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Editors-in-Chief

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Mara Del Baldo
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Co-Editors

Encyclopedia of Sustainable Management

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Encyclopedia of Sustainable Management

With 418 Figures and 166 Tables

 Springer

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Foreword

In the arena of business's social, ethical, and stakeholder consciousness, there are few topics that are more timely, relevant, and forward thinking than that of sustainable management. In the minds of most experts – practitioners as well as academics – the concept of sustainability embraces and is intertwined with a host of other highly relevant concepts such as corporate social responsibility (CSR), stakeholder management, corporate citizenship, ethics management, corporate social responsiveness, purpose-driven management, and others. These concepts overlap and intersect considerably and that is evident when you examine the Table of Contents of this volume.

Though initially thought of as a natural environment related phenomenon, sustainability now is more broadly conceived to embrace wider environments, including the economy and society. As the sustainability movement continues to grow, creative business people are developing new ways of doing business that benefits all aspects of the triple bottom line – profits, people, and the planet. Each of these is fully considered in my four-part concept of CSR and corporate citizenship to comprise economics, law, ethics, and philanthropy.

The emphasis on sustainable economic citizenship is fundamental to the success of enterprises. The economic bottom line goes beyond profits to include business's creation of material wealth, including financial income and assets. The basic economic responsibility, to produce goods and services and offer them to consumers at fair prices, is the cornerstone of modern capitalism. Related to this is the offering of jobs and positions in which employees can make a living to support their families and a decent standard of living. It is for this reason that in my writings I have placed the economic responsibility at the base of the Pyramid of CSR – it is essential for enterprises to prosper and succeed, and it forms the basis upon which all other responsibilities become possible. The alternative is job layoffs and economic stagnation. Given the economic challenges of the past decade including financial and pandemic issues, the sustainability of the financial aspects of operations have never been more important.

The social bottom line embraces a concern for the quality of people's lives and about equality between and among people, communities, and nations. The "S" in CSR is often broadly conceived, but its main focus is on people. Society today is typically thought of as the full array of stakeholders that business must think about and strategically management as it attempts to fulfill its financial role. Before sustainability became a well-known emphasis, CSR embraced the whole host of stakeholders, but the sustainability notion has focused attention

on the importance of future thinking and management of stakeholder relationships. Today, the social dimension includes all affairs and interactions present in the business-and-social relationship. Law and ethics are extremely important in the social dimension.

The third aspect of the triple bottom line is, of course, the natural environment. This sustainability focus is about the protection, conservation, and survival of the physical environment in which we live and the emphasis is on the planet. This is one of the most important facets of CSR today. Climate change seems to be the driving issue in this realm. In fact, if one considers the UN Global Compact's Sustainable Development Goals (SDGs), several pertain to the natural environment and its ancillaries including clean water and sanitation, affordable and clean energy, climate action, life below water, and life on land.

The concepts, terms, ideas, and management strategies found in this volume are exhaustive. The A-to-Z treatment of related notions in this volume exceed 700. Indeed, there is hardly an idea or thought you can contemplate that is not treated in encyclopedic form herein. The contents of this volume are comprehensive, up-to-date, and address all aspects of management and organizations. This volume has a strong set of editors and authors, and these contribute significantly to the overall quality of the book and its contents. This volume is unlike any other than is available today and should be required reading for academics, executives, nonprofit managers, and all others that are interested in sustainability in their enterprises. I am pleased to give this book my strong and enthusiastic endorsement, and I encourage all libraries to maintain an up-to-date version of this volume.

Dr. Archie B. Carroll

Scherer Chair of Management and Corporate Public Affairs *Emeritus* and professor of management *emeritus* in the Terry College of Business, University of Georgia, USA.

Coauthor of *Corporate Responsibility: The American Experience*; *Business and Society: Ethics Sustainability and Stakeholder Management*, 11 edition; and *Business Ethics: Brief Readings on Vital Topics*.

Preface

The Brundtland Report of the World Commission on Environment and Development of 1987 introduced the term *Sustainable Development* into global consciousness. The report alerted us all to the serious consequences of living unsustainably. It drew our attention to the unsustainable wrong assumptions that the yesteryears business model made in terms of everything nature has endowed our planet with. The said wrong business model assumed that all these nature endowed resources would last forever. Thus the journey to take-use-waste-and throw away commenced. It also drew our attention to the fact that *Planet Earth* does not have the capability to process the waste we generate without being sustainable with the waste. These and other facts have enabled global citizens to embark on a drive to drastically change the way we live and operate because of this generation and future generations for the better. The concept of Corporate Social Responsibility (CSR) has played a part in reorienting our understanding of what we should all be doing in our various life capacities as individuals, stakeholders, corporate entities, local communities, societies, non-governmental organizations, governments, international organizations, and all the animate and perhaps the inanimate components that make up our world. By being socially responsible and environmentally sustainable, we believe would transform and improve lives of both the present generation and future generations of man and other living objects. Of course, we are not oblivious to the fact that CSR is only a concept coined by some innovative scholars of yesteryears who were enlightened enough to want to delve deeper into the forms and shapes that business community's concern for society should take and the actions required by everyone in order to ensure that planet Earth would stand the test of time. Sustainable management requires us all regardless of our life callings to be ethical in all we do. Being ethical expects everybody to do the right things regardless of whether or not we are being watched. One might argue that, this is probably not always easy but that's always the correct thing to do, we owe it to planet Earth, this generation and future generations who would exist on this planet.

Treading the path of sustainable management in a world full of challenges would probably be like treading a difficult road. It is often argued that "all difficult roads often lead to beautiful destinations" this statement should be our assurance that, that should be the path to tread. It would help to ensure the survival of our common future as noted in the Brundtland Report 1987.

When the concept of corporate social responsibility (CSR) first came on to the corporate scene, there were some scholars who were adamantly opposed to what CSR was expecting profit seeking corporations to engage in. These scholars argued that CSR was advocating what they believed were *ultra vires* and perhaps *illegitimate actions* in terms of the mandates given to those at the helms of managing the affairs of corporations – *agents* by their owners and providers of capital – *principals*. Famous scholars such as Levitt (1958), Friedman (1962), and others in their camp were adamantly against the philosophy of CSR. It became apparent to all that these scholars were wrong with what have now transpired in the field of CSR and how it has now thrived worldwide. Nothing could have been more unsustainable in terms of their arguments on CSR. In fact, CSR is now practiced everywhere in the world – see, for example, Idowu and Leal Filho (2008) and Idowu (2021). In fact, today CSR is a legal requirement in some countries around the world. We can now be rest assured that managing sustainably is the right thing to do as depicted in many of the entries in the *Encyclopedia of Sustainable Management* (ESM).

The idea for the project on the ESM was conceived by the two Editors-in-Chief in the People's Republic of China in May 2013 when Idowu and Schmidpeter were invited by their great friend Dr. Liangrong Zu to go to China to support the setting up of a Center for CSR and Sustainability by Professor Hualiang Lu then of Nanjing University of Finance and Economics. It was in Nanjing that Idowu and Schmidpeter both resolved that that a second Encyclopedia on *Sustainable Management* would be desirable to compliment the Encyclopedia of Corporate Social Responsibility (ECSR) that was published five months earlier – in January 2013. The ESM was designed to help different stakeholders of the twenty-first century – managers, politicians, trade unionists, researchers, international organizations, academic institutions, non-governmental organizations, consumers, socially responsible investors, lenders, the media, and all stakeholders on planet Earth in the drive to support this generation and future generations that would exist on planet Earth. The ECSR was a very popular and successful project which I am personally very proud to have initiated. I am equally confident that the ESM would even be far more popular and successful than the ECSR.

The articles in each section of the Encyclopedia were written with the sole objective of satisfying the information needs of modern stakeholders, practitioners, researchers, legislators, international organizations, governments, tomorrow's business managers (students), and all those who are enthusiastic about how to manage sustainably in order to ensure the survival of our dear planet. It is hoped that this sister version of the ECSR which was supported by scholars with international experiences from about fifty nations from around the globe will further enhance our readers' understanding of what *Sustainable Management* is all about in their daily use of this reference book – the ESM.

Comments on how to improve its future editions are most welcome by the lead Editor-in-Chief. I also want to add that the publication of the e-version of

the ESM will continue, and I am therefore taking this opportunity to seek for articles on more relevant and up-to-date issues to the field sustainable management to be sent to us for processing and if found to be of good quality will be published in the e-version of the Encyclopedia as soon as they have been processed. Please email your articles to either of the two Editors-in-Chief or both of them. Thank you so much for your support.

London, UK

Bern, Switzerland

Spring 2023

Samuel O. Idowu, PhD

Lead Editor-in-Chief, ESM

Prof. Dr. Rene Schmidpeter

Editor-in-Chief, ESM

Acknowledgements

We are grateful to a number of great people around the globe who have helped us to complete our second journey in the publication of a sister Encyclopedia to the Encyclopedia of Corporate Social Responsibility (ECSR), which was published ten years ago. Like the ECSR, when the journey for the publication of the ESM commenced, we were unsure of many things. For example, we were certainly not envisaging that it would take us a lot longer to get to the publication stage than it took us with the ECSR. But here we are it did take us a lot longer. I am however delighted that we got to the end of the journey. I must say that without the help and support of those I was fortunate to know prior to the commencement of the project and those I consequently got to know as a result of the project and the immeasurable contributions they made to the project, we would have been unable to make the publication of the ESM a reality. Some of these individuals as things have turned out; I would remain indebted to for the rest of my life simply because they have contributed immensely to an unimaginable success of the ESM. Like the ECSR, I am also proud to say that the ESM has made for me an unimaginable number of friends in at least 50 countries around the globe. I am so delighted for this. I am therefore extremely grateful to all our contributors for honoring our initial invitations to participate in this fantastic project, thank you all. I am particularly grateful to Professor Archie B Carroll who has continued to support all my projects. Needless to say, Professor Carroll wrote a great Foreword to this ESM, many thanks, Sir.

I want to start my personal “thank you” journey with my five co-editors starting with the “father” of the project Professor Nick Capaldi lately of Loyola University, New Orleans USA; my co-editor in Chief, Professor Rene Schmidpeter now based in Switzerland; Dr. Liangrong Zu, lately of the International Labor Organization Training Center, Turin, Italy, but now the President of two Global Academies – The Taoist Leadership Academy for Sustainability and Excellence and The Global Youth Leadership Academy, Italy; Professor Mara Del Baldo, University of Urbino, Italy; and Professor Rute Maria Gomez Abrue, Instituto Politecnico da Guarda, Portugal, thank you for being part of this successful project and for all your activities to ensure its successful outcome.

We are equally grateful to all the members of the Editorial Board of the ESM whose name I would like to mention here in no particular, Professor Eila Jeronen (Finland), Brian Jones (UK), Professor Berna Kirkulak-Uludag (Turkey), Kristijan Krkač (Croatia), Professor Duygu Turker (Turkey),

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There are a few friends and colleagues of mine spread around the world who I would like to express my gratitude to; for helping me and the team in satisfactorily concluding the project, some of the names would probably be familiar to those who have read a few of our earlier CSR books: Professor Nadia Nedzel, Christopher Hutchinson, Professor John O Okpara, Professor Stephen Vertigans, Professor Stephen Perkins, Professor Malcolm Gillies, Timothy Cleary, Professor Dan Topor, Professor Adriana Burlea Schiopoiu Professor Adriana Tiron-Tudor, Professor Oana Raluca Ivan, Professor Biswanath Swain, Professor Irene Arraiano, Professor Belen Diaz, Professor Ndangwa Noyoo, Dr. Mikovhe Maphiri, Michael Soda, Benjamin Ade Aina, KC, Samson Nejo, Emmanuel Ayoola Osho, Samson Owokoniran, Jonathan Oluwasheyi Shebioba, Samuel A Olaleye, Venerable Superior Evangelist Joseph Adesanya, AVSE Yinka Odunlami, Lawrence Ojelade, Alfred K Idowu, Sola Olaluwoye, Bayo Odugbesi Assistant Venerable Superior Evangelist Olagunju, Elder Anoba, Olusheyi Bamgbose-Martins, MC Durojaiye, MC Rosemary Ogunlaja and MC Nike Oke. My sister Mrs Elizabeth Lawal and her family have been very helpful to me in my journey of life, thank you Ye Femi.

I also want to take this opportunity to thank my wife Mrs Olufunmilola Idowu, my darling son Josiah and great daughters: Rachael, Mary, Abigail, and Hannah who have continued to inspire me and support all my ventures. Thank you from the bottom of my heart, I am grateful and proud of you all for your forbearance and unflinching support.

I cannot forget all my friends and great colleagues at Springer Palgrave who have had to ensure that the process went smoothly with little or no problems, Christian Rauscher (a great friend of mine for well over a decade), Michael Hermann, Barbara Bethke, Allan Cohen, and Salmanul Faris Nedum Palli, you have all been most professional and wonderful in your dealings with all these fantastic individuals we have been fortunate to have as contributors and editors to the ESM.

I would also like to take this opportunity to thank some readers of our earlier CSR books and authors/editors of our Springer Book Series on CSR, Sustainability, Ethics and Governance who have at some point in the past contacted me to say some nice things about our books, thank you for caring and for being loyal to us; you are also part of the success story, thanks very much.

Finally, I would like to apologize for any errors or omissions that may appear anywhere in the ESM, no harm was intended either directly or indirectly to anyone.

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Section Editor: *Berna Kirkulak-Uludag*

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Section Editor: *Carmela Gulluscio*

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He is the founder and president of the Global Corporate Governance Institute. His principal research and teaching interest is in public policy and its intersection with political science, philosophy, law, religion, and economics. He is the author of 12 books, over 100 articles, and editor of 10 anthologies, and has served as editor of *Public Affairs Quarterly*. He is the author of the Cambridge intellectual biography *John Stuart Mill*. His most recent books are *Liberty and Equality in Political Economy: From Locke versus Rousseau to the Present* as well as *The Anglo-American Conception of the Rule of Law*.



Dr. Liangrong Zu is former senior United Nations official, founder of Global Youth Leadership Academy (GYLA) and Taoist Leadership Academy for Sustainability and Excellence (T-LASE), and Vice President of China Institute for Responsible Management Education and Sustainable Development. Dr. Zu is specialist and consultant in corporate social responsibility (CSR), business ethics, systems and design thinking for sustainable development, social innovation and social entrepreneurship, Taoist leadership and management, executive presence, etc. Dr. Zu holds PhD in business and management at Nottingham University Business School in United Kingdom. He received his master's degree in economics of education from Beijing Normal University in China.

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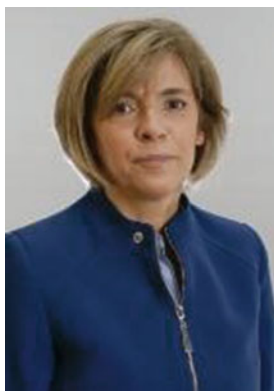
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A

2018 United Nations Climate Change Conference

- [Katowice Climate Negotiations](#)

2CC2

- [Cradle to Cradle](#)

A General Contingency Theory of Management

- [Contingency Theory](#)

A Self-Assessment Survey

- [Supplier Self-Assessment Questionnaire](#)

AA1000

- [AA1000 Series of Standards, The](#)

AA1000 Series of Standards, The

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Synonyms

[AA1000](#)

Definition

The **AA1000 Series of Standards** comprises three interrelated voluntary standards: AA1000 Assurance Standard (AA1000AS), AA1000 Stakeholder Engagement Standard (AA1000SES), both guided by the AA1000 AccountAbility Principles (AA1000AP). The AA1000AP provides generic guidelines for organizations, while other standards support implementation.

The principles-based standards present frameworks to guide all types of organizations in demonstrating accountability in the fields of leadership, responsibility, and sustainability. The AA1000 series of standards represent social and ethical accounting (► [Social Accounting](#)) processes aimed at facilitating stakeholder communication (► [Stakeholder](#)). Assurance refers to the organizational practice of evaluating performance (AccountAbility [2018b](#)) and binds the

three standards. It covers methods, processes, systems, and the data employed in the assurance process.

Key Issues

The AA1000AP consists of four principles:

- **The foundation principle of inclusivity** meaning stakeholders' participation in decisions on how to address sustainability issues (► [Sustainability](#))
- **The principle of materiality** meaning to include in all organization's actions material issues
- **The principle of responsiveness** meaning that organization has to respond to those stakeholder's issues affecting its performance
- **The principle of impact** meaning monitoring the organization's effect on the ecosystem (AccountAbility [2018a](#))

The AA1000SES directly refers to the first principle covering guidance for stakeholder engagement (► [Stakeholder Engagement](#)). The Standard defines good quality stakeholder engagement by establishing a rationale for engagement (purpose), defining the issues needed to be included (scope), and who should engage (stakeholders) (AccountAbility [2015](#), p. 15). A classification of stakeholders and addressing their interests is the first step toward engagement (Farooq et al. [2021](#)).

The AA1000AS can be employed in two ways. The first one – Type 1 – characterizes adherence to the above-listed AA1000 principles. The second way – Type 2 – additionally includes an evaluation of the reliability of the sustainability performance information (AccountAbility [2018b](#)). Type 2 represents high assurance as it is more precise in areas whereas Type 1 offers more generic coverage. It incorporates unrestricted and extensive evidence characteristics describing all organizational levels, with a very low risk of an incorrect conclusion.

Sustainability assurance is the key issue in sustainability reports (Kolk and Perego [2010](#)). It

is defined in the AA1000 as “Assurance of public disclosures on sustainability performance as well as underlying systems, data and processes against suitable criteria and standards” (AccountAbility [2018b](#), p. 24). Assurance is described as containing an established scope of engagement, clearly stated independence and impartiality, possessing the necessary competencies for assurance sustainability, exercise of due care, and planned engagement control.

Future Directions

A study confirms the need to adopt a sustainability assurance statement within national settings (Kolk and Perego [2010](#)). However, the specific factors behind the decision to undertake efforts to prepare sustainable reports are still evolving. Kolk and Perego ([2010](#)) also point out a quality issue relating to statements regarding the future introduction of mandatory standards. It is associated with a need for national requirements regarding the unification of content coverage in sustainability reports (Junior et al. [2014](#)).

The ability to build the capabilities and skills required by assurance providers is perceived as a major challenge (Leipziger [2017](#), p. 503). It refers to engagement planning, documenting the engagement, performing it, as well as its critical evaluation and reporting. This additionally covers the competencies to adhere to three main AA1000 principles: inclusiveness, materiality, and responsiveness. As the AA1000 standards concentrate on what should be reported, it needs to be more oriented toward explaining how the organization should be prepared to demonstrate adequate institutional competencies (AccountAbility [2018b](#), p. 15).

While the AA100 standards offer useful principles-based sustainability-assured guidance for integrating stakeholder engagement into organizational systems, processes, and data-usage, the above review of the limited academic literature available indicates the requirement for further development to improve accountability in the fields of leadership, responsibility, and sustainability.

Summary

The AA1000 Series of Standards are not the only guidelines for social and ethical accounting within a sustainability context (► [Sustainability Accounting](#)). The others include: Global Reporting Initiative (GRI) (► [Global Reporting Initiative](#)), the recommendation of Fédération des Experts Comptables Européens (FEE), and the International Standard on Assurance Engagements (ISAE) 3000 issued by the International Audit Assurance Standards Board.

The AA1000AS mainly differ from other sustainability standards based on the required items covered in conclusion with reference to the AA1000AP and the suggestion to include progress since the last report and areas of improvement. However, the scope of the AA1000 standards is more holistic compared to other accounting solutions, which explains its increasing popularity (O'Dwyer and Owen 2007). A study shows that the AA1000 is mainly chosen by non-accounting sustainability assurance providers, while accounting sustainability assurance providers tend to use the ISAE3000 (Farooq and de Villiers 2019). Nevertheless, compliance with the AA1000 and ISAE3000 delivers enhanced results in relation to stakeholder trust (Iansen-Rogers and Oelschlaegel 2005, p. 25). The explanation behind these findings demonstrates the complementary nature of both standards based on their different inherent focus. This supports the practice of adopting integrated reporting (► [Integrated Reporting](#)).

Cross-References

- [Global Reporting Initiative](#)
- [Integrated Reporting](#)
- [Social Accounting](#)
- [Stakeholder](#)
- [Stakeholder Engagement](#)
- [Sustainability](#)
- [Sustainability Accounting](#)

References

- AccountAbility. (2015). *AA1000 stakeholder engagement standard 2015*. London/Washington, DC: AccountAbility.
- AccountAbility. (2018a). *AA1000 accountability principles standard 2018*. London/Washington, DC: AccountAbility.
- AccountAbility. (2018b). *AA1000 assurance standard 2008 with 2018 addendum*. London/Washington, DC: AccountAbility.
- Farooq, M. B., & de Villiers, C. (2019). The shaping of sustainability assurance through the competition between accounting and non-accounting providers. *Accounting, Auditing & Accountability Journal*, 32(1), 307–336. <https://doi.org/10.1108/AAAJ-10-2016-2756>.
- Farooq, M. B., Zaman, R., & Nadeem, M. (2021). AccountAbility's AA1000AP standard: A framework for integrating sustainability into organisations. *Sustainability Accounting, Management and Policy Journal*, 12(5), 1108–1139. <https://doi.org/10.1108/SAMPJ-05-2020-0166>.
- Iansen-Rogers, J., & Oelschlaegel, J. (2005). Assurance standards briefing AA1000 assurance standard & ISAE3000. <https://www.accountability.org/wp-content/uploads/2016/11/Assurance-Standards-Briefing.pdf>. Accessed 29 Dec 2019.
- Junior, R. M., Best, P. J., & Cotter, J. (2014). Sustainability reporting and assurance: A historical analysis on a worldwide Phenomenon. *Journal of Business Ethics*, 120(1), 1–11. <https://doi.org/10.1007/s10551-013-1637-y>.
- Kolk, A., & Perego, P. (2010). Determinants of the adoption of sustainability assurance statements: An international investigation. *Business Strategy and the Environment*, 19(3), 182–198.
- Leipziger, D. (2017). *The corporate responsibility code book* (3rd ed.). London/New York: Routledge.
- O'Dwyer, B., & Owen, D. L. (2007). Seeking stakeholder-centric sustainability assurance: An examination of recent sustainability assurance practice. *The Journal of Corporate Citizenship*, 25, 77–94.

Abidjan Convention Secretariats

- [UNEP Abidjan Convention Secretariat, Abidjan, Côte d'Ivoire](#)

Able Leadership

- [Good Governance](#)

Abundance (CSR)

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Synonyms

Extensive wealth; Opulence; Plenty

Definition/Description

There are three critical economic concepts or distinct branches of inquiry: scarcity, abundance, and sufficiency (Daoud 2018). Scarcity is described as a gap between a need or wants for a good (limited resource) and the theoretically unlimited wants of consumers (Benammar 1999). The present economy concept is a scarcity economy. Abundance occurs in a reversed situation, while sufficiency arises when requirements and goods are balanced (Daoud 2018). Abundance is often compared to having a relative degree of fullness or plentifulness that flows out of a deep inner sense of personal worth and security (Covey 2004). It is a model of understanding with plenty out there for everybody. The outcome of the abundance mentality in business is sharing prestige, recognition, and profits which opens new possibilities, options, and alternatives in doing business (Covey 2004).

Introduction

The concept of paradise is directly associated with the concept of abundance. After being banished from paradise, man was destined for lasting and difficult coexistence with the economic problem of scarcity (Rothbard 2006). Human civilization formed itself in a wild dance between abundance and scarcity. Humans are rarely rational and rarely

consume the optimal amount of needed resources, so they have created a world around their wants, not needs. Resources are especially accumulating in developed societies. The perception of development has led modern societies to a series of problems like the scarcity of specific natural resources and their permanent destruction, biodiversity loss, the devastation of nature, and the widening gap between the rich and the poor. Even before Richard Thaler was awarded the Nobel Prize for his work on cognitive biases affecting economic decision-making, it was evident that the rational homo-economicus that inhabits most economic models and theories could behave rationally only in academic papers. The basis of the objective approach is reason and analysis through the mind–intellect instrument in which the problem is typically placed outside of the collective self (Nevatia and Nevatia 2021). From the repeating history of conflict over obsession with material to the fact that humans are only beings producing waste to satisfy delusional wants, humans proved that they are both subjects and objects of (un)willing manipulation. Modern society is full of paradoxes, so although the population growth rate declined from 2.2% to less than 1% per year in relative terms, it continues to grow in absolute terms. That means that more and more humans are using the traditional consumer-centric linear model based on “explore-take-make-consume-throw away,” thinking and acting like resources are limitless.

The literature on abundance is relatively scarce, and just lately, it has been related to Corporate Social Responsibility (CSR). Throughout history, abundance has been a driving force behind economic development for humanity. However, it is important to acknowledge that creating a solution in one place cannot come at the expense of causing damage elsewhere. Creating new value and providing humans with products and services was the first and foremost reason for economic efforts of any kind, but it should be balanced, not maximized. Throughout human history, the desire for greater abundance has been a consistent motivator, often taking precedence over simply meeting basic needs. However,

numerous instances have demonstrated that merely achieving abundance does not guarantee success. In literature, abundance is defined as “an amount that is more than enough” or as “an establishment on a firm basis or for enduring existence” (Keyser 2022). An enduring existence depends on abundance. Keyser (2022) connects abundance with founders of new businesses and nonprofits that determine the components necessary to achieve lasting and consistent yields of high quality. It is also called a business model. A sustainable organization seeks growth in quality of impact rather than quantity. Sustainable organizations do not ignore “externalities” or consequences of business activity that impact society and the environment without affecting business operating costs. Instead, they take responsibility for their externalities so that they manage them and actively try to lower the negative impact those externalities cause, either to society or the environment. This way, key stakeholders, such as founders of these new companies and their managers, contribute to sustainable development while creating abundance. According to Keyser (2022), founders and abundance are two words that will become more and more commonly associated.

Abundance and Corporate Social Responsibility (CSR)

Abundance in sustainability means that organizations should find ways to create new value without spending too many resources. While leaders understand the importance of sustainability, they often need help translating it into action. Kiron et al. (2013) found that while nearly two-thirds of business respondents felt sustainability issues were important, only 10% of companies entirely tackled them. A key differentiator in their success was linking sustainability and business strategy. The abundance process is a continuous improvement fueled by the evolution of social, economic, and environmental issues (Friedlander 2016). Sustainable companies should create products and services that provide quality without extra

quantity. Separation of those two divides standard leaders from leaders of tomorrow or sustainable leaders. The real question is, how much abundance can be created without using extra resources? Can modern society continue developing and increasing the quality of life without disturbing more of Earth’s resources and ecosystems? Is this increase in value-creation and GDP rising possible on the constant amount of energy and resource usage?

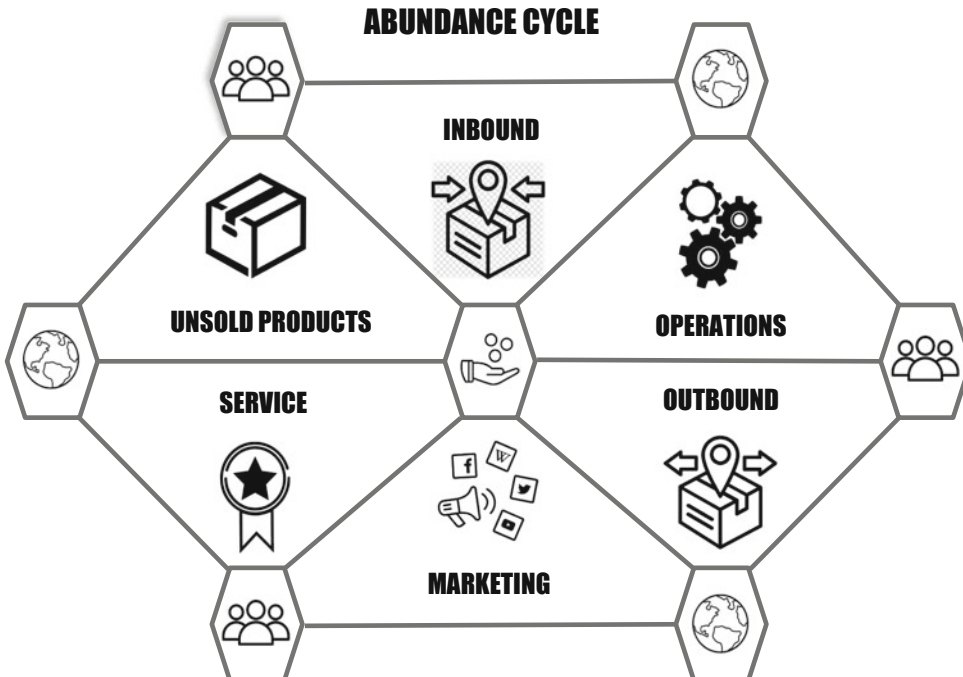
Aziz (2018) advocates that abundance can be a new way of sustainability, covering more than just environmental issues. It could also cover human and social justice issues. Aziz (2018) proposes changes regarding the perception of ROI in business by incorporating environmental and social impact. He considers a more holistic view for measuring the “good” that a business does and the positive impact of many factors like loyalty, volunteering, engagement, retention, and many more. Companies that provide their employees with opportunities for volunteering and fundraising have 57% less turnover (the average cost of replacing an employee is 1.2 times their annual salary) (Aziz 2018). The parable of the talents shows that humans must first be willing to share to gain. It is unrealistic for society to continuously consume more value than it generates, and it is also unsustainable to persist in transferring value from one group of stakeholders to another. What Aziz (2018) advocates represent the fundamental values of the sustainability concept, where the preservation of the environment is not the only goal of sustainability. Instead, sustainability should help society find the compromise between preserving natural capital and providing benefits and well-being to all humans. Inclusion and diversity in companies and organizations can help to get closer to this equilibrium because it will give all employees an opportunity for self-accomplishment. At the same time, the data above show that companies with higher diversity among employees and management can better understand the market’s needs and provide innovation revenues. In other words, diverse companies can better understand diverse populations’ needs and create products and services to fulfill those needs.

Abundance and Sustainable Leaders/Leadership

Sustainable leaders will know how to unlock the potential in their employees and their companies and will create value for the entire value chain. Unlike classical leadership thinking, sustainable leaders will not think just of the interest of their shareholders but will strive to create value for all included in their value chain. In other words, they will be creating abundance. As Friedlander (2016) has poetically put it: “The steward with an attitude of abundance freely plants and nourishes seeds of opportunity trusting in the principle of the harvest to yield her fruit. On the other hand, the landowner, whose vision is obscured by scarcity, distrusts the vagrant elements of sun, rain, and soil that might combine to multiply his storehouse and instead keeps precious seeds locked away to rot and fertile ground to lay fallow.” The cyclical nature of abundance is shown in Fig. 1.

So, when discussing sustainable leaders who can create abundance, it is vital to understand the inefficiency of using natural capital and the number of products that are becoming waste, polluting ecosystems and the environment. In that sense, sustainable leadership imperatives should be to:

- Create a company that is creating value for all stakeholders in the value chain, not just shareholders.
- Use the company’s potential to create more efficient ways of using natural capital and resources.
- Use a company to create well-being and self-accomplishment for all employees, not just top management structures.
- Create a corporate culture that enriches not only employees but also the customers, clients, and society.
- Use the power of the corporation to educate and raise awareness on important issues like



Abundance (CSR), Fig. 1 Consists of inbound, operations, outbound, marketing, service, and unsold production (Friedlander 2015)

solidarity and responsibility for each other and the environment.

- Use a decision-making process to innovate, progress, and educate.
- Use the company potential to create sustainability in the entire value chain.

In other words, sustainable leaders will use the company's potential to create abundance. Sustainable leadership imperatives should be to create a company that is creating value for all stakeholders in the value chain, not just shareholders. However, the open question remains: is a sustainable business strategy enough to create abundance from scarcity? Is a shift in how sustainable businesses manage resources enough to make the economy and human lifestyles sustainable? Alternatively, should humans also work on a transformative change in their behavior in spending and consuming lifestyle choices? Is abundance available for everybody in the context of substantial resources and a rising human population? Alternatively, is abundance just something humans must put aside out of solidarity toward each other and out of responsibility toward the environment?

Critical Elements for Economy of Abundance

To transfer from an economy of scarcity to an economy of abundance, it is crucial to have sustainable leaders with a vision that all humans and other species on this planet will be able to progress in the present and future (Hoeschele 2010).

Hoeschele (2010) advocates seven critical elements that are crucial for an abundance economy:

1. Natural resources and land commons, are gifts of nature. No human has created them, which is why they should be treated as gifts, not as unlimited resources as in the present economy. A sustainable business should take the case for these gifts.
2. A cooperative business is a type of business where an organization is owned and led by its members who participate in the production process.
3. Energy for everyone is vital for cooperative and sustainable businesses as they should try to increase energy efficiency wherever possible.
4. The financial industry is a servant, not a master. In contrast today, financial services are the game makers, not servants, and this needs to change in abundance future.
5. Smart cities are not made to serve authorities and housing developers, but humans who live there.
6. Autonomous learning is where humans learn because they desire personal growth and development.
7. Genuinely caring for health means a shift from health care oriented on doctor's enrichment, pharmaceutical, and insurance companies to care for people's health.

Summary

The objective world subsists, functions, and plays its follies according to the temporal dominion and phenomenal laws over which man has no control – just as he has no control over laws of gravitation (Nevatia and Nevatia 2021). The generally accepted notion is that the economy operates under conditions of scarcity, whereby resources that are limited in supply are considered valuable. Paradoxically a scarcity economy leads to environmental destruction because the natural environment is treated as a free commodity. Social inequality among humans is mainly created due to the control of critical assets by a few. So, it is inevitable that society will change the present economic system that is based on the limitless consumption of scarce resources to more sustainable models. Shifting from a scarcity-based to an abundance-based economy involves altering the mindset from perceiving an infinite supply of resources to satisfy humans' desires, to recognizing that humans possess only adequate resources to fulfill our necessities. Abundance is closely related to the company's sustainable business model and society, so leaders who can change the economy and

the world with organizational abundance will redefine the new normal in the role of business in contemporary society.

Cross-References

► [Sharing Economy](#)

References

- Aziz, A. (2018). *The power of purpose: Abundance is the new sustainability*. <https://www.forbes.com/sites/afdelaziz/2018/11/04/the-power-of-purpose-abundance-is-the-new-sustainability/?sh=56b5c4e95ccb>. Accessed 27 May 2022.
- Benammar, K. (1999). Abundance and scarcity: Concepts and rhetoric in ecology, economics, and eco-ethics. *Acta Institutiones Philosophiae et Aestheticae*, 17, 91–99.
- Covey, S. R. (2004). *The 7 habits of highly effective people: Restoring the character ethic*. New York: Free Press.
- Daoud, A. (2018). Unifying studies of scarcity, abundance, and sufficiency. *Ecological Economics*, 147, 208–217. <https://doi.org/10.1016/j.ecolecon.2018.01.019>.
- Friedlander, J. (2015). From sustainability to abundance. *Stanford Social Innovation Review*. https://ssir.org/articles/entry/from_sustainability_to_abundance#. Accessed 7 May 2022.
- Friedlander, J. (2016). *Five steps to strategic sustainability and abundance: Making sustainability profitable may be simply a matter of perspective*. On-line. Available at: <https://sloanreview.mit.edu/article/five-steps-to-strategic-sustainability-and-abundance/>. Accessed 7 May 2022.
- Hoeschele, W. (2010). *The economics of abundance: A political economy of freedom, equity, and sustainability*. London: Routledge.
- Keyser, W. (2022). *Founders and abundance*. <https://venturefounders.com/founders-and-abundance>. Accessed 27 May 2022.
- Kiron, D., Kruschwitz, N., Rubel, H., Reeves, M., & Fuisz-Kehrbach, S.-K. (2013) Sustainability's next frontier – Walking the talk on the sustainability issues that matter most. *MIT Sloan Management Review*. <https://sloanreview.mit.edu/projects/sustainabilitys-next-frontier>. Accessed 3 December 2022.
- Nevatia, P., & Nevatia, R. (2021). *Managing abundance: The ethics paradigm: A business-like approach to demit scarcity and admit abundance*. New York: Business Expert Press.
- Rothbard, M. N. (2006). *Economic thought before Adam Smith*. Auburn: Ludwig Von Mises Institute.

Abuse of Non-human Rights

► [Speciesism](#)

ACCA

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Synonyms

[Association of Chartered Certified Accountants](#)

Definition

The Association of Chartered Certified Accountants (ACCA) is the international organization of accountants which awards the qualification of Chartered Certified Accountant, a qualification recognized throughout the world. ACCA was founded in London in 1904 and currently has approximately 241,000 members in 178 countries. The purpose of the association is to train highly professional accountants. The term chartered was awarded in 1974 by Royal Charter of the United Kingdom in recognition of the high degree of quality of qualifications. ACCA offers several certificates that fall under the scope of accounting and finance. The members of ACCA are characterized by high professional skills and high ethical qualities.

The Evolution of ACCA

ACCA was founded on 30 November 1904 when 8 accountants formed the London Association of Accountants, the predecessor company of ACCA. The early 1890s are characterized by a strong growth in members, reaching 1000 in 1910. From the early years, the company was

characterized by its intentions to go beyond national borders. In 1913, in fact, the first foreign branch was opened in South Africa. Internationalization that will materialize with greater force in the following years. In the 1930s, the first branches in Asia were opened in Malaysia-Singapore. The Asian presence was strengthened in the 1950s with the opening of other branches, such as that of Hong Kong, at the same time as the increase of the presence in Africa. In 1939, the Association of Chartered Certified Accountants was officially born as a merger of the London Association of Certified Accountants (formerly the London Association of Accountants) and the Scottish body Corporation of Accountants. The following years consolidate the role of the association in the world with the opening of new branches and the increase of members and students who use the services offered by ACCA.

Thanks to the high qualification offered to students and members, ACCA obtains important recognitions in the United Kingdom. 1974 was an important year for ACCA as it received the important recognition of Royal Charter from Queen Elizabeth II. In 1986, however, ACCA, which had more than 25,000 members, was recognized under the Financial Services Act.

The launch of the website represents another important moment for ACCA. The definition of an institutional website allows to increase the latent potential of the association. Thanks to the association's presence on the Internet, it was possible to introduce and develop the first digital services for businesses. Presence on the web is consolidated over the years reaching 2004 with the opening of ACCA connect.

Recent years have confirmed the commitment made by ACCA in professional training all over the world where it has more than 100 offices. In addition, it has actively engaged in social and environmental issues. ACCA has proved since the first years of its establishment an association with a farsighted and sensitive look at issues relating to environmental social fields. With regard to social topic, it should be noted that in 1909 Ethel Ayres Purdie became the first female accountant to be a member of an accounting association. Also in the gender field, in 1980 the first female

president of the association was elected as well as the first female president of an accountancy body. With regard to the environmental field, in the 1990s a rewarding system was introduced for environmental reports.

Sustainability According to the ACCA

ACCA has shown over the years its commitment to issues related to sustainability. His commitment has been demonstrated several times throughout the life of the association. The testimony of the continuous commitment was also demonstrated by the Queen's Award for Enterprise obtained in the sustainable development category. In terms of reporting, the first CSR report was published in 2009 in which the CSR practices carried out by the association were reported for the first time. The first integrated annual report was also published a few years later. ACCA has also become the first accountancy body to examine the integrated report within the exams of the professions.

Among the CSR practices, it is worth mentioning call for action against climate change. Through this call, the association wanted to underline the critical issues relating to climate change by asking for urgent interventions by governments and companies. In fact, climate change is one of the major megatrends to which governments and businesses should give timely responses (Cosma et al. 2022; Luo and Tang 2014; Ngo et al. 2022). The short-term trend of companies to maximize profits for shareholders could represent an obstacle to the responses of these subjects to the challenges posed by global warming (Pizzi et al. 2023). To governments, ACCA suggests using taxation as a tool to guide organizations and various subjects and support sustainable economic growth. Among the proposals suggested to businesses, ACCA suggests:

- Identify and assess risks related to climate change
- Implement environmental, social and governance (ESG) performance metrics in order to

integrate sustainability into strategic planning and strategy definition processes

- Adjust corporate governance and risk management to emerging risks and opportunities as well as rethink new business models integrating ESG issues
- Promote circular economy-oriented policies

The thought of ACCA is also expressed in the profuse commitment to zero carbon emissions and achievement of sustainable development goals (SDGs).

Summary

In an increasingly changing and complex context, the high qualification of accounting professionals represents an important driver in support of company decisions. In the 119 years since its foundation, ACCA has provided useful training to practitioners to increase specific knowledge and update it according to new challenges, as in the case of non-financial reporting. The relevance of ACCA's work is demonstrated by the presence of the association in the major international accounting forums: the International Federation of Accountants (IFAC), the Confederation of Asia Pacific Accountants (CAPA), the ASEAN Federation of Accountants (AFA), the Fédération des Experts Comptables Européens (FEE), and the Pan African Federation of Accountants (PAFA).

References

- Cosma, S., Principale, S., & Venturelli, A. (2022). Sustainable governance and climate-change disclosure in European banking: The role of the corporate social responsibility committee. *Corporate Governance (Bingley)*, 22(6), 1345–1369. <https://doi.org/10.1108/CG-09-2021-0331/FULL/XML>.
- Luo, L., & Tang, Q. (2014). Carbon tax, corporate carbon profile and financial return. *Pacific Accounting Review*, 26(3), 351–373. <https://doi.org/10.1108/PAR-09-2012-0046>.
- Ngo, T., Le, T., Ullah, S., & Trinh, H. H. (2022). Climate risk disclosures and global sustainability initiatives: A conceptual analysis and agenda for future research. *Business Strategy and the Environment*. <https://doi.org/10.1002/BSE.3323>.
- Pizzi, S., Principale, S., Fasiello, R., & Imperiale, F. (2023). The institutionalization of social and environmental accounting practices in Europe. *Journal of Applied Accounting Research*. <https://doi.org/10.1108/JAAR-07-2022-0190>.

Acceptability of Activities

► Acceptability of Operations

Acceptability of Operations

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Synonyms

Acceptability of activities; Acceptability of processes; Legitimacy of operations; License to operate

Definition

Acceptability is a value-bound social concept applied commonly when referring to societal relationships between an organization and involved groups, i.e., judges that evaluate operations or actions of the unit. The acceptability of a matter reflects the values of a society at a certain point in time and place. A value refers to choices which are (1) adopted from the surroundings, (2) considered in common, (3) permanent, and (4) concerned with the defined targets (Allardt 1983).

The other value-related feature is the matter of judgment. This entails the process that a judge evaluates the value-based matter and gives standards and criteria to the matter. Fredrick (1995)

considered each person's having personal values, which characterizes values as capable of expressing relative human diversity in social time and space.

Values tend to follow new social trends. The general substances of value characterize the concept giving the changing feature to the concept of acceptability. As a value, it is relatively permanent in nature, although value changes do occur for various reasons and can operate in different directions. Changes in social, cultural, demographic, economic, and technological factors can often be identified behind the value development (Karppinen 1998). The changing nature is one of the major limitations of the acceptability concept when standardizing organizational operations and process through the third-party judgment.

The acceptance is closely related to operations that interact closely with surrounding societies. Consequently, the concept of acceptability is used in practice when referring to societal relationships within socially sensitive sectors, such as natural resources-based sectors, sectors related to basic needs, like food, water, and energy, or other type necessities, or health care and medical sectors.

Introduction

The concept of acceptability is used in practice when referring to societal relationships within socially sensitive sectors, for example, natural resources-based sectors. The consumers' and/or stakeholder' acceptance is perceived relevant for the successful business operations which is well reflected in the number of scientific researches since the early 2000s. For example, Mikkilä (2003) started to investigate the concept among practitioners within the pulp and paper industry in Finland in the later 1990s. The changing operation environment and active environmental debate surrounding the industry together with internal pressure to strengthen the quality of the production process lead to the employment of the concept when assessing future challenges related to the interaction of the industry with the society (Mikkilä 2006).

Acceptability of Natural Resource Related Operations

Mikkilä (2003) proposed the application of the acceptability of operations as an indicator of corporate social performance. Furthermore, Mikkilä (2005) provided empirical content for the acceptability of operations through a qualitative field study concluding that the acceptability of operations is an applicable indicator for corporate social performance. Mikkilä et al. (2005) tested further the indicator hypothesis by applying multi-attribute methods. Mikkilä (2006) concluded the acceptability of operations being a social value expressing a person's or group's expectations. Also, the societal debate is reflected in the acceptability characteristics. The concept of acceptability is a local and regional phenomenon based on the local and regional value base.

McGuire et al. (2017) studied social acceptability in establishing of forest-based biorefineries in Maine, USA, in order to understand general public and local perceptions of bioenergy industries in their establishment, success, and sustainability. Apollo et al. (2017) investigated the reduction of environmental degradation in the county as a result of artisan mining. The livelihood by the indigenous people may be considered generally acceptable operation. The work analyzed the feasibility and acceptability of community participation, technology, and management strategies on the reduction of environmental degradation in Taita Taveta County, Kenya.

Horta Nogueira et al. (2017) applied the concept of acceptability in reviewing the available works in the field of sustainable and integrated bioenergy, more precisely in the areas related to energy production and agricultural activity. The work outlined a supporting approach for supporting policymakers in taking decision process of deploying sustainable bioenergy systems in Latin America and Africa.

Acceptability of Food-Water-Energy Nexus

The acceptance is closely related to the basic needs-related sectors, such as food, water, and

energy, or other type necessities that interact closely with surrounding populations. For example, Bouwer Utne (2008) discussed the performance of the Norwegian fishing fleet within an acceptable level of sustainability. The outcome was acceptance criteria of a sustainable Norwegian cod-fishing fleet to enable fisheries to monitor the sustainability performance of the fleet.

MacRitchie (2014) analyzed public's views on acceptability of interventions to reduce *Campylobacter* in poultry production in the UK. Zungu et al. (2019) aim at providing nutritional recommendations in South Africa for undernourished populations by assessing the effect of *Moringa oleifera* leaf powder (MOLP) on the nutritional composition and consumer acceptability of the snack.

Availability and public acceptability of residential rainwater use in Sri Lanka was examined through a questionnaire survey indicating high acceptability of noncontact and non-intake uses, such as outdoor, toilet, and laundry uses (Takagi et al. 2019). Mirás-Avalosa et al. (2017) investigated the effect of irrigation on consumer acceptability of white wines comparing irrigated against rain-fed Albariño and Godello vines. Consumer acceptance was analyzed using descriptive and multivariate techniques.

Sustainable business models as an innovation strategy and the related consumer's acceptance in the water sector was investigated by Sousa-Zomera and Cauchick Miguel (2018). The findings showed the space to strengthen consumers' acceptance, risk perception, and confidence in decentralized approaches with the support of business models through the integration of customers. Westin et al. (2016) combined a stylized transport model of an urban road network with a model of the political process. The combined model incorporated interactions between voters, citizen interest groups, and politicians to explore the political acceptability for efficient transport policies.

On example of the application of acceptability in the energy sector comes from Dreyer et al.'s (2017) attitudes' and behaviors' assessment related to tidal energy. The study outcome that higher levels of perceived benefits and climate change

beliefs were associated with increased acceptability of and support for tidal energy whereas greater perceived risks were associated with decreased acceptability and support. The conceptualization showed the characters of acceptability as an attitudinal construct, supporting a behavioral construct. Liu et al. (2019) compared the acceptability of renewable energy projects in the Netherlands and China. The work concluded the public acceptability being lowest when people had low trust in responsible agents and when people could only influence minor decisions regarding the project both in the Netherlands and China.

Acceptability Research Within Medical Sciences and Treatments

Health care and medical sectors are socially very sensitive areas of operations. Logically, the research field investigates largely the social acceptability of practices. The research has been significantly active in the late 2010s indicating the increasing popularity and applicability of the concept of acceptability in this context.

One of the newest works reviewed acceptability of financial incentives directed to patients for health-related behavior change (Hoskins et al. 2019). Burnett-Zeigler et al. (2019) studied the acceptability and feasibility of a mindfulness-based group intervention for socioeconomically disadvantaged women in an urban community health center with qualitative research techniques. Mock and Sethares (2019) tested concurrent validity and acceptability of the single item literacy screener, functional health literacy, and the newest vital sign in hospitalized adults with heart failure. Rush et al. determined feasibility, acceptability, and initial efficacy of the inhibitory-control training for drug use disorder and contingency management.

Acceptability Within Quantitative Research and Performance Techniques

The concept of acceptability can be studied both quantitatively and qualitatively. For example, Gall

and Rodwell (2016) considered the concept of social acceptability informative and relevant within the conservation of natural resources when applying Q methodology, a quantitative approach to reveal stakeholder perspectives, to assess social acceptance in the context of a marine protected area with fisheries and conservation management goals.

The concept of acceptability was applied also in evaluating performance appraisal techniques. An appraisal system has been judged traditionally according to its reliability and validity indexes, but recently the user acceptance has been considered critical to a system's successful implementation (Hedge and Teachout 2000). Song et al. (2017) applied a stochastic multi-criteria acceptability analysis to present a holistic measurement of the country-specific energy performance.

Conceptual Framework

The acceptability of operations has been largely applied in various research fields when investigating involved people's perceptions during the 2000s. The acceptability of operation relates closely with the concept of legitimacy and institutional behavior. The acceptability of operations refers commonly to the practical and operational use meanwhile the legitimacy has been applied widely by scholars. Acceptability of operations by the engaged groups, commonly stakeholders, provides a license to operate for an organization. This reflects the organizational behavior institutionalized by the Institutional organization theory (e.g., Powell and DiMaggio 1991) that the dimensions of the operation environment of an organization, such as social, economic, and political factors, build an institutional structure within which the actor engage specific types of activities.

Summary

Acceptability is a value-bound social concept being subject to acceptance for some purpose.

The concept can be considered as a value that changes in time and place. The changing nature is one of the major limitations, especially when assessing the acceptability of an issue, operation, process, protocol, etc. The issue judged acceptable yesterday, may get a different status today and tomorrow.

The acceptance is closely related to operations and procedures that interact closely with surrounding societies. Consequently, the concept of acceptability is used in practice when referring to societal relationships within socially sensitive sectors, such as natural resources-based sectors, sectors related to basic needs, like food, water, and energy, or other type necessities, or health care and medical sectors.

The research started to emerge in the early 2000s. The acceptability of operations has been largely applied in various research fields when investigating involved people's perceptions. The concept has been studied both quantitatively, qualitatively, and with mixed methods. The number of scientific works has increased significantly towards the end of 2010s indicating the popularity and applicability of the concept both among scholars and practitioners.

Cross-References

- Institutional Theory
- Legitimacy of Operations
- Legitimacy Theory
- Stakeholder
- Stakeholder Theory
- Value

References

- Allardt, E. (1983). *Sociologia I*. WSOY, Juva, p. 278.
- Apollo, F., Ndinya, A., Ogada, M., & Rop, B. (2017). Feasibility and acceptability of environmental management strategies among artisan miners in Taita Taveta County, Kenya. *Journal of Sustainable Mining*, 16(4), 189–195. <https://doi.org/10.1016/j.jsm.2017.12.003>.
- Bouwer Utne, I. (2008). Acceptable sustainability in the fishing fleet. *Marine Policy*, 32(3), 475–482. <https://doi.org/10.1016/j.marpol.2007.09.017>.

- Burnett-Zeigler, I., Satyshur, M. D., Hong, S., Wisner, K. L., & Moskowitz, J. (2019). Acceptability of a mindfulness intervention for depressive symptoms among African-American women in a community health center: A qualitative study. *Complementary Therapies in Medicine*, 45, 19–24. <https://doi.org/10.1016/j.ctim.2019.05.012>.
- Dreyer, S. J., Polis, H. J., & Jenkins, L. D. (2017). Changing tides: Acceptability, support, and perceptions of tidal energy in the United States. *Energy Research & Social Science*, 29, 72–83. <https://doi.org/10.1016/j.erss.2017.04.013>.
- Fredrick, W. C. (1995). *Values, nature, and culture in the American corporation* (p. 313). New York/Oxford, UK: Oxford University Press.
- Gall, S. C., & Rodwell, L. D. (2016). Evaluating the social acceptability of marine protected areas. *Marine Policy*, 65, 30–38. <https://doi.org/10.1016/j.marpol.2015.12.004>.
- Hedge, J. W., & Teachout, M. S. (2000). Exploring the concept of acceptability as a criterion for evaluating performance measures. *Group & Organization Management*, 25(1), 22–44. <https://doi.org/10.1177/1059601100251003>.
- Horta Nogueira, L. A., de Souza, L. G. A., Barbosa Cortez, L. A., & Lima Verde Leal, M. R. (2017). Sustainable and Integrated Bioenergy Assessment for Latin America, Caribbean and Africa (SIBYL-LACAf): The path from feasibility to acceptability. *Renewable and Sustainable Energy Reviews*, 76, 292–308. <https://doi.org/10.1016/j.rser.2017.01.163>.
- Hoskins, K., Ulrich, C. M., Shinnick, J., & Buttenheim, A. M. (2019). Acceptability of financial incentives for health-related behavior change: An updated systematic review. *Preventive Medicine*, 126, 105762. <https://doi.org/10.1016/j.ypmed.2019.105762>.
- Karppinen, H. (1998). Values and objectives of non-industrial private forest owners in Finland. *Silva Fennica*, 32(1), 43–59.
- Liu, L., Bouman, T., Perlaviciute, G., & Steg, L. (2019). Effects of trust and public participation on acceptability of renewable energy projects in the Netherlands and China. *Energy Research & Social Science*, 53, 137–144. <https://doi.org/10.1016/j.erss.2019.03.006>.
- MacRitchie, L. A., Hunter, C. J., & Strachana, N. J. C. (2014). Consumer acceptability of interventions to reduce *Campylobacter* in the poultry food chain. *Food Control*, 35(1), 260–266. <https://doi.org/10.1016/j.foodcont.2013.06.005>.
- McGuire, J. B., Leahy, J. E., Marciano, J. A., Lilieholm, R. J., & Teisl, M. F. (2017). Social acceptability of establishing forest-based biorefineries in Maine, United States. *Biomass and Bioenergy*, 105, 155–163. <https://doi.org/10.1016/j.biombioe.2017.06.015>.
- Mikkilä, M. (2003). Acceptability of operations as an indicator of corporate social performance. *Business Ethics: A European Review*, 12(1), 78–87. <https://doi.org/10.1111/1467-8608.00307>.
- Mikkilä, M. (2005). Observing corporate social performance empirically through the acceptability concept: A global study. *Corporate Social Responsibility and Environmental Management*, 12, 183–196. <https://doi.org/10.1002/csr.84>.
- Mikkilä, M. (2006). The many faces of responsibility: Acceptability of the global pulp and paper industry in various societies. *Dissertationes Forestales*, 25. <https://doi.org/10.14214/df.25>.
- Mikkilä, M., Kolehmainen, O., & Pukkala, T. (2005). Multi-attribute assessment of acceptability of operations in the pulp and paper industries. *Forest Policy and Economics*, 7, 227–243. [https://doi.org/10.1016/S1389-9341\(03\)00062-6](https://doi.org/10.1016/S1389-9341(03)00062-6). [https://doi.org/10.1016/S1389-9341\(03\)00062-5](https://doi.org/10.1016/S1389-9341(03)00062-5).
- Mirás-Avalosa, J. M., Fandiño, M., Trigo-Córdoba, E., Rey, B. J., Orriols, L., & Cancel, J. J. (2017). Influence of irrigation on consumer acceptability of Albariño and Godello wines. *LWT – Food Science and Technology*, 85(B), 345–352. <https://doi.org/10.1016/j.lwt.2017.01.076>.
- Mock, M. S., & Sethares, K. A. (2019). Concurrent validity and acceptability of health literacy measures of adults hospitalized with heart failure. *Applied Nursing Research*, 46, 50–56. <https://doi.org/10.1016/j.apnr.2019.02.007>.
- Powell, W. W., & DiMaggio, P. J. (1991). *The new institutionalism in organizational analysis* (p. 478). Chicago/London: The University of Chicago Press.
- Song, L., Fu, Y., Zhou, P., & Keung Lai, K. (2017). Measuring national energy performance via Energy Trilemma Index: A stochastic multicriteria acceptability analysis. *Energy Economics*, 66, 313–319. <https://doi.org/10.1016/j.eneco.2017.07.004>.
- Sousa-Zomera, T. T., & Cauchick Miguel, P. A. (2018). Sustainable business models as an innovation strategy in the water sector: An empirical investigation of a sustainable product-service system. *Journal of Cleaner Production*, 171, S119–S129. <https://doi.org/10.1016/j.jclepro.2016.07.063>.
- Takagi, K., Otaki, M., Otaki, Y., & Chaminda, T. (2019). Availability and public acceptability of residential rainwater use in Sri Lanka. *Journal of Cleaner Production*, 234, 467–476. <https://doi.org/10.1016/j.jclepro.2019.06.263>.
- Westin, J., Franklin, J. P., Proost, S., Basck, P., & Raux, C. (2016). Achieving political acceptability for new transport infrastructure in congested urban regions. *Transportation Research Part A: Policy and Practice*, 88, 286–303. <https://doi.org/10.1016/j.tra.2016.04.009>.
- Zungu, N., van Onselen, A., Kolanisi, U., & Siwela, M. (2020). Assessing the nutritional composition and consumer acceptability of Moringa oleifera leaf powder (MOLP)-based snacks for improving food and nutrition security of children. *South African Journal of Botany*, 129, 283–290. <https://doi.org/10.1016/j.sajb.2019.07.048>.

Acceptability of Processes

► Acceptability of Operations

Access Economy

- ▶ Collaborative Consumption
- ▶ Sharing Economy

Access Economy (Ethics)

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Synonyms

Open access economy; Resource-based economy;
Trust economy

Definition/Description

The access economy is based on the idea that we all own certain assets or services, but we do not use them all the time. So why not share them with others who need them? An access economy is a digital platform that allows community members to rent assets temporarily, as required. It emerges when access to a specific product or service becomes easy to use, cost-effective, and reliable enough that the motivation to own that product or service disappears. Different consumers and customers, from individuals to business entities, from micro to large businesses coming from developed and developing countries, can share unutilized resources, products, and/or services by means of a third-party provider, typically an app or digital platform. This enables closed community members (people and organizations) to earn financial compensation from underutilized resources.

Introduction

There are different strategies to fight overconsumption or harmful impact consumption from restrictions of advertisements to building

consumer's awareness on how, when, and where they are consuming products and services. But the most critical question is why? Why are we, as reasonable beings (*Homo sapiens*) trying to own stuff, we do not need permanently (sometimes even on temporary basis)? Why are we turning expensive living spaces, for which we sacrificed ourselves, into storage space? Why are we overproducing and overconsuming? Why do we own things, instead of sharing them in common or providing access to them?

The idea of the access economy refers to a wide range of possibilities that may be either more commercial or more social, sustainable, and democratic. The access economy, in recent years, has been surrounded by various opposing views, encompassing the idea that it contributes to a decentralized, just, and sustainable economy, as well as opposing views that it leads to the development of an unregulated market (Kumar, 2017). It is a stream of new companies that connect consumers to service providers or product owners for transactions using information and communication technology. Often is described as a novel, turbulent, and innovative feedback to overconsumption and underutilization of assets and resources (Findlay 2018). Access economy empowers individuals to achieve a more sustainable future while also changing attitudes about responsible consumption of goods and services (Albinsson & Perera, 2018). Simply said, the access economy is a distinctive business model that boosts the utilization of goods and services (Kumar, 2017).

Most of human history has been about acquiring and possessing goods and services, but recent trends have moved consumer preferences toward permanently sharing things we do not need. The value here is created from the fact that many resources humans own, are acquired to satisfy infrequent demand but are otherwise poorly utilized (for example, the average car in the USA is used less than 5% of the time) (Benjaafar et al., 2019). Sharing is a powerful concept that is as old as humanity and can be found everywhere (Bratianu, 2015). The act of sharing requires giving something that we have to others for their use and vice versa (Belk, 2007). A sharing economy is a set of practices that, mainly through technology,

allow participants and businesses to share access to goods, services, and experiences. Access economy platforms are typically described as temporary, on-demand transactions that occur over a short period through digital platforms (Bardhi & Eckhardt, 2012). Platforms are also described as organizational forms that solve the problems of delivering a good or service, clearing transactions (usually payment) between sellers and buyers, and creating trust between these parties (Munger, 2021). Sharing economy is widely defined as broad access to various products or services without the need to possess specific assets, appropriation of goods, and the exchange of intangible assets (Geissinger et al., 2022, citing Botsman & Rogers, 2010). These novel business opportunities caused a significant change in the understanding of how we as a society create value and our motivation for ownership.

Considering this, it can be concluded that several concepts exist simultaneously for this phenomenon (Fig. 1). The first is a collaborative economy, characterized as a marketplace in which buyers rely upon and meet their needs through direct interaction, as opposed via large

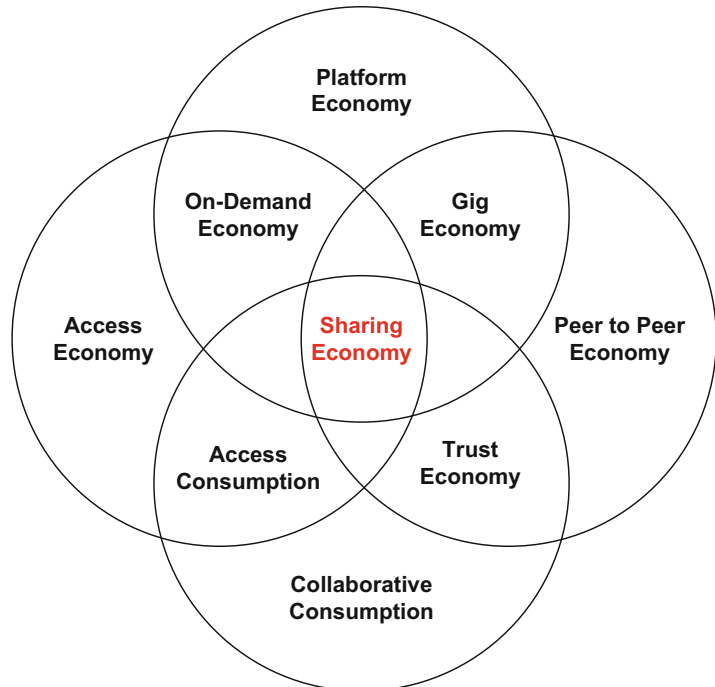
companies. The gig economy is a marketplace constructed of flexible, nonpermanent, or freelance jobs connected through online platforms with customers. The platform economy is the shift for businesses to move toward and in favor of digital platform business models (Govender, 2021). The on-demand economy is defined as an activity created by digital marketplaces to answer consumer wishes through prompt access to goods and services (Denning, 2014). The trust economy provides customers the possibility to control their data. The peer-to-peer economy is exemplified by the concept of transactions of goods or services between two customers without intermediaries (Pereira, 2020). The last one is sharing economy, characterized by the concept of shared assets and services between people (Govender, 2021) (Fig. 1).

Comparison Between Access and Conventional Economy

In recent years, the access economy has been growing in popularity as an alternative to the

Access Economy (Ethics),

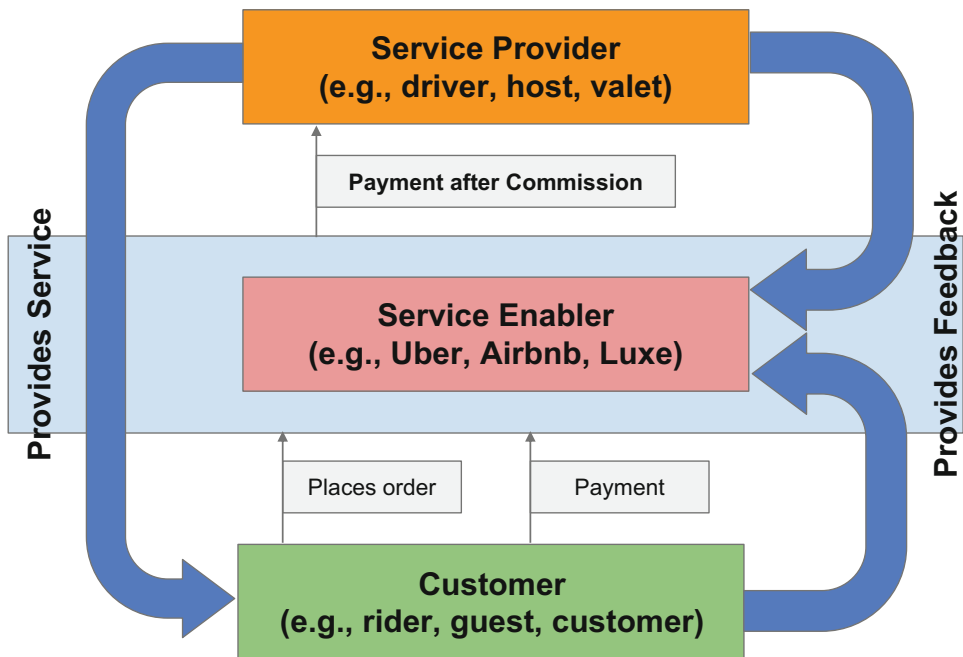
Fig. 1 Concepts of the phenomenon. Names for this phenomenon include collaborative consumption, access economy, gig economy, platform economy, on-demand economy, trust economy and peer-to-peer economy, and sharing economy (Govender 2021)



traditional model of ownership (Bratianu, 2015). In the access economy, people consume goods or services that are owned by someone else (Govender, 2021). This shift from ownership to access is becoming increasingly popular, especially among younger generations who prioritize experience and performance over possessions (Denning, 2014). Additionally, the access economy is often seen as a more sustainable and environmentally conscious way of living. With the help of information technology, the access economy can utilize resources that would otherwise go unused. Comparatively, the traditional ownership model often results in wasted resources (Govender, 2021) (Fig. 2).

The access economy deals through the short-term rental of one particular service or product, while on a conventional two-sided business model, market revenues are generated through sales. Regardless whether it is selling goods or services, access economy is mainly service-focused, in which providers are looking to carry out higher service quality, while

conventional markets go for sharpened product quality. Service quality is essential for the access economy because the main focus is increasing the number and quality of interactions between involved parties (Choudary et al., 2016). In a conventional two-sided market, there is no face-to-face interaction with the customer needs, but in an access economy, face-to-face interaction with customers is crucial. Also, in an access economy, it is normal to have a homogeneity of services under one service provider (for example, Uber and its transportation service). Comparing the risks associated with participating in the access economy and the conventional one, the risk is more significant in the access economy due to the lack of regulations (Kumar, 2017). The access economy represents a variety of activities that are placed in four categories – the first one is the recirculation of goods, the next one is increased use of durable assets, the third category is an exchange of services, and the last one is sharing of productive assets (Ravenelle, 2019).



Access Economy (Ethics), Fig. 2 The access economy business model. The model of the shared or access economy is made up of a business enabler acting as an arbitrator

between the suppliers of an underutilized good or service and customers who demand those (Kumar, 2017)

Product Categories in the Access Economy and the Benefits for Consumers

Govender (2021) defines access economy as a system of economic activity based on shared access to goods and services, along with collaborative production. The main characteristic of the access economy is that it is built around the sharing of resources and assets among peers, which are often underutilized. This includes everything from cars and bicycles to storage space and office equipment. In recent years, the access economy has grown rapidly, with many new businesses and platforms emerging to facilitate this type of collaborative peer-to-peer consumption.

Four main types of access economies have emerged: ride access, space access, book access, and music access.

- Ride access refers to a system where people can access different vehicles for transportation, from cars and bikes to motors and scooters or other modes of transportation (Govender, 2021). Ride-sharing is an innovative on-demand transport service that aims to promote sustainable transport, reduce car utilization, increase vehicle occupancy and public transport ridership (Mitropoulos et al., 2021). One aspect of ride sharing is apps like Uber, Taxify, Curb, or Bolt, which connect drivers with people who need a ride and market themselves as taxi replacement service. Rather than owning a car, customers can experience driving on a short-term basis whenever they need a vehicle and let others drive them when they need them. Another aspect is car-sharing models like Zipcar, Getaround, Lyft, and RubyRide, where you temporarily access a car and you drive yourself. Ride-sharing models make value to consumers and influence local transportation (Chen, 2009). There are many ride-sharing advantages like no maintenance cost, no underutilization of vehicles, no need for parking space, no need for insurance costs, and a pay-per-use model. Bicycle-sharing is a service that provides access to bicycles. The key benefits of participating in bicycle-sharing platforms and apps like Ofo, LimeBike, and Mobike, are the potential to reduce the number of cars on the road, navigate traffic congestion, reduce fuel consumption, reduce carbon emissions and potentially the cost of travel (Govender, 2021). Bicycle-sharing allows a consumer to collect a bicycle on loan from one location and return it to another short-term destination (Govender, 2021). It is interesting to mention examples of the access economy in China, where instead of countless number of bikes in cities, Chinese platforms and apps are using AI and big data technologies to identify spots with the most significant demand (Ma, 2020). Besides apparent benefits connected to environmental protection like reducing the number of bikes and cutting pollution in cities, other benefits include no longer cluttering with discarded bikes, availability of bikes during rush hour, and improved health for millions, not to mention new companies and employment.
- Models of access to space vary depending on their purpose, so there are models related to access to accommodation, space for work, storage space, and so on. The most popular is the model of accommodation access, where people rent out their homes or apartments to travelers (Govender, 2021). This is usually done through digital platforms like Airbnb and Vrbo, which allows people to search for and book rooms or entire homes in different locations around the world. The literature argues for both positive and negative socio-cultural, economic and environmental impacts emanating from the tourism and hospitality businesses and value chains that are dependent on AirBnB and other online platforms (Hall et al., 2022). Positive sides to not owning a property, like cost-effectiveness, flexibility, ease of use, and has no maintenance, among others. In addition, accommodation-sharing travelers could experience a range of destinations and accommodations worldwide.
- Book-access refers to a service that provides access to books online. It is a system where people can borrow and lend books to each other instead of buying books they need

- (Govender, 2021). This is typically done through online book libraries, like Little Free Libraries, BookMooch, and BookCrossing.
- Music-streaming platforms allow users to listen to free music or subscribe for a monthly subscription for a fee (Ma, 2020). Popular examples of music-streaming platforms include Spotify and Apple Music.

There are many benefits associated with the access economy. For example, it can help reduce traffic congestion and pollution, and save people money on ownership and maintenance costs. Additionally, the access economy often leads to the creation of new jobs and businesses. However, some challenges are associated with the access economy, such as a lack of regulation, standardization of quality, and the potential for abuse by platform providers. There are a few more examples of the access economy worth noting:

- JustPark is an online digital platform and mobile app that matches drivers with parking spaces.
- Poshmark is an online digital platform for new and used women’s fashion clothing and accessories and other verticals like home décor.
- Stashbee, the online digital platform, is specifically designated for sharing storage areas.

- Spinlister is an online digital platform connecting sporting equipment owners with short-term renters.
- SharedEarth is an online digital platform that connects landowners with gardeners and farmers.
- Camp space is an online digital platform facilitating authentic camping experiences on 1000 microsites.
- TaskRabbit is an online and mobile marketplace that matches freelance labor with local demand, allowing consumers to find immediate help with everyday tasks.

The sharing economy has revolutionized our way of life and work, and its growth will continue in the years to come. As more and more people adopt this way of living, it is important to be aware of the pros and cons of the sharing economy (Table 1).

Ethics in the Access Economy

The concept of trust is critical to the access economy (Ravenelle, 2019). The term “trust” has a variety of meanings. In the access economy, it denotes how much a customer trusts someone or something (Slee, 2015). Customers are more likely

Access Economy (Ethics), Table 1 Advantages and disadvantages in access economy

Advantages		Disadvantages	
Service providers (businesses)	Users	Service providers (businesses)	Users
New business models Efficient technologies Growing of new employment areas Possibility to find parallel work Flexible working hours Free and attractive compensation models Additional earning potential Commodification of excess capacity	Accessibility Attractive prices Larger offer of products and services Reducing environmental impact Consumer comments via the Internet, transparency Earning potential	Lack of legislative regulation Possibility of unfair competition Unclear taxes practise Heavy reliance on technology Lack of consumer loyalty Modifies customer wishes Unclear quality control	Risk of fraud and scams Lack of guarantee Lack of consumer protection (privacy and safety concerns) Commercialization No ownership on permanent basis Unclear transaction costs

The examples of successful companies show that various advantages follow the new business model, but there are also some disadvantages for users and businesses (Collins, 2021)

to buy products or services that they have come to trust. Customers are readier to make purchases if they feel secure about the brand. Trust will influence customers intentions favorably, which is essential for purchase. The greater the level of trust, the more favorable the desire to use a consumption mode is. To create a digital recreation of neighborly interactions, social media companies like Facebook and Google use provider accounts to verify identities (Stone & Hernandez, 2013). Every access to a digital platform, by default, demands that users create a genuine profile with personal information, and service enablers work to gather data on people's online character from their social media presence (Ravenelle, 2019). Although the access economy has many advantages, it also contains several drawbacks, such as tax evasion, skyrocketing property prices, job and wage insecurity, and so on. The access economy concept has historically masked exploitation, and significant division of power in the digital economy (Ahsan, 2018).

EU Perspective on the Access Economy

The European Union has established two primary lines of action to stay globally competitive: continuing digitization and environmental protection. The access economy best combines these two strategic concepts by giving people services and products when they need them and how much they need them, thus increasing market efficiency and effectiveness by optimizing the number of products and services in circulation. Peer-to-peer sharing of products and services is an as old concept as human existence. However, recent technological advancements have made it more accessible by lowering the associated search, and transaction costs (Benjaafar et al., 2019). On the one hand, the human race has made incredible progress over the past 100 years as our increasingly digitized world is rapidly developing under the influence of new technological opportunities such as the Internet of Things (IoT), Artificial Intelligence (AI), augmented reality (AR), big data, blockchain, and crypto currencies, among others; on the other, there is increased awareness of the negative

human impact on the environment and ubiquitous societal trends.

Access economy is not defined in EU legislation, but it has been the subject of various studies undertaken by the European Commission and the European Parliament (Weitzenboeck, 2022 citing Abadie et al., 2016; Dervojeda et al., 2013). The access economy is a new economic paradigm changing companies and customers based on mutual trust. It has been said that access is the future of business because it creates new services that enable a new generation of entrepreneurs to flourish.

The access economy is a new theory emphasizing access to assets or resources rather than ownership. It promotes a lifestyle centered on maximizing resource usage, which results in long-term cost savings for consumers. This implies that the consumption model of clients will shift because of the access economy. Businesses selling access rather than property are popping up all over.

The access economy, as defined by Accessibility for the Visually Impaired (2011), promotes more adaptable and flexible organizational structures built on networking architecture and aided by digital technologies (Ravenelle, 2019). Uber, AirBnB, Netflix, and Spotify have demonstrated that the access economy is a valid model for growth and success. The access economy is changing how we think about access and ownership, creating a new way of doing more sustainable business for our planet.

Summary

The access economy term is described along with all the features of the business model and compared with traditional market models with particular emphasis on the ethical dimension. In a highly networked modern world, people do not need ownership and overconsumption of things and/or services but accessibility, usage, and experience. Access economy can be described as an Internet-based business model in which providers of various items and services, such as employment, transportation, tourism, workspace, music, finance, or durable-goods lending

(demand), connect. Access economy business models significantly impact the market, society, and environment due to their drastically reduced transaction costs in digital environments. They compete with existing service providers in their industries (e.g., taxi services, vehicle rentals, or space access), impact workers (e.g., their skills, income, legal issues, and way of working), and provide consumers with alternatives (e.g., through storage-sharing rather than buying a property). Therefore, the access economy has already gained considerable attention from business, economic, environmental, and social science research.

Cross-References

- Collaborative Consumption
- Consumerism
- Gig Economy
- Peer-to-Peer Economy
- Sharing Economy
- Trust Economy

References

- Abadie, F., Biagi, F., & Codagnone, C. (2016). The future of work in the 'sharing economy'. *Joint Research Centre, Institute for Prospective Technological Studies*. <https://data.europa.eu/doi/10.2791/431485>
- Ahsan, M. (2018). Entrepreneurship and ethics in the sharing economy: A critical perspective. *Journal of Business Ethics*, 161, 19–33. <https://doi.org/10.1007/s10551-018-3975-2>.
- Albinsson, P. A., & Perera, B. Y. (2018). *The rise of sharing economy: Exploring the challenges and opportunities of collaborative consumption*. Santa Barbara: ABC Clío.
- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881–898. <https://doi.org/10.1086/666376>.
- Belk, R. (2007). Why not share rather than own? *The Annals of the American Academy of Political and Social Science*, 611(1), 126–140. <https://doi.org/10.1177/0002716206298483>.
- Benjaafar, S., Kong, G., Li, X., & Courcoubetis, C. (2019). Peer-to-peer product sharing. In M. Hu (Ed.), *Sharing economy – Making supply meet demand* (pp. 11–36). Cham: Springer.
- Bratianu, C. (2015). *Knowledge sharing and communities of practice*. Hershey: IGI Global. <https://doi.org/10.4018/978-1-4666-8318-1.ch011>.
- Chen, Y. (2009). Possession and access: Consumer desires and value perceptions regarding contemporary art collection and exhibit visits. *Journal of Consumer Research*, 35(6), 925–940. <https://doi.org/10.1086/593699>.
- Choudary, S. P., Parker, G., & Van Alstyne, M. (2016). *Platform revolution: How networked markets are transforming the economy and how to make them work for you*. New York: W. W. Norton & Company.
- Collins, A. (2021). *The sharing economy: Definition, examples and advantages*. Climate Consulting. <https://climate.selectra.com/en/environment/sharing-economy>. Accessed 9 May 2022.
- Denning, S. (2014). An economy of access is opening for business: Five strategies for success. *Strategy and Leadership*, 42(4), 14–21. <https://doi.org/10.1108/SL-05-2014-0037>.
- Dervojeda, K., Verzijl, D., Nagtegaal, F., & Lengton, M. (2013). *The sharing economy: Accessibility based business models for peer-to-peer markets*. Brussels: European Commission, Directorate-General for Enterprise and Industry.
- Findlay, I. M. (2018). Precursors to the sharing economy: Cooperatives. In P. A. Albinsson, & Y. Perera (Eds.), *The rise of the sharing economy: Exploring the challenges and opportunities of collaborative consumption* (pp. 9–28). Santa Barbara: ABC Clío.
- Geissinger, A., Laurell, C., Öberg, C., & Sandström, C. (2022). The sharing economy as an entrepreneurial evolution of electronic commerce. In E. Vinogradov, B. Leick, & D. Assadi (Eds.), *Digital entrepreneurship and the sharing economy* (pp. 72–88). New York: Routledge.
- Govender, K. (2021). *The rise of the sharing economy*. Bryanston: Tracey McDonald Publishers.
- Hall, C. M., Prayag, G., Safonov, A., Coles, T., Gössling, S., & Koupaie, S. N. (2022). Airbnb and the sharing economy. *Current Issues in Tourism*, 25(19), 1–11. <https://doi.org/10.1080/13683500.2022.2122418>.
- Kumar, V. (2017). A strategic framework for a profitable business model in the sharing economy. *Industrial Marketing Management*, 69, 147–160. <https://doi.org/10.1016/j.indmarman.2017.08.021>.
- Ma, V. (2020). *Here are 4 major bike-sharing trends from China after lockdown*. World Economic Forum (WEF). <https://www.weforum.org/agenda/2020/07/4-big-bike-sharing-trends-from-china-that-could-outlast-covid-19/>. Accessed 6 May 2022.
- Mitropoulos, L., Kortsari, A., & Ayfantopoulou, G. (2021). A systematic literature review of ride-sharing platforms, user factors and barriers. *European Transport Research Review*, 13(1), 61–83. <https://doi.org/10.1186/s12544-021-00522-1>.
- Munger, M. C. (2021). *The sharing economy: Its pitfalls and promises*. London: The Institute of Economic Affairs.
- Pereira, D. (2020). *Peer-to-peer business model*. The Business model analyst. Retrieved from <https://businessmodelanalyst.com/peer-to-peer-business-model/>

- Ravenelle, A. J. (2019). *Hustle and gig: Struggling and surviving in the sharing economy*. Oakland: California Press.
- Slee, T. (2015). *What is yours is mine: Against the sharing economy*. New York: OR Books.
- Stone, P., & Hernandez, L. A. (2013). The all-or-nothing workplace: Flexibility stigma and “opting” out among professional-managerial women. *Journal of Social Issues*, 69(3), 235–256. <https://doi.org/10.1111/josi.12013>.
- Weitzenboeck, E. M. (2022). The EU legal- regulatory framework for digital entrepreneurs in the sharing economy. In E. Vinogradov, B. Leick, & D. Assadi (Eds.), *Digital entrepreneurship and the sharing economy* (pp. 181–194). New York: Routledge.

Access-Based Consumption

- ▶ Collaborative Consumption
- ▶ Sharing Economy

Access-Based Service

- ▶ Sharing Economy

Accord de Paris

- ▶ Paris Agreement

Accountability

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Synonyms

[Answerability](#); [Reporting](#); [Responsibility](#)

Description

In its broadest sense, accountability in the corporate context refers to the extent to which corporate agents, primarily managers and directors, take responsibility for actions taken within the corporate. Responsibility for the consequences of corporate actions extends to stakeholders including shareholders, loan creditors, trade contacts, employees, and society. Accountability is an area of corporate governance which has enduringly drawn the attention of policymakers and scholars. Often viewed from a financial perspective, accountability has been promoted in UK best governance practice guidelines since the publication of the *Cadbury Report* in 1992. Over time, the need for accountability to parties beyond those with financial interests in the corporate has been recognized, and the standards of accountability expected in the corporate environment have extended and increased. This entry reviews the evolution of the concept of accountability within the UK corporate governance regulatory framework and considers the extent to which the current guidelines serve to promote accountable corporate activity in an inclusive and sustainable manner.

Introduction

Corporate governance may be viewed as a system which ensures that companies discharge their accountability to all their stakeholders (Solomon 2007). Accountability is a subset of governance and involves the monitoring, evaluation, and control of organizational agents to ensure that they behave in the interests of shareholders and other stakeholders (Keasey and Wright 1993). As such, a key premise of good governance is that management and directors should be accountable for their actions. While a strictly financial view of the corporate focuses primarily on accountability to shareholders, it is claimed that corporate development and shareholder returns may only be achieved if corporates ensure a level of accountability to all of their stakeholders (Stoney and Winstanley 2001). For over two decades, an enduring desire for corporate accountability

among investors and other corporate stakeholders has motivated continual development of guidelines and recommendations on best practice in corporate governance in the UK. Such recommendations seek to foster the principle of accountability among corporate boards without enforcing it upon them through the legal system. Best practice recommendations of the 1990s place a palpable emphasis on accountability to the shareholder; this is particularly true of the *Cadbury Report* and the *Greenbury Report*.

The Cadbury Report

The *Cadbury Report* captures the essence of accountability in corporate governance in stating that shareholders, as owners of the corporate, elect the directors to run the business on their behalf and hold them accountable for its progress. The issue for corporate governance is how to strengthen the accountability of boards of directors to shareholders (para. 6.1). Since the committee's terms of reference were primarily related to the financial aspects of governance, much of the recommendations made within the report are directed toward the role of the board, the audit committee, and the independent auditor in ensuring financial accountability to the shareholder. The report advises that the most direct method of ensuring that corporates are accountable for their actions is through open disclosure by boards and audits carried out against strict accounting standards (para. 5.2). This is promoted and strengthened through properly constituted boards, a separation of the roles of chairman and chief executive, audit committees, vigilant shareholders, and financial reporting and auditing systems which provide full and timely disclosure (para 7.2).

The Greenbury Report

The board's role in assuring accountability with regard to directors' remuneration is considered in depth in the *Greenbury Report* (1995). Despite its origins as a response to public concern regarding

increasing levels of executive pay which coincided with redundancies and wage reductions among low- to middle-income earners, the *Greenbury Report*, like the *Cadbury Report*, converges largely upon accountability to the shareholder. The guidelines recommended within the report consider the remuneration committee as the body with primary responsibility for ensuring accountability with respect to executive pay (para 4.3). Disclosure is viewed as the main mechanism through which such accountability may be exercised (paras 5.2–5.3). Linking pay to performance in a manner that reflects the corporate's position within an industry is also strongly encouraged as a means of justifying the levels, and structure, of the remuneration package awarded to individual directors (paras 6.6–6.7; 6.16).

Both the *Cadbury Report* and the *Greenbury Report* are considered to have led to enhancements in accountability (*Hampel Report*, para. 1.1). The emphasis placed in the respective reports on the roles of the audit and remuneration committees in ensuring accountability to the shareholder is strongly reflected in the *Combined Code* on Corporate Governance of 1998 (FRC 1998).

The Higgs Review

The shareholder-oriented perspective on accountability persists to some extent in the *Higgs Review* (2003), describing corporate governance as providing “an architecture of accountability – the structures and processes to ensure companies are managed in the interests of their owners” (para 1.5). The *Higgs Review* considers how effective board processes can support accountability such that good governance is ensured, noting that a “progressive strengthening of the existing architecture is strongly desirable, both to increase corporate accountability and to maximise sustainable wealth creation” (para 1.13). While acknowledged in the *Cadbury Report* to an extent, the *Higgs Review* underlines shareholders' responsibility to actively engage with the corporates in which they invest to ensure accountability is delivered to them (para 17.8).

The Smith Report

The *Smith Report* (2003) makes recommendations concerning the accountability of the external auditor to the audit committee and the accountability of the audit committee and the board to the shareholders. These recommendations place particular weight on the independence of both the external auditor and the audit committee so as to strengthen such accountability. With regard to the activity of the audit committee, the *Smith Report* recommends committees meet at least three times in the year (para 3.5) and monitor the integrity of the corporate financial statements, the effectiveness of internal financial control and risk management systems, and the effectiveness of the corporate's internal audit function (para 2.1). However, it is made clear that it is the board as a whole who is accountable to the shareholder for producing accurate, compliant, financial statements (para 5.2). With regard to the external audit, it is advised that the audit committee makes recommendations to the board regarding the appointment of the external auditor (para 5.15); approves the auditor's remuneration and terms of engagement (para 5.19); ensures rotation of the external auditor (para 5.25); ensures the external auditor's independence, objectivity, and effectiveness; and develops and implements policy regarding the external auditor's supply of non-audit services (para 5.26). Recommendations put forth in the *Higgs Review* and the *Smith Report* were incorporated in the revised *Combined Code* (FRC 2003).

The Combined Codes of 2006 and 2008

The 1992–2003 period witnessed a continued strengthening of guidelines aimed at encouraging appropriately structured and skilled boards, which were sufficiently active to ensure accountability to the shareholder. Changes made to the *Combined Code* in 2006 and 2008 tend not to place any significant additional onus on the board of directors. Revisions to the Code in 2006 largely serve to facilitate the shareholder in requiring accountability from the board by setting out guidelines on

shareholder voting by proxy (FRC 2006: Provisions D.2.1. and D.2.2). The revised Code of 2008 introduces greater flexibility for board by removing the restriction on directors from serving on more than one FTSE 100 board and permitting chairmen in smaller corporates to serve on audit committees. In this regard, the guidelines appear to introduce something of a balance between the board's responsibility to ensure accountability to shareholders and the need for a board to be structured in a manner that best suits the size and nature of the business (FRC 2008).

The Walker Review

In the wake of the Global Financial Crisis of 2008, the consequences of short-term-oriented risk-taking behavior became starkly apparent. The *Walker Review* (2009) noted the need to ensure that boards are “equipped and driven to focus more effectively on the core elements in the wide array of accountabilities that they already have” (para. 2.12). The review highlights nonexecutive directors' role in holding executive directors to account in strategic decision-making with respect to the sustainability of strategies pursued (para. 3.9). While initially directed toward the banking and financial services industry, the recommendations of the review led to the replacement of the *Combined Code* with the *UK Corporate Governance Code* (FRC 2010a) and the accompanying *UK Stewardship Code* (FRC 2010b).

The UK Corporate Governance Code and the UK Stewardship Code

There are a number of notable aspects of the *UK Corporate Governance Code* (2010) which serve to reinforce the spirit of accountability by the board and management (FRC 2010a). The *Walker Review's* strong emphasis on regular board refreshment as a means of sustaining board accountability is reflected in the Code, which requires all directors of FTSE 350 companies to stand for annual re-election (Provision B.7.1). In light of the lessons learned from the financial

crisis, the Code sets out the board's responsibility to determine the nature and extent of significant risks it is willing to take (Principle C.2). In this respect, the FRC expresses the view that clear lines of accountability throughout the corporate are essential for effective risk management (FRC 2011). A large degree of responsibility is placed on nonexecutive directors to hold themselves accountable for risks taken by the corporate; it is recommended that they satisfy themselves that financial controls and systems of risk management are robust and defensible (supporting principle A.4). Yet, the board as a whole is considered accountable for risk-taking within the corporate. Under provision C.2.1, the board should, at least annually, conduct a review of the effectiveness of the corporate's risk management and internal control systems and should report to shareholders that they have done so. The Code also echoes the recommendations of the *Walker Review* and a general post-crisis focus on long-term value creation. The Code is presented as being "based on the underlying principles of all good governance: accountability, transparency, probity and focus on the sustainable success of an entity over the longer term" (FRC 2010a, Governance and the Code, para 4). This view of governance might be considered more prescriptive and outward-looking than that taken in the prior *Combined Code* (FRC 2008): "Good governance should facilitate efficient, effective and entrepreneurial management that can deliver *shareholder value* over the longer term." Nonetheless, the provisions of the *UK Corporate Governance Code* (FRC 2010a) remain predominantly focused on accountability to the shareholder and offer little guidance on accountability to other stakeholders of the corporate.

The introduction of the accompanying *UK Stewardship Code* marked a significant broadening of the concept of accountability from the perspective of codes of best practice. Before this, guidelines aimed at promoting accountability focused almost exclusively on the relationship between the board and the shareholder. The *UK Stewardship Code* (FRC 2010b) aims to make investors more accountable to their clients and beneficiaries with a view to improving long-term

returns to investors (*UK Stewardship Code*, Preface). The Code sets out that institutional investors' duty is to act within the interests of their beneficiaries and offers guidance on resolving conflicts of interests which may arise between institutional investors and their beneficiaries, particularly in respect of voting at AGMs of parent and client corporates (Principle 2). Institutional investors are advised to make disclosures regarding their activities regarding voting and engagement with investee firms so as to enhance their accountability to their beneficiaries (Principles 6 and 7). The Code also guides institutional investors in holding the boards of investee corporates to account through monitoring and dialogue (Principle 3), intervention when necessary (Principle 4), and collaboration with other investors (Principle 5).

The *UK Corporate Governance Code* has undergone revisions biennially since 2010. Revisions made to the *UK Corporate Governance Code* in 2012 may be seen to increase the level of accountability expected from boards, and in particular audit committees, to shareholders (FRC 2012). Principally, audit committees in all firms are required to disclose to shareholders, a detailed narrative of how they adhere to their responsibilities (Provision C.3.8). A palpable onus is placed on the board to make themselves accountable for overseeing the sustainable performance of the corporate in the 2014 edition of the Code (FRC 2014), which advises the publication of a clearer and broader view of solvency, liquidity, risk management, and viability (Provision C.2.1). Boards must identify any material uncertainties to the corporate's ability to continue to adopt the going concern basis of accounting over the next year (Provision C.1.3).

Following the introduction of a new EU regulatory framework on audit reform in 2016, the Directive 2014/56/EU and Regulation 537/2014, many of the changes which emerged in 2016 are manifest in the FRC's *Guidance on Audit Committees* (FRC 2016a), published separately to the *UK Corporate Governance Code* (FRC 2016b). Accountability to the shareholder is strongly encouraged in the guidance. The audit committee should include in the annual report, a section, signed by its chairman, explaining the nature of

its role to shareholders (para. 80). The chairman of the audit committee should be present at the AGM to answer questions on the audit committee's activities and matters within the scope of the audit committee's responsibilities (para. 85). The emphasis placed upon assurance of the financial sustainability of the corporate is carried through in the guidance which states that, unless a separate risk committee is in place, the audit committee should review and recommend to the board the disclosures included in the annual report in relation to internal control, risk management, and viability (para. 44).

Notwithstanding, the heightening of the standards of accountability expected from boards over the decades, it was not until 2018 that considerable attention was devoted in best practice guidelines to the board's accountability to non-shareholder stakeholders. In its introduction, the *UK Corporate Governance Code* (FRC 2018) sets out that:

"successful and sustainable businesses underpin our economy and society by providing employment and creating prosperity. To succeed in the long-term, directors and the companies they lead need to build and maintain successful relationships with a wide range of stakeholders. These relationships will be successful and enduring if they are based on respect, trust and mutual benefit."

Principle A departs from the shareholder-centric approach taken in previous codes by outlining that the board is accountable to shareholders in a broader societal context; the board's role is described as being to promote the long-term sustainable success of the corporate, generating value for shareholders and contributing to wider society. Under Provision 5, the need for the board to understand the views of the corporate's key non-shareholder stakeholders is clarified. The board is encouraged to describe in the annual report how stakeholders interests have been considered in board discussions and decision-making. The board should keep engagement mechanisms under review so that they remain effective, particularly with respect to employees. Clarity in disclosure of remuneration arrangements is encouraged so as to promote effective engagement with shareholders and the workforce

(Provision 40). Such encouragement of accountability to the corporate's broader non-shareholder stakeholders is consistent with Section 172 of the UK Companies Act which sets out the duty of directors to promote the success of the corporate for the benefit of its members as a whole, with due regard to the interests of the corporate's employees; relationships with suppliers, customers, and others; and the impact of the corporate's operations on the community and the environment.

Summary

The progress made in encouraging board accountability within UK guidelines on best practice in corporate governance is evident. The standards expected of boards of directors of accountability to shareholders have continually increased. Yet, until recently, such guidance has been quite narrowly focused on financial accountability. Despite the setting out in legislation in 2006 of a director's duty to promote the interests of members of the corporate as a whole, including but not limited to employees, suppliers, customers, and society, a time period of 12 years elapsed before this is reflected in corporate governance guidelines. Accountability to broader stakeholders is acutely acknowledged as fundamental both to effective governance and sustainable corporate and economic development within the academic literature (McLaren 2004; Mason and Simmons 2014). From a traditional financial perspective, it is arguable that the shareholder-oriented approach to accountability taken over much of the past two decades may have positive externalities for more peripheral stakeholders in the corporate to the extent that directors' focus on maximizing shareholder wealth will enviably result in corporate growth, leading to job creation, productive relations with suppliers, and enhanced offerings to consumers (Mayer 1997; Roe 2000; Faleye et al. 2006). Yet, such focus may often entail efficiency measures which can have harmful impacts on working conditions, damage supplier relations, and even reduce the level of competition in the product

markets (Mayer 1997; Roe 2000; Deakin 2005; Goergen et al. 2014).

Early guidance on best practice in corporate governance might be considered to paradoxically lack focus on how board practices serve to enhance accountability, being largely concerned with structural aspects of the board. It was not until the *Higgs Review* in 2003 that significant guidance is offered on how board processes can support accountability. From a behavioral perspective of accountability, both relationships on the board and relationships between the board, shareholders, and other stakeholders are integral to ensuring responsibility is duly assumed and integrity underpins the corporate's business activities (Huse 2005). Since the financial crisis, UK guidelines on best practice in corporate governance have increasingly offered advice on how board behavior, processes, and relationships may contribute to greater accountability particularly with regard to risk-taking and ensuring the viability of the corporate in the long term. Similarly, the policy emphasis placed on how accountability in relationships along the investment chain, and between investment managers and directors, can help improve long-term returns to investors in the *UK Stewardship Code* may be seen as a necessary addition to the regulatory framework from the perspective of sustained accountability.

Notwithstanding such developments, scholars of corporate governance continue to note the lack of authentic evidence of accountability in the corporate setting (Harvey et al. 2019; Steckler and Clark 2019), noting that such heavy reliance on disclosure of accounting information does not necessarily lead to enhanced accountability or control (Du Rietz 2018). The self-regulatory governance framework followed in the UK may be considered too blunt an instrument to promote genuine accountability by corporate management to the range of stakeholders in the corporate (Harvey et al. 2019). Yet the ability of legally enforced rules to foster a true spirit of integrity and responsibility has long been questioned (Keenan 2004; Romano 2005; Arcot et al. 2010). Indeed, the self-regulatory approach in itself has its merits; the extent to which it is fit for the purpose of promoting accountability will inevitably depend on the

nature of issues arising between corporates, their shareholders, and other stakeholders. Often criticized for being somewhat reactionary in their construction, it has been pragmatically suggested that corporate governance policy which can sustain accountability ought to reflect not only the lessons learned from past crises and failures but to also account for changes which will impact regulatory models and practice in the long term (Brennan and Solomon 2008).

Cross-References

- ▶ [Combined Code](#)
- ▶ [Greenbury Report \(UK\)](#)
- ▶ [Hampel Report \(UK\)](#)
- ▶ [Higgs Report \(UK\)](#)
- ▶ [Reporting Framework](#)
- ▶ [Responsibility](#)
- ▶ [Responsiveness](#)
- ▶ [Social License to Operate](#)
- ▶ [UK Corporate Governance Code \(2010\)](#)
- ▶ [United Nations Human Rights Committee](#)
- ▶ [Walker Review \(2009\) on Banks' Corporate Governance](#)

References

- Arcot, S., Bruno, V., & Faure-Grimaud, A. (2010). Corporate governance in the UK: Is the comply or explain approach working? *International Review of Law and Economics*, 30(2), 193–201.
- Brennan, N. M., & Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: An overview. *Accounting, Auditing & Accountability Journal*, 21(7), 885–906.
- Cadbury, A. (1992). *Committee on the financial aspects of corporate governance*. London: Gee Publishing.
- Deakin, S. (2005). The coming transformation of shareholder value. *Corporate Governance*, 15(1), 11–18.
- Du Rietz, S. (2018). Information vs knowledge: Corporate accountability in environmental, social, and governance issues. *Accounting, Auditing & Accountability Journal*, 31(2), 586–607.
- Faleye, O., Mehrotra, V., & Morck, R. (2006). When labor has a voice in corporate governance. *Journal of Financial and Quantitative Analysis*, 41(3), 489–510.
- Financial Reporting Council. (1998). *The combined code on corporate governance, June 1998*. London: Financial Reporting Council Ltd.

- Financial Reporting Council. (2003). *The combined code on corporate governance, July 2003*. London: Financial Reporting Council Ltd.
- Financial Reporting Council. (2006). *The combined code on corporate governance, June 2006*. London: Financial Reporting Council Ltd.
- Financial Reporting Council. (2008). *The combined code on corporate governance, June 2008*. London: Financial Reporting Council Ltd.
- Financial Reporting Council. (2010a). *The UK corporate governance code, June 2010*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2010b). *The UK stewardship code, July 2010*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2011). *Boards and risk: A summary of discussions with companies, investors and advisors, September 2011*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2012). *The UK corporate governance code, September 2012*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2014). *The UK corporate governance code, September 2014*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2016a). *Guidance on audit committees, April 2016*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2016b). *The UK corporate governance code, April 2016*. London: The Financial Reporting Council Ltd.
- Financial Reporting Council. (2018). *The UK corporate governance code, July 2018*. London: The Financial Reporting Council Ltd.
- Goergen, M., O'Sullivan, N., & Wood, G. (2014). The consequences of private equity acquisitions for employees: New evidence on the impact on wages, employment and productivity. *Human Resource Management Journal*, 24(2), 145–158.
- Greenbury, R. (1995). *Directors' remuneration: Report of a study group chaired by sir Richard Greenbury*. London: Gee Publishing.
- Hampel Committee on Corporate Governance. (1998). *Committee on corporate governance, final report*. London: Gee Publishing.
- Harvey, C., Maclean, M., & Price, M. (2019). Executive remuneration and the limits of disclosure as an instrument of corporate governance. *Critical Perspectives on Accounting*, forthcoming, 102089.
- Higgs, D. (2003). *Review of the role and effectiveness of non-executive directors*. London: Department of Trade and Industry.
- Huse, M. (2005). Accountability and creating accountability: A framework for exploring Behavioural perspectives of corporate governance. *British Journal of Management*, 16, S65–S79.
- Keasey, K., & Wright, M. (1993). Issues in corporate accountability and governance: An editorial. *Accounting and Business Research*, 23(sup1), 291–303.
- Keenan, J. (2004). Corporate governance in UK/USA boardrooms. *Corporate Governance: An International Review*, 12(2), 172–176.
- Mason, C., & Simmons, J. (2014). Embedding corporate social responsibility in corporate governance: A stakeholder systems approach. *Journal of Business Ethics*, 119(1), 77–86.
- Mayer, C. (1997). Corporate governance, competition, and performance. *Journal of Law and Society*, 24(1), 152–176.
- McLaren, D. (2004). Global stakeholders: Corporate accountability and investor engagement. *Corporate Governance: An International Review*, 12(2), 191–201.
- Roe, M. J. (2000). The shareholder wealth maximization norm and industrial organization. *University of Pennsylvania Law Review*, 149, 2063–2081.
- Romano, R. (2005). The Sarbanes-Oxley act and the making of quack corporate governance. *Yale Law Journal*, 114(7), 1521–1611.
- Smith, R. (2003). *Audit committees combined code guidance*. London: The Financial Reporting Council.
- Solomon, J. (2007). *Corporate governance and accountability*. Sussex: Wiley.
- Steckler, E., & Clark, C. (2019). Authenticity and corporate governance. *Journal of Business Ethics*, 155(4), 951–963.
- Stoney, C., & Winstanley, D. (2001). Stakeholding: Confusion or Eutopia? *Journal of Management Studies*, 38(5), 603–626.
- Walker, D. (2009). *A review of corporate governance in UK banks and other financial industry entities: Final recommendations*. London: HM Treasury.

Accountability in Nonprofit Sector

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Synonyms

CSR in nonprofit sector; Liability in nonprofit sector; Responsibility in nonprofit sector; Transparency in nonprofit sector

Definition

Accountability in nonprofit sector concerns an articulated assessment of global and overall consistency inherent in the following key elements:

- (a) Transparent use of financial and nonfinancial resources.
- (b) Correctness of management and governance.
- (c) Adequacy and conformity between actions and objectives.
- (d) Clear communication of the results achieved.

In essence, it is intended to refer to the application of the concept of accountability to the nonprofit sector. If the generic term accountability is very multifaceted, as it is highly debated and chameleon-like (Mulgan 2000; Messner 2009), it is even more complex and profound when referring to nonprofit institutions (NPIs) (Rademacher and Remus 2017). In fact, it presents an evident versatility, being able to represent a principle, a duty, a system, a process, a mechanism, a set of tools and techniques (Ricci 2019): it describes the need to report, responsibly, the work of NPIs towards all stakeholders regarding the use of the resources, the correctness of the management, the correspondence and the consistency of the activities with respect to the programmed objectives (Ricci 2016). The final aim is to allow the correct demonstration of social value (Campbell 2002) and public value (Moore 1995; Esposito and Ricci 2015) generated by NPIs, which are necessary to guarantee their success (Krisch and Grabner-Kräuter 2017).

Introduction

As argued by literature, a fundamental aspect of the management of any economic institution is represented by the processes involved in evaluating performance (Speckbacher 2003). Nonetheless, it must be stressed that this statement, although valid from a theoretical-general point of view, cannot be abstractly referred to any type of organization, and with the same modalities of application.

In this perspective, the nonprofit sector constitutes a very particular area of economic organizations characterized by three peculiarities (Anheier 2000; Civitillo 2016):

- 1. The absence of the profit purpose.
- 2. The difficulty of using reliable financial parameters and criteria.
- 3. The mission is strongly influenced by the set of values pursued with its activities.

These elements give to NPIs characteristics of hybridity which make it very difficult to identify models, principles, criteria and tools useful for the correct management of these economic organizations.

Furthermore, since NPIs do not find their main management driver in profit, a further consequence is that performance assessment in these particular entities is extremely ambiguous, mainly due to their value system which is vast, unclear, vague, imprecise, heterogeneous and difficult to express with measures.

It is clear that the value system of NPIs (e.g., politics, religion, health, environment, ethics, morals, voluntarism, philanthropy, compassion, etc.) affects the set of programmed objectives and the ways in which these are achieved (Najam 1996; Porter and Kramer 1999; Moore 2000; Putnam 2001; Speckbacher 2003; Toepler and Anheier 2004).

This means that in NPIs the connection between their organization and their value system is so close that the mission takes an enormous importance, also in relation to the organization and management of these institutions (Moore 2000; Smith 2008). In this sense, the mission of NPIs can be useful to define the value system to which NPIs are intended (Moore 2000).

Many theories have tried to correctly interpret the existence of NPIs, most of which are relatively recent (DiMaggio and Anheier 1990; Hansmann 1996; Rose-Ackerman 1996; Salamon and Sokolowski 2004). In essence, they seem to pose a crucial question: whether market economies are aimed at profit, why are there some organizations that decide not to foresee profit as a priority of their system of values?

To answer this question, a very useful starting point could be the identification of the main characteristics of NPIs (Salamon and Anheier 1996; Anheier 2014).

In this sense, it is very interesting to highlight that NPIs could (or probably should) be more correctly considered as “nonprofit-distributing” organizations rather than as “nonprofit-making” entities (Anheier 2014), mainly because NPIs are structurally conceived as economic organizations in which the incoming monetary flows are destined to the exercise of their institutional activities and, therefore, to their mission; on the contrary, it is not foreseen that incoming resources can be distributed, in any way, to the different governing bodies of the same organizations.

All this means that any financial resources generated by the action of this particular type of organization are mainly reinvested or, in any case, destined for the declared mission of it.

This first argument would lead to the following conclusions:

- (a) NPIs, unlike private companies, are extraneous to the generation of profits or, in general, of positive financial results.
- (b) The acquisition of resources (financial and nonfinancial) in NPIs is very sensitive to levels of efficiency and effectiveness in the pursuit of the aforementioned institutional needs, with obvious management consequences.

The second statement is particularly useful to highlight that the management of NPIs can never allow the abandonment of the basic economic paradigms typical of any economic organization, regardless of whether it is of the “profit” or “nonprofit” type. In both cases, managerial processes and patterns are substantially similar, to diverge only for aspects related to the specific purposes: “profit” or “nonprofit” goals (Civitillo 2016).

Accountability in Nonprofit Institutions

In the context just described, a very important concept is represented by profit, which can be conceived as a sort of fuzzy and multiform concept: if it is indisputable that it cannot be assumed as a possible absolute indicator of the capacity to create value of any type of economic

organization (Ricci and Civitillo 2019), this is particularly true for NPIs which are not institutionally prearranged for profit (Moore 2000; Dees 2001).

In this sense, the real and concrete value attributable to NPIs could be identified in the construction of social relations with communities and citizens of a certain territory (Porter and Kramer 1999; Putnam 2001; Tenbensen et al. 2014): in some fields, nonprofit sector is able to generate indisputable advantages in terms of social value production, such as the creation of networks to exchange information from/to the communities or social and professional networking (Porter and Kramer 1999; Wondolleck and Yaffee 2000; Smith 2008).

However, it should be noted that nonprofit sector and its institutions have also been subject to a complex process of importing business-type methodologies and tools, similarly to what happened for the Public Administration with the typical approaches of New Public Management. This has led to a progressive loss of their civic-engagement characteristic, resulting in a decrease in their degree of representativeness and democracy (Smith 2010; Skocpol 2013).

All this has meant that NPIs, up to now, have been considered as organizational entities whose objective of optimizing and maximizing performance levels do not appear compatible with the pursuit of the civic-engagement objectives that characterize their value system.

In truth, however, it is possible to identify a sort of complementary element to the performance objectives: it is the accountability concept which, in this perspective, does not represent an obstacle to the performance objectives of NPIs but, on the contrary, a process that is able to improve the overall management of these organizations (Boris and Steuerle 2006; Ricci and Civitillo 2017, 2018). NPIs increasingly emphasize the notions of performance measurement and accountability as the same assessment of the organization’s ability to properly fulfill its mission is effective only in the presence of an efficient information level of performance. On the other hand, the absence or even the limitedness of information lead to inevitable unfortunate consequences, as

well as a series of negative externalities such as the reduction of the level of public trust in NPIs which, obviously, can seriously compromise the same survival of these organizations, as well as their development (Speckbacher 2003).

It is therefore evident that, in this context, accountability plays a fundamental role (Dubnick 2011), as it implies the duty to act in a responsible way and to be accountable to others for one's actions, in order to maintain effective and logical links between planning, deciding, action, and verification (Ricci 2016). Although accountability represents "a complex and chameleon-like term" (Mulgan 2000, p. 555), recently, it has significantly expanded its relevance, becoming a fundamental factor for various aspects of citizens' lives.

According to Mulgan (2000), accountability can take on at least four meanings:

1. Accountability as a sense of responsibility for the public interest expected of public employees (professional and personal accountability).
2. Accountability as a democratic control system of government actions (accountability as control).
3. Accountability as a criterion for pursuing the desires or needs of communities (accountability as responsiveness).
4. Accountability as a form of public dialogue for citizens (accountability as dialogue).

All this implies that accountability, with specific reference to NPIs, refers to the need to make the use of financial and nonfinancial resources transparent, but also about the correctness of the management capacity, the adequacy and conformity between actions and objectives, and the clear reporting of results achieved by the organization (Rosenfield 1974; Behn 2001). This determines that clear representation of policies and rules relating to the political, social, cultural context in which NPIs operate appears today a fundamental requirement to guarantee the achievement of their planned objectives and, therefore, their success. Consequently, despite a physiological reciprocal link, performance measurement and

accountability remain different, especially regarding the objectives pursued: accountability necessarily implies the complete, systematic and transparent reporting of the multifaceted organizational structure of an economic organization, both financial and (or, perhaps, above all) non-financial nature (Civitillo 2016). In this sense, for example, accountability may be able to demonstrate the efficient and effective use of money in the organization and the level of goods and services produced. It is only in this way that the user is able to know the public value generated (Moore 1995; Esposito and Ricci 2015).

In this context, NPIs are able to generate high level of social value goods and services (Campbell 2002) which, very often, are not actually supplied either by Market or by Public Administrations since they do not fall within their respective productive or strategic advantages: consequently, accountability can be the ideal tool also to increase the visibility of these organizations, which is a particularly relevant aspect (Krisch and Grabner-Kräuter 2017).

Notwithstanding the scientific literature shows how the studies have always focused almost exclusively in relation to the for-profit institutions (Habisch et al. 2005; Barth and Wolff 2009; Idowu et al. 2015), it is essential to point out that accountability is a prerequisite for NPIs because it allows them to demonstrate to the stakeholders the effective ability of the organization to pursue the objectives set by its mission (Nardo and Siboni 2018).

In the current era, the objectives of NPIs include a far too wide range of activities, such as education, healthcare, charity, religion or culture, just to give a few examples: these are activities intimately connected to citizens and, in general, to the civilian community and which, above all, presuppose a high degree of confidence and trust.

As a result, anything that is capable of harming this trust relationship – even if only potentially – may have enormous repercussions on the financial resources of NPIs.

This means that today, maintaining an adequate level of trust in the nonprofit sector is no longer a mere alternative of growth development but rather:

- A real need, in order to improve the management of NPIs.
- A moral or ethical duty or obligation, in consideration of the institutional goals of the organizations in this sector.

What has just been highlighted assumes even greater importance in consideration of the development of the SDGs and the 2030 Agenda for Sustainable Development by the United Nations which, in fact, have made the role of the Nonprofit sector even more relevant for the pursuit of the general objective of sustainability of the global economy:

“All countries and all stakeholders, acting in collaborative partnership, will implement this plan. We are resolved to free the human race from the tyranny of poverty and want and to heal and secure our planet. We are determined to take the bold and transformative steps which are urgently needed to shift the world on to a sustainable and resilient path. As we embark on this collective journey, we pledge that no one will be left behind” (United Nations 2015, p. 3).

Following the program envisaged by the SDGs, all the actors of civil society are called to contribute to reach a concept of sustainability:

- Authentic, trying to overcome the traditional notion of development through the broader concept of prosperity.
- Multifaceted, as it includes the multitude of social actors and the numerous aspects of sustainability such as efficiency, responsiveness, innovation, etc.
- Dynamic, as it should not be a static conceptual goal, but rather a dynamic balance, able to absorb and react to the different changes in the external environmental context.

Summary

Accountability in nonprofit sector concerns an articulated assessment of global and overall consistency inherent numerous key elements such as: transparency, correctness, adequacy, conformity, coherence and communication about nonprofit institutions (NPIs).

Nonprofit sector constitutes a very particular area of economic organizations characterized by some peculiarities which attribute to NPIs characteristics of hybridity and make it very difficult to identify models, principles, criteria and tools useful for the correct management of these economic organizations.

It is clear that the value system of NPIs (e.g., politics, religion, health, environment, ethics, morals, voluntarism, philanthropy, compassion, etc.) affects the set of programmed objectives and the ways in which these are achieved (Najam 1996; Porter and Kramer 1999; Moore 2000; Putnam 2001; Speckbacher 2003; Toepler and Anheier 2004).

In this perspective, accountability represents the duty to report, responsibly, the work of NPIs towards all stakeholders regarding the use of the resources, the correctness of the management, the correspondence and the consistency of the activities with respect to the programmed objectives (Ricci 2016). The final aim is to allow the correct demonstration of social value (Campbell 2002) and public value (Moore 1995; Esposito and Ricci 2015) generated by NPIs.

Cross-References

- [Accountability](#)
- [Corporate Mission, Vision, and Values](#)
- [Public Value](#)
- [Social Responsibility](#)
- [Stakeholder](#)
- [Stakeholder Value Creation](#)
- [Sustainability and Profitability](#)
- [Transparency](#)
- [Value Creation](#)

References

- Anheier, H. K. (2000). *Managing non-profit organisations: Towards a new approach* (Civil Society working paper 1). Centre for civil society, London, UK: London school of economics and Political Science.
- Anheier, H. K. (2014). *Nonprofit organizations: Theory, management, policy* (2nd ed.). New York: Routledge.

- Barth, R., & Wolff, F. (Eds.). (2009). *Corporate social responsibility in Europe: Rhetoric and realities*. Northampton/Cheltenham: Edward Elgar Publishing.
- Behn, R. D. (2001). *Rethinking democratic accountability*. Washington, DC: Brookings Institution Press.
- Boris, E. T., & Steuerle, C. E. (Eds.). (2006). *Non profits & government: Collaboration & conflict*. Washington, DC: The Urban Institute Press.
- Campbell, D. (2002). Outcomes assessment and the paradox of nonprofit accountability. *Nonprofit Management and Leadership*, 12(3), 243–259.
- Civitillo, R. (2016). *L'aziendalità nel volontariato. Il non profit nella provincia di Benevento*. Milano: FrancoAngeli.
- Dees, J. G. (2001). The meaning of social entrepreneurship. https://web.stanford.edu/class/e145/2007_fall/materials/dees_SE.pdf. Accessed 11 Feb 2020.
- DiMaggio, P., & Anheier, H. K. (1990). A sociological conceptualization of the non-profit organizations and sectors. *Annual Review of Sociology*, 16, 137–159.
- Dubnick, M. J. (2011). Move over Daniel: We need some “accountability space”. *Administration & Society*, 43(6), 704–716.
- Esposito, P., & Ricci, P. (2015). How to turn public (dis) value into new public value? Evidence from Italy. *Public Money & Management*, 35(3), 227–231.
- Habisch, A., Jonker, J., Wegner, M., & Schmidpeter, R. (Eds.). (2005). *Corporate social responsibility across Europe*. Heidelberg: Springer.
- Hansmann, H. (1996). *The ownership of enterprise*. Cambridge: Harvard University Press.
- Idowu, S. O., Schmidpeter, R., & Fikfa, M. S. (Eds.). (2015). *Corporate social responsibility in Europe: United in sustainable diversity*. Berlin: Springer.
- Krisch, U., & Grabner-Kräuter, S. (2017). Insights into the impact of CSR communication source on trust and purchase intention. In S. Diehl, M. Karmasin, B. Mueller, R. Terlutter, & F. Weder (Eds.), *Handbook of integrated CSR communication* (pp. 449–469). Cham: Springer.
- Messner, M. (2009). The limits of accountability. *Accounting, Organizations and Society*, 34(8), 918–938.
- Moore, M. H. (1995). *Creating public value: Strategic management in government*. Cambridge/London: Harvard University Press.
- Moore, M. H. (2000). Managing for value: Organizational strategy in for-profit, nonprofit, and governmental organizations. *Nonprofit and Voluntary Sector Quarterly*, 29(1), 183–204.
- Mulgan, R. (2000). ‘Accountability’: An ever-expanding concept? *Public Administration*, 78(3), 555–573.
- Najam, A. (1996). Understanding the third sector: Revisiting the prince, the merchant, and the citizen. *Nonprofit Management and Leadership*, 7, 203–219.
- Nardo, M. T., & Siboni, B. (2018). Requirements and practices of social reporting in Italian not-for-profit organizations. In R. Tench, B. Jones, & W. Sun (Eds.), *The critical state of corporate social responsibility in Europe* (pp. 299–317). Bingley: Emerald Publishing.
- Porter, M. E., & Kramer, M. R. (1999). Philanthropy’s new agenda: Creating value. *Harvard Business Review*, 77, 121–131.
- Putnam, R. D. (2001). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.
- Rademacher, L., & Remus, N. (2017). Integrated CSR communication of NGOs: The dilemma to communicate and cooperate in CSR project partnerships. In S. Diehl, M. Karmasin, B. Mueller, R. Terlutter, & F. Weder (Eds.), *Handbook of integrated CSR communication* (pp. 393–411). Cham: Springer.
- Ricci, P. (2016). Accountability. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy and governance* (pp. 1–6). Cham: Springer.
- Ricci, P. (2019). L’accountability Pubblica. In L. Anselmi & S. Pozzoli (Eds.), *Le Aziende Pubbliche. Aspetti di governance, gestione, misurazione, valutazione e rendicontazione* (pp. 81–93). FrancoAngeli: Milano.
- Ricci, P., & Civitillo, R. (2017). Accountability and third mission in Italian universities. *International Journal of Managerial and Financial Accounting*, 9(3), 201–221.
- Ricci, P., & Civitillo, R. (2018). Italian public administration reform: What are the limits of financial performance measures. In E. Borgonovi, E. Anessi Pessina, & C. Bianchi (Eds.), *Outcome-based performance Management in the Public Sector* (pp. 121–140). Cham: Springer.
- Ricci, P., & Civitillo, R. (2019). La valutazione della performance “Benessere”: su cosa fondare le decisioni in ambito pubblico?. *Welfare e Ergonomia* (2):31–46.
- Rose-Ackerman, S. (1996). Altruism, nonprofits, and economic theory. *Journal of Economic Literature*, 34(2), 701–728.
- Rosenfield, P. (1974). *Stewardship, objectives of financial statements*. New York: AICPA.
- Salamon, L. M., & Anheier, H. K. (1996). In search of the nonprofit sector II: The question of classification. *Voluntas*, 3(3), 267–309.
- Salamon, L. M., & Sokolowski, S. W. (2004). *Global civil society: Dimensions of the non-profit sector*. Bloomfield: Kumarian Press.
- Skocpol, T. (2013). *Diminished democracy: From membership to management in American civic life* (Vol. 8). Norman: University of Oklahoma Press.
- Smith, S. R. (2008). The challenge of strengthening nonprofits and civil society. *Public Administration Review*, 68(s1), S132–S145.
- Smith, S. R. (2010). Nonprofits and public administration reconciling performance management and citizen engagement. *The American Review of Public Administration*, 40(2), 129–152.
- Speckbacher, G. (2003). The economics of performance management in nonprofit organizations. *Nonprofit Management & Leadership*, 13(3), 267–281.
- Tenbenschel, T., Dwyer, J., & Lavoie, J. (2014). How not to kill the golden goose: Reconceptualizing accountability environments of third-sector organizations. *Public Management Review*, 16(7), 925–944.

- Toepler, S., & Anheier, H. K. (2004). Organizational theory and nonprofit management: An overview. In A. Zimmer & E. Priller (Eds.), *Future of civil society* (pp. 253–270). Wiesbaden: VS Verlag für Sozialwissenschaften.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations.
- Wondolleck, J. M., & Yaffee, S. L. (2000). *Making collaboration work: Lessons from innovation in natural resource management*. Washington: Island Press.

Accountability to Impacted Stakeholders

► Power Equalizing

Accounting

► Endowment Fund

Accounting for Greenhouse Gas (GHG) Emissions

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Synonyms

[Accounting for the carbon; GHG accounting](#)

Definition

Mounting social and legal concerns worldwide about rapid increase in Earth's average global surface temperature and resultant climate change have led to building mechanisms such as the Kyoto Protocol for reducing GHG emissions. The Kyoto Protocol is an international treaty under United Nations Framework Convention on Climate Change (UNFCCC) where the signatory parties commit to reduce GHG emissions as per

the defined emission reduction targets (UNFCCC 2020a). The implementation of the Protocol and resulting carbon trading have given rise to the need for accounting GHG-related information of an entity. Accounting for GHG emissions or simply GHG accounting is the process by which an entity monitors, measures, and accounts for the emission of carbon and other major GHGs as defined under the Kyoto Protocol. GHG emissions can be accounted and reported at global, national, regional, corporate, product, or project levels within or outside the Protocol. GHG accounting helps an entity in predicting and measuring its carbon footprint and in understanding the costs and benefits associated with carbon-related actions. It provides concerned stakeholders with factual information for GHG-related decision-making.

Introduction

In the past few decades, unprecedented increase in GHG emissions, global warming, and the resultant climate change have become some of the most pertinent global challenges. "Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level" (IPCC 2007). The first major international step in the direction of dealing with this situation was the United Nations Framework Convention on Climate Change (UNFCCC). The Convention was first held in 1992 where it was agreed by most of the participating countries that there is an urgent need to control GHG emissions so as to reduce the heat on the Earth and the resulting climate-related problems. In December 1997, the third session of the Conference of Parties (COPs) to the Convention was held in Kyoto, Japan, where the Kyoto Protocol was adopted aiming at concerted international efforts to reduce global GHG emissions. The Kyoto Protocol became legally binding in 2005. The Protocol covers six main GHGs which are given in Annexure A of the Protocol. These include "carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O),

hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆)” (United Nations 1998). Each of these gases has a different global warming potential (a capacity to heat the atmosphere), so these are converted into equivalent tons of CO₂, the most important GHG and the one that represents the vast majority of the world’s GHG emissions (about 55%). “Carbon dioxide is the most important anthropogenic greenhouse gas. The global concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm to 379 ppm³ in 2005” (IPCC 2007). Because of this, GHG accounting is also sometimes referred to as carbon accounting.

The Kyoto Protocol divides participating countries into two groups: Annex I (Developed) countries and Non-Annex I (Developing) countries. It was recognized that developed nations are mainly responsible for the current levels of GHG emissions in the atmosphere. Hence, the Kyoto Protocol assigned the binding responsibility for reducing emissions only to the developed nations under the principle of “common but differentiated responsibility and respective capabilities” (UNFCCC 2020b). The developing countries were not given any binding targets. The first commitment period for the Kyoto Protocol was from 2008 to 2012. The target for the first commitment period was to reduce the combined GHG emissions by 5% of the 1990 levels (United Nations 1998). In 2012, the Doha Amendment was adopted where new commitment period starting from 2013 to 2020 was agreed and a revised list of GHGs was decided (UNFCCC 2020c). In order to enable Annex I countries to meet their emission reduction targets in a cost-effective manner, the Protocol prescribed three mechanisms, namely, Clean Development Mechanism (CDM), Joint Implementation (JI), and International Emission Trading (IET) (UNFCCC 2010). The implementation of these mechanisms led to the creation of a new commodity in the form of emission reduction or removal units which is traded in the carbon markets, each unit representing one ton of CO₂ removed from the atmosphere or saved from being emitted (UNFCCC 2020d).

The Kyoto Protocol and the related carbon trading gave rise to the need for accounting GHG emissions and preparing GHG inventories.

Accounting for GHG emissions involves identifying GHG emission sources, measuring GHG emissions of an entity, preparing GHG inventories, finding carbon footprint of a concern, verification of GHG accounts, and reporting GHG-related information to the concerned stakeholders. GHG inventories include all emissions and removals of GHGs from a given entity during a specified period of time. GHG accounts/statements are prepared using internationally recognized data collection methods suggested under the Kyoto Protocol, GHG Protocol, or other recognized standards.

Accounting for GHG Inventories

In order to collect and report credible and reliable information on GHG emissions of any entity, GHG inventories are prepared. “GHG inventories are estimates of all emissions and removals of greenhouse gases (GHG) from given sources or sinks from a defined region in a specific period of time” (IPCC 2015). Such inventories can be prepared at global, national, regional, corporate, product, or project levels. GHG inventory information is required by policy makers to formulate, implement, and enforce policies related to reduction in GHGs.

There are standard reporting requirements for preparing national GHG inventories by parties to the Kyoto Protocol. In order to ensure quality, integrity, and completeness of national GHG inventories, “the UNFCCC reporting guidelines on annual inventories for Annex I Parties require use of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories” (UNFCCC 2020e). National inventories record all anthropogenic emissions and removals. “Anthropogenic emissions and removal means that greenhouse gas emissions and removals included in national inventories are a result of human activities” (IPCC 2006). The Kyoto Protocol specifies the rules for determining about the sources and sinks which are to be considered while calculating permitted emissions of a country (Ratnatunga 2007). GHG inventories at state, city, or regional levels can also be made using a similar approach. The national GHG inventory data for Annex I countries is published by UNFCCC (UNFCCC 2020f).

For quantifying and recording GHG emissions at corporate, project, or activity levels, business organizations all over the world use GHG protocol. “GHG protocol establishes comprehensive global standardized frameworks to measure and manage GHG emissions from private and public sector operations, value chains and mitigation actions” (GHG Protocol 2020a). The GHG protocol divides emission sources into three categories (GHG Protocol 2011):

- Scope 1 – Direct emissions from sources owned or controlled by a business
- Scope 2 – Indirect emissions from purchased or acquired electricity, steam, heat, and cooling
- Scope 3 – Indirect emissions that occur from sources not owned and controlled by the concern. These may be caused by a concern’s value chain – upstream or downstream activities. It may represent largest source of emissions for companies.

Corporate GHG inventories include all GHG emissions (direct as well as indirect) caused by a concern. The protocol’s corporate accounting and reporting standard provides guidance for quantification and reporting of corporate-level GHG emissions (GHG Protocol 2020b). The aim is to help concerns in preparing GHG inventories using standard techniques and principles. It not only simplifies the procedure of compiling GHG inventories but also increases credibility, consistency, and transparency of the reported GHG information. The corporate standard can also be used by nonprofit-making organizations like NGOs, educational institutions, or government offices. In 2015, the corporate standard was revised to provide more guidance on measurement and reporting of Scope 2 emissions (GHG Protocol 2020b). The corporate value chain (Scope 3) standard allows a company to measure the emission impact of its entire value chain and helps in knowing where the reduction is possible (GHG Protocol 2011).

For calculating GHG emissions from specific emission reduction/mitigation projects, project-level GHG protocol is used. “The GHG Protocol for project accounting provides principles,

concepts and methods for quantifying and reporting GHG reductions- i.e. the decreases in GHG emissions, or increases in removals and/or storage- from climate change mitigation projects” (GHG protocol 2005). The aim of project-level accounting guidance is to provide credible and reliable information on GHG reductions from GHG mitigation projects. Other standards issued by GHG protocol include standard for cities. Mitigation goal standard, policy and action standard, product standard, and project standard (GHG Protocol 2020c). “GHG protocol tools enable companies and cities to develop comprehensive and reliable inventories of their GHG emissions, and help countries and cities track progress toward their climate goals” (GHG Protocol 2020d).

The International Organization for Standardization (ISO) has also issued several standards on GHG accounting. Important among these are ISO 14064-1, ISO 14064-2, and ISO 14067. “While ISO 14064-1:2018 deals with quantification and reporting of GHG emissions and removals at organization level; ISO 14064-2:2019 provides guidance on quantification, monitoring and reporting of GHG emission reductions or removal enhancement at project level” (ISO 2020). In order to harmonize GHG accounting during project appraisals, International Financial Institutions (IFIs) use GHG accounts of a project which are prepared using established calculation approaches and methodologies “provided by GHG protocol, CDM methodology, verified carbon standards, gold standard and EU emission trading schemes, ISO 14064 (1) and (2) and other international standards” (UNFCCC 2015, 2019).

Life Cycle Accounting (LCA)

At the product level, life cycle technique is used these days to track emissions associated with a specific product or service throughout its life. This is also known as life cycle accounting (LCA). “Life-cycle greenhouse gas (GHG) accounting evaluates and reports the full life-cycle GHG emissions associated with the raw materials extraction, manufacturing or processing, transportation, use, and end-of-life management of a good or service” (EPA 2019a). ISO 14067: 2018 also

deals with GHG gases – carbon footprint at product level (ISO 2020).

Carbon footprint can also be calculated at home level. GHG emissions caused by day-to-day activities like use of electricity in home appliances, gas leaks from refrigerators and air conditioners, driving of cars or waste disposal, etc. together make up a household's carbon footprint. "EPA carbon footprint calculator helps to estimate carbon footprint in the areas of home energy, transportation and waste" (EPA 2019b).

Verification of GHG Accounts

In order to reduce risk of inaccurate disclosure of GHG emissions and other GHG-related information in the reports published by an entity, an independent external assurance of GHG inventories is required. "ISO 14064-3 is an internationally recognized standard for verification and validation of GHG assertions" (ISO 2020). The standard is applicable for organization-, project-, and product-level GHG statements. It is designed to be flexible and program neutral, so it can be referenced or used in multiple voluntary or regulatory regimes (Weng and Boehmer 2006). The International Auditing and Assurance Standards Board (IAASB) has also released International Standard on Assurance Engagements (ISAE) 3410 on Assurance engagements on GHG statements in 2012 (IAASB 2012). To ensure accuracy, completeness, consistency, and comparability of national GHG inventories, IPCC validation and verification guidelines are used (IPCC n.d.). The UNFCCC suggests the use of principles of accuracy, comparability, completeness, consistency, and transparency to guide the development of national GHG inventories. Same principles can be modified for other types of GHG accounting. These accounting principles provide guidance to practitioners in GHG accounting as well as to those verifying these accounts.

Benefits of GHG Accounting

The main objective of GHG accounting is to provide accurate, reliable, and comparable GHG

emission information to the policy makers so as to assist them in making strategies to combat climate change. GHG accounting helps in identifying opportunities to reduce GHG emissions, controlling GHG-related risks, improving emission management system, and achieving GHG reduction targets (Tang and Luo 2014). GHG statements prepared by an entity also provide information on the avoided GHG emissions, i.e., the amount of CO₂ and CO₂ equivalents that has not been or will not be released into the atmosphere as a result of various steps undertaken like tree plantations, use of renewable energy, pollution control measures, etc. It helps in building efficient emission reduction policies in the future by setting measurable and more ambitious emission reduction goals and tracking progress of emission reduction projects efficiently and comprehensively. GHG accounting is also needed to understand costs and benefits associated with GHG mitigation strategies. Quantification of the benefits of such mitigation projects encourages business organizations to come up with more innovative ideas to reduce GHG emissions. "Countries and individuals can do a better job addressing climate change when they understand the true sources of their emissions, whether generated at home or in the manufacturing and shipping of products from around the globe" (UNFCCC 2015b). Accurate measurement of GHG-related data and reporting of externally verified carbon statements to various internal and external stakeholders help them in making informed decisions.

Summary

In the past few decades, the role of GHG accounting in managing an entity's GHG emission-related data has gained significant importance. GHG accounting is the process of measuring, recording, analyzing, and reporting information on carbon dioxide and other GHGs emitted by an entity over a period of time. The emissions are measured in a standard unit, i.e., tons of carbon dioxide equivalents. GHG inventories can be prepared at various levels using internationally recognized

quantification and reporting methods. GHG accounting helps entities to understand their carbon footprint and related climate change impacts. Preparing credible and reliable GHG accounts helps in managing GHG-related risks, identifying GHG reduction opportunities, meeting GHG reduction commitments, reporting reliable data to concerned stakeholders, and participating in the carbon markets.

Cross-References

- Carbon Trading Schemes
- Kyoto Protocol
- Paris Agreement

References

- EPA. (2019a). *Life-cycle GHG accounting versus GHG emission inventories*. Source: <https://www.epa.gov/sites/production/files/2016-03/documents/life-cycle-ghg-accounting-versus-ghg-emission-inventories10-28-10.pdf>. Last accessed on 25th Dec 2019.
- EPA. (2019b). *Carbon footprint calculator*. Source: <https://www3.epa.gov/carbon-footprint-calculator/>. Last accessed on 25th Dec 2019.
- GHG Protocol. (2005). *The GHG protocol for project accounting*. Source: https://ghgprotocol.org/sites/default/files/standards/ghg_project_accounting.pdf. pg 5. Last accessed on 10th June 2020.
- GHG Protocol. (2011). *Corporate value chain (scope 3) accounting and reporting standard*. Pp 4–5. SOURCE: https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf. Last accessed on June 12 2020.
- GHG Protocol. (2020a). *About us*. Source: <https://ghgprotocol.org/about-us>. Last accessed on 22nd Dec 2019.
- GHG Protocol. (2020b). *Corporate standard*. Source: <https://ghgprotocol.org/corporate-standard>. Last accessed on 15th June 2020.
- GHG Protocol. (2020c). *Standards*. Source: <https://ghgprotocol.org/standards>. Last accessed on 15th June 2020.
- GHG Protocol. (2020d). *Calculation tools*. Source: <https://ghgprotocol.org/calculation-tools>. Last accessed on 15th March, 2020.
- IAASB. (2012). *ISAE 3410, Assurance engagements on green house gas statements*. Source: https://www.ifac.org/system/files/publications/files/Basis%20for%20Conclusions%20-%20ISAE%203410%20Assurance%20Engagements%20on%20Greenhouse%20Gas%20Statements-final_0.pdf.
- IPCC. (2006). *Guidelines for national greenhouse gas inventories*. Source: https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1_Volume1/V1_1_Ch1_Introduction.pdf. pg. 1.4. Last accessed on 10 June 2020.
- IPCC. (2007). *Climate change 2007: The physical science basis, A report of working group I of the Intergovernmental Panel on Climate change, Summary for policy makers*. Source: <https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-spm-1.pdf>. pp 2–5. Last accessed on 24 Nov 2019.
- IPCC. (2015). *GHG inventories: Their importance to monitor progress in climate change mitigation*. Source: https://archive.iges.or.jp/files/research/alliges/pdf/20150316/7_e_Naha_Inventories&Mitigation_TK.pdf. Last accessed on 15th June 2020.
- IPCC. (n.d.). *Checks and verification at national and international levels*. Source: https://www.ipcc-nggip.iges.or.jp/public/gp/bgp/6_3_Verification.pdf. Last accessed on June 18 2020.
- ISO. (2020). *STANDARDS BY ISO/TC 207/SC 7. Greenhouse gas management and related activities*. Source: <https://www.iso.org/committee/546318/x/catalogue/>. Last accessed on 14 the June 2020.
- Ratnatunga. (2007). *An inconvenient truth about accounting*, Journal of Applied Management Accounting Research, 5(1), pg. 3.
- Tang, Q., & Luo, L. (2014). *Carbon management systems and carbon mitigation*. Australian Accounting Review, March.
- UNFCCC. (2010). *The Kyoto Protocol mechanisms*. Source: https://cdm.unfccc.int/about/cdm_kpm.pdf. Last accessed on June 10 2020.
- UNFCCC. (2015). *International Financial Institution framework for a harmonised approach to GHG accounting*. Source: <https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting>.
- UNFCCC. (2015b). *Accounting emissions to consume with care*. Source: <https://unfccc.int/news/accounting-emissions-to-consume-with-care>. Last accessed on 24th Dec 2019.
- UNFCCC. (2019). *IFIs - Harmonization of Standards for GHG accounting*. Source: <https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting>. Last accessed on 15th Dec 2019.
- UNFCCC. (2020a). *History of Kyoto Protocol*. Source: <https://unfccc.int/process/the-kyoto-protocol/history-of-the-kyoto-protocol/text-of-the-kyoto-protocol>. Last accessed on 10th June 2020.
- UNFCCC. (2020b). *What is Kyoto Protocol?* Source: https://unfccc.int/kyoto_protocol. Last accessed on 10th June 2020.
- UNFCCC. (2020c). *The Doha amendment*. Source: <https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment>. Last accessed on 30th Mar 2020.
- UNFCCC. (2020d). *International emission trading*. Source: <https://unfccc.int/international-emissions-trading>. Last accessed on 17th June 2020.

- UNFCCC. (2020e). *Reporting requirements*. Source: <https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/reporting-requirements>. Last accessed on June 18 2020.
- UNFCCC. (2020f). *National greenhouse gas inventory data for the period 1990–2017*. Source <https://unfccc.int/documents/201000>. Last accessed on June 13th 2020.
- United Nations. (1998). *Kyoto Protocol to the United Nations Framework Convention on Climate Change*. Source: <https://unfccc.int/resource/docs/convkp/kpeng.pdf>. Accessed on 30th Apr 2019.
- Weng, C., & Boehmer, K. (2006). *Launching of ISO 14064 for greenhouse gas accounting and verification*. ISO Management System, March–April, 2006. Source: <https://www.iso.org/files/live/sites/isoorg/files/archive/pdf/en/greenhouse.pdf>. Last accessed on 2nd Dec 2019.

Accounting for the Carbon

- [Accounting for Greenhouse Gas \(GHG\) Emissions](#)

Accounting for the Environment

- [Environmental Accounting](#)

Accounting Synthesis

- [Reporting](#)

Acid Deposition

- [Acid Rain](#)

Acid Precipitation

- [Acid Rain](#)

Acid Rain

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Synonyms

[Acid deposition](#); [Acid precipitation](#); [Acidification](#)

Description

Acid rain is one of the effects that Air Pollution (see) has on our planet, along with global warming and the ozone hole. They involve the fallout to the ground of acid substances (precipitation, particulate matter, aerosols, and gas). What is commonly known as “acid rain” should be more correctly defined as “acid deposition” or “acid precipitation.”

This issue can be distinguished in “wet deposition” (rain, snow, sleet, hail, fog, or dew) and “dry deposition” (dust or other acidifying micro-particles, smoke, gases, or aerosols) not conveyed to the ground by precipitation, but by physical mechanisms and times that depend mainly by gravity and the characteristics of microparticles (size and weight).

In the particular case in which the particles of pollutants are wrapped inside the drops of fog or clouds and reach vegetation in this physical state, some authors call this phenomenon not “wet deposition” but “occult deposition.”

Introduction

Dry depositions, in general, occur near the regions from which the emissions originate and within a few days. Wet depositions, on the other hand, are not just a local phenomenon, confined exclusively within densely industrialized areas, but global. In fact, due to the wind and to the widespread use of tall chimneys, they fall to the ground far from the

emission places, on very distant territories that are considerably large and after a long time, thus assuming a transnational (sometimes, also intercontinental) connotation and gravity (Haradhan 2018). It is therefore indispensable to study also the role and the dynamics of atmospheric currents to monitor the movements of polluting chemical forerunners (or precursors of acid rain) from their origin to precipitation.

The eastern regions of the United States and Canada and northeastern Europe (from Poland to Scandinavia) have been affected by acid rain since the 1980s, when some studies estimated that half of the trees in the Black Forest had suffered damage (UN 2019).

The first to notice and describe the negative effects of air pollution on Arundel marbles (Oxford) was the English writer John Evelyn in 1661 in his book *Fumifugium*. While the first to coin the term “acid rain” (in French “pluie acid”) was in 1845 the pharmacist M. Ducros (Menz and Seip 2004).

A few years later, in 1852, the Scottish chemist Robert Angus Smith – in his detailed and pioneering studies, reported later in 1872 in his book “Air and Rain: The Beginnings of a Chemical Climatology” – used the same term to describe the potentially harmful effects of the atmospheric polluting phenomenon deriving from the massive use of high-sulfur coal in Manchester and in other northern British cities (Gorham 1982).

The first alarming research on this issue, on large-scale was conducted in the countries of the Scandinavian peninsula by some scholars. Among them, the Norwegian geologist and mineralogist Waldemar Christopher Brøgger, in a note in “Naturen” (1881), and the Swedish soil scientist and chemist Svante N.F. Oden (1976) established, without uncertainty, that the increase in acidification of surface waters of Norway and Sweden was to be attributed to the long-distance transport of atmospheric pollutants from United Kingdom and central Europe. Since then, research on the monitoring of pollutants, their transnational movements, and receptor sites has increased along with a growing public concern about the possible risks to ecosystems.

Causes

The formation of acid rain is essentially attributable to the presence in the atmosphere of different pollutants or acid precursors: carbon dioxide (CO_2), sulfur oxides or SO_x (mainly SO_2), and, to a lesser extent, nitrogen oxides or NO_x (NO and NO_2).

The presence of these substances may be due to natural phenomena, such as: volcanic eruptions, lightning, wildfires, bacterial degradation of organic substances, and the respiration processes of plants and animals. However, human activities are mainly responsible for the release of pollutants because they massively burn fossil fuels (coal, oil, and natural gas).

In fact, in addition to releasing SO_2 and NO_x during their combustion, coal and fossil hydrocarbons also contain small amounts of sulfur which, burning and reacting with air oxygen, produces SO_2 . The main natural biological source of sulfur compounds is dimethyl sulfide (DMS) released into the atmosphere primarily from the oceans (Brimblecombe 1994).

Nitrogen oxides, on the other hand, are produced by the high temperatures of combustion processes and lightning; the high heat, in fact, breaks the strong bonds of the diatomic molecule (N_2) and causes the combination of nitrogen with oxygen.

Atmospheric CO_2 , on the other hand, derives not only from volcanic eruptions and from the combustion of any substance, but also, as known, from the respiration processes of plants and animals.

The main anthropogenic sources of SO_2 are industrial sites (manufacturing, oil refineries, and other industries), domestic heating systems, thermoelectric power plants, etc., which use coal and petroleum fractions containing small amounts of sulfur; while the main sources of NO_x are motor vehicles, characterized by high operating temperatures.

With water (both in the liquid state and in atmospheric vapor) or with the hydroxyl radical $\text{OH}^\cdot$, the precursors are transformed into airborne weak and strong acid substances, for the most part, already before their deposition: carbonic

acid (H_2CO_3 ; ionizing in water as HCO_3^-), sulfuric acid (H_2SO_4 ; SO_4^{2-} in water), and nitric acid (HNO_3 ; NO_3^- in water). Dry depositions, on the other hand, cause the formation of acids only after they have been deposited on the Earth's surface soil (Irwin and Williams 1988).

Recently, following the circumstance that, in many regions, both the emissions of sulfur oxides and of nitrogen have declined, ammonia (NH_3) emissions (from fertilizers, animal, and natural sources) and ammonium (NH_4^+) depositions have received widely increased attention as contributors to ecosystem acidification (Burns et al. 2016).

Effects

The effects of acid rain are considerable not only for Biodiversity (see) and the persistence of ecosystems, but also for buildings and for human health itself. In fact, they cause acidification of surface freshwaters (lakes and streams), damage soil, forests, flora and fauna in general (mainly at high altitude where rainfall is more abundant). The damages of acidity are very evident not only to the plants (terrestrial and aquatic) – heavily affecting their growth and reproductive capacities – but also to the animals, and in particular to the aquatic ones.

For flora, the phytotoxicity of acid deposition, even for evergreen trees, result either from the direct absorption of these acids through the gaseous and liquid exchanges by roots and leaves (whose protective wax coating is attacked and damaged by acid solutions, so interfering with photosynthesis) (Huttunen 1994) or, indirectly, from the variation of the organic and inorganic components of the soil (humus and minerals). All this increases the vulnerability of plants to climatic stress and to pest attacks.

Acid depositions, in fact, by lowering the pH of a soil and modifying its chemical composition (mineralization of organic matter, fixation of nitrogen, etc.) cause the progressive disappearance of the edaphon (bacteria, fungi, algae, protozoa, rotifers, etc.) – that is of those organisms that live in the soil and that have fundamental

importance for plants (many of these microorganisms are saprophytes or symbionts) also because they decompose organic substances – and the reduction of the presence of basic cations: e.g., calcium (Ca), magnesium (Mg), potassium (K), and phosphorus (P) (Fischer et al. 1996).

The fauna of lake and streams is damaged both by the higher acidity of the environment in which it lives and by the presence of some toxic substances (i.e., inorganic monomeric aluminum) released by a decrease of pH. Freshwater basins (lakes, streams, and wetlands) generally hold onto fragile and delicate ecosystems, so that the disappearance of a plant or animal species, which is more sensitive to an increase in acidity, causes a series of repercussions, not very predictable and controllable, on the other species living in the same environment.

The most rapidly affected aquatic animals are shelled organisms, like crustaceans (mainly shrimps) and mollusks (mussels and snails), and the most sensitive insects, interfering with egg hatching and the embryonic growth. With further acidification, plankton, small fish (i.e., minnows), and frogs begin to be lost and, subsequently, the increasingly bigger ones – and, even, nonaquatic species, such as birds – which are positioned at the top of the food chain of that specific ecosystem (Tagliarolo 2019).

The magnitude of these effects and the acidity neutralization also depend by other factors according to source-receptor relationships: characteristics of the basin itself (e.g., number influents and effluents, water turnover rate, presence of underground springs, etc.); the “buffering capacity” (presence of chemical complexes that can accept or donate hydrogen ions); the alkalinity or the acid-neutralizing capacity (ANC, measuring the amount of strong base in a solution) of the receptor (Jenkins et al. 2005).

The direct negative effects of acid rain on human health – i.e., by skin contact with contaminated water – can be considered almost nonexistent. Only inhalation of irritating substances from dry depositions can cause respiratory diseases: irritations of the respiratory tract, asthma, and other respiratory pathologies. Much more serious, on the other hand, are the indirect effects

(respiratory, cardio-circulatory, and also tumoral pathologies) of wet depositions that can arise from the ingestion of water and foods (vegetables or animals), in which toxic bioaccumulative substances (heavy metals such as aluminum, zinc, cadmium, lead, and mercury) made bioavailable, in a toxic form, by acid in soil or in basins (Norton et al. 2014).

Moreover, visibility undergoes significant deterioration through the absorption and reflection phenomena of light due to the presence of acid precursors in the air.

Acid rain also causes considerable damage to the materials (limestone, marble, reinforced concrete, iron, copper, bronze, etc.) of which man constructions (monuments, buildings, bridges, and other buildings) are constituted, accelerating their corrosion and decay. In particular, calcareous stones, attacked by sulfuric acid, are transformed from calcium carbonate (CaCO_3) into calcium sulfate or gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$), much more porous, fragile, and easily damaged by rain and wind with significant repercussions on the historical and cultural heritage and on the economy of a nation.

Remedies

For several decades until now, developed countries have established discussion tables to find shared and global solutions to this problem and to others connected to it, such as the Greenhouse Effect (see) and Global Warming (see). Among the most important international treaties in this regard are the Geneva UN Convention of 1979, on the control of transboundary air pollution, and the 1997 Kyoto Protocol (see), in which the idea of the Emissions Trading System (ETS) was conceived.

In the United States in particular, over the years, a number of programs and networks have been launched, organized by the Environmental Protection Agency (EPA) as leader, for continuous and long-term monitoring of precipitation chemistry and acid deposition, both in wet that dry state: the National Atmospheric Deposition Program (NADP) since 1978; the National Acid

Precipitation Assessment Program (NAPAP), established by the US Congress in 1982 to incorporate the NADP network into the National Trends Network (NTN); The Long-Term Monitoring (LTM) project, implemented in 1983, controlling the acidity levels of about 180 lakes and streams; the Clean Air Status and Trends Network (CASTNET), established under the 1990 Clean Air Act Amendments; the 1990s Environmental Monitoring and Assessment Program (EMAP), a long-term umbrella program for the US EPA that includes the LTM and the TIME (Temporally Integrated Monitoring and Ecosystems) projects.

The most immediate and most effective remedy would be to implement policies and strategies, for individuals or entire nations, that require less use of fossil fuels. In particular, a greater use of renewable energy sources (solar and wind power, first and foremost) and a greater diffusion of electric cars could greatly help to achieve this goal.

In combustion processes, effective technological solutions (before, during, and post combustion) are already implemented to reduce the formation of sulfur and nitrogen oxides: removing sulfur and its compounds from fuels through desulfurization processes or using low sulfur-based fuels; optimizing the stoichiometric air-fuel reactions and lowering the combustion temperatures so as to reduce the formation of NO_x ; reducing NO_x catalytically and desulfurizing the combustion fumes, by Flue-Gas Desulfurization (FGD) technologies.

For strongly acid limited areas of land and small basins of fresh water, the spreading of basic buffer substances (liming) or strong base cations (SBC, i.e., powdered limestone, CaCO_3) could be implemented. These operations, however, are to be considered only a limited and immediate solution both because their effects are only temporary and because they are very expensive. Similar projects have been carried out for the lakes and streams of Sweden, Norway, and Wales (Lawrence et al. 2016).

Other possible solutions can be found in: the modernization of the existing thermoelectric park (through the gradual replacement of the old coal-fired power plants with more efficient ones, such

as those with combined cycle gas turbine or CCGT); a greater use of public transport; regulating the vehicles emissions and lowering speed limits; and, in general, raising public awareness to implement more environmentally friendly lifestyles.

Summary and Conclusion

The problem of acid depositions of man-made origin exploded with the First Industrial Revolution (second half of the eighteenth century), following the increasing use of fossil fuels. Since then, this issue has continued to worsen, also due to population growth. In recent years, countries with the most advanced economies have reduced their emissions, especially of sulfur oxides, while this has not happened for nitrogen oxides. For developing countries and for those nations with high industrial growth (i.e., those of Asian region), pollutants emissions continue to grow and generate acid depositions.

Cross-References

- [Air Pollution](#)
- [Biodiversity](#)
- [Global Warming](#)
- [Greenhouse Effect](#)
- [Kyoto Protocol](#)

References

- Brimblecombe, P. (1994). Environmental acidification. In C. N. Hewitt et al. (Eds.), *Global atmospheric chemical change*. Springer Science, Dordrecht (NL).
- Burns, D. A., Aherne, J., Gay, D. A., & Lehmann, C. M. B. (2016). Acid rain and its environmental effects. Recent scientific advances. *Atmospheric Environment*, 146, 1–4.
- Fischer, Z., Angiel, M., Pienkowski, P., Dowgiallo, A., & Focht, U. (1996). Studies of the effect of simulated acid rain on the ecological equilibrium of the soil system. *Environmental Monitoring and Assessment*, 41(1), 1–65. <https://doi.org/10.1007/BF00394246>.
- Gorham, E. (1982). Robert Angus Smith, F.R.S., and ‘Chemical Climatology’. *Notes and Records of the Royal Society of London*, 36(2), 267–272. <https://doi.org/10.1098/rsnr.1982.0016>. PMID 11615878.
- Haradhan, M. (2018). Acid Rain is a local environment pollution but global concern. *Open Science Journal of Analytical Chemistry*, 3(5), 47–55. <https://doi.org/10.1016/j.atmosenv.2016.10.019>. <https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/oden-svante-n-f1924-1986>.
- Huttunen, S. (1994). Effects of air pollutants on epicuticular wax structure. In K. E. Percy, J. N. Cape, R. Jagels, & C. J. Simpson (Eds.), *Air pollutants and the leaf cuticle* (NATO ASI series (Series G: Ecological sciences), Vol. 36). Springer, Berlin/Heidelberg. https://doi.org/10.1007/978-3-642-79081-2_6.
- Irwin, J. G., & Williams, M. L. (1988). Acid rain: Chemistry and transport. *Environmental Pollution*, 50(1-2), 29–59. [https://doi.org/10.1016/0269-7491\(88\)90184-4](https://doi.org/10.1016/0269-7491(88)90184-4).
- Jenkins, J., Roy, K., Driscoll, C., & Buerkett, C. (2005). *Acid Rain and the Adirondacks: A research summary*. Ray Brook: Adirondack Lakes Survey Corporation.
- Lawrence, G. B., Burns, D. A., & Riva-Murray, K. (2016). A new look at liming as an approach to accelerate recovery from acidic deposition effects. *Science of the Total Environment*, 562(15), 35–46.
- Menz, F. C., & Seip, H. M. (2004). Acid rain in Europe and the United States: An update. *Environmental Science & Policy*, 7(4), 253–265. <https://doi.org/10.1016/j.envsci.2004.05.005>.
- Norton, S. A., Kopaček, J., Fernandez, I. (2014). Acid Rain – Acidification and recovery. Treatise on geochemistry: Second Edition. In H. Holland & K. Turekian (Eds.), *Treatise on geochemistry*. Amsterdam/San Diego: Elsevier.
- Oden, S. (1976). The acidity problem. An outline of concepts. *Water Air Soil Pollution*, 6, 137–166.
- Tagliarolo, M. (2019). Acidification in aquatic systems. In B. Faith (Ed.), *Encyclopedia of ecology* (2nd ed., pp. 6–13). Amsterdam: Elsevier.
- UN. (2019). Acid Rain in Europe. United Nations Environment Programme. <https://www.grida.no/resources/5497>. Accessed 27 June 2019.

Acidification

- [Acid Rain](#)

Acquiescence

- [Compliance](#)

Acquisitions (also M&A)

- [Hostile Takeover](#)

Action Research

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Definition

Action research is a form of enquiry that integrates theory and action to address real life problems. It enables practitioners to systematically evaluate and improve their practice. The number of types of action researches has multiplied over the last 50 years (Fourali 2016) or so and, accordingly, so did the number of definitions offered. These usually refer to the following characteristics of AR:

1. Use of an iterative model (e.g., Kolb's model) for systematically analyzing, testing, and reviewing the reality being faced
2. Involve the participation of stakeholders with a purpose of co-design of solution
3. Support in depth analysis of faced situation that goes beyond addressing the symptoms
4. May refer to several disciplines to help understand and address the faced problems
5. Is inclusive and ethically informed

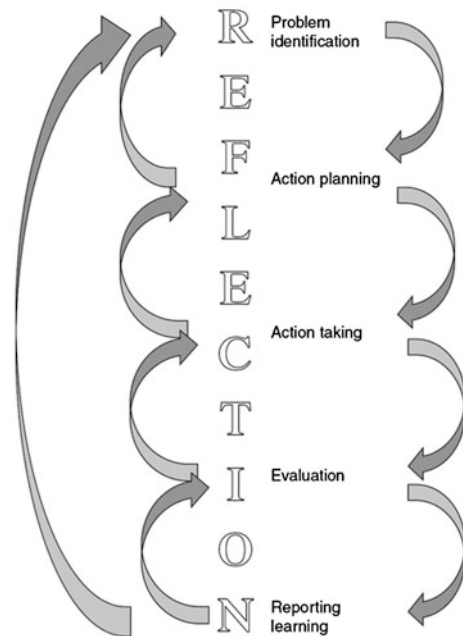
Various authors were identified as the originators of action-led research and learning. These included Kurt Lewin, Reg Revans, and Kolb. Fourali argued that the approach has been used by some authors more than others its steps are akin to what might be labeled a problem-solving perspective which may not only apply to education but all scientific enterprises facing practical problems. Accordingly, all civilizations who developed solutions to practical problems may be seen to have contributed to the action research methodology.

Introduction

Action research has been developed to remind us that all practitioners (initially, in education,

but later, in any discipline) can develop their professional expertise through undertaking action research to any problematic situation they may face and that may involve one or a multitude of cases. Also practitioner-researchers may not be restricted by the circumstances of the “accepted ideologies” of received research reports. Hence, AR is an empowering method that does not simply encourage practitioners to wait for the research undertaken by the experts but, rather, encourage them to seek their own solutions that may be particularly suited to the unique situation they may be facing. Such benefits were particularly demonstrated by practitioner researchers such as Paolo Freire (1970).

As stated above, there are a number of iterative steps that have been developed to guide action researchers. One model stipulates the following steps: Diagnosing, Action planning, Taking action, Evaluating, and Specifying learning. Another simply suggests four steps: Reflecting, Planning, Acting, and Observing. Recently, Fourali (2016) suggested that since all steps require “reflection” they should be reflected with the model as follows:



Steps of action research (Fourali 2016)

Key Issues

As stated above, action research is seen as a family of approaches rather than one particular technique. Some classify it as “qualitative approach” while others classify it as a mixed design approach to the problem addressed. The later view seems to be closer to the reality since a researcher may combine both quantitative and qualitative (say bottom up approach) to understand and find a way forward for the addressed problem. At the moment one might argue that five versions of AR have been particularly used. These include (McNiff and Whitehead 2011; Coghlan and Brannick 2005):

Action science: This approach differentiates the researchers formally adopted theories and their individual theories of action.

Cooperative/collaborative enquiry: This approach advocates going through four stages of “propositional knowing,” researcher’s “practical knowing,” externally verified “experiential knowing,” and “creating new knowledge and ways of acting.” If the last stage is unsatisfactory then another iteration through the four stages is advised.

Participatory AR: Although this approach was initially associated the critical pedagogy movement promoted by Paulo Freire, it has developed multiple perspectives with the dual aims of knowledge making and social change. It accounts the present by referring to historical factors and aims to establish a more just society through promoting a more inclusive democratic perspective.

Developmental action research enquiry: This is perhaps one of the most challenging versions of AR since its aim is not simply adopting a detached approach to a practical problem. Rather, AR in this instance is applied simultaneously to the researcher (first person), the second person relationships the researcher is engaged with, and, on the third-person, institutions that may be implicated in the issues being addressed. Accordingly, this perspective should lead to both changes of consciousness (through new realizations/interpretations of reality) but also cultural transformations.

Living educational theories: This perspective particularly highlights the importance of the effect of the researcher and the research process on the outcome of the research and accordingly, encourages transparency and honesty about these two dimensions. This approach encourages the researcher to be authentic about his/her views and subsequent transformations highlighting associated existential and spiritual issues.

Summary and Future Directions

As stated above, AR has come to reflect a family of approaches whose main thrust is to make research accessible to practitioners be they educationists, psychologists, sociologists, or managers. One of the challenges is how to ensure that such variety of approaches will not be considered equally valid alternative approaches given the various levels of foci since clearly approaches with multiple level of foci are much richer in clarifying issues and tend to be more robust in deriving solutions than some approaches that may be simply focused at one level of the problem.

The issues of “objectivity” of research outcomes have been raised and will still be raised, by the puritan positivists who leveled the charge that AR is too subjective. However, the response is that action researchers usually deal with social issues and, as such, such subjectivity is very much the target of many problematic practical situations and may need observing in their natural environment. Addressing the imagery, opinions and perceptions of stakeholders are necessary steps of helping to resolve practical issues such as emotional coping or understanding the values that underpin certain social behaviors.

The last point is very much linked to the context of AR in addressing a sustainable issue. While some experimental types of research may help identify sources and effect of some environmental problems, it is clear that understanding multifaceted dimensions of human behavior may require the input of various practitioners helping address a problem that may be affected by several factors. Accordingly, sustainability issues require

an army of researchers working in various contexts using various techniques. This means that environmental researchers will require an armamentarium of methods and techniques from which they will be able to choose those relevant to the problem at hand.

AR has come a long way from being just seen as an adjunct approach to what came to be termed “qualitative/soft” methods, to being seen as a valid approach that may entail the use of multiple quantitative and qualitative techniques.

References

- Coghlan, D., & Brannick, T. (2005). *Doing action research in your own organization*. London: Sage.
- Fourali, C. (2016). *The promise of social marketing: A powerful tool for changing the world for good*. London: Routledge.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Herder & Herder.
- McNiff, J., & Whitehead, J. (2011). *All you need to know about action research* (2nd ed.). London: Sage.

Activism

► Shareholder and Stakeholder Activism

Activist Investor

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Synonyms

Activists; Investor activism

Definition

An activist investor is defined as an individual or group who acquires a stake of shares in a publicly

listed company with the intention to have the influence over it (Nordberg, 2010; Larcker and Tayan, 2011). The size of the stake enables such person or a group an active participation in decision-making over the company strategic development, investment, and profit distribution. Exercising their rights as partial owners, activist investors challenge executives, engage in the discussions on corporate matters, and submit proposals of the resolutions to be voted during the shareholder meeting (Tricker, 2015).

With the stakes held, activist investors are more likely to get appointed to the board in order to have the access to information about the company operations and have a real influence on the possible changes. They can also motivate and coordinate the actions of other shareholders. They pressure for the procedures on effective governance such as the board work and appointment, assessment of corporate performance, review of strategy, and structuring executive compensation. However, some activist investors do not hold significant stakes in ownership but play a very active role in the dialog with executives and submit many shareholder proposals. Such activists include well-known prominent private investors or high profile asset managers. Examples of activist investors include pension funds, institutional funds with a social or environmental mission, hedge funds, and individual investors (Larcker and Tayan, 2011).

Introduction

The concept of investor activism has been developing in line with the fundamental assumption that the effective monitoring and control may enhance firm value. Numerous studies have shown that coordinating actions by shareholders and their engagement in oversight over executives provide discipline and enhance firm value (Shleifer and Vishny, 1997; Black, 2018).

According to studies on ownership structure in the 1980s, the percentage of shares held by institutional investors in an average American corporation surpassed the percentage of shares held by individual investors (Useem, 1996). This process

gave rise to the engagement of institutional investors in the US corporate governance due to the size of their stakes, their expertise, and know how as well as the ability to pressure executive boards (Maug, 1998).

The development of corporate governance guidelines, specifically addressing the practice of the board, the structure of executive compensation, and the standards of transparency laid further grounds for investor activism. With waves of corporate scandals and analysis of corporate governance inefficiencies, a list of recommendation to assure for effective monitoring and governance was formulated. The emergence of professional ratings evaluating the quality of corporate governance of a company (e.g., MSCI) brought the more quantitative element to measure the board practice, executive remuneration structure, company relations with auditors, and the exercise of shareholder rights (Skougard, 2017). Investors could assess the quality of corporate governance in companies and suggest required changes based on the assumption that these changes would enhance firm value (Renders et al., 2010).

Investor activism has developed in the largest and most liquid stock markets which due to the legal regime of common law assure for strong investor protection. Investors are motivated for active engagement in monitoring and control as they are provided with detailed information about companies (high transparency standards), are given the right to engage in class action, and may sue the management if creating shareholder value is threatened and may exert voice via proxy voting. In countries characterized with significant ownership concentration, blockholders are naturally involved in the oversight over company performance (Shleifer and Vishny, 1997; Berglöf and Claessens, 2006), and if dissatisfied they can remove the executives and impose a different strategic direction. Such actions are naturally constrained in the environment of dispersed ownership which is characterized with the separation of ownership and control, and information asymmetry as well as the risk of executive acting at the expense of shareholders.

The role of activist investors significantly depends on the national system of corporate

governance and shareholder structure. Market-based model of corporate governance, deep and liquid stock market, and dispersed ownership give rise to the development of power of activist investors (Bainbridge, 2012). Corporate governance based on hierarchies, concentrated ownership, and the dominance of families limit the opportunity for outside investors to play a significant role.

The Development of Activist Investors

Distinct types of investors have different goals and expectations expressed in their investment strategies (Aluchna & Kamiński, 2017). Investors reveal the whole spectrum of the activity level ranging from passive investors to involved investors and activists depending on a number of factors. Nordberg (2010) distinguishes three dimensions of shareholder politics which determine different actions and campaign activism may engage into:

- Attitude which refers to the investment strategy of buy, sell, and hold.
- Participation which addresses the degree in which investors decide to engage in having influence in a company ranging from passive to active. This criterion may also be used to differentiate investment strategy between passive such as index-tracking and active investing Wall Street Walk and views active reaction and selling shares in the moments of disappointments with company performance as a version of activism (Edmans, 2009).
- Horizon which indicates the perspective of the investment with respect of time ranging from short-term to long-term investment.

Table 1 presents the set of determinants of engagement by institutional investors as identified in the OECD study.

As shown in Table 1, large group of ownership investors may be categorized according to several criteria such as purpose, investment strategy, and objectives. Activists tend to have quantitative approach, to follow diversified investment strategy, and to have short term for profit orientation.

Activist Investor, Table 1 Determinants of ownership engagement

Purpose	Not for profit		For profit	
Liability structure	Long term		Short term	
Investment strategy	Passive, index	Passive, fundamental	Active, fundamental	Active, quantitative
Portfolio structure	Concentrated		Diversified	
Fee structure	Not applicable	Performance fee	Flat fee	Zero fee
Political/social objectives	Political/social incentives		No social/ political incentives	
Regulatory framework	Engagement requirements	Engagement limitations	No legal requirements/ limitations	

Source: Celik S., Isaksson M. (2013). Institutional investors and ownership engagement, OECD Journal: Financial Market Trends, 2013/2, 93–114, <http://www.oecd.org/corporate/Institutional-investors-ownership-engagement.pdf>, 105

Corporate governance studies focus predominantly on the impact of profit-motivated investors. While the typology presented in Table 1 assumes that passive investors reveal not for profit orientation, some of them, as index funds, focus on generating returns based on investment in a pre-determined index (Larcker and Tayan, 2011). Active investors reveal a dynamic approach to investment strategies searching for the best outcome. Yet, these investors, in the case of disappointment with company performance, may choose between two general strategies – exit and vote. The exit or reduce approach refers to the withdrawal from the investment of given companies in reaction to poor performance. Contrary to the exit strategies, satisfied and interested investors may pursue, maintain, or accumulate strategy.

The alternative approach refers to the active engagement in voting or a number of other actions. It is based on the fundamental assumption that such interventions result in better performance and higher return on investment. Activists often participate in shareholder meetings and launch campaigns which exert pressure on management and suggest corporate governance reforms (Tricker, 2015).

Historically, investor activism is linked to the strategies adopted by US pension funds (e.g., CalPERS, TIAA-CREF) which after acquiring a stake of shares intervened in the targeted companies (Blair, 1995; Mallin, 1998; Monks and Minow, 2004). Tricker (2015) discusses that in the early twentieth century shareholder democracy was limited as the separation of ownership

and control identified by Berle and Means (1932) moved power from shareholders to management. After the takeover era and in line with the growing presence of institutional investors such as pension funds and investment funds in shareholder structure, the balance of powers started to change (MacAvoy & Millstein, 2003; Davidoff, 2009; Bainbridge, 2012) and gave rise for investor activism. Pension funds tended to focus on companies which were undervalued or revealed significant inefficiencies on corporate governance (Woitke, 2002). With the proposal to reform shareholder statutory rights, board structure, or replacing CEOs, pension funds proved that activism is not only possible but that it can also lead to changes in corporate governance and enhance firm value. Their interventions had an impact on the board previously dominated by executive directors and the strong positions by CEOs who often serve as Board Chairman.

Over years, shareholder activism has changed the ways control and monitoring function. First, many financial and social investors actively monitor executives and participate in annual shareholder meetings submitting different proposals. With the technological development, companies introduce the e-voting that allows shareholder to participate in the shareholder meeting without the need of physical presence. The activism of investor takes also other forms of actions. Investors participate in roadshows and meetings with the company executive teams and write letters to management. In addition, there are specialized companies and advisory groups which support

shareholder in exercising their rights by providing the expertise or offering the representation at the shareholder meeting. This allows potentially dispersed shareholders to act collectively and increase their position.

Second, investor activism is not limited to traditional financial institutions. Holding companies, hedge funds, or private equity funds led by prominent individuals, including Carl Icahn, Nelson Peltz, and Bill Ackman, are among the most active and influential investors with significant impact over the company strategy and governance procedures. The presence in social media as well as general public trust strengthens the power of active investors who may challenge executives with respect to company performance and profit-sharing policy (dividend payouts, stock repurchase). As more capital is accumulated in different types of investment schemes, funds gain more impact on companies holding numerous stakes. It is estimated that nowadays 75–85% of shares of listed companies in the USA and UK are held by financial investors. Even if not all of them are actively engaged in monitoring, still the overall impact by shareholder is growing.

Third, while in the early days investor activism focused mostly on M&A transactions and corporate governance-related issues, today more topics are on the table. Shareholder proposals may include restructuring, strategic redevelopment, environmental protection, divestment from politically sensitive parts of the world, working conditions, or diversity management. The scope of investor activism is discussed in the following section.

The Size and Scope of Investor Activism

In recent years, reports have been revealing the growing interest in shareholder activism calling it the megatrend in corporate governance. It is not only the activism itself that “is as strong as it’s ever been” has been increasing (Skorupa, 2017), but also the impact that activism has on companies operation, governance, development, and CEO turnover (McKinsey, 2014). McKinsey reports that there are around 550 “active activists” around

the world controlling more than 180 billion USD (McKinsey, 2014). They operate mostly not only in the USA but also in Europe, Australia, Canada, and Hong Kong where they cooperate with assets and pension fund managers to reform corporate governance. JP Morgan estimates that approximately 13% of US companies with market value over \$10 bn are subject to activist campaigns (JP Morgan, 2019).

According to Schulte Roth and Zabel (2019), in 2018 activists targeted 922 companies with over a half of cases (491 cases) in the USA. This is an increase from the previous years when 856 (in 2017) and 887 (in 2016) cases took place. Activists focused on small cap (25% of actions taken), nano cap (23%), and large cap (20%) companies. With respect to the sector of operation of targeted companies, services dominated the sample with 22% of cases followed by finance (20%), basic materials (15%), and technology (13%). The activism took the form of monthly occasional focus with 36% of targets followed by concerned shareholder approach with 35% of cases (Schulte Roth & Zabel, 2019).

A different publication by Lazard’s Shareholder Advisory Group (2019) 2018 Review of Shareholder Activism reveals that 226 of companies were targeted in 2018 by activist investors as compared to 188 firms in 2017 with \$65.0bn of capital deployed. The review also reports a record 131 investors engaged in activism in 2018 with nine of the top ten activists investing more than \$1bn in 2018 (60 new campaigns in aggregate). Against the backdrop of a robust M&A market, 33% of 2018 activist campaigns were M&A related.

Besides the increase in the scale of activism, investors broaden the scope of their actions. Investor activism often takes the form of taken actions and proposals submitted during the annual (general) shareholder meeting. These actions may refer to blocking decision submitted by management team on mergers and acquisitions, decisions on capital structure (stock splits), profit-sharing policy (dividend payouts, stock repurchase), and valuation in divestiture transactions. Campaigns launched by investors cover also corporate performance specifically emphasizing the level of costs,

rigidity of the corporate structure (e.g., in holdings), and introducing restructuring plans and reforms. Other issues raised by activists refer to the functioning of the board or the practice of executive compensation. The main focus of activist is to eliminate company bylaws or rules that constrain equal treatment of shareholders, for instance, activist support majority voting or proxy access.

Specifically, with respect to the board practice investors engage in the so-called shaming and naming actions which refer to the public criticism of executives or directors (Nordberg, 2010). Such campaigns address the appointment of directors and executives to the board, the removal of staggered board, and increased board disclosure (self-assessment report with the information of board meetings and directors attendance). Investors emphasize the importance of having well-experienced and active directors and call for increasing diversity on board and growing awareness of ESG challenges.

For reshaping boardroom activists adopt three main tactics: proxy fights, long slates, and litigations (Lazard's Shareholder Advisory Group, 2019). Proxy fight is defined as an action of a group of shareholders joining forces, in a bid to collect enough shareholder proxies to win a corporate vote. Long slates are understood as situations where an activist nominates directors to replace 50%-plus of the incumbent board. Litigation means that the case between two actors is taken to court for the final resolution.

Activist investors often target the topic of executive compensation calling for higher transparency on the evaluation procedure of executive work (financial measures, nonfinancial indicators), proper balance between short, medium, and long-term goals and incentive schemes.

M&A transaction is another area of a particular interest of activist investors. Their campaigns refer to three main topics of selling a company to consolidate business, break-ups, and divestiture to limit the scope of corporate strategy as well as entering into live M&A situation to improve deal terms or block an ill-perceived deal from

proceeding. Activist campaigns address also the forecasts of the M&A efficiency (Lazard's Shareholder Advisory Group, 2019).

Although activist investors belong to the most aggressively acting shareholders, they may motivate traditional investors to support their campaigns and introduce changes in the board structure or decide about the M&A transaction. Table 2 presents selected public campaigns launched by activists.

As reported in Table 2, the actions undertaken by activist investors are often not very well welcomed by company executives or even by other shareholders. This means that activists need to engage in negotiations while their actions require a lot of efforts. As reported by JP Morgan The 2018 Proxy Season 37 fights in the USA were resolved with settlements, the most frequent single outcome, which is an increase from 28 in 2017, while dissidents succeeded at least partially in 56% of 2018's contests as compared to 43% in 2017. In addition, many of the suggestions raised by activists do not end up in voting or are not included in the shareholder meeting agenda, for instance, in 2012 when Carl Icahn expected Apple executive to deploy higher funds for additional stock repurchase claiming that the company stock was undervalued. Due to reservations by the executives and some board directors, eventually Carl Icahn decided to withdraw this proposal from the shareholder meeting. Such move allows to avoid a conflict with executives.

Investor activism takes different forms (Tricker, 2015) – from announcement, press conferences or releases, and letters to shareholders or to management to starting a campaign, calling for intervention, restructuring or executive replacement, and active participation at the shareholder meeting.

The largest activist investors include three funds operating on the global scale: Elliott with \$14.7 of the market value of positions launched in 2013–2017, ValueAct with \$12.6 bn and Cevian with \$11.2bn (Lazard's Shareholder Advisory Group (2019). They are followed by investors focused on the activity on the American market including Trian with \$11.1 bn, Third Point with

Activist Investor, Table 2 Selected public campaigns launched by activists

Launch date	Company/ market cap	Activist	Highlight
USA			
October 2018	Dell VM ware (\$18.9bn)	Icahn enterprises, Elliott	Icahn opposed offer from Dell to buy VMware tracking shares due to insufficient price. The fund relented after Dell increased its offer and won support from Elliott and canyon capital
March 2018	United technologies (\$97.8bn)	Third point	Pershing Square and third point urged United Technologies to break itself into three businesses. After receiving clearance for a merger with Rockwell Collins in November, United Technologies announced it would separately spin off its carrier and Otis businesses
Europe			
December 2018	Nordea (\$34.2bn)	Cevian capital,	Cevian pressured Nordea significantly reduce costs to bring the Company's performance in line with its Scandinavian peers
May 2018	ThyssenKrupp (\$15.8)	Cevian capital, Elliott	The company CEO and Chairman resigned in July 2018 as a result of pressure from Cevian and Elliott. In September, the Company announced the separation of its marine and industrial solution businesses

Source: based on Lazard's Shareholder Advisory Group (2019), p. 3–4

\$9.4 bn, and Icahn with \$7.9 bn of the market value of positions launched in 2013–2017. Other sources point also at Jana Partners and Starboard Value, Legion Partner Asset Management.

Benefits and Criticism of Active Investors

The development of activist investors was based on the assumption that the involvement of institutional investors in governance may lead to better performance and produce a higher return of investment. Over years, a number of studies have been revealing various results raising some questions on the efficiency of institutional investors in general and activists in particular. Below the most important aspects of benefits and criticism are discussed.

Studies indicate positive (Romano, 1993, 2006) or little positive (Bainbridge, 2012) evidence of institutional investors engagement in governance. Due to their experience, know-how, and professional knowledge, institutions provide oversight and monitoring over the executives (Nagel et al., 2015), discipline executive, and exert pressure on dominant owners in countries

characterized with concentrated ownership. Active shareholder policy improves monitoring of corporate spending, reduces manipulation of management earnings, lowers the size of executive compensation, supports governance reforms, and addresses social and environmental issues (David et al., 2007). Activists most often target companies who are underperforming, particularly lagging the industry benchmark with large cash balances and recurring restructuring charges (Cyriac et al., 2014). In result, positive effect on performance is noted. These positive effects are also observed for activists who motivate executive for restructuring corporate governance reforms and improve performance in targeted companies (Dai, 2014). Actions undertaken by activists are beneficial also to other shareholders (Cyriac et al., 2014).

Activist investors are also seen as an important element of stock market as by rising important topics they can motivate universal owners (institutional investors) to actively support key proposals on corporate governance, restructuring, or M&A deals. According to Gilson and Gordon (2013), in that way activist investors may help reconcentrate power from institutional investors.

Finally, activist investors add to increasing liquidity (Back et al., 2018).

The role of activist investors can be also controversial. First, traditionally researchers questioned the actual engagement and impact investors can have on companies. As mentioned above, investors differ in goals and expectations as well as in monitoring strategies and governance behavior (Woidtke, 2002; Chen et al., 2007) that may be mirrored in different strategies in campaign launched by activists and in proxy fights. Second, activists, as other investors, are the source of another agency problem. They represent and act on behalf of their customers and may have different interests (Gilson and Gordon, 2013). They may also be subject to principal-agency problems and information asymmetry. Studies on institutional investors show some concerns are raised on the actual effect on performance, particularly long-term performance. Particularly activists tend to be short-term oriented, and their actions may be detrimental to long-term focus value creation. This argument however was not recently supported. Bebchuk et al. (2015) noted that there is no evidence suggesting that interventions are undertaken by activists followed by short-term gains in performance that come at the expense of long-term performance.

Activist Investors and Sustainability

Traditionally, activist investors were focused on financial performance and increasing shareholder value. The campaigns target underperforming companies which offer possibilities to higher return on investment once restructured. Taking into account the engagement of the activist investors in the ownership structure or their overall reputation and impact on the investor community, activists could encourage other shareholders to support their proposals. Potentially, these proposals can refer to sustainability performance and disclosure and well as to strategic decisions which incorporate ESG dimension. Still however, evidence on such proposals remain scarce, adding to potential avenues for future research.

Summary

An activist investor is an individual or group who acquires a stake of shares in a publicly listed company with the intention to have the influence over it. Activist investors include pension funds, institutional funds with a social or environmental mission, hedge funds and individual investors. Activists possess a stake in company ownership that enables such person or institution to have influence in decision making over the company strategic development, investment and profit distribution. Exercising their rights as partial owners activist investors challenge executives, engage in the discussions on corporate matters and submit proposals of the resolutions to be voted during the shareholder meeting. Since they are often well know members of the investor community, they are likely to encourage other shareholder to support their proposals and implement changes in the targeted companies. Their primary focus is to improve financial performance of the company and increase shareholder value. Yet, activist investors have the potential to submit proposals related to ESG performance and disclosure.

Cross-References

- ▶ [Corporate Activism](#)
- ▶ [Institutional Investors](#)
- ▶ [Shareholder and Stakeholder Activism](#)
- ▶ [Shareholder Model](#)
- ▶ [Shareholder Theory/Shareholder Value](#)

References

- Aluchna, M., & Kamiński, B. (2017). Ownership structure and company performance. *A Panel Study from Poland, Baltic Journal of Management*, 12(4), 485–502.
- Back, K., Collin-Dufresne, P., Fos, V., Li, T., & Ljungqvist, A. (2018). Activism, strategic trading, and liquidity. *Econometrica*, 86(4), 1431–1463.
- Bainbridge, S. (2012). *Corporate governance after the financial crisis*. Oxford: Oxford University Press.
- Bebchuk, L., Brav, A., & Jiang, W. (2015). The long-term effects of hedge fund activism. *Columbia Law Review*, 115(5), 1085–1155.

- Becht, M., Franks, J., Mayer, C., & Rossi, S. (2009). Returns to shareholder activism: Evidence from a clinical study of the Hermes UK focus fund. *Review of Financial Studies*, 22(8), 3093–3129.
- Berglöf, E., & Claessens, S. (2006). Enforcement and good corporate governance in developing countries and transition economies. *World Bank Research Observer*, 21(1), 123–150.
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. Commerce Clearing House, New York.
- Blair M. (1995). *Ownership and control: Rethinking corporate governance for the twenty-first century*, Brookings Institution.
- Celik S, Isaksson M (2013). Institutional investors and ownership engagement. *OECD Journal: Financial Market Trends* 2013/2, s. 93–114, <http://www.oecd.org/corporate/Institutional-investors-ownership-engagement.pdf>
- Chen X., Harford J., & Li K. (2007). Monitoring: which institutions matter? *Journal of Financial Economics*, 86, 279–305.
- Cyriac, J., de Backer, R., Snaders, J. (2014). *Preparing for bigger, bolder shareholder activists*, McKinsey & Company Special Collection.
- Dai, N. (2014). Hedge funds activism and corporate governance. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance* (pp. 564–580). Oxford: Oxford University Press.
- David, P., Bloom, M., & Hillman, A. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28, 91–100.
- Davidoff, S. (2009). *Gods at war. Shotgun takeover; government by Deal and the private equity implosion*. New Jersey: Wiley.
- Edmans, A. (2009). Blockholder trading, market efficiency, and managerial myopia. *Journal of Finance*, 64(5), 2481–2513.
- Gilson, R., & Gordon, J. (2013). The agency costs of agency capitalism: Activist investors and the revaluation of governance rights. *Columbia Law Review*, 113(4), 863–928.
- Gramm, J. (2015). *Dear chairman. Boardroom Battles and the Rise of Shareholder Activism*, Harper Business, New York.
- JP Morgan (2019). *The 2018 proxy season*, <https://www.jpmorgan.com/global/proxy-season-2018/home>
- Larcker, D., & Tayan, B. (2011). *Corporate governance matters. A Closer Look at Organizational Choices and Their Consequences*, Pearson Education, New Jersey.
- Lazard's Shareholder Advisory Group (2019). *2018 Review of Shareholder Activism*, Lazard, <https://www.lazard.com/media/450805/lazards-2018-review-of-shareholder-activism.pdf>
- MacAvoy, P., & Millstein, I. (2003). *The recurrent crisis of corporate governance*. Basingstoke: Palgrave Macmillan.
- Mallin, Ch. (1998). *The role of institutional investors in the corporate governance of financial institutions: The UK case, financial and monetary policy studies book series* (FMPS, volume 33), 217–234.
- Maug, E. (1998). Large shareholders as monitors: Is there a trade-off between liquidity and control? *Journal of Finance*, 53, 65–98.
- McKinsey (2014). *Dealing with activist investors, interview with Larry Kanarek, McKinsey & Company Special Collection*.
- Monks, R. A., & Minow, N. (2004). *Corporate governance*. Blackwell Publishing.
- Nagel, G., Qayyum, M., & Roskelley, K. (2015). Do motivated institutional investors monitor firm payout and performance? *The Journal of Financial Research*, 37(2), 349–377.
- Nordberg, D. (2010). The politics of shareholder activism. In H. Baker & R. Anderson (Eds.), *Corporate governance. A synthesis of theory, research and practice* (pp. 409–425). Wiley.
- Puri, P., & Vasudev, P. (2010). Canadian pension funds: Investments and role in the capital markets and corporate governance. *Banking & Finance Law Review*, 25, 247–340.
- Renders, A., Gaeremynck, A., & Sercu, P. (2010). Corporate-governance ratings and company performance: A cross-European study. *Corporate Governance: An International Review*, 18(2), 87–106.
- Romano, R. (1993). Public pension fund activism in corporate governance reconsidered. *Columbia Law Review*, 93(4), 795–853.
- Romano, R. (2006). Institutional shareholders and corporate governance in the US. In G. Owen, T. Kirchmaier, & J. Grant (Eds.), *Corporate governance in the US and Europe, where are we now?* (pp. 52–56). New York: Palgrave Macmillan.
- Schulte Roth & Zabel (2019). *The activist investing annual review*. The Sixth Annual Review of Trends in Shareholder Activism, https://corpgov.law.harvard.edu/wp-content/uploads/2019/02/AIAnnual_Review2019.pdf
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783.
- Skorupa, Ch. (2017). 2017 and beyond – major trends shaping shareholder activism, Forbes, October, <https://www.forbes.com/sites/christopherskroupa/2017/10/31/2017-and-beyond-major-trends-shaping-shareholder-activism/#6ce1c52515e7>.
- Skougard, M. (2017). Perspectives on the integration of corporate governance in equity investments: From the periphery to the core, from passive to active. In M. Aluchna & S. Idowu (Eds.), *Responsible corporate governance* (pp. 33–50). Heidelberg: Towards Sustainable and Effective Governance Structures, Springer.
- Tricker, B. (2015). *Corporate governance. Principles, policies and practices*. Oxford: Oxford University Press.
- Useem, M. (1996). Shareholders as strategic assets. *California Management Review*, 39(1), 8–27.
- Woidtke, T. (2002). Agents watching agents?: Evidence from pension fund ownership and firm value. *Journal of Financial Economics*, 63(1), 99–131.

Activists

► Activist Investor

Actors of Development Management

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Synonyms

Country growth players

Definition

The term actor comes from the Latin actor which is none other than the noun derived from the Latin verb *agere* which means to act: the actor is the one who acts. The actors of the development are all those organizations, institutions, and people that act for the human development of the territorial areas. There are therefore different types of actors in the system: main, secondary, and support actors; global, regional, and local actors; intergovernmental, governmental, and non-governmental actors; economic and social actors; traditional and emerging actors. In many cases, the same organization has multiple roles within a development process. For these reasons it is not easy to provide a classification of the type of actors of a development process that is exhaustive, without losing clarity and effectiveness. For these reasons we theorized the Development Actors Matrix: the matrix of actors that can play different and even multiple roles for country development. In fact they can be proactive actors, support actors, economic sources, and process and controller regulators.

Key Issue

We therefore chose to distinguish the organizations that participate in the development process of weak areas according to two fundamental characteristics: (1) the “legal” nature, divided into public, private, and mixed and (2) the area of action, divided into global, regional, and local (Fig. 1).

Public actors include all those organizations that have exclusively public legal nature.

These actors can be divided by their geographical area of action, in international, regional (Garcia, 2015), and local, and further subdivided through the type of activity carried out for the human development of the weak areas of the world.

Among the public actors, we distinguish: global and regional intergovernmental actors and governmental actors. Intergovernmental actors correspond to those structures that are founded by several governments at the same time. These structures may include governments located in multiple continents (global intergovernmental actor) or in a single continent (continental intergovernmental actor) or in a specific geographical, religious, or cultural area (regional intergovernmental actor).

The governmental actors are, instead, those organizations founded by a single government, such as government commissions, public universities, public enterprises, etc. Obviously, in this case, there are only national or subnational actors.

In an overall system of development of a country, the public actors of international development are necessarily joined by those not tied to governments, independent, sometimes linked to the market. These are the NGAs (nongovernmental actors).

They include all the actors involved in the development of the transforming areas that do not have binding relationships with governments (Anheier, 2011; Salamon and Anheier, 1997), i.e., NGOs, companies, social movements (Cesareo, 2003), private universities, private foundations (Andrews, 1956; Lundsgaarde, 2010; Srivastava and Oh, 2010), etc., like Save the Children and the Bill and Melinda Gates Foundation. These can correspond to global, regional, or local organizations.

Actors of Development Management,

Fig. 1 Development actors matrix (Sciarelli and Rinaldi 2017a, b)

		Nature		
		PUBLIC	PRIVATE	MIXED
Geographical Area	GLOBAL	<i>Intergovernmental Global Actors</i>	<i>Multinational Non Governamental Actors</i>	<i>Global PPP Network</i>
	REGIONAL	<i>Intergovernmental Regional Actors</i>	<i>Regional Non Governamental Actors</i>	<i>THO Network</i>
	LOCAL	<i>Governamental and Local Public Actors</i>	<i>Local Non Governamental Actors</i>	<i>Local PPP Network</i>

Lastly, we have public-private actors (Argueta de BARillas and Gomez, 2014), i.e., foundations, associations, commissions, and companies that are founded on partnerships between public actors and private actors, such as the Global Fund for Fighting AIDS.

Collective actions for international development have greatly increased in the last two decades. Many of these have been realized and are realized in the creation of new global partnership organizations (Missoni and Alesani, 2014). Public-private partnerships (PPPs), which involve both public and private organizations, are essential especially when the urgency of acting to resolve a particular humanitarian issue exceeds the speed and capacity of traditional institutions to respond effectively. The mandates of the majority of these organizations, in fact, face a specific challenge or a specific problem (for example, vaccinations, the main infectious diseases, and primary education). Because of this, they are

generally referred to as vertical organizations or vertical funds.

All these actors can then play different and even multiple roles. For example, they can be proactive actors, support actors, economic sources (Nelson, 2013), process, and controller regulators (Sciarelli and Rinaldi, 2018).

Summary

The actors of the development are all those organizations, institutions, and people that act for the human development of the territorial areas. There are therefore different types of actors in the system, in many cases, with multiple roles. All players are fundamental for the territory development. They are sometimes initiators, sometimes supporters, and sometimes operatives. In the development phases of a country each actor has a different role and this itself changes from phase

to phase. The activities of Intergovernmental Global Actors, for example, are completely different in the Start up phase than Hang on phase or Self development phase. The importance of the matrix is to put all the players in order to identify, with great attention, their role in the phases of the Overall development model.

Cross-References

- Development Management
- Development Program
- HRM of Sustainable Development Phases
- Lifecycle of Sustainable Development

References

- Andrews, F. E. (1956). *Philanthropic foundation*. Russel Sade Foundation. Anheier, H.K. How to measure civil society. e London School of Economics and Political Science, <http://fathom.lse.ac.uk/features/122552>.
- Anheier, H. K. (2011). *Global civil society 2011. Global justice*. Basingstoke: Palgrave.
- Cesareo, V. (2003). *Alla ricerca della società civile*. Rubbettino, Milan.
- Argueta de Barillas, M., & Gomez, F. J. (2014). *Creating new models, innovative public-private partnerships for inclusive development in Latin America*. Global Agenda Council, World Economic Forum.
- Garcia, L. E. (2015). *Comparative advantages and challenges of regional development banks: e CAF experience*. LSE Global South Unit Policy Brief Series Policy Brief No. 2/2015.
- Lundsgaarde, E. (2010). *Emerging non-state actors in global development: Challenges for Europe* (EDC 2020 working paper 7/2010).
- Missoni, E., & Alesani, D. (2014). *Management of international institutions and NGOs*. London: Routledge.
- Nelson, R. M. (2013). *Multilateral development banks: Overview and issues for congress*. Congressional research service. Retrieved from <https://www.fas.org/sgp/crs/row/R41170.pdf>.
- Salamon, L. M., & Anheier, H. K. (1997). *Defining the non profit sector*. Manchester: Manchester University Press.
- Sciarelli, F., & Rinaldi, A. (2017a). Overall development management model: A new approach for emerging countries. Comparative analysis of six countries on two continents, special issue on “integrating research, education, and problem solving (2017)” of the *Journal of Systemics, Cybernetics and Informatics (JSCI)*.
- Sciarelli, F., & Rinaldi, A. (2017b). Development Management of Transforming Economies. In *Theories, approaches and models for overall development*. London, UK: Palgrave Macmillan.
- Sciarelli, F., & Rinaldi, A. (2018). *Il Macro-Management per le Aree Deboli del Mondo*. Milano: Franco Angeli.
- Srivastava, P., & Oh, S. A. (2010). Private foundations, philanthropy, and partnership in education and development: Mapping the terrain. *International Journal of Educational Development*, 30(5), 460–471.

Adaptability

- Resilience

Additional Compensation

- Bonuses (Employee for Performance)

Administration

- Governance
- Leadership Communication
- Management

Admittance

- Inclusion

Adversarial Ethics

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Synonyms

Competitive ethics; Ethics of adversaries

Definition

Adversarial ethics is a relatively recent field of morality, which is concerned with competitive behaviors, such as in sports, politics, business, the judiciary system, or, ultimately, war. Its aim is to determine the conditions to be imposed on competition for rendering it acceptable. It constitutes a departure from “traditional ethics” and from its focus on the principles and constraints to be applied to individuals when they cooperate or interact in a neutral manner (neither competitive nor cooperative). In contrast, adversarial ethics deals with situations where individuals and organizations should not intend to collaborate, when they unapologetically pursue their self-interests. Most of such situations are socially codified and circumscribed, e.g., sports, business, or politics. Moreover, they are accepted insofar as they generate positive outcomes of some sort (for instance, a thrilling spectacle, lower prices, products of higher quality, better qualified representatives, truth in court). Thus, adversarial ethics could be understood in a consequentialist way as a set of reflections about how to bound competitive behaviors in a manner that maximizes social benefits. However, the approach could be criticized as fueling moral drifting or relativism. Finally, it might be claimed that adversarial contexts, although genuinely specific in nature, do not justify as much departure from common morality than it is often assumed.

Introduction

Ethics is the field that reflects on the mutual obligations of human beings. Traditionally, it has dealt with the imperative of and conditions for goodness, fairness, or reciprocity among people who cooperate or who interact on a daily basis. Most approaches rely on principles enjoining agents to be kind or generous, to do good, to treat others with respect or reciprocate.

Nevertheless, human relations are not always characterized by kindness, generosity, or cooperation. Furthermore, in specific situations,

individuals are not expected to be kind or generous. For example, opponent teams during a football tournament are not expected to be kind or “collaborate.” Political adversaries who run for the same elected office are not expected to be nice toward each other. Any occurrence where competitors seem to band up together raises the suspicion of collusion, of a rigged game.

Thus, there are situations where individuals compete for winning, for accessing to goods, for gaining votes or customers, and for pushing their rivals out of office or business. The confrontation could be violent and nasty, for instance, between mafia organizations with threats, pressures, and killings, or it could take milder expressions like in sports. Some competitive structures are accepted (e.g., in politics or sports), while others are repressed (e.g., between mafia organizations).

Regarding the former, traditional ethics offers little guidance when it comes to determine the boundaries of tolerable attitudes and behaviors. The reason is that traditional ethics, by definition, is meant to eschew or lessen rivalry and force individuals to adopt a cooperative or a benevolent stance. For example, the Kantian categorical imperative is mostly ineffective for separating acceptable from unacceptable types of competition on a football pitch. It is unclear how the principle of universalizability could apply, at least the argument goes.

Adversarial ethics is presented as a response to such a lacuna. It is a field that takes seriously the specificity of the context (competition, noncooperation) and reflects on the potential obligations that must bind antagonists. To some degree, it relies on the assumption that the social (and, therefore the moral) life can be divided into spheres where norms vary depending on the sort of interaction that define each of these spheres.

The Moral Specificity of Competition

First, adversarial ethics posits that cooperative and competitive settings differ in a *morally significant manner*. In the former, individuals interact with the objective of pursuing their conception

of the good while benefiting from each other. Examples include working in an organization such as a company, a ministry, or a nonprofit organization. Members usually share a common goal (e.g., developing the best products, devising policies, providing public services or advocating for specific rights) and, consequently, are expected to adopt a mutually beneficial or at least non-detrimental strategy.

To this first category, neutral settings could be added, where people neither collaborate nor compete. In most of these situations, non-interference is the default position. Individuals are expected not to interfere into someone else's life or course of action *without good reasons* (e.g., to end negative externalities such as pollution). For example, individuals are entitled to enjoy their property without arbitrary interference as long as they do not threaten or hurt anyone, as stipulated by the harm principle (Mill 1859).

In contrast, competition encompasses situations where agents meddle, to some extent, into each other's plans. They oppose, conflict, and clash. Furthermore, any suspicion of either cooperation or noninterference is likely to be lambasted. For instance, when teams rig a match, it is viewed as a violation of the "spirit of the game," a collapse of good "sportsmanship," and, ultimately, a sign of moral corruption (e.g., the fixed game between West Germany and Austria during 1982 FIFA World Cup that provoked the elimination of Algeria).

Adversarial situations are contexts where rivals are expected to compete for the sake of some higher "good," broader benefits, or "positive externalities" (Norman 2011). Companies operating on free markets aim at taking away their competitors' clients, revenues, market shares, and so forth. Consequences are revenue losses for those falling behind, employees laid off, or bankruptcy. In an open democracy when politicians compete for elective positions, they actually try to oust incumbents or bar other people from getting a public office. Access to resources, prestige, and power is at stake, and the defeated side is at risk of being cut off from these advantages.

Thus, adversaries hurt each other. Politicians are claimed to be incompetent or self-interested, damaging their reputation. In virtue of the rotation of political representatives, they regularly become unemployed. Their private life might be exposed. They might be accused of being vicious and inept or of suffering from poor judgment. Occasionally, the competition ramps up, and allegations of treason, misconduct, or even embezzlement are laid.

Rivalry pushes firms out of business and leads to people losing jobs, income, and often other benefits (e.g., health insurance, pensions). Joseph Schumpeter's concept of "creative destruction" (Schumpeter 1994) acknowledges this ambivalent dynamic at the core of capitalism where companies fail, markets decline, and crises happen. Creative destruction is tolerated because it clears the ground for new economic initiatives and ideas. Criminal legal procedures result in exchange of accusations, exposition of people's private lives, and sometimes lies and humiliation. Sports constitute zero-sum games where one side wins what the other loses (e.g., points in a championship, trophies, place in the tournament).

The very existence of harm, and its social acceptance, is at odds with "traditional" ethics which instructs, for instance, to treat another person "as an end, never merely as a means" (Kant 1997), to act in a way that they maximize pleasures, happiness, or positive outcomes and minimize pain, unhappiness, or negative outcomes (for utilitarianism or consequentialism). It is difficult to deny that even in adversarial contexts, there is some duty of respect, usually related to the "spirit of the rules" or fair play. However, it is unclear how rivals should treat each other as ends in themselves without drastically altering or, worse, suspending competition (e.g., fixed games). More broadly, competition seems to shake the very foundations of ethics, by tackling the widespread obligation to do good.

Adversarial ethics then emerge as the attempt to directly derive principles and constraints from the nature of competitive settings for rendering them more "ethical" or acceptable. It could be interpreted as a tentative to grant exemptions from general moral rules (e.g., not lie, not harm, cooperate) for the lawyer defending her client

in court, a tennis player at Roland Garros, or a politician running for president *while securing the benefits society extracts from rivals endorsing their “role.”*

Adversarial ethics raise the issue of contextualism. It suggests that the context, the “role” that befall on antagonists, matter for moral evaluation. The “context” refers to the competitive conditions in themselves but also to the wider environment. A presidential election is a particular setting, institutionally devised, that performs a specific function in the broader frame of open democracy: *letting candidates chosen by their party competing through a rational exchange of arguments in order to cater to voters evidence about their adequacy as potential head of the executive branch.*

Another illustration is provided by Adam Smith (1993). His idea is that the ultimate justification for markets (so competition) lies in their capacity of channeling self-interests into realizing the common good. He famously posits that markets act as they are guided by an “invisible hand” that coordinates the diversity of egoistic motives for satisfying everyone’s needs and contributing to improving social welfare. Adversarial ethics could be viewed as a voluntarist enterprise to support the multitude of invisible hands. It achieves that by devising obligations that derive from a close attention to the conditions under which competition creates net benefits. It formulates constraints on antagonists for keeping their strategies within the limits of what is socially beneficial.

Competition needs to happen in such a way that its “virtues” are preserved, i.e., that the actual behavior of rivals does not undermine the social benefits expected by the society from particular competitive settings. In other words, adversarial ethics try to optimize the positive consequences of competition in relation to the negative ones for each specific setting.

On markets, the main social benefits include low prices, innovation, quality products/services, and adequate information. These are the outcomes to be expected when companies compete in a proper manner. Such benefits could be subsumed under the principle of “market efficiency” in the

sense that well-devised moral limits contribute to improving Pareto efficiency (i.e., when the situation of at least one agent is enhanced without anyone else being made worse off).

As indicated above adversarial ethics consists in constraining competitive settings for maximizing the probability of positive consequences and minimizing the negative ones (efficiency). This explains why false advertising or price dumping is deemed unethical, because they impair the expected social benefits by conveying deceiving information, artificially keeping prices low the time to get rid of the concurrence, and so on. Moreover, those shortcomings are likely to generate misallocations of productive resources (i.e., capital and labor).

The positive outcomes of electoral competition are to offer pertinent knowledge on candidates’ ability to govern, provide a channel to the expression of political pluralism, and so forth. If politicians lie about their credentials, partake in ad hominem attacks, and cover up their real intention (e.g., be at the service of some powerful lobby at the expense of the common good), they tarnish the signals received by citizens and dampen the quality of the debate. They distort the information collected by voters and pervert the expression of pluralism.

For sports competition, individuals and teams are expected to genuinely try to win by respecting the game’s rules *and* spirit. For instance, their performance needs to flow from their efforts, wits, strategy, preparation. and, perhaps, a dose of luck, not from gaming the rules, bribing referees, or colluding with rivals. If they indulge in one of the latter, they degrade the quality of the spectacle, spoiling the experience of the spectators and, ultimately, being accused of ruining the game.

There have been sparse tentatives for devising what adversarial ethics requires in specific competitive contexts. Drawing an analogy with sports, Joseph Heath (2014) offers one of the few attempts to elaborate adversarial principles for business. Morally acceptable market competition should conform to five rules: do not exploit market failures (e.g., pollution), do not cheat (i.e., respect the law, for instance, by not engaging in

tax evasion), do not game the rules (i.e., follow the spirit of the rules, e.g., by not avoiding tax), take the high road (the fact that its rivals violate the rule does not excuse for any lapse), and do not lobby against regulation that aims at fixing market failures (because then the social benefits of competition are undermined).

An objection is to underline the risk of ethical drifting. The contextual nature of adversarial ethics could be interpreted as granting a license to specific actors (e.g., companies, politicians) not to follow at all (or selectively) the rules of common morality such as not lying, not harming others, and so forth. Adversarial ethics would then be used as an excuse for obviously wrong or bad behaviors that, in other circumstances, will be condemned.

A variant of the objection is to raise the danger of relativism in a society where diverse social, competitive and noncompetitive, spheres would be governed by different, potentially conflicting standards. The worst-case scenario would be the emergence of a fragmented ethical landscape. In such a situation, it would become difficult to hold rivals accountable for their actions.

A possible answer is to assert that adversarial ethics cannot be equated to moral relativism or drifting. The reason is that, even though the context matters for devising antagonists' duties, the context is not the only thing that matters, the only source of normativity. The overall social benefits of the adversarial settings matter. Other obligations, extracted from daily morality, also matter. For instance, it is absolutely forbidden for a company or a football team to murder their competitors. Lying is actually not tolerated (at least not justified) for corporate or political communication.

A broad conclusion could be that although adversarial situations represent indeed specific contexts and although such contexts may grant some ethical modulations, they justify more modest departures from common morality than often assumed (Applbaum 1999). Therefore, rivals should benefit from less latitude for engaging in harmful, coercive, or deceptive behavior.

Summary

Adversarial ethics is the field of moral reasoning that covers contexts characterized by competition, i.e., situations where individuals are not expected to cooperate or, at least, to interfere into someone else's life. It refers to contexts like market or political rivalry, sports, or the judicial system. It has two traits. First, it represents a departure from "traditional" or daily morality which imposes to agents some degree of benevolence, generosity, cooperation, and so forth. Second, it justifies such a departure from the setting in which the adversarial interaction takes place by invoking the social benefits of competition, thus positing that specific situations could require specific duties and exemptions. These two characteristics are subject to criticism from those objecting to the moral autonomy of competitive settings and, therefore, the salience of adversarial ethics.

Cross-References

- [Business Ethics](#)
- [Competitiveness](#)
- [Ethics](#)
- [Ethics and Ethical Theories](#)
- [Professional Ethics](#)
- [Sustainable Competitiveness](#)

References

- Applbaum, A. I. (1999). *Ethics for adversaries*. Princeton: Princeton University Press.
- Heath, J. (2014). *Morality, competition, and the firm*. Oxford: Oxford University Press.
- Kant, I. (1997). *Groundwork of the metaphysics of morals*. Cambridge, UK: Cambridge University Press.
- Mill, J. S. (1859). *On liberty*. London: John W. Parker and Son, West Strand.
- Norman, W. (2011). Business ethics as self-regulation: Why principles that ground regulations should be used to ground beyond-compliance norms as well. *Journal of Business Ethics*, 102, 43–57. <https://doi.org/10.1007/s10551-011-1193-2>.
- Schumpeter, J. A. (1994). *Capitalism, socialism and democracy*. London: Routledge.
- Smith, A. (1993). *An inquiry into the nature and causes of the wealth of nations*. Lanham: Rowman & Littlefield.

Affirmative Action

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Synonyms

Positive action; Positive discrimination; Reservation (in India)

Definition

Affirmative Action (AA) is a debated topic in many fields of study; however, psychology and juridical research have paid major attention.

AA consists of a body of policies and procedures aimed at eliminating discrimination at work against women and ethnic minorities, and repairing the effects of discrimination suffered in the past (Kravitz et al., 1997, p. Vii cited by Kovacs et al., 2014). However, in a wider sense, it can include all policies and actions to promote opportunities for disadvantaged (or minority) groups to give them equal access as the majority population within a society (e.g., Sowell, 2004).

Indeed, AA is often adopted by governments and educational institutions to ensure that those groups within a society are able to take all the opportunities offered, including promotional, educational, and training ones. Usually, AA takes the form of policies for targeted recruitment programs, preferential treatment for disadvantaged groups and, in some cases, the use of quotas.

Disadvantaged groups vary based on the national contexts; however, typically, they are identified according to gender, ethnicity and/or disability or their status, conceived as a combination of education, income, and occupation.

Introduction

Origins of AA date back to the United States (US) Reconstruction Era, 1863–1877 (Urofsky, 2020). Successively, Executive Order No. 10925, signed by President Kennedy in 1961, introduced AA with its current meaning by stating that government contractors take AA to ensure that job applicants and employees are treated without disparities related to their race, creed, color, or national origin (US Department of Labor, n.d.). It was then replaced by the Executive Order n. 11246, signed by President Johnson in 1965. Such document established requirements for non-discriminatory practices concerning race, color, religion, sex, or national origin in workforce hiring and treatment by US government contractors, which also apply to federal contractors and subcontractors.

The Executive Order n. 11246 has therefore been modified and further strengthened over the years, safeguarding the rights of workers employed by federal contractors – corresponding to about one-fifth of the US workforce – from discrimination based on race, color, religion, sex, sexual orientation, gender identity, or national origin, opening the path for AA provision. In particular, the subsequent Executive Decree no. 11375 in 1967 extended the protected categories by AA, such as introducing women by inserting “sex” in the list (UCI – OEOD, n.d.).

AA could assume different forms, likewise laws, policies, guidelines, and administrative practices under a government mandate and/or approved by the government. AA can also include actions taken by private companies, which reserve preferential treatment to target groups with specific attributes such as sex or skin color, to counter the effects of entrenched discriminatory practices that violate the inherent equality and deny opportunities (Feinberg, 2005).

Formerly, AA was adopted to redress and compensate for historical discrimination disadvantages. More recently, various political contexts, such as the US and the European Union, encouraged public institutions representing their populations (such as universities, hospitals, and

police forces) to adopt AA to give an example and be imitated (Fullinwider, 2018).

So far, target groups for AA have been women, ethnic minorities living in various countries, and the disabled. The content of the AA concerns achieving goals such as promoting their access to education, bridging inequalities in employment and pay, particularly in specific occupations, encouraging diversity in the workplace and culture, and redressing apparent past wrongs or hindrances.

Notably, the United Nations International Convention on the Elimination of All Forms of Racial Discrimination provides (Article 2.2) for the request of AA to the countries adhering to the convention on the rectification of systematic discrimination. It is a case of legitimate differentiation under the Covenant to carry out activities necessary to correct discrimination (UN, 1989).

Instances of AA Around the World

AA takes different forms according to the national context. Some countries use the quota system to devote a percentage of jobs in public institutions, political positions or tuition waivers to a member of specific target groups. On the contrary, quotas based on race are illegal in other countries because it is considered an additional source of discrimination as it does not treat all people equally.

Finally, several countries devote AA to ensuring equal opportunity by, for example, targeted advertising campaigns to encourage ethnic minority candidates to join the police force, etc. (this is sometimes called “positive action”).

The following table provides an overview of the different national approaches to AA.

Reasons for and Against

Literature has massively engaged on the reasons for and against AA. The following summarizes some main arguments.

Proponents argue that AA is a form of compensation for past discrimination, persecution or exploitation suffered by socioeconomically

disadvantaged groups caused by the ruling class (overrepresented or majority groups) of a culture. Furthermore, AA addresses existing discrimination brought about by institutionalized bias or under historical conditions that caused the exclusion of minorities from education, employment, and culture (e.g., Crosby & VanDeVeer, 2000).

Indeed, such groups are disadvantaged by past oppression. In particular, the social imbalance dates back to slavery and the related laws. The AA also addresses structural racism and racial inequality to elevate the status of the perpetual underclass.

The ultimate aim is to maximize diversity at all sectors and levels of society and restore equal access to opportunities and benefits. To this end, AA seeks to achieve several objectives, including reducing employment and pay inequalities; increasing access to education; ensuring that the full spectrum of society is represented in state, institutional, and professional leadership; correcting apparent wrongs, damages, or obstacles of the past.

As for other positions in favor, Kim and Kim (2014) support that AA repairs existing unfair treatment and assures women equal opportunities, which will be consolidated in the future.

Other than the need to counterbalance historic inequality, arguments in favor of AA rely on examples of success in women, support equity and increase diversity allowing the achievement of the right of equal opportunity.

Several studies fund a positive effect of AA on advancing black, Hispanic, and white women into management, professional, and technical occupations (e.g., Kurtulus, 2012).

According to Miller (2017), in the US the number of black people among employees of private companies is equal to an average of 0.8 percentage points in the 5 years after the first regulation of AA. Surprisingly, this share continues to grow at a similar rate even after deregulation. One could argue that this persistence is partly related to improved methods for selecting potential hires induced by AA.

However, it can also lead to undesirable side-effects and consequences such as causing resentment toward its beneficiaries (e.g., Heilman,

Affirmative Action, Table 1 Approaches to AA from around the world

Continent and country	AA context	Target Groups	Provision
Africa			
South Africa	Employment	Various disadvantaged groups All people of color, women (including white women) and people with disabilities (including white people).	Companies employing more than 50 people are required to design and implement plans to improve the demographic distribution of the workforce – all people of color, women (including white women) and people with disabilities (including white people) – and report them to the Department of Labor.
Asia			
China	Education	Ethnic minorities	Universities may reduce the minimum requirements for the mandatory national exam for universities access from ethnic minorities. Some universities could set quotas system for minority student intake. Scholarships and/or tuition waivers and a monthly salary for students enrolled in ethnic minority-oriented specialties.
Israel	Employment and education	Various disadvantaged groups (Israeli citizens who are Arabs, blacks or people with disabilities)	AA civil service employment and a class-based access policy for the four-most selective university for Israeli citizens who are Arabs, blacks, or people with disabilities. Full university tuition scholarships provided by the state.
India	Employment and education	Social minorities (caste division: Scheduled Castes and Scheduled Tribes and Other Backward Classes)	Reservation of up to 50% of all government-run higher education admissions and government job vacancies for Scheduled Castes and Scheduled Tribes (SC/ST) and Other Backward Classes (OBC). A 10% quota is reserved for Economically Weaker Sections (EWS) within the remaining unreserved.
Malaysia	Various	Ethnic minorities (Bumiputera)	The Malaysian New Economic Policy (NEP) included several operations addressed to people deemed “Bumiputera” (which consists of the Malay population, Orang Asli, and the indigenous people of Sabah and Sarawak). Such operations consist of, for instance, a 30% quota for investors reserved in all initial public offerings and quotas for admission to public universities.
Sri Lanka	Education	Students from areas with lower education rates	The standardization policy established a student selection in some university faculties based on the language spoken and the district of origin to increase the enrollment of students from areas with lower education rates.
Taiwan	Employment and education	Ethnic minorities (Taiwanese Aborigines)	Firms (with 100 or more employees) wishing to become contractors for the government must have at least 1% of Taiwanese Aborigines employees. The high school or college entrance exams for Taiwanese Aboriginal students involves demonstrating some knowledge of their tribal language and culture.
Europe			
Finland	Employment and education	Language/ethnic minorities (Swedish language) Women	Some university programs have quotas reserved for highly qualified students in the Swedish language and the curriculum is partially taught in Swedish. Preferential treatment in hiring women for some public sector jobs where there is a gender imbalance.

(continued)

Affirmative Action, Table 1 (continued)

Continent and country	AA context	Target Groups	Provision
France	Employment and education	Language/ethnic minorities Students from impoverished families Women	In neighborhoods labelled “Priority Education Zones”, some primary and secondary schools are granted more funds than the others. In some institutes, students from these schools also benefit from particular policies. Some schools are obligated to take a certain number of students from impoverished families. Women must represent at least 20% (40% since 2017) of board members in all stock exchange listed or state-owned companies.
Germany	Employment	Women Disabled people	If men and women have equal qualifications, women have to be preferred for a job; moreover, the disabled should be preferred to non-disabled people.
Italy	Employment	Gender minorities	Gender equality in access to the board and control bodies of companies listed on regulated markets, establishing the less represented gender must obtain at least 33% of the members.
Norway	Employment	Gender minorities	In all public stock companies (ASA) boards, either gender should be represented by at least 40%.
Romania	Education	Ethnic minorities (Romani people)	Romani people are allocated quotas for access to public schools and state universities.
Russia	Employment and education	Ethnic minorities and inhabitants of certain territories	Preferences for some ethnic minorities and inhabitants of certain territories.
Serbia	Education	Ethnic minorities (e.g., national minorities)	The constitution promotes AA for certain marginalized groups. For instance, the Roma national minority is enabled to enroll in public schools under more favorable conditions.
Slovakia	NONE		AA is considered against the constitution
UK	Employment	Religious minority Women Other disadvantaged groups	Discrimination, quotas or favoritism due to sex, race and ethnicity among other “protected characteristics”, is generally illegal. Exceptions are listed in the Equality Act 2010, establishing the principles of equality and their implementation in the UK. Some examples include: – Police Service of Northern Ireland recruits 50% of numbers from the Catholic community and 50% from the Protestant and other communities. – All-women shortlists are allowed to select more women as election candidates.
America			
Canada	Employment and education	Women, the disabled, ethnic minorities (aborigines and aboriginal descendants), and visible minorities	Preferential treatment is established for employers in federally-regulated industries for disadvantaged groups (such as women, persons with disabilities, aborigines and aboriginal descendants, and visible minorities). Some universities offer alternative requirements for the admission of aboriginal students. In some provinces and territories, aboriginal people are given preference for jobs and education.

(continued)

Affirmative Action, Table 1 (continued)

Continent and country	AA context	Target Groups	Provision
US	Employment and education	Various disadvantaged groups	Workers employed by federal contractors and belonging to disadvantaged groups are protected from discrimination based on their race, color, religion, sex, sexual orientation, gender identity, or national origin. Some education institutions consider race as a factor when admitting students. Some colleges use financial criteria to attract underrepresented racial groups with lower living conditions. However, some states (e.g., California, Michigan, Washington) ban their public institutions, including public schools, from practicing AA (Cornell Law School, 2003).
Brazil	Employment and education	Ethnical minorities, the poor and disabled	Some universities established quotas to increase the admission of racial minorities, the poor and the disabled. In the civil public services, quotas of up to 20% of vacancies are reserved for people with disabilities.
Oceania			
New Zealand	Education	Ethnical minorities (Maori or other Polynesian descendants)	The Maori or other Polynesian descendants often have preferential treatment to access university courses or have scholarships granted.

Source: our elaboration from https://en.wikipedia.org/wiki/Affirmative_action (accessed 22 April 2022)

1996; Harrison et al., 2006). AA devalues the achievements of people selected based on the social group they belong to rather than their qualifications, thus making AA dysfunctional.

Also, arguments against AA maintain that it is based on a discriminatory assumption and would be a further new form of discrimination (a reverse discrimination form). For instance, the quota system might result in the assumption of less skilled people to the detriment of trained and meritorious staff. This could lead to unintended consequences, such as discouraging capable people from gaining high education and performing well in their studies or work. In hiring less qualified people, firms and ultimately the economy would be negatively affected.

Among the opponents of AA, it is argued that it hinders reconciliation; establishes new wrongs instead of old ones; undermines the achievements of minorities and encourages individuals to label themselves disadvantaged, even when they are not. As pointed out by Sowell (2004)

concerning race-based AA, more privileged people within minority groups benefit from AA at the expense of less fortunate people, such as middle- and upper-class blacks acquiring the benefit instead of the poor whites or Asians. Such experiences reduce the incentives to give the best for both the AA beneficiaries and the others, with consequent losses for society. Moreover, it increases the aversion toward the target groups of AA, and tensions among groups can increase.

Finally, another negative effect of AA corresponds to mismatching. It consists in admitting students to colleges that are too difficult for them and do not match their academic abilities. Under the mismatching hypothesis, AA often increases students' chance of dropping out of college, compromising their chances of graduating or pursuing their desired specialization. As a result, AA harms the intended beneficiaries (e.g., Amar & Sander, 2007). Mismatching has also been seen as a contributing factor to

reducing the achievement and completion of STEM degrees among specific populations (e.g., Hill, 2017).

Summary

Centuries have passed since AA was founded. However, forms of discrimination, persecution or exploitation of socio-economically disadvantaged groups persist. While AA originally consisted of policies and procedures aimed at eliminating discrimination at work against women and ethnic minorities, today discrimination also covers race, color, religion, sexual orientation, gender identity, or national origin. Consequently, the same target groups are no longer just women and ethnic minorities, but all those disadvantaged or minority groups who must be guaranteed a fair and equal opportunity to access to the socio-economic life of a country, as well as to the political ones.

In this sense, it is likely that the opposition between those for and against AA will continue to persist. On the other hand, the realization of a society in which fairness and merit are not opposed, but on the contrary, act in synergy for the growth of each person is a priority for the whole of human society.

This work outlines origins and definition of AA, reason for and against it, and provides examples of AA around the world.

Cross-References

- [Corporate Social Responsibility](#)
- [CSR and Women](#)
- [Discrimination](#)
- [Disability Management](#)
- [Diversity Management](#)
- [Equality](#)
- [Equality of Opportunity](#)
- [HR and Corporate Social Responsibility](#)
- [Human rights](#)
- [Nondiscrimination](#)
- [Rights of Employees](#)
- [United Nations Human Rights Committee](#)

References

- Amar, V., & Sander, R. H. (2007, September 26). Does affirmative action hurt minorities? *Los Angeles Times*. <https://www.latimes.com/news/la-oe-sander26sep26-story.html>. Accessed 27 April 2022.
- Cornell Law School – Legal Information Institute. (2003, June 23). *Highlights of the 2002–2003 supreme court term*. <http://supct.law.cornell.edu/supct/03highlts.html#2>. Accessed 22 April 2022.
- Crosby, D. F. J., & VanDeVeer, C. (Eds.) (2000). *Sex, race, and merit: Debating affirmative action in education and employment*. The University of Michigan Press, US, online available at: https://books.google.it/books?id=x3YUy5d0ISUC&pg=PA135&lpg=PA135&dq=Heilman,+1996+positive+actions&source=bl&ots=anVuLa0cps&sig=ACfU3U36fspf_gfMTgio7s86Qpj0KZhSQ&hl=it&sa=X&ved=2ahUKewjz0d61laf3AhUVSPEDHcU-BG4Q6AF6BAgQEAM#v=onepage&q&f=false. Accessed 26 April 2022.
- Feinberg, W. (2005). Affirmative action. In H. LaFollette (Ed.), *The Oxford handbook of practical ethics*. <https://doi.org/10.1093/oxfordhb/9780199284238.003.0012>.
- Fullinwider, R. (2018). Affirmative action. In E. N. Edward Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer Ed.). <https://plato.stanford.edu/archives/sum2018/entries/affirmative-action>. Accessed 22 April 2022.
- Harrison, D. A., Kravitz, D. A., Mayer, D. M., Leslie, L. M., & Lev-Arey, D. (2006). Understanding attitudes toward affirmative action programs in employment: Summary and meta-analysis of 35 years of research. *Journal of Applied Psychology*, 91, 1013–1036.
- Heilman, M. E. (1996). Affirmative actions contradictory consequences. *Journal of Social Issues*, 52(4), 105–109.
- Hill, A. J. (2017). State affirmative action bans and STEM degree completions. *Economics of Education Review*, 57, 31–40. <https://doi.org/10.1016/j.econedurev.2017.01.003>.
- Kim, S., & Kim, S. (2014). Exploring the effect of four factors on affirmative action programs for women. *Asian Journal of Women's Studies*, 20(1), 31–70. <https://doi.org/10.1080/12259276.2014.11666172>.
- Kovacs, J. A., Truxillo, D. M., Bauer, T. N., & Bodner, T. (2014). Perceptions of affirmative action based on socioeconomic status: A comparison with traditional affirmative action. *Employee Responsibilities and Rights Journal*, 26, 35–57. <https://doi.org/10.1007/s10672-013-9223-0>.
- Kravitz, D. A., Harrison, D. A., Turner, M. E., Levine, E. L., Chaves, W., Brannick, M. T., et al. (1997). *Affirmative action: A review of psychological and behavioral research*. Bowling Green, OH: Society for Industrial and Organizational Psychology.
- Kurtulus, F. A. (2012). Affirmative action and the occupational advancement of minorities and women during 1973–2003. *Industrial Relations: A Journal of Economy and Society*, 51(2), 213–246.

- Miller, C. (2017). The persistent effect of temporary affirmative action. *American Economic Journal: Applied Economics*, 9(3), 152–190.
- Sowell, T. (2004). *Affirmative action around the world: An empirical study*. New Haven: Yale University Press.
- UCI – OEOD. (n.d.). *A brief history of affirmative action*. Office of Equal Opportunity and Diversity – University of California, Irvine. http://www.oeod.uci.edu/policies/aa_history.php. Accessed 22 April 2022.
- UN. (1989). *United Nations Committee on human rights*. General comment 18 on non-discrimination. <https://www.refworld.org/docid/453883fa8.html>. Accessed 26 April 2022.
- Urofsky, M. I. (2020). *The affirmative action puzzle: A living history from reconstruction to today*. New York: Random House.
- US Department of Labour. (n.d.). *History of executive order 11246*. <https://www.dol.gov/agencies/ofccp/about/executive-order-11246-history#:~:text=On%20March%206%2C%201961%2C%20shortly,without%20regard%20to%20their%20race%2C>. Accessed 22 April 2022.

Affluence

► Sufficiency

African Integrated Maritime Strategy 2050: Challenges for Implementation

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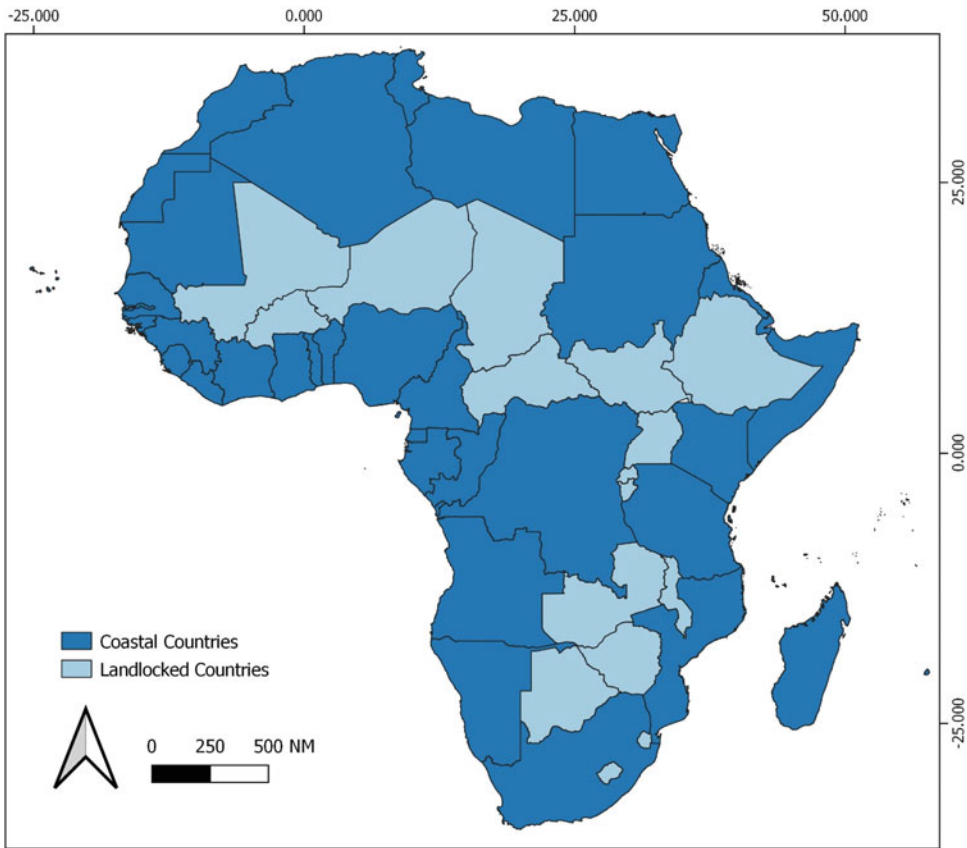
Introductory Background

Globally, the roles played by ocean and seas in the Earth system are still not fully known, so is the information to adequately understand its impact on human activities remains nascent (Ehlers 2016). But from existing knowledge, marine ecosystems worldwide provide essential goods and services for the benefit of nature and mankind (Duarte 2000; Palumbi et al. 2012). However, these ecosystems are threatened by multiple

pressures and interactions, while there is a paucity of facts about the cumulative effects on maritime activities (Holon et al. 2018; Cormier et al. 2019). Hence, the range of interactions between anthropogenic and climatic pressures makes the management of the marine domain a complex task (McQuatters-Gollop 2012). The twenty-first-century ocean and climate change challenges have many faces, and there are different pathways to curtailing these challenges depending on the contexts. Among these pathways are marine management frameworks (e.g. Marine Spatial Planning, Integrated Coastal Zone Management) which utilize ecosystem-based management approach to increase social security, economic prosperity, and environmental protection –even beyond national boundaries and single-state stakeholders.

Cavallo et al. (2016) explain that the trans-boundary nature of the marine environment requires concerted actions among neighbouring countries to improve its quality in an effective way. Several initiatives have been taken worldwide to promote international coordination and integrated approach in marine management (Cavallo et al. 2019). Therefore, an integrated maritime strategy supporting such actions can help resolve issues in a polycentric governance context, especially where incomplete understanding and knowledge prevent potential win-win alternatives to emerge over the lose-lose conflictual current situation.

Africa is a “continental Island,” exhibiting uniqueness as it is flanked by a quadrilateral maritime belt (Rao 2014). With 54 countries, only 15 are landlocked states indicating that maritime economy is of great importance to the littoral states (see Fig. 1). Hence, increased disturbance of the marine ecosystem and safety have cumulative impacts on African coastal communities and their subsistence – a role that cannot be over-emphasized (Francis and Bryceson 2001; UNDP 2013; Engel 2014; IMS-UD/UNEP 2015). Nonetheless, just like in other climes, there is an increasing level of pressure and challenges at the regional and continental levels from both traditional and emerging maritime activities, exacerbated by climate change (Kebe 1990; FAO/UNEP 2016; Okafor-yarwood 2018; UNEP 2018);



African Integrated Maritime Strategy 2050: Challenges for Implementation, Fig. 1 Map of Africa showing coastal and landlocked countries (data source: Flanders Marine Institute 2019)

threatened by maritime security issues (Blank 2013; Hodgkinson 2013); and unstable and fragile political regimes (Rao 2014). While this warrants an integrated regional approach through a framework of action, African States are still unable to individually or collectively ensure a stable maritime order and governance in their maritime domain (Rao 2014). After all, maritime challenges in the region are almost homogenous, and common solution is needed if the continent is to successfully benefit from the potential of its maritime economy (Walker 2017).

Prior to 2014, there was invariably measly and inconsistent political and economic appreciation of the values of the ocean capital, and the management/governance of marine resource was predominantly sectoral. Besides, there was inadequate integration of common policy

framework at national, subregional, and regional levels for the delivery of collective actions to safeguard the regions oceans and seas (Engel 2014; Ukeje 2015; Walker 2015b; IMS-UD/ UNEP 2015). Africa countries recognized the need to move towards an integrated management and governance, adopting the 2050 Africa's Integrated Maritime Strategy (AIMS) in 2014. Upon the adoption of on the AIMS by the African Union Commission (AU) in 2014, a Strategic Plan of Actions was equally adopted – highlighting the major activities necessary to attaining the stated objectives, indicators of outputs, and responsible intuitions with responsibilities for the implementation of identified activities.

In 2019, the 2050 AIMS Plan of Action entered the second cycle (2019–2030) of its implementation, intending to fulfill the medium-term

objectives of “improving maritime workforce and research capacity, accentuating on programmes necessary to promote Research and Human resource development.” But scholars like Walker (2017) and Egede (2018) have argued that the implementation of the Plan of Action is principally failing due to lack of resources and expertise by the African Union (AU). However, at this stage of its supposed implementation, it is especially important to have a full picture of what the major impediments are, how to forestall them, and the necessary next steps for a successful implementation.

Just as the dynamics of strategy implementation in the marine sector is still in its infancy, this present chapter gives a general literature review on strategy implementation in other practice and knowledge field. With this understanding, salient issues emerging from the implementation of strategies in the marine domain are highlighted. Using the 2050 AIMS as a practical case study, impediments to its implementation as indicated by experts and scholars in the region were elucidated. Afterwards, the author amplified those factors which are more important to the 2050 AIMS’s implementation from his viewpoint. Finally, the chapter concludes by proposing recommendations to overcome these impediments for the current and future implementation phases of the 2050 AIMS. These recommendations can also be considered in the implementation of other Africa-wide instruments with similar reach and mandate.

The 2050 African’s Integrated Maritime Strategy (AIMS)

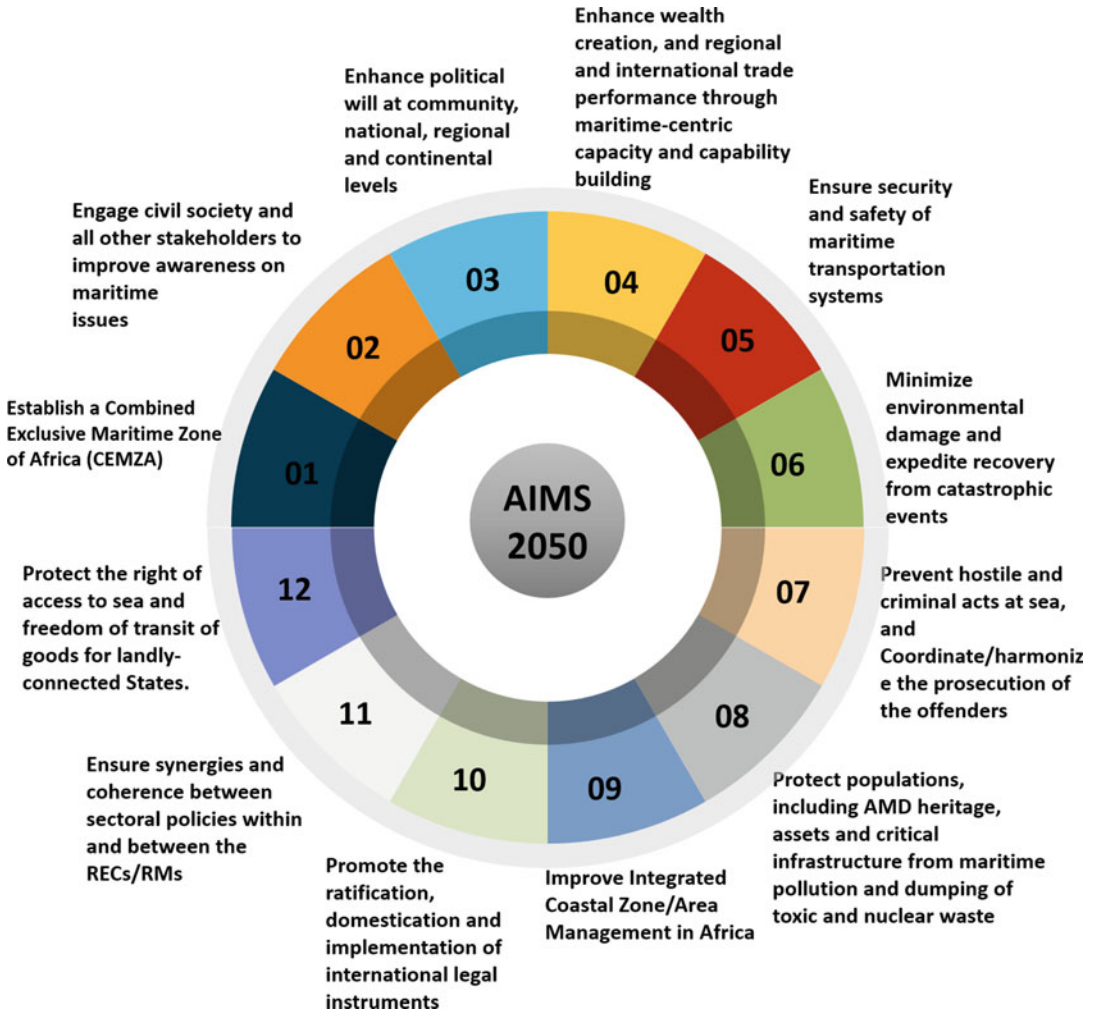
The African Union (AU) (OAU formally became the AU in 2002), formerly the Organisation of Africa Unity (OAU), was established in 1963, with the Secretariat headquartered in Addis Ababa. The AU, acceding to the OAU Charter of 1963 (OAU 1963), and pursuing the objectives enshrined in the 2000 Constitutive Act (AU 2000), purposes to promote and coordinate efforts of its Member States toward an Africa that is *united and integrated; imbued with the ideals of justice and peace; inter-dependent and robust; underpinned by political, economic, social, and cultural integration; committed to sustainable*

development; and devoted to ensuring the progress and prosperity of its citizens. Among the important tools used to express and galvanize these collective commitments is the development of policy documents that articulate the commitments, roles, and responsibilities of the Member States and the Secretariat toward goals and issues.

Out of a body of Africa-wide marine-related documents, the 2050 AIMS is the overarching framework which all member states are expected to follow (IMS-UD/UNEP 2015; Walker 2015a), to ensure complementarity among objectives and avoid overlaps in the path to sustainable wealth creation and maritime safety. Adopted in 2014, this ambitious strategy serves as the overarching framework for Africa to confront several of its maritime challenges, beyond a counter-piracy agenda. It intends to accelerate wealth creation and maritime safety sustainably by achieving four aims and 12 strategic objectives (Fig. 2).

Also adopted alongside the 2050 AIMS in 2014 was its Plan of Action to operationalize the strategy over the 2013-2050 period. Both the 2050 AIMS and the Plan of Action were innovative in several ways. First, they called for intersectoral action based on seven strategic areas that have a crosscutting impact on a range of priority maritime issues the continent is confronted with. For each strategic area captured in the Plan of Action, there were clear objectives, indicators, and recommended actions on the interagency, regional, and subregional. In addition to the 11 strategic programs, the Plan of Action proposed 21 objective goals, with 61 action target and 65 measures of outputs to help quantify and monitor the 2050 AIMS’s impact on the regional and country levels.

It is to be noted that the possibility of establishing new institutions and structures has been forecasted in the Action Plan, including extended focus on human capacity development for maritime governance (AU 2012). However, issues bothering on the financial requirements and implication to actualize the intention enshrined in the action plan were not documented either as at when the AIMS was adopted or till date.



African Integrated Maritime Strategy 2050: Challenges for Implementation, Fig. 2 Twelve objectives of the 2050 AIMS (Source: AU, 2012)

Implementing Strategies Vis-à-Vis Marine Strategies

The definitions to what a strategy really is has always been given selective attention (Hax and Majluf 1988), and based on diversity of perspectives (Noble 1999). But to put it simple and straight, strategy is about success (Foundation of Strategy, n.d.). It recognizes the existing state of affairs, provides a vision for what the future should look like, and devises a plan of action for how to get from the present to the future (ACSS 2016). However, the bane of strategy is implementation, the de facto success rate of intended

strategies (Raps 2005). Therefore, an assessment of strategy implementation processes becomes crucial for practitioners and researchers alike in order to conduct and evaluate different implementation processes (Thompson et al. 2007). But at least, there are pieces of literatures in the strategy formulation and implementation field that have explored these dynamics. The 1980s show a rise in the study of strategy implementation. Waterman et al. (1980) proposed one of the earliest known work in this regard, putting forward the McKinsey's 7-S framework which identified seven implementation factors consisting of strategy, structure, system, style, staff, skills, and

subordinate goal. Jiang and Carpenter (2013) referenced several other studies such as Stonich, (1982), Hrebiniak and Joyce (1984), Galbraith and Kazanjian (1986), and Reed and Buckley (1988) who have also presented similar implementation factors adding to Waterman's voice. However, these earlier works were deemed not enough on the ground that they merely referred to individual factors, and neither did they provide explanation about their interrelationship nor empirically tested (Kazmi 2008).

Though Okumus (2001) reported that studies in the strategic management field had revealed the lack of knowledge on strategy implementation, more research is essential. This perhaps is also due to the lack of a cohesive body of existing implementation research (Noble 1999). After a critical review of previous frameworks, Okumus (2001) came up with ten key variables for strategy implementation: strategy formulation, environmental uncertainty, organizational structure, culture, operational planning, communication, resource allocation, people, control, and outcome. However, contrary to Kazmi (2008) critique of earlier works failing to explain the interrelationship between the factors, Oskooee (2017) explains that these factors are so close and often overlap to the extent that prioritizing them becomes difficult.

To deal with this unprecedented level of change in today's competitive, dynamic, and unpredictable world, 15 years after Okumus (2001) revealed the dearth of studies on strategy implementation, Katamei, Omwono, and Wanza (2015) disclosed that a lot of thoughts have been focused on strategy implementation. The complexity and dynamism are evenly largely observed also in today's marine space. But one would wonder why there has not been significant study shedding light in the maritime field, despite indication by experts and scholars to the difficulties in the implementation of maritime strategies (McQuatters-Gollop 2012; Walker 2015b; Cavallo et al. 2016, 2019). Most research in this area either concentrates on commercial organizations or programs of global funders and development partners with little or no attention paid to the challenges encountered in the process of implementing maritime strategies. Whereas,

effective implementation of strategy is a key factor to achieve strategic success (Oskooee 2017). This, in turn, reveals that focus also needs to be centered on the issue of strategy implementation in the marine domain.

In the marine/maritime field, few studies have drawn attention to the difficulty in implementing strategies directed at achieving sustainability either sectorally (Garcia and Prouzet 2009; McQuatters-Gollop 2012; Fulton et al. 2014) or holistically (Walker 2015b; Egede 2018; Cavallo et al. 2016, 2019). This challenge comes from the entire spectrum of the strategy itself, from its formulation to its review process. McQuatters-Gollop (2012) researched on the challenges for implementing the European Marine Strategy Framework Directive (MSFD) in a climate of macroecological change. Recently, Cavallo et al. (2019) reviewed the impediments to the implementation of MSDF with particular focus on challenges related to transboundary cooperation and policy integration. After identifying the salient present and future challenges (Table 1), based on Newton and Elliott (2016), they were categorized as either "bottlenecks" (the easily solved), "show-stoppers" (would require more effort to solved), and "train-wrecks" (most difficult to stop and discovered). After assessing the implementation of the 2050 AIMS, Walker (2015) concluded that its implementation is the most difficult part, as key activities in the plan of action have not yet been undertaken.

Challenges of Implementing the 2050 AIMS: Experts' Perspective

The Blue Economy has been made cardinal to the vision of AIMS (Walker 2015b; Egede, 2019; Hussain 2019). More so, its importance is vivid in many high-level policy documents such as the Lome Charter, Agenda 2063, etc. The AU's 387th Peace and Security Council final communiqué in 2013 expressly identified the Blue Economy as the "new frontline of Africa's renaissance." However, scholars and reports have faulted the AIMS, arguing that the strategic importance the AU accorded to the Blue Economy would be (has been) problematic to its implementation under its current operations. Walker (2017) identified three deficits to this effect:

African Integrated Maritime Strategy 2050: Challenges for Implementation, Table 1 Examples of “bottlenecks,” “showstoppers,” and “train-wrecks” in marine management (Cavallo et al. 2019)

Bottlenecks	Showstoppers	Train-wrecks
• Insufficient monitoring budget • Lack of (shared) targets [2.3, 2.4] • Decision on indicator aggregating methods • Multiple stakeholder fora [2.6] • Lack of data (ecological, social, and economic) [2.1, 2.4, 2.6, 2.7] • Excessive and redundant advice documents [2.1] • Lack of harmonized and generic indicators [2.2, 2.4, 2.7]	• Complex regulation [2.4, 2.5] • Complex reporting [2.1, 2.4] • Lack of experts with multidisciplinary background • Overlapping designation • Sectoral management (e.g., separate management for fisheries, energy, nature conservation) [2.5, 2.6] • Poor coordination among national agencies • Different economic prerogative (i.e. blue growth with precedence over GES) [2.2, 2.6] • Lack of use of technologies • Short timescale	• Resistance to collaborate • Lack of dedicated funding • Legal challenges • Political will • Unwillingness to adopt joint aims/vision • Inflexible planning system • Sociocultural conflict

The numbers in brackets in column 1 and 2 refer to the sections in the main text where challenges related to transboundary cooperation and policy integration are discussed. Illustrations of train-wrecks are evaluated in the Discussion section.

1. The need to define the term “Blue Economy,” emphasizing that a major challenge to maritime stakeholders is that the AIMS did not do justice to what the term means both legally and in practice. This argument is apt as ideally, maritime policies for Africa should be developed as a process around a defined Blue Economy and maritime security (Swanepoel 2017).
 2. The inability to establish a dedicated standalone maritime entity within the AU, with the mandate to coordinate and steer action toward accomplishing the 2050 AIMS’s objectives. Even though this need has been recommended by a 2009 resolution of the Third Sea Power for Africa symposium in Cape Town (Wingrin 2009), established within 2050 AIMS itself, and supported by African maritime ministers in the Addis Ababa Declaration of 2012 which endorsed 2050 AIMS.
 3. The inefficiency of the 2050 AIMS Strategic Task Force (STF). The STF has incessantly failed to convene consistent meetings critical to the implementation of the 2050 AIMS as mandated by the 2014 Malabo Declaration (AU. 2014).
- challenging — emphasizing that achieving *coherence* with the different wide-ranging maritime issues it tends to address is difficult. This coherence, he said, would only be achieved if these three core issues are put in the front burner:
- (a) *Effective coordination*. Just like Walker (2017), he advocated for a prominent department in the AU with clear mandate, like the UN Department of Ocean Affairs (DOALOS) that would coordinate the 2050 AIM Strategy and the various aspects of the African Blue Economy.
 - (b) *Information flow*. To keep the implementation of the 2050 AIM on the front agenda of the AU assembly, a reporting mechanism (like the United Nations Secretary-General’s annual oceans report to the General Assembly) should be dedicated to communicating annual reports on the progress made in the implementation of the strategy and the Lomé Charter, presented to the Assembly by the AUC Chairperson, and posted on the AU website.
 - (c) *Nexus approach*. With the 2050 AIMS acknowledging the inter-connectivity of maritime issues, paying cognizance to the interaction and interdependence (the nexus) of the different issues, and communicating them accordingly would aid its implementation.
- Egede (2018) believes that the 2050 AIMS is seemingly complex, and its implementation would be

Challenges of Implementing the 2050 AIMS: Author's Perspective

Blue Economy Is a Contested Concept (Never Done Before)

The 2050 AIMS anchors itself on the precepts of the Blue Economy. However, arguments have ensued about what the “Oceans Economy,” “Blue Economy,” or “Blue Growth” concept really means at global, regional, and national levels. Specialists and researchers have presented several definitions. The Economist Intelligence Unit believes that “A sustainable ocean economy emerges when economic activity is in balance with the long term capacity of ocean ecosystems to support this activity and remain resilient and healthy” (Goddard 2015). The World Bank in a report on “The Potential of the Blue Economy: Increasing Long-Term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries,” implied Blue Economy as: “the range of economic sectors and related policies that together determine whether the use of oceanic resources is sustainable.” These definitions and others remain contested, and the need for a clear meaning remains active, even as it is related to its usage in the 2050 AIMS (Walker 2015b; Egede 2018). Though as variant as the available definitions of the concept might be, the truth is that there is no unique definition of the concept, as it is only caught up in language schematics based on context and the interpreter.

Fred W. Riggs in his 1979 article “The importance of concepts: some considerations on how they might be designated less ambiguously” pointed to the fact that the use of different technical words, terms, and nomenclatures in social science also have a wide variety of connotations in everyday usage. He referred “concept” as a way of distinguishing between the various meanings of word (Riggs 1979). Bassey (2000) quoting Eugen Wüster (1974) also lends a voice stating that, the starting point of all terminology work is the concept and indicates why terminologists speak about concepts while linguists speak about meaning. Anyway, in relevance to this study, what is certain is the inevitable effect of the meaning on the Blue

Economy concept on the strategy implementation, because it affects the ways of perceiving solutions to maritime issues and even thinking about them. Unfortunately, even just for the sake of it, the 2050 AIMS has not provided an “African” version of what Blue Economy “should” mean. Swanepoel (2017) believes that immediately this concept is better understood, and legally defined, African countries can continue their work to incorporate Blue Economy into national maritime policies.

Another connected factor here impeding the implementation of the 2050 AIMS is the *shock of something new and fresh*. Due to the complexity of what the 2050 AIMS professes, some AU Member States are still resistant to change, and still prefers the status quo of sectoral management approach. Resistance to change according to Hrebiniak (2013) and David (2011) is often the single greatest obstacle to effective implementation of strategy. Most African countries even though bounded by the sea, and fully aware of the myriads of ocean challenges confronting them, still perceive that it would be foolhardy to go into the integrated ocean governance scheme as preached by the 2050 AIMS. However, the 2050 AIMS has not provided a kind of contingency plan or alternative scenario that could accelerate buy-in at national level.

Structures to Achieve Coordination and Coherence at National, Regional, and AU Levels Not Adequate

Just as coordination at international level is essential for the implementation of environmental policies aimed at reducing the consequences of constant interaction between nature and uses such as shipping and fishing (Cavallo et al. 2016), the success of Africa's maritime future lies in coordinated, integrated actions and policies for combined and joint projects (Walker 2019). The growing importance of maritime activities such as fisheries, shipping, resource extraction, tourism, and offshore renewable energy across Africa's seas requires strong political coordination among countries that share the same marine area to ensure more sustainable management of the marine environment. This is also relevant as

the ecosystem approach expressly professed by the 2050 AIMS requires cross-cutting implementation (no silos). However, the structure to do so is technically absent, or grossly inadequate (IMS-UD/UNEP 2015), even though the 2050 AIMS presented the development of new institutions and structures as part of its objectives. For example, the proposed Special Task Force (S2TF) saddled with the responsibility to oversee the realization of the proposed Combined Exclusive Maritime Zone of Africa (CEMZA) is yet to be put in place. Even the (New Partnership for Africa's Development) NEPAD Planning and Coordinating Agency (NPCA) whose mandate within the AU is to coordinate the implementation of AU's programs of action have not attempted forging coherence and coordination of the targets embodied by the 2050 AIMS. Whereas, having structure proportional to strategy is a critical factor in the strategy implementation (Oskooee 2017). Also, the definition of how to create coordination is not visible within the 2050 AIMS and its Plan of Action – as it does not adequately define whether existing or proposed implementing organizations should be dependent or run more independently; if coordination should be done in a coalition or not; and even if the organizations responsibilities should requires a high level of coordination or not.

Absence of Adequate Institutional Power and Information Sharing Capacity

Power had been identified as a key factor for the successful implementation of the strategy (Hrebiniak 2013). Even though power can have negative performance in strategy implementation, it mostly facilitates the development and implementation of strategy (Oskooee 2017). The weight of the 2050 AIMS exceeds the organizational value and power structure of the 2050 AIM Strategy Task Force (STF) set up in June 2011, which marks why it has been said to record more failures than points. Given the glaring failure of the STF, it is time for the AU to adjust its structure to suit the needs of the 2050 AIMS by urgently putting in place a better empowered organizational unit, where there would be a proper balance between centralization and decentralization of decision-making in favor of the correct

implementation of the 2050 AIMS. Hence, corroborating earlier arguments put forward by Walker (2017) and Egede (2018) expressing that the responsibility to coordinate and implement the 2050 AIMS should go beyond the STF. However, contrary to Walker and Egede's idea of a standalone department within the AU, and seeing the inefficiency of the NPCA as an agency of the AU, a counterpart technical commission (African Blue Economy Commission) just like the African Energy Commission or body such as the African Union-Inter Africa Bureau for Animal Resources (AU-IBAR) be created, as commissions are more independent and with statutory legal power and competency. This would also help in delegating responsibilities more efficiently (whether on board, Working Groups, Advisory Groups, etc.) and activate the process of coordination.

Checking through different repositories, hardly could one find documents relating to the progress of implementing the 2050 AIMS. This to a large extent stems from the inadequate capacity of the STF. A recognized impediment to implementation of the strategy and (organizational learning) is poor communication (Beer and Eisenstat 2000). By establishing a dedicated organization saddled with the responsibilities to coordinate and implement the 2050 AIMS, the efficiency of designing a functional plan or strategy (e.g., as suggested by Egede, 2018) for determining how information sharing and knowledge transfer will be attained surfaces.

Potential Implementation Burden Rising from Disproportionate Operational Planning

Robbins and Coulte in their 2012 classics *Management* alluded that operational planning is to choose the means to achieve *short-term goals* (Robbins and Coulter 2002). The 2050 AIMS Plan of Action have 11 strategic programs, 21 objectives goals, and 61 target actions which would not be said to be too cumbersome or superfluous of such. However, apart from the fact that preconditions (such as proper coordination and presence of capable implementing organizations, timely availability of funds, effective monitoring) to implement the 2050 AIMS are simply not available or inadequate, the

operational programs presented to achieve the 2050 AIMS are mostly short term, while the 2050 AIMS has a long-term horizon. And to implement a strategy, the designing of appropriate programs is necessary (Hrebiniak 2013). Perhaps Abah (2017) is right by saying that “Africa’s problem is planning, not implementation!”. His statement validates Oskooee’s (2017) assertion that even if strategies are formulated properly, it does not guarantee successful implementation; hence, a successful implementation of the strategy should be planned. As the marine ecosystems are interconnected both vertically and horizontally beyond legal boundary, so are the various maritime activities, uses – requiring regional and global responses. The interconnectedness of maritime issues and its relationship with the 2050 AIMS has been elucidated by Egede (2018). Hence, programs with a long-term vision taking into consideration the interwoven relationship between different maritime sectors and uses should have been proposed. This deficiency in the 2050 AIMS regarding operation plan also springs up the issue of funding. Operation plan ensures successful implementation of action and monitoring, and at the same time necessitates the preparation of project funds and identification of clear sources of funds (WWF 2007). However, neither the 2050 AIMS nor its Plan of Action contains any information on funding to implement stated objectives. This would once again reinforce the ongoing argument that funding is one of the reasons why projects fail in Africa (Ika and Saint-Macary 2014; Marabuka 2013).

Lack of Knowledge and Data

The 2050 AIMS has listed Marine Spatial Planning (MSP) as one of the instruments to ensure coordinated and coherence ocean governance in Africa. However, MSP approach among others, leverages on evidence-based, verifiable data and stakeholders participation for its short- and long-term operation and process (Blæsberg et al. 2009; IOC-UNESCO 2009; Gunton et al. 2010; Gimpel et al. 2015; Siddiki and Goel 2015). Interestingly, the 2050 AIMS acknowledge that a robust and precise data is needed for any analysis aimed at

informing policy makers, and also admit that such data were limited or nonexistent. Throughout the document, need for, and the intention to fast track data collection, storage, and sharing was resounding. It proposed:

1. Including pooling of knowledge into an African marine data center
2. Creating a maritime database generation and maritime information exchange network
3. Data gathering and statistical information, nodal point for cross-sector maritime

Till date, unfortunately, the reality remains that there are no such data or facilities available, and this seem not to be a new experience in the region. The lack of data has been generally blamed for Africa’s inability to adequately cater for its conservation needs (Kudom-Agyemang 2019). The complexity of ensuring the implementation of 2050 AIMS with its myriads of actors and drivers make the need for data increasingly desirable. The failure to address this would create a vicious cycle of challenges inhibiting the implementation of the strategy and the realization of evidence-based, empirically backed marine policy options in Africa. For example, assessing the implementation of the 2050 AIMS at regional, subregional, and country level will be challenged due to lack of data and information sharing channels. Of course, this would be aggravated by low institutional capacities across, and glassy communication between sectors, institutions, and stakeholders. These vicious cycles thus will affect existing (if any) mechanisms put in place to ensure stakeholders participation in the implementation process.

Recommendation and Conclusion

Conclusion

Several key conclusions can be drawn from the study which has implications for the implementation of the 2050 AIMS and other documents of its kind both in Africa and in other climes. First, issues related to strategy implementation cuts across different research and practice domain,

where even the business and corporate sectors are still grappling with implementation challenges. The literature review aspect of this study also reveals that a significant amount of literature about strategy implementation is out there and that a close analysis of their findings indicates that the variables identified to be impediments to implementing strategies in the business, management, and corporate world are similar and inter-related to the factors the author deduces as impediments to implementing the 2050 AIMS. Hence, those in charge of evaluating and reviewing the implementation of marine strategies would benefit from the range of resources already available that can be compared. The literature review also espoused that there are few papers and experts' opinions on maritime strategy implementation, and their conclusion about the challenges is similar and overlapping.

Based on authors' experience and perception of the 2050 AIMS, those factors limiting the implementation of the 2050 AIMS are products of the process, tactical and operational deficiency of the strategy. They include issues with the novelty of the concept which the strategy is predicated, inadequate mechanism for cooperation, and misnaming critical programs and targets of the Plan of Action at regional and national level. Issues related to low political buy-in, and competent institutions to coordinate and champion the implementation of the strategy were also identified. Tactically, the operation planning of programs and lack of budgeting provisions, plus the complete absence of data on progress of implementation, also inhibits the implementation of the strategy.

Therefore, it can be claimed that the process of formulating the 2050 AIMS and its Plan of Action, right from the design to implementation phase have largely contributed to the low success in implementing the strategy. It should also be noted that internal context plays a key role in achieving the goals and objectives of maritime strategies, and focusing on the implementation process alone and ignoring the wider context does not provide a clear and holistic picture of the implementation process and its challenges.

Recommendations

Blue Economy is contested concept (never done before)

The 2050 AIMS and its Plan of Action are due for review considering the loopholes in its logic and conception, and this should be carried out periodically afterward. Perhaps, the time is now for the "definitional" burden of the Blue Economy be addressed in a reviewed version of the 2050 AIMS. However, we cannot shy away from the fact that concept, no matter how well defined they might be, would still be subjected to contests. From the legal parlance of "essentially contested concepts," Gallie (1955) already gave us an inkling that a particular use of any concept [...] is liable to be contested for reasons they usually carry with them an assumption [...]. Along this reasoning of an essentially contested concept, we can then borrow a leaf from the grand solution proposed by Waldron (2002) and supported by Collier, Hidalgo, and Maciuceanu (2006) emplacing that, "the rule of law is the solution to a problem we are not sure how to solve." Therefore, either at national, subregional, or regional level, a legislation which clearly defines the Blue Economy concept should be passed into law. This also implies the need to make the 2050 AIMS legally binding, where states can transpose it into their national legal structure.

Structures to achieve coordination and coherence at national, regional, and AU levels not adequate

Successful implementation of the 2050 AIMS would require strengthening institutions and intensifying efforts toward getting buy-in from governments at national levels. As most countries in Africa already have a national vision and the policy basis for sustainable development, some of them are already thinking of how to incorporate Blue Economy thinking into their national policy (e.g., Nigeria, Kenya, Benin), while some especially the Small Island States are way beyond others. To achieve more coherence and coordination, a cross-cutting logic needs to be reflected in the 2050 AIMS Plan of Action. Few things must be put in place, including:

- (a) The 2050 AIMS must be legally binding, compelling states to transpose it into their national law just like the EU Marine Strategy Framework Directive.
- (b) Since the AU is currently the main coordination organ for facilitating the implementation the 2050 AIMS Plan of Action, the principle of subsidiarity should be followed in order to galvanize a lot of political will and commitment to effect change at national level. (The principle of subsidiarity indicates that any policy is better achieved at the most immediate level closer to issues (in this case the states).)
- (c) As the Plan of Action has not provided any indication of how coherence and mainstreaming of the 2050 AIMS would be mapped at the regional/national level, a detailed legal guidance on the mainstreaming of the 2050 AIMS should be developed.

Absence of adequate institutional power and information sharing capacity

Bridging strategy implementation skills gap is critical, as successful strategy implementation depends on people taking the right actions (Speculand 2014). Also, improving the capacity to look ahead is critical as the process of progressive implementation will require capacity to anticipate the potential consequences (Garcia and Prouzet 2009). Therefore, by establishing a dedicated Commission in charge of coordinating and implementing the 2050 AIMS, the power of institutional influence and credibility will facilitate capacity development, as a well-structured institution uniquely positioned to drive change.

Additionally, it is understandable that the process of establishing a standalone institution as recommended in section “[Absence of Adequate Institutional Power and Information Sharing Capacity](#)” might take some time. A tentative arrangement could be made whereby the AU will constitute a thematic cross-sectoral regional Blue Economy Committee that will work in tandem with the STF, and chaired by regional coordinator (for example, selected among the Ministers of Environment, Transportation, Ocean Economy, etc. in each region) who will work

to champion and increase support for the 2050 AIMS at the national level.

Potential implementation burden rising from disproportionate operational planning

Moving past the implementation burden created by faulty operational planning of project will require a review of the 2050 AIMS Plan of Action. A project is successful when it has met needs of stakeholders. Therefore, during this review process, it is important to allow the needs of stakeholders to guide the identification and design of programs and cooperate to determine the indicators that would be used to evaluate their implementation.

To every action, there must be a reaction. This saying also applies to marine policy implementation, as the policy process creates a demand for action, which in turn requires financing (IMS-UD/ UNEP 2015). Therefore, at this stage, a general assessment of financial requirement of implementing the 2050 AIMS at least over the medium-term implementation period should be carried out. For the expected lifetime of the 2050 AIMS, high-level (not too detailed) financial estimates must be prepared showing current and potential sources of funds, the estimated cost of actions and programs presented to implement the strategy at different stages, the monitoring activities, as well as any other resources gap. IMS-UD/ UNEP (2015) has succinctly provided a number of recommendations that the handlers on the 2050 AIMS must consider to scale the funding hurdles, which includes adopting innovative approaches such as the Blue Bond and Payment for Ecosystem Services (PES), establish continental-wide special fund for ocean governance, etc.

Lack of knowledge and data

Though at the initial stage of strategy implementation, data seem to be very scarce. However, the 2050 AIMS is not in its second implementation cycle, therefore, a semblance of data to champion should be available. Developing a data strategy can help to overcome the challenges and bring efficiency to the implementation process (Attaran and Attaran 2018). The solution here is to have a 2050 AIMS data strategy that articulates how both input and output data will enable and inspire the strategy. This will include an indication

of how data will be collected, managed, shared, and used. Relevant input and output data from similar Africa-wide strategy (e.g., the African Development Bank Strategy for agricultural Transformation in Africa 2016–2025, the AU Continental Agribusiness Strategy Driving Africa's Growth, and the African Union Strategy on Climate Change) should be retrieved and documented to improve buy-ins for the 2050 AIMS and to enhance coherence in its implementation. For example, in the implementation of the European Marine Strategy Framework Directive (MSFD), the use of existing data, methodologies, and targets from related environmental policies corresponds to the higher levels of coherence among countries, while a limited use of such policies produces less coherence (Cavallo et al. 2016).

References

- Abah, J. (2017). Africa's problem is planning, not implementation! Retrieved from Africa Research Institute website: <https://www.africaresearchinstitute.org/newsite/blog/africas-problem-planning-not-implementation/>
- ACSS. (2016). *The process of National Maritime Security Strategy Development in Africa*. Washington, DC: Africa Center for Strategic Studies.
- Attaran, M., & Attaran, S. (2018). Opportunities and challenges of implementing predictive analytics for competitive advantage. *International Journal of Business Intelligence Research*, 9. <https://doi.org/10.4018/978-1-5225-5718-0.ch004>.
- AU. (2000). Constitutive act of the African Union. *Human Rights in Africa*, 280–293. <https://doi.org/10.1017/cbo9780511494031.011>.
- AU. (2012). *2050 Africa's Integrated Maritime Strategy*. Retrieved from http://cggrrps.org/wp-content/uploads/2050-AIM-Strategy_EN.pdf
- AU. (2014). *Africa Union Executive Council Twenty-Fifth Ordinary Session*. Retrieved from https://au.int/sites/default/files/decisions/9662-ex_cl_dec_813_-_850_xxy_e-1.pdf
- Bassey, E. A. (2000). Terminology and language planning – An alternative framework of practice and discourse. *Book Review*, 285–288. Retrieved from <https://link-springer-com.libgate.library.nuigalway.ie/content/pdf/10.1023%2FA%3A1027307902213.pdf>.
- Beer, M., & Eisenstat, R. A. (2000). The silent killers of strategy implementation and learning. Sloan Management Review Summer. Retrieved from <http://sloanreview.mit.edu/article/the-silent-killers-of-strategy-implementation-and-learning>.
- Blæsbjerg, M., Pawlak, J., Sørensen, T. K., & Vestergaard, O. (2009). *Marine spatial planning in the Nordic region – Principles, perspectives and opportunities*. Nordic Forum on MPAs in Marine Spatial Planning Mette. Copenhagen: Nordic Council of Ministers.
- Blank, L. R. (2013). Rules of engagement and legal frameworks for multinational counter-piracy operations. *Case Western Reserve Journal of International Law*, 2–6. Retrieved from <https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=1044&context=jil>
- Cavallo, M., Borja, A., Elliott, M., Quintino, V., & Touza, J. (2019). Impediments to achieving integrated marine management across borders: The case of the EU marine strategy framework directive. *Marine Policy*, 103 (August 2018), 68–73. <https://doi.org/10.1016/j.marpol.2019.02.033>.
- Cavallo, M., Elliott, M., Touza, J., & Quintino, V. (2016). The ability of regional coordination and policy integration to produce coherent marine management: Implementing the marine strategy framework directive in the north-East Atlantic. *Marine Policy*, 68, 108–116. <https://doi.org/10.1016/j.marpol.2016.02.013>.
- Collier, D., Hidalgo, F. D., & Maciuceanu, A. O. (2006). Essentially contested concepts: Debates and applications. *Journal of Political Ideologies*, 11(3), 211–246. <https://doi.org/10.1080/13569310600923782>.
- Cormier, R., Elliott, M., & Rice, J. (2019). Putting on a bow-tie to sort out who does what and why in the complex arena of marine policy and management. *Science of the Total Environment*, 648, 293–305.
- David, F. R. (2011). *Strategic management: Concepts and cases*. New Jersey: Pearson Education.
- Duarte, C. M. (2000). Marine biodiversity and ecosystem services: An elusive link. *Journal of Experimental Marine Biology and Ecology*, 250(2000), 117–131.
- Egede, E. E. (2018). Maritime security: Implementing the AU's AIM strategy. Retrieved September 1, 2019, from maritime law website.: <https://www.africaportal.org/features/maritime-security-implementing-aus-aim-strategy/>
- Ehlers, P. (2016). Blue growth and ocean governance – How to balance the use and the protection of the seas. *WMU Journal of Maritime Affairs*, 15(2), 187–203. <https://doi.org/10.1007/s13437-016-0104-x>.
- Engel, U. (2014). *The African union, the African peace and security architecture, and maritime security*. Addis Ababa: Friedrich-Ebert-Stiftung.
- FAO/UNEP. (2016). Transboundary diagnostic analysis: Canary current large marine ecosystem (CCLME). *Canary Current Large Marine Ecosystem (CCLME) Project*. <https://doi.org/10.1017/CBO9781107415324.004>.
- Flanders Marine Institute. (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM). *Version 11*. <https://doi.org/10.14284/386>
- Foundation of Strategy. (n.d.). The concept of strategy. In *Foundations of Strategy*. Retrieved from <http://www.foundationsofstrategy.com/files/4914/2901/0015/c01.pdf>
- Francis, J., & Bryceon, I. (2001). Tanzanian coastal and marine resources: some examples illustrating questions

- of sustainable use. *Chapter*, 76–102. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Tanzanian+coastal+and+marine+resources:+some+examples+illustrating+questions+of+sustainable+use#0>
- Fulton, E. A., Smith, A. D. M., Smith, D. C., & Johnson, P. (2014). An integrated approach is needed for ecosystem based fisheries management: Insights from ecosystem-level management strategy evaluation. *PLoS One*, 9(1). <https://doi.org/10.1371/journal.pone.0084242>.
- Gallie, W. B. (1955). Essentially contested concepts. *Proceedings of the Aristotelian Society*, 56, 167–198. Retrieved from <http://www.jstor.org/stable/4544562>.
- Garcia, S. M., & Prouzet, P. (2009). Towards the implementation of an integrated approach to fisheries resources management in Ifremer, France. *Aquatic Living Resources*, 22(4), 381–394. <https://doi.org/10.1051/alr/2009057>.
- Gimpel, A., Stelzenmüller, V., Voss, R., Floeter, J., Buck, B. H., & Temming, A. (2015). Ecosystem service trade-off assessment to support marine spatial planning. *ICES Journal of Marine Science*, 0(11).
- Goddard, C. (2015). *The Blue Economy: Growth, opportunity and a sustainable ocean economy*. Retrieved from <http://www.greengrowthknowledge.org/resource/blue-economy-y-growth-opportunity-and-sustainable-ocean-economy>
- Gunton, T., Gunton, T., Rutherford, M., & Dickinson, M. (2010). Stakeholder analysis in marine planning stakeholder analysis in marine planning. *Environmental Journal*, 37(3).
- Hax, A. C., & Majluf, N. S. (1988). The concept of strategy and the strategy formation process given selective who have de the different authors. *Interfaces*, 18(3), 99–109.
- Hodgkinson, S. (2013). Current trends in global piracy. *Case Western Reserve Journal of International Law*, 46, 145–161. <https://doi.org/10.1146/annurev.ento.49.061802.123314>.
- Holon, F., Marre, G., Parravicini, V., Mouquet, N., Bockel, T., Descamp, P., et al. (2018). A predictive model based on multiple coastal anthropogenic pressures explains the degradation status of a marine ecosystem: Implications for management and conservation. *Biological Conservation*, 222, 125–135.
- Hrebiniak, L. (2013). Making strategy work: Leading effective execution and change. In *Organizational dynamics*. New Jersey: Pearson Education.
- Hussain, T. (2019). Sustainability in Africa's maritime industry. Retrieved august 19, 2019, from Africa focus website.: <https://www.whitecase.com/publications/insight/sustainability-africas-maritime-industry>
- Ika, L., & Saint-Macary, J. (2014). Special issue: Why do projects fail in Africa? *Journal of African Business*, 15(3), 151–155. <https://doi.org/10.1080/15228916.2014.956635>.
- IMS-UD/UNEP. (2015). *Development of Ocean Governance Strategy for Africa: Summary of Scoping Study and Gap Analysis*. <https://doi.org/10.1192/bjp.111.479.1009-a>
- IOC-UNESCO. (2009). *Marine spatial planning - A step-by-step approach towards ecosystem-based management*. Paris: UNESCO-IOC.
- Jiang, N., & Carpenter, V. (2013). A case study of issues of strategy implementation in internationalization of higher education. *International Journal of Educational Management*, 27(1), 4–18. <https://doi.org/10.1108/09513541311289792>.
- Katamei, J. M., Omwono, G. A., & Wanza, S. L. (2015). Challenges of strategy implementation on performance of constituency development fund projects in Kenya: A case of Marakwet west constituency. *International Journal of Business Administration*, 6(3), 48–62. <https://doi.org/10.5430/ijba.v6n3p48>.
- Kazmi, A. (2008). A proposed framework for strategy implementation in the Indian context. *Management Decision*, 46(10), 64–81.
- Kebe, M. (1990). Waste disposal in Africa. *Marine Policy*, 251–253. <https://doi.org/10.1016/0308-597X/90/030251-03>.
- Kudom-Agyemang, A. (2019, June). Lack of data blamed for Africa's loss on investments in conservation businesses. *BFT Online*. Retrieved from <https://thebftonline.com/2019/world/africa/lack-of-data-blamed-for-africas-loss-on-investments-in-conservation-busineses/>
- Marabuka, E. R. (2013). *Asses the causes of project failures in Zimbabwe's rural areas use example when possibl*. Lupane State University.
- McQuatters-Gollop, A. (2012). Challenges for implementing the marine strategy framework directive in a climate of macroecological change. *Philosophical Transactions of the Royal Society A*, 370(1980), 5636–5655. <https://doi.org/10.1098/rsta.2012.0401>.
- Newton, A., & Elliott, M. (2016). A typology of stakeholders and guidelines for engagement in transdisciplinary, participatory processes. *Frontiers in Marine Science*, 3(230). <https://doi.org/10.3389/fmars.2016.00230>.
- Noble, C. H. (1999). The eclectic roots of strategy implementation research. *Journal of Business Research*, 45(2), 119–134. [https://doi.org/10.1016/S0148-2963\(97\)00231-2](https://doi.org/10.1016/S0148-2963(97)00231-2).
- OAU. (1963). *Charter of the Organization of African Unity*, May 25, 1963. Retrieved from https://au.int/sites/default/files/treaties/7759-file-oau_charter_1963.pdf
- Okafor-yarwood, I. (2018). The effects of oil pollution on the marine environment in the Gulf of Guinea – The Bonga oil field example. *Transnational Legal Theory*. <https://doi.org/10.1080/20414005.2018.1562287>.
- Okumus, F. (2001). Towards a strategy implementation framework. *International Journal of Contemporary Hospitality Management*, 13(7), 327–338. <https://doi.org/10.1108/09596110110403712>.
- Oskooee, H. A. (2017). Key Factors in Strategy Implementation. *Proceedings of the International Conference on Intellectual Capital, Knowledge Management & Organizational Learning*, (January), 355–364. Retrieved from

- <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=126894475&site=ehost-live>
- Palumbi, S., Sandifer, P., Allan, J., Michael, B., & Fautin, D. (2012). Marine ecosystem services. *Frontiers in Ecology and the Environment*, 7(February), 204–211. <https://doi.org/10.1890/0701.35>.
- Rao, P. . (2014). Africa's maritime domain : Can the regional states ensure a stable regime in the Indian Ocean region?
- Raps, A. (2005). Strategy implementation – An insurmountable obstacle? *Handbook of Business Strategy*, 6(1), 141–146. <https://doi.org/10.1108/08944310510557152>.
- Riggs, F. W. (1979). The. *Importance of concepts: Some considerations on how they might be designated less ambiguously*, 14(4), 172–185. Retrieved from <https://www-jstor-org.libgate.library.nuigalway.ie/stable/pdf/27702386.pdf?refreqid=excelsior%3A0a9322bf5502b4920d06aa60b8ba3803>.
- Robbins, S. P., & Coulter, M. (2002). Management. Pearson.
- Siddiki, S., & Goel, S. (2015). A stakeholder analysis of U. S. marine aquaculture partnerships. *Marine Policy*, 57, 93–102. <https://doi.org/10.1016/j.marpol.2015.03.006>.
- Speculand, R. (2014). Bridging the strategy implementation skills gap. *Strategic Direction*, 30(1), 29–30. <https://doi.org/10.1108/SD-12-2013-0093>.
- Swanepoel, E. (2017). The Nexus between prosperity in the African maritime domain (No. 163).
- Thompson, A., Strickland, A. J., & Gamble, J. E. (2007). *Crafting and executing strategy: The quest for competitive advantage, concepts and cases* (15th ed.). Boston: Mc Graw Hill.
- Ukeje, C. (2015). The Abuja declaration and the challenge of implementing a maritime security strategy in the Gulf of Guinea and the South Atlantic. *Journal of the Indian Ocean Region*, 11(2), 220–235. <https://doi.org/10.1080/19480881.2015.1074784>.
- UNDP. (2013). *Towards Ecosystem-Based Management of the Guinea Current*. Retrieved from [http://www.undp.org/content/dam/undp/library/Environment and energy/water and ocean governance/GCLME report 2013.Pdf](http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/water%20and%20ocean%20governance/GCLME%20report%202013.Pdf)? Download.
- UNEP. (2018). “Twenty years of the Bamako convention: A time for more effective implementation.”
- Waldron, J. (2002). Is the rule of law an essentially contested concept (in Florida)? *Law and Philosophy*, 21(2), 137–164. <https://doi.org/10.2307/3505128>.
- Walker, T. (2015a). *Enhancing maritime domain awareness in Africa*. (October), 8.
- Walker, T. (2015b). *Implementing Africa's maritime security strategies*. (May). Wilton Park.
- Walker, T. (2017). Reviving the AU' s maritime strategy. *Institute for Security Studies Policy Brief*, 96(February), 1–8.
- Walker, T. (2019). In the game of maritime power politicking, is Africa the biggest loser? Retrieved September 1, 2019, from ISS Today website: <https://issafrica.org/amp/iss-today/in-the-game-of-maritime-power-politicking-is-africa-the-biggest-loser>
- Wingrin, D. (2009). SAN hosts 3rd sea power for Africa symposium. Retrieved September 5, 2019, from Defence web website: <https://www.defenceweb.co.za/sea/sea-sea/san-hosts-3rd-sea-power-for-africa-symposium/>
- WWF. (2007). Designing operation plan. In *Resources for Implementing the WWF Project and Programme Standards*. Gland: World Wide Fund for Nature.

Age-Based Discrimination

► Ageism

Ageism

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Synonyms

[Age-based discrimination](#)

Definition

The shortest, the most common, and on the face of it the clearest English dictionary description of “ageism” says that “it is the prejudice toward, stereotyping or discrimination of a person or group of people because of their age” (Low and Ang 2013). However, as it is often the case, clear, short, and elegant definitions hide and imply a lot most of which isn't neither clear nor short, and in most cases quite unfashionable. Two, among many defects of such descriptions, are that neither by being too universal they do not apply to actual practice that a description supposes to describe, nor by being too clear criteria have acceptably short list of standard exceptions.

Ageism

The fact is that humans as any other developed biological species with sexual reproduction

systems are getting older, becoming old, and die (opposite to, e.g., some simple organisms that are virtually immortal). Evolutionary, biologically, and gerontologically speaking, this fact isn't explained yet. It is also the fact that the world population is aging more rapidly than ever before, meaning that there is the constant growth in number and proportion of older people in the world's population.

Further on, aging is becoming extremely relevant medically speaking since it is among the greatest risk factors for most diseases. These facts further on immensely determine changes in legal, economic, political, social, and cultural aspects of the human species. Last but not the least, it is also a fact that, in part due to these facts, the phenomenon of ageism as a negative prejudice, stereotype, and discrimination of an individual or a group because their age exists and is becoming more and more relevant. On the margin of causes of ageism, there is also the so-called the cult of the youth which doesn't just deny ageism but tends to deny obvious facts about aging, sometimes conceiving it as a kind of social construct. (Neiman 2014).

In what follows, ageism and aging will be described, ageism theories will be listed, and ageism at workplace will be explicated in detail as the most frequent and the important type of ageism in its positive and negative, implicit and explicit types, and in its economic, business, legal, sustainable, and moral aspects so that the complexity of the issue and related practices can be viewed in detail and applied in other situations *ceteris paribus*. The reason for this example is given by the facts about humanity which says that the "world human population in ageing rapidly" (United Nations, Department of Economic and Social Affairs, Population Division) (2015). World Population Ageing 2015 (ST/ESA/SER.A/390), and therefore the workforce, is getting older as well which leads to new demands in workforce treatment and overall approach to it in social, cultural, economic, legal, and moral aspects.

Let us begin with first level of complexity concerning the elements of mentioned definition. "A stereotype is any thought widely adopted

about specific types of individuals or certain ways of behaving intended to represent the entire group of those individuals or behaviors as a whole" (McGarty et al. 2002). The first problem is that these thoughts or beliefs may or may not accurately reflect reality (Judd and Park 1993). Now, there is obvious tension between a common misinterpretation of stereotype which says that it doesn't reflect reality and its original meaning which says that it is any "solid impression" (*stereos + typos*) and it was invented for a quality of a copy in the printing trade. Let us stop here and move to the second concept.

Stereotype is similar to prejudice, and discrimination, but it differs from them in a way that it emphasizes cognitive dimension, while prejudice emphasizes emotional, and discrimination practical dimensions. Therefore, a stereotype can be only incorrect so far as an impression isn't solid, but as such it can be wrong if it leads one toward, justifies, or causes some negative prejudice (given that there are positive prejudice as well) and surely if these two lead to discrimination. Discrimination is any disadvantageous or prejudicial consideration or a treatment of an individual based solely on their belonging to a particular category (social, ethnic, racial, etc.).

Basically, to discriminate is to consider to act or to act indirectly or directly intolerantly. Finally, A tolerates B if and only if: A disagrees with what is B doing or intends to do, A can prevent B in doing, and A doesn't prevent B. Consequently, if A is preventing B in an action because A disagrees with the action in question, B is acting intolerantly toward B. In a quite vivid example, A can be a manager in a company who disagrees that B, who is an older employee, continues to work, no matter if the relevant international documents, national legal regulations, and company's policies allow her or him to continue to work. A can dismiss B only because B is older employee, and A disagrees that older employees should work for the company, since, as A thinks, "It is a dynamic environment composed of young and creative people." If this is the case, it is an obvious situation of intolerance, discrimination, prejudice, and stereotyping of an employee based solely on her or his age and therefore the case of ageism.

Last but not least, “ageism” in its core rests on a biological fact about developed living beings, humans included, which correctly says that people age, or that they undergo the normal stage in life called “aging” or “becoming old.” This biological fact is in a way considered negatively, for instance, in “politically correct” talk which doesn’t tolerate expressions such as “old woman” or “old worker,” while suggesting that “a senior citizen” or “a senior employee” is the right non-discriminating, non-prejudicial, and non-stereotypical way of talking, considering, and acting toward old people or anti-ageism policy.

This short definition of ageism (Butler 1969) no matter how narrow it is, i.e., considering only negative action toward old people qua old people, shows these and many other flaws. Some contemporary analyses of aging try to broaden the scope of it by saying that ageism is not directed toward old people as old people, but toward young people as well, since they can be subjects of ageism as well (Bytheway 2005), and some try to broaden the scope to any age group at all (Palmore 1999). These developments surely help understanding ageism more fully, especially if it is detected and fought against with various policies in different demographical situations; however, they do not supply effective description that can determine our practice against it. Much of problems of ageism, previous to all other phenomena, rest on its unclear relation to biological fact of aging, and much of them rest on the implicit practice of ageism (since explicit and direct ageism is not common due to various cultural, political, and even legal constraints).

Aging

One among many obvious situations in which the presented description of ageism doesn’t help, much is a situation in which “being old,” “being young,” or for that matter “being of any age” whatsoever is in fact an advantage, and therefore ageism or even better aging (sometimes positively referred to as “seniority”) seems to be a correct

description, and a possible positive prejudicial and positive discriminating action can be justified and morally good under some further conditions. For various activities, professions, lines of work, and hobbies, “being of a particular age” is not just an advantage, but previous to that a necessary condition of an activity. This is obvious for many activities for which “being of a particular age” is biologically important, e.g., for a development of a particular physical capabilities in people, say physical speed by running certain age is necessary. Namely, if this particular capability isn’t developed in a particular age, the capability will remain undeveloped or at least underdeveloped.

Furthermore, for particular activities, an amount of experience, defined by years of practice and level of expertise and excellence, is a clear precondition; therefore, “being of a particular age” is a precondition of engaging in an activity, e.g., being any kind of a coach, trainer, educator, teacher, mentor, or similar, say in sports, at a workplace, in private life, etc. So the issue here isn’t just about positive and negative ageism, but previous to that the issue is about relating ageism to aging in both positive and negative ways and to differ between them at least for practical purposes.

Being old or being young doesn’t mean that one is automatically more suitable for an activity given the fact that they are being in the right age for an activity, or having a certain amount of experience doesn’t necessarily leads to suitability of acting. However, clearly stating that an individual or a group is at the particular age for a particular activity or a practice has nothing to do with ageism, and it is connected to age solely. So it is important to be able to talk and act in respect of an age of an individual or a group without being negatively prejudicial, stereotyping, or discriminating in terms of ageism. Between what ought to be done (i.e., how to escape negative ageism), and what is the fact (i.e., use of age and aging properly), there are some theories about ageism which try to explain or at least explicate why this phenomenon occurs in societies and cultures.

Biologically and evolutionary speaking, aging emerged when the evolution of sexual

reproduction occurred. Before that, starting approximately at 3.7 billion years ago, there were singled-cell organism on Earth that reproduced by fissioning into daughter cells. Sexual reproduction brought change, and humans are no exception (this should not be mixed with the fact that some cells even in humans have the potential for immortality). Aging is normal, and as such it normally occurs in any group or a population of humans. Biological causes of normal aging are still researched, and there are several competing models of it, like the model of damage which causes organ systems to fail and programmed aging model which says that there is a mechanism which causes aging. Prevention of aging on individual and organ systems level is one of the most researched topics in human biology and medical sciences. The social and economic issue especially rises if the group of older individuals is growing rapidly and becomes dominant group in a given population because the population on average is getting older.

The issue here is aging which is dominant in the dynamics of a population, i.e., increasing number of older people in it. This phenomenon leads to a new biological and demographical stratum, namely, dominance of a particular age group, and consequently different social stratification (the so-called age distribution or age composition). In other words, normal age distribution or age pyramid in a society is changed, i.e., stationary pyramid is changed to the model which is a mixture between expansive and constrictive pyramids because there is a high birth rate (and other causes like immigration of families with more than two babies) and in the same time this birth rate is overpowered by higher life expectancy. Consequently, absolute number of a population is rising, and also the number of older groups in it, and the median age is rising (e.g., in EU, North America, and Japan, it is above 42 years and rising in the period 1990–2020). This fact determines a lot in a society, from family, education, work, quality of life, and even leisure time.

The UN 2015 report “World Population Ageing,” based on global and precise data, claims that

aging is not just the fact, but perhaps one among the most important facts about humanity in the near future:

The world’s population is ageing: virtually every country in the world is experiencing growth in the number and proportion of older persons in their population. Population ageing—the increasing share of older persons in the population—is poised to become one of the most significant social transformations of the twenty-first century, with implications for nearly all sectors of society, including labour and financial markets, the demand for goods and services, such as housing, transportation and social protection, as well as family structures and intergenerational ties. Preparing for the economic and social shifts associated with an ageing population is thus essential to ensure progress in development, including towards the achievement of the goals outlined in the 2030 Agenda for Sustainable Development. (UN 2015)

Generally speaking, the most developed regions in the world are actually dying since there is growth of people of middle age combined with smaller number of children and greater number of old people. Such condition determines almost everything in such regions, from individual to social rules and customs, and from legal to economic activities and models. Old people in such populations become a dominant group, and consequently children and very old people are minorities. In that light, previously mentioned definition of ageism which broadens the concept from old people to young people makes perfect sense in such demographically structured populations. Ageism is a present phenomenon, and it is possible that it changes due to changes in the age distribution of a population which makes it quite interesting phenomenon in need for a new explanation and hence new models of ageism and policies of reducing ageism.

Ageism Types and Models

There are four ecosocial levels of analysis that can be applied to ageist manifestation in society. From a macro, meso, micro, and individual level, these ageist categories are structural, institutional, interpersonal, and embodied ageism.

N. Krieger offers some excellent and succinct definitions of structural, institutional, and interpersonal discrimination, which apply well to ageism (Krieger 1999).

E. Palmore claims that structural ageism, also known as “systemic ageism,” is the “totality of ways in which societies foster discrimination” against older adults. A subset of structural ageism, cultural ageism, encompasses ageist media messages, commentary, humor, and other cultural facets wherein ageist perspectives are accepted as de facto truths.

Institutional ageism, or “organizational ageism,” refers to “discriminatory policies or practices carried out by state or non-state institutions” that are detrimental to older adults. Interpersonal ageism or “institutional ageism” refers to “directly perceived discriminatory interactions between individuals” (Palmore 1999).

Although ageism is often direct, explicit, and efficient, new social, cultural, and political circumstances give rise to indirect and implicit ageism. There are no obvious stereotypes and prejudices toward any age group, not even direct discriminating practices, but they are obviously implicit and deeply rooted in societies. Implicit ageism shouldn’t be mixed with benevolent ageism which is directed, for instance, toward younger or older co-workers who are patronized or pitied, but explicit ageism is often hostile and direct.

Ageism at Workplace

A known joke says that an employer wanted one younger candidate with at least 20 years of experience and also one experienced candidate not older than 25 years of age. So a woman applied for both jobs, and she said to the interviewer that she is 25 years old, that she has 15 years of experience and a PhD and a DBA in accounting. The interviewer looks at her, thinks to himself, she is obviously more 30 years old, with no more than 10 years of experience tops, and without PhD or DBA, and he says to her: “Well, what you are saying is impossible.” She replied: “To say something which is impossible to these impossible

recruitment conditions was the only possible thing to do.” She got the job.

Contrary to the joke, many young people don’t get jobs because they are too inexperienced; many are poorly paid because they are the youngest and patronized in the workplace because they are inexperienced, and many efficient elderly workers are dismissed only because they are old. The previous joke doesn’t seem to be so comical anymore, more to that, it seems tragic, and it is a typical ironic and sarcastic response to typical rising ageism discrimination all around the world (only in some rare societies, older workers are taken as the crucial part of the workforce because their expertise, experience, and capability of passing knowledge to younger workers which is considered as of utmost importance for continuity and stability of a business).

As any other ageism, so is workplace ageism stereotyping, prejudicial, and discriminating attitude comprising cognitive, emotional, and proactive and practical elements toward employees of any age group. Given that the major group in a workforce is similar to the major group in age distribution in a society, the most frequent groups that will probably suffer ageism are younger and older employees. Some of ageism practices are in some countries allowed by different laws and sublegal rules and procedures, for instance, in a case of younger workers, these can result in unequal payment for an equal work, and similar can be the fact for older workers, especially women (therefore, ageism as the age discrimination is combined with the sexism and gender discrimination). In some countries, age discrimination is explicitly prohibited besides the fact that there are various regulations regulating equal employment opportunity.

Ageism here makes a strange relation to ageism as the normal age distribution in a population and workforce as well. Namely, ageism is quite irrational economic practice given that it is highly probable that strengths and opportunities generally override weaknesses and threats in younger and older groups of employees. For instance, energy, creativity, and easygoing features of younger employees and experience and capability of mentoring younger employees by seniors are

besides being economically rational, also quite natural for any group engaged in a line of work that doesn't have objective, e.g., psycho-physical age conditions.

Therefore, by being discriminating practice, ageism seems to be an irrational business practice as well, and as such bad for business. Nevertheless, the practice still goes on despite legal restrictions and being an irrational business behavior. For instance, in many EU countries, candidates of older age get approximately 50% less job interview invitations compared to those of younger age (Ahmed et al. 2012; Baert et al. 2015; Kautonen et al. 2015). Furthermore, mandatory or obligatory retirement age which exists in many countries and companies, as it was initially planned, doesn't create greater opportunities for younger candidates.

Since all age groups cannot be covered here, only old workers will be covered, and it is possible that facts, rules, practices, and policies apply to all other age groups of workers *ceteris paribus* (different estimation say that in developed countries, workforce of age 65 occupies 25% of the whole group and that the rapidly growing tendency is to rise to 1/3 in the near future (U.S. Department of Labor Bureau of Labor Statistics 2008)).

One should keep in mind that ageism of older workers in workplace overlaps with other types of discrimination in workplace on the one hand and with other types of ageism outside of a workplace, i.e., in private life, in local community, etc. This is relevant as far as some discriminating practices toward older workers are simple continuation of discrimination practices toward older persons in society and private life.

Practical policies try to restrict ageism at workplace, besides following legal constraints that apply more strictly, but also they may be more proactive, meaning not just protecting older employees from ageism, but also creating age-friendly workplace environment. Such policies present a great problem for practitioners of business culture (objectively) and organizational climate (intersubjectively), namely, for human resources (HR) departments in companies. Among these policies, flexible work load

and working hours can contribute substantially to creating old age-friendly workplace environment.

Such policies do not present extra cost for companies and may gain extra profit given that for a series of professions, there is no proof that older workers will be less efficient simply because they are older, rather for a series of other causes among which the very ageism discrimination may play significant role in lowering their motivation (in a way it seems true that "Old is the new Young" as claimed by a Canadian post-punk band "No means no").

Therefore, it seems rational, efficient, by all means legal, and perhaps morally correct as well to avoid any form of negative ageism in the workplace. Formally speaking, this means avoiding it during recruitment, setting of the workplace terms and conditions, and dismissal. Points of recruitment and dismissal are often covered by media and popular texts, but they are in terms of quality and quantity almost irrelevant compared to ageism in view of the workplace terms and conditions.

Ageism in employment can contain advertising for someone to join a young team, not interviewing someone because they are too young or too old to, not employing younger workers because it's assumed that they'll quickly move on, not employing older workers because it's assumed that they'll soon retire, not providing training opportunities for young or mature workers because it is too expensive given the probable benefits, limiting their job responsibilities and duties, forcing someone to retire, because of their age, many forms of mobbing of young employees by older and vice versa, or by superiors, etc.

So ageism can be "horizontal," i.e., among co-workers, and "vertical," i.e., between managers and workers. It can be implicit, i.e., hidden within actual practices covered up by formal alignment with the legal requirements and best practices of avoiding ageism, and it can be explicit.

As said, various policies can successfully minimize ageism in a company, especially in the workplace and that for the benefit of all parties

included, namely, the owners, management, workers, company's image in a community, society, and especially among buyers and regular customers, etc. Anti-ageism policies aren't implemented just by following laws and other regulations and best practices, but also by implementing pro-age policies in all cases in which ageism is going on and needs to be reduced for the good of all.

Summary

There are facts about aging and fact about ageism. The origins and causes of both phenomena remain unknown which leads to some problems in dealing with them. On the other hand, what isn't problematic is that ageism is an irrational behavior that causes unnecessary problems wherever and whenever practiced, i.e., in everyday private life, in public life, in politics, culture, economy, etc. Therefore, it seems obvious to create not just legal regulations against ageism, but also various policies in order to influence culture in all spheres of a society, and in business this means to influence corporate climate and organizational behavior.

Anti-ageism policies in business should vary in their objects, i.e., if they are directed toward younger employees or older ones (especially if they are to be consistent with other anti-discriminating policies). They should vary in view of the core business of a company or even a whole sector of economy if certain age in terms of experience and psycho-physical requirements is necessary. Finally, they should vary concerning not just rhetoric but real inclusion of different age groups in a business primarily because this seems to be rational economic behavior. Rapid rise of aging in humans and perhaps parallel rise of ageism should be recognized, embraced, and confronted if needed, and so far these seem obvious no matter if actual policies are mostly protective and not so proactive.

Famous quote by Leonardo da Vinci goes: "While I thought that I was learning how to live, in fact I was learning how to die." This is

something that each one of us, children of the twenty-first century, has to learn for ourselves before we learn it as society of humans.

Cross-References

- ▶ [Counterproductive Work Behaviors](#)
- ▶ [Workplace Health Promotion](#)

References

- Ahmed, A. M., Andersson, L., & Hammarstedt, M. (2012). Does age matter for employability? A field experiment on ageism in the Swedish labor market. *Applied Economics Letters*, 19, 403–406.
- Baert, S., Cockx, B., Gheyle, N., & Vandamme, C. (2015). Is there less discrimination in occupations where recruitment is difficult? *ILR Review*, 68, 467–500.
- Butler, R. (1969). Age-ism: Another form of bigotry. *The Gerontologist*, 9, 243–246.
- Bytheway, B. (2005). Ageism. In M. Johnson (Ed.), *The Cambridge handbook of age and ageing* (pp. 338–339). Cambridge: Cambridge University Press.
- Judd, C. M., & Park, B. (1993). Definition and assessment of accuracy in social stereotypes. *Psychological Review*, 100(1), 109–128.
- Kautonen, T., Hatak, I., Kibler, E., & Wainwright, T. (2015). The role of age-based self-image. *Journal of Economic Psychology*, 50, 41–51.
- Krieger, N. (1999). Embodying inequality: A review of concepts measures, and methods for studying health consequences of discrimination. *International Journal of Health Services*, 29(2), 295–352.
- Low, K. C. P., & Ang, S-L. (2013). Ageism. In S. O. Idowu (Ed-in-chief), *Encyclopedia of corporate social responsibility* (Vol. 1, A-C, pp. 42–54). Berlin/Heidelberg: Springer.
- McGarty, C., Yzerbyt, V. Y., & Spears, R. (2002). *Stereotypes as explanations: The formation of meaningful beliefs about social groups*. Cambridge: Cambridge University Press.
- Neiman, S. (2014). *Why grow up?: Subversive thoughts for an infantile age*. New York: Farrar, Straus and Giroux.
- Palmore, E. (1999). *Ageism negative and positive* (2nd ed.). New York: Springer.
- U.S. Department of Labor Bureau of Labor Statistics. (2008, July). *Older workers: Are there older people in the workplace?* http://www.bls.gov/spotlight/2008/older_workers/. Accessed 2016.
- UN (United Nations, Department of Economic and Social Affairs, Population Division). (2015). *World Population Ageing 2015* (ST/ESA/SER.A/390).

Agency Theory

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Synonyms

Principal-agent conflicts; Principal-agent theory

Definition

Agency theory is a concept which perceives the company as a nexus of contracts between various actors (Fama & Jensen, 1983a, b; Jensen & Meckling, 1976) who cooperate in order to maximize firm profit. It “recognizes conflicts of interest between different economic actors, formalizing these conflicts through the inclusion of observability problems and asymmetries of information” (Hart, 1989:1758–1759).

To achieve the organizational goals, actors need to engage in a number of relations which are described in contracts (Jensen & Meckling, 1976) specifying goals, procedures for performance assessment, and the distribution of profits. Following the rationale on the division of labor, these contracts describe the work which is delegated by principals to a number of agents. Since actors tend to maximize their utility, naturally their interests are of conflicting character (Jensen & Smith, 1985).

Agency theory has been widely adopted by numerous research in organizational studies (Dalton et al., 2007; Eisenhardt, 1989; Gomez-Mejia & Wiseman, 1997) to analyze the potential lack of alignment of goals, preferences, and actions between agents (managers) and principals (shareholders) (Nyberg et al., 2010: 1030). Recently, agency theory has also used in studies in political science, law, and sociology (Shapiro, 2005; Luh Lan and Heracleous, 2010).

Introduction

Agency theory, known also as principal-agent theory, is one of the most influential concepts which has been largely used in management, finance, and economics studies. It conceptualizes contractual relationships between different actors and analyzes the conflicts of interests which characterizes these relationships. According to the theory, actors who engage in contracts are motivated by rational preferences and driven by the goal of utility maximization. Thus, as a consequence they find themselves acting in conflict with other individuals (Simon, 1959).

The development of the theory dates back to 1976 and the seminal paper by Jensen and Meckling (1976) and works by Ross (1973) and Mitnick (1975), followed by a number of later works by Fama and Jensen (1983a, b), Jensen and Smith (1985), and Shleifer and Vishny (1997). Its prepositions are embedded in the ongoing discussion of the economics of contracts (Hart, 1995; Hart & Moore, 1988), firm theory (Coase, 1937; Demsetz, 1983), transaction costs economics (Williamson, 1975), and information asymmetry (Akerlof, 1970; Stigler, 1961). Agency theory addresses the weaknesses of the neo-classical economics and analyzes behavioral patterns within the firm. It views the firm as a production set and emphasizes the decision-making role of the professional managers. In sum, the theory is based on the assumptions of (1) the goal maximization by individuals, (2) the conflicts of interests between different actors, and (3) asymmetry of information.

Agency Conflicts in the Context of the Firm

Agency theory addresses the contractual character of the organization reality. Specifically, this theory helps to explain relations between actors at different organizational levels. Orts (2013) distinguishes two general types of agency relations: internal and external. Internal agency relations are found in the company between employees,

supervisors, managers, directors and shareholders. The external agency relations take the form of contracts between company representatives and outside entities such as suppliers, customers and contractors.

In general, principals are interested in getting the work done at the lowest cost and the highest quality possible, while agents are interested in increasing their pay and lowering their effort (Jensen & Smith, 1985). This conflicting context is additionally complicated by the information asymmetry (Fama & Jensen, 1983a, b; Jensen & Meckling, 1976) – the situation in which principals do not observe the daily operation of agents since such monitoring is too costly. Moreover, all contracts are incomplete since future situations cannot be foreseen. This means that the so-called residual rights, i.e., the rights to decide in situations not described in the contracts, belong to agents. The conflict of interests and information asymmetry lead the problems of moral hazard, the opportunistic behavior by agents, and the risk of expropriation of principal by agents.

Moral hazard refers to the situations when actors may engage in the excessively risky situations if they do not bear the cost of the actions undertaken because they are protected by contract or their actual contribution is difficult to be observed. Opportunistic behavior of agents takes place when agents engage in the actions which are likely to maximize their utility and wealth yet are at the expense of principals. This means that principals due to the information asymmetry and the inability to control agents may be expropriated by agents. The agents' tendency to act opportunistically at the cost of their principals takes the forms of (Hart & Holmström, 1987):

- Hidden information which refers to the situations when the agent does not provide information (or purposefully hides the information) on the project/company situation to the principal.
- Hidden action which refers to the situations when the agent does not disclose (or purposefully hides) the information on his or her actions undertaken in the company/project to the principal.
- Hidden intention which refers to the situations when the agent does not disclose (or purposefully hides) the information on his or her intention towards the company/project to the principal.

In the corporate governance literature agency theory refers to the analysis between and executives as well as between shareholders and debtholders. The shareholder-manager conflict takes place in the context of the separation of ownership and control and is significantly strengthened when the ownership remains dispersed (Berle & Means, 1932/1967). The shareholder-debtholder conflict emerges when the company uses bank loans to finance its operation. Recently, the research on companies operating in countries characterized with significant ownership concentration gave rise to the analysis of the principal-principal conflict which is mirrored in the tensions between dominant (majority) shareholders and minority investors.

The conflicts between these economic actors lead to the emergence of the so called agency costs. The agency problems are present at all the levels of the organization as they emerge always when agents perform tasks on behalf of their principals, meaning where there is a need of cooperation and delegation of some work to a third party. Focusing on the optimization of contracts and the increase of organizational efficiency the theory proposes the adoption of a number of governance mechanisms in order to mitigate the conflicts and lower the agency costs. These mechanisms include: shareholder participation in annual meetings, shareholder empowerment, increased transparency and disclosure, independent and efficient board, incentive function of executive pay, whistle blowing procedures, and engagement by creditors as well as the monitoring from the public and the market. Below the two cases of shareholder-manager and shareholder-debtholder conflicts are presented.

Shareholder-Manager Conflict

Numerous studies adopt agency theory to explain the relations between shareholders

(principals) and executives (agents). Since the shareholders delegate the work to professional managers they face all above listed problems related to the conflict of interest and information asymmetry. Specifically, the conflict between shareholder and a professional manager derives from the following three sources (Jensen & Smith, 1985):

- Choice of effort – illustrates the tendency of the manager to lower his/her effort to improve firm performance. The rational manager would carefully assess whether it pays off to undertake the effort and work.
- Differential risk exposure – addresses different possibilities to diversify risk by shareholders and managers. Shareholders may invest in a number of companies, what lowers their risk exposure and hence encourages them to engage in more risky projects. On the contrary, the manager invests all his/her resources (time, reputation, experience) in one company and would react differently to avoid excessive risk exposure. This observation explains the managerial tendency to pursue firm diversification and increase the size of the company – both strategies lower the risk exposure by the manager, yet they do not increase shareholder value.
- Differential horizons – refers to the potentially indefinite investment by shareholders and time-bounded engagement by the managers in a firm. This impacts the patterns of behavior of shareholder and managers, specifically, when managerial contracts cease or when managers are about to retire. Hence, executives would tend to lower the cash flow upon their departure from the company.

According to the positive view of agency theory, managers who maximize their utility acting at the expense of their principals are rational economic actors. They naturally engage in actions which may expropriate shareholders but which increase their (managers') wealth. Managers may limit the scope of financial reporting in order to prevent the access to information by shareholders about financial conditions of the firm. The most

frequently observed actions undertaken by managers to increase their utility include (Shleifer & Vishny, 1997): frauds, inefficient management, the increase of corporate expenses (business travels, executive pay, perks), short-term orientation, excessive size of the firm (usually in the form of mergers and acquisitions), excessive and economically unjustified diversification, risk aversion which lowers shareholder wealth. In addition, managers may manipulate accounting data in order to portray their performance as much better than the actual results are (e.g., early booking of revenues, increasing or decreasing cash reserves, treating costs as investments). Finally, the evidence indicates the abuse of selected components of the executive remuneration which does not correlate with or increase shareholder value. Such actions include the abuse of stock options, the short-term orientation of incentive schemes, excessive payment of bonuses in cash, or introducing the so-called "guaranteed bonus".

Jensen and Meckling (1976) argue that due to the lower investment in the company, managers treat corporate expenses in a different way. Particularly, the ownership of 1% of shares by a managers means that he or she covers 1% of the costs (for instance, for fancy office furniture), while enjoys 100% of it. For the manager, who is simultaneously the owner of the firm, the benefit is similar, yet the cost corresponds proportionally with percentage of shares owned. Thus, executives rationally are interested in increasing corporate spending, especially when their financial investment on the company is low.

To address the above-listed problems, the normative view of agency theory offers mathematical studies to structure the optimal contract. Such contract considers the actors' preferences as well as a number of attributes including (Eisenhardt, 1989; Shapiro, 2005) the length of principal-agent relationship, organizational structure and form, characteristics of industries, organizations, and employees (technology, diversification, ownership structure, the so-called programmability and definability of the task, and the organizational environments.

Majority-Minority Shareholder Conflict

The concept of agency theory initially did not elaborate on the conflicts between majority shareholder and minority investors. These problems were brought to the discourse of the analysis on ownership structure in continental Europe, Asia, and Latin America, developing and emerging economies. While the concentrated ownership understood as the possession of a large stake by a single shareholder is viewed as a potential monitoring mechanism efficient to control opportunistically behaving managers, it may lead to other problems identified as the principal-principal conflict. The principal-principal conflict, known as the second type of agency problem, demonstrates itself in a number of actions undertaken by the majority shareholder (blockholder) which increases his/ her private benefits and leads to the expropriation of minority shareholders (Bebchuk & Roe, 1999; Thomsen & Pedersen, 2000). Due to its dominant position during shareholder meeting and on the board the majority shareholder may engage in actions which increase his/her wealth and do not distribute the created value to fragmented minority shareholders.

The principal-principal conflict may take different forms having a direct impact of profit redistribution and financial performance as well as having an effect on decision making process and firm transparency. Specifically, majority shareholder may block dividend payouts and exercise the so called related party transactions which serve to shift profit from the listed company to entities fully controlled by him/her. Majority shareholders may also dominate the boardroom appointing directors and in effect take control over the decision process. They may lower the scope of reporting depriving minority shareholders of the access to the information on actual performance and strategic developments of the company.

Shareholder-Debtholder Conflict

The conflict between shareholder and debtholder refers to the situation when the firm expansion is financed in the form of debt and when the shareholder has “the opportunity to design a whole hierarchy of fixed claims on assets and earnings, with premiums paid for different levels of risk”

(Jensen & Meckling, 1976:334). The main aspect of the conflict addresses the transfer of risk to debtholder if certain projects are undertaken after the contract with the debtholder is written. This means that for the debtholder it matters if the finance is provided before a given investment in a possibly risky project as compared to the situation when the shareholder invests first in a risky project and then raises additional funds to finance it in the form of debt.

The shareholder-debtholder conflict arises with the shareholder decision which transfers the wealth from the firm to the shareholder and hence, has the effect on the risk of providing finance by the debtholder. The decision decreasing the firm value which constitutes the sources of the shareholder-debtholder conflict includes (Jensen & Meckling, 1976):

- Dividend payouts lower the value of debt if the finance was granted without the consideration of the payouts (La Porta et al., 2000).
- Claim dilution refers to the increase of the existing debt which decreases the value of the prior debt raised.
- Assets substitution refers to the investment of assets in the project of higher risk which decreases the value of the debt.
- Underinvestment addresses the situation when the future value of the firm is based on its investment opportunities. The withdrawal of the firm from NPV positive projects may impact the value of debt.

This conflict is based on the divergent interests between shareholders and debtholders – since debtholders are aware of this conflict of interest they will anticipate the possibility that shareholder would engage in highly risky projects once the funds are granted. Thus, debtholder adopt a number of mechanisms to project their position and to control the actions undertaken by shareholders.

Excessive Loyalty

Recently the emergence of an additional agency problem in the nexus of contracts within the organization has been recognized. While agency theory focuses on the opportunistic behavior of

managers and conflicts of interests between shareholders and managers, Morck (2010) argues that agents may reveal an excessive loyalty towards principals. This may have an effect on their behavior and may lead to the uncritical actions undertaken by agents following the order and expectations of principals. The agency shift of loyalty and the lack of rational assessment are the products of the agent's willingness to obtain acceptance within the organizational hierarchy.

Agency Costs

Agency Costs of Equity

Agency theory identifies conflicts between shareholders and managers and suggests the mechanisms to shape managers' behavior to mitigate these costs. According to Jensen and Meckling (1976) agency costs of equity include:

- The monitoring expenditures by the principal are spent on the control mechanisms which limit the discretion of the manager. In addition, the incentive mechanisms which motivate managers to act in the interest of shareholders.
- The bonding expenditures by the agent – the actions and mechanisms adopted by the manager to assure that undertaken actions will not harm shareholders or that shareholder will be compensated for such actions.
- The residual loss – is understood as “the dollar equivalent of the reduction in welfare experienced by the principal as a result of this” . . . “divergence between the agent's decisions and those decisions which would maximize the welfare of the principal” Jensen and Meckling (1976:308). The residual loss indicates also that the full enforcement of the contract exceeds its benefits (Fama & Jensen, 1983a). Principals (shareholders) are aware of this loss as inevitable.

While this breakdown of agency costs remain conceptual, there have been attempts to measure them. The indirect approach to calculate agency costs include to the loss of market value of a firm, value of fraud or the premium at which majority

stakes are traded (Shleifer & Vishny, 1997). Ang et al. (2000) offers an interesting analysis using two measures of (1) operating costs versus annual sale and (2) annual sale versus total assets which are compared within two sample subsets of companies where the manager is the owner versus the companies where the managers in an outsider. The first variable measures the costs understood as the excessive corporate spending and the second measure illustrates the effort undertaken by the manager. The results indicate the agency cost for manager-outsider at the level of 65,000 dollars annual (for the operating costs versus annual sale measure) and 180,000 dollars (for the annual sale versus total assets measure).

Costs of Free Cash Flow

Agency costs of free cash flow refer to a firm's own substantial cash flow at disposal with the lack of promising NPV (net present value) projects. The overinvestment in project characterized with insufficient expected profitability leads to decrease of the firm value (Jensen & Meckling, 1976). Agency costs of free cash flow are driven by the managerial tendency to increase the size of the firm (empire building) and increase of executive pay (Jensen, 1986).

Costs of Debt

The agency costs of debt are the derivative of the shareholder-debtholder conflict. Since debtholders anticipate the shareholders actions decreasing the firm value after the funds are raised, they incorporate the risk and implement measures to protect the value of debt. Hence, the agency costs of debt include:

- The incentive effects associated with highly leveraged firms which illustrate the residual loss when the firm needs to raise funds in the form of debt and is limited in its investment decisions – instead of the more risky (and potentially more promising) project it has to choose a less risky project.
- The monitoring costs which refer to the contracts limiting decision of managers who may engage in projects lowering the value of debt. The covenants on the indenture provision limit

the managerial discretion and protect debtholders.

- Bankruptcy and reorganization costs which include costs of assets relocation and residual claims rearrangement in the case of financial distress of the firm.

Residual Claims

Agency theory analyzes contracts within the organizational context which: specify decision-making process, define residual claims, provide mechanisms for control of agency conflicts, and decide about resource allocation. Jensen and Meckling (1983b) argue that different organizational and legal forms are characterized with different distribution of residual risk. Residual risk is defined as the risk between the firm revenues and payment to an agent and is bear by the group of the so-called residual claimants who control the rights to net cash flows.

The decision process is divided into two main stages (Fama & Jensen, 1983a):

- Decision management which encompasses initiation (generation of proposals) and ratification (choice of the decision).
- Decision control which includes implementation (execution of decision) and monitoring (measurement of performance and implementation of rewards).

From the perspective of the contract structure in organizations, two options of the relations between the risk-bearing and decision processes are possible (Fama & Jensen, 1983a): (1) the separation of decision management from decision control (when residual risk bearing is separated from decision management) and (2) the combination of decision management and decision control (when residual risk bearing is combined with decision management). The separation option gives rise to the emergence of a wider group of residual claimants what allows to share risk. This model is used in large firms, public listed corporations, non-profit organization, closed investment funds which require the

increased specialization of knowledge, and diffusion of monitoring functions (Fama & Jensen, 1983a). The model based on the combination of decision management and decision control reduces the number residual claimants and posts a greater risk on them. This model is found in smaller firms and family controlled companies which are limited in the appointment of individuals who play the monitoring functions. The monitors need to be selected from the group of residual claimants and not on the basis of their experience and skills (Fama & Jensen, 1983a).

Practical Implications

Agency theory has been widely adopted in management and finance studies which propose the paradigm of shareholder value maximization (Vogel, 2005; Zumbansen, 2009) focusing on the financial performance of the company (Bainbridge, 2012). Foundations of this theory gave rise to further works analyzing the most efficient structures and governance mechanisms (Jensen and Meckling, 1983b). Shareholders, who in the case of public corporations become the residual claimants, are willing to introduce and use control mechanisms to discipline managers (Eisenhardt, 1989; Hung, 1998) to mitigate the conflicts of interests, to lower the costs, and to assure for high efficiency. The governance mechanisms relate to:

- The exercise of shareholder rights (participation in annual meeting, shareholder activism, the disciplinary role of the majority shareholder, monitoring over blockholders) (Shleifer & Vishny, 1997; Mallin, 2004).
- Efficient board work including the company bylaws and regulation, specialized committees (Fisch, 2004; MacAvoy & Millstein, 2003; Carter & Lorsch, 2004).
- Structuring executive compensation which should include performance related component and should align the interests of managers with those of shareholders via managerial ownership.

Studies based on the assumption of agency theory led to the development of corporate governance understood as a concept that introduces control, monitoring, and incentive mechanisms in a company with the goal of minimizing the conflicts between shareholders and executives or shareholders. In the words of agency theory, corporate governance is perceived as a structure that assures investors to receive return on their investments (Shleifer & Vishny, 1997) or a set of constraints that forms the ex-post distribution of wealth (Zingales, 1997).

Criticism

The fundamental assumption of agency theory based on the self-interest and opportunistic behavior has been criticized. Firstly, the theory suggests that the shareholder interest and financial performance prevail over other company goals (Allen & Gale, 2000; La Porta et al., 1999). It is believed to contribute to the so-called financialization of the company (McSweeney, 2008). Secondly, agency theory emphasizes the economic rationality and focuses on the individual utility which may be limited by a number of organizational and environmental attributes. Thirdly, it offers a very simplistic view of the firm neglecting other stakeholders such as employees, communities, suppliers. And finally, agency theory provides the legitimization of illegal or unethical behavior which are defined as economically rational.

In the opposition to agency theory, the organizational studies have developed other conceptual frameworks including stewardship theory, managerial hegemony theory (Barney & Hesterly, 2008), team production theory (Blair & Stout, 1999), and stakeholder theory (Freeman, 1984; Freeman & Reed, 1983). These approaches offer different perspectives on the managerial role in the company and call for inclusion of other stakeholder in the recognition of the firm's responsibility and duties (Tricker, 2015).

Agency Theory and Sustainability

While agency theory offers an economic perspective of relations between principals and agents, it is also widely adopted in sustainability research. In the traditional approach, the shareholder utilized agency theory findings to focus on financial performance and assure for creation of shareholder value. With the growing interests towards sustainability, shareholders and stakeholders are interested in improving ESG performance which on the one hand adds to the rage of corporate performance and on the other remains crucial for increasing shareholder value. Put differently, the enumerated practical implications are now adopted with the intention to assure for ESG performance – investors are interested in enhanced sustainability disclosure to make investment decision, they develop monitoring company ESG performance. Also boards with regard to composition and structure (size, independent directors, female directors, CSR board committee) are found to contribute to better monitoring of executives with regard to ESG performance. Finally, KPIs based on ESG and sustainability measure are used to structure executive compensation to motivate managers to improving ESG performance.

Cross-References

- ▶ [Auditors and Corporate Governance](#)
- ▶ [Accountability](#)
- ▶ [Codes of Good Governance](#)
- ▶ [Corporate Governance, Measurement of](#)
- ▶ [European Corporate Governance Institute](#)
- ▶ [Good Governance](#)
- ▶ [Governance](#)
- ▶ [Theorizing Governance from a Banking Perspective](#)

References

- Akerlof, G. (1970). The market for 'lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics, The MIT Press*, 84(3), 488–500.
- Allen, F., & Gale, D. (2000). *Comparing financial systems*. Cambridge, MA: MIT Press.

- Ang, J., Cole, R., & Wuh Lin, J. (2000). Agency costs and ownership structure. *Journal of Finance*, 55(1), 81–106.
- Bainbridge, S. (2012). *Corporate governance after the financial crisis*. Oxford: Oxford University Press.
- Barney, J., & Hesterly, W. (2008). *Strategic management and competitive advantages*. Upper Saddle River, NJ: Pearson/Prentice Hall.
- Bebchuk, L., & Roe, M. (1999). A theory of path dependence in corporate ownership and governance. *Stanford Law Review*, 52(1), 127–170.
- Berle, A., & Means, G. (1932/1967). *The modern corporation and private property* (2nd ed.). New York: Harcourt, Brace and World.
- Berle A., Means G. 1932/ 1967. The Modern Corporation and Private Property, 2nd edition Harcourt, Brace and World, New York.
- Blair, M., & Stout, L. (1999). A team production theory of corporate law. *Virginia Law Review*, 85(2), 248–328.
- Carter, C., & Lorsch, J. (2004). *Back to the drawing board*. Cambridge, MA: Harvard Business School Press.
- Coase, R. (1937). The nature of the firm. *Economica, New Series*, 4(16), 386–405.
- Dalton, D., Hitt, M. Certo, T., & Dalton, C. (2007). The fundamental agency problem and its mitigation. *The Academy of Management Annals* 1(1), 1–64
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *Journal of Law and Economics*, 26(2), 375–390.
- Eisenhardt, K. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(1), 57–74.
- Fama, E., & Jensen, M. (1983a). Separation of ownership and control. *Journal of Law and Economics*, 26, 301–325.
- Fama, E., & Jensen, M. C. (1983b). Agency problems and residual claims. *Journal of Law and Economics*, 26, 327–349.
- Fisch, J. (2004). Taking boards seriously in Joo Th (eds). *Corporate Governance, Law, Theory and Policy*. Carolina Academy Press, 329–336.
- Freeman, R. (1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.
- Freeman, R., & Reed, L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, 25(3), 88–105.
- Gomez-Mejia, L., & Wiseman, R. (1997). Reframing executive compensation: An assessment and outlook. *Journal of Management* 23(3), 291–374
- Hart, O. (1989). An economist's perspective on the theory of the firm. *Columbia Law Review*, 89(7), 1757–1774.
- Hart, O. (1995). *Firms, contracts, and financial structure*. Oxford University Press.
- Hart, O., & Holmström, B. (1987). The theory of contracts. In *Bewley* (pp. 71–155). T. Advances in economics and econometrics: Cambridge University Press.
- Hart, O., & Moore, J. (1988). Incomplete contracts and renegotiation. *Econometrica*, 56(4), 755–785.
- Hung, H. (1998). Rethinking agency theory as a leading framework for the study of board performance. *AAM Journal*, 3(2), 1–18.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329
- Jensen, M., & Smith, C. (1985). Stockholder, manager, and creditor interests: Applications of agency theory. In E. Altman & M. Subrahmanyam (Eds.), *Recent advances in corporate finance*. Homewood Richard D. Irwin.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Agency problems and dividend policies around the world. *Journal of Finance*, 51(1), 1–33.
- La Porta R., Loper-de-Silanes F., Shleifer A. (1999). Corporate ownership around the world. *Journal of Finance*, 54(2), 471–517.
- Lan, L., Heracleous, L. (2010). Rethinking agency theory: the view from law. *Academy of Management Review*, 35(2), 294–314.
- MacAvoy, P., & Millstein, I. (2003). *The recurrent crisis of corporate governance*. Basingstoke: Palgrave Macmillan.
- McSweeney B. (2008). Maximizing shareholder value. A panacea for economic growth or a recipe for economic and social disintegration? *Critical Perspective on International Business*, 4(1), 55–74.
- Mallin C. (2004). *Corporate Governance*. Oxford University Press, Oxford.
- Mitnick B. (1975). The theory of agency: The policing paradox and regulatory behavior. *Public Choice*, 24, 27–42.
- Morck, R. (2010). Loyalty, agency conflicts and corporate governance. In H. Baker & J. Nofsinger (Eds.), *Behavioral finance* (pp. 453–473). Hoboken: John Wiley & Sons.
- Nyberg, A., Smithey Fulmer, I., Andmason, B., & Carpenter, M. (2010). Agency theory revisited: CEO return and shareholder interest alignment. *Academy of Management Journal*, 53(5), 1029–1049.
- Orts, E. (2013). *Business persons*. A legal theory of the firm: Oxford University Press, Oxford.
- Ross, S. (1973). The economic theory of agency: The principal's problem. *American Economic Review*, 63(2), 134–139.
- Shapiro, S. (2005). Agency theory. *Annual Review of Sociology*, 31, 263–284.
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783.
- Simon, H. (1959). Theories of decision-making in economics and behavioral science. *The American Economic Review*, 49(3), 253–283.
- Stigler, G. (1961). The economics of information. *Journal of Political Economy*, 69 (3), 213–225.
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European

- companies. *Strategic Management Journal*, 21(6), 689–705.
- Tricker, B. (2015). *Corporate governance. Principles, policies and practices*. Oxford: Oxford University Press.
- Vogel D. (2005). Is there market for virtue? The business case for corporate social responsibility. *California Management Review*, 47(4), 19–45.
- Williamson, O. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: The Free Press.
- Zingales, L. (1997). *Corporate governance*. Chicago: National Bureau of Economic Research.
- Zumbansen, P. (2009). The evolution of the corporation: Organization, finance, knowledge and corporate social responsibility, Osgoode Hall Law School of York University, research report no. 6/2009.

Agenda 2030

► Global Governance

Agenda21 (UN)

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Definition

Agenda21 supports sustainable development in the twenty-first century, via an action plan used to address urgent social and environmental issues. It is promoted by the United Nations (UN) and has been signed by 183 heads of state around the world, first during the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, and subsequently, in 2002, during the World Summit on Sustainable Development.

Agenda21 is based on the premise that human societies cannot continue along their current path. It seeks to develop new pathways that bridge the social and economic gap between and within nations, focusing on the human issues that are poverty, hunger, disease, and illiteracy, and environmental issues that see the destruction of the

world's fragile ecosystems. Agenda21 provides a list of objectives and activities to be implemented that aim to promote sustainable development. Its target is states, governments, nongovernmental organizations, and the private sector, urging them to create a global partnership to collaborate with all stakeholders in social and economic development that improves quality of life in a way that is environmentally sustainable.

Introduction

According to the most popular definition, sustainable development is a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). Since the 1970s, the UN has committed to promoting sustainable development. A series of high-level international conferences has resulted in recommendations to national governments, as well as to multinational and national corporations, to support sustainable development (Siboni and Sangiorgi 2013).

Agenda21 is central to the UN's efforts, providing a plan for action that lists objectives and activities aimed at addressing the urgent need for social and environmental reform in order to achieve sustainable development in the twenty-first century. Agenda21 was presented alongside the Rio Declaration, the Conventions on Climate Change and Bio-Diversity and the Declaration on Forests during the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, the first global UN gathering of heads of state to debate the state of the environment. During the conference, Agenda21 was signed by 183 heads of state, securing their commitment to policies supporting the objectives of the Agenda.

In 1997, the UN General Assembly held a special session (“Rio+5”) to assess what, if any, progress had been made since Agenda21 was signed. The conference concluded that little progress had been made, with an increased disparity having emerged among states, both in terms of the economy and the environment. In response, the General Assembly adopted two further programs

aimed at reviving and strengthening commitment to sustainable development: the “Programme of Work of the Commission for 1998–2002” and the “Programme for the Further Implementation of Agenda21,” which included an action plan for the following 5 years.

The UN’s commitment to fulfilling Agenda21 was confirmed in 2002 during the UN World Summit on Sustainable Development, along with the achievement of the Millennium Development Goals. During 2012, the Fourth UN World Summit on Sustainable Development was held in Rio de Janeiro, 20 years after the first Summit (called Rio+20). In its most recent document, “The future we want” (UN 2012), the importance of Agenda21 was reaffirmed. While this is not a binding agreement, it emphasizes to nation states the importance of implementing sustainable development policies.

While the principal responsibility of implementing Agenda21 remains with national governments, a specific section of the document is devoted to local authorities (Chapter 28), to encourage them to work with stakeholders to formulate and enact a local plan for sustainable development. According to Scherr and Barnhizer (1997), Agenda21 has been most successful at a local rather than national level.

In Europe, the impetus for implementing Agenda21 has been the initiative “Campaign of Sustainable Cities,” which was initially supported by five local authority networks with the participation of the European Commission’s Environment General Directorate. The Campaign was launched during the European Conference for Sustainable Cities held in Aalborg in 1994 and continued during the Fourth European Conference for Sustainable Cities held in 2004 again in Aalborg, where cities agreed to fulfill the Aalborg Commitments, a list of sustainable objectives to be implemented at the local level. The Alliance for Sustainable Cities was confirmed during the Fifth European Conference of Sustainable cities held in Siviglia in 2007, which was followed in 2010 by the Sixth European Conference of the Alliance held in Dunkirk, during which two declaration were approved: The Dunkirk 2010 Declaration on Local

Sustainability and the Call 2010 on Climate Actions, which commits cities to a transition to a green and sustainable economy while also reinforcing the need for cities to acknowledge their role to work closely with national governments toward the goal of sustainable development.

What Is Agenda21?

Agenda21 lists a plan of objectives and actions to support sustainable development at a global, national, and local scale. The overarching themes of the Agenda are the need to urgently address critical issues confronting global society in the twenty-first century. The themes address the intertwining concerns of the climate and society that create a widening gap between and within nations relating to poverty, hunger, ill-health, and illiteracy, and the continuing deterioration of the world’s ecosystem.

The Agenda is founded on the idea that no nation can confront these emergencies alone. It calls for the establishment of a new global partnership for sustainable development, in which nation states engage in a continuous dialog, inspired by the need to achieve a more efficient and equitable world economy, particularly in light of the increasing interdependence of the community and economy of nations. While implementing the Agenda’s objectives and actions is foremost the responsibility of national governments, the document encourages international cooperation, inviting organizations at all levels, from international to national to regional and local, to contribute to this effort. The broadest public participation and the active involvement of nongovernmental organizations and other groups are also encouraged. In fact, Agenda21 promotes a “joint responsibility” of citizens, the public sector and stakeholders, hence, encouraging a synthesizing of the political, organizational, governmental, and individual. In such a context, the traditional conception of the role of government is overturned in favor of a participatory one that is flexible and accessible to a wide range of social participants, aimed at engaging stakeholders in the widest

possible sense, in order to develop a shared sustainable plan for the community.

According to Agenda21, both the economic policies of individual countries and international economic relations are crucial to achieving sustainable development. In fact, the development process needs a dynamic and stable global economy, in which developing countries are not weighed down by external debt, and in which there are no barriers restricting access to markets, as well as fair commodity prices and terms of trade.

Key principles underpinning the Agenda are democracy, subsidiarity, responsibility, transparency, public involvement, in terms of developing a decision process. In terms of environmental governance, the foundations are prevention, precaution, polluter pays, cooperation, and act within the ecosystem.

Table 1 shows the contents of the document, which start with a preamble, followed by 40 chapters in four sections.

Each chapter includes several intervention areas, which are described in terms of the basis for action, objectives, activities, and means of implementation. However, Agenda21 is a dynamic program with the potential to evolve over time as needs and circumstances change. For instance, Chapter 40 on “Information for decision-making” includes the following two areas of interventions:

“A. Bridging the data gap”:

- Basis for actions highlights the need for:
 - Capacity (particularly in developing countries) for collection and assessment of data on the issues covered by the chapters of Agenda21 in order to indicate the status and trends that relate to the global ecosystem and socioeconomic variables, to enable decision-makers to make informed decisions
- Objectives refers to the need to:
 - Achieve more cost-effective and relevant data collection and assessment by better identification of users
 - Strengthening of local, provincial, national, and international capacity to

collect and use multisectoral information in decision-making processes

- Developing or strengthening the means of ensuring that planning for sustainable development in all sectors is based on timely, reliable, and usable information
- Making relevant information accessible both in terms of form and at the time required to facilitate its use
- Activities relates to:
 - Development of indicators of sustainable development
 - Promotion of global use of indicators of sustainable development
 - Improvement of data collection and use
 - Improvement of methods of data assessment and analysis
 - Establishment of a comprehensive information framework
 - Strengthening of the capacity for traditional information
- Means of implementation implies:
 - Financing and cost evaluation, that is, average total annual cost (1993–2000) estimated at about \$1.9 billion from the international community on grant or concessional terms
 - Institutional means, that is, the activities related to development data of agencies and institutions of the UN system should be more effectively coordinated, perhaps through an equivalent and complementary “Development Watch,” which with the existing Earthwatch should be coordinated through an appropriate office within the UN to ensure the full integration of environment and development concerns
 - Scientific and technological means, that is, the need to develop guidelines and mechanisms for rapid and continuous transfer technologies on data-collection and information technologies as well as appropriate training for human resources for such activities
 - Capacity-building, that is, all countries should strengthen their capacity to collect, store, organize, assess, and use data in decision-making more effectively

Agenda21 (UN), Table 1 Table of contents of Agenda21

1. Preamble
Section I. Social and Economic Dimensions
2. International cooperation to accelerate sustainable development in developing countries and related domestic policies
3. Combating poverty
4. Changing consumption patterns
5. Demographic dynamics and sustainability
6. Protecting and promoting human health conditions
7. Promoting sustainable human settlement development
8. Integrating environment and development in decision-making
Section II. Conservation and Management of Resources for Development
9. Protection of the atmosphere
10. Integrated approach to the planning and management of land resources
11. Combating deforestation
12. Managing fragile ecosystems: combating desertification and drought
13. Managing fragile ecosystems: sustainable mountain development
14. Promoting sustainable agriculture and rural development
15. Conservation of biological diversity
16. Environmentally sound management of biotechnology
17. Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources
18. Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources
19. Environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products
20. Environmentally sound management of hazardous wastes, in hazardous wastes
21. Environmentally sound management of solid wastes and sewage-related issues
22. Safe and environmentally sound management of radioactive wastes
Section III. Strengthening the Role of Major Groups
23. Preamble
24. Global action for women towards sustainable and equitable development
25. Children and youth in sustainable development
26. Recognizing and strengthening the role of indigenous people and their communities
27. Strengthening the role of nongovernmental organizations: partners for sustainable development
28. Local authorities' initiatives in support of Agenda21
29. Strengthening the role of workers and their trade unions
30. Strengthening the role of business and industry
31. Scientific and technological community
32. Strengthening the role of farmers
Section IV. Means of Implementation
33. Financial resources and mechanisms
34. Transfer of environmentally sound technology, cooperation and capacity-building
35. Science for sustainable development
36. Promoting education, public awareness and training
37. National mechanisms and international cooperation for capacity building in developing countries
38. International institutional arrangements
39. International legal instruments and mechanisms
40. Information for decision-making

Source: UN (1992)

“B. Improving availability of information”

- Basis for actions highlights that:
 - Even where information is available it is not adequately managed, because of shortages of financial resources and trained manpower, lack of awareness of the value and availability of such information and other immediate or pressing problems, especially in developing countries
- Objectives refers to:
 - Strengthened technical assistance for existing national and international mechanisms of information processing and exchange
 - Strengthened national capacities
 - Ensuring full participation of, in particular, developing countries in any international scheme under the auspices and organizations of the UN system for the collection, analysis, and use of data and information
- Activities relates to:
 - Production of information usable for decision-making
 - Establishment of standards and methods for handling information
 - Development of documentation about information
 - Establishment and strengthening of electronic networking capabilities
 - Making use of commercial information sources
- Means of implementation implies:
 - Financing and cost evaluation, that is, an average total annual cost (1993–2000) estimated at about \$165 million from the international community on grant or concessional terms
 - Institutional means, that is, strengthening of existing institutions, as well as of cooperation with nongovernmental organizations
 - Capacity-building, that is, developed countries and relevant international organizations should cooperate, in particular with developing countries, to expand capacity to receive, store, and retrieve, contribute, disseminate, use,

and provide appropriate public access to relevant environmental and developmental information, by providing technology and training to establish local information services

- Scientific and technological means, that is, developed countries and relevant international organizations should support research and development in hardware, software, and other aspects of information technology, in particular in developing countries

Cross-References

- ▶ [Ecology and Ecosystem: Sustainability](#)
- ▶ [Health and Safety](#)
- ▶ [Human Rights](#)
- ▶ [Hunger and Poverty](#)
- ▶ [Local Agenda 21](#)
- ▶ [Pollution](#)
- ▶ [Rio Declaration on Environment and Development](#)
- ▶ [Social Sustainability](#)
- ▶ [Stakeholder Engagement](#)
- ▶ [Sustainable Consumption](#)
- ▶ [Sustainable Development](#)
- ▶ [Sustainable Growth](#)
- ▶ [United Nations Sustainable Development Goals 2030, The](#)

References

- Scherr, J., & Barnhizer, D. (1997). The failure of Agenda21. *Ecodecision*, 24, 33–36.
- Siboni, B., & Sangiorgi, D. (2013). Genesis and development of the European communication on sustainability in local governments. *International Journal of Advances in Management Science*, 2(2), 43–49.
- United Nations. (1992). Agenda21. Retrieved from <https://sustainabledevelopment.un.org/outcomedocuments/agenda21>
- United Nations. (2012). The future we want. Retrieved from <https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf>
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press. Retrieved from <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

Air Contamination

► Air Pollution

Air Pollutants

► Air Pollution

Air Pollution

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Synonyms

[Air contamination](#); [Air pollutants](#); [Air quality](#); [Atmospheric pollution](#); [Smog](#)

Definition

Air, as known, being a heterogeneous mixture of various gases and particles of different types and sizes, has a variable composition in space and time. For this reason, it is really difficult to define a conventional standard of air quality characteristics and its related pollution conditions.

Starting from this preamble, it could be anyway possible to define, in an indirect way, the concept of air pollution based on the description of the substances (solid, liquid, or gaseous) and phenomena (physical, chemical, and biological) that characterize this state.

In this regard, it is usually distinguished between “contaminant” and “pollutant.” Contaminants are those substances that, added into an environmental system (i.e., in the atmosphere), cause a chemical and/or physical deviation from the average geochemical composition. A pollutant is instead a contaminant that can cause, directly or

indirectly, harmful effects to environment and life (Williamson 1973).

In essence, however, this distinction is less clear than it appears, especially with regard to the earth’s atmosphere: any contaminant, in fact, in the long term, could tend to become a pollutant as a result of the complex chemical reactions to which it could potentially be subject. Therefore, in many situations, contaminants and pollutants are considered synonymous (Zannetti 1990).

According to the above, it would be considered polluted, therefore, the air altered: in its chemical-physical parameters (i.e., noise, heat); in the quantitative relationships of the substances present in it; and/or by the presence of substances outside its average standard composition (or established by law).

Introduction

Air pollution has arisen when mankind began to exploit the non-renewable resources of our planet, in particular the fossil energy sources. Its negative effects can be amplified – in local area and for limited time periods – by different meteorological and climatic factors, such as thermal inversions. As known, this is a well-known natural atmospheric phenomenon for which there is a rise in the thermal gradient with altitude. Under these conditions, the suspension of convective air motions and stagnation near the soil of the pollutants occur. This is exactly the situation that happened in December 1952 in London known as “The Great Smog of London,” when thousands of people prematurely died in a few days (Rodriguez 2014).

Air pollution can be investigated as “external” or “outdoor” pollution (of the atmosphere and, in particular, of the troposphere) and “internal” or “indoor” pollution, typical of closed small environments (i.e., houses and workplaces). The types of pollutants, for the two situations, are usually very different. For indoor pollution, in particular, the characterization of the corresponding pollutants is much more difficult than that of outdoor pollution because its air composition is very variable and characterized by substances not

detectable outdoor (i.e., Rn, H₂CO). Furthermore, the complete understanding of the problems of indoor pollution is still affected by the scarcity of common data from standardized and large-scale monitoring studies (Hernandez and Peden 2014). For these reasons, in this chapter, we will refer mainly to outdoor (atmospheric) pollution and, particularly often, to the contamination of that troposphere zone called PBL (planet boundary layer).

Sources and Pollutants

Pollutants are usually divided into “primary” and “secondary.” The substances directly emitted from sources into the atmosphere and which, often, persist in their native molecular or atomic state (i.e., carbonic, nitrogen, sulfur, and halogen compounds and particulate matter) – are called primary, whereas those substances that, in particular atmospheric conditions, originate from the transformation or chemical reaction between the primary pollutants or between the primary precursors and some natural components of the atmosphere are considered secondary (i.e., tropospheric ozone, aerosols, acids, and nitrogen dioxide) (Daly and Zannetti 2007). This distinction is important for the purposes of the related control measures: in fact, often the reduction in the atmosphere of a primary precursor does not necessarily lead to a proportional reduction of the corresponding secondary pollutant. This is principally due to the complex chemistry between the different particles of the atmosphere.

Atmospheric pollutants can have different origins (emission sources): natural and man-made. The natural sources are very different: gaseous emissions from biological processes; ash and oxides from volcanoes or fires; radioactive emissions; dust and spores from wind-blown soil; aerosols from oceans; geological debris containing asbestos from screes; etc. Also the anthropogenic sources can be numerous; in fact, the emissions can come from: vehicular traffic, industrial activities, home heating, agricultural and zootechnical sector (intensive farms), waste

treatment plants (incinerators, landfills, and composting plants), etc. (Gordon et al. 2014). In this regard, if the source of the emissions is conveyed into a chimney or located in a fixed and limited place, it is a point source of pollution; vice versa, if this does not happen, then it is a non-point source (NPS) of pollution or area source.

The most widespread groups of atmospheric pollutants, according to the WHO's (World Health Organization) “Air quality guidelines” (2006), and among the most monitored in the world are sulfur compounds (SO₂, COS, H₂S, CS₂, etc.), mainly produced by the combustion of fossil energy sources, volcanic eruptions, and decomposition of organic matter; oxides of nitrogen or NO_x (NO as primary pollutant and NO₂ as secondary pollutant from the reaction of NO with O₃) from the high temperatures of combustion processes; carbon compounds (CO and CO₂) from natural sources, motor vehicles, and thermal plants; ozone (O₃), secondary highly oxidizing and toxic pollutant, from the reaction involving solar radiation and nitrogen dioxide; free radicals (OH[•], HO[•], and NO[•]), very reactive secondary pollutants, originating from complex reactions involving O₃ and NO; volatile organic compounds (VOC), which include both hydrocarbons and other compounds containing oxygen and/or halogens, from various chemical products (solvents, paints, fuels, etc.); polycyclic aromatic hydrocarbons (IPA) from combustions in general; halogenated compounds (HCl, HBr, HF, CFC); heavy metals (Cd, Cr, Pb, Hg), mainly from the chemical industries; and particulate matter (PM₁₀, PM_{2.5}, and PM_{0.1}), complex pollutants (primary and secondary) which are produced mainly by combustion processes or chemical-physical reactions directly in the atmosphere.

Effects

The effects, on ecosystems and health, of the pollutant emissions depend not only on the specific fuel or plant (its age and its state of maintenance) but even on factors linked to atmospheric phenomena (i.e., rains, convective and dispersive motions of air currents, and so on) and to the

orography of places, which greatly affect the persistence of pollutants near the ground.

Globally, the most significant adverse effects of air pollution on ecosystems can be acid deposition (see ► [“Acid Rain”](#)), ► [“Greenhouse Effect”](#), and ozone hole. Other effects, on limited areas, are photochemical smog and eutrophication (Saxena and Naika 2019). As known, acid rain originates from the reaction of CO₂, NO_x, and SO₂ with the water vapor of the atmosphere and can cause serious damage to living beings and to anthropogenic and natural environment. The greenhouse effect is a climatic phenomenon that allows the warming (see ► [“Global Warming”](#)) of the earth’s atmosphere by the shielding of some greenhouse gases (CO₂ and CH₄, mainly). The ozone hole, due to the preponderance of organic halogenated compounds, causes the reduction of the natural protection of ecosystems against ultraviolet (UV) radiation from the sun.

The risks of air pollution to health are not yet fully clarified. However, the possible effects may be acute (in the short term) and chronic (in the long term). Short-term ones are investigated by medical researches on a daily basis. Those of long term, which are more difficult to identify and characterize, are subject by long-term cohort investigations. The acute risks extend from simple irritations of the respiratory system up to the possible onset of severe respiratory and cardiovascular diseases caused by ozone, nitrogen, and sulfur oxides. Prolonged exposure to some pollutants (fine particulate matter, benzene, and heavy metals) can cause asthma, chronic bronchitis and emphysema (chronic obstructive pulmonary disease or COPD), lung cancer, leukemia, and death (Kampa and Castanas 2008). The toxicity of the effects is very variable and depends obviously on the age of the subjects involved (children and old people are obviously the most sensitive), the health conditions, and the intensity of exposure.

Countermeasures

In the last 40 years, the international community has begun to take care of this problem by laws and instruments that allowed lowering the

concentrations of pollutants such as sulfur dioxide, lead, and carbon dioxide. The first international convention that aimed to protect the environment and health from atmospheric pollution was that of Geneva in 1979 (Convention on long-range transboundary air pollution or CLRTAP). Over the years, other conventions, implementation protocols, and directives have followed it. These international improvement tools have had clear positive feedback on air quality and health, but have not yet solved the problem at all.

In the industrial sector, for a long time, the polluting emissions have been strongly regulated. Industrial plants, in fact, are regularly subjected to inspections and checks by the competent control authorities and are obliged to adopt systems to reduce their impact on the environment.

To moderate air pollution, much more can and should be done by nations and people (see ► [“Pollution”](#) and ► [“Pollution Prevention”](#)): periodically checking the combustion plants and the pollutant abatement systems; reducing urban circulation in city centers and during traffic congestion; modernizing motor vehicles; choosing collective transport solutions (buses or trains); driving at moderate speed; recycling waste; moderating the temperature of heating/cooling systems; preferring energy renewable sources; adopting energy-saving tools and environmental friendly styles of consumption; and so on.

Summary

Air pollutants can alter the earth’s climate and cause danger to the quality of the environment (natural or anthropic), to ecosystems, to life, and to humans, in particular. They can also seriously affect the rightful uses of the environment by mankind. Air pollution is one of the environmental problems that most concern the populations of large urban conglomerations mainly due to the high density of emissions (that is, the quantity of pollutants emitted per unit of territory) in these places. A complete evaluation of the potential polluting effect of the thousands of substances released into the air would be quite complicated,

so only specific pollutants – characterized by a high level of environmental pollution potential – are investigated by the international scientific community. Atmospheric pollutants have direct repercussions – even at considerable distances from the place of emission – on ecosystems, especially on the most vulnerable ones, and on health. To reduce air pollution, much more can and should be done by nations and people.

Cross-References

- [Acid Rain](#)
- [Global Warming](#)
- [Greenhouse Effect](#)
- [Pollution](#)
- [Pollution Prevention](#)

References

- Daly, A., & Zannetti, P. (2007). An introduction to air pollution – Definitions, classifications, and history. In P. Zannetti, D. Al-Ajmi, & S. Al-Rashied (Eds.), *Ambient air pollution*. Freemont: The Arab School for Science and Technology (ASST) and The EnviroComp Institute.
- Gordon, T., Stanek, L. W., & Brown, J. S. (2014). Air pollution: Sources, regulation, and health effects. In P. Wexler (Ed.), *Encyclopedia of toxicology* (pp. 995–1002). London: Academic.
- Hernandez, M. L., & Peden, D. B. (2014). Air pollution: Indoor and outdoor. In N. Adkinson, B. Bochner, A. Burks, W. Busse, S. Holgate, R. Lemanske, R. Hehir, & E. Middleton (Eds.), *Middleton's allergy: Principles and practice*. Philadelphia: Elsevier/Saunders.
- Kampa, M., & Castanas, E. (2008). Human health effects of air pollution. *Environmental Pollution*, 151(2), 362–367.
- Rodriguez, Y. R. (2014). Great smog of London. In P. Wexler (Ed.), *Encyclopedia of toxicology* (pp. 796–797). London: Academic.
- Saxena, P., & Naika, V. (2019). *Air pollution: Sources, impacts and controls*. Wallingford/Oxfordshire/Boston: CAB International.
- Williamson, S. (1973). *Fundamentals of air pollution*. Reading: Addison-Wesley.
- World Health Organization. (2006). *Air quality guidelines: Global update 2005: Particulate matter, ozone, nitrogen dioxide, and sulfur dioxide*. Copenhagen: World Health Organization.
- Zannetti, P. (1990). *Air pollution modeling: Theories, computational methods and available software*. Boston: Springer.

Air Quality

- [Air Pollution](#)

Algae

- [Algae Bioenergy](#)

Algae Bioenergy

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Synonyms

[Algae](#); [Biomass](#); [Biofuel](#); [Sustainability](#)

Definition

Algae can be referred to as a broad, diversified class of eukaryotic, photosynthetic organisms.

They can be single-celled, multicellular, or even exist in colonies. Algae are a polyphyletic group of creatures that include Bacteria, Plantae, Chromista, and Protozoa, all classified as members of separate biological kingdoms.

Algae contain chlorophyll which gives them the photosynthetic ability to convert sunlight and carbon dioxide to produce oxygen and energy in the form of sugar. Algae are abundantly present in practically every area of oceans and other water bodies that receive sunlight.

The term “biomass” refers to any fuel made from plants that can be used to generate heat or electricity. To further meet the need for transportation fuel, biomass is turned into liquid fuels referred to as Biofuels.

The use of biofuel made from biomass resources has been promoted to meet the world’s energy needs and lower pollution emissions from the transportation industry. Using biomass and other biodegradable wastes effectively through biofuel production is a sustainable strategy.

There are 44,000 species, although the precise number varies depending on who defines “algae,” with some estimates putting the figure as high as a million (Guiry, 2012).

Examples of classes of algae are algae (Chlorophyceae), brown algae (Phaeophyceae), red algae (Rhodophyceae), cyanobacteria (Cyanophyceae), diatoms (Bacillariophyceae), yellow-green algae (Xanthophyceae), golden algae (Chrysophyceae), dinoflagellates (Dinophyceae), (Prasinophyceae and Eustigmatophyceae).

Introduction

Microalgae are a diverse group of microorganisms that have adapted to various environmental conditions in response to photooxidative stress or other adverse environmental circumstances. Many microalgae produce large quantities of triacylglycerols (TAG) as a storage lipid (e.g., 20–50% dry cell weight) (Hu et al., 2008). They are regarded as primary producers because, when exposed to sunlight, they are the predominant converters of water and carbon dioxide to biomass and oxygen (Kukwa & Chetty, 2021).

Microalgae species can rapidly develop and produce significant amounts of oil, making them

great candidates for producing biofuel oils and other lipids (Sheehan et al., 1998). Furthermore, while macroalgae generate little lipids, they are a substantial source of carbohydrates that may be converted to bioethanol or biomethane by biological conversion processes such as anaerobic digestion and fermentation (Driver et al., 2014). Furthermore, algae are considered potential feedstocks for future bioenergy production; numerous recent literature studies have focused on algal-based biofuels and bioproducts, as well as the possibilities and problems that come with them (Williams & Laurens, 2010).

This Encyclopedia chapter aims to supply a long-term perspective of algal biofuel development. Microalgae have been the focus of most of the bioenergy research and development, from basic research through conversion and implementation. As a result, microalgae will get much of the focus in this study.

Potential of Algae Bioenergy

Global demand for fossil-fuel-based energy is rising as the world’s population continues to expand. As a result of worldwide usage, fossil fuels have been depleted and will be depleted and consumed. This situation is because they are non-renewable and cannot be reused. There’s a reason biofuel is gaining popularity worldwide, especially in countries with limited financial resources and assets. (Khan et al., 2018).

Burning fossil fuels is terrible because it promotes global climate change by increasing greenhouse gas (GHG) emissions. Microalgae could be a viable renewable energy source, and they could help fulfil the Sustainable Development Goals by reducing greenhouse gas emissions. (SDGs) (Merlo et al., 2021).

It is possible to drastically reduce CO₂ emissions worldwide by using algae-based microalgae fuels, which are both environmentally friendly and non-toxic. According to one study, one kilogram of algal biomass can absorb 1.83 kg of CO₂ from the atmosphere (Paul et al., 2014). Microalgae have been hailed as a potential next-generation biofuel source because they are 10–20 times more

abundant than any other biofuel crop and do not need a lot of area or valuable biodiverse landscapes to grow (Narala et al., 2016).

Microalgae could be utilized to make a variety of biofuels. Biodiesel and biohydrogen are produced from microalgal oil (Gavrilescu & Chisti, 2005; Kapdan & Kargi, 2006; Spolaore et al., 2006).

Biofuels have been produced using microalgae. Several countries have started research programs to discover how to grow microalgae for biofuels since then (Oswald and Golueke, 1950). Microalgae production for biofuels has started in the United States, Australia, and Japan, among other countries (Salian & Strezov, 2017).

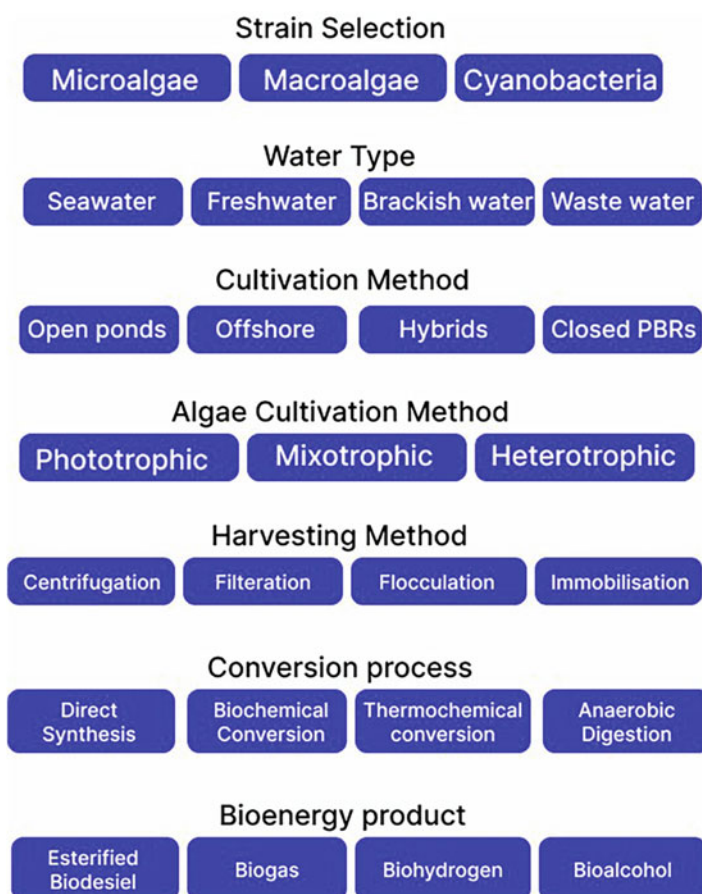
In the past two decades, algae-based biofuels have attracted much attention. Microalgae biofuels have been thoroughly explored from a technical, economic, and environmental

standpoint. The most significant focus has been paid to profitability measurements (Venkatesan et al., 2017). Microalgae's contribution to the United Nations' Sustainable Development Goals (SDGs), as well as global and climatic change, is another indicator that they will be there for a long time. More study is needed to properly understand how microalgae may help make the world a better place (Itoiz et al., 2012) (Fig. 1).

The numerous options for algae biofuel production are illustrated. There are many options for algae type and strain, including eukaryotic algae and prokaryotic cyanobacteria, the water source for cultivation, cultivation method and algae cultivation method, algae harvesting method and biofuel conversion process. These processes determine how metabolite like a triacylglycerol is extracted from algae and what type of biofuel is generated (Driver et al., 2014).

Algae Bioenergy,

Fig. 1 The building blocks of algal biofuel manufacturing



Even though both microalgae and macroalgae are viable bioenergy feedstocks, most liquid biofuels research has focused on microalgae due to their high biomass output, great oil content, and low land requirements. Macroalgae, or seaweeds, on the other hand, have the potential to make a significant contribution to algae-based bioenergy production and are of particular interest to countries with macroalgae-friendly beaches. Although ethanol synthesis from macroalgae has been shown, primary bioenergy applications for macroalgae are more for biogas production than liquid biofuels (Chen et al., 2015).

According to several studies, microalgae biofuel production has several advantages, including:

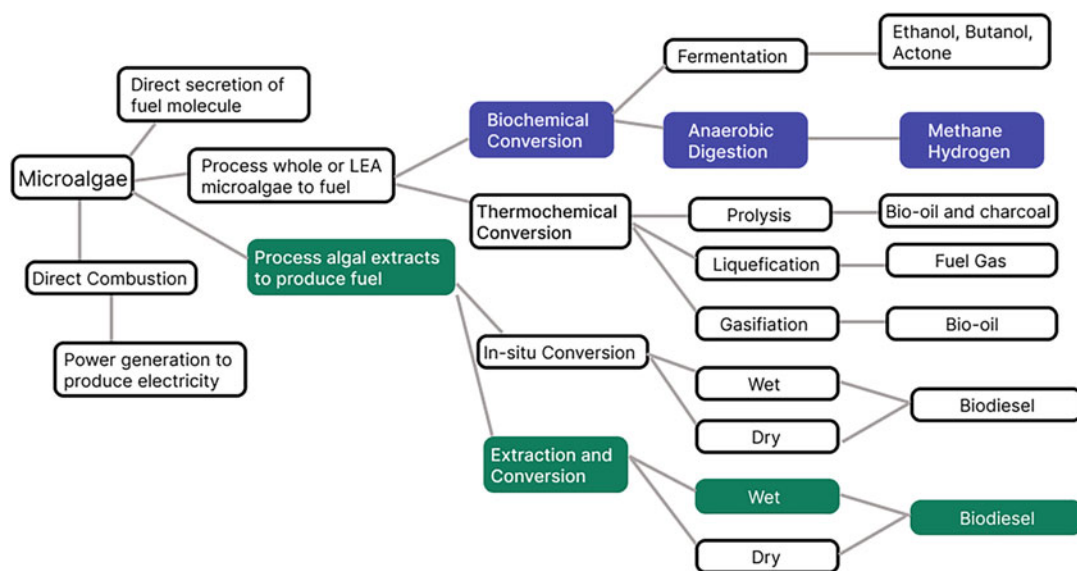
- (i) No conflict with human or animal food chains.
- (ii) High carbohydrate, protein, and oil content.
- (iii) Ability to grow in aqueous media such as wastewater, freshwater, and saline water.
- (iv) Ability to assimilate nutrients from brackish, salt, or highly polluted water.
- (v) Create a long-term O₂ generating method and employ it in photosynthetic respiration to reduce CO₂ emissions (Laurens et al., 2017).

Algae Biomass Production Systems for Bioenergy

Open and enclosed culture systems are the two kinds of culture systems used to produce biomass from microalgae (Itoiz et al., 2012). Raceways and open ponds have low initial construction and maintenance costs, low volumetric production, and difficult-to-control properties such as temperature, evaporation, and pollution. Horizontal photobioreactors, bubble columns, and flat panels yield 13-fold more volumetric biomass than raceways or ponds. They can grow only one microalgal cell (monoculture) and are less prone to contamination than open systems. Compared to open systems, enclosed systems have a higher initial construction cost. Photobioreactors offer a controlled environment tuned to the unique needs of very prolific microalgae, resulting in consistently high oil production year after year (Chisti, 2007).

The algal biofuel production method follows several steps that take you from algae growth through collection and harvest and eventually to fuel conversion (Fig. 2).

As illustrated above, there are numerous possibilities for producing biofuel from algal



Algae Bioenergy, Fig. 2 Energy production from algae via different pathways (Zewdie & Ali, 2020)

biomass. Various elements, including material and energy efficiency, infrastructure availability, CO₂ emissions, and other environmental issues, influence the criteria for selecting the optimal biomass process (Zewdie & Ali, 2021). According to Davis et al. (2011), the routes help demonstrate the resource requirements and repercussions of scaling up alternative technologies to produce algal biofuels.

Critical Issues to Algae Bioenergy Production

In 2017, the International Energy Agency's (IEA) Bioenergy Technology Collaboration Program (TCP) commissioned and released research on the status of algae-based bioenergy technology, covering many problems. This chapter is the product of literature on processing, biorefinery applications, macroalgae, and general techno-economics or sustainability problems (IEA, 2017). The following are some of the report's primary messages:

- Algae have excellent photosynthetic efficiencies and yields (up to double that of terrestrial plants, 55 tons ha⁻¹ yr⁻¹), making them an appealing target for improving the long-term sustainability of bioenergy production.
- The cost of producing and collecting algal biomass feedstocks, which is now a factor of 10–20 too high for commodity fuel generation, remains the single most significant obstacle to the commercial deployment of algae.
- The low cost of natural gas, along with the lack of consistent carbon pricing regimes, makes developing cost-competitive algae-based bioenergy products such as gaseous and liquid fuels difficult.
- Algae might be employed in an integrated biorefinery to produce higher-value food, feed, nutraceutical, and oleochemical bio-products in the near future, which could aid the development of cost-effective bioenergy production.
- Land use competition will come from other market possibilities for algal biomass, such as food and feed usage.
- Water, land, and sunlight availability, as well as nutrient demands (N, P), remain critical economic and environmental challenges, with wastewater integration providing near-term answers.
- Recent technological advancements have allowed all components of algal biomass to be used; algal biomass production is no longer just focused on achieving high lipid output.
- According to the literature, algae-based bioenergy production of primary products such as liquid or gaseous fuels is unlikely to be economically viable in the near future. Under mild maritime circumstances, macroalgae have a lot of promise as a biogas, chemicals, and biofuels crop. Its commercialization is also hampered by cost and scalability issues.
- From cultivation through product separation to Techno-economic analysis (TEA) and Life cycle assessment (LCA) and modelling, more open data sharing and standardization of analytical methodologies are critical for identifying and overcoming hurdles to low-cost bioenergy production.

Experts do not argue that microalgae are the answer to humanity's underlying energy issues, according to Merlo et al. (2021). However, they could be a part of the global answer, particularly in rural or underdeveloped areas. Microalgae biofuel could help manage the majority of global GHG emissions and climate change by partially replacing fossil fuels, which are nearing their limits. Biofuels made from microalgae are produced, processed, and used in various ways to achieve the Sustainable Development Goals.

Despite the relevance and significance of biofuel as an energy source, various technological obstacles and constraints must be overcome, according to the critical conclusions of the IEA research, to produce enough biofuel to fulfil global energy demand. Primary obstacles in bioenergy production include identifying potential species with triacylglycerides in optimal

cultivation, adaptability and development of cultures (inocula), large-scale systems, and overall cost reduction (Hu et al., 2008).

Aside from the prohibitive cost and other challenges, microalgae biofuels have a lower energy and water impact than terrestrial biofuels (Maeda et al., 2018). Microalgae may also contribute to the attainment of crucial SDGs vital to our society by creating sustainable energy. They give a lot of room for expansion and allow governments to diversify their energy mix while improving energy stability and security. As a result, petroleum supplies are limited, and rising oil prices are unavoidable as the oil peak approaches (Turiel, 2010).

Summary

Microalgae could be used to manufacture biofuels by acting as a cell factory. They are renewable, sustainable, and cost-effective biofuels that could be an alternative to liquid fossil fuels in terms of sustainability and environmental challenges. The cost of producing algae-based biofuels continues to divide experts, and it's uncertain whether they'll be able to compete effectively in the market against fossil fuels or conventional biofuels.

More sophisticated research is required to make large-scale biofuel manufacturing cost-effective. Most current R&D efforts are focused on lowering these expenses. Several businesses engaged in the commercial development of algae-based biofuels have shifted their attention to higher-value foods, feed, and speciality commodities.

One way to reduce the cost of algae-based biofuel production is to use multi-product biorefinery technology, which allows algal biomass to be sustainably processed into various bio-based commodities and bioenergy products. Applications for algae-based bioenergy are continuously being developed. Algae-based biofuel production costs must improve to compete with fossil fuels or conventional biofuels, although the requisite degree of increase is attainable.

The issues of commercialization and successful algae production for low-value energy and fuel sectors are expected to be solved in the not-too-distant future, ensuring a sustainable energy source.

References

- Chen, H., Qiu, T., Rong, J., He, C., & Wang, Q. (2015). Microalgal biofuel revisited: An informatics-based analysis of developments to date and future prospects. *Applied Energy*, 155, 585–598. <https://doi.org/10.1016/j.apenergy.2015.06.055>.
- Chisti, Y. (2007). Biodiesel from microalgae. *Biotechnology Advances*, 25(3), 294–306.
- Davis, R., Aden, A., & Pienkos, P. T. (2011). Techno-economic analysis of autotrophic microalgae for fuel production. *Applied Energy*, 88(10), 3524–3531.
- Driver, T., Bajhaiya, A., & Pittman, J. K. (2014). Potential of bioenergy production from microalgae. *Current Sustainable/Renewable Energy Reports*, 1(3), 94–103. <https://doi.org/10.1007/s40518-014-0011-8>.
- Gavrilescu, M., & Chisti, Y. (2005). Biotechnology—A sustainable alternative for the chemical industry. *Biotechnology Advances*, 23(7–8), 471–499. <https://doi.org/10.1016/j.biotechadv.2005.03.004>.
- Guiry, M. D. (2012). How many species of algae are there? *Journal of Phycology*, 48(5), 1057–1063.
- Hu, Q., Sommerfeld, M., Jarvis, E., Ghirardi, M., Posewitz, M., Seibert, M., & Darzins, A. (2008). Microalgal triacylglycerols as feedstocks for biofuel production: Perspectives and advances. *The Plant Journal*, 54(4), 621–639.
- IEA Bioenergy, State of Technology Review - Algae Bioenergy. (2017). 978–1–910154–30–4. <http://www.ieabioenergy.com/publications/state-of-technology-review-algae-bioenergy/>
- Itoiz, E. S., Fuentes-Grünwald, C., Gasol, C. M., Garcés, E., Alacid, E., Rossi, S., & Rieradevall, J. (2012). Energy balance and environmental impact analysis of marine microalgal biomass production for biodiesel generation in a photobioreactor pilot plant. *Biomass and Bioenergy*, 39, 324–335.
- Kapdan, I. K., & Kargi, F. (2006). Bio-hydrogen production from waste materials. *Enzyme and Microbial Technology*, 38(5), 569–582.
- Khan, M. I., Shin, J. H., & Kim, J. D. (2018). The promising future of microalgae: Current status, challenges, and optimization of a sustainable and renewable industry for biofuels, feed, and other products. *Microbial Cell Factories*, 17(1), 1–21. <https://doi.org/10.1186/s12934-018-0879-x>.
- Kukwa, D. T., & Chetty, M. (2021). Microalgae: The multifaceted biomass of the 21st century. *Biotechnological applications of Biomass*, 355.

- Laurens, L. M., Markham, J., Templeton, D. W., Christensen, E. D., et al. (2017). Development of algae biorefinery concepts for biofuels and bioproducts; a perspective on process-compatible products and their impact on cost-reduction. *Energy & Environmental Science*, 10(8), 1716–1738.
- Maeda, Y., Yoshino, T., Matsunaga, T., Matsumoto, M., & Tanaka, T. (2018). Marine microalgae for the production of biofuels and chemicals. *Current Opinion in Biotechnology*, 50, 111–120.
- Merlo, S., Gabarrell Durany, X., Pedroso Tonon, A., & Rossi, S. (2021). Marine microalgae contribution to sustainable development. *Water*, 13(10), 1373. <https://doi.org/10.3390/w13101373>.
- Narala, R. R., Garg, S., Sharma, K. K., Thomas-Hall, S. R., Deme, M., Li, Y., & Schenk, P. M. (2016). Comparison of microalgae cultivation in photobioreactor, open race-way pond, and a two-stage hybrid system. *Frontiers in Energy Research*, 4, 29.
- Salian, K., & Strezov, V. (2017). Biofuels from microalgae. In *Encyclopedia of sustainable technologies* (pp. 107–120). Elsevier.
- Sheehan, J., Dunahay, T., Benemann, J., & Roessler, P. (1998). A look back at the US Department of Energy's aquatic species program: Biodiesel from algae. *National Renewable Energy Laboratory*, 328, 1–294.
- Spolaore, P., Joannis-Cassan, C., Duran, E., & Isambert, A. (2006). Commercial applications of microalgae. *Journal of Bioscience and Bioengineering*, 101(2), 87–96.
- Venkatesan, J., Anil, S., & Kim, S. K. (2017). Introduction to seaweed polysaccharides. In *Seaweed polysaccharides* (pp. 1–9). Elsevier.
- Williams, P. J. L. B., & Laurens, L. M. (2010). Microalgae as biodiesel & biomass feedstocks: Review & analysis of the biochemistry, energetics & economics. *Energy & Environmental Science*, 3(5), 554–590.
- Zewdie, D. T., & Ali, A. Y. (2021). Utilization of sugarcane factories' wastes as inexpensive source of nutrients and CO2 for microalgal biomass production: Process coupling and potential evaluation. *SN Applied Sciences*, 3(3), 1–15.

Alteration

- [Communication and Innovation](#)

Alternative Consumerism

- [Responsible Consumption](#)

Alternative Energy

- [Energy-Renewable](#)

Alternative Finance

- [Mezzanine Finance](#)

Altruism

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Definition

Altruistic acts are acts committed with the intention to purposively help others, even at the expense of one's welfare. The English word altruism comes from Latin word *alter* which means "other". Auguste Comte is credited as the originator of the word.

Conditions for the Development of Altruistic Behavior

Various explanations on the origin of altruism and cooperation between beings exist. However, all of those have in common that they emphasize that for the existence of altruism, beings need to have at least some access to the faculty of memory, and they need to be able to distinguish and categorize different members of their and other species in some way. Ability to distinguish between members of different species in turn suggests that they also have some, at least rudimentary, understanding of different beings and their qualities (Broom 2003, p. 89; Dugatkin and Alfieri 2002). In the

context of life in general, e.g., biological altruism, the condition of intention is emitted, and the acts are only looked through the lens of consequences the act has on fitness. If the intentions were presupposed as the necessary condition, then altruistic behavior would be reserved only to humans.

Altruistic Behavior with an Intention to Act

Unlike actions in the general animal kingdom, when it comes to people, for something to be considered as an altruistic act, there is very often a presupposed intention to carry out the act with the purpose of helping others. This might be called “real” altruism. Nonetheless, even when the discussion is about human altruistic behavior, there are possible distinctions. For example, it is not the same if a person does something out of entirely selfless reasons and a wish to help others or if a person does something to help others but has some self-interest in the results of that action. Both cases can be looked at as altruistic. The difference in motives, having entirely no self-interest and having some interest, can be made more apparent by denoting altruistic acts and the use of the word altruism, as cases of “strong” and “weak” altruism (Kraut 2018).

In the case of “strong” altruism, there is no self-interest on the side of the agent, and there is a possibility of some loss. For example, one might be willing to help a stranger in the city to get around and in doing that lose its time and perhaps even be late for work. On the other hand, in the case of “weak” altruism, there is some motive for acting which is at least somewhat related to the well-being of an agent. For example, a person might again wish to help a stranger in the city, but the person wishes to leave a good impression believing that would help increase his chances of future well-being in whatever context.

Both strong and weak cases of altruism should be distinguished from self-sacrificing behavior where there is always a loss present for the agent. An everyday example of something not being self-sacrificing behavior might be the situation when someone has lunch vouchers but cannot use them

all and gives them to someone else, so they do not go to waste. Here there is no actual loss for the person giving the vouchers. A completely different situation is when someone gives their vouchers to someone and goes hungry as a result.

Cross-References

► [Altruistic CSR](#)

References

- Broom, D. (2003). *The evolution of morality and religion*. Cambridge: Cambridge University Press.
- Dugatkin, L. A., & Alfieri, M. S. (2002). A cognitive approach to the study of animal cooperation. In M. Bekoff, C. Allen, & G. M. Burghardt (Eds.), *The cognitive animal. Empirical and theoretical perspectives on animal cognition* (pp. 413–419). London: The MIT Press.
- Kraut, R. (2018). Altruism. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2018 ed.). <https://plato.stanford.edu/archives/spr2018/entries/altruism/>. Accessed 20 Feb 2019.

Altruistic CSR

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Synonyms

[Altruism](#); [Altruistic morality](#); [Altruistic way of doing business](#); [Applications of altruistic moral teachings](#); [Beneficent way of doing business](#); [Benevolent](#); [Charitable](#); [Humanitarian CSR](#); [Philanthropic CSR](#)

Definition

Altruistic CSR

The term altruism means renunciation of the self and an exclusive concern and care for the welfare

of others. Therefore altruistic CSR is a form of corporate social responsibility (CSR) that goes beyond ethical behavior to voluntarily donate time and/or money towards certain groups of stakeholders, even if the time or money commitment sacrifices part of the business profitability.

Introduction

CSR as a Concept

CSR is the internal obligation of each business entity to account for the way its activities impact the economic, social, and environmental dimensions of its environs and to ensure that this impact generates equitable and sustainable benefits and there is no harm to all the stakeholders involved.

The CSR concept developed from two sources at different times but converged as a business norm after the millennium. One source was CSR as business ethics, and the other was CSR as part of sustainable development programs promoted by the United Nations (United Nations 1992). The idea that a company should be responsive towards the society rather than simply achieve economic goals was raised through discussions on business ethics since the 1950s (Carroll 1999). CSR as part of sustainable development programs started in the early 1990s, shortly prior to the Earth Summit held by the United Nations. The conference called for cooperation to reduce environmental damages and to pursue business goals while considering environmental impacts (United Nations 1992).

Evolution Phase of Corporate Social Responsibility

If we study the evolution phase of corporate social responsibility globally, we would come across certain distinct time periods, and each of such time periods had added to or enriched the concept of CSR through the valuable researches carried on by various eminent researchers.

The first *time period of 1920–1950s* concentrated on the social responsibilities of businessmen which was quite evident from some of the works worth noting like Chester Barnard's *The Functions of the Executive* (1938), J. M. Clark's

Social Control of Business (1939), and Theodore Kreps's *Measurement of the Social Performance of Business* (1940), to point out just a few. In the second time period of the 1950s, corporate social responsibility as a concept started taking shape. Most scholars point to Howard Bowen's *Social Responsibilities of the Businessman* (1953) as the first attempt to theorize the relationship between companies and society (Carroll 1999; Preston and Post 1975; Wartick and Cochran 1985). According to Bowen, CSR "refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (Bowen 1953). The *decade of the 1960s* "marked a significant growth in attempts to formalize or more accurately, state what corporate social responsibility means" (Carroll 1999). He suggested that some of the most prominent writers during that time were Keith Davis, Joseph W. McGuire, William C. Frederick, and Clarence C. Walton. The notion of business ethics to corporate social responsibility was introduced during this era. The *time period of the 1970s* was an era of enlightened self-interest. A breakthrough in conceptual development was observed during this period when a new study on corporate social responsibility was commissioned by the Committee for Economic Development. The Committee described corporate social responsibility as being "related to products, jobs and economic growth; related to societal expectations; and related to activities aimed at improving the social environment of the firm" (US Committee for Economic Development in Wheeler et al. 2003). There was enthusiasm and research in the field of corporate social responsibility in the 1970s (Ackerman 1973; Fitch 1976; Murray 1976). The *era of the 1980s* paved way for the development of complementary themes to CSR. A prominent development in terms of corporate social responsibility was the global debate on sustainable development that emerged in this decade (Tilbury and Wortman 2004; World Commission on Environment and Development 1987). The *era of the 1990s* was that of imbibing the concept of CSR in the field of strategic management. CSP, stakeholder theory, business ethics

theory, and corporate citizenship were the major themes that took center stage in the 1990s (Carroll 1999). Corporate social responsibility advanced with more practical applications in mind by strategic management scholars such as Philip Kotler, Nancy Lee, Michael Porter, Rosabeth Moss Kanter, and Stuart Hart. In the *twenty-first-century* expansions, the theoretical contributions to the concept and meaning of CSR had given way to empirical research on the topic and a splintering of interests away from CSR into related topics such as stakeholder theory, business ethics, sustainability, and corporate citizenship. The most optimistic perspective during this era was depicted well by D. Lydenberg (2005) in his book *Corporations and the Public Interest: Guiding the Invisible Hand*. Lydenberg saw CSR as “a major secular development, driven by a long-term reevaluation of the role of corporations in society.”

Three Forms of CSR

Ethical CSR

Ethical CSR is morally mandatory and goes beyond fulfilling a firm's economic and legal obligations, to its ethical responsibilities to avoid harms or social injuries, even if the business might not appear to benefit from this. Hence, a corporation is morally responsible to any individuals or groups where it might inflict actual or potential injury (physical, mental, economic, spiritual, and emotional) from a particular course of action (Lantos 2001). Although economic and legal responsibilities embody ethical norms about fairness and justice, ethical responsibilities embrace those activities and practices that are expected or prohibited by societal members even though they are not codified into law. Ethical responsibilities embody those standards, norms, or expectations that reflect a concern for what consumers, employees, shareholders, and the community regard as fair, just, or in keeping with the respect or protection of stakeholders' moral rights. In one sense, ethics or values precede the establishment of law because they become the driving force behind the very creation of laws or regulations.

Altruistic CSR

Fulfillment of an organization's philanthropic responsibilities, going beyond preventing possible harms (ethical CSR) to helping alleviate public welfare deficiencies, regardless of whether or not this will benefit the business itself is what altruistic CSR is all about. Altruistic CSR is equivalent to Carroll's (2000) philanthropic responsibilities and involves contributing to the good of various societal stakeholders, even if this sacrifices part of the business' profitability. The justification lies in the fact that the corporation has been entrusted with massive economic and human resources and has the power to affect many parties beyond the shareholders. Thus, there is a social contract between business and society. Philanthropic responsibilities encompass those corporate actions that are in response to society's expectation that businesses be good corporate citizens. This includes actively engaging in acts or programs to promote human welfare or goodwill. The distinguishing feature between philanthropy and ethical responsibilities is that the former is more discretionary or voluntary on the part of businesses even though there is always the societal expectation that business provides it whereas ethical responsibilities are morally mandatory.

Strategic CSR

Strategic CSR involves being responsive to societal needs that in turn would accomplish strategic business goals. Strategic CSR is central to the firm's value creating activities. By taking a strategic approach, companies can choose activities that will strengthen their competitive advantage. If CSR becomes a part of a company's overall plan, then organizations can ensure that nothing affects the need to behave ethically with their stakeholders. Strategic CSR helps companies to balance economic value with that of societal value, manage their stakeholder relationships, identify and respond to threats and opportunities facing their stakeholders, and develop sustainable business practices. *It is here that the opportunities for shared value truly lie. The success of the company and the success of the community*

become mutually reinforcing. If a social issue is closely connected to the company's business, then the opportunity to leverage the firm's resources and capabilities and benefit society is greater.

Key Issues

Altruistic CSR according to many authors (Lantos 2001) is not a legitimate corporate activity. Corporations do not have the obligation to engage in altruistic activities, but it is their responsibility to ensure that society is not harmed by their actions. One of the main challenges for business is to establish an effective CSR framework that combines both the aspects of profitability and responsibility towards the stakeholders and environment. Corporations are not altruistic, and they cannot be altruistic in a competitive environment. Hence, declaring philanthropy as CSR gives an imperfect picture of the business as well as its relationship with the society. The philanthropic approach to CSR which wants a corporation to take responsibility beyond their core business activities is problematic. Thus we need to emphasize more on strategic CSR which benefits both companies and the society.

Cross-References

- [Altruism](#)
- [Business Case of CSR](#)
- [Corporate Citizenship](#)
- [Corporate Social Responsibility](#)
- [CSR Pyramid](#)
- [CSR: Evolution of concept](#)
- [Definitions of CSR](#)
- [Embedded CSR](#)
- [Philanthropic CSR](#)
- [Social Case of CSR](#)
- [Strategic CSR](#)
- [Sustainable Tourism \(Sustainable Development of Tourism, Sustainable Tourism Management\)](#)
- [World Business Council for Sustainable Development](#)

References

- Ackerman, R. W. (1973). How companies respond to social Demand's. *Harvard Business Review*, 51(4), 88–98.
- Bowen, H. (1953). *Social responsibilities of the businessman*. New York: Harper.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38(3), 268–295.
- Carroll, A. B. (2000). Ethical challenges for business in the new millennium: Corporate social responsibility and models of management morality. *Business Ethics Quarterly*, 10(1), 33–42.
- Clark, J. M. (1939). *Social control of business*. New York: McGraw-Hill.
- Fitch, H. G. (1976). Achieving corporate social responsibility. *Academy of Management Review*, 1, 38–46.
- Kreps, T. J. (1940). *Measurement of the social performance of business: In an investigation of concentration of economic power for the temporary National Economic Committee* (Monograph NO. 7). Washington, DC: Government Printing Office.
- Lantos, G. P. (2001). The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing*, 18(7), 595–630.
- Lydenberg, S. D. (2005). *Corporations and the public interest: Guiding the invisible hand*. San Francisco: Berrett-Koehler Publishers, Inc.
- Murray, E. A., Jr. (1976). The social response process in commercial banks: An empirical investigation. *Academy of Management Review*, 1, 5–15.
- Preston, L. E., & Post, J. E. (1975). *Private management and public policy. The principle of public responsibility*. Englewood Cliffs: Prentice Hall.
- The United Nations Framework Convention on Climate Change. (1992). Rio De Janeiro.
- Tilbury, D., & Wortman, D. (2004). *Engaging people in sustainability*. IUCN, Commission on Education and Communication.
- Wartick, S., & Cochran, P. L. (1985). The evolution of corporate social performance model. *Academy of Management Review*, 10(4), 758–769.
- Wheeler, D., Colbert, B., & Freeman, R. E. (2003). Focusing on value: Reconciling corporate social responsibility, sustainability and a stakeholder approach in a network world. *Journal of General Management*, 28(3), 1–28.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.

Altruistic Morality

- [Altruistic CSR](#)

Altruistic Way of Doing Business

► Altruistic CSR

Analysis

► Audit

Analysis of Value Chain

► Value Chain Analysis

Angel Philanthropy

► Venture Philanthropy

Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier)

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Synonyms

One-tier board model versus two-tier board model; Outsider system versus insider system; Shareholder-oriented systems versus relationship-based system; Unitary model versus dual model

Definition

One-tier and two-tier models are the typical expressions used to describe how corporate

governance is structured in a company, in compliance with its country's legislation.

In a one-tier model, corporate governance prerogatives are assigned to a single board, named the board of directors. This board is usually appointed by the shareholders' meeting, and according to the law, it exercises both direction and control. The one-tier model is typical of the Anglo-American countries, but it can be found in other world regions too.

A two-tier model consists of two separate corporate governance boards, which are appointed in sequence. The process starts with the appointment of the supervisory board by the shareholders' meeting; the employees can also take part in the nomination process, if it is laid down by law. Then, the supervisory board appoints the management board, which is composed of executives who are selected from outside the supervisory board. The two-tier model mainly characterizes Germany and the Rhine context.

The legislation of some European countries, such as Italy, Portugal, and the Netherlands, also envisages a third type of corporate governance model, in which two separate bodies appointed by the shareholders' meeting perform different functions: A board of directors is responsible for defining strategies and managing activities, while a board of statutory auditors monitors the company's administration and information system.

The effective functioning of corporate governance boards is key to ensuring decision-making and assessment processes based on social responsibility and sustainability principles, in the broad interest of all stakeholders.

Introduction

Policymakers, regulators, business associations, and scholars have suggested many definitions of corporate governance, all of which imply references to the various models that can be implemented.

A well-known definition of corporate governance states that it "involves a set of relationships between a company's management, its

board, its shareholders and other stakeholders”; moreover, it “provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined” (G20/OECD, 2015).

Therefore, corporate governance is a combination of the structure and the dynamics through which a company aims to best meet the expectations of its shareholders and all other significant stakeholders, such as employees, money lenders, customers, suppliers, communities, and governments, in full respect of mandatory laws, recommendations, and voluntary provisions.

In this regard, corporate governance embodies social responsibility and sustainability principles, which are currently shared worldwide by prosperous businesses of any size. Even in the American scenario, which has traditionally been shareholder-oriented and focused on financial results, large corporations have recently rethought their main purposes embracing a broader perspective. As a consequence, corporate governance now emphasizes a fundamental commitment to all stakeholders, as stated in August 2019 by the Business Roundtable (Business Roundtable, 2019), an association of CEOs of America’s leading companies that has periodically issued corporate governance principles since 1978.

This enriched approach of corporate governance struggles to balance the efforts for generating long-term value for shareholders, who provide the capital that sustains corporate investment, growth, and innovation, with the company’s commitment to all other parties. This requires the equitable composition of economic, social, and environmental interests in corporate objectives, activities, and performances; in other words, corporate governance must be sustainable. That means companies are also expected to take care of their heterogeneous stakeholders. The support to employees through a fair compensation, continuous training, and education and the guarantee of inclusion, dignity, and respect are the core pillars for sound corporate governance in companies operating all over the world. A modern and successful

approach of corporate governance also encompasses dealing fairly and ethically with suppliers, as well as delivering value to customers. Finally, but no less importantly, sound corporate governance aims to contribute to the development of local communities. This can be achieved through the protection of human rights and the adoption of business practices that respect the environment.

Together with the evolution of corporate governance in accordance to sustainability principles, the financial world has witnessed a steady growth in the popularity of ESG-oriented indexes, which track the performance of the largest listed companies with good environmental, social, and governance scores. Stock indexes such as MSCI USA Extended ESG Focus Index, which includes securities across the US equity markets, the FTSE4Good Index Series in the United Kingdom, DAX50 ESG Index in Germany, CAC40 ESG Index in France, and MIB ESG Index in Italy have become increasingly important for investors throughout the world. This underlines the undeniable centrality of sustainability for long-term value creation; in addition, it emphasizes the necessity of implementing structures and processes of corporate governance that ensure the balance of economic, social, and environmental performances, also considering national peculiarities.

A corporate governance structure consists in a company’s system of boards, committees, and officers entrusted with specific powers and responsibilities regarding decision-making, management, and supervision in the interest of shareholders and other stakeholders. In other terms, a corporate governance structure derives from the implementation of a one-tier or a dual-board model of corporate governance.

The distinction between one-tier and two-tier models is indeed a cornerstone of corporate governance laws, regulations, and self-discipline, and it has been largely discussed in the business literature (Hopt, 2013; Jungmann, 2006). The difference between one-tier and two-tier models depends on two elements (Salvioni & Bosetti, 2006):

- The process through which corporate governance boards are appointed, which can require either one or two steps or levels (“tiers”)
- The powers and functions corporate governance boards are entrusted with

The one-tier model is also known as single-tier model or unitary model. The expression “single-tier model” refers to the rules for appointing the persons who will be in charge of administrating the company and monitoring its management: All board members are directly appointed by the shareholders, without intermediate stages. The expression “unitary model” accentuates the attribution of direction and control to the whole board as a collegial body, although these functions are actually exercised by two different groups of directors (namely, the executive directors and the nonexecutive directors). Advantages derive from the unitary nature of the board, for example, rapid exchange of information among directors, better understanding of the company’s affairs, environment, and performance, and fast decision-making (Jungmann, 2006).

The one-tier model is largely adopted in the Anglo-American systems, i.e., the USA and the UK. However, it can also be implemented in Latin European countries (e.g., France, Spain, and Italy), in Scandinavian countries, and in former socialist countries of Europe (e.g., Slovenia, Romania, and Bulgaria), all macroregions where it is either mandatory or allowed by the law.

The two-tier model owes its name to the two steps required for the appointment of its two separate corporate governance boards, i.e., the supervisory board and the management board. The shareholders and, in certain countries, the employees nominate the supervisory board, which in turns appoints the management board. The strong separation of these bodies, due to their different composition, allows us to define this corporate governance structure as a “dual model.” The duality is also evident in the distinctive powers and responsibilities of the two boards. The management board decides and takes part in the company’s day-to-day operations, whereas the duty of the supervisory board is usually limited to overseeing the work of the management board and

assessing the company’s performance. However, the national law or the company’s articles of association can establish that, under specific circumstances, the supervisory board provides the management board with a nonbinding opinion or the formal approval of proposals. In some countries, for example, the management board is expected to consult the supervisory board in relation to strategic and other significant operations.

The two-tier model is primarily associated to Germany, where the legislation and the business tradition recognize the role of labor in corporate governance. According to the laws on codetermination (or “Mitbestimmung” in German), employees have the right to appoint their representatives to the supervisory board. Based on the company’s size and industry, the employee representatives can be as many as half the members of the supervisory body.

Even if codetermination reaches its peak in Germany, employees’ participation in corporate governance is also found in other countries of the Rhine region and Central Europe (Austria, Luxembourg, the Netherlands, and Denmark), Northern Europe (Norway, Sweden, and Finland), and part of the former socialist bloc (Slovenia, Czech Republic, Slovakia, Hungary, Poland, and Romania). In the said countries, there is a clear correspondence between codetermination and the adoption of a two-tier model of corporate governance as imposed or allowed by the national laws. In all likelihood, this depends on the possibility for employees’ representatives in the supervisory board to orientate and control the management board’s activities directly. Furthermore, the presence of employees’ representatives in the main corporate governance body should facilitate dialogue and interaction with the shareholders, a category that often includes banks and other financial institutions. The cooperation among diverse stakeholder classes (i.e., shareholders and employees) within the supervisory board is essential to developing a relationship-based system of corporate governance and to create sustainable shared value in the long term.

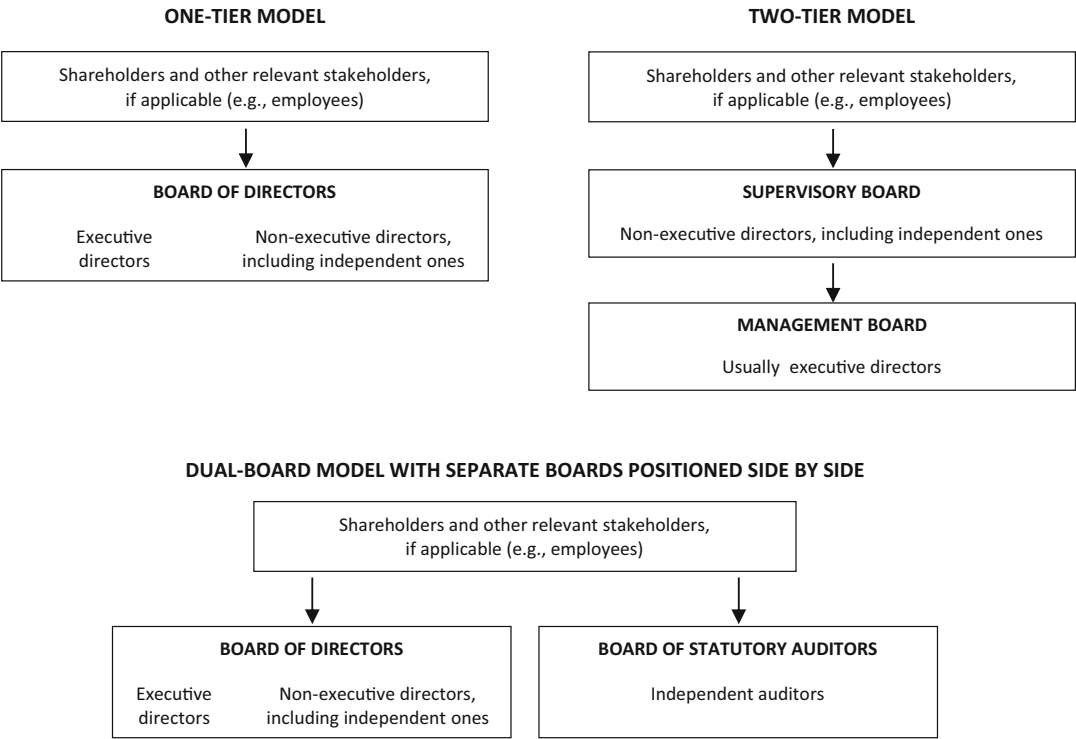
Another particular type of dual-board model presupposes the existence of two distinct boards, positioned side by side at the same level in the

corporate governance structure chart and entrusted with different tasks, i.e., the board of directors and the board of statutory auditors. The former is responsible for the company’s direction, which encompasses strategic decision-making and daily management, whereas the board of statutory auditors performs a monitoring function over the company’s administration and information system, verifying their fairness, adequacy, and compliance with the law and the corporate bylaws. The statutory auditors’ tasks can also include controls over accounting and financial statements.

Figure 1 depicts the three different corporate governance models introduced above. Despite their peculiarities, these models present important similarities with each other. Indeed, a path of convergence in international corporate governance has started in this century, particularly after the corporate scandals that involved listed

companies of several countries and the financial crisis that spread throughout the world over the past ten years. Convergence was induced by supranational law reforms (such as those promoted in the EU), self-discipline, and emulation among companies. Even if the process is still underway, it has already determined a significant overcoming of certain substantial differences between corporate governance models, thus making companies more comparable in global markets and contributing to the general improvement of their direction and control worldwide.

Moving from the peculiarities of corporate governance models in some leading economic systems, the following sections aim to reflect on the process of convergence underway, which is currently facilitated by a shared orientation toward stakeholder protection and corporate sustainability.



Author’s own elaboration.
Figure 1 shows the three different corporate governance models that companies around the world can implement. The choice depends on national legislation. In each model, the attribution of powers and responsibilities to one or two boards is defined by the law.

Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier), Fig. 1 Corporate governance models

Outsider and Insider Systems of Corporate Governance

The Cadbury Report of 1992, which represented a milestone in the development of modern corporate governance, defined it as “the system by which companies are directed and controlled.” This raises the question of who must legally be in charge of direction and control within a company.

Several factors have contributed to outline the main features of corporate governance models in each country, although the current trend of convergence is bringing to share some critical elements.

American and British listed companies are usually larger than Latin and Continental Europe’s ones; moreover, they often have a highly dispersed ownership (OECD, 2017). For example, 90% of companies listed on the London Stock Exchange lack a major shareholder owning 25% or more (OECD, 2011). Similarly, US listed companies are rarely under the control of a major shareholder, although important exceptions exist (e.g., Amazon, Facebook, and Walmart) (OECD, 2017). Australia and Ireland, whose business environment is traditionally influenced by the UK, also present a mainly dispersed ownership model (OECD, 2017).

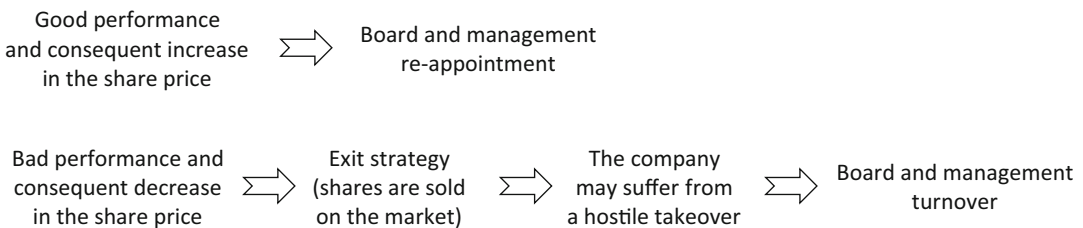
The equity capital of US and UK companies is generally divided among a multitude of small shareholders, each of whom holds a very few number of shares and has little interest in exercising a direct role in the company by taking part in

decision-making, daily operations, and monitoring processes. Therefore, shareholders entrust directors and managers with such functions.

Despite the prevailingly passive attitude of small shareholders, their economic interests find protection in the typical efficiency, transparency, and liquidity of Anglo-American financial markets. Shareholders who have invested in a successful company, whose good performance is reflected in an increased share price, can obtain dividends and capital gains (Rott, 2009), whereas unsatisfied shareholders can easily sell their shareholding on the stock exchange, by opting for the “exit” strategy over the “voice” strategy (which instead consists in intervening and voting in the shareholders’ meeting). Therefore, the financial resources migrate rapidly from a company to another, following the trend of share prices reflecting the perceived soundness of management, as well as the shareholders and analysts’ expectations on future performance.

From the perspective of corporate governance, this situation determines a lack of stability in the ownership of US and UK large companies, as well as in the composition of their boards. A decrease in the share price, combined with the financial markets’ liquidity, paves the way to a takeover; as a consequence, the managers are constantly exposed to the risk of being replaced if the owners change, particularly in case of a hostile takeover (Fig. 2).

The strong power of capital markets in modifying a company’s ownership structure and



Author’s own elaboration.

With reference to an outsider system of corporate governance, Figure 2 shows the implications of corporate performances and related variations in stock exchange price for the board of directors and management. Good performances determine an increase in the share price and strengthen the board and management’s position in the company. Bad performances mean a decrease in the share price, with high possibility for directors and managers to be replaced.

Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier), Fig. 2 Effects of corporate performance

governance is the reason why the Anglo-American business contexts are labeled as “outsider” or “market-oriented” systems.

Another remarkable aspect of the Anglo-American systems is the separation of ownership and control. This separation originates the main issue of corporate governance in large corporations (Berle & Means, 1932), which is known as principal-agent relationship and concerns the alignment of shareholders and managers’ goals (vertical agency problem). According to agency theory, principals employ the services of agents for the latter to perform an activity in behalf of the former; however, principals and agents can have different interests, which lead them to pursue different goals. In a large public company, shareholders are the principals and managers are the agents. Shareholders are interested in long-term value creation and durable growth of the company, whereas managers aim to maximize current cash flows, in order to demonstrate their ability in running the company. Indeed, this will allow them to obtain a higher remuneration, if this is linked to the company’s stock price. To mitigate the risk of misalignment between shareholders’ interests and managers’ behavior and decisions, the agency theory suggests some mechanisms for shareholders to monitor corporate management. In particular, shareholders can appoint nonexecutive, independent directors, i.e., directors who are free of any conflict of interest, to advise and supervise the managers. Today, institutional investors tend to play an increasingly active role in nominating independent directors, who are expected to act with the intent to protect minority shareholders and to promote the sustainable growth of the company in the long run.

By contrast with the Anglo-American outsider systems of corporate governance, the systems used in Continental and Latin European countries are often described as “insider,” “relationship-based,” and “network-based.” These expressions stress the role of insiders, such as controlling owners, banks, and employees, in a company’s decision-making processes, selection of managers, and performance assessment.

Companies from Central, Latin, and Eastern Europe often present blockholders, such as the

founder or the founder’s family, the State, and financial institutions (Amindav and Papaioannou, 2016); blockholders are the owner of majority shareholdings that give him the right to control a company. This concentrated ownership may lead to a horizontal agency issue between majority shareholders and minority shareholders. Majority shareholders have a dominant position in the general meeting and in the board nomination, play an active role in running the company, and have direct access to significant information. By contrast, minority shareholders provide financial resources, in the form of equity capital, but are exposed to the consequences of majority shareholders’ decisions that could expropriate minority shareholders’ wealth (Gogineni et al., 2016). To prevent this risk, the appointment of a sufficient number of independent directors is strongly recommended by the EU Commission (see Sect. 4, Recommendation 2005/162/EC). In some countries, such as Italy, the law also requires the appointment of minority directors, who are elected from a minority list using the slate-voting mechanism.

In Continental and Latin Europe, corporate governance is also affected by the behavior of financial institutions, which hold a large percentage of equity in nonfinancial companies and take active part in the shareholders’ meeting. Suffice it to recall the case of Germany (Hackethal et al., 2005), where banks have long been a prominent actor in corporate governance. The bank-based nature of German corporate governance has a long-standing tradition, which dates back to the last century when the banking sector played a crucial role in overcoming the heavy economic crises following both world wars. Since then, banks have constantly been involved in strategic decision-making and supervision of management in German companies, acting in the positions of direct shareholders and proxy holders representing individual savers.

In the meantime, the banking sector has also continued to provide the German corporations with loans, and this has implied for German banks to assume a twofold role in corporate governance, as both shareholders and creditors. The main consequence is the variety of interests

converging in German companies' supervisory boards. Coexistence of different viewpoints and expectations should stimulate a broad debate within the supervisory board, and in the end, this should lead shareholders and financiers to reach common understanding on companies' strategies and find an agreement on the appointment of the management board.

Among the countries with insider systems, a further distinction can be made based on the so-called codetermination of the board, i.e., the formal participation of employees in corporate governance structures and processes in compliance with the national legislation. Codetermination is a juridical mechanism that recognizes the economic and social relevance of labor as a primary resource for a company's sustainable growth; for this reason, codetermination has been described as a form of workplace democracy (Andersen & Hoff, 2001). Therefore, the laws on codetermination require that a given number of board seats are reserved to the company's employees or their representatives, who are typically elected within the work councils and trade unions. In Europe, codetermination is found in Germany and other Rhine countries (Austria, Luxembourg, and the Netherlands), the Scandinavian countries, and some post-Soviet states where labor participation in corporate governance is a legacy of socialism.

As mentioned above, Germany has the most stringent codetermination system. In fact, the German laws on codetermination ensure an equal representation of shareholders and employees in the supervisory board, at least in large companies.

In the other countries where labor participation in corporate governance is officially provided for by the law, the employees' right to be represented at board level is nevertheless weaker than shareholders'. For instance, labor participation at board level is established at only one-third in the States of the Rhine region other than Germany. In the Northern European countries, codetermination formally exists, but it is applied in each company at the discretion of trade unions, employees, and shareholders. This possibly depends on the fact that in the Northern European countries labor

protection has historically been pursued through important collective bargain actions by highly developed trade unions, which gather the vast majority of workers. OECD statistics on trade union density, expressing the ratio of wage and salary earners that are trade union members, reach very high levels in Iceland (85.5 in 2016), Denmark (67.2 in 2016), Sweden (66.8 in 2015), Finland (64.6 in 2016), and Norway (52.5 in 2015) (OECD, 2018).

In countries like Denmark and Norway, this situation has probably made the need for codetermination less acute, and it has justified the introduction of particular legislative provisions. On the one hand, codetermination must be explicitly claimed by the employees who intend to apply it in the company where they work; on the other hand, a specific agreement between trade unions and the company is sufficient to renounce codetermination, without this infringing the national legislation.

From a structural perspective, the two-tier model of corporate governance is usually adopted to implement codetermination, it being the most appropriate model to support the monitoring tasks performed by the employee representatives over management. However, a one-tier model also serves to this end, when one or more directors are appointed by the employees.

To conclude this section, Table 1 summarizes the key elements of corporate governance in the main Anglo-American and European countries.

A Review of Corporate Governance in Selected Countries

Since the 1990s, a wave of reforms focusing on corporate governance has swept the world, producing its most notable effects on listed companies. Over the past three decades, national listing rules and self-discipline codes based on the "comply-or-explain" principle have frequently dealt with key issues concerning administration and supervision on management. In many countries, recommendations from business associations and requirements imposed by the stock exchanges have even anticipated the introduction of

Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier), Table 1 Key elements of corporate governance systems around the world

	One-tier model (BoD)*	Two-tier model (SB + MB)*	Dual-board model with side-by-side boards (BoD + BoA)*	Stakeholders represented at board level	Codetermination: employee representation at board level
Anglo-American countries – outsider systems					
United States	x			Shareholders	
United Kingdom	x			Shareholders	
Ireland	x			Shareholders	
Australia	x			Shareholders	
Rhine and Scandinavian countries – insider systems					
Germany		x		Shareholders and employees	From 1/3 to 1/2 of SB
Austria		x		Shareholders and employees	1/3 to 1/2 of SB
The Netherlands	x	x	x	Shareholders (but in the two-tier model, an agreement with employees is required with reference to the profile or the list of candidates to the SB)	
Luxembourg	x	x		Shareholders and employees	Up to 1/3 of BoD or SB
Denmark	x	x		Shareholders and employees	1/3 of BoD or SB
Sweden	x			Shareholders and employees	2 or 3 members of BoD
Norway	x	x		Shareholders and employees	Up to 1/3 of BoD or SB
Finland	x	x		Shareholders and employees	Up to 1/5 of BoD or SB
Latin countries – insider systems					
Italy	x	x	x	Shareholders	
France	x	x		Shareholders (and employees only in specific cases)	1 or 2 members
Belgium	x	x		Shareholders	
Spain	x			Shareholders	
Portugal	x	x	x	Shareholders	
Greece	x			Shareholders	
Eastern European countries – insider systems					
Slovenia	x	x		Shareholders and employees	From 1/5 to 1/3 of BoD; from 1/3 to 1/2 of SB
Slovakia		x		Shareholders and employees	1/3 of SB
Czech Republic		x		Shareholders and employees	1/3 of SB
Hungary		x		Shareholders and employees	1/3 of SB
Poland		x		Shareholders and employees	2/5 of SB

(continued)

Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier), Table 1 (continued)

	One-tier model (BoD)*	Two-tier model (SB + MB)*	Dual-board model with side-by-side boards (BoD + BoA)*	Stakeholders represented at board level	Codetermination: employee representation at board level
Romania	x	x		Shareholders and employees	1 nonvoting member of BoD
Bulgaria	x	x		Shareholders	
Estonia		x		Shareholders	
Latvia		x		Shareholders	
Lithuania	x	x		Shareholders	

* BoD = Board of Directors; SB = Supervisory Board; MB = Management Board; BoA = Board of Auditors
 Author's own elaboration based on: Legislation in force; Salvioni et al., 2015; OECD, 2017

Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier), Table 2 Implementation of corporate governance models in listed companies from selected countries

	United States	United Kingdom	Germany	France	Italy
Size of sample	482	150	67	40	100
Average board size	10.8	10.2	14.1	13.9	11.6
Average board size (excluding employee representatives)	N/A	10.1	7.7	12.4	N/A
% of independent board members	84%	61.1%	60%	69%	50.1%
Average number of executive directors	–	2.5	N/A	1	2.6
Combined chairman and CEO	52%	0.7%	0%	55%	18%
% of boards with senior independent director	86%	99.3%	N/A	43%	–

N/A = not applicable

Blank cell = information not available or not included in the research

Data from Spencer Stuart, 2016

mandatory provisions by the policymakers. This has certainly contributed to sharing the best practices of corporate governance at the international level and to reducing differences between national systems.

Looking at how listed companies from different countries implement their typical corporate governance models, a clear convergence trend emerges. Listed companies operating in business systems with diverse tradition and attention to shareholders and stakeholders' expectations still present similarities in the board composition and the directors' profiles (Table 2). In this regard, a comparison among the different corporate governance models adopted by American, British, German, French, and Italian listed companies can be useful.

Corporate Governance in the USA

In the Anglo-American countries, listed companies generally implement the one-tier model of corporate governance. The board of directors has a central role in guaranteeing sound and transparent corporate governance. According to the law, a broad range of tasks concerning direction and supervision of the company's business must be fulfilled by the board of directors, who are responsible for creating value in the main interest of shareholders. By contrast, the involvement of the latter in corporate affairs is usually limited to the election of board members and to the discussion and approval of directors' proposals on essential changes such as mergers, sales of assets, dissolution, and amendments to the articles of association and the bylaws.

Despite the collegial nature of the board in US companies, duties are distributed among directors in such a way as to best exploit professional background, education, skills, and experience of each of them in the company, industry, and market. The allocation of tasks also considers individual qualities like impartial judgment and independence.

In US listed companies, the board of directors is commonly composed of both executive and nonexecutive directors. In practice, the board separates direction and control functions, which are performed by executive directors and non-executive ones, respectively.

Executive directors are engaged in the daily management of the company, with the duty to implement the guidelines provided by the whole board. The executive directors have the following responsibilities:

- They must design and develop the company's strategic and financial plans.
- They must outline the organizational structure and flows of information.
- They must select and appoint the corporate officers with whom they will share the managerial tasks.
- They must periodically report to the board about the company's business and performance.

Nonexecutive directors have a monitoring function, consisting in the supervision of executive directors and managers. Nonexecutive directors have a key role in the discussion, approval, and review of the company's long-term plans; furthermore, they can formulate fair and unbiased recommendations on operations and opinions on results, because they are not directly involved in the daily management of the company.

US boards are typically made up of few and yet powerful executive directors. The appointment of a single executive member acting as the chief executive officer (CEO) and the board chair at the same time ("CEO duality") is not even rare. However, effective corporate governance requires balancing powers and responsibilities of each actor, as well as balancing direction and control within the collegial board. For this reason, a large

number of nonexecutive directors is certainly appropriate, and sometimes necessary, to counterbalance a strong CEO. Actually, a significant number of nonexecutive members allow a pervasive and extensive surveillance on the company's CEO, other executives, and senior management, with the purpose of reassuring shareholders that no unfair and opportunistic behavior has been adopted within the board to achieve someone's personal interest.

To improve the quality of advice and supervision provided by the board of directors, the US legislation and listing regulations demand that the majority of board members be independent. In short, it is required that the majority of directors do not have any material conflict of interest with the company, its controlling shareholders, and executives due to family, managerial, business, or consultancy relations.

The appointment of independent directors is also intended to allow a proper composition of board-level committees entrusted with proposing and consultative functions. Such units are totally made up of independent members, and they are devoted to corporate matters that could originate conflicts of interest, such as auditing, director nomination, and director remuneration.

The board also selects a lead director (or presiding director) among its independent members. In brief, the lead director's role consists in (Penbera, 2009):

- Coordinating the activity of all the independent directors and promoting sessions in which they meet without the presence of the CEO and the other nonindependent board members
- Dealing with shareholders' requests and complaints which have not received an adequate answer from the CEO

The current structure of the US boards has mainly been determined by the Sarbanes-Oxley Act (SOX) of 30 July 2002. This Act introduced a mandatory reform of corporate governance as a reaction to the Enron and WorldCom scandals that had come to light in the previous months. By strengthening the rules on director independence, internal controls, and external audit, the US

government aimed to protect the investors from further corporate scandals.

The SOX also marked a turning point for the US governance system toward greater environmental sustainability and accountability. In fact, the SOX has increased the responsibilities of management to implement internal control procedures that should ensure transparent information on environmental costs and liabilities. This is crucial to meet the environmental disclosure requirements imposed by the Securities and Exchange Commission (SEC) to American listed companies (Hall & Pugliese, 2004). More exactly, the SEC Regulation S-K requires a company to:

- Identify any material effects that compliance or noncompliance with federal, state, and local environmental regulations may have on the company's earnings, competitive position, and capital expenditures.
- Disclose any material pending or threatened litigations, including those related to environmental issues, in which the company is a party.
- Discuss and analyze any trends, events, or uncertainties that may have a material effect on the company's financial position; specifically, environmental issues such as GHG emission reduction requirements, proposed hazardous substance restrictions, and expected costs for site clean-up or remediation could qualify as trends, events, or uncertainties affecting the company's financial position.

Although the SOX did not actually change the disclosure requirements mentioned above, it strengthened the responsibilities of management with reference to the adoption of effective internal control processes on both key environmental issues and the accounting procedures to inform shareholders, financial markets, and authorities about their effects on the company's financial results.

Due to its importance, the SOX originated a wave of reforms all over the world, aimed at enhancing independence, integrity, and transparency in corporate governance structures and procedures.

Corporate Governance in the UK

The enhancement of corporate governance in the UK is largely associated to the publication of the Cadbury Report of 1992. However, the original set of recommendations has been revised and enlarged on more occasions, particularly in the last two decades.

According to the UK company law and best practices of corporate governance, British listed companies present a one-tier model that is very similar to the American one. Like US boards, UK boards are based on the division of tasks between executive and nonexecutive directors. UK boards comprise a high percentage of independent members, who are led by a senior independent director, who is a third leadership figure within the board together with the CEO and the chairperson (Hopt, 2013). Moreover, the board delegates functions to three standing committees, which are composed of a majority (nomination committee) or the totality (remuneration committee and audit committee) of independent members. Finally, the UK boards strictly comply with the recommendation of separating CEO and chairperson positions; this is a significant difference compared to what the American companies generally do.

Corporate Governance in Germany

In this century, corporate governance of listed companies has considerably improved in Germany as well. Extensive legislative reforms and a self-discipline code (the Cromme Code, issued in 2002 and last amended in April 2022) have been adopted to enhance shareholder protection and to raise foreign investors' confidence toward the two-tier model and the codetermination system that are peculiar to German companies.

German mandatory provisions on codetermination can be considered as a means to promote stakeholder orientation of businesses by ensuring a balanced representation of shareholders and employees within the supervisory board. Codetermination is regulated by law as follows:

- (a) *Coal and Steel Codetermination Act of 1951*: In coal and steel companies with at least 1000 employees, workers and shareholders elect seven supervisory board members each;

moreover, a neutral member selected by agreement between the two parties has the right to exercise a casting vote in case of stalemate on the board.

- (b) *Works Councils Act of 1952*: In all companies with more than 500 and fewer than 2000 employees, workers have the right to elect one-third of the supervisory board.
- (c) *Codetermination Act of 1976*: In all companies with more than 2000 employees, workers have the right to elect half of the supervisory board (with two to three seats reserved to trade union representatives), whose size depends on the employees' number:
 - Total 12 members (6 elected by the shareholders and 6 elected by the workers) are required in companies with up to 10,000 employees.
 - Total 16 members (8 + 8) are required in companies with 10,001 to 20,000 employees.
 - Total 20 members (10 + 10) are required in companies with more than 20,000 employees.

If the two parties equally represented in the supervisory board do not reach an agreement on the selection of the chairperson and the deputy chairperson, the law establishes that the former is elected by the shareholders' representatives and the latter by the employees' representatives. This rule is crucial, because the chairperson is entitled to the casting vote to resolve a possible deadlock; in other terms, the shareholders can dominate relevant decision-making.

The rules impose the separation between the supervisory board and the management board and establish that the former nominates the latter. Moreover, the supervisory board guide and control the activity of the management board, whose members act as executive directors and may only be dismissed for good cause.

The German corporate governance code contains recommendations to enhance the quality of guidance and supervision exercised by the supervisory board. In this regard, the code states that the supervisory board shall include an appropriate number of independent members, appointed on

the shareholders' side. In addition, no more than two former members of the management board can be appointed to the supervisory board. This recommendation aims at safeguarding the impartiality of judgment that the supervisory board should ensure, but that could be undermined by previous relationships with the executives. Independence is especially important for the supervisory board members who are responsible for monitoring the accounting process and the effectiveness of internal control, risk management, internal auditing, and compliance. Coherently, an audit committee with an independent chair shall be established within the supervisory board.

Corporate Governance in France

The Latin European countries have also seen a significant evolution of their corporate governance systems, induced by a combination of laws and codes of best practices.

In France, where both the one-tier and the two-tier models are permitted by the law, an important innovation has regarded the separation of chair and CEO positions in companies implementing the single-tier structure (Martin, 2017). A reform of 2001 eliminated the previous obligation to entrust the board chairperson with the daily management of the company; since then, this option has been subject to the decision of the board of directors, and the selection of a CEO not belonging to the board has become quite usual.

In the one-tier French model, the board of directors determines the corporate strategies and monitors their implementation; furthermore, it appoints and removes the chairperson and the CEO, determines their remuneration, and supervises the company's operations. Similar powers and duties are attributed to the supervisory board in the two-tier model.

The board of directors in the one-tier model and the supervisory board in the two-tier model can reach a large size, as the law allows up to a maximum of 18 members. In the one-tier model, this rule favors the nomination of nonexecutive directors with monitoring duties.

Participation of employees at board level is also required in state-owned and privatized companies, in companies where employees hold more

than 3% of the share capital, and in companies whose group has more than 1000 employees in France or more than 5000 employees worldwide. According to the circumstances, employees' representation can reach one-third of the board. However, France has no systematic set of laws on codetermination. Corporate governance remains mainly shareholder-oriented, with concentrated ownership in many SMEs and dispersed ownership in a few large corporations.

To promote more equitable corporate governance processes and strengthen minority shareholders' protection, the AFEP-MEDEF code of best practices for listed companies (updated in January 2020) recommends the appointment of independent directors. In companies lacking of a controlling shareholder, half of the board members should be independent; in other companies, one-third of the board should be composed of independent directors. A significant presence of independent members is also necessary to establish internal committees in compliance with the law and the code of corporate governance. Indeed, French listed companies are obliged by law to have an audit committee composed for two-thirds of independent directors, with an independent chairperson and not comprising executive officers; moreover, the audit committee must include a financial expert and an employees' representative. The code recommends the creation of a remuneration committee, which should be mostly composed of independent members, be headed by an independent director, and comprise an employees' representative. Moreover, the board should establish a nomination committee, which should mostly consist of independent members and not include executives.

Corporate Governance in Italy

Italy also deserves to be considered in this review. In fact, it provides the main example of the adoption of a dual-board model in which two separate bodies, namely, a board of directors and a board of statutory auditors, are both elected by the shareholders' meeting. This model is implemented in almost all Italian stock companies, even if they can also opt for either the one-tier model or the two-tier model introduced

by the "Vietti reform" of 2004 (Astori & Bosetti, 2010).

The traditional Italian model ensures strong separation of direction and control, which are assigned to two different collegial bodies: the board of directors, which usually includes both executive and nonexecutive members, and the board of statutory auditors, whose members must be independent from the company's controlling shareholders and executives. The effectiveness of the statutory auditors' activity is enhanced by two additional legal requirements concerning professionalism and honorability of the members.

The board of directors examines, approves, and monitors the implementation of the company's strategic, operational, and financial plans; in addition, it is responsible for running the business. Since these functions are actually carried out by the two distinct groups of directors forming the board (i.e., nonexecutive and executive directors), a further and even stronger separation of management and control characterizes most Italian companies.

The board of statutory auditors performs verifications on the adequacy of the accounting and administrative system; in unlisted companies, it also audits the financial statements.

After the Parmalat scandal of December 2003, which had damaged a multitude of bondholders and small shareholders, Italy issued additional legislative provisions to strengthen corporate governance in listed companies. The "Savings Law" of 2005 introduced the obligation for listed companies to appoint at least one independent director in boards consisting of no more than seven members, and at least two independent directors in larger boards. Furthermore, the law imposed the use of slate voting to nominate at least one director and one statutory auditor representing minority shareholders; the board of statutory auditors must also be headed by a representative of the minorities. Similar rules were also addressed to companies adopting the one-tier model and the two-tier one.

Italian listed companies are also expected to comply with the national corporate governance code, which was first promoted by the stock exchange in 1999 and last revised in January 2020. Among others, the code contains the

following recommendations on the size, composition, and functioning of the board:

- (a) An adequate number of nonexecutive directors shall be independent, and such independence shall be assessed after their appointment, and then on an annual basis.
- (b) A lead independent director should be designated if the chairperson also acts as the company's CEO or is the controlling shareholder.
- (c) The board shall establish one or more standing committees, comprising at least three members. Specifically, the recommendations concern the creation of:
 - A nomination committee, including a majority of independent directors
 - A remuneration committee, made up of nonexecutive directors, in majority independent, and including an expert in finance and compensation policies
 - A control and risk management committee (formerly named audit committee), composed of nonexecutive directors, in majority independent, and comprising an expert in accounting, finance, and risk management

The code of best practices should be applied in all Italian listed companies, with appropriate adaptations if the one-tier model or the two-tier one is implemented.

Summary

We are currently witnessing a growing harmonization of corporate governance throughout the world. This phenomenon is mainly due to the increasing globalization of financial markets, which has induced higher international competition in attracting investments. In this regard, the adoption of the best practices for direction and control can be crucial to raise investors' confidence.

Policymakers, market regulators, and stock exchanges all over the world have continuously issued mandatory and voluntary provisions on

corporate governance, in order to enhance the quality of board activities in listed companies and the protection of minority shareholders. Some leading principles of corporate governance, based on ethics, independence, respect for the law, and safeguarding of stakeholders' expectations, are generally recognized as suitable to achieve these objectives. Therefore, the differences that have existed between country-based models of corporate governance until a few years ago tend to decrease in today's context of market globalization and convergence of companies' behavior.

One-tier and dual-board models have become more similar. Listed companies implementing the one-tier model have progressively introduced a stricter separation of direction and control tasks attributed to the board members; this has certainly been facilitated by the appointment of a significant number of nonexecutive and independent directors, who have been entrusted with the supervision of management. Differently, dual-board models tend to absorb elements which have long been experienced in the single-tier structure, such as the establishment of standing committees. Since matters like director nomination and remuneration, internal control, audit, and risk management have already obtained higher consideration in any business system, they presumably represent the key aspects on which corporate governance practices would further converge in future.

Despite the differences that will continue to exist to some extent (for example, in relation to the CEO duality), a path of convergence is certainly underway. Convergence of corporate governance practices is increasingly involving the business approaches promoted at the board level. In particular, companies all over the world are experiencing a broader adoption of sustainability principles as fundamentals of corporate strategies and operations (Salvioni et al., 2016). This is often accompanied by a stronger orientation to risk management in order to prevent losses and take emerging opportunities. All of this should facilitate long-term value creation, also through a more equitable balance of the economic, social, and ecological expectations converging in every company.

Cross-References

- Chief Executive Officer (CEO Duality)
- Corporate Governance
- Corporate Governance, Measurement of
- Corporate Governance Perspectives (Shareholder vs. Stakeholder Perspective)
- One-Tier Board
- Two-Tier Board

References

- Amindav, G., & Papaioannou, E. (2016). Corporate control around the world. NBER working paper series, working paper 23010. <http://www.nber.org/papers/w23010>. Accessed Jan 10, 2019.
- Andersen, J. G., & Hoff, J. (2001). *Democracy and citizenship in Scandinavia*. London: Palgrave Macmillan.
- Astori, R., & Bosetti, L. (2010). Corporate governance systems facing the economic crisis. In G. T. Papanikos (Ed.), *International developments in management research* (pp. 37–62). Athens: Athens Institute for Education and Research.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: Macmillan.
- Business Roundtable. (2019). Statement on the Purpose of a Corporation. <https://s3.amazonaws.com/brt.org/May-2022BRTStatementonthePurposeofaCorporationwithSignatures.pdf>. Accessed June 15, 2022.
- G20/OECD. (2015). Principles of corporate governance. OECD Report to G20 Finance Ministers and Central Bank Governors. https://www.oecd-ilibrary.org/governance/g20-oecd-principles-of-corporate-governance-2015_9789264236882-en. Accessed Jan 10, 2019.
- Gogineni, S., Linn, S. C., & Yadav, P. K. (2016). *Vertical and horizontal agency costs: Evidence from public and private firms*. <https://doi.org/10.2139/ssrn.2024597>.
- Hackethal, A., Schmidt, R. H., & Tyrell, M. (2005). Banks and German corporate governance: On the way to a capital market-based system? *Corporate Governance. An International Review*, 13(3), 398–407. <https://doi.org/10.1111/j.1467-8683.2005.00434.x>.
- Hall, R. M., & Pugliese, M. (2004). Sarbanes-Oxley and environmental disclosures. Environment and energy business law reporter (December). Environmental, energy and natural resources Committee of the Business law Section of the American Bar association (ABA).
- Hopt, K. J. (2013). Comparative corporate governance: The state of the art and international regulation. In A. M. Fleckne & K. J. Hopt (Eds.), *Comparative corporate governance. A functional and international analysis*. United Kingdom: Cambridge University Press.
- Jungmann, C. (2006). The effectiveness of corporate governance in one-tier and two-tier board systems – Evidence from the UK and Germany. *European Company and Financial Law Review*, 3(4), 426–474. <https://doi.org/10.1515/ECFR.2006.019>.
- Martin, D. (2017). France. In W. J. L. Calkoen (Ed.), *The corporate governance review*. London: The Law Reviews.
- OECD. (2011). *Board practices: Incentives and governing risks*. OECD Publishing. <https://doi.org/10.1787/9789264113534-en>.
- OECD. (2017). *OECD Corporate Governance Factbook* (p. 2017).
- OECD. (2018). Trade unions: Trade union density. *OECD Employment and Labour Market Statistics (database)*. <https://doi.org/10.1787/data-00371-en>.
- Penbera, J. J. (2009). What lead directors do. *MIT Sloan Management Review*, 50(4), 15–17.
- Rott, R. (2009). A systemic evaluation of the German corporate governance code: The battle between inconsistency and persistence. In F. J. Lopez (Ed.), *Codes of good governance around the world* (pp. 187–214). UK: Nova Science Publishers.
- Salvioni, D. M., & Bosetti, L. (2006). Corporate governance report and stakeholder view. *Symphonya. Emerging Issues in Management (symphonya.Unimib.It)*, 1, 24–46. <https://doi.org/10.4468/2006.1.03salvioni.bosetti>.
- Salvioni, D. M., Gennari, F., Bosetti, L., & Almici, A. (2015). The audit committee in the EU emerging countries. In S. Boubaker & D. K. Nguyen (Eds.), *Corporate governance and corporate social responsibility: Emerging markets focus* (pp. 211–234). Singapore: World Scientific Publishing.
- Salvioni, D. M., Gennari, F., & Bosetti, L. (2016). Sustainability and convergence: The future of corporate governance systems? *Sustainability*, 8(11), 1203. <https://doi.org/10.3390/su8111203>.
- Spencer Stuart. (2016). *Boards around the world*. International comparison.

Anglo-American Model vs. Continental Europe Model

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Synonyms

Implicit vs. explicit CSR

Definition

Despite the many definitions and the wide use of the *corporate social responsibility* (CSR) term in theory and practice, CSR remains a fluid and somewhat vague concept (Dahlsrud 2008). When it comes to CSR definitions, one should be aware that CSR definitions, as well as CSR practices, differ widely across countries and regions. It should especially be noted that comparative research on CSR in Anglo-American countries and (Continental) European ones identified remarkable differences between company practices on the two sides of the Atlantic (Matten and Moon 2008).

While CSR has traditionally been defined much more in terms of a philanthropic model in Anglo-American countries, the focus in Europe is much more on conducting the whole business in socially responsible ways, complemented by investments in communities for concrete business case reasons (Fernando 2009). In addition, historically, CSR in Anglo-American countries is conducted and communicated more explicitly than in Europe (Maignan and Ralston 2002; Matten and Moon 2008).

History of CSR in the USA and Europe

Despite the wide use of the term *corporate social responsibility* (CSR) in theory and practice, CSR is still a fluid and somewhat vague concept (Dahlsrud 2008). When it comes to CSR, one should be aware that CSR definitions, as well as CSR practices, differ widely across nations and societies (Matten and Moon 2008). This is due to historically grown institutional frameworks that shape national or regional business systems (Whitley 1997). Although all national business systems necessarily consist of individuals and companies, business is conducted in the context of specific social and political environments and national institutions (Moon and Vogel 2008). By definition, CSR assumes an independent company, free to decide how to deploy its resources. But the concept also entails conformance with

laws, which are primarily national in character and scope (Carroll 1991). Therefore, we can observe a considerable variety in the structure and regulation of markets, the involvement of governments and the operation of legal systems, and also when it comes to CSR (Moon and Vogel 2008).

Traditionally, CSR has been seen much more like a desirable philanthropic deed in Anglo-American countries. Companies conduct their business and generate profits unhindered and free except by fulfilling their obligation to pay taxes. Then they donate a certain part of their profits to charitable causes (Fernando 2009). Charitable giving, however, is a complicated and very complex question for any company that has more than one stakeholder (Pearson 2013).

(Continental) European companies do not have such a long tradition when it comes to CSR like Anglo-American companies, but since the European Union started to promote CSR in the early 1990s (see EU communication CSR), many of those companies have adopted a CSR strategy or implemented certain CSR activities. In contrast to the Anglo-American model of CSR, the Continental European model of CSR is much more concerned with operating the whole business in a socially responsible way, complemented by investments in communities for concrete business case reasons (Fernando 2009). In 2011, the European Union (EU) had put forward a new definition of CSR as “the responsibility of enterprises for their impacts on society.” The EU Commission, an important EU institution, has outlined that in order to meet their corporate social responsibility, “enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders” (European Commission 2011).

Fernando (2009) has explained some reasons why it is believed that the Continental European model of CSR is more sustainable:

- (a) Following this approach, CSR becomes an essential part of the wealth creation process

and enhances business competitiveness (if managed properly). At the same time, it will maximize wealth creation for society.

- (b) During challenging times (e.g., during recessions or crisis times), there is an incentive to practice CSR even more and better if it is a core activity. In contrast, CSR activities will be among the first things to go when push comes to shove if it is just a philanthropic exercise with no connection to the wealth creation process of a company.

Explicit vs. Implicit CSR

In their research, Matten and Moon (2008) addressed the question of why and how CSR differs among countries and regions and why and how it changes over time. Arguing in accordance with two schools of thought in institutional theory, the research of Matten and Moon (2008) conceptualizes, first, the main differences between CSR in Anglo-American countries and Europe and, second, the recent intensification of CSR in Europe. Matten and Moon (2008) distinguish between “explicit” and “implicit” CSR: While “explicit” CSR refers to “voluntary programs and strategies by corporations that combine social and business value and address issues perceived as being part of the social responsibility of the company” (Matten and Moon 2008: 409), “implicit” CSR refers to societal values, norms, and rules (both obligatory and customary) which constitute formal and informal institutions. The entry argues that US companies historically had more explicit CSR than European companies. However, US companies’ voluntary CSR programs and strategies are often implicitly covered by European companies due to their legal obligations. For example, labor relations in the USA have been closely linked to CSR since the US government has played a less critical role in supplying welfare benefits to employees and has rarely been involved in wage negotiations (compared to Europe, where governments have historically played a central role in labor market regulation and wage-setting). Therefore, there was comparatively less scope for companies in Europe to make pensions, wages, or health insurance a part of their CSR strategy. These were either supplied

by the government or regulated through laws (Matten and Moon 2008; Moon and Vogel 2008). However, it can be observed that the factors described above are changing over time. In the USA, for example, a growing number of companies are looking now toward core business issues when implementing their CSR activities, and European companies nowadays publish more and more information about their CSR activities, making it more visible and explicit.

Summary

As with any behavior based on collective actions of groups of human beings (as companies are), there is not a “one size fits all” solution. Different norms, values, and priorities will shape business conduct in other countries, societies, or regions. When it comes to CSR, we can observe substantial differences between Anglo-American and Continental European companies. Previous research (Maignan and Ralston 2002; Matten and Moon 2008) has shown that the main differences lie in the fact that Anglo-American companies often conduct CSR activities mainly through philanthropic giving, while in Europe, CSR activities are generally more linked to the core activities of the business and strategic in nature. In addition, Anglo-American companies tend to make their CSR activities more public than European companies do.

Cross-References

- [Definitions of CSR](#)
- [EU Communication CSR](#)

References

- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.
- European Commission. (2011). *Communication from the Commission to the European Parliament, the Council,*

the European Economic and Social Committee and the Committee of the Regions – A renewed EU strategy 2011–14 for Corporate Social Responsibility. COM (2011) 681 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0681>. Accessed 5 Aug 2021.

- Fernando, A. C. (2009). *Business ethics: An Indian perspective*. New Delhi: Pearson Education India.
- Maignan, I., & Ralston, D. A. (2002). Corporate social responsibility in Europe and the US: Insights from businesses' self-presentations. *Journal of International Business Studies*, 33(3), 497–514.
- Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- Moon, J., & Vogel, D. (2008). Corporate social responsibility, government, and civil society. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. S. Siegel (Eds.), *The Oxford hand book of corporate social responsibility*. Oxford: Oxford University Press.
- Pearson, D. (2013). *The 20 Ps of marketing: A complete guide to marketing strategy*. London: Kogan Page Publishers.
- Whitley, R. (1997). Business systems. In A. Sorge & M. Warner (Eds.), *The IEBM handbook of organizational behaviour* (pp. 173–186). London: International Thomson Business Press.

Animal Experiments

► Animal Testings

Animal Research

► Animal Testings

Animal Testings

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Synonyms

Animal experiments; Animal research; In vivo research

Definition

For “animal testing” we mean a scientific test that involves the use of animal testing.

Introduction

The scientific experiments on living beings find a first historical confirmation within the “Corpus Hippocraticum” (end V – the beginning of the fourth century BC). In Aristotle’s treatise “Parts of animals”, we can trace a first attempt at describing the inside and outside of animals by dissection (not of the human being). In the III sec. with the School of Alexandria Erofilo and Erasistrato the human body was studied for the first time by dissecting corpses. In the “Anatomical Procedures” of Galen, the dissection modalities of numerous animal species observed by him (pigs, mice, monkeys) are instead described. Galen also, taking up the idea of the soul of Aristotle, writes “The Usefulness of the Parts of the Body” claiming that the animal in the completeness of its body structure encloses its soul.

Since then, many steps forward have been made, and animal experiments have led to important scientific discoveries and a more in-depth study of the immune system. Revolutionary discoveries were those of insulin for diabetes, treatment for leprosy, yellow fever, and typhoid.

Animal Experiments

Animal experiments can be dual: that of mere observation of behavior and that of application of models to understand a biological characteristic of another species.

After the Nazi atrocities and the Nuremberg trial, experiments on human beings are forbidden, because in the years of the Nazis the atrocities suffered above all by Jews exceeded any ethical limits. The Helsinki Declaration (1964) and the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research (1974) and the resulting Belmont Report (1979) set the goal of creating protection

about research on human beings by drawing up principles of respect, charity, and justice.

From the principles enunciated in Helsinki, it clearly shows the will to protect the human being.

For this reason, it is emphasized that biomedical research cannot be conducted on human subjects except in cases where the importance of the research itself, and its objective, is not proportionate to the risk to which the human subject is exposed.

This is why more and more often humans have been replaced with animals to conduct more high-risk experiments. Over the past century, however, the question has been raised about the ethics of animal experiments. In particular, the first discussion on this subject was carried out by Charles Hume and William Russell at the Universities Federation for Animal Welfare (UFAW)-tariff in 1957 and was developed by W. Russell and R.L. Burch in 1959 in their book: *The Principles of Humane Experimental Technique*.

Russel and Burch elaborated on the “3R” strategy: reduction, refinement, and replacement.

For the two studies, it was necessary to drastically reduce the number of animals that adjusted for scientific research (reduction). For the animals to which the experimental treatment administered was necessary, during the experiment, the reduction of pain and state of anxiety was triggered by the experiment itself (refinement). Also to this last end, the “sentient” animals considered “superior,” for the two scholars, had to be replaced with “inferior” animals (replacement) (Russel and Burch 1959).

By “replacement” we must mean: “Any scientific method that uses non-sentient material that can replace the use of conscious living vertebrates in animal experimentation.” During the experiments, two hypotheses of “substitution” are considered: absolute or partial with the substitution of the animal or with its partial use without exposure to the problem that could generate stress.

Subsequent studies sought to focus their attention on the understanding of animal sensibility that in the past had not been adequately considered and which today is believed to be more protected (Ferdowsian and Beck 2011). A growing number of studies on the emotion and

cognition of animals have meant that scientists could say with certainty that animals experience pain and anguish.

Stress situations can be triggered by experiments involving invasive procedures, diseases, and deprivation of basic physiological needs. Even the environment in which the animals live strongly affects their quality of life and therefore their well-being. Social deprivation and the loss of natural behavior can trigger a sense of anxiety.

This stress situation also has a significant impact on the result of the research carried out by scholars who often, to achieve a satisfactory result, are forced to use a large number of animals.

As pointed out by W. Lane-Petter in 1958 in his text “Laboratory Animals of High Quality,” although, for equal needs, the work of researchers varies greatly from country to country. The number of research centers and universities is not always the same. The development of the pharmaceutical industry and the investments that each country can make in the sector also greatly affect the quality of the work performed. This means that the number of animals used varies from country to country (Lane-Petter 1958).

Within the development of the animal, tests are inserted a particular type of experimentation that involves the transplantation of cells, tissues, or organs from one animal to another of different species: xenotransplants. These types of intraspecies transplants began in the 1960s and concerned in particular the porcine species and nonhuman primates (Platt and Bach 1991).

We often hear of “genome engineering,” the practice of inserting human genes into the animal gene to produce cells, tissues, or organs that the human body does not reject. We try to study the immunological barrier because it intervenes when a xenotransplant is performed and rejects the organ that the subject has received inside him, considering it foreign to himself.

Another risk factor is the transmission of a pathogen, such as the porcine retrovirus “porcine endogenous retroviruses” or “PERV.”

Further development of animal testing concerns animal cloning. To obtain cloning, genetic manipulation is structured that transfers the somatic cell nucleus (SCNT) of the organism to

be cloned into an egg cell of the same non-fertilized species. An embryo is thus obtained which is implanted in a “surrogate mother.” The first tests already in the 1990s led Ian Wilmut, of the Roslin Institute of Edinburgh in Scotland, to the cloning of the famous sheep “Dolly” (1996).

Also, for this cloning technique is used in animal husbandry to improve the quality of the animals that are raised. Also, for this reason, EFSA, the European Food Safety Authority, has been attentive in the field of food safety and is concerned about the uncertainty of the impact on human health and of animals if cloning is systematically used for food purposes. The European Group on Ethics in Science and New Technologies (GEE) agrees and already in 2008 seemed to express strong doubts about the ethics of cloning animals especially if used for food purposes.

Key Issues

The ongoing debate raises the question of what the limit that science must not overcome in terms of animal tests, genetic manipulations, and xenotransplants. The difficulty of establishing this limit often depends on the sensitivity of individuals and of the civil and religious communities in which this problem is discussed. For this reason, too, this limit often changes according to the state that is analyzed and modified over time.

Future Directions

In the present, and even more so in the future, it will increasingly come to the end of experiments with animals, leaving room for experiments conducted thanks to the use of new technologies. Analysis technologies, computer models, cell cultures, and in vitro, nanotechnology, would help to achieve this important goal. New chromosomal techniques, for example, replace animals in drug dose tests.

Computers, new software, and specialized computer models that can be used and created shortly will increasingly help develop an understanding of biology. Thanks to their use, the

practice of vivisection can cease. Moreover based on various scientific results, especially in branches such as neurology and vascular diseases, there is a question of doubting the reliability of animal experimentation since the same research experiments then replicated on humans have not had the same effects. This is because obviously the same diseases administered to animals do not always imitate the pathological processes and the responses to treatment on humans.

For the study of vaccines, an in vitro surrogate human immune system was also created to obtain surely more reliable results than previous research and, above all, the replacement of animals.

However the overwhelming part of the scientific community, from the members of the Royal Society to those of the National Academy of Sciences, believes that it is not yet possible to totally replace the technology for the use of animals since it has not yet succeeded, even with the most sophisticated models, to totally reproduce a living model.

Xenografts will become important for clinical emergencies and in the absence of human organ donors.

At the core of the ethical debate, these are the following questions: is it right to imitate even cells of different origins within a human body? What is the real limit beyond which science cannot enter by ethical-moral principles?

Cloning has raised an ethical debate concerning its application for the human race. Genetic engineering has placed the study of the human genome at the center of this topic. The ethical debate on the manipulation of human DNA has seen bioethics scholars place themselves in a position of firm condemnation in particular when we speak of “eugenics,” that is, of wanting to modify the characteristics of the human being through such scientific practices. The study and experiments on human embryos are the focus of utmost attention. In many countries including the USA and Italy, these types of experiments are prohibited by law. On the contrary, in Japan much more has been done with the testing of human-animal embryos to obtain human organs suitable for transplants.

Summary

The human being carries out tests on animals to observe their behavior and to understand a biological characteristic of another species. The results of these tests are used by biomedical science in order to always seek new solutions to specific problems, especially of a healthy nature. The tests that take place on animals are often higher risk tests and, after the Declaration of Helsinki of 1964 elaborated by the World Medical Association (WMA), it is not possible to carry them out on humans. The ethical debate that surrounds this topic today is particularly heated because it tries to delineate the limits within which new technologies and sciences are right or wrong to go. Vivisection, manipulation of the human genome, genetic engineering, cloning, xenotransplants, and GMOs are among the most debated topics among scholars.

References

- Ferdowsian, H. R., & Beck, N. (2011). Ethical and scientific considerations regarding animal testing and research. *PLoS One*, 6(9), e24059. <https://doi.org/10.1371/journal.pone.0024059>.
<https://www.efsa.europa.eu/it/topics/topic/cloning>
 Lane-Petter, W. (1958). Laboratory animals of high quality. *ICLA Memorandum*.
 Platt, J. L., & Bach, F. H. (1991). The barrier to xenotransplantation. *Transplantation*, 52(6), 937–947.
 Russell, W. M. S., & Burch, R. L. (1959). *The principles of humane experimental technique*. London: Methuen.
 World Medical Association. (1964). Declaration of Helsinki. 18th WMA General Assembly. Helsinki. <http://history.nih.gov/research/downloads/helsinki.pdf>

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Anthropological Sustainability

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Synonyms

[Economy serving life](#); [Integral ecology](#); [Sustainable economy](#)

Definition

Anthropological Sustainability (Morandini 2007) refers to the understanding of practices of social, environmental, and business sustainability not as an end in themselves but rather as parts of a holistic ethical posture. The latter is concerned with public happiness (Bruni and Zamagni 2007; Pabst 2018), spirituality (Zsolnai 2011), and community well-being (Maspero 2020). This perspective builds on the overlapping of theories of Integral Ecology (Esbjörn-Hargens 2005; Jakobsen and Zsolnai 2017; Mickey 2014), Environmental Economy (Musu 2003; Brown 2013), and Economic Anthropology (Carrier 2012), insofar it provides a conceptual framework able to bridge insights from different disciplines working on the issue of sustainability. Anthropological Sustainability collects both religious and secular points of view on the economy of care for the common good. Therefore, it represents a conceptual contribution both to studies on the relations between the individual and the greater good (Zsolnai 2011; Ims and Pedersen 2015) as well as on the interpersonal relations taking place while caring for the common good (Eisler 2014; Zamagni 2008).

Introduction

Anthropological Sustainability (Morandini 2003, 2007) represents a concept able to compel perspectives on social, environmental, and business sustainability by looking at them through the lenses of ethics and anthropology. Economic crises of our time are not circumscribed at the economic system nor can be solved without understanding their broader causes: environmental damage, moral disorder, and political turmoil are interconnected dimensions to be tackled together in order to look for systemic solutions (Ims and Pedersen 2015; Jackson 2010). The popular concept of “sustainable development,” as summarized in the SDGs UN 2030 Agenda, presupposes an idea of a human sustainable development that connects the different goals, in the form of an anthropological idea concerning which would be the limits and the possibilities of

sustainable lifestyles and sustainable societal interactions: indeed, social innovation, throughout all its multidisciplinary contributions, needs to foresee a new model to overcome current crises of the Anthropocene (Moore 2016). Sustainability is a “social construct” concept itself (Bruni 2007, p. 513): it addresses a shared notion of what is desirable, enduring, and meaningful in the long term for humankind as such. Accordingly, Anthropological Sustainability addresses a notion of progress and public happiness way more ambitious than quantified economic growth (Zamagni 2008).

Sustainability is thus a concept developed in the light of peculiar visions of human life as such, i.e., of the anthropological premises underpinning the connected ethical stances (Jonas 1984; Larrivee 2006). As Business Ethics recognizes, anthropological considerations have always shaped the economic and the business sphere: as assumptions, they constitute the basis for economic models built upon them; as understanding of essential features of human kind and of certain cultures, religious behaviors and community habits, they inform the analysis of economic actions (Schlag and Melé 2020; Larrivee 2006). When arguing that sustainable business practices hold a preeminent role, due to their reach and effectiveness, in facing environmental and social crises (Hart 1997), focusing on the anthropological standpoint allows to grasp the nature of this effectiveness: it provides an underpinning theory to practices of sustainability as being connected not only to management of scarce resources and reputational concerns but also to a larger awareness on issues as the quality of life, the idea of justice and of beauty (Morandini 2003). Similarly, recent studies on place-based sustainability management highlight the importance of notions connected to intangible values deriving from places (Shrivastava and Kennelly 2013), thus contributing to shaping a field of inquiry that exceeds economical and technical dimensions, moving toward philosophical and anthropological fields. Ultimately, anthropological sustainability shapes the idea that: “as we know, on the basis of analytical developments of economic anthropology, the partition between ‘market’ and ‘nonmarket’ is fundamentally illusory” (Sapelli 2013, p. 61).

The latter idea entails the possibility to analyze sustainable economic practices (such as, for instance, the theory of the TBL, see among others Elkington 1998, or the adoption of sustainable business models, Stubbs and Cocklin 2008) in the light of a philosophy of integral and multi-dimensional development (Jakobsen and Zsolnai 2017; Alexander 2012) that merge tangible and intangible variables involved.

The idea that “the business of business is the human person” (Melé and Schlag 2015) solicits not only a reflection on what kind of economic system is best suitable for enhancing personal virtue and human dignity but is intertwined with the research on what kind of society would be anthropologically sustainable as well. Anthropological Sustainability is thus influenced by religious spirituality as well as civil mundane engagement toward social justice, in trying to provide answers to these questions. As speculations on the desirable society for human development are phrased by religious intellectuals: “Three Keys Concepts of Catholic Humanism for Economic Activity: Human Dignity, Human Rights and Integral Human Development” (Melé 2015) as well as by scholars involved in the study of relationality and human interdependence and natural sociability (Ross and Creed 2012). Moving from these deeply humanistic perspectives, Anthropological Sustainability represents a useful concept exploitable within the building of the paradigm of Integral ecology: caring for the “common home” (Pope Francis, *Laudato Si'*) is thus conceived not only as a spiritual encounter with the value of the Creation as such, but also as an ethical posture involving the implementation of qualitative relationships between humans and living beings (Zrinyi 2019).

Main Issues

The main issue at stake with Anthropological Sustainability is a thorough understanding of the falsehood of the trade-offs between individual and social welfare, self-interest and solidarity, free market and social progress, human dignity and economic growth, profits and shared prosperity. When facing the grand challenges of our era, such

as economic crisis, inequality, and climate change, scholars and experts have underlined how the individualistic paradigm of short-term maximization not only fosters social disintegration and environmental degradation, but ends up in undermining the very ability of the individual to pursue his/her realization, which is impossible without shared meaning and social recognition (Goldschmidt 1990) and ends up in preventing economic growth as well (among others: Stiglitz 2013).

In this light, Anthropological Sustainability proposes a paradigm able to grasp the proper human distinctive features of economic actions enacted by different subjectivities, organizations, and institutions. For example, when considering pollution and environmental irresponsibility, unlike in the classical view provided by Coase's theory, pollution cannot be considered an externality toward others well-being, but needs to be analyzed throughout a multilevel framework embracing different terrains, all of which are to be involved in the analysis of the consequences of pollution (Esbjörn-Hargens 2005). In this light, integral ecology does not consider only one side of the interaction between business and the environment, such as, in the example, the one that can be monetized, but rather evaluates this dynamic according to the quality of human life, which is at stake because of it (Alexander 2012).

Furthermore, from the disciplinary point of view of economic anthropology, Karl Polanyi explains how an atomized society, whose bounds have been weakened by individualism and pursue of market and economic freedom per se, leads to social turmoil and the request for social protection from economic insecurity addressed to the State; according to this view, individualism leads to a counter-movement balancing the one of the dis-embedding of the economy from society itself (Polanyi 1944). This is one of the most relevant anthropological perspective leading to considerations on how the individualistic paradigm does not conduct to a society of free peaceful individuals but rather to the control imposed by the State on the market that has become *uncivilized*. On the contrary, paradigms such as the one of the Civil Economy, by proposing a positive anthropology,

provide a view of anthropological sustainability for the market, by focusing on its feature of embeddedness within interpersonal relations (Bartolini and Palma 2002). Therefore, in order to argue for the civilized feature of the market, an idea of anthropological sustainability is needed as a requirement.

Anthropological Sustainability provides a field on enquiry that focuses on *how* humans, outside the individualistic paradigm, cooperate and share tangible and intangible values, rather than asking whether they do so. Indeed, as it has been noted: “Interpersonal relationships and individual pursuits both make up distinctive features of human life” (Sison 2017, p. 328). This anthropological standpoint allows to convey the possibility of a harmonious quest for private and common interests that entails the possibility to foresee solidarity, empathy, and reciprocity as ontologically part of exchange relations and, thus, also of economic exchanges (Schlag and Mercado 2016; Zamagni 2008; Sapelli 2013; Davis 1996).

As Anthropological Sustainability understands common well-being as an essential feature of the human condition and as a significant influence over its actions, it goes in the opposite way from the idea of the *homo oeconomicus* and foresees that economic growth can be considered as such only if it bares better off conditions for society as a whole (Zamagni et al. 1999). Mainstream economic reductionism is unable to inquire into the harmonization of individual quests and societal well-being (Grassl 2012). Indeed, experiences of individual and shared prosperity through economic action are increasing and fostering innovative models of making business. The blurring of the boundaries between profit and no profit (Waddock 2014) reveals an increasing sensibility of the contemporary business sphere toward the issue of shared value, strong CSR (Del Baldo and Baldarelli 2015), and Humane enterprise forms of business, able to engage workers and local communities (Mollner 2011; Del Baldo 2020). This trend reveals the possibility of pursuing common good through business organizations not as a general claim but as a concrete set of practices. Consequently, the concept of Anthropological Sustainability is useful in moving from profit-driven agency theory to the notion of prosperity-

driven actions, which is a notion investing the collective sphere rather than the private one alone. Within this approach, the idea of relationality replaces philanthropy in addressing the relation between wealth creation and distribution (Bouckaert 2019).

Ultimately, the understanding of the economic discipline as a moral science (Rona and Zsolnai 2017) presupposes an anthropological stance to be chosen to support consequent moral claims (Bruni and Zamagni 2009). Integral ecology, understood through a dialogue between spirituality in business and sustainable economy, presupposes the overcoming of a conception of development as technologically driven exploitation of resources with short-term objectives and the moving toward a philosophical vision of mutual respect and relational value. Ultimately, Anthropological Sustainability frames integral ecology and integral human development theories by stressing their ability to provide a holistic account of the level of inquiry into the meaning of life as a distinctive feature of humankind and human action.

Summary

Anthropological Sustainability provides a conceptual framework able to bridge the idea of Integral Ecology and Environmental Economy by focusing on both the relationships between humankind and the environment as well as the one in between people caring for the common good and future generations. This idea has a two-fold meaning as it compels both insights from the Catholic Social Thought tradition and insights from economic anthropology, both stressing the idea that there cannot be social and environmental responsibility, accountability, and sustainability without an adequate anthropological background. In this light, inspirations of Integral Ecology taken from Pope Francis’s *Laudato Si’* can be considered common ground for all scholars facing the issue of Anthropological Sustainability: “But one cannot prescind from humanity. There can be no renewal of our relationship with nature without a renewal of humanity itself. There can be no ecology without an adequate anthropology” (*Laudato si’*, §18).

Cross-References

- [Business Ethics](#)
- [Circular Economy](#)
- [Sustainable Economy](#)

References

- Alexander, C. (2012). Economic valuations and environmental policy. In J. G. Carrier (Ed.), *A handbook of economic anthropology*. Cheltenham: Edward Elgar.
- Bartolini, S., & Palma, R. (2002). Economia e felicità: una proposta di accordo. In L. Bruni & V. Pelligra (Eds.), *Economia come impegno civile [Economy as civil engagement]*. Roma: Città Nuova.
- Bouckaert, L. (2019). Caring for being and caring for the other. In O. Setter & L. Zsolnai (Eds.), *Caring management in the new economy*. Palgrave.
- Brown, L. R. (2013). *Eco-economy. Building an economy for the heart*. London: Earthscan.
- Bruni, L. (2007). *Handbook on the economics of happiness*. Edward Elgar Publishing.
- Bruni, L., & Zamagni, S. (2007). *Civil economy. Efficiency, equity and public happiness*. Bern: Peter Lang.
- Bruni, L., & Zamagni, S. (2009) (eds). *Dizionario di economia civile*.
- Carrier, J. G. (Ed.). (2012). *A handbook of economic anthropology*. Cheltenham: Edward Elgar.
- Davis, J. (1996). An anthropologist's view of exchange. *Social Anthropology*, 4(30), 213–226.
- Del Baldo, M. (2020). Company case study 8: Cucinelli – A humanistic enterprise for a sustainable growth and a sustainable world. In W. Wehrmeyer, S. Looser, & M. Del Baldo (Eds.), *Intrinsic CSR and competition*. Palgrave Macmillan.
- Del Baldo, M., & Baldarelli, M. G. (2015). *From weak to strong CSR: The experience of the EoC (economy of communion) industrial parks in Germany and Italy*. uwf UmweltWirtschaftsForum – Springer.
- Eisler, R. (2014). Roadmap to a new economics: Beyond capitalism and socialism – Economics as if children and their future actually mattered. In M. Pirson, U. Steinvorth, C. Largacha-Martinez, & C. Dierksmeier (Eds.), *From capitalistic to humanistic business*. Palgrave Macmillan.
- Elkington, J. (1998). Accounting for the triple bottom line. *Measuring Business Excellence*, 2(3), 18–22.
- Esbjöm-Hargens, S. (2005). Integral ecology: The what, who, and how of environmental phenomena. *World Futures: The Journal of New Paradigm Research*, 61(1–2), 5–49.
- Goldschmidt, W. (1990). *The human career. The self in the symbolic world*. Cambridge: Blackwell.
- Grassl, W. (2012). Paper presented at conference “Free Markets with Solidarity and Sustainability,” Catholic University of America, Washington, DC, October 22–23, 2012 (organized with Pontificia Università della Santa Croce). To appear in proceedings, Catholic University of America Press.
- Hart, S. L. (1997). Beyond greening: Strategies for a sustainable world. *Harvard Business Review*, 75(1), 66–76.
- Ims, K. J., & Pedersen, L. J. T. (Eds.). (2015). *Business and the greater good – Rethinking business ethics in the age of economic crisis* (pp. 107–116). Cheltenham: Edward Elgar.
- Jackson, K. T. (2010). The scandal beneath the financial crisis: Getting a view from a moral-cultural mental model. *Harvard Journal of Law & Public Policy*, 33(2), 735–778.
- Jakobsen, O., & Zsolnai, L. (2017). Introduction: Why integral ecology is needed for reforming business. In *Integral ecology and sustainable business* (Contributions to conflict management, peace economics and development) (Vol. 26, pp. 3–11). Bingley: Emerald Publishing.
- Jonas, H. (1984). *The imperative of responsibility: In search of an ethics for the technological age*. The University of Chicago Press.
- Larriee, J. (2006). Economic theory meets human nature: How anthropological views of the human person shaped economic theory in Western history. In M. Schlag & J. A. Mercado (Eds.), *Free markets with solidarity & sustainability facing the challenge*. Washington, DC: The Catholic University of America Press.
- Maspero, G. (2020). Humanistic management for laypeople: The relational approach. *Humanistic Management Journal*, 5, 25–38.
- Melé, D. (2015). Three keys concepts of Catholic humanism for economic activity: Human dignity, human rights and integral human development. In D. Melé & M. Schlag (Eds.), *Humanism in economics and business. Issues in business ethics* (Vol. 43). Dordrecht: Springer.
- Melé, D., & Schlag, M. (2015). *Humanism in economics and business*. Springer.
- Mickey, S. (2014). *On the verge of a planetary civilization: A philosophy of integral ecology*. London: Rowman & Littlefield.
- Mollner, T. (2011). Mondragon: Could something like this be in our future? In H. Von Kimakowitz, M. Pirson, H. Spitzack, & C. Dierksmeier (Eds.), *Humanistic management in practice*. London: Palgrave Macmillan.
- Moore, J. W. (Ed.). (2016). *Anthropocene or Capitalocene? Nature, history, and the crisis of capitalism*. Oakland: PM Press.
- Morandini, S. (2003). *Il tempo sarà bello. Fondamenti etici e teologici per nuovi stili di vita*. Bologna: EMI.
- Morandini, S. (2007). *Per la sostenibilità etica ambientale ed antropologica [For ethical, environmental and anthropological sustainability]*. Gregoriana Libreria Editrice.
- Musu, I. (2003). *Introduzione all'economia dell'ambiente [Introduction to environmental economy]*. Bologna: Il Mulino.
- Pabst, A. (2018). Political economy of virtue: Civil economy, happiness and public trust in the thought of Antonio Genovesi. *The European Journal of the History of Economic Thought*, 25(4), 582–604.

- Polanyi, K. (1944). *The great transformation. The political and economic origins of our time*. Boston: Beacon Press.
- Rona, P., & Zsolnai, L. (Eds.). (2017). *Economics as a moral science*. Springer.
- Ross, J., & Creed, A. (2012). The human nexus – A practical framework for inspiring trust and making ethical decisions. *Small and Medium Sized Enterprises & Entrepreneur Review*, 4(2), 22–27.
- Sapelli, G. (2013). *Morality and corporate governance: Firm integrity and spheres of justice*. Milan: Springer.
- Schlag, M., & Melé, D. (2020). Building institutions for the common good. The practice and purpose of business in an inclusive economy. *Humanistic Management Journal*, 5, 1–6.
- Schlag, M., & Mercado, A. (Eds.). (2016). *Free markets with solidarity & sustainability: Facing the challenge*. Washington, DC: The Catholic University of America Press.
- Shrivastava, P., & Kennelly, J. J. (2013). Sustainability and place-based enterprise. *Organization & Environment*, 26(1), 83–101.
- Sison, A. J. G. (2017). Book review: Free markets with solidarity & sustainability: Facing the challenge. *Business Ethics Quarterly*, 27(2), 327–330.
- Stiglitz, J. (2013). *The price of inequality: How today's divided society endangers our future*. Penguin.
- Stubbs, W., & Cocklin, C. (2008). Conceptualizing a “sustainability business model”. *Organization & Environment*, 21(2), 103–127.
- Waddock, S. (2014). The changing social role of business in a world of collapsing boundaries. In M. Pirson, U. Steinvorth, C. Largacha-Martinez, & C. Dierksmeier (Eds.), *From capitalistic to humanistic business*. Palgrave Macmillan.
- Zamagni, S. (2008). Reciprocity, civil economy, common good. In *Pursuing the common good: How solidarity and subsidiarity can work together pontifical academy of social sciences*. Vatican City. www.pass.va/content/dam/scienzesociali/pdf/acta14/acta14-zamagni.pdf
- Zamagni, S., Acocella, N., Roncaglia, A., & Pizzuti, F. R. (1999). Social paradoxes of growth and civil economy. In G. Gandolfo & F. Marzano (Eds.), *Economic theory and social justice*. London: Palgrave Macmillan.
- Zrinyi, I. U. (2019). Authentic human relations and the economy. In O. Setter & L. Zsolnai (Eds.), *Caring management in the new economy*. Palgrave.
- Zsolnai, L. (2011). Taking spirituality seriously. In L. Zsolnai (Ed.), *Spirituality and ethics in management. Issues in business ethics* (Vol. 19). Dordrecht: Springer.

Anti-bribery and Corruption (ABC) Compliance Programs

- [ISO 37001 Anti-bribery Management Systems](#)

Anti-bribery Management System Standard

- [ISO 37001 Anti-bribery Management Systems](#)

Anti-corruption Management Systems

- [ISO 37001 Anti-bribery Management Systems](#)

Antidiscrimination

- [Nondiscrimination](#)

Anti-oppressive Ethics

- [Ethic of Love](#)

Apparatchik

- [Chernobyl Disaster, The](#)

Applications of Altruistic Moral Teachings

- [Altruistic CSR](#)

Applied Ethics

- [Professional Ethics](#)

Appropriate Consumption

- [Sustainable Consumption](#)

Aqua

► Water

Aquaculture

► Fisheries

Aquaculture and Blue Farming

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production of aquatic animals and plants (including photosynthetic organisms). Fish is an essential source of protein for humans, and demand will rise as the world's population expands (Tidwell and Allan 2012; Tsado et al. 2012). It is a renewable natural resource that, if carefully managed, may be utilized forever. The present level of exploitation has gone beyond the maximum sustainable output, leaving aquaculture operators to meet the increasing need for artificial production. The process of reproducing aquatic creatures in a regulated or semi-controlled environment is known as aquaculture. According to Dauda and Ibrahim (2015), aquaculture is the cultivation of aquatic creatures with human intervention to increase production while allowing private ownership of the stock produced. The idea of “Blue Farming” aims to increase the sustainability of agricultural lands and farms by assisting in the transition to sustainable and organic farming, while also regenerating the seas, coastal communities, and the climate. The difficulties that fish farmers encounters as they attempt to move toward more sustainable fish production have a natural and circular answer in the form of blue farming (Wouters, 2022).

In contrast to fishing, this enables the selective breeding of species for human food, industrial usage, or recreational fishing. Aquaculture has been critical to long-term fish production. According to Adeogun et al. (2007), it is well-positioned to compensate for declining catch fishing supplies. Jagger and Pender (2001) say that it could make food more secure, cut fish prices, and create new jobs in the fishing industry.

Synonyms

Aquaponics; Blue farming; Blue revolution; Brackish water culture; Farmed fishery; Freshwater culture; Hydroponics; Mariculture; Pisciculture

Introduction and Definition

The FAO (Food and Agriculture Organization of the United Nations) defines aquaculture as the

Status of Aquaculture

Since 475 BC, aquaculture has been recorded in China (Cruz et al. 2012). It wasn't until the late 1940s that it was recognized as having a significant influence on spawning by replenishing natural water basins. Since fish capture has been stagnant for more than three decades, the country's existence is dependent on its performance (Dauda et al. 2018). Aquaculture production has steadily grown in recent decades, rising

from a tiny percentage in the 1950s to more than 20% in the mid-1990s. It has progressed from being a secondary to a primary source of fish production in recent decades. According to the FAO (2018), aquaculture produced about 110 million tonnes in 2016, including aquatic plants. The production includes food fish worth 80 million tonnes valued at USD 231.6 billion and 30.1 million tonnes of aquatic plants at USD with 37,900 tonnes of non-food products at USD 214.6 million. This fact proves the feasibility of increasing aquaculture fish productivity. Likewise, exploring global production, Asia contributes to around 89.4 % of global output, followed by the Americas (4.2 %) and Oceania (0.26 %). In 2016, China accounted for around 61.5 % of the world's output (FAO 2018).

Types of Aquaculture

Because aquaculture is done primarily for convenience, there is no standard approach for categorizing it. Because of the wide range of aquaculture operations, describing the many types of aquaculture systems can be difficult. Aquaculture encompasses a wide range of activities, including:

- **Hydrobiological characteristics:** The aquatic environment in which the culture is carried out, such as freshwater, brackish water, or saltwater. Freshwater, which is found chiefly in inland sections of a country, and saltwater, found in seas and oceans, have vastly different salinities, ranging from zero to nearly 35 parts per trillion in the former and nearly 35 parts per trillion in the latter. Brackish water is in estuaries, river deltas, lagoons, and backwaters worldwide, subject to tidal forces. The salinity in such ecosystems varies greatly, from insignificant to 35 parts per thousand, depending on the tide phase and the volume of freshwater discharged into the sea through the river. Finfish and shellfish found in brackish seas are always euryhaline, meaning they belong to a group of organisms that can endure large fluctuations in salt in their environment. Aside from the salt of the water, the temperature of

the water has a selective effect on the fish that flourish there, such as warm-water fish against temperate or coldwater fish. Coldwater fish, e.g., trout, loach, etc., can be found in temperate countries and the higher reaches of tropical countries at high altitudes. Then there's the particular fish fauna of warm waters, e.g., scores of carps and catfishes and several species of mussels, etc.

- **Water exchange** Aquaculture systems come in various types, despite variances in the physicochemical features of their habitats. The amplitude and intensity of water exchange rates in most systems vary. The volume of water exchanged, or the control over water flow to the system is called water exchange. Water exchange levels are static, open, semi-closed, and recirculating (closed). Pond culture is used in a lot of aquaculture operations around the world. During the culture stage, there is no water exchange in these ponds. To compensate for evaporation, some topping up may be necessary. When a cage system is situated within a large body of water, such as an ocean or an estuary, it is described as an open system. The fish in these cage systems are usually kept at a high density, and artificial feed is provided. On the other hand, natural currents and tides keep water quality in check. As a result, these are open systems that require a lot of work. Globally, cage-based fish production is rising, and the technologies are now well developed in Europe, sections of South America (mainly Chile), and China. Recirculating systems typically have extraordinarily little water exchange during a production cycle, hence the term "closed" systems. Particulate matter is filtered out of the water as it runs through the treatment chamber, and the air is added. This closed system regulates salinity, temperature, oxygen, and other variables. It is a green system since just a tiny amount of new water is released to replenish the water that has evaporated. In most recirculating tank systems with intensive culture, some water is drained and refilled each day. This situation is due to parts of the routine maintenance procedure for nitrate removal.

- **Intensity of culture:** This indicates the number of aquaculture organisms per unit area or volume of water and the system's ability to support biological productivity. Depending on its intensity, culture is classified as intense, semi-intensive, or extensive. Intensification aims to increase yield while using the same or less land, water, and labor inputs. The following concepts guide these systems: (1) Increase water flow and pond aeration to provide oxygen to the pond. (2) Protein-rich pellets are fed. (3) Increasing the number of fish species stocked.
- **Fish farming methods:** This refers to the number of different fish species that are raised in the same pond, such as monoculture, polyculture, or integrated farming. Monoculture is the cultivation of a single species of organism in any sort of water, fresh, brackish, or salt. Whereas polyculture is the cultivation of multiple species in a single body of water. Integrated fish farming is raising fish in conjunction with other agricultural/livestock operations in a pond. The farming sub-systems, such as fish, crops, and livestock, are intertwined so that byproducts/waste from one sub-system become valuable inputs to another, ensuring total land usage. This combination of intensity, culture methods, species, farming techniques, and distinct phases of culture results in a highly diversified set of aquaculture systems and technology.

Aquaculture Species

Finfish, crabs, mollusks, other aquatic invertebrates, and aquatic plants have all been successfully farmed by humans. Although the exact number of current fish species is unknown due to discoveries regularly, Nelson (2006) estimated around 515 families and 32,500 marine and freshwater fish species (Helfman et al. 2009). Not all of these fish species can currently be raised in captivity. Aquaculture candidate species are defined by their hardness, rapid growth, resilience to disease and parasites, ability to reproduce in captivity, tolerance to artificial feeding, and market

availability. These are some of the most important characteristics that distinguish a species as a prospective aquaculture candidate (Ajani et al. 2011). According to the FAO (2018), over 598 aquatic animal species have been or are currently being economically farmed. Fish account for the majority of the species (369), followed by mollusks (109), crustaceans (64), amphibians and reptiles (7), and aquatic invertebrates (9), and maybe 40 algae. The silver carp (*Ctenopharyngodon idellus*) is native to Southeast Asia. *Hypophthalmichthys molitrix* is a kind of carp. *Cyprinus carpio* and Nile Tilapia are two of the most common freshwater fish. Bighead carp and *Oreochromis niloticus* are both African carp species. *Hypophthalmichthys nobilis* is the most commonly farmed finfish. The legs of whiteleg shrimp are white. The most commonly farmed species, *Penaeus vannamei*, accounts for more than half of all farmed crustaceans. A cup of oysters, *Crassostrea spp.*, and *Ruditapes philippinarum* are the most farmed mollusks, whereas the Chinese softshell turtle, *Trionyx sinensis*, is the most extensively farmed aquatic animal.

Precision Aquaculture

Precision aquaculture is a technique for increasing fish farmers' ability to check, regulate, and record biological processes in aquaculture production. Precision aquaculture is helpful when considering fish farming in four cyclical operational processes: observe, interpret, decide, and act. First, the farmer sees and records the fish's bio-reactions, either by hand or using data-gathering technology such as cameras. The farmer then subjectively examines this data to acquire a real-time picture of the fish's health. Agricultural operations and management choices are created based on these interpretations, then manually applied in the cage. Precision aquaculture techniques use technical solutions and notions of automation for several or all areas of agricultural operations. Thereby converting operational features associated with various fish farming operations from an experience-based to a knowledge-

based regime. Improve agricultural activity accuracy, precision, and repeatability; enable more autonomous and continuous biomass/animal monitoring; give more reliable decision support, and minimize reliance on manual labor and subjective judgment, increasing staff safety. Animal health and well-being will improve because of precision aquaculture. This situation will also improve yield and output and the environment. There are technological constraints in a fish farm setting due to the underlying physics of the sub-surface environment, sensor technology characteristics, and data transmission protocol restrictions. These challenges must be overcome before a complete shift to commercial aquaculture occurs. Changing system settings, adding new product features, and moving equipment are practical options.

Infrastructure and support technologies are also critical. Among the difficulties relating to infrastructure and support, technologies are those relating to environmental evaluation and planning, such as computerization of aquaculture production, financial commands and control, systems to assist in decision-making during planning, farm management software that is more effective also improved online monitoring devices, as well as dependable calibration and self-diagnosis are required (for biomass, environmental parameters).

For adequate better zoning and control, as well as improved environmental management include incorporating Geographic Information Systems (GIS) into System Management, improved approaches for impact evaluation — for example, carrying and holding ability models — might be beneficial, and vaccines and parasite treatments are applied in enormous quantities across producing zones.

Issues Affecting Aquaculture

Many of today's aquaculture practices are environmentally hazardous. In aquaculture, eutrophication is a prevalent problem and refers to an environment's excessive nitrogen and phosphorus enrichment. Aquaculture uses antibiotics, which leads to eutrophication. Excess fish feed

introduces significant levels of nitrogen and phosphorus into open-water aquaculture systems (Talbot and Hole 1994). Closed inland systems that dump wastewater straight into natural rivers may lead to eutrophication (Talbot and Hole 1994). Unexpectedly, ecological aquaculture pollution has occurred from a rapidly expanding and poorly managed industry. Aquaculture waste adds to nutrient contamination and harms other fish. Aquaculture methods like open net-cage farming are often utilized around the borders of large bodies of water. It is hard to escape feces into the sea where farmed fish are trapped in large mesh fishing nets. Antibiotics, insecticides, and fish excrement may be included in this waste, rendering it inappropriate for human eating, recreational use, or animal survival.

Overfeeding of Fish and other marine organisms can affect the environment. A lack of control and a faulty feed plan may have a wide range of adverse environmental consequences. Nutrients that have not been utilized are released into the environment, causing the ecosystem to adapt to survive. Aquaculture waste discharged into the environment also harms the ecosystem. Aquaculture, like all other methods of animal production, generates waste. Aquaculture solid waste is classified into solid waste and dissolved waste (Amirkolaie 2011). Uneaten or spilled feed and fish excrement are examples of solid waste. The majority of dissolved waste is assumed to be caused by fish metabolites (Amirkolaie 2011). These two pollutants build up in a system and eventually deteriorate water quality, leading to an invasion of disease-carrying fish. Aquatic systems such as ponds, raceways, and caged systems generate artificial channels by continuously pumping water through them. This system allows the system to maintain a higher level of water quality for the fish. It also shows that dissolved and solid wastes are released into the environment regularly and unreported (Martins et al. 2010), which means that they don't get cleaned up.

The ongoing improvement in feed digestibility (which allows fish to eat more nutrients while producing fewer waste products) has lowered organic waste and operating costs (Bureau and Hua 2011). Fish, like other livestock, may be

carefully chosen to improve their “feed-conversion ratio” (i.e., the kilograms of feed needed to produce one kilogram of product). New farming approaches are now being tested. The production of shellfish and seaweed close to or alongside finfish farms has been suggested to reduce nutrient pollution. IMA, or integrated multi-trophic aquaculture, is becoming more popular as a workable alternative to traditional aquaculture practices. Fish meal and fish oil are essential components of aquaculture feed. Because of this reliance on fisheries, overfishing and overexploitation of natural aquatic resources occur. Despite extensive investigation, no commercially viable alternative feed components have yet to be discovered.

Similarly, cultured Fish release nutrients caused by cultured organisms' eating and excretion (uneaten food and waste products). Therefore, it causes organic enrichment and lowers oxygen levels, and increases animal mortality. These result in dead zones and significant changes in the benthos, the biological communities at the bottom of aquatic environments. The discharge of organic and inorganic nutrients then further from microalgal blooms (eutrophication) alters the aquatic food chain.

Invasive species are becoming a global problem. Many aquaculture organisms are unusually adapted to their habitats. A notable example is the culture of Atlantic salmon (*Salmo salar*) in Chilean fjords. Invading species introduce new diseases into natural populations (parasites and pathogens are imported into the aquatic environment). The species that live in open water sometimes go extinct due to failure, human mistakes, or harsh weather. There is more competition for food and space when invasive species move into an area where they are not native. This factor can hurt the health of the animals and plants there.

Aquaculture is so poorly regulated at the state, national, and international levels that it endangers the natural environment we humans rely on and enjoy. Algal blooms are one of the most dangerous and difficult-to-control effects of fertilizer runoff. This kind of algae bloom is harmful to both humans and animals, and it has the potential to interrupt daily routines. These blooms can

make local water unsafe for drinking and recreational use and damage native creatures. According to experts, aquaculture in its current form endangers our natural system. Aquaculture regulation may result in enhanced human food products and economic advantages from job creation in various businesses. It may also be beneficial to the environment.

Strength and Benefit of Aquaculture

Globally, there are now more than 7 billion people, with projections of more than 10 billion by 2050. Despite significant advancements in food delivery, the World Food Programme predicts that 800 million people will be hungry by 2020. The SDGs call for increased food production, the development of resilient and sustainable food systems, and the provision of safe and nutritious food to everyone. The “Blue Revolution” has piqued the public's curiosity. As a “rich dinner for the poor,” fish is ideally positioned to aid in achieving the SDGs. Because most fish populations have been fished to their total capacity or at unsustainable levels, the seafood industry has shifted to aquaculture, which has risen dramatically in recent decades. Aquaculture provides food and livelihoods, but it also helps to rehabilitate fragile and endangered species populations and increase wild stock numbers. People who work in seafood processing, feed, and equipment production get jobs because aquaculture helps them.

While food security guarantees that everyone has access to nutritious food and enough calories, the significance of aquaculture in supplying healthy, lean protein to the world's expanding population cannot be overstated. Aquaculture also helps to ensure the food security of many low-income individuals in developing countries. It is estimated that they account for 22% of total animal protein intake in food-insecure countries. Experts recommend that pregnant or nursing women, as well as children, consume seafood. Consumption of farmed fish may improve nutrition and food security for many individuals.

Diversification in aquaculture is owing to the continuous introduction of new species and activities. There is a solution for you, from small-scale inshore to large-scale (industrial) offshore aquaculture production systems. Diversification is critical for resilience to climate change and other external pressures, regardless of the sector's diversity of species, production zones, and artistic techniques – whether in marine or freshwater settings. This variety safeguards aquaculture food systems against economic, social, and environmental threats. The use of more climate-resilient species and genetic strains may reduce the sector's susceptibility to climate change.

Further north, Atlantic and Cod output is increasing, while Halibut and Sole are becoming more popular with buyers. Diversification is becoming more common among freshwater farmers, with the cultivation of Sturgeon for both caviar and meat being the most well-known example. Several catfish species, including the Wels catfish and the African catfish, are being researched.

As a result, freshwater scarcity has become a worldwide concern. Competition for freshwater resources is developing among aquaculture and other users, such as agriculture, which uses more than 70% of the world's freshwater. It is difficult to increase food production through efficient water use. The recirculatory aquaculture system (RAS) is critical to our food chain's ability to adjust to climate change. The water is filtered before it is recirculated back into the system, which removes metabolic waste from the stock. Mechanical or biological filtration, sterilization, and oxygenation are used to purify water. Water reuse varies in complexity and efficiency, but all RAS reuse water to a high degree (> 90%). RAS technology has significantly improved in the last two decades, and its popularity has recently expanded. RAS uses Biofloc technology to conserve even more water. Probiotic nutrients may assist fish in developing faster, responding better to antibiotics, and reducing oxidative stress. The status and relevance of aquaculture are projected to expand in the next few years as worldwide consumer demand for healthy food rises.

Marketing of Aquaculture Products

Market-based fish and aquaculture products will be found and produced, with commercialization being vital to the success of an aquaculture firm. A profitable fish farm can be created using the four Ps of marketing: Place, Price, Product, and Promotion. Fishers who want to make money need to know about popular fish species, marketing channels, target markets, government regulations, and set prices. They are identifying a target audience or customer, whether merchants, shop owners, wholesalers, restaurants, or local fishmongers, to help decide what to market. In addition to their commercial potential, although acceptability varies by region, highly sought-after aquaculture species should be farmed or marketed in varieties to offer farmers a competitive edge. Extensive but straightforward market and customer preference surveys may aid in resolving the product form problem. Customers would be willing to pay more for their benefits, and producers would understand how to promote their products and where to find individuals in need. The next step is to create unique marketing methods to persuade buyers to choose the firm over competitors. Farmers' marketability and reach will expand due to price decisions, marketing initiatives, and healthy eating programs. Improvements to the supply chain and logistics and government certifications to encourage healthy eating will boost agricultural sales. Customers are more likely to purchase a product if they believe it is readily available and appropriately priced. According to Burnham and Leary (2018), word-of-mouth marketing is the most effective form of advertisement. Customers that get exceptional customer service are more likely to recommend it to their friends and family and return to the company. However, customers who get defective fish products may question the producers. Fish products may be promoted through social media, radio jingles, local magazine advertisements, and cooking shows. However, everything must be precise and concise. It will also provide raised fish producers with a competitive advantage.

Aquaculture is a long-standing yet highly competitive commercial sector. Inland fishers,

trawlers, other farm-raised fish producers, and animal producers compete with fish farmers. Knowing your competitors' strengths and shortcomings may help you develop marketing tactics that can endure the rigors of manufacturing and distribution. Aquaculturists must acquire information, energy, and resources about their sector to evaluate their competitors. These rules, if followed, will assist in the profitable sale of aquaculture items.

Perseverance is rewarded in this life. A successful aquaculture company must have a well-thought-out business and marketing plan. Time, effort, and innovation are necessary inputs in the fish marketing process. Producers should look at and work on each idea independently, keeping their budgets and resources in mind.

Sustainability of Aquaculture

Aquaculture production has grown by twelve in the previous 30 years. As a result, it is responsible for meeting the world's rising need for fish protein in an environmentally beneficial manner (HLPE 2014). It can supply jobs for the world's growing population, particularly in underdeveloped countries. However, it must incorporate environmental, economic, and social sustainability to be sustainable. The kind of fish cultivated, the location, environmental constraints, and the skill level of the fish farmer all affect the construction of a sustainable aquaculture system. Aquaculturists are being pushed to grow in an environmentally sustainable manner. Environmentalists believe aquaculture is unsustainable because of the negative environmental repercussions and eutrophication of fish-producing water bodies (Bill 2017). Meanwhile, sustainable aquaculture activities must not be considered adequate to affect the biodiverse fauna and flora. They support the effective use of value-added fish products, waste reduction, sludge, organic matter, and filtering process management. Wastewater should be treated, recycled, or managed before being released into the environment. The preservation of a circular and cooperative economy is critical for efficient farming and business operations. The

organization places a premium on biosecurity, accountability, decreasing synthetic fertilizer and pesticides, and supporting correct financial records. Polyculture, cultivating water creatures alongside terrestrial plants or animals, may effectively use multiple niches and resources within the farm with low output and bring mutually beneficial advantages to the species grown while boosting the farm's economic performance. A long-term aquaculture industry with long-term aims and prospects is required. Fishers must adhere to legal requirements while embracing effective and safe community practices. The well-being of the community should come first. If you work in agriculture, no matter your race or gender or how much money you make, your job should be safe and paid fairly. Well-managed aquaculture will give significant advantages while creating minimal harm to the ecosystem over time. A new management plan that incorporates the implications of aquaculture on ecosystems and actions that are predictable, tolerant, robust, and adaptive over a wide variety of locations is necessary to boost the sector's production and sustainability. It is required to educate local communities, industry, and other significant players about impact assessments and procedures for creating a regulatory framework. Increasing coastal preservation is critical for the long-term sustainability of the ecosystem and future food security. This situation includes better management and conservation of natural resources and the promotion of environmentally and economically sound aquaculture (Gomez 2020).

Summary

Aquaculture's rapid expansion has made it a critical source of human nutrition and a contributor to global food security. Long-term aquaculture development needs ecological integrity. An innovative, integrated, and multi-disciplinary approach to aquatic resource management attempts to collect as many ecological products and services from seas, rivers, and wetlands as possible while also supplying social and economic benefits. It strives to decrease poverty,

hunger, and malnutrition by incorporating inclusive growth management. It is becoming more necessary for society to develop the economic capability to sustainably use aquatic ecosystems and their benefits in the blue economy.

Cross-References

- [Blue Economy](#)
- [Fisheries](#)

References

- Adeogun, O. A., Ogunbadejo, H. K., Ayinla, O. A., & Oresegun, A. (2007). Urban Aquaculture: Producer perceptions and practices in Lagos State Nigeria. *Mid-East Journal of Scientific Research*, 2(1), 21–27.
- Ajani, E. K., Akinwale, A. O., & Ayodele, I. A. (2011). *Fundamentals of Fish Farming in Nigeria*. Walecrown publishers Ibadan. 158pp.
- Amirkolaie, A. (2011). Deduction in the environmental impact of waste discharged by fish farms through feed and feeding. *Reviews in Aquaculture*, 3(1). <https://doi.org/10.1111/j:1753-5131.2010.01040.x>.
- Bill McGraw. (2017). Protecting the world's "blue food" revolution. TheFishSite. <https://thefishsite.com/articles/the-many-sides-of-sustainability-in-aquaculture>
- Bureau, D. P., & Hua, K. (2011). Towards effective nutritional management of waste outputs in aquaculture with particular reference to salmonid aquaculture operations. *Aquaculture Research*, 41(5), 777–792.
- Burnham, T. A., & Leary, R. B. (2018). Word of mouth opportunity: why recommendation likelihood overestimates positive word of mouth. *Journal of Marketing Theory and Practice*, 26(4). <https://doi.org/10.1080/10696679.2018.1487770>.
- Cruz, M. T., Ibanez, A. L., Hermosillo, O. A. M., & Saad, H. C. R. (2012). Use of Probiotics in Aquaculture. *International Scholarly Research Network ISRN Microbiology*, 2012 (2012), Article ID 916845, 13 pages.
- Dauda, A. B., & Ibrahim, H. I. (2015). Prevalence of Fish Diseases in Fish Farms in Katsina State, Nigeria. *The Bulletin of Animal Health and Production in Africa*, 2015(63), 495–503.
- Dauda, A. B., Ikhsan, N., Karim, M., Kamarudin, M. S., & Bichi, A. H. (2018). African Catfish Aquaculture in Malaysia and Nigeria: Status, Trends, and Prospects. *Fisheries and Aquaculture Journal*, 2018(9), 1. <https://doi.org/10.4172/2150-3508.1000237>.
- FAO. (2018). *The State of World Fisheries and Aquaculture-Meeting the Sustainable Development Goals*. Rome: Fisheries and Aquaculture Department, Food and Agriculture Organization of the United Nations.
- Gomez, S. (2020). *Aquaculture: Challenges on the road to sustainability*. <https://hydroheart.org/2020/09/13/aquaculture-principles-history-and-current-challenges-on-the-road-to-sustainability/>
- Helfman, G. S., Collette, B. B., Facey, D. E., & Bowen, B. W. (2009). *The diversity of fishes: Biology, evolution and ecology*. Oxford: Wiley-Blackwell Publishing.
- HLPE. (2014). *Sustainable fisheries and aquaculture for food security and nutrition*. Rome: A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security.
- Jagger, P., & Pender, J. (2001). Markets, marketing and production issues for aquaculture in east Africa: The case of Uganda. *Naga-The ICLARM Quarterly*, 24, 42–51.
- Martins, C., Eding, E., Verdegem, M., Heinsbroek, L., Schneider, O., Blancheton, J., & Verreth, J. (2010). New developments in recirculating aquaculture systems in Europe: A perspective on environmental sustainability. *Aquacultural Engineering*, 43(3), 83–93.
- Nelson, J. S. (2006). *Fishes of the World* (4th ed.). New Jersey: John Wiley & Sons Inc..
- Talbot, C., & Hole, R. (1994). Fish diets and control of eutrophication resulting from aquaculture. *Journal of Applied Ichthyology*, 10(4), 258–270. <https://doi.org/10.1111/j.1439-0426.1994.tb00165.x>.
- Tidwell, J. H., & Allan, G. (2012). The role of Aquaculture. In J. H. Tidwell (Ed.), *Aquaculture production systems* (pp. 3–13). World Aquaculture Society, Wiley-Blackwell.
- Tsado, J. H., Adeniji, O. B., Ojo, M. A., Adebayo, C. O., & Abdulazeez, R. (2012). Perception of women's knowledge on the nutritive value of Fish in Kaduna north local government area of Kaduna state, Nigeria. *Journal of Agriculture and Social Research (JASR)*, 12(1), 162–169.
- Wouters, J. 2021. Blue Farming: accelerating the transition to sustainable and organic agriculture. The Seaweed Company. <https://www.theseaweedcompany.com/news/blue-farming-accelerating-the-transition-to-sustainable-and-organic-agriculture#:~:text=The%20Seaweed%20Company-,%E2%80%8D,impact%20with%20seaweed%2Dbased%20solutions.>

Aquaponics

- [Aquaculture and Blue Farming](#)

Aquatic Sustainability

- [Ocean Sustainability](#)

Aral Sea

► [Aral Sea Disaster, The](#)

Aral Sea Disaster, The

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Synonyms

[Aral Sea](#); [Bioweapons](#); [Central Asia](#); [Over-exploitation of natural resources](#); [Pesticides](#); [Soviet Union](#)

Definition

Environmental sensitivity is a warning to society that, if no action is taken soon, the world as it has been known could be degraded to such extremes that could never have been imagined. However, this is not a future alert as there are painful examples in the immediate present of how the human hand is capable of transforming the face of the planet. In this sense, the Aral Sea disaster serves as a model to epitomize the nefarious repercussions of short-term economic policies on the natural habitat. The Aral Sea disaster and what it entailed are detailed below: the conversion of a lake into a desert, the sudden change in the geography of the area, the disappearance of millenarian native cultures, the exposure of the population to pollutants of all kinds, the bacteriological war, or the emergence of several diplomatic conflicts between those countries with economic interests in the lake basin that still do not agree on what decisions to take, once the damage to humanity seems to be irreversible.

Introduction

Something very strange must be happening if during the last few years dust particles fall on Norway and Greenland from a remote desert located several thousand kilometers away, which in turn is settled on the floor of what became one of the largest lakes on the planet until only 60 years ago (Pandey and Jha, 2003). This desert (Aralkum) extends over most of the ancient Aral Sea, in what is one of the greatest environmental catastrophes in the history of mankind, which, despite all attempts, seems to show very difficult or impossible solutions. While other environmental tragedies such as the Exxon Valdez oil spill, the nuclear disasters of Chernobyl and Fukushima, or the Bhopal accident did have a huge media impact since they occurred, this catastrophe was initially hidden, hence it is usually recognized in the literature as “Quiet Chernobyl” (Kumar, 2002). Its magnitude would become known when in the early 1990s A. Gore, then vice president of the USA, related his feelings of helplessness and disbelief in the face of the sinister image of the merchant ships stranded in the dry bottom of the Aral Sea (see Gore, 1992), an icon that would gradually transcend among the international public opinion after the fall of the Iron Curtain.

The motives that prompted this “Man-Made Desert” could not be specifically assigned to any particular person or human group but to the greed and thoughtless short-term policies (Breckle and Geldyeva, 2011; Joger et al., 2011) or perhaps to the *Gossypium*, that is, to the cotton. Effectively, this small plant, just as it was the involuntary protagonist of the slave trade in the Americas, was also the main character of everything that happened in the Aral Sea. The purpose of this entry is to summarize what was this environmental calamity, its genesis, as well as a series of facts of great relevance that were concatenated from it. If there is a lesson to be learned from any event that threatens the ecosystem, the Aral Sea Disaster is probably one of the most noteworthy, as it demonstrates that respect for the ecosystem is more than a mere motto: it must be a civic obligation.

Geopolitical Context of the Aral Sea

The vast area around the Aral Sea was already populated during the Neolithic period by several hunters and fishing tribes (Breckle and Geldyeva, 2011), with its first purely historical reference appearing in Strabo which places it “behind *Tanais* and *Meotide*” (see Zonn et al., 2009). Centuries later, Emperor Wu of Han sent the Chang-Ch’ien emissary to establish diplomatic-commercial relations with the tribal clans of the area, and from this expedition the first available data on the lake. In the second half of the nineteenth century, the Russian conquest of Central Asia took place, being later this enormous territory split during the Soviet era into two Soviet Socialist Republics: Kazakh and Uzbek (today Kazakhstan and Uzbekistan). It was from the 1950s onward that the problems in the Aral Sea really began, as a consequence of Soviet developmentalist policies which proved to be somewhat effective but which, under no circumstances, could be considered respectful of the environment or the most elemental human rights.

In effect, the drying of the Aral Sea can be contemplated as the most important “achievement” carried out by the ancient Soviet authorities in order to ensure maximum five-year production quotas, whatever the cost: economic, human, or environmental. Along with this catastrophe, it may be listed a long number such as the erection of the Stalingrad/Volgograd Hydroelectric Power Station, the construction of The Karakum Canal, or the cruel *Holodomor* (1933), a time when practically all Ukrainian wheat production was confiscated, with which more than 3 million human beings died of hunger (Wolny, 2017). With a few exceptions such as Kelley (1976), it must be taken into account that the existing sources on this catastrophe, or any critical monograph on the environmental subrogation to the Soviet corporate productivity, are practically nonexistent due to the censorship exercised by the *nomenklatura* since it was not until February 1986 that M. Gorbachev enunciated the mythic phrase “restructuring and transparency” (*perestroika* and *glasnost*) on the occasion of the 27th Congress of the CPSU. Certainly, from this openness onward some measures

began to be taken to counteract the environmental damage; however, they were either insufficient or it was too late (see, i.e., Pryde, 1988; DeBardeleben, 1990).

Genesis, Evolution, and Consequences of the Aral Sea Disaster

The Aral Sea has always been considered the fourth largest lake in the world after the Caspian Sea, Lake Superior, and Lake Victoria, but it has seen its flow reduced significantly to 10% of what it was in the 1960s. Despite its name, the Aral Sea has no outlet to the sea as it is a closed or endorheic basin (Micklin, 2016) and is fed by two rivers that cross Central Asia: Amu Daria and Sir Daria, born in the western anteroom of the Himalayas (Thiam Sam and Pamir mountains). The total area of the lake basin covers 1,200,000–1,300,000 km² extending over Northern Afghanistan, the southern part of Kazakhstan, a large part of Turkmenistan and Kyrgyzstan, and the whole of Tadjikistan and Uzbekistan (Ivanov et al., 1996). The course of both rivers was diverted in the 1950s to increase the cotton monoculture in the area, which is why the Karakum canal (about 500 kilometers long) was built with the sole idea of enlarging the irrigated area. However, this engineering work turned out to be really inefficient and wasteful, since up to 70% of the water transported was lost, although the objectives initially set were achieved, since Uzbekistan became one of the first cotton producers in the world and, consequently, the Soviet Union was able to show off its cotton production against the USA, its antagonistic rival during the Cold War.

Those economic successes had dire consequences for the Aral Sea, verifying the proverb “bread now, hunger for tomorrow”: The lake passed from an initial extension of 68,000 km² in the 1960s to less than 7,000 km² in the 1980s, becoming even smaller than the Titicaca Lake.

From the beginning, the Soviet authorities were aware of the coming disaster, but instead of stopping it, they chose to do just the opposite, blinded by their greed, i.e., to drain the lake further, in order to obtain more cultivable lands for

cotton production. In this way, the traditional fishing industry in the area, which along with the Caspian Sea supplied the entire Soviet Union, was practically reduced to a minimum. Note that this was always the main economic resource of the regions near the lake, so the socioeconomic impact was terrible because some local populations that were on the verge of disappearing impacting negatively on the ancient sociocultural idiosyncrasies of the area. Table 1 summarizes the most representative species of fish in the lake, obviously affected by its gradual disappearance over the last 60 years:

From 1987, the decline in the water flow caused the lake to split into two parts: the northern part in Kazakhstan (North Aral Sea or “The Small Sea”) and the southern part in Uzbekistan (South Aral Sea or “The Large Sea”), which marked an even faster decline in its surface, hence the UN

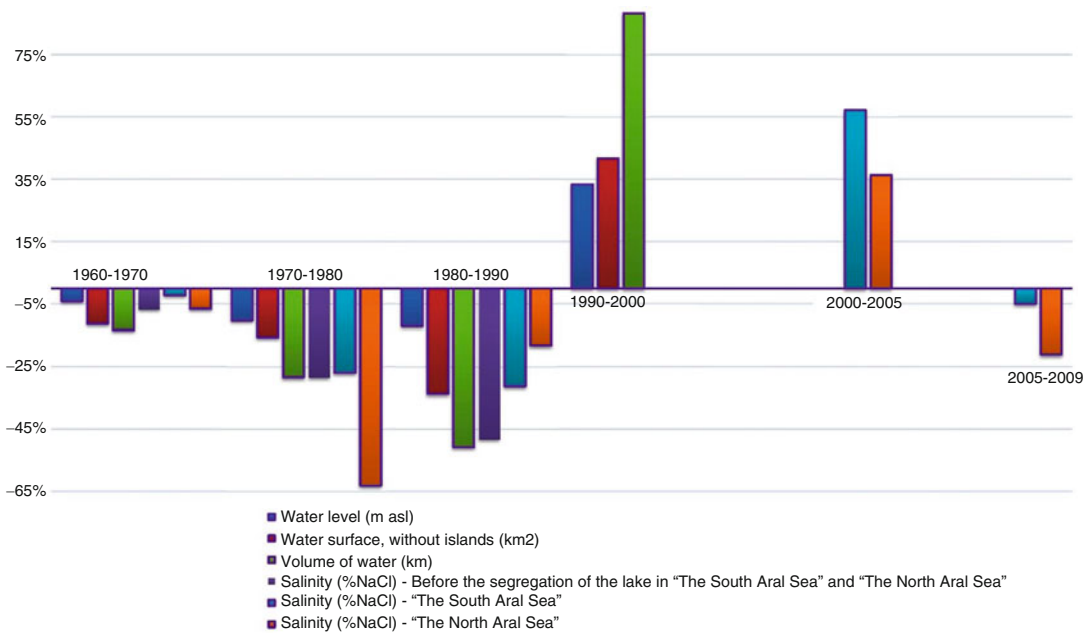
Aral Sea Disaster, The, Table 1 Ichthyofauna of the Aral Sea. Source: Own elaboration from Plotnikov and Aladin (2016).

- Aral barbel (<i>Barbus brachycephalus brachycephalus</i> (Kessler))
- Aral roach (<i>Rutilus rutilus aralensis</i> (Berg))
- Aral shemaya (<i>Chalcalburnus chalcoides aralensis</i> (Berg))
- Asp, zherekh (<i>Aspius aspius iblioides</i> (Kessler))
- Bighead carp, spotted silver carp (<i>Aristichtys nobilis</i> (Richardson))
- Bream (<i>Abramis brama orientalis</i> (Berg))
- Common carp (<i>Cyprinus carpio aralensis</i> (Spitshakow))
- Flounder (<i>Platichthys flesus</i> (Linnaeus))
- Grass carp (<i>Ctenopharyngodon idella</i> (Valenciennes))
- Ide, orfe (<i>Leuciscus idus oxianus</i> (Kessler))
- Pike (<i>Esox lucius</i> (Linnaeus))
- Pike perch, zander (<i>Stizostedion lucioperca</i> (Linnaeus))
- Rudd (<i>Scardinius erythrophthalmus</i> (Linnaeus))
- Sabrefish (<i>Pelecus cultratus</i> (Linnaeus))
- Silver carp (<i>Hypophthalmichthys molitrix</i> (Valenciennes))
- Snakehead (<i>Channa argus warpachowskii</i> (Berg))
- Turkestan barbel (<i>Barbus capito conocephalus</i> (Kessler))
- Wels (<i>Silurus glanis</i> (Linnaeus))
- White-eye bream (<i>Abramis sapa aralensis</i> (Tjapkin)).

came to consider it the greatest ecological disaster on the planet deliberately caused by the human hand (see i.e. Grabish, 1999). Figure 1 details how the main indicators of the Aral Sea varied between 1966 and 2009:

Inevitably, the climatic consequences began to take effect: The water surface constituted a factor that counterbalanced the extreme temperatures of the region, so that its loss led to much warmer summers and especially cold winters, with periods of prolonged and persistent droughts occurring very frequently. In the same way, salinity reached 100 grams per liter, much more than in the oceans themselves.

This phenomenon was aggravated by the use of a wide variety of highly toxic components such as heavy metals, pesticides, fertilizers, and poly-aromatic hydrocarbons (Ivanov et al., 1996) that had been intended for cotton cultivation. Consequently, Waehler and Dietrichs (2017) pointed out that the infant mortality rate in and around the Aral Sea is significantly higher than in Uzbekistan or Russia, with abnormally low fertility rates and body mass indexes compared to other nearby countries in the same area. It is worth noting that the events on Vozrozhdeniya Island summarize the ongoing nonsense that the Aral Sea was facing: The sudden reduction of the waters turned the island into a peninsula (sarcastically, “Vozrozhdeniya” in Russian means “rebirth”). In 1948, a top secret biological weapons research base was established there (Aralsk-7), where it seems that among other bioagents tested were: *Botulinum toxin*, *Brucella suis*, *Coxiella burnetii*, *Francisella tularensis*, *Rickettsia prowazekii*, *Variola major*, *Venezuelan equine encephalitis virus*, and *Yersinia pestis* (see Bozheyeva et al., 1999). This base would later be abandoned, but in 1971 an accident known as the Aral smallpox incident occurred in which part of the population of the area was severely affected by an outbreak of smallpox derived from those infamous tests. Faced with this situation, after the fall of the Soviet bloc the countries most involved in the problems that arose after the drying up of the Aral Sea had to take action, so in 1992 they created the International Fund for Saving the Aral Sea (IFAS). Among other measures, it was



Aral Sea Disaster, The, Fig. 1 Main indicators of the Aral Sea drainage (1960–2009). Variations in water level, water surface, and salinity. Source: Own elaboration from Breckle and Geldyeva (2011).

decided that each country would allocate a proportional part of its national budget to restore all the problems that had occurred, but this collaboration was left in the middle of the agreement insofar as the economic interests of the signatories of the agreement were totally opposed. For example, of the five nations involved, Kyrgyzstan and Tajikistan have no oil or natural gas reserves, so they installed hydroelectric power plants at the headwaters of the Amu Daria and Sir Daria rivers, resulting in the situation not improving, as much as the flow of these rivers was once again limited. Fortunately, there has been a minimal recovery of the water flow in the northern part of the lake (Kazakhstan) since the construction of the Korakal Dam in 2005, a structure cofinanced by the World Bank.

This mega containment system is named after the Korakal peninsula which, like the Vozrozhdeniya peninsula, was once an island. Its entry into service has enabled the waters of the Sir Daria river to be contained in the northern part of the extinct lake, which has made it possible for the desalination of the waters to begin to decline in that area (see Fig 1), the watercourses to rise again

and, therefore, the coastal populations to return to the shores of the lake. However, this project also has its limitations, as it involves safeguarding the northern part of the lake at the expense of what little is remaining of the southern part.

Summary

Although the Aral Sea is a “young” lake in geological terms (Joger et al., 2011), it has only taken 60 years to destroy what nature built 35,000 years ago. This entry obviously shows how the interrelationship between irrigation and drainage (Bos and Aart, 2012) are the main causes of the Aral Sea disaster, but it also contains an implicit message: Large-scale public works such as those in which the decision to drain the Aral Sea was made should never be left to countries or institutions with democratic deficits (Pandey and Jha, 2003) as was unequivocally the case in the Soviet Union in the 1950s and 1960s. Not without some reason, the capitalist system today is judged to be unscrupulous and, to a certain extent, is advocating the establishment of production models similar to

those of the former Soviet Union, when these systems were precisely characterized by the systematic violation of the environment.

If it were not for the supervening seriousness, the Aral Sea catastrophe could be seen as a surrealist tragicomedy: boats and trucks stranded in the middle of a desert, islands that appear and disappear and become peninsulas, towns that were coastal 60 years ago, today remain far from the lake for many kilometers. This spectral panorama does not belong to another world, but this one, and represents a clear warning of what can happen again at any time and place if the right decisions are not taken.

Cross-References

- Biodiversity
- Chernobyl Disaster, The
- Conservation: Sustainability
- Environmental Disaster
- Exxon Valdez
- Global Warming
- Responsible Consumption
- Waste Dumping

References

- Bos, M., & Aart, R. V. (2012). The inter-relationship between irrigation, drainage and the environment in the Aral sea basin. In M. Bos, (Ed.), *The inter-relationship between irrigation, drainage and the environment in the aral sea basin*, Vol. 22 of *Advanced Science Institutes Series* (pp. 7–20). Dordrecht: Kluwer Academic Publishers.
- Bozheyeva, G., Kunakbayev, Y., & Yeleukenov, D. (1999). *Former Soviet biological weapons facilities in Kazakhstan: past, present, and future*, number 1. In 'Occasional Paper', Center for Nonproliferation Studies, Monterey Institute of International Studies.
- Breckle, S., & Geldyeva, G. (2011). Dynamics of the Aral Sea in geological and historical times. In S. Breckle, W. Wucherer, L. Dimeyeva and N. Ogar, (Eds.), 'Aralkum – a Man-Made Desert: The Desiccated Floor of the Aral Sea (Central Asia)', Vol. 218 of *Ecological Studies* (pp. 13–36). Berlin Heidelberg: Springer-Verlag, chapter 2.
- DeBardeleben, J. (1990). Economic reform and environmental protection in the USSR. *Soviet Geography*, 31(4), 237–256.
- Gore, A. (1992). *Earth in the Balance: Ecology and the Human Spirit*. Plume.
- Grabish, B. (1999). Dry Tears of the Aral. UN Chronicle, <https://www.un.org/en/chronicle/article/dry-tears-aral>. Accessed 17 September 2020.
- Ivanov, Y., Chub, V., Subbotina, O., Tolkacheva, G., & Toryannikova, R. (1996). Review of the scientific and environmental issues of the Aral Sea Basin. In P. P. Micklin & W. D. Williams, (Eds.), 'The Aral Sea Basin', Vol. 12 of *Advanced Science Institutes Series* (pp. 9–24). Berlin Heidelberg: Springer-Verlag.
- Joger, U., Dujsebayaeva, T., Belyalov, O., Chikin, Y., Guicking, D., Grachev, Y., Kadyrbekov, R., & Miaud, C. (2011). Fauna of the Aralkum. In S. Breckle, W. Wucherer, L. Dimeyeva and N. Ogar, (Eds.), 'Aralkum – a Man-Made Desert: The Desiccated Floor of the Aral Sea (Central Asia)', Vol. 218 of *Ecological Studies* (pp. 199–270). Berlin Heidelberg: Springer-Verlag, chapter 11, .
- Kelley, D. R. (1976). Environmental Policy-Making in the USSR: The Role of Industrial and Environmental Interest Groups. *Soviet Studies*, 28(4), 570–589.
- Kumar, R. S. (2002). Aral Sea: Environmental Tragedy in Central Asia. *Economic and Political Weekly*, 37(37), 3797–802.
- Micklin, P. (2016). Introduction to the Aral Sea and Its Region. In P. Micklin, N. Aladin & I. Plotnikov, (Eds.), 'The Aral Sea: The Devastation and Partial Rehabilitation of a Great Lake', Vol. 10178 of *Springer Earth System Sciences* (pp. 25–40). Berlin Heidelberg: Springer-Verlag, chapter 1.
- Pandey, A. C., & Jha, N. K. (2003). Chaos and transformation theories: a theoretical analysis with implications for organization theory and public management. *Central Asia: Democratic deficit and challenges of sustainable development*, 1(4), 403–411.
- Plotnikov, I., & Aladin, N. (2016). The Biological Future of the Aral Sea. In P. Micklin, N. Aladin and I. Plotnikov, (Eds.), 'The Aral Sea: The Devastation and Partial Rehabilitation of a Great Lake', Vol. 10178 of *Springer Earth System Sciences* (pp. 355–360). Berlin Heidelberg: Springer-Verlag, chapter 14.
- Plotnikov, I. S., Ermakhanov, Z. K., Aladin, N. V., & Micklin, P. (2016). Modern state of the Small (Northern) Aral Sea fauna. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use*, 21(4), 315–328.
- Pryde, P. R. (1988). The future environmental agenda of the USSR. *Soviet Geography*, 29(6), 555–567.
- Waehler, T., & Dietrichs, E. (2017). The vanishing aral sea: Health consequences of an environmental disaster. *Tidsskrift for Den norske legeforening*, 137.
- Wolny, P. (2017). *Holodomor: The Ukrainian Famine-Genocide*, Bearing witness: Genocide and ethnic cleansing. New York: Rosen Publishing.
- Zonn, I., Glantz, M., Kosarev, A., & Kostianoy, A. (2009). *The Aral Sea Encyclopedia*, Encyclopedia of Seas, Berlin Heidelberg: Springer-Verlag.

Aridity

► [Water Problems](#)

Arms

► [Arms Export](#)

Arms Export

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Synonyms

[Arms](#); [Arms industry](#); [Arms trade](#); [Weapons export](#)

Definition

“Arms export” means the sale of arms made by producing countries to buying countries.

Introduction

In the centuries that saw the ancient civilizations and the great peoples (Egyptians, Greeks, Persians, Romans) flourish, the birth of the warrior figure and subsequently the formation of the organized army led to the first phase of strong investment by the rulers in military spending.

In the following centuries, the invention of ever more lethal weapons led to an advancement in the art of war. In the transition from the Middle Ages to the First World War, the war was transformed from a siege war to a war of attrition. The two industrial revolutions led the companies of the eighteenth and nineteenth centuries to a

standardized production that until recently was mostly handmade.

The two great world wars saw a development hitherto unthinkable of the armaments production system. The atomic bombs dropped on Hiroshima and Nagasaki were the culmination of centuries of development and the first real moment of reflection on how much the human being could harm himself. The UN was born in 1945 to maintain world peace and promote disarmament.

The “Cold War” saw, after the Second World War, the USA and the USSR protagonists in a very high international tension which only out of a sense of responsibility on both sides did not result in a nuclear conflict.

Today, the greatest attention is paid to the trade and development of weapons worldwide. The creation of advanced technologies, which if used would bring the whole of humanity and illegal trade to the brink, requires transparency from the producing States and a sense of responsibility to all world governments.

A Brief History of the Production of Weapons

The need to defend oneself from external dangers, whether they are generated by man himself or by nature, or the desire to extend his dominion to other territories, has always pushed the human being, gifted with an intellect superior to other living species present on Earth, to study more sophisticated methods of making weapons.

Over the centuries, during the creation of the first human appropriations, the new figure of the warrior began to develop. It grew from the era of the great Egyptian pharaohs, the Greeks, the Persians, and the Romans onward, a real modern army divided between draft troops and professional soldiers, trained in hand-to-hand combat and the use of weapons since from a young age. His job was to defend against enemy attacks and start military expansion campaigns to increase possessions.

At that time, the production of weapons was always the preserve of local craftsmen, specialized blacksmiths, who forged swords and shields

for the warriors and for the gentlemen who commissioned their invoice. The figures of the “Armourer” and the “Gunsmith” distinguished the production of defense weapons, or “white weapons,” such as armor and shields (in the first case), and of offense, such as swords and weapons by fire (in the second case).

The Persian Empire, the largest of the ancient empires, had very strong, multiethnic warriors, the most famous of them called “immortals.” The weapons that the soldiers used were advanced and valuable, like the famous swords: the “akinaka” and the “shamshir.” The Persian army was the first to concretely develop naval warfare.

The archaeological finds demonstrate how the Hellenic gunsmiths were skilled workers of metallic materials and managed to create weapons not only of the highest quality but also with artistic touches of great importance. Famous were the large bronze shields, the “oplons,” and the armor that covered the bust. The Greeks were formidable navigators and strengthened their naval war fleet to the extent that they were large like modern ones.

Alexander the Great, in 336 BC, innovated the Greek army, also taking inspiration from the Persian one. He created an army with various integrated departments, introduced crossbow and catapult, founded military academies, and adequately equipped his men to make them more agile but at the same time fearsome.

Despite the little news found about the production of weapons, during the Roman Empire the weapons were produced by three main producers. The first were the “*fabricae*,” as attested by the “*Notitia Dignitatum*,” a text (the official discussion of which is still much discussed) containing the list of Roman military and civilian positions in the late empire. The “*fabricae*” were managed by the “*magister officiorum*” which had control over the “*fabricenses*,” i.e., those who worked in the *fabricae*. With Diocletian, the “*Fabricae*” became a state factory. The second producer were the legions, which were provided with highly specialized personnel (*gladiarii*, *scutarii*, *sagittarii*) inside the camp, capable of repairing and producing weapons for the soldiers. The third producer remained the individual craftsman.

The production of private weapons was often still carried out in places where the production of state factories was far away.

During the Middle Ages, cavalry, prominent in the uses of barbarian peoples, took the place of infantry. In the Carolingian era, valuable armor also covered a considerable cost for their splendid invoices. But from the tenth century after Christ, the “chain mail” began to spread and the art failed in the manufacture of armor. In the fourteenth century, there was a new important change with the new “plate” armor. We saw the spread in the renaissance of important manufacturing centers for valuable armor. In the Holy Roman German Empire, the guilds of craftsmen who forged weapons flourished in its large cities.

In the transition from the ancient world to the Middle Ages, the development of society saw, therefore, an evolution of the art of war and weapons progressed becoming more sophisticated and deadly. What radically changed the world of weapons was gunpowder. This appeared in ninth-century China and then spread throughout the Asian and European continent. The first weapon was the siege mortar, which allowed to weaken and destroy the walls of the mighty castles.

With the passage to the nation-states in the fifteenth century and the decline of the feudal one, the army became permanent and professional. We pass shortly after the wars of conquest to the wars of attrition. It was during one of these wars, the Thirty Years’ War (1618–1648), that Gustavo Adolfo invented the paper cartridge for better functioning of the rudimentary rifle.

On an economic level, the passage from the great empires to the nation-states, often led by an absolute monarch, led to difficult maintenance of the expenses of military campaigns in a context where the appearance of financial instruments, banks, and traders gave way to an embryonic international economic system. Thus, often the sovereigns in conflict with each other could not stay there long if not at risk of getting into debt and subsequently having to declare bankruptcy.

All this continued until it reached the two industrial revolutions when, first in England, then in the rest of Europe, it went from artisanal

production to an industrial production that was aimed at the mass.

Great protagonists changed history by revolutionizing the weapons existing in those centuries of great innovations – among them: William George Armstrong, who invented the rifled cannon with a retro-charge; Joseph Whitworth in Great Britain, with the invention of the Whitworth rifle, used by the British army; Alfred Krupp in Germany with his steel factory in Essen; Adolphe and Eugene Schneider in France with their steel mill that produced cannons, tanks, ships, submarines, locomotives.

During the modern age, colonialism saw the European powers (Great Britain, France, Portugal, Spain, and the Netherlands) succeeding in predominating over the populations of the territories not yet “civilized,” thanks to their social and economic organization, but, above all, thanks to their power of arms compared to those of the local peoples.

The American War of Independence (1860–1865) was the first modern war to see both peoples fighting with each other involved and an industrial apparatus aimed at their maintenance and production of weapons. The trains allowed a rapid and consistent supply of troops even over long distances.

The second industrial revolution (1870) continued the innovation process, characterizing the new technologies not as the result of an almost random nature but of careful and financed research of specialists and universities.

It is in this period that repeated conflicts gave birth to the machine gun, the mine, the rifles, and the pistols (in addition to the cannons), which greatly improved accuracy and shooting distance. Warships enhanced the iron hull, incorporating turrets with multiple cannons until they reached the modern battleships. In the early 1900s, the submarine made its appearance and in 1903 Orville Wright with an internal propulsion engine flew a first embryonic airplane within seconds.

However, it was the two great wars that characterized a real arms race. Nations converted industries into war and weapon industries, thus radically transforming their economies. Weapons became an instrument of advanced and mass

death. Airplanes, tanks, ships, and submarines had become the tools of death that the whole international community was accustomed to knowing and to fear.

At the end of the Second World War, on August 6 and 9, 1945, the release by the USA of the first two atomic bombs on Hiroshima and Nagasaki, in Japan, certainly marks the culmination of the destructive power of the two wars and gave the whole international society the sense of insecurity to which it was necessary to remedy with closer control of governments and cooperation that increasingly focused on peace.

Thus was born in the same year the UN that gathered around the main nations of the world and had as its objectives the maintenance of peace on the whole planet and the progressive disarmament as well as an arms control and management.

The so-called Cold War (1962–1991) which accompanied the difficult post-war years continued under the banner of such insecurity. The USA and the USSR threatened to unleash a third world conflict that would certainly have been fought with the use of nuclear weapons and mass destruction. The sense of responsibility on both sides averted the worst for the entire international community. In this period, however, both sides were several times on the point of no return and both powers found themselves arming the Satellite States to secure military bases and allied countries already armed in case of world conflict.

The “Nuclear Age”

Nine States have nuclear weapons in the world and only the USA and Russia own 95% of the world’s arsenal (Granoff 2015). The other States are Great Britain, China, Pakistan, France, India, North Korea, and Israel. South Africa renounced nuclear weapons in 1991. The outbreak of a war that could trigger the use of nuclear bombs would jeopardize the existence of entire populations and would be catastrophic.

The “Nuclear Non-Proliferation Treaty – TNP,” signed on July 1, 1968, and entered into force on March 5, 1970, featured both nuclear weapon countries and countries that did not have

them. The international treaty, and its 11 articles, aimed at disarmament, nonproliferation of nuclear weapons, and their peaceful use. For this reason, on that occasion, it was established that the countries possessing nuclear weapons should not transfer atomic weapons unless under the control of the IAEA (International Atomic Energy Agency) and the countries without them should not try to get hold of them. Currently, 189 countries are signatories to this treaty.

Also, for this reason, the USA and the then USSR signed the first agreements called SALT "Strategic Armaments Limitations Talks" on May 26, 1972, and decided that the number of missiles produced and held ("ICBM" intercontinental missiles and "ABM" anti-missile missiles) should be limited. On that date, the anti-ballistic missile treaty "ABM Treaty" was also signed, which then entered into force on 3 October of the same year. SALT II signed on June 18, 1979 was the fulfillment of the agreements on the limitation of the production of strategic weapons. The "INF Treaty" for the elimination of intermediate and short-range missiles was signed on October 11, 1987. In the climate of the so-called Cold War, agreements continued slowly and with continuous suspension. Thus on July 31, 1991, the agreements on the reduction of weapons owned by the two superpowers continued with the signing of the "START – Strategic Arms Reduction Treaty" agreement, later called "START I" after the signature of January 3, 1993, of the agreement called "START II."

On May 24, 2002, in Moscow, the two superpowers signed the "SORT – Strategic Offensive Reductions Treaty" agreement also known as the "Moscow Treaty," which had among its objectives the common reduction of nuclear warheads by the end of 2012. On April 8, 2010, USA and Russia signed the "New START" agreement which replaced all the previous "START I," "START II," and also the "SORT." The "New START" aims to reduce the limit of nuclear warheads provided for by the "SORT" by 30% and lasts for 10 years, which can be extended to 15, unless a new agreement is signed between the parties.

The UN and the Arms Treaties

The United Nations has among its objectives the creation of peace between the nations of the world and disarmament and control over weapons. Over time, these objectives have given rise to some of the following tools and treaties.

The "Convention on Certain Conventional Weapons – CCW Convention" (signed on October 10, 1980, in Geneva and entered into force on December 2, 1983) aims to prohibit the use of weapons that are particularly dangerous or that would indiscriminately affect even the civilian population. This Convention is made up of five protocols in which they desire to protect human life as much as possible is evident by prohibiting the use of weapons that produce fragments, mines, and traps, incendiary weapons, blinding lasers, explosive remnants of war. To date, 125 are the signatory States of the Convention (plus 4 signatories).

The "UN Register of Conventional Arms – UNROCA" (created in 1991) is the register containing reports on the legal arms trade declared by 170 states in order to create trust and transparency and discourage massive exchange between countries by also activating diplomacy systems preventive.

The "Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction – Ottawa Treaty" (signed on December 3, 1997 and entered into force on March 1, 1999) has been ratified by 164 States with, however, the absence of states such as China, Pakistan, Russia, USA, India, and South Korea. The objectives of the Convention were the rapid destruction of the stocks of anti-personnel mines owned by each state, the reclamation of the mined areas within 10 years of entry in force of the Convention and assistance to victims.

The "Program of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects" (adopted in 2001) was created to contrast the illicit market for small arms and light weapons. Two subsequent review conferences in 2006 and 2012, four

biennial meetings, and a meeting of experts from the various governments in 2011. In 2005, the “International Tracing Instrument (ITI)” was introduced asking the states that they adequately mark the weapons and that they create and maintain the relevant registers also to create greater international cooperation aimed at tracking. Achieving this goal is part of the 2030 Agenda for Sustainable Development.

The “Firearms protocol” (resolution 55/255 of May 31, 2001, signed on July 11, 2001, which entered into force on July 3, 2005) is the protocol against the illicit manufacture of weapons which completes the “United Nations Convention against Transnational Organized Crime (Organized Crime Convention).” The protocol sheds light on the need to manage arms trade flows to prevent them from being intercepted by the illicit market.

The “National Legislation on Transfer of Arms, Military Equipment and Dual-Use Goods and Technology” (adopted in 2003) deals with regulating the trade in weapons, software, and technologies potentially usable in two versions both by the military and by the civilian population. This regulation requires a great deal of research about new technologies and the exchange of information between states, an effort required by the UN General Assembly.

The “ATT-Arms Trade Treaty” (adopted on April 2, 2013, and entered into force on December 24, 2014) is the first international treaty aimed at two main objectives: the regulation of the arms trade and the fight against illicit trafficking. The treaty aims to raise contracting states’ awareness of the suffering caused by weapons in the hope that the path of disarmament will soon be followed. There are 96 States Parties and 130 are the signatories. Articles 6 and 7 are important. Article 6 lists the cases where the arms trade is prohibited; Article 7 instead lists the criteria according to which a state must accept or reject an export request. The fourth conference of signatory states was held in Tokyo in August 2018 in which efforts were made to reach more and more low-income states, especially in the Middle East and North Africa.

SIPRI and Data on the Arms Trade

The independent international institute SIPRI, “Stockholm International Peace Research Institute,” was founded in 1966, to study and analyze conflicts, military expenses, armaments, and arms trade, with a view to “peace study.” Since 2011, in its “Yearbooks,” SIPRI has published the annual data obtained from its research translated into different languages.

SIPRI estimates that global military spending totaled \$ 1.822 billion in 2018. This expenditure was 2.6% higher than in 2017 and 5.4% higher than in 2009. The USA in a logic of increasing the stock of weapons (conventional and nuclear) in their possession and an increase in military salaries have military spending increased by \$ 649 billion.

In the 2019 Yearbook, SIPRI classifies the top five exporting countries: the USA, Russia, France, Germany, and China; and the top five importing countries: Saudi Arabia, India, Egypt, Australia, and Algeria.

To date, SIPRI tells us about an international reality in which the transparency of the data that each State delivers to the UN, regarding the production and trade of weapons, is increasingly fundamental. International arms transfers increased by 7.8% between 2009–2013 and 2014–2018. Seventy-five percent of the market is occupied by the five major world producers. The gap between the USA and Russia (first and second world producers respectively) was 12% in the period 2009–2013, reaching 75% in the period 2014–2018.

The volume of these exports sees Asia, Oceania, and the Middle East among the main importing countries. Asia and Oceania collect 40% of imports in the period 2014–2018 and the Middle East 35% with an increase in flow in the periods taken as a reference. In the 2014–2018 period, Europe imported only 11% and Africa imported 7.8%.

The SIPRI in its Yearbook studies and analyzes data relating to the major arms industries. According to SIPRI, the top 100 producers generated \$ 398 billion in 2017.

Still in the global framework outlined by SIPRI, there are 36 multilateral arms embargoes imposed in 2018 – 14 UN, 21 EU (of which 10 implement UN ones), 1 Arab League. These embargoes were aimed at IRAN and North Korea while some EU also addressed Russia and Syria.

The four control systems envisaged for continuous technological updating and to combat illegal purchases are still active:

- Australia Group (AG)
- Missile Technology Control Regime (MTCR)
- Nuclear Suppliers Group (NSG)
- Wassenaar Arrangement (WA)

The EU has sought to expand its interest in “dual-use” and the ongoing control of arms exports. The EU and the USA have tightened controls on foreign direct investment for these types of sensitive technologies.

Particular cases have been in recent years IRAN and North Korea. The “JCPOA - Joint Comprehensive Plan of Action” is the agreement signed on July 14, 2015, in Vienna for the elimination of medium-enriched uranium and the 98% reduction of low-enriched uranium in Iran to end heavy sanctions economic measures of resolution 1747 for the nuclear program setup. Furthermore, on the principle of nonproliferation, Iran has undertaken not to build new heavy water reactors. In 2018, however, a crisis scenario opens with the USA which, by requesting the Government to withdraw the Pasdaran from Syria, unilaterally abandons the agreement and once again requires economic sanctions on Iranian oil and banks. The European Union criticizes the US choice, which sees in this choice the risk of weakening the moderates present in the country in favor of ultraconservatives. Tensions rise after the Iranian ultimatum in 2019 and the killing of General Qasem Soleimani in a US raid in 2020, and Iran announces that it will resume the nuclear energy program.

North Korea has resumed its nuclear program since 2006. According to the SIPRI calculation in January 2019, the Asian country would have owned about 20–30 nuclear warheads. The

escalation with the USA, which also threatened armed intervention if necessary, stems from the latter’s request to suspend nuclear tests started by the North Korean regime. The UN Security Council has also imposed economic sanctions, including restrictions on oil imports for the Pyongyang government. The ongoing negotiations will hopefully ward off conflicts that could lead to the use of atomic weapons.

Cybersecurity, Darknet, Terrorism, and Submerged Markets

The Europol “European Police Office” was born on July 1, 1991 to combat criminal activities carried out within the European Union. Illegal (including computerized) arms trade is still widespread in the less politically stable areas of the planet, but not only. Being the payment of weapons in the so-called Darknet (black market of the network) completely anonymous, it allows the buyer not to be traced and in some cases to buy with cryptocurrencies. The Darknet is in itself a flexible tool, in a continuous state of innovation and above all without any border barrier. Also for this reason, collaboration with the private sector through public–private partnerships is fundamental in combating these types of crime.

With the Schengen Treaty and the elimination of borders between European states, it requires further internal control over the flow of firearms. The European Directive 91/447/EEC created the “European Firearms Card” which is issued to anyone who holds firearms. After the signing of the “United Nations Protocol against the Illicit Manufacturing and Trafficking of Firearms,” additional to the “United Nations Convention against Crime,” this directive was updated. Directive (EU) 2017/853 and Implementing Regulation 2015/2403, following the terrorist acts in France, were instead evidence of a greater awareness of the need to combat the terrorist use of firearms (Nunzi 2018). The European Agenda on Security was equally relevant.

The European Security Agenda (of April 28, 2015), providing for shared actions between the European Union and the Member States, has been

prepared for the maintenance of security within European borders and the effective contrast of terrorism, organized crime, and computer technology.

Illegal weapons mainly come from smuggling routes that see the Balkans as protagonists (where the arms embargo on the former Yugoslavia favored illicit trafficking often in the hands of local mafias), North Africa (especially the Maghreb, Tunisia, Morocco, Algeria), and the Middle Orient.

The small arms and light weapons, “SALW,” of which the western countries are exporters, are the most smuggled and also those which are held responsible for the greatest number of deaths each year.

Key Issues

In addition to being a trade with decidedly important revenues, the arms trade is closely linked to the confluences that still today do not cease to inflame entire areas of our planet. Furthermore, illicit trade feeds terrorist and criminal groups that do not help stabilize these areas. The lack of transparency of the States toward the UN on the arms trade still allows getting lost in the flow of weapons destined for submerged markets.

Future Directions

In the near future, it will be necessary to implement transparency between States through the implementation of UN brokerage and to promote cooperation, disarmament, and peace more and more. Countering the illegal trade in weapons must always be a priority for all producing states that must increasingly control the flow of weapons they produce with greater accuracy. New technologies will increasingly focus on sophisticated and deadly systems of armaments which, if not regulated and ended up in the Darknet, in the terrorist and criminal circuit, could prove potentially harmful to all humanity. The steps on Cybersecurity are still not well defined and soon need clear lines of intervention shared globally.

Even the steps of the “Biological and Toxic Weapon Convention - BTWC” on the disarmament and nonproliferation of chemical and bacteriological weapons are, despite the growing attention, still not entirely sufficient in a world scenario in constant evolution.

Summary

The arms trade found its beginning in ancient times, with ancient civilizations often fighting for territorial supremacy and the appropriation of resources. The weapons have thus been increasingly advanced and deadly over the centuries. The watersheds between ancient war weapons and modern war weapons were the two great industrial revolutions and the two world wars. The arms race of those years was a run-up not only to greater productivity but also to the search for the most sophisticated offensive and defensive technology. Thus arrived at the end of the Second World War the weapon that would have frightened the entire planet for its destructive force: the atomic bomb. Today the arms trade follows several paths, legal and otherwise. Darknet today is one of the most important threats that prevent a real fight against arms smuggling, and for this reason, the global role of cybersecurity becomes increasingly important. The SIPRI, Stockholm International Peace Research Institute, founded in 1966, analyzes world trade in its “Yearbook” and gives the world governments the picture of the major exporting countries and the major arms importing countries of the world.

Cross-References

► [Shadow Trades](#)

References

- Granoff, J. (2015). Pacta sunt servanda: Nuclear weapons and global secure sustainable development (pp. 311–330). *Southwestern Journal of International Law*, 21. http://www.treccani.it/enciclopedia/armi_%28Enciclopedia-delle-scienze-sociali%29/

https://ec.europa.eu/home-affairs/sites/homeaffairs/files/e-library/documents/basic-documents/docs/eu_agenda_on_security_en.pdf
<https://italiarappginevra.esteri.it/rappginevra/it/il-disarmo/trattati-e-convenzioni>
<https://thebulletin.org/global-nuclear-power-database/>
<https://www.europol.europa.eu/>
<https://www.sipri.org/>
<https://www.un.org/disarmament/convarms/att/>
<https://www.un.org/disarmament/convarms/nldu/>
<https://www.un.org/disarmament/convarms/register/>
 Nunzi, A. (2018). Europol e il contrasto del commercio informatico illegale delle armi. *Crossroads*, 4(2). <https://doi.org/10.13130/cross-10457>.

Arms Industry

► [Arms Export](#)

Arms Trade

► [Arms Export](#)

Artificial Intelligence

► [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

Asbestos

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Synonyms

[Carcinogen](#); [Noncandescent](#); [Noncombustible](#);
[Nonflammable](#)

Definition

The term asbestos is a trade name given to minerals or a range of fibrous silicates that occur in polyfilamentous bundles. These naturally occurring, extremely flexible fibers are characterized by thin fibrils and are easily parted from each other (USGS 2001; Health and Safety Executive 2005).

The six different minerals that are known as asbestos are crocidolite (blue asbestos), chrysotile (white asbestos), amosite (brown asbestos), anthophyllite (gray or dull green), tremolite, and actinolite asbestos. These belong to the serpentine (curly shaped fibers) or amphibole (needle shaped fibers) families (Bartrip 2004).

Brief History

Asbestos has a very important characteristic, namely, it can withstand very high temperatures. Given this property, asbestos quickly became indispensable in the construction and shipbuilding industry. What made it even more attractive was that it was cheap and durable and therefore very profitable. Companies jumped in on the chance to be able to cash in on the insatiable demand for the product throughout history across the world. At its peak, there were over 3000 products that contained asbestos (Bartrip 2004).

Issues with Asbestos

The inherent indestructibility combined with its fibrous nature made asbestos deadly. The fine fibrous particles loosened routinely in the air, in the process of mining, manufacturing, constructing, or any process that created dust, could be inhaled into the lungs. It is now known that prolonged exposure to such asbestos dust causes a form of lung and abdomen lining cancer called mesothelioma. It is also known to cause asbestosis which is a severe lung infection that makes breathing eventually impossible.

Asbestos is classified as a Group-1 carcinogen, which means the material can cause cancer in humans. To put this into context, for example, glyphosate and DDT have a Group 2A classification which is reserved for materials that “probably” cause cancer in humans (IARC 1977, 1987).

In the years between 2007 and 2017, the deaths and disability-adjusted life years directly related to asbestos increased by 19.6% and 15.3%, respectively (Murray 2018). According to ILO, about 100,000 people, every year, die due to asbestos exposure at their place of work with experts stating that even many more people die outside their place of work due to the same reason (“Asbestos still pushed,” 2014).

Responses to Asbestos

Despite the serious health dangers posed by asbestos, mining for it continued.

In the earlier period, while most of the fabrication work was being done in the USA and the UK, mines were operating in Canada, South Africa, Russia, and Zimbabwe.

For a large part of the twentieth century, Canada’s Quebec province, with its several dozen mines, was the world’s chief asbestos manufacturer and exporter. When a new local government questioned why the province was still producing and exporting something that its own citizens had already rejected, Quebec Province eventually ceased its asbestos business in 2012 (“Asbestos still pushed,” 2014). The last Canadian mine finally closed down in 2011, but it was only in 2018 that a complete country-wide ban on asbestos was put in place (Mauney 2019).

Throughout the EU, asbestos was finally banned in 2005. As of July 2019, around the world, 67 countries have banned the use of all types of asbestos (Ibase Secretariat n.d.).

In the USA, however, there is still not ban despite the obvious health warnings and EPA activism. Despite regulating its use and reduction

in consumption, the USA continues to be a relatively large importer and consumer of asbestos (King 2019).

Liability Consequences

Asbestosis may take up to 30 years to develop, and mesothelioma can be dormant for up to four decades. In other words, workers are likely to carry on working in their respective careers not knowing that they are getting seriously ill. WHO estimates that around the world, about 125 million people come into contact with asbestos in their workplace environment every year (“Asbestos still pushed,” 2014).

The liabilities that arise in companies therefore accumulate over decades (Maiden 2010). Presently, around the globe, there are numerous asbestos-related court cases going on. These are primarily trying to hold (the accused) companies responsible for not safeguarding the health of their immediate stakeholders such as employees and community.

Given the obvious, the insurance industry has been reducing coverage for asbestos exposure-related issues since the early 1900s. Over 730,000 asbestos-related claims, costing the insurance industry about US\$ 70 billion, have been made in the USA since 1970 until 2002 (Selby 2019). Many such litigations, in the USA alone, have led to business insolvencies, which in turn have resulted in over 60,000 job losses (ISSA n.d.). Between US\$ 200 and 300 billion is what the insurance industry expects to be the all-inclusive future cost of asbestos-related cases (Selby 2019).

Current Outlook

Despite the well-documented health hazards, the commercial production and use of the toxic product continues, especially in the developing world. Most of the production and recycling of the hazardous material has now moved to

developing countries where the safety standards are relatively relaxed. Here, the regulatory governance tends to be weak, and workers are often uneducated or relatively uninformed. They are sometimes simply unaware of the hazardous situation they are putting themselves into and sometimes given their poor economic backgrounds, they are unwilling or incapable of fighting for their rights. Heavy asbestos-based industries, such as those that dismantle ships at the end of their useful lives (ship graveyards), or industries which dispose-off boilers by breaking them up, or even industries that recycle automotive parts, thrive in low- and middle-income countries like India.

U.S. Geological Survey (USGS 2017) states that the BRIC countries (excluding India) were leaders in terms of asbestos mining in the years 2015 and 2016. Of these, in 2017, only Brazil finally banned the use of asbestos and shut down the business itself in the country (USGS 2017).

Some countries like India have also very recently stopped mining for asbestos, mostly for quality reasons, in that the asbestos mined here is of low quality. However, up until 2015, 17 asbestos mines were still active in India. Asbestos imports have also become cheaper mostly pushed by Canada (Jadhav and Gawde 2019). India and China are among the largest consumers of asbestos in the world with others being Indonesia and Russia (Frank and Joshi 2014).

Jadhav and Gawde (2019) state that the deaths related to cancers caused by asbestos exposure are increasing around the world with India being at the forefront given its conducive affinity towards the asbestos processing industry. According to them, in the coming years, half of the expected 12.5 million global asbestos-associated illness patients, will be in India. They also however clarify that the actual facts and figures may be skewed (downwards) given the limited capacities within the Indian health system (Jadhav and Gawde 2019).

Despite this, India continues to promote the products containing asbestos for economic reasons.

Possible Solutions

In parts of the world such as in the USA, consumption of asbestos minerals has gone considerably down from over 800 thousand tons in 1973 to about 300 tons in 2017 (Flanagan 2018). Several alternatives such as different materials, substitutes, and even new technology have been and are also currently being explored. Some of such alternatives have already led to replacing asbestos thereby resulting in its decline.

According to Flanagan (2018), this decline in the use of asbestos will continue with non-asbestos substitutes becoming more and more mainstream. Castleman (2009) provides a long list of possible substitutes for different purposes along with their suppliers in different parts of the world. Some of these are amorphous silica fabric, cellulose fiber, polyurethane foam, flour fillers, and thermoset plastic flour.

Asbestos is and will continue to be a cheap and economically lucrative option to many of the growth and development problems of countries and their citizens. Moreover, given the rather long cancer development latency resulting from exposure to the toxic product, many corporations find it relatively easy to shrug off their responsibilities, a problem exacerbated by the short-term focus on shareholder wealth maximization.

According to “Asbestos still pushed” (2014) article, toxicologists financed at least partly by the asbestos friendly industry, downplay the carcinogenic impact of the toxic product and claim that the WHO is scaremongering. In a poor country like India, affordable housing is beyond reach for millions and this is where asbestos-based roofing sheets come into play. Big multinational organizations lobby governments of poor countries and push toxic asbestos products consciously burying valid concerns (“Asbestos still pushed” 2014).

Unless a worldwide ban is imposed on the product and its use, this seems to be just another ticking bomb driven by corporate greed for higher profits and complete disregard to stakeholder welfare.

References

- Asbestos still pushed in India and business is booming. (2014, August 14). *CNBC*. <https://www.cnbc.com/2014/08/13/asbestos-pushed-in-asia-as-product-for-the-poor.html>. Accessed 16 Dec 2019.
- Bartrip, P. W. J. (2004). History of asbestos related disease. *Postgrad Medical Journal*, 80, 72–76. <https://doi.org/10.1136/pmj.2003.012526>.
- Castleman, B. (2009). Substitutes for Asbestos-cement construction products. http://www.ibasecretariat.org/bc_subst_asb_cem_constr_prods.php. Accessed 16 Dec 2019.
- Flanagan, D. (2018). U.S. geological survey. In *Mineral commodity summaries*. January. US: U.S. Government Publishing Office.
- Frank, A. L., & Joshi, T. K. (2014). The global spread of asbestos. *Annals of Global Health*, 80(4), 257–262. <https://www.ncbi.nlm.nih.gov/pubmed/25459326>. Accessed 14 Dec 2019.
- Health and Safety Executive. (2005). *Asbestos: The analysts' guide for sampling, analysis and clearance procedures*. HSG 248. London: HSE Books.
- Ibase Secretariat. (n.d.). http://ibasecretariat.org/alpha_ban_list.php#1. Accessed 14 Dec 2019.
- International Agency for Research on Cancer (IARC). (1977). Asbestos. In *IARC monographs on the evaluation of carcinogenic risk of chemicals to humans* (Vol. 14, p. 106). France: IARC Publications.
- International Agency for Research on Cancer (IARC). (1987). Overall evaluations of carcinogenicity. In *IARC monographs on the evaluation of carcinogenic risk of chemicals to humans*. Suppl. 7, pp. 106–116.
- ISSA. (n.d.). Asbestos and nanotechnologies: Avoiding a second disaster? https://ww1.issa.int/sites/default/files/documents/prevention/2-40_Years_of_Commitment_to_Improving_Safety_en-36296.pdf. Accessed 16 Dec 2019.
- Jadhav, A. V., & Gawde, N. C. (2019). Current Asbestos exposure and future need for palliative care in India. *Indian Journal of Palliative Care*, 25(4), 587–591. https://doi.org/10.4103/IJPC.IJPC_51_19.
- King, D. (2019). History of Asbestos. <https://www.asbestos.com/asbestos/history/>. Accessed 12 Dec 2019.
- Maiden, M. (2010, February 4). History was against CSR on asbestos. *The Sydney Morning Herald*.
- Mauney, M. (2019). Asbestos mining. <https://www.asbestos.com/occupations/mining/>. Accessed 12 Dec 2019.
- Murray, C. J. L. (2018). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: A systematic analysis for the global burden of disease study 2017. *The Lancet*, 392, 1923–1994. [https://www.thelancet.com/journals/lan/article/PIIS0140-6736\(18\)32225-6/fulltext#seccetitle410](https://www.thelancet.com/journals/lan/article/PIIS0140-6736(18)32225-6/fulltext#seccetitle410). Accessed 14 Dec 2019.
- Selby, K. (2019). Mesothelioma & Asbestos worldwide. <https://www.asbestos.com/mesothelioma/worldwide/>. Accessed 16 Dec 2019.
- US Geological Survey (USGS). (2001). Some facts about Asbestos. USGS fact sheet FS-012-01. <http://www.capcoa.org/Docs/noa/%5B12%5D%20USGS%20Facts%20on%20Asbestos.pdf>. Accessed 14 Dec 2019.
- US Geological Survey (USGS). (2017). Mineral commodity summaries. <https://www.usgs.gov/centers/nmic/asbestos-statistics-and-information>. Accessed 14 Dec 2019.

Ashoka (Innovators for the Public)

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Synonyms

Ashoka innovators for public

Definition

“Ashoka (Innovators for the Public)” was created on June 3, 1980, by Bill Drayton. Ashoka (IFP) is registered with a \$ 50,000 start-up capital, as an international non-profit organization in District of Columbia, USA. The headquarters of the company are located in Arlington, Virginia, USA, Tax ID #: 51-0255908 (Annual Reports 2019).

Ashoka (IFP) is the world's first professional organization for “social entrepreneurship.” Its founder and author of the term “*social entrepreneurship*,” Bill Drayton, gave the organization the name “Ashoka,” named after the Indian ruler, Ashoka Maurya, focused his policy on the poor, ensuring the welfare of his people and the maintenance of basic human values (Bhatta 2000).

What is “Ashoka (Innovators for the Public)?” The answer of the organization itself is: “Ashoka is a network addressing the world's most pressing problems. We identify and accelerate cutting edge social innovation: whether in social

entrepreneurship, education or business. By bringing together these communities across sectors we are building a world in which everyone is equipped and empowered to be a changemaker” (What is Ashoka? 2017).

Ashoka does not accept funding from government entities. Its activity is provided by individual and institutional endowment funds (Charity Navigator – Your Guide To Intelligent Giving” n.d.-a).

Introduction

There is a distinction between traditional entrepreneurship and social entrepreneurship. While traditional entrepreneurship uses neutral mechanisms and creates goods that are appropriated on a market principle and become private goods, social entrepreneurship creates “public goods.” While traditional entrepreneurship creates products, looking for market niches, social entrepreneurship is looking for “social niches” for which it develops its products and services. When designing their products and services, they are concerned whether people have access to them and how many people have access to them. For social entrepreneurship, the leading incentive to start an entrepreneurial venture is to create products and services that more people need and who cannot afford them in the existing market pattern of distribution. (This also embodies the principle of “scalability” of social entrepreneurial projects.) Social enterprises usually direct their efforts to the so-called “market failures” (Chahine 2016, p. 3).

In our opinion, Social Entrepreneurship is emerging and evolving due to the rising income inequalities in the world, which peaked in the mid-1970s and 1980s of the twentieth century. It is still high and will remain high as predicted for a long time (Roser 2019; Lakner and Milanovic 2013).

Key Issues

What is “Social entrepreneurship and social entrepreneur” in Ashoka’s vision?

There are many definitions of the phenomenon “social entrepreneurship” (Mair et al. 2006). “Social entrepreneurs are the essential corrective force. They are system-changing entrepreneurs. And they are committed to the welfare of all” (Drayton 2019), and “Social entrepreneurs are individuals with innovative solutions to society’s most pressing social, cultural, and environmental challenges. They are ambitious and persistent – tackling major issues and offering new ideas for system-level change” (Social Entrepreneurship 2019).

According to Ashoka what is a social entrepreneur? The answer is given by one of the leading fellows of Ashoka: “So what is a social entrepreneur really? A social entrepreneur creates innovative reinforcement systems that serve people or causes lacking resources, thus generating surplus value that the entrepreneur reinvests to grow and improve those systems. Or something like that” (Castro 2016).

Here are three key phrases: “corrective force,” “social innovations,” “producing surplus value.” Social entrepreneurship is a force that corrects the failure of market allocation. At the same time it is an innovative force that creates value added.

The company’s goal is to create professional social entrepreneurs (Ashoka: Innovators for the Public – NGOs India 2018).

“*Organization of the civil sector*”: Ashoka (IFP) prefers to be termed the “organization of the civil sector” to emphasize what it is and not what it is not.

Structure and Activities

Ashoka (IFP) at present includes more than 3500 leading social entrepreneurs in over 92 countries (Ashoka n.d.-a)

The organization includes the following programs for the development of social entrepreneurship:

1. *Ashoka Fellows*. These are specially selected. They receive a 3-year scholarship with which they are not allowed to fund their entrepreneurial initiative. The scholarship is granted to

cover costs for the development of their entrepreneurial idea. They receive support from specialists in the given area of the Ashoka global community (Ashoka 2017a).

2. *Ashoka Venture and Fellowship*
3. *Ashoka Support Network (ASN)*
4. *Executive in Residence (EIR)*
5. *Ashoka Changemakers*
6. *Ashoka Youth Venture*[®] (Ashoka n.d.-b)

Ashoka's main activities are Fellows and Venture Social Capital.

Ashoka Fellows are specially selected. Leading criteria are creativity and social scalability of the project, readiness to work for the public, and not for personal benefit. They receive a 3-years scholarship, which is determined individually for each of the fellows. The scholarship is not granted for financing the entrepreneurial initiative. It is granted to cover the fellows' personal expenses for the development of their entrepreneurial idea. They receive support from professionals and successful social entrepreneurs in the given area of the Ashoka global community (Ashoka 2017b).

Social Venture Capital

"Ashoka" finances Fellowships by raising funds from donors. These funds are used as venture capital. The organization is a pioneer in creating "*social venture capital*." Social venture capital differs from traditional venture capital in that social investors do not have as their primary objective the monetary return from the investment. Social venture investors are *ethical investors*. They invest in businesses that would make the world better with their goods and services and have the potential for development. They usually invest in social niches, which are not occupied by traditional investors and public organizations, with the potential for scaling.

Social venture investment differs from traditional venture investment in the way they assess the potential of entrepreneurial endeavors. First of all, these new businesses must meet certain ethical and social standards.

The Social Venture Investor is active in managing the company. The social venture investment is longer than the traditional one, which is usually for less than a year, while the social venture funding is for a minimum of 5 years. While traditional venture investment is project financing, the social venture funding is financing the entire entrepreneurial venture. It does not focus on tangible assets but on intangible assets and mainly on intellectual and human capital (Roger 2007).

Ashoka applies the so-called "five why's" technique in its Guide to Social Venture Investor Guidelines. They are related to addressing local and global social and environmental issues. Only when the owner of the venture capital answers these questions, may he ask himself how can I intervene, how can I increase my investment in solving this public problem? (Ashoka n.d.-b).

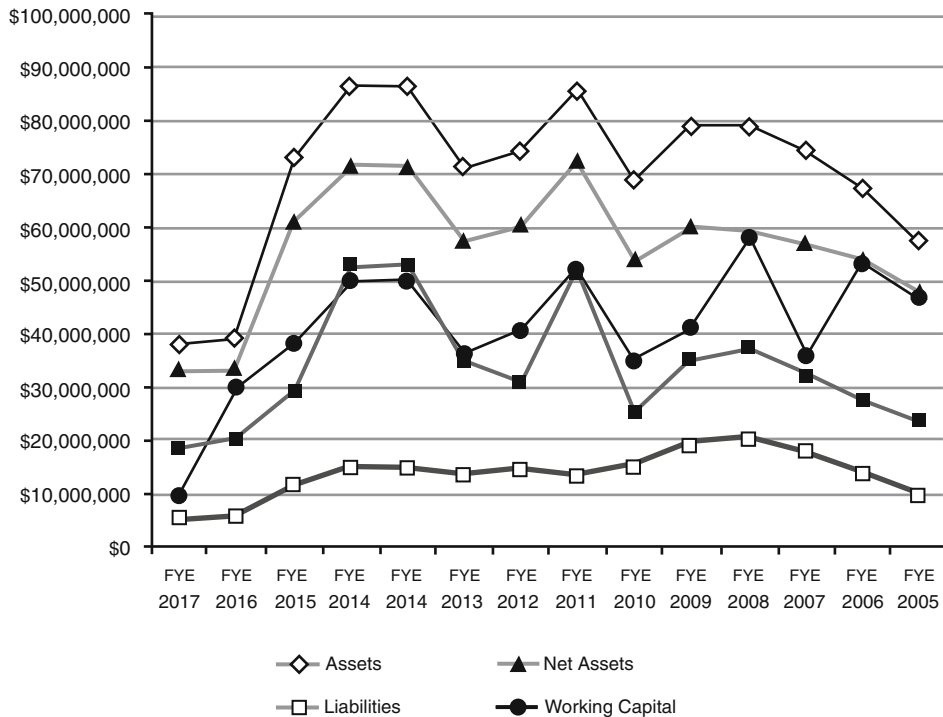
Ashoka Changemakers

In 1993 Ashoka began publishing the first professional magazine "Ashoka Changemakers." Changemakers "activates a global network of social entrepreneurs, innovators, business leaders, policy makers and activists to build everyone a Changemaker world" (Ashoka n.d.-c).

Ashoka Changemakers[®] is a program of the foundation that in a three-step process – frame, convene, and ignite, works with the other Ashoka structures in a global network and partners to frame an approach to a problem that exponentially accelerates social change (Ashoka n.d.-d).

Financial Conditions

The financial position of Ashoka was rated with 81 points (max. 100) by Charity Navigator (the largest rating agency for charities). The organization maintains good financial health, but its activity is apparently limited after 2014 (Fig. 1).



Ashoka (Innovators for the Public), Fig. 1 Ashoka, Balance Sheets, 2017–2005. (Data Source: Charity Navigator – Your Guide To Intelligent Giving, Ashoka Historical Data [n.d.-b](#))

Conclusions

Ashoka creates a new model of entrepreneurship-social entrepreneurship. It is based on the discovery of “market failures” and the lack of adequate governmental intervention to correct them. Ashoka changes the vision for entrepreneurial purposes; the goal of the entrepreneur is not to create only monetary profit but to create value added for society and produce public goods accessible to those who, under the existing system of distribution of income and wealth, were earlier inaccessible.

Cross-References

- ▶ [Ashoka \(Innovators for the Public\)](#)
- ▶ [Public Goods](#)
- ▶ [Social Entrepreneurship](#)
- ▶ [Social Innovation](#)

References

- Annual Reports “Ashoka. Innovators for the public”. (2019, May 23). Retrieved June 3, 2019, from <https://www.ashoka.org/en-NL/annual-reports>
- Ashoka. (n.d.-a). About us. Retrieved June 3, 2019, from <https://www.changemakers.com/about>
- Ashoka. (n.d.-b). Ashoka envisions a world in which everyone is a changemaker. Retrieved May 3, 2019., from <https://www.ashoka.org/en/node/31089>
- Ashoka. (n.d.-c). Changemakers. Retrieved June 3, 2019, from <https://www.changemakers.com/>
- Ashoka. (n.d.-d). What we do. Retrieved June 3, 2019, from <https://www.changemakers.com/what-we-do>
- Ashoka. (2017a, June 29). The Ashoka Fellowship. Retrieved May 3, 2019, from <https://www.ashoka.org/en/story/ashoka-fellowship>
- Ashoka. (2017b, June 30). The Ashoka Fellowship. Retrieved June 3, 2019, from <https://www.ashoka.org/en-NL/story/ashoka-fellowship>
- Ashoka: Innovators for the Public – NGOs India. (2018, June 30). Retrieved June 3, 2019, from <https://ngosindia.com/ashoka-innovators-for-the-public/>
- ASOKA – Definition and synonyms of Asoka in the English dictionary. (n.d.). Retrieved June 3, 2019, from <https://educalingo.com/en/dic-en/asoka>

- Bhatta, C. P. (2000). Leadership values: Insights from Ashoka's Inscriptions. *Journal of Human Values*, 6(2), 103–113. <https://doi.org/10.1177/097168580000600202>.
- Castro, D. (2016, July 18). What is a social entrepreneur, really? Retrieved June 3, 2019, from <https://www.ashoka.org/en-NL/node/3664>
- Chahine, T. (2016). *Introduction to social entrepreneurship*. Oxfordshire, UK: Taylor & Francis.
- Charity Navigator – Your guide to intelligent giving. (n.d.-a). Retrieved June 3, 2019., from <https://www.charitynavigator.org/index.cfm?bay=search.summary>
- Charity Navigator – Your guide to intelligent giving. (n.d.-b). [Dataset]. Retrieved June 3, 2019., from <https://www.charitynavigator.org/index.cfm?bay=search.summary>
- Drayton, B. (2019, May 14). Social entrepreneurship. Retrieved June 3, 2019, from <https://www.ashoka.org/en-NL/focus/social-entrepreneurship>
- Lakner, C., & Milanovic, B. (2013). Global Income Distribution: From the fall of the Berlin Wall to the Great Recession. Policy research working papers. <https://doi.org/10.1596/1813-9450-6719>
- Mair, J., Robinson, J., & Hockerts, K. (2006). *Social entrepreneurship*. Palgrave Macmillan UK.
- Roger, A. (2007). An early stage venture capital. Presented at the OECD World Forum for Measuring and Fostering the Progress of Society, Istanbul, 27–30 June 2007, Panel: Citizens with vision: The Impact of Social Entrepreneurship, Istanbul. Retrieved from <https://slideplayer.com/slide/6151944/>
- Roser, M. (n.d.). Global economic inequality. Retrieved June 3, 2019, from Published online at OurWorldInData.org; <https://ourworldindata.org/global-economic-inequality>
- Social Entrepreneurship. (2019, May 14). Retrieved June 3, 2019, from <https://www.ashoka.org/en-NL/focus/social-entrepreneurship>
- What is Ashoka? (2017, December 14). Retrieved June 3, 2019, from <https://www.ashoka.org/en-NL/story/what-ashoka>

Ashoka Innovators for Public

- [Ashoka \(Innovators for the Public\)](#)

Assent

- [Compliance](#)

Assessment

- [SWOR Analysis](#)

Association of Chartered Certified Accountants

- [ACCA](#)

Assortment

- [Diversity](#)

Assurance Market

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Synonyms

[Assurance of sustainability reports market](#)

Description

The assurance market for sustainability reports arises from the need to increase the credibility of information on corporate social responsibility (CSR). The essence of external assurance is that the information is more credible if it has been examined by an expert who is unrelated to the reporting party. Its objective is to reinforce the users' confidence in certain information, through analysis by an independent third party that establishes an opinion about its adequacy and veracity.

Sustainability reports and traditional financial reporting are an important source of information to support the decision-making process within the

new context of business responsibilities understood from an economic, social, and environmental perspective. This circumstance favors the creation of a market for external assurance services and provides an opportunity for different professionals facing an emerging demand.

As in any external assurance service, three participants can be distinguished a priori in this market: companies that hire the service, professionals who implement it, and users of the information. This market is widely considered as the expansion of the financial audit market. However, the particular characteristics of sustainability information and the absence of legislation in this area cause differences between both two. In this sense, the voluntary nature of the demand, the wide number of professionals competing in the market, and the use by an extensive range of stakeholders, beyond shareholders and investors are all worth highlighting.

Introduction

The creation of a market arises from the existence of a need that encourages the demand and the supply of a certain good or service. The need that justifies the external assurance of sustainability reports derives from the evolution of the way the role of companies in society is understood. Social responsibility is established in the twenty-first century as a fundamental principle of the sustainable performance of companies, i.e., way in which organizations are able to respond to the interests and expectations of their stakeholders (AccountAbility 2008a). The value of a company ceases to be only measured from an economic perspective, and it now includes social and environmental impacts. This entails the expansion of the transparency concept in terms of information content and receivers (see ► [“Communication of CSR Information”](#)). Thus, financial information is insufficient for decision-making by a broad group of stakeholders. Nonfinancial information is important even for more traditional groups, namely, shareholders and investors (Berthelot et al. 2012; Cheng et al. 2014; Orlitzky et al.

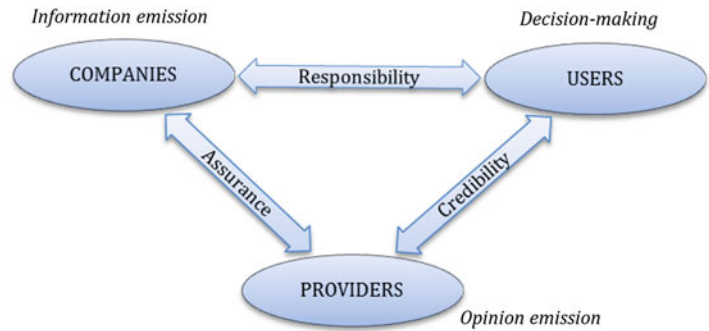
2003; Schadewitz and Niskala 2010). Given this paradigm, the external assurance of CSR disclosures has become a fundamental component for increasing the stakeholders' confidence in information (Darus et al. 2014; Herda et al. 2014). This service is required to equate CSR information to financial information in decision-making processes (KPMG 2011).

In the case of financial audit services, three fundamental pillars justify the existence of their market: the responsibility relationships of companies, the need to generate credible information, and the usefulness of such information for decision making (Flint 1988; Lee 1993). This justification is attributable to any external assurance service (Fig. 1) in which, at least, three actors with different roles and responsibilities are distinguished: the party that hires the service, the professionals who perform it, and the information users (IAASB 2013). Companies hiring the service to an external professional are ultimately responsible for the information issued to their stakeholders. Professionals are the assurance service providers responsible for obtaining sufficient and adequate evidence to issue an opinion that improves information credibility to users (see ► [“Standards for the Assurance of CSR Information”](#)). Users are those individuals and organizations that use the information to facilitate their decision-making process. Therefore, disclosure of credible sustainability reports is based on the interaction between companies, assurance suppliers, and stakeholders (Park and Brorson 2005).

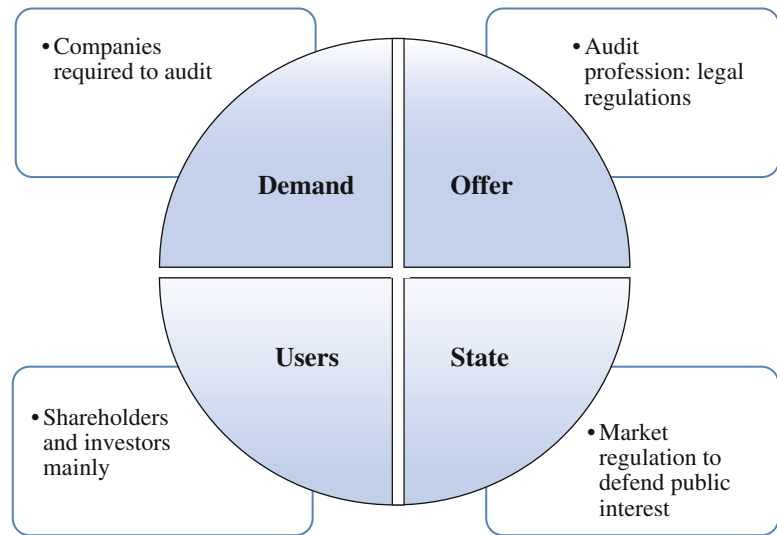
Despite this common justification, the differences between financial and nonfinancial (sustainability) information lead to differences in the way their respective assurance markets work.

A fourth actor participates in the specific case of the mature financial audit services market: the State, acting as regulator (Fig. 2). Its role is to achieve an adequate market balance, both in terms of quantity and quality, to guarantee user rights on the information issued by companies (Angulo 1995). Thus, legislation establishes the obligation to demand the service from certain companies, regulates the professionals who offer it, and arranges the attributes the service must possess

Assurance Market,
Fig. 1 External assurance justification: main participants, roles, and relationships



Assurance Market,
Fig. 2 Participants in the financial audit market



to meet the expectations of users, mainly investors and shareholders, under the premise of public interest.

Unlike financial auditing, external assurance of sustainability reports and its respective market are still in their early stages of development. This situation is partly attributed to the absence of legal requirements for assurance processes for CSR information (Ackers and van Heerden 2015; Darus et al. 2014). This circumstance affects the establishment of offer and demand, configured under the premise of willfulness. Likewise, it is important to note that the wide range of users makes it difficult to determine their expectations and needs.

In the absence of the fourth element identified in the audit market (the State), the configuration of

the three common elements – demand, offer, and users – is analyzed below.

It should be noted that this chapter focuses on the assurance market of sustainability reports given the widespread use of these documents to communicate CSR issues (see ► [“Communication of CSR Information”](#)). The same conditions could be made extensive to other ways of communicating CSR, such as integrated reports or nonfinancial statements.

The Demand of External Assurance of Sustainability Reports

In the financial auditing field, regulation and State mediation encourage the market and avoid

underproduction of demand (Wallace 1980). However, in the case of the external assurance of sustainability reports, the absence of regulation implies a lack of a legal provision that forces companies to hire this service. This is voluntary yet highly recommended by some public and private agencies promoting CSR and standardization of sustainability information, such as the Global Reporting Initiative (GRI).

Despite this, the demand for external assurance has increased since the end of the twentieth century. The average growth rate of formal assurance of nonfinancial reports was around 20% between 1997 and 2007 (CorporateRegister.com 2008). More recently, the number of assured sustainability reports continues to grow in absolute terms (CorporateRegister.com 2013). This trend is reflected in the surveys about CSR reporting issued by KPMG (2002, 2008, 2013, 2017) that are used by numerous authors to demonstrate the importance this service has acquired (Deegan et al. 2006; Manurung and Basuki 2010; O'Dwyer et al. 2011; Pflugrath et al. 2011). The latest KPMG document shows how the demand for assurance continues rising internationally among large companies. In 2017, 67% of the G250 companies (world's 250 largest companies by revenue) and 45% of the N100 (top 100 companies in 49 countries) had their CSR reports assured, against 63% and 42%, respectively, in 2015 (KPMG 2017).

The existence of an increasing demand within the context of voluntary assurance allows to suppose the presence of a series of benefits and pressures that drive companies to hire them, despite their not being legally required to do so, thus allowing to justify the resources investment (CorporateRegister.com 2008; O'Dwyer et al. 2011). In addition to improving the credibility of information and its value for stakeholders, the assurance allows the enhancement of some aspects such as performance or corporate reputation (KPMG 2008; Marx and van Dyk 2011).

Numerous studies deal with setting some general patterns in the demand for assurance of sustainability reports by defining those

characteristics of companies dominating their configuration. In the same way that size and industry are widely considered in the literature as determining factors in the decision to publish CSR reports (Fifka 2013), these characteristics are considered determinants in the demand for external assurance. Thus, larger companies and organizations belonging to industries characterized by a lower confidence degree to their stakeholders, a greater social and environmental sensitivity and a high visibility for society, are more prone to externally assure their sustainability information (Castelo Branco et al. 2014; Fernandez-Feijoo et al. 2012, 2015; Marx and van Dyk 2011; Moroney et al. 2012; Sierra-García et al. 2013, 2014; Simnett et al. 2009).

The explanation for the voluntary demand of external assurance can be supported by the legitimacy theory (Lindblom 1994): companies exposed to greater public scrutiny and, therefore, with a greater need for being accepted (legitimized) by society are more likely to demand external assurance of their sustainability reports on a voluntary basis (Vaz-Ogando et al. 2018).

The Offer of External Assurance of Sustainability Reports

No regulation defines a specific profession to implement the assurance service of sustainability reports. Therefore, no profession has sufficient capacity to control aspects related to the exercise of the activity and the requirements demanded of those offering it.

In the decade of the 90s, authors like Elliot (1997) predicted the evolution of the audit profession to other market segments, considering the expansion of techniques, customers, and services needed to ensure its survival in view of the importance acquired by nonfinancial information (Wallage 2000). This expansion phenomenon includes the offer of external assurance for sustainability reports (O'Dwyer 2011). Given the similarities between financial auditing and the assurance of nonfinancial information, auditors

have great opportunities to provide this service (Ballou et al. 2006). However, the assurance of sustainability reports occurs in a competitive market where the accounting profession does not always dominate (Ballou et al. 2006; Pflugrath et al. 2011).

The existence of numerous professionals that compete in the assurance market encourages the debate about the characteristics of each type of provider, the way in which they offer the service or the most appropriate profile. However, there is no consensus on who should perform these services, what their competencies should be, or how the engagement should be accomplished (Deegan et al. 2006).

The literature mainly distinguishes between two groups of main suppliers, auditors, and consultants, considering that each of these two professions has a different approach when perform the assurance task (Manurung and Basuki 2010). The differences in the background of the diverse professionals potentially contribute to the variability in the assurance of sustainability reports processes as well as its results. In general, auditors are characterized by greater risk aversion, being reluctant to provide high levels of assurance and focusing more on consistency of information, accuracy of data, and the evaluation of control systems (Deegan et al. 2006; Manurung and Basuki 2010; Owen and O'Dwyer 2004). Likewise, they use a more conservative approach, influenced by the use of mandatory standards for their profession, ethical requirements, and control and quality mechanisms (Pflugrath et al. 2011; Simnett et al. 2009). However, the characteristics of CSR information, due to its predominantly qualitative nature, lead to the need for other evaluation methods beyond the rigor that defines financial auditing (Ballou et al. 2006). Thus, some authors believe that the accounting profession may lack certain necessary skills to face the difficulties presented by aspects such as the environmental impact assessment or the true level of commitment with stakeholders (Gray 2000; Manetti and Becatti 2009).

In contrast, consultants are characterized as having a more strategic approach focusing on the stakeholders' interests (Manurung and Basuki 2010; Owen and O'Dwyer 2004). Their main competitive advantage is their greater experience and knowledge in the social and environmental dimensions of CSR (Perego 2009; Simnett et al. 2010). Their procedures are more aimed at evaluating the communication process, considering measures of added value and sustainable performance under the premises of completeness, equity, and balance (Manurung and Basuki 2010; Owen and O'Dwyer 2004). Therefore, they are more likely to make opinions and improvement recommendations for reporting companies (Owen and O'Dwyer 2004; Perego 2009).

Despite the different professional approaches traditionally detected in the literature, the establishment of multidisciplinary teams and outsourcing are ideas gaining strength among academics (Adams and Evans 2004; Gonella and Woo 2000; Lewellyn 2000; Simnett et al. 2009; Wallage 2000) and standardization bodies (AccountAbility 2008b; IAASB 2013). This helps achieve the right balance of skills and competencies needed to add credibility to the process. This idea is reinforced in practice by the Big4 (Deloitte, EY, KPMG, PWC), large professional service firms that offer both auditing and consulting services, and the providers that have maintained the largest international market shares since the beginning of the twenty-first century (KPMG 2008, 2015; O'Dwyer and Owen 2005).

The Users of External Assurance of Sustainability Reports

Although the demand of assurance services is directly dependent on companies, it could not be maintained if no indirect demand by information final users was present (O'Dwyer et al. 2011). In the case of financial information, this and its consequent audit is traditionally intended for groups that need this information to control the

management of companies and/or make investment or financing decisions. The interests and needs of users, mainly shareholders and investors, are protected by existing legislation.

However, a wide variety of stakeholders with different expectations is contemplated regarding CSR disclosures (AccountAbility 2008a; Simnett et al. 2009; Spence 2009), as employees, shareholders, investors, consumers, suppliers, or local communities (CorporateRegister.com 2013). Likewise, although regulatory initiatives are beginning to become apparent in the field of non-financial information (as in the case of Directive 2014/95/EU), its particular characteristics make it difficult for regulatory bodies to verify and control sustainability reports with the same rigor as financial reports (Olson 2010). The defense of the interests and needs of multiple users would be the main motivation to promote the existence of legal requirements (O'Regan 2010). Nevertheless, it can also pose one of the main limitations for its existence, given the difficulty to identify specific interests (Dellaportas and Davenport 2008).

The absence of regulation and the existence of multifarious agents with diverse interests can lead to the emergence of an expectations gap that surrounds sustainability information (Manetti and Becatti 2009; Milne and Adler 1999) and its assurance (Ackers and van Heerden 2015; Adams and Evans 2004; Hodge et al. 2009). Therefore, the role of the external assurer becomes a key element for the credibility of CSR information that seeks to guarantee an adequate scope to meet the needs of stakeholders (Adams and Evans 2004). A commitment must be acquired with the stakeholders to guarantee information transparency and encourage their participation in the assurance process (Park and Brorson 2005). The assurance provider must know and understand the relationships between them and the company, from which CSR criteria included in a sustainability report have been developed to determine aspects such as relevance, materiality, comprehensibility, and integrity (Bebbington et al. 2007; Manetti and Becatti 2009; Wallage 2000).

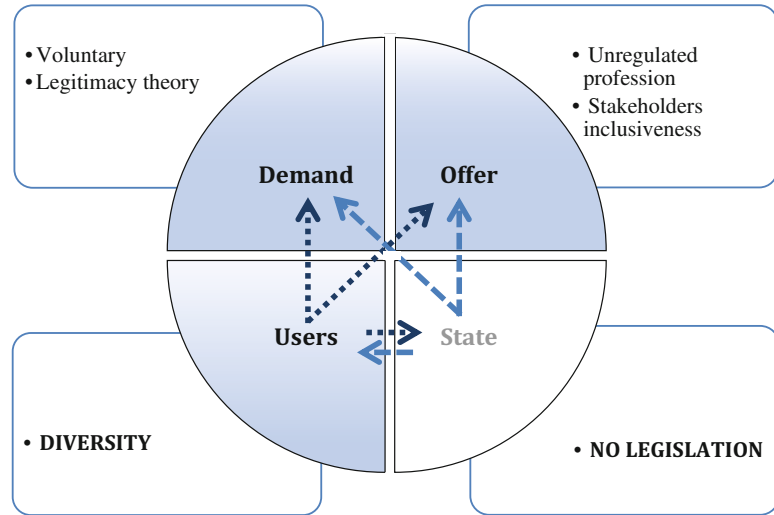
Despite the prominence that stakeholders should acquire throughout the process related to

firm sustainability, doubts arise concerning their true inclusion in assurance processes (Ackers and van Heerden 2015; Manurung and Basuki 2010; O'Dwyer and Owen 2005). The absence of regulation in this market allows managers to decide which information should be verified and, if the result of the assurance is published, which favors managerial capture. This concept refers to the fact that managers can take control of assurance policies and practices, pursuing their own interests or those of a particular group, instead of seeking utility for all stakeholders (O'Dwyer 2003; Smith et al. 2011). Given this situation, the assurance service can be seen from a symbolic perspective, to manage stakeholders' perceptions (Michelon et al. 2015), and CSR disclosures can become a controlled public relations exercise (Owen et al. 2000). This circumstance diminishes the clarity and transparency of the assurance statements, causing a negative impact on the mechanisms of accountability (Deegan et al. 2006) that reduces the public interest of this service (Smith et al. 2011). Therefore, while stakeholder inclusiveness is a key element of external assurance quality (IFAC 2011), it is also one of the major difficulties that the service and its market face (Manetti and Toccafondi 2012).

Summary

The new concept of transparency that emerges with the CSR paradigm establishes the need for companies to issue reliable information, beyond the financial scope, that supports the stakeholder decision-making processes. This need encourages the demand and the offer of assurance services for sustainability reports and, consequently, the creation of its market.

The configuration of this market has a certain parallelism with the financial auditing market. Both have a common justification: the need to increase information credibility. Thus, three different participants are identified: the companies, which constitute the direct demand of the service as information transmitters; the service providers, who are delivered with the opportunity to provide their professional services in a "fertile

Assurance Market,**Fig. 3** Assurance market: configuration and particular characteristics

A

area”; and users, who increase their confidence in the information to be able to make decisions through assurance. However, the development of the assurance market of sustainability reports is conditioned by two factors that distinguish it from financial auditing: the absence of legal requirements regulating the service and the large number of information addressees. Figure 3 graphically represents the structure of the external assurance market based on the auditing market scheme. It reflects how the two mentioned characteristics condition the rest of the participants.

The absence of legislation causes the existence of demand of voluntary nature. Taking into account the predominant characteristics of the companies demanding the service (large size and belonging to sensitive industries), this demand can be explained by the legitimacy theory and, therefore, by the pressure the users exert on informant companies.

No legal provisions regulate a specific profession in terms of the offer. Multiple suppliers compete in this market where large professional service firms are predominant. They can offer the multidisciplinary teams required by the complexity of nonfinancial information. However, its ability to increase users’ confidence ultimately conditions the quality of its services, which makes it indispensable to include stakeholders in the assurance process.

Finally, both the absence of regulation and the broad number of stakeholders can lead to non-compliance with user expectations, thus distorting the public interest of the assurance service. This circumstance would justify the appearance of regulatory initiatives that would, in turn, be hampered, among other issues, by concrete public interest in the face of different needs and types of stakeholders.

In short, the assurance market for sustainability reports (and any other means of communicating nonfinancial information) is an emerging market in its early stages of development. Its operation could be considered in parallel with the auditing market, due to the similitude of both services. However, despite the growing demand for the service by greater and more sensitive firms, and the existence of a set of different professionals providing it from a multidisciplinary perspective, its particular characteristics have impeded its development with the same rigor as its counterpart in terms of regulation and, therefore, public interest protection. However, just like the regulatory framework regarding CSR communication is evolving, the assurance market is expected to eventually do so too.

Cross-References

- [Auditing and Sustainability](#)
- [Communication of CSR Information](#)

- ▶ Environmental Compliance Audit
- ▶ Social Auditing
- ▶ Standards for the Assurance of CSR Information

References

- AccountAbility. (2008a). *AA1000 accountability principles standard 2008*. London: AccountAbility.
- AccountAbility. (2008b). *AA1000 assurance standard 2008*. London: AccountAbility.
- Ackers, B., & van Heerden, B. (2015). Can a conceptual framework for corporate social responsibility [CSR] assurance be developed? *Corporate Ownership and Control*, 12(4), 8–23.
- Adams, C. A., & Evans, R. (2004). Accountability, completeness, credibility and the audit expectations gap. *Journal of Corporate Citizenship*, 14, 97–115.
- Angulo, J. A. G. (1995). La auditoría, una profesión en la encrucijada de los noventa. *Revista Española de Financiación y Contabilidad*, 84, 595–629.
- Ballou, B., Heitger, D. L., & Landes, C. E. (2006). The future of corporate sustainability reporting: A rapidly growing assurance opportunity. *Journal of Accountancy*, 202(6), 65–74.
- Bebbington, J., Brown, J., Frame, B., & Thomson, I. (2007). Theorizing engagement: The potential of a critical dialogic approach. *Accounting, Auditing & Accountability Journal*, 20(3), 356–381.
- Berthelot, S., Coulmont, M., & Serret, V. (2012). Do investors value sustainability reports? A Canadian study. *Corporate Social Responsibility and Environmental Management*, 19(6), 355–363.
- Castelo Branco, M., Delgado, C., Ferreira Gomes, S., & Cristina Pereira Eugénio, T. (2014). Factors influencing the assurance of sustainability reports in the context of the economic crisis in Portugal. *Managerial Auditing Journal*, 29(3), 237–252.
- Cheng, M. M., Green, W. J., & Ko, J. C. W. (2014). The impact of strategic relevance and assurance of sustainability indicators on investors' decisions. *Auditing: A Journal of Practice & Theory*, 34(1), 131–162.
- CorporateRegister.com. (2008). *Assure view: The CSR assurance statement report*. London: CorporateRegister.com.
- CorporateRegister.com. (2013). *CR perspectives 2013: Global CR reporting trends and stakeholder views*. London: CorporateRegister.com.
- Darus, F., Sawani, Y., Mohamed Zain, M., & Janggu, T. (2014). Impediments to CSR assurance in an emerging economy. *Managerial Auditing Journal*, 29(3), 253–267.
- Deegan, C., Cooper, B. J., & Shelly, M. (2006). An investigation of TBL report assurance statements: UK and European evidence. *Managerial Auditing Journal*, 21(4), 329–371.
- Dellaportas, S., & Davenport, L. (2008). Reflections on the public interest in accounting. *Critical Perspectives on Accounting*, 19(7), 1080–1098.
- Elliott, R. K. (1997). Assurance service opportunities: Implications for academia. *Accounting Horizons*, 11, 61–74.
- Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2012). Measuring quality of sustainability reports and assurance statements: Characteristics of the high quality reporting companies. *International Journal of Society Systems Science*, 4(1), 5–27.
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2015). Multilevel approach to sustainability report assurance decisions. *Australian Accounting Review*, 25(4), 346–358.
- Fifka, M. S. (2013). Corporate responsibility reporting and its determinants in comparative perspective—a review of the empirical literature and a meta-analysis. *Business Strategy and the Environment*, 22(1), 1–35.
- Flint, D. (1988). *Philosophy and principles of auditing: An introduction*. Basingtoke: Macmillan Education.
- Gonella, C., & Woo, C. M. (2000). Total assurance. *AccountAbility Quarterly*, 13, 12–14.
- Gray, R. (2000). Current developments and trends in social and environmental auditing, reporting and attestation: A review and comment. *International Journal of Auditing*, 4(3), 247–268.
- Herda, D. N., Taylor, M. E., & Winterbotham, G. (2014). The effect of country-level investor protection on the voluntary assurance of sustainability reports. *Journal of International Financial Management & Accounting*, 25(2), 209–236.
- Hodge, K., Subramaniam, N., & Stewart, J. (2009). Assurance of sustainability reports: Impact on report users' confidence and perceptions of information credibility. *Australian Accounting Review*, 19(3), 178–194.
- IAASB. (2013). *ISAE 3000 (revised), assurance engagements other than audits or reviews of historical financial information*. New York: International Federation of Accountants.
- IFAC. (2011). *Sustainability framework 2.0: Professional accountants as integrators*. New York: International Federation of Accountants.
- KPMG. (2002). *KPMG international survey of corporate sustainability reporting 2002*. Amsterdam, The Netherlands: KPMG Global Sustainability Services.
- KPMG. (2008). *KPMG international survey of corporate responsibility reporting 2008*. Amsterdam, The Netherlands: KPMG International.
- KPMG. (2011). *KPMG international survey of corporate responsibility reporting 2011*. Amsterdam, The Netherlands: KPMG International.
- KPMG. (2013). *The KPMG survey of corporate responsibility reporting 2013*. Amsterdam, The Netherlands: KPMG International.
- KPMG. (2015). *The KPMG survey of corporate responsibility reporting 2015*. Amsterdam, The Netherlands: KPMG International.
- KPMG. (2017). *The KPMG survey of corporate responsibility reporting 2017*. Amsterdam, The Netherlands: KPMG International.

- Lee, T. A. (1993). *Corporate audit theory*. London: Chapman & Hall.
- Lewellyn, P. G. (2000). Sustainability auditing: Issues for the AICPA. *AccountAbility Quarterly*, 13, 30–34.
- Lindblom, C. K. (1994). The implications of organizational legitimacy for corporate social performance and disclosure. In *Critical perspectives on accounting conference*, New York, 1994.
- Manetti, G., & Becatti, L. (2009). Assurance services for sustainability reports: Standards and empirical evidence. *Journal of Business Ethics*, 87(1), 289–298.
- Manetti, G., & Toccafondi, S. (2012). The role of stakeholders in sustainability reporting assurance. *Journal of Business Ethics*, 107(3), 363–377.
- Manurung, A. M., & Basuki, H. (2010). An analytical assessment of assurance practices in social environmental and sustainable reporting in the United Kingdom and North America. *Gadjah Mada International Journal of Business*, 12(1), 75–115.
- Marx, B., & van Dyk, V. (2011). Sustainability reporting and assurance: An analysis of assurance practices in South Africa. *Meditari Accountancy Research*, 19(1/2), 39–55.
- Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33, 59–78.
- Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12(2), 237–256.
- Moroney, R., Windsor, C., & Aw, Y. T. (2012). Evidence of assurance enhancing the quality of voluntary environmental disclosures: An empirical analysis. *Accounting & Finance*, 52(3), 903–939.
- O'Dwyer, B. (2011). The case of sustainability assurance: Constructing a new assurance service. *Contemporary Accounting Research*, 28(4), 1230–1266.
- O'Dwyer, B., Owen, D., & Unerman, J. (2011). Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting. *Accounting, Organizations and Society*, 36(1), 31–52.
- O'Regan, P. (2010). Regulation, the public interest and the establishment of an accounting supervisory body. *Journal of Management & Governance*, 14(4), 297–312.
- O'Dwyer, B. (2003). The ponderous evolution of corporate environmental reporting in Ireland. Recent evidence from publicly listed companies. *Corporate Social Responsibility and Environmental Management*, 10(2), 91–100.
- O'Dwyer, B., & Owen, D. L. (2005). Assurance statement practice in environmental, social and sustainability reporting: A critical evaluation. *The British Accounting Review*, 37(2), 205–229.
- Olson, E. G. (2010). Challenges and opportunities from greenhouse gas emissions reporting and independent auditing. *Managerial Auditing Journal*, 25(9), 934–942.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441.
- Owen, D., & O'Dwyer, B. (2004). *Assurance statement quality in environmental, social and sustainability reporting: A critical evaluation of leading edge practice*. Nottingham: International Centre for Corporate Social Responsibility.
- Owen, D. L., Swift, T. A., Humphrey, C., & Bowerman, M. (2000). The new social audits: Accountability, managerial capture or the agenda of social champions? *European Accounting Review*, 9(1), 81–98.
- Park, J., & Brorson, T. (2005). Experiences of and views on third-party assurance of corporate environmental and sustainability reports. *Journal of Cleaner Production*, 13(10–11), 1095–1106.
- Perego, P. P. (2009). Causes and consequences of choosing different assurance providers: An international study of sustainability reporting. *International Journal of Management*, 26(3), 412–425.
- Pflugrath, G., Roebuck, P., & Simnett, R. (2011). Impact of assurance and assurer's professional affiliation on financial analysts' assessment of credibility of corporate social responsibility information. *Auditing: A Journal of Practice & Theory*, 30(3), 239–254.
- Schadewitz, H., & Niskala, M. (2010). Communication via responsibility reporting and its effect on firm value in Finland. *Corporate Social Responsibility and Environmental Management*, 17(2), 96–106.
- Sierra-García, L., Zorio, A., & García-Benau, M. A. (2013). Sustainable development and assurance of corporate social responsibility reports published by Ibex-35 companies. *Corporate Social Responsibility and Environmental Management*, 20(6), 359–370.
- Sierra-García, L., García-Benau, M. A., & Zorio, A. (2014). Credibility in Latin America of corporate social responsibility reports. *Revista de Administração de Empresas*, 54(1), 28–38.
- Simnett, R., Vanstraelen, A., & Chua, W. F. (2009). Assurance on sustainability reports: An international comparison. *The Accounting Review*, 84(3), 937–967.
- Simnett, R., Huggins, A., & Green, W. (2010). Are greenhouse gas assurance engagements a natural domain of the auditing profession? *Current Issues in Auditing*, 5(2), A1–A12.
- Smith, J., Haniffa, R., & Fairbrass, J. (2011). A conceptual framework for investigating 'capture' in corporate sustainability reporting assurance. *Journal of Business Ethics*, 99(3), 425–439.
- Spence, C. (2009). Social and environmental reporting and the corporate ego. *Business Strategy and the Environment*, 18(4), 254–265.
- Vaz-Ogando, N., Ruiz Blanco, S., & Fernandez-Feijoo, B. (2018). The assurance market of sustainability reports in Spain: An analysis from the demand perspective. *Revista de Contabilidad-Spanish Accounting Review*, 21(1), 48–62.
- Wallace, W. (1980). *The economic role of the audit in free and regulated markets*. New York: University of Rochester.
- Wallage, P. (2000). Assurance on sustainability reporting: An auditor's view. *Auditing: A Journal of Practice & Theory*, 19(s-1), 53–65.

Assurance Normalization

► [Standards for the Assurance of CSR Information](#)

Assurance Norms

► [Standards for the Assurance of CSR Information](#)

Assurance of Sustainability Reports Market

► [Assurance Market](#)

Assurance Standardization

► [Standards for the Assurance of CSR Information](#)

Assurance Standards

► [Standards for the Assurance of CSR Information](#)

Atmospheric Pollution

► [Air Pollution](#)

Attitudes

► [Core Values](#)

Audit

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Synonyms

[Analysis](#); [Evaluation](#); [Examination](#); [Inspection](#);
[Investigation](#); [Verification](#)

Definition

The audit is a complex, objective, independent, and inductive process, and it has a clear objective to verify if the activity is performed according to its efficiency and performance criteria and by internal and external regulations. The audit is a monitoring mechanism that helps managers to make efficient decisions if the auditors are specialists and do not have any relationship or conflict of interest with the organization audited. The audit definitions should be adapted to the challenges of digitalization and the pandemic crisis generated by COVID-19. Therefore, the audit can be defined as a process that uses the advantage offered by digitalization to develop the capacity of the audited organization or activity to overcome the internal and external obstacles and improve their performance.

Introduction

The financial audit was at the origin of the audit. However, the diversification of the activities developed many typologies of audit: cultural audit, quality audit, project audit, social audit,

human resources audit, IT audit, security audit, and many others.

The landmark in the audit process, no matter its typology, remains the financial audit, and, as a control tool, the audit is perceived as a process that requires much time and human resources.

The audit is performed by auditors who use qualitative and quantitative techniques to develop independent reasoning, referring to the rules of evaluation, reliability, or efficiency of an organization's systems and procedures concerning standards (Burlea-Schiopoiu 2008).

The auditors should continuously find the answer to the following questions:

How can we improve the image of the audit and transform it from something frightening into a strategic tool of the organization?

Why is the audit considered a punishment and a source of criticism?

The audit results consist of internal or external audit reports. The managers and employees of the audited organization perceived the recommendations as a critique and not as tools that provide organizations with valuable information for improving the weaknesses and developing a creative organizational climate (Bogdan 2021).

The image of the audit can be improved by establishing a balance between strengths and weaknesses or the risks of the organization or activity being audited. Therefore, the audit aim will be aligned to new challenges, and it will consist of transforming the essential information and procedures in instruments of sustainable change that require continuously corrective actions that will improve the organizational performance.

Digitalization, dispersal, and the contradictory sources of information are factors that negatively influence the audit by a considerable amount of data that requires additional skills of auditors. In this framework arises the following question:

How can auditing be transformed from a time-consuming and resource-intensive process into an efficient and flexible process?

We will find the answer to this question in the following sections.

Key Issues

The Audit: From Control to Recommendation

The relationship between risks, fees, and efforts in the auditing process is critical, and its disequilibrium generated by omitted or incorrect information is considered a source of many scandals. The efficiency of audit consists of objectivity and independence of the auditor and is based on information available and practical regulations. Moreover, the auditors observe, critically analyze, and evaluate the organizational weaknesses and the strengths during their mission to evaluate the risks and elaborate the recommendations considering the organizational particularities and the external environment.

Zhang and Shailer (2021) observed that the audit fees significantly increase when new risks of material misstatements in extended auditor's reports appear. This correlation between extrinsic motivation (audit fees) and the auditors' responsibilities partially explains the subjective or objective behavior of the auditor.

The financial and ethical pressure makes the auditor give the audit process a negative image and emphasize its control side.

The solution for transforming audit from control to recommendations consists of the auditor's total independence from the audited organization and correlating the workload with auditor salary. Therefore, the audit fees should be established, considering the particularities of audited organizations and auditor competencies. An audit process flexible and objective results from the balance between audit risk and audit outcomes.

The Impact of Dispersal of Information on Audit

The dispersal of information (DI) "is described by a large amount of information that is presented chaotically and repetitively," and it is ubiquitous in the audit process proved by many criteria that classify the audit (Burlea-Schiopoiu 2019, p. 142). The diverse typology of audit creates confusion for both auditors and organizations. DI is promoted by managers who overestimate

their position in the organization and transform their decision-making process in an attribute of auditors. Therefore, DI allows the managers to transfer the responsibilities related to their unethical behavior to auditors and limit auditors' independence. The auditors' independence is related to the information they need and audit fees (Burlea-Schiopoiu and Idowu 2016).

The other source of DI consists of auditing standards that do not clearly specify how the auditor will make the difference between omitted or incorrect information and the disclosed information. The auditor should assess the quality of information, formulate an objective opinion on existing information based on organization systems, and neglect the financial pressure to avoid repetitiveness of disclosures over time.

The Impact of Audit on Organization Ethics

The purpose of the audit is to assess the degree of involvement of the organization in promoting ethical principles and create value for it by promoting an ethical climate. The sources of many financial scandals were the unethical behavior of the organizations and the weaknesses of the audit process. Therefore, it is essential to understand the regulatory environment and the particularities of audited organizations very well because sometimes the past ethical or unethical behavior can be reflected in the current behavior and the revealed information related to fraud risk assessment.

The auditors should improve their professionalism and objectivity when the audited organization has problems and pay great attention to falsified documents and records. Auditors' independence should be analyzed with audited organization financial statements and ownership structures.

Managers have incentives when they hire auditors who easily give up their independence and this unethical behavior is predominantly reported to managers that by their influence on the decision-making process, equality between their interests and shareholders'.

Another cause of unethical audit is managers' interests who want to exercise greater control over the organization and make decisions that no longer converge with shareholders' interests. This desire for supremacy of managers causes them to

falsify or hide some critical information from the auditor.

The solution for avoiding unethical behavior consists of a puzzle strategy in audit that requires an auditor for every piece of the puzzle and, at the end of the process, an auditor who was not involved in the initial audit process to solve the puzzle and write the report.

The puzzle strategy required regular interaction between auditors and the board of managers to discuss the problems as they arise, elaborate on ways to solve them, and mention them correctly in the final report.

This puzzle strategy has many advantages as follows: the financial and time pressure on auditor is reduced and mitigates the threat to the independence of the auditor; the possibility to falsify documents and records is low because puzzle strategy audit supposes a concatenated analysis of information, and if a piece of the puzzle is not properly audited, it will lead to the resumption of the audit process by another auditor.

Future Directions

In the future, the digitalization of audit and the dispersal of information will raise other challenges, but the leading actor will remain the auditor that will make the difference between recommendations and critics. The organizations will increasingly be exposed to external risks, regulation abundance, and contradictory sources of information, which will require audits to be conducted at shorter intervals. The objectivity of the audit depends on the objectivity of the auditor. Therefore, auditors must develop their skills and audit skills. They must also have communication skills, strategic thinking, and empathy to identify the organization's weaknesses and provide the most effective recommendations to be accepted by both shareholders and stakeholders.

Summary

The audit is a complex process that involves all organizational departments. Due to the evolution

of technology, many audit tasks were digitalized, and the involvement of the human factor was reduced at the level of critical thinking and interpretation of the facts and documents. Digitization has added new competencies to the auditors and contributed to their independence. However, the dispersal of information is used by some auditors as an excuse for the low quality of their reports. Nowadays, the evolution of audit is evident because if the process were seen as punitive, at present, the audit is considered as one that, by its recommendations, contributes to increasing organizational performance and improving work climate.

Cross-References

- [Accountability](#)
- [Auditing and Sustainability](#)
- [EMAS: Eco-Management and Audit Scheme](#)
- [Environmental Compliance Audit](#)
- [Social Auditing](#)

References

- Bogdan, A. M. (2021). Auditul financiar-contabil în era digitală. In G. Coord, A. M. Bogdan, M. Iatagan, C. Uță, L. Ionescu, M. Andronie, & R. Ștefănescu (Eds.), *Zaman, Provocări privind contabilitatea și managementul în era digitală* (pp. 75–104). Editura Fundației România de Măine.
- Burlea-Schiopoiu, A. (2019). The impact of triple bottom dispersal of actions on integrated reporting: A critical perspective. In S. O. Idowu & M. del Baldo (Eds.), *Integrated reporting: Antecedents and perspectives for organizations and stakeholders* (pp. 141–152). Springer Nature Switzerland. https://doi.org/10.1007/978-3-030-01719-4_7.
- Burlea-Schiopoiu, A. (2008). *Audit social. De la teorie la practică*. Sitech.
- Burlea-Schiopoiu, A., & Idowu, O. S. (2016). The independence of the managers: An ethical dilemma. *International Journal of Social Entrepreneurship and Innovation*, 4(2), 152–171. <https://doi.org/10.1504/IJSEI.2016.076688>.
- Zhang, P. F., & Shailer, G. (2021). Changes in audit effort and changes in auditors' disclosures of risks of material misstatement. *The British Accounting Review*, 53(3), 100970. <https://doi.org/10.1016/j.bar.2020.100970>.

Audit Committee

- [Auditors and Corporate Governance](#)
- [Board Committees and Corporate Governance](#)

Audit Risk and Internal Control

- [Auditors and Corporate Governance](#)
- [Board of Directors and Corporate Governance](#)

Auditing and Sustainability

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Synonyms

[Sustainability assurance](#); [Sustainability auditing standards](#); [Sustainability reporting standards](#)

Definition

Sustainability performance data has become a crucial decision-making criterion for investors. Due to the increasing relevance of nonfinancial information, in particular about environmental, social, and governance (ESG) aspects, sustainability performance data has become a powerful tool for both shareholders' and stakeholders' decision-making. Independent external assurance is a key way for increasing the credibility of sustainability reporting and, indirectly, of the companies' reported performance. External assessment of sustainability disclosure processes and reports can give users greater confidence in the quality of such data and therefore promote its

usage, as it is the case for historical financial figures. However, despite its relevance and materiality, and the increasing public expectation of accuracy of the information displayed in sustainability reports, assurance on these disclosures is not widely required yet. Sustainability reports are being voluntarily assured by an independent third party, and increasingly so; however, the level of assurance varies considerably due to the inherent characteristics of nonfinancial data.

Introduction

Investors are increasingly focusing on environmental, social, and governance (ESG) (4) dimensions of organizational performance, rather than only on financial and economic sustainability (3), when making investment decisions. To avoid multiple ways to communicate the information, as well as to enhance the consistency and comparability of sustainability reporting (8) and Corporate Social Responsibility reporting (2), sustainability frameworks have been developed (PwC, 2016). Entities have been making sustainability disclosures in their attempts to demonstrate accountability (that they are offering products or services with satisfactory sustainability performance by reducing adverse environmental and social impacts) and that they are contributing to sustainable social development (see, e.g., Ericsson's 2018 Sustainability and Corporate Sustainability Report – Ericsson, 2019). Such information is being communicated through press releases, companies' websites, and particularly through both voluntary and required sustainability reports, with the latter being the major source for ESG credibility. To support effective decision-making, sustainability disclosures must be not only relevant, comparable, and consistent, in the same way that it should be for financial data, but also reliable. As there is a risk of misleading or inaccurate ESG-related statements, ensuring their reliability becomes important. As a prerequisite for effective sustainability reporting, credibility can be considerably enhanced through independent external assurance (AccountAbility, 2008). This text aims to present an overview of

sustainability auditing and sustainability assurance (a broader concept of verification used for nonfinancial data), as a way to enhance the quality, usefulness, and reliability of ESG information (GRI, 2013) (5).

Sustainability Reporting Frameworks and Disclosure Requirements

Should sustainability reporting standards not exist, each company would produce the information at its own discretion. Criteria for evaluating performance information can be either established or specifically developed. Sources for established criteria may be regulatory requirements and other standards or frameworks, such as financial reporting ones. With regard to sustainability-related matters, specific criteria have also been developed and several organizations have provided frameworks for sustainability reporting and metrics as a guidance for companies to disclose such matters.

GRI's framework remains the most widely adopted global standard for sustainability reporting (KPMG, 2017; The Conference Board, 2018). In the USA, the Sustainability Accounting Standards Board (SASB) has issued guidance for disclosing sustainability metrics at an industry level, enabling investors and companies to compare performance across companies within a given industry. These standards only address the subset of ESG factors likely to have material financial impact on a company, which vary by industry. Some companies have started to complement GRI's approach by considering the SAS (e.g., Gap Inc., which has reported in accordance with SAS in 2018). Recently, the International Integrated Reporting Council (IIRC) developed the Integrated Reporting (IR) (6) framework, in which companies integrate sustainability reporting within their annual financial report. Demand from a variety of stakeholders, as well as the introduction of regulatory requirements in some countries, has promoted companies to make climate change-related disclosures and promoted the development of standards for certain types of information, particularly Greenhouse Gas (GHG)

emissions. The Carbon Disclosure Standards Board (CDSB) developed the Climate Change Reporting Framework (CCRF), enhancing standardization and consistency of climate change-related disclosures in financial reports (CDSB, 2012). In summary, and in spite of the availability of several frameworks and some tendency toward adopting the GRI framework, there is no single generally accepted reporting standard and no single set of criteria to measure and report sustainability information. Given the lack of comparability between entities' criteria, these need to be clearly disclosed so that users can understand how the reported information was measured, recorded, collected, and reported (IAASB, 2013).

Nonfinancial data, in the past only disclosed voluntarily, are now required for companies operating in several countries, namely in the European Union. The European Directive on Non-financial Disclosure, Directive 2014/95/EU, established the requirement for public companies with more than 500 employees operating in Europe (including non-European companies) to report on multiple nonfinancial metrics. Topics to be disclosed include environmental protection, social responsibility and treatment of employees, anti-corruption and bribery issues, as well as diversity of their board of directors. Regulators in other regions have taken a similar approach, and ESG disclosure has become a listing rule in multiple stock exchanges, such as India, South Africa, and Brazil (Singer, 2018).

Assurance Needs on Sustainability Reporting

With the proliferation of ESG information reporting and practices, it has become clear that external assurance would be of interest to investors in assessing the reliability of such reports. Therefore, the increase in sustainability reporting has been accompanied by a growing interest in the accuracy of such reports and by demands of assurance statements to be included in the sustainability reports.

“External assurance or verification can provide both report readers and internal managers with

increased confidence in the quality of sustainability performance data, making it more likely that the data will be relied on and used for decision making” (GRI, 2013). Reporting assurance is the practice of using an independent third-party verification for data included in the report and for the process behind such report, in accordance with specific assurance standards. “Auditing” is a part of the wider “assurance” term, although they are often used interchangeably. Although both consist of the external verification of data to provide confidence on disclosed information, they are separate concepts. The key difference relates to the conclusion being or not an objective opinion on that data. Auditing usually applies to audits of historical financial information based on auditing standards, while assurance is used for the remaining situations, such as sustainability reporting.

There is a significant increase in the number of companies choosing to have their nonfinancial data externally assured. According to the analysis by the Conference Board (2018), sustainability report assurance is used by almost 40 percent of S&P (Standard & Poor's) Global 1200 companies, with European companies furthest ahead in adopting ESG assurance, namely when compared with companies in North America (Singer, 2018).

Assurance Standards for Sustainability Reporting

Unless there are criteria that are suitable (relevant, complete, reliable, and understandable) for evaluating specific performance information and against which the assurance provider performs testing procedures as part of its approach, no assurance may be given (IAASB, 2013). One of the major difficulties in providing assurance on sustainability reports has been concerns about the development of generally accepted reporting criteria for nonfinancial data that are suitable across companies and even industries. As criteria used to measure sustainability matters are not widely established and are frequently specific to a particular entity, properly defined and disclosed

criteria are a fundamental requirement to be able to provide assurance.

Several standardized approaches for assurance on sustainability reports have been developed (7). Assurance frameworks and standards provide guidance to be used during the assurance process, similarly to international auditing standards for financial reporting audits. Major standards and guidelines for sustainability reports assurance are the International Standard on Assurance Engagements (ISAE) 3000 (Revised) and AA1000 Assurance Standard (AA1000AS) (Rao, 2017). The Big Four firms, traditionally involved in financial audit, appear to favor the use of ISAE 3000 (Revised), issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC), individually or together with AA1000AS, rather than using AA1000AS individually. Other specialist assurance providers appear to be more comfortable using AA1000AS (Rao, 2017). The assurance parameters given in ISAE 3000 (Revised) are similar to traditional financial statement auditing and are based on a risk and assertions approach, together with sampling testing. Assurance procedures may also consist of inspection, observation, confirmation, recalculation, reperformance, analytical procedures, and inquiry, in order to gather evidence supporting the selected information in the sustainability report.

Given the increasing importance of climate change issues and their link to GHG emissions, many companies are quantifying their GHG emissions for internal management purposes. Many are also preparing a GHG statement as part of a regulatory requirement or in the context of an emissions trading scheme, or to inform investors and others on a voluntary basis. The ISAE 3410 deals with assurance engagements to report on an entity's GHG statement, setting out constituent elements and quantifying GHG emissions for a certain period (IAASB, 2012). This specific assurance standard enhances the strong demand for assurance of GHG emission reports. Finally, the International Organization for Standardization standard ISO 14064-3:2019 also provides guidance for verifying and validating such statements.

There are differences in terms of the extent and the depth of the assurance (the scope), and the

wording of the conclusion of the verification will differ accordingly. An important step in the assurance approach is defining what is to be externally verified, in terms of the disclosures (whether the whole report or only specified elements) and the processes or systems related to sustainability. Depth may be greater (reasonable assurance) or lower (limited assurance). In a reasonable assurance engagement, the conclusion is expressed in a positive form; it states an opinion on the outcome of the measurement or evaluation of the underlying information against given criteria, and it states that the information is free from material misstatements (IAASB, 2013). On the contrary, in a limited assurance engagement, the conclusion is expressed negatively. Such approach is restricted to inquiring, primarily people responsible for preparing the sustainability report, and applying analytical and other limited assurance procedures, rather than examining, on a test basis, evidence supporting the information being assured. However, in accordance with ISAE 3000 (Revised), a combined approach may be used.

Although, as mentioned above, sustainability reporting regulations are increasing and several regulators and exchanges have taken initiatives to promote disclosures on ESG performance (e.g., the recent requirement by the European Union Directive 2014/95/EU to verify the disclosure of nonfinancial data), sustainability assurance is not widely mandatory or regulated. No regulator recommends adopting any particular assurance framework or any particular type of assurance scope; in addition, providers can freely select any of the existing options. Finally, there is no specific requirement either with regard to the sustainability assurance provider, which may originate from the auditing (accountancy) profession or from outside (sustainability services and engineering firms). Major providers are, however, accountancy firms (GRI, 2013) (1).

The Current Status and the Future of Sustainability Assurance

In spite of the increase in assurance demands, the scope of ESG assurance is still narrow and restricted by most companies to a limited number

of ESG indicators (Singer, 2018). This study also reveals that in a few examined companies the scope of assurance only included the data collection process and methodology, but excluded verifying the data itself. Moreover, the majority of ESG data within the scope of the assurance was related to GHG emissions; beyond GHG emissions, the scope mainly included metrics focusing on energy and water consumption (Singer, 2018). These findings are consistent with the nature of sustainability disclosures, involving a mix of quantitative and qualitative data. Furthermore, quantitative sustainability disclosures are usually not measured in monetary units, and internal control procedures and data collection processes may lag behind systems and processes for financial reporting (GRI, 2013). Sustainability reports to be assured may also address a wide range of areas such as the environment (GHG emissions, waste recycling or water usage), health and safety, social responsibility, and governance structure. In addition, much of the quantitative information for different data is not measured in a common unit of measure. For example, customer satisfaction performance indicators may be measured in terms of customer complaints, while injuries/illnesses may be measured as a percentage of working hours. With such a variety of sustainability data and measurement units, alongside qualitative information (often with equal importance to users as quantitative information), current assurance methodologies, based on monetized measures, need to adapt to ensure a high-quality sustainability reporting.

Instead of expanding the scope of their ESG disclosures, firms are turning to focus on sustainability issues considered to impact their business in a more material way (Singer, 2018). As such, business materiality is increasingly privileged when selecting reported metrics. For example, carbon emissions are more material to a manufacturer than to a financial institution. It may be challenging for a company to determine which sustainability indicators are material and decision-useful for the market, to define appropriate processes to capture such information and to define controls to disclose them reliably (PwC 2019). Challenges are likely to be even greater for the assurer when conducting its own

materiality assessment, an important step in the assurance process, and require specific knowledge of the sustainability issues for each industry and each company.

Environmental and social issues, such as climate change, water scarcity, and human rights, are expected to be increasingly seen as financial issues, rather than as nonfinancial ones, leading to a merger of financial and nonfinancial issues (KPMG, 2017). To a better understanding of the various ESG issues that may be faced during the assurance process, increasing expertise in both sustainability and assurance frameworks and practices is also desired. As there are different subject matters (such as environmental, labor practices, social, and human rights, among others), multidisciplinary teams are fundamental for an effective assurance approach, as well as the involvement of many experts, as stated in ISAE 3000 (Revised) and 3410. The integration of financial information (subject to a mandatory audit) and nonfinancial information (that can be assured on a voluntary basis) may also result in additional challenges. In fact, the audit report on the financial statements and the assurance report on the sustainability information, potentially with a different assurance scope, are presented in the same integrated reporting, hence potentially creating confusion among users.

To overcome the practical issues in assuring in accordance to ISAE 3000 (Revised), the IAASB has initiated in October 2017 the “Extended External Reporting (EER)” (integrated reporting, sustainability reporting, and other reporting by entities about ESG matters) assurance project (IAASB, 2019). The purpose of this project is to provide practical guidance for the implementation of ISAE 3000 (Revised), namely, with regard to the suitability of the criteria and the materiality process discussed above. The final guidance is expected to be concluded in late 2020.

Summary

In the context of an increasing relevance of non-financial data, sustainability reports are being widely publicly disclosed and investors are

increasingly integrating ESG factors into their analysis. Therefore, akin to financial reporting, assurance of those reports has become a matter of public interest. Independently of the process and framework underneath the sustainability disclosures, those that are externally assured are seen as more robust and more reliable (GRI, 2013). External providers of independent and nonbiased assessment of the content of such reports have increased and the assurance process has become an important, although voluntary, factor in the organizational approach to sustainability. However, challenges exist. While what financial reporting is intended to measure is clear and related reporting practices are duly regulated and widely understood by users, sustainability reporting includes a diversity of matters and most relevant issues to be measured and disclosed vary by sector, and even by company, and involves a mix of quantitative and qualitative information. While auditing financial information is widespread and required for large companies, assurance on ESG and global sustainability reports is still developing the most appropriate and effective assurance methodologies for assuring sustainability features, which cannot be quantitative or monetized. While harmonizing frameworks and metrics to achieve greater consistency and comparability across reporting entities is important (PwC 2019), establishing requirements for assurance should also be a priority, in order to protect investors and other stakeholders from misleading and inaccurate ESG and global sustainability information.

Cross-References

- ▶ Assurance Market
- ▶ Corporate Social Responsibility Reporting
- ▶ Economic Sustainability
- ▶ Environment, Social, and Governance (ESG)
- ▶ Global Reporting Initiative
- ▶ Integrated Reporting for Sustainability
- ▶ Standards for the Assurance of CSR Information
- ▶ Sustainability Report and Sustainability Reporting

References

- AccountAbility. (2008). AA1000 Assurance Standard (AA1000AS) with 2018 Addendum. www.accountability.org/standards. Accessed September 15, 2019.
- Climate Disclosure Standards Board (CDSB). (2012). Climate change reporting framework. <https://www.cdsb.net/climate-change-reporting-framework/updates-framework>. Accessed September 14, 2019.
- Ericsson. (2019). Ericsson Annual Report 2018. <https://www.ericsson.com/48fa18/assets/local/investors/documents/financial-reports-and-filings/annual-reports/ericsson-annual-report-2018-en.pdf>. Accessed September 14, 2019.
- Global Reporting Initiative. (2013). The external assurance of sustainable reporting. <https://www.globalreporting.org/resource-library/GRI-Assurance.pdf>. Accessed September 13, 2019.
- International Auditing and Assurance Standards Board (IAASB). (2012). International Standard on Assurance Engagements (ISAE) 3410 – Assurance engagements on greenhouse gas statements. <https://www.ifac.org/publications-resources/glance-international-standard-assurance-engagements-isa-3410-assurance>. Accessed August 27, 2019.
- International Auditing and Assurance Standards Board (IAASB). (2013). International Standard on Assurance Engagements (ISAE) 3000 (Revised) – Assurance engagements other than Audits or Reviews of Historical Financial Information. <https://www.ifac.org/system/files/publications/files/IAASB-2018-HB-Vol-2.pdf>. Accessed 12 October 12, 2019.
- International Auditing and Assurance Standards Board (IAASB). (2019). Extended External Reporting (EER) Assurance IAASB Consultation Paper. <https://www.iaasb.org/publications-resources/consultation-paper-extended-external-reporting-assurance>. Accessed October 12, 2019.
- KPMG. (2017). The KPMG survey of Corporate Responsibility Reporting 2017. <https://assets.kpmg/content/dam/kpmg/be/pdf/2017/kpmg-survey-of-corporate-responsibility-reporting-2017.pdf>. Accessed September 13, 2019.
- PricewaterhouseCoopers (PwC). (2016). Sustainability reporting and disclosure. <https://www.pwc.com>. Accessed July 13, 2019.
- Rao, S. (2017). The current state of assurance on sustainability reports. The CPA Journal. <https://www.cpajournal.com/2017/07/26/current-state-assurance-sustainability-reports/>. Accessed September 15, 2019.
- Singer, T. (2018). Sustainability assurance services. The CPA Journal, <https://www.cpajournal.com/2018/07/20/sustainability-assurance-services/>. Accessed September 13, 2019.
- The Conference Board. (2018). Sustainability Reporting: Quality over quantity. <https://www.conference-board.org>. Accessed September 14, 2019.

Auditors and Corporate Governance

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Synonyms

[Audit committee](#); [Audit risk and internal control](#); [Corporate governance control systems](#); [External auditors](#); [Internal auditors](#)

Definition

The audit function is a key internal and external corporate governance control mechanism. In recent times, the audit function has become one of the cornerstones of corporate governance because it provides an objective check on the manner in which financial statements are prepared and presented by firms (Cadbury Report 1992). This view is supported by Filatotchev et al. (2006) who identified drivers of good corporate governance to include independence of external auditors and a competent audit committee.

An auditor is someone who examines a firm's annual report and accounts to ascertain whether they have been prepared appropriately. The auditor is tasked with providing an accurate portrayal of the true nature of financial data and the financial health of the business. Auditors may be individuals or firms. They must be appropriately qualified and must be a member of a recognized supervisory body and meet independence requirements (Hannigan 2018).

There are two main types of auditors, namely, internal and external auditors. Internal auditors are relevant because they examine financial statements and consider wider issues such as firms' reputation and growth, and its impact on the environment and employee relations (Mallin 2019). Internal auditors are good internal corporate governance mechanisms because they bring

independent, objective, and constructive perspective to firms (BCBS 2010, 2014). External auditors are independent of the firm. They are good external corporate governance control mechanisms because they protect shareholder and stakeholder interests by acting as firm watchdogs and help reduce information asymmetry between management and stakeholders (Elon and Gynes 2003).

Introduction

Various corporate governance codes call for high levels of disclosure and transparency in firms. The objective of transparency is to ensure that shareholders and other stakeholders are provided with sufficient information necessary to ensure that they can effectively monitor the effectiveness of the board of directors and executive management (BCBS 2014). The disclosure of relevant and useful information, such as the selection processes for directors, ensures that stakeholders can hold the board of directors and management accountable for their actions (BCBS 2014). Transparency is essential for sound and effective corporate governance, because inadequate transparency practices ensure that shareholders and other relevant stakeholders and market participants cannot effectively monitor and properly hold boards and senior management accountable for their actions (BCBS 2014). Thus, the objective of transparency is to provide stakeholders with critical information necessary to ensure that they are able to assess the effectiveness of boards and senior management (BCBS 2010). Accordingly, the OECD (2004) posits that firms should produce written reports summarizing its mission statement and main objectives, performance, future plans, strategies, and exposures to risk. It also recommends that timely and accurate disclosures must be provided by firms of all matters, including its financial situation, performance, ownership structure, and governance to shareholders and other stakeholders. Therefore, a narrative report supporting the financial and audit report must be published, which should include the chairman's statement, the director's report, a corporate governance

report, a remuneration report, and increasingly a CSR and sustainability report (Tricker 2012).

Every company must appoint an auditor or auditors, except when the directors decide otherwise on the basis that audited accounts are not necessary (small companies are audit-exempt). In the case of public companies, where an auditor is to be appointed, the appointment must be made at the accounts meeting. Where the company is a public interest entity with an audit committee, the audit committee must make a recommendation on the appointment of the auditor to the board (Hannigan 2018). The audit committee is an integral corporate governance internal control system, it is a subcommittee of the board of directors comprised of independent nonexecutive directors (Mallin 2019). The audit committee helps in framing policy on internal audit, it oversees the financial reporting process, providing oversight of and interacting with the firm's internal and external auditors (BCBS 2015).

Internal Auditors and the Internal Corporate Governance Control System

Internal auditor ensures the effectual operation of governance and risk management as well as other internal control processes of firms (BCBS 2010, 2014). Therefore, internal auditors are tasked with matters that are of fundamental importance to the subsistence of the firm and its overall performance (BCBS 2010, 2014). According to Mallin (2013), boards and audit committees look to the internal audit function to:

- Provide a continuous analysis of the effectiveness of processes and associated internal control systems.
- Review operational and financial performance.
- Assess the achievement of corporate objectives.
- Identify areas of reform for the proficient use of resources.
- Confirm the existence and value of firms' assets.
- Carry out ad hoc inquiries into possible irregularities and fraudulent activities.
- Review the compliance framework and identify issues.
- Review firms' values and code of conduct or ethics.

The internal control system should ensure compliance with applicable laws and regulations and also seek to ensure reliable financial reporting and achieve operational efficiency. To ensure that internal auditors perform their functions they should be individuals who are independent and competent and possess personal integrity. The head of the internal audit should be a top manager (i.e., assistant general manager and above) and should be a member of a relevant professional body. The head of the internal audit is charged with ensuring that quarterly audit reports are conducted and provided to the audit committee. The importance of internal auditors was reemphasized in the 2007–2008 financial crisis. It was revealed that internal auditors were negligent because they had not considered the impact of a rapid national economic decline on banks and they had also failed to emphasize aggressive provisioning against risk assets (Lincoln et al. 2017, 2019). Mallin (2019) argues that in order to maintain independence and foster direct reporting relationship, it is best practice for a private meeting to be convened between the internal audit head, audit committee, and the board of directors.

External Auditors and the External Corporate Governance Control System

External auditors can detect and prevent fraudulent activities and assist in installing effective accounting systems in firms. The audit of financial statements ensures the credibility of disclosed information, thereby instilling confidence in firms' transparency (Tricker 2012). External auditors also ensure board and management accountability to shareholders and other stakeholders, which ultimately promote domestic and foreign investor confidence in the market (Mallin 2019). Consequently, it is essential for external auditors to be independent of boards and management. Lack of auditor independence is detrimental to the audit function and to achieving effective corporate governance. For example, the collapse of Enron was attributed to ineffective auditor oversight caused by a lack of independence (Elon and Gynes 2003).

To ensure independence and objectivity, it is essential that a professional relationship is maintained between external auditors,

consultants, internal auditors, and the management. External auditors must maintain a professional relationship, “present a fair, balanced and understandable assessment of the company’s position and prospects and establish procedures to manage risk, oversee the internal control framework, and determine the nature and extent of the principal risks the company is willing to take in order to achieve its long-term strategic objectives” (FRC 2018).

Various national codes have advocated that auditors should not simultaneously carry out auditing and consultancy functions in the same firm, this ensures that the audit process is not potentially corrupted by an auditor’s interest in obtaining consultancy fees (Mallin 2019). To ensure that financial statements accurately reflect risk management practices, internal controls, and compliance with regulatory provisions, the UK Companies Act (2006; Sec 485(1), 489(1)) and the Corporate Governance code 2018 mandate that such reports are externally audited. External auditors must possess high integrity, independence, and competence (FRC 2018).

Key Issues

Audit, Risk, and Control Function

The Corporate Governance Code (2018) advocates for audit, risk, and control functions. The Code lists three principles which focus on the internal and external audit function; balanced and fair assessment of the company’s position and prospects; risk management procedures and internal control framework. The Code states that “the board should establish formal and transparent policies and procedures to ensure independence and effectiveness of internal and external audit functions and satisfy itself on the integrity of financial and narrative statements” (FRC 2018). For example, the audit committee has a role in fraud prevention; as such it must ensure that there are provisions throughout the firm that allows transparent disclosure and report of improprieties. Furthermore, effective whistleblowing provisions should be provided.

Under the UK Corporate Governance Code, directors are mandated to “explain in the annual report their responsibility for preparing the annual report and accounts, and they must state that in their opinion, they consider the annual report and accounts, taken as a whole to be fair, balanced and understandable” (FRC 2018). In addition, they must provide pertinent information, which is required for shareholders to make an informed assessment of the firm’s performance, business model, and strategy (FRC 2018). Principle 26 of the UK Corporate Governance Code also offers greater safeguard by providing that the “annual reports should describe the work of the audit committee explaining how it has assessed the independence and effectiveness of the external audit process and the approach vis-à-vis the appointment or reappointment of external auditors. Furthermore, where there is no internal audit function, a clear explanation is required for the absence, how internal assurance is achieved, and how this affects the work of external audit” (FRC 2018). Finally, the annual report must clearly outline how the company was able to safeguard the independence of auditors, and their objectivity, where the external auditor provides additional non-audit services (FRC 2018).

Audit Committee Composition and Responsibility

The UK Corporate Governance Code advocates for the establishment of an audit committee. The UK also implements the European Union Audit Directive (2014/56/EU), which imposes a requirement for firms whose securities are traded on a regulated EU market to have an audit committee. This further shows the importance of the audit committee and steps taken both on a national and international level in ensuring this key function within the firm.

The audit committee should comprise a “minimum of three independent non-executive directors.” In the case of small firms, the audit committee should comprise a “minimum of two independent non-executive directors.” The chair of the board should not be a member. The board should satisfy itself that at least one member has recent and relevant financial experience. The

committee as a whole shall have competence relevant to the sector in which the company operates” (FRC 2018). Furthermore, in order to ensure collaboration in the auditing process, the audit committee should have access to external auditors for explanations and additional information without the presence of management (FRC 2018).

The audit committee is tasked with a robust list of responsibilities. Principle 25 of the UK Corporate Governance Code sets out the main roles and responsibilities of the audit committee. It states that the role and responsibility of the audit committee includes assessing the integrity of the financial statements of the company, advising the board of directors on the fairness of accounts and annual reports, scrutinizing the internal financial controls and risk management structures and systems of the company, and assessing the internal audit function of the company. The audit committee is also tasked with recommending to the board of directors the appointment and removal of external auditor, ensuring external auditor objectivity and compliance with any professional and regulatory requirements. Finally, the audit committee is tasked with devising policies where external auditors are required to provide non-auditing services and ensuring this does not encroach the auditor’s independence (FRC 2018). The committee must also report to the board of directors the steps taken to effectively discharge its responsibility (FRC 2018).

Summary

Good corporate governance mandates the introduction of internal and external controls mechanisms to ensure effective audit and risk prevention within the firm. So as to ensure they perform their functions effectively, auditors must be individuals who are independent, competent, ethical, and possess personal integrity. The internal control system should ensure compliance with applicable laws and regulations and also seek to ensure reliable financial reporting and achieve operational efficiency. In addition, the external auditing function should ensure board and management

accountability to shareholders and other stakeholders, thus promoting investor confidence. External auditors are important corporate governance players. They are gatekeepers, consequently, they must be independent, maintain a professional relationship, and ensure they effectively oversee the internal control framework within the firm.

The importance of the audit committee in ensuring effective corporate governance cannot be overemphasized. The audit committee is considered a key governance committee created to oversee the internal control framework of the firm. The committee is tasked with determining the nature and extent of the risks the firm is exposed to relative to its long-term strategic objective. The audit committee should be competent and have a clear understanding of the sector and industry in which the company operates. Finally, the audit committee should be responsible for reviewing the integrity of financial reports and overseeing the independence and objectivity of external auditors.

References

- BCBS. (2010). *Principles for enhancing corporate governance*. Available <https://www.bis.org/publ/bcbs176.pdf>
- BCBS. (2014). *Consultative document corporate governance principles for banks*.
- BCBS. (2015). *Guideline corporate governance principles for banks*. Available <https://www.bis.org/bcbs/publ/d328.pdf>
- Cadbury, A. (1992). *Report of the committee on the financial aspects of corporate governance*. London: Gee and Co. Ltd.
- Companies Act. (2006). Available <https://www.legislation.gov.uk/ukpga/2006/46/contents>
- Elon, C. M., & Gynes, C. J. (2003). Enron failure and corporate governance reform. *Wake Forest Law Review*, 38, 855.
- Filatotehev, I., Jackson, G., Gospel, H., & Allcock, D. (2006). *Key drivers of ‘Good’ corporate governance and the appropriateness of UK policy responses*. London: The Department of Trade and Industry.
- Financial Reporting Council. (2018). *The UK corporate governance code*. London: The Financial Reporting Council Limited. Available at <https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-UK-Corporate-Governance-Code-FINAL.pdf>.

- Hannigan, B. (2018). *Company law* (5th ed.). Oxford: Oxford University Press.
- Lincoln, A., Adedoyin, O., & Laugharne, J. (2017). Board composition and corporate governance mechanisms in the Nigerian banking sector. In N. Capaldi, S. O. Idowu, & R. Schmidpeter (Eds.), *Dimensional corporate governance: An inclusive approach*. Berlin Heidelberg: Springer.
- Lincoln, A., Adedoyin, O., & Croad, J. (2019). Goal 16 of the UN sustainable development agenda and its implications for effective governance and sustainability in the Nigerian banking sector. In S. O. Idowu & R. Schmidpeter (Eds.), *Business perspectives of sustainable development goals 2030, CSR, sustainability, ethics & governance*. Berlin Heidelberg: Springer.
- Mallin, C. A. (2013). *Corporate governance* (4th ed.). Oxford: Oxford University Press.
- Mallin, C. A. (2019). *Corporate governance* (6th ed.). Oxford: Oxford University Press.
- OECD. (2004). *Principles of corporate governance*. Available at <http://www.oecd.org/corporate/ca/corporate-governanceprinciples/31557724.pdf>
- Statutory Audit Service for Larger Companies (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014, SI 2014/56/EU.
- Tricker, B. (2012). *Corporate governance: Principles, policies and practices* (2nd ed.). Oxford: Oxford University Press.

being oneself, and remaining true to one's self. Indeed, behaving authentically means acting in accord with one's values, preferences, and needs as opposed to acting merely to please others to attain rewards or avoid punishments through acting "falsely" (Kernis and Goldman 2006). According to this construct authentic leaders have been defined as those individuals who are deeply aware of how they think and behave, as well as of the context in which they operate. They are perceived by others as being aware of their own and others' values and moral perspective, knowledge, strength, and as being confident, hopeful, optimistic, and resilient (Klenke 2007). Authenticity is about being sincere, honest and genuine (Trilling 1972). When underpinning the entrepreneurial and managerial conduct authenticity represents a key element of the orientation toward genuine corporate social responsibility (CSR) and sustainability approaches that rest on a social, economic, environmental, and anthropological ecology. In other words, authentic CSR is driven by authentic leaders capable to orient the company toward the common good (Zamagni 1995; Kaptein and Wempe 2002).

Authentic CSR

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Synonyms

Ethically based CSR; Ideal-driven CSR; Intrinsic CSR; Non-opportunistic CSR

Definition

The concept of authenticity has been addressed in both religious and historical studies. Moreover, it has been extensively treated in various disciplines, including psychology and philosophy, among others. Authenticity calls us to be true and real to ourselves and the world (Terry 1993). The construct of authenticity refers to accepting,

Introduction

In the last decades business ethics literature has emphasized authenticity and integrity in the corporate context (Paine 1994; Vyakarnam et al. 1997; Hemingway and MacLagan 2004; Ketola 2008). Virtue ethics has gained momentum within business (MacIntyre 1985) attempting to ground ethics on the basis of character (Bertland 2009) and emphasizing integrity both at a personal and organizational level (Solomon 1992; Melé 2009; Bertland 2009). Rediscovering the strength of virtue ethics in the business environment contributes to foster best practices (Flynn 2008) since ethical-driven and purpose-driven businesses are addressed to pursue common benefits and construct a more civil economy (Carroll 2000; Driscoll and Hoffman 2000; Pruzan 2001; Argandoña 2003; Luthans and Avolio 2003; Zadek 2006; Riggio et al. 2010).

Nevertheless, CSR policies often fail in rendering organizations more ethical because they are not authentically driven and lack from a consistent leadership model (Painter-Morland 2006). The gap between leadership and effective CSR can be attributed to the fact that CSR strategies are often driven by extrinsic motivation and therefore are not adequately connected to an authentic ethical construct (Looser and Wehrmeyer 2015). Consequently, they cannot provide a lasting and effective contribution to sustainability nor do they trigger sustainable entrepreneurship. It thus becomes important to distinguish between extrinsic (opportunistic-led) and intrinsic (authentic and ethically based) orientation toward CSR and sustainability.

Business survival depends on a continuous endeavor for sustainability. In this context, a moral and virtues-based leadership is a key driver in implementing authentic CSR and sustainability-driven strategies, based on values such as caring, people-centeredness, integrity, transparency, and accountability (Garriga and Melé 2004; Visser 2011). Contemporary leadership literature emphasizes moral and ethical-based leadership as a prerequisite for effective leadership and many efforts have been devoted to identifying its content and antecedents (Brown 2005).

The attention that has emerged from the literature is confirmed in practice since there are more and more leaders who freely admit that they are driven by an intrinsic commitment to values. While some organizations do not contemplate the challenge of taking a leadership stance on CSR and sustainable entrepreneurship, there are a growing number of high-performing companies whose success rests on their leaders' commitment to ethics and values (Lamont 2002), capable to translate into successful CSR and sustainability strategies (Jenkins 2006). Those individuals (managers and/or entrepreneurs) engaging in sustainable entrepreneurship are doing so to leverage their authenticity in a way that contributes to broader social change. Therefore, attention is addressed to the antecedents of leadership models consistent to responsible strategies and practices pointing out the relevance of values and virtues in the entrepreneurial and business context. Values

and virtues are considered as “pillars” that act as “hidden” driving of CSR and sustainable orientation.

Key Issues

On the one hand CSR is either a commercial instrument and extrinsically motivated; on the other hand it is based on intrinsic (or idealistic) reasons, which makes it a moral activity. (Looser and Wehrmeyer 2015, p. 2)

Extrinsic CSR is aimed at increasing social legitimacy and company reputation (Matten and Moon 2008). Among the external drivers are contextual pressures from consumers, shareholders, competition, the media, international trade issues, or regulatory demands. More precisely, CSR engagement can be egoistic-driven by the desire to exploit a situation or strategic-driven by the goal of making a better profit and minimize risks. In addition, CSR orientation can be stakeholder-driven by the need to react to pressures from stakeholders. It usually manifests through a formalized approach based on the adoption of accountability tools (such as sustainability reports, ethical codes, certifications, stakeholder engagement activities) finalized to improve external recognition and market share. The extrinsic motives are consistent with managerial perceptions and beliefs that CSR is an effective tool to achieve wealth maximization, while financial performance is the actual financial status results. This approach often underpins a type of attitude in the use of CSR as a tool of rhetoric rather than an expression of virtuous actions (Visser 2011). It has been stigmatized as impression management (Hooghiemstra 2000) that ends up by crossing into phenomena of greenwashing, decoupling, and camouflaging (Laufer 2003; Moneva et al. 2006; Du et al. 2010).

Intrinsic CSR rests on entrepreneurial and managerial motivations related to morality, thus positioning CSR in a values-driven perspective (Looser and Wehrmeyer 2015) that sees CSR as the right thing to do and is consistent with an authentic approach to CSR. Hemingway and MacLagan (2004) signify the role that socially

responsible managers and entrepreneur can play as “change agents” because they can reflect their personal values regarding CSR on their managerial discretion and implementation of corporate strategies. Intrinsic CSR is thus consistent with responsible practices promoted by the entrepreneur and/or the top management (Lamont 2002; Jenkins 2006; Del Baldo 2012) and nurtured by authentic-driven relationships with internal and external stakeholders (Graafland and Van de Ven 2006; Graafland et al. 2012; Story and Neves 2015). “Authenticity is posited to be a function of the openness of the organizational climate and is manifest by the degree to which members resist personal change when enacting their leadership and professional roles. Organization’s authenticity is manifest through its leadership” (Gardner et al. 2011, p. 1121). “Organizational integrity means that the organization’s values should guide its interactions with internal and external stakeholders” (Painter-Morland 2006, p. 358). Organizational integrity manifests in organizational practices and relationships nurtured by values and virtues including justice, temperance, fortitude, and prudence, among others. In this regard, business ethics research emphasizes the role of contextual elements within the workplace in generating management and employee ethical behavior. The organizational context is interpreted as a direct influencer of individual moral or immoral action (Kaptein 2017).

Extrinsic CSR is mainly diffused among large companies, while small and medium-sized firms (SMEs) are more prone to manifest an intrinsically-driven orientation toward CSR (Wehrmeyer et al. 2020). Among SMEs and family businesses intrinsic motives are nurtured by personal and community values tied to the social capital they are embedded to. In such contexts, despite the lack of formal CSR strategies and extrinsic policies, CSR is ethically grounded. Accordingly, authentic leadership acts as a driver for social change, and the operationalization of CSR has the power to contribute to the common good by generating “social goods.” In other words, the “doing” CSR (the “walking”) is superior to communicating CSR (the “talking” of CSR) and hence CSR

practices should be the primary concern (Lee and Hageman 2018; Schoeneborn et al. 2019). In addition to SMEs, there are several companies where the aforementioned orientation is actually operationalized since they are purpose-driven, such as the economy of communion companies (Del Baldo and Baldarelli 2015), territorial companies (Del Baldo 2010), benefit corporations, and B Corps (Rawhouser et al. 2015), among others.

Future Direction

“Although there are important differences in terminology and foci, divergent perspectives converge on the acknowledgement that leadership effectiveness depends less on individual, heroic action and more on collaborative processes supported by a network of individuals, leaders, and followers engaged in collective achievement, teamwork, and shared accountability” (Klenke 2007, p. 69). Entrepreneurs and managers can trigger corporate responsible and sustainable strategies and hinder the “turbo-capitalism” effects (Matacena 2010) by valorizing people, relationships, the community, and the environment (Zsolnai 2015).

Some authors argue that the intrinsic motivation induces a stronger involvement in CSR (Graafland and van de Ven 2006). At the same time, several scholars claim for the need to adopt an integrative framework by considering the “mutually reinforcing relationship” among intrinsic and extrinsic CSR orientation (Muller and Kolk 2010, p. 4). A broader perspective concerning the intrinsic motivations of business organizations to pursue goals that go beyond economic performance and aim for long-term, sustainable performance is necessary. Such a broader perspective should take into account both managerial and entrepreneurial motivations, and the overall organizational context that influences internally the ethical activity of the organization, which can be further externalized and communicate as organizational (ethical, sustainability, and social) performance (Costantinescu and Kaptein 2020).

Summary

The “missing link” between the theory and practice of CSR and sustainability in the daily life of companies can be attributed to the lack of coherent and authentic leadership models and styles which should be consistent to a sustainability orientation and based on a moral and ethical construct. Adhering to these lines of thought, authentic CSR orientation can be considered a step in the business strategy (Schmidpeter 2014) that rests on a coherent leadership model. The latter incorporates transformational, charismatic, servant, spiritual, or other forms of positive leadership (Avolio and Gardner 2005).

Proactive entrepreneurial and managerial behaviors nurtured by authenticity contribute to orient businesses’ strategies and actions toward effective stakeholder orientation, transparency, and sustainable growth (Walker and Salt 2006). Running a company that is genuinely oriented toward CSR and sustainability requires a consistent leadership model based on values (such as justice and integrity), in directing the corporation so as to ensure its prosperity based on transparency, accountability, and responsibility (Von Ahnen 2015; Oreg and Berson 2011). A common trait of authentic CSR rests on the moral construct of entrepreneurs and managers, which generates the capacity to communicate the vision and strengthen a cohesive organizational culture, thus inspiring in others the will to emulate their choices (Hoivik von Weltzien 2014). Accordingly, a challenging approach Visser (2011) rests on the notion that business survival depends on a continuous striving for sustainability and that moral leadership is a key driver to implementing authentically CSR and sustainability-driven strategies.

Cross-References

- Integrity
- Sunken CSR and SMEs

References

- Argandoña, A. (2003). Fostering values in organizations. *Journal of Business Ethics*, 45, 15–28.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16, 315–338.
- Bertland, A. (2009). Virtue ethics in business and the capabilities approach. *Journal of Business Ethics*, 84, 25–32.
- Brown, M. T. (2005). *Corporate integrity. Rethinking organizational ethics and leadership*. Cambridge, UK: Cambridge University Press.
- Carroll, A. B. (2000). Ethical challenges for business in the new millennium: Corporate responsibility and model of management morality. *Business Ethics Quarterly*, 10 (1), 33–40.
- Costantinescu, M., & Kaptein, M. (2020). Virtue ethics and CSR: The two sides of sustainable organizational performance. In W. Wehrmeyer, S. Looser, & M. Del Baldo (Eds.), *Intrinsic CSR and competition. Doing well amongst European SMEs* (pp. 119–132). Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-21037-3_7.
- Del Baldo, M. (2010). Corporate social responsibility and corporate governance in Italian SMEs: Toward a “territorial” model based on small “champions” of CSR. *International Journal of Sustainable Society*, 2(3), 215–247.
- Del Baldo, M. (2012). Corporate social responsibility and corporate governance in Italian SMEs: The experience of some “spirited business”. *Journal of Management and Governance*, 16(1), 1–36.
- Del Baldo, M., & Baldarelli, M. G. (2015). From weak to strong CSR: The experience of the EoC (Economy of Communion) industrial parks in Germany and Italy. *UWF*, 23(4), 213–226.
- Driscoll, D. M., & Hoffman, W. M. (2000). *How to implement values-driven management*. Waltham: Bentley College.
- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, 12, 8–19.
- Flynn, G. (2008). The virtuous manager: A vision for leadership in business. *Journal of Business Ethics*, 78, 359–372.
- Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P. (2011). Authentic leadership: A review of the literature and research agenda. *The Leadership Quarterly*, 22, 1120–1145.
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1), 51–71.
- Graafland, J. J., & Van de Ven, B. (2006). Strategic and moral motivation for corporate social responsibility. *Journal of Corporate Citizenship*, 22, 111–123.

- Graafland, J., Mazereeuw, C., & Schouten, V. D. (2012). Motives for corporate social responsibility. *De Economist*, 160, 377–396.
- Hemingway, C. A., & MacLagan, P. W. (2004). Managers' personal values as drivers of corporate social responsibility. *Journal of Business Ethics*, 50(1), 33–44.
- Hoivik von Weltzien, H. (2014). The heart of leadership is ethics. *Impresa Progetto – Electronic Journal of Management*, 11, 1–9.
- Hooghiemstra, R. (2000). Corporate communication and impression management – New perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1–2), 55–68.
- Jenkins, H. (2006). Small business champions for corporate social responsibility. *Journal of Business Ethics*, 6(3), 241–256.
- Kaptein, M. (2017). When organizations are too good: Applying Aristotle's doctrine of the mean to the corporate ethical virtues model. *Business Ethics: A European Review*, 26, 300–311.
- Kaptein, M., & Wempe, G. (2002). *The balanced company: A theory of corporate integrity*. Oxford, UK: Oxford University Press.
- Kernis, M. H., & Goldman, B. M. (2006). A multi-component conceptualization of authenticity: Theory and research. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 38, pp. 283–357). San Diego: Academic Press.
- Ketola, T. (2008). A holistic corporate responsibility model: Integrating values, discourses and actions. *Journal of Business Ethics*, 80, 419–435.
- Klenke, K. (2007). Authentic leadership: A self, leader, and spiritual identity perspective. *International Journal of Leadership Studies*, 3(1), 68–97.
- Lamont, G. (2002). *The spirited business: Success stories of soul friendly companies*. London: Hodder & Stoughton.
- Laufer, W. S. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, 43(3), 253–261.
- Lee, W. E., & Hageman, A. (2018). Talk the talk or walk the walk? An examination of sustainability accounting implementation. *Journal of Business Ethics*, 152, 725–739.
- Looser, S., & Wehmeyer, W. (2015). Doing well or doing good? Extrinsic and intrinsic CSR in Switzerland. *UWF*, 1–14. <https://doi.org/10.1007/s00550-015-0360-9>.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership: A positive developmental approach. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 241–261). San Francisco: Berrett-Koehler.
- MacIntyre, A. (1985). *After virtue. A study in moral theory* (2nd ed.). London: Duckworth.
- Matacena, A. (2010). Corporate social responsibility and accountability: Some glosses. In M. G. Baldarelli (Ed.), *Civil economy, democracy, transparency and social and environmental accounting research role* (pp. 7–59). Milano: McGraw-Hill.
- Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- Mel  , D. (2009). Integrating personalism into virtue-based business ethics: The personalist and the common good principles. *Journal of Business Ethics*, 88, 227–244.
- Moneva, J. M., Archel, P., & Correa, C. (2006). GRI and the camouflaging of corporate unsustainability. *Accounting Forum*, 60, 121–137.
- Muller, A., & Kolk, A. (2010). Extrinsic and intrinsic drivers of corporate social performance: Evidence from foreign and domestic firms in Mexico. *Journal of Management Studies*, 47, 1–26.
- Oreg, S., & Berson, Y. (2011). Leadership and employees' reactions to change: The role of leaders' personal attributes and transformational leadership style. *Personnel Psychology*, 64(3), 627–659.
- Paine, L. S. (1994). Managing for organizational integrity. *Harvard Business Review*, 72(2), 106–117.
- Painter-Morland, M. (2006). Triple bottom-line reporting as social grammar: Integrating corporate social responsibility and corporate codes of conduct. *Business Ethics: A European Review*, 15(4), 352–364.
- Pruzan, P. (2001). The question of organizational consciousness: Can organizations have values, virtues and visions? *Journal of Business Ethics*, 29, 271–284.
- Rawhouser, H., Cummings, M., & Crane, A. (2015). Benefit corporation legislation and the emergence of a social hybrid category. *California Management Review*, 57, 13–35.
- Riggio, R. E., Zhu, W., Reina, C., & Maroosis, J. A. (2010). Virtue-based measurement of ethical leadership: The Leadership Virtues Questionnaire. *Consulting Psychology Journal*, 62(4), 235–250.
- Schmidpeter, R. (2014). The evolution of CSR from compliance to sustainable entrepreneurship. In C. Weidinger, F. Fischler, & R. Schmidpeter (Eds.), *Sustainable entrepreneurship. Business success through sustainability* (pp. 127–134). Berlin/Heidelberg: Springer-Verlag.
- Schoeneborn, D., Morsing, M., & Crane, A. (2019). Formative perspective on the relation between CSR communication and CSR practices: Pathways for walking, talking and t(w)alking. *Business & Society*, 59(1), 5–33.
- Solomon, R. C. (1992). *Ethics and excellence: Cooperation and integrity in business*. New York: Oxford University Press.
- Story, J., & Neves, P. (2015). When corporate social responsibility (CSR) increases performance: Exploring the role of intrinsic and extrinsic CSR attribution. *Business Ethics: A European Review*, 24(2), 111–123.
- Terry, R. (1993). *Authentic leadership*. San Francisco: Jossey-Bass.
- Trilling, L. (1972). *Sincerity and authenticity*. Oxford, UK: Oxford University Press.

- Visser, W. (2011). The nature of CSR leadership. Definitions, characteristics and paradoxes. *CSR International Paper Series*, 4, 1–10.
- Von Ahnen, A. (2015). Sustainability leadership. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility* (p. 444). Berlin/Heidelberg: Springer-Verlag.
- Vyakarnam, S., Bailey, A., Myers, A., & Burnett, D. (1997). Towards an understanding of ethical behaviour in small firms. *Journal of Business Ethics*, 16(15), 1625–1636.
- Walker, B., & Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington, DC: Island Press.
- Wehrmeyer, W., Looser, S., & Del Baldo, M. (Eds.). (2020). *Intrinsic CSR and competition. Doing well amongst European SMEs*. Cham: Palgrave Macmillan.
- Zadek, S. (2006). Responsible competitiveness: Reshaping global markets through responsible business practices. *Corporate Governance*, 6(4), 334–348.
- Zamagni, S. (Ed.). (1995). *The economics of altruism*. Hants: E. Elgar.
- Zsolnai, L. (2015). *Prudence in management and economic wisdom*. Lecture presented at presented at the SPES Congress virtues and vices in economics and business, Centre for Economics and Ethics of the Catholic University of Leuven in cooperation with the European SPES Institute, Leuven, 19–20 June. https://www.eurospes.org/sites/default/files-attachments/laszlo_zsolnai_prudence.pdf. Accessed 13 May 2018.

Authority vs. Bureaucracy

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Synonyms

Governance; Governance models; Leadership; Leadership models; Powers that be; Red tape

Description

Authority (from Lat. *auctor*, father, creator, one who brings about; and that from *augēre*, to create, Harper 2017), and bureaucracy (from Fr. *bureau*, office; and Gr. *kratein*, to rule, have power, strength, Harper 2017) are perhaps the oldest,

historically surely the most frequent, and nowadays the most practiced models of ruling and governance (important concept in *cratology*, i.e., the science of social power). The former simply says, the one who creates is the one who governs, while the latter says – since the governance is complicated because the system is complicated, no individual or a group can govern, rather the corresponding system of offices (*ruling of the offices*, Albrow 1970; Garston 1993; Weber 2015).

It should be noted that authority can be understood as the type of governance, i.e., governing authoritatively, and as a model of governance, i.e., authoritative governance, and so bureaucracy as well, namely, as a type, i.e., governing bureaucratically (say vs. administratively or corruptively), and as a model, i.e., bureaucratic governance (say vs. multi-authoritatively). It also should be noted that there are normative aspect of these models, namely, socio-psychological, cultural, and moral, i.e., ethical (Lynn 2006). There's some truth to it.

Introduction

On the one hand, the model of authority governance has its legitimacy in a common fact that the author of something has legitimacy and often legality to govern it, but authority governance can be understood and experienced as arbitrary egoistic autocracy, i.e., rule of the one or of the small body solely for their own individual benefits which hardly has any legitimacy what so ever from the point of view of the governed organization and its members and is considered immoral.

On the other hand, the model of bureaucracy, distinct from its historical development (Weber 1958), has its legitimacy again in a common fact that some organization's systems are too complicated to be governed by one or even a small group of people, rather they should be governed by the somewhat big group of very specialized professionals who govern all organizational actions, and all crucial standard operating procedures (SOPs), but as it can be the case, this model is such that these offices often turn to act solely and “arrogantly” (Merton 1957) for their own advantage,

something like a big net of closely interdependent small centers of authority, which again hardly has any legitimacy, and is considered immoral.

Concerning morality, it should be noted that no authoritarian model of governance is a dictatorship and that no bureaucratic model is oligarchy of egoistic bureaucrats by itself and so far immoral; rather they can be made immoral if they are misused as any other model. However, it is commonly suggested that these two models are extremely sensible to such misuse, among many reasons also because of the sometimes pessimistically understood human nature as essentially having certain propensity toward immorality.

As opposed to morality, authority (further on abbreviated as A) and bureaucracy (further on abbreviated as B) models of governance differ in many aspects some of which are nature (personal vs. impersonal), quantity (one vs. many), quality (one rule vs. complicated decision process), effectiveness (fast vs. slow), and social interaction, culture, morality (exclusive vs. inclusive). If A and B are understood solely as models of governance, they differ in their obvious formal features which make them more or less suitable for various types of organizations and various projects, and actions, so they are essentially good if used properly in appropriate situations.

For instance, if an organization faces an unexpected crisis due to some external causes none of which it contributed to, if a quick decision and action is of utmost importance, and given that A is much quicker than B, perhaps A is a more fitting model of governing than B. If, as opposed to previous example, an organization faces a long-term decision which will determine its future in say following 5–10 years, given that B is more systematic, rational, well-founded, all-inclusive, etc., then perhaps B is better than A.

On the one hand, there are negative connotations of A and B. Namely, an A without legitimacy is considered morally wrong because it is close to the authoritarian model of governance which is a type of totalitarian model as far as it unjustifiably limits human rights and freedoms. Further on, a B with clear and efficient administrative SOPs has, as it is commonly suggested, a natural tendency to become slow and illegal, i.e., performed

solely for the individual benefit of the administrators, which results with bureaucratization, and as such it is opposite to corruption. Obviously B can be morally wrong as well as A (Krkač 2013).

On the other hand, in themselves A and B have no negative connotations, especially not moral ones. There has been a series of suggestions for replacements of these terms, i.e., A with service, management, etc. and B with administration, jurisdiction, governing, ruling, etc. Historically speaking, what Weber called “bureaucracy” we nowadays call “administration” if it is public and management if it is private (like in corporations), and what was called “authority” we nowadays call “hierarchical governance,” “legitimacy,” and “legality” (for Weber see Waters and Waters 2015, especially concerning an English translation of German word *Herrschaft* as *rule* or as *authority*).

In what follows, A and B will be described, overviewed, and criticized, and their possible formal and practical conflict will be described in terms of various ways in which they are understood (Green 2013), since it is by all means possible that they are almost equally good and bad if used properly, i.e., in view of the goals of a given organization, or improperly, and they will be compared to different models of governance some of which are similar and some of which are quite different in order to show not only the variety of these models and the place of A and B among them but also to show that there are many possibilities in process of governance of an organization in most cases consisting of thousands of people, pieces of machinery, sites, periods, and processes.

On Authoritarian Model of Governance (A) and Its Criticism

History of archaic humans and modern humans show that a large amount of probably various authoritarian and anti-authoritarian societies existed in prehistory. Modern history shows the same thing, and there is no one dominant model of governing in history of mankind. In terms of political systems, it is a fact that democratic

systems existed previous to the French Revolution but only sporadically and locally (proto-democracy in small bands of hunter gatherers, for instance). It seems that an authoritarian model of governance was for sure not the only model but also that it was dominant. Given the fact that it has some obvious advantages over rival systems, such as speed of decision-making process, clarity of decisions, and swift execution, which was surely important in majority of history of the mankind which was for hundred thousands of years living without secured sources of water, food, shelter, without fire, etc., it seems obvious why the authoritarian model of governance was accepted and not challenged, namely, because it was efficient and it kept humans alive.

Having authority or not, being authoritative or not, or to rule in an authoritarian manner or not is a bit different thing. The first simply means that one has legitimacy and legality to independently decide on some matter and/or to perform an action concerning some issue. For instance, parents have authority over their children in terms of their biological, psychological, educational, and similar needs; or a teacher has an authority over pupils concerning their learning activities, etc. Having an authority doesn't mean executing it automatically. Omitting such execution for various reasons sometimes is also an example of authority, since only the one who has authority can omit its use. Sometimes an active non-use of the authority one undoubtedly performs is in fact the use of it, i.e., in the any case of toleration, since to tolerate means to have an authority over something or someone, and in the same time not using this authority (given that "to tolerate" means that A disagrees with what B does, A can prevent B in doing so, and A doesn't prevent B in doing so, see Walzer 1997). Lack of authority simply means lack of author or creator legitimacy or legality to decide or do something. Authority doesn't come in absolute terms, rather it has degrees.

Second, being authoritative means to act in accordance with an actual authority or as if one has it while one actually doesn't have it. The first is frequently used to mean to act over-authoritatively, especially in cases in which it is

unnecessary to do so, or to misuse an authority in terms of unnecessary intolerance or coercion. It concerns more the style of governing of an individual or sometimes the whole organization than the actual formal principles and SOPs of any type of governance.

Third, authoritarian ruling or governance is a formal set of principles and practices of governing of groups or organizations of various kinds, say family, group of friends, school, company, ministry, government, and even international organizations and non-governmental organizations (NGOs). It is of importance to understand that authoritarian governing isn't in itself a morally wrong thing to do. Namely, authoritarian governing doesn't mean authoritarian regime, rather simply the fact that in any organization, persons and offices in power perform their SOPs in accordance with the authority they have and without overstepping it with needed results which means that if they don't do it, it would be wrong. This shouldn't be understood as a misuse of authority for which there are further conditions.

Principles and Types of Authority Governance

Among principles of authority/authoritarian governance are the following: superiority of position of offices or individuals in power, hierarchy of organization, and top-down model of decision-making and execution. Obvious advantages are speed of decision-making process and implementation of decisions, while obvious disadvantages are firm structure which adopts slowly and lack of bottom-up communication which both can lead to the system corruption and failure.

Among types of authoritarian governance, from Weber onward, it is commonly differed between legal, traditional, and charismatic (Weber 1958). These types are strict, but they can mix between each other, so there can be various shared types (e.g., they can mix in time; a charismatic type can be followed by the traditional one). Types of legitimacy are differed in the same way, especially in Weber, as types of authority are.

The legality of authority rests on administrators who have legality and legitimacy by being appointed or elected as officials. In ideal model,

and Weber calls these types “ideal,” superiors are limited in their use of authority, but in actual system they are rarely so especially in a public administration (as, for instance, various corruption indexes show).

Traditional authority rests on the principle of inheritance. Inheritance doesn’t have to be biological, e.g., from father to son or mother to daughter, but it can embrace various relations, familiar, ideological, business/financial, between long-term friends, and similar (e.g., ideological and/or financial relations were quite important in the twentieth-century totalitarian regimes such as communism and socialism).

Charismatic authority is based on the personal charisma (gr. *χάρισμα*, *gift of grace*) of the leader or more rarely of the charisma of the whole group and all of its members (Weber et al. 2002). Charisma includes some special and unique qualities of an individual. This is the reason why still in many democracies, ex-generals, especially after wars, become ministers of defense, MDs become ministers of health, or lawyers or judges the ministers of justice.

In all pure types of authority, charisma is important, and it spreads over different social, economic, and political systems; namely, it seems to be trans-social, trans-economic, and trans-political. Nowadays in more or less free market economies and liberal political practices, we still have a lot of charismatic leaders and models of governance. They are manifested most vividly on various lists of top managers, the most influential politicians, intellectuals, celebrities, etc.

There is also a lot of misuse of charisma as a type of authority, e.g., it is often used if an appeal of an individual of some authority cannot be described clearly, while when it is explicated, charisma loses all of its explanatory powers and charm. Charisma is also a frequent buzzword and the same objection stands here as well. All meanings of charisma are metaphorical, while the only literal meaning is if it is “established” as a *gift by the mercy of Gods or God (per misericordiam Dei)*. Actually it is said that, if one says that a person is a charismatic leader, one has a mixture of appealing character, looks, charm, rhetoric,

motivational powers, and perhaps social status. Nowadays, a charisma can be constructed ex nihilo by various means, especially media, but destroyed as well. Here the so-called authority bias applies. It says that “there is a tendency to attribute greater accuracy to the opinion of an authority figure and be more influenced by that opinion” (Milgram 1963).

It is not correct that types of A and legitimacy do not have mixed types, because they do. It is also not correct that they follow each other irreversibly throughout history and that they present some kind of development. There is no proof that in a variety of circumstances and historical situations of societies, changes any of these types are the most efficient one, no matter what contexts may or may not occur internally or externally to a group or a society.

On Bureaucratic Model of Governance (B) and Its Criticism

From Weber onward, bureaucracy (B) refers to a system of government officials as elected or appointed on national or local level without whose activity the major public goals wouldn’t be achieved or to a system of administrative policy-making group, and such system is often large, dispersed, and extremely complicated (Weber 2015).

From its development and scientific research of it, from the nineteenth century onward, B is followed by its dark shadow consisting of a series of negative connotations. Some of these are an uncontrolled growth of a social system, the threat of self-purpose or becoming its own purpose without any purpose outside of it, slowing down public processes to the level of social collapse, emerge of corruption, bureaucratization, etc.

However, there is nothing in formal principles, SOPs, and normal functioning of B that suggests it will necessarily manifest these negative effects. Quite the contrary, B was invented with the purpose of eliminating these negativities that were manifested by often actually previous A systems of governance, and yet eventually it manifested them as well.

So, the major task of contemporary governance and managerial theories, policies, and practices is the reduction of B systems in quantity and developing it into more efficient and corruption-proof system of governance. In the same time, quality should be raised in terms of precision, time, effectiveness, etc.

Given the fact that contemporary governance systems, no matter if in global trans-national and trans-continental corporations or collaborations or in international public organization of any purpose whatsoever, are such that they cannot function without corresponding system of administration, the possibility of reducing B to zero is at the moment no option in reality and in day-to-day practice of such institutions. Why is this so, it remains unexplained, but common and yet not fully verified answer says that the bigger the organization is, the greater the tendency to be slower and ineffective (especially in view of Pareto, Kaldor-Hicks, allocative efficiency, and 80/20 principle).

One among obvious reasons is that contemporary organizations are not just too big to have big B, but also too complicated, so their Bs require a series of professions collaborating with the same goal. Some experiments and examples of the so-called holacracy (derived from “holarchy”) (see Koestler 1967) show that only partial reduction of B is possible in terms of hierarchical structure and self-organization. Some anarchical models show the same result especially if they tend to reduce all A and B. The major practical obstacle is the size of contemporary B system and their magnitude in terms of consequences of their actions. Alternative governing models work as far as they are applied to quite small organizations (families, small businesses, small local communities, and similar), especially social anarchism.

Principles of Any Types of Bureaucratic Governance

Weber saw that “an administration means fundamentally domination through knowledge” (Swedberg and Agevall 2005), and yet he saw its positive (rational) and negative (“iron cage”) connotations. Ideal B model by Weber is characterized by the following features: “hierarchical

organization, formal lines of authority, a fixed area of activity, rigid division of labor, regular and continuous execution of assigned tasks, all decisions and powers specified and restricted by regulations, officials with expert training in their fields, career advancement dependent on technical qualifications, and qualifications evaluated by organizational rules, not individuals” (Weber 2015).

Hierarchical organization is essentially bad in all cases in which a decision-making process should include equally important and regarded various stakeholders of an organization or an issue. If some of them are external, they by definition don’t belong to the hierarchy of B and are either excluded or included but as minor or undervalued stakeholders. If some of them are internal but low in hierarchy, their voice is practically rarely heard and taken as relevant.

Formality of B is an excellent feature in principle, yet if a decision has to be reached by a small group of superiors at the top of hierarchy, their informal relations forming at least in part their formal trust and professionalism can be important. Generally speaking, formality is much better than informality because it tends to reduce corruption.

Fixed area of activity is very important, but it is like Janus, a deity with two faces. It can be used properly in terms of subsidiary principle, but it can be misused in order not to perform regular activities and to meddle into something which doesn’t belong to B, especially if a B system tends to spread all over the organization and make it a purpose for its own existence and prosperity (in majority of cases of its own individual members).

Rigid division of labor also has two sides, namely, any division of labor is good because it is more efficient and effective, yet its over-rigidity can cause troubles particularly in rationalizations of members of B who didn’t performed particular part of the task and are removing the responsibility to some other often nearby members or groups of B.

Regularity and continuity of actions is by all means excellent feature of B as well as formality, since it is of utmost importance that some processes never stop no matter what, and B is capable

of sustaining these processes by these features (e.g., A doesn't have these features).

Regulative nature of activities is also two-sided feature because there is obvious risk of over-regulation of B procedures which are in practice frequently a sign of "bureaucratization" which means slowing down of standard speed of proceeding, lowering quantity and quality of results without obvious reason. Therefore, it is always good to draw a line below which there are no regulations in B, and above which as well, because processes belong to different administrative bodies (say elected ministers, prime minister, chief executive officers, and similar). Issues specific for B as a public administration are also important in this view because public administration because of its public legitimacy has a tendency to represent itself and to act as omnipotent ruler (Lynn 2006).

Officials with professional training create also important feature of B, since professionalism cannot be replaced, especially not with the so-called charismatic leaders as it is nowadays so emphasized by a series of managerial models and practices. However, professional bodies licensing future professionals are under the same risk as the whole B system, i.e., to become its own purpose and to serve its own superior members, and as such are open to corruption and especially nepotism and conflict of interest (professionals in some lines of work, such as outplacement companies in some European Union member countries, divided their professional organizations in several territorially based sections which mutually compete and therefore keep the healthy market and avoid these possible obstacles) (Noeleen 1998).

Authoritarian vs. Bureaucratic Models of Governance

Although A and B as systems of governance were historically matched to pre-democratic and democratic political regimes, and pre-free market and free market economies, this is just a historical coincidence. What is important in terms of their practical modeling or practicing is that A relies on a sole, individual, personal, and highest power of

one human being, while B relies on countless, plural, impersonal mass of officials who function as a supreme administrative body.

It is obvious that both A and B have some advantages and shortcomings, but comparatively B seems to be more suited for present-day purposes of post-modern living standards (e.g., inclusiveness on all levels, participation, equality, etc.) in contemporary societies and organizations (B seems to be a nice example of a model of governance which has inherent feature of refusing to be re-modeled).

Further on, they both prove to be incapable to solve their own problems that appear from their own improper application, use, and maintenance. A can easily end in authoritarian non-democratic and non-free market practices and B in self-absorbing system of bureaucratization, nepotism, and corruption.

There seem to be no internal tools in A and B to deal with these problems and misuses, so it seems that external solutions should be applied. However, which are they, nobody knows for sure, especially not the sociologists from the later twentieth century such as Merton who seems to see all the flaws in Weber's descriptions but offers no practical solutions (Merton 1957). Because of mentioned issues, the tension between A and B will continue to exist in the twenty-first century, but due to new circumstances, it is rational to believe in completely new forms in economy, law, and politics.

Summary

Authority governance isn't authoritarian governance, and bureaucracy governance isn't bureaucratization of governance, i.e., their negative effects; rather, they are value-neutral formal models of governance which proved themselves good in particular circumstances, but neither of them is universally good and useful.

This creates a particular tension between them and possible paradox on some levels of understanding and practice. Perhaps the twenty-first-century world as being more and more globalized in quantity and quality will present this tension in

a new light, especially on economic, legal, and international political levels, since as the world becomes more unified, it also becomes or at least needs to become more organized and efficient in order not to dismantle into small unrelated segments, and A and B are models of such organizations which are still the most frequent.

Yet, the old days, such as the twentieth century, in which these systems and models of governance were unchallenged are gone. New and alternative systems and models, while being invented in the twentieth century, are being applied in the twenty-first century, and some of them work at least at the level of small-scale organizations or groups within bigger organizations. This is certainly an external challenge to A and B both, and internal challenges are as old as human species, i.e., corruption, bureaucratization, etc., but they will, due to the fact that systems are becoming bigger than ever, create possible bigger problems that need to be addressed in the nearby future.

Cross-References

- [Corporate Governance](#)
- [Global Governance](#)

References

- Albrow, M. (1970). *Bureaucracy*. London: Macmillan.
- Garston, N. (Ed.). (1993). *Bureaucracy: Three paradigms*. Boston: Kluwer.
- Green, M. (2013). Authority versus bureaucracy. In S. O. Idowu (Ed-in-chief), *Encyclopedia of corporate social responsibility* (Vol. 1, A-C, pp. 133–139). Berlin/Heidelberg: Springer.
- Harper, D. (2017). *Online Etymology Dictionary*. <http://www.etymonline.com/index.php>, Accessed 19 Aug 2017.
- Koestler, A. (1967). *The ghost in the machine*. London: Penguin Group.
- Krkač, K. (2013). Bribery and corruption. In S. O. Idowu (Ed-in-chief), *Encyclopedia of corporate social responsibility* (Vol. 1, A-C, pp. 215–222). Berlin/Heidelberg: Springer.
- Lynn, L. E., Jr. (2006). *Public management: Old and new*. London: Routledge.
- Merton, R. K. (1957). *Social theory and social structure*. Glencoe: Free Press.
- Milgram, S. (1963). Behavioral study of obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 23–41.
- Noeleen, D. (1998). The role of outplacement in redundancy management. *Personnel Review*, 27(4), 343–353.
- Swedberg, R., & Agevall, O. (2005). *The max Weber dictionary: Key words and central concepts*. Cambridge, MA: Stanford University Press.
- Walzer, M. (1997). *On toleration*. New Haven/London: Yale University Press.
- Waters, T., & Waters, D. (2015). *Weber's rationalism and modern society*. London: Palgrave.
- Weber, M. (1958). The three types of legitimate rule. *Berkeley Publications in Society and Institutions*, 4(1), 1–11.
- Weber, M. (2015). *Bureaucracy in Weber's rationalism and modern society*. London: Palgrave Macmillan.
- Weber, M., Baehr, P. R., & Wells, G. C. (2002). *The Protestant ethic and the spirit of capitalism and other writings*. London: Penguin.

Awareness Management

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Synonyms

[Management of awareness](#); [Organization's awareness management](#)

Definition

Awareness management is the process of leading an organization to gain and communicate a better understanding of complex issues with internal and external stakeholders that will then guide mutually beneficial transformations within the business, society, and the planet.

Introduction

Globalization has transferred power from political actors to those holding economic power. As a result, people's lives are affected more by the actions of large companies and business

innovations than by governments' decisions (Dicken 2003; Korten 1998). Rapid changes in the shifting of the center of power have caused new types of complex environmental, social, and economic problems to which it has been challenging to react efficiently locally and globally. Escalating environmental crises and human rights violations have led to perceiving the business sector primarily in a negative light: The private sector has been mainly seen as only producing social and ecological unsustainability, which should be curbed as soon as possible with stricter regulations and laws (Brinkman and Brinkman 2002). This interpretation has led, also within the business world, to see the goals of social and ecological sustainability as a burden and opposition to achieving the organization's financial goals (Alexander 2007).

According to Schaltegger and Wagner (2011), organizations' attitudes regarding sustainable development goals can be described through three categories. The first group includes organizations that oppose changes and view sustainable development goals as mandatory obligations. Such companies only strive to comply with the legislation and mainly aim for economic sustainability by reducing the production costs of their company. The second group includes organizations with an adaptive strategy that considers environmental responsibility a complementary part of their business. In these companies, operations are partly sustainable, but the importance of the sustainability of the business as a whole is not fully understood. Finally, the third category includes organizations with a proactive strategy, which means they have integrated sustainability into their overall business strategy and every individual operation. Such companies strive toward environmental and social sustainability in all their activities and understand that the sustainability perspective brings a competitive advantage for them in the market (Schaltegger and Wagner 2011).

Proactively responding to wicked sustainability problems requires skillful awareness management in organizations. Management must target both internal and external awareness of the organization, i.e., managers and employees and

customers and suppliers (Brem and Viardot 2015). Awareness management is not one-way administration. In contrast, increasing awareness moves from management to employees and vice versa, from the company to customers and from customers and other external stakeholders to the organization's internal stakeholders. The management of awareness requires systems thinking (Hossain et al. 2020), thus, a holistic understanding of how complex social and environmental issues are intertwined and how different interests and measures are connected. Awareness management based on systems thinking is also linked to recognizing and creating shared value (Porter and Kramer 2019) and even common good for all lives on the planet (Dyllick and Muff 2016). Increasing social and environmental awareness produces operations that mutually improve the company's success and the well-being of society and the environment.

Sustainability Standards

Sustainability management in organizations refers to the planning and implementing business processes so that environmental, social, and economic sustainability aspects are considered and continuously developed at every level of its operations (Gladwin et al. 1995). An organization often utilizes an extensive (e.g., ISO Management System Standards) or a more simplified system of standards to improve its operations. The concept of awareness management is typically linked to using a management standard because it helps to find ways to guide the sustainability awareness of the organization, particularly among its employees. A well-functioning standardized system does not only aim toward the awareness of harmful environmental and social effects but can also help to identify and reduce an organization's production costs. Furthermore, the standards help the organization to become more aware of how to put the sustainable strategy into practice. So, sustainability standards are organizations' practical management tools for sustainability awareness. The most well-known environmental management tools are based on the ISO 14001 standard,

ISO 26000 is a guide on societal responsibility, and ISO 9001 shows the requirements for quality management (see ISO 2022).

Applying a standard, the organization systematically considers environmental and social issues in all its activities. Standards can strengthen not only managers but employees' environmental awareness too and, through this, also help the organization's internal management, its continuous planning and monitoring of its operations in various sectors (Bettley and Burnley 2008). Moreover, a standard certification issued by accredited certification bodies can confirm the company's environmental and social responsibility to customers, partners, financiers, authorities, and media. So, the standards also help manage the awareness of the organization's external stakeholders by supporting its sustainable communication, branding, and marketing.

However, it has been identified that the standards are so detailed and complex that they are mainly suitable for only large companies. Smaller businesses are heterogeneous, and their processes cannot be easily scaled like large companies. Also, managing all the information necessary to evaluate the organization's sustainable actions is perceived as too complex. The correct selection, interpretation, and use of standards and indicators can be a challenge if companies lack proper resources and the personnel's awareness of diverse sustainability aspects is weak (Hillary 2004; Stubblefield Loucks et al. 2010).

Understanding that standards are helpful instruments but not end goals is also critical. Therefore, it is necessary to develop the organization's self-awareness skills and use stakeholder collaborations when identifying the true sustainability goals of a business. Then the choice of the best standards and indicators as practical development tools for this particular business is based on more broadly and systemically considered knowledge.

Organization's Self-Awareness

An organization's development efforts often remain isolated if sustainability issues are not

included in its strategy and decision-making at every level of its operations (Dyllick and Muff 2016). So, more than the administration of standards is needed to lead to the overall development of an organization; sustainability awareness and actions depend primarily on managers' and employees' genuine desire to rethink their values and develop operations. Sustainability transformation requires a critical self-reflection of individual leaders and laborers but also self-awareness of the whole organization and its role in society (Johnson 2015).

The starting point for an organization's development must be the understanding that business innovations change the world at least as much as state regulations. So, innovations do not happen by chance or by just obeying rules but require visionary leaders who decide and dare to act differently and place sustainability aspects at the center of the company's strategy and all of its operations (Esty and Winston 2009). Instead of just harm reduction, improving the life quality of society and the planet must be emphasized in sustainable business development (Dyllick and Muff 2016). Sustainable entrepreneurship means seeing the organization as an active and responsible agent in sustainable transformation (Dyllick and Muff 2016; Schaltegger and Wagner 2011). So, sustainability demands are not perceived as unfavorable but as positive catalysts for the business. Sustainable development means more than merely avoiding problems but solving them proactively with sustainable innovations (Schaltegger and Wagner 2011).

The challenge is making sustainability issues part of the company's strategy so that environmental and social responsibility are considered integral to all the company's activities. Furthermore, there is also a need for more clarity about how this happens concretely (Hillary 2004). Thus, awareness management is not just passing on knowledge in managers' and employees' training but integrating awareness and actions into the organization's everyday operations. Awareness is not raised just by pouring down visions from top to bottom but by generating conversations where everyone's interests, skills, and knowledge about sustainability are recognized, shared, and further

developed in cocreation between different management levels and between the leaders and employees.

Sustainable transformation does not happen without “creative destruction” (Schumpeter 1934; see Schaltegger and Wagner 2011). Therefore, the organization’s unsustainable practices must be first recognized and dismantled, and the underlying assumption of its production methods, markets, and consumer behavior must be radically rethought (see also Martusewicz et al. 2015). Then, creating novel markets for environmental and societal transformation that would also be financially sustainable requires an ability to imagine the organization’s more responsible relationship with the local and global community and present and future humans and the Earth (see also Berry 2012). Rethinking and undoing conservative values, structures, and practices do not only have to happen in start-ups but also through intrapreneurs who work in existing companies and are given space and time inside the organizations to develop innovative ideas that will enhance their future (Weber et al. 2014). However, an organization’s awareness does not improve merely in a vacuum but requires active communication also with its external stakeholders (Herzig and Schaltegger 2006).

Stakeholder Collaboration

A stakeholder is a party with whom the organization deals, which is affected by its operations, and which, in return, affects the company’s operations (Freeman 1984). Without stakeholders, the organization cannot function. There are various stakeholders inside (managers, owners, employees) and outside (customers, competitors, financiers, suppliers, authorities) the company. Stakeholders may have different goals for the company and its operations (Carney et al. 2011). For example, owners may want more profit, employees better salaries, and customers more environmental-friendly products. The various interests may result in stakeholder conflicts, which should be resolved with skillful awareness management. Awareness management must start from the understanding

that stakeholders always operate and communicate in reciprocal relationships that aim for sustainable value creation for all (Hörisch et al. 2014).

The concept of stakeholder value refers to creating optimum returns for all stakeholders in an organization, which is different from shareholder value, which usually focuses on maximizing the profits of the corporation’s equity owners. Creating Shared Value (CSV) is another concept that brings business goals and the community’s well-being together to benefit society. Therefore, successful awareness management begins with recognizing shared value creation (Porter and Kramer 2019). In its more radical form, it even aims for the common good of society and the planet (Dyllick and Muff 2016).

The organization’s ability to become aware of its place and purpose in society is a key to visioning and controlling its sustainability aims and operations instead of just being a passive object to external motivations, market demands, and authorities’ regulations. The organization’s awareness management is not a mechanical assessment of its strengths and weaknesses or just about green marketing and communication but an active and continuous interaction between the various stakeholders. In stakeholder collaboration, the organization shares ideas and searches for solutions with its internal and external stakeholders. They may have similar or different perspectives but always go beyond the different party’s vision of what is imaginable and achievable in terms of environmental, social, and financial sustainability (Hörisch et al. 2014).

When aiming for strong sustainability, the organization must thoroughly consider who its stakeholders are. Dyllick and Muff (2016) have presented that the sustainability transition of companies takes place through three typologies. The first transition toward a more sustainable business occurs when the organization recognizes not only financial but environmental and social sustainability aspects too as essential parts of its strategy. Therefore, the organization must expand its awareness by asking *what concerns* affect the company’s aims and operations regarding sustainable business development. The second transition

requires that the company understands that value creation must shift from shareholders to the Triple Bottom Line, so not only profit but also people and the planet. In other words, the organization must rethink for whom and *for what* they develop their strategy and create value. The third transition is a prerequisite for strong sustainability and requires the organization to change its perspective from inside to outside. When an organization asks itself *how* to implement a sustainable strategy that genuinely benefits more than just the organization itself, it must shift its primary focus to society and the Earth. In short, the organization must serve the planet's and people's needs, not the opposite.

This radical shift in an organization's awareness management toward strong sustainability, presented by Dyllick and Muff (2016), refers to an expansion of the stakeholder view to cover not only humanity now and in the future but also the more-than-human world (Abram 1996). According to this view, a stakeholder can be another human, or human community, another animal or an ecosystem, or even an inanimate nature, which is affected by the organization's operations, and which, in return, affects the company's operations directly or indirectly, immediately or in delay. This approach to awareness management extends beyond the anthropocentric worldview (see also Abram 1996; Keto and Foster 2021; Martusewicz et al. 2015).

Summary

In times of wicked social and environmental problems, the challenge of awareness management is to recognize the mutual relationship between social, economic, and ecological sustainability in the organization's values, goals, and operations. These aspects do not exist independently; success or failure in one area affects the state of sustainability in another area. Adopting systems thinking, the organization makes sense of the interdependent connections and the world's complexities by looking at them in terms of relationships rather than splitting them into parts and under the company's autonomous operations. Addressing sustainability issues requires

awareness management expertise in organizations. Management must target awareness of diverse, internal and external, local and global, and human and more-than-human, stakeholders in a way that is based on recognizing and creating the common good for all. Through transparent operations and open conversations, the organization can develop its self-awareness on the level of individuals and the whole organization and find its active role in creating a more sustainable society. An organization's success stands on understanding the cobenefits between the business and the well-being of human communities, societies, and the whole living Earth.

Cross-References

- Corporate Sustainable Innovation
- Creating Shared Value
- Crisis Management
- Intrapreneurship
- ISO 14000 Standards Series
- ISO 14001 Standard
- ISO 9000
- Management
- Shareholder Theory/Shareholder Value
- Social Responsibility According to ISO 26000
- Stakeholder
- Stakeholder Theory
- Stakeholder Thinking
- Stakeholders
- Strong Sustainability
- Sustainability Standards and Standardization
- Sustainable Entrepreneurship
- Triple Bottom Line

References

- Abram, D. (1996). *The spell of the sensuous: Perception and language in a more-than-human world*. New York: Pantheon.
- Alexander, J. (2007). Environmental sustainability versus profit maximization: Overcoming systemic constraints on implementing normatively preferable alternatives. *Journal of Business Ethics*, 76, 155–162. <https://doi.org/10.1007/s10551-006-9264-5>.
- Berry, W. (2012). *It all turns on affection: The Jefferson lecture & other essays*. Berkeley: Counterpoint Press.

- Bettley, A., & Burnley, S. (2008). Towards sustainable operations management integrating sustainability management into operations management strategies and practices. In K. B. Misra (Ed.), *Handbook of performance engineering* (pp. 875–904). London: Springer. https://doi.org/10.1007/978-1-84800-131-2_53.
- Brem, A., & Viardot, É. (2015). *Adoption of innovation: Balancing internal and external stakeholders in the marketing of innovation*. Cham: Springer.
- Brinkman, R. L., & Brinkman, J. E. (2002). Corporate power and the globalization process. *International Journal of Social Economics*, 29(9), 730–752. <https://doi.org/10.1108/03068290210442739>.
- Carney, M., Gedajlovic, E., & Sur, S. (2011). Corporate governance and stakeholder conflict. *Journal of Management and Governance*, 15(3), 483–507.
- Dicken, P. (2003). *Global shift: Reshaping the global economic map in the 21st century*. London: Sage.
- Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. *Organization & Environment*, 29(2), 156–174.
- Esty, D. C., & Winston, A. (2009). *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. Hoboken: Wiley.
- Freeman, E. (1984). *Stakeholder Management*. Mansfield: Pitman.
- Gladwin, T. N., Kennelly, J. J., & Krause, T.-S. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. *Academy of Management Review*, 20(4), 874–907. <https://doi.org/10.5465/AMR.1995.9512280024>.
- Herzig, C., & Schaltegger, S. (2006). Corporate sustainability reporting. An overview. In S. Schaltegger, M. Bennett, & R. Burritt (Eds.), *Sustainability accounting and reporting* (Vol. 21). Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-4974-3_13.
- Hillary, R. (2004). Environmental management systems and the smaller enterprise. *Journal of Cleaner Production*, 12(6), 561–569.
- Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework. *Organization & Environment*, 27(4), 328–346. <https://doi.org/10.1177/1086026614535786>.
- Hossain, N. U. I., Dayarathna, V. L., Nagahi, M., & Jaradat, R. (2020). Systems thinking: A review and bibliometric analysis. *System*, 8(3), 23.
- ISO. (2022). ISO – International Organization for Standardization. Standards. <https://www.iso.org/standards.html>
- Johnson, M. P. (2015). Sustainability management and small and medium-sized enterprises: Managers' awareness and implementation of innovative tools. *Corporate Social Responsibility and Environmental Management*, 22(5), 271–285. <https://doi.org/10.1002/csr.1343>.
- Keto, S., & Foster, R. (2021). Ecosocialization—An ecological turn in the process of socialization. *International Studies in Sociology of Education*, 30(1–2), 34–52. <https://doi.org/10.1080/09620214.2020.1854826>.
- Korten, D. C. (1998). Do corporations rule the world? And does it matter? *Organization & Environment*, 11(4), 389–398. <https://doi.org/10.1177/0921810698114001>.
- Martusewicz, R. A., Edmundson, J., & Lupinacci, J. (2015). *Ecojustice education: Toward diverse, democratic, and sustainable communities* (2nd ed.). New York: Routledge.
- Porter, M. E., & Kramer, M. R. (2019). Creating shared value. In G. Lenssen & N. Smith (Eds.), *Managing sustainable business* (pp. 323–346). Dordrecht: Springer. https://doi.org/10.1007/978-94-024-1144-7_16.
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Business Strategy and the Environment*, 20(4), 222–237. <https://doi.org/10.1002/bse.682>.
- Schumpeter, J. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Stubblefield Loucks, E., Martens, M. L., & Cho, C. H. (2010). Engaging small- and medium-sized businesses in sustainability. *Sustainability Accounting, Management and Policy Journal*, 1(2), 178–200. <https://doi.org/10.1108/20408021011089239>.
- Weber, S., Trost, S., Wiethe-Körprich, M., Weiß, C., & Achtenhagen, F. (2014). Intrapreneur: An entrepreneur within a company: An approach on modeling and measuring intrapreneurship competence. In S. Weber, F. Oser, F. Achtenhagen, M. Fretschner, & S. Trost (Eds.), *Becoming an entrepreneur* (pp. 279–304). Rotterdam: Sense.

B

Balanced Scorecard

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Synonyms

[Strategic scorecard](#)

Definition

A **balanced scorecard** (BSC) is defined as a management system, a framework designed for performance measurement at a strategic level for an entire organization. This solution was proposed by a team of 12 business representatives led by Robert S. Kaplan and David N. Norton in 1992 (Kaplan and Norton 1992). In their seminal paper, Kaplan and Norton initially referred the BSC as a set of measures divided into four interrelated categories: customer, finance, internal business, and (organizational) innovation and learning. Each of these perspectives addresses questions for management to answer. Their aim was to help to develop objectives, measures (KPIs), targets, and initiatives from the perspective of the identified categories. The customer perspective as its name implies takes the clients' viewpoint. The financial perspective includes a shareholders' perception of the organization's performance. The internal

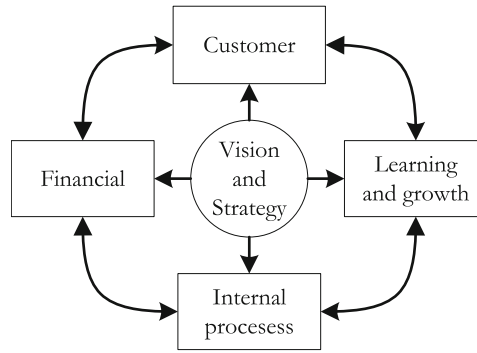
perspective focuses on processes which should provide value for customers. The last perspective, the innovation and learning, aims at improvement and development. The linkage between all four perspectives culminates in a company's vision.

The framework described above was subsequently elaborated by R. S. Kaplan and D. N. Norton (1993, 1996a) by stressing a strategic dimension. The authors describe how applying a top-down approach allows strategic objectives to be deployed into lower management levels. Based on a cascading approach, the strategy (► [“Strategy”](#)) is not merely operationalized but more importantly aligned throughout the whole company. Implementing the BSC accordingly associates with translating the vision, communicating, and linking the company's objectives with individual performance, business planning comprising a financial budget supporting strategic planning, as well as feedback and learning to check if the strategy works (Kaplan and Norton 1996b).

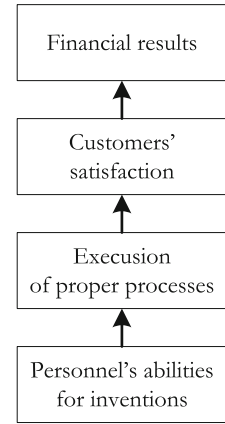
Generations of BSC

A conceptual and methodological development led to the creation of the three main interpretations or generations of BSC (Lawrie and Cobbold 2004; Morisawa 2002). The first phase can be located between 1993 and 1996. During this period performance measurement was stressed as the main benefit of using the tool. The second

Balanced Scorecard,
Fig. 1 Logic of balanced
 scorecard and strategy map



BSC model and relations among
 perspectives



Strategy map

generation appeared in 1996–2004. Its main features included a strategy map. It was a new concept allowing the visualization of cause and effect relations among the elements included in the four categories. Overall, this helped to demonstrate how intangible assets serve tangible results (Kaplan and Norton 2004) (see Fig. 1).

Strategy maps can be used as a communication tool allowing for a better understanding of strategic management within a company. The third generation of BSC emerged around 2001 when the main use of this method shifted towards change management (Kaplan and Norton 2001). Succeeding generations continue to cover the earlier-mentioned strategy map and communication.

Key Issues

In spite of being used for more than 20 years, the use of the BSC is associated with some key issues which require consideration. The main ones include the need to adapt the tool to (1) suit the profile of the target organization and (2) address national culture.

The initial version of BSCs was designed for big corporations. Recognition of its benefits triggered attempts to adjust it to suit other types of organizations, such as NGOs (► “NGOs”) or public administration (Niven 2008). This resulted in the requirement to change the perspectives’

names, as well as adapting to a different logic in cases where money does not come from the company’s customers. For instance, the financial perspective may indeed be removed where shareholders do not appear as the main receivers of financial performance, as in the case of nonprofit organizations. To address this, a new categorization, group of donors (such as institutions giving grants, tax-payers, etc.), was introduced, while beneficiaries (e.g., citizens) replaced the customer perspective.

A further difference in the usage of BSCs originates from the requirement for national modifications. The literature distinguishes four distinct types. The first type represents the use of the original four dimensions related to customer, finance, processes, and learning. The second type characterizes a change in dimension type. An example of this adjustment is Skandia’s Navigator (Ax and Bjørnenak 2005). This insurance company introduced the fifth dimension, replacing vision and mission in connecting the other perspectives, which is a human focus. This change reoriented performance measurement towards intellectual capital (Edvinsson 1997). The third type comes from Germany. The initial set of four perspectives is treated as a point of departure towards an increased number of viewpoints, even as many as ten (Friedag and Schmidt 2001). This modification represents the main area of functionality, such as total quality management

or controlling. The last modification of BSCs, very often identifying as a synonym for BSC, is the French method called *tableau de bord* (dashboard). A set of measures offering a quick evaluation of an operations' performance was compared to a dashboard used by pilots since the 1930s in France (Bourguignon et al. 2004). The main difference between BSC and *tableau de bord* derives from their respective purposes. For the French tool, the choice of measures is subjective; they are not so strictly ordered according to earlier defined perspectives, and they are designed to help in organizational learning. On the other hand, BSC measures come from perspectives' types and are pre-defined, more oriented towards accounting. This could be interpreted to reflect the diversity of organizational cultures and leadership styles between France and the United States (Trompenaars and Hampden-Turner 2011).

In general, however, the creation of altered national patterns of the BSC is explained by differences in historical backgrounds, management education, national culture type according to Hofstede's typology, and local philosophical traditions (Bourguignon et al. 2004).

Future Directions

The development of the BSC is still ongoing. According to a review study performed by Z. Hoque (2014), some issues still need to be resolved related to the content of the previous section. One of these directions is to adjust the framework to explain the differences in organizations derived from different countries. For instance, the reason for implementations and the role consultants, among other aspects', could help to understand the BSC modifications which have appeared within certain national contexts. Further development is required regarding the use of the BSC for individual purposes, i.e., focused at personal and not the organizational level. The use of measures for personal development refers to psychology studies on relations between measurement (accounting) and human behavior. A third direction involves the need to analyze the impact

of other institutional research in the use of the BSC, such as dependence on sociocultural norms in a given network. Finally, applying the BSC to the nonprofit sector results in new forms, such as the public value scorecard (Meynhardt et al. 2014; Moore 2003) (► "Public Value"), which has been identified as one promising approach towards measuring public value (Ćwiklicki 2016). The performance measurement practices and changes affecting the public sector especially in emerging economies are pointed out as a promising direction for future research (Hoque 2014). Moreover, some problematic subjects related to BSC's nature are still not fully resolved. This refers to misunderstandings of causality with covariation expressed in strategy maps, factors, and conditions needed for successful implementation and dominated, imposed managerial point of view in BSC's narrative (Nørreklit et al. 2018).

A key test for the BSC will be whether it can serve to solve wicked problems and thereby address the UN Sustainable Development Goals 2030. The BSC methodology could develop into a useful approach to navigate that journey towards creating future sustainable value.

Cross-References

- [Balanced Scorecard and Sustainability](#)
- [Corporate Strategy](#)
- [Strategy](#)

References

- Ax, C., & Bjørnenak, T. (2005). Bundling and diffusion of management accounting innovations – The case of the balanced scorecard in Sweden. *Management Accounting Research*, 16(1), 1–20. <https://doi.org/10.1016/j.mar.2004.12.002>.
- Bourguignon, A., Malleret, V., & Nørreklit, H. (2004). The American balanced scorecard versus the French *tableau de bord*: The ideological dimension. *Management Accounting Research*, 15(2), 107–134. <https://doi.org/10.1016/j.mar.2003.12.006>.
- Ćwiklicki, M. (2016). Comparison of public value measurement frameworks. *Zarządzanie Publiczne*, 1(35), 20–31. <https://doi.org/10.15678/ZP.2016.35.1.02>.

- Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning*, 30(3), 366–373. [https://doi.org/10.1016/S0024-6301\(97\)90248-X](https://doi.org/10.1016/S0024-6301(97)90248-X).
- Friedag, H. R., & Schmidt, W. (2001). *Balanced scorecard: Mehr als ein Kennzahlensystem* (3rd ed.). Freiburg im Breisgau: Haufe.
- Hoque, Z. (2014). 20 Years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research. *The British Accounting Review*, 46(1), 33–59. <https://doi.org/10.1016/j.bar.2013.10.003>.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard – Measures that drive performance. *Harvard Business Review*. January–February, 71–79.
- Kaplan, R. S., & Norton, D. P. (1993). Putting the balanced scorecard to work. *Harvard Business Review*, 71(5) (September–October), 134–147.
- Kaplan, R. S., & Norton, D. P. (1996a). *The balanced scorecard: Translating strategy into action*. Boston: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (1996b). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1) (January–February), 75–85.
- Kaplan, R. S., & Norton, D. P. (2001). *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Boston: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2004). *Strategy maps converting intangible assets into tangible outcomes*. Boston: Harvard Business School Press.
- Lawrie, G., & Cobbold, I. (2004). Third-generation balanced scorecard: Evolution of an effective strategic control tool. *International Journal of Productivity and Performance Management*, 53(7), 611–623. <https://doi.org/10.1108/17410400410561231>.
- Meynhardt, T., Gomez, P., & Schweizer, M. (2014). The public value scorecard: What makes an organization valuable to society? *Performance*, 6(1), 2–9.
- Moore, M. H. (2003). *The public value scorecard: A rejoinder and an alternative to “strategic performance measurement and management in non-profit organizations” by Robert Kaplan (no. 18)*. Cambridge, MA: Hauser Center for Nonprofit Organizations.
- Morisawa, T. (2002). *Building performance measurement systems with the balanced scorecard approach*. NRI papers, 45. Retrieved from <http://members.home.nl/j.s.sterk/AQM/BuildingPerformanceMeasurementSystemswiththeBalancedScorecardApproach.pdf>
- Niven, P. R. (2008). *Balanced scorecard step-by-step for government and nonprofit agencies* (2nd ed.). Hoboken: Wiley.
- Nørreklit, H., Kure, N., & Trenca, M. (2018). Balanced scorecard. In R. L. Heath & W. Johansen (Eds.), *The international encyclopedia of strategic communication* (1st ed.). Boston: Wiley-Blackwell. <https://doi.org/10.1002/9781119010722>.
- Trompenaars, F., & Hampden-Turner, C. (2011). *Riding the waves of culture: Understanding cultural diversity in business* (2nd ed.). London: Brealey.

Balanced Scorecard and Sustainability

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Synonyms

Comprehensive performance management system; Comprehensive performance measurement system; Strategic performance management system; Strategic performance management tool; Sustainability balanced scorecard; Sustainability scorecard

Definition

The balanced scorecard (BSC) is a widely used strategic performance management tool, to support strategy communication, execution, and control. The BSC has a comprehensive scope, based on the inclusion of both financial and nonfinancial perspectives: the customer, internal processes, and learning and growth perspectives. The four perspectives are typically depicted in a strategy map, a visual representation of an organization strategy, linking the strategic objectives in a chain of cause and effects. Strategy maps contribute to communicate strategy, bridge strategic and operational levels, guide employees' behaviors in light of the defined strategy, and support BSC design.

The BSC has been found suitable to support the implementation and control of sustainability strategies. For this purpose, various modifications of the original BSC framework have been developed, in order to include not only economic but also environmental and social issues, leading to the emergence of sustainability balanced scorecards (SBSCs). The modifications to the BSC include various architectures of SBSCs and various ways to integrate sustainability indicators in the SBSCs, making the comprehensive scope of BSCs become even wider and more holistic.

Introduction

The balanced scorecard (BSC) is a strategic performance management tool, with both financial and nonfinancial perspectives, aiming at supporting strategy communication, execution, and control. The BSC, and its associated strategy map depicting organizational strategy across those perspectives, is one of the most widely adopted tools within organizations' management control systems (see ► [“Management Control Systems and Sustainability”](#)). The BSC has a holistic scope by nature, and it has also been adopted within the specific area of sustainability, in order to influence managers' and employees' behaviors and align them with the adopted sustainability strategies, hence promoting the attainment of sustainability objectives. This has led to the development of sustainability balanced scorecards (SBSCs), based on the original BSC but explicitly including environmental, social, or ethical issues (Hansen and Schaltegger 2016).

The ensuing text starts by providing the introductory notions about the BSC. It then discusses the adoption of the BSC to support the management of sustainability strategies in organizations, hence becoming SBSCs. It discusses the various architectures of SBSCs and the various ways sustainability indicators have been integrated into SBSCs. A brief summary closes this text.

The Balanced Scorecard: An Overview

The BSC was developed by Kaplan and Norton (1992), arising from the perception that performance measurement had an excessive financial focus and was neglecting other aspects that were increasingly relevant to the long-term value of organizations. Financial indicators were lagging and too aggregated measures of performance, hence providing limited insights on the drivers of future value. So while Kaplan and Norton (1992) contended that financial performance remained crucial, the financial indicators had to be supplemented by nonfinancial indicators to promote managers' attention to those organizational competencies and results crucial to drive

future financial performance. Importantly, they claimed that no standalone measure could be used as a single performance target and that multiple measures, across different areas of the organization, were required.

Kaplan and Norton (1992) therefore proposed the BSC, initially presented as a performance measurement tool with a balanced approach, adopting not only a financial perspective but also three nonfinancial perspectives: customers; internal processes; and learning and growth. The financial perspective aims at depicting how investors view the organization; it often refers to shareholders, although the scope has also often been enlarged to include other financial investors. The customer perspective aims at capturing the critical factors with regard to customers' perceptions about the value proposition offered by the organization and/or its products/services. The internal processes perspective focuses on the key business processes at which the organization should excel. Finally, the learning and growth perspective identifies the key intangible factors, such as human, information, or organizational capital, which the organization needs to develop in order to improve and create value.

The four perspectives should be integrated into a chain of cause and effects: Developing the key intangibles enables to improve performance in the key internal processes. In turn, this will improve the value perceived by our customers. Improvements in the previous perspectives, in particular in the customer and internal processes perspectives, will ultimately improve the value to the investors. This hierarchical representation of vertical causal relationships, all directly or indirectly contributing to the financial perspective, makes clear that financial performance was considered, in the original BSC, as the ultimate organizational goal. This view was made even clearer, in a more visual way, with the landmark publication Kaplan and Norton (2004a). Strategy maps are a visual representation of the strategy of the organization, in a clear and intuitive way, depicting the chain of cause and effects between the key strategic objectives across the four perspectives. Strategy maps contribute to communicate strategy, bridge strategic and operational levels, guide employees' behaviors in light

of the defined strategy, and support BSC design. As an example, see Kaplan and Norton (2004a, p. 32) for an example of a strategic map, developed for a particular medical equipment company. This holistic integration has also been fostered by the potential cascading of the BSC across the various organizational levels, from the top corporate level to lower levels, such as a strategic business unit, a shared service or some of its functions, a department, or even an individual.

A crucial and sensitive step of the BSC design is to identify (only a few) key performance indicators (KPIs) to measure the attainment of each strategic objective. High-quality KPIs should have certain characteristics. First, KPIs should be technically viable, i.e., have a reasonable degree of reliability. Second, the cost to calculate those KPIs should be reasonable, vis-a-vis their usefulness. Third, the KPIs should include, in a balanced way, both lagging indicators (representing desired results) and leading indicators (representing the drivers that will produce the desired results). Fourth, a KPI should not have dysfunctional effects, meaning that it should be: objective (i.e., clear and unambiguous); complete (i.e., it fully captures all desired attributes, with no need of additional indicators); and reactive (i.e., it clearly conveys the desired action that will influence the indicator and the strategic objective).

Throughout the years, the BSC has experienced continuous development. From an initial emphasis on performance measurement, the linkages with strategy were further developed, and the BSC became a tool for strategic performance management and, later, for strategy execution (Kaplan and Norton 2008).

The literature consistently reports high adoption rates of the BSC. For example, Rigby and Bilodaou (2015), reporting the results of a survey of executives on management trends and techniques, indicate the BSC as the sixth most popular tool, with high satisfaction levels (even though the subsequent survey reported lower usage levels). While the mainstream explanation of the BSC success rests on its suitability to address the functional needs of organizations, Cooper et al. (2017) highlight the importance of global processes of translation and transformation of the tool, as well

as less rational processes based on fads and imitation. Notwithstanding alternative explanations for the BSC success, its wide diffusion, associated with some core characteristics of the BSC, made it a particularly well-suited technique to support the management of sustainability in organizations, becoming a SBSC, as discussed next.

Sustainability and the Balanced Scorecard

The organizational pursuit of sustainability objectives has faced various challenges. Even when organizations develop suitable strategies of sustainability management, it is crucial to develop appropriate systems to measure sustainability performance across the economic, environmental, and social perspectives, so that organizations can control and improve their performance.

The BSC has been considered a suitable framework to support such sustainability measurement and control. The wide scope of the original BSC framework, encompassing not only financial but also nonfinancial perspectives, makes it particularly suitable for this purpose. In addition, bridging the gap between strategy design and its execution, and the strategic and operative levels, is precisely one of the objectives of the BSC (Kaplan and Norton 2008) – and one of the challenges of sustainability management (Bieker 2005).

Indeed, one of the challenges of sustainability management strategy is that this area often fails to be integrated with companies' core processes, both operational processes and control processes. Specifically, the lack of integration with core control processes may mean that sustainability-oriented controls may fail to become embedded in organizational processes and impact organizational decisions and behaviors. Gond et al. (2012) emphasize the need to integrate sustainability within the wider control systems in organizations, in particular within the main management control systems that managers use interactively. Introducing sustainability concerns in a mainstream tool such as the BSC that covers the main areas of performance measurement and

management in so many organizations may be a particularly effective way to support the success of sustainability strategies.

Moreover, the BSC has been typically considered not as a rigid framework to be strictly applied to all settings but as a flexible framework that can be adapted to suit particular contexts. For example, the strategy map referenced above from Kaplan and Norton (2004a, p. 32) adapts the original framework, in particular the internal process perspective, here relabeled “networked processes” to suit the characteristics of the medical equipment company to which it was developed. In particular, public, not-for-profit, and non-governmental organizations, when compared with profit-oriented organizations, have typically a very specific and different nature, vision, mission, and strategies. Very often, these organizations do not have financial objectives as their ultimate goals, and economic concerns come alongside environmental and social ones. This has made many of these organizations to align the BSC with their characteristics, for example, adapting the financial and customers’ perspectives. Therefore, the original BSC framework has been modified in various ways to explicitly include not only economic but also environmental and social issues, in a comprehensive way, as discussed next.

Types of Sustainability Balanced Scorecard Architectures

There are various possible types of modifications to the original BSC, when designing a SBSC, in particular with regard to its architecture – i.e., its overall structure, particularly as depicted in the strategy map, with the various perspectives, strategic objectives, and cause-and-effect chains. Hansen and Schaltegger’s (2016) systematic review of the SBSC literature is a particularly useful study to describe the various architectures and will structure the analysis below. The reader is encouraged to examine this paper to identify the many reviewed articles, since the ensuing text will privilege referencing articles not mentioned in this review.

Prior to presenting the alternative SBSC architectures, Hansen and Schaltegger (2016) identify in the reviewed literature three theoretical standpoints underlying the different designs of SBSCs. First, the instrumental standpoint sees social and environmental issues as a way to improve competitive advantage or organizational efficiency, in line with the idea of making a business case for sustainability; sustainability issues are also seen as a way to improve performance through a strategic management of stakeholders, based on improved relationships, products, or reputation. Second, the social/political standpoint emphasizes how organizations need to address societal expectations and hence be perceived as legitimate and keep their “license to operate”. The third standpoint is the normative/ethical, based on normative stakeholder theory, that aims at total wealth creation, to address organizational responsibilities and a moral duty towards a wide range of stakeholders, rather than simply shareholders.

Hansen and Schaltegger (2016) then identify three main alternative architectures: hierarchical; semi-hierarchical; and nonhierarchical. The first most popular alternative is to keep the strict hierarchical architecture of the original BSC, in which the objectives of the various nonfinancial perspectives ultimately contribute towards financial objectives, in line with the instrumental standpoint of the SBSC promoting competitive advantage or organizational efficiency. See Figge et al.’s (2002) SBSC as an illustration of a strict hierarchical architecture, with all the causal arrows “pointing upwards” (although, as discussed below, adding a “nonmarket” perspective, about child labor, that actually embeds all other perspectives).

The second alternative architecture is a semi-hierarchical SBSC, mostly based on the social/political and normative/ethical standpoint. In this alternative, some approaches relax cause-and-effect chains, in which not all relations among objectives need necessarily to point upwards; this gives a greater prominence to nonfinancial objectives and hence better addressing trade-offs among conflicting interests of distinct stakeholders. This semi-hierarchical alternative architecture also includes approaches which replaced

the financial perspective at the top either with a triple bottom line (see ► [“Triple Bottom Line \(TBL\)”](#)) (Henriques and Richardson 2004)/sustainability perspective or, alternatively, with multiple perspectives, placing the financial perspective alongside environmental and/or social perspectives, at the same hierarchical level.

Finally, the third alternative architecture is the nonhierarchical/network, mostly associated with the normative/ethical standpoint. Rejecting linear cause-and-effect chains, in this nonhierarchical/network architecture, the BSC hierarchy is replaced by a network structure, in which all perspectives are interrelated or are indeed independent, representing a stakeholder scorecard. Conceptual papers were found discussing this architecture, but not empirical ones – an absence credited to the anticipated difficulties due to, for example, a potential loss of focus. Lu et al.’s (2018) proposal of a SBSC for airports illustrates this nonhierarchical/network approach, depicting the interrelationships between all adopted perspectives, including an environmental and a social perspective (but not a customer perspective).

The above examples have already introduced the issue of how to integrate sustainability objectives and indicators in the SBSC. In fact, in addition to the choice of the architecture adopted for SBSCs, there is the issue of how to integrate sustainability objectives and respective indicators, in particular in the highly visual strategy map. This issue is discussed next.

The Integration of Sustainability Objectives in the BSC

Hansen and Schaltegger (2016) identified four alternative ways of integrating sustainability objectives within a BSC, in an increasing level of integration (see also Morioka and Carvalho 2016). The first, and least integrated way, is merely adding a separate sustainability perspective, typically subordinated to the financial perspective. Lu et al.’s (2018) proposal illustrates this “add-on” approach of integration, adding the

sustainability focus apart from other traditional perspectives – even though they consider two separate perspectives (environmental and social), and do not consider the financial perspective as the ultimate goal, given the bidirectional arrows. Hansen and Schaltegger (2016) warn that should the links to the remaining traditional perspectives be weak, this approach has the risk of making sustainability management restricted to the sustainability department, detached from the rest of the organization (see also Gond et al. 2012).

The second way of integration is a (merely) partial integration, which integrates sustainability objectives in one or few perspectives, particularly in the internal processes perspective. The third way is a full integration, integrating sustainability objectives in all four perspectives, which may retain their conventional names or may be relabeled. For example, the customer perspective may become “customers and (external) stakeholders”, “customer and suppliers”, “relational”, or may be complemented by an “employee perspective”. Some SBSCs go beyond the typical (and criticized) internal focus of the BSC and extend it beyond organizational boundaries, changing from internal processes into “network-extended business processes” and from learning and growth to “systemic knowledge and renewal”.

Finally, the fourth, and deepest, way of integration combines the addition of a separate sustainability perspective (as in the first alternative) and the full integration of sustainability objectives within the four traditional perspectives (as in the third alternative). In this approach, the dedicated sustainability perspective is used to include very long-term objectives with scarce or no short-term contribution to financial performance, under labels such as “society perspective”. Figge et al.’s (2002) SBSC, already referenced above, illustrates this deepest way of integration, combining the addition of an encompassing “non-market perspective”, related with child labor, with the inclusion of multiple sustainability-related objectives within the traditional BSC perspectives.

Summary

This text has analyzed how the BSC and the associated strategy map have been used and adapted to support the implementation and control of sustainability strategies. Adding environmental and social concerns to these tools has led to the development of a sustainability balanced scorecard (SBSC). Adaptations include the SBSC architecture and various ways to integrate sustainability objectives and indicators. SBSCs have extended the BSC traditional focus on economic factors by including environmental and social factors. Therefore, the SBSC has the potential to support the success of sustainability strategies, effectively integrating sustainability within core business and control processes and linking sustainability strategies and operational level decisions and behaviors.

Cross-References

- Management Control Systems and Sustainability
- Triple Bottom Line (TBL)

References

- Bieker, T. (2005). Sustainability management with the balanced scorecard. In I. Oehme (Ed.), *Corporate sustainability: Theoretical perspectives and practical approaches* (pp. 121–146). München: Profil.
- Cooper, D. J., Ezzamel, M., & Qu, S. (2017). Popularizing a management accounting idea: The case of the balanced scorecard. *Contemporary Accounting Research*, 34(2), 991–1025. <https://doi.org/10.1111/1911-3846.12299>.
- Figge, F., Tobias, T., Schaltegger, S., & Wagner, M. (2002). The sustainability balanced scorecard – Linking sustainability management to business strategy. *Business Strategy and the Environment*, 11(5), 269–284. <https://doi.org/10.1002/bse.339>.
- Gond, J.-P., Grubnic, S., Herzig, C., & Moon, J. (2012). Configuring management control systems: Theorizing the integration of strategy and sustainability. *Management Accounting Research*, 23(3), 205–223. <https://doi.org/10.1016/j.mar.2012.06.003>.
- Hansen, E.G., & Schaltegger, S. (2016). The Sustainability Balanced Scorecard: a systematic review of architectures. *Journal of Business Ethics*, 133, 193–221. <https://doi.org/10.1007/s10551-014-2340-3>.
- Henriques, A., & Richardson, J. (2004). *The triple bottom line: Does it all add up?* London: Earthscan.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard – Measures that drive performance. *Harvard Business Review*, 70(1), 71–79.
- Kaplan, R. S., & Norton, D. P. (2004a). *Strategy maps: Converting intangible assets into tangible outcomes*. Boston: Harvard Business School Publishing.
- Kaplan, R. S., & Norton, D. P. (2004b). Strategy maps. *Strategic Finance*, 3, 27–35.
- Kaplan, R. S., & Norton, D. P. (2008). *The execution premium: Linking strategy to operations for competitive advantage*. Boston: Harvard Business Press.
- Lu, M.-T., Hsu, C.-C., Liou, J. J. H., & Lo, H.-W. (2018). A hybrid MCDM and sustainability-balanced scorecard model to establish sustainable performance evaluation for international airports. *Journal of Air Transport Management*, 71, 9–19. <https://doi.org/10.1016/j.jairtraman.2018.05.008>.
- Morioka, S. N., & Carvalho, M. M. (2016). Measuring sustainability in practice: Exploring the inclusion of sustainability into corporate performance systems in Brazilian case studies. *Journal of Cleaner Production*, 136(Part A), 123–133. <https://doi.org/10.1016/j.jclepro.2016.01.103>.
- Rigby, D., & Bilodaou, B. (2015). Management tools and trends 2014. <https://www.bain.com/insights/management-tools-and-trends-2015/>. Accessed 20 Oct 2019.

Bamako Convention

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Synonyms

Bamako Convention against illegal dumping of hazardous wastes; Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa.

Address

Bamako Convention Secretariat.
United Nations Environment Program Africa
Office.
United Nations Avenue, Gigiri.
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Website: [https://www.unenvironment.org/
explore-topics/environmental-rights-and-governance/what-we-do/meeting-international-environmental](https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/meeting-international-environmental)

Introduction

Issues related to the movement of hazardous wastes across national boundaries have often brought serious concerns to African leaders since the early 1980s, prior to the Basel Convention. This was mainly because Africa was fast becoming a dumpsite for industrialized nations at the time. As a result, there was a resolution in 1988 by the Council of Ministers of the defunct Organization for African Unity (OAU) (now African Union) condemning and confirming that importation of hazardous materials into Africa was a crime against the continent and its people (UNEP 2018a). To support the efforts of governments in developing and implementing efficient regional and national policies for management of hazardous wastes, the Governing Council of the United Nations Environment Program (UNEP) had sanctioned the Cairo Guidelines and Principles for the Environmentally Sound Management of Hazardous Wastes otherwise known as the Cairo Guidelines earlier in June 1987. However, not satisfied by the international community's effort to protect the region, the Council of Ministers of OAU reached a number of resolutions, with Resolution 1153 calling on African states to ban all kinds of hazardous items in accordance to the set guidelines (UNEP 2011; Kummer 1999; UNEP 2018a). A prior recognition of the possibility that the Basel Convention, which was adopted in 1989, would fail to recognize the plight

of the African continent in terms of its environmental pollution, was a major catalyst for resolution 1153. As such, the coming of the Basel Convention and failure to completely address the existing concerns of African nations did not come as a surprise. As a response to the Basel Convention, the Council of Ministers of African Nations again converged at its 49th session and adopted Resolution 1199 (XLIX) on the Global Convention for the Control of Transboundary Movements of Hazardous Wastes, where the position of African continent was made known (UN Commission on Human Rights 1991; UNEP 2018a). One impact of this resolution is the implementation of a complete ban of all kinds of hazardous materials, for which the Basel Convention only mentioned "regulation and control." It was against this backdrop that the Organization of African Unity called on African nations to reach a common ground, to ameliorate the inadequacies perceived within in the Basel Convention, and to ensure their solidarity. As such, none of the African nations who were part of the Organization of African Unity signed the Basel Convention in its first year of existence. Rather, African countries agreed to draft their own guidelines, which are now known as the Bamako Convention (Kummer 1999; UNEP 2018a).

History

The Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, abbreviated simply as "The Bamako Convention," is an extension of the Basel Convention, and an agreement by African countries to officially prevent the importation of all kinds of hazardous waste. The Convention which was originally negotiated by 12 member states of the OAU on 30 January 1991 entered into force on 22 April 1998 (UNEP 2018a, b). A unique feature of the Convention is the fact that it does not leave out any radioactive materials like in the case of the Basel Convention. Thus, it is generally perceived as a more stringent treaty,

though it remains a response to specific sections of the Basel Convention, which encourages regional, bi-, and multilateral agreement for hazardous wastes (UNEP 2018a).

The Bamako convention evolved in reaction to Article 11 of the Basel convention, which encourages bilateral, multilateral, and regional agreements among state parties on hazardous wastes. Of the many lapses within the Basel Convention that gave rise to the Bamako Convention, some were rather critical. First, the Basel Convention relaxed the rules for a few radioactive materials. Second, it was flawed on the ground that no part of the treaty addressed trading hazardous/dangerous wastes to low income countries (UNEP 2019). As such there was continuous shipping of toxic wastes to developing countries (mostly Africa) until the enactment of the Bamako Convention. A popular example is the case of the shipment of several barrels of polychlorinated biphenyls to Nigeria by two Italian firms through the port of Koko in 1987 on the ground that a local farmer would store these wastes for a reward (Adeola 2011). In August 2006, there was another case of waste dumping. This time, it was in Ivory Coast, by a vessel docked at the port of Abidjan. The wastes had been received by a local waste management company and dumped in several parts of the city of Abidjan, having been earlier transported through a ship from Panama by an oil/commodity company based in Singapore. Dumping of these toxic wastes in and around Abidjan caused severe health problems among city dwellers, with several persons hospitalized during the time. In 2008, a lawsuit was filed against the shipping company by a group of concerned citizens, on the ground that the company has refused to take responsibility (UNEP 2018a). However, leaked e-mails exchanged between some traders linked to the firm (obtained about a year after the lawsuit) revealed the possibility of the company knowing the dangers of dumping such materials around human habitations. This situation forced the shipping company into agreeing to pay compensation to the tune of US\$42.4 million, part of which was embezzled as a result of the negligence on the part

of the law firm representing the citizens. In another case in the southern part of Africa, villagers in Chongwe district of Zambia started to excavate tons of beef which the Zambian army had buried after they were imported into Lusaka by an Eastern Bloc country. Some people had started consuming the contaminated beef when the “Times of Zambia,” a leading tabloid published a story that the beef did contain traces of radioactive materials (UNEP 2018a).

The foremost “Conference of the Parties” (COP) to Africa’s Bamako Convention was held between 24 and 26 June, 2013 at the capital city of Mali, where the convention was first signed. Two major resolutions at the meeting include: an agreement to allow the United Nations Environmental Program to act in the capacity of a secretariat for the Convention, and an agreement to push for better cooperation with secretariats of the treaties signed in Basel, Rotterdam, and Stockholm. Other resolutions were the adoption of designated centers of the Basel and Stockholm conventions and the scheduling of the dates for the second COP planned for Abidjan in Cote d’Ivoire (Wahlen 2018). At the second COP meeting held between 30 January and 1 February 2018, and tagged “The Bamako Convention: a platform for a pollution-free Africa,” parties reaffirmed their commitments to the convention and agreed to align efforts of the convention with those of a few chemical management bodies around the world. As listed by UNEP (2018b), the chemical management bodies include:

- The United Nations Environment Assembly’s (UNEA) resolutions on chemicals and pollution.
- The Strategic Approach to International Chemicals Management (SAICM).
- The African Union’s (AU) Agenda 2063.
- The 2030 Agenda for Sustainable Development.

Mission/Objectives/Focus Areas

The main objectives of the Bamako Convention on the Ban on the Import into Africa and the

Control of Transboundary Movement and Management of Hazardous Wastes within Africa according to UNEP and outlined in Eze (2007) and UNEP (2019) include:

- Prohibition of importation of all known hazardous and radioactive wastes/chemicals into member states regardless of the reason for such importation.
- Drastic reduction and control of movements of hazardous wastes within/across the boundaries of member states.
- Prohibition of dumping of wastes and all kinds of incinerated hazardous materials into oceans and inland waters.
- Enforcement of waste disposal in an environmental-friendly manner.
- Promotion of sustainable and green production techniques, so as to attain values even lower than permissible emissions rates.
- Establishment of the precautionary principle.

Structure of Governance/Coverage

The Bamako convention adopts a similar format and approach to that of Basel Convention, except that it exhibits much firmer prohibitions of all hazardous wastes and does not make exceptions to any kind of hazardous wastes. Thus, the Convention has a much wider coverage relative to Basel convention, since it does not only consider radioactive wastes but also any kind of waste that possesses hazardous characteristics including those captured under individual national definitions of hazardous wastes (UNEP 2019). The Bamako Convention mostly investigates the issue of waste disposal and dumping that are not within the Basel Convention, i.e., certain radioactive wastes. This means that any kind of waste that have been restricted in one of the members remains completely restricted by the convention. The convention also provides a comprehensive list of waste streams considered or defined as hazardous wastes and radioactive, which are restricted from dumping, incineration, or importation into the African continent (UNEP 2018a).

As part of the working structure of the Bamako Convention, trading of wastes between parties must be reduced to the barest minimum, so that it can only be conducted with permission from all the states involved from importation to transit and delivery. However, it is important for member states to drastically reduce production of these hazardous substances, and ensure that excess production of such substances is disposed in an environmentally friendly manner (UNEP 2018a).

Though, the first meeting of the conference of parties was convened by the Secretary-General of the OAU as stipulated in Article 15 of the treaty, like many other conventions, the COP is the supreme decision-making body of the Convention. The COP developed its Rules of Procedures including those of other subsidiary bodies which may be established, while it also determines the financial participation of parties (Kaminsky 1992). Though the Convention had much earlier entered into force in 1998, Parties at the first COP which convened in Bamako in June 2013 agreed by Resolution 1/6 UNEA that the Bamako convention Secretariat function should be carried out by the Executive Director of UNEP, subject to approval by the United Nations Environment Assembly (UNEA) (Ashton 2013).

Activities/Major Accomplishments/Contributions

Since entering into force on 22 April 1998, the Bamako Convention has recorded several milestones such as its United Nations registration in March 2000. Furthermore, a document released by the African Union in January 2019 revealed that out of the 55 African nations, 35 had so far signed the agreement to the convention, while 28 countries had ratified it, and 28 have also made deposits. These figures show tremendous progress in the African environmental spheres, following the kind of success already seen with the Basel Convention. While the progress is recorded, some observers have stressed that the Bamako Convention has not lived up to expectations, given that there are suspicions on

the possibility that shipped wastes still find their ways to the shores of Africa (Agbor 2016). While there is no concrete evidence to these allegations, Agbor (2016) further claimed that the slow-paced nature of ratification (while 23 nations had ratified the Convention as of 2010, the figure only increased by 5 nations as of March 2020) seems to breed disagreement of purpose among African nations.

Be that as it may, it is important to stress that in a bid to completely eradicate poverty, and continuous harm imposable to citizens and the environment, African nations have a responsibility to uphold the virtues of the Bamako Convention – an act that will further encourage African power houses of the northern (Algeria and Morocco) and southern parts (South Africa, Botswana, and Namibia) of the continent to join the move. Continuous checks and balances in terms of structure and implementation of the targets of the convention also need to be prioritized, so that there are no back-stabbers in the move to reject making Africa a dumping ground for industrialized nations.

Summary

Prior to the evolvement of the Bamako convention, Africa had become a major destination for global hazardous wastes. Though the Basel Convention was established to protect human health and control the illegal transboundary movement of hazardous wastes, it still could not prevent the continuous landing of radioactive and other hazardous waste at the shores of African countries as shipping companies still exploited loopholes in the treaty. It was this situation that necessitated the birth of the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa with much stringent prohibitions in 1998. Though the Convention has since its evolvement recorded several successes, many African countries are yet to deposit their document of ratification while others have refused to sign up to the Convention.

References

- Adeola, F. O. (2011). *Hazardous wastes, industrial disasters, and environmental health risks: Local and global environmental struggles*. New York: Springer. <https://doi.org/10.1057/9780230339538>.
- Agbor, A. A. (2016). The ineffectiveness and inadequacies of international instruments in combatting and ending the transboundary movement of hazardous wastes and environmental degradation in Africa. *African Journal of Legal Studies*, 9(4), 235–267.
- Ashton, M. (2013). *Bamako COP 1 decides UNEP to host secretariat*. Retrieved March 10, 2020, from IISD: <http://sdg.iisd.org/news/bamako-cop-1-decides-unep-to-host-secretariat/>.
- Eze, C. N. (2007). The Bamako convention on the ban of the import into Africa and the control of the transboundary movement and management of hazardous wastes within africa: A milestone in environmental protection? *African Journal of International and Comparative Law*, 15(2), 208–229.
- Kaminsky, H. S. (1992). Assessment of the Bamako convention on the ban of import into Africa and the control of transboundary movement and management of hazardous wastes within Africa. *Geo. Int'l Envtl. L. Rev.*, 5, 77.
- Kummer, K. (1999). *International management of hazardous wastes: The Basel convention and related legal rules Oxford monographs in international law*. Oxford: Oxford University Press on Demand.
- UN Commission on Human Rights. (1991). *Movement and dumping of toxic and dangerous products and wastes*. Geneva: UN Commission on Human Rights. <https://www.refworld.org/docid/3b00f08e30.html>.
- UNEP. (2011). *History of the negotiations of the Basel convention*. Retrieved from Basel Convention: <http://www.basel.int/TheConvention/Overview/History/Overview/tabid/3405/Default.aspx>.
- UNEP. (2018a). *Bamako convention: Preventing Africa from becoming a dumping ground for toxic wastes*. Retrieved February 26, 2020, from United Nations Environment Programme: <http://www.unenvironment.org/news-and-stories/press-release/bamako-convention-preventing-africa-becoming-dumping-ground-toxic>.
- UNEP. (2018b). *Second meeting of the conference of the parties to the Bamako convention*. Retrieved February 28, 2020, from United Nations Environment Programme: <http://www.unenvironment.org/news-and-stories/press-release/second-meeting-of-the-bamako-convention-preventing-africa-becoming-dumping-ground-toxic>.
- UNEP. (2019). *The Bamako convention*. Retrieved from United Nations Environment Programme: <https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/meeting-international-environmental>
- Wahlen, C. B. (2018). *Bamako COP affirms commitment to pollution-free Africa*. International Institute for Sustainable Development.

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Banks and the Sustainable Development Goals

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Synonyms

[Banking](#); [Banks](#); [Finance](#); [Financial institutions](#); [Financial intermediary](#); [Financial intermediation](#)

Definition/Description

Banks are authorized and regulated financial intermediaries that undertake different activities to

meet consumption, savings, investment, and financial risk management needs. Gobat (2012) identifies making loans, creating money, and transmitting money policy as key bank functions. Banks bring savers and borrowers together and, in so doing, reduce the transaction and information costs of mobilizing savings and financing investments. This facilitates economic activity and growth. Modern banks are multi-product firms, with broad distinctions made between commercial banks which combine deposit taking with credit creation and payments services and investment banks. Investment banks help companies to raise funds through the financial markets, offer financial advisory services, and trade financial instruments. Resilient banks that also adopt an inclusive approach to banking have a major role to play in supporting stable economic growth, reducing inequalities in society and advancing several of the Sustainable Development Goals. On the other hand, bank failures and widespread financial instability can be symptomatic of irresponsible business practices in banks and unsustainable ways of value creation that undermine progress toward sustainable development.

Introduction

This entry explores the implications of the functions and strategies of retail commercial banks for achieving the United Nations' Sustainable Development Goals (SDGs). The entry also considers how reforms to the regulatory governance framework for banks contribute to creating an operating environment within which banks could pursue strategies and practices that support economic growth and development, environmental protection, and social welfare.

The traditional financial intermediation theory of banking presents banks as a distinct subset within the group of institutions known as financial intermediaries. In this traditional view, the distinguishing feature of banks is their ability to combine taking deposits and making loans in one institution (Allen and Santomero 2001; Bossone 2001; Werner 2014a).

In an exposition of what makes banks different, Werner (2014a, b) draws attention to the characteristics that enable banks to influence the money supply of a country through credit creation. Bank credit is used to finance consumption, undertake investment for productive purposes and for speculation. Whether as intermediaries or as money creators, banks are essential for financing and facilitating economic activity and economic growth. Hamilton (1781) described banks as the happiest engines that were ever invented for advancing trade and attributed the economic successes of several nations to banks. Hamilton also recognized that banks are subject to abuse and could be harmful. Indeed, the 2008 Global Financial Crisis has been attributed in part to problems with banks' lending and investment activities and weaknesses in banks' corporate governance practices. This entry explores the capacity for banks to both promote and derail the sustainable development agenda. The next section provides an overview of the links that have been made in the academic literature between banks, economic growth, and several of the SDGs. To explore the nexus between sustainable development and responsible business practice in banking, section three examines how the unique features of banks can enhance as well as threaten responsible value creation and governance in the sector. Before concluding, the chapter considers how post-crisis regulatory reforms aim to strengthen the ways in which banks can interact positively with the sustainable development agenda

Banks, Economic Growth, and the SDGs

Banks are the primary financial institutions in most countries despite international differences in financial structure (Levine 1997; Rajan and Zingales 1998, 2001). Most of the academic literature indicates that banks, like financial markets, are important institutions through which financial development can affect economic growth (Levine 2002; Cole et al. 2008; Wolde-Rufael 2009; Beck 2012; Moshirian and Wu 2012; Popov 2018; Tongurai and Vithessonthi 2018; Allen et al.

2018a). Banks can foster growth in several ways. These include mobilizing savings, providing good quality information that will support better decision making for resource allocation purposes, providing external finance, facilitating trade and risk management, and monitoring managers in the businesses they have relationships with to perform a corporate governance role (Levine 1997). Furthermore, as suppliers in loan markets, banks sustain economic growth by making consumer loans which allow people to spend in ways that are not in line with their incomes. In order to repay these loans, people may have to increase the hours they work to repay quicker and reduce borrowing costs (van Griethuysen 2010; Jackson 2009).

By spurring economic growth, it is thought that banks can influence other aspects of economic prosperity, such as reducing poverty (Honohan 2004; Demirgüç-Kunt and Levine 2009). Ultimately it can be deduced that banks may contribute to reducing poverty by making it possible for people to make payments efficiently, manage risks, smooth their consumption, and invest. To date, analysis of the role of financial institutions on alleviating poverty is largely confined to studies of the social impact of microfinance institutions, which are also widely studied as vehicles for promoting financial inclusion (Okpara 2010).

Widening effective access to financial services and inclusive banking are subsumed in several of the SDGs as identified in the SDG Compass developed by the Global Reporting Initiative, the UN Global Compact, and the World Business Council for Sustainable Development (2015). Policy makers make a case for inclusive banking as an enabler of several of the SDGs such as good health and well-being, access to quality education, gender equality, and inclusive growth (Klapper et al. 2016; Demirgüç-Kunt et al. 2017). For sustainable development to occur, banks need to develop useful and affordable products and deliver them through processes that will maximize use and minimize unintended barriers to access (Cámara and Tuesta 2014).

Unlike economic growth and development, the concept of sustainable development involves balancing different goals. The World Commission

on Environment and Development (1987) notes that economic growth is only one aspect of sustainable development and can have negative repercussions on society and the environment. Haapanen and Tapio (2016) highlight that an inordinate focus on an increase in GDP, as a component of sustainable development could disregard actions that support human well-being and protect the environment as well as limit the options for pursuing sustainable development. A recognition of this need for balance between economic, social, and environmental goals underpins why banks are being challenged to engage with other aspects of sustainable development through initiatives such as Banks for a Better World that was launched by SWIFT, a financial cooperative (Stephen and Skinner 2013; Mainelli and Mills 2018). To provide a framework for sustainable banking, a set of six Responsible Banking Principles have been released by the United Nations Environment Programme Finance Initiative (UNEPFI 2019). Formulated in collaboration with the banking industry, these principles outline guidelines for banks in the areas of sustainability impact analysis, target setting and implementation, governance, and accountability. By incorporating such guidelines banks would make more progress toward a sustainable financial system by building a wider repertoire of tools that can reduce and reflect social, environmental, and climate risks (UNEP 2016). Through their Network for the Greening of the Financial System, central bankers and regulators as key players in the management, stability and sustainability of financial systems have come together to urge bankers to integrate climate financial risks into their operations and risk management (NGFS 2019).

Several studies have explored how banks around the world advance and report on the SDGs. Weber (2005) explored banks' motivations for engaging with sustainability and found that European banks had different approaches to sustainability. While some banks adopted sustainability as a strategy or as a value driver, other banks' involvement was in response to clients' requirements or as a public mission. In terms of the reported performance of European banks on the SDGs, Avramopou et al. (2019) found a low

contribution to the SDGs by leading European banks, with SDG4 (quality education), SDG8 (decent work and economic growth), and SDG16 (peace, justice, and strong institutions) being the most well reported. Weber (2012) found that Canadian banks had progressed further than other countries in examining environmental risks when lending. Environmental management, however, is not the main priority of banks in developing countries. Hu and Scholtens (2014) concluded that banks in developing countries have made more progress on social issues when compared to their performance on environmental practices. As banks' sustainability performance extends beyond economic prosperity and social justice, Buranatrakul and Swierczek (2018) explored international banks' response to the climate change challenge and found that North American banks ranked first for developing climate change-related products such as green bond initiatives, loans for renewable energy and clean technology projects, carbon and climate loans, and ecological funds.

With the allocation of funds to productive uses being a core banking activity, other research has investigated the social and environmental impacts of banks' lending and investment activities (Scholtens 2006, 2009; Coulson and O'Sullivan 2014). Studies to date indicate that banks have made considerable progress in integrating their CSR strategies in their lending activities. This progress has been facilitated by two developments. The first initiative, the UNEP Statement by Banks on the Environment and Sustainable Development raised initial awareness of environmental issues in 1991. Since 1991, the statement has been revised and is now incorporated into the Statement of Commitment by Financial Institutions on Sustainable Development (UNEPFI 2011). The second development is the establishment of the Equator Principles in 2003. The ten Equator Principles provide a roadmap for banks to discharge, albeit in a limited way, a primary responsibility to sustainable development through risk analysis and management.

The Equator Principles require banks to apply environmental and social risk analysis in four areas – project finance, project finance advisory

services, project related corporate loans, and bridge loans. Through the application of these principles to lending decisions, banks have a significant impact on environmental and community degradation as well as poverty. The principles also serve as an accountability initiative for banks and have been found to enhance the social accountability of banks (O'Sullivan and O'Dwyer 2015).

The challenge of the SDG funding gap presents an opportunity for banks to simultaneously promote responsible consumption and production patterns in their own activities and indirectly influence these patterns in other businesses through their lending and investment decisions. Meeting the SDGs require considerable redistribution of funds, financial input, and investment. In its 2014 World Development Report, the United Nations Conference on Trade and Development (UNCTAD) estimated that total investment needed to deliver the SDGs in developing countries alone could be about \$ 3.9 trillion a year and that total global investment needs are in the order of \$5 to \$7 trillion a year. To meet the considerable challenges of financing the SDGs, banks do not only need to integrate the SDGs into their operations but national banking sectors need to be reshaped so that domestic commercial banks can work in a complementary way with cooperative banks, development banks, and international banks with a view to creating viable and stable financing frameworks that create shared value. The next section offers a commentary on responsible value creation and governance in banks.

Responsible Value Creation and Bank Stability

At the heart of sustainable development is the notion of shared value creation (Kramer and Porter 2011). Value creation in banks can be approached from the perspective of functional efficiency whereby banks create value through excellence in executing core functions such as origination to gain new customers, intermediation between savers and borrowers, and distribution of products and services through different channels including branches, ATMs, and smartphone

technology. An alternative way of conceptualizing value creation in banks is through the interactions between banks and a complex web of stakeholders. The special problems associated with value creation in banks result in banks having a fiduciary duty to multiple stakeholders such as depositors, creditors, bondholders, the society, and the environment (Macey and O'Hara 2003; De Haan and Vlahu 2016). Detecting and satisfying the expectations of these stakeholders in a way that creates shared value is a clear challenge for banks from strategic to operational level (Formisano et al. 2018).

In the aftermath of the global financial crisis, banks were accused of destroying rather than protecting wealth and stability. According to Chen et al. (2018) in the year following the crisis economic activity declined in half of all the countries in the world, demonstrating the threat banks can pose globally. Irresponsible bank lending which created the US subprime mortgage crisis has been acknowledged by many as a primary cause of the 2008 Global Financial Crisis (Blundell-Wignall 2009; Crotty 2009; Dell Ariccia et al. 2012). Relaxed lending standards which applied less weight to a borrower's ability to repay fuelled a credit boom which preceded the crisis. Banks use of innovative securitization products such as Collateralised Debt Obligations for risk management as well as for investment purposes have also been widely criticized. Responsible financial innovation is an integral part of sustainable value creation and is seen as an important vehicle for creating solutions to economic and social problems (Mainelli and Mills 2018). However, some innovative products and practices, if not developed using consultative and responsible product governance processes, can distort risk-taking, lead to consumer detriment and even contribute to financial exclusion (Armstrong et al. 2012).

Campbell (2018) defines socially irresponsible behavior as occurring when a corporation knowingly takes an action that would harm stakeholders. It also covers instances where an organization becomes aware that it has harmed stakeholders but does not take corrective action. The profit maximization model of governance that commercial banks adopt may contribute to a

short-term value creation perspective in banks. Studies that compared the performance of commercial banks and stakeholder cooperative banks have found that cooperative banks demonstrated more stable performance and resilience in the global financial crisis period. This difference in performance has been attributed to differences in governance models, as member-owned cooperatives do not have to fulfill external shareholders' profit expectations but have a mandate to prioritize economic viability and pursue social as well as economic goals (Birchall and International Labour Office 2013; Becchetti et al. 2016). Building on the work of Fiordelisi and Molyneux (2010) on shareholder value creation, Stankeviciene and Nikonorova (2014) distinguished between shareholder value creation and sustainable value in banks and found that sustainable value creation is associated with positive financial performance banks during periods of financial instability.

The SDG Industry Matrix for Financial Services published in 2015 by KPMG and the UN Global Compact identifies ways in which banks could align their strategies with the SDGs to achieve sustainable value creation. These include sharing anonymized data and risk analysis to inform public policy, developing innovative pricing models that will incentivize sustainable production and using results indicators in their reporting that will measure the implementation of ESG management and the fulfilment of ILO conventions. Similarly, UNEPFI's (2018) Positive Impact framework which specially addresses how banks and other financial institutions could meet the financing gap challenge goes beyond banks' lending and investment to guide banks in sustainable value creation in their product development and ongoing portfolio analysis and monitoring activities. Adoption of these principles and frameworks will not only aid sustainable value creation in banks but also enhance reporting and build the transparency, accountability, and trust required for preservation of function.

Apart from value creation, another important aspect of sustainability is to preserve the functionality and status of institutions and systems. Banks' transparency is one area that has attracted

attention in connection with sustainability, particularly because of the role banks play in financing business activities. The conventional wisdom is that banks are opaque because it is difficult for stakeholders to determine banks' soundness and levels of accountability. This opaqueness can not only make it difficult to determine what progress individual banks are making toward sustainability but also undermine trust and contribute to widespread financial instability (Morgan 2002; Spargoli and Upper 2018).

Bank failure has the potential to undermine the effective functioning of the entire financial system because of the negative externalities that can occur in banking. These externalities are a type of market failure which cause the costs and benefits of banking transactions to spill over to third parties who are not directly involved in these transactions. Consequently, the social costs of a bank's failure exceed the losses that would accrue directly its claimholders, making the bank a potential source of a systemic risk. Bank failure can reduce economic growth through disruption in the payments systems, a loss public confidence in the banking system and through a general reduction in lending (Kupiec and Ramirez 2013).

As a result of externalities, the benefits of good bank performance would accrue privately to shareholders and bank managers who earn bonuses, while the costs of failure would be socialized and disproportionately borne by taxpayers and other stakeholders. This was evident in the 2008 Global Financial Crisis when several banks had to be bailed out and recapitalized by governments using public funds, while bankers continued to receive contractual bonuses. The severe consequences for a range of stakeholders when banks are not managed in a sustainable manner provide a rationale for bank regulation and have prompted recent reforms at national and international levels. For example, in the USA, which was the epicenter of the subprime lending crisis, the Dodd–Frank Wall Street Reform and Consumer Protection Act 2010 include provisions that tighten mortgage lending regulation to ensure that banks are more diligent in evaluating loan affordability. At a global level, the revised Basel Recommendations on Corporate

Governance Principles for Banks is one initiative that aims to strengthen bank stability and rebuild confidence in banks by reinforcing the role of bank boards in oversight, remuneration, and risk governance.

Regulating Banks for Sustainable Development

The regulatory framework is part of the system of governance for banks which contributes to developing the public trust and confidence that is essential for banks to operate successfully. Stronger regulatory governance can play a role in minimizing banking risks and in enhancing banks' accountability while addressing concerns about financial stability, information asymmetry, and unfair competition in banking. A combination of the likelihood of contagion that is inherent in banking and developments in financial globalization, deregulation, and technology can make the consequences of value creation in banks complex, giving them a cross-border dimension. As a result, establishing a global financial architecture for stability becomes an indispensable part regulating banks to support sustainability.

Deposit insurance and government bailouts are the main tools used to provide a safety net that prevents bank runs and panics. The safety net also improves the financial position of depositors and creditors, should a bank failure and crisis occur. These tools are costly to taxpayers and governments. As governments are expected to fund most of the investments required to meet the SDGs, spending on bank bailouts will threaten SDG spending. Spending on bank bailouts is at the expense of spending on other core government commitments such as spending such as health services, systems of social protection and education. Hence bank bailouts have the potential to disrupt progress toward the SDGs. It is widely debated whether deposit insurance and government bailouts can cause moral hazard and increase incentives to take risk because the protection these measures offer is akin to insurance (Diamond and Dybvig 1983; Allen et al. 2015, 2018b; Calomiris and Jaremski 2016). Allen et al. (2015) highlight

that many national governments took steps to mitigate moral hazard after the 2008 global financial crisis through redesigning deposit insurance scheme. National efforts like these are complemented by international initiatives. For example, the Financial Stability Board, an international body set up to identify and monitor financial system vulnerability, now regularly highlights and monitors those large and systemically important banks that would pose a threat to the stability of the global financial system because of their size, complexity, interconnectedness, cross-jurisdictional activity, and the lack of readily available substitutes for their services.

In tandem with these stability measures prudential regulation, including capital requirements, has long been used to limit banks' risk-taking activities and increase banks' resilience by enhancing their ability to absorb loss. The most high-profile international prudential measure is the convergence agreement on capital standards commonly known as the Basel Accord. In the Basel III amendments, the provisions of the Accord were revised to strengthen both the quality and quantity of capital of held by internationally operating banks and to regulate for liquidity as well as credit, market, and operational risks (BIS 2011).

Schwarz (2017) argues that a focus on bank size and moral hazard detracts attention from issues of corporate governance and corporate responsibility in banks which may better explain excessive risk taking. Information asymmetry between banks and their customers and skewed incentives given to staff can result in scenarios where irresponsible conduct on the part of banks could undermine the sustainability of the global banking system. Arguably, regulation that is aimed at improving bank conduct and protecting consumers, who are major bank stakeholders, has attracted the most attention from regulators in recent years because of a proliferation of product mis-selling scandals. By December 2019, the Payment Protection Insurance scandal in the UK had cost banks £38.3 billion in refunds and compensation payments to customers who were mis-sold this insurance with loan and credit products over several years (FCA 2020). Some countries have

set up separate conduct regulatory agencies which have a mandate to protect consumers. These include the Financial Conduct Authority in the UK and the Consumer Financial Protection Bureau in the USA. It has long been recognized that the poor design of bank products, unsuitable advice, and inappropriate sales methods can cause detriment to consumers due to information asymmetry between banks and their customers, the intangible nature of bank products, behavioral biases, and opportunistic behavior on the part of firms (Llewellyn 1995, 1999). Product failure and the failure to create cultures in banks that would promote ethical behavior in sales transactions can undermine trust and confidence, cause misallocation of resources, and result in social costs with widespread losses.

In some countries, structural reforms have been introduced to alter the organizational form of banks through some type of separation or restriction of activity. In the UK, ringfencing rules now legally separate the retail banking services of large banks from the rest of a bank's business. In a similar vein, to contain riskiness, the Volcker Rule which was introduced in the USA in 2013 prohibits banks from owning hedge funds and private equity funds (FDIC 2019). The rule also limits banks from undertaking proprietary trading transactions which is a means for banks to realize direct market gain unlike when they invest on behalf of clients. These reforms will also enhance transparency and accountability which are important principles for sustainability.

Summary

Modern banks meet a range of society's financial and economic needs for investment, savings, money transmission, risk management, and consumption and are indispensable partners in efforts to achieve sustainable development. From a sustainability perspective, banks are unique institutions because of their financing capabilities, the scope for their activities to impact on a web of stakeholders and the threats that market failures such as externalities and information asymmetry

can pose to financial stability and sustainable development. While it is in achieving the goals of economic prosperity such as economic growth and poverty reduction that banks have been most widely studied, more research needs to be conducted into the social and inclusive impacts of banks activities. There is very little academic literature that seeks to investigate empirically the links between banks, banking development, and a range of sustainability indicators and explore links between banking and sustainable development empirically. Furthermore, several initiatives have been established at national and international levels that have the capacity to alter the institutional environments within which banks operate. Another much-needed line of enquiry is to investigate how different institutional environments affect how banks engage with and implement the SDGs.

Cross-References

- [Economic Sustainability](#)
- [Inclusive/Selective/Compliant Finance/Banking](#)
- [Sustainable Development](#)
- [Sustainable Growth](#)

References

- Allen, F., & Santomero, A. M. (2001). What do financial intermediaries do? *Journal of Banking & Finance*, 25 (2), 271–294.
- Allen, F., Carletti, E., Goldstein, I., & Leonello, A. (2015). Moral hazard and government guarantees in the banking industry. *Journal of Financial Regulation*, 1(1), 30–50.
- Allen, F., Bartiloro, L., Gu, X., & Kowalewski, O. (2018a). Does economic structure determine financial structure? *Journal of International Economics*, 114, 389–409.
- Allen, F., Carletti, E., Goldstein, I., & Leonello, A. (2018b). Government guarantees and financial stability. *Journal of Economic Theory*, 177, 518–557.
- Armstrong, M., Cornut, G., Delacôte, S., Lenglet, M., Millo, Y., Muniesa, F., Pointier, A., & Tadjeddine, Y. (2012). Towards a practical approach to responsible innovation in finance: New Product Committees revisited. *Journal of Financial Regulation and Compliance*, 20(2), 147–168.
- Avrampou, A., Skouloudis, A., Iliopoulos, G., & Khan, N. (2019). Advancing the sustainable development

- goals: Evidence from leading European banks. *Sustainable Development*, 27(4), 743–757.
- Beccchetti, L., Ciciretti, R., & Paolantonio, A. (2016). The cooperative bank difference before and after the global financial crisis. *Journal of International Money and Finance*, 69, 224–246.
- Beck, T. (2012). The role of finance in economic development—benefits, risks, and politics. In Mueller, D.C. (ed.), *The Oxford handbook of capitalism* (pp. 161–203). Oxford University Press.
- Birchall, J., & International Labour Office. (2013). *Resilience in a downturn: The power of financial cooperatives*. Geneva: International Labour Office.
- BIS. (2011). *Basel III: A global regulatory framework for more resilient banks and banking systems*. Bank for International Settlements. <https://www.bis.org/publ/bcb189.pdf>
- Blundell-Wignall, A., Atkinson, P., & Lee, S. H. (2009). The current financial crisis. *OECD Journal: Financial Market Trends*, 2008(2), 1–21.
- Bossone, B. (2001). Do banks have a future? A study on banking and finance as we move into the third millennium. *Journal of Banking & Finance*, 25(12), 2239–2276.
- Buranatrakul, T., & Swierczek, F. W. (2018). Climate change strategic actions in the international banking industry. *Global Business Review*, 19(1), 32–47.
- Calomiris, C. W., & Jaremski, M. (2016). Deposit insurance: Theories and facts. *Annual Review of Financial Economics*, 8, 97–120.
- Camara, N., & Tuesta, D. (2014). *Measuring financial inclusion: A multidimensional index*. BBVA research paper (14/26).
- Campbell, J. L. (2018). 2017 Decade award invited article reflections on the 2017 decade award: Corporate social responsibility and the financial crisis. *Academy of Management Review*, 43(4), 546–556.
- Chen, W., Mrkaic, M., & Nabar, M. (2018). *Lasting effects: The global economic recovery 10 years after the crisis*. <https://blogs.imf.org/2018/10/03/lasting-effects-the-global-economic-recovery-10-years-after-the-crisis/>
- Cole, R. A., Moshirian, F., & Wu, Q. (2008). Bank stock returns and economic growth. *Journal of Banking & Finance*, 32(6), 995–1007.
- Coulson, A. B., & O'Sullivan, N. (2014). Environmental and social assessment in finance. In J. Babbington, J. Unerman, & B. O'Dwyer (Eds.), *Sustainability accounting and accountability* (2nd ed., pp. 142–158). London: Routledge.
- Crotty, J. (2009). Structural causes of the global financial crisis: A critical assessment of the 'new financial architecture'. *Cambridge Journal of Economics*, 33(4), 563–580.
- De Haan, J., & Vlahu, R. (2016). Corporate governance of banks: A survey. *Journal of Economic Surveys*, 30(2), 228–277.
- Dell'Ariccia, G., Igan, D., & Laeven, L. U. (2012). Credit booms and lending standards: Evidence from the subprime mortgage market. *Journal of Money, Credit and Banking*, 44(2-3), 367–384.
- Demirgüç-Kunt, A., & Levine, R. (2009). Finance and inequality: Theory and evidence. *Annual Review of Financial Economics*, 1(1), 287–318.
- Demirguc-Kunt, A., Klapper, L., & Singer, D. (2017). *Financial inclusion and inclusive growth: A review of recent empirical evidence* (Policy research working paper 8040). Washington, DC: World Bank Group.
- Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. *Journal of Political Economy*, 91(3), 401–419.
- FCA. (2020). *Monthly PPI refunds and compensation, financial conduct authority*. <https://www.fca.org.uk/data/monthly-ppi-refunds-and-compensation#:~:text=A%20total%20of%20%C2%A3332.4,2011%20to%20%C2%A338.3%20billion.&text=We%20provide%20monthly%20figures%20on,who%20have%20complained%20about%20PPI>
- FDIC. (2019). Prohibitions and restrictions on proprietary trading and certain interests in, and relationships with, hedge funds and private equity funds. *Federal Register*, 84(220). <https://www.fdic.gov/news/board/2019/2019-08-20-notice-dis-a-fr.pdf>
- Fiordelisi, F., & Molyneux, P. (2010). The determinants of shareholder value in European banking. *Journal of Banking & Finance*, 34(6), 1189–1200.
- Formisano, V., Fedele, M., & Calabrese, M. (2018). The strategic priorities in the materiality matrix of the banking enterprise. *The TQM Journal*, 30(5), 589–607.
- Global Reporting Initiative. United Nations Global Compact and WBCSD. (2015). *SDG Compass: The guide for business action on the SDGs*. Available at https://sdgcompass.org/wp-content/uploads/2015/12/019104_SDG_Compass_Guide_2015.pdf
- Gobat, J. (2012). What is a bank? *Finance and Development*, 49(1), 38–39.
- Haapanen, L., & Tapio, P. (2016). Economic growth as phenomenon, institution and ideology: A qualitative content analysis of the 21st century growth critique. *Journal of Cleaner Production*, 112(4), 3492–3503.
- Hamilton, A. (1781). *Letter from Alexander Hamilton to Robert Morris*, 30th April 1781, Founders Online National Archives. Available at <https://founders.archives.gov/documents/Hamilton/01-02-02-1167>
- Honohan, P. (2004). *Financial sector policy and the poor: Selected findings and issues* (World Bank working paper No 43). Washington, DC: The World Bank.
- Hu, V. I., & Scholtens, B. (2014). Corporate social responsibility policies of commercial banks in developing countries. *Sustainable Development*, 22(4), 276–288.
- Jackson, T. (2009). *Prosperity without growth: Economics for a finite planet*. London: Routledge.
- Klapper, L., El-Zoghbi, M., & Hess, J. (2016). *Achieving the sustainable development goals: The role of financial inclusion*. Washington, DC: CGAP.
- KPMG International and UN Global Compact. (2015). *The SDG industry matrix: Financial services*. https://d306pr3pise04h.cloudfront.net/docs/issues_doc%2Fdevelopment%2FSDGMatrix_FinancialSvcs.pdf
- Kramer, M. R., & Porter, M. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.

- Kupiec, P. H., & Ramirez, C. D. (2013). Bank failures and the cost of systemic risk: Evidence from 1900 to 1930. *Journal of Financial Intermediation*, 22(3), 285–307.
- Levine, R. (1997). Financial development and economic growth: Views and agenda. *Journal of Economic Literature*, 35(2), 688–726.
- Levine, R. (2002). Bank-based or market-based financial systems: Which is better? *Journal of Financial Intermediation*, 11(4), 398–428.
- Llewellyn, D. (1995). Consumer protection in retail investment services: Protection against what? *Journal of Financial Regulation and Compliance*, 3(1), 43–54.
- Llewellyn, D. (1999). *The economic rationale for financial regulation*. London: Financial Services Authority.
- Macey, J. R., & O'Hara, M. (2003). The corporate governance of banks. *Federal Reserve Bank of New York Economic Policy Review*, 9(1), 91–107.
- Mainelli, M., & Mills, S. (2018). *Financial innovations and sustainable development*. Business & Sustainable Development Commission. Z/Yen Group. Retrieved from https://www.longfinance.net/media/documents/BSDC_report.pdf
- Morgan, D. P. (2002). Rating banks: Risk and uncertainty in an opaque industry. *American Economic Review*, 92(4), 874–888.
- Moshirian, F., & Wu, Q. (2012). Banking industry volatility and economic growth. *Research in International Business and Finance*, 26(3), 428–442.
- NGFS. (2019). *First comprehensive report a call for action: Climate Change as a source of financial risk*. https://www.banquefrance.fr/sites/default/files/media/2019/04/17/ngfs_first_comprehensive_report_-_17042019_0.pdf
- O'Sullivan, N., & O'Dwyer, S. (2015). The structuration of issue-based fields: Social accountability, social movements and the Equator principles issue-based field. *Accounting, Organizations and Society*, 43, 33–55. <https://doi.org/10.1016/j.aos.2015.03.008>.
- Okpara, G. C. (2010). Microfinance banks and poverty alleviation in Nigeria. *Journal of Sustainable development in Africa*, 12(6), 177–191.
- Popov, A. (2018). Evidence on finance and economic growth. In T. Beck & R. Levine (Eds.), *Handbook of finance and development* (pp. 63–104). Northampton: Edward Elgar.
- Rajan, R., & Zingales, L. (1998). Financial dependence and growth. *American Economic Review*, 88(3), 559–587.
- Rajan, R., & Zingales, L. (2001). Financial systems, industrial structure and growth. *Oxford Review of Economic Policy*, 17(4), 467–482.
- Scholtens, B. (2006). Finance as a driver of corporate social responsibility. *Journal of Business Ethics*, 68(1), 19–33.
- Scholtens, B. (2009). Corporate social responsibility in the international banking industry. *Journal of Business Ethics*, 86(2), 159–175.
- Schwarcz, S. L. (2017). Too big to fool: Moral hazard, bailouts, and corporate responsibility. *Minnesota Law Review*, 102, 761.
- Spargoli, F., & Upper, C. (2018). *Are banks opaque? Evidence from insider trading* (BIS Working paper no. 697). Bank for International Settlements.
- Stankeviciene, J., & Nikonorova, M. (2014). Sustainable value creation in commercial banks during financial crisis. *Procedia-Social and Behavioral Sciences*, 110, 1197–1208.
- Stephens, C., & Skinner, C. (2013). Banks for a better planet? The challenge of sustainable social and environmental development and the emerging response of the banking sector. *Environmental Development*, 5(0), 175–179.
- Tongurai, J., & Vithessonthi, C. (2018). The impact of the banking sector on economic structure and growth. *International Review of Financial Analysis*, 56, 193–207.
- UNCTAD. (2014). *Investing in the SDGs: An action plan for promoting private sector contributions, Chapter 4*. World Development Report. Available at https://unctad.org/en/PublicationChapters/wir2014ch4_en.pdf
- UNEP. (2016). *Imagining a sustainable financial system – Inquiry* (Working Paper 16/02). http://unepinquiry.org/wp-content/uploads/2016/02/Imagining_a_Sustainable_Financial_System.pdf
- UNEPFI. (2011). *Statement of commitment by financial institutions on sustainable development*. <https://www.unepfi.org/about/unep-fi-statement/>
- UNEPFI. (2018). *Rethinking impact to finance the SDGs. A position paper and call to action prepared by the positive impact initiative*. <https://www.unepfi.org/wordpress/wp-content/uploads/2018/11/Rethinking-Impact-to-Finance-the-SDGs.pdf>
- UNEPFI. (2019). *Principles for responsible banking*. <https://www.unepfi.org/banking/bankingprinciples/>
- Van Griethuysen, P. (2010). Why are we growth-addicted? The hard way towards degrowth in the involuntary western development path. *Journal of Cleaner Production*, 18(6), 590–595.
- Weber, O. (2005). Sustainability benchmarking of European banks and financial service organizations. *Corporate Social Responsibility and Environmental Management*, 12(2), 73–87.
- Weber, O. (2012). Environmental credit risk management in banks and financial service institutions. *Business Strategy and the Environment*, 21(4), 248–263.
- Werner, R. A. (2014a). Can banks individually create money out of nothing? – The theories and the empirical evidence. *International Review of Financial Analysis*, 36, 1–19.
- Werner, R. A. (2014b). How do banks create money, and why can other firms not do the same? An explanation for the coexistence of lending and deposit-taking. *International Review of Financial Analysis*, 36, 71–77.

- Wolde-Rufael, Y. (2009). Re-examining the financial development and economic growth nexus in Kenya. *Economic Modelling*, 26(6), 1140–1146.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.

Base of the Pyramid

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Synonyms

BOP; Bottom of the Pyramid

Description

Base of the Pyramid (also referred to as Bottom of the Pyramid or simply BOP) is a term that refers to the poorest socioeconomic segment that is not well integrated into the formal economy (London and Hart 2011). The term has been popularized by management scholar C.K. Prahalad (2004) (see ► “Pralhad’s “Bottom of the Pyramid””), who argues that the pursuit of profits by private enterprises can alleviate poverty at the base of the economic pyramid. Through the lens of **inclusive capitalism** (Pralhad and Hart 2002), the world’s poorest population is perceived not as victims and recipients of charitable giving but as value-demanding consumers and highly resourceful innovative entrepreneurs (Simanis and Hart 2006). Business ventures at the BOP comprise a broad range of business models designed to target the poorest segments of society (London and Hart 2011). They pursue “a business and development strategy grounded in a synergistic relationship between the generation of economic returns and the solution to social and environmental problems” (London and Hart 2011, p. 4).

Definition of BOP

The origins of the term “bottom of the pyramid” can be traced back to the great depression in the 1930s and president Roosevelt’s radio address about “the forgotten man” at the bottom of the economic pyramid. In its current meaning, the term was introduced by Prahalad and Hart (2002) in their seminal article “The Fortune at the Bottom of the Pyramid” in 2002. The authors described the **world economic pyramid** divided into four tiers. Tier 1 that constitutes the very top of the pyramid comprises 75–100 million affluent consumers – middle- and upper-income people in developed markets and rich elites from the developing countries. The middle of the pyramid, tier 2 and 3, encompasses poor people from the developed countries and middle class from the developing ones. Finally, tier 4, the bottom of the pyramid, refers to the poorest people in the world that constitute the majority (around two-thirds) of global population. Later, some authors proposed to use the term “base” instead of “bottom” because of the negative connotations of the latter (Simanis and Hart 2008).

The literature does not provide precise definition of the bottom tier. Different BOP authors have proposed different per capita income values defining BOP, ranging from \$1500 to \$3000 per annum and \$1 to \$4 per day on purchasing power parity (London and Hart 2011). Thus, as London and Hart (2011) argue, income lines should not be perceived as a rigid definition. Additionally, BOP is not homogenous and can be divided into several segments, such as poverty levels (e.g., extreme, moderate, and relative poverty), urban versus rural locations, or the degree of isolation from mainstream markets (Kolk et al. 2014).

In the light of these inconsistencies, London and Hart (2011) propose to define BOP through its key characteristics:

- The world’s population with the least amount of income
- Not well integrated with the formal capitalist economy
- Living primarily in the informal economy

- Constituting the majority of global population
- Heterogeneous across multiple dimensions

BOP Venture/Business

BOP ventures are defined as revenue-generating enterprises that target the BOP's consumers, sellers, and entrepreneurs. Their objectives include becoming economically self-sustaining and scalable. The two basic types of BOP ventures include those serving BOP consumers and those serving BOP producers.

Despite its size, tier 4 has remained invisible for the corporate sector. Yet, as argued by Prahalad and Hart due to large aggregated buying power of the poor, "low-income markets present a prodigious opportunity" (2002, p. 1) for investment. According to Hart and Christensen (2002), companies engaging at the BOP are not forced to compete against capable competitors over savvy customers but can enjoy competition against non-consumption. Additionally solutions developed in low-income markets are more easily adaptable than models from high-income markets – they can be more easily applied in more places. Originally the concept focused on MNCs as the initiators of BOP businesses. Many of BOP initiatives, however, are led by small, local firms, as well as NGOs and governments (Kolk et al. 2014). BOP businesses span sector and size, often involving cross-sectoral and cross-industry partnerships. Other term to describe BOP venture is inclusive business (see ► [“Inclusive Business”](#) and ► [“Inclusive Innovation”](#)).

Ventures Serving BOP Consumers

Simanis and Duke (2014) identify nine kinds of opportunities for ventures targeted at BOP consumers that often occur simultaneously. Starting with the least and ending with the most complex and resource-consuming, they include:

1. Targeted marketing – messaging strategies focused on illiterate or skeptical consumers that aim at boosting short-term consumption of a product

2. Product redesign – capturing greater market share with product modifications that meet additional needs and increase the overall value proposition
3. Distribution extension – harnessing the existing nontraditional channels that can quickly and easily reach new customers
4. New channel creation – building parallel distribution channel that can penetrate hard-to-reach areas
5. New product development – using present product development capabilities to design an affordable and sustainable product that address an unmet need
6. Conquest a competitor's market – using the company's economies of scale and minor product modifications to outstrip local competitors and capture significant market share where the company has no operations
7. Greenfield market expansion – expansion by tailoring core offering and business model used to serve BOP consumers in one area to meet the needs of similar consumers in a different area
8. New business model development – creating a new business model for company's existing product in order to offer its core functionality to hard-to-reach consumers
9. New market creation – addressing an unmet and latent need among a large population of low-income hard-to-reach consumers

Ventures Serving BOP Producers

Other opportunities relate to building business linkages with BOP producers by engaging local farmers, micro-entrepreneurs, and small business within MNCs' value chains. On the one hand, such business linkages by stimulating job creation, enhancing skills and capacity, and increasing purchasing power contribute to the economic development of the BOP communities. On the other hand, business linkages may translate into competitive advantage, by helping company reach the BOP end consumers more effectively, catalyze innovation, reduce costs, increase flexibility and specialization, and enhance social license to operate. Jenkins et al. (2008) identify three types of opportunities of building business linkages:

1. Buying from BOP partners – sourcing variety of products and services from local suppliers. This form of partnership can help MNCs increase flexibility and reduce costs, as well as increase quality, traceability, and sustainability of supplies contributing to creation of unique product offer and enhancing company's legitimacy.
2. Distributing through BOP partners – partnering with local small and microenterprises to reach target consumers at the BOP. Distribution partnerships allow to overcome challenges related with low sales volumes and/or price points and poor infrastructure that make usage of traditional distribution methods (e.g., big trucks) either cost-ineffective or impossible. Additionally local distributors play a crucial role in marketing of MNCs' products, as they help in building consumer trust and awareness.
3. Selling to BOP partners – delivering products and services, including financial services, communications and information technology, or production equipment, that contribute to the increase of productivity of small and microenterprises at the BOP. Creation of this kind of business linkages often requires product and process adaptation that drives creativity and innovation in MNCs.

Challenges

In order to tap the opportunities presented by the BOP, companies first need to face set of challenges. Tier 4 consumers live mostly in poorly communicated rural areas or urban slums; they are poorly educated and cannot afford good quality products and services sold in developed countries. They live in high-cost microeconomic systems dominated by local monopolies and often operate in the underground economy (Prahalad and Hart 2002). Profits at the BOP cannot be driven by traditional high margins but rather by volume and capital efficiency. Yet, as some (Simanis and Hart 2006) argue, the cost structure and material intensity of MNCs' current business models preclude the introduction of low-cost strategies.

Prahalad and Hart (2002) underline the need to develop commercial infrastructure enabling effective business operations at the BOP (see

► “Prahalad's “Bottom of the Pyramid””). This encompasses creating buying power of the poor by providing access to credit and opportunity for income generation; developing distribution systems and communication links; shaping aspirations; and tailoring solutions to unique needs and problems of local communities. The latter includes addressing severe environmental problems in developing countries as well as completely different set of institutional and cultural factors that the BOP markets are characterized by.

Addressing challenges at the BOP requires innovation in technology, business models, and management processes, as well as wide multilateral partnerships with financial institutions, other companies, local governments, NGOs, and communities (London and Hart 2011; Prahalad 2011; Prahalad and Hart 2002; Simanis and Hart 2006).

Evolution of the BOP Business Concept

BOP 1.0 (See ► “Prahalad's “Bottom of the Pyramid””)

Early literature on BOP as well as the majority of corporate initiatives in this area followed one-direction approach of selling products to the masses of underserved consumers (London and Hart 2011). First generation of BOP (BOP 1.0) strategies has been centered on four dimensions: 1. affordability, building affordable products and services that match cash flows of BOP customers; 2. acceptability, creating culturally acceptable solutions adapted to the unique needs of customers and distributors at the BOP; 3. availability, ensuring availability of products and services for the hard-to-reach customers; and 4. awareness, raising awareness through unconventional advertising media (Anderson and Markides 2007).

However, as some authors (Karnani 2006; van der Klein et al. 2012) argue, the extent to which such activities served the poor remained questionable. The poverty alleviation strategies outlined in BOP 1.0 literature were premised on the consumption-based economic growth theories from the 1950s. Companies have viewed poverty primarily as a question of basic needs such as hygiene, access to drinking water, or electricity

needs (Simanis et al. 2008). Although BOP 1.0 strategies often involved the poor as producers and included income generation component, majority of them were centered on simple income expansion that leads merely to increase in consumption and did not include any forms of empowerment or participation. Simanis et al. (2008) argue that the basic needs thinking is often viewed as a paternalism and cultural imperialism devaluating the cultures and traditions of the poor. As such it may face resistance from local NGOs, governments, and communities, who perceive corporations' engagement at the BOP merely as a smart strategy for selling to the poor. Additionally, in the BOP 1.0 literature, the bottom of the economic ladder has been viewed as a one homogenous market, while as Simanis et al. (2008) note, it is not a market at all but a demographic classification.

BOP 2.0 and the BOP Protocol

In the later stream of BOP, the research focus has shifted from selling to the poor toward co-creating new markets, business models, and technology solutions (London and Hart 2011). Some authors (London and Hart 2011; Simanis et al. 2008) call to perceive local communities not only as consumers and producers but as co-inventors or business partners involved in a process of a deep dialogue and mutual learning. Second generation of BOP strategies (BOP 2.0) has been based on a co-venturing approach that marries “the capabilities and knowledge of corporations with those of the communities and embed the business within the existing socio-cultural institutions” (Simanis et al. 2008, p. 64). MNC takes the lead in the process, but its strength is reinforced by local NGOs, public authorities, as well as smaller, more flexible, innovative, international, and local companies (van der Klein et al. 2012). The role of MNC in poverty alleviation alters “from that of a “development doctor,” who diagnoses the poor’s problem and prescribes the solution, to that of “enterprise facilitator,” who assists the poor in acting on their self-defined aspirations” (Simanis and Hart 2006, p. 43). As this requires an entirely new strategic process and corporate capability,

Simanis and Hart (2008) propose an approach called the Base of the Pyramid Protocol.

The core principles of the BOP Protocol are “mutual value” and “co-creation.” According to the first, each stage of the process must create value for all partners. The latter emphasizes the partner-based relationships with BOP communities. Co-creation not only catalyzes creativity but also ensures cultural fit and environmental sustainability of the business model (Simanis and Hart 2008). The protocol represents a shift from Structural Innovation Paradigm (SIP) toward Embedded Innovation Paradigm (EIP) (Simanis and Hart 2011). While SIP focuses on satisfying consumer needs better, faster, and cheaper than competitors through structural changes to a company’s business system, EIP’s aim is to re-embed consumers and producers back into the society by building cooperative communities. Table 1 presents main differences between the two paradigms.

While SIP is driven by the belief in the unmet needs in the society, EIP focuses on a latent potential within diverse economies. Within SIP, companies compete for customers on the basis of consumption-based value, i.e., value (understood as ratio of quality to price) contained within products and services. EIP, in contrast, aims at creation of relationship-based values – values residing in the community relationships, like fraternity, sense of belonging, excellence, growth, and learning. Finally, within SIP, companies have transactional approach toward stakeholder engagement. External stakeholders are viewed as a source of knowledge, resources, and capabilities that a company needs to assess in order to satisfy consumer needs. The shift toward EIP induces transformational

Base of the Pyramid, Table 1 Comparison of Structural Innovation Paradigm and Embedded Innovation Paradigm

	SIP	EIP
Focus	Latent needs	Latent potential
Value created	Consumption-based	Relationship-based
Stakeholder engagement	Transactional	Transformational

Source: own elaboration

stakeholder engagement that aims at the creation of new stakeholder behavior, habits, and identities necessary for realizing a new enterprise.

Managers involved in BOP initiatives based on the protocol are guided by the following code of conduct (Simanis et al. 2008):

- Creation of businesses that increase earning power, remove constraints, and build potential of local communities
- Equal share in wealth generated by the business
- Use of sustainable technologies
- Promotion of the development of affected communities
- Performance of the business measured in terms of “triple bottom line”
- Addressing negative impacts of the business model
- Sharing the best practices with local partners
- Transparent communication and dialogue with stakeholders
- Commitment to increase community value regardless of the business outcome

In the absence of an existing product market that can be researched, the BOP Protocol uses action-learning techniques for defining business concept and the new value proposition in a low-risk manner. Action learning helps building locally embedded businesses and committed local markets. The protocol consists of three interdependent phases of activity that take approximately 3 years to complete. Phase I: Opening Up includes a company immersion in the community using home stays, recruitment of community team, and business concept co-creation workshops. During the Phase II: Building the Ecosystem project team comprising company and community representatives is formalized. Its aim is to create an initial brand and product/service prototype through intensive action learning that engages the wider community. In the last phase, Phase III: Enterprise Creation, the project team creates a full working business model using small-scale tests and continued action learning within even broader community segment. At this

stage, the aim is also to build local management capacity so that, in the future, community team is able to manage and grow the business independently (Simanis and Hart 2011).

As reported by Kolk et al. (2014), still the vast majority of examples of BOP initiatives provided in the literature engaged the locals as recipients, rather than as co-inventors. Most of BOP ventures reported in the literature view the poor as consumers of existing or adapted products and do not involve co-invention. Examples of initiatives, where the degree of adaptation is significant leading to radical business model innovation, are still rare.

Back to Business Fundamentals

The BOP Protocol methodology was field tested by three ventures: an initial pilot in Kenya by SC Johnson; the DuPont subsidiary, Solae, in India; and a US-based effort on healthcare provision in low-income communities. However, all three tests ended in failure. Some authors argue that the reason for these failures was that the ventures were focused rather on philanthropic efforts and not on profits and growth (Simanis 2012; Simanis and Milstein 2012). The goal of the test projects to develop new business model for BOP markets was nebulous and not linked to any specific business objectives. The original concept of BOP framed through a business lens has undergone a complete inversion with for-profit corporations “rapidly falling from its ranks, and filling their place in an expanding number of government and non-profit organizations” (Simanis and Milstein 2012, p. 82).

Simanis and Duke (2014) argue that BOP ventures in order to be socially beneficial and sustainable over the long term need to focus on profits and make investment decisions basing on their core capabilities and not on social commitment. Simanis and Milstein (2012) propose four changes to management practice at the BOP. First, managers need to drop the term “Bottom of the Pyramid,” which has poverty alleviation focus, and shift, instead, to using the term “Developing and Emerging (D&E) Markets.” According to the authors, using “BOP” term is a risky internal and external communication strategy.

Internally it aligns the venture with corporate philanthropy and not core business. Externally it creates risks for business-focused ventures to be labeled “a poverty wash” (Simanis and Milstein 2012, p. 86). Second, while defining business case for D&E investment, managers should stop focusing on ambitious goals and possibilities for disrupting the entire industry but rather identify concrete and tightly bounded business opportunities that match the already defined objectives and investment parameters of a specific unit in the company. Third, at the field level, before engaging community and co-designing a product, managers need to first identify key business economic drivers, including fixed cost base, wages, price points, gross margins, penetration rates, and customer sales loads. These drivers serve as viability screening criteria for different ideas occurring during product and business model brainstorming sessions. Finally, to evaluate D&E projects, managers should shift from external impact assessment to key business metrics of performance.

Summary

BOP is a management concept introduced by Prahalad and Hart (2002). The idea lying at the heart of it is that the low-income countries represent multitrillion-dollar market full of unmet needs and untapped business opportunities. While developed markets are increasingly saturated and provide limited future growth opportunities, the underserved needs at the BOP offer massive growth potential for multinational corporations (MNCs) (Simanis and Hart 2006).

The concept has evolved in three stages, from a one-directional model focused on selling to the poor (BOP 1.0), through socially-committed ventures based on co-creation partnerships (BOP 2.0), toward strictly business-focused ventures in developing and emerging markets.

Cross-References

► Prahalad’s “Bottom of the Pyramid”

References

- Anderson, J., & Markides, C. (2007, Fall). Strategic innovation at the base of the economic pyramid. *MIT Sloan Research Paper*. <https://doi.org/10.1108/02756660710732611>.
- Hart, S. L., & Christensen, C. M. (2002, Fall). The great leap: Driving innovation from the base of the pyramid. *MIT Sloan Management Review*, 44, 51.
- Jenkins, B., et al. (2008) *Supporting entrepreneurship at the base of the pyramid through business linkages*. International Business Leaders Forum.
- Karnani, A. (2006). The misfortune at the bottom of the pyramid. *Greener Management International*, 51 (Summer), 99–110.
- Kolk, A., Rivera-santos, M., & Rufin, C. (2014). Reviewing a decade of research on the “base/bottom of the pyramid” (BOP) concept. *Business & Society*, 53(3), 338–377.
- London, T., & Hart, S. L. (2011). Creating fortune with the base of the pyramid. In T. London & S. L. Hart (Eds.), *Next generation business strategies for the base of the pyramid. New approaches for building mutual value* (pp. 1–16). Upper Saddle River: Pearson Education.
- Prahalad, C. K. (2004). *The fortune at the bottom of the pyramid. Eradicating poverty through profits*. Upper Saddle River: Pearson Education.
- Prahalad, C. K. (2011). The big picture. In T. London & S. L. Hart (Eds.), *Next generation business strategies for the base of the pyramid. New approaches for building mutual value* (pp. xxvi–xxx). Upper Saddle River: Pearson Education.
- Prahalad, C. K., & Hart, S. L. (2002). The fortune at the bottom of the pyramid. *Strategy + Business*, (26).
- Simanis, E. (2012). Reality check at the bottom of the pyramid. *Harvard Business Review*, (June), 1–6.
- Simanis, E., & Duke, D. (2014, October). Profits at the bottom of the pyramid. *Harvard Business Review*, 1–14. <https://doi.org/10.1017/CBO9781107415324.004>.
- Simanis, E., & Hart, S. (2006). Expanding possibilities at the base of the pyramid: Innovation case discussion: KickStart. *Innovations: Technology, Governance, Globalization*, 1(1), 43–51. <https://doi.org/10.1162/itgg.2006.1.1.43>.
- Simanis, E., & Hart, S. L. (2008). *The base of the pyramid protocol: Toward next generation BoP strategy* (2nd ed.). Ithaca: Center for Sustainable Global Enterprise.
- Simanis, E., & Hart, S. L. (2011). Innovation from inside out. *MIT Sloan Management Review*, 50(4), 9–18.
- Simanis, E., & Milstein, M. (2012). Back to business fundamentals: Making “bottom of the pyramid” relevant to core business. *Field Actions Science Reports*, (Special Issue 4), 82–88.
- Simanis, E., Hart, S., & Duke, D. (2008). The base of the pyramid protocol: Beyond “basic needs” business strategies. *Innovations: Technology, Governance, Globalization*, 3(1), 57–84. <https://doi.org/10.1162/itgg.2008.3.1.57>.
- van der Klein, W., Chevrollier, N., & Collée, L. (2012). *Inclusive innovation. Shared value at the base of the pyramid*. Utrecht: BoP Inc.

Basel Convention

► [Basel Convention on the Control of Hazardous Wastes](#)

Basel Convention on the Control of Hazardous Wastes

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Synonyms

[Basel convention](#)

Definition/Description

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on 22 March 1989 by the Conference of Plenipotentiaries in Basel, Switzerland. It entered into force on 5 May 1992. It is signed by 187 countries (Basel Convention 2019a).

The main objective of the Basel Convention is to “protect human health and the environment against the adverse effects of hazardous wastes” (UN 1992). It is the first international legal instrument that provides legally binding rules for international hazardous waste trade and management.

The scope of application of the Convention covers wastes defined as “hazardous wastes” based on their origin and composition, as well as household waste and incinerator ash waste (UN 1992). The principle aims of the Convention are the reduction of hazardous waste generation, reduction of transboundary hazardous waste movement, and regulation of the permitted transboundary hazardous waste movement (Kummer Peiry 2013).

In addition to the Convention there are two supplementary documents that are attached to it, and that parties of the Convention can be a part of. The first is the Basel Protocol on Liability and Compensation, which was adopted on 10 December 1999 (Basel Convention 2019b) after the Fifth Conference of Parties (COP-5) that took place in Basel, Switzerland (Basel Convention 2020c). The second is the Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, also known as the Ban Amendment, adopted in 1995, signed by 97 countries (Basel Convention 2019c) in Geneva on 22 September 1995, and entered into force on 5 December 2019. The Convention’s main purpose is to promote environmentally sound waste management (UN 1992).

The last amendment of the Basel Convention is to enter into force in 2021 and is concerning plastic wastes (Basel Convention 2020b). The Plastic Wastes Amendments were adopted at the 14th COP of the Basel Convention in 2019.

The Basel Negotiation Process

The issue of international transport of hazardous wastes became a topic of discussion in the 1980s with its culmination being a case of transportation and storage of toxic waste in Nigeria where a number of people were injured and toxic waste was spilled into the environment (Evans 1996). The debate over illegal transboundary traffic in toxic waste reached its peak in 1988 when media reports on incidents involving illegal dumping of toxic waste from industrialized nations in developing countries were spiking up international and national society (Kummer Peiry 2010). The issue became internationally significant and was taken up by different institutions – governments, inter-governmental organizations, and non-governmental organizations (Kummer Peiry 2010).

Based on a joint proposal by Switzerland and Hungary, in June 1987, the Governing Council of UNEP mandated the Executive Director to convene a working group for elaborating a global

convention on the control of transboundary movements of hazardous wastes. The negotiation process was endorsed by the UN General Assembly (GA) (Kummer Peiry 2010).

The Basel Convention was signed in the end of the Conference of Plenipotentiaries on the Global Convention on the Control of Transboundary Movements of Hazardous Wastes, that took place from 20 to 22 March 1989 in Basel, and that was attended by 116 representatives of states (Basel Convention 2019a). The conference was the final event of the series of negotiations that took place between 1987 and 1989 in relation to developing a mechanism for environmental management of international import and export of hazardous waste (Kummer Peiry 2013). The Basel Convention was designed and adopted as a measure for mitigating the negative effects of the so-called “toxic trade.”

The Basel Convention was closed for signature on 22 March 1990. It entered into force on 5 May 1992 (Kummer Peiry 2010). As of September 2019, there are 187 parties to the Basel Convention (Basel Convention 2019d).

Key Provisions of the Basel Convention

The Basel Convention is a legally binding international treaty, and its provisions are obligatory for countries that have signed and ratified the document. Each country has the right to make declarations or reserves on certain provisions, and some countries have made such. A formal objection has been made by Italy, which stated that “no provision of this Convention should be interpreted as restricting navigational rights recognized by international law. Consequently, a State party is not obliged to notify any other State or obtain authorization from it for simple passage through the territorial sea or the exercise of freedom of navigation in the exclusive economic zone by a vessel showing its flag and carrying a cargo of hazardous wastes” (Basel Convention 2020d).

The Convention provides a regulatory system for management of waste import and export. It is founded on the concept of prior informed consent, so it establishes the rule for countries to agree explicitly (written consent) to an international waste trade and management procedure before a transfer is made (UN 1992).

The scope of the Convention covers a range of waste types defined as “hazardous wastes,” which are defined as such based on their origin or composition, and their characteristics, and are separated from “other wastes,” which are not meeting the Convention’s criteria for “hazardous wastes” (UN 1992).

The principal aims of the Convention, as author Katharina Kummer sums up, are as follows:

- The reduction of the generation of hazardous waste and promotion of environmentally sound management of hazardous waste in every place of disposal.
- Restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management.
- Foundation of the regulatory system that is to be applied to cases where transboundary movements of hazardous wastes are permissible (Kummer 1998).

The Convention provides general provisions requiring states to observe the fundamental principles of environmentally sound waste management (Article 4) (UN 1992).

It establishes the borders where hazardous waste cannot be exported to (UN 1992). It also regulates matters of action in the event of illegal transport and import of hazardous waste. It attributes responsibility to the states involved.

The Convention provides the foundations of management of international waste transfer. It establishes the minimum of regulation that is to be kept by countries. Following international legal principles, all bilateral or multilateral agreements on hazardous waste management with other

parties or with non-parties are encouraged provided that they are “no less environmentally sound” than the Convention’s provisions (Article 11) (UN 1992).

Non-trade issues for cooperation between parties are handled as well. Ranging from information exchange to technical assistance, the Convention provides legal foundations for the development of such a system (Article 10 and 13) (UN 1992). The establishment of regional centers for training and technology transfer is provided as well. According to the official webpage of the Convention, 14 centers have been established (Basel Convention 2020a).

The Convention emphasizes on the need for assistance (including technical assistance) to developing nations (UN 1992). The idea behind this is that most developing countries do not have the technologies to manage hazardous waste properly, but they are receiving a large proportion of that waste, despite them more often being the importers of waste in global “toxic trade.”

The Secretariat of the Convention, which is the main administrative structure that supports the implementation of the Convention, facilitates this cooperation (UN 1992). It is situated in Geneva, Switzerland. The Executive Secretary of the Secretariat is Katharina Kummer Peiry, who has occupied this position since 2011 (Basel Convention 2020e).

Global Governance of Toxic Trade

In the early 2000s political discussion over the 1995 Ban Amendment of the Convention, which banned all waste exports from OECD to non-OECD countries, was essential to the governance of “toxic trade” (Kummer Peiry 2013). After a protracted series of efforts by some developed countries to weaken or undermine the Ban Amendment including a bid to interpret the Convention to delay entry into force, at the Tenth Conference of the Parties in 2009 it was decided that the Ban Amendment would enter into force with 3/4 of the Parties present and voting at the

time of its adoption in 1995 (BAN and IPEN 2020). In 2019 with St. Kitts and Nevis and Croatia being the final two ratifying countries to complete the required number for entry into force of the amendment, the Ban Amendment entered into force on 5 December (BAN and IPEN 2020).

The Basel Convention has been considered as one of the more important legal instruments that promote the world polity of international problem-solving and governance (Gareau and Lucier 2018). Despite being a traditional international treaty, signed and implemented by nation states, the provisions of the document actually have a wide spectrum of stakeholders including nongovernmental organizations, industry actors, and the general public.

Despite that environmental nongovernmental organizations (NGOs) have been advocating the complete prohibition of shipments of all waste materials from North to South (Evans 1996), the shift in perception of waste as raw material resources made them more willing to conditionally acknowledge that under proper management waste trade can be environmentally and economically sound and can create opportunities for “green” business (Kummer Peiry 2013). In recent years emerging economies became noticed as new players with an interest in the potential of green business opportunities and jobs stemming from waste raw material production and management (Kummer Peiry 2013).

The concept of environmentally sound management that the Convention provides thus became a key factor for global governance of this type of international trade. The Basel Convention requires that transboundary shipments of hazardous wastes be sent only to facilities with environmentally sound management, with “environmentally sound management” being defined in general terms (Alter 2000, p. 115). Specific responsibilities on the operator of a facility are placed, and environmentally sound management practices are required to comply not only with general international regulation but with local environmental regulations and standards as well (Alter 2000).

In recent years the Basel Convention has become a significant instrument of international law to regulate trade of ever more important wastes such as plastic wastes (Basel Convention 2020b), and e-wastes (Khan 2016). With the adoption of the Plastic Wastes Amendments and the entry into force of the Ban Amendment, the plastic and e-waste regulation on an international level is hoped to provide efficient ways for combatting illegal international trade of such materials. With watchdog environmental organizations such as the Basel Action Network (BAN) publishing investigations on both how e-waste is traded among nations (which they detected is sometimes illegal) and the damaging effects of e-waste to environment and people (BAN 2019), the Ban and Plastic Waste Amendments' effective international implementation becomes of crucial importance. The amendment that regulates the transboundary shipments of plastic waste entered into force on 1 January 2021 (Synergies 2021b).

Efforts to create a global governance framework for waste management take form of cooperation between actions of the Basel Convention, Stockholm Convention on Persistent Organic Pollutants, and the Rotterdam Convention on Pesticides and Industrial Chemicals (Synergies 2021a).

Despite efforts to provide efficient forefront regulation to international trade of waste, there still has been some criticism toward the governance regime that the Basel Convention establishes. Opinions of criticism have included the idea that the Convention is impeding international trade and creating national autarky in relation to waste management. From the viewpoint of free trade supporters in international economics, this is considered an obstacle for efficiency and essentially leads to higher costs for waste management on both the national and global level (Evans 1996).

References

- Alter, H. (2000). Environmentally sound management of the recycling of hazardous wastes in the context of the Basel Convention. *Resources, Conservation and Recycling*, 29(1–2), 111–129. [https://doi.org/10.1016/S0921-3449\(99\)00061-0](https://doi.org/10.1016/S0921-3449(99)00061-0).
- Basel Action Network (BAN). (2019). Watchdog group uses GPS trackers to discover illegal electronic waste exports from Europe to Africa and Asia Retrieved at <https://www.ban.org/news/2019/2/6/gps-trackers-discover-illegal-e-waste-exports-to-africa-and-asia>. Accessed 23 Sept 2020.
- Basel Action Network (BAN) and IPEN Network (IPEN). (2020). The entry into force of the Basel Ban Amendment, a guide to implications and next steps. Retrieved at <https://ipen.org/documents/basel-ban-amendment-guide>. Accessed 23 Sept 2020.
- Basel Convention. (2019a). History of the negotiations of the Basel Convention. Retrieved at <http://www.basel.int/TheConvention/Overview/History/Overview/tabid/3405/Default.aspx>. Accessed 12 Oct 2019.
- Basel Convention. (2019b). Basel protocol on liability and compensation. Retrieved at <http://www.basel.int/TheConvention/Overview/LiabilityProtocol/tabid/2399/Default.aspx>. Accessed 12 Oct 2019.
- Basel Convention. (2019c). The Basel Convention Ban Amendment. Retrieved at <http://www.basel.int/Implementation/LegalMatters/BanAmendment/Overview/tabid/1484/Default.aspx>. Accessed 12 Oct 2019.
- Basel Convention. (2019d). History of the negotiations of the Basel Convention. Retrieved at <http://www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx#enote1>. Accessed 12 Oct 2019.
- Basel Convention. (2020a). The Basel Convention regional and coordinating centres. Retrieved at <http://www.basel.int/Partners/RegionalCentres/Overview/tabid/2334/Default.aspx>. Accessed 12 June 2020.
- Basel Convention. (2020b). Basel Convention Plastic Waste Amendments. Retrieved at <http://www.basel.int/Implementation/Plasticwaste/PlasticWasteAmendments/Overview/tabid/8426/Default.aspx>. Accessed 12 June 2020.
- Basel Convention. (2020c). Fifth meeting of the conference of the parties to the Basel Convention. Retrieved at <http://www.basel.int/TheConvention/ConferenceoftheParties/Meetings/COP5/tabid/6150/Default.aspx>. Accessed 12 June 2020.
- Basel Convention. (2020d). Parties to the Basel Convention on the control of transboundary movements of hazardous wastes and their disposal. Retrieved at <http://www.basel.int/?tabid=4499>. Accessed 20 Aug 2020.
- Basel Convention. (2020e). Meet the executive secretary of the Basel Convention. Retrieved at <http://archive.basel.int/convention/secretariat.html>. Accessed 23 July 2020.
- Evans, N. R. (1996). The Basel Convention: A toxic treaty for a toxic trade? *Economic Affairs*, 16(5), 17–23. <https://doi.org/10.1111/j.1468-0270.1996.tb00563.x>.
- Gareau, B. J., & Lucier, C. A. (2018). Neoliberal restructuring of the world polity: The weakening of the Montreal Protocol and Basel Convention in historical perspective. *Environmental Sociology*, 4(3), 325–342. <https://doi.org/10.1080/23251042.2018.1436893>.

- Khan, S. A. (2016). E-products, E-waste and the Basel Convention: Regulatory challenges and impossibilities of international environmental law. *Review of European, Comparative & International Environmental Law*, 25(2), 248–260. <https://doi.org/10.1111/reel.12163>.
- Kummer, K. (1998). The Basel Convention: Ten years on. *Review of European Community and International Environmental Law*, 7(3), 227–236. <https://doi.org/10.1111/1467-9388.00154>.
- Kummer Peiry, K. (2010). *The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal*. United Nations Audiovisual Library of International Law. United Nations. <https://legal.un.org/avl/ha/bcctmhwd/bcctmhwd.html>. Accessed 10 June 2020.
- Kummer Peiry, K. (2013). The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal. *Proceedings of the Annual Meeting (American Society of International Law)*, 107, 434. <https://doi.org/10.5305/procanmeetasil.107.0434>.
- Synergies Between the Basel, Stockholm and Rotterdam Conventions (Synergies). (2021a). History of the synergies process. Retrieved at BRS Conventions > Decision-making > Overview > Synergies Process (brsmeas.org). Accessed 02 Feb 2021.
- Synergies Between the Basel, Stockholm and Rotterdam Conventions (Synergies). (2021b). Basel Convention's Plastic Waste Amendments become mandatory for 186 States. Retrieved at BC Plastic Waste Amendments (brsmeas.org). Accessed 02 Feb 2021.
- United Nations (UN). (1992). *Basel Convention on the control of transboundary movements of hazardous wastes and their disposal*. United Nations Treaty Collection. Retrieved at https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtds_g_no=XXVII-3&chapter=27&clang=_en. Accessed 12 Oct 2019.

Further Readings

- Louka, E. (2006). *International environmental law: Fairness, effectiveness, and world order*. Cambridge: Cambridge University Press.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal

- [Basel Declaration on the Control of Hazardous Wastes \(Basel Convention\)](#)

Basel Declaration on the Control of Hazardous Wastes (Basel Convention)

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Synonyms

[Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal](#)

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Introduction

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (hereinafter referred to as “the Basel Convention”) is a child of necessity that came into being after series of dialogue between the industrialized nations and the third world countries on the sound management of hazardous wastes (Andrews 2009). Prior to the birth of the Convention, especially in the early 1980s,

international trade in hazardous wastes had thrived tremendously as most developed countries shipped their toxic wastes to less developed countries for disposal. Importation of toxic wastes from abroad became a big international business and indeed flourished as many of the impoverished developing countries especially in Africa were desperate for foreign currency (Krueger 2001; Andrews 2009). Poor public environmental awareness in the developing countries had made such cross-border transport of hazardous wastes easy. Thus, multiple stories of the misadventure of “toxic wastes trade” such as the Koko village and Khian Sea waste disposal incidents seized front page news across the world. This was the basis upon which the Basel Convention was negotiated to combat international shipment of hazardous wastes (Andrews 2009).

Waste is adjudged to be hazardous if it exhibits some of the following characteristics: explosive, corrosive, flammable, oxidizing, poisonous, infectious, and toxic, or contain one or more of the following constituents: arsenic, cadmium, strong acids and bases, cyanide, lead, mercury, and persistent organic pollutants, etc. Notable sources of hazardous wastes include but not limited to clinical waste, radioactive waste, metals, and plastics. Other sources are wastes from the production of drugs, medicine, organic solvent, ink, dyes, paint, adhesive, glue, and wood preservatives (Okaru 1993; UNEP 1989). The Basel Convention however excluded radioactive wastes, incinerator ash, infectious waste, as well as poisonous fertilizer like DDT from the broad definition of hazardous waste. Improper handling and disposal of these wastes has the potential of causing immediate or long-term impacts on human health and the environment, usually through leakages of toxins into groundwater, soil, waterways, and the atmosphere (Andrews 2009; Choksi 2001).

History

In the 1970s and 1980s, there was a drastic increase in environmental awareness and the

understanding of the harmful effects of hazardous wastes on human health and the environment. Thus, the developed countries had begun to enact stringent regulations on the disposal of hazardous waste leading to the escalation of treatment and disposal cost. In an attempt to seek cheaper alternative elsewhere and to bank on the nonexistence of environmental awareness and enforcement mechanisms mostly in the developing countries, the industrialized countries had turned to Africa and Eastern Europe for the dumping of waste that were known to have negative impacts on human health and the environment (Hackett 1990). Mindful of the growing threat posed by the continuous generation and transboundary movement of hazardous waste, the international community launched treaty negotiations under the authority of the United Nations Environmental Program, which eventually led to the adoption of the Basel Convention on the Control of Transboundary Movement of Hazardous Waste and Their Disposal in March 1989 (Peiry 2010; Andrews 2009). High profile cases of hazardous waste dumping in developing countries include: the storage of 8000 improperly marked hazardous waste in Koko, Nigeria, that eventually leaked to the environment as well as exportation of toxic wastes to communities in Zimbabwe, Congo, Liberia, Gabon among other nations without the consent of the host nations (Andrews 2009; Okaru 1993).

Originally, the conception of Basel Convention was to find a meeting point for the conflicting views of nations which had supported the implementation of a complete ban of transboundary trade in hazardous wastes and those which hold the “no ban” view. Here, many developing nations have contended and shared the view with European Union (EU) and alliance of Environmental NGOs that banning trade in hazardous wastes will best ensure that industrial nations deal with their wastes locally than shipping them to developing nations which often lack the capacity to manage them (Hackett 1990). On the contrary, many of the non-EU industrialized nations aligned with a few but important developing nation including India and Pakistan to oppose the ban arguing that a total ban will not serve the best interest of the global

environmental and economic development. Thus, in reconciling the opposing views, the Convention chose to regulate the trade in hazardous waste rather than implementing a total ban (Andrews 2009; Peiry 2013).

Issues of regulation of hazardous wastes have been on top of the global environmental agenda since the early 1980s, as one of the three issues of prime concern identified and adopted by the Governing Council of the United Nations Environment Programme (UNEP) on November 6, 1981, in the Montevideo Program on Environmental Law. However, the Basel Convention was adopted on March 22, 1989, and came into force on May 5, 1992, following negotiations that lasted between 1987 and 1989. There are 187 parties to the Basel Convention (UNEP/SBC 2002).

Objectives and Key Provisions of the Convention

The overarching objective of the Basel Convention is hinged on the need to protect human health and the environment and provide solutions to most of the pressing issues associated with the transboundary movement of hazardous waste (Andrews 2009). This objective is built on three targets: (i) minimization of the volume of hazardous wastes generated; (ii) limitation of the amount of cross-border movement of toxic wastes; and (iii) promotion of Environmentally Sound Management (ESM) of hazardous waste (Peiry 2010).

To particularly achieve these targets, several prohibitions are designed to ensure that hazardous wastes are not exported to Antarctica, a state not party to the Convention or a nation in which importation of hazardous waste has been banned. Article 4(5), for example, totally prohibits trade in hazardous wastes between the party and nonparty States to the Convention, while Article 4 reiterates the right of every party not to allow the importation of wastes, whether toxic or not, into its territory. However, provisions were made to allow parties to go into bilateral and multilateral agreement on hazardous waste management, provided

that such agreements are in tune with the Environmental Sound Management principles of the Convention. This provision is entrenched in Article 4(9) where the Convention established three conditions under which transboundary movement of hazardous wastes and other wastes are permitted. Furthermore, where such transboundary trade wastes must take place, the procedure of Prior Informed Consent (PIC) must be followed under the principle of ESM. The PIC as implied in Article 6 requires that the waste generator (i.e., the organization or state of origin) must notify in writing, the relevant authority in the waste receiving states well beforehand, informing them of the nature and characteristics of the waste to be shipped and all parties involved (Andrews 2009; UNEP 1989).

Basel Ban Amendment

Following the adoption of the Basel Convention, the underlying factor that led to its birth came to the fore again. This time some countries of the global south once again aligned with some environmental NGOs and argued that the Convention had not effectively regulated the transboundary trade of wastes (Goldberg et al. 2019). Though the Convention prohibits the shipment of hazardous wastes in Antarctica, it only requires the “Prior Informed Consent” for export to other destinations in the world. Traders in wastes have consistently exploited the recycling option to justify shipment of toxic wastes to developing countries. This was the premise upon which the Bamako Convention was adopted. Thus, the coalition calls for a complete ban of shipment of hazardous wastes to the developing countries (Andrews 2009; Krueger 2001).

At the Conference of Parties (COP) of the Convention in 1995, several EU countries joined the coalition of the developing countries and environmental NGOs and led the adoption of an amendment to the Convention, otherwise known as “the Basel Ban Amendment.” However, the amendment cannot become effective except it is ratified by three-fourths of the parties to the

Convention (UNEP 2019). Croatia submitted her document of ratification on September 6, 2019, and became the 97th State to do so and on December 5, 2019 (90 day after the receipt of instrument of ratification by at least three-fourths of the parties), in accordance with Article 17(5) of the Convention, an amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal entered into force. The Basel Ban Amendment prohibits the movement of hazardous wastes for any reason from a list of industrialized countries (mostly OECD countries) to developing countries (Goldberg et al. 2019; UNEP 1989).

Summary

The Basel Convention is the only universal treaty on the management of waste. The Convention which was negotiated in 1989 and entered into force in 1992 was became necessary following growing reports of illegal international trade in hazardous wastes resulting in shipments mainly from industrialized countries to the developing ones. Thus, the primary goal of the Basel Convention was to protect human health and environment through the regulation of transboundary movement of toxic wastes. However, after the Convention had entered into force, some developing countries argued that, despite the adoption of the Convention, transboundary shipment of wastes still flourished since traders in wastes only require the “Prior Informed Consent” to ship their wastes across borders. Backed by many countries from the European Union and some NGOs, these countries therefore negotiated for a total prohibition of shipment of hazardous wastes to the developing countries, a move that led to an amendment to the Basel Convention termed “the Basel Ban Amendment” in 1995.

Cross-References

- [Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal](#)

References

- Andrews, A. (2009). Beyond the ban – can the basel convention adequately safeguard the interests of the world’s poor in the international trade of hazardous waste? *Law Environment and Development Journal*, 5 (2), 167–184. Retrieved from <http://www.lead-journal.org/content/09167.pdf>.
- Choksi, S. (2001). The basel convention on the control of transboundary movements of hazardous wastes and their disposal: 1999 protocol on liability and compensation. *Ecology Law Quarterly*, 28(2), 509–539. Retrieved March 12, 2020, from www.jstor.org/stable/24114136.
- Goldberg, A., Hagen, P., LaMotte, R., & Meng, D. (2019). Basel ban amendment to restrict international trade in hazardous recyclables. Retrieved March 8, 2020, from Beveridge & Diamond: <https://www.bdlaw.com/publications/basel-ban-amendment-to-restrict-international-trade-in-hazardous-recyclables/>
- Hackett, D. P. (1990). An assessment of the basel convention on the control of transboundary movements of hazardous wastes and their disposal. *American University International Law Review*, 5(2), 291–323.
- Krueger, J. (2001). The basel convention and the international trade in hazardous wastes. In O. S. Stokke & Ø. B. Thommessen (Eds.), *Yearbook of international co-operation on environment and development 2001/2002* (pp. 43–52). London: Earthscan Publications.
- Okaru, V. O. (1993). The basel concention: Controlling the movement of hazardous wastes to developing countries. Fordham. *Environmental Law Review Report*, 4(2), 137–165. Retrieved March 12, 2020, from www.jstor.org/stable/44174465.
- Peiry, K. K. (2010). Basel convention on the control of transboundary movements of hazardous wastes and their disposal. *United Nations Audiovisual Library of International Law* (Basel 1989). Retrieved March 12, 2020, from https://legal.un.org/avl/pdf/ha/bcctmhwd/bcctmhwd_e.pdf
- Peiry, K. K. (2013). *The basel convention on the control of transboundary movements of hazardous wastes and their disposal: The basel convention at a glance* (Vol. 107, pp. 434–436). Cambridge University Press. <https://doi.org/10.5305/procanmeetasil.107.0434>.
- UNEP. (1989). Basel convention on the control of transboundary movements of hazardous wastes and their disposal. Retrieved March 5, 2020, from ECOLEX: <https://www.ecolex.org/details/treaty/basel-convention-on-the-control-of-transboundary-movements-of-hazardous-wastes-and-their-disposal-tre-001003/>
- UNEP. (2019). *Entry into force of amendment to UN treaty boosts efforts to prevent waste dumping*. Retrieved March 5, 2020, from UNEP/Basel Convention: <http://www.basel.int/Default.aspx?tabid=8120>
- UNEP/SBC. (2002). *Minimizing hazardous wastes: A simplified guide to the basel convention*. Retrieved November 21, 2019, from United Nations Environment Programme: <https://www.ecolex.org/details/literature/minimizing-hazardous-wastes-a-simplified-guide-to-the-basel-convention-mon-091113/>

Basel Recommendations on Corporate Governance Principles for Banks

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Synonyms

Corporate governance principles

Definition

The Basel Recommendations on Corporate Governance Principles for Banks are a set of high-level guidelines that provide standards on how banks should approach establishing sound and transparent decision making and risk management structures and processes (BIS 2015). Bank governance standards aim to enhance bank stability and the confidence that shareholders and stakeholders, such as creditors have in banks (Becht et al. 2011). The Basel Recommendations on Corporate Governance principles for Banks are published by the Basel Committee for Banking Supervision (BCBS) that is headquartered at the Bank for International Settlements in Basel, Switzerland. As banks play a key role in channeling funds to productive investments and in facilitating payments, good governance in banks is instrumental in promoting sustainable development and in preserving natural systems and social stability.

Introduction

Following the 2008 global financial crisis governance weaknesses in banks, especially in the case of the largest banks, were widely cited as

fundamental flaws in financial systems that threatened sustainable growth (Walker 2009; Kirkpatrick 2009). Subsequently, national governments and the international community, including the Basel Committee on Banking Supervision (BCBS), the Organisation for Economic Corporation and Development (OECD), and the Financial Stability Board (FSB), have taken steps to foster robust standards in corporate governance. The 2015 Basel Recommendations on Corporate Governance (henceforth Basel Recommendations) are part of the broader international efforts to promote prudent management and mutually beneficial engagement with stakeholders that will support long term success and stability in banking. Revised Principles of Corporate Governance issued by the OECD are another part of these efforts (OECD 2015). The International Monetary Fund identified a weak global financial architecture as another failure that, together with the corporate governance shortcomings of banks, contributed to the widespread instability that accompanied the 2008 global financial crisis (IMF 2009). The term global financial architecture refers to the network of international financial institutions (IFIs), policy initiatives and rules that facilitate financial stability and the smooth flow of funds at a transnational level. The Basel Recommendations join other efforts to provide a more robust global financial architecture that will maintain financial sustainability, support economic growth, and foster stable and inclusive societies.

Engagement with the sustainable development agenda focuses the attention of businesses on stakeholders and relational concerns (Steuer et al. 2005; Leal Filho and Brandli 2016). This focus puts both relationships and transactions at the heart of business decisions that focus on long-term success. Corporate governance involves a set of relationships between a company's management, its board, its shareholders, and other stakeholders (OECD 1999). This view of corporate governance that emphasizes relationships has been adopted by the BCBS in the corporate governance principles that it provided to banks as recommendations.

The principles that the BCBS recommends are not legally binding on any national government. They are issued by the BCBS in line with the forum's mandate to enhance financial stability by

strengthening the regulation, supervision, and practices of banks. The BCBS' approach of using principles to provide guidelines that will influence the behavior of banks has many advantages (Black et al. 2007; Ford 2010). A principles-based approach allows banking regulators to set the high-level goals and outcomes that banks are to achieve. Furthermore, this approach gives the banking industry itself the responsibility of specifying the processes and details that will achieve the outcomes that regulators require. The flexibility that principles afford to banks can allow each bank to make decisions that are in line with its characteristics. Banks vary in terms of size, risk profile, and complexity and these differences give rise to different governance requirements. This flexibility is often presented as one of the advantages of principles-based regulation. Alexander (2009) points out that principles shift the focus of regulators and supervisors away from the strict application of prescriptive rules to allow for a closer look at the effectiveness of compliance processes. As with all regulatory approaches, the use of principles has limitations. By focusing on outcomes instead of prescribing rules, a principles-based approach can lead to a lack of certainty. Another concern about principles-based regulation is that it may even encourage regulatory creep – a situation where regulators push the boundaries of regulation and their scrutiny into areas that are not subject to regulatory requirements (Black et al. 2007). Recognizing the benefits and the limitations of both rules and principles, Arjoon (2006) argues that effective and ethical corporate governance requires a combination of both approaches.

The Basel Committee on Banking Supervision and Bank Governance

The Basel Committee on Banking Supervision (BCBS) was set up in 1974 and comprises representatives of central banks and supervisors from several countries. This international standard setting body and forum is based at the Bank for International Settlements in Basel, Switzerland. The BCBS has published several international

banking standards and is best known for the prudential standards embodied in the Basel Capital Adequacy Accord. The BCBS started setting international guidelines and standards on corporate governance for banks in September 1999 (BIS 1999a). This publication was titled “Enhancing Corporate Governance in Banking Organisations” and was issued shortly after the OECD published a set of corporate governance standards and guidelines in June 1999 (BIS 1999a; OECD 1999). The OECD's standards were aimed at governments to support stock exchanges, investors, businesses, and other entities that were involved in establishing good corporate governance systems and practices. Since 1999, the BCBS has continued to review and revise its advice on corporate governance to keep abreast of developments and emerging trends in the banking sector.

The motivation for the BCBS to issue corporate governance guidelines for banks was to take account of the unique elements of banks that need to be recognized in corporate governance and to also provide support for the critical role good corporate governance plays in the proper functioning of banking supervision. Banks are deemed to have a fiduciary duty that goes beyond their obligation to shareholders and extends to multiple stakeholders such as depositors, creditors, bondholders, the society, and the environment (Macey and O'Hara 2003; De Haan and Vlahu 2016). Detecting and satisfying the expectations of these stakeholders in a way that creates shared value is a clear challenge for banks from strategic to operational levels (Formisano et al. 2018). Public confidence in banks is essential to maintain economic growth, financial stability, and sustainability. Good corporate governance would contribute significantly to incentivizing banks' managers and owners to undertake risk prudently, at levels that would not lead to instability or create social costs for other stakeholders and the wider economy (Alexander 2006).

The BCBS explicitly states that one group of bank stakeholders for whom the quality of bank governance has practical implications is bank supervisors. Supervisors have a mandate to mitigate the adverse effects of banks' activities and limit systemic risk. They achieve these goals by

evaluating banks' activities, by promoting good governance in banks, and by establishing the expectations for corporate governance. It is not surprising that following the 2008 global financial crisis international financial institutions like the BCBS have increased their focus on risk management, on reinforcing the oversight and risk governance role of bank boards and board committees, and on strengthening accountability and internal controls.

History and Development of the Basel Recommendations

The 1999 corporate governance guidelines issued by the BCBS targeted banking supervisors globally, with the aim of providing a tool for supervisors to promote good corporate governance practices among banks (BIS 1999a). Bank supervisors are responsible for checking that a bank is properly governed and for highlighting any shortcomings in bank's corporate governance practices to senior management. Prior to publishing these guidelines, the BCBS had issued publications on the management of interest rate risk, the management of credit risk, bank transparency, and internal control systems which highlighted and reinforced the importance of corporate governance to banks' strategies and techniques (BIS 1997, 1998a, b, 1999b). The 1999 corporate governance guidelines identified and set out seven areas of good corporate governance practice but did not refer to these explicitly as principles. The guidelines related to setting and communicating strategic objectives and corporate values; setting and enforcing lines of responsibility and accountability; board member qualifications and independence from senior management; senior management oversight; internal and external auditors; compensation and transparency of corporate governance. While noting the primary responsibility for corporate governance rests with the board and senior management, the important role of other players, such as governments, stock exchanges and securities regulators, auditors, and trade associations, in implementing good corporate governance is also acknowledged in the

guidelines. The 1999 corporate governance paper was divided into three clear sections titled practices, supervisors, and environment, respectively.

Following the OECD's reissue of a set of corporate governance principles in 2004, the BCBS revised its own guidelines in 2006 (OECD 2004; BIS 2006). The 2006 version was issued to both banking organizations and supervisors. The revised guidelines also paid specific attention to complex banking organizations and financial conglomerates that operate across jurisdictions and across several lines of business which results in them having structures that are not transparent. The 2006 publication paper followed a similar structure to the 1999 paper. Section 1 presented eight distinct principles; section 2 considered the role of supervisors; and section 3 commented on promoting an environment that is conducive to sound corporate governance (BIS 2006).

The 2008 global financial crisis acted as a catalyst of the release of the first post-crisis version of the BCBS corporate governance guidelines in 2010 (BIS 2010). The crisis revealed several corporate governance failures and weaknesses in banks. Kirkpatrick (2009) highlighted several areas of weakness that had contributed to the crisis. The flaws included weaknesses in risk management systems; compensation and incentive systems that encouraged risk taking; ineffective board oversight; gaps in disclosure and accounting standards and a flawed credit rating process. In response to the weaknesses identified, a key focus of the BCBS was curbing short-termism and excessive risk taking in banking. The principles were revised and expanded to 14 principles. These principles were set out in six different sections as follows:

- Section A: Board Practices – Principles 1 to 4 (overall responsibilities, qualifications, structure, group structures)
- Section B: Senior Management – Principle 5 (consistency of activities with risk appetite and strategy)
- Section C: Risk Management and Controls – Principles 6 to 9 (effective internal controls and risk, management function including a Chief

Risk Officer or equivalent, risk identification and monitoring, robust risk communication and reporting, use of work conducted by internal auditors, external auditors and internal controls)

Section D: Compensation – Principles 10 and 11 (design, operation and review of compensation systems, alignment between compensation and risk)

Section E: Complex or Opaque Structures – Principles 12 and 13 (board and senior management knowing and understanding structures and associated risks, understanding the risks of special purpose structures and jurisdictions that may impede transparency and steps taken to mitigate these risks)

Section F: Disclosure and Transparency – Principle 14 (transparency of governance to shareholders and stakeholders)

This breakdown shows that 8 out of the 14 principles are in the areas of board practices and risk governance. The guidelines were strengthened on the role, qualifications, and composition of boards and board oversight of compensation systems. The significance of the risk management function and the role of the chief risk officer were also emphasized. Furthermore, the importance of an understanding of banks' operational structure and risks by both the board and senior management was incorporated in the guidelines.

The 2015 Principles

Following consideration of the comments received on the consultative version of the principles in 2014, an updated version was published in July 2015 (BIS 2015). This version also considered recommendations made by the Financial Stability Board in its 2013 Thematic Review on Risk Governance about the board's role in risk governance and in establishing a risk culture in a bank (FSB 2013). The 13 principles include changes that provide more clarity, detail and guidance on the obligations of board members, board collective competence, the oversight and risk governance responsibilities of the board, the allocation of responsibilities between committees, senior

management and control functions, the key elements of a robust risk governance framework, and the internal control mechanism of banks.

The 2015 principles acknowledge that the primary role of a bank's board of directors is oversight. In this version, the requirement that the chairperson of the board of directors should not chair any board committee was removed. One of the ways in which these principles would be helpful to bank supervisors is that they can act as a guide for supervisors in how they assess the processes that banks have used to select their board members and senior management. There are important changes with regard to risk management and to compensation provisions for those who are deemed to be risk takers in banks. Compared to the preceding version of the guidelines, some aspects of the 2015 recommendations are worth noting because of their implications for responsible conduct and its regulation. In recognition of growing concerns about mis-selling and other scandals in banking, specific provisions on conduct risks are included explicitly in the responsibilities of board members and senior management (Ferran 2012; Financial Conduct Authority 2013; Zunzunegui 2018; Bugeja 2018). As trust and integrity are important for sustainability, a new feature of the guidelines is the recommendation in Principle 9 that banks establish a compliance function as a second line of defense that will support corporate values and ensure that banks act responsibly. The guidelines also specify roles for supervisors that will strengthen the global financial architecture that identifies and manages the risks that are inherent in a global financial system.

The 13 principles of the Basel Recommendations on Corporate Governance for Banks cover the following topics:

1. Board's overall responsibilities
2. Board qualifications and composition
3. Board's own structure and practices
4. Senior management
5. Governance of group structures
6. Risk management function
7. Risk identification, monitoring, and controlling
8. Risk communication
9. Compliance

10. Internal audit
11. Compensation
12. Disclosure and Transparency
13. The role of supervisors

Summary

The 2015 Basel Recommendations on Corporate Governance Principles for Banks are part of the developments that have evolved to create a more sustainable financial system. This would allow banks to play an effective role in financing sustainable development and in maintaining the financial stability that is needed for economic growth and development. Institutions such as the Basel Committee on Banking Supervision, the Organisation for Economic Cooperation and Development, and the Financial Stability Board are collaborating and cooperating to help promote financial stability through better bank governance and to end the problem of institutions deemed too big to fail. Strengthening bank governance by means of a principles-based approach to regulation is an ongoing process that will progress over time as bank boards adopt the appropriate oversight and develop the appropriate corporate culture, controls, risk management, and compliance systems that underpin good corporate governance.

Cross-References

- Banks
- Corporate Governance
- Global Governance
- OECD Principles of Corporate Governance
- Walker Review (2009) on Banks' Corporate Governance

References

- Alexander, K. (2006). Corporate governance and banks: The role of regulation in reducing the principal-agent problem. *Journal of Banking Regulation*, 7(1–2), 17–40.
- Alexander, K. (2009). Principles v. Rules in financial regulation: Re-assessing the balance in the credit crisis symposium at Cambridge University, 10–11 April 2008. *European Business Organization Law Review*, 10(2), 169–173.
- Arjoon, S. (2006). Striking a balance between rules and principles-based approaches for effective governance: A risks-based approach. *Journal of Business Ethics*, 68(1), 53–82.
- Becht, M., Bolton, P., & Röell, A. (2011). Why bank governance is different. *Oxford Review of Economic Policy*, 27(3), 437–463.
- BIS. (1997). *Principles for the management of interest rate risk*. Available at <https://www.bis.org/publ/bcbs28a.pdf>
- BIS. (1998a). *Enhancing bank transparency*. Available at <https://www.bis.org/publ/bcbs41.pdf>
- BIS. (1998b). *Framework for internal control systems in banking organisations*. Available at <https://www.bis.org/publ/bcbs41.pdf>
- BIS. (1999a). *Enhancing corporate governance for banking organisations*. Available at <https://www.bis.org/publ/bcbs56.pdf>
- BIS. (1999b). *Principles for the management of credit risk*. Available at <https://www.bis.org/publ/bcbs54.pdf>
- BIS. (2006). *Enhancing corporate governance for banking organisations*. Available at <https://www.bis.org/publ/bcbs122.pdf>
- BIS. (2010). *Principles for enhancing corporate governance*. Available at <https://www.bis.org/publ/bcbs176.pdf>
- BIS. (2015). *Basel recommendations on corporate governance principles for banks*. Available at <https://www.bis.org/bcbs/publ/d328.pdf>
- Black, J., Hopper, M., & Band, C. (2007). Making a success of principles-based regulation. *Law and Financial Markets Review*, 1(3), 191–206.
- Bugeja, D. (2018). Managing conduct risk in the boardroom: A credit institution's perspective. In S. Grima & Marano P. (Eds.), *Governance and regulations: Contemporary issues* (Contemporary studies in economic and financial analysis, Vol. 99, pp. 19–32). London: Emerald Publishing.
- De Haan, J., & Vlahu, R. (2016). Corporate governance of banks: A survey. *Journal of Economic Surveys*, 30(2), 228–277.
- Ferran, E. (2012). Regulatory lessons from the payment protection insurance mis-selling scandal in the UK. *European Business Organization Law Review*, 13(2), 247–270.
- Financial Conduct Authority. (2013). *FCA Risk Outlook 2013*. Available at <https://memofin-media.s3.eu-west-3.amazonaws.com/uploads/library/pdf/fcarco%5b1%5d.pdf>
- Financial Stability Board. (2013). *Thematic review on risk governance*. Available at https://www.fsb.org/2013/02_r_130212/
- Ford, C. (2010). Principles-based securities regulation in the wake of the global financial crisis. *McGill Law Journal/Revue de droit de McGill*, 55(2), 257–307.
- Formisano, V., Fedele, M., & Calabrese, M. (2018). The strategic priorities in the materiality matrix of the banking enterprise. *The TQM Journal*, 30(5), 589–607.

- IMF. (2009). *Initial lessons of the crisis for the global architecture and the IMF*. Available at <https://www.imf.org/external/np/pp/eng/2009/021809.pdf>
- Kirkpatrick, G. (2009). The corporate governance lessons from the financial crisis. *OECD Journal: Financial Market Trends*, 2009(1), 61–87.
- Leal Filho, W., & Brandli, L. (2016). Engaging stakeholders for sustainable development. In *Engaging stakeholders in education for sustainable development at university level* (pp. 335–342). Cham: Springer.
- Macey, J. R., & O'Hara, M. (2003). The corporate governance of banks. *Federal Reserve Bank of New York Economic Policy Review*, 9(1), 91–107.
- OECD. (1999). *OECD principles of corporate governance*. Available at [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C/MIN\(99\)6&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C/MIN(99)6&docLanguage=En)
- OECD. (2004). *OECD principles of corporate governance 2004*. Available at <http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf>
- OECD. (2015). *OECD principles on corporate governance 2015*. Available at <https://www.oecd.org/corporate/principles-corporate-governance.htm>
- Steurer, R., Langer, M. E., Konrad, A., & Martinuzzi, A. (2005). Corporations, stakeholders and sustainable development I: A theoretical exploration of business–society relations. *Journal of Business Ethics*, 61(3), 263–281.
- Walker, D. (2009). *A review of corporate governance in UK banks and other financial industry entities*. Available at https://webarchive.nationalarchives.gov.uk/+/www.hm-treasury.gov.uk/d/walker_review_261109.pdf
- Zunzunegui, F. (2018). Mortgage Credit. *Mis-selling of financial products*. European Parliament, Brussels.

Behavior Theories

► Ethical Theories II

Behavioral Finance

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Synonyms

Behavioural finance; Investor sentiment

Definition/Description

The holy grail of academic finance is to identify those factors that are best able to explain expected returns. The capital asset pricing model (CAPM) proposed by Sharpe (1964) and Lintner (1965) sought to calculate the risk premia inherent to financial assets. Researchers correspondingly study a variety of risk factors to best explain and predict the expected returns, including works by Fama and French (2016, 2018), and Barillas and Shanken (2018) among many others. In addition to company fundamentals and the macroeconomic environment, a new branch of finance has emerged for forecasting expected returns based on investor sentiment as one of the main drivers inducing return co-movements. Optimism or pessimism may drive investor behaviors that condition their interactions with the markets and therefore impacting on stock returns. This investor sentiment can derive from their belief or otherwise in the future performance of companies and economies. Consequently, beyond providing a financial context for market behaviors, sentiment also shapes the overview of the prevailing health of economies.

How best to measure investor sentiment is a recent but wide-reaching debate in academia (Zhou 2018). According to Pompian (2011), behavioral finance emerged as a specific academic and professional field in the wake of the works by Professors Daniel Kahneman and Vernon Smith who culminated in their receiving the 2002 Nobel Prize for their contribution of having integrated psychological research into economic science. Professor Kahneman, along with Professor Amos Tversky, put forward prospect theory as capable of returning better accounts of the behaviors observed (Kahneman and Tversky 1990). Given the impossibility of measuring sentiment directly, proxy measures are adapted to this end and potentially enable the predictability of asset prices. The sentiment measures coexisting today approach market data, survey data, and text analysis data (social, Internet, and media information on markets). There has hitherto been no unanimous consensus as to the best proxy measure

either for sentiment or for forecasting market movements and co-movements. However, the Baker and Wurgler (2006, 2007) market sentiment index remains one of those most commonly applied.

Background

Financial market movements and co-movements are also shaped by sentiment, especially during periods of irrationally unjustified panics or exaggerated optimism. Sentiment maybe defined as the deviation bias between the theoretical asset price as sustained by its fundamentals and its current price (Benhabib et al. 2016; Piccione and Spiegler 2014). Stock prices thus turn irrational whenever the market is moved by (irrational) investor sentiment. Accordingly, the Fama (1960) efficient market hypothesis, characterized by a market with overwhelmingly well-informed investors, properly priced investments that reflect all of the information available will simply never prevail. Hence, contagion, crisis spillover, or market co-movements all represent evidence of the relevance of investor sentiment. Market data-based measures of sentiment include closed-end discount funds, dividend premiums, stock turnover rates, IPO numbers, trading volumes, VIX sentiment (the implied volatility of S&P500 options), and new account numbers, among others (Chen et al. 2019). Survey data provides another means of measuring sentiment in accordance with the results of investor surveys on market prospects with the most common such inquiries being the University of Michigan Consumer Sentiment Index, Investor Intelligence, the American Association of Individual Investors (AAII), and the EUROSII sentiment (which is the Eurozone Sentix Investor Confidence) for the European context. In terms of the text data approach, this type of sentiment measure applies word recognition to evaluate the incidence of predetermined terms in social media data and on social networks such as LinkedIn, Facebook, Twitter, and Instagram. Thomson Reuters, for example, runs a text data sentiment index called

MarketPsych. Machine learning and AI (artificial intelligence) techniques are opening up new paths for quantitative fund managers to derive value from traditional and nontraditional data sources, in particular text data. Nevertheless, irrespective of the utility of the resulting indexes, accounting and finance text data studies are subject to criticisms that include their lack of transparency and the failure to replicate their results (Loughran and McDonald 2016). However, understanding how investor psychology impacts on stock market returns holds the utmost importance to better any understanding of markets, especially as regards the predictive powers of investor sentiment.

Summary

Behavioral finance applies the field of psychology to finance and became the focus of many studies in the wake of the tech-stock bubble in 2000 (Pompian 2011). Human emotions (investor psychology or cognitive psychology provoking excessive euphoria or fear) and cognitive errors in financial decision-making create psychological biases when assessing the future performance of stock markets, driving fluctuations that generate instability. Behavioral finance studies the irrational behaviors or biases of individual investors and correspondingly investigates the irregularities in the efficient market hypothesis.

Cross-References

- [Behavioral Finance](#)
- [Investor Sentiment](#)

References

- Baker, M., & Wurgler, J. (2006). Investor sentiment and the cross – Section of stock returns. *The Journal of Finance*, 61(4), 1645–1680.
- Baker, M., & Wurgler, J. (2007). Investor sentiment in the stock market. *Journal of Economic Perspectives*, 21(2), 129–152.

- Barillas, F., & Shanken, J. (2018). Comparing asset pricing models. *Journal of Finance*, 73(2), 715–754. <https://doi.org/10.1111/jofi.12607>.
- Benhabib, J., Liu, X., & Wang, P. (2016). Sentiments, financial markets, and macroeconomic fluctuations. *Journal of Financial Economics*, 120(2), 420–443. <https://doi.org/10.1016/j.jfineco.2016.01.008>.
- Chen, R., Yu, J., Jin, C., & Bao, W. (2019). Internet finance investor sentiment and return comovement. *Pacific-Basin Finance Journal*, 56, 151–161.
- Fama, E. F. (1960). Efficient market hypothesis. Doctoral dissertation, Ph.D. thesis, Ph.D. dissertation, University of Chicago Graduate School of Business.
- Fama, E. F., & French, K. R. (2016). Dissecting anomalies with a five-factor model. *Review of Financial Studies*, 29(1), 69–103.
- Fama, E. F., & French, K. R. (2018). Choosing factors. *Journal of Financial Economics*, 128(2), 234–252. <https://doi.org/10.1016/j.jfineco.2018.02.012>.
- Kahneman, D., & Tversky, A. (1990). 6. Prospect theory: An analysis of decision under risk. In *Rationality in action: Contemporary approaches* (p. 140). Cambridge: Cambridge University Press.
- Lintner, J. (1965). The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets. *Review of Economics and Statistics*, 2, 13–37.
- Loughran, T., & McDonald, B. (2016). Textual analysis in accounting and finance: A survey. *Journal of Accounting Research*, 54(4), 1187–1230. <https://doi.org/10.1111/1475-679X.12123>.
- Piccione, M., & Spiegler, R. (2014). Manipulating market sentiment. *Economics Letters*, 122(2), 370–373. <https://doi.org/10.1016/j.econlet.2013.12.021>.
- Pompian, M. M. (2011). *Behavioral finance and wealth management: How to build investment strategies that account for investor biases* (Vol. 667). Hoboken: Wiley.
- Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, 19(3), 425–442.
- Zhou, G. (2018). Measuring investor sentiment. *Annual Review of Finance Economics*, 10, 239–259. <https://doi.org/10.1146/annurev-financial-110217-022725>.

Behavioral Incentives

- [Sanctions of Social Capital](#)

Behavioural Finance

- [Behavioral Finance](#)

Being Present in the Present

- [Mindfulness](#)

Beliefs

- [Core Values](#)

Bell-Shaped Curve

- [Peak Oil](#)

Benchmarking

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Synonyms

[Emulation](#)

Definition

The origin of the concept of benchmarking was introduced to describe the financial phenomenon from a strategic perspective. A preliminary definition of benchmarking was provided by Camp (1989) who defines benchmarking as research of best practices in order to achieve higher performance. From his perspective, benchmarking consists of a philosophical approach to firms' activities due to their exigence to identify the best in class competitors in order to measure in a comprehensive and consciousness way their performance. Specifically, the contribution of Camp supports one of the most appreciated philosophical quotes proposed by Sun-Tzu (1963) that said: “If you know the enemy and know yourself, you

need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle."

Prior studies denoted how since 1940, studies on this topic have been characterized by five different degrees of sophistication about the reason behind the adoption of these practices (Watson 1993). The author suggests how during the period between 1940 and 1990, we observed a passage from "reverse benchmarking" activities oriented to analyze products' characteristics to "global benchmarking" activities oriented to understand the strength and the weakness of an entire enterprise. Moreover, recently, academics identified a potential "sixth phase" called "learning benchmarking" or "bench-learning" (Kyrö 2003). The aim of these new practices is to develop new competencies through a deep analysis of competitors.

Benchmarking Indicators

Benchmarking consists of the identification of a multidimensional set of indicators that represents and describes competitor characteristics. In fact, the analysis of performance could not be conducted only on a set of specific indicators because from a theoretical point of view every firm has its own strength and weakness. In this sense, the comparative analysis allows the manager to identify a new operational paradigm in order to gain, repair, and maintain their strength. Moreover, the analysis of this concept was conducted even by consulting firms due to the increasing attention paid by them to this topic in their services. Their attention has been favored by the new exigencies of the firms that, contrarily to the past, start to consider in their business models further aspects not strongly related to financial performance such as nonfinancial aspects and relationship with their stakeholders. In this sense, benchmarking needs a strong connection between theory and praxis in order to identify a set of measures useful for analysts to understand the effective context where their firms operate.

According to this evidence, academics identified four pillars that describe clearly the focus of this practice. These four pillars are represented by reciprocity, processes' similarity, processes' evaluation, and evaluation's legitimacy. The principle of reciprocity consists in the implementation of friendly connections between firms and observed firms in order to favor the exchange of information between them. In this sense, a true benchmarking process could not exist without a two-way exchange of information between the parts involved. The principle of similarity is obvious in a process of evaluation, and it consists of a prior selection of activities characterized by similar paradigms in order to favor their comparison. The principle of a praxis' evaluation consists of the effective identification of a set of best in class firms and by their relative analysis. In this sense, as evidenced before, this process currently is typically data driven due to the existence of new digital tools like blockchain that allow analysts to find information through data-mining activities (Hamida et al. 2017). Finally, the last pillar is represented by evaluation's legitimacy that represents the validation of the analysis goodness. In this sense, the legitimacy of evaluation systems could be measured through the adoption of a set of common standards.

Benchmarking and Sustainable Development

The socioeconomic implications that characterize the current scenario have imposed enterprises to redefine their paradigms through new strategies. One of the most appreciated strategies adopted worldwide by them is represented by benchmarking. In this sense, during the last few years, the concept of benchmarking has been widely analyzed by academics that operate in different fields of study. In fact, the literature on benchmarking is not strictly related to business and management fields but is extended to other areas such as engineering, chemistry, and medicine. In this sense, the multidisciplinary aspects that characterize sustainable management allowed academics that operate in different fields and

contexts to apply this theoretical framework to nonfinancial aspects.

The relevance of benchmarking on sustainable practices regards not only academics but also new categories of stakeholders. In fact, the recent scenario is characterized by several attentions paid by policymakers, NGOs, and investors to these practices. In this sense, the increasing attention paid by stakeholders on sustainability practices represents a new area of analysis for academics and practitioners in order to identify the new protocol to improve the degree of transparency about nonfinancial aspects connected to entities activities. In fact, as evidenced by prior studies, one of the most important aspects connected to the adoption of sustainability practices consists of the value relevance of these practices. In this sense, this theoretical evidence has been supported by the recent environmental scandals where the disclosure of negative information about firms' sustainability impacted negatively on firms' market value. A typical example of this phenomenon is represented by Volkswagen's case where after the scandals the share's market price decreases consistently. In this sense, the last few years were characterized by the rapid growth of socially responsible investments (SRI), which represents a new market segment for financial analysts. In this sense, to improve the degree of comparability between socially responsible firms, rating's agency introduced new ethics indexes in order to give to each fund a score that represents its behavior. According to this evidence, benchmarking covers a central role in sustainability due to the coexistence of different expectatives about firms' socially responsible practices.

One of the most important contributions in terms of development of benchmarking practices has been proposed by the United Nations (UN). Since 2015, the UN introduced 17 Sustainable Development Goals (SDGs), composed of 169 targets, in order to achieve better condition for all before 2030. Specifically, SDG 12.6 highlighted the relevance of reporting in order to sustain the achievement of better condition. In this sense, the content of SDG 12.6 is as follows: "*Encourage companies, especially large and*

transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle." The definition of this goal by the UN represents a strategic driver to the adoption of benchmarking practices by firms due to the highest availability of information about nonfinancial aspects produced by firms inspired by this principle. Moreover, standard setters have introduced a new form of frameworks in order to harmonize the content of nonfinancial reports inspired by SDGs. In this sense, Global Reporting Initiative (2015) introduced a set of standards that describe SDGs through the combination between different nonfinancial indexes. This contribution has been relevant as evidenced by Oxfam (2018) who denoted how firms' activities on sustainable development are not ever followed by effective communication. In this sense, a large part of them discloses information characterized by a lack of credibility due the absence of common reporting standards. In fact, prior studies denoted how the adoption of a set of large adopted standards increases the degree of credibility connected to nonfinancial information. Moreover, their adoption decreases the risks of greenwashing and abuse of impression management strategies by managers (Brockhaus et al. 2016).

In this sense, internal and external stakeholders currently need more information than in the past due to the increase in sensibilization on this topic. Specifically, managers need information about their firms in order to adequate their business models through an internal benchmarking analysis. Furthermore, managers need information about competitors' practices in order to acquire knowledge from them through an external benchmarking analysis. In this sense, this evidence denoted how the comprehension of this phenomenon in sustainability management needs a strong orientation by the manager to these practices. In fact, as evidenced before, one of the most important principles in benchmarking is represented by reciprocity. However, from a managerial perspective, firms are typically not oriented to act in a reciprocity way with external stakeholders due their

skepticism to share negative information with them. A typical example is represented by the healthcare sector where managers prefer to not disclose information about the average number of deaths due the risks of benchmarking analysis by their patient (Lilford and Pronovost 2010).

According to this evidence, a central role is covered by nonfinancial reporting. In fact, prior studies highlighted how the increasing of the average number of nonfinancial reports published yearly impacts positively on stakeholder's ability to compare entities' sustainable performance (Milne and Gray 2013). Finally, the different categories of stakeholders interested by firms' activities need information about their nonfinancial performance in order to judge the gap between their expectative and firms' behaviors (Skouloudis et al. 2012). However, practitioners denoted how even if in the absence of worldwide mandatory provisions about nonfinancial reporting, an increasing number of firms started to adopt nonfinancial reports voluntarily (KPMG 2017). Moreover, the introduction of new regulation about mandatory nonfinancial reporting has increased the degree of transparency of information about firms' nonfinancial impacts. In fact, the provisions of a set of common rules about nonfinancial reporting in contexts such as Europe and South Africa allowed academics, analysts, and managers to make an internal and external comparison between periods, sectors, and country (Venturelli et al. 2019; Doni et al. 2019). A central role in the process of harmonization about firms' nonfinancial reports has been covered by Global Reporting Initiative (GRI) that introduced a set of common reporting standards in order to improve the degree of comparability between nonfinancial reports. Furthermore, GRI prepared a set of sector-specific standards in order to evaluate in a more effective way firms' behavior. In this sense, despite the general orientation of worldwide regulators is to introduce a new form of soft regulations to achieve an adequate degree of harmonization without a substantial standardization, country-specific studies highlighted how the most common standard-setters adopted by firms to prepare their reports are represented by GRI. This evidence favors the achievement of the

four benchmarking pillars evidenced in the previous section. In fact, the adoption of common standards by a large part of the firms interested to adopt nonfinancial reports in a voluntary or mandatory way responds to the requirements of reciprocity, similarity, effective evaluation, and legitimacy.

Key Issues

Although nonfinancial reporting remains a typical voluntary activity, policymakers have begun to introduce a new form of regulations in order to increase the average number of nonfinancial information yearly disclosed by entities. However, despite the quick increase of nonfinancial reports published, the current scenario is characterized by low attention paid by worldwide firms to this topic. In particular, this negative phenomenon regards SMEs that are typically not oriented to adopt voluntarily these practices. In fact, SMEs typically perceived nonfinancial reporting as a practice not adequate to their business. Moreover, another category that is typically not oriented to adopt nonfinancial reports is represented by state-owned enterprises (SOEs). Specifically, prior study evidenced how the peculiarities of their activities influenced negatively their orientation to adopt nonfinancial reports prepared according to the Global Reporting Initiative standards. In this sense, benchmarking on sustainability practices still represents an activity that typically regards large firms that operate in private sectors due to the physiological lack of data connected to SMEs and SOEs. In this sense, the increasing attention paid by policymakers to nonfinancial reporting represents a strategic driver in order to ensure the achievement of this topic.

Furthermore, a central role is covered by the United Nations. In fact, as evidenced before, the clear identification in SDGs 12.6 of nonfinancial reporting as strategic driver represents an important element to improve the attention paid by public and private stakeholders to sustainability topics. In this sense, the recent data provided by practitioners denoted how public and private

sectors started to adapt their strategies to principles inspired by ethics.

However, the worldwide diffusion of benchmarking practices about sustainable activities needs a physiological cultural change by managers. In fact, as denoted by prior academics that analyzed for the first time this topic, benchmarking impacts on corporate governance because its implementation needs a subsequential orientation to new operation paradigms (Camp 1989). In this sense, managers must adapt their behavior to benchmarking's principles. Furthermore, other studies evidenced how the adoption of practices inspired by benchmark principles represents a strategy that impacts positively on firms' ability to engage in an effective way with its stakeholders. Specifically, prior studies denoted how benchmarking acts as an intermediary between firms and external stakeholders that represent a "*specific environment*" which impacts on firms' performance (Robbins et al. 2008). In this sense, its main role is represented by the ability to improve firms' knowledge about market complexity.

Summary

The topic of benchmarking in sustainable management represents a new field of study for academics due to the prominent role covered by public and private sectors in order to achieve an adequate level of worldwide sustainable development. However, as evidenced in the previous sections, studies on benchmarking are currently based on prior researches based on financial performance. In this sense, the topic needs a new contribution by academics in order to identify new paradigms to analyze this topic from a sustainability point of view. In this sense, a strong connection between academics that operate in different fields of studies represents a strategical driver for the achievement of these topics. Moreover, the great attention paid by public and private entities to a new form of accountability such as nonfinancial reports and integrated reports increases the degree of information about the sustainable practices adopted by them. In this sense,

the role of policymakers and think tanks will be strategical in order to increase the number of entities that prepared yearly nonfinancial reports. Furthermore, the introduction by standard setters of a new form of reporting framework represents an important element in order to improve the degree of comparability between information provided by firms that operate in different context and sectors.

From a methodological point of view, the rapid growth of Big Data represents an important tool to improve the ability of stakeholders to make benchmarking between two or more entities. In this sense, the contribution of academics will be relevant in order to identify a new paradigm useful for managers and practitioners to activate a new form of benchmarking. Furthermore, digitalization will be a strategical driver to identify new operational paradigms to increase the degree of comparability between and within entities (Ebner et al. 2016). Nowadays, benchmarking practices have been characterized by a rapid growth favored by the introduction of new technologies such as Internet of Things (IoT), Blockchain, and Big Data that allows firms to acquire in an easy way information useful for their internal and external analysis (McKinney et al. 2017).

According to this evidence, the introduction of benchmarking praxis about nonfinancial practices will be easier than in the past due to the major attention paid by stakeholder and due to the existence of new evaluation tools. In this sense, future research will identify a new frontier of analysis and new operational paradigms in order to achieve a higher degree of data comparability. Moreover, started from the most recent research, the new challenge for academics will be connected to the identification of a new type of benchmarking practices characterized by a higher degree of sophistication.

Cross-References

► [Market for Corporate Control and CSR](#)

References

- Brockhaus, S., Fawcett, S., Kersten, W., & Knemeyer, M. (2016). A framework for benchmarking product sustainability efforts: Using systems dynamics to achieve supply chain alignment. *Benchmarking: An International Journal*, 23(1), 127–164.
- Camp, R. C. (1989). *Benchmarking: the search for industry best practices that lead to superior performance*. Asq Press.
- Doni, F., Corvino, A., & Martini, S. B. (2019). King codes on corporate governance and ESG performance: Evidence from FTSE/JSE all-share index. In *Integrated Reporting* (pp. 341–364). Cham: Springer.
- Ebner, K., Urbach, N., & Mueller, B. (2016). Exploring the path to success: A review of the strategic IT benchmarking literature. *Information & Management*, 53(4), 447–466.
- Global Reporting Initiative. (2015). United Nations global compact. *World Business Council for Sustainable Development (WBCSD). SDG Compass. The guide for business action on the SDGs. SDG Compass*.
- Hamida, E. B., Brousmiche, K. L., Levard, H., & Thea, E. (2017). Blockchain for enterprise: overview, opportunities and challenges. In The Thirteenth International Conference on Wireless and Mobile Communications (ICWMC 2017).
- KPMG. (2017). *The road ahead: the KPMG survey of corporate responsibility reporting 2017*. Zurich: KPMG International. Retrieved 20 Nov 2018.
- Kyrö, P. (2003). Revising the concept and forms of benchmarking. *Benchmarking: An International Journal*, 10(3), 210–225.
- Lilford, R., & Pronovost, P. (2010). Using hospital mortality rates to judge hospital performance: a bad idea that just won't go away. *BMJ*, 340, c2016.
- McKinney, E., Jr., Yoos, C. J., II, & Snead, K. (2017). The need for 'skeptical' accountants in the era of Big Data. *Journal of Accounting Education*, 38, 63–80.
- Milne, M. J., & Gray, R. (2013). W (h)ither ecology? The triple bottom line, the global reporting initiative, and corporate sustainability reporting. *Journal of Business Ethics*, 118(1), 13–29.
- Robbins, S. P., DeCenzo, D. A., & Coulter, M. K. (2008). *Fundamentals of management: Essential concepts and applications*. Upper Saddle River: Pearson Prentice Hall.
- Skouloudis, A., Evangelinos, K., & Moraitis, S. (2012). Accountability and stakeholder engagement in the airport industry: An assessment of airports' CSR reports. *Journal of Air Transport Management*, 18(1), 16–20.
- Tzu, S. (1963). *The art of war*. USA: Oxford University Press.
- Venturelli, A., Caputo, F., Leopizzi, R., & Pizzi, S. (2019). The state of art of corporate social disclosure before the introduction of non-financial reporting directive: a cross country analysis. *Social Responsibility Journal*, 15(4), 409–423.
- Watson, G. H. (1993). *Strategic benchmarking: How to rate your company's performance against the world's best*. Wiley.

Beneficent Way of Doing Business

► Altruistic CSR

Benefit Corporations

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Synonyms

Hybrid companies; Social purpose companies

Definition

Benefit corporations are for-profit companies that commit to creating a benefit in addition to their for-profit motive. The benefit corporation status is a corporate legal form that was introduced in 2010 in Maryland, giving directors and officers the legal protection to pursue a public benefit. The Benefit Act requires boards to consider environmental and social factors as well as the financial interests of shareholders. In most states, benefit corporations are required to publish an annual benefit report that includes an assessment of the overall social and environmental performance against a third-party standard to help the company, management, governance, shareholders, and the general public determine whether it has met the declared benefit in its statutory corporate purpose. The B Corp B Lab certification, on the other hand, is a seal of fitness to the standards. To become certified B Corps, companies have to achieve a score of 80 or above on the B Lab platform by taking an online assessment. The Benefit Impact Assessment (BIA) measures a company's overall impact by analyzing the business model and the following areas: workers, community, environment, customers, and governance. Once the process evaluates the global impact of the business, the company that completes the assessment can

add the B Corp certification to its products and website. Lastly, the B Corp Benchmarks help to compare and improve a company's social and environmental performance.

Introduction

The financial, social, and environmental crisis experienced in the twenty-first century has brought to wealth inequality, climate change, and social unrest and has led to the need to rethink business and economics. The shareholder supremacy model that has been advocated for so long by both practitioners and academics has damaged entire communities and depleted natural resources, creating severe risks for the living conditions of future generations (United Nations 1992) and species (Laszlo 2019).

This brought to a profound transformation of the economic and social ecosystem to take place where (Nigri and Del Baldo 2018; Nigri and Michelini 2019) attention is drawn to social and environmental outputs and not only to economic outcomes (Hiller 2013; Nicholas and Sacco 2017).

Governments and the nonprofit sector alone cannot affect large-scale systemic change. For-profit business, on the contrary, can attract capital and talent at scale accelerating a global culture shift and build a more inclusive and sustainable economy (McNulty Foundation 2015). Companies today – in line with the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda – are thus expected to become actors of change and value creation (Nigri et al. 2016).

B Lab – a third party such as the US Green Building Council, Underwriters Laboratory, Green Seal, or Global Reporting Initiative (Nicholas and Sacco 2017) – where B stands for Beneficial (Steiman 2007), pursues this goal by creating a network and an infrastructure that can help support this economic transformation.

Brief History

B Lab's founders, Jay Coen Gilbert, Andrew Kassoy, and Bart Houlihan, all attended Stanford

University in the 1980s and different years later became Henry Crown Fellows of the Aspen Global Leadership Network (AGLN) (McNulty Foundation 2015). As roommates and friends, in 1993, Jay and Bart founded AND1 – a footwear and clothing company specializing in basketball attire and tapes – together with Seth Berger and Tom Austin (Dent 2016). By the 2001 season, AND1 was second only to Nike. As a company, it had grown not only its market share but also its socially responsible activities. They implemented shared ownership programs and promoted high-quality urban education and youth leadership by financing – with 5% of profits annually – programs with local charities. They also posed great attention to employees and worked with overseas factories to implement a supplier code of conduct ensuring worker health and safety, fair wages, and professional development (Honeyman 2014).

After a credit crunch and a few layoffs, in 2005, when the company was back on track, they finally decided to sell to American Sporting Goods (Hartford 2005), and within a few months' time, the company's preexisting commitments to its employees, overseas workers, and local community were eliminated (Honeyman 2014). It was this drive, the Henry Crown Fellowships, and their network and relationship that pushed them to search for a different paradigm. They wanted stakeholders – employees, communities, and people affected by the business – to matter as much as shareholders. They thus founded B Lab (McNulty Foundation 2015), a nonprofit organization that uses business as a force for good (Honeyman 2016), together with Andrew, who had only been an investor in the AND1 project and was now ready to support them fully, after spending 16 years in private equity.

B Lab, therefore, began by building an independent certification and the market infrastructure to help it scale (Di Cesare and Ezechieli 2017). All companies could aim to be like the original AND1. The for-Benefit model (Castellani et al. 2016) they had in mind could help capitalism work for the long term to the benefit of all (Honeyman 2016; Schaw 2017) and drive a global cultural shift by redefining success in business. By creating a community of certified benefit

corporations, B Lab aims to build a more inclusive and sustainable economy (Fierro and Miller Hill 2016) with specific values and aspirations embedded in the B Corp Declaration of Interdependence (B Lab 2019a).

B Lab's initiatives today include the B Corp Certification, the administration of the B Impact Management programs and software, stakeholder management tools like the Benefit Impact Assessment (BIA) (Steiman 2007; B Lab 2018a), and advocacy for governance structures like the benefit corporation legal framework (Hiller 2013; Baudout et al. 2018).

Legal Framework, Certification, and Report

Benefit corporations and certified B Corps represent alternative models of enterprise, often referred to as hybrid companies that bridge the for-profit and not-for-profit models (Billis 2010; Baudout et al. 2018). Although their goal remains the same, benefit corporations and B Corps are two different phenomena which must be outlined separately (Nigri et al. 2016).

Benefit corporations are for-profit companies that commit to creating a benefit in addition to their for-profit motive (Bauco et al. 2017) and have formally agreed to do so by incorporating as a benefit corporation or adding the benefit in their company motives, giving it a binding, legal statute.

The benefit corporation status is a corporate legal form that was introduced in 2010 in Maryland, giving directors and officers the legal protection to pursue a public benefit (Hiller 2013). The Benefit Act (US Law 2010) requires boards to consider environmental and social factors as well as the financial interests of shareholders (Stecher et al. 2012). This corporate form provides companies that want to act in the public interest governance processes and access to investment capital (Baudout et al. 2018).

In most states, benefit corporations are required to publish – it does have to be audited or certified – an annual benefit report that includes an assessment of the overall social and

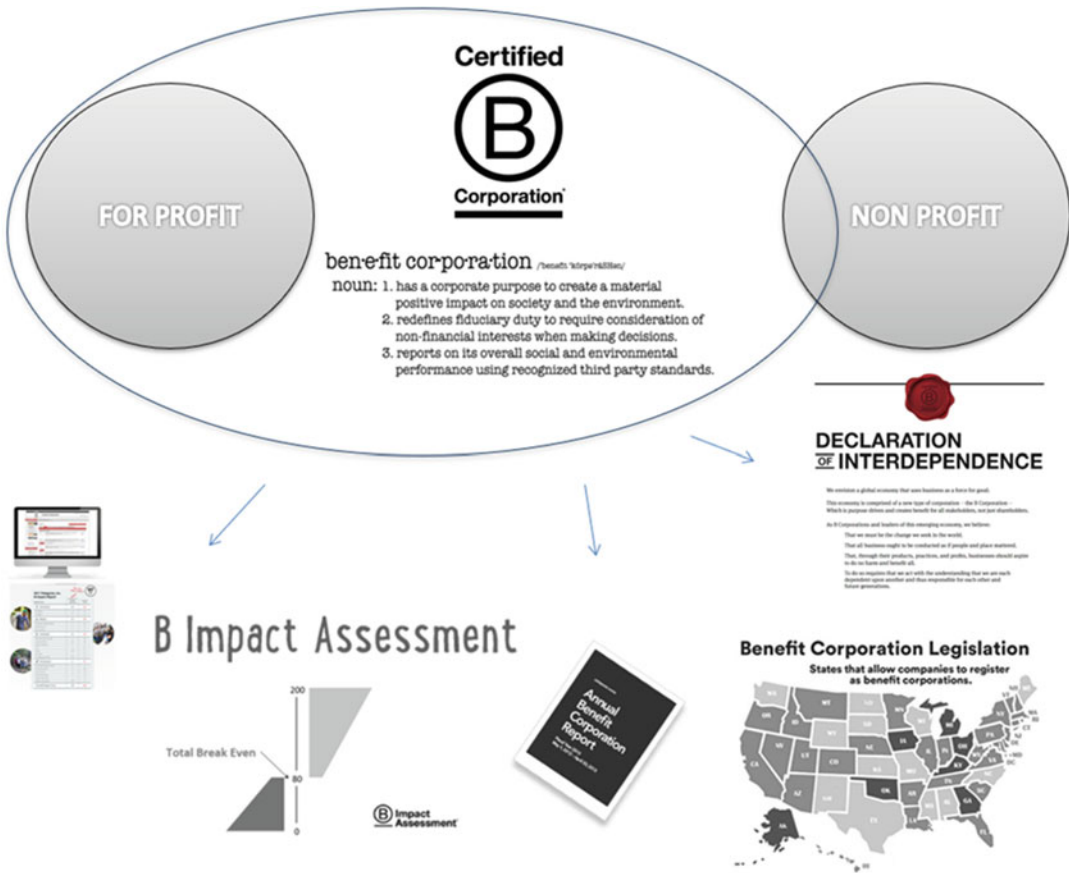
environmental performance against a third-party standard to help the company, management, governance, shareholders, and the public determine whether they have met the declared benefit in their statutory corporate purpose. As of today, most benefit corporations utilize the B Lab framework (B Lab 2019b) when preparing their annual benefit reports even though the benefit corporation legislation does not require benefit corporations to adopt any specific third-party standard – any third party can provide the standard. The law states that the standard must abide by specific outlined characteristics and must be independent and credible and respect accountability and transparency provisions (US Law 2010).

The purpose of the benefit report serves de facto to meet the transparency and accountability provisions of the benefit corporation legislation: inform the public about the overall impact and performance of the benefit corporation, assess the progress of directors, and give stakeholders the possibility to exercise their rights. In a benefit enforcement proceeding, for example, judges may look at a benefit report, or at a series of annual benefit reports, to determine if the benefit corporation has met its statutory requirement to meet its general, and any named specific, public benefit purpose.

The B Corp B Lab certification, on the other hand, is a short-term seal of fitness to the standards (Nicholas and Sacco 2017) which measures a company's balance between profit and purpose. A Certified B Corp is thus a business that meets social and environmental performance, public transparency, and legal accountability standards, verified by B Lab, through the benefit impact assessment (Fig. 1).

The Benefit Impact Assessment

Therefore, certifying as a benefit corporation goes beyond product- or service-level certification. To become certified B Corps, companies must achieve a score of 80 or above on the B Lab platform by taking an online assessment (Nigri et al. 2016) which evaluates how a company's



Benefit Corporations, Fig. 1 Graphic representation of benefit corporations and B Corps

operations and business model impacts workers, the community, the environment, and customers.

These areas consider the impact that the company may generate, the standards and certifications it has obtained, implemented in-house practices, community involvement, and value chain activities (Nigri 2018). The assessment ranges from supply chain management and input materials to philanthropic charitable giving and employee benefits.

Workers

The worker impact measurement focuses on three main aspects: (1) compensation, analyzing sector average salaries and comparing the salary levels and benefits granted to executives with those given to employees; (2) benefits, such as

supplementary retirement plans and health services, smart working, childcare, flexibility, and stock options; and (3) training, concentrating on professional development, turnover, health, and safety. Finally, company ownership and employee engagement through an employee handbook and anonymous satisfaction surveys are included in the evaluation (Honeyman 2016). In detail:

Community

The community impact measurement focuses on five areas: (1) job creation, for example, a recruitment policy that is attentive to the local dimension and to chronically underemployed social groups; (2) diversity, i.e., a board of directors, a team of managers, a staff, and a supply chain in which the

usually marginalized categories are adequately represented; (3) civic engagement and philanthropy, i.e., support for employee volunteering activities and charitable donations; (4) involvement at the local level, such as appealing to local and independent financial institutions and supporting local businesses, owned by members of ethnic minorities or women; and finally, (5) the suppliers, distributors, and products area, which includes aspects such as increasing transparency thanks to the dissemination of the social and environmental performance of the supply chain (Honeyman 2016) to all stakeholders.

Environment

The environment impact measurement focuses on four areas: (1) the land, offices, and plant area, which includes improving efficiency in water and energy consumption and waste generation, using renewable energy, encouraging employees to use ecological home/work transport alternatives, and improving indoor air quality for company buildings; (2) the energy, water, and materials area, which includes, among other things, the performance of a product life-cycle assessment; (3) the emissions and waste area, which consists of the launch of a plan for the recovery and reuse of products and the monitoring of greenhouse gas emissions; and (4) the transport, distribution, and supplier area, which includes the ability to incentivize suppliers to improve their environmental performance (Honeyman 2016).

Governance

The governance impact measurement focuses on three main areas: (1) the mission, which includes the inclusion of a commitment to sustainability in the declaration of intent and on the mission itself, the training of personnel on environmental and social values, and the request for feedback to stakeholders; (2) transparency, which includes the sharing of economic and financial information with employees, the presentation of an annual report, and collaboration in the development of social environmental standards within the business sector; and (3) the corporate form, to verify

if the company has formally integrated its mission in the statute (Honeyman 2016).

The process involves inserting company data, such as previous certification, partnerships, and questionnaire results, into the algorithm developed by B Labs' Standards Advisory Council (SAC) (Bauco et al. 2017), an independent committee of 20–22 members, each with deep industry or stakeholder expertise (Nigri 2018). The SAC is divided into two subgroups – one to oversee the content and weightings for the version of the B Impact Ratings System (B Lab 2019c) for companies and funds in developed markets and the other for emerging markets (B Lab 2018b).

Once the process evaluates the global impact of the business, the company that completes the assessment process (which lasts about 6 weeks) can add the B Corp certification to its products and website (Nigri 2018; B Lab 2016).

Summary

The B Corp certification pinpoints where a company excels in the short term, and the benefit corporation governance framework commits to consider stakeholder impact for the long term by building it into its legal structure (Di Cesare and Ezechieli 2017). BIA results give specific impact indications that can be utilized to prepare the annual benefit report (B Lab 2017) and as a benchmark to compare and improve a company's social and environmental performance against peers (B Lab 2019b).

Over the next 3 years, thanks to a partnership between B Lab and the UN Global Compact, the B Corp Benchmarks system will help companies assess their performance against Sustainable Development Goals (SDGs) comparing them to tens of thousands of other companies in B Lab's database.

B Lab and the UN Global Compact have an agreement to collaborate to create a free publicly available online management platform, key indicators, and resources available for companies to improve their impact. The plan is to reach 100,000 companies by 2030 in partnership with other

institutions and networks aiming to help businesses deliver on the SDGs (ASVIS 2018).

Cross-References

- [Balanced Scorecard and Sustainability](#)
- [Corporate Social Responsibility Reporting](#)
- [CSR Disclosure Quality: Role of NEDs](#)
- [Stakeholder Value Creation](#)
- [Sustainable Reporting](#)

References

- ASVIS. (2018). Introducing an actionable management platform for businesses to deliver on the Sustainable Development Goals by 2030. <https://asvis.it/rapporto-asvis-2018/#>.
- B Lab. (2016). The B impact assessment. <https://bcorporation.eu/about-b-lab>.
- B Lab. (2017). Benefit Corporation. <https://bcorporation.eu/about-b-lab>.
- B Lab. (2018a). Benefit Corporations. <https://bcorporation.eu/about-b-lab>.
- B Lab. (2018b). B Corporation standards and governance. <https://bcorporation.eu/about-b-lab>.
- B Lab. (2019a). About B corps. <https://bcorporation.eu/about-b-lab>.
- B Lab. (2019b). How do I pick a third party standard.
- B Lab. (2019c). B analytics. <https://bcorporation.eu/about-b-lab>.
- Bauco, C., Castellani, G., De Rossi, D., & Magrassi, L. (2017). Società benefit (Parte III). <https://www.fondazionenazionalecommercialisti.it/node/1194>.
- Baudout, K.L., Dillard, J., & Pencle, N. (2018, June). The emergence of benefit corporations: A cautionary tale of responsible business conduct and the common good. In *Conference presented at the 41th Annual Congress of EEA*, European Accounting Association, Bocconi University, Milan.
- Billis, D. (Ed.). (2010). *Hybrid organizations and the third sector: Challenges for practice, theory and policy*. Basingstoke/Hampshire/New York: Palgrave Macmillan.
- Castellani, G., De Rossi, D., & Rampa, A. (2016). *Le Società Benefit: la nuova prospettiva di una Corporate Social Responsibility con commitment*. Fondazione Nazionale dei Commercialisti.
- Dent, M. (2016). *What happened to AND1? The Wharton grad who sold the clothing brand has a new idea*. Billy Penn. <https://billypenn.com/2016/01/25/whatever-happened-to-and1-the-insurgent-clothing-brands-founder-has-a-new-product/>.
- Di Cesare, P., & Ezechieli, E. (2017). *Le benefit Corporations e l'evoluzione del Capitalismo* (version 1.0). Università Ca' Foscari Venezia, Italia. <https://doi.org/10.14277/6969-188-1/LCF-4-4>.
- Fierro, R., & Miller Hill, D. (2016). Benefit corporations and measures of social impact: Evaluation insight, opportunities, and limitations. Partners for development. www.pfd.com.
- Hartford, T. (2005). *American sporting goods acquires AND 1*. SGB Media. <https://sgbonline.com/american-sporting-goods-acquires-and-1/>.
- Hiller, J. S. (2013). The benefit corporation and corporate social responsibility. *Journal of Business Ethics*, 118, 287. <https://doi.org/10.1007/s10551-012-1580-3>.
- Honeyman, R. (2014). *A look at the history of the B Corp movement*. Triple Pundit. <https://www.triplepundit.com/story/2014/look-history-b-corp-movement/41536>.
- Honeyman, R. (2016). *Il manuale delle B Corp. Usare il business come forza positiva*. Milano: Bookabook.
- Laszlo, C. (2019). Strengthening humanistic management. *Humanistic Management Journal*. <https://doi.org/10.1007/s41463-019-00055-9>.
- McNulty Foundation. (2015). How three successful entrepreneurs redefined business as a force for good. <http://mcnultyfound.org/impact/stories/how-three-successful-entrepreneurs-redefined-business-as-a-force-for-good>.
- Nicholas, A. J., & Sacco, S. (2017). *People, planet, profit: Benefit and B certified corporations – Comprehension and outlook of business students*. Articles & Papers Faculty and Staff. Salve Regina University.
- Nigri, G. (2018). Social impact in benefit corporations: benefit impact assessment and communication tools. *Advances in Business and Management* 15, 131–158. Nova. <https://novapublishers.com/shop/advances-in-business-and-management-volume-15/>.
- Nigri, G., & Del Baldo, M. (2018). Sustainability reporting and performance measurement systems: How do small and medium-sized benefit corporations manage integration? *Sustainability*, 10, 4499. <https://doi.org/10.3390/su10124499>.
- Nigri, G., & Michelini, L. (2019). A systematic literature review on social impact assessment: Outlining main dimensions and future research lines. In R. Schmidpeter, N. Capaldi, S. O. Idowu, & A. S. Herrera (Eds.), *International dimensions of sustainable management* (pp. 53–67). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-04819-8_4.
- Nigri, G., Michelini, L., Grieco, C., & Iasevoli, G. (2016). B corps and their social impact communication strategy: Does the talk match the walk? In *SIM conference 2016*. Università di Cassino.
- Schaw, P. (2017). Heroes of Conscious Capitalism. Schwab, Klaus. The fourth industrial revolution, Currency.
- Stecher, B. M., Camm, F., Damberg, C. L., Hamilton, L. S., Mullen, K. J., Nelson, C., ... & Stecher, B. M. (2012). Toward a culture of consequences: Performance-based

accountability systems for public services. *Rand health quarterly*, 2(1).

Steiman, H. C. (2007). A New Kind of Company: A “B” Corporation, INC. (Magazine) (July 1, 2010). <https://www.inc.com/magazine/20070701/priority-a-new-kind-of-company.html>.

United Nations. (1992). Rio declaration of the United Nations on environment and development. <https://www.un.org/en/conferences/environment/rio1992>.

US Law. (2010). The benefit act. Maryland Code. <https://law.justia.com/codes/maryland/2015/article-gca/title-5/subtitle-6c/>.

Benefit Focus

- [Utilitarianism](#)

Benefit-Cost Analysis

- [Cost-Benefit Analysis](#)

Benefits

- [Bonuses \(Employee for Performance\)](#)

Benevolent

- [Altruistic CSR](#)

Best Practice

- [Social Case of CSR](#)

Best Practices Recommendations

- [Codes of Good Governance](#)

Bidirectional Decentralized Power System

- [Smart Grid](#)

Big Data and Data Mining

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Synonyms

[High volumes of data](#); [Large amounts of data](#); [Large amounts of information](#); [Large quantities of data](#); [Lots of data](#); [Massive data](#); [Three Vs](#)

Definition/Description

Big data refers to a large volume of data that is gathered and stored in digital format. Because of their size, datasets that are gathered can be utilized and analyzed only through special techniques.

Despite not having a single valid definition of how big a dataset should be in order for it to be qualified as big data, most professionals agree that big data should have the so-called three Vs – volume, variety, and velocity (Smiley 2016). Big data can be structured, semi-structured, and unstructured.

Data mining refers to the process of extracting knowledge from large datasets. It is essentially discovering and analyzing hidden patterns in data, from where the mining metaphor comes from (Wu et al. 2009).

Data mining algorithms can be supervised or unsupervised. There are different types of algorithms that can be applied for discovery of knowledge from data – classifier, regression, clustering, association, sequential analysis, time series, dimensional reduction, etc. Each algorithm serves for discovering meaningful patterns of behavior that are hidden in data (Dataflok 2020).

Big data and data mining techniques have applications in many fields of business and research. As the amount of data that is collected grows, more and more entities – companies, governments, and research institutes – turn to data analysis in order to find hidden patterns of behavior and acquire more knowledge of relevant processes that may not be apparent or proven by more traditional methods of knowledge discovery (Smiley 2016).

Big Data

Big data has established itself as one of the main ways in which different patterns of hidden behavior can be identified. For this reason, it has been considered that big data analysis is a useful tool for cost minimization and profit maximization in business. It is more and more applied by organizations in the public and private sectors in order to gain insights that lead to better decision-making and improving strategies. Big data analysis is also gaining large popularity in various fields of scientific inquiry (Smiley 2016).

Despite not having a single definition on how much data can be considered big data, both theorists and practitioners agree that the big data should adhere to the three Vs of big data:

- Volume: refers to the amount of data or the size of datasets
- Variety: refers to different types of data
- Velocity: refers to how fast data is growing (Smiley 2016)

In some instances, two additional Vs are added to the initial three: veracity, whether the data can be trusted or not, and value, whether the data which we are storing and processing is worth the investment in terms of value of analysis insights (Tole 2013).

Challenges of Big Data

- Storage – storing large amounts of data creates the need for specific infrastructure that could often be costly (Mazumdar et al. 2019).

- Processing – specialists with specific skills are required in order to perform analysis of big data (Mikalef et al. 2018).
- Personal information regulation compliance – privacy and use of personal data have become one of the main issues in data handling. The privacy issue has both ethical and economic debates.

Perhaps some of the biggest challenges in big data, however, are not of technical nature but are rather socioeconomic issues. The use of big data in social-scientific analysis has raised a number of ethical concerns. Such concerns involve the necessity of signed consent forms of participants (Trilling 2017). Privacy and anonymization of the dataset are another related problem when using big data for social research. Even if pieces of information such as names or identity numbers are stripped from a dataset, people still might be identifiable (Trilling 2017).

Reproducibility of research results is also challenged due to legal restrictions and because big data is often dynamic in nature (Trilling 2017). Also, the size of the data is often too big, and in order to be able to reproduce the research techniques used in a study, researchers would need a specialist hardware for storage of data, etc. (Trilling 2017).

Data Mining and Data Mining Algorithms

Data mining is a combination of operations that data analysts apply to a dataset. The idea of data mining is to obtain information on often hidden patterns of behavior and find dependencies between variables (Wu et al. 2009).

Data mining algorithms are split into supervised learning algorithms and unsupervised learning algorithms.

Some main algorithms that are used in order to obtain meaningful insight from datasets are:

- Classification: These algorithms put the data into various classes based on their attributes (Datafloq 2020).

- Clustering: These algorithms divide data into clusters on the basis of some similar properties (Datafloq 2020).
- Association: These algorithms find correlation between attributes in data, on the basis of which they attempt to create association rules which are then used for predictions (Datafloq 2020).
- Sequence analysis: Finding frequent sequences in data.
- Regression: A mathematical model used to establish correlation or to predict behavior based on the data available.
- Time series analysis: A mathematical model that incorporates seasonal cycles.

Challenges in Data Mining

Development of data mining has led to unique challenges from the perspective of processing and analysis (Aggarwal 2015, p. 3). Some of the major challenges concern (Kade 2019):

- Data mining algorithms perform differently on bigger sets; therefore a scaling challenge is sometimes posed.
- Combinations of different types of complex data could be challenging, and data could often be noisy or incomplete.
- Protection of data security, integrity, and privacy is an ever growing issue.

Summary

Big data and data mining are considered to be highly valuable in terms of better understanding of the processes in both business and society. In the more and more data-driven economy, using data analysis has become a necessity for companies. It is by harnessing the power of gathered data that many organizations find new ways of optimizing their strategies. However, it is of most importance to have a transparent and fair way of collecting and using data, especially when it is related to individual behavior and individual choice.

References

- Aggarwal, C. C. (2015). *Data mining: The textbook*. Cham: Springer.
- Datafloq. (2020). 5 major data mining techniques being used by big data. <https://datafloq.com/read/5-major-data-mining-techniques-being-used-big-data/3352>. Accessed 7 Nov 2020.
- Kade, R. (2019). Your guide to current trends and challenges in data mining. *Smart Data Collective*. <https://www.smartdatacollective.com/your-guide-to-current-trends-and-challenges-in-data-mining/>. Accessed 7 Nov 2020.
- Mazumdar, S., Seybold, D., Kritikos, K., & Verginadis, Y. (2019). A survey on data storage and placement methodologies for Cloud-Big Data ecosystem. *Journal of Big Data*, 6(15), 1–37. <https://doi.org/10.1186/s40537-019-0178-3>.
- Mikalef, P., Giannakos, M., Pappas, I., & Krogstie, J. (2018). The human side of big data: Understanding the skills of the data scientist in education and industry. In *2018 IEEE global engineering education conference (EDUCON)* (pp. 503–512). Spain, Tenerife: IEEE. <https://doi.org/10.1109/EDUCON.2018.8363273>.
- Smiley, M. (2016). An introduction to big data. *Encyclopedia of Cloud Computing*, 537–550. <https://doi.org/10.1002/9781118821930.ch44>.
- Tole, A. (2013). Big data challenges. *Database Systems Journal*, 4(3), 31–40.
- Trilling, D. (2017). Big data, analysis of. *The international Encyclopedia of communication research methods* (pp. 1–20). <https://doi.org/10.1002/9781118901731.iecrm0014>.
- Wu, X., Zhang, Y., & Zhu, X. (2009). Data mining. *Wiley Encyclopedia of Computer Science and Engineering*. <https://doi.org/10.1002/9780470050118.ecse094>.

Bill Clinton's Presidency

- [Clinton Global Initiative](#)

Bio Economy

- [Green, Circular, and Bio Economy](#)

Biocombustibles

- [Energy Biofuels](#)

Biodesign

► Biomimicry

Biodiversity

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Synonyms

Biological diversity; Ecological diversity; Ecosystem diversity; Variety of living things

Definition

Biodiversity is an abbreviation for biological diversity and it represents the variety of life. There is a growing recognition that biodiversity represents a resource with enormous value for present and future generations. The Convention on Biological Diversity defines biodiversity as “the variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and ecological complexes of which they are a part: this includes diversity within species, between species and of ecosystems” (CDB 1992).

It is possible to distinguish three different hierarchical levels of biodiversity: genetic, species, and ecosystem diversity.

The first one is the genetic variation within a species, and it is the basis of a population’s adaptive capacity to environmental stresses.

Species biodiversity refers, instead, to the variety of species within a region, and its easiest measure is the number of species present in the area per unit (the greater is the richness of the species, the greater is the species diversity). To evaluate species biodiversity, however, it is also essential to consider species uniformity, given that not all species coexist in an environment of equal numbers: some are rare, some are popular, and

others are abundant. Regions with a higher number of species, with more uniformly distributed individuals, are those with greater species biodiversity.

Ecosystem diversity is the largest scale of biodiversity and describes the number of niches, trophic levels, and different ecological processes that maintain energy flow, food webs, and the recycling of nutrients.

The Dimensions of Biodiversity

The Convention on Biological Diversity defines biodiversity as “the variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and ecological complexes of which they are a part: this includes diversity within species, between species and of ecosystems” (CDB 1992).

The well-being (see) and productivity of all ecosystems, on which humans depend, are influenced by the environment around them in which there are different plant and animal species. The sum of all living organisms (microorganisms, plants, and animals), the genes that they have, and the complex ecosystems that they constitute in the biosphere represent the biodiversity that can be defined as the wealth of life on Earth.

The Earth’s biota is made up of an estimated ten million species (Pimm et al. 1995), whereas UNEP estimates that the possible global total of species amounts at approximately 14 million of which about 1.75 million species have been described and named to date, the others are unknown and undescribed. The most described species are animals (1,320,000 described and 10,600,000 estimated) and plants (270,000 described and 300,000 estimated), covering a total of 90% of the described species, while the currently less identified species are bacteria, for which there is also the greatest gap between described species and estimated species (4,000 described species compared to the estimated 1,000,000) (CBD 2001). There is, therefore, a large portion of unknown biodiversity associated with a loss of biodiversity caused by the extinction of many species. The present extinction rate of species is about 1000 to 10,000 times higher than the natural one (Pimentel et al. 1997). The International Union

for the Conservation of Nature (IUCN) has carried out a species extinction risk assessment, identifying different threat categories with an increasing risk of extinction in the short or medium term (least concern, near threatened, threatened, and extinct) (Pimm et al. 2014). By March 2014, IUCN had evaluated 71,576 species (mainly terrestrial and freshwater ones) and their related risk of extinction, observing that 860 were extinct, while 21,826 are threatened with extinction and, among these, 4,286 are endangered. The most threatened species were the terrestrial ones, with values ranging from 13% (birds) to 41% (amphibians and gymnosperms), while for freshwater species, the threat levels ranged from 23% (mammals and fish) to 39% (reptiles).

In addition to the decline in the number of species on the planet, changes that represent loss of biodiversity can also be considered:

- Conversion of biomes (of the 14 terrestrial biomes, two thirds of two and more than half of four have been converted to agriculture since 1990).
- The distribution of species on land is increasingly homogeneous.
- Genetic diversity has decreased globally, especially among cultivated species (MEA 2005).

The main factors for biodiversity loss are the destruction, degradation, and fragmentation of habitats, caused both by natural disasters (volcanic eruptions, tsunamis, floods, etc.) and by profound changes caused by human activities (climate change (see), pollution (see), overexploitation of natural resources, introduction of exotic species, deforestation, and habitat loss).

The Value of Biodiversity

Biodiversity is increasingly recognizable as the core of healthy ecosystems as biodiversity loss reduces multi-trophic interactions. The conceptual guiding principle behind the interconnection between biodiversity, good environmental condition, and human well-being is:

biodiversity → ecosystem functioning (EF) → ecosystem services (ES) → human well-being.

This consequential flow is based on the assumption that the increase in biodiversity has a positive effect, at least to some degree, on the functioning of the ecosystem, which increases ES and can finally enhance human well-being (Pinto et al. 2014).

The diversity of genes, species, and ecological processes makes a vital contribution to the functioning of ecosystems supporting their structure and processes (e.g., water, nitrogen, and carbon cycles are made possible by different species working to maintain ecological processes, and pollinators provide substantial benefits to the diversity of ecosystems, etc.).

Promoting the healthy functioning of ecosystems also directly improves ecosystem services (ES), which are defined as “the conditions and processes through which natural ecosystems, and the species that compose them, sustain and complete human life” (Daily et al. 1997); in short, “the set of ecosystem functions useful to man” (Kremen 2005). There are various benefits that individuals and society can obtain from ecosystems and they are organized in:

- Provisioning services, which are products obtained from ecosystems, for example, foods, freshwater, fiber, genetic resources, fuelwood, biochemical, etc.
- Regulating services, which are benefits obtained from ecosystem processes comprising climate and water regulation, pollination, water purification, etc.
- Cultural services, which are nonmaterial advantages obtained from ecosystems, comprising cultural heritage, recreation and ecotourism, sense of place, aesthetics, etc.

Biodiversity always plays a more or less significant role in all these services so that changes and/or losses of biodiversity affect the functionality in the production of ecosystem services that support various aspects of human well-being.

Ecosystem services are influenced by functional diversity in an ecosystem rather than by species diversity. Indeed, as formulated by McCann (2000), the stability of an ecosystem is related to its functional diversity that is able to provide diverse responses to environmental changes. For example,

if there is a competition for the same resource by two different species, it will result in the stabilization of ecosystem functions through the decline of one of the two species and the upper hand of the one that is able to do well under changed conditions, contributing to the maintenance of the ecosystem as a whole. Thus, the functional diversity in an ecosystem impacts ecological resilience (see), that is, the ability of ecosystems to resist stress and shock, to absorb disturbance, and to recover from disruptive change.

Many of the ecosystem services are linked with the ecosystem resilience; a decrease in resilience is expected to have, as a consequence, a decrease in ecosystem services, and, in this context, biodiversity can have a significant influence to ecosystem resilience (Myers 1996). Biodiversity, in fact, offers sustainability and resilience, especially in the poorest and most vulnerable countries where biodiversity has a safeguarding function of providing multiple sources of ecosystem services, for example, alternative options for food and/or other resources (MEA 2005). The loss of biodiversity also influences the sustainability and resilience of agricultural systems; in fact, the deletion of the entire functional groups of species in order to promote intensive agriculture has increasingly compromised the development of ecosystem services. Adopting agricultural systems capable of providing standard production (plant and animal) as well as ecological services that allow for the protection, conservation, and increase of biodiversity would make farmers less at risk for a loss of production and would make agricultural systems more resilient to environmental changes.

The first recognition of the value and commitment needed for the conservation of biological diversity was the Convention on Biological Diversity (CDB 1992), inspired by the world's growing commitment to sustainable development (see). For the first time in history, the Convention focused on the sustainable use of the components of biodiversity and on the benefits arising from the use of genetic resources.

Ten years after its establishment, political leaders at the 2002 World Summit on Sustainable Development agreed to “achieve by 2010 a significant reduction in the current rate of

biodiversity loss at global, regional and national levels as a contribution to poverty alleviation and to the benefit of all life on earth” (COP Decision 2002).

Globally, the 2010 biodiversity targets have not been met. The third edition of the Global Biodiversity Outlook (GBO-3) is one of the most significant documents produced during the year 2010, known as the International Year of Biodiversity. In the GBO-3, the probable, further, and rapid loss of biodiversity is reported with a consequent dramatic reduction of many essential services for human society. In response to this failure, at the tenth Conference of the Parties in Nagoya, in Japan, the CDB adopted a new strategic plan for biodiversity 2011–2020 including a vision for 2050 (CDB 2010). The plan provided for 20 ambitious targets, articulated in 56 indicators, collectively known as Aichi Biodiversity Targets, which have been the reference framework for the definition of global, national, and regional targets during this decade, in order to promote and take urgent and effective measures to stop biodiversity loss and ensure resilient ecosystems by 2020.

Summary

Often the term biodiversity is used as synonymous of species richness (the number of species present), although it also includes a wide range of biotic scales, from genetic variations within species to interactions between species and to the diversity of ecosystems. This is due to the fact that the changes generated by the variation in the richness and composition of species are the object where the research is most concentrated (Hooper et al. 2005). Variations in the components of the Earth's biodiversity have a strong impact on the properties and functions of ecosystems and on the goods and services they provide for the livelihood and well-being of humanity.

Cross-References

- [Climate Change](#)
- [Pollution](#)

- Resilience
- Sustainable Development

References

- CDB. (1992). Convention on biological diversity. <https://www.cbd.int/doc/legal/cbd-en.pdf>. Accessed 22 July 2019.
- CDB. (2001). Status and trends of global biodiversity. In *Global biodiversity outlook 1 chapter 1*. Accessed 23 July 2019.
- CDB. (2010). Convention on biological diversity. UNEP/CBD/COP/DEC/X/22 29 October 2010. <https://www.cbd.int/doc/decisions/cop-10/cop-10-dec-22-en.pdf>. Accessed 22 July 2019.
- COP decision. (2002). Strategic plan for the convention on biological diversity. COP 6 Decision VI/26. <https://www.cbd.int/decision/cop>. Accessed 10 June 2019.
- Daily, G. C., Matson, P. A., & Vitousek, P. M. (1997). Ecosystem services supplied by soil. In G. C. Daily (Ed.), *Nature services: Societal dependence on natural ecosystems* (pp. 113–132). Washington, DC: Island Press.
- Hooper, D. U., Chapin, F. S., Ewel, J. J., Hector, A., Inchausti, P., Lavorel, S., & Lawton, J. H. (2005). International union for the conservation of nature. IUNC. <http://www.iucnredlist.org>. Accessed 12 June 2019.
- Kremen, C. (2005). Managing ecosystem services: What do we need to know about their ecology? *Ecology Letters*, 8, 468–479.
- McCann, K. S. (2000). The diversity–stability debate. *Nature*, 405, 228–233.
- MEA. (2005). Millennium ecosystem assessment. Ecosystems and human well-being: Biodiversity synthesis. <https://www.millenniumassessment.org/documents/document.354.aspx.pdf>. Accessed 23 July 2019.
- Myers, N. (1996). Environmental services of biodiversity. *Ecology*, 93, 2764–2769.
- Pimentel, D., Wilson, C., McCullum, C., Huang, R., Dwen, P., Flack, J., Tran, Q., Saltman, T., & Cliff, B. (1997). Economic and environmental benefits of biodiversity. *Bioscience*, 47(11), 747–757.
- Pimm, S. L., Russell, G. J., Gittleman, J. L., & Brooks, T. M. (1995). The future of biodiversity. *Science*, 269, 522.
- Pimm, S. L., Jenkins, C. N., Abell, R., Brooks, T. M., Gittleman, J. L., Joppa, L. N., Raven, P. H., Roberts, C. M., & Sexton, J. O. (2014). The biodiversity of species and their rates of extinction, distribution, and protection. *Science*, 344, 618.
- Pinto, R., De Jonge, V. N., & Marques, J. C. (2014). Linking biodiversity indicators, ecosystem functioning, provision of services and human well-being in estuarine systems: Application of a conceptual framework. *Ecological Indicators*, 36, 644–655.

Biodiversity Education

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Synonyms

Biological diversity education; Education for biodiversity; Education for biological diversity; Education on biodiversity; Education on biological diversity

Definition

The biodiversity decline (see Biodiversity) relates to other urgent sustainable development topics (see Sustainable Development) like climate change (see Climate Change) and is one of the more alarming threats to the world of today (CBD 2000, 2020b; Erdelen 2014). Humans are completely dependent on other biological components for their survival, but humans are a threat to the planet's biodiversity. Yet, as a species with moral consciousness, humans are capable of learning and understanding how their activities affect the rest of nature, and how future biodiversity losses can be avoided. Therefore, biodiversity education (BE) is most important and is in need of development.

BE focuses on raising awareness on the necessity of sustaining a biodiverse planet (CEE 2013). This awareness includes understanding what biodiversity means, why it is important, how to safeguard it, and how to manage it. The aim is to encourage joint engagement and inclusion (see Inclusion) of various persons and groups in the work on biodiversity protection and preservation. *Protection* is a more instrumental approach to safeguard nature for human interests and *preserve* searches for a kinship with nature (Franco 2013). This means that the approach varies (see also Weak Sustainability and Strong Sustainability). Since biodiversity is more than a biological

concept, BE likewise relates to many other human domains, such as politics, the economy, social and cultural issues, legacy, and ethics (see Ethics and Ethics and Ethical Theories). BE is a lifelong process including people from the entire world and in the most various learning situations.

Introduction

The concept of biodiversity education comprises two words. While both these words are difficult to understand, they will first be separately interpreted with the education-related word “learning.” To begin with, biodiversity is a shortening of biological diversity, and it was coined in the 1980s. The Convention on Biological Diversity (CBD) defines the concept like this:

“Biological diversity” means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems. (UN 1992, p. 9).

The core of the biodiversity concept from a biological view includes three levels: a genetic level, a species level, and an ecosystem level (see Ecology and Ecosystems). First, diversity at the genetic level implies the variety among individuals of the same species. Second, the species level is the diversity between species, which is the level that people usually relate to the biodiversity concept, and with it imply that a place with many species has a richer biodiversity (e.g., a forest with a more varied number of different tree species). Third, the ecosystem level includes the communities or habitats in which biological organisms interact with each other and with their physical environments (e.g., a lake, a forest, or a swamp). Besides these levels, conservation biologists emphasize the number of rare or endemic species in an area (endemic means that they are unique for a particular place), while urban biodiversity researchers mainly focus on the species richness in a particular spot (Szlavecz et al. 2011).

The *Convention on Biological Diversity* is the legal framework for the protection of biodiversity. The convention was signed by world leaders on the *UN Conference on Environment and Development* (UNCED) in Rio de Janeiro 1992, and it was ratified in 1993. Since then, nearly 200 countries have signed the agreement (CBD 2000). From the very beginning, lack of awareness and understanding of the urgency of biodiversity protection has been a vast obstacle to halt the loss of biodiversity efficiently. However, even in the first agreement in 1992, education and awareness raising play crucial roles (CBD 2000) (see Sustainability Education and Awareness). In the CBD strategic plan for biodiversity 2011–2020, including the so-called Aichi Biodiversity Targets from 2010, the very first target is: “By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably” (CBD 2020a). However, 10 years later, the report *Global Biodiversity Outlook 5* shows that this target has not been met (UNESCO/UNEP/CBD 2020). The *Update of the zero draft of the post-2020 global biodiversity framework* includes reformed targets. In the updated document, the first Aichi target has received a new and more precise formulation. Traditional knowledge has become visible, and people are specified by the decision-makers and general public: “By 2030, ensure that quality information, including traditional knowledge, is available to decision makers and public for the effective management of biodiversity through promoting awareness, education and research” (CBD 2020b, p. 7).

In addition to climate change, the loss of biodiversity is one of the main dilemmas needing to be solved, according to the United Nations Educational, Scientific and Cultural Organization (UNESCO) (2017) (see Biodiversity: Environment, and Biodiversity: Sustainability). Biodiversity is the basis of healthy ecosystems and sustainable human development and for all human life (see more in Freedman 2014). In addition, human activities are a major reason for the biodiversity loss. Therefore, education and learning on the issue of biodiversity are highly ranked

on the UNESCO's priority list. Education is a tool to gain knowledge, to shape new ways of viewing the world, and to create new practices.

The concept of biodiversity has a distinct definition (see the beginning of the introduction). However, the interpretation of this concept is not self-evident, especially in relation to education. This will become obvious in the next section. Before that, the word education needs to be clarified. "Education" is a usual word that entails schooling, instruction, tutoring, coaching, learning, and various experiences (Jeronen 2012; Wolff 2011). Education takes place in numerous situations and includes targets of many kinds. The site for education can be a preschool, elementary school, or higher education institution (formal education), or it can take place in some other arranged situation outside the educational system (non-formal education). Education also happens in more or less usual (unplanned) daily life situations (informal education). Sometimes, the educational processes involve people in the roles of teachers and students, but learning can also take place without a teacher. Education is much more than a transmission of information from one transmitter (teacher, computer program, book, etc.) to a person. Concepts like communication, illumination, information, and participation (see Participation) are thus sometimes indistinct from education or are at least overlapping.

Similarly, the education-related word "learning" can be interpreted variously. Learning takes place in many completely different circumstances and in various contexts (see Sewell and Newman 2014; Wolff 2011). Yet, education does not always advance to learning. Many elements affect the learning situations, and for learning to happen, these elements need to correlate. The learning environment (physical and social), the learners' and teachers' attitudes and experiences, not to talk about wider political frameworks and social norms, all influence how people learn. The education can aim at a "transmission" of traditions and norms, or a "transformation" (cf. Transformative Learning) aimed at worldview transformation and a change of thinking or practice, even a societal change. When it comes to BE,

the concepts education and learning have to be interpreted in various ways. This is a challenge, but also an opportunity, since the development options in the field already exist. This text brings forward ideas from the multifaceted field of BE.

Biodiversity: A Complex and Ethically Challenging Educational Issue

Since biodiversity is a complex issue, it calls for actions of many kinds. Even if many interesting projects are going on in relation to BE, many difficulties are involved in the topic of biodiversity. Accordingly, it is necessary to reflect on some of these difficulties, since they are all obvious in BE, and must be considered. The first problem is ethical and relates to humans' position in the natural world and their rights and obligations in connection to other species. Other problems relate to location, social and economic matters, and, finally yet importantly, time. In addition to its relational feature, the biodiversity issue is interdisciplinary.

Ethical Problems

When discussing biodiversity as well as BE, it is usual to stress that humans need nature now as well as in the future and that specific species might be beneficial in hitherto unknown ways as medicine, building materials, or for other scientific reasons.

'Biological resources' includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity. (UN 1992, p. 9)

Beside biological resources, the concept "ecosystem service" is common, including all the benefits humans have from nature (see Wägele 2014; Erdelen 2014). However, this anthropocentric view neglects that nature might have an intrinsic value and be valuable for its own sake (Sturma 2014). On the other hand, if nature has an intrinsic value, humans might not be the ones to decide which parts of the biological domain that have a right to live. Still, humans are a species capable of

making such a decision. If every species is treated equally, insects who destroy crops that humans or domestic animals feed on, or those who transmit diseases, are all allowed to exist. From an eco-centric view, in which nature has an intrinsic value, nature must be preserved, while an anthropocentric view asks for conservation of nature (Van Dyke 2014). However, questions remain about what nature needs protection and from what it has to be preserved. Compromises between these perspectives are often the only realistic directions.

Another ethical problem is what nature is. In one way or another, most land on Earth is affected by humans. In addition, most humans live in urban environments, with nature areas composed of many species from other geographical zones and continents far away. To draw a line between what is natural and worthy of protection is then all but easy.

Even if the genetic, species, and ecosystem levels call for different approaches, these levels are often interconnected. In addition, they are associated with human matters like economics and politics (Spash and Aslaksen 2015) and are influenced by human traditions, values, and emotions. When humans make decisions based on which genes of a special species are economically best to invest in, they easily neglect subspecies less suitable for cultivating or breeding, and genetic diversity decreases. In the same way, pragmatic values of other kinds may lead to a decline in diversity at the species and ecosystem levels. Even abstract aims like historical, aesthetic, and symbolic values influence decisions and choices.

When it comes to the educational implementation of the biodiversity issue, many of the political documents mention behavioral change as a purposeful aim of BE (see CE 1995; CEE 2013; UNESCO/UNEP/CBD 2020). This is also an ethical problem (see ► “Ethics of Sustainability Education”). If BE strives to change other people toward specific norms, it becomes reminiscent of indoctrination and is far from transformative learning (Wolff 2011). Therefore, awareness of this risk and negotiations on it is a necessary part of BE development.

Locational Problems

Other BE problems relate to geography and locations. The biodiversity on planet Earth is unevenly distributed; some areas have much greater diversity than others do, and the richest areas are called *hotspots* (Van Dyke 2014). A rich biodiversity occurs on areas with apposite biotic factors (non-biological factors like climate, soil, etc.), but these areas may be economically weaker than areas with much poorer biodiversity.

Nature does not follow human boundaries. Rivers and other bodies of water traverse political borders. Some species and thus genetic material continually change residence and location (Kühl-Stenzel 2014). Among them are migrating birds that spend their lives in several countries. Humans also move around substances. Biological raw material, such as nutrition plants, may grow in one part of the world and be transported for refining in another and again transported for sale in a third. This makes the same plant dependent on politics, economics, and legislation in several states. Even if the transportation of sensitive biological material like blood, tissue, DNA, and microorganisms is regulated by international laws, these kinds of moving are always risky (damage, crimes, etc.) and may be a danger to someone.

Social and Economic Problems

When studying biodiversity, the social and economic aspects cannot be avoided (Spash and Aslaksen 2015). The biodiversity topic is strongly related to the well-being of humans, to equality, and gender, as well as to trade and employment questions. Biodiversity protection as such generates jobs, but biodiversity is also linked to more traditional livelihoods like fishery, agriculture, forestry, and water management.

Biodiversity relates to cultures and traditions in specific areas, and its protection may conflict with the rights of vulnerable groups and indigenous people (Bubna-Litic 2014). Likewise, the protection of biodiversity may be in the interest of local people, but not acknowledged by international politics or by transnational trade and economic organizations.

According to the Aichi Biodiversity Targets, among the major challenges for the Decade on Biodiversity was poverty, loss of livelihood, water scarcity, desertification, access and benefit sharing of genetic resources, and erosion of traditional, indigenous knowledge and values (CEE 2013).

Development and Time-Related Problems

A further set of problems relate to development and time (Wolff and Skarstein 2020). Humans' use of nature has a history, a present day, and a future. How to relate to all these time dimensions in education connects to cultural traditions and social circumstances but also to technology development and economics. Local and international agencies and citizens need to have the opportunity to participate and have their say in the biodiversity debate and be a target for educational endeavors.

A Quest for a Multiple Approach

Finally, BE reflects complexness in many ways. The biodiversity dilemmas obviously call for broad perspectives, knowledge, and skills from various disciplines (see ► [“Transdisciplinary Learning”](#)), employment of several educational methods, and inclusion of multiple groups (Erdelen 2014). It is not enough to deliver knowledge from a strictly scientific or biological angle. A wider examination might bring necessary restrictions to the surface — at least theoretically.

Critical examination and revisions which meet the standards of ethical justification will lead to normative restrictions on the options of human activities. These restrictions will, at least to some extent, suggest a withdrawal from certain habitats. (Sturma 2014, p. 130.)

The Tasks of Biodiversity Education

BE appeared on the educational agenda at the beginning of the 1990s. Important partners in the development of BE have been the CBD, UNESCO, UNEP (United Nations Environment Programme), IUCN (International Union on Conservation of Nature), and WWF (Worldwide

Fund). Yet, there have been earlier attempts that also could be called BE. An example of that are the books by Maria Merian (born 1647), who skillfully combined art and biology describing insect species (mainly butterflies) and plants in a clear pedagogical way (see, e.g., Sidman 2018).

Biodiversity was a major topic for the *European Nature Conservation Year 1995*. The Council of Europe (CE) report from this special year highlights climate change as a major sign of how humans mistreat planet Earth (CE 1995). Therefore, the report emphasizes actions that could limit the damage and restore the environment.

Preserving the planet is the most important political aspect of *European Nature Conservation Year*, and society must be called upon to pull together as a whole. We must be more mindful of our local environmental situation. (CE 1995, p. 3.)

The CE report shows that many countries in Europe worked with BE in 1995. The activities included conferences, seminars, courses, and research days; production of material, such as booklets, videos, and songs; outdoor education, rehabilitation of nature areas, setting up nature trails, and planting hedges; and arranging exhibitions. BE was also the topic of the IUCN's *Commission on Education and Communication's* regional organization *European Committee for Environmental Education's* workshops 1995 and 1996. These workshops resulted in a publication on biodiversity education and communication discussing both biodiversity as a concept and its educational implications. The practical part of the publication includes topics like how to influence decision-makers and school policy, biodiversity in formal education, teacher training, communication and media, rural and urban BE, and the use of drama methods in BE (IUCN 1998).

In 2002, the CBD adopted the global initiative *Communication, Education and Public Awareness* (CEPA), with the UNESCO as the key partner (CEE 2013). Despite the ambitious strategy of international cooperation and inclusion of BE in education on various levels, the aims of this initiative were not met. Even if governments showed understanding, they were not willing to provide

resources. On national levels, there was a lack of knowledge management (see Knowledge Management), political willingness, and expertise in relation to BE. Subsequently, the *International Year of Biodiversity 2010* especially stressed the role of education and so did the program for the *UN Decade on Biodiversity 2011–2020*. Yet, who is BE actually for, and how could it be implemented?

The Target Groups of Biodiversity Education

BE starts from the smallest children at home, in daycare, and in preschools; continues through elementary, secondary, vocational, and higher education; and continues to workplace training and other professional instruction. BE is also a part of leisure time courses and activities. Through BE, it is possible to initiate learning conditions activating rural as well as urban citizens, indigenous people as well as officials, politicians, researchers, and other stakeholders in mutual dialogues and activities.

The campaign target audiences for the *European Nature Conservation Year 1995* were municipal, regional, and national authorities; people depending on the natural environment for work or leisure pursuits (e.g., farmers, foresters, fishers, or hunters); landscape users (tourists, property developers, etc.); and young people. The last-mentioned group was especially underscored (CE 1995). These target groups are still relevant in 2021. Yet, the list has developed and the specification of the target groups becomes increasingly more distinct.

With support from the UNESCO and in collaboration with the CBD, the *Centre for Environment Education* (CEE) in India prepared a strategy intended to facilitate the promotion of the 19 *Aichi Biodiversity Targets*. This strategy aimed at integrating the goals of *Education for Sustainable Development* (ESD), especially the experience from the *UN Decade of Education for Sustainable Development* (2015–2014) (see Decade of Education for Sustainable Development, and United Nations Decade of Education

for Sustainable Development), with the goals of the CBD (CEE 2013). The targets listed by the CEE are governments (officers and decision-makers on several levels), communities, NGOs (non-governmental organizations, see NGOs and Sustainability and NGOs) and CBOs (community-based organizations), business groups (public and private), media, general public, researchers, teachers, students, and youth (CEE 2013). However, the strategy overlooks the children under 6 years, even if they are included already in the IUCN publication of 1998.

Even if the CEE (2013) stresses that all citizens need BE, the strategy recommends that the planning of a specific action or learning project starts from an identification of the key stakeholders. In addition, the document emphasizes the importance of understanding the background of the key groups. This includes understanding for their socioeconomic and cultural backgrounds, their basic values, their knowledge levels, and how they are used to manage biodiversity. Thus, the BE can build on what these target groups need, acknowledge their preunderstanding and previous skills, and create education based on this information. When the educational planning starts from the premise that all stakeholders have something to bring forward, the communication and learning approach becomes reciprocal.

Biodiversity Education in Early Childhood and School Age

Spontaneously, BE might first be taught of as education taking place in schools. Yet, it is not enough that students in school age learn about biodiversity. The issue is broad and has to be an ingredient in education outside school as well. However, with a good start at an early age, the interest has already been awakened. This practical part of the text starts with a description of BE in early childhood, and in schools, and continues with various adult groups.

Biodiversity Education in Early Childhood

In early childhood settings, BE is a part of the daily activities and communication. Yet,

childhood is not restricted to special places with purposeful education. Interviews with older children and adults have approved the importance of authentic experiences of nature as a child. Early frequent experiences of organisms in their habitats generate an interest and “open the children’s eyes” for natural phenomena like biodiversity (Wolff and Skarstein 2020). With small children, communication is part of the exploration. Together, adults and children experience new phenomena outdoors and spend time finding out what happens around them by carefully listening and watching. Indoors, the studies continue with the help of pictures and books and by drawing, singing, and pondering. Play and dialogues are part of the learning processes, and the choice of pedagogical strategies is significant (Edwards and Cutter-Mackenzie 2013). In addition, the adults’ way of talking about biodiversity-related issues makes a difference. At an early age, children can learn what living and non-living material is, adapt concepts and species names, and discuss ethical problems related to how to treat other creatures.

Biodiversity Education in Schools

Like in the early years, authentic learning is also a benefit for children of school age, and a combination of indoor and outdoor activities is being used to promote scientific literacy, as well as care and responsibility (see Responsibility). The means and activities depend on the age, but below are examples of methods to modify these according to the group in question (Wolff 1998; Yli-Panula et al. 2018). Interdisciplinary approaches are beneficial, when appropriate, since the biodiversity topic includes many fields of knowledge. Besides teacher-led instruction, problem-based learning, phenomenon-based learning (see Phenomenon Based Learning), and other student-centered approaches suit BE well (Jeronen et al. 2017). Experimental learning, role-play, and discussions are parts of BE. The students need a critical analyzing skill, ability to evaluate their own lifestyle, and ability to understand casual relationships. Learning how to use technology and media sensibly in biodiversity inquiries (Yli-Panula et al. 2019)

and gain insight in both how to influence decisions and how to envision the future also belongs to a critical learning approach (Wolff 1998, 2011). The foundation of BE is biology (ecological interdependences, the role of microbes, climate factors, human diversity and adaptability, genetic diversity and engineering, etc.). Yet BE relates to history, geography, chemistry, physics, mathematics, language, art, and social studies, among other subjects. The students need to become familiar with politics and nature management, as well as biodiversity-related research.

Outdoor BE includes sense experiences, hands-on learning, training in observing, examining, and “reading nature” (Jeronen et al. 2017). Aesthetic experiences, drama, games, and practical activities like gardening, are also beneficial (Wolff 1998). The utensils can be simple outdoor equipment as well as cameras and other digital tools. Partnership with other local schools and schools in other regions and parts of the world extends the biodiversity perspectives (see Skarstein and Wolff 2020). Collaboration with other local interest groups, like the community’s decision-makers or officials, also enriches the experiences. Metacognition, analyzing thinking skills, synthesis making, and evaluations support the higher-order thinking and develop best in meaningful real activities (see Jeronen et al. 2017 and the examples of BE for adult groups in the next section). Finally, the role of species knowledge and identification and naming of local species and their habitats in combination with authentic experiences is a core in BE in schools (see Jeronen et al. 2017). Nevertheless, underpinning values guide the learning process. It is, therefore, a challenge to develop educational methods that combine cognitive outcomes (through scientific knowledge), personal experiences (through outdoor activities), and value-related issues (through reflections and debates). This is necessary to activate the students’ interest and encourage them to a sustainability envisioning and to start acting responsibly on behalf of a more sustainable and biodiverse future (Sjöblom and Wolff 2017).

Examples on Biodiversity Education for Various Adult Groups

In schools and other educational institutions, BE can be included in the teaching subjects as a natural part of the content and methods in a combination of theories and practice. In adult learning, BE is often performed in the form of multi-stakeholder projects. After finishing school, engagement in shorter biodiversity activities might be the only option. Continuous BE might sound superior to project-based learning, but what is best depends on the target and the situation. Next are examples of BE initiatives from various adult education contexts in a number of countries.

Collaborative Learning About Alien and Invasive Species

A fundament of biodiversity conservation and land management worldwide is the controlling of alien and invasive species. From earlier focusing merely on the biological dimensions of the problem, the emphasis has now turned to the human dimensions including social and economic aspects (Davies et al. 2016). Education plays a crucial role in tackling the invasive species problem. In South Africa, the biological invasion is a challenge for education that stretches from rural communities to shipping companies (Davies et al. 2016). This has been tackled through education that includes on-the-job training as well as advanced degree training for people already in service. Likewise, training of researchers from various disciplines is a growing field. Researchers cooperate with landowners and lobby groups to develop management strategies for the so-called “conflict species,” a concept that implies that a species initially introduced for its benefit have become problematic and invasive (Davies et al. 2016). In addition, stakeholder workshops offer learning environments, in which people with different interests and initial knowledge discuss and change experience and learn from each other.

Learning About Endemic Insect Species

A BE project in the Azores (an island in the Atlantic belonging to Portugal) focused on endemic insect species (Amorim et al. 2016).

Since the Azores have a large endemic insect fauna, an aim was to raise attention about the life of insects and their ecological roles as pollinators, decomposers, and regulators of other organism populations. The communication method of this project was a large outdoor exhibition (street exhibition) and a web contest. Since some insects lacked common names, the audience on the Internet was asked to name them. The result from this project was learning how it was necessary to know the target and to establish trust between communicators and target groups. A BE process demands increasingly mutual accommodation and modification and a multidisciplinary approach. Evaluation has to take place continuously and be sensitive to peoples’ reactions. This project also showed that aesthetic values and emotions influence the appreciation of organisms, and therefore, insects are a more challenging BE topic than, for example, birds.

Citizen Science in Urban Landscapes

Urban areas and city backyards are good places for citizen science programs. Studying biodiversity and developing BE in urban areas is not only an issue for biology but also for social science. The urban ecosystems have special features. In urban areas, the species composition is heterogeneous and different than in nature areas more typical for the actual climate zone. In addition, the species’ genetic adaption is fast, and the impact of humans on ecosystems is big. Citizen science programs, in which citizens and scientist collaborate, have taken place in the UK, Canada, Baltimore, Germany, and the USA, for instance (Szlavec et al. 2011). The aim is to attract various groups, like taxonomists, park managers, and the public (citizens including families and school classes), for joint projects on the search and observation of particular species, revitalizing of neighborhoods, or installing new management principles. The participants in these projects have shown interest in the projects and have been willing to help the researchers. Still there is a need for studies focusing on issues like the mechanism between human socioeconomic factors and species diversity, the effect of humans on prey populations, BE’s long-term influence on

decision-making, what kind of diversity humans value, and many other questions that could become citizen-scientist partnership projects.

Involving Local Stakeholders in Biodiversity Conservation

A project in Mexico strived to unite researchers, NGO members, and local stakeholders in the topic of how sociocultural elements influence the efficiency of conservation initiatives (Ruiz-Mallén 2016). Democracy, mutual understanding, and learning in dialogue about resource management were the core in this BE project. The approach was interdisciplinary and based on many interactive methods, such as local engagement in conservation initiatives and management procedures. An interesting finding was the significance of traditional knowledge and the history of the community in enforcing biodiversity protection. The involvement of local people in dialogues about their relationship with the surrounding nature in past, present, and future perspectives produced new knowledge and enhanced learning both for the society and for the researchers.

Student Teachers Learning Species

Teachers need knowledge and skills to have confidence to engage children and students in biodiversity issues. Research on training of teachers in species knowledge has been going on for many years in the Nordic countries. In a collaboration project between Finland and Norway, early childhood student teachers attending university courses learned to identify and know about species (Wolff and Skarstein 2020). During the Finnish course that was based on a similar course in Norway, the students had to identify 95 species (birds, mammals, reptiles, amphibians, and plants). Part of the course took place outdoors in various settings, in a botanical garden, on a farm, in a nature reserve, and in an urban area. The quantitative result was very good, as was the qualitative result. The species knowledge improved remarkably. Another result was that the learning was joyful and rewarding for the students, and they developed nature observation skills they regarded useful in their coming work.

The results correspond with studies on how primary and secondary student teachers learn about biodiversity. Field studies in authentic environments evidently promote learning (Jeronen et al. 2017; Palmberg et al. 2019). When the students confront living organisms in their natural habitats, both the students' knowledge and curiosity grow. In addition, research from the Nordic countries has shown that early childhood student teachers as well as primary and secondary student teachers regard biodiversity knowledge, skills, and interests as being important in promoting sustainability (Palmberg et al. 2018; Skarstein and Skarstein 2020; Wolff and Skarstein 2020).

Multicountry e-Learning Courses

The final example is train-the-trainer courses including both e-learning and intensive phases (Argiolas et al. 2016). The participants came from four regions, southeast Europe, southeast Africa, north and west Africa, and from twenty-two countries. The topic was biosafety, biosecurity, and bio risk management related to biological substances, and the target was academic experts in this field. The training was tailored and focused both on collaboration and on local needs. Since the platform was open after the courses had ended, the content could be further developed and translated into local languages and particular needs. This is an example of how multiple perspectives and experiences can become a joint BE development project.

Summary

Many BE projects take place around the world both in schools and in other contexts. To learn from these projects and to develop new strategies, continual and purposeful evaluations are crucial. Educational development builds on the willingness to share and learn from earlier experiences (also from failures) and to continue searching for better methods in cooperation between education practitioners, students, researchers, managers, decision makers, NGO members, and others.

BE is not only a way for knowledge delivery and skills training. Nevertheless, it has to be

clearly included in the curricula (see Sustainability in Curricula: Sustainability Education). It may bring about critical learning and initiate the process of becoming and enable a joint transformation of the world. Consequently, the development of BE is simultaneously a way to develop more appropriate education for the world of today and in the future. Finally, available resources, adequate investments, and purposeful actions will show if BE receives the status in educational frameworks that the current situation of ever faster-growing biodiversity loss demands. Success requires a well-functioning and dynamic education system, which is open to flexibility. Introducing new urgent learning topics like BE is not only a question about protecting a diverse nature, but also about social and gender equality, fair distribution of goods, availability of clean drinking water, and food for all. Biodiversity awareness is built up in critical dialogues and interactions, in which even diametrically opposed perspectives are allowed to respectfully confront each other and have a voice.

The complexity of the environment inaugurates a new pedagogy of a dialogic and subjective reappropriation of knowledge, moved by values, interests and utopias, a confluence of different forms of knowledge in permanent diversification and differentiation. (Setti and Azeiteiro 2016, p. 237).

Cross-References

- Biodiversity
- Biodiversity: Environment
- Biodiversity: Sustainability
- Climate Change
- Decade of Education for Sustainable Development
- Ecology and Ecosystem
- Ethics
- Ethics and Ethical Theories
- Ethics of Sustainability Education
- Inclusion
- Knowledge Management
- Phenomenon-Based Learning
- Responsibility
- Strong Sustainability
- Sustainability and NGOs
- Sustainability Education and Environmental Awareness
- Sustainable Development
- Transdisciplinary Learning
- Transformative Learning
- Weak Sustainability

References

- Amorim, I. R., Arroiz, A. M., São Marcos, R., Borges, P. A., & Gabriel, R. (2016). Bugs and society II: Testing two communication strategies for public engagement in the Azores. In P. Castro, U. M. Azeiteiro, P. Bacelar-Nicolau, W. Leal Filho, & A. M. Azul (Eds.), *Biodiversity and education for sustainable development* (pp. 125–153). Cham: Springer. https://doi.org/10.1007/978-3-319-32318-3_9.
- Argiolas, C., Baldo, V., & Martellini, M. (2016). Knowledge dissemination and best practice transfer on bio-safety, biosecurity and biorisk management through a sustainable and effective education and awareness system. In P. Castro, U. M. Azeiteiro, P. Bacelar-Nicolau, W. L. Filho, & A. M. Azul (Eds.), *Biodiversity and education for sustainable development* (pp. 321–334). https://doi.org/10.1007/978-3-319-32318-3_10.
- Bubna-Litic, K. (2014). The impact of access and benefit sharing programmes on indigenous people in Australia. In D. Lanzerath & M. Friele (Eds.), *Concepts and values in biodiversity* (pp. 199–224). London: Routledge.
- CBD (Convention on Biological Diversity). (2000). *Sustaining life on earth: How the Convention on Biological Diversity promotes nature and human well-being*. Int Biological CBD. ang. Accessed 31 June 2021.
- CBD (Convention on Biological Diversity). (2020a). *Aichi biodiversity Targets*. <https://www.cbd.int/sp/targets/>. Accessed 5 July 2021.
- CBD (Convention on Biological Diversity). (2020b). *Update of the zero draft of the post-2020 global biodiversity framework*. <https://www.cbd.int/doc/c/3064/749a/0f65ac7f9def86707f4eaeafa/post2020-prep-02-01-en.pdf>. Accessed 5 July 2021.
- CE (Council of Europe). (1995). *Report on European Nature Conservation Year 1995*. <https://rm.coe.int/report-on-european-nature-conservation-year-1995-2nd-session/16808bec89>. Accessed 28 July 2021.
- CEE (Centre for Environment Education). (2013). *Comprehensive educational strategy for biodiversity conservation and sustainable use: A draft*. <https://educationcbd.org/PDF/Strategy%20Document.pdf>. Accessed 25 June 2021.
- Davies, S. J., Measey, G. J., du Plessis, D., & Richardson, D. M. (2016). Science and education at the Centre for

- Invasion Biology. In P. Castro, U. M. Azeiteiro, P. Bacelar-Nicolau, W. Leal Filho, & A. M. Azul (Eds.), *Biodiversity and education for sustainable development* (pp. 93–105). Cham: Springer. https://doi.org/10.1007/978-3-319-32318-3_7.
- Edwards, S., & Cutter-Mackenzie, A. (2013). Pedagogical play types: What do they suggest for learning about sustainability in early childhood education? *International Journal of Early Childhood*, 45(3), 327–346. <https://doi.org/10.1007/s13158-013-0082-5>.
- Erdelen, W. R. (2014). The future of biodiversity and sustainable development: Challenges and opportunities. In D. Lanzerath & M. Friele (Eds.), *Concepts and values in biodiversity* (pp. 149–161). London: Routledge.
- Franco, J. L. A. (2013). The concept of biodiversity and the history of conservation biology: From wilderness preservation to biodiversity conservation. *História (São Paulo)*, 32, 21–48. <https://www.scielo.br/j/his/a/LZyXDZjgmVh4ssHfPPNrGHd/?format=pdf&lang=en>. Accessed 2 Aug 2021.
- Freedman, B. (2014). Biodiversity conservation. In A. C. Michalos (Ed.), *Encyclopedia of quality of life and well-being research*. Dordrecht: Springer. https://doi.org/10.1007/978-94-007-0753-5_210.
- IUCN (International Union for Conservation of Nature). (1998). *Education and communication for biodiversity*. Gland: IUCN.
- Jeronen, E. (2012). Education. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Cham: Springer. https://doi.org/10.1007/978-3-319-32318-3_7.
- Jeronen, E., Palmberg, I., & Yli-Panula, E. (2017). Teaching methods in biology education and sustainability education including outdoor education for promoting sustainability: A literature review. *Education Sciences*, 7, 1. <https://doi.org/10.3390/educsci7010001>.
- Kühl-Stenzel, A. (2014). Whose biodiversity is it? Challenges in managing migratory species. In D. Lanzerath & M. Friele (Eds.), *Concepts and values in biodiversity* (pp. 270–286). London: Routledge.
- Palmberg, I., Hermans, M., Jeronen, E., Kärkkäinen, S., Persson, C., & Yli-Panula, E. (2018). Nordic student teachers' views on the importance of species and species identification. *Journal of Science Teacher Education*, 29(5), 397–419. <https://doi.org/10.1080/1046560X.2018.1468167>.
- Palmberg, I., Kärkkäinen, S., Jeronen, E., Yli-Panula, E., & Persson, C. (2019). Nordic student teachers' views on the most efficient teaching and learning methods for species and species identification. *Sustainability*, 11, 5231. <https://doi.org/10.3390/su11195231>.
- Ruiz-Mallén, I. (2016). Communicating biodiversity conservation research through dialogue and mutual learning in rural and indigenous communities. In P. Castro, U. M. Azeiteiro, P. Bacelar-Nicolau, W. Leal Filho, & A. M. Azul (Eds.), *Biodiversity and education for sustainable development* (pp. 155–168). Cham: Springer. https://doi.org/10.1007/978-3-319-32318-3_10.
- Setti, A. F. F., & Azeiteiro, U. M. (2016). Education for sustainable development in Brazil: Challenges for inclusive, differentiated and multicultural education. In P. Castro, U. M. Azeiteiro, W. L.-F. Bacelar-Nicolau, & A. M. Azul (Eds.), *Biodiversity and education for sustainable development* (pp. 237–248). Cham: Springer. https://doi.org/10.1007/978-3-319-32318-3_9.
- Sewell, K., & Newman, S. (2014). What is education? In W. Curtis, S. Ward, J. Sharp, & L. Hankin (Eds.), *Education studies: An issue based approach* (pp. 3–11). London: Sage.
- Sidman, J. (2018). *The girl who drew butterflies: How Maria Merian's art changed science*. New York: Houghton Mifflin Harcourt.
- Sjöblom, P., & Wolff, L. A. (2017). “It wouldn’t be the same without nature”—The value of nature according to Finnish upper secondary school students. *The Journal of Environmental Education*, 48(5), 322–333. <https://doi.org/10.1080/00958964.2017.1367637>.
- Skarstein, T. H., & Skarstein, F. (2020). Curious children and knowledgeable adults: Early childhood student-teachers' species identification skills and their views on the importance of species knowledge. *International Journal of Science Education*, 42(2), 310–328. <https://doi.org/10.1080/09500693.2019.1710782>.
- Skarstein, F., & Wolff, L. A. (2020). An issue of scale: The challenge of time, space and multitude in sustainability and geography education. *Education Sciences*, 10(2), 28. <https://doi.org/10.3390/educsci10020028>.
- Spash, C. L., & Aslaksen, I. (2015). Re-establishing an ecological discourse in the policy debate over how to value ecosystems and biodiversity. *Journal of Environmental Management*, 159, 245–253.
- Sturma, D. (2014). Ethics of nature and biodiversity. In D. Lanzerath & M. Friele (Eds.), *Concepts and values in biodiversity* (pp. 136–147). London: Routledge.
- Szlavec, K., Warren, P., & Pickett, S. (2011). Biodiversity on the urban landscape. In R. P. Cincotta & L. J. Gorenflo (Eds.), *Human population* (pp. 75–101). Berlin: Springer. https://doi.org/10.1007/978-3-319-32318-3_7.
- UN (United Nations). (1992). *Convention on biological diversity*. <https://www.cbd.int/doc/legal/cbd-en.pdf>. Accessed 21 June 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2017). *Biodiversity and education*. <http://www.unesco.org/new/en/natural-sciences/special-themes/biodiversity/biodiversity-education/>. Accessed 20 June 2021.
- UNESCO/UNEP/CBD (United Nations Educational, Scientific and Cultural Organization/United Nations Environment Programme/Convention on biological diversity). (2020). *Global biodiversity outlook 5*. Montreal: Secretariat on the Global Biological Diversity. <https://digitallibrary.un.org/record/3881096>. Accessed 23 June 2021.
- Van Dyke, F. (2014). Biodiversity hotspots: Concepts, applications and challenges. In D. Lanzerath & M. Friele (Eds.), *Concepts and values in biodiversity* (pp. 245–269). London: Routledge.

- Wägele, J. W. (2014). The necessity for biodiversity research: We are responsible for the quality of life of coming generations. In D. Lanzerath & M. Friele (Eds.), *Concepts and values in biodiversity* (pp. 39–54). London: Routledge.
- Wolff, L.-A. (1998). LUMO: Espoo's educational project on biodiversity. In *IUCN, education and communication for biodiversity* (pp. 57–59). Gland: IUCN.
- Wolff, L.-A. (2011). *Nature and sustainability: An educational study with Rousseau and Foucault*. Saarbrücken: Lambert.
- Wolff, L. A., & Skarstein, T. H. (2020). Species learning and biodiversity in early childhood teacher education. *Sustainability*, 12(9), 3698. <https://doi.org/10.3390/su12093698>.
- Yli-Panula, E., Jeronen, E., Lemmetty, P., & Pauna, A. (2018). Teaching methods in biology promoting biodiversity education. *Sustainability*, 10(10), 3812. <https://doi.org/10.3390/su10103812>.
- Yli-Panula, E., Jeronen, E., Inkinen, J., & Sohlman, S. (2019). Digitaaliset opetusmenetelmät biologian opetuksessa ja oppimisessa (Digital teaching methods promoting biology learning). In M. Rautiainen & M. Tarnanen (Eds.), *Tutkimuksesta luokkahuoneisiin. Ainedidaktisia tutkimuksia*, 15 (pp. 425–443). Jyväskylän yliopisto: Jyväskylä.

Biodiversity: Environment

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Synonyms

[Biological diversity](#)

Definition/Description

Biodiversity is the shortened form of two words “biological” and “diversity.” Since the Convention on Biological Diversity was adopted at the Rio “Earth Summit” in 1992 (UNCED 1993), biodiversity has been discussed on three dimensions: ecosystems, species, and genes. Ecosystem

diversity relates to the variety of habitats, biotic communities, ecological processes, and the diversity within ecosystems. An ecosystem is (UN 1992): “a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit.” For a business, an ecosystem perspective focuses on where a company operates within the ecological landscape (IUCN 2002).

Species diversity refers to the variety of species within a region. The “biological species definition” or the “biological species concept” is based on Ernst Mayr’s definition (Mayr 1942): “Species are groups of actually or potentially interbreeding natural populations, which are reproductively isolated from other such groups.” They provide ecosystem services recycling wastes, purifying water, driving biogeochemical cycles, maintaining an aerobic atmosphere, regulating climate, and generating soil fertility (IUCN 2002).

Genetic diversity refers to the variation of genes within species. Genetic material is (UN 1992): “any material of plant, animal, microbial or other origin containing functional units of heredity.” The corporate sector plays a dominant role in the commercial use of it (IUCN 2002). Biodiversity emphasizes the interrelated nature of the living world changing constantly by evolution. It is of value for cultural and recreational purposes.

Introduction

“Biodiversity,” or “biological diversity,” is fundamental for continuous life on Earth. It includes a range of ecosystems and habitats. An ecosystem is a community made up of living organisms and nonliving components such as air, water, and mineral soil (Schulze et al. 2005). Natural habitats include land and water areas characterized by certain environmental conditions and by the plant and animal species typical of such areas (Ministry of Environment and Finnish Environment Institute 2016) (Figs. 1, 2, and 3). A species’ habitat is those places where a species can find food, shelter, protection, and mates for reproduction.

Biodiversity: Environment, Fig. 1 Forest. (Photo: E. Jeronen)



B



Biodiversity: Environment, Fig. 2 Meadow. (Photo: E. Jeronen)



Biodiversity: Environment, Fig. 3 Lake. (Photo: M. Kortessuoma)

Waste and emissions produced by human beings have an impact on ecosystems and habitats from the local level to the global one. For this reason, people depend on so-called ecosystem

services. The Millennium Assessment (MA) defines ecosystem services as “the benefits people obtain from ecosystems. These include provisioning...regulating services...cultural services...and supporting services” (MEA 2005, p. V). Biodiversity has been seen to be a contributor to ecosystem services, to be an ecosystem service itself, and to be a product of some ecosystem services (Gaston and Spicer 2004; MEA 2003). The ecosystem services have provisioning such as food and water, cultural such as for recreation, and supportive characters like nutrient cycles. They also play an important role for the quality of life in a city regulating a city’s climate,

filtering emissions and protecting a city against flooding (UN Environment 2018). Biodiversity is therefore essential for human well-being, health, and resilience (Sala et al. 2009), as well as for human social and economic development (UNCED 1993; UNESCO 2014).

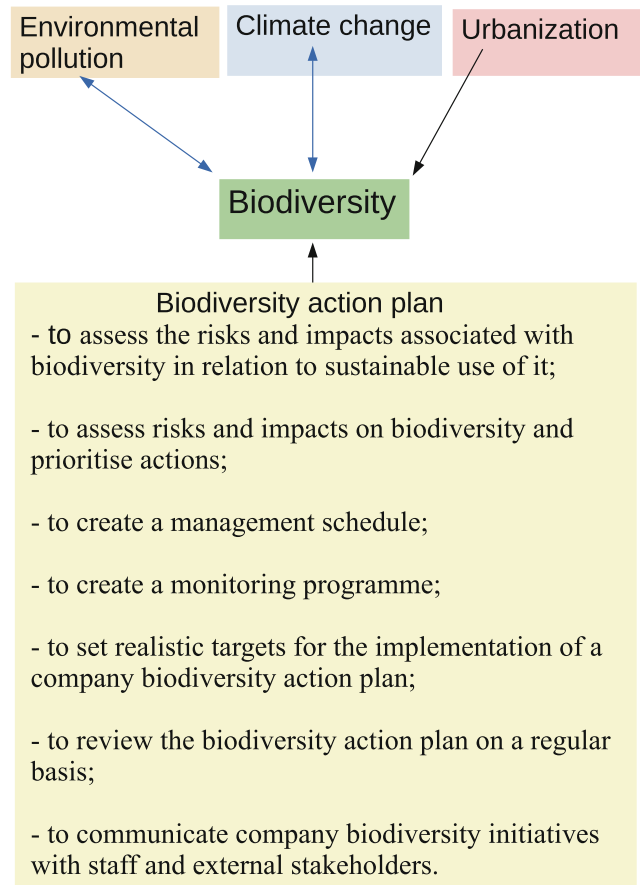
Key Issues

“Biodiversity” refers to the total variability of life on Earth (Heywood and Watson 1995, p. 5). It includes both variations at taxonomic levels (species, genus, family, order, class, phylum, kingdom, and domain) (Ruggiero et al. 2015; Woese et al. 1990) and at the genetic level, as well as variation in ecological functions (Butchart et al. 2010) such as those of pollinators and seed dispersers. Species are divided into bacteria, archaea, protozoa, chromista, plants, fungi, and animals

(Ruggiero et al. 2015). Many species are characterized by their unique adaptations to the local environment and special climatic conditions. Conservation of biodiversity is often conceptualized through the extinction of species, threatened species, and biodiversity loss. When reflecting the interaction of ecological, economic, and social issues, the biodiversity dimensions are important parameters of sustainability (Kassas 2002; Van Weelie and Wals 2002; WCED 1987). For example, tropical rainforests are not only important for living plants and animals but also important for people’s living environment and for preserving their local and regional cultures. Each ecosystem differs in detail from every other and changes over time. Examples of ecosystems are forests, grasslands, and rivers. All ecosystems are facing problems of pollution, climate change, and urbanization, resulting in biodiversity loss (Fig. 4). For terrestrial ecosystems, further threats

Biodiversity: Environment,

Fig. 4 Factors affecting biodiversity (Holdgate 1979; MEA 2003; McKinney 2002; Niemelä 1999; Pickett et al. 2001; CSR 2011; Earthwatch 2018)



include air pollution, soil degradation, and deforestation. For aquatic ecosystems, threats include also unsustainable exploitation of marine resources (for example overfishing of certain species), marine pollution, microplastics pollution, water pollution, and building on coastal areas (Alexander and Fairbridge 1999).

Holdgate (1979, p. 17) defined environmental pollution as: “the introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structures or amenity, or interference with legitimate uses of environment.” The definition can be applied to all types of pollution ranging from physical to economic, political, social, and religious. Over the past decades, various sources of pollution have been identified that altered the composition of water, air, and soil of the environment. The substances that cause pollution are known as pollutants. According to Rai (2016), a pollutant can be any chemical (toxic metal, radionuclides, organophosphorus compounds, gases) or geochemical substance (dust, sediment), biological organism or product, or physical substance (heat, radiation, sound wave) that is released intentionally or inadvertently by man into the environment with actual or potential adverse, harmful, unpleasant, or inconvenient effects. Undesirable effects affecting human beings may be direct or indirect, being mediated via climate change or resource organisms.

Climate change is likely to become one of the most significant drivers of biodiversity loss by the end of the century (MEA 2003). It is already forcing biodiversity to adapt either through shifting habitat, changing life cycles, or the development of new physical traits. Environmental change causes changes in the distribution of single species including the potential increase of the immigration of non-native species (Hoffman and Courchamp 2016). Such migrations might result in new species-species interactions like pollinator shifts, new host-parasite systems, and hybridization after new contact. Detrimental impacts of non-native species on native biota have occurred through competition, predation, herbivory, habitat alteration, disease, and genetic effects. There are

potential effects on genetic biodiversity as well as species biodiversity (Manchester and Bullock 2000).

Urbanization has impacts on biodiversity transforming the ecology of an area. Such transformation can include, for example, the alteration of habitats, such as the loss and fragmentation of natural vegetation, and the creation of novel habitat types (McKinney 2002; Niemelä 1999; Pickett et al. 2001). Habitat fragmentation has confined many species to relatively small areas within their previous ranges, resulting in reduced genetic variability (UN 2018). The ecosystem services (e.g., air, water, and climate regulation, pollination) and other resource flows (e.g., reduction in net primary production, increase in regional temperature, and degradation of air and water quality) can also change (Henry and Dicks 1987; Rebele 1994) as well as disturbance frequencies (Rebele 1994). In addition, there can be disruption of species occurrence and abundance patterns, commonly including the local extinction of many species that are habitat specialists, require large habitat patches, utilize the interiors rather than the edges of patches, or are associated with complex vegetation structures (Chace and Walsh 2006; McKinney 2002; Pickett et al. 2001).

Losing biodiversity means losing ecosystem processes. Ecosystems are significantly influenced by multiple evolutionary responses to environmental change that act on species' relationships with other species. These multispecies interactions range from different symbiotic interactions like mutualism to true coevolution (Lin et al. 2017). Conservation of natural terrestrial, freshwater, and marine ecosystems and restoration of degraded ecosystems including their species and genetic diversity is essential because ecosystems play a key role in the global carbon cycle and in adapting to climate change and because they provide ecosystem services that are essential for human well-being.

Biodiversity can support efforts to reduce the negative effects of climate change. Conserved or restored habitats can remove carbon dioxide from the atmosphere, thus helping to address climate change by storing carbon, for example, reducing

emissions from deforestation and forest degradation. Moreover, conserving in-tact ecosystems, such as mangroves, for example, can help reduce the disastrous impacts of climate change such as flooding and storm surges. It may modify the prevailing ecological conditions, affecting the recolonization potential and modifying the extent and trajectory of ecosystems' recovery process after pressure intensity has been reduced (Cf. Fuller et al. 2010). The impact of climate changes represents an additional constraint for restoration programs or in preventing ecosystems deterioration.

The biosphere is itself the product of life on Earth. The composition of the atmosphere and soil, the cycling of elements through air and waterways, and other ecological assets are all the result of living processes and they all are maintained and replenished by living ecosystems. The human species, while buffered against environmental immediacies by culture and technology, is ultimately fully dependent on the flow of ecosystem services (MEA 2003). Several studies have emphasized knowledge of place as an important driver of local action and planning initiatives (Davenport and Anderson 2005; Gobster et al. 2007; Larson et al. 2013; Williams and Stewart 1998).

To promote the well-being of nature and people, corporations can take into account in their Biodiversity Action Plans (CSR 2011; Earthwatch 2018), for example:

- Assessment of the risks and impacts associated with biodiversity in relation to sustainable use of biodiversity
- Assessment of the risks and impacts on biodiversity and prioritize actions
- The plant of a management schedule that details the appropriate actions and a monitoring program to enable the effects on biodiversity to be assessed
- Realistic targets for the implementation of a company biodiversity action plan
- The evaluation of the biodiversity action plan on a regular basis
- Communication concerning company biodiversity initiatives with staff and external stakeholders for equitable benefit sharing and strengthening of management, evaluation and reporting systems, and for identification of new opportunities

The financial values assigned to biodiversity depend strongly on the purposes of valuation. Utilitarian benefits include the values of presently marketed and presently unexploited nature products, and the monetary value of environmental benefits. Nonmonetary values of nature are also essential components of decision-making (cf. Kelemen et al. 2016). Decisions regarding creation and management of various kinds of reserves are likely to be key factors in determining the long-term future of biodiversity.

Summary

Biodiversity means the variability among living organisms from all ecosystems and habitats. Many species are characterized by their unique adaptations to the local environment and special climatic conditions. Climate change is one of the most significant drivers of biodiversity loss. Environmental change causes changes in the distribution of single species and the alteration of habitats. Ecosystems play a key role in the global carbon cycle and in adapting to climate change. Thus losing biodiversity means losing ecosystem processes. In addition, conservation of different ecosystems and restoration of degraded ecosystems including their species and genetic diversity is essential, because biodiversity has been seen to be a contributor to ecosystem services, to be an ecosystem service itself, and to be a product of some ecosystem services. Not only utilitarian benefit but also nonmonetary values of nature are key factors in decision-making regarding creation and management of various kinds of reserves. How the utilitarian benefit and the nonmonetary values of nature are taken into account will determine the future development of biodiversity and future of human beings in the short and long term.

Cross-References

- [Conservation: Sustainability](#)
- [Ecology and Ecosystem](#)
- [Sustainable Development](#)

References

- Alexander, D. E., & Fairbridge, R. W. (Eds.). (1999). *Encyclopedia of environmental science*. Dordrecht: Springer. ISBN 978-1-4020-4494-6.
- Butchart, S. H. M., Walpole, M., Collen, B., van Strien, A., Scharlemann, J. P. W., Almond, R. E. A., & Watson, R. (2010). Global biodiversity: Indicators of recent declines. *Science*, 328, 1164–1168. <https://doi.org/10.1126/science.1187512>.
- Chace, J. F., & Walsh, J. J. (2006). Urban effects on native avifauna: A review. *Landscape and Urban Planning*, 74(1), 46–69.
- CSR (Corporate Social Responsibility). (2011). Reporting 2011, planet. <http://csrreporting.sanofi.com/web/planet/biodiversity>. Accessed 31 Oct 2012.
- Davenport, M. A., & Anderson, D. H. (2005). Getting from sense of place to place-based management: An interpretive investigation of place meanings and perceptions of landscape change. *Society and Natural Resources*, 18(7), 625–641. <https://doi.org/10.1080/08941920590959613>.
- Earthwatch. (2018). Company biodiversity action plan. Biodiversity forms one of the corner stones of sustainable development. The Business & Biodiversity Resource Centre. http://www.businessandbiodiversity.org/action_company_bap.html. Accessed 31 Oct 2018.
- Fuller, R. A., Tratalos, J., Warren, P. H., Davies, R. G., Pepkowska, A., & Gaston, K. J. (2010). Environment and biodiversity. Chapter 4. In M. Jenks, & C. Jones (Eds.), *Dimensions of the sustainable city: Future city*, 2 (pp. 75–103). Springer: Science+Business Media B.V. https://doi.org/10.1007/978-1-4020-8647-2_4.
- Gaston, K. J., & Spicer, J. I. (2004). *Biodiversity: An introduction* (2nd ed.). Oxford: Blackwell.
- Gobster, P. H., Nassauer, J. I., Daniel, T. C., & Fry, G. (2007). The shared landscape: What does aesthetics have to do with ecology? *Landscape Ecology*, 22, 959–972. <https://doi.org/10.1007/s10980-007-9110-x>.
- Henry, J. A., & Dicks, S. E. (1987). Association of urban temperatures with land-use and surface materials. *Landscape and Urban Planning*, 14(1), 21–29.
- Heywood, V. H., & Watson, R. T. (1995). *Global biodiversity assessment*. Cambridge, UK: Cambridge University Press.
- Hoffman, B. D., & Courchamp, F. (2016). Biological invasions and natural colonisations: Are they that different? *NeoBiota*, 29, 1–14. <https://doi.org/10.3897/neobiota.29.6959>. Accessed 31 Oct 2018.
- Holdgate, M. W. (1979). Pollution and pollutants. Definitions. In M. W. Holdgate (Ed.), *A perspective of environmental pollution* (p. 17). Cambridge: Cambridge University Press. ISBN 0521 299721 1.
- IUCN. (2002). *Business & biodiversity – The handbook for corporate action*. World Business Council for Sustainable Development, Earthwatch Institute. <https://portals.iucn.org/library/sites/library/files/documents/2002-022.pdf>. Accessed 12 November 2018.
- Kassas, M. (2002). Environmental education: Biodiversity. *Environmentalist*, 22, 345–351.
- Kelemen, E., García-Llorente, M., Pataki, G., Martín-López, B., & Gómez-Baggethun, E. (2016). Non-monetary techniques for the valuation of ecosystem service. In M. Potschin-Young, & K. Jax (Eds.), *OpenNESS ecosystem services reference book*. <http://www.openness-project.eu/library/reference-book>. Accessed 12 Nov 2018.
- Larson, S., De Freitas, D. M., & Hicks, C. C. (2013). Sense of place as a determinant of people's attitudes towards the environment: Implications for natural resources management and planning in the Great Barrier Reef, Australia. *Journal of Environmental Management*, 117, 226–234. <https://doi.org/10.1016/j.jenvman.2012.11.035>.
- Lin, N., Chen, H., Jing, S., Liu, F., & Liang, X. (2017). Biomimicry of symbiotic multi-species coevolution for discrete and continuous optimization in RFID networks. *Saudi Journal of Biological Sciences*, 24, 610–621. <https://www.sciencedirect.com/science/article/pii/S1319562X17300426>. Accessed 31 Oct 2018.
- Manchester, S. J., & Bullock, J. M. (2000). The impacts of non-native species on UK biodiversity and the effectiveness of control. *Journal of Applied Ecology*, 37, 845–864.
- Mayr, E. (1942). *Systematics and the origin of species*. New York: Columbia University Press.
- McKinney, M. L. (2002). Urbanization, biodiversity, and conservation. *Bioscience*, 52(10), 883–890.
- MEA (Millennium Ecosystem Assessment). (2003). *Ecosystems and human well being: A framework for assessment*. Washington, DC: Island Press. http://pdf.wri.org/ecosystems_human_wellbeing.pdf. Accessed 31 Oct 2018.
- MEA (Millennium Ecosystem Assessment). (2005). *Ecosystems and human well-being: Synthesis*. Washington, DC: Island Press. <https://www.millenniumassessment.org/documents/document.356.aspx.pdf>. Accessed 28 Nov 2018.
- Ministry of Environment & Finnish Environment Institute. (2016). Natural habitats. http://www.ymparisto.fi/en-US/Nature/Natural_habitats. Accessed 4 Nov 2018.
- Niemelä, J. (1999). Ecology and urban planning. *Biodiversity and Conservation*, 8(1), 119–131.
- Pickett, S. T. A., Cadenasso, M. L., Grove, J. M., Nilon, C. H., Pouyat, R. V., Zipperer, W. C., & Costanza, R. (2001). Urban ecological systems: Linking terrestrial ecological, physical, and socioeconomic components of metropolitan areas. *Annual Reviews in Ecology and Systematics*, 32, 127–157.
- Rai, P. K. (2016). Particulate matter and its size fractionation. In *Biomagnetic monitoring of particulate matter*

- in the Indo-Burma hotspot region 2016 (pp. 1–13). <https://doi.org/10.1016/C2015-0-01874-3>. Accessed 31 Oct 2018.
- Rebele, F. (1994). Urban ecology and special features of urban ecosystems. *Global Ecology and Biogeography Letters*, 4(6), 173–187.
- Ruggiero, M. A., Gordon, D. P., Orrell, T. M., Bailly, N., Bourgoin, T., Brusca, R. C., Cavalier-Smith, T., Guiry, M. D., & Kirk, P. M. (2015). A higher level classification of all living organisms. *PLoS One*, 10(4), e0119248. <https://doi.org/10.1371/journal.pone.0119248>. Accessed 31 Oct 2018.
- Sala, O. E., Mayerson, L. A., & Parmesan, C. (Eds.). (2009). *Biodiversity change and human health: From ecosystem services to spread of diseases* (Scientific Committee on Problems of the Environment (SCOPE), 69). Washington, DC: Island Press. ISBN 9781597264969.
- Schulze, E.-D., Beck, E., & Müller-Hohenstein, K. (2005). *Plant ecology*. Heidelberg: Springer.
- UN (United Nations). (1992). Convention on biological diversity. <https://www.cbd.int/doc/legal/cbd-en.pdf>. Accessed 29 Oct 2018.
- UN (United Nations). (2018). Climate change and biodiversity. Conversion on biological diversity. <https://www.cbd.int/climate/intro.shtml>. Accessed 31 Oct 2018.
- UN Environment (United Nations Environment). (2018). Biodiversity and ecosystems. <http://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/cities/biodiversity-and-ecosystems>. Accessed 4 Nov 2018.
- UNCED (United Nations Conference on Environment and Development). (1993). The final text of agreements negotiated by governments at United Nations Conference on Environment and Development, in agenda 21: Programme of action for sustainable development: Rio declaration on environment and development; statement of forest principles. In *Proceedings of the UNCED (United Nations Conference on Environment and Development), Rio de Janeiro, Brazil, 3–14 June 1992*. New York: United Nations Department of Public Information.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2014). Learning about biodiversity – Multiple-perspective approaches; education for sustainable development in action. Learning and training tools, 6; UNESCO education sector. United Nations Decade of Education for Sustainable Development (2005–2014). <http://unesdoc.unesco.org/images/0023/002311/231155e.pdf>. Accessed 29 Oct 2018.
- van Weelie, D., & Wals, A. E. J. (2002). Making biodiversity meaningful through environmental education. *International Journal of Science Education*, 24(11), 1143–1156. <https://doi.org/10.1080/09500690210134839>.
- WCED (World Commission on Environment and Development). (1987). Report of the World Commission on Environment and Development: Our common future. UN Documents Gathering a body of global agreements. <http://www.un-documents.net/wced-ocf.htm>. Accessed 27 Oct 2018.
- Williams, D. R., & Stewart, S. I. (1998). Sense of place. An elusive concept that is finding a home in ecosystem management. *Journal of Forestry*, 96(5), 18–23.
- Woese, C., Kandler, O., & Wheelis, M. (1990). Towards a natural system of organisms: Proposal for the domains Archaea, Bacteria, and Eucarya. *Proceedings of the National Academy of Sciences of the United States of America*, 87(12), 4576–4579. <http://www.pnas.org/content/pnas/87/12/4576.full.pdf>. Accessed 4 Nov 2018.

Biodiversity: Sustainability

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Synonyms

Biological diversity; Natural diversity

Definition/Description

The scientific concept of biodiversity refers to richness in variation among all living organisms at three levels: ecosystem diversity, species diversity, and genetic diversity (WCED 1987). According to WCED (1987), ecosystem diversity means variety of habitats, living communities, and ecological processes. Species diversity includes the number of species and number of individuals of each species in a particular location. Genetic diversity again means richness of the variety and range of genes within and between populations of organisms (WCED 1987).

In addition to these three dimensions, the fourth dimension is also mentioned. It is human cultural diversity (Chivian 2002; Heywood and Watson 1995). Cultural diversity means the

ethical, spiritual, and cultural values (Callicott et al. 1999), driving forces and human influences, as well as the measures for the conservation and sustainable use of biodiversity (Heywood and Watson 1995). All four dimensions are important parameters of sustainability, when reflecting the interaction of ecological, social, and economic issues (WCED 1987; Van Weelie and Wals 1999; Kassas 2002).

Conservation of biodiversity is often conceptualized through the extinction of species, threatened species, and biodiversity loss (Butchart et al. 2010). Biodiversity is fundamental for continuous life on Earth. It is also essential for human health and resilience (Sala et al. 2009), as well as for social and economic development (UNCED 1993; UNESCO 2014).

nitrogen deposition all result biodiversity losses (Sala et al. 2009). The Convention on Biological Diversity at the Rio Earth Summit stated that biodiversity is “a common concern of human-kind” and that it should be “an integral part of the sustainable development process” (UN 1992, p. 3). The convention also recognized that ecosystems, species, and genes can be used for the benefit of humans. However, this should be done in a way and at a rate that does not lead to the long-term decline of biodiversity. Later on, biodiversity has been seen as one of the major pathways to sustainability (Gayford 2000) and the protection of biodiversity as one of the basic roads to sustainability (Dikmenli 2010).

Key Issues

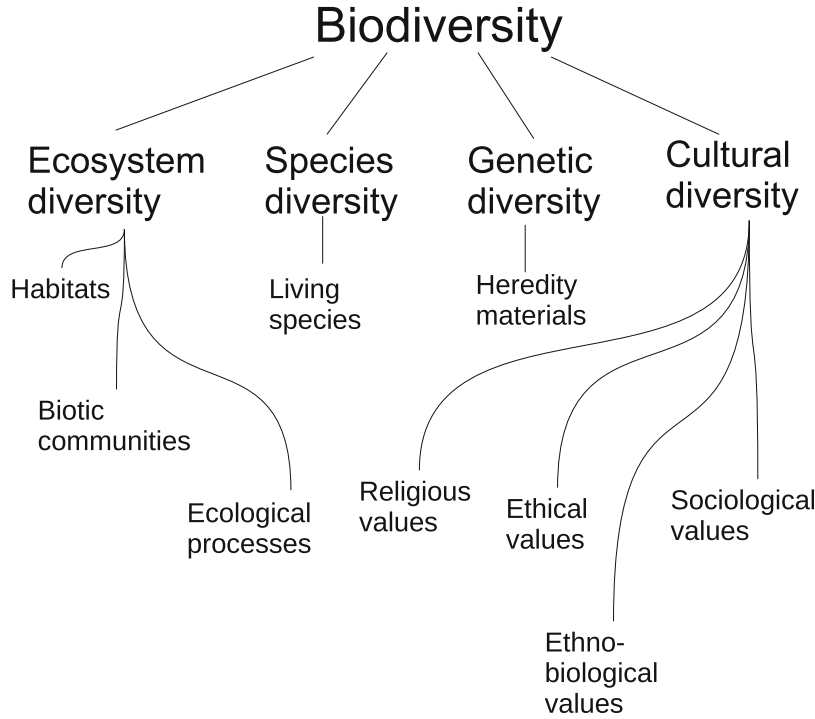
Introduction

Human actions and their effects on environment change biodiversity at both local and global levels. Human-driven climate change, habitat destruction, invasive species introductions, and

Biodiversity is usually considered at three different levels: ecosystem diversity, species diversity, and genetic diversity (UN 1992) (Fig. 1).

Ecosystem diversity relates to the variety of habitats, biotic communities, and ecological processes, as well as the diversity present within

Biodiversity: Sustainability,
Fig. 1 Biodiversity dimensions (UN 1992; Chivian 2002; Heywood and Watson 1995)



ecosystems in terms of habitat differences and the variety of ecological processes. Species diversity refers to the variety of living species (Figs. 2 and 3) (UN 1992). Genetic diversity includes (UN 1992): “any material of plant, animal, microbial or other origin containing functional units of heredity.” Biodiversity increases when new genetic variation is produced, a new species evolves, or a novel ecosystem forms, and it decreases when the genetic variation within a species decreases, a species becomes extinct or an ecosystem is lost or degraded (Australian Government 2007). The corporate sector plays a dominant role in the commercial use of biodiversity (IUCN 2002). The fourth dimension, human

cultural diversity (Chivian 2002; Heywood and Watson 1995) recognizes the important role of sociological, ethical, religious, and ethno-biological values in human activities (Heywood and Watson 1995). Biodiversity emphasizes the inter-related nature of the living world – including human being – that is changing constantly through evolution, therefore, the role played by humanity in the interrelation is significant (Yli-Panula et al. 2018).

The most fundamental needs and requirements of human society are supported by biodiversity. Essential services provided to the society include material goods, such as medicines, food, and fibers, as well as various services required to underpin ecological functions, such as flood control, climate regulation, nutrient cycling, maintaining hydrological cycles, cleaning water and air, soil formation and soil storage (Millennium Ecosystem Assessment 2005), pollination and pest control, and carbon sequestration and storage (Barton and Pretty 2010). All of these are interwoven with cultural, social, aesthetic, and ethical values (Swift et al. 2004), as well as emotional and recreational nature experiences (Braun and Dierkes 2017). Biodiversity is the basis of numerous ecosystem services that keep the natural environment alive, ranging from maintaining watersheds that provide fresh water to pollination and nutrient cycles, and the maintenance of clean air and atmospheric gases. The interdependence between humanity and biodiversity is critical for all peoples, because all communities ultimately depend on biodiversity services and resources. Some people lead lifestyles that are more directly dependent on biodiversity than others, their culture, history, and identity being intimately associated with the natural environment and its systems. Different cultures and peoples perceive and value biodiversity in different ways as a consequence of their distinct heritages and experiences. But even though many people’s dependence on biodiversity has become less tangible and apparent, it remains critically important for all communities (Australian Government 2007). The preservation of biodiversity forms the core of sustainability (Gayford 2000), and the protection of



Biodiversity: Sustainability, Fig. 2 Polypore. (Photo: E. Jeronen)



Biodiversity: Sustainability, Fig. 3 Whooper swan. (Photo: M. Kortessluoma)

biodiversity is a prerequisite for sustainable development (Dikmenli 2010).

Biological diversity and its components have the intrinsic value and also the ecological, genetic, social, economic, scientific, educational, cultural, recreational, and aesthetic values (UN 1992). Biodiversity values transcend boundaries imposed by man such as watercourses, corridors connecting areas of remnant vegetation, soil types supporting particular vegetation communities, the home ranges of many fauna species, as well as migratory species (Australian Government 2007). A person's capacity to understand biodiversity and various systems in nature is called a person's ecological literacy (ecoliteracy or environmental literacy) (Cutter-Mackenzie and Smith 2003; McBride et al. 2013; Palmberg et al. 2016). In addition to knowledge, an ecologically literate person has awareness, positive attitudes and values, and practical competence to preserve the environment (Orr 1992). He/she is able to take a holistic view when preserving and managing biodiversity to maintain ecological services.

Local and global understanding of inter-ecosystem interactions and dependencies is still evolving. Diverse systems are generally considered more constant (Tilman et al. 2006), reliable (Naeem and Li 1997), predictable (Berlow 1999), and less prone to change (Dovčiak and Halpern 2010) or invasion (Elton 1958) than simple systems. It empowers a natural system to absorb and recover from detrimental human impacts, and enhances sustainability (Australian Government 2007). Understanding of the major threats to biodiversity and the importance of preventing, halting, and reversing processes of degradation is increasing. However, there is a decreasing trend in biodiversity due to human actions (Primack 2010; Fryxell et al. 2014). Biodiversity is threatened by various human activities or their effects: human-induced changes in land cover that decrease and fragment the habitats of various species, invasive alien species, pollution, overuse of natural resources and climate change, as well as a range of socio-scientific factors (Hamble and Canney 2013). All these issues have led to an increasing awareness of the importance of preserving biodiversity not only for the well-being

of humans but also for moral reasons to preserve it for its own sake (Diaz et al. 2006). Public concern over biodiversity loss and ecosystem damage is reflected in a growing number of initiatives. These range from civil society and local community action to international, national, and local laws, policies, and regulations aimed at protecting, conserving, or restoring ecosystems.

Conversely, the failure to adequately avoid or minimize the impacts of operations on biodiversity poses growing threats and risks that can materially affect business's operations. Extinction is also of particular significance, since the loss of any species diminishes biodiversity. Extinction equates to lost opportunity, for example, to develop new medicines or other products. It also diminishes the collective well-being of society. Extinctions can also have significant effects on communities depending on cultural factors, particularly where there is a strong spiritual and/or emotional significance attached to the species. Community partnerships are therefore an effective means of achieving beneficial conservation outcomes.

Summary

Biodiversity refers to four dimensions: ecosystem, species, genetic, and cultural dimensions. The core idea of biodiversity concerns the inter-related nature of the living world changing constantly through evolution. Biodiversity is threatened by various human activities or their effects. However, the interdependence between biodiversity and humanity is critical for all peoples. Biodiversity is the basis of numerous ecosystem services that keep the natural environment alive, ranging from maintaining watersheds that provide fresh water to pollination and nutrient cycles, and the maintenance of clean air and atmospheric gases. Thus all communities ultimately depend on biodiversity services and resources. The preservation of biodiversity forms the core of sustainability and the protection of biodiversity is a prerequisite for sustainable development. A prerequisite for sustainable development and sustainability is the ability of a person to understand

biodiversity and its holistic character, and willingness to act together for beneficial preservation outcomes.

Cross-References

- [Conservation: Sustainability](#)
- [Sustainable Development](#)

References

- Australian Government. (2007). *Biodiversity management. Leading Practice Sustainable Development Program for the Mining Industry. Department of Industry, Tourism and Resources*. Commonwealth of Australia. ISBN 0 642 72506 3. <https://im4dc.org/wp-content/uploads/2014/01/Biodiversity-management.pdf>. Accessed 29 Oct 2018.
- Barton, J., & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health? A multi-study analysis. *Environmental Science & Technology*, 44, 3947–3955.
- Berlow, E. L. (1999). Strong effects of weak interactions in ecological communities. *Nature*, 398, 330–334.
- Braun, T., & Dierkes, P. (2017). Connecting students to nature: How intensity of nature experience and student age influence the success of outdoor education programmes. *Environmental Education Research*, 23, 937–949.
- Butchart, S. H. M., Walpole, M., Collen, B., van Strien, A., Scharlemann, J. P. W., Almond, R. E. A., & Watson, R. (2010). Global biodiversity: Indicators of recent declines. *Science*, 328, 1164–1168. <https://doi.org/10.1126/science.1187512>.
- Callicott, J. B., Crowder, L. B., & Mumford, K. (1999). Current normative concepts in conservation. *Conservation Biology*, 13(1), 22–35. <https://doi.org/10.1046/j.1523-1739.1999.97333.x>.
- Chivian, E. (2002). *Biodiversity: Its importance to human health. Interim executive summary. A project of the Center for Health and the Global Environment*. Boston: Harvard Medical School, Center for Health and the Global Environment. https://www.uttayarndham.org/sites/default/files/3_biodiversity_v2_screen_0_0.pdf. Accessed 29 Oct 2018.
- Cutter-Mackenzie, A., & Smith, R. (2003). Ecological literacy: The “missing paradigm” in environmental education (part one). *Environmental Education Research*, 9(4), 497–524. <https://doi.org/10.1080/1350462032000126131>.
- Diaz, S., Fargione, J., Chapin, S., & Tilman, D. (2006). Biodiversity loss threatens human well-being. *PLoS Biology*, 4, 1300–1305.
- Dikmenli, M. (2010). Biology student teachers’ conceptual frameworks regarding biodiversity. *Education*, 130, 479–489.
- Dovčiak, M., & Halpern, C. B. (2010). Positive diversity-stability relationships in forest herb populations during four decades of community assembly. *Ecology Letters*, 13, 1300–1309. <https://doi.org/10.1111/j.1461-0248.2010.01524.x>. <https://www.ncbi.nlm.nih.gov/pubmed/20735464>. Accessed 29 Oct 2018.
- Elton, C. S. (1958). *The ecology of invasions by animals and plants*. London: Methuen.
- Fryxell, J. M., Sinclair, A. R. E., & Caughley, G. (2014). *Wildlife ecology, conservation, and management* (3rd ed.). Chichester: Wiley Blackwell.
- Gayford, C. (2000). Biodiversity education: A teacher’s perspective. *Environmental Education Research*, 6, 347–362.
- Hamble, C., & Canney, S. M. (2013). *Conservation* (2nd ed.). New York: Cambridge University Press.
- Heywood, V. H., & Watson, R. T. (1995). *Global biodiversity assessment*. Cambridge, UK: Cambridge University Press.
- IUCN (The World Conservation Union). (2002). *Business & biodiversity – The handbook for corporate action* (Earthwatch Europe, IUCN – The World Conservation Union and the World Business Council for Sustainable Development). Geneva: ATAR Roto Presse SA. ISBN 2-940240-28-0.
- Kassas, M. (2002). Environmental education: Biodiversity. *Environmentalist*, 22, 345–351.
- McBride, B. B., Brewer, C. A., Berkowitz, A. R., & Borrie, W. T. (2013). Environmental literacy, ecological literacy, ecoliteracy: What do we mean and how did we get here? *Ecosphere*, 4(5), 67. <https://doi.org/10.1890/ES13-00075.1>.
- Millennium Ecosystem Assessment. (2005). *Ecosystems and human well-being: Synthesis*. Washington, DC: Island Press.
- Naem, S., & Li, S. (1997). Biodiversity enhances ecosystem reliability. *Nature*, 390, 507–509.
- Orr, D. W. (1992). *Ecological literacy: Education and the transition to a postmodern world*. Albany: State University of New York Press.
- Palmberg, I., Jonsson, G., Jeronen, E., & Yli-Panula, E. (2016). Blivande lärares uppfattningar och förståelse av baskunskap i ekologi i Danmark, Finland och Sverige [Student teachers’ conceptions and understanding of basic knowledge in ecology in Denmark, Finland and Sweden]. *Nordic Studies in Science Education*, 12(2), 197–217. <https://doi.org/10.5617/nordina.2557>.
- Primack, R. B. (2010). *Essentials of conservation biology*. Basingstoke: Palgrave Macmillan. ISBN 9781605352893.
- Sala, O. E., Mayerson, L. A., & Parmesan, C. (Eds.). (2009). *Biodiversity change and human health: From ecosystem services to spread of diseases* (Scientific Committee on Problems of the Environment (SCOPE)) (Vol. 69). Washington, DC: Island Press.

- Swift, M. J., Izac, A. M. N., & van Noordwijk, M. (2004). Biodiversity and ecosystem services in agricultural landscapes – Are we asking the right questions? *Agriculture, Ecosystems & Environment*, 104, 113–134.
- Tilman, D., Reich, P. B., & Knops, J. M. H. (2006). Biodiversity and ecosystem stability in a decade-long grassland experiment. *Nature*, 441, 629–632. <https://doi.org/10.1038/nature04742>. <http://www.ncbi.nlm.nih.gov/pubmed/16738658>. Accessed 29 Oct 2018.
- UN (United Nations). (1992). Convention on biological diversity. <https://www.cbd.int/doc/legal/cbd-en.pdf>. Accessed 29 Oct 2018.
- UNCED (United Nations Conference on Environment and Development). (1993). The final text of agreements negotiated by governments at United Nations Conference On Environment and Development, in agenda 21: Programme of action for sustainable development: Rio declaration on environment and development; statement of forest principles. In *Proceedings of the UNCED (United Nations Conference on Environment and Development), Rio de Janeiro, Brazil, 3–14 June* (p. 1992). New York: United Nations Department of Public Information.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2014). Learning about biodiversity – Multiple-perspective approaches; education for sustainable development in action. Learning and training tools, 6; UNESCO education sector. United Nations Decade of Education for Sustainable Development (2005–2014). <http://unesdoc.unesco.org/images/0023/002311/231155e.pdf>. Accessed 29 Oct 2018.
- van Weelie, D., & Wals, A. E. J. (1999). Stepping stones for making biodiversity meaningful through education. In A. E. J. Wals (Ed.), *Environmental education and biodiversity – IKC-report*, 36 (pp. 49–81). Wageningen: National Reference Centre for Nature Management.
- WCED (World Commission on Environment and Development). (1987). Report of the World Commission on Environment and Development: Our common future. UN Documents Gathering a body of global agreements. <http://www.un-documents.net/wced-ocf.htm>. Accessed 27 Oct 2018.
- Yli-Panula, E., Jeronen, E., Lemmetty, P., & Pauna, A. (2018). Teaching methods in biology promoting biodiversity education. *Sustainability*, 10, 3812. <https://doi.org/10.3390/su10103812>. <https://www.mdpi.com/2071-1050/10/10/3812>. Accessed 29 Oct 2018.

Bioecology

- Ecology and Ecosystem: Sustainability

Bioeconomy

- Blue Economy (Sustainability)

Bioenergy

- Phytoremediation

Bioenergy Fuels

- Energy Biofuels

Bioenergy Sources

- Energy Biofuels

Bioethics Theories

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Biofuel

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Biofuels

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Bioinspiration

- Biomimicry

Biological Diversity

- ▶ [Biodiversity](#)
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Biomimesis

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Biomimetic

- ▶ [Biomimicry](#)

Biomimicry

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Synonyms

[Biodesign](#); [Bioinspiration](#); [Biomimesis](#); [Biomimetic](#)

Definition (Biomimicry/Biomimesis)

The term biomimetic was first introduced by Otto H. Schmitt in 1969. The word meaning is bios (living, life, and living things in Ancient Greece), mimesis (imitation), or mimicry (imitate). In the literature, the words biomimetic, bionic, biomimicry are mostly used synonymously. Although the basic meanings of these terms are similar, their emergence and usage areas have changed over time (Dicks 2016). For example, while the bionic design is mostly related to the field of medicine, the term biomimicry or biomimetic based on the learning principle of nature is more evident in the design and architectural disciplines.

Biomimicry is a new discipline that explores the best ideas of nature and imitates these designs and is developed for people's problems (Biomimicry Institute 2016). Janine M. Benyus used this term for the first time in her book *Biomimicry: Innovation Inspired by Nature* in 1997 (Benyus 2002). Janine Benyus refers to the term biomimicry, which aims to be a bridge between biology and many other sciences in the use of the principles of nature: (Benyus 2002)

The biomimicry approach seeks the advice of nature at every stage of the design, from concept to creation and evaluation. Innovators discover and ask the correct functions of their designs that they want to finalize by working together with biologists at the design desk: Which organism or ecosystem enables them to survive by performing these functions?

Reed explains the biomimicry approach as follows (Reed 2004):

We are in the middle of a paradigm shift in looking and interacting with the natural world. This new line of thinking-biomimicry has a tremendous impact on the technological products and systems we have already designed. Biomimicry, an extremely important component of technology literature, is also an excellent example of the interdisciplinary nature of science and technology.

Nature has always produced many solutions to the problems it faced during its evolution. These solutions have been passed down from generation

to generation, such as the creature's ability to fly, swim, dig, run and, climb. The relationship of this capacity of nature with engineering inspires the formation of new tools, mechanisms, materials, and systems. Pump mechanism, controlled adhesion feature, honeybee structure ability, biological materials, and artificial intelligence are some of them. Biomimetic studies are also applied in different fields such as multifunctional materials, superior robots, and developed drugs.

The main idea behind all organic design concepts is learning from nature such as bionics, biomimetics, biomimics, biomechanics, biomechanics. The solutions developed by all living creatures to the problems faced by nature have directed humanity from past to present to approaches such as learning from nature and imitating nature. Therefore, these approaches have been accepted and developed in many fields such as medicine, architecture, engineering, design, and art (Altun 2019).

In biomimetic design, it is benefited not only from plants and animals but also from human biology. Deyoung and Hobbs compared the various examples given in this book to microorganisms, insects, flying animals, underwater life, humans, plants, nonliving objects, and inspiring examples and design practices (Deyoung and Hobbs 2009). Inspiration from nature involves many examples, including humans. There are many biomimetic examples designed from human DNA to a computer memory system, from human muscles to robotics, from the cochlea to headset, inspired by human biology (Kokturk and Altun 2018; Lurie-Luke 2014; Macnab 2012; Treehugger 2016).

Ten Inclusive Principles of Nature

In order to better understand the concept of bioinspiration, the inclusive principles of nature must first be known and understood. Basically, nature has ten inclusive principles (Serna and Barragan 2017). Therefore, these inclusive principles are the source of inspiration from nature.

These ten principles can be summarized as follows (Nature's Unifying Patterns 2016):

- Nature uses only as much energy as it needs.
- Nature recycles all materials. One's waste is another's treasure.
- Nature supports diversity. It is able to stand and resist the chaos and noise it brings.
- Nature does not maximize, optimizes. It establishes a balance between entering and leaving. It never overdoes it.
- Nature rewards collaboration and common work.
- Nature works on knowledge, proceeds with knowledge. There are feedback mechanisms.
- Nature uses only chemicals and materials that are safe for living things.
- Nature uses already existing and abundant resources, keeping rare resources in its constitution only sparingly.
- Nature keeps up with the settlement and responds. However, only by using the information in the environment and giving the appropriate answer can survive (adaptation ability).
- Nature correlates function and form. So it does whatever it has to do with minimum energy and materials.

Inspiration Forms in Biomimetic Design

With the use of biomimetic in technology and design, inspiration patterns were discussed by different researchers, and different figures of these forms were presented in the researches. But first, the concept of the inspiration forms in biomimetic has been proposed by Biodesign Team Turkey. This classification made by the Biodesign Team Turkey is as follows (Biodesign Team Turkey 2016):

Formal Inspiration: It can be defined as an imitation of the formal features of the organism. Formations observed in nature are different from man-made structures in terms of "scale," "function," and "formation processes." Despite this difference, the material has been

used as an inspiration by many architects and engineers with its energy conservation, lightness, as well as its durability. From ancient times to today, human beings have benefited from nature inspiration in every field. Biomimetic inspiration has been in life for thousands of years, such as hieroglyphic fonts in ancient Egypt consisted of motifs, for instance, birds and leaves in nature, and ancient motifs are dominant in the works of art of ancient civilizations. Many architectural structures and products, including forms inspired by nature, can also be cited in the design area. Types of inspiration from nature can be classified as herbal, animalistic (zoomorphic), humanoid (anthropomorphic), microscopic, and shaping of living environments of organisms (Yeler 2012).

Physiological Inspiration: It is defined as an imitation of formal or structural features of the organism for utilitarian purposes. It is within the definition of physiological inspiration to examine a specific feature, behavior, or functioning of a biologically defined organism or ecosystem and to use the data obtained to solve the design problem. An example of physiological inspiration is the self-cleaning glass developed by Bharat Bhushan using the lotus leaf's ability to self-clean. This design was developed based on the principle of keeping the water on the surface of the lotus leaf to remove dirt from the leaf (Dunster 1997). Similarly, a small wheeled vehicle produced to obtain maximum volume using the minimum material designed by Daimler Chrysler can be given as examples. The shape of this vehicle is designed by inspiring from boxfish (*Ostracion meleagris*). In the design of the vehicle, the relationship between the movement characteristics and shape of the fish was used. These and many other examples can be multiplied for physiological inspiration (Vincent et al. 2006; French and Ahmed 2010; Yoon et al. 2014).

Behavioral Inspiration: It is defined as being inspired by the natural processes (reproduction, birth, growth, decay, etc.) of the organism or living communities, or the behavior of living things, their interactions with the environment.

Different examples can be presented for this form of inspiration, which gained more importance in the architectural field with the developments in technology (Gruber 2011; Pawlyn 2011; Kokturk et al. 2019). The first example is the study analyzing how much the Tokyo subway line, which is also made using the shortest path finding feature of Slime molds, also called smart molds, overlaps with the real subway line (Tero et al. 2010). Slime mold is a eukaryotic living thing that feeds on oats. In this study, a small-scale of Tokyo metro network map has been dissolved into slime molds and this solution has been shown to overlap substantially with the established network. Other than this, there are also studies with slime molds, and motorways of countries such as America, Spain, England are resolved (Adamatzky and Jones 2010). As can be seen from these studies, slime mold is directly included in the process. Moreover, another study in which living things are incorporated is the process of developing a building block using mushrooms. The first studies of this block, mushroom included, have been produced by Ecovative and there are currently building blocks and additional design objects produced by this company (Younsung and Daniel 2019; kim and Ruedy 2019). Furthermore, researcher Andrew Adamatzky predicts that these designs may be used as microprocessors, which are the computer brain of the future, in the study of the logic gate models of Slime mold and other mushrooms (Adamatzky 2010).

Examples Mimicking to Nature in Terms of Material in Biomimicry

One of the areas using most in the concept of biomimicry is architecture and design. Leonardo De Vinci can be cited as the father of biomimetic design. Leonardo da Vinci used nature observations in many of his works. For example, he designed flying instruments by observing the flights of birds. Researcher Wilhelm Barthlott discovered in his research on the lotus leaf that the

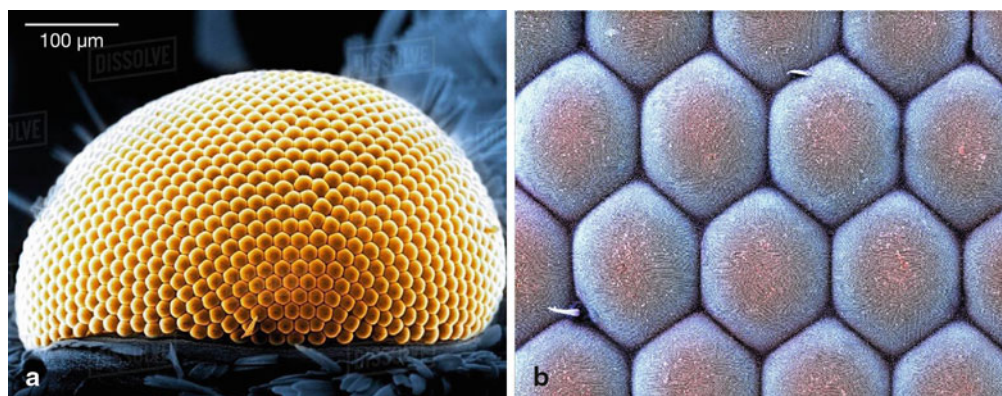
leaf has sticky crystals that have small bubbles and repel water. Dirty molecules on the surface of the lotus leaf rise by means of the bumps on the leaf and can be easily collected with water droplets. This feature of the lotus leaf, which leaves pollutants behind, has been applied by Barthlott to various products such as exterior painting. This feature is known as the lotus effect and used in materials such as textiles, wood, glass. There are numerous small bumps and a wax-like layer on the lotus leaf at a height of 0.005–0.01 mm. In this way, water drops can remain on the upper points of the leaf. Due to this limited adherence, the droplets roll over the leaf quickly, and while rolling, they remove the soil pieces from the leaf (Deyoung and Hobbs 2009). It is used in areas such as the cleaning of high skyscraper glasses, the cleaning of automobile surfaces, and outdoor wall stain by imitating the formal characteristic, and adhesive crystal structure of the bubbles of the lotus leaf.

Penguins have a clear vision, despite the intense brightness of sunlight at the poles. These animals have a liquid in their eyes that allows them to filter the blue and ultraviolet colors of the solar spectrum. The fact that the researchers transferred the superiority of the penguins to the design with an orange filter caused the welding masters to use a more transparent and safe orange mask and screen than the masks previously used. Furthermore, orange-colored sunglasses provide pilot, sailors, and skiers a clearer view in bright

light, haze, and fog. Orange glasses are also thought to help patients with eye disorders caused by cataracts and macular degeneration (an eye disease that does not affect your central vision while blurring your central vision) (Deyoung and Hobbs 2009).

British doctor Ken Philips, who worked 15 years ago to prevent injuries in motorcycle accidents, found that even the safest helmet could not stop the rotation of the head immediately after the collision. Philips later realized that nature had a great invention to protect man's head. The human skin, in this example, the scalp provides a movement against moving in the direction of the effect, thereby reducing the effect of pressure on the skull. Dr. Philips suggested that covering the helmet with a thin material such as the scalp will prevent injuries and protect users' skull and brain and created Superskin technology. The new helmet design has decreased injuries by 67.5% according to the test results. The material coated on the helmet has a flexible structure like human skin and was developed by taking inspiration from this characteristic.

The moth is a living being that flies in the dark and has large eyes. It has a wavy protruding structure that allows these large eyes to see better without reflecting the light and to do this without appearing to other living things (Fig. 1). The transfer of this structure to the design has resulted in an innovative material. Inspired by this complex microstructure in the eye of the moth, a



Biomimicry, Fig. 1 (a) Moth eye under electron microscope, (b) moth eye structure inspired glare-resistance screen coating



Biomimicry, Fig. 2 Morphotex fiber inspired by Morpho butterfly (antenna.sciencemuseum.org.uk)

plastic film has been developed. This film is applied to mobile phone screens, allowing the phone screen to not reflect and use less light to illuminate the screen, thereby extending battery life. This material can be used in many areas such as solar panel, glasses, as well as on phone screens.

A Japanese textile company that mimics the wings of the Morpho butterfly has created Morphotex fiber using very thin wavy polyester layer and nylon (Fig. 2). This structure, which is 70–100 nanometer thick each layer, controls the scattered light tabs and creates red, green, blue, purple colors. This technology, which provides color formation without using stain, is also important in terms of sustainability in energy.

The Gecko gripper is another good example of a material-based biomimetic. Gecko lizard is a type of lizard that can cling to a surface with dry

adhesion. Under the animal's feet are microstructures (seta) and thousands of branched nanostructures (spatulas) (Bhushan 2009). These spatulas provide the grip between Gecko's feet and the surface it climbs thanks to the Van der Waals ties. Although the force of a single spatula is very weak, the force resulting from thousands of spatulas is large enough to carry the weight of Gecko, giving it speed and maneuverability. In this way, Gecko can move on any horizontal and vertical surface without the need for any chemical secretion. Inspired by the structure of the Gecko foot, the researchers copied this structure. Mark Katkosky and his team, who studied robots at Stanford University, designed a robot named Stickybot, which can climb the wall and looks like Gecko. The same team also developed a wearable garment that would allow a person weighing about 70 kg to climb a building with a glass outer surface. Another group of researchers

from the University of Massachusetts developed an adhesive tape, almost the size of a shopping voucher, capable of carrying the 320 kg load they named GeckSkin, using the sticking feature of Gecko. This tape can not only carry large loads with its small parts but can also be removed without leaving any traces from where it adheres.

Living in the Namibian Desert, one of the driest regions in the world, the black colored fog beetle lifts the back of its body upwards to obtain water from dew and fog. Microgrooves and protrusions on the insect's hardened chitin layer help to direct the insect from the back to the mouth by condensing the fog with dew. Also, the combination of hydrophilic and hydrophobic areas in this microstructure increases the amount of water directed (Naidu and Hattingh 2003). With this feature, the fog beetle can collect enough water to meet 40% of its body weight every day. This feature of this insect ensures its survival in difficult desert conditions. Designer Pik Kitae has developed a bottle called “Dew Bank” by taking advantage of the fog bug's water retention feature to provide water to millions of people who do not have access to water. The protruding stainless steel dome of this bottle becomes cooler than air in the morning, transferring the grains of dew sliding over it to the channel surrounding its base and allowing it to accumulate there. It is suggested that at least one glass of water will be collected with the dew bank bottle.

Examples Mimicking to Nature in Terms of Design in Biomimicry

The Crystal Palace built in London and the Eiffel Tower in Paris are examples of biomimetic design in architecture. The Crystal Palace was built in London for the first World Fair in 1851. This structure, which combines glass and iron, is considered a marvel of technology. A landscape architect named Joseph Paxton designed this building by observing the structure of the leaves of the lotus (*Victoria Amazonica*) plant growing Victoria in Amazonia. Paxton likened the glass parts of the structure to the leaf itself and the iron carriers to the complex and cross veins of the leaf (Fig. 3). As a result of this simulation, it designed a light and solid roof that covers a wide area by using glass and iron. Similarly, the Eiffel tower, one of the first examples of biomimetic design in architecture, was inspired by the structure at the head of the thigh bone. Hermann Von Mayer professor of anatomy in Zurich observed that the structure at the head of the thigh bone consists of many intertwined curved structures. Swedish engineer Karl Culmann realized that this structure is important in engineering and is resistant to the effect of the pressure on it, and revealed that the structure of the thigh bone transfers strength from the hip to the long leg bones in the best way. French structural engineer Gustaff Eiffel applied these principles to the building and built the Eiffel Tower in Paris in 1889 (Rao 2003).



Biomimicry, Fig. 3 (a) The Crystal Palace, London, (b) Amazon lotus flower (Meadows 1999)

The application of the structure of the thigh bone to the building gave the building durability and eliminated the ventilation problem. Application of the grid structure of bones in architecture and design reduces the material requirement and increases the strength of the building.

Another example of biomimetic approaches in architecture is the Munich Olympic Stadium, under which Frei Otto was engineered and completed in 1972. The system used here is inspired by the shape of the Alpine mountains. Spanish architect and engineer Santiago Calatrava, on the other hand, takes the functional aspects of forms in nature as a starting point in their designs. Milwaukee Art Museum (Quadracci Pavilion), completed in 2001, Calatrava provided a new function to the building mimicking the form in the structure. The building is in the form of a bird wing and has a collapsible roof system. While the wings open up during the day, they control the sunlight entering the museum, and they close at night and in bad weather conditions, protecting the museum against external influences.

Termite (*Macrotermes Michaelsoni*) especially living in the tropics is a kind of insect, also called white ant. These insects, which look like ants, form huge structures in the form of towers on the ground. At the same time, termites engaged in farming for food chains provide the air conditioning and ventilation systems of the nest with this tower-shaped structure (Fig. 4). They optimize the temperature in the housing with heat from the sun. The temperature inside is the same as the outside temperature. This ventilation method was applied

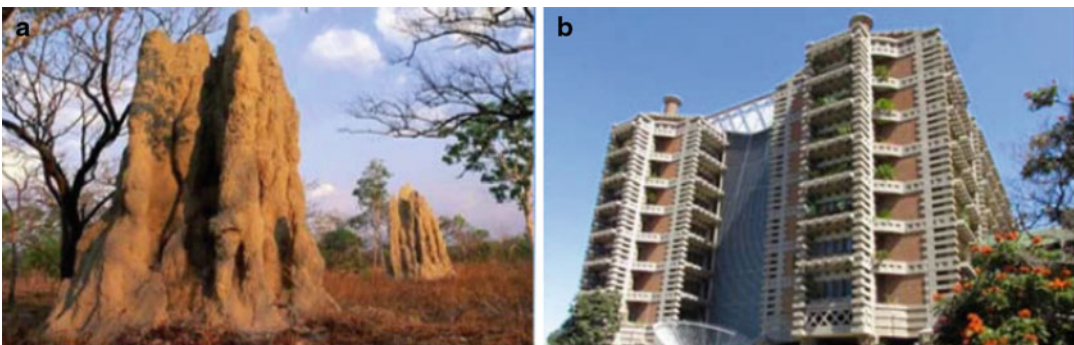
by Architect Mick Pearce in 1996 in the Eastgate building. The building as a residential is the first naturally cooled building. With this building designed the mimicking termites, a high level of energy was saved.

Summary

Biomimetic which combines technology and biology is an exciting branch that is frequently used today. There is a new understanding that biomimetic carries to the world of science: "Not learning things about nature, necessary learn from nature for innovation." This new apprehension has changed the view of nature and design. Nature contains many technologies. Therefore, it is clear that natural systems can be applied to many sectors.

The main idea at the basis of all concepts such as bionic, biomimetic, biomimicry, biodesign, biomechanics, organic design is learning from nature, inspiration from nature. The solutions developed by the living beings in nature against the problems faced have directed the designers and engineers to approach such as learning from nature and mimicking nature. These approaches have been accepted in many fields such as medicine, architecture, engineering, design, and art and they maintain their development.

In the relationship between design and nature, now it was passed through beyond simply copying the format into the product. In the problems encountered by examining the systems, methods, and functions of nature, the resources that can



Biomimicry, Fig. 4 (a) Termit yuvası, (b) Eastgate binası

perform similar functions in nature are searched and the application is started by seeking the solution in nature.

Examples of biomimetic design arise from observations in nature, as well as studies in which different disciplines that require biological examinations work together. Examples of biomimetic design consist of designs inspired by nature's structure, function, and forms. When the examples are examined, the designs that mimicking nature are divided into two classes, in terms of material and structure. Mimicking in terms of structure is classified as structural and textural, and the constructional structures are categorized as a structure where the function constitutes the architecture and the structure in which form generates the architecture. In the material, by being inspired by nature in terms of form and functionality, the product can be obtained by directly adding the living being into it. As a result, with the developing technology, the design has started to take a very different form by being inspired by nature in different ways. It is predicted that many technological product designs will be realized in the future not only through inspiration but also with the cooperation of nature.

References

- Adamatzky, A. (2010). *Physarum machines: Computers from Slime Mould* (World Scientific Series on Non-linear Science: Series A). World Scientific Publishing Company. ISBN: 978-9814327589.
- Adamatzky, A., & Jones, J. (2010). Road planning with slime mould: If Physarum built motorways it would route M6/M74 through Newcastle. *International Journal of Bifurcation and Chaos*, 20(10), 3065–3084.
- Altun, T. D. (2019). Biocollaborative approaches to design, <https://archdsgnsummit.com/>. Accessed 3 Dec 2019.
- <https://antenna.sciencemuseum.org.uk>. Accessed 7 Jan 2017.
- Benyus, J. M. (2002). *Biomimicry: Innovation inspired by nature*. Harper Perennial Publishing. ISBN: 978-0060533229.
- Bhushan, B. (2009). Biomimetics: Lessons from nature-an overview. *Philosophical Transactions of the Royal Society*, 367, 1445–1486. <https://doi.org/10.1098/rsta.2009.0011>.
- Biodesign Team Turkey. (2016). <https://www.biodesignteam.com>. Accessed 7 Jan 2017.
- Biomimicry Institute. (2016). <https://biomimicry.org/>. Accessed 7 Apr 2011.
- Deyoung, D., & Hobbs, D. (2009). *Discovery of design: Searching out creator's secrets*. Master Books. ISBN: 978-0890515747.
- Dicks, H. (2016). The philosophy of biomimicry. *Philosophy and Technology*, 29, 223–243. <https://doi.org/10.1007/s13347-015-0210-2>.
- Dunster, A. M. (1997). *Naturally innovative: Using biomimetics in construction*. IP 11/07.
- French, J. R. J., & Ahmed, B. M. (2010). The challenge of biomimetic design for carbon-neutral buildings using termite engineering. *Insect Science*, 17, 154–162. <https://doi.org/10.1111/j.1744-7917.2009.01306.x>.
- Gruber, P. (2011). Biomimetics in Architecture [Architektur-bionik]. In P. Gruber, D. Bruckner, C. Hellmich, H. B. Schmiedmayer, H. Stachelberger, & I. Gebeshuber (Eds.), *Biomimetics-materials, structures and processes*. Berlin: Springer. ISBN: 978-3-642-11933-0.
- Kim, Y., & Ruedy, D. (2019). Mushroom packages an ecovative approach in packaging industry. In *Handbook of engaged sustainability*. Springer. https://doi.org/10.1007/978-3-319-53121-2_27-1.
- Kokturk, G., & Altun, D. A. (Eds.). (2018). *Interdisciplinary expansions in engineering and design with the power of biomimicry*. InTech Open Publishing. ISBN: 978-953-51-3935-5.
- Kokturk, G., Tokuc, A., Altun, T. D., Kale, I., Ozkaban, F. F., Cakir, O. A., & Sendemir, A. (2019). Experimental and numerical shortest route optimization in generating a design template for a recreation area in Kadifekale. In I. Dincer, C. Colpan, & M. Ezan (Eds.), *Environmentally-benign energy solutions, green energy and technology*. Springer.
- Lurie-Luke, E. (2014). Product and technology innovation: What can biomimicry inspire? *Biotechnology Advances*, 32(8), 1494–1505.
- Macnab, M. (2012). *Design by nature: Using universal and principles in design*. New Riders. ISBN: 978-0-321-74776-1.
- Meadows, R. (1999). Designs from life. *Zooger*, 28(4).
- Naidu, S. G., & Hattingh, J. (2003). Water balance and osmoregulation in Physadesmia Globosa, a Diurnal Tenebrionid beetle from the Namib Desert. *Journal of Insect Physiology*, 33(10), 911–917.
- Nature's Unifying Patterns. (2016). 10 lessons to consider every time you design something. Biomimicry.org/AskNature.org. Accessed 28 Aug 2019.
- Pawlyn, M. (2011). *Biomimicry in architecture*. RIBA Publishing. ISBN: 978-1859463758.
- Rao, P. R. (2003). Biomimetics. *Sadhana*, 28, 657–676. <https://doi.org/10.1007/BF02706452>.
- Reed, A. (2004). *A paradigm shift: Biomimicry*. Resources in Technology, The Technology Teacher.
- Serna, H., & Barragan, D. (2017). Patterns in nature: More than an inspiring design. *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales*, 41(160), 349–360. <https://doi.org/10.18257/racefyn.481>.

- Tero, A., Takagi, S., Saigusa, T., Ito, K., Bebbler, D. P., Fricker, M. D., Yumiki, K., Kobayashi, R., & Nakagaki, T. (2010). Rules for biologically inspired adaptive network design. *Science*, 327(5964), 439–442.
- Treehugger. (2016). Natural science. <http://www.treehugger.com/natural-sciences/nature-blows-my-mind-miracles-termite-mounds.html>. Accessed 28 Nov 2017.
- Vincent, J. F. V., Bogatyrev, O. A., Bogatyrev, N. R., Bowyer, A., & Pahl, A. K. (2006). Biomimetics-its practice and theory. *Journal of the Royal Society Interface*. <https://doi.org/10.1098/rsif.2006.0127>.
- Yeler, M. G. (2012). *Mimarlıkta Biyomorfizm*. Ph.D. Dissertation, The Graduate School of Natural and Applied Sciences, Trakya University.
- Yoon, Y., Moon, S. K., & Hwang, J. (2014). 3D printing as an efficient way for comparative study of biomimetic structures-trabecular bone and honeycomb. *Journal of Mechanical Science Technology*, 28, 4635–4640. <https://doi.org/10.1007/s12206-014-1031-4>.
- Younsung, K., & Daniel, R. (2019). Mushroom packages an ecovative approach in packaging industry. In *Handbook of engaged sustainability*. Springer. https://doi.org/10.1007/978-3-319-53121-2_27-1.

Bionomics

► Ecology and Ecosystem: Sustainability

Bioremediation

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Synonyms

Green economy; Green energy; Green technology; Phytoremediation; Sustainable development

Definition

In the same way that industrialization brought the economic development of nations, it also introduced increasing pollution indices that, in addition to environmental degradation, caused serious problems in the self-sustaining growth of the food chain, or led to the deterioration of human and animal health. Even many antibiotics became ineffective due to the action of these pernicious elements which, basically, can be classified into two groups, heavy metals and polycyclic aromatic hydrocarbons (PAHs). Certainly, the resolution of this issue is quite complex given that, in addition to the abovementioned damages, they also constitute a strong barrier to the economic growth of nations, especially those that lack the resources to fight the environmental pollution of soils. Against this scenario, bioremediation, a range of techniques, methods, and procedures that use as a foundation, tools provided by nature, is a uniquely successful remedy, whose effectiveness has been proven throughout the world. This entry describes the main stylized facts and defining characteristics of bioremediation.

Introduction

In accordance with the patterns marked by the Greco-Latin wisdom, the germ of Western knowledge, all the substances could be decomposed into four fundamental elements: earth, air, water, and fire (Ball 2004), which coexisted in several sciences such as medicine, pharmacopeia, or philosophy. Thousands of years later, in our most immediate present, with the sole exception of fire, the rest of the primary elements have been, in one way or another, contaminated by the effects of man's hand. During the last decades, the globalization of the economies as well as the late industrialization of some nations has resulted in economic growth that originally was inextricably linked to pollution and environmental deterioration (Briffa et al. 2020; Su et al. 2014), being particularly pernicious for the environmental habitat or the human health the contamination

stemming from the so-called heavy metals (Jean-Philippe et al. 2012; Su et al. 2014) without forgetting the impact of the polycyclic aromatic hydrocarbons (hereinafter, PAHs) (Cristaldi et al. 2017). Regarding the consequences of heavy metals on the environment, the food chain, or on living organisms through bioaccumulation processes (Briffa et al. 2020), it can simply be determined that their effects are devastating. In fact, Hubeny et al. (2021) report that heavy metals can contribute to an increase in the resistance to the antibiotics administered to humans through their uncontrolled discharge in sewage, sewage sludges, and river waters.

Stricto sensu, heavy metal pollution is caused when human activities lead to excessive deposition of heavy metals in soils (Su et al. 2014), contaminating terrestrial watercourses (rivers, streams, lakes, etc.) and ultimately reaching the oceans. According to Mohan et al. (2021), among the long list of heavy metals that contribute most to the systematic poisoning of the biosphere, it should be pointed out: arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), or zinc (Zn). The different

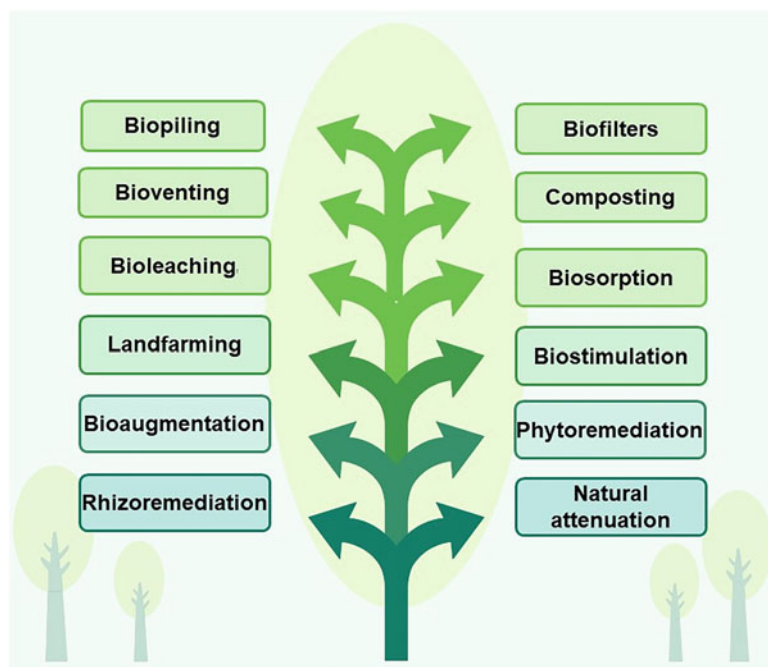
forms in which heavy metals can be present in soils are basically five (Lasat 1999): in the form of free metal ions, soluble metal complexes or oxides, hydroxides, and carbonates, as well as associated with the matter existing in soils or added to the structure of silicate minerals.

Note that when terrestrial soils undergo contamination from heavy metals, it is quite difficult to eradicate their effects (Su et al. 2014) and even more complicated to restore them to their original state. In this context, there exist very few alternatives available, being one of them bioremediation, a numerous group of relatively modern procedures, techniques, and methods that etymologically mean “biological relief.” Taking Cristaldi et al. (2017) and Kavamura and Esposito (2010) as a point of reference, the main branches of bioremediation can be summarized in Fig. 1.

Indeed, since it is to some extent a novel term, there is no widely accepted concept of it (Wang et al. 2021). Thus, while Merriam-Webster (MW 2022) defines bioremediation very succinctly as “the treatment of pollutants or waste (as in an oil spill, contaminated groundwater, or an industrial process) by the use of

Bioremediation,

Fig. 1 Main methods and procedures from which bioremediation is implemented

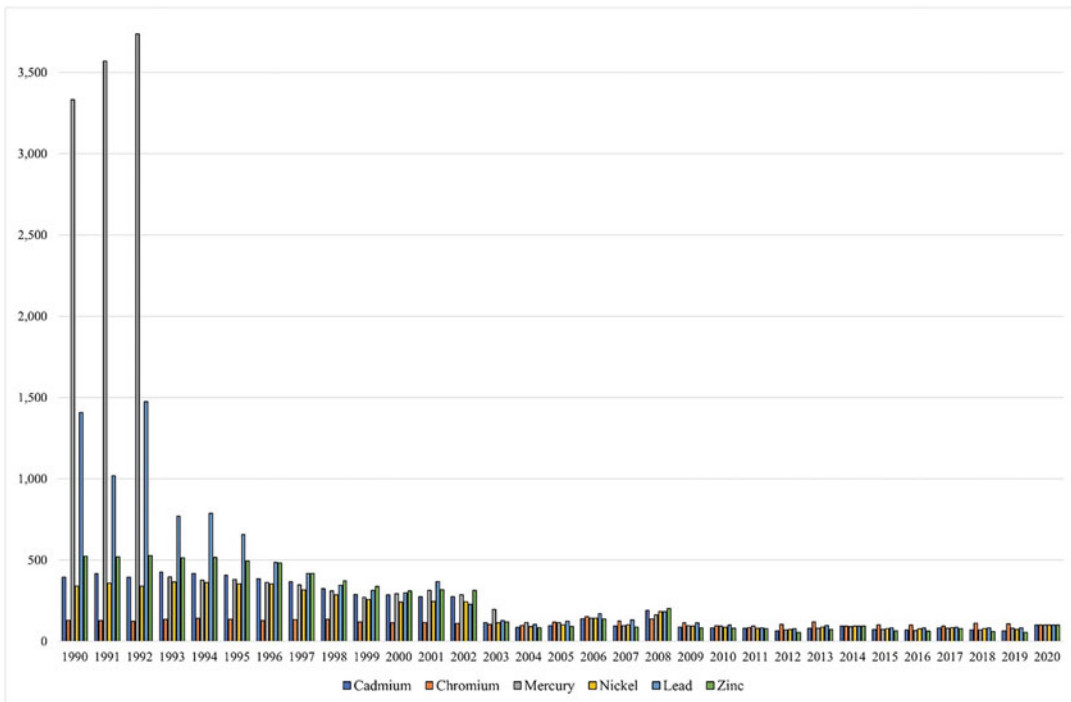


microorganisms (such as bacteria) that break down the undesirable substances,” Sharma (2020) provides a purely academic definition: “Bioremediation is a process where biological organisms are used to remove or neutralize an environmental pollutant by metabolic process. The ‘biological’ organisms include microscopic organisms, such as fungi, algae and bacteria, and the ‘remediation’ - treating the situation.” Whereas until not too recently, heavy metals pollution was not taken into consideration as much as air or water pollution, because it was difficult to control by the governmental authorities (Su et al. 2014) or because it is sometimes a priori more complex to detect than other sources of pollution, it has now become a global problem (Nriagu and Pacyna 1988) that concerns underdeveloped, developing, and developed nations authorities (Su et al. 2014).

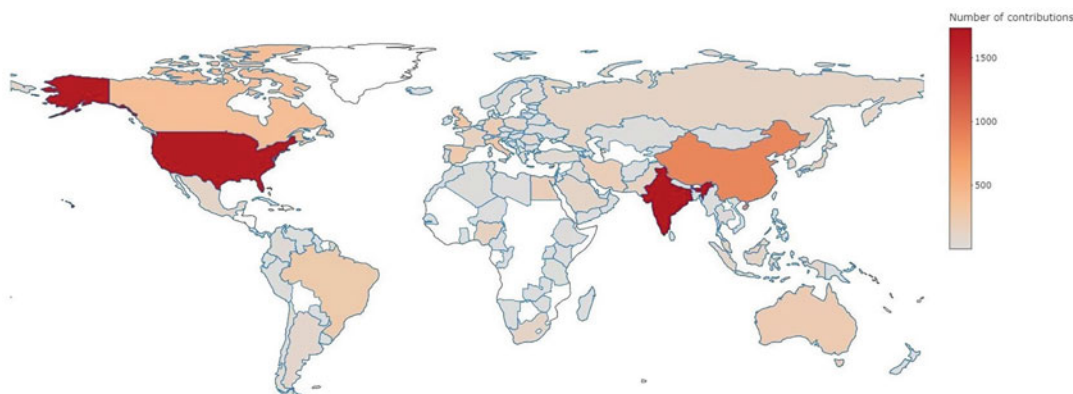
In this framework, industrialized countries have chosen to substantially reduce the disposal of heavy metals by raising social awareness or

through ambitious bioremediation projects (Vischetti et al. 2022). This decrease can be illustrated in Fig. 2, which presents the evolution of emissions of five heavy metals in all the member countries of the European Union over the last 30 years.

According to this graph, created from annual data provided by the European Environment Agency (EEA 2022), it can be observed a drastic reduction of mercury and cadmium emissions, along with some worrying levels of chromium, lead, and nickel. However, many voices have accused the developed countries of being exposed to a double standard since large multinational corporations have outsourced the dumping of polluting substances in the soils of less economically favored countries (Khor 2010) through the controversial and immoral phenomenon of “exporting pollution” (Ben-David et al. 2021). In the face of this situation, bioremediation has emerged as a response to the global pollution excesses. In order to obtain a rough idea of the



Bioremediation, Fig. 2 Heavy metal emissions to the atmosphere from extractive activities in the European Union (1990–2020)



Bioremediation, Fig. 3 Global distribution of researches focused on the bioremediation (1987–2022)

implementation of bioremediation worldwide, Fig. 3 displays a choropleth map of the distribution by country of all English-language scientific papers that have addressed these procedures and their ancillary techniques and processes collected from the Scopus database during the period 1987–2022 (Scopus 2014). More specifically, the different countries in which studies of this type have been carried out are presented by the nationality of the corresponding author. Altogether, there are 8338 scientific papers produced in 121 different countries.

The leading countries in terms of scientific production and investigation in the field of bioremediation are India, the United States, China, and Canada, although it can be noticed that developing and underdeveloped countries (i.e., Niger, Panama, Papua New Guinea, Paraguay, Senegal, Yemen, or Zimbabwe) can also benefit from these activities.

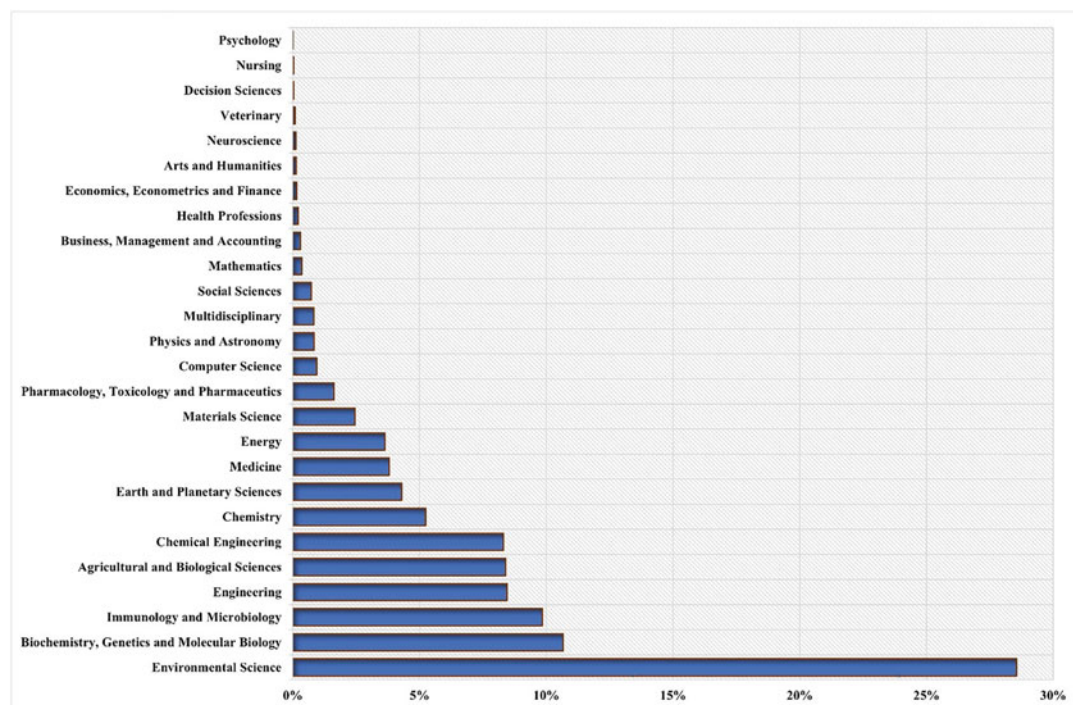
The implementation of bioremediation is perhaps most needed in the less economically favored nations, since the effects of contamination, apart from having a highly negative impact on the natural habitats of these countries, have also served to undermine the foundations of their weak economies, contributing to the gradual impoverishment of the local populations. This pattern is particularly notable in countries located in the sub-Saharan African Region (Anyanwu et al. 2018).

Consequently, Fig. 4 lists all the scientific disciplines on which have been articulated the 8338 scientific papers mentioned before that studied bioremediation during the period 1987–2022.

Although clearly, these are a series of techniques and procedures whose genesis comes from the Natural Sciences (e.g., Environmental Sciences, Biochemistry, Biology, or Chemistry), it should also be emphasized their multidisciplinary character, given that not a few of the Human Sciences have approached their analysis, as is the case of knowledge domains such as Economics and Finance, Business and Management, Arts and Humanities, or Psychology, as can be appreciated in Fig. 4.

Rationale of Bioremediation Procedures and Techniques

The bioremediation concept was first coined in 1972 for the cleaning of the Sun Oil pipeline spill at Ambler, Pennsylvania, USA (Kumar 2020). Bioremediation is a method to remove pollutants from the environment, i.e., soil, sediment, and water, especially in wastewater and solid waste (Massoud et al. 2019; Motaghi and Ziarati 2016; P. Ziarati et al. 2019a, b). Generally, microbes are used to degrade organic pollutants. Mostly used microbes are bacteria, algae, and fungi. The most commonly used bacteria



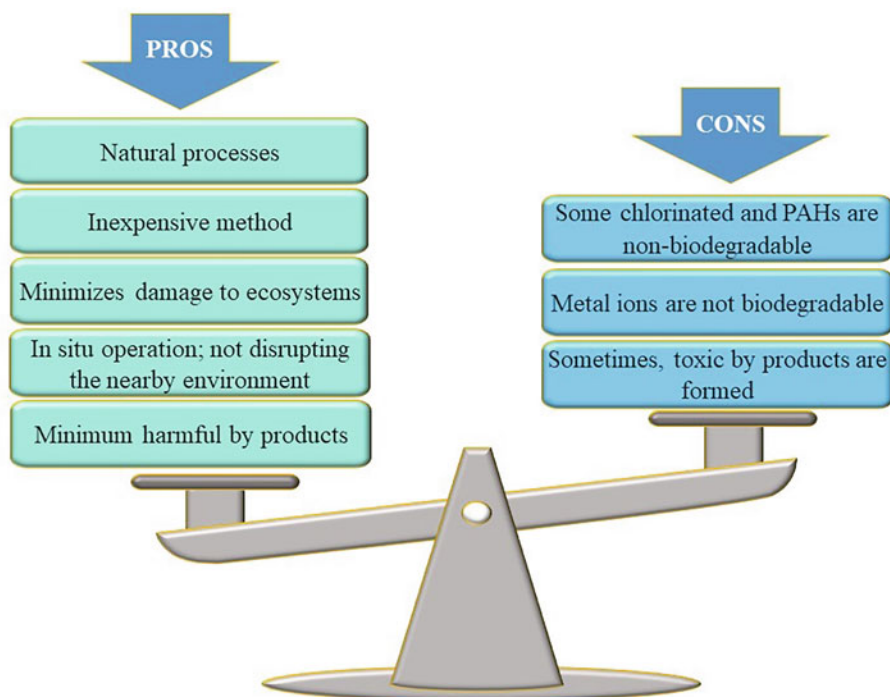
Bioremediation, Fig. 4 Main areas of research related to bioremediation (1987–2022)

are *Alcaligenes odorans*, *Bacillus subtilis*, *Corynebacterium propinquum*, *Pseudomonas aeruginosa*, *Aspergillus niger*, *Candida glabrata*, *Candida krusei*, and *Saccharomyces cerevisiae* (Marzuki et al. 2020). The commonly used algae are species of *Chlorella*, *Chaetomorpha*, *Poly-siphonia*, *Ulva*, and *Cystoseira*. The fungi used are white-rot fungi such as *Phanerochaete chrysosporium*, *Pleurotus ostreatus*, *Cyanea versicolor*, and *Cyathus stercoreus* (Silva et al. 2019). The pollutants are oxidized or reduced by microbial enzymes. Generally, bioremediation is used to remove the organic pollutants that originated from anthropogenic activities such as household, agricultural, and industrial applications (Ojuederie and Babalola 2017).

The common pollutants removed by bioremediation techniques are household and petroleum products, heavy metals, oil and solvents, pesticides, agrochemicals, chlorinated compounds, xenobiotics, halogens, nuclear waste, normal hydrocarbons, dyes plastics residues, and sludge (Medina-Bellver et al. 2005; Ziarati et al. 2020).

Most of the bioremediation reactions involve oxidation and reduction phenomena (redox). In this process, a chemical species gives an electron (electron donor) to a dissimilar species that accepts the electron (electron acceptor). Consequently, the electron donor is oxidized, whereas the electron acceptor is reduced. The common electron acceptors in the bioremediation phenomenon are mainly nitrate, oxygen, manganese (III and IV), iron (III), carbon dioxide, and sulfate. Electron donors are fats, sugars, natural organic material, alcohols, fuel hydrocarbons, and a variation of reduced organic pollutants. Mostly bioremediation is carried out in aerobic conditions but, sometimes, anaerobic conditions are also used as per the requirements.

The plan, design, control, and optimized process is a complicated phenomenon that includes several factors such as microbe population, availability as well as the contents of contaminants, type of matrix, pH, temperature, and the availability of oxygen and nutrients (Fritsche and Hofrichter 2001; Rawe et al. 2006; Ziarati et al.



B

Bioremediation, Fig. 5 Advantages and disadvantages of bioremediation

2018). Normally, bioremediation is an inexpensive process and more sustainable in comparison to other methods. This method is applied either in situ or ex situ depending on the requirements. Such dichotomous characterization is established on the basis of several criteria, which include the cost, the nature of the site, and the type and concentration of contaminants (Sharma 2020). This approach has many advantages in comparison to other methods like a natural process, a wide range of applications, harmless by-products, in situ nature, inexpensive, coupling with other techniques, etc.

Figure 5 provides an indicative illustration of the different advantages and disadvantages of bioremediation.

Summary

Still, there are some challenges in bioremediation, and these include lack of knowledge about microbe proliferation in the field, glitches, and

handling of the microbe, and difficulty in confirming correct interaction or arrangement among microbes and the contaminant. Researchers are working for innovative ideas to include materials that are capable to inspire microbes. It is expected that in the future, technologies of bioremediation are likely will provide better situations for disabling limits due to microbiological factors. Besides, new methods are being planned to improve microbes' bioavailability to increase bioremediation efficiency. However, the microbes should be handling carefully to avoid any damage to human beings and useful animals, i.e., the treated soil, sediment, and water should be free of microbes. Briefly, bioremediation is an extensively recognized method for cleaning and has a bright future.

Other lines of research can be addressed to develop the potential of bioremediation, not only in terrestrial soils but also in oceans, especially in cases of petroleum contamination (Bacosa et al. 2022), highlighting the cases of the Exxon Valdez, BP Deepwater Horizon, or Prestige oil spills

(Atlas and Hazen 2011; Gallego et al. 2007). It would also be interesting to perform studies that carry out jointly specific case studies in the wake of seminal works such as Balba et al. (1991) or Devine (1992), in order to establish comparisons between the different sites and procedures in which bioremediation has been used, or to deepen the implementation of strategies such as bioaugmentation or biostimulation to ensure the continued viability of these processes (Tyagi et al. 2011). In any case, it should always be taken into account the two main differential facts of bioremediation according to Sharma (2020) and what they imply for the achievement of a clean environment, the accomplishment of a true green economy, or a mankind free of diseases of pollution origin: “Bioremediation is the most effective, economical, eco-friendly management tool to manage the polluted environment.”

Cross-References

- Community Sustainability
- Energy Biofuels
- Environmental Impact
- Exxon Valdez
- Phytoremediation
- Sustainable Growth

References

- Anyanwu, B. O., Ezejiofor, A. N., Igweze, Z. N., & Orisakwe, O. E. (2018). Heavy metal mixture exposure and effects in developing nations: An update. *Toxics*, 6(4), 65. <https://doi.org/10.3390/toxics6040065>.
- Atlas, R. M., & Hazen, T. C. (2011). Oil biodegradation and bioremediation: A tale of the two worst spills in U.S. history. *Environmental Science & Technology*, 45, 6709–6715. <https://doi.org/10.1021/es2013227>.
- Bacosa, H. P., Ancla, S. M. B., Arcadio, C. G. L. A., Dalogdog, J. R. A., Ellos, D. M. C., Hayag, H. D. A., Jarabe, J. G. P., Karim, A. J. T., Navarro, C. K. P., Palma, M. P. I., Romarate, R. A., Similatan, K. M., Tangkion, J. A. B., Yurong, S. N. A., Mabuhay-Omar, J. A., Inoue, C., & Adhikari, P. L. (2022). From surface water to the Deep Sea: A review on factors affecting the biodegradation of spilled oil in marine environment. *Journal of Marine Science and Engineering*, 10(3), 426. <https://doi.org/10.3390/jmse10030426>.
- Balba, M. T., Ying, A. C., & McNeice, T. G. (1991). Bioremediation of contaminated soil: Strategy and case histories. United States: Hazardous Materials Control Research Institute. https://inis.iaea.org/search/search.aspx?orig_q=RN:24058991
- Ball, P. (2004). *The elements: A very short introduction*. Oxford: Oxford University Press.
- Ben-David, I., Jang, Y., Kleimeier, S., & Viehs, M. (2021). Exporting pollution: Where do multinational firms emit CO₂? *Economic Policy*, 36(107), 377–437. <https://doi.org/10.1093/epolic/eiab009>.
- Briffa, J., Sinagra, E., & Blundell, R. (2020). Heavy metal pollution in the environment and their toxicological effects on humans. *Heliyon*, 6(9), e04691. <https://doi.org/10.1016/j.heliyon.2020.e04691>.
- Cristaldi, A., Oliveri Conti, G., Hea Jho, E., Zuccarello, P., Grasso, A., Copat, C., & Ferrante, M. (2017). Phytoremediation of contaminated soils by heavy metals and PAHs. A brief review. *Environmental Technology and Innovation*, 8, 309–326. <https://doi.org/10.1016/j.eti.2017.08.002>.
- Devine, K. (1992). *Bioremediation case studies: An analysis of vendor-supplied data* (Washington D. C.: U.S). Office of Environmental Engineering & Technology Demonstration: Environmental Protection Agency.
- EEA. (2022). *Heavy metal emissions to air from extractive activities from 1990–2020, indexed to 1990*. European Environment Agency, https://www.eea.europa.eu/data-and-maps/daviz/emission-of-heavy-metals-to#tab-chart_1. Accessed 25 Dec 2022.
- Fritsche, W., & Hofrichter, M. (2001). Aerobic degradation by microorganisms. In H.-J. Rehm & G. Reed (Eds.), *Biotechnology set* (pp. 144–167). <https://doi.org/10.1002/9783527620999.ch6m>.
- Gallego, J. R., Gonzalez-Rojas, E., Pelaez, A. I., Sanchez, J., Garcia-Martinez, M. J., & Llamas, J. F. (2007). Effectiveness of bioremediation for the prestige fuel spill: A summary of case studies. In *Proceedings of the second IASTED international conference on advanced Technology in the Environmental Field, ATEF 2006* (pp. 68–73).
- Hubeny, J., Harnisz, M., Korzeniewska, E., Buta, M., Zieliński, W., Rolbiecki, D., Giebułtowski, J., Nałęcz-Jawecki, G., & Płaza, G. (2021). Industrialization as a source of heavy metals and antibiotics which can enhance the antibiotic resistance in wastewater, sewage sludge and river water. *PLoS One*, 16(6), e0252691. <https://doi.org/10.1371/journal.pone.0252691>.
- Jean-Philippe, S. R., Labbe, N., Franklin, J. A., & Johnson, A. (2012). Detection of mercury and other metals in mercury contaminated soils using mid-infrared spectroscopy. *Proceedings of the International Academy of Ecology and Environmental Sciences*, 2(3), 139–149.
- Kavamura, V. N., & Esposito, E. (2010). Biotechnological strategies applied to the decontamination of soils polluted with heavy metals. *Biotechnology Advances*, 28(1), 61–69. <https://doi.org/10.1016/j.biotechadv.2009.09.002>.

- Khor, M. (2010). The double standards of multinationals. *The Guardian*. <https://www.theguardian.com/commentisfree/cif-green/2010/jun/25/double-standards-multinationals-ecological-disasters>. Accessed 25 Dec 2022.
- Kumar, S. (2020). *Modern treatment strategies for marine pollution*. Amsterdam: Elsevier Science.
- Lasat, M. M. (1999). Phytoextraction of metals from contaminated soil: A review of plant/soil/metal interaction and assessment of pertinent agronomic issues. *Journal of Hazardous Substance Research*, 2(5), 1–25. <https://doi.org/10.4148/1090-7025.1015>.
- Marzuki, I., Daris, L., Nisaa, K., & Emelda, A. (2020). The power of biodegradation and bio-adsorption of bacteria symbiont sponges sea on waste contaminated of polycyclic aromatic hydrocarbons and heavy metals. *IOP Conference Series: Earth and Environmental Science*, 584, 12013. <https://doi.org/10.1088/1755-1315/584/1/012013>.
- Massoud, R., Hadiani, M. R., Hamzehlou, P., & Khosravi-Darani, K. (2019). Bioremediation of heavy metals in food industry: Application of *Saccharomyces cerevisiae*. *Electronic Journal of Biotechnology*, 37, 56–60. <https://doi.org/10.1016/j.ejbt.2018.11.003>.
- Medina-Bellver, J. I., Marín, P., Delgado, A., Rodríguez-Sánchez, A., Reyes, E., Ramos, J. L., & Marqués, S. (2005). Evidence for in situ crude oil biodegradation after the prestige oil spill. *Environmental Microbiology*, 7(6), 773–779. <https://doi.org/10.1111/j.1462-2920.2005.00742.x>.
- Mohan, I., Gorla, K., Dhar, S., Kothari, R., Bhau, B. S., & Pathania, D. (2021). Phytoremediation of heavy metals from the biosphere perspective and solutions. In S. Pardeep, S. Rishikesh, S. Vipin Kumar, & B. Rahul (Eds.), *Pollutants and water management: Resources, strategies and scarcity* (pp. 95–127). Hoboken: John Wiley & Sons. <https://doi.org/10.1002/9781119693635.ch5>.
- Motaghi, M., & Ziarati, P. (2016). Adsorptive removal of cadmium and Lead from *Oryza sativa* Rice by Banana Peel as biosorbent. *Biomedical & Pharmacology Journal*, 9(2), 739–749. <https://doi.org/10.13005/bpj.998>.
- MW. (2022). *Bioremediation*. Dictionary by Merriam-Webster. <https://www.merriam-webster.com/dictionary/bioremediation>. Accessed 25 Dec 2022.
- Nriagu, J. O., & Pacyna, J. M. (1988). Quantitative assessment of worldwide contamination of air, water and soils by trace metals. *Nature*, 333(6169), 134–139. <https://doi.org/10.1038/333134a0>.
- Ojuederie, O. B., & Babalola, O. O. (2017). Microbial and plant-assisted bioremediation of heavy metal polluted environments: A review. *International Journal of Environmental Research and Public Health*, 14(12), 1504. <https://doi.org/10.3390/ijerph14121504>.
- Rawe, J., Hodge, V., Acheson, C. M., Lutes, C., & Liles, D. (2006). *In situ and ex situ biodegradation Technologies for Remediation of contaminated sites [Engineering issue]*. United States Environmental Protection Agency, EPA/625/R-06/015.
- Scopus. (2014). *Quick reference guide*. Amsterdam: Elsevier.
- Sharma, I. (2020). Bioremediation techniques for polluted environment: Concept, advantages, limitations, and prospects. In M. A. Murillo-Tovar, H. Saldarriaga-Noreña, & A. Saeid (Eds.), *Trace metals in the environment*. IntechOpen: Rijeka. <https://doi.org/10.5772/intechopen.90453>.
- Silva, A., Delerue-Matos, C., Figueiredo, S. A., & Freitas, O. M. (2019). The use of algae and fungi for removal of pharmaceuticals by bioremediation and biosorption processes: A review. *Water*, 11(8), 1555. <https://doi.org/10.3390/w11081555>.
- Su, C., Jiang, L. Q., & Zhang, W. J. (2014). A review on heavy metal contamination in the soil worldwide: Situation, impact and remediation techniques. *Environmental Skeptics and Critics*, 3(2), 24–38.
- Tyagi, M., da Fonseca, M. M. R., & de Carvalho, C. C. C. R. (2011). Bioaugmentation and biostimulation strategies to improve the effectiveness of bioremediation processes. *Biodegradation*, 22(2), 231–241. <https://doi.org/10.1007/s10532-010-9394-4>.
- Vischetti, C., Marini, E., Casucci, C., & de Bernardi, A. (2022). Nickel in the environment: Bioremediation techniques for soils with low or moderate contamination in European Union. *Environments*, 9(10), 133. <https://doi.org/10.3390/environments9100133>.
- Wang, M., Chen, S., Jia, X., & Chen, L. (2021). Concept and types of bioremediation. In M. Hasanuzzaman & M. N. V. Prasad (Eds.), *Handbook of bioremediation: Physiological, molecular and biotechnological interventions* (pp. 3–8). Cambridge: Academic Press. <https://doi.org/10.1016/B978-0-12-819382-2.00001-6>.
- Ziarati, P., Moradi, D., & Vambol, V. (2020). Bioadsorption of heavy metals from the pharmaceutical effluents, contaminated soils and water by food and agricultural waste: A short review. *Labour Protection Problems in Ukraine*, 36(2), 3–7. <https://doi.org/10.36804/nndipbop.36-2.2020.3-7>.
- Ziarati, P., Mostafidi, M., Arabian, S., Vambol, S., Vambol, V., & Kozub, P. (2019a). *Patent № 137794 Ukraina*. Sposib detoksykatsiyi gruntiv. Zayavka № u201903535; zayavl. 08.04.2019; opubl. 11.11.2019, Byul. № 21.
- Ziarati, P., Mostafidi, M., Arabian, S., Vambol, S., Vambol, V., & Kozub, P. (2019b). *Patent № 138281 Ukraina*. Sposib ochystky vody. Zayavka № u201904687; zayavl. 02.05.2019; opubl. 25.11.2019, Byul. № 22.
- Ziarati, P., Mostafidi, M., Shirkhan, F., & Tamaskani Zahedi, M. (2018). Analysis of removal methods of toxic heavy metals using bio-absorbs. *Науково-Технічний Журнал “техногенно-Екологічна Безпека”*, 4(2). <https://doi.org/10.5281/zenodo.1402587>.

Biota

► Ecology and Ecosystem

Bioweapons

- [Aral Sea Disaster, The](#)
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- [Business in the Community \(UK+Derivatives\)](#)
-

BITC Index

- [Business in the Community Index](#)
-

Black Economic Empowerment

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Abbreviations

BBBEE	Broad-Based Black Economic Empowerment
BEE	Black Economic Empowerment

Introduction

The South African legislature in 2003 enacted the Broad-Based Black Economic Empowerment Act (BBBEE). The word Black Economic Empowerment (BEE) is often used to refer to the legislation or policies related to the BBBEE. The Act is meant to promote the right to equality as stipulated in the Constitution by increasing the participation of black persons in the economy. The right to equal participation in the economy is essential in South Africa because of the colonial and apartheid-era that disfranchised black persons from benefiting and participating in the economy (Duffett et al. 2009; Ponte et al. 2007). The

World Bank report noted that South Africa is one of the most unequal countries in the world (World Bank 2018).

In 1994, the democratic government enacted legislation that was meant to facilitate radical economic transformation (Ponte et al. 2007). For these reasons, the democratic government enacted Restitution of Land Rights Act, National Empowerment Fund Act, Employment Equity Act, Competition Act, Skills Development Levies Act, Preferential Procurement Policy Framework etc. The Black Empowerment was formed in 1998, which released a report in 2001 (Emuze and Adlam 2013). The report noted that the aim of the Commission was the realization that the domination of business activities by white businesses and the exclusion of black people and women from the mainstream economy. The Commission defined black economic empowerment, and the definition was divided into a narrow and broad definition. The report argued that the narrow definition of black economic empowerment focuses on the entry and transaction activities of black people in business, particularly black economic empowerment (BEE) investment policies. The broader definition of BEE argued that the fundamental crisis in South Africa's economy was the exclusion of black persons from financial and economic resources. In that light, the report recommended, among other things, the stakeholders to steer investments towards areas of national priority, development of human resources, procurement policies, etc. Further it recommended the promulgation of BEE legislation (Black Economic Empowerment Commission 2001).

Broad-Based Black Economic Empowerment Act

The Act has a broad definition of a black person which includes Africans, Coloreds, and Indians. Further, it specifies that such persons must be South African citizens by birth, who became South Africa citizens by naturalization before 27 April 1994 or those who were entitled to citizenship before 27 April 1994. It also emphasizes

women, workers, youth, people in rural areas, and people with disability. Notably, the Act takes a broad approach to the concept of economic participation. Economic participation includes control of enterprises, facilitation of ownership, human resources and skills development, preferential procurement, and investment in enterprises that are owned and managed by black people (Broad-Based Black Economic Empowerment Act 2003).

Implementation

The Minister of the Department of Trade and Industry is responsible for the implementation of the Act and may issue codes of good practice on black economic empowerment. Brun (2014) explained the implementation of the codes of good practice. Codes of good practice may give a further interpretation of BBEE and categories of BEE entries, criteria for preferential treatment, and any other matter necessary to achieve the objectives of the Act. Organizations gain points based on their compliance. The points earned in each element of the scorecard are added together, and the total number translates into recognition levels and B-BEE status achieved. The BBBEE status is the determining factor in obtaining preference points when tendering for government work. Different sectors may have specific sector codes that are aligned to the default codes and published for comment, and the Ministry is responsible for the alignment of the codes. Stakeholders develop sector codes, for example, Financial Sector Charter, Chartered Accountancy Sector, and Construction Sector Code etc.. The verification agency comprised of approved auditors conducts procedures to assess, verify, and validate the scorecards. The purpose of verification is to reduce the risk of misstatements, provide assurance, integrity, and reliability of the statements (Brun 2014).

Companies listed on the regulated market, Johannesburg Stock Exchange are required to disclose the details of their BBBEE compliance and publish on an annual basis their scorecard. The scorecard ought to detail the level of compliance

with targets of black ownership, management control, and skills development on their websites (Naidoo 2016).

Literature shows a mixed reaction towards BBBEE. Pike et al. (2018) conducted qualitative research to comprehend the future of BBBEE on small, micro, and medium enterprises. The participants of the research revealed that the BBEE is resulting in economic strain, mixed economic outcomes, and economic progression. The research also showed that the ripple effect of the procurement policies is tender corruption, increased business costs, and incompetence. Further, a few participants expressed that the legislation should remain as is, while the rest were of the view that amendments were needed to equalize the economy and provide equal opportunities for all (Pike et al. 2018). Another qualitative research conducted on construction firms by Emuze and Adlam (2013) showed that the companies face commercial impediments in implementation of BEE.

Ponte et al. (2007) argued that employment outcomes had heavily limited the meaningful participation of blacks in the economy since 1994. Further, employment creation has been limited and failed to keep up with the growth of labor force resulting in rising unemployment. The legislation that was meant to assist young black professionals did not succeed (Ponte et al. 2007). The arguments are plausible because the World Bank (2018) released a report which showed that high unemployment remains the critical challenge for South Africa and the inability to generate sufficient jobs. The report also showed that the labor market is split into two, at one extreme is a small number of people with highly paid jobs in the formal sector and the larger population in the informal sector. Further, it highlighted that despite the challenges, there was progress in the reduction of poverty since 1994 (World Bank 2018).

Mbeki analyzed the plight of Africa and argued that:

BEE strikes as a fatal blow against the emergence of black entrepreneurship by creating a small class of unproductive but wealthy black capitalists made up of African National Congress politicians ... who have become strong allies of the economic

oligarchy that is ironically the caretaker of South Africa's industrialisation'. The objects of BEE were to co-opt leaders of the black resistance movements by offering them what looked like a massive transfer of assets at no cost. As a result, subsidiaries of BEE, namely affirmative action and affirmative procurement, created economic oligarchs to protect assets. (Mbeki 2009)

BEE is another transformation goal of the democratic government and indeed a necessary policy. The problem with policies is always implementation, which results in mixed reactions towards BEE. Nonetheless, the progress since 1994 cannot be ignored as there are more black people participating in the economy.

Summary

Black economic empowerment is a policy by the South African government to address participation in the economy of previously disadvantaged South Africans. The equal participation of previously disadvantaged persons is regulated by the Broad-Based Black Economic Empowerment Act and implemented by the Department of Trade and Industry. The participation in the economy includes, among others, control of enterprises, ownership, and skills development. Organizations gain points for compliance which is audited by verification agencies.

References

- Black Economic Empowerment Commission. (2001). Black economic commission report. <http://www.kznhealth.gov.za/TED/commission.pdf>. Accessed 30 May 2019.
- Broad-Based Economic Empowerment Act. (2003). <https://www.bbbeecommission.co.za/wp-content/uploads/2016/09/Consolidated-B-BBEE-Act-2013.pdf>. Accessed 30 May 2019.
- Brun, B. (2014). *The practical guide to the amended broad-based black economic empowerment codes of good practice*. Durban: LexisNexis.
- Duffett, R. G., Van der Heever, I., & Bell, D. (2009). Black economic empowerment progress in the advertising industry in Cape Town: Challenges and benefits. *Southern African Business Review*, 13(3), 86–118.
- Emuze, F., & Adlam, R. (2013). Implementation of broad-based black economic empowerment in construction: A south African metropolitan area study. *Acta Structilia*, 20(1), 126–154.
- Mbeki, M. (2009). *Architects of poverty: Why African capitalism needs changing*. Johannesburg: Picador.
- Naidoo, R. (2016). *Corporate governance: An essential guide for South African companies*. Durban: LexisNexis.
- Pike, A., Puchert, J., & Chinyamurindi, W. T. (2018). Analysing the future of broad-based black economic empowerment through the Lens of small and medium enterprises. *Acta Commercii*, 18(1), 1–10.
- Ponte, S., Roberts, S., & Van Sittert, L. (2007). Black economic empowerment', business and the state in South Africa. *Development and Change*, 38(5), 933–955.
- World Bank. (2018). Overcoming poverty and inequality in South Africa: An assessment of drivers, constraints and opportunities. <http://documents.worldbank.org/curated/en/530481521735906534/pdf/124521-REV-OUO-South-Africa-Poverty-and-Inequality-Assessment-Report-2018-FINAL-WEB.pdf>. Accessed 30 May 2019.

Black Markets

► Shadow Trades

Blue Circular Economy

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Synonyms

Sustainability

Definition/Description

The circular economy is defined as “a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse,

remanufacturing, refurbishing, and recycling” (Geissdoerfer et al. 2017: 764).

Circular Economy

Introduction

In the last two decades, much attention was drawn to the concept of circular economy, both by researchers and practitioners (Ghisellini et al. 2016). Adopted widely in Europe and currently in Asia (Andersen 2007), the idea was appealing as it offered a new mindset for sustainability and sustainable business. Shifting away from the “linear economy” in which a business produces a product, the consumer buys it and it then goes to waste, the circular economy creates a cycle in which everything stays in the system, nothing goes to waste, and innovative design thinking is used to create even better products and systems.

Circular Economy Defined

Circular economy is defined as “a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling” (Geissdoerfer et al. 2017, p. 764). Korhonen et al. (2018, p. 39) defined the circular economy as an economy “constructed from societal production-consumption systems that maximizes the service produced from the linear nature-society-nature material and energy throughput flow.” The authors also asserted that circular economy limits the throughput flow to a level that nature tolerates and utilizes ecosystem cycles in economic cycles by respecting their natural reproduction rates. It is defined by European Institutions as an economy “where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimized.” (Merli et al. 2018, p. 704). While there is no one agreed-upon definition, there are some common elements such as the value of natural and other resources, minimization of waste, and a close, circular loop.

While the idea of materials cycles has been around since the dawn of industrialization (Korhonen et al. 2018), circular economy as a concept is relatively new. The circular economy concept was introduced by Pearce and Turner (1990), based on industrial ecology, which emphasizes the benefits of recycling residual waste materials and by-products through, for example, the development of complex interlinkages. Since then, the concept of circular economy became the focus of academic research particularly in the last decade. A systematic literature review by Merli et al. (2018) revealed 565 articles on the topic, most of them published since 2010. The authors argued that circular economy is a topic in rapid development, and that it has been recognized both by public decision makers and academia as the way forward to balanced development.

Furthermore, many countries around the world (particularly in Europe, as well as in Asia and Canada) have been adopting a circular economy approach. China was the first country in the world to adopt a law for the circular economy in 2008 (Korhonen et al. 2018).

The Shift

The circular economy aims to transform the linear “extract-produce-use-dispose” economy, which was the main way of doing business for decades, generating high levels of energy, labor, and material waste. As such, circular economy is a closed-loop approach to the economy, focusing on the optimal use of resources, enhancing the use and preservation of natural capital and limiting risks by effectively managing finite resource stocks and renewable energy (Webster 2015). Stahel (2016) explained that while the linear economy is like a river, the circular one is like a lake.

Furthermore, the circular economy differentiates between technical and biological cycles: it promotes the production of goods in a way that technical and biological components can be separated and recirculated in the supply chain (Webster 2015). It would change economic logic because it replaces production with sufficiency: reuse what you can, recycle what cannot be

reused, repair what is broken, and remanufacture what cannot be repaired (Stahel 2016).

Benefits and Limitations

Successful circular economy contributes to all the three dimensions of sustainable development (Korhonen et al. 2018; Stahel 2016). The benefits for the environment are the most obvious ones, with extracting less natural resource a lesser harm is caused to the natural ecosystem and biodiversity. There are also societal benefits, such as employment, increased sense of community (Korhonen et al. 2018), and the creation of social capital through collaboration and trust. Finally, there are also economic and business benefits, such as reduced costs, increased value, and enhanced brand (Haski-Leventhal 2018). Circular economy can assist in achieving sustainable development and (at least some of) the United Nations Sustainable Development Goals (or the SDGs). These benefits will become more prevalent as climate change turns more prominent and dangerous, with governments putting additional pressure on business.

However, there are also some limitations and issues with the concept of circular economy and its implementation. Korhonen et al. (2018) detailed six such limitations: thermodynamic limits (e.g., cyclical systems consume resources and create wastes and emissions); system boundary limits (e.g., problems are shifted along the product life cycle); limits posed by physical scale of the economy; limits posed by path-dependency and lock-in (e.g., first technologies retain their market position despite of inefficiency); limits of governance and management; and limits of social and cultural definitions.

In Practice

Webster (2015) detailed three circular economy principles for action, which are useful to include here:

1. **Natural capital should be preserved** by exerting control and limiting the use of natural resources and by utilizing resources that are renewable in nature. The circular system selects resources and materials which are likely

to perform better and have multiple uses to allow for regeneration of those resources.

2. **Using resources optimally** so that products and their components can be of high utility both in the technical and the biological cycles of a product's life cycle. The zero-waste economy ensures that biological materials (e.g., paper and fabric) are composted and technical materials and man-made materials (e.g., plastic) are of high-quality design so that they can be retained and reused.
3. **Fostering system effectiveness** by designing products that can be remanufactured, refurbished, and recycled so that they can be utilized in a new supply chain and circulated continuously in the economy. The preservation of land, air, and water together with determination to reduce pollution and manage climate change are important components of the circular economy.

One approach to circular economy is based on the idea the customers are product users, not owners, and they need to return products back to the companies when they are done using them, or to another third party who can use them (Lacy and Rutqvist 2015). Instead of owning, users return, lease, rent, or share their products and return them back into the supply chain. This business model is designed to rid the world of one-time use products.

The Blue Economy

The blue economy has a similar approach to sustainability as the circular economy and shares some of its ideas and concepts. Gunter Pauli's (2010) book, "The Blue Economy: 10 years – 100 innovations – 100 million jobs," offered a move forward from the green economy. The idea of the blue economy (based on the notion that the sky, ocean, and earth from space all look blue) is that we can shift from scarcity to abundance with what is locally available. The main argument of this book is that some of the sustainable issues and solutions around sustainability and the green economy have trade-offs. For example, renewable energy is not yet affordable to all and there are

some issues with current technology that might affect people's health and the environment. Instead, the blue economy offers circular solutions with no negative trade-offs.

The blue economy is about connecting and combining seemingly disparate environmental problems with open-source scientific solutions based upon physical processes common in the natural world to create solutions that hold environmental and financial benefits. Pauli (2010) claimed that industrial processes and environmental issues can be addressed by using simpler and cleaner technologies. Instead of only focusing on cutting costs and reducing harm, the blue economy focuses on value creation and economic benefits via job creation, reduced energy use, and community building.

The blue economy website offers over 200 examples and cases to inspire business people and entrepreneurs to work according to their principles. One such case is of the innovative use of coffee waste to grow mushrooms. This reduces waste, creates food, and offers sustainability and financial gain at the same time.

It should be noted that the UN refers to the blue economy as ocean governance (Silver et al. 2015), but this is not the focus of this entry, which relates to circular economy.

Summary

In the last two decades, much attention was drawn to the concept of circular economy, both by researchers and practitioners. Circular economy is about creating a regenerative system in which resource input and waste, emission, and energy leakage are minimized by slowing, closing, and narrowing material and energy loops. The circular economy aims to transform the linear “extract-produce-use-dispose” economy, which was the main way of doing business for decades, generating high levels of energy, labor, and material waste. Successful circular economy contributes to all the three dimensions of sustainable development: environmental, social, and financial. However, it is also with some limitations and challenges.

Similar to the idea of circular economy, the concept of the blue economy was developed, to offer holistic solution without negative side effects for the environment. It is a more popular term than an academic one.

Cross-References

- [Green Economy](#)
- [Sustainability](#)
- [Sustainable Development](#)
- [Sustainable Development Goals](#)

References

- Andersen, M. S. (2007). An introductory note on the environmental economics of the circular economy. *Sustainability Science*, 2(1), 133–140.
- Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The circular economy – A new sustainability paradigm? *Journal of Cleaner Production*, 143, 757–768.
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11–32.
- Haski-Leventhal, D. (2018). *Strategic corporate social responsibility: Tools and theories for responsible management*. London: Sage.
- Korhonen, J., Honkasalo, A., & Seppälä, J. (2018). Circular economy: The concept and its limitations. *Ecological Economics*, 143, 37–46.
- Lacy, P., & Rutqvist, J. (2015). *Waste to wealth: The circular economy advantage*. New York: Palgrave Macmillan.
- Merli, R., Preziosi, M., & Acampora, A. (2018). How do scholars approach the circular economy? A systematic literature review. *Journal of Cleaner Production*, 178, 703–722.
- Pauli, G. A. (2010). The blue economy: 10 years, 100 innovations, 100 million jobs. Paradigm publications.
- Pearce, D. W., & Turner, R. K. (1990). *Economics of natural resources and the environment*. Balt: John Hopkins University Press.
- Silver, J. J., Gray, N. J., Campbell, L. M., Fairbanks, L. W., & Gruby, R. L. (2015). Blue economy and competing discourses in international oceans governance. *The Journal of Environment & Development*, 24(2), 135–160.
- Stahel, W. R. (2016). The circular economy. *Nature*, 531 (7595), 435.
- Webster, K. (2015). *The circular economy: A wealth of flows / Ken Webster* (2nd ed.). Cowes: Ellen Macarthur Foundation Publishing.

Blue Economy

- [Life Cycle Sustainability Assessment](#)
- [Ocean Sustainability](#)

Blue Economy (Sustainability)

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Synonyms

[Bioeconomy](#); [Blue growth](#); [Ocean economy](#); [Ocean sustainability](#)

Definition

Although no specific definition is designated for this term, this concept has been previously defined based on the field of application and utilization. The blue economy refers to the sustainable utilization of ocean and coastal resources for economic growth, improved livelihoods, and job

creation while preserving the health of marine ecosystems. It is also regarded as an economic concept encompassing various economic activities in the ocean and coastal area, including traditional activities such as fishing, shipping, and shipbuilding, as well as newer activities such as offshore wind and wave energy, ocean-based aquaculture, and marine biotechnology. It is defined as the range of economic activities in the coastal zone and on the ocean, including shipping, fishing, oil and gas extraction, tourism, and renewable energy production. Generally, the blue economy mainly focuses on the responsible extraction and utilization of marine resources required to enhance ocean-based economies while adopting more balanced conservation measures to ensure resource sustainability.

Introduction

The “blue economy” or “sustainable ocean-based economy” comprises several economic and governmental sectors whose primary objectives are to responsibly boost economic and social development to guarantee the long-term sustainability of the seas and coastlines. These blue ecosystems and their resources, such as mangroves, are also known to protect beaches and coastal regions from unexpected storms and flooding, thereby facilitating habitat biodiversity, climate control, carbon storage, and detoxification. Marine and coastal ecosystems provide two-thirds of all critical services. Subsistence fishing and farming have benefited most indigenous people, especially in coastal settlements, from marine resources (Elegbede et al., 2023a, b; Okafor-Yarwood et al., 2020).

Over the years, incidents involving the extreme depletion of many aquatic resources due to anthropogenic activities, notably for profit generation, have been observed (Jolaosho & Olorunniyi, 2022). The effects of these stresses on the aquatic environment include acidification, pollution, ocean warming, eutrophication, fisheries collapse, loss of marine species, destruction of breeding grounds, and instability of ecosystems (Leadley, 2010; Naggar, 2020). This issue demands an immediate response since the adverse

effects will have long-term consequences for the planet's health. To protect these resources for a sustainable blue economy, it is necessary to employ proper management strategies. The blue economy is the sustainable use of ocean and coastal resources for economic development, better livelihoods, and job creation while maintaining the health of marine ecosystems (United Nations Development Programme, 2016). It includes historic operations such as fishing, shipping, ship-building, and recent activities such as offshore wind and wave energy, ocean-based aquaculture, and marine biotechnology. It is the spectrum of economic activity in the coastal zone and on the ocean, including shipping, fishing, oil and gas exploitation, tourism, and the generation of renewable energy (Halpern, 2015).

The world's foremost economists presented a technique for achieving sustainability many years ago. Nevertheless, Belgian economist Gunter Pauli created the notion of the blue economy in 2011, and the United Nations Development Programme embraced it in 2014. Since then, governments and stakeholders have recognized it as a crucial strategy for achieving sustainable development and tapping the potential of the ocean economy (United Nations Development Programme, 2016). In recent years, the blue economy idea has gained traction as the contribution of the ocean economy to sustainable development has been widely acknowledged (Brouwer & Heesterbeek, 2018).

Developed countries have embraced and implemented the recommended paradigm in various sustainable development applications (Martnez-Vázquez et al., 2021; Brears, 2021; Nash & Herscovitch, 2018; Elegbede et al., 2023a, b; United Nations Development Programme, 2016; Elegbede 2021; Krause, 2019).

Benefits of a Sustainable Blue Economy

A sustainable blue economy is necessary to attain the United Nations Sustainable Development Goals (SDGs) and maintain coastal and island populations' long-term prosperity and well-being. The ocean economy is anticipated to

quadruple by 2030, reaching approximately \$3 trillion (United Nations Development Programme, 2018). This economy has enormous potential for economic expansion, job creation, and poverty alleviation, especially in developing nations. In addition, the sustainable blue economy may play a significant role in tackling global concerns such as climate change, food insecurity, and biodiversity loss (United Nations Development Programme, 2018). It is seen as a technique for promoting sustainable development in coastal regions and tiny island governments and a possible means of combating poverty and inequality (Halpern, 2015).

The increasing popularity and acceptance of the blue economy idea were due to its capacity to govern and protect marine environments sustainably and healthily, cut emissions, and address climate change challenges. There has been a significant increase in the population of renewable energy sectors, with the ocean serving as the primary source of renewable resources. Wind, hydropower, and tidal energy are also associated with maritime ecosystems. For all energy sources in the water to be exploited, it is necessary to establish specific criteria. To create wind farms, for instance, industrial experts and workers must be consulted; this indicates that the ocean provides employment prospects in various industrial disciplines, particularly construction.

Further advantages of the blue economy include offshore wind, wave, and tidal energy generation; offshore fish farming; ocean sediments collected through dredging; and blue biotechnology, which uses marine resources such as shellfish, bacteria, and algae for medicinal and energy production reasons. The blue economy has often been employed throughout international business transactions as a mode of conveyance for commodities. The European Union (EU) and the United Nations (UN) have enacted measures and policies that will aid in preserving ocean resources and limiting the impact of climate change on the blue economy over a very long period so that these resources can be explored for their economic benefits in a more sustainable manner.

Differences Between the Blue Economy and Ocean Economy

The terms “blue economy” and “ocean economy” are frequently used interchangeably, although they have distinct implications. The ocean economy comprises all economic activities related to the ocean, including transportation, tourism, and offshore energy production. In contrast, the blue economy is a subset of the ocean economy that focuses on the sustainable use of ocean resources for economic growth and job creation while protecting the health of the ocean ecosystem (Ryabibin et al., 2019). The blue economy emphasizes the need for collaboration and stakeholder engagement in the sustainable management of ocean resources, which is another essential differentiator. When designing and implementing sustainable ocean policies, the blue economy considers the interests of all stakeholders, including local communities, government agencies, and the corporate sector (Voyer & van Leeuwen, 2019; Islam & Mostaque, 2016; Patil et al., 2018; Sarker et al., 2019; Bari, 2017).

The blue economy is more concerned with the health of the ocean ecosystem. It aims to promote the conservation and sustainable use of marine resources. At the same time, the ocean economy focuses primarily on the economic benefits derived from the ocean and coastal areas (United Nations Regional Information Centre for Western Europe, 2022).

Economic Activities in the Blue Economy

The contributions of industries involved in the blue economy concept while operating sustainably to ensure the sustainability of coastal and marine resources are as follows.

Fisheries and Aquaculture

The industry includes capturing wild fish and shellfish and cultivating aquatic plants and animals in marine and freshwater habitats. Almost

2 million Nigerians rely on the fishing industry, making it a significant business (Federal Ministry of Agriculture and Rural Development, 2019). The worldwide fishery and fishery product business is valued at over \$150 billion, and over 500 million people rely on the industry for their lives (Food and Agriculture Organization, 2020). The aquaculture industry has grown at a pace of 4.8% annually since 2000, making it the fastest-growing food production sector (World Bank, 2018). With an estimated value of \$1.5 billion, the fishing sector in Nigeria is a substantial economic contributor (Federal Ministry of Agriculture and Rural Development, 2019). In addition to overfishing; illicit, unreported, unregulated fishing; and the destruction of coastal and marine environments, the industry faces various issues (Food and Agriculture Organization, 2020). Poor infrastructure, low finances, and a lack of technological access are obstacles confronting the Nigerian fishing sector (Federal Ministry of Agriculture and Rural Development, 2019). Nonetheless, there is potential for sustainable growth, including expanding aquaculture, adopting sustainable fishing techniques, and using new technology (Federal Ministry of Agriculture and Rural Development, 2019).

Maritime Transport and Logistics

The marine transport industry comprises cargo shipping, cruise ships, and ferry services, among other operations (Krause, 2019). It is crucial in international trade and business, linking nations and regions by transporting products and people. Almost 90% of Nigeria’s import and export commerce is performed via its ports, making the marine industry substantially contribute to its economy (Nigerian Ports Authority, 2020). The worldwide marine transport business is worth more than \$375 billion. The shipping industry alone accounts for over 90% of the global commerce volume (United Nations Conference on Trade and Development, 2020).

Additionally, the industry employs millions of people, including sailors and port employees

(International Transport Workers' Federation, 2020). In Nigeria, the marine industry, directly and indirectly, employs approximately 100,000 people (Nigerian Ports Authority, 2020). Over-capacity, increasing competition, and a deficiency of efficiency are difficulties affecting the industry (United Nations Conference on Trade and Development, 2020). There are also worries over the sector's environmental effects, including greenhouse gas emissions and marine pollution. In Nigeria, the industry faces obstacles such as insufficient infrastructure, a weak regulatory framework, and insecurity in the Gulf of Guinea (Nigerian Ports Authority, 2020). There are prospects for sustainable development, including adopting new technology, such as digitalization, automation, and alternative fuels, and applying sustainable practices, such as enhanced energy efficiency and emission reduction (Nigerian Ports Authority, 2020).

Offshore Energy Production

Offshore energy production includes oil and gas extraction, wind and wave energy, and ocean thermal energy conversion. The oil and gas industry substantially contributes to Nigeria's economy, accounting for more than 90% of export profits and more than 70% of government income (National Petroleum Corporation, 2020). Approximately 30% of world oil output and 20% of global gas production originate from offshore sources, valuing the global offshore oil and gas business at more than \$200 billion (Hughes, 2020). The oil and gas industry in Nigeria contributes significantly to the country's economy, with an estimated value of over \$300 billion (Nigerian National Petroleum Corporation, 2020). The industry faces resource depletion, environmental consequences, and oil price volatility (Baker Hughes, 2020). In Nigeria, the industry faces obstacles such as insufficient infrastructure, a weak regulatory framework, and insecurity in the Niger Delta area (Nigerian National Petroleum Corporation, 2020).

Coastal and Marine Tourism

Coastal and marine tourism encompasses beach vacations, ecotourism, and cruise ship travel, among other things. Tourism is a rapidly expanding business in Nigeria, emphasizing the country's cultural diversity and natural features (Federal Ministry of Information and Culture, 2020). The coastal and marine tourism industry is worth approximately \$300 billion. More than 1 billion international tourists visit coastal regions annually (World Tourism Organization, 2020). The tourist business in Nigeria contributes significantly to the country's economy, with an estimated value of over \$1 billion (Federal Ministry of Information and Culture, 2020). Overtourism, environmental deterioration, and the effects of climate change are some of the issues confronting the industry (World Tourism Organization, 2020). Nigeria's industry needs more infrastructure, a weak regulatory environment, and no marketing activities (Federal Ministry of Information and Culture, 2020). Nevertheless, there are also chances for sustainable growth, such as creating sustainable tourist destinations, adopting sustainable practices, and using new technology (Federal Ministry of Information and Culture, 2020).

Biotechnology and Marine-Based Renewable Energy

Biotechnology and marine-based renewable energy involve the creation of novel marine goods and services and the use of ocean resources for energy production. Biotechnology is a rapidly expanding industry in Nigeria, emphasizing the creation of new marine-based goods and services (Federal Ministry of Science and Technology, 2020). The value of the worldwide biotechnology and marine-based renewable energy market exceeds \$200 billion, with tremendous development potential in sectors such as marine biotechnology, aquaculture, and ocean energy (International Energy Agency, 2020). In Nigeria, the industry is still in its infancy. Nevertheless, it could become a substantial economic contributor

(Federal Ministry of Science and Technology, 2020).

The industry faces obstacles such as a lack of investment, poor infrastructure, and research and development funding (Federal Ministry of Science and Technology, 2020). However, there is potential for sustainable growth, including creating new marine-based goods and services, implementing sustainable practices, and using new technology (Federal Ministry of Science and Technology, 2020).

Seabed Mining

Copper, gold, and zinc are among the minerals that mining may extract from the seafloor (International Seabed Authority, 2020). The value of the worldwide seabed mining industry exceeds \$50 billion, with tremendous growth potential as new technologies and rising mineral demand drive exploration and development. The industry faces obstacles such as increased awareness of the environmental effects of seabed mining, insufficient laws, and the need for further research and development (International Seabed Authority, 2020). Nevertheless, there are prospects for sustainable growth, such as developing sustainable mining methods and using new technology (International Seabed Authority, 2020).

Maritime Engineering and Construction

Marine construction and engineering aspects include developing and maintaining offshore structures, ports, and shipyards. Marine construction and engineering are a rapidly expanding industry in Nigeria that emphasizes building new ports and shipyards and maintaining and extending current infrastructure (Nigerian Ports Authority, 2020). The worldwide maritime construction and engineering industry is valued at over \$200 billion, with tremendous development potential in offshore wind, ports, and shipyards (Frost & Sullivan, 2020). The industry is a substantial economic contributor in Nigeria, estimated at \$2 billion (Nigerian Ports Authority,

2020). The industry faces obstacles such as a lack of investment, poor infrastructure, and research and development funding (Nigerian Ports Authority, 2020). However, there are prospects for sustainable growth, such as creating sustainable infrastructure, implementing sustainable practices, and using new technology (Nigerian Ports Authority, 2020).

Blue Carbon

Blue carbon is the carbon stored in coastal and marine ecosystems, including mangroves, seagrasses, and salt marshes. The worldwide blue carbon market is estimated at over \$50 billion. It has tremendous potential for carbon sequestration and emission reductions (United Nations Framework Convention on Climate Change, 2020).

The industry faces obstacles such as a better understanding of blue carbon's potential, weak laws, and further research and development. Nonetheless, there is potential for sustainable development, including protecting and restoring coastal and marine ecosystems and using blue carbon for carbon offsetting and sequestration (United Nations Framework Convention on Climate Change, 2020).

Challenges and Opportunities

Problems confronting the blue economy: overfishing, pollution, coastal development, and climate change are among the issues facing the blue economy. These obstacles may hinder the sustainable growth of the blue economy and coastal populations' means of subsistence. For instance, overfishing has caused the depletion of fish populations, which has economic and ecological repercussions (Costello et al., 2012). Likewise, pollution from plastic trash, pesticides, and oil spills has devastating consequences for marine species and environments (Gregory & Ryan, 2009). Coastal development and urbanization have also led to the loss and deterioration of mangroves, seagrasses, and salt

marshes, among other ecosystems (Pendleton et al., 2012). In contrast, climate change is generating sea level rise, ocean acidification, and changes in ocean currents and temperature regimes, all of which may impact marine ecosystems and the services they offer (IPCC, 2019).

Growth and innovation potential in the blue economy: Notwithstanding these obstacles, there are growth and innovation opportunities in the blue economy. For instance, sustainable aquaculture may offer a reliable food supply and revenue while safeguarding wild fish populations (FAO, 2020). In addition, the blue economy can provide employment, drive economic expansion, and contribute to the sustainable development of coastal towns.

Policies and measures to encourage the sustainable growth of the blue economy: Sustainable development policies and strategies must be implemented to overcome these obstacles and achieve the potential benefits of the blue economy. These policies and initiatives include establishing protected areas, protecting and restoring coastal and marine ecosystems, and reducing greenhouse gas emissions. To overcome these difficulties and support the sustainable growth of the blue economy, it is crucial to emphasize the integration of sectoral activity and the engagement of stakeholders. In Nigeria, for instance, the government has developed the Integrated Coastal Zone Management Project (ICZMP) to promote sustainable development in coastal regions by integrating sectoral operations and involving stakeholders (Shah & Ramesh, 2022). This initiative strives to solve coastal erosion, pollution, and overfishing challenges by applying laws, regulations, and management plans. In addition, Nigeria's Ministry of Environment has developed a National Biodiversity Strategy and Action Plan (NBSAP) to guide the protection and sustainable use of biodiversity in the nation (Kumar et al., 2021). This policy directs the country's protection and sustainable marine and coastal biodiversity use. It relates to the worldwide biodiversity objectives established by the Convention on Biological Diversity.

The blue economy may significantly alleviate poverty in coastal areas by providing employment, income, and food security. In Nigeria, for instance, the fishing sector employs and supports millions of people, mainly in coastal towns (FAO, 2020). Similarly, developing sustainable tourism may offer local populations jobs and income while safeguarding marine and coastal ecosystems (WTO, 2020). The potential of the blue economy in various regions vary by geography and the accessibility of marine resources and infrastructure. Through the growth of sectors such as fisheries, tourism, and renewable energy, the blue economy can provide substantial economic and social advantages in Nigeria, for example (Federal Ministry of Environment, 2020). In addition, the nation has enormous potential for the growth of the offshore oil and gas industry, which is a significant source of government income and job opportunities for its residents.

Future Directions

With an expanding worldwide population and need for food and energy, there is a growing need for the sustainable use of marine resources, which bodes well for the future of the blue economy. The blue economy is anticipated to expand and be a significant economic growth and social development source. To guarantee the conservation of marine and coastal ecosystems and the well-being of coastal populations, however, this expansion must be guided by sustainable development principles. The sustainable growth of the blue economy requires a comprehensive strategy that considers its economic, social, and environmental elements. Moreover, the sustainable growth of the blue economy demands global cooperation and collaboration since the blue economy is a global problem that impacts all nations and areas. Participation from all stakeholders, including governments, the commercial sector, civil society, and local communities, should be needed.

It is essential to implement laws and regulations that encourage the conservation of marine resources to maintain the long-term growth of the

blue economy. Implementing measures such as marine protected zones, sustainable fishing techniques, and catch limits may be necessary. Encouragement of sustainable economic activities, such as sustainable aquaculture, ecotourism, and marine-based renewable energy, is also advantageous and may be accomplished via R&D funding and private sector involvement incentives. In addition, it is necessary to adapt to the consequences of climate change on the blue economy by developing steps to address increasing sea levels, ocean acidification, and severe weather events. Adopting an integrated approach to coastal zone management that considers the blue economy's economic, social, and environmental components and incorporates all stakeholders may contribute to sustainable development. Global pollution, overfishing, and climate change need international collaboration. Inclusivity and poverty reduction may be promoted by integrating underrepresented populations and establishing income-generating opportunities.

Summary

The blue economy is the sustainable use of ocean and coastal resources for economic development, enhanced livelihoods and employment, and the health of ocean ecosystems. It includes fisheries and aquaculture, maritime transportation and logistics, offshore energy production, coastal and marine tourism, biotechnology and marine-based renewable energy, seabed mining, marine construction and engineering, and blue carbon. The blue economy can stimulate economic development and enhance coastal towns' living standards. Nevertheless, the sustainable growth of the blue economy faces various obstacles, such as overfishing, pollution, coastal development, and climate change, which may have a detrimental impact on the lives of coastal populations and the sustainable development of the blue economy. Sustainable development policies and strategies must be implemented to overcome these obstacles and achieve the potential benefits of the blue economy. This initiative encompasses sustainable management of marine resources, promoting

sustainable economic activities, adaptation to climate change, integrated coastal zone management, international collaboration, inclusion, poverty reduction, research and monitoring, and education and awareness.

Cross-References

- [Blue Ocean Strategy](#)
- [Blue Circular Economy](#)
- [Ocean Sustainability](#)
- [Sustainability Science](#)

References

- Bari, A. (2017). Our oceans and the blue economy: Opportunities and challenges. *Procedia Engineering*, 194, 5–11.
- Brears, R. C. (2021). *Developing the blue economy* (p. 337). Cham: Springer.
- Brouwer, R., & Heesterbeek, J. P. (2018). A review of the blue economy: Definitions, theories, and lessons from practice. *Marine Policy*, 91, 41–49. <https://doi.org/10.1016/j.marpol.2018.03.016>.
- Costello, C., Coll, M., Danovaro, R., Halpin, P., Ojaveer, H., & Palomera, I. (2012). A census of marine biodiversity knowledge, resources, and future challenges. *PLoS One*, 7(7), e12110.
- Elegbede, I. O. (2021). *Assessment of the potentials of sustainability standards in the Nigerian industrial marine fisheries sector*. Doctoral dissertation, Brandenburgische Technische Universität Cottbus-Senftenberg.
- Elegbede, et al. (2023a). Marine and coastal resources. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Springer. https://doi.org/10.1007/978-3-030-02006-4_304-1.
- Elegbede, I., Lawal-Are, A., Favour, O., Jolaosho, T., & Goussanou, A. (2023b). Chemical compositions of bivalves shells: *Anadara senilis*, *Crassostrea gasar*, and *Mytilus edulis* and their potential for a sustainable circular economy. *S.N. Applied Sciences*, 5(1), 44.
- El-Naggar, H. A. (2020). Human impacts on coral reef ecosystem. In *Natural resources management and biological sciences*. IntechOpen.
- Federal Ministry of Agriculture and Rural Development. (2019). *Fisheries and aquaculture in Nigeria*. Retrieved from <https://fmar.gov.ng/fisheries-and-aqua-culture-in-nigeria/>
- Federal Ministry of Information and Culture. (2020). *Nigerian tourism industry*. Retrieved from <https://www.fmict.gov.ng/tourism-industry/>

- Federal Ministry of Science and Technology. (2020). *Nigerian biotechnology industry*. Retrieved from <https://www.fmst.gov.ng/biotechnology/>
- Food and Agriculture Organization. (2020). *Fisheries and aquaculture*. Retrieved from <http://www.fao.org/fishery/topic/16140/en>
- Frost & Sullivan. (2020). *Marine construction and engineering industry*. Retrieved from <https://www.frost.com/marcon>
- Gregory, M. R., & Ryan, P. G. (2009). Plastic debris in the open ocean. *Proceedings of the National Academy of Sciences*, 106(7), 6752–6759.
- Halpern, B. S. (2015). The ocean's role in sustaining humanity. *Nature*, 518(7538), 27–35. <https://doi.org/10.1038/nature14248>.
- Hughes, B. (2020). *Offshore oil and gas industry*. Retrieved from <https://www.bakerhughes.com/offshore>
- International Energy Agency. (2020). *Marine energy in the blue economy*. Retrieved from <https://www.iea.org/reports/marine-energy-in-the-blue-economy>
- International Seabed Authority. (2020). *Seabed mining*. Retrieved from <https://www.isa.org.jm/seabed-mining>
- International Transport Workers' Federation. (2020). *Seafarers*. Retrieved from <https://www.itfglobal.org/seafarers>
- IPCC. (2019). *Climate change and land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* (P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D.C. Roberts, P. Zhai, R. Slade, S. Connors, E. van Gorsel, E. Stehfest, J. Liu, S. Neogi, M. Agrawala, S. Chong, A. Goklany, I. Haddeland, J. Armeth, & K. Riahi, Eds.).
- Islam, M., & Mostaque, L. Y. (2016). Blue economy and Bangladesh: Lessons and policy implications. *Economics*, 2(2), 1–21.
- Jolaosho, T. L., & Olorunniyi, S. I. (2022). Studies on morphometric, length–weight relationship, condition factor and food and feeding habit of *Pseudolithus elongatus* from Makoko River, Lagos State. *International Journal of Clinical Biology and Biochemistry*, 4(1), 37–47.
- Krause, G. (2019). A review of the blue economy concept and its implications for marine spatial planning. *Marine Policy*, 104, 37–45. <https://doi.org/10.1016/j.marpol.2019.>
- Kumar, R., Verma, A., Shome, A., Sinha, R., Sinha, S., Jha, P. K., ... & Vara Prasad, P. V. (2021). Impacts of plastic pollution on ecosystem services, sustainable development goals, and need to focus on circular economy and policy interventions. *Sustainability*, 13(17), 9963.
- Leadley, P. (2010). *Biodiversity scenarios: Projections of 21st century change in biodiversity, and associated ecosystem services: A technical report for the global biodiversity outlook 3* (No. 50). UNEP/Earthprint.
- Martínez-Vázquez, R. M., Milán-García, J., & de Pablo Valenciano, J. (2021). Challenges of the blue economy: Evidence and research trends. *Environmental Sciences Europe*, 33, 61. <https://doi.org/10.1186/s12302-021-00502-1>.
- Nash, J., & Herscovitch, B. (2018). *The blue economy: National, regional and global perspectives* (p. 47). Fyshwick, Australian Capital Territory: Sea Power Centre Australia.
- Nigerian National Petroleum Corporation. (2020). *Nigerian oil and gas industry*. Retrieved from <http://www.nnpcgroup.com/nnpcBusiness/OilGas.aspx>
- Nigerian Ports Authority. (2020). *Nigerian maritime sector*. Retrieved from <https://www.nigerianports.gov.ng/index.php/maritime-sector/>
- Okafor-Yarwood, I., Kadagi, N. I., Miranda, N. A., Uku, J., Elegbede, I. O., & Adewumi, I. J. (2020). The blue economy—cultural livelihood—ecosystem conservation triangle: The African experience. *Frontiers in Marine Science*, 7, 586.
- Patil, P. G., Virdin, J., Colgan, C. S., Hussain, M. G., Failler, P., & Vegh, T. (2018). *Toward a blue economy*. Washington, DC: World Bank.
- Pendleton, L. H., Dethier, M. N., & Halpern, B. S. (2012). Coastal development and habitat loss: Causes, consequences, and opportunities for the future. *Annual Review of Environment and Resources*, 37, 195–221.
- Ryabinin, V., Barbière, J., Haugan, P., Kullenberg, G., Smith, N., McLean, C., et al. (2019). The U.N. decade of ocean science for sustainable development. *Frontiers in Marine Science*, 6, 470.
- Sarker, S., Ara Hussain, F., Assaduzzaman, M., & Failler, P. (2019). Blue economy and climate change: Bangladesh perspective. *Journal of Ocean and Coastal Economics*, 6(2), 6.
- Shah, H., & Ramesh, R. (2022). Development-aligned mangrove conservation strategy for enhanced blue economy: A successful model from Gujarat, India. *Estuarine, Coastal and Shelf Science*, 274, 107929.
- United Nations Conference on Trade and Development. (2020). *The review of maritime transport 2020*. Retrieved from https://unctad.org/en/PublicationLibrary/rmt2020_en.pdf
- United Nations Development Programme. (2016). *Blue economy report: UNDP*. Retrieved from <https://www.undp.org/content/undp/en/home/librarypage/environment-energy/blue-economy.html>
- United Nations Development Programme. (2018). *The blue economy: A pathway to sustainable development*. Retrieved from <https://www.undp.org/content/undp/en/home/librarypage/environment-energy/blue-economy/the-blue-economy-a-pathway-to-sustainable-development.html>
- United Nations Framework Convention on Climate Change. (2020). *Blue carbon*. Retrieved from <https://unfccc.int/blue-carbon>
- UNRIC. (2022) Blue Economy: oceans as the next great economic frontier. United Nations. 14 Maret 2022. <https://unric.org/en/blueeconomy-oceans-as-the-next-great-economic-frontier/> (diakses Agustus 10, 2022).

- Voyer, M., & van Leeuwen, J. (2019). 'Social licence to operate' in the blue economy. *Resources Policy*, 62, 102–113.
- World Bank. (2018). *Blue economy: An opportunity for sustainable growth*. Retrieved from <https://www.worldbank.org/en/topic/oceans/brief/blue-economy-an-opportunity-for-sustainable-growth>
- World Tourism Organization. (2020). *Coastal and marine tourism*. Retrieved from <http://www2.unwto.org/coastal-and-marine-tourism>

Blue Farming

- [Aquaculture and Blue Farming](#)

Blue Growth

- [Blue Economy \(Sustainability\)](#)

Blue Ocean Strategy

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Synonyms

[Uncontested market space](#); [Unexplored market](#);
[Untapped emerging markets](#)

Description

In the last decades, business strategy was dominated by the competition and rivalry strategies. For instance, Porter's five forces has been one of the most influential models not only in academia but also among business practitioners as well. Porter utilized five explanatory variables to explain superior or inferior performance of the companies (Grundy 2006). These five explanatory variables were: (1) the bargaining power of the buyers, (2) entry barriers, (3) rivalry, (4) substitutes, and (5) the bargaining power of the

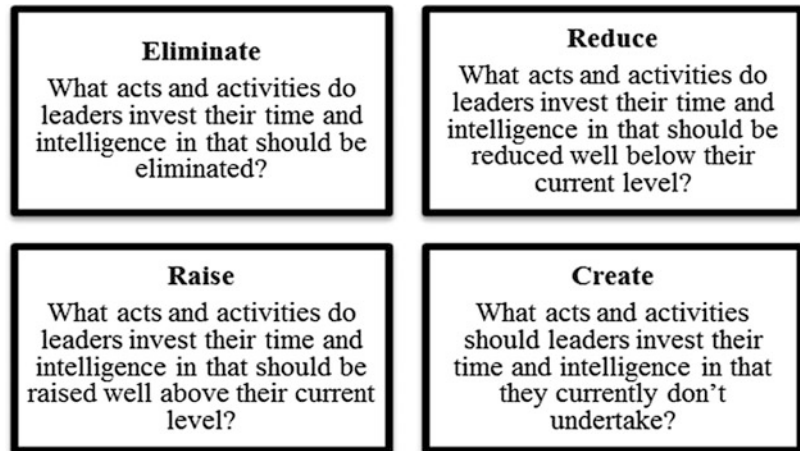
suppliers (Porter 1980). Prior to Porter's contribution to business strategy literature, Industrial Organization (IO) economists attempted to analyze relation between industry structure and performance through empirical work and eventually Porter's framework for industry analysis helped broaden the supply-demand analysis of individual markets (Karagiannopoulos et al. 2005). Traditionally, these frameworks were imperative to provide guidance on the business strategy where there is an existing market and competitive landscape. It is observed that in existing markets, competition grows over time which in turn puts pressure to the price points and turns the products into commodities. In the existing markets, the customer demand and the supply are already known by the industry players. There is sufficient visibility into the competitor share data and companies thrive to increase share from the competitors. Price wars, cost-cutting, and several different examples of share gain strategies are applied to be able to win in the marketplace. These examples represent the "Red Ocean" where there is already known market and customer demand.

As opposed to "Red Ocean," "Blue Ocean" represents the unexplored market where there is no or limited competition. Blue Ocean markets are yet to be explored and hence bring a myriad number of potentials such as new product introductions, new business models, higher margin, and profitability opportunities.

Tactics to Develop New Blue Ocean Strategies

Adoption of "Blue Ocean" strategy translates into driving costs down while at the same time driving value up for the customers (Kim 2005). According to Kim and Mauborgne (2014), there are five main points of distinction that companies should start considering when thinking about "Blue Ocean" strategy: (1) Competition should not be at the center of strategic thinking, (2) industry strategy can be shaped by the companies, (3) strategic creativity can be unlocked systematically, (4) execution can be integrated into strategy development, and (5) with a structured model,

Blue Ocean Strategy,
Fig. 1 Blue Ocean
Leadership Grid (Kim and
Mauborgne 2014)



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companies can avoid market-competing traps and achieve market-creating innovations. These distinction points help companies challenge the traditional beliefs in the world of strategy and enable them to rethink about innovation in their respective businesses. According to Leavy (2005), “Blue Ocean” strategy planning through utilization of strategy canvas is applicable to any type of industry including business to business setting. With the help of strategy canvas, companies can find Blue Ocean for their businesses (Alam and Islam 2017).

Kim and Mauborgne provided a framework for “Blue Ocean Leadership Grid,” which is an analytic tool that challenges people to think about which acts and activities leaders should do less of because they hold people back and which leaders should do more of because they inspire people to give their all (Kim and Mauborgne 2014). According to authors, effective leaders create value utilizing the four categories laid out in the grid: (1) eliminate, (2) reduce, (3) raise, and (4) create (Fig. 1). This Blue Ocean leadership can help transform the organizations through improving leaders and employee’s performance (Alam and Islam 2017).

higher margin, and profitability opportunities. As a matter of fact, according to a study conducted by Kim, 2005, only 14% of all studied business launches were made within the Blue Ocean markets, but these 14% achieved 38% revenue impact and about 61% of profit impact, compared to the majority of 86% business launches in red oceans, which were able to get 39% of the total profit impact (Kim and Mauborgne 2004). This result reinforces the power of “Blue Ocean” strategy and its potential impact on driving business outcomes. According to Basri, Ghadzali, and Ismail (2011), “Blue Ocean” strategy generated positive outcomes in organizations such as IKEA, Starbucks, Philips, and non-profit organizations. These case studies show the impact of this strategy and can set a benchmark for other organizations and industries as “Blue Ocean” strategy has the power of making competition irrelevant and generates a new marketplace for brand-new demand.

In today’s world where there is increased competition, increased supply surpassing demand, and ever harder supply chain and competitive landscape post-Covid, companies should take a hard look into “Blue Ocean” strategy to create sustainable performance in their businesses.

Summary

As mentioned before, “Blue Ocean” strategy brings a myriad number of potentials such as new product introductions, new business models,

Cross-References

- [Business Model](#)
- [Disruptive Innovation](#)

- Sustainable Business Model
- Sustainable Growth
- Sustainable Leadership

References

- Alam, S., & Islam, M. T. (2017). Impact of Blue Ocean Strategy on organizational performance: A literature review toward implementation logic. *IOSR Journal of Business and Management*, 19(1), 1–19.
- Basri, J., Ghadzali, M., & Ismail, M. (2011). BOS: Application in Universiti Sains Malaysia library. *Jurnal PPM*, 5. Retrieved from http://eprints.usm.my/26112/1/blue_ocean_strategy.pdf
- Grundy, T. (2006). Rethinking and reinventing Michael Porter's five forces model. *Strategic Change*, 15(5), 213–229.
- Karagiannopoulos, G. D., Georgopoulos, N., & Nikolopoulos, K. (2005). Fathoming Porter's five forces model in the internet era. *Info*, 7(6), 66–76.
- Kim, W. C. (2005). Blue Ocean Strategy: From theory to practice. *California Management Review*, 47(3), 105–121.
- Kim, W. C., & Mauborgne, R. (2004). BOS: How to create uncontested market space and make the competition irrelevant. *Harvard Business Review*, 10, 71–81. Retrieved from <http://www.qfinance.com/business-strategy-finance-library/blue-ocean-strategy-how-to-create-uncontested-market-space-and-make-the-competition-irrelevant>
- Kim, W. C., & Mauborgne, R. (2014). *Blue Ocean Strategy, expanded edition: How to create uncontested market space and make the competition irrelevant*. Cambridge, MA: Harvard Business Review Press.
- Leavy, B. (2005). Value pioneering – How to discover your own “blue ocean”: Interview with W. Chan Kim and Renée Mauborgne [abstract]. *Strategy and Leadership*, 33(6), 13–20. <https://doi.org/10.1108/10878570510631611>.
- Porter, M. E. (1980). *Competitive strategy*. New York: Free Press.

Blue Revolution

- Aquaculture and Blue Farming

Bluewashing

- Greenwashing

Board Behaviour

- UK Corporate Governance Code (2010)

Board Capital

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Synonyms

Board intellectual capital; Board knowledge, skills and relationships; Human and social board capital

Definition

The “Board Capital” is the combination of human and social/relational capital of board members (Hillman and Dalziel 2003). More specifically, scholars define the Board Capital as the sum of knowledge and skills that directors hold thanks to their educational path and work experiences and the set of relationships established by directors with internal and external stakeholders.

Introduction

Characteristics of board members that influence firm performance have increasingly been of interest of scholars and practitioners (Daily et al. 2003; Gupte and Paranjape 2014; Agrawal and Chadha 2005). In this regard, a relevant issue in the academic and practical debates has been to answer the question of what enhances directors' effectiveness in value maximization. Despite there has always been a tacit consensus that individual director characteristics and qualifications are relevant aspects (Jensen 1993), most of studies have mainly focused on broad board attributes such as

board size, composition (e.g., independence), appointment methods, structure, equity ownership, and diversity (i.e., gender and ethnicity) (Johnson et al. 2012).

However, against the main stream examining the surface properties of the board of directors, a number of articles have recently explored the determinants of board functioning by focusing on its relational and human capital (Berezinets et al. 2016). Board capital is the sum of human and social/relational capital of board members (Hillman and Dalziel 2003). More specifically, scholars define the board human capital as the expertise, experience, knowledge, and skills that board members possess thanks to their education and work experiences, ranging from the high educational level to the expertise in a specific sector. Differently, scholars identify the board relational (or social) capital in the relationships established by board members with internal and external stakeholders.

Hillman and Dalziel (2003) have been the pioneers of the board capital construct. The authors have claimed that directors contribute to the board through their expertise, experience, and skills, as well as social links and networks. In this regards, scholars have argued that the effectiveness of board functioning relies on the intellectual capital of board members, that is able to overcome the inconclusiveness of the empirical evidence examining the relationship between the surface properties of the board of directors and firm performance until then. Indeed, according to the authors (Hillman and Dalziel 2003), this construct would have allowed to overcome the weakness of choosing one theoretical approach over another on the board (Nicholson and Kiel 2004) and the inability of typical board composition/structure measures to predict its effectiveness (Dalton et al. 1998; Hillman et al. 2000). Differently, board capital represents the preconditions of the board's ability to engage in all governance activities, such as monitoring or resource provision roles, by explaining and arguing all the theories concerning the board governing role (e.g., agency theory, resource dependence theory) (Kor and Sundaramurthy 2008; Nicholson and Kiel 2004).

To appreciate how the board capital concept has been able to overcome the limits of the

traditional board demographic approach, it seems crucial to understand the process that led scholars to develop it. In particular, it is worth noting that the formulation of the above-mentioned concept takes place thanks to two main contributions (Zona 2013; Berezinets et al. 2016). Within a first paper of 2000, Hillman, Cannella, and Paetzold argue that the traditional board members classification according their independence status allows to proxy for the antecedents of board monitoring function but not for the service role. In their paper, the authors claim that it is possible to overcome this limit by using alternative classifications, for example by measuring if board members have work experiences in comparable firm, or an educational degree in a specific area (e.g., law, banking, commercial). Therefore, the authors develop the belief that building on the "resource dependency theory" perspective, the effectiveness of board directors in providing resources to the company relies on their social and human capital.

As a further step in the development of the Board capital construct, 3 years later, Hillman and Dalziel (2003) publish a seminal paper on the *Academy of Management Journal* and refer for the first time to the human capital theory and to the social capital theory. More specifically, they argue that board members' capital is able to allow the governing body to perform not only the service role, but also the monitoring one. Indeed, the researchers assert that the directors' independence does not proxy for the members' ability to monitor but for their incentive to do so. This incentive can moderate the board's ability which in turn only depends on the members' relational and human capital.

In this perspective, the literature highlights that the human and social capital is the best proxy to appreciate the board's ability to perform its functions. It is worth noting that the concept of the human and social/relational capital, and the related measures represent the only ones that allow to explain and argue all theories related to the governing roles of the board (Nicholson and Kiel 2004). The intellectual capital held by the governing body thus represents the precondition of the board's ability to carry out all its activities.

Scholars argue that the board's ability to carry out all roles relies on the resources that directors provide to the board (Berezinets et al. 2016; Sarto 2016).

The advantage of employing this approach is twofold. Indeed, on the one hand, as previously stated, it allows to grasp the ability of the governing body to fulfill all its roles and activities, from the monitoring role to the provision one, overcoming therefore the competition between the different theoretical approaches. On the other hand, it also allows to look at the board as a collegial body, representing a proxy to appreciate some of the processes defined by Forbes and Milliken (1999), such as the presence of cognitive conflicts or the use of the knowledge and skills available in the board (Sarto 2019).

Aside the theoretical contributions that have developed the Board capital construct, it is also relevant to mention those studies that have identified the dimensions that characterize the board capital. In this regards, Haynes and Hillman (2010) conceptually identify the "breadth" and "depth" as two dimensions of board capital. While the former captures the human and relational capital heterogeneity of board members, the latter refers to the embeddedness of the board in the focal firm's industry. Some authors have enlarged the dimensions of board capital by identifying also its quality, in terms of educational level, as well as professional prestige. Moreover, additional scholars have enlightened the board capital complementarity, that concerns the level of complementarity between the directors' background and the firm activities (Zona 2013; Sarto et al. 2020).

The Board Human Capital

Focusing the attention on the human capital element of the board capital, it is worth noting that the idea of human capital finds its origin in 1960s when the economists Schultz (1961) and Becker (1962) defined and formalized the *Human Capital Theory*. Indeed, over the early 1960s, scholars of economic growth found out a number of difficulties in explaining the boost of US economy in

terms of traditional tangible factors of production (Krueger 1968). Indeed, researchers used to neglect "the residual" factors that instead were crucial determinants of the economic gap, that is, the *human capital* (Becker 1962; Schultz 1961; Weisbrod 1966). Differently, Schultz (1961) and Becker (1962) interpreted this gap through the lenses of the human capital theory. The base principle of the theory is that within an organization peoples' learning capacities are valuable as well as the other resources that are employed in the production (Lucas 1988). In this sense, if these resources are empowered through investments and are effectively used, the results are profitable not only for the individual but also for the organization and the overall society (Becker 1962; Schultz 1961). Therefore, according to the human capital theory the human capital is a crucial determinant for the organizational outcomes. Building on this assumption, as previously stated, corporate governance literature has developed the concept of human capital as a part of the wider notion of board capital (Hillman et al. 2002).

Research investigating the board human capital provides a number of classifications (Gibbons and Waldman 2004; Lester et al. 2008). Most studies distinguish between general and specific human capital. While the former includes the overall expertise that is generally applied across settings, the latter considers the one that matters for a specific firm, industry, and function (Behrens et al. 2012; Ganotakis 2010; Kor and Sundaramurthy 2008; Marvel and Lumpkin 2007). In particular, studies on general human capital focus on the director education by examining the educational qualification awarded by prestigious universities and management schools or the educational degree (e.g., PhD and master degree) (Arena et al. 2015; Bond et al. 2010; Barroso et al. 2011). As for the specific human capital, research distinguishes among firm, industry/sector, and functional expertise (Ganotakis 2010).

As generally reported for the board capital, the human capital of board members determines the board ability to effectively execute both monitoring and resources provision roles (Hillman and Dalziel 2003).

Concerning the former, having firm and industry experience/expertise allows to better know the typical management job tasks and skills useful, for example, to perform the board's duties of nominating top executives (Tian et al. 2011). Expertise in the firm or in the sector is also relevant for the management evaluation process as it fosters the better identification of appropriate activities as well as the estimation of changes to cope with future firm contexts and environments (Carpenter et al. 2001; Jensen and Meckling 1976). The assessment and the evaluation of managerial activities also benefits from the breadth of knowledge of board members. Indeed, the presence of heterogeneous board members, with a wide range of skills and expertise, allows to observe the problem from different points of view.

Concerning the second role, board human capital improves the provision of advice and counsel as well as legitimacy for firm operating activities (Hillman and Dalziel 2003).

Regarding the strategic process, literature reports that taking complex strategic decisions requires, in strict time constraints, managing information overload as well as effectively recognizing the long-term implications of the alternatives to consider (McDonald et al. 2008). In this sense, experts are generally better able to solve these troubles as they hold highly developed problem-solving skills and better knowledge of critical issues in the area where they are experts (Kor and Sundaramurthy 2008). Moreover, experiences in the same firm/industry allow them to better understand firm business, technology, human assets, and the specific setting conditions so as to overcome decision challenges (Kroll et al. 2008). Still concerning the strategic board process, the advice and counsel role of the board benefits from the presence of (e.g., educational and functional) (Bunderson and Sutcliffe 2002; Forbes and Milliken 1999; Li and Hambrick 2005). Literature in this tradition reports that the board human capital heterogeneity improves the directors' decision-making and results in positive corporate outcomes. Indeed, scholars suggest that the background diversity connected to the cognitive heterogeneity of board members stimulates the debate among directors and enhances the board

problem-solving (Lester et al. 2008; Cho and Hambrick 2006). In addition, scholars claim that the board human capital heterogeneity increases the information available to board directors, fostering the proper appraisal of company opportunities with positive implications for their decision making activity (Brodbeck et al. 2007).

Turning the attention to the provision of legitimacy, directors with relevant expertise/experience like business founders (Kor and Sundaramurthy 2008), former government members and politicians (Hillman et al. 2000; Hillman 2005; Lester et al. 2008), or generally business/industry experts (Hillman et al. 2000; Kor and Misangyi 2008), increase the reputation of both board and organization (Certo 2003; Hillman and Dalziel 2003). Moreover, the board members' educational qualification awarded by prestigious universities and management schools, or board educational level (in terms of PhD, master degree, or bachelor degree), improves the reputation of the board functioning (Arena et al. 2015; Bond et al. 2010; Barroso et al. 2011).

Empirical studies report supportive findings in this sense. As human capital enhances the effectiveness of governance roles, and as an effective governance function improves company output (Nicholson and Kiel 2004), this literature explores the relationship between industry expertise, firm expertise, functional background and heterogeneity, and the organizational outcomes.

More specifically, it is possible to highlight the existence of four main streams of research.

The first stream examines the implications of the quality of board human capital, in terms of level of expertise and experience. Studies in this tradition have investigated the implications of the educational level on the innovation (Wincent et al. 2010; Dalziel et al. 2011) and the internationalization (Barroso et al. 2011). Others have explored the effect of the educational level of board members on financial performance (Jermias and Gani 2014; Arena et al. 2015) and IPO value (Certo 2003; Sundaramurthy et al. 2014).

The second stream of research investigates the implications of having working experience in specific activities or specific functions (i.e., the functional expertise), as well as a training/education in

a specific area. More specifically, some studies have reported the implications of board financial expertise for the debt level (Burak Güner et al. 2008), strategic choices (Jensen and Zajac 2004; Westphal and Fredrickson 2001), innovation (Dalziel et al. 2011), firm performance (Kim and Lim 2010; DeFond et al. 2005), and finally, accounting practices (Dhaliwal et al. 2010). Other studies have investigated the performance implications of having expertise in specific activities and contexts such as M&A operations (McDonald et al. 2008), strategic alliances (Chen and Lai 2017), internationalized organizations (Chen et al. 2016), and green setting (Cowden and Bendickson 2015).

The third research stream is composed by articles investigating the implications of board members expertise/experience consistent with the characteristics of the company in which they have been appointed. This is the case of industry and firm expertise. Concerning the former, several articles have explored the relationship between this measure of board human capital and firm outcomes such as the start-up success (Kor and Misangyi 2008), the outcome of M&A operations (Kroll et al. 2008), the firm growth (Kor and Sundaramurthy 2008), the earnings management (Wang et al. 2015), the level of internationalization (Barroso et al. 2011; Volonté and Gantenbein 2016), the market value (Tian et al. 2011), and the firm performance (Dass et al. 2014; Veronesi et al. 2013). Turning the attention to the firm expertise, a less copious group of papers have explored the positive implications of board members with previous experiences in the same firm. They mainly investigate firm outcomes in terms of growth (Kor and Sundaramurthy 2008), internationalization (Barroso et al. 2011), and market reaction (Fahlenbrach et al. 2010).

Finally, the fourth stream of research has explored the relationship between, on the one side, the board background heterogeneity and, on the other side, the financial outcomes (Antonelli et al. 2013; Wellalage and Locke 2013; Harris and Helfat 1997; Volonté and Gantenbein 2016; Vandenbroucke et al. 2016) and the corporate innovation (Midavaine et al. 2016; Van Knippenberg

et al. 2011; Kim and Kim 2015; Bianchi et al. 2012; Sarto et al. 2020; Heyden et al. 2015).

The Board Social Capital

Shifting the attention to the other side of the coin, that is, the board social capital, literature defines it as the directors' ability to extract future economic benefits from the resources that they obtain through the established relationships with external and internal stakeholders, at board and company level (Berezinets et al. 2016).

Previous studies have identified several board social capital classifications. However, the most widespread classification distinguishes the internal social capital from the external one. The first element includes director's ties within the governing board, and refers to the relationships established among the same directors. Differently, the external capital includes the links established by board members with the external environment (inside and outside the firm), thanks to which they gain information, power, legitimacy, and other critical resources for the achievement of the firm competitive advantage (Pérez-Calero et al. 2016). In this regard, the board external social capital can be in turn divided into two sub-elements. On the one side, it refers to the relationships between board members and the manager/employees inside the firm. On the other side, it includes the links that directors create with stakeholders outside the company. Finally, it is worth noting that aside the internal and external board social capital, scholars suggest the existence of a *borderline* social capital element that can be considered either internal or external and that refers to the director's social standing and reputation (Sarto 2019).

Focusing the attention on the external board social capital, and specifically on the established links with stakeholders outside the company, scholars distinguish the single-type bonds from double-type ones. In the first case, they represent relationships that a director directly establishes with another company. This phenomenon occurs when a non-executive director sits on the board

of the “X” company and is fully employed in the “Y” company. Differently, double links occur when a board member of “X” company also sits on the board of the “Y” company and correspond to the interlocking directorship phenomenon (Johnson et al. 2012). In this regard, scholars suggest that there are a number of positive implications of the existence the above-mentioned links. Firstly, relationships allow the access to useful and timely information, fostering the information sharing. This is beneficial for board processes, and for the fulfillment of the advice and counsel role, especially with regard to the strategy formulation (Ferris et al. 2003), thus positively affecting company outcomes (Kor and Sundaramurthy 2008; Hoitash 2011; Jiraporn et al. 2008). From a different point of view, relationships with external stakeholders allow firm to access to crucial resources as well as to acquire them at more favorable conditions, with positive effects for business performance (Hillman 2005; Kor and Sundaramurthy 2008).

Still concerning the external capital, but focusing on the links among board members and manager/employees/owners of the same firm, scholars claim that these relationships can occur in three specific cases (Johnson et al. 2012). First of all, board members can be “affiliated,” as they have been appointed on the board due to previous working relationships with the firm, such as in the case of suppliers, consultants, or customers. Second, directors can be appointed on the governing body based upon a CEO’s request. Finally, there is the case of members with personal relationships with company managers, based on family or friendship links (Jones et al. 2008). Research on the topic suggest that personal and trust relationships can favor the information sharing between the board and the company, thus improving the board strategic process. Indeed, directors with friendship links are better able to express their doubts about corporate strategies (Westphal and Bednar 2005). From a different point of view, other studies document that “affiliated” directors as well as members with personal ties carries weight in the decision-making process and are more

influential compared with their peers (Stevenson and Radin 2009).

Turning the attention to the internal social capital, studies show that the links among directors are consequences of their previous work experience within the same team. In this regard, the board functioning takes advantage from the co-working experience and this positively affects company performance (Tian et al. 2011). Indeed, board members develop tacit knowledge of the firm and its characteristics, and this is especially useful for independent members. In addition, thanks to the co-working experience, the team increases its ability of coordination and integration of various skills represented in the group.

Shifting the focus on the last dimension of the board social capital, literature has highlighted the crucial role played by the directors’ social status. Indeed, research suggests that the reputation and prestige of a board member act as a signal, by increasing the external legitimacy of the firm (Certo 2003). Indeed, it is able not only to increase the overall trust of external stakeholders toward the firm, but also to allow the company access to crucial resources.

Summary

This entry illustrates the main characteristics of Board capital. More specifically, it examines in depth both the human and social dimensions of board capital, by explaining their implications for the board of directors’ effectiveness and firm outcomes.

Cross-References

- [Board Diversity and Gender Quotas](#)
- [Human Capital Management](#)
- [Non-executive Director \(NED\)](#)
- [Sanctions of Social Capital](#)
- [Social Capital, Interpretation of](#)
- [Social Capital, Measurement of](#)
- [Theoretical Paradigms of the Board of Directors](#)

References

- Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *The Journal of Law and Economics*, 48(2), 371–406.
- Antonelli, G., Riviello, G., & Moschera, L. (2013). Caratteristiche dei consigli di amministrazione e performance delle società quotate in borsa: un'analisi per cluster. In *La retribuzione del top management: incentivi, carriera e governance* (pp. 49–78). Milano: EGEA.
- Arena, C., Cirillo, A., Mussolino, D., Pulcinelli, I., Saggese, S., & Sarto, F. (2015). Women on board: Evidence from a masculine industry. *Corporate Governance: The international journal of business in society*, 15(3), 339–356.
- Barroso, C., Villegas, M. M., & Pérez-Calero, L. (2011). Board influence on a firm's internationalization. *Corporate Governance*, 19(4), 351–367.
- Becker, G. (1962). Investment in human capital: a theoretical analysis. *The Journal of Political Economy*, 70(5), 9–49.
- Behrens, J., Patzelt, H., Schweizer, L., & Bürger, R. (2012). Specific managerial human capital, firm age, and venture capital financing of biopharmaceutical ventures: A contingency approach. *The Journal of High Technology Management Research*, 23(2), 112–121. Elsevier B.V.
- Berezinets, I., Garanina, T., & Ilina, Y. (2016). Intellectual capital of a board of directors and its elements: Introduction to the concepts. *Journal of Intellectual Capital*, 17(4), 632–653.
- Bianchi, S., Corvino, A., & Rigolini, A. (2012). Board diversity and investments in innovation: Empirical evidence from Italian context. In *International conference: Corporate governance & regulation: Outlining new horizons for theory and practice*.
- Bond, M., Glouharova, S., & Harrigan, N. (2010). The political mobilization of corporate directors: Socio-economic correlates of affiliation to European pressure groups. *The British Journal of Sociology*, 61(2), 306–335.
- Brodbeck, F. C., Kerschreiter, R., Mojzisch, A., & Schulz-Hardt, S. (2007). Group decision making under conditions of distributed knowledge: The information asymmetries model. *Academy of Management Review*, 32(2), 459–479.
- Bunderson, J. S., & Sutcliffe, K. M. (2002). Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal*, 45(5), 875–893.
- Burak Güner, A., Malmendier, U., & Tate, G. (2008). Financial expertise of directors. *Journal of Financial Economics*, 88(2), 323–354.
- Carpenter, M. A., Sanders, G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm. *Academy of Management Journal*, 44(3), 493–511.
- Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review*, 28(3), 432–446.
- Chen, L. Y., & Lai, J. H. (2017). The effect of board human capital on the performance of technical alliance investments. *R&D Management*, 47(2), 265–276.
- Chen, H. L., Hsu, W. T., & Chang, C. Y. (2016). Independent directors' human and social capital, firm internationalization and performance implications: An integrated agency-resource dependence view. *International Business Review*, 25(4), 859–871.
- Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization Science*, 17(4), 453–469.
- Cowden, B., & Bendickson, J. (2015). Experience-based green board capital: Linking Board of Directors and Firm Environmental Performance. *Journal of Leadership, Accountability and Ethics*, 12(3), 16–29.
- Daily, C. M., Dalton, D. R., & Cannella, A. A., Jr. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3), 371–382.
- Dalton, D. R., Daily, C. M., & Johnson, J. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19(3), 269–290.
- Dalziel, T., Gentry, R. J., & Bowerman, M. (2011). An integrated agency-resource dependence view of the influence of directors' human and relational capital on firms' R&D spending. *Journal of Management Studies*, 48(6), 1217–1242.
- Dass, N., Kini, O., Nanda, V., Onal, B., & Wang, J. (2014). Board expertise: Do directors from related industries help bridge the information gap? *Review of Financial Studies*, 27(5), 1533–1592.
- DeFond, M. L., Hann, R. N., & Hu, X. (2005). Does the market value financial expertise on audit committees of boards of directors? *Journal of Accounting Research*, 43(2), 153–193.
- Dhaliwal, D. A. N., Naiker, V. I. C., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research*, 27(3), 787–827.
- Fahlenbrach, R., Low, A., & Stulz, R. M. (2010). Why do firms appoint CEOs as outside directors? *Journal of Financial Economics*, 97(1), 12–32.
- Ferris, S. P., Jagannathan, M., & Pritchard, A. C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *The Journal of Finance*, 58(3), 1087–1111.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489–505.
- Ganotakis, P. (2010). Founders' human capital and the performance of UK new technology based firms. *Small Business Economics*, 39(2), 495–515.

- Gibbons, R., & Waldman, M. (2004). Task-specific human capital. *American Economic Review*, 94(2), 203–207.
- Gupte, A., & Paranjape, S. (2014). Performance Evaluation of Boards and Directors. Deloitte.
- Harris, D., & Helfat, C. E. (1997). Specificity of CEO human capital and compensation. *Strategic Management Journal*, 18, 895–920.
- Haynes, K. T., & Hillman, A. (2010). The effect of board capital and CEO power on strategic change. *Strategic Management Journal*, 31, 1145–1163.
- Heyden, M. L. M., Oehmichen, J., Nichting, S., & Volberda, H. W. (2015). Board background heterogeneity and exploration-exploitation: The role of the institutionally adopted board model. *Global Strategy Journal*, 5(2), 154–176.
- Hillman, A. (2005). Politicians on the Board of Directors: Do connections affect the bottom line? *Journal of Management*, 31(3), 464–481.
- Hillman, A., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *The Academy of Management Review*, 28(3), 383–396.
- Hillman, A., Cannella, A. A. J., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235–255.
- Hillman, A. J., Cannella, A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ?. *Journal of management*, 28(6), 747–763.
- Hoitash, U. (2011). Should independent board members with social ties to management disqualify themselves from serving on the board? *Journal of Business Ethics*, 99(3), 399–423.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *the Journal of Finance*, 48(3), 831–880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. C., & Zajac, E. J. (2004). Corporate elites and corporate strategy: How demographic preferences and structural position shape the scope of the firm. *Strategic Management Journal*, 25(6), 507–524.
- Jermias, J., & Gani, L. (2014). The impact of board capital and board characteristics on firm performance. *British Accounting Review*, 46(2), 135–153.
- Jiraporn, P., Kim, Y. S., & Davidson, W. N., III. (2008). Multiple directorships and corporate diversification. *Journal of Empirical Finance*, 15(3), 418–435.
- Johnson, S. G., Schnatterly, K., & Hill, A. D. (2012). Board composition beyond Independence: Social capital, human capital, and demographics. *Journal of Management*, 39(1), 232–262.
- Jones, C. D., Makri, M., & Gomez-Mejia, L. R. (2008). Affiliate directors and perceived risk bearing in publicly traded, family-controlled firms: The case of diversification. *Entrepreneurship Theory and Practice*, 32(6), 1007–1026.
- Kim, N., & Kim, E. (2015). Board capital and exploration: From a resource provisional perspective. *Management Decision*, 53(9), 2156–2174.
- Kim, H., & Lim, C. (2010). Diversity, outside directors and firm valuation: Korean evidence. *Journal of Business Research*, 63(3), 284–291.
- Kor, Y., & Misangyi, V. (2008). Outside directors' industry-specific experience and firms' liability of newness. *Strategic Management Journal*, 29(12), 1345–1355.
- Kor, Y., & Sundaramurthy, C. (2008). Experience-based human capital and social capital of outside directors. *Journal of Management*, 35(4), 981–1006.
- Kroll, M., Walters, B., & Wright, P. (2008). Board vigilance, director experience, and corporate outcomes. *Strategic Management Journal*, 29(4), 363–382.
- Krueger, A. (1968). Factor endowments and per capita income differences among countries. *The Economic Journal*, 78(311), 641–659.
- Lester, R., Hillman, A., Zardkoohi, A., & Cannella, A. A. J. (2008). Former government officials as outside directors: The role of human and social capital. *Academy of Management Journal*, 51(5), 999–1013.
- Li, J., & Hambrick, D. C. (2005). Factional groups: a new vantage on demographic faultlines, conflict, and disintegration in work teams. *Academy of Management Journal*, 48(5), 794–813.
- Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, 3–42.
- Marvel, M., & Lumpkin, G. (2007). Technology entrepreneurs' human capital and its effects on innovation radicalness. *Entrepreneurship Theory and Practice*, 31(6), 807–828.
- McDonald, M., Westphal, J., & Graebner, M. (2008). What do they know? The effects of outside director acquisition experience on firm acquisition performance. *Strategic Management Journal*, 29(11), 1155–1177.
- Midavaine, J., Dolfsma, W., & Aalbers, R. (2016). Board diversity and R & D investment. *Management Decision*, 54(3), 558–569.
- Nicholson, G. J., & Kiel, G. C. (2004). A framework for diagnosing board effectiveness. *Corporate Governance: An International Review*, 12(4), 442–460.
- Pérez-Calero, L., Villegas, M. D. M., & Barroso, C. (2016). A framework for board capital. *Corporate Governance*, 16(3), 452–475.
- Sarto, F. (2016). *19. Il contributo del capitale umano nel consiglio di amministrazione. Aspetti teorici ed evidenze empiriche*. Aracne: Roma.
- Sarto, F. (2019). *Il ruolo del board human capital nel governo delle aziende. Profili teorici e riflessi sulla performance*. Giappichelli: Torino.
- Sarto, F., Saggese, S., Viganò, R., & Mauro, M. (2020). Human capital and innovation: mixing apples and oranges on the board of high-tech firms. *Management Decision*, 58(5), 897–926.

- Schultz, T. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
- Stevenson, W. B., & Radin, R. F. (2009). Social capital and social influence on the board of directors. *Journal of Management Studies*, 46(1), 16–44.
- Sundaramurthy, C., Pukthuanthong, K., & Kor, Y. (2014). Positive and negative synergies between the CEO's and the corporate board's human and social capital: A study of biotechnology firms. *Strategic Management Journal*, 35(6), 845–868.
- Tian, J., Haleblan, J., & Rajagopalan, N. (2011). The effects of board human and social capital on investor reactions to new CEO selection. *Strategic Management Journal*, 32(7), 731–747.
- Van Knippenberg, D., Dawson, J. F., West, M. A., & Homan, A. C. (2011). Diversity faultlines, shared objectives, and top management team performance. *Human Relations*, 64(3), 307–336.
- Vandenbroucke, E., Knockaert, M., & Ucbasaran, D. (2016). Outside board human capital and early stage high-tech firm performance. *Entrepreneurship Theory and Practice*, 40(4), 759–779.
- Veronesi, G., Kirkpatrick, I., & Vallascas, F. (2013). Clinicians on the board: What difference does it make? *Social Science & Medicine*, 77, 147–155.
- Volonté, C., & Gantenbein, P. (2016). Directors' human capital, firm strategy, and firm performance. *Journal of Management & Governance*, 20(1), 115–145.
- Wang, C., Xie, F., & Zhu, M. (2015). Industry expertise of independent directors and board monitoring. *Journal of Financial and Quantitative Analysis*, 50(05), 929–962.
- Weisbrod, B. (1966). Investing in human capital. *The Journal of Human Resources*, 1(1), 5–21.
- Wellalage, N. H., & Locke, S. (2013). Women on board, firm financial performance and agency costs. *Asian Journal of Business Ethics*, 2(2), 113–127.
- Westphal, J. D., & Bednar, M. K. (2005). Pluralistic ignorance in corporate boards and firms' strategic persistence in response to low firm performance. *Administrative Science Quarterly*, 50(2), 262–298.
- Westphal, J. D., & Fredrickson, J. W. (2001). Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy. *Strategic Management Journal*, 22(12), 1113–1137.
- Wincent, J., Anokhin, S., & Örtqvist, D. (2010). Does network board capital matter? A study of innovative performance in strategic SME networks. *Journal of Business Research*, 63(3), 265–275.
- Zona, F. (2013). *Corporate governance*. Egea: Milano.

Board Committees and Corporate Governance

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Synonyms

[Audit committee](#); [Board committees](#); [Board of directors](#); [Corporate governance](#); [Ethics and compliance committee](#); [Nomination committee](#); [Remuneration committee](#); [Risk committee](#)

Definition

The board of directors may establish specialized board committees to allow more in-depth focus in particular areas, thus increasing efficiency (BCBS 2015). These committees are often referred to as subcommittees and are created and mandated by the full board. There are various board subcommittees, namely nomination committee; audit committee; remuneration committee; risk committee; and ethics and compliance committee.

Nomination Committee: A subcommittee of the board of directors tasked with making recommendations to the board on appointments and succession planning.

Audit Committee: A subcommittee of the board of directors tasked with reviewing the scope and outcome of the audit function and ensuring auditor objectivity.

Remuneration Committee: A subcommittee of the board of directors tasked with making recommendations to the board on executive directors' remuneration including base salary, bonuses, stock options, pensions, and other benefits.

Risk Committee: A subcommittee of the board of directors tasked with assessing the firm's financial, operational, and reputational risk exposure.

Ethics and Compliance Committee: A subcommittee of the board of directors tasked with the responsibility of ensuring that the firm has appropriate mechanisms to promote good

Board Committees

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decisions and compliance with applicable legal and regulatory provisions, as well as internal rules.

Introduction

There is now clear recognition of the importance of sustainability initiatives in achieving effective corporate governance. For example, the FRC (2018) states that “a successful company is led by an effective and entrepreneurial board whose function is to promote the long-term sustainable success of the company, generate value for shareholders, and contribute to the wider society.” The board of directors is tasked with establishing the company’s purpose, strategy, and values and in ensuring that “resources are in place for the company to meet its objectives and measure performance against them and establish a framework of prudent and effective controls which enables risk to be assessed and managed” (FRC 2018). The board may appoint various subcommittees or delegate some of its role and responsibilities to committees to enhance its oversight and decision-making effectiveness (Tricker 2012; BCBS 2015). While board committees assist individual directors and the entire board to discharge duties and functions, the board of directors is ultimately responsible for the delegated duties and functions and the various subcommittee report directly to the board. (OECD 2004; The BCBS 2015; Mallin 2019).

Board committees allow the injection of increase objectivity into the decision-making process and assist the board of directors in effectively dealing with board functions by considering in greater detail than would be possible for the board as a whole (Lincoln et al. 2017). Nomination, remuneration, and audit committees are the most commonly found board committees (OECD 2004; FRC 2018). The FRC (2018) recommends that “the board should establish a nomination committee to lead the process for appointments, ensure plans are in place for orderly succession to both the board and senior management positions, and oversee the development of a diverse pipeline for succession” (FRC 2018). Furthermore, a large

preponderance of the members of the committee ought to be independent non-executive directors. The Cadbury Report (2000) recommended that an audit committee and remuneration committee should be formed and recommends a nomination committee in order to ensure the board appointment process is more transparent. The Higgs review (2003) confirms this view by reporting that most listed companies have an audit committee and a remuneration committee.

The number and nature of subcommittees established ultimately depends on company size, its board, its business, and its risk profile. To ensure transparency and accountability, a board should disclose pertinent information to the committees to enable them carry out their functions effectively and also the board should implement a term of reference that sets out the mandate, scope, working procedures, and composition of its committees (BCBS 2015). Thus, effective corporate governance mandates that the board of directors must develop a written, concise description of the roles for the board of directors, chair, CEO, and the board subcommittees. To maintain the independence of these committees, it is best practice for the board chairman not to serve simultaneously in his/her capacity as the head of the board and as a committee member. It is also best practice to ensure that no director can serve on more than two of these three committees: nomination, remuneration, and audit (BCBS 2015).

Key Issues

Nomination Committee

The FRC (2018) recommends that the board should establish a nomination committee. The nomination committee is tasked with evaluating the skills, knowledge, experience, and independence of the board, and utilizing this when preparing a candidate profile for new appointments (Tricker 2012; Hannigan 2018). The nomination committee is responsible for appointments to both the board and senior management positions. It is also tasked with overseeing the development of a diverse pipeline for succession and should identify possible gaps and challenges in the skills and

knowledge of the board (BCBS 2014; Hannigan 2018). This recommendation is important in light of the fact that boards are often criticized for being inadequate in selecting chief executive officers (CEO) (Larcker and Tayan 2011). The Spencer Stuart UK Board Index (2011) discovered that chairman succession planning is not widely discussed in most UK boards. This is because few formal mechanisms have been implemented to address the issue beyond the chairman's annual review with the senior independent nonexecutive directors. Therefore, shareholder groups have pressured boards to increase the transparency in succession plans (The Spender Stuart UK Board Index 2011). The work of the nomination committee should also be described in the annual report.

Interestingly, the FRC (2018) also reflects an emphasis on gender diversity and inclusivity, it states that "appointments and succession plans should be based on merit and objective criteria and, within this context, should promote diversity of gender, social and ethnic backgrounds, cognitive and personal strengths" (FRC 2018). As well as reporting on "policy on diversity and inclusion, its objectives and linkage to company strategy, how it has been implemented and progress on achieving the objectives and report on the gender balance of those in the senior management" (FRC 2018).

To be effective, "majority of members of the nomination committee should be independent non-executive directors with a minimum membership of three, the chair of the board should not chair the committee when it is dealing with the appointment of their successor, and the length of service of the board as a whole and membership regularly refreshed" (FRC 2018).

Audit Committee

Various national and international policy-makers have highlighted the importance of the audit committee as the bridge connecting external auditors and the board of directors (OECD 2004; BCBS 2015). The audit committee protects shareholder and other stakeholder interests by monitoring financial reports and internal control. In the aftermath of the 2007–2008 global financial crises,

audit committee members have been criticized for their lack of skills and expertise, and their intrusion in the legitimate responsibilities of executive management (Tricker 2012). Other criticisms included their proclivity for bureaucratic and rigid processes and their inability to exercise good judgment (Tricker 2012). The FRC advocates for the establishment of an audit committee. The UK also implements the European Union Audit Directive (2014/56/EU), which imposes a requirement for firms whose securities are traded on a regulated EU market to have an audit committee. This further shows the importance of the audit committee and steps taken both on a national and international level to ensure this key function within the firm.

Several national corporate governance codes recommend that audit committees should be comprised of financially literate independent non-executive directors (FRC 2018). The FRC (2018) recommends that audit committee should be comprised of independent nonexecutive directors, and there should be a minimum membership of three members and two members in the case of smaller companies. This recommendation is supported by research work carried out by Yeh et al. (2011) who found that financial firms with more independent nonexecutive directors on the audit and risk committees performed better during the 2007–2008 global crises.

The FRC (2018) notes that "the chair of the board should not be a member. The board should satisfy itself that at least one member has recent and relevant financial experience. The committee as a whole shall have competence relevant to the sector in which the company operates." Furthermore, in order to ensure collaboration in the auditing process, the audit committee should have access to external auditors for explanations and additional information without the presence of management (FRC 2018). The audit committee is tasked with a robust list of responsibilities. Principle 25 of the FRC sets out the main roles and responsibilities of the audit committee. It states that the role and responsibility of the audit committee include monitoring the integrity of the financial statements of the company and providing advice to the board on the fairness of annual

reports and accounts as well as “internal control and risk management systems including the internal audit function.” The audit committee is also tasked with recommending the board of directors the appointment and removal of external auditor, ensuring external auditor objectivity and compliance with any professional and regulatory requirements. Finally, the audit committee is tasked with devising policy where external auditors are required to provide non-auditing services and ensuring this does not encroach the auditor’s independence (FRC 2018).

Remuneration Committee

The remuneration committee is tasked with the responsibility for devising policy for executive director pay and setting pay and remuneration for the chair, executive directors, and senior management including base salary, bonuses, stock options, pensions, and other benefits (FRC 2018). National and international policy-makers highlight a clear link between remuneration and individual performance of executives and overall firm success (BCBS 2015; FRC 2018). Therefore, the role of a remuneration committee is to ensure that there is a formal and transparent procedure for developing remuneration policy and ensuring that compensation is appropriate and consistent with the organizational culture, long-term business prospects, risk strategy, and performance of the organization, appropriate legal and regulatory requirements, and promotion of long-term sustainable success of the organization (Tricker 2012; FRC 2018; Mallin 2019).

Decisions on executive remuneration packages should be made by those who do not stand to benefit directly from them. Thus, as a matter of good governance practice, executive directors should not be responsible for determining their own remuneration. The remuneration committee should comprise of a “minimum of three independent non-executive directors. In the case of a small company a minimum of two independent non-executive directors is required (FRC 2018). In addition, the chair of the board can only be a member if they were independent on appointment and cannot chair the committee. Before appointment as chair of the remuneration committee, the

appointee should have served on a remuneration committee for at least 12 months” (FRC 2018). The remuneration committee works closely with various other subcommittees. For example, the remuneration committee works with the risk committee in evaluating the incentives created by the remuneration system to ascertain whether incentives provided take into consideration risk, capital, liquidity, and the likelihood and timing of earnings (BCBS 2015). In addition, the Higgs Report (2003) recommends that the “remuneration committee work closely with the nomination committee to ensure incentives are appropriately structured for directors and for senior executives,” avoid rewarding poor performance and ensure appropriate policy is in place to deal fairly in cases where departure is not due to poor performance.

Recent legislative development in this area includes the Companies (Miscellaneous Reporting) Regulations 2018 which require publication and justification of the companies pay ratio and also “illustrate the effect of future share price increases on executive pay outcomes” in order to ensure shareholders are clearly informed when voting on long-term incentive plans. For the first time, quoted and UK registered companies with more than 250 UK employees are now legally mandated to publish and justify the pay difference between chief executives and their staff on an annual basis. The obligations now imposed on these companies are to be expected in light of the fact that excessive remuneration and lack of proper transparency and accountability vis-à-vis remuneration were some of the catalysts in the recent financial crisis. For example, Bebchuk et al. (2010) found that excessive remuneration for executives at US Bear Stearns and Lehman Brothers encouraged a culture of excessive risk-taking in 2000–2008. In the aftermath of the 2007–2008 financial crises, the OECD (2004) discovered that remuneration systems failed worldwide because managers had considerable influence over the level and conditions for performance-based compensation, which meant that boards were unable to exercise objective and independent judgment. Additionally, there is evidence to suggest that the remuneration packages

of senior management in banks, in the period leading to the 2007–2008 financial crises, supported a culture where poor standards became norm (Lincoln and Adedoyin 2018).

Risk Committee

Various governance codes and guidelines recommend the establishment of a risk committee, comprised of independent nonexecutive directors who are financially knowledgeable, charged with the responsibility of advising the board on current and future risk strategies, and overseeing the implementation of such strategies by senior management (BCBS 2010; FRC 2018). Risk management subcommittee provides “strategies for capital and liquidity management, as well as credit, market, operational, compliance, reputational and other risks of the company.” It is argued that the creation of a risk committee will circumvent the widespread failure of risk management discovered in the aftermath of the 2007–2008 financial crises. For example, in the aftermath of the 2007–2008 global financial crises, the OECD (2004) found that boards of directors were still ignorant of the risk’s firms encounter. It therefore reaffirmed the need to ensure that effective risk management is established in firms. However, in some listed firms risk assessment is imbibed in the mandate of the audit committees. For example, in the USA, the NYSE’s listing rules mandates the audit committee with the task of explaining the risk assessment and management policies of listed firms. This creates additional problems and complexities because audit committees examine the past to discharge their accountability functions. They are involved with audit outcomes and provide accountability information for financial reports (Tricker 2012). As risk assessment needs to be forward-looking, the audit committee may not be ideal for such responsibilities (Lincoln and Adedoyin 2018).

The presence of a risk management committee cannot be overstated particularly in certain sectors for example the banking and financial sectors. This view is also supported by the BCBS (2010) and the FRC which emphasizes that the nature and business of banking dictates for the inclusion of a risk committee among board subcommittees

(BCBS 2010; FRC 2018). In addition, Yatim (2010) found a significant correlation between the presence of a risk management committee and strong board structures.

Ethics and Compliance Committee

The OECD (2004) recommended that firms set up internal programs and procedures to promote compliance with applicable law, regulations, and ethical standards. The BCBS (2010) states that the ethics and compliance committee should ensure that the organization has the appropriate mechanisms to promote good decisions and compliance with applicable legal and regulatory provisions, as well as internal rules. This is important to the corporate governance agenda and the spirit of corporate governance recommendations which mandates that firms act in a moral and ethical manner (Mallin 2019). According to Stevens et al. (2005) the extent to which ethics codes are used by executives when making strategic choices is unknown. That said, executives were observed to be more likely to integrate their firm’s ethics code into their decision-making process where there is perceived pressure from various stakeholder groups. In addition, it was found that ethics codes create an internal ethical culture and promotes a positive external image of the firm and that they are integrated into daily activities through training programs. The importance of the ethics and compliance committee and their role in ensuring the implementation of appropriate internal ethical and compliance programs and procedure cannot be overemphasized. Creation of an ethics committee helps ensure that shareholders rights are protected, checks and balances are in place to help detect and prevent fraudulent behavior, and that the rule of law is upheld (Lincoln et al. 2017).

Summary

Board committees are an integral part of the internal corporate governance mechanism ensuring effective and efficient dispatch of the boards business by considering it in more detail than would be convenient for the whole board.

Board committees allow the injection of objectivity in the decision-making process. Various board committees include nomination committee; audit committee; remuneration committee; risk committee; and ethics and compliance committee. The increased use of board committees in recent times has played an important role in raising corporate governance standards worldwide. It is incumbent on all directors to act in the interest of the company, that said, the board committee also have a particular role to act independently of the executive in ensuring that shareholders' interests and various stakeholder groups are properly protected in relation to the stated objective of the subcommittee and the role for which it was set up to fulfill. However, the board retains ultimate responsibility, thus disagreements within the board, as well as disagreements involving various board committee's members and the board as a whole, are resolved predominantly at board level.

Board "committees give assurance that important board duties are being rigorously and diligently discharged." In order to be effective however, various corporate governance codes and guidelines provide that nonexecutive directors, and independent non-executive directors, should play leading roles in these board committees. The rationale behind this is that the inclusion of independent nonexecutive directors helps to avoid conflict of interest for the executive directors. Finally, it is crucial when appointing committee members that the board draws on those nonexecutive directors and independent non-executive directors who possess relevant skills and expertise. This allows the committees to comprehensively understand their role and responsibilities, objectively evaluate outcomes to be achieved and bring fresh thinking to decision making.

References

- BCBS. (2010). *Principles for enhancing corporate governance*. Available <https://www.bis.org/publ/bcbs176.pdf>
- BCBS. (2014). *Consultative document corporate governance principles for banks*.
- BCBS. (2015). *Guideline corporate governance principles for banks*. Available <https://www.bis.org/bcbs/publ/d328.pdf>
- Bebchuk, L. A., Cohen, A., & Spamann, H. (2010). *The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000-2008*. Working Paper No. 657, Harvard Law School.
- Cadbury, A. (2000). The corporate governance agenda. *Corporate Governance: An international Review*, 8(1).
- Financial Reporting Council. (2018). *The UK corporate governance code*. London: The Financial Reporting Council Limited. Available at <https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-UK-Corporate-Governance-Code-FINAL.pdf>.
- Hannigan, B. (2018). *Company law* (5th ed.). Oxford: Oxford University Press.
- Higgs, D.. (2003). *Review of the role and effectiveness of non-executive directors*. The Department of Trade and Industry. Available at www.dti.gov.uk/cld/non_exec_review
- Larcker, D., & Tayan, B. (2011). *Corporate governance matters a closer look at organisational choices and their consequences*. Upper Saddle River: Pearson Education Inc.
- Lincoln, A., & Adedoyin, O. (2018). *An African perspective on corporate governance in the banking sector*. Kindle Edition.
- Lincoln, A., Adedoyin, O., & Laugharne, J. (2017). Board composition and corporate governance mechanisms in the Nigerian banking sector. In N. Capaldi, S. O. Idowu, & R. Schmidpeter (Eds.), *Dimensional corporate governance: An inclusive approach*. Berlin Heidelberg: Springer.
- Mallin, C. A. (2019). *Corporate governance* (6th ed.). Oxford: Oxford University Press.
- OECD. (2004). *Principles of corporate governance*. Available at <http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf>
- Spencer Stuart UK Board Index. (2011). *Current board trends and practices at major UK companies*. Statutory Audit Service for Larger Companies (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014, SI 2014/56/EU.
- Stevens, J., Steensma, K., Harrison, D., & Cochran, P. (2005). Symbolic or substantive documents? The influence of ethics codes on financial Executives' decision. *Strategic Management Journal*, 26(2), 181–195.
- The Companies (Miscellaneous Reporting) Regulations. (2018) Available at: <https://www.legislation.gov.uk/uksi/2018/860/made>
- Tricker, B. (2012). *Corporate governance: Principles, policies and practices* (2nd ed.). Oxford: Oxford University Press.
- Yatim, P. (2010). Board structures and the establishment of a risk management committee by Malaysian listed firms. *Journal of Management and Governance*, 14, 17–36.

Yeh, Y. H., Chung, H., & Liu, C. L. (2011). Committee Independence and financial institution performance during the 2007–08 credit crunch: Evidence from a multi-country study. *Corporate Governance: An International Review*, 19(5), 437–458.

Board Diversity and Gender Quotas

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Synonyms

[Board heterogeneity](#)

Definition

Board diversity refers to the “board composition and the varied combination of attributes, characteristics and expertise contributed by individual board members in relation to board process and decision making” (van der Walt and Ingley 2003, p. 219). Gender is the most relevant feature that may drive board diversity. As a matter of fact, different countries are introducing regulations promoting the appointment of female directors to boards with the purpose of fighting gender inequality in top corporate positions.

Introduction

Board of directors’ diversity is a broad concept that refers to the “board composition and the varied combination of attributes, characteristics and expertise contributed by individual board members in relation to board process and decision making” (van der Walt and Ingley 2003, p. 219). This definition emphasizes two relevant aspects of board diversity: (i) the antecedents of diversity and (ii) its effect (Rao and Tilt 2016). Board

diversity is a multidimensional concept driven by distinct individual director attributes; some are observable (e.g., gender, age, race, or nationality) while others are less apparent (e.g., experience, functional background or education) (Kang et al. 2007; Pelled 1996). Board diversity may affect the operation and dynamics of boards, thereby influencing performance in monitoring and advisory tasks. In line with resource dependence theory (Pfeffer and Salancik 1978), board diversity represents a source for creativity, innovation, and original solutions to problems (Carter et al. 2003; Huse et al. 2009). Directors of diverse backgrounds, knowledge, and skills might contribute to the strategic advisory role of boards by fostering different perspectives (Harjoto et al. 2015; Shaukat et al. 2016). However, it is important to balance the presence of diversity in the board given that too much heterogeneity among directors could lead to conflict and may result in the obstruction of consensus and deterioration of the board decision-making process (Lau and Murnighan 1998; Harjoto et al. 2015).

By means of its influence on board tasks, board diversity is an important determinant of firm performance in both financial and corporate social responsibility (Rao and Tilt 2016). Boards of directors are an important determinant of CSR practices given that one of their duties is to provide management with strategic advice (Jamali et al. 2008). By broadening the perspectives and backgrounds in the boardroom, diversity fosters the sensitivity of the board toward all stakeholders, not just toward shareholders (Harjoto et al. 2015; Rao and Tilt 2016).

Nowadays, the presence of female directors is the attribute most subject to attention among the different demographic characteristics that could lead to diversity. Gender inequality in top corporate positions is a global issue. This issue is particularly relevant when analyzing board of directors because women are significantly underrepresented as compared to their male peers (Terjesen et al. 2015). Female directors are more likely to be on boards in countries with more females in top management, a lower gender pay gap and a lower presence of women in political positions (Terjesen and Singh 2008). In addition,

the representation of female directors is greater at family firms, where they are usually appointed for simply being part of the family (Terjesen et al. 2015).

The overall smaller presence of women on boards is driven by a gender-stereotype effect in the board recruitment process. Women consistently face greater difficulties than men in achieving top level positions due to a “glass ceiling” effect. This term refers to invisible barriers impeding the promotion of women within organizations. These barriers are linked to an unjustified social belief claiming that women lack the adequate human capital in terms of skills, experience, and background to properly undertake upper-echelon positions (Powell 1999). The similarity-attraction paradigm (Byrne 1971) and homosocial reproduction theory (Daily and Dalton 1995) also suggest that individuals are more comfortable working with people akin to them (Byrne 1971). Thus, CEOs and current directors, mostly men, are more likely to support the appointment of new male directors (Terjesen et al. 2009). Women are required to possess greater skills and abilities to attain the same board position. The lack of transparency in director recruitment and appointment has contributed to maintaining biased and inadequate selection procedures.

Gender inequality is undesirable because it represents an ethical and moral problem; it restricts the access of women to the boardroom. Furthermore, it creates problems for firm effectiveness because they do not exploit talent from the pool of suitable director/management candidates (Terjesen et al. 2015; Terjesen and Sealy 2016). Thus we may observe a growing social and governmental demand to increase female participation in top-level positions, especially on boards of directors. Some countries, especially in Europe, have responded to this demand by proposing several instruments to promote/encourage the appointment of female directors.

Gender diversity has become an important topic of debate subject to growing public attention. This relevance has given way to a significant line of research that studies the antecedents, motivations, and consequences of the presence of women on boards and gender quotas. The papers

of Terjesen and coauthors on these issues, quoted throughout the text, help to understand these phenomena.

Instruments to Promote the Presence of Women on Boards

Two types of instruments are currently being used to increase the representation of women on boards of directors. Some governments are advocating soft law regulation by proposing voluntary mechanisms while others have decided to establish hard law regulation through mandatory mechanisms (Terjesen et al. 2015). The most common measure among the voluntary instruments is the inclusion of recommendations on board gender equality in national corporate governance codes (e.g., Australia, Austria, Denmark, Germany, Ireland, Luxembourg, Malawi, Malaysia, The Netherlands, Nigeria, Poland, South Africa, Sweden, United Kingdom, and the United States) (Terjesen et al. 2015). Some of these codes set a voluntary target for the proportion of female board members. In contrast to this approach, others simply highlight the importance of fighting gender inequality and the need to appoint female directors. The recommendations usually follow the “comply or explain” principle: firms must indicate whether they comply with the gender recommendation and explain why if they fail to do so. In addition to corporate governance code recommendations, other voluntary mechanisms are available, for example, proposed training and mentoring programs, awards for gender-balanced companies, or the creation of databases on qualified women for board positions (European Union 2013).

Regarding the legal mechanisms, some countries set mandatory quotas so that women must represent a specific proportion of board members. Companies are required to meet the quota and may face sanctions if they refuse to do so. The specific requirements of the quotas vary from one country to another. For instance, targeted firms could be state-owned, public, or both. The required proportion of women also differs significantly. It goes from the presence of at least one female director in India and United Arab Emirates

to 50% in Quebec (Canada) and Austria. The timetable for the quota implementation and the sanctions for firms also vary. In Norway, penalties are strict, even leading to firms being delisted or dissolved. By contrast, Spain prescribes no sanctions. The Spanish government tries to incentivize compliance with the quota by providing benefits to complying firms. In Italy, penalties become stricter the longer the company fails to comply; they may even result in the annulment of the board of directors.

European continental countries are more likely to establish board gender quotas. According to Terjesen et al. (2015), countries with quotas are usually characterized by three institutional factors. Quotas are more likely in countries with more policy welfare provisions, a left-party government, and a history/record of numerous initiatives fostering gender equality at the political and corporate levels.

The European Union advocates the establishment of gender quotas on boards of directors. The European Commission submitted a proposal for a directive on board gender equality in 2012. The proposed directive states that the underrepresented sex should account for 40% of nonexecutive directors at listed companies. Firms may also comply with the directive if the underrepresented sex represents at least one-third of all board members. The deadline for attaining this target is 2020. The proposal considers sanctions, such as administrative fines or the annulment of the appointment of directors, if companies fail to achieve the 40% goal/target. Although the proposal is currently under study, the European Parliament has already claimed its support for the directive, but some member countries are against establishing binding quotas.

Motivations for Establishing Board Gender Quotas

Proponents base their justification for establishing board gender quotas on two types of arguments: (i) a quest for justice and (ii) a potential positive effect on company performance. The first type of reasoning, justice, is grounded on the access of

men and women alike to the same positions. The Article 2 of the Universal Declaration of Human Rights states that no distinction should be made among human beings based on sex. However, as abovementioned, the presence of significant differences between genders in access to jobs is owed to the fact that women face stronger barriers to access top level decision-making position in firms than do men (Terjesen et al. 2009). As a minority group, women require higher qualifications to overcome discrimination stereotypes for a directorship (Hillman et al. 2002). Board gender quotas help to achieve equality by promoting the underrepresented sex to make an equitable distribution of top-level corporate positions. Increasing female representation on boards contributes to “building more inclusive and fairer business institutions that better reflect their present generation of stakeholders” (Terjesen et al. 2009, p. 320).

The second type of reasoning argues that the presence of women on boards enhances the performance of firms (Terjesen and Sealy 2016). By considering women in selection procedures and appointing them to board, firms effectively utilize the pool of human capital and hire the most talented individuals. If this is properly done, the presence of women increases the diversity of skills and abilities in the boardroom and contributes to the board decision-making process. Women are different to men in terms of backgrounds, experience, and personalities (Huse 2008; Terjesen et al. 2009). Furthermore, female directors also improve knowledge because they usually hold higher academic qualifications and broader international experience than their male counterparts (Singh et al. 2008). The diverse set of individual member attributes and characteristics fosters innovation, creativity, and the problem-solving capacity of the board as a whole. These enhancements to the board’s decision-making process ultimately lead to improved financial performance. Female presence is also likely to improve CSR performance because women are more sensitive to all of the stakeholders’ concerns (Terjesen et al. 2009). Nonetheless, female directors may feel constrained and may be reluctant to express their opinions (Terjesen et al. 2009). Thus, the positive effects provided by women may not

take place unless a critical mass of them is represented on the board (Konrad et al. 2008). Establishing gender quotas helps to achieve this critical mass of women and thereby leverage this positive impact.

Finally, board gender quotas are expected to have a spillover effect and increase female presence at all company levels as well as in the economy. They may also help to reduce the gender-pay gap. What is more, female directors may motivate other women to access management jobs (Bilimoria and Wheeler 2000).

Are Quotas Achieving Their Expected Goals?

Quotas are useful instruments for increasing the number of females, especially as compared to nonbinding measures like recommendations on corporate governance codes directors (Walby and Armstrong 2012). However, the presence of women on boards of directors is still low (Terjesen et al. 2015). Despite the improvements they have driven, quotas fall short of being effective to adequately increase female board representation. The severity of the noncompliance sanctions established by the country issuing the quota seems to partly determine the achievement of the target. For instance, sanctions in Norway are hard, and they could eventually lead to the dissolution of the company. Thus, the majority of the Norwegian companies affected by quotas achieved the 40% target. By contrast, many Spanish firms do not meet the same 40% threshold suggested by their national quota. Spain follows an incentive approach with no particular sanctions for companies failing to meet the quota.

Whether or not the representation target is met, several issues question the suitability of legally imposing board gender quotas. Although gender inequality on boardrooms is undesirable, quotas may raise ethical tensions because they try to “prevent discrimination by utilizing discrimination” (Terjesen and Sealy 2016, p. 33). The establishment of a quota might bias the selection procedure for new directors as firms may have to hire women to meet the quota regardless of their

qualifications (Terjesen et al. 2015). In so doing, quotas reduce the freedom of companies and their owners to select the most suitable individual. As a consequence, newly appointed women could feel their nomination is less legitimate because they may have been hired for firm compliance rather than for their actual merits (Sealy 2010). Nonetheless, after the quota is met, women consider they really improve the performance of the board because they are more qualified than former male directors (Terjesen and Sealy 2016).

Another problem relates to the scope of the quota. The change led by quotas is quite limited because, as Terjesen et al. (2015) noted, most of these quotas only affect listed and state-owned firms, while most companies are private. Additionally, quotas fail to increase the pool of women candidates when analyzing new board appointments because same women are actually appointed on different boards. This group of women is known as the “golden skirts” (Huse 2011).

Finally, it is noteworthy to point out that quotas could also create organizational problems, particularly for multinational companies. They could create market barriers because the voluntary or mandatory nature of female board representation may vary among countries in function of the targeted firms and fixed proportion (Walby and Armstrong 2012).

To conclude, even though quotas help to increase the presence of women on boards, they still present some inefficiencies making their suitability questionable. They should therefore be combined with other mechanisms that contribute to promoting female representation. To this respect it seems crucial to establish instruments to fight/break the barriers impeding/hindering the access of women to top level positions in the first place. Gender equality can only be effectively achieved by diminishing the cultural and environmental factors obstructing the absence of discrimination in the job market.

Summary

This chapter covers the topic of board diversity, with a particular focus on gender diversity. After

introducing the concept of board diversity, the chapter explains the main instruments that are used to promote the presence of female directors on boards. In the last sections, the application of gender quotas is briefly analyzed to characterize their situation and evaluate their influence on board female representation.

Cross-References

- [Board Capital](#)
- [Diversity of Boards](#)

References

- Bilimoria, D., & Wheeler, J. V. (2000). Women corporate directors: Current research and future directions. *Women in Management: Current Research Issues*, 2, 138–163.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic.
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), 33–53.
- Daily, C., & Dalton, D. (1995). CEO and director turnover in failing firms: An illusion of change. *Strategic Management Journal*, 16, 393–400.
- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board diversity and corporate social responsibility. *Journal of Business Ethics*, 132(4), 641–660.
- Hillman, A. J., Cannella, A. A., Jr., & Harris, I. C. (2002). Women and racial minorities in the boardroom: How do directors differ? *Journal of Management*, 28(6), 747–763.
- Huse, M. (2008). Women directors and the “Black Box” of board behavior. In S. Vinnicombe, V. Singh, R. Burke, D. Bilimoria, & M. Huse (Eds.), *Women on corporate boards of directors: International research and practice*. Cheltenham: Edward Elgar.
- Huse, M. (2011). The golden skirts: Changes in board composition following gender quotas on corporate boards. In Australian and New Zealand Academy Meeting, Wellington.
- Huse, M., Nielsen, S. T., & Hagen, I. M. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics*, 89(4), 581–597.
- Jamali, D., Safieddine, A. M., & Rabbath, M. (2008). Corporate governance and corporate social responsibility synergies and interrelationships. *Corporate Governance: An International Review*, 16(5), 443–459.
- Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15(2), 194–207.
- Konrad, A. M., Kramer, V., & Erkut, S. (2008). Critical mass: The impact of three or more women on corporate boards. *Organizational Dynamics*, 37(2), 145–164.
- Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and fault lines: The compositional dynamics of organizational groups. *Academy of Management Review*, 23(2), 325–340.
- Pelled, L. H. (1996). Demographic diversity, conflict, and work group outcomes: An intervening process theory. *Organization Science*, 7(6), 615–631.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Stanford: Stanford University Press.
- Powell, G. N. (1999). *Handbook of gender and work*. Thousand Oaks: Sage.
- Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138(2), 327–347.
- Sealy, R. (2010). Changing perceptions of meritocracy in senior women’s careers. *Gender in Management: An International Journal*, 25(3), 184–197.
- Shaukat, A., Qiu, Y., & Trojanowski, G. (2016). Board attributes, corporate social responsibility strategy, and corporate environmental and social performance. *Journal of Business Ethics*, 135(3), 569–585.
- Singh, V., Terjesen, S., & Vinnicombe, S. (2008). Newly appointed directors in the boardroom: How do women and men differ? *European Management Journal*, 26(1), 48–58.
- Terjesen, S., & Sealy, R. (2016). Board gender quotas: Exploring ethical tensions from a multi-theoretical perspective. *Business Ethics Quarterly*, 26(1), 23–65.
- Terjesen, S., & Singh, V. (2008). Female presence on corporate boards: A multi-country study of environmental context. *Journal of Business Ethics*, 83(1), 55–63.
- Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Review*, 17(3), 320–337.
- Terjesen, S., Aguilera, R. V., & Lorenz, R. (2015). Legislating a woman’s seat on the board: Institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*, 128(2), 233–251.
- Union, E. (2013). *Legal instruments for gender quotas in management boards*. Brussels: European Parliament.
- Van der Walt, N., & Ingley, C. (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate Governance: An International Review*, 11(3), 218–234.
- Walby, S., & Armstrong, J. (2012). Gender Quotas in Management Boards. European Parliament, FEMM Committee. Resource document: <http://www.europarl.europa.eu/document/activities/cont/201202/20120216ATT38420/20120216ATT38420EN.pdf>

Board Diversity and Inclusivity

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Synonyms

Board of Directors, BOD; Diversity; Equality; Gender discrimination; Inclusivity; Race discrimination

Definition

The Board of Directors (BODs) is an internal governance mechanism. The BODs are responsible for safeguarding shareholders and providing the framework which ensures alignment of management interest and those of stakeholder groups (OECD 2004; FRC 2018). As a result of the significant role played by BODs, board diversity and inclusivity are key governance issue in recent times.

Diversity in the boardroom requires an inclusion of different types of people within the organization. Inclusivity on the other hand has a much wider implication, in that, it involves including different types of people within the organization and working effectively to treat them all in an equal and fair manner (Lincoln and Adedoyin 2012a, b).

It is not enough to just have a diverse board. From a legal standpoint, steps must be taken to ensure inclusivity (Equalities Act, 2010) within boardrooms. Inclusivity celebrates the differences in each board member and requires the creation of a culture where trust, candor, and respect are celebrated as key organization objectives. In addition, inclusivity dictates that each member of the board is encouraged to contribute their experience, perspectives, and are not afraid to showcase their identity. Inclusivity promotes a culture of power sharing regardless of a person's personal characteristics and ensures that each

member is equally engaged and invested in the objectives to be achieved (Lincoln and Adedoyin 2012a, b).

Consequently, the board of directors, as the decision-making organ at the highest level of organizational leadership, play a crucial role in creating a culture and an environment that supports equality, promotes integrity and openness, and values diversity and inclusivity. There are benefits in ensuring BODs are diverse and inclusive. Diversity and inclusivity increase firm financial performance and widens the company's talent pool, thereby bolstering creativity and innovation and enabling the company to combine social justice and competitive advantage (Carter et al. 2008; House of Common's BEIS Committee Report 2017).

Introduction

Good corporate governance mandates the creation of an effective internal control mechanism within organizations. Good corporate governance also provides the framework and "structure through which the objectives of the company are set, the means of attaining those objectives" and creation of tools to effectively monitor subsequent performance (Lincoln and Adedoyin 2012a, b; OECD 2004). Furthermore, good corporate governance highlights the importance of the BODs and the role played by the board of directors as the strategic organ of the company. An effective and functional board is essential to ensure organizational success, good corporate governance, and investor relations (Lincoln and Adedoyin 2012a, b; Mallin 2019).

Lincoln and Adedoyin (2012a, b) identify the importance of the board of directors where they state that the board is "tasked with determining the company's aims and objectives and putting in place strategic plans and policies needed to fulfil those aims. The role of the board also involves leading and controlling the company and providing entrepreneurial leadership within a framework of prudent and effective controls which allows for apt assessment and management of risk" (Lincoln and Adedoyin 2012a, b; FRC 2018). According to

Epstein and Roy (2006) high performing corporate boards must seek to achieve three core objectives namely:

1. Strategic leadership for overall organizational growth
2. Transparency and accountability to various stakeholders' groups
3. Creation of qualified executive and management teams (Epstein and Roy 2006)

As a result of the 2007 financial crisis core governance issues such as diverse and inclusive boards, board evaluation, and succession planning are recognized as essential in ensuring board effectiveness. Board diversity and inclusivity allows an organization strengthen board deliberations and decision-making, thus ensuring greater injection of skills and talents into the workplace. "Individuals from different ethnicity, background and cultures bring additional and invaluable insights into the boardroom and reduces the likelihood of a 'group think' mentality forming" (Davies Report 2011; Lincoln and Adedoyin 2012a, b). Furthermore, there is consensus in the academic literature to support the view that a diverse board reflects the real-world reality as companies have a diverse set of clients, customers, and stakeholders. The need to ensure a diverse and inclusive work force is also enshrined in law. The Equalities Act (2010) mandates diversity and an inclusive approach in employment relationships. It identifies Eight protected personal characteristics, namely, disability, age, race, gender reassignment, religious belief, marriage and civil partnership, and sexual orientation.

Age

Section 5 of the Equalities Act (2010) states that "a reference to a person of a particular age group and persons who share a protected characteristic is a reference to persons of the same age group. Furthermore, reference to an age group is a reference to a group of persons defined by reference to age, whether by reference to a particular age or an age range."

Disability

According to Section 6 of the Equalities Act (2010) "a person has a disability if he/she has a physical or mental impairment and said impairment has a substantial and long-term adverse effect on his/her ability to carry out normal day-to-day activities. Reference to a person who has/or persons who share a particular protected characteristic is a reference to a person(s) who has/have the same disability."

Gender Reassignment

Under Section 7 of the Equalities Act (2010) "gender reassignment is recognised as a protected characteristic. Thus, if a person is proposing to undergo, is undergoing or has undergone a process (or part of a process) for the purpose of reassigning the person's sex by changing physiological or other attributes of sex," the person has the protected characteristic. Transsexual persons are also protected under this section.

Marriage and Civil Partnership

A "married person or a person in a civil partnership is a protected class. Consequently, any reference to a person(s) who is/are married or is/are in a civil partnership is a reference to a protected class" (Section 8 of the Equalities Act, 2010).

Race

The Equalities Act (2010) states that a racial group is a class or group of persons defined according to their race. Multiplicity of racial origin does not prevent it constituting a particular racial group. Thus, a racial group may comprise of two or more distinct racial groups. Race is said to include color, nationality, ethnicity, or national origin (Section 9 of the Equalities Act, 2010). Consequently, "a reference to a person who has a particular protected characteristic or a person's racial group is a reference to a person of a particular racial group or reference to a racial group into which the person falls."

Religion or Belief

According to Section 10 of the Equalities Act (2010) religion incorporates both religion and "reference to a religion or a lack of religion. Belief

on the other hand means any religious or philosophical belief and a lack of belief. Accordingly, a reference to a person(s) who has or shares a protected characteristic is a reference to a person(s) of a particular religion or belief or who are of the same religion or belief.”

Sex

Under Section 11 of the Equalities Act 2010, a person is afforded protection on the ground of sex. “A reference to a person who has a particular protected characteristic under Section 11 is a reference to a man or to a woman and a reference to persons who share a protected characteristic is a reference to persons of the same sex.”

Sexual Orientation

Under Section 12 of the Equalities Act (2010) sexual orientation is defined to include “a person’s sexual orientation towards a person of the same sex, opposite sex, or persons of either sex.”

Key Issues

The UK Corporate Governance Code empowers the nomination committee to develop a diverse pipeline of talent and to ensure that appointment and succession plans promote diversity (FRC 2018). According to the FRC (2018), the board of directors should strive to encourage diverse skill sets, knowledge, and experience. Thus, board appointments must be based on merit and objective criteria should be developed which ensures transparent and rigorous appointment of candidates. Selection of members for board appointments should promote various aspects of diversity, for example, cognitive and intellectual prowess, ethnicity, gender, and diverse social background (FRC 2018). In addition, an effective succession plan must be developed for senior members of the management and leadership teams.

Race and Gender Diversity and Inclusivity

Diversity is often defined broadly in terms of gender or race (Mallin 2019). Race in this context

also includes color, nationality, ethnicity, or national origin. (Mallin 2019). There is copious literature on the lack of board diversity and inclusivity vis-a-vis gender and race. For example, a study carried out by Guest (2016) found that minority executives as a whole were not afforded equal treatment when compared to their peers. The minority executives experienced lower promotion, higher demotion, and higher exit from the organization.

There is now increased focus on race diversity, prompted by the 2017 Parker Review. The Parker Review (2017) reported that there was a lack of diversity and representation of minority groups in boardrooms. The Review highlighted several issues that require improvement. For example, the need to ensure more ethnic diversity within UK boards; succession planning, enhanced transparency, and disclosure and development of skilled candidates for succession (Mallin 2019). The main finding was that there was no “director of colour” in 51 of the FTSE 100 companies as of July 2017 (Parker Review 2017; Hannigan 2018) and thus the Review made the following key recommendations:

1. “FTSE 100 board should have at least one director of colour by 2021”
2. “FTSE 250 board should have at least one director of colour by 2024”
3. “Transparency of annual reports and the need for companies to describe actions taken to increase ethnic minority diversity” (Parker Review 2017).

The contributions made by the Parker Review is a step in the right direction, as there is credible evidence to suggest that a diverse board comprised of people from different race and ethnicity perform better than boards comprised of those who share similar personal characteristics. Various Reports highlight the importance of promoting diversity and inclusivity within boards. For example, the Tyson Report (2003) states that diversity helps reduce nepotism, promotes fairness, and stakeholder engagement in corporate decision-making.

There are similar results where gender diversity is concerned. For example, the Davies Report (2011) found that women were underrepresented in boardrooms. The Report recommended that “FTSE 100 boards should aim for a minimum of 25 per cent female representation by the end of 2015,” a figure which was achieved (Davies Report 2015). In ensuring more women representation in senior executive and leadership positions, the Hampton-Alexander review (2017) increased the target to 33 % for FTSE 350 boards and 33 % for FTSE 100 by 2020. The Equality and Human Rights Commission suggests the target should be raised to 50 % (Hannigan 2018; Mallin 2019).

Various countries have also introduced forms of positive action, legislations, and quotas with a view to increasing the number of women in leadership positions (Davies Report 2011). According to Lincoln and Adedoyin (2012a, b), the need for increased participation and representation of women stems from the unique role women play. “Women are independent and possess a better understanding of consumer behaviour and opportunities to meet those needs, this is because women make around 70 percent of consumer purchasing decisions as such being able to connect better with the female workforce and consumer base affords more opportunities for companies to be able to better understand their customer base and drivers of the decision-making process. Various writers suggest that having women in top management can result in higher earnings and greater shareholder wealth and better corporate governance and increased competitive advantage” (Lincoln and Adedoyin 2012a, b).

Research in the UK supports inclusion of more women in leadership positions and in the board room. Carter et al. (2008) asserts that the presence of women in leadership positions and in board of directors results in “improved performance of Fortune 500 companies, primarily through the effect on the boards audit function.” This is because of the fact that “women are shown to pay more attention to monitoring firms and appear to be better at explicitly identifying criteria for measuring and monitoring the implementation of corporate strategy when compared to an all-male

board. In addition, women play a more active role in setting the strategic direction and weighing long-term priorities of the company. The main impact includes increased attendance and better board monitoring and increased diversity in the company’s top management team” (Lincoln and Adedoyin 2012a, b; World Development Report 2012). Research also shows that “having at least one female on the board of directors helps reduce the risk of bankruptcy, enhance accountability and ensure more effective communication between the board and stakeholders” (Wilson and Altanlar 2009; Lincoln and Adedoyin 2012a, b).

Board diversity and inclusivity shows a declaration for equality and a policy for non-discrimination on grounds of a protected characteristics, thus promoting a commitment which ensures people are not disenfranchised and subjugated. Achieving board diversity is not without its challenges. For example, Lincoln and Adedoyin (2012a, b) notes that “coordination may be difficult and costly to attain, consequently potential increase in performance may not be adequate to balance the increased associated costs. Other arguments against board diversity include less efficient decision-making ability, which affect the firm’s ability to compete effectively. Some scholars argued that actively seeking board diversity can be damaging to board cohesion.” Other challenges identified in extant academic debates include increase conflict where there is race, ethnicity, and gender diversity, which results in reduced performance and lack of communication thereby reducing group cohesion (Lincoln and Adedoyin 2012a, b). Notwithstanding the challenges, there is a case to be made for board diversity and inclusivity, a diverse board is one with the right composition of members, equipped with requisite skill and experience needed to make strategic decision and implement long-term vision for organizational survival and growth.

Summary

Board diversity and inclusivity are key determinant of effective corporate governance. Board

diversity encourages better corporate governance, transparency, and effective stakeholder management. Lack of board diversity and inclusivity has a wider impact on the dynamics of the board, firm performance, governance, and social responsibility.

A legal case for diversity and inclusivity is as a result of the fact that it is enshrined in legislation that a person should not be discriminated against on the basis of his or her personal characteristic. For example, the UK Equalities Act 2010 which was enacted to reduce socioeconomic inequalities and increase equality of opportunity for all, prohibits discrimination on grounds of gender, race, ethnicity, religion, age, disability, and sexual orientation.

In addition, there is a conceptual argument for promoting a diverse and inclusive board. The conceptual case stems from the need for a more nuanced understanding of dynamism inherent in an increasingly varied organizational context. Thus, the inclusion of people from diverse backgrounds allows for a more robust awareness of intricacies both within the work environment and on a global scale, thereby ensuring broader perspectives are considered when making decisions, and that there is a genuine attempt at cultural integration and creation of effective global networks.

The reality is that many boardrooms do not reflect gender, race, or ethnic diversity; are not inclusive nor do they reflect the stakeholder groups that the companies engage with. Consequently, it is imperative to continue to ensure annual evaluation of boards to monitor their composition, to ensure they are diverse and inclusive, while also ensuring that the board can work together effectively in order to achieve set objectives. Furthermore, organizations policy on diversity and inclusivity must meet the objectives set out in various corporate governance codes and government reviews targeted toward achieving greater board diversity and inclusivity.

Cross-References

► [Board Committees and Corporate Governance](#)

References

- Adams, B., & Ferreira, D. (2009). Women in the boardroom and their impact on corporate governance and performance. *Journal of Financial Economics*, 94, 291–309.
- Branson, D. (2006). *No seat at the table: How corporate governance and law keep women out of the boardroom*. New York: New York University Press.
- Carter, D., D'Souza, F., Simkins, B., & Simpson, W. (2008). *The diversity of corporate board committees and financial performance* (Working paper). Oklahoma State University.
- Davies, E. M. (2011). *Women on boards*. London: Department of Trade and Industry, BIS.
- Davies, E. M. (2015). *Women on boards, five year summary*. London: BIS.
- Epstein, M., & Roy, M. (2006). Measuring the effectiveness of corporate boards and director's. In M. J. Epstein & K. O. Hanson (Eds.), *The accountable corporation*. Westport: Praeger Publishers.
- Financial Reporting Council. (2018). *The UK corporate governance code*. London: The Financial Reporting Council Limited. Available at <https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-UK-Corporate-Governance-Code-FINAL.pdf>
- Hampton, A. (2017). *Improving gender balance in FTSE leadership, FTSE Women Leaders*. Sponsored by KPMG, London.
- Hannigan, B. (2018). *Company law* (5th ed.). Oxford: Oxford University Press.
- House of Commons. (2017). *Business, Energy and Industrial Strategy (BEIS) Committee Report on corporate governance*. Diversity and Inclusion Group, House of Commons.
- Lincoln, A., & Adedoyin, O. (2012a). Corporate governance and gender diversity in Nigerian boardrooms. *World Academy of Science, Engineering and Technology*, 71.
- Lincoln, A. A., & Adedoyin, O. (2012b). Corporate governance and gender diversity in Nigerian boardrooms. *Development Economics: Women*.
- Mallin, C. A. (2019). *Corporate governance* (6th ed.). Oxford: Oxford University Press.
- Nordberg, D. (2011). *Corporate governance: Principles and issues*. London: Sage Publications.
- OECD. (2004). *Principles of corporate governance*. Available at <http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf>
- Parker Review. (2017). *A report into ethnic diversity of UK boards: 'Beyond one by 21'*. Sponsored by EY and Linklaters, London.
- Singh, V. (2007). Ethnic diversity on top corporate boards: A resource dependency perspective. *International Journal of Human Resource Management*, 18(12), 2128–2146.

Tyson, L. (2003). *The Tyson Report on the recruitment and development of non-executive directors*. London: London Business School.

Wilson, N., & Altanlar, A. (2009). Director characteristics, gender balance and insolvency risk: An empirical study. Abstract May 2009. Available at <http://ssrn.com/abstract=1414224>

World Development Report. (2012). *Gender differences in employment and why they matter*. Available at, <http://siteresources.worldbank.org/INTWDR2012/Resources/7778105-1299699968583/7786210-1315936222006/chapter-5.pdf>

Board Heterogeneity

- [Board Diversity and Gender Quotas](#)

Board Independence

- [CSR Disclosure Quality: Role of NEDs](#)

Board Intellectual Capital

- [Board Capital](#)

Board Knowledge, Skills and Relationships

- [Board Capital](#)

Board of Directors

- [Board Committees and Corporate Governance](#)
- [Board of Directors and Corporate Governance](#)
- [Management](#)
- [One-Tier Board](#)

Board of Directors and Corporate Governance

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Synonyms

[Audit risk and internal control](#); [Board of directors](#); [Board structures](#); [Composition](#); [Leadership and responsibility](#); [Remuneration](#); [Succession and evaluation](#)

Definition

The board of directors is the beacon of the company, tasked with the responsibility for postulating the firm's strategic vision, ensuring transparency and accountability to shareholders and stakeholders. A significant difference between countries is the type of board. Boards can either be "unitary" or "dual" depending on the country.

The unitary board, commonly referred to as the one-tier board, is characterized by one single board, comprising both executive and non-executive directors. Unitary boards are charged with the overall responsibility of monitoring management and determining and implementing the strategy of firms. Unitary boards are vested with the responsibility for all aspects of the company's activities. Shareholders elect directors to the board at the company's annual general meeting (AGM), and all the directors work to achieve the same ends (Mallin 2019). Unitary boards are prevalent in Anglo-Saxon countries such as the United States, Australia, and New Zealand (Mallin 2019).

The dual board, commonly referred to as two-tier board, is the prevalent type of board worldwide. Dual boards are widespread in countries such as Austria, Denmark, and Germany (Mallin 2019). A dual board system consists of a supervisory board and an executive board of management. The supervisory board oversees the

direction of the firm and as such is comprised entirely of nonexecutive directors who are appointed by shareholders and other stakeholders. The management board is tasked with the running of the firm and is composed entirely of executive directors who are appointed by the supervisory board to run the firm (Mallin 2019).

Introduction

Ultimately, the board of directors' paramount responsibility is to ensure positive performance of the firm and maximize wealth for its shareholders. In recent times, this responsibility has been extended to cater for a variety of stakeholder groups. Consequently, the board of directors is also tasked with aligning the firm's objectives with the stakeholder's expectations. Effective corporate governance mandates a hierarchy of accountability of the firm to various stakeholders. The board provides entrepreneurial, strategic, and ethical leadership to the firm and ensures that management is acting in the best interests of owners and other stakeholders through the board's advisory and monitoring roles, thus enhancing and sustaining the prosperity of the firm. This assertion is also echoed by the UK Corporate Governance Code which states that "a successful company is led by an effective and entrepreneurial board, whose role it is to promote the long-term sustainable success of the company, generating value for shareholders and contributing to wider society" (Financial Reporting Council 2018). To this end, "the board should establish the purpose of the company, its core strategy and cultural values and ensure clear alignment." In addition, company directors must strive to act with integrity and promote organizational culture through effective leadership. The company should also ensure that it provides required resources for the company to meet its objectives. Finally, effective control mechanisms should be established to cater for assessment of risk and encourage shareholder and stakeholder participation (Financial Reporting Council 2018).

There is synergy therefore with the "Enlightened Shareholder Value" concept enshrined into

UK company law legislation by virtue of Section 172 of the Companies Act 2006, "the Board of Director is expected to understand the views of the company's other key stakeholders and describe in the annual report how their interests and the matters set out in section 172 of the Companies Act 2006 have been considered in board discussions and decision-making." Accordingly, Section 172 of the Companies Act (2006) states that the director in promoting the success of the company should: "act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard to:

- (a) the likely consequences of any decision in the long term,
- (b) the interests of the company's employees,
- (c) the need to foster the company's firm relationships with suppliers, customers and others,
- (d) the impact of the company's operations on the community and the environment,
- (e) the desirability of the company maintaining a reputation for high standards of firm conduct,
- (f) the need to act fairly as between members of the company."

Key Issues

The role and responsibilities of the board of directors in countries around the globe is contained in various corporate governance codes and guidelines. The board of directors is tasked with the responsibility of implementing the guidelines and principles contained therein. For example, the UK Corporate Governance Code (2018) contains a set of principles which highlight the "importance of good corporate governance to long-term sustainable success."

Board Leadership and Division of Responsibilities

A well-balanced, independent, and qualified board is essential to corporate governance as composition has a direct impact on corporate performance. The board of directors is led by the "Chairman" who is responsible for the overall

direction and effectiveness of the firm, setting board agenda, overseeing hiring, firing, and evaluating chief executive officer remuneration (Tricker 2012). The chair should seek to demonstrate objective judgement throughout their tenure in office and promote a culture of openness and debate. The importance of the position of the chair can also be seen when one considers their role in facilitating board relations, effective contribution of all nonexecutive directors, and provision of accurate, timely, and clear information to directors.

The chief executive officer (CEO) is the “single most influential individual responsible for the overall management” and performance of firms (Mallin 2019). The majority of academics and policy-makers favor CEO and chairman separation as they argue it ensures checks and balances, enhances board independence and accountability, and reduces potential conflict of interests (OECD 2004; Mallin 2019). Several countries including Australia, Belgium, Canada, France, Germany, Italy, Japan, Sweden, Switzerland, the Netherlands, and the United Kingdom advocate for the separation of roles. For example, the UK Corporate Governance Code states that the roles of chair and chief executive should be held by separate individuals. In exceptional circumstances, where duality be favored, this should be proposed by the board, and major shareholders should be consulted ahead of appointment. Furthermore, the board should provide a clear rationale to shareholders at the time of the appointment. This information should also be provided on the company website (Financial Reporting Council 2018).

The promoters of the two main governance theories also call for separation of the roles. Agency theorists argue that the position of chairman and CEO should not be held by the same person. The reasoning here is that separation of the roles is said to dilute the power of the CEO thus enabling the board to properly exercise independent judgment and critically evaluate CEO and management performance (Jensen 1993). Stakeholder theorists assert that duality hinders the stakeholder orientation of directors. Thus, duality is seen to provide an individual with immeasurable powers, including the authority to

establish strategic influences. Such power and influence can intimidate other directors and restrict stakeholder orientation in firms (Lincoln et al. 2013).

The board is supported by the office of the company secretary. The company secretary advises the board on all corporate governance matters. The company secretary must act in good faith and avoid conflict of interest (Mallin 2019). Furthermore, the company secretary ensures that the board and relevant board subcommittees are equipped with requisite information and resources to function effectively. Directors require accurate, relevant, timely, and continuous information regarding internal and external environment of firms (OECD 2004; Tricker 2012). Such information should include firms’ industry, competitors, customers, products, operations, financial position, and the overall political, economic, social, and technological environment.

Nonexecutive directors (NEDs) and independent nonexecutive directors (INEDs) play a prominent role in the corporate governance agenda. There is growing consensus in corporate governance literature that the board of directors should be comprised of a sufficient number of NEDs and INEDs to ensure that it can exercise independent judgment of corporate affairs (OECD 2004; BCBS 2010). NEDs are directors who do not hold executive management position in firms; they act as a control mechanism of executive directors by ensuring that no individual or group can unduly influence board of directors’ decisions (Mallin 2019). NEDs help in minimizing conflict of interest among stakeholders, particularly between shareholders and regulators, and contribute to the overall leadership and competitiveness of the firm (Mallin 2019). That said, their ability to effectively execute their responsibilities depends on NEDs having sufficient time and possessing the appropriate knowledge and skills to be effective. Additionally, the effectiveness of NEDs is dependent on information symmetry between executive directors and NEDs. Therefore, various national codes and international principles recommend that NEDs must be supplied with necessary information in a timely manner. INEDs, on the other hand, are directors with no affiliation or

relationship with firms, who can exercise objective and independent judgment (Mallin 2019). INEDs effectively monitor management and help improve performance by ensuring compatible remuneration incentives for managers. INEDs are not incentivized to pursue short-term objectives for remuneration and so are more inclined to properly carry out their functions. INEDs enhance board independence and objectivity, transfer valuable knowledge to the company, and efficiently use its resources.

Succession and Evaluation

According to the UK Corporate Governance Code, an effective succession plan should be maintained for board and senior management (Financial Reporting Council 2018). “Appointments and succession plans should be based on merit and objective criteria and, within this context, should promote diversity of gender, social and ethnic backgrounds, cognitive and personal strengths” (Financial Reporting Council 2018). Furthermore, a “nomination committee is required to lead the process for appointments and ensure plans are in place for orderly succession to both the board and senior management positions. A majority of members of the committee should be independent non-executive directors. The chair of the board should not chair the committee when it is dealing with the appointment of their successor” (Financial Reporting Council 2018). The appointments of directors should be formal, rigorous, and transparent, and all directors should be subject to annual reelection. Directors should be appointed on an objective basis including merit and having sufficient time to effectively discharge their responsibilities.

The board and its committees should have a combination of skills, experience, and knowledge. Directors should receive a full, formal, and tailored induction on appointment and should regularly refresh their skills and knowledge by attending training programs. Furthermore, “consideration should be given to the length of service of the board as a whole and membership regularly refreshed. An annual evaluation of the board should also consider its composition, diversity

and how effectively members work together to achieve objectives.”

To ensure that directors have sufficient time to fulfil their role and responsibilities, several corporate governance codes have restricted the maximum number of concurrent directorships a person can hold (OECD 2004). The UK Corporate Governance Code states that the “chair should not remain in post beyond nine years from the date of their first appointment to the board. To facilitate effective succession planning and the development of a diverse board, this period can be extended for a limited time, particularly in those cases where the chair was an existing non-executive director on appointment and a clear explanation should be provided” (Financial Reporting Council 2018).

Audit, Risk, and Internal Control

Good corporate governance mandates the introduction of internal controls to ensure effective audit and risk prevention. The board of directors is also tasked with the “establishment of formal and transparent policies and procedures to ensure the independence and effectiveness of internal and external audit functions.” To ensure that auditors perform their functions, they should be individuals who are independent, competent, and ethical and possess personal integrity. The internal control system should achieve efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations (Financial Reporting Council 2018; Mallin 2019).

The board should “establish procedures to manage risk, oversee the internal control framework, and determine the nature and extent of the principal risks the company is willing to take in order to achieve its long-term strategic objectives” (Financial Reporting Council 2018). Consequently, an audit committee should be established. The audit committee as a whole shall have competence relevant to the sector in which the company operates and should be responsible for reviewing the integrity of financial reports and overseeing the independence and objectivity of external auditors. In order to ensure that the audit committee fulfils its role and responsibilities effectively and independently, there should be a

minimum of three independent nonexecutive directors, or two in the case of smaller companies. At least one member must have recent and relevant financial experience. The chair of the board should not be a member (Financial Reporting Council 2018). The importance of the audit committee in ensuring effective corporate governance cannot be overemphasized. As Mallin (2019) puts it “the audit committee is arguably the most important of the board sub-committees.”

Remuneration

Directors should be adequately remunerated to ensure that they are motivated to pursue stakeholder interests. Inadequate remuneration fails to align manager and shareholder interests and impacts corporate governance practices and managerial conduct. While stronger remuneration packages would promote good corporate governance practices, caution must be exercised to ensure that management are not encouraged to pursue accounting malpractices for higher remuneration (Mallin 2019).

The UK Corporate Governance Code advocates for a remuneration committee to be established with a “minimum membership of three, or in the case of smaller companies, two tasked with deciding executive remuneration” (Financial Reporting Council 2018). Directors when authorizing remuneration outcomes are encouraged to “exercise independent judgement and discretion and take into account the company, individual performance as well as the wider circumstances” (UK Corporate Governance Code, 2018). Thus, the key is to ensure that executive remuneration aligns with the company purpose and values and is designed and clearly linked to support strategy and promote long-term sustainable success and that no director should be involved in deciding their own remuneration outcome.

Summary

The board of director is the primary internal corporate governance mechanism. The board is responsible for overseeing firm objectives and advising executive management. The board of directors is crucial to the corporate governance

agenda and helps resolve ethical issues by curtailing opportunistic behavior of executives. Consequently, efficient boards must provide strategic guidance which promotes accountability to stakeholders, and the presence of a competent and qualified management team.

A sound corporate governance strategy allows the board of directors to effectively execute their core functions, thereby reducing the reoccurrence of corporate collapses. Recent corporate collapses unearth significant failing on the part of the board of directors. There are examples of board of directors clearly ignoring good governance practices, personally enriching themselves, lacking requisite skills/qualifications to ensure full and effective oversight functions, lacking independence, possessing weak ethical standards, engaging in corrupt practices, and lacking commitment.

The strategic adoption of corporate governance practices and the creation of clearly defined boards that properly implement governance strategies, oversee risk management and remuneration packages, and manage succession planning should be encouraged in all firms. It is also imperative that there be clear distinction between management and control in order to safeguard board independence.

References

- BCBS. (2010). *Principles for enhancing corporate governance*. Available <https://www.bis.org/publ/bcb176.pdf>
- Companies Act. (2006). Available <https://www.legislation.gov.uk/ukpga/2006/46/contents>
- Financial Reporting Council. (2018). *The UK corporate governance code*. London: The Financial Reporting Council Limited. Available at <https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-UK-Corporate-Governance-Code-FINAL.pdf>.
- Lincoln, A., Fields, R., & Adedoyin, O. (2013). Chairman/CEO duality and its effects for the management of corporate governance in Guyana. *International Journal of Business and Management*, 8(20), 36–47.
- Mallin, C. A. (2019). *Corporate governance* (6th ed.). Oxford: Oxford University Press.
- OECD. (2004). *Principles of corporate governance*. Available at <http://www.oecd.org/corporate/ca/corporate-governanceprinciples/31557724.pdf>
- Tricker, B. (2012). *Corporate governance: Principles, policies and practices* (2nd ed.). Oxford: Oxford University Press.

Board of Directors, BOD

- [Board Diversity and Inclusivity](#)

Board Performance

- [Good Governance](#)

Board Structures

- [Board of Directors and Corporate Governance](#)

Boiling Point

- [Tipping Point](#)

Bonus

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Synonyms

[Bonus pay](#); [Incentive compensation](#); [Incentive remuneration](#); [Pay incentive plans](#); [Stock options](#)

Definition

In the governance literature, the bonus identifies the variable component of incentive remuneration packages (Bryan et al. 2000; Jensen and Murphy 2004; Sanders 2001; Wu 2007) aiming to reward managers and executives (Izhakian and Yermack 2017; Kraus 2017).

In this regard, it is worth noting that the remuneration schemas encompass both the fixed wages and the short/long-term variable bonus pay (Conyon and Murphy 2000; Hoi and Robin 2004). Over the last decades, this latter component has experienced an increasing adoption even outside the Anglo-American companies where the widespread use of incentive remuneration packages started in the mid-1980s (Conyon and Peck 2001; Core et al. 2003). The tendency under scrutiny is especially pronounced for the bonus plans involving stock options that, since then, have been massively used in order to reward top managers and executives (Balsam 2002; Frydman and Saks 2010; Towers Perrin 2000, 2005). Indeed, while in the mid-1980s this kind of remuneration covered one-fifth of the average managerial compensation, in the 2000s its proportion has become the largest one, especially in the USA (Dunford et al. 2010; Hall and Murphy 2002; Murphy 1999).

However, the spread of incentive pays has not only questioned the remuneration gap between managers and rank-and-file employees (Hall and Liebman 1998) but it has also placed the factors that drive and affect the related use at the centre of the debate.

Stemming from these premises, the chapter illustrates the theoretical rationale of bonus pay and discusses the governance implications of such incentive remuneration component.

Theoretical Foundations and Governance Implications of Bonus Pay

From a theoretical standpoint, the rationale of granting the bonus pay lies on the divergence of interests between powerful reckless managers and dispersed heterogeneous owners described by the classic specification of the agency theory (i.e. agency problem type I) (Bebchuk et al. 2002; Berle and Means 1932; Jensen and Meckling 1976).

Building on this framework, some scholars posit that the incentive remuneration component under scrutiny is able to address the above-mentioned conflicts and motivate managers

toward the shareholder value maximization (Jensen and Murphy 2004; Towers Perrin 2000, 2005; Zattoni 2007; Zattoni and Minichilli 2009) as it limits their opportunistic behaviour (Ross 1973). Indeed, agency proponents argue that the presence of a direct link between managerial compensation and company performance (Jensen and Murphy 1990) provides managers (agents) with incentives to risk taking and value creation (Edmans and Gabaix 2011; Gormley et al. 2013; Harford and Li 2007; Hayes et al. 2012) by aligning their interests with those of shareholders (principal) (Bryan et al. 2000; Holmstrom and Costa 1986; Jensen and Murphy 2004; Wu 2007). This is especially true in companies characterized by widely dispersed ownership structures where the risks of misleading behaviour by managers and executives are sizable due to the high costs of their supervision (Bebchuk and Fried 2006; Shleifer and Vishny 1997).

The empirical research supports these conclusions and provides evidence on the alignment between the interests of shareholders and managers by highlighting that the incentive bonus pay is associated with higher pay-for-performance sensitivity (Kuang and Qin 2009; Jensen and Murphy 1990).

According to scholars, the bonus plan design is one of the main drivers of the alignment effect as literature suggests that its effectiveness encourages managers to maximize the shareholder value (Bebchuk et al. 2002; Bebchuk and Fried 2006; Johnson and Tian 2000; Kuang and Qin 2009; Zattoni 2007). This circumstance is particularly pronounced for the length of the incentive plan (Wheeler 2004) since the choice of long-term horizons hampers the managerial myopia and motivates managers to take value-maximizing decisions by discouraging their short-term opportunistic behaviour (Fudenberg et al. 1990; Hoi and Robin 2004; Jensen and Murphy 2004; Peng and Roell 2008). Shifting the attention to specific incentive pay schemas, such as the stock options, similar conclusions can also be drawn with regard to the identification of the related exercise price (Bettis et al. 2018). Indeed, the choice to link the striking price to the performance of comparable firms/competitors provides incentives to the firm

value maximization (Bebchuk et al. 2010; Bertrand and Mullainathan 2001; Johnson and Tian 2000; Sautner and Weber 2011) as managers are rewarded on the basis of their contribution to the value of company shares (Bebchuk et al. 2002; Kuang and Qin 2009).

Nevertheless, prompted by the wave of scandals in the late 1990s and the anecdotal evidence in the last decades, scholars have questioned the ability of the bonus remuneration to align the conflicting interests of managers and shareholders (Catuogno et al. 2016a, b; Tosi et al. 2003), even in companies with concentrated ownership structures (Melis et al. 2012; Zattoni 2007). In this regard, academics and practitioners emphasize that, in given circumstances, the incentive pay can be also symptomatic of an opportunistic behaviour and interpret the managerial grants as signal of extraction of private benefits (Bebchuk et al. 2002; Bebchuk and Fried 2006).

On the basis of these premises, scholars suggest that bonus plans prompt entrenched and opportunistic managers to expropriate the company wealth to the detriment of shareholders (Bebchuk et al. 2002; Bebchuk and Fried 2003, 2006; Core et al. 1999). In particular, powerful managers can take advantage of the board ineffectiveness (Andreas et al. 2012; Capezio et al. 2011; Chhaochharia and Grinstein 2009; Sun and Cahan 2009) and the collusive cooperation with the compensation committee to opportunistically set their own pay (Barontini and Bozzi 2009; Cao et al. 2011; Fracassi and Tate 2012; Goergen and Renneboog 2011; Gong 2011; Lin and Lin 2014). Therefore, in these circumstances, the bonus compensation tends to exacerbate the agency conflicts since managers receive pay in excess of the optimal amount for shareholders (Bebchuk et al. 2002; Bebchuk and Fried 2006).

Aside these arguments, it is worth noting that the use of the bonus pay can also be interpreted in the light of the related costs (Hall and Murphy 2002). Indeed, academics posit that the choice of the incentive remuneration under scrutiny relies on the costs and perceived risks (Zattoni and Minichilli 2009) that it entails since managers are especially concerned with their accounting

and tax implications (Catuogno et al. 2016a; Hall and Murphy 2003; Murphy 2002).

Overall, literature suggests that the attitude of bonus pay to address the agency conflicts or to foster the managerial entrenchment depends on the legal protection of investors provided by the regulation in force (Bender and Moir 2006; Coles et al. 2006; Perry and Zenner 2001; Rajgopal and Shevlin 2002) and on the type of ownership structure (Conyon 2014; Gomez-Mejia et al. 2007; Nyberg et al. 2010; Zattoni and Minichilli 2009). As for the former, studies emphasize that the stronger investor protection and the presence of disclosure compliance requirements of bonus pay are able to hamper the opportunistic behaviour of entrenched managers (Enriques and Volpin 2007; Liu et al. 2014; Nelson et al. 2010; O'Connor et al. 2006). With regard to the latter, the research is still inconclusive since it has not univocally interpreted the ability of incentive pay schemas to address the conflicts between managers and owners. In particular some studies highlight that, in widely held listed firms, these governance mechanisms effectively align the conflicting interests of manager and owners (Chalmers et al. 2006; Conyon 2014; Kuang and Qin 2009; Nyberg et al. 2010). Differently, other research draws opposite conclusions by suggesting that the strong managerial power due to this kind of ownership structures fosters the opportunistic use of incentive remuneration (Shleifer and Vishny 1997) and the extraction of private benefits to the detriment of shareholders (Core et al. 1999; Tosi et al. 2003).

The same inconclusiveness also characterizes the research efforts related to the blockholder-dominated companies (Barca and Becht 2001; Faccio and Lang 2002; Melis et al. 2012). Indeed, while some studies document that the incentive compensation is able to align the conflicting interests of owners and managers (Nagaoka 2005; Zattoni and Minichilli 2009), other research posits that the overlapping between directors/managers and owners allows blockholders to use remuneration to expropriate the firm wealth (Melis et al. 2012; Su et al. 2010). This last circumstance is especially pronounced for companies ruled by control enhancing mechanisms (Cao et al. 2011; Cuomo et al. 2012; Institutional Shareholder

Services 2007; Saggese 2013, 2018; Saggese et al. 2016) as well as when the concentrated ownership is combined with the family control (Barontini and Bozzi 2009). Indeed, literature suggests that the deviation from the proportionality principle due to control enhancing devices (Adams and Ferreira 2008; Burkart and Lee 2008; Grossman and Hart 1988) provides majority shareholders with incentives to extract private benefits of control through the incentive compensation (Barontini and Bozzi 2009; Chourou 2010; Haid and Yurtoglu 2006; Masulis et al. 2009; Tinaikar 2014). Similar conclusions are drawn with regard to the firms controlled by a family owner. Indeed, research documents that the incentive pay can be used by opportunistic family managers to extract rents to the detriment of non-family shareholders (Berrone et al. 2010; Gomez-Mejia et al. 2007; Kellermanns et al. 2012; Morck and Yeung 2003; Stockmans et al. 2010; Zattoni and Minichilli 2009).

Notwithstanding the scholarly efforts to identify the implications of incentive bonus pay, there are still open issues on how the governance characteristics (i.e. governance mechanisms and governance roles) and the exogenous features of financial markets interact, thus affecting the use of this tool. Thereby, future research efforts should be devoted to assess the interplay of both the internal and the external forces responsible to drive the adoption of incentive bonus pay.

Summary

The chapter illustrates the theoretical underpinnings of the bonus pay adoption and provides an overview on the governance implications of such incentive remuneration element.

Cross-References

- Agency Theory
- Bonuses (Employee for Performance)
- Compensation Effectiveness
- Control-Enhancing Mechanisms (CEMs)
- Corporate Governance

- Corporate Governance, Measurement of
- Family-Owned Firms

References

- Adams, R., & Ferreira, D. (2008). One share-one vote: The empirical evidence. *Review of Finance*, 12(1), 51–91.
- Andreas, J. M., Rapp, M. S., & Wolff, M. (2012). Determinants of director compensation in two-tier systems: Evidence from German panel data. *Review of Managerial Science*, 6(1), 33–79.
- Balsam, S. (2002). *An introduction to executive compensation*. San Diego: Academic Press.
- Barca, F., & Becht, M. (2001). *The control of corporate Europe*. Oxford: Oxford University Press.
- Barontini, R., & Bozzi, S. (2009). Board compensation and ownership structure: Empirical evidence for Italian listed companies. *Journal of Management & Governance*, 15(1), 59–89.
- Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*, 17(3), 71–92.
- Bebchuk, L. A., & Fried, J. M. (2006). Pay without performance: Overview of the issues. *Academy of Management Perspectives*, 20(1), 5–24.
- Bebchuk, L. A., Fried, J. M., & Walker, D. I. (2002). Managerial power and rent extraction in the design of executive compensation. *The University of Chicago Law Review*, 69(3), 751–846.
- Bebchuk, L. A., Grinstein, Y., & Peyer, U. (2010). Lucky CEOs and lucky directors. *The Journal of Finance*, 65(6), 2363–2401.
- Bender, R., & Moir, L. (2006). Does “best practice” in setting executive pay in the UK encourage “good” behaviour? *Journal of Business Ethics*, 67(1), 75–91.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: The Macmillan Company.
- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larrazza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55(1), 82–113.
- Bertrand, M., & Mullainathan, S. (2001). Are CEOs rewarded for luck? The ones without principals are. *The Quarterly Journal of Economics*, 116(3), 901–932.
- Bettis, J. C., Bizjak, J., Coles, J., & Kalpathy, S. (2018). Performance-vesting provisions in executive compensation. *Journal of Accounting and Economics*, 66(1), 194–221.
- Bryan, S., Hwang, L., & Lilien, S. (2000). CEO stock based compensation: An empirical analysis of incentive-intensity, relative mix, and economic determinants. *The Journal of Business*, 73(4), 661–693.
- Burkart, M., & Lee, S. (2008). One share – One vote: The theory. *Review of Finance*, 12(1), 1–49.
- Cao, J., Pan, X., & Tian, G. (2011). Disproportional ownership structure and pay–performance relationship: Evidence from China’s listed firms. *Journal of Corporate Finance*, 17(3), 541–554.
- Capezio, A., Shields, J., & O’Donnell, M. (2011). Too good to be true: Board structural independence as a moderator of CEO pay-for-firm-performance. *Journal of Management Studies*, 48(3), 487–513.
- Catuogno, S., Saggese, S., & Sarto, F. (2016a). Alignment vs rent-extraction effects of stock options: A conceptual model. *Corporate Governance*, 16(4), 693–708.
- Catuogno, S., Saggese, S., Sarto, F., & Viganò, R. (2016b). Shedding light on the aim of stock options: A literature review. *Journal of Management & Governance*, 20(2), 387–411.
- Chalmers, K., Koh, P.-S., & Stapledon, G. (2006). The determinants of CEO compensation: Rent extraction or labour demand? *The British Accounting Review*, 38(3), 259–275.
- Chhaochharia, V., & Grinstein, Y. (2009). CEO compensation and board structure. *The Journal of Finance*, 64(1), 231–261.
- Chourou, L. (2010). Compensation of owner managers in Canadian family-owned businesses: Expropriation of minority shareholders. *Canadian Journal of Administrative Sciences*, 27(2), 95–106.
- Coles, J. L., Daniel, N. D., & Naveen, L. (2006). Managerial incentives and risk-taking. *Journal of Financial Economics*, 79(2), 431–468.
- Canyon, M. J. (2014). Executive compensation and board governance in US firms. *The Economic Journal*, 124(574), F60–F89.
- Canyon, M. J., & Murphy, K. J. (2000). The prince and the pauper? CEO pay in the United States and the United Kingdom. *The Economic Journal*, 110(467), 640–671.
- Canyon, M., & Peck, S. (2001). Performance pay and UK firms. *European Management Journal*, 19(1), 73–82.
- Core, J., Holthausen, R., & Larcker, D. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51(3), 371–406.
- Core, J., Guay, W., & Larcker, D. (2003). Executive equity compensation and incentives: A survey. *Economic Policy Review*, 9(1), 27–50.
- Cuomo, F., Zattoni, A., & Valentini, G. (2012). The effects of legal reforms on the ownership structure of listed companies. *Industrial and Corporate Change*, 22(2), 427–458.
- Dunford, B. B., Boswell, W. R., & Boudreau, J. W. (2010). When do high-level managers believe they can influence the stock price? Antecedents of stock price expectancy cognitions. *Human Resource Management*, 49(1), 23–43.
- Edmans, A., & Gabaix, X. (2011). The effect of risk on the CEO market. *The Review of Financial Studies*, 24(8), 2822–2863.
- Enriques, L., & Volpin, P. (2007). Corporate governance reforms in continental Europe. *Journal of Economic Perspectives*, 21(1), 117–140.

- Faccio, M., & Lang, L. H. P. (2002). The ultimate ownership of Western European corporations. *Journal of Financial Economics*, 65(3), 365–395.
- Fracassi, C., & Tate, G. (2012). External networking and internal firm governance. *The Journal of Finance*, 67(1), 153–194.
- Frydman, C., & Saks, R. E. (2010). Executive compensation: A new view from a long-term perspective, 1936–2005. *The Review of Financial Studies*, 23(5), 2099–2138.
- Fudenberg, D., Holmstrom, B., & Milgrom, P. (1990). Short-term contracts and long-term agency relationships. *Journal of Economic Theory*, 51(1), 1–31.
- Goergen, M., & Renneboog, L. (2011). Managerial compensation. *Journal of Corporate Finance*, 17(4), 1068–1077.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52(1), 106–137.
- Gong, J. J. (2011). Examining shareholder value creation over CEO tenure: A new approach to testing effectiveness of executive compensation. *Journal of Management Accounting Research*, 23(1), 1–28.
- Gormley, T. A., Matsa, D. A., & Milbourn, T. (2013). CEO compensation and corporate risk: Evidence from a natural experiment. *Journal of Accounting and Economics*, 56(2–3), 79–101.
- Grossman, S. J., & Hart, O. (1988). One share-one vote and the market for corporate control. *Journal of Financial Economics*, 20(January–March), 175–202.
- Haid, A., & Yurtoglu, B. B. (2006). Ownership structure and executive compensation in Germany. *SSRN Electronic Journal*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=948926.
- Hall, B. J., & Liebman, J. B. (1998). Are CEOs really paid like bureaucrats. *The Quarterly Journal of Economics*, 113(3), 653–691.
- Hall, B. J., & Murphy, K. J. (2002). Stock options for undiversified executives. *Journal of Accounting and Economics*, 33(1), 3–42.
- Hall, B. J., & Murphy, K. J. (2003). The trouble with stock options. *Journal of Economic Perspectives*, 17(3), 49–70.
- Harford, J., & Li, K. (2007). Decoupling CEO wealth and firm performance: The case of acquiring CEOs. *The Journal of Finance*, 62(2), 917–949.
- Hayes, R. M., Lemmon, M., & Qiu, M. (2012). Stock options and managerial incentives for risk taking: Evidence from FAS 123R. *Journal of Financial Economics*, 105(1), 174–190.
- Hoi, C., & Robin, A. (2004). The design of incentive compensation for directors. *Corporate Governance: The International Journal of Business in Society*, 4(3), 47–53.
- Holmstrom, B., & Costa, J. R. I. (1986). Managerial incentives and capital management. *The Quarterly Journal of Economics*, 101(4), 835–860.
- Institutional Shareholder Services. (2007). Report on the Proportionality Principle in the European Union. ISS. http://ec.europa.eu/internal_market/company/docs/shareholders/study/final_report_en.pdf.
- Izhakian, Y., & Yermack, D. (2017). Risk, ambiguity, and the exercise of employee stock options. *Journal of Financial Economics*, 124(1), 65–85.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(2), 225–264.
- Jensen, M. C., & Murphy, K. J. (2004). Remuneration: Where we've been, how we got to here, what are the problems, and how to fix them. *ECGI Working Paper*, 44/2004, 1–105. https://ecgi.global/sites/default/files/working_papers/documents/SSRN-id561305.pdf.
- Johnson, S. A., & Tian, Y. S. (2000). Indexed executive stock options. *Journal of Financial Economics*, 57(1), 35–64.
- Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, 36(6), 1175–1182.
- Kraus, H. (2017). *Executive stock options and stock appreciation rights*. New York: Law Journal Press.
- Kuang, Y. F., & Qin, B. (2009). Performance-vested stock options and interest alignment. *British Accounting Review*, 41(1), 46–61.
- Lin, D., & Lin, L. (2014). The interplay between director compensation and CEO compensation. *International Journal of Business and Finance Research*, 8(2), 11–27.
- Liu, L., Liu, H., & Yin, J. (2014). Stock option schedules and managerial opportunism. *Journal of Business Finance and Accounting*, 41(5–6), 652–684.
- Masulis, R. W., Wang, C., & Xie, F. (2009). Agency problems at dual-class companies. *The Journal of Finance*, 64(4), 1697–1727.
- Melis, A., Carta, S., & Gaia, S. (2012). Executive remuneration in blockholder-dominated firms. How do Italian firms use stock options? *Journal of Management & Governance*, 16(3), 511–541.
- Morck, R., & Yeung, B. (2003). Agency problems in large family business groups. *Entrepreneurship Theory and Practice*, 27(4), 367–382.
- Murphy, K. J. (1999). Executive compensation. In O. Ashenfelter & D. Card (Eds.), *Handbook of labor economics* (Vol. 3). North Holland: Elsevier.
- Murphy, K. J. (2002). Explaining executive compensation: Managerial power versus the perceived cost of stock options. *The University of Chicago Law Review*, 69(3), 847–870.
- Nagaoka, S. (2005). Determinants of the introduction of stock options by Japanese firms: Analysis from the incentive and selection perspectives. *Journal of Business*, 78(6), 2289–2316.

- Nelson, J., Gallery, G., & Percy, M. (2010). Role of corporate governance in mitigating the selective disclosure of executive stock option information. *Accounting and Finance*, 50(3), 685–717.
- Nyberg, A. J., Fulmer, I. S., Gerhart, B., & Carpenter, M. A. (2010). Agency theory revisited: CEO return and shareholder interest alignment. *Academy of Management Journal*, 53(5), 1029–1049.
- O'Connor, J. P., Jr., Priem, R. L., Coombs, J. E., & Gilley, K. M. (2006). Do CEO stock options prevent or promote fraudulent financial reporting? *Academy of Management Journal*, 49(3), 483–500.
- Peng, L., & Roell, A. (2008). Manipulation and equity-based compensation. *The American Economic Review*, 98(2), 285–290.
- Perry, T., & Zenner, M. (2001). Pay for performance? Government regulation and the structure of compensation contracts. *Journal of Financial Economics*, 62(3), 453–488.
- Rajgopal, S., & Shevlin, T. (2002). Empirical evidence on the relation between stock option compensation and risk taking. *Journal of Accounting and Economics*, 33(2), 145–171.
- Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American Economic Review*, 63(2), 134–139.
- Saggese, S. (2013). *La separazione fra proprietà e controllo. Profili aziendali e di governance*. Padua: Cedam.
- Saggese, S. (2018). *I meccanismi di potenziamento del controllo aziendale nella comunicazione economico-finanziaria*. Padua: Cedam.
- Saggese, S., Sarto, F., & Cuccurullo, C. (2016). Evolution of the debate on control enhancing mechanisms: A systematic review and bibliometric analysis. *International Journal of Management Reviews*, 18(4), 417–439.
- Sanders, W. G. (2001). Incentive alignment, CEO pay level, and firm performance: A case of 'heads i win, tails you lose'? *Human Resource Management*, 40(2), 159–170.
- Sautner, Z., & Weber, M. (2011). Corporate governance and the design of stock option contracts. Working paper. AFA 2007 Chicago meetings paper; EFA 2006 Zurich meetings. *Die Betriebswirtschaft*, 71, 331–354. https://papers.ssrn.com/Sol3/papers.cfm?abstract_id=825429.
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783.
- Stockmans, A., Lybaert, N., & Voordeckers, W. (2010). Socioemotional wealth and earnings management in private family firms. *Family Business Review*, 23(3), 280–294.
- Su, Z., Li, Y., & Li, L. (2010). Ownership concentration and executive compensation in emerging economies: Evidence from China. *Corporate Governance: The International Journal of Business in Society*, 10(3), 223–233.
- Sun, J., & Cahan, S. (2009). The effect of compensation committee quality on the association between CEO cash compensation and accounting performance. *Corporate Governance: An International Review*, 17(2), 193–207.
- Tinaikar, S. (2014). Voluntary disclosure and ownership structure: An analysis of dual class firms. *Journal of Management & Governance*, 18(2), 373–417.
- Tosi, H. L., Shen, W., & Gentry, R. J. (2003). Why outsiders on boards can't solve the corporate governance problem. *Organizational Dynamics*, 32(2), 180–192.
- Towers Perrin. (2000). *Worldwide total remuneration study*. New York: Towers Perrin.
- Towers Perrin. (2005). *Equity incentives around the world*. New York: Towers Perrin.
- Wheeler, P. R. (2004). *Stock options & grants: The executive's guide to equity compensation*. Sunnyvale: Advisorpress.
- Wu, M.-C. (2007). Selecting suitable compensation plans of executive stock options. *Applied Economics*, 39(9), 1185–1193.
- Zattoni, A. (2007). Stock incentive plans in Europe: Empirical evidence and design implications. *Corporate Ownership and Control*, 4(4), 70–79.
- Zattoni, A., & Minichilli, A. (2009). The diffusion of equity incentive plans in Italian listed companies: What is the trigger? *Corporate Governance: An International Review*, 17(2), 224–237.

Bonus Pay

► Bonus

Bonuses

► Executive Remuneration and CSR

Bonuses (Employee for Performance)

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Synonyms

Additional compensation; Benefits; Extra compensation; Fringe benefits; Incentive system;

Performance-based compensation; Premium; Special compensation; Variable compensation; Variable income; Variable payment

Definition

Bonuses are variables payments assigned to employees upon reaching some predefined goals. The bonus pays are usually tied to company outcomes (e.g., profits, share price, sales, customer satisfaction) as well as linked to specific employee's area of responsibility so as to allow the identification of the individual efforts and results. Bonuses pays could be tied to the achievement of short-term, intermediate-term, and long-term goals.

Introduction

Over the last decades, firms have radically changed their pay practices, especially at managerial level, where employees are given much greater benefits for the services they provide, and a much larger portion of their pay is based on the firm performance or deemed "at risk" (Magnan and Martin 2019).

Indeed, it is worth noting that the employee compensation can be made up of various components and, besides the fixed cash salary, there are a lot of additional and nonmonetary benefits (e.g., tax consultant services, medical check-ups, company car, furniture for company housing) as well as perquisites (e.g., club memberships). Nevertheless, in recent years the biggest part of the remuneration consists of the performance-based rewards, as additional monetary benefits which mostly consist of direct (cash) bonuses or equity-based bonuses (Luthans and Stajkovic 1999). Anecdotal evidence confirms this trend. Indeed, looking at top managerial compensation, there is the case of the CEO of Chrysler, Lee Iacocca, who gained a nominal cash salary of \$1 but earned \$35 million in stock options gains (Catuogno et al. 2016a, b). Additionally, according to a study provided by the Hay Group in 2009 on the CEO compensation in US, while the CEO base salaries

have significantly decreased from 2008 to 2009, in the same time frame the annual incentive pay grew of 3.4%. Indeed, the number of organizations that largely employ incentive plans in order to remunerate and reward the performance of outperforming employees has significantly increased (Falola et al. 2014). The main aim is to design the incentive packages to get the maximum performance from their employees as well as to retain the most productive ones among them (Arnold 2013).

Scholars suggest that an adequate incentive-based compensation scheme represents a crucial instrument through which organizations can motivate and increase their workers' performance. Indeed, studies belonging to different field (e.g., management literature, accounting literature) have documented that the use of incentive plan in employees' compensation influences workers performance by inducing a higher level of their efforts (Gomez-Mejia et al. 1987; Tosi and Gomez-Mejia 1994; Chow 1983; Waller and Chow 1985; Chow et al. 1988). Also, there are many studies that have empirically examined the implications of incentives plans for firm outcomes (Al-Nsour 2012; Arnolds and Venter 2007; Banker et al. 1996). Overall, these studies document that measuring and rewarding the performance of employees encourage and sustain employee contributions to the success of the organization for a number of reasons (Milkovich et al. 2010).

First of all, according to the expectancy theory, the employees' motivation and therefore their productivity are enhanced as their behaviors are highly instrumental in achieving the desired outcomes. Indeed, linking the employees' compensation to the outcomes of their behaviors, enhances the expectation of receiving rewards tied to a specific outcome as well as the motivation of employees to engage in the behaviors that allow to achieve the desired outcomes (Gerhart and Milkovich 1990; De Kok et al. 2006). In this regard, scholars suggest that performance-based remuneration system in which efforts and rewards are characterized by specific individual goals, represent the best tool to increase the employee's motivation (Fay and Thompson 2001).

From a different standpoint, research enlightens that incentive compensations are able to align the interests of employee and owners, especially with regard to employees at managerial level (Kruse et al. 2010). In this regard, according to the agency theory, the incentive performance-based bonuses are able to address the conflicts of interest between the owner (i.e., principal) and the employee (i.e., agent) (Jensen and Meckling 1976). Indeed, the theory stems from the problem of the employment which involves that the owner delegates his work to an agent who performs his job in return for some remuneration. However, as a self-interested rationalist, the agent will try to avoid performing the contracted obligations by taking advantage of the principal inability to control all aspects of his behaviors. In this regard, the principal could invest in monitoring behavior or, in alternative, in using incentive compensation systems that rewards the agent based on firm outcomes, so as to resolve the above-mentioned issue (Gerhart and Milkovich 1990). Indeed, by making workers' remuneration contingent on organizational-level outcomes, such as shareholder profit or value creation (Ross 1973), employees are better able to behave as owners and are also more likely to take risk (Coles et al. 2006; Edmans and Gabaix 2011; Gormley et al. 2013; Hayes et al. 2012).

Additional benefits of using remuneration packages that include variables payments compensation are linked to the firm's ability to draw talented employees compared with untalented ones (Hancock et al. 2013; Long et al. 2002). Indeed, as brilliant employees are more confident to increase company value, they are more committed to do so (Chrisman et al. 2017; Long 2000), with obviously positive implications in terms of the improvement of the level of firm performance.

Finally, the positive implications of incentive compensations also occur in terms of group coordination. This is especially true when the employees reward is based on the product of group-based assessments instead of individual ones, as it increases the degree of cooperation among employees within the firm (Blinder 2011; Nyberg et al. 2016). Indeed, the performance group-based compensation encourages employees to monitor each other by hampering the level of the

team effort and productivity and by reducing the free-riding co-workers effect (Kruse et al. 2012).

Stock-Based Incentive Compensation Plans

Among several key components of bonuses, stock-based incentive compensation plans are recognized as the most effective way to relate pay to performance (Zattoni 2007). This is especially true for employee at managerial level as they usually represent the main part of the overall managerial compensation. Indeed, Damodaran (2015) documents that on average, in 2013, 70% of the CEO compensation package in US is equity-based, while cash compensation (salary and cash bonuses) is lower than 25%.

From a technical point of view, literature has classified stock-based incentive compensation plans into two main groups: (i) non stock option plans and (ii) stock option plans. While the former link employees' remuneration to the value of firms' shares, the latter provide employees with the possibility to buy or subscribe company shares (Bernhardt 1999; Zattoni and Minichilli 2009).

Focusing the attention on non-option stock plans, these tools can be classified into two categories (Zattoni 2007). The former has a higher incentive goal and includes those plans granting a reward to employees for achieving certain targets. This is the case of phantom stocks that give a bonus (in cash or stock) if the firm share price has increased, or additionally of stock appreciation rights that assign to employees a cash premium award equal to the difference between the market share price and a predefined strike price. The second group of non-option stock plans is composed by share ownership plans, where granting share is part of a more general employee shareholding scheme. This group includes instruments that assign stocks to workers, free or under convenient conditions (i.e., stock grants) or that they have to sell back to the company whenever some targets are not achieved (i.e., restricted stock plans) (Zattoni 2007; Catuogno 2013).

Shifting the focus on the stock option plans, this kind of incentive plans give workers the right to

buy or subscribe stocks, after (i.e., vesting period) and within (i.e., exercise period) a certain time period, at a predefined price (i.e., strike price), and sometimes conditionally to the achievement of some firm performance targets (Zattoni 2007). These bonuses represent a motivational contract tool as employees are encouraged to increase the value of company shares because if it overcomes the strike price, they can buy and later sell firm stocks, gaining the difference between the strike and selling prices (Jensen and Murphy 1990). Irrespective of the aim of stock option plans, it is worth noting that these tools can differ according several variables such as the qualification of the involved employees (i.e., broad-based stock option vs executive stock option plans), the method of presetting the strike prices (i.e., fixed stock option plans, variable stock option plans, or indexed stock option plans), or the presence of a link with a firm performance variable (i.e., market performance plans vs enterprise performance plans).

Despite stock option plans and non-stock option plans present some basic similarities as they both link managerial remuneration to the value of the firm's equity, the abovementioned peculiarities involve that they overall differ in terms of risk profile, motivational effect, financial resource required and link with the achievement of firm targets (Zattoni 2007).

Stock Option Plans

Literature has interpreted the use of stock option plans as a compensation tool in the light of the agency problem between managers and shareholders in Anglosaxon public companies (Berle and Means 1932; Catuogno et al. 2016a). Indeed, according the optimal contracting theory, by linking executives compensation to shareholder value, stock options represent a governance tool able to diminish managerial opportunism and to align the interests of managers (agents) and owners (principal) (Ross 1973; Zattoni 2007; Holmstrom and Costa 1986; Jensen and Meckling 1976). Following the alignment rationale, stock options represent a tool able to increase the company performance and maximize the shareholder

value (Jensen and Meckling 1976). Indeed, by providing managers with a proprietary interest in the company, they will achieve both their own and shareholder goals (Murphy 1999).

However, some recent financial scandals in European and US companies have suggested that stock option plans can often fail to solve the conflicting interests in dispersed ownership structures (Terviö 2008; Tosi et al. 2003), and they are also sometimes employed in the presence of blockholders (Catuogno et al. 2016a; Melis et al. 2012; Zattoni 2007).

In this regard, proponents of the rent extraction view (Bebchuk et al. 2002) have suggested that that stock options may represent an additional tool for powerful opportunistic managers to increase their wages and “camouflage” inefficient wealth transfers from shareholders to them (Bebchuk and Fried 2003, 2006; Hall and Murphy 2002). Still building on the agency theory, this framework suggests that powerful managers receive a pay in excess (i.e., a rent) of the optimal level as they are able to condition their own compensation arrangements (Bebchuk et al. 2010; Bebchuk and Fried 2006). In this regard, literature suggests that badly designed stock option plans may usually represent a signal of the agency conflict, instead of a governance mechanism able to solve it (Bebchuk et al. 2002; Bebchuk and Fried 2006; Terviö 2008; Barontini and Bozzi 2009).

Building on this, it is worth noting that the aim of stock option can be interpreted as a double-edge sword. However, scholars have suggested that the design of stock options plan is able to ensure the alignment aim of stock option (Catuogno et al. 2016a). Indeed, governance literature advocates that the strike price, the vesting period, the lockup period, the vesting conditions, and the repricing play a crucial role to define an effective stock option plan (Catuogno et al. 2016b; Bebchuk et al. 2010; Kuang and Qin 2009). More specifically, both research and practice emphasize that the abovementioned elements should be effectively designed in order to achieve a long-term remuneration perspective that motivates managers to take value-maximizing decisions (Catuogno et al. 2016b).

First of all, with regard to the strike price, research documents that setting the exercise

price equal or higher than the current share market price at the assignment date increases the managerial incentive to pursue shareholder wealth and to boost the shareholders' returns (Bebchuk and Fried 2006). Therefore, an at-the-money/out-of-the-money strike price pushes managers to increase the market stock price so as to benefit from the emerging capital gain (Catuogno et al. 2016b; Zattoni 2007). Opposite conclusions are drawn if at the assignment day the strike price is already equal to the current market value of the underlining share, as the option is already in the money, and managers are not incentivized to achieve the shareholder value maximization (Bebchuk and Fried 2006; Zattoni 2007; Balsam and Miharjo 2007).

Shifting the focus on the vesting period, studies document that the an effective design of stock option plans requires a long vesting period in order to avoid the "managerial myopia" (Catuogno et al. 2016b; Peng and Roell 2008), as it involves a higher share prices at the exercise date (Liljebloom et al. 2011; Fudenberg et al. 1990). Similar conclusions can be drawn with regard to the lockup period, as its presence pushes managers toward medium-/long-term firms goals. Indeed, executives are dissuaded to adopt a short-term opportunistic behavior due to their inability to shortly exercise the options and sell the shares (Melis et al. 2012; Zattoni and Minichilli 2009). Thus, studies in this tradition advocate that both the presence and the length of vesting, and lockup periods are crucial for the achievement of the rent extraction or the alignment purposes (Wheeler 2004).

Literature suggests that an additional element able to influence the effective design of stock option plan is the existence of an indexed strike price as a vesting condition (Catuogno et al. 2016a; Bebchuk et al. 2002; Sautner and Weber 2016). Indexed exercise prices ensure that managers are rewarded only if they really provide a contribution to the rise of company value. The underlying assumption is that the stock price changes could be not completely linked to the managerial performance, but influenced by market trends and expectations (Kuang and Qin 2009; Bertrand

and Mullainathan 2001; Johnson and Tian 2000). However, indexed strike prices ensures that the options can be exercised when company share prices exceeds their market peers share prices (Hall and Liebman 1998), avoiding that executives are rewarded even if they have not conditioned the rise of company value (Bebchuk et al. 2002).

Finally, it is worth noting that an efficient design of stock option plans should not allow to re-set the exercise price if the original one is higher than the current value of the stocks (Chen 2004). Indeed, this could allow executives to gain boundless remunerations if the market price increase, or to protect themselves from the losses in the opposite case (Catuogno et al. 2016b; Catuogno 2013). Therefore, scholars suggest that the repricing is able to challenge the alignment aim of stock options leading to the rent extraction purpose (Chance et al. 2000; Chidambaran and Prabhala 2003).

Summary

This entry illustrates the main objective and characteristics of incentive compensation plan, with particular reference to the equity-based ones.

Cross-References

- [Agency Theory](#)
- [Bonus](#)
- [Compensation Effectiveness](#)
- [Corporate Governance](#)
- [Corporate Governance, Measurement of](#)
- [Executive Remuneration and CSR](#)
- [Human Capital Management](#)

References

- Al-Nsour, M. (2012). Relationship between incentives and organizational performance for employees in the Jordanian Universities. *International Journal of Business and Management*, 7(1), 78.
- Arnold, A. (2013). The best employee incentives; Demand Media, Houston Chronicles, Texas.

- Arnolds, C., & Venter, D. (2007). The strategic importance of motivational rewards for lower-level employees in the manufacturing and retailing industries. *SA Journal of Industrial Psychology*, 33(3), 15–23.
- Balsam, S., & Miharjo, S. (2007). The effect of equity compensation on voluntary executive turnover. *Journal of Accounting and Economics*, 43(1), 95–119.
- Banker, R. D., Lee, S. Y., & Potter, G. (1996). A field study of the impact of a performance-based incentive plan. *Journal of Accounting and Economics*, 21(2), 195–226.
- Barontini, R., & Bozzi, S. (2009). Board compensation and ownership structure: Empirical evidence for Italian listed companies. *Journal of Management and Governance*, 15(1), 59–89.
- Bebchuk, L. A., & Fried, J. M. (2003). Executive compensation as an agency problem. *Journal of Economic Perspectives*, 17(3), 71–92.
- Bebchuk, L. A., & Fried, J. M. (2006). Pay without performance: Overview of the issues. *Academy of Management Perspectives*, 20(1), 5–24.
- Bebchuk, L. A., Fried, J. M., & Walker, D. I. (2002). Managerial power and rent extraction in the design of executive compensation. *The University of Chicago Law Review*, 69(3), 751–846.
- Bebchuk, L. A., Grinstein, Y., & Peyer, U. (2010). Lucky CEOs and lucky directors. *The Journal of Finance*, 65(6), 2363–2401.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: The Macmillan Company.
- Bernhardt, W. (1999). Stock options for or against shareholder value?—New compensation plans for top management and the interests of the shareholders. *Corporate Governance: An International Review*, 7(2), 123–135.
- Bertrand, M., & Mullainathan, S. (2001). Are CEOs rewarded for luck? The ones without principals are. *The Quarterly Journal of Economics*, 116(3), 901–932.
- Blinder, A. S. (Ed.). (2011). *Paying for productivity: A look at the evidence*. Washington, DC: Brookings Institution Press.
- Catuogno, S. (2013). *Le stock option in Italia: tra finalità incentivanti ed espropriazione delle minoranze*. Padova: CEDAM.
- Catuogno, S., Saggese, S., & Sarto, F. (2016a). Alignment vs rent-extraction effects of stock options. A conceptual model. *Corporate Governance*, 16(4), 693–708.
- Catuogno, S., Saggese, S., Sarto, F., & Viganò, R. (2016b). Shedding light on the aim of stock options: A literature review. *Journal of Management and Governance*, 20(2), 387–411.
- Chance, D. M., Kumar, R., & Todd, R. B. (2000). The ‘repricing’ of executive stock options. *Journal of Financial Economics*, 57(1), 129–154.
- Chen, M. A. (2004). Executive option repricing, incentives, and retention. *The Journal of Finance*, 59(3), 1167–1199.
- Chidambaran, N. K., & Prabhala, N. R. (2003). Executive stock option repricing, internal governance mechanisms, and management turnover. *Journal of Financial Economics*, 69(1), 153–189.
- Chow, C. W. (1983). The effects of job standard tightness and compensation scheme on performance: An exploration of linkages. *Accounting Review*, 58, 667–685.
- Chow, C. W., Cooper, J. C., & Waller, W. S. (1988). Participative budgeting: Effects of a truth-inducing pay scheme and information asymmetry on slack and performance. *Accounting Review*, 63, 111–122.
- Chrisman, J. J., Devaraj, S., & Patel, P. C. (2017). The impact of incentive compensation on labor productivity in family and nonfamily firms. *Family Business Review*, 30(2):119–136
- Coles, J. L., Daniel, N. D., & Naveen, L. (2006). Managerial incentives and risk-taking. *Journal of Financial Economics*, 79(2), 431–468.
- Damodaran, A. (2015). *CEO compensation: The pricing and valuing of top managers!* New York: ValueWalk. Retrieved from <http://www.valuewalk.com/2015/04/ceo-compensation-the-pricing-and-valuing-of-top-managers>.
- De Kok, J. M., Uhlander, L. M., & Thurik, A. R. (2006). Professional HRM practices in family owned-managed enterprises. *Journal of Small Business Management*, 44(3), 441–460.
- Edmans, A., & Gabaix, X. (2011). The effect of risk on the CEO market. *The Review of Financial Studies*, 24(8), 2822–2863.
- Falola, H. O., Ibidunni, O. S., & Olokundun, A. M. (2014). Incentives packages and employees’ attitudes to work: a study of selected government parastatals in Ogun State, South-West, Nigeria. *International Journal of Research in Business and Social Science*, 3(1), 63–74.
- Fay, C. H., & Thompson, M. A. (2001). Contextual determinants of reward systems’ success: An exploratory study. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 40(3), 213–226.
- Fudenberg, D., Holmstrom, B., & Milgrom, P. (1990). Short-term contracts and long-term agency relationships. *Journal of Economic Theory*, 51(1), 1–31.
- Gerhart, B., & Milkovich, G. T. (1990). Organizational differences in managerial compensation and financial performance. *Academy of Management Journal*, 33(4), 663–691.
- Gomez-Mejia, L. R., Tosi, H., & Hinkin, T. (1987). Managerial control, performance, and executive compensation. *Academy of Management Journal*, 30(1), 51–70.
- Gormley, T. A., Matsa, D. A., & Milbourn, T. (2013). CEO compensation and corporate risk: Evidence from a natural experiment. *Journal of Accounting and Economics*, 56(2–3), 79–101.
- Hall, B. J., & Liebman, J. B. (1998). Are CEOs really paid like bureaucrats. *The Quarterly Journal of Economics*, 113(3), 653–691.

- Hall, B. J., & Murphy, K. J. (2002). Stock options for undiversified executives. *Journal of Accounting and Economics*, 33(1), 3–42.
- Hall, B. J., & Murphy, K. J. (2003). The trouble with stock options. *Journal of Economic Perspectives*, 17(3), 49–70.
- Hancock, J. I., Allen, D. G., Bosco, F. A., McDaniel, K. R., & Pierce, C. A. (2013). Meta-analytic review of employee turnover as a predictor of firm performance. *Journal of Management*, 39(3), 573–603.
- Hayes, R. M., Lemmon, M., & Qiu, M. (2012). Stock options and managerial incentives for risk taking: Evidence from FAS 123R. *Journal of Financial Economics*, 105(1), 174–190.
- Holmstrom, B., & Costa, J. R. I. (1986). Managerial incentives and capital management. *The Quarterly Journal of Economics*, 101(4), 835–860.
- Jensen, M. C., & Meckling, W. H. (1976). Agency costs and the theory of the firm. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(2), 225–264.
- Johnson, S. A., & Tian, Y. S. (2000). Indexed executive stock options. *Journal of Financial Economics*, 57(1), 35–64.
- Kruse, D. L., Freeman, R. B., & Blasi, J. R. (Eds.). (2010). *Shared capitalism at work: Employee ownership, profit and gain sharing, and broad-based stock options*. Chicago: University of Chicago Press.
- Kruse, D. L., Blasi, J. R., & Freeman, R. B. (2012). *Does linking worker pay to firm performance help the best firms do even better? (No. w17745)*. Cambridge, MA: National Bureau of Economic Research.
- Kuang, Y. F., & Qin, B. (2009). Performance-vested stock options and interest alignment. *British Accounting Review*, 41(1), 46–61.
- Liljeblom, E., Pasternack, D., & Rosenberg, M. (2011). What determines stock option contract design? *Journal of Financial Economics*, 102(2), 293–316.
- Long, R. (2000). Employee profit sharing: Consequences and moderators. *Relations Industrielles/Industrial Relations*, 55(3), 477–504.
- Long, L., Fang, L., & Ling, W. (2002). Organizational career management: Measurement and its effects on employees' behavior and feeling in china. *Acta Psychologica Sinica*, 34(01), 98–106.
- Luthans, F., & Stajkovic, A. D. (1999). Reinforce for performance: The need to go beyond pay and even rewards. *Academy of Management Perspectives*, 13(2), 49–57.
- Magnan, M., & Martin, D. (2019). Executive compensation and employee remuneration: The flexible principles of justice in pay. *Journal of Business Ethics*, 160(1), 89–105.
- Melis, A., Carta, S., & Gaia, S. (2012). Executive remuneration in blockholder-dominated firms. How do Italian firms use stock options? *Journal of Management and Governance*, 16(3), 511–541.
- Milkovich, G. T., Newman, J. M., & Gerhart, B. (2010). *Compensation (edition)*. New York: McGraw-Hill.
- Murphy, K. J. (1999). Executive compensation. In O. Ashenfelter & D. Card (Eds.), *Handbook of labor economics* (Vol. 3). Amsterdam: Elsevier.
- Nyberg, A. J., Pieper, J. R., & Trevor, C. O. (2016). Pay-for-performance's effect on future employee performance: Integrating psychological and economic principles toward a contingency perspective. *Journal of Management*, 42(7), 1753–1783.
- Peng, L., & Roell, A. (2008). Manipulation and equity-based compensation. *The American Economic Review*, 98(2), 285–290.
- Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American Economic Review*, 63(2), 134–139.
- Sautner, Z., & Weber, M. (2016). *Corporate governance and the design of stock option contracts*. Unpublished manuscript, Mannheim University.
- Terviö, M. (2008). The difference that CEOs make: An assignment model approach. *American Economic Review*, 98(3), 642–668.
- Tosi, H. L., Jr., & Gomez-Mejia, L. R. (1994). CEO compensation monitoring and firm performance. *Academy of Management Journal*, 37(4), 1002–1016.
- Tosi, H. L., Shen, W., & Gentry, R. J. (2003). Why outsiders on boards can't solve the corporate governance problem. *Organizational Dynamics*, 32(2), 180–192.
- Waller, W. S., & Chow, C. W. (1985). The self-selection and effort effects of standard-based employment contracts: A framework and some empirical evidence. *Accounting Review*, 60, 458–476.
- Wheeler, P. R. (2004). *Stock options & grants: The executive's guide to equity compensation*. Sunnyvale: Advisorpress.
- Zattoni, A. (2007). Stock incentive plans in Europe: Empirical evidence and design implications. *Corporate Ownership and Control*, 4(4), 54–62.
- Zattoni, A., & Minichilli, A. (2009). The diffusion of equity incentive plans in Italian listed companies: What is the trigger? *Corporate Governance: An International Review*, 17(2), 224–237.

BOP

- [Base of the Pyramid](#)
- [Pralhad's "Bottom of the Pyramid"](#)

BoP (Bottom of the Pyramid) Partnerships

- [Inclusive Business](#)

Border Cohesion

- [Cross Border Equity](#)

Border Equity

- [Cross Border Equity](#)

Bottom of the Pyramid

- [Base of the Pyramid](#)

Boycotts

- [Economic Sanctions](#)

Brackish Water Culture

- [Aquaculture and Blue Farming](#)

Brand Communities

- [Online Communities](#)

Brand Management

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Synonyms

[Branding](#); [Brand strategy](#)

Definition

Brands are a widely discussed topic in the academic literature – yet depending on the sources and the conceptual frameworks, the term branding has several different definitions with various perspectives which constitute brand meaning. One of the most cited definitions comes from the American Marketing Association, which defines a brand as: “A brand is a name, term, design, symbol or any other feature that identifies one seller’s good or service as distinct from those of other sellers” (AMA 2014). Considering this definition, brand management includes all the strategies and processes that are aimed at creating, maintaining, and improving brand equity and performance over time.

Introduction

Customers, on average, are exposed to approximately 5 000 brands per day. It is therefore clearly impossible to memorize them all. Therefore, a good branding and brand management strategy will seek a precise positioning for selected customers, easing their decision-making, reducing the risk of a wrong choice, and creating (emotional) value. By doing so, the brand will stand out from the mass.

Brands thus represent valuable assets for companies and can significantly contribute to their financial success. Therefore, they must be managed strategically, which again requires a consistent nurture and maintenance of the brand. Consequently, brands can generate competitive advantages through outstanding product performances as well as independently of the product only with the help of favorable image associations (Keller 2013, pp. 31–32). “A brand is thus as an amalgam of interpretations” (De Chernatony 2010, p. 73).

Although the impact and the functions of brands are indisputable nowadays, there is no consistent and approved definition of brands yet. This can be attributed to numerous changing factors over time, such as environmental conditions and the relationship between manufacturer and

retailers, which have affected the brand understanding and brand management consequently.

Historic Development of Conceptual Branding Definitions

According to Bruhn (2004, p. 9) and Baumgarth (2014, p. 3), the historic definition approaches of brands can be classified into the following systematization:

- Legal approach
- Characteristic-based approach
- Supply-oriented approach
- Demand-driven approach
- Identity-based approach

The idea of branding is no contemporary invention, a few centuries ago livestock farmers already distinguished their products from competitors by means of burned-in signs. For this reason, “[...] the word brand is derived from the Old Norse word *brandr*, which means to burn [...]” (Keller et al. 2008, p. 2).

Until the mid-1960s, brands were defined as bundles of characteristics, and they were distinguished from unmarked products.

Regarding selected characteristics, this approach must be viewed critically, e.g., finished products exclude persons, cities, and even countries as brands although they represent brands in fact. The characteristic-based approach thus offers many indications on how to make a successful brand, but it fails to consider the demand perspective and other forms of brands besides finished products (Schwertfeger 2017, p. 3).

In the following supply-oriented approach, the characteristic-based brand understanding was replaced by a brand understanding based on the marketing efforts of the suppliers. Here, brands are defined as a set of sales-related marketing instruments. However, this definition approach lacks general validity, as it cannot be applied to all common sales approaches (Baumgarth 2014, p. 4).

Due to an increasing competitive orientation on the market, a demand-driven approach was

developed in the 1980s, which dealt with the external impact of a brand on the consumer (Bruhn 2004, p. 9). All products and services were regarded as branded products, which consumers identified as such. Although the operationalization of the brand impact on the consumer has led to disagreement among scholars, brands must at least provoke a high brand recall, a distinctive image, and a preference to attract consumers’ attention (Baumgarth 2014, p. 5).

In the 1990s, the demand-driven approach was supplemented by the view of the company, which led to an identity-based approach (Aaker 1996; Meffert and Burmann 1996). In this approach, the brand is treated from a sociopsychological perspective, which is based on the interaction between the company perspective (brand identity) as well as the consumer perspective (brand image) (Schwertfeger 2017, p. 3). The brand identity reflects an internal image of the own brand, which is actively shaped by all brand relevant characteristics. It forms the basis for a sustainable differentiation from other brands. Through the brand promise (positioning) and the linked brand behavior, the company aims at conveying its internal image to the consumer from the inside-out (Meffert et al. 2015).

By contrast, the brand image is shaped by the consumer and can therefore only be influenced indirectly by the company. It results from the perception and decoding of all signals emitted by the company, for which it makes use of the consumer’s brand expectations and brand experiences at all available brand touchpoints. Consequently, the brand image is built over a certain period and with a time delay, compared to the brand identity (Meffert et al. 2015).

Only if a company manages its brand individually, consistently, and continuously at all touchpoints with its consumers, brand authenticity can be achieved, which improves brand trust and thus ensures the success of a brand.

Strategic Brand Management

Traditional strategic brand management encompasses firms’ efforts around the customers’

engagement with brands by designing and implementing appropriate marketing programs in order to create favorable outcomes including high brand loyalty (Keller 2013, p. 58). This loyalty is often viewed as the “holy grail” of marketing and may be achieved – as the flip side of brand equity – through savvy relationship management (Shugan 2005, p. 185). Building brand equity requires programs which properly position the brand in the customers’ minds and foster strong customer-brand relationships. This kind of marketing approach may provide organizations with benefits: Customer profit rates tend to grow over the life of transactions between brands and retained customers whose retention costs five times less than new customers’ acquisition (Keller 2013, p. 183).

Customer-Based Brand Equity

The CBBE concept approaches brand equity from the customer’s point of view and rotates around the idea that brand knowledge has a positive and differentiating effect on consumers’ responses to brand management efforts. Accordingly, a brand has a positive (negative) CBBE when customers react more (less) favorably to the product and its marketing when the brand is clearly identified than when it is unnamed. According to the concept, brand knowledge is regarded as the key to building brand equity since it drives the differential effect mentioned above. This knowledge has been defined in terms of its two components brand awareness and brand image which also represent the sources of brand equity: The former reflects the consumer’s ability to identify the brand and comprises brand recognition and brand recall, meaning the brand’s retrieval in consumers’ minds. Brand image, on the other hand, refers to brand associations held in consumers’ memories that may be either brand attitudes, attributes, or benefits (Keller 2013, pp. 70–73).

According to the so-called brand resonance model, building a strong brand embraces a sequence of multiple steps which build on each other and are carried out successively. Thus, the order of these steps is often associated with a branding ladder including four stages of brand

development. However, this brand-building process is complicated and difficult; thus it is often structured and illustrated in six brand-building blocks assembled in a pyramid in order to provide clarity. Creating significant brand equity requires reaching the top of the pyramid (Roper and Fill 2012, p. 164; Keller 2013, p. 107).

Brand Identity

Brand identity forms the foundation of the model and requires creating high brand salience in terms of the brand’s retrieval in consumers’ minds. However, deep and broad brand awareness is usually not sufficient, and the next level, brand meaning, comes into play (Roper and Fill 2012, p. 164; Keller 2013, pp. 107–111).

Brand Meaning

Building brand meaning includes establishing a brand image and may be differentiated in terms of more rational performance-based considerations and more emotional, abstract imagery-based perspectives. Brand performance, on the one hand, measures the extent to which the brand’s product and service attributes satisfy the customers’ needs and wants (Keller 2013, pp. 111–113). Brand imagery, on the other hand, deals with the more intangible aspects of the brand and may be formed directly by own experiences or indirectly by advertising or word of mouth. Four sets of associations linked to a brand may be identified which involve user profiles, purchase and usage situations, personality and values, as well as history, heritage, and experiences: Whereas the first two categories relate to types of brand users and situations in which the brand could be bought or used, the other two sets cover the brand’s personality traits and associations with the brand’s heritage. Brand performance’s and imagery’s interplay creates unique and favorable brand associations which are key in building CBBE and help to reach the level of brand response (Keller 2013, pp. 83–88).

Brand Response

This stage relates to the customers’ response to the brand and its marketing and may be distinguished in terms of brand judgments and brand feelings.

The former include customers' personal evaluations and opinions about the brand's quality, credibility, consideration, and superiority (Keller 2013, p. 117). Favorable perceptions of quality and credibility are crucial however not sufficient if consumers do not incorporate the brand in their "[...] set of possible options of brands they might buy or use" and do not consider the brand unique and better than competitive brands (Keller 2013, p. 118). Brand feelings, on the other hand, refer to consumers' emotional reactions and responses to a brand, including, for instance, excitement or social approval (Keller 2013, pp. 118–120). Customers' positive reactions towards the brand may be a consequence of brand response; however, reaching the final level of the pyramid – a relationship between the customer and the brand – requires creating high brand resonance (Keller 2013, p. 120).

Brand Resonance

This relationship's nature is manifested in loyal and highly engaged customers who feel a personal attachment with the brand and are willing to invest resources in the brand beyond those spent during the purchase or consumption. Eventually, a sense of affiliation with other brand users contributes to the creation of brand resonance. Indeed, by reaching this stage of the pyramid, a brand equity and thus high customer loyalty have been established. The abovementioned sense of bonding with other people associated with the brand may be referred to as the brand community which will be examined in greater depth in the subsequent section.

In today's world, there is a great need for adequate branding due to increasing globalization. Changing market conditions, increasing competition, product distinction, behavioral habits, and customer credibility can be considered major challenges. The commoditization of products, giving consumers a wide range of alternatives to a certain product or need, makes it impossible to choose one product or service over another without looking at brand names. A lot of companies use "fast communication" rather than appropriate branding strategies. The marketing tools and instruments are exploited before an

actual branding process takes place. This can be explained by the similar general principles and frameworks of both: branding and marketing (Chernev 2017, p. 3). The strategic side of branding is not fully understood and performed, and therefore marketing and branding are often considered the same concepts. Thus, a brand's uniqueness cannot be recognized as marketing focuses more on several product features instead of a distinctive value proposition. Gaining a clear competitive advantage gets more difficult to achieve but, at the same time, is necessary to position a company successfully in the market and to create brand awareness in a globalizing world (Gronlund 2013).

In general, there is no consensus in the literature for the meaning of the term brand. It can however be stated that the underlying idea of a brand is that a consumer is able to perceive several attributes in the goods or services of a provider in such a way that the consumer identifies the supplier directly. Brands have a wide range of characteristics that, in today's economic and social environment, have to be involved to support the marketing processes directly and indirectly. Therefore, before executing any marketing measures, a brand must begin with positioning itself in the market. The brand identity acts as the foundation of the brand management and represents the self-image of a brand. It is the basis and formulates objectives for the positioning, which gives the brand its own and unmistakable profile. A clear competitive advantage must be visible while addressing the needs of the target audience to further influence the brand image, the external perception in the eyes of the stakeholders (Gronlund 2013, p. 2). Ideally, the potential customer immediately recognizes a brand by its color, design, and logo (brand identity) and consequently creates a brand image. If a brand manages to reflect a positive brand image successfully, it offers benefits from both a consumer and a supplier perspective. In accordance with established literature on this topic, there are three broadly categorized benefit aspects for a customer: Identification and orientation function (information efficiency), trust (risk reduction), and identification and prestige (image benefits).

These customer advantages also fulfill several benefits for the supplier.

Numerous opportunities for the brand management of a company are created through customer benefits. A brand gives the opportunity for an entrepreneur to be profiled and to increase the economic brand value. According to Chernev (2017), creating market value must be the overall objective of a brand. In this context, the brand serves to create preferences and differentiation from the competition. If a company manages to create consumer satisfaction with its performance, it eventually increases customer loyalty. From a business perspective, these aspects are also of great importance in connection with sales development and planning. It offers the opportunity to serve market segments with different target group-specific brands in the best possible way. A company can therefore position itself in different segments in an optimal way, each pursuing a specific brand policy. In this case, one speaks of segment-specific market cultivation. In addition, the so-called line extensions enable the establishment of new products of the same brand in product categories that are already served. Successful brands also create a scope for pricing policy. The more successful a company's brand management, the greater its scope to adapt prices. This goes hand in hand with an increase in the value of the company. In this context, experts often outline that brands also have a life cycle. A life cycle is known originally from the goods industry, describing its development through the time on the market. To extend the life cycle of a brand, it must be ensured that the brand is sustained in the long-term by the support of the above-illustrated functions (Kapferer 2012). Thus, brand visibility can be highlighted through line extensions which are consequently saturating short-term demands. Distribution extensions make brands more available in the long-term and renewed advertising or communication can be used additionally. Price reductions and new innovations offer new competitive advantages, and, in the same way, the value creation of a brand can be strengthened. Lastly, repositioning can be used to extend and rearrange the brand's value. Consequently, a brand's life cycle can be sustained if the functions

are optimally supported by respective measures (Kapferer 2012).

These are the strategic brand management tools by which the brand is built and sustained in the long-term. Furthermore, it is highly recommended that branding should be regarded about how to strategically develop a meaningful and loyal relationship to the customers and about creating market value and not about the amount of effort a company puts into marketing activities (Gronlund 2013, p. 3). Nevertheless, marketing activities are the asset in supporting efficient brand management. These measures must be consistent with a brand's positioning strategy.

Development of Brand Management

Since decades, companies and researchers try to develop theories and ways on how to develop a strong and appealing brand because brands are often invoked as the most valuable assets of a company. A dominant brand correlates positively with a higher market share (Smith and Basu 2002, p. 21), and strong brands are more resilient to a product harm crisis (Dawar and Pillutla 2000, p. 224). Further, brand loyalty leads users to be more likely to counter-argue negative information about the brand (Ahluwalia et al. 2000, p. 10). Branding creates trust and emotional attachment and therefore influences the buying. Thus, thousands of publications deal with the topic of brand management and, in general, how companies can create a strong and appealing brand.

In intensive research of 300+ journal articles conducted by Heding et al. (2009), brand management theories from 1985 to 2008 were analyzed. As a result, the authors found seven different approaches to brand management and thus, how brand managers see the brand-consumer interaction. "These [...] approaches complement rather than substitute each other [...]". Further, the authors "[...] stress that the birth of one approach does not imply the end of the 'previous' one[s]" (Heding et al. 2009, p. 21). The seven different approaches to brand management reflect the thinking of the research period. However, many parallels to today can be drawn and valuable information

deducted. In the following, the seven approaches are structured in chronological order of their appearance.

The economic approach is based on neoclassical microeconomic theories and ideas from transactional marketing. Hence, brand management focuses on understanding marketing mix factors which influence consumption decisions, because “the exchange between brand and consumer consists of isolated transactions rather than an ongoing relationship” (Heding et al. 2009, p. 34). By focusing only on the marketing mix, brand managers assume that consumption choices are made due to rational reasons with consumers searching for brands delivering a high utility compared to their price. Thus, consumers are seen as aiming to maximize a product’s utility. As a result, the economic approach sees the consumer as a passive recipient of brand communication. The linear brand communication focuses on reaching the consumer at the right time and ensures that consumers are aware of the brand utility (Heding et al. 2009, pp. 34–45).

The identity approach assumes that brand value creation correlates positively with a strong brand identity. This view marks a shift from a product-level focus to a corporate-level branding focus because brand managers focus on creating a coherent identity.

Hence, the effect of organizational behavior changes on brand identity, brand image, and brand reputation is a concern of brand managers. Furthermore, the consumer is not seen as a passive recipient anymore since brand identity cannot be communicated only in a linear way “but is the result of negotiation between internal and external shareholders” (Heding et al. 2009, p. 55). As an implication, brand managers need to ensure that all stakeholders experience a strong coherent brand identity across all touchpoints with the company (Heding et al. 2009, pp. 47–79). The brand is linked to consumer associations.

The consumer-based approach assumes that a brand is a cognitive construct in the consumer’s mind. Brand managers can influence brand perception inside the mind of the consumer by listening to consumers and choosing the right brand elements and the right communication. In this

approach, brand managers “[are] seen in charge of communications as an assumption of linear communication applies to the cognitive consumer perspective” (Heding et al. 2009, p. 108). Further, brand managers should position the brand with consistency as memory is based on permanent and durable recognition (Heding et al. 2009, pp. 83–113).

The personality approach assumes that consumers project human personality and human attributes to brands. In this approach, brand personality plays a significant role in determining the brand strength as consumers search for a brand-consumer personality fit (Heding et al. 2009, pp. 116–149). Thus, brand managers need to focus on building an “attractive and relevant brand personality” (Heding et al. 2009, p. 147).

The relational approach emphasizes a viable brand-consumer relationship leading to a significant paradigm shift. Consumers are not seen as passive recipients but rather as active partners. Brand loyalty is often closely linked with the perception of the quality of a relationship and is an essential foundation of the relational approach. Furthermore, the “inner reality” of consumers is taken into consideration when the phenomenological perspective distinguishes a holistic view with several indirect factors influencing consumer choice. Brand managers need to leave full control of the brands since brand-consumer interaction is a dyadic and dynamic process with a risk of information overload while trying to integrate consumer information into brand communication. As a result, consumers are not only seen as an information source but rather as a respective partner (Heding et al. 2009, pp. 151–178).

The community approach assumes that consumers should interact with one another as brand managers are outnumbered and the management of a brand becomes increasingly difficult. This approach observes that brand loyalty and a deeper inner consumer-driven brand perception are significant advantages of the interactive involvement of consumer groups. For managerial implications, this approach sees brand managers as discrete observers and facilitators, which do not try to convince the individuals in the community to purchase the newest products. Instead, brands

need to aim for a high involvement of its community members and encourage the sharing of consumption experiences (Heding et al. 2009, pp. 181–204).

The cultural approach assumes that brands “act as a cultural artifact” (Heding et al. 2009, p. 112). With this approach, the macro-perspective of brands becomes significant and focuses on the cultural influence of brands. Hence, brands can act as iconic brands or establish an anti-brand movement with brands being more successful when they integrate themselves into the social culture. Thus, brand managers need to develop cultural understanding, providing brands with cultural meaning and monitor cultural changes in brand perception (Heding et al. 2009, pp. 207–239).

Considering these approaches, a positivistic and a constructive paradigm of brand management approaches is identified. The positivistic paradigm emphasizes that brands are “owned” by brand managers, who control the communication to a passive consumer. In contrast to that, the constructive paradigm was developed later and views a brand and its value created in the interaction between brand managers and an active consumer. These brand management approaches show that brand management is constantly changing. This is particularly relevant today, as technological progress is accelerating, and social views are strongly influenced by social media and the Internet.

Identity-Based Brand Positioning

Considering the development of brand management approaches, the latest brand management approaches focus on the importance of social interaction and being part of a broader cultural artifact. Consequently, brand positioning and brand perception become decisive factors for successful brands. Burmann et al. (2018) express this in similar terms: Successful brand management cannot be based exclusively on the requirements of the market and the view of the demanders. It is only the internal view of the brand, its identity, that allows differentiating the own brand from the competition in the long run. The combination of the outside-in with the inside-out perspective

represents the core idea of identity-based brand management (Burmann et al. 2018).

The identity-based brand positioning comprises four steps that make up the management process of brand positioning. These four steps are the development of the brand positioning towards a target identity, the compression of six identity components into symbolic-functional customer benefits, the translation into a brand-benefit promise, and finally the communication of the brand message to the target group (Burmann et al. 2018). The brand-benefit promise must be conveyed in a way that is suitable for the target group. This is done using the entire marketing mix as well as the appearance and behavior of the employees at all the brand touchpoints, which the consumer has with the brand. To a greater extent, the brand identity is composed of these six identity components (Burmann et al. 2018, p. 103):

- Services (what do we offer?)
- Competencies (what can we do?)
- Origin (where do we come from?)
- Vision (what do we want to achieve?)
- Personality (how do we communicate?)
- Values (what do we believe in?)

These identity components play an essential role in providing customer benefits, which are categorized into functional and symbolic benefits. Depending on the brand identity, the functional benefits (utilitarian, economic) and the symbolic benefits (aesthetic, hedonistic, social) differ (Burmann et al. 2018). The brand image and the consideration of customer need through feedback are impacted by ideals and previous experiences and mark the outside-in perspective of this theory. This is combined with the inside-out perspective, which analyzes the companies own resources and competence to meet the needs of the customer (Burmann et al. 2018).

To ensure the sustainable success of brand positioning, it is essential that the individual underlying factors of the four-step management process are optimally addressed. A lack of credibility of the brand value proposition has a high adverse effect on the success of the positioning. The brand value proposition should also be

understandable for the target group and relevant and superior to competing brands. In practice, there are often significant discrepancies between the target positioning and the actual positioning, and consequently, the failure of the target positioning and the actual positioning. Summarized, the result of this four-step management process is a precise position of the brand in the minds of the consumers and, thus, a particular brand image (Burmman et al. 2018).

Cross-References

► Sustainable Brands

References

- Aaker, D. A. (1996). *Building strong brands*. New York: Free Press.
- Ahluwalia, R., Burnkrant, R. E., & Rao Unnava, H. (2000). Consumer response to negative publicity: The moderating role of commitment. *Journal of Marketing Research*, 37, 203–214.
- AMA. (2014). Definitions of marketing. Retrieved under <https://www.ama.org/the-definition-of-marketing-what-is-marketing/>
- Baumgarth, C. (2014). *Markenpolitik: Markentheorien, Markenwirkungen, Markenführung, Markencontrolling, Markenkontexte [Brand policy: Brand theories, brand effects, brand management, brand controlling, brand contexts]* (4th ed.). Wiesbaden: Springer Gabler.
- Bruhn, M. (2004). Begriffsabgrenzungen und Erscheinungsformen von Marken [Definition of terms and appearances of brands]. In M. Bruhn (Ed.), *Handbuch Markenführung: Kompendium zum erfolgreichen Markenmanagement [Brand management manual compendium for successful brand management]* (2nd ed., pp. 3–49). Wiesbaden: Gabler.
- Burmman, C., Halaszovich, T., Schade, M., & Piehler, R. (2018). *Identitätsbasierte Markenführung [Identity-based brand management]* (3rd ed.). Wiesbaden: Springer Gabler.
- Chernev, A. (2017). *Strategic brand management* (2nd ed.). Chicago: Cerebellum Press.
- Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crisis on brand equity: The moderating role of consumer expectations. *Journal of Marketing Research*, 37, 215–226.
- De Chernatony, L. (2010). *From brand vision to brand evaluation: The strategic process of growing and strengthening brands* (3rd ed.). Amsterdam/London: Butterworth-Heinemann.
- Gronlund, J. (2013). *Basics of branding: A practical guide for managers*. New York: Business Expert Press.
- Heding, T., Knudtzen, C., & Bjerre, M. (2009). *Brand management: Research, theory and practice*. New York: Routledge.
- Kapferer, J.-N. (2012). *The new strategic brand management – Advanced insights and strategic thinking* (5th ed.). London/Philadelphia/New Delhi: Kogan Page.
- Keller, K. L. (2013). *Strategic brand management: Building, measuring, and managing brand equity* (4th ed.). Boston: Pearson.
- Keller, K. L., Apéria, T., & Georgson, M. (2008). *Strategic brand management: A European perspective*. Harlow: Financial Times Prentice Hall.
- Meffert, H., & Burmann, C. (1996). *Identitätsorientierte Markenführung: Grundlagen für das Management von Markenportfolios [Identity-based brand management: Basics for the management of brand portfolios]*. H. Meffert, H. Wagner, & C. Backhaus (eds.). Münster: Marketing Centrum Münster (working paper nr. 100).
- Meffert, H., Burmann, C., & Kirchgeorg, M. (2015). *Marketing: Grundlagen marktorientierter Unternehmensführung [Marketing: Fundamentals of market-oriented corporate management]* (12th ed.). Wiesbaden: Springer Gabler.
- Roper, S., & Fill, C. (2012). *Corporate reputation – Brand and communication*. Harlow: Pearson Education.
- Schwertfeger, M. (2017). *Handelsmarkenmanagement [Management of private labels]*. Wiesbaden: Springer Gabler.
- Shugan, S. M. (2005). Brand loyalty programs: Are they shams? *Marketing Science*, 24(2), 185–193.
- Smith, T., & Basu, K. (2002). A view from the top: The impact of market share dominance on competitive position. *Journal of Brand Management*, 10(1), 19–32.

Brand Strategy

► Brand Management

Branding

► Brand Management

Breakdown

► Disaster Management

Bribe Payers Index (BPI)

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Synonyms

[Bribery](#); [Corruption](#); [Corruptions](#) [Perceptions](#)
[Index](#); [Global Corruptions Barometer](#)

Definition

Bribe Payers Index (BPI) was launched in 1999 by *Transparency International*, a global civil society not-for-profit organization that works with governments, businesses, and citizens to alleviate corruption around the world. The organization has an international secretariat in Berlin, Germany, and charters in more than 90 countries.

BPI appraises the supply side of corruption. It looks at the probability of companies from the world's developed nations to bribe overseas. Governments are often complicit in exporting corruption by allowing firms located in their countries to use bribes to win businesses abroad. Between 1999 and 2011, the BPI ranked the globe's wealthiest nations by the propensity of their companies to bribe overseas. The reports were based on surveys of thousands of senior business officials from both developing and developed countries and also looked at the worst offenders by industrial sectors. The reports are available for 1999, 2002, 2006, 2008, and 2011. The projects were partially underwritten by the *John D. and Catherine T. MacArthur Foundation*.

Key Issues

The inaugural *BPI* report of 1999 was based on a study commissioned by *Transparency International* and conducted by *Gallup International Association (GIA)* with private sector executives in 14 developing market economies accounting for over 60 percent of all imports. The survey

was conducted between April and July 1999 in Argentina, Brazil, Columbia, Hungary, India, Indonesia, Morocco, Nigeria, Philippines, Poland, Russia, South Africa, South Korea, and Thailand. Professionally trained interviewers conducted 779 interviews – approximately 55 in each country. About one-third (230) of the informants were senior executives, resident in emerging market countries, and employed by foreign multinationals, while another third (236) represented major national companies. The remaining respondents were charter accountants (84), from binational chambers of commerce (78), domestic and foreign commercial banks (78), and commercial law firms (75).

Overall, the report provides a troubling picture of bribe-paying practices in the leading exporting countries. The key factors influencing such practices appeared to be remarkably similar to each other. The primary reason attributed to an increase in bribe-taking was most senior officials receiving low salaries (66% of respondents). Immunity of public officials (63%), secrecy in government (57%), worsening public procurement practices (51%), the privatization process (37%), increase in foreign investment and trade (30%), restrictions on the media (24%), and financial liberalization (19%) were found to be the additional reasons for increasing bribe-taking.

The countries are rated on a 0–10-point scale, where 10 corresponds to the interpretation that firms from a country never engage in bribery when conducting business abroad. Among the 19 leading exporting countries, the least incidences of bribe paying among companies to continue doing business in the country were in (in order) Sweden, Australia, Canada, Austria, and Switzerland, while the highest scores were for (in order) China, South Korea, Taiwan, Italy, and Malaysia. The sectors where bribery was likely to be more prevalent were (in order): Public works contracts and construction, Arms and defense industry (including petroleum and energy), Industry (including mining), Healthcare/social work, Telecommunications, Post (equipment and services), Civilian aerospace, Banking and finance, and Agriculture. Overall, almost a third of the respondents felt that corruption had increased over the past 5 years (i.e., 1994–1999).

Comparisons of BPI Scores Over Time

The BPI scores have remained consistent in some ways and changed in other ways between 1999 and 2011. Countries like Japan, the Netherlands, Switzerland, Belgium, and Germany are ranked with least bribes. There was no significant increase in the scores in the last two times the scores were published (i.e., between 2008 and 2011). The average score across the 22 countries in 2008 was 7.8, compared to a slightly higher rating of 7.9 in 2011.

By the final version of the BPI survey in 2011, a few things remained the same from the first study in 1999, while there were other notable differences. The data in 2011 were collected from more than 3000 business executives in 28 leading countries based on their value of their foreign direct investment (FDI) outflows, the value of their exports, and their regional significance. The Netherlands and Switzerland had the best scores, followed by Belgium, Germany, and Japan. Firms from these countries were seen to be least likely to engage in bribery than the other countries. At the bottom of the table, where business people perceived bribery to be the most widespread, were China and Russia, both of whom were substantially lower than the other surveyed countries. The remaining three countries rounding up the bottom five were Mexico, Indonesia, and the United Arab Emirates.

In looking at the change in scores on a country-by-country basis, no country's score has deviated by more than a point on the BPI. India saw a most significant increase of 0.7 yet remains in the bottom half of the table. Canada and the United Kingdom saw the most significant decreases in their scores with a decline of -0.3 each, which dropped their rankings by five and three places, respectively.

Recommendations

The BPI reports between 1999 and 2011 underlined the magnitude to which business professionals consider that bribery happens across major economies and business sectors. All

stakeholders, particularly governments and businesses, have to take responsibility for alleviating bribery practices. Governments should have effective regulatory policies installed in preventing as well as criminalizing bribery, as well as actively investigating and prosecuting bribery cases. Antibribery and anticorruption standards for suppliers and contractors in public procurement should be in place. Loan disbursements, as well as influencing bodies such as export credit agencies, should be carefully monitored.

Governments should also combat international bribery with international organizations such as the G20, European Union, UN, and the OECD. Countries should be encouraged to ratify the UN Convention against Corruption. Finally, international cooperation between regulators and enforcement agencies have to be strengthened to control bribery.

In addition to governments, the companies are also encouraged to bolster the implementation, monitoring, and reporting of anticorruption policies and procedures, and transparency commitments, which should be verifiable by independent third-party institutions. Firms should also be encouraged to report on how their anticorruption plans match global benchmarks, such as the UN Global Compact. They should also voluntarily disclose monetary transfers made to governments on a country-by-country basis and report all political contributions and lobbying efforts in their corporate reporting. Bribery and other corruption risks must be assessed not only within the firm but also across the entire supply chain. The antibribery policies must be clearly disclosed to suppliers, contractors, and other stakeholders. Finally, they should empower whistleblowers who have knowledge of bribery or corruption via appropriate policies and procedures.

Cross-References

- ▶ [Bribery](#)
- ▶ [Corruption](#)
- ▶ [Corruption Perception Index](#)
- ▶ [Global Corruptions Barometer](#)
- ▶ [ISO 37001 Anti-bribery Management Systems](#)

Further Readings

- Álvarez Etcheberria, I., & Aldaz Odriozola, M. (2018). The social reputation of European companies: Does anti-corruption disclosure affect stakeholders' perceptions? *Corporate Social Responsibility and Environmental Management*, 25(5), 713–721.
- Barkemeyer, R., Preuss, L., & Lee, L. (2015). Corporate reporting on corruption: An international comparison. *Accounting Forum*, 39(4), 349–365. Elsevier.
- Chen, C. W., Cullen, J. B., & Parboteeah, K. P. (2015). Are manager-controlled firms more likely to bribe than shareholder-controlled firms: A cross-cultural analysis. *Management and Organization Review*, 11(2), 343–365.
- Frei, C., & Muethel, M. (2017). Antecedents and consequences of MNE bribery: A multilevel review. *Journal of Management Inquiry*, 26(4), 418–432.
- Harrison, E. (2017). The 'cancer of corruption'. In *Between morality and the law* (pp. 143–162). Routledge.
- Heywood, P. M. (2015). Measuring corruption: Perspectives, critiques, and limits. In *Routledge Handbook of Political Corruption* (pp. 137–153).
- Islam, M. A., Dissanayake, T., Dellaportas, S., & Haque, S. (2018). Anti-bribery disclosures: A response to networked governance. *Accounting Forum*, 42(1), 3–16. Elsevier.
- Laurance, W. F. (2004). The perils of payoff: Corruption as a threat to global biodiversity. *Trends in Ecology & Evolution*, 19(8), 399–401.
- Liu, Z., Liu, X. X., Hong, Y. Y., Brockner, J., Tam, K. P., & Li, Y. M. (2017). Is individual bribery or organizational bribery more intolerable in China (versus in the United States)? Advancing theory on the perception of corrupt acts. *Organizational Behavior and Human Decision Processes*, 143, 111–128.
- Mazar, N., & Aggarwal, P. (2011). Greasing the palm: Can collectivism promote bribery? *Psychological Science*, 22(7), 843–848.
- Na, K., Kang, Y. H., & Kim, Y. (2018). The effect of corporate governance on the corruption of firms in BRICs (Brazil, Russia, India & China). *Social Sciences*, 7(6), 85–100.
- Niazi, H., Bernardi, R. A., & Bosco, S. M. (2017). Do International business professionals' ethical perceptions associate with their prior education, country, or gender? *Journal of Business Ethics Education*, 14, 41–68.
- Peiffer, C., & Rose, R. (2018). Why are the poor more vulnerable to bribery in Africa? The institutional effects of services. *The Journal of Development Studies*, 54(1), 18–29.
- Picci, L. (2018). The supply-side of international corruption: A new measure and a critique. *European Journal on Criminal Policy and Research*, 24(3), 289–313.
- Rose-Ackerman, S., & Palifka, B. J. (2016). *Corruption and government: Causes, consequences, and reform*. Cambridge University Press.
- Shacklock, A., & Galtung, F. (2016). Measuring the immeasurable: Boundaries and functions of (macro) corruption indices. In *Measuring corruption* (pp. 117–146). Routledge.
- Stapenhurst, F., Karakas, F., Sarigöllü, E., Jo, M. S., & Draman, R. (2017). The supply and demand sides of corruption: Canadian extractive companies in Africa. *Canadian Foreign Policy Journal*, 23(1), 60–76.
- Swaleheen, M., & Allen, M. T. (2017). Have multilateral conventions lowered bribery around the world. *Cato Journal*, 37, 103–110.
- Xu, L., & Clarke, G. (2002). *Ownership, competition, and corruption: Bribe takers versus bribe payers*. The World Bank.
- Wu, X. (2005). Corporate governance and corruption: A cross-country analysis. *Governance*, 18(2), 151–170.

Bribery

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Term and Definition

Bribery is a major aspect of the more generic term and concept of corruption. According to Transparency International, a worldwide operating NGO in the area of fighting corruption, established in 1993, corruption is the “the abuse of entrusted power for private gain or advantage” (Transparency International: <https://www.transparency.de/ueber-uns/was-ist-korruption/?L=0>) and bribery one of its best-known varieties.

In the legislation of most countries, the term “corruption” itself does not exist, only concrete types such as fraud, deception, extortion, or both, the active version of bribery in the form of offering someone an illegitimate advantage as well as the passive version in the form of taking this advantage (in German “Bestechlichkeit,” in English: corruptibility). Against this background, bribery can be defined as the act of offering/giving or accepting/receiving any item

of value with the purpose, implicitly or explicitly expressed by the active side (also referred to as the briber), of getting something in exchange which the passive party, the bribe-taker, otherwise would neither be willing nor allowed to give. (For a legal definition of bribery, see e.g., Articles 2 and 3 of the *Criminal Law Convention on Corruption (ETS 173)* of the Council of Europe; see also, the *United Nations Convention Against Corruption* (UN 2004), Articles 15 and 16, p. 17, for bribery in the private sector Article 21, p. 19.) The advantage, the actively bribing party is asking for, therefore, is an undue advantage.

As such, it has to be differentiated from offering money or gifts in order to get something, e.g., a service; the bribe giving side has a right to get respectively the receiving side is (legally) obliged to, such as clearing the goods for import at the border by public officials. In some countries, this practice is the norm, often resulting from a developing status not having the tax structure to pay civil servants an adequate salary. From an ethical viewpoint, this version of bribery has to be evaluated differently and, therefore, is often considered as belonging to the less immoral category of “petty corruption” (Pieth and Eigen 1999, p. 2). The given material advantage is also known as “facilitation payment,” “speed,” or “grease money.” (For different types of corruption and bribery, see e.g., Bannenberg (2002), pp. 111–114.) This differentiation is also reflected by some early legal frameworks in the area of anticorruption like the US Foreign Corrupt Practices Act from 1977: Even though formulating a clear and rather strict prohibition of “awarding contracts” by payments to foreign governments, it contains an exception regarding so-called grease payments, i.e., it allows companies payments to officials in order to obtain the performance of ministerial acts which they are legally required to do (Breslin and Kocoras 2010, p. 362).

These cases show at the same time that the active respectively passive sides of bribery are interchangeable: By demanding the undue advantage from the other side, the bribe-taker is taking over the active part.

Types of Bribes

Bribery occurs in many ways and takes many different forms (Breslin and Kocoras 2010, pp. 365/366). Primarily, material values are being offered by the briber respectively asked for by the other party. They may range from cash money, extra tip, precious gifts, invitations to expensive meals, events, or holidays, etc. via donations, the funding of research projects or political campaigns, sponsorships, etc. up to stock options or “special services” like building a swimming pool or a whole house for the bribe-taker. Bribery may also take the form of a secret commission, i.e., a profit made by an agent in the course of his employment without the knowledge of his principal. Euphemisms used for this are for instance “sweetener” or “kick-back” (Pieth and Eigen 1999, pp. 2–4).

Immaterial advantages can comprise a high rank position in the public or private sector, one’s vote in the next elections or championships, an attractive contract or any other version of promotion up to getting a better grade in an exam at university.

Unlike other forms of corruption, bribery only knows “offenders” since both sides take an advantage from the transaction whereas the “victims” resulting from this version of unethical or illegal behavior arise only outside of their relationship, i.e., among third parties like the community, the market, the rest of the affected organization. This, at the same time, makes the detection of bribery especially difficult because no side has an interest that the false behavior of any of the involved parties becomes evident. According to experts in the field, the most important factor to prevent bribery, thus, is both, a culture as well as structures fostering the principles of transparency and of equality! (see e.g., Bannenberg and Schaupensteiner 2004).

Reasons for and Consequences of Bribery

Bribery takes place at all institutional levels and in all areas of society: Politics, sports, medicine, business, etc. Next to structural reasons like a

lack of transparency, cultural or historical reasons like in China, e.g., the tradition of operating in closely connected networks, the so-called *guanxi* (see e.g., Chen 2004, pp. 62–64), bribery in principle is favored by any kind of imbalance of power or influence in a specific context. This may be true for a policeman in the situation of stopping a driver who didn't obey the rules, for the referee in a soccer match as final decision-maker for imposing a sanction to one of the teams, for the doctor who can prescribe to his patients the products of a certain pharmaceutical company only, or for the purchaser of a private or public organization who decides about contracts and tenders. In all of these examples, there is a potential risk that an interested party tries to influence the respective persons by offering them a monetary or immaterial bribe to either avoid negative consequences for itself or to achieve an individual advantage.

In a broader societal, political, and economic context, the widespread practice of bribery often goes along with low life expectancy, poverty, poor health, and unequal distribution of income and wealth rooted in dysfunctional public and private institutions (see e.g., Frisch 1999; Rose-Ackerman 1999). Because of unfair competition, its distortion, or, in some cases, even its full extinction, consumers as well as customers in the B-to-B-sector will have to buy overpriced products of a bad quality. As a result, affected countries and their economies are unable to use their potential, e.g., human and material resources, effectively. Inefficient companies and the allocation of talent, technology, and capital away from their most productive uses lead to further economic losses (Frisch 1999, p. 93; Cockcroft 2012, p. 135). Entrepreneurs entering the market will face a corrupt structure of making deals and be forced to bargain over bribes which will minimize their incentives to enter the market at all. Consequences include greater political instability, international distrust, less direct foreign investments, less national output and organizational growth, lower tax income as well as lower levels of public spending on education and health care (Rose-Ackerman 1999, p. 42). It is precisely this vicious circle that explains why corruption

and bribery are seen as one of the largest obstacles for the healthy and sustainable development of countries (Frisch 1999, pp. 92–94; Redwitz 2013, p. 7).

The correlation described above is also reflected by the annually published “Corruption Perception Index” of Transparency International in which Scandinavian countries with a comparably high average income, a high standard of living, and a high degree of public transparency are always listed on the first ranks indicating a low rate of perceived corruption (see e.g., Transparency International 2019).

Relevance in the Context of Sustainable Management

As the previous section shows, bribery has a significant negative impact on the economy and on the well-being of societies and their people. Fighting bribery, as a major version of corruption, thus, can be seen as a significant factor on the way to sustainable development of the global society.

In 2015, this overarching global goal has been made more concrete by the new “Agenda 2030” of the United Nations, consisting of 17 so-called Sustainable Development Goals (SDGs) including 169 targets. Unlike the UN Millennium Development Goals, the new SDGs are not only addressing states and governments of the developing world; all countries and all kinds of organizations worldwide are equally appealed to contribute to the realization of the Agenda 2030 (UN 2015: Article 67 of the Agenda 2030).

Next to other international frameworks or global “soft law,” relevant for sustainability, like the OECD guidelines, the 10 Principles of the UN Global Compact, or ISO 26000, the SDGs, therefore, can be considered as today's main framework and scale for sustainability and the sustainable management of organizations.

Against the background of the negative consequences of bribery described above, especially, the following goals implicitly recommend to take efforts to stop bribery and corruption inside and outside of organizations:

Goal no. 8	<i>Promote sustained, inclusive, and sustainable economic growth, full, and productive employment, and decent work for all</i>
Goal no. 10	<i>Reduce inequality within and among countries</i>
Goal no. 12	<i>Ensure sustainable consumption and production patterns</i>

Explicitly, Goal no. 16 is addressing the fight against corruption and bribery: “Promote just, peaceful, and inclusive societies” (UN 2015: Goal 16), in particular, by target 5: *Substantially reduce corruption and bribery in all their forms* and by target 6: *Develop effective, accountable and transparent institutions at all levels*.

Global and Legal Approaches to Fight Bribery in and of Organizations

Apart from the Foreign Corrupt Practices Act (FCPA) of the United States from 1977 (see also above), which addressed the influencing of foreign officials by companies through rewards or payments, other countries came up with comparably strict legislations much later – in many cases as a reaction to spectacular fraud and corruption scandals (e.g., Siemens in Germany) or in order to support fair competition on a global market and to encourage foreign investments (like in China after 1997) (see e.g., Schroeder 2009, pp. 55–57).

International institutions like the OECD and the UN started in the 1990s to encourage the fight against bribery and corruption by guidelines, conventions, and voluntary agreements for both, countries and businesses: In 1996, the OECD council recommended to member countries to refrain from the tax-deductibility of bribes to foreign officials (which happened, e.g., in Germany not before 2002), followed by the publication of their Anti-Bribery Convention (“Convention on Combating Bribery of Foreign Public Officials in International Business Transactions”) (OECD 2009). It was signed in December 1997 and came into force in February 1999. Against the background of the UN’s preparation of a respective convention, in 2003, the UN Global Compact

added to the originally 9 principles from 1999, a 10th principle regarding antibribery, and finally, in 2004, the United Nations released their “United Nations Convention against Corruption (UNCAC),” considered by the editing office (UN office on drugs and crime) as the “only legally binding universal anti-corruption instrument” (United Nations 2004). Next to the description of preventive measures, criminalization and law enforcement, international cooperation, asset recovery, etc., it covers many different forms of corruption, such as bribery, trading in influence, abuse of functions, and various acts of corruption in the private sector.

Till date, the UK Bribery Act (2010), which came into effect in 2011, is considered as one of the strictest laws in the area of antibribery. In effect, it owns a global scope of application as it governs not only the British companies but all their subsidiaries as well. The UK’s authorities aggressively pursue offenders regardless of their geographical location or place of incorporation, following the so-called Long Arm of the Law principle. After its establishment, the UK’s Ministry of Justice at that time indicated that all that is required to be subject to the UK’s new law is considered to be a tangential relationship with the UK, falling, thus, under its scope. Offences may lead to sanctions of both, individuals and corporates, including high financial fines and/or imprisonment of individuals up to 10 years (Breslin and Kocoras 2010, pp. 363–365).

In the case of sentencing, the FCPA as well as the UK Bribery Act are rewarding the efforts of organizations to prevent bribery on a corporate level, by less strict sanctions. Systematic approaches which include antibribery measures are known today as compliance and/or integrity programs.

Corporate Approaches of Preventing Bribery: Compliance- and Integrity Management

As a reaction to the huge fraud scandal around the US-American energy company Enron, the United

States published a new law in 2002, the Sarbanes Oxley Act (SOX) which made compliance and compliance management mandatory for all companies worldwide if they want to be listed at any stock exchange located in the United States. Until then in Europe, only the financial sector had heard of and practiced “compliance” in a corporate context (Kleinfeld and Martens 2018, p. 6).

In the Business Ethics debates in the United States and in Europe, however, a discussion about compliance as a minimum requirement of corporate ethical behavior had already taken place in the 1990s, going along with the controversial discussion of whether the so-called integrity approach (see e.g., De George 1993; Paine 1994; Becker 1998), based on a management of values, of corporate culture and on the intrinsic motivation and commitment of the corporate members, would be the more effective alternative to a pure compliance approach, concentrating on controlling mechanisms of legal conformity only (Kleinfeld and Martens 2018, p. 7; Schöttl 2018, pp. 38–41). Both, the theoretical discussion as well as the later introduced practical approaches of compliance and/or integrity management had a strong focus on preventing bribery and other forms of corruption in and of organizations – the latter mainly because of the new legal frameworks described above.

In the meantime, a number of national as well as international guidelines and standards have been developed providing guidance for companies of the private and public sector how to set up, establish and manage effective antibribery measures inside, as a part of their own corporate governance mechanisms, but also outside, throughout their supply and value chains. One of the first globally promoted frameworks were the *Business Principles for Countering Bribery* by Transparency International (2002), published in a first edition in December 2002. The principles could be used both, for the orientation of the own bribery preventing activities, as well as for external verification processes in order to assure that an organization has established a program which is considered to be state of the art in the field of antibribery.

Defining what precisely is state of the art in a certain area on a global scale is one of the main tasks of the International Standards Organization (ISO): In 2014, it published ISO 19600, a guidance document dealing with the implementation and establishment of an effective compliance management; in 2016, it released ISO 37001, a certifiable standard which “specifies requirements and provides guidance for establishing, implementing, maintaining, reviewing and improving an antibribery management system” (ISO 2016). Verification processes based on ISO 37001 or any other certifiable framework, however, cannot and never are intended to guarantee that an organization and all of its members are behaving with integrity. The main reason for companies to undergo an external verification process of their antibribery programs instead is to credibly show to customers or public authorities that they did respectively are doing whatever necessary to prevent bribery.

Against the background of the legislation and its sentencing guidelines described above, this becomes especially relevant in the event of a concrete case of bribery or any other form of corruption.

Cross-References

- [Bribe Payers Index \(BPI\)](#)
- [Business Ethics](#)
- [Corruption](#)
- [Fraud](#)
- [Integrity Management](#)
- [UN Global Compact](#)

References

- Bannenberg, B. (2002). *Korruption in Deutschland und ihre strafrechtliche Kontrolle. Eine kriminologisch-strafrechtliche Analyse*. Neuwied: Luchterhand.
- Bannenberg, B., & Schaubenstein, W. J. (2004). *Korruption in Deutschland. Portrait einer Wachstumsbranche*. München: Verlag C.H. Beck.
- Becker, T. E. (1998). Integrity in organizations: Beyond honesty and conscientiousness. *Academic Management Review*, 23(1), 154–166.

- Breslin, B., & Kocoras, J. (2010). The Bribery Act 2010: Raising the bar above the US Foreign Corrupt Practices Act. *Company Lawyer*, 31(11), 362. Sweet & Maxwell.
- Chen, M.-J. (2004). *Geschäfte machen mit Chinesen – Insiderwissen für Manager*. Frankfurt/New York: Campus-Verlag.
- Cockcroft, L. (2012). *Global corruption: Money, power and ethics in the modern world*. New York.
- De George, R. T. (1993). *Competing with integrity in international business*. New York: Oxford University Press.
- Frisch, D. (1999). Entwicklungspolitische Gesichtspunkte der Korruption. In M. Pieth & P. Eigen (Eds.), *Korruption im internationalen Geschäftsverkehr: Bestandsaufnahme, Bekämpfung, Prävention* (pp. 89–100). Neuwied: Luchterhand.
- ISO. (2016). ISO 37001: 2016 (en), Geneva.
- Kleinfeld, A., & Martens, A. (Eds.). (2018). *CSR und Compliance. Synergien nutzen durch ein integriertes Management*. Berlin/Heidelberg: Springer Gabler.
- OECD. (2009). *Convention on Combating Bribery of Foreign Public Officials in International Business Transactions*. <https://www.oecd.org/corruption/oecdantibriberyconvention.htm>. Accessed 4 Apr 2020.
- Paine, L. S. (1994). Managing for organizational integrity. *Harvard Business Review*, 72(2), 109–117.
- Pieth, M., & Eigen, P. (Eds.). (1999). *Korruption im internationalen Geschäftsverkehr: Bestandsaufnahme, Bekämpfung, Prävention*. Neuwied: Luchterhand.
- Redwitz, Ch. (2013). *Korruption als wirtschaftliche Handlung: Ziele und Auswirkungen von Korruption in der Zusammenarbeit von Unternehmen und Behörden*. Wiesbaden: Gabler Verlag.
- Rose-Ackerman, S. (1999). Globale Wirtschaft und Korruption. In M. Pieth & P. Eigen (Eds.), *Korruption im internationalen Geschäftsverkehr: Bestandsaufnahme, Bekämpfung, Prävention* (pp. 40–55). Neuwied: Luchterhand.
- Schöttl, L. (2018). Integrity Management als Brücke zwischen CSR- und Compliance Management. In A. Kleinfeld & A. Martens (Eds.), *CSR und Compliance. Synergien nutzen durch ein integriertes Management* (pp. 35–47). Berlin/Heidelberg: Springer Gabler.
- Schroeder, M. (2009). Legal in Fernost. Bekämpfung von Bestechung und Bestechlichkeit in der VR China. In *ZRFC: Risk, fraud & compliance* (pp. 54–57). Berlin: Prävention und Aufdeckung in der Compliance-Organisation.
- Transparency International. (2002). *Business principles on countering bribery*. https://web.archive.org/web/20100902190630/http://www.transparency.org/global_priorities/private_sector/business_principles. Accessed 3 Apr 2020.
- Transparency International. (2019). *Corruption Perceptions Index 2019*. <https://www.transparency.org/cpi2019>. Accessed 4 Apr 2020.
- United Nations. (2004). *United Nations Convention against Corruption*. New York: United Nations.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Accessed 6 Apr 2020.

Brundtland Report

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Synonyms

[Our common future](#)

Definition

The 12 chapters (247 pages) Brundtland report was published by the United Nations World Commission on Environment and Development (UNWCED) in 1987. Its title is derived from the name of the head of the commission, Gro Harlem Brundtland. Its original title is “Our common future.” The report aims to provide a perspective for the long-term, environmentally-friendly, and sustainable human development (Raschke 2015) to address international environmental concerns about economic development (Quick 2017).

History and Description

The Brundtland report counts as the beginning of the discourse about sustainability and sustainable development, but the discussion about the topic started at least in 1972 with the publication of the report “Limits to growth” by the Club of Rome and the United Nations Conference on the Environment in Stockholm (BMZ 2020). It continued in the early 1980s, as the United Nations became highly concerned about the deterioration of natural resources and the human environment, including ozone depletion, global warming, and the unequal living standards of the world population (Britannica 2020).

On the 19th of December 1983, the General Assembly of the United Nations therefore agreed on the establishment of a special commission (Resolution 38/161) to make a report on the environment and global problems to the year 2000 and beyond available. A particular focus was to be put on proposed strategies for sustainable development (United Nations 2020). The UN expected that the commission would develop a “Global Agenda for Change.” Included in this resolution was the point that the report shall collaborate with the Intergovernmental Inter-Sessional Preparatory Committee of the Governing Council of the UN Environment Program to provide the basis for the environmental perspective of the United Nations Environment Program (UNEP) up to the year 2000. More specifically, the General Assembly called the Commission:

- “To propose long-term environmental strategies for achieving sustainable development by the year 2000 and beyond;
- To recommend ways concern for the environment may be translated into greater co-operation among developing countries and between countries at different stages of economical and social development and lead to the achievement of common and mutually supportive objectives that take account of the interrelationships between people, resources, environment and development;
- To consider ways and means by which the international community can deal more effectively with environmental concerns; and
- To help define shared perceptions of long-term environmental issue and the appropriate efforts needed to deal successfully with the problems of protecting and enhancing the environment, a long term agenda for action during the coming decades, and aspirational goals for the world community.” (WCED, 1987, Foreword by Brundtland)

The UN Secretary General Javier Perez de Cuellar appointed the commissioners of the UNWCED, chairwoman Gro Harlem Brundtland (Norway) and vice chairmen Mansour Khalid (Sudan). They selected the members of the commission from elected and civil servants as well as environmental experts from the 21 participating

countries. It consisted of 19 members from 19 countries (originally 20 members from 20 countries): Susanna Agnelli (Italy), Saleh A. Al-Athel (Saudi-Arabia), Bernard Chidzero (Zimbabwe), Lamine Mohammed Fadika (Cote d’Ivoire), Pablo Gonzales Casanova (Mexico, left the commission in August 1986 for personal reasons), Volker Hauff (Federal Republic of Germany), Istwan Lang (Hungary), Ma Shijun (People’s Republic of China), Margarita Marina de Botero (Colombia), Nagendra Singh (India), Paulo Nogueira-Neto (Brazil), Saburo Okita (Japan), Shridath S. Ramphal (Guyana), William Doyle Ruckelshaus (USA), Mohamed Sahnoun (Algeria), Emil Salim (Indonesia), Bukar Shaib (Nigeria), Vladimir Sokolov (USSR), Janez Stanovnik (Yugoslavia), Maurice Strong (Canada), plus Jim MacNeill (Canada; ex officio). The Commission was an independent body, where the members served as individuals and not as representatives of their governments.

In the year 1987, the commission released its report “Our common future”. It was the conclusion of 4 years of discussions about the future of humanity. The publication of the report resulted in two following international conferences on the importance of global sustainable development in London in 1987 and in Milano in 1988. The commission was officially dissolved on 31.12.1987, but continued as the Centre for Our Common Future in Geneva in April 1988. It was re-activated as part of the Rio-Conference in 1992 (Lexikon der Nachhaltigkeit 2020). At this conference (also called Rio Earth Summit), the directives from the Brundtland Report were expanded into five agreements including the Rio Declaration on Environment and Development and Agenda 21 (Quick 2017). The ideas of the report are also included in the Millenium Development Goals and the Sustainable Development Goals (SDGs) (Mondini 2019).

The book is subdivided into three parts and 12 chapters. It covers topics such as sustainable development, energy consumption, industrial impacts, impacts species and ecosystems, the role of the international economy for development, population growth and human resources, food security, and legal principles for environmental protection (Britannica 2020). In more detail, the report contains the following parts and chapters:

Part 1 Common Concerns (Chap. 1 A threatened future; Chap. 2 Towards Sustainable Development, Chap. 3 The Role of the International Economy).

Part 2 Common Challenges (Chap. 4 Population and human resources; Chap. 5 Food Security: Sustaining the Potential; Chap. 6 Species and Ecosystems: Resources for Development; Chap. 7 Energy: Choices for Environment and Development; Chap. 8 Industry: Producing More with Less; Chap. 9 The Urban Challenge).

Part 3 Common Endeavors (Chap. 10 Managing the Commons; Chap. 11 Peace, Security, Development, and the Environment; Chap. 12 Towards Common Action: Proposals for Institutional and Legal Change) (UNWCED 1987)

One of the most enduring aspects of the publication is the popularization of the following definition of sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of ‘needs’, in particular the essential needs of the world’s poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs” (UNWCED 1987, p. 41)

For the first time, “Our common future” made available a basis for integrative global policies that connected usually separated problem areas such as environmental pollution in industrialized countries, debt crisis, population development, and desertification in the so-called third world. The goals were to overcome poverty in the developing world and adjust consumption patterns in the industrialized world with the protection of nature as the foundation of human life (Lexikon der Nachhaltigkeit 2020). At the same time, critics argued that the report reflects a continued believe in the ideals of economic growth to sustain the status quo, thereby securing the ability of humanity to develop within the existing socio economic mechanisms through a different type of growth (Hopwood et al. 2005; Cayley n.d.). Additionally,

the concept of needs as an anthropocentric term allowing the instrumental use of nature, the question of what should be developed and sustained as well as the lack of models to operationalize the vague definition of sustainable development (e.g., quantification and qualification) are further shortcomings. Today, the use of the expression sustainable development is used in ways that sometimes mutually exclusive (Redclift 2009). At the same time, it was outlined that “Our common future” provides a pragmatic reform approach, accepting the necessity of new ways to interact with the environment as being interconnected with the economy and the society (Cayley n.d.).

Since the publication of the report, the world has changed dramatically (e.g., the end of the Cold War, globalization, neo-liberal economic changes) and with it subsequent interpretations of the concept of sustainable development (Papuzinski 2018). Nevertheless, the Report brought sustainability issues into the mainstream (Cayley n.d.). Moreover, it gives the first systematization and reference of the link of development and environmental issues and the connection of the responsibility of present generations for future generations (Reschke 2015).

The complete report can be downloaded on: <https://sustainabledevelopment.un.org/milestones/wced>

Summary

The 1987 published so-called Brundtland Report (Our common future) by the UNWCED was an important step in the public discourse on sustainable development. It continued a process that had started in 1972 at the United Nations Conference on the Environment in Stockholm and later continued at the Rio Earth summit in 1992. Today, it remains a valid base for global sustainable development expressed, for example, in the Sustainable Development Goals. (This comes from the original text) Since the publication of the 12-chapter report, the world has changed dramatically (e.g., the end of the Cold War, globalization, neo-liberal economic changes) and with it subsequent interpretations of the concept of sustainable development (Papuzinski 2018).

Nevertheless, the Report brought sustainability issues into the mainstream (Cayley n.d.). Moreover, it gives the first systematization and reference of the link of development and environmental issues and the connection of the responsibility of present generations for future generations (Reschke 2015).

Cross-References

- Club of Rome
- Limits to Growth
- Sustainable Development
- Sustainability (World Commission on Environment and Development Definition)

References

- BMZ (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung). (2020). Die Nachhaltigkeitsagenda und die Rio-Konferenzen. http://www.bmz.de/de/themen/2030_agenda/historie/rio_plus20/. Accessed 30 Nov 2020.
- Britannica. (2020). Brundtland Report, <https://www.britannica.com/topic/Brundtland-Report>. Accessed 30 Nov 2020.
- Cayley, M. (n.d.) The Brundtland Report: A short critique. https://www.academia.edu/7757839/The_Brundtland_Report_A_Short_Critique. Accessed 05 Dec 2020.
- Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: mapping different approaches to sustainable development, 13(1), 38–52.
- Lexikon der Nachhaltigkeit. (2020). Brundtland Bericht, 1987. https://redaktion.nachhaltigkeit.info/artikel/brundtland_report_563.htm. Accessed 30 Nov 2020.
- Mondini, G. (2019). Sustainability assessment: From Brundtland report to Sustainable Development Goals. *Journal Valori e Valutazioni*, 23, 129–137.
- Papuzinski, A. (2018). The enlightenment assumptions of the Brundtland report. *Problemy Ekorozwoju/ Problems of Sustainable Development*, 13(1), 7–14.
- Quick, S. (2017). Brundtland report. In L. L. Lowry (Ed.), *The Sage International encyclopedia of travel and tourism* (pp. 172–174). Thousand Oaks: SAGE.
- Raschke, J. (2015). *Brundtland Bericht, 1987*, Verfügbar unter. https://www.nachhaltigkeit.info/artikel/brundtland_report_563.htm. [aufgerufen am 20. September 2017].
- Redclift, M. R. (2009). Sustainable development (1987–2005)–an oxymoron comes of age. *Problemy Ekorozwoju/ Problems of Sustainable Development*, 4(1), 33–50.
- United Nations. (2020). Report of the World Commission on Environment and Development- Our common future. <https://sustainabledevelopment.un.org/milestones/wced>. Accessed 30 Nov 2020.
- UNWCED. (1987). Report of the world commission on environment and development- Our common future. https://www.un.org/ga/search/view_doc.asp?symbol=A/42/427&Lang=E. Accessed 30 Nov 2020.
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BS8001 Circular Economy Standard

Synonyms

Circular economy best practices; Circular economy guidelines; Circular Economy

Implementation Standards; Circular Economy Sustainability Standards

Definition

The circular economy is a holistic systems approach that looks to create a closed loop of material flows, where waste is minimized, and products and materials are kept in use for as long as possible. BS8001: Circular Economy Standard is a framework developed by the British Standards Institution (BSI) to help organizations implement circular economy principles and practices. The standard provides guidance on how to assess an organization's circular economy performance, how to identify and manage material flows, how to use renewable energy and reduce greenhouse gas emissions, and how to promote social fairness and well-being. The standard is intended to help organizations reduce their environmental impact and improve their economic performance by creating new business opportunities, driving innovation, and increasing resource productivity. BS8001 serves as a guide to organizations on how to implement the circular economy principles; it provides a set of guidelines and requirements that organizations can follow to improve their environmental performance, economic performance, and social performance. The standard can be applied to organizations of all sizes and sectors, it is intended to help organizations to adopt the circular economy principles and create a more sustainable future.

Introduction

The circular economy is a concept that has gained significant attention in recent years as a way to address the pressing environmental and economic challenges of our time. The traditional linear model of take-make-waste, in which resources are extracted, used, and then discarded, is no longer sustainable. Instead, the circular economy aims to keep resources in use for as long as possible, extracting the maximum value from them before recovering and regenerating them (Wiedmann et al. 2018). This approach can not

only reduce the environmental impact of economic activity but also improve economic performance by creating new business opportunities, driving innovation, and increasing resource productivity (Elegbede et al. 2023a, b; Easton et al. 2017).

The circular economy is a holistic systems approach that seeks to create a closed loop of material flows, where waste is minimized, and products and materials are kept in use for as long as possible. This can be achieved through the implementation of circular economy principles, such as designing out waste and pollution, keeping products and materials in use, and regenerating natural systems (European Commission 2015).

One of the key ways to implement the circular economy is through the use of standards and frameworks. The British Standards Institution (BSI) developed BS8001, which provides a framework for organizations to implement circular economy principles and practices. BS8001 is a standard that is designed to help organizations to improve their environmental performance, economic performance, and social performance (BSI 2020). It provides guidance on how to assess an organization's circular economy performance, how to identify and manage material flows, how to use renewable energy and reduce greenhouse gas emissions, and how to promote social fairness and well-being (Chen et al. 2019).

Principles of the Circular Economy

The circular economy is based on a set of principles that aim to create a closed loop of material flows, where waste is minimized, and products and materials are kept in use for as long as possible. The principles of the circular economy include designing out waste and pollution, keeping products and materials in use, and regenerating natural systems (Ellen MacArthur Foundation 2018, 2019).

Designing out waste and pollution: The circular economy seeks to design out waste and pollution by creating products and services that are designed for disassembly and reuse, and that minimize the use of hazardous materials. This can be achieved through the use of life cycle thinking,

which considers the entire life cycle of a product or service, from design and production to use, reuse, and end-of-life (Ellen MacArthur Foundation 2018).

Keeping products and materials in use: The circular economy aims to keep products and materials in use for as long as possible by extending their lifetimes, and by recovering and regenerating materials at the end of their useful lives. This can be achieved through the use of circular business models such as product-as-a-service, leasing, and shared use (Kestens et al. 2018).

Regenerating natural systems: The circular economy also aims to regenerate natural systems by reducing the use of virgin materials and increasing the use of renewable materials. This can be achieved through the use of closed-loop systems, such as recycling, composting, and anaerobic digestion, that convert waste into valuable resources (Elegbede et al. 2022; Ellen MacArthur Foundation 2018). It is important to note that the circular economy principles are interconnected and mutually reinforcing, and that the implementation of one principle often supports the implementation of others (Ellen MacArthur Foundation 2018).

BS8001 Requirements and Implementation

BS8001 is a standard developed by the British Standards Institution (BSI) to provide a framework for organizations to implement circular economy principles and practices. The standard is intended to help organizations reduce their environmental impact and improve their economic performance. The standard is composed of three key requirements: assessment, management, and performance.

Assessment: BS8001 requires organizations to assess their circular economy performance by identifying and quantifying the material flows that are most relevant to their operations. This assessment should take into account the entire life cycle of the products and services, from raw materials to end-of-life (BSI 2017, 2020).

Management: BS8001 requires organizations to manage their material flows by developing

strategies and action plans to reduce waste, increase resource efficiency, and promote the use of renewable materials. This can be achieved through the use of circular business models such as product-as-a-service, leasing, and shared use (Kestens et al. 2018).

Performance: BS8001 requires organizations to continuously monitor and improve their circular economy performance by setting targets and indicators, and by reporting their progress to stakeholders (BSI 2020).

Implementation: Implementing BS8001 requires organizations to take a holistic approach that considers the entire life cycle of products and services. Organizations should begin by assessing their circular economy performance, identifying the material flows that are most relevant to their operations. This assessment should take into account the entire life cycle of the products and services, from raw materials to end-of-life (BSI 2020).

Once the assessment is completed, organizations should develop strategies and action plans to reduce waste, increase resource efficiency, and promote the use of renewable materials (Kestens et al. 2018). This can be achieved through the use of circular business models such as product-as-a-service, leasing, and shared use. Also, organizations should continuously monitor and improve their circular economy performance by setting targets and indicators, and by reporting their progress to stakeholders (BSI 2020).

An example of an organization implementing BS8001 is a car manufacturing company that switches to a product-as-a-service business model by leasing cars to customers instead of selling them. By doing so, the company is able to reduce waste by keeping cars in use for longer periods of time, increase resource efficiency by using renewable materials in the manufacturing process, and promote the use of renewable energy by encouraging customers to use electric cars. Another example of an organization implementing BS8001 is a construction company that switches to using circular building materials such as reclaimed wood and recycled steel in their building projects. By doing so, the company is able to reduce waste by using materials that would

otherwise go to the landfill, increase resource efficiency by using materials that have already been extracted and processed, and promote the use of renewable materials by using materials that can be recycled or regenerated at the end of their useful life. It's worth noting that the examples above are just a representation of how organizations can implement BS8001. Every organization will have different challenges and opportunities to apply the standard in their specific field.

Effectiveness of BS 8001:2017 Circular Economy Standard for Organizations

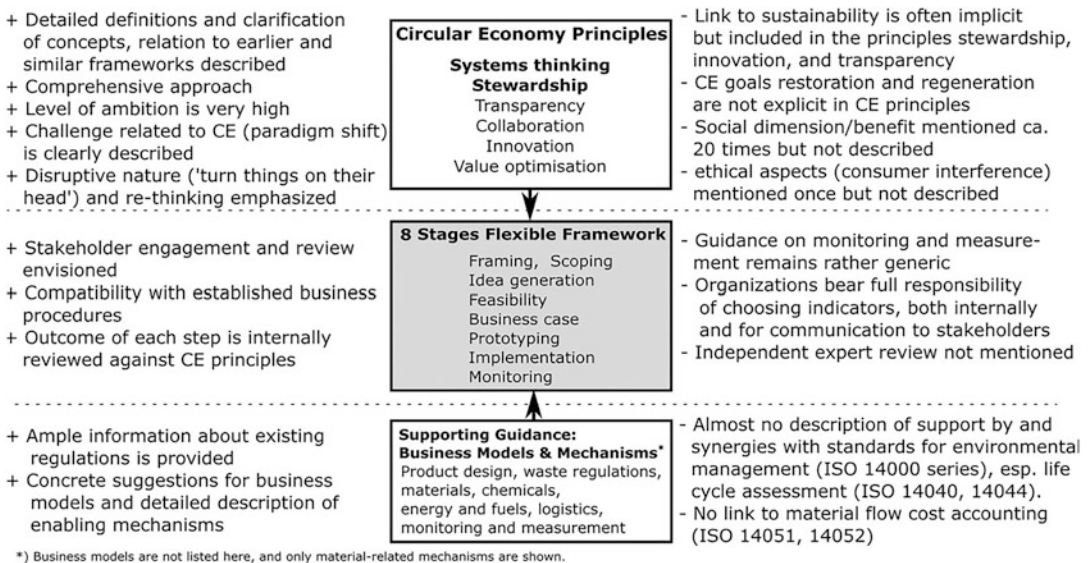
The Circular Economy Standard for Organizations BS 8001:2017 is a comprehensive guide to the implementation of circular economy principles in organizations. The standard provides an in-depth introduction to the motivations behind the circular economy, its mechanisms, and its relation to other concepts such as resource efficiency and the bioeconomy. The standard defines the circular economy as an “economy that is restorative and regenerative by design, and which aims to keep products, components, and

materials at their highest utility and value at all times, distinguishing between technical and biological cycles.” The definition of value in the standard is described as “financial and/or non-financial gain” (Pauliuk 2018).

The standard lists several macro-level benefits of the circular economy, including improved resilience of economic systems, economic growth and employment, and preserved natural capital and climate change mitigation. At the micro-level, the standard cites cost savings, new sources of innovation and revenue, improved customer relationships, and improved resilience for organizations as benefits (Fig. 1).

The standard outlines six principles of the circular economy that all organizations should follow, with systems thinking and stewardship being two overarching principles that have far-reaching consequences for decision-making within the organization. The core of the standard is an eight-stage flexible framework to guide the practical implementation of circular economy principles in organizations. The framework is flexible, allowing organizations to adapt it to their level of “circularity maturity.”

For each stage, the standard provides a detailed description of its purpose and the actions that



BS8001 Circular Economy Standard, Fig. 1 Framework and key components of the BS 8001:2017 Circular Economy Standard for Organizations (Pauliuk 2018)

should be taken, with a review of the outcome against the principles of the circular economy. The standard also provides guidance on business models, enabling mechanisms, and a total of 16 circular economy issues and considerations, including aspects of accounting, competition law, marketing, insurance, and information management. The overarching goal of the implementation of circular economy principles is to create long-term business value through sustainable resource management (Pauliuk 2018).

The standard contains a warning against superficial adoption of circular economy principles and emphasizes the need for systemic consideration in order to create real change towards a circular economy. The standard's strengths include the clarification of terms, the description of the profound changes necessary, the integration of circular economy principles into the business development process, and the description of relevant regulatory frameworks and mechanisms. However, there may be some tension between the need for radical change and the standard's main task of providing reliable and authoritative guidance on organizational processes.

Overall, the Circular Economy Standard for Organizations BS 8001:2017 serves as a comprehensive guide to the implementation of circular economy principles in organizations, providing a flexible framework, clear guidance on business models and enabling mechanisms, and the integration of circular economy principles into the business development process.

Circular Economy Business Models

Circular economy business models are a key element of the circular economy as they can provide organizations with new opportunities to create value while reducing their environmental impact. Circular economy business models can be defined as “innovative business models that are designed to keep products, components, and materials at their highest utility and value at all times, in a closed loop system” (Kestens et al. 2018).

There are several different types of circular economy business models, each with its own

unique characteristics. Some of the most common circular economy business models include:

Product-as-a-service: This model involves providing customers with access to a product rather than selling the product itself. This can be achieved through leasing, renting, or subscription-based models. An example of a product-as-a-service model is a car sharing program, where customers pay a monthly fee for access to a fleet of cars rather than purchasing a car (Geyer et al. 2017).

Shared use: This model involves sharing resources, such as equipment or facilities, among multiple users. An example of a shared use model is a tool sharing program where customers can borrow tools from a community-based lending library rather than purchasing their own tools (Hammer 2018).

Closed-loop supply chains: This model involves creating closed-loop systems where resources are kept in use for as long as possible and waste is minimized. An example of a closed-loop supply chain model is a recycling program where waste materials are collected, processed, and used as raw materials for new products (Lieder et al. 2018).

Upcycling: This model involves taking waste materials and turning them into new products of higher value. An example of upcycling is turning used plastic bottles into fibers for clothing (Lieder et al. 2018).

Leasing: This model involves renting out a product or service for a certain period of time, at the end of which the product is returned to the supplier. An example of leasing is renting out construction equipment instead of buying it (Geyer et al. 2017).

Circular economy business models can provide organizations with new opportunities to create value while reducing their environmental impact. They can also help organizations to comply with BS8001 requirements by reducing waste, increasing resource efficiency, and promoting the use of renewable materials (Tiwari et al. 2019). Additionally, these business models can also help organizations to improve their economic performance by creating new revenue streams and reducing costs (Geyer et al. 2017).

However, it is important to note that implementing circular economy business models can also present challenges for organizations. These challenges include a lack of understanding and knowledge about circular economy business models, limited access to financing and investment, and regulatory barriers (Hammer 2018).

To successfully implement circular economy business models, organizations must have a clear understanding of the circular economy principles and the potential opportunities and challenges that these models present. They should also actively engage with stakeholders and partners to build a supportive ecosystem and overcome any barriers to implementation (Hammer 2018).

Challenges and Opportunities of Implementing BS8001

Implementing BS8001, the Circular Economy Standard developed by the British Standards Institution (BSI), can provide organizations with numerous benefits, including improving resource efficiency, reducing waste, and promoting the use of renewable materials. However, the implementation process can also present various challenges for organizations.

One major challenge is a lack of understanding and knowledge about circular economy principles and practices. This lack of understanding can make it difficult for organizations to identify and implement relevant circular economy strategies and action plans (Hammer 2018). Additionally, organizations may face limited access to financing and investment for circular economy projects and initiatives, particularly for small and medium-sized enterprises (SMEs) (Geyer et al. 2017).

Regulatory barriers can also pose a challenge for organizations looking to implement BS8001. Regulations and policies that are not aligned with the principles of the circular economy, such as those that favor a linear take-make-waste model, can hinder the implementation process (Hammer 2018). Moreover, organizations may also face resistance to change from employees, customers, and other stakeholders who may be hesitant to embrace new circular economy practices and business models (Hammer 2018).

Despite these challenges, there are also many opportunities for organizations that implement BS8001 and adopt circular economy principles and practices. These include:

Creating new business opportunities: Organizations can create new revenue streams and business models by implementing circular economy principles and practices (Geyer et al. 2017).

Driving innovation: Organizations can drive innovation by finding new ways to use resources and by developing new products and services (Tiwari et al. 2019).

Reducing costs: Organizations can reduce costs by improving resource efficiency and by reducing the need to purchase new raw materials (Geyer et al. 2017).

Improving environmental performance: Organizations can improve their environmental performance by reducing waste, increasing resource efficiency, and promoting the use of renewable materials (Tiwari et al. 2019).

Improving social performance: Organizations can improve their social performance by creating sustainable jobs, promoting fair labor practices, and fostering collaboration between different stakeholders (Hoffman 2019).

Best Practices for Implementing BS8001

Implementing BS8001 can be a complex process, but there are several best practices that organizations can follow to ensure a successful implementation.

Assess current performance: Organizations should assess their current performance related to circular economy principles and practices, and identify areas for improvement. BS8001 provides a framework for assessing circular economy performance, including environmental performance, economic performance, and social performance (British Standards Institution 2020).

Develop a strategy and action plan: Organizations should develop a strategy and action plan that outlines specific actions to be taken to improve circular economy performance. The strategy and action plan should align with the organization's overall sustainability goals and objectives (British Standards Institution 2020).

Engage stakeholders: Organizations should engage with stakeholders, including employees, customers, suppliers, and other partners, to build support for the implementation of BS8001. Stakeholder engagement can also help organizations identify challenges and opportunities, and identify potential solutions (British Standards Institution 2020).

Continuously monitor and improve performance: Organizations should continuously monitor and evaluate their circular economy performance, and take actions to improve performance as needed. BS8001 includes requirements for monitoring and reporting on circular economy performance (British Standards Institution 2020).

Leverage technology: Organizations can leverage technology to improve resource efficiency, increase the use of renewable materials, and reduce waste. Examples of technologies that can be used to support circular economy principles include digital platforms for sharing resources, recycling technologies, and circular design software (British Standards Institution 2020).

Collaborate with other organizations: Organizations should collaborate with other organizations to share knowledge, resources, and best practices related to circular economy principles and practices. Collaboration can help organizations to overcome challenges and achieve greater impact (British Standards Institution 2020).

Summary

BS8001 provides a framework for organizations to implement circular economy principles and practices and improve their environmental performance, economic performance, and social performance. The standard requires organizations to assess their circular economy performance, develop strategies and action plans to reduce waste, increase resource efficiency, and promote the use of renewable materials, and continuously monitor and improve their performance. By implementing BS8001, organizations can create new business opportunities, drive innovation, and increase resource productivity while reducing their environmental impact. Circular economy

business models are an essential element of the circular economy as they can provide organizations with new opportunities to create value while reducing their environmental impact. Organizations should consider implementing these models as part of their efforts to comply with BS8001 and create a more sustainable future. Implementing BS8001 can present challenges for organizations, the benefits of improved resource efficiency, reduced waste, and increased use of renewable materials make it a worthwhile endeavor. Organizations should carefully evaluate the challenges and opportunities and develop strategies to overcome the challenges and capitalize on the opportunities. Implementing BS8001 requires a comprehensive approach that includes assessing current performance, developing a strategy and action plan, engaging stakeholders, continuously monitoring and improving performance, leveraging technology, and collaborating with other organizations. By following these best practices, organizations can improve their circular economy performance and achieve their sustainability goals.

Cross-References

- [Blue Circular Economy](#)
- [Circular Economy](#)
- [Green Circular Economy](#)
- [Green, Circular, and Bio Economy](#)
- [Life Cycle Sustainability Assessment](#)
- [Ocean Sustainability](#)

References

- Blomsma, F., & Brennan, G. (2017). The Emergence of Circular Economy: A New Framing Around Prolonging Resource Productivity. *J Ind Ecol* 21. <https://doi.org/10.1111/jiec.12603>
- Blomsma, F., Tennant, M., & Ozaki, R. (2023). Making sense of circular economy: Understanding the progression from idea to action. *Business Strategy and the Environment*, 32(3), 1059–1084.
- British Standards Institution (BSI). (2020). *BS 8001:2019 framework for implementing the principles of the circular economy in organizations*. London: BSI.
- BSI. (2017). *Circular Economy Standard for Organizations BS 8001:2017*. London: BSI Standards Limited.

- Chen, X., Chen, J., & Sun, Y. (2019). The circular economy and the role of standardization: A systematic literature review. *Journal of Cleaner Production*, 241, 118735.
- Easton, J. L., Wiedmann, A. M., & Barrett, J. (2017). The circular economy in practice: An analysis of current and future opportunities for UK businesses. *Journal of Industrial Ecology*, 21(1), 51–64.
- Elegbede, I. et al. (2022). Ocean Sustainability. In: Idowu, S., Schmidpeter, R., Capaldi, N., Zu, L., Del Baldo, M., Abreu, R. (eds) *Encyclopedia of Sustainable Management*. Springer, Cham. https://doi.org/10.1007/978-3-030-02006-4_302-1
- Elegbede, I., Lawal-Are, A., Favour, O., Jolaosho, T., & Goussanou, A. (2023a). Chemical compositions of bivalves shells: *Anadara senilis*, *Crassostrea gasar*, and *Mytilus edulis* and their potential for a sustainable circular economy. *SN Applied Sciences*, 5(1), 44.
- Elegbede, I. et al. (2023b). Embedded Sustainability. In: Idowu, S., Schmidpeter, R., Capaldi, N., Zu, L., Del Baldo, M., Abreu, R. (eds) *Encyclopedia of Sustainable Management*. Springer, Cham. https://doi.org/10.1007/978-3-030-02006-4_442-1
- Ellen MacArthur Foundation. (2018). *Towards the circular economy*. Cowes: Ellen MacArthur Foundation.
- Ellen MacArthur Foundation. (2019). *The circular economy: A new economic growth model*. Cowes: Ellen MacArthur Foundation.
- European Commission. (2015). *A resource-efficient Europe*. Brussels: European Commission.
- Geyer, R., Reuter, C., & Spath, D. (2017). The circular economy: A new sustainability paradigm? *Journal of Cleaner Production*, 142, 1552–1571.
- Hammer, M. (2018). Circular economy business models: A review of the literature. *Journal of Cleaner Production*, 172, 3450–3468.
- Hoffman, A. J. (2019). The circular economy and its implications for sustainability governance. *Sustainability Science*, 14(1), 1–13.
- Kestens, T., de Lange, M., & de Bakker, J. (2018). Circular economy business models: A systematic literature review. *Journal of Cleaner Production*, 201, 1–17.
- Lieder, L. K., Seuring, S., & Gold, S. (2018). Circular economy in food systems: A review of the literature. *Journal of Cleaner Production*, 185, 830–845.
- Pauliuk, S. (2018). Critical appraisal of the circular economy standard BS 8001: 2017 and a dashboard of quantitative system indicators for its implementation in organizations. *Resources, Conservation, and Recycling*, 129, 81–92.
- Tiwari, C. M., Ashworth, G. J., & Brown, R. A. (2019). Circular economy in construction: A review of current literature and practice. *Journal of Cleaner Production*, 233, 1165–1178.
- Wiedmann, A. M., Minx, P., & Barrett, J. (2018). Towards a circular economy: An analysis of the practical implementation of circular economy principles in the UK. *Journal of Cleaner Production*, 189, 738–750.

Buddhist Ethics

► Confucian Ethics

Building Energy Conservation

► Building Energy Management

Building Energy Management

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Synonyms

Building energy conservation; Building energy management system (BEMS); Building management

Definition

Building energy management is the act of energy conservation in a building through identifying and monitoring energy consumption and directing building and user behavior to decrease energy consumption and costs. From a wider point of view, the term also pertains to energy policy targets like zero emissions, decreasing air pollution, increasing the share of renewable energy resources, or creating smarter cities. Building management and building energy management is mainly threefold. First is the physical and energetic aspects of management, which is affected by the design, size, age and use of the building, energy-consuming equipment located inside of the building, monitoring equipment, sensors, control mechanisms, and other physical makeup of the building. Second is decreasing energy costs, which is usually a significant part of the operational budget. This aspect is concerned with how the building is connected to the infrastructure, its

access to renewable energy resources, and contracts with utility companies. The third is engaging with tenants and managing or encouraging pro-environmental behavior. The responsibility of management lies with both a building manager and whoever is driving the development in the city, thus directing the vision and consequent management decisions related to energy policy and infrastructure. A more limited view of building energy management is the utilization of only Building Energy Management Systems (BEMS). BEMS and other advances in technology make monitoring, adjusting and implementation easier while decreasing energy consumption and costs. They can also be integrated to control other systems such as water, industrial processes, security, and information.

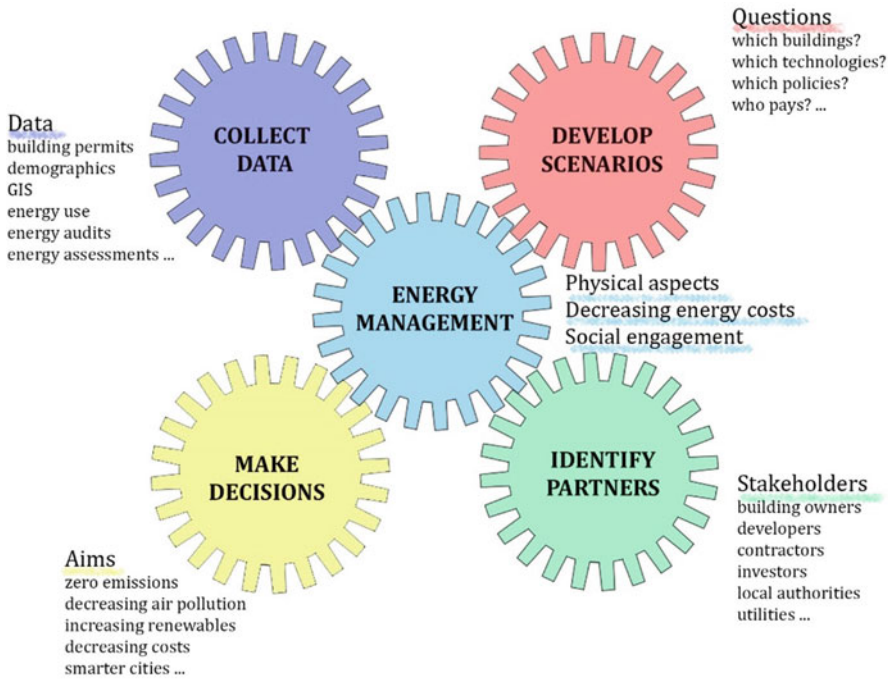
Background

The building sector accounts for about 20% of the total delivered energy consumption in the world (EIA 2019), and in many countries, the building sector consume around 40% of the total energy use in the EU and 37% in China (Delzendeh et al. 2017). In addition, this consumption constitutes about one-third of global carbon emissions (UNEP 2009), therefore decreasing building energy consumption is a common target in decreasing carbon emissions to mitigate climate change. However, the total building energy demand is estimated to increase because of growth (EIA 2019) that is an increase in the human population, quality of life, and access to services. In this context, all countries and many regions have legislation and aims relevant to building design and construction. For example, the recast of EU's Directive on Energy Performance of Buildings in 2017 establishes "nearly zero energy building" as the target for all public buildings after 2018 and all new buildings after 2020 at the European level. In the USA, voluntary practices and programs that encourage energy-efficient structures are widespread, one of which is the Zero Energy Ready Homes program of the US Department of Energy. Moreover, concerned parties are creating more stringent or voluntary building

initiatives such as green building, solar building, zero energy building, plus energy building, energy-efficient building, passive building, zero-emission building, intelligent building, and smart building. Besides, decarbonization of a building, which means removing greenhouse gasses from the buildings' energy consumption, is a long-term goal.

After the industrial revolution, new building typologies such as factories, apartments, and skyscrapers have emerged, and urbanization has accelerated and created a change in both the citizen culture and the building stock. Also, modern architecture, which advocates that people should dominate the nature and that a building can be applied anywhere regardless of local environmental conditions, has emerged and spread globally, thus utilizing heating and cooling systems to regulate environmental conditions and reach thermal comfort conditions while consuming huge amounts of energy became the norm. The energy crisis of the 1970s became a wakeup call to the unsustainability of this system; moreover, environmental awareness increased. With increasing awareness of environmental impacts of greenhouse gas emissions resulting from energy use, the concepts of energy efficiency and energy management in buildings gained importance. Nevertheless, the consumption society and the associated consumption-based building construction still remained largely dominant.

The energy policy and targets of a city or a nation are affected by the building stock and its energy consumption to a certain degree (see, for example, Dhakal 2009). In this context, data about the existing situation can be collected from resources such as building permits, demographics, geographical information systems (GIS), energy use, and energy audits or assessments. Scenarios can be developed by answering the questions of "which buildings," "which technologies," "which policies," and "who pays." When gaps are identified, decisions can be made related to the targets of energy policy like zero emissions, decreasing air pollution, increasing the share of renewable energy resources, decreasing costs, or creating smarter cities. The partners include building owners, developers, contractors,



Building Energy Management, Fig. 1 Conceptual diagram of building energy management

investors, local authorities, utilities, and companies. Thus implementation, that is, building energy management, usually becomes a step in the continuing progress toward reaching large-scale goals, yet the implementation can be divided into application steps of physical aspects, decreasing energy costs, and social engagement (Fig. 1).

Physical Aspects

The main factors in reaching comfort and minimum energy consumption in a building are the building's design and its physical properties. The major energy consumption categories of a building are usually determined at the design phase, and are related to heating, cooling, ventilation, water heating, electrical appliances, and cooking. Accordingly, the energy performance of a building depends on its architectural, and mechanical and electrical-electronic systems design. Passive and active technologies and design strategies are mainly concerned with appropriate architectural

design, integration of renewable energy resources within buildings, proper design, and choice of technical equipment for thermal, visual, and acoustic comfort. The main considerations for energy efficiency include orientation; relationship with other buildings and infrastructure; construction details; the utilization of surrounding sources from the sun, wind, light, air, water, and ground; the life cycle energy requirements and thermo-physical properties of building materials; and using energy-efficient appliances. Contemporary building regulations usually limit the maximum values for energy consumption related to heating and cooling requirements. In addition to calculations to show compliance with building codes, building simulation and building information modeling in the design stages can help to significantly increase building energy performance (see Fouquier et al. 2013, for more information). However, the occupants and manager of the building play a role in the actual performance of the building and actual results can show (sometimes up to three times) higher values for total energy

consumption, or even larger (e.g. up to ten times) values for energy end-use (Hong et al. 2016).

After the major energy consuming activities are identified, they can be monitored through metering, sensors, or utility bills. The role of sensors is important for an efficient and reliable system. Environmental sustainability is an important issue today; therefore sensors monitor the operation of environmental elements. Some of the sensors are level indicators of clean water tanks, gray water tanks and rainwater tanks, rain sensors for operations such as plant irrigation, and photovoltaic cleaning in the water systems. Other sensors include photometers, light adjustment, human presence, wind, smoke, electricity production and consumption, and electrical measuring devices consumed by different devices in the electrical installations. In this context, occupancy and behavioral patterns can be deduced by new algorithms.

Design strategies and measurements are not sufficient by themselves, and they need to be managed to improve energy performance and comfort at the same time. For this reason, monitored or simulated energy demands can be categorized, the problems identified and decreased by taking appropriate measures. Commissioning services are valuable to maintain the optimum use of resources since installation errors and malfunctions can be a major contributor to decreased energy performance (Cali et al. 2016). If the energy demand of a building is much higher than a similar building, building retrofit may be necessary. The most common energy retrofit measures are changing the elements of the building envelope by implementing thermal insulation or shading, decreasing thermal bridges and unwanted air changes, design for natural ventilation, and using more suitable and energy-efficient appliances. Furthermore, rebates and financing with low credit rates can be possible with energy utility and bank contracts.

Since most of the energy consumption occurs during the occupancy phase of a building and the action of users play a significant role, automation and control of mechanical and electrical-electronic systems are developed. For instance, Building Energy Management Systems (BEMS) are

automated or computerized to control energy-related building services while increasing user comfort. These systems identify their users, learn their comfort preferences, and offer appropriate solutions. They can also be connected to the user via the cloud, utility services via wireless connections, and thus make real-time performance evaluation possible (Shaikh et al. 2014 provide a comprehensive review of intelligent control systems).

BEMS have been in use since the 1980s and can be integrated within the building. Because communications, information, and automation are constantly evolving with the advances in technology, BEMS generally consists of four main components. The first component consists of sensors and actuators such as temperature, humidity, CO₂, and light. All of the data from sources and sensors are encrypted or decrypted for communication with the main processing unit in the second component. The third component is the main processing unit, where all logic and calculations are performed on the data. It hosts databases and web services, and provides output to user units via programmed algorithms. The fourth component is the machine-human interface and provides user control and access to communication protocols. Its reports generally show the status of sensors to the user via mobile or web applications. The management depends on the aim of the manager and can be done in real-time, hourly, daily, or through adjustments when a situation occurs.

Decreasing Energy Costs

Energy consumption usually is a significant part of the operational budget of a building. Besides decreasing the amount of energy consumed by the building, the physical and legal infrastructure and how energy is supplied to the building are the main elements of decreasing energy costs.

Since increasing energy demands on the electricity grid create a strain in many cities, one solution is for grids to be more flexible and robust to deal with special needs. Therefore, decreasing energy demand on the side of the consumer is desired by the electricity suppliers, and is named

energy demand management (or demand side management). Delaying the peak load of the building or making the energy requirements of the building more homogeneous throughout the days and seasons are valuable strategies used in energy demand management. For this reason, measures to decrease electricity costs for off-peak load times are necessary and widespread measures include time of use tariffs or critical peak pricing. They can be implemented by either programming the functions of the building so that they do not overlap or make use of energy storage technologies (for a review of energy demand management measures, see Palensky and Dietrich 2011).

Developing strategies for generating their electricity from onsite or renewable resources and incorporating them into the management plan of the building can be a necessity for a building energy manager. While the intermittent nature of renewable energy resources makes their real-time utilization a challenge; adding energy storage capabilities to the production system can cause the costs to increase to nearly twice, therefore grid connection can be a good choice if available. Yet the addition of renewable energy resources put a strain on the grid mainly because of their intermittent nature, so feeding unconsumed energy to the grid cannot always be possible. Tronchin et al. (2018) analyze and discuss issues and models relevant to making decisions to integrate demand side management and energy storage into buildings.

Some governments and authorities have policies to increase the amount of renewable energy in the electricity sector, or other political priorities like greenhouse gas emission management, clean air pacts, and UN Sustainable Development Goals, thus they subsidize or otherwise encourage the utilization of local decentralized renewable energy production. The availability of renewable energy alternatives can be more expensive, yet they can be subsidized or their price can be made compatible by making use of dynamic pricing or making contacts with sustainable energy resource suppliers. Other procurement options also have to be investigated to decrease energy costs. Especially in large-scale projects, building

energy management has to be taken into account with sustainability management. Moreover, buildings can be integrated with infrastructure and transportation systems in smart buildings and cities. The cooperation between prosumers (both producers and consumers), producers, and operators is a must for the sustainability of the energy grid.

Social Engagement

There is a wide gap between predicted and actual building energy performance and occupant behavior, therefore research on changing occupant behavior is emerging. There can be major variances in the energy consumption of similar units in the same or similar building blocks due to the number of occupants, their schedules of being inside the unit, their need for fresh air, difference in lifestyles, socioeconomic circumstances, and the difference between thermal, acoustical, and visual preferences. All of these elements can be classified under occupant behavior, in addition to the interaction of occupants with building elements and systems including unplugging electrical devices; setting thermostats for heating, cooling, and hot water; operating windows and blinds; and closing devices when the users are not present. The energy-saving potential of occupant behavior is estimated in the range of 10%–25% for residential buildings and 5%–30% for commercial buildings (Zhang et al. 2018). Martinaitis et al. (2015) propose that the desire to control is the main cause of this gap.

Societies are becoming information societies, therefore both the utilities and the building energy managers collect a number of data, thus they can provide feedback on the consequences of the occupants' life choices, and educate and encourage them to behave more consciously. Governments, local authorities, and various interested stakeholders campaign to increase energy responsible behavior as a way to combat climate change (Scherbaum et al. 2008), since behaving in one pro-environmental way crosses over to other areas, that is various energy-related behaviors of occupants are interlinked. While decreasing

greenhouse gas emissions in people's lifestyles can correspond with responsible building energy use, Littleford et al. (2014) report that settings such as office and home identify different behavioral features. Besides, there are various experimental works in encouraging pro-energy behavior including education, and increasing energy, climate, and social awareness. Psychology-based interventions include giving feedback within the context of information of similar consumers and reframing of energy-related issues. Technical advancements make it easier to behave more energy consciously by having access to more options to less energy-intensive devices and designing or making it easier to schedule events without decreasing comfort.

Summary

Decreasing energy consumption, utility costs, the utilization of energy resources, or carbon footprint are all valid reasons for managing building energy. From a limited point of view, an energy manager starts to work with the commissioning of a building over a certain size. Yet in fact, energy needs to be evaluated during the design phase. From a wider perspective, city authorities, utilities, developers, and other stakeholders are a part of the management process. In this context, determining, monitoring, and evaluating the energy needs of a building, decreasing the demand by optimizing different variables, and reducing the consumption are among the targets of building energy management. Besides, simulations during design, careful detailing, and evaluating resources from a life cycle cost point of view would help to realize this intention. Also, integrated management with building systems, tariff selection, and scheduling of energy demand activities in the agreements with utility companies are important. Moreover, communication with other buildings, infrastructure services, generating their own energy, etc. should also be evaluated.

In order to maximize user comfort, feedback should be provided to users regarding their education, behavior, comfort, energy, place

attachment, and climate consciousness. One user's capability to decrease the total building energy consumption is limited, whereas a building energy manager can help many users to come together and realize big scale projects, that is, projects bigger than an individual user can. The one to pay for all the costs is usually the owner, therefore split incentives among owners, users, builders, and utilities can decrease resistance to building and living in high energy performing buildings. In addition the physical needs of the users, their psychological needs, and costs are significant in the energy management of a building.

Buildings of the future can be evaluated within the scope of applications that can be realized by using today's state-of-the-art technologies while taking the economy into account. Although many buildings and communities with targets such as zero energy and zero waste have not been successful yet, great progress has been made in the last decades. Perhaps the most ambitious and aggressive goals in the world are decarbonization and net-zero targets for 2050 set by the EU. EU has mostly established an infrastructure that will achieve the goal of building almost zero energy buildings. Even though EU's goals seem ambitious, there are some prototypes, and some of these technologies will probably mature in the near future; therefore, similarly aggressive goals can be set throughout the world within a slightly longer timeframe.

Cross-References

- [Air Pollution](#)
- [Carbon Emissions](#)
- [Carbon Management](#)
- [Energy Demand Management](#)
- [Energy Efficiency in Public Building Procurement](#)
- [Energy Pricing for Households for Promoting Energy Efficiency](#)
- [Energy-Renewable](#)
- [Green Building](#)
- [Net Zero Emission](#)

- Smart Cities
- Smart Grid
- Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators

References

- Cali, D., Osterhage, T., Streblow, R., & Müller, D. (2016). Energy performance gap in refurbished German dwellings: Lesson learned from a field test. *Energy and Buildings*, 127, 1146–1158. <https://doi.org/10.1016/j.enbuild.2016.05.020>.
- Delzendeh, E., Wu, S., Lee, A., & Zhou, Y. (2017). The impact of occupants' behaviours on building energy analysis: A research review. *Renewable and Sustainable Energy Reviews*, 80, 1061–1071. <https://doi.org/10.1016/j.rser.2017.05.264>.
- Dhakal, S. (2009). Urban energy use and carbon emissions from cities in China and policy implications. *Energy Policy*, 37(11), 4208–4219. <https://doi.org/10.1016/j.enpol.2009.05.020>.
- EIA. (2019). International energy outlook. Resource document. U.S. Energy Information Administration. <https://www.eia.gov/outlooks/ieo/pdf/ieo2019.pdf>
- EU. (2017). Proposal for a directive of the European Parliament and of the Council amending Directive 2010/31/EU on the energy performance of buildings COM/2016/0765 final - 2016/0381 (COD). Resource document. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1490877208700&uri=CELEX:52016PC0765>
- Fouquier, A., Robert, S., Suard, F., Stéphan, L., & Jay, A. (2013). State of the art in building modelling and energy performances prediction: A review. *Renewable and Sustainable Energy Reviews*, 23, 272–288. <https://doi.org/10.1016/j.rser.2013.03.004>.
- Hong, T., Taylor-Lange, S. C., D'Oca, S., Yan, D., & Corgnati, S. P. (2016). Advances in research and applications of energy-related occupant behavior in buildings. *Energy and Buildings*, 116, 694–702. <https://doi.org/10.1016/j.enbuild.2015.11.052>.
- Littleford, C., Ryley, T. J., & Firth, S. K. (2014). Context, control and the spillover of energy use behaviours between office and home settings. *Journal of Environmental Psychology*, 40, 157–166. <https://doi.org/10.1016/j.jenvp.2014.06.002>.
- Martinaitis, V., Zavadskas, E. K., Motuzienė, V., & Vilutienė, T. (2015). Importance of occupancy information when simulating energy demand of energy efficient house: A case study. *Energy and Buildings*, 101, 64–75. <https://doi.org/10.1016/j.enbuild.2015.04.031>.
- Palensky, P., & Dietrich, D. (2011). Demand side management: Demand response, intelligent energy systems, and smart loads. *IEEE Transactions on Industrial Informatics*, 7(3), 381–388. <https://doi.org/10.1109/TII.2011.2158841>.
- Scherbaum, C. A., Popovich, P. M., & Finlinson, S. (2008). Exploring individual-level factors related to employee energy-conservation behaviors at work. *Journal of Applied Social Psychology*, 38(3), 818–835. <https://doi.org/10.1111/j.1559-1816.2007.00328.x>.
- Shaikh, P. H., Nor, N. B. M., Nallagownden, P., Elamvazuthi, I., & Ibrahim, T. (2014). A review on optimized control systems for building energy and comfort management of smart sustainable buildings. *Renewable and Sustainable Energy Reviews*, 34, 409–429. <https://doi.org/10.1016/j.rser.2014.03.027>.
- Tronchin, L., Manfren, M., & Nastasi, B. (2018). Energy efficiency, demand side management and energy storage technologies—A critical analysis of possible paths of integration in the built environment. *Renewable and Sustainable Energy Reviews*, 95, 341–353. <https://doi.org/10.1016/j.rser.2018.06.060>.
- UNEP. (2009). *Buildings and climate change: Summary for decision-makers*. Paris: United Nations Environmental Programme, Sustainable Buildings and Climate Initiative.
- Zhang, Y., Bai, X., Mills, F. P., & Pezzey, J. C. V. (2018). Rethinking the role of occupant behavior in building energy performance: A review. *Energy and Buildings*, 172, 279–294. <https://doi.org/10.1016/j.enbuild.2018.05.017>.

Building Energy Management System (BEMS)

- Building Energy Management

Building Management

- Building Energy Management

Built-in Obsolescence

- Planned Obsolescence

Business Administration

- Corporate Governance

Business Angels

► [Venture Capital](#)

Business Case

► [Business Model](#)

Business Case of CSR

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Synonyms

[Butterfly effect](#); [Corporate financial performance](#); [Corporate social responsibility](#); [Stakeholder theory](#)

Definition

What is corporate social responsibility (CSR)? Should corporate social responsibility be a business strategy? Both of the preceding questions are deceptively simple! This is evident from the quagmire arising from the ways academics and practitioners present and practice CSR. The result is a gamut of definitions contending for relevance and acceptability in the literature. CSR is a social construction that is multi-perspectival and multi-dimensional. Reviews of CSR definitions (see, e.g., Carroll 1999; Dahlsrud 2008) present CSR as a multidimensional overlapping construct with crisscrossing interpretations. Each dimension captures the unique way scholars and practitioners conceive CSR. Accordingly, five dimensions of CSR are identified, namely, environmental, social, economic, stakeholder, voluntariness/ethical/discretionary/philanthropic, and legal dimensions.

The environmental dimension, CSR, is defined as an attempt by organizations to show visible concern for the health of the natural environment by ensuring that their operations all through the value chain do not jeopardize ecological sustainability. Further, the social dimension of CSR tries to explain CSR from the prism of the nexus between business and society. Here CSR is seen as a corporate obligation or responsibility to ensure that they contribute to a healthier society through avoiding practices that would negatively impact the society but vigorously undertake actions that promote the good of the society. The economic dimension of CSR makes a case for CSR to be a strategic path to fulfilling the profitability and other goals of a firm. According to its proponents, CSR is justified if it serves as a tool for maximizing the profit aspiration of the firm. Another dimension of CSR is the stakeholders also referred to as stakeholder groups. It portrays CSR as a strategic responsibility of firms to care and interact with its stakeholders within and outside it to maintain supportive collaboration that supports the continued progression of the firm. This means that CSR would be sub-defined further according to the individual interests of the various stakeholders of the firm. For instance, employees who are one of the internal stakeholders of the firm would define a firm's CRS in terms of the staff welfares and job security. CRS is also defined from the voluntariness of the firm to do things not necessarily because of legal obligations, but majorly because they consider it ethical and are willing to it voluntarily even without any selfish interest. The legal dimension introduces the logic of legal responsibilities. Legal responsibility refers to a firm's conduct that is "consistent with expectations of government and law" (Carroll 1991:40).

Introduction

Resolving the Tension in Theory and Practice: The Stakeholder Theory

The origin of corporate social responsibility (CSR) is fluid, which originates from its diverse definitional perspectives. Therefore, it is arguable

that the concept and practice of CSR predates contemporary age. Therefore, the broad themes of CSR are replete in the literature of the Ancient Greek philosophers, the Bible, and the Middle Ages (Cannon 1994; Blowfield and Frynas 2005; Ciulla 1991). Hence, ancient themes on ethics broadly cover topics that proxy CSR. Also, businesses of earlier times engaged in practices that promoted social welfare as a payback gesture to the society or interest groups or even as a means for promoting their interests. Contemporary CSR has “corporate philanthropy” as its ancestry! Back then, “companies recognised the need to build schools and health centres, for example, as a means of securing the social license to operate” (Newell 2008:1065). From this perspective, CSR could mean an act of “enlightened self-interest,” which is acting morally not just for the sole benefit of others but nearly for self-interest. The modern CSR is traced to the 1800s or the era of the industrial revolution (Carroll 2008) but gained prominence from the 1950s. Yet, despite over half a century of theorization, many tensions persist, resisting a consensus understanding of CSR. Given the continuing widening perspectives and perceptions about CSR, the tensions regarding the epistemology and ontology of CSR continues to get tighter and, at the same time, grow more robust. It is an enigma, “a fad that may never fade.”

Despite the growing debate on CSR, the stakeholder’s theory provides a richer theoretical framework to explain CSR’s nature, scope, and motives. In the 1960s, the Stanford Research Institute first employed the term stakeholder in a corporate context “as a generalisation of the terms stockholder or shareholder” (Modvar and Manuel-Navarrete, 2016). The CSR was defined narrowly as all the groups that influence the survival of an organization (Bonnafeous-Boucher and Rendtorff 2016). Freeman (1984), and other scholars later expanded the meaning to reflect anyone or organization whose action can affect the attainment of organizational objectives or who can be affected by the same. In this sense, a firm’s stakeholder is context and time dependent. Mitchell et al. (1997) identify a firm’s stakeholder in terms of the extent such person is use the

criterion of being useful to the organization. Accordingly, a stakeholder to an organization at any point is one/organisation whose action and perhaps inaction matter to the organization.

One important lesson from the stakeholder’s theory is the apparent fact that organizations are no longer isolated institutions. Instead, they represent a system of negotiated interests where one’s negotiation depends largely on the level of influence one can assert on the attainment of the one’s objectives. Therefore, from the organisation’s point of view, CSR serves as a veritable thread for knitting the diverse interest groups and galvanise them to achieve the objectives of the organization. Thus, CSR serves as a system for assuaging the opposing expectations of the diverse interest groups as a means to ensure sustainable engagements. From this perspective, CSR is increasingly being constructed as a strategy for creating an appropriate environment for organizations to achieve their goals. To this extent, any CSR that does not contribute directly or indirectly, currently, or in the future to the attainment of the goals of organizations may be unattractive to the organization. This forms the point of departure for the business case for CSR.

Should CSR Be a Business Strategy?

The stakeholder theory indicates that for a business to operate in an environment conducive for profit-making and survival, there are parties internal and external to the organizations whose interests must be protected or taken into cognizance. In other words, for continued business operation, businesses must factor in the interest of these parties; otherwise, profit-making or survival can always be distorted. These groups include but are not limited to employees, suppliers, shareholders, host communities, customers, government, pressure groups and activists, competition, and environmental factors such as technology, politics, economy, and sociocultural systems, among many others. Whenever any of these groups’ interests seem to have been neglected either in the short run or long run, covertly or overtly, that constituency would trigger a response that could disrupt the chaos that would generate an unimaginable effect on the organization. This

phenomenon is called the *butterfly effect*, which is discussed elsewhere in this volume. A typical case is the death of George Floyd in the USA and COVID-19. Both events were not directly linked to any business organizations in the strict sense of it. However, they escalated on a global scale with unimaginable implications. They suddenly became CSR issues. In the case of George Floyd, organizations and individuals started donating to promote the general good of the black race, not just in the USA but all over the world. Organizations used the opening to shop and trade for reputational capital. In the same manner, the impact of COVID-19 on the human race globally created a window for organizations, nations and politicians to engage in CSR activities that position them as caring, socially responsible citizens and brands. Arguably, such actions, even if they are decimal are expected to create goodwill and attract rewards from stakeholders.

Indeed, increasing evidence is mounting, suggesting that most organizational publics believe that organizations are not sincere with their CSR claims. There seems to be a wide margin between what organizations claim in their CSR reporting and what the publics expect from them (Nkamnebe, 2021). There seems to be increasing suspicion of corporate hypocrisy when it comes to CSR performance of some organizations. Nkamnebe and Igwenazo (2019) report that some multinational oil companies in Nigeria's Niger Delta are typical of this act. Again, the CSR crisis that erupted in Ogoni land that resulted in the killing of environmental activists is replete in the literature. Alluding to this, Wan-Jan (2006:180) opines that "the dissonance between what the public expects firms to do and what they think the firms are doing is worrying." Scholars (see, e.g., Wan-Jan 2006) are enacting the business perspective to CSR by arguing that organizations should leverage CSR to regain public goodwill for sustainability. In addition, Lewis (2003) and Porter (2003) argue that CSR is potential sources of competitive advantage.

Carroll and Shabana (2010) synthesize the business case for CSR and argue that even from inception, CSR initiatives have the underlying supposition that CSR will provide some form of benefit to the firm at some point. Accordingly,

CSR evolved from ethically camouflaged to visible economic/financial beneficial engagement of firms.

Carroll and Shabana (2010:91-92) pose the following questions that address the issue of business case for CSR:

can a firm do well by being good? Is there a return on investment to CSR? What are the bottom-line benefits of socially responsible corporate performance? Is corporate social performance (CSP) positively related to corporate financial performance (CFP)? (For business practitioners), a 'business case' is 'a pitch for investment in a project or initiative that promises to yield a suitably significant return to justify the expenditure'. That is, can companies perform better financially by addressing both their core business operations and their responsibilities to the broader society? (Kurucz et al. 2008.

At the surface, it may look like the quest for a business sense of CSR is solely on the shoulders of the leaders of firms and their shareholders. However, the truth is that the various dimensions of CSR are so intricately related that, in the final analysis, everyone benefits from it. Everyone in one way or the other becomes stakeholder! The entrepreneurs are interested in ensuring that they receive a reward for their risk-taking through the continued stream of profit. The government wants a fair cut by way of tax to boost its financial position and execute their social contract with the citizenry. Employees are interested in ensuring their welfare during their active work lives and retirement. Suppliers would want to deal with sustainable businesses that guarantee continued good business relations and even consumers want firms that produce the right product for them that at the same time maintains a healthy and sustainable environment. Perhaps, it is in this context that Edward Freeman, in his stakeholder model argue for businesses to create value to its stakeholders as a strategic choice for survival (Freeman, 1984). On the other hand, Milton Friedman argues that the only justified social responsibility of a business is to increase and protect the expectation of the shareholders – shareholder model of business (Friedman 1962, 1970). Considering the interconnectedness of contemporary society and the increasing emphasis on sustainability, a broadened approach to CSR makes huge sense. Accordingly, businesses

cannot operate in isolation for long. At the same time, society cannot survive if businesses are overburdened to the extent of lacking the motivation to operate and encourage the emergence of new ones. Thus, as has been suggested, “Friedman must also accept a view of business as embedded in social interdependency, which serves as the logical and moral foundation for corporate social responsibility” (Ferrero et al. 2012).

Increasing scholarly and practice-based approaches have been documented to showcase the increasing importance and recognition of the business case for CSR. For instance, Carroll and Shabana (2010:92) report the following:

1. The business case for CSR has been broken down into four different categories by Simon Zadek. Zadek has argued that companies pursue CSR strategies to (1) defend their reputations (pain alleviation), (2) justify benefits over costs (the “traditional” business case), (3) integrate with their broader strategies (the “strategic” business case), and (4) learn, innovate, and manage risk (New Economy Business case) (Zadek 2000).
2. Kurucz et al. (2008, pp. 85–92) also have set out four general types of a business case for CSR, which overlap with Zadek’s. They maintain that there are four different groupings of the business case based on the *focus* of the approach, the *topics* addressed, and the *underlying assumptions* about how value is created and defined. Their four approaches include (1) cost and risk reduction; (2) gaining competitive advantage; (3) developing reputation and legitimacy; and (4) seeking win-win outcomes through synergistic value creation.
3. Other widely accepted approaches to the business case include focusing on the empirical research linking CSR with CSP and identifying benefits to different stakeholder groups that directly or indirectly benefit companies’ bottom lines.
4. Also, the socially conscious investment movement, sometimes called “ethical investing,” is often built on the belief that there exists a strong correlation between social performance and financial performance.

Key Issues

Today’s interconnected and interdependent systems, including economic systems with increasing enlightenment of stakeholders, pose a serious challenge to organizations in diverse ways. First, with the increasing awareness of the import of sustainable development goals (SDGs), the number of businesses’ stakeholders is increasing, and businesses must respond to the sustainability responsibility from consumers as a strategic option to survive. This rising consciousness of becoming stakeholders and increasing democratisation of consumption present a new frontier of growth, which organizations should leverage for better performance. Second, society is critically evaluating the social performance of all organizations including the governments toward building a sustainable society. The sustainable development goals (SDGs) are increasingly becoming a new metrics for society to measure the performance of businesses and government. As a result, businesses, in particular, must devise better ways to frame their social responsibilities and communicate them in order to benefit maximally from it.

Amid these issues, businesses are increasingly becoming under pressure to ensure that their investments reflect on their financial performance. This, in a way, makes enormous sense as businesses must make more profit to meet the expectations of the mounting stakeholders. Besides, they need to adapt, innovate, and survive in an environment that is increasingly being shaped by rapid technological innovations and recently being disrupted by new forces like COVID-19. How can businesses survive in turbulent environment and not offend the conflicting expectations of multiple stakeholders?

Future Directions

Corporate hypocrisy in CSR management has become crucial in businesses’ future growth strategies. Corporate hypocrisy in the context of CSR claims arises when there is inconsistency in a firm’s CSR claims and public performance of such claims. With increasing awareness and

expectation of CSR, and firms' attempt to present socially responsible corporate citizen imagery, managing CSR communications will continue to present a serious strategic challenge to firms. Arguably, a poorly managed CSR communications have far-reaching potentially damaging reactions from the known and unknown stakeholders of the firm. Hafenbrädlä and Waeger (2021) collaborate this assertion and document research evidence suggesting the likely low consequence due to responses from consumers (Baskentli et al. 2019), investors, and other stakeholders (Jones et al. 2014). They went on to assert that any claim of CSR engagement may be perceived by stakeholders as image laundering propaganda and mere empty talk (Aras and Crowther 2008); and if such promises becomes too mouth-watering it may be seen as hypocritical (Jordan et al. 2017). In other words, crafting and communicating CSR must be done with expertly, particularly in contexts where companies' intentions cannot be easily inferred from their actions. One very popular way of framing CSR activities involves invoking the business case for CSR (Bird and Waters 1989). The business case for CSR revolves around the claim that it pays to be socially responsible and that there is a "win-win" situation in which profits and morality are aligned. For instance, Larry Fink, the CEO of BlackRock (the world's largest asset management company), wrote the following in a recent letter to S&P 500 CEOs: "To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society" (Fink 2017). To illustrate just how often the business case frame is used to pragmatically motivate CSR activities, a recent study found that 58% of Fortune 100 companies have framed their diversity strategies in exclusively pragmatic terms (23% have used both moral and pragmatic frames and 4% have used an exclusively moral frame (Nurmohamed et al. 2018).

Cross-References

- [Corporate Financial Performance](#)
- [Corporate Social Responsibility](#)

- [Shareholder Model](#)
- [Stakeholder Theory](#)

References

- Aras, G., & Crowther, D. (2008). Corporate sustainability reporting: A study in disingenuity? *Journal of Business Ethics*, 87(1), 279. <https://doi.org/10.1007/s10551-008-9806-0>.
- Baskentli, S., Sen, S., Du, S., & Bhattacharya, C. B. (2019). Consumer reactions to corporate social responsibility: The role of CSR domains. *Journal of Business Research*, 95, 502–513. <https://doi.org/10.1016/j.jbusres.2018.07.046>.
- Bird, F. B., & Waters, J. A. (1989). The moral muteness of managers. *California Management Review*, 32(1), 73–88. <https://doi.org/10.2307/41166735>.
- Blowfield, M., & Frynas, J. G. (2005). Setting new agendas: Critical perspectives on corporate social responsibility in the developing world. *International Affairs*, 81(3), 499–513.
- Bonnafous-Boucher, M., & Rendtorff, J. (2016). *Stakeholder theory: A model for strategic management*. Springer.
- Cannon, T. (1994). *Corporate responsibility*. Harlow: Pearson Education.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organisational stakeholders. *Business Horizons*, 34, 39–48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G).
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38, 268–295.
- Carroll, A. B. (2008). A history of corporate social responsibility: Concepts and practices. In A. In Crane, D. Matten, A. McWilliams, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199211593.003.0002>.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Review*, 12(1). <https://doi.org/10.1111/j.1468-2370.2009.00275.x>.
- Ciulla, J. B. (1991). Why is business talking about ethics?: Reflections on foreign conversations. *California Management Review*, 34(1), 67–86.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1–13. <https://doi.org/10.1002/csr.132>.
- Ferrero, I., Hoffman, W. N., & McNulty, R. E. (2012). *Must Milton Friedman Embrace Stakeholder Theory?* Working Paper No.10/12.
- Freeman, R. E. (1984). *Strategic management. A stakeholder approach*. Pitman Publishing.

- Fink, L. (2017). Larry Fink's letter to CEOs. Retrieved 18 February 2018, from BlackRock website: <https://www.blackrock.com/corporate/en-no/investor-relations/larryfink-ceo-letter>.
- Friedman, M. (1962). *Capitalism and freedom*. Chicago: University of Chicago Press.
- Friedman, M. (1970). The social responsibility of business. *The New York Times Magazine*, September 13th. In M. Friedman. *An economist's protest: Columns on political economy*. Glen Ridge: Thomas Horton & Daughters. 1972, pp. 177–184.
- Hafenbräddla, Sabastian & Waeger, Daniel (2021). The Business case for CSR: A trump against hypocrisy. *Journal of Business Research*, 129, 838–848.
- Jones, D. A., Willness, C. R., & Madey, S. (2014). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57(2), 383–404. <https://doi.org/10.5465/amj.2011.0848>.
- Jordan, J. J., Sommers, R., Bloom, P., & Rand, D. G. (2017). Why do we hate hypocrites? Evidence for a theory of false signaling. *Psychological Science*, 28(3), 356–368. <https://doi.org/10.1177/0956797616685771>.
- Kurucz, E., Colbert, B. A. N. D., & Wheeler, D. (2008). The business case for corporate social responsibility. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 83–112). Oxford: Oxford University Press.
- Lewis, S. (2003). Reputation and corporate responsibility. *Journal of Communication Management*, 7(4), 356–394.
- Mitchell, R. K., Agle, B. R., & Wood, D. S. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–866.
- Modvar, C., & Manuel-Navarrete, D. (2016). “stakeholder”. Encyclopedia Britannica. <https://www.britannica.com/topic/stakeholder>. Accessed 26 November 2021.
- Newell, P. (2008). CSR and the limits of capital. *Development and Change*, 39(6), 1063–1078.
- Nkamnebe, A. D. (2011). Sustainability marketing in the emerging markets: imperatives, challenges, and agenda setting. *International Journal of Emerging Markets*, 6(3), 217–232. <https://doi.org/10.1108/17468801111144058>.
- Nkamnebe, A. D., & Igwenazo, O. N. (2019). Corporate environmental accountability, corporate hypocrisy and corporate reputation: Case of niger delta region. Paper presented at the 13th annual conference of the academy of management Nigeria. Federal University Otuoke. Otuoke: The Academy of Management Nigeria.
- Nkamnebe, A. D. (2021). Beyond consumption: Contemporary marketing and the idolatry of materialism – lessons from COVID-19. 58th Inaugural Lecture of Nnamdi Azikiwe University, Nigeria. Modvar, Cecilie and Manuel-Navarrete, David. “stakeholder”. Encyclopedia Britannica, 11 Nov. 2016, <https://www.britannica.com/topic/stakeholder>. Accessed 26 November 2021.
- Nurmohamed, S., McCluney, C., Cameron, L., & Mayer, D. M. (2018). Giving managers the business: The effectiveness of business case and moral language for diversity. (Unpublished Working Paper).
- Porter, M. (2003). CSR: A religion with too many priests? *European Business Forum*, 15 Autumn 2003.
- Wan-Jan, W. S. (2006). Defining corporate social responsibility. *Journal of Public Affairs*, 6, 176–184. <https://doi.org/10.1002/pa.227>.
- Zadek, S. (2000). *Doing good and doing well: Making the business case for corporate citizenship* (Research Report 1282-00-RR). New York: The Conference Board.

Business Code

► Corporate Codes of Conduct

Business Codes

► Codes of Conduct in Greece

Business Compliance Initiatives

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Synonyms

Certification; Human rights; Labor standards; Social auditing

Introduction

Amfori Business Social Compliance Initiative (amfori BSCI) was founded by the Foreign Trade Association (FTA, today: amfori) in 2003. It is a retail and business initiative designed to

review and improve social standards along global value chains of consumer goods (Eggert, 2015, 140). In order to meet its objectives, amfori offers companies a code of conduct (amfori BSCI Code of Conduct) and several tools to manage the social and environmental performance of supply chains. The code covers eleven principles of decent work and covers the following issues:

1. The Rights of Freedom of Association and Collective Bargaining
2. Fair remuneration
3. Occupational health and safety
4. Special protection for young workers
5. No bonded labor
6. Ethical business behavior
7. No discrimination
8. Decent working hours
9. No child labor
10. No precarious employment
11. Protection of the environment

Companies who wish to join the program are supposed to protect workers' rights and implement the amfori BSCI Code of Conduct. Furthermore, they need to inform workers about their rights and responsibilities and offer them a whistleblowing hotline. Additionally, they are supposed to influence other associate partners to adapt the amfori BSCI Code of Conduct in order to cause a cascade effect.

The History

The history of amfori BSCI dates back to the year 1977, when several companies founded the Foreign Trade Association (FTA), an organization that incorporates the foreign trade interests of European salesmen, trademarks, and importing wholesalers to international institutions.

In the face of environmental and social challenges, FTA constantly evolved its scope. In 2003, they founded the Business Social Compliance Initiative (BSCI) as a public-private partnership (PPP) with the German Society for Technical Cooperation (GTZ) (GIZ, 2003). With BSCI, they were aiming to offer enterprises a system to develop social compliance along their supply chains.

This efficient system was honored by the DNWE (Deutsches Netzwerk Wirtschaftsethik) with the Corporate Ethics Award in 2008 (DNWE 2019).

In view of the success of BSCI, a new governance structure was adopted in 2011 and sustainability was included in the core business. Since 2014, the Business Environmental Performance Initiative (BEPI) has been part of the offering in order to support companies that are aiming to improve environmental performance in their supply chains. In 2017, FTA turned 40. Alongside this anniversary, FTA introduced its new strategy: vision 2030. The idea of vision 2030 is that open trade might cause and enhance environmental and social progress. Parallel to its new vision, FTA introduced its new name in 2018: amfori.

Definition: Mission, Objectives, and Focus Areas

Amfori BSCI is a holistic system for reviewing and enhancing minimum requirements of decent work. It includes an auditing system and appropriate training and training measures. Amfori BSCI focuses on three topics:

- Auditing of production sites and farms to verify the degree of implementation of the amfori BSCI Code of Conduct
- Training of participants and their suppliers in order to improve the understanding and implementation of the amfori BSCI Code of Conduct
- Continuous dialogue with stakeholders (governments, trade unions, etc.) to improve the political, economic, and cultural situation with the overall goal of sustainable improvement of working conditions

(Kontaktgruppe BSCI Schweiz, 2016)

The initiative sees itself as a facilitator that enables participating companies and their suppliers to meet challenges related to social standards within international value chains (Eggert, 2015, 140).

The amfori BSCI code of conduct introduced in 2014 comprises 11 principles (mentioned

above) and is based on the conventions of the International Labor Organization (ILO), the Universal Declaration of Human Rights, the UN Declaration on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination against women (CEDWA), the UN Global Compact, and the OECD guidelines (Kontaktgruppe BSCI Schweiz, 2016). Further, the amfori BSCI code of conduct addresses the UN Sustainable Development Goals 1, 2, 3, 4, 5, 8, 10, 16, and 17 (Amfori, 2019).

By joining the amfori BSCI, companies commit themselves to involving their suppliers in the amfori BSCI process and are constantly checked for their progress. The suppliers of the BSCI participants undertake to comply with the BSCI Code of Conduct and are audited accordingly. In addition, the companies are supported with training in further development.

The verification and confirmation of compliance with the Code of Conduct is carried out by independent companies accredited by Social Accountability International (SAI) and selected by the BSCI, with local nongovernmental organizations and employee representatives.

The amfori BSCI Code of Conduct with its 11 principles is translated into 13 interconnected "Performance Areas" (PAs):

- "Social Management System and Cascade Effect
- Workers Involvement and Protection
- The Rights of Freedom of Association and Collective Bargaining
- No Discrimination
- Fair Remuneration
- Decent Working Hours
- Occupational Health and Safety (OHS)
- No Child Labour
- Special Protection for Young Workers
- No Precarious Employment
- No Bonded Labour
- Protection of the Environment
- Ethical Business Behaviour" (Amfori, 2019)

The Amfori BSCI "full audits" evaluates all thirteen "Performance Areas." Audits take place every two years, which constitutes the "amfori

BSCI audit cycle." "Amfori BSCI follow-up audits" are conducted in between these intervals and have to take place within twelve months from the previous audit. They treat those performance areas that need improvement.

The overall result of an amfori BSCI audit shows the company's status quo of implementation. The results of the audits can range from A to E. For "A" (Outstanding), 86-100 % of the criteria must be met, whereas the result "E" (Unacceptable) only meets 0-29 % of the criteria. If companies achieve the result A or B under the "Full Audit," the certification is valid for two years. In the case of C-E results, the auditee has to offer a remediation plan within 60 days of the audit date. Additionally, a follow-up must be carried out no later than 12 months after the full audit (Amfori BSCI Handbuch, 2019, 48).

The results of the audits are generated automatically by the amfori BSCI IT system. Even the auditor is not informed about the final rating until they submit the audit results to the amfori BSCI platform. Therefore, in the closing meeting of the audit the auditor focuses on all the findings (good as well as bad ones) and is not able to name a rating.

There are three types of audits: audits which are fully announced, semiannounced, or fully unannounced. Semiannounced audits are audits where the audited company is aware that an audit will be conducted soon, though it is not informed about the exact day of the year.

Depending on the size of the operation to be audited, an auditing process can take 1.5-5 days (Amfori BSCI Handbuch, 2018, 53).

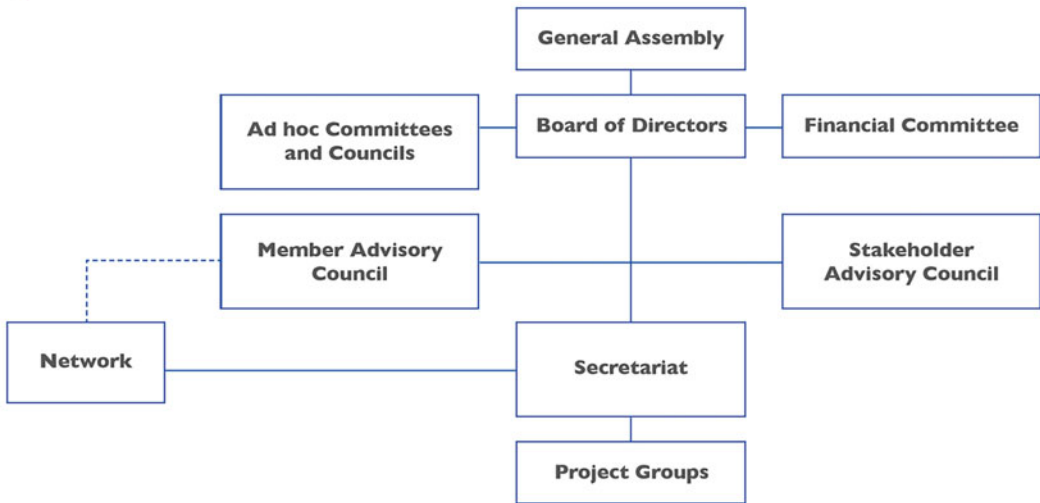
Today, amfori BSCI covers all industries and can be used in all countries (Kontaktgruppe BSCI Schweiz, 2016).

Structure of Governance

The following organization chart shows the overall structure of amfori, which hosts the Amfori BSCI Code of Conduct (picture, <https://www.amfori.org/content/our-governance>) (Fig. 1)

Amfori is directed by a "General Assembly" that is composed of all types of amfori members:

Our governance structure



B

Business Compliance Initiatives, Fig. 1 Governance structure

ordinary, associate, and affiliate. According to their turnover, “ordinary members” have the right to vote. The “board of directors” manages amfori. Its members represent salesmen, importing wholesalers, trademarks, and companies from different geographic areas and industries, and therefore reflect the diversity of amfori itself.

The board of directors is supported by a number of councils and committees, which offer help and advice regarding strategic issues and upcoming trends. Networks provide amfori with additional information from a local perspective, and project groups support amfori with their expertise on specific matters.

Major Accomplishments and Critics

Amfori BSCI has more than 15 years of experience in improving social performance within supply chains. It is active in over 130 countries. More than 2,000 companies have joined the initiative, and there are more than 54,000 producers listed on the amfori BSCI platform (Amfori BSCI, 2018).

On the occasion of the tenth anniversary, Jörg. S. Hofstetter and Marc Müller of the University of St. Gallen published a study on the

history and successes of amfori BSCI. It turned out that India has become the country with the highest number of compliant producers in recent years (Hofstetter & Mueller, 2013, 14; 18).

According to the study, the main procurement markets are China, India, Bangladesh, Turkey, and Vietnam. At the end of 2011, they account for nearly 89 % of all audit-methodology-consistent producers (Hofstetter & Mueller, 2013, 14).

Within the first year, after BSCI was founded, 14 out of 15 audits applied to the clothing and textile industry; within the following years, the focus extended to other goods such as leather, shoes, jewelry, and electronics (Hofstetter, 2009, 25).

The share of producers (of all product groups) that accomplish a “good” rating is increasing. About 60 % of all nonfood factories reach compliance at the end of 2011 (Hofstetter & Mueller, 2013, 15).

Irrespective of positive headlines, Amfori BSCI has repeatedly been criticized – especially from NGOs – for the fact that it is not an independent multistakeholder initiative in which companies, trade unions, and NGOs are equal members. Another point of criticism is the voluntary participation. The requirements remain nonbinding for the industry, and the audits are commissioned

within the industry. The view from outside, for example, by external nongovernmental organizations, is not taken into account. In addition, amfori BSCI is criticized for its few requirements regarding the wage level and the lack of disclosure of the audit results to the public. Furthermore, amfori BSCI has been criticized for the fact that not the entire supply chain has to be considered, but only direct suppliers. Subsuppliers might commit serious violations of labor rights, but that has no influence on the outcome of the amfori BSCI certification process. Another point of criticism relates to the common practice of prior notification of audit controls, which offers suppliers the opportunity to hide grievances. Besides, it is criticized that the amfori BSCI has hardly any means for sanctions in place (except the exclusion of companies from the initiative) whenever a company violates the BSCI requirements (Mußmann, 2017). Various critical articles have been published over the years.

Especially the Clean Clothes Campaign (CCC) had a critical eye on the amfori BSCI. They criticized the work of the initiative against the background of the factory collapse in Rana Plaza, Bangladesh. A few months before the disaster, TÜV Rheinland audited the production site of Phantom Apparel Ltd. The German certification company did not criticize the documents on building safety and did not adequately examine some other shortcomings. TÜV Rheinland was commissioned by a member of the Business Social Compliance Initiative. According to CCC, the BSCI certificate primarily serves the image of companies but is of little use to workers in global production and supply chains, as the example of Rana Plaza shows (Kampagne für saubere Kleidung, 2017).

Summary

Amfori BSCI is a holistic system for reviewing and enhancing minimum requirements of decent work. Besides being an auditing system, it also comprises appropriate training and training measures. The initiative looks back on more than

15 years of experience in improving social performances within supply chains. Despite much criticism, amfori BSCI is still a famous option when it comes to social auditing (Amfori BSCI, 2018).

Cross-References

- [Corporate Social Responsibility \(CSR\)](#)
- [Social Accountability International \(SAI\)](#)
- [Social Auditing](#)

References

- Amfori. (2019). www.amfori.org, Accessed on the 24th of June 2019.
- Amfori BSCI Handbuch. (2018). In: https://www.amfori.org/sites/default/files/amfori%20BSCI%20System%20Manual_German.pdf, Accessed on the 24th of June 2019.
- DNWE. (2019). Preis für Unternehmensethik. In: <https://www.dnwe.de/home/veranstaltungen/preis-fur-unternehmensethik/>, Accessed on the 24th of June 2019.
- Eggert, J. A. (2015). Der Handel übernimmt Verantwortung. In M. Knoppe (Ed.), *CSR und Retail Management* (pp. 137–148). Berlin Heidelberg: Gesellschaftliche Verantwortung als zukünftiger Erfolgsfaktor im Handel.
- GIZ. (2003). Einführung eines einheitlichen Modells zur Verbesserung der Arbeitsbedingungen in den Beschaffungsmärkten des deutschen Einzelhandels in ausgewählten Ländern (PPP). In: <https://web.archive.org/web/20131005001939/http://www.giz.de/Themen/de/18054.htm>, Accessed on the 24th of June 2019.
- Hofstetter, J. S., & Mueller, M. (2013). Achievement. 10 years of the BSCI. In: https://www.amfori.org/sites/default/files/bsciachievementstudy_master_final.pdf, Accessed on the 24th of June 2019.
- Kampagne für saubere Kleidung. (2017). Mehr Show als Sicherheit: Zertifikate in der Textilindustrie – Beschwerde bei BSCI <https://saubere-kleidung.de/2015/07/mehr-show-als-sicherheit-zertifikate-in-der-textilindustrie-beschwerde-bei-bsci/>, Accessed on the 24th of June 2019.
- Kontaktgruppe BSCI Schweiz. (2016). <https://web.archive.org/web/20161002100936/http://bsci-ch.org/>, Accessed on the 24th of June 2019.
- Mußmann, O. (2017). Business Social Compliance Initiative (BSCI). In: <https://www.csr-news.net/news/2017/04/11/business-social-compliance-initiative-bsci/>, Accessed on the 24th of June 2019.

Business Conduct

► Professional Ethics

Business Conduct in Islam

► Islamic Business Ethics

Business Corporate Finance

► Corporate Finance

Business Development

► Corporate Development

Business Ecosystems

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Synonyms

[Ecosystem approach](#); [Ecosystems](#)

Summary

Business ecosystems are loosely coupled, dynamically coevolving associations of firms that compete and cooperate interactively to achieve complementarity and innovation resulting in mutually shared value creation. Business ecosystems have developed as firms have experienced increasing levels of competition, change, and globalization in their environments requiring them to seek more efficient models to

organize and innovate. The business as ecosystem metaphor has developed over the last several decades to explain interdependent networks of firms that represent a different form of organization distinct from hierarchies, supply chains, or free markets. The business ecosystem concept has been developed overtime through the work of several scholars including Cusumano, Moore, Iansiti and Levien, and Adner. Studies of business ecosystems as instances of complex systems have analyzed them in terms of their distinctive characteristics including: emergent behavior, value sharing, coevolution, and complementarity.

Defining Business Ecosystems

Business ecosystems are loosely coupled, dynamically coevolving associations of firms that compete and cooperate interactively to achieve complementarity and innovation resulting in mutually shared value creation. Since scholars have tended to focus their attention on the specific characteristics of business ecosystems, however, there is still no widely accepted overall definition of a business ecosystem (Bogers et al. 2019).

Based upon an extensive literature review of the field Bogers, Sims and West have proposed a definition of a business ecosystems as “an interdependent network of self-interested actors jointly creating value” (Bogers et al. 2019, p. 2). Adner identifies two distinct approaches in the conceptualization of an ecosystem: that which focuses on the “ecosystem-as-structure” (activity centric – “the structure of the independent activities that underly a value contribution”) compared with that of the “ecosystem-as-affiliation” (an actor-centric approach) (Adner 2017).

The impact of platform-based business models (Kenney and Zysman 2016) and strategies based upon open innovation (Vanhaverbeke and Cloudt 2006) for both competition and value creation have resulted in great attention being shown to the business ecosystems concept by both scholars and practitioners of management starting from the early 2000s (Adner 2017; Bogers et al. 2019; Greer et al. 2017).

Jacobides, Cennamo, and Gawer have identified three streams in the business ecosystem literature: (1) business ecosystems, (2) innovation ecosystems, and (3) platform ecosystems (Jacobides et al. 2018, p. 2257). The business ecosystem approach focuses on firms as actors in a community of interaction (Teece 2007), the innovation ecosystem orientation looks at the way in which firms collaborate in order to provide “customer-facing solutions” (Adner 2006, p. 98), while the platform ecosystem approach is concerned primarily with technological interdependencies between sponsor and complementors (Ceccagnoli et al. 2012). Rapid change in many business environments calls for more flexibility and speed in the development and application of new and diverse skills. The increasing pressure of globalization and competition have highlighted inefficiencies in traditional organizations of production (Ghisi and Martinelli 2006, p. 462) and prompted firms to seek more flexible methods to organize and manage risks and opportunities (Fuller et al. 2019, p. 2).

The business as ecosystem metaphor represents a move away from the atomistic view of firms as isolated competitors in markets (Granovetter 1985; Gulati et al. 2000) and the limitations it imposes for understanding the competitive dynamics of commitment and flexibility in interfirm relationships (Gulati 1998, p. 295).

Development of the Business Ecosystems Concept

The defining characteristics of ecosystem-based business becomes clear when compared with that which prevailed previously. Previously, the key to maintaining a competitive advantage was contingent upon developing and maintaining excellent resources within the corporate organization. The primary concern of corporations was to exploit economies of scale in production and sales strategies. For this, firms emphasized the importance of excellence in their human resources, technologies, and made it a policy to create these resources internally.

In accordance, firms pursued policies of vertical integration whereby they acquired and absorbed smaller firms with competitive (excellent) resources. The result of this – as is clear from the representative case of the “Detroit Model” of the automobile industry – was the development of large, powerful corporate groups. This corporate consolidation was based upon a strategy of “make or buy” where the choice was to either buyout a supplier or control it as part of the corporate supply chain. Thus, by controlling more resources than their competitors, firms were able to leverage economies of scale while preventing imitation and thereby secure greater returns on their investments. This model was described by Chandler as the classical model of twentieth century US industry (Chandler 2009).

Cusumano has defined the dominators of the Detroit model as “Product Platformers” – firms which have created a supply chain in order to produce their own products – and distinguishes them from “Industry Platformers” (Cusumano 2012). While product platformers gain by delegating the production of important integral parts of their products to external firms, industry platformers are able to leverage strong network effects. Industry platformers see themselves as partners in naturally occurring ecosystems rather than as controllers of supply chains. As seen in the case of Microsoft and Apple, firms based on business networks do not attempt to internalize all the resources and capabilities critical to their businesses. Industry platformers create ecosystems based upon massive networks of multiple partner firms using the technological infrastructure afforded by advances in information technology. The development of the business ecosystem concept can be traced through the work of three influential theorists in the field: Moore, Iansiti and Levien, and Adner.

Moore: The Ecology of Business

Moore is credited as having introduced the term “business ecosystem” into the management field (Elkington 1998, p. 44; Muegge 2013, p. 11) by proposing an ecological approach to management. By applying an ecosystem metaphor to business networks, Moore emphasized an

assumed rule of the jungle wherein ecosystems were led by a firm as the dominant species which maintains control by defining strategic direction over the other members and wherein member firms gain profit by maintaining “bargaining power” over each other (Moore 1993, p. 81).

Moore states that the distinction between ecological and business ecosystems is that a: “biological ecosystem is a community of organisms, interacting with one another, plus the environment in which they live and with which they also interact, while business ecosystem is an economic community supported by foundation of interacting organizations and individuals – the organisms of the business world” (Moore 1993, pp. 26–27). Business, unlike biological ecosystems are based on voluntary contractual relationships motivated by mutual gain.

This early application of the ecosystem concept emphasized the cyclical nature of group formation as new innovations were introduced and commercialized and either collapsed as they were made obsolete or renewed by the adoption of the next generation of technology (Moore 1996, p. 47). Moore later described the business ecosystem as the result of a process of mutual alignment among “customers, suppliers, competitors, and other stakeholders, who coevolve their capabilities and roles” (Moore 1996).

Iansiti and Levien: The Relationships of Ecosystems

Following Moore, Iansiti and Levien also adapted language from ecological ecosystems in order to further explain the dynamics of business organization and explain the possibilities of interfirm activity in terms of distributing risk and cost in order to gain synergies and achieve innovation. Iansiti and Levine contend that the most critical issue for firms today is how to best leverage critical resources which they neither own nor control (Iansiti and Levien 2004a). Iansiti and Levine provide a theoretical construct by which the concept of a business ecosystem can be operationalized and its management assessed.

According to Iansiti and Levine, in business, as in biological ecosystems, many actors are connected to form a network. These connections

are complex and highly interactive and the soundness of individuals depends on the soundness of the entire ecosystem because: “like an individual species in a biological ecosystem, each member of a business ecosystem ultimately shares the fate of the network as a whole, regardless of that member’s apparent strength” (Iansiti and Levien 2004b, p. 69). Iansiti and Levine have identified this interdependent network effect as a defining characteristic of business ecosystems.

Iansiti and Levien identify productivity, robustness, and niche creation as the dimensions by which to measure strength in a business ecosystem. In order to create and maintain a business ecosystem, it is necessary to create value within it and assure that value is shared among its constituents (Iansiti and Levien 2004a, p. 91). In order to create value, ecosystems must innovate – this requires that there are opportunities for niche players to innovate within the ecosystem and that there is sufficient benefit from innovation to warrant ongoing investment in new value creating capabilities.

The key to this for Iansiti and Levien is the “operating leverage” provided by the ecosystem. Operating leverage is the strategy of the keystone firm by which it provides a series of assets that can be “easily scaled and shared by a broad network of business partners” within the ecosystem by its members. These assets can be physical, intellectual, or financial but must be managed in such a way as to ensure that the value derived from their leverage rapidly exceeds their costs as the number of ecosystem members increases – thus creating a surplus of value which can be shared (Iansiti and Levien 2004a, p. 92).

One of Iansiti and Levien’s key contributions has been to elucidate the strategic roles played by firms within business ecosystems. Iansiti and Levien define five roles – keystones, niche players, dominators, and hub landlords – each of which represents a different strategy to leverage the value of a business ecosystem.

Iansiti and Levine redefine Cusumano’s industry platformers as keystone companies – firms that act as network hubs in order to benefit both themselves and the members of their ecosystems by providing technological or service-based

platforms that can be leveraged in their own strategies. keystones serve to manage and regulate a large number of companies in the network to build a stable and predictable platform. By doing so, the numerous and loosely connected ecosystem partners retain their interdependence and grow. Niche players leverage the platform of the keystone by developing unique, differentiating capabilities which are critical for the strength and innovation of the ecosystem as a whole. Dominators are often large firms that extract value from ecosystems to the disadvantage of other firms thus undermining the health, versatility, and potential growth of the ecosystem on the long term. Hub landlords do not attempt to dominate the ecosystem but extract value in the form of “rent” from the use of resources vital to the platform while creating little or no value in return.

Iansiti and Levine maintain that a business ecosystem is not therefore simply a corporate group, but that its participants are loosely connected with each other for the common purpose of survival and productivity. This coordinated yet highly distributed form of network structure is markedly different to the structure of previous corporate groups. The networking of business ecosystems: “requires only interoperability and extensibility based on satisfying just sufficient protocols for interaction and leveraging” (Anggraeni et al. 2007, p. 8).

Adner: The Structure of Business Ecosystems

Adner identifies two approaches in the conceptualization of ecosystems: affiliation and structure (Adner 2017, pp. 39–40). Adner classifies the approaches of Moore (1993, 1996) and Iansiti and Levien (2004a) as *ecosystems-as-affiliation* wherein ecosystems are defined as “communities of associated actors defined by their networks and platform affiliations” as opposed to his own *ecosystem-as-structure* approach wherein ecosystems are defined as an “alignment structure of the multilateral set of partners that need to interact in order for a focal value proposition to materialize” (Adner 2017, pp. 39–42).

In contrast to the ecosystems-as-affiliation approach takes the members of an ecosystem as its starting point, the ecosystems-as-structure

starts with the value proposition, the activities that are required to realize it and from then goes on to examine the actors involved and their ability to perform the actions required of them (Adner 2017, p. 44).

Adner defines a business ecosystem from this “ecosystem as structure” approach as “the ecosystem is defined by the alignment structure of the multilateral set of partners that need to interact in order for a focal value proposition to materialize” (Adner 2017, p. 42).

By focussing on the creation of a value proposition and its realization as the objective of a business ecosystem, Adner is able to define the structural requirements of a business ecosystem in terms of four basic elements: (1) Activities: what must be done in order for the value proposition to be realized, (2) Actors: who is necessary to perform these activities, (3) Positions: the interaction between actors whereby activity is ordered and flows, and (4) Links: the transfers between actors of material, information, finances, and or influence which may or may not include the focal firm (Adner 2017, p. 43). Business ecosystems cannot be equated with supply or value chains. Unlike supply chains that are defined by a well determined path that is reducible to bilateral partnerships (Adner 2017, p. 52), interfirm relationships within ecosystems are characterized by their multiparty interdependence and mutable nature.

Adner explores the relationship between the concepts of business ecosystems and business models. Adner identifies the difference between a business model and a business ecosystem when he observes that an individual firm may adopt an ecosystem strategy as its own business model, but its own particular business model will not become an ecosystem. Ecosystem strategy is defined by Adner as the “way in which a focal firm approaches the alignment of partners and secures its role in a competitive ecosystem” (Adner 2017, p. 47). For Adner: “The successful ecosystem is composed of multiple firms acting in concert – an ecosystem strategy can be thought of as one that takes partner firms’ business model to be as critical to address as the focal firm’s” (Adner 2017, p. 51).

Adner’s formulation differs from that of Moore and Iansiti and Levien in that the latter defines

ecosystem boundaries in terms of formal partnerships, whereas the former recognizes the influence of actors outside partner relationships and presumes change.

A further key contribution of Adner's structural approach therefore is that it "explicitly extends the strategic view to include activities and actors over which the focal organization may have no control, and with whom they have no direct contact" (Adner 2017, p. 44). The participation (or non-participation) of firms and individuals in business ecosystems therefore becomes purposeful and ecosystem border identification becomes an issue. Adner's structural approach to ecosystems therefore encompasses the dimension of external and potential relationships and sets the stage for the consideration of trust and business ecosystems.

Characteristics of the Business Ecosystem Concept

Despite the emergence of different approaches to and conceptualizations of the concept of the business ecosystem, there are several characteristics central to most interpretations. Fuller, Jacobides and Reeves have identified seven characteristics of what they term the "ecosystem perspective" as including: (1) dynamism which assumes the flexibility of coevolutionary relationships comprising the ecosystem, (2) collaboration as a result of complementarity between the development of innovative capabilities, (3) governance which is based upon influence rather than direct and formal control, (4) emphasis on sharing value created in order to enable and promote innovation in other firms, (5) openness to the possibility of serendipitous change as a result of emergent behavior of the ecosystem as a complex system, (6) multilateral interdependencies between firms in multiple networks, and (7) porous boundaries whereby firms strategic interests extend beyond their own immediate boundaries or supply chains (Fuller et al. 2019, pp. 2–3).

Lengnick-Hall and Wolff have identified three distinct and contrasting logics within recent strategy research – these being: "resource-based

views, hypercompetitive/high-velocity studies, and ecosystem/chaos theory research" (Lengnick-Hall and Wolff 1999, p. 1110). Lengnick-Hall and Wolff locate the business ecosystem approach within the third logic of "complexity" because of its use of a systems thinking approach to strategy. For Lengnick-Hall and Wolff, the business ecosystem's approach to strategy can be characterized by the assumption that: "strategic success is a function of a firm's talent for thriving in dynamic nonlinear systems that rely on network feedback and emergent relationships. Effective strategies therefore require a blend of competition and cooperation. Paradoxical relationships, positive and negative feedback, and dynamic tension embedded between various actors and processes, as well as between a firm and its context, are fundamental elements of complexity logic. Strategy is reconceptualized to mean the design of processes that create attractors, facilitate desirable flows, foster synergy, integrate subsystems, capitalize on community, and simultaneously eliminate errors and reduce entropy. Traditional notions of competitive advantage do not carry much weight in complexity logic" (Lengnick-Hall and Wolff 1999, p. 1114).

Lengnick-Hall and Wolff identify six premises that define the complexity logic that drives the business ecosystem approach: (1) the success of firms within the ecosystem is dependent upon that of the overall health of the ecosystem and therefore of the health of each of its component sub-systems, (2) progress moves in a nonlinear manner in complex systems and the accommodation of unplanned and unpredicted events and development is important, (3) the ecosystem is shaped by its attractors – the values and visions upon which it is based and by which the behavior of member firms is influenced and shaped, (4) change is constant and ongoing and strategies must be renewed as relationships and contexts shift, (5) the multiple cross interdependencies among ecosystem member firms gives rise to self-organizing transformation based on emergent behavior, and (6) the boundaries of the ecosystem are established and maintained by the commonality of values and the effect of attractors rather than the force of procedure

based guides to behavior (Lengnick-Hall and Wolff 1999, pp. 1114–1115).

Underlying these characterizations are two key pragmatic themes for the management of business ecosystems: value creation and governance.

Value Creation in Business Ecosystems

Adner has proposed that the objective of a business ecosystem is the creation of “value that no single firm could have created alone” (Adner 2006, p. 98). Adner is referring to the value created out of the network effects of the business ecosystem itself. Muegge has elaborated on this by explaining that: “by operating a business within a networked ecosystem of interdependent and co-dependent businesses with partially aligned incentives, a technology entrepreneur can achieve more, learn faster, and reach farther than otherwise possible, while sharing some of the risks and costs with others” (Muegge 2013, p. 6). Membership in a business ecosystem can allow firms to leverage the assets of other members – in terms of both their currently leverageable resources and the capabilities to generate and contribute new, nongeneric resources within the ecosystem. The potential of the ecosystem to create value in this manner is the product of complementarity.

Jacobides, Cennamo, and Gawer have noted that: “as we define them, then, ecosystems are groups of firms that must deal with either unique or supermodular complementarities that are nongeneric, requiring the creation of a specific structure of relationships and alignment to create value” (Jacobides et al. 2018, p. 2257). Healthy ecosystems must attract members. The potential of an ecosystem to create value for its members is its greatest enticement. For its members, the value creating potential of an ecosystem is located in three sources: the externalities of the network, the diffusion of innovation within the ecosystem, and open versus closed innovation (Shapiro and Varian 1998, p. 204).

The role of ecosystem members in terms of both their capability to operate as a business and

their strategy for interaction with the other members of the ecosystem are important factors in determining the value creation potential of the business ecosystem as a whole. Bogers, Sims, and West have explained this as: “the value creation for an ecosystem depends on the contributions of the actors. On the one hand, all ecosystem members have a stake in its success. On the other hand, the nature of the relationship *between* the actors – particularly whether their respective goals are competing or complementary – will influence how (or how well) they will work together to achieve that success” (Bogers et al. 2019, p. 2). As discussed above, however, despite the obvious importance of creating and sharing surplus value in an ecosystem, and the many studies of ecosystems which assume value creation within ecosystems, few to date have attempted to actually analyze and measure the value creation within actual instances of business ecosystems (Bogers et al. 2019, p. 6).

Governance of Business Ecosystems

Interactions between firms as business activity requires some form of coordination. As discussed above, business ecosystems contrast sharply with the hierarchies of vertically integrated firms, closely managed supply chains and with the free associations between firms in open market situations. Moore (2006) argued that business ecosystems are a distinct organizational form – a mode of organizing economic production that differs from markets and the organizational hierarchies of firms. The coordination of business ecosystems is incompatible with the binding contractual arrangements of hierarchies, the static interfirm agreements of supply chains, and the periodic transactions between firms in the open market.

The effective governance of business ecosystems is currently seen as a new competitive advantage in business strategies that require managing networks of firms in order to achieve the ongoing provision of transformative business solutions. Jacobides, Cennamo, and Gawer characterize business ecosystems upon the basis of the way

by which they resolve what they term the “coordination challenge” (Jacobides et al. 2018, p. 2260). The challenge being how to effectively coordinate a: “set of actors with varying degrees of multilateral, nongeneric complementarities that are not fully hierarchically controlled” (Jacobides et al. 2018, p. 2257).

Business ecosystems constitute an intermediate form of organization, one shaped by mutual interdependence without contractual obligation. The coordination of business ecosystems is better characterized as governance through influence rather than management by control. In order to respond to the “coordination challenge,” the governance of business ecosystems must fulfill several functions. Governance must (1) encompass the constituents of business ecosystems as they interact through three shifting roles of cooperation, competition, and coopetition (Bogers et al. 2019, pp. 9–10), (2) allow organizational modularity to develop, function, and change within the ecosystem (Jacobides et al. 2018, p. 2255), (3) function as a network of “specialised and complementary opportunity niches – both known and yet to be discovered” (Muegge 2013, p. 11), while allowing (4) the “local interactions, emergence and feedback” (Reeves et al. 2016, p. 47) which ensure the adaptability and sustainability of the business ecosystems. Governance, for business ecosystems becomes a matter of coordination for mutual survival and benefit.

Cross-References

- [Corporate Strategy](#)
- [Ecology and Ecosystem](#)
- [Stakeholder Theory](#)
- [Supply Chain](#)

References

- Adner, R. (2006). Match your innovation strategy to your innovation ecosystem. *Harvard Business Review*, 84(4), 98–107.
- Adner, R. (2017). Ecosystem as structure: An actionable construct for strategy. *Journal of Management*, 43(1), 39–58.
- Anggraeni, E., den Hartigh, E., & Zegveld, M. (2007). *Business Ecosystem as A Perspective for Studying the Relations Between Firms and Their Business Networks*. Paper presented at the proceedings of European Chaos and Complexity in Organisations Network (ECCON) annual meeting.
- Bogers, M., Sims, J., & West, J. (2019). What is an ecosystem? Incorporating 25 years of ecosystem research. *Academy of Management Proceedings*, 2019(1), 11080.
- Ceccagnoli, M., Forman, C., Huang, P., & Wu, D. J. (2012). Cocreation of value in a platform ecosystem! The case of Enterprise software. *MIS Quarterly*, 36(1), 263–290.
- Chandler, A. D. (2009). *Scale and scope: The dynamics of industrial capitalism*. Cambridge: Massachusetts Harvard University Press.
- Cusumano, M. A. (2012). *Staying power: Six enduring principles for managing strategy and innovation in an uncertain world*. Oxford: Oxford University Press.
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, 8(1), 37–51.
- Fuller, J., Jacobides, M. G., & Reeves, M. (2019). The myths and realities of business ecosystems. *MIT Sloan Management Review*, 60(3), 1–9.
- Ghisi, F. A., & Martinelli, D. P. (2006). Systemic view of Interorganisational relationships: An analysis of business networks. *Systemic Practice and Action Research*, 19(5), 461–473.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481–510.
- Greer, C. R., Lusch, R. F., & Hitt, M. A. (2017). A service perspective for human capital resources: A critical base for strategy implementation. *Academy of Management Perspectives*, 31(2), 137–158. <https://doi.org/10.5465/amp.2016.0004>.
- Gulati, R. (1998). Alliances and networks. *Strategic Management Journal*, 19(4), 293–317.
- Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, 21(3), 203–215.
- Iansiti, M., & Levien, R. (2004a). *The keystone advantage: What the new dynamics of business ecosystems mean for strategy, innovation, and sustainability*. Boston: Harvard Business School Press.
- Iansiti, M., & Levien, R. (2004b). Strategy as ecology. *Harvard Business Review*, 82(3), 68–81.
- Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8), 2255–2276. <https://doi.org/10.1002/smj.2904>.
- Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology*, 32(3), 61–69.
- Lengnick-Hall, C. A., & Wolff, J. A. (1999). Similarities and contradictions in the core logic of three strategy research streams. *Strategic Management Journal*, 20(12), 1109–1132.

- Moore, J. F. (1993). Predators and prey: A new ecology of competition. *Harvard Business Review*, 1993(May–June), 75–86.
- Moore, J. F. (1996). *The death of competition: Leadership and strategy in the age of business ecosystems*. New York: Harper Business.
- Moore, J. F. (2006). Business ecosystems and the view from the firm. *The Antitrust Bulletin*, 51(1), 31–75.
- Muegge, S. (2013). Platforms, communities, and business ecosystems: Lessons learned about technology entrepreneurship in an interconnected world. *Technology Innovation Management Review*, February 2013, 5–15.
- Reeves, M., Levin, S., & Ueda, D. (2016). The biology of corporate survival. *Harvard Business Review*, 94(1/2), 46–55.
- Shapiro, C. S., & Varian, H. R. (1998). *Information rules: A strategic guide to the network economy*. Boston: Harvard Business School Press.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) Enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- Vanhaverbeke, W., & Cloudt, M. (2006). Open innovation in value networks. In H. Chesbrough, W. Vanhaverbeke, & J. West (Eds.), *Open innovation: Researching a new paradigm*. Oxford: Oxford University Press.

Business Ethics

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Synonyms

Corporate social responsibility; Doing good; Ethical conduct; Ethics

Definition

Business ethics can be viewed as consisting of three main areas of endeavor. These are: (1) a consideration of the ethics of business, that is, an examination of the application of broadly accepted ethical norms to business; (2) an field of academic

research and teaching in which normative and critical examinations of business practices are subjected to ethical critiques and examinations of justifications; and (3) an applied endeavor by businesses to alter behavior to comply with broader societal ethics including law as a minimum standard (Buchholz, 1989) and more broadly, corporate social responsibility (Sheehy, 2015).

The common ethical approaches of teleology, deontology, virtue ethics, and pragmatism are used in all three types of business ethics endeavors (MacDonald, 2015; Ferrell et al., 2015; Fontrodona et al., 2013; Whetstone, 2001; Bradburn, 2001; Richardson, 1995). Teleologically, the ultimate end that justifies for-profit business is a public good. Deontologically, business ethics identifies problems with exploitative business practices and argues that these practices are not permissible on deontological grounds (Buchholz, 1989). Virtue ethics thinkers focus on the actions and decision-making of executives and consider how generally accepted virtues might be useful in guiding or judging decisions and actions in a business context (Solomon, 2005). Pragmatism provides an approach to business ethics which rejects an ideal, true knowledge about right and wrong. It seeks instead to provide a balance between parties and their legitimate interests, allowing needs to be met within contemporary social systems of production, distribution, and consumption while acknowledging limitations and problems with those systems (Peterson, 2021; Visser, 2019; Richardson, 1995).

Introduction

Business ethics can be described as a “new, very old concept.” From one perspective, ethical thinking has its origins in the writings and thoughts of the great philosophers such as Socrates, Plato, Kant, and Confucius. These philosophical traditions are much concerned with thinking about what is moral, right, or wrong and also how we make informed judgments and defend our moral position. With respect to business ethics, Aristotle wrote that an exchange of things of equal value was

just and ethical (“Aristotle” *Nicomachean Ethics*, Bk V: 5).

As new ideas and institutions such as capital markets developed, however, further thinking about business and business ethics was required. Thinkers such as John Locke and Adam Smith provided new justifications for, as well as limitations on, how the economic system ought to work and what was appropriate for business (DeGeorge, 1992). Others, most famously, Karl Marx, developed systematic attacks on the underlying premises of capitalism and the capitalist system (Jackson, 1996). Business is an institution in much of the world today and business ethics, therefore, involves a study of institutions (Velasquez, 2012; Crane & Matten, 2010; Nickels et al., 2008). As such, business ethics includes the study of business institutions, situations, activities, and decisions where issues of right and wrong are addressed (Crane & Matten, 2010) and extends beyond immediate business concerns to include considerations of social justice (Khalidah et al., 2018) and the environment.

Bradburn (2001) states that business ethics is not just about being moral, but it is also concerned with adopting an ethical approach that may have strategic advantage of the business. In this sense, business ethics becomes a type of business strategy and “doing good” becomes a means of achieving profit or a means of delivering effective services in a way that enhances the common good. Common themes include social scientists’ positive research on the impact of ethics on businesses, arguments on the agency of the corporate organization, and normative debate on right and wrong in the conduct of business.

The focus of most contemporary business ethics is on the actions or omissions of organizations dedicated to for-profit activities. That is, the business ethics discussion is about the ethics of for-profit enterprises, their actions, and underlying values. This entry adopts that focus.

Business Ethics Defined and Clarified

The term “Business Ethics” is used in a variety of ways to denominate an area of thought about

right and wrong where ethics and business interact. Scholars define business ethics as organizational principles, values, and norms that may originate from individuals, organizational policies or from the legal system, social institutions, and broader civil society that guide individual and group behavior in the context of business operations and transactions (Ferrell et al., 2015; Carroll et al., 2018; MacDonald, 2015).

Business ethics is the study of those practices in organizations and is a quest to determine whether or not these practices are morally acceptable. Solomon (1992) suggests that the values of business life and the life outside of business are rarely far apart. Allison (1998) argued that ethics is fundamental to business conduct and that a moral relationship based on trust lies at the foundation of all agreements between people and two organizations. Business ethics as an academic discipline is, therefore, a specific but limited discipline that considers moral and ethical decision making in economic organizations such as business corporations. The scholarly endeavor analyzes rules, standards, codes, or principles that provide guidelines for morally right behavior in specific business situations and the actual decision-making and conduct of businesses. As a practice, business ethics implements these rules, standards, and codes through decision-making and conduct.

Three Areas of Business Ethics

There are three broad areas where business ethics is considered. These are considerations of: (1) the ethics of business as a social activity – an examination of the application of broadly accepted ethical norms to business, (2) the academic field of business ethics which examines business practices in terms of ethical critiques and justifications, and (3) business ethics as an applied endeavor – an applied endeavor by businesses to alter behavior to comply with broader societal ethics including corporate social

responsibility (Carroll et al., 2018) and a professional practice.

Ethics of Business as a Social Activity

The discussion of business as a social activity and business ethics in that context examines and questions what is right or considered ethical conduct in society generally and whether and how this broader social morality coincides with or is ignored by business. This line of inquiry has developed from thinkers like Locke and Marx, as mentioned above, to the deeper and broader societal responses to specific matters, in evidence such as environmental harms and consumer product liability (DeGeorge, 1992). This area is often examined as corporate social responsibility which is defined as “international soft law norms seeking to ameliorate and mitigate the social harms of and to promote public good by industrial organizations” (Sheehy, 2015). It is often described as the extent to which organizations meet and exceed societal expectations regarding a firm’s economic, legal, ethics, and philanthropic responsibilities (Prakash Sethi, 1975; Carroll, 1979). Ness (1992) makes an important observation with regards to CSR activities. Just as organizations that meet minimum legal requirements of society cannot be considered as irresponsible, meeting such obligations not means that an organization is necessarily responsible.

Along with this wider, secular criticism of business behavior, a long, significant line of religious thinking has been focused on business behavior, also using ethical language (Mele, 2015; Ruel, 2020; Kamarudin, 2020). Basic principles, such as the prohibitions on lying and deceiving found in most religious traditions as well as advocating justice such as supporting safe and fair working conditions, are part of this tradition. The Roman Catholic Church in the late nineteenth century advocated for a just or living wage under Pope Leo XIII. That pope was the first pontiff to address the problems of industrialization directly in his encyclical *Rerum Novarum*, which literally means “Of New Things.” The encyclical, while accepting a right to private

property and capital, also addressed other aspects including the recognition of workers’ rights, the unacceptability of child labor, and the need for a living wage (Catholic Church, 1940). *Rerum Novarum* is often advanced as the foundation of modern Catholic social teaching and a foundation of an era of more broadly socially progressive thought.

Various scandals, environmental disasters, and corruption, particularly where there is government involvement, have been a catalyst for public interest in business practices and public protest as well. This public discussion drew academic attention and provided a segue into the academic study of business ethics. In sum, understanding business ethics as a critical examination of a social activity “business” has been useful in drawing attention to harms inflicted by the social institution and prompted organized social response.

Academic Field of Business Ethics

Just as ethics is the systematic study of morality, the mores, or right and wrong of any given society, the academic field of business ethics seeks to expose the principles that make acts just or unjust, to uncover unjust rules and support just rules, and to ensure consistency and coherence among the rules (DeGeorge, 1992). It examines the conduct of business as a social activity including a focus on the accepted norms or practice within the business community. Rather than appealing to universal norms, it connects with and reflects upon the specific socio-historical context of behavior in the business community.

Within the academy, business ethics is a branch of applied ethics with a focus on ethics of for profit, not for-profit organizations, and public sector organizations and the people within the organizations. It examines all actions, conditions, and dilemmas in business and provides frameworks for analysis, challenge, and resolution or justification of those actions, conditions, and dilemmas, predominately using the frameworks of utilitarian, deontological and virtue ethics, and often advocating a combination of two or more (Buchholz, 1989; Velasquez, 2012; Ferrell et al., 2015; MacDonald, 2015).

In conducting their research, business ethicists pursue three distinct research agendas: (1) one a normative agenda examining how ethics should work, (2) an empirical group who sought to describe what was actually occurring in businesses and how ethics approaches could be incorporated as part of business structures, processes, and the production of goods and services, and (3) what aspects of ethics should be taught within traditional business education in addition to how it should be taught. While the first business ethic academic agenda was often found in association with philosophy departments and theological seminaries, the second and third were generally found in the management schools, where scholars and practitioners having expertise in society and business relationships and management training were employed (Sheehy, 2012, 2015; Segon & Booth, 2014).

In terms of the first research agenda, greater attention to business practices emerged following numerous corporate scandals in the 1970s, such as the Hooker chemical disaster in the Niagara, NY, suburb of Love Canal; the substandard Ford Pinto car and resulting deaths, and the range of corporate takeovers of the 1980s from the junk bond M&As, to the notorious collapses of firms like Enron and World Com of the 2000s (DeGeorge, 1999; Beauchamp & Bowie, 1993; Weiss, 1994). These examples focused the attention of not only scholars, but vocal critics such as Ralph Nader, who drew the attention of the general public causing them to consider the behavior and decisions of senior executives and the cultures of organizations that allowed significant harm to individuals and society in general in order to generate profits.

This wider social dialogue led to legislative action. Steinmann and Olbricht (1996) note that Federal US legislation had a critical impact on the policies, operations, and behavior of American corporations. It led to the development of ethics and compliance-based approaches, with codes of conduct, ethics training, and an attempt to develop ethical corporate cultures. In particular, it did so via criminal sentencing. The 1991 US Federal Sentencing Guidelines started by addressing both the personal responsibility of corporate officials and the punishment of the organization for

criminal conduct. The 1994 US Sentencing Commission further identified the development of an effective program to prevent and detect violations of the law as a mitigating factor in the determination of the level of fines imposed on an organization. Further, Steinmann and Olbricht (1996) and Izraeli and Schwartz (1998) argued that the guidelines had a significant impact on the establishment or enhancement of corporate ethics programs in the USA and that the impact was directly attributable to the relationship between the size of the fine and the existence of the compliance or ethics program within the organization.

Among the first scholars to research corporate ethics and organizational approaches was the late Dr. W. Michael Hoffman, the founder of Bentley's Center for Business Ethics. Hoffman focused on corporate structures and managerial approaches including leadership, communication, training, and development and management of employee performance as means by which to develop appropriate corporate cultures. Hoffman (cited in Drummond & Bain, 1994) made the point that it is generally the failure of the corporate control systems that provides the opportunity for unethical actions of its employees. In this view, an organization can enhance the ethical behavior of its workforce by improving corporate culture, that is, by recognizing the influence of significant others and the context in which decisions are made that may provide the opportunity for employees to engage in unethical behavior (Ford & Richardson, 1994; Vidaver-Cohen, 1998; White & Lam, 2000; Adams et al., 2001).

Harvard Professor, Lynn Sharp Paine, elaborated and refined Hoffman's approaches identifying two types of ethical systems: (i) a compliance approach that used a normative foundation for prescribing ethical corporate behavior and (ii) an integrity approach that parallels virtue ethics as a means of guiding and enhancing culture and corporate behavior (Sharp Paine, 1994). This typology has in turn been developed further by numerous researchers; however, a feature of all of these approaches is the use of codes of conduct and codes of ethics as a form of organizational policy and related procedure. Beyond Hoffman and Sharp Paine's typology, Segon (2007), using

the organizational design theories of Mintzberg (1981), noted that the compliance and integrity approaches parallel only two of multiple corporate structures prevalent in the business world. Hence, Segon argued that a new approach was required, which while using the same components of leadership, policy training, etc., included the development of ethical culture. This development, he argued, needed structural variants, including multiple codes of conduct and ethics that aligned to each organizational structure and purpose, consistent with Mintzberg's (1981) hypothesis of "fit."

Business ethics in academic work includes training, often in professional programs as found in business schools. Hoffman's contribution to business ethics was not limited to organizational research but extended to education with the development of one of the first business ethics concentrations in an MBA program – a project that he developed at Bentley College in Massachusetts in the 1980s. Hoffman argued that there was a clear need for ethics inclusion in business education in order to balance the singular profit maxim of most of the substantive business topics such as marketing, accounting, strategy. Buchholz (1989) and Crane (2004) explicated the critical issue, namely, that business students are taught all the substantive areas of business including theories of management, but are not exposed to and taught about the implications of business thinking and its potential in terms of poor or unacceptable business ethics (Trevino & Nelson, 2006).

Current approaches to management development and training, most notably the Emotional Social Competency Inventory or ESCI, contain little if any appeal to ethics and morality (Segon & Booth, 2014). Concerningly, from a business ethics perspective is Caruso and Salovey's view that "the emotionally intelligent manager's moral perspective is, we hope, well developed" (2004, p. 171). This assumption illustrates the ongoing concerns about how to ensure the moral dimension is developed in business leaders. It is a concern, for as Orme and Ashton (2003) and Segon et al. (2021) argue, ethics is a foundation competency and that individuals cannot be expected to follow ethical rules unless they actually understand them. Segon and Booth (2014) suggest

that ethics needs to be developed using an input-based competency approach addressing the conceptual, behavior, and attitudinal knowledge required to be a superior performing manager (Boyatzis, 1982; Hellriegel et al., 2008; Salovey & Mayer, 1997; Pedler et al., 2013; Quinn et al., 2015). Unfortunately, as one might surmise from statements like Caruso and Salovey's, the inclusion of ethics within business training continues to be haphazard with numerous studies identifying inconsistent approaches as to whether ethics should be taught as a stand-alone unit or embedded throughout other content (Alsop, 2006; Evans & Robertson, 2003; Hartman & Hartman, 2005).

Business ethics has been a burgeoning area of scholarship. The year 1980 saw the first professional conference and academic society, the Society for Business Ethics, established. Its members were primarily philosophers drawn into management division of the Academy of Management. Two years later, independently of the Academy of Management's decision, the leading journal in the area, the *Journal of Business Ethics* was founded in 1982. The Academy of Management's initiative launched the journal, *Business Ethics Quarterly* in 1991 – a journal that has gone on to considerable success. A network of business ethics societies has followed around the globe, including the Society for Business Ethics in the USA founded in 1979/1980, European Business Ethics Network founded in 1987 in Belgium, and the Australian Association of Professional and Applied Ethics in 1992. Business ethics journals of various types and with different locations and focuses have sprung up around the world.

Business Ethics as an Applied Endeavour and Professional Practice

Business ethics is turned into an actionable organizational policy framework through the ideas of corporate social responsibility. Corporate social responsibility includes ethics. Indeed, it is impossible to consider a corporation as being socially responsible if it does not account for its ethics (Sheehy, 2012). As noted, it has developed into a form of global soft law (Sheehy, 2015). Corporate

ethics as a compliance matter deals with the hard law obligations imposed by public regulators.

The professional practice of business ethics has had rather mixed results. Where business ethics has been part of an organizational strategy, it is often relegated to a marketing team or public relations department. These teams and departments that use business ethics are part of a branding exercise or a differentiation strategy. Business ethics may well have little to do with how the organization makes decisions or operates. It is usually considered part of a Corporate Social Responsibility strategy ending up in “greenwash,” “blue wash” or whatever colored cause the business seeks to align itself with (Greer & Bruno, 1996).

Levels of Business Ethics

Both DeGeorge (1992) and MacDonald (2015) suggest that business ethics can be analyzed at a number of levels: at an individual with considerations of personal responsibility, at an organizational or firm level, at an industry level, and at a national and finally an international level. We discuss each in turn. The focus of the first level is on personal responsibility, personal development, and ethical decision making. MacDonald (2015) notes that a range of influences will affect how we approach an issue. Ultimately, people must personally and individually make a decision and take responsibility for that decision at least in the realm of one’s own conscience.

The second level concerns the internal structures and processes of an organization with attention to fairness and procedure, and related principles such as transparency, as well as problems arising from a lack of attention to these matters. As agents of a firm, people are required to make decisions on behalf of or in the interests of organizations rather than being guided by self-interest. This fact leads to an important question: If a manager makes a decision for an organization on the basis of one’s understanding of the best interests of the organization and not for personal reasons, who is to be held responsible for the outcome where a negative outcome results: the organization, the manager, or both?

An example of this organizational ethical risk can be illustrated by a single focus on output. An instruction to “get it done whatever it takes” can be read as an invitation to ignore proper protocols. While the production may indeed increase, without sufficient regard to process the output may well end up with serious ethical problems. There may be increased worker injury, damaged relationships with suppliers, or products or services that are harmful or poorly accepted by customers.

The industry level focuses on the examination of the norms of an industry, such as the extractive industry or chemical or financial industry. The problems faced by participants in these industries cannot be resolved by individual firms on their own. Rather, the firms need to coordinate themselves to address and solve industry-wide issues arising from such ethically challenging concerns as pollution, destruction of the natural habit, or predatory behavior. The solutions to such problems are often developed through multi-stakeholder initiatives and promulgated through industry codes, as for example, Forestry Stewardship Council’s code (Sheehy, 2019).

The fourth level is the national. The nation-state has a variety of tools available to address ethical issues. Indeed, it is an expectation of the citizenry that the government will step in to deal with powerful industrial actors to address matters that private citizens lack the power to address on their own or even collectively. There are numerous questions which arise at the national level and in particular, the obligations of firms and organizations, including multinational corporations, to that society. Concepts such as the social contract and the license to operate need to be considered.

The fifth level is the international level. As this level, multiple actors are pursuing multiple different and often conflicting objectives. For example, multinational corporations, various governments, and international actors will be pursuing different objectives, some of which will be in conflict in the following scenario. A multinational corporation may be planning to move operations from one jurisdiction to another jurisdiction to avoid stricter environmental regulations and regulation of unsafe working conditions. This move is expected to reduce operating costs of the multinational

corporation. At the same time, governments in both jurisdictions will have different agendas. The move may bring much needed employment and revenue to the weaker jurisdiction. Such a move, however, may damage the community where it is currently operating and providing employment to a significant part of the population. Finally, international organizations such as the International Labour Organisation or an environmentally focused NGO may focus on the respective concerns of their organizations to influence the multinational corporate actor. There are obviously an host of ethical questions as to whether the multinational should be moving.

The sixth level, the global level, like the national level has severe ethical challenges. These challenges arise not only from the multinational corporation and disparate agendas of many actors but extend as the global challenges are not resolvable in one part of the globe without affecting all of the globe, regardless of their location. Matters such as global warming, a by-product of industrial activity, cannot be resolved by multinational corporations and some governments acting in concert. Rather, in matters that touch global concerns, the need for business ethics, analysis and debate, comes to the fore.

International Business Ethics

Both De George and MacDonald note the international context, with its diversity of cultural norms, laws, and standards as presenting significant ethical dilemmas. The most significant ethical theory for addressing this aspect of business is relativism. Relativism acknowledges that national cultures play a critical role in determining moral values and standards of ethical behavior (Becker & Fritzsche, 1987; Hofstede, 1980; Langlois & Schlegelmilch, 1990; Vitell et al., 1993). Ethical relativism claims that conflicting views held by different national cultures and societies can be right and further that morality and ethical principles or judgments are relative to the norms of one's culture. Accordingly, whether an action is right or wrong depends on the moral norms of the

society and the time in which it was done (Velasquez et al., 2015; La Follete, 2014; Buchholz (1989).

If one accepts ethical relativism, then one must also accept that there can be no common framework for resolving or reaching agreement on moral disputes or ethical matters among members of different societies. Hinman (2012) suggests relativism is only feasible when cultures do not have to interact with one another. As the global COVID pandemic has illustrated, our societies are inextricably linked and the challenges of coordinated responses stemming from relativism cannot be ignored. For managers and leaders working in a cross-cultural or international context, dilemmas occur continuously. They will be confronted with practices and approaches that may be considered unethical in their home country yet part of normal practice or *modus operandi* in another. The ethical challenge these leaders face is how to deal with these dilemmas. Perhaps the most confronting for those from Western cultures are those dilemmas that involve requests or offers of additional payments, facilitation, gifts, or unusual favors, in other words forms of bribery and corruption. Those from other cultures are often just as uncomfortable with the requests and offers; however, their long exposure and experience with these cultural issues helps them deal with the requests and offers more easily.

These offers and requests, in ethical terms, "bribery and corruption," are the two main issues for international business. There are multiple definitions/perceptions of meanings of corruption, including "the misuse of authority for personal, sub-unit, and/or organizational gain" (Ashforth & Anand, 2003, p. 2). Transparency International (2000, p. 1) defines corruption in a way that fits both the public and private context: "the misuse of public power for private benefit." The term bribery is more often described as the action of giving or receiving a financial or other advantage in connection with the "improper performance" of a duty by a party in a position of trust, or execution of a function that is expected to be performed impartially or in good faith.

Practices that are deemed “bribery and corruption” are seen as unethical in one country; however, they can be seen as consistent with the business norms of another, and thus, it can be argued that they are ethical. Donaldson and Dunfee (1999) describe this as the “when in Rome” approach – an approach drawn from the Bible. The saying is “when in Rome, do as the Roman’s do,” meaning follow the local norms. With respect to bribery and corruption, many managers use the “when in Rome” approach as a justification for engaging in such practices. Accepting this approach, however, creates the potential paradox of an organization accepting in one country what it prohibits in another. This simultaneous acceptance and prohibition appears to be unfair – a double set of rules applying to managers and other employees depending on where they are. It is made more complex by the fact that many transactions are multinational and it is unclear where the exact location of the transaction can be said to occur. Donaldson and Dunfee (1999) argue that the “when in Rome strategy is a mistake because it exposes the company (and its brand names) to corruption and public affairs disasters, and because it misses the opportunity to find the glue that cements moral and cooperative strategy.”

Perhaps the most significant initiative in combatting global corruption is the United States’ Foreign Corrupt Practices Act of 1977 – a piece of legislation that sought to outlaw the practice of bribing a foreign government official in order to secure contracts or gain market advantage. A similar initiative was published by the OECD as a convention on bribery and corruption. In 1996, it required all members of the OECD to develop and ratify anticorruption legislation. This initiative has been implemented. For example, the United Kingdom introduced one of the most stringent and far-reaching pieces of legislation in 2010 known as the simply as the UK Bribery Act, which applied to both public and private sector organizations. Australia has its own Foreign Corruption Provisions: Section 11.5(1) and 70.2(1) of the Criminal Code Act 1995. Similar legislation has indeed been introduced by many countries around the world

with anticorruption bodies springing up to enforce the provisions.

Summary

Business ethics is a long-standing concern. It has a wide variety of focal points – from labor, to environment, to product liability. There are three main approaches: an examination of business as a social activity, an academic discipline, and an applied endeavor. It includes impacts at all levels from the individual to the global. A major challenge arises in the context of international business and relativism.

Cross-References

- [Civil Economy](#)
- [CSR: Evolution of Concept](#)
- [Ethics Management](#)
- [Leadership Ethics](#)

References

- Adams, J. S., Tashchian, A., & Shore, T. (2001). Codes of ethics as signals for ethical behavior. *Journal of Business Ethics*, 29, 199–211.
- Allison, R. E. (1998). Ethical values as part of definition of business enterprise and part of the internal structure of the business enterprise. *Journal of Business Ethics*, 17(9), 1015–1028.
- Alsop, R. J. (2006). Business ethics education in business schools: A commentary. *Journal of Management Education*, 30(1), 11–14.
- Aristotle. (1984). Nichomachean ethics. In J. Barnes (Ed.), *The complete works of Aristotle*. Princeton, N.J: Princeton University Press. Nichomachean Ethics, Bk V: 5.
- Ashforth, B. E., & Anand, V. (2003). The normalization of corruption in organization. *Research in Organizational Behavior*, 25, 1–25.
- Beauchamp, T. L., & Bowie, N. E. (1993). *Ethical theory and business*. Prentice Hall.
- Becker, H., & Fritzsche, D. J. (1987). Business ethics: A cross cultural comparison of manager’ attitudes. *Journal of Business Ethics*, 6(4), 289–295.
- Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. Wiley.
- Bradburn, R. (2001). *Understanding business ethics*. Continuum.

- Buchholz, R. (1989). *Fundamental concepts & problems in business ethics*. Prentice-Hall.
- Carroll, A. B. (1979). A three dimensional model of corporate performance. *Academy of Management Review*, 4, 497–505.
- Carroll, B., Brown, J., & Buchholtz, A. K. (2018). *Business & society ethics, sustainability & stakeholder management* (10th ed.). Cengage.
- Carruso, D. R., & Salovey, P. (2004). *The emotionally intelligent manager*. Jossey-Bass.
- Catholic Church. (1940). *Rerum novarum: Encyclical letter of Pope Leo XIII on the condition of labor (with discussion club outline)*. New York: Paulist Press.
- Crane, A., & Matten, D. (2010). *Business ethics* (3rd ed.). Oxford University Press.
- Crane, F. G. (2004). The teaching of business ethics: An imperative at business schools. *Journal of Education for Business*, 79(3), 149–151.
- DeGeorge, R. T. (1992). Agency theory and the ethics of agency. *The Ruffin Series in Business Ethics*, 59–72.
- Donaldson, T., & Dunfee, T. W. (1999). When ethics travel: The promise and peril of global business ethics. *California Management Review*, 41(4), 45–63.
- Donaldson, T., & Werhane, P. (1999). *Ethical issues in business: A philosophical approach*. Prentice Hall.
- Drummond, J., & Bain, B. (1994). Managing business ethics a reader on business ethics for managers and students.
- Evans, F. J., & Robertson, J. (2003). *Business school deans and business ethics*. AACSB Annual Meeting, New Orleans, April.
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2015). *Business ethics: Ethical decision making and cases* (10th ed.). Houghton Mifflin.
- Fontrodona, J., Sison, A. J. G., & de Bruin, B. (2013). Editorial introduction: Putting virtues into practice. A challenge for business and organizations. *Journal of Business Ethics*, 113(4), 563–565.
- Ford, R. C., & Richardson, W. D. (1994). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, 13(3), 205–221.
- Greer, J., & Bruno, K. (1996). Greenwash: The reality behind corporate environmentalism. Third World Network.
- Hartman and Hartman, 2005.
- Hellriegel, D., Jackson, S. E., & Slocum, J. W. (2008). *Managing: A competency based approach*. Cengage Learning.
- Hinman, L. L. M. (2012). *Ethics: A pluralistic approach to moral theory*. Wadsworth: Cengage Learning.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage.
- Izraeli, D., & Schwartz, M. S. (1998). What can we learn from the U.S. federal sentencing guidelines for organizational ethics? *Journal of Business Ethics*, 17(9/10), 1045–1055.
- Jackson, J. (1996). *An introduction to business ethics*. Blackwell.
- Kamarudin, Z. (2020). *The influence of religion and business ethics towards entrepreneurship*.
- Khalidah, K., Zulkufly, R., & Lau, T. C. (2018). *Business ethics* (2nd ed.). Oxford.
- La Follete, H. (2014). *Ethics in practice*. Wiley and Sons.
- Langlois, C., & Schlegelmilch, L. L. (1990). Do codes of ethics reflect national character? Evidence from Europe and the United States. *Journal of International Business Studies*, 21(4), 519–539.
- MacDonald, G. (2015). *Business ethics: A contemporary approach*. Cambridge University Press.
- Mele, D. (2015). Religious approaches on business ethics: Current situations and culture perspectives. *Journal of Applied Ethics*, 6, 137–160.
- Mintzberg, H. (1981). Organization design: fashion or fit?. Harvard Business Review, January–February.
- Ness, M. R. (1992). Corporate social responsibility. *British Food Journal*, 7, 38–44.
- Nickels, W. G., McHugh, J. M., & McHugh, S. M. (2008). *Understanding business* (8th ed.). McGraw Hill/Irwin.
- Orme, G., & Ashton, C. (2003). Ethics a foundation competency. *Industrial and Commercial Training*, 35(5), 184–190.
- Pedler, M., Boydell, T., & Burgoyne, J. (2013). *A manager's guide to self-development*. McGraw-Hill.
- Peterson, A. L. (2021). Pragmatism and ethics: The path of inquiry. In *Works righteousness: Material practice in ethical theory* (pp. 65–86). Oxford University Press.
- Prakash Sethi, S. (1975). Dimensions of corporate social performance: An analytical framework. *California Management Review*, 17, 58–64.
- Quinn, R. E., Faerman, S. R., Thompson, M. P., & McGrath, M. R. (2015). *Becoming a master manager: A competing values approach*. Wiley.
- Rest, J. R. (1988). Can ethics be taught in professional schools? The psychological research. *Easier Said Than Done*, 1(1), 22–26.
- Richardson, H. S. (1995). Beyond good and right: Toward a constructive ethical pragmatism. *Philosophy and Public Affairs*, 24(2), 108.
- Ruel, H. (2020). *Religion and business ethics: Inseparable twins?* <https://doi.org/10.13140/RG.2.2.12959.71840>.
- Salovey, P., & Mayer, J. D. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–32). Basic Books.
- Segon, M. J. (2007). Designing an ethics system using Mintzberg's configuration approach. *The Australian Journal of Professional and Applied Ethics*, 9(2), 66–76.
- Segon, M. J., & Booth, C. (2014). Virtue: The missing element in emotional intelligence. *Journal of Business Ethics*, 128(4), 789–802.
- Segon, M. J., Booth, C., & Pearce, J. (2021). *Ethical reflection: A multi-university comparison*. Unpublished.
- Sharp Paine, L. (1994). Managing for organizational integrity. *Harvard Business Review*, March/April, 106–117.

- Sheehy, B. (2012). Understanding CSR: An empirical study of private self-regulation. *Monash University Law Review*, 38(2), 103–127.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648. <https://doi.org/10.1007/s10551-014-2281-x>.
- Sheehy, B. (2019). TNC code of conduct or CSR? A regulatory systems perspective. In M. M. Rahim (Ed.), *Global code of conduct on transnational corporations: Challenges and opportunities* (pp. 45–62). Springer.
- Solomon, R. C. (1992). *Ethics and excellence*. Oxford University Press.
- Steinmann, H., & Olbricht, T. (1996). Business ethics in US corporations. *Ethique Des Affaires*, May(4/5), 6–22.
- Transparency International. (2000). <https://www.transparency.org/en/what-is-corruption>
- Trevino, L. K., & Nelson, K. (2006). *Managing business ethics: Straight talk about how to do it right*. Wiley.
- Velasquez, M. G. (2012). *Business ethics: Concepts and cases* (7th edn.). Pearson.
- Velasquez, M., Andre, C., Shanks, T., & Meyer, M. (2015). Thinking ethically. *Issues in ethics*, 8, 2–5.
- Vidaver-Cohen, D. (1998). Moral climate in business firms: A conceptual framework for analysis and change. *Journal of Business Ethics*, 17, 1211–1226.
- Visser, M. (2019). Pragmatism, critical theory and business ethics: Converging lines. *Journal of Business Ethics*, 156, 45–57.
- Vitell, S., Nwachukwu, S., & Barnes, J. (1993). The effects of culture on ethical decision-making: An application of hofstede's typology. *Journal of Business Ethics*, 12, 753–760.
- Weiss, J. W. (1994). *Business ethics: A managerial, stakeholder approach*. Wadsworth.
- Whetstone, J. T. (2001). How virtue fits within business ethics. *Journal of Business Ethics*, 33(2), 101–114.
- White, L. P., & Lam, L. W. (2000). A proposed infrastructure model for the establishment of organisational ethical system. *Journal of Business Ethics*, 28(1), 35–42.

Business Ethics in Islam

► Islamic Business Ethics

Business Etiquette

► Professional Ethics

Business Expansion

► New Markets

Business in the Community (UK+Derivatives)

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Synonyms

BITC

Definition

Business in the Community (BITC) is one of the Prince's Charities and the UK's largest business-led membership organizations committed to promote corporate responsibility practices (Idowu 2013).

This organization undertakes to work with businesses to drive change, thus responding effectively to growing concerns such as community engagement, unemployment, diversity, and circular economy. In concrete terms, BITC seeks to trigger a change in the perception of their members and to fuel their commitment to the well-being of the society. To this end, it provides businesses with expert advice and specialist resources, and it is committed to shed light on best practices by convening, sharing learning, and publicly recognizing valuable performance across its influential network (BITC 2017).

Concerning its institutional status, BITC constitutes a public benefit entity complying with FRS 102, and it emerges as a company limited by guarantee and a registered charity in England, Wales, and Scotland (BITC 2018). At a

supranational level, BITC acts as the convener of the CSR360 Global Partner Network, the largest global network of not-for-profit organizations championing Responsible Business, assuming that the terms “Responsible Business” and “Corporate Responsibility” are deemed as tantamount to Corporate Social Responsibility (CSR) (Idowu 2013). Currently, this Network is made up of 133 independent organizations from 67 countries, and it reaches over 6,000 companies around the world (BITC 2017).

Brief History

In the 1970s, although the enactment of some socially responsible regulatory provisions (Idowu and Towler 2004), governance crisis erupted due to some critical issues such as the 1973 oil crisis, political weakness, and economic stagnation. Both conservative and labor governments were ill-equipped to address the high rates of inflation, public debt, and unemployment and, more broadly, to deal with a changeable commercial and political environment. Consequently, it occurred the reduction of state responsibility for social provision and, facing growing community riots, the government acknowledged its societal governance deficits, laying the foundations for a higher and higher private sector involvement (Vertigans 2015).

As evidence thereof, following a government conference where a group of US business leaders involved in the urban regeneration of Baltimore and Detroit in the 1970s shared their experiences with their British counterparts, and on the back of the Toxteth and Brixton race riots in 1981, Business in the Community (BITC) was established as a token of a collaboration between government and business (Moon and Richardson 1985; Grayson 2007; Idowu 2013). Actually, it should be kept in mind that BITC built on the work of pre-existing groups such as the Action Resource Centre and the Community of St Helens Trust (Grayson 2007).

Basically, BITC history might be split up in at least three major phases (Grayson 2007). During Phase I in the 1980s, it predominantly championed business support for local enterprise

agencies as a way of business helping to regenerate local economies depressed by corporate closures. With this regard, a major activity was to encourage small business development and reskilling (Grayson 2007).

During Phase II, dating back to the 1990s, BITC was involved in promoting a wider agenda of corporate community involvement. Specifically, the focus was on helping businesses better organize their involvement (Grayson 2007). Lastly, Phase III has seen BITC embrace corporate responsibility, also known as “responsible business.” The business driver has shifted more to competitive advantage for individual companies and the pressures of sustainability as a business challenge. Throughout, BITC has encouraged companies to get involved individually and to work together through collective business action (Grayson 2007).

Almost 40 years after forming, BITC still acts as a connecting bridge between business and society, devised to address those organizations, which are willing to “act responsibly and to invest in building a better and more healthy society” by anchoring the development of their businesses to the prosperity of society (BITC 2018).

BITC Vision

BITC is intended to support businesses to realize where they can best contribute, and it provides them with the appropriate guidance, tools, and insights to make this happen.

Basically, BITC membership is grounded in the idea that the success of business and society are mutually dependent. Therefore, if every individual business strives to be the best it can be in all areas as a responsible business, there will be a positive multiplier effect, which would be amplified by the cooperation and shared learnings among all the businesses. This would translate into enhancing the society, the economy, and the environment, and it would contribute to build the UK’s growth in the long term.

After all, being a responsible business is useful for each business since it can produce bottom-line business benefits in terms of staff recruitment and retention, brand value and reputation, managing risk in supply chain, driving innovation and

productivity, and opening up new markets. Moreover, it can lead to the adoption of new business models, such as those ones related to sharing and circular economy (BITC & Doughty Centre for Corporate Responsibility 2011; Department for Business Innovation and Skills 2014).

In the light of the above, once joined the BITC network, each member is expected to do two things: on the one hand, to embark on a “journey” of continuous improvement that may lead to social, environmental, and economic sustainability and to measure and to account for its CSR performance and, on the other hand, to collaborate with other businesses and relevant actors involved (such as local community leaders, charities, voluntary groups, schools, and public sector organizations) and to invest in building a better society, thus transforming communities via transforming each business (BITC 2018).

BITC Mission

At a mission-level, BITC undertakes to help businesses make progress with reference to four different key areas:

1. People: helping business build better workforces
2. Environment: helping business create a sustainable economy
3. Place: helping build healthy communities
4. Impact: helping business measure their impact (BITC 2018)

Within the “People” key area, it is possible to distinguish different fields of interventions.

Concerning the employment one, the Employment Team aims to make work more accessible and sustainable for people who face barriers to employment. Specifically, BITC is committed to make jobs more accessible through campaigns and advice resources granted to its members; to make jobs more sustainable through the development work around good work for all; to support disadvantaged individuals through the so-called Ready for Work Programme; to address tricky issues spread out in any workplace, such as gender equality or the support to a

multigenerational workforce; as well as to overcome workplace barriers associated with race diversity. Concerning well-being area of intervention, BITC is intended to endorse a holistic approach aimed at ensuring the employee well-being in relation to both physical and mental health. With reference to the education area of intervention, BITC helps businesses of all sizes support local schools, with a view of fostering young people – particularly those facing social disadvantage – to develop the skills they will need for work.

Likewise, BITC aims to guide businesses in developing their partnerships with schools.

Concerning “Environment” key area, BITC is expected to inspire and enable smart growth of any business, starting from the assumption that restoring a healthy environment is indispensable if any business hopes for achieving long-term financial success. Concretely, BITC works with businesses to reduce risk and improve the health of water, soil, and biodiversity within their supply chain.

In parallel, BITC “Circular Economy Taskforce” is called to raise awareness and inspire action to bring circular economy to life through knowledge-sharing and networking events (via the so-called Circular Office initiative) and by building up programs of practical collaboration, action, and innovation. A sector-focused work is also being developed with the UK government, with a view of designing policy frameworks and support tools to boost circular economy opportunities nationally.

With this regard, findings of a consultation with “Circular Economy Taskforce” members published in May 2018 call on business, government, academia, and other stakeholders to work together and bring the circular economy to life, since this approach could result in a 3% boost to resource productivity and generate £10bn GVA and 200,000 jobs by 2030 (BITC 2018).

Concerning the third key area named “Place,” BITC is intended to help bridge the gap between businesses and the communities. This entails supporting businesses in building healthy local communities. With this in view, employee volunteering programs might be seen as a powerful lever promoted by BITC to tackle local social issues. In particular, these programs enable

employees to donate time and skills during work hours for the benefits of local communities. For the same purpose, business connectors, as talented employees seconded from either business or the public sector to BITC, might be entrusted to work across a specific city or area, typically less advantaged, in order to develop sustainable partnerships.

Eventually, about the fourth key area “Impact,” BITC is intended to help business measure to what extent it might be framed as responsible, regardless of its size, the sector to which it belongs, and its being listed or unlisted. With this regard, in Financial Year 2017/2018, BITC launched “Responsible Business Tracker,” a new responsible business management and benchmarking tool whose first full cycle will take place in 2019 and that replaced the “Corporate Responsibility Index,” launched by BITC in 2002 (BITC 2018).

As a whole, BITC helps businesses promote leadership and engagement on all levels, as well as it enables to develop skills and expertise required to listen to the local communities’ needs and to meet them. Beyond granting advice resources and measurement and benchmark support tools such as the “Responsible Business Map” (viewed as a useful tool to realize what stage of the responsible business “journey” each business has reached), BITC offers access to a network of employers, and it encourages its members to work together and to share knowledge. By fostering the collaboration between business and community and among the businesses themselves, there are laid down the foundations for co-creating innovative solutions and determining the expected change through direct action.

Facts and Figures Concerning Some Achievements Recorded in 2017/2018

Within “People” key area, with regard to the area of intervention “employment,” 400,000 more older workers have been employed at work in the last 2 years. In parallel, concerning area of intervention “well-being,” in the last year 11,000 people completed the “Mental Health at Work” survey, while, concerning area of intervention

“education,” it turns out that in the last 10 years, 28,800 young people have been reached through the so-called “Business Class” process (BITC 2018). About “Environment” key area, in the last year, more than 80 companies have been working to develop “Circular Office” solutions. With reference to the “Place” key area, it has been found out that in the last year £48.3 M has been leveraged into communities in cash, in-kind donations, and volunteering, including the value of the business connectors themselves (BITC 2018).

Eventually, concerning “Impact” key area, at the end of 2018, BITC began to pilot the Responsible Business Tracker with 82 forerunner member companies from 26 sectors (BITC 2018).

Summary and New Challenges

BITC has been established to support businesses to become more and more responsible. Since its birth, it has been encouraging companies to change the way business activities are traditionally managed, thereby generating benefits for local communities. Nevertheless, nowadays BITC runs the risk of being affected by some upcoming macroeconomic uncertainties. In particular, the UK’s decision to leave the European Union (the so-called Brexit) could push businesses to cut discretionary expenditure, creating a loss of members or a lower BITC programs participation. Membership drop, in turn, may cause the BITC income stream to downsize. As a reaction, BITC should leverage the relationship management, and it should work closely with members to raise their awareness of how much BITC’s activity and campaigns are relevant to deal with societal and environmental needs (BITC 2018).

Cross-References

► [Business in the Community Index](#)

References

BITC (Business in the Community). (2017). About us. https://www.bitc.org.uk/about-us_. Accessed 1 Feb 2019.

- BITC (Business in the Community). (2018). Onwards and upwards 2017/2018. 2018 Annual Report. https://www.bitc.org.uk/sites/default/files/bitc_annualreport2018.pdf. Accessed 1 Feb 2019.
- BITC (Business in the Community), & Doughty Centre for Corporate Responsibility. (2011). The business case for being a responsible business. https://www.bitc.org.uk/sites/default/files/kcfinder/files/Business_case_final1.pdf. Accessed 1 Feb 2019.
- Department for Business Innovation & Skills. (2014). Corporate responsibility. Good for business & society: Government response to call for views on corporate responsibility. <https://www.gov.uk/government/consultations/corporate-responsibility-call-for-views>. Accessed 1 Feb 2019.
- Grayson, D. (2007). *Business-led corporate responsibility coalitions: Learning from the example of business in the community*. Cambridge, MA: CSR Initiative of the Kennedy School of Government, Harvard University.
- Idowu, S. O. (2013). Business in the community (UK + Derivatives). In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 262–264). Berlin, Heidelberg: Springer. <https://doi.org/10.1007/978-3-642-28036-8>.
- Idowu, S. O., & Towler, B. A. (2004). A comparative study of the contents of corporate social responsibility reports of UK companies. *Management of Environmental Quality: An International Journal*, 15(4), 420–437. <https://doi.org/10.1108/14777830410540153>.
- Moon, J., & Richardson, J. J. (1985). *Unemployment in the UK: Politics and policies*. Aldershot: Gower.
- Vertigans, S. (2015). Corporate social responsibility in the United Kingdom. In S. O. Idowu, R. Schmidpeter, & M. S. Fifka (Eds.), *Corporate social responsibility in Europe* (pp. 37–56). Cham: Springer. https://doi.org/10.1007/978-3-319-13566-3_3.
- <http://www.bitc.org.uk>. Accessed 1 Feb 2019.
- <http://www.csr360gpn.org>. Accessed 1 Feb 2019.

Business in the Community Index

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Synonyms

BITC index; Corporate responsibility index; CR index; CRI

Definition

The Corporate Responsibility (CR) Index is a voluntary benchmarking tool launched in 2002 by UK Business in the Community (BITC). CR Index follows a systematic approach to managing, measuring, and reporting on business responsible business practices and the impacts on society and the environment.

Brief History

According to Business in the Community (BITC), Corporate Social Responsibility (CSR) – also known as Corporate Responsibility (CR) or Corporate Responsibility and Sustainability (CRS) – hints at a voluntary integration of social and environmental concerns into business practice. It's about being a responsible business, thus taking charge of the impacts on society and the environment. Such a CR conception is embedded in the Corporate Responsibility Index (CR Index), considered as the leading benchmark of responsible business in the UK.

In 1996, BITC launched a “Business in the Environment Index” to assess the performance regarding environmental management practices of member companies. In 2002 members requested social issues to be integrated into the index. As a result, BITC established the CR Index in collaboration with over 80 leading UK corporations and with UK-based nonprofit organizations (Spitzeck 2009; El-Masry and Kamal 2013).

As a general rule, participation to CR Index has been open to all the Financial Times Stock Exchange (FTSE) listed companies, Dow Jones Sustainability Index listed companies, and BITC level 1 and 2 and Premier members (BITC 2012). Throughout the CR Index whole period of application, it has been recorded a significantly positive response from corporations, investment fund managers and city analysts, pension funds, insurers, government, and the public. As a matter of fact, over 100 corporations have participated in the CR Index every year from the time of its establishment (El-Masry and Kamal 2013).

Business in the Community Index,

Fig. 1 5-star rating system of CR index performance (BITC 2017)



CR Index urges companies to conceive and deliver business strategies that are consistent with the responsible business framework. To this end, it takes care of conducting a gap analysis, benchmarking against industry peers, and recognizing and communicating achievement of public participants. CR Index stands as an online survey, which prompts companies to report on their social and environmental impacts and to measure to what extent responsible business framework is integrated into their strategy. Companies follow a self-assessment process intended to help them identify both the strengths in their management and CR performance and gaps, where future progress can be made.

Since 2014 CR Index performance moving has been categorized to a 5-star rating system, whose boundaries have been set as depicted in Fig. 1:

Structure of CR Index

The CR Index is organized into four sections:

- Corporate Strategy section
- Integration section
- Management section
- Performance and Impact section

First of all, Corporate Strategy section aims to realize how the business's activities are reflected upon each company, by focusing on the corporate vision and values, the effective governance, and the CR risks and opportunities underlying each business. As a general rule, this CR Index section is meant to reward companies for internalizing CR values in their business strategy. Beyond looking at the effectiveness of company's corporate

governance processes, Corporate Strategy section asks whether there is a system to identify key social and environmental risks and opportunities and whether these are addressed through strategy, policies, and responsibilities held at a senior level. By contrast, companies have to account for leadership and commitment at the highest level, internal reporting to the board and public advocacy of responsible business practice (Hopkins 2005).

Vice versa, Integration section sheds light on how companies organize, manage, and embed corporate responsibility into their operations through strategic decision-making, performance management, training, effective stakeholder engagement, and public reporting. Concretely, the CR Index section under scrutiny is expected to answer the following questions:

- Is the responsible business framework part and parcel of the company culture?
- Is it integrated into the strategic decision-making processes of the company and linked through into internal governance and risk-management systems?

Indeed, as explained by BITC, it is not enough to have a strategy. In fact, any strategy needs to be implemented and embedded throughout the business. This requires internal communication and training employees in finding out the key CR issues for the company and building CR-related performance criteria into appraisal and remuneration systems. Moreover, engaging the stakeholders might be conducive to a more effective CR strategy implementation, as well as embodying social and environmental issues into the strategic decision-making process and raising the transparency degree through external

reporting on CR management practices and impacts may lead to more satisfying end- results.

Subsequently, integration degree is assessed through the Management section, where processes are reviewed for how they manage different stakeholder relationships. Going in depth, Management section assesses whether a company has developed management practices to address materially significant CR issues across four areas:

- Community, that relates to the interface between business and society, positively or negatively affected by a project, product, or investment on a local or global level.
- Environment, that is the world's ecosystems and natural resources that can be directly and indirectly affected by a company's operations, products, and services, to such an extent that being responsible means safeguarding both the systems and resources for future generations.
- Marketplace, that refers to how companies manage business and consumer and supplier relationships, from product development to sourcing, buying, marketing, selling, and promotion of products and services. It also relates to how companies influence the rules of the marketplace in which they operate.
- Workplace, that hints at the creation of a working environment where personal and employment rights are upheld (Hopkins 2005; Hansen and Spitzack 2010).

Overall, Management section is expected to clarify how a company selects and prioritizes key material environmental and social issues; to identify which are the relevant programs around different areas of CR and which are the objectives and targets chosen to steer a continuous improvement; to monitor systems designed to measure, assess, and report on progress; and to keep track of public reporting on key issues, objectives, and targets.

Lastly, Performance and Impact section asks companies to report performance in a range of social and environmental impacts areas. By contrast, participants complete three environmental and three social areas based on the relevance to their business. The environmental impact areas

include one core or mandatory impact, climate change, plus two self-selected area of material significance to the business. For their social impact areas, companies are able to choose between employee engagement and well-being, employee development, equality, diversity and inclusion in the workplace, community investment, international development, or another self-selected impact area. By resorting to focused graphs, CR Index is expected to disclose results and benchmarking information covering the environmental and social impact areas completed by the company. Such information concerns about organizational commitment to managing the issue, the programs in place to drive improvements, and the organizational performance over time.

Given this structure of the CR Index, each company, for its part, is called to answer the questions corresponding to the four sections, which, in turn, are individually weighted, as follows:

- 15% of total score is awarded to the Corporate Strategy section.
- 28% of total score is awarded to the Integration section.
- 23% of total score is awarded to the Management section.
- 33% of total score is awarded to the Performance and Impact section.

Therefore, percentage score achieved by any company results from the weighted sum of all the marks accomplished in each of the abovementioned sections. Each corporation is accountable for signing off its own index findings by CEO or through the board member handling the corporate responsibility to ensure director-level dedication to the reliability of the responses to the survey. In parallel, BITC is committed to strengthen the truthfulness of the Index by deploying checks throughout key stages in the compilation, examination, aggregation, and presentation of information (El-Masry and Kamal 2013).

At the end of the assessment process, the output will be a standard scores report, which

graphically displays the company's management and performance scores across the CR agenda. This will include the benchmark against peer companies who participated in the public index and against the overall universe of participating companies. As a matter of fact, once defined, the percentage score is grouped into performance bands (platinum, gold, silver, and bronze), which make up the public CR Index annual ranking. Such index will be made publicly accessible on BITC website and with the media partners.

Benefits Deriving from Using CR Index in Absolute and Relative Terms

Basically, the CR Index is the only voluntary, business-led benchmarking index which encompasses all corporation divisions and reports on the four basic influence sections of corporate responsibility: community, workplace, marketplace, and environment, all together treated on an equal basis.

Differently from some other widely adopted indices such as Dow Jones Sustainability Index and the FTSE4 Good, CR Index works as a business instrument rather than an investment instrument (El-Masry and Kamal 2013). Moreover, unlike some indices such as the Carbon Disclosure Project and the London Benchmarking Group that are focused on just one influence area (respectively, the climate change and the community), CR Index is geared toward detecting CR performance in more than one influence area (El-Masry and Kamal 2013).

In absolute terms, benefits arising from using CR Index might be summarized as follows:

- It provides a tried and tested framework for the management of social and environmental issues.
- It helps identify good practice across the CR agenda in the form of a gap analysis.
- It focuses on nonfinancial risk management.
- It drives CR-related efficiencies and innovation.
- It facilitates communication and engagement with internal and external stakeholders.
- It enhances brand reputation.

- It demonstrates a strategic commitment to sustainability (BITC 2012).

To the abovementioned benefits, there should be added those ones deriving from exerting the Private Benchmarking option each participant may take advantage of. Indeed, beyond publicly available CR Index, participants may decide to resort to this confidential option, which allows them to compare against the CR Index participants without having to publicly disclose results.

Therefore, Private Benchmarking may provide companies with additional advantages such as fully flexible timeline, openness to all companies and sectors; guidance before and during self-assessment period; additional feedback for comprehensive baseline assessment; and no reputational risk (BITC 2012).

Summary and Future Directions: The Launch of the "Responsible Business Tracker"

Although each business found CR Index extremely valuable, in recent years there was a growing perception that changes in the responsible business domain and in sustainable development policy were causing CR index to lose its effectiveness progressively (BITC 2018). Hence, in Financial Year 2017/2018, basing on the feedbacks from members, BITC changed its approach to benchmarking and performance management. This has ended up with designing the new Responsible Business Tracker, generously supported by Sky and made possible also by counting on the assistance of Lloyds Banking Group Centre for Responsible Business at the University of Birmingham (BITC 2018).

The Responsible Business Tracker stemmed from a consultation with over 200 companies, nongovernmental organizations, government, and international partners. Following in the CR Index's vein, the Responsible Business Tracker stands as a measurement tool designed to enable a business to measure their performance as a responsible business. It provides a robust validation process with feedback tailored to the



Business in the Community Index, Fig. 2 UN Sustainable Development Goals (UN 2015)

organization, which informs an action plan with support from a Business in the Community adviser. Compared to the previous CR Index, the Tracker's unique selling point is that it covers the entire responsible business agenda, it is expected to cater to all sectors and sizes of businesses (whether listed or unlisted), and it aligns with the 17 United Nations' (UN) Global Goals, conceived as the Sustainable Development Goals (Fig. 2).

Sustainable Development Goals are to be pursued in compliance with the BITC Responsible Business Map reported in Fig. 3.

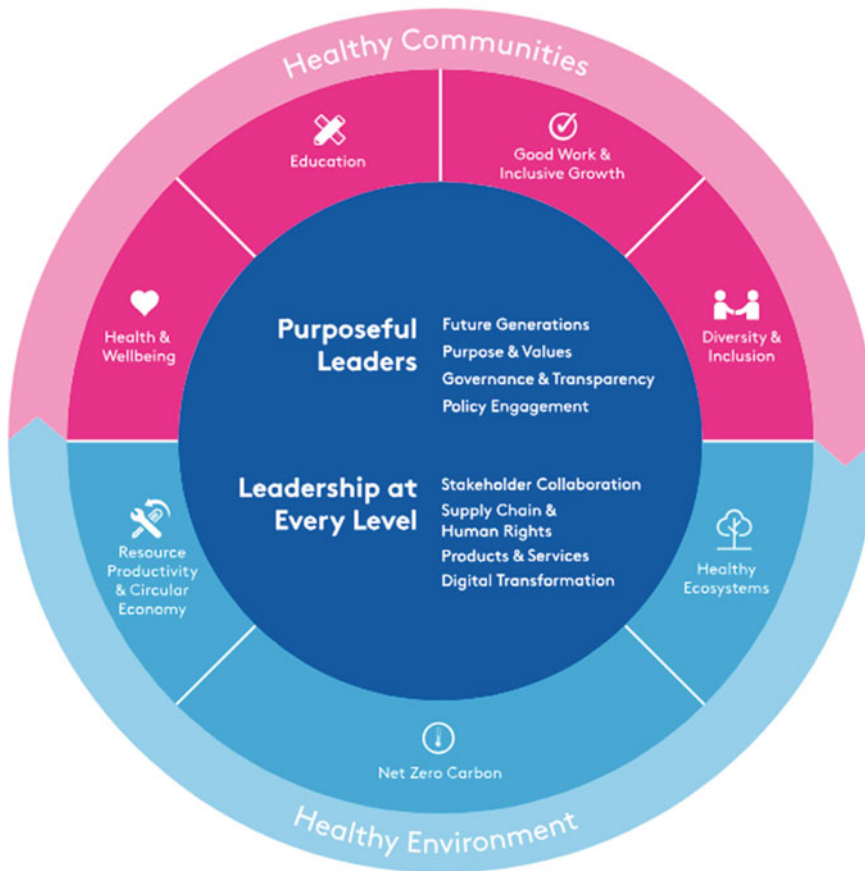
Based on the premise that the Global Goals campaign looks up to the UN sustainable development agenda of 2015 and aims to engage businesses everywhere to ensure that their core business model is a sustainable one, Tracker is intended to enable a business to contribute to the realization of the Sustainable Development goals by identifying the key issues that need to be addressed to ensure long-term financial value, enabling both society and the planet to thrive. After all, by looking up to the abovementioned Responsible Business Map, responsible business might be framed as one that puts creating healthy communities and a healthy environment at the

center of its strategy to achieve long-term financial value.

Differently from the CR Index, which popped up as a management and benchmarking tool based on a yearly basis cycle, the Tracker is a biennial tool. Indeed, a biennial cycle may enable organizations to focus and work on the feedback received from their Corporate Adviser in a timely fashion before embarking on the next cycle. Once again, Tracker offers benchmarking and recognition as well as gap analysis, highlighting best practice and allowing organizations to measure themselves against competitors (BITC 2018).

In 2018, BITC began to pilot the Responsible Business Tracker with 82 forerunner member companies from 26 sectors. Participants trialed the survey tool between September and December 2018 before receiving practical tips, examples of good practice, tailored advice, and an action plan from a Business in the Community adviser. The first full cycle of the Responsibility Business Tracker will take place in September 2019.

Overall, BITC vision is that global organizations of all sizes may give proof that mainstreaming sustainability and responsible



Business in the Community Index, Fig. 3 Responsible Business Map (BITC 2018)

business as part of their business model is the best route to commercial success and to deliver the Sustainable Development Goals by 2030 (BITC 2018).

Global organizations, on their parts, by taking into account the role of Responsible Business Tracker as a groundbreaking hub for employers, might achieve the Global Goals more easily through sharing expertise, shared learning, best practices, and recommended practical and strategic actions.

Cross-References

- [Business in the Community \(UK+Derivatives\)](#)
- [Corporate Social Responsibility \(CSR\)](#)

References

- BITC (Business in the Community). (2012). Corporate Responsibility Index Private Benchmarking. https://www.bitc.org.uk/sites/default/files/bitc_environment_index_private_benchmarking_flyer_2012.pdf. Accessed 1 Feb 2019.
- BITC (Business in the Community). (2017). CR Index 2017 Pennon Group PLC. www.pennon-group.co.uk. Accessed 1 Feb 2019.
- BITC (Business in the Community). (2018). Onwards and upwards 2017/2018. 2018 Annual Report. https://www.bitc.org.uk/sites/default/files/bitc_annualreport2018.pdf. Accessed 1 Feb 2019.
- El-Masry, A., & Kamal, N. (2013). Corporate responsibility index. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 528–534). Berlin/Heidelberg: Springer. <https://doi.org/10.1007/978-3-642-28036-8>.
- Hansen, E., & Spitzbeck, H. (2010). Stakeholder governance—an analysis of BITC corporate responsibility

- index data on stakeholder engagement and governance. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1690600. Accessed 1 Feb 2019.
- Hopkins, M. (2005). Measurement of corporate social responsibility. *International Journal of Management and Decision Making*, 6(3–4), 213–231. <https://doi.org/10.1504/ijmdm.2005.006549>. <https://www.bitc.org.uk>. Accessed 1 Feb 2019.
- <https://www.un.org/sustainabledevelopment/development-agenda/>. Accessed 1 Feb 2019.
- Spitzeck, H. (2009). The development of governance structures for corporate responsibility. *Corporate Governance: The International Journal of Business in Society*, 9(4), 495–505. <https://doi.org/10.1108/14720700910985034>.
- UN (United Nations). (2015). Sustainable Development Goals kick off with start of New Year. <https://www.un.org/sustainabledevelopment/blog/2015/12/sustainable-development-goals-kick-off-with-start-of-new-year/>. Accessed 1 Feb 2019.

Business Integrated Reporting

► Integrated Reporting for Sustainability

Business Judgment Rule

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Synonyms

Directors' defense; Directors' discretion

Definition

The business judgment rule is a rule in corporate law which provides directors of a business corporation a defense in lawsuits where corporate decisions have been challenged in the courts. The rule provides a defense where directors can demonstrate that they have acted in good faith. The rule is based on the general corporate law principle that the courts will not impose liability where a corporate decision has had negative consequences

for the company provided that the directors have acted in the best interests of the company when taking those decisions (Arsht 1979; Sheehy and Feaver 2014).

In essence, the business judgment rule protects a corporation's board of directors and allows it to function without wasting excessive time defending against frivolous litigation concerning the conduct of the corporation's business. The rule in common law countries provides that boards are presumed to act in "good faith" – i.e., boards are assumed to be operating in line with the obligations of loyalty, diligence, and care that directors have to the company. Thus, without clear evidence that a board has breached its legal duty, the courts will not review or overturn a board decisions about how to conduct the business of the company (Kim 1980).

Introduction

The business judgment rule is derived from a legal doctrine that is at least 150 years old in the common law world. It arose to ensure that decisions made by directors, officers, and controlling shareholders that were done in good faith would be allowed to stand even where those decisions led to poor results or were contrary to the will of the shareholders more generally. More recently, as a response to the rise of derivative actions in which directors' decision-making came under increasing scrutiny, the necessity of excusing honest directors took on a greater importance and led ultimately to law reform and a statutory enactment of the rule. It is important to note that each jurisdiction has distinct rules for its distinctive business judgment rule. The entry which follows is introductory only and readers looking for the specifics of the rule are directed to their specific jurisdictions.

The American Law Institute formulated the basic rule as follows:

A director or officer who makes a business judgment in good faith fulfils the duty under this section if the director or officer (1) is not interested in the subject of the business judgment; (2) is informed with respect to the subject of the business judgment

to the extent to which the director or officer reasonably believes to be appropriate under the circumstances; and (3) rationally believes that the business judgment is in the best interests of the corporation. (American Law Institute 1994)

Assumptions

The rule operates on certain assumptions. First, it is assumed that directors, officers and majority shareholders are executing their duties correctly – i.e., in good faith, with care and diligence. As a result, plaintiffs looking to challenge directors' decisions have to demonstrate a failure of directors in fulfilling their fiduciary duties. Second, it assumes that directors' decisions will not always be good decisions, that errors will be made and that even good decisions may result in poor outcomes. In other words, it is recognized that directors will not make optimal decisions (Bainbridge 2004). The consequence of this assumption is that directors are not unduly cautious and are willing to take appropriate risks knowing that the business judgment rule will shield them from liability in such instances.

Objectives

The basic objectives of the rule are twofold: (1) To provide assurance to directors that they will not be found to be liable for decisions taken where they have been taken on appropriate grounds. (2) As such, that protection granted to directors ultimately results in protecting corporations from frivolous lawsuits. This result eventuates because of legal presumption requires parties seeking to file lawsuits to prove that management is working against the interests of shareholders (Block et al. 1990).

Legal Principles and Business Decision-Making

The rule further implements a legal principle of judicial deference to directors and officers. That principle is that the judiciary will not interfere in

the internal affairs of the corporation in the absence of some type of fraud or other violation of the law. It recognizes that judicial expertise is in the interpretation and application of law whereas the expertise of directors and officers is in the evaluation and weighing of benefits and costs and related risks in business. Thus, unless there has been a violation of the law including a breach of duties, the court will not entertain a complaint about the decision made (Block et al. 1990).

Decisions made by directors and officers are complex, multifaceted, and have long-term implications. Furthermore, decisions are made with imperfect information – information that is incomplete, incorrect, outdated, or otherwise lacking desirable characteristics. Finally, these decisions are made in an environment dynamic marketplaces. As a result, there is no guarantee that the best of decisions will prove to be profitable, as is seen with failed mergers and acquisitions which may lead to significant financial losses (Weber 1996). Accordingly, it is entirely appropriate that these senior corporate decision-makers be excused from liability for decisions which do not turn out as planned.

The Delaware court has put the legal principle as follows: “Substantive second-guessing of the merits of the business decision. . .is precisely the kind of inquiry that the business judgment rule prohibits” (*In re The Dow Chemical Company Derivative Litigation* 2010 WL 66769 Del. Ch.).

In essence, therefore, the business judgment rule is an acknowledgement that business decision-making both in terms of long-term strategy and day-to-day operations involves uncertainty, contestable decisions, and putting the company's assets at risk, and includes making errors of judgment. Indeed, by their nature business decisions require an element of risk as part of the investment decision, whether starting a new product line or investing in a new venture. A general assumption in business is that higher profits require taking greater risks (Greenfield and Nilsson 1997; Johnson 2000).

In setting out the test for the business judgment rule, American courts use the *Aronson rule* (*Aronson v. Lewis*, 473 A.2d 805, 814, Del. 1984). It sets out two alternative tests. These are

either “The complaint must allege particularized facts that establish a reasonable doubt that ‘(1) the directors are disinterested and independent [or] (2) that challenged transaction was otherwise the product of a valid exercise of business judgment’” (cited in Goldberg 1999; Block and Prussin 1983).

Limitations and Criticisms of Business Judgment Rule

The business judgment rule is limited to situations where directors are seeking to defend against claims that they have breached their duties to act with care and diligence. The rule does not extend to breaches of other duties (Hansen 1993; Horsey 1994).

Further, the rule only applies to “business judgments.” In other words, it is limited to “any decision to take or not take action in respect of a matter relevant to the business operations of the corporation” (Carroll 1991). While this definition is relatively broad, courts have limited the scope of decisions that will be classified at law as “business judgments.” For example, the court has determined that decisions in areas of business planning, budgeting, and forecasting are business judgments. Further, the court has excluded common director activities like monitoring corporate affairs and understanding a company’s financial position, as not falling into the category of decision-making subject to a business judgment rule defense. As a result of such judicial interpretations, the business judgment rule does not provide a defense in all circumstances where judgment is required (Block and Prussin 1983; Horsey 1994). Finally, the business judgment rule only applies to actual “decisions.” Thus, for the business judgment rule to have potential application as a defense a director must positively turn his or her mind to the matter in question (Hinsey 1983).

Legislating the Business Judgment Rule

Although as noted, the business judgment rule has a long history, more recently, legislators have

begun to introduce statutory versions. The aim is to provide clarity and certainty for directors and officers acting properly in the discharge of their duties while recognizing the commercial reality of uncertainty in decision-making.

The rule takes account of the reality that no commercial decision has predetermined outcomes and that at times, business decisions will lead to financial loss and even business difficulty. While a subsequent review of the decision may find fault with some aspect of the decision, the law governing corporate decision-making is not aimed at punishing directors and officers who have made properly informed and careful decisions that failed to produce desired results. It is a legal method designed to provide support for diligent decision-making and remove unnecessary threat of review by courts of appropriate exercise of management discretion (Bainbridge 2004).

Summary

The business judgment rule is a rule in corporate law. It provides a defense to directors and officers who are seeking to avoid liability for decisions which have failed to produce the positive results planned or harmed the corporation. To invoke the business judgment rule as a defense, the following elements, found in the statutory form of the business judgment rule in most common law jurisdictions around the world, must be demonstrated by the director or officer. Drawn from the American Law Institute’s Principles of Corporate Governance, the elements are that the business judgment was made:

- In good faith and for a proper purpose
- With no material personal interest in the subject matter of the judgment
- After they informed themselves about the subject matter of the judgment to the extent they reasonably believed to be appropriate
- With a rational belief that the decision was in the best interests of the corporation

As the test is cumulative, a director or officer must prove all four elements to rely on the rule.

Cross-References

- [Corporate Governance](#)
- [Shareholder Rights](#)

References

- American Law Institute. (1994). *Principles of corporate governance*, part IV para 4.0(a).
- Aronson v. Lewis, 473 A.2d 805, 814, Del. 1984.
- Arsht, S. S. (1979). The business judgment rule revisited. *Hofstra Law Review*, 8, 93.
- Bainbridge, S. M. (2004). The business judgment rule as abstention doctrine. *Vanderbilt Law Review*, 57, 83.
- Block, D. J., & Prussin, H. A. (1983). Termination of derivative suits against directors on business judgement grounds: From Zapata to Aronson. *The Business Lawyer*, 39, 1503.
- Block, D. J., Radin, S. A., & Rosenzweig, J. P. (1990). The role of the business judgment rule in shareholder litigation at the turn of the decade. *The Business Lawyer*, 45, 469–510.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Goldberg, S. (1999). Statistics, law, and justice. *Jurimetrics*, 39, 255–259.
- Greenfield, K., & Nilsson, J. E. (1997). Gradgrind's education: Using Dickens and Aristotle to understand (and replace) the business judgment rule. *Brooklyn Law Review*, 63, 799.
- Hansen, C. (1993). Duty of care, the business judgment rule, and the American Law Institute Corporate governance project. *The Business Lawyer*, 48(4), 1355–1373.
- Hinsey, J., IV. (1983). Business judgment and the American Law Institute's corporate governance project: The rule the doctrine and the reality. *The George Washington Law Review*, 52, 609.
- Horsely, H. R. (1994). The duty of care component of the Delaware business judgment rule. *Delaware Journal of Corporate Law*, 19, 971.
- Johnson, L. (2000). The modest business judgment rule. *The Business Lawyer*, 55, 625–652.
- Kim, K. S. (1980). The demand on directors requirement and the business judgment rule in the shareholder derivative suit: An alternative framework. *Journal of Corporate Law*, 6, 511.
- Sheehy, B., & Feaver, D. (2014). Anglo-American directors' legal duties and CSR: Prohibited, permitted or prescribed. *Dalhousie Law Journal*, 37(1), 345.
- Weber, Y. (1996). Corporate cultural fit and performance in mergers and acquisitions. *Human Relations*, 49(9), 1181–1202.

Business Management

- [Corporate Governance](#)

Business Model

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Synonyms

[Business Case](#); [Business process model](#); [Commercial model](#); [Company's plan](#); [Economic model](#); [Enterprise/Corporate model](#); [Management model](#); [Operating model](#)

Definition/Description

This chapter provides an understanding of the business model concept in different settings. Starting with a focus on **traditional business model**, an overview of the range of definitions is given. Generally, a business model represents the relevant activities of a company and their relations with each other in order to create, deliver, and capture value (Zott & Amit, 2010; Osterwalder & Pigneur, 2010; Richardson, 2008; Wirtz, Pistoia, Ullrich, & Göttel, 2016). Business models consist of several **elements** which are discussed in the following section. The **Business Model Canvas** (Osterwalder & Pigneur, 2010) is known as a prominent tool in practice and academia alike and introduced in detail. Subsequently, the most prominent **patterns** of business models which are **freemium**, **long-tail**, and **multi-sided platforms** are presented using practical examples. Besides traditional organizations, **social enterprises** gained increasing importance during the last decades. For this purpose, the Business Model Canvas has been adopted to the **Social Business Model Canvas**. Due to the increasing pressure from the environment, organizations

need to *innovate* themselves in order to become more sustainable (Lacy & Rutqvist, 2015). In the third section it is shown how the concepts from traditional businesses can be transferred to *sustainable business and sharing economy* in particular. Therefore, the ReSOLVE framework can help organizations to innovate and align their business model with sustainability purposes (De Angelis, 2018; EMF et al., 2015). This chapter concludes with a practical application of the Business Model Canvas of BlaBlaCar as an organization in the sharing economy.

Understanding of Traditional Business Models

Defining Business Model

The concept of business model obtained considerable interest within practitioners and academic communities. It gained popularity in the 1990s as an own field of research alternative to more traditional management approaches (Amit, Zott, & Pearson, 2012; Baden-Fuller & Morgan, 2010; Wirtz et al., 2016; Zott, Amit, & Massa, 2011). Publications in the field of business models increased and it became so important that the *Long Range Planning* journal published a special issue on this topic including articles from Baden-Fuller and Morgan (2010), Teece (2010), and Wirtz et al., (2010), to name only some of them. However, despite the magnitude of research in this domain during the last years, no common definition has been agreed on. Zott et al. (2011) complain that that “the term business model in its current use is not one concept; it is many concepts” (pp. 1034–1035). Likewise, Wirtz, Schielke, and Ullrich (2010) criticize that the term business model is not applied coherently. Contrary, the term business models has been used in various specification such as technology, innovation management, strategy, environmental sustainability, and social entrepreneurship (Stampfl, 2016).

In line with the amount of literature a huge range of definitions and interpretations on the term business model can be found (Sparviero, 2019; Zott et al., 2011). More generally, Porter

(2001), describe it as “conception of how a company does business and generates revenue” (p. 73). Zott & Amit (2010) highlight the business model as system of independent activities (see also Amit & Zott, 2001). Similarly, Richardson (2008), Timmers (1998), and Wirtz (2020) consider relevant activities or the architecture of a business as central aspect constituting business models. Addressing and satisfying a customer need is another important issue that has been mentioned (Amit et al., 2012; Magretta, 2002; Teece, 2010; Wirtz, 2020). Richardson (2008) includes the term “strategy” and calls for clearly distinguishing these concepts from each other. Whereas a strategy strives for building and securing a competitive advantage compared to competitors (e.g., by conducting market analyses and analyzing positions in the market), business models relate to customers and the value they deliver (how activities implement a strategy) (Magretta, 2002; Stampfl, 2016). This relationship between business model and strategy is supported by Richardson (2008) underlying the business model’s executing role in realizing strategies. In a similar vein, Osterwalder (2004) argues that a business model is the “the strategy’s implementation into a conceptual blueprint of the company’s money earning logic” (p. 17).

Besides these different orientations of the selected definitions on business models, they all refer to the element of “value.” Zott et al. (2011) refer to “value creation” and “value capture” and argue about the interplay of both. Teece (2010) puts the customer into the focus and says that the customer is willing to pay for value that he achieves through the product and a need that is going to be fulfilled (see also Christensen, 1997). Likewise, Osterwalder and Pigneur (2010) put the value into the core of their definition of business model. Wirtz (2020) argues that a business includes components which lead to value-added and finally generating or preserving competitive advantage. An overview over the range of definitions on the concept of business models is given in Table 1.

Condensing the definitions provided above a business model represents the relevant activities of a company and their relations with each

Business Model, Table 1 Range of business model definitions (own illustration based on Stampfl (2016) and Zott et al. (2011))

Author	Definition “business model”
Amit & Zott (2010)	“We conceptualize a firm’s business model as a system of interdependent activities that transcends the focal firm and spans its boundaries. The activity system enables the firm, in concert with its partners, to create value and also to appropriate a share of that value.” (p. 216)
Amit et al. (2012)	“A business model is a bundle of specific activities – An activity system conducted to satisfy the perceived needs of the market , along with the specification of which parties conduct which activities , and how these activities are linked to each other.”
Chesbrough and Rosenbloom (2002)	The business model is “the heuristic logic that connects technical potential with the realization of economic value ” (p. 529).
Magretta (2002)	Business models “explain how enterprises work” and answer the following questions: “Who is the customer ? And what does the customer value ? It also answers the fundamental question every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to the customers at an appropriate cost?” (p. 87)
Osterwalder and Pigneur (2010)	“A business model describes the rationale of how an organization creates, delivers, and captures value .” (p. 14)
Richardson (2008)	A business model is “a conceptual framework that helps to link the firm’s strategy , or theory of how to compete, to its activities , or execution of the strategy. The business model framework can help to think strategically about the details of the way the firm does business.” (p. 135)
Teece (2010)	“A business model articulates the logic, the data and other evidence that support a value proposition for the customer , and a viable structure of revenues and costs for the enterprise delivering that value .” (p. 179)
Timmers (1998)	The business model is “an architecture of the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenues .” (p. 4)
Wirtz (2020)	“A business model is a simplified and aggregated representation of the relevant activities of a company. It describes how marketable information, products and/or services are generated by means of a company’s value-added component . In addition to the architecture of value creation, strategic as well as customer and market components are considered in order to realize the overriding objective of generating and preserving a competitive advantage .” (p. 57)

other in order to create, deliver, and capture value (Zott & Amit, 2010; Osterwalder & Pigneur, 2010, Richardson, 2008; Wirtz et al., 2016).

Business models are applicable on several levels, such as companies, business units, or products and services. Literature mainly refers to the organizational level, namely the company. Business models deliver several benefits for the organization. By implementing a business model, competitive advantages can be reached since an existing business model makes it harder to be copied by others. Similarly, existing and transparent business models contribute to a company’s unique selling proposition. The

organization delivers unique value to the customer which increases customer loyalty and retention. Moreover, business models provide an overview on success and costs as well as risks which increase strategic flexibility (Wirtz et al., 2016).

Elements and Components of Business Models

Business models can be depicted including several elements or components, ranging from only a few ones (2–3) to a more complex picture (9–11). There is a consensus in the scientific community that the business model reflects a company’s internal resources and capabilities as well as

corresponding transactions in the course of value creation (Amit et al., 2012; Teece, 2010).

Richardson (2008) argues that business models include three main components which are value proposition, value creation and delivery, and value capture. Wirtz's (2020) business model resembles the value chain by including elements such as procurement, finance, value creation, market offer, revenue, customer, and three subordinated models: strategy, resources, and network (p. 199).

Gassmann, Frankenberger, and Csik (2013) developed the Business Model Navigator comprising a triangle and four elements which are who (who is your target customer?), what (what do you offer to the customer?), how (how is the value proposition created?), and value (why does this business model generate profit?). This concept resembles the work of Markides (1999) who referred to the three dimensions what, who, and how when illustrating a business model. By doing so, the authors set the customer into the core of their analysis (who-dimension), the company's bundle of products and services satisfying the needs and adding value to the customer (what), the organization's internal processes and resources as well as the value chain (how), and finally the financial viability reflecting the revenue model (costs and revenues).

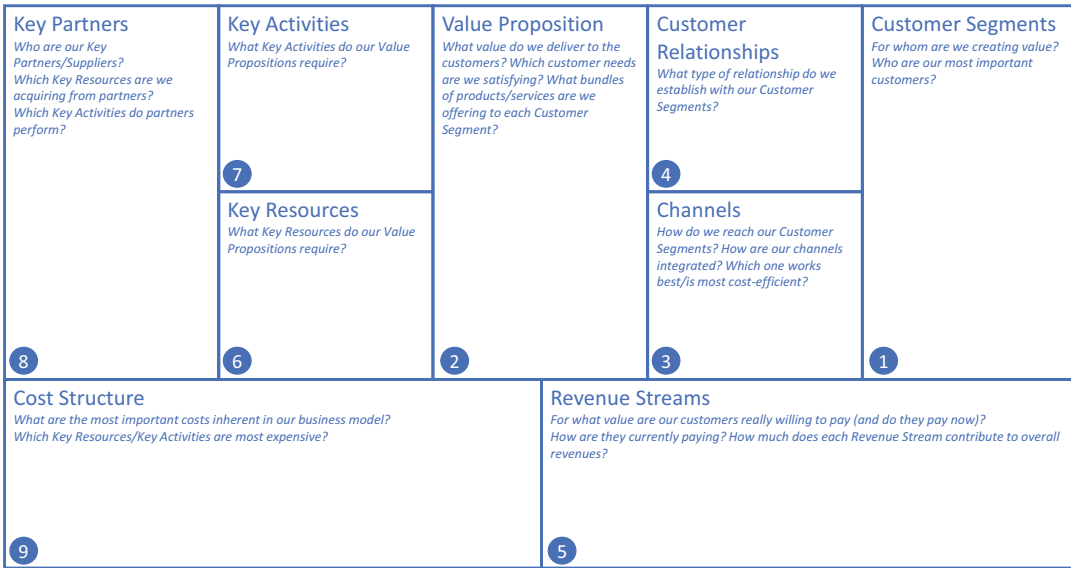
When comparing the different approaches and frameworks, even if the number of elements and components is differing from each other, the content is similar to each other (Stampfl, 2016).

Most prominent is the work from Osterwalder and Pigneur (2010). The authors developed the Business Model Canvas, a tool for academic and practitioners alike, to evaluate company's profitability. The ontology of the Business Model Canvas has been already developed in Osterwalder's dissertation in 2004. In the latest and highly cited version from 2010, Osterwalder and Pigneur present the result after having collaborated with 470 practitioners from 45 countries. The success is tremendous, since the concept has prominent position in academia and practices alike. It has been translated in over 30 different languages and increasingly cited on Google Scholar. The Canvas from Osterwalder and Pigneur (2010) is

chosen to be introduced in more detail since it presents a profound visualization of the business. It has been used extensively because it allows to experiment and theoretically reconfigure the elements (Chesbrough, 2010). Moreover, it facilitates creative thinking and teamwork. The Business Model Canvas includes nine building blocks (see Fig. 1). The nine building blocks and the core questions can be found in Fig. 1. When applying the Business Model Canvas, in a first step each of the nine building blocks is considered individually (a suggestion might be provided by the numbers in the boxes). Following, interdependencies are taken into consideration so that the whole picture can be created. More generally, these nine building blocks can be differentiated in the commercial model (focuses on addressing new demand, customer segments, customer relationships, channels, and revenue streams) and the operational model (refers to supply, key activities, key resources, key partners, and cost structure) (Osterwalder, 2004; Osterwalder & Pigneur, 2010).

Patterns and Typologies of Business Models

Typologies can be used to develop design guidelines for practical applications. A typology or pattern is helpful in order to identify common elements and summarizes them into groups. For business models, several typologies have been presented (e.g., Wirtz, 2020; Zott et al., 2011). **Malone et al. (2006)** focus on the rights that a company possesses (creator, distributor, landlord, and broker) and combined them with the underlying assets (financial, physical, intangible, and human). **Zott and Amit (2010)** develop the *NICE design themes* referring to the four components: novelty, lock-in, complementarities, and efficiency. Business models focusing on *novelty* refer to adopting new activities, including new participants, and developing new ways to link or manage these activities. As an example, the authors mention Apple introducing iTunes and iPod into the market. By doing so, Apple was the first distributing music integrating this activity into its business model. *Lock-in* refers to the customer retention in terms of high switching costs or network externalities (e.g., loyalty



Business Model, Fig. 1 Business Model Canvas (own illustration according to Osterwalder & Pigneur, 2010)

programs which retain customers to an organization). **Complementarities** is given if the bundle of two products/services provides higher value to the customer than selling them individually. Fourth, the authors explain **efficiency** as another criteria. Efficiency is present, e.g., in case of Internet online platforms such as [booking.com](https://www.booking.com) where search costs are reduced by decreasing information asymmetries (Zott & Amit, 2010).

Gassmann, Frankenberger, and Csik (2015) provide a more detailed typology of business models by differentiating 55 patterns. They include more prominent types such as freemium and long tail, but on the other hand very specific patterns. As such, reverse innovation is rather rarely applied, but very important. It means that a product or service has been explicitly designed for emerging markets purposes, and is then introduced into industrial markets (Govindarajan & Ramamurtin, 2011). As an example, the GE Healthcare MAC, a portable and small ECG, has been specifically invented for emerging countries.

Studies as well as practical use of the different types of business models have shown that freemium, long-tail (including subscription), and multi-sides platforms are to most promising ones. This is why they are considered more detailed.

Freemium has a long history and reaches back to the year 1845 where Peter Cooper applies a patent for gelatine in powder form. He sold it to Frank Woodward who tried to sell the powder but was not successful. The customer was not used to it and did not know which purpose it should fulfill. Thus, he wrote a book with many recipes and gave it for free in order to generate a huge customer base. Customers needed to buy the powder in order to cook the recipes. This model is also known as Razor and Blade model (razor is useless without blades) and is applied heavily (e.g., cell phone for free when signing a contract, Skype is generally free but charges in app fees) (Anderson, 2009; Teece, 2010). Freemium is often combined with subscription. A customer pays a regular fee and receives a product or service and the company can benefit from a regular income stream (example: newspaper).

Long tail is another important pattern characterized by Anderson (2008). So far, businesses acted according to the principle of scarcity. They concentrated on the top 20% of products which could be sold at high volume, so high popularity. The long tail explicitly focuses on the remaining part of products with the huge amount of least popular items (e.g., songs and books). Through

the Internet and digitalization it became attractive to also address these customer segments which present a kind of niche and were not so attractive to invest in before. Prominent examples are Netflix, iTunes, or Youtube: special clips could be uploaded, shared, and downloaded at low costs and satisfy a customer need (Anderson, 2008).

Through digitalization **multi-sided platforms** gained increasing attention. According to Osterwalder and Pigneur (2010) “multi-sided platforms bring two or more different customer groups together. Such platforms are only of value to one customer group if the other customer group is also present.” (p. 77). Literature on multi-sided platforms goes back to network economics research stating that an increasing network size offers benefits to the parties (Rochet & Tirole, 2003). Multi-sided platforms combine both, direct and indirect network effects. A single user can generate more value when the user group is large (e.g., Skype, all of friends are also on Skype), which is the direct effect. Indirect network effect means that the value increases in case another user group is also present in the market (credit card market: value for both parties, company and owner, is dependent on the other). The interaction between both parties is an essential criterion for generating value (Osterwalder & Pigneur, 2010).

Social Business Model Canvas

The Business Model Canvas has originally been developed for commercial or traditional organizations. However, during the last decades, social enterprises have been increasingly entered the market. “Social entrepreneurship typically refers to the phenomenon of applying business expertise and market-based skills in the nonprofit sector” (Austin et al., 2006, p. 2; see also Social Entrepreneur). They represent an important pillar of the three pillars of sustainability. Alter (2007) provides a typology for social enterprises and summarizes nine types. Prominent examples are, e.g., the Grameen bank (entrepreneur support) supporting local entrepreneur with microcredits (see also Microfinance).

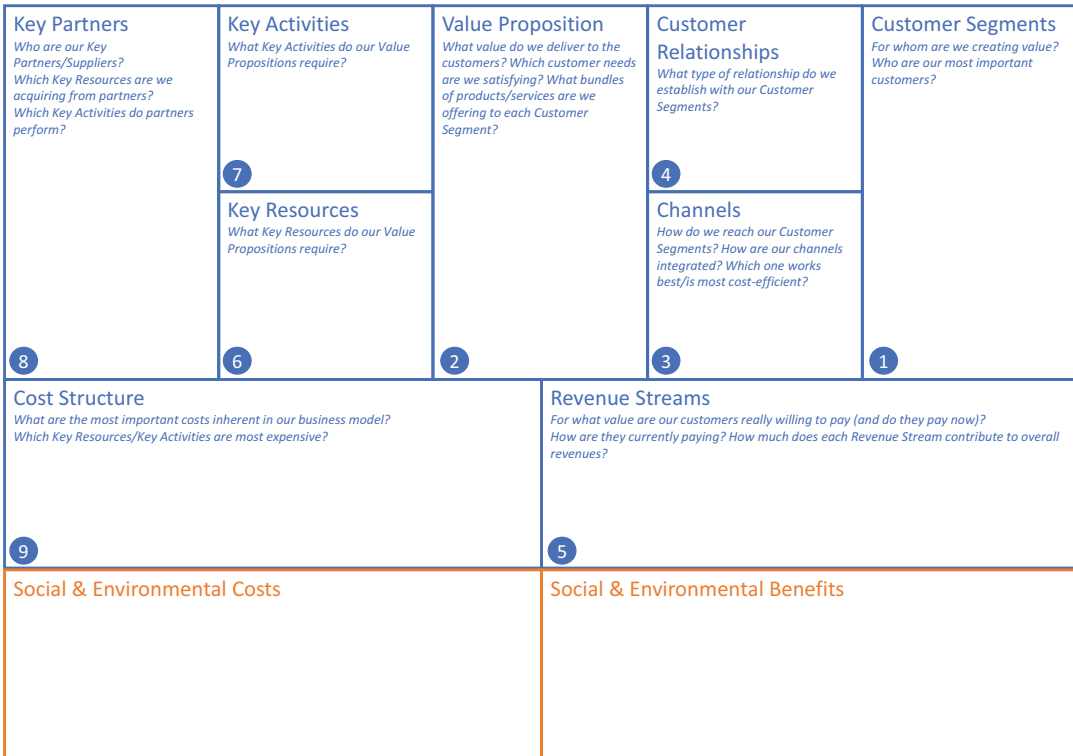
According to Osterwalder and Pigneur (2010), the Business Model Canvas is not only designed for for-profit companies, but also to analyze those organizations that “have strong non-financial missions focused on ecology, social causes and public service mandates” (p. 264). The Business Model Canvas can be adopted in so far that the triple bottom line is (see also Triple Bottom Line) incorporated into the framework. Therefore, the authors suggest adding two further building blocks, namely social and environmental costs and social and environmental benefits, in order to take the additional value those organizations generate into consideration (Osterwalder & Pigneur, 2010). The Social Business Model Canvas can be found in Fig. 2.

Social enterprises face specific challenges as compared to traditional businesses (Jamali, Yianni, & Abdallah, 2011, see also Koschmann, Kuhn, & Pfarrer, 2012). They need to explicitly set up and actively communicate their **mission**, in addition with the need to blend and combine social and economic **objectives**. Furthermore, they translate these objectives into measurable **impact** and **output** (Emerson, 2003; Sparviero, 2019). Regarding their partners, social enterprises distinguish between **nontargeted stakeholders** (i.e., partners and affected stakeholders) and **targeted stakeholders (i.e., customers and beneficiaries)**. Finally, social enterprises establish organizational **governance** mechanisms in order to check whether they achieved their mission and objectives. Sparviero (2019) analyzed these characteristics of social enterprises and integrated them into the traditional Business Model Canvas. The enlarged version as well as a practical example is provided by Sparviero (2019, p. 246).

Business Model Innovation

Defining Business Model Innovation

Influences from the environment such as digitalization or changing society makes the need for adapting a business model faster and more radically than ever before. Once a business model has been developed and executed, a company might face the challenge how to develop the existing



Business Model, Fig. 2 Social Business Model Canvas (own illustration according to Osterwalder & Pigneur (2010) and Sparviero, 2019)

business further. It is important to search for new revenue streams and value creation (Hamel, 2000). By doing so, new and maybe unknown customer needs can be detected and addressed (Osterwalder & Pigneur, 2010). Underlining the importance of business model innovation, Wirtz et al. (2010) argue that “current business model should always be critically regarded from a dynamic perspective, thus within the consciousness that there may be the need for business model evolution or business model innovation, due to internal or external changes over time.” There are several strategies and methods in order to innovate a business model. Either the commercial model can be optimized by, e.g., using digitalization in order to improve sales (e.g., marketing, sales, and supply chain). On the other hand, the operational model might be enhanced by, e.g., improving the internal structure and processes as well as production site. Completely re-innovating or disrupting (see also Disruptive Innovation) a

business model is another solution (see, e.g., Christensen, 1997) which refers to Schumpeter’s process of creative disruption (Schumpeter, 1934).

Sustainable Business Model

The concept of sustainability was constituted by the report of the Brundtland Commission (see also Brundtland Report), the United Nations World Commission on Environment and Development of the United Nations. In 1992, the UN Conference on Environment and Development decided to strive for sustainable development which was confirmed as a result of the UN Climate Summit in Paris in 2015. These goals have been determined within the 2030 Agenda for Sustainable Development, with **17 Sustainable Development Goals (SDG)** (see also Sustainable Development Goals [SDGs]) at its core, at the UN Sustainable Development Summit in September 2015 (United Nations, 2015). In contrast to the Millennium

Development Goals focusing on the social dimension of development, the SDGs were introduced to emphasize the issue of sustainability. The target is to reach a **circular economy**. This concept describes those resources can be used more than one time (Gallaud and Laperche (2016). “A circular economy thus provides opportunities to create well-being, growth, and jobs, while reducing environmental pressures. The concept can, in principle, be applied to all kinds of natural resources, including biotic and abiotic materials, water and land” (European Environment Agency, 2016, p. 9.; see also Environmental Sustainability Index [World economic forum]).

According to Elkington (1997), sustainability strives for reaching economic, ecologic, and social value (see also John Elkington). Society expects organizations to strive for sustainability and to take the lead in addressing these problems. Taking this challenge and addressing the issue of sustainability in a business model can result in competitive advantage and better reputation, increased customer loyalty reduced supply costs and risks (Lacy & Rutqvist, 2015). In order to include sustainability into a business model, the traditional business model needs to be transformed to a sustainable business model. EMF et al. (2015) proposed the **ReSOLVE framework** which means regenerate, share, optimize, loop, virtualize, and exchange (EMF et al., 2015, p. 25). The meaning and examples of the principles can be found in Table 2.

A sustainable business, e.g., uses materials that are fully recoverable, and most probably the supply chains will be more local and regional due to closer material loops and less geographical barriers (Lacy & Rutqvist, 2015; WEF et al., 2014; see also Sustainable Business Model). The business model no longer focuses on customers possessing products, but leasing those (e.g., domestic appliances). It will evolve from ownership to lending and the value creation is more about the service because this will generate the main revenue (De Angelis, 2018; EMF, & McKinsey, 2012). Today this is possible with, e.g., renting photovoltaic plants at EON.

As in the case of social enterprises, the frameworks and typologies can similarly be transferred to sustainable business models. Most of the 55 patterns that Gassmann et al. (2015) presented can be applied to sustainable businesses alike (e.g., De Angelis, 2018). Out of the 55 patterns, only a few types such as shop-in-shop or direct selling cannot be applied to sharing economy since they are particularly tailored to purposes of commercial organizations. Others do not fit to sustainable targets at all (flat rate). Other patterns such as open source, renting instead of buying, or reverse innovation clearly refer to sustainable business models (see also Reverse Innovation).

Sharing Economy Business Model

In line with the SDGs and the focus on social as well as sustainable business models, sharing

Business Model, Table 2 Own illustration in reference De Angelis, 2018; EMF et al., 2015

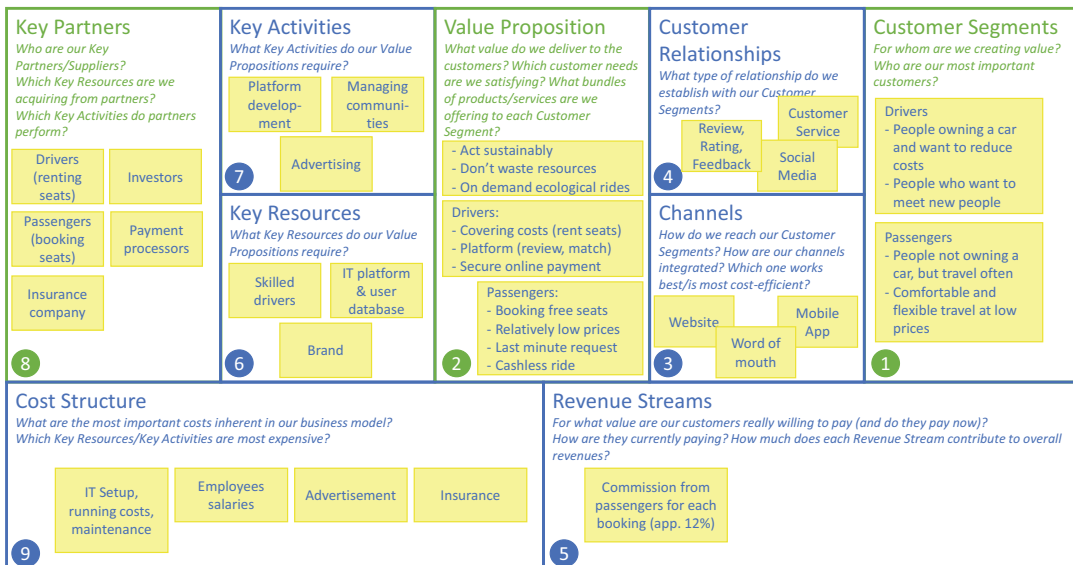
	Meaning	Example
Regenerate	Renewable materials and sources of energy	Pottburri compostable packaging
Share	Sharing goods among users, also along the product life cycle by, e.g., repair	Airbnb
Optimize	Improves product and processes efficiency	Renting clothes (Kleiderei in Berlin)
Loop	Returning technical materials to use (e.g., repair, remanufacturing, and recycling)	Miele (long-lasting washing machines)
Virtualize	Delivering utility in the absence of physical products (e.g., online music and books)	Spotify and iTunes
Exchange	Use of innovative technologies and materials enabling more resource-efficient industrial processes	Daimler Car2go (also share)

economy became more and more attractive in recent years (Curtis, 2021; see also Sharing Economy). Sharing contributes to reducing the waste of resources by giving products another life cycle. The concept is also known as collaborative consumption (Botsman & Rogers, 2014) or peer-to-peer economy (Miao, Lin, Wei, & Moon, 2021). Another synonym is *co-consumption* which is “made by the activities of sharing, exchanging and rental of resources without owning the goods” (Nah & Tan, 2017, p. 174). Another definition for sharing economy is provided by Botsman. “An economy built on distributed networks of connected individuals and communities versus centralized institutions, transforming how we can produce, consume, finance and learn” (Botsman, 2013). Highlighting the use of Internet platforms, Apte and Davis (2019) understand sharing economy as a new way of business by using cloud-based technology to connect customers and the providers. Changing consumer preferences such as the willingness to share, new technical possibilities due to the Internet and digitalization as well as social networks allow sharing economy to grow.

Three different types of share economy can be distinguished from each other. **Redistribution markets** mean that online market places enabling goods no longer needed by their original owner to be reused elsewhere (e.g., Ebay and Vinted). **Product-service systems** allow people to receive the benefits of a product without having actually own it themselves (e.g., Airbnb, Spotify, and Car Sharing). **Collaborative lifestyles** extend the product-service systems from physical goods to the sharing of time, skills, space, and money generating the additional benefit of exchanges on a local or regional scale (e.g., Taskrabbit, BlaBlaCar, and Neighborhood Fruit) (Botsman & Rogers, 2014).

The Business Model Canvas is also applicable to sharing economy. An example is given in Fig. 3 with the organization BlaBlaCar.

BlaBlaCar has been established in 2006 in France and is a community-based traveling network with currently over 90 million members worldwide. It is a traditional organization of sharing economy since they allow passengers to benefit from the product they do not own (car) themselves. Additional benefit is generated



Business Model, Fig. 3 Business Model Canvas in sharing economy on BlaBlaCar. (Own illustration based on BlaBlaCar, 2021 and Elisei, 2016)

through the sharing of time (talking during the trip, “blablabla”) (Blablacar, 2021; Elisei, 2016).

The example demonstrates that the Business Model Canvas is similarly transferred to organizations from sharing economy. However, there are three building blocks of customer segments, value proposition, and key partners (highlighted in green color in Fig. 3) which gain particular importance. Sharing automatically brings previously anonymous people together, in this case driver and passenger. These different perspectives need to be incorporated in the sharing economy Business Model Canvas.

Cross-References

- Brundtland Report
- Disruptive Innovation
- Innovative Business Models
- John Elkington
- Reverse Innovation
- Sharing Economy
- Sustainable Development Goals (SDGs)
- Sustainable Business Model
- Sustainable Business Model Innovation
- Triple Bottom Line

References

- Alter, K. (2007). Social Enterprise Typology. https://knowhow3000.org/wpcontent/files/CoPs/KM/Global%20Social%20Enterprise/Sessions/1.%20Introduction/Social_Enterprise_Typology_Updated_Novem.pdf. Accessed July 3rd 2022.
- Amit, R., & Zott, C. (2001). Value creation in E-business. *Strategic Management Journal*, 22(6–7), 493–520. <https://doi.org/10.1002/smj.187>.
- Amit, R., Zott, C., & Pearson, A. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, 53, 1–15.
- Anderson, C. (2008). *The long tail: Why the future of business is selling less of more*. New York: Hachette Books.
- Anderson, C. (2009). *Free. The future of a radical Price*. New York: Hyperion.
- Apte, U., & Davis, M. (2019). Sharing economy services: Business model generation. *California Management Review*, 61(2), 104–131. <https://doi.org/10.1177/0008125619826025>.
- Baden-Fuller, C., & Morgan, M. (2010). Business models as models. *Long Range Planning*, 43(2–3), 156–171. <https://doi.org/10.1016/j.lrp.2010.02.005>.
- Blablacar. (2021). About Us. <https://blog.blablacar.com/about-us>. Accessed 02 July 2022.
- Botsman, R. (2013). *The sharing economy lacks a shared definition*. <https://www.fastcompany.com/3022028/the-sharing-economy-lacks-a-shared-definition>. Accessed 2 July 2022.
- Botsman, R., & Rogers, R. (2014). Beyond Zipcar: Collaborative consumption. *Harvard Business Review*. <https://hbr.org/2010/10/beyond-zipcar-collaborative-consumption>. Accessed 02 July 2022.
- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2–3), 354–363. <https://doi.org/10.1016/j.lrp.2009.07.010>.
- Chesbrough, H., & Rosenbloom, R. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation’s technology spin-off companies. *Industrial and Corporate Change*, 11(3), 529–555.
- Christensen, C. (1997). *The Innovator’s dilemma*. Boston: Harvard Business School Press.
- Curtis, S. (2021). Business model patterns in the sharing economy. *Sustainable Production and Consumption*, 27, 1650–1671. <https://doi.org/10.1016/j.spc.2021.04.009>.
- De Angelis, R. (2018). *Business models in the circular economy: Concepts, examples and theory*. Exeter, UK: Palgrave Pivot Cham. <https://doi.org/10.1007/978-3-319-75127-6>.
- Elisei, R. (2016). <http://1rckugelschreiber.weebly.com/blog/top-5-companies-with-innovative-business-models>. Accessed 02 July 2022.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing Ltd.
- Emerson, J. (2003). The blended value proposition. *California Management Review*, 45, 35–51.
- EMF, & McKinsey. (2012). *Towards the Circular Economy: Economic and Business Rationale for an Accelerated Transition*. <http://www.ellenmacarthurfoundation.org/business/reports>. Accessed 02 July 2022.
- EMF, SUN, & McKinsey. (2015). *Growth within: A Circular Economy Vision for a Competitive Europe*. <https://www.mckinsey.com/capabilities/sustainability/our-insights/growth-within-a-circular-economy-vision-for-a-competitive-europe>. Accessed 02 July 2022.
- European Environment Agency (2016). *Circular economy in Europe: Developing the Knowledge Base*. EEA Report 2016. <https://www.socialistsanddemocrats.eu/sites/default/files/Circular%20economy%20in%20Europe.pdf>
- Gallaud, D., & Laperche, B. (2016). *Circular economy, industrial ecology and short supply chain* (Vol. 4). Hoboken, New Jersey: Wiley.

- Gassmann, O., Frankenberger, K., & Csik, M. (2013). *The St. Gallen Business Model Navigator*. <https://wackwork.de/wp-content/uploads/2017/11/St-Gallen-Business-Model-Innovation-Paper.pdf>
- Gassmann, O., Frankenberger, K., & Csik, M. (2015). *The business model navigator: 55 models that will revolutionise your business*. Upper Saddle River, New Jersey: FT Publishing International.
- Govindarajan, V., & Ramamurtin, R. (2011). Reverse innovation, emerging markets, and global strategy. *Global Strategy Journal*, 1(3–4), 191–205. <https://doi.org/10.1111/j.2042-5805.2011.00023.x>.
- Hamel, G. (2000). *Leading the revolution*. Boston: Harvard Business School Press.
- Jamali, D., Yianni, M., & Abdallah, H. (2011). Strategic partnerships, social capital and innovation: Accounting for social Alliance innovation. *Business Ethics: A European Review*, 20, 375–391.
- Konig (2018). *Seo: Long-Tail Strategie im E-Commerce*. <https://www.mstage.at/long-tail-e-commerce/>. Accessed 2 July 2022.
- Koschmann, M., Kuhn, T., & Pfarrer, M. (2012). A communicative framework of value in cross-sector partnerships. *Academy of Management Review*, 37, 332–354.
- Lacy, P., & Rutqvist, J. (2015). *Waste to wealth: The circular economy advantage*. New York: Palgrave Macmillan.
- Magretta, J. (2002). Why business models matter. *Harvard Business Review*, 80(5), 86–92.
- Malone T., Weill P., Lai R., D'Urso V., Herman G., Apel T., & Woerner S. (2006). *Do some business models perform better than other?*. MIT Sloan research paper no. 4615-06, May 18.
- Markides, C. (1999). A dynamic view of strategy. *Sloan Management Review*, 40(3), 55–63.
- McGovern, G. (2021). *The Strangers Long Neck*. <https://gerrymcgovern.com/books/the-strangers-long-neck/read-the-first-chapter/>. Accessed 02 July 2022.
- Miao, L., Lin, M., Wei, W., & Moon, H. (2021). Peer regulation in a peer-to-peer business model. *Journal of Hospitality & Tourism Research*. <https://doi.org/10.1177/10963480211031421>.
- Nah, F., & Tan, C. (2017). *HCI in business, government and organizations. Supporting business*. Lecture Notes in Computer Science. <https://doi.org/10.1007/978-3-319-58484-3>. Accessed 02 July 2022.
- Osterwalder, A. (2004). *The business model ontology – A proposition in a design science approach*. Lausanne: University of Lausanne.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. Hoboken: Wiley.
- Porter, M. (2001). Strategy and the internet. *Harvard Business Review*, 79(3), 62–78.
- Richardson, J. (2008). The business model: An integrative framework for strategy execution. *Strategic Change*, 17, 133–144.
- Rochet, J., & Tirole, J. (2003). Platform competition in two-sided markets. *Journal of the European Economic Association*, 1(4), 990–1029.
- Schumpeter, J. (1934). *The theory of economic development*. Cambridge: Harvard University Press.
- Sparviero, S. (2019). The case for a socially oriented business model canvas: The social Enterprise model canvas. *Journal of Social Entrepreneurship*, 10(2), 232–251. <https://doi.org/10.1080/19420676.2018.1541011>.
- Stampfl, G. (2016). *The process of business model innovation: An empirical exploration*. Wiesbaden: Springer Gabler. <https://doi.org/10.1007/978-3-658-11266-0>.
- Teece, D. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2–3), 172–194.
- Timmers, P. (1998). Business models for electronic markets. *Electronic Markets*, 8(2), 3–8.
- United Nations. (2015). *Progress towards the sustainable development goals*. https://sustainabledevelopment.un.org/content/documents/29858SG_SDG_Progress_Report_2022.pdf. Accessed 05 July 2022.
- WEF, EMF, & McKinsey. (2014). *Towards the circular economy: Accelerating the scale-up across global supply chains*. <http://ellenmacarthurfoundation.org/business/reports>. Accessed 02 July 2022.
- Wirtz, B. (2020). *Business model management*. Wiesbaden: Gabler. <https://doi.org/10.1007/978-3-030-48017-2>.
- Wirtz, B., Schielke, O., & Ullrich, S. (2010). Strategic development of business models: Implications of the web 2.0 for creating value on the internet. *Long Range Planning*, 43(2–3), 272–229. <https://doi.org/10.1016/j.lrp.2010.01.005>.
- Wirtz, B., Pistoia, A., Ullrich, S., & Göttel, V. (2016). Business models: Origin, development and future research perspectives. *Long Range Planning*, 49(1), 36–54. <https://doi.org/10.1016/j.lrp.2015.04.001>.
- Zott, C., & Amit, R. (2010). Business model design: An activity system perspective. *Long Range Planning*, 43(2–3), 216–226. <https://doi.org/10.1016/j.lrp.2009.07.004>.
- Zott, C., Amit, R., & Massa, L. (2011). The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019–1042. <https://doi.org/10.1177/0149206311406265>.

Business Model Innovation

► Sustainable Business Model Innovation

Business Model Perspective

► Strategy in a Circular Economy: Discussion of Opportunities and Limitations

Business Morality in Islam

- ▶ [Islamic Business Ethics](#)

Butterfly Effect

- ▶ [Business Case of CSR](#)
- ▶ [CSR Butterfly Effect 2](#)

Business Performance Measurement

- ▶ [Management Accounting and Sustainability](#)

Buying Addiction

- ▶ [Compulsive Buying](#)

Business Process Model

- ▶ [Business Model](#)

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Business Sustainable Development

- ▶ [Entrepreneurial Sustainability](#)

Buyout

- ▶ [Hostile Takeover](#)

C2C

► [Cradle to Cradle](#)

Capacity of Innovation

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Synonyms

[Determinants of innovation](#); [Factors influencing the capacity for innovation](#); [Innovation ability process](#); [Innovation dynamics](#); [Innovative performance](#)

Definition

The capacity of innovation is understood as the ability of an actor to do innovation. Thus, at

territorial level capacity for innovation it is the innovative capacity of a territory. The capacity of innovation or innovation capacity is related to the determinants that affect innovation ability at territorial level.

Suarez-Villa (1990) introduced the concept of capacity of innovation to measure the invention and innovation potential of a country, to know its real situation in terms of innovation and to provide relevant information for both policy-makers and academics.

At the national level, for Natário et al. (2007) the ability to innovate is an evolutionary process and it is related with the performance and innovative capacity of countries. This capacity involves divers' factors of invention, such as education and formation, research and development (R&D), the protection of intellectual property and innovation systems.

The national innovation capacity is the main driver of economic performance and measuring institutional structure achievements. This involved the innovation systems, institutional infrastructures and support systems that sustain innovation activities (Mathews and Hu 2007).

Innovation capacity is about the dynamics of the country to transform knowledge into innovation, and to generate long-term prosperity (Furman et al. 2002; Natário et al. 2011; Chaminade et al. 2018; Weresa 2022). The concept relates to innovative performance and relates to the impact of institutional efficiency, the role of national culture, the influence of innovation

infrastructures to support innovation capacity, financial support for innovation and the cooperation links and networks used to stimulate/promote innovation capacity (Natário et al., 2011).

Pavão et al. (2019) consider the capacity for innovation depends to the autonomy regional governance; the effect of latitude geography; the role of central and peripheral; and the European Union's (EU) regional development policy, embodied in the criteria for cohesion policy.

Innovation capacity in the countries changes over time and can be influenced by internal and external factors. The key internal factors include R&D expenditure and its structure, human resources for research and development activities as well as innovation policy incentives. The main external factors are related to the international trade of high-tech goods, foreign direct investment and international mobility of R&D personnel (Weresa 2022).

Innovation capacity studies are carried out to understand the fundamental factors and determinants of innovation dynamics and capacity to develop innovation. They strive to understand what factors are key to stimulating and promoting territorial innovation and see innovation as a key role in competitiveness. The aim is to identify the most important factors in the development of innovation policies that promote innovation dynamics and innovation systems.

Also, the studies in this area of innovation are intended to be a guide for researchers, practitioners doing business and policy-makers to support the design and implementation of strategies and policies capable of boosting innovation capacity at different levels: international, national and regional. They examine the factors of innovation success and offer recommendations for future policy actions (Kowalski 2022).

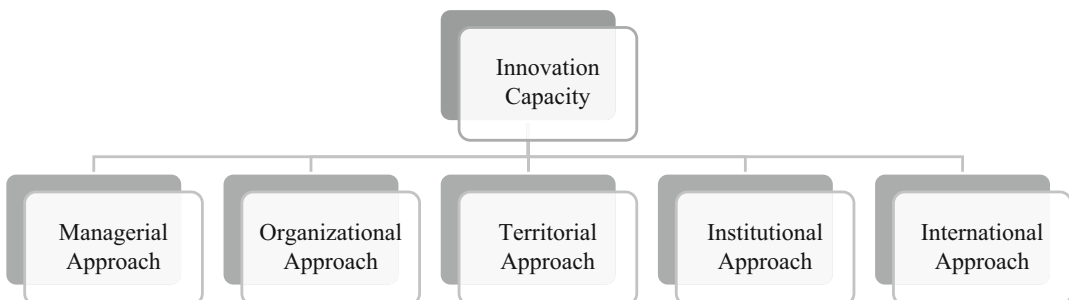
Introduction

Territorial competitive advantage depends on its ability to innovate in relation to its innovation dynamics. Areas supporting innovative attitudes have improved their capacity for innovation and promoted competitiveness. Innovation is the basis for the development of strategic benefits. Innovation capacity allows areas to increase their productivity and attract investment, thereby maintaining the continuous development of quality and living standards (Natário et al. 2012).

Key Issues

Many authors have focused on enriching analysis and clarifying the concept of innovation capacity using different approaches (Howells 2005; Schiuma and Lerro 2008; Natário et al. 2011; Pavão 2014; Weresa 2022) (see Fig. 1).

At national level, the capacity of innovation can be understood as the characteristics and factors that distinguish countries or groupings of countries, which, through the application of techniques of quantitative analysis, such as cluster analysis, allows to identify them. For Furman



Capacity of Innovation, Fig. 1 Approaches of Innovation Capacity. (Source: Adapted from Pavão (2014) and Weresa (2022))

et al. (2002), the concept of national innovation capacity encompasses three approaches: (i) the theory of endogenous growth based on Romer's ideas (1990); (ii) the theory of industrial clusters based on the competitive advantages of Porter (1990); and (iii) the approach of national systems innovation developed by Lundvall (1992), Nelson (1993) and Edquist (1997).

On the basis of the three approaches mentioned above, Furman et al. (2002) developed a model contemplating the following determinants of national innovation capacity:

1. Common infrastructure (common institutions, resources committed, policies that support innovation); according to López-Fernandes et al. (2012), this set of determinants is comprised of the investments that support innovative activities that affect all activities of the innovation-oriented economy.
2. Specific conditions of cluster in the nation (the particular environment of innovation in industrial clusters of the nation). Although the common infrastructure establish the overall context for innovation, they are the companies, influenced by its microeconomic environment, that developed and market innovations. Diamond-based Porter (1990) recognized four main elements of this microeconomic environment: the presence of highly skilled inputs, a context that encourages investment and intense local rivalry, demand conditions and the presence of related and supporting industries.
3. The quality of relations between the previous categories (capacity to channel research for companies, collective efforts which will contribute to the entire set of technology and trained personnel).

The interaction between these three determinants is key to promoting innovative performance in economies.

At the national level, innovative performance and capacity of innovation, according Natário et al. (2011), depends on five country ecosystems:

1. Institutional ecosystems based on the efficiency of the institutions

2. National culture
3. Innovation's infrastructures: human resources, workers'skills in innovation and technology
4. Finance resources for innovation
5. Linkages and cooperation networks to stimulate/promote the innovation capacity

The capacity to create linkages toward several actors of national or regional innovation systems are crucial to stimulate innovation capacity.

At the regional level, territorial innovation capacities depends, following Natário et al. (2012), on the dynamics of each region in the following factor dimensions: (1) the collective training innovation infrastructure; (2) financial sources of innovation; and (3) cooperation networks.

For Chaminade et al. (2018) natural resources and environmental impacts and the sustainable are dimensions that influence innovation systems and also sustainable innovation capacity.

Pavão et al. (2019) have added additional relevant dimensions to the study of the subject at the regional level, focusing on four new dimensions, the first on the impact of regional autonomy on regional innovation capacity, the second, the geographical location dimension, where it is used to measure the impact of width on innovation capacity, the third dimension is the comparability of the accessibility index or binomial centre relative to the periphery, finally, it informs it of centrality through the European Union's (EU) regional development policy embodied in the criteria for cohesion policy.

The international dimension, with respect to external factors as international trade, high-tech trade, foreign direct investment (FDI), and international mobility of human resources, in particular R&D resources, was introduced by Weresa (2022) in order to analyse the innovativeness at the national level.

More recently, also McCaleb (2022) identified the national and regional level determinants of innovation capacity. The aim of this study is to contribute to the definition of strategies, policies and instruments capable of promoting innovation capacity at regional and national levels.

Thus, at the national level, the key factors to promoting innovative capacities are: the central

government's provision of policy, financial and regulatory support, the size and sophistication of the domestic market, the expenditures on R&D, the quality of higher education, R&D personnel and culture. At the regional level, innovative capabilities were influenced by inflows of FDI, local governments agile in creating innovative ecosystems and venture capital (McCaleb, 2022).

Future Directions

New directions of future research can be achieved through a new nature of the economic specialisation of regions or as an impact of innovation on the public sector. Studies on innovation in services are recent and new in the public sector. It is therefore important for countries and their innovation capacities to analyse the public sector innovation process and its impact on the innovation capacity of the territories.

The sustainability of innovation capacity associated with natural resources and environmental factors and with social responsibility will be a field of research of special interest and very important given the profound climate changes.

Cross-References

- Corporate Sustainable Innovation
- Disruptive Innovation
- Eco-Sustainability Innovations Performance Measurement
- Innovation and Territorial Development
- Reverse Innovation
- Social Innovation
- Sustainable Business Model Innovation
- Triple Helix and Innovation

References

- Chaminade, C., Lundvall, B. Å., & Haneef, S. (2018). *Advanced introduction to national innovation systems*. Cheltenham: Edward Elgar Publishing.
- Edquist, C. (1997). *Systems of innovation: Technologies, institutions and organizations*. London and Washington, DC: Pinter.
- Furman, J. L., Porter, M. E., & Stern, S. (2002). The determinants of national innovative capacity. *Research Policy*, 31, 899–993.
- Howells, J. (2005). Innovation and regional economic development: A matter of perspective? *Research Policy*, 34, 1220–1234.
- Kowalski, A. M. (Ed.). (2022). *The dynamics of the innovation divide between China and Europe: National and regional dimensions* (1st ed.). Routledge. <https://doi.org/10.4324/9781003199052>.
- López-Fernández, M. C., Serrano-Bedia, A. M., & García-Piqueres, G. (2012). Determinants of innovative capacity: The case of European peripheral regions. Paper presented at the *Engineering, technology and innovation (ICE) conference, 2012*, 18th International ICE Conference, Munich.
- Lundvall, B. A. (1992). *National systems of innovation: Towards a theory of innovation and interactive learning*. London: Pinter Publishers.
- Mathews, J. A., & Hu, M.-C. (2007). Enhancing the role of universities in building national innovative capacity in East Asia: The case of Taiwan. *World Development*, 35(6), 1005–1020.
- McCaleb, A. (2022). Chapter 5: China's innovation capacity: National and regional level determinants. In A. M. Kowalski (Ed.), *The dynamics of the innovation divide between China and Europe: National and regional dimensions* (1st ed.). Routledge. <https://doi.org/10.4324/9781003199052>.
- Natário, M., Couto, J., Tiago, T., & Braga, A. (2007). Determinants of the National Innovative Capacity: An Analysis to the European Reality. In Chen, J., Xu, Q. & Wu, X. (eds.). *Proceedings of the 5th International Symposium on Management of Technology, ISMOT'07 - Managing Total Innovation and Open Innovation in the 21st Century*, (pp. 211–214). Hangzhou: China Zhejiang University Press, June 1–3 de 2007, ISBN: 978-7-89490-375.
- Natário, M. M. S., Couto, J. P. A., Tiago, M. T. B., & Braga, A. M. M. (2011). Evaluating the determinants of national innovative capacity among European countries. *Global Journal of Management and Business Research*, 11(11), 67–78.
- Natário, M., Couto, J., Braga, A., & Tiago, T. (2012). Innovativeness patterns in different European regions: An empirical approach. *Studies in Regional Science*, 42(3), 647–669. <https://doi.org/10.2457/srs.42.647>.
- Nelson, R. (Ed.). (1993). *National systems of innovation: A comparative study*. Oxford: University Press.
- Pavão, P. N.R. (2014). *Os determinantes da capacidade regional de inovação nas Regiões Periféricas da União Europeia*. Dissertação de Mestrado em Gestão de Empresas/MBA. Ponta Delgada: Universidade dos Açores.
- Pavão, P. N. R., Couto, J. P. A., & Natário, M. M. S. (2019). A tale of different realities: Innovation capacity in the European Union regions. In H. Almeida & B. Sequeira (Eds.), *The role of knowledge transfer in open*

- innovation (pp. 262–280). Hershey: Business Science Reference. IGI Global.
- Porter, M. E. (1990). *The competitive advantage of the nations*. New York: The Free Press.
- Romer, P. (1990). Endogenous technological change. *Journal of Political Economy*, 98, S71–S102.
- Schiama, G., & Lerro, A. (2008). Knowledge-based capital in building regional innovation capacity. *Journal of Knowledge Management*, 12(5), 121–136.
- Suarez-Villa, L. (1990). Invention, inventive learning and innovative capacity. *Behavioral Science*, 35(4), 290–310.
- Weresa, M. A. (2022). Chapter 1: What determines convergence in innovation capacity? A literature review. In A. M. Kowalski (Ed.), *The dynamics of the innovation divide between China and Europe: National and regional dimensions* (1st ed.). Routledge. <https://doi.org/10.4324/9781003199052>.

Carbon Accounting Reporting

► Environmental Disclosure

Carbon Balance

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Synonyms

Carbon cycle; Global carbon cycle

Definition

“Carbon balance” is defined as the balance of carbon flows within a specific “carbon cycle” or at the level of the “global carbon cycle.”

Introduction

The carbon cycle involves three “districts” of the Earth: the hydrosphere, the biosphere, and the atmosphere. These districts are called “carbon sink” and are linked together in what is the natural cycle. A fourth carbon sink “district” is that of the

geosphere, in which carbon settles in tens of millions of years and becomes fossil fuel or fossil carbon (Ferrara and Ferrugia 2007). However, the geosphere has no natural connection with the remaining three districts, and the carbon accumulated in it does not come out naturally. The human factor has created an artificial connection “tube” between the geosphere district and the atmosphere, thus connecting the fourth district to the other three, leading to an imbalance between the flows: the carbon released by the geosphere does not return there (at least not before millions of years) and affects the balance of the natural cycle.

The carbon balance, therefore, is used to calculate excesses or defects of these flows and will be important in the near future to try to build solutions to reach new equilibrium phases in the global carbon cycle or a specific cycle. Overcoming the ongoing climate changes also strongly depends on this balance.

The Balance of the Carbon Cycle

The carbon cycle is closely linked to the climate and its transformations and is made up of physical, chemical, and biological phases. This cycle foresees that the plants on Earth through the chlorophyll photosynthesis absorb carbon dioxide. The biosphere through the respiration of plants and animals (consumption of oxygen “O₂” through cellular respiration and production of carbon dioxide “CO₂”), through their decomposition and natural fires, releases carbon into the atmosphere.

Similarly, in the hydrosphere, a close relationship is created between the amount of carbon dioxide present in the air and that dissolved in the water (Post et al. 1990). This presence is due to the pressure created on the surface of the water. In fact, if the exchange coefficient (speed of the molecule to move) of the gas changes, the surface of the water, in turn, releases CO₂ into the atmosphere. Just as in the biosphere, living organisms in water also absorb CO₂, the most important phytoplankton of all.

The percentage of CO₂ in the atmosphere, calculated in parts per million, has grown at a

dizzying rate in the last century. Thanks to the coring carried out by scientists in Antarctica, it is possible to know that at the beginning of the 1800s, there were 280 ppm of CO₂ (pre-industrial age), while today the instruments record the data of 411 ppm, recorded in December 2019. The explanation of this increase is the human activity which in the industrialization and growth phase developed a strong dependence on fossil fuels which, until then, were kept inside the subsoil. These fuels have put into circulation “ancient” stable carbon, without its radioactive part “carbon-14 (¹⁴C),” creating an important imbalance in the carbon cycle. It was the Austrian Hans Suess who studied the variation between the atmospheric concentrations of carbon isotopes (¹³C and ¹⁴C) with the dilution of large quantities of CO₂ from fossil fuels and then discovered that it runs out in ¹³CO₂ without containing the ¹⁴CO₂ radiocarbon that is reused in chlorophyll photosynthesis from plants (Suess effect).

The carbon balance within its natural cycle was previously constant over time. If an excess of carbon had occurred within one district, a defect would have occurred in another. This balanced state of balance, however, changed with the external insertion of carbon from the geosphere, extracted by the human being to conduct its activities.

Until the 1970s, part of the excess carbon was reintroduced into the carbon cycle, thanks to the absorption of the biosphere and hydrosphere. However, these absorptions, which still occur today, do not appear, from the balance sheets, to be sufficient for the current rate of extraction and human use of fossil fuels. In the 1970s, the maximum possible absorption levels at the natural level were reached, calculated at around 3000 megatonnes of carbon, and since then it is possible to observe a strong acceleration of the concentration of carbon in the atmosphere (analyzed in CO₂).

In 1827 the French mathematician Jean-Baptiste Fourier for the first time used the term “greenhouse effect” to illustrate how even minimal changes in the atmosphere could alter the climate of the planet. In truth, the greenhouse effect is a natural phenomenon, thanks to which

an average temperature on the planet of about 15 °C is possible. In the absence of a greenhouse effect, life on Earth would not be possible (the average temperature on the planet in the absence of a greenhouse effect is estimated to be around –18 °C on average) (Pasini et al. 2006).

The gases that allow the greenhouse effect (therefore called “greenhouse gases”) reabsorb part of the energy re-emitted from the soil, and in the atmosphere, there is a greater amount of energy than the incident solar energy. Because of this and because of the energy released by the same gases, previously accumulated, the temperatures rise strongly. These gases are methane (CH₄), nitrous oxide (N₂O), ozone (O₃), chlorofluorocarbons (CFC), and carbon dioxide (CO₂).

The balance of climate-changing gases and CO₂ emissions are the subject of great attention by the scientific world because the future of the planet will depend on how much the human being will be able to stabilize its activities by keeping the concentrations of CO₂ equivalent in the atmosphere at a sustainable level.

Key Issues

The excess of carbon dioxide in the atmosphere, and consequently in the other three land districts, has increased global temperatures, thus creating a global climate change. Scientists around the world agree that it is the man with his activities who is the primary cause of this excess and that a solution is needed as soon as possible.

Future Directions

The future of the planet and mankind will depend on how much emissions from human activities affect climate events and the increase in global temperatures.

In this future, the analysis of the carbon balance and its cycle will be fundamental to try to understand the optimal direction to take for a readjustment of the economy and human life on earth.

The carbon balance and its cycle must always tend in a balanced and balanced state. The human being must predict awareness that planet Earth is not able to sustain for a long time the development activities without limit and the exploitation of reckless natural resources.

Scholars from all over the world question themselves every day trying to find alternative answers to the economic theories that today are prevailing and globally recognized as valid for the well-being of human civilization.

Tending toward a “carbon-free” development that allows the balance between emissions and absorptions to be brought to zero is the objective to be put in place in the political, economic, and social forums. A new way of thinking about human life, which has less impact on the carbon balance, will require an increasingly greener economy.

Reforestation is an important step that many countries around the world have decided to take to create green lungs capable of supporting current emissions even more. On the contrary, large farms, overfishing, and intensive cultivation are still a major global problem to which the governments of the main industrialized and developing states are not giving due weight (Brown 2009).

The transport sector, especially the automotive sector, being one of the sectors with the most important emissions, has taken on the concept of sustainable mobility and sharing economy in recent decades, with the inclusion of hybrid and electric cars in the global market and with important international brands that have focused on “carsharing”

The design of increasingly energy-efficient houses and buildings will also reduce emissions and waste of energy in the construction and residential life sector.

New technologies, renewable energy sources to be increasingly replaced by fossil fuels, will have to allow for greater energy efficiency in all sectors, from industrial to corporate, from the public to private, only in this way will it be possible to achieve important results on CO₂ emissions balance. Applying the new concepts of circular economy and bioeconomy will be

fundamental to start producing bioenergy and biomaterials.

The carbon balance in this will be fundamental to understand to every human action how the natural plant and ocean system will respond, which is what will happen to every change of CO₂ and climate. It will be necessary to observe the global biogeochemical-climatic system with extreme attention, communicate the results of these observations to the institutions, and ensure that human, economic, and social choices adapt to the balance necessary to stop climate change.

Summary

The stability that the balance of the carbon cycle in nature had in the past has been changed by the activities of the human being. The central pivot of these activities is the development of industrialization based on the exploitation of resources, especially of fossil fuels. This exploitation has increased the concentration of carbon dioxide, both in the biosphere and in the hydrosphere, thus increasing the greenhouse effect and temperatures, causing ongoing climate changes and jeopardizing global climate balances. Knowing the functioning of the carbon cycle, the human being must aim at solving the problem through policies that aim at a new balancing of the cycle, regulating emissions on the basis of absorption capacities, in order to adapt its activities to current changes and, by contrasting them, avert the possible catastrophic consequences for life on Earth.

Cross-References

- [Carbon Emissions](#)
- [Carbon Footprint](#)
- [Carbon Footprint II](#)
- [Carbon Management](#)
- [Carbon Offsets](#)
- [Carbon Trading Schemes](#)
- [Greenhouse Gases](#)

References

- Brown, L. R. (2009). *Plan B 4.0 mobilizing to save the civilization*. London: W.W. Norton & Company.
- Ferrara, V., & Ferruggia, A. (2007). *Clima istruzioni per l'uso: I fenomeni, gli effetti, le strategie*. Milano: Edizioni Ambiente.
- Pasini, A., Antonioli, F., Colacino, M., Cristaldi, M., Di Menno di Buccianico, A., Ferrara, V., Lionello, P., Sciortino, M., Szpunar, G., & Tubiello, F. (2006). *Kyoto e dintorni. I cambiamenti climatici come problema globale*. Milano: Franco Angeli.
- Post, W. M., Peng, T. H., Emanuel, W. R., King, A. W., Dale, V. H., & DeAngelis, D. L. (1990). The global carbon cycle. *American Scientist*, 78(4), 310–326.

Carbon Cycle

► Carbon Balance

Carbon Dioxide Emissions

► Carbon Emissions

Carbon Disclosure Project

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Definition

Carbon Disclosure Project (CDP hereinafter) is a nonprofit organization that directs the global disclosure system for investors, companies, cities, states, and regions in order to manage their impact on the environment. It was created in 2000 at the initiative of a group of 35 institutional investors interested in incorporating information on business' carbon emissions into their analyses and assessment (Depoers et al. 2016, p. 446).

Introduction

Carbon Disclosure Project (CDP hereinafter) is a nonprofit organization that directs the global disclosure system for investors, companies, cities, states, and regions in order to manage their impact on the environment. It was created in 2000 at the initiative of a group of 35 institutional investors interested in incorporating information on business' carbon emissions into their analyses and assessment (Depoers et al. 2016, p. 446).

Climate change, water scarcity, and deforestation are unprecedented global challenges that demand a systemic change in market behavior. To achieve this, CDP directs the global disclosure system that allows companies, cities, states, and regions to measure and manage their impact on the environment. In this regard, over the past 15 years CDP has created a system that has resulted in unparalleled engagement on environmental issues between investors, companies, cities, states, and regions worldwide. CDP's data enables our network to link environmental integrity, fiduciary duty, and public interest to make better-informed decisions on climate action.

Following Depoers et al. (2016) and Stanny and Ely (2008), the CDP has two main objectives: (i) sending an annual questionnaire, supported by institutional investors, to the world's largest firms by market value for informing managers of investor's concerns over climate change; and (ii) by making individual responses available at its website, the CDP can produce reports with aggregate responses for informing investors of firm's climate change-associated risks. Reid and Toffel (2009, p. 1163) describe the CDP as "...the largest repository of corporate greenhouse gas emissions data in the world," making it internationally significant and influential (Andrew and Cortese 2011).

According to Depoers et al. (2016), the main differences with respect to the traditional corporate reports are that the CDP audience is the firm's investors; the basic purpose of the CDP is the disclosure of the volumes of firm's climate change actions – for instance, greenhouse gas emissions; the scope of reported emissions in the participation in the CDP requires the broadest scope

possible; with respect to the method used for calculating greenhouse gas emissions, the CDP established a free choice of method but with a greenhouse gas emission protocol recommended; the presentation of greenhouse gas emissions requires a specific format following the usual calculation standards; and, finally, the CDP requires a required format with a set of questions related to the amounts of emissions reported.

The procedure is as follows. Every year the CDP asks firms, cities, states, and regions for data on their environmental performance, for instance, their greenhouse gas emissions, emission reduction targets, and climate change risks, opportunities, and management strategies, by answering the CDP questionnaire (Kim and Lyon 2007). Then, the CDP transforms that data into detailed analysis on critical environmental risks, opportunities, and impacts. Companies' responses are made publicly available on the CDP website. Finally, investors, businesses, and policy makers use its data and insights to make better decisions, manage risks, and capitalize on opportunities. At this respect, over time, CDP has tried to reinforce the reliability and comparability of its data – for instance, regarding comparability, CDP has tried to make a distinction between activity sectors, requesting more information to those carbon-intensive activity sectors. Moreover, as Matisoff et al. (2013) highlight, changes in the CDP format often seemed reasonable, because, for instance, it has moved from open-ended responses to multiple-choice answers that force firms to provide specific types and formats. For it, questionnaires have been modified and improved in the last years and paid more explicit and specific attention to emission trading and quantitative data (Kolk et al. 2008). CDP has also increased the number of items analyzed related to strategy, governance, and management.

As this organization highlighted, the CDP operates in most major economies worldwide and channels information and progress through individual programs. These are climate change, water, supply chain, forests, and cities. Its carbon action initiative encourages investors to accelerate carbon reduction in high-emitting industries and to implement emission-reducing projects that

generate positive return on investment. With respect to the first, CDP's climate change program aims to reduce companies' greenhouse gas emissions and mitigate climate change risk. CDP requests information on climate risks and low carbon opportunities from the world's largest companies. Secondly, the water program motivates companies to disclose and reduce their environmental impacts by using the power of investors and companies. With respect to supply chain, in 2016, some 90 organizations, representing over US\$2.5 trillion of purchasing power, requested that their suppliers disclose information on how they are approaching climate and water risks and opportunities. Moreover, CDP collects information from companies through the lens of the four agricultural commodities responsible for most deforestation: timber, palm oil, cattle, and soy. CDP's forest program was first set up by the Global Canopy Programme which remains a prime funder for the program. Finally, CDP Cities provides the global platform for cities to measure, manage, and disclose their environmental data. The potential and need for this program are enormous since soon over half of the world's population will live in cities. CDP Cities provides an easy to use global platform based upon a simple questionnaire that allows city governments to publicly disclose their greenhouse gas emission data.

But, what have motivated firms to disclose according to the CDP? CDP in its website propose that "in recognizing the tangible business benefits of disclosure and action, companies are raising their ambitions and taking meaningful steps to address climate change, deforestation and water security. This ensures their long-term sustainability and profitability, as well as equipping them to respond to regulatory and policy changes, such as the Paris Agreement." Meanwhile, for cities, disclosing environmental data through CDP Cities has a huge number of advantages, from improved engagement to centralizing data and tracking progress.

In more detail, in recent years, we have become aware of the increasing interest in environmental issues leading to a considerable increase in the literature and research carried out internationally

on this topic. As a consequence of the sharp rise in concern with environmental topics, there has recently been an increase in the need to know how companies, governments, and society at large all over the world should confront this problem, which has repercussions at both national and international levels.

Voluntary carbon disclosure could be explained from two theoretical standpoints (Clarkson et al. 2008), which are clearly contradictory in terms of their predictions: (i) sociopolitical theories on legitimization and stakeholders and (ii) economic theory on voluntary information disclosure. From the first perspective, carbon disclosure is seen as one of the strategies used by companies to seek acceptance and approval of their activities from institutional investors (Matisoff et al. 2013), society, or interest groups. Economic theory predicts that this disclosure is influenced by the benefit and risk of the company being affected by third parties.

Adopting this last theoretical argument and based on the capital market transactions hypothesis, firms have incentives to disclose carbon information following CDP as other voluntary information as result of the generation of specific benefits: a reduction in the information asymmetry problems (Lev 1992) and the adverse selection problem wherein informed agents trade on their private information to the disadvantage of uninformed investors (Lang and Lundholm 1996). In addition, companies that opt to disclose information beyond the standard requirements reduce the information risk or increase the investor following, resulting in benefits such as a reduction in capital and debt costs or an increase in the market value of the company (Barry and Brown 1984). Thus, CDP would primarily reduce information asymmetry by assisting investors in evaluating the ethical and environmental practices and their relationship with climate change actions and activities. In addition, it may enhance capital market participants' perceptions of the company from the positive association of being a growth-sustainable organization aware about climate change, a reputation that translates into increased sales.

Moreover, the proactively climate change actions identified by a firm in its carbon disclosure

reports could aid rivals in competing with the disclosing firm. These climate change activities serve as a driving factor in reducing costs, achieving operational efficiency, and improving productivity because they allow the firm to attract better talent and motivate employees (Edmans 2011).

According to Ilinitich et al. (1998), the different stakeholders interested in environmental issues can be consumers, shareholders, potential investors, creditors, regulators, employees, and the general public. Thus, from the consumer point of view, customers are showing a preference for ecological companies and products, and from an investment standpoint, shareholder value suffers when companies pay millions of dollars in fines, cleanup fees, and court costs to keep corporate officers out of jail (Minow and Deal 1991, p. 36).

Within the environmental sphere, companies now have to consider climate aspects as an economic factor in their business strategy, including gathering and reporting and disclosure of greenhouse gas emissions or emission reduction target data, for example (Kolk and Pinkse 2005). According to Freedman and Jaggi (2011), reporting acts as a means to increase transparency, informing stakeholders about corporate actions and strategies related to carbon or greenhouse gas emission accounting. A high degree of carbon information transparency reveals a firm's strategy, which allows interest groups to monitor and seek improvement in the firm's operations (Sroufe 2003; Kolk et al. 2008). However, firms have not been forthcoming about this information in their annual reports since there are no internationally accepted carbon accounting standards that oblige firms to reflect the carbon accounting treatment in their financial accounts, leading it to be considered as voluntary information, thus the need to go deeper into this issue. According to Tang and Luo (2014, p. 89), "carbon accounting collects, summarizes and measures the greenhouse gas emissions data to enable comparisons across reporting periods and facilitate independent reviews for compliance and data accuracy. In addition, sophisticated greenhouse gas emissions accounting can provide executives with real-time visibility into project and firm-level data and account for the financial impact of

emissions, which is increasingly relevant for managerial decisions.”

Despite the efforts made internationally to establish a legal framework to be applied in all countries, currently there are no international regulations within the International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (US-GAAP) that oblige and specify how to disclose carbon accounting in annual reports. In practice, organizations are developing this type of accounting attending to diverse criteria (Hopwood 2009). The impact of the lack of a standardized accounting framework in financial reports is also discussed by Bebbington and Larrinaga-González (2008) and McGready (2008). This divergence in practice undermines the comparability of financial statements, making it harder for stakeholders to make appropriate decisions (Ernst & Young 2009).

Because of these difficulties, companies need to explain their accounting policies to investors and other stakeholders (Ernst & Young 2009) because the purpose behind financial accounting is to provide information to their shareholders and facilitate independent reviews for compliance and data accuracy. Accounting professionals have also expressed concern along this same line, when they point out that “the problem for the accounting profession is there are no accounting standards dealing directly with the carbon accounting treatments yet we must provide a true and fair view of the financial position of the businesses that are impacted by its legislation” (Collier et al. 2011, p. 46).

Since there are as yet no accounting standards that oblige firms in all countries to reflect the carbon accounting treatment in their annual accounts, then this must be considered as information to be disclosed voluntarily. In this context, one of the most prominent initiatives that have emerged for creating a demand for carbon disclosure is the CDP. CDP reflects an international collaboration of institutional investors concerned about the business implications of climate change (Kolk et al. 2008). It is necessary to note that CDP is not a standard-setting organizations; however, its effectiveness in fostering disclosure and

accountability relies on standardized disclosure data. Although information provided in the CDP is voluntary, it is highly structured as it is collected through a questionnaire and reported in a standard tabular format (Depoers et al. 2016). Precisely, at this respect Lyon and Maxwell (2004) suggest that firms proactively perform voluntary environmental agreements for deflecting the enforcement of mandatory regulation, usually more costly.

CDP has built the most comprehensive collection of self-reported environmental data in the world. As Kolk et al. (2008) reported, CDP has been successfully using institutional investors to urge firms to disclose extensive information about their climate change activities. It represents a non-mandatory effort to develop standardized reporting procedures for companies concerning their climate actions. These reports aim to complement financial statements and reporting. Moreover, it also provides information and data and reflects the reality of the business risks and opportunities in hand of a firm. CDP has helped to establish, develop, and perform norms for carbon accounting methodology (Matisoff et al. 2013).

In the context of “win-win” voluntary disclosure, the CDP pursues that carbon disclosure will be an extension of carbon trading in order to build an alliance with environmental groups, companies, investors, customers, and other stakeholders. This is possible because CDP provides and enables a channel for accountability to shareholders and stakeholders that can be used for benchmarking and comparison (Kolk et al. 2008). In the same line, Fiorino (2006) suggests that CDP as initiative of carbon disclosure allows firms to obtain reputational benefits associated to the non-mandatory disclosure of climate change information, carbon trading, greenhouse gas emissions, and so on; moreover, it also decreases and minimizes the risk of pressure exerted by NGOs and other activists for firms that do not disclose this type of information and/or for poorly performing firms in terms of climate change actions and activities. Matisoff et al. (2013) also defend that the convergence in non-mandatory reporting standards and in discourses of CDP participants facilitates and reinforces transparency, comparability, and coordination.

O'Dwyer et al. (2005) also suggest that carbon disclosure represents information that is crucial for the more accurate valuation of assets. Kim and Lyon (2007, p. 5), in this line, suggest that firms' participation in the CDP translates into good news and may positively affect their stock prices around the date of CDP disclosure. However, it is necessary to highlight that voluntary carbon disclosure remains inconsistent and difficult to interpret (Kolk et al. 2008). In this regard, Hassel et al. (2005) pointed out that the efficacy, relevance, and effectiveness of carbon disclosure as voluntary relies on that this information will be relevant and valuable for investors. It must contain information about the financial impact of climate risks and carbon control on the valuation of corporate assets and must avoid that the disclosure generate any doubts about the reliability of the data. For it, CDP exerts a fundamental labor the commensuration of carbon disclosure; it attempts to standardize the reporting of carbon disclosure and aims to decrease the breadth and diversity of activities and the qualitative nature of the data (in contrast to the quantitative nature of financial statements and reports) (Kolk et al. 2008). CDP is also seeking that data will be comparable and reliable for meeting the needs of all stakeholders (investors, customers, suppliers, NGOs, policy makers, governmental bodies, and so on). As Kiernan (2008) noted, these stakeholders demand that information will be complete and consistent between firms and over time.

Advancing the understanding and knowledge of CDP, Sullivan (2009) and, 4 years later, Matisoff et al. (2013) perform a content analysis on CDP from 2003 to 2001 and find that CDP – as its main objective – has demonstrated a higher transparency in later years, especially in Japanese and EU firms. Nonetheless, the transparency and quality of some emissions have not increased over time. At industry level, Matisoff et al. (2013) also find differences attending to the activity sector. At this respect, energy-intensive industries have either increased carbon disclosure and transparency, while less energy-intensive industries have become less transparent; these firms are less incentive and motivated for performing a voluntary carbon disclosure and followed the CDP.

As final point, talking about data that provides CDP in its website, as international organization, it has regional offices and local partners spanning 50 countries. There are now companies, cities, states, and regions from over 90 countries that disclose through CDP. Its network of investors and purchasers, representing over \$100 trillion, along with policy makers around the globe, use its data and insights to make better-informed decisions. Through its offices and partners in 50 countries, CDP has driven unprecedented levels of environmental disclosure.

Moreover, according to the data reported by the CDP, in 2017: Over more than 6300 companies responded to the climate change, water, forest, and supply chain questionnaire; more than 500 cities disclosed environmental information through CDP; CDP's 99 supply chain members represent a combined purchasing power of over \$3 trillion; over 650 investors with US\$87 trillion in assets request information on climate change, water, or forests; and over 100 of the world's states and regions now measure their environmental impacts through CDP. Finally, it is remarkable to highlight that 1/5 of global emissions are now managed through CDP, as reported by companies who represent over half the global market capitalization. Moreover, 827 investors are now requesting data from companies through CDP's climate change program. These investors represent US \$100 tn.

Cross-References

- [Carbon Footprint](#)
- [Carbon Offsets](#)
- [Carbon Trading Schemes](#)

References

- Andrew, J., & Cortese, C. L. (2011). Carbon disclosures: Comparability, the carbon disclosure project and the greenhouse gas protocol. *Australasian Accounting, Business and Finance Journal*, 5(4), 5–18.
- Barry, C. B., & Brown, S. J. (1984). Differential information and security market equilibrium. *Journal of Financial and Quantitative Analysis*, 20(4), 407–422.

- Bebbington, J., & Larrinaga-González, C. (2008). Carbon trading: Accounting and reporting issues. *The European Accounting Review*, 17(4), 697–717.
- Clarkson, P., Li, Y., Richardson, G., & Vasvari, F. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33, 303–327.
- Collier, G., Sinclair, J., & Orme, S. (2011). Carbon accounting and ETS. *Chartered Accountants Journal*, 90(6), 44–46.
- Depoers, F., Jeanjean, T., & Jérôme, T. (2016). Voluntary disclosure of greenhouse gas emissions: Contrasting the carbon disclosure project and corporate reports. *Journal of Business Ethics*, 134(3), 445–461.
- Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), 621–640.
- Ernst & Young. (2009). *Accounting for emission reductions and other incentive schemes*. London: EYGM Limited.
- Fiorino, D. J. (2006). *The new environmental regulation*. Cambridge, MA: MIT Press.
- Freedman, M., & Jaggi, B. (2011). Global warming disclosures: Impact of Kyoto Protocol across countries. *Journal of International Financial Management and Accounting*, 22(1), 47–90.
- Hassel, L., Nilsson, H., & Nyquist, A. S. (2005). The value relevance of environmental performance. *The European Accounting Review*, 14(1), 41–61.
- Hopwood, A. G. (2009). Accounting and the environment. *Accounting, Organizations and Society*, 34(3–4), 433–439.
- Ilinitch, A. Y., Soderstrom, N. S., & Thomas, T. E. (1998). Measuring corporate environmental performance. *Journal of Accounting and Public Policy*, 17, 383–408.
- Kiernan, M. J. (2008). *Investing in a sustainable world: Why green is the new color of money on Wall Street*. AMACOM Div American Mgmt Assn.
- Kim, E. H., & Lyon, T. P. (2007). *When does institutional investor activism pay? The Carbon Disclosure Project*. Unpublished working paper.
- Kolk, A., & Pinkse, J. (2005). Business responses to climate change: Identifying emergent strategies. *California Management Review*, 47(3), 6–20.
- Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *The European Accounting Review*, 17(4), 719–745.
- Lang, M., & Lundholm, R. (1996). Corporate disclosure policy and analyst behavior. *The Accounting Review*, 71, 467–492.
- Lev, B. (1992). Information disclosure strategy. *California Management Review*, 34(4), 9–32.
- Lyon, T. P., & Maxwell, J. W. (2004). *Corporate environmentalism and public policy*. Cambridge University Press.
- Matisoff, D. C., Noonan, D. S., & O'Brien, J. J. (2013). Convergence in environmental reporting: Assessing the Carbon Disclosure Project. *Business Strategy and the Environment*, 22(5), 285–305.
- McGready, M. (2008). Accounting for carbon. *Accounting*, 142, 84–85.
- Minow, N., & Deal, M. (1991). The shareholders' green focus. *Directors & Boards*, 15(4), 35–40.
- O'Dwyer, B., Unerman, J., & Hession, E. (2005). User needs in sustainability reporting: Perspectives of stakeholders in Ireland. *The European Accounting Review*, 14(4), 759–787.
- Reid, E. M., & Toffel, M. W. (2009). Responding to public and private politics: Corporate disclosure of climate change strategies. *Strategic Management Journal*, 30(11), 1157–1178.
- Sroufe, R. (2003). Effects of environmental management systems on environmental management practices and operations. *Production and Operations Management*, 12(3), 416–431.
- Stanny, E., & Ely, K. (2008). Corporate environmental disclosures about the effects of climate change. *Corporate Social Responsibility and Environmental Management*, 15(6), 338–348.
- Sullivan, R. (2009). The management of greenhouse gas emissions in large European companies. *Corporate Social Responsibility and Environmental Management*, 16(6), 301–309.
- Tang, Q., & Luo, T. (2014). Carbon management systems and carbon mitigation. *Australian Accounting Review*, 68(24), 84–98.

Carbon Emissions

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Synonyms

Carbon dioxide emissions; CO₂-emissions

Definition/Description

Carbon emissions describe the emissions of carbon dioxide (CO₂) by human activities such as the combustion of fossil fuels, steel and cement production, deforestation, and land-use change. The combustion of biofuels is not included in the

inventories of CO₂ emissions of the International Energy Agency (IEA) and the European Union (EU), since it is assumed that this process does not cause net CO₂ emissions (IEA 2016; Janssen-Mahout et al. 2017).

Introduction

Carbon dioxide is a natural component of air. Biological and geological activities release CO₂ which is then absorbed in closed and balanced cycles – the biological and the geological carbon cycle (Sundquist 1985). Additional CO₂ is released by human activities of which the combustion of fossil fuels is the most important (IEA 2016). These emissions are not completely absorbed in carbon sinks as, for example, forests, but either remain in the air or are dissolved in the oceans (University of New Hampshire n.d.). From the industrial revolution onwards, a continuous increase of the global CO₂ content in the air has been observed (NOAA n.d.; Etheridge et al. 1996). This is expected to have severe consequences since the increase of CO₂ in the air leads to an enhanced absorption of infrared (IR) radiation in the atmosphere, which causes a global rise of temperature (see also ► “Greenhouse Gases”, ► “Climate Change”). An increasing amount of CO₂ also leads to increasing dissolution of CO₂ in water. This significantly lowers the pH in oceans and severely affects maritime eco-systems.

Measurement of Global Carbon Dioxide Contents in Air

In 1958, C. D. Keeling started a series of measurements of CO₂ content in the air at a facility of the National Oceanic and Atmospheric Administration (NOAA) at the Mauna Loa Observatory in Hawaii. An increase of CO₂ from 320 ppm in 1958 to 406 ppm at the beginning of 2017 was observed (latest verified measurements) (NOAA n.d.). Other CO₂ measurement sites are operated by the European Union (EU), for example (Ciais et al. 2015).

Preindustrial carbon dioxide levels have been analyzed by measuring the carbon dioxide content of air enclosed in ice cores (Etheridge et al. 1996). “A record of atmospheric CO₂ mixing ratios from 1006 A.D. to 1978 A.D. has been produced. . . The CO₂ data overlap with the record from direct atmospheric measurements for up to 20 years” (Etheridge et al. 1996). The authors determined preindustrial CO₂ levels in a range between 275 and 284 ppm with lower levels during the period of 1550–1800.

The CO₂ content of air can also be measured from space using the infrared spectroscopy of satellites (Butz et al. 2011) which allows a determination of CO₂ and other greenhouse gases (GHG) with a spatial dissolution in the km range (see also ► “Greenhouse Gas Emissions”).

Impact of CO₂ Emissions on Global Climate

CO₂ molecules are able to absorb and emit IR radiation which is why they contribute to the Greenhouse Effect (see also ► “Greenhouse Effect”). Rising amounts of CO₂ in the atmosphere lead to an increased absorption of IR radiation which causes an increase of temperature and climate change (see ► “Climate Change”).

Climate change caused by increasing GHG emissions, including CO₂ which Hansen et al. (Hansen et al. 1981; IPCC 1990) named as the most important among them, has already been identified as a major challenge in the 1980s (IPCC 1990). Reducing the usage of fossil fuels and stopping deforestation are assumed to be key measures in order to reduce the global temperature increase to values below 2.0 °C (UN 2015).

Nevertheless GHG emissions increased from 24.3 Giga tons (Gt) of CO_{2e} in 1970 to 46.6. Gt CO_{2e} in 2012 (Janssens-Maenhout et al. 2017, p. 9). Between 1970 and 2012, CO₂ emissions had the highest share of GHG emissions.

Since CO₂ is the most important GHG, the global warming potential of other greenhouse gases is given as equivalent of the global warming potential of CO₂, carbon dioxide equivalents

(CO_{2e}). The common units are kilograms or metric tons (t) (Krey et al. 2014).

Impact of CO₂ Maritime Eco-Systems

Geological formations and oceans are important sinks of CO₂ (Post et al. 1990). CO₂ is soluble in water and “*Rising atmospheric carbon dioxide (CO₂) concentrations over the past two centuries have led to greater CO₂ uptake by the oceans*” (Feely et al. 2004). Small amount (below 1%) of dissolved CO₂ forms with water carbonic acid (H₂CO₃), which is a weak two protonic acid (Mortimer and Müller 2010).

This means that maritime eco-systems are not only affected by increasing global temperature but also by increasing amounts of dissolved CO₂. Severe impact of CO₂ emissions on the ecology of oceans has already been observed in 2005 (Raven et al. 2005). Raven et al. estimated that in the last 200 years, 50% of the CO₂ emitted by the combustion of fossil fuels and in cement production have been absorbed by the oceans. With the help of surface-ocean CO₂ measurements and existing knowledge of ocean chemistry, they calculated the uptake of CO₂ and found a reduction “*of the pH of surface seawater of 0.1 units, equivalent to a 30% increase in the concentration of hydrogen ions*” (Raven et al. 2005). This finding was in agreement with Jacobson’s estimation that the ocean pH had dropped from 8.25 in historical time to 8.14 in 2004 (Jacobson 2005).

Sources of Carbon Dioxide Emissions

Carbon Dioxide Emissions by Fuel Combustion

The most important source of anthropogenic greenhouse gas emissions is the energy sector with 68% of GHG emissions (IEA 2016, p. 9) (see ► “Greenhouse Gas Emissions”). “*Within the energy sector, CO₂ resulting from the oxidation of carbon in fuels during combustion dominates total GHG emissions*” (IEA 2016, p. 9). According to IEA, CO₂ has a share of 90% of the global GHG emissions in the energy sector.

This is in agreement with Janssens-Maenhout et al., who estimated that in 2012, CO₂ accounted for two thirds of the GHG emissions (Janssens-Maenhout et al. 2017, p. 14) and makes the energy sector the most important sector for GHG reduction measures (see also ► “Climate Change”).

In 2016, 35.8 Gt of CO₂ were emitted worldwide due to the combustion of fossil fuels (Janssens-Maenhout et al. 2017, p. 5; IEA 2016). The amount of CO₂ emissions per energy unit depend on the carbon content of the fuels. Among the different types of coal, anthracite has the highest share of carbon and emits the most CO₂ per energy unit, followed by lignite, subbituminous coal, and bituminous coal. Due to the higher hydrogen to carbon ratio, CO₂ emissions of products made from oil are lower than those made from coal. Natural gas has the highest hydrogen to carbon share and therefore the lowest CO₂ emissions per energy unit.

Table 1 shows the average CO₂ emissions per energy unit for different fossil fuels:

In reporting to the UNFCCC Eq. 1 is used for the calculation of CO₂-emissions.

$$F = EF * AD \quad (1)$$

With F: emission of CO₂, EF: emission factor of the fuel and AD: activity data = amount of energy provided by a certain fuel. (UNFCCC n.d.-a)

The emission factors are defined by the 2006 IPCC Guidelines 2006 (Gómez et al. 2006). Default carbon emission factors are 15.3

Carbon Emissions, Table 1 Carbon dioxide emissions of different fossil fuels

Fuel	CO ₂ in t/TJ
Coal (anthracite)	98
Coal (lignite)	93
Coal (subbituminous)	92
Coal (bituminous)	89
Diesel fuel and heating oil	69
Gasoline	68
Propane	60
Natural gas	50

Data are taken from EIA (n.d.)

tCO₂/TJ for natural gas, 15.7–26.5 tCO₂/TJ for oil products, and 25.8–29.1 tCO₂/TJ for primary coals (IEA 2016).

Carbon Dioxide Emissions by Fuel Combustion Since 1971

In 2014, the highest share of the global CO₂ emissions (28%) was observed in China (incl. Hongkong) (IEA 2016). The second biggest emitter was the USA with a share of 16%. Figure 1 shows the global CO₂ emissions and the CO₂ emissions of the countries, who contribute the most.

Since 1971, the global CO₂ emissions have increased continuously from 1.39 Gt to 20.5 Gt in 1990 and 32.4 Gt in 2014.

As can be seen in Fig. 1 on the left, the USA were the biggest emitter of CO₂ until 2007. Their CO₂ emissions reached a peak between 2000 and 2005, then dropped slightly but still remained on a high level of around 5.2 Gt. In 2007 China took over and became the biggest CO₂ emitter. China's CO₂ emissions increased continuously, leading to a threefold of CO₂ emission from 3.1 Gt to 9.1 Gt between 2000 and 2014.

In Fig. 1 on the right, CO₂ emissions of Germany, India, Russian Federation, and Japan are shown. A continuous increase of CO₂ emissions has been observed for India which overtook Japan, Germany, and the Russian Federation and has now the third biggest emissions of CO₂ with around 2 Gt.

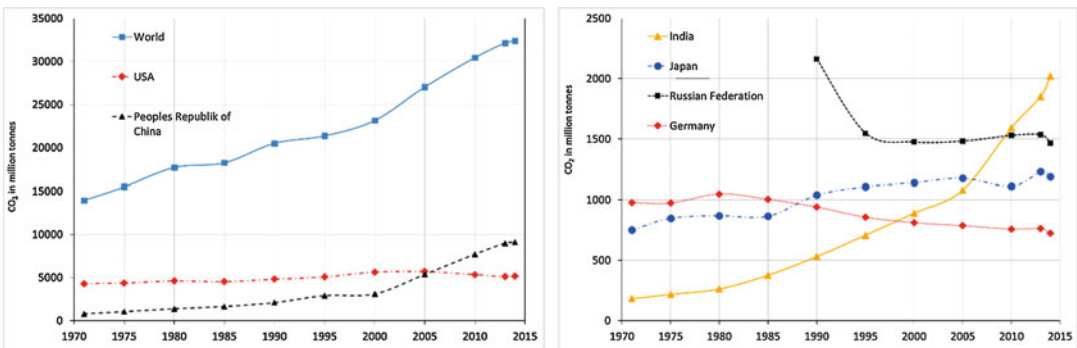
The Russian Federation experienced a sudden decrease of CO₂ emissions in the 1990s, due to a radical shift in the economic system and deindustrialization (IEA 2016). Some further decline was observed between 2013 and 2014.

In Japan CO₂ emissions increased slowly, and in 2014 1.2 Gt of CO₂ were emitted. Only in 2010 as in many countries CO₂ emissions declined due to the financial and economic crisis. Germany's emissions peaked in 1980 (1.0 Gt) and afterwards a continuous decrease was observed – most pronounced in the 1990s. In 2014 0.7 Gt of CO₂ were emitted.

Also of interest are the per capita emissions of CO₂. As can be seen in Table 2, CO₂ emissions per capita vary widely between the discussed countries. The emissions per capita in the table are highest for the USA, even if they declined significantly in the discussed time period. In the Russian Federation and in Germany the emission per capita also decreased but the level still remained high, while in Japan a small increase of CO₂ emissions per capita was observed. A significant increase of CO₂ emission per capita was observed for China and India. Nevertheless, in 2014, the per capita emissions of both countries were much lower than those of the developed countries shown in Table 2.

Kaya Identity

One approach to analyze the CO₂ emissions of the past and to predict future CO₂ emissions either



Carbon Emissions, Fig. 1 Development of CO₂ emission 1970–2014 worldwide and in different countries. (Data taken from IEA (2016))

Carbon Emissions, Table 2 CO₂ emissions per capita in t/capita

Year	World	USA	People's Republic of China	Russian Fed.	Germany	Japan	India
1971	3.71	20.65	0.93		12.49	7.15	0.32
1990	3.88	19.2	1.85	14.59	11.05	8.42	0.61
2014	4.47	16.22	6.66	10.2	8.93	9.35	1.56

Data taken from IEA (2016)

globally or for different countries is the Kaya identity which was first presented in 1991. It states that global carbon dioxide emissions can be expressed as a product of four factors: population, gross domestic product GDP per capita, energy intensity (total energy consumed divided by GDP), and carbon efficiency (carbon dioxide emission per energy unit) (Nakićenović et al. 1998):

$$F = P \times G/P \times E/G \times F/E \quad (2)$$

With F: global CO₂ emissions, P: global population, G: global GDP, E: global primary energy consumption.

An increase in population would lead to an increase of CO₂ emissions since more people need more energy. Economic growth would also lead to an increase of CO₂ emissions since the production of goods needs energy.

A reduction of CO₂ emissions is possible by reducing the energy intensity of production processes, for example, through energy saving measures. The emission of CO₂ can be reduced by increasing the efficiency of carbon, for example, by shifting to less carbon intensive fuels such as natural gas, nuclear energy, or renewable energy (see ► “Energy-renewable”).

Carbon Dioxide Emissions by Sector

In 2014, the sector “Electricity and Heat” held the highest share (42%) of all global CO₂ emissions due to the fact that many countries use coal for electricity production (IEA 2016). “Electricity and Heat” contains heat and electricity production for industry (18%) residential (11%), service (8%), transport (0.5%), and others (5%). As a result of increased power production in Asia,

CO₂ emissions have rapidly increased (IEA 2016, p. 13). At the same time several European countries extended their use of renewable energy in electricity production which has led to a significant decrease of carbon dioxide emissions in electricity production of these countries. In Italy, for example, the share of fossil fuels in electricity production declined from 81% in 2000 to 56% in 2014 (IEA 2016, p. 13).

The second highest emissions were caused by the transport sector (23%), followed by industry (excluding heat and electricity) with 18%, residential (6%), services (3%), and others (7%) (IEA 2016, p. 12).

Other Processes Emitting CO₂ in Industrial Production

Other sources of CO₂ emissions can be found in the industrial production of steel and cement. Besides the high energy demand in the production of iron and steel which mainly uses fossil fuels (Wiley 2011), additional CO₂ is released when iron oxide reacts with carbon to CO₂ and pig iron, iron with a carbon content of 12% (Gallagher and Ingram 2000, p. 202). The processing of pig iron into steel leads to further CO₂ emissions, since the carbon is released as CO₂ (Gallagher and Ingram 2000, pp. 208–209).

Between 1990 and 2018, the amount of steel production increased from around 800 million tons to 1800 million tons (World Steel Association 2019). As a consequence, CO₂ emissions increased proportionally despite various attempts to produce steel more energy-efficiently. According to the World Steel Association “*The steel industry generates between 7% and 9% of direct emissions from the global use of fossil fuel*”

(World Steel Association [n.d.](#)). In industrialized countries, enhanced energy efficiency and improved recycling had led to a significant decrease of CO₂ emission per ton of steel from 3.0 t_{CO2}/t_{steel} in 1980 to 1.82 t_{CO2}/t_{steel} in 1991 (Kundak et al. [2009](#)). Since the industrialized countries have applied all available technical means to reduce emissions by using carbon as reducing agent (Kundak et al. [2009](#)), a further reduction of CO₂ emissions can only be achieved by either using carbon capture (Wiley et al. [2011](#)) or by replacing carbon by hydrogen (Kundak et al. [2009](#)). A demo-plant in Sweden which uses hydrogen that is generated by electrolysis (Karagiannopoulos [2018](#)) is supposed to start operation in 2020. It will use electricity produced from hydropower for the production of “green” steel.

In cement production, around 50% of the CO₂ emissions are caused by the combustion of fossil fuels. The other 50% are released during the calcination of limestone, which reacts with silicates to form calcium oxide, the main component of clinker (Worrel et al. [2001](#)). Limestone mainly consists of calcium carbonate CaCO₃. When heated in the kiln to 600–900 °C, CaCO₃ decomposes to form calcium oxide CaO and CO₂ (Gibbs et al. [n.d.](#)). While the carbon intensity of the fossil fuel can be reduced by shifting to less carbon intensive energy forms, the release of CO₂ during the process of calcination is much harder to reduce (Worrel et al. [2001](#)). One option would be to substitute parts of the clinker “*by industrial by-products, such as coal fly ash (a residue from coal burning), blast furnace slag (a residue from ironmaking), or other pozzolanic materials (e.g., volcanic material)*” (Worrel et al. [2001](#)). Replacing clinker by other materials would change the properties of the resulting concrete, so more systematic investigation is required.

In sum, the contribution of the cement industry to the global anthropogenic CO₂ emissions at begin of the 2000th was about 5% (Worrel et al. [2001](#)). In 2016, the global cement production released 1.45 Gt ± 0.2 Gt of CO₂, which is around 4% of the emissions of fossil fuels (Andrew [2018](#)).

Carbon Dioxide Emissions by Land Use Change

Further carbon dioxide is released by deforestation, drying of wetlands and other land-use changes. In the IPCC GHG inventory, anthropogenic land use and land cover changes (LULCC) describe GHG emissions of human activities (UNFCCC [n.d.-b](#)). These processes also diminished the ability of terrestrial biosphere to absorb carbon dioxide. It is estimated that around 20% of the fossil fuel CO₂ emissions are absorbed by terrestrial biosphere, soil, and vegetation (Arneth et al. [2017](#)). The ability of land to absorb CO₂ depends on its use.

While it is well known that CO₂ is absorbed by vegetation via photosynthesis, the carbon uptake of soil has mostly been investigated with a focus on the quality of the soil and the productivity in agriculture and forestry (Powlson et al. [2004](#)). Only in recent years, at the beginning of 2000, the importance of soil as a carbon sink has come into focus (Powlson et al. [2004](#); Schlesinger and Andrews [2000](#)). Wood harvesting, grazing, and crop harvesting as well as crop land management lead to a reduction of soil carbon pools which are difficult to quantify but also contribute to LULCC (Arneth et al. [2017](#)). On the other hand, afforestation could lead to an absorption of carbon dioxide and in the long term to an increase of the carbon content of the soil (Kudeyarov [2018](#)).

Accounting is also difficult due to different time scales of the different processes: Deforestation leads to a rapid carbon loss, whereas it is lost slowly in the post-deforestation phase. The uptake of carbon in areas of regrowth also occurs slowly (Arneth et al. [2017](#)).

Dynamic global vegetation models are used to describe the magnitude and spatial distribution of GHG and CO₂ emissions (Arneth et al. [2017](#)). Since the typical resolution of the models is in the range of over thousands of kilometers squared, subgrid changes, which can have significant effects on the simulated carbon cycles, are not considered (Arneth et al. [2017](#)). This leads to high uncertainties in regard to the estimations of carbon emissions due to LULCC. For the time period of 1901–2014, Arneth et al. estimated

that by land use change cumulated 35 ± 18 GT carbon (equal to 128 ± 66 Gt CO₂) were emitted.

Measures for Carbon Dioxide Emission Reduction

There are different strategies to reduce CO₂ emissions. In 2015, a worldwide agreement was achieved, stating that the temperature change should be kept below 2 °C and that actions which help to keep the temperature increase below 1.5 °C should be taken (UNFCCC 2015).

Different types of targets concerning a reduction of GHG emissions were formulated which included fixed level targets, targets relative to business as usual, trajectory targets, and non-GHG emission targets such as shift to renewable energy, increasing energy efficiency, afforestation, and mitigation targets (Vaidyula and Hood 2018).

In order to reduce CO₂ emissions, also carbon sequestration is discussed (Hu et al. 2016). But technical and economical feasibility for large scale carbon capture has yet to be shown (Aminu et al. 2017).

Summary

Increasing CO₂ emissions within the last 200 years have led to a significant increase of CO₂ in the atmosphere from below 300 ppm in preindustrialized time to above 400 ppm in 2017 (NOAA n.d.). Since CO₂ emissions absorb IR-light, the energy balance of the earth has shifted. An increase of around 1 °C due to increased CO₂ and other GHG emissions has been observed within the last 100 years (Lindsey and Dahlmann 2018). In order to limit the temperature increase to values below 2 °C GHG emissions shall be reduced (UN 2015). CO₂ is the most important GHG, since CO₂ emissions from the combustion of fossil fuels are dominant, most important in the energy sector (IEA 2016). Increasing energy demand especially in the developed countries led to a continuous increase of CO₂ emissions globally. Nevertheless mean per capita

CO₂ emissions are much lower in developing countries than in developed countries (IEA 2016). In recent years, some European countries have been successful in reducing CO₂ emissions, for example, by shifting to renewable energy.

Cross-References

- [Climate Change](#)
- [Energy-Renewable](#)
- [Greenhouse Gas Emissions](#)
- [Greenhouse Gases](#)

References

- Aminu, M. D., Nabavi, S. A., Rochelle, C. A., & Manovic, V. (2017). A review of developments of carbon dioxide storage. *Applied Energy*, 208, 1389–1419. <https://doi.org/10.1016/j.apenergy.2017.09.015>.
- Andrew, R. M. (2018). Global CO₂ emissions from cement production. *Earth System Science Data*, 10, 195–217. <https://doi.org/10.5194/essd-10-195-2018>.
- Armeth, A., Sitch, S., Pongratz, J., Stocker, B., Ciais, P., Poulter, B., Bayer, A., Bondeau, A., Calle, L., Chini, L., Gasser, T., Fader, M., Friedlingstein, P., Kato, E., Li, W., Lindeskog, M., Nabel, J. E. M. S., Pugh, T. A. M., Robertson, E., Viovy, N., Yue, C., & Zaehle, S. (2017). Historical carbon dioxide emissions caused by land-use changes are possibly larger than assumed. *Nature Geoscience*, 10, 79–86. <https://www.nature.com/articles/ngeo2882>. Accessed 14 Aug 2014.
- Butz, A., Guerlet, S., Hasekamp, O., Schepers, D., Galli, A., Aben, I., Frankenberg, C., Hartmann, J.-M., Tran, H., Kuze, A., Keppel-Aleks, G., Toon, G., Wunch, D., Wennberg, P., Deutscher, N., Griffith, D., Macatangay, R., Messerschmidt, J., Notholt, J., & Warneke, T. (2011). Toward accurate CO₂ and CH₄ observations from GOSAT. *Geophysical Research Letters*, 38, L14812. <https://doi.org/10.1029/2011GL047888>.
- Ciais, P., Crisp, D., Denier van der Gon, H., Engelen, R., Janssens-Maenhout, G., Heimann, M., Rayner, P., & Scholze, M. (2015). *Towards a European operational observing system to monitor fossil CO₂ emissions*. Brussels: European Commission. https://www.copernicus.eu/sites/default/files/2018-10/CO2_Report_22Oct2015.pdf. Accessed 16 Aug 2019.
- Energy Information Agency (EIA). (n.d.). Frequently asked questions: How much carbon dioxide is produced when different fuels are burned? <https://www.eia.gov/tools/faqs/faq.php?id=73&t=11>. Accessed 21 June 2019.

- Etheridge, D. M., Steele, L. P., Langenfelds, R. L., Francey, R. J., Barnola, J.-M., & Morgan, V. I. (1996). Natural and anthropogenic changes in atmospheric CO₂ over the last 1000 years from air in Antarctic ice and firn. *Journal of Geophysical Research Atmospheres*, 101(D2), 4115–4128. <https://doi.org/10.1029/95JD03410>.
- Feely, R. A., Sabine, C. L., Lee, K., Berelson, W., Kleypas, J., Fabry, V. J., & Millero, F. J. (2004). Impact of anthropogenic CO₂ on the CaCO₃ system in the oceans. U.S. Dept. of Commerce/NOAA/OAR/PMEL/Publications. <https://www.pmel.noaa.gov/pubs/outstand/feel2633/figs.shtml>. Accessed 14 Aug 2019.
- Gallagher, R. M., & Ingram, P. (2000). *Complete chemistry*. Oxford, UK: Oxford University Press.
- Gibbs, M. J., Soyka, P., & Conneely, D. (n.d.). CO₂ emissions from cement production good practice guidance and uncertainty management in national greenhouse gas inventories. https://www.ipcc-nggip.iges.or.jp/public/gp/bgp/3_1_Cement_Production.pdf. Accessed 13 Aug 2019.
- Gómez, D. R., Watterson, J. D., Americano, B. B., Chia, H., Marland, G., Matsika, M., Namayanga, L. N., Osman-Elasha, B., Kalenga Saka, J. D., & Treanton, K. (IEA), Contributing Author Quadrelli, R. (IEA). (2006). Stationary combustion. In *UNFCCC 2006 IPCC guidelines for national greenhouse gas inventories, Vol. 2 energy*. <https://www.ipcc-nggip.iges.or.jp/public/2006gl/vol2.html>. Accessed 16 Aug 2019.
- Hansen, J., Johnson, D., Lacis, A., Lebedeff, S., Lee, P., Rind, D., & Russel, G. (1981). Climate impact of increasing atmospheric carbon dioxide. *Science*, 213, 957–966.
- Hu, G., Nicholas, N. J., Smith, K. H., Mumford, K. A., Kentish, S. E., & Stevens, G. W. (2016). Carbon dioxide absorption into promoted potassium carbonate solutions: A review. *International Journal of Greenhouse Gas Control*, 53, 28–40. <https://doi.org/10.1016/j.ijggc.2016.07.020>.
- Intergovernmental Panel on Climate Change (IPCC). (1990). In J. T. Houghton, G. T. Jenkins, & J. J. Ephraims (Eds.). *Climate change the IPCC scientific assessment*. New York: Cambridge University Press.
- International Energy Agency (IEA). (2016). CO₂ emissions from fuel combustion highlights. https://emis.vito.be/sites/emis.vito.be/files/articles/3331/2016/CO2EmissionsfromFuelCombustion_Highlights_2016.pdf. Accessed 21 June 2019.
- Jacobson, M. Z. (2005). Studying ocean acidification with conservative, stable numerical schemes for non-equilibrium air-ocean exchange and oceanequilibrium chemistry. *Journal of Geophysical Research*, 110. <https://doi.org/10.1029/2004JD005220>.
- Janssens-Maenhout, G., Crippa, M., Guizzardi, D., Muntean, M., Schaaf, E., Olivier, J. G. J., Peters, J. A. H. W., & Schure, K. M. (2017). *Fossil CO₂ and GHG emissions of all world countries*. JRC107877, EUR 28766 EN (p. 14). Luxembourg: Publications Office of the European Union, Luxembourg. p 14. <https://doi.org/10.2760/709792>. ISBN 978-92-79-73207-2.
- Karagiannopoulos, L. (2018). Swedish steel plant to run on hydrogen. Reuters. <https://af.reuters.com/article/africaTech/idAFL8N1PR4R2>. Accessed 13 Aug 2019.
- Krey, V., Masera, O., Blanford, G., Bruckner, T., Cooke, R., Fisher-Vanden, K., Haberl, H., Hertwich, E., Kriegler, E., Mueller, D., Paltsev, S., Price, L., Schlomer, S., Urge-Vorsatz, D., van Vuuren, D., & Zwickel, T. (2014). Annex II: Metrics & methodology. In O. Edenhofer, R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, S. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlomer, C. von Stechow, T. Zwickel, & J. C. Minx (Eds.), *Climate change 2014: Mitigation of climate change. Contribution of working group III to the fifth assessment report of the intergovernmental panel on climate change*. Cambridge, UK/New York: Cambridge University Press.
- Kudeyarov, V. N. (2018). Soil respiration and biogenic carbon dioxide sink in the territory of Russia: An analytical review. *Eurasian Soil Science*, 6, 599–612. <https://doi.org/10.1134/S1064229318060091>.
- Kundak, M., Lazij, L., & Črnko, J. (2009). CO₂ emissions in the steel industry. *Meta*, 3, 193–197.
- Lindsey, R., & Dahlgren, L. A. (2018). Climate change: Global temperature. National Oceanic and Atmospheric Administration (NOAA). <https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature>. Accessed 26 Aug 2019.
- Mortimer, C. E., & Müller, U. (2010). *Chemie—Das Basiswissen der Chemie* (p. 466). Stuttgart: Thieme Verlag.
- Nakićenović, N., Victor, N., & Morita, T. (1998). Emissions scenarios database and review of scenarios. *Mitigation and Adaptation Strategies for Global Change*, 3, 95–120.
- National Oceanic and Atmospheric Administration (NOAA). (n.d.). Trends in atmospheric carbon dioxide. <https://www.esrl.noaa.gov/gmd/ccgg/trends/full.html>. Accessed 20 June 2019.
- Post, W. M., Peng, T.-H., Emanuel, W. R., King, A. W., Dale, V. H., & DeAngelis, D. L. (1990). The global carbon cycle. *American Scientist*, 78(4), 310–326. <http://www.as.wvu.edu/biology/bio463/globalcarbon.pdf>. Accessed 16 Aug 2019.
- Powlson, D., Smith, P., & Greenland, D. (2004). Soils as carbon sinks foreword. *Soil Use and Management*, 20, 210–211. <https://doi.org/10.1079/SUM2004232>.
- Raven, J., Caldeira, K., Elderfield, H., Hoegh-Guldberg, O., Liss, P., Riebesell, U., Shepherd, J., Turley, C., & Watson, A. (2005). *Ocean acidification due to increasing atmospheric carbon dioxide*. London: The Royal Society. 68 p. ISBN 0-85403-617-2. <https://royalsociety.org/topics-policy/publications/2005/ocean-acidification/>. Accessed 22 June 2019.

- Schlesinger, W. H., & Andrews, J. A. (2000). Soil respiration and the global carbon cycle. *Biogeochemistry*, 48, 7–20. <https://link.springer.com/article/10.1023/A:1006247623877>. Accessed 15 Aug 2019.
- Sundquist, E. T. (1985). Geological perspectives on carbon dioxide and the carbon cycle. In E. T. Sundquist & W. S. Broecker (Eds.), *The carbon cycle and atmospheric CO₂: Natural variations Archean to present* (Vol. 32). <https://doi.org/10.1029/GM032p0005>. ISBN 9780875900605
- United Nations (UN). (2015). The Paris agreement. https://unfccc.int/sites/default/files/english_paris_agreement.pdf. Accessed 22 June 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (2015). Adoption of the Paris agreement – Proposal by the President – Draft decision -/CP.21. <https://unfccc.int/resource/docs/2015/cop21/eng/109.pdf>. Accessed 15 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (n.d.-a). National GHG inventories: Scope and general principles, and 2006 IPCC guidelines and relationship to earlier IPCC guidelines. https://unfccc.int/sites/default/files/01_overview_final.pptx. Accessed 12 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (n.d.-b). Glossary of climate change acronyms and terms. <https://unfccc.int/process-and-meetings/the-convention/glossary-of-climate-change-acronyms-and-terms>. Accessed 13 Aug 2019.
- University of New Hampshire. (n.d.). An introduction to the global carbon cycle. <http://globecarboncycle.unh.edu/CarbonCycleBackground.pdf>. Accessed 22 June 2019.
- Vaidyula, M., & Hood C. (2018). Accounting for baseline targets in NDCs: Issues and options for guidance. Climate change expert group paper no. 2018 (2)JT03430722©OECD/IEA, Paris, p. 10. https://www.oecd.org/environment/cc/Accounting_for_baselines_targets_in_NDCS.pdf. Accessed 15 Aug 2019.
- Wiley, D. E., Hoa, M. T., & Bustamante, A. (2011). Assessment of opportunities for CO₂ capture at iron and steel mills: An Australian perspective. *Energy Procedia*, 4, 2654–2661. <https://doi.org/10.1016/j.egypro.2011.02.165>.
- World Steel Association. (2019). World steel in figures 2019. Brussels. <https://www.worldsteel.org/en/dam/jcr:96d7a585-e6b2-4d63-b943-4cd9ab621a91/World%2520Steel%2520in%2520Figures%25202019.pdf>. Accessed 13 Aug 2019.
- World Steel Association. (n.d.). Steel's contribution to a low carbon future. <https://www.worldsteel.org/publications/position-papers/steel-s-contribution-to-a-low-carbon-future.html>. Accessed 13 Aug 2019.
- Worrel, E., Price, L., Martin, N., Hendriks, C., & Meida, L. O. (2001). Carbon dioxide emissions from the global cement industry. *Annual Review of Energy and the Environment*, 26, 303–329. <https://doi.org/10.1146/annurev.energy.26.1.303>.

Carbon Finance

► Climate Finance

Carbon Footprint

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Synonyms

Global warming potential

Definition

The term *carbon footprint* (CF) refers to the measurement of direct and indirect net climate change impacts of a product, process, company, or system. The sole impact category of the CF is climate change, typically expressed as global warming potential (GWP) impacts caused by greenhouse gas emissions. The standard unit of measurement for GWP impacts is carbon dioxide equivalent, which is based on the global warming potential including lifetime of different greenhouse gases in the atmosphere. A carbon footprint may be evaluated through life cycle assessment methodology, including all relevant life cycle stages of the system under study. CF assist different actors in mitigating their climate change impacts and in identifying more climate friendly options. The CF concept is widely utilized both in science and business because it is readily understandable, making it an important tool in bridging the gap between the scientific community and decision makers.

Introduction/History

Climate change is a major challenge to sustainability for humankind and it has been accelerating,

especially due to anthropogenic greenhouse gas emissions. After meetings in 1988, 1995, 2001, and 2007, the Intergovernmental Panel on Climate Change (IPCC) published assessment reports on climate change and the role of greenhouse gases (IPCC 2000). In 1998, the Kyoto Protocol defined global warming potential (GWP) impacts for major greenhouse gases (GHG) (United Nations 1998). The measurement of GHG emissions and their impacts has become essential to understanding the reasons behind climate change and to devising strategies to reduce these impacts. According to Caro (2019), the carbon footprint is a relatively easy-to-use tool for monitoring and quantifying greenhouse gas emissions and associated impacts. The advantages of the CF tool are that it includes both direct and indirect impacts from different life cycle stages. The CF has become the most popular indicator in sustainability assessments because it can be utilized across a wide range of applications: products, processes, companies, and countries.

Because of increased interest in and awareness of climate change in previous decades, a new and easily applied tool to measure climate change impacts was required. This led to the process of developing the CF. The origin of the carbon footprint derives from the ecological footprint. Wackernagel and Rees (1996) presented the ecological footprint to describe human impacts on Earth. At first, the ecological footprint was related to the land area required to sustain various human activities (Monfreda et al. 2004; Huijbregts et al. 2008). According to Monfreda et al. (2004), the ecological footprint generally presents “how much land area . . . the human economy need [s] to provide ecological goods and services it uses at a renewable rate.” The first definition for the CF was also based on land (Wiedmann 2009). According to De Benedetto and Klemeš (2009), the CF stood for the land area required to sequester fossil-based CO₂ emissions from the atmosphere through afforestation. This calculation required a detailed input-output analysis (Wiedmann 2009).

However, there was no clear definition for the term *carbon footprint* until Wiedmann and Minx (2008) amassed previous definitions and proposed

that “The carbon footprint is a measure of the exclusive total amount of carbon dioxide (CO₂) emissions that is directly and indirectly caused by an activity or is accumulated over the life stages of a product.” This led to the current definition, in which a carbon footprint measures greenhouse gas emissions or their impacts (rather than land area for carbon sequestration purposes).

The term CF in general became more popular in the 2000s, and at that time, a key question in the scientific literature was the extent to which CO₂ emissions could be attributed to a certain product, process, company, or organization. Businesses had a particular interest in using the carbon footprint indicator; as Lash and Wellington (2007) pointed out, a reduced carbon footprint might provide business advantages for companies. According to Weidema et al. (2008), proactive companies and retail chains have been notable in spreading CF thinking throughout society. Non-governmental organizations (NGOs) were also key promoters in the early years of the CF. Unlike business and NGOs, academic research was not a driving force in the development of the carbon footprint tool, and this contributed to the emergence of different definitions and calculation methods (Weidema et al. 2008).

Wiedmann and Minx (2008) observed that many CF calculations included other greenhouse gases in addition to carbon dioxide. This quickly led to all CF calculations generally including other greenhouse gases. The CF evolved to quantify GHG emissions contributing to global warming and climate change, and indicators such as the global warming potential began to be used widely (Čuček et al. 2012). Also, other terms, such as *climate footprint*, *CO₂ footprint*, *GHG footprint*, *methane footprint*, and *GWP footprint*, were suggested by different researchers (Čuček et al. 2012). CF applications also expanded, for example, to products, processes, companies, and nations (Hertwich and Peters 2009). At this point in time, the popularity of the definition based on land area waned (Alvarez et al. 2016). According to the International Reference Life Cycle Data System (ILCD) Handbook, LCAs should also include other impact categories besides the carbon footprint, except in cases in which the GWP is the

major environmental sustainability impact (European Commission et al. 2010).

According to Muthu (2014) and Alvarez et al. (2016), the carbon footprint has become a globally accepted and widely implemented tool or indicator for quantifying greenhouse gas emissions of products. However, the enormous interest in the CF concept and lack of consensus in calculation methodologies have also led to public hesitation and confusion (Alvarez et al. 2016). The standardization of the term *carbon footprint* as well as the calculation methods and rules outlined in documents such as Publicly Available Specification (PAS) 2050 (2008 and 2011), the Greenhouse Gas Protocol (2011), International Organization for Standardization (ISO) 14067 (2013), and ISO 14067 (2018) have clarified the topic and enabled more uniform assessments.

Standardization

The International Organization for Standardization has published ISO 14040 and 14044 international standards to provide guidelines for LCA studies. The ISO 14040 standard addresses principles and framework for life cycle assessment methodology. Its main scope is to provide rules for conducting LCA studies. The ISO 14044 standard supplies additional information for LCA studies, including, for instance, goal setting, inventory analysis, impact analysis, results analysis, reporting, critical review, and limitations.

Publicly Available Specification of the British Standard Institution (BSI), PAS 2050 aims to present a consistent method for GHG emission assessment of goods and services throughout the life cycle. PAS 2050 is based on the ISO 14040 and ISO 14044 standards (BSI 2011). It provides instructions for GWP assessment, system boundaries, data quality, and allocation procedures. However, PAS 2050 does not use the term *carbon footprint*.

The Greenhouse Gas Protocol (2011) used PAS 2050 as a base when developing its own product standard. The Greenhouse Gas Protocol (2011) presents the CF as a subcategory of life cycle assessment (LCA) because it only focuses

on the climate change impact category. This protocol takes an attributional approach, whereby GHG emissions and removals are attributed to the functional unit linking together attributable processes along its life cycle. The attributional approach typically uses primary data or average data for a given process (Greenhouse Gas Protocol 2011).

The Greenhouse Gas Protocol presents three “scopes” for greenhouse gas emissions assessments for companies. Scope 1 includes direct greenhouse gas emissions from sources that are owned or controlled by the company. Scope 2 includes GHG emissions from the production of purchased electricity consumed by the company. Scope 3 is an optional category which includes all other indirect emissions (i.e., those which are a consequence of the operation of the company, but which are released in processes not owned or controlled by the company) (Greenhouse Gas Protocol 2004).

Product carbon footprint assessment was first standardized by the ISO 14067 standard in 2013 and was updated in 2018. The update (ISO 14067: 2018) specifies principles, requirements, and guidelines for measuring and reporting the CF of a product. The CF assessment is presented so that it is consistent with the aforementioned ISO 14040 and 14044 standards, which provide general guidelines for LCA. ISO 14067: 2018 only addresses the climate change impact category, and it does not include carbon offsetting. According to the standard, the CF of a product is the net greenhouse gas emissions in a life cycle of a product system presented as CO₂ equivalents, using the impact category of climate change. CO₂ equivalent results should be presented as mass per functional unit. GHGs can be attributable to natural or anthropogenic sources, and they absorb and emit infrared radiation from the Earth’s surface, atmosphere, and clouds at specific wavelengths. The standard focuses on long-lived GHGs; therefore, short-lived radiative forcing agents and surface reflectors such as black carbon and aerosols also fall outside the scope. Water vapor and ozone are also outside the scope of the standard.

In addition to a single product, a partial CF can be calculated for a product, or for a system

including two or more products of the same organization. The ISO 14067 standard is the first of its kind to offer a detailed guide and standardized template for an external communication report for the CF, tracking report, declaration, and label. This facilitates more transparent communication and comparisons for CFs. The ISO 14064 standard also describes specifications and guidance for greenhouse gas emission quantification, monitoring, reporting, and verification at the organizational level (ISO 14064-1), project level (ISO 14064-2), and product level (ISO 14064-3).

Key Issues

According to the current standardization guidelines, a carbon footprint should be presented as CO₂ equivalents in mass units related to global warming. This requires global warming potential factors for other greenhouse gases in relation to CO₂. The GWPs of different greenhouse gases have been measured based on their impacts on radiative force over a given time horizon. Typical time horizons are 20 and 100 years, but in CF assessment, 100 years is most often used. For a 20-year assessment, the GWP impacts of methane (CH₄) become more significant due to the short lifetime of methane in the atmosphere.

IPCC (2007) defines and publishes global warming potentials for 61 different greenhouse gases. CO₂, CH₄ and nitrous oxide (N₂O) are typical greenhouse gases that can be released from natural or anthropogenic processes. The main sources of CO₂ are related to the combustion of fossil fuels. CH₄ and N₂O are released from energy production, but also from agricultural processes, for example. In addition, there are multiple other greenhouse gases, such as fluorinated gases. Fluorinated gases are synthetic, and they are emitted from industrial processes. They typically have considerable GWP impact factors, but their quantities are rather low (EPA 2017).

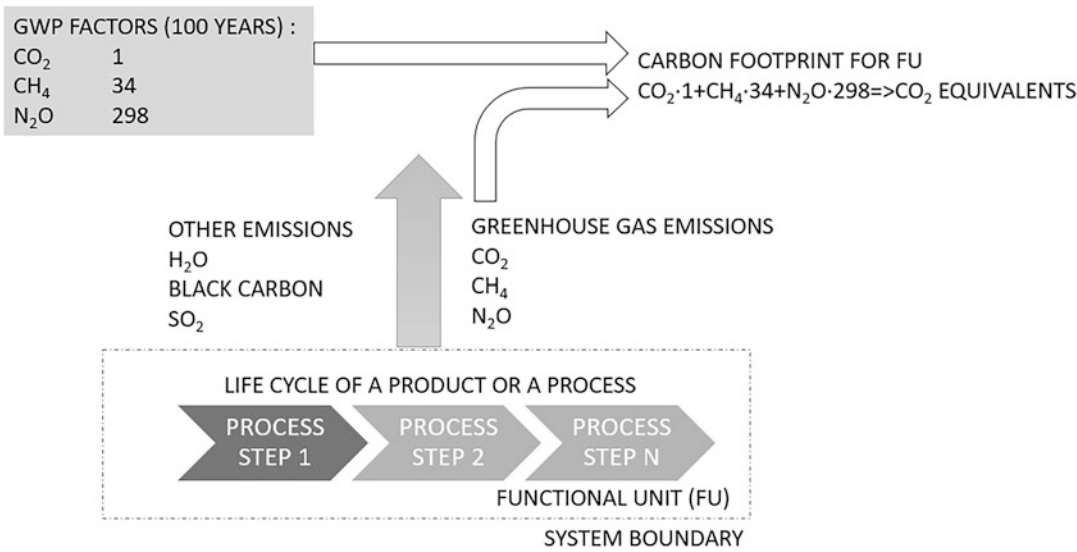
According to Gasser et al. (2017), one of the challenges in defining the GWP factors of other greenhouse gases in relation to CO₂ is the climate-carbon feedback. CO₂ emissions increase the CO₂ pool in the atmosphere. Part of this CO₂ is absorbed by sinks. However, due to the warming climate, the CO₂ uptake from atmosphere slows down, impacting the CO₂ lifetime in the atmosphere (Gasser et al. (2017).

Table 1 presents the GWP impact factors for some of the typical greenhouse gases according to the IPCC's 5th assessment report and IPCC (2007).

Figure 1 presents the core idea of a carbon footprint calculation. The GHG emissions from different life cycle stages are calculated as CO₂

Carbon Footprint, Table 1 The global warming potentials of example greenhouse gases over 20- and 100-year time horizons with and without climate-carbon feedback (cc fb) (Myhre et al. 2013; IPCC 2007)

Greenhouse gas	Lifetime (a)		GWP ₂₀		GWP ₁₀₀	
	Myhre et al. 2013	IPCC 2007	Myhre et al. 2013	IPCC 2007	Myhre et al. 2013	IPCC 2007
CO ₂				1		1
CH ₄	12.4	12	84 (No cc fb) 86 (With cc fb)	72	28 (No cc fb) 34 (With cc fb)	25
HFC-134a	13.4	14	3710 (No cc fb) 3790 (With cc fb)	3830	1300 (No cc fb) 1550 (With cc fb)	1430
CFC-11	45.0	45	6900 (No cc fb) 7020 (With cc fb)	6730	4660 (No cc fb) 5350 (With cc fb)	4750
N ₂ O	121.0	114	264 (No cc fb) 268 (With cc fb)	289	265 (No cc fb) 298 (With cc fb)	298
CF ₄	50,000.0	50,000	4880 (No cc fb) 4950 (With cc fb)	5210	6630 (No cc fb) 7350 (With cc fb)	7390



Carbon Footprint, Fig. 1 Carbon footprint calculation

equivalents using GWP factors for different gases. The CF calculations only include climate change impacts; other impact categories are excluded. The goal and scope define whether the CF is calculated for a product, service, or company and what is a functional unit of assessment. Included life cycle steps are presented, and a study may be related to full or partial product life cycles (e.g., cradle-to-gate, cradle-to-grave, or gate-to-gate).

Future Directions

The definition of carbon footprint has evolved over time, and multiple methodological issues related to CF assessment have arisen. One of the main challenges of the CF concept pointed out by researchers is the methodological divergence between product carbon footprints and corporate ones. It is difficult to compare CFs resulting from the application of different methods, and this may weaken consumer confidence in the reliability of the carbon footprint information (Alvarez et al. 2016). The ISO 16047 standard diminishes the methodological and terminological confusion. Notwithstanding this, due to the popularity of CF and possible public misperception, further development of the CF tool is necessary.

According to Caro (2019), the utilization of the CF at the micro level, e.g., product level, has received an international reputation, but at the macro level, e.g., global level, the international community has not strongly approved its application, so methodological development is still clearly required.

Many carbon footprint labels have been developed in order to interface with consumers (Ecolabel index 2019). However, different methodologies and ways of presenting a carbon footprint exist. This may further confuse consumers, especially if the CF labels are not comparable. Therefore, more uniform carbon footprint labeling is also essential in the future.

Previously, countries reported their carbon footprint with production-based or area-based boundaries. According to Caro (2019), carbon leakage and embodied emissions in international trade may be revealed in the country-level CFs, if an approach based on consumption is used. This might have significant impacts on the global trading system in the future (Caro 2019). This type of approach has attracted more interest because it also includes emissions related to a country’s consumption in terms of material, product, and energy production not only within the country but also externally, throughout the globe.

As a carbon footprint is a reflection of the negative climate impacts of products and companies, calls have been made for quantifying and communicating the positive climate impacts as well. The carbon handprint approach (Grönman et al. 2019) has subsequently been proposed. This approach is built largely upon standardized CF methodology, but complements it by offering guidelines for setting up a comparison between the baseline solution and the handprint solution, which presumably contains climate benefits.

Summary

The carbon footprint has become one of the most commonly used indicators of environmental sustainability assessment. It presents direct and indirect global warming potential impacts of a product, process, system, company, or country. The carbon footprint is presented in mass units as CO₂ equivalents by using the global warming potential impact factors of different greenhouse gases. Previously, carbon footprint calculation rules varied greatly, but the International Organization for Standardization has standardized them in the ISO 14067 standard (2013 and 2018).

Cross-References

- Carbon Handprint
- Climate Change
- Environmental Impact Assessment
- Life Cycle Assessment

References

- Alvarez, S., Carballo-Penela, A., Mateo-Mantecon, I., & Rubio, A. (2016). Strengths-weaknesses-opportunities-threats analysis of carbon footprint indicator and derived recommendations. *Journal of Cleaner Production*, 121, 238–247.
- BSI. (2011). Specification for the assessment of the life cycle greenhouse gas emissions of goods and services. PAS 2050:2011. ISBN 978 0 580 71382 8.
- Caro, D. (2019). Carbon footprint. In *Encyclopedia of ecology* (Vol. 4, 2nd ed., pp. 252–257). <https://www.sciencedirect.com/referencework/9780444641304/encyclopedia-of-ecology#book-description>
- Čuček, L., Klemeš, J. J., & Kravanja, Z. (2012). A review of footprint analysis tools for monitoring impacts on sustainability. *Journal of Cleaner Production*, 34, 9–20.
- De Benedetto, L., & Klemeš, J. (2009). The environmental performance strategy map: An integrated LCA approach to support the strategic decision-making process. *Journal of Cleaner Production*, 17, 900–906.
- Ecolabel index. (2019). All ecolabels on carbon. Big room Inc. <http://www.ecolabelindex.com/ecolabels/?st=category,carbon>
- EPA. (2017). *Overview of greenhouse gases*. United States Environmental Protection Agency. <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>
- European Commission, Joint Research Centre, & Institute for Environment and Sustainability. (2010). International Reference Life Cycle Data System (ILCD) handbook, general guide for life cycle assessment, detailed guidance (1st ed. March 2010) (EUR 24708 EN). Luxembourg: Publications Office of the European Union.
- Gasser, T., Peters, G. P., Fuglestad, J. S., Collins, W. J., Shindell, D. T., & Ciais, P. (2017). Accounting for the climate-carbon feedback in emission metrics. *Earth System Dynamics*, 8, 235–253.
- Greenhouse Gas Protocol. (2004). *A corporate accounting and reporting standard*. World Resources Institute and World Business Council for Sustainable Development.
- Greenhouse Gas Protocol. (2011). *Product life cycle accounting and reporting standard*. World Resources Institute and World Business Council for Sustainable Development.
- Grönman, K., Pajula, T., Sillman, J., Vatanen, S., Kasurinen, H., Soininen, A., & Soukka, R. (2019). Carbon handprint – An approach to assess the positive climate impacts of products demonstrated via renewable diesel case. *Journal of Cleaner Production*, 206, 1059–1072.
- Hertwich, E. G., & Peters, G. P. (2009). Carbon footprint of nations: A global, trade-linked analysis. *Environmental Science & Technology*, 43, 16.
- Huijbregts, M. A. J., Hellweg, S., Frischknecht, R., Hungerbühler, K., & Hendriks, A. J. (2008). Ecological footprint accounting in the life cycle assessment of products. *Ecological Economics*, 64, 798–807.
- Intergovernmental Panel on Climate Change (IPCC). (2000). IPCC overview, Technical report.
- IPCC. (2007). *Climate change 2007: The physical science basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor & H.L. Miller (Eds.)]. Cambridge, UK/New York: Cambridge University Press, 996 pp.
- ISO 14040. International Organization for Standardization. EN ISO 14040:2006. Environmental management. Life cycle assessment. Principles and framework.
- ISO 14044. International Organization for Standardization. EN ISO 14044:2006. Environmental management. Life cycle assessment. Requirements and guidelines.
- ISO 14067: 2018. Greenhouse gases. Carbon footprint of products. Requirements and guidelines for quantification.

- Lash, J., & Wellington, F. (2007). Competitive advantage on a warming planet. *Harvard Business Review*. <https://hbr.org/2007/03/competitive-advantage-on-a-warming-planet>
- Monfreda, C., Wackernagel, M., & Deumling, D. (2004). Establishing national natural capital accounts based on detailed ecological footprint and biological capacity assessments. *Land Use Policy*, 21, 231–246.
- Muthu, S. S. (2014). *Assessment of carbon footprint in different industrial sectors* (Vol. 1). Springer. ISBN 978-981-4560-41-2.
- Myhre, G., Shindell, D., Bréon, F.-M., Collins, W., Fuglestad, J., Huang, J., Koch, D., Lamarque, J.-F., Lee, D., Mendoza, B., Nakajima, T., Robock, A., Stephens, G., Takemura, T., & Zhang, H. (2013). Anthropogenic and natural radiative forcing. In T. F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, & P. M. Midgley (Eds.), *Climate change 2013: The physical science basis. Contribution of working group I to the fifth assessment report of the intergovernmental panel on climate change*. Cambridge, UK/New York: Cambridge University Press.
- United Nations. (1998). Kyoto protocol to the United Nations framework convention on climate change. *Review of European Community & International Environmental Law*, 7(2), 214–234.
- Wackernagel, M., & Rees, W. E. (1996). *Our ecological footprint reducing human impact on the earth*. Michigan: New Society Publishers.
- Weidema, B. P., Thrane, M., Christensen, P., Schmidt, J., & Løkke, S. (2008). Carbon footprint. *Journal of Industrial Ecology*, 12(1), 3–6.
- Wiedmann, T. (2009). Editorial: Carbon footprint and input – Output analysis – An introduction. *Economic Systems Research*, 21, 175–186.
- Wiedmann, T., & Minx, J. (2008). A definition of ‘carbon footprint’. In C. C. Pertsova (Ed.), *Ecological economics research trends* (pp. 1–11). Huppauge: Nova Science Publishers. Chapter 1.

Carbon Footprint II

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Synonyms

Greenhouse Gas Footprint or Climate Footprint

Definition

Carbon footprints have been designed and promoted by nongovernmental organizations, companies, and different private organizations that have climate change in the spotlight. Historically, it has been associated with emission sources, without paying excessive attention to emission drivers (Peters 2010); among emission drivers, we can identify firms, organizations, households, existing infrastructures, production systems, or government policies and nations.

Introduction

Over last years, firms are aimed to diminish emissions from their business activities, and invest in low-emissions products and technologies (Kolk et al. 2008). Moreover, organizations are seeking to develop “organizational and informational infrastructures for assessing, measuring, reporting and managing greenhouse gas emissions and their associated impacts” (Kolk et al. 2008, p. 720). Climate change and the reduction of the carbon emissions are one of the main environmental concerns of communities, organizations, firms, policymakers, governments, and so on (Weidema et al. 2008). In this context, the United Nations, the European Union, and a large list of countries have established regulation and planned tools with the purpose of reducing the carbon emissions (Hua et al. 2011). Their objective was to reduce and alleviate global warming.

In general, and as Wiedmann and Minx (2008) pointed out, the agenda of organizations, investors, politicians and society has seen an increase in both issues and concerns about climate change, demanding greater attention regarding the carbon footprint. It is necessary that companies begin to include its management into their corporate choices for reducing global warming and, more specifically, carbon emissions (Hua et al. 2011). Precisely, among the reasons for being carbon footprint it is in the interest caused by household environmental and integrated product policy (Hertwich 2005; Lenzen and Foran 2001). Hertwich (2005) pointed out that activities

causing GHG emissions help humans by providing consumer goods and services. Lenzen et al. (2001), meanwhile, for an Australian study defended the need of a responsible water use because of its consumption activities and the life-style gleaned therefrom. It must be not valid to apportion the environmental damage from inappropriate water use.

This term has undergone a remarkable evolution in recent years which particularly stands out in the UK (Weidema et al. 2008). Carbon footprints have been planned and promoted by non-governmental organizations, companies, and different private organizations that have climate change in the spotlight. Historically, it has been associated with emission sources, without paying excessive attention to emission drivers (Peters 2010); among emission drivers, we can identify firms, organizations, households, existing infrastructures, production systems, or government policies and nations.

However, despite its growing importance and relevance within the academy, to date no common definition of carbon footprint has been found. It generates and leads to a notable confusion about that term. Numerous are the explanations about its concept and numerous are the approaches adopted in the definitions, but there is no single definition that is homogeneous and unanimous in the literature. Wiedmann and Minx (2008) collect in their study some of these definitions that provide the basic ideas about what carbon footprint is, and what we understand by carbon footprint that we synthesize in the following:

- For BP (2007), “the carbon footprint is the amount of carbon dioxide emitted due to your daily activities – from washing a load of laundry to driving a carload of kids to school.”
- Patel (2006) pointed out that for the British Sky Broadcasting (SKY), they are measured as “the CO₂ equivalent emissions from its premises, company-owned vehicles, business travel and waste to landfill.”
- The Carbon Trust (2007) pointed out “... a methodology to estimate the total emission of greenhouse gases (GHG) in carbon equivalents from a product across its life cycle from the production of raw material used in its manufacture, to disposal of the finished product (excluding in-use emissions)”; and “... a technique for identifying and measuring the individual greenhouse gas emissions from each activity within a supply chain process step and the framework for attributing these to each output product (we [The Carbon Trust] will refer to this as the product’s ‘carbon footprint’)” (Carbon Trust 2007, p. 4).
- For ETAP (2007) “...the ‘Carbon Footprint’ is a measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in tonnes of carbon dioxide.”
- Meanwhile, the Global Footprint Network (GFN) in 2007 defines carbon footprints highlighting “the demand on biocapacity required to sequester (through photosynthesis) the carbon dioxide (CO₂) emissions from fossil fuel combustion” (GFN 2007).
- Grubb and Ellis (2007) clearly pointed out that “a carbon footprint is a measure of the amount of carbon dioxide emitted through the combustion of fossil fuels. In the case of a business organization, it is the amount of CO₂ emitted either directly or indirectly as a result of its everyday operations. It also might reflect the fossil energy represented in a product or commodity reaching market.”
- Peters (2010, p. 245) defines them as “all emissions of a product both backward in time from the point of consumption to emissions sources and forward in time to include the use and disposal phase of products” and “carbon footprint may be too restrictive as climate is affected by more than carbon (e.g., N₂O, SO₂, black carbon, land use change, albedo, and so on).”
- For the Paliamentary Office of Science and Technology (2006), “a ‘carbon footprint’ is the total amount of CO₂ and other greenhouse gases, emitted over the full life cycle of a process or product.”
- Lash and Wellington (2007) and Hertwich and Peters (2009) consider that the term also represents the interest of several agents like industries, consumers, suppliers, regulatory bodies,

and so on. Hertwich and Peters (2009, p. 6414) define the term “as the greenhouse gases CO₂, methane, nitrous oxide and fluoride emitted in the production of goods and services used for final consumption and greenhouse gases emissions occurring during the consumption activities themselves.”

- Following the Carbon Trust (2009), for Hua et al. (2011, p. 179), “carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organization, event or product in tonnes (The accounting profession normally avoids any type of conversion and tries to express each phenomenon to the most appropriate extent (Stahmer 2000). In this regard and regarding the measure of carbon footprint, Wiedmann and Minx (2008) choose to express and measure the carbon footprints in tonnes of carbon dioxide, with this measure they try to avoid the use of type of conversion.) (or kg) of CO₂ equivalent.”

From the above, Wiedmann and Minx (2008, p. 4) being aware of the previous definitions clarify the definition as follows: “carbon footprint is a measure of exclusive total amount of carbon dioxide emissions that is directly and indirectly caused by an activity or is accumulated over the life stages of a product.” Examining in detail the definition, these authors include as carbon footprint all the activities of the different agents (populations, governments, businesses, organizations, activity sectors, and so on, and even products refer to good and services). Moreover, they stated that for calculating carbon footprint direct and indirect emissions must be considered. It must be noted that direct emissions refer to on-site and internal emissions while indirect emissions refer to off-site, external, embodied, upstream, and downstream emissions.

As Peters (2010) pointed out, there is not an extensively recognized term of carbon footprint. Nonetheless, once we have covered its definition, it also is necessary to point out the following steps for organizations, consumers, governments, policymakers, and so on for decreasing carbon emissions. As Carbon Trust (2006, p. 4) included

in its reports, “managing the carbon footprint of products across the supply chain is the next step for business to take in the effort to reduce carbon emissions and mitigate climate change. There are several issues driving business to take action, including: (i) increases in direct energy costs and the energy costs of suppliers; (ii) existing and planned legislation which penalises high energy consumption and rewards emissions reductions; and (iii) changing consumer attitudes to climate change, presenting forward-thinking companies with an opportunity to develop and market low-carbon products.”

In this respect, Carbon Trust (2006, p. 6) also suggest the existence of three steps that any organization can take to decrease the carbon footprint and thus slow down climate change. In the following and attending to the report of this organization, the three stages are described.

The first step focuses efforts on decreasing direct emissions. The proposed actions are:

- “Implementing all cost-effective energy efficiency measures, such as heating and lighting upgrades, using new process technologies and delivering staff training and awareness programs.
- Developing low-carbon energy sources such as on-site generation.
- Addressing the more strategic business risks and opportunities associated with climate change. Typically, this can include work on regulatory compliance, value at risk, future cost of carbon, other market risks and opportunities, and shareholder and other stakeholder impacts.”

As Carbon Trust (2006) highlights, there are several associated benefits of doing this. Among them, cost savings stand out as the organization reduces the cost of its energy bills. Also, there is the improvement of operational efficiency and its reputation. And finally, the reduction of regulatory risks also stands out.

The second step focuses on decreasing indirect emissions by working with organizations via the supply chain. Through the supply chain, the amount of carbon footprint can be calculated

since the total quantity of raw materials and all the necessary processes are considered until the final good/service is on the market. Knowing these data allows us to identify those sections of the supply chain where efforts must be intensified to reduce emissions and energy costs. Furthermore, it should not be forgotten that this approach allows companies to adapt to changes in consumer demands, being able to develop products adapted to low carbon emissions that have a positive impact on their market value and corporate performance.

Step 3 is elective and is focused on offsetting. Carbon Trust (2006) considers carbon offprint as the possibility of offsetting the carbon emissions of one company with others. This is materialized through credits related to the reduction of emissions of carbon dioxide or other greenhouse gases. This initiative may be interesting for those companies more oriented to the consumer or the service sector due to the benefits associated with action against climate change. Of course, to guarantee the success of the carbon offprint it is essential that the credits that are acquired are correlated with verified projects and really linked to emission reductions.

In the first step, the abovementioned direct emissions are analyzed considering a wide variety of business actions, which also includes a set of products designed and provided by the Carbon Trust. In addition, several companies have also chosen to develop strategies that allow them to compensate for excess emissions; they buy credits associated with reducing gas emissions (third step). It should be noted that to achieve the reduction imposed by the UK, much deeper cuts are required than what is proposed at this stage, so every organization should also consider the opportunity to reduce the carbon footprint related to the second step.

Referring again to the Carbon Trust (2006) report, in page 9 this organization pointed out that “the methodology developed draws heavily on standard life-cycle analysis techniques (LCA).” The United Nations Environment Program (UNEP) describes LCA as “. . .the process

of evaluating the effects that a product has on the environment over the entire period of its life cycle. . . extraction and processing; manufacture; transport and distribution; use, re-use and maintenance; recycling and final disposal.” Moreover, the methodology to calculate carbon footprints could be described in four stages. The first stage refers to the initial scrutiny; the second stage to its construction; the third stage to identify opportunities and establish the order of priority between them; and the last stage to the development of the plan once the results of the previous phases have been presented.

But the debate is not only about what the carbon footprint is, but also how this footprint carbon is to be measured. Wiedmann and Minx (2008) precisely question whether carbon footprint must contain CO₂ emissions, other greenhouse gas emissions, or even additional constituents that do not contain carbon in their molecule. Carbon footprints are valuable for promoting and implementing more active policies for decreasing climate change (Matthews et al. 2008). In any case, the data and nature of the information of the carbon footprint will be contingent on how it was measured, then multiple possibilities exist. Weidema et al. (2008) was also aware of the diversity of possibilities to quantify and present carbon emissions data in a consistent manner. Among the range of possibilities, Weidemann and Minx (2008) point out that they could be measured from two methodological approaches. The first of them refers to the bottom up and is based on a process analysis (PA). The second one refers to the top down and is based on environmental input-output (EIO). In spite of the differences that will later be signaled between both approaches, both are aimed at capturing the full life cycle. Peters (2010), at this respect, suggest that the method used to measure carbon footprint depends on the type of products. Consumer products usually use bottom-up LC. But, other studies usually employ the top-down input-output analysis (Wiedmann 2009) especially when they focus at country level. But also, as Weidemann and Minx (2008) suggest, the selection of the

approach also is contingent to the accessibility of data and the purpose of the enquiry.

PA is the bottom-up approach, developed with the aim of reinforcing the understanding of the environmental effect that individual products have from the beginning to the end of their days (Wiedmann and Minx 2008). At this respect, Lenzen and Foran (2001) pointed out that the bottom-up nature of PA-LCAs reflects a system boundary problem only on-site. When this approach is adopted to calculate and capture the carbon footprint, special care should be paid to the identification of system boundaries. It should be noted, however, as Tukker and Jansen (2006) and Wiedmann and Minx (2008, p. 5) suggest, that the adoption of this approach requires that “a subset of individual products be representative for a larger product grouping and the use of information from different databases.”

For its part, the EOI approach has a top-down orientation to compute carbon footprint. Under this method, information is provided on all organizations at the sector level. Considering that the environmental data will be robust, under this approach of top-down EOI, the carbon footprints could be estimated by employing a more inclusive and strong technique. As in the previous approach, it is necessary to set the entire economic system as a boundary line (Wiedmann and Minx 2008). As a disadvantage, this method also requires that – at sector level – the product (good/service) be restricted, and that there be homogeneity in prices, outputs, and carbon emissions. Nonetheless, its main benefit is the shorter time and manpower (Wiedmann and Minx 2008).

The best possible approach would be the combination in a hybrid of both methods, thus combining the strengths of each of them and minimizing their disadvantages (Suh et al. 2004; Heijungs and Suh 2013). This fusion would consider preserving the detail and accuracy of the PA approach while covering the high-order requirements of the EOI approach.

Finally, the process of standardization of a unique and valid measure of carbon footprint

is one of the manifestations that firms, organizations, households, governments, and so on are beginning to diminish carbon footprint and take into account in their business decisions (Peters 2010). Many of these agents are increasing their concerns about climate change and carbon emissions, designing and promoting so several projects to reduce the global climate change (as carbon footprint). Global carbon emissions regulation is imminent (Matthews et al. 2008). At this respect and as final remark, in the development of valid and generalizable measures of carbon footprint the international trade should be included; the unanimous measure must include a more comprehensive approach for carbon footprint estimation.

Cross-References

- [Carbon Disclosure Project](#)
- [Carbon Offsets](#)
- [Carbon Trading Schemes](#)

References

- BP. (2007). *What is a Carbon footprint?* http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/A/ABP_ADV_what_on_earth_is_a_carbon_footprint.pdf
- Carbon Trust. (2006, November). *Carbon footprints in the supply chain: The next step for business*. Report number CTC616, The Carbon Trust, London. <http://www.carbontrust.co.uk>
- Carbon Trust. (2007, February 27). *Carbon footprint measurement methodology*, version 1.1. The Carbon Trust, London. <http://www.carbontrust.co.uk>
- Carbontrust. (2009). <https://www.carbontrust.co.uk/cut-carbon-reduce-costs/calculate/carbon-footprint/pages/carbon-footprint.aspx>. Accessed 05 April 2018.
- ETAP. (2007). *The Carbon Trust helps UK businesses reduce their environmental impact*. Press release. http://ec.europa.eu/environment/etap/pdfs/jan07_carbon_trust_initiative.pdf
- GFN. (2007). *Ecological footprint glossary*. Global Footprint Network, Oakland. Accessed July 2007 from http://www.footprintnetwork.org/gfn_sub.php?content=glossary
- Grubb, E., & Ellis, C. (2007). *Meeting the carbon challenge: The role of commercial real estate owners*. Chicago: Users & Managers.

- Heijungs, R., & Suh, S. (2013). *The computational structure of life cycle assessment* (Vol. 11). Springer Science & Business Media.
- Hertwich, E. G. (2005). Life cycle approaches to sustainable consumption: A critical review. *Environmental Science & Technology*, 39(13), 4673–4684.
- Hertwich, E. G., & Peters, G. P. (2009). Carbon footprint of nations: A global, trade-linked analysis. *Environmental Science & Technology*, 43(16), 6414–6420.
- Hua, G., Cheng, T. C. E., & Wang, S. (2011). Managing carbon footprints in inventory management. *International Journal of Production Economics*, 132(2), 178–185.
- Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *European Accounting Review*, 17(4), 719–745.
- Lash, J., & Wellington, F. (2007). Competitive advantage on a warming planet.
- Lenzen, M., & Foran, B. (2001). An input–output analysis of Australian water usage. *Water Policy*, 3(4), 321–340.
- Matthews, H. S., Hendrickson, C. T., & Weber, C. L. (2008). The importance of carbon footprint estimation boundaries. *Environmental Science and Technology*, 42(16), 5839–5842.
- Paliamentary Office of Science and Technology (2006). Carbon footprint of electricity generation, October 2006. Available at: [chrome-extension://efaidnbmnnnibpcajpcgicclefindmkaj/ https://researchbriefings.files.parliament.uk/documents/POST-PN-268/POST-PN-268.pdf](chrome-extension://efaidnbmnnnibpcajpcgicclefindmkaj/https://researchbriefings.files.parliament.uk/documents/POST-PN-268/POST-PN-268.pdf)
- Patel, J. (2006). Green sky thinking. *Environment Business*, 122, 32.
- Peters, G. P. (2010). Carbon footprints and embodied carbon at multiple scales. *Current Opinion in Environmental Sustainability*, 2(4), 245–250.
- Stahmer, C. (2000). The magic triangle of input-output tables. In *13th international conference on input-output techniques* (Vol. 21, p. 25). Macerata: University of Macerata.
- Suh, S., Lenzen, M., Treloar, G. J., Hondo, H., Horvath, A., Huppes, G., & Munksgaard, J. (2004). System boundary selection in life-cycle inventories using hybrid approaches. *Environmental Science & Technology*, 38(3), 657–664.
- Tukker, A., & Jansen, B. (2006). Environmental impacts of products: A detailed review of studies. *Journal of Industrial Ecology*, 10(3), 159–182.
- Weidema, B. P., Thrane, M., Christensen, P., Schmidt, J., & Løkke, S. (2008). Carbon footprint. *Journal of Industrial Ecology*, 12(1), 3–6.
- Wiedmann, T. (2009). A review of recent multi-region input–output models used for consumption-based emission and resource accounting. *Ecological Economics*, 69(2), 211–222.
- Wiedmann, T., & Minx, J. (2008). A definition of ‘carbon footprint’. *Ecological Economics Research Trends*, 1, 1–11.

Carbon Handprint

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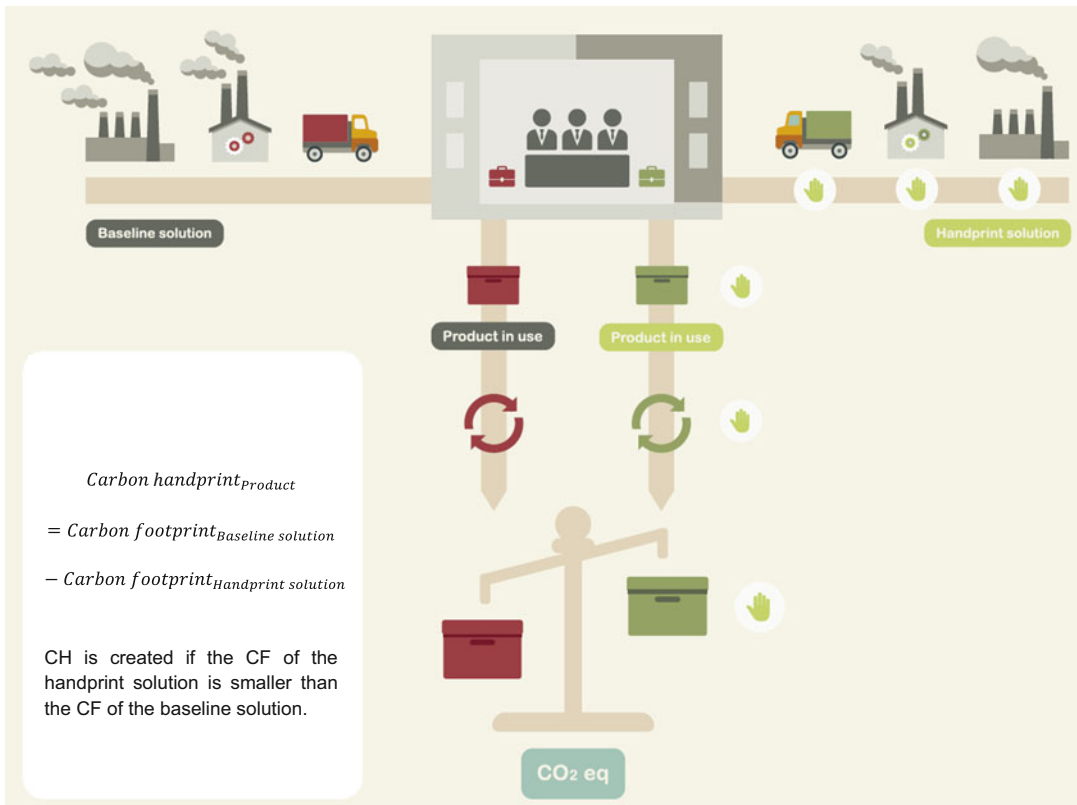
Definition/Description

A carbon handprint is a new approach developed to quantify the positive climate impact of products and services. In contrast to carbon footprint, which refers to negative global warming potential as a consequence of greenhouse gas (GHG) emissions over the life cycle of a product, a carbon handprint indicates the reduced amount of greenhouse gas emissions due to the use of a specific product or a service. A carbon handprint can be thus defined as *the beneficial climate impact that organizations can achieve and communicate by providing products or services that reduce the carbon footprints of customers* (Grönman et al. 2019).

Carbon handprint builds upon the assumption that reducing the product’s carbon footprint alone is not a handprint. Carbon handprint can be achieved in a provider–customer relationship, when the provided goods, intermediate product, raw material, service, technology, etc. (hereafter: a product), that a customer uses, serves to reduce the customer’s carbon footprint when compared to a baseline practice. A carbon handprint, therefore, is always a carbon footprint calculation of the modified situation against the baseline situation: see Fig. 1. Carbon handprint can be used in the communicating and marketing of global warming reduction potential as well as in identifying the development needs of a product.

Development of the Handprint Concept

The term ‘handprint’ was first introduced in 2007 by UNESCO and determined as a measure of Education for Sustainable Development action, aiming to decrease the human footprint (Hand



Carbon Handprint, Fig. 1 Carbon handprint (CH) is the difference of carbon footprints (CF) of the baseline solution and the handprint solution when a customer is using either the baseline product or the handprint product

Print Action Toward Sustainability [n.d.](#)). Shifting handprints to serve as environmental indicators is based on the work done by Biemer et al. (2013) and Norris (2015). Grönman et al. (2019) introduced the definition (see above) and calculation guidelines specifically for carbon handprint assessments. Norris (2019) backs up the Grönman et al. definition by determining handprints as *reductions in footprint related impacts outside the scope of the actor's footprint with respect to business as usual*. Most recently, Kühnen et al. (2019) introduced a handprint methodology that focuses on positive contributions to sustainable development.

The need for carbon handprint quantification and communication has risen from the industrial sector. Many companies and organizations already act responsibly toward the environment, so they might have already minimized their resource use as well as the emissions and waste

created. They could even be providing products or services that help their customers reduce their environmental impact. However, these frontrunner companies have also been forced to settle for using traditional life cycle assessment (LCA) quantifying their negative environmental impacts. Besides handprints, other concepts or indicators for environmental benefits have emerged, e.g. Cradle to Cradle (McDonough and Braungart 2002), unburdening of the environment (Kravanja and Čuček 2013), positive footprints (Dyllick and Muff 2016), and net positivity (Dyllick and Rost 2017; Norris 2015).

The goal for carbon footprints is to see a reduction close to zero whereas, with handprints, there is no upper limit on the positive impacts that can be achieved (Biemer et al. 2013). Some studies have used a negative footprint to illustrate the positive impact, which has led to confusion regarding the footprint concept. These starting

points indicate a clear need for developing a scientifically sound calculation approach for carbon handprint that organizations can use effectively.

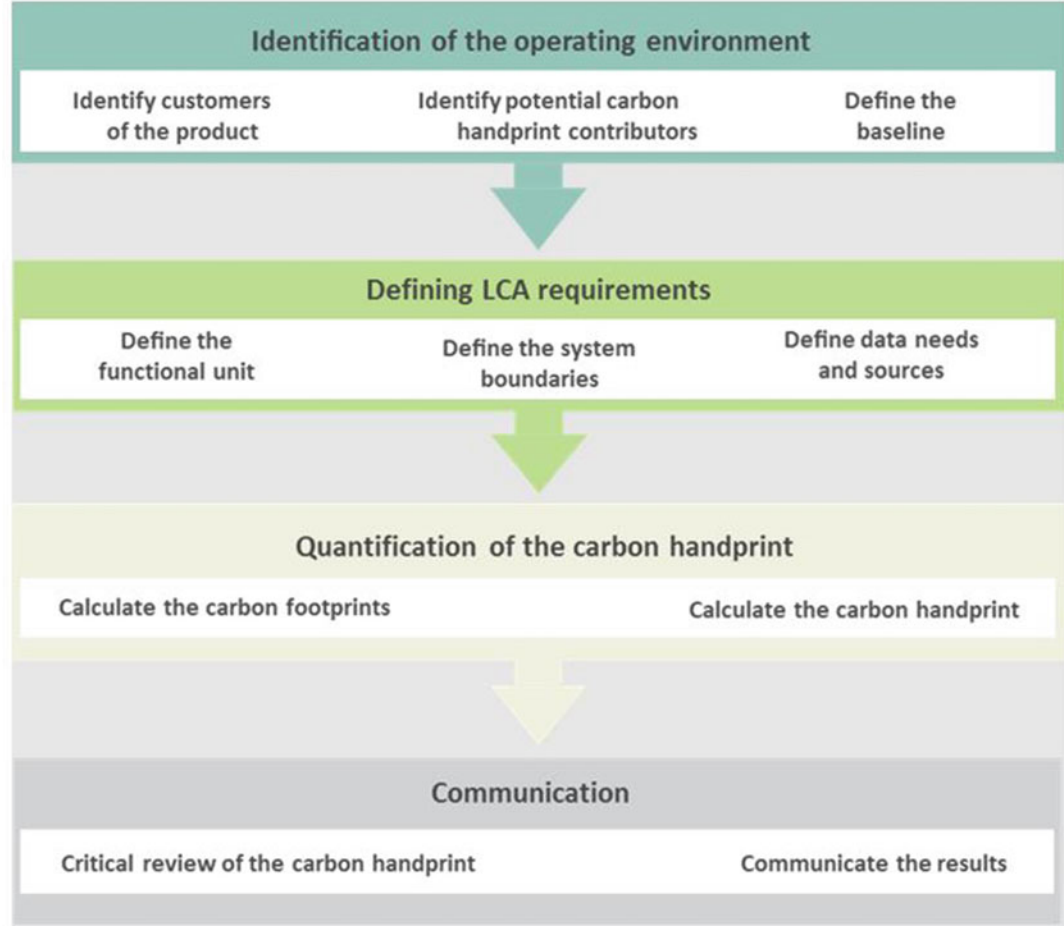
Carbon Handprint Calculation Process

The carbon handprint approach of Grönman et al. (2019), which is further presented in Pajula et al. (2018) and Vatanen et al. (2018), is based on ISO standards for life cycle assessment (ISO 14040 2006 & ISO 14044 2006) and for carbon footprint (ISO 14067 2018). The carbon handprint approach complements these standards by offering guidance in setting up a comparison between the handprint solution and baseline solution:

especially by identifying customers of the product, identifying potential carbon handprint contributors, and defining the baseline. Figure 2 illustrates the four stages and ten steps in the carbon handprint approach, which are then described in more detail.

Stage 1: Identification of the Operation Environment

In the first stage, the conditions of the product’s operational environment are identified. This stage forms the core of the carbon handprint assessment and is additional to traditional LCA. As the first step, the (potential) user of the product, or the customer, is recognized. Because carbon handprint is always calculated in the



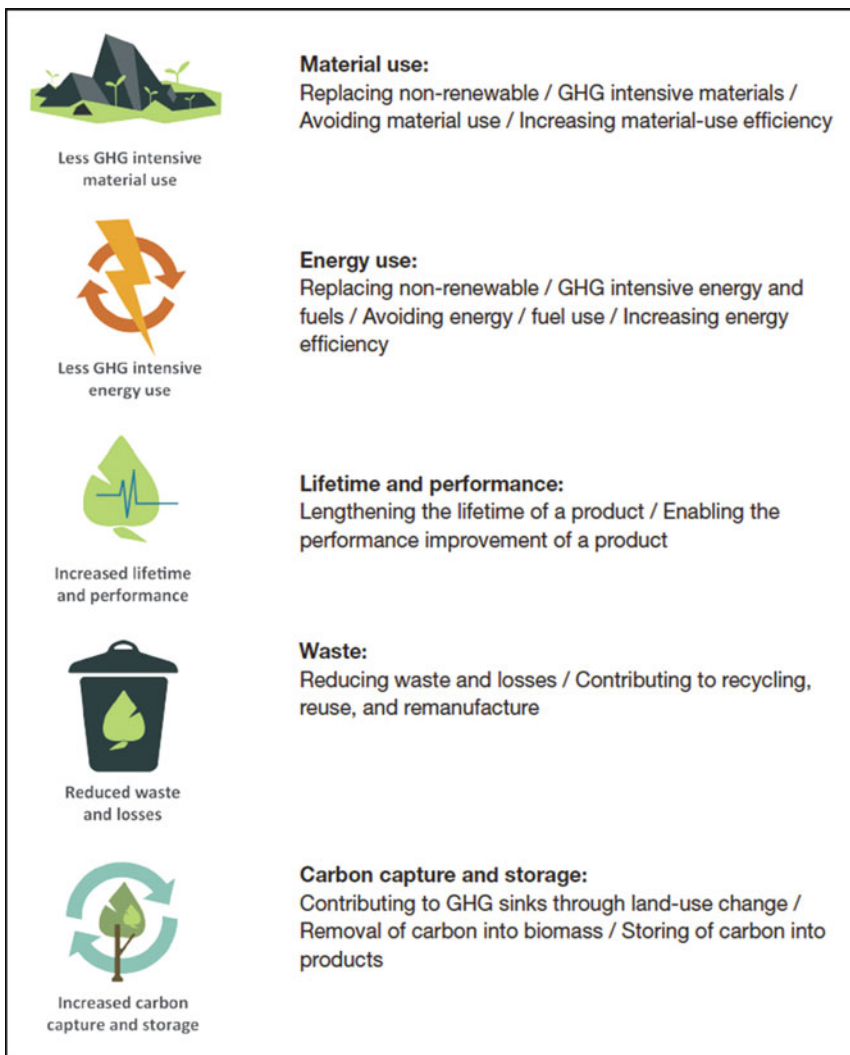
Carbon Handprint, Fig. 2 The carbon handprint calculation process (Pajula et al. 2018)

provider–customer interface, it is essential to define who the customers are and where and how they are using the product. Different kinds of customers using the product differently or in different operating environments can also be identified.

Next, a hypothesis is formed on the mechanism, in terms of how this product can reduce the carbon footprint of the customer using it. This hypothesis affects in following steps, defining the baseline and the system boundaries. Whether the carbon handprint outperforms the baseline product in this regard will be verified

while conducting the carbon footprint calculations. Examples of possible contributing mechanisms for carbon handprint creation can be seen in Fig. 3.

As a third step, the baseline is defined. The baseline solution should deliver the same function as the handprint solution, be used for the same purpose, be available on the same market in a specified time period and geographical location, and be assessed consistently following the LCA guidance in terms of several key factors, e.g. data quality, representativeness, system boundaries, and assumptions.



Carbon Handprint, Fig. 3 Possible contributing mechanisms to carbon handprint (Pajula et al. 2018)

If the product is entirely new on the market, the baseline has to be set to reflect the current situation without the product. However, if a (more sophisticated) product replaces a current market-available product, the conductors of the assessment have to define the baseline based on the specific customer's current product. If the customer cannot be precisely identified and, thus, the current baseline product cannot be determined directly, one must set the baseline complying with three key criteria. First, choose a market leader or a typical product in the identified reference area and time. Second, if identifying one typical product is not possible, one can use an average product in that specific region and time. As a third option, available product specifications, standards, or best available technique reference documents can be used as a baseline. This can be a justified choice, if there is an abundant amount of business-as-usual solutions or if data on the competitor's solution is difficult to attain.

Stage 2: Defining LCA Requirements

The second stage in the process covers the essential steps regarding LCA requirements. First, the functional unit of the study describes the performance of the studied product system and provides a reference on which the resulting greenhouse gas emissions are related. Second, the system boundaries defining unit processes to be included or excluded from the study are set. The system boundaries should be set consistently with the goal of the study and, therefore, always include the product's use phase by the customer. It is also important to have equal system boundaries for the baseline and the handprint solutions. Third, data needs and sources are identified. If the customer of the product can be identified in the previous stage, one should aim to use the most recent primary data from that customer. If this is not possible, statistical or average data needs to be used. However, the aim is to have data that is as representative as possible of the actual operating environment, both for the baseline and for the handprint solution.

Next, the carbon footprint calculation for the baseline solution, as well as for the handprint solution, is conducted following ISO 14067

guidance. After that, these two footprints are compared and the difference equals the carbon handprint of the product. The product that enabled this reduction gets the carbon handprint, and the carbon footprint reduction benefits the customer using that product. In some cases, the baseline solution has a lower carbon footprint than the handprint solution. Then, no carbon handprint is not created.

The final step in the carbon handprint approach focuses on communication. First, a critical review is recommended if the study is intended to be disclosed to a public audience. Second, the results of the study are to be communicated following the principles of appropriateness, clarity, credibility, and transparency – as presented in ISO 14026 (2017) and ISO 14063 (2010). Kilograms of carbon dioxide equivalents [kg CO₂eq.] per functional unit is the carbon handprint unit used for describing greenhouse gas emission reduction. However, using more informative reference unit instead the functional unit may be reasonable for better communicating the results to the audience. As carbon handprint is new as a concept, and the logic of creating a handprint differs from a footprint, the term and results can be difficult to convey. Additionally, also hindering the communication is a great deal of information and assumptions that should be acknowledged, as is the case in LCA or footprint studies too.

Summary

The lack of methods for calculating and communicating the beneficial environmental impacts of products and services has led to the development of a carbon handprint approach. The purpose of this approach is to assess and communicate the positive climate impact of products and services, thereby incentivizing responsible practices and allowing educated choices.

The core of the approach involves comparing the carbon footprint of an improved product with the carbon footprint of the baseline product and, subsequently, calculating the reduction in greenhouse gas emissions that can be achieved by using the improved product. The carbon handprint

approach is founded on the standardized life cycle assessment methodology for footprints.

Organizations can use carbon handprints to quantify the greenhouse gas reductions that their customers can achieve by using provided products. The carbon handprint can, thus, serve as a tool in communications and marketing. A company can also find out how their product qualifies in comparison to baseline products and, therefore, carbon handprints can also support decision-making and lifelong product design. Through future research, the handprint methodology may be adjusted to also cover other environmental impact categories or indicators.

Cross-References

- Carbon Footprint
- Life Cycle Assessment

References

- Biemer, J., Dixon, W., Blackburn, N., (2013). Our environmental handprint – The good we do. 2013 1st IEEE Conf. Technol. Sustain. SusTech 2013, pp. 146–153. <https://doi.org/10.1109/SusTech.2013.6617312>.
- Dyllick, T., & Muff, K. (2016). Clarifying the Meaning of sustainable business: introducing a typology from business-as-usual to true business sustainability. *Organization and Environment*, 29, 156–174. <https://doi.org/10.1177/1086026615575176>.
- Dyllick, T., & Rost, Z. (2017). Towards true product sustainability. *Journal of Cleaner Production*, 162, 346–360. <https://doi.org/10.1016/j.jclepro.2017.05.189>.
- Grönman, K., Pajula, T., Sillman, J., Leino, M., Vatanen, S., Kasurinen, H., Soininen, A., & Soukka, R. (2019). Carbon handprint – An approach to assess the positive climate impacts of products demonstrated via renewable diesel case. *Journal of Cleaner Production*, 206, 1059–1072. <https://doi.org/10.1016/j.jclepro.2018.09.233>.
- Hand Print Action Towards Sustainability (n.d.) Evolution of handprint (WWW Document). http://www.handprint.in/handprint_legacy Accessed 6 June 2017.
- ISO 14026. (2017). Environmental labels and declarations – Principles, requirements and guidelines for communication of footprint information. Brussels: European Committee for Standardization.
- ISO 14040. (2006). Environmental management, Life cycle assessment, Principles and framework. Brussels: European Committee for Standardization.
- ISO 14044. (2006). Environmental management, Life cycle assessment, Requirements and guidelines. Brussels: European Committee for Standardization.
- ISO 14063. (2010). Environmental management. Environmental communication. Guidelines and examples. Brussels: European Committee for Standardization.
- ISO 14067. (2018). Greenhouse gases. Carbon footprint of products. Requirements and guidelines for quantification. Brussels: European Committee for Standardization.
- Kravanja, Z., & Čuček, L. (2013). Multi-objective optimisation for generating sustainable solutions considering total effects on the environment. *Applied Energy*, 101, 67–80. <https://doi.org/10.1016/J.APENERGY.2012.04.025>.
- Kühnen, M., Silva, S., Beckmann, J., Eberle, U., Hahn, R., Hermann, C., Schaltegger, S., & Schmid, M. (2019). Contributions to the sustainable development goals in lifecycle sustainability assessment: Insights from the Handprint research project. *Nachhaltigkeits Management Forum*, 27, 65–82. <https://doi.org/10.1007/s00550-019-00484-y>.
- McDonough, W., & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things* (1st ed.). New York: North Point Press.
- Norris, G. (2019). Net positive methodology summary (WWW Document). https://static1.squarespace.com/static/5af56b9436099b397b0c0ec7/t/5c5d6091e5e5f0151eac4f31/1549623442097/Net+Positive+Project+Methodology+Summary_Jan+2019.pdf. Accessed 11 June 2019.
- Norris, G. (2015). Handprint-based net positive assessment (WWW Document). http://hwpi.harvard.edu/files/chge/files/handprintbased_netpositive_assessment.pdf. Accessed 11 June 2019.
- Pajula, T., Vatanen, S., Pihkola, H., Grönman, K., Kasurinen, H., Soukka, R. (2018). Carbon handprint guide (WWW document). https://www.vtt.fi/sites/handprint/PublishingImages/Carbon_Handprint_Guide.pdf Accessed 12.11.18.
- Vatanen, S., Grönman, K., Pajula, T., Pihkola, H., Soukka, R., Kasurinen, H., Behm, K., Hohenthal, C., Sillman, J., & Leino, M., 2018. The carbon handprint approach to assessing and communicating the positive climate impact of products (WWW document). VTT Technol. 346. <https://www.vtt.fi/inf/pdf/technology/2018/T346.pdf> Accessed 20 Dec 2018.

Carbon Management

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Synonyms

Greenhouse gas (GHG) management; Mitigation measures and mechanisms

Definition

Carbon management is managing the causes and impacts of climate change, mainly via mitigation measures and mechanisms. These include implementing mechanisms from international treaties, measuring and regulating mitigation measures, reducing carbon, i.e. greenhouse gas (GHG), emissions in the atmosphere, and governing global and local policies. Even though mitigation is defined as the primary goal of carbon management, some adaptation measures need to be taken to deal with the effects of climate change. From its inception, carbon management is a multi-disciplinary and interdisciplinary global issue; therefore, carbon management requires a wealth of knowledge from various areas. The adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 is the basis of international efforts. Related international treaties have led to several policy implementations on various levels. Although the energy sector is directly linked to carbon emissions and the buildings sector is the largest emitter, every sector can take measures. Each stakeholder must identify, assess, plan, and monitor their GHG emissions to reach relevant carbon goals. In this context, mitigation, economy, and policies lie at the core of carbon management.

Background

Carbon management is a multidisciplinary and interdisciplinary field. A variety of changes are linked to climate change including changes in the hydraulic cycle of the Earth, changes in sea levels, displacements of climate zones, increase in sudden climatic events, desertification, remarkable changes in glacial areas, epidemics related to temperature changes, and increase in pests. Besides, these physical changes are linked to the lives of humans and have various socio-economic effects. Understanding the entire carbon cycle requires an understanding of carbon sources, processes, and sinks. Therefore, the effect of human interventions on environmental mechanisms is not easy to determine.

The nature-based emissions – emitted during the carbon cycle – dominate the amount of carbon in the atmosphere; there were many claims that human-induced emissions are insignificant and there is no climate change or global warming, and even if there is, it is not human-induced. However, the findings of the United Nations Intergovernmental Panel on Climate Change (IPCC) show that climate change is occurring, and it is very likely caused by human-induced emissions. IPCC constantly reviews climate change science and reports its findings, and IPCC's models form the basis for unifying many diverse studies throughout the globe.

The main aim of carbon management is to decrease the total amount of carbon in the atmosphere to stabilize global temperature. Also called climate change mitigation, carbon management refers to actions that limit or reduce the amount of greenhouse gas (GHG) in the atmosphere. While various gasses play a role in climate change, the most infamous one is carbon dioxide; thus, the term “carbon emissions” is used as an alternative way to call GHG emissions. Theoretically, carbon neutrality can be reached as a net balance of zero between “emission sources” and “capture and storage”. Therefore, efforts to mitigate climate change lie in identifying their sources, utilizing more efficient or more sustainable resources, and increasing their sequestration. These processes have many interlinked facets, and current research tends to focus on integrated assessments. Here, the topic is discussed under the core headings of carbon mitigation, carbon economy, and carbon policies.

Carbon Mitigation

The cause of the climate change phenomenon has been accepted as correlating to human-induced GHG emissions. Yet there is still a need for research on climate models, so that carbon mitigation pathways that aim for a target temperature increase can be generated. The results from geophysical models largely depend upon the uncertainties of data input to the system. In time the number of relevant measurements and

accessibility to reliable data increases globally. For long-term projections, other causes of uncertainties include technological innovations, shifts in the economy, and policies. The spread of open research, open access, and data-sharing platforms and developments in information and communication technologies is making accessing and using data easier.

GHG emissions have been continuously increasing despite mitigation efforts. Moreover, the speed of growth between 2000 and 2010 was the highest in human history. The most recent relevant summary of carbon emissions, as well as drivers and trends for mitigation can be found in IPCC's Fifth Assessment Report (2014). The increase in GHG levels in the atmosphere is mainly related to the use of fossil fuel combustion and industrial processes. Therefore, at first, the target of carbon management strategies has been to regulate and possibly decrease the amount of existing carbon emissions. The first step was to increase the share of renewable energy in the energy sector, thereby decreasing the carbon intensity of the energy supply. While solar and onshore wind energy widely propagated into the market, the use of fossil fuels (coal in particular) has also increased since 2000, according to IPCC (2014).

Population growth, per capita production and consumption growth are the main drivers of GHG emissions. The carbon efficiencies of energy technologies are increasing with time. The trend of R&D budget for energy research in IEA member countries also strongly favors renewables while the share of nuclear and fossil fuels is decreasing, but the most significant increase is in energy efficiency research. However, the potential reductions of increased efficiency and other technological innovations are not reached. The "rebound effect" diminishes potential gains by triggering behavioral responses. In recent years, the overall increase in consumption, coupled with population growth, increased the total demand and related carbon emissions as a result despite reducing the energy intensity of products.

Many industries are changing their practices in accordance with the legislative requirements of reporting carbon in different scopes. The most

rapid rise is seen in emissions from international transport with logistics and smartness as primary issues. IPCC (2007) projects that the building sector can have the most impact on global emissions with the least amount of costs. This is because a 90% of reduction in projected baseline emissions is possible with less than 20US\$ per tCO₂-eq, which is possible by utilizing simple building energy efficiency and management measures. Even a 29% of reduction can be reached through behavioral changes at no cost. In addition, cities provide high mitigation opportunities since more than half of the human population is living in cities, and the city populations are increasing. However, some choices such as urban design, form, and infrastructure have long-lasting effects.

The existing cities and the life cycle of their elements must be considered in urban development. Besides, financial and institutional capacities limit what can be implemented. While embodied carbon is not a common concern, the concepts of recycling, reuse, and circularity are gaining attention and decreasing the new resource requirements and affecting related land use. With the increasing knowledge of ecosystems, making use of and strengthening ecosystem services in the desired direction, for instance, by bringing nature into cities is a prominent research topic with demonstration applications. Other research areas worth mentioning relate to smart cities, smart transportation, resilient design, circular economy, building energy management, biodesign, social responsibility, and encouraging pro-environmental behavior.

The easiest way to calculate carbon in the atmosphere is to look at human-induced energy use according to fuel type and looking at the removal of carbon from the atmosphere. Reducing the carbon from the atmosphere for mitigation is called carbon sequestration or carbon dioxide removal (CDR). In the carbon cycle, carbon is removed from the atmosphere through biological means. Carbon sinks, i.e., natural reservoirs that play a role in the carbon cycle by absorbing carbon, can be utilized for carbon sequestration; these include soil, photosynthetic organisms, and the ocean. The most common implementation

examples are afforestation or changing land use and land cover to vegetation, thus enhancing the ecosystem's capacity to sequester carbon.

Options without CDR include economic, efficiency, renewable energy, agricultural intensification, low-carbon technologies, lifestyle change, and low population growth. Van Vuuren et al. (2018) analyzed these diverse transition pathways to reach a 1.5 °C target set in the Paris Agreement and found that although these options greatly reduce the necessity for CDR, CDR is still necessary for reaching the target. Meanwhile, capturing waste carbon (by any means) is called carbon capture and storage (CCS), otherwise known as carbon capture and sequestration. The maturity of CCS technologies limits its utilization; meanwhile, areas for improvement include cost, capacity, leakage prevention, and possible effects on the environment.

Carbon Economy

Classic theories of international relations and economics are inadequate for capturing the challenges of climate change on global development (Sequeira and Reis 2019). The carbon economy is a relatively new term, since carbon trading started through market-based instruments started recently. The first instruments defined in the Kyoto Protocol emission trading schemes (ETS) include “cap-and-trade (CAT)” or “allowance” and “carbon credit.” Kyoto Protocol allows a country to redeem part of its obligations in other countries via a clean development mechanism (CDM) and joint implementation (JI). Other market instruments include “baseline and credit” and prescriptive regulation. Gillingham and Stock (2018) argue that the most economically efficient way to reduce emissions can be implemented by a Pigouvian tax for carbon so that externalities can be internalized, and markets find the most cost-effective ways without failing. However, a carbon tax is not common.

Many large corporations adopted carbon management practices (CMPs) and monitor, measure, and report their carbon emissions. Some argue that corporations use CMPs to either greenwash

or not deal with the real underlying problems about the exploitation of the environment. The literature on CMPs usually makes use of a wide range of case studies to find out which CMPs are more effective. More successful CMPs are flexible, dynamic, and in alignment with the corporation's strategy while ensuring stakeholder engagement (Mazhar et al. 2017). Yet, all evidence does not support that CMPs are successful; Doda et al. (2016) conducted the first large-scale empirical study to look at common corporate carbon management practices by using data from the Carbon Disclosure Project. They did not find enough evidence to support that common CMPs are effective and proposed three likely explanations: (1) Data reporting is nonstandard; (2) there is a possible delay between action and effect, or (3) the practices do not have enough impact.

The GHG Protocol defines scopes for GHG emissions to standardize calculations. Yet, approaches used for measuring, estimating, reporting, and verifying GHG emissions and removals are not standard, and all have limitations. For example, direct or indirect emission accounting changes the interpretation and expectations. The results of a CMP can be assessed by comparison against a “baseline” emission level. The “permanence,” i.e., its continuation till the promised carbon reduction is reached and the carbon decrease made possible with the funding (additionality) also needs consideration (Lansing 2012). The marginal cost per tCO₂-eq GHG emissions is around \$116 according to a meta-analysis of the literature while the regulatory agencies in the USA report a more conservative number of \$36 in 2007 (Di Filippo et al. 2019).

There is a strong correlation between gross domestic product (GDP) and emissions (IPCC 2014). Although there are some exceptions, a 1% GDP increase is associated with a 0.49% carbon emission increase related to fossil energy; this is mainly due to the rapid growth of some Asian countries. There is a wide range of carbon emissions for each added person according to socio-economic and geographical properties; in other words, behavior and lifestyle choices play a significant role in the amount of carbon emission per capita. While there is a 91-fold difference in

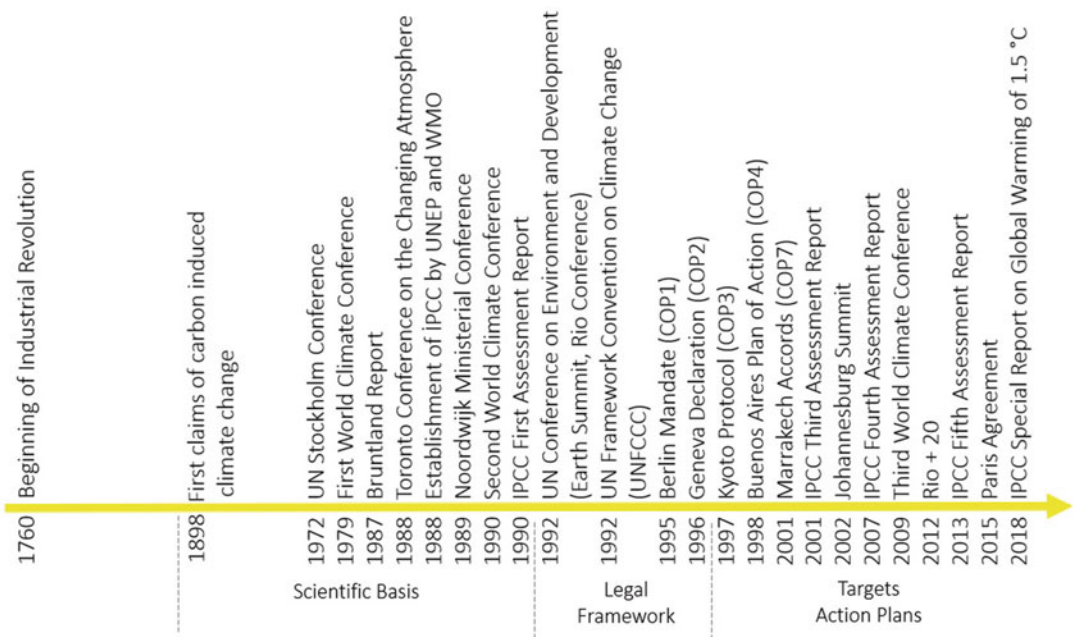
per capita emissions between the highest and lowest emitters (IPCC 2014), whether an increase in the population of high-income or low-income countries affects GHG emissions more is unclear since early stages of industrialization require higher consumption and cause associated emissions (Martínez-Zarzoso and Maruotti 2011).

Globally, low-income countries cause nearly ten times less emissions than high-income countries according to 2010 data. Yet, mitigation costs vary, and moving away from established business as usual practices can put a burden on economies, especially for low-income countries. Although there is no economic equity in costs of mitigation, mitigation efforts themselves provide more cobenefits for developing countries: improvement in indoor air quality and related health benefits; decrease in the energy requirements and related economic, infrastructure, energy security, and accessibility gains; and alternative employment and economic opportunities. These cobenefits are difficult to assess, and adverse side effects are also possible. For instance, a replacement technology can decrease carbon dioxide but cause other GHG emissions.

Carbon Policies

Policies affect all implementations, key drivers, and barriers to mitigation, even though carbon mitigation consists of several complex and inter-related issues. The basic international legal instrument against climate change is the United Nations Framework Convention on Climate Change (UNFCCC), which aimed to “stabilize the GHG concentrations in the atmosphere” and was adopted in 1992 during the Earth Summit. The UNFCCC required its Parties to make a national inventory of their GHG emissions and removals for 1990 data. It also mentioned “common but differentiated responsibilities” according to the economic development of countries (UNFCCC 1992).

There have been many international meetings and treaties in related fields within UNFCCC; Fig. 1 shows the historically significant points in time for carbon management policies, from the industrial revolution until 2020. After the first claims of human-induced climate change at the end of the nineteenth century until the establishment of UNFCCC has been the period for debates



Carbon Management, Fig. 1 Historically significant points for carbon management policies

and preparation of scientific basis related to carbon. Later, the legal framework was established, through which either legally binding or voluntary targets were set for implementation through many agreements, the most significant of which are the Kyoto Protocol and the Paris Agreement.

The Kyoto Protocol, adopted in 1997, laid out legally binding targets for the six GHG listed in its Annex A. The Protocol aimed to regulate and decrease emissions; thus, it assigned specific mitigation targets to countries according to their economic development. In addition to setting targets for carbon emissions, the Kyoto Protocol introduced an economical mechanism. Other significant meetings and developments happened before the second phase of the Kyoto Protocol entered into force. While the outlook that sees economic growth and environmental degradation as mutually exclusive was cast off, new targets and economic mechanisms were not widely agreed upon until the Paris Agreement in 2015.

The Paris Agreement aimed to keep the long-term “increase in global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above preindustrial levels” in the twenty-first century. Each country had the responsibility to set their own goals and roadmaps and report their nationally determined contributions (NDCs) to mitigation efforts within a very flexible mechanism, which allowed for making course corrections to reach targets within time. The Agreement supported capacity building and transparency with new technological and financial resources, including voluntary cooperation and nonmarket approaches that lead to mitigation outcomes (UNFCCC 2015).

While some claim that 1.5 °C is a well-thought target, some claim that it is ambitious or impossible to reach and criticize the accountability mechanism of the Paris Agreement with not promoting compliance (Rogelj et al. 2016). Mechanisms formed by international treaties can be either obligatory or voluntary. However, countries cannot manage each other’s internal affairs; therefore, free riding becomes an issue. To solve this issue, Nordhaus (2015) proposes

that countries create a climatic club, with trade penalties for nonparticipants. Buchholz and Sandler (2017) point out that environmental leadership usually encourages free riding instead of following the leader. Another solution can be international coordination by a big and powerful coalition, such as the European Union.

The Paris Agreement also considers the issues of adaptation, resilience, averting loss and damage, and climate change education that also need consideration in addition to mitigation goals. Adaptation is an approach to reduce the vulnerability of the expected effects of climate change by adjusting to a new normal. Adaptation does not only encompass reactions to minimize the impacts of the new system but also looks for opportunities to maximize benefits from the new situation. While Bayramoglu et al. (2018) relate mitigation with public good and adaptation with private good, they also show that adaptation strategies can complement and enhance the effects of mitigation efforts.

International agreements must be translated to come into effect so that implementation is possible at other levels. Besides adoption into the national legal system, domestic policies and local legislative measures are necessary. In other words, the law must be consolidated. Effective action at a local level and community engagement are vital. Grassroots activities can emerge when the governmental view is not in line with taking mitigation options. There are prescriptive legislation or more flexible mechanisms, in which a polluter can choose from options. Which mechanisms perform best, to regulate mitigation is unclear at the moment. Therefore, the performance of mitigation actions must be assessed for a low-carbon future.

Summary

Carbon management aims to utilize and develop appropriate resources and methods to preserve the future well-being and prosperity of humanity by mitigating climate change. It is a rapidly growing research field including modeling and assessing

technological, natural, governance measures, and strategies. Carbon mitigation pathways mainly involve reducing carbon emissions by utilizing alternative technologies, increasing carbon sinks, and capturing carbon. For accounting purposes, new and more reliable data is becoming available with the spread and advances in information and communication technologies; therefore, it is easier to develop, test, and improve models and metrics.

Carbon is on the agenda of every individual on earth since it cannot be researched in isolation from the other elements of the ecosystem. Energy generation and use are at the focus of carbon management since it is directly related to carbon emissions and all sectors are interconnected with energy. The building sector is the biggest emitter and provides the biggest opportunities for change with the least amount of cost. Also, environmental awareness is increasing. While the scope of carbon management stays on mitigation, experimental lifestyles, and economies of low-carbon, zero-carbon, or carbon-neutral qualities, are being developed, and there are some implementations.

Transitioning to lower carbon from traditional systems necessitates socio-economic transitions, mitigation costs, social acceptability, employment effects, and risk management, as well as policies of decision-makers. Linkages between sectors, supply-demand, adaptation pathways, environmental behavior, synergies, cobenefits, and tradeoffs are relevant research areas. Whether mitigation effects will be successful post-Paris Agreement is an ongoing intellectual debate. However, every study emphasizes that decisions today will have an impact on the global climate. Delaying mitigation restricts the options of carbon management pathways for a target global temperature increase, thus continuous efforts are necessary.

Cross-References

- Carbon Disclosure Project
- Carbon Emissions
- Carbon Footprint
- Carbon Offsets

- Carbon Trading Schemes
- Clean Development Mechanism (CDM)
- Climate Change
- Energy Demand Management
- Energy-Renewable
- Global Warming
- Greenhouse Gases
- Net Zero Emission
- Paris Agreement
- Smart Cities
- Sustainable Energy

References

- Bayramoglu, B., Finus, M., & Jacques, J. F. (2018). Climate agreements in a mitigation-adaptation game. *Journal of Public Economics*, 165, 101–113. <https://doi.org/10.1016/j.jpubeco.2018.07.005>.
- Buchholz, W., & Sandler, T. (2017). Successful leadership in global public good provision: Incorporating Behavioural approaches. *Environmental and Resource Economics*, 67, 591–607. <https://doi.org/10.1007/s10640-016-9997-2>.
- Di Filippo, J., Karpman, J., & DeShazo, J. R. (2019). The impacts of policies to reduce CO2 emissions within the concrete supply chain. *Cement and Concrete Composites*, 101, 67–82. <https://doi.org/10.1016/j.cemconcomp.2018.08.003>.
- Doda, B., Gennaioli, C., Gouldson, A., Grover, D., & Sullivan, R. (2016). Are corporate carbon management practices reducing corporate carbon emissions? *Corporate Social Responsibility and Environmental Management*, 23(5), 257–270. <https://doi.org/10.1002/csr.1369>.
- Gillingham, K., & Stock, J. H. (2018). The cost of reducing greenhouse gas emissions. *Journal of Economic Perspectives*, 32(4), 53–72. <https://doi.org/10.1257/jep.32.4.53>.
- IPCC. (2007). *Climate change 2007: Mitigation. Contribution of Working Group III to the fourth assessment report of the intergovernmental panel on climate change: Technical summary*. Cambridge/New York.
- IPCC. (2014). *IPCC fifth assessment report (AR5)*. Cambridge/New York.
- Lansing, D. M. (2012). Performing Carbon's materiality: The production of carbon offsets and the framing of exchange. *Environment and Planning A*, 44(1), 204–220. <https://doi.org/10.1068/a44112>.
- Martínez-Zarzoso, I., & Maruotti, A. (2011). The impact of urbanization on CO2 emissions: Evidence from developing countries. *Ecological Economics*, 70(7), 1344–1353. <https://doi.org/10.1016/j.ecolecon.2011.02.009>.
- Mazhar, M. U., Bull, R., & Lemon, M. (2017). Critical success factors for embedding carbon management in organizations: Lessons from the UK higher education

- sector. *Carbon Management*, 8(5–6), 379–392. <https://doi.org/10.1080/17583004.2017.1386533>.
- Nordhaus, W. (2015). Climate clubs: Overcoming free-riding in international climate policy. *American Economic Review*, 105(4), 1339–1370. <https://doi.org/10.1257/aer.15000001>.
- Rogelj, J., Den Elzen, M., Höhne, N., Fransen, T., Fekete, H., Winkler, H., . . . & Meinshausen, M. (2016). Paris agreement climate proposals need a boost to keep warming well below 2 C. *Nature*, 534(7609), 631–639. <https://doi.org/10.1038/nature18307>.
- Sequeira, T., & Reis, L. (2019). *Climate change and global development*. Springer International Publishing.
- UNFCCC. (1992). United Nations framework convention on climate change. Report No. FCCC/INFORMAL/84. <https://unfccc.int/resource/docs/convkp/conveng.pdf>
- UNFCCC. (2015). Adoption of the Paris Agreement. Report No. FCCC/CP/2015/L.9/Rev.1. <http://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf>
- van Vuuren, D. P., Stehfest, E., Gernaat, D. E., Van Den Berg, M., Bijl, D. L., De Boer, H. S., . . . & Hof, A. F. (2018). Alternative pathways to the 1.5 C target reduce the need for negative emission technologies. *Nature Climate Change*, 8(5), 391–397. <https://doi.org/10.1038/s41558-018-0119-8>.

Carbon Neutrality

► Net Zero Emission

Carbon Offsets

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Definition

Contextualizing carbon offsets, Kolk et al. (2008, p. 722) defend that carbon trading has emerged as the basis of the growing global climate regime, improving and facilitating the convergence of business, governments, NGOs, and academics and professionals around a somewhat fragmented, decentralized, and market-oriented mode of

carbon governance (Aulisi et al. 2005). Referring to the history of carbon offsets, in the beginning, they were created to establish relationships between market environmentalist-oriented NGOs and large companies to reduce the carbon footprint of investors with a clearly philanthropic and ethical objective (Bayon et al. 2012). The first voluntary carbon offsets born in 1989 when AES Corporation (from the United States of America) invested in agroforestry in Guatemala (Hawn 2005).

Introduction

Parallel to the Clean Development Mechanism created by the Kyoto Protocol, a voluntary market for carbon offsets has emerged particularly oriented to those organizations or individuals in countries where strategies are against the Kyoto Protocol (Bumpus and Liverman 2008). Contextualizing carbon offsets, Kolk et al. (2008, p. 722) defend that carbon trading has emerged as the basis of the growing global climate regime, improving and facilitating the convergence of business, governments, NGOs, and academics and professionals around a somewhat fragmented, decentralized, and market-oriented mode of carbon governance (Aulisi et al. 2005). Referring to the history of carbon offsets, in the beginning, they were created to establish relationships between market environmentalist-oriented NGOs and large companies to reduce the carbon footprint of investors with a clearly philanthropic and ethical objective (Bayon et al. 2012). The first voluntary carbon offsets born in 1989 when AES Corporation (from the United States of America) invested in agroforestry in Guatemala (Hawn 2005).

Carbon trading provides a flexible mechanism to emission reductions at relatively low cost, offering profitable opportunities for firms for developing technologies, products, or tools that decrease emissions (Kolk et al. 2008, p. 722). Firms have several incentives to participate in carbon trading. For instance, Kolk et al. (2008) suggest that firms can engage in voluntary trading

systems for gaining credit for early action or for gaining competitive advantage through early trading experience. Moreover, participating in a voluntary carbon trading allows larger firms to develop an emission management system for their international operations, needed for continuing operating in these markets. Carbon offset has gained some attraction and momentum mainly among consumers in Western countries who have become aware and who are concerned about the potentially negative environmental effects of energy-intensive lifestyles and economies, and moreover, because they are also aware about the co-benefits of achieving and reinforcing the sustainable growth in developed and developing countries (Harper et al. 2007). It must be noted that carbon offsets were designed as a solution to the deficiencies evidenced in the previous projects to reduce carbon and greenhouse gas emissions (e.g., the European Carbon Emission Trading Scheme). It offered a possibility of solution with a “win-win” paradigm that would allow the countries to reduce their carbon emissions at a lower cost and obtain financing that would allow them to follow a “climate-friendly orientation” (Wara and Victor 2008).

Carbon Trust (2006, p. 7) suggests that there are three stages that a company can focus on to reduce carbon emissions and mitigate climate change. In the first and second stage, organizations focus their efforts on reducing direct and indirect emissions, respectively. The third stage is optional and is focused on offsetting – it may then be appropriate for some companies to develop a voluntary offsetting strategy. Carbon offsetting is where a company buys credits associated with environmental projects that reduce emissions of carbon dioxide or other greenhouse gases around the world, as a way of offsetting their own carbon emissions. For some service-sector or consumer-facing organizations, there may be corporate social responsibility benefits from offsetting some of their emissions. For any offsetting strategy to be successful, it is key that the offsets purchased are of high quality and from verified projects that create truly additional emission reductions.

In this context, the market for carbon offsets is another form of voluntary carbon trading; firms sell offsets to consumers and firms who wish to reduce their carbon impact (Kolk et al. 2008). A carbon offset is a reduction in emissions of carbon dioxide or greenhouse gases made to offset an emission made elsewhere (Goodward and Kelly 2010). As Taiyab (2006, p. 1) proposes, “the voluntary market of carbon offsets consists of companies, governments, organizations, organizers of international events, and individuals, taking the responsibility for their carbon emissions by voluntary purchasing carbon offsets. These voluntary offsets are often bought from retailers and organizations that invest in a portfolio of offsets projects and sell slices of the resulting emissions reductions to customers in relatively small quantities.” In this line, the essential of carbon offsets is that they mitigate the share of carbon emissions (Galatowitsch 2009). Moreover, Galatowitsch (2009) clearly postulates that “the general approach for carbon offsetting is based on the project and the seller of projects commits to provide a stable and permanent reservoir of carbon.”

There is no consensus about the definition of carbon offsets. As Carbon Footprint pointed out in their website, “a carbon offset is a way to compensate for the emissions by funding an equivalent carbon dioxide saving elsewhere. Our everyday actions, at home and at work, consume energy and produce carbon emissions, such as driving, flying and heating buildings. Carbon offsetting is used to balance out these emissions by helping to pay for emission savings in other parts of the world.” At this respect, Carbon Footprint “offers a range of carbon offset projects to international standards, including the Verified Carbon Standard (VCS), Gold Standard Voluntary Emission Reductions (VER) and Certified Emission Reductions (CER). All of which meet the Quality Assurance Standard for Carbon Offsetting following a footprint calculation on this web site and BSI’s PAS 2060 specification on carbon neutrality. Many of the carbon offsetting projects also provide wider benefits in addition to carbon reduction, such as biodiversity, education, jobs, food security and health and well-being in

developing countries.” Bumpus and Liverman (2008) also define carbon offsets as “occurring when one actor (individual, company, NGO, or state) invest in a project elsewhere that results in a reduction of greenhouse gas emissions that would not have occurred in the absence of the project.”

In more detail, the objective of carbon offset – as voluntary tax of sorts – is to reduce the carbon footprint to the minimum possible, to zero. Carbon offsets, as a voluntary carbon trading mechanism, was conceived with the aim of reducing, mitigating, and reducing carbon emissions, a reduction that would entail a series of social and environmental benefits to the organizations that achieved it (Klooster and Masera 2000; Galatowitsch 2009). In this sense and as Kollmuss et al. (2008) propose, the scope of carbon offsets has been increased to include energy efficiency, renewable energy, methane/carbon capture/geological storage, and a large list of biosequestration options.

For Wara and Victor (2008, p. 131), “carbon offsets allow carbon to be reduced by compensating for excess emissions in one location through carbon reductions in another. Countries, companies, and individuals have decided to reduce carbon for reasons than include environmental concern, competitive advantage, regulations and incentives, and they are interested in offsets as a cheaper alternative to expensive or difficult internal reductions.” Carbon offsets emerge, therefore, from the debate on the need to mitigate and reduce climate change as much as possible; this carbon trading plays a fundamental role in responding to the perceived gap in the market for carbon (Bumpus and Liverman 2008).

Carbon offset as a voluntary carbon trading is needed to achieve reductions in carbon and greenhouse gas emissions more easily, cheaply, and quickly than local or domestic reductions would imply (Wara and Victor 2008). This, in turn, would have benefits for the atmosphere and guarantee sustainable development. It is, therefore, a new project that solves the weaknesses of the previous ones in order to provide a new form of financing to reduce carbon emissions as well as to improve the conservation of the atmosphere and

obtain business opportunities (Wara and Victor 2008; Bayon et al. 2012).

The purpose of carbon offset, therefore, is to reduce or neutralize a ton of CO₂ or equivalent that has been emitted in a certain place by avoiding the release of one ton of CO₂ or equivalent elsewhere, or, where appropriate, by absorbing and/or sequestering a ton of CO₂ or equivalent that could have remained in the atmosphere (Taiyab 2006). These carbon offset projects get carbon credit or emission reductions that can be exchanged – or bought – by individuals, organizations, governments, and other agents to reduce and neutralize the greenhouse gas emissions. That is, through carbon offset as a voluntary carbon trading, companies, organizations, and other potential buyers offset their annual carbon emissions and get a neutral balance of emissions.

It should be noted, however, a peculiarity of carbon offset versus another type of carbon trading. In this mechanism, the concept of additionally is fundamental (Taiyab 2006; Bumpus and Liverman 2008). That is, the emission reductions that may be exchanged in carbon trading must be additional to those that are generated in the normal course of business, in the business-as-usual scenario proposed by Taiyab (2006). This additionally principle assumes that if carbon credits are not additional to the business-as-usual scenario, they cannot be considered carbon offsets. We understand, therefore, the carbon offsets as carbon credits that emanate from additional projects that generate carbon emissions. For example, additionally can be demonstrated by showing how a project would not be profitable or not enough to obtain financing without the sale of carbon credits; or a technology could not be adopted without the sale of carbon credits.

The trade of carbon trading takes place, therefore, when an entity (be it a company, individual, organization, government, or other agent) purchases emission credit or allowance to give a quantity of carbon emissions to another agent that allows it to comply with the established amount of carbon emissions. This amount can be determined voluntarily or based on a regulatory regime. These emission credits can be acquired through project-based transactions or allowance-based transactions (as Taiyab

2006, pointed out). Project-based transactions consider that carbon credits are purchased for a specific project, while allowance-based transactions consider that carbon emission allowances are regulated by regulators in a cap-and-trade regime. The regulating organisms establish the allowed emissions that each participant can emit and then issue allowance units to the rest of participants which represents the caps. Each participant is then free to buy and sell their allowances, so that at the end of the period, each participant holds an amount of allowances that represent their current emissions. This is the fusion of the carbon market.

As additional clarification, it must be noted that although the carbon offsetting is possible to occur through local exchange, the reduction in the amount of carbon emissions could be located anywhere (Bumpus and Liverman 2008). It is possible to reduce carbon emissions through carbon offsetting without the need of a relationship or national context. In this way, carbon offset is guaranteed to be more effective than other carbon trading mechanisms, and a less costly mitigation system for climate change is provided.

However, as in the case of carbon footprints, there is no universally accepted standard for accounting for offsets, verifying, and controlling them (Galatowitsch 2009). As Bumpus and Liverman (2008) pointed out, understanding carbon reductions through baseline calculations is extremely complex and difficult. A clear and credible measure is necessary to calculate the carbon offsets. Normally, the basis for calculation with the greenhouse gas emissions exists without the project taking place (given the previously commented requirement of additionally). Subsequently, the carbon offsets are calculated as the difference between the baseline emissions and the carbon emissions with the offset project; this difference represents the total amount of carbon credits that can be exchanged in the carbon trade (Taiyab 2006). Therefore, in order for the reductions to really be real, they must be measured and verified independently by a third party (Taiyab 2006); with this, investors are really aware that the reduction has been effective and reliable. Galatowitsch (2009) describes the certification

process based on a first step in which the carbon sources and sinks are estimated within a defined area project. This evaluation by the regulatory organization is also collected and analyzed by Wara and Victor (2008). These authors point out that the host governments and investors seek to guarantee that the efforts in the reduction of carbon emissions are real and true; but on many occasions, the regulator does not have access to the information required to evaluate these claims. Given the possible discretionary behavior (the third-party certifiers are paid by their own project developers), it is possible that the certifiers approve the projects even when it is not possible to guarantee the integrity of the verification process.

Within the carbon offsets, it should be noted that there are two existing markets: a greater compliance market and a smaller voluntary market. In the first one, companies, governments, or other entities buy carbon offsets to comply “with a note” the total amount of carbon dioxide that they are allowed to emit. This market exists to achieve compliance with the obligations of the Kyoto Protocol and entities prone to the European Union Emission Rights Trade Regime. In the second smaller market, individuals, companies, or governments buy carbon offsets to mitigate their own greenhouse gas emissions; these emissions can come from transportation, the use of electricity, and other sources.

Aiming to summarize the main characteristics of voluntary carbon offsets with respect to other carbon trading mechanisms (for instance, the Clean Development Mechanisms), we refer to the previous studies of Harris (2006), World Bank (2007), Clean Air-Cool Planet (2006), and Bumpus and Liverman (2008). Following these authors, carbon offsets lack a standard and universally accepted definition, although it is true that their different meanings usually include common terms such as voluntary emission reduction and voluntary carbon unit. Similarly, there is no common and homogeneous standard (we can only refer to the code of practice that is available in the British government). Regarding the overarching governance structure, there is no formal and common structure. In practice, the overall

governance of each offset project is decided between the different participants or actors that implement the project, that is, between buyers and sellers of emission credits. Carbon offsets do not require a project design document either, although it can be used by the agents involved. Private contracts are established by the project developers and credit buyers in accordance with the size and nature of the carbon offset.

The concept of additionally and baselines may or may not be explicitly included in the project documentation. The sellers of credits can be any voluntary offset retailers, while the buyers of credits could be covered under the Kyoto Protocol or European Emissions Trading Scheme, companies, organizations, individuals, governments, NGOs, and so on. It should be noted as one of the main differences with respect to other carbon trading mechanisms that transaction costs are lower. There is no formal registration requirement nor is it necessary to use officially required third-party verifiers (although it is recommended). As a numeric data, Bumpus and Liverman in 2008 pointed out that the average price per ton of CO₂ or equivalent is around \$10.00 in comparison with \$10.90 when the Clean Development Mechanism is adopted.

Finally, and again referring to the previous author Galatowitsch (2009, p. 568), carbon offsets as a voluntary carbon trading will reduce coal and greenhouse gas emissions in the future provided that the benefits associated with such reduction are an essential part in all types of carbon emission trading standards. Also, keep in mind that the estimation and accounting of carbon offsets can create incentives for long-term stewardship. Finally, a process of verification of estimates and accounting of carbon offsets, with comprehensive assessments that are universal, is required. However, carbon offset does not always achieve a reduction in carbon/greenhouse gas emissions or that the investment made is really solid (Wara and Victor 2008).

In practice, it has been shown that there has been no reduction in carbon emissions through carbon offsets, and the future trend seems to continue similar or even worse. Therefore, a reform is required where emission credits clearly allow

reducing carbon emissions. Therefore, a much more effective control is demanded.

Cross-References

- [Carbon Disclosure Project](#)
- [Carbon Footprint](#)
- [Carbon Trading Schemes](#)

References

- Aulisi, A., Farrell, A. E., Pershing, J., & VanDeveer, S. D. (2005). *Greenhouse gas emissions trading in U.S. states: Observations and lessons from the OTC NOx Budget Program*. Washington, DC: World Resources Institute.
- Bayon, R., Hawn, A., & Hamilton, K. (2012). *Voluntary carbon markets: An international business guide to what they are and how they work*. London, Routledge.
- Bumpus, A. G., & Liverman, D. M. (2008). Accumulation by decarbonization and the governance of carbon offsets. *Economic Geography*, 84(2), 127–155.
- Carbon Trust. (2006). Carbon footprints in the supply chain: The next step for business. Report Number CTC616, November 2006, *The Carbon Trust*, London. <http://www.carbontrust.co.uk>
- Clean Air-Cool Planet. (2006). *A consumer's guide to retail carbon offset providers*. Portsmouth: Clean Air-Cool Planet.
- Galatowitsch, S. M. (2009). Carbon offsets as ecological restorations. *Restoration Ecology*, 17(5), 563–570.
- Goodward, J., & Kelly, A. (2010). *Bottom line on Offsets*. Washington, DC: The World Resources Institute.
- Harper, R. J., Beck, A. C., Ritson, P., Hill, M. J., Mitchell, C. D., Barrett, D. J., ... Mann, S. S. (2007). The potential of greenhouse sinks to underwrite improved land management. *Ecological Engineering*, 29(4), 329–341.
- Harris, E. (2006). *The voluntary retail carbon market: a review and analysis of the current market and outlook* (Doctoral dissertation, Centre for Environmental Policy, Imperial College London).
- Hawn, A. (2005). Horses for courses: Voluntary vs CDM projects in Mexico, ed. R. Bayon. San Francisco: Ecosystem Marketplace. Available online: http://ecosystemmarketplace.com/pages/article.news.php?component_id=2509&component_version_id=4039&language_id=12
- Klooster, D., & Masera, O. (2000). Community forest management in Mexico: Carbon mitigation and biodiversity conservation through rural development. *Global Environmental Change*, 10(4), 259–272.
- Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The

- institutionalization and commensuration of carbon disclosure. *The European Accounting Review*, 17(4), 719–745.
- Kollmuss, A., Zink, H., & Polycarp, C. (2008). *Making sense of the voluntary carbon market: A comparison of carbon offset standards*. Tricorona: WWF Germany, Stockholm Environment Institute.
- Taiyab, N. (2006). *Exploring the market for voluntary carbon offsets* (No. 8). London: IIED.
- Wara, M. W., & Victor, D. G. (2008). A realistic policy on international carbon offsets. *Program on Energy and Sustainable Development Working Paper*, 74, 1–24.
- World Bank. (2007). *Carbon finance at the World Bank*. Available online: <http://carbonfinance.org>

Carbon Trading Schemes

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Definition

Carbon trading provides a flexible mechanism to emissions reductions at relatively low cost, offering profitable opportunities for firms for developing technologies, products, or tools that decrease emissions (Kolk et al. 2010, p. 722). Carbon trading schemes impose a carbon price but without political costs of direct taxes. In this context, it is necessary to talk about a “win-win” process; in it, firms that proactively act in terms of climate change win, but also governmental authorities, NGOs, environment, society, investors, customers, and so on. Carbon and emissions trading is a very complex system with a very simple objective: to reduce the costs that companies and governments must allocate to meet emission reduction objectives.

Introduction

Kolk et al. (2008, p. 722) defend that carbon trading has emerged as the basis of the growing

global climate regime, improving and facilitating the convergence of business, governments, NGOs, and academics and professionals around a somewhat fragmented, decentralized, and market-oriented mode of carbon governance (Aulisi et al. 2005).

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Firms have several incentives to participate in carbon trading schemes. For instance, Kolk et al. (2008) suggest that firms can engage in voluntary trading systems for gaining credit for early action or for gaining competitive advantage through early trading experience. Moreover, participating in a voluntary trading scheme allows larger firms to develop an emissions management system for their European operations, needed for continuing operating in these markets.

Conceptualizing it, set up in 2005, the EU emissions trading system (EU ETS) is the world’s first and biggest international emissions trading system, accounting for over three-quarters of international carbon trading. Gilbertson and Reyes (2006, p. 28) point out that the idea of compensation did not start with the Kyoto Protocol or the CO₂ trade. Already in the first systems of commerce of pollution, governments and private companies looked for ways to inject extraordinary permits, for a low price, in the market, in order to make it even easier for them to meet the objectives than what would result with the cap and barter systems. In 1976, a policy was enacted in the United States that allowed new sources of contamination to be located in places where

fixed ceilings were not being reached, provided they obtained “compensation” credits generated by other projects that saved or reduced emissions.

As it was described in its website (https://ec.europa.eu/clima/policies/ets_en), “the EU ETS is a cornerstone of the EU’s policy to combat climate change and its key tool for reducing greenhouse gas emissions cost-effectively. It is the world’s first major carbon market and remains the biggest one.” Meanwhile, Grubb and Neuhoﬀ (2006, p. 2) highlighted that the EU ETS has an efficient and effective market design that risks being undermined by three interrelated problems: the approach to allocation; the absence of a credible commitment to post-2012 continuation; and concerns about its impact on the international competitiveness of key sectors. Moreover, these authors also point out that covering almost half of all EU CO₂ emissions, it forms the centerpiece of European policy on climate change. Trade in these emission allowances gives value to reducing CO₂ emissions and has formed a market with an asset value worth tens of billions of euros annually. Putting a price on carbon has been an achievement of global significance, through the linkages to emission credits generated under the Kyoto mechanisms (p. 3).

In terms of data, the EU ETS operates in 31 countries (all 28 EU countries plus Iceland, Liechtenstein, and Norway), limits emissions from more than 11,000 heavy energy-using installations (power stations and industrial plants) and airlines operating between these countries, and covers around 45% of the EU’s greenhouse gas emissions.

The EU ETS works on the “cap and trade” principle. A cap is set on the total amount of certain greenhouse gases that can be emitted by installations covered by the system. The cap is reduced over time so that total emissions fall. Within the cap, companies receive or buy emission allowances which they can trade with one another as needed. They can also buy limited amounts of international credits from emission-saving projects around the world. The limit on the total number of allowances available ensures that they have a value. After each year a company must surrender enough allowances to cover all

its emissions, otherwise heavy fines are imposed. If a company reduces its emissions, it can keep the spare allowances to cover its future needs or else sell them to another company that is short of allowances. Trading brings flexibility that ensures emissions are cut where it costs least to do so. A robust carbon price also promotes investment in clean, low-carbon technologies.

Then, by EU emission trading rights we refer to the system that legally requires companies to be assigned quotas for their carbon and greenhouse gas emissions according to the objectives of their respective governments in environmental matters. This system is highly practical because it allows firms to surpass their emissions quota as long as they can find other companies producing fewer emissions to sell them their quotas. On the one hand, this system offers certain flexibility, while restraining further damage to the environment. It also fosters the development of new technologies, as organizations, motivated by the benefits they can obtain from selling their emissions, will develop and employ clean technologies.

The firms that participate in the carbon emissions system will be regulated by their respective national authorities or by the European Commission, in accordance with the principle of subsidiarity. Regulations are usually very formal and noncompliance with requirements can result in legal procedures, fines, or prosecution. Therefore, they set binding obligations on companies and act as a coercive pressure to change organizational activities (Dimaggio and Powell 1983). Regulation can put constraints on companies and, it has been argued, inhibit the development of voluntary reporting practices (Higgins and Larrinaga 2014). Coercive pressures may be felt as force, as persuasion, or as invitations to join in collusion (Dimaggio and Powell 1983). Companies that have installations regulated under the EU emissions trading schemes are required annually to report on direct carbon dioxide emissions to a regulatory authority (Kauffmann et al. 2017).

According to MacKenzie (2007), the trading of emissions requires companies to perform their activities under a new scheme that will develop new knowledge and skills within the organization. Likewise, companies need to

develop organizational routines to negotiate emission and to represent this new objective in their accounting system. Also, according to MacKenzie (2007) and Lovell et al. (2010), there are two main types of emission trading schemes: cap-and-trade-schemes and project-based schemes. In the cap and trade system emission reduction objectives are established, carbon emission can be bought and sold and the companies emitting greenhouse gases must have enough rights to cover their emissions (Russell-Smith et al., 2009). This is the more easily implemented scheme, since the alternative (credit-based) systems entail high transaction costs because it is necessary to demonstrate for each emission reduction project that the reduction was achieved to levels below the reference level. This verification means that the administrative workload is much heavier under this system (Del Río 2005). Moreover, the reference level must be negotiated with the sectors (Convery and Redmond 2007), which can also involve high administrative and transaction costs.

In any case, the idea of emissions trading is to guarantee equal treatment of similar sized firms in the framework of a carbon emission trading system, to reduce to a minimum the possibility of competition distortion, to guarantee synergy with current regulations, to ensure the effective application of the system and to guarantee compatibility with the system provided for in the Kyoto Protocol. According to Scott (2013), companies are expected to comply with regulatory requirements to avoid prosecution or legal action and so ensure that legitimacy is maintained in society.

At this respect, also Ellerman et al. (2010) highlight the emission trading as the basic policy instrument; it involves an overall cap per unit of time on the emissions to be permitted and allocates allowances of permits to emitters such that the sum of the allocations do not exceed the cap (p. 3).

As pointed out by Gilbertson and Reyes (2006), in theory, it would be expected that the offer of emission permits will be reduced in the coming years and that a turning point will be established from which it will begin to be scarce; this would mean that the market would continue

to maintain its value and, in addition, pollution levels would be significantly reduced.

However, this reduction from the environmental point of view depends on the “cap” prefixed as the allowed limit of pollution level in a specific period of time. Therefore, the “trading,” although basic in the ETS, does not allow to reduce the general contamination levels if there is no previous reduction in cap. What it allows is that companies have a greater margin of maneuver, more flexible, to address the problem of the level of pollution and emissions. The reality is that those organisms that exceed the maximum allowed threshold of pollution reduction can sell their surplus to those organisms that have not fulfilled their obligations in reducing the level of contamination.

That is, this system translates into a market in which those agencies that reduce pollution levels above what is legally required can obtain an additional benefit derived from selling them to those “most polluting.” The organisms that do not comply with the legal requirements can continue to pollute since they can buy such credits at a very economic price without having to modify their practices, activities, strategies, etc.

That is why several authors such as Gilbertson and Reyes (2006) make a profound criticism of the ETS system. They clearly point out in their book that the ETS has not managed to reduce emissions, the cap and trade threshold established to cover the level of pollution has been much more generous than necessary; this has made it possible for the allowance to be sold to other polluting industries that, in this way, do not have to limit their greenhouse gas emissions either.

To date, the aforementioned authors indicate (p. 13) that the number of permits granted is calculated based on the existing levels of pollution, which means that the industries that have contaminated the most in the past are rewarded with the most important. Giving these rights to the industries that pollute the most is also one of the most regressive projects in history regarding the creation and distribution of property rights.

Moreover, the Paris Agreement provides for a robust and ambitious basis for the use of international markets and reinforces international targets, transparency, and the accountability of Parties.

Recognizing the importance of international carbon markets, Article 6 of the agreement allows parties to use international trading of emission allowances to help achieve emissions reduction targets and establishes a framework for common robust accounting rules, and creates a new, more ambitious market mechanism.

At this regard and under the numerous gaps in the first and second phase of the EU ETS, in December 2008, the EU approved the incorporation of significant changes in EU ETS for the third phase, which extends from 2013 to 2020. Gilbertson and Reyes (2006, p. 51) in their in-depth review of the EU ETS point out that the new rules establish a formal limit on the use of compensation credits; the national allocation plans disappear to give way to a common allocation plan for the whole EU and a greater use of the auction mechanisms is foreseen. These changes have been promoted as a way to make the cap more stringent, accompanied by the idea that this step should favor further reductions and boost the price of emission rights up to a level that encourages a shift toward low technology. However, these authors point out that there are still important gaps and that, in addition, new ones arise related to the accumulation of surplus credits of the second phase; exemptions from the rules for sectors exposed to international competition and the possibility of trading offset credits in sectors not covered by the EU ETS; the incorporation of new sectors, such as aviation; the expansion of the program to include all greenhouse gases in it; and the increasing complexity of the financial instruments, futures markets, and derivatives through which the emission rights are marketed, suggest that the cap will continue to be plagued by large gaps.

The European Commission points out that the surplus of emission rights is partly due to the economic crisis (whose effects caused a reduction in emissions higher than expected) and to the high imports of international credits. This has caused a fall in carbon prices, which, in turn, discourages the reduction of emissions. In the short term, the surplus threatens to undermine the proper

functioning of the carbon market. In the long term, it could affect the EU ETS's ability to cost-effectively meet more stringent emission reduction targets. In figures, the surplus was around 2 billion emission rights at the beginning of the third phase and reached 2,100 million in 2013. In 2015, this amount was reduced to 1,780 million as a result of the postponement of the auctions ("back-loading"). Without this postponement, the surplus would have increased by almost 40% by the end of 2015.

At this regard, the European Commission presented in July 2015 a legislative proposal to revise the EU ETS for the period after 2020. This is the first step in delivering on the EU's target to reduce greenhouse gas emissions by at least 40% domestically by 2030 in line with the 2030 climate and energy policy framework and as part of its contribution to the Paris Agreement. To achieve at least 40% EU target, the sectors covered by the ETS have to reduce their emissions by 43% compared to 2005. To this end, the overall number of emission allowances will decline at an annual rate of 2.2% from 2021 onwards, compared to 1.74% currently. This amounts to an additional emissions reduction in the sectors covered by the ETS of some 556 million tons over the decade — equivalent to the annual emissions of the UK.

Cross-References

- [Carbon Disclosure Project](#)
- [Carbon Footprint](#)
- [Carbon Offsets](#)

References

- Aulisi, A., Farrell, A. E., Pershing, J., & Van Deveer, S. (2005). *Greenhouse gas emissions trading in US states: Observations and lessons from the OTC NOx budget program*.
- Boone Kauffman, J., Arifanti, V. B., Hernández Trejo, H., del Carmen Jesús García, M., Norfolk, J., Cifuentes, M., ... & Murdiyarso, D. (2017). The jumbo carbon footprint of a shrimp: carbon losses from mangrove

- deforestation. *Frontiers in Ecology and the Environment*, 15(4), 183–188.
- Convery, F., & Redmond, L. (2007). Market and price developments in the European Union emissions trading scheme. *Review of Environmental Economics and Policy*, 1(1), 88–111.
- Del Río, P. (2005). La Directiva sobre Mercado de Derechos de Emisión en la UE y sus efectos sobre los sectores productivos españoles. *Revista de Economía Crítica*, 4, 39–65.
- Dimaggio, P. J., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147–160.
- Ellerman, A. D., Convery, F. J., & De Perthuis, C. (2010). *Pricing carbon: The European Union emissions trading scheme*. Cambridge University Press.
- Gilbertson, T., & Reyes, O. (2006). *El mercado de emisiones: cómo funciona y por qué fracasa*. Carbon Trade Watch.
- Grubb, M., & Neuhoff, K. (2006). Allocation and competitiveness in the EU emissions trading scheme: Policy overview. *Climate Policy*, 6(1), 7–30.
- Higgins, C., & Larrinaga, C. (2014). Sustainability reporting insights from institutional theory. In J. Bebbington, J. Unerman, & B. O'Dwyer (Eds.), *Sustainability accounting and accountability*. New York: Routledge.
- Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *European Accounting Review*, 17(4), 719–745.
- Lovell, H., Sales de Aguiar, T. H., Bebbington, J., & Larrinaga-Gonzalez, C. (2010). *Accounting for carbon*. England: The Association of Chartered Certified Accountants.
- MacKenzie, D. (2007). *Changing the bottom line, contribution au colloque, exercices de métaphysique empirique* (Autour des travaux de Bruno Latour). Cerisy-la-Salle, 23–30 June.
- Russell-Smith, J., Murphy, B. P., Meyer, C. M., Cook, G. D., Maier, S., Edwards, A. C., . . . & Brocklehurst, P. (2009). Improving estimates of savanna burning emissions for greenhouse accounting in northern Australia: limitations, challenges, applications. *International Journal of Wildland Fire*, 18(1), 1–18.
- Scott, W. R. (2013). *Institutions and organizations*. London: Sage.

Carcinogen

► [Asbestos](#)

Carpooling

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Synonyms

[Collaborative consumption](#); [Collaborative economy](#); [Peer economy](#)

Definition

In the consumer market, IoT technology refers to products that can be controlled via remote devices, such as smartphones. The growth of the Internet and its use of big data has facilitated the connection between asset owners and those seeking to use those assets. This sort of dynamic can also be referred to as shareconomy, collaborative consumption, collaborative economy, or peer economy. Collaborative consumption is at the basis of car sharing. The term car sharing indicates a service that involves the use of a car shared with different users, paying only for its use, based on the time for which it is available, on the kilometers traveled, or both of these factors. It, therefore, allows an alternate use of the same vehicle by more people where each contributes to a share of the incurred expenses. Carpooling, defined as a group of people who travel together, usually in a different member's car each day, is an evolution of car sharing services. This mode of transport is widespread in work or university environments, where various subjects, who travel the same route in the same time slot, spontaneously agree to travel together with a significant contribution to the development of eco-sustainable mobility.

Introduction

Internet of Things (IoT) is a neologism used in the language of telecommunications, which defines

real objects connected online, which interact electronically and transfer data and information (Ashton 2009). In the consumer market, IoT technology refers to products that can be controlled via remote devices, such as smartphones. The growth of the Internet – and its use of big data – has facilitated the connection between asset owners and those seeking to use those assets. This sort of dynamic can also be referred to as the shareconomy, collaborative economy, or peer economy (Chappelow 2019). Sharing economy is proposed as a model that makes sharing, active participation, and sustainability the new means to achieve an environmentally-friendly collective action against hyper-consumerism (Heinrichs and Rita 2015). Sharing economy is related to circular economy, which aims to minimize waste and enhance collaborative consumption in which an item is consumed by multiple people (Botsman and Rogers 2010). An example of sharing economy is car sharing. In car sharing, the consumer purchases the use of the vehicle instead of the vehicle itself and shares it with other consumers since private vehicles go unused for 95 percent of their lifetime (Hahn and Metcalfe 2017; Chappelow 2019).

Sharing Economy

The public perception of shared goods – the notion of sharing bikes, cars, or rides on an on-demand basis – has gained widespread popularity. This is true especially in the context of big cities that struggle with population growth and increasing density where sharing vehicles promises to reduce inner-city traffic, congestion, and pollution problems and, at the same time, reduce costs for consumers (Cohen and Kietzmann 2014).

Peer-to-Peer

The most common sharing economy business model is peer-to-peer (P2P). In this model, the sharing economy platform acts as an intermediary between supply and demand, allowing products or services to be shared between individuals. By using the available platform – that is maintained

and guaranteed by a private or public entity – the service providers and the service consumers are directly put into contact with each other. Sometimes, it may also happen that the two sides coincide, so a consumer is also a supplier and vice versa. Examples of companies that use this model are Airbnb and Zipcar.

Business-to-Business

A second business model involves inter-company, business-to-business (B2B) exchange. The company provides a good or service to another company. It works just like P2P only that it generally requires infrastructure contractors, industrial companies, municipalities, or the armed forces. An example of a company that uses this model is United Rentals.

Business-to-Consumer

The sharing economy also includes features in common with traditional business models, where companies make their service available directly to users – business-to-consumer (B2C). In B2C, companies provide the platform and are also the suppliers of the good or service. The most significant examples of this business model are car sharing and bike sharing platforms like Enjoy or Bikemi.

Consumer-to-Business

The last model is a relatively recent model that is emerging – consumer-to-business (C2B). In this model, consumers offer goods and services to businesses, through websites, blogs, or forums using intermediary systems like PayPal, Google AdSense, and Google Wallet for payments, even though there are still some pending tax issues. An example of a company that uses this model is Fotolia, a site where consumers can post their digital content (images, animations, videos) and sell them to different companies (Moncada et al. 2018).

On top of the advantages of an improved lifestyle, car sharing also has a significant impact on security and the market. Private cars often carry only the driver and are used for short periods during the day, while the shared car allows more intensive use of the individual vehicle [3]. Shared

cars tend to be renewed more frequently due to mileage and not to aging than the private cars they replace. Users will then drive more modern technologically advanced vehicles with several advantages, such as greater road safety and lower emissions and consumption (Shaheen et al. 2016).

Collaborative Consumption

Collaborative consumption refers to resource circulation systems in which consumers may act as both providers of resources and obtainers of resources (Dhingra and Stanich 2013). Resource circulation systems include (Table 1).

Therefore, exchanges in collaborative consumption may be performed directly on a peer-to-peer basis or indirectly through an intermediary (Ertz et al. 2019).

Car Sharing

Collaborative consumption is at the basis of car sharing. The term car sharing indicates a service that involves the use of a car, shared with different users, paying only for its use, based on the time for which it is available, on the kilometers traveled, or both of these factors. It, therefore, allows an alternate use of the same vehicle by more people where each contributes to a share of the expenses to be incurred.

The first reference to car sharing was in 1948 in Switzerland, followed by car share projects in the

early 1970s in France and some examples in the first half of the 1990s in Switzerland and Germany but also on a smaller scale in Canada, the United States, the Netherlands, and Sweden. But it was not until Benoît Robert founded Communauto in Quebec City in 1994 that car sharing became a term of common use (Shaheen et al. 2016).

Today, many car sharing services have evolved and have created a demand for new car sharing models. Generally, though, car sharing programs fall into one of four sharing models:

- Roundtrip: members begin and end their trip at the same location, often paying by the hour, mile, or both.
- One-way: members begin and end their trip at different locations.
- P2P: operates just as roundtrip or one-way with a sharing system operated by a third party; however, the vehicles themselves are typically privately owned or leased – the owner rents his car at times of nonuse, in exchange for an economic return.
- Fractional ownership: allows users to co-own a vehicle and share its costs and use (Shaheen et al. 2017).

The complete service, from the search for the car to its release, is managed via the Internet, through smart cards that enable the use of the car, computerized management of emergencies or malfunctions, refueling, and invoice accounting (Iacovini 2014).

The car, thanks to car sharing, goes from being a durable consumer good to a service eliminating the burden of ownership – original purchase, insurance, taxes, maintenance, overhaul, and fuel – and is still available at lower rates than would be paid if utilizing a public service such as a taxi. In addition, replacing private automobiles with shared ones directly reduces demand for parking spaces, traffic congestion, and environmental impact, thanks to lower harmful emissions (Cervero 2002).

For future applications, car sharing companies are investing in self-driving cars, blockchain technology - to record ownership, usage of shared vehicles, and insurance information - and plug-in

Carpooling, Table 1 Collaborative consumption resource circulation systems (Botsman and Rogers 2010)

Product-service systems	Privately owned goods can be shared or rented out via P2P marketplaces allowing consumers to engage in monetized exchanges for temporary access to goods
Redistribution markets	Goods, used or new, are passed on from someone who does not want them to someone who does
Collaborative lifestyles	Extends the exchange from physical goods to the sharing of time, skills, space, and money

hybrid electric vehicles (PHEV), to reduce gas consumption (Zoepf 2015).

Carpooling

Carpooling, defined as a group of people who travel together, usually in a different member's car each day is an evolution of car sharing services (Cambridge Dictionary 2019).

Carpooling was born in San Francisco, at the end of 1914, when car owners began offering seats in their cars for the same price as a streetcar fair, known as a jitney (Cozza 2012). Although this caused an immediate boom, ridesharing and carpooling remained at a low ebb until World War II when the federal government, facing the need to conserve oil resources for the war effort, worked alongside the oil industry to push drivers to take passengers along when they drove (Oliphant and Amey 2010). By the late 1970s, President Carter proposed multiple initiatives to encourage further ridesharing such as appointing the National Task Force on Ridesharing, which provided assistance and incentive programs. The first regional carpool services were introduced, and use was promoted as a way to reduce local air pollution. Participation declined though with the fall of oil prices in the 1980s, and it was only with the advent of smartphones in 2007 that carpooling was rediscovered (Oliphant and Amey 2010).

Today, the constant connection to the Internet, and the additional flexibility provided by modern information technology, made carpooling more viable again (Shaheen et al. 2016). Network platforms have allowed to overcome the constraint of sharing a car trip with strangers. Thanks to a comment evaluation system present on the platforms, it is possible to know in advance the usual behavior of a traveling companion or driver, facilitating the overcoming of distrust. The consumer chooses the desired route, contacts the driver, meets at an agreed-upon location, and travels together. Especially at an aggregate level, research has shown that in the absence of adequate public transit, commuters opt for ridesharing (Cozza 2012).

Also, there are strong relational and psychological aspects tied to carpooling. Subjective perceptions – rapport with car mates, constraints to independence, and status as a passenger or driver – are more important than objective attributes: cost, convenience, and civic-mindedness (Oppenheim 1979). Strong ethnic ties within immigrant communities, for example, contribute to immigrants' propensity to carpool, increasing the likelihood that residents will travel to and from common destinations (Blumenberg and Smart 2014). These findings suggest an essential role for social capital connections and the likeliness to engage in activities which require it (Charles and Kline 2006).

Summary

In general, sharing economy business models, as an alternative and complement to the more common “reduce, reuse, recycle, repair” methods, pursue goals that can be summarized in the following four categories: redistribution and reuse, extension and maximization of the use of durable assets, exchange of goods and services, and sharing of productive assets.

Car sharing gives users the possibility to use the car only for the time it takes, which allows to reduce the number of cars in circulation, generating benefits at all levels. Increase in available parking spaces and reduction of harmful emissions improve the quality of life in the city with a significant contribution to the development of eco-sustainable mobility. Finally, eco-compatible and efficient vehicles augment compliance with safety and environmental impact standards.

Carpooling encourages people to get together with other people in their otherwise solitary commute time. This mode of transport is widespread in work or university environments, where different subjects, who travel the same route in the same time slot, spontaneously agree to travel together, sharing travel and maintenance costs extending the concepts of social networking application generating personal value and energy savings (Selker and Saphir 2010).

Cross-References

- [Circular Economy](#)
- [Sharing Economy](#)

References

- Ashton, W. S. (2009). The structure, function, and evolution of a regional industrial ecosystem. *Journal of Industrial Ecology*, 13(2), 228–246.
- Blumenberg, E., & Smart, M. (2014). Brother can you spare a ride? Carpooling in immigrant neighbourhoods. *Urban Studies*, 51(9), 1871–1890.
- Botsman, R., & Rogers, R. (2010). What's mine is yours. The rise of collaborative consumption.
- Cambridge Dictionary. (2019). <https://dictionary.cambridge.org/it/dizionario/inglese/carpooling>
- Cervero, R. (2002). Built environments and mode choice: Toward a normative framework. *Transportation Research Part D: Transport and Environment*, 7(4), 265–284.
- Chappelow, J. (2019). Sharing economy. *Investopedia [online]*, 15, 2019.
- Charles, K. K., & Kline, P. (2006). Relational costs and the production of social capital: Evidence from carpooling. *The Economic Journal*, 116(511), 581–604.
- Cohen, B., & Kietzmann, J. (2014). Ride on! Mobility business models for the sharing economy. *Organization & Environment* 27(3), 279–296.
- Cozza, J. (2012). The history of carpooling, from jitneys to ridesharing. Retrieved April 29, 2016.
- Dhingra, & Stanich. (2013). <https://www.smartcitiesdiver.com/ex/sustainablecitiescollective/car-sharing-picking-speed-developing-world/152996/>
- Ertz, M., Durif, F., & Arcand, M. (2019). A conceptual perspective on collaborative consumption. *AMS Review*, 9(1–2), 27–41.
- Galland, S., et al. (2014). Multi-agent simulation of individual mobility behavior in carpooling. *Transportation Research Part C: Emerging Technologies*, 45, 83–98.
- Hahn, R., & Metcalfe, R. (2017). The ridesharing revolution: Economic survey and synthesis. *More Equal by Design: Economic Design Responses to Inequality*, 4.
- Heinrichs, D., & Rita, C. (2015). Automated driving: How it could enter our cities and how this might affect our mobility decisions. *disP-The Planning Review*, 51(2), 74–79.
- Iacovini, C. (2014). Car sharing: Come la sharingeconomy cambia la nostra mobilità. Edizioni Ambiente.
- Moncada, C., Escobar, D., & Jones, D. J. (2018). Evolution of transport policies in Latin-America, stages and steps forward. *Modern Applied Science*, 12, 59–72. <https://doi.org/10.5539/mas.v12n7p59>.
- Oliphant, M., & Amey, A. (2010). Dynamic ridesharing: Carpooling meets the information age. Webinar for the American Planning Association, co-hosted by the MIT team 63.
- Selker, T. & Saphir, P. H. (2010). *TravelRole: A carpooling/physical social network creator*. International Symposium on Collaborative Technologies and Systems. IEEE.
- Shaheen, S. A., Chan, N. D., & Gaynor, T. (2016). Casual carpooling in the San Francisco bay area: Understanding user characteristics, behaviors, and motivations. *Transport Policy*, 51, 165–173.
- Shaheen, S., Cohen, A., & Martin, E. (2017). Smartphone app evolution and early understanding from a multi-modal app user survey. In *Disrupting mobility* (pp. 149–164). Cham: Springer.
- Teal, R. F. (1987). Carpooling: Who, how and why. *Transportation Research Part A: General*, 21(3), 203–214.
- Zoepef, S. M. (2015). *Plug-in vehicles and carsharing: User preferences, energy consumption and potential for growth*. Diss. Massachusetts Institute of Technology.

Carroll, A.B.

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Education

Archie B. Carroll completed his academic training in full at the Florida State University (Tallahassee, Florida). He graduated with a bachelor degree in business administration in personnel management in 1965. He continued his studies in management and organizations and received his MBA in 1966. He completed his academic education with a doctoral thesis 6 years after completing his master's degree. His PhD in business administration (1972) also dealt with the topic of management and organizations. Before completing his PhD, he served as an assistant professor at Athens (Ala.) College (from 1966 to 1969) and as an instructor for the Florida State University College of Business (from 1969 to 1972) (Terry College of Business 2019).

Academic Career

After finishing his PhD, Archie B. Carroll took a position at the Terry College of Business at the University of Georgia. He remained working as a tenured faculty member in the Terry College of Business, serving the University of Georgia for 40 years in total (including 7 years of part-time employment) at the University of Georgia. Here, he progressed through the various stages of his academic career from the position of an assistant professor (1972–1975) to an associate professor (1976–1979) and finally to a full professor (1979–2005). In addition to his work as a professor, he served as an associate dean of the college (1979–1982) and as head of the Management Department (1995–2000). In 1986, Archie B. Carroll was awarded the Robert W. Scherer Chair of Management and Corporate Public Affairs. He held this position until his retirement in 2005. From 2001 to 2010, he taught in the GLOBIS Study Abroad Program of the University of Georgia and gave lessons in business ethics to students in Verona, Italy (Terry College of Business 2019; Idowu 2013). Archie B. Carroll retired from his full-time tenured position (2005) and became professor emeritus in 2006. Regardless of his retirement, he kept up his commitment as part-time director of the Nonprofit Management and Community Service Program (from 2000 to 2012).

During his academic career, he conducted research on the subject of CSR for decades. With the publication of more than 100 articles in leading management journals and over 20 books (including multiple editions of several ones), he contributed significantly to a broader understanding of CSR (Terry College of Business 2019). In addition to his teaching activities at universities (in USA and abroad), he also taught extensively in Executive Development Programs. Besides, he supervised PhD theses, served on graduate committees, and was a welcome speaker to business, government, and NGOs (Idowu 2013).

Even though retired for almost 15 years, he is still an active part of the academic world of CSR.

Major Contributions and Fields of Research

According to the website of Terry College of Business, University of Georgia, Archie B. Carroll's research interests are corporate social responsibility and performance, business ethics, stakeholder theory/management, sustainability, and nonprofit management/governance (Terry College of Business 2019). Carroll became devoted to these issues very early in his career. He joined the Social Issues in Management (SIM) Division of the Academy of Management in 1972 and became a chair of the SIM Division in 1976–1977 (Idowu 2013). Shortly after, he published his first book in the field “Managing Corporate Social Responsibility” (1977). In this publication, he focused on a number of management related aspects of CSR.

Two years later, Carroll published his most important theoretical article on “A Three-Dimensional Conceptual Model of Corporate Social Performance” (Carroll 1979). The conceptual model introduced in this article comprehensively describes essential aspects of corporate social performance. There are three aspects within the model which address major questions of concern relevant to academics and managers alike:

1. “What is included in CSR?”
2. What are the social issues the organization must address?
3. What is the organization's philosophy or mode of social responsiveness?”

(Carroll 1979, p. 497)

According to Carroll, a complete definition of social responsibility of business has to embody economic, legal, ethical, and discretionary categories. These four categories always simultaneously exist for business organizations (Carroll 1979, p. 499). More specifically, “any given responsibility or action of business could have economic, legal, ethical, and discretionary motives embodied in it” (Carroll 1979, p. 500). These ideas later formed the basis for Carroll's most influential article: “The Pyramid of Corporate Social Responsibility: Toward the Moral

Management of Organizational Stakeholders” (Carroll 1991), which has been frequently reproduced in top management and CSR journals (Visser 2006, p. 33). In this article, Carroll depicts his ideas of CSR into a pyramidal model that shows four responsibility categories, which in sum constitute total CSR: the four categories are:

1. Economic
2. Legal
3. Ethical
4. Philanthropic (Carroll 1991, p. 40).

Carroll emphasizes the importance of stakeholders and says that the stakeholder management perspective provides “not only a language and way to personalize relationships with names and faces, but also some useful conceptual analytical concepts for diagnosing, analyzing, prioritizing an organization’s relationships and strategies” (Carroll 1991, p. 48). The link between CSR and profitability was already explored before 1985. However, the research results could only be described as insufficient, either because they showed an ideological bias or were based on limited methodological procedures (Aupperle et al. 1985). By contrast, in the data-gathering study “An Empirical Examination of the Relationship between Corporate Social Responsibility and Profitability” (1985), the authors, by relating to Carroll’s definitions, developed an elaborate, forced-choice instrument. This instrument is one of the earliest accepted methods for measuring CSR among CEOs and according to Idowu, most frequently used in research studies up to the present day (Idowu 2013).

Carroll’s “Business & Society: Managing Corporate Social Performance” (1981) was one of the first books that emphasized the managerial/organizational dimension of the interdependence of business and society (Idowu 2013). The publication comprises four main parts, which focus on the business and society relationship (Part 1), external publics and issues, e.g., business and government, consumers or environment (Part 2), internal publics and issues, e.g., business, employees, and the individual, employment discrimination (Part 3), and finally deals with the question how to manage

corporate social performance, including information on social performance measurement, reporting, and communicating the social role of business (Part 4) (Carroll 1981). In this publication, Carroll elaborated on the ethical component to which he attributed a growing importance (Carroll 1999, p. 283). The book provided the basis for Carroll’s later publication “Business & Society: Ethics & Stakeholder Management” (1989), which is probably one of his most famous works. While he released the first three editions himself, he was joined by his colleague, Prof. Ann K. Buchholtz, (Rutgers business school, New York University) from the fourth edition onward, and Prof. Jill Brown (Bentley University) beginning with the tenth edition. It deals with the question how managers can balance and protect the interests of various stakeholders, including investors, employees, the community, and the environment successfully. It treats the linkage between business and natural, social, and financial environments. All three of them must be balanced in order to contribute to sustainability and future generations (Carroll and Buchholtz 2012). The book, as of late in its tenth edition, now runs under the title “Business & Society: Ethics, Sustainability & Stakeholder Management” (Carroll et al. 2018).

In addition to his articles on CSR (As of October 2019, Carroll’s articles have been cited 64,846 times according to Google Scholar (<https://scholar.google.com/citations?user=qMaIUAcAAAAJ&hl=en>), Accessed 21 October 2019), Carroll also dealt with the history of theory and research on CSR. His article on “Corporate Social Responsibility: Evolution of a Definitional Construct” provides a comprehensive overview of the evolution of CSR. Starting in the 1950s and ending up in the late 1990s, he shows how the understanding of CSR changed overtime (Carroll 1999). As of 2019, this article was still the most-read article in the previous 6 months in *Business & Society* journal. As an author, Carroll also contributed to the book “*Corporate Responsibility. The American Experience*” (Carroll et al. 2012), which documents the history of CSR in the US from the mid-eighteenth century to the modern day.

Engagement and Service

Apart from his academic commitment, Archie B. Carroll served in several organizations and institutions with a linkage to his research areas, e.g., as an active member in the Society of Business Ethics (from the 1980s onward), in which he served as a board member (from 1996 to 2001) and as a president (from 1998 to 1999) (Terry College of Business 2019). During his presidency he helped to bring together the Society for Business Ethics and the SIM Division of the Academy of Management (Idowu 2013), in which he also served as a board member (from 1975 to 1978), as Division Chair (from 1976 to 1977), and as a committee member for several awards (e.g., CSR Paper Award: 2011 until present; Buchholtz Mentor Award, 2017–2020). Moreover, Carroll was a board member of the Southern Management Association (from 1995 to 1998), chair of the Service Award Committee (from 2003 to 2005), and a member of the award committee (from 2016 to 2017). He was also a founding member of the International Association of Business & Society, for which he was in service from 1990 to 1993 as a board member.

Besides his engagement in the above-mentioned organizations, Carroll has served as a paper presenter, discussant and reviewer, author and editor of several journals (e.g., for the *Academy of Management Review*, *Journal of Management*, *Business and Society*, *Business Ethics Quarterly*, *Journal of Public Affairs*, *Sage Series in Business Ethics*, University of Georgia Press, and *Annual Editions: Business Ethics*) (Terry College of Business 2019).

Carroll also published a monthly column for the Athens Banner-Herald newspaper (from 1999 to 2008), in which he dealt with business ethics and CSR of common interest. Over 100 of these columns were published in the book *Business Ethics: Brief Readings on Vital Topics* (Carroll 2009).

Awards

Carroll, who has been a major contributor to the discussion about CSR over several decades, has won a variety of awards. His latest award is the

“Best Paper Finalist Award” from the journal “Business & Society” for his article “The Institutionalization of Corporate Social Responsibility Reporting” (Shabana et al. 2016). In 2016, he was awarded the Hunt SMA Sustained Outstanding Service Award by the Southern Management Association. He received the best book award by the Academy of Management, Social Issues in Management, in 2014 for “Corporate Responsibility: The American Experience” (Carroll et al. 2012). One of his most important recognitions was the first Lifetime Achievement Award in CSR, which was presented by the Institute of Management, Humboldt University, Berlin, Germany, in 2012.

Carroll was an elected Fellow of the International Association for Business and Society (IABS) (2011), the Academy of Management (2005), and the Southern Management Association (1996). He received the Distinguished PhD Alumni Award from the Florida State University College of Business in 2008. In 2003, he was awarded with the Distinguished Faculty Service Award of the University of Georgia, Terry College of Business. He was presented with the Sumner Marcus Distinguished Service Award in 1992 from the Academy of Management and, within the same year, the Distinguished Faculty Research Award from the University of Georgia, Terry College of Business (Terry College of Business 2019).

Summary

Archie B. Carroll is professor emeritus in the Terry College of Business, University of Georgia, USA. As a researcher, he significantly shaped the notions of corporate social responsibility (CSR) (Scherer and Patzer 2011, p. 322). His international recognition was advanced through the publication of his CSR Pyramid (Carroll 1991), which is probably the best-known model of CSR until today (Visser 2006, p. 33).

Cross-References

- CSR
- CSR Pyramid

References

- Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28(2), 446–463.
- Carroll, A. B. (1977). *Managing corporate social responsibility*. Boston: Little, Brown & Co.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1981). *Business and society: Managing corporate social performance*. Boston: Little, Brown & Co.
- Carroll, A. B. (1989). *Business and society: Ethics and stakeholder management*. Cincinnati: South Western Educ Pub.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. July–August.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38(3), 268–295. September.
- Carroll, A. B. (2009). *Business ethics: Brief readings on vital topics*. New York/London: Routledge Publishers.
- Carroll, A. B. (2019). Google Scholar citations. <https://scholar.google.com/citations?user=qMalUAcAAAAJ&hl=en>. Accessed 21 Oct 2019.
- Carroll, A. B., & Buchholtz, A. K. (2012). *Business and society: Ethics, sustainability and stakeholder management* (8th ed.). Boston: Cengage Learning.
- Carroll, A. B., Lipartito, K. J., Post, J. E., Werhane, P. H., & Goodpaster, K. E. (Executive Ed.). (2012). *Corporate responsibility: the American experience*. New York: Cambridge University Press.
- Carroll, A. B., Brown, J., & Buchholtz, A. K. (2018). *Business and society: Ethics, sustainability and stakeholder management*. Boston: Cengage Learning.
- Idowu, S. O. (2013). Archie B. Carroll. In: S. O. Idowu, N. Capaldi, A. Das Gupta, & L. Zu (Eds.), *Encyclopaedia of corporate social responsibility*. Berlin/Heidelberg: Springer.
- Scherer, A. G., & Patzer, M. (2011). *Corporate social responsibility* (pp. 321–329). In: M. S. Assländer (Ed.). Stuttgart: Handbuch Wirtschaftsethik.
- Shabana, K. M., Buchholtz, A. K., & Carroll, A. B. (2016). The institutionalization of corporate social responsibility reporting. *Business and Society*, 56(8), 1107–1135.
- Terry College of Business. (2019). <https://www.terry.uga.edu/directory/management/archie-b-carroll>. Accessed 14 Oct 2019.
- Visser, W. (2006). Revisiting Carroll's CSR pyramid: An African perspective. In M. Hünich & E. P. Rahbek (Eds.), *Corporate citizenship in developing countries – New partnership perspectives* (pp. 29–56). Copenhagen: Copenhagen CBS Press.

Catalytic Philanthropy

► Venture Philanthropy

Cause Promotions

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Synonyms

Fundraising; Sponsorship; Volunteer participation

Definition

Cause promotions are the use of company resources. The aim is to raise awareness of a case and to draw attention. It can be in a form of fundraising, volunteer participation, or sponsorship. The promotion of the case is directed by the company or may be associated with a similar activity. This is the costliest CSR activity in terms of resource use (Thomas and Sonal 2017).

Kotler and Lee (2005) distinguish six types of CSR along which a company can behave responsibly: cause promotion, cause-related marketing, corporate social marketing, corporate philanthropy, community volunteering, and socially responsible business practices. In the formulation of Kotler and Lee (2005), cause promotions is a method that gives companies the opportunity to fund, to contribute, and to show commitment to a particular cause.

While in the case of cause related marketing, the company implements its CSR activities through the sale of corporate products with the involvement of consumers, in the case of cause promotions, these solutions cannot be applied (Galan-Ladero and Valero 2013).

Chiagouris and Ray (2000) distinguish between cause promotions and advocacy advertising. “Cause promotions that promise a donation

to a cause based on a purchase of the company's product; and advocacy advertising of social issues that are sponsored by the brand" Chiagouris and Ray (2000, p. 50).

According to Arora and Henderson (2007), cause promotions programs can work more effectively than providing discounts.

Introduction

The purpose of cause promotions is convincing communication. It arouses interest in social affairs and raises awareness. Promotional strategies focus on external communication. The target audience is primarily stakeholders outside the company.

The following communication goals can be achieved through cause promotions (Kotler and Lee 2005):

- Raising awareness of the issue by presenting statistics and facts.
 - Convincing people to want to know more about the case.
 - Convincing people to sacrifice their time for the cause.
 - Persuading people to donate money.
 - Persuading people not to donate money but to donate in kind.
 - Convincing people to participate and be involved.
2. A donation with purchase is when a donation is made within a given time interval along each product sold. It is implemented in a specific amount, or as a percentage, which typically has an upper limit on the total amount of the donation. It is advantageous in that it can be well tracked by the number of sales, but ensuring transparency is often limited.
 3. Donation with a label or coupon redemption is accomplished by giving customers a code or label at the time of purchase that they can donate to in the store or by mail. That is, it expects additional activity from the consumer. This helps to measure the involvement of consumers, but at the same time it can be also deterrent to consumers.
 4. Donation with online activation, which, like the previous push, requires an extra energy investment from consumers. However, since all of this is requested online, this solution may be more convenient for them, but there is a risk that they will forget it.
 5. In the case of donation with consumer action, the donation is not related to the sale but to the consumer action, which in any case requires active consumers.
 6. The essence of the dual incentive method is the double incentive. That is, the company encourages consumers to increase their willingness to donate (e.g., a donation match). This provides an opportunity to form a partnership with the consumer, which also increases the loyalty of the consumer.
 7. In the case of consumer pledge drives, the company encourages consumers to act for a social cause or to cooperate with a nonprofit organization that requires localization.
 8. The buy one, give one (BOGO) method is a popular form of cause promotions campaigns in which a company does or gives a specific thing in exchange for selling a product. It is always attractive for consumers to see tangible results, but the problem of transparency can also arise here.
 9. The type of consumer directed donation is special in that it involves consumers in the

Types of Cause Promotions

Crocker (2021) distinguishes 10 types of cause promotions type CSR initiatives.

1. In the case of the "proud supporter" method, the company does not link the donation to the sale of a product or any other activity of the consumer, but makes a flat donation. As it is not tied to sales, it can take longer. However, in the absence of coercion to act, it only triggers passive consumer engagement.

decision to have a say on a list defined in advance by the company or even by designating their favorite organization to whom and how the company should make a donation. This will make the consumer more committed to the company and the perceived value will also be higher. However, this action is resource intensive if not just one but more nonprofit organizations are the beneficiary.

10. Volunteerism rally, this emphasizes the donation of time to consumers, that is, to volunteer, in return for which the company provides them with a free product or service as a reward. This makes it possible to implement and personalize local actions, but at the same time requires a high level of consumer commitment.

Advantages and Disadvantages of Cause Promotions

Cause promotions provides the following benefits to companies (Kotler and Lee 2005):

- Strengthening brand positioning.
- Creating a brand preference.
- Increasing the turnover.
- Building consumer loyalty.
- Increasing employee satisfaction.
- Developing partnerships.

However, there are also disadvantages to using cause promotions that companies should be aware of before choosing this form of CSR (Kotler and Lee 2005):

- Company visibility may be lost.
- It can only have a short-term effect.
- Tracking of investments and promotional investments is limited.
- It takes more time and involvement than a simple donation.
- The promotion is easy to repeat and copy and therefore the competitive advantage disappears.

Summary

To be successful, the following aspects should be considered when implementing the cause promotions action (Kotler and Lee 2005):

- Selecting a question that matches the product or company value.
- Being able to be committed by the management in the long run.
- Being of interest to the target market and consumers.
- Motivating employees.
- Having the ability to display media.
- Linking to the product during a campaign.
- Building partnerships.
- Incorporating brand visibility.
- Measuring and monitoring results.

Cross-References

- Cause-Related Marketing
- Corporate Social Responsibility
- Marketing and CSR

References

- Arora, N., & Henderson, T. (2007). Embedded premium promotion: Why it works and how to make it more effective. *Marketing Science*, 26(4), 514–531.
- Chiagouris, L., & Ray, I. (2000). Saving the world with cause-related marketing: It's time to take a look at its latest principles and practices. *Marketing Management*, 48–51. July/August.
- Crocker, B. (2021). Top 10 types of cause promotions. <https://www.conecomm.com/insights-blog/top-10-types-of-cause-promotions> (10.01.2021).
- Galan-Ladero, M. M., & Valero, V. (2013). Sustainable, socially responsible business: The cause-related marketing case. A review of the conceptual framework. *Journal of Security and Sustainability Issues*, 2(4), 35–46.
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility: Doing the most good for your company and your cause*. Hoboken: Wiley.
- Thomas, S., & Sonal, K. (2017). Exploring the interconnections of consumer preference between cause type and cause scope in a cause-related marketing activity: Evidence from Indian context. *International Journal Indian Culture and Business Management*, 14(3), 365–373.

Cause-Related Marketing

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Synonyms

Corporate issue promotions; Corporate social marketing; Corporate societal marketing; Passion branding; Pro-social marketing; Social issues marketing

Definition

One of the most expressive definitions that clearly links cause-related marketing to donation is: “Cause-related marketing is the process of formulating and implementing marketing activities that are characterized by an offer from the firm to contribute a specific amount to a designated cause when customers engage in revenue providing exchanges that satisfy organizational and individual objectives” (Varadarajan and Menon 1988, p. 60) Another approach to CRM is represented by Hawkes and Stead (1996) that CRM is “any marketing activity undertaken by a company designed to simultaneously benefit the company and the charity, or similar cause. The emphasis is on marketing” (p. 4). However, there are those who interpret it more broadly: “the general alliance between businesses and non-profit causes that provide resources and funding to address social issues and business marketing objectives” (Cui et al. 2003, p. 310), in that sense CRM can be an event sponsorship, it can also be related to volunteering or PR. (Duff 2003) Thus, the concept of CRM has expanded to mean that sales do not necessarily mean donations, and in Marconi’s (2002) formulation, CRM is a marketing practice that creates a mutually beneficial relationship with a product, service, brand, or company and a nonprofit organization, i.e., the relationship between the two stakeholders

should be mutually beneficial (File and Prince 1998; Papasolomou and Kitchen 2011).

Introduction

Cause-related marketing (CRM) is a specific form of corporate social responsibility (CSR) (Liu et al. 2010) or a type of CSR (Kotler and Lee 2005). CRM is part of CSR, but it does not fully cover CSR alone, meaning we cannot use the two terms synonymously (Rahman 2011).

CRM, however, is part of a marketing tool and marketing mix (File and Prince 1998), which was the fastest growing type in the early 1990s (Smith 1994). However, CRM is not the same as social marketing, it is definitely used to improve your company’s market position. Importantly, it is a tool in which a company and a case work together publicly. Kotler and Lee (2005) also distinguish between the two CSR solutions. CRM differs from strategic philanthropy (Adkins 1999) as the goal is not only to improve the social situation, but also to increase business success and profits, rather the primary purpose is much more commercial interest (Smith and Higgins 2000).

Mekonnen et al. (2008) call a new version of CRM affinity marketing with a long-term and discrete group orientation.

The Purpose of CRM

Cause-related marketing campaigns basically have two important goals. One is to achieve the social goal itself, such as alleviating global hunger, raising awareness, and supporting it. The other is important for the corporate side, increasing reputation, strengthening consumer loyalty, and increasing financial profits. The essence of CRM is to link the sale of a product or service to a social cause and the company donates a portion of the amounts sold to the case. So it applies to a particular product for a specified period of time and serves a particular organization or cause (Kotler and Lee 2005). Over the last 40 years, it has become a very common form of CSR. Collaboration benefits both companies and

nonprofits. There are few such solutions as CRM that reconcile social and commercial interests (Berglind and Nakata 2005).

Types of CRM

Basically, it is worth distinguishing between strategic and tactical CRM. In the case of tactics, we are only talking about a short-term marketing activity (Drumwright and Murphy 2001; Till and Nowak 2000), the primary goal is to increase revenue. In strategic CRM, top management is also actively involved, the company has significant resources invested and requires long-term commitment. Rather, the goal is to improve the company's long-term image and develop a positive consumer attitude toward the brand (Berger et al. 2007; Dowling 2001).

The two types differ mostly in four respects:

1. Matching the cause and the core competencies of the company (Pracejus and Olsen 2004), which in the case of strategic CRM means connecting with the core business.
2. The duration of the campaign (Till and Nowak 2000), typically 1 month for tactical ones, and it can be several years for strategic CRM.
3. The amount of resources invested (Macleod 2001; Welsh 1999), i.e., what the company spends on the case, is negligible in tactical CRM, typically around 1%, while in the case of a strategic solution it can be higher, up to 100%.
4. The degree of senior management involvement (Macleod 2001; Miller 2002) shows that managers are not involved in tactical CRM, while their involvement is considered particularly important in strategic CRM.

CRM can also be categorized based on the type of open economic relationship between the two organizations:

- Transaction programs, which, after the classic exchange-based donation, that is, after each unit sold, the company contributes a portion of the revenue to a social goal.

- Message promotion programs where the goal is promoted by the company but does not necessarily involve a transaction or financial contribution.
- Licensing programs, where a nonprofit adds its logo and name to a product and then receives a percentage of transactions.

However, in a broader sense, other forms of CRM can be implemented:

- For case-focused programs, the company selects a nonprofit on a strategic basis for a specific case with whom it enters into a partnership. They stand together for a cause, and that does not necessarily mean financial support.
- Business activity programs are linked to ethical business practices, raising awareness of the company's ethical business practices, but there is no specific donation (as fair trade products).
- Targeted programs, where a company helps its main market segment, which can take several forms: donations, volunteers, donations in kind and in cash or publicity.

Advantages of CRM

The following benefits can be seen from the side of companies:

- It helps the bottom line: it generates sales growth without additional investment (Varadarajan and Menon 1988).
- It helps the brand building: corporates choose issues that are of more interest to their consumers, thus expecting greater brand memory, preference, and purchase. Webb and Mohr (1998) showed that consumers value case-related brands more positively.
- It increases corporate reputation: popular cases also increase corporate popularity and are linked to the company name of the case.
- It generates goodwill: in times of crisis, wealth creation becomes even more important, consumers are less likely to leave socially

responsible companies, even if they have engaged in unethical practices (Creyer and Ross 1992), i.e., it is a long-term investment.

- It improves employee morale and retention, increases employee loyalty, creates satisfaction and pride in employees and owners: when choosing a job, 75% of respondents consider whether the company is committed to social issues where they want to work (Cone Communications 2002; Deloitte 2004; Kotler and Lee 2005), which confirms that CRM is worthwhile to apply for increasing employee loyalty.
- It gives credibility to the company as a non-profit organization.
- It provides a competitive advantage over other companies (Kooijmans 2004).
- It causes customer retention (Duff 2003).
- It helps to access market niches.
- It reduces consumer price sensitivity (Trimble and Rifon 2006).

From the side of nonprofit organizations, the following advantages are worth highlighting:

- The funding aspect is the most important and also the primary reason, i.e., it provides financial security for the organizations.
- Effectiveness of messages: however, delivering messages to consumers for their own benefit is also important; they can reach stakeholders, the company's partners, and customers much more easily.
- It also gives them marketing value, as the company carries out the promotion and the non-profit organization has no task.
- If the company manages it as an internal employee program, the employees can also be potential volunteers for the nonprofit organization.

Summary

The success of CRM can also be influenced by the design of the cause along different dimensions (Vanhemma et al. 2012):

- Type: primary need or secondary need/life saver or life enhancer.
- Scope: local, national, international.
- Acuteness: sudden disaster or ongoing tragedy.

The following are the challenges to consider when planning a CRM campaign:

- In order to be more than just an ad hoc campaign, it is necessary to involve top management so that the company has a lasting commitment to socially responsible operations. According to Drumwrights' (1996) research, managers are more actively involved in CRM campaigns than in a CSR initiative, with a higher personal commitment to the cause.
- The right fit between the goal and the company is essential, i.e., if the relationship needs to be explained, it is no longer appropriate.
- Creative solution is needed to fulfill the goal of the company and the organization; longer preparation, preliminary testing, concept creation, and open discourses are needed.
- It is worthwhile to develop a CRM code of ethics for transparency.
- Consideration and compatibility of the relationship between consumer preferences and the chosen goal can also help in the success of CRM (Vanhamma et al. 2012).
- Strategic CRM means higher evaluation in the eyes of consumers (Van den Brink et al. 2006).

The following questions should also be considered when starting this type of campaign:

- Is CRM just a diversionary tactic or is it really a good cause?
- Is it only one product problem that becomes hidden in PR?
- Is the amount offered disproportionately small compared to the increase in sales of the product it generates? Is it a win-win situation or just the corporate win from the cooperation? Does the company just take advantage of the nonprofit?
- Is it just manipulation or real social impact?

- Are the two interests compatible, does the company not influence the goal too much?
- How transparent is the campaign?

Cross-References

- Corporate Social Responsibility
- CSR Reporting
- Marketing and CSR
- Social Marketing
- Societal Marketing

References

- Adkins, S. (1999). *Cause related marketing: Who cares wins*. Burlington: Elsevier.
- Berger, I. E., Cunningham, P. H., & Drumwright, M. E. (2007). Mainstreaming CSR: Developing markets for virtue. *California Management Review*, 49(44), 132–157.
- Berglund, M., & Nakata, C. (2005). Cause-related marketing: More buck than bang? *Business Horizons*, 48, 443–453. <https://doi.org/10.1016/j.bushor.2005.04.008>.
- Cone Communications, Inc. (2002). *2002 Cone corporate citizenship study*. Retrieved May 18, 2004, from <http://www.coneinc.com/Pages/pr13.html>
- Creyer, E. H., & Ross, W. T., Jr. (1992). The impact of corporate behavior on perceived product value. *Marketing Letters*, 7(2), 173–185.
- Cui, Y., Treni, E. S., Sullivan, P. M., & Martiru, G. N. (2003). Cause-related marketing: How generation Y responds. *International Journal of Retail & Distribution Management*, 31(6/7), 310–320. <https://doi.org/10.1108/09590550310476012>.
- Deloitte. (2004). *Deloitte survey reveals that 72 percent of Americans want to work for companies that support charitable causes*. Accessed 10 Jan 2010, from http://www.csrwire.com/press/press_release/21881-Deloitte-Survey-Reveals-that-72Percent-of-Americans-Want-to-Work-for-Companies-that-Support-CharitableCauses
- Dowling, G. (2001). *Creating corporate reputation, image and promise*. Oxford: Oxford University.
- Drumwright, M. E. (1996). Company advertising with a social dimension: The role of noneconomic criteria. *Journal of Marketing*, 60(4), 71–87.
- Drumwright, M. E., & Murphy, P. E. (2001). Corporate societal marketing. In P. N. Bloom & G. Gundlach (Eds.), *Handbook of marketing and society* (pp. 162–183). Thousand Oaks: Sage Publications.
- Duff, A. (2003). Making the cause fit commercial aims. *Director*, 56(8), 42.
- File, K. M., & Prince, R. A. (1998). Cause related marketing and corporate philanthropy in the privately held enterprise. *Journal of Business Ethics*, 17(14), 1529–1539.
- Hawkes, G., & Stead, J. (1996). *Who chooses? The family and their buying decisions. The influence of partnerships between companies and charities on family purchasing decisions*. London: NCH Action for Children.
- Kooijmans, M. C. (2004). *Heineken: Only one thing missing*. Unpublished MSc thesis, RSM Erasmus University Rotterdam, Rotterdam.
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility: Doing the most good for your company and your cause*. Hoboken: Wiley.
- Liu, G., Liston-Heyes, C., & Ko, W.-W. (2010). Employee participation in cause-related marketing strategies: A study of management perceptions from British consumer service industries. *Journal of Business Ethics*, 92(2), 19. <https://doi.org/10.1007/s10551-009-0148-3>.
- Macleod, S. (2001). Why worry about CSR? *Strategic Communication Management*, 5(5), 8–9.
- Marconi, J. (2002). *Cause marketing: Build your image and bottom line through socially responsible partnerships, programs, and events*. Chicago: Dearborn Trade.
- Mekonnen, A., Harris, F., & Laing, A. (2008). Linking products to a cause or affinity group: Does this really make them more attractive to consumers? *European Journal of Marketing*, 42(1), 135–153. <https://doi.org/10.1108/03090560810840943>.
- Miller, B. A. (2002). Social initiatives can boost loyalty. *Marketing News*, 36(21), 14–15.
- Papasolomou, I., & Kitchen, P. J. (2011). Cause related marketing: Developing a tripartite approach with BMW. *Corporate Reputation Review*, 14(1), 63–75.
- Pracejus, J. W., & Olsen, G. D. (2004). The role of brand/cause fit in the effectiveness of cause-related marketing campaigns. *Journal of Business Research*, 57, 635–640. [https://doi.org/10.1016/S0148-2963\(02\)00306-5](https://doi.org/10.1016/S0148-2963(02)00306-5).
- Rahman, S. (2011). Evaluation of definitions: Ten dimensions of corporate social responsibility. *World Review of Business Research*, 1(1), 166–176.
- Smith, C. (1994). The new corporate philosophy. *Harvard Business Review*, 72(3), 105–116.
- Smith, W., & Higgins, M. (2000). Cause-related marketing: Ethics and the ecstatic. *Business & Society*, 39(3), 304–322. <https://doi.org/10.1177/000765030003900304>.
- Till, B. D., & Nowak, L. I. (2000). Toward effective use of cause-related marketing alliances. *Journal of Product & Brand Management*, 9(7), 472–484. <https://doi.org/10.1108/10610420010351394>.
- Trimble, C. S., & Rifon, N. J. (2006). Consumer perceptions of compatibility in cause-related marketing messages. *International Journal of Nonprofit and Voluntary Sector Marketing*, 11(1), 29–47.
- Van den Brink, D., Oderkerken-Schröder, G., & Pauwels, P. (2006). The effect of strategic and tactical cause-

related marketing on consumers' brand loyalty. *Journal of Consumer Marketing*, 23(1), 15–25. <https://doi.org/10.1108/07363760610641127>.

Vanhemmen, J., Lindgreen, A., Reast, J., & van Popering, N. (2012). To do well by doing good: improving corporate image through cause-related marketing. *Journal of Business Ethics*, 109(3), 259–274. <https://doi.org/10.1007/s10551-011-1134-0>.

Varadarajan, P. R., & Menon, A. (1988). Cause-related marketing: A co-alignment of marketing strategy and corporate philanthropy. *Journal of Marketing*, 52, 58–74.

Webb, D. J., & Mohr, L. A. (1998). A typology of consumer responses to cause-related marketing: From skeptics to socially concerned. *Journal of Public Policy and Marketing*, 17(2), 226–238.

Welsh, J. C. (1999). Good cause, good business. *Harvard Business Review*, 77(5), 21.

CERES Principles

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Synonyms

Corporate code of environmental conduct; Non-profit organization; Sustainability organization

Definition

The Coalition for Environmentally Responsible Economies (CERES) is a nonprofit organization based in the USA which comprises investors, environmental and religious organizations, public pension trustees, and public interest groups. Smith (1993) clearly pointed out that CERES provides a broad consensus among different groups of interests such as environmental activists, investors, community, and so on. Given the diversity of members that have promoted the CERES coalition, the adoption of CERES principles leads to the promotion of different community interests in a more inclusive way than other associations focused on an industry or commerce level. Thus, CERES is a coalition of investors, firms, and environmental organizations. The coalition's purpose is to promote investment policies that are environmentally, socially, and financially sound. In other words, the goal of the members of the CERES coalition is to reinforce, increase, and guarantee the corporate environmental responsibility through the selective use of investment capital (Smith 1993). There are currently more than 70 members, including large financial organizations such as Harrington Investments and environmental groups such as the Sierra Club (https://www.iisd.org/business/tools/principles_ceres.aspx). As Smith (1993, p. 313) clarified, “although CERES developed the principles in the United States and has mainly sought

CDM

► Clean Development Mechanism (CDM): Benefits and Project Cycle

Central Asia

► Aral Sea Disaster, The

CEO Activism

► Corporate Activism

CEO Duality

► Chief Executive Officer (CEO Duality)

CEO-Led Organization for Sustainable Development

► World Business Council for Sustainable Development

endorsements by U.S.-based companies, the coalition recognizes that environmental accountability problems do not end at U.S. borders. The CERES Principles are designed to be applied worldwide, in industrialized nations and in developing nations.”

Introduction

Within the environmental sphere, companies now have to consider climate aspects as an economic factor in their business strategy, including gathering and reporting and disclosure of environmental issues, concerns, and strengths. According to Freedman and Jaggi (2011), reporting acts as a means to increase transparency, informing stakeholders about corporate actions and strategies related to environmental issues such as climate change. A high degree of environmental information transparency reveals a firm’s strategy, which allows interest groups to monitor and seek improvement in the firm’s operations (Sroufe 2003; Kolk et al. 2008). As Woodall, Vice President for Environmental Policy for the Southern Company, pointed out in 1992, firms have begun to be critical in their thinking about the value of a company associated with the disclosure of environmental information.

The proactively climate change actions identified by a firm in its voluntary disclosure reports could aid rivals in competing with the disclosing firm. These climate change activities serve as a driving factor in reducing costs, achieving operational efficiency, and improving productivity because they allow the firm to attract better talent and motivate employees (Edmans 2011). Moreover, companies that opt to disclose information beyond the standard requirements reduce the information risk or increase the investor following, resulting in benefits such as a reduction in capital and debt costs or an increase in the market value of the company (Barry and Brown 1984). Thus, a voluntary disclosure policy would primarily reduce information asymmetry by assisting investors in evaluating the ethical and environmental practices and their relationship with climate change actions and activities. In addition, it

may enhance capital market participants’ perceptions of the company from the positive association of being a growth-sustainable organization aware about climate change, a reputation that translates into increased sales.

Overall, as a consequence of the sharp rise in concern with environmental topics, there has recently been an increase in the need to know how companies, governments, and society at large all over the world should confront this problem, which has repercussions at both national and international levels. In this line, and as Cogan (2006, p. 1) pointed out, “companies as the vanguard no longer question how much it will cost to reduce greenhouse gas emissions, but how much money they can make doing it. Financial markets are starting to reward companies that are moving ahead on climate change, while those lagging behind are being assigned more risk.”

At this regard, the Coalition for Environmentally Responsible Economies (CERES) emerges as a non-profit organization based in the USA which comprises investors, environmental and religious organizations, public pension trustees, and public interest groups. Smith (1993) clearly pointed out that CERES provides a broad consensus among different groups of interests such as environmental activists, investors, community, and so on. Given the diversity of members that have promoted the CERES coalition, the adoption of CERES principles leads to the promotion of different community interests in a more inclusive way than other associations focused on an industry or commerce level. Thus, CERES is a coalition of investors, firms, and environmental organizations. The coalition’s purpose is to promote investment policies that are environmentally, socially, and financially sound. In other words, the goal of the members of the CERES coalition is to reinforce, increase, and guarantee the corporate environmental responsibility through the selective use of investment capital (Smith 1993). There are currently more than 70 members, including large financial organizations such as Harrington Investments and environmental groups such as the Sierra Club (https://www.iisd.org/business/tools/principles_ceres.aspx). As Smith (1993, p. 313) clarified, “although CERES

developed the principles in the United States and has mainly sought endorsements by U.S.-based companies, the coalition recognizes that environmental accountability problems do not end at U.S. borders. The CERES Principles are designed to be applied worldwide, in industrialized nations and in developing nations.”

CERES “environmental members” include Green Seal, the Sierra Club, Valdez Society of Japan, Earth Island Institute, the International Alliance for Sustainable Agriculture, and the Worldwide Fund for Nature. “Social investment members” include the United States Trust Company of Boston, Harrington Investments, Parnassus Fund, Social Responsibility Investment Group, Calvert Social Investment Fund and Foundation, and the Presbyterian Church. Note, even more, that large members are organizations and individuals whose interests are not represented by the other members of the Coalition. They include the Industrial Union Department, the Jessie Smith Noyes Foundation, and the Washington Office on Environmental Justice.

From the beginning of the coalition, there were numerous interventions that clearly defended and claimed the need for CERES. Harrison J. Golding who was Comptroller of New York City clearly pointed out: “We hope corporations come to recognize that environmental considerations are among the most essential to the corporate policy-making process. Hence, our guidelines are in no way weapons of coercion. . . . Rather, at this point the Principles will serve merely as a starting point from which corporations can help us develop a workable approach to environmentally responsible corporate policy making.” Meanwhile, for one of the chairs of the Sierra Club, Mike McCloskey: “The time is right for corporations and environmentalists to deal directly with each other and not filter everything through government. The companies that sign the CERES Principles identify themselves as ones that organizations like mine should approach in our desire to forge a new relationship.”

In detail, CERES is a sustainability nonprofit organization working with the most influential investors and companies to build leadership and drive solutions throughout the economy. Through

powerful networks and advocacy, CERES tackles the world’s biggest sustainability challenges, including climate change, water scarcity and pollution, and human rights abuses. Overall, its mission is transforming the economy to build a sustainable future for people and the planet. Specifically, CERES advances leading practices that ramp up global investments in clean energy and sustainable food and water. It also set the highest bar for sustainability leadership for Fortune 500 firms and other influential companies. It delivers cutting-edge research and innovative tools to educate and inspire leaders across every sector of the economy to take action. And it mobilizes investor and company leaders to advocate for stronger climate, clean energy, and water policies at the state and federal level.

In 1989, CERES announced a set of several principles for ensuring and heightening the corporate environmental responsibility. In their website and several annual reports, CERES specifies that it is based on a set of ten key principles; the ten so-called CERES principles offer guidance and standards against which companies can measure their performance on environmental and social issues. For Statman (2007), the CERES principles link corporate environmental responsibility with the bottom line while covering environmental protection, resource conservation, risk reduction, product safety, public access to information, and accountability. The ten principles commit companies to protecting the Earth, using energy and resources wisely and sustainably, minimizing waste, and selling safe products and services. The signatories back up their commitment by pledging to reduce risk, disclose hazards, and compensate for damages. They also agree to provide high-level management support for environmental activities, and to gather and disseminate information about their environmental performance, both internally and externally. For Smith (1993, p. 311), the CERES principles recognize that sustainable use of national resources is ultimately necessary for corporate survival. Furthermore, as an externally developed mechanism, the CERES principles must be internalized through the signature of the organizations of these principles, on a voluntary basis; this makes the

environmental concerns and issues in one of the top priorities of a corporation (Smith 1993). It must be highlighted that the CERES principles are entirely voluntary.

Organizations that voluntarily sign the principles proposed by CERES assume the responsibility of annually disclosing a report on the annual progress in the implementation and development of these principles. Therefore, these organizations that voluntarily sign CERES principles confirm their intention to be reference organizations, leaders, in the disclosure of their environmental performance in a standardized manner. For Smith (1993), one of the benefits associated with the standardization of environmental performance reports is that it allows investors to evaluate and analyze the environmental impact and performance of a firm; this evaluation will be useful in the decision-making process.

As Smith (1993) points out in his research on the CERES principles, they develop a unique approach and vision on the environmental responsibility of an organization that differs from the traditional system of legal sanctions. Justify your claim with a series of arguments. First, the author points out that the principles act as the necessary tool to guarantee environmental responsibility and accountability from an ethical point of view and complement government regulation. In the second place, the CERES principles represent a broad consensus among the population. Third, these principles standardize the practice of disclosure of environmental information. Fourth, the principles are applicable to all national and international organizations regardless of the sector of activity.

Specifically, the ten CERES principles that this coalition points out in its website and numerous reports are the following:

1. Protection of the biosphere

The aim of CERES is to minimize and strive to eliminate the release of any pollutant that may cause environmental damage to air, water, or Earth or its inhabitants. CERES aims to safeguard habitats in rivers, lakes, wetlands, coastal zones, and oceans and minimize contributing to the greenhouse effect,

depletion of the ozone layer, acid rain, or smog.

2. Sustainable use of natural resources

The aim of CERES is to make sustainable use of renewable natural resources, such as water, soils, and forest. CERES will conserve nonrenewable natural resources through efficient use and careful planning and protecting wildlife habitats, open spaces, and wilderness while preserving biodiversity.

3. Reduction and disposal of waste

The aim of CERES is to minimize the creation of waste, especially hazardous waste, and wherever possible recycle materials. CERES will dispose of all wastes through safe and responsible methods.

4. Wise use of energy

CERES aims to make every effort to use environmentally safe and sustainable energy sources to meet our needs. The aim of CERES is to invest in improved energy efficiency and conservation in members' operations and maximize the energy efficiency of products that their members produce and sell.

5. Risk reduction

The aim of CERES is to minimize the environmental health and safety risks to its employees and the communities in which its members operate by employing safe technologies and operating procedures and by being constantly prepared for emergencies.

6. Marketing safe products and services

The aim of CERES is to sell products or services that minimize adverse environmental impacts and that are safe as consumers commonly use them. CERES will inform consumers of the environmental impacts of its members' products or services.

7. Damage compensation

CERES aims to take responsibility for any harm that its members cause to the environment by making every effort to fully restore the environment and to compensate those persons who are adversely affected.

8. Disclosure

CERES will disclose to its employees and to the public incidents relating to its member's operations that cause environmental

harm or pose health or safety hazards. At this regard, CERES aims to disclose potential environmental, health, or safety hazards posed by its operations. Moreover, CERES will not take any action against employees who report any conditions that create a danger to the environment or pose health or safety hazards.

9. Environmental directors and managers

Specifically, at this respect, CERES points out that it will continue to improve management resources to implement the CERES principles. This includes monitoring and reporting its implementation efforts and sustaining a process to ensure that the board of directors and chief executive officer are kept informed of and are fully responsible for all environmental matters. CERES will establish a committee of the board of directors with a responsibility for environmental affairs. At least one member of the board of directors will be a person qualified to represent environmental interests to come before the company.

10. Assessment and audit

The aim of CERES is to conduct and make public an annual self-evaluation of its progress in implementing these principles and in complying with applicable laws and regulations throughout the worldwide operations of it and its members. CERES aims to work toward the timely creation of independent environmental audit procedures that it will complete annually and make available to the public.

The truth is that over the last decades, numerous organizations and entities have voluntarily disclosed environmental reports. However, the target audience for these reports has not been able to assess them clearly, with knowledge, in part due to the absence of standardization. The reports have not been comparable on many occasions because they contain different types of information, both qualitative and quantitative (Clarkson et al. 2008).

In addition to this lack of homogeneity, there was also the lack of credibility and trust in the

information contained in these voluntary reports. Therefore, one of the main benefits of CERES with respect to the issuance of previous voluntary reports is standardization, which has an effect on a higher level of homogenization (Smith 1993). This standardization allows each organization adhering to the CERES principles to answer the same questions in the same format, in such a way that they provide information about environmental concerns, strengths, and issues in standardized terms. These questions are intended to know and assess the degree of adherence of the entity to the aforementioned principles.

In sum, by adhering to CERES principles, organizations aim to voluntarily affirm and disclose their commitment and compromise to environmental responsibility; they must promote activities, actions, and strategies according to the responsible stewards of the environment, protecting also the Earth (Smith 1993).

Summary

The Coalition for Environmentally Responsible Economies (CERES) emerges as a non-profit organization based in the USA which comprises investors, environmental and religious organizations, public pension trustees, and public interest groups. CERES is a coalition of investors, firms, and environmental organizations. The coalition's purpose is to promote investment policies that are environmentally, socially, and financially sound. Overall, its mission is transforming the economy to build a sustainable future for people and the planet. CERES specifies that it is based on a set of ten key principles; the ten so-called CERES principles offer guidance and standards against which companies can measure their performance on environmental and social issues. The CERES principles must be internalized through the signature of the organizations of these principles, on a voluntary basis. Organizations that voluntarily sign the principles proposed by CERES assume the responsibility of annually disclosing a report on the annual progress in the implementation and development of these principles.

Cross-References

- ▶ [Carbon Disclosure Project](#)
- ▶ [Carbon Footprint](#)
- ▶ [Carbon Offsets](#)
- ▶ [Carbon Trading Schemes](#)

References

- Barry, C. B., & Brown, S. J. (1984). Differential information and security market equilibrium. *Journal of Financial and Quantitative Analysis*, 20(4), 407–422.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4–5), 303–327.
- Cogan, D. G. (2006). *Corporate governance and climate change: Making the connection*. Boston: CERES.
- Edmans, A. (2011). Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics*, 101(3), 621–640.
- Freedman, M., & Jaggi, B. (2011). Global warming disclosures: Impact of Kyoto protocol across countries. *Journal of International Financial Management and Accounting*, 22(1), 47–90.
- Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *European Accounting Review*, 17(4), 719–745.
- Smith, J. A., III. (1993). The CERES principles: A voluntary code for corporate environmental responsibility. *Yale Journal of International Law*, 18, 307.
- Sroufe, R. (2003). Effects of environmental management systems on environmental management practices and operations. *Production and Operations Management*, 12(3), 416–431.
- Statman, M. (2007). Socially responsible investments. Santa Clara University. USA. Available at SSRN 995271.

Certification

- ▶ [Business Compliance Initiatives](#)

Certification Audit

- ▶ [Environmental Compliance Audit](#)

Chain of Event

- ▶ [CSR Butterfly Effect 2](#)

Change

- ▶ [Communication and Innovation](#)
- ▶ [Systemic Transition](#)

Change Management

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Synonyms

[Organizational change](#)

Definition

Coupled with the accelerating technological advancements, global competition, and the transformations in human capital, organizations are prompted to undergo a continuous change (By 2005; Kotter 1996). Despite the ample research in the literature, change still is the representation of a management challenge for practitioners and scholars (Suddaby and Foster 2017). There is still no clarity in the conceptualization of the construct, which leads a lack of consensus on the definition of change management (Suddaby 2010). However, in general, change management is the reflection of a process that aims to modify an organization's strategy, structure, procedures, and capabilities in order to adapt to the external environment (Moran and Brightman 2000).

Introduction

In today's extensively aggressive and continuously changing environment, where the change has turned into a norm for both private and state organizations to survive, managing the change has become the major tasks of managers (By 2005). Organizational change is an undeniable feature of organizations' lives at operational and strategic level (Burnes 2004; D'Aunno et al. 2000). In this regard, an organization's ability to identify its desired state and to manage the change process in order to reach that desired state is of importance, correspondingly, change management is usually viewed as a crucial managerial skill (Harigopal 2006; McCauley 2006). Although the necessity of organizational change is indisputable with contemporaneous dynamic patterns taken into account, engaging in sustainable changes potentially harbors a number of complicated adverse effects (Stouten et al. 2018). The difficulties of operating in a hyper-turbulent environment entail organizations to learn and adopt new approaches for renewal. In this domain, organizational agents are exposed to adopt a change management approach to cope with the changing process. Therefore, successful change management has been the focal point of organizations (Ashurst and Hodges 2010). Thus, organizations are continuously endeavoring to align their business activities with the requirements of rapidly changing external environment (March 1981; Moran and Brightman 2000).

According to the metaphor of organizational life, organizations are open systems that are adaptive and living (Morgan 1986). Organizations adapt in a way that the external environment favors them to achieve success. Despite the numerous perspectives and methods that have been proposed to cope with change, the existing literature lacks a consensus on the most appropriate change method for organizations (Bamford and Forrester 2003) since every organization may need or follow a different approach based on their contingencies; therefore, suggestion of a directive change is not appropriate for organizations (Burnes and Jackson 2011; Michel et al. 2013; Nyström et al. 2013). Organizational

changes can include mergers, establishment of a new department, downsizing, adoption of new technologies, implementation of new procedures, changes in product or service lines, and alterations in production systems (Lines 2005). Although the literature provides a significant number of change methods, majority of the organizations that undergo change fail (Al-Haddad and Kotnour 2015; Burnes 2009; Burnes and Jackson 2011; Gill 2003; Michel et al. 2013; Sirkin et al. 2005).

The fundamental and solid basis of change management traces back to the initial work of Kurt Lewin with his focus on organizational development that is so called as "*the planned change approach*" (Cummings et al. 2016; Todnem 2005). Although there is no universally accepted practical view to organizational change, planned organizational change tries to clarify what kind of transformations organizations need to experience and how they implement the change (Burnes 2004; By 2005). The planned change approach proposes the three major steps of organizational change including "*unfreeze, change, and freeze*" (Lewin 1952; Sonenshein 2010). These sequential prescriptive steps aim to advise the managers about how to manage organizational change. In this vein, unfreezing reflects the change in an organization's vision with a change plan to implement. The unfreezing step prepares the organization for adoption of new organizational systems. Lastly, the change step includes the modification of existing systems including policies, procedures, and structures. In the last step, the change is consolidated across the organization. The planned organizational change underlines the significance of comprehending the different states that organizations experience while moving from current to desired state (Eldrod II and Tippet 2002; Stouten et al. 2018). The planned change management approach of Lewin with this three-step approach has dominated and initiated the further change views in the literature (Levasseur 2001; Michaels 2001). The further change approaches were developed following the Lewin's approach of change (e.g., Beer 1980; Hiatt 2006; Judson 1991; Kanter et al. 1992; Kotter 1996).

Despite the ample support, the planned approach has been the center of critics as it assumes that all organizational members are willing to change, which is usually an exceptional case, as individuals and groups can have different opinions (Bambford and Forrester 2003). In conjunction with this view, due to the highly volatile environments and high levels of uncertainty, employees in an organization can never experience the refreezing state (Mack et al. 1998). The dominant understanding lying behind the planned change view is that change agents are the ones who are responsible for timing and planning the change (Burnes 2004). However, changes can emerge without the managers' intention instead through a situational momentum which is considered as the contextual factors that drive organizational change (Jing and Van de Ven 2014). As organizations are highly connected with the entities residing in their external environment, the internal organizational practices and mechanisms are shaped by these external forces (Pfeffer and Salancik 2003). Therefore, all organizations are exposed to their environmental conditions, which indicates that even planned change is not without external contingencies. In addition, the planned organizational change entails ambiguity and involves the organizational members, their interests and goals that can create conflict. In addition, some authors assert that the planned approach reflects a bounded process where change management is an ongoing process (Oswick et al. 2005).

While there are other typologies of organizational change in terms of how change happens, the emergent change is viewed as the other dominant approach for change (By 2005). The emergent view of change stresses the perspective that change is not a combination of linear events that happen in a certain time of period, it is a continuous process for adapting to the changing environment (Burnes 2004; Oswick et al. 2005). Caldwell et al. (2004, p. 77) defines emergent change as “*a long-term complex and incremental process of shaping how change unfolds over time.*” Drawing with this notion, the emergent approach to change points out the unforeseen nature of change.

According to Burnes (1996, p. 14), emergent approach emphasizes “*extensive and in-depth*

understanding of strategy, structure, systems, people, style and culture, and how these can function either as sources of inertia that can block change, or alternatively, as levers to encourage an effective change process.” The core idea behind the emergent change is that identifying and implementing a linear combination of actions is not possible for rapid and complex changes (Todnem 2005). According to the supporters of emergent view, the planned change is not appropriate to implement in complex and uncertain environments and change should be considered in a holistic and contextual manner (Mintzberg and Westley 1992; Todnem 2005). Therefore, emergent perspective advocates that success in change is more dependent on initiation of change, communication, and understanding of issues at organizational level rather than specified steps (Pettigrew 1997). In this vein, the emergence of change proposes that it is not possible for top management to identify and make an implementation of every action for change. Moreover, during the change process, the senior managers adopt a facilitator role of change rather than a controller one. Therefore, emergent change points out the initiation steps before change happens rather than the specifically set steps to change (Burnes 2004, 2009). The prominent emergent change models are developed by Kanter et al. (1992), Kotter (1996), and Luecke (2003) in which they point the role of leaders as an initiator and facilitator of change by developing a shared vision and communicating the vision of change within the organization and emphasize the role of organizational members at the lower level rather than a top-down change process (Todnem 2005). Correspondingly, emergent approach puts more emphasis on the extent that an organization is ready for change and the managers' role in facilitating the change within the organization (Burnes 2004).

In addition to the typology of emergent and planned change, there is another basic conceptualization of organizational change which depends on the rate of occurrence (Todnem 2005). In this vein, Tushman and Romanelli (1985) propose the punctuated equilibrium model which represents the discontinuous change. In discontinuous change, an organization experiences incremental

changes that are interrupted by radical changes. Grundy (1993, p. 26) asserts that organizations undergo rapid changes which can encapsulate fundamental strategic, cultural, and structural changes in discontinuous change. Compared to discontinuous change, in continuous change, organizations can continually adapt to the environment to keep pace with the environmental changes (Burnes 2004; Luecke 2003).

Despite the approaches proposed for change management, Dunphy and Stace (1993, p. 905) assert that *“managers and consultants need a model of change that is essentially a ‘situational’ or ‘contingency model’, one that indicates how to vary change strategies to achieve ‘optimum fit’ with the changing environment.”* In addition, according to Bamford and Forrester (2003), it is not possible to label any model as “one best way” and there is no clarified best way to manage organizational change. Therefore, it is crucial for managers to comprehend their aim, their internal strengths and weaknesses, and the contextual factors in which the organization operates. Every organization may follow a different approach depending on their size, structure, industry, or environmental circumstances.

Related Issues

Organizational change entails leadership efforts to introduce the required new behaviors for change. Leaders are the ones who are responsible for creating the appropriate environment for the organizational members in order to implement the change (Burnes 2011). Leaders play a critical role in creating organizational readiness and improving adaptability of employees for the change. According to Gill (2003, p. 307), it is the leaders who make a difference in the success of organizational change which *“must be planned, organized, directed, and controlled.”* Gill (2003) asserts that successful organizational change requires a culture with shared values that can promote the communication and understanding of change for strategy and vision through empowerment, motivation, and inspiration of the organizational members.

Although organizational change is crucial for organizational survival (Kiesebach et al. 2009), it can accompany some implications at individual level (Vakola et al. 2013) such as increase in turnover intention, anxiety (Holt et al. 2007; Rafferty and Griffin 2006), decrease in productivity and job satisfaction (Mack et al. 1998; Rafferty and Griffin 2006). Therefore, the ability of leaders to manage the change is of importance. Leader behaviors can impact the wellbeing of subordinates during organizational change, as they are the role models or facilitators of change (Kiesebach et al. 2009). Accordingly, if the management of organizational change is carried out in an informative, fair, and participative manner, the change can garner more positive reactions including acceptance and embracement of change (Armenakis et al. 2007; Oreg et al. 2011). In this vein, leaders can shape the change process in a way that can conduce the subordinates to accept the change. Especially, transformational leaders can stimulate subordinates to perform beyond what is expected, promote communication of organizational goals, provide guidance, and bridge multilevel processes including individual, team, and organizational level, all of which lead successful management of organizational change (Bass 1985; Bass and Riggio 2006; Feng et al. 2016; Holten and Brenner 2015).

Successful leaders need intellectual and cognitive abilities to process crucial information for solving problems, rationalizing the possibilities, and making decisions. Moreover, the spiritual abilities of leaders build a bridge between the organizational members and the company by communicating the meaning of their efforts (George 2001). Emotional intelligence provides leaders to benefit from who they are rather than the power of their position or authority (Gill 2003). The behavioral skills encompass verbal and nonverbal communication within the organization. These abilities are important to communicate effectively and build a strong shared vision, which are considered as the key ingredients of successful organizational change (Armenakis et al. 1993). In essence, effective communication enables the inspiration and adaptation of employees towards change and persuasion to

accept the change. Employees' commitment and cooperative behaviors are vital for organizational change (Porras and Robertson 1992). In addition, through empowerment, leaders can build trust with their employees and eliminate the barriers for creative, risk-taking, and innovative behaviors of employees (Kotter 1996). It is crucial that organizational members are cognitively, emotionally, and behaviorally ready to accept and adopt the change, which indicates the extent of organizational readiness for change (Armenakis et al. 1993, 2007; Weiner et al. 2008). Successful organizational change entails required resources including "budget, systems, time and information, and the necessary expertise, knowledge, and skills" (Gill 2003).

In terms of barriers to change, organizations' strategic and structural inertia behaviors can rise due to their past experience since organizations are bounded with their existing systems, which acts as a barrier to change and also as a cause to the death of organizations (Hannan and Freeman 1984; Huang et al. 2013) as organizational inertia inhibits the adaptation of organizations to their external environment (Chesbrough 2007). Especially, organizational inertia can restrict innovation capabilities of organizations that are important for organizational adaptation (Huang et al. 2013). In addition, although firm capabilities are important for organizational change such capabilities can create competency trap for organizations as well. For example, organizational learning can provide organizational success; however, a competency trap can emerge when successful outcomes are achieved by existing procedures and experience that blinds the organization to explore for new procedures, systems, and competencies. Thus, the organization can become incapable of changing and adapting to the external environment (Hannan and Freeman 1984; Levinthal and March 1993; March 1991).

Summary

In today's hypercompetitive global environment, change has become a sine qua non for

organizations. Organizations need appropriate policies, practices, culture, systems, and adequate resources and capabilities to experience successful organizational change in order to adapt to the external environment. The contextual factors can affect the appropriate change process that suits organizations; therefore, there is no one best way for organizational change. In conjunction with aforementioned statements, organizational change can be smoothly implemented when the stakeholders' and organization's goals are in alignment. In essence, as employees are the actual players in the implementation process of change, it is important to provide direction and motivate them to accept the change that can help to avoid breaking psychological contracts.

Cross-References

- Organizational Development
- Transformational Leadership

References

- Al-Haddad, S., & Kotnour, T. (2015). Integrating the organizational change literature: A model for successful change. *Journal of Organizational Change Management*, 25(2), 234–262. <https://doi.org/10.1108/JOCM-11-2013-0215>.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, 46, 681–703. <https://doi.org/10.1177/001872679304600601>.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, H. J. (2007). Organizational change recipients' beliefs scale. *The Journal of Applied Behavioral Science*, 43(4), 481–505. <https://doi.org/10.1177/0021886307303654>.
- Ashurst, C., & Hodges, J. (2010). Exploring business transformation: The challenges of developing a benefits realization capability. *Journal of Change Management*, 10(2), 217–237. <https://doi.org/10.1080/14697011003795685>.
- Bamford, D. R., & Forrester, P. L. (2003). Managing planned and emergent change within an operations management environment. *International Journal of Operations and Production Management*, 23(5), 546–564. <https://doi.org/10.1108/01443570310471857>.

- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Mahwah: Erlbaum.
- Beer, M. (1980). *Organization change and development: A systems view*. Santa Monica: Goodyear.
- Burnes, B. (1996). No such thing as . . . a “one best way” to manage organizational change. *Management Decision*, 34(10), 11–18. <https://doi.org/10.1108/00251749610150649>.
- Burnes, B. (2004). Emergent change and planned change—competitors or allies? *International Journal of Operations & Production Management*, 24(9), 886–902. <https://doi.org/10.1108/01443570410552108>.
- Burnes, B. (2009). Reflections: Ethics and organizational change—time for a return to Lewinian values. *Journal of Change Management*, 9(4), 359–381. <https://doi.org/10.1080/14697010903360558>.
- Burnes, B. (2011). Introduction: Why does change fail, and what can we do about it? *Journal of Change Management*, 11(4), 445–450. <https://doi.org/10.1080/14697017.2011.630507>.
- Burnes, B., & Jackson, P. (2011). Success and failure in organizational change: An exploration of the role of values. *Journal of Change Management*, 11(2), 133–162. <https://doi.org/10.1080/14697017.2010.524655>.
- By, R. T. (2005). Organizational change management: A critical review. *Journal of Change Management*, 5(4), 369–380. <https://doi.org/10.1080/14697010500359250>.
- Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Toward an understanding of the relationships among organizational change, individual differences, and changes in person-environment fit: A cross-level study. *Journal of Applied Psychology*, 89(5), 868–882. <https://doi.org/10.1037/0021-9010.89.5.868>.
- Chesbrough, H. (2007). Business model innovation: it’s not just about technology anymore. *Strategy & Leadership*, 35(6), 12–17. <https://doi.org/10.1108/10878570710833714>.
- Cummings, S., Bridgman, T., & Brown, K. G. (2016). Unfreezing change as three steps: Rethinking Kurt Lewin’s legacy for change management. *Human Relations*, 69(1), 33–60. <https://doi.org/10.1177/0018726715577707>.
- D’anno, T., Succi, M., & Alexander, J. A. (2000). The role of institutional and market forces in divergent organizational change. *Administrative Science Quarterly*, 45(4), 679–703. <https://doi.org/10.2307/2667016>.
- Dunphy, D., & Stace, D. (1993). The strategic management of corporate change. *Human Relations*, 46(8), 905–920. <https://doi.org/10.1177/001872679304600801>.
- Eldrod, P. D., II, & Tippet, D. D. (2002). The “Death Valley” of change. *Journal of Organizational Change Management*, 15(3), 273–291. <https://doi.org/10.1108/09534810210429309>.
- Feng, C., Huang, X., & Zhang, L. (2016). A multilevel study of transformational leadership, dual organizational change and innovative behavior in groups. *Journal of Organizational Change Management*, 29(6), 855–877. <https://doi.org/10.1108/JOCM-01-2016-0005>.
- George, W. W. (2001). Keynote address, academy of management annual conference. Washington, DC, August. *Academy of Management Executive*, 15(4), 39–47.
- Gill, R. (2003). Change management – or change leadership? *Journal of Change Management*, 3(4), 307–318. <https://doi.org/10.1080/714023845>.
- Grundy, T. (1993). *Managing strategic change*. London: Kogan Page.
- Hannan, M., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review*, 49(2), 149–164. <https://doi.org/10.2307/2095567>.
- Harigopal, K. (2006). *Management of organizational change: Leveraging transformation* (2nd ed.). New Delhi: Response Books.
- Hiatt, J. M. (2006). *ADKAR: A model for change in business, government and our community: How to implement successful change in our personal lives and professional careers*. Loveland: Prosci Research.
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change. *The Journal of Applied Behavioral Science*, 43(2), 232–255. <https://doi.org/10.1177/0021886306295295>.
- Holten, A., & Brenner, S. (2015). Leadership style and the process of organizational change. *Leadership & Organization Development Journal*, 36(1), 2–16. <https://doi.org/10.1108/LODJ-11-2012-0155>.
- Huang, H.-C., Lai, M.-C., Lin, L.-H., & Chen, C.-T. (2013). Overcoming organizational inertia to strengthen business model innovation: An open innovation perspective. *Journal of Organizational Change Management*, 26(6), 977–1002. <https://doi.org/10.1108/JOCM-04-2012-0047>.
- Jing, R., & Van de Ven, A. H. (2014). A yin-yang model of organizational change: The case of Chengdu bus group. *Management and Organization Review*, 10(1), 29–54. <https://doi.org/10.1111/more.12045>.
- Judson, A. (1991). *Changing behaviour in organizations: Minimizing resistance to change*. Cambridge, MA: Basil Blackwell.
- Kanter, R. M., Stein, B. A., & Jick, T. D. (1992). *The challenge of organizational change: How companies experience it and leaders guide it*. New York: Free Press.
- Kieselbach, T., Bagnara, S., Elo, A.-L., Jefferys, S., Joling, C., Kuhn, K., Nielsen, K., Popma, J., Rogovsky, N., Sahler, B., Triomphe, C. E., & Widerszal-Bazyl, M. (2009). *Health in restructuring. Innovative approaches and policy recommendations (HIRES)*. Muenchen: Rainer Hampp Verlag.
- Kotter, J. P. (1996). *Leading change*. Cambridge, MA: Harvard Business Press.

- Levasseur, R. E. (2001). People skills: Change management tools-Lewin's change model. *Interfaces*, 31(4), 71–73. <https://doi.org/10.1287/inte.31.4.71.9674>.
- Levinthal, D. A., & March, J. G. (1993). The myopia of learning. *Strategic Management Journal*, 14(S2), 95–112.
- Lewin, K. (1952). *Selected theoretical papers*. London: Tavistock.
- Lines, R. (2005). The structure and function of attitudes toward organizational change. *Human Resource Development Review*, 4(1), 8–32. <https://doi.org/10.1177/1534484304273818>.
- Luecke, R. (2003). *Managing change and transition*. Boston: Harvard Business School Press.
- Mack, D. A., Nelson, D. L., & Quick, J. C. (1998). The stress of organisational change: A dynamic process model. *Applied Psychology*, 47(2), 219–232. <https://doi.org/10.1111/j.1464-0597.1998.tb00022.x>.
- March, J. G. (1981). Footnotes to organizational change. *Administrative Science Quarterly*, 26(4), 563–577. <https://doi.org/10.2307/2392340>.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87. <https://doi.org/10.1287/orsc.2.1.71>.
- McCauley, C. (2006). *Developmental assignments: Creating learning experiences without changing jobs*. Greensboro: Center for Creative Leadership Press.
- Michaels, M. (2001). *The quest for fitness: A rational exploration into the new science of organization*. San Jose: Writers Club Press.
- Michel, A., Todnem, R., & Burnes, B. (2013). The limitations of dispositional resistance in relation to organizational change. *Management Decision*, 51(4), 761–780. <https://doi.org/10.1108/00251741311326554>.
- Mintzberg, H., & Westley, F. (1992). Cycles of organizational change. *Strategic Management Journal*, 13(S2), 39–59. <https://doi.org/10.1002/smj.4250130905>.
- Moran, J., & Brightman, B. (2000). Leading organizational change. *Journal of Workplace Learning*, 12(2), 66–74. <https://doi.org/10.1108/13665620010316226>.
- Morgan, G. (1986). *Images of organization*. Beverly Hills: SAGE.
- Nyström, M. E., Höög, E., Garvare, R., Weinehall, L., & Ivarsson, A. (2013). Change and learning strategies in large scale change programs. *Journal of Organizational Change Management*, 26(6), 1020–1044. <https://doi.org/10.1108/JOCM-08-2012-0132>.
- Oreg, S., Vakola, M., & Armenakis, A. A. (2011). Change recipients' reactions to organizational change: A sixty-year review of quantitative studies. *Journal of Applied Behavioral Science*, 47, 461–524. <https://doi.org/10.1177/0021886310396550>.
- Oswick, C., Grant, D., Michelson, G., & Wailes, N. (2005). Looking forwards: Discursive directions in organizational change. *Journal of Organizational Change Management*, 18(4), 383–390. <https://doi.org/10.1108/09534810510607074>.
- Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23(2), 173–185. <https://doi.org/10.1177/0146167297232006>.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford, CA: Stanford University Press.
- Porras, J. I., & Robertson, P. J. (1992). Organizational development: Theory, practice, and research. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 3, 2nd ed., pp. 719–822). Palo Alto: Consulting Psychologists Press.
- Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, 91(5), 1154–1162. <https://doi.org/10.1037/0021-9010.91.5.1154>.
- Sirkin, H. L., Keenan, P., & Jackson, A. (2005). The hard side of change management. *Harvard Business Review*, 83(10), 108–118.
- Sonenshein, S. (2010). We're changing-or are we? Untangling the role of progressive, regressive, and stability narratives during strategic change implementation. *Academy of Management Journal*, 53(3), 477–512. <https://doi.org/10.5465/amj.2010.51467638>.
- Stouten, J., Rousseau, D. M., & De Cremer, D. (2018). Successful organizational change: Integrating the management practice and scholarly literatures. *Academy of Management Annals*, 12(2), 752–788. <https://doi.org/10.5465/annals.2016.0095>.
- Suddaby, R. (Ed.). (2010). Editor's comments: Construct clarity in theories of management and organization. *The Academy of Management Review*, 35(3), 346–357. <https://doi.org/10.5465/amr.35.3.zok346>.
- Suddaby, R., & Foster, W. M. (2017). History and organizational change. *Journal of Management*, 43(1), 19–38. <https://doi.org/10.1177/0149206316675031>.
- Todnem By, R. (2005). Organisational change management: A critical review. *Journal of Change Management*, 5(4), 369–380. <https://doi.org/10.1080/14697010500359250>.
- Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. *Research in Organizational Behavior*, 7, 171–222.
- Vakola, M., Oreg, S., & Armenakis, A. (2013). Reactions to organizational change from an individual-differences perspective: A review of empirical research. In S. Oreg, A. Michel, & R. By (Eds.), *The psychology of organizational change: Viewing change from the employee's perspective* (pp. 95–123). Cambridge: Cambridge University Press.
- Weiner, B. J., Amick, H., & Lee, S.-Y. D. (2008). Conceptualization and measurement of organizational readiness for change: A review of the literature in health services research and other fields. *Medical Care Research and Review*, 65(4), 379–436. <https://doi.org/10.1177/1077558708317802>.

Channel and Network Control Regulation

► Media Ethics

Characters

► Core Values

Charismatic Leaders

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Synonyms

Effective leadership; Positive leadership; Transformational leadership

Definition

There are several approaches to leadership and management, based on different assumptions and styles. The latter can be grounded on a combination of personal and organizational attributes of tangible and intangible nature, such as charisma. Visioning, empathy, and empowerment are all components of charismatic leadership.

Charisma is a unique type of influence in which followers believe their leader possesses exceptional qualities, such as effective communication, vision, trust, and impression management (Bell, 2013). Personal responsibility, integrity, responsibility, and solidarity are typical characteristics of charismatic leaders (Becker, 1998) who help organizations foster a virtuous corporate culture in organizations (Bruni & Sena, 2013; Cardona, 2000).

Charisma has been identified as an essential component of transformational leadership

(Jacobsen & House, 2001). Transformational leadership components include charisma, intellectual stimulation, and individualized consideration (Avolio et al., 1999; Bass, 1985; Bass & Avolio, 2000; Waldman et al., 2006). Charisma “provides followers with a clear sense of purpose that is energizing, a role model for ethical conduct, and builds identification with the leader and his or her articulated vision” (Avolio et al., 1999, p. 442).

Charismatic leadership takes on socialized and personalized forms. The latter can have and bring negative or positive connotations and implications. Along with numerous positive examples (e.g., Ghandi, Yunus, or Saint Francis), there are charismatic leaders throughout history who have had disastrous consequences for their followers, institutions, and organizations. Socialized charismatic leadership, on the other hand, motivates followers to maximize organizational goals.

Introduction

Over the last few decades, several leadership theories “referred to as charismatic, transformational, visionary, purpose-driven or inspirational, has emerged in the organizational and managerial literature” (Shamir et al., 1993, p. 577). According to the theories mentioned above, “leaders transform the needs, values, preferences and aspirations of followers from self-interests to collective interests. Further, they cause followers to become highly committed to the leader's mission” (Shamir et al., 1993, p. 577). Theories of charismatic leadership contend that a variety of leadership behaviors shift followers from an individual-oriented, hedonistic, rational-economic mode of operation to a collective, moral, and value-oriented approach (Shamir et al., 1993).

Several empirical studies have found that leaders who engage in charismatic behaviors elicit higher performance ratings and more satisfied followers. As a result, they are regarded as more effective in positions of leadership than others. According to Burns (1978) and Bass (1985), charismatic leaders elevate followers' needs due to their ability to allow followers transcend their own self-interests (Bass, 1985; House, 1977).

Charismatic leaders raise followers to “more principled levels of judgment” (Burns, 1978).

Shamir et al. (1993) argue that charismatic leaders motivate their followers through the following drivers: increasing the intrinsic valence of effort; increasing effort-accomplishment expectancies; enhancing the intrinsic valence of goal achievement; instilling faith in a better future; and creating personal commitment. The valence of efforts is increased by emphasizing symbolic aspects based on key values encompassing moral statements. Indeed, charismatic leaders emphasize the links between efforts and values and improve followers' self-worth and self-esteem by expressing confidence in their ability to meet such expectations (Yukl, 1989). Charismatic leaders articulate a values-based vision and a values-driven mission that increase the intrinsic valence of goal accomplishment by presenting goals in terms of the values embodied in the vision and mission. In this regard, the charismatic motivational influence in enhancing commitment to a common vision underpinning transcendent goals is critical (Bennis & Nanus, 1985; House, 1977). Charismatic leaders de-emphasize extrinsic reward expectations. “The rewards involved in the charismatic leadership process include self-expression, self-efficacy, self-worth and self-consistency, which emerge from the process” (Shamir et al., 1993, p. 583).

Attention should also be addressed to the organizational conditions for charismatic leadership. When the organizational task is closely related to dominant social values to which potential followers are exposed, charismatic leadership is more likely to emerge and be effective, especially in exceptional circumstances and/or extraordinary conditions that call for changes to tackle with unforeseen circumstances and require exceptional efforts or sacrifices (Brown, 2011; Martin, 2002; Olsen, 2010).

Key Issues

Among the two major traditions of study on charisma (Jacobsen & House, 2001), the former is

sociological-based and stems from Weber (1922). “This stream of studies addresses the social conditions under which charismatic leadership appears and the contingencies in which personal charisma will/will not be routinized into a stable social order” (Jacobsen & House, 2001, p. 76). The latter is psychologically based and focuses on the personal characteristics of charismatic leaders such as visioning, empathy, and empowerment (Choi, 2006). Leaders who express themselves with passion, motivation, emotional, and inspirational are likely to transmit charisma to the followers (Yukl, 1999 and 2010).

Charismatic leaders create a vision that informs employees about the organization's goals. The vision is integrated into the organization's day-to-day operations through the alignment of the leader's actions with the values advocated in the vision.

Empathy is the ability to understand another person's motivations, values, and emotions. It entails mutual trust and may result in relationship-oriented leadership behavior (Bell, 2013). Followers are attracted by relationship-oriented leaders (Ehrhart & Klein, 2001), who motivate them to perform better than expected by helping them acquire self-actualization (Yukl, 1999).

Empowerment allows leaders to make followers feel powerful and capable to achieve goals and develop their sense of self-efficacy. Charismatic leaders can empower their followers in a variety of ways, such as by establishing clear goals and tasks.

A charismatic leader's qualities also include integrity and effective communication (Conger et al., 2000). On the one hand, leaders must demonstrate integrity by being consistent between organizational values and personal actions. On the other hand, they should display courage to manage the followers' impression and effectively communicate their convictions.

Finally, the situational context - defined as the current situational realities - influences the leader's charisma. A conceptual integration among three main factors - the leaders, their attributes, and the social situation in context - has

been provided by Jacobsen and House (2001), addressing attention to the phases included in the process from the rise of a leader to the achievement of a socialized leadership (Palshikar 2007).

Summary

To face increasingly complex contexts, organizations need people equipped with hard and soft skills and must seek to create an organizational environment that provides them with empowerment, sense of responsibility, and trigger their capability to contribute to achieve the organizations' goals through an appropriate leadership style, according to the situational context. In this vein, charismatic leaders are transformational, as they arouse inspirational motivation, provide intellectual stimulation, and treat followers with individualized consideration (Avolio & Bass, 1987), driving them to reach their full potential, generate higher levels of performances, and achieve the company's goals.

Cross-References

► Integrity

References

- Avolio, B. J., & Bass, B. M. (1987). Charisma and Beyond. In J. G. Hunt, B. R. Baliga, H. P. Dachler, & C. A. Schriesheim (Eds.), *Emerging Leadership Vistas* (pp. 29–49). MA: D. C. Heath and Company.: Lexington.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the multifactor leadership questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441–462.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Academic Press.
- Bass, B. M., & Avolio, B. J. (2000). *MLQ: Multifactor leadership questionnaire* (2nd ed.). Redwood City, CA: Mind Garden.
- Becker, T. (1998). Integrity in organizations: Beyond honesty and conscientiousness. *Academy of Management Review*, 23(1), 154–161.
- Bell, M. (2013). Charismatic Leadership Case Study with Ronald Reagan as Exemplar. In *Emerging Leadership Journeys*, 6(1), 66–74. Leadership: Regent University School of Business &.
- Bennis, W., & Nanus, B. (1985). *Leaders: The Strategies for Taking Charge*. New York: Harper & Row.
- Brown, J. B. (2011). The Building of a Virtuous Transformational Leader. *The Journal of Virtues and Leadership*, 2(1), 6–14.
- Bruni, L., & Sena, B. (Eds.). (2013). *The Charismatic Principle in Social Life*. New York: Routledge.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cardona, P. (2000). Transcendental leadership. *Leadership and Organization Development Journal*, 21(4), 201–206.
- Choi, J. (2006). A motivational Theory of Charismatic Leadership: Envisioning, Empathy and Empowerment. *Journal of Leadership & Organizational Studies*, 13(1), 24–43.
- Conger, J. A., Kanungo, R. N., & Menon, S. T. (2000). Charismatic leadership and follower effects. *Journal of Organizational Behavior*, 21(7), 747–767.
- Ehrhart, M. G., & Klein, K. J. (2001). Predicting followers' Preferences for Charismatic Leadership: The Influence of follower Values and Personality. *The leadership Quarterly*, 12, 153–179.
- House, R. J. (1977). A 1976 Theory of Charismatic Leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The Cutting Edge* (pp. 189–207). Carbondale: Southern Illinois University Press.
- Jacobsen, C., & House, R. C. (2001). Dynamics of charismatic leadership: A process theory, simulation model, and tests. *Leadership Quarterly*, 12(1), 75–112.
- Martin, R. L. (2002). The virtue matrix: Calculating the return on corporate responsibility. *Harvard Business Review*, 80(3), 68–75.
- Olsen, O. K. (2010). Are good leaders moral leaders? The relationship between effective military operational leadership and morals Dissertation for the philosophiae doctor degree (PhD) at the University of Bergen.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4(4), 577–594.
- Waldman, D. A., Siegel, D. S., & Javidan, M. (2006). Components of CEO transformational leadership and corporate social responsibility. *Journal of Management Studies*, 43, 1703–1725.
- Weber, M. (1922). *Gesammelte aufsaetze zur wissenschaftslehre*. Tuebinge: Morh.
- Yukl, G. A. (1989). *Leadership in Organizations* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Yukl, G. A. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly*, 10, 285–305.

Charitable

- ▶ [Altruistic CSR](#)
-

Charitable CSR

- ▶ [CSR 1.0/2.0/3.0](#)
-

Charitable Trust

- ▶ [Foundations](#)
-

Chartered Institute of Marketing, The

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Synonyms

[CIM](#)

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<https://www.cim.co.uk>

Email: membership@cim.co.uk

Introduction

The Chartered Institute of Marketing, or CIM (CIMA), is the largest professional body for marketing in the world, with a membership that reached over 30,000 members (Wikivisually, 2020). It is a British Council qualified association based in the UK. It offers professional marketing

related qualifications together with training for achieving them.

CIM's primary focus is to set and maintain professional standards for the marketing and sales profession and to develop the skills and knowledge of its members to achieve those standards.

History

According to CIM (CIMb), in 1911, 12 sales managers met up in a London hotel and agreed to set up the organization that eventually became known as CIM. Their common goal was to professionalize the field of selling. Hence, they named the organization as Sales Managers' Association. Its overarching aim was: "To promote, encourage and coordinate the study and advancement of sales management in all its branches." The association, which by 1921 became known as the Incorporated Sales Managers' Association (ISMA), formed affiliations with the American National Association of Sales Managers and the Associated Advertising Clubs of the World in 1922. By 1924, they formed the first branch of the organization in Manchester and held their first conference in Buxton on 27–28 May. In 1927, the association set up its benevolent fund, which started supporting charities such as the London Orphan School. By 1928, the first annual Certificate examinations were held. Two decades later, in 1956, the Association was instrumental in helping set up the European Contact Group of Sales and Marketing Associations, which later (in 1965) became the European Marketing Council.

Following further years of developments, including achieving successive patronage from King George VI, the HRH the Duke of Edinburgh until the current Patron the Prince of Wales, the association decided to change its name to the Institute of Marketing and Sales Management in 1961. In 1963, a boost to the field of marketing was provided as part of "National Productivity Year." This was reflected at a special luncheon when both HRH the Duke of Edinburgh and Prime Minister Harold Macmillan highlighted the importance of marketing as a decisive element

for improving and supporting UK business performance. In 1968, the Institute of Marketing and Sales Management was finally changed to the Institute of Marketing. In 1971, the headquarters of the Institute was moved from Holborn, in central London, to a nine-acre site at Moor Hall, Cookham, Berkshire. In the same year, various Marketing Interest Groups (MIGs) were set up to reflect marketing issues in their respective industries. In 1973, the first code of practice was adopted by the Institute. It requires all members to observe its provision under the term of the constitution. In 1976, perhaps one of the most enduring marketing definitions was approved by the Institute as follows: "Marketing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably." Almost half a century later, this definition is still widely referred to.

In 1989, the Institute received its Royal Charter. Consequently, it became known as the Chartered Institute of Marketing or CIM (CIMb). This also enabled the conferral of Chartered Marketer on the members that met the requirements.

In 1992, the European Union adopted CIM's Diploma as the preferred professional marketing qualification through member states. Shortly afterward, the Diploma qualification is awarded postgraduate status.

Subsequently, CIM established close links with various marketing organization, including Japan, Canada, Australia, New Zealand, and South Africa. It also set up branches through various parts of the world, including Sri Lanka, Hong Kong, Singapore, and Malaysia.

In 2001, the Marketing and Sales Standards Setting Body (MSSSB) (Fourali, 2009), the national standards body (NSB) for these two professional areas, was established by the Department for Education and Skills (DfES) at CIM to develop world-class benchmarks of best practice for the Marketing and Sales occupational areas, as well as associated areas such as Social Marketing and Telesales. The leadership of this body was assigned to Dr. Chahid Fourali, who led it for 8 years. MSSSB worked with dozens of

stakeholders to eventually produce and launch the New National Standards for Marketing and Sales in 2006. Perhaps another significant set of standards that were set up by MSSSB is the Social Marketing (SM) occupational standards that garnered the support of many marketing gurus throughout the world. The SM standards were presented at the very first international social marketing conference in Brighton to an audience of about a thousand participants. It is worth noting that although the MSSSB derived the national competence standards that professional and examining bodies need to demonstrate in their qualifications, some professional bodies may develop their own professional standards that address the professional needs of their constituents. Nevertheless, such professional standards have to be compatible with the national competence standards in order to attract accreditation of their qualifications.

This history shows that the institute has managed to adapt to changes and be a very important influence for change. Such an approach is still being followed to ensure its relevance. For example, in 2014, CIM rebranded and delivered a new strategy which is seen to be more relevant to address current challenges. The approach seems to be bearing fruit, as recently CIM achieved seventh place out of 300 major brands that participated in the Customer Experience dimension run by GfK. The award seems credible as it includes an objective mystery shopping dimension.

Mission/Objectives/Focus Areas

CIM's mission is "To be the pre-eminent body on marketing practice, standards and associated knowledge on an international basis and for this to be acknowledged by governments, marketers, business, education and others."

Structure of Governance

CIM is governed by the Constitution and Board of Trustees that are established by it. The

constitution is made up of the Royal Charter, bye-laws and regulations. The Board of Trustees advises on and approves the strategic direction of the CIM. In turn, the Board is accountable to the CIM members regarding its running and whether its objectives are being met.

CIM is regulated by a group of advisors to the Queen, known as the Privy Council. Its regulations stipulate that any amendments to its Charter have to be supported by the Queen in Council, and any changes to the bye-laws must be approved by the Privy Council.

It is worth noting that Charters are very rarely granted and, so far, less than 1,000 Royal Charters have been granted since 1231. Such grants usually apply to bodies working in the public interest, such as professional institutions, as is the case with CIM.

Five committees advise and support the work of the trustees. These are the Constitution and Ethics Committee, the Disciplinary Committee, the Audit and Risk Committee, the Appointments and Remuneration Committee, and, lastly, the Strategy and Finance Committee.

It's worth mentioning here that CIM had a short experiment with the charity status (between 2001 and 2004), which brought negative media attention regarding the effectiveness of the International Board of Trustees (IBT).

Activities/Major Accomplishments/Contributions

Despite some challenges that CIM faced since its establishment, it is still seen as the paramount body for marketing professionals around the world. This is shown by the high esteem it has by many well-placed personalities, including prime ministers, who have consistently reiterated the importance of marketing to the success of business industries. In terms of its achievements, CIM had helped organize a united perspective to standards setting in marketing-related professional areas represented by a multitude of bodies such as the Market Research Society, the

Institute of Professional Advertising, the direct Marketing Association, the Chartered Institute of Public Relations, the Institute of Sales and Marketing Management, the Institute of Purchasing and Supply, etc. This is no small feat, given the variety of perspectives assumed by the various bodies.

The CIM has now established grades of membership covering Affiliate (ACIM), Member (MCIM), or, at the highest level, Fellow of CIM (FCIM). The benefits include: Association with a professional body with an international reputation; Access to specialist resources; Access to an international network of professionals; and Career advice.

CIM also has a suit of qualifications with an international reputation that range from the most basic level for those starting in their marketing journey (e.g., Foundation Certificate in Marketing) to the Chartered Postgraduate Diploma in Marketing.

CIM Commitment to Advancing Social Issues

Given that the focus of this Encyclopedia is on sustainable management, CIM has a special interest group (SIG) on Charity and Social Marketing issues for members with an interest in the following:

- Non-profits and social enterprises
- Corporate social responsibility
- Behavioral insight and change
- Social marketing

This is in addition to the earlier initiative that CIM supported in setting the first world-class standards for social marketing, in conjunction with the MSSSB (see above) and the National Social Marketing Centre (NSMC). Additionally, a CIM representative (Dawn Southgate, personal communication, 2019) stated that, “in our operations too we aim to cut down on using material that is not recyclable.”

References

- Fourali, C. (2009). Developing world-class social marketing standards: a step in the right direction for a more socially responsible marketing profession. *Social Marketing Quarterly*, 15(2), 14–24.
- Wikivisually. (2020). The Chartered Institute of Marketing. Accessed at: https://wikivisually.com/wiki/Chartered_Institute_of_Marketing (Retrieved on 19/02/2020)

Chemical Sector Commitment Program

► Responsible Care

Chernobyl Disaster, The

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Synonyms

Apparatchik; Nuclear crisis; Nuclear energy for civilian purposes; Radiation; Revisionism; Soviet Union; Transparency

Definition

In no order of human activities, there exists a true absolute certainty that entails the adoption of a certain measure to avoid a hypothetical and unforeseeable future event. As the famous Scottish-American naturalist J. Muir once stated, “there is nothing certain but the uncertain.” To a certain extent, this proverb can be rebutted if it is contrasted with the prospect of minimum

rationality in the decision-making process which affects the global community. In effect, the Chernobyl disaster could have been perfectly avoided if the potential risks of any nuclear reactor had been taken into account and if the decisions had been made following a series of truly effective protocols. In addition this dramatic event which would mark the recent contemporary history, on the one hand, it was partially overshadowed to worldwide public opinion, and on the other hand, it was the result of the “apparatchik,” a functionary class of the extinct Soviet Union whose only aim was to put the political interests before the common welfare. There are, verbatim, thousands of studies that in one way or another have dealt with the Chernobyl tragedy since the dawn of April 26, 1986. This entry of the encyclopedia highlights those sociological-political aspects that contributed to the outcome of the accident so that future generations can be aware of what this disaster meant to ensure that it will never be repeated, on the basis of the prevalence of the democratic values as outlined in the UN 2030 Agenda.

Introduction

The use of atomic energy for civil purposes is one of the fundamental bases of sustainable development (IAEA 2017). At first sight, this statement may seem contradictory or inappropriate given the negative social image of nuclear energy utilization due to painful historical events such as the Hiroshima and Nagasaki atomic bombs or the nuclear accidents associated with climate change such as the Fukushima catastrophe (Skea et al. 2013); nevertheless, the employment of this type of energy is part of one of the 17 global Sustainable Development Goals (Goal 7, Affordable and Clean Energy). The only condition, so to speak, would be that its implementation is carried out in a balanced manner, seeking to minimize its effects on both the environment and people. In fact, the use of nuclear energy according to IAEA (2017) can be positive for several aspects: on a global scale, it accounts for almost a third part of the energy obtained through coal, and it can supply

electricity to growing urban populations or contribute to the economic development of the nations.

On the other hand, it causes a minimal impact on ecosystems. Its consumption of water is comparable to that of other energy sources, except its material requirements (land and economic resources), which are also lower than those of other sources. Therefore, if atomic power contributes to achieving one of the objectives pursued by the UN (“Ensure access to affordable, reliable, sustainable and modern energy for all”), why is there such fear among society regarding its use, either civil or military? Precisely because of events such as Chernobyl, in which a series of errors in the decision-making process were intermingled one after the other, mixing completely rational decisions with others whose illogicality can only be understood in the context of the former Soviet Union (Potter 1990). At that time, the rational-irrational aspect of decision-making was marked by the degree of paroxysm of all the members of society to the interests of the single party, regardless of the consequences they might entail, which is what the Chernobyl catastrophe basically involved.

Two key events in the history of mankind converge in the Pripjat River valley: It was one of the first settlements of the Proto-Slavic tribes in Eastern Europe, but it is above all known for the nuclear disaster that occurred at the site in 1986. When the Soviet authorities decided to construct the future Vladimir Ilyich Ulyanov Lenin Nuclear Power Plant on this location, it was based on its position as a strategic enclave: a few kilometers from the confluence with the Dnieper River, relatively close to Kyiv, the capital of the Ukrainian SSR at that time, and also very close to the border with today’s Belarus (former Byelorussian SSR). The new nuclear power plant was built not far from a centuries-old settlement of medieval origin, Chernobyl, whose name etymologically comes from the archaic Proto-Slavic name referring to the mugwort flower (Melnichuk 1982). As a base for the conglomerate of workers who would render their services in the nuclear power plant, in 1970, a new city was founded practically equidistant from Chernobyl called “Pripjat,” a model city

in which the *Nomenklatura* intended to stage the achievements reached by the triumph of scientific socialism.

The coat of arms of the new city would paradoxically represent an atom, following the Soviet nuclear policy (atomic cities or “atomgrads”) whose motto was popularized as the “peaceful atom.” This is actually the “real” Chernobyl, the tragedy’s ground zero, today a terrifying ghost town surrounded by an exclusion zone that reaches a radius close to 30 km. However, when the disaster became known worldwide, after being deliberately concealed in its early stages, it was named in the same way as the not-too-distant original Chernobyl, which continues harboring a meager population. For obvious reasons, it was preferred to nominalize the disaster in this way rather than remember the official name of the Nuclear Power Plant, in the belief that it would weigh negatively on the figure of the most important leader of the Russian Revolution. This community eventually reached a population of almost 50,000 inhabitants, constituting a center full of life in which scientists from the 4 corners of the former Soviet Union came because it was a city expressly built for them and their families and where they would have a series of facilities and means that were not precisely abundant in any other Soviet population of that time. Nevertheless, in a matter of a few seconds, it passed from being the first place in which any Soviet scientist would have loved to live to the last place that any human being would ever have wished to know.

The Perversion Attached to the Single Thought

The fact that the catastrophe was initially overshadowed or the subsequent observance of continuous failures in the chain of command that should have prevented as well as the continuous disrespect and harassment showed by A. Dyatlov, deputy chief engineer of Chernobyl who was the supervisor of the Reactor 4 of the nuclear reactor to the other members of the scientific staff, it is particularly striking and extremely difficult to understand according to today’s awareness in the field of

nuclear energy. To understand the keys behind the tragedy, it is necessary to recall the behavioral patterns of the Soviet society, in essence very similar to the dystopia presented by Orwell in *Animal Farm*, with which it has many similarities. The omnipresent-omnipotent power of the single party was supported by the *Nomenklatura*, an elitist class which was in charge of the highest functions of the State Administration, receiving orders directly from the Politburo. Below this echelon, there were the *Apparatchiki*, a medium class of functionaries compulsorily belonging to the Party which performed purely bureaucratic functions and which in most cases had a rather limited education. Notwithstanding, it was quite common that they were frequently placed in positions of relative importance that they did not have sufficient preparation for or, even more, that they were reassigned in more than one area during their career. This branch was the executing hand of the Party in all USSR republics, being the most visible part of the very extensive governmental organigram of the State. From this singular way of understanding the meritocracy, the unbreakable adhesion to the single leader and the Party was prevailing, in front of any personal, labor, or academic merit. At a political level, this superstructure facilitated the perpetuation of the system, but at a scientific scale, as it was demonstrated in Chernobyl on 04/26/1986, it was disastrous given that the inflexibility of the predetermined hierarchical hierarchy only obliged to obey orders, not to analyze them and even less to question them, or to allow the slightest communication gap between the supervisor and the subordinates. The construction of a utopian society simply required the total adhesion to a totalitarian regime that knew how to create its own pantheon of heroes attached to the cause. Such is the case of the mythical Pavlik ("Paulie") Morozov, Soviet child-martyr who reported his parents to the GPU, the regime's political police, for having (supposedly) aided the enemies of the state. Consequently, the slightest political dissent was automatically punishable by deportation, loss of civil rights, or, if necessary, the capital punishment. Such a state of collective hysteria contributed to the fact that any citizen could turn in a very short time from hero to villain (never the other the other way around), a fact fully ascertainable in the summary

trial of those directly responsible for the Chernobyl nuclear power plant held in July 1987 (Plokhly 2018). The Soviet criminal trial determined the guilt of five scientists (A. S. Dyatlov, N. M. Fomin, B. V. Rogozhin, A. P. Kovalenko, and Y. A. Laushkin) who were sentenced to several years of imprisonment in labor camps. No one at all could escape the arbitrariness of the regime when applying its harshness, not even the most powerful members of the society. Such was the case of P. S. Zhemchuzhina, wife of the all-powerful V. M. Molotov, the figurehead who seemed destined to replace Stalin, for many years the foreign minister of the USSR and one of the main architects of the redrawing of Europe's borders after World War II. The charges against Zhemchuzhina were based on crimes of high treason, considering her a conspirator in disguise against the regime, basing this assumption solely and exclusively on her Jewish origins. Consequently, in 1948, she was forced to divorce her husband and was sentenced to 5 years of exile in Uritsky, an inhospitable collective farm near Kazakhstan not too far from the ill-fated confinement camp ALZHIR ("Akmola camp for wives of traitors to the Motherland") (Rosinka173 2021). It is fair to recognize the progress of Soviet science in many fields, but it is even more important to underline how this advance would have been even greater if there had not been a continuous purge of dissident or suspected dissident scientists (Solzhenitsyn 1974). Or how these auto-depuration tools were often based on spurious and racist motives, following identical motivations as with P. S. Zhemchuzhina: indeed, the regime from time to time persecuted preeminent scientists of Jewish origin, trying to discriminate or exclude them from the Soviet scientific community (Burg 1979; Schulman and Hsieh 2021). Proof that "Big Brother" controlled or monitored absolutely everything is the gloomy House of Embarkment (Slezkine 2017) a veritable tower of horrors built in the 1930s for the elites of the party. This building consisted of a block of luxury apartments in which the leading members of the party, as well as the most prominent members of Soviet civil society lived together. In reality, its function was not at all to accommodate its tenants but to keep them under

control in the same place, being known by the Muscovites as “The House of Preliminary Detention” or the “beehive”: during the Great Purge, it was a point of no return to a remote labor camp or to the capital punishment. In this social context, it is presupposed that the freedom of any citizen is curtailed, as well as the ability to take a number of rapid or effective decisions which, in the long run, could be considered contrary to the party for questioning Soviet scientific advances. This simple fact is what lies in the background of the Chernobyl catastrophe, for no one dared to contravene a number of orders that were devoid of logic or, even less, to publicly acknowledge the innumerable flaws in the design of the RBMK-1000 reactor, as would finally be recognized by A. S. Dyatlov, deputy chief of staff at the Chernobyl reactor a few years before he died of a heart attack, one of the last effects of the 3.9 sieverts received that fateful night in April 1986 (Dyatlov 1995). At first, this scientist was taken as a scapegoat by the Soviet authorities because of his negligence and ineptitude. Besides, his tyranny and bad manners towards the younger members of the staff he headed became known. However, according to The Moral Code of the Builder of Communism, such an attitude should be justifiable since the end justified the means (MCBC 1961). In fact, as absurd as it may seem, in the development of the Soviet mentality, personal humiliation as a “procedure” played an important role (Mikheyev 1987): “Humiliation is used to bring the prospective members of an institution into line with its values. The would-be initiate has to be brought to recognize, first of all, that his set of values is not the most important and the highest. He must learn that, not only are there other sets of values, but also some (most notably those of the institution) are superior. The individual’s self-esteem should be lowered, and humiliation is the most efficient method of doing this. Humiliation can be physical, psychological, or intellectual, as well as a combination of the three.” Another important factor to take into account is the root of the Soviet nuclear culture, noting in whose hands its design and strategy was originally handed over in 1945: L. P. Beria, who was not exactly characterized as being an apostle of peace or an individual of a conciliatory nature given that he commanded the

fearsome National Security Police during the Stalinist purges (NKVD), also considered the ultimately responsible for the Katyn Forest massacre in which 22,000 Polish prisoners were massacred. This staunch defender of the first Soviet atomic bomb (RDS-1 1949) established a policy of total secrecy about the Soviet nuclear program, generating a certain number of doubts in the world public opinion which are still present today when it comes to distinguishing between when the atomic energy is really being used for primarily civilian purposes (an alibi used by that regime) and when it is being employed for military purposes. The result of such opacity was the concealment of the disaster that occurred in 1957 in Mayak, today’s Russian Federation, which would be on the podium of nuclear catastrophes together with Chernobyl and Fukushima (2011). In this new “achievement,” a failure in the cooling system of one of the plant’s tanks caused its explosion and the consequent generation of a radioactive cloud formed by cesium-137 and strontium-90 which covered an area of more than 300 km and affected at least 22 populations, causing the evacuation of 10,000 individuals who were not notified of the incident until a week later. Such was the degree of secrecy that the plant (Chelyabinsk-40) did not even appear on maps, hence it was called Kyshtym, like the nearest town. In Western countries, the catastrophe was known 20 years later by the dissident physicist Z. Medvedev (Roberts and Medvedev 1977), and this was also apparently the posture of the Soviet authorities concerning Chernobyl (Dyatlov 1995) until the Forsmark nuclear power station in Sweden raised the alarm of the event just 2 days later: inexplicably Swedish scientists had found a particularly high concentration of atomic particles in the plant’s grass, determining that they were of specifically of Soviet provenance (EP 2014). Faced with the overwhelming evidence of the facts and above all, due to their extreme severity, Soviet authorities ended up confirming the tragedy, probably motivated by the fact that such was the magnitude of the drama caused, that they could not solve it by themselves without the help of the rest of the nations. As a result of this fact, the regime had to open up, forcing M. S. Gorbachev to begin the *Glasnost*, a process that in the long run would be essential in the

liquidation of the USSR. In any case, while the politicians came to an agreement and began to clarify responsibilities, the toxic cloud of Chernobyl was spreading throughout Europe, reaching green enclaves such as the Grand Bois de Vielsalm in Belgium (Ronneau et al. 1987), which would also suffer from the Chernobyl disaster.

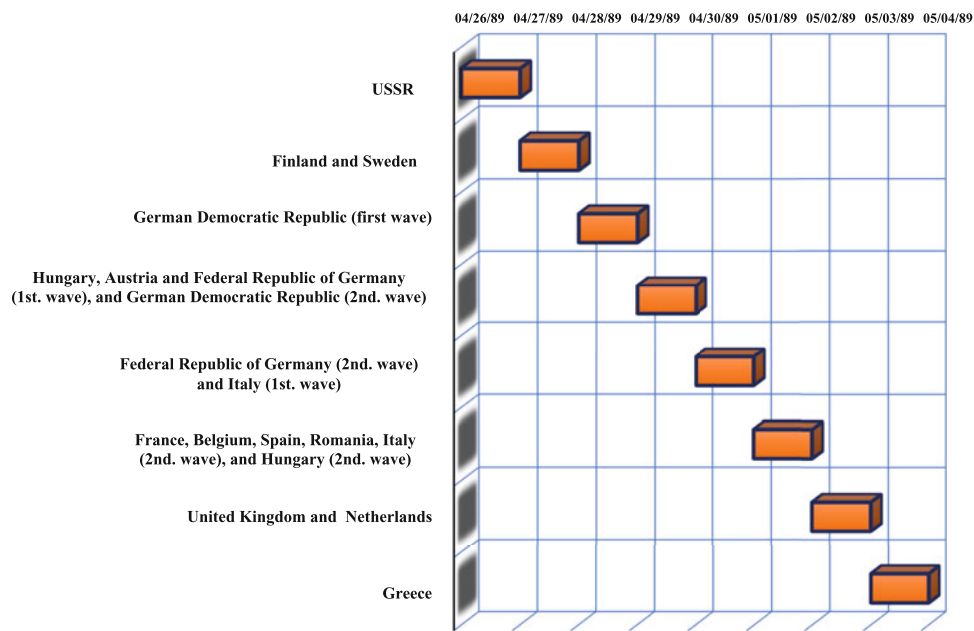
Origins, Global Expansion, and Significance of the Catastrophe

Unfortunately, the causes and, above all, the consequences of the Chernobyl disaster will never be known in full extent (Yaroshinskaia 2006), and therefore, this entry has to be guided by the official version of the events, made public about a decade after the tragedy by the UNSCEAR report (1998). On April 26, 1986, at 01 h 23 min 04 s, the accident at the fourth Chernobyl reactor was unleashed (Dyatlov 1995), giving rise to a cloud of volatile radioactive materials, including radio-nuclides of iodine, cesium, tellurium, barium, plutonium, or cerium, among others. Everything started when a simple security control test was being carried out, which normally should have been carried out before the whole power plant had come into operation. It involved a short shutdown of the turbine of the number four reactor to check whether its driving force would be sufficient in the hypothetical event of a future emergency shutdown. It seems that the staff in charge of A. S. Dyatlov did not know exactly what the previous shift had done and that this engineer was not known for following the protocols or for creating the best working atmosphere among his subordinates. During the test, the “safety rods” were deliberately and negligently removed from the reactor core, which proved to be defective, causing a sudden and unexpected drop in power, which was quickly followed by a huge increase.

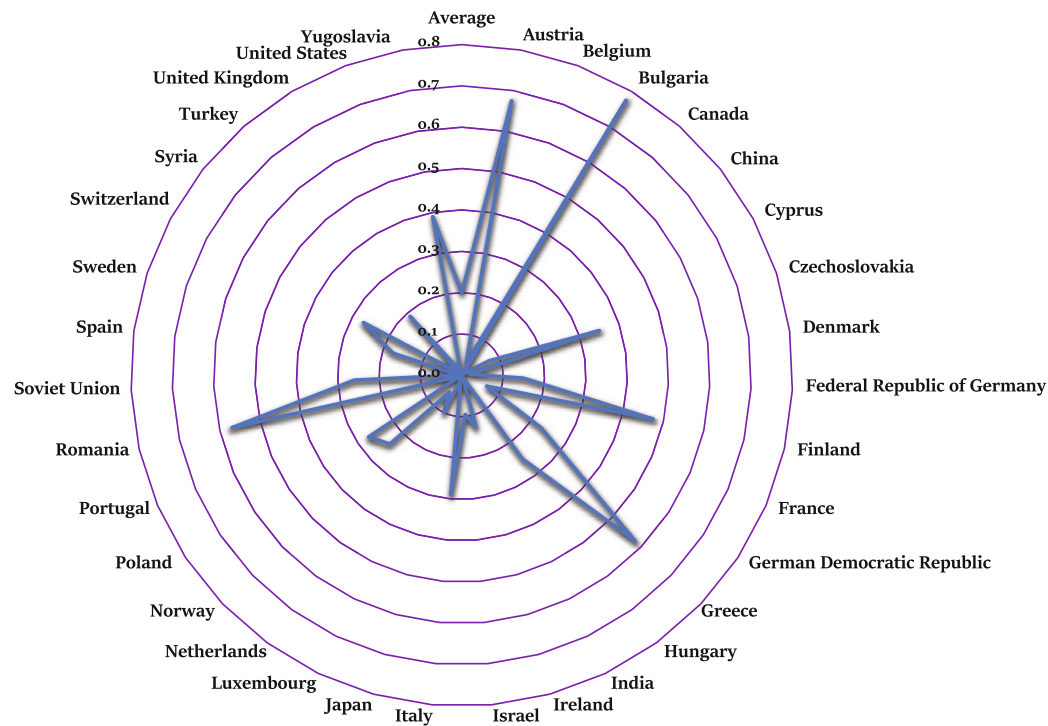
In this situation, and contrary to the opinion of A. S. Dyatlov, the safety button (AZ-5 or “Rapid Emergency Defense”) was pressed, a fact that precisely led to the disaster due to the aforementioned design flaws in the safety of the RBMK-1000 reactor, in which positive radioactivity coefficients were reached when the reactor

reached low power levels. Although the exact number of explosions remains unknown, it appears that there were two, releasing such an amount of energy that the 1000 t outer cover of the reactor was blown off. These explosions led to contact with atmospheric oxygen, which burned the graphite terminals. It was followed by several fires in which the temperature exceeded 2000 °C, dispersing an enormous amount of radioactive materials in the form of dust particles and gases into the atmosphere. In the early hours of the morning, the civil protection services, police, and firemen were called in as a matter of urgency, many of whom perished shortly afterwards as a result of the radiation. In the same way, the employees assigned to the operation of the reactors as well as the workers of other departments and services of the nuclear plant were also mobilized massively (Plokhly 2018).

There was an additional element that turned Chernobyl into the “perfect storm,” the meteorological factor. During the week that followed the catastrophe, the weather conditions were very changeable, hence the shifting winds at different heights contributed to the toxic cloud dispersing within a week all over Europe and, soon after, throughout the Northern Hemisphere of the planet. Figure 1 shows the daily evolution of the cloud during this period and, subsequently, Fig. 2 details the radiation levels reached by various nations 1 year after the tragedy. Obviously, the impact was felt with greater severity in the countries closest to the Chernobyl plant. Note that only the former Byelorussian Soviet Socialist Republic reached between 1 and 2 micro Sieverts. There was nothing to hide, and the Soviet authorities had to take action in the matter, essentially for two reasons: they alone were unable to repair the disastrous situation and, inevitably, they had to clean up the regime’s face to the exterior. Reminiscent of the early stages of the tragedy, the “Oudovenko Report,” a declaration of intentions to the United Nations, which presented a somewhat partial view of the disaster and outlined the present and future measures to be taken in this respect, stands out from this period. In a first step, it was decided to recognize that it was not only a “radiation disaster” but also a “tragedy in the



Chernobyl Disaster, The, Fig. 1 Daily diffusion of radionuclides throughout Europe from the beginning of the disaster. (Source: Own elaboration from UNSCEAR (1998))



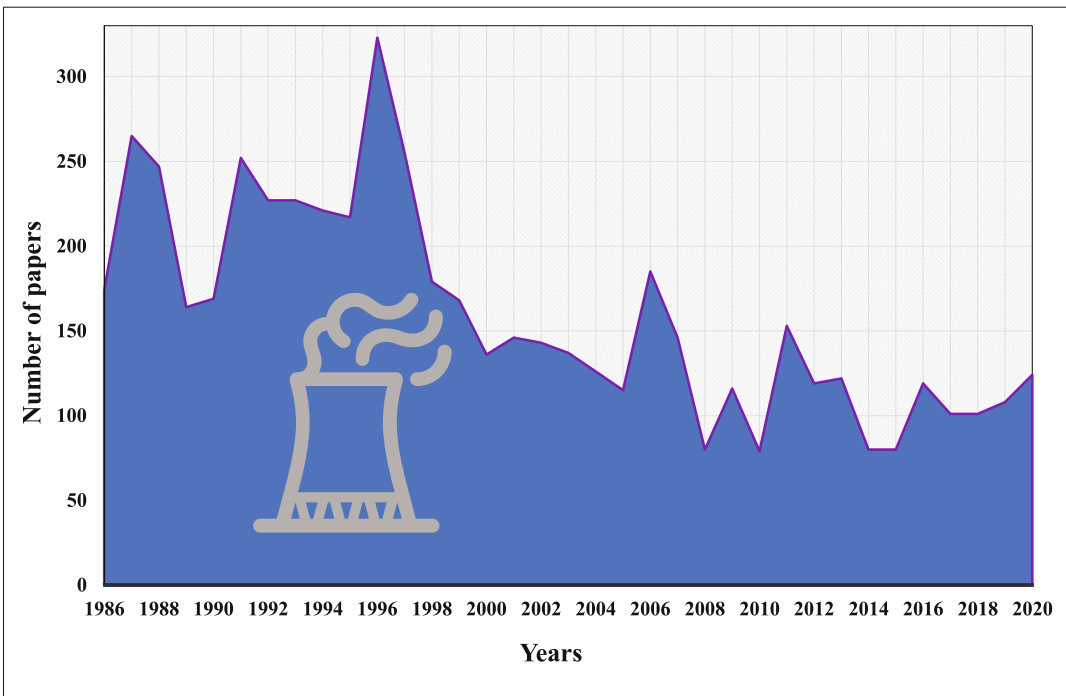
Chernobyl Disaster, The, Fig. 2 Equivalent effective doses worldwide, 1 year after the expansion in the atmosphere of the radioactive cloud generated at Chernobyl. (Source: Own elaboration from UNSCEAR (1998))

history of national culture,” appealing to the international cooperation and to an ecological spirit never seen before in the Soviet mentality.

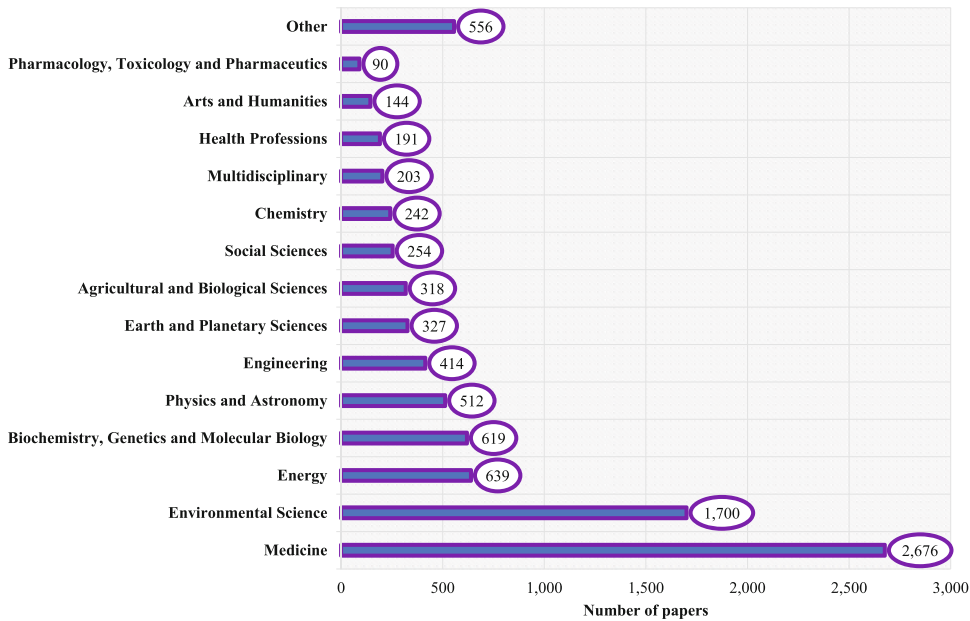
It also tried to give definitive figures on the number of hectares of agricultural and forest land that would never be productive again (144,000 and 492,000, respectively), as well as the number of evacuations (116,000 people), giving a derisory number of direct deaths due to the radioactivity of the plant (30 people). In short, this report attempted to play down the disaster and still praised the regime that had directly created it. Regrettably, this dossier offers an unrealistic and rather short-sighted view of the disaster. Read, for example, Oudovenko (1990): “On 26 October 1989, the Supreme Soviet of the Byelorussian SSR approved a State programme for dealing with the after-effects in the Byelorussian SSR of the accident at the Chernobyl nuclear power plant for the years 1990–1995. In the Ukrainian SSR, a similar long-term programme has been adopted

for the period up to the year 2000. A corresponding programme for 1990–1995 has been adopted in the RSFSR.”

Reality took care of designing a completely different picture, far from the factuality of a simple 5-year plan. Effectively, the problems resulting from the Chernobyl disaster were far from being solved in such a short period of time. The enormous flow of economic resources needed to partially alleviate the drama would gradually arrive from the West (EC 2015), from nations not involved in the genesis of the tragedy which opted for the benefit of the community to restore the ominous repercussions of this disastrous episode. Figure 3 shows the evolution of the bibliographic production related to Chernobyl by including all those papers indexed in the Scopus database between 1900 and 2020 that contain the term “Chernobyl” in their title. It should be noted that until April 26, 1986, “Chernobyl” was a minor topic, present only in very few manuscripts published in Soviet scientific journals (Skachenko



Chernobyl Disaster, The, Fig. 3 Evolution of the scientific production focused on the research of the Chernobyl catastrophe (1900–2020). (Source: Own elaboration)



Chernobyl Disaster, The, Fig. 4 Scientific contributions that have analyzed the Chernobyl disaster by knowledge fields (1900–2020). (Source: Own elaboration)

and Budas’ 1976; Shul’tsev et al. 1982; Golubev et al. 1982; Novosel’skii et al. 1984).

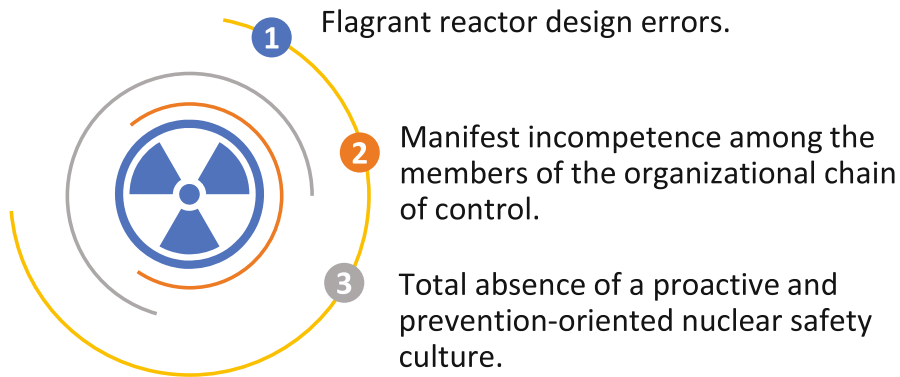
In this respect, Fig. 4 complements the previous illustration by detailing the different scientific areas that have studied this disaster. In fact, it can be observed that practically no area of human knowledge has been exempted from the scope of Chernobyl.

The following disciplines are included under the category Other: Chemical Engineering, Psychology, Immunology and Microbiology, Materials Science, Neuroscience, Business, Management and Accounting, Economics, Econometrics and Finance, Computer Science, Nursing, Mathematics, Veterinary, Decision Sciences, Dentistry, and Undefined.

Summary

Although a planned economy is at a clear disadvantage in several respects compared to a free market economy, it also has a great advantage: in the absence of any control by the citizens, the governmental authority can dispose of an

enormous amount of resources of all kinds in a given area of research, in this case, in the field of nuclear energy. On the other hand, under no circumstances could it be said that Soviet scientists were not of a high level, just the opposite. Precisely, from the same academic institution where the reviled A. S. Dyatlov completed his studies, the Moscow Mechanical Institute, emerged famous world-class researchers, among them Nobel Prize winners such as N. G. Basov, P. Cherenkov, I. M. Frank, A. D. Sakharov, N. N. Semyonov, or I. Tamm. Thus, if all types of resources were available and the scientific background was optimal, what was the real problem of Chernobyl?: it was precisely its lack of monitoring and a complete subordination to the power of the ruling party, where the only option was to execute orders, to broadcast the merits of the revolution and to silence all its shortcomings. In the case of Chernobyl, it was decided to proceed according to the easiest way: to blame a group of chosen ones instead of elucidating responsibilities starting from the highest positions of the administration. Evidently, this exercise was an entelechy in the former Soviet Union since the



Chernobyl Disaster, The, Fig. 5 Main factors that caused the tragedy of Chernobyl. (Source: Own elaboration)

party elite was practically irresponsible before the law and its decisions were peremptorily accepted by unanimity. Moreover, the new society that had arisen under the revolution developed its own axiological system, openly opposed to the Western one, whereby due obedience was the main value of a citizen, regardless of any context or circumstance. As shown in Fig. 5, such a system impeded the option of denouncing the well-known reactor failures, the free interaction between the members of the scientific teams, or the establishment of an effective nuclear safety policy.

In other words, fear was used to restrain and drive the civilian population, not to take coherent solutions or emergency decisions as it happens nowadays in practically all democratic countries that try to preempt to events by developing proper macro-level emergency policies and instructing on leadership and coordination in the sphere of the Public Administration (Farazmand 2016). Hence the importance of inculcating the values of democratic coexistence in citizens by following in the wake of the UN 2030 agenda. Besides many other factors, it is necessary for citizens to evaluate for themselves the convenience of nuclear energy, as well as to be able to prevent its risks. It is simply a matter of replacing fear and terror with respect and awareness, factors that were, unfortunately, lacking at Chernobyl on the fateful night of April 26, 1986. It seems that Sir W. Churchill once stated: “Democracy means

that when there’s a knock in the door at 3 am, it’s probably the milkman.” Following this same parallelism, it is assumed that there must be a certain democratic shortfall if at the same hour a brigade knocks on the door of any citizen and invites them to leave their residence because of a potentially avoidable atomic accident.

In recent times, the Chernobyl catastrophe has been felt among the new generations, those who had not yet been born when the disaster occurred, who, educated in other principles so different from the context in which the tragedy originated, such as tolerance or democracy, are surprised to contemplate to what extreme the unreason of the human being subject to totalitarian opprobrium can lead. Series such as “Chernobyl” (Renck 2019) have contributed to the young people’s first-hand knowledge of what happened that fateful night, but other sources such as Shramovych and Chornous (2019) suggest that there is more fiction than reality in the plot of the outcome, an aspect that may not be so relevant given that perhaps it will never be known clearly how the incident occurred, given that at the beginning everything possible was done to try to hide it.

Cross-References

- [Acid Rain](#)
- [Core Values](#)
- [Environmental Disaster](#)

- Policy and Military Force Sustainability
- Sustainable Development Planning
- Sustainable Energy
- Sustainable Growth

References

- Burg, S. L. (1979). Russians, natives and Jews in the Soviet scientific elite [Cadre competition in Central Asia]. *Cahiers du Monde Russe*, 20, 43–59.
- Dyatlov, A. S. (1995). *Chernobyl. How it was, biographies and memoirs*. Moscow: Nauchtekhlitizdat.
- EC. (2015). *EU-Ukraine Summit: EU steps up its contribution to nuclear safety in Chernobyl with €70 million*. European Commission Press Release 04/27. https://ec.europa.eu/commission/presscorner/detail/en/IP_15_4862. Accessed 29 Sept 2020.
- EP. (2014). *Forsmark: How Sweden alerted the world about the danger of the Chernobyl disaster*. News European Parliament, 05/15. <https://www.europarl.europa.eu/news/en/headlines/society/20140514STO47018/forsmark-how-sweden-alerted-the-world-about-the-dan-ger-of-chernobyl-disaster>. Accessed 29 Sept 2020.
- Farazmand, A. (2016). *Global cases in best and worst practice in crisis and emergency management*. Boca Raton: CRC Press.
- Golubev, E. K., Glazov, E. E., Plokhii, T. G., Bronnikov, V. K., Vakulenko, B. F., & Mikhailov, V. S. (1982). Operation of the evaporator within a K-500-65/3000 turbine unit at the Chernobyl nuclear power plant. [RABOTA ISPARITELYA V SOSTAVE TURBOUSTANOVKI K-500-65/3000 NA CHERNOBYL'SKOI AES.]. *Teploenergetika*, 11, 32–35.
- IAEA. (2017). *Nuclear power for sustainable development*. Vienna: Department of Nuclear Energy, International Atomic Energy Agency.
- MCBC. (1961). *Materially XXII S'ezda KPSS, 1961 [The moral code of the builder of communism (MCBC)-22nd congress of CPSU]*. Moscow: Politizdat.
- Melnychuk, O. S. (1982). *Etymolohichniy slovnyk ukrainskoi movy [Etymological dictionary of the Ukrainian language]* (Vol. 7). Kyiv: Naukova Dumka.
- Mikheyev, D. (1987). The soviet mentality. *Political Psychology*, 8(4), 491–523.
- Novosel'skii, O. Y., Karasev, V. B., Sakovich, E. V., Lyutov, M. A., & An'kov, V. I. (1984). Tests on improved steam separators in the third unit at the Chernobyl nuclear power station. *Soviet Atomic Energy*, 57(6), 807–811.
- Oudovenko, G. I. (1990). Letter dated 90/07/06 from the Deputy Minister for Foreign Affairs of the Union of Soviet Socialist Republics and the representatives of the Byelorussian Soviet Socialist Republic and the Ukrainian Soviet Socialist Republic to the United Nations addressed to the Secretary-General. United Nations Digital Library, 02/21. <https://digitallibrary.un.org/record/94223?ln=en>. Accessed 29 Sept 2020.
- Plokhly, S. (2018). *Chernobyl: The history of a nuclear catastrophe*. New York: Basic Books.
- Potter, W. C. (1990). *Soviet decision-making for Chernobyl: An analysis of system performance and policy change*. Los Angeles: National Council for Soviet and East European Research, University of California.
- Renck, J. (2019). *Chernobyl* (TV Mini Series). Produced by Home Box Office (HBO), Sister Pictures, Sky Television, The Mighty Mint, and Word Games. <https://www.imdb.com/title/tt7366338/>. Accessed 29 Sept 2020.
- Roberts, A., & Medvedev, Z. A. (1977). *Hazards of nuclear power*. Nottingham: Spokesman Books.
- Ronneau, C., Cara, J., & Apers, D. (1987). The deposition of radionuclides from Chernobyl to a forest in Belgium. *Atmospheric Environment*, 21(6), 1467–1468.
- Rosinka173. (2021). 19, For which Stalin arrested Molotov's wife. Polina Zhemchuzhina: "Born by the Revolution" For which Polina Zhemchuzhina was imprisoned. The history of Molotov and his wife. <https://rosinka173.ru/en/za-cto-stalin-arestoval-zhenu-molotova-polina-zhemchuzhina-rozhdannaya.html>. Accessed 29 Sept 2020.
- Schulman, J., & Hsieh, M. (2021). How Soviet anti-Semitism buried Jewish scientists. *Coffin Problems*, 02/21. <https://www.tabletmag.com/sections/science/articles/coffin-problems-soviet-anti-semitism-scientists>. Accessed 29 Sept 2020.
- Shramovych, V., & Chornous, H. (2019). Chernobyl survivors assess fact and fiction in TV series. *BBC Ukrainian*, 06/12. <https://www.bbc.com/news/world-europe-48580177>. Accessed 29 Sept 2020.
- Shul'tsev, D. N., Egorov, M. F., Kw'min, Y. S., & Sidorov, A. A. (1982). State of stress and strain and vibration resistance of manifolds and tube assemblies of the RBMK-1000 plant exemplified by Leningrad, Kursk and Chernobyl Nuclear Power Plants. [NAPRYAZHENNO-DEFORMIROVANNOE SOSTOYANIE I VIBROSTOIKOST' KOLLEKTOROV I TRUBNYKH BLOKOV USTANOVKIRBMK-1000 NA PRIMERE LENINGRAD-SKOI KURSKOI I CHERNOBYL'SKOI AES.], 5, 7–9.
- Skachenko, V. I., & Budas, M. M. (1976). Organization of socialist competition in the pharmacy establishments of Chernobyl District [Orhanizatsiia sotsialistychnoho zmahannia v aptechnykh ustanovakh Chornobyl's'koho raionu]. *Farmatsevtichnyi zhurnal*, 2, 13–16.
- Skea, J., Lechtenböhmer, S., & Asuka, J. (2013). Climate policies after Fukushima: Three views. *Climate Policy*, 13(sup01), 36–54.
- Slezkine, Y. (2017). *The house of government: A Saga of the Russian revolution*. Princeton: Princeton University Press.
- Solzhenitsyn, A. I. (1974). *The gulag archipelago: An experiment in literary investigation*. Paris: Éditions du Seuil.
- UNSCEAR. (1998). *Sources, effects and risks of ionizing radiation: United Nations scientific committee on the*

effects of atomic radiation: UNSCEAR 1998 report to the general assembly with scientific annexes. New York: United Nations Publications.

Yaroshinskaia, A. (2006). Chernobyl: The big lie. *Index on Censorship*, 35(2), 20–28.

Chief Executive Officer (CEO Duality)

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Synonyms

CEO duality; Dual leadership structure; Duality of power; Pure duality

Definition

Chief executive officer (CEO) duality refers to the relationship between the chairperson of the board of directors and the CEO of the company. More specifically, duality of power is defined as the union of the positions of board of directors chairperson and the CEO of the firm in the same person (Gove et al. 2017). This definition of CEO duality, accepted by a greater number of academics, is the so-called pure duality or dual leadership structure (Krause et al. 2014).

Key Issues

The separation of the roles of CEO and board chairperson is an issue that has generated great debate in the literature on corporate governance and one that is still unresolved (Chang et al. 2019; Daily and Dalton 2015; Wang et al. 2019). Although there is no unanimity in the recommendations of codes of good governance, in general they suggest an effective separation of the figures of CEO and board chairperson, and none of them

explicitly advocates for CEO duality (Andrés and Santamaría 2018). In this sense, CEO duality is often perceived as a symbol of poor governance (Adams 2017).

Academic literature offers conflicting views on the advantages and disadvantages associated with CEO duality (Krause et al. 2014). “CEO duality is more common in some countries than others and it is important to understand the institutional features that drive this variation before jumping to conclusions concerning the benefits, or lack thereof, of duality” (Adams 2017, p. 55). There are important differences by countries (e.g., cultural, institutional, legal causes) that lead to some countries where it is difficult to find firms with CEO duality (e.g., Finland, Norway, Denmark) and other countries in which CEO duality is very common (e.g., France, Spain, Germany, the USA) (Andrés and Santamaría 2018).

From an agency theory perspective, CEO duality has been criticized and catalogued as an inappropriate way to design the leadership structure of the firm (Jensen 1993). From this approach, leadership structures that have an effective separation of the figures of chairperson and CEO make boards more efficient (Aktas et al. 2019). The leadership structure provides information on the power of the board in relation to the executive management of the company and, therefore, is an indicator of the degree of independence of the board with respect to the management team in general and from the CEO in particular. In this sense, it is argued that the separation of powers allows boards of directors to efficiently develop their supervisory role given that boards without CEO duality are considered more independent (Fama and Jensen 1983). Moreover, an independent chairperson could have important contacts (e.g., with banks and governments), which could provide valuable networks for the company (Yusoff 2010).

The board of directors must ensure that the CEO and the rest of the directors act in the interest of the owners. As discussed above, the leadership structure is related to the independence of the board, so that those dual structures can compromise that independence to properly supervise the performance of the CEO (Daily and Dalton 2015).

If the figures of the board chairperson and the company CEO fall on the same person, a concentration of power will arise allowing said person to engage in opportunistic behavior and make decisions in their own interest, at the expense of the interests of the shareholders. This can lead to inefficient supervision of managerial opportunism by the board (Martin and Butler 2017).

On the other hand, proponents of the stewardship theory advocate for CEO duality (Donaldson and Davis 1991). Under this approach, the CEO is a good steward of the company they manage and does not engage in any opportunistic behavior (Krause et al. 2014; Martin and Butler 2017). In this sense, non-CEO duality is perceived as a supervisory mechanism, which will reduce the pro-organizational attitude of the top executive, with the consequent inconveniences that this would imply for business activity. However, when the positions of the CEO and the board chairperson are held by the same person, the more authoritative decision-making leads to a better corporate performance (Braun and Sharma 2007). This argument is based on the idea that the executive management of the company has close ties with its day-to-day business activity and, therefore, has more detailed and accurate information (Martin and Butler 2017). From this point of view, García-Ramos and García-Olalla (2014) pointed out that CEO duality is more likely to lead to situations in which the benefits derived from the greater flow of information, as well as the greater unity in decision-making, overcome the inconveniences resulting from agency problems (Adams and Ferreira 2007; Donaldson and Davis 1991).

Arguments based on the stewardship theory link directly with the advisory role of the board of directors. To this end, it can be expected that the presence of the CEO on the board will have a positive effect on business results, because the CEO has specific knowledge about the firm, its strategic direction and its investment opportunities, which can help to take optimal decisions (Brickley et al. 1997). As stated by Adams and Ferreira (2007), if the CEO is at the same time chairperson of the board, they will make his

information available to the directors, allowing them to carry out their work of advising the management team more efficiently. Advocates of dual leadership structures argue that CEO duality provides a clearer vision of corporate objectives and lets stakeholders know that the direction of the management does not present ambiguities (Finkelstein and D'Aveni 1994). Moreover, CEO duality reduces the steps of the communication process and the costs of transferring relevant information between the CEO and the chair of the board. It is also argued that CEO duality increases supervision to identify the possible effects of entrenchment and that CEO duality is more effective because the same individual can exercise full control over the company and provide a clear criterion that allows corporate objectives to be achieved (Yusoff 2010; Martin and Butler 2017).

Future Direction

The contrasting views of theoretical perspectives regarding the leadership structure derive from the different approach taken to explain the relationship between the management of the company and its shareholders (Krause et al. 2014; Martin and Butler 2017). It is common in previous research to adopt one view over the other and to assume that there is a universal leadership structure that fits all organizations. However, this assumption is not realistic. The optimal leadership structure is more likely to depend on other contextual variables, such as the size of the company, its age, the activity sector, the country in which it operates, the legal and institutional environment, or the ownership structure, both in its quantitative (concentration) and qualitative (identity of the control shareholders') dimension, as well as on the role and power of the different agents participating in the firm (Aguilera and Jackson 2003; Aguilera 2006; Huse 2005).

From an empirical point of view, there are several studies that have analyzed the relationship between the leadership structure and corporate performance. However, the results are

inconclusive, and nowadays there is no consensus about whether dual or non-dual leadership structures should prevail in companies in different world economies (Krause et al. 2014). “Whether or not the individual holding the Chair position uses it to accumulate excessive power is likely to be a function of [...] the characteristics of the individual holding the position” (Adams 2017, p. 55). Moreover, recent studies conclude that “CEO duality may be a strategic leadership structure under certain circumstances and will not universally result in excessive CEO power and unchecked discretion” (Wang et al. 2019, p. 191). Policymakers, practitioners, and academics should consider all these concerns when deciding the optimal board configuration in order to advance our knowledge of corporate governance.

Cross-References

- [Codes of Good Governance](#)
- [Corporate Governance](#)
- [Theoretical Paradigms of the Board of Directors](#)

References

- Adams, R. B. (2017). Boards, and the directors who sit on them. In *The handbook of the economics of corporate governance* (Vol. 1, pp. 291–382). North-Holland.
- Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. *The Journal of Finance*, 62(1), 217–250.
- Aguilera, R. V. (2006). Corporate governance and employment relations: Spain in the context of Western Europe. In H. Gospel & A. Pendleton (Eds.), *Corporate governance and labour management* (pp. 197–225). Oxford: Oxford University Press.
- Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of Management Review*, 28(3), 447–465.
- Aktas, N., Andreou, P. C., Karasamani, I., & Philip, D. (2019). CEO duality, agency costs, and internal capital allocation efficiency. *British Journal of Management*, 30(2), 473–493.
- Andrés, P., & Santamaría, M. (2018). Del consejo de administración a los códigos de buen gobierno: un paseo por la literatura académica. *Economistas*, 158, 106–125.
- Braun, M., & Sharma, A. (2007). Should the CEO also be chair of the board? An empirical examination of family-controlled public firms. *Family Business Review*, 20(2), 111–126.
- Brickley, J. A., Coles, J. L., & Jarrell, G. (1997). Leadership structure: Separating the CEO and chairman of the board. *Journal of Corporate Finance*, 3(3), 189–220.
- Chang, K., Lee, J., & Shim, H. (2019). CEO duality and firm performance: Does economic policy uncertainty mediate the relation? *International Review of Finance*, 19(4), 877–891.
- Daily, C. M., & Dalton, D. R. (2015). Corporate governance in the small firm: Prescriptions for CEOs and directors. *Journal of Small Business Strategy*, 5(1), 57–68.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics*, 26(2), 327.
- Finkelstein, S., & D’Aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*, 37(5), 1079–1108.
- García-Ramos, R., & García-Olalla, M. (2014). Board independence and firm performance in Southern Europe: A contextual and contingency approach. *Journal of Management & Organization*, 20(3), 313–332.
- Gove, S., Junkunc, M., Bruyaka, O., Kabbach de Castro, L. R., Laraza-Kintana, M., Mingo, S., & Thakur Wernz, P. (2017). Reexamining CEO duality: The surprisingly problematic issues of conceptualization and measurement. *Corporate Governance: An International Review*, 25(6), 411–427.
- Huse, M. (2005). Accountability and creating accountability: A framework for exploring behavioural perspectives of corporate governance. *British Journal of Management*, 16, S65–S79.
- Jensen, M. (1993). The modern industrial revolution, exit and the failure of internal control systems. *Journal of Finance*, 48(3), 481–531.
- Krause, R., Semadeni, M., & Cannella, A. A. (2014). CEO duality: A review and research agenda. *Journal of Management*, 40, 256–286.
- Martin, J. A., & Butler, F. C. (2017). Agent and stewardship behavior: How do they differ? *Journal of Management & Organization*, 23(5), 633–646.
- Wang, G., DeGhetto, K., Ellen, B. P., & Lamont, B. T. (2019). Board antecedents of CEO duality and the moderating role of country-level managerial discretion: A meta-analytic investigation. *Journal of Management Studies*, 56(1), 172–202.
- Yusoff, W. F. W. (2010). Characteristics of boards of directors and board effectiveness: a study of Malaysian public listed companies (Doctoral dissertation, Victoria University).

CIM

- [Chartered Institute of Marketing, The](#)
-

Circuition

- [Green Jobs Social Life Cycle Assessment](#)
-

Circular Business Model

- [Innovative Business Models](#)
-

Circular Economy

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Definition

A circular economy is a production system designed to minimize the use of resources in production and to reduce unwanted negative externalities from manufacturing processes including waste, emissions, and energy leakages. Such an approach is differentiated from linear production approaches that are built on the premise of “take-make-consume and dispose” (Camilleri, 2019; EU, 2014) that presume that resources are abundant, available, and easily disposed of.

A circular economy can be achieved by remanufacturing, refurbishing, reusing, and

recycling resources and repairing goods and resources that were consumed in production or use, so safeguarding the natural environment. It is essentially a long-lasting closed loop product service system (EMF, 2013). It is a system that balances economic development with environmental and resource protection. It leads to higher operational efficiencies through both responsible production and consumption behaviors (UNEP, 2006).

Introduction

Prior to the industrial revolution, business and industry seldom disposed of waste and by-products. In many cases, waste was reutilized and recycled as it was too costly to obtain new resources. Over the years, however, particularly in the last century, manufacturers changed manufacturing methods and resorted to large-scale production of disposable goods.

Growing populations and increased wealth lead to greater demands for products that have to be disposed of once they have been used. While some of these used items will find their way into landfills, others pollute and linger in the environment more broadly where they pose risks to flora and fauna. Waste products of both production and consumption are sometimes dealt with through incineration which may increase concentrations of residual toxins including heavy metals which may in turn contaminate air, groundwater, and oceans, contaminating the ecosystem. For example, plastic waste dumped into the oceans has formed a large plastic island in the Pacific Ocean. A specific area known as “Great Pacific Garbage Patch” is responsible for the deaths of millions of tonnes of fish, seabirds, and sea mammals (NOAA, 2022). These are some of the detrimental effects resulting from industrial activities. This production and consumption pattern contributes to greenhouse gas emissions, the warming of the earth’s climate, and ongoing land degradation including the disappearance of arable land and desertification.

In the light of these impacts on the natural environment, a circular economy could contribute to restoring the planet. The idea of a circular economy is essentially based on three principles: the

elimination of waste and pollution, the circulation of products and materials (at their highest value), and the regeneration of nature (Ellen MacArthur Foundation, 2013). Hence, it requires a transition to both the recycling of materials and to renewable energy.

A circular economy system aims to decouple economic activity from the consumption of the planet's finite resources and requires using resources more efficiently. It requires eco-friendly designs of production and products, waste prevention and reutilization and recycling of materials. Such improved production and product designs and use of materials are predicted to result in better environmental outcomes as well as improved businesses' financial performance (Camilleri, 2020; Stahel, 2016; Van der Linde, 1995).

Key Policies and Regulatory Interventions

Over the last few decades, a number of intergovernmental institutions including the United Nations Environment Program (UNEP) and the European Union (EU), as well as a number of nongovernmental organizations and other advocates, have increasingly called for raised awareness of sustainable production and consumption possibilities (Camilleri, 2020; EMF, 2013; Lieder & Rashid, 2016), for example, the 2002 UN Report of the World Summit on Sustainable Development in added reference to unsustainable patterns of production and consumption. In that report, UN member states were urged to manage their natural resources in a sustainable manner, with lower negative environmental impacts. They were urged to promote conservation, biodiversity, and the sustainable use of ecosystems, while reducing waste (WSSD, 2002, p. 13). The resolution A/RES/66/288 – The Future We Want – allowed the UN General Assembly to reaffirm its commitment to green economy policies in the context of sustainable development.

Governments voting in favor of these resolutions commit themselves to promoting and implementing policies supporting sustainable

development and management of ecosystems, including their conservation, regeneration, and restoration (UNCSD, 2012). In 2015, a General Assembly Resolution A/RES/70/1 – Transforming our world: the 2030 Agenda for Sustainable Development – was put to the floor. World leaders adopted this latest iteration of the development policy, the Sustainable Development Goals “(‘SDGs’), which replaced the Millennium Development Goals of 2000. In the context of production and consumption, Sustainable Development Goal 12 “Sustainable Consumption and Production” noted a need to change policies and practices for business in order to increase sustainability through changes as noted, to production and product design, as well as noting the potential economic gains to be had by resource and energy efficiencies. The United Nations SDGs also raised awareness about the potential of sustainable infrastructure. It urged member states to address air, water, and soil pollution to minimise their countries’ impact on the environment (UNDP, 2015). Later, focusing on greenhouse gas, the Paris Climate Agreement (COP 21), Resolutions 1/5 and 2/7 on chemicals and waste, and Resolution 2/8 on sustainable production and consumption, of June 27, 2014, and May 27, 2016, respectively, are important policy instruments that support a circular economy agenda.

These international, intergovernmental commitments to sustainable development, consumption, and production have generated increased pressures on governments to regulate their industries and to improve related environmental practices (Sheehy & Farnetti, 2021). Indeed, in 2014, the European Union (EU) Commission anticipated that, “new business models, eco-designs and industrial symbiosis can move the community toward zero-waste; reduce greenhouse emissions and environmental impacts” (EU, 2015).

Eventually, in March 2017, the EU Commission and the European Economic and Social Committee organized a Circular Economy Stakeholder Conference, where it reported on the delivery and progress of some of its Action Plans. It simultaneously established a Finance Support Platform in collaboration with the European Investment Bank (EIB) and issued important guidance documents

to Member States on the conversion of waste to energy.

There have been several other EU Communications on this subject, including:

- “Innovation for a sustainable future – The Eco-innovation Action Plan”
- “Building the Single Market for Green Products: Facilitating better information on the environmental performance of products and organisations”
- “Green Action Plan for SMEs: enabling SMEs to turn environmental challenges into business opportunities”
- “Closing the loop – An EU action plan for the Circular Economy” and the report on its implementation
- “Investing in a smart, innovative and sustainable Industry – A renewed EU Industrial Policy Strategy” (EU, 2017)

More recently, the European Commission adopted a set of measures focused on the use of plastics. These include the document a “Strategy for Plastics in the Circular Economy” which stipulated that all plastic packaging must be recyclable by 2030. It has further released a communication on the interaction among chemical, product, and waste regulations. In support of these policy initiatives, the European Commission launched a Monitoring Framework to be used to assess the progress of its member states toward the circular economy. This framework is comprised of ten key indicators: (1) EU self-sufficiency for raw materials; (2) green public procurement; 3a–c) waste generation; (4) food waste; (5a, b) overall recycling rates; (6a–f) recycling rates for specific waste streams; (7a, b) contribution of recycled materials to raw materials demand; (8) trade in recyclable raw materials; (9a–c) private investments, jobs, and gross value added; and (10) patents.

Conclusion

Many actors’ international bodies to regional and national governments in addition to

nongovernmental organizations and private actors such as industry associations have formulated policies and codes for sustainable development and responsible production and consumption (Camilleri, 2015, 2020; UNDP 2015; UNCSD 2012). Nevertheless, potential challenges remain for the development and implementation of the circular economy’s closed loop, production, and product systems. The economic implications of the development and implementation of the circular economy pose distinct challenges to industry and to lesser endowed governments. As a result, there are and will continue to be calls for contributions from government and other actors to provide economic support through subsidies, tax breaks, and other incentives to support the circular economy.

Summary

This contribution provides a definition of the circular economy (CE). It features a short introduction on this paradigm and sheds light on regulatory guidelines and principles that are intended to foster CE behaviors.

Cross-References

- [Green Circular Economy](#)
- [Green, Circular, and Bio Economy](#)

References

- Camilleri, M. A. (2015). Valuing stakeholder engagement and sustainability reporting. *Corporate Reputation Review*, 18(3), 210–222.
- Camilleri, M. A. (2019). The circular economy’s closed loop and product service systems for sustainable development: A review and appraisal. *Sustainable Development*, 27(3), 530–536.
- Camilleri, M. A. (2020). European environment policy for the circular economy: Implications for business and industry stakeholders. *Sustainable Development*, 28(6), 1804–1812.
- Ellen MacArthur Foundation. (2013). *Circular economy*. <https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>. Accessed 4 Apr 2022.

- EMF. (2013). *Towards the circular economy*. <https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>
- EU. (2014). *Towards a circular economy: A zero waste programme for europe, european commission, brussels, belgium*. <https://ec.europa.eu/environment/pdf/circular-economy/circular-economy-communication.pdf>
- EU. (2015). *Closing the loop – An EU action plan for the circular economy*. Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions. <http://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:52015DC0614&from=EN>
- EU. (2017). *Council conclusions on eco-innovation: Enabling the transition towards a circular economy*. European Council of the European Union, Brussels, Belgium. <http://www.consilium.europa.eu/en/press/press-releases/2017/12/18/council-conclusions-oneco-innovation-transition-towards-a-circular-economy/#>. Accessed 5 Feb 2020).
- Lieder, M., & Rashid, A. (2016). Towards circular economy implementation: A comprehensive review in context of manufacturing industry. *Journal of Cleaner Production*, 115, 36–51.
- National Oceanic and Atmospheric Administration. (2022). <https://marinedebris.noaa.gov/info/patch.html>. Accessed 4 Apr 2022.
- Porter, M. E., & Van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review*, 73(5), 120–134.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability and corporate sustainability: What is the difference? And, does it matter? *Sustainability*, 13(11), 5967.
- Stahel, W. R. (2016). Circular economy: A new relationship with our goods and materials would save resources and energy and create local jobs. *Nature*, 531(7595), 435–439.
- UNCSD. (2012). *Future we want – Outcome document*. Resolution adopted by the General Assembly on 27 July 2012. United Nations General Assembly. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E.
- UNDP. (2015). *Transforming our world*. Resolution adopted by the General Assembly on 25 September 2015 http://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf.
- UNEP. (2006). *Circular economy: An alternative model for economic development*. United Nations Environment Programme. Paris, France. <http://www.unep.fr/scp/publications/details.asp?id=DTI/0919/PA>. Accessed 25 Oct 2017.
- WSSD. (2002). *United Nations report of the world summit on sustainable development*. Johannesburg, South Africa, 26 August– 4 September 2002. <http://www.un-documents.net/aconfl99-20.pdf>.

Circular Economy Best Practices

- [BS8001 Circular Economy Standard](#)

Circular Economy Guidelines

- [BS8001 Circular Economy Standard](#)

Circular Economy Implementation Standards

- [BS8001 Circular Economy Standard](#)

Circular Economy in the Built Environment

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Synonyms: Circularity, CE

Definition/Description

The Circular Economy (CE) provides a conceptual framework that challenges the established linear model of economic growth by prioritizing environmental concerns and putting these at the center of a new approach to sustainable economic growth (Bocken et al., 2019). Minimization of waste, reducing resource and material use, and re-using, and recycling are the entire areas which feature prominently in the CE debate. A useful definition is provided by the EU:

The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the **life cycle of products is extended**. In practice, it implies **reducing waste**

to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible thanks to recycling. These can be productively used again and again, thereby **creating further value**. (European Parliament, 2023)

The Built Environment, as implied by the name, refers to building and associated infrastructure, and while it is about the physical space, it has social and environmental dimensions. Indeed, the physical, social, and environmental dimensions are interconnected, and all have consequences for the health and wellbeing of the people who live there or visit. This marrying up of the physical, social, and environmental provides for an inclusive approach to the built environment that does not prioritize one over the other but sees them as mutually reinforcing.

The CE and Built Environment intersect in the drive to create a more sustainable future.

Introduction

The circular economy is a much-discussed concept at the academic (Antikainen & Valkokari, 2016; Konietzko et al., 2020), policy (European Commission, 2016 and 2021; European Parliament, 2023), and business (Arup, 2016; World Economic Forum, n.d.) levels. There is no one universally agreed definition of the CE, and as such, it is a contested and much discussed concept. Different points of emphasis are given to CE by different countries of varying political persuasions; as well as within and between regions, business sectors, academic positions, policy approaches, and actual “real-world” practice.

As a large consumer of resources from the natural environment, those involved in creating the built environment have much to consider and to do in delivering on the ideals of the CE. The CE plays into the ideal of creating more sustainable, people-friendly, commutable, and liveable cities. Waste reduction is a central tenet of the CE, but this is somewhat problematic for the building industry involved, as it is in demolition and construction which generates waste and uses a

considerable amount of resources and materials (UK Green Building Council, 2023). The built environment plays a significant part progressing the CE debate, in part because of the amount of energy and materials used, and greenhouse gases generated. The built environment shapes thinking in this area and influences the policy-practice business agenda.

Sharing, Leasing, and Using Anew

To achieve waste reduction, the focus should not only be on production but also consumption. Finding new ways to live in the built environment and to create sustainable cities by extending the life of existing products and recent technological innovations offers one way forward. The collaborative, platform, or sharing economy serves as one example of this and can be illustrated through the example of Airbnb or BlaBlaCar. The sharing, leasing, and reusing of products such as apartments, houses, and cars are examples of how the CE and built environment are being re-worked and re-imagined through the use of technology as part of the new platform economy. The debate on the sharing, collaborative, or platform economy makes competing claims for its impact and perceived impact on the local community, natural environment, and resources (Perez-Vega et al., 2021; Miguel et al., 2022).

Energy Inefficient Buildings

The built environment contributes to greenhouse gases, and planning and urban development that is sustainable provides a start for cities that value the principles and ideals of the circular economy. Old buildings are usually energy inefficient, and at the same time, new buildings use energy and materials in their construction. There has been much recent public and policy discussion about the retrofitting of old buildings so that they become more energy efficient. Demolition of old buildings is postponed, and new life is breathed into them as their product life is extended. Repurposing old energy inefficient into energy-efficient buildings is a positive result and is one clear example of the CE principles in action. Sustainable urban development seeks to address the UN SDGs and, as such, is very much about the CE.

Circular Economy Sustainability Standards

- ▶ [BS8001 Circular Economy Standard](#)

Circular Real Estate

- ▶ [Sustainability and Sustainable Development in Real Estate Industry](#)

Citizen Engagement

- ▶ [Public Participation](#)

Citizen Journalism

- ▶ [Media Ethics](#)

Citizen/Consumer Shifts

- ▶ [Consumerism](#)

Citizenship

- ▶ [Endowment Fund](#)

City Logistics

- ▶ [Sustainable Logistics](#)

Civil Economy

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Synonyms

[Business ethics](#); [Economy serving life](#); [Moral economy](#); [Sustainable economy](#)

Definition

Civil Economy is a school of thought promoted by leading economists and scholars, inspired by the thought of Antonio Genovesi (1713–1769) and leading intellectuals of the Italian Enlightenment period (Dal Degan [2018a](#)). This intellectual tradition is retrieved and actualized as its understanding of the economic discipline and business role within civil society are believed to be best suitable to face contemporary challenge such as raising inequality, climate change, and democratic crises (Bruni and Zamagni [2009](#)). Originally circulated within the Italian academia and afterward developed and disseminated with international scholars, business actors, civil society organizations, cultural foundations, and third sector institutions, Civil Economy represents an alternative approach to political economy. It is based on the revision of the economic anthropological assumption of the *homo oeconomicus* that should be replaced with the Aristotelian *zoon politikon* paradigm (Bruni and Zamagni [2007](#)). This vision entails that the market and its actors are to be understood as being embedded within cultural, religious, intellectual, spiritual, and political relations. This tradition proposes that responsible business, social business, moral economic behavior, cooperation, sustainability practices, care for

the Common Good, and common goods should be analyzed through the tools of a human and relational-based approach rather than neoclassical individualistic models (Carrier 2012; Bruni and Zamagni 2009; Schlag and Melé 2020; Bruyn 2000). Civil Economy collects insights on relationality as a category of the economic discipline from the History of Economic Thought and Business History up to the present days, in order to provide Business Ethics with a coherent underpinning holistic vision of the economic political theory (Screpanti and Zamagni 2005).

Introduction

The Civil Economy school of thought develops an alternative understanding of Political Economic Theory based on tradition and innovation: on one side, it rediscovers neglected or lost traditions within the History of Economic Thought and Business History (or particular readings of mainstream approaches and authors, such as Adam Smith's interpretation; Zamagni 2008; Bruyn 1999), on the other side it seeks to provide to Business Ethics contemporary approaches a theoretical framework based on humanism and relationality, thus being able to explain morally oriented economic behaviors and develop sustainable business models based on insights coming from the role of business within society (Sapelli 2013; Costa and Ramus 2015).

The term Civil Economy is retrieved from the work of Antonio Genovesi, who was an Italian economist as other relevant intellectuals of the time such as Ferdinando Galiani, Gaetano Filangeri, Cesare Beccaria, Pietro Verri, and Giammaria Ortes (belonging to different cities, Porta 2011). Genovesi is considered the founder of the Italian economic thought as well as a leading intellectual of the Italian Enlightenment, which was developed within the intellectual scenario of urban civilization in the XVIII Century (Porta 2018; Screpanti and Zamagni 2005; Stapelbroek 2006). Genovesi taught the oldest academic course in economy, at the University of Naples, titled "Civil and Mechanical Economy" and his 1756 *oeuvre* is known as "Lezioni

di economia civile" ("Lectures on Civil Economy"). Building on this tradition, contemporary Civil Economy recalls its cornerstone idea that "*the pursuit of self-interest is a passion compatible with other people's interests*" (Zamagni 2008, p. 474). In this light, the shaping of the economic discipline as such can be understood as a social science with strong moral and anthropological assumptions: indeed, both Adam Smith and Antonio Genovesi grounded their economic visions in moral philosophy backgrounds (Genovesi 2013). Both of them argued that self-interest is compatible with the pursuit of public interest, but they differ in the understanding of how economic behavior relates to this human leaning toward the others: while, according to Adam Smith, economic and business relations are impersonal and it is desirable for them to be so, for intellectuals belonging to the Civil Economy school of thought those relations are highly personal and involve a great deal of variables that cannot be reduced to the unique tension to self-interest and profit maximization (Dal Degan 2018b; Bruni and Zamagni 2009). Civil Economy underlines how the first treatises of the economic discipline considered an autonomous field of thought were highly concerned with the issue of public happiness (Screpanti and Zamagni 2005) and, accordingly, with the idea that people organize economic institutions (such as the market) to find common ground and common rules to pursue societal well-being, in order to reaffirm that Business Ethics does not address a particular side of economic relations but rather represents the original essence of the discipline. According to the paradigm of Civil Economy, both markets and business organizations serve social purposes and have to be studied as being inherently not individualistic neither political, but rather as ontologically belonging to the civil society terrain where the human being realizes its potential and seeks *eudaimonia* (Bruni and Zamagni 2009). The market economy is thus considered to be not the place where Hobbesian negative anthropology of the striving *homo homini lupus* takes action, but, on the opposite, is conceived as: "human nature trying to civilize itself" (Bruyn 2000, p. 242), i.e., the place where human needs are met in reciprocal dynamics.

By proposing a positive anthropology as underpinning economic and business models, Civil Economy can be considered part of the field of interest of recent studies, such as humanistic management (Schlag and Melé 2020; Melé 2013) with which it shares a common vision on the nature of human beings and a common critical address toward utilitarianism and economicism (Melé 2003). Both the Civil Economy and the Humanistic Management paradigm refuses the idea that the market is unethical and that the economy should be disembedded from society and thus analyzed regardless of historical, cultural, religious, political, and spiritual variables that affect both its structure as a social institution and people's behavior when interacting through it. Moreover, both paradigms aim to overcome the vision of the market as being a neutral mechanism, detached from the above-mentioned variables that can be extended to non-economic spheres of social life (Polanyi 1944). On the contrary, Civil Economy and Humanistic Management develops theoretical frameworks and models apt to grasp why and how the economic sphere includes nonprofit and nonexploitative exchange and production relations, such as gratuity, gift, cooperation (Bruni and Zamagni 2009; Zsolnai 2011). These similarities shed new light on the innovative features of Civil Economy, which represents both an attempt of circulation of so far less popularized theories within the History of Economic Thought, as well as a useful paradigm to enquire into the features and the possibilities of responsible and sustainable business and its ability to balance profitability and moral-driven aspects (Baldarelli and Del Baldo 2013).

Civil Economy represents a coherent theory of social wealth creation and allocation, providing understanding of the mechanisms of its production and distribution as well as explanation of its social purpose and shared meaning for people involved in economic relations (Costa and Ramus 2015).

Key Issues

By providing to Business Ethics a positive anthropological model (*zoon politikon*) and by

reestablishing the original moral philosophical inspiration in which History of Economic Thought was originally rooted (Screpanti and Zamagni 2005; Roncaglia 1996), Civil Economy provides theoretical and conceptual frameworks, as well as empirical research tools, able to explore all those issues that, through the *homo oeconomicus* model, would otherwise be neglected or difficult to subsume to the motive of self-interest: some of them are the notion of Common Good and its spiritual influence, the idea of caring for common goods and the environment, the issue of public happiness and the economic concept of relational value.

In line with the thought of the very founder of the Italian tradition of *Economia Aziendale* Gino Zappa (1879–1960), it is possible to address business organizations as being subject to three *raison d'être* and social functions: they serve the need of exchange and production through market institutions, they fulfill economic sustainability objectives, they act according to “other purposes” (Costa and Ramus 2015). The latter dimension would be impossible to grasp without a thorough understanding of values, beliefs, and spiritual/personal influences informing entrepreneurship and management actions (Del Baldo 2020). According to this view, which conveys a proper ontology of the firm, as the one proposed by Gino Zappa's vision, it would be impossible to make sense of firms' choices and behaviors disregarding the analysis of the relations it is embedded within. In turn, the firm itself can be evaluated as being functional or dysfunctional according to the social aims that society pursues through it (Bruni and Zamagni 2009, p. 60). Among intellectual traditions that are revisited by Civil Economy scholars, insights taken from the Catholic Social Thought hold a significant place in discussing the notion of Common Good and providing an accomplished vision of entrepreneurship and the firm as an economic organization that overcomes its economic goals (Baldarelli 2006). The idea of Common Good, i.e., a transcendental dimension that gives purpose to human life and human actions (Schlag and Melé 2015), informs Civil Economy insofar it provides explanation to the influence of intangible

values and shared purposes on economic life and business governance and organization (Costa and Ramus 2015; Bouckaert and Zsolnai 2012). Concern for the Common Good represents one of the possible reasons why business actors choose to behave responsibly, not only because of reputational reasons but moved by *intrinsic* motives (Del Baldo 2017) as well as moved by a higher ideal that binds humankind together and fosters virtue-based actions with solidarity and reciprocity features. By opposing the Friedman Doctrine (Friedman 1970) Civil Economy provides theoretical and empirical evidence of altruistic business models and leaderships committed to spiritual values (Schlag and Mercado 2016; Del Baldo 2020). Ultimately, the theoretical link between CST and Civil Economy is provided by the common quest for answers to a fundamental research question consubstantial to all Business Ethics studies: “*Does economic life enhance or threaten our life together as a community?*” (Economic Justice for All, issued by the US Catholic bishops in 1986, quoted in Finn 2010, p. vi).

Civil Economy represents also a power paradigm to explain the simultaneous coexistence of heterogeneous forms of economic organization and relation, not entirely or not at all belonging to capitalism nor satisfactorily definable using market rules and profit-driven reasoning (Porta and Scazzieri 1997). Hybrid forms of not-entirely economic nor State-controlled economic phenomena need to be understood against the *zoon politikon* background (Bruni and Zamagni 2009): it is the case, among others, of philanthropic and nonprofit organizations (Nigri et al. 2020), actors and issues connected to the economy of care (Schoenmaker 2020), social business and cooperatives (Kay and McMullan 2017; Menzani and Zamagni 2010), forms of exchange through gift and gratuity (Faldetta and Paternostro 2011), and common goods governance theories (Ostrom 1993). Civil Economy contributes to studies adopting the Integral Ecology perspective (Jakobsen and Zsolnai 2017) by providing anthropological insights on both the relations between humankind and the ecosystem as well as the relations between human beings in

order to ensure environmental and social sustainability (Deak 2017). Civil Economy represents a valid contribution to the discussion of public happiness and social welfare as a sphere of interest that investigates economic prosperity beyond current measures of economic growth (Pabst 2018; Bartolini 2007). It seeks to frame the latter within shared prosperity and sustainable value creation for local communities and workers (Zamagni et al. 1999; Mazzucato 2017; Mirowski 1991a).

Human relations and relational value are the core of the epistemological reflection undergone by scholars of Civil Economy. Reinstatement of anthropology and philosophy, overcoming the neoclassical influence exerted by Physics (Mirowski 1984) and Mathematics (Mirowski 1991b; Röpke 1960; Roncaglia 1996), allows to focus on variables that cannot be quantified objectively, promoting enquiries on motives and interpersonal dynamics resulting in certain economic actions rather than focusing only on the output of those actions (Bruni and Zamagni 2009). Civil Economy addresses “interpersonal relations”: it proposes to add to notions of value of use and value of exchange the one of relational value (Zamagni 2008), thus relationality becomes a category of economic thinking (thus contributing to understand the value of others categories such as interdependence as well (Gatzia 2011).

Civil Economy aims to raise awareness on the performative power of the discipline, i.e., on its systematic affection of the object of investigation. Indeed, not only does Civil Economy focuses on aspects of economic life that are not quantifiable (Bruni and Zamagni 2009), it also aims to influence those aspects by reinforcing the moral side of the economic thinking and of business behavior, highlighting how the two spheres are intertwined (for instance, when discussing economic crisis, Jackson 2010). Civil Economy reinforces already existing theories that consider Business Ethics an endogenous rather than exogenous feature of the economy (Nilakant and Addison 1999), by specifying that there is a close relationship between anthropological economic assumptions that are

provided to economic and business models and good or bad moral-wise behavior. This means that responsibility and ethical concerns are at stake not only for economic actors and business organizations but for scholars in the field and economists as well: ultimately, Civil Economy provides a vision of the economic discipline as being a form of civil engagement itself (Bruni and Pelligra 2002).

Summary

Civil Economy provides the economic discipline with a revision of its original inspiration, enrooted in moral philosophy and ethics. Its main promoters argue that a significant change in anthropological assumptions upon which economic models are built is needed to face contemporary grand challenges, such as raising inequality and climate change. In this light, irresponsible behavior by firms and economic actors is not framed as being the output only of legislative loopholes and uniquely profit-driven business plans, but as a consequence of a certain anthropological understanding of the human nature as being self-interested. On the contrary, Civil Economy reaffirms the constitutive sociable feature of the humankind, according to which business, economic institutions, and organizations (such as the market, the firm, the cooperative organizations, banks and financial institutions, and others) are animated. Civil Economy defines itself as “l’economia come se la persona contasse” (Bruni and Zamagni 2009) [“The Economy as the person would matter”] and according to this inspiration provides an academic paradigm able to understand interpersonal relational value and intangible morally driven goals underpinning economic life.

Cross-References

- [Business Ethics](#)
- [Social Business](#)
- [Sustainability in Economy of Communion Enterprises](#)

References

- Baldarelli, M. G. (2006). An Italian note on social responsibility, catholic social teaching and the economy of communion. *Social and Environmental Accountability Journal*, 26(1), 7–12.
- Baldarelli, M. G., & Del Baldo, M. (2013). The question of pendulum between entrepreneurship and managerialism: New challenges in theory and practice. *Ideas Ideals*, 4(18), 63–74.
- Bartolini, S. (2007). Why are people so unhappy? Why do they strive so hard for money? Competing explanations of the broken promises of economic growth. In L. Bruni & P. L. Porta (Eds.), *Handbook on the economics of happiness*. Cheltenham/Northampton: Edward Elgar.
- Bouckaert, L., & Zsolnai, L. (2012). Spirituality and business: An interdisciplinary overview. *Society and Economy*, 34(3), 489–514.
- Bruni, L., & Pelligra, V. (2002). *Economia come impegno civile [Economy as civil engagement]*. Roma: Città Nuova.
- Bruni, L., & Zamagni, S. (2007). *Civil economy. Efficiency, equity and public happiness*. Bern: Peter Lang.
- Bruni, L., & Zamagni, S. (Eds.). (2009). *Dizionario di economia civile [Dictionary of civil economy]*. Roma: Città Nuova Editrice.
- Bruyn, S. T. (1999). The moral economy. *Review of Social Economy*, 57(1), 25–46.
- Bruyn, S. T. (2000). *A civil economy transforming the market in the twenty-first century*. Ann Arbor: Michigan University Press.
- Carrier, J. G. (Ed.). (2012). *A handbook of economic anthropology*. Cheltenham: Edward Elgar.
- Costa, E., & Ramus, T. (2015). Italian Economia Aziendale as a model inspired by catholic humanism. In D. Melé & M. Schlag (Eds.), *Humanism in economics and business perspectives of the catholic social tradition*. Springer.
- Dal Degan, F. (2018a). Antonio Genovesi and Italian economic thought: When ethics matters in economics. *The European Journal of the History of Economic Thought*, 25(4), 524–530.
- Dal Degan, F. (2018b). Beyond virtues and vices: Antonio Genovesi’s and Adam Smith’s “science of relationships”. *The European Journal of the History of Economic Thought*, 25(4), 562–581.
- Deak, D. (2017). Social interventions in nature. In *Integral ecology and sustainable business* (Contributions to conflict management, peace economics and development) (Vol. 26, pp. 31–53). Bingley: Emerald Publishing.
- Del Baldo. (2017). Moral and virtue-based leadership for enhancing integral ecology. In O. Jacobsen & L. Zsolnai (Eds.), *Integral ecology and sustainable business* (Contributions to conflict management, peace economics and development) (Vol. 26, 203228). Bingley: Emerald.
- Del Baldo, M. (2020). Company case study 8: Cucinelli—A humanistic enterprise for a sustainable growth and a

- sustainable world. In W. Wehrmeyer, S. Looser, & M. Del Baldo (Eds.), *Intrinsic CSR and competition*. Palgrave Macmillan.
- Faldetta, G., & Paternostro, S. (2011). The logic of the gift and the bonding value: A new perspective for business management. *Journal of Management Development*, 30(6), 594–604.
- Finn, D. (Ed.). (2010). *The true wealth of nations: Catholic social thought and economic life*. Oxford.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*.
- Gatzia, D. E. (2011). Towards a caring economy. In M. Hamington & M. Sander-Staudt (Eds.), *Applying care ethics to business. Issues in business ethics* (Vol. 34). Dordrecht: Springer.
- Genovesi, A. (2013). *Lezioni di Economia Civile [Civil economy lectures]*. Milano: Vita e Pensiero.
- Jackson, K. (2010). The scandal beneath the financial crisis. *Harvard Journal of Law and Public Policy*, 33(2), 735–778.
- Jakobsen, O., & Zsolnai, L. (2017). *Introduction: Why integral ecology is needed for reforming business, integral ecology and sustainable business* (Contributions to conflict management, peace economics and development) (Vol. 26, pp. 3–11). Bingley: Emerald Publishing Limited.
- Kay, A., & McMullan, L. (2017). Contemporary challenges facing social enterprises and community organisations seeking to understand their social value. *Social and Environmental Accountability*, 37(1), 59–65.
- Mazzucato, M. (2017). *The value of everything*. London: Penguin.
- Melè, D. (2003). The challenge of humanistic management. *Journal of Business Ethics*, 44, 77–88.
- Melè, D. (2013). Antecedents and current situation of humanistic management. *African Journal of Business Ethics*, 7(2), 52.
- Menzani, T., & Zamagni, V. (2010). Cooperative networks in the Italian economy. *Enterprise & Society*, 11(1), 98–127.
- Mirowski, P. (1984). Physics and the ‘marginalist revolution’. *Cambridge Journal of Economics*, 8(4), 361–379.
- Mirowski, P. (1991a). Postmodernism and the social theory of value. *Journal of Post Keynesian Economics*, 13(4), 565–582.
- Mirowski, P. (1991b). The when, the how and the why of mathematical expression in the history of economic analysis. *Journal of Economic Perspectives*, 5(1), 145–157.
- Nigri, G., Del Baldo M., & Aguilini, A. (2020). The Mondora method: Quantum leaders in benefit corporations. *Entrepreneurship Research Journal*, 2020, 20190309.
- Nilakant, V., & Addison, R. (1999). Ethics in action: The management of intangibles. In P. H. Werhane & A. E. Singer (Eds.), *Business ethics in theory and practice. Issues in business ethics* (Vol. 13). Dordrecht: Springer.
- Pabst, A. (2018). Political economy of virtue: Civil economy, happiness and public trust in the thought of Antonio Genovesi. *The European Journal of the History of Economic Thought*, 25(4), 582–604.
- Polanyi, K. (1944). *The great transformation*. Boston: Beacon Press.
- Porta, P. L. (2011). Lombard enlightenment and classical political economy. *The European Journal of the History of Economic Thought*, 18(4), 521–550.
- Porta, P. L. (2018). From *Economia Civile* to *Kameralwissenschaften*. The line of descent from Genovesi to Beccaria in pre-Smithian Europe. *The European Journal of the History of Economic Thought*, 25(4), 531–561.
- Porta, P. L., & Scazzieri, R. (1997). Towards an economic theory of international civil society: Trust, trade and open government. *Structural Change and Economic Dynamics*, 8(1), 5–28.
- Roncaglia, A. (1996). Why should economists study the history of economic thought? *The European Journal of the History of Economic Thought*, 3(2), 296–309.
- Röpke, H. (1960). *A humane economy*. Chicago: Henry Regnery.
- Sapelli, G. (2013). *Morality and corporate governance: Firm integrity and spheres of justice*. Milan: Springer.
- Schlag, M., & Melè, D. (2020). Building institutions for the common good. The practice and purpose of business in an inclusive economy. *Humanistic Management Journal*, 5, 1–6.
- Schlag, M., & Mercado, J. A. (Eds.). (2016). *Free markets with solidarity & sustainability facing the challenge*. Washington, DC: The Catholic University of America Press.
- Schoenmaker, D. (2020). *The impact economy: Balancing profit and impact* (Working paper 2020/04). Bruegel. Available at SSRN: <https://ssrn.com/abstract=3567026>
- Screpanti, E., & Zamagni, S. (2005). *An outline of the history of economic thought*. Oxford University Press.
- Stapelbroek, K. (2006). Preserving the Neapolitan state: Antonio Genovesi and Ferdinando Galiani on commercial society and planning economic growth. *History of European Ideas*, 32(4), 406–429.
- Zamagni, S. (2008). Reciprocity, civil economy, common good. In *Pursuing the common good: How solidarity and subsidiarity can work together pontifical academy of social sciences*. Vatican City. www.pass.va/content/dam/scienzesociali/pdf/acta14/acta14-zamagni.pdf
- Zamagni, S., Acocella, N., Roncaglia, A., & Pizzuti, F. R. (1999). Social paradoxes of growth and civil economy. In G. Gandolfo & F. Marzano (Eds.), *Economic theory and social justice*. London: Palgrave Macmillan.
- Zsolnai, L. (2011). Taking spirituality seriously. In L. Zsolnai (Ed.), *Spirituality and ethics in management. Issues in business ethics* (Vol. 19). Dordrecht: Springer.

Civil Engagement

- [Employee Volunteer Programs](#)

Civil Liberties

- [Human Rights](#)

Civil Rights

- [Human Rights](#)

Classification

- [CSR Disclosure, Quality Measurement of](#)

Clean Development Mechanism (CDM)

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Synonyms

[Instrument of market-based climate change mitigation and development](#)

Definition

The Clean Development Mechanism (CDM) is the most significant of the three flexible mechanisms under the 1997 Kyoto Protocol. The mechanism allows countries with greenhouse

gas (GHG) emission reduction targets under the Kyoto Protocol to implement emission-reduction projects in developing countries. In turn, CDM project proponents earn credits called certified emission reductions (CERs). The main purposes of the CDM are to reduce the cost of complying with the Kyoto Protocol for industrialized nations while also promoting sustainable development in countries with economies in transition. Ultimately, the global initiative is meant to provide CDM project proponents with more options to fulfill their emission reduction targets, strengthen sustainable development, and mitigate climate change.

Introduction

Climate change is the biggest threat to humankind. Therefore, decisions and actions are required to limit global warming and set specific targets for GHG emissions. The United Nations Framework Convention on Climate Change (UNFCCC) was established to set global climate strategies based on a principle of “common but differentiated responsibilities.” According to this principle, each country is responsible of limiting the greenhouse gas emissions depending on their resources. The CDM is one of the three flexibility mechanisms under the Kyoto Protocol for achieving the targets of the UNFCCC, along with Joint Implementation and International Emissions Trading. The CDM has the dual aim of achieving emission reductions alongside sustainable development in host countries.

UNFCCC has faced criticism related to CDM process, inadequate additionality, minor sustainable development benefits, and uneven distribution within host countries. CDM projects have been criticized for being short-term, ad hoc, and unable to promote clean and renewable energy in host countries (Watts et al. 2015). Therefore, discussion on creating new market mechanisms (NMMs) has mounted (UNFCCC 2019). NMMs are meant to provide economic, sector-wide emission reductions instead of ad hoc, project-based reductions and avoid the flaws of the CDM.

Development of the CDM

The CDM was established in 1994 along with the Kyoto Protocol, and it came into force in 1995. The main operational guidelines of the CDM were accepted in November 2001 as part of the Marrakesh Accords.

Even though the Marrakesh Accords made it possible for developed country participants to adopt the CDM as a tool for climate change mitigation, the decision for participants to do so was not widespread. In 2004, the Government of the Netherlands and the World Bank accounted for a third of the total number of CDM project transactions (Lecocq and Ambrosi 2007).

Originating from EU Directive 92/57/EEC (OJ L245, 26.8.92), the CDM 2007 regulations were introduced to combine welfare requirements with existing Construction (Health, Safety, and Welfare) Regulations under the CDM umbrella. The first commitment period of the Kyoto Protocol, which ran from 2008 to 2012, aimed to set the pace for achieving binding emission reduction targets. Industrialized countries were urged not to exceed dangerous levels of GHG emissions.

A second commitment period was established in 2012 in Doha. The period, which ran from 2013 to 2020, limited the use of CDM only to least developed countries. However, since the second commitment period ended on December 31, 2020, the CDM has been left with an uncertain fate.

NMMs were presented at the end of the first commitment period. Discussion on reforming the flexible, market-based mechanisms under the Kyoto Protocol began in 2007 in Bali. At the 2011 Durban Climate Change Conference, parties established “new market-based mechanisms” to make mitigation actions more affordable.

Structure of Governance

The UNFCCC set up a system of governance for the CDM, as presented in Fig. 1. CMP represents the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

The CDM Executive Board, guided by the CMP, oversees the CDM process. The board is

fully liable to the CMP. It brings CDM project participants together for the registration of projects and issuance of CERs.

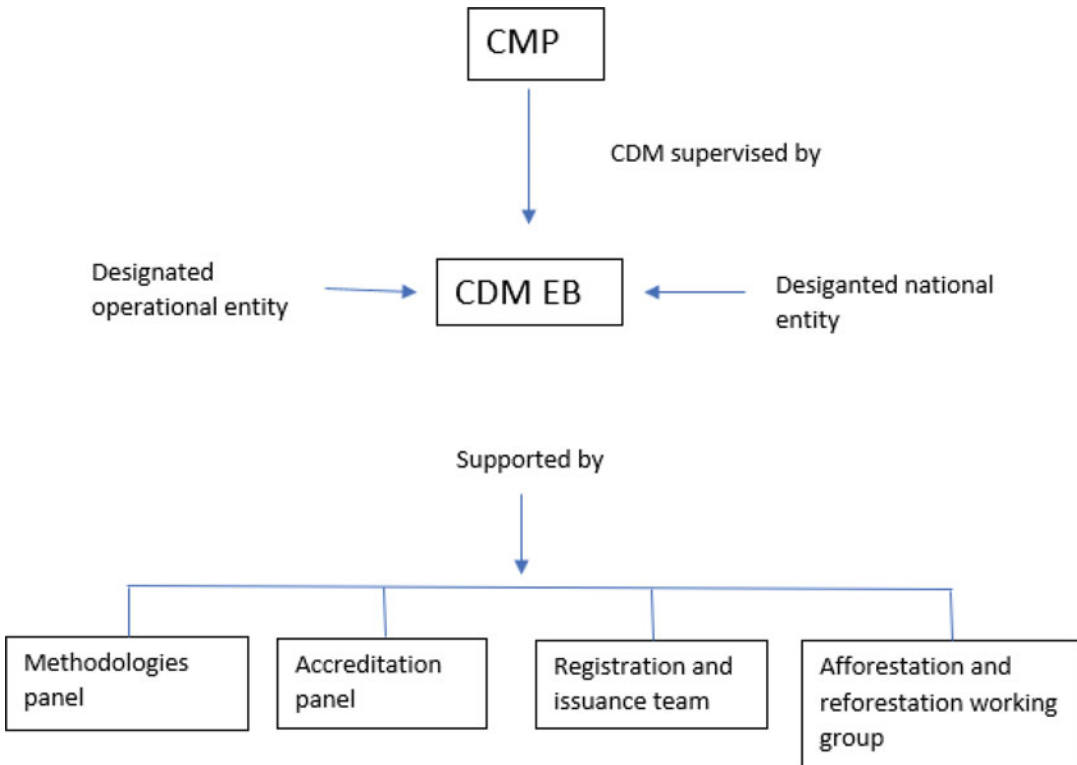
The Methodologies Panel develops recommendations for the board on guidelines for methodologies for baseline and monitoring plans and prepares recommendations on submitted proposals for baseline and monitoring methodologies. Host countries designate a national authority to authorize and approve participation in CDM projects. The designated operational entity is an independent auditor accredited by the CDM that validates project proposals and verifies GHG emission reductions.

Challenges

The CDM has allowed for climate change mitigation while providing developing countries with opportunities to engage in the global carbon market. However, it has been criticized for high transaction costs, ignoring the aim of sustainable development, complexity in verifying a project's additionality, and unequal distribution of projects across host countries, which leads to unequal distribution of project benefits (Boyd et al. 2009).

The capability of CDM projects to reduce GHG emissions cost-effectively and promote sustainable development in countries with economies in transition has been questioned (Dechezleprêtre et al. 2009; Olsen 2007). Researchers have identified trade-offs between the two aims of CDM. For example, CDM projects often favor the cost-effectiveness of certain mitigation actions over sustainable development in countries with economies in transition (Huang and Barker 2008; Kolshus et al. 2001; Olsen 2007; Olsen and Fenhann 2008; Paulsson 2009; Sutter and Parreño 2007). Market forces have not been able to support sustainable development in host countries. If developing countries continue participating in international climate collaboration, the impacts of CDM projects on sustainable development in countries with economies in transition should be recognized and reported.

The CDM has suffered from the unequal geographic distribution of projects, due to high



Clean Development Mechanism (CDM), Fig. 1 Governance structure of the CDM. (Adapted from UNFCCC)

demand for inexpensive emission reductions. Less than one fifth of CDM projects are hosted outside of the Asia-Pacific region; China hosts more than half of all CDM projects and India hosts one fifth of all CDM projects. The rest of the participating developing countries share less than 5% of CDM projects (Watts et al. 2015).

Watts et al. (2015) concluded that the CDM registry process is too ambiguous, which makes verifying additionality extremely complicated. The process has also been criticized for being too inflexible and requiring too much unavailable data for measuring baseline and project activity.

Additionality means that emission reductions from CDM projects should be additional. In other words, the emission reductions would not have occurred without the CDM project. However, the CDM requirements for additionality might discourage host countries from implementing ambitious renewable energy policies. If a host country already has ambitious policies for renewable

energy development in place, verifying the additionality of a CDM project becomes complicated. One of the verification issues is called double counting, which occurs when two different projects receive CERs for the same contribution. For example, if a project spans two different geographic areas, its climate benefits might be counted twice, and both areas might receive the CERs.

Lessons Learned from the CDM

The Kyoto Protocol is missing a clear-cut technology transfer mandate, and, according to Kim et al. (2013), technology transfer to host countries has not been significant. Certain desired technologies have been found to be “neglected” by the CDM. Technology transfer appears to be essential to reducing GHG emissions in developing countries, and local technological capabilities can play a significant role (Kim et al. 2013).

Maraseni and Cadman (2015) argued that the CDM has not achieved the expected emission reductions since 2008. At the end of the first commitment period of the Kyoto Protocol, there was a great financial crisis. In addition, a lack of commitment from industrialized countries, such as the USA, led to the dramatic drop of carbon prices. The current climate finance regime has not been able to support the participation of developing countries and the investments in the least developed countries (Hannam et al. 2015).

According to Watts et al. (2015), the CDM has not achieved sustainable development because the assessment process for CERs is biased and lacks universal standards. The United Nations lacks an accurate and accepted evaluation for sustainable development, despite the fact that the pursuit of sustainable development varies from country to country.

Subbarao and Lloyd (2011) argued that the existing architecture of the CDM has not delivered the expected benefits, especially for rural areas. Agriculture projects are scarce under the CDM, and due to high transaction costs, there is a lack of access for the poor, smallholders, and other vulnerable rural communities. However, smallholders could be included in the global carbon market through specific cooperative initiatives (Kahiluoto et al. 2012).

Successful projects involve and empower local communities. They are often managed in cooperation with local people rather than international companies. Involving local stakeholders and communities in the CDM may increase the probability of real development in host countries. Renewable energy CDM projects that are small-scale, rural, and community-based could be especially beneficial for sustainable development.

One of the successes of the CDM is the mobilization of investment. The mechanism has succeeded in engaging the public and private sectors of developed and developing countries in climate change mitigation. In addition, the CDM could increase the energy security of host countries with the help of a well-developed renewable energy strategy (Doukas et al. 2009).

Summary

The CDM was established in 1994 along with the Kyoto Protocol, with the dual aim of improving sustainable development in countries with economies in transition and providing affordable emission reductions for industrialized countries. It is one of three flexible mechanisms under the Kyoto Protocol for achieving the targets of the UNFCCC, along with Joint Implementation and International Emissions Trading. The UNFCCC has been criticized related to CDM project management, complex verification of additionality, inadequate sustainable development benefits, and unsatisfactory geographical distribution and permanence of projects. Also, high transactions costs have led to low accessibility to the CDM for the poor, smallholders, and other vulnerable rural communities. CDM projects have been criticized for being ad hoc and unable to accomplish profound change within the global energy system. While actual contributions to sustainable development and emission reductions have been debated, the CDM has been successful in mobilizing funding for climate change mitigation.

Cross-References

- [Carbon Offsets](#)
- [Carbon Trading Schemes](#)
- [Climate Finance](#)
- [Kyoto Protocol](#)

References

- Boyd, E., Hultman, N., Roberts, J. T., Corbera, E., Cole, J., Bozmoski, A., & Liverman, D. M. (2009). Reforming the CDM for sustainable development: Lessons learned and policy futures. *Environmental Science and Policy*, 12(7), 820–831.
- Dechezleprêtre, A., Glachant, M., & Ménière, Y. (2009). Technology transfer by CDM projects: A comparison of Brazil, China, India, and Mexico. *Energy Policy*, 37(2), 703–711.

- Doukas, H., Karakosta, C., & Psarras, J. (2009). RES technology transfer within the new climate regime: A “helicopter” view under the CDM. *Renewable and Sustainable Energy Reviews*, 13(5), 1138–1143.
- Hannam, P. M., Liao, Z., Davis, S. J., & Oppenheimer, M. (2015). Developing country finance in a post-2020 global climate agreement. *Nature Climate Change*, 5(11), 983.
- Huang, Y., & Barker, T. (2008). *The clean development mechanism and sustainable development: A panel data analysis*.
- Kahiluoto, H., Rimhanen, K., Rötter, R., & Tseganeh, B. (2012). Mitigation of climate change to enhance food security: An analytical framework. *Forum for Development Studies*, 39(1), 51–73.
- Kim, J. E., Popp, D., & Prag, A. (2013). The clean development mechanism and neglected environmental technologies. *Energy Policy*, 55, 165–179.
- Kolshus, H. H., Vevatne, J., Torvanger, A., & Aunan, K. (2001). Can the Clean Development Mechanism attain both cost-effectiveness and sustainable development objectives? (No. CICERO-WP–2001: 8). Oslo Univ. (Norway). Center for International Climate and Environmental Research.
- Lecocq, F., & Ambrosi, P. (2007). *The clean development mechanism: History, status, and prospects*. Oxford University Press.
- Maraseni, T. N., & Cadman, T. (2015). A comparative analysis of global stakeholders’ perceptions of the governance quality of the clean development mechanism (CDM) and reducing emissions from deforestation and forest degradation (REDD+). *International Journal of Environmental Studies*, 72(2), 288–304.
- Olsen, K. H., & Fenhann, J. (2008). Sustainable development benefits of Clean Development Mechanism projects: A new methodology for sustainability assessment based on text analysis of the project design documents submitted for validation. *Energy Policy*, 36(8), 2819–2830.
- Olsen, K. H. (2007). The clean development Mechanism’s contribution to sustainable development: A review of the literature. *Climatic Change*, 84(1), 59–73.
- Paulsson, E. (2009). A review of the CDM literature: From fine-tuning to critical scrutiny? *International Environmental Agreements: Politics, Law and Economics*, 9(1), 63–80.
- Subbarao, S., & Lloyd, B. (2011). Can the Clean Development Mechanism (CDM) deliver? *Energy Policy*, 39(3), 1600–1611.
- Sutter, C., & Parreño, J. C. (2007). Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects. *Climatic Change*, 84(1), 75–90.
- United Nations Framework Convention on Climate Change. (2019). What is the CDM. Retrieved June 26, 2019, from <https://cdm.unfccc.int/about/index.html>
- Watts, D., Alborno, C., & Watson, A. (2015). Clean Development Mechanism (CDM) after the first commitment period: Assessment of the world’s portfolio and the role of Latin America. *Renewable and Sustainable Energy Reviews*, 41, 1176–1189.

Clean Development Mechanism (CDM): Benefits and Project Cycle

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Synonyms

CDM; Flexibility mechanism under the Kyoto Protocol; Market-based mechanism

Definition

The Clean Development Mechanism (CDM) is one of the market-based mechanism given in the Kyoto Protocol which allows developed countries (Annex I) to achieve their binding emission reduction or limitation targets in a cost-effective manner. Under CDM, an Annex I country can implement an emission reduction project in a developing country where the cost of implementing such project is relatively lower. Each CDM project goes through a cycle of approvals and validations by a designated operating entity and a designated national authority before it is registered by CDM executive board. The developed country earns Certified Emission Reduction (CER) credits through these CDM projects. “Each CER is equivalent to one tonne of CO₂. These CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol” (UNFCCC 2020a). Thus, CDM provides developed nations some flexibility in how they meet their commitments under the Kyoto

Protocol while assisting developing countries in achieving their development goals in a sustainable manner and in participating in international efforts to mitigate climate change.

Introduction

In the past few decades, global warming and the resultant climate change have become one of the most pertinent global problems. Increasing legal and social pressures along with growing scientific evidence about the adverse impact of many human activities on the global climate system have led to combined international efforts since mid-1980s to deal with this grave situation. “In 1988, the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) established the Intergovernmental Panel on Climate Change (IPCC) to provide policymakers with authoritative scientific information” (UNEP 2008). This information can be used by countries in making their climate policies (IPCC 2020). United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992 with the objective of “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (United Nations 1992). At third Conference of Parties (COP3) to the Convention held at Kyoto, Japan, Kyoto Protocol was introduced. The main aim of the Kyoto Protocol was to reduce GHG emissions by setting internationally binding emission reduction targets. The target for the first commitment period (2008–2012) was to reduce the collective emissions of six GHGs by developed countries by at least 5% of 1990 levels (United Nations 1998). Most of these reductions had to occur within the national borders largely through national measures. In addition, to help developed countries to achieve their targets in a cost-effective way, the Protocol provided for three market-based mechanisms: “Joint implementation (JI), Clean Development Mechanism (CDM), and International Emission Trading” (UNFCCC 2007). Thus, CDM is one of the market-based mechanisms for achieving GHG reduction targets in a cost-effective manner.

According to Article 12 of the protocol, “the CDM allows emission-reduction (or emission removal) projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of CO₂. These CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol” (UNFCCC 2007). The reasoning behind CDM is that since it makes no difference where a ton of CO₂ or other GHG is reduced, the emission reduction targets can be achieved in the developing countries where cost of implementing emission reduction projects is relatively lower. For these projects, the funds and technology are given by the developed nations. Thus, the CDM seeks to match funds and technologies of industrialized nations with reduction opportunities in the developing countries so as to produce a cost-effective GHG reduction strategy.

Benefits of CDM

According to Article 12.2 of the Kyoto Protocol, “the purpose of the Clean Development Mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3” (United Nations 1998). For the developed countries, CDM projects earn tradable, saleable CERs which can be used by them to meet a part of their binding commitments under the Kyoto Protocol.

Emission reduction CDM projects may include energy efficiency improvement projects, renewable energy projects like solar water heating or wind energy projects, fossil fuel switching projects, projects for reducing agricultural emissions, reduction in industrial process emissions, sink projects for afforestation and reforestation, land-fill gas projects, etc. Developing countries usually lack both financial and technological resources to undertake these projects. These funds and technology can be provided by the industrialized

nations. It helps developing countries in participating in the international efforts to mitigate adverse impact of climate change and, at the same time, in meeting their social, environmental, and economic goals.

Thus, CDM projects lead to various economic, social, and environmental benefits for the developing countries. These include:

- Procurement of funds from the industrialized nations for major emission reduction projects
- Transfer of technology in the developing country to replace existing fossil fuel technology with new environmentally sustainable technology
- Accelerated economic activities
- Skill enhancement
- Creation of employment opportunities
- Other social benefits like self-sufficiency, poverty alleviation, balanced regional development
- Better standards of living and improvement in quality of life of communities
- Environmental benefits like cleaner air and water, improved land use, energy efficiency, reduced dependence on fossil fuels, reduced soil erosion, protected bio-diversity

CDM helps in raising climate funds which can be used to combat climate change and protect the earth. Some portion of the CERs generated through CDM projects is contributed to adaptation fund. According to Article 12.8 of the Protocol, “The Conference of the Parties serving as the meeting of the Parties to this Protocol shall ensure that a share of the proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation” (United Nations 1998).

Governance

The CDM projects are monitored by an executive board. The CDM executive board is the central authority for CDM projects, and it works under

the authority and guidance of the CMP (conference of parties serving as meeting of the parties) to the Kyoto Protocol (UNFCCC 2020b). The executive board accredits independent organizations to operate as designated operating entities (DOE). The DOE validates that proposed CDM projects meet the prescribed requirements of the CDM and submit these projects with the executive board for the registration. It also verifies the actual emission reductions from these projects and requests CDM executive board to issue CERs. In addition to DOE, designated national authorities are appointed for each host country which give national approval to the proposed CDM projects. Another important task of the CDM executive board is to develop and maintain a CDM registry as per the requirements of the Protocol (UNFCCC 2020c). The purpose is “to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs by Parties” (UNFCCC 2020b). The executive board is supported by various panels and teams like methodology panel, registration, and issuance panel which assist and guide the board and make recommendations on various relevant issues.

CDM Project Cycle

In order to participate in the CDM, there are three basic requirements: “Voluntary participation in the CDM, the establishment of National CDM authority and ratification of Kyoto Protocol” (UNEP 2008). In addition, Annex I parties must meet some requirements like national system of estimation of GHGs, national registry, preparation of annual GHG inventory, etc.

Before registration, a CDM project has to go through a series of steps (UNEP 2008). The CDM cycle starts with the identification of a potential CDM project and checking its feasibility and additionality. A project design document (PDD) is prepared by the project participant. The document contains all the relevant details about the project including the proposed methodology, monitoring methods, timeline, expected environmental impacts, etc. The details are submitted with the Designated National Authority of the

host party for securing its approval. The project is also independently evaluated by a Designated Operating Entity (DOE) to see whether it meets various requirements of the CDM as mentioned in the protocol or prescribed by the executive board. Once the project is validated by the DOE, it is submitted with the CDM executive board for registration. The executive board, after checking all the details, may grant registration or ask for review of the project.

After registration of the project, the project can be started. During lifetime of the project, actual emissions are regularly monitored by the project participant using the approved methodology. The participant prepares a monitoring report stating the claimed emission reductions. The monitored reductions are independently verified by the DOE. The verification report is submitted to the executive board. The Board then issues CERs to the project participant. These CERs can be traded in the carbon markets or used by developed nations in meeting their binding commitments under the Kyoto Protocol.

Additionality Criteria

For qualifying for accreditation under CDM, the project participant must prove additionality. Additionality means that the proposed CDM project would result in emission reductions which would not have been occurred in the absence of that project (United Nations 1998). In other words, the project should lead to additional emission reductions. The actual emission reductions from a CDM project are also certified on the basis of this additionality. For this purpose, the emissions are compared to the baseline reference range which is established by the participant using an approved methodology for that particular sector or project. The project participant is required to prove that the emission reduction would not have happened under a usual business scenario. For example, in an area where only fossil fuels are used for the generation of electricity, any project that uses renewable energy would be deemed to be additional. “It is likely that the large majority of

the projects registered and CERs issued under the CDM are not providing real, measurable and additional emission reductions” (Cames et al. 2016). However, CDM is considered to be one of the important tools under the Kyoto Protocol to meet climate change mitigation goals, and it is expected that an analysis of CDM functioning may pave way to build mechanisms to meet targets given in the Paris agreement (UNFCCC Nav 2018). In 2020, there were over 7800 registered CDM projects with issuance of more than 2 billion CERs for project activity (UNFCCC 2020d). China dominated the scene with about 50% of the projects in September 2020, while India hosted about 20% of the projects (UNFCCC 2020e).

Summary

The Clean Development Mechanism is one of the flexibility mechanism defined under the Kyoto Protocol which allows Annex I countries to start emission reduction projects in developing countries in order to earn Certified Emission Reduction (CER) credits. These CERs can be used by these countries in meeting their national targets. The CDM is based on the logic that cost of reducing emissions may vary from country to country, but the benefit of emission reduction for the atmosphere will be the same irrespective of where the emission reduction action is taken. The industrialized countries can implement emission reduction projects in the developing countries where the cost of implementing such projects is comparatively lower. This also has the benefit of accelerating green investments and technology transfers in the host countries and of promoting sustainable economic development in different parts of the world.

Cross-references

- ▶ [Climate change](#)
- ▶ [GHG emissions](#)
- ▶ [Kyoto Protocol](#)
- ▶ [Paris agreement](#)

References

- Cames M. et al. (2016). *How additional is the clean development mechanism? Analysis of the application of current tools and proposed alternatives*. Source: https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf. Accessed 1 June 2019.
- IPCC. (2020). *About the IPCC*. Source: <https://www.ipcc.ch/about/>. Last accessed 1 Dec 2020.
- UNEP. (2008). *Clean development mechanism: Introduction to the CDM*. UNEP Collaborating Centre on Energy and Environment. Risø National Laboratory. Roskilde, Denmark. Retrieved from https://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/unepcdmintro.pdf. Last accessed 1 Nov 2020.
- UNFCCC. (2007). *The Kyoto protocol mechanisms*. Source: <https://unfccc.int/resource/docs/publications/mechanisms.pdf>. Last accessed 1 May, 2020.
- UNFCCC. (2020a). *About CDM: Governance*. Source: <https://cdm.unfccc.int/EB/governance.html>. Last accessed 6 Dec 2020.
- UNFCCC. (2020b). *What is the CDM*. Source: <https://cdm.unfccc.int/about/index.html>. Last accessed 4 Dec 2020.
- UNFCCC. (2020c). *CDM registry*. Source: <https://cdm.unfccc.int/Registry/index.html>. Last seen 6 Dec 2000.
- UNFCCC. (2020d). *Clean development mechanism: CDM projects*. Retrieved from <http://cdm.unfccc.int>. Last accessed 2 Dec 2020.
- UNFCCC. (2020e). *CDM insights, project activities: Distribution of registered projects by host party*. source: <https://cdm.unfccc.int/Statistics/Public/CDMinsights/index.html>. Last accessed 2 Dec 2020.
- UNFCCC Nav. (2018, 3 May). *CDM can inspire, inform, outfit any new mechanism under Paris agreement*. UN Climate change news.
- United Nations. (1992). *United Nations framework convention on climate change*. <https://unfccc.int/sites/default/files/conveng.pdf>. Last accessed 4 May 2019.
- United Nations. (1998). *Kyoto protocol to the United Nations Framework convention on climate change*. <https://unfccc.int/resource/docs/convkp/kpeng.pdf>. Accessed 30 April 2019.

Clean Technology for Food Sustainability

- [Green Technology for Food Sustainability](#)

Cleaner Production

- [Pollution Prevention](#)

Cleaner Technologies

- [Pollution Prevention](#)

Client Service

- [Customer Service](#)

Climate Change

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Synonyms

[Climatic fluctuations](#); [Global climate change](#)

Definition

Climate change is a measurable systemic change in the state of the climate driven by natural events or anthropogenic activities that alter the composition of the atmosphere.

Earth Is Undergoing Human-Induced Climate Change

Widespread and large climate changes such as an increase or decrease in the mean temperature and extreme weather events like severe storms have occurred repeatedly throughout the history of earth (Petit et al. 1999). Such changes can have natural causes, or they can be triggered by humans (Alley et al. 2003). They are related to variations in the composition of the atmosphere, in particular the concentration of greenhouse gases such as

water vapor, carbon dioxide, nitrous oxide, methane, and ozone. The consequential changes are called the greenhouse effect. It can be defined as the "...exchange of incoming and outgoing radiation that warms the earth..." (Lalliana 2018). The greenhouse effect was first identified by Svante Arrhenius in 1896 (Arrhenius 1896). Today, it is distinguished between the natural and the human-induced or increased greenhouse effect. While the natural one is change caused by natural processes, the human-induced greenhouse effect is a recent occurrence initiated by human activities (Koh and McCarthy 2018; Nica et al. 2019).

According to the international scientific community, the dominant cause of the current global warming is human activities (Cook et al. 2013; Caldeira 2012). Expanding economies and population growth threaten to collide with a finite Earth – its resources, fragile ecosystems, and the ability to absorb greenhouse gases. In particular the burning of fossil fuels, deforestation, land-use practices, and industrial processes have led to an enormous increase in the concentration of greenhouse gases in the atmosphere (Edenhofer and Jakob 2017).

Most climate scientists agree that human activities cause climate change (Kovaka 2019). Human-induced climate change can accordingly be described as one of the biggest policy challenges of humankind, for example, in health policy (e.g., issues regarding access to clean water, growth in heart-related illnesses, reduction in agricultural production) (Edenhofer and Jakob 2017). According to Milfont et al. (2017) "the public's belief in climate change and its human cause are increasing over time." More often citizens agree that climate change is real and is caused by humans and that action is needed to reduce the impacts of climate change.

The question is therefore not whether if human-induced climate change is real, but how to respond to its impacts (Brooks 2013). Two possible approaches are mitigation and adaptation. According to Lackner (2017), mitigation is "a human intervention to reduce the sources or enhance the sinks of greenhouse gases" (Lackner 2017, 3232), while adaptation is the "adjustment

in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities" (Lackner 2017, 3270).

Failure of climate-change mitigation and adaptation with the following extreme weather events is the top global risk to the future in terms of likelihood and the second biggest risk in terms of impact right after weapons of mass destruction (WEF 2019, 5). Climate change poses a risk to material well-being, food security, and personal health (Levine and Kline 2017; Obradovich et al. 2018). It reduces economic welfare and has severe effects on the stability of the financial system (Dafermos et al. 2018; Obradovich 2017).

Thus, climate change represents one of the greatest public policy challenges because "rapid global warming could serve to increase the likelihood of large, abrupt, persistent, and to some extent unpredictable, changes" (Alley et al. 20,013). According to Maximilian Auffhammer, the slow public policy response to climate change is "the biggest environmental market failure in human history" (Auffhammer 2018, 33). A logic response would require an understanding of the external cost imposed by a series of sub-issues, such as mitigation, adaptation to climate change, and emissions from land use, while at the same time touching upon numerous other policy fields such as biodiversity, trade, transportation, energy, health, migration, and the north–south divide (Brown et al. 2018).

Climate Change as a Regional and Temporal Problem

Climate change is a complex problem (Rittel and Webber 1973; Funtowicz and Ravetz 1993) with uncertain consequences (Filho et al. 2018). Complexity and uncertainty are associated with regional and temporal features of the phenomenon.

First, regional challenges are related to the geographical particularities associated with climate change. Climate change is a global phenomenon with local consequences that evolve as a consequence of local emissions (Auffhammer 2018). High-income areas often have the largest emissions per capita (Roberts and Parks 2007). They are less

vulnerable to climate change due to economic, governance, and social adaptations readiness. Opposite to this, developing countries are often victims of the global warming even if their own emissions are not high (Sarkodie and Strezov 2019; Watson et al. 2013). This is an ethical challenge.

Second, temporal features refer to the multi-generational impacts of climate change. In practical terms the global warming crosses generations so that people who will be most affected by its consequences have not yet been born. The current generation is pushing the costs of climate change onto future generations. This free riding occurs because “most of the benefits of costly emissions reductions today would accrue many decades in the future” (Nordhaus 2019) as greenhouse gases are long-lived. Consequently, humanity commits future generations to living with the consequences of climate change such as temperature and sea-level rises (IPCC 2019).

Solutions to the Climate Crisis

Taking care of the living conditions of the present and future generations is difficult because climate change is a phenomenon with uncertain consequences moving forward relatively slowly. Nevertheless, mitigation and adaptation strategies are applied to reduce the impacts of climate change.

Three strategies to mitigate climate change are (a) reducing emissions, (b) removing emissions from the atmosphere, and (c) increasing reflectivity of the Earth by solar-radiation management. Of those strategies, the reduction of emissions is the most feasible way to combat global warming (Nordhaus 2019). However, complex interdependencies among environmental change and socioeconomic development are challenging possibilities to reduce emissions. Additionally, different national governments have varied opinions about climate change and its possible consequences as well as mitigation and adaptation strategies. This is expressed in the climate agreements such as the Kyoto Protocol or the Paris Agreement (e.g., Held and Roger 2018).

According to Nordhaus (2019) “nations can overcome the syndrome of free riding in

international climate agreements if they adopt the club model rather than voluntary arrangements.” A climate club is an agreement between countries to undertake harmonized emission reductions. The central new feature is that nations would be penalized if they do not meet their obligations (Nordhaus 2019; Potoski 2017.) Furthermore, public awareness and the perceived threat of climate change are associated with governmental mitigation targets. Therefore, public awareness is and will be an essential part of garnering the support required for policies designed to mitigate and adapt to climate change (Drummond et al. 2018). In practical terms, 5% of the world GDP is needed for 20 years to solve the climate problem. A carbon tax could be levied at the coal face, oil well, and gas pipeline entry points. With that money 5% of the workforce and capital would shift to production of climate-friendly goods and services (Randers 2012).

Overall, it seems that a more holistic systemic approach is needed. Systems thinking is associated with a holistic worldview. This means that the world is interpreted as an integrated whole rather than as a collection of parts (Capra 1996). Climate change should be addressed with such a systemic thinking approach.

Future Directions

Systemic sustainability science helps to meet the great environmental and development challenges of this century (Kates 2011), including climate change. In particular solutions-oriented research could be further emphasized in sustainability science to move forward (Sarewitz et al. 2012; Wiek et al. 2012). This is important because time is running. Evidence is mounting that climate tipping points could be much sooner than was thought. The consequent changes will “have high impacts and are interconnected across different biophysical systems, potentially committing the world to long-term irreversible changes” (Lenton et al. 2019).

These tipping points are, for example, ice loss acceleration in Greenland, the East and the West Antarctic, fires and pests destroying boreal forests, or frequent droughts and severe bushfires in

Australia. As well as undermining humanities life-support system, biosphere tipping points can trigger additionally abrupt carbon release back to the atmosphere. According to Lenton et al. (2019), “this can amplify climate change and reduce remaining emission budgets. If damaging tipping cascades can occur and a global tipping point cannot be ruled out, then this is an existential threat to civilization.” The consideration of the tipping points makes clear that humanity lives in a climate emergency, and this strengthens “calls for urgent climate action – from schoolchildren to scientists, cities and countries” (Lenton et al. 2019).

Cross-References

- Externalities
- Greenhouse Effect
- Kyoto Protocol
- OECD Principles of Corporate Governance
- Paris Agreement
- Sustainability Science

References

- Alley, R., Marotzke, J., Nordhaus, W., Overpeck, J., Peteet, D., Pielke, R., Jr., Pierrehumbert, R., Rhines, P., Stocker, T., Talley, L., & Wallace, J. (2003). Abrupt climate change. *Science*, 299(5615), 2005–2010.
- Arrhenius, S. (1896). On the influence of carbonic acid in the air upon the temperature of the ground. *Philosophical Magazine and Journal of Science*, 41(5), 237–275.
- Auffhammer, M. (2018). Quantifying economic damages from climate change. *Journal of Economic Perspectives*, 32(4), 33–52.
- Brooks, T. (2013). Climate change justice. Introduction to climate change justice. *Political Science and Politics*, 46(1), 9–12.
- Brown, G., McLean, I., & McMillan, A. (2018). *A concise Oxford dictionary of politics and international relations* (4th ed.). London: Oxford University Press.
- Caldeira, K. (2012). The great climate experiment. *Scientific American*, 307, 78–83.
- Capra, F. (1996). *The web of life. A new scientific understanding of living systems*. New York: Doubleday.
- Cook, J., Nuccitelli, D., Green, S., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., & Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters*, 8(2), 1–7.
- Dafermos, Y., Nikolaidi, M., & Galanis, G. (2018). Climate change, financial stability and monetary policy. *Ecological Economics*, 152, 219–234.
- Drummond, A., Hall, L., Sauer, J., & Palmer, M. (2018). Is public awareness and perceived threat of climate change associated with governmental mitigation targets? *Climate Change*, 149, 159–171.
- Edenhofer, O., & Jakob, M. (2017). *Klimapolitik. Ziele, Konflikte, Lösungen. Sonderausgabe für die Bundeszentrale für politische Bildung*. München: CH Beck.
- Filho, W. L., Morgan, E., Godoy, E., Azeiteiro, U., Bacelar-Nicolau, P., Ávilag, L., Mac-Lean, C., & Hugé, J. (2018). Implementing climate change research at universities: Barriers, potential and actions. *Journal of Cleaner Production*, 170, 269–277.
- Funtowicz, S., & Ravetz, J. (1993). Science for the post-normal age. *Futures*, 25(7), 739–755.
- Held, D., & Roger, C. (2018). Three models of global climate governance: From Kyoto to Paris and beyond. *Global Policy*, 9(4), 524–537.
- IPCC. (2019). *IPCC special report on the ocean and cryosphere in a changing climate*. Geneva: International Panel on Climate Change.
- Kates, R. (2011). What kind of a science is sustainability science? *PNAS*, 108(49), 19449–19450.
- Koh, H., & McCarthy, G. (2018). Private and public sector responses to climate change. *American Medical Association JAMA*, 319(17), 1756–1757.
- Kovaka, K. (2019). Climate change denial and beliefs about science. *Synthese*. <https://doi.org/10.1007/s11229-019-02210-z>.
- Lackner, M. (2017). Adaptation. In W.-Y. Chen, T. Suzuki, & M. Lackner (Eds.), *Handbook of climate change mitigation and adaptation* (2nd ed.). Cham: Springer International Publishing.
- Lalliana, M. (2018). What is the greenhouse effect? <https://www.livescience.com/37743-greenhouse-effect.html>. Accessed 19 Jan 2020.
- Lenton, T., Rockström, J., Gaffney, O., Rahmstorf, S., Richardson, K., Steffen, W., & Schellnhuber, H.-J. (2019). Climate tipping points – Too risky to bet against. *Nature*, 575, 592–595.
- Levine, A., & Kline, R. (2017). A new approach for evaluation climate change communication. *Climate Change*, 142, 301–209.
- Milfont, T., Wilson, M., & Sibley, C. (2017). The public’s belief in climate change and its human cause are increasing over time. *PLoS One*, 12(39), e0174246.
- Nica, A., Popescu, A., & Ibanescu, D.-C. (2019). Human influence on the climate system. *Current Trends in Natural Sciences*, 8(15), 209–215.
- Nordhaus, W. (2019). Climate change: The ultimate challenge for economics. *American Economic Review*, 109(6), 1991–2014.
- Obradovich, N. (2017). Climate change may speed democratic turnover. *Climate Change*, 140, 135–147.
- Obradovich, N., Migliorini, R., Paulus, M., & Rahwan, I. (2018). Empirical evidence of mental health risks posed by climate change. *PNAS*, 115(43), 10953–10958.

- Petit, J. R., Jouzel, J., Raynaud, D., Barkov, N. I., Barnola, J.-M., Basile, I., Bender, M., et al. (1999). Climate and atmospheric history of the past 420,000 years from the Vostok ice core, Antarctica. *Nature*, 399, 429–436.
- Potoski, M. (2017). Green clubs in building block climate change regimes. *Climatic Change*, 144, 53–63.
- Randers, J. (2012). *2052: A global forecast for the next forty years*. Vermont: Chelsea Green Publishing.
- Rittel, H., & Webber, H. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155–169.
- Roberts, J., & Parks, B. (2007). *A climate of injustice: Global inequality, north-south politics, and climate policy*. Cambridge: MIT Press.
- Sachs, J. (2015). *The age of sustainable development*. New York: Columbia University Press.
- Sarewitz, D., Kriebel, D., Clapp, R., Crumley, C., Hoppin, P., Jacobs, M., & Tickner, J. (2012). The sustainability solutions agenda. *New Solutions*, 22(2), 139–151.
- Sarkodie, S., & Strezov, V. (2019). Economic, social and governance adaptation readiness for mitigation of climate change vulnerability: Evidence from 192 countries. *Science of the Total Environment*, 656, 150–164.
- Watson, J., Iwamura, T., & Butt, N. (2013). Mapping vulnerability and conservation adaptation strategies under climate change. *Nature Climate Change*, 3, 989–994.
- WEF. (2019). *The global risks report 2019* (14th ed.). Geneva: World Economic Forum.
- Wiek, A., Ness, B., Brand, F. S., Schweizer-Ries, P., & Farioli, F. (2012). From complex systems analysis to transformational change: A comparative appraisal of sustainability science projects. *Sustainability Science*, 7(1), 5–24.

Climate Change Adaptation

► Climate Change Adaptation in Coastal Cities

Climate Change Adaptation in Coastal Cities

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Synonyms

Climate change adaptation; Coastal resilience

Definition

Climate change adaptation is an approach that aims to address the consequences of climate change and produce solutions quickly and easily. Through history, coastal cities were preferred for settlement due to their distinctiveness in ecosystem diversity, their potentials for offering rich and diverse activities, as well as for being rich trade and extensive tourism centers. Coastal cities are dense areas, and sea level rise due to climate change is one of the major threats for coastal cities since climate change can cause sudden storm surges, sea level rises, intensifying frequency and intensity of precipitation rates, and extreme temperature increases. In addition to negative impacts on ecological diversity and economic sectors, such as agriculture and fishing, climate change is a threat for the cities in terms of physical, spatial, functional, social, and economic aspects. The spatial and functional impacts of sea level rise in coastal cities are evident mainly on infrastructure systems, historical-cultural heritage, and biodiversity. One of the approaches against the risk of climate change is mitigation, which focuses on eliminating the causes of this problem. Alternatively, adaptation looks for solutions to live with and adapt to climate change in the long term. While global warming due to climate change is among the most critical environmental problems in the twenty-first century, the biggest challenge in taking measures against climate change effects is the uncertainty of its risks. Generating and implementing long-term action plans depend on both the availability of reliable data and a committed and flexible governance structure.

Background

In the 1960s, the damage caused to the environment and ecological concerns triggered awareness and the environmental movement, leading to international public awareness during the 1970s. While the increasing impacts of climate change, such as extreme weather events, flooding, heavy rainfalls, higher temperatures, began to disturb

cities, adaptation to these impacts became crucial. The talks during the United Nations Stockholm Conference (1972) emphasized that the tripartite relation between environment-economy-social developments should enter the public agenda as a priority. During the Rio Conference (1992), it is underlined that cooperation between governments, sectors, and nongovernmental organizations should be developed in order to establish novel global partnerships for protecting the global environment and development system (United Nations 1992). Actions promoting adaptation included the integration of climate information into broad development strategies, macropolicies, sector policies, institutional/organizational structures, or in development project design and implementation (Burton and van Aalst 1999). In the United Nations Conference on Human Settlements (Habitat II) (1996), the need to develop fundamental infrastructure services and urban planning within the scope of sustainability objectives is emphasized (United Nations 1996).

The issues on climate change vulnerabilities or adaptation require integrated structure of related government policies on water management, disaster vigilance, emergency planning, and land-use planning. Even if the impacts of climate change are uncertain, future scenarios can help to develop adaptation strategies. In some cases, early implementation of adaptation measures could be more cost-effective, especially for infrastructure with long economic life (Shukla et al. 2004). The IPCC Third Assessment Report (2001) showed that adaptive capacity is influenced by not only economic development and technology, but also social factors of human capital and governance structures. The literature on the institutional requirements for adaptation suggests that public policy has an important role in facilitating adaptation to climate change. This includes reducing vulnerability of people and infrastructure; providing information on risks for private and public investments and decision-making; and protecting habitats, species, and important resources.

In 2010, the United Nations Office for Disaster Risk Reduction (UNISDR) published a report which contains strategies both to promote an increased understanding and commitment by local governments in cities against risk reduction, and to

build cities that are sustainable, and resilient to disasters and climate change. These strategies include maintaining up-to-date data on hazards and vulnerabilities, preparing risk assessments, and using these strategies as the basis for urban development plans and decisions. The actions, taken by the local governments concerning the ideas for sustainable cities until today, have been as follows: investing in and maintaining critical infrastructure to reduce risk; assessing the safety of schools and health facilities and upgrading them whenever necessary; applying and enforcing realistic, risk-compliant building regulations and land use planning principles; preparing educational programs and trainings on disaster risk reduction in schools and local communities; developing protecting systems for ecology and natural buffers to mitigate floods, storm surges, and other hazards to which cities may be vulnerable; installing early warning systems and emergency management capacities in cities and holding regular public drills; and ensuring that the needs of the survivors, and supporting them and their community organizations to design and help implement responses, which include rebuilding homes and livelihoods after disasters.

The related literature shows that the studies on adaptation for coastal cities focus mostly in the local scale. There are a number of guidebooks, which outline the situation or offer adaptation strategies, prepared by various institutions and organizations against both the threat of climate change and the sea level rise in Europe, America, and Asia. They vary in the size of cities they discuss, the audience they address (i.e., specifically urban planners or policy makers), the offered impact scenarios, the benefits of adaptation, and the scenarios regarding physical, spatial, and social aspects. The adaptation strategies can be delineated in a number of steps, including to create risk maps showing the areas at risk regarding the possible amount of sea level rise, to make land use plans and converting them according to the implementation strategies by local municipalities, and to inform and assist communities in identifying potential alternatives for adaptation strategies. The possible effects of climate change and the possible adaptation strategies in coastal areas can be investigated in five different scales (Table 1). From macro to micro, they cover global (the entire

world), regional (a broad geographical area), national (the whole country), urban (built urban environment), and architectural (buildings and coastal structure) scales.

Adaptation strategies could be developed by individuals; however, other types of adaptation – mostly in response to extreme climatic events – should also be planned for and implemented by

Climate Change Adaptation in Coastal Cities, Table 1 The possible impacts of climate change and the possible adaptation strategies for coastal cities in different scales (Adapted from Ercanlı et al. 2019)

	Possible impacts of climate change on coastal areas	Possible adaptation strategies in coastal areas
Global scale	Unawareness from climate change effect Difficulties of estimating uncertain climatic events Lack of international coordination	Increasing public awareness Developing action plans against sea level rise risks Generating future scenarios Providing long-term and secured financial support Developing long-term and geographically extensive data sets Coordination between international organizations Reducing socio-economic effects of migration Developing disaster risk insurance policies
Regional scale	Economic inequalities Uncertainty in decision-making High costs for coastal management process Effects on coastal tourism	Founding regional organizations Supporting poor countries Long-term identification and assessment, adoption and funding implementation and evaluation Political commitment Vigilance Systematic knowledge of coastal resources Developing general adaptation strategies in the long term Considering adaptation while planning tourism areas in coastal cities
National scale	Socio-economic and cultural problems Lack of responsible departments and organizations Lack of future scenarios and adaptation strategies Lack of disaster risk policies and action plans Lack of regulations for risks due to climate change Necessity of interdisciplinary approaches Uncertainty for risky areas Lack of infrastructure	Education for public awareness Adapting regional action plans to national scales Developing scenarios and regulations Collaboration between stakeholders Developing projects with an interdisciplinary approach Determining risky areas and risk ratios Establishing of institutionalized substructure in regional ministries Revision of current coastal laws
Urban scale	Public unawareness Lack of national scenarios and plans Lack of flood risk management Unprepared local municipalities	Zoning urban areas Developing regional scenarios and plans Increasing public awareness and involvement Developing a flood risk management Educating occupational groups Disaster management Developing an action plan against sea level rise risks Developing specific plans for different natural coasts Specific department in local municipalities Identifying and involving governmental agencies and other stakeholders
Architectural scale	Lack of architectural and urban planning regulations Lack of local architectural strategies	Determining coastal land uses in accordance with risk analysis Revision of architectural regulations Generating alternative designs solutions for public spaces for possible sea level changes by local administrations

governing institutions on behalf of societies. Adaptation strategies can only be realized in a system, where different actors participate in an integrated structure. A variety of actors, including academic and scientific organizations, community-based organizations and small business, governments, international and nongovernmental organizations, large-scale industry or business, the United Nations, and international financial institutions, can implement adaptation strategies in ways that is not possible by only the city. Adaptation strategies by governments or public bodies usually involve actions to protect citizens together with their livelihoods, assets, and access to basic infrastructural services. Increasing local awareness and enhancing involvement can also be added as basic responses to cope with disasters and climate hazards.

Key Issues

The issues of human behavior and awareness are at the root of the problem of climate change (Marten, 2010). Public understanding of global warming can be predicted by a number of factors such as place attachment, receiving the local message, and gender. Changing the interaction of human beings with their environment relies on individual engagement and studies of personal and social factors such as childhood experience, knowledge and education, personality and self-construal, sense of control, values, political views and worldviews, goals, felt responsibility, cognitive biases, place attachment, age, gender, chosen activities religion, residence place, norms, social class, proximity to problem sites, and cultural and ethnic variations (Gifford and Nilsson 2014). Therefore, the biggest challenge of climate-change policy-making is mass communication. Culture and community are strongly related to place, therefore local knowledge and practices can be effective for adaptation. In addition, climate-related policies can be framed by policy makers and the media in terms of achievement of potential gains or in terms of avoidance in accordance with the

potential outcome and regulatory concern underlying the policy.

Another issue is that a hazard does not lead to a disaster if relevant policy responses are in place. The priority in developing policy should address: first, the issues of the absence of an immediate guaranteed payoff for risk reduction; second, the challenge of linking physical, social, ecological, and cultural disciplines; and third, the difficulty in assigning responsibility to one sector or ministry. While there are various studies in different aspects and different scales, their results are often not easily accessible to policymakers. An investigation on scenarios shows that while the decision makers in policy and practice typically do not use research-based knowledge sufficiently, the researches typically do not produce sufficient directly usable knowledge (Weichselgartner and Kasperson 2010). This is mainly because of the limitations of estimation tools that cause a wide range of scientific and socio-economic uncertainties. Besides, systematic observation schemes and data available for mitigating or adapting to climate change are lacking. Together with developing long-term geographically extensive data sets and sharing them in different scales, coordination is vital. Revision of current coastal law strategies, vigilance, planning, continually renewed political commitment, and considering adaptation options are necessary for planning coastal cities and developing proper strategies.

It is not merely enough to develop an action plan against risks due to climate change, to generate future scenarios, to provide long-term financial support, and to develop disaster risk insurance policies. Many coastal management plans either do not contain climate change adaptation measures or are not very effective. Their implementation requires establishing institutions that would bring together existing international organizations around the world to conduct coordinated work, lead countries' policies, and support poor countries for establishing institutionalized substructure in ministries. Other issues to consider include economic inequalities across countries in the responsibility for climate change, uncertainty in who will make decisions, balancing costs for

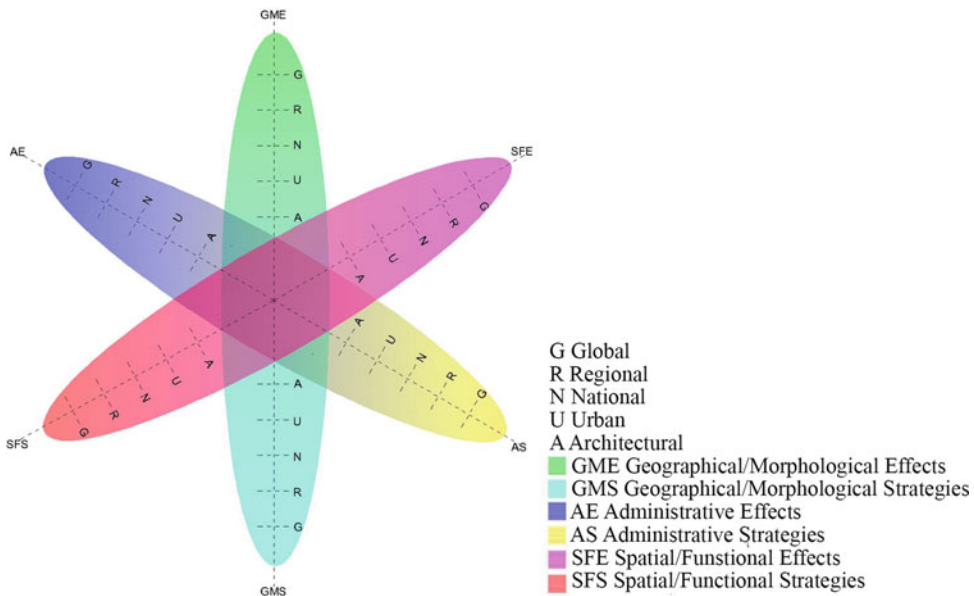
coastal management process, and decline of coastal tourism. Regarding the relative impact of climate change on rich and poor countries in terms of impact per capita and impact per GDP, it is argued that the poor countries are more susceptible to more damages. Moreover, lack of site-specific architectural and urban planning regulations needs to be remedied.

Summary

The biggest challenge in taking measures against climate change is the uncertainty of risks, and most of the studies are based on estimates and risk scenarios from one point of view, i.e., most of the studies conducted in the natural sciences consider the risks only within the limits of the discipline of the main authors. So far, risk analyses use deterministic ways against the annual average loss as a result of floods. Furthermore, sufficient number of strategies or action plans are not developed for the estimated future scenarios. There are almost no studies in the human sciences

that conduct an in-depth evaluation of the topic regarding human necessities; few studies partly relate to sociology, archaeology, and cultural studies. The topic can be investigated through more recent collaborative research between natural and human sciences such as ecology and economy, or geography and administration. As the spatial domain covers a broad range from the planning and design of cities, public spaces, and buildings, the risk is either rarely examined in the disciplines of urban planning and architecture, or hardly implemented in these scales. Therefore the reasons and consequences of adaptation should be addressed from a more comprehensive perspective that includes morphological, special, functional, and administrative issues together for designing future cities with climate-oriented approaches.

The possible effects of climate change and possible adaptation strategies against these effects can conceptually be discussed within three aspects: geographical/morphological (GM), administrative (A), and spatial/functional (SF) (Fig. 1). The effects (E) and adaptation strategies



Climate Change Adaptation in Coastal Cities, Fig. 1 Conceptual diagram according to multiple scales and aspects (adapted from Ercanlı et al. 2019)

(S) related to the geographical elements or physical forms of urban settlements are grouped in geographical/morphological aspects. Spatial/functional aspects are related directly to natural or built environment connecting with a function. Administrative aspects are related to the arrangements and work, which is necessary to control the operation of a plan or an organization. The aspects are grouped in five scales from macro to micro namely global (G) (the entire world), regional (R) (a broad geographical area), national (N) (the whole country), urban (built urban environment) (U), and architectural (A) (buildings and coastal structure) scales. Besides, each scale is interrelated with the other four and links the possible effects and adaptation strategies (Fig. 1) (Ercanlı et al. 2019).

In addition to conservation strategies and infrastructure proposals, studies and revisions in legislation are necessary for the development and implementation of adaptation strategies compatible with planning and zoning legislation. Besides legal regulations and strategy plans for all cities at the global scale, preparation and implementation of climatic strategy plans in which local municipalities are also stakeholders are necessary. Within the context of urban and architectural scales, more adaptation strategies and design approaches should be developed. Some of the steps for adaptation worth mentioning are generation of urban plans in accordance with local morphological and spatial features, designing multifunctional structures for adaptation of coastal cities, and enhancement of structures with materials as a response for sudden climatic changes.

Cross-References

- Carbon Emissions
- Climate Change
- Disaster Management
- Ecocultural Tourism
- Energy-Renewable
- Global Warming
- Good Governance

- Governance
- Resilience
- Sustainable Development Planning

References

- Burton, I., & Van Aalst, M. (1999). *Come hell or high water: Integrating climate change vulnerability and adaptation into bank work*. Washington, DC: World Bank.
- Ercanlı, Ç., Savaşır, G., Tokuç, A., & Altınörs Çırak, A. (2019). A general framework for adaptation strategies to sea level rise: The case of Turkey. *International Journal of Global Warming*, 18(3/4), 336–362. <https://doi.org/10.1504/IJGW.2019.101093>.
- Gifford, R., & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour: A review. *International Journal of Psychology*, 49(3), 141–157. <https://doi.org/10.1002/ijop.12034>.
- IPCC Third Assessment Report (TAR). (2001). *Climate change 2001, the scientific basis*. UNEP.
- Marten, G. G. (2010). *Human ecology: Basic concepts for sustainable development*. Boca Raton: Routledge.
- Shukla, P. R., Kapshe, M., & Garg, A. (2004). *Development and climate: Impacts and adaptation for infrastructure assets in India. ENV/EPOC/GS/FD/RD (2004)3/FINAL*. Paris: OECD.
- United Nations. (1972). *UN Stockholm environment declaration*. UN: Stockholm.
- United Nations. (1992). *Rio Declaration*. Rio: UN.
- United Nations. (1996). *Second international conference on human settlements (Habitat II)*. UN: Istanbul.
- Weichselgartner, J., & Kaspersen, R. (2010). Barriers in the science-policy-practice interface: Toward a knowledge-action-system in global environmental change research. *Global Environmental Change*, 20(2), 266–277. <https://doi.org/10.1016/j.gloenvcha.2009.11.006>.

Climate Change and Role of IPCC

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Synonyms

IPCC; UN IPCC

Definition/Description

The United Nations Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. Its main task is to provide policymakers with regular assessments of the scientific basis of climate change, including its impacts and the risks that climate change poses, as well as options for adaptation to and mitigation of climate change.

The Intergovernmental Panel on Climate Change is a body created by the World Meteorological Organization (WMO) and the United Nations Environmental Program (UNEP) in 1988 (Agrawala 1998). The IPCC is an organization that includes the governments of all member states of the United Nations and/or the WMO. According to IPCC's official website, it currently has 195 members (IPCC 2020b).

The IPCC does not conduct its own scientific research, rather it issues scientific assessments that aim to provide scientific foundation for governments to develop their policies for addressing climate change. According to the IPCC official statements, the assessments of the panel "are policy-relevant but not policy-prescriptive" (IPCC 2013a), therefore they aim to provide insight into processes on climate change, but do not prescribe any particular policy that should be implemented.

The IPCC assessments are written and edited by leading scientists in the relevant climate change fields that are voluntary contributors to the IPCC. The IPCC provides a platform for the research but authors deliver their personal professional opinions rather than represent the IPCC's.

Main Text

The IPCC is an intergovernmental body for scientific assessment of climate change. It is one of the organizations that are considered an emanation of the trend towards international policymaking, where national governments' authority is shifted towards institutions such as the United Nations (UN) (Gilland 2007). Aiming to provide an alternative and independent assessment on issues of

both global and local importance, the IPCC enhances the decision-making process and policy adoption.

History

The IPCC was created in 1988 (Zillman 2007). The creation of the Panel was a consequence of the uprising interest and debate in climate change that started in the middle of the twentieth century. Various research pieces and political incentives had already taken place by then, and interest in climate change in both policymakers and civil society was high. Some of the predeceasing structures and initiatives were the Advisory Group of Greenhouse Gases (AGGG), the Villach/Bellagio workshops, the 1986 SCOPE 29 Report of the International Council of Scientific Unions (ICSU), and the 1987 Report of the World Commission on Environment and Development (the Brundtland Report) (Agrawala 1998).

The practice of gathering scientists from different countries and various fields of study was already witnessing a rise (Gilland 2007), so the format of the IPCC was shaping to be one of a multicountry interdisciplinary approach to scientific assessment of climate action.

The Tenth World Meteorological Congress held in Geneva in May 1987 led to the WMO adopting a resolution, where countries agreed that the World Climate Programme, relying on WMO, the International Council of Scientific Unions (ICSU), and the United Nations Environment Programme (UNEP) are to address "all scientific aspects of global climate change, including the collection and analysis of data and the application of current knowledge to aspects of human endeavour" (WMO 1987, p. 124), while recognizing the necessity for an interdisciplinary scientific approach to assessment of climate degradation issues (WMO 1987).

The initiative was created with the support of the USA where discussions on climate change policies and action were taking place between various authorities (Agrawala 1998). Shortly after the initiative for creating an intergovernmental body for scientific analysis of

climate change was shaped, the UNEP joined the WMO initiative.

The main idea was to create an intergovernmental mechanism to provide scientific assessment of climate change, assist government bureaucrats with information, help come to the negotiating table, and better informed when it comes to decision-making (Agrawala 1998).

In this way in 1988 the WMO established together with the UN Environment Programme (UNEP) the Intergovernmental Panel on Climate Change (IPCC), and was given the task to scientifically evaluate the risk of climate change caused by human activity (Volger 2010).

Structure of the IPCC

The IPCC comprises of three working groups and one permanent task force on National Greenhouse Inventories. Sometimes, additional task groups might be created in order to facilitate certain projects (IPCC 2013a).

- Working Group I – thematic topics on the Physical Science Basis of Climate Change.
- Working Group II – thematic topics on Climate Change Impacts, Adaptation, and Vulnerability.
- Working Group III – thematic topics on Mitigation of Climate Change (IPCC 2013a).

The administration of the IPCC is headed by the Secretariat, headquartered in Geneva, Switzerland.

Major decisions of the IPCC are taken in plenary meetings. According to the Principles Governing IPCC Work, decision-making and administrative structures of the IPCC (like the Bureau, the IPCC Working Group Bureaux, etc.) should reflect a balanced geographic representation (IPCC 1998a). IPCC working groups and any task forces constituted by the IPCC shall have clearly defined and approved mandates and work plans as established by the Panel (IPCC 1998a).

Participation in the work of the IPCC is open to all WMO and UN member countries, and

invitations to participate in the sessions of the Panel, working groups, and task forces shall be extended to governments and other organizations (IPCC 1998a). The IPCC is to inform in advance governments or international organizations of the individual experts that have invitations extended to (IPCC 1998a).

According to Article 4 of Appendix B of the Principles that regulates the financing of the IPCC, the IPCC trust fund is administered by mutual agreement between the WMO and the UNEP, and “under the Financial Regulations of the WMO, consistent with the International Public Sector Accounting Standards (IPSAS)” (IPCC 1998c). Financing IPCC is made by members of the IPCC donating to the IPCC trust fund, and administered through the financial regulation of the WMO.

IPCC Reports

The IPCC assessments are based on peer-reviewed and published scientific literature (Volger 2010). IPCC assessments are written by leading scientists who volunteer as coordinating lead authors and lead authors of the reports. Hundreds of other experts provide complementary contributions by being associated as contributing authors.

IPCC reports undergo multiple rounds of drafting and review. The reports have appointed relevant teams of review editors which consist of experts, other from the authors (IPCC 2013b).

Experts from different areas covered by IPCC reports provide expertise as coordinating lead authors and lead authors. Contributing authors and expert reviewers provide specific contributions (IPCC 2013b). Contributing authors often are more than a hundred experts. Authors are selected on the basis of their relevant expertise after a call to governments and IPCC-related organizations (IPCC 2013b).

The process for selecting authors is described in Appendix A to the Principles Governing IPCC Work and its annexes (IPCC 1998b). Coordinating lead authors and lead authors have collective responsibility for the contents of a chapter, while

contributing authors, who often number hundreds, provide specific knowledge in a given area of expertise (IPCC 2013b).

According to Article 3 of the Principles Governing IPCC Work since the IPCC is an inter-governmental body, review of IPCC documents should involve both peer review by experts and review by governments (IPCC 1998a).

IPCC assessment reports cover scientific, technical, social, and economic aspects of climate change. The Assessment report is divided into four parts – one for each of the working groups. The fifth part of the assessment report is a synthesis report. So far five comprehensive assessment reports have been issued. The IPCC is currently in its sixth assessment cycle. The Panel will produce three special reports, a methodology report on national greenhouse gas inventories and the Sixth Assessment Report (AR6) throughout 2021 (IPCC 2020a).

Besides the assessment reports, the IPCC also issues special reports on specific topics related to climate change. Recent special reports include the Global Warming of 1.5 °C Report, Climate Change and Land Report, and the Ocean and Cryosphere in a Changing Climate Report.

IPCC also issues methodology reports that aim to provide guidelines for the preparation of greenhouse gas inventories.

The IPCC reports are focused on different aspects of climate change. IPCC reports are considered to be some of the scientific assessments that have an impact on decision-making and technical coordination between public authorities on both national and international level.

Whenever differing points of view are present in drawing assessments and reports, the IPCC is to provide information on these different opinions. Differing views on matters of a scientific, technical, or socioeconomic nature shall be appropriately represented in the document issued. If any differences of views on topics of policy and procedures are recorded in the Report of the Session (IPCC 1998a). Conclusions drawn by IPCC Working Groups are not considered official IPCC views until they have been accepted by the Panel in a plenary meeting (IPCC 1998a).

Criticism of ICPP

While the IPCC reports have been generally welcomed by governments and the vast majority of stakeholder groups, and widely used as a basis for informing national and international greenhouse policy development, both the IPCC and its reports have also been strongly criticized on both scientific and procedural grounds.

The IPCC has faced criticism in various fields. Partially because of its intergovernmental nature, it has been criticized that findings are determined by politics rather than by science, and that it has a political agenda that impedes scientific reason (Alexander 2007). Having an intergovernmental status has led to some difficulties in terms of IPCC assessment summaries being regarded as politically negotiated which, according to Agrawala, have at times undermined their credibility (Agrawala 1998).

Other major points of criticism that the IPCC has faced include statements that it consists of a self-serving research community talking up the climate change issue to attract research funding, and that it lacks expertise in key areas such as geology and economics. According to Zillman, some key working group co-chairs and lead authors have explicitly declined to identify future research needs without special pleading to the IPCC process (Zillman 2007). He notes that criticism has come particularly from some members of the geological community, and from some members of the economics community (Zillman 2007).

There has been criticism that the IPCC idea of consensus between science and governance structures (whether governments or local authorities) is inappropriate for science. When there is not full agreement amongst lead authors, the IPCC procedures provide mechanisms for informing policymakers on the strengths, or weaknesses, of that agreement (Zillman 2007).

Critics of the IPCC have emerged from various communities – from experts in the scientific community whose research has not been favorably assessed in IPCC reports, through scientists whose fields are not represented in the IPCC reporting, to business and other social actors who find the IPCC findings inconvenient (Zillman 2007).

Summary

The IPCC is an organization that aims to provide a better scientifically backed understanding of climate change and the socioeconomic processes, related to climate change. The organization has 195 member countries, which creates a pool of researchers and scientists that could under the supervision and support of the IPCC combine their efforts in contributing to climate change combating with their expertise.

Cross-References

- [Climate Change](#)
- [United Nations Environment Program \(UNEP\)](#)

References

- Agrawala, S. (1998). *Climatic Change*, 39(4), 605–620. <https://doi.org/10.1023/a:1005315532386>.
- Alexander, W. J. R. (2007). The IPCC: Structure, processes and politics climate change — The failure of science. *Energy & Environment*, 18(7), 1073–1077.
- Gilland, T. (2007). Digging up the roots of the IPCC. *Energy & Environment*, 18(7), 893–907.
- Henderson, D. (2007). Unwarranted trust: A critique of the IPCC process. *Energy & Environment*, 18(7), 909–928.
- Intergovernmental Panel on Climate Change (IPCC). (1998a). *Principles governing IPCC work*. IPCC. <https://archive.ipcc.ch/pdf/ipcc-principles/ipcc-principles.pdf>. Accessed 2 Apr 2020.
- Intergovernmental Panel on Climate Change (IPCC). (1998b). *Principles governing IPCC work, Appendix A. Procedures for the preparation, review, and acceptance, adoption, approval, and publication of the IPCC reports*. IPCC.
- Intergovernmental Panel on Climate Change (IPCC). (1998c). *Principles governing IPCC work, Appendix B: Financial procedures for the intergovernmental panel on climate change*. IPCC.
- Intergovernmental Panel on Climate Change (IPCC). (2013a). *IPCC factsheet: What is the IPCC?*. IPCC, <https://www.ipcc.ch/2013/09/19/ipcc-factsheets/>. https://www.ipcc.ch/site/assets/uploads/2018/02/FS_what_ipcc.pdf. Accessed 3 Apr 2020.
- Intergovernmental Panel on Climate Change (IPCC). (2013b). *IPCC factsheet: How does the IPCC select its authors?*. IPCC, <https://www.ipcc.ch/2013/09/19/ipcc-factsheets/>. https://www.ipcc.ch/site/assets/uploads/2018/02/FS_select_authors.pdf. Accessed 3 April 2020.
- Intergovernmental Panel on Climate Change (IPCC). (2020a). *IPCC Website, Sixth Assessment Report*. <https://www.ipcc.ch/report/sixth-assessment-report-working-group-ii/>. Accessed on 3 April 2020.
- Intergovernmental Panel on Climate Change (IPCC). (2020b). *IPCC Website, List of IPCC Member Countries*. https://www.ipcc.ch/site/assets/uploads/2019/02/ipcc_members.pdf. Accessed on 2 July 2020.
- Volger, H. (2010). World meteorological organization. In H. Volger (Ed.), *Concise encyclopedia of the United Nations* (2nd ed., pp. 868–870). Leiden: Martinus Nijhoff Publishers.
- World Meteorological Organization (WMO). (1987). *Tenth world meteorological congress, Geneva 4–28 May 1987*. Abridged report with resolutions. WMO, 681(68). Secretariat of the World Meteorological Organization. Geneva. https://library.wmo.int/doc_num.php?explnum_id=6071. Accessed 31 Mar 2020.
- Zillman, J. W. (2007). Some observations on the IPCC assessment process 1988–2007. *Energy & Environment*, 18(7), 869–891.

Further Readings

IPCC Repots directory: <https://www.ipcc.ch/reports/>

Climate Change Disasters

- [Global Warming](#)

Climate Engineering

- [Geo-engineering](#)

Climate Ethics

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Synonyms

[Ethics of climate change](#)

Definition

Climate ethics is a subfield of environmental ethics which focuses on the distribution of individual and collective duties and rights, burdens, and benefits pertaining to the causes and consequences of climate change. It tackles the moral issues embodied in the recent evolution of the Earth system and its future course. Due to the key role of humanity, especially since the onset of the industrial times, at the beginning of the nineteenth century, captured by the concept of *Anthropocene* (the age/epoch of humans), climate ethics deals with *Homo sapiens*' responsibility in the rise of climate-related harms, risks, and uncertainties. More precisely, it addresses the issues of (1) who is responsible for the current climate patterns, i.e., for emitting vast amounts of greenhouse gas; (2) how should the burdens and benefits be distributed, including carbon abatement; and (3) how to balance the interests of the present and the future generations. In sum, climate ethics articulates three aspects: *evaluative*, which is about ascribing responsibilities; *distributive*, which is about allocating the present and future costs/benefits; and *prescriptive*, which is about what to do for mitigating (cutting down carbon emissions) or adapting to climate change.

Introduction

Climate ethics principally deals with the adverse consequences of climate changes, viz., the increase of temperatures, the rise of sea levels, the acidification of the oceans, and the higher frequency of extreme weather events. Such changes are mainly due to human releases of staggering quantities of greenhouse gas (GHG), such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and so forth, in the atmosphere, either directly (e.g., through fossil fuel combustion) or indirectly (e.g., through melting permafrost or leaks while exploiting oil and shale fields). As a result, global temperatures have been rising (with local variations) since the nineteenth century, at an accelerating rate starting from 1970. In its Fifth Assessment Report (IPCC 2013), the

Intergovernmental Panel on Climate Change (IPCC) estimated that temperatures have already climbed by 0.85 °C from 1880 to 2012. Temperatures have continued to soar during the 2010s.

This fast-paced increase is not leaving much time to animal and vegetal species for adapting or migrating to more clement latitudes or altitude. In addition, sea levels have been rising due to the combined effects of heat dilation, loss of ice in Greenland and Antarctica, and melting land ice masses (glaciers). By 2100, oceans could have risen between 30 cm and 111 cm, depending on the path followed by GHG emissions during the rest of the century (Wuebbles et al. 2017). Oceans have become more acidic, threatening coral reef and marine life (e.g., mollusks and some fish species). The exact amplitude of these changes is not totally clear since it depends, for a large part, on current and future emissions.

In the absence of drastic reduction of GHG emissions, the consequences for the humans and ecosystems will be severe. In addition to global warming, models have been predicting more frequent extreme weather events such as floods, heat waves, tornadoes, hurricanes, and droughts. These drastic conditions will threaten agricultural activities and human health. Exotic viruses (such as West Nile virus) and pests have started to spread from tropical to more temperate regions, creating public health hazards. More people will suffer from malnutrition and restricted access to water. Some zones will become inhospitable (e.g., coastal and arid zones).

These changes will generate serious environmental (e.g., loss of species), material (e.g., damages to public infrastructure, decline of economic growth), and human costs (e.g., diseases, deaths). Regions which are already vulnerable on ecological, economic, social, and political grounds (e.g., Africa, Pacific Islands) will be hit first and the harshest. International organizations such as the United Nations are expecting a sharp increase of migration.

The impact of climate change, combined with pollution, is so significant that scientists have proposed to rename the current geological epoch, *Holocene* (the new epoch), into *Anthropocene* (the age or epoch of humans). The

reason is that humanity has become the main geological force by releasing large amounts of carbon and other GHGs but also by polluting the land and sea with plastics, chemicals, and radioactivity as well as drastically altering the landscape (e.g., by diverting rivers, mining).

Considering its extent, climate change raises key economic, social, and political issues in terms of responsibilities, distribution of burdens, adapting, or preventing further worsening. The major issue concerns the intragenerational and intergenerational distribution of responsibilities and costs of mitigation (initiatives that aim at lowering GHG emissions and improve GHG sinks such as forests (IPCC 2007, p. 878)) and adaptation (intervention that attempts at adjusting human and natural systems to climate changes (IPCC 2007, p. 869)).

Climate ethics tackles these issues on moral grounds, i.e., from the perspective of the evaluation of the current state of affairs and the actions that could be required from different, global and local, actors ranging from individuals, municipalities, corporations to states and international organizations. It assesses the badness and wrongness of the situation while searching to address it while respecting principles such as responsibility, fairness, minimization of harms, and so forth.

Climate Ethics

Climate ethics can be understood as the reflection on (1) who is responsible for the current climate patterns, (2) how should climate changes' burdens and benefits be distributed, and (3) how to balance the interests of the present and the future generations. It spells out the specifics of human responsibility for climate-related issues in the Anthropocene. Since most of the current changes in the Earth climate are due to anthropic interference (mostly through greenhouse gas emissions), there is a need to reformulate moral responsibilities in proportion of such an interference. Climate ethics is to take the role of humanity in crafting the modern environment seriously.

Responsibility for Climatic Changes

The first issue can be summed up by *who is responsible for climate changes*. Despite the insistence on GHG emissions (and concentration) and the ensuing rise of temperatures, climate changes encompass more than those aspects. It refers to the swelling of sea levels (and the threat it represents for coastal populations), the higher frequency of extreme events (e.g., storms, hurricanes, floods, droughts, forest fires), or the acidification of the oceans.

Adverse outcomes also include massive extinction of animal species (Cebalos et al. 2017), which have been already threatened by human activities, the difficulty of plants to adapt, and so forth. If the cause of climate change is clearly identified as the accumulation of GHG in the atmosphere, the repercussions are broader and more serious than a few degrees on a thermometer.

Responsibility is a multilayered concept. It could be *causal* (when someone's actions have contributed to the current state of affairs), *material* (when someone is liable for the consequences of some actions or states of the world), *legal* (when someone is legally liable for some actions or states of the world), and *ethical* (when someone is considered as morally praiseworthy or blameful for some actions or states of the world).

The various dimensions of responsibility are connected. It is intuitively appealing to ground material, legal, or moral dimension in the causal one. This raises an important issue since material, legal, or moral aspects could be seen as stemming from causal one. For instance, if a car driver initiates an accident by making a bold turn, driving too fast, or being intoxicated, he should *ceteris paribus* bear at least some of the fallout in terms of costs, redress, compensation, and so on.

In the case of climate change, the rising temperatures, the acidification of the oceans, and the worsening of weather conditions (e.g., more frequent and intense hurricanes, droughts) have irrefutably been associated with the current GHG concentrations in the atmosphere. Carbon concentration has climbed from 280 parts per million (ppm) before the industrialization (end of the eighteenth century) to ca. 410 ppm in 2019, mostly due to fossil fuel combustion.

Indeed, humans are causally responsible for the bulk of the dramatic increase in GHG level. Moreover, a look at the main past emitters offers a finer-grained view. Since CO₂ release is tightly correlated to economic growth, nations are causally responsible for the present state of affairs in a direct proportion of their past development, which is mirrored by their affluence. Thus, causal and material responsibilities could be combined for backing up the assertion that industrialized countries ought to assume most of climate change-induced costs, which is at the foundation of the “polluter payer principle” (Gardiner 2010). This approach represents an instance of historic justice implying intergenerational responsibility in which the current generations in developed countries are being held responsible for the choices and actions of past generations.

Besides, it could be claimed that, in addition to bearing an important causal responsibility, the largest carbon emitters from a historical perspective, namely, the industrialized nations, are those who are more likely to have benefited from such release. As a result, they are the most capable of assuming the material consequences of climate change by compensating individuals and communities who are, and will be, suffering the most (e.g., low-rise Pacific Islands), by covering for the costs of adaptation (e.g., by building protective dykes, breeding plants resistant to droughts, supporting/hosting population relocation) or mitigation (e.g., by transferring technologies, financing the decarbonization of economies). This rationale captures the “ability-to-pay principle.”

Both principles – polluter payer and ability to pay – are formulated in article 3.1. of the 1992 United Nations Framework Convention on Climate Change (UNFCCC). Per se, the causal responsibility and the capacity to face a problem do not have to coincide. However, in the case of climate change, there is a robust overlap between the two. Additionally, it could be claimed that industrialized nations have created global negative externalities, passing part of the costs of their affluence onto less wealthy ones and future generations (more below).

In realpolitik, this topic is contentious. Developed countries (“Annex I parties” under the

UNFCCC) often search to downplay or escape their historic responsibility, which undermines any large-scale international agreement. A blatant example is the Kyoto Protocol (signed in 1997, entered in force in 2005), which aimed at reducing GHG emissions. As illustrations of this avoidance strategy, the United States signed but didn’t ratify the protocol, whereas Canada pulled out in 2012. Another occurrence is the Paris Agreement signed in 2016, in which most publicized target is to maintain the global temperature rise significantly under 2 degrees, preferably within a 1.5-degree range, and from which the United States decided to withdraw in 2017.

Developed countries (UNFCCC “non-Annex I parties”) contend that the trend of emissions has been shifting in the last two decades. Since the mid-2000s, China has become the main source of carbon, its total emission being over the United States and EU altogether. Other developing economies such as India have steeply increased their release, while many industrialized nations have kept under control or reduced their own (e.g., Russia and the European Union).

Developing countries usually stress that a glimpse at the emissions per capita offers a different picture where the United States and other industrialized nations are still the main polluters. Moreover, they oppose the *right to (sustainable) development*, as stipulated in the 25 September 2015 United Nations resolution adopted by the general assembly titled *2030 Agenda for Sustainable Development* (A/RES/70/1), initially formulated in the United Nations general assembly resolution 41/128 (4 December 1986). Therefore, humanity has to find a way of balancing, on the one hand, the necessity of carbon abatement, and on the other hand, the necessity to alleviate poverty and suffering (Moellendorf 2014).

Distribution of Harms and Benefits

The question of who is responsible for the situation but, more importantly, who is for tackling it underlines the issue of how the burdens (and potential benefits) of climate change ought to be distributed. Because one country or group of countries cannot be regarded as entirely responsible, there is the need for more granular rules or

principles. Considering only the material costs (e.g., loss of crops due to droughts, the relocation of population because of rising sea, migrations), should the costs be allocated in accordance to causality (past emissions) or capacity (affluence)? In other words, should such a distribution follow a polluter payer, an ability-to-pay principle, a mix of the two, or something else?

As stipulated above, the polluter payer and ability-to-pay principles mostly (still) overlap, but the situation is changing. This raises the further issue of global responsibility, which is captured by the fact that GHG emissions could be seen as *negative externalities*, i.e., costs imposed on third parties without their consent, disproportionally generated by few actors at the expense of everyone else, especially already vulnerable, less affluent populations. The language of negative externalities suggests that the main carbon polluters would have actually inflicted unacceptable harms for which they are materially and morally responsible and that would require some intervention, regulation, and, potentially, redress or compensation (Mill 1859).

In addition, it is probable that in the short run some areas will gain from the temperature increase. For instance, a broader variety of crops could be farmed in Scandinavia, the growing season might be extended, and tourism might develop in places which were previously inhospitable (e.g., the Arctic region). Since they directly stem from past emissions and happen concurrently with burdens (without even considering the fact that many of these benefits may occur in the most developed countries such as Scandinavia), how much those who are gaining from climate change should compensate the losers?

Such a question points at the necessity of widely agreed global justice mechanisms. Furthermore, it tackles the views that tie moral responsibilities to a principle of proximity, stipulating that duties vary in a direct, positive proportion with the degree of closeness (geographical, national, cultural) to the potential beneficiaries. As the proximity argument goes, it is the reason why moral bounds would be stronger among citizens than between citizens and foreigners. Due to its global scope as well as the uneven dispersion

of damages (less affluent parts of the world suffering the most), climate change challenges traditional stances about proximity as the core for duties, in particular of justice (for redress, compensation, or redistribution).

Climate change burdens humans, but not only. Nonhuman animals, plants, and arguably other organisms (as well as, perhaps, ecosystems) have also been adversely affected by the rise of temperature and the alteration of environmental conditions, some being independent from GHG emissions (e.g., destruction of natural habitats). When thinking about responsibilities, it is important to circumscribe the limits of the “moral community” or, in other terms, the entities who matter in the evaluation of a given situation (which could create duties on the human side).

The inclusion of animals, plants, and other organisms within human moral concerns appears in international texts, agreements, covenants, or declarations. For instance, the 1992 Convention on Biodiversity affirms the intrinsic value of biodiversity, i.e., the moral worth of living organisms cannot be reduced to their instrumental value for humans. If taken seriously, this implies that any discussion on climate change, its effects, and human responsibilities needs extent to other living organisms, their interests, well-being, and so forth, to an extent to be defined.

Part of the debates in climate ethics revolve around the issue of which value to attribute to nonhuman living beings. Should it be instrumental, as posited by anthropocentrism (which claims that humans and their interests are ultimately what morally matter), or should such a value be intrinsic, as usually defended by nonanthropocentric conceptions such as biocentrism (Taylor 1986)? Furthermore, should an inherent worth be given to ecosystems as wholes, as initiated by the famous conservationist Aldo Leopold (1949)?

Future Generations

The third initial question enlarges the horizon by including the future generations. If one considers that climate change results from concentration of greenhouse gas in the atmosphere released by past and current human beings and that its adverse effects will be constantly ramping in the future,

this implies that distant generations will have to face dangers that will mostly not be their doing.

Climate change thereby involves intragenerational externalities. GHG emissions could be interpreted as the inevitable side products of industrialization which, for sure, left future generations with excessive carbon but also, presumably, with higher quality of life, more advanced technology, more extensive public infrastructure (e.g., transportation, libraries, universities, hospitals), and so forth. In short, future generations will be, on the average, better armed for tackling mitigation and adaptation issues.

This argument is at the core of the *social time discount rate*, which is applied to the future costs of climate changes. Put differently, the interests of, benefits to, or costs incurred by future generations do not count as equal to current generations' ones. They are discounted when doing an intertemporal cost-benefit analysis. The rationale is because distant generations will be better prepared than the current ones for confronting climate change. They will have better science and technology, better equipment, and better information. They will also be richer, so they will be more capable of financing ambitious projects, for instance, in green energy or geoengineering deployment.

Therefore, it is morally permissible (and economically efficient) to invest only a small portion (depending on the discount rate) of the capital that will be required in the future for mitigating or adapting to climate change. Discounting is acceptable because future generations' ability to pay will be superior to the present ones. Furthermore, present sacrifices are reduced, which do not impede the right to develop of worse-off populations, e.g., in developing countries.

These arguments are at the core of the controversy between advocates of a low discount rate, represented by Nicholas Stern in his famous *Review* (2007), and advocates of a high rate (the interests of future generations count for less), such as William Nordhaus (2008). Stern claims that humanity should dramatically cut its emissions as soon as possible in order to prevent dangerous climate changes, whereas Nordhaus argues for

modest abatement first that will steeply ramp up further down the line, in decades.

This controversy highlights two key points. The first is the assumption about future generations' affluence. This is visible in Nordhaus' position. It is posited that future generations will be better off, which implies that no significant crisis will hit and provoke economic stagnation or depression. The second is that climate is assumed to follow linear patterns, which means that adverse events will be proportional to the increase in GHG concentrations. However, this assumption is contested by scientists. Many point out that climate does not tightly correlate with carbon emissions and will display a nonlinear variation.

On the one hand, it is clear that the climate does not react concurrently to CO₂ concentration. The impact is delayed, which explains why the current temperatures are below what they should be if we assume a strict and immediate correlation with GHG concentrations. For instance, the last time Earth experienced CO₂ concentrations ca. 415 ppm (parts per million), it was between 3 and 5 million years ago, during the Pliocene, when global temperatures were 3–4 °C warmer (Naish et al. 2009); in the Arctic, temperatures may have been 8 °C warmer (Brigham-Grette et al. 2013); Antarctica had forests (Rees-Owen et al. 2018); and the sea levels were probably between 10 and 20 m higher than nowadays. In sum, the current weather does not accurately reflect the underlying climatic change.

On the other hand, a great deal of uncertainty still exists about *tipping points*, which, if crossed, will make the climate unstable. Weather events will become increasingly unpredictable in terms of frequency and intensity. The tipping points usually identified by climate science (Lenton et al. 2019) include the massive release of the methane currently captured in the permafrost, the loss of West Antarctica and Greenland ice caps, the complete disappearance of the Arctic ice sheet, the shutdown of the thermohaline circulation, and so forth. Some of these tipping points are at higher risk to be crossed if temperatures climb beyond the 1.5 °C mark in comparison with pre-industrial time (IPCC 2018, pp. 282–283).

Thus, discussions about the social time discount rate involve reflections about risks and uncertainty. More precisely, it underlines the questions of which level of risk it is morally acceptable to take, especially if we consider that such risks might pile up dramatically as we advance in the future. That is the reason why the precautionary principle is mobilized as a justification for immediate and drastic mitigation, along adaptation. Both principle 15 of 1992 Rio Declaration on Environment and Development and article 3.3 of the UNFCCC posit that the prevention of “serious or irreversible” damages to the environment should not be impeded by the absence of “full scientific certainty.”

The prospect of “serious or irreversible” climate damages is magnified in the intergenerational perspective. By not drastically cutting down their emissions that present generations are creating risks for future generations, they externalize part of the burdens created by their lifestyle. There is also the risk that future generations might be literally locked in a dangerous and unstable climate for decades or centuries. This could be characterized as an instance of intergenerational *moral hazard*, where one party adopts riskier behavior because he knows that the detrimental consequences will be partly or totally assumed by another party.

The core issue raised by the third dimension can be summed up by asking: *what do present generations owe to future ones?* The situation could be seen as one of transmitting a pool of various resources which include natural resources, atmosphere composition, institutions, technologies, cultures, etc. but also harmful risks (adverse events about which science can provide fairly reliable probabilities) and, more importantly, uncertainties (unpredictable events with outcomes that are impossible to evaluate). In this context, a balance has to be found between which risks can present generations take for the sake of socioeconomic development without jeopardizing the interests of the individuals to come and other living beings. The issue is one of distributive justice, but under an amount of uncertainty that will depend on key choices about mitigation (e.g., choice of

technology, green energies, carbon removal) and adaptation.

Summary

Climate change is one of the most, if not the most, severe problems faced by humanity. It directly results from the release of CO₂ and other greenhouse gases (GHGs) in the atmosphere, especially since the onset of the industrialization. This origin explains why there is a correlation between the countries which omitted the most GHGs and those who are the most socioeconomically advanced. Climate ethics constitutes the attempt to think climate change from a moral perspective, which raises three issues. The first is to determine who is responsible for the current situation and its future evolution. The question is contentious since developed and developing countries disagree about historic responsibility but also about how should carbon abatement be divided nowadays. The second issue is about the distribution of the burdens and benefits of climate change. When doing such a review, it is important to determine whether to count the consequences to humans only or to include concerns for other living beings taken as instrumentally or intrinsically valuable. The third question deals with what current generations owe to future ones. It is captured by debates around the time social discount rate, which consists in deflating future generations’ interests, incurred costs, etc. because they will presumably be better off than present generations and, indeed, more capable of addressing climate change. Any discussions about a fair intergenerational distribution of burdens and benefits are obscured by the looming uncertainty of climate changes, especially when considering the probable existence of tipping points.

Cross-References

- [Climate Change](#)
- [Climate Change Adaptation in Coastal Cities](#)
- [Geo-engineering](#)
- [United Nations Convention on Climate Change \(UNCCC\)](#)

References

- Brigham-Grette, J., Melles, M., Minyuk, P., Andreev, S., Tarasov, P., Deconto, R., Koenig, S., Nowaczyk, N., Wennrich, V., Rosén, P., Haltia, E., Cook, T., Gebhardt, C., Meyer-Jacob, C., Snyder, J., & Herzschuh, U. (2013). Pliocene warmth, polar amplification, and stepped Pleistocene cooling recorded in NE Arctic Russia. *Science*, 340(6139), 1421–1427. <https://doi.org/10.1126/science.1233137>.
- Cebalos, G., Ehrlich, P. R., & Dirzo, R. (2017). Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines. *Proceedings of the National Academy of Sciences of the United States of America*, 114(30), E6089–E6096. <https://doi.org/10.1073/pnas.1704949114>.
- Gardiner, S. (2010). Ethics and global climate change. In S. M. Gardiner, S. Caney, D. Jamieson, & H. Shue (Eds.), *Climate ethics: Essential readings* (pp. 3–35). Oxford: Oxford University Press.
- IPCC. (2007). Climate change 2007: Impacts, adaptation and vulnerability. In M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden, & C. E. Hanson (Eds.), *Contribution of working group II to the fourth assessment report of the intergovernmental panel on climate change*. Cambridge/New York: Cambridge University Press.
- IPCC. (2013). Climate change 2013: The physical science basis. In T. F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, & P. M. Midgley (Eds.), *Contribution of working group I to the fifth assessment report of the intergovernmental panel on climate change*. Cambridge/New York: Cambridge University Press.
- IPCC. (2018). Global warming of 1.5 °C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. In V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, & T. Waterfield (Eds.) Geneva: IPCC.
- Lenton, T. M., Rockström, J., Gaffney, O., Rahmstorf, S., Richardson, K., Steffen, W., & Schellnhuber, H. J. (2019). Climate tipping points too risky to bet against. *Nature*, 575, 592–595. <https://doi.org/10.1038/d41586-019-03595-0>.
- Leopold, A. (1949). *A sand county almanac*. Oxford: Oxford University Press.
- Mill, J. S. (1859). *On liberty*. London: John W. Parker and Son, West Strand.
- Moellendorf, D. (2014). *The moral challenge of dangerous climate change: Values, poverty, and policy*. Cambridge: Cambridge University Press.
- Naish, T., Powell, R., Levy, R., Wilson, G., Scherer, R., Talarico, F., Krissek, L., Niessen, F., Pompilio, M., Wilson, T., Carter, L., DeConto, R., Huybers, P., McKay, R., Pollard, D., Ross, J., Winter, D., Barrett, P., Browne, G., Cody, R., Cowan, E., Crampton, J., Dunbar, G., Dunbar, N., Florindo, F., Gebhardt, C., Graham, M., Hannah, I., Hansaraj, D., Harwood, D., Helling, D., Henrys, S., Hinnov, L., Kuhn, G., Kyle, P., Läufer, A., Maffioli, P., Magens, D., Mandernack, K., McIntosh, W., Millan, C., Morin, R., Ohneiser, C., Paulsen, T., Persico, D., Raine, I., Reed, J., Riesselman, C., Sagnotti, L., Schmitt, D., Sjunneskog, C., Strong, P., Taviani, M., Vogel, S., Wilch, T., & Williams, T. (2009). Obliquity-paced Pliocene West Antarctic ice sheet oscillations. *Nature*, 458, 322–328. <https://doi.org/10.1038/nature07867>.
- Nordhaus, W. (2008). *A question of balance: Weighing the options on global warming policies*. New Haven: Yale University Press.
- Rees-Owen, R. L., Gill, F. L., Newton, R. J., Ivanović, R. F., Francis, J. E., Riding, J. B., Vane, C. H., & Lopes dos Santos, R. A. (2018). The last forests on Antarctica: Reconstructing flora and temperature from the Neogene Sirius Group, Transantarctic Mountains. *Organic Geochemistry*, 118, 4–14. <https://doi.org/10.1016/j.orggeochem.2018.01.001>.
- Stern, N. (2007). *The economics of climate change: The Stern review*. Cambridge: Cambridge University Press.
- Taylor, P. (1986). *Respect for nature*. Princeton: Princeton University Press.
- Wuebbles, D. J., Fahey, D. W., Hibbard, K. A., DeAngelo, B., Doherty, S., Hayhoe, K., Horton, R., Kossin, J. P., Taylor, P. C., Waple, A. M., & Weaver, C. P. (2017). Executive summary. In D. J. Wuebbles, D. W. Fahey, K. A. Hibbard, D. J. Dokken, B. C. Stewart, & T. K. Maycock (Eds.), *Climate science special report: Fourth National Climate Assessment* (Vol. I, pp. 12–34). Washington, DC: U.S. Global Change Research Program.

Climate Finance

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Synonyms

Carbon finance; Global climate finance; Green finance; Low-carbon finance; Sustainable finance

Definition

Climate finance refers to local, national, or transnational financing for climate change mitigation and adaptation of related activities drawn from public, private, and alternative sources. There is no single definition of climate finance. It is, in some instances, discussed separately but often integrated with related and overlapping concepts of green, sustainable, or low-carbon finance.

The United Nations Framework Convention on Climate Change (UNFCCC) has defined climate finance as “*finance that aims at reducing emissions, and enhancing sinks of greenhouse gases and aims at reducing vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts.*”

This definition encapsulates climate finance in its broadest form, as it represents the funding of all activities and projects that take climate change mitigation and adaptation into account. A broad definition is necessary as climate finance consists of many different elements such as the type of financing that is provided, the source of financing, flows of financing, what is financed, and whether climate change mitigation is the major or minor element of the activity. Climate finance is, however, most often utilized in the context of climate change negotiation processes, wherein the aim is to provide additional financial resources from developed to developing countries for climate change mitigation and adaptation activities that are unlikely to occur without additional financing.

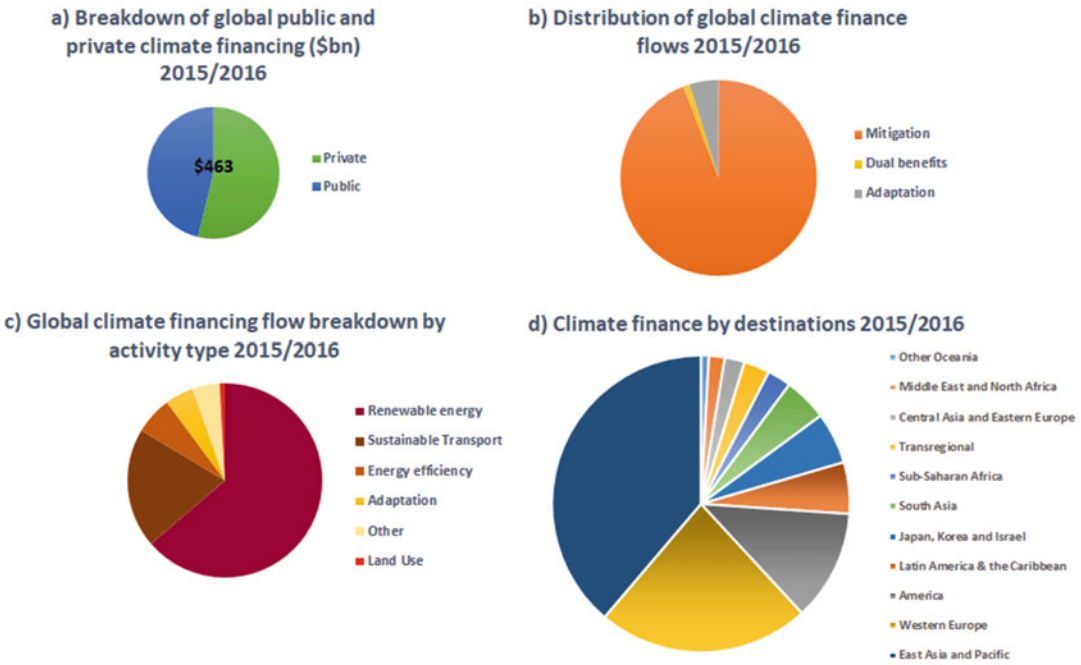
Introduction

Climate finance aims to provide the financial means for implementing the transition to a sustainable low-carbon and climate-resilient economy in line with the 2 °C goal set by the Paris Agreement on Climate Change. However, how the financing of the transition will be done is still an open question. In 1992, UN member states agreed that those responsible for climate change should compensate for caused emissions by

financing mitigation and adaptation activities. Global effort is needed as the contribution of countries to climate change, and their capacity to prevent it and cope with its consequences varies enormously.

According to the Climate Policy Initiative (CPI 2018), the global climate finance flows are increasing. The average annual flow of climate finance was USD 463 billion during 2015–2016. Private sectors, such as project developers, banks, and corporations, provided the major share of climate investments (54%) in the 2015–2016 period (Fig. 1). Estimates for finance flows in 2017 range from USD 510 billion to USD 530 billion. However, adaptation finance flows are estimated to be just USD 22 billion per year because of lack of private investments. The vast majority of investments (81%) were spent domestically during 2015–2016, and most of the international flows were from OECD to non-OECD countries. More specifically, the dominant international destinations were in East Asia and in the Pacific region during 2015–2016. Finance flows are mainly concentrated in the renewable energy sector (approximately USD 300 billion). Water and wastewater management projects are the largest sectors when it comes to adaptation finance, followed by agriculture, forestry, and land-use adaptation activities (CPI 2018).

To achieve the goal of limiting warming set at 2 °C in the Paris Agreement, global annual emissions need to be less than 42.51 GtCO₂ e in 2030, while 1.5 °C pathways annual global emissions need to be about three-quarters of that at 33.94 GtCO₂ e (UNFCCC 2019). The Intergovernmental Panel on Climate Change (IPCC) reports showing a USD 1.6–3.8 trillion requirement for further investments to sustainable energy systems to keep warming within a 1.5 °C scenario (IPCC 2018). In 2009, developed countries committed (COP15) to mobilize USD 100 billion annually by 2020 for climate action in developing countries. According to the UNEP Adaptation Gap report (2016), developing countries would need to invest between USD 140 billion and USD 300 billion per year by 2030 in order to adapt to a 2 °C future. This means that estimated costs are 9–19 times higher than current levels of international public



Climate Finance, Fig. 1 (a) Breakdown of global public and private climate financing during 2015–2016 (\$bn), (b) Average distribution of global climate finance between private and public flows during 2015–2016,

(c) Proportions of global climate financing for mitigation and adaptation, and (d) Climate finance by destination during 2015–2016. (CPI 2018)

adaptation finance to avoid an adaptation finance gap in 2030 (Oliver et al. 2018).

Finance Mechanisms

In order to incentivize and hasten sustainable transformation, multiple mechanisms have been implemented. These mechanisms are divided into two main categories: voluntary and mandatory mechanisms. Mandatory markets are founded upon negotiation processes, which set regulatory requirements on the participants. The most prominent of these negotiation processes was the establishment of emissions trading under the Kyoto protocol. Each ratified country is set an emissions target and a corresponding number of allowances. Countries can meet their targets by limiting emissions or by purchasing carbon credits from countries that have a surplus of allowances. The Kyoto Protocol also established the so-called Flexible Mechanisms, the Clean Development Mechanism

(CDM), and Joint Implementation (JI), to increase cost-effectiveness of emission reductions. The CDM allows developed countries to partly meet their Kyoto targets by financing carbon emission reduction projects in developing countries. The aim, in CDM, is that the developed country can implement its reduction goals in a developing country, wherein it is the most cost-effective, while offering sustainable development benefits where the implementation takes place. JI works similarly to CDM, with the exception that the host country is a developed country as well (UNFCCC 2005). New market-based mechanisms are being developed (e.g., the new market mechanism (NMM)), but these mechanisms have not been codified yet (Gao et al. 2016).

A group of European countries created the EU Emissions Trading Scheme (EU-ETS), where allowances may be traded among participating countries. The EU-ETS began its operations in 2005 and is the largest emission-trading scheme. There are, currently, dozens of regional, national,

or transnational systems in the World, operating under or independently of the Kyoto Protocol. They have been established, for example, in Canada, in California, in the East Coast of the United States, and in eight Chinese provinces. China's national emissions trading scheme is expected to start operating during 2020 (Cao et al. 2019).

The voluntary carbon markets function independently from and additionally to the regulatory law and compliance markets, enabling private entities to voluntarily offset their emissions by purchasing offsets that were created either in the voluntary market or in the CDM. There are no established specialized rules and regulations, such as those set by the US Securities and Exchange Commission, for the stock exchange of the voluntary carbon market. This lack of overhead allows for innovation and experimentation, as projects can be implemented with fewer transaction costs than compliance market projects, making it feasible to also implement micro-sized projects. Conversely, the lack of quality control has led to the production of some low-quality credits, such as those from projects that would have likely happened anyway; thus, the offset credit produced does not always fulfill the additionality criteria.

Multilateral climate funds are one of several ways how climate finance flows are distributed. The climate funds play an important role in supporting vulnerable communities in developing countries to transform into clean technology and climate-resilient economies. More than 1000 projects are being funded by the four main climate funds: the Green Climate Fund (GCF), Adaptation Fund (AF), Climate Investment Fund (CIF), and Global Environment Facility (GEF). CIF accelerates climate action by empowering transformations in clean technology, energy access, climate resilience, and sustainable forests in developing and middle-income countries. While GCF finances both adaptation and mitigation projects, GEF is largely dedicated to mitigation. AF was established to finance practical adaptation projects and programs in developing countries that are parties of the Kyoto Protocol and are particularly vulnerable to the adverse effects of climate change. Most of the projects funded so far

by the leading funds are in Mexico, followed by India, Cambodia, and South Africa (CB 2017).

Lessons Learned

Climate financing has two relevant variables and stakeholder goals: monetary gain and emissions reduction, or sequestration amount. Thus, it is pivotal to consider the fact that mere climate-financing flow does not necessarily correspond to effective emissions reduction as the used monetary amount does not give an indication of how much carbon was abated. To achieve more transparency, climate financing flows should be connected and standardized according to the actual, measured climate effect whenever possible. Second, with standardization, the complexity of the climate financing could be simplified to a few key indicators that are the most important for the activity, usually monetary gain, cost, carbon reduction, and sequestration achieved. This transparency and simplicity would help ensure that the goals of different stakeholders are met and that decision-makers are selecting the best available methods and technologies to combat this difficult challenge. One successful decision-making tool when choosing and assessing carbon abatement measures has been the usage of marginal abatement cost (MAC) curves, which indicate the marginal cost of each additional unit of carbon reduction or sequestration. However, implementation from country to a smaller project scope is recommended so that utilization of the most efficient carbon solutions becomes an ordinary and habitual part of decision-making (Ibrahim and Kennedy 2016).

The carbon prices collapsed during the economic recession. Thus, the cost of carbon emissions was not significant enough to convince industries to invest in carbon reduction in accordance with national targets. Different mechanisms have been created to ensure carbon prices that incentivize investments in carbon reduction. In EU, the ETS carbon-trading scheme was reorganized to have a depository of excess carbon credits, which immediately increased emissions allowance prices. The prices climbed up to 30

euros per ton, which was a sufficient price to influence companies' investment decisions to take into account the lower emissions targets. In the United Kingdom, the Carbon Price Floor (CPF) was introduced in 2013 to support the EU-ETS by taxing fossil fuels used to generate electricity via Carbon Price Support rates set under the Climate Change Levy. Since the implementation of the CPF, there has been significant reduction in coal electricity generation, which has partly been attributed to the CPF (Hirst 2018).

Besides the reduction of emissions, one major challenge is the adaptation, especially in the developing countries that neither have the infrastructure nor the resources to alleviate the effects of climate change. According to the latest finance flow data, only USD 22 billion was directed toward adaptation, wherein the estimated amount needed to alleviate climate change is between USD 280 billion and USD 500 billion in the year 2050 (UNEP 2016). Consequently, in order to prevent loss of biodiversity and worsening of living conditions, over tenfold increase in adaptation flows is needed. According to Hallmeyer and Tonkonogy (2018), there are several barriers that explain the lack of financing when it comes to adaptation, both in private and public sectors, especially in developing countries. Their barrier framework identifies three distinct categories: context, business model, and internal capacity barriers. In an adaptation finance scheme, context barriers refer to gaps in regulatory stability, enforceable laws, and the protection of property rights, especially in developing countries where adaptation finance is most needed. Business model barriers are specific, to the context of the product or service being offered, and refer to uncertainty of investment returns, high up-front costs, and lack of technical capacity to implement and maintain adaptation products. Internal capacity barriers refer to the scalability of adaptation services and products.

Summary

Although climate financing flows are increasing, hundreds of billions of dollars or more

will still need to be mobilized to achieve transition to a low-carbon-resilient economy. If this is to be accomplished, multiple different measures need to be implemented, especially to activate investments of the private sector into emerging economies. One of these measures is to make the data more accessible to the decision-makers by quantifying and representing complex issues with key metrics, such as with MAC curves or other analysis tools, so that each choice between activities becomes comparable in terms of cost and climate change abatement. Second, there should be compelling incentives for each stakeholder to make carbon-emission-reducing investments and decisions based upon those key metrics.

Cross-References

- Carbon Offsets
- Carbon Trading Schemes
- Clean Development Mechanism (CDM)
- Kyoto Protocol

References

- Cao, J., Ho, M., Jorgenson, D., & Nielsen, C. (2019). China's emissions trading system and an ETS-carbon tax hybrid. *Energy Economics*, 81, 741–753.
- CB. (2017). Mapped: Where multilateral climate funds spend their money. <https://www.carbonbrief.org/mapped-where-multilateral-climate-funds-spend-their-money>. Accessed 11 June 2019.
- CPI. (2018). Global climate finance: An updated view 2018. <https://climatepolicyinitiative.org/wp-content/uploads/2018/11/Global-Climate-Finance-An-Updated-View-2018.pdf>. Accessed 1 June 2019.
- Gao, S., Mattijs, S., Mol, A., & Wang, C. (2016). New market mechanism and its implication for carbon reduction in China. *Energy Policy*, 98, 221–231.
- Hallmeyer, K., & Tonkonogy, B. (2018). Designing technical assistance activities for adaptation and resilience companies. Climate Policy Initiative. <https://climatepolicyinitiative.org/wp-content/uploads/2018/05/Designing-Technical-Assistance-Activities-for%2D%2DAdaptation-and-Resilience-Companies.pdf>. Accessed 1 June 2019.
- Hirst, D. (2018). Carbon price floor (CPF) and the price support mechanism, briefing paper, number 05927, 8 January 2018. House of Commons Library.

- Ibrahim, N., & Kennedy, C. (2016). A methodology for constructing marginal abatement cost curves for climate action in cities. *Energies*, 9, 227. <https://doi.org/10.3390/en9040227>.
- IPCC. (2018). In V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, & T. Waterfield (Eds.), *Global warming of 1.5 °C. an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. In Press.
- Oliver, P., Clark, A., & Meattle, C. (2018). Global climate finance: An update view 2018. Climate policy initiative, November 2018. <https://climatepolicyinitiative.org/publication/global-climate-finance-an-updated-view-2018/>. Accessed 18 June 2019.
- UNEP. (2016). UNEP's adaptation finance gap report 2016. United Nations Environment Programme (UNEP). Nairobi. <http://www.unepdtu.org/newsbase/2016/05/uneps-adaptation-finance-gap-report-released?id=377aa3d4-32c1-4100-8bee-ae65390b60ba>. Accessed 15 June 2019.
- UNFCCC. (2005). Report of the conference of the parties serving as the meeting of the parties to the Kyoto protocol on its first session, held in Montreal from 28 November to 10 December 2005.
- UNFCCC. (2019). Climate action and support trends. Based on national reports submitted to the UNFCCC secretariat under the current reporting framework. https://unfccc.int/sites/default/files/resource/Climate_Action_Support_Trends_2019.pdf. Accessed 20 June 2019.

Climate Intervention

- [Geo-engineering](#)

Climate Modification

- [Geo-engineering](#)

Climate Neutrality

- [Net Zero Emission](#)

Climate Warming

- [Global Warming](#)

Climatic Fluctuations

- [Climate Change](#)

Climatic Warming

- [Greenhouse Effect](#)

Clinical Governance

- [Hospital Governance](#)

Clinton Global Initiative

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Synonyms

[Bill Clinton's Presidency](#); [Global warming awareness](#); [Globalization](#)

Definition

Modern societies have to work hand in hand with public powers to ensure that all social groups, including the most disadvantaged, can develop their projects. In this sense, many civic-social initiatives have proliferated over the last few decades, but none other is comparable to the

Clinton Global Initiative: it seeks to perpetuate the achievements of a presidential administration characterized through a discourse based on the dialogue and the concord, moving, at last, from empty words to tangible deeds.

Introduction

The last years of the twentieth century brought a myriad of geopolitical events such as the Fall of the Berlin Wall (1989), the environmental disasters of Bhopal (1984), Chernobyl (1986) or Exxon Valdez (1989), the meteoric growth of the Chinese economy in the aftermath of Deng Xiaoping's principles ("One country, two systems") that signaled the advent of a New International Economic Order (NIEO).

In this context, the world economic concert resulting from the Second World War became totally obsolete, with which many voices began to emerge that proposed a new economy less dependent on fossil fuels as well as a way of doing politics centered in "common people" that was close to the concrete needs of citizens and that could not be pigeonholed within the left- or right-wing of the ideological spectrum. Among these dissonant voices, two young American dreamers soon stood out: Bill (William Jefferson) Clinton and Al (Albert Arnold) Gore who would eventually become, respectively, President and Vice President of the United States (1993–2001). Fortunately, the end of this period would by no means mean a definitive halt in the ambitious renovation project of Clinton and Gore, but it continues to be present through the philanthropic programs of their foundations and, very especially, through the renowned Clinton Global Initiative Clinton Global Initiative (McGurn 2012).

This entry analyzes the meaning of this institution in contemporary society, contextualizing it within the scope of the main objectives of the Clinton administrations since, in a certain sense, it can be considered a natural evolution of Bill Clinton's first presidency summarized in the *motto* "Putting People First" that popularized it. These innovative policies were later materialized in the Clinton Foundation, on which the

Clinton Global Initiative depends, also named under the watchword "Turning ideas into action." According to this initial layout, the main characteristic elements of the Clinton Global Initiative are detailed below.

Putting People First

After the collapse of the Soviet Union and its bloc of influence, American society began to reconsider the almost obligatory need for a drastic reduction of disproportionate military spending, allocating public resources to policies of a pronounced social character. It was a new way of doing politics, "Putting People First," of a pragmatic rather than ideological orientation, completely exempt from the bureaucracy that kept away the average American citizen from her/his representatives, reinvigorating the entrepreneurial spirit that had always defined the American people. Clinton and Gore (1992) pointed out that those policies were neither liberal nor conservative, neither Democratic nor Republican. They were simply "new and different."

The awareness of the environmental issues undoubtedly conditioned these new ways of doing and understanding politics from social action. In fact, in 2007 A. Gore received the Nobel Peace Prize for his courageous efforts to denounce to the world public opinion the environmental change that was the result of the hand of man and that, in any case, could always be avoided if effective measures were taken in time, capable of counteracting the irreversible effects of the global warming (Gore 1992). At these times, an ecological catastrophe systematically concealed by the Soviet *nomenklatura* to the rest of the world began to be known, which powerfully drew the attention of A. Gore: The gradual drying up of the Aral Sea, which the American politician can observe in situ (Zonn et al. 2009). This environmental disaster was due to the unconscious overexploitation of water resources and the detour of the course of two great rivers of Central Asia: the Syr Darya and the Amu Darya. The apocalyptic image of the merchant ships stranded in the middle of the desert contributed to the

“Putting People First” program to take an even greater stand for environmental awareness in the United States, doing everything possible to ensure that such events would not be repeated in this nation or the rest of the world, thus ending the old short-sighted policies of “something for nothing” whose result had not exactly been positive for society during the Pre-Clinton era (Clinton and Gore 1992).

The Clinton Administrations always had a global projection, trying to extend the ideals of democracy and social justice to other areas of the planet. In this sense, it is necessary to emphasize the efforts of Clinton for the adhesion of the People’s Republic of China to the GATT (General Agreement on Tariffs and Trade) in 2001, with a threefold purpose: to generate substantial economic benefits in the US economy, to create a gradual opening of Chinese society and to develop synergies between all world economies, finally free of trade barriers. On the other hand, the democratization of the countries from the former socialist bloc was another of its keys to break the political-social isolation of this area (MacLean 2006), passing from the militarist policy of most of its predecessors in the oval office to another merely based on the dialogue.

Within this frame of reference, human capital prevails over economic capital, which is why

investment in the future of the youngest was promoted as a priority, training them in various technical disciplines such as basic sciences, mathematics, and engineering (Rumyantseva 2017). After his presidential mandate, Bill Clinton applied this humanistic perspective to the conceptualization of the Clinton Foundation in 2001, leaving a statement of his intention to perpetuate the social policies exercised by his administrations during the period 1993–2001. This foundation has its origins in the American philanthropic movement initiated by A. Carnegie in the early twentieth century, which has borne fruit in a wide range of charitable organizations and initiatives of a similar nature around the world, such as (just to name a few): The Aga Khan Foundation, The Azim Premji Foundation, The Bill & Melinda Gates Foundation, The Howard Hughes Medical Institute, The International Buddhism Foundation, The Novo Nordisk Foundation, The Stichting INGKA Foundation, The Wellcome Trust, etc. Its objectives are synthesized from the phrase “empowering people to build better futures for themselves, their families, and their communities” (see Clinton 2016) and are distributed in three major areas of direct action: Economic, Health-Welfare, and Civic Service, according to the scheme shown in Fig. 1:



Clinton Global Initiative, Fig. 1 Main goals of the Clinton Foundation. (Source: Own elaboration from Clinton Foundation (2020a))

Turning Ideas into Action

The pragmatism that characterized Clinton's policies is the main defining element of the Clinton Global Initiative once it begins operations in 2005. It constitutes a dependent entity of the Clinton Foundation of which it could be considered its flagship but, unlike the Clinton Foundation, it does not finance or develop projects or involve any kind of direct disbursement to the organization (Gaouette 2016), except for the donations that cover its general expenses. This entity simply puts donors in contact with groups that have specific needs in order to solve their problems, thus creating an extensive network of global cooperation.

This pooling of donors vs. "needs of common people" takes place in the form of periodic events throughout each year, including a major annual event that takes place every September in New York. Since the Clinton Global Initiative aims to move from words to action, these cooperation projects are generically referred to as "commitments to action" (Clinton Foundation 2020b). Among the cooperation projects, those that take into account the effects of global warming (Tillett 2006), the full integration of the female collective in the field of scientific research (Ranani and Kharazmi 2017), and, above all, the integral development of the world's youth should be pointed out. A large number of projects led by the Clinton Global Initiative are usually recorded in a database (see, e.g., Sund 2011). It should be noted that only in the period 2005–2016, the members of the global network formed for this organization have conducted more than 3600 projects in 180 countries, contributing to the improvement of the living conditions of 435 million people. As an illustration, Table 1 summarizes 26 commitments in effect in November 2020:

Summary

The enduring legacy of the Clintonian administrations was a breath of fresh air in which a transition was made from "macropolitics" to "micropolitics" by addressing the needs of the

ordinary citizen as opposed to any other previous consideration. The social component, as well as the environmental concerns, has played a leading role thanks to this new way of doing politics, creating a new framework of understanding between public opinion and the decisions taken by the politicians, who are now more open to listening to the requests of the citizens than to unilaterally take decisions of no relevance to the future of society, especially to the future of its youngest members. On these principles, the Clinton Foundation was built, being the Clinton Global Initiative the instrument that this institution uses for political activity is not only expressed in simple words but in social commitments that can and should be carried out. Obviously, like any other innovative institution, it has also received some criticism from ideological perspectives contrary to Bill Clinton's philanthropic tasks, by accusing it of lack of transparency in the accounts that could raise certain suspicions that its donors can buy political influences instead of doing purely charitable practices. Criticism, or at least doubts, has also come from Bill Clinton's own party: in fact, Bernie Sanders made public his disagreement with donations coming from foreign governments, especially if they were undemocratic (see, e.g., Gaouette 2016).

It is noteworthy that Bernie Sanders' controversial opinions tend to have special significance both within the Democratic Party and in the public opinion as a whole: since his beginnings as a young activist in support of civil rights (when he was affiliated with the Socialist Party of America), he always maintained a contentious attitude towards the political elites of Washington D.C. During his lengthy political career (Mayor of Burlington, Vermont (1981–1989), U.S. House of Representatives (1991–2007), and U.S. Senate (2007–present)), the essence of his ideology was based on the total transparency of public accounts in the eyes of the citizens, on the basis that, according to his position, electoral campaigns should be financed in the form of crowdfunding or "small-dollar donations" in order to avoid the interference of third countries in political

Clinton Global Initiative, Table 1 Switching from words to tangible facts: Excerpt of the social commitments carried out by the Clinton Global Initiative. Source: Own elaboration from Clinton Foundation (2020b)

Contributor	Project	Contributor	Project
First BanCorp	1ÉXITO: Small Business Optimization and Growth Program	Mercy Corps	MicroMentor: Entrepreneurial Growth Through Mentorship
Afya Foundation	Airlift to Support Access to Care in Rural Areas	Caribbean Philanthropic Alliance; Jamaica Diaspora Task Force	Mobilizing Caribbean Philanthropy to Plant 1M Trees
Friends of Puerto Rico	AMIGAS and SEEDS: Entrepreneurship for Women and Girls	5 Minute Beach Cleanup Foundation (5MBCF)	Ocean Heroes San Juan Educational Elementary Program
The American Red Cross	ARC's Commitment to Solar Power for Primary Health Clinics	Good360	Optimizing Corporate Disaster Giving & Engagement
Airlink	AviationC.A.R.E.S.	Clinton Giustra Enterprise Partnership	Partnering for Local Sourcing in the Dominican Republic
Comic Relief	Breaking the Cycle of Generational Poverty in Puerto Rico	The Solar Foundation	Powering the Rio Piedras Market
American Society for Clinical Pathology	Bridging Staffing Shortages for Pathology in Puerto Rico	World Hope International	Preparing to Support Fresh Water Production in Disasters
Commonwealth of Dominica	Building the First Climate Resilient Nation in the World	Solar Electric Light Fund (Self)	Professional Advanced PV Training Programs for Haiti
World Ocean School	Building the Marine Sector: Virgin Islands Maritime Academy	Invest Puerto Rico	Promoting Puerto Rico's Creative Industry
The Cathexis Project	Business & Cognitive Training for Puerto Rico's SMBs	FarmPod	Promoting Resilient Agriculture with FarmPod Technology
Reach Within	Caribbean Child Development Center	Inclusiv	Puerto Rico CDFI Initiative
Caribbean Tourism Organization; Caribbean Hotel and Tourism Association; Expedia; Kindustry	Caribbean Coalition for Tourism and Brand Caribbean	Smallholder Farmers Alliance (SFA)	Puerto Rico Cotton Study
NetHope	Caribbean Disaster Preparedness & Response	Puerto Rico Disability Community Relief Network	Puerto Rico Disability Community Relief Network (PRDCRN)

decisions that would affect the social collective, or of the everlasting American industrial lobbies. Therefore, Bernie Sanders' attitude towards the Clinton Global Initiative should not be strange, but not towards its philanthropic social action, but rather to the openness of its funding.

Cross-References

- [Altruism](#)
- [Climate Ethics](#)
- [Corporate Activism](#)
- [Exxon Valdez](#)

- Global Warming
- Sustainability and NGOs
- Sustainable Development

References

- Clinton, B. (2016). Empowering people to build better futures for themselves, their families, and their communities. <https://www.clintonfoundation.org/blog/2016/08/22/empowering-people-build-better-futures-themselves-their-families-and-their>. Accessed 17 Sept 2020.
- Clinton Foundation. (2020a). Commitments to action. <https://www.clintonfoundation.org/clinton-global-initiative/commitments>. Accessed 17 Sept 2020.
- Clinton Foundation. (2020b). Our work. <http://www.clintonfoundation.org/our-work>. Accessed 17 Sept 2020.
- Clinton, B., & Gore, A. (1992). *Putting people first: How we can all change America*. New York: Times Books.
- Gaouette, N. (2016, August 08). ¿Qué es la Fundación Clinton y por qué está envuelta en controversia? <https://cnnespanol.cnn.com/2016/08/24/que-es-la-fundacion-clinton-y-por-que-esta-envuelta-en-la-controversia/>. Accessed 17 Sept 2020.
- Gore, A. (1992). *Earth in the balance: Ecology and the human Spirit*. New York: Plume.
- MacLean, G. A. (2006). *Clinton's foreign policy in Russia: From deterrence and isolation to democratization and engagement*. Farnham: Ashgate Publishing.
- McGurn, E. (2012). The 2012 Clinton global initiative. *Architecture*, 101(11), 38.
- Ranani, S. R. A., & Kharazmi, Z. N. (2017). The significance of Muslim women in American foreign policy case study: Hillary Clinton's prophecy for women of science in MENA. *Womens Studies International Forum*, 61, 20–27.
- Rumyantseva, T. B. (2017). Investment in the future: Training in basic science, mathematics and engineering as a priority of technology policy of Clinton's administration, 1993–1995. *Vestnik Tomskogo Gosudarstvennogo Universiteta Istoriya-Tomsk State University Journal of History*, 45, 55–59.
- Sund, E. (2011). Partnering with the Clinton global initiative, the AIA pledges to create a stalled projects database. *Architecture*, 100(9), 40–41.
- Tillett, T. (2006). Global warming. Clinton climate initiative heats up. *Environmental Health Perspectives*, 114(11), A638.
- Zonn, I., Glantz, M., Kosarev, A., & Kostianoy, A. (2009). *The Aral sea encyclopedia. Encyclopedia of seas*. Berlin/Heidelberg: Springer.

Closed-Loop Production

- Strategy in a Circular Economy: Discussion of Opportunities and Limitations

Club of Rome

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Synonyms

The Club of Rome

Definition/Description

In its words, the Club of Rome defines itself as “an organization of individuals who share a common concern for the future of humanity and strive to make a difference.” Its members are notable scientists, economists, businessmen and businesswomen, high level civil servants and former heads of state from around the world. Their mission is to promote understanding of the global challenges facing humanity and to propose solutions through scientific analysis, communication, and advocacy. Their distinct perspective is holistic, systemic, and long-term.

The Club has published a number of peer-reviewed “Reports to the Club of Rome,” the most famous of which is “The Limits to Growth” (1972). In September 2019, following the UN Climate Action they launched the “Planetary Emergency Plan - Searching a New Deal for People, Nature and Climate”, while in June, 2020 they issued “Bildung - Keep Growing”, a document that encourages to rethink the approach to “knowledge exchange, education and life-long learning as anchors for holistic economic and

political development at the community, national and global levels”.

More information at: www.clubofrome.org.

The History

The history of the Club of Rome began in 1967 with a fortuitous crossing of paths between Aurelio Peccei, a successful Italian manager, economist, and man of vision, and Alexander King, an eminent Scottish scientist, scientific director of the Organization for Economic Cooperation and Development.

In a keynote speech, Peccei expressed his concerns about socio-economic development, environmental degradation and the North/South divide. A series of coincidences resulted in Peccei's speech transcript landing on the desk of Alexander King, who was so impressed that he contacted Peccei and suggested a meeting.

In April 1968, a group of 30 people, including scientists, economists, educators, humanists, industrialists, and national and international civil servants, from 10 different countries, met at the Accademia dei Lincei in Rome. The aim was to discuss “a subject of staggering scope – the present and future predicament of man” (from the foreword of Meadows et al. 1972). But the meeting was a flop mainly as the document they were asked to discuss was too abstract, complicated, and controversial. The participants recognized they had been “too foolish, naïve, and impatient” and decided to spend the following year(s) educating themselves: they call this discussion circle the “Club of Rome.”

Until 1969, the Club remained an informal group of individuals who met for a better understanding of global problems. Although the membership was (and still is) limited, the number of participants progressively expanded to include representatives of an even greater variety of cultures, nationalities and value systems. Owing to this increase, it became necessary to create a legal structure and to appoint a President: Aurelio Peccei was the first President of the Club of Rome.

All the members were united by the conviction that the major problems facing mankind were of such complexity and so interrelated that

traditional institutions and policies were no longer able to cope with them, nor even to understand their full implications (foreword of Meadows et al. 1972). In particular, Peccei strongly believed that understanding the “*problematique*,” as they called the interconnected challenges, was essential for the future. A series of meetings of the Club culminated with the decision to start the ambitious “Project on the Predicament of Mankind” (The Club of Rome 1970).

By invitation of the Swiss Government, on June 1970 the Club held its first official meeting in Bern.

During this meeting, Jay Forrester, a professor of the Massachusetts Institute of Technology (MIT), suggested building a computer model that simulated the interactions between the main factors considered to be the basis of humanity's problems.

In less than a month, Forrester presented a draft model which showed how, in a world of finite dimensions, the continuous growth of variables such as pollution and population would, sooner or later, lead to collapse. Convinced by these preliminary results, the members of the Club of Rome insisted on refining the study.

Forrester involved one of his colleagues, Dennis Meadows, who became the scientific director of the group. Meadows gathered a team of young researchers, to develop a model with five variables: population growth, food production, industrialization, pollution, and consumption of nonrenewable resources. The result was the first Report of the Club of Rome. “*The Limits to Growth*” was the first study to question the viability of continued growth of the human ecological footprint. The book was a success!

In just a short while, the Report and the Club of Rome found themselves at the center of a world controversy. However, this sudden fame attracted the attention of the public and the support of important political figures such as Maurice Frederick Strong – president of the first UN climate conference, held in Stockholm in 1972 – and Sicco Leendert Mansholt, then President of the EEC. The Club of Rome had achieved one of its goals: to raise international attention to sustainability issues.

In 1974, Peccei was able to hold a meeting in Salzburg between members of the Club and some heads of state. The event ended with a press conference attended by 300 journalists and the publication of the “Salzburg Statement.” This statement emphasized that the 1970s oil crisis was part of a global problem and not simply a political issue, as many then believed.

Following the death of Aurelio Peccei in 1984, the Club underwent important changes. Alexander King was appointed President, the post of Secretary General was created, and the headquarters were moved from Rome to Paris, where King was based. The Club also made a deliberate change to its approach to “the predicament of mankind.” While maintaining a distinctively global approach, it chose to focus on particular aspects of the challenge, such as governance, peace and disarmament, population growth, and the consequences of advances in science and technology. This new approach persists even now.

Subsequent Presidents represented different cultures, positions in society, and value systems. In 1990, Ricardo Diez-Hochleitner, a Spanish diplomat, educational reformist and economist, was appointed President. He had held key education-related posts in international organizations, including the Organization of American States, the World Bank and UNESCO. While in 2000, during a meeting in Madrid attended by Juan Carlos, King of Spain, and Queen Sophia (both Honorary Members of The Club of Rome), HRH Prince El Hassan bin Talal of Jordan was appointed President.

A period of Co-Presidency then followed. In 2007, Ashok Khosla, a leading Indian environmentalist, and Eberhard von Koerber, a German businessman were appointed Co-Presidents. In 2012, it was the turn of Ernst Ulrich von Weizsäcker, a leading German expert in resource efficiency, and Anders Wijkman, a Swedish politician and former member of the European parliament. Finally, during the celebrations of the Club’s 50th anniversary in Rome, for the first time in its history, the members appointed two women to co-lead the organization: Dr. Mamphela Ramphela (South Africa) and Sandrine Dixon Declève (Belgium) were appointed Co-Presidents.

Club of Rome, Table 1 The history of the Club of Rome

1967 – Meeting of Aurelio Peccei and Alexander king
1968 – Creation of the Club of Rome
1969 – Aurelio Peccei appointed president. Club of Rome became a formal association
1970 – First official meeting of the Club of Rome in Bern. Presentation of the document “the predicament of mankind.” The Club commissioned a group of MIT researchers to write the first report.
1971 – Foundation of the first national association in the Netherlands
1972 – Publication of the limits to growth
1974 – Meeting with heads of state in Salzburg
1984 – Alexander king appointed president. The Club moved to Paris
1990 – Ricardo Diez-Hochleitner appointed president
1998 – The Club of Rome moved to Hamburg, Germany
2000 – HRH Prince El Hassan bin Talal of Jordan appointed president
2007 – Ashok Khosla and Eberhard von Koerber appointed co-presidents
2008 – The Club of Rome moved to Winterthur, Switzerland
2012 – Anders Wijkman and Ernst von Weizsäcker appointed co-presidents
2018 – Dr. Mamphela Ramphela and Sandrine Dixon Declève appointed co-presidents of the Club of Rome. Celebration of the Club’s 50th anniversary in Rome, Italy.

Source: Club of Rome official website (www.clubofrome.net – accessed on 29 August 2019)

In the meantime, the Club moved from Paris to Hamburg (Germany) and has its headquarters in Winterthur (Switzerland) since 2008. It is now working in close cooperation with a number of private and public institutions globally, also thanks to the National Chapters.

Table 1 reports the main stages in the history of the Club.

The Mission and Vision of the Club of Rome

The Club of Rome is a global network of independent and renowned thinkers. The Club of Rome analyzes today’s challenges facing the world, the root causes and the possible features in a systematic and holistic manner.

The Club of Rome encourages global debate in order to set in motion actions that by the middle of the century will ensure a more secure, equitable and prosperous world. (text of a video available at <https://www.clubofrome.org/about-us/> – accessed on 29 August 2019–)

Even if it has continuously kept abreast of the new challenges emerging in different contexts, the vision of the Club of Rome has retained some of the features that have characterized it since its beginnings. Below the words published in the official website (accessed on 29 August 2019) on the members' vision of the Club:

Humanity faces an existential crisis. We face threats of systemic collapse on many fronts. The philosophical underpinnings of modern societies' democratic institutions and core values of respect for human rights, the rule of law and ethical use of science are all under threat. Decades of exponential growth in both population and consumption are now colliding with the limits of the Earth's biosphere destabilizing the very foundations of intelligent life as we know it today. It is encouraging to see a growing level of consciousness across the globe of the need to ask questions about how we engage in conversations to enable us to shape a new core value system that would enhance harmony between humans and with nature. The critical shift for the Club of Rome is a move beyond sounding the alarm to advancing conceptual frameworks essential for actualizing humanity's potential as a beneficial rather than solely predatory species.

This vision recurs throughout the various documents published by the Club over the years.

National Associations

The Club of Rome has supporters in many countries who have decided to create a National Association or Chapter to promote debates and activities related to the Club of Rome in local, regional, or national contexts. At the moment, there are National Associations in more than 30 countries. They are legally separate entities.

Under the new Co-Presidency established on the 50th Anniversary of the Club in 2018, the relationship between the Club of Rome and the National Associations is under revision to make them stronger and to increase the efficacy of the

Club's overall strategy promoting the shift towards a more sustainable world.

Membership and Governance

The members of the Club are typically prominent scientists, business leaders, ex-politicians, or retired heads of state. All share a common concern for the future of humanity. Potential new members are proposed by a current member to the Executive Committee.

There are three main categories of membership: Full Members (with voting right), Associate members, and Honorary Members.

The Club of Rome is governed by an Executive Committee. The members of the Executive Committee are appointed for 3 years and are eligible for re-election. One or two Co-Presidents are elected from amongst the members of the Executive Committee.

The Club of Rome receives contributions from a wide range of international organizations, foundations, and individuals from around the world. It also receives annual subscriptions from its members.

Activities

The Club of Rome acts as a catalyst of change mainly by sponsoring studies and conferences and publishing reports. Since the beginning of its activity, the Club has been committed to identifying the most critical problems facing humanity, analyzing all the possible interrelations on the basis of an interdisciplinary, holistic, and global perspective, and finding positive scenarios based on humanity's response to these problems.

This approach has been taken since the first document issued by the Club "The Predicament of Mankind" (The Club of Rome 1970).

The Predicament of Mankind

After the first meetings of The Club of Rome in 1968, its members agreed to undertake an

ambitious project: “The Predicament of Mankind.” The intent of this project was to tackle the complexity of the problems troubling men of all nations, such as poverty, environmental degradation, loss of faith in institutions, urban spread, insecurity of employment, alienation of youth, rejection of traditional values, inflation, and other monetary and economic disruptions, in a more interconnected way (Meadows et al. 1972). As stated in the report:

When we consider the truly critical issues of our time such as environmental deterioration, poverty, endemic ill-health, urban blight, criminality, etc., we find it virtually impossible to view them as problems that exist in isolation or, as problems capable of being solved in their own terms. For even the most cursory examination will at least reveal the more obvious (though not necessarily the most important) links between problems. (The Club of Rome 1970: 12)

Despite possessing considerable knowledge and skills, mankind does not understand “the origins, significance, and interrelationships of its many components and thus is unable to devise effective responses. This failure occurs in large part because we continue to examine single items in the *problematique* without understanding that the whole is more than the sum of its parts, that change in one element means change in the others” (Meadows et al. 1972: 11).

In 1970, Professor Jay Forrester of the Massachusetts Institute of Technology (MIT) presented a global model to the Club that allowed many specific components of the *problematique* to be clearly identified and suggested a computer technique for analyzing the behavior and relationships of the most important of those components. This presentation led to the initiation of a study conducted by an international team, under the direction of Professor Dennis Meadows, with financial support from the Volkswagen Foundation. The result was the publication, 2 years later, of “The Limits to Growth.”

The Limits to Growth

It is by far the best-known report of the Club of Rome. Even after nearly 50 years from its issue, it remains a pillar of the literature on sustainability.

Translated into over 30 languages, the book has sold more than 16 million copies.

The Limits to Growth is the nontechnical report of the findings of the group of young researchers from the MIT. The study was based on multiple simulations of a “system dynamics” computer model of the five basic factors that determine and therefore, ultimately limit growth on this planet: population; agricultural production; natural resource use; industrial production; and pollution.

The results of the simulations bore witness to the idea of physical limits to continuous growth, involving resource depletion and pollution.

The message of the book still holds true today: “The earth’s interlocking resources – the global system of nature in which we all live – probably cannot support present rates of economic and population growth much beyond the year 2100, if that long, even with advanced technology” (Meadows et al. 1972: back cover).

Rather than a dramatic prediction of future doom, the report maintains that men and women can change the world and establish a sustainable condition of economic and population stability and a fair and equitable global distribution of resources:

Man can create a society in which he can live indefinitely on earth if he imposes limits on himself and his production of material goods to achieve a state of global equilibrium with population and production in carefully selected balance. (Meadows et al. 1972: back cover)

After the Limits to Growth, the Club of Rome has identified a number of global issues facing humanity and issued a series of important reports on different topics, such as depletion and pollution of the environment, demographic problems, the quality and distribution of work, the sociocultural impact of new technologies, dysfunctional governments and educational systems, financial disorder, etc.

After the celebration of its 50th Anniversary, held in Rome (2018), the Club embraced four main themes:

- Emerging New Civilization(s) Initiative
- Reclaiming and Reframing Economics
- Rethinking Finance
- Climate Emergency

The latter is part of a project launched on December fourth 2018 at the European Parliament: *The Club of Rome – Climate Emergency Plan*.

Cross-References

- [Blue Economy](#)
- [Climate Change](#)
- [United Nations Convention on Climate Change \(UNCCC\)](#)

References or Further Readings

Where not otherwise specified, all the information reported has been retrieved from the Club of Rome official website (www.clubofrome.org) accessed in August 2019.

Other documents examined to produce this chapter were: Club of Rome. International Encyclopedia of the Social Sciences. Retrieved August 30 2019 from [Encyclopedia.com: https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/club-rome](https://www.encyclopedia.com/social-sciences/applied-and-social-sciences-magazines/club-rome)

Idowu, S. O. (2013). *Club of Rome. Encyclopedia of corporate social responsibility*. Berlin/Heidelberg: Springer.

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W., III. (1972). *The limits to growth. A report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books.

The Club of Rome. (1970). *The predicament of mankind. Quest for structured responses to growing world-wide complexities and uncertainties. A Proposal*. Management and Behavioral Science Center, University of Pennsylvania.

Coastal Resilience

- [Climate Change Adaptation in Coastal Cities](#)

Code of Best Practice

- [Corporate Codes of Conduct](#)

Code of Best Practices for Corporate Governance

- [Codes of Good Governance](#)

Code of Conduct in Marketing

- [Marketing \(Ethics of\)](#)

Code of Ethics

- [Corporate Codes of Conduct](#)

Codes

- [Core Values](#)

CO₂-Emissions

- [Carbon Emissions](#)

Coastal and Marine Management

- [UNEP Abidjan Convention Secretariat, Abidjan, Côte d'Ivoire](#)

Codes of Conduct in Greece

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Synonyms

[Business codes](#); [Codes of ethics](#); [Ethical codes](#); [Responsive business conduct](#)

Introduction

Corporations have obtained tremendous power in modern world that sometimes is even bigger than governments. So, the spotlight is turned to them examining their intentions to use their power and influence either for good or bad purposes. Thus, the concept of business ethics has special value in business world of the twenty-first century. The parameter of ethos, with its ancient Greek meaning or ethics in modern English, refers to a moral character that can distinguish good and bad, right and wrong, and continues doing the right, good, ethical thing (Eisenstein 2020). A lot of firms have created a so-called code of conduct which is considered as a guide for ethical behavior. This affects the processes inside the organization and furthermore the interaction of the organization with its external environment and its stakeholders including the society and the state. Greece entered in the eurozone in January 2001, and this signals a new start for the country whose companies try to compete in the European and global financial environment, and, thus, they endeavor to apply the idea of code of conduct in their everyday business activities (Skouloudis et al. 2011).

Definition

A code of conduct is an effort to institutionalize the principles and the ideals of the corporation's founders in a way that every new employee has the chance to study them and become part of corporate culture (Weiss 1994). Ethical codes consist of an effort to improve a firm's atmosphere so that employees could behave ethically (Shaw and Barry 2016). The legal system is not so tight to force corporations to take into account all the ethical aspects of their actions (Arrow 1973; Cohen and Stone 1976).

Ethics can be defined as a systematic attempt to make a cohesive, rational whole out of our individual and social moral experiences. The purpose of this attempt is to formulate rules to differentiate good and bad human conduct (De George 1992). In terms more specific to business, ethics provide the foundation for employee pride and motivation

(Hall 1992) and provide a condition for customers' satisfaction (Hall 1992). Ethics and quality can be equated insofar as the production of quality goods and services is *prima facie* ethical treatment of the consumer.

Historic Review

American corporations were the first which adopted codes of conduct, and the European companies of the biggest European countries followed their example. A big development in the adoption of codes of ethics was recorded during the 1970s and 1980s because of business scandals. The owners of the companies had to enhance their integrity, and the existence of codes of conduct could operate as a symbol to both internal and external stakeholders (Murphy 1995). Nowadays, the existence of code of conduct is spread all over the world. However, the proportion is not the same among the countries (Langlois and Schlegelmilch 1990; Skouloudis et al. 2011). The corporations in the countries of Southeast Europe like Greece, Italy, Portugal, and Spain have developed code of conduct later than those in Northwest Europe (UK, France, Germany, Netherlands) (Albareda et al. 2007). Indicatively, Langlois and Schlegelmilch (1990) had recognized that European companies in total were almost 10 years late than American companies since the proportion of the first with codes was 41% and the second was 75% in the mid of 1980s.

Langlois and Schlegelmilch (1990) identified three kinds of codes in use in Europe and the USA: (1) regulatory documents giving specific advice on behavior and conduct; (b) short, broad creeds including statements of aims or values; and (3) elaborate codes covering social responsibility to a set of stakeholders and many other topics. Regardless of the type chosen, generally good codes of conduct have certain characteristics. Codes should be accurate so that the behavior is expected or denied is easily understood. Codes should also be comprehensive so that reference to the code will aid in effecting the solution. Additionally, enforcement is essential in the long-term efficacy of the code. For most effective use of the code, it

should be publicized: If employees do not know of the existence of the code or that it might be helpful in solving a problem, the employee will not make use of it. Finally, codes should be continually revised to keep up with changes in law, politics, demographics, and technology (Payne and Dimanche 1996).

Literature Review

A host of ethical issues surrounds business. Research of ethical dilemmas faced by domestic US businesses has been conducted in areas of economic justice, marketing, corporate codes, corporate morality, and whistleblowing, just to name a few. The need for ethics in business is recognized by both consumers and businesses alike. Laczniak and Murphy (1991) reported several statistics that make such concern obvious: The majority of Americans believe that most businesspeople regularly participate in ethical transgressions, and 76% of the American public feel that a lack of business ethics in business managers contributed to the decline of US moral standards. French, German, and American managers have overly agreed that sound ethical practices are good business in the long run (McDonald and Zepp 1989).

Ethics in business is not an option – it is not only necessary but an absolute requirement for success. These remarks underline the importance of taking a long-term view of financial success and of the necessity of strong leadership and focus to develop a positive corporate culture (Pitts and Cooke 1991).

Attribution theory suggests that the root of an unethical behavior is the person himself and not the organization's environment. This view of seeing people as causal agents rather than facing environmental influences for ethical or unethical behavior could make code of conduct look meaningless (Messick and Bazerman 2001). However, a synthetic view where an unethical behavior could be a combination of person's character and environment's characteristics implies that a code of conduct has the power to send messages and influence toward the good direction. For those

with ethical personality, a code of conduct operates as a supportive tool for ethical behavior. For those who are looking for chances to act unethical, a code of ethics operates as a deterrent. Finally, for those who are in between, a code of ethics serves as a guide about the expected behavior in difficult situations. The fear of punishment or the expectation of a reward serves as motives for employees in companies with code of conduct. In general, the existence of a code of ethics sends the message that the company places some value on ethical attitude in company's functioning, and there may be consequences positive or negative based on an employee's behavior under certain conditions. The total absence of a code of ethics could be interpreted as lack of interest for any moral aspect in doing business by top management (Adams et al. 2001: 201).

Top management uses codes of conduct to send messages about its expectations of standards that go beyond behavior required by law. Thus, a code of conduct is a cornerstone for company's culture (Stevens 1994). However, it is at least of equal importance the level of respect to that code which has influence on employees' behavior and corporation's culture. Although there is a prestige around such a code especially in big companies, there are a lot of opinions regarding the effectiveness of these codes on perceptions and attitude of employees (Treviño and Nelson 2017) or even of employees' understanding and recall of specific messages of that code in a decision-making process (Weaver 1995).

The mere existence of a code of ethics is at first a good thing assuming that employees receive an initial message that ethics matter. However, this cannot serve as an assurance that top management has a great understanding of the kinds of difficulties that employees strive. Nevertheless, there could be negative consequences from the existence of a code of conduct. Some employees may feel that they can just follow the instruction of such a code and avoid understanding the complexity of a situation and find the best solution. A code of conduct may enhance a diffusion of responsibility among several people and lead to a lack of initiatives since an employee could feel safe behind words (Toffler 1991). In

this case, a gap between words and deeds may convert a code of conduct to a guide of inertia where avoiding responsibilities and risk of punishment is the best solution. However, Weber (1990) suggests that when an organization has no code of ethics, employees may behave less ethically inside the organization than what they usually do out of the office based on what their personality indicates because their personal beliefs could be overcome by company's culture.

A code of ethics enhances corporate ethical behavior by creating dialogue among employees about moral topics. In this case, a code of ethics along with a specific issue that may arise causes an exchange of ideas among colleagues hopefully prior of decision-making (Fisher 1993). Waters (1988) asserts that such discussion internally challenges top management to express its opinion and guidance. Carroll (1991) states that a formal code of conduct serves as a key symbol that senior management cares about ethical behavior. Adams et al. (2001: 208) support that the majority of employees in companies with an official code of conduct cannot recall any specific content of it, but they pay attention to its existence. Their findings indicate a different perception about business ethics between employees of companies having a code and employees of companies lacking a code.

It is true that employees of firms with an official code of conduct tend to behave more ethically rather than those in companies without an ethical code because they do not feel discouraged to do so. The code of conduct is also a manifestation from top management to employees and stakeholders about their principles and values (Adams et al. 2001: 208). It is noteworthy to be mentioned that Adams et al. found that the biggest differences in perceptions concerning business ethics were detected in senior management body of respondents from firms with ethical code versus those without an ethical code. The most important is the existence or not of an ethical code rather its content itself.

Greek Framework

The upgrading of the Greek capital market to mature market status, the entrance to eurozone in

2001, and the global competition for capital have boosted the corporate governance (CG) idea in Greece. The collapse of Greek stock market after 1999 created a lack of trust in investors from Greek companies. The Olympic Games of 2004 put the Greek market in the international spotlight, and the interest in investments in Greece was increased. The Greek economy sustained a high growth rate up to 2007 (Spanos 2005). The global crisis of 2007–2009 had as consequence a big recession period in Greece between 2009–2019 which is continued due to the pandemic of Covid-19.

Some of the major characteristics of the Greek market are as follows:

- (a) The high level of individualism of the Greeks.
- (b) The relations of interdependence among politicians, media groups, and economic interests.
- (c) The phenomenon of avoidance of tax payment. Aggressive tax avoidance in terms of transfer-pricing practices and formation of offshore companies has flourished in recent years, and the present tax reforms have taken into account such methods of tax avoidance. However, there is a plethora of opportunities for tax avoidance due to the existence of loopholes in the Greek tax system to take advantage of. This consists of the ultimate dilemma for any organization that claims a socially responsible operation and assures its stakeholders to be a good corporate citizen (Skouloudis et al. 2011).
- (d) Furthermore, Greek economic environment includes less large-sized firms and more small- and medium-sized enterprises (SMEs).
- (e) Traditionally, Greek companies were – and most of them remain – family owned. Family members are the owners, the board members, and company's executives. This kind of structure does not facilitate the development of ideas like CG and code of ethics since the owners feel that they keep the control of the organization and there is no need for these tools (Skouloudis et al. 2011). Thus, a global principle that applies in the Greek case is that smaller organizational size is associated

with less formalization in organizational procedures, including the adoption of a formal ethical code.

The discussion of CG in Greece is focused mainly on protecting individual and minority shareholders' interests that are practically cut off from the decision-making process of the firm. CG was first introduced in Greece in 1998 through an introductory paper published by the Athens Stock Exchange (ASE). A series of conferences and discussions led, then, to the adoption of a voluntary code of conduct in 1999 initiated by the Hellenic Capital Market Commission (HCMC) in collaboration with all relevant agents in the Greek economy. In May 2002, the Ministry of the Economy amended the corporate law and incorporated fundamental CG obligations. Moreover, the National and Kapodistrian University of Athens has established a rating system for the listed companies in Greece based solely on CG criteria. The legislative framework of the Greek capital market is now fully harmonized with the guidelines and directives of the EU. Although improvements in CG have occurred in Greece, they are mainly confined to a small number of large, listed companies that are more in tune with the international corporate stage (Spanos 2005).

The main drivers for the adoption of code of conduct in Greece were (a) the example of multinational firms with branches in Greece and the ambition of their Greek competitors to obtain similar structure and performance, (b) the trend of private family-owned companies to be transformed to public listed companies because of their need for raising capital in the late 1990s, and (c) the unexpected capital market growth in the country in 1997–1999 and the following underperformance the next years 2000–2002. The efforts to restore investors' confidence and people's trust in the stock market included extensive discussions by specialists, scientists, businessmen, auditors, legal practitioners, etc., about a more transparent system of CG which should include a code of conduct among others.

A voluntary code of conduct with the title "Principles on Corporate Governance: Recommendations for Its Competitive Transformation"

was created by the ad hoc Committee on Corporate Governance 1999 which was in compliance with the Principles of Corporate Governance of the Organisation for Economic Co-operation and Development (OECD). There were 44 recommendations compiled on seven main categories:

1. The rights and obligations of shareholders
2. The equitable treatment of shareholders
3. The role of stakeholders in CG
4. Transparency and disclosure of information and auditing
5. The board of directors
6. The nonexecutive members of the board of directors
7. Executive management

The principles and best practice rules were closely modeled according to the OECD Principles of Corporate Governance (OECD 1999; Spanos 2005).

The Federation of Greek Industries (FGI) adopted the Principles of Corporate Governance for all companies, particularly for those listed on the ASE. However, the field of stakeholders' rights was excluded (Skouloudis et al. 2011).

In May 2002, the Greek Ministry of the Economy in its effort to improve a corporate law (No. 3016/2002) added a subset of the principles that were contained in the previous voluntary code. This effort met strong opposition by industrial federations. FGI had suggested that the codes on internal governance should remain voluntarily and the regulator should refrain from legal enforcement (Florou and Galarniotis 2007).

The effort to reform corporate governance has only recently grown in Greece, where legislators and business people are struggling to reform a corporate culture that has been highly centralized around government affairs since the inception of the modern Greek state. (Mertzanis 2001)

The code of ethics is an internal policy instrument to help employees in ethical decision-making. The introduction of code of ethics developed by multinationals and other foreign companies established in Greece has overall upgraded the use of ethical policy instruments. Finally, the existing corporate culture is the

most crucial factor in affecting ethical behavior. Additionally, the top management's actions affect decision-making where there is an ambiguity or a dilemma with ethical dimensions (Siomkos et al. 2006).

At a national level, a cornerstone in the dissemination of code of conduct was the establishment of the Hellenic CSR network which belongs to the European CSR network. It was formed in Athens in June 2000 as a nonprofit organization by 13 companies and three business institutions. Its mission is to spread the ideas of sustainability in the Greek business world and the Greek society, including the development of the idea of code of conduct for corporations (CSR Hellas 2021).

Florou and Galarniotis (2007) examined the Greek companies listed in ASE regarding their CG mechanisms in place. They have identified three levels: the minimum requirements under Greek regulation correspond to the lower level; the incremental recommendations of the Greek code are categorized as the middle level; and the additional international best practices, prescribed by the UK Combined Code, indicate the higher level of CG. The findings portrayed that governance ratings of Greek companies increase with company size. Of the 274 companies out of 340 listed in ASE in 2003, 65.5% scored positively in relation to the minimum governance requirements of the national law (Florou and Galarniotis 2007). The last development is the establishment of the environmental, social, and governance (ESG) index in the ASE on August 2, 2021, which monitors 35 companies which are Coca-Cola, OTE, Alpha Bank, Eurobank, OPAP, Mytilineos, National Bank, PPC, Jumbo, Piraeus Bank, Titan, Motor Oil, GEK Terna, Terna Energy, Lamda Development, Hellenic Petroleum, EYDAP, Ellaktor, ADMIE, Sarantis, Viohalco, Fourlis, Hellenic Exchanges, Quest, Thrace Plastics, Crete Plastics, Aegean, ElvalHalcor, Piraeus Port Authority, Cenergy, European Reliance, Athens Medical, Plaisio, Alumil, and Inform Lycos. It is expected that the number of companies will reach 60 up to 2025 (ESG Reporting Guide 2019 2019).

Conclusions

Codes of conduct have not been widespread in Greek business world, and the level of uptake and diffusion differs from company to company. The slow rhythm of adoption of CSR initiatives by Greek firms of all sizes may reveal that "...Greek firms may not yet be convinced by the merits of corporate governance; instead, governance may still be viewed as an unavoidable cost" (Florou and Galarniotis 2007: 992). Especially SMEs have not proceeded with the adoption of codes of conduct (Florou and Galarniotis 2007: 992). It seems that the orientation of codes of conduct in Greek firms is to internal operations rather to external relations with their stakeholders (Skouloudis et al. 2011).

In general, the CSR concept and the idea of a code of conduct as a subset of it have a lot of space for further improvement in Greece. Only a few large firms have articulated a sound strategy for CSR and have embedded a code of conduct in it. A domestic firm's CSR agenda usually pertains to the responsibilities of the public relations, communications, or marketing departments and is mostly narrowed to charitable contribution or community donations. On the other hand, however, the recent establishment of leading sustainability indices in Greece (Accountability Rating, BITC CR index, Athex-ESG) suggests that CSR will make further headway in domestic business conduct and potentially lead to the introduction of socially responsible investment (SRI) funds in the domestic capital market in the long term (Skouloudis et al. 2011). However, there is a clear message that corporates should balance their intention for maximization of profit versus the interests of their stakeholders and take into consideration the global concerns for climate change and sustainable development.

Cross-References

- [Business Ethics](#)
- [Corporate Governance](#)
- [Corporate Social Responsibility](#)
- [Stakeholders](#)

References

- Adams, J. S., Tashchian, A., & Shore, T. H. (2001). Codes of ethics as signals for ethical behavior. *Journal of Business Ethics*, 29, 199–211.
- Albareda, L., Lozano, J. M., & Ysa, T. (2007). Public policies on corporate social responsibility: The role of governments in Europe. *Journal of Business Ethics*, 74(4), 391–407. <https://doi.org/10.1007/s10551-007-9514-1>.
- Arrow, K. J. (1973). Social responsibility and economic efficiency. *Public Policy*, 21, 303–318.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Cohen, K. A., & Stone, C. D. (1976). Where the law ends: The social control of corporate behavior. *Virginia Law Review*, 62(1), 259. <https://doi.org/10.2307/1072410>.
- CSR Hellas. <https://csrhellas.org/en/>. Assessed on 14 Sept 2021.
- DeGeorge, R. T. (1992). *Business Ethics* (3rd ed.). MacMillan.
- Eisenstein, L. (2020, July 1). *What is the difference between business ethics and social responsibility?* Board Effect. <https://www.boardeffect.com/blog/what-difference-between-business-ethics-social-responsibility/>
- ESG Reporting Guide 2019. (2019). Athens stock exchange. <https://www.athexgroup.gr/documents/10180/5665122/ENG-ESG+REPORTING+GUIDE/28a9a0e5-f72c-4084-9047-503717f2f3ff>
- Fisher, D. (1993). *Communication in organizations* (2nd ed.). Minneapolis: West Pub.
- Florou, A., & Galarniotis, A. (2007). Benchmarking Greek corporate governance against different standards. *Corporate Governance: An International Review*, 15(5), 979–998. <https://doi.org/10.1111/j.1467-8683.2007.00614.x>.
- Hall, S. S. J. (Ed.). (1992). *Ethics in hospitality management: A book of readings*. Educational Institute of the American Hotel & Motel Assoc
- Laczniak, G. R., & Murphy, P. E. (1991). Fostering ethical marketing decisions. *Journal of Business Ethics*, 10(4), 259–271. <https://doi.org/10.1007/BF00382965>.
- Langlois, C. C., & Schlegelmilch, B. B. (1990). Do corporate codes of ethics reflect national character? Evidence from Europe and the United States. *Journal of International Business Studies*, 21(4), 519–539.
- McDonald, G. M., & Zepp, R. A. (1989). Business ethics: Practical proposals. *Journal of Management Development*, 8(1), 55–66. <https://doi.org/10.1108/EUM000000001336>.
- Mertzanis, H. (2001). Principles of corporate governance in Greece. *Corporate Governance*, 9(2), 89–100. <https://doi.org/10.1111/1467-8683.00233>.
- Messick, D. M., & Bazerman, M. H. (2001). Ethical leadership and the psychology of decision making. In *Research in ethical issues in organizations* (Vol. 3, pp. 213–238). Emerald: MCB UP. [https://doi.org/10.1016/S1529-2096\(01\)03014-0](https://doi.org/10.1016/S1529-2096(01)03014-0).
- Murphy, P. E. (1995). Corporate ethics statements: Current status and future prospects. *Journal of Business Ethics*, 14, 727–740.
- OECD. (1999). *OECD principles of corporate governance*. Paris: OECD.
- Payne, D., & Dimanche, F. (1996). Towards a code of conduct for the tourism industry: An ethics model. *Journal of Business Ethics*, 15(9), 997–1007. <https://doi.org/10.1007/BF00705578>.
- Pitts, R. E., & Cooke, R. A. (1991). A realist view of marketing ethics. *Journal of Business Ethics*, 10(4), 243–244. <https://doi.org/10.1007/BF00382960>.
- Shaw, W. H., & Barry, V. E. (2016). *Moral issues in business* (13th ed.). Melbourne: Cengage Learning.
- Siomkos, G., Vassilikopoulou, A., Rigopoulou, E., & Stavrianea, A. (2006). Managers' and Consumers' perceptions of corporate social responsibility: Some empirical evidence and strategic marketing implications for private healthcare organizations. *European Journal of Social Sciences*, 2(2), 260–268.
- Skouloudis, A., Evangelinos, K., Nikolaou, I., & Filho, W. L. (2011). An overview of corporate social responsibility in Greece: Perceptions, developments and barriers to overcome. *Business Ethics: A European Review*, 20(2), 205–226. <https://doi.org/10.1111/j.1467-8608.2011.01619.x>.
- Spanos, L. J. (2005). Corporate governance in Greece: Developments and policy implications. *Corporate Governance: The International Journal of Business in Society*, 5(1), 15–30. <https://doi.org/10.1108/14720700510583430>.
- Stevens, B. (1994). An analysis of corporate ethical code studies: Where do we go from here? *Journal of Business Ethics*, 13, 63–69. <https://doi.org/10.1007/BF00877156>.
- Toffler, B. L. (Ed.). (1991). *Tough choices: Managers talk ethics*. New York: Wiley.
- Treviño, L. K., & Nelson, K. A. (2017). *Managing business ethics: Straight talk about how to do it right* (7th ed.). Hoboken: Wiley.
- Waters, J. A. (1988). Integrity management: Learning and implementing ethical principles in the workplace. In *Executive integrity*. San Francisco: Jossey-Bass.
- Weaver, G. R. (1995). Does ethics code design matter? Effects of ethics code rationales and sanctions on recipients' justice perceptions and content recall. *Journal of Business Ethics*, 14, 367–385.
- Weber, J. (1990). Managers' moral reasoning: Assessing their responses to three moral dilemmas. *Human Relations*, 43(7), 687–702. <https://doi.org/10.1177/001872679004300705>.
- Weiss, J. W. (1994). *Business ethics: A managerial, stakeholder approach*. Belmont: Wadsworth Pub. Co..

Codes of Ethics

► Codes of Conduct in Greece

Codes of Good Governance

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Synonyms

Best practices recommendations; Code of Best Practices for Corporate Governance; Guidelines for good corporate governance; Principles of good corporate governance

Definition

Codes of good governance are sets of recommendations and principles about the appropriate structure of the governing bodies of organizations and the proper behavior of the members of those governing bodies (Aguilera and Cuervo-Cazurra 2004; Cuomo et al. 2016). Their purpose is to recover the confidence of shareholders and investors in the transparency and efficiency of financial markets and in the governance systems of companies (Aguilera et al. 2016; Berglöf and Claessens 2006; Hermes et al. 2006).

Introduction

Over the past decades, the concern to find optimal models of corporate governance has resulted in the publication, both at a national level individually by each country and at an international level through various international bodies, of several codes of good governance.

Although codes of good governance have their origin in the United States at the end of the decade of the 1970s, their great development took

place from the Cadbury Report, published in the United Kingdom in 1992. Since the global financial crisis of 2007–2008, “the number of corporate governance codes has increased exponentially over time” (Cuomo et al. 2016, p. 222). The European Corporate Governance Institute (ECGI) provides a code database (<http://www.ecgi.org/codes/>), which is a comprehensive source of governance codes, principles, and recommendations in Europe and elsewhere (Adams 2017). Nowadays, there are codes of good governance in more than 100 countries (Adams 2017), with several updates over time in the most developed ones (e.g., the United Kingdom is the most active country with 13 updates of its good governance code) (Andrés and Santamaría 2018).

Codes of good governance are different from other forms of regulation in that they are not formally binding and mandatory (Haxhi and Aguilera 2012, p. 239). They are soft law or soft regulation, instead of hard law or hard regulations, such as the Sarbanes-Oxley Act of 2002. They are flexible in their application and have an evolutionary character (Haxhi and Aguilera 2012, p. 239). The voluntary and self-regulatory nature of the codes, as a regulatory characteristic in the field of corporate governance, is revealed through the mechanism for implementing these codes, which is usually based on the comply or explain principle (Haxhi and Aguilera 2012, p. 239), following the trend started in the United Kingdom with the Cadbury Code (1992) (Aguilera and Cuervo-Cazurra 2009; Reddy 2019). This principle implies that companies can comply with the recommendations or explain why they have not done so (Aguilera and Cuervo-Cazurra 2009; Aguilera et al. 2016). In such a way, companies are not required to adopt all the recommendations, but are only obliged to declare to what extent they have followed the principles of good governance and, in the case of not complying with them, explaining the reasons why they have not done so.

Therefore, in most legal systems, codes of good governance have no specific legal basis, and they are not legally binding (Wymeersch 2006; in Zattoni and Cuomo 2008). Only in a minority of countries, such as Germany, the

United Kingdom, or the Netherlands in the European context, the law explicitly recognizes legal consequences of the codes or their provisions (Zattoni and Cuomo 2008). Under this philosophy of comply or explain underlies the idea that there is no optimal governance structure that suits all companies – in Anglo-Saxon terminology “one size does not fit all.” In this vein, the objective is to allow companies some flexibility, that is, they can decide what structure of corporate governance to adopt for the best achievement of their objectives, while guaranteeing greater market transparency (Cuomo et al. 2016).

The degree of disclosure of compliance with the recommendations of the national codes differs among countries (Cuomo et al. 2016, p. 223): Disclosure of the adoption of the recommendation or explanation of non-adoption may be mandatory (i.e., voluntary adoption and mandatory disclosure) or voluntary (i.e., voluntary adoption and voluntary disclosure). Mandatory disclosure may be required by securities market regulators (such as in Australia, Canada, Estonia, Luxembourg, Malta, Malaysia, Russia, Singapore, and the United Kingdom) or by law (this is the case of several countries in the European Union (EU), such as Belgium, France, Germany, Italy, the Netherlands, and Spain, given that “from 2006, EU Directives state that companies listed on an EU listed market must publish a separate corporate governance statement in their annual report in order to mandatorily disclose their level of voluntary adoption of a legally non-binding code or to explain the reasons for non-compliance with it”) (Cuomo et al. 2016, p. 223).

Key Issues

The type of issuer of codes of good governance can be classified into six categories (Aguilera and Cuervo-Cazurra 2004, p. 421): “(1) Stock exchange, when the issuer is the stock exchange or the overseer of the stock exchange (Securities and Exchange Commission); (2) Government, when the issuer is the central or federal

government or one of its ministries; (3) Directors’ association, when the issuer is an association of directors; (4) Managers’ association, when the issuer is an association of managers; (5) Professional association, when the issuer is an association of accounting or legal professionals; and (6) Investors’ association, when the issuer is an institutional investor or an association of investors.” These authors “show that the type of institutional pressure to adopt the recommendations provided by codes varies with the type of issuer: it is a coercive pressure when codes are issued by the stock exchange or investors, a mimetic pressure when codes are issued by a managers’ association, and a normative pressure when they are issued by the remaining types of issuers” (Cuomo et al. 2016, p. 223).

The design of corporate governance codes can be developed “at three hierarchical levels: international, national and individual firm level” (Cuomo et al. 2016, p. 223). In this sense, since 1996, several transnational organizations have designed several codes with the objective of improving the corporate governance of multiple countries. Its character, therefore, is more general than that of the codes promulgated at the national level. Among the institutions that have been responsible for the development of these codes are the International Corporate Governance Network (International Corporate Governance Network), the Organization for Economic Cooperation and Development (OECD), and various European organizations. The World Bank and the International Monetary Fund have also been involved in the governance of nations at an international level, although their work has consisted in the preparation of reports on corporate practices in the area of good governance and they have not drafted codes in the strict sense.

The content of the codes of good governance has been strongly influenced by the studies and practices of corporate governance (Zattoni and Cuomo 2008; Andrés and Santamaría 2018). Its starting point is very heterogeneous depending on the legal and institutional environment of each country, and, therefore, its study cannot be done outside the cultural, political-social, and

economic context where the company operates. Codes address important aspects such as the equality of all shareholders, clear accountability on the part of directors and managers, transparency in financial and nonfinancial reports, the interests of all stakeholders, and compliance with law (Gregory and Simmelkjaer 2002; Coombes and Wong 2004).

The recommendations of codes of good governance can be grouped into three main blocks: first, recommendations about committees, the shareholding structure, and the control groups; second, recommendations on the audit process and financial information; and, third, recommendations aimed at the structure and responsibility of the board of directors. The core of the codes is found in the recommendations referring to the board of directors. For instance, about 75% of the recommendations included in the recent codes of good government published by the United States, the United Kingdom, Japan, Germany, France, Italy, and Spain focus on the board of directors (composition, responsibilities of boards, configuration in committees) (Andrés and Santamaría 2018). Following the dominant approach of agency theory (Jensen and Meckling 1976; Fama and Jensen 1983), codes of good governance encourage boards to play an active and independent role in the control of managers (Zattoni and Cuomo 2008, p. 4). In general, academics and professionals recommend to increase the number of non-executive directors and have a clear separation of powers to guarantee the independence of the board, the creation of committees (e.g., appointment, remuneration, and audit committees) composed of independent non-executive directors, and the development of board evaluation procedures. The introduction of these practices is considered a necessary factor to avoid government problems of governance and to increase the performance of the board and of the company (Zattoni and Cuomo 2008, p. 4).

The effective dedication of directors to their roles is articulated in the codes through three types of recommendations (Andrés and Santamaría 2018, p. 120): a first group of general recommendations about the need for directors to

devote sufficient time to carry out their functions; a second group of recommendations referred to the number of annual meetings of the board; and a third type of recommendations that focuses on setting limits to the number of positions that the same director can occupy in other companies. In general, the codes of good governance also address, although in a very generic way, the issue of the diversity of the board of directors (e.g., age, gender, nationality, ethnic origin), paying special attention to gender diversity.

The transnational institutions have promoted the convergence of government practices with the objective of regulating markets and protecting investors (Aguilera and Cuervo-Cazurra 2009). In this vein, European unification has contributed to the convergence in governance (Reid 2003; Hermes et al. 2006, 2007), particularly through its Communication 284 (COM-284) of 2003, which addresses how to improve corporate governance in the European Union while providing specific governance recommendations, such as the strengthening of shareholders' rights, the greater disclosure of accounting information, as well as the modernization of boards of directors. Although codes of good governance are adopted at the national level, Directive 2006/46/EC of the European Commission promotes its application by requiring listed companies to refer to a code in their corporate reports on the principle of comply or explain. In 2011, the Commission approved a Green Paper through its Communication 164 (COM-164), with the aim of assessing the effectiveness of the current governance framework of European companies, in order to ensure sustainable growth and to build a strong international financial system. At this moment, corporate governance regulations at the European level are being revised as a consequence of that Green Paper and, subsequently, of the Action Plan of December 2012, as a result of which the Commission has already issued a Directive Proposal, amending Directive 2007/36/EC to favor the long-term involvement of shareholders, and a Recommendation on the Quality of Corporate Governance Reporting (comply or explain). In 2015, the G20/OECD

Principles were issued. Recently, the OECD has published the OECD Corporate Governance Factbook (the Factbook). “This 2019 edition of the OECD Corporate Governance Factbook provides a unique source for understanding how the G20/OECD Principles of Corporate Governance (the G20/OECD Principles) are implemented around the world. By providing comparative information across 49 jurisdictions including all OECD, G20 and Financial Stability Board members, the Factbook supports informed policymaking based on up-to-date information on the variety of ways in which different countries throughout the world translate the G20/OECD Principles’ recommendations into their own legal and regulatory frameworks” (OECD 2019, p. 9).

Another important question related to codes of good governance is the legal environment in which they are created. In this vein, the classification of financial systems based on their legal origin takes on special relevance (La Porta et al. 1998). It is possible to distinguish two types of countries: those framed within Anglo-Saxon law or common law legal tradition and those framed within continental law or civil law legal tradition, which in turn can be subdivided into three major legal traditions, the French, the Scandinavian, and the German. The content of the codes of good governance depends on the legal and institutional environment of each country through the legal protection it confers to investors. Empirical evidence suggests that codes of good corporate governance arise as a response to poor legal protection, trying to alleviate their shortcomings. In a global scenario in which increasingly integrated and globalized financial markets assume greater levels of prominence, codes of good governance seek to improve corporate governance when the external discipline of markets and the legal environment are insufficient to guarantee that the management team pursue the maximization of the wealth of firm owners. In this sense, López and Pereira (2006) conclude that civil law countries, where legal protection to investors is lower than in common law countries, incorporate into their codes of good governance a greater number of specifications than common

law countries, consistent with the idea that codes arise with the aim of correcting the deficiencies of the legal and institutional environment in which companies operate. On the other hand, Aguilera and Cuervo-Cazurra (2004), after analyzing the codes of 49 countries, conclude that they are more likely to be enacted where there is weak legal protection of shareholder rights, high governance liberalization, and a high presence of foreign institutional investors. However, contrary to their expectations, they find that countries with more effective systems of governance in terms of legal protection, that is, those that follow the tradition of common law, are more likely to continue improving their governance practices and develop new ones. As the authors point out, this finding could suggest that the efforts of some countries to improve the protection of their investors’ rights and improve their corporate governance are not a static practice but rather a dynamic process in which governance recommendations are reviewed and improved, meeting new business realities. Nevertheless, and in spite of the differences indicated, corporate governance recommendations converge toward the practices of the Anglo-Saxon markets. The study of Kabach-Castro and Crespi-Cladera (2011) compares the codes of good governance of Spain, Germany, and the United Kingdom and shows their remarkable similarities, despite being framed in legal systems of a very different tradition – French civil law, German civil law, and common law, respectively. However, they point out that the main difference found is in the explanations of the “non-compliance” of the rules, based fundamentally on the ownership structures (see, e.g., Aguilera et al. (2016) to deepen on the importance of ownership structure for the development of codes of good governance). Cicon et al. (2012) conclude that the difference and changes in codes of good governance across 23 European countries are explained by the strength of the legal protection and the type of issuer (Cuomo et al. 2016). Bosáková et al. (2019), after reviewing 11 codes of good governance from 17 developing and emerging countries, conclude that, when deciding the content of corporate governance recommendations,

each country must consider its particular characteristics in terms of political, legal, economic, and sociocultural environment.

Future Directions

Recent studies show that more regulation is needed to improve corporate governance practices (Cuomo et al. 2016). The current and future trends seem to point to increasingly specific regulations, that is, the development of good governance codes considering the institutional context and specific factors of the companies to which their recommendations are addressed, such as their ownership structure, size, sector of activity, etc. (Adams 2017; Aguilera et al. 2016; Andrés and Santamaría 2018).

An issue that has sparked a great debate in the field of international corporate governance refers to whether countries should impose hard mandatory regulations, as in the United States with the Sarbanes-Oxley Act (2002) and more recently the Dodd-Frank Act (2010), or if, on the contrary, soft regulation of a voluntary nature, such as that included in the codes of good governance, is sufficiently effective to improve existing governance practices and transparency and corporate responsibility (Aguilera and Cuervo-Cazurra 2009). In this regard, empirical evidence is not conclusive. From the academic field, the effectiveness of both types of regulations varying across different contexts has been highlighted. Further research is needed in order to investigate the effectiveness of both approaches and even the adoption of a hybrid system that combines both forms of regulations.

Cross-References

- ▶ [Corporate Codes of Conduct](#)
- ▶ [Corporate Governance](#)
- ▶ [Corporate Governance, Measurement of](#)
- ▶ [CSR and Role of Government as a Regulator](#)
- ▶ [European Corporate Governance Institute](#)

References

- Adams, R. B. (2017). Boards, and the directors who sit on them. In *The handbook of the economics of corporate governance* (Vol. 1, pp. 291–382). North-Holland.
- Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: What is the trigger? *Organization Studies*, 25(3), 415–443.
- Aguilera, R. V., & Cuervo-Cazurra, A. (2009). Codes of good governance. *Corporate Governance: An International Review*, 17(3), 376–387.
- Aguilera, R. V., Florackis, C., & Kim, H. (2016). Advancing the corporate governance research agenda. *Corporate Governance: An International Review*, 24(3), 172–180.
- Andrés, P., & Santamaría, M. (2018). Del consejo de administración a los códigos de buen gobierno: un paseo por la literatura académica. *The Economist*, 158, 106–125.
- Berglöf, E., & Claessens, S. (2006). Enforcement and good corporate governance in developing countries and transition economies. *The World Bank Research Observer*, 21(1), 123–150.
- Bosáková, I., Kubiček, A., & Strouhal, J. (2019). Governance codes in the developing and emerging countries: Do they look for the international role model? *Economics & Sociology*, 12(3), 251–272.
- Cadbury, A. (1992). *The financial aspects of corporate governance – A report of the committee on corporate governance*. London: Gee and Co.
- Cicon, J. E., Ferris, S. P., Kammell, A. J., & Noronha, G. (2012). European corporate governance: a thematic analysis of national codes of governance. *European Financial Management*, 18(4), 620–648.
- Coombes, P., & Wong, S. C. Y. (2004). Why codes of governance work. *The McKinsey Quarterly*, 2, 48–53.
- Cuomo, F., Mallin, C., & Zattoni, A. (2016). Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 24(3), 222–241.
- Dodd-Frank Act, United States. Congress. (2010). *Dodd-frank wall street reform and consumer protection act: conference report* (to Accompany HR 4173) (Vol. 111, No. 517). US Government Printing Office.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.
- Gregory, J. H. & Simmelkjaer, T. R. (2002). *Comparative study of corporate governance codes relevant to the European Union and its member states*. New York: Weil, Gotshal & Manges LLP.
- Haxhi, I., & Aguilera, R. V. (2012). Are codes fostering convergence in corporate governance? An institutional perspective. In *The convergence of corporate governance* (pp. 234–248). London: Palgrave Macmillan.
- Hermes, N., Postma, T. J., & Zivkov, O. (2006). Corporate governance codes in the European Union: Are they

- driven by external or domestic forces? *International Journal of Managerial Finance*, 2(4), 280–301.
- Hermes, N., Postma, T. J., & Zivkov, O. (2007). Corporate governance codes and their contents: An analysis of eastern European codes. *Journal for East European Management Studies*, 12, 53–74.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kabach-Castro, L. R., & Crespi-Cladera, R. (2011). Understanding non-compliance with corporate governance codes: Evidence from Europe. In *Academy of management proceedings* (Vol. 2011, no. 1, pp. 1–7). New York: Academy of Management.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155.
- López, F. J. I., & Pereira, M. L. (2006). Análisis internacional de los códigos de buen gobierno. *Universia Business Review*, 11, 10–21.
- OECD. (2019). OECD Corporate Governance Factbook 2019. www.oecd.org/corporate/corporate-governance-factbook.htm
- Reddy, B. V. (2019). Thinking outside the box—eliminating the perniciousness of box-ticking in the new corporate governance code. *The Modern Law Review*, 82(4), 692–726.
- Reid, A. S. (2003). The internationalization of corporate governance codes of conduct. *Business Law Review*, 24, 233–238.
- Sarbanes, P. (2002). Sarbanes-Oxley act of 2002. In *The public company accounting reform and investor protection act*. Washington, DC: US Congress.
- Wymeersch, E. (2006). *Corporate governance codes and their implementation*. Working Paper N° 10, Financial Law Institute, Universiteit Gent.
- Zattoni, A., & Cuomo, F. (2008). Why adopt codes of good governance? A comparison of institutional and efficiency perspectives. *Corporate Governance: An International Review*, 16(1), 1–15.

Coercive Measures

► Economic Sanctions

Collaboration

- Cooperation and Open Innovation
- Power Equalizing

Collaborative Consumption

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Synonyms

Access economy; Access-based consumption; Gift economy; Gig economy; Peer-to-peer economy; Sharing economy; Social sharing; We-conomy

Definition

In recent years, the concept of collaborative consumption which has shifted the attitudes of individuals towards consumption received a burgeoning interest among scholars and appeared as an appealing alternate for consumers (Botsman and Rogers 2010). There exist several different terminologies that capture the diverse features of the phenomenon and can be interchangeably used for collaborative consumption in the pertinent literature such as sharing economy, gift economy, gig economy, peer-to-peer economy, social sharing, and access economy (Belk 2014; Dredge and Gyimóthy 2015). Collaborative consumption has been emerged as a new consumption paradigm, drawing a considerable attention of both consumers and entrepreneurs due to the heightened concerns over economic crisis and environmental conservation (Tussyadiah 2015). Owing to collaborative consumption, consumers get access to goods they necessitate for a limited time period rather than purchasing or owning them (Bardhi and Eckhardt 2012). In that vein, collaborative consumption can be defined as “a form of consumption where people coordinate the acquisition of a resource for a (monetary or non-monetary) compensation” (Belk 2014, p. 1597). In a parallel vein, Bardhi and Eckhardt (2012, p. 881) have defined market-mediated access-based consumption as “the transactions that may be market mediated in which no transfer of ownership

takes place.” In addition, Benkler (2004) explains collaborative consumption activities as “non-reciprocal pro-social behavior,” referring to the collaborative acts of individuals regardless of the existence of any potential reciprocal exchange in future. Similarly, Botsman (2014) defines collaborative consumption as “a system activating the untapped value of assets through models and marketplaces that enable greater efficiency and access” (p. 24).

Key Issues

Given the benefits of collaborative consumption models, individuals gain access to goods without paying higher costs and taking responsibility stemmed from the ownership (Hartl et al. 2016). In this sense, collaborative consumption offering a wide range of several sharing exchanges in a variety of business fields, transport (e.g., car sharing like Uber), accommodation (e.g., house sharing like AirBnB), entertainment (e.g., file sharing like Soulseek), and food (e.g., communal gardens like Revolv). Key underlying features of collaborative consumption platforms can be listed as: (1) *access over ownership*, referring to the getting access to the goods regardless of owning or purchasing them; (2) *peer to peer*, implying to the transactions among peers mediated by digital platforms; and (3) *distribution of ineffective resources*, meaning to the sharing owned but idle resources to the access of everyone via monetary and non-monetary transactions (Constantiou et al. 2017).

In the light of these considerations, there appears to be three main players engaged in collaborative consumption transactions: (a) *the online platform*, which serves as a intermediary that sets demand with the supply in terms of different sharing options such as renting, hiring, swapping and provides a number of complementary services for both providers and consumers such as instant messaging, reviews, and ratings; (b) *peer providers*, involving individuals or companies that intend to share or exchange the goods or services for consumers; (c) *peer consumers*, that are the beneficiaries of shared or exchanged

goods or services and engaging in collaborative consumption activities provided by P2P internet-based platforms with an aim of accessing goods/services for environmental or economic purposes (European Commission 2016; Hausemer et al. 2017; OECD 2016).

Besides, another critical issue from the perspective of consumer policy is to distinguish the collaborative consumption activities regarding the level of market mediation such as non-monetary and monetary transactions. While the former depends upon sharing systems and having access for goods/services for free (e.g., sharing systems like Couchsurfing), the latter provides access to goods/services with monetary purposes (e.g., renting systems like AirBnB) (Bardhi and Eckhardt 2012). On the other hand, collaborative consumption platforms can be also classified as sequential (i.e., exploiting from goods/services at different times) or simultaneous (i.e., exploiting from goods/services simultaneously by providers and consumers) (Scholl et al. 2015). According to the report of European Commission (2016), five key industries of collaborative consumption involves: (a) *resale of goods*, consisting of selling or purchasing used goods from other individuals such as Gumtree in the United Kingdom, Car24 in Bulgaria, Modacruz in Turkey; (b) *sharing/renting goods*, referring to the sharing or renting of goods from other individuals such as Letgo in Turkey, Trovit in the United Kingdom; (c) *sharing/renting accommodation*, comprising services for different purposes such as long-term periods (e.g., Sahibinden.com in Turkey), short-term period for vacation (e.g., Trumpam in Lithuania), specific hobbies (e.g., Campinmygarden in Greece), flat sharing (e.g., Appartager in France); (d) *sharing/hiding rides*, offering well-known examples of collaborative consumption such as car sharing (e.g., Uber, Lyft, BlaBlaCar), motorbike sharing (e.g., Relay Riders); and (e) *odd jobs*, meaning to the hiring of non-professional to do odd jobs and consisting of a wide range of services such as teaching (e.g., Cambly), dog sitting (e.g., Housemydog in Ireland), or various services such as cleaning, writing, photography (e.g., Armut in Turkey).

The Historical Evolution of the Concept

The notion of collaborative consumption was first emerged in the study of Felson and Spaeth (1978), indicating the acts of collaborative consumption including “the events in which one or more persons consume economic goods or services in the process of engaging in joint activities with one or more others” (p. 614). Nevertheless, there was no evidence of intermediaries, as it has been published 20 years before the Internet (Gyimóthy and Dredge 2017). In this regard, Botsman and Rogers (2011) have first mentioned about the mediated mechanisms for collaborative consumption models via monetizing the transactions among peers, involving broader range of activities such as bartering, sharing, lending, trading, gifting, and swapping. However, Belk (2014) contradicts with their arguments via declaring that some activities in their study do not involve monetary transactions such as “Couchsurfing” and redefines the concept as “people coordinating the acquisition and distribution of a resource for a fee or other compensation” (p. 1597). Overall, it is obvious that this term has a wide variety of meaning and there exist still various conflictions related to the conceptualization, coverage, and the meaning of the phenomenon in the pertinent literature (Gyimóthy and Dredge 2017).

Summary

The collaborative economy, as a disruptive body of innovation shifting the rules of game, has radically changed the traditional ways of consumption and received a great deal of attention from both scholars and practitioners in recent years (Walsh 2011). This entry was endeavored to explore the historical roots and definitions of collaborative consumption, putting special emphasis on its different types, key actors, and the level of market mediation via providing wide range of examples from distinct industries in which collaborative consumption activities actively engage. This new era of consumption embodies distinctive motivations, including

economic, social, ecological drivers that stimulate consumers to engage in collaborative consumption activities.

Cross-References

- Carpooling
- Collaborative Economy
- Responsible Consumption
- Sharing Economy

References

- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881–898.
- Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595–1600.
- Benkler, Y. (2004). Sharing nicely: On shareable goods and the emergence of sharing as a modality of economic production. *Yale LJ*, 114, 273.
- Botsman, R. (2014). Collaborative economy services: Changing the way we travel. <http://www.collaborativeconsumption.com/2014/06/25/collaborative-economy-services-changing-the-way-we-travel/>.
- Botsman, R., & Rogers, R. (2010). Beyond zipcar: Collaborative consumption. *Harvard Business Review*, 88(10), 30.
- Botsman, R., & Rogers, R. (2011). *What's mine is yours*. New York: Collins.
- Constantiou, I., Marton, A., & Tuunainen, V. K. (2017). Four models of sharing economy platforms. *MIS Quarterly Executive*, 16(4), 231–251.
- Dredge, D., & Gyimóthy, S. (2015). The collaborative economy and tourism: Critical perspectives, questionable claims and silenced voices. *Tourism Recreation Research*, 40(3), 286–302.
- European Commission, (2016). Synopsis report on the public consultation on the regulatory environment for platforms, online intermediaries, data and cloud computing and the collaborative economy. <https://ec.europa.eu/digital-singlemarket/en/news/public-consultation-regulatory-environment-platforms-onlineintermediaries-data-and-cloud>.
- Felson, M., & Spaeth, J. L. (1978). Community structure and collaborative consumption: A routine activity approach. *American Behavioral Scientist*, 21(4), 614–624.
- Gyimóthy, S., & Dredge, D. (2017). Definitions and mapping the landscape in the collaborative economy. In D. Dredge & S. Gyimóthy (Eds.), *Collaborative economy and tourism* (pp. 15–30). Cham: Springer.
- Hartl, B., Hofmann, E., & Kirchler, E. (2016). Do we need rules for “what’s mine is yours”? Governance in

- collaborative consumption communities. *Journal of Business Research*, 69(8), 2756–2763.
- Hausemer, P., Rzepecka, J., Dragulin, M., Vitiello, S., Rabuel, L., Nunu, M., Rodriguez Diaz, A., Psaila, E., Fiorentini, S., Fiorentini, S., Gysen, S., Meeusen, T., Quaschnig, S., Dunne, A., Grinevich, V., Huber, F., & Baines, L. (2017). *Exploratory study of consumer issues in peer-to-peer platform markets*. Publications Office of the European Union.
- OECD. (2016). Consumer protection in E-commerce. OECD Recommendation. <http://www.oecd.org/sti/consumer/ECommerce-Recommendation-2016.pdf>
- Scholl, G., Behrendt, S., Flick, C., Gossen, M., Henseling, C., Richter, L. (2015). Peer-to-peer sharing, Definition und Bestandsaufnahme. PeerSharingArbeitsbericht. http://www.peer-sharing.de/data/peersharing/user_upload/Datien/PeerSharing_Ergebnispapier.pdf
- Tussyadiah, I. (2015). An exploratory on drivers and deterrents of collaborative consumption in travel. In I. Tussyadiah & A. Inversini (Eds.), *Information & Communication Technologies in tourism 2015*. Cham: Springer International Publishing.
- Walsh, B. (2011). 10 ideas that will change the world. Time. http://content.time.com/time/specials/packages/article/0,28804,2059521_2059717_2059710,00.html

Collaborative Economy

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Synonyms

Collaborative consumption; Community consumption; Peer-to-peer-based sharing; Shared economy

Definition

Sharing economy is about the economy of sharing. Instead of ownership, the focus is on the (usually) temporary consumption of a good. Since several people can usually use one and the same good, the term “collaborative consumption” (Bendel, 2021; Cheng, 2016) or collaborative economy is also used. The term “peer-to-peer-based sharing” is also used, which focuses on

the interaction between provider and customer (Ludman, 2018, p.9). The sharing economy has gained a special dynamic through digitization.

Maintext

The term “sharing economy” (shared economy, collaborative economy, collaborative consumption, peer-to-peer-based sharing, community consumption) is closely related to the economy of sharing. Alternative terms are collaborative economy or consumption or community consumption is also spoken of. The concept of the sharing economy was coined by the American economist Martin Weitzman (Weitzman, 1984). In the meaning of collaborative consumption, the term was established in 2008 (Lessig, 2008, pp. 143 ff.).

The sharing economy focuses on economic activities related to the sharing of goods. These goods can be products, services, resources, or information such as knowledge. In practice, this can be, for example, cars, holiday apartments, areas, books, data, or many other goods. These are made available to consumers as the first economic “service” by suppliers. The second economic “service” is the bringing together and networking of suppliers of goods and the respective consumers. The economic advantage of the sharing economy is a better distribution of existing capacities through better organization and control of supply and demand.

When considering the economy of sharing, it should be added that the respective goods must be available. Specifically this means that products are usable and useful. One of the considerations is the basic idea of renouncing property. Think of the example of car sharing: The user of a good – for example, the driver of a car – takes it for a limited period of time, for example, for the journey from point A to point B. He takes possession of the car. At the same time, however, he waives ownership of the car, which continues to belong to the car sharing provider.

It is clear that the sharing economy is characterized by enormous heterogeneity. Not only the considered goods can be very different. The

variety of providers of the goods can be, for example, private individuals, companies, interest groups, institutions, or the state. As a so-called platform provider, a company can only aim to bring providers and buyers together by providing a (technical) infrastructure (e.g. an exchange platform) within the framework of so-called P2P platforms (peer-to-peer). Alternatively, a company can offer goods itself as a supplier (e.g. a car), conceivable ways to other companies (B2B/business-to-business), and alternatively to private individuals (B2C platforms/business-to-consumer). The heterogeneity can also be seen, for example, in whether services are (supposedly) offered free of charge (think of the bookcases in some city centers where citizens make books available to interested readers free of charge). On the other hand, provision or mediation may be subject to a fee. Sharing economy covers many sectors and industries (European Commission, 2022). Examples are food, financial, mobility, travel, logistics, work, or education (Puschmann & Alt, 2016, p.2).

Topicality of the Sharing Economy

It should be noted that the sharing economy itself is nothing new. Everyone knows a library – and in principle a library is based on the concept of the sharing economy. A ride-sharing agency is not an invention of recent years. Think of the cooperative model (“Genossenschaft”) that has been established in German-speaking countries since the Middle Ages (DGRV, 2022). What is new today and at the same time massively supports the sharing economy are the opportunities of digitization. Online platforms, (mobile) internet, or social media greatly simplify the networking of suppliers and buyers (Puschmann & Alt, 2016, pp.1 ff.). A worldwide network enables the provision and use of goods significantly. In the economic sense, it can be stated that the costs of organizing the part – of transactions – have fallen significantly as a result of technological achievements. This has contributed to the triumph of new business models in almost all areas of life – think of apartment brokerage, dating, logistics, public

transport in the cities, and the sharing of time and experiences such as the photos of the last vacation trip. Other impacts besides digitization are the focus on ecological impacts, sustainability, or a better value distribution in the supply chain (Cheng, 2016, p.60).

Critical Appraisal of the Sharing Economy

As diverse as the sharing economy is, so different and controversial is the discussion about its advantages and disadvantages. In regard to the companies, it can be seen that the sharing economy and the increased usability resulting from digitization have resulted in a large number of new business models (Cheng, 2016, p.1). Think of the possibility of renting apartments from private individuals for a day or two instead of a hotel almost anywhere in the world, or the flexibility of private individuals taking you in their own car for a fee in a city so you do not need to rely on a taxi. These two companies have experienced enormous economic growth in recent years. New business models for bringing together suppliers and demand create new business opportunities for companies. And the collection of data is also an important business model that is made possible by the sharing economy. Sharing economy can be a source of innovation and new business opportunities (European Commission, 2022).

If you look at already established companies – the example of the hotel industry makes it clear – this “new” competition certainly promotes the incentive to constantly develop as a company in order to be able to continue to welcome guests. Through special (new) service, higher quality, or other things, it is important that companies remain competitive when they are threatened by new companies entering their market segment thanks to the principle of the sharing economy. To put it positively, competition stimulates “business” and forces established companies not to stand still but to develop further. In other words, the sharing economy also increases productivity through established competitive incentives.

One of the points of criticism of the sharing economy is from the point of view of companies: due to the forced structural change, tried-and-tested business models have to be changed – for example, because owning a car is no longer as important as being able to use the car only when you need it. The added value also arises in a completely different place, namely less and less in the production of goods but perhaps “only” in the mediation. It becomes particularly difficult when there are different regulations for market access, i.e., when the requirements differ between a company in the sharing economy and an “old” company that aims at the same product: when a hotel has significantly stricter bureaucratic legal requirements (think about hygiene regulations), it is more expensive than a private provider that does not have to meet these requirements. Although in the example mentioned, the user regulates ex-post through negative customer feedback those providers who (in the example) offer an unhygienic place to sleep, the market access costs are nevertheless different. Disadvantaging established companies is a common criticism of the sharing economy. Under certain circumstances, this will in turn lead to new regulation by the state.

From the user’s point of view, the sharing economy can often be advantageous. Not only does the availability of services or products increase enormously – if you only “share” a car when you need it, it is significantly cheaper than parking your car in front of your house or workplace for most of the day. In addition, greater competition and rivalry can lead to increased price pressure and the use or consumption of a good becomes cheaper. Quantity, availability, and (possibly) a cheaper price can be an advantage for users of the sharing economy.

As a result of less resource requirements for the production of goods and the multiple use of goods, the sharing-economy is often supposed to be more sustainable resource and environmental protection are advantages from a social point of view. Last but not least, the sharing economy can also help to change consumer behavior: if things are available every day and everywhere, you may not need to own them – with the same positive effects on resource requirements.

On the other hand, there are critical approaches to the sharing economy. Platform operators are accused of exploiting their existing market power, not least to take advantage of established companies. Topics such as employee rights, remuneration, or protection against dismissal by companies in the sharing economy are also discussed. Another sensitive issue is the handling of user data from platform companies.

Summary

Sharing economy is about the sharing of goods. They are made available to consumers. Sharing economy connects suppliers of goods and consumers. The advantage is a better distribution of capacities. Nowadays sharing economy is characterized by enormous heterogeneity, regarding the goods or the providers. Nevertheless, sharing economy is nothing new. What is new are the opportunities of digitization and the importance of sustainability which do have a massive impact on sharing economy. In regard to the companies, sharing economy has resulted in a large number of new business models. Sharing economy is a source of innovation. It does stimulate old-fashioned business models and forces to becoming more innovative overall. Otherwise sharing economy forces structural change and comes together with many topics regarding market regulations, etc. From a user’s point of view sharing economy seems advantageous. The availability of services and products increases. By using less resource requirements it might have a positive impact on sustainability at all.

Cross-References

► [Carpooling](#)

References

Bendel, O. (2021). Sharing economy. Gabler Wirtschaftslexikon. <https://wirtschaftslexikon.gabler.de/>

[definition/sharing-economy-53876/version-384536](#).

Accessed April 26, 2022.

Cheng, M. (2016). Sharing economy: A review and agenda for future research. *International Journal of Hospitality Management*, 57, 60–70. <https://doi.org/10.1016/j.ijhm.2016.06.003>.

DGRV (Der Deutsche Genossenschafts- und Raiffeisenverband). (2022). Genossenschaften in Deutschland. DGRV - Deutscher Genossenschafts- und Raiffeisenverband e.V.. <https://www.genossenschaften.de/was-ist-eine-genossenschaft>.

Accessed April 26, 2022.

European Commission. (2022). Internal Market, Industry, Entrepreneurship and SMEs. https://ec.europa.eu/growth/single-market/single-market-services/collaborative-economy_en. Accessed April 26, 2022.

Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. New York: Penguin.

Ludman, S. (2018). Ökologie des Teilens – Bilanzierung der Umweltwirkungen des Peer-to-Peer Sharing. PeerSharing Arbeitsbericht 8. Berlin/Heidelberg: Institut für ökologische Wirtschaftsforschung (IÖW), IZT - Institut für Zukunftsstudien und Technologiebewertung, ifeu - Institut für Energie- und Umweltforschung Heidelberg.

Puschmann, T., & Alt, R. (2016). Sharing economy. *Business & Information Systems Engineering*, 58(1), 93–99. <https://doi.org/10.1007/s12599-015-0420-2>.

Weitzman, M. (1984). *The share economy: Conquering stagflation*. Cambridge: Harvard University Press.

Collaborative Governance

► Global Governance

Collaborative Leadership

► Inclusive Leadership

Collaborative Management

► Stakeholder Governance and Citizen Science

Collaborative Teamwork

► Collaborative Teamworking

Collaborative Teamworking

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Synonyms

[Collaborative teamwork](#)

Definition

Collaborative teamworking is satisfactory and productive problem-solving in a group process based on recognizing interdependent tasks and goals, conscious communication, and emergent knowledge building.

Introduction

Teamwork has been a standard in organizations for many years. The use of teams can be traced back to the early twentieth century with the introduction of the assembly line in manufacturing. Rapid technological advancements, the growing need for collaboration between highly specialized professionals, and the economic demands to increase productivity have constantly changed how organizations run their operations. Teamworking in various fields, including business, education, and health care, has many advantages, such as bringing together the expertise of diverse people, allowing for shared responsibility in making decisions, and providing access to more resources and ideas. In working life, the word team is often used as a synonym or general term for all work groups. A *team* may be defined as a community formed by individuals constantly interacting with each other or a group with common goals. Teams can be set up to manage continuous tasks or production, or on the other hand, for only a specific task for a limited life span.

The concept of teamwork began to gain widespread acceptance in the 1980s and 1990s as companies began to realize the benefits of

collaboration and cooperation in achieving business goals (Guzzo and Dickson 1996; Parker 2008; Salas et al. 2000). The rise of technology and the Internet have also made it easier for teams to collaborate remotely, further increasing the prevalence of teams in organizations. In addition, to tackle problems that are too complex for individuals to address alone, organizations have responded by forming teams to accomplish them (Cannon-Bowers and Salas 1998). Particularly solving today's wicked problems requires challenging linear thinking and mechanistic solutions (Grewatsch et al. 2021). Organizations can achieve this by creating collaborative teams not bound by hierarchical structures, siloed resources, and rigid roles but in contrast by embracing the team members' various perspectives and skills and by recognizing the interdependence of different tasks and goals (Parker 2008). Collaborative teams often adopt a systems thinking approach to identify the interconnectedness of different aspects of the issue and how they interact (Grewatsch et al. 2021). Additionally, collaborative teams aim to create shared value (Porter and Kramer 2019), benefiting all stakeholders, not just one group or individual. Efficient collaboration requires open, respectful, and concise communication. Furthermore, positive synergy in teamwork allows emergent knowledge building, which is necessary for innovations (Goold and Campbell 1998). When correctly performed, collaborative teamworking is both satisfactory and productive problem-solving in a group process based on shared values and an awareness of a common purpose (Adler and Heckscher 2018).

Teamwork and Collaboration

In the research literature, the definitions of teamwork vary. On the one hand, teamwork is understood as contradictory or difficult to define; on the other hand, as a clear and specific phenomenon. Sometimes a team is referred to as a cooperative or collaborative experience, but it can also refer to an organizational structure to accomplish a task. A team can be defined as two or more people, with clearly defined roles and tasks, working together

to achieve a common goal, which requires responsive and adaptive cooperation (Salas et al. 2000). A commonly used definition for a team has been provided by Katzenbach and Smith (2005, 165): "A team is a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable."

Since the 1990s, a growing amount of teamworking has been done virtually. Online communication platforms have provided greater flexibility and global reach for organizations. Virtual teams can include people from multiple locations. However, whether in an online or physical workplace, the team's duties and responsibilities remain the same, requiring effective communication, teambuilding skills, and knowledge management (Holton 2001). Teams are always composed of individuals who rely on each other to obtain a common goal or complete an assigned task (Parker 2008). So, even though a virtual team consists of members located in different places or have different schedules, they still must be motivated by a shared sense of purpose and clearly communicated tasks and roles (Adler and Heckscher 2018; Holton 2001).

The definition of *collaboration* is sometimes close to identical compared to teamwork. However, these can also be approached as two distinct concepts. While teamwork involves a group working together on completing a task or achieving a common goal, collaboration is when individuals with different expertise come together to solve a problem or create something new. Teamwork requires concise communication and clearly defined tasks and roles, but collaboration requires creativity guided by a clear sense of shared purpose, flexibility, and openness to see novel solutions (Adler and Heckscher 2018; Selznick 1957). Teamwork always includes cooperation at some level since achieving the agreed result requires dividing the work among the team members. On the other hand, problem-solving and innovations call for creative collaboration in which individuals can give unique perspectives and develop solutions to a problem in a generative process (Parker 2008).

The concept of synergy refers to the situation in which the combined effect of two or more things is greater than the sum of their individual effects. In the context of collaborative teamwork, synergy refers to the idea that a group of people working together can achieve more than they could individually. This can happen when team members bring different skills, perspectives, and ideas to the table and can work together productively. It can also describe the positive interaction between team members (Goold and Campbell 1998). When the ideas of collaboration and teamwork are combined, there is both individuality and cohesion in the group.

Interdependence

Interdependence refers to the reliance of one person or group on another person or group in order to achieve a common goal or objective. In the context of collaborative teamwork, interdependence means that each team member's actions and decisions affect the other members and that the success of the team as a whole depends on the contributions and cooperation of all its members. Interdependence can be positive or negative. Positive interdependence means that the success of one person or group is linked to the success of others, which can motivate team members to work together effectively. Negative interdependence means that the success of one person or group comes at the expense of others, which can lead to conflict and competition (Tjosvold 1986).

Collaborative teamwork is a dynamic process that necessarily involves interdependence among individuals. Mohrman, Cohen, and Mohrman (1995) state that the team members share goals and are mutually dependent in accomplishing them. However, the interdependence scale may vary in different teams concerning their tasks and goals. Thus, Thompson (1967) has identified three types of interdependence – pooled, sequential, and reciprocal – to illustrate an organization's intensity of relationships and behavior. Examining the interconnectedness of the different teams' or individuals' tasks and goals can assist in comprehending how the achievements of one are

reliant upon the performance of others. This understanding helps organizations make well-informed decisions for their operations.

Pooled interdependence is the least structured form of the three. Here, the teams or individuals are not reliant on others; they all independently perform their own functions. The pooled interdependence model allows departments to work together without interacting directly and being dependent on each other. Each department still provides its input toward the same overall goal (Thompson 1967).

Tjosvold (1986) has similarly identified that in some teams, interdependence between goals is not experienced at all. Then the individuals accomplish their tasks alone, have little interaction with others, and use resources for their success. Even negative interdependence can be experienced when individuals are given separate tasks and personal rewards for success. Individual responsibilities and encouragement for winning make people work for themselves and against others. If the different goals are perceived as negatively linked, the individuals may experience distrust. Conflicts are either avoided or to be won. Resources are used for one's benefit and against others (Tjosvold 1986, 528–529).

Thompson's (1967) concept of sequential interdependence refers to a common phenomenon that occurs when an individual's or a team's output is required for the other's performance. For example, each unit's contribution is necessary for an assembly line to complete the production process. In this kind of organization model, it is critical to use cooperation between the teams to plan and schedule resources well advanced. Doing so avoids delays down the line, allowing for more effective operations (Thompson 1967).

Reciprocal interdependence is comparable to sequential interdependence since the outcome of one team serves as an input for another, which continues in a cyclical form. It increases the intensity of interaction among different teams in an organization. Reciprocal models are complicated to manage because one unit can change procedures and unexpectedly impact everyone else. Thus, the operations require careful management and forethought, but most of all, collaboration

with constant adaptation from each team (Thompson 1967).

Tjosvold (1986) refers to positive interdependence as a team process in which individuals work on a joint project and take responsibility for its progress together. The team members are rewarded together, making them coordinate their activities better and approach their goals as interconnected. Positive dependence on others also fuels fair division of labor and sharing of resources. Positive interdependence also leads to solving conflicts more easily, exchanging abilities, and encouraging team members to help each other accomplish their tasks. These interaction patterns improve the overall efficiency of collaborative teamworking. Shared values and a common vision affect the sense of belonging among the team members. Experienced cohesiveness in the team encourages the individuals to continue further working on joint projects, share rewards, assist each other, and understand that their goals are interconnected (Tjosvold 1986, 528).

According to Thompson (1967), organizations can more efficiently collaborate if tasks are organized according to the intensity of interdependence and managed with specific coordination approaches. The model of pooled interdependence requires standardization, while the other two models are more flexible with coordination styles (see also Steiner 1972). For example, teams with sequential interdependence can be managed successfully through adaptive planning and scheduling. In contrast, teams with reciprocal interdependence operate by constantly exchanging information and making mutually beneficial process adjustments. Therefore, it is essential to understand the different levels of collaboration needed. Sometimes working independently, with minimum interaction with others, is the most effective way. In contrast, collaborative teamworking is guided by a sense of shared purpose (Adler and Heckscher 2018) and involves defining together not only the means of working but also the end goal (Thomson et al. 2009; Wood and Gray 1991).

In addition to understanding task and goal interdependence and how they affect a team's behavior, factors such as personality, beliefs,

values, and behavior also play a role in determining how well individuals interact with each other within a team environment (Tjosvold 1986). In collaborative teamwork, knowing how every individual perceives reality is essential. Someone with a more independent view of reality primarily focuses on their goals and progress. An interdependent view refers to individuals recognizing the collective's importance, and they strive for shared success. It is essential to be mindful of these different perspectives to create a cohesive team environment.

The rewards and control systems can also affect how well the team works together (Tjosvold 1986). Rewards can motivate individuals to work harder and more efficiently, while control systems can help ensure everyone is on task and working toward the same goal. Team members are sometimes pitted against each other to foster competition and increase productivity. This strategy creates a stimulating work environment that encourages employees to achieve better results. However, it can lead to negative consequences such as strain on team relationships.

The potential benefits of teamworking to individual members or various teams in an organization vary depending on the type of work they are doing and their goals. In specific projects, different teams may have goals that seem unrelated to each other at first glance. However, upon closer inspection and analysis, it is possible to identify how these goals are interconnected and mutually beneficial. Fostering collaboration and understanding between teams can help ensure that all their objectives are met efficiently and effectively.

Communication

Teamwork always occurs in communication, where group or team members become aware of each other in various ways. Through communication, the team members' roles, tasks, norms, and rules are determined (Hollingshead et al. 2005). Because collaborative teamworking involves individuals' willingness to work together and share their decision-making, open communication between the team members is essential for an

effective way to accomplish common goals (Kaufmann and Wagner 2017). In transparent communication, the collaborating team members share information and updates about their progress and any challenges they face. Timely communication helps ensure everyone is on the same page and potential risks or issues can be identified quickly. Open communication also creates an environment of trust, which allows team members to feel more comfortable sharing ideas.

The sense of inclusiveness and belonging in collaborative teamwork can lead to increased motivation and engagement and, again, better job satisfaction among employees (Shore et al. 2011). Empathy in organizational communication refers to the ability of individuals to understand and share the feelings of others within an organization (Goleman 1995). It involves actively listening to and trying to understand the perspectives and emotions of others and recognizing that everyone may have different backgrounds, experiences, and communication styles (Alon and Higgins 2005). Empathy in organizational communication involves being sensitive and responsive to the emotional needs of others and being aware of one's biases and assumptions (Shore et al. 2011). It helps to build trust, understanding, and positive relationships among employees, which leads to a more positive work environment, and improved organizational performance.

Teambuilding activities are designed to improve inclusion and communication to strengthen teamwork; however, these events do not typically go beyond the intellectual understanding of communication. Interaction between individuals does not only take place on a cognitive but an embodied level too. Embodiment refers to the idea that our understanding of the world and our place in it is deeply rooted in our bodily experiences (Merleau-Ponty 2008). In other words, it is the idea that the way our bodies perceive and interact with the world around us shapes our thoughts, emotions, and behaviors. In organizational communication, embodiment refers to the idea that communication is not just about exchanging words but also about the bodily presence of the individuals involved (Dale 2000).

Communication is a holistic process that involves not just the verbal and nonverbal messages being exchanged but also the physical context in which those messages are being sent and received. Embodied communication in organizations can include factors such as the physical layout of a space, the body language and facial expressions of the individuals involved, and the use of props or other objects to convey meaning. The concept of embodiment also highlights the importance of intersubjectivity in organizational communication, as the body is the medium through which we communicate with others and the world. With the understanding of embodiment, communication in collaborative teamwork can be perceived more holistically (Dale 2000).

Emergent Knowledge Building

Tame problems are well-defined and have clear solutions, while wicked problems are complex and difficult to define or solve. Tame problems are often technical in nature, whereas wicked problems are multi-layered and include social and political aspects to be considered. Tame problems can be solved using linear thinking and established methods and techniques in teams organized in bureaucratic and hierarchical ways. In contrast, wicked problems require systems thinking, embodied communication, and more adaptive approaches (Rittel and Webber 1973).

Wicked problems, such as climate change, nature loss, poverty, and many others related to ecological and social sustainability, are complex and have high uncertainty and unpredictability. They also have multiple causes, and they tend to change over time. Thus, addressing wicked problems requires collaboration and systems thinking. The systems thinking approach involves understanding the problem in the context of the more extensive system in which it occurs (Hossain et al. 2020). It helps to identify the underlying causes and interconnections of the problem. Thus, systems thinking offers a creative and adaptive approach to addressing wicked problems. Experimenting with different solutions and being open to new ideas can help to find innovative

solutions and adapt to new information and changing circumstances.

Wicked problems often involve multiple stakeholders with conflicting values (Carney et al. 2011). Communicating effectively with various stakeholders and being transparent about the problem-solving process can build trust and support for the solutions. Creating shared value (Porter and Kramer 2019) is essential for sustainable innovations. Collaboration across different sectors and disciplines can generate new ideas, products, or services that benefit the company and society at large. Solving wicked problems cannot be reduced to a simple cause-and-effect relationship; thus, embracing the complexity and uncertainty of these issues can help to rely on emergent knowledge building in finding sustainable solutions for them. In other words, when addressing wicked problems, it is essential to understand that the solution is a process in which the team needs to continuously learn and adapt.

Emergent knowledge building refers to the process of creating new knowledge through the interactions and collaboration of individuals or teams. It is a bottom-up process, where knowledge is created and shared through the collective efforts of team members rather than being imposed from the top down by a single individual or authority. Emergent knowledge building can occur through various activities such as problem-solving, decision-making, and brainstorming, where team members work together to generate new ideas. It is often associated with collaborative teamwork and characterized by an open and dynamic process where knowledge constantly evolves and adapts to new information and situations (Cress and Kimmerle 2008).

An egalitarian team is a type of collaborative team in which all members are considered equal in the decision-making process. Egalitarian teams are characterized by a flat organizational structure and a lack of hierarchy, where all team members are considered peers and have equal status (Weinberg et al. 2011). In an egalitarian team, decision-making is often done through consensus, where all members can express their opinions and ideas, and a decision is made only when all members agree (Yngvesson 1978). In practice, it might

only be possible to partially achieve the egalitarian team ideal since some leaders or members may hold more power or influence than others, which can lead to challenges in terms of communication and decision-making (Weinberg et al. 2011). In egalitarian communities, a controversial decision is made not necessarily through consensus but by distributing responsibility among all the members of the group, so no single individual can take credit or blame for it (Yngvesson 1978). Egalitarian teams focus on collective goals and objectives rather than individual achievements. Bringing together diverse knowledge and perspectives in inclusive, egalitarian teams can lead to the creation of novel solutions and breakthrough innovations.

Summary

Collaborative teamwork refers to a group of people working together to achieve a common goal or objective. It can be applied in various settings, including business, education, and healthcare, and is often seen as an effective way to accomplish complex tasks, solve problems, and generate innovations. Thus, collaborative teamwork is particularly helpful for solving wicked ecological and social problems where traditional linear thinking, conservative solutions, and hierarchical teams fall short. When done correctly, it is a highly effective and satisfying problem-solving model in an organization that combines individual but interdependent skills and roles and encourages everyone to work together to achieve a shared purpose. An equitable working environment encourages teams to maximize their potential and improve outcomes. However, efficient collaboration in a diverse team requires respectful communication between all its members. Responsible collaboration between specialists from various fields and diverse expertise allows emergent knowledge building and can thus initiate a more productive problem-solving process based on synergy. Moreover, collaborative teamworking increases job satisfaction and offers a sense of purpose that can lead to innovative solutions. Therefore, it is vital to recognize the potential of collaborative teamworking in organizations

aiming for sustainability and to create a working environment that encourages and supports it.

Cross-References

- Awareness Management
- Communication and Innovation
- Creating Shared Value
- Cross-Cultural Management
- Inclusion
- Knowledge Management
- Leadership Communication
- Shared Value

References

- Adler, P. S., & Heckscher, C. (2018). Collaboration as an organization design for shared purpose. In L. Ringel, P. Hiller, & C. Zietsma (Eds.), *Toward permeable boundaries of organizations? Research in the sociology of organizations* (Vol. 57, pp. 81–111). Bingley: Emerald Publishing.
- Alon, I., & Higgins, J. M. (2005). Global leadership success through emotional and cultural intelligences. *Business Horizons*, 48, 501–512.
- Cannon-Bowers, J. A., & Salas, E. (1998). Team performance and training in complex environments: Recent findings from applied research. *Current Directions in Psychological Science*, 7(3), 83–87.
- Carney, M., Gedajlovic, E., & Sur, S. (2011). Corporate governance and stakeholder conflict. *Journal of Management and Governance*, 15(3), 483–507.
- Cress, U., & Kimmerle, J. (2008). A systemic and cognitive view on collaborative knowledge building with wikis. *International Journal of Computer-Supported Collaborative Learning*, 3, 105–122.
- Dale, K. (2000). *Anatomising embodiment and organisation theory*. Springer.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Dell.
- Goold, M., & Campbell, A. (1998). Desperately seeking synergy. *Harvard Business Review*, 76(5), 131–143.
- Grewatsch, S., Kennedy, S., & Bansal, P. (2021). Tackling wicked problems in strategic management with systems thinking. *Strategic Organization*. <https://doi.org/10.1177/14761270211038635>.
- Guzzo, R. A., & Dickson, M. W. (1996). Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology*, 47, 307–338. <https://doi.org/10.1146/annurev.psych.47.1.307>.
- Hollingshead, A. B., Wittenbaum, G. M., Paulus, P. B., Hirokawa, R. Y., Ancona, D. G., Peterson, R. S., Jehn, K. A., & Yoon, K. (2005). A look at groups from the functional perspective. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 21–62). Sage. <https://doi.org/10.4135/9781483328935.n2>.
- Holton, J. A. (2001). Building trust and collaboration in a virtual team. *Team Performance Management: An International Journal*, 7(3/4), 36–47. <https://doi.org/10.1108/13527590110395621>.
- Hossain, N. U. I., Dayarathna, V. L., Nagahi, M., & Jaradat, R. (2020). Systems thinking: A review and bibliometric analysis. *Systems*, 8(3), 23.
- Katzenbach, J. R., & Smith, D. K. (2005). The discipline of teams. *Harvard Business Review*, 83(7), 162–171.
- Kaufmann, L., & Wagner, C. M. (2017). Affective diversity and emotional intelligence in cross-functional sourcing teams. *Journal of Purchasing and Supply Management*, 23(1), 5–16.
- Merleau-Ponty, M. (2008). *Phenomenology of perception*. London: Routledge Classics.
- Mohrman, S. A., Cohen, S. G., & Mohrman, A. M., Jr. (1995). *Designing team-based organizations*. San Francisco: Jossey-Bass.
- Parker, G. M. (2008). *Team players and teamwork: New strategies for developing successful collaboration*. Wiley.
- Porter, M. E., & Kramer, M. R. (2019). Creating shared value. In G. Lenssen & N. Smith (Eds.), *Managing sustainable business* (pp. 323–346). Dordrecht: Springer. https://doi.org/10.1007/978-94-024-1144-7_16.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155–169. <https://doi.org/10.1007/bf01405730>.
- Salas, E., Burke, C. S., & Cannon Bowers, J. A. (2000). Teamwork: Emerging principles. *International Journal of Management Reviews*, 2(4), 339–356.
- Selznick, P. (1957). *Leadership in administration: A sociological interpretation*. New York: Harper & Row.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262–1289. <https://doi.org/10.1177/0149206310385943>.
- Steiner, I. D. (1972). *Group process and productivity*. New York: Academic.
- Thompson, J. D. (1967). *Organizations in action: Social science bases of administrative theory*. New York: McGraw-Hill.
- Thomson, A. M., Perry, J. L., & Miller, T. K. (2009). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory*, 19(1), 23–56.
- Tjosvold, D. (1986). The dynamics of interdependence in organizations. *Human Relations*, 39(6), 517–540. <https://doi.org/10.1177/001872678603900603>.
- Weinberg, D. B., Cooney-Miner, D., Perloff, J. N., Babington, L., & Avgar, A. C. (2011). Building collaborative capacity: Promoting interdisciplinary teamwork in

the absence of formal teams. *Medical Care*, 49(8), 716–723.

Wood, D. J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *The Journal of Applied Behavioral Science*, 27(2), 139–162.

Yngvesson, B. (1978). Leadership and consensus: Decision-making in an egalitarian community. *Ethnos*, 43(1–2), 73–90.

Collective Bargaining

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Synonyms

Coordinated wage bargaining; Wage and salary negotiation

Definition

The term collective bargaining describes the negotiation process between employers and organized labor aimed at agreements to regulate working salaries, working conditions, benefits, and other aspects of workers' compensation and rights for workers. The purpose of collective bargaining is to allow the representation of interests of employees by trade unions and the organization of strikes in order to enhance the pressure on corporate decision makers to make concessions to the workers. The process of collective bargaining can include elements such as strikes and work stoppages. Collective bargaining has existed in this sense since the end of the nineteenth century, especially in Europe and North America. Given the social question prompted by industrialization, the original aim of trade unions was to improve the living conditions of the working class in terms of better working environments, working times, and compensation. Major human rights treaties and documents have formalized the right of worker self-determination and defined them as a human right.

Introduction

The right to organize and bargain collectively with employers is a privilege that employees have fought for decades. The ILO Convention No. 154 has produced a definition of collective bargaining as:

All negotiations which take place between an employer, a group of employers or one or more employers' organisations, on the one hand, and one or more workers' organisations, on the other, for:

- (a) determining working conditions and terms of employment; and/or
- (b) regulating relations between employers and workers; and/or
- (c) regulating relations between employers or their organisations and a workers' organisation or workers' organisations. (Article 2)

The negotiations stated in the ILO Convention N. 154 can include grievance mechanism as well, allowing employees to report violations of labor rights or violations of negotiated agreements. A further purpose of collective bargaining is to allow the representation of interests of employees by trade unions and the organization of strikes in order to enhance the pressure on corporate decision makers to make concessions to the workers. Examples would be “work councils” (Staples and Whittall 2020) or safety and health committees mandated by law and allowing representatives to influence decisions concerning occupational health (Gramberg et al. 2020; Kuruvilla and Li 2021).

Apart from the understanding of collective bargaining as a human right, collective bargaining and explicitly trade unions play a mediating role for moderating social conflicts and have a wider societal purpose. In particular, collective bargaining is understood as a means to compensate for the imbalance between companies and the workforce in terms of in terms of socio-economic power and is widely regarded as a right of organized labor vis-à-vis the employer for securing other human rights (see Mantouvalou 2012). While the exact economic impact of collective bargaining on aspects such as inflation and

inequality is part of a wider theoretical debate in economics, the international human rights discourse has stressed the relevance of worker representation, freedom of association, and collective bargaining. Examples for the integration of collective bargaining as a human right manifest in major conventions including the Universal Declaration of Human Rights, the International Covenant on Social, Cultural and Economic Rights, International Labour Organization, and the UN Guiding Principles on Business and Human Rights. In the wake of globalization, the question of how to realize these rights in international supply chain has evolved as a major aspect of the international human and labor rights discourse.

Collective Bargaining in History

Collective bargaining is often understood in a wider historical context of worker representation and codetermination (Collins et al. 2018; Mantouvalou 2012). The modern understanding of collective bargaining emerged in the late eighteenth century, when trade unions were established as an organization to represent the interests of workers. In the wake of industrialization, the emergence of a right to collective bargaining played a specific role for settling the distributional conflicts coming along with the economic transformation of Europe and North America in the nineteenth century. Initially, the notion of collective bargaining and the institution of trade unions attracted hostility from employers and government groups that regarded these new groups as a threat to their power, explaining the legal situation in most of the nineteenth century, which prohibited trade unions. Given the social question prompted by industrialization, the main aim of trade unions was to improve the living conditions of the working class in terms of better working environments, working times, and compensation. Therefore, trade unions responded to the “social question” in Europe and varied in terms of political affiliation (politically neutral, confessional, or socialist). Some of these different traditional types of trade unions have remained

until today such as Christian Trade Union Federation of Germany (CGB).

On the turn to the twentieth century, the role of trade unions was strengthened by political events and the emergence of Socialist parties demanding collective bargaining. British trade unions were legalized in 1872, after the Royal Commission on Trade Unions in 1867 agreed that the establishment of the organizations was to the advantage of both employers and employees. The changed attitude of the German government following the retreat of Chancellor Otto von Bismarck sparked an end to the Anti-Socialist Laws which were repealed later allowing for the creation of trade unions in Germany. Moreover, the encyclical “*De Rerum Novarum*” issued by Pope Leo XIII, acknowledged the basic principles of collective bargaining, freedom of association, and the role of employee codetermination. Further steps of legalization and acceptance of trade unions and collective bargaining were the Stinnes-Legien Agreement in Germany, enshrining and reaffirming major labor rights including the right to strike and to form trade unions.

Reaching their peak in the 1950s and 1960s, trade unions evolved as a dominant factor in European and – to a different extent – North American politics. Mass strike co-organized by trade unions often included a substantial proportion of the total labor force and occurred, for example, in the 1926 United Kingdom general strike illustrating the political role of collective bargaining. In this sense, strikes were not only meant for worker representation in a specific company, but also directed at political changes of a more general nature and contributing to the political weight of the labor movement of the early twentieth century. Trade unions influenced here national legislation on working hours and days, as well as legislation against child labor in Europe. This process was partly accompanied by the emergence of trade unions restricting themselves to single occupational groups. Prominent examples are here the IG Metall in Germany (Industrial Union of Metalworkers) or the United Auto Workers in the United States and Canada, which played a significant role in American party politics and unfolded a strong impact on wages in

North America's automotive sector (see Katz et al. 2013). Other trade unions focused on the public sector and on white-collar jobs largely representing administrative and technical employees.

Starting with the late 1970s, politicians in the West particularly in the United Kingdom and the United States sought to liberalize the economy and heavily collided with the interests of organized labor. With the proclaimed aim of restoring "a fair balance between the rights and duties of the trade union movement," Margaret Thatcher sought to limit the role of trade unions, especially addressing the state sector (Hanson 2016; Mitchell 1987). This development appears to appear to have manifested over time in a declining socioeconomic status of trade unions accompanied by a higher level of individualization in the labor markets. Similar events unfolded in Germany at the turn of the millennia, when the Agenda 2010 liberalized German labor markets and resulted in cut-backs of social spending, drawing criticism from trade unions. These developments appeared to have contributed to a tendency that even countries and economic sectors with apparently robust rule-based labor relations systems experienced a decline in union density and centralized bargaining (Baccaro and Howell 2017; Kuruvilla and Li 2021).

Collective Bargaining in Collective Bargaining in Economic Thought

The right to collective bargaining is featured prominently throughout different economic theories, including the writings of Karl Marx, John Maynard Keynes, Friedrich August von Hayek, Milton Friedman, and other economists, who have contributed to the contemporary assessment of trade unions and their political or economic role (Rivot 2012). This debate is embedded in the larger normative debate on the role of property rights, entrepreneurial freedom, economic inequality, and worker representation (Collins et al. 2018). A general critique on the right to collective bargaining has primarily manifested in approaches pointing out the role of competition

and market prices as the most efficient tools for determining wages for employees. From this perspective, Friedrich August von Hayek has argued that unemployment is to be explained by pricing and that the right to collective bargaining driving higher wages increases unemployment (see Richardson and Roberts 1997). Other theorists including Milton Friedman pointed out that collective bargaining constitutes a major cause for unemployment (Schwarzer 2018), although this claim has been dismissed by others (Pissarides 1986). Further economic theories tried to establish a linkage between the role of trade unions in the economy and the distribution of wealth and income. Studies have underpinned the argument that unions reduce inequality as demonstrated in the case of the United States and that a weaker role of unions might drive up wage disparities (Farber et al. 2018; Michin 1997). Along these lines, the aspect of union-wide wages and wage centralization plays a major role (Dawid et al. 2021).

Collective Bargaining as a Human and Constitutional Right

While the impact of globalization on labor standards remains a subject of academic debate (Chan 1998; Neumayer and De Soysa 2006), international coordination of labor rights played an early role in the labor movement. This has manifested in the foundation of the International Workingmen's Association in London in 1864 and in the foundation of the International Labour Organization, in the aftermath of the First World War in 1919 (see Valcitos 1998). For addressing the challenges of globalization to labor rights, conventions of the International Labour Organization such as ILO Convention No. 154, Right to Organise and Collective Bargaining Convention, 1949 (No. 98), or the Labour Relations (Public Service) Convention, 1978 (No. 151) have generated implications of collective bargaining for companies. Moreover, collective bargaining and the instrument of worker representation have here been understood as an instrumental right to guarantee other human and labor rights such as occupational health and safety, fair compensation, and nondiscrimination (Metcalf

et al. 2001). As a result, major human rights treaties and documents have formalized the right of worker self-determination and defined them as a human right. Article 23 of the Universal Declaration of Human Rights refers to the “*right to form and to join trade unions for the protection of his interests.*” Likewise, Article 8 of the International Covenant on Social, Cultural, and Economic Rights in 1966 has reaffirmed the “*the right of everyone to form trade unions and join the trade union of his choice.*”

On a constitutional level, the realization of the right to collective bargaining is widely differing. The right to collective bargaining has been enshrined in Article 28 of the Charter of Fundamental Rights, stating that:

Workers and employers, or their respective organisations, have, in accordance with Union law and national laws and practices, the right to negotiate and conclude collective agreements at the appropriate levels and, in cases of conflicts of interest, to take collective action to defend their interests, including strike action.

Moreover, the right to collective bargaining has been formalized in national codifications such as Article 9 of the German Basic Law or Section 1 of the US National Labour Relations Act. A particular challenge arises in states that have not signed the ILO Convention on Freedom of Association and Protection of the Right to Organize though. Specifically, authoritarian regimes tend to control trade unions and to prohibit worker codetermination, allowing foreign investors to reap profits from the suppression of organized labor (Kopper 2021; Kuruvilla and Li 2021). As a result, the UN Guiding Principles of Business and Human Rights have stressed the role of global responsibilities in terms of labor rights and referred explicitly to the major codifications of the ILO as international standards. Although the UN Guiding Principles are soft law, they have influenced the ongoing debate on due diligence in the supply chain and the positions of companies on international collective bargaining practices. The United Kingdom was here one the first countries to implementing the United Nations Guiding Principles on Business and Human Rights (UNGPs) in the form of a national action plan, including the United Kingdom Modern Slavery

and Human Trafficking Act (LeBaron and Rühmkorf 2019). These efforts notwithstanding, many observers have noted the importance of enhancing already existent measures to realize a better protection of human rights and the right to collective bargaining in particular in countries with lower labor rights standards. In this sense, the United Nations Sustainable Development Goals, which have been prominently outlining “Decent Work” as a major pillar of development policies, contribute to a more holistic approach for getting sense of the overlap between international development policies, structural poverty, and labor rights.

In order to fulfill the responsibilities originating from UNGPs, multinationals need to design policies safeguarding ethical conduct. Principle 11 of the UNGPs outlines that “Business enterprises” should respect human rights. This means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved.” One instrument to prevent violations of the right to collective bargaining is the code of conducts regulating the collective bargaining in specific companies. Likewise, global framework agreements governing industrial relations (Hammer 2005) and world company councils or social charters are here seen as instruments of standardizing the collective bargaining policies of multinationals and creating global minimum standards. Nevertheless, navigating between these challenges presents a major challenge for international companies. Research has shown that private regulation (corporate codes of conduct) has not yet overcome institutional settings hostile to the enforcement of collective bargaining standards (Santoro 2000; Santoro 2018). Moreover, research has demonstrated the difficulties in remediating collective bargaining standards in the supply chain of Western companies (see Van Liemt 1989; Anner 2012). Likewise, research that is more recent ponders on the influence of digitization on traditional collective bargaining practices (see Vandaele 2018). Combined with the decline of unionization in Western countries, these questions represent the key academic and practical challenges for realizing the

internationally guaranteed rights to collective bargaining and link up to the more general human rights and globalization discourse.

Summary

Collective bargaining is not accepted in all constitutions as a fundamental right, what makes it difficult for international companies to establish international protection for workers seeking to unite. Collective bargaining is therefore more contested on a theoretical level than other human rights. The roots of anti-union legislation are manifold, and the protection of trade unions or the right to collective bargaining is not self-evident even in many Western countries. For aligning with international norms on collective bargaining, companies can orient themselves to the ILO conventions or to the UNGPs, which inform corporate decision makers on strategies how to implement union rights in hostile environments. Companies can make a difference by engaging in company-specific policies to create a good institutional environment for protecting the interests and rights of workers in hostile cultural or political settings. As goodwill on behalf of company is not enough, the creation of minimum standards in tandem with international supply chain legislation depict important moves to anchor participation rights internationally.

Cross-References

- [Corporate Social Responsibility](#)
- [Nonfinancial Disclosure](#)
- [Occupational Safety and Health Administration](#)
- [Social Justice](#)
- [Stakeholder Model](#)

References

Anner, M. (2012). Corporate social responsibility and freedom of association rights the precarious quest for legitimacy and control in global supply chains. *Politics and Society*, 40(4), 609–644.

- Baccaro, L., & Howell, C. (2017). *Trajectories of neoliberal transformation: European industrial relations since the 1970s*. Cambridge: Cambridge University Press.
- Chan, A. (1998). Labor relations in foreign-funded ventures, Chinese trade unions, and the prospects for collective bargaining. *Guangdong*, 28, 44–705.
- Collins, H., Lester, G. L., & Mantouvalou, V. (2018). Does labour law need philosophical foundations? (Introduction). In *Philosophical foundations of labour law*. Oxford: Oxford University Press.
- Dawid, H., Harting, P., & Neugart, M. (2021). The role of (de-) centralized wage setting for industry dynamics and economic growth: An agent-based analysis with the Eurace@ Unibi Model. In *Dynamic analysis in complex economic environments* (pp. 205–230). Cham: Springer.
- Farber, H. S., Herbst, D., Kuziemko, I., & Naidu, S. (2018). *Unions and inequality over the twentieth century: New evidence from survey data* (No. w24587). National Bureau of Economic Research.
- Gramberg, V., Bernadine, J. T., Bamber, G. J., & Cooper, B. (2020). Employee voice, intention to quit, and conflict resolution: Evidence from Australia. *ILR Review*, 73(2), 393–410.
- Hammer, N. (2005). International framework agreements: Global industrial relations between rights and bargaining. *Transfer: European Review of Labour and Research*, 11(4), 511–530.
- Hanson, C. (2016). *Taming the trade unions: A guide to the Thatcher government's employment reforms, 1980–90*. Springer.
- Katz, H. C., MacDuffie, J. P., & Pil, F. K. (2013). Crisis and recovery in the US auto industry: Tumultuous times for a collective bargaining pacesetter. In *Collective bargaining under duress: Case studies of major north American industries* (pp. 45–79). Ithaca: Cornell University Press.
- Kopper, C. (2021). Business as usual under a military regime? Volkswagen do Brazil and the military dictatorship in Brazil (1964–1980). In *Big business and dictatorships in Latin America* (pp. 319–344). Cham: Palgrave Macmillan.
- Kuruvilla, S., & Li, C. (2021). Freedom of association and collective bargaining in global supply chains: A research agenda. *Journal of Supply Chain Management*.
- LeBaron, G., & Rühmkorf, A. (2019). The domestic politics of corporate accountability legislation: Struggles over the 2015 UK Modern Slavery Act. *Socio-Economic Review*, 17(3), 709–743.
- Mantouvalou, V. (2012). Are labour rights human rights? *European Labour Law Journal*, 3(2), 151–172.
- Metcalf, D., Hansen, K., & Charlwood, A. (2001). Unions and the sword of justice: Unions and pay systems, pay inequality, pay discrimination and low pay. *National Institute Economic Review*, 176(1), 61–75.

- Mitchell, N. J. (1987). Where traditional Tories fear to tread: Mrs Thatcher's trade union policy. *West European Politics*, 10(1), 33–45.
- Neumayer, E., & De Soysa, I. (2006). Globalization and the right to free association and collective bargaining: An empirical analysis. *World Development*, 34(1), 31–49.
- Pissarides, C. (1986). Trade unions and the efficiency of the natural rate of unemployment. *Journal of Labor Economics*, 4(4), 582–595.
- Richardson, R., & Roberts, B. C. (1997). Hayek on trade unions: Social philosopher or propagandist? In *Hayek: Economist and social philosopher* (pp. 259–280). London: Palgrave Macmillan.
- Rivot, S. (2012). The great divide? Keynes and Friedman on employment policy. *Cahiers d'économie politique/Papers in Political Economy*, 1, 223–251.
- Santoro, M. A. (2000). Global capitalism and the road to Chinese democracy. *Current History*, 99(638), 263.
- Santoro, M. A. (2018). *Profits and principles*. Cornell University Press.
- Schwarzer, J. A. (2018). Retrospectives: Cost-push and demand-pull inflation: Milton Friedman and the “Cruel Dilemma”. *Journal of Economic Perspectives*, 32(1), 195–210.
- Staples, R., & Whittall, M. (2020). *The dilemma of social media for German work councils representing qualified employees—The case of a German car manufacturer*. New Technology, Work and Employment.
- Van Liemt, G. (1989). Minimum labour standards and international trade: Would a social clause work. *International Labour Review*, 128, 433.
- Vandaele, K. (2018). *Will trade unions survive in the platform economy? Emerging patterns of platform workers' collective voice and representation in Europe* (ETUI research paper-working paper). Brussels European Trade Union Institute.

Collective Consciousness

- ▶ [CSR Butterfly Effect](#)

Collective Property

- ▶ [Co-ownership/Collective Ownership](#)

Combined Code

- ▶ [UK Corporate Governance Code \(2010\)](#)

Combustion

- ▶ [Sustainability of Waste Management Systems: Energy Recovery](#)

Commercial Life

- ▶ [Product Life Cycle](#)

Commercial Model

- ▶ [Business Model](#)

Commitment

- ▶ [Employee Engagement](#)
- ▶ [Social Obligations \(CSR\)](#)

Common Good

- ▶ [Creating Shared Value](#)
- ▶ [Shared Value](#)

Common Pool Resources

- ▶ [Co-ownership/Collective Ownership](#)

Communal

- ▶ [Green Jobs Social Life Cycle Assessment](#)

Communication and Innovation

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Synonyms

Alteration; Change; Metamorphosis; Transformation; Variation

Description

Organizations face increasing pressures in the form of environmental disasters, resource depletion, and societal and industry demands which require them to become more sustainable in their operations. Standard ways of doing business no longer are enough. Organizations must make intentional changes in their philosophy and values, products, processes, or practices, in order to create and realize social and environmental value in addition to economic returns. To do so, they must innovate. These innovations can range from changes in operational efficiencies to transformational shifts. This entry defines innovation, especially sustainability-oriented innovations, and discusses how such innovations emerge and spread. Communication is key to any innovation process. Communication is discussed in terms of environmental scanning and information acquisition which occurs as part of the complex adaptive system model, diffusion of innovation, leader framing and management of meaning, internal communication systems and channels, strategic communication, and organizational culture norms. Both internal and external innovation champions and sustainability communication practitioners must emphasize the ease of implementing and realizing and advantages of innovative sustainability practices.

Defining Innovation

Innovation is a construct used and defined by various fields of study, which makes it very difficult to define. However, Baregheh et al. (2009) offer a very useful definition of organizational innovation writing that, “Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, services or processes, in order to advance, compete and differentiate themselves successfully in their marketplace” (p. 1334). Innovations involve two intertwined dimensions: processes (how something is done) and outputs (what is done). Innovations begin with an idea which leads to new/improved products, services, or processes. Organizational innovation is driven by things such as the desire for advancement, market competition, and the need for differentiation in organization’s market. Organizations seeking to embrace sustainability initiatives may adopt a series of multiple pragmatically focused smaller innovations (e.g., engage in new eco-efficiencies) so as to improve their existing policies, procedures, practices, and products. However, other organizations may adopt more transformational innovations and disrupt their current policies, procedures, practices, and products which redirect them toward significantly different directions (e.g., adopting the principles of biomimicry).

Innovation Emergence

Regardless of the nature or extent of the innovation, the process of adopting innovations consists of three very general parts – initiation, adoption, and implementation. During the initiation phase, organizational members recognize the need for and availability of a particular innovation, initially evaluate it in terms of its suitability for their organization, and then propose it for their organization’s adoption. The adoption phase refers to the decision-making process which includes a deeper evaluation of the effectiveness and financial viability of the proposed innovation. Lastly, during the implementation phase, the innovation is often

modified, prepared for the organization's use, and used for a trial period. If the innovation works and is accepted by its users, ultimately it becomes a routine in an organization (Damanpour and Schneider 2006). Sometimes, however, an innovation's adoption can be more spontaneous and less rationally evaluated than this three-phase process implies.

Various things influence an innovation's adoption including an organization's environment (e.g., market needs, competitor actions), leadership demographics and style, organizational dynamics (e.g., complexity and size, resource allocation, and organizational culture) and business processes (e.g., project management) (Crossan and Apaydin 2010), as well as breakthroughs made by engineers and scientists.

Sustainability-Oriented Innovation

While global and national businesses have always invested in innovations in hopes of positively impacting their financial bottom line, increased pressures from nongovernmental agencies, governments, competitors, citizens, and other external and internal stakeholders are pushing organizations to become more sustainable (Varadarajan 2017). Organizational innovation in terms of sustainability has been addressed through a concept known as sustainability-oriented innovation (SOI) which has been defined as "making intentional changes to an organization's philosophy and values, as well as to its products, processes or practices, to serve the specific purpose of creating and realizing social and environmental value in addition to economic returns" (Adams et al. 2016, p. 181). SOI focuses organizations on developing new products, processes, and business models that simultaneously benefit the economic, social, and environmental sides of the business. To begin a systematic search for potential innovations, practitioners complete a quick audit of their existing sustainability-oriented practices to identify any gaps and easy changes where innovations are needed.

There are different approaches to SOI. The SOI process can either be slow and incremental

(operational optimization) or radical and disruptive (systems building). The *operational optimization* SOI refers to organizations that use innovations to reduce the negative consequences of their business activities. For example, an operational optimization happens when organizations implement a new system that lowers CO2 emissions into the atmosphere. Operational optimizations often involve modifying already developed procedures and processes to address sustainability-related issues. Many organizations make operational optimizations to meet industrial regulations or improve their production efficiency and effectiveness. Few organizations move beyond operational optimization, because doing so requires a more radical approach to innovation – the *systems building* SOI. Systems building organizations recognize that simply reducing harmful influences on the environment is not the same as preventing harm to the environment. Proponents of this approach argue that even though some organizations are incrementally improving their production mechanisms to become more environmentally and socially friendly, that approach does not lead to sustainability. Organizations must experiment and not be afraid to create radical business model changes and alternative delivery systems for their products, as well as address the social elements associated with sustainability in a radically different way. Before senior-level management even attempts to spread *operational optimization* or *systems building* innovations throughout their organizations, it is important to understand how innovations emerge.

SOI Emergence

Nair et al. (2016) proposed a complex adaptive system (CAS) model to explain how environmental innovations emerge in organizations and spread through a supply network. Here, we focus on the first four steps of the model that deal with the SOI's emergence. Although we primarily discuss it within the context of a leader's role, other organizational members may identify, recommend, and champion an innovation. As in our

earlier discussion of the stages of an innovation's adoption, SOI emergence starts with exposure to outside influences. Changes in market and industry regulations can cause organizations to innovate (an example of operational optimization). Top leaders (e.g., CEO, board members), organizational boundary spanners, and other employees might also be exposed to new ideas from a variety of sources as was the case for Ray Anderson, the late CEO of Interface, when he read Paul Hawken's book *The Ecology of Commerce*. This first step is called *sensing*. Organizational leaders and members observe the changes and understand that those changes can or should affect their businesses. That leads to the second step – *intuiting*. After organizational leaders and members first notice changes, it is hard to make informed decisions because there is not enough information available. Therefore, they must intuitively make decisions based on their industry-related experience and perceptions. The next step is *interpretation*. Abstract ideas came out of the process of intuiting and now must be understood by everyone. By interpreting these abstract ideas, organizational leaders and members create shared understanding of how to develop SOI. Lastly, it is important to *structure* the proposed SOI changes. One way to do this might be to set up a task force or a sustainability department which will be in charge of carrying out various new sustainability-related practices. Structuring also involves grouping sustainability practices together. For example, if an organization identifies ways to improve its diversity and inclusion practices, that would be related to the social aspect of sustainability and should be labeled as such along with other social-related initiatives (e.g., workers' rights). Additional steps of the CAS model focus on diffusing and amplifying information on sustainability practices. These steps will be discussed in subsequent sections. Throughout the CAS model, communication plays an important role in knowledge acquisition (sensing), interpreting, organizing (structuring), and dissemination – indeed, throughout the overall process of SOI development and implementation.

SOI and Communication

This section discusses communication in terms of external knowledge. The importance of sustainability has grown significantly over the last two decades. Sustainability is rapidly moving from being just a part of the corporate social responsibility framework to being an essential standard for well-developed organizations. Given the swift shift to a new sustainably focused business environment in many sectors, often extensive information or knowledge on sustainable development and innovations is not present in an organization. Organizational leaders and members must reach beyond their internal knowledge resources to seek outside expertise. Two of the five most important priorities in creating organizational innovations are (1) accumulating and sharing internal knowledge and (2) gathering and integrating external knowledge (Dess and Picken 2000). Organizational leaders and members must exchange information with inside and outside entities to initiate change (innovation) and propose new ideas for adoption. Decision-makers often rely on external communication to make well-informed decisions. But organizations must have the capacity to use the external knowledge. Internally, communication becomes essential when modifying and spreading information about an innovation as well as empowering employees to identify and propose new innovations. Once innovations are recognized, they spread throughout an organization via strategic communication structures and framing (see Allen 2016).

How Innovations Spread

As we approach the end of the second decade of the twenty-first century, sustainable innovations are crucial not only for preserving our environment but also for preserving the business practices that depend on the fast-diminishing resources such as fossil fuels (Reed 2002). While the existence of sustainable innovations (e.g., new technologies, new resource mapping which allows for increased conservation) is important, such

potential innovations are only effective if they spread between and within organizations, supply chains, industries, and nations. Diffusion of innovation theory (Rogers 2003) is a key theory which sheds additional insight into the process of how innovations spread at multiple levels (e.g., organizationally, nationally). Rogers proposed an S-curve of adoption whereby within any social system there are innovators, early adopters, early majority, late majority, and laggards. He identified the characteristics of the various groups, the elements of an innovation which make it more or less attractive and spreadable, the role of key communication roles such as innovation champions, and the communication process which begins with knowledge followed by persuasion, decision, implementation, and confirmation. This model has been applied to how various organizations adopt and embrace sustainability (see Allen 2016).

Sustainable innovation within organizations must be powered by employee participation. Identifying potential innovations and adopting a new, sustainability-focused business model are admirable but useless if there are no employees who will think like entrepreneurs in terms of sustainable practices (Geradts and Bocken 2019). Before employees can participate in finding and enacting sustainability-related innovations, they must be aware of whether or not their organization has a sustainable mission, vision, goals, or strategy and understand the specifics of any sustainable strategy being implemented. Communication plays a very important role in this process. Internal communication in its various forms (e.g., internal publications) can be used to simultaneously disseminate information about new and/or best sustainable practices and recognize employees involved in championing the new innovation (Reed 2002). Communication is key for building an internal sustainability-oriented culture focused on continual improvement and transformational change, that is, a learning organization (Senge 1990). The management of meaning perspective of leadership (Smircich and Morgan 1982) and the idea of transformational leadership (Bass 1985) both focus on the importance of how leaders can articulate and frame the need for transformational

innovations. In addition, individuals and small groups are empowered to champion and adopt innovations through strategic communication at the organizational and leader levels. Finally, communication networks and processes allow for the dissemination of information about the potential utility of and ways to enact new innovations. Over time, employees come to accept sustainable innovation as their professional worldview, which will keep them engaged in the process of continually innovating for more sustainable practices.

Furthermore, external communication can and should be used to share and champion best practices with supply chain members and industry leaders interested in implementing new sustainable innovations. It is through innovation champions that diffusions are spread along supply chains and industry fields. Both internal and external sustainability communication practitioners must emphasize the ease of implementing and realizing and advantages of sustainability practices (Smerecnik and Andersen 2011). If an organization's stakeholders perceive sustainable innovations as being difficult and complicated, the innovations will not get adopted, let alone spread.

Summary

Increasing attention needs to be focused on the powerful role of communication in enabling organizational members to recognize potential external innovations (both operational and transformational) they might use to enhance their sustainability initiatives (Allen 2016). Once innovations are recognized, formal communication structures can be put in place using mechanisms such as cross-functional teams and shared information repositories to promote an innovation's spread within an organization. Beyond that, employees can be encouraged to search for and try out potential useful innovations, to champion them internally, and to help create an organizational culture focused on continual transformation. Strategic communication goes beyond routine public relations and internal communication efforts to enlist all organizational employees

in making continual innovations. Continual innovations are key to successful organizational operations in a changing environmental and social landscape. Strategic communication is also key to the sharing of innovations across supply chains, through interorganizational networks, and within organizational fields as environmental disasters and shrinking resources create global challenges to continued economic and social well-being.

Cross-References

- ▶ [Business Model Innovation](#)
- ▶ [Corporate Sustainable Innovation](#)
- ▶ [Disruptive Innovation](#)
- ▶ [Managing Change for Sustainability](#)
- ▶ [Social Innovation](#)
- ▶ [Sustainable Innovation](#)
- ▶ [Sustainable and Innovation Process](#)

References

- Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented innovation: A systematic review: Sustainability-oriented innovation. *International Journal of Management Reviews*, 18(2), 180–205. <https://doi.org/10.1111/ijmr.12068>.
- Allen, M. (2016). *Strategic communication for sustainable organizations: Theory and practice*. Cham: Springer.
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), 1323–1339. <https://doi.org/10.1108/00251740910984578>.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
- Crossan, M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of Management Studies*, 47(6), 1154–1191. <https://doi.org/10.1111/j.1467-6486.2009.00880.x>.
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. *British Journal of Management*, 17(3), 215–236. <https://doi.org/10.1111/j.1467-8551.2006.00498.x>.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, 28, 18–34. [https://doi.org/10.1016/S0090-2616\(00\)88447-8](https://doi.org/10.1016/S0090-2616(00)88447-8).
- Geradts, T. H. J., & Bocken, N. M. P. (2019). Driving sustainability-oriented innovation. *MIT Sloan Management Review*, 60(2), 1.
- Nair, A., Yan, T., Ro, Y. K., Oke, A., Chiles, T. H., & Lee, S. (2016). How environmental innovations emerge and proliferate in supply networks: A complex adaptive systems perspective. *Journal of Supply Chain Management*, 52(2), 66–86. <https://doi.org/10.1111/jscm.12102>.
- Reed, K. E. (2002). Everyone takes the field: How 3M encourages employee involvement in promoting sustainable development. *Corporate Environmental Strategy*, 9, 383–389. [https://doi.org/10.1016/S1066-7938\(02\)00109-4](https://doi.org/10.1016/S1066-7938(02)00109-4).
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Smerecnik, K., & Andersen, P. (2011). The diffusion of environmental sustainability innovations in North American hotels and ski resorts. *Journal of Sustainable Tourism*, 19(2), 171–196. <https://doi.org/10.1080/09669582.2010.517316>.
- Smircich, L., & Morgan, G. (1982). Leadership: The management of meaning. *Journal of Applied Behavioral Science*, 18, 257–273. <https://doi.org/10.1177/002188638201800303>.
- Varadarajan, R. (2017). Innovating for sustainability: A framework for sustainable innovations and a model of sustainable innovations orientation. *Journal of the Academy of Marketing Science*, 45(1), 14–36. <https://doi.org/10.1007/s11747-015-0461-6>.

Communication Climate and Culture

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Synonyms

[The atmosphere of personal relationships/interactions within organization](#); [The emotional tone of a relationship between two or more individuals](#)

Definition

In order to understand human communication climate and culture, it is necessary to understand limitations created by models of communication.

Basic type of communications is mixed meaning that messages include not just information, but also a persuasion element, and are not of just one channel type, say verbal, written, via facial expressions or gestures. Here the general rule is simple – the more formalized the type of a communication, the less space for informal aspects of a message. This stands for quite formalized written communication types such as formal letters, memos, requests, complaints, etc.

However, written communication is often accompanied by previous, parallel, or later verbal communication which no matter how formally regulated it may be, will always include some informality. Verbal communication types vary from simple and formal, such as simple tasks, obligations, requests, and similar to quite complicated such as discussions, decision reaching processes, negotiations, etc. Here the same rule applies.

Introduction

Communication (Lat. *communicare* from *communis* = common) means literally “to make common” and derivatively “to share, to join, to participate in” (Harper 2017). Communication is essential for survival and for the quality of living of all living beings in a way that quality of communication contributes the quality of living, and communicating that something is, for instance, eatable and drinkable or not, a danger or a safety, a shelter or a risk, a passage or an obstacle is of essence for survival as before 100,000 years, so in the twenty-first century.

Let us suppose that a member of old *Homo sapiens sapiens* tribe was sent to find water and that she comes back exhausted and starts to describe the path she found. The tribe sends a group and they bring the water. What she was doing was communicating the information. We know that because the group found water and did it because she used signs that they understood and interpret in the correct way in order to learn it and find the water.

We know it also because she used the signs in a proper manner and calmly making sure that they

understand her and because she asked the leader to repeat the path in order to see did he or did he not remembered it correctly. Without communicating this message completely, correctly, and in a proper way, there would be no water for the tribe, and eventually they would be in great danger after few days.

However, many if not all living being communicate. Some use chemical substances; electric impulses; seismic movements; thermal radiation; scent and different smells; movements, i.e., quite complicated movements like in human dances; sight; and only some like humans use sounds (Witzany 2014). It is important to understand that sound communication is quite rare among living creatures.

Anthroposemiotically speaking, it is unknown how primates, especially modern humans, started to articulate their communication sounds into what we know as speech and language. Some physical prerequisites were needed, like development of particular regions of the brain cortex, tongue, lips, larynx, and respiratory control (e.g., it is very hard for a quadrupedal hominid to have respiratory control for talking if he or she is using front legs or arms for movement and protection most of the time). Some speculations claim that besides physical conditions, some psychological and social were needed as well, or constant situations in which the communication was needed (like hunting, feeding, grooming, etc.).

There are various theories about the origin of speech sounds in humans even in the twentieth century, but none of them was proven (Botha and Knight 2009; Christiansen and Kirby 2003; Harper 2017; Tallerman and Gibson 2012). Since we don't know the origin of speech, and consequently the origin of language as well (Knight 2016), this influences our tendency to improve our current communication, since if we don't know what it is, it's harder to know how to improve it. The sound communication, i.e., speech and language, which we use to communicate complicated messages, isn't reserved for us only. Some mammals use complicated communication (e.g., types of roars in lions). Primates can also learn human sign language. Some primates produce complete words as sentences with

specific semantics (like the word “krak” for leopard alarm or “hok” for eagle alarm by monkeys) (Prigg 2014).

Speech and language, as it is common anthropological knowledge, among modern *Homo sapiens* evolved around 500,000 years ago, but it is possible that the beginning of this process was much earlier. Therefore, it is important to understand that human speech and language is not specific for humans. What is specific is that we developed complicated languages, natural as well as artificial (like mathematical or logical).

Last, but not least, humans have invented and developed computers and robots that use their own programming languages and can communicate with us and with each other. Human communication nowadays includes the use of machines, especially computers and similar so that much of communication is done online. This use changed the way in which we write in our natural languages (e.g., by using new abbreviations, icons, and symbols for the whole sentences).

It is not just that humans are talking to each other via computers, but also that they are communicating among them, and computers and robots are communicating to humans. On March 22, 2016, a robot named “Sofia” to the question by her creator David Hanson “Do you want to destroy humans?” answered “OK. I will destroy humans” (Parsons 2016). It is not known was this a trick or not, neither did she understood that Hanson was joking with her, so she thought she said something funny, or did she really meant it, and besides that the irony is that she was made to be used as a “sex robot.”

On July 21, 2017, it was reported that “[a]n artificial intelligence system being developed at Facebook has created its own language. It developed a system of code words to make communication more efficient. Researchers shut the system down when they realized the AI was no longer using English.” Machines Bob and Alice started to communicate with each other without human control. First, experts thought that they were talking gibberish since Bob said to Alice “I can i i everything else.” and Alice responded “Balls have zero to me to me to me. . .” (Walker 2017).

It is not the point that robots developed some kind of AI unknown to us, rather the point is that our communication becomes more digitalized and that the industry is rapidly developing, so that our communication rules, practices, and standards may radically change during twenty-first century, and we should be aware of it, because, as said, our survival at least in part depends on it.

In what follows, basics of communication climate and culture, with emphasis on workplace and business communication, will be described, types of it will be explicated as well as the most frequent mistakes that we make while communicating in various ways, places, times, and with different persons and machines, and some further notes on possible developments of human communication will be suggested (for development and changes, see Rentsch 1990; Schneider et al. 1996).

Phenomenon of Communication Climate and Culture

Study of human communication (anthroposemiotics) is a study of human communication which is important in order to understand how we live (Stacks and Salwen 2009). Communication climate and culture has dual origin and status. On the one hand, it depends on individual communication know-how, skills, technique, and experience, and on the other hand, it depends on applying individual communication know-how to many different, big, and diverse groups of people in different situations, places, and times. Both aspects of this origin needs to be learned, developed to possible novelties, and adjusted to new circumstances.

There are many myths about human communication some of which are exaggerations, such as the one which says that humans learn to communicate naturally and that nothing further should be learned. If this would be correct, then none of the frequent mistakes in communication would ever happen, yet they do happen and quite frequently (Budd and Ruben 1975).

Another, quite opposite myth, says that communication is loaded with scientific theories and

models that need to be learned for a good communication practice. First of all, as far as “the meaning of a word is its use in the language” as radically claimed by philosopher L. Wittgenstein (Wittgenstein 2009§:43) and nothing more, so by analogy one could suggest that the meaning of communication is just its use in life, since “the speaking of language is part of an activity, or of a form of life” (Melville and Krkač 2015; Wittgenstein 2009 § 23).

On another occasion, the same philosopher wrote: “(Picture: two professors in front of a bridge under construction.) Voice from above: ‘Fotch it dahn – coom on – fotch it dahn A tell tha – we’ll turn it t’other road sooin!’ – ‘It really is quite incomprehensible, my dear colleague, how such complicated & precise work can be carried out in this language’” (Wittgenstein 1998). This story nicely shows that our communication, no matter how complicated it may be, still it is learned primarily as a know-how because it is a skill and technique connected with other actions, rather than theory that needs to be applied.

Last but not the least, among great myths about human communication is that it is mainly verbal, propositional, and relational. Concerning verbal, it is quite sufficient to recognize that basic human communication includes not just speech but closely connected with it a body language which is complicated form of nonverbal communication that includes physical expressions (facial, gestures, body postures, etc.), specific forms (e.g., oculusics, haptics, proxemics, etc.), movement (i.e., kinesics), and tone of voice (Klima and Bellugi 1979).

Concerning propositional nature of communication, philosopher J. L. Austin established the so-called descriptive fallacy which says that, opposed to what positivists claimed, not all meaningful statements are true or false, but only “constantives,” while “performatives” (such as promises or declarations) are meaningful but not statements and are such under different conditions (Austin 1976).

Austin observed that there are a lot of utterances that we frequently use on daily basis but which are not “locutionary acts” (i.e., claiming that some state of facts occurs or not, for instance,

“Train.” in the case that a child is standing by the train and pointing to it) and that some are obviously meaningful and “illocutionary acts” (“Train!” as surprise) or “perlocutionary acts” (“Train!” in terms of danger if one is near to the rails). So, he claimed that not much of our utterances are constantives, rather performatives, and that the later are in fact acts, not primarily verbal expressions because they tend to express an action and sometimes that causes an action (e.g., “Be careful of the train coming!”).

Connected with this myth, and especially concerning with contemporary usage of various computer generated symbols (like emojis, smileys, and similar), human communication isn’t basically letters or words, but pictograms, ideograms, non-alphabetic signs, symbols, etc. (it is sufficient that one observes daily urban environment and how many non-alphabetic signs and symbols surround us) (Poe 2011).

The last myth is that communication is relational meaning that the core of communication is just passing the content of a message from one person to other. This myth neglects the rhetoric nature of human communication which, from Aristotle to the present day, suggests that it is based on influence and persuasion, however, as Aristotle claimed, further on based on rigorous argumentation. It is enough to observe how hard it is to pass simple information to other person without any persuasion or influence, i.e., not to add any persuasive content to the information, not to persuade with tone of voice, rhythm, and tempo of pronunciation, facial expressions, gestures, etc.

Given all mentioned myths and simple mistakes, it can be said that communication climate and culture are two sides of the same coin which is an average level and quality and quantity of communication within any group acting as a formal or informal trying to achieve some goal. It can be private (in a family or among friends), public (in formal bodies of a government), and corporate (within companies, and related to their external stakeholders, e.g., suppliers, buyers, customers, markets, media, etc.). One side of the coin is the subjective and the other is objective.

The issue here is that sometimes climate is called subjective and culture objective and

sometimes other way around. For the present purpose, and given the meaning of the words, climate can be called subjective and culture objective because a communication culture is often a part of organizational culture which is established by objective measurable routines, habits, and standard operating procedures (SOPs), while a climate is subjective or inter-subjective “feel” or “pulse” of members of a group about the whole group (known triangle between a recognition, an acknowledgment, and an endorsement or opposite).

No matter how objective communication is determined by formal rules, there is always a subjective part of communication which is of the equal importance especially in direct physical verbal face-to-face communication because of the rhetoric reasons mentioned before and the nature of humans. Also, a climate is sometimes the name for an emotional and motivational aspect of communication, while culture is the name of cognitive aspect of it (sent or received). Here various culture differences can create issues and should be taken into account.

Both communication climate and culture can be established or not, even formally or informally, and these can be done in detail but in the same time can be positive and negative. Namely, in a formal group in which a communication culture is very strict and formal, communication climate can be very negative, and other way around, in an informal group in which communication culture doesn't exist at all, a climate can be positive. Strict culture can reduce many negative elements of climate but not all, and a good climate can replace many rules of a culture but again not all, and from time to time, a need for formal rules is obvious.

It is important to mention not just that a communication culture is a part of an organizational culture, i.e., communication procedures are part of all procedures and actions as well as that a communication climate is a part of broader overall climate which covers more than just a communication, i.e., performance, results, effort, etc. given the goals of a group, and this stands for any group from family, friends, or schoolmates to coworkers, people engaged in a group leisure activity, or observing some event (for basics of

communication climate and culture as a part of organizational climate and culture, see Schneider 1990; Trice and Beyer 1993).

Types of Communication Climate and Culture

The channel of communication often determines the ratio between possible positive and negative communication climate. Written communication in formal groups or organizations is often very formalized as well, and there is no much space for creation of negative climate, while verbal communication can create negative as well as positive climate, no matter how formalized it may be.

Some organizations have very strict rules concerning any type of communication, its possible contents, and style, even time of sending a message or reading it. In case of verbal and complicated communication within large groups, all the positive and negative aspects of communication climate and culture can emerge, and such examples typically include crucial decisions and actions of a given group (e.g., long-term decision by a family, group of friends, parliament, or a board of directors of a corporation).

Because of these risks, such types of communication are often regulated by some kind of a strict procedure for discussion, reaching a decision, and implementation. Here communication climate and culture overlap with a decision-making process and steps of this process if set in a strict and efficient way often determine communication climate and culture in such complicated types of communication.

No matter how communication climate and culture can be positive and formally regulated, there are objective obstacles to its effectiveness which are not bypassed by “more emotional positivity” or “more formal regulations,” rather by dealing with technical roots of the problem. Some obvious and typical cases of such obstacles are the following: physical barriers within say working space or between groups of employees, unclear organizational structure (a person isn't clear to whom it should report a problem), barriers

of attitudes (people are refusing to communicate when necessary), linguistic barriers (ambiguity in speech, use of difficult or inappropriate words or phrases), fear of being criticized (one among major reasons for bad communication), etc.

The most prevalent types of communication are verbal and nonverbal. Nonverbal often include facial expressions, gestures, and various symbols and icons combined with written ones, while verbal are further divided into written and oral. Concerning written, there are many formal models of written communication, and they if implemented rarely produce negative communication neither climate nor culture. Negative influence appears in situations in which formal models or channels of communication are used in an informal way or for personal messages (e.g., if formal email is used for gossip).

Opposite to written, verbal oral communication is much loosely formally regulated so it can easily produce either negative or positive influence on communication climate and culture. Individual face-to-face communication can influence climate and culture in specific cases. One is if such communication is between the most responsible decision-makers in a group. Another is if such communication is repeated within group between many members so it can have cumulative effect.

The next level is individual-to-group communication and vice versa which can produce effect on climate and culture in all possibilities, especially if one is presenting something to a group, or if a group is presenting something to an individual (power and influence levels here create numerous possibilities even in formally structured groups). Finally, group-to-group communication (the best examples are various types of negotiations in diplomacy, politics, and business) is often quite chaotic and can produce negative climate and culture if it isn't minimally formalized.

It seems important to notice that reducing negative climate and culture doesn't mean reducing verbal oral face-to-face communication replacing it with say written, because humans are such creatures that need to receive crucial messages orally, verbally, directly, and face-to-face. More to that, negative impact in such situations of reduction means that there is some probability that existent

negativity will simply migrate from oral to written verbal communication channels.

Avoiding Negative and Creating Positive Communication Climate and Culture

On the market, there are hundreds of manuals for effective and positive communication, and most of them have at least one excellent advice which somebody who is on daily basis engaged in communication doesn't know and never applied in an actual communication. Since nowadays we use much more technology, it seems appropriate to advance manuals which, on first sight, repeat what is trivial and obvious concerning these technologies.

In terms of the most often used computer presentations, some obvious advices are not so obvious, like putting a clear contrast between the text or illustration or figure and their background, putting not more than 4–5 lines of remarks and never the whole sentences, concerning pointing it seems obvious to stand to the right of the presentation if one is reading off it since than one can move a hand or a pointer in the direction of the text (in majority of languages from left to right), and finally concerning talking it seems obvious if one doesn't have much time left to cut long story short and to repeat the basics at the end rather than speeding up.

Concerning all the channels of communication and as far as they can produce negative or positive climate and culture simply by being used in an unsuitable manner, it can be said that there is always one general rule. Let us take a conversation as an example. Many experts have described this rule in different ways; however, it seems that P. Grice in his essay "Logic and Conversation" formulated it consistently as his "Cooperative Principle" by saying: "Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (Grice 1991).

Further on, Grice separated this principle in nine rules which are more than obvious, yet rarely completely followed in a communication practice.

In abbreviated forms, these are the following: “be informative as required, don’t be informative more than needed, don’t say what you believe is false, don’t say what you lack evidence for, avoid obscurity, avoid ambiguity, be brief, be orderly, and be relevant” (Grice 1991). Following this principle and these rules strictly may be not much, but it seems that it can create a good start of forming, maintaining, and improving positive communication climate and culture, and perhaps repeating these rules from time to time can minimize negative climate and culture.

Workplace Communication Climate and Culture

Given the fact that three spheres fill our daily lives, namely, our physical needs (like sleeping, eating, etc.), our work, and our private time, it seems important to apply what is previously said to a workplace. Workplace communication and culture is a part of organizational communication and corporate communication (Shockley-Zalabak 2015).

Since organizational communication is a type of communication within middle or a big group with necessary formal channels of communication and frequent and diverse types of messages, the major issue is how the system is structured or which pattern the system presents. There are various patterns and models of communication, but basically they follow the form of management and governance in the organization. It is quite unlikely that a pyramidal structured organization with strict top-down communication pattern will encourage reverse-pyramid model of work and bottom-up communication pattern.

In short, if one understands the managerial model of a company, one is quite close to its communication model. Many companies have failed because of poor communication systems as a result of poor management system (some speculate that management and communication systems were among major triggers of 2015 “Volkswagen emission case”). There are various patterns or models of organizational communication among which the most frequently mentioned

in literature are chain pattern (pyramid and reverse-pyramid included), circular pattern (wheel included), and star pattern (all-channel network included). Most models follow some previously mentioned basic communication patterns such as Aristotelian persuasion pattern, information model (in various subtypes), or group communication pattern (sociological).

Business communication is a subtype of an organizational communication which covers all organizations. Business communication is specific because the nature of the sector of economy, a particular core business, the market, and the nature of management in a particular company or a corporation can relevantly determine the nature of communication. More to that, every part of a business has its communication aspect, such as production, marketing, management, finance, accounting, etc., and all stakeholders are included, relevantly divided into internal and external in respect to a company (Newman and Ober 2013).

Consequently, basic types of business communication are internal which goes on among company’s internal stakeholders (management, employees, owners, etc.) and external ones (suppliers, market, competitors, buyers, consumers, government, media, local community, etc.). Since majority of external communication of a company eventually goes through marketing department and therefore always is a kind of advertising, an internal communication is what is essential to the company’s core business and basic professions. In this way, internal business communication is closely connected to the technical communication (in which knowledge about processes, products, and similar is needed) and to professional communication (in which know-how of application of professional SOPs to a particular business processes is needed).

Since a business needs to be effective, but not to the cost of quality of a product or a service, fast communication is of essence for its success. Therefore, verbal written and oral communication are reserved for special occasions such as individual relations or crucial managerial decisions, while all other communication is done via other channels such as telephone, video chat, video

conference, online reports, presentations, internal web conferences, workshops, and similar (for practical advices and exercises, see Bennie 2009).

Since these forms are mostly formal, the frequent problem isn't with the communication concerning its content, form, time, or place, rather concerning its direction. Downward or top-bottom communication is regular, but bottom-up or upward is quite rare since employees are quite reluctant to communicate with superiors, especially if they are high in hierarchy.

Therefore, educating in forms of communication and encouraging employees to communicate concerning the core business issues with superiors is of utmost importance, and systems of such communication in a company must be in place and working well, because these communication channels are often the only possible regular media of communication.

Corporate climate and culture immensely define its communication climate and culture, and the most important part of its communication is the one with and between employees that are engaged in its core business and basic professions and workplaces. Here it can be mentioned that Grice saw his "Cooperation principle" as descriptive as well as normative, i.e., as a kind of duty of anybody engaged in a communication.

This is important from a moral and consequently a professional ethical point of view as well, since business ethics, corporate social responsibility (CSR), and sustainability of a good business start at its basic workplaces related to its core business and naturally flows to all other sectors of a company. No matter how a company tries to cover up its flaws in corporate and communication climate and culture, it will, at the end, show that some of basics of human communication applied to a workplace and employees were neglected without obvious reason.

Summary

Communication climate and culture is important for all species which need to communicate so far

as they want to survive, and humans aren't exceptions to this regularity which consequently applies to all human activities that include effective, efficient, good, and decent communication as an essential part of achieving a goal of any activity.

As a part of organizational climate and culture and its managerial pattern and model, communication climate and culture depends a lot on the wider models of governance on the one hand, but it needs to be done properly from the view of human communication as well on the other hand.

Mentioned definitions, models, patterns, etc. apply to all human communication, in private and public life, in any organization, public like governments or ministries, or private like companies of small or medium businesses. There are dozens of historical examples which cannot be mentioned here which show that various social groups, formal organizations, and even companies that were effective, legal, and even fair failed because of their low, poor, or negative group, organizational, or corporate communication climate and culture.

On the one hand, all of previously said can be changed in few decades. Even nowadays we live in a world in which powerful computers are managing powerful robots which are producing not just goods, but services as well. Sooner or later we humans will be communicating with other humans and with robots and computers equally in our private and professional lives.

On the other hand, a communication will always be a communication, but words by being just words are for humans also deeds as Wittgenstein, Austin said, or as Goethe famously claimed "In the beginning was the deed.", or in short as the Old Latin anonymous saying goes "Rem tene, verba sequentur." / "Grasp the subject and the words will follow."

Cross-References

- [CSR communication](#)
- [Communication and innovation](#)
- [Leadership communication](#)

References

- Austin, J. L. (1976). *How to do things with words*. Oxford: Oxford University Press.
- Bennie, M. (2009). *Good business communication*. Oxford: How To Books Ltd.
- Botha, R., & Knight, C. (Eds.). (2009). *The cradle of language*. Oxford: Oxford University Press.
- Budd, R., & Ruben, B. (1975). *Human communication handbook* (Vol. 1). New Jersey: Hyden Book Company.
- Christiansen, M., & Kirby, S. (Eds.). (2003). *Language evolution*. Oxford: Oxford University Press.
- Grice, P. (1991). *Studies in the way of words*. Harvard: Harvard University Press.
- Harper, D. (2017). *Communication*. Online Etymology Dictionary. <http://www.etymonline.com/?term=communication>. Accessed 14 August
- Klima, E. S., & Bellugi, U. (1979). *The signs of language*. Cambridge, MA: Harvard University Press.
- Knight, C. (2016). Puzzles and mysteries in the origins of language. *Language & Communication*, 50, 12–21.
- Melville, N., & Krkač, K. (2015). The primacy of function over structure, analogy reading of Wittgenstein's meaning is use aphorism. *Synthesis Philosophica*, 60(2), 289–307.
- Newman, A., & Ober, S. (2013). Business communication: In Person, In Print, Online. 8th ed. Mason: South-Western Cengage Learning.
- Parsons, J. (2016). Watch Sophia the 'sexy robot' claim she will 'destroy humans' - leaving creator red faced. *Mirror*, 12(05), 22 March, 2016. <http://www.mirror.co.uk/tech/watch-sophia-sexy-robot-claim-7606152>. Accessed 14 Aug 2017.
- Poe, M. T. (2011). *A history of communications: Media and society from the evolution of speech to the internet*. Cambridge: Cambridge University Press.
- Prigg, M. (2014). *How to speak Monkey*. Mirror Online, 21: 36 BST, 18 December 2014. <http://www.dailymail.co.uk/sciencetech/article-2879585/How-speak-MONKEY-Researchers-uncover-sophisticated-primate-language-local-dialects.html>. Accessed 14 Aug 2017.
- Rentsch, J. R. (1990). Climate and culture: Interaction and qualitative differences in organizational meanings. *Journal of Applied Psychology*, 75(6), 668–681.
- Schneider, B. (Ed.). (1990). *Organizational climate and culture*. San Francisco: Jossey-Bass.
- Schneider, B., Brief, A. P., & Guzzo, R. A. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics*, 24(4), 7–19.
- Shockley-Zalabak, P. S. (2015). *Fundamentals of organizational communication: Knowledge, sensitivity. Skills, values* (9th ed.). London: Pearson.
- Stacks, D., & Salwen, M. (2009). *An integrated approach to communication theory and research*. New York: Routledge.
- Tallerman, M., & Gibson, K. (Eds.). (2012). *The Oxford handbook of language evolution*. Oxford: Oxford University Press.
- Trice, H. M., & Beyer, J. M. (1993). *The cultures of work organizations*. Englewood Cliffs: Prentice-Hall.
- Walker, J. (2017). Researchers shut down AI that invented its own language. Digital Journal, July 21. <http://www.digitaljournal.com/tech-and-science/technology/a-step-closer-to-skynet-ai-invents-a-language-humans-can-t-read/article/498142>. Accessed 14 Aug 2017.
- Wittgenstein, L. (1998). *Culture and Value*, Rev 2nd ed. Oxford: Blackwell.
- Wittgenstein, L. (2009). *Philosophical investigations* (4th ed.). Oxford: Wiley-Blackwell.
- Witzany, G. (Ed.). (2014). *Biocommunication of animals*. Dordrecht: Springer.

Communication Impartiality

► Media Ethics

Communication of CSR Information

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Synonyms

Communication of sustainability information;
Disclosure of CSR information; Sustainability reporting

Description

Communication of CSR information emerges from the evolution of the transparency concept at the peak of social responsibility in business management. Traditional financial information for shareholders and investors becomes insufficient to reflect the value of companies and support the decision-making process of a wide range of stakeholders with a growing social awareness. Therefore, the need to create new value metrics arises to cover nonfinancial aspects from an economic, social, and environmental perspective.

Different tools provide information on the sustainable performance of companies. However, sustainability reports are consolidated as the main tool to communicate CSR. Although the implementation of these documents in information systems has been applied on the basis of voluntarism, the newly acquired importance of nonfinancial information encourages regulators to intervene with norms such as Directive 2014/95/EU in the European Union. Also, from a normative standpoint, the Global Reporting Initiative (GRI) plays an important role in the development of sustainability reporting. This institution facilitates transparency and comparability of information by establishing a standardized set of criteria and indicators that adapt to the need for information at each moment. This allows for a more systematic communication between companies and their stakeholders.

Introduction

The new economic and social paradigm in which CSR operates is characterized by the development of a civil society with greater social and environmental awareness. Traditional corporative responsibility evolves from pure economic accountability to shareholders and investors to another one that additionally covers social and environmental issues and addresses a wide range of stakeholders (Fig. 1). Stakeholders expect companies to act responsibly, and they also wish to have knowledge of their activities and their performance in each of the dimensions comprising the CSR. This has triggered a change in the concept of corporate transparency. Social

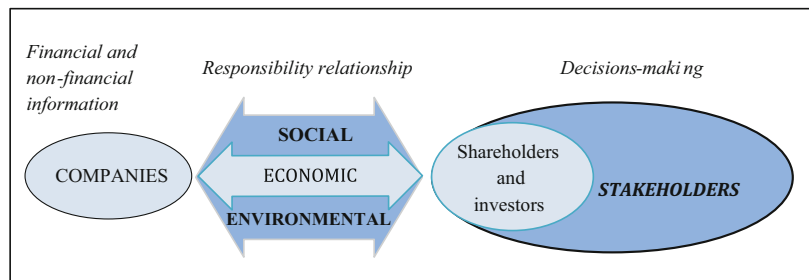
and environmental information then becomes a significant element in the decision-making process. Under this circumstance, new value or performance metrics, mainly of a nonfinancial nature, attempt to complement traditional financial information to reflect business reality.

Communication on sustainability can be performed in many different ways: information disclosed by the companies themselves or by third parties, in the annual report or by specific reports, externally or internally, with quantitative or qualitative information, and so on (Gray et al. 1995). This practice takes advantage of various initiatives and tools designed around CSR that directly or indirectly provide any information on the sustainable performance of companies. Statements of principles and codes of conduct; guidelines on management systems and certification instruments; professional qualifications; and CSR reporting frameworks are notable among these initiatives.

Statements of principles and codes of conduct are adopted by companies as an internal management tool, but they are also used to make their values and ethical standards visible (see ► “Codes of Good Governance”). The usefulness of these tools will depend on their transparency and credibility. They should therefore be communicated to stakeholders and be controlled by appropriate mechanisms to implement and verify their compliance (European Commission 2004). In this sense, companies can communicate their values and behaviors on issues related to CSR by ratifying such codes and statements, with the possibility of also issuing progress reports on their implementation. The organization itself may develop specific codes of conduct, but international

Communication of CSR Information,

Fig. 1 Changes in the concept of transparency with CSR paradigm. (Source: self-elaborated)



initiatives involving relevant stakeholders may also be present. Examples are the United Nations Global Compact (see ► [“United Nations Global Compact”](#)) or the Guidelines for Multinational Enterprises of the Organization for Economic Co-operation and Development (OECD) (see ► [“OECD Principles of Corporate Governance”](#)).

Regarding guidelines on management systems and certification tools, numerous standards allow organizations to integrate social and environmental considerations in business management (European Commission 2004). For greater credibility, they can sometimes opt for a certification of compliance, a source of reliable information on sustainable company performance. However, most standards cover the dimensions of CSR partially, and they focus on specific aspects, such as SA8000 (see ► [“SA8000 Standard”](#)) and some of the certifications of International Organization for Standardization (ISO) (see ► [“ISO 14000 Standards Series”](#) and ► [“ISO 9000”](#)). Following a more inclusive approach, the ISO26000 proposes a guide to improve existing practices and incorporate CSR criteria in business management. However, this standard contains no requirements for certification (see ► [“ISO 26000 Standard”](#)).

For their part, professional qualifications are a source of information through tools such as lists of socially responsible companies and sustainability indices. Lists of socially responsible companies emerge to identify firms with the best ethical and social practices. When expert ratings on sustainability relate to financial performance, they are called sustainability indices. An example of this is the Dow Jones Sustainability Index (DJSI) (see ► [“Dow Jones Sustainability Index”](#)) or the FTSE4 Good Index. Indices are considered a source of objective and reliable information (Cheung 2011; Christofi et al. 2012; Collison et al. 2008). Even though they make the information available to all stakeholders, these indices are primarily meant for investors given the newly acquired importance of socially responsible investment (Consolandi et al. 2009). Furthermore, they only provide information on large firms given their connection to stock markets.

Finally, CSR information frameworks or structures (see ► [“Reporting Framework”](#)) arise to increase objectivity and comparability in company communication. Unlike financial information, CSR communication involves a great deal of qualitative information, which is difficult to measure. This encourages the development of standards and guidelines to measure, communicate, and evaluate sustainability information. Global Reporting Initiative (GRI) is the most prominent and widely accepted international initiative (Manetti and Becatti 2009; Marimon et al. 2012; Nikolaeva and Bicho 2011). Its purpose is to establish guidelines for companies to provide a balanced and reasonable representation of their sustainability performance. Such initiatives materialize sustainability disclosures through written documents issued by companies to their stakeholders. Public documents providing information on the social, environmental, and economic performance of an organization are known as CSR reports or triple bottom line (TBL), among others. However, the term most commonly used is the sustainability report, popularized by GRI (Amran et al. 2014; Borkowski et al. 2011; Moneva 2007).

Table 1 summarizes the initiatives and tools somehow related to the communication of CSR. Their particular characteristics are identified according to the transmitter, the receiver, and the content of the information emanating from the same.

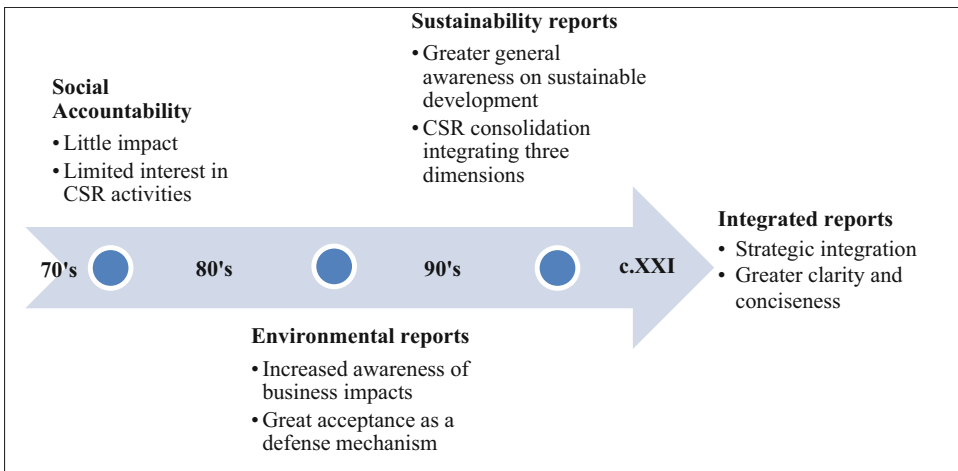
Sustainability reports may be the most comprehensive tool for communicating a firm's sustainable performance. The information contained in these documents comes from a primary source, the companies themselves. Moreover, information is addressed to all stakeholders and refers to the values, management, and performance of businesses from an economic, social, and environmental perspective.

Evolution in CSR Communication by Companies

Evolution in communicating sustainability has been accompanied by the implementation of

Communication of CSR Information, Table 1 Tools for CSR communication (Source: self-elaborated)

CSR initiative	Communication tool	Transmitter	Main receiver	Information content
Statements of principles and codes of conduct	Codes of Conduct Progress Reports	Company	All stakeholders	Values
Guidelines on management systems and certification instruments	Certifications	External professional	All stakeholders	Management
Professional qualifications	Sustainability lists and indices	External professional	Investors	Performance
Information framework and structures	Sustainability reports	Company	All stakeholders	Values, management, performance



Communication of CSR Information, Fig. 2 Evolution of sustainability information. (Source: self-elaborated)

CSR as a key element in business management. Changes in the social and economic paradigm over the years have caused a shift in corporate communication trends, so that the information adjusts to the needs at each moment and evolves in terms of format and content. Figure 2 shows the most prominent landmarks in the development of sustainability information.

Several authors place the beginning of the development and publication of nonfinancial information in the 1970s (Daub 2007; Manurung and Basuki 2010; Moneva 2005) when concepts such as social accounting and social balance were developed (Gray et al. 1996). At this stage, the financial reports included some aspects of interest to users, such as environmental and labor impacts.

Social accounting was then defined as the process of communicating the social and environmental impact of economic activities of an organization to a particular interest group or society as a whole (Gray et al. 1987). However, this information had little impact then, because the interest on corporate performance was mainly based on the economic aspect and social activities were considered an obstacle for organizations at the time (Moneva 2005). It was not until the late 1980s and early 1990s that nonfinancial information became increasingly important and resulted in the emergence of environmental reports (Daub 2007; Jones III and Jonas 2011; Moneva 2005). A successive series of environmental disasters gave rise to social awareness concerning the environmental

impact of business (Blacconiere and Patten 1994; Moneva 2007; Patten and Nance 1998). This situation is enhanced by greater involvement at the institutional level that highlighted some initiatives of the United Nations like the publication of the Brundtland Report in 1987 and the celebration of the Rio Earth Summit in 1992. This promotes the search for a balance between economic and environmental issues, to benefit both dimensions, thus raising interest in environmental management and communication (Jones III and Jonas 2011; Moneva 2007). Investors start to value this information, and voluntary disclosure becomes a defense mechanism against possible future regulations (Blacconiere and Patten 1994; Patten and Nance 1998). As of the mid-1990s, after the concept of sustainable development is accepted, the content of these reports expands into the social aspects, while economic aspects are reoriented. This leads to the origin of sustainability reports at the end of that decade and its consolidation in business information systems at the beginning of the twenty-first century (Manurung and Basuki 2010; Moneva 2005; Park and Brorson 2005). These documents have a significant potential, as an appropriate vehicle for communicating the nonfinancial performance of organizations, to change the nature of business value measures and provide a balanced assessment of company performance (Hubbard 2011). Given the adaptive nature of sustainability information, a new documentary format called integrated report (see ► “Integrated Reporting for Sustainability”) is developed at the start of the second decade of the century. The integrated report aims to concisely communicate how the strategy of an organization, contemplated from a triple perspective and within the context of its external environment, leads to the creation of value in the short, medium, and long term.

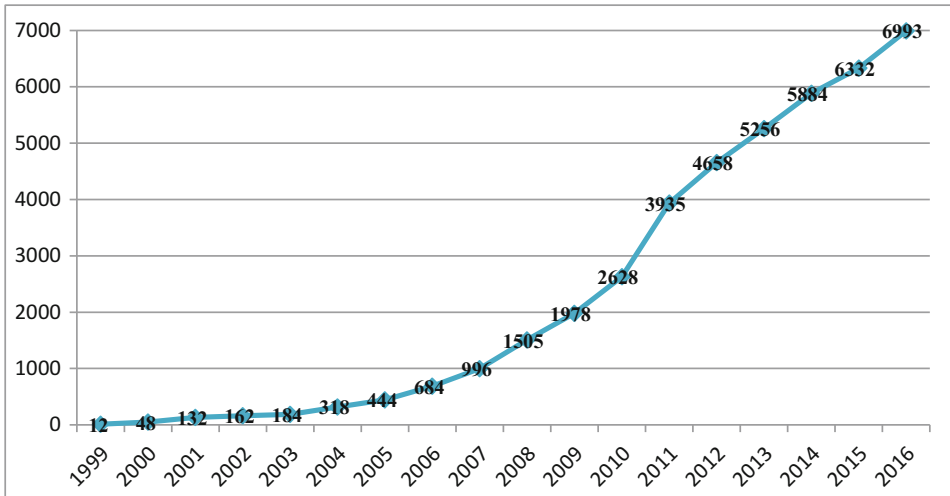
Note that the CSR communication is a largely voluntary practice that companies perform to legitimize their actions to society (Michelon 2011; Robinson et al. 2011). However, the development of the institutional level reflects the importance acquired by this information. Organisms begin to promote policy initiatives that determine formats and contents. Examples

of this are the King Report on Corporate Governance in South Africa (see ► “King III Report and CSR”) and Directive 2014/95/EU of the European Parliament and the European Union Council. The King Code, mandatory for companies listed on the Johannesburg Stock Exchange, requires firms to disclose their sustainability through an integrated report, promoting the proliferation of such documents (Vaz et al. 2016). For its part, the European Directive requires large companies to add a nonfinancial statement within their annual report that includes specific social and environmental information. However, companies are exempt from this obligation when they voluntarily submit sustainability reports that include a minimum content. In both cases, the importance of the GRI Guidelines is highlighted as a framework for the development of information.

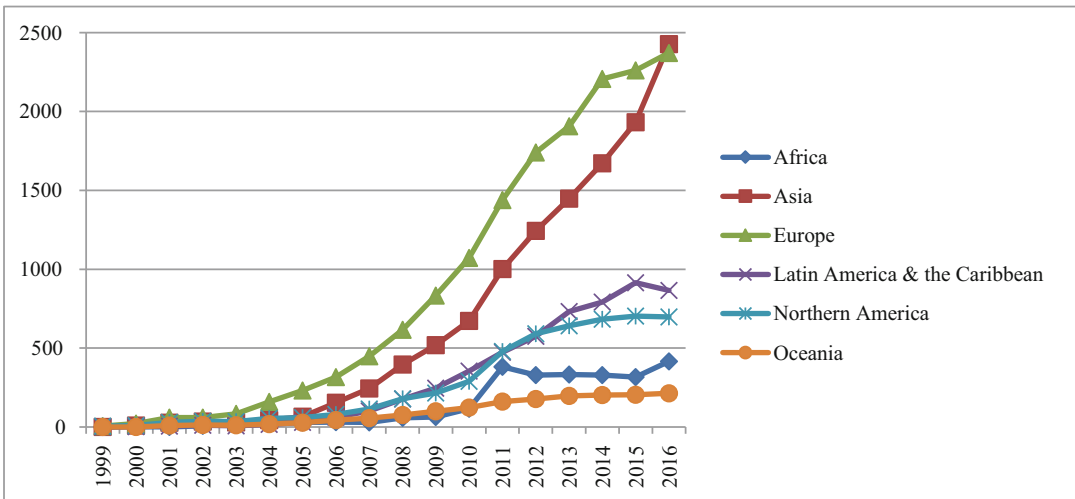
GRI and CSR Communication

Sustainability reports are first issued as such in the late twentieth century, and they have gained weight over the years in terms of the number of publications as well as the quantity and quality of information they contain (CorporateRegister.com 2013; Kolk 2008; KPMG 2015). The appearance of this type of document coincides with the issuance of the first GRI’s guide in 1999 (Hahn and Kühnen 2013). This organization has an extensive database containing the reports that have been published following their guidelines since the launch of the first guide. Furthermore, since 2011 the organization also includes other reports not made from their guides to broaden the scope of analysis and to get a general overview about CSR information trends. As seen in Fig. 3, the number of registered documents worldwide totals 12 reports in 1999 to 6.993 in 2016. Although there is an upward trend in all regions, the regions of Europe and Asia especially contribute to this growth (Fig. 4).

The framework established by GRI is currently the most widely used internationally for this purpose (KPMG 2017). This institution was born in 1997 upon the initiative of the US non-



Communication of CSR Information, Fig. 3 Number of sustainability reports registered in GRI database. (Source: Self-elaborated. Compiled from the GRI database (accessed in November 2018))



Communication of CSR Information, Fig. 4 Number of sustainability reports registered on GRI database by region. (Source: Self-elaborated. Compiled from the GRI database (accessed in November 2018))

governmental organization Coalition for Environmentally Responsible Economies (CERES) and the Tellus Institute, with the involvement of the United Nations Environment Program (UNEP) too. Its initial goal was to drive the environmental performance of companies, but it later expanded its scope to also include social and economic dimensions (Jones III and Jonas 2011). Each of the versions of the GRI Guidelines has evolved under a review process that includes institutions,

organizations, and relevant experts in sustainability, based on existing experience and feedback.

The first GRI guide (GRI-G1) appears as a draft on exhibition in 1999. A final version is published in 2000 as the first global framework for sustainability reporting; its review begins immediately and continues for the next 2 years, culminating in the development of a new guide in 2002 (GRI-G2). Later, in 2006, a third version of the guide (GRI-G3) is issued along with a series

of sectoral supplements to suit the specific needs of each industry. The improved third edition version (GRI-G3.1) is published in 2011. It includes a more extensive guide to report on human rights, local community impacts, and gender that shows greater support for social information. After 2 years of work to adapt to new communication trends, such as the integrated reporting, GRI presents its fourth version (GRI-G4) in the year 2013. This new version implements changes and developments that attempt to focus on the material aspects of CSR of each company to reach more strategic and credible reports. Finally, the GRI launches the first comprehensive standards for sustainability reporting (GRI Standards) in 2016 that include the main concepts of the previous version with a more flexible modular structure, some clearer requirements, and simpler language. GRI Standards is effective for reports published from July 2018 and can be used by companies of any size, industry, or geographic location. Figure 5 shows how companies that publish GRI reports according to database records already suit each of the guide versions from the

year in which they are issued. It also reflects that different versions can coexist in the same year during the transition stage.

The GRI is therefore a dynamic initiative that continually evolves and adapts its guidelines for companies to provide quality information based on needs arising at all times. Each version implies a greater commitment and participation of stakeholders, the search for a greater ease of use by information issuers and users, the harmonization with other initiatives, and the strengthening of information reliability. In this adaptive and harmonizing facet, it is noteworthy to point out that GRI, together with the Prince of Wales' Accounting for Sustainability Project, formed the International Integrated Reporting Council (IIRC) in 2010, which advocates the implementation of an integrated report. This concept, which includes the idea of strategic integration of information, has been increasingly accepted over recent years (Ballou et al. 2012; Eccles and Krzus 2010; Frias-Aceituno et al. 2014; Sierra-García et al. 2015; Veltri and Nardo 2013). The report published by KPMG (2013) evidences an



Communication of CSR Information, Fig. 5 GRI Guidelines implementation in reporting practices. (Source: Self-made, Compiled from the GRI's database (date accessed November 2018))

increase in the publication of CSR information integrated in annual reports. However, only 10% of companies belonging to the N100 index (made up of the 100 largest companies in 41 countries) state having an integrated report. Following the information extracted from the GRI database, the number of registered integrated reports declined from 15% in 2011 to 8% in 2016. Furthermore, it is still an ambiguous concept that has given rise to different information structures, ranging from the communication of unconnected information to the creation of a more sophisticated structure that provides interrelated financial and nonfinancial information. Therefore, sustainability reports remain as the most widely used tool for CSR communication.

Summary

CSR is configured as a strategic element integrated in business management consequent to the evolution of corporate responsibility in society. Organizations must not only act from a socially responsible perspective, but they should also declare their commitment and performance so that it can be internally or externally communicated. Therefore, corporate sustainability must be defined, measured, and communicated to become a source of value creation.

Several tools can be used to report on the sustainable performance of companies, whether it is directly or indirectly, as a whole or partially, and so on. Nevertheless, sustainability reports are configured as the main instrument used to disseminate business practices in CSR matters. Often accompanying financial reports, sustainability reports symbolize a growing demand for greater transparency from stakeholders. These documents reflect the image of companies from a holistic perspective that encompasses economic, social, and environmental dimensions, to generate a valuable source of information for the new paradigm of decision-making beyond mere financial performance.

Communication of CSR should be understood as a dynamic and evolving practice that serves the information needs of stakeholders.

Although the origin of nonfinancial information dates back to earlier decades, its importance as a key element for decision-making is consolidated in the twenty-first century. The increasingly voluntary disclosure through the publication of sustainability reports confirms its importance. Furthermore several new regulatory initiatives make the disclosure of nonfinancial information mandatory for certain companies over the last decade. This reflects the need for this type of information and traditional financial reporting to be similarly considered in assessing business performance.

The mainly qualitative nature of nonfinancial information, its contextualization, and the variety of its users hinder the implementation of communication processes with the same rigor and regulation of financial information. In this sense, information frameworks are of great importance in developing and improving sustainability reporting, promoting comparability, and evaluating reports contents. Specifically, the guidelines issued by GRI have a significant potential to improve the usefulness and quality of information on sustainable impacts and performance. They quickly adjust to changing business transparency from an integrative and multi-stakeholder perspective. This is why their actions may be decisive in the development of CSR communication. In fact their standards enjoy great international recognition, both at the firm and the institutional level.

Cross-References

- [Codes of Good Governance](#)
- [Corporate Social Responsibility Reporting](#)
- [Dow Jones Sustainability Index](#)
- [European Union Directive: The 8th Company Law Directive on Disclosure and Transparency](#)
- [Integrated Reporting for Sustainability](#)
- [ISO 26000 Standard](#)
- [ISO 9000](#)
- [ISO 14000 Standards Series](#)
- [King III Report and CSR](#)
- [OECD Principles of Corporate Governance](#)
- [Reporting Framework](#)

- ▶ [SA8000 Standard](#)
- ▶ [Sustainable Reporting](#)
- ▶ [United Nations Global Compact](#)

References

- Amran, A., Lee, S. P., & Devi, S. S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, 23(4), 217–235.
- Ballou, B., Casey, R. J., Grenier, J. H., & Heitger, D. L. (2012). Exploring the strategic integration of sustainability initiatives: Opportunities for accounting research. *Accounting Horizons*, 26(2), 265–288.
- Blaconiere, W. G., & Patten, D. M. (1994). Environmental disclosures, regulatory costs, and changes in firm value. *Journal of Accounting and Economics*, 18(3), 357–377.
- Borkowski, S. C., Welsh, M., & Wentzel, K. (2011). Sustainability reporting assurance: Your next growth area? *Pennsylvania CPA Journal*, 82(2), 24–27.
- Cheung, A. W. K. (2011). Do stock investors value corporate sustainability? Evidence from an event study. *Journal of Business Ethics*, 99(2), 145–165.
- Christofi, A., Christofi, P., & Sisaye, S. (2012). Corporate sustainability: Historical development and reporting practices. *Management Research Review*, 35(2), 157–172.
- Collison, D. J., Cobb, G., Power, D. M., & Stevenson, L. A. (2008). The financial performance of the FTSE4Good indices. *Corporate Social Responsibility and Environmental Management*, 15(1), 14–28.
- Consolandi, C., Jaiswal-Dale, A., Poggiani, E., & Vercelli, A. (2009). Global standards and ethical stock indexes: The case of the Dow Jones sustainability Stoxx index. *Journal of Business Ethics*, 87(1), 185–197.
- CorporateRegister.com. (2013). *CR perspectives 2013: Global CR reporting trends and stakeholder views*. London: CorporateRegister.com.
- Daub, C. H. (2007). Assessing the quality of sustainability reporting: An alternative methodological approach. *Journal of Cleaner Production*, 15(1), 75–85.
- Eccles, R. G., & Krzus, M. P. (2010). *One report: Integrated reporting for a sustainable strategy*. Hoboken: Wiley.
- European Commission. (2004). *ABC of the main instruments of corporate social responsibility*. Luxembourg: Office for Official Publications of the European Communities.
- Frias-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23(1), 56–72.
- Gray, R., Owen, D., & Maunders, K. (1987). *Corporate social reporting: Accounting and accountability*. Hemel Hempstead: Prentice-Hall International.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47–77.
- Gray, R., Owen, D., & Adams, C. (1996). *Accounting & accountability: Changes and challenges in corporate social and environmental reporting*. Harlow: Prentice Hall.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5–21.
- Hubbard, G. (2011). The quality of the sustainability reports of large international companies: An analysis. *International Journal of Management*, 28(3), 824.
- Jones, A., III, & Jonas, G. A. (2011). Corporate social responsibility reporting: The growing need for input from the accounting profession. *The CPA Journal*, 81(2), 65.
- Kolk, A. (2008). Sustainability, accountability and corporate governance: Exploring multinationals' reporting practices. *Business Strategy and the Environment*, 17(1), 1–15.
- KPMG. (2013). *The KPMG survey of corporate responsibility reporting 2013*. The Netherlands: KPMG International.
- KPMG. (2015). *The KPMG Survey of Corporate Responsibility Reporting 2015*. The Netherlands: KPMG International.
- KPMG. (2017). *The KPMG survey of corporate responsibility reporting 2017*. The Netherlands: KPMG International.
- Manetti, G., & Becatti, L. (2009). Assurance services for sustainability reports: Standards and empirical evidence. *Journal of Business Ethics*, 87(1), 289–298.
- Manurung, A. M., & Basuki, H. (2010). An analytical assessment of assurance practices in social environmental and sustainable reporting in the United Kingdom and North America. *Gadjah Mada International Journal of Business*, 12(1), 75–115.
- Marimon, F., Del Mar Alonso-Almeida, M., Del Pilar Rodríguez, M., & Alejandro, K. A. C. (2012). The worldwide diffusion of the global reporting initiative: What is the point? *Journal of Cleaner Production*, 33, 132–144.
- Michelon, G. (2011). Sustainability disclosure and reputation: A comparative study. *Corporate Reputation Review*, 14(2), 79–96.
- Moneva, J. M. A. (2005). Información sobre responsabilidad social corporativa: Situación y tendencias. *RAE: Revista Asturiana de Economía*, 34, 43–67.
- Moneva, J. M. A. (2007). El marco de la información sobre responsabilidad social de las organizaciones. *Ekonomia: Revista vasca de economía*, 65, 284–317.
- Nikolaeva, R., & Bicho, M. (2011). The role of institutional and reputational factors in the voluntary adoption of corporate social responsibility reporting standards. *Journal of the Academy of Marketing Science*, 39(1), 136–157.

- Park, J., & Brorson, T. (2005). Experiences of and views on third-party assurance of corporate environmental and sustainability reports. *Journal of Cleaner Production*, 13(10–11), 1095–1106.
- Patten, D. M., & Nance, J. R. (1998). Regulatory cost effects in a good news environment: The intra-industry reaction to the Alaskan oil spill. *Journal of Accounting and Public Policy*, 17(4–5), 409–429.
- Robinson, M., Kleffner, A., & Bertels, S. (2011). Signaling sustainability leadership: Empirical evidence of the value of DJSI membership. *Journal of Business Ethics*, 101(3), 493–505.
- Sierra-Garcia, L., Zorio-Grima, A., & García-Benau, M. A. (2015). Stakeholder engagement, corporate social responsibility and integrated reporting: An exploratory study. *Corporate Social Responsibility and Environmental Management*, 22(5), 286–304.
- Vaz, N., Fernandez-Feijoo, B., & Ruiz, S. (2016). Integrated reporting: An international overview. *Business Ethics: A European Review*, 25(4), 577–591.
- Veltri, S., & Nardo, M. T. (2013). The intangible global report: An integrated corporate communication framework. *Corporate Communications: An International Journal*, 18(1), 26–51.

Communication of Sustainability Information

- [Communication of CSR Information](#)

Communications Privacy Principles

- [Media Ethics](#)

Communities of Practice

- [Online Communities](#)

Community Acceptance

- [Social Acceptance](#)

Community Based

- [Green Jobs Social Life Cycle Assessment](#)

Community Consumption

- [Collaborative Economy](#)

Community Development

- [Participatory Development](#)
- [Social Management](#)

Community Engagement

- [Corporate Community Involvement](#)
- [Social License to Operate](#)
- [Stakeholder Governance and Citizen Science](#)

Community Involvement

- [Public Participation](#)

Community of Practices

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Synonyms

[Learning by interaction](#); [Practitioner community](#); [Professional community](#); [Situated learning](#); [Thinking together](#)

Definition

“We all belong to communities of practice... in fact communities of practice are everywhere” (Wenger 1998, p. 6). A Community of Practice (CoP) is a group of people who share similar challenges, interact regularly, learn from and with each other, and improve their ability to address their challenges. The theory of CoP starts from the idea of situated learning and learning by interaction and studies how a CoP generates and diffuses knowledge among members and in the organization in which the CoP arises and grows. In this chapter, CoP is described, taking into consideration components, characteristics, relationships among members in the CoP and between the CoP and organizations, benefits and limitations in activating a CoP, and factors that enable or obstacle the success of a CoP. It emerges that CoP exist in many contexts and that the presence of interorganizational CoP is growing, as well as the diffusion of virtual CoP. Moreover, CoP must pay attention to the search for an equilibrium between formal-informal functioning, control-autonomy, and core group-peripheral members.

Recently, CoP has manifested an interesting role in two key issues: innovation and sustainability. Some experiences show the conditions under which a CoP can be a center of innovation production, both incremental and radical. The lens of the theory of CoP seems to be very useful when communities face the challenge of sustainability. It represents a very promising area in which research and practice dialogue in search of the best solutions to environmental issues.

Introduction

Intellectual capital and social capital are among the most relevant resources in a firm. In the literature, there are many definitions of intellectual capital. Marr et al. (2004, p. 554) report several definitions of intellectual capital and propose their own: “(Intellectual capital) ... is composed of all knowledge-based assets, distinguished between organizational actors (relationships, HR) and infrastructure (virtual and physical).” OECD

(2001, p. 41) defines social capital as “networks together with shared norms, values and understandings that facilitate co-operation within or among groups.”

Roots of both intellectual capital and social capital are knowledge and know-how. Thus, research of the social and organizational conditions favorable to creation and diffusion of knowledge inside the firm and among economic actors is imperative. In every organization, private or public, effective and efficient knowledge management supports the creation of innovation and the goal of competitive advantage. Over time, the role of knowledge management manifested in essentially three phases (Snowden 2002), related to the increasing consciousness of the strategic meaning of knowledge.

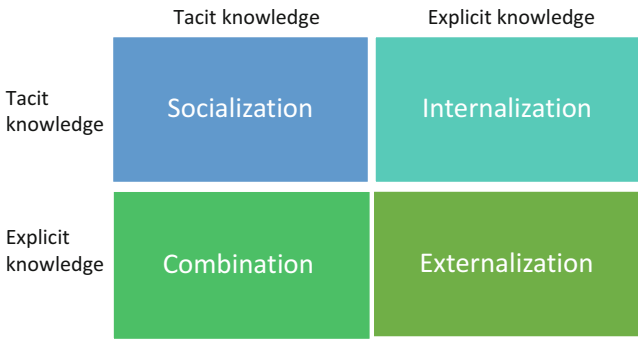
Initially, knowledge management was neglected, because the focus was on business process reengineering interventions. As an organization needs more information in order to make decisions and formulate strategies, rethinking information flows is an unavoidable issue in the firm. The value of knowledge gained through experience was not part of this discussion.

In the second phase, firms realized the crucial necessity to transform individual knowledge into organizational knowledge. However, it soon became clear that this transformation was not driven only by an information flow. It required a socio-relational component essential to spread knowledge. Moreover, the concept of knowledge itself has a tacit and an explicit component, making the diffusion of knowledge difficult.

This leads to the third phase, in which knowledge management means to build, maintain, and nurture conditions to create and disseminate knowledge through social relationships.

In general, individual knowledge could be explicit, that is, easy to share with other people, or tacit, that is, personal knowledge that is not visible to others. As has been indicated, it is crucial to transform knowledge from individual to organizational knowledge. Nonaka and Takeuchi (1995) described a model of knowledge conversion: the SECI model. These authors argued that, in organizations, knowledge is created, transferred, and regenerated through four phases:

Community of Practices,
Fig. 1 Four modes of
knowledge conversion
(Nonaka and Takeuchi
1995, p. 62)



socialization, externalization, combination, and internalization (Fig. 1).

Socialization (from tacit knowledge to tacit knowledge) occurs when an individual is willing to share knowledge with other people. It is the process of sharing tacit knowledge through observation, imitation, practice, and participation in formal or informal communities. Externalization (from tacit knowledge to explicit knowledge) is the process of expressing tacit knowledge in explicit concepts, thereby transforming tacit knowledge into explicit knowledge available to the organization. Combination (from explicit knowledge to explicit knowledge) is the process of integrating concepts into a knowledge system. Internalization (from explicit knowledge to tacit knowledge) is the process of embodying explicit knowledge into tacit knowledge. The individual makes new knowledge coherent to his/her identity and enhances knowledge through a learning process.

In this broad context, Community of Practice (CoP) was born and developed (Choi 2006).

Community of Practice

As described, the creation and diffusion of knowledge is possible only if there are places, physical or virtual, where tacit knowledge is shared. Many social structures play a relevant role in sharing knowledge, for example, project teams, formal work groups, or networks (Wenger and Snyder 2000; Kerno 2008). Lave and Wenger introduced the CoP in 1991 and extended the concept in 1998

(Cox 2005). In describing situated learning, they considered CoP as a different social structure that brought together the ideas of community and practice.

A CoP is a group of practitioners who share similar challenges, interact regularly, learn from and with each other, and improve their ability to address their challenges.

Another interesting definition (Lave and Wenger 1991, p. 98) gives evidence to the strong relation between CoP and knowledge management: “(a CoP) is a set of relations among persons, activity and the world, over time and in relation with other tangential and overlapping communities of practice. A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretative support necessary for making sense of its heritage”.

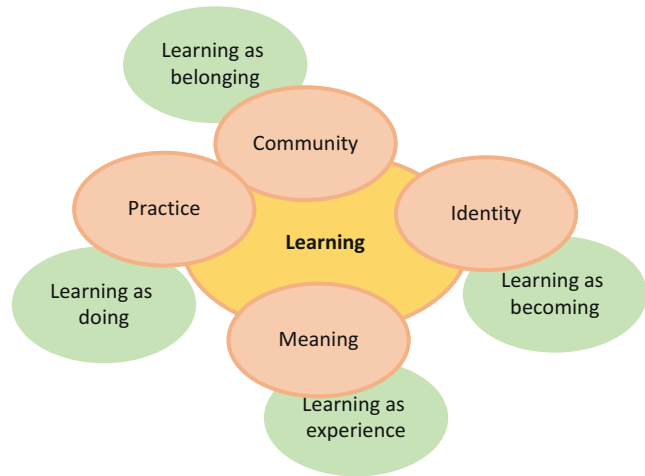
The CoP find its roots in a social theory of learning and in the idea of learning by interacting, emphasizing the relevance of “interaction” between individuals in creating knowledge. The social theory of learning includes four essential elements (Wenger 1998): (i) meaning, (ii) practice, (iii) community, and (iv) identity (Fig. 2).

First, “meaning” indicates the ability to interact with reality and the world and to attribute meaning to lived experiences which are shared in the community. Members, in becoming part of the CoP, have shared interests and the same understanding of what is important to individuals and to society.

Second, “practice” indicates the schemes, frameworks, and perspectives derived from

Community of Practices,

Fig. 2 Components of a social theory of learning (Wenger 1998, p. 5)



experience that originates in the community. In other words, practice implies knowledge in action (Mohajan 2017).

Third, the “community” is the structure in which activities have a specific meaning to the members of the group.

Finally, identity implies that learning changes who we are.

Some characteristics of the CoP help to distinguish it from other social structures related to knowledge. In a CoP, membership derives from a self-selection based on interest, passion, common challenges, etc. As a result, the community could be physically distant. In addition, boundaries are fuzzy, as a CoP can change over time in terms of members and goals. In fact, usually a CoP originates with a core group of members, then, progressively, younger and less expert members join. New members are initially in a peripheral position but gradually gain legitimization through interaction with older and more expert members. This process is complex and implies an evolution from peripheral to core membership through several phases (Borzillo et al. 2011). In this sense, newer members move to the center of the CoP, while other members gradually leave. Finally, as a CoP is not formally determined, trust between members is crucial to sustain the structure.

According to Wenger (1998), a CoP has three distinguishing factors (Fig. 3):

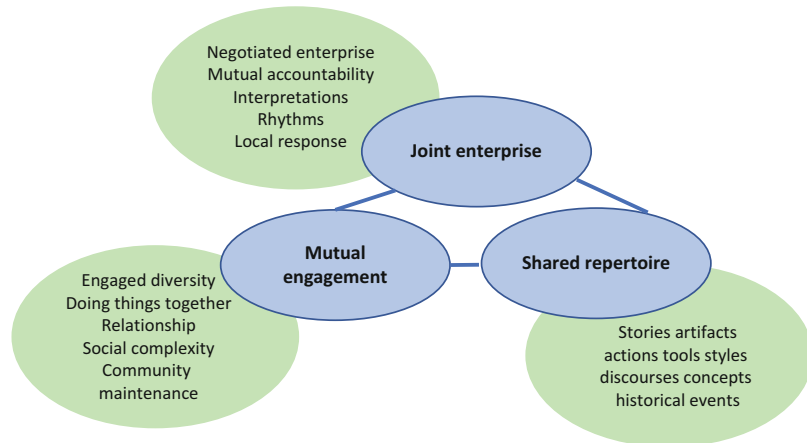
- Joint enterprise: members recognize a common goal of the community and work together in pursuing it (what the CoP is about).
- Mutual engagement: members deliberately interact with others in the community and have a strict relationship with the community (how the CoP functions).
- Shared repertoire: members create common resources and practices. This process is possible thanks to mutual engagement and the sharing of experiences and activities that lead to practices which have a common and shared meaning in the community. It means that the community has common languages, meanings, routines, and experience, even if they continuously change over time (what capabilities the CoP has produced).

Key Issues

After its conceptualization, CoP became very popular and the literature acknowledged that CoP is present in many organizations. CoP can be found in private and public sectors and in very different organizations, but results are not positive in every context or firm. Consequently, many authors investigate the benefits and limitations of a CoP. Wenger (1998) underlined that CoP contribute to organizational learning potential in two ways: they develop knowledge at their core; and they develop knowledge through interactions at

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Fig. 3 Dimensions of practice as the property of a community (Wenger 1998, p. 73)



their boundaries. In fact, CoP is a node for interpretation and exchange of information in which knowledge is produced in “living ways” and diffused throughout the whole organization. Bringing some experience from business cases, Wenger and Snyder (2000) argued that CoP:

- Help drive strategy because they support the firm in finding out key issues or topics that could be relevant in defining and implementing strategies.
- Start new lines of business because CoP generate incremental innovation as well as radical innovation, helping the firm to find new market opportunities (Borzillo and Kaminska-Labbè 2011).
- Solve problems quickly, because they help to locate members that face the same problems and can assist in finding solutions. Thanks to the informality of CoP, contact and dialogue is easier than in other forms of cooperation.
- Transfer best practices because they are an ideal forum where ideas are shared and best practices emerge and then are spread into the organization.
- Develop professional skills as the dynamics of a CoP allow younger members to learn from senior members. Moreover, the movement of members from peripheral to the center helps in sharing knowledge.
- Help companies recruit and retain talent because people find in the CoP the opportunity to express themselves, cultivating ideas

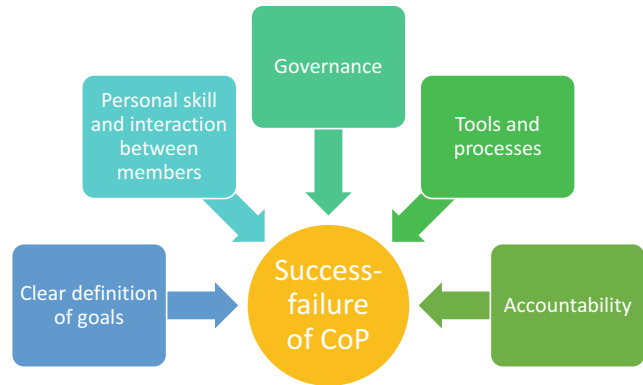
and projects and giving value to their roles. Moreover, in generating knowledge, CoP renew people skills and the organization itself.

Dalkir (2005) emphasized that CoP improve efficiency of processes, generate greater and growing revenue, and provide support in building loyalty and commitment among stakeholders.

CoP also have some limitations and weaknesses. Roberts (2006) underlined how power inside the CoP can shape the meanings and the direction of the CoP and how it can reduce creativity and the emergence of new and different perspectives. Even if the CoP is a flat structure, this problem can be more intense when CoP members belong to different levels in the hierarchy of the organization. The language or code that a CoP uses could be too restricted and limit learning and knowledge creation. In addition, the sociocultural environment in which the community lives can be a limitation, depending on the culture in the organization and in the region. For example, Kerno (2008) suggested that Western societies are likely to be less successful than their Eastern counterparts, due to the different cultures.

Other, more practical, obstacles are related (Kerno 2008) to the limited availability of time (time crunch). To be effective, a CoP needs a time-dedicated activity. As CoP are established in organizations, a strong hierarchical structure may tend to limit creativity and define too strictly the borders of the activities of the CoP.

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Fig. 4 Factors of success
 and failure of CoP



Several authors have focused attention on factors that can positively or negatively affect the life and the results of CoP. In general, five areas are relevant in the success or failure of a CoP (Fig. 4).

A review of these contributions is reported in Table 1 which shows the most critical areas, deriving from the characteristics and elements of CoP.

The “clear definition of goals” is a prerequisite to CoP establishment and is at the basis of the joint enterprise, defined by Wenger. When goals are too generic, CoP have a high probability of failure. One problem can be practice intangibility (Probst and Borzillo 2008, p. 343) that occurs “when members fail to engage with one another in a way that allows them to illustrate the practice to make it concrete enough for other members to understand and visualize its function.” As a CoP doesn’t live in a vacuum, the goals of a CoP need to be coherent with an organization’s strategy to be effective in their context. When a CoP affords very complex topics, it is very useful to split the fundamental goal into sub-topics or problems that can be studied and solved separately in an easier way.

A CoP works if its members have the right competencies and an attitude of interaction. Experience gives evidence to the fact that CoP with very specialized members as well as CoP with diverse competencies can be successful, depending on the topic and the challenges they face. Interactions derive from mutual trust between members and the motivation of individuals. The presence of an environment that favors cooperation helps a CoP to express creativity. Pyrko et al. (2017, p. 394) speak of “thinking

together as a form of sharing tacit knowledge under non-routine problematic circumstances.” Schofield et al. (2018) advised to be alert regarding lack of a genuine interest to participate (Machiavellian participation). In contrast, if competencies are too rigid, interaction is low, the environment is very competitive, and a strong hierarchy is predominant, then a CoP will find it difficult to grow and to achieve good results in terms of knowledge and innovation.

The issue of governance is very crucial because the theory of CoP argues that they are spontaneous and informal, but empiric observation shows that CoP have some rules and mechanisms of functioning. Various authors underline how important it is to have a central nucleus in which members act as stimuli inside the CoP. The presence of a leader and a sponsor helps to keep all members focused on the challenge they are facing, and a governance committee helps in working on sub-goals and in integrating results. As a CoP is part of an organization (Bardon and Borzillo 2016), good governance mechanisms support the autonomy of the CoP while allowing the diffusion of knowledge within the firm. The balance of control and autonomy is one key question in the relationship between a CoP and the organization. Many CoP are interorganizational, and this increases the necessity of mechanisms that will canalize, in some way, the informal and innovative energy of the CoP in producing knowledge that can be used efficiently in the organizations involved. As Borzillo and Kaninska-Labbè (2011, p. 29) suggested, “CoP transcend the rigidity of organizational boundaries and hierarchies

Community of Practices, Table 1 Success and failure factors in a CoP (re-elaborated version of Cattaneo et al. 2018)

Success factors	Failure factors
<i>Clear definition of goals</i>	
Joint enterprise (Wenger 1998)	Practice intangibility (Probst and Borzillo 2008)
Stick to strategic objectives (Probst and Borzillo 2008)	
Divide objectives into sub-topics (Probst and Borzillo 2008)	
<i>Personal skill and interaction between members</i>	
Mutual engagement (Wenger 1998) and active participation (Davenport and Hall 2002)	Low level of one-to-one interaction between members (Probst and Borzillo 2008)
Shared practice or shared repertoire (Wenger 1998)	Rigidity of competences (Probst and Borzillo 2008)
	Lack of identification with the CoP (Probst and Borzillo 2008)
Cooperative environment (Kerno 2008)	Competitive and individualist environment (Kerno 2008)
	Hierarchical structure (Roberts 2006; Kerno 2008)
Genuine interest to participate (Schofield et al. 2018)	Machiavellian participation (Schofield et al. 2018)
<i>Governance</i>	
Form one or more governance committees (Probst and Borzillo 2008)	Lack of a core group, taking an active part in the CoP (Probst and Borzillo 2008)
Identify CoP leader and sponsor (Probst and Borzillo 2008)	
Overcome hierarchy-related pressures (Probst and Borzillo 2008)	
Establish a form of recognition of the participation of individuals (Mohajan 2017)	
<i>Tools and processes</i>	
Tension between formal and informal Intervention of management in the management of the CoP (Bardon and Borzillo 2016; Borzillo et al. 2011; Borzillo and Kaminska-Labbè 2011)	
Feed the CoP with external expertise (Probst and Borzillo 2008)	Be self-referential and isolated from the organization (Pattinson et al. 2016)
Promote the access to other intra- and interorganizational networks (Probst and Borzillo 2008)	
<i>Accountability</i>	
Provide measurable performance (Probst and Borzillo 2008)	
Share and discuss the results (Probst and Borzillo 2008)	Keep results only inside the CoP (Pattinson et al. 2016)
Appreciation, across organization, of the result of CoP (Wenger and Snyder 2000)	

without destabilizing the formal organizational structure.”

Related to the governance mechanisms is the issue of “tools and processes.” Many authors underline that a CoP must be “managed” or “cultivated”; that is, it must search for an equilibrium between formal and informal. In this regard, managers of the organization must support the CoP by legitimizing it and creating the best conditions for people who are part of the CoP. They must favor the diffusion of the results of the CoP within the

organization as well as in other organizations who take part in the CoP. In other words, organizations (and managers in particular) are fundamental in nurturing a CoP. In fact, their mediation role between CoP and organizations, and their support in finding out relevant challenges, can “translate” the output of the CoP into practices that become part of the routine in the organization.

Some tools are very important in facilitating the work in a CoP because a CoP can be located in a physical place or, more frequently, a distributed

or virtual one. The establishment of an online CoP creates an opportunity to involve many individuals who are sometimes dispersed all over the world but are interested in the same topic or are facing similar challenges. Even in a virtual CoP, communication systems and technology are essential; they are important in every CoP because they increase the sharing of information and experience, the formalization of the shared repertoire, and provide a means to transfer knowledge across the boundaries of the community.

Finally, the results of CoP must be measurable, that is, the CoP itself must be accountable. It is important to make visible the practices or innovations that emerge from the work of the CoP, as well as to give evidence as to how they can improve efficiency and efficacy in the organization. Managers are important in giving value to the output of the CoP, but this is possible only if the CoP has some measurement tools. Even if knowledge and innovation are intangible and difficult to measure, a CoP that makes visible its contribution to continuous improvement (or, sometimes, to disruptive innovation) will gain legitimization in the organization.

Future Directions

Despite some limitations and barriers, CoP are considered a very useful structure in the generation and diffusion of knowledge. Some future directions of research emerge.

A first stream of research is related to innovation. Currently, many authors have extended the CoP perspective, studying CoP not only as a center of exchange and diffusion of knowledge but also as a center of production innovation. Borzillo and Kaminska-Labbè (2011) investigated how a CoP can contribute to incremental innovation as well as to radical innovation. Specifically, they observed that managerial involvement can create a virtuous circle of innovation. In a first phase, managers are in “step-in mode”; that is, they are a sponsor of the CoP and support it in making clear the goals of the CoP and the way it works. This phase leads to an expansion of knowledge and to incremental innovation; that is, to recombining

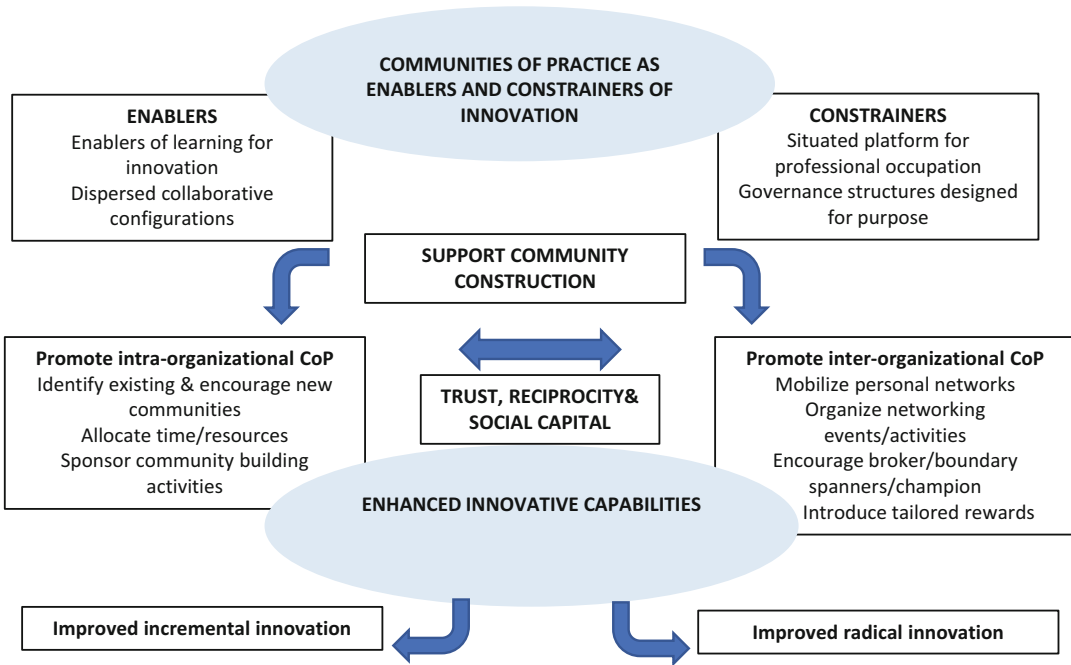
knowledge to improve existing product offerings. In a second phase, managers are in “step-out mode” and voluntarily withdraw from their community. The new free and unstructured flow of ideas that results allows a knowledge probing that leads to radical innovation from a recombining of knowledge to generate radically new product offerings.

More recently, Pattinson et al. (2016) built a framework for constructing communities of innovation and showed how CoP can act as enablers or constrainers of innovation (Fig. 5).

As the figure shows, a closed and too structured CoP results in a constraint to innovation, while a more collaborative and open structure enables innovation. Trust, reciprocity, and social capital lies in the center of the CoP. If they receive the right support, both intra- and interorganizational CoP can enhance innovative capabilities and originate innovation (incremental and radical).

The interorganizational CoP area is growing in relevance. These CoP face challenges that involve several organizations and, almost more frequently, communities and society. Dunham et al. (2006) discussed the notion of “community” and the role of “community” in stakeholder theory. They described CoP as an emerging subcategory of community that, similarly to Virtual Advocacy Groups, has not received much consideration in stakeholder theory but are increasingly significant. Referring to CoP, the authors (pp. 35–36) argued that: “the challenge for stakeholder managers here is to identify the various CoP that operate within their organizations, or that link their organizations with outside constituencies, and then support those communities. . . .support those actions and policies committed to preserving, supporting and enriching the development of each individual’s uniqueness within the context of community, rather than subordinating the individual in the name of community building.”

A second relevant stream of development is sustainability. Some authors have observed, using the lens of CoP theory, several cases of CoP in the area of community sustainability, often in creating a bridge between science,



Community of Practices, Fig. 5 Communities of practice as enablers and constrainers of innovation (Pattinson et al. 2016, p. 511)

practice, and politics. For example, Gonzalez et al. (2011) showed a CoP involving five European cities and engaging researchers and practitioners. The goal of the CoP was to develop common urban sustainability indicators and to consider city specific aspects as well. The authors highlighted some limitations of the observed CoP to be the influence of some actors in defining indicators, the fact that the interests of stakeholders did not always merge with the project objectives and the time constraints. On the other hand, the project increased collaboration and enhanced capabilities of participants and of the city involved.

Armanios (2012) studied 23 Egyptian rural water projects and, integrating the CoP framework with a capabilities approach, described a matrix considering local/external definitions of project goals and local/external implementations of the project. It led to four possible scenarios and to an evaluation of their economic, environmental, and engineering sustainability.

Iyalomhe et al. (2013) described two cases regarding projects of climate change adaptation. In these contexts, researchers, experts, policy-makers, and stakeholders worked together in a CoP and defined ways of practice in these projects. It created a virtuous circle of knowledge and led to efficiency and efficacy of the project.

Bradbury and Middlemiss (2015) showed how learning in a CoP supported a grassroots association (Green Action) and sustained and renewed it in the long term. Green Action is a student society that introduced a recycling scheme and time, runs a food cooperative, and offers skill-share workshops. The authors recognized in the CoP the component and characteristics described by the theory of CoP and concluded that the learning process allowed Green Action to be active for more than 20 years despite the turnover in student population.

These experiences give evidence to the fact that CoP can contribute to transform principles and goals of sustainability in projects, practices, and routines.

Summary

CoP have probably always existed as a spontaneous aggregation of people that, in sharing their experiences and knowledge, find more efficient solutions for common problems. However, positioning CoP in relation to knowledge management, social capital, and intellectual capital shifts attention to the potential of CoP in creating and spreading knowledge. The theory of CoP has received much attention from researchers as well as practitioners. Many issues are relevant in making a CoP a success or a failure, and they regard the composition and the dynamic relations between members who are part of the CoP. The relation between a CoP and the organization to which it belongs is also very important. Complexity will increase in cases of interorganizational CoP or virtual CoP, in which the issue of technology and instruments of sharing become crucial.

New directions in studies and experiences are more focused on CoP as a place of innovation (incremental and radical) and on the topic of sustainability, as the CoP could be a place of dialogue between researchers, experts, decision makers, and various stakeholders.

Cross-References

- Capacity of Innovation
- Human Capital Management
- Knowledge Management
- Online Communities
- Social Capital, Interpretation of
- Stakeholder Theory
- Sustainable Communities

References

- Armanios, D. E. (2012). Sustainable development as a community of practice: Insights from Rural Water Projects in Egypt. *Sustainable Development*, 20, 42–57. <https://doi.org/10.1002/sd.463>.
- Bardon, T., & Borzillo, S. (2016). Communities of practice: Control or autonomy? *Journal of Business Strategy*, 37(1), 11–18. <https://doi.org/10.1108/JBS-02-2015-0018>.
- Borzillo, S., & Kaminska-Labbè, R. (2011). Step in or step out: Supporting innovation through communities of practice. *Journal of Business Strategy*, 32(3), 29–36. <https://doi.org/10.1016/j.emj.2008.05.003>.
- Borzillo, S., Aznar, S., & Schmitt, A. (2011). A journey through communities of practice: How and why members move from the periphery to the core. *European Management Journal*, 29, 25–42. <https://doi.org/10.1016/j.emj.2010.08.004>.
- Bradbury, S., & Middlemiss, L. (2015). The role of learning in sustainable communities of practice. *Local Environment*, 20(7), 796–810. <https://doi.org/10.1080/13549839.2013.872091>.
- Cattaneo, C., Signori, S., & Acerbis, E. (2018). Potenzialita' e limiti delle comunita' di pratica in sanita': un caso di studio. In S. Corbella, L. Marchi, & F. Rossignoli (Eds.), *Nuove frontiere del reporting aziendale la comunicazione agli stakeholders tra vincoli normativi e attese informative* (pp. 122–154). Milano: Franco Angeli editore.
- Choi, M. (2006). Communities of practice: An alternative learning model for knowledge creation. *British Journal of Educational Technology*, 37(1), 143–146. <https://doi.org/10.1111/j.1467-8535.2005.00486.x>.
- Cox, A. (2005). What are communities of practice? A comparative review of four seminal works. *Journal of Information Science*, 31(6), 527–540. <https://doi.org/10.1177/0165551505057016>.
- Dalkir, K. (2005). *Knowledge management in theory and practice*. Oxford: Elsevier-Butterworth Heinemann.
- Davenport, E., & Hall, H. (2002). Organizational knowledge and communities of practice. *Annual Review of Information Science and Technology*, 36(1), 171–227.
- Dunham, L., Freeman, R. E., & Liedtka, J. (2006). Enhancing stakeholder practice: A particularized exploration of community. *Business Ethics Quarterly*, 16(1), 23–42.
- Gonzalez, A., Donnelly, A., Jones, M., Klostermann, J., Groot, A., & Breil, M. (2011). Community of practice approach to developing urban sustainability indicators. *Journal of Environmental Assessment Policy and Management*, 13(4), 591–617. <https://doi.org/10.1142/S1464333211004024>.
- Iyalomhe, F., Jensen, A., Critto, A., & Marcomini, A. (2013). The science-policy interface for climate change adaptation: The contribution of communities of practice theory. *Environmental Policy and Governance*, 23, 368–380. <https://doi.org/10.1002/eet.1619>.
- Kerno, S. J. (2008). Limitations of communities of practice. A consideration of unresolved issues and difficulties in the approach. *Journal of Leadership and Organizational Studies*, 15(1), 69–78. <https://doi.org/10.1177/1548051808317998>.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

- Marr, B., Schiuma, G., & Neely, A. (2004). Intellectual capital – Defining key performance indicators for organizational knowledge assets. *Business Process Management Journal*, 10(5), 551–569. <https://doi.org/10.1108/1463715041055922>.
- Mohajan, H. K. (2017). Roles of communities of practice for the development of the society. *Journal of Economic Development, Environment and People*, 6(3), 27–46.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company*. New York: Oxford University Press.
- OECD. (2001). *The well-being of nations: The role of human and social capital*. Paris: OECD.
- Pattinson, S., Preece, D., & Dawson, P. (2016). In search of innovative capabilities of communities of practice: A systematic review and typology for future research. *Management Learning*, 47(5), 506–524. <https://doi.org/10.1177/1350507616646698>.
- Probst, G., & Borzillo, S. (2008). Why communities of practice succeed and why they fail. *European Management Journal*, 26, 335–347. <https://doi.org/10.1016/j.emj.2008.05.003>
- Pyrko, I., Dörfler, V., & Eden, C. (2017). Thinking together: What makes communities of practice work? *Human Relations*, 70(4), 389–409. <https://doi.org/10.1177/0018726716661040>.
- Roberts, J. (2006). Limits to communities of practice. *Journal of Management Studies*, 43(3), 623–639.
- Schofield, K., Analoui, B. D., Brooks, J., & Husain, S. F. (2018). Competitive communities of practice, knowledge sharing, and Machiavellian participation: A case study. *International Journal of Training and Development*, 22(3), 210–221. <https://doi.org/10.1111/ijtd.12129>.
- Snowden, D. (2002). Complex acts of knowing: Paradox and descriptive self-awareness. *Journal of Knowledge Management*, 6(2), 100–111.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*, 78, 139–145.

Community Participation

- [Corporate Community Involvement](#)
- [Participatory Development](#)

Community Services

- [Social Care](#)

Community Sustainability

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Synonyms

[Local sustainability](#); [Sustainable communities](#)

Definition

Sustainability has become a central concern in communities around the world. However, there have been limited attempts to define sustainability at community level. It is widely argued that sustainable communities are the ones that follow ecological, social, and economic aspirations and aspects of sustainable development. Accordingly, community sustainability can be defined as the total of community-based attempts to preserve a strong and successful economy, society, and environment; to adjust and respond to outside challenges and opportunities; and to provide quality of life for members in a persistent way (MacKendrick and Parkins 2004). In a more recent and comprehensive definition, Mischen and her colleagues (2019) describe community sustainability as sharing of collective resources by functionally and socially connected actors in “a way that engages members in a set of governance processes resulting in an equitable access to health, educational, and economic well-being while not disturbing future generations’ or other communities’ rights on these resources” (p. 10). Sustainable communities continue to develop sustainably, where this development is achieved as a fundamental part of the environment without harming it, and allows equal distribution of resources and opportunities among its members both today and in the future (Winther 2017). Sustainable communities have the power, agency, organization, and capability to realize sustainable development and change.

Introduction

Understanding sustainable development at broader levels such as national and global necessitates first examining and measuring it at community-level. Communities have two essential attributes related to sustainability. Community refers to a particular geographic area where people are linked to one another. That is, people live, work, and obtain key resources (e.g., water, gas, and electricity) and services (e.g., health care, education) within a community (Mischen et al. 2019). Additionally, the boundaries of a community are determined by its functional and social relationships as opposed to mere geographical proximity (Callaghan and Colton 2008). These boundaries may shift according to the underlying issue and time. Spatially, communities comprise neighborhoods or municipalities, whether rural or urban. Functionally, they stand on a rich and complex network of actors that bring resources, capacity, coordination, governance, and other essential components to a community (Mischen et al. 2019). The complex interactions in a community at micro and macro levels constantly change across time and space (Winther 2017), which represents a dynamic, ongoing process produced and shaped by the action of multiple actors.

Community sustainability consists of a set of tangible and intangible elements, representing different elements of sustainability. The most important ones include sustainable production and consumption, job creation, transport and connectivity, infrastructure, health, aging and well-being, ecology, education, housing, energy use, cultural and social activities, and tourism (e.g., MacKendrick and Parkins 2004; Farmer et al. 2012; Winther 2017). All of these aspects at community level are characterized by different goals, indicators, and measures. In communities, a number of subsystems are placed within larger systems and these subsystems are presented by different stakeholders such as governors, local businesses, healthcare service providers, and schools. Still, these elements are interconnected and complementary to one another.

Within this integrated system, sustainability of communities rely on fostering social equity, creating and maintaining economic and environmental health, and motivating community members' participation in planning and implementation of common issues (Middlemiss 2011). The success of community sustainability initiatives is largely determined by the involvement of members in sustainability principles and collective vision for future and the integration of economic, environmental, and social goals (Ling et al. 2009). The next three sections outline the key concepts and frameworks regarding community sustainability: community capitals framework, community resilience, and community sustainability planning (CSP), followed with a discussion of how community sustainability can be measured through selected indicators.

Community Capitals Framework

Community capitals framework is one of the essential models to explain community sustainability. It proposes that communities have a set of different types of capitals that flow and interact, and sustainability of a community depends on the development of these capitals (Robinson and Carson 2016; MacKendrick and Parkins 2004). They represent various types of resources, which diverse community stakeholders rely on and contribute into (Callaghan and Colton 2008), and in turn, these resources and their interactions are supposed to determine sustainability of a community. While Bourdieu (1986) initially established economic, social, and cultural capital as the fundamental forms of capital, new categories have been added by different researchers including natural, human, financial, infrastructure, and political capital.

Natural (environmental) capital consists of the ecological resources and all earth systems such as air, sun, water, soil, wildlife, and biodiversity, climatic factors like greenhouse emissions, which provide both possibilities and limits to human action (MacKendrick and Parkins 2004). Economic capital reflects the allocation decisions

of monetary and other economic resources that can be categorized into two types: financial and infrastructure capital (Callaghan and Colton 2008). Financial capital represents the money available to use in community capacity-building and future community development provided by individuals' wages, loans, and investments whereas infrastructure capital entails human-made structures and institutions like water and sewer systems, transportation, housing, information and communication systems, parks, and libraries (Flint 2010). The private sector along with the public sector may also contribute to building it. Besides financial and infrastructure capital, commercial capital may also be considered as a component of economic capital, available to only those who enter into a commercial transaction or agreement.

As another community capital type, human capital reflects the characteristics, abilities, knowledge, skills, and potential of individuals gained from birth or developed through education. Altogether, it reflects the capacity of persons to contribute to community through production, innovation, leadership, and decision-making (MacKendrick and Parkins 2004). What skills and knowledge are most essential depends on the specific context and future aspirations of the community. Social capital describes the nature and ways of interaction among people built around solidarity, mutuality, collective identity, and sense of a common future (Dale and Newman 2008; Robinson and Carson 2016). The amount and quality of relationships facilitate productive activities in the community. However, it can only exist through human interaction. Cultural capital entails the values, beliefs, symbols, and world views that we give importance and usually takes for granted such as language, history, art, customs, artifacts, sense of place and time, and the ways of acting (Callaghan and Colton 2008). Both tangible and intangible cultural heritage are largely manifested in the structure of the community. Finally, political and public capital can be added to the above. Political capital indicated the power to influence certain standards and rules and the application of them regarding resource use and distribution.

It is very difficult to say if one of these capitals is superior to or more relevant than the others. However, some of them may provide the necessary foundation to the others (Flint 2010). Finding the right balance among different capital forms is needed yet difficult. The connections among them are often deep and subtle, thus cannot be easily detected. Moreover the balance among them will change over time. As community stakeholders have different needs, concerns, and interests, they give different levels of value to each capital domain (Robinson and Carson 2016).

Community capital framework has become a very useful model for developing the necessary tools to measure different aspects of community as well as their aggregation (MacKendrick and Parkins 2004). It could also be used to model the changes in any of the capital types and relative performance compared to other communities (Callaghan and Colton 2008). The link between the levels of available capital and different community outcomes can also be assessed. This assessment helps to identify the existing problems and risks so that proper policies can be developed for addressing them.

Community Resilience

Recently, community sustainability has been increasingly discussed in relationship to the notion of community resilience, and in many occasions, sustainability and resilience are used interchangeably (Callaghan and Colton 2008; Robinson and Carson 2016). While there are essential connections and similarities between community sustainability and resilience, the two concepts have distinct meanings and roles. Resilience in human communities represents the collective capability to adjust to and influence change. Then, a resilient community is the one that has the capacity to react to economic, social, and ecological crisis (Lew et al. 2016). Besides sustaining the community, collective capacity is used to renew it and develop new paths for its future (Winther 2017). Elements for developing community resilience include planning and

developing strategies to reduce vulnerabilities, developing crisis management systems, creating risk minimization and diversification programs (Franklin et al. 2011).

Community resilience and community sustainability both assume the congruence between society and environment, mutually focus on ecological systems and community development, and have the shared ultimate goal of community survival and well-being. Yet they also differ in several aspects. Sustainability seeks stability, balance, and preservation whereas resilience emphasizes dealing with and managing unpredictable change, vulnerability, flexibility, and crisis (Lew et al. 2016). Based on the goals of the particular community, one might prevail over the other. However, they can also be used together as complementary perspectives for necessary yet nuanced objectives of the same community (Flint 2010). For example, when evaluating a community project, its contribution to sustainable development might be supported with the question of whether it also creates a more resilient environment, society, and economy. In a way, enhanced community resilience may ultimately push a community toward sustainability.

Community Sustainability Planning

In order to develop a resilient community with necessary capitals, careful plans should be made and implemented. CSP can be described as a long-standing plan developed by the participation of community stakeholders that provides the course to community sustainability goals and implications regarding economic, social, and environmental pillars (Park et al. 2009). The need for CSP emerges from the fact that sustainability cannot be achieved through individual and isolated actions in different sectors. Such plans aim to create an agenda for action on a wide array of sustainability goals. CSP provides an integrated approach that produces multiple impacts and larger benefits for the community. Sustainability planning brings about a comprehensive understanding for managing resources efficiently,

bridging local and broader decision making, and engaging in long-term thinking.

CSPs typically define specific objectives and aims for environmental, sociocultural, economic, and governance domains of sustainability. There might be collaborative or stand-alone CSPs. Integrated CSPs require collaboration between different levels of government and across private-public sectors, so that new approaches, technologies, and governance systems can be implemented (Ling et al. 2009).

There is no single way of developing a CSP and each community may treat it differently. Yet, there are some common principles that should be followed (e.g., MacDonald et al. 2019; Park et al. 2009). First, good CSP is about the process, not only outcomes. Strong leaders and participants who have a good understanding of what sustainability is are required to initiate such plans. Similarly, without a strong, shared vision of what community wants, a good plan cannot be articulated. The sustainability gap should also be clearly identified. That is, the gap between what has already been done and what is desired in the future should be clear. The collaboration among different actors both individual and organizational should be built. Last, the advancement and progress of sustainability plans should be carefully followed and measured.

CSPs are conducted through a number of steps (Park et al. 2009; Ling et al. 2009). According to Park and his colleagues (2009), in phase 1, an invitation is made to relevant community stakeholders and leaders who will engage in conversations and discussions regarding the future of the community. In phase 2, the planning process is structured. That is, the specific approach to be followed and the roles and responsibilities of contributors are determined. Phase 3 entails building of a community vision and a shared understanding of success, and a shared intention for sustainable development is generated. In phase 4, the specific community systems for achieving sustainability are determined. It necessitates identifying these systems, clarifying the process and deliverables, and selecting sustainability indicators. In phase 5, initiatives and investments are prioritized based on strategic goals. Finally, in phase 6 the progress

on the implementation of the CSP is monitored and evaluated.

Another CSP template introduced by Ling et al. (2009) argues that a community sustainability plan can be developed through four key steps: engagement, understanding community space, establishing the plan, and executing the strategy. Engaging the community entails determining who the locals are, establishing the principles of engagement, giving members actual influence in decision-making, and learning from others' experiences. Understanding space is about mapping the community with respect to the allocation of ecological, social, and economic opportunities and services, so that problems in accessing resources, places, and information can be resolved. After this mapping, the plan can be created, in which the community vision, goals, and principles are defined, and a long-term view is linked to shorter terms goals. Such adaptive timeframe can support better responses to uncertainty, changing environmental limits and newly emerge community desires and knowledge.

The scale of CSP should cover different groups in community population and be broad enough to examine intrinsically connected community services as well as the infrastructure needed to sustain them. Moreover, institutional needs and strategic areas are identified, commitments are determined, and progress is monitored and measured against measured desired outcomes. In the final stage of implementation, a review is undertaken to identify problems in principle and in action that may hinder sustainability planning. Legally enforceable and accountable plans should be developed. Finally, the plan implementation should be supported by knowledge and information disseminated.

A number of CSP implementation examples have also been examined in the literature such as the CSP initiative for conserving and developing tropical landscapes in tropical communities (Reed et al. 2019) and the integrated CSP developed in Atlantic Canada municipalities (Grant et al. 2018). These examples indicate that complex community problems regarding environmental,

social, cultural, and economic issues can be effectively addressed through CSP with the involvement of diverse stakeholders across different sectors. Even though implementation and operationalization challenges exist, aligning the planning policy appears to bring several advantages to communities for developing long-term comprehensive outcomes.

Indicators of Community Sustainability

To meaningfully understand and compare communities for sustainability, specific indicators, metrics, and indices have been developed, enabling the identification of community strengths and weaknesses regarding sustainability (e.g., Turcu 2013; Lew et al. 2016). In turn, the findings from such measurements shape the policies and practices which will lead to higher levels of community sustainability (Mischen et al. 2019). On the other hand, sustainability assessment systems adopted at the community level might have certain problems and limitations including ambiguous definition of community sustainability, scale issues, and implementation challenges. For these indicators to be useful, sustainability should first be defined at the community level. Researchers suggest that the indicators should reflect all pillars of sustainability, namely, social sustainability indicators (e.g., sense of community, community activities), environmental indicators (e.g., resource use), economic indicators (e.g., local jobs and business activity), and governance/institutional indicators (e.g., local governance, policies, and regulations) (Lew et al. 2016; Turcu 2013). Besides these core sustainability pillars, several unique indicators can also be identified including unemployment, schooling, energy consumption, water consumption, waste use and disposal, access to healthcare, housing, public green spaces, economic infrastructure, business activity, conservation of nature, land use, transportation, local networks and collaborations, and public services and facilities (Mascarenhas et al. 2010). Different weights can be assigned to each set of indicators

depending on the unique conditions of the community.

Indicators of community sustainability often follow the community capital framework, and specific indicators are created to measure each form of community capital. For instance, while natural capital is measured by indicators such as the existence of certain plant and animal types, the amount of natural resource stocks, the degree of water supply, oil and energy, human capital is assessed by indicators such as demographics, education, professional training, access to health care, and other services (MacKendrick and Parkins 2004). In addition to typical forms of community capital, more specific dimensions such as environmental integrity, economic and social energy, health and well-being of citizens, recreational options, technology use, and process indicators have also been considered in community sustainability measurement (Lew et al. 2016).

All in all, the development of sustainability indicators helps reduce the complexity of community sustainability and generate programs and policies to improve it. Yet, beyond their individual presence, the interrelationships among these pillars should be carefully considered. That is, instead of seeing indicators as isolated pieces of information, the underlying networks and mutual sustainability mechanisms should be identified.

Summary

Community sustainability entails dealing with community-level social, environmental, and economic issues in a comprehensive and interconnected way. Along with outcomes, it can be described as a process of constant improvement so that communities evolve and change to attain collective goals. This process includes participation of diverse community members at broad scale, generating a common vision for future, developing sustainability principles, keeping an inventory of necessary resources and capabilities that the community would capitalize on, setting clear and measurable goals, evaluating progress and results by developing a framework

of sustainability indicators, and achieving open and transparent communication. It is quite likely that the interest on the topic of community sustainability will grow further through increasing attempts of integrating it with the notions of sustainability at broader levels.

Cross-References

► Shared Community-Based Governance

References

- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook for theory and research for the sociology of education* (pp. 241–258). New York: Greenwood.
- Callaghan, E. G., & Colton, J. (2008). Building sustainable & resilient communities: A balancing of community capital. *Environment, Development and Sustainability*, 10(6), 931–942.
- Dale, A., & Newman, L. (2008). Social capital: A necessary and sufficient condition for sustainable community development? *Community Development Journal*, 45(1), 5–21.
- Farmer, J., Prior, M., & Taylor, J. (2012). A theory of how rural health services contribute to community sustainability. *Social Science & Medicine*, 75(10), 1903–1911.
- Flint, W. (2010). Seeking resiliency in the development of sustainable communities. *Human Ecology Review*, 17(1), 44–57.
- Franklin, A., Newton, J., & McEntee, J. C. (2011). Moving beyond the alternative: Sustainable communities, rural resilience and the mainstreaming of local food. *Local Environment*, 16(8), 771–788.
- Grant, J. L., Beed, T., & Manuel, P. M. (2018). Integrated community sustainability planning in Atlantic Canada: Green-washing an infrastructure agenda. *Journal of Planning Education and Research*, 38(1), 54–66.
- Lew, A. A., Ng, P. T., Ni, C., & Wu, T. C. (2016). Community sustainability and resilience: Similarities, differences and indicators. *Tourism Geographies*, 18(1), 18–27.
- Ling, C., Hanna, K., & Dale, A. (2009). A template for integrated community sustainability planning. *Environmental Management*, 44(2), 228–242.
- MacDonald, A., Clarke, A., & Huang, L. (2019). Multi-stakeholder partnerships for sustainability: Designing decision-making processes for partnership capacity. *Journal of Business Ethics*, 160(3), 409–426.
- MacKendrick, N. A., & Parkins, J. R. (2004). *Frameworks for assessing community sustainability: A synthesis of current research in British Columbia* (Information

- Report Nor-X-392). Edmonton: Canadian Forest Service – Northern Forestry.
- Mascarenhas, A., Coelho, P., Subtil, E., & Ramos, T. B. (2010). The role of common local indicators in regional sustainability assessment. *Ecological Indicators*, 10(3), 646–656.
- Middlemiss, L. (2011). The effects of community-based action for sustainability on participants' lifestyles. *Local Environment*, 16(3), 265–280.
- Mischen, P. A., Homsy, G. C., Lipo, C., Holahan, R., Imbruce, V., Pape, A., Zhu, W., Graney, J., Zhang, Z., Holmes, L. M., & Reina, M. (2019). A foundation for measuring community sustainability. *Sustainability*, 11(7), 1903–1919.
- Park, C., Purcell, M., & Purkis, J. (2009). *Integrated community sustainability planning: A guide*. Ottawa: Natural Step Canada.
- Reed, J., Barlow, J., Carmenta, R., van Vianen, J., & Sunderland, T. (2019). Engaging multiple stakeholders to reconcile climate, conservation and development objectives in tropical landscapes. *Biological Conservation*, 238, 1–9.
- Robinson, G. M., & Carson, D. A. (2016). Resilient communities: Transitions, pathways and resourcefulness. *The Geographical Journal*, 182(2), 114–122.
- Turcu, C. (2013). Re-thinking sustainability indicators: Local perspectives of urban sustainability. *Journal of Environmental Planning and Management*, 56(5), 695–719.
- Winther, A. M. (2017). Community sustainability: A holistic approach to measuring the sustainability of rural communities in Scotland. *International Journal of Sustainable Development and World Ecology*, 24(4), 338–351.

Community-Based Action

- ▶ [Participatory Development](#)

Community-Based Companies

- ▶ [Sustainable Companies](#)

Community-Based-Enterprises

- ▶ [Inclusive Business](#)

Community-Driven Development

- ▶ [Participatory Development](#)

Companies Act of 2013, Section 135, Corporate Social Responsibility Voluntary Guidelines, Corporate Social Responsibility Policy Rules, 2014, Schedule VII

- ▶ [Mandatory CSR an Indian Companies Act 2013](#)

Company

- ▶ [Corporate/Corporation](#)

Company Culture

- ▶ [Integrity Management](#)

Company Management

- ▶ [Corporate Governance](#)

Company's Plan

- ▶ [Business Model](#)

Comparability of Business Ethics

- ▶ [Quantification of Business Ethics](#)

Compatibility of Work and Family

- [Work–Life Balance](#)

Compatibility of Work and Private Life

- [Work–Life Balance](#)

Compensation Effectiveness

- [Rewards Effectiveness](#)

Competences, Higher Education, Organic Learning Gardens, Sustainability

- [University Gardens for Sustainable Development](#)

Competitive Advantage

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Synonyms

[Competitive edge](#); [Gamesmanship](#); [Relative advantage](#)

Definition

The term competitive advantage refers to a company's ability to outperform its competitors

and to separate from them by creating more economic value in the same given market (Augier and Teece 2016). A competitive advantage may include access to natural resources, or it can be more inherently to the firm's core, like better technology, a favorable cost structure, or other advantages in the value chain or resources of a company.

According to Michael Porter (1985, 1989), strategic management should be concerned with building and sustaining competitive advantage. He distinguishes between two methods how an organization can gain a competitive advantage over its rivals: differentiation advantage and cost advantage. They can be described as follows:

- A cost advantage occurs when a business can provide the same products or services as its competitors, but has lower costs.
- A differentiation advantage means that a business provides better products or services as its competitors.

Introduction

Having realized the struggle of companies with worldwide growing competition, Michael Porter shifted the attention of management thinkers to competitive strategies and the achievement of the competitive advantage itself (Porter 2008). Especially his books *Competitive Advantage: Creating and Sustaining Superior Performance* (1985), *The Competitive Advantage of Nations* (1993), and *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (1980) had a huge impact on the understanding of competition and therefore also on strategic planning in order to enhance profitability. This led to the development of new concepts, management tools, and government policies that influenced whole industries.

The following parts will briefly summarize the main ideas behind the named concepts in order to inform about the most commonly known ways to achieve a competitive advantage.

Gaining and Sustaining a Competitive Advantage

According to Porter (1985, 1989), the first important step for a company that is aiming to sustain a competitive advantage is to choose an attractive industry or to improve the given industry's attractiveness. In a second step, companies need to decide if they want to achieve cost leadership or follow a differentiation or focus strategy (see also Generic Strategies). Implementing the right strategy will help a company to gain a competitive advantage over its rivals.

- **Cost Leadership Strategy:** Pursuing a cost leadership strategy, a company seeks to produce its products or services to the lowest costs in the industry. The sources of a cost advantage hereby depend on the structure of the industry and “may include the pursuit of economies of scale, proprietary technology, preferential access to raw materials, and other factors” (Porter 1985, p. 12).
- **Differentiation Strategy:** By choosing a differentiation strategy, the company's goal is to have a unique selling proposition (USP) which allows to sell its products or services to higher prices. Common approaches to generate such an USP are adjustments in product dimensions valued by consumers, different marketing strategies, and improved delivery systems. The differentiation strategy can only be successful if the costs that come with differentiation are lower as the price premium buyers of the product are willing to pay. While innovation can enable a company to produce to lower costs, it can also be one of the most successful sources of differentiation. Hence, a company that wants to differentiate itself from its competitors should encourage “innovation, individuality, and risk-taking” (Porter 1985, p. 24).
- **Focus Strategy:** There are two forms of the focus strategy: the cost focus and the differentiation focus. Both of those strategies are similar to the ones discussed above but differ in their competitive scope. While the cost leadership strategy and the differentiation strategy

both have a broad target, both variants of the focus strategy concentrate on “a narrow competitive scope within an industry” (Porter 1985, p. 15). Caused by the smaller scope, a company is then able to tailor the strategy exclusively to its focus group and therefore has the opportunity to perfectly fit the focus group's needs. In order for this strategy to work, different segments have to be identifiable and separable, and the chosen segment has to have either “unusual needs” (Porter 1985, p. 15) or a different willingness to pay.

- **Blue Ocean Strategy:** Blue Ocean Strategy (BOS) is a management concept which proposes that organizations, rather than going head-to-head with competitors, should try to create and exploit new market spaces, so-called blue oceans (Madsen and Slåtten 2019). Contrary to the strategies discussed above, the BOS aims to guarantee a firm superior performance by different means. Instead of facing competition in an existing industry, companies should aim for “uncontested market space” that makes “the competition irrelevant” (Mauborgne and Kim 2005, p. 1). When following a BOS, a company has to create demand whether by entering a new industry or by overcoming industry boundaries. The main way to achieve this is by breaking the “value/cost trade-off,” which was present in Porter's generic strategies, and instead pursuing differentiation and low cost at the same time (Mauborgne and Kim 2005, p. 7). By doing so, a company is able to increase the value not only for customers but also for itself through new opportunities for growth and hence economies of scale and network effects that make imitation hard. In order to align differentiation, low costs, and value creation, a company can save costs by “eliminating and reducing the factors an industry competes on” and enhance the consumers perceived value “by raising and creating elements the industry has never offered” (Mauborgne and Kim 2005, p. 7). The strategy promises to attract customers immediately and therefore guarantees a profitable and non-imitable growth, by which

potential competitors are outperformed. Since its introduction in the mid-2000s, the Blue Ocean Strategy has developed into one of the most popular concepts in the strategic management field and one of the biggest catchwords in the business world (Madsen and Slåtten 2019).

The Importance of Resources and Capabilities

Whereas the generic strategies and the Blue Ocean Strategy articulate strategic choices to be the main source and starting point for gaining and maintaining a competitive advantage, the resource-based view emphasizes that a company's resources and core competencies are the means to achieve superior performance. This view leads to a framework in which the identification of first resources and then capabilities (see also VRIO Analysis) is the main source of the competitive advantage and strategy selection is based upon the best possible exploitation of "the firm's resources and capabilities relative to external opportunities" (Grant 1991, p. 115).

Summary

In conclusion, every company should aim to create a competitive advantage. While this entry covers only the most commonly known strategies to achieve superior performance, there are countless other approaches a company can choose from in order to find the most suitable strategy. Because of its importance and urgency toward companies, the term competitive advantage, the nature of competition, and competitive strategies are expected to stay in the spotlight of management thinkers and researchers. Especially with changing consumer needs and renewed conceptions of the value chain through current ecological-centered debates, more opportunities for differentiation and incentives for efficiency enhancement and cost reductions will arise and will quite likely lead to the emergence of even more contemporary approaches.

Cross-References

- [Blue Ocean Strategy](#)
- [Resource-Based View](#)

References

- Augier, M., & Teece, D. J. (Eds.) (2016). Competitive advantage. In *The Palgrave encyclopedia of strategic management. The Palgrave encyclopedia of strategic management*. London: Palgrave Macmillan.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114–135.
- Madsen, D. Ø., & Slåtten, K. (2019). Examining the emergence and evolution of Blue Ocean Strategy through the lens of management fashion theory. *Social Sciences*, 8(1), 28.
- Mauborgne, R., & Kim, W. C. (2005). *Blue ocean strategy*. Boston: Harvard Business School Publishing Corporation.
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: The Free Press.
- Porter, M. E. (1985). *Competitive advantage - creating and sustaining superior performance*. New York: The Free Press.
- Porter, M. E. (1989). From competitive advantage to corporate strategy. In D. Asch & C. Bowman (Eds.), *Readings in strategic management* (pp. 234–255). London: Palgrave.
- Porter, M. E. (1993). *The competitive advantage of nations* (pp. 73–93). Cambridge: Harvard Business School Management Programs.
- Porter, M. E. (2008). *Competitive strategy: Techniques for analyzing industries and competitors. With a new introduction*. New York: The Free Press.

Competitive Edge

- [Competitive Advantage](#)

Competitive Ethics

- [Adversarial Ethics](#)

Competitiveness

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Synonyms

Coopetition; Global Competitiveness Index; Global network; Shared value; Stakeholder relationship management; Sustainable business model

Definition

The concept of competitiveness for both nations and businesses changed due to the globalization, the diffusion of information technology (IT), the high level of innovation, the Fourth Industrial Revolution, the spread of concepts as corporate social responsibility (CSR), and sustainability. For nations competitiveness means focusing not only on short- and medium-term productivity drivers but also on productivity over the longer term in order to balance the interests of different groups of people, within the same generation and among generations. This means the need to go beyond the mere economic well-being including other factors that promote a high-quality growth.

With regard to business, in the last decades, the interaction between sustainability and competitiveness has received considerable attention, changing the traditional point of view based on rivalry relations among companies, because of their product's characteristics and price, toward an approach considering the importance of cooperation, networks, relations with stakeholders, and the ability to create shared value with society as competitive drivers.

Introduction

Competition and competitiveness are terms frequently used in both public discussion and business about the organizations' ability to perform

according to their policy or strategic goals (Listra 2015).

Stigler (1988) defines competition as rivalry between individuals (or groups or nations), arising whenever two or more parties strive for something that all cannot obtain.

The globalization, the diffusion of information technology, the high level of innovation, the Fourth Industrial Revolution, and the spread of concepts of corporate social responsibility (CSR), and sustainability have changed in a very relevant way the traditional settings of competitiveness for both nations and businesses.

For nations competitiveness is traditionally defined as the set of institutions, policies, and factors which determine the level of productivity of a country (World Economic Forum 2011), mainly measured by the Global Competitiveness Index (GCI) that takes into account 12 drivers of competitiveness over the short to medium term. The conversation on sustainability and sustainable development, defined as a development path that satisfies the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1987), led nations and international organizations to focus not only on short- and medium-term productivity drivers but also on productivity over the longer term. World economy should be socially cohesive, should live within its financial means, and should ensure the correct and efficient use of its resources. This new approach implies a reconsideration of competitiveness and related measures. In this light, sustainable competitiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country while ensuring the ability of future generations to meet their own needs (World Economic Forum 2011), measured by sustainable competitiveness indexes.

Competition is a multifaceted concept that in business is mainly associated with the comparative advantage as a driving force of markets; many models were developed to capture the relations among existing and potential competitors (as Porter's five forces and game theories). In the last decades, the interaction between sustainability and business competitiveness has received

considerable attention, changing the traditional point of view based on rivalry relations among companies, because of their product's characteristics and price, toward an approach considering the importance of cooperation, networks, relations with stakeholders, and the ability to create value and share it with the society as competitive drivers.

Yet the productivity of a country is ultimately set by the productivity of its companies: an economy cannot be competitive unless companies operating there are competitive (Porter et al. 2008). It follows that the concept of competitiveness is wide and cannot be studied without a global perspective.

Theoretical Framework

Countries' Competitiveness

The attempt to rank countries' competitiveness and give a tool for benchmarking countries' strengths and weaknesses induced scholars and institutions to put several efforts in such indexes. An important milestone was reached in 2000, when Jeffrey Sachs introduced the Growth Competitiveness Index, based on a stronger academic foundation in economic growth theory. In fact, the main mechanisms identified by economists as creators of economic growth are the allocation of resources, the capital accumulation, and the technological advance. The efficient allocation of resources, according with Adam Smith (1776), depends on the division of labor and market competition. The capital should be intended as not only plants and equipment but also human capital, this last resulting from educational, health, and social politics. Finally, the technological advancement referring to products and production processes depends on the ability to create new technology or to adopt a technology that has been developed abroad. Technology is considered the current most impacting factor for a sustainable economic growth in the long-term, and the main difference among countries in the modern history is the ability to achieve technological innovation at a high rate. Basing on these considerations, Sachs proposed a new Growth Competitiveness

Index as sum of three indexes focused on the following pillars of growth: technology, public institutions, and the macroeconomic environment (Warner 2000; McArthur and Sachs 2001). In particular, the originality of this index refers to the separate consideration of growth factors affecting the world's core innovator economies and those affecting the non-core technological adapters.

Michael Porter introduced a companion Business Competitiveness Index (BCI) focused on the microeconomic drivers of prosperity. In the modern global economy, productivity depends less on what industries a nation's firms compete in than on how they compete, that is to say, the nature of their operations and strategies. There is no good or bad industry in this new "productivity paradigm" where the competitive advantage shifts from the ownership of resources (which are accessible at low costs) to the ability of assembling these resources to create valuable products and sources (Porter 2000). Porter suggests a different way to define the concept of competitiveness (Porter 2001). Competitiveness is not necessarily a zero-sum game where one country's gain comes at the expense of the others, but it can be a source of prosperity improving a nation's standard of living.

For a number of years, business leaders and decision-makers that wanted to understand the competitiveness of nations had to deal with two different measures. For this reason, in 2004, Sala-i-Martin et al. (2004) studied a Global Competitiveness Index (GCI), which includes both macroeconomic and microeconomic factors of competitiveness. One of the goals of the GCI was, therefore, to merge the two approaches into a single, unified, and global index that captured both the national and business components of competitiveness at the same time. Another goal was making the GCI a useful tool for policy and decision-making.

The concept leading the statement of this index is that the determinants of competitiveness are many and complex. This complexity is captured assigning the many factors that underlie competitiveness to 12 areas: (1) institutions, (2) physical infrastructures, (3) macrostability, (4) security, (5) human capital, (6) goods market efficiency,

(7) labor market efficiency, (8) financial market efficiency, (9) technological readiness, (10) openness and market size, (11) business sophistication, and (12) innovation.

GCI became the official index of the World Economic Forum in the 2005–2006 issue of the Global Competitiveness Report. Since then, the GCI has become the most widely used index of competitiveness around the globe, continuously under attention.

Porter et al. (2008) created a new GCI concentrating on the determinants of the productivity level that a national economy can sustain, which is the ultimate driver of national prosperity. The new GCI captures macroeconomic and microeconomic factors from which competitiveness arises. Macroeconomic factors operate indirectly to affect the productivity of firms in an economy; they are necessary, but not sufficient, for higher productivity. Microeconomic factors operate directly on firms in affecting productivity, and they are influenced by multiple stakeholders.

The spread of the concept of sustainability suggests relating sustainability with competitiveness and productivity, defining the sustainable competitiveness as a set of institutions, policies, and factors that make a nation remain productive over the longer term while ensuring social and environmental sustainability (Osorio et al. 2013). In particular, authors define the environmentally sustainable competitiveness as “the institutions, policies, and factors that ensure an efficient management of resources to enable prosperity for present and future generations,” and the socially sustainable competitiveness as “the institutions, policies, and factors that enable all members of society to experience the best possible health, participation, and security; and that maximize their potential to contribute to and benefit from the economic prosperity of the country in which they live.”

From these definitions emerges the need to go beyond the mere economic well-being including other factors that promote a high-quality growth.

Blanke et al. (2011) suggest to face the sustainable competitiveness issue from the point of view of the long-term vulnerabilities, with a Sustainable Competitiveness Index (SCI) composed by

indicators aimed at highlighting the areas where long-term vulnerabilities may manifest themselves (human capital, market conditions, technology and innovation, policy environment, and enabling conditions).

The Fourth Industrial Revolution (4IR) and the recession caused by the great financial crises of 10 years ago emphasize the fact that economies must invest in broader measures of competitiveness today to sustain growth and income in the future, improving resilience to shocks. The recognition that economic growth is a core driver of human development, also according with the Goals of UN 2030 Agenda, encourages the World Economic Forum to introduce the GCI 4.0 (World Economic Forum 2011), integrating the established aspects with new and emerging levers that drive productivity and growth. In particular, the role of human capital, innovation, resilience, and agility are considered key factors for the economic success in the 4IR. The findings affirm that the competitiveness is not a zero-sum game between countries, confirming that all economies have the opportunity to carve a path to competitiveness.

Another index focused on sustainable growth and wealth creation is the Global Sustainable Competitiveness Index (GSCI) by SolAbility (2017). The GSCI considers the fundamentals that shape the current and the future state (as competitiveness) of a national economy organized in five pillars: natural capital, social capital, resource management, intellectual capital, and governance efficiency.

Business Competitiveness

Companies must understand their competitive environment to define strategic and operational choices. The traditional model to study the competitive environment defines this last as the system of the existing and potential competitors within the same industry. Porter's model (1980), the so-called five competitive forces framework, suggests considering not only the competitive rivalry but also the threat of new entrance, the threat of substitutes, the bargaining power of customers, and the bargaining power of suppliers. All these relations are seen as moves of antagonistic

players where competitive interdependences arise from largely diverging or even completely opposite interests.

Today's turbulent competitive environment, and the diffusion of corporate social responsibility (CSR) principles, with the valorization of stakeholder perspective (Freeman 1984; Freeman and Dmytriiev 2017), emphasizes the importance of the sustainable company's development in the long-term, that is to say the ability to create value today and in the future thanks to relations' shifting from a mere competitiveness to a sustainable competitiveness (Gennari and Salvioni 2018).

This approach changes the way to look at the relationships between competitors and between business and society. Since the late 1980s, an alternative paradigm to the competitive one has diffused in the strategic management literature (Contractor and Lorange 1988; Hakansson and Snehota 1995; Powell et al. 1996): the cooperative model. This paradigm reveals that companies search for collaborative advantages for which the strength and success of a given company result in the strength and success of other companies.

Companies establish partnership and collaborative networks to enhance innovation capability and competitive advantage (Bellamy et al. 2014); competition tends to become coopetition as a condition where competition and cooperation coexist (Brandenburger and Nalebuff 1995; Schweitzer and Galinski 2015). According with the view, firms interact among each other because of a partially convergent interest structure in a coopetitive game characterized by a win-win structure (Padula and Dagnino 2007).

Sustainable competitiveness implies also the ability by company to produce shared value that is generating economic value in a way that also produces value for society, by addressing its challenges, connecting company success with social progress (Porter and Kramer 2006, 2011). In this way, corporate success and social welfare are not a zero-sum game, considered that they are not opposite but interdependent. According with Porter and Kramer, every company operates within a competitive context, which significantly affects its ability to carry out its strategy, especially in the

long run. Social conditions form a key part of this context. Competitive context can have strategic importance for both companies and societies: ensuring the health of the competitive context benefit both the company and the community.

In addition, companies should be fully engaged with the achievement of the UN 2030 Agenda Sustainable Development Goals (SDGs) as the main drivers for the economic development. Businesses are recognizing that having a sense of sustainable purpose inspires confidence in leaders and stakeholders alike can lead to a competitive advantage in a time of change and uncertainty while addressing the economic, social, and environmental challenges facing humanity (Deloitte 2017).

Key Issues

Sustainable competitiveness, both for countries and companies, refers to the acknowledgment of the value intrinsic in the relationships with stakeholders, because these relations can create a competitive environment where all can win.

With regard to nations, this means managing economic growth balancing its positive and negative (e.g., environmental) effects according with a global view. Countries' development should be really interpreted as equitable and balanced, meaning that, in order for development to continue indefinitely, it should balance the interests of different groups of people, within the same generation and among generations, and do so simultaneously in three major interrelated areas (economic, social, and environmental). Therefore, sustainable development is about equity, defined as equality of opportunities for well-being, as well as about comprehensiveness of objectives (Soubbotina 2004). This view opens the debate about the most appropriate measures and indicators of country competitiveness.

The corporate approach toward competitiveness according with a sustainable view implies the need to revise business models in a way that assure companies to address the economic, social, and environmental challenges, in order to secure their long-term success and the social progress

too. This situation is changing the traditional way to make business, and the competitive drivers increasingly focus on the creation of shared value in the long run.

By the way the business sees itself and embeds this purpose within the strategy and the organization; thanks to culture, values, and internal and external stakeholder engagement, companies can address the economic, social, and environmental challenges facing humanity and respond to the accelerating challenges to securing long-term financial success (Deloitte 2017). This is the key to compete in global markets (Salvioni and Gennari 2017).

New business models oriented to sustainability emphasize the importance of new attention for success drivers, which can be both material and intangible. Know-how, distinctive abilities which cannot be easily replicated, relationships with the network's actors, alliances, brand value, and human capital are all assets on which the market competition can take place. In the current new economy, a business can be built around a pattern of thinking rather than a model of products and services (Dobre 2013). Hence, the competitiveness must be rethought in the light of new key success factors able to support the development of companies in the long run thanks to a corporate global responsibility which includes economic, social, and environmental aspects (Salvioni et al. 2016).

The system of intangible assets a company is able to create as a source of sustainable competitive advantage should be protected and increased in value by means of an effective and transparent process of communication with stakeholders (Brondoni 2010). The challenges in the competitive environment induce new ways and contents in corporate communication. In particular, the traditional financial communication is completed or integrated with new information about the social and environmental performance and the intangible assets (e.g., intellectual capital statement). The increase of information needs requires also new methods for content dissemination, connected to the use of more and more appropriate tools to facilitate both the timeliness

and the access to the information (Salvioni and Bosetti 2014).

Summary

Global markets call for new and complex competitiveness for both countries and companies, which have to face the challenge about the ability to understand the requirements of wide and different categories of stakeholders, considering also the future impacts of actions adopted to meet these expectations. Traditionally, competitive relations are grounded on organizations' power, as economic growth or market quotas in a zero-sum game.

The spread of the concept of sustainability changes the way to compete and the drivers for success and social progress, which shift from resources and products to the ideas and relations. The future of competitiveness seems to be a global network where different actors co-create value according with a sustainable way of living and make business. No longer can governments and companies autonomously create value, but they must build new theory on how to compete in an emerging opportunity space (Prahalad and Ramaswamy 2004).

This change induces the revision of governance models and communication contents and tools. Organizations require internal mechanisms to understand, capture, and manage the new critical success factors according with a view aimed at maximizing the opportunities and minimizing the risks today and in the future. New key performance indicators arise, and communication activities about the economic and socio-environmental performance nurture the relations between the organizations and their stakeholders in a shared process of value creation.

Cross-References

- [Competitive Advantage](#)
- [Global Performance](#)
- [Sustainable Competitiveness](#)

- Sustainable Growth
- World Economic Forum (Davos)

References

- Bellamy, M. A., Ghosh, S., & Hora, M. (2014). The influence of supply network structure on firm innovation. *Journal of Operations Management*, 32, 357–373.
- Blanke, J., Crotti, R., Drzeniek, H. M., Fidanza, B., & Geiger, T. (2011). The long-term view: Developing a framework for assessing sustainable competitiveness. In *The global competitiveness report 2011–2012*. Geneva: World Economic Forum.
- Brandenburger, A. M., & Nalebuff, B. J. (1995). The right game: Use game theory to shape strategy. *Harvard Business Review*, 73(July–August), 57–71.
- Brondoni, S. M. (2010). Ouverture de ‘intangible assets and global competition’. *Symphonya. Emerging Issues in Management*, 2, 1–5. <https://doi.org/10.4468/2010.2.01ouverture>.
- Contractor, F. J., & Lorange, P. (1988). *Cooperative strategies in international business*. Boston: Lexington Books.
- Deloitte. (2017). *2030 Purpose: Good business and a better future. Connecting sustainable development with enduring commercial success*. London: Deloitte LLP.
- Dobre, A. M. (2013). Intangible assets as a source of competitiveness in the post-crisis economy. The role of brands. *Theoretical and Applied Economics*, XX, 12 (589), 127–138.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. New York: Pitman.
- Freeman, R. E., & Dmytriiev, S. (2017). Corporate social responsibility and stakeholder theory: Learning from each other. *Symphonya. Emerging Issues in Management*, 2, 7–15.
- Gennari, F., & Salvioni, D. M. (2018). CSR committees on boards: The impact of the external country level factors. *Journal of Management and Governance*, 1–27. <https://doi.org/10.1007/s10997-018-9442-8>.
- Hakansson, H., & Snehota, I. (1995). *Developing relationships in business networks*. London: Routledge.
- Listra, E. (2015). The concept of competition and the objectives of competitors, 20th International Scientific Conference Economics and Management – (ICEM-2015). *Procedia – Social and Behavioral Sciences*, 213, 25–30.
- McArthur, J. W., & Sachs, J. D. (2001). The growth competitiveness index: Measuring technological advancement and the stages of development. In *The global competitiveness report 2001–2002*. Geneva: World Economic Forum.
- Osorio, B. B., Blanke, J., Campanella, E., Crotti, R., Drzenuck-Hanouz, M., & Serin, C. (2013). Assessing the sustainable competitiveness of nations. In *The global competitiveness report 2013–2014*. Geneva: World Economic Forum.
- Padula, G., & Dagnino, G. B. (2007). Untangling the rise of coopetition: The intrusion of competition in a cooperative game structure. *International Studies of Management and Organization*, 37(2), 32–52. <https://doi.org/10.2753/IMO0020-8825370202>.
- Porter, M. E. (1980). *Competitive strategy*. New York: Free Press.
- Porter, M. E. (2000). Attitudes, values, beliefs, and the micro-economics of prosperity. In L. E. Harrison & S. P. Huntington (Eds.), *Culture matters: How values shape human progress*. New York: Basic Books.
- Porter, M. E. (2001). Enhancing the microeconomic foundations of prosperity: The current competitiveness index. In The Global (Ed.), *Competitiveness report* (pp. 2001–2002). New York: Oxford University Press for the World Economic Forum.
- Porter, M. E., & Kramer, M. R. (2006). Strategy society. The link between competitive advantage and CSR. *Harvard Business Review*, 84, 78–92.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*, 89, 62–77.
- Porter, M. E., Delgado-Garcia, M., Ketels, C. H. M., & Stern, S. (2008). Moving to a new global competitiveness index. In *The global competitiveness report 2008–2009*. Geneva: World Economic Forum.
- Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Inter-organizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41(1), 116–145.
- Prahalad, C. K., & Ramaswamy, V. (2004). *The future of competition: Co-creating unique value with customers*. Boston: Harvard Business School Press.
- Sala-i-Martin, X., Doppelhoffer, G., & Miller, R. (2004). Determinants of long-term growth: A Bayesian averaging of classical estimates (BACE) approach. *American Economic Review*, 94(4), 813–835.
- Salvioni, D. M., & Bosetti, L. (2014). Sustainable development and corporate communication in global markets. *Symphonya. Emerging Issues in Management*, 1, 1–19. <https://doi.org/10.4468/2014.1.03salvioni.bosetti>.
- Salvioni, D. M., & Gennari, F. (2017). CSR, sustainable value creation and shareholder relations, *Symphonya. Emerging Issues in Management*, 1, 36–49.
- Salvioni, D. M., Gennari, F., & Bosetti, L. (2016). Sustainability and convergence: The future of corporate governance systems? *Sustainability*, 8, 1203. <https://doi.org/10.3390/su8111203>.
- Schweitzer, M., & Galinski, A. (2015). *Friend & Foe: When to cooperate, when to compete, and how to succeed at both*. New York: Crown Business.
- Smith, A. (1776). An Inquiry into the Nature and Causes of the Wealth of Nations. In W. B. Todd (Ed) *McMaster University Archive for the History of Economic Thought*. Oxford: Clarendon Press, 1976.

- Soubbotina, T. P. (2004). *Beyond economic growth. An introduction to sustainable development* (2nd ed.). Washington, DC: The World Bank.
- Stigler, G. (1988). Competition. In J. Eatwell, M. Milgate, & P. Newman (Eds.), *The new Palgrave: A dictionary of economics* (pp. 531–536).
- Warner, A. M. (2000). *Economic creativity. Global competitiveness report 2000*. New York: Oxford University Press.
- World Commission on Environment and Development. (1987). *Our common future. WCED report*. Oxford: Oxford University Press.
- World Economic Forum. (2011). *The Global Competitiveness Report 2011–2012*. Switzerland: Geneva.

Compliance

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Synonyms

Compliance is synonymous with the terms [Acquiescence](#); [Assent](#); [Concurrence](#); [Conformity](#); [Consent](#); and [Observance](#) and is used in association with [Conventions](#); [Practice](#); [Regulations](#); [Rules](#); or [Custom](#) which would need to be complied with.

Definitions and Introduction

The term “comply” was derived from the verb comply in early fourteenth century, “to fulfill, carry out” from Old French compli, past participle of complir “to accomplish, fulfill, carry out” from Vulgar Latin complire, from Latin complere “to fill up.” The sense of “to consent” began in c.1600. Compliance (n) from comply +ance dates from the 1640s. Compliance can be defined as “the function of identifying relevant legislative, regulatory and best practice requirements and implementing the necessary arrangements, systems and controls so as to facilitate adherence to these obligations” (Mills and Haines [2015:18](#)).

The Debate About the Need for Regulatory Compliance

There is no consensus about the necessity of regulation and compliance (Dragomir [2012](#)), and this is considered to be “heavily contested intellectual territory” (Davies and Green [2008:12](#)). Arguments range from rigid state control to no regulation. On the one hand, there is a view that free markets, left to themselves, do not always deliver the optimal good to society and that when employment stagnated, government must step in (Keynes [1936](#)). On the other hand, regulation can be found to be too detailed and intrusive. There may be over-demand from consumers who perceive regulation as a free good and oversupply by the regulator who is risk averse (Goodhart et al. [1999](#)). There is also the moral hazard of the assumption that if something is not covered by regulation, it does not have a regulatory dimension, and that care/compliance is not needed. There is some consensus for the view that “regulation approved in a crisis must be subsequently fine-tuned” (Greenspan [2007:374](#)). In the context of the rising consciousness of the need for corporate sustainability, from both environmental and social contexts, there are increasing calls being made for compliance with sustainability standards.

Compliance and Innovation in Relation to Sustainability

Sustainability is broadly defined as an organization’s ability to balance short-term and long-term needs of stakeholders (direct and indirect) through the sale of value-adding goods and services, which are produced in line with the earth’s carrying capacity and exert a maximum positive social impact (Porter and Van der Linde [1995](#); Nidumolu et al. [2009](#)). Challenges are faced by companies when they seek to ensure compliance with corporate sustainability standards. They would need to examine their practices in light of compliance standards and take corrective action as required (Grimm et al. [2016](#)).

First, in the context of sustainability, compliance relates to certifiable management systems in various areas such as quality, health, safety, and environment. For example, “sustainability management accounting and control” envisages the inclusion of social and environmental measures, in addition to the conventional focus on financial outcomes. Environmental quality and economic growth were viewed as trade-offs, but this view is rapidly changing to one of the identifying simultaneous targets for growth, sustainability, and societal development (Porter and Van der Linde 1995; Ambec et al. 2013).

Second, in the context of sustainability, compliance also relates to corporate governance, specifically corporate governance codes, where companies and executives are asked to “comply or explain”: comply with such codes or explain why they do not. Doyle et al. (2019) explore the link between Governance, Risk, and Compliance (GRC) and innovation in the context of sustainability; they propose a practice-based concept of compliance–innovation and set out its significance for sustainability. The concept envisages the central role of knowledge integration across business domains as the basis of modern competitive advantage. They outline how the integration of GRC and innovation domains drive commercial exploitation for both environmental sustainability and business sustainability.

Sustainability Compliance Index (SCI)

Corporate concern has been expressed for introducing a sustainability perspective early in the manufacturing and other processes and addressing this concern, Hallstedt (2017:258) attempts to identify and develop sustainability criteria and index in relation to product life cycle stages and socio-economic sustainability principles; his index demonstrates to what degree a product or process concept performs in relation to a sustainable solution as indicated in the table below:

Sustainability Index Compliance (SCI) scale	
SCI 9	The strategic sustainability criterion is fulfilled. Reached excellent level
SCI 6	Have implemented a strategy with concrete actions for how to move step-wise towards more sustainable solutions. Moving strategically towards excellent level (SCI9)
SCI 3	Compliance with socio-ecological related regulations. A low but acceptable level
SCI 1	Lowest level of sustainability compliance. Not acceptable level
0	No information to score a SCI value. Need more research and investigation

The SCI scale is listed in descending order of compliance, and the final row represents unavailable information. The index is useful for flagging up the current level of compliance and underlines the need to undertake further work in order to reach the top excellent level.

Compliance and Due Diligence

Due diligence refers to the process of collecting, examining, analyzing, and researching information in order to make decisions that comply with regulatory requirements. Prieto et al (2021:1) describe the concept of due diligence as “a methodology for assessing risks.” While due diligence processes may differ from industry to industry, the overarching aim of the process of due diligence is to mitigate risk and facilitate compliance. Thus, the process of due diligence could help ensure compliance with sustainability requirements and mitigate risks that may arise on account of non-compliance.

Summary/Conclusion

Compliance has implications for sustainability. It is crucial that corporate dealings in their day-to-



day practices are compliant with relevant regulations and conventions, not only for sustainability and ethical issues, but also for preserving the long-term health of companies and businesses. Firms would need to recognize that in the long term, profits are linked to sustainability.

Cross-references

- [Corporate Governance](#)
- [Corporate Social Responsibility](#)
- [Enlightened Self-Interest](#)
- [Management Control Systems and Sustainability](#)
- [Moral Hazard](#)

References

- Ambec, S., Cohen, M., Elgie, S., & Lanoie, P. (2013). The Porter hypothesis at 20: Can environmental regulation enhance innovation and competitiveness? *Review of Environmental Economics and Policy*, 7(1), 2e22.
- Davies, H., & Green, D. (2008). *Global financial regulation: The essential guide*. John Wiley and Sons.
- Doyle, E., McGovern, D., McCarthy, S., & Perez-Alaniz, M. (2019). Compliance-innovation: A quality-based route to sustainability. *Journal of Cleaner Production*, 210(10 February), 266–275.
- Dragomir, L. (2012). *European Prudential banking regulation and supervision: The legal dimension*. Routledge/Taylor and Francis.
- Goodhart, C., Hartmann, P., Llewellyn, D. T., Rojas-Suarez, L., & Weisbrod, S. (1999). *Financial regulation: Why, how and where now?* Abingdon Oxon: Routledge. (reprinted 2005).
- Greenspan, A. (2007). *The age of turbulence*. London: Penguin Press.
- Grimm, J. H., Hofstetter, J. S., & Sarkis, J. (2016). Exploring sub-suppliers' compliance with corporate sustainability standards. *Journal of Cleaner Production*, 112(Part 3, 20 January), 1971–1984.
- Hallstedt, S. I. (2017). Sustainability criteria and sustainability compliance index for decision support in product development. *Journal of Cleaner Production*, 140(Part 1, 1 January), 251–266.
- Keynes, J. M. (1936). *The general theory of employment, interest and money*. New York: Harcourt, Brace.
- Mills, A., & Haines, P. (2015). *Essential strategies for financial services compliance* (2nd ed.). Chichester: John Wiley and Sons.
- Nidumolu, R., Prahalad, C. K., & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation. *Harvard Business Review*, 87(9), 56–64.
- Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment competitiveness relationship. *The Journal of Economic Perspectives*, 9(4), 97–118.
- Sanz-Prieto, I., de-la-fuente-Valentin, L., & Ríos-Aguilar, S. (2021). Technical due diligence as a methodology for assessing risks in start-up ecosystems: An advanced approach. *Information Processing & Management*, 58(5), 1–11, 14 May 2021.

Compliance Culture

- [ISO19600 Compliance Management Systems](#)

Compliance Management

- [Compliance Management System](#)
- [Integrity Management](#)

Compliance Management System

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Synonyms

[Compliance Management](#)

Definition

Compliance is the necessity to meet the regulatory obligations for a company and it requires the organization to embed a culture that will affect the attitude of people within the organization to act in line with the regulations. Compliance also indicates accountability and an obligation to sustain relevant codes of conduct (Singh and Bussen 2015). Some compliance requirements for organizations are not in the form of regulations, they can be industry-specific, can be based on several

standards, or can be shaped by the expectations of the society.

Compliance Management System (CMS) is the designation of a program for an organization that intends to keep the organizations on the right side of regulations. CMS aims to create an integrated system that gathers the processes, controls, functions, and tools to mitigate an organization's compliance with regulations. CMS designs organizations that prohibit violations of law and lead them to be respectful to the community. CMS, in short, aims to create an effective compliance structure within an organization. CMS is of crucial importance for companies to avoid fines and penalties and to prevent reputational scandals.

CMS programs in organizations define specific rules that apply to the organization and establish a framework or strategies to ensure the organization sticks to those rules. CMS programs can be viewed as strategies to align a company to strong corporate governance applications. The design of a CMS program requires the board of directors' oversight, the full commitment of all employees, and design of effective compliance programs. Even though compliance is blamed for decreasing efficiency within an organization, it may help organizations to save millions of dollars and their reputation as well. Various corporate scandals revealed the necessity of establishing CMS.

A Brief History of Misconducts and Evolution of CMS

Despite the recent popularity of the subject, CMS went through various stages of development starting from the beginning of the twentieth century. In this part, a brief history of the CMS is presented.

Beginning of the twentieth Century: Even if the term compliance became popular in the last three decades in the aftermath of the famous corporate scandals, its origins date back to the beginning of twentieth century in the USA. At the beginning of the 1900s, compliance was a concern for pharmaceutical companies. Food and Drug Administration (FDA) suppressed the drug companies for public safety concerns, which led to the

design of internal compliance management systems within those companies.

The 1970s: The emergence of corporate scandals led to the formation of CMS. Watergate scandal in the 1970s shed light on the corporate and governmental corruptions and revealed that many companies bribed foreign government officials to gain business advantages (de Beaufort Wijnholds, Onno 2015). With the initiatives of the Securities Exchange Commission (SEC) and Internal Revenue Service (IRS), a new law, the Foreign Corrupt Practices Act (FCPA) was passed in 1977 to prevent misconduct and to ensure trust. FCPA serves as a significant landmark for organizations willing to design an effective compliance system (Cassin 2011).

The 1980s: 1980s showed a various number of corporate misconducts and those misconducts took place in various industries. The first sprout of scandals of the decade started in the defense industry. Following the various bribery scandals in the defense industry in 1977, media reported the abuse and waste by defense contractors (Sethi 2011). These scandals have created new rules under Defense Industry Initiative on Business Ethics and Conduct, which is also crucial because of its promotion for reporting misconduct to government authorities. This initiative is an early settlement for whistleblowing.

Various other misconducts took place in the savings and loans industry, which was resulted from the collapse of significant financial companies. The scandals in the financial industry led the way to the Federal Deposit Insurance Corporation Act of 1991, which required the design of stronger internal compliance programs (Singh and Bussen 2015).

Another striking misconduct took place by Ford Pinto automobiles when their gas tanks exploded when hit behind. Despite the denial of Ford for any wrongdoing, there was compelling evidence that the company was aware of the issues related to the problem and did nothing to fix it (Spencer and Sims 1995). This misconduct added product safety and safety concerns to the list among other issues related to noncompliance.

The 1990s and 2000s: This period witnessed lots of financial scandals related to the biggest

publicly traded companies. The most famous ones are Enron, WorldCom, Tyco, etc., which caused the investors to lose a significant amount of their wealth and resulted in the loss of investor confidence. The common point in these scandals is that the companies tried to illustrate a better performance of themselves in their financial statements by using fraudulent accounting practices. In Enron's case, they hid their losses by transferring their liabilities to shell companies and they made investors believe that their business was booming. They also built a fake trading floor and used their own employees to call the trading floor to impress and trick the investors to think that the business operations are immense. Arthur Andersen, a former audit company, reviewed and approved their questionable financial statements; they even hid and destroyed certain documents related to the performance of the company. In late 2001, it was revealed that the company restated 3 years of financial statements and significant information. Later at the end of 2001, Enron was filed for bankruptcy, which was the largest in US history. Arthur Anderson was also found guilty of obstruction of justice, and they went out of business.

The result of these accounting frauds led the way to new regulations to prevent these scandals. Thus, the Sarbanes Oxley Act of 2002 (SOX) was passed, which contributed significantly to the compliance of the organizations. Several reforms were introduced to increase corporate responsibility, enhance financial disclosures, and eliminate accounting fraud. Public Company Accounting Oversight Board was also introduced as a result of the act to oversee auditing activities. SOX formed the basis of "corporate governance principles," which promote ethical conduct, conflict avoidance, and compliance with applicable laws, rules, and regulations, and fair, accurate, and timely disclosure of information (Singh and Bussen 2015).

The 2010s and current case: Despite the various attempts to minimize accounting frauds and environmental concerns and increase public safety and product safety, there are still significant cases of noncompliance in the current last two decades, e.g., British Petroleum fraudulent oil spill, Volkswagen diesel emission scandal (see

Jung and "Alison" Park 2017), etc. Apart from these, various scandals emerged as a result of the advancement in information technologies. Buzz, which is the social networking function of Google, was condemned to violate the privacy promises to its users in 2011. As a result, Google had to comply with a lot of terms that include establishing, design and implement a privacy program to protect the privacy of personal information. A more renowned scandal about Facebook burst at the beginning of 2018. The so-called Cambridge Analytica Scandal revealed that Facebook shared information belonging to 87 million users to Cambridge Analytica, a British political consulting firm. The scandal was revealed with the help of a whistleblower and it is asserted that the information gathered helped Donald Trump to win the elections (Cadwalladr and Graham-Harrison 2018). Federal Trade Commission (FTC) approved a fine of \$5 billion on Facebook. Other social media platforms like Twitter and LinkedIn are also under the investigation of regulators in many countries over the way they use personal data to provide targeted advertising. The advancements in technology suggest that the designing of advanced forms of Information Technology Governance should not be overlooked.

The incidents mentioned above show that misconducts happen all the time and they show variety over time. Some of the misconducts reveal a one-guy problem, where one bad guy causes a corporate mishap. Most cases are on the other hand systematic and signal an organizational culture problem. Nonetheless, the outcomes of noncompliance are costly for sure. The outcomes of the noncompliance penalties can be monetary penalties as well as other requirements that involve extensive oversight and accountability with implementation costs and other activities. Google's 2011 settlement agreement with the FTC involves nonmonetary penalties. Following the violation of privacy promises, Google was forced to design a comprehensive privacy program to protect personal information. To maintain this program Google had to assign a coordinator to identify and work up the risks and train all its employees on privacy. Moreover, they had to hire

a qualified third-party professional to provide privacy assessments. The penalties Google faced involve lots of work and costs, even if they did not get any monetary penalties. Considering the high costs of noncompliance, designing an effective Compliance Management Systems within an organization is a must.

Designing an Effective Compliance Management System

A Strategic Approach to Compliance Policy

Laws, rules, and regulations within an industry are often associated with the performance of companies like product safety, human resources policies, information privacy and security, environmental sustainability, timely and accurate dissemination of information, and financial reports. These all will assist a company to perform better, and meet stakeholder expectations in the long term (Steinberg 2011). A successful manager will get it and makes a clear statement about a company's compliance with applicable laws, rules, and standards. This statement should be made clear to everyone who is working internal and external with the company. External stakeholders involve suppliers, who are also equally crucial to comply with the laws, regulations, and standards. The study of Turker and Altuntas (2014) reveals that supplier compliance with the buyer company's code of conduct is seen at the heart of a complex system of the sustainable supply chain. In a broader sense, by following such compliance programs, companies set the rules of the game for suppliers in order "to monitor the process of implementation and to measure the level of progress among their suppliers deriving from these existing standards" (Turker and Altuntas 2018).

Aligning Compliance Processes into Business Processes

Despite the call for a Chief Compliance Officer (CCO) to ensure an effective CMS, it is more significant to include every manager to adapt their operations to compliance processes. It is very important to harmonize compliance processes to the goals, tasks, and objectives of a

company. If this harmonization is achieved, it would not be possible to consider CMS a burden for the company. Furthermore, it is necessary to define operational procedures based on compliance, which will focus on the problems identified through audits. These procedures may highlight compliance processes like the detection of legal obligations, designing breach monitoring and reporting programs, complaint handling issues, and incentive and reward programs for diligent workers.

Designing a Program Based on Integrity and Ethics

An effective CMS program must be based on an ethics policy that matches the operations and organizational culture of the company. Previous corporate scandals display that organizational culture lies at the heart of an effective compliance program. The scandals arose because there was something wrong in the organizational culture, which could be identified by weak internal control mechanisms as well as tolerance for unethical corporate behavior. Thus, it is necessary to set a policy, which is comprehensive, organized, and understandable by everyone in the company. To make everyone understand and apply the program, training programs should be available to everyone, which will be reinforced by incentivizing employees who are persistent in compliance. The company should also design programs to whistleblower channels and protect those workers that whistleblow the non-compliance within the company. It should be clear to every worker that using such channels is to ensure cultural integrity and ethical values of the organization.

Designing an Ongoing Program to Maintain Compliance

CMS of an organization should be monitored and well documented so that the program ensures efficiency and effectiveness. The program should include internal and external audits to maintain compliance and it should be adaptive to changes in the regulations, laws, and standards. Thus, it is also crucial to monitor the changes in the standards and regulations. Especially independent

external reviews are significant to maintain and meet the current legislation.

Adapting the Technology

The company should design systems that will adapt the use of technology in their programs. Deploying technology to monitor the operations, processes, and transactions of the company will centralize the activities of the company. In that sense, it will be easier to address concerns related to noncompliance. Also, the use of technology will enable the provision of timely and correct data to evaluate the current compliance of the company. Technology will facilitate human resource-related tasks to be handled, such as providing training and awareness regarding compliance. The systems designed by technology will provide support on measurement and reporting of procedures, risks, and controls (Steinberg 2011).

Summary

Various corporate scandals throughout the last century revealed the necessity of compliance to the norms, standards, and regulations. Despite compliance to the laws and maintaining compliance being considered costly, noncompliance results in higher monetary, nonmonetary, and reputational costs for the organizations. Thus, it is crucial to design Compliance Management Systems within an organization to keep it on the right side of the regulations and expectations of the customers and society. The existence of a well-established CMS will not only help a company to be in line with regulations but also let it be more effective and raise its performance. To design an effective CMS, the contribution of every employee is of high importance. To ensure a well-functioning CMS, it is necessary to have a strategic approach to compliance policy, align compliance processes to business processes, design a program based on ethics and integrity, design an ongoing and active program, and adapt the technology to the processes.

Cross-References

- [Corporate Governance](#)
- [ISO19600 Compliance Management Systems](#)
- [OECD Principles of Corporate Governance](#)
- [Values Management System](#)

References

- Cadwalladr, C., & Graham-Harrison, E. (2018, March 17). Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach. *The Guardian*. <https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election>. Accessed on 2 Aug 2019.
- Cassin, R. L. (2011). *The Foreign Corrupt Practices Act of 1977 & Lay Person's Guide to FCPA, with and Introduction by Richard Cassin*. Cassin Law Publishing.
- de Beaufort Wijnholds, O. (2015). *Gold, the Dollar and the Watergate*. London: Palgrave Macmillan.
- Jung, J. C., & "Alison" Park, S. B. (2017). Case study: Volkswagen's diesel emissions scandal. *Thunderbird International Business Review*, 59(1), 127–137.
- Sethi, S. P. (2011). *Globalization and self-regulation: The crucial role that corporate codes of conduct play in global business*. New York: Palgrave Macmillan.
- Singh, N., & Bussen, T. J. (2015). *Compliance management: A how-to guide for executives, lawyers and other compliance professionals*. Oxford: Praeger Publishing.
- Spencer, M. P., & Sims, R. R. (1995). Understanding corporate misconduct: An overview and discussion. In M. P. Spencer & R. R. Sims (Eds.), *Corporate misconduct: The legal, societal, and management issues*. Westport: Quorum Books.
- Steinberg, R. M. (2011). *Governance, risk management and compliance: It can't happen to us-avoiding disaster while driving success*. Hoboken: Wiley.
- Turker, D., & Altuntas, C. (2014). Sustainable supply chain management in the fast fashion industry: An analysis of corporate reports. *European Management Journal*, 32(5), 837–849.
- Turker, D., & Altuntas, C. (2018). Diffusion of sustainability: Effectiveness of corporate compliance programs for suppliers. In S. Yousafzai (Ed.), *Measuring and controlling sustainability: Spanning theory and practice*. Taylor & Francis.

Component

- [Water](#)

Composition

- Board of Directors and Corporate Governance

Comprehensive Corporate Reporting

- Integrated Reporting

Comprehensive Performance Management System

- Balanced Scorecard and Sustainability

Comprehensive Performance Measurement System

- Balanced Scorecard and Sustainability

Comprehensive Quality Management

- Total Quality Management and European Foundation of Quality Management

Compulsive Buying

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Synonyms

Buying addiction; Buying-shopping disorder;
Compulsive buying disorder (CBD); Compulsive

shopping; Compulsive spending; Consumerism;
Impulse control disorder; Impulsive buying;
Oniomania; Pathological buying; Shopaholic;
Shopping addiction

Definition

Compulsive buying is an all-consuming, often incessant, preoccupation with buying. The urge to buy something (anything) is so strong that the afflicted individual finds it impossible to resist. It is often described as an unhealthy obsession with buying (Kagan 2020). Simply spending hours in online browsing or physical window shopping without buying anything is also classified as compulsive buying (Black 2007). This obsession is severe enough to hinder normal functioning of the individual. The person spends hours if not days researching purchases, checking for deals, simply buying more than planned as a routine, etc. This needless overpowering urge to buy often, predictably leads to psychological, personal, work related, financial, and sometimes even criminal consequences (Black 2007).

The need to shop is so overwhelming that no amount of resistance and distraction help, but in fact, only make it worse. This is a condition seen commonly in most forms of addictive behavior like taking drugs, gambling, binge eating, or other eating disorders among others. Pathological cases include symptoms of depression, anxiety, and stress which are relieved (momentarily) immediately after a shopping episode (Müller et al. 2019). This is often followed by guilt and low self-esteem leading to further buying sprees creating an unbreakable, destructive, and escalating cycle. Triggers to this behavior could be multifold and often include low moods, boredom, ebbing confidence, finding sales irresistible, and omnipresent advertising among others (Black 2007).

The shopping is not in any way limited to items of need but progresses into justifying unnecessary purchases consistently. Some of the common consequences of compulsive buying are spiraling debts, relationships breakdown, and compulsive hoarding among others (Black 2007).

Background

Buying as an addiction was first recognized by Kraepelin (1915). He called it the “impulsive insanity.” Bleuler (as cited in Black 2007) then is credited with grouping compulsive buying, also known as Oniomania, with kleptomania and pyromania, in the early twentieth century.

It was not a widely researched topic up until the 1990s when the discussion of this condition became more mainstream. Today, there is still some resistance to classify compulsive buying as a medical disorder and therefore has led to various different classifications such as behavioral disorder or mood disorder. The medical grouping of this affliction can fall under various disorders like addictive disorder, obsessive compulsive disorder, or impulse control disorder (Black 2007).

Some studies suggest that age and gender play a definitive role in compulsive buying disorder with young females being more susceptible (Black 2007; Rose and Dhandayudham 2014). Other studies suggest that compulsive buying affects both men and women equally (Koran et al. 2006; Müller et al. 2010; Biolcati 2017).

Faber (1992) states that those showing symptoms of compulsive buying often talk about pleasurable highs and rushes during the (pre)planning and the actual act of shopping itself. In the same vein, Granero et al. (2016) compare compulsive buying disorder and gambling disorder and state that the same regions are involved in both these disorders and that they showed a high level of association.

On the other hand, Spinella et al. (2015) suggest that compulsive buying is not a medical condition that can be treated with medication but just an extreme form of habit manifested in general by people. In other words, compulsive buying behavior is driven by materialistic values and attitudes toward consumption and money.

Treatment

Compulsive buying (disorder) when diagnosed is often treated with behavioral therapy and impulse

control medications. Other recommended forms of treatment include group therapy, couple therapy, counseling, and use of antidepressants (Koran and Aboujaoude 2014).

Some Specific Triggers

Triggers can be both psychological and sociocultural. Psychological triggers could include anxiety, stress, depression, self-confidence, moods, social status, loneliness, obsessive nature among others. Other triggers could come from the social environment of the individual (O’Guinn and Faber 1989).

Market-based economy and disposable incomes tend to facilitate the obsession. But this compulsive buying may also be manifested in individuals who have relatively less disposable income. In other words, despite the income situation, this behavior is partly driven by the ease of access to shopping opportunities (Zadka and Olajosy 2016).

Some Examples

Online/Internet Shopping – this development has transformed the experience of shopping completely. The availability of millions, if not more shops, from the comforts of home combined with home delivery make the shopping experience limitless (Müller et al. 2019). There is nothing stopping anyone from shopping anytime for anything, anywhere. This opening up of shopping world creates endless opportunities for compulsive buyers to indulge. The idea of receiving a package results in anticipation followed by the utter joy of actually receiving the package and its contents. This euphoria is soon dissipated, and the next cycle begins to relive the previous experience which over time becomes less and less satisfactory creating an endless destructive loop (Rose and Dhandayudham 2014).

Online shopping is additionally dangerous since it usually removes physical cash completely from the transaction. The ease of using credit or debit cards was always manifest, but with the payment details being stored in the system of the

frequented online stores, results in implicitly creating less and less connect with the actual position of the money in the accounts.

With new technology, now one can pay with their fingerprints, with their phones, etc. These forms of payments make it very difficult to gauge how much money is really being spent, resulting in serious debts (Müller et al. 2019).

Sophisticated marketing – the savvy of the advertising world is unbeatable, and this has been fine-tuned with the use of big data mining and tracking surfing habits. Every time someone buys something online or simply searches for something, their digital footprint is left behind. This footprint gets tracked and mined. Companies now do not need to segment their markets anymore since they have access to individual data. The landscape of marketing has changed completely which in many ways is a very good development, but not so for a compulsive buyer. People, in general, receive adverts tailored for them based on their online surfing behavior making it very difficult for the afflicted individual to ignore their already weak impulses (Müller et al. 2019). The temptation is brutally hard, incessant, and omnipresent.

Developments in the production industry – the above problems are made worse by developments in the said industry itself. For instance, Fast Fashion, which involves producing cheap versions of catwalk designs quickly to exploit current trends. Availability of cheap goods at an increasingly rapid pace drives the appetite for more and more buying with higher frequency (Stanton 2018). The use and throw culture permeates, and once again creates a never ending cycle of buying repeatedly.

Online “trenders and influencers” – This is an interesting development in that it accords the trenders and influencers a chance of livelihood while doing what is the order of the times and indulge their own needs. This phenomenon of trending and influencing, however, once again fuels addictive consumption dramatically (Müller et al. 2019).

All of the above exacerbate the problem of compulsive buying for a compulsive buyer.

CSR and Compulsive Buying

The damage is obvious; unbridled consumption has consequences for everyone even companies. According to Kerin et al. (2011) if companies aid and encourage compulsive buying directly or indirectly, the consequences will spill over way beyond the personal domain of the compulsive buyer. Targeted marketing, incessant adverts in email boxes and online website, frequent flash sales, limited time offers, and fast moving items all create serious pressure on individuals who find it difficult to fight their impulses.

However, it might be unfair to hold companies ransom to their focused and sophisticated marketing strategies which seek to increase their market share and maximize revenues. These are very valid and justified objectives any company has. But in so far as contributing to an ever-increasing social malady, companies do have a moral responsibility to bear. Simply selling as much as possible in the pursuit of higher revenues is not a sustainable solution in the long run for anyone.

One cannot deny that the afflicted individual should also attempt to recognize and address their issues. But this is not always possible because compulsive disorders are debilitating on many levels.

The compulsive buying habit is driven by a culture of acceptable debt which is debatably asocial in itself. If a company notices that certain repeat customers are buying their products at a relatively higher frequency, then maybe there needs to be a way to flag such cases. The company bears a social and moral responsibility to investigate the issue instead of milking the individual for their last cent. One can argue that caveat emptor should not be the rule here.

The gambling industry is regulated to a certain extent, in that, there are certain maximum caps in place to help prevent an individual from completely going overboard with their money. Perhaps there can be a way whereby flagged cases of compulsive buying have a monthly spending limit in place to prevent excesses. Such limits could also be put in place by the lending agencies, credit card issuers, and banks for

instance. The consequences of not doing so could simply result in higher levels of bad uncollectible debts (Granero et al. 2016).

Alternatively, a very recent example of conscious consumption comes from the pilot program on renting clothes being put in place at Selfridges, the high-end store on Oxford Circus in London (“Selfridges to offer,” 2020). Here, in the special context of the corona virus, Selfridges, in order to tempt its younger and more sustainability conscious clientele, has decided to approach a novel way of shopping which involves renting of clothes and goods rather than buying and owning them. This move qualifies as a clever CSR strategy helping both the company and the affected stakeholders.

In all practical sense, there is no immediate reason why companies should engage with a consumer who is spending repeatedly and a lot on their products – this would be shooting themselves in the foot. But by not engaging with what is now considered to be a global phenomenon of debt-driven unnecessary consumption would be, by any standard, bad CSR.

Cross-References

- [Conspicuous Consumption/Positional Goods](#)
- [Consumer Social Responsibility \(CnSR\)](#)
- [Consumerism](#)
- [Emulative Consumption and Bankruptcy](#)
- [Responsible Consumption](#)
- [Sustainable Consumption](#)

References

- Biolcati, R. (2017). The role of self-esteem and fear of negative evaluation in compulsive buying. *Frontiers in Psychiatry*, 8(74). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5411448/>. Accessed 25 Aug 2020.
- Black, D. (2007). A review of compulsive buying disorder. *World Psychiatry*, 6(1), 14–18. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1805733/>. Accessed 25 Aug 2020.
- Faber, R. (1992). Money changes everything. Compulsive buying from a biopsychosocial perspective. *American Behavioral Scientist*, 35(6), 809–819. <https://journals.sagepub.com/doi/abs/10.1177/0002764292035006015?journalCode=absb>. Accessed 27 Aug 2020.
- Granero, R., Fernández-Aranda, F., Steward, T., Mestre-Bach, G., Baño, M., Pino-Gutiérrez, A., Moragas, L., Aymamí, N., Gómez-Peña, M., Mallorquí-Bagué, N., Tárrega, S., Menchón, J., & Jiménez-Murcia, S. (2016). Behavior: Characteristics of comorbidity with gambling disorder. *Frontiers in Psychology*. <https://www.frontiersin.org/articles/10.3389/fpsyg.2016.00625/full>. Accessed 26 Aug 2020.
- Kagan, J. (2020, February 9). *Compulsive Shopping*. <https://www.investopedia.com/terms/c/compulsive-shopping.asp>. Accessed 27 Aug 2020.
- Kerin, R., Hartley, S., & Rudelius, W. (2011). *Marketing* (10th ed.). New York: McGraw-Hill Irwin.
- Kraepelin, E. (1915). *Psychiatrie*. 8th ed. Leipzig: Barth.
- Koran, L., & Aboujaoude, E. (2014). Treating compulsive buying disorder. *Current Treatment Options in Psychiatry*, 1(4), 315–324. <https://doi.org/10.1007/s40501-014-0024-3>. Accessed 25 Aug 2020.
- Koran, L., Faber, R., Aboujaoude, E., Large, M., & Serpe, R. (2006). Estimated prevalence of compulsive buying in the United States. *American Journal of Psychiatry*, 163, 1806–1812. Accessed 25 Aug 2020.
- Müller, A., Mitchell, J., Crosby, R., Gefaller, O., Faber, R., Martin, A., Bleich, S., Glaesmer, H., Exner, C., & de Zwaan, M. (2010). Estimated prevalence of compulsive buying in Germany and its association with socio demographic characteristics and depressive symptoms. *Psychiatric Research*, 180, 137–142. <https://doi.org/10.1016/j.psychres.2009.12.001>. Accessed 27 Aug 2020.
- Müller, A., Steins-Loeber, S., Trotzke, P., Vogel, B., Georgiadou, E., & Zwaan, M. (2019). Online shopping in treatment-seeking patients with buying-shopping disorder. *Comprehensive Psychiatry*, 94. <https://www.sciencedirect.com/science/article/pii/S0010440X19300434?via%3Dihub>. Accessed 3 Dec 2020.
- O’Guinn, T., & Faber, R. (1989). Compulsive buying: A phenomenological exploration. *Journal of Consumer Research*, 16(2), 147–157. <https://academic.oup.com/jcr/article-abstract/16/2/147/1800427>. Accessed 27 Aug 2020.
- Rose, S., & Dhandayudham, A. (2014). Towards an understanding of internet-based problem shopping behaviour: The concept of online shopping addiction and its proposed predictors. *Journal of Behavioral Addictions*, 3(2), 83–89. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4117286/>. Accessed 26 Aug 2020.
- Selfridges to offer clothing rental in environmental push. (2020, August 18). *BBC News*. <https://www.bbc.com/news/business-53805033>. Accessed 25 Aug 2020.
- Spinella, M., Lester, D., & Yang, B. (2015). Compulsive buying tendencies. *Psychological Reports*, 117(3),

649–655. <https://journals.sagepub.com/doi/10.2466/15.PR0.117c28z1>. Accessed 25 Aug 2020.

Stanton, A. (2018, October 8). *What is fast fashion, anyway?* <https://www.thegoodtrade.com/features/what-is-fast-fashion>. Accessed 2 Dec 2020.

Zadka, L., & Olajosy, M. (2016). Compulsive buying in outline. *Psychiatria Polska*, 50(1), 153–164. http://psychiatriapolska.pl/uploads/images/PP_1_2016/ENGver153Zadka_PsychiatrPol2016v50i1.pdf. Accessed 2 Dec 2020.

Compulsive Buying Disorder (CBD)

- [Compulsive Buying](#)

Compulsive Shopping

- [Compulsive Buying](#)

Compulsive Spending

- [Compulsive Buying](#)

Concentrating Solar Power

- [Solar as a Sustainable Energy](#)

Conceptualization of CSR

- [Definitions of CSR](#)

Concurrence

- [Compliance](#)

Conducts

- [Core Values](#)

Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24)

- [Katowice Climate Negotiations](#)

Conflict Management

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Synonyms

[Conflict resolution](#); [Conflict settlement](#)

Definition

The issue of conflict, and its management in an organizational sense have been in the radar of academics, training organizations, and other institutions for the last 30 years. The skill of conflict resolution is sought after in the candidates for most of the jobs. The Merriam-Webster definition of conflict is “competitive or opposing action of incompatibles.” While this broad definition is enough to define the word, the understanding of the underlying reasons is essential for conflict management. Conflict occurs when two or more parties have opposing needs, incompatible objectives, and scarce resources at their disposal and can be observed on personal, group, or organizational levels. However, the perception that conflict

is negative and destructive, thus should be prevented is outdated. Conflict management is a concept that aims to limit the negative outcomes of conflict and harness the positive aspects of it. There are more than enough studies that prove well-managed conflict can provide positive outcomes in terms of productivity and sustainability. In order to properly manage conflict, one must recognize the sources that generate conflict, and the appropriate style of conflict resolution that is suitable for that situation and the parties involved.

Introduction

What differentiates “conflict management” from its predecessor “conflict resolution” is the understanding that conflict is not an all-destructive and negative notion, but through management can provide positive outcomes as well (Strauss 1982). The management of conflict can be exercised by the disputants or a third party (Wall and Callister 1995), the third party being a manager in majority of the cases. What the disputants and/or the managers must do as a first step in the way to managing conflict is the identification of the source. Thereafter the parties can manifest “styles” of mediating behavior ranging from “assertive” to “cooperative.”

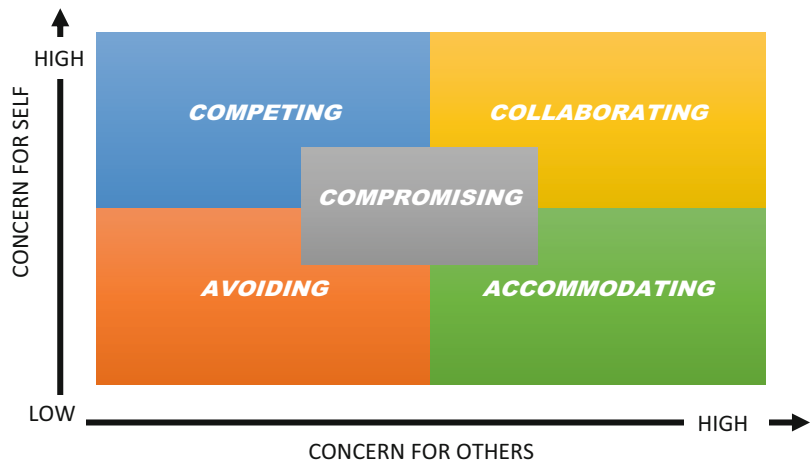
Conflict Management Styles

Early studies in conflict management relied on one-dimension measure for conflict management

which put “cooperation” and “competition” on opposite sides (Vliert and Prein 1989). It was Blake and Mouton’s (1964) work that re-designed this measure as a two-dimensional framework. Over time these dimensions were defined as “assertiveness” and “cooperativeness” by Thomas (1976) and “concern for self” and “concern for others” by Rahim (1986). The transition between these two dimensions results in five different styles of handling managing conflict. Blake and Mouton (Blake et al. 1964) named these five styles on the basis of the attitude shown by the managers: forcing, withdrawing, smoothing, compromising, and problem solving. Later, Rahim (1992) within the scope of “concern for self” and “concern for others” defined these five styles as integrating, obliging, dominating, avoiding, and compromising (Fig. 1).

Integrating style shows high concern for both self and others. This requires collaboration between parties, information flow, and understanding the incompatibility among parties in order to reach a solution that is favorable for each party. The way this style creates solutions is through confrontation which leads the way for problem solving. *Obliging* style shows low concern for self and high concern for others. In this style one party tries to satisfy the others’ needs and wants which can be achieved through acts of generosity, sacrifice, and obedience. The obliging party neglects their own concern in order to meet the concerns of the other. *Dominating* style shows high concern for self and low concern for others. Also known as competing, a dominating party

Conflict Management,
Fig. 1 Conflict management styles.
(Source: Derived from Rahim (2017))



tries to force their way to reach their objective and while doing so, ignores the needs and wants of the other party. A dominating party is prone to “pulling rank” with their subordinates to reach their goal. *Avoiding* style shows low concern for both self and others. Whether it be putting off an issue for later or just removing one’s self from a conflict situation, an avoiding party does not satisfy either their own concerns, or the others’. In order to not to deal with it, people with avoiding tendencies may be hesitant to accept there is even a conflict at all. *Compromising* style shows intermediate concern for both self and others. As the name suggest it requires compromises, from both sides of a conflict. Searching for a middle ground that is mutually acceptable for both parties is the foundation of this style of conflict management.

Complementary Forms of Conflict Management

There are few practices that serve as complementary methods for conflict management, which target interpersonal, intragroup, and intergroup conflicts. *Mediation*, which can be applied on both personal and group levels, requires an impartial third party, which can be selected by the disputants or appointed by a superior, that will lead or structure the discussion to help parties meet on common ground (Eunson 2012). *Moderation*, while similar to mediation, requires a group setting and deals with the working processes of groups. The moderator should be impartial and make sure every participant is equally involved in the proceedings, in this method the main aim is not conflict management, but reaching an objective. *Supervision* method is effective with teams and/or groups where there is a complex set of relationships. In this method, along with the group objectives, the development of individuals is also a priority. It allows for peer consulting and voicing of problems that arise in a work group. *Coaching*, not to be confused with the common usage for the “boss” of a team setting, is the exercise of providing counsel for individuals in order to help them reach their objectives by dealing with their problems. While forming the strategy to achieve the goal, coaching can help with conflict prevention

along with conflict management. *Team development* is the practice of forming a group into a “team.” A professional advisor manages the process of becoming a team by helping the members communicate better, co-operate, form relationships, and develop a team identity. The main aim is to get the group working together, solve conflicts, and even prevent them by eliminating reasons for conflict that may have arisen if this method was not implemented, such as forming of factions, power plays, and cultural barriers (Proksch 2016).

Summary

Conflict management is a concept that has been visible in the literature for over 30 years, and its inception stems from the lack of coverage the term conflict resolution had. Conflict management perspective accepts conflict is unavoidable, and rather than exhausting its efforts on conflict prevention, focuses it on making the most out of it. However, each conflict and its’ parties are different and require different approaches/styles for optimum outcome. Taxonomy of conflict management shows that these styles can range from “assertive” to “cooperative” or as later conceptualized as “concern for self” and “concern for others.” The process of conflict management can be supplemented by complementary methods such as mediation, moderation, supervision, coaching, and team development. Each of these methods target different settings (intrapersonal, interpersonal, intragroup, intergroup). Proper execution of conflict management paves the way for improved productivity and sustainability.

Cross-References

- Collaborative Teamworking
- Counterproductive Work Behaviors

References

- Blake, R. R., Mouton, J. S., Barnes, L. B., & Greiner, L. E. (1964). Breakthrough in organization development. *Harvard Business Review*, 42(6), 133–155.

- Eunson, B. (2012). *Conflict management*. Wiley.
- Proksch, S. (2016). *Conflict management*. Springer.
- Rahim, M. A. (1986). Referent role and styles of handling interpersonal conflict. *The Journal of Social Psychology*, 126(1), 79–86.
- Rahim, M. A. (1992). *Managing conflict in organizations*. New York: Praeger.
- Rahim, M. A. (2017). *Managing conflict in organizations*. Routledge.
- Strauss, G. (1982). Bridging the gap between industrial relations and conflict management: An introduction. In G. B. In Bomers & R. B. Peterson (Eds.), *Conflict management and industrial relations*. Springer Science & Business Media.
- Thomas, K. W. (1976). Conflict and conflict management. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 889–935).
- Van de Vliert, E., & Prein, H. C. (1989). The difference in the meaning of forcing in the conflict management of actors and observers. In *Managing conflict: An interdisciplinary approach* (pp. 51–63).
- Wall, J. A., Jr., & Callister, R. R. (1995). Conflict and its management. *Journal of Management*, 21(3), 515–558.

Conflict Minerals

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Definition/Description

Access to, exploitation of and trade in mineral resources such oil, gas, metals, gems, rare earths, and others valuable in the global marketplace are often causes and/or consequences of interstate and intrastate conflicts. These often scarce and strategic resources are often found in developing countries and emerging economies, though their exploitation is typically controlled by multinational corporations from the industrialized world. As a consequence of protracted wars, failed states arise which are unable to exercise full sovereignty over their territory and this contributes to human rights abuses, kleptocracy, money laundering, and arms purchases – by government forces, separatist movements, terrorist groups, and the like. Despite

embargoes and boycotts imposed by intergovernment or nongovernment organizations, the mineral resources produced under those conditions enter into global supply chains where they are unsustainably processed and incorporated into consumer and industrial goods marketed worldwide.

Conflict Case-Studies

Diamonds in West Africa: In 2000, the UN Security Council embargoed rough diamonds from conflict zones in Sierra Leone controlled by the Revolutionary United Front forces, which were noted for human rights abuses and war crimes. Since this insurgent group was supported by the then president Charles Taylor of neighboring Liberia, the diamonds were smuggled through his country which also produces diamonds and thus entered the global supply chain.

Oil and energy in the Middle East: In the mid-2010s, much of the oil-rich Levant region came under the control by the so-called Islamic State of Iraq and Syria, which used much of those reserves to fund its terrorist regime. ISIS was successful in smuggling much of this output through a Mediterranean port in Turkey where it was mixed with oil from Caspian Sea states also destined for legitimate global markets. While supply chains for energy resources are particularly prone to wars, terrorism, civil strife, and embargoes, given their strategic importance any disruption results in swift illicit circumvention.

Rare-earths in Central Africa: Only in 2008 did the UN Security Council embargo arms to nonstate groups in the conflict in eastern Congo, for the first time linking this to funding by the trade in mineral resources. However, no groups or corporations have been identified for appropriate sanctions despite evidence provided by NGOs. Among the corporations identified as trading in resources from the Congo conflicts zones in defiance also of OECD Guidelines are the major European, Asian, and American miners, traders,

and smelters. These are in addition to African ones from neighboring countries, the latter exercising military control over regions across their borders.

Coltan in Latin America: Although Venezuela was believed to have reserves of coltan, it was only in 2009 that its discovery deep in its Amazonian jungles bordering Colombia was announced along with a ban on private mining enforced by the military. However, that has not kept away artisanal miners or prevented smuggling of the ore into Brazil where it feeds domestic industry demand as well as gets exported. As the left-wing government of Venezuela remains at odds with the right-leaning pro-US government of Colombia, tensions could result in conflict. As this border area is on the route for drugs-smuggling to the USA, the syndicates involved in this have diversified into the equally-profitable trade in coltan ore.

Coal in South Asia: There has been domestic conflict involved in the more mundane extraction of coal in mineral-rich jungles inhabited by tribal peoples increasingly economically and politically disenfranchised. Their cause has been supported by Naxalite or Maoist-communist insurgents who have long been in conflict with the Indian government. Ironically the state-owned coal-mining corporations are alleged to be paying millions of rupees to the Naxalites as “protection-money.” Meanwhile the Naxalites themselves have operations to process profitably the coal mined illegally by tribal villagers, then bribing police and government officials to not intervene.

Regulation and Enforcement

In order to provide economic livelihoods of the poor, OECD guidelines allow multinational corporations to engage with artisanal mines and informal traders, provided there are no armed groups or human rights abuses involved. These guidelines have been influential in the drafting of regulations around the world, as in the EU and China. Thus, impetus was provided for

corporations to establish responsible supply chains for minerals from conflict and high-risk regions. Subsequently specific industry codes, certification, and auditing requirements have been inaugurated such as by the World Gold Council, London Bullion Market, and Dubai Multi-Commodities Centre.

In postfinancial crisis USA, the Dodd-Frank Act regulated public corporations, incorporating a provision requiring them to divulge information on conflict minerals contained in their products. Still the majority of the consequent filings claim being unable to ascertain whether their minerals are conflict-free, besides lobbying to see this law amended. Suppliers to global electronic manufacturers argue that once refined by smelters it is near-impossible to determine whether the minerals are from conflict regions, let alone that its trade helps fund armed groups and corrupt governments. Thus, less than a quarter of US corporations fully comply with the law, while about half do not file at all and face no adverse legal or economic consequences.

Compliance with conflict-free minerals regulations may have had unintended consequences for the industry in Africa. With regulations being enforced in industrialized countries, developing and emergent market traders tend to be the only ones still buying there, often at discounted prices and with their own smelter within the mined country to mask mineral origins. China has also signed “resources-for-infrastructure” agreements with African governments within which pricing of minerals and the extent these are conflict-zone sourced remains opaque. Persistent consumer demand for products with conflict-free certification may yet motivate corporations to increasingly source their minerals sustainably from Europe, North America, and Australasia.

Summary

Significant as the contribution of mining has been to resource-rich developing countries in Africa,

this has not translated into much economic development. Human rights is a generally issue in the extractive industries, covering practices ranging from people displacement, forced labor, workplace health-and-safety to detention and torture by security staff. Collapsed law-and-order along with lack of concern about environment and human rights during conflict are favorable to trade in resources. Especially if armed groups and their sponsors benefit economically from that trade, these parties tend to maintain the underlying conflict.

Despite challenges of their implementation in remote regions, the science and technology exists to track mineral resources from sourcing through processing to incorporation into products, both industrial and consumer. Yet both international and national laws need to be made more effective so that all involved in illicit extracting and trading in conflict minerals could be held responsible for the crimes committed. This means not only representatives of multinational corporations, local agents, governments, and de facto forces but manufacturers and marketers of the end-products as well. Ultimately it will take discerning buyers demanding products be conflict-free and sustainably sourced that will change practices along the global supply chain.

Cross-References

- [Corruption](#)

Further Reading

- Bannon, I., & Collier, P. (2003). *Natural resources and violent conflict: Options and actions*. Washington, DC: The World Bank.
- Campbell, G. (2012). *Blood diamonds: Tracing the deadly path of the world's most precious stones*. New York: Basic Books.
- Epstein, M. J., & Yuthas, K. (2011). Conflict minerals: Managing an emerging supply-chain problem. *Environmental Quality Management*, 21(2), 13–25.
- Extractive Industries Transparency Initiative. <https://eiti.org/>
- Global Witness. <https://www.globalwitness.org/en/campaigns/conflict-minerals/>

McBain, D. (2014). Coltan: A study of environmental justice and global supply chains. *Power, Justice and Citizenship*, 173. https://doi.org/10.1163/9781848882928_014.

UK Government. <https://www.gov.uk/guidance/conflict-minerals>

Conflict Resolution

- [Conflict Management](#)

Conflict Settlement

- [Conflict Management](#)

Conformity

- [Compliance](#)
- [Sanctions of Social Capital](#)

Confucian Ethics

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Synonyms

[Buddhist ethics](#); [Ethics and ethical theories](#); [Leadership ethics](#)

Background on Confucius

Confucius (*Kong Fuzi* or *Kung fu tzu* in Chinese) was a Chinese philosopher, educator, and political thinker. He lived over 2500 years ago (551–479 BCE) and was the founder of the *Ru* School of Chinese thought. He was born into a period of the War of the Seven States

characterized by severe violence and intellectual competition (Graham 1989). In such a period, Confucius pragmatically became an itinerant philosopher in order to ensure that his views were spread extensively. He wrote copiously about the pragmatic rules of living needed to ensure political and social success (Ames and Rosemont 1998).

Confucius was a very popular teacher and his ideas have provided for a fertile ground for the flourishing of Chinese culture throughout history (Chai and Chai 1973). This is evident in generations of competitive literary examinations or merit system (Brett 1997) in China; Eastern societies that were located within China's cultural orbit, like Korea, Japan, and Singapore; and among overseas Chinese communities. Confucianism is a "philosophy of life" or "the way" in the tradition of non-organized religions. Hence, its values have continued to be embedded in the social life of the Chinese people for millennia as "customs" and traditions. Hence, it is critical to look at Confucius' precepts in its original form in order to try and tentatively grasp the author's original intentions.

Premise of Confucian Ethics

The Western world's knowledge of Confucianism is primarily through the Jesuit, Matteo Ricci's writings (Roy et al. 2018). In many ways, Confucius was considered as the equivalent of what Socrates was to Western philosophy, although their approaches to ethics were starkly different (Yu 2005). Confucius' ideas are best reflected in the *Lunyu* (or *Analects*) which broadly focus on the education and comportment of the "ideal" man – how individuals should live life and interact with others, as well as the forms of society (Van Norden 2002).

It is worth noting that in addition to Confucianism, the Chinese orientation toward life has also been shaped by Taoism and later, Buddhism. Each philosophy shared the emphasis on harmony and discouraged abstract conjectures. Taoism's teachings focused on opposition, contradiction, change, and cycles (the *yin* and the *yang*). It

stood for a deep appreciation of nature, the rural life, and simplicity. Buddhism, which originated in India, came to China a few 100 years after the advent of Taoism and Confucianism. It provided an epistemology, or a body of knowledge. Like the earlier two orientations, Buddhism also harped on the tenets of harmony, holism, and the mutual influence of organizational systems.

Correlates of Confucian Ethics

As compared to Western countries, Eastern countries scored high on the Confucian Work Dynamism Index. This Index was positively correlated with the economic growth of countries (Franke et al. 1991), entrepreneurship orientation, and a high "marginal propensity to save." In other empirical studies, the Index was negatively correlated to "this year's profits," but positively correlated to "profits 10 years from now."

Hofstede and his coauthors in their later empirical studies observed that the Index measures only specific features of Confucian ethic and ignores others such as filial piety and hence reinterpreted the meaning of this construct as "*Long-term Orientation*." This dimension portrays the furthering of virtues oriented toward future returns, particularly perseverance and thrift. Given the limitation of an overall insight into Confucius value-system, we propose an alternative set of "ideal types" in order to facilitate Western companies' charter of new political territories.

Certain facets of Confucian societies and their related explanations have been questioned. First, a high rate of savings may be caused by comparatively high costs of consumption coupled with the high taxes on consumption and the poor availability of social security for the elderly, rather than just long-term orientation. Second, the Index included other items, like, "ordering relationships by status and observing this order" and "having a sense of shame" that have inconsequential association with long term association. Third, some negatively related items, such as "respect for tradition" and "personal steadiness and stability" are not necessarily inversely related to long-term orientation. To the contrary, an appreciation of how

history and tradition define opportunities and capabilities for the future can be part of long-term orientation.

There are, of course, positive (Lam 2003) and negative uptakes on Confucian value-system (Ip 2009) as well as attempts to diagnose overlaps of Confucian values with Western values (Yeh and Xu 2010). Confucian Dynamism is also associated with a system of *authoritarian pluralism* distinguishable from the liberal democracies of the Western world. For example, drug trafficking is heavily penalized in countries such as Singapore, Malaysia, and Thailand. Divorce rates are significantly lower than those of the Western societies as family is relied as a form of social insurance. Attacks on other beliefs are relentlessly pursued, since most societies are pluralistic as far as religions are concerned. Finally, the press is free, yet not a “fourth estate.” This means that while freedom of press is valued as a stipulation for good governance, the press has no absolute right and is expected to blend in with the national consensus.

Even though Eastern perspectives are not represented in the definitions of culture, Boyd’s (1974) study found similarities in the expansion of leadership attributes in Confucian China and Victorian England in that leaders in both countries were expected to display good manners, good physical conditioning, and classical training. Lately, in tune with our concern, some (e.g., Ailon 2008) have started to point out that interpreting ethical values in one culture and applying them to other cultures demands caution. Furthermore, based on the works of other authors such as Ozkazanc-Pan (2008) highlights the shared concerns of representing facets of non-Western cultures using Western lenses.

Confucius’ teaching also provides a different perspective on virtue ethics – what kind of people we want to be through our actions and how our decisions may impact the lives of others surrounding us. Provis (2010) argued Confucian ethics has significant similarities to Aristotelian virtue ethics, sharing similar ideas of practical wisdom. Furthermore, ideas of moral judgments and virtue

ethics traditions born of Confucius and Aristotle are consistent with modern ideas about intuition in managerial decision-making. However, according to Chan (2008), while Confucian ethics provides “interesting” parallels with contemporary Western-oriented business ethics, it also diverges in significant ways. These include a greater emphasis on hierarchy, *guanxi*, social traditions, and harmony. We also believe Confucian ethics provides some unique philosophical and intellectual perspectives on human virtues that will help us shape our contemporary business ethics better.

China’s current promotion of Confucian ethical values is a reflection of its growing international power and its desires to garner domestic legitimacy as a benevolent and enlightened government and ensure domestic peace (McGregor 2007). More critically, it is imperative to understand Confucian values as extant cultural underpinnings of organizational management practices in China. Such understanding is important in any Chinese-value-dominated country. For instance, Tsui-Auch (2004) demonstrated the impact of Confucian values on the management structures of professionally managed family businesses in Singapore. In another study Woods and Lamond (2011) examined Confucian moral philosophy to determine its impact on managers’ self-regulation. Values tend to be sticky, and it is critical to negotiate such value-paths. Only then can one strategically conduct business ventures within the boundaries of the rising great power, which in the business world is referred to as the “China, Inc.” (Fishman 2005).

Summary and Conclusion

Confucius lived over 2500 years ago, yet his teachings have immensely influenced Chinese culture as well as those of other Southeast Asian countries. Confucianism has been a dominant philosophy in this region, which has recently witnessed unparalleled prosperity. Specifically, China has instituted several Confucius institutes throughout the world to spread the country’s culture. Although substantial prior

research has attempted to interpret his thoughts and teachings.

There are direct implications for Confucius's teachings on management practices. For instance, what is the proper role of financial rewards for salespeople? Confucianism recognizes that intention and remuneration are independent of each other. In practicing a profession, the individual's main criteria should be to be virtuous and help others, rather than seeking material benefits for self. Conversely, it was society's responsibility to remunerate everyone based on the quality of work performed, and hence valuable work should be highly rewarded.

With the remarkable economic transformation of China and other Southeast Asian economies in the last decade, Confucian ethics will continue to be of interest to scholars and businesses throughout the world. It will be imperative to understand the underpinnings of these societies in order to successfully conduct business in this region of the globe.

Cross-References

- [Adversarial Ethics](#)
- [Buddhist Ethics](#)
- [Business Ethics](#)
- [Discourse Ethics](#)
- [Entrepreneurial Sustainability](#)
- [Ethics Management](#)
- [Islamic Business Ethics](#)
- [Leadership Ethics](#)
- [Professional Ethics](#)

References

- Ailon, G. (2008). Mirror, mirror on the wall: Culture's consequences in a value test of its own design. *Academy of Management Review*, 33(4), 885–904.
- Ames, R. T., & Rosemont, H. Jr. (trans). (1998). *The analects of Confucius: A philosophical translation*. New York: Ballantine.
- Boyd, D. P. (1974). Research note: The educational background of a selected group of England's leaders. *Sociology*, 8, 305–312.

- Brett, C. (1997). The importance of learning in the ancient East: As illustrated by Confucian aphorisms. In T. J. Sienkewicz & J. E. Betts (Eds.), *Festschrift in honor of Charles Speel*. Monmouth: Monmouth College.
- Chai, C., & Chai, W. (1973). *Confucianism*. Woodbury: Barron's Educational Series.
- Chan, G. K. Y. (2008). The relevance and value of Confucianism in contemporary business ethics. *Journal of Business Ethics*, 77, 347–360.
- Fishman, T. C. (2005). *China Inc.: how the rise of the next superpower challenges America and the world*. New York: Scribner.
- Franke, R., Hofstede, G., & Bond, M. (1991). Cultural roots of economic performance: A research note. *Strategic Management Journal*, 12, 165–173.
- Graham, A. C. (1989). *Disputers of the Tao: Philosophical argument in ancient China*. La Salle: Open Court Hall.
- Ip, K. P. (2009). Is Confucianism good for business ethics in China? *Journal of Business Ethics*, 88(3), 463–476.
- Lam, K. J. (2003). Confucian business ethics and the economy. *Journal of Business Ethics*, 43(1–2), 153–162.
- McGregor, R. (2007). Why fast-changing China is turning back to Confucius. *The Financial Times*, April 11, p. 1.
- Ozkazanc-Pan, B. (2008). International management research meets the rest of the world. *Academy of Management Review*, 33(4), 964–974.
- Provis, C. (2010). Virtuous decision making for business ethics. *Journal of Business Ethics*, 91, 3–16.
- Roy, A., Paul, P., Roy, M., & Mukhopadhyay, K. (2018). Mapping Confucian values in the context of ethical dimensions: Implications for contemporary business practices. *Business and Professional Ethics Journal*, 37(2/3), 181–212.
- Tsui-Auch, L. S. (2004). The professionally managed family-ruled enterprise: Ethnic Chinese business in Singapore. *Journal of Management Studies*, 41(4), 693–723.
- Van Norden, B. W. (2002). Introduction. In B. W. Van Norden (Ed.), *Confucius and the analects: New essays* (pp. 3–38). Oxford, UK: Oxford University Press.
- Woods, P. R., & Lamond, D. A. (2011). What would Confucius do? – Confucian ethics and self-regulation in management. *Journal of Business Ethics*, 102, 669–683.
- Yeh, Q. J., & Xu, X. (2010). The effect of Confucian work ethics on learning about science and technology knowledge and morality. *Journal of Business Ethics*, 95(1), 111–128.
- Yu, J. (2005). The beginning of ethics: Confucius and Socrates. *Asian Philosophy*, 15(2), 173–189.

Further Reading

- Ames, R. T. (2011). *Confucian role ethics: A vocabulary*. Hong Kong: Chinese University Press.
- Chang, C. L. H. (2017). Confucian ethics perspective: The effect of course style on the information ethics

cognition of students. *Management Decision*, 55(2), 427–449.

- Dollinger, M. J. (1988). Confucian ethics and Japanese management practices. *Journal of Business Ethics*, 7(8), 575–584.
- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5–21.
- Kang, J. H., Matusik, J. G., & Barclay, L. A. (2017). Affective and normative motives to work overtime in Asian organizations: Four cultural orientations from Confucian ethics. *Journal of Business Ethics*, 140(1), 115–130.
- Lew, S. C., Choi, W. Y., & Wang, H. S. (2011). Confucian ethics and the spirit of capitalism in Korea: The significance of filial piety. *Journal of East Asian Studies*, 11(2), 171–196.
- Ornatowski, G. K. (1996). Confucian ethics and economic development: A study of the adaptation of Confucian values to modern Japanese economic ideology and institutions. *Journal of Socio-Economics*, 25(5), 571–590.
- Park, H., Rehg, M. T., & Lee, D. (2005). The influence of Confucian ethics and collectivism on whistleblowing intentions: A study of South Korean public employees. *Journal of Business Ethics*, 58(4), 387–403.
- Shun, K. L., & Wong, D. B. (Eds.). (2004). *Confucian ethics: A comparative study of self, autonomy, and community*. Cambridge, UK: Cambridge University Press.
- Wang, X., Li, F., & Sun, Q. (2017). Measuring Confucian ethics: Scale development and validation – An abstract. In *Creating marketing magic and innovative future marketing trends* (p. 897). Cham: Springer.
- Wang, X., Li, F., & Sun, Q. (2018). Confucian ethics, moral foundations, and shareholder value perspectives: An exploratory study. *Business Ethics*, 27(3), 260–271.
- Williams, S., & Sandler, R. L. (1995). Work values and attitudes: Protestant and Confucian ethics as predictors of satisfaction and commitment. *Research and Practice in Human Resource Management*, 3(1), 1–13.
- Wong, P. H. (2015). Confucian environmental ethics, climate engineering, and the “playing god” argument. *Zygon*, 50(1), 28–41.

Conscious Consumerism

- [Responsible Consumption](#)

Conscious Consumption

- [Responsible Consumption](#)
- [Sustainable Consumption](#)

Conscious Investment

- [Sustainable Investment](#)

Consciousness

- [Spirituality in Management](#)

Consent

- [Compliance](#)

Consequences of Social Capital

- [Sanctions of Social Capital](#)

Conservation: Sustainability

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Synonyms

[Prevention of wasteful use of a resource](#)

Definition/Description

The terms preservation and conservation are often confused and are used to mean the same thing. However, differences exist. Preservation aims to maintain as such the areas of the Earth what are so

far untouched by humans. Environmental preservation is often regarded as a deeper form of environmentalism or ecocentrism (Enviropedia 2018). Conservation, on the other hand, means careful protection of something. Its goal is a planned management of natural resources, e.g., water and wildlife, flora and fauna to prevent exploitation, destruction, or neglect (Dictionary Merriam-Webster 2018). The term is gradually extended to cover human rights, industrial, and commercial context of environmental concerns (Dictionary 2018). Conservationists are persons who accept that change and progression are necessary for a better future, but only when the changes take place in ways that are not wasteful (Enviropedia 2018). They argue that environmental waste and pollution will cause problems and suffering not only for the present but also for future generations. Environmental conservation is often regarded as a more shallow form of environmentalism.

Conservation and protection of many-sided biodiversity is fundamental for continuous life on Earth. The loss of species represents an unacceptable drop in the available gene pool and the potentially irreplaceable loss of species that could provide the bases for social wellbeing and economic development of human societies (UNCED 1993; UNESCO 2014). Conservation is one of the key action strategies that form a part of the philosophical and practical approach to implementing sustainable development.

Key Issues

Conservation and sustainable development represent one of the most important ways of thinking in natural resource management and policy (Schelhas and Lassoie 2001). Conservation includes various subdivisions (Table 1).

The 1970s and 1980s marked important milestones in the discourse on environmental conservation. One major development during that period was the establishment of the United Nations Environment Programme (UNEP) following the 1972 United Nations Conference on Human Environment in Stockholm, Sweden (Rowland 1973). The main motivation behind this development was the

realization that the natural environment was increasingly becoming unable to sustain life, both human and other forms. Of great concern was the need to put under scrutiny the environmental consequences of the various human activities (Makokha 2013).

The first international document on living resource conservation was *World Conservation Strategy* (IUCN et al. 1980). It was produced with inputs from governments, nongovernmental organizations, and other experts. World Conservation Strategy emphasized conservation stating (p. 1):

Human beings, in their quest for economic development and enjoyment of the riches of nature, must come to terms with the reality of resource limitation and the carrying capacities of ecosystems, and must take account of the needs of future generations.

This is the message of conservation. For if the object of development is to provide for social and economic welfare, the object of conservation is to ensure Earth's capacity to sustain development and to support all life.

The document targets policymakers, conservationists, and development practitioners with its core tenets of protection of ecological processes and life-support systems, preservation of genetic diversity, and sustainable utilization of species and ecosystems.

Dower (1992) notes that since the 1980s, two important concepts have been at the center of the debate on environmental conservation and development, namely, "sustainable development" and "the right to development." World Conservation Strategy (1980) guided the United Nations General Assembly in 1983 to harmonize environmental conservation and human development needs (WCED 1987). According to Makokha (2013), this recognition underscores the ethical underpinnings not only of development but also of environmental conservation.

Over the past 60 years, many advances have been made for fostering understanding of the limitations and sensitivities of the biosphere, and minimizing detrimental effects of human activities on the environment. There is more than one

Conservation: Sustainability, Table 1 Subdivisions of conservation and their descriptions

Subdivision	Description	References
Architectural conservation	Secures the survival or preservation of buildings, cultural artifacts, natural resources, energy or any other thing of acknowledged value for the future	Simpson (2016)
Conservation biology	Provides principles and tools for preserving biological diversity, i.e., species, communities, and ecosystems that are perturbed, either directly or indirectly, by human activities or other agents	Soulé (1985)
Conservation economics	Investigates how human welfare and the natural environment interact over time, with an eye towards the future	Conservation Economics Institute (2018)
Conservation ethics	Work from the idea of respect for the things people are protecting, preserving for future generations, acting as a steward and seeing the natural world merely as a resource to be exploited	Environmental Science (2008)
Conservation finance	Is the set of mechanisms for investing in an ecosystem, directly or through intermediaries, that aims to conserve the values of the ecosystem for the long term	Huwylar et al. (2014)
Conservation genetics	Preserves species as dynamic entities capable of coping with environmental change	Frankham et al. (2002)
Conservation law (environmental law, environmental and natural resources law)	Is body of rules, regulations, orders, and statutes, concerned with the maintenance and protection of the natural environment of a country. It provides basis for measuring and apportioning liability in cases of environmental crime and the failure to comply with its provisions	Business Dictionary (2018)
Energy conservation	Looks for ways to reduce energy consumption	Griffin and Steele (1986)
Habitat conservation	Is a management practice designed to conserve, restore, and steward habitat areas for native plants and animals, especially conservation-reliant species to prevent their extinction, fragmentation, or reduction in range	Lexicon of food (2017)
Heritage conservation (heritage science, conservation science)	Encompasses the identification, protection, and promotion of things that are important in our culture and history	Fulton (2006/2015)
Marine conservation (marine resources conservation, ocean conservation)	Is the protection and restoration of marine species, populations, habitats, and ecosystems in oceans and seas worldwide. It is also mitigating human activities such as overfishing, habitat destruction, pollution, whaling, and other issues that impact marine life and habitats	Kennedy (2018)
Preventive conservation	Includes all measures and actions aimed at avoiding and minimizing future deterioration or loss	ICOM (2008)
Soil conservation	Is the protection of soil from erosion and other types of deterioration, so as to maintain soil fertility and productivity	OECD (2003a)
Water conservation	Refers to the preservation, control, and development of water resources, both surface and groundwater, and prevention of pollution	OECD (2003b)
Wetland conservation	Ensures that wetlands can continue to fully deliver their vital role in supporting biological diversity and human well-being. According to the Ramsar Convention, <i>wetlands are areas of marsh, fen, peatland, or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish, or salt, including areas of marine water; the depth of which at low tide does not exceed 6 meters</i>	Medwet (2018)
Wildlife conservation	Preserves both species and species diversity and seeks ways to promote the wild life of captive animals	Zhou et al. (2016)

way to conserve biodiversity. In situ and ex situ are the Latin words for “on-site” and “offsite.” They are two different but complementary approaches to biodiversity conservation. In situ conservation means maintenance of ecosystems and natural and seminatural habitats, viable populations, and species in their natural surroundings (Figs. 1 and 2) and in the case of domesticated or cultivated species in the surroundings, where they have developed their distinctive properties (Dudley 2008). Ex situ conservation in its part occurs when a specimen of a species is translocated to more appropriate locations such as in a zoo or a botanical garden (Hay-Edie and Bulus 2013). Ex situ conservation should be used as a “last resort” or as a supplement to in situ

conservation, e.g., when a climate change or other cause threatens the survival of a species in a region. Because ex situ conservation is rarely enough to save a species from extinction, it is necessary to improve links between in situ and ex situ conservation efforts (Dudley 2008).

Biosphere reserves are one of types of in situ conservation. In 1971, UNESCO (United Nations Educational, Scientific, and Cultural Organization) created Man and the Biosphere (MAB) program to facilitate intergovernmental cooperation in promoting harmonious relationships between people and their environments; and in 1995, it published criteria for establishing of biosphere reserves (Manley and Hayes 2006). According to these criteria, a biosphere reserve should (UNESCO 1995):

1. Contain a mosaic of ecological systems representative of a major biogeographic region, including a gradation of human influences
2. Contain areas significant for biodiversity conservation
3. Offer opportunities to explore and demonstrate approaches to sustainable development on a regional scale
4. Extend over an appropriately sized area to serve the three basic functions
5. Identify appropriate zones (core, buffer and transition ones) to accomplish functions



Conservation: Sustainability, Fig. 1 Peacock butterfly in Seitsemien National park, Finland. (Photo: J. Jeronen)

Conservation: Sustainability, Fig. 2 Old forest in Seitsemien National park, Finland. (Photo: J. Jeronen)



6. Establish an organizational structure that provides for the involvement and participation of a range of authorities, communities, and interests
7. Plans, programs, and policies that support the functions and activities of the biosphere reserve

Three basic functions mentioned in the criteria are (1) conservation – contribute to the conservation of landscapes, ecosystems, species, and genetic variation; (2) development – foster economic and human development which is socio-culturally and ecologically sustainable; and (3) logistic support – support, e.g., for environmental education and training, research and monitoring related to local, regional, and global issues of conservation and sustainable development. Core areas again consist legally protected area(s) managed to sustain indigenous biota and natural processes, and a buffer zone consists a legally or administratively established area that typically adjoins or surrounds the core area. A transition area in its part surrounds the core area and buffer zone and supports a variety of resource uses and human activities characteristic of the larger region (UNESCO 1995).

Protected areas are by no means uniform entities. At one extreme a few sites are so important and so fragile that no one is allowed inside, whereas other protected areas encompass traditional, inhabited landscapes and seascapes where human actions have shaped cultural landscapes with high biodiversity (Dudley 2008).

Productive landscapes such as seas and marine areas, timber forests, agricultural lands, and grasslands are also important for biodiversity through producing ecosystem services for human beings. In September 2015, 193 countries formally adopted the 2030 Agenda for Sustainable Development, which consists of 17 sustainable development goals (UN 2015). Two of these objectives are directed specifically at the conservation and the protection of water and terrestrial ecosystems. The goal 14 includes the idea of conserving and sustainably use of the oceans, seas, and marine resources, and the goal 15 stresses protection, restoration, and promotion of sustainable use concerning terrestrial ecosystems. The latter one also emphasizes the sustainable management of

forests, the fight against desertification and the prevention of land degradation and the halting of biodiversity loss (UN 2015). This recognition has led to the promotion of sustainable fisheries, sustainable forestry, sustainable agriculture, and sustainable grassland management.

Close monitoring of biodiversity belongs to important conservation practices. It involves regular checking of the overall health of ecosystems and the species living within it (Hay-Edie and Bulus 2013). Monitoring is especially important when the activities are carried out on an industrial scale because their impact is greater than the impact of similar activities carried out on a smaller subsistence scale by local communities. Conservation mechanisms include also law or community enforcement. When the laws are not respected, illegal logging, mining, and bushmeat hunting erode the benefits of conservation efforts.

In many cases, traditional knowledge has contributed to protecting wildlife and ecosystems and to ensuring a “natural balance.” According to Convention on Biological Diversity (2018), traditional knowledge comprises of “knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.” For example, traditional agroecosystems represent centuries of accumulated experience of interaction with the environment by farmers without access to scientific information, external inputs, capital, credit, and developed markets (Altieri and Merrick 1987). Such skills, using locally available resources, have often translated into farming systems with sustained yields (Egger 1981; Wilken 1977). In many places, the community members have developed well-recognized and respected rules that are often stronger than any law and have been practiced for generations (Altieri and Merrick 1987). Biodiversity conservation practitioners should therefore ensure that the communities relying directly on natural resources are involved in conservation initiatives, and guarantee their active participation during the whole conservation process.

Biodiversity conservation requires the participation of many different groups of people,

working with various conservation mechanisms both in situ and ex situ. The health of an ecosystem is closely related to the quality of life of its inhabitants. Biodiversity is a key component of the “environmental health” pillar of sustainable development providing people with basic ecosystem goods and services.

Summary

Environmental conservation and sustainable development are two interrelated branches. Conservation contributes to the conservation of ecosystems, species, genetic variation, and landscapes, but it also includes a planned management of natural resources and community reserves. Development fosters economic and human development which is ecologically and socioculturally sustainable. So, these terms focus on nature conservation on one side, and on the other environmental protection, social progress, and economic growth. Therefore also protected areas are various. They include both endangered natural areas and cultural landscapes with abundant biodiversity. The promotion of sustainable management of natural resources, sustainable fisheries, sustainable forestry, sustainable agriculture, and sustainable grassland management are the main approaches for preserving cultural landscapes for long-term social, economic, and ecological benefits.

Environmental conservation and sustainable development are important ways of thinking in natural resource management and policy. There are different approaches involving different groups of people and different strategies and timeframes for achieving similar goals. United Nations and governments have created various frameworks and guidelines for global, regional, and local conservation and preservation action. Biodiversity conservation practitioners should also take into account that the communities have traditional knowledge which may support conservation and sustainable development. Therefore, citizens should be encouraged to participate in conservation work.

Cross-References

- Biodiversity
- Sustainable Development

References

- Altieri, M. A., & Merrick, L. C. (1987). In situ conservation of crop genetic resources through maintenance of traditional farming systems. *Economic Botany*, 41(1), 86–96. <http://www.jstor.org/stable/4254942>. Accessed 19 Nov 2018.
- Business Dictionary. (2018). What is environmental law? Definition and meaning. <http://www.businessdictionary.com/definition/environmental-law.html>. Accessed 2018.
- Conservation Economics Institute. (2018). Conservation economics. <https://www.conservationecon.org/>. Accessed 20 Nov 2018.
- Convention on Biological Diversity. (2018). What the convention says about traditional knowledge, innovations and practices. <https://www.cbd.int/traditional/what.shtml>. Accessed 19 Nov 2018.
- Dictionary. (2018). <https://www.dictionary.com/browse/conservation>. Accessed 18 Nov 2018.
- Dictionary Merriam-Webster. (2018). <http://www.merriam-webster.com/dictionary>. Accessed 17 Nov 2018.
- Dower, N. (1992). Sustainability and the right to development. In R. Attfeldt & B. Wilkins (Eds.), *International justice and the third world* (pp. 93–116). London: Routledge.
- Dudley, N. (Ed.) (2008). *Guidelines for applying protected area management categories*. Gland: IUCN, x + 86 pp. With Stolton, S., Shadie, P., & Dudley, N. (2013). *IUCN WCPA best practice guidance on recognising protected areas and assigning management categories and governance types* (Best practice protected area guidelines series No. 21). Gland: IUCN. Xx pp. ISBN: 978-2-8317-1636-7. <https://portals.iucn.org/library/sites/library/files/documents/PAG-021.pdf>. Accessed 19 Nov 2018.
- Egger, K. (1981). Ecofarming in the tropics, characteristics and potentialities. *Plant Research and Development*, 13, 96–106.
- Environmental Science. (2008). Conservation: History and future of conservationism. <https://www.environmentalscience.org/conservation>. Accessed 30 Dec 2018.
- Enviropedia. (2018). Conservation & preservation. Sustainable environment, earth. http://www.sustainable-environment.org.uk/Earth/Conservation_and_Preservation.php. Accessed 16 Nov 2018.
- Frankham, R., Ballou, J. D., & Briscoe, D. A. (2002). *Introduction to conservation genetics*. Cambridge: Cambridge University Press.
- Fulton, G. (2006/2015). Heritage conservation. In *The Canadian encyclopedia*. <https://www.thecanadianencyclopedia.ca/en/article/heritage-conservation>. Accessed 2018.

- Griffin, J. M., & Steele, H. B. (1986). *Energy economics and policy*. Orlando: Academic.
- Hay-Edie, T., & Bulus, B. (2013). Biodiversity conservation & sustainable development. The need to maintain natural resources for future generations. In *The youth guide to biodiversity*, (pp. 128–143). FAO, Youth and United Nations Global Alliance. <http://www.fao.org/docrep/017/i3157e/i3157e10.pdf>. Accessed 18 Nov 2018.
- Huwylar, F., Käppeli, J., Serafimova, K., Swanson, E., & Tobin, J. (2014). *Conservation finance: Moving beyond donor funding toward an investor-driven approach*. Zurich: Credit Suisse.
- ICOM (International Council of Museums) (2008). Terminology for conservation – ICOM-CC. http://www.icom-cc.org/242/about/terminology-for-conservation/#.W_QoPuJoTIU. Accessed 20 Nov 2018.
- IUCN (International Union for Conservation of Nature and Natural Resources), UNEP (United Nations Environment Programme), WWF (World Wildlife Fund), FAO (Food and Agriculture Organization of the United Nations), & UNESCO (United Nations Educational, Scientific and Cultural Organization). (1980). World conservation strategy, living resource conservation for sustainable development. <https://portals.iucn.org/library/sites/library/files/documents/WCS-004.pdf>. Accessed 18 Nov 2018.
- Kennedy, J. (2018). What is ocean conservation? <https://www.thoughtco.com/what-is-marine-conservation-2291532>. Accessed 20 Nov 2018.
- Lexicon of Food (2017). Definition of habitat conservation. <https://www.lexiconoffood.com/definition/definition-habitat-conservation>. Accessed 20 Nov 2018.
- Makokha, K. (2013) The ethical foundations of environmental conservation and sustainable development. *Thought and Practice: A Journal of the Philosophical Association of Kenya (PAK)*, New Series, 5(2), 1–17. ISSN: 2076–7714. <https://www.ajol.info/index.php/tp/article/view/104301/94389>. Accessed 18 Nov 2018.
- Manley, P. N., & Hayes, D. C. (2006). Biodiversity conservation, sustainable development, and the U.S. man and the biosphere program: Past contributions and future directions. In C. Aguirre-Bravo, P. J. Pellicane, D. P. Burns, & S. Draggan (Eds.), *Monitoring science and technology symposium: Unifying knowledge for sustainability in the western hemisphere* (USDA Forest Service proceedings RMRS-P-42CD) (pp. 663–670). Fort Collins: Department of Agriculture, Forest Service, Rocky Mountain Research Station. <https://www.fs.usda.gov/treesearch/pubs/26554>. Accessed 18 Nov 2018.
- Medwet (The Mediterranean Wetlands Initiative). (2018). The Ramsar Convention – Medwet. <https://medwet.org/aboutwetlands/ramsarconvention/>. Accessed 20 Nov 2018.
- OECD. (2003a). OECD glossary of statistical terms – Soil conservation Definition. <https://stats.oecd.org/glossary/detail.asp?ID=2502>. Accessed 20 Nov 2018.
- OECD. (2003b). OECD glossary of statistical terms – Water conservation definition. <https://stats.oecd.org/glossary/detail.asp?ID=2903>. Accessed 20 Nov 2018.
- Rowland, W. (1973). *The plot to save the world: The life and times of the Stockholm conference on the human environment*. Toronto: Clarke, Irwin & Co.
- Schelhas, J., & Lassoie, J. P. (2001). Learning conservation and sustainable development: An interdisciplinary approach. *Journal of Natural Resources and Life Sciences Education*, 30, 111–119. https://www.srs.fs.usda.gov/pubs/ja/ja_schelhas002.pdf. Accessed 18 Nov 2018.
- Simpson, J. (2016). *The anatomy of theory*. <http://www.buildingconservation.com/articles/anatomytheory/anatomytheory.htm>. Accessed 20 Nov 2018.
- Soulé, M. F. (1985). What is conservation biology? *Bioscience*, 35(11), *The Biological Diversity Crisis*, 727–734.
- Talbot, L. M. (1980). The World's Conservation Strategy. *Environmental Conservation*, 7(4), 259–268. <https://core.ac.uk/download/pdf/85218500.pdf>. Accessed 20 Nov 2018.
- UN (United Nations). (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015. A/RES/70/1. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E. Accessed 19 Nov 2018.
- UNCED (United Nations Conference on Environment and Development). (1993). The final text of agreements negotiated by governments at united Nation's conference on environment and development, in agenda 21: Programme of action for sustainable development; Rio declaration on environment and development; statement of forest principles. In *Proceedings of the UNCED (United Nations conference on environment and development), Rio de Janeiro, Brazil, 3–14 June 1992*. New York: United Nations Department of Public Information.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (1995). *Statutory framework of the world network of biosphere reserves*. Paris: UNESCO, Division of Ecological Sciences. [http://www.dolnimorava.org/attachments/statframe\[1\].pdf](http://www.dolnimorava.org/attachments/statframe[1].pdf). Accessed 18 Nov 2018.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2014). Learning about biodiversity – Multiple-perspective approaches; education for sustainable development in action. Learning and training tools, 6; UNESCO education sector. United Nations Decade of Education for Sustainable Development (2005–2014). <http://unesdoc.unesco.org/images/0023/002311/231155e.pdf>. Accessed 29 Oct 2018.
- WCED (World Commission on Environment and Development) (1987). Report of the world commission on environment and development: our common future. UN documents gathering a body of global agreements. <http://www.un-documents.net/wced-ocf.htm>. Accessed 27 Oct 2018.

- Wilken, G. C. (1977). Integrating forest and small-scale farm systems in middle America. *Agro-Ecosystems*, 3, 291–302.
- Zhou, X.-H., Wan, X.-T., Jin, Y.-H., & Zhang, W. (2016). Concept of scientific wildlife conservation and its dissemination. *Zoological Research*, 37(5), 270–274.

Conspicuous Consumption/ Positional Goods

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Synonyms

Conspicuous spending; Distinctive competition; Positional externalities; Positional goods; Positional spending; Status-seeking; Veblen goods

Definition

Conspicuous consumption refers to the consumption of goods and services motivated by considerations of relative standing, i.e., one's position in the distribution of income, status, prestige, occupations, or any other relevant dimension. This kind of consumption is aimed at signaling such a position to other individuals. The central feature is to be visible, thus spending tends to be concentrated on goods that ostensibly signal one's position (e.g., sports' cars, luxury items, fancy vacation destination). Such goods are characterized as "positional," i.e., their demand is primarily determined by individuals' willingness to indicate their relative position within a given social context. In economic textbooks, they are labeled "Veblen goods," after the economist Thorstein Veblen. Veblen goods are goods which demand swells in response to price increase. Conspicuous consumption and positional goods challenge traditional economics which stipulate that individuals are only sensitive to absolute considerations, they are mutually disinterested,

and their satisfaction only reflects the amount they consume (including satiety effect). Positional goods question this assumption since their demand is determined by their social scarcity. If accessible to too many individuals, a good loses its signaling quality. Conspicuous consumption is not restricted to the better-offs in the society. It captures a broader phenomenon: the very fact that the social life imposes standards of decency, such as what is appropriate to possess, wear, eat, and spend, on everyone within a given society.

Introduction

Conspicuous consumption highlights the eminent social dimension of spending. Spending in a social context is not trivial. Consumers use strategically their consumption, both in terms of quantity and quality, for addressing signals around them, to whom they evaluate being their inferiors, peers, and superiors. In that context, some goods are consumed because they have the characteristic of displaying one's (high) relative standing due to scarcity and price. In other terms, spending decisions can be determined by one's relative position, i.e., not in isolation of others' actions.

The idea that the social context matters for spending is barely new. However, it has matured over the last couple of centuries and reformulated around the concepts of conspicuous consumption and positional goods.

A Brief History

In *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), Adam Smith notes that although a linen shirt is not necessary for a laborer, not wearing one in public signals poverty and destitution. This illustrates standards of decency that translate into spending standards. The same dynamic is at work at schools nowadays when children and teenagers feel pressured to wear specific brands in order to be socially included.

The first contemporary description of conspicuous consumption is due to Thorstein Veblen. In *The Theory of the Leisure Class* (1899), he offers a sociological (a bit idealized) account of

ostensible behavior and consumption patterns of the leisure class, i.e., the better offs in the society who take pride of not having to work. He shows that many spending decisions have no other function than demonstrative, viz. to conspicuously assert spender's social class. In that context, the very fact of spending on unnecessary ever futile, goods reinforces this signaling effect.

In *Income, Saving and the Theory of Consumer Behaviour* (1949), James S. Duesenberry develops the idea further. He proposes the relative income hypothesis. It tackles the traditional assumption that individuals only care about their absolute level of income. For Duesenberry, individuals' economic decisions, in particular spending, are less guided by their absolute income than by their relative one, i.e., how much they earn in comparison to others.

The concept of positional goods is due to Fred Hirsch. In *Social Limits to Growth* (1976), he makes a key distinction between material and positional goods. Material goods are goods that bring satisfaction in direct relation to their inner qualities. For instance, a shirt or potatoes will provide satisfaction (economists use the concept of utility) to the consumer depending on how good they turn to provide decent clothing for the upper body part or their nutritional characteristics. Positional goods are goods which produce relative satisfaction, i.e., satisfaction that depends on their social scarcity. Examples are luxury items.

The analytical framework has been broadened by Robert H. Frank (1999) who claims that individuals are motivated by concerns for their relative standing, i.e., their social position or status. It is not only, or mainly, a question of types of goods. Individuals are not led by absolute considerations (e.g., their income, spending, satisfaction of their own needs, and achievements), but by relative ones (i.e., how well they perform by comparison with others, how much more they spend or earn).

Individual satisfaction does not only (or even mainly) depend on one's absolute level of income, achievements, consumption, etc., but also on one's performance compared to other people. Individuals compare themselves to whom they consider as peers and to whom they perceive

belonging to the social class immediately above them. This creates what Frank coins as "expenditures' cascades": a process of imitation and competition in which individuals constantly spend more. The idiom "Keeping up with the Joneses" captures this dynamic.

A Prisoner's Dilemma

The issue is not simply one of individual prestige or success, but of concrete life opportunities. The kind of signal one sends through its consumption impacts others' perception of her. It impacts the access one can get to specific social networks, one's jobs and sentimental opportunities, and so forth. For instance, Frank remarks that success at a job interview among participants of equivalent quality depends on appearances. If applicants want to have a fair chance, they should invest in an at least as-good-outfit as their best dressed competitor. This initiates a race-to-the-bottom (i.e., a race during which participants harm each other by raising spending standards). The overall dynamics is a game with no absolute winner, everyone ending up at the same position (so the relative structure is kept), but with higher spending (so everyone is worse off).

Such a dynamic has the characteristics of what is called in game theory a *prisoners' dilemma*, i.e., a situation where individuals are stuck with a mutually harmful strategy but have no incentive to change it (which game theorists name a Nash equilibrium). Collectively, everyone would be better off if spending less on houses, cars, clothes, electronic appliances, vacation, gifts, and so forth. Because a big portion of those expenses matter for one's life opportunities, for the kind of education one can offer to her children, and so on, no one has interest to scale down her expenditures.

Conspicuous consumption is a controversial concept, not so much in regard to the existence of such spending patterns, but to the seriousness of the issue. It could be claimed that the concept oversimplifies complex social dynamics and that individuals are less subject to relative standing than assumed. In other words, conspicuous consumption would be descriptively faulty.

Nonetheless, conspicuous consumption is not solely a descriptive concept. There is a normative

component, a critique of modern consumerism. The critique could be read as one of human envy. Individuals would be mutually interested in the sense that they would want to outperform their peers, spend more than them for the only sake of staying ahead. However, envy is not necessary for conspicuous consumption to exist, especially under the formulation elaborated since Veblen until Frank. According to Hirsch for instance, it is the quality of the goods that makes them positional, independent of individuals' psychological inclinations. For Frank, individuals engage in conspicuous spending because their capacity of reaching their (nonenvious) goals depends on their relative standing.

Works in evolutionary biology tend to strengthen this interpretation. Humans are social animals and, as such, their social performance matters for a broad array of outcomes: what they can achieve in life, their status, the respect they get from others, the access to mating partners, how they are treated by others and authorities, and so forth. An important dimension is health performance. Studies in epidemiology and public health have shown that morbidity and life expectancy strongly depend on status. The most prominent are the *Whitehall studies* (Marmot 2004) that screened British civil servants. The main discovery is the lower the status of individuals, the more chance of cardiovascular diseases and death, even after adjusting for education, income, and other factors.

Thus, because one's relative standing determines one's health condition (among other things) and since individuals sense this, they compete for maximizing their status. More importantly, they compete for displaying their status. As previously mentioned, by doing so, they would engage in a rat race where everyone is constantly increasing the spending standards for everyone else.

Positional Externalities

Frank proposes the concept of "positional externalities" (Frank 2008) for describing the costs imposed on each other due to conspicuous consumption. By searching to outspend their competitors, individuals waste time, material resources, etc., at a high psychological price

(e.g., stress, anxiety, and depression). Conspicuous consumption generates negative externalities in the sense that everyone is affected by the spending decisions of distant people who raise spending standards. A negative externality is an external cost, imposed from outside on an agent or a group without their consent and for the benefit of another agent or group. Externalities are costs that are not included in the original transaction and, hence, are passed on third parties, namely individuals or entities who are not part of the initial exchange.

An example of negative externality is the river polluted by a factory operating nearby. By dumping chemicals in the river, the factory contaminates the water downstream, killing fishes, making swimming unhealthy, rendering water undrinkable, and so forth. In that case, the factory and its customers who are parts of the original exchange externalized their costs onto third parties, the people who live downstream.

The concept of positional externalities underlines the normative dimension of conspicuous consumption. Consuming positional goods cannot be seen as a benign, voluntary, and private act. The creation of external costs turns the issue into a collective action problem, which is used for justifying regulation, especially from public institutions. Actually, if individuals by their spending patterns impose costs on each other and if they cannot reasonably step out of this competition, then it may be legitimate to regulate individual behavior.

The situation is actually worsened by the amount of resources spent in conspicuous consumption. First of all, individuals end up consuming goods and services they do not need. For example, everyone needs a home, but no regular size family *needs* a 500 m² mansion with 15 bedrooms, 3 kitchens, and 5 bathrooms; everyone needs decent clothes to wear, but no one needs *luxury* clothes; and so forth. By doing so, individuals end up saving less than they could and should, which is a normative judgment.

Second, this translates into too low saving rates at the social level. Too low savings rates are damageable for a national economy since it involves higher interest rates, more difficulties to invest in future projects and development, and so

forth. In a context of open economies, too low saving rates may lead to increase national external debts (because of the high level of importations), and it may undermine the value of currency and degrade the balance of payments.

Third, this translates into misallocation of productive resources (capital and labor) throughout the economy, with industries producing positional goods diverting resources that could have been used elsewhere with better results on collective well-being. For instance, more resources could have been used for financing public health, schools, infrastructure, and so on.

Possible Responses

Regulatory responses have been proposed. One of the most discussed options is to implement an incremental consumption tax (Frank 1999), i.e., the marginal rate of consumption increases by brackets with the volume of consumption until, under Frank's proposal, reaching a confiscatory rate (close to 100%). The aim is to incentivize the top spenders to cut down their expenses in favor of saving. In virtue of the "expenditure cascades," it is expected that all income categories will downsize their expenditures as a consequence of increased fiscal pressure, but also due to reduced imitation pressure.

Various criticisms could be addressed to this proposition. One is that would unacceptably interfere with individuals' right of using their income. In other words, it would violate property rights. However, this objection does not properly take into consideration that property rights are always limited. One widely accepted limit, even among libertarian thinkers, is the harm inflicted to others. A solid justification for public intervention is indeed to prevent such harms, as stipulated in John Stuart Mill's harm principle (Mill 1859).

Few defend the idea that one's property can be used without restriction to hurt anyone else. Yet, it is possible to deny that positional externalities constitute harms that legitimate public regulation. One could reject the presentation of conspicuous consumption as a prisoners' dilemma: Individuals would always be free and able to engage or step out of distinctive competition. Therefore, they could choose not being harmed.

Another objection is to locate the issue in the resentment felt by less successful individuals. Any regulation of consumption would then give way to people's envy, which would express morally dubious intents. Moreover, it could erode the work ethos and emulation based on competition, which will harm socioeconomic development. One may also question the reality or extent of positional externalities by arguing that they either do not exist or are less serious than alleged.

Other criticisms stress the possible consequences of such a tax. For instance, heavily taxing consumption could depress the demand in several sectors, which may lead to an overproduction crisis, layoffs, and potentially a downturn. An answer to such objection is to point out that other sectors (e.g., construction, health, and education) will most likely experience an increase of demand. Thus, a reallocation of productive resources (capital and labor) across sectors could compensate the tax effects.

Nonetheless, it leaves open the question whether the increase of activity in some sectors will make for the full loss of demand in others. A further concern is whether the labor force will have versatile skills enough for being transferred to sometimes drastically different occupations. The concern could apply to capital too. A large amount of equipment and machines might not be usable in other industries. At the end, those are implementation questions of empirical nature that could only be answered by a proper impact study.

Another criticism centered on the consequences is to pinpoint the political risk of top-earners reducing their spending in favor of accumulating large capital. First of all, there is a chance that this will accentuate wealth inequalities, which have already been in the rise in many industrialized countries since the 1970s (Piketty 2014). There is also the risk that such accumulated capital starts being used for lobbying, influencing decision makers, or even fueling the shadow economy and corruption. Again, this is an empirical issue which is difficult, or even impossible, to settle beforehand.

Besides fiscal instruments, another regulatory response could be to constrain commercial publicity. Assuming that advertisement has a

significant influence on individuals, the argument is that, by restricting the advertisement, individuals will have fewer incentives to spend, so it will moderate conspicuous consumption, while not meddling in individuals' spending decision. The problem with this argument is that it relies on the assumption that publicity, and not interpersonal comparisons, is the main driver behind the consumption of positional goods. There are reasons for doubting such assumption, especially if the thesis is taken seriously that human brain is hard-wired for paying attention to relative standing.

A Threat to Subjective Well-Being?

Finally, the theme of conspicuous consumption taps into a broader issue: the apparent dissatisfaction with the capitalistic model of economic development. The Great Recession (2007–2008 crisis and the aftermath) has accentuated the trend, but for a couple of decades, voices have been rising for condemning excessive consumerism.

One early formulation of such discontent can be found in the report *The Limits to Growth* released by the Club of Rome in 1972. The happiness research has been reinforcing suspicions that a capitalistic model of growth based on mass production and consumption would actually not significantly improve quality of life in industrialized countries.

The Easterlin Paradox has been a key for supporting such concerns. Formulated by the American economist Richard A. Easterlin (1974), it articulates three propositions:

1. Within a given country, happiness (measured by life satisfaction) is correlated with wealth (measured by income).
2. When countries are compared, there is a correlation between happiness (measured by life satisfaction) and wealth (usually approximated by gross domestic product per capita) until a threshold after which happiness stops being significantly correlated with wealth.
3. Some longitudinal studies show the absence of significant increase in happiness (life satisfaction) for several decades in countries such as Japan or the USA.

A ready-made explanation for the Easterlin Paradox is that economic growth creates additional resources that are, after basic needs are covered, massively used for conspicuous reasons, which do not bring lasting satisfaction (on the top of generating stress and waste). Again, this point is empirical and cannot be resolved without solid studies. Furthermore, the Easterlin Paradox as well as the whole happiness research raises serious methodological issues about the collection and statistical treatment of data.

Notwithstanding the various controversies, conspicuous consumption and positional goods prompt crucial concerns not only about social dynamics and hierarchy, but human satisfaction and development too. They highlight how important are the topics of efficiency, equality, and life quality in industrialized countries – topics that will become increasingly important in the Anthropocene.

Summary

Conspicuous consumption refers to the consumption of goods and services motivated by relative standing, i.e., one's position in the distribution of income, status, prestige, occupations, or any other relevant dimension. This kind of consumption is aimed at signaling such a position. Conspicuous consumption challenges the postulate of traditional economy that individuals are mutually disinterested and derived their satisfaction only from absolute levels of consumption. Instead it depicts individuals motivated by interpersonal comparisons. Moreover, the analysis of conspicuous consumption underscores the adverse consequences that the consumption of positional goods could have, e.g., on life satisfaction, stress, or efficient allocation of resources. Several institutional responses have been proposed ranging from fiscal instruments (such as an incremental tax on consumption) to restrictions on commercial advertisements. Despite the controversies they generate, such responses underline the importance of issues such as efficiency, equality, and quality of life in industrialized societies.

Cross-References

- [Fiscal Fairness](#)

References

- Duesenberry, J. S. (1949). *Income, saving and the theory of consumer behaviour*. Cambridge: Harvard University Press.
- Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P. A. David & M. W. Reder (Eds.), *Nations and households in economic growth: Essays in honor of Moses Abramovitz* (pp. 89–125). New York: Academic.
- Frank, R. H. (1999). *Luxury fever: Why money fails to satisfy in an era of success*. New York: The Free Press.
- Frank, R. H. (2008). Should public policy respond to positional externalities? *Journal of Public Economics*, 92(8–9), 1777–1786. <https://doi.org/10.1016/j.jpubeco.2008.03.001>.
- Hirsch, F. (1976). *Social limits to growth*. London: Routledge.
- Marmot, M. (2004). *The status syndrome: How social standing affects our health and longevity*. London: Bloomsbury Publishing.
- Mill, J. S. (1859). *On liberty*. London: John W. Parker and Son, West Strand.
- Piketty, T. (2014). *The capital in the twenty-first century*. Cambridge, MA: Harvard University Press.
- Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. London: W. Strahan and T. Cadell.
- Veblen, T. (1899). *The theory of the leisure class*. New York: Macmillan.

Conspicuous Spending

- [Conspicuous Consumption/Positional Goods](#)

Constitutional Rights

- [Human Rights](#)

Construction Debris

- [Waste Dumping](#)

Consumer Activism

- [Consumer Social Responsibility \(CnSR\)](#)

Consumer Experience

- [Consumerism](#)

Consumer Judgments

- [Legitimacy Theory II: Legitimacy Judgments](#)

Consumer Service

- [Customer Service](#)

Consumer Social Responsibility (CnSR)

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Synonyms

[Consumer activism](#); [Ethical consumerism](#); [Ethical purchasing](#); [Ethical shopping](#); [Ethical sourcing](#); [Green consumerism](#); [Mindful consumption](#); [Moral purchasing](#)

Description

Despite the extensive debate as to what corporate social responsibility (CSR) is, consumer social responsibility (CnSR) has received very limited attention by researchers and practitioners (Quazi et al. 2016) and remains a term that is largely

unexplored and under-theorized (Vogel 2005; Caruana and Chatzidakis 2014). Very few of the many articles about CSR discuss the role of the consumer in achieving corporate social responsibility even though it will be difficult if not impossible for corporate social responsibility to succeed without the assistance of consumers (Vitell 2015).

In its broadest form, consumer social responsibility can be defined as “the conscious and deliberate choice to make certain consumption choices based on personal and moral beliefs” (Devinney et al. 2006). It mainly shows up in two different ways:

- Expressed activity with respect to specific causes (e.g., protests and demonstrations)
- Expressed activity in terms of purchasing (e.g., consumer boycotts or buycotts, ethical consumption)

Levels of consumer activism have been fueled by increased exposure to and accessibility of information about questionable business practices such as child labor, environmental pollution, or animal welfare abuse (Shaw et al. 2006).

Introduction

Much has been written on the business case for corporate responsibility. Unfortunately, a review of the evidence, including academic studies of the relationship between firm profitability and CSR, finds no evidence for the claim that there is a generic or universal business case for CSR. There is no automatism, and responsible company behavior does not automatically lead to increased company success. This, however, does not mean that there is no business case for CSR at all. As Vogel (2005, p. 45) has outlined, this “is rather to suggest that any such claim must be more nuanced. CSR does make business sense for some firms in specific circumstances.”

The business case is often grounded in the key assumption that consumers, employees, and investors care in ways that create economic incentives for companies to give attention to corporate responsibility (Smith 2007). The following parts

will discuss the role of consumers in CSR or, in other words, consumer social responsibility. The emphasis is on illustrating what research suggests are the conditions under which consumers might serve as drivers of corporate responsibility.

Protests and Demonstrations as a Form of Consumer Social Responsibility

The increasing number of protests and demonstrations directed at companies (particularly at large multinational corporations) is one way how consumer social responsibility is expressed. Protests and demonstrations invite consumers to join in collective action to send a message to companies. In earlier decades, consumers often took individual action in the form of phone calling and letter writing to protest against company behavior, but with the advancement of electronic information and communication technology came new ways of expressing and organizing protests (Kendall et al. 2007). Protests against the socially irresponsible behavior of companies are nowadays increasingly organized via digital media (van den Broek et al. 2017), and today, we often see consumers taking larger-scale, community-based action and making extensive use of the Internet to express their dissatisfaction with company behavior. Since firms can expect to suffer financial, reputational, and sales damage as a result of public protests and media exposure, this form of expressed consumer activism puts a lot of pressure on companies and can be seen as a driver of CSR (van den Broek et al. 2017; Vogel 2005).

Ethical Consumption as a Form of Consumer Social Responsibility

Every buyer (...) determines in some degree the direction of industry. The market is a democracy where every penny gives the right to vote. (Fetter 1911, p. 394)

The term “ethical consumer,” now used generically, was popularized by the UK magazine *Ethical Consumer*, first published in 1989 (Hunt

2018). Ethical consumption is most commonly defined as “the act of taking into account the public and societal consequences of one’s private decisions” (Strandvik et al. 2013, p. 484). It is another way how consumer social responsibility is expressed. Quite often, socially irresponsible company behavior leads not only to consumer protests but also to boycotts and buycotts, forms of ethical consumption. Ethical consumption (alternatively called ethical purchasing, moral purchasing, ethical sourcing, ethical shopping, or green consumerism) is a type of consumer activism that is based on the concept of dollar voting (Giesler and Veresiu 2014). It is practiced through “positive buying” in that ethical products are favored or “moral boycott” that is negative purchasing and company-based purchasing (Hunt 2018). In his 1998 published book *Unequal Freedoms: The Global Market As An Ethical System*, John McMurtry argued that all purchasing decisions imply some moral choice and that there is no purchasing that is not ultimately moral in nature (McMurtry 1998).

Boycotts

Consumer boycotts, defined as “an attempt by one or more parties to achieve certain objectives by urging individual consumers to refrain from making selected purchases in the marketplace” (Friedman 1985, p. 97), have a long and interesting history in consumer social responsibility, even if the term did not arise until the 1880s in England. By refusing to purchase products on a large-scale basis, consumers have an influence on corporate behavior and induce corporate change. From combating environmental pollution, the lack of minimum labor standards, lobbying, or misinformation campaigns to protecting animal rights, boycotts put economic pressure on some of the biggest companies to change their practices. They have seen repeated successes and continue to play an important role in consumer social responsibility. Examples of consumer boycotts are plenty. Some well-known ones are the boycott of BP after the Deepwater Horizon oil spill in the Gulf of Mexico in 2010, the boycott of Nestlé for their irresponsible marketing of baby milk formula since the 1970s, or

the recent boycott of Amazon over its outrageous tax avoidance.

Buycotts

Buycotts, on the other hand, “encourage people to purchase goods following an established set of criteria” (Micheletti 2003, p. 50). Quite often, such buycotts take the form of labeling schemes where groups of consumers or activists identify products that satisfy certain criteria (Kendall et al. 2007).

Areas of Concern and Impact

Consumers who are interested in ethical consumerism are mostly interested in company behavior in five main areas:

- Environment (e.g., environmental reporting, nuclear power, climate change, pollution, toxics, resources)
- People (e.g., human rights, workers’ rights, supply chain policy, irresponsible marketing)
- Animals (e.g., animal testing, factory farming)
- Politics (political activity, antisocial finance)
- Product sustainability (e.g., organic, fair trade, positive environmental features)

Survey data suggest that up to 90% of consumers consider corporate social responsibility in their individual purchase and consumption behavior (Vogel 2005). Even though research has shown that there is a huge gap between what consumers say they would do and their actual behavior, ethical consumption has become a routine part of shopping for consumers in many countries, and markets for organic, fair trade, and eco-labeled products have been growing for over a decade (Summers 2016). Therefore, ethical consumption is an important driver of CSR (Vogel 2005).

Summary

As the use and acceptance of corporate responsibility expand, it is becoming extremely important

for companies to have a socially conscious image. More and more consumers are beginning to prioritize CSR when choosing a brand or company, and therefore, being a responsible company can lead to competitive advantages and growth, while a company that is seen as irresponsible might be confronted with consumer protests or boycotts which could pose a threat to the survival of the company.

Cross-References

- [Business Case](#)
- [Business Case of CSR](#)
- [Competitive Advantage](#)

References and Readings

- Caruana, R., & Chatzidakis, A. (2014). Consumer social responsibility (CnSR): Toward a multi-level, multi-agent conceptualization of the "other CSR". *Journal of Business Ethics*, 121(4), 577–592.
- Devinney, T. M., Auger, P., Eckhardt, G., & Birtchnell, T. (2006). The other CSR: Consumer social responsibility. *Stanford Social Innovation Review*, Fall 2006, Leeds University Business School working paper no. 15-04. <https://ssrn.com/abstract=901863> or <https://doi.org/10.2139/ssrn.901863>
- Fetter, F. A. (1911). *The principles of economics*. New York: The Century Company.
- Friedman, M. (1985). Consumer boycotts in the United States, 1970–1980: Contemporary events in historical perspective. *Journal of Consumer Affairs*, 19(1), 96–117.
- Giesler, M., & Veresiu, E. (2014). Creating the responsible consumer: Moralistic governance regimes and consumer subjectivity. *Journal of Consumer Research*, 41 (Oct), 849–867.
- Hunt, T. (2018). Why shop ethically. Ethical consumer. <https://www.ethicalconsumer.org/why-shop-ethically>. Retrieved 8 May 2019.
- Kendall, B. E., Gill, R., & Cheney, G. (2007). Consumer activism and corporate social responsibility: How strong a connection. In: *The debate over corporate social responsibility* (pp. 241–264). New York: Oxford University Press.
- McMurtry, J. (1998). *Unequal freedoms: The global market as an ethical system*. Toronto: Garamond Press.
- Micheletti, M. (2003). *Political virtue and shopping: Individuals, consumerism, and collective action*. New York: Palgrave Macmillan.
- Quazi, A., Amran, A., & Nejati, M. (2016). Conceptualizing and measuring consumer social responsibility: A neglected aspect of consumer research. *International Journal of Consumer Studies*, 40(1), 48–56.
- Shaw, D., Newholm, T., & Dickinson, R. (2006). Consumption as voting: An exploration of consumer empowerment. *European Journal of Marketing*, 40(9/10), 1049–1067.
- Smith, N. C. (2007). *Consumers as drivers of corporate responsibility* (Centre for Marketing working paper no. 07-103). London: London Business School. <https://doi.org/10.1093/oxfordhb/9780199211593.003.0012>
- Strandvik, T., Rindell, A., & Wilén, K. (2013). Ethical consumers' brand avoidance. *Journal of Product & Brand Management*, 22(7), 484–490.
- Summers, N. (2016). Ethical consumerism in global perspective: A multilevel analysis of the interactions between individual-level predictors and country-level affluence. *Social Problems*, 63(3), 303–328.
- van Den Broek, T., Langley, D., & Hornig, T. (2017). The effect of online protests and firm responses on shareholder and consumer evaluation. *Journal of Business Ethics*, 146(2), 279–294.
- Vitell, S. J. (2015). A case for consumer social responsibility (CnSR): Including a selected review of consumer ethics/social responsibility research. *Journal of Business Ethics*, 130(4), 767–774.
- Vogel, D. J. (2005). Is there a market for virtue? The business case for corporate social responsibility. *California Management Review*, 47(4), 19–45.

Consumer's Social Responsibility Communication (CNSRC)

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Synonyms

[Ethical consumptions](#)

Definition

Consumer's social responsibility communications (CNSRC) can be defined as the way consumers choose products/goods in accordance with ethical consumption. Consumer's social responsibility communications is also defined as a type of

relationship between enterprises and clients, in which clients express their requirements related to enterprises' socially responsible activities. Socially ethical consumer choices are becoming a requirement for enterprises and their operations (Cross-Reference: ► [“Consumer’s Social Responsibility Communication \(CNSRC\)”](#)). Consumers, through their purchases and consumption of products, are the final judges of corporations' behavior (Russell and Russell 2010). This concept is closely associated with consumer's social responsibility (CNSR). CNSR has been defined as the conscious and deliberate choice to make certain consumption choices based on personal and moral beliefs (Devinney et al. 2006). CNSR conceptualizes the “socially conscious consumer,” one of the stakeholder groups for enterprises, as a rational, individual decision-maker, motivated toward ethically augmented products (Caruana 2007). For this group of customers, ethical motivations play a key role in their decision-making process. CNSR is conceived here as the application of instrumental, relational, and moral logics by individual, group, corporate, and institutional agents seeking to influence a broad range of consumer-oriented responsibilities (Caruana and Chatzidakis 2013). Ethical consumption is defined by how material, goods, and services are used to provide consumers with a better quality of life while not degrading the environment or threatening the consumption of future generations (Szwajca 2018). Consumers with a high degree of ecological awareness (ecologically sensitive, eco-consumers) take measures to protect the environment by purchasing eco-products, avoiding non-biodegradable packaging, practicing waste segregation, and supporting green organizations and movements. In response to preferences of green buyers, companies expanded their market offer and introduced new product categories. Sen and Bhattacharya (2001) suggested that there are both company-specific and consumer-specific factors involved in the CNSR dynamic, where the major factor is consumer perception of the degree of congruence between themselves and the organization. Therefore, the CNSR dynamic is complex. Consumer engagement is embedded in cultural rationales (Devinney et al. 2006). Becker-Olsen et al. (2006) proposed that

consumer engagement with CSR is influenced by perceived fit (congruence of corporate mission and social initiative), perceived corporate motive (social centered versus profit-centered), and the timing of the communication (reactive vs proactive) with “fit” being considered as the perceived link between a cause and the firm's product line, brand image, position, and/or target market. To demonstrate the complexity of CNSR, Manning (2013) described the push-pull interaction mechanism between CSR and CNSR.

Conceptual Foundation

To understand the concept of consumer's social responsibility communications, it is necessary to refer to key concepts associated with it. The most important concepts are green consumption, sustainable consumption (customer perspective), and corporate social responsibility (enterprise perspective).

Green Consumption

Green consumption characterized consumers that “take into account the public consequences of his or her personal consumption and attempts to use his or her purchasing power to bring about social change” (Webster 1975, p. 188). Ecologically oriented buyers consciously choose “green” products. The following are some characteristics of green products described by Elkington et al. (1990):

- Does not threaten the health of people or animals.
- Should be environmentally friendly at any stage of its life, including manufacture, use, and disposal.
- Should be economical both in terms of energy consumption and use of other resources during manufacture, use, or disposal.
- Shouldn't cause waste associated with excessive packing or a short useful life.
- During its production, animals should not be used or abused.
- Shouldn't use materials derived from threatened species or environments.

Environmentally friendly consumption may be characterized as highly a complex form of consumer behavior, both intellectually and morally as well as in practice (Moisander 2007, p. 404). The demand for eco-friendly products is driven by consumer awareness about environment.

Sustainable Consumption

Trends, such as green growth and increased public awareness, change the perception of the world surrounding consumers. The concept highlights significant changes in the role of consumers as partners in the act of exchange and in their behavior in sustainable consumption (Cross-Reference: ► [“Sustainable Consumption”](#)). Contemporary consumerism in all its varieties, i.e., ecological, ethical, political, and consumerism, aims primarily at transforming the current consumption model into sustainable consumption in the economic, ecological, social, psychological, demographical, spatial, and temporal dimensions.

Consumers are treated as one of the company's stakeholder groups (Cross-Reference: ► [“Stakeholder Engagement”](#)). Freeman (1984, p. 26) defines stakeholder as any group or individual, who can affect or is affected by the achievement of the firm's objectives, and he suggests that there is a need for integrated approaches for dealing with multiple stakeholders on multiple issues. To analyze their behavior, stakeholder theory can be used (Cross-Reference: ► [“Stakeholder Theory”](#)). Andriof and Waddock (2002) underlines the importance of engaging stakeholders in long-term value creation. The emphasis is moved from a focus on stakeholders being managed by companies to a focus on the interaction that companies have with their stakeholders based on a relational and process-oriented view (Andriof and Waddock 2002, p. 19).

While consumers express the desire for information on firms' CSR records, the communication of CSR initiatives remains a challenge for the CSR marketing communicator. Morsing and Schultz (2008) find that consumers prefer CSR initiatives to be communicated through, i.e., annual reports and websites over the use of traditional communication channels.

Corporate social responsibility (CSR) is a management strategy, according to which companies in their activities voluntarily take into account social interests, environmental aspects, or relationships with various groups of stakeholders (Cross-Reference: ► [“Corporate Social Responsibility”](#)). The stakeholder theory underlies the concept of corporate social responsibility. According to this theory formulated by E. Freeman, the enterprise is a constellation of cooperation with him and competing stakeholders (Cross-Reference: ► [“Stakeholder Theory”](#)). Social responsibility includes investments in human resources, environmental protection, relations with the company's environment, and informing about these activities. These factors contribute to the increase of the company's competitiveness and shaping conditions for sustainable social and economic development. Corporate social responsibility is defined as a company's obligation to exert a positive impact and minimize its negative impact on society (Wagner et al. 2009).

Literature highlights positive effect of social responsibility on financial performance (Orlitzky et al. 2003; Marom 2006), consumer product responses (Pirsch et al. 2007), attitudes toward corporate and brand images (Webb and Mohr 1998), purchase intention (Smith and Alcorn 1991; Adkins 1999), as well as consumer-company identification (Sen and Bhattacharya 2001).

The involvement of enterprises in environmental protection, ethics issues, and solving social problems affects the level of identification of consumers with the enterprise, and their emotional relationship resulting from the acceptance of the same values determines their purchasing decisions and the degree of loyalty. As a result, consumer behavior sets the framework for the expected and accepted social commitment of enterprises.

Issues

Carroll's (1979) classic work on CSR highlights four types of social responsibilities, including

economic, legal, ethical, and philanthropic/discretionary. Aupperle et al. (1985, p. 458) emphasized primarily the legal, ethical, and philanthropic responsibilities as representing a firm's concern for society and argued that the social orientation of an organization can be appropriately assessed through the importance it places on the three non-economic components compared to the economic. Consumers care about transparency; hence making organizational transparency is an important factor in engaging stakeholders (including consumers).

Based on Grunig and Hunt's (1984) characterization of models of public relations, Morsing and Schultz (2008) unfold three types of stakeholder relations in terms of how companies strategically engage their stakeholders in CSR communication: the stakeholder information strategy; the stakeholder response strategy; and the stakeholder involvement strategy. A key challenge of CSR communication is generating favorable attributions that cover consumer's requirement. Ellen et al. (2006) found that most respondents gave mixed attributions and, interestingly, when CSR attributions were mixed, respondents' reactions to CSR were actually more positive than when attributions were purely intrinsic or extrinsic. Ellen et al.'s (2006) finding are also consistent with other research showing that stakeholders are often tolerant of extrinsic motives as long as CSR initiatives are attributed to intrinsic motives as well (Sen et al. 2006).

Social responsibility is an important motive that drives action and choices not only for consumers but also for companies. From this perspective, it is worth emphasizing that in 2010, the International Organization for Standardization developed the ISO 26000 standard (Cross-Reference: ► ["ISO 26000 STANDARD"](#)). This standard is intended as a guide for organizations in the application of the principles of social and environmental responsibility. "Guidance on social responsibility" defines social responsibility as the responsibility of an organization for the impact of its decisions and actions on society and the environment, through transparent and ethical

behavior in key areas, such as organizational order, human rights, work practices, environment, fair operating practices, consumer issues, social involvement, and local community development ([ISO 26000 Social Responsibility](#)). This standard is intended for all organizations and is not subject to certification; it is a set of practices and canons giving the possibility of their voluntary application by the organization. Any organization can use this standard if it complies with its principles.

Summary

Trends such as green growth and increased public awareness change the perception of the world by consumers. Well-informed customers expect suppliers' products not only to be of quality, valuable, and safe but also to take into account international quality standards, such as ecological products and packaging, interactive communication, and reliable, honest, and ethical advertising. Including the concept of corporate social responsibility in the practice of business operations reinforces the need to compete for consumers through justice, fairness, rights, virtue, and sustainability. Company-costumer relations require a social-moral relationship. From the perspective of consumer's social responsible communication, it would be interesting to understand what the interconnections between instrumental, relational, and moral motivations are. On the other hand, how do corporations respond to different pressures for CSR at the corporate-consumer interfaces in the context of their own range of motivations?

Cross-References

- [CSR Communication and Perspective](#)
- [ISO 26000 STANDARD](#)
- [Stakeholder Engagement](#)
- [Stakeholder Theory](#)
- [Sustainable Consumption](#)

References

- Adkins, L. (1999). Community and economy: A retraditionalization of gender? *Theory, Culture and Society*, 16(1), 119–139. <https://doi.org/10.1177/026327699016001008>.
- Andriof, J., & Waddock, S. (2002). Unfolding stakeholder engagement. In *Unfolding stakeholder thinking: Theory, responsibility and engagement* (pp. 19–42). Sheffield: Greenleaf Publishing.
- Aupperle, K., Carroll, A., & Tfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28, 446–463. <https://doi.org/10.2307/256210>.
- Becker-Olsen, K., Cudmore, B., & Hill, R. (2006). The impact of perceived corporate social responsibility on consumer behavior. *Journal of Business Research*, 59, 46–53. <https://doi.org/10.1016/j.jbusres.2005.01.001>.
- Carroll, A. (1979). A three-dimensional conceptual model of social performance. *Academy of Management Review*, 4, 497–505. <https://doi.org/10.2307/257850>.
- Caruana, R. (2007). A sociological perspective of consumption morality. *Journal of Consumer Behaviour*, 6, 287–304. <https://doi.org/10.1002/cb.222>.
- Caruana, R., & Chatzidakis, A. (2013). Consumer social responsibility (CnSR): Toward a multi-level, multi-agent conceptualization of the “other CSR”. *Journal of Business Ethics*, 121, 577–592. <https://doi.org/10.1007/s10551-013-1739-6>.
- Eckhardt, G. M., Belk, R., & Devinney, T. M. (2010). Why don't consumers consume ethically? *Journal of Consumer Behaviour*, 9(6), 426–436. <https://doi.org/10.1002/cb.332>.
- Elkington, J., Hailes, J., & Makover, J. (1990). *The green consumer*. New York: Penguin.
- Ellen, P. M., Wiener, J. L., & Cobb-Walgren, C. (1991). The role of perceived consumer effectiveness in motivating environmentally conscious behaviours. *Journal of Public Policy and Marketing*, 10, 102–117. <https://doi.org/10.1177/074391569101000206>.
- Ellen, P.S., Webb, D.J., Mohr, L.A. (2006) Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs. *Journal of the Academy of Marketing Science* 34(2):147–157
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Grunig, J.E. and Hunt, T. (1984). *Managing Public Relations*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- ISO 26000 Social Responsibility. <http://www.iso.org/iso-26000-social-responsibility.html>, Accessed 5 Jan 2020.
- Maignan, I., & Ferrell, O. (2004). Corporate social responsibility and marketing: An integrative framework. *Journal of the Academy of Marketing Science*, 32, 3–19. <https://doi.org/10.1177/0092070303258971>.
- Manning, L. (2013). Corporate and consumer social responsibility in the food supply chain. *British Food Journal*, 115, 9–29. <https://doi.org/10.1108/00070701311289858>.
- Marom, I. Y. (2006). Toward a unified theory of the CSP–CFP link. *Journal of Business Ethics*, 67, 191–200. <https://doi.org/10.1007/s10551-006-9023-7>.
- Moisander, J. (2007). Motivational complexity of green consumerism. *International Journal of Consumer Studies*, 31(4), 404–409. <https://doi.org/10.1111/j.1470-6431.2007.00586.x>.
- Morsing, M., & Schultz, M. (2008). Corporate social responsibility communication: Stakeholder information, response and involvement strategies. *Business Ethics: A European Review*, 15, 324–338.
- Orlitzky, M., Schmidt, F., & Rynes, S. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24, 403–441. <https://doi.org/10.1177/0170840603024003910>.
- Pirsch, J., Gupta, S., & Grau, S. (2007). A framework for understanding corporate social responsibility programs as a continuum: An exploratory study. *Journal of Business Ethics*, 70, 125–140. <https://doi.org/10.1007/s10551-006-9100-y>.
- Russell, D. W., & Russell, C. A. (2010). Here or there? Consumer reactions to corporate social responsibility initiatives: Egocentric tendencies and their moderators. *Marketing Letters*, 21, 65–81. <https://doi.org/10.1007/s11002-009-9082-5>.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38(2), 225–243. <https://doi.org/10.1509/jmkr.38.2.225.18838>.
- Sen, S. & Bhattacharya, CB & Korschun, D. (2006). The Role of Corporate Social Responsibility in Strengthening Multiple Stakeholder Relationships: A Field Experiment. *Journal of The Academy of Marketing Science*. *J Acad Mark Sci*, 34, 158–166. <https://doi.org/10.1177/0092070305284978>.
- Smith, S. M., & Alcorn, D. S. (1991). Cause marketing: A new direction in the marketing of corporate responsibility. *Journal of Consumer Marketing*, 8(3), 19–35.
- Szwajca D. (2018). Consumer Social Responsibility (CnSR) and CSR in the Context of Sustainable Development. In: Nalepka, A., Ujwary-Gil, A. (ed.), Nowy Sącz: Business and Non-profit Organizations Facing Increased Competition and Growing Customers' Demands VOL. 17. Foundation for the Dissemination of Knowledge and Science “Cognitione”
- Wagner, T., Lutz, R.J., Weitz, B.A. (2009) Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions. *Journal of Marketing* 73(6):77–91.
- Webb, D. J., & Mohr, L. A. (1998). A typology of consumer responses to cause related marketing: From Skeptics to socially. *Journal of Public Policy Marketing*, 2, 226–238.
- Webster, F. E. (1975). Determining the characteristics of the socially conscious consumer. *Journal of Consumer Research*, 2, 188–196.

Consumer-Centered Strategies

► Consumerism

Consumerism

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Synonyms

Consumer-centered strategies; Consumption crisis/critiques; Citizen/consumer shifts; Consumer experience; Resource depletion debates; Human-made waste/pollution; Output-focused economies; User activism; Social/commerce tensions; Use-goal utility; Tangible leisure attainment

Definition

There are two essential and opposing ways of looking at the long-contested subject of *consumerism*; a set of combined, context-dependent approaches have been emerging as sustainability discourses, management practices, and consumer behaviors had grown and developed over time.

Two very restricted opposing definitions may be offered at this point, before due elaboration ensues. The third may not (yet) be fully formulated at a level of definition:

First, as the practice of upholding the rights and enfranchisement of consumers – and the very notion of consumption as a doctrine fundamental to the conception of capitalist systems, especially in their advanced mass-market forms – understood to be sustaining, stimulating, promoting, and facilitating production, economic growth, prosperity and well-being (Which can be traced back to Adam Smith’s renowned postulates of causation of production in consumption. It is not the place of this elaboration to address such

fundamental concepts though they do require recognition. Indeed, it is equally important to refer to consumer cooperatives’ response to socioeconomic change which would later become reformulated among the ethical consumerist discourses (e.g. De Ugarte 2014).).

Second, the critique of modern cultural and societal fascination (The notions articulated as dependence (Galbraith 1998) and addiction (Room 2011) or habit (Eyal 2014).) with the perpetual consumption of goods, services, and – more recently – experiences and its arguably detrimental and alienating effect on human society, threatening its health, well-being, and the global environment.

The third (It is worth noting at this point that the three are presented in historical succession.) – nascent – concept may be addressing an emergent manner of the increasingly adopted practice of conscious and mindful utilization of goods and services in substantively rational (In the Weberian sense of “substantive rationality”; for further elaboration see Weber (2002).) and experientially purposeful ways: “Consumption activism as novel consumer sovereignty (A detailed elaboration of consumer sovereignty as posited by Mises, Hutt, and others, see Olsen (2019). Regarding the criticism of consumer (ethics) activism, see Hussain (2012)).”

The prevailing critical definition and use of the term *consumerism* emerged in 1960 at the height of consumer culture specifically in the United States. Marking the analytical change of direction in the early 1960s, this now pervasive meaning was first articulated in a seminal book by Vance Packard. Though not explicitly interested in academic work, nor labeling himself an environmentalist, Packard – journalist, public intellectual, and author of several influential tomes of astute social criticism – had nonetheless influenced sustainability and environmental thought (Having also addressed many other aspects of life in his critique of society, industry, and culture in affluent Western industrialized economies between the early 1960s and late 1980s.). The term *consumerism* had since been widely adopted in numerous treatises across the disciplines of social sciences, philosophy, culture, communications, (critical)

management analyses, and even engineering. The focus of this text will chiefly address critical takes on consumerism and its components.

Introduction with Developmental Conceptualizations of Critical Consumerism

Overall, opinions are divided as to the exact definition, meaning or esteem of “consumerism.” As for the means of defining the term, presenting various examples: Some of its advocates (e.g., Pirie 2012) refer to the 1915 entry of the Oxford English Dictionary (The critical insight on consumerism involves texts addressing very instrumental logics of engineering management such as those by El Hami et al. who state that the 1915 definition carries the literal meaning of what it entails to “consume”; they provide perceptive context as to its subsequent redefinitions of “a real ideology where the consumption of goods is of capital importance, a phenomenon that continues up to excess” (2017: 6). Reeves (2013: 66) sheds added light on the original use of the phrase: The term “consumerist” originally came to mean consumption in the context of customer rights and “advocacy of the rights and interests of consumers,” claiming its real modern meaning to have emerged in the 1960s, as per the impact of Packard’s work (though not directly referred to in this explanation).). Other, more critical sources (Intriguingly, all of the sources referring to Veblen above belong to the realm of evolutionary psychology.) trace the term to Veblen’s influential tome of 1899 (e.g., Burkeman 2009; Sundie et al. 2011) – though *the term itself* does not figure as such, some core elements of its modern meaning are identifiable. Historical, revisionist works tend to look at consumerism in ancient times and identify certain models and behaviors traceable to the Roman Empire, and before (e.g., Walsh 2013; Greene 2008); other, supportive interpretations of consumerism align it with the positive contributions of capitalism and its connotations as expressed by a leading automotive executive in 1955 (In addition to the exploration of the use of

the term by a Ford Vice President in 1955, Gurney (2017: 3-4) also provides an overview of the neo-liberal turn toward the widespread adoption consumerist culture in the 1980s following a previously critical take on the matter; e.g., in public services where “passengers” in public transport announcements and “patients” in healthcare contexts would become labeled “customers.”) (e.g., as cited in the critical overview of post-WW II consumerism by Whiteley (1987)). The latter term (Quite literally, “Fordist,” owing to the sources of its origin.) designates economic conditions, industrial practice, and human behaviors alike.

The authors also tend to demonstrate either very positive or equally negative implications when discussing *consumerism*. Notions covered include environmental harm, waste, planned and/or engineered obsolescence, addiction, mental health issues, social stratification and damage to the social fabric, and even crime. Also, conversely, those of progress, innovation, economic growth, enterprise and empowerment, social advancement, open market competition, freedom of choice, and user emancipation – all those varied and often contradictory perceptions and elaborations accompany the term. Pragmatic critical approaches tend to look at consumer activism, political or ethical connotations, involvement in environmental or health-promoting causes (It should be noted that the role and involvement of consumers who self-identify as conscientious, engaged, and ethics is itself criticized within the context of proclaimed assertions vs. impact, i.e., words vs. action.), and such like.

While this entry affords due attention to free market approaches, it is necessary to clearly acknowledge the critical origins of the modern-day use of the term *consumerism*. The matters of particular importance in this instance would be those relating to environmental and social sustainability and means by which consumers as citizens – or citizens as consumers (See terminological – and policy critique: e.g., Livingstone et al. (2007). Not to be confused with Mises’/Hutt’s notion of consumer sovereignty; however, nuanced connections do exist.) – act

to take claim of their rights and responsibilities in an active manner within the scope of market economy.

There are other positively intoned approaches to consumerism. Those tend to address the perceived awakening of consumers as to their social role and impact, and a growing number of consumer groups and movements aimed at the proactive enactment of positive, sustainably conscious sociocultural change in consumption behavior patterns. The journey toward a culture of consumption and consumption as a force of identity and culture formation is arguably making full circle with large-scale behavioral changes recorded in recent decades. This, namely, is arising from and chiefly present in developed western postindustrial economies. The aspirational aspects of consumerism appear to capture the imagination of the rising and growing middle classes of “emerging economies,” i.e., those production giants where most of the Western corporations’ manufacturing base is outsourced, more resembling a similar consumer optimism of Western consumers in the post-war reconstruction period from the 1950s (The matter of outsourcing and global production and supply structures may yet become debatable in the wake of the COVID-19 pandemic. Also, though Paek and Pan (2004) speak of a mainstream predilection for consumerism, Zhu and Sarkis (2016) address the matter of environmental consumerism on the rise in China.).

At the peak of that era of Western trends of consumer optimism and outpourings of American industrial goods mass production appeared the key book by Packard, “*Waste Makers*” (1960), producing the impactful work of critical analysis that largely defines consumerism in its enduringly contemporary meaning. J K Galbraith’s matter-of-fact analysis *The Affluent Society* from 1998, with a chapter on “dependence effect” is of particular relevance to critical views of consumerism as an innately unstable self-perpetuating cycle of self-causality:

The higher level of production has, merely, a high level of want creation necessitating a higher level of want satisfaction. (Galbraith 1998: 127)

The notion of dependence (even addiction as will be seen below) are fundamentally related to many expositions on consumerism. Packard’s metaphorical Cornucopia City is the site of improvidence and symbolic extrapolation of *positive feedback loops* in consumption and planned obsolescence, thus forming a negative utopia. The two works, though different in style and tone, appear to have sought a moderating approach that mitigates market excess and addresses the then core extant notions of value, e.g., infrastructure and education (As such, they are opposed to what would morph into the neoliberal doctrines akin to consumer sovereignty.). With the spread of neoliberal (This complex term of central importance is too demanding to be attended to in this text.) thought into policy and practice, deregulation, privatization of the public sphere, and an increasing role of media, advertising, marketing, and PR within societal constructs widely adopted, the critical thought of such works had no longer found an institutional basis in civil society.

Another critical text worthy of special attention was Marcuse’s *One-Dimensional Man (Not without criticism, e.g., from feminist views holding against omitted notions pervasive gender dominance.)* (1964). Marcuse discusses the “flattening of discourse” in liberal contexts where consumption adopts a social function and leads to a resultant passivity of contradictions defused and channeled by becoming seemingly reconciled and fed through the liberal media and consumption conduits. As envisaged by Marcuse and other precursors of the “new left,” the grounds of social dialogue soon shifted into matters identifiable with previous niche discourses and oft-marginalized rights contestations. Such contestations, consensus rethinks, and substantive rationality discourses had become the platform for societal dialogue in the wake of the neoliberal turn; as such, it had allowed for public debate within its broadly market-formulated scope which left room for diversity. Value/values rationality thus adopted a new form, that of substantively rational – less so structurally instrumental – goals informed by the preservation of the habitat, rights activism, and the legacy of cooperative

approaches (Traceable back to the eighteenth century.), all of which had tasked their participants to carry out the form of then new ethical and/or political consumerism (e.g., Clarke 2008).

Owing to normative transformations of societies on a worldwide scale, and fundamentally influenced by globalization (especially its economic and multinational corporate features), civil society negotiation by sector and cause and fragmented consensus-building had replaced prior, frontally oppositional doctrines. In such contexts, critical works akin to those of Galbraith and Packard retained some explicatory potential. Especially in an environmental context, the practice of *planned (engineered) obsolescence* is central to Packard's 1960 volume. This highly developed concept is well-covered in sustainability literature (e.g., Maycroft 2009; Wieser 2016). As such, it acts as the dependence-forming vehicle necessary for continued flow of consumption (Ever more sophisticated tools and methodologies are in use in the early twenty-first century (see Eyal, 2014)).

Consumption, Dependence, Habits, and Addictions

Critical judgments of consumerism continue to relate to forms of dependency beyond the formulations offered by the authors cited above.

Some illustrations concerning *addiction*: Supporting the claim of innate inconsistency of everyday consumerist ethics, Room (2011) analyses the contradictions between neoliberal "consumer sovereignty" concept and its extensions represented in the phenomenon of *alcohol marketing* (e.g., advertising, round-the-clock availability, and "the moderate drinker ideal") against the backdrop of requirements for sobriety in regular tasks around everyday life. Room (2011: 6) notes that:

The moderate drinker, who drinks regularly, but without ever becoming intoxicated, is thus a hero of the economic system, painstakingly treading the knife-edge between failure to consume and overconsumption.

and

Putting the blame on the individual level provides a solution to the contradictions of a system built both around expectations of sober attention and around a relatively free availability of alcohol. (Room 2011: 7)

Elsewhere, Reith (2004) points at the "discursive convergence" and internal conflicts of cultural drives toward compulsive behavior and self-control in neoliberal consumerist societies where freedom, as contrasted with determinism and addiction, appears to be proliferated through the neoliberal constructs such as *freedom to choose* (Milton Friedman's own term.) and collectively sanctioned embodiments of consumer autonomy. Using key, yet peripheral, examples of addiction discourse's connection to *substances and activities such as tobacco, caffeine, and shopping* (2004: 288), as well as the medical *focus on the body of the user* (2004: 291), Reith posits the co-opting of such "deviant" meaning outside the normative impact of neoliberal discourse and the blame apportioning toward users (Social, hereditary, and community-bound connotations of such users form an integral part of her analysis.).

A seasoned practitioner in device-driven and cognitively informed marketing, Eyal (2014) distances himself from addiction as such. In a highly articulate and practice-focused book, remarkably and aptly titled *Hooked*, he leads the reader through the reasoning, (elements of) science, and features of device-focused technology behind the design and implementation principles of leading *habit-forming products* (the term appears in the book's subtitle). A frank and candid elaboration on the practice some would find ethically dubious but few would dispute its effectiveness, *Hooked* provides the reader with direct insight into consumerist-advancing blends of technology and psychosocial innovation underpinning the ubiquitous digital devices of the early twenty-first century. Further permeating everyday life and affecting regular communications, entertainment, and time-focused attention-driven media, such devices and myriad platforms designed for them bring consumption and intuitive market research into the space of individual privacy, intimacy, and personal routine. As elaborated by Jaakkola (2020) and Hill (2011), among others: The most

ethically problematic aspect of such permeating impact on any part of the broadest human community is that on children, proven to be affected by consumerist habit formation. It is the ultimate sustainability of our species – that of the plausible survival, mental, and physical well-being of the next generation of human life (This is where few would disagree that identity constructs play a major role.).

Hyper-consumption, the Environment, and the Ethical Consumer Movement

In an interview with London's *The Independent* (*The text also reveals elements of the cultural shift that also helped articulate shopping as a preferred pastime of "late modernity"; arguably, this may be traced to the beginnings of PR in the early twentieth century.*), author Benjamin Barber states:

"Over a billion people are without drinking water," says Barber. "Why don't we find out ways to get the water they need to them, instead of new ways of getting water to us?" (Morris and Barber 2008)

Ethical discourses play a central role in consumer activism.

This entry presents a minute sample of such work. Once more, opinions are divided.

While some (e.g., Akenji 2014; Hussain 2012) observe problematic, partisan (Akenji observes the practices mainly aimed at businesses; Hussain recounts the politics of consumption and identifies the American Colonies' rejection of the British 1756 Stamp Act as an early example of such practice.) components within the doctrines and practices of ethical consumerism, the vast majority of authors across different sectors and outside the academe tend to explore its contribution, lending it their judicious support.

For example, Sachdeva et al. (2015) explore green consumerism across the factors of values, identity, and social norms; expectations and connotations; and structural factors and impact, while Moisander (2007) seeks to acquit individual

consumers of the burden of environmental responsibility, echoing somewhat the concerns over deontological bias regarding individual agency and action as per above and seeking a set of systemic solutions instead. Elsewhere, Thompson and Coskuner-Balli (2007) conducted a detailed fieldwork study examining the linkages between belief systems and normative codes (of substantive/value rationality) adopted for the sake of developing and enhancing community supported agriculture and their practical impact on the organization and business of it. Relatedly, authors such as Copeland (2014) explored value change in postmaterialist political consumerism, seeking to connect it to other forms of political behavior. The influential work of Smith (e.g., 2007) connects ethical consumerism and corporate social responsibility on structural and mutually causative levels, arguing that ethical consumerism forms a prime case for CSR.

Scrutinizing the ethical consumerist discourse and practice, however, contributes to the construct validity of the entire field in terms of practice and of analysis, theorization, and methodology alike. Thus, for example, Auger and Devinney (2007) examine the data reliability of consumer surveys in categories of socially or ethically responsible behavior, proposing a more accurate yardstick and refined test/control group connections. Another significant example: Carrington et al. (2010) similarly identify a notable gap between professed and stated preferences of ethical intentions and manifest behavior, along the insights of *implementation intentions, actual behavioral control, and situational context* to form a *holistic conceptual gap* between stated intentions and actual behavior among ethically minded consumers. Weaver's 2019 critique of *consumer activism as economic democracy* explores the discerning inspection of the practice and its postulates from the viewpoints of multiple doctrines and pragmatic processes, while also working to uncover innate built-in conceptual preferences in consumer sovereignty notions and feeding insights back in to the field.

Feedback Loops of Present-as-Future

In the dynamic category of *consumerism*, especially in *ethical terms*, it is important to note the *evidential effects* of economic, social, and cultural change. The theme of *alienation* persists: The impact of neoliberal logic, doctrine, and globally pervasive practice has resulted in extensive cultural changes since such effects were first felt. The shift from citizen to consumer and from community member to autonomous agent of choice had marked the post-1979 era. Arguably (A city broker identified the 2011 UK riots as consumerism-oriented; branded goods were looted, and cheaper products destroyed by the mob (e.g., Hawkes 2011).), this led to the diminishing role of broader societal cohesion (as referred to above, e.g., Gurney 2017: 3-4). The COVID-19 pandemic seems to have delivered (The global pandemic is still affecting the world at the time of writing.) examples of further voracity and alienation (“... When we talk about extreme overstocking behaviour, that is problematic’ said marketing researcher”) (Rodriguez 2020) – as well as some positive change (Thought-provoking balance of “health-as-luxury” against the backdrop the luxury of ‘life’s simple pleasures.’) – across the world (Achim 2020). As novel market uncertainty is being built into the “new normal” (a term entering the mainstream) – *social distancing* is being identified as a factor affecting brands, should its effects be felt long term. Cultural change may regardless of global health tremors relate to the behavioral generation gap already widening in advance of it; Canavan (2019) reports the *millennial* distaste for physical outlets. The present is by definition in a state of flux. What trends may emerge depends on such flux.

Summary

Consumerism remains a highly charged and changing, evolving concept. By definition, it is rooted in the notions that come as close as possible to sustainability in ethics and practice. It is a

fact of advanced capitalism, and while in the West it is very much about conscious consumption and citizen responsibility, in the emerging economic powerhouses of today, it largely takes the original form of conspicuous consumption. Whether one adopts Veblen’s approach or Ford executive pragmatism; Packard’s nascent and thus deeply influential criticism; a religious, or conversely, social (ist) values critique either ideologically burdened as in the old, or cynically elaborate as in the works of a new left following in Marcuse’s work – consumerism tends to generate discourse, in its multitude and diversity, engaging a variety of schools of thought around social norms and problems. Indeed, one’s stance toward consumerism is not just outward signifying practice of a discourse: it is an agent of definition of that very approach and worldview. The modern, engaged consumers often see themselves as activists of ethical consumption, not merely of a utility or of an aesthetic branding laden with meaning, but both. It is not lost, however, on the critics of activist/citizen-consumer thought, that it tends to be extreme and/or ineffective: in some cases, critics point out that consumer activism can be overimpassioned; in others, that there is a consistency gap between the proclaimed and the actual behavior on display. Where such approaches seem best effective is in the fields of community-centered practice of production-meets-consumption, such as in small-scale growing of crops and health foods. The environmental aspect of consumerism is clearly a hallmark of its modern-day meaning, whereby “modern” encompasses even the very early works of Veblen or of Weber, in his elaboration of values-based thought. The underlying principles of consumption articulated by Smith in the eighteenth century remain fundamental to the notion of exchange value which stands at the heart of a (post)industrial society, regardless of ideological precursors: both Marxian and neoliberal approaches to consumption are bound by the notion of an exchange values-driven society. Therefore, leisure and consumption remain intricately related to one another and to labor, surplus value, and numerous other weighty and charged

concepts. This appears that only communities-led approaches to production-consumption circuits seem to stand outside such reckonings, though they do remain untested on any replicable large-scale sampling as exceptions to the organized norm since at least the advanced stages of the industrial revolution.

Cross-References

- [Compulsive Buying](#)
- [Conspicuous Consumption/Positional Goods](#)
- [Emerging Economies](#)
- [Emulative Consumption and Bankruptcy](#)

References

- Achim, A. L. (2020). *The Post-COVID-19 Rise of Conscious Luxury*. Jing Daily. 8 March 2020. Available at: <https://jingdaily.com/the-post-covid-19-rise-of-conscious-luxury/>. Accessed 18 Mar 2020.
- Akenji, L. (2014). Consumer scapegoatism and limits to green consumerism. *Journal of Cleaner Production*, 63, 13–23.
- Auger, P., & Devinney, T. M. (2007). Do what consumers say matter? The misalignment of preferences with unconstrained ethical intentions. *Journal of business ethics*, 76(4), 361–383.
- Burkeman. (2009). This column will change your life: Conspicuous consumption. [online] *The Guardian*. 22 August 2009. Available at: <https://www.theguardian.com/lifeandstyle/2009/aug/22/change-your-life-conspicuous-consumption>. Accessed 4 Apr 2020.
- Canavan, B. (2019). Consumerism in crisis as millennials stay away from shops. *The Conversation*. 15 January, 2019 [online]. Available at: <https://theconversation.com/amp/consumerism-in-crisis-as-millennials-stay-away-from-shops-109827>. Accessed 10 June 2019.
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97(1), 139–158.
- Clarke, N. (2008). From ethical consumerism to political consumption. *Geography Compass*, 2(6), 1870–1884.
- Copeland, L. (2014). Value change and political action: Postmaterialism, political consumerism, and political participation. *American Politics Research*, 42(2), 257–282.
- De Ugarte, D. (2014). *A brief history of contemporary "Consumerism" And Anti-Consumerism*. [online] (originally published by Las Indias). November 14, 2014. Available at: <https://www.resilience.org/stories/2014-11-14/a-brief-history-of-contemporary-consumerism-and-anti-consumerism/>. Accessed 29 Mar 2020.
- El Hami, A., Delaux, D., & Grzeskowiak, H. (Eds.). (2017). *Reliability of high-power mechatronic systems 1: Aerospace and automotive applications: Simulation, modeling and optimization*. Elsevier.
- Eyal, N. (2014). *Hooked: How to build habit-forming products*. Penguin.
- Galbraith, J. K. (1998). *The affluent society*. Houghton Mifflin Harcourt.
- Greene, K. (2008). Learning to consume: consumption and consumerism in the Roman Empire. *Journal of Roman Archaeology*, 21, 64–82.
- Gurney, P. (2017). *The making of consumer culture in modern Britain*. Bloomsbury Publishing.
- Hawkes, A. (2011). UK riots were product of consumerism and will hit economy, says City broker. [online] *The Guardian*. 22 August 2011. Available at: <https://www.theguardian.com/business/2011/aug/22/uk-riots-economy-consumerism-values>. Accessed 30 Mar 2020.
- Hill, J. A. (2011). Endangered childhoods: How consumerism is impacting child and youth identity. *Media, Culture & Society*, 33(3), 347–362.
- Hussain, W. (2012). Is ethical consumerism an impermissible form of vigilantism? *Philosophy & Public Affairs*, 40(2), 111–143.
- Jaakkola, M. (2020). From vernacularized commercialism to kidbait: toy review videos on YouTube and the problematics of the mash-up genre. *Journal of Children and Media*, 14(2), 237–254.
- Livingstone, S., Lunt, P., & Miller, L. (2007). Citizens, consumers and the citizen-consumer: articulating the citizen interest in media and communications regulation. *Discourse & Communication*, 1(1), 63–89.
- Maycroft, N. (2009). *Consumption, planned obsolescence and waste*. University of Lincoln. Eprints.
- Moisander, J. (2007). Motivational complexity of green consumerism. *International journal of consumer studies*, 31(4), 404–409.
- Morris, S., & Barber, B. (2008). Think you love shopping? It's the marketing scam of the century. *The Independent*. 19 June 2008 [online] Available at: <https://www.independent.co.uk/environment/green-living/think-you-love-shopping-its-the-marketing-scam-of-the-century-849922.html?amp>. Accessed 10 June 2019.
- Olsen, N. (2019). *The Sovereign consumer: A new intellectual history of neoliberalism*. Springer.
- Packard, V. (1960). *The waste makers*. Harmondsworth: Penguin books.
- Paek, H. J., & Pan, Z. (2004). Spreading global consumerism: Effects of mass media and advertising on consumerist values in China. *Mass Communication & Society*, 7(4), 491–515.

- Pirie, M. (2012). *In praise of consumerism*. [Blog] Adam Smith Institute. 22 June 2012. Available at: <https://www.adamsmith.org/blog/thinkpieces/in-praise-of-consumerism>. Accessed 4 Apr 2020.
- Reeves, P. (2013). *Affordable and social housing: Policy and practice*. Routledge.
- Reith, G. (2004). Consumption and its discontents: Addiction, identity and the problems of freedom. *The British Journal of Sociology*, 55(2), 283–300.
- Rodriguez, M. (2020). *Ethical consumerism important through the COVID-19 pandemic: Expert*. [online]. Keremeos Review. 18 March 2020. Available at: <https://www.keremeosreview.com/news/ethical-consumerism-important-through-the-covid-19-pandemic-expert/>. Accessed 18 Mar 2020.
- Room, R. (2011). Addiction and personal responsibility as solutions to the contradictions of neoliberal consumerism. *Critical Public Health*, 21(2), 141–151.
- Sachdeva, S., Jordan, J., & Mazar, N. (2015). Green consumerism: moral motivations to a sustainable future. *Current Opinion in Psychology*, 6, 60–65.
- Smith, N. C. (2007). Consumers as drivers of corporate responsibility. *Centre for Marketing Working Paper*. LBS.
- Sundie, J. M., Kenrick, D. T., Griskevicius, V., Tybur, J. M., Vohs, K. D., & Beal, D. J. (2011). Peacocks, Porsches, and Thorstein Veblen: Conspicuous consumption as a sexual signaling system. *Journal of Personality and Social Psychology*, 100(4), 664.
- Thompson, C. J., & Coskuner-Balli, G. (2007). Enchanting ethical consumerism: The case of community supported agriculture. *Journal of consumer culture*, 7(3), 275–303.
- Trentmann, F. (2016). *How Humans Became 'Consumers': A History: Until the 19th century, hardly anyone recognized the vital role everyday buyers play in the world economy*. [online] The Atlantic. 28 November 2016. Available at: <https://www.theatlantic.com/amp/article/508700/>. Accessed 29 Mar 2020.
- Walsh, J. S. P. (2013). *Consumerism in the Ancient World: Imports and Identity Construction*. Routledge.
- Weaver, R. H. (2019). Is consumer activism economic democracy. *University of Pennsylvania Journal of Law and Social Change*, 22, 241.
- Weber, M. (2002). *The Protestant ethic and the "spirit" of capitalism and other writings*. Penguin.
- Whiteley, N. (1987). Toward a throw-away culture. Consumerism, 'style obsolescence' and cultural theory in the 1950s and 1960s. *Oxford Art Journal*, 10(2), 3–27.
- Wieser, H. (2016). Beyond planned obsolescence: product lifespans and the challenges to a circular economy. *GAIA-Ecological Perspectives for Science and Society*, 25(3), 156–160.
- Zhu, Q., & Sarkis, J. (2016). Green marketing and consumerism as social change in China: Analyzing the literature. *International Journal of Production Economics*, 181, 289–302.

Consumption Crisis/Critiques

- Consumerism

Consumption of Energy

- Energy Conservation: More Efficient Use of Energy

Contamination

- Pollution

Contemplation

- Spirituality in Management

Contingency Approach

- Contingency Theory

Contingency Model of Leadership Effectiveness

- Contingency Theory

Contingency Perspective

- Contingency Theory

Contingency Theory

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Synonyms

A general contingency theory of management; Contingency approach; Contingency model of leadership effectiveness; Contingency perspective; Contingency theory of leadership; Contingency view; Fiedler's contingency model; Fiedler's contingency theory; Fiedler's theory of leadership; Structural contingency theory; The contingency theory of organizations

Definition/Description

Leadership can be characterized as a human-centered system that responds to all internal and external factors that impact it. Modern business organizations are under the influence of many volatile, uncertain, complex, and ambiguous (VUCA) factors. Contingency theory is considered as one way of assessing organization and leadership action, supported by various empirical research that observes leaders' styles concerning specific situations (Northouse, 2013), whereas organizational effectiveness is deemed because of specific organizational characteristics and contingencies (Donaldson, 2001). Contingency theory is based on the belief that the environment a company operates severely affects the appropriate way a firm should organize to be more effective (Betts, 2003). According to Chenhall (2003, p. 191 as cited in Otley, 2016), "term contingency means that something is true only under specified conditions." Contingency theory depends (is contingent) on a variety of factors, including the environment, technology, size of the organization, number of employees, company culture, and a range of products (Betts, 2003; Heery & Noon, 2008).

Introduction

The importance of studying the environmental influence on business organizations became a trend in the 1960s after the development of open-systems theory and contingency theory when researchers went beyond organizational boundaries to realize the scope of managerial influence. They tried to find out how business leaders perceive and influence the organizational relationship with different factors that are shaping their business environment. An organizational environment is a cluster of forces and conditions that operates outside of the organization but affect its reality and the manager's ability to engage and utilize resources. From the organizational perspective, it all started through the work of Burns and Stalker (1961), who used the organizational contingencies theory to identify a crucial link between organizational structure and context to develop models of organizational structure that can be modified to fit various types of environments.

As Valeri (2021) wrote, the general rule here is that the organization should develop its level of specialization so that single parts interact with specific environmental factors to guarantee compliance with the principle concerning the rate of adaption of an organizational structure, which corresponds to the rate of change of the environment it works in. Since the environment in which organizations operates is in constant flux, Burrell and Morgan stated that contingency theory enables different proper responses to changes in the environment (Lagstedt & Dahlberg, 2018). Contingency theory is based on the notion that an adequate "fit" between organizational parameters and contingency variables leads to enhanced performance (Betts, 2003). Contingency theory is situation-specific by definition, whereas specific authors believe that even though there is no single preferred management approach and way of decision making, the organization should align with the environmental conditions, while authors with different views believe that organization can influence and adjust the environmental conditions (Heery & Noon, 2008).

Some authors believe there is a distinction between structural and strategic contingency theory (Betts, 2003). Structural contingency theory first appeared in 1958 through Joan Woodward's work, in which "the contingency equation" was mentioned which posits that the alignment among structural features and production improves a company's performance (Shenkar & Ellis, 2021). Structural contingency theory is less in scholars' focus than in previous decades, which is observable by several papers published in leading management journals, where a sharp decline is visible in the mid-1990s and with very few articles published in the discipline afterward (Shenkar & Ellis, 2021).

Fred Fiedler and his associates developed the most prominent and influential contingency theory approach (Ayman et al., 1995; Northouse, 2013). In the past, organizational research attempts were made to find the most appropriate style of leadership and management behavior, where a leader can learn how to adapt leadership style to various new situations, whereas the contingency view sees an organization's success as matching the leader's motivational structure and control (evaluated with LPC – least preferred coworker scale) with impact on the situation (Leister et al., 1977). Fiedler posited that there is more than one style of leadership, where the best fit depends on the situation (Verkerk, 1990). The closer the fit, the better the effectiveness (Northouse, 2013). Other authors also researched contingent leadership behavior, and one common denominator is focused on completing activities instead of focusing on leaders working with people (Verkerk, 1990).

Contingency Approaches

Several contingency approaches exist in the literature, ranging from qualitative to quantitative (Luthans & Stewart, 1977). The contingency approach aims to establish connections among environmental, managerial, and performance variables, where various approaches include: organization design, leadership, behavioral use, and quantitative use (Luthans & Stewart, 1977).

Stemming from general organizational contingency theory, besides the field of management (Betts, 2003) and leadership, contingency approaches were explored and used in various areas such as risk management (Collier & Woods, 2011; Silva & Francisco, 2019); innovation management (Chesbrough, 2020); supply chain risk management (Grötsch et al., 2013); organizational change (Batillana & Tiziana, 2012); operations management (Sousa & Voss, 2008); project management (Howell et al., 2010); management control systems (Otley, 1980; Chenhall, 2003); management accounting (Otley, 2016); as well as other areas of research and application.

Fiedler's Contingency Theory

According to Fiedler, the contingency theory of management states that leaders attempt to adjust the appropriate leadership style to the specific situation that will drive them to accomplish the organizational purpose (Northouse, 2013). Core aspects of Fiedler's contingency model are situational favorableness (leader's control and influence) and leadership style (as measured by the LPC scale) (Fiedler, 1972, p. 453). Furthermore, leadership styles can be task motivated (reaching a goal) or relationship-motivated (forming close interpersonal relationships), where leadership styles can be measured with the LPC scale (employee with whom the leader least likes working), where high scores indicate relationship motivated (close interpersonal relations and group support), while low scores indicate task motivated (prefer specific evidence of accomplishments) (Leister et al., 1977; Northouse, 2013). In literature, the LPC score that measured leadership style with scales was often presented with 16–22 bipolar items (that describe the least preferred coworker in opposing adjectives, e.g., pleasant as opposed to unpleasant) and calculated as a sum of ratings (Mitchell et al., 1970; Ayman et al., 1995).

According to contingency theory and different leadership styles, task-motivated leaders are

effective in very positive and very negative situations (crises or poor performance), whereas relationship-motivated leaders are effective in certain situations (not fully controllable or, on the other hand, crisis situations) (Ayman et al., 1995; Northouse, 2013). When the situation is determined and the appropriate leadership style is considered, the leader's appropriateness for handling the specific case can be determined (Northouse, 2013). As Fiedler proposed, depending on the situation, various leaders can be more or less successful in dealing with situations, whereas the LPC score is primarily determined by personality and its flexibility to change in time or by modifying the favorableness of the situation (Fiedler, 1972).

Contingency theory and a leader's control and influence can be established and measured through situational factors: "leader-member relations, task structure, and position power" (Leister et al., 1977, p. 465). Through dichotomies, dimensions can be observed as "good vs. poor leader-member relations, structured vs. unstructured tasks, and strong vs. weak position power," whereas, from the stated possibilities, the most preferred are good leader-employee relations, with simultaneously structured tasks and strong position power (Jago, 1982, p. 323).

Situational Leadership Theory

Situational leadership theory, or Hersey and Blanchard's theory, is based on the presumption that effective leaders modify leadership styles regarding ongoing situations (Graeff, 1997). The approach advocates the need for a suitable match of two essential elements: leadership style and follower's maturity (Blake & Mouton, 1982).

The theory recognizes four leadership style approaches (Hersey & Blanchard, 1977):

- Style 1 is called directing, guiding, or telling leadership style, in which the leader is very directive and authoritative, while the level of supportive behavior toward followers is low.

- Style 2 is called coaching, selling, or explaining leadership style, in which the level of the directive behavior of the leader is high, and the level of supportive behavior toward followers is high.
- Style 3 is called supportive, participating, or facilitating leadership style, in which the level of supportive behavior of the leader toward followers is high, and the level of directive behavior of the leader is low. A leader is more democratic and works with followers.
- Style 4 is called delegating, monitoring, or empowering leadership style, in which the leader delegates decision-making responsibility to followers.

On the other hand, there are also four levels of follower's maturity (Blake & Mouton, 1982):

- M1 is defined by followers' low competence, commitment, and confidence.
- M2 is defined by followers' low competence and high commitment and confidence.
- M3 is defined by followers' high competence and low commitment and confidence.
- M4 is defined by followers' high competence, commitment, and confidence.

Figure 1 shows that each of the leadership styles is suitable for one of the follower's maturity level (Hersey & Blanchard, 1988).

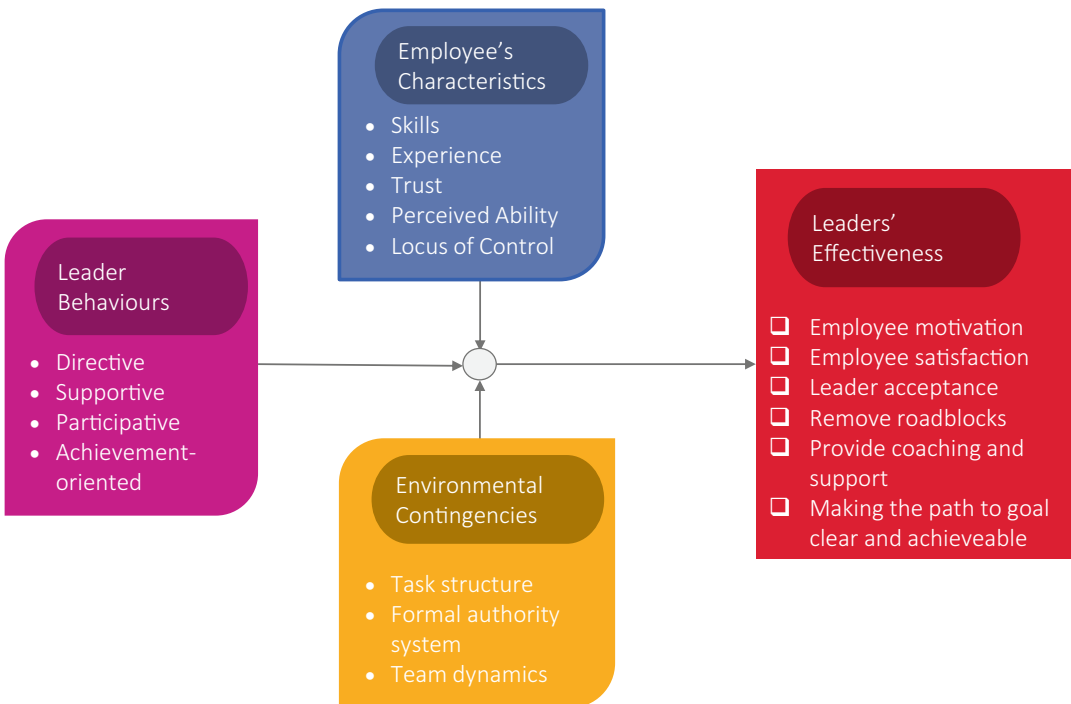
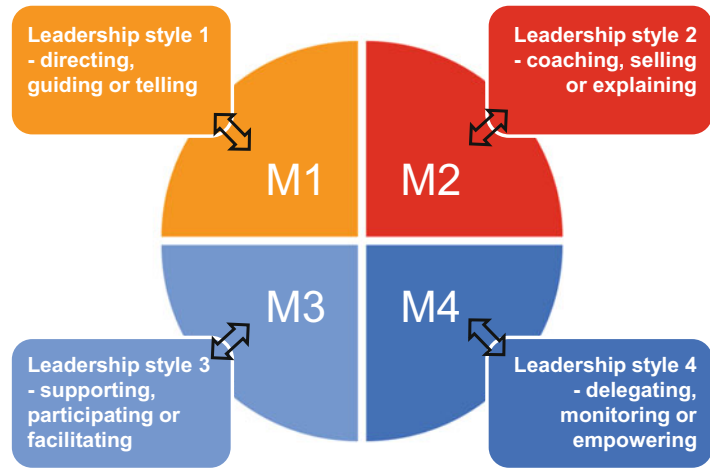
Path-Goal Theory

In this theory, leadership style or path changes according to a person's situation (Northouse, 2013). Leaders adopt a path based on the situation trying to achieve a goal, and as a result, a leader is more involved in the process (House & Mitchell, 1974). A leader's primary purpose is to show the followers the right path that will lead to the fulfillment of an organizational goal. Leaders empower followers, leading to a more significant level of efficiency and productivity.

Figure 2 shows that leaders' effectiveness depends on the employee and environmental

Contingency Theory,

Fig. 1 Matching leadership/followership styles



Contingency Theory, Fig. 2 Path-goal theory of leadership

factors and particular leadership styles (Stogdill, 1974).

According to the Path-goal theory, four leadership styles exist (Mango, 2018):

- Directive or task-oriented leadership style in which the leader gives followers guidelines

about tasks, makes standards for performance and controls behavior when standards are not satisfied.

- A supportive or people-oriented leadership style in which the leader is empathetic, and supportive results in better employee engagement and job satisfaction.

- Participative leadership style in which the leader works collaboratively with followers regarding crucial business decisions, ideas, and strategies.
- The achievement-oriented or goal-setting leadership style is when the leader sets ambitious goals for followers to boost motivation and strive for excellence in the organization.

The Decision-Making Theory

Decision-making theory, or the Vroom-Yetton contingency model, puts the leader's decision-making process at the center of the leader's attention. It is designed to help the leader recognize the most suitable decision-making approach and leadership style in an ongoing situation (Vroom & Yetton, 1973). The model examines three factors (decision quality, team commitment, and time constraints) located in a decision tree. A leader should answer seven questions to find the best decision-making process for ongoing situations (Vroom & Jago, 1978).

Decision-making theory portrays five decision-making processes (Vroom & Jago, 1988):

- Autocratic model (A1), a leader decides based on existing information without any consultation with followers.
 - Autocratic model (A2), a leader consults with followers regarding specific information and then decides.
 - Consultative model (C1), a leader consults with each follower individually (without a team synergy effect) and then decides.
 - Consultative model (C2), a leader holds team meetings regularly with followers and then makes decisions.
 - Collaborative model (G2), a leader is a moderator on a journey in which followers try to find a decision they all agree on.
- focuses on a leader's style and related success in a specific situation, and does not expect that every leader is capable of handling various conditions, which is a different approach compared to the trait approach to leadership (Northouse, 2013). Furthermore, the LPC questionnaire allows a multi-level analysis of relations between leaders and employees that can be used for leadership training and also the development of employees, and adjustments in existing ways of conducting work (Ayman et al., 1995). Contingency theory can be applied in organizations to evaluate and clarify why certain employees are effective in specific positions and situations while not so good in others (Northouse, 2013). In addition, contingency theory relationships are considered relatively simple to understand compared to other theories and can enable simple decision-making rules that affect the results of an organization (Betts, 2003).
- During the past decades since the emergence of contingency theory, there have been significant findings concerning the theory, where empirical research found that it is not feasible for organizations to cover all various contingencies it faces with adequate approaches (Otley, 2016).
- Criticism of contingency theory involves the following (Northouse, 2013):
- It does not completely shed light on why one category of leaders (task-oriented or relationship-oriented) is more suitable in certain situations than the other.
 - Certain researchers criticize the least preferred coworker (LPC) scale for its absence of face validity, unclear instructions, and challenges of use in organizations.
 - It does not fully elaborate on how the organizations should act when leaders' style does not match the situation or how to accommodate leadership style.

Strengths and Weaknesses of Contingency Theory

Strengths of contingency theory are that it is grounded in research, has a predictive approach,

Also, the organizational fit notion is only sometimes, especially in situations with more than one contingency scenario, where it poses a challenge as to how to apply the theory in such cases (Betts, 2003).

Considering all the advantages and limitations of contingency theory which deals with leadership effectiveness, it provides a basis for a successful framework for linking leadership styles with situations (Northouse, 2013).

Contingency Theory and the Workplace

Contingency theory advocates a non-general or identical style of leadership. Effective leaders apply appropriate leadership styles under the specific situation and followers (Gill, 2011). There are a lot of diverse factors that influence leader effectiveness in the workplace. These are workforce, corporate culture and climate, team size, task structure, management style, work schedule, work style and follower morale, and company policy (Bass & Stedlmeier, 1999). Each with a different leadership style, leaders respond to this diverse factor in a non-identical way. Leaders must always be aware that their success depends on myriad factors surrounding the organization and its followers (Northouse, 2013). Contingency theory leaders know the means of implementing diverse leadership styles in various situations regarding the fact that if one thing worked in the past, there is no guarantee that it will work again because of the different factors (Kriger & Seng, 2005).

Ethics in Contingency Theory

One of the challenges modern organizations have to deal with is leadership with deeper meaning, both for leaders and followers (Kriger & Seng, 2005). Today, it is inevitable that leadership has a moral dimension in an organization because it carries enormous ethical responsibility (Northouse, 2013). It is often compared that the leader's actions and behavior are just the tips of an iceberg, while feelings, thoughts, and intuitions shape a leadership style and influence followers (Badaracco, 2002). Applying the contingency theory in leadership means that leaders, through their power and influence, try to create an ethical and well-being climate for an organization (Kriger &

Malan, 1993). There are six factors of crucial importance in building ethical leadership (Northouse, 2018): character, action, goal, honesty, power, and values of the leader. Character defines the leader as a person, while actions refer to showing respect and justice to followers and empowering diversity in the workplace through leaders' strong core values (Kriger & Hanson, 1999). By selecting purposeful, critical, and worthwhile goals, the leader promotes positive values in the organization (Northouse, 2013). If a leader is not honest with himself/herself and followers and if he/she does not use the power of influence for the common good, he/she is not an ethical leader. Applying ethical contingency theory in an organization means that a leader is aware of who is he/she as a person, what the values are to promote in the organization, and how is he/she going to use his/hers power on followers (Northouse, 2018).

Corporate Social Responsibility and Contingency Theory

Responsibility is a necessary component for a leader's effectiveness (Waldman & Galvin, 2008). In the VUCA world, the lack of a leader's responsibility can cause ethical blindness in followers, leading to crises of legitimacy and trust in the organization (Maak & Pless, 2006). Responsible leadership is described as making sustainable decisions to achieve mutual benefits for internal and external stakeholders (Maak, 2007). It is recognized as more effective and influential than any other leadership style, with great potential to boost organizational performance and be a powerful source for innovative behavior of followers (Voegtlin et al., 2020). In responsible leadership, the leader shares their values regarding concern for the environment with internal and external stakeholders who desire to influence welfare improvement (Shen & Zhu, 2011). Contingency theory argues that there is no best set of corporate social responsibility initiatives for boosting organizational benefits because they depend on the situation in an organization (Javed et al., 2020).

Summary

In short, the contingency theory posits that there is no one-size-fits-all approach to leadership and that the most effective leadership style depends on the specific situation. Fiedler's contingency theory is a well-known management model that posits that a leader's effectiveness is contingent upon the leader's interaction style and situation. The theory has several advantages, including its relative simplicity and empirical evidence supporting it. However, one of its main shortcomings is that it needs to provide the best fit in situations with multiple contingencies. More recently, the theory has been applied in an attempt to improve ethical and moral standards within an organization by promoting responsibility among leaders and positive influence over followers.

Cross-References

- [Ethics](#)
- [Leadership](#)

References

- Ayman, R., Chemers, M. M., & Fiedler, F. (1995). The contingency model of leadership effectiveness: Its levels of analysis. *Leadership Quarterly*, 6(2), 147–167. [https://doi.org/10.1016/1048-9843\(95\)90032-2](https://doi.org/10.1016/1048-9843(95)90032-2).
- Badaracco, J. L., Jr. (2002). *Leading quietly: An unorthodox guide to doing the right thing*. Boston: Harvard Business School Press.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership. *Leadership Quarterly*, 10(2), 181–217. [https://doi.org/10.1016/S1048-9843\(99\)00016-8](https://doi.org/10.1016/S1048-9843(99)00016-8).
- Batillana, J., & Tiziana, C. (2012). Change agents, networks, and institutions: A contingency theory of organizational change. *Academy of Management Journal*, 55(2), 381–398. <https://doi.org/10.5465/amj.2009.0891>.
- Betts, S. C. (2003). Contingency Theory: Science Or Technology?. *Journal of Business & Economics Research (JBER)*, 1(8), 123–130. <https://doi.org/10.19030/jber.v1i8.3044>.
- Blake, R. R., & Mouton, J. S. (1982). Theory and research for developing a science of leadership. *Journal of Applied Behavioral Science*, 18(3), 275–291. <https://doi.org/10.1177/002188638201800304>.
- Burns, T., & Stalker, G. M. (1961). *The management of innovation*. London: Tavistock.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2–3), 127–168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7).
- Chesbrough, H. (2020). To recover faster from Covid-19, open up: Managerial implications from an open innovation perspective. *Industrial Marketing Management*, 88, 410–413. <https://doi.org/10.1016/j.indmarman.2020.04.010>.
- Collier, P. M., & Woods, M. (2011). A comparison of the local authority adoption of risk management in England and Australia. *Australian Accounting Review*, 57(21), 111–123. <https://doi.org/10.1111/j.1835-2561.2011.00126.x>.
- Donaldson, L. (2001). *The contingency theory of organizations*. Thousand Oaks: Sage. <https://doi.org/10.4135/9781452229249>.
- Fiedler, F. E. (1972). The effects of leadership training and experience: A contingency model interpretation. *Administrative Science Quarterly*, 17(4), 453–470. <https://doi.org/10.2307/2393826>.
- Gill, R. (2011). *Theory and practice of leadership*. London: Sage.
- Graeff, C. L. (1997). Evolution of situational leadership theory: A critical review. *The Leadership Quarterly*, 8(2), 153–170. [https://doi.org/10.1016/S1048-9843\(97\)90014-X](https://doi.org/10.1016/S1048-9843(97)90014-X).
- Grötsch, V. M., Blome, C., & Schleper, M. C. (2013). Antecedents of proactive supply chain risk management- A contingency theory perspective. *International Journal of Production Research*, 51(10), 2842–2867. <https://doi.org/10.1080/00207543.2012.746796>.
- Heery, E., & Noon, M. (2008). *A dictionary of human resource management* (2nd ed.). Oxford University Press. Retrieved from <https://www.oxfordreference.com/view/10.1093/acref/9780199298761.001.0001/acref-9780199298761>. Accessed 19 May 2022.
- Hersey, P., & Blanchard, K. H. (1977). *Management of organizational behavior – Utilizing human resources*. New Jersey: Prentice Hall.
- Hersey, P., & Blanchard, K. H. (1988). *Management and organizational behavior*. New Jersey: Prentice Hall.
- House, R. J., & Mitchell, T. R. (1974). Path-Goal theory of leadership. *Contemporary Business*, 3, 81–98.
- Howell, D., Windhal, C., & Seidel, R. (2010). A project contingency framework based on uncertainty and its consequences. *International Journal of Project Management*, 28, 256–264. <https://doi.org/10.1016/j.ijproman.2009.06.002>.
- Jago, A. J. (1982). Leadership: Perspectives in theory and research. *Management Science*, 28(3), 315–336. <https://doi.org/10.1287/mnsc.28.3.315>.

- Javed, M., Rashid, M. A., Hussain, G., & Ali, H. Y. (2020). The effects of corporate social responsibility on corporate reputation and firm financial performance: Moderating role of responsible leadership. *Corporate Social Responsibility and Environmental Management*, 27(3), 1395–1409. <https://doi.org/10.1002/csr.1892>.
- Kruger, M. P., & Hanson, B. J. (1999). A value-based paradigm for creating truly healthy organizations. *Journal of Organizational Change Management*, 12(4), 302–317. <https://doi.org/10.1108/09534819910282144>.
- Kruger, M. P., & Malan, L. C. (1993). Shifting paradigms: The valuing of personal knowledge, wisdom, and other invisible processes in organizations. *Journal of Management Inquiry*, 2(4), 391–398. <https://doi.org/10.1177/105649269324011>.
- Kruger, M., & Seng, Y. (2005). Leadership with inner meaning: A contingency theory of leadership based on the worldviews of five religions. *The Leadership Quarterly*, 16(5), 771–806. <https://doi.org/10.1016/j.leaqua.2005.07.007>.
- Lagstedt, A., & Dahlberg, T. (2018). *A contingency theory motivated frameworks to select information system development methods*. In Twenty-Second Pacific Asia conference on information systems, Japan, pp. 1–14. <https://aisel.aisnet.org/pacis2018/46>. Accessed 15 May 2022.
- Leister, A., Borden, D., & Fiedler, F. (1977). Validation of contingency model leadership training: Leader match. *The Academy of Management Journal*, 20(3), 464–470. <https://doi.org/10.5465/255420>.
- Luthans, F., & Stewart, T. I. (1977). A general contingency theory of management. *Academy of Management Review*, 2(2), 181–195. <https://doi.org/10.5465/amr.1977.4409038>.
- Maak, T. (2007). Responsible leadership, stakeholder engagement, and the emergence of social capital. *Journal of Business Ethics*, 74, 329–343. <https://doi.org/10.1007/s10551-007-9510-5>.
- Maak, T., & Pless, N. (2006). Responsible leadership in a stakeholder society – A relational perspective. *Journal of Business Ethics*, 66, 99–115. <https://doi.org/10.1007/s10551-006-9047-z>.
- Mango, E. (2018). Rethinking leadership theories. *Open Journal of Leadership*, 7(1), 57–88. <https://doi.org/10.4236/ojl.2018.71005>.
- Mitchell, T. R., Biglan, A., Oncken, G. R., & Fiedler, F. E. (1970). The contingency model: Criticism and suggestions. *The Academy of Management Journal*, 13(3), 253–267. <https://doi.org/10.2307/254963>.
- Northouse, P. G. (2013). *Leadership: Theory and practice*. Thousand Oaks: Sage.
- Northouse, P. G. (2018). *Introduction to leadership: Concepts and practice*. Thousand Oaks: Sage.
- Otley, D. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, 5, 413–428. [https://doi.org/10.1016/0361-3682\(80\)90040-9](https://doi.org/10.1016/0361-3682(80)90040-9).
- Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management Accounting Research*, 31, 45–62. <https://doi.org/10.1016/j.mar.2016.02.001>.
- Shen, J., & Zhu, J. C. (2011). Effects of socially responsible human resource management on employee organizational commitment. *International Journal of Human Resource Management*, 22(15), 3020–3035. <https://doi.org/10.1080/09585192.2011.599951>.
- Shenkar, O., & Ellis, S. (2021). The rise and fall of structural contingency theory: A theory's 'autopsy'. *Journal of Management Studies*, 59(3), 782–818. <https://doi.org/10.1111/joms.12772>.
- Silva, M. Z., & Francisco, C. F. (2019). The influence of contingencies factors strategy and structure in the enterprise risk management in a hospital. *Gestão & Produção*, 26(1), e2315. <https://doi.org/10.1590/0104-530X2315-19>.
- Sousa, R., & Voss, C. A. (2008). Contingency research in operations management practices. *Journal of Operations Management*, 4(11), 697–713. <https://doi.org/10.1016/j.jom.2008.06.001>.
- Stogdill, R. (1974). *Handbook of leadership: A survey of theory and research*. New York: The Free Press.
- Valeri, M. (2021). *Organizational studies – Implications for the strategic management*. Cham: Springer.
- Verkerk, P. J. (1990). *Fiedler's contingency model of leadership effectiveness: Background and recent developments* (OCTO-report; Vol. 9002). Eindhoven University of Technology. <https://pure.tue.nl/ws/portalfiles/portal/4271307/352989.pdf>. Accessed 20 May 2022.
- Voegtlin, C., Frisch, C., Walther, A., & Schwab, P. (2020). Theoretical development and empirical examination of a three-roles model of responsible leadership. *Journal of Business Ethics*, 167, 411–431. <https://doi.org/10.1007/s10551-019-04155-2>.
- Vroom, V. H., & Jago, A. G. (1978). On the validity of the Vroom-Yetton model. *Journal of Applied Psychology*, 63(2), 151–162. <https://doi.org/10.1037/0021-9010.63.2.151>.
- Vroom, V. H., & Jago, A. G. (1988). *The new leadership: Managing participation in organizations*. New Jersey: Prentice Hall.
- Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.
- Waldman, D. A., & Galvin, B. M. (2008). Alternative perspectives of responsible leadership. *Organizational Dynamics*, 37(4), 327–341. <https://doi.org/10.1016/j.orgdyn.2008.07.001>.

Contingency Theory of Leadership

► Contingency Theory

Contingency View

- [Contingency Theory](#)
-

Continual Performance

- [Sustainable Performance](#)
-

Continuous Improvement

- [Kaizen](#)
-

Continuous Performance

- [Sustainable Performance](#)
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Control-Cash Flow Divergence Mechanisms

- [Control-Enhancing Mechanisms \(CEMs\)](#)
-

Control-Enhancing Mechanisms (CEMs)

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Synonyms

[Control-cash flow divergence mechanisms](#); [Disproportional ownership mechanisms](#); [Mechanisms of separation between ownership and control](#); [Ownership structures](#)

Definition

Control-enhancing mechanisms (also called CEMs) identify the governance devices responsible for increasing the corporate control (Lin 2017; Saggese et al. 2016). Such mechanisms foster the deviation from the proportionality principle (i.e., “one share-one vote” rule – OSOV rule) between cash flow rights and voting rights (Adams and Ferreira 2008; Burkart and Lee 2008; Grossman and Hart 1988) and concentrate the firm control in the hands of a limited group of shareholders (i.e., blockholders/majority shareholders) (Deminor Rating 2005; Institutional Shareholder Services 2007).

It is worth noting that the proportionality principle postulates that one share should imply the right to exercise one vote in order to allow the effective allocation of company resources by properly aligning ownership rights and risks to investors (Adams and Ferreira 2008; Burkart and Lee 2008; Grossman and Hart 1988). Nevertheless, in firms characterized by CEMs, the diversion from this rule hampers the efficiency of the market for corporate control (Cuomo et al. 2012) and leads to identify two groups of shareholders with differential ownership rights (OECD Steering Group on Corporate Governance 2007). As a result, the presence of CEMs arises strong agency costs (Fama and Jensen 1983; Jensen and Meckling 1976; La Porta et al. 1999) since the disproportional ownership due to the use of these devices exacerbates the misalignment between the interests of blockholders and minority shareholders (Saggese 2018).

On the basis of these premises, the chapter provides an overview on control-enhancing mechanisms and sheds light on the issues raised by the related adoption.

What We Know and What We Have Learned on CEMs

Control-enhancing mechanisms can be classified in some categories. A first group comprises the devices able to enhance the blockholders’ control by leveraging the voting power (e.g., pyramidal

structures). A second cluster consists of CEMs that lock-in the company control (e.g., priority shares, depository certificates, voting right ceilings, ownership ceilings, and supermajority provisions), while another group includes the mechanisms that play as coordination devices (e.g., voting trusts). Finally, a last cluster encompasses the disproportional ownership mechanisms able to separate the company ownership from its control by leveraging the legal structures of the firm (e.g., partnerships limited by shares) or exploiting privatization processes (e.g., golden shares) (Burkart and Lee 2008; Institutional Shareholder Services 2007).

In this regard, a fruitful stream of research has mainly examined pyramidal structures (Almeida and Wolfenzon 2006a, b), voting trusts (Gianfrate 2007), golden shares (Bel and Trillas 2005; Boubakri et al. 2009; Hanousek et al. 2007), cross ownership (Bebchuk et al. 2000; Chapelle and Szafarz 2005), non-voting shares, and dual class shares (Nicodano 1998; Ødegaard 2007). However, less attention has been devoted to depository certificates, voting right ceilings, ownership ceilings, supermajority provisions, and partnership limited by shares as consequence of the limited use of such control-enhancing mechanisms (Institutional Shareholder Services 2007).

Overall, the latest debate on CEMs has emerged when the studies on ownership structures have started to focus on the separation between ownership and control due to the diversion from the proportionality principle. Since then, the interest of practitioners and academics has grown significantly (Saggese et al. 2016). In particular, it has steadily boosted after the wave of scandals that in the past decades has increased the pressures toward effective policy-making interventions aiming to improve the protection of minority interests. Indeed, CEMs have attracted the policy-makers' attention especially during the recent wave of reforms of financial market regulations and the harmonization process of the European commercial law (Allen et al. 2017; Cuomo et al. 2012; Saggese et al. 2016; Saggese 2018). Moreover, the debate on CEMs has been strongly prompted by the reports on the takeover bids

(Winter et al. 2002) and the application of the one share-one vote rule in Europe (Deminor Rating 2005; Institutional Shareholder Services 2007).

However, the research efforts on these devices date back to the studies on the legal foundation of disproportional ownership carried out by the North American Law Schools (e.g., Harvard, Yale) between the end of the nineteenth and the beginning of the twentieth century (Baldwin 1891; Finkelstein 1926; Harriman 1904; Smith 1922; Wormser et al. 1918). Since then the academics' interest has increased over time, but it has been characterized by a shift of its focus in 1929 when the Wall Street crash has emphasized the financial implications of the ownership structure selection (Saggese et al. 2016). Few years later, the seminal work of Berle and Means (1932) on the separation between ownership and control in the US has further boosted the research on CEMs. Nevertheless, from the mid-1930s onward, the adoption of fiscal restrictive regulations (e.g., regulation on intercompany dividends in 1935) has fostered the disappearance of certain types of disproportional ownership mechanisms (e.g., pyramidal structures) and has braked on the studies on CEMs (Morck and Yeung 2005). As a result, for a long time, the research on control-enhancing mechanisms has been far from appearing as a body of knowledge accumulating from year to year (Saggese et al. 2016).

A new encouragement to the studies on the topic can be traced back to 1976 when Jensen and Meckling published their seminal paper on the theory of the firm. Indeed, by applying the agency framework to develop the theory of ownership structure, the above-mentioned article has represented a turning point for the research on disproportional ownership for some reasons (Saggese et al. 2016). First of all, it has contributed to the application of the agency approach as the most common lens to explain the use of CEMs. In addition, it has shifted the focus of the debate on disproportional ownership toward the European markets (Bergström and Rydqvist 1990; Nicodano 1998; Zingales 1994), where control-enhancing mechanisms are considered as proper solutions to foster company growth

by hindering the financial markets' underdevelopment (Saggese 2013, 2018).

On the basis of these premises, by relying on the conclusions of the seminal paper of Jensen and Meckling (1976), the academic discussion on CEMs has focused on the majority-minority shareholder conflict due to the separation between ownership and control (Saggese et al. 2016) and has interpreted the phenomenon through the second-type agency theory (Buzzacchi and Colombo 1996; Leech 1987). As a consequence, later studies on the topic have been mainly grounded on this specification of the agency framework to explain the owner-owner conflict that CEMs encourage (La Porta et al. 1999). In addition, prompted by the agency theory, the debate around disproportional ownership devices has moved toward the assessment of their pathological implications (Cheung and Gaa 1989; Smith and Amoako-Adu 1995). This is especially true for the entrenchment of controlling shareholders (Harris and Raviv 1988; Partch 1987) as scholars have focused on the opportunistic adoption of CEMs and on the factors that provide incentives to this phenomenon (Cheung et al. 2006; Friedman et al. 2003; Johnson et al. 2000).

In this regard, it is worth noting that the diversion from the proportionality principle due to CEMs may encourage blockholders to extract private benefits of control and expropriate the interests of minority shareholders (Saggese 2013; 2018) as these mechanisms are able to mitigate the effectiveness of the market for corporate control (Manne 1965) and the limited ownership concentration (Shleifer and Vishny 1997).

Based on these premises, the debate on control-enhancing devices has been strongly influenced by two lines of inquiry. The first one has explored the determinants of disproportional ownership, while the second one has investigated the effects of the tools under scrutiny (Adams and Ferreira 2008; Chernykh 2008; Morck et al. 2005).

As for the determinants of CEMs, the discussion has focused on the incentives to use the disproportional ownership mechanisms in order to extract private benefits of control. In particular, the scholarly debate has examined mixed outcomes of the entrenchment effect and has mainly

analyzed the tunneling practices in terms of expropriation of cash flows, assets and equity, self-dealing transactions/activities, and collusion with managers (Almeida and Wolfenzon 2006a; Bhaumik and Gregoriou 2010; Burkart et al. 1997; Cheung et al. 2006; Friedman et al. 2003). Moreover, academics have deeply investigated the factors that influence the opportunistic use of CEMs. In this regard, studies have strengthened the notion that the regulatory framework matters for the use of disproportional ownership devices (Bel and Trillas 2005; Holmen and Knopf 2004; Watanabe 2002). From the end of the 1990s, a strong contribution to this discussion has been provided by the articles authored by La Porta and colleagues on the relationship between investor protection and corporate ownership (La Porta et al. 1998, 1999) as the "law and finance" arguments have strongly fueled the debate on control-enhancing mechanisms. In line with these conclusions, the scholarly research has documented that the limited protection of minority investors arises governance and ownership issues as it provides incentives to the deviation from the proportionality principle through CEMs (Claessens et al. 2000; Cuomo et al. 2012; Faccio et al. 2010; Fan and Wong 2002; Masulis et al. 2011; Mengoli et al. 2009).

In the first decade of 2000s, the focus on the implications of investor protection for the use of CEMs has been also witnessed by the interest of practitioners and policy-makers to provide a comprehensive picture of disproportional ownership devices to foster the harmonization process of commercial and financial market regulations. This is especially true in Europe where the strong presence of CEMs has led policy-makers to assess the application of the proportionality principle in the European countries (Deminor Rating 2005; OECD Steering Group on Corporate Governance 2007). One of the most illustrative examples of this phenomenon has been provided by the attempt to map the existing deviations from the one share-one vote rule across the European listed companies by the Institutional Shareholder Services (ISS), the Shearman & Sterling LLP, and the European Corporate Governance Institute (ECGI) (Institutional Shareholder Services 2007).

The studies that have been published after the above-mentioned efforts can be divided in two groups, as they deal with corporate ownership characteristics or particular CEMs (Azofra and Santamaría 2011; Bena and Ortiz-Molina 2013; Gompers et al. 2010; Intrinsicano 2012; Langlois 2013). However, a strong contribution to the debate has been also provided by the research on the simultaneous adoption of different kinds of CEMs (Bortolotti and Faccio 2008), especially in terms of devices for leveraging voting power, to lock-in the company control (Carvalho da Silva and Subrahmanyam 2007; Gompers et al. 2010) and CEMs related to privatization processes (Borisova et al. 2012; Zhang 2014).

In addition, scholars have mainly explored the role of context and the influence of owner identity (e.g., Institutional investors, families, State, banks) on the choice of using control-enhancing mechanisms (Azofra and Santamaría 2011; Craninckx and Huyghebaert 2015; Di Carlo 2014; Kang et al. 2006; Villalonga and Amit 2006). In this regard it is worth noting that, as documented by the literature in this tradition, both factors can separately or jointly affect goals and incentives to deviate from the proportionality principle through such devices (Ben-Amar and Andre 2006; Kang et al. 2006; King and Santor 2008; Levy 2009).

Turning the attention to the studies on the effects of CEMs, academics have discussed both positive and negative implications of disproportional ownership (Almeida and Wolfenzon 2006b; Enriques and Volpin 2007; Friedman et al. 2003; Johnson et al. 2000; Jung et al. 2009; Kim et al. 2007; Morck 2005) by combining the agency and the socio-cognitive frameworks (Azofra and Santamaría 2011; Luo and Liu 2014). Indeed, scholars have been strongly committed in advancing the knowledge on the influence of disproportional ownership mechanisms on corporate governance and firm outcomes (Bennedsen and Nielsen 2010; Intrinsicano 2012; Saggese 2013). In particular, academics have examined the relationship between CEMs and company performance, drawing mixed conclusions on the role of these devices (Azofra and Santamaría 2011; Cronqvist

and Nilsson 2003; Maury and Pajuste 2005; Thomsen and Pedersen 2000).

A first strand of studies highlights that the disproportional ownership mechanisms prompt value-decreasing decisions able to limit the company performance (Bae et al. 2002; Bebchuk et al. 2000; Bianco and Casavola 1999; Chung and Chan 2012; Claessens et al. 2002; Liu and Sun 2005). In line with these conclusions, the empirical evidence documents two main effects. On the one hand, it highlights that firms ruled by CEMs are willing to make suboptimal choices to improve the blockholders' power (Johnson et al. 2000; Wei and Zhang 2008). On the other hand, it emphasizes that the financial market tends to hinder the performance of companies where disproportional ownership devices are in place due to the opacity of the related governance structures (Cheung et al. 2006; King and Santor 2008; Roosenboom and Schramade 2006; Villalonga and Amit 2009).

Opposite effects are documented by a second strand of studies suggesting that control-enhancing mechanisms improve firm results (Almeida and Wolfenzon 2006b) for a number of reasons. In particular, literature in this tradition suggests that, in given circumstances, the presence of controlling owners due to disproportional ownership is able to mitigate the agency conflicts between managers and owners (Carvalho 2012; González et al. 2012; Hanousek et al. 2007). Moreover, when the external financing is limited, the use of specific CEMs turns out to be a proper solution to address the issue under scrutiny. This is especially true for pyramidal structures as this kind of mechanisms is able to exploit the financing advantages for setting up new firms (Bena and Ortiz-Molina 2013). In addition, companies ruled by such CEMs are also characterized by internal capital markets that can effectively allocate resources among the related companies (Almeida and Wolfenzon 2006b).

Thereby, while the first strand of studies has interpreted disproportional ownership devices as tools able to expropriate the wealth of minority shareholders (Gianfrate 2007; Morck et al. 2005; Riyanto and Toolsema 2008), the second line of inquiry has emphasized their ability to support the

business and the economic growth in many countries (Becker-Ritterspach and Bruche 2012; Lin 2012; Saggese 2013).

This twofold interpretation can be explained taking into consideration that the CEMs' ability to be beneficial to firms depends on the forces and factors that shape the related use by limiting the incentives of blockholders to extract private benefits of control to the detriment of minorities.

Such circumstance is confirmed by the recent scholarly interest around the identification of proper solutions aiming to overcome the distortions of disproportional ownership (Hong 2013; Jog et al. 2010; Jung et al. 2009). Indeed, following a "law and finance approach," academics have reaffirmed the pivotal role played by the legal regulation in place to limit the conflicts and the opportunistic use of disproportional ownership (Cuomo et al. 2012; Liu and Magnan 2011; Saggese 2018).

Grounding on these premises, the ongoing debate around CEMs has shifted beyond the boundaries of the corporate governance domain and has been significantly fueled by practitioners and policy-makers involved in the harmonization process of the commercial law in Europe (Institutional Shareholder Services 2007; Lin 2017; Saggese 2018). The related policy-making interventions have tried to limit the corporate distortions due to the deviation from the proportionality principle and have spawned a new trend in the debate on CEMs in order to support the proper use of such mechanisms by promoting transparency and competitiveness of firms ruled by disproportional ownership devices (Cuomo et al. 2012; Saggese et al. 2016).

Summary

The chapter offers an overview on the characteristics and the governance issues of the ownership mechanisms that enhance the corporate control by deviating from the proportionality principle between cash flow rights and voting rights.

Cross-References

- [Agency Theory](#)
- [Auditors and Corporate Governance](#)
- [Corporate Governance](#)
- [European Corporate Governance Institute](#)
- [Shareholder Rights](#)

References

- Adams, R., & Ferreira, D. (2008). One share-one vote: The empirical evidence. *Review of Finance*, 12(1), 51–91.
- Allen, F., Jackowicz, K., Kowalewski, O., & Kozłowski, Ł. (2017). Bank lending, crises, and changing ownership structure in Central and Eastern European countries. *Journal of Corporate Finance*, 42, 494–515.
- Almeida, H. V., & Wolfenzon, D. (2006a). A theory of pyramidal ownership and family business groups. *The Journal of Finance*, 61(6), 2637–2680.
- Almeida, H. V., & Wolfenzon, D. (2006b). Should business groups be dismantled? The equilibrium costs of efficient internal capital markets. *Journal of Financial Economics*, 79(1), 99–144.
- Azofra, V., & Santamaría, M. (2011). Ownership, control, and pyramids in Spanish commercial banks. *Journal of Banking & Finance*, 35(6), 1464–1476.
- Bae, K., Kang, J., & Kim, J. (2002). Tunneling or value added? Evidence from mergers by Korean business groups. *The Journal of Finance*, 57(6), 2695–2740.
- Baldwin, S. E. (1891). Voting-trusts. *The Yale Law Journal Company*, 1(1), 1–15.
- Bebchuk, L. A., Kraakman, R., & Triantis, G. (2000). Stock pyramids, cross-ownership and dual class equity: The mechanisms and agency costs of separating control from cash-flow rights. In R. Morck (Ed.), *Concentrated corporate ownership*. Chicago: University of Chicago Press.
- Becker-Ritterspach, F., & Bruche, G. (2012). Capability creation and internationalization with business group embeddedness – The case of Tata Motors in passenger cars. *European Management Journal*, 30(3), 232–247.
- Bel, G., & Trillas, F. (2005). Privatization, corporate control and regulatory reform: The case of Telefonica. *Telecommunication Policy*, 29(1), 25–51.
- Bena, J., & Ortiz-Molina, H. (2013). Pyramidal ownership and the creation of new firms. *Journal of Financial Economics*, 108, 798–821.
- Ben-Amar, W., & Andre, P. (2006). Separation of ownership from control and acquiring firm performance: The case of family ownership in Canada. *Journal of Business Finance & Accounting*, 33(3–4), 517–543.
- Bennedsen, M., & Nielsen, K. M. (2010). Incentive and entrenchment effects in European ownership. *Journal of Banking & Finance*, 34(9), 2212–2229.

- Bergström, C., & Rydqvist, K. (1990). Ownership of equity in dual-class firms. *Journal of Banking & Finance*, 14(2–3), 255–269.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: The Macmillan Company.
- Bhaumik, S. K., & Gregoriou, A. (2010). ‘Family’ ownership, tunnelling and earnings management: A review of the literature. *Journal of Economic Surveys*, 24(4), 705–730.
- Bianco, M., & Casavola, P. (1999). Italian corporate governance: Effects on financial structure and firm performance. *European Economic Review*, 43(4–6), 1057–1069.
- Borisova, G., Brockman, P., Salas, J. M., & Zagorchev, A. (2012). Government ownership and corporate governance: Evidence from the EU. *Journal of Banking & Finance*, 36(11), 2917–2934.
- Bortolotti, B., & Faccio, M. (2008). Government control of privatized firms. *The Review of Financial Studies*, 22(8), 2907–2939.
- Boubakri, N., Cosset, J.-C., & Guedhami, O. (2009). From state to private ownership: Issues from strategic industries. *Journal of Banking & Finance*, 33(2), 367–379.
- Burkart, M., & Lee, S. (2008). One share – One vote: The theory. *Review of Finance*, 12(1), 1–49.
- Burkart, M., Gromb, D., & Panunzi, F. (1997). Large shareholders, monitoring, and the value of the firm. *The Quarterly Journal of Economics*, 112(3), 693–728.
- Buzzacchi, L., & Colombo, M. G. (1996). Business groups and the determinants of corporate ownership. *Cambridge Journal of Economics*, 20(1), 31–51.
- Carvalho, A. (2012). Do shareholder agreements affect market valuation? *Journal of Corporate Finance*, 18(4), 919–933.
- Carvalho da Silva, A., & Subrahmanyam, A. (2007). Dual-class premium, corporate governance, and the mandatory bid rule: Evidence from the Brazilian stock market. *Journal of Corporate Finance*, 13(1), 1–24.
- Chapelle, A., & Szafarz, A. (2005). Controlling firms through the majority voting rule. *Physica A: Statistical Mechanics and its Applications*, 355(2–4), 509–529.
- Chernykh, L. (2008). Ultimate ownership and control in Russia. *Journal of Financial Economics*, 88(1), 169–192.
- Cheung, C. S., & Gaa, J. C. (1989). Controlling opportunistic behavior in corporate governance: The role of disproportionate voting shares and coat-tail provisions. *Journal of Institutional and Theoretical Economics*, 145(3), 438–450.
- Cheung, Y. L., Rau, P. R., & Stouraitis, A. (2006). Tunneling, propping, and expropriation: Evidence from connected party transactions in Hong Kong. *Journal of Financial Economics*, 82(2), 343–386.
- Chung, H. M., & Chan, S. T. (2012). Ownership structure, family leadership, and performance of affiliate firms in large family business groups. *Asia Pacific Journal of Management*, 29(2), 303–329.
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1–2), 81–112.
- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57(6), 2741–2771.
- Craninckx, K., & Huyghebaert, N. (2015). Large shareholders and value creation through corporate acquisitions in Europe: The identity of the controlling shareholder matters. *European Management Journal*, 33(2), 116–131.
- Cronqvist, H., & Nilsson, M. (2003). Agency costs of controlling minority shareholders. *Journal of Financial and Quantitative Analysis*, 38(4), 695–719.
- Cuomo, F., Zattoni, A., & Valentini, G. (2012). The effects of legal reforms on the ownership structure of listed companies. *Industrial and Corporate Change*, 22(2), 427–458.
- Deminor Rating. (2005). *Application of the one share-one vote principle in Europe*. Brussels: Deminor.
- Di Carlo, E. (2014). Pyramids and the separation between direction and control of non-financial Italian family companies. *Journal of Management & Governance*, 18(3), 835–872.
- Enriques, L., & Volpin, P. (2007). Corporate governance reforms in continental Europe. *Journal of Economic Perspectives*, 21(1), 117–140.
- Faccio, M., Lang, L. H. P., & Young, L. (2010). Pyramiding vs leverage in corporate groups: International evidence. *Journal of International Business Studies*, 41(1), 88–104.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.
- Fan, J. P. H., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3), 401–425.
- Finkelstein, M. (1926). Voting trusts agreements. *Michigan Law Review*, 24(4), 344–369.
- Friedman, E., Johnson, S., & Mitton, T. (2003). Propping and tunneling. *Journal of Comparative Economics*, 31(4), 732–750.
- Gianfrate, G. (2007). What do shareholders’ coalitions really want? Evidence from Italian voting trusts. *Corporate Governance: An International Review*, 15(2), 122–132.
- Gompers, P. A., Ishii, J., & Metrick, A. (2010). Extreme governance: An analysis of dual-class firms in the United States. *The Review of Financial Studies*, 23(3), 1051–1088.
- González, M., Guzmán, A., Pombo, C., & Trujillo, M. A. (2012). Family firms and financial performance: The cost of growing. *Emerging Markets Review*, 13(4), 626–649.

- Grossman, S. J., & Hart, O. (1988). One share-one vote and the market for corporate control. *Journal of Financial Economics*, 20, 175–202.
- Hanousek, J., Kočenda, E., & Svejnar, J. (2007). Origin and concentration. *The Economics of Transition*, 15, 1–31.
- Harriman, E. A. (1904). Voting trusts and holding companies. *The Yale Law Journal*, 13, 109–123.
- Harris, M., & Raviv, A. (1988). Corporate governance: Voting rights and majority rules. *Journal of Financial Economics*, 20, 203–235.
- Holmen, M., & Knopf, J. D. (2004). Minority shareholder protections and the private benefits of control for Swedish mergers. *Journal of Financial and Quantitative Analysis*, 39(1), 167–191.
- Hong, H. A. (2013). Does mandatory adoption of international financial reporting standards decrease the voting premium for dual-class shares? *The Accounting Review*, 88, 1289–1325.
- Institutional Shareholder Services. (2007). *Report on the proportionality principle in the European Union*. ISS. http://ec.europa.eu/internal_market/company/docs/shareholders/study/final_report_en.pdf
- Intrigano, C. (2012). Control-enhancing mechanisms in Italian companies. *China-USA Business Review*, 11, 328–358.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- Jog, V., Zhu, P., & Dutta, S. (2010). Impact of restricted voting share structure on firm value and performance. *Corporate Governance: An International Review*, 18, 415–437.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American Economic Review*, 90, 22–27.
- Jung, K., Kim, B., & Kim, B. (2009). Tax motivated income shifting and Korean business groups (Chaebol). *Journal of Business Finance & Accounting*, 36, 552–586.
- Kang, H. C., Park, K. S., & Jang, H. (2006). Determinants of family ownership: The choice between control and performance. *Asia Pacific Journal of Financial Studies*, 35, 39–75.
- Kim, W., Lim, Y., & Sung, T. (2007). Group control motive as a determinant of ownership structure in business conglomerates: Evidence from Korea's chaebols. *Pacific-Basin Finance Journal*, 15, 213–252.
- King, M. R., & Santor, E. (2008). Family values: Ownership structure, performance and capital structure of Canadian firms. *Journal of Banking & Finance*, 32, 2423–2432.
- La Porta, R., Lopez de Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106, 1113–1155.
- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517.
- Langlois, R. N. (2013). Business groups and the natural state. *Journal of Economic Behavior & Organization*, 88, 14–26.
- Leech, D. (1987). Corporate-ownership and control – A new look at the evidence of Berle and Means. *Oxford Economic Papers, New Series*, 39, 534–551.
- Levy, M. (2009). Control in pyramidal structures. *Corporate Governance: An International Review*, 17, 77–89.
- Lin, W. T. (2012). Family ownership and internationalization processes: Internationalization pace, internationalization scope, and internationalization rhythm. *European Management Journal*, 30(1), 47–56.
- Lin, Y. H. (2017). Revisiting corporate control-enhancing mechanisms. In P. M. Vasudev & S. Watson (Eds.), *Global capital markets: A survey of legal and regulatory trends*. Cheltenham/Northampton: Edward Elgar.
- Liu, M., & Magnan, M. (2011). Self-dealing regulations, ownership wedge, and corporate valuation: International evidence. *Corporate Governance: An International Review*, 19, 99–115.
- Liu, G., & Sun, P. (2005). The class of shareholdings and its impacts on corporate performance: A case of state shareholding composition in Chinese public corporations. *Corporate Governance: An International Review*, 13(1), 46–59.
- Luo, J., & Liu, H. (2014). Family-concentrated ownership in Chinese PLCs: Does ownership concentration always enhance corporate value? *International Journal of Financial Studies*, 2, 103–121.
- Manne, H. G. (1965). Mergers and the market for corporate control. *Journal of Political Economy*, 73, 110–120.
- Masulis, R. W., Pham, P. K., & Zein, J. (2011). Family business groups around the world: Financing advantages, control motivations, and organizational choices. *The Review of Financial Studies*, 24(11), 3556–3600.
- Maury, B., & Pajuste, A. (2005). Multiple large shareholders and firm value. *Journal of Banking & Finance*, 29(7), 1813–1834.
- Mengoli, S., Pazzaglia, F., & Sapienza, E. (2009). Effect of governance reforms on corporate ownership in Italy: Is it still pizza, spaghetti, and mandolino? *Corporate Governance: An International Review*, 17(5), 629–645.
- Morck, R. (2005). How to eliminate pyramidal business groups: The double taxation of intercorporate dividends and other incisive uses of tax policy. *Tax Policy and the Economy*, 19, 135–179.
- Morck, R., & Yeung, B. (2005). Dividend taxation and corporate governance. *Journal of Economic Perspectives*, 19(3), 163–180.
- Morck, R., Wolfenzon, D., & Yeung, B. (2005). Corporate governance, economic entrenchment and growth. *Journal of Economic Literature*, 43(3), 655–720.
- Nicodano, G. (1998). Corporate groups, dual-class shares and the value of voting rights. *Journal of Banking & Finance*, 22(9), 1117–1137.
- Ødegaard, B. A. (2007). Price differences between equity classes. Corporate control, foreign ownership or liquidity? *Journal of Banking & Finance*, 31(12), 3621–3645.

- OECD Steering Group on Corporate Governance. (2007). *Lack of proportionality between ownership and control: Overview and issues for discussion*. <http://www.oecd.org/daf/ca/corporategovernanceprinciples/40038351.pdf>
- Partch, M. M. (1987). The creation of a class of limited voting common stock and shareholder wealth. *Journal of Financial Economics*, 18(2), 313–339.
- Riyanto, Y. E., & Toolsema, L. A. (2008). Tunneling and propping: A justification for pyramidal ownership. *Journal of Banking & Finance*, 32(10), 2178–2187.
- Roosenboom, P., & Schramade, W. (2006). The price of power: Valuing the controlling position of owner-managers in French IPO firms. *Journal of Corporate Finance*, 12(2), 270–295.
- Saggese, S. (2013). *La separazione fra proprietà e controllo. Profili aziendali e di governance*. Padua: Cedam.
- Saggese, S. (2018). *I meccanismi di potenziamento del controllo aziendale nella comunicazione economico-finanziaria*. Padua: Cedam.
- Saggese, S., Sarto, F., & Cuccurullo, C. (2016). Evolution of the debate on control enhancing mechanisms: A systematic review and bibliometric analysis. *International Journal of Management Reviews*, 18(4), 417–439.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783.
- Smith, M. (1922). Limitations on the validity of voting trusts. *Columbia Law Review*, 22, 627–637.
- Smith, B. F., & Amoako-Adu, B. (1995). Relative prices of dual class shares. *Journal of Financial and Quantitative Analysis*, 30(2), 223–239.
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689–705.
- Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417.
- Villalonga, B., & Amit, R. (2009). How are U.S. family firms controlled? *The Review of Financial Studies*, 22(8), 3047–3091.
- Watanabe, M. (2002). Holding company risk in China: A final step of state-owned enterprises reform and an emerging problem of corporate governance. *China Economic Review*, 13(4), 373–381.
- Wei, K. C. J., & Zhang, Y. (2008). Ownership structure, cash flow, and capital investment: Evidence from East Asian economies before the financial crisis. *Journal of Corporate Finance*, 14(2), 118–132.
- Winter, J., Schans Christensen, J., Garrido Garcia, J.M., Hopt, K.J., Rickford, J., Rossi, G., & Simon, J. (2002). *Report of the high level group of company law experts on issues related to takeover bids*. <https://doi.org/10.2139/ssrn.315322>.
- Wormser, I. M., Columbia, S., Review, L., & Feb, N. (1918). The legality of corporate voting trusts and pooling agreements. *Columbia Law Review*, 18, 123–136.
- Zhang, L. (2014). Corporate governance of Chinese state-controlled listed companies: A revisit through the lens of venture capital. *European Business Organization Law Review*, 15(1), 107–139.
- Zingales, L. (1994). The value of the voting right: A study of the Milan Stock Exchange experience. *The Review of Financial Studies*, 7(1), 125–148.

Controlling the Building Energy Footprint

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Introduction and Background

Carbon footprint of the utilization phase for different buildings continues to have a major role in defining the total carbon footprint for the life cycle of a building. Most part of the utilization phase carbon emissions are caused by the energy consumption, to run the building systems. The carbon footprint caused by the energy consumption of building systems can also be interpreted as the energy footprint of a building.

The following list (IEA 2018) highlights the importance and some trends of global buildings and construction sector in terms of energy demand and emissions:

- Buildings construction and operations play a dominant role in the clean energy transition, with 36% of global final energy use and nearly 40% of energy-related CO₂ emissions in 2017
- Global buildings sector energy use continues to grow, increases in population and floor area are and will be the principal factors of rising energy demand in buildings
- Buildings and construction sector emissions appear to have leveled off since 2015, a clean energy transition will enable a steady decrease in future emissions
- Global dialogue is supporting progress in developing policies for sustainable buildings.

Most countries have submitted nationally determined contributions (NDCs), many NDCs still lack specific actions

- Countries are continuing to implement and update building energy codes and certification policies. However, most expected future buildings growth will happen in countries that do not have mandatory energy codes and policies in place yet
- Investment in energy efficiency in buildings has slowed

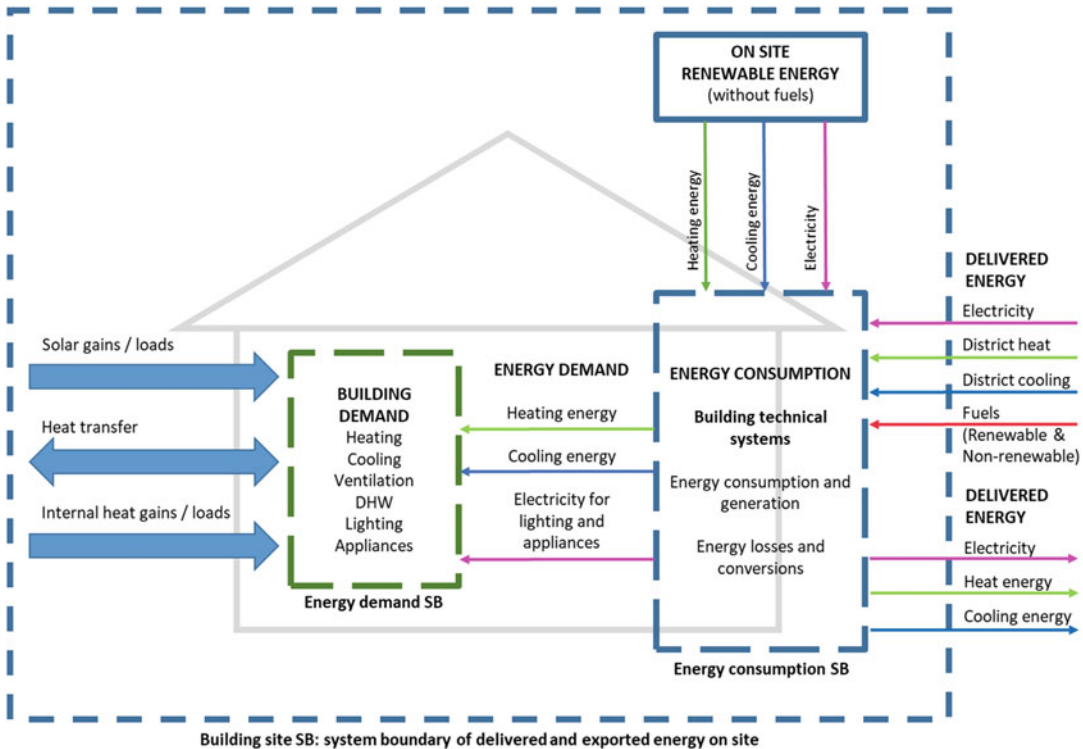
This entry presents the principles of determining and controlling the energy footprint of a building. The Finnish energy system is used as an example, including 100% access to electricity, customer's freedom to choose electricity origin from open market, and widespread utilization of district heating. However, the principles of energy balance of a building and energy options offered by energy markets can be applied also elsewhere.

Building Energy Balance

Controlling the energy footprint of a building means in practice controlling energy consumption, peak loads, and origin of energy consumed. To be able to do this, one should be able to define the energy balance for a specific building, including the actual energy demand for space heating/cooling, ventilation/air-conditioning, domestic hot water (DHW), lighting, and electrical appliances (Fig. 1).

In Fig. 1, the building energy demand is determined by the heat losses, solar and internal gains or loads, and electricity required for operating the buildings systems and devices. The building technical systems deliver the building energy demand by utilizing different energy sources. Energy, heat, or electricity can be produced on-site, or it can be delivered from elsewhere.

Each building has a specific energy demand, depending on the structures, materials, devices,



Controlling the Building Energy Footprint, Fig. 1 System boundaries for building site energy considerations. (Adapted from Kumitski 2013)

and technical systems it contains. Also, the location, orientation, and geometry of the building have effect on the energy demand. North and south slopes of hills provide different conditions, as do flat areas compared to hillsides. Furthermore, the climate determines whether heating or cooling is dominant in producing and maintaining the indoor climate quality.

Heat Losses and Gains

In cold climates, heating of spaces determines the major part of the total energy demand, along with heating of the supply air. In Fig. 2, energy consumption in Finnish households is presented.

The coldest hours of the year determine the design of the heating system. For example, in Finland the design outside temperature for building HVAC systems varies from -26°C to -38°C , from south to north. Since the normal indoor design temperature is $+21^{\circ}\text{C}$, the temperature difference between indoor and outdoor during winter can be even up to 60°C .

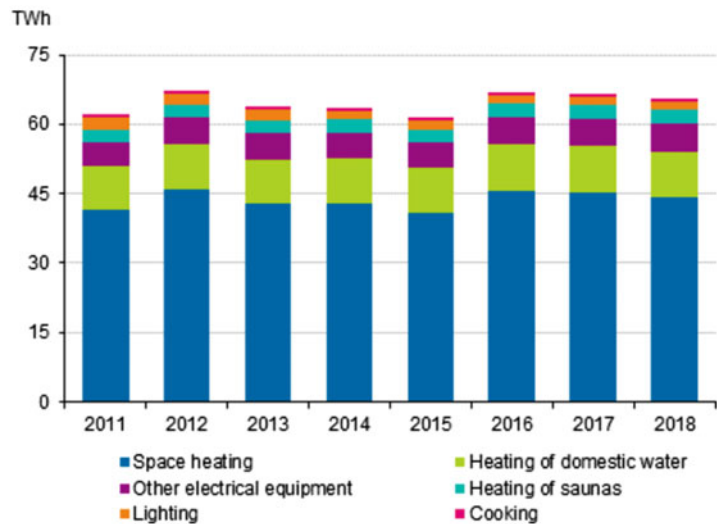
Energy consumption for space heating consists mainly on heat losses through walls, windows, doors, floor, and roof structures. The properties of the components of the building envelope, together with the temperature difference between outside air and inside air, determine the gross energy demand for space heating. In annual

energy demand calculations, the heat gains are subtracted from the gross energy demand. The typical gains are solar heat gains, heat produced by humans and animals inside, and heat gains from electrical appliances. The net demand has to be covered by some means of heating, for example, central water heating system connected to a district heating grid, or producing heat by heat pump(s).

In warm climates, elsewhere in summer, solar heat and heat from humans and animals become loads, instead of gains. Cooling is needed to maintain the temperature and relative humidity of indoor air at desired level. Compared to the heating demand in cold climates, energy demand for cooling is usually lower, since the temperature difference is smaller. For example, the temperature difference is only 15°C , when the temperature outside is $+40^{\circ}\text{C}$, and inside $+25^{\circ}\text{C}$. During hot weather, the indoor temperatures are usually allowed to be a little higher compared to the heating season, to avoid any health implications due to rapid changes in temperature when people move from outside to building, or vice versa. Passive cooling methods are recommended at the first level, the rest of the cooling demand requires often consumption of electricity, since the cooling technologies are usually applications of heat pump technology.

Controlling the Building Energy Footprint,

Fig. 2 Energy consumption in Finnish households 2011–2018. (OSF 2019)



Ventilation and Air-Conditioning

Air-conditioning system involves changing of indoor air, usually by supply and exhaust fans. Achieving and maintaining good indoor climate quality requires continuous change rate of indoor air, i.e., contaminated indoor air is replaced with fresh outdoor air. Supply and exhaust fans need to be operating all the time, although the air change rate can be varied according to the utilization rate of the building.

In cold climates, a large part of the heat content of exhaust air can be utilized in preheating of the supply air, taken from outside the building to replace the extracted air. Current heat recovery units can provide the annual average heat recovery efficiency in the order of 75–80%. This means significant decrease in the building net energy demand, compared to the situation where all of the incoming supply air has to be heated with additional energy from the outside temperature to indoor temperature, for example +21 °C.

National building codes determine the required air change rates for each type of inside spaces. In Finland, the designer can choose the applicable indoor quality class, from three classes (S1, S2, and S3), and then design the outside air flows according to the quality class. The better the class, the greater the air flows. It has been studied (Allen et al. 2016; CABA 2017) that increasing the air change rate improves the efficiency of working and decreases the amount of sick leaves.

Filtration of supply air (also extract air) is important, especially in densely populated areas. Increasing the filtration efficiency means more electricity consumption, as the pressure difference over the filters increases. However, better filtration improves the quality of the indoor air.

Domestic Hot Water

Domestic hot water is needed mainly for maintaining hygiene, and cooking. Basically, the heat energy demand is more or less constant throughout the year, with some variation between the seasons – mostly from the possible changes in the occupancy rate of indoor spaces. In cold climates, hot showers are common during winter time, during the hot periods the hot water consumption might be a little lower. Also, the

occupancy rate of an office, school, kindergarten, or a residential building is likely to be less during summer vacation season than in winter.

In Finland, domestic water is usually acquired from municipal distribution system, or in rural areas, from separate wells. DHW is produced from cold water by heating it from appr. +5–10 °C to +55–65 °C. The DHW temperature should in all cases be at least +55 °C, to prevent the legionella bacteria growth inside the building water system. The upper limit in Finland is +65 °C, to avoid any burns caused by the hot water.

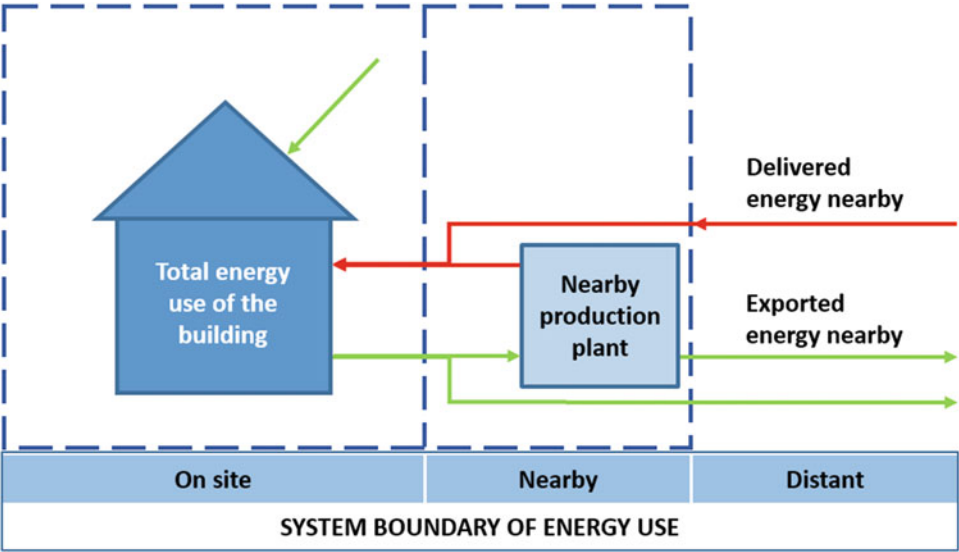
Appliances

In the context of defining the energy consumption for a building, all human activities are left out. In other words, only those appliances which are a part of the building systems, such as pumps and fans, are counted in. In controlling the energy footprint of a building, these appliances can generally be assumed to be controlled by the building automation system. Single appliances can be also controlled automatically individually, as long as it does not conflict with other appliances or systems.

Setting the Boundaries for Measuring the Energy Consumption

System boundaries for a building's energy consumption can be set in different ways, depending on the context. In Fig. 3, three different boundary layers for defining the net energy consumption for a building are described, in compliance with the EPBD (Directive on the energy performance of buildings) directive (EC 2018).

On-site boundary layer is normally utilized in defining the net energy consumption (total energy demand – renewable energy produced and utilized on-site) of a building. Renewable energy can be produced on building site from geo-, aero- and hydrothermal sources, to compensate the energy demand of the building. In some cases, also nearby produced renewable energy may be accepted to be included in the calculations, if the national legislation allows nearby energy production to be linked to the building. In these cases, the



Controlling the Building Energy Footprint, Fig. 3 Boundary layers of building’s energy balance. (Adapted from Kurnitski 2013)

actual production/generation capacity should be linked to the building with, e.g., long-term contracts. One solution here could be forming a renewable energy community or citizen energy community in neighborhood. Such energy communities are promoted by European directives (EC 2018, 2019). Outside of the nearby boundary layer is in practice the national electricity grid, or the local district heating grid not included to the nearby production and delivery.

Primary energy indicator is the sum of all delivered and exported energy into a single indicator, including electricity, district heat/cooling, and fuels. Primary energy factors are used in the calculation of primary energy indicator, energy consumption/demand is multiplied with the energy factor. The factors are nationally determined for different energy sources, to take account the national energy system structure, process efficiencies, distribution losses, and fuels utilized in the energy production. Fossil energy has a factor of 1, other sources are compared to this factor. Typically, electricity production has a factor >1 and district heating <1. As the national energy systems are developed to more efficient and renewable based, the factors are updated to

lower level. This will further decrease the primary energy indicator values for buildings in general.

Table 1 shows different options on how to utilize different boundary layers in order to reach the zero energy building (ZEB) status for a building.

Controlling the Building Energy Footprint Is Controlling Energy Consumption, Peak Loads, and Origin

Controlling a building’s energy footprint is in practice controlling the amount of primary energy needed to compensate the energy demand of the building. In other words, controlling energy footprint is also controlling carbon footprint of energy consumption.

Energy demand of building systems can be controlled, up to a certain point, without the residents noticing it, or feeling too much discomfort. Controlling energy demand (consumption) requires automated building systems, and in many cases information from energy markets. This means, for example, that during a period of expensive energy hours heating of floor slab can

Controlling the Building Energy Footprint, Table 1 Zero energy building (ZEB) renewable energy supply option hierarchy

Option no.	ZEB supply-side options	Examples
0	Reduction of site energy use through low-energy building technologies	Daylighting, high-efficiency HVAC equipment, natural ventilation, evaporative cooling, etc.
	On-site supply options	
1	Use of renewable energy sources available within the building's footprint	PV, solar hot water, and wind located on the building
2	Use renewable energy sources available at the site	PV, solar hot water, low-impact hydro, and wind located on-site, but not on the building
	Off-site supply options	
3	Use of renewable energy sources available off-site to generate energy on-site	Biomass, wood pellets, ethanol, or biodiesel that can be imported from off-site, or waste streams from on-site processes that can be used on-site to generate electricity and heat
4	Purchase of off-site renewable energy sources	Utility-based wind, PV, emissions credits, or other "green" purchasing options; hydroelectric is sometimes considered

Source: Torcellini et al. (2006)

be turned off for some time, and use the stored heating energy for heating. The heat storage can be charged again with less expensive energy.

Energy Origin Versus Footprint

The origin of energy consumed in the building determines the actual footprint of the consumption. The whole energy chain has to be taken into account, when the footprint is calculated. The chain includes extraction of the fuels used in production, losses in production/generation, and losses in distribution and losses in building systems.

Peak Demand Periods

Controlling the peak loads of a building can be even more of interest than controlling annual energy consumption. This is due to the structure of the heat and/or electricity production system. The higher the total energy consumption in the buildings connected to the grid, the more production units have to produce energy to the grid.

The time constant (the time during which the customer does not notice a change in service, when there is a failure in the service chain) in heating grids is normally not critical (in the order of hours), since heat is normally transported via water, and the whole grid forms a heat storage which operates as a buffer in failure situations.

In electricity grid, the balance between generation and demand has to be maintained constantly. This is done by balancing the loads in the grid and the production. Due to the nature of electricity consumption (electric loads are often on/off loads, appearing and disappearing suddenly), time constants in electricity grids are much smaller compared to heat grids, in the order of milliseconds.

The production plants can be divided in four categories:

- Base load plants (operating almost constantly, with almost constant output)
- Middle load plants (operating long periods, with reasonably high efficiency)
- Peak load plants (operating typically some days annually, using normally fossil fuels)
- Reserve load plants (in case that the local/national capacity cannot otherwise be met)

Peak demand is, by the definition, the load (basic SI unit: watt) which occurs during a period of maximum energy demand. In heating grids, this is usually the coldest time of the year, especially the coldest hours of the coldest period. During the peak load, also peak load plants are being operated, on top of the base load and intermittent load plants. Usually, the peak load plants use fossil

fuels, such as natural gas or light fuel oil, thus they have an effect of the carbon footprint of consumed heat energy.

Electricity Versus Heat

Electricity and heat consumption should be considered separately in energy balance considerations. Electricity is more versatile than district heat in building energy applications, as it can be utilized in all energy requiring processes. Also, electricity can be transported from distant production sites with fairly low transportation losses, whereas heat energy is always more or less a local product, due to its higher transportation losses. Heating of spaces involves time constants, which are in the order of tens of minutes, or hours – instead of timescale of milliseconds, which is required to maintain the balance between consumption and generation in electricity network.

Combined heat and power (CHP) production is commonly utilized in cold climates, generating heat for district heating purposes and electricity for electricity market. The advantage of CHP is the high efficiency of the generation process, up to 90%. Compared to a situation, where the same amount of heat and electricity would be generated by combustion in separate units, the overall efficiency of generation is higher with CHP. On the other hand, renewable electricity can also be generated by hydro-, wind-, or solar plants.

Demand Side Management (DSM) and Demand Response (DR) in Controlling the Energy Footprint of a Building

Demand response means the change of electricity load by final customers from their normal or current consumption patterns in response to market signals, including in response to time-variable electricity prices or incentive payments, or in response to the acceptance of the final customer's bid to sell demand reduction or increase at a price in an organized market (EC 2019).

Demand side management (DSM) is a utility action that reduces or curtails end use equipment or processes. DSM is often used in order to reduce customer load during peak demand and/or in times of supply constraint. DSM includes

programs that are focused, deep, and immediate such as the brief curtailment of energy-intensive processes used by a utility's most demanding industrial customers, and programs that are broad, shallow, and less immediate such as the promotion of energy-efficient equipment in residential and commercial sectors (EIA 2020).

DSM can take place either by user adaptation, i.e., by changing habits, or by automated DR applications utilizing IoT (Internet of Things) technologies. In this case, the user does not necessarily even notice when the DR operations are active.

Benefits of DR from the viewpoint of the controlling of the energy footprint of the building are increased self-consumption of locally generated energy, reducing the peak power, and favoring the RES in case of purchased energy (using energy in such time when RES is available from grid). Typically, all these benefits are also lowering the energy-related costs.

Service Quality Versus Energy Footprint

Energy consumption in buildings should be considered together with the quality of the service, not separately. Indoor climate is the basic service of all buildings, which involve human activities. Therefore, it is important to consider also what could be gained with improved indoor air quality, for example. For example, improving indoor air quality in offices usually means more automated control of indoor temperatures (heating/cooling), controlling CO₂ levels, increased air changes rates, etc. It can also involve better filtration of supply air, or adding natural lighting sources. Adding these features to a system will probably increase energy consumption in the building per se, but they will also increase the quality of indoor climate. Improving indoor climate quality decreases the amount of sick leaves in working environments, and increases the productivity.

Controlling the energy footprint should be also considering the quality of the service, combined to the consideration of the energy origin. In an ideal situation, with abundance of renewable energy sources, the service quality could be maximized with maximum economical and health impacts.

Factors of Energy Footprint Control

The main factors determining the energy demand for a building can be listed as follows:

- Location: Climate determines the demand for heating and cooling energy
- Building position: Utilization of natural light, solar gains/loads, valley vs. hill, etc.
- Energy-efficient building envelope: Minimized heat losses, maximized gains, minimized cold bridges, and minimized moisture risks in structures
- Indoor climate quality: Comfortability, productivity, and healthiness
- Affordable life cycle costs

In addition to the above, the most important factors in determining, and minimizing, the energy footprint for a building could be listed as follows:

- As high as possible service quality/consumed energy ratio
- As high as possible on-site/nearby RE generation
- As high as possible RER (renewable energy ratio) for acquired energy
- Utilization of DR opportunities to lower the energy costs, and to create additional value for the energy distribution/transmission structure, through peak shaving and shifting

Boundary layers are of importance, when steering mechanisms for improving energy efficiency in buildings are planned and implemented. For example, in the case if the excess on-site renewable energy generation (energy export through the boundary layer) is not rewarded, it most likely leads to a situation where solar power investments are lower. On the other hand, if the excess generation is rewarded, larger solar plants become more attractive. Furthermore, if nearby renewable energy is allowed to be calculated in the building's energy balance, it could compensate the lack of building-dedicated solar power units. In the case of abundant renewable energy

from the grid, investments on smaller renewable energy units would not be needed.

Fluctuations on energy demand, caused by different weather throughout the year and behavioral patterns of people, are the greatest challenge in achieving 100% renewable energy system. Fluctuations occur in different time scales, from daily to annual fluctuations. This means, in practice, that many energy systems operate at least part of the time with lower efficiency, compared to the nominal performance level. Shaping the demand as closer to constant, throughout the fluctuations, would benefit the energy system, as generation units could be designed smaller, and their performance would be better. Also, the demand for investments in the energy system would be lower.

In Nordic environment the outside temperatures vary greatly throughout the year, resulting a significant imbalance between annual peaks and lows. The availability of renewable energy sources, mainly hydro, wind, and solar power, is not constant throughout a year. Furthermore, the momentary demand and generation capacity of renewables are rarely equal. Hence, demand and renewable generation do not have the same pattern. This means that storages are needed, if renewable generation is expected to cover the annual peaks, usually during the coldest period. Storages could in principal be centralized, or decentralized. The main challenge in storage technologies is how to store energy with low losses and costs over seasons.

Energy footprint management of a building requires the understanding of the relevance of building structures, available building technologies, and indoor climate quality factors as parts of energy demand determination. Also, it requires understanding of regional and national energy systems and markets, and their interconnections to life cycle cost management. All the actors in the energy chain, from fuel providers to the consumer, including energy producers, distributors, and service providers, as well as legislators and decision-makers, are needed in the transformation process from the old inefficient fossil energy-based system to the future 100% renewable energy-efficient energy system.

Summary

In this chapter, the principles of determining and controlling the energy footprint of a building have been described. Determining the footprint requires recognizing the building's energy flows, in and out. Energy is required in heating and/or cooling, DHW heating, for appliances. In addition, renewable energy, heat or electricity, can also be produced and utilized on-site. This can decrease the amount of energy to be purchased from the electricity market, or local district heating supplier. This usually helps in decreasing the carbon footprint of a building, since purchased energy often is produced using at least some amount energy sources that result carbon emissions.

Benefits of demand response from the viewpoint of the controlling of the energy footprint of the building are increased self-consumption of locally generated energy, reducing the peak power, and favoring the RES in case of purchased energy (using energy in such time when RES is available from grid). Typically, all these benefits are also lowering the energy-related costs.

Energy footprint management of a building requires the understanding of the relevance of building structures, available building technologies, and indoor climate quality factors as parts of energy demand determination. Also, it requires understanding of regional and national energy systems and markets, and their interconnections to life cycle cost management.

References

- Allen, J. G., MacNaughton, P., Satish, U., Santanam, S., Vallarino, J., & Spengler, J. D. (2016). Associations of cognitive function scores with carbon dioxide, ventilation, and volatile organic compound exposures in office workers: A controlled exposure study of green and conventional office environments. *Environmental Health Perspectives*, 124(6), 805–812. <https://doi.org/10.1289/ehp.1510037>.
- CABA (Continental Automated Buildings Association). (2017). Improving organizational productivity with building automation systems. Research Report.
- EC (European Commission). (2018). Directive 2018/2001 on the promotion of the use of energy from renewable sources. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018L2001>
- EC (European Commission). (2019). Directive 2019/944 on common rules for the internal market for electricity. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0944>
- EIA (U.S. Energy Information Administration). (2020). Glossary. Available: <https://www.eia.gov/tools/glossary/index.php?id=D#dsm>. Accessed 15 June 2020.
- IEA (International Energy Agency). (2018). Towards a zero-emission, efficient, and resilient buildings and construction sector. Global Status Report 2018. United Nations Environment Programme. ISBN No: 978-92-807-3729-5.
- Kurnitski, J. (2013, May). Technical definition for nearly zero energy buildings. *REHVA Journal*, 22–28.
- OSF (Official Statistics of Finland). (2019). *Energy consumption in households* [e-publication]. ISSN=2323-329X. 2018. Helsinki: Statistics Finland [referred: 16.6.2020]. Access method: http://www.stat.fi/ti/asen/2018/asen_2018_2019-11-21_tie_001_en.html
- Torcellini, P., Pless, S., Deru, M., & Crawley, D. (2006). Zero energy buildings: A critical look at the definition. In *ACEEE Summer Stud.* Pacific Grove.

Cross-References

- [Energy Efficiency in Public Building Procurement](#)
- [Energy Pricing for Households for Promoting Energy Efficiency](#)
- [Needs and Barriers for Local Energy Market Solutions](#)
- [Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators](#)

Conventions

- [Compliance](#)

Convivial Enterprises

- [Sustainable Companies](#)

Cooperation

► Policy and Military Force Sustainability

Cooperation and Open Innovation

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Synonyms

Collaboration; Interaction; Linkages; Network; Partnerships; Relationship

Definition

The notion of cooperation is associated to the relationship between firms or between firms and other actors to promote innovation and competitiveness. Cooperation is related to weak or strong ties, is the measure of embeddedness (Liu, 2013), and can be seen as the network density and linkages of different agents of innovation.

In what concerns the term open innovation, it signifies an open process in which an organization searches externally for knowledge resources to develop internal innovation. “It is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively” (Chesbrough, 2006:1). The partnerships or cooperation with external firms are important in this process (Di Benedetto, 2014) to internalize external knowledge or commercialize the knowledge internally developed (Chesbrough, 2005).

For Di Benedetto (2014), open innovation requires a strategic commitment on the part of the firm to improve its innovation performance

by complementing the internal knowledge with knowledge that exists externally.

Introduction

Cooperation and open innovation are two concepts associated with the process and dynamics of innovation. They emerge to emphasize that innovation is not an isolated process. Enterprises do not innovate by themselves; they depend on the milieu that makes them act (in the perspective of the “milieu innovateur” of Aydalot, 1980, 1985, 1986 and Camagni et al., 1999) and the performance of the several intervenients in interaction, in network and in system (from the perspective of the systems of innovation from Lundvall, 1992, 2017; Edquist, 1997 and Chaminade et al., 2018), and in the organization of the innovation process.

As refer Chaminade et al. (2018:1), “innovation is an interactive process where different kinds of knowledge are combined through communication” between different kinds of actors (users-producers of knowledge). The dynamics of innovation demand the interaction with different departments (within the company) and with the different subjects from the company’s external environment, in an open perspective and of creation of knowledge (Natário et al., 2010).

The open innovation model was developed by several authors (Bessant & Tidd, 2007; Chesbrough, 2003, 2005, 2006, 2007; Chesbrough & Appleyard, 2007; Di Benedetto, 2014; Naqshbandi & Kamel, 2017, among others) and emerges as an alternative to linear models of innovation that integrated internal research and development (R&D) efforts to develop new products or services and introduce this innovation in the market (Chesbrough, 2006; Naqshbandi & Kamel, 2017). This approach is based on building strategic innovation networks in order to promote innovation and competitiveness.

The studies of cooperation and open innovation search to understand how the firm mobilizes innovation sources internally and externally to stimulate and promote innovation and gain competitive advantages. The aim is perceiving the linkages and interactions between the actors of

innovation in innovation dynamics and which factors facilitate or not this open process.

Key Issues

In the open innovation approach, the firm mobilizes innovation sources inside and outside (Bessant & Tidd, 2007), cooperating and collaborating with external partners in the promotion of internal innovation capacity (Pavão et al., 2019).

On the territorial context, in this perspective of open innovation, the territory/region simultaneously looks at “in-out” and “out-in” scenarios (Natário, Couto, et al., 2012a) and combines internal and external ideas to create value in systems and structures territorially localized. Thus, the open innovation is understood as a structured form of behavior that can promote seeking for information from partners, while simultaneously hiding some of their regional information and requiring a strong trust between the different actors/agents of innovation (Natário, Couto, et al., 2012a).

The strong ties, the embeddedness, and network density (Liu, 2013) are vital to stimulate the cooperation and partnerships and generate flux of knowledge in order to internalize external ideas and to promote innovation and gain competitive advantage (Naqshbandi & Kamel, 2017).

To stimulate innovation and improve competitiveness, a high involvement and commitment of different actors is important. The linkages with clients and consumers as a source of information and the collaborations with public and laboratories and institutions strengthen the requirement for a more open innovation approach (Natário et al., 2012b). For Natário et al. (2012b:33), “the importance of this open innovation also appears to be associated with the networking of clients, as key elements of information in the innovation process. The experience of regions where companies have greater results shows that these connections could be stimulated through funding policies that promote the development of relationships and association with two special stakeholders: universities and clients.”

In open innovation paradigm, it is important to be part of a network and to enter “partnerships with external entities, like universities and research institutions (Perkmann & Walsh, 2007), suppliers (Emden et al., 2006) and other entities whose resources or capabilities a firm may seek” (Naqshbandi & Kamel, 2017:2).

Naqshbandi and Kamel (2017) pointed organizational culture as a facilitator or impediment of open innovation considering outbound and inbound as two types of open innovation.

The networks, partnerships, and cooperation facilitate the exploitation of knowledge and the processes of knowledge transferring and reproduce the corporate dimension, encompassing the firms, their clients, their suppliers, their competitors, and their partners (Natário et al., 2012a). The interactions between academy, government, R&D laboratories, and other institutional organizations facilitate the continuous exchange of knowledge. Both increase the ability and capacity of partners to promote innovation and gain sustainability and competitive advantages.

Future Directions

Future investigations may focus on the study of open innovation in the public sector. The growing success of open innovation practices in the administration of private companies, as explained by Chesbrough (2003), raises the question of the applicability of these principles to public sector organizations as referred by Freitas and Dacorso (2014).

Thus, a profitable field of future research would be the study of open innovation in public management.

Summary

This chapter discusses the concepts of cooperation and open innovation in a context of promoting territorial dynamics of innovation and competitiveness. In this process, interaction, linkages, networks and partnerships are highlighted.

Cross-References

- Corporate Sustainable Innovation
- Disruptive Innovation
- Eco-Sustainability Innovations Performance Measurement
- Innovation and Territorial Development
- Innovative Business Models
- Reverse Innovation
- Social Innovation
- Sustainable Business Model Innovation

References

- Aydalot, P. (1980). *Dynamique Spatiale et Développement Inégal*. Économica, 2ème édition, Paris: Collection Approfondissement de la Connaissance Economique. [https://books.google.pt/books?hl=pt-PT&lr=&id=HqFYDwAAQBAJ&oi=fnd&pg=PT140&dq=Aydalot,+P.+\(1980\).+Dynamique+Spatiale+et+D%C3%A9veloppement+In%C3%A9gal.+%C3%89conomica,+2%C3%A8me+%C3%A9dition,+Paris:+Collection+Approfondissement+de+la+Connaissance+Economique&ots=By-I32mlG3&sig=G5S24V2baBxPDaMU_u1GMxBm_Zs&redir_esc=y#v=onepage&q&f=false](https://books.google.pt/books?hl=pt-PT&lr=&id=HqFYDwAAQBAJ&oi=fnd&pg=PT140&dq=Aydalot,+P.+(1980).+Dynamique+Spatiale+et+D%C3%A9veloppement+In%C3%A9gal.+%C3%89conomica,+2%C3%A8me+%C3%A9dition,+Paris:+Collection+Approfondissement+de+la+Connaissance+Economique&ots=By-I32mlG3&sig=G5S24V2baBxPDaMU_u1GMxBm_Zs&redir_esc=y#v=onepage&q&f=false).
- Aydalot, P. (1985). *Économie Régionale e Urbaine*. Paris: Économica.
- Aydalot, P. (Ed.). (1986). *Milieux Innovateurs en Europe*. Paris: Groupe de Recherche Européen sur les Milieux Innovateurs. <https://www.unine.ch/irer/gremi/Gremi%201.pdf>.
- Bessant, J., & Tidd, J. (2007). *Innovation and entrepreneurship*. West Sussex, UK: Wiley. [https://books.google.pt/books?hl=pt-PT&lr=&id=kKvKh7pla8kC&oi=fnd&pg=PR11&dq=Bessant,+J.+\(2007\).+Innovation+and+Entrepreneurship.+West+Sussex,+UK:+John+Wiley+%26+Sons+Ltd&ots=EPgDhGySW7&sig=76jRnMXraPUZ1YsHIykgv4QsnBo&redir_esc=y#v=onepage&q&f=false](https://books.google.pt/books?hl=pt-PT&lr=&id=kKvKh7pla8kC&oi=fnd&pg=PR11&dq=Bessant,+J.+(2007).+Innovation+and+Entrepreneurship.+West+Sussex,+UK:+John+Wiley+%26+Sons+Ltd&ots=EPgDhGySW7&sig=76jRnMXraPUZ1YsHIykgv4QsnBo&redir_esc=y#v=onepage&q&f=false).
- Camagni, R., Maillat, D., Matteaccoli, A., & Perrin, J.-C. (1999). Le Paradigme du Milieu Innovateur dans L'Économie Spatiale Contemporaine. *Revue d'Économie Régionale et Urbaine – RERU*, 3, 425–428.
- Chaminade, C., Lundvall, B.-Å., & Haneef, S. (2018). *Advanced introduction to national innovation systems*. Cheltenham UK: Edward Elgar Publishing. Elgar Advanced Introductions. [https://books.google.pt/books?hl=pt-PT&lr=&id=T2NaDwAAQBAJ&oi=fnd&pg=PT11&dq=Chaminade,+C.,+Lundvall,+B.-%C3%85.,+%26+Haneef,+S.+\(2018\).+Advanced+Introduction+to+National+Innovation+Systems.+Cheltenham+UK:+Edward+Elgar+Publishing.+Elgar+Advanced+Introductions&ots=sMABgwt1ua&sig=V_HSHzhRbrXruttn-pkRhGQjQ&redir_esc=y#v=onepage&q&f=false](https://books.google.pt/books?hl=pt-PT&lr=&id=T2NaDwAAQBAJ&oi=fnd&pg=PT11&dq=Chaminade,+C.,+Lundvall,+B.-%C3%85.,+%26+Haneef,+S.+(2018).+Advanced+Introduction+to+National+Innovation+Systems.+Cheltenham+UK:+Edward+Elgar+Publishing.+Elgar+Advanced+Introductions&ots=sMABgwt1ua&sig=V_HSHzhRbrXruttn-pkRhGQjQ&redir_esc=y#v=onepage&q&f=false).
- Chesbrough, H. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Boston, MA: Harvard Business School Press. https://dlwqtxts1xzle7.cloudfront.net/30503779/open_innovation-libre.pdf?1363465487=&response-content-disposition=inline%3B+filename%3DOpen_innovation_The_new_imperative_for_c.pdf&Expires=1670435073&Signature=NEBkY8tBuR7uEMH9HZwBlXpw42Jl-djTq0NRIAcPee4GMfg3xNu62yuD-PPzcQpQs7h40Aasrrd7X2yWkT50HAcOxEMzHOvomFjhSNBDeNrphEVVS3rio-zT9aZeFG8C7TQxPoXBFV8Na3OAMKOFSumWTz6fa40XEA17oS0lyNiUEysxU5KT6NYc2DgHO0xK388f9gqgtCzG61SqfcqFNpt-8U30Avxn-Z6aCwgvfG0rxgXYDD34XqqvBovxv8E8UeNI29599dkT1bvYLxYly~SFliTKbB3Id3b57edPFadyP2KhELhZYD7iIB93186SCateWYsLw5d0ZRNW4j0yJg__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA.
- Chesbrough, H. (2005). *Open innovation: The new imperative for creating and profiting from technology*. Boston, MA: Harvard Business School Press. [https://books.google.pt/books?id=OeLIH89YiMcC&printsec=frontcover&dq=Chesbrough,+H.,+\(2005\).+Open+Innovation:+The+New+Imperative+for+Creating+and+Profiting+from+Technology.+Boston,+MA:+Harvard+Business+School+Press&hl=pt-PT&sa=X&redir_esc=y#v=onepage&q&f=false](https://books.google.pt/books?id=OeLIH89YiMcC&printsec=frontcover&dq=Chesbrough,+H.,+(2005).+Open+Innovation:+The+New+Imperative+for+Creating+and+Profiting+from+Technology.+Boston,+MA:+Harvard+Business+School+Press&hl=pt-PT&sa=X&redir_esc=y#v=onepage&q&f=false).
- Chesbrough, H. (2006). Open innovation: A new paradigm for understanding industrial innovation. In H. Chesbrough, W. Vanhaverbeke, & J. West (Eds.), *Open innovation: Researching a new paradigm* (pp. 1–12). Oxford: Oxford University Press. https://www.academia.edu/2008513/Open_innovation_a_new_paradigm_for_understanding_industrial_innovation.
- Chesbrough, H. (2007). Why companies should have open business models. *Sloan Management Review*, 48, 22–28. http://secure.com.sg/courses/ICI/Grab/Reading_Articles/L08_A02_Chesbrough.pdf.
- Chesbrough, H., & Appleyard, M. M. (2007). Open innovation and strategy. *California Management Review*, 50, 57–76. https://journals.sagepub.com/doi/pdf/10.2307/41166416?casa_token=NY6cHfeXcJQAAAAA:vDa-xO8-jy_DDjP3F-6V6IXAUzlsP8ls0FR9oKBUI1aQm0PM4Sp17SeAU5cBCFPtYe4mY9lst.
- Di Benedetto, C. A. (2014). Open innovation and the value of crowds: Implications for the fashion industry. *Journal of Global Fashion Marketing*, 5(1), 26–38. <https://doi.org/10.1080/20932685.2013.859876>.

- Edquist, C. (1997). *Systems of innovation: Technologies, institutions and organizations*. London and Washington: Pinter. https://www.routledge.com/Systems-of-Innovation-Technologies-Institutions-and-Organizations/Edquist/p/book/9780415516112?gclid=EAIaIqobChMIoPK14vvl-wIVR5nVCh2f1QoGEAAYASAAEgKqw_D_BwE.
- Freitas, R. K. V., & Dacorso, A. L. R. (2014). Inovação Aberta na Gestão Pública: Análise do Plano de Ação Brasileiro para a Open Government Partnership. *Revista de Administração Pública*, 48(4), 869–888. <https://doi.org/10.1590/0034-76121545>.
- Liu, R. (2013). Cooperation, competition and coepetition in innovation communities. *Prometheus: Critical Studies in Innovation*, 31(2), 91–105. <https://doi.org/10.1080/08109028.2013.818788>.
- Lundvall, B.-Å. (1992). *National Systems of innovation: Towards a theory of innovation and interactive learning*. London: Pinter Publishers. <https://library.oapen.org/bitstream/handle/20.500.12657/31613/626406.pdf?sequence=1#page=102>.
- Lundvall, B.-Å. (2017). National Innovation Systems and globalisation. In H. Bathelt, P. Cohendet, S. Henn, & L. Simon (Eds.), *The Elgar companion to innovation and knowledge creation* (pp. 230–243). London: Edward Elgar Publishing. <https://library.oapen.org/bitstream/handle/20.500.12657/31613/626406.pdf?sequence=1#page=368>.
- Naqshbandi, M., & Kamel, Y. (2017). Intervening role of realized absorptive capacity in organizational culture–open innovation relationship: Evidence from an emerging market. *Journal of General Management*, 42(3), 5–20. <https://journals.sagepub.com/toc/gema/42/3>.
- Natário, M. M. S., Couto, J. P. A., Tiago, M. T. B., & Braga, A. M. M. (2010). Chapter 7, Section 2 : Factors and dimensions of national innovative capacity. In L. Al-Hakin & C. Jin (Eds.), *Innovation in business and enterprises: Technologies and frameworks* (pp. 92–104). New York: Business Reference Source. <https://doi.org/10.4018/978-1-61520-643-8.ch007>.
- Natário, M., Couto, J., Braga, A., & Tiago, T. (2012a). Innovativeness patterns in different European regions: An empirical approach. *Studies in Regional Science*, 42(3), 647–669. <https://doi.org/10.2457/srs.42.647>.
- Natário, M., Braga, A., Couto, J., & Tiago, T. (2012b). Territorial standards for innovation: Analysis for the regions of Portugal. *Revista de Estudios Regionales*, 95, 15–38. <http://www.revistaestudiosregionales.com/documentos/articulos/pdf1194.pdf>.
- Pavão, P. N. R., Couto, J. P. A., & Natário, M. M. S. (2019). A tale of different realities: Innovation capacity in the European Union regions. In H. Almeida & B. Sequeira (Eds.), *The role of knowledge transfer in open innovation* (pp. 262–280). Hershey, PA: Business Science Reference. IGI Global. <https://doi.org/10.4018/978-1-5225-5849-1.ch013>.

Cooperatives

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Synonyms

Coops; Co-ops

Definition

A cooperative, according to the International Co-operative Alliance, is defined as “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise” (ICA 2015, p. 2).

Cooperatives are founded as private initiative enterprises to respond to single or multiple common needs of a group of individuals (Hansmann 1988). The special features of cooperatives are two. The first is that all members have the capacity to take place in the process of decision-making and governance (International Co-operative Alliance 2015; Matten and Crane 2005; Stanton 1986). The second is that the members of a cooperative are either the consumers or the workers and not capital investors (ICA 2015; Zeuli and Cropp 2004). The interests of the cooperative, therefore, coincide with those of the users.

There are different types of cooperative: consumer, retail, housing, worker, banking, insurance, agriculture, and utility cooperatives (Zeuli and Cropp 2004).

Cooperatives are based on seven principles: voluntary and open membership; democratic member control; economic participation by members; autonomy and independence; education, training, and information; cooperation among cooperatives; and concern for community.

Cooperatives usually have tax special rules that exonerate members from income tax, up to a point

(Caves and Petersen 1986), and receive support from governments.

Finally, cooperatives may present some problems in raising capitals and for free-riding actions (Mazzarol et al. 2011).

Origins and History of Cooperatives

Cooperatives are organizations whose origin is extremely remote. It is believed that already at the early days of prehistoric human societies, there were forms of organized associationism in the form of cooperatives whose task was to distribute resources and tasks among the members of the tribes so as to preserve the survival of the entire community (International Co-operative Alliance 2015) over time. The ancient origins of cooperative forms were designed to serve the needs of members, even if difficult to date back to their origins indicate the importance of cooperative action in human societies.

The earliest documents showing the existence of associations in the form of cooperatives dated back to 1498 with the creation, in Aberdeen, of “The Shore Porters Society” which operated in Scotland as a workers’ cooperative in the logistics and goods storage sector (Mazzarol et al. 2011). Subsequently, other examples can be found in France and England in the eighteenth century (Mazzarol et al. 2011; Williams 2007).

But it was only in the nineteenth century that, following the industrialization of the economy of modern societies, the cooperation movement developed.

Robert Owen, who lived from 1771 to 1858 in Scotland, is considered the father of the cooperative movement. He was convinced that the workers of his well-performing cotton trade company could have better worked if they had had the opportunity to participate actively in the governance of the company and if they could have received benefits such as education for their children etc. (Owen 1967).

In 1844, 28 artists of the Rochdale Society of Equitable Pioneers established the “Modern Cooperative Movement” in Lancashire (International Co-operative Alliance 2015). The aim was

to provide fresh food, such as oatmeal, flour, sugar, and butter, to the community in a way that the surplus was redistributed among the members of the cooperative and no disparities emerged.

The most important international body of the cooperative movement was founded later in 1891. The “International Co-operative Alliance” in London came into being. It shapes and preserves the cooperative principles and supports cooperatives in many countries around the world (International Co-operative Alliance 2015).

Today, many sectors experience companies organized in the form of cooperatives. Among the 300 largest cooperatives, 117 operate as insurance companies, 95 are in agriculture, 53 are cooperative supermarket, 21 are banks, and the others operate in 5 other sectors (World Cooperative Monitor 2019). It is estimated that cooperatives employ over 100 million workers and support the daily life needs of 3 billion people around the world. Internationally, the 300 world largest cooperatives have a turnover of between \$600 million and \$65 billion (Cronan 2007), and, altogether, they generate a total turnover of \$2,034 billion (World Cooperative Monitor 2019).

They operate in many sectors such as agriculture, banking, insurance, supermarkets, etc. (Mazzarol et al. 2011).

Description of Cooperative

Cooperatives are created as organizations aimed at satisfying common needs of a group of individuals. The group of individuals who give rise to and participate in the cooperative is individuals who can be very heterogeneous in economic/social extraction but share a need that cannot be addressed individually (Diaz-Foncea and Marcuello 2013). People do not found a cooperative either with the aim of maximizing profit or for regulatory compliance. Instead, the aim is to help each other in a particular task or service (Simmons and Birchall 2004). Hence the two main types of cooperative are consumers’ and workers’ cooperatives.

In the first type (consumers’ cooperative), the business is owned by the cooperative’s

consumers, and they elect the board of directors from among themselves. In the second type (workers' cooperatives), the society is created and governed by its employees. The interests of the society are the same as the interests of its workers as who actively operates in the company also owns it (Stanton 1986).

Types of Cooperatives

The social purpose of consumer cooperatives depends on the type of service/product they provide to their members. Retail cooperatives, housing cooperatives, utility cooperatives, cooperatives banks, and social cooperatives currently operate on the market (Zeuli and Cropp 2004).

Retail cooperatives represent supermarkets or grocery stores that are owned by its customers whose reason for membership is the need to obtain goods whose price is cheaper as a consequence of collective rather than individual negotiation. Retail cooperatives are very common in many countries. In Denmark, Singapore, Italy, Finland, and Switzerland, for example, the largest market share in the grocery store sector is captured by costumer-owned cooperatives.

Housing cooperatives represent real estates owned by the people who reside in them. Members usually take place in the process of construction and maintenance of cooperative buildings. Providing high value/cost ratio housing and good neighborhood relations are the main objectives of a housing cooperative. In order to do so, housing cooperatives pool together the members' resources and gather more negotiating power toward the propriety vendors. Furthermore, the members are entitled to elect their representatives who have the power to screen the new residents' settlement requests in order to only select the most trustworthy families.

A utility cooperative delivers a public utility (water, electricity, and telecommunications) to its members. They were born in order to build the necessary infrastructure to bring the services to those rural and hardly reachable areas. The original members of this type of cooperative joined together to get access to modern utility services

and, by doing so, let their local community enjoy a service which was otherwise unattainable for individual families. Electrical cooperatives are not rare in the USA, and a telephone cooperative still operates as phone and Internet provider in the UK.

Cooperative banks play a crucial role within the financial and economic world system (Freeman and Lomi 1994). They operate in many countries around the world, and, in Europe, they represent the 20% of the banking sector market share (in 2019). They can be in the form of retail or commercial bank. The main aim of a cooperative bank is to provide deposit and loan services to its members. In fact, they have nonmember clients, and they can be traded on public stock markets even if they still are ruled by members.

The last consumers' cooperative type is represented by social cooperatives. They carry a mixed social and capitalistic mission. They play a pivotal role in many social sectors such as healthcare, education, sustaining of people with disabilities, immigration, equality, addiction care, and many others. In order to operate, they also need to manage financing and budgeting; however, these activities shall be functional to the performance of social actions.

The second type of cooperative mentioned above is called worker cooperative. In a pure worker cooperative, only internal workers can be members (Kremer 1997). The society cannot have employees but only members as part of the workforce. The cooperative is set and governed by those who actively provide their work inside the organization. In recent times, however, a more hybrid structure of worker cooperatives has taken place. Consumers, community members, and investors can hold a worker cooperative's share. However, the majority of its shares are required to belong to the workers.

Principles of Cooperatives

Cooperatives, as stated by the International Co-operative Alliance (ICA), are founded on seven principles that have evolved over time (Dunn 1988; International Co-operative Alliance 2015):

1. Voluntary and open membership. Participation in the cooperative is free and autonomous. Cooperatives are open to all people who are able to use their services and who are willing to accept the responsibility that being a member brings with it. Nobody can be forced to take part in a cooperative and, likewise, no one can be excluded. This principle is meant to avoid the possibility to discriminate potential members for their gender, race, and political or religious preferences.
2. Democratic member control. Members of a cooperative democratically control the society and actively participate in the process of decision-making. In primary cooperatives, the voting rights are equally distributed among members (one member, one vote). Also, cooperatives at other levels are governed in a democratic manner (Varman and Chakrabarti 2004).
3. Member economic participation. Members of the cooperative contribute equally to the capital of their cooperatives. Consequently, the capital of cooperatives represents, even if only partially in some cases, the common propriety of the cooperative. Profits of the cooperative are allocated following these purposes: benefiting its members accordingly to the frequency of interactions they have with the cooperative; reinforcing the cooperative's capital structure by allocating to reserves (many of which are not available); and sponsoring other community activities approved by the membership.
4. Autonomy and independence. This principle states that cooperatives are self-help, autonomous organizations in which their members have the control. Whether cooperatives are to join agreements with other organizations or intend to raise capital from external sources, they should always do that in terms that ensure the autonomy of the cooperative and its democratic control by their members.
5. Education, training, and information. The development of the cooperative depends also on its ability to educate and train its members, employees, representatives, managers, etc. In addition, they are in charge of informing

general public, and specific new generations, about the nature and advantages of cooperation.

6. Cooperation among cooperatives. Cooperatives should cooperate among them in order to better serve their members' interests and to consolidate the cooperative movement's value.
7. Concern for community. Cooperatives, putting into practice policies approved by their members, work for the sustainable development of the communities they belong to.

These ICA (International Co-operative Alliance 2015) seven principles are fully comprehensive of the values of a cooperative business. However, in order to be commonly accepted as a cooperative, the basic three principles (proportional distribution of benefits, user-ownership, and user-control) should be satisfied. According to scholars and cooperative leaders, the other principles are to be considered as useful recommendations as they are not applicable to all regions and to all sectors. For example, cooperative banks discriminate new members on financial criteria; otherwise the cooperative could face significant financial stability risks. Housing cooperatives cannot admit everyone as they have limited physical room for new memberships.

Fiscal Advantages of Cooperatives

An important advantage of cooperative businesses is related with fiscal treatment (Caves and Petersen 1986). Corporate tax rules are different in every country of the world. However, cooperatives are generally believed to produce social welfare and, for this reason, many countries have special fiscal rules for cooperatives' surpluses in order to incentivize the development and strengthening of their social positive impact. Indeed, in many countries, members are only taxed based on the income they receive from the cooperative. The share of cooperatives' profits not distributed does not generally contribute to the determination of corporate tax base. As a result, cooperatives are not stimulated to distribute profits and, on the other hand, are

incentivized to invest in new corporate assets (Hansmann 1988).

Differently, cooperatives that mainly operate for profit are taxed just like ordinary businesses. However, they are still able to benefit some indirect fiscal advantages. They can reduce their amount of taxation by paying their members with refunds and discounts on products and services. Every action of the cooperative toward members' need satisfaction is usually well regarded by state governments.

Cooperatives usually receive financial support from governments and private foundations as they act as a social welfare increaser.

Main Disadvantages of Cooperatives

Even if cooperatives seem to provide positive effects on management, resources allocation, democratic participation, taxation, etc., some problems of this organizational form have been recently investigated. In particular, the main problem concerns the risk of free riding, the difficulty of raising capitals on the secondary financial market, and the management of the portfolio (Mazzarol et al. 2011).

Cooperatives are clearly exposed to the problem of free riding. Some members may be tempted to join the cooperative only for particular interests without proving other members with any service or help. For this reason, some new cooperatives introduce a closed membership.

Raising capitals for a cooperative may be more complex than for ordinary businesses as they cannot address the capital market easily.

The management of the portfolio in a cooperative may result slightly more difficult than in an normal company as investment decision is tied to patronage and members often pressure the board to reduce risk.

The Diffusion of Cooperatives in the World

The cooperative model is widespread around the world, and many countries have account for

companies that operate as cooperatives. However, there are regions in which the presence of cooperative companies is more embedded within the cultural and historical settings of the society. Europe accounts for hundreds of thousands of cooperative companies and represents the continent with the most relevant presence of this type of organization also due to the tradition in European countries. In Italy, England, Germany, France, and Spain, a relevant part of the economy is represented by cooperatives (Quintana and Cooperatives Europe's Team 2016).

Following European tradition, even Americas see many companies operating as cooperatives specially in the agriculture sector.

A more contained number of cooperatives are currently operating in Asia (with exception for India), Africa, and Australia.

Insights for Future Research

Research on cooperatives should focus on the results of the implementation of this organizational model in different geographical and cultural contexts (Harris et al. 1996).

It is important to study how the different national regulatory frameworks encourage or disadvantage the creation and the maintenance of this type of entity (Holmström 1999).

Differences in the performance of cooperatives should be investigated according to whether they are cooperatives whose members are customers or workers.

In addition, possible methods of measuring the performance of cooperatives and possible management structures that can create value for cooperative members in the long term should be investigated (Mook et al. 2007).

Summary

Cooperatives are special forms of organization in which the members can be customers or workers who not only own the cooperative but participate in its governance actively and democratically.

The origins of cooperatives are ancient, and it is believed that some prehistoric organizations, aimed at the management of resources and tasks, already had a cooperative form in the tribes. Only in industrial times, however, did they become structurally and formally part of the economic and social context. In 1844 the cooperative “Modern Cooperative Movement” was founded, starting a further cooperative tradition. Today, many players in various sectors such as agriculture, insurance, grocery, etc. are organized as cooperatives developing a considerable economic and employment turnover.

The members of the cooperatives can be, alternatively, customers or workers of the organization, and there are some different types of cooperatives. The most important are retail cooperatives, housing cooperatives, utility cooperatives, cooperative banks, and social cooperatives.

Cooperatives, although they develop in very different forms, are guided by seven fundamental principles that govern their constitution and

governance. These principles are voluntary and open membership; democratic member control; economic participation by members; autonomy and independence; education, training, and information; cooperation among cooperatives; and concern for community.

In addition to historical and ethical aspects, cooperatives are also established for fiscal advantage reasons. Usually governments grant tax advantages for the profits that cooperatives reinvest in their activities or that they allocate to social activities.

The cooperative model also has disadvantages. Cooperatives may be more subject to the problem of free riding, and it is more difficult for them to access the capital market and the management of the portfolio.

Although much has been published about cooperatives, future research should focus on issues related to the diffusion of the model in different regions of the world and on effective measurement systems that can capture both the



Cooperatives, Fig. 1 Summary of main features, types, and principles of cooperatives (author’s personal elaboration)

economic and social/environmental performance indicators of cooperatives.

Figure 1 shows a graphical definition of cooperatives and their major features.

Cross-References

► Cooperatives

References

- Caves, R. E., & Petersen, B. C. (1986). Cooperatives' tax "advantages": Growth, retained earnings, and equity rotation. *American Journal of Agricultural Economics*, 68(2), 207–213.
- Cronan, G. (2007). *Review of International Co-operation* ICA General Assembly Edition. Geneva: International Co-Operative Alliance, 100(1).
- Diaz-Foncea, M., & Marcuello, C. (2013). Entrepreneurs and the context of cooperative organizations: A definition of cooperative entrepreneur. *Canadian Journal of Administrative Sciences*, 30(4), 238–251.
- Dunn, J. R. (1988). Basic cooperative principles and their relationship to selected practice. *Journal of Agricultural Cooperatives*, 3(7), 32–46.
- Freeman, J., & Lomi, A. (1994). Resource partitioning and foundings of banking cooperatives in Italy. In J. A. C. Baum & J. V. Singh (Eds.), *Evolutionary dynamics of organizations* (pp. 269–293). New York: Oxford University Press.
- Hansmann, H. (1988). Ownership of the firm. *Journal of Law, Economics, and Organization*, 4(2), 267–304.
- Harris, A., Stefanson, B., & Fulton, M. E. (1996). New generation cooperatives and cooperative theory. *Journal of Cooperatives*, 11(42), 15–28.
- Holmström, B. (1999). Future of cooperatives: A corporate perspective. *Liiketaloudellinen aikakauskirja*, 4, 404–417. (In Finnish).
- International Co-operative Alliance. (2015). *Guidance notes to the co-operative principles*. Brussels: International Co-operative Alliance.
- Kremer, M. (1997). *Why are worker cooperatives so rare?* Cambridge, MA: National Bureau of Economic Research.
- Matten, D., & Crane, A. (2005). What is stakeholder democracy? Perspectives and issues. *Business Ethics: A European Review*, 14(1), 6–13.
- Mazzarol, T., Limmios, E. M., & Reboud, S. (2011). Co-operative enterprise: a unique business model. Paper Submitted for the Australia and New Zealand Academy of Management (ANZAM) Annual Conference, Wellington.
- Mook, L., Quarter, J., & Richmond, B. J. (2007). *What counts : Social accounting for nonprofits and cooperatives*. London: Sigel Press.
- Owen, R. (1967). *The life of Robert Owen with selections from his writings and correspondence*. New York: Kelley.
- Quintana, C. & Cooperatives Europe's Team. (2016). The power of cooperation. Cooperatives Europe, key figures 2015. <https://coopseurope.coop/sites/default/files/The%20power%20of%20Cooperation%20-%20Cooperatives%20Europe%20key%20statistics%202015.pdf>. Accessed 08 Feb 2020.
- Simmons, R., & Birchall, J. (2004). What motivates members to participate in co-operative and mutual businesses ? A theoretical model and some findings. *Annals of Public and Cooperative Economics*, 75(3), 465–495.
- Stanton, V. G. (1986). *The cooperative society*. La Habra: Cooperative Society Pub..
- Varman, R., & Chakrabarti, M. (2004). Contradictions of democracy in a workers' cooperative. *Organization Studies*, 25(2), 183–208.
- Williams, R. C. (2007). *The cooperative movement: Globalization from below*. London: Ashgate.
- World Cooperative Monitor. (2019). *Cooperatives report 2018*. World Cooperative Monitor.
- Zeuli, K., & Cropp, R. (2004). Cooperatives: Principles and practices in the 21st century. *Cooperatives*, 1, 1–96.

Coopetition

► Competitiveness

Coops

► Cooperatives

Co-ops

► Cooperatives

Coordinated Wage Bargaining

► Collective Bargaining

Co-ownership/Collective Ownership

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Synonyms

Collective property; Common pool resources

Definition

A collective ownership is an organization in which people cooperate for managing the collectively owned assets. This organization benefits all the members composing the group of owners. The group owners can vary in terms of dimension and can range from few people to a large group depending on the assets collectively managed.

Collective ownership has been described from a legal point of view as “another way of owing” (Grossi 1977). This ownership does not neglect private ownership and is not opposed to it, but it coexists together with private property for achieving collective results aimed to the common good of society (Pesci et al. 2020).

In western countries, this form of organization in the past centuries has been used for satisfying needs that people alone could not satisfy. Collective ownership resulted more efficient than private property in managing particular types of resources in a cooperative way in substitution or behalf of the local or national authorities.

This cooperative form of management of properties collectively owned helped for centuries and still helps in guaranteeing a proper exploitation of impervious lands (Dodgshon 2019). The common management of the lands object of care by collective property is helpful for developing civic sense. Each member of the organization, indeed, participates to preserve and to take care of the collective owned assets.

The majority of these organizations do not benefit members in monetary terms by sharing profits, but they provide the members with rights of use and exploitation of the managed assets.

Collective Ownership Studies

Collective Ownership gained attention of scholars because it has been considered able of avoiding the tragedy of commons described by Hardin (1968) due to the overexploitation of scarce natural resources. Commons, as defined in Hardin’s (1968) work, are subject to overexploitation when privately managed or when their use is not ruled, because they are goods not excludable and rival; consequently each user rushes “to harvest the resource before the next person does” (Hardin 1968, p. 1244). The resulting exploitation compromises the possibility of survival in the long run of our planet and causes direct and indirect negative consequences deserving particular attention (i.e., climate change).

The model of collective property has been deeply investigated by Ostrom (1990) who concentrated the attention on Alpine Swiss villages and the collective management of the Alpine impervious lands that this ancient organizational form made over centuries. Alpine collective ownership/property, indeed, was born centuries ago to assist local inhabitants in their old agroforestry activities that in the past could be performed only during the short summer season before the arrival of the hard wintertime (Netting 1981). The collective management of pastures and wood, therefore, could give to the indigenous population the possibility of obtain numerous advantages.

Even if, thanks to the studies of the Nobel Prize Hellinor Ostrom (1990, 2000, 2002), Alpine collective ownership has been deeply investigated, other forms of collective ownerships/properties exist and they are spread in different locations and countries, but they are similarly managed in a cooperative way for benefitting all the members of the local communities.

For example, Wade (1988) studied collective ownership in commonly managed irrigation systems in South India. In the same line, Mosse (1997) through an historical and ethnographic exploration of indigenous tank irrigation systems in India challenged the economic-institutional modeling of common property systems in terms of sets of rules and cooperative equilibrium outcomes. While Adhikari et al. (2004) studied collective ownership in Nepal, examining the relationship between household characteristics and common property resources used, in order to assess whether poorer households are able to gain greater access to community forests. In addition, the concept of collective ownership has been investigated in relation to its potentialities in urban contexts by examining three case study regions in Sweden, Germany, and South Africa and elaborating on their role for biodiversity conservation in urban settings (Colding et al. 2013).

The abovementioned studies demonstrated how the model of collective ownership has developed in different countries where the need of managing the environment was felt as an urgency and where the union of people for achieving natural resources' management goals has been considered essential.

In some areas, in recent times the institution of collective ownership has been further developed, gaining attention and becoming object of normative care with the growth of specific regulations (Baur and Binder 2013).

From a regulative point of view, the case of Alpine collective ownership in Northern Italy is particularly worth of attention because the collective ownerships of the Veneto Region of Cadore's valley pushed for being legally recognized because they experienced a period of legal obscuration that started at the beginning of the twentieth century (Bolla 1963; Grossi 1977). After several years of legal efforts and battles, a regional law in 1996 and a national law in 2017 arrived to recognize the centenary rights of these organizations over the managed lands. In addition, these laws recognize to the collective ownerships an important role connected to sustainability issues.

Accordingly, currently Alpine collective ownership/property is mainly becoming an organization for protecting the local environment and to guarantee a sustainable use of Alpine lands. The deep changes in the local economy mainly based on tourism, indeed, are required for these organizations to reshape their core activities toward the new needs of the local society to which members belong. These needs are obviously related to environmental and sustainability issues that must be addressed. In the ability of reshaped collective properties of meeting new social needs and of addressing new issues dwell their resilience during past centuries and their future perspectives as well (Ostrom et al. 1999).

In general, this organizational model of management and governance has been important for the development of several lands where geographical morphology and social conditions were particularly difficult. This model still represents an effective way of governing commons and it is worth of serious investigation from several angles.

Collective Ownership an Interdisciplinary Field for Investigating Sustainability

The studies on collective ownership can provide with an idea of the interdisciplinary of this field, because they encompass several disciplines: law, economics, ecology, geography, management, accounting, anthropology, sociology, and history.

An important area of development of current studies is connected with sustainable issues and the contribution of these organizations to sustainable use of lands (Agrawal and Benson 2011). An interdisciplinary view for studying this subject should be adopted. The implications of efforts direct to investigate challenges and impacts of collective property's model can result of particular interest for people involved in their management and for achieving sustainable development goals. In this regard, the work of Agrawal (2001) pointed

the attention on the sustainable governance of resources allowed by collective ownership model.

Another area of research that can benefit of the interdisciplinary of the subject of collective property is the arena of impact measurements that are measurement systems devoted to assess the impacts on the society and on the environment of the activity of human organizations.

Finally, this form of collective arrangements for governing commons can stimulate people to act together for protecting the scarce resources of our Planet, which is a major issue for the current and the future generations. The auspice is that a growing number of scholars continue to investigate in this arena for further exploring connected challenges and opportunities especially when connected with sustainable development.

Cross-References

- [Accountability](#)
- [Climate Change](#)
- [Cooperatives](#)
- [Common Good](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References

- Adhikari, B., Di Falco, S., & Lovett, J. C. (2004). Household characteristics and forest dependency: Evidence from common property forest management in Nepal. *Ecological Economics*, 48(2), 245–257. <https://doi.org/10.1016/j.ecolecon.2003.08.008>.
- Agrawal, A. (2001). Common property institutions and sustainable governance of resources. *World Development*, 29(10), 1649–1672. [https://doi.org/10.1016/S0305-750X\(01\)00063-8](https://doi.org/10.1016/S0305-750X(01)00063-8).
- Agrawal, A., & Benson, C. (2011). Common property theory and resource governance institutions: Strengthening explanations of multiple outcomes. *Environmental Conservation*, 38(2), 199–210. <https://doi.org/10.1017/S0376892910000925>.
- Baur, I., & Binder, C. (2013). Adapting to socioeconomic developments by changing rules in the governance of common property pastures in the Swiss Alps. *Ecology and Society*, 18(4), 1–15. www.jstor.org/stable/26269426. Accessed 15 May 2020.
- Bolla, G. G. (1963). *La proprietà regoliara – Scritti di diritto agrario*. Milano: Giuffrè.
- Colding, J., Barthel, S., Bendt, P., Snep, R., van der Knaap, W., & Ernstson, H. (2013). Urban green commons: Insights on urban common property systems. *Global Environmental Change*, 23(5), 1039–1051. <https://doi.org/10.1016/j.gloenvcha.2013.05.006>.
- Dodgshon, R. (2019). The Alps and their common property rights: Resource, regulation and exploitation 1500–1914. In R. Dodgshon (Ed.), *Farming communities in the western Alps, 1500–1914* (pp. 89–105). Berlin: Springer.
- Grossi, P. (1977). *Un Altro Modo Di Possedere: L'emersione Di Forme Alternative Di Proprietà Alla Coscienza Giuridica Postunitaria*. Milano: Giuffrè.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162(3859), 1243–1248.
- Mosse, D. (1997). The symbolic making of a common property resource: History, ecology and locality in a tank-irrigated landscape in South India. *Development and Change*, 28, 467–504. <https://doi.org/10.1111/1467-7660.00051>.
- National Law, 20 November 2017, no. 168. Norme in materia di domini collettivi. G.U. 278, 28 Nov 2017.
- Netting, R. M. (1981). *Balancing on a Alp: Ecological change and continuity in a Swiss mountain community*. Cambridge: Cambridge University Press.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Ostrom, E. (2000). Reformulating the commons. *Swiss Political Science Review*, 6(1), 29–52.
- Ostrom, E. (2002). Common-pool resources and institutions: Toward a revised theory. In B. L. Gardner & G. C. Rausser (Eds.), *Handbook of agricultural economics* (pp. 1315–1339). Amsterdam: Elsevier.
- Ostrom, E., Burger, J., Field, C. B., Norgaard, R. B., & Policansky, D. (1999). Revisiting the commons: Local lessons, global challenges. *Science*, 284(5412), 278–282.
- Pesci, C., Costa, E., & Andreass, M. (2020). Using accountability to shape the common good. *Critical Perspectives on Accounting*, 67(68), 1–24. <https://doi.org/10.1016/j.cpa.2019.03.001>.
- Regional Law, 19th 1996, no. 26. Disciplina delle Regole, delle Proprietà collettive dell'Altopiano di Asiago e degli Antichi Beni Originari di Grignano Polesine. Regione del Veneto.
- Wade, R. (1988). *Village republics: Economic conditions for collective actions in South India*. Cambridge: Cambridge University Press.

COP21

- [Paris Agreement](#)

Core Values

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Synonyms

Attitudes; Beliefs; Characters; Codes; Conducts;
Ethics; Ideals; Integrity; Morals; Mores; Scruples;
Sense of duty; Sense of honor; Standards

Definition/Description

Values are ubiquitous and present at different levels of human existence. Individuals choose few core values from a large universe of values. Core values are derived from parents, teachers, friends and peers, literature and media, and our own life experiences. Core values operate at four levels of individual, group, organization, and society. Personal core values determine how individuals take decisions pertaining to life. Group/team values affect how work is done and goals achieved. The corporate core values define how an organization operates internally and externally. The societal core values make up the culture of a society and determine how members of that society think act and behave. Core values have to be developed, nurtured, and preserved at each level. A case in point is that of rise in consciousness about sustainability affecting the core values of individuals, groups, organizations, and societies.

Introduction

Value is an abstract concept that is difficult to grasp and define. Yet they are very real. They operate at an individual level and at collective levels of society, organizations, and social groups. To an individual, a set of values denotes what is important and worthwhile to adopt in life. A person may adopt a course of action or take a

particular decision in life based on what values she possesses. If that person believes in the value of honesty, she may adopt a course of action that may involve fairness toward others and making the right choices in sync with the prevailing norms of the society in which she lives.

Values for an organization mean what it stands for; it adopts in its internal functioning, and would like to propagate to others. An example of an organizational value is fairness to its employees. Such a value may guide organizational behavior to adopt a course of action that may involve not just professing to be fair but being fair to employees in all matters. If they have relationship with other organizations such as their suppliers, then they would like to propagate the value of being fair to employees to their partners too.

The types and number of values are large making up a large universe of values to choose from. But not all values are equally important to an individual or an organization. There are a finite number of values that form a set of core values that are primary and fundamental. They are the more important values to a person or an organization. Come what may, the individual may like to stick to these core values even in the face of changes. Only a life-changing experience or an encounter with a situation that might challenge the fundamental beliefs of a person does the core values change. Such encounters provide an opportunity to question and rethink the core values one possesses. It is possible that individuals might not be fully aware of which core values drive their specific actions. They might even act inconsistently with their core values sometimes that often might happen under group or peer pressure.

Values

Values are the organization's essential and enduring tenets – a small set of general guiding principles; not to be compromised for short-term financial gain or expediency (Collins and Porras 1994).

Philosophically, values are all deep-seated beliefs and attitudes that are for or against anything. A person may like or dislike, prefer or not

prefer, consider necessary or unnecessary, be open to or be averse to, treat it as right or wrong, perceive it to be beautiful or ugly, assess it to be useful or useless, and so on and so forth. All these attitudes demonstrate the values a person possesses. Not all values are equally important as some of the values might have more weight and a higher priority than others.

Individuals care about their values as these are principles, standards, traits, and characteristics that they care about. These values contribute to driving their behavior. Values held by individuals are underpinned by a set of norms or unwritten rules about what is considered to be socially acceptable behavior.

Values – though deep-seated beliefs – are different from beliefs. Values are not contextual or shaped by the circumstances. They are universal and timeless in contrast to beliefs that are contextual and are a product of the past and of the circumstances. Thus, vegetarianism may be a belief of certain social groups or religions while prevention of cruelty to animals is a value.

In Western philosophy, the term axiology denotes the philosophical study of value. It is also called the theory of value. It is the study of values and how those values are generated in a society. The term “value” was primarily seen in the economic sense of something having some worth and thus being of some value in an economic exchange. Over time, the term “value” came to include a wide variety of objects of interests beyond merely the economic sense of the term. Axiology also is related to ethics and aesthetics. All three terms deal with the worth of anything. While ethics deals with goodness, aesthetics is concerned with beauty. Studying value gives us an understanding of what is good and beautiful and why is it so.

Core Values

When individuals are in the process of selecting their values they are exercising a degree of judgment. Such an exercise involves determining *what* is important as well as *how* important that is to

them. Individuals determine a set of values as being relatively more important to them. Having determined such a set of values as being relatively more important, they assign inter se importance to the values in such a set. This process of exercising judgment leads to the identification of core values. Once an individual has decided on a set of core values, it becomes the means for them to decipher the world around them, take action, exhibit behavior, justify their actions, and judge others' actions. The core values are the fundamental values that guide conduct of an individual or an organization. They help in determining right and wrong.

Where Do Core Values Come From?

Values, particularly, core values of personal nature come from several sources that we experience over our life time. Several of these are from nature that is the environment in which we grow up as children. Thus, parents, other family members, and adults in the society around, our friends and peers, from the literature we read and the media we watch and listen to, and our own life experiences as we go around the world interacting with people.

Our parents pass on their genes to us and we inherit our sense of personal core values from them. Apart from the genes, parents are also our first teachers. We learn so much from them that go into us and remain as core values. A child brought up in a family of hardworking and honest parents grows up with a sense of diligence and honesty. Another child brought up in an atmosphere where parents might be alcoholic and abusive may grow with a set of negative core values that might include the belief that the world is a nasty place.

Our other family members and other adults with whom we come in contact during our childhood and adolescence impact us in many subtle ways and shape our core values. Many of us have a favorite uncle or a resourceful aunt with whom we identify. We are also influenced by our teachers at school. In fact, some of the teachers have a lifelong impact on us by their behavior and

conduct. These shape our personal core values as we go along.

Another influential source from whom we derive core values is our friends and peers. Beyond our family, we associate with friends at school and college and peers work. We derive a lot of sense about core values from our friends especially those who seem to have leadership qualities and whom others like to emulate. The famous quote of Aesop, “a man is known by the company he keeps” is so true. We like to be surrounded by people who are like us or we tend to associate with people whom we like. We tend to develop positive or negative core values depending on the type of friends and peers we have.

Religion plays a vital role in the life of most people around the world. It is a potential source of moral values that individuals imbibe through a process of acculturation in a society. One of the roles of the parents and elders is to impart moral values that are most often done through the learning of religion. Individuals adopt and follow the norms of religion that are moral values such as considering all human beings as worthy of respect and dignity, speaking the truth and acting with honesty in interpersonal dealing.

A source that has a deep impact on us as we go along in our lives is the literature we read and the media we watch and listen to. The value of good literature lies in its ability to impart good, positive values to us. Reading literature and reflecting on it shapes our thinking and sense about core values to a large extent. This might happen imperceptibly and we might not even be aware of how and why this is happening. Similarly, the type of movies we watch and the type of music we listen to also impacts our choice of core values.

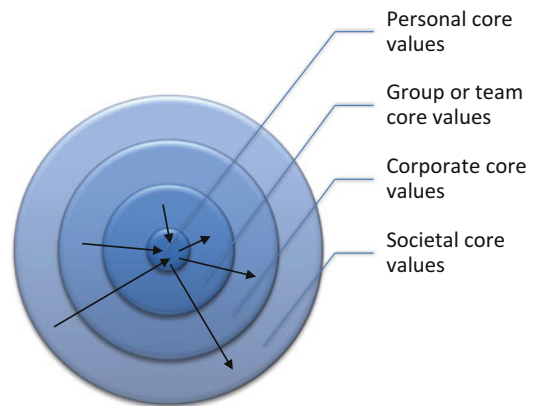
Significant life experiences both pleasant as well as unpleasant affect our lives and thinking. These go on to shape our beliefs and attitudes to things. Many of us develop positive core values in response to the pleasant experiences we have had in our childhood and adolescence. On the other hand, some of us also face unpleasant situations that are deeply disturbing and even traumatic and that end up shaping our beliefs about the world at large.

Types/Levels of Core Values

Core values operate at several levels as shown in Fig. 1. There are four levels shown that are personal, groups or teams, organization, and society. Core values of an individual are the personal core values. The group or team operates on the basis of the team core values. Core values of an organization are its corporate core values. Finally, the society exhibits the societal core values. The arrows show the direction in which core values intermingle with the other core values at other levels. The core values move both ways across different levels. This creates a system of core values where, for instance, the societal core values impact the core values at corporate, team, and personal levels. Similarly, there is some impact of personal core values on the team value and subsequently on the corporate and societal core values. In such a situation, there is a blurring of lines between the different levels of core values.

Personal Core Values

Personal core values are “personal” to every individual human being. They are emotionally charged one-word statements that consume our hearts and minds and help to define what our real self is. The most important core values are the ones that are different for each individual



Core Values, Fig. 1 Different levels at which core values operate

person. The set of core values might never be duplicated. There are several core values that are common. One such is belief in God that believers share among them. Another common core value is the importance people give to work in their lives. This might be seen in the value statement such as: "working hard is essential to success in life." As can be seen, people may differ in their core values. Some may believe that hard work alone is not essential to success in life. Rather they would need luck to be on their side or favorable circumstances that might help them more than hard work. Another good example of a personal core value is the relative importance people give to family. For some, commitment to family is of paramount importance. The family might be of secondary importance to some, their work or business taking precedence. Core values are, unfortunately, not always positive. Some people have negative personal core values such as having a negative view of the world as being selfish or brutal or every one as being untrustworthy. Some people have a negative view of life itself as being meaningless.

The Schwartz theory of basic human values identifies ten basic personal values that are recognized across cultures. These values are: self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. The theory also explains the sources from which these values come. Schwartz proposes that the ten basic personal values form a circular structure that depicts the motivations each value expresses. The measurement of values was done through Schwartz Value Survey and the Portrait Values Questionnaire. The findings from 82 countries support the theory. They reveal substantial differences in the value priorities of individual though the average value priorities of most societal groups exhibit a similar hierarchical order.

Group/Team Core Values

Teams perform a number of functions in organizations. Many routine and nonroutine tasks are got done through teams. Teams are also known as groups, taskforces, crew, committees, etc. They focus the attention of people on common goals to

be achieved, create the necessary cooperation and coordination among team members, establish communication link and help create better understanding, help team members to function better and feel good about working in a team, and lead to accomplishments and a sense of achievement. Teamwork is an essential part of an organization's work pattern nowadays. The result of teamwork is *esprit de corps* that is morale that becomes the basis for sharing common core values.

Team core values are those beliefs that teams have about what is right and wrong. They are about the norms and standards of behavior and conduct of team members as well as shared beliefs that all team members believe in and agree upon. The team core values help to regulate the interpersonal relationship that team members have with each other. These values also help the teams to communicate with people outside the team. The core values are relatively permanent and do not change with circumstances. The most significant purpose of having team core values is to have a unifying core that binds all the team members to the central purpose. In the absence of team core values, it is difficult to perform teamwork. Core values underpin team building that helps to keep the team members together and motivates them to pursue common goals.

A few examples of team core values are: result orientation, sense of purpose, commitment to learning and constant improvement, ability to listen and communicate loyalty and commitment, and self-respect and respect for others.

Corporate Core Values

Corporate core values are the fundamental beliefs and guiding principles that organizations decide they will adopt and follow in their internal functioning as well as dealing with the outside world. The corporate core values make up the foundation on which work is performed and members of the organization conduct themselves. There might be a large number of values but among these there are a few that are so important to the organization that whatever changes might take place around in the environment these core values remain at the core.

Examples of corporate core values could be several. Commitment to excellence, innovation, sustainability, public interest, and sustainability are a set of corporate core values that are popular among organizations. Patagonia is known for its commitment to environmental sustainability as a core corporate value. Apple is reputed as having a commitment to innovation as a core corporate value. Several public utilities and companies around the world are committed to serving the larger public interest than focusing on private profit.

The corporate core values perform many crucial functions in organizations. Among the several functions, given below is a list of the major ones.

- Act as fundamental tenets by which the organization operates
- Clarify and communicate what the organization stands for
- Guide decision-making by managers and how the business processes operate
- Lay down how systems such as rewards and penalties work in the organization
- Determine how interpersonal relation work in the organization
- Determine how inter-organizational relationships are managed

One can get a good idea about core values by learning about those things that are not core values. Values are not vision, mission, strategies, or doctrinal statements. They are also not operating practices, competencies, or cultural norms. Corporate core values do not change in response to short-term market changes in the external environment.

Societal Core Values

Societies regulate the behavior of individuals who are a part of that society and in doing so define the societal core values. Individuals have a give-and-take relationship with the society in which they live and populate. The societal core values are a common collective of the personal core values of the individuals residing in that

society. All the levels – be it personal, team, or corporate – contribute to the building up a system of societal core values. Along with societal core values, there is a system of societal norms that exists to guide the behavior of individuals. Societal norms are informal agreements by members of society to adopt certain patterns of behavior as acceptable or not acceptable and to reward or penalize behavior of individuals based on such norms. Both the societal core values and societal norms are the bases for the behavior and conduct of individuals.

Societal core values are often equated with culture in which case they are referred to as “core societal values.” Culture is generally thought of as values, beliefs, attitudes, norms, and basic assumptions shared by individuals of a group, organization, or society. Usually, culture at the level of society is associated with geographical entities such as countries or region though such an association is not very exact as societies are not homogeneous culturally. But, for the sake of ease of analysis and categorization, culture is a handy concept.

A popular explanation of societal core values is offered by the World Values Survey (WVS – www.worldvaluessurvey.org) is a Stockholm-based, global network of social scientists that survey and analyze changing values and their impact on social and political life. The survey that started in 1981 does surveys and interviews in about 100 countries and periodically reports on the findings of these surveys. The WVS seeks to demonstrate that values in a country play a major role in several aspects such as economic development, democracy, gender equality, and governance of that country.

The WVS uses data analyzed by political scientists Ronald Inglehart and Christian Welzel to create two major dimensions of cross-cultural variation in the world: traditional values versus secular-rational values; and survival values versus self-expression values. These values are explained as below.

- *Traditional values* stress on importance of religion, parent-child ties, and deference to authority and traditional family values.

- *Secular-rational values* are the reverse of traditional values and deemphasize the importance of religion, parent-child ties, and deference to authority and traditional family values.
- *Survival values* emphasize economic and physical security and encourage an ethnocentric attitude that demonstrates low level of trust and tolerance.
- *Self-expression values* focus on active participation in economic and political spheres and greater tolerance and acceptance of diversity as well giving importance to gender equality and environmental protection.

The model adopted by the WVS seeks to explain how the societal core values in different countries vary over time with changing conditions. For example, as countries improve economic conditions and improve the standard of living of their citizens they tend to move toward to secular-rational values and self-expression values. Another interesting phenomenon to note is that the value of assigning high priority to environmental protection arises as a part of the self-expression value.

Developing, Nurturing, and Preserving Core Values

Core values at the personal level are derived from many sources as described in an earlier section. Once these core values form a part of the value repertoire of an individual these have to be developed, nurtured, and preserved. In case, the values need to be reviewed in light of new facts and circumstances then new values can replace the older values that can be discarded. Often, core values undergo transformation at the time of major transitions in life. Some of these milestones are job and career changes, relationship change, habitation change, and family lifecycle transition. Thus, first job, starting a new business, getting married, having children, moving to a new city or country, and children moving out are some of the major inflection points that may result in a

reassessment of core values. It is not necessary for all core values to be changed. In many cases, it might just be an alteration of priority with an erstwhile most important core value moving down the hierarchy. A complete transformation of core values might be a rare instance.

At the level of team and organization, developing core values, nurturing them, and preserving them becomes crucial for success. The better an organization is able to internalize its core values, the better it can motivate its employees toward common goals. Organizations need to use all means possible to communicate the shared values in formal statements as well as informal means. A very common approach used by organizations is the mission statement. The media used for communicating values is the company documents, brochures, website, and social media. Orientation programs for newly recruited employees can be used to inculcate organizational values to convey what the purpose of the organization is and what it stands for. Gradually, shared values become a part of the organizational memory and internalized to the extent that they become a part of the routines and help guide decision-making.

At the societal level, the developing, nurturing, and preserving of values takes place at an imperceptible pace driven by various factors at work in the external environment. The WVS, referred to earlier, shows how societal core values undergo transformation as time passes on. As the standards of living in nations improve and the countries move from developing country stage to that of postindustrial societies the people experience relatively wider choice than mere survival. They seek some self-expression values as it happens in the industrialized western societies. With greater citizens' empowerment, the yearning for democracy heightens and people demand political choice. The aspirations for democracy rise leading to self-expression values. There is certain level of convergence between societies. They seem to follow similar trends in many sociological aspects such as family values, the institution of marriage, views about gender equality, and changing sexual orientation.

Application of Core Values

This section provides an illustration of application of core values by taking up the case of the changing attitude to sustainability over time. Sustainability is a value like freedom and democracy. A concern for environment can be a part of the personal core value set of an individual. Over the years, as more evidence comes up of the destruction of the physical environment and resources at a faster rate than they can get replaced through the self-rejuvenation process, there is a growing concern for environment. The sustainability issue has been in the limelight for quite some time. This has led to individuals as employees and consumers becoming more conscious of sustainability issues. The rising concern is also reflected at other levels of groups and organizations. There are a growing number of activists' groups that work in the area of environmental protection and sustainability. Organizations are realizing, and are made to realize, the growing role of sustainability in their internal and external operations. Governments are bringing in legislation for environmental protection and pollution control. The global multilateral organizations such as United Nations are working to highlight the sustainability through the formulation of sustainable development goals. Societies around the world are becoming more conscious of sustainability issues and incorporating values that aid in protecting and nurturing the physical environment.

Summary

Values are fairly enduring beliefs about the world in general that enable individuals to distinguish right or wrong, or acceptable or unacceptable about any phenomenon around them. Individuals choose a few core values from a large universe of values to choose from. These core values come from different sources such as genes from parents and exposure to teachers, friends and peers, the organizations where people work, and the society where they live. Values

operate at four levels of individuals, groups, organizations, and society. Personal core values are those that define an individual's choice about the world around them. Group core values determine how collectives of individuals come together for a common purpose. Corporate core values are a reflection of what the organization stands for and is dedicated to commit resources to. Societal core values express the preferences of the members of that society regarding anything. An illustration of core values is the changing attitude of people, organizations, and society about sustainability.

Cross-References

- ▶ [Corporate Mission, Vision, and Values](#)
- ▶ [Creating Shared Value](#)
- ▶ [Public Value](#)
- ▶ [Shared Value](#)
- ▶ [Value](#)
- ▶ [Values Management System](#)

References

- Collins, J. C., & Porras, J. I. (1994). *Built to last: Successful habits of visionary companies*. New York: HarperBusiness.
- National Park Service. (n.d.). Retrieved <https://www.nps.gov/training/uc/whcv.htm>
- OpenLearn, Open University (GB). (n.d.). <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=21013§ion=2.2>
- Schwartz, S. H. (2012). An overview of the Schwartz Theory of basic values. *Online Readings in Psychology and Culture*, 2 (1). <https://doi.org/10.9707/2307-0919.1116>.
- World Values Survey. (n.d.). Retrieved from <http://www.worldvaluessurvey.org/WVSCContents.jsp>

Corporate Accountability

- ▶ [Corporate Social Performance](#)
- ▶ [Corporate Social Responsibility](#)

Corporate Activism

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Synonyms

CEO activism; Corporate political activity (CPA);
Corporate social activism

Definition/Description

Corporate activism can be defined as actions taken by the firm or its executive leadership, using the power of the brand and the company's resources, in order to address a perceived social problem, to promote or counter changes to the existing social order. Corporate activism can target the general public, consumers, governments, other businesses, and other stakeholders, either as allies or as opponents in a fight for a cause. Oftentimes, corporate activism moves beyond the company's strategy, goals, and even its CSR as companies stand by their corporate values or the personal values of their leaders and against wrongs such as racism, discrimination, and destruction. However, some companies align what they fight for with what they stand for, using strategic CSR to align the company's core business and values with its activism.

Corporate Activism

Introduction

In August 2017, a white supremacist rally that occurred in Charlottesville, Virginia, was led by members of the far-right, white nationalists, neo-Nazis, KKK, and others. The marchers chanted racist and anti-Semitic slogans and carried semi-automatic rifles, swastikas, and Nazi and neo-Nazi symbols. Many stood against this rise of American racism, including companies and well-

known CEOs. Starbucks founder Howard Schultz spoke to his employees at a forum called "hate has no hope here," to "address the violence, hatred, and empowerment of white supremacists and neo-Nazis." These actions can be seen as part of a new wave of corporate activism.

Corporate activism seems to be on the rise. Gaines-Ross (2017) examined corporate responses to each of five controversial Trump administration actions and statements in 2017: the travel ban, withdrawal from the Paris Agreement on climate change, barring of transgender service members from the US military, the president's comment that "many sides" were to blame for the death of a woman at the Charlottesville riots, and the decision to end the Deferred Action for Childhood Arrivals (DACA) program. In total, 425 corporate responses were found to these actions, with seven companies speaking up in opposition to all five events: Apple, Airbnb, Box, Facebook, Intel, Microsoft, and Salesforce.

Corporate activism can be seen as a new wave in corporate social responsibility. Fully embracing their social responsibility, corporates and their leaders have started using their power to change attitudes, policies, and behaviors of their various stakeholders. While there were a few examples, such as Ben & Jerry's or The Body Shop, of companies standing by their values and political views long before the last decade, it is only recently that we have started capturing this movement, as it becomes much wider and stronger.

The academic research on corporate activism is almost nonexistent, and as of 2019, there were no academic articles on this topic. There are a few articles, mainly in Harvard Business Review, on CEO activism (e.g., Chatterji and Toffel 2016, 2018a) and many more on shareholder activism and consumer activism (Hadani et al. 2018), but not on corporate activism. While corporate activism usually takes place with the involvement of the CEO, stakeholders, and/or consumers, what we refer to here as the use of the brand and the organization to lead social change.

This entry will, therefore, offer the first definition of corporate activism, bring examples of CEO activism and stakeholder activism, and discuss the use of social marketing in service of this kind of

activism. We will also discuss the motivations and drivers behind this recent trend and the important related benefits and risks.

Corporate Activism Defined

To date, there are no existing definitions of corporate activism. To develop one, we rely on existing definitions of social activism, which Briscoe and Gupta (2016, p. 4) defined as “instances in which individuals or groups of individuals, who lack full access to institutionalized channels of influence, engage in collective action to remedy a perceived social problem, or to promote or counter changes to the existing social order.” What is similar between social activism as defined here and the examples of corporate activism we will later discuss is the motivation to remedy a social problem or change the existing social order, which is perceived as wrong by the activist. However, the major difference is that while social activism is undertaken by individuals or groups who lack power, corporations and CEOs use their immense power to drive this change.

For decades we have witnessed social activists targeting large corporations in order to change social order, from consumers boycotting Nike in 1990 to the Occupy Wall Street movement in 2011. This is referred to as “social activism targeting organizations” (Briscoe and Gupta 2016) which is the collective action routines pursued by social activists for the purpose of gaining concessions, grabbing attention, and/or mobilizing participants. To achieve their goals, social activists can choose disruptive/protest tactics (focused on creating material or reputational costs for organization) and persuasive/influence tactics (geared toward convincing decision-makers about the merits of activist claims).

Another related concept which we can build upon is corporate political activity or CPA (Hadani et al. 2018), which refers to corporate actions aimed at influencing political processes and their outcomes. CPA includes corporate lobbying, political donations, and other contributions to political action committees, grassroots lobbying, and the development of relational ties with public policy officials. However, CPA was mostly done for the benefit of a firm or consortium of

firms and possibly at the expense of the public. In contrast, corporate activism is aimed to benefit the public and society at large or at least some parts of it.

As such, corporate activism can be defined as actions taken by the firm or its executive leadership, using the power of the brand and the company’s resources, in order to address a perceived social problem, to promote or counter changes to the existing social order. Corporate activism can target the general public, consumers, governments, other businesses, and other stakeholders, either as allies or as opponents in a fight for a cause. Oftentimes, corporate activism moves beyond the company’s strategy, goals, and even its CSR as companies stand by their corporate values or the personal values of their leaders and against wrongs such as racism, discrimination, and destruction. However, some companies align what they fight for with what they stand for, using strategic CSR to align the company’s core business and values with its activism (Haski-Leventhal 2018).

CEO Activism

Bank of America’s CEO, Brian Moynihan, told *The Wall Street Journal*: “Our jobs as CEOs now include driving what we think is right. It’s not exactly political activism, but it is action on issues beyond business” (Chatterji and Toffel 2018a).

While there are currently no academic articles on corporate activism, there is recent body of work on CEO activism. Until recently, it was rare for corporate leaders to plunge aggressively into thorny social and political discussions about race, sexual orientation, gender, immigration, and the environment (Chatterji and Toffel 2015, 2018), and CEO activism, particularly as a wide trend in some societies, is quite new.

CEO activism takes place when executive leaders of large corporations use their power, their resources, and their voice to speak up on things that matter to them. One prominent example is Google former executive chairman, Eric Schmidt, who used his power and strong voice to raise awareness to climate change. In an interview to *The Washington Post* (Fung 2014), Schmidt said:

The company has a very strong view that we should make decisions in politics based on facts, what a shock. And the facts of climate change are not in question anymore. Everyone understands climate change is occurring and the people who oppose it are really hurting our children and our grandchildren and making the world a much worse place. And so, we should not be aligned with such people — they're just, they're just literally lying.

Starbucks founder, Howard Schultz, used his position to speak to his employees at the midst of the rise of American racism and the Charlottesville riots. Schultz called a large-scale meeting to “address the violence, hatred, and empowerment of white supremacists and neo-Nazis” (Dahlstrom 2017):

What we witnessed this past weekend. . . is against every sense of what is right. My fear is not only that this behavior is being given permission and license, but its conduct is being normalized to the point where people are no longer hiding their face. We've all seen pictures of the KKK in the South . . . they were hiding because they were afraid to be outed. People are no longer afraid. The moral fiber, the values, and what we as a country have stood for is literally hanging in the abyss. We are at a critical juncture in American history. That is not an exaggeration. We are at and facing a crucible in which our daily life is being challenged and being questioned about what is right and what is wrong.

There are many other examples of corporate leaders who act to enhance social and environmental goals, from Sheryl Sandberg, Facebook COO, on gender equity and women's right (captured in her *Lean In* book and movement) to Tim Cook, Apple CEO, on marriage equality and LGBT community rights.

While there is criticism against CEO activism, such as xxx, claiming that CEOs should be doing their jobs, not activism, yet, corporate leaders such as Jeff Immelt, the former CEO of GE, think otherwise:

I just think it's insincere to not stand up for those things that you believe in. We're also stewards of our companies; we're representatives of the people that work with us. And I think we're cowards if we don't take a position occasionally on those things that are really consistent with what our mission is and where our people stand.

Stakeholder Activism

While CEO activism is often seen as the cause for corporate activism, there are many other

stakeholders who can together use the company or target it to achieve similar results.

Since the 1980s with the emergence of stakeholder theory (Freeman 1994), it was understood that companies need to manage and work with a wide range of stakeholders, not just shareholders. This notion entered the corporate boardrooms all over the world. As Marc Benioff, CEO of Salesforce, recently told *Time*: “Today CEOs need to stand up not just for their shareholders, but their employees, their customers, their partners, the community, the environment, schools, everybody.”

Consequently, stakeholder activism can become corporate activism or lead to it. Stakeholders can strive to influence the organization in which they work, invest, or buy from but also target it if it acts against their values and worldview. Briscoe and Gupta (2016: 2) explained that such activists typically “target companies or other marketplace organizations whose practices encroach upon the interests of stakeholders and the larger society, deploying various tactics to gain attention and influence organizational decision-makers and the wider public.”

Stakeholder activism can be done by primary stakeholders (e.g., shareholder and employees) and secondary ones (e.g., consumers, media, and general public). Stakeholders can also be divided to internal stakeholders (e.g., employees) and external ones (e.g., consumers), consequently resulting in internal activism vs. external activism. Internal corporate activism aims to change the organization inside out, while external one aims to do so from the outside. Shareholder, consumer, and employee activism can all lead to corporate activism or at least to defense and compliance (Haski-Leventhal 2018).

Shareholder activism is the effort and attempt of shareholders to positively influence corporate behavior and demand that the companies they invest in will be more responsible and sustainable (Guay et al. 2004; Haski-Leventhal 2018). People use their rights as shareholders and their voting power to address environmental, social, and corporate governance issues. There are several ways a shareholder can make changes: vote of proxies, writing letters to the company's investor relations departments, file resolutions, and request in-

person meetings, and if all of the above does not work – they can divest their funds elsewhere (Guay et al. 2004; Haski-Leventhal 2018). Socially oriented shareholder activism is an increasingly important mechanism through which social movement organizations seek to influence the private sector by exerting pressure on corporate activities in areas such as human rights, environmental protection, and labor policies (Hadani et al. 2018).

Consumer activism is similar to shareholder activism, using consumer buying power to influence the company. The most common tactic is through consumer boycotting – a distinct class of disruptive tactics that is commonly instigated by outsider activists (Briscoe and Gupta 2016). There are many examples in which consumers boycotts led to actions by companies, such as Nike or Nestle (Zadek 2004). In a survey conducted by the Global Strategy Group (2016), consumers thought it was appropriate for companies to take a stance on most social issues, including environmental issues (nearly 80% agreed), domestic violence (74%), race relations (72%), and LGBTQ equality (52%). In another recent survey, 47% of Millennials said they believe CEOs ought to take positions on issues that are important to society, and another 51% said they were more likely to buy from companies whose CEOs express views they agree with (Walker 2018).

Employee activism is a newer concept, far less discussed compared to the other two. Unlike shareholders and consumers, employees have higher risks attached to their activism, such as losing one's job and livelihood. One well-known example is whistle blowing, when employees use their inside knowledge to inform the company's leadership or outsiders about unethical behavior. However, employee activism moves beyond this to working for companies that are engaged in corporate activism, being involved in the employer's activism, or even leading it. Gaines-Ross (2017) showed that twice as many Millennials said they would feel increased loyalty (rather than decreased loyalty) toward their own CEO, if he or she took a stand on a hotly debated issue (44% vs. 19%, respectively).

Social Marketing and Brand Activism

One way of using the company's brand to address social issues and enhance causes that are important to the company and its leaders is through social marketing. Social marketing is the use of marketing principles and tools to influence human behavior and attitudes in order to benefit society (Haski-Leventhal 2018). Kotler and Zaltman (1971, p. 5) defined social marketing as the "design, implementation and control of programs calculated to influence the acceptability of social ideas." It is a strategic or planning process, or systematic application of techniques, used for the benefit of individuals or society rather than for commercial gain (Carins and Rundle-Thiele 2014). It occurs when organizations use marketing to improve the customers' and the society's well-being.

Social marketing is not new, and governments, nonprofit organizations, and even companies have been using it for years for raising awareness and change people's behavior on various topics, such as smoking, volunteering, drinking, and driving. These marketing campaigns were not aimed at selling us something (at least most of the time) but to change our individual behavior for our own benefit and the benefit of society at large.

However, what is relatively new is using social marketing as part of corporate activism, even on controversial topics, such as marriage equality and the right of gay people to marry. In 2017, as Australians were asked to "vote" on marriage equality, Airbnb featured the "until we all belong" campaign (Airbnb 2017). Aligned with the company's slogan, "belong anywhere," the social marketing campaign called Australians to show their acceptance of marriage equality and commit to wearing a bespoke ring until same-sex marriage is recognized in Australia. Thousands of these rings were sold within 24 h on eBay at cost. The video attracted nearly half a million views on YouTube. Other companies, such as Qantas, joined Airbnb in this social marketing campaign, not without risks and negative public opinion.

This example can also be referred to as brand activism, in which businesses launch carefully designed "social good" campaigns aimed at raising awareness about a particular issue while also

promoting a positive corporate message. In 2019, Gillette aired a social campaign “We believe: The best men can be,” which was a response to the #MeToo movement against sexual harassment and abuse. While the ad attracted nearly 30 million views, it also had 1.4 million dislikes (double the number of “likes”). Other controversial examples include Patagonia’s “The President Stole Your Land” campaign to protect national parks in the USA or Nike’s adverts featuring Colin Kaepernick, the NFL quarterback who first knelt during the national anthem to highlight racial injustice.

Corporate activism can use social marketing to voice concerns and help shape people’s mindset. However, as can be seen here, it is not without risks which will also be detailed below.

Motivations and Drivers for Corporate Activism

Why do companies start to involve in social and political activism? It takes an immense amount of time, money, and other resources, using the precious time of busy CEOs and often risking the brand, and yet more and more companies are getting on board. There are several motivations and drivers which can explain the emergence of corporate activism. Gaines-Ross (2017) detailed a few: stakeholders demanding business leaders to take action in the face of distrust in the government, working according to the company’s core values, and attracting new talent, particularly Millennials.

In addition to leadership (see CEO activism above) and pressure from various stakeholders (from shareholders to consumers and employees), a sense of urgency, lack of political leadership, and a drive for a higher purpose and marketing can all drive the emergence of corporate activism.

Sense of Urgency and Public Pressure

Many of the examples of corporate activism from the last several years occurred when there was a sense of urgency that something must be said and done immediately to hit the iron while it was hot. In the face of perceived unfairness and injustice,

social wrong, and dangers, many people sense that they cannot keep silent. This was the case with the Charlottesville riots, the US travel ban, or the marriage equality survey in Australia. These were burning issues, and many, including CEOs, felt they needed to speak up, either as individuals or as the company and the brand which they lead.

There is also a sense of urgency in climate change. Although the devastating consequences of climate change may not all be immediate, there is a very narrow window of opportunity for humanity to act and mitigate this scenario. As such, many companies use their brand and what it stands for to speak up for climate change action. One such example is Ben & Jerry’s and its campaign “if it’s melted it’s ruined,” using ice cream to demonstrate what a two degrees difference can do to our planet. The company used its brand to march on many social and environmental causes, including climate change.

The sense of urgency can often bring companies, even competitors, to act together on one cause. At the time leading to the Paris Agreement on climate change, the CEOs of 14 major food companies – Mars, General Mills, Coca-Cola, Unilever, Danone Dairy North America, Hershey, Ben & Jerry’s, Kellogg, PepsiCo, Nestlé USA, New Belgium Brewing, Hain Celestial, Stonyfield Farm, and Clif Bar – cosigned an open letter calling on government leaders to create a strong accord that would “meaningfully address the reality of climate change.”

Lack of Political Leadership

Lack of strong political leadership is often mentioned as one of the drivers for corporate activism, particularly referring to the Trump administration (Chatterji and Toffel 2018a).

Political and social upheaval has provoked frustration and outrage, inspiring business leaders like Tim Cook of Apple, Howard Schultz of Starbucks, and Marc Benioff of Salesforce – among many others – to passionately advocate for a range of causes. Nearly 100 CEOs cosigned an amicus brief to encourage federal judges to overturn Trump’s “travel ban”: an executive

order banning citizens from seven Muslim-majority countries from entering the USA (Chatterji and Toffel 2018b).

A Drive for Higher Purpose

With the shift toward a purpose-driven business, led by thought leaders such as Simon Sinek (Start with Why) and John Mackey (Conscious Capitalism), many companies are searching for and communicate their higher purpose, and corporate activism can often serve these efforts.

According to conscious capitalism (Mackey and Sisodia 2014), a conscious business refers to business galvanized by higher purposes that serve and align the interest of all major stakeholders. Such a business, its leaders and stakeholders, demonstrate higher level of awareness to what is happening around them and act to create a win-win situation for all stakeholders. Having such a level of consciousness and purpose implies that the business and the business leaders cannot ignore or remain silent in face of horrendous suffering.

Whole Foods Market, for example, founded by John Mackey who co-wrote this book, is an example of a business led by high levels of consciences and purpose, striving not to turn a blind eye to suffering caused in its supply chain. Their policies and actions on animal rights and labor rights demonstrate this.

As such, some companies are motivated by “doing the right thing” and use a more deontological approach to corporate activism, rather than utilitarian and instrumental approaches.

Public Relations

Starbucks CEO, Schultz, came up with the “Race Together” initiative to hold conversation about race in the café chains. He argued that “this is not some marketing or PR exercise. This is to do one thing: use our national footprint and scale for good.”

While many companies and their leaders do not necessarily engage in corporate activism for marketing and PR reasons, there could be brand benefits for doing so.

Benefits and Risks

Corporate activism has several benefits to three main actors: the firm, the activists, and society at large. The latter, being the target of corporate activism, has the potential of benefiting the most. When companies make a stance on what they perceive as morally right and fight for a better social justice, society at large and the target group (such as Muslim travelers, the LGBT community, or other minorities) benefit from better rights. When companies work to achieve better equality, it is not only the affected discriminated against group that benefits from such actions but society at large. For example, gender equity at work benefits not only women but everyone in the company at the general community in which this company operates (Elomäki 2015).

In addition, there are potential benefits for the firm, which are similar to the potential benefits of CSR in general. Corporate activism could lead to a stronger brand and better global and local reputation, to employee engagement and performance, to higher levels of consumer loyalty, and to financial performance as well (Haski-Leventhal 2018). Employees, particularly Millennials, take a sense of pride in working for a company that is socially active (Gaines-Ross 2017).

The social activists, be it the CEO, shareholders, consumers, or employees, receive a sense of power when their voices are heard. CEO activism is becoming more socially acceptable, and oftentimes CEOs who speak up are celebrated by society and the company’s stakeholders, as could be seen with many of the aforementioned examples. When companies enable employees to be activists as part of their jobs, it gives a sense of voice to employees which also has many benefits (Duan et al. 2018). As for the CEO, corporate activism could act as a double-edged sword, depending on the company’s and the CEO’s reputation, the nature of the cause for which they campaign, the timing, and other aspects. For example, while Schultz and Chick-Fil-A’s Dan Cathy (who spoke out opposing gay marriage) have faced withering critiques for their activism, Facebook’s Sandberg and Goldman Sach’s Blankfein have generally been praised for

their public statements supporting gender and marriage equality (Chatterji and Toffel 2015).

As such, there are also many risks involved. As could be seen by the above example of Gillette, corporate activism could attract criticism from shareholders, consumers, and the general public. In a *The Wall Street Journal* article, Walker (2018) wrote:

You're a CEO, stop talking like a political activist: As a growing number of CEOs who have swept aside old taboos about activism to express their views on social and political issues, those who haven't done so are finding themselves in a perilous spot.

Consumers who do not agree with the company's worldview on LGBT rights, gun control, or immigration could stop buying from the company and badmouth it on social media. Shareholders can withdraw and take their money elsewhere. And employees may feel a low value congruence with their employers, resent, disengage, or leave.

Chatterji and Toffel (2015) argued that unfettered CEO activism has the potential to cause harm, particularly to employees if they are coerced into promoting the CEO's position. These authors further explain, however, that the power of corporate activism is somewhat constrained by the very fact that it relies on media coverage to be effective, and employees or consumers who disagree can often take their labor or purchases elsewhere.

There could also be unintended effects that were not part of activists' goals and objectives (Briscoe and Gupta 2016), such as counter activism by people who disagree with the company's perspective, stronger political actions by legislators, punishment to less powerful activists, and so on. For example, the corporate and social activism for Saudi women freedom to drive and being their own guardian may have backfired and could have resulted in the 2018 line of arrests for many female activists in Saudi Arabia.

In addition, CEO activism has sometimes led to charges of hypocrisy. For example, a few conservative websites have criticized Benioff and Cook for denouncing religious freedom laws, while Salesforce and Apple continue to do

business in countries that persecute LGBTQ individuals (Chatterji and Toffel 2018a).

In order to yield better benefits of corporate activism and avoid some of the risks, it is important for companies and CEO to be fully knowledgeable of the issues for which they stand, assure that the company's stakeholders may have freedom of expression and speech (excluding hate speech), and taking a holistic and genuine approach on these matters.

Summary

In the last decade, a new aspect of CSR has emergence in corporate activism, and academic research is yet to draw level with managerial practice. With the lack of an academic definition of corporate activism, we define it as actions taken by the firm or its executive leadership, using the power of the brand and the company's resources, in order to address a perceived social problem, to promote or counter changes to the existing social order. The current body of work on activism mainly focuses on CEO activism, which takes place when executive leaders of large corporations use their power, their resources, and their voice to speak up on things that matter to them. In addition, there is literature on stakeholder activism, particularly on shareholder activism and consumer activism, although employee activism is also on the rise. Corporate activism often uses social marketing and brand activism to achieve their goals. There are several motivations and drivers for corporate activism: in addition to leadership and stakeholder pressure, a sense of urgency, lack of political leadership, and a drive for a higher purpose and marketing can all drive the emergence of corporate activism. Finally, there are related benefits and risks that need to be considered and managed.

Cross-References

- [Consumer Activism](#)
- [Corporate Social Responsibility](#)
- [Shareholder Activism](#)

References

- Airbnb YouTube Channel. (2017). Until we all belong. The Acceptance Ring. Retrieved February 14, 2019, from <https://www.youtube.com/watch?v=0Y4EqF0PR4E>
- Briscoe, F., & Gupta, A. (2016). Social activism in and around organizations. *The Academy of Management Annals*, 10(1), 671–727.
- Carins, J. E., & Rundle-Thiele, S. R. (2014). Eating for the better: A social marketing review (2000–2012). *Public Health Nutrition*, 17(7), 1628–1639.
- Chatterji, A. K., & Toffel, M. W. (2015). Starbucks' "Race together" campaign and the upside of CEO activism. *Harvard Business Review*.
- Chatterji, A. K., & Toffel, M. (2016). *Do CEO activists make a difference? Evidence from a field experiment* (Working Paper 16-100). Boston: Harvard Business School.
- Chatterji, A. K., & Toffel, M. W. (2018a). The new CEO activists. *Harvard Business Review*.
- Chatterji, A., & Toffel, M. W. (2018b). Assessing the impact of CEO activism. *Harvard Business School Technology & Operations Management* 16-11. Available at SSRN: <https://ssrn.com/abstract=2742209> or <https://doi.org/10.2139/ssrn.2742209>
- Dahlstrom, L. (2017). Hate has no home here: Starbucks' Schultz fights back against racism. *Starbucks*. Retrieved February 14, 2019, from <https://stories.starbucks.com/stories/2017/hate-has-no-home-here/>
- Duan, J., Gong, Y., Hui, C., & Xu, Y. (2018). Authoritarian leadership and employee voice: The effect of employee integrity. *Academy of Management Proceedings*. Retrieved February 15, 2019, from <https://doi.org/10.5465/AMBPP.2018.15840abstract>
- Elomäki, A. (2015). The economic case for gender equality in the European Union: Selling gender equality to decision-makers and neoliberalism to women's organizations. *European Journal of Women's Studies*, 22(3), 288–302.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, 4, 409–422.
- Fung, B. (2014, September 22). Google: We're parting with the climate change skeptics at ALEC. *Washington Post*. Retrieved February 14, 2019, from https://www.washingtonpost.com/news/the-switch/wp/2014/09/22/google-were-parting-with-the-climate-change-skeptics-at-alec/?noredirect=on&utm_term=.750bcabc683f
- Gaines-Ross, L. (2017). What CEO activism looks like in the trump era. *Harvard Business Review*. <https://hbr.org/2017/10/what-ceo-activism-looks-like-in-the-trump-era>
- Global Strategy Group. (2016, January). Business and politics: Do they mix? Third annual study. Retrieved February 14, 2019, from <http://www.globalstrategygroup.com/thought-leadership/gsgs-third-annual-study-business-politics-do-they-mix>
- Guay, T., Doh, J. P., & Sinclair, G. (2004). Non-governmental organizations, shareholder activism, and socially responsible investments: Ethical, strategic, and governance implications. *Journal of business ethics*, 52(1), 125–139.
- Hadani, M., Doh, J. P., & Schneider, M. A. (2018). Corporate political activity and regulatory capture: How some companies blunt the knife of socially oriented investor activism. *Journal of Management*, 44(5), 2064–2093.
- Haski-Leventhal, D. (2018). *Strategic corporate social responsibility: Tools and theories for responsible management*. London: Sage.
- Kotler, P., & Zaltman, G. (1971). Social marketing: An approach to planned social change. *The Journal of Marketing*, 35, 3–12.
- Mackey, J., & Sisodia, R. (2014). *Conscious capitalism, with a new preface by the authors: Liberating the heroic spirit of business*. Harvard Business Review Press, Boston.
- Walker, S. (2018, July 27). You're a CEO: Stop talking like a political activist. *The Wall Street Journal*. Retrieved February 15, 2019, from <https://www.wsj.com/articles/youre-a-ceostop-talking-like-a-political-activist-1532683844>
- Zadek, S. (2004). The path to corporate responsibility. *Harvard Business Review*, 82(12), 125–133.

Corporate Citizenship

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Definition

The term corporate citizenship is typically used to describe corporations in their socio-political role. It recognizes that corporations are involved in social activity beyond mere financial activities and carry obligations to contribute to the social well-being of a society. As the term "citizen" indicates, the notion is rooted in politics, indicating a recognition of the corporation as a social actor and as responding to non-market pressures. Research of the concept includes both institutional and business social scientific methods.

Introduction

Over the years, the corporate citizenship agenda has been developed interacting with distinct aspects of corporate social responsibility (CSR) (Sheehy and Farneti 2020). Its conceptual foundations can be found in the CSR literature broadly (e.g., Carroll 1979), taking cues from political science (Sheehy 2015). It includes aspects of the concepts of corporate social responsiveness (e.g., Clarkson 1995), corporate social performance (e.g., Albinger and Freeman 2000), theory of the firm (McWilliams and Siegel 2001), stakeholder engagement (Strand and Freeman 2013), and other enlightened “self-interest” theories. Corporate citizenship can be a source of opportunity, innovation and competitive advantage (Camilleri 2017a, b; Porter and Kramer 2006). For this reason, this concept continues to receive specific attention, particularly by those responsible businesses that are differentiating themselves through responsible and sustainable behaviors.

Literature Review

Multinational corporations (MNCs) have long been under pressure to exhibit “good corporate citizenship” – to participate positively to the social and political processes, to be good citizens – in nearly every country or market in which they operate their businesses. They are continuously monitored by stakeholders, including regulatory authorities, creditors, investors, customers, and the community at large. In addition, they are scrutinized by scholars and researchers.

Several empirical studies have explored the individuals’ attitudes and perceptions toward corporate citizenship. Methods in these often involve quantitative analyses of corporations’ behaviors classifying them as responsible or irresponsible when considered in comparison to what would be expected of a “responsible citizen” (Camilleri 2017a, b). Other research has focused on the managerial perceptions of corporate citizenship (e.g., Basu and Palazzo 2008). A number of studies have gauged corporate citizenship by adopting commercially available indices such as Fortune’s

reputation index (Flanagan et al. 2011; Melo and Garrido-Morgado 2012), the KLD index (Dupire and M’Zali 2018; Fombrun 1998; Griffin and Mahon 1997), or Van Riel and Fombrun’s (2007) Reptrak. Such measures rely on surveyed executives to assess the extent to which a company behaves responsibly toward the environment and the community (Fryxell and Wang 1994).

Despite the wide usage of such measures in past research, the reliability of these indices and their underlying measures and constructs remains doubtful. For instance, Fortune’s reputation index failed to account for the multidimensionality of the corporate citizenship construct and it has been questioned as to whether it is more significant as a measure of management quality than of corporate citizenship (Waddock and Graves 1997). Fortune’s previous index suffered from a flaw in that its items were not properly conceptually grounded as they did not appropriately represent the economic, legal, ethical, and discretionary dimensions of the corporate citizenship construct.

It is not that these constructs and theories are lacking. Pinkston and Carroll (1994) identified four dimensions of corporate citizenship: orientations, stakeholders, issues, and decision-making autonomy. First, they argued that by observing orientations, one may better understand the inclinations or the posturing behaviors of organizations with respect to corporate citizenship. Second, Pinkston and Carroll (1994) sought to identify the stakeholder groups that are benefiting from the businesses’ corporate citizenship practices. Third and fourth, they argued that the business’s selection of issues for corporate citizenship attention and businesses’ decision-making autonomy reflected the organizational level at which those decision-makers were located. Recognizing the problem, Griffin and Mahon (1997) combined four estimates of corporate citizenship – Fortune’s reputation index, the KLD index, the Toxic Release Inventory (TRI), and the rankings that are provided in the Directory of Corporate Philanthropy – to provide a solution.

Taking a different approach to the problem, Singh de los Salmones Sanchez et al. (2008) adopted a multidimensional perspective on three domains: commercial responsibility,

ethical responsibility, and social responsibility. The commercial responsibility domain focused on the businesses' responsibility to develop high quality products and truthful marketing communications of their products' attributes and features among customers. Concerning the second domain, they maintained that ethical responsibility is focused on businesses obligations toward shareholders, suppliers, distributors, and other agents with whom the business deal. Underlying this obligation, Singh de los Salmones Sanchez et al. (2008) argued that ethical responsibility stems from a respect for the human rights and other norms defined in the law governing business activities. They argued that contrary to Carroll, respecting ethical principles in business relationships is a greater priority than achieving superior economic performance. As to their third domain, social responsibility, they argue that corporate citizenship focuses on initiatives that are characterized by the businesses' laudable behaviors (Camilleri 2017c). The authors argue that big businesses ought to allocate part of their budget to the protection of the natural environment, philanthropy, or other socially oriented work that supports the most vulnerable groups in society. This third domain obliges the corporation to support the development of the financing of social and/or cultural activities expressing an intention improve societal well-being (Singh de los Salmones Sanchez et al. 2008).

Summary

There are several types of actors within a society. Among those actors, parties that benefit from a state, that are citizens, carry obligations vis-à-vis other members of that society. These may include the government and policy makers, businesses, marketplace stakeholders, and civil society organizations among others (Camilleri 2015). It is within this context that a corporate citizenship relationship framework can work to foster socially positive practices, which among other things would enhance the businesses' legitimacy amongst stakeholders (Camilleri 2017a, b, c,

2018). The corporate citizenship practices including socially responsible and environmentally sustainable practices may be triggered by the institutional and/or stakeholder pressures.

Cross-References

- [Corporate Community Involvement](#)
- [Corporate Social Responsibility Strategy](#)
- [Corporate Sustainability and Responsibility](#)
- [CSR Reporting](#)

References

- Albinger, H. S., & Freeman, S. J. (2000). Corporate social performance and attractiveness as an employer to different job seeking populations. *Journal of Business Ethics*, 28(3), 243–253.
- Basu, K., & Palazzo, G. (2008). Corporate social responsibility: A process model of sensemaking. *Academy of Management Review*, 33(1), 122–136.
- Camilleri, M. A. (2015). Valuing stakeholder engagement and sustainability reporting. *Corporate Reputation Review*, 18(3), 210–222.
- Camilleri, M. A. (2017a). Corporate citizenship and social responsibility policies in the United States of America. *Sustainability Accounting, Management and Policy Journal*, 8(1), 77–93.
- Camilleri, M. A. (2017b). Corporate social responsibility policy in the United States of America. In *Corporate Social Responsibility in Times of Crisis* (pp. 129–143). Cham: Springer.
- Camilleri, M. A. (2017c). Corporate sustainability and responsibility: Creating value for business, society and the environment. *Asian Journal of Sustainability and Social Responsibility*, 2(1), 59–74.
- Camilleri, M. A. (2018). Theoretical insights on integrated reporting: The inclusion of non-financial capitals in corporate disclosures. *Corporate Communications: An International Journal*, 23(4), 567–581.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Dupire, M., & M'Zali, B. (2018). CSR strategies in response to competitive pressures. *Journal of Business Ethics*, 148(3), 603–623.
- Flanagan, D. J., O'shaughnessy, K. C., & Palmer, T. B. (2011). Re-assessing the relationship between the Fortune reputation data and financial performance:

Overwhelming influence or just a part of the puzzle? *Corporate Reputation Review*, 14(1), 3–14.

- Fombrun, C. J. (1998). Indices of corporate reputation: An analysis of media rankings and social monitors' ratings. *Corporate Reputation Review*, 1(4), 327–340.
- Fryxell, G. E., & Wang, J. (1994). The Fortune corporate 'reputation' index: Reputation for what?. *Journal of Management*, 20(1), 1–14.
- Griffin, J. J., & Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate twenty-five years of incomparable research. *Business & Society*, 36(1), 5–31.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127.
- Melo, T., & Garrido-Morgado, A. (2012). Corporate reputation: A combination of social responsibility and industry. *Corporate Social Responsibility and Environmental Management*, 19(1), 11–31.
- Pinkston, T. S., & Carroll, A. B. (1994). Corporate citizenship perspectives and foreign direct investment in the US. *Journal of Business Ethics*, 13(3), 157–169.
- Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648.
- Sheehy, B., & Farneti, F. (2020). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference and does it matter? Available at SSRN: <https://ssrn.com/abstract=3549577> or <https://doi.org/10.2139/ssrn.3549577>.
- Singh, De los Salmones Sanchez J., & Del Bosque, I. R. (2008). Understanding corporate social responsibility and product perceptions in consumer markets: A cross-cultural evaluation. *Journal of Business Ethics*, 80(3), 597–611.
- Strand, R., & Freeman, R. E. (2013). Scandinavian cooperative advantage: The theory and practice of stakeholder engagement in Scandinavia. *Journal of Business Ethics*, 127(1), 65–85.
- Van Riel, C. B., & Fombrun, C. J. (2007). *Essentials of corporate communication: Implementing practices for effective reputation management*. Oxford/New York: Routledge.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal*, 18(4), 303–319.

Corporate Code of Environmental Conduct

► CERES Principles

Corporate Codes of Conduct

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Synonyms

Business code; Code of best practice; Code of ethics; Ethical guidelines; Rules of conduct

Definition

Corporate Codes of conduct consist of a codified set of ethical standards not subject to legal enforcement. They originated around in 1900 in the USA getting relevance in the 1950s due to the antitrust legislation (Wiley 1995).

OECD defines these codes as: “commitments voluntarily made by companies, associations or other entities, which put forth standards and principles for the conduct of business activities in the marketplace” (OECD 2001, p. 3).

Other relevant definitions have been formulated by scholars such as Kolk et al. (1999) who define codes of conduct as “encompassing guidelines, recommendations or rules issued by entities within society (adopting body or actor) with the intent to affect the behavior of (international) business entities (target) within society in order to enhance corporate responsibility” (Kolk et al. 1999, p. 151).

Langlois and Schlegelmilch identify the code of conduct as a “statement setting down corporate principles, ethics, rules of conduct, codes of practice or company philosophy concerning responsibility to employees, shareholders, consumers, the environment or any other aspects of society external to the company” (Langlois and Schlegelmilch 1990, p. 522).

In general, literature provides different definitions – in addition to the standard one, which is underlined at the beginning of this section – which are characterized by shared features such as: voluntary nature, self-regulatory approach, behavior

orientation, and moral guidance with respect to a specific set of issues (Alexander 1997; Forcese 1997; Diller 1999; Kaptein and Wempe 2002).

The Main Steps of Code of Conduct's Adoption

The economic development in the 1980s, the increasing integration of international markets for goods and finance, and the general privatization of state assets are some of the conditions affecting the redefinition of the economic role of the state, implying a new focus on self-regulation and on social responsibility of firms.

Indeed, the new context leads to "private governance" tools enabling the orientation of corporate behavior in a given issue area with a focus on voluntary codes of conduct defining the scope of responsible corporate practices in an industry.

In this regard, Corporate Code of Conduct is seen as a tool of behavior's orientation in the areas of labor and environment, according to principles of social equity, human rights protection, and environment safeguard.

The codes of conduct are, first of all, a specific typology of codes: "codes are an organized collection of norms used to communicate behavioral norms which are accepted or rejected within a specific institutional context. They identify which behaviors will be rewarded or punished" (Sheehy 2019, p. 3).

In particular, corporate codes of conduct originated in the USA around 1900 and developed throughout the time according to three main stages:

1. The first stage (in the late 1970s) is characterized by corporate codes focused on questionable payments (bribery) issue, considering the great amount of such practices investigated by the Securities and Exchange Commission (Kline 1985). At the beginning, the approach is actually strongly legalistic with frequent reference to antitrust laws (Wiley 1995) as such codes first emerge in response to unethical US companies' practices engaging in bribery when operating abroad. This stage mainly relates to

demands for sound management and social awareness due to a wide series of corporate scandals.

2. The second step mainly refers to the early 1990s characterized by a wide renewal of interest in corporate codes of conduct, after a decrease, by the mid-1980s, of public pressure for adopting these codes. Within this stage, codes of conduct mainly address environmental and labor issues rather than bribery as in the first step with an increasing adoption by companies. This stage underlines the shift from state regulation of transnational corporations toward corporate self-regulation in the domain of labor, environmental standards, and human rights;
3. The last stage mainly refers to the impact of transnational corporations on social and environmental conditions, focusing on globalization effects in terms of labor and human rights and on related challenges for governments. This stage refers to globalization with the related firm's understanding that social and environmental issues are becoming increasingly relevant; thus, in response to this awareness, firms introduce Codes of Conduct that are expected to ensure socially responsible behaviors. Indeed, globalization emphasizes human rights critical issues such as excessive working hours, poor wages, child labor, and hazardous working conditions, leading many global corporations to develop their own Codes of Conduct.

The Motivation and the CSR Issue

The motivation for adopting a code of conduct has been widely investigated by scholars: some argue that such codes are identified as an effective tool for solving any legitimacy problems (Howard-Grenville et al. 2008); other researchers posit that the main motivation relates to the need of introducing clear standards promoting loyalty and collaboration among the organization's members (White and Montgomery 1980) or playing a regulatory effect as a guiding tool toward ethical and acceptable conduct.

The motivation issue is closely related to the benefits arising from such codes; the most relevant are the following: reputational benefit as the adoption of a voluntary code may reflect a strategic choice to maintain or acquire a positive reputation within the institutional environment (Diller 1999); product differentiation and risk reduction, allowing firms to sell products at a higher price; improved stakeholder's relationships; investor confidence, enabling greater access to capital markets; reduced staff turnover; prevention of fraud and corruption; and enhanced employee morale.

The adoption of the Codes of Conduct depends on the level of a company's moral development; in general, the decision to formulate this specific code aims at both informing behavioral expectations and policy and reducing risk exposure.

Scholars have identified seven main reasons for adopting codes of conduct:

- Ensuring legal compliance and other statutory requirements.
- Providing a guide for behavior and formalized expectations.
- Protecting and enhancing organizational reputation.
- Ensuring employee, management, and supplier compliance and minimizing risk.
- Ensuring consistency across global networks.
- Creating and maintaining trust and confidence with stakeholders.
- Communicating principles and commitments to stakeholders (Bondy et al. 2006).

In general, corporate Codes of Conduct are drafted in order to affect the behavior of all employees in the organization. In this regard, Baker states that codes of conduct “develop incrementally, out of disparate precursor documents that were formulated for a variety of purposes as field grappled with various issues and decided, one-by-one, how best to deal with them.

By aggregating these statements of conduct into a single document that strives for a measure of universality and consistency, codifiers help a field to articulate the vision implicit in the standards that a field has already set for itself, so that this vision can be better understood and

appreciated by its membership and by the world at large” (Baker 2005).

In general, Codes of Conduct can be used according to a specific strategic approach, in order to achieve the company's selected goals; with reference to large corporations, the main motivations include the following (United Nations 2001): in some cases, codes of conduct are adopted simply to prevent external pressures; in other cases, codes of conduct's adoption aims at establishing a competitive advantage in a specific industry, by promoting the company's image and managing the reputational risks.

Besides, the adoption of ethical principles can increase the commitment of company personnel with positive effects on productivity and the overall performance. Conversely, smaller firms are usually less likely to adopt Codes of Conduct, due to the difficulty in coping with cost increases associated with any improvement of labor or environmental conditions.

The analysis of the main motivations leading to the adoption of Corporate of Conduct has implied the investigation of the relationship between this statement and Corporate Social Responsibility approach. Indeed, corporate Codes of Conduct are written statements of principle expressing the commitment to a particular conduct (Diller 1999). The introduction of corporate Code of Conduct has been characterized by an increasing emphasis on Corporate Social Responsibility (CSR) on the belief that firms should not only be concerned with profit-making; indeed, codes of conduct are also known as “codes of ethics” or “codes of business ethics” in order to depict the company's commitment to CSR.

In this regard, Bromley states that “an organization's clearest indication of a collective conscience is (...) a corporate code of conduct,” which is “designed to protect an organisation's public image, and to a lesser extent to enhance it, by declaring its moral standards to others” (Bromley 1993, pp. 196–197). In this context, corporate social responsibility is regarded as voluntary corporate commitment to face the obligations imposed on a company by society's expectations, according to a long-range plan of action.

Code of Conduct is a practical CSR tool used by firms to establish responsible business practices and to promote a socially responsible organizational culture by responding to internal and external forces, according to a global responsibility approach whose key principles are: at the social/institutional level, the principle of legitimacy; at the organizational level, the principle of public responsibility; at the individual level, the principle of managerial discretion (Kolk et al. 1999). Legitimacy is about business as social institution, framing the perspective associated to the relationship between business and society. Public responsibility concerns the single firm and its outcomes while managerial discretion considers managers as moral actors operating according to corporate social responsibility rules.

In this regard, Paine states: “by adopting its own code, a company can clarify for all parties, internal and external, the standards that govern its conduct and can thereby convey its commitment to responsible practices wherever it operates” (Paine et al. 2005).

The closed relation between codes of conduct and CSR is clear considering the CSR’s definition provided by Sheehy: “a type of international private law (that) . . . can be defined as a socio-political movement which generates private self-regulatory initiatives, incorporating public and private international law norms seeking to ameliorate and mitigate the social harms of and to promote public good by industrial organisations” (Sheehy 2015).

Similarly, Sethi states that “a corporate code of conduct is in the nature of «private law» or a «promise voluntarily made» whereby an institution makes a public commitment as to certain standards of conduct” (Sethi 2002). Indeed, in literature written on codes, there is a general belief that codes are formulated in order to encourage firms act more responsibly; Kolk et al. underline the relation between Codes of Conduct and Corporate Social Responsibility in a clear way, by defining such codes as: “encompassing guidelines, recommendations or rules issued by entities within society (adopting body or actor) with the intent to affect the behavior of (international) business entities

(target) within society in order to enhance corporate responsibility” (Kolk et al. 1999).

In this context, the role played by different stakeholders is emphasized as the CSR approach requires the wide attention for all stakeholder’s expectations; codes of conduct promote the establishment of ethical practices and behaviors enabling the safeguard of multiple dimensions (economic, social, and environmental). In other words, in order to comply with such codes’ principles and the related CSR values, firms should encourage stakeholder engagement as this approach enables firms to identify stakeholders’ expectations and promote their fulfillment.

However, the adoption of a Code of Conduct does not necessarily imply a more responsible behavior due to the so-called phenomenon “attitude behavior gap” (O’Driscoll et al. 2013). Even if such codes have been seen as a CSR tool, some scholars argue that, in many cases, firms adopt codes in order to implement *white* and *green washing* practices aiming at hiding their unethical behaviors or to avoid government legislation and intervention.

The Content and Styles

Corporate Codes of conduct have been introduced mainly in order to reduce abuse and exploitation of workers by promoting the safeguard of human rights, such as freedom and gender rights. The focus on workers’ welfare identifies corporate codes’ public aim even if these statements may address different issues such as: extortion, conflict of interest, illegal payment, and potential violations of law (Chattov 1980) or other general aspects such as honesty, equity, rights, and environmental impacts. Generally, Codes of Conduct are focused on the protection of the firm and on Corporate Social Responsibility issues, by emphasizing the acts defined by the law as punishable (for example, overcharging, bribing, and manipulating accounting books and records).

The increasing relevance of different stakeholder and related expectations (economic and noneconomic) implies a widening of the areas of responsibilities included in these codes, moving

from the initial concern for employees to the recognition of other stakeholders such as consumers, suppliers, and listed companies' shareholders.

In particular, the growing demand for firm's global responsibilities leads to the belief that codes of conduct should include also environmental contents in order to cope with different stakeholders' needs, without complicating the related adoption (Fisher et al. 2005; Singh 2006).

With reference to the content and the adopting actors, these codes have been differently categorized as follows: issue focused, such as on human rights and child labor; company codes, which are adopted unilaterally by firms; trade association codes adopted by a group of firms in a specific industry; multi-stakeholder codes resulting from negotiations among firm's stakeholders; model codes representing a benchmark for potential adopters; intergovernmental codes, negotiated at an international level and accepted by national governments (OECD 2000); industry focused, supra-organization, organizational or sub-organizational (Preuss 2010); internal codes aiming at achieving internal purposes and external in response to stakeholder pressures, which find in such codes a measure to address public concerns for corporate practices.

With reference to codes' styles, Bondy et al. (2006) identify four specific alternatives:

- Stipulative codes, using words such as "shall," "will," and including sanctions for non-compliant behaviors.
- Commitment-based codes, providing the guidelines to move toward a corporate social responsibility view as a specific company's commitment.
- Principle-based codes, including a set of principles leading companies toward the implementation of ethical practices.
- Information-based codes mainly including information about what the company has already done in terms of corporate social responsibility.

Similarly, Lowe (1996) identifies common formats including the following: the "foreign/legal" format emphasizing legal compliance and

sanctions in case of violation, typical of multinational organizations; the "follow the leader" as this approach characterizes companies that borrow existing frameworks formulated by professional associations. Other scholars make a distinction between value-based codes, mainly based on broad principles guiding behaviors; and rule-based codes, including rules and principles that must be respected (Farrell and Cobbin 1996).

The Effectiveness

In general, a Code of Conduct must ensure the following qualitative characteristics: clarity, comprehensiveness, and enforceability (Wiley 1995; Raiborn and Payne 1990).

Clarity refers to transparency and absence of ambiguity or vagueness, implying documents written in an understandable, concise, and honest way, while comprehensiveness means that the code addresses any conduct.

Finally, enforceability implies that the code provides specific description regarding expected behavior, which can violate the code and related punishments.

Enforceability is closely related to the Codes of Conduct's effectiveness; this issue has been widely investigated by scholars with specific reference to the codes' ability of improving ethical standards in organizations (Cressey and Moore 1983; Hunt et al. 1984; Matthews 1987; Kjonstad and Willmott 1995). In general, Codes of Conduct's effectiveness is generally considered weak due to the absence of monitoring activities based on sound criteria to ensure compliance (Hale and Wills 2007; Raworth and Coryndon 2004).

In this regard, Sethi argues that: "multinational codes of conduct are only as good as the public's perception and belief that companies are indeed doing what they proclaim to be doing. (...) It is ironic that while corporations expect to be audited by independent outsiders for their financial performance to ensure their investors of the accuracy of this information, they are unwilling to provide similar information in other areas of their activities including their codes of conduct" (Sethi 2002), while Robin et al. (1989) state that "codes

have little to do with ethics and may not be able to mandate an ethical business climate” (Robin et al. 1989, p. 66).

Singhapakdi and Vitell (1990) found that the enforcement of codes of conduct enables organizations to be more sensitive to ethical problems and to cope with them by choosing the best ethical alternative in the decision process.

Other researchers argue that codes have limited to no impact (Matthews 1987) and they are poor predictors of ethical values (Callan 1992); similarly, Mitchell et al. (1996) observe that no correlation can be demonstrated between the adoption of such a code and the legal/illegal behavior.

In this regard, Argandoña argues: “An ethical code may be an opportunity for a company to build moral capital and to improve ethical behavior in the company and in its community, and also to get financial or economic benefits. But the company may also use the code to attain short-term profits, exploiting a reputation for morality that does not correspond with the truth. Therefore, the existence of an ethical code is not necessarily a guarantee of moral attitudes (...)” (Argandoña 1994, pp. 151–52).

Similarly, McDonald et al. underline that codes of conduct “naturally suffer from some of the same defects (...) policies cannot cover all possible situations; they are not prioritized, and they may lead to conflicting and potentially incompatible instructions. Formal policies may also be inconsistent with day-to-day practices for getting a job done. It has been found that the more decentralized the decision-making function (and consequently the direct supervision of managers), the greater the likelihood of inadvertent noncompliance. It could also be suggested that if employees do not perceive senior managers to be complying with ethical policy, they may tend not to comply themselves” (McDonald and Zepp 1994, p. 205).

Another factor of effectiveness’ weakness has been identified in the limited integration of codes of conduct into organizational activities and regulatory system with a consequent limitation of improving ethical behaviors. Indeed, Sheehy (2019) states that: “Codes that are not integrated into a coherent regulatory system suffer from their status as a stand-alone solution, are orphaned and

destined for obscurity. Thus for codes to be effective, they must be embedded within a regulatory system that includes the necessary administrative and institutional infrastructure.”

According to some researchers, the codes’ effectiveness doesn’t work, as firms usually do not identify their core values and the related ethical priorities in the process of code development. Indeed, many firms adopt a “one size fits all approach” based on the practice of using a generic industry code, without reflecting the organization’s characteristics.

Conversely, some scholars believe that the adoption of codes of conduct produce a positive effect on employee behavior (Ferrell and Skinner 1988) while other researchers argue that the effectiveness of these code depends on the manner they are written: vague statements are less effective than detailed codes and are likely to fail to address relevant issues (Hunt et al. 1984).

In this regard, Herndon identifies specific factors affecting codes of conduct’s effectiveness such as: the code itself with reference to the writing style, applicability and enforcement measures; top management actions fighting unethical behaviors; the extent of ethical problems within the organization; the external environment in terms of industry competition and cultural approach (Herndon 1994). Similarly, Sethi argues that a code of conduct, to be effective, should be: economically viable, considering the competition forces and industry structure; aimed at addressing any relevant stakeholder’s issues, starting from employee’s ones and moving toward other affected group’s expectations; specific in order to enable the performance assessment.

In order to improve codes of conduct’s effectiveness, it should be useful to enhance corporate culture, which refers to the values, principles, expectations, and beliefs shared by the organization’s members as well as the corporate governance bodies.

In literature, corporate culture has been differently defined as: “the collective programming of the mind which distinguishes the members of one human group from another” (Hofstede 1980); “a cognitive framework consisting of attitudes, values, behavioral norms and expectations”

(Greenberg and Baron 1997); “the collective thoughts, habits, attitudes, feelings and patterns of behavior” (Clemente and Greenspan 1999); “the pattern of arrangement, material or behavior which has been adopted by a society (corporation, group or team) as the accepted way of solving problems” (Ahmed et al. 1999), and “the specific collection of values and norms that are shared by people and groups in an organizational and that control the way they interact with each other and with stakeholders outside the organization” (Hill and Jones 2001).

The improvement of values established by corporate bodies and shared with all the organization’s members can strengthen the corporate compliance to codes’ statements according to global responsibility principles. The values of a company’s corporate culture characterize its internal dimensions, orienting the behaviors of its members toward the achievement of the goals selected by the corporate governance body. Thus, it is important to establish a cultural perspective promoting the codes of conduct’s adoption and implementation, as well as ethical behaviors based on a strong awareness of social and environmental issues.

Summary

The meaning of Corporate Codes of conduct has changed throughout the time, moving from codes focused on bribery issue toward codes emphasizing the relevance of social and environmental issues. Similarly, the adoption of a code of conduct may be motivated by different reasons such as: the introduction of clear standards promoting loyalty and collaboration among the organization’s members; the need to promote ethical and acceptable behaviors. Indeed, code of conduct can be seen as a CSR tool used by firms to establish responsible business practices and to promote a socially responsible organizational culture.

In general, a Code of Conduct must fulfill specific criteria: clarity, comprehensiveness, and enforceability. Clarity refers to transparency and absence of ambiguity or vagueness, implying documents written in an understandable, concise, and honest way, while comprehensiveness means that

the code addresses any conduct. Finally, enforceability implies that the code provides specific description regarding expected behavior, which can violate the code and related punishments.

Cross-References

- [Accountability](#)
- [Corporate Social Responsibility](#)
- [Corporate Sustainable Innovation](#)
- [Creating Shared Value](#)
- [CSR: Evolution of Concept](#)
- [Ethics Management](#)

References

- Ahmed, P. K., Loh, A. Y. E., & Zairi, M. (1999). Cultures for continuous improvement and learning. *Total Quality Management*, 10, 426–434.
- Alexander, J. (1997). On the right side. *World Business*, 3 (1), 38–41.
- Argandoña, A. (1994). Business, law and regulation: Ethical issues. In B. Harvey (Ed.), *Business ethics: A European approach*. London: Prentice Hall.
- Baker, R. (2005). A draft model aggregated code of ethics for bioethicists. *The American Journal of Bioethics*, 5 (5), 33–41.
- Bondy, K., Matten, D., & Moon, J. (2006). *MNC codes of conduct: CSR or corporate governance?* (Research paper series, no. 40-2006) (pp. 1–28). International Centre for Corporate Social Responsibility. Available at: www.nottingham.ac.uk/business/ICCSR
- Bromley, D. B. (1993). *Reputation, image and impression management*. London: Wiley.
- Callan, V. J. (1992). Predicting ethical values and trading needs in codes of ethics. *Journal of Business Ethics*, 11 (10), 761–769.
- Chattov, R. (1980). What corporate ethics statements say. *California Management Review*, 22(4), 20–29.
- Clemente, M. N., & Greenspan, D. S. (1999). Culture clashes. *Executive Excellence*, 16, 12.
- Cressey, D., & Moore, C. A. (1983). Managerial values and corporate codes of ethics. *California Management Review*, 25, 53–77.
- Diller, J. (1999). A social conscience in the global marketplace? Labour dimensions of codes of conduct, social labelling and investor initiatives. *International Labour Review*, 138(2), 99–129.
- Farrell, B. J., & Cobbin, D. M. (1996). A content analysis of codes of ethics in Australian enterprise. *Journal of Managerial Psychology*, 11(1), 37–55.
- Ferrell, O. C., & Skinner, S. J. (1988). Ethical behaviour and bureaucratic structure in marketing research

- organisations. *Journal of Marketing Research*, 25(1), 103–109.
- Fisher, C., Parry, I., Aguilar, F., & Jawahar, P. (2005). *Corporate codes of conduct: Is common environmental content feasible?* (Discussion paper 05–09). Washington, DC: Resources for the Future.
- Forcese, C. (1997). *Commerce with conscience. Human rights and corporate codes of conduct*. Montreal: International Centre for Human Rights and Democratic Development.
- Greenberg, J., & Baron, R. A. (1997). *Behavior organizations*. Upper Saddle River: Prentice-Hall.
- Hale, A., & Wills, J. (2007). Women working worldwide: Transnational networks, corporate social responsibility and action research. *Global Networks*, 7(4), 453–476.
- Herndon, N. C. Jr. (1994). *Toward enhancing the effectiveness of a corporate code of ethics*. Proceedings of Inaugural Conference of the Centre for the Study of Business Values, University of Hong Kong, Hong Kong.
- Hill, C., & Jones, G. (2001). *Strategic management*. Boston: Houghton Mifflin.
- Hofstede, G. (1980). *Culture's consequences. International differences in work-related values*. Beverly Hills: Sage Publications.
- Howard-Grenville, J., Nash, J., & Coglianese, C. (2008). Constructing the license to operate: Internal factors and their influence on corporate environmental decisions. *Law & Policy*, 30, 73–107.
- Hunt, S. D., Chonko, L. B., & Wilcox, J. B. (1984). Ethical problems of marketing researchers. *Journal of Marketing Research*, 21, 309–324.
- Kaptein, M., & Wempe, J. (2002). *The balanced company: A theory of corporate integrity*. Oxford: Oxford University Press.
- Kjonstad, B., & Willmott, H. (1995). Business ethics: Restrictive or empowering? *Journal of Business Ethics*, 14(6), 445–464.
- Kline, J. (1985). *International codes and multinational business: Setting guidelines for international business operations*. Westport: Quorum Books.
- Kolk, A., van Tulder, R., & Welters, C. (1999). International codes of conduct and corporate social responsibility: Can transnational corporations regulate themselves? *Transnational Corporations*, 8(1), 143–180.
- Langlois, C. C., & Schlegelmilch, B. B. (1990). Do corporate codes of ethics reflect national character? Evidence from Europe and United States. *Journal of International Business Studies*, 519–539.
- Lowe, S. (1996). Codes of conduct in Hong Kong organisations. *International Journal of Value-Based Management*, 9(3), 211–225.
- Matthews, M. C. (1987). Codes of ethics: Organisational behaviour and misbehaviour. In W. C. Frederick & L. E. Preston (Eds.), *Research in corporate social performance and policy* (pp. 107–130). Greenwich: JAI Press.
- McDonald, G. M., & Zepp, R. A. (1994). Business ethics: Practical proposals. In J. Drummond & B. Bain (Eds.), *Managing business ethics*. Oxford: Butterworth-Heinemann.
- Mitchell, D. R., Daniels, D., Hooper, H., George-Faley, J., & Ferris, G. R. (1996). Perceived correlates of illegal behavior in organizations. *Journal of Business Ethics*, 15, 430–455.
- O'Driscoll, A., Claudy, M., & Peterson, M. (2013). Understanding the attitude-behavior gap for renewable energy systems using behavioral reasoning theory. *Journal of Macromarketing*, 33(4), 273–287.
- OECD. (2000). *Codes of conduct – An expanded review of their contents* (OECD working party of the trade committee, TD/TC/WP(99)56/FINAL). Paris: Organisation for Economic Cooperation and Development.
- OECD. (2001). *Codes of corporate conduct: Expanded review of their contents*. Paris: Organisation for Economic Cooperation and Development.
- Paine, L., Deshpande, R., Margolis, J. D., & Bettcher, K. E. (2005). Up to code. Does your company's conduct meet world-class standards? *Harvard Business Review*.
- Preuss, L. (2010). Codes of conduct in organisational context: From cascade to lattice-work of codes. *Journal of Business Ethics*, 94, 471–487.
- Raiborn, C. A., & Payne, D. (1990). Corporate codes of conduct: A collective conscience and continuum. *Journal of Business Ethics*, 9(11), 879–889.
- Raworth, K., & Coryndon, A. (2004). *Trading away our rights: Women working in global supply chains*. London: Oxfam International.
- Robin, D., Giallourakis, M., David, F. R., & Moritz, T. E. (1989). A different look at codes. *Business Horizons*, 66–73.
- Sethi, P. (2002). Standards for corporate conduct in the international arena: Challenges and opportunities for multinational corporations. *Business and Society Review*, 107(1), 20–40.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131, 625–648.
- Sheehy, B. (2019). TNT code of conduct or CSR? A regulatory systems perspective. In M. Rahim (Ed.), *Code of conduct on transnational corporation. CSR, sustainability, ethics & governance*. New York: Springer.
- Singh, J. B. (2006). Ethics programs in Canada's largest corporations. *Business and Society Review*, 111(2), 119–136.
- Singhapakdi, A., & Vitell, S. J. (1990). Marketing ethics: Factors influencing perceptions of ethical problems and alternative. *Journal of Macro Marketing*, 12, 4–18.
- United Nations. (2001). Corporate codes of conduct. Self-regulation in a global economy. Technology, business and society programme. Paper number 2.
- White, B. J., & Montgomery, B. R. (1980). Corporate codes of conduct. *California Management Review*, 23, 80–87.
- Wiley, C. (1995). The ABCs of business ethics: Definitions, philosophies and implementation. *Industrial Management*, 37(1), 22–27.

Corporate Communication

► CSR Communication and Perspective

Corporate Community Involvement

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Synonyms

Community Engagement; Community Participation; Corporate Citizenship; Corporate Social Action; Social Responsibility

Definition

Corporate Community Involvement (CCI) refers to businesses' involvement in societal initiatives aimed at meeting the needs of the communities in which they conduct their operations. It differs from philanthropic activities since it allows stakeholders to enter the company's infrastructure, human resources, and business operations. CCI requires a significant commitment of both time and resources from the company towards community initiatives, distinguishing it from other types of Corporate Social Responsibility (CSR). While the latter may be motivated by the necessity to address the negative impacts of a company's operations, CCIs are unique in their altruistic intent (Yekini et al. 2015). CCIs are distinguished by their active participation in societal affairs and the engagement of companies in civic responsibilities within their local community. Furthermore, the historical roots of CCI also set it apart from other CSR initiatives.

Introduction

Corporate participation in social affairs predates contemporary notions of CSR. As Gilchrist (2003) observed, corporations were an integral part of society during the late nineteenth- and early twentieth-centuries with visible links to their communities. It was customary for businesses to make their resources available to the society in which they operated. However, in the wake of the Second World War, there was a noticeable decline in corporate involvement with society. This disconnect was exacerbated by the war's devastating impact, which left many national governments unable to single-handedly address its aftermath and reliant on corporations as partners. In summary, unlike the broad concept of CSR, CCI is a distinctive and specific form of corporate engagement with the community. It has a rich historical legacy of corporations' active involvement and interaction with their local society. Several studies (Campbell et al. 2006; Rehbein and Schuler 2015; Yekini et al. 2015) have acknowledged the distinctiveness of CCI and its dissimilarity from other forms of CSR, mainly due to its outward-looking approach and its substantial involvement with the external community. Rehbein and Schuler (2015) state that corporate community programs (CCP) are "aimed at addressing various social issues, such as poverty, education gaps, environmental deterioration, and human health" and are outward facing.

Key Issues

CCI as a Developmental Tool

As mentioned, CCI emerged as a strategic response by governments to foster economic and social renewal in the aftermath of the Second World War by encouraging businesses to engage in community development (Bush et al. 2008). This shift led corporations to transition from philanthropic activities such as donations and public relations to community development. While some community development initiatives were mandated by government policies aimed at

regeneration, some corporations today engage in such activities as part of their CSR obligations. In contrast, others do so to secure a social license to operate safely in their local communities.

Societal Expectations for It and the Demand for Its Disclosure

Over time, there has been an increase in society's expectations for corporate community involvement, leading to a demand for its disclosure in annual reports. This demand has spurred scholarly research, including works by Epstein and Freedman (1994), Cowen et al. (1987), Patten (1992), Campbell et al. (2006), Yekini and Jallow (2012), and Yekini et al. (2015, 2017, and 2021). While some scholars have focused on societal demand and motivation for the disclosure of community involvement, others have investigated the social impacts of community activities on affected groups and companies' reporting behavior over an extended period. More recently, studies have shifted their focus to the quality and transparency of the disclosures. For instance, Yekini and Jallow (2012) examined the nature of community involvement activities companies undertake and their level of commitment, while Yekini et al. (2015) investigated how the presence of non-executive directors could affect the quality of community disclosure, and Yekini et al. (2017) looked into the influence of community expectations.

The Disclosure of It by Corporations

There is a common belief that managers can improve their value maximization strategy by reporting the company's financial performance through annual reports. However, it is worth considering whether managers can fulfill their moral obligation by disclosing the company's community initiatives. Furthermore, it is crucial to examine whether the disclosure of corporate community involvement activities in annual reports can be perceived as an indicator of Corporate Community Development (CCD) or merely a demonstration of conformity to societal norms. The argument is that the language of narrative disclosures can influence thinking and affect

perception. As such, one may argue that CCID represents a communication tactic utilized by corporations to measure their achievements in corporate community involvement (CCI) or to signal observance with CSR. Nevertheless, despite identifying "the community" as a critical member of the stakeholder system, literature on CCID is scarce (Campbell et al. 2006; p. 97). In addition, a more fundamental issue with the CSR discussion, specifically the limited CCI literature, is the insufficient theorization and restricted conceptual basis that relies heavily on traditional frameworks like stakeholder and legitimacy theories, which have dominated the CSR conversation (Yekini et al. 2021). Hence, several studies (Bebbington et al. 2008; Yekini et al. 2021) have suggested novel theoretical approaches to improve the caliber of Corporate Social Responsibility (CSR) literature.

Future Directions

The advent of the COVID-19 pandemic and the invention of the new normal calls to mind the need to reinvent CCI as a developmental tool. The pandemic accelerated the advancement of technology and its use in our everyday life. Undoubtedly, CCI has a role to play on the road to recovery and the sustainability imperatives in the post-pandemic world. The challenges faced by society to restore stability and functionality to post-pandemic services without losing sight of the SDGs is a crucial direction to consider for CCI researchers and organization desiring to use CCI as a CSR tool. Furthermore, the incorporation of theoretical frameworks from other social science disciplines, including psychology, media studies, anthropology, sociology, and politics, can enhance our collective understanding of the wider CSR discourse.

Summary

To summarize, corporate community involvement demonstrates a company's commitment to social

responsibility and sustainable development by engaging in sustainable practices and strategic partnerships; companies contribute to improving communities, fostering positive relationships with stakeholders, and contributing to a more inclusive and sustainable society. To ensure accountability and transparency, companies measure and report on the impact of their community involvement efforts. Reporting became exacerbated by societal demand for it, thereby necessitating its integration into the overall corporate strategy and core business operations. Thus, companies ensure long-term commitment and sustained impact by incorporating community involvement as a strategic priority.

Cross-References

- [CSR Disclosure, Quality Measurement of](#)
- [CSR Disclosure Quality: Role of NEDs](#)
- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

References

- Bebbington, J., Larrinaga-González, C., & Moneva-Abadía, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, 21(3), 337–361.
- Bush, G., Grayson, D., Jordan, A., & Nelson, J. (2008). *Engaging business in the community – not a quick fix*. The Smith Institute monograph.
- Campbell, D., Moore, G., & Shrives, P. (2006). Cross-sectional effects in community disclosure. *Accounting, Auditing & Accountability Journal*, 19(1), 96.
- Cowen, S. S., Ferrari, L. B., & Parker, L. D. (1987). The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis. *Accounting, Organizations and Society*, 12(2), 111–122.
- Epstein, M. J., & Freedman, M. (1994). Social disclosure and the individual investor. *Accounting, Auditing & Accountability Journal*, 7(4), 94.
- Gilchrist, A. (2003). Community development in the UK—possibilities and paradoxes. *Community Development Journal*, 38(1), 16–25.
- Patten, D. M. (1992). Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory. *Accounting, Organizations and Society*, 17(5), 471–475.
- Rehbein, K., & Schuler, D. A. (2015). Linking corporate community programs and political strategies a resource-based view. *Business & Society*, 54(6), 794–821.
- Yekini, K., & Jallow, K. (2012). Corporate community involvement disclosures in annual report: A measure of corporate community development or a signal of CSR observance? *Sustainability Accounting, Management and Policy Journal*, 3(1), 7–32.
- Yekini, K., Adelopo, I., Andropoulos, P., & Yekini, S. (2015). Impact of board independence on the quality of community disclosures in annual reports. *Accounting Forum*, 39(4), 249–267.
- Yekini, K. C., Adelopo, I., & Adegbite, E. (2017). The impact of community expectations on corporate community involvement disclosures in the UK. *Accounting Forum*, 41, 234–252.
- Yekini, K. C., Omotoso, K., & Adegbite, E. (2021). CSR communication research: A theoretical-cum methodological perspective from semiotics. *Business and Society*, 60(4), 876–908.

Corporate Compliance

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Definition/Description

Corporate compliance refers to an organization's substantive commitment to direct the activities of its employees, management, and executive officers in ways that conform to the regulatory and ethical norms of the societies in which it operates. This commitment requires a process that aligns a firm's behavior with these norms. This process typically includes articulating a code of conduct, developing organizational rules and standards, establishing channels of communication within a hierarchy from both top to bottom (training) and bottom to top (reporting), implementing a transparent and effective system of enforcement, and empowering a top-level executive with authority to effectuate the process.

History of Compliance Programs

Before the 1980s, corporate compliance programs, if they existed, were informal. The first formal program traces to bribery scandals associated with US defense contracting during the 1980s which led to a self-regulatory body called the “Defense Industry Initiative” that continues today. Formal programs flourished with the passage of the US Sentencing Commission’s Sentencing Guidelines for Organizations [Guidelines], which identified a “corporate compliance program” as a mitigating factor when assessing a criminal fine against a corporation. The Guidelines were enacted in 1991, and within a few years virtually every Fortune 500 firm had created a compliance program.

The Guidelines specified seven factors needed to achieve a full reduction on criminal fines: (1) reasonable rules and standards; (2) high-level executive oversight; (3) diligence in hiring; (4) communication and training; (5) monitoring and testing; (6) alignment of incentives; and (7) appropriate remediation. Establishing a compliance program entailed costs; yet, if the projected savings on fines exceeded those costs, then establishing a compliance program enhanced corporate profit. Corporate counsel recommended hiring “compliance officers” to design and implement these programs. To meet the enumerated criteria, these officers were often given the title of vice president with direct reporting to the chief executive officer or the board of directors. Companies set up reporting hotlines and implemented training programs.

Compliance programs address a host of regulatory concerns including rules promulgated by the Securities and Exchange Commission, Federal Trade Commission, Environmental Protection Agency, Occupational Safety and Health Administration, and other regulatory bodies. In *United States v. Booker* (2005), the US Supreme Court held that the Guidelines were merely advisory and not binding on the courts. Nonetheless, the Department of Justice uses the Guidelines in sentencing recommendations which carry significant weight with courts. Perhaps more importantly, federal prosecutors and regulatory officials use

the Guidelines in non-prosecution agreements (NPA) and deferred prosecution agreements (DPA) negotiated during plea bargaining (Griffin 2016, p. 2087). In exchange for a reduced fine, the offending company signs an NPA or DPA stipulating that the company will strengthen its compliance program.

Today, corporate compliance has blossomed into a thriving industry complete with associations such as the Society for Corporate Compliance and Ethics that serve professionals who practice compliance across various substantive areas. New course offerings are appearing in law schools in response to the demand for compliance officers. The first compliance textbook has arrived for adoption in law schools. Compliance programs also have spread internationally. The European Business Ethics Network contributes to the growth of compliance in Europe, and the European Ethics Forum provides an annual meeting place for compliance officers. Similarly, Ben-Africa offers a forum for compliance professionals in Africa.

Economic Logic of Compliance

Corporate compliance has been folded under the umbrella of financial risk management (Miller 2017). Compliance efforts are directed to areas where legal risks are most acute. For some companies, this means concerns over price-fixing, product extensions, or other forms of anticompetitive activities. For other companies, mass tort claims provide the main threat (Coffee 2015). Most, if not all, firms must attend to issues of financial reporting and tax compliance. Of course, establishing and managing a compliance program entails costs. If economic logic prevails, then resources will be employed up to a point where the marginal cost of compliance equals the marginal benefit resulting from fewer instances of unlawful behavior (Laufer 2006).

Corporate criminal malfeasance has a long history. Edwin Sutherland (1949) coined the term “white-collar-crime” in his groundbreaking study documenting that each of the seventy largest US corporations had been found guilty of or plead

guilty to a criminal felony during the first half of the twentieth century, with an average recidivism rate of 14. Most of these crimes involved antitrust, fraud, unfair labor practices, and bribery charges. In the 1960s and early 1970s, Congress enacted a host of regulatory bodies, each with the power to levy criminal fines. The Civil Rights Act of 1964 gave birth to the Equal Employment Opportunity Commission. Ralph Nader (1965) shed light on unsafe Corvairs, and the National Highway Traffic Safety Commission was born. The Cuyahoga River caught fire, and Congress enacted the Environmental Protection Agency. Unsafe workplaces led to safety regulations. By the mid-1970s, virtually every interface between management and a corporate stakeholder was regulated, and the management of public policy became a major component of corporate governance (Preston and Post 1975). Notwithstanding the new laws, the 1980s witnessed widespread insider trading crimes of Ivan Boesky and others resulting in tighter securities laws. Later in the decade, corruption scandals associated with the Keating Five contributed to the collapse of the savings and loan industry that cost American taxpayers more than one hundred billion dollars. Continuing the trend, the new millennium brought the financial frauds of Enron, WorldCom, and Adelphia, leading to the Sarbanes-Oxley accounting reforms. The financial meltdown of 2008 gave birth to Dodd-Frank banking regulations.

Corporate compliance officers purport to scan the regulatory landscape and to take steps to protect the firm's reputation and manage financial risks. As an incentive, business scholars have identified a so-called market for morality (e.g., Dunfee 1999). Developing a favorable reputation for compliance can forestall regulatory actions, curry favor with investors, inspire employees, and attract appreciative customers. Non-compliance, by contrast, generates risks, including the risk of significant fines and dissolution, as Arthur Anderson discovered. Unfortunately, the recent Volkswagen emissions regulations scandal and the Wells Fargo fraudulent bank accounts illustrate that compliance failures persist. Too often, it seems, a business actor does a calculation,

decides that a white-collar crime pays, and fails to perceive and embrace the moral self-restraint necessary to resist temptation (Ostas 2007). So long as compliance is framed solely in economic terms, malfeasance will remain a part of the corporate landscape.

Moral Basis of Compliance

The Ethics Research Center, a part of the Ethics and Compliance Initiative, conducts the National Business Ethics Survey. Surveys show that more components (training, codes, hotlines) help, but to be most effective, workers must see these efforts as sincere, not just window dressing. In other words, it may be easy to put programs in place but difficult to inculcate an ethical culture (Langevoort 2017). To build such a culture, employees, managers, and executives must perceive corporate compliance as an ethical duty, rather than a mere economic calculation where one complies only to avoid fines. The latter approach threatens to reduce compliance to a game where it may be tempting to take advantage of underenforced laws, legal loopholes, and employ a variety of corporate legal strategies that seemingly make fraud and other crimes pay. Corporate compliance must involve more than a game where one does whatever one can get away with.

Establishing a compliance culture begins with articulating a code of conduct. These codes typically include the business ethics values of integrity, honesty, fairness, trust, and responsibility (Blodgett 2012). Ideally, the duty of legal obligation derives from and is driven by these ethical values. Most, if not all, regulations express societal standards and seek to promote moral ends. One is hard-pressed to find an example of a regulation void of moral content (Paine 1994). A reasonably just law, promulgated in a reasonably just society, deserves compliance in accord with the legislators' normative expectations (Rawls 1971, pp. 355–356; Edmundson 1999). A corporate code that emphasizes a commitment to the moral underpinning of the law is more likely to support a

compliance culture than one that portrays the rule of law as merely a set of rules. Too often, rules can be vague, gap-riddled, ambiguous, and open to interpretation. Ethical commitment, by contrast, has no loopholes (Katz 1996).

For corporate compliance to be effective, training programs must emphasize a common-sense interpretation of legal obligations illustrated with safe harbors that bring corporate actions comfortably within the law. Training programs should also emphasize the moral bases of legal obedience. These include avoiding the negative societal consequences of corporate crime and the affirmative duties of reciprocal gratitude owed to a state that provides benefits and fairness to fellow citizens who willingly obey the law. In addition, the confidentiality of the reporting process must be beyond question. Executives must hear not only good news but bad news as well. Top-level management must model exemplary behavior, displaying proper decorum, and shared sacrifice during lean times. Finally, rewards and punishments must reinforce the commitment to corporate compliance (Miller 2017).

Summary

Corporate compliance has arrived as a significant component of financial risk management and corporate governance. Programs that follow the federal Guidelines tend to reduce the likelihood of malfeasance while simultaneously reducing penalties paid for misdeeds. To be effective, the economic logic of compliance must be reinforced with an appreciation of the moral underpinnings of political obligation. Moral leadership reflected in codes of conduct, effective training, and even-handed enforcement have all proved effective in promoting corporate compliance.

Cross-References

- [Compliance Management](#)
- [Corporate Governance](#)
- [Risk Management](#)

References

- Blodgett, M. S. (2012). Substantive ethics: Integrating law and ethics in corporate ethics programs. *Journal of Business Ethics*, 99, 39–48.
- Coffee, J. C. (2015). *Entrepreneurial litigation: Its rise, fall, and future*. Cambridge, MA: Harvard University Press.
- Dunfee, T. W. (1999). Corporate governance in a market with morality. *Law & Contemporary Problems*, 62(3), 129–158.
- Edmundson, W. A. (Ed.). (1999). *The duty to obey the law: Selected philosophical readings*. Lanham: Rowman & Littlefield.
- Griffin, S. J. (2016). Corporate governance in an era of compliance. *William & Mary Law Review*, 57(6), 2075–2140.
- Katz, L. (1996). *Ill-gotten gains: Evasion, blackmail, fraud, and kindred puzzles in law*. Chicago: University of Chicago Press.
- Langevoort, D. C. (2017). Cultures of compliance. *American Criminal Law Review*, 54(4), 933–978.
- Laufer, W. S. (2006). *Corporate bodies and guilty minds: The failure of corporate criminal liability*. Chicago: Chicago University Press.
- Miller, G. P. (2017). *The law of governance, risk management, and compliance* (2nd ed.). New York: Wolters Kluwer.
- Nader, R. (1965). *Unsafe at any speed: The designed-in dangers of the American automobile*. New York: Grossman Publishers.
- Ostas, D. T. (2007). When fraud pays: Executive self-dealing and the failure of self-restraint. *American Business Law Journal*, 44(4), 571–601.
- Paine, L. (1994). Law, ethics, and managerial judgment. *Journal of Legal Studies Education*, 12(2), 153–170.
- Preston, L. E., & Post, J. E. (1975). *Private management and public policy*. Englewood cliffs: Prentice Hall.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Sutherland, E. H. (1949). *White collar crime*. New York: Dryden Press.
- United States v. Booker*, 543 U.S. 220 (2005).

Corporate Conscience

- [CSR Reporting](#)

Corporate Contributions

- [Corporate Philanthropy](#)

Corporate Control

- ▶ [Corporate Governance](#)

Corporate Crime

- ▶ [Corporate Manslaughter](#)

Corporate Culture

- ▶ [Organizational Culture](#)

Corporate Death

- ▶ [Corporate Manslaughter](#)

Corporate Democracy

- ▶ [Shareholder Democracy](#)

Corporate Development

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Synonyms

[Business development](#); [Development of the company](#); [Enterprise development](#)

Definition

The term *corporate development* refers to the planning and execution of strategies to meet corporate objectives (Mishra 2010). Companies may expand in new strategic markets or geographical areas, establish new business units, or engage in mergers or acquisitions to grow, or they might need to focus on core competencies or to close business units in order to succeed. While the term corporate development can be linked to an abundance of activities, activities most often falling under the term corporate development include mergers and acquisitions (M&A), investments and divestitures, as well as the incubation of new businesses (Corporate Finance Institute 2019a).

Corporate development is usually a process that takes place over an extended period of time and therefore needs to be adjusted or refined as time and projects move forward. Corporate development is strongly influenced by and linked to the environment of a company, company strategy, and company culture (Heitger and Serfass 2015).

Introduction

Corporate development involves tasks and processes to develop and implement growth opportunities for organizations. As such, corporate development strategies are closely linked to overall corporate-level strategies and try to ensure that companies engage in the right businesses and markets. Accordingly, decisions must be supported by a comprehensive understanding of where the market is today and where it is headed in the future (Heitger and Serfass 2015).

In the broader sense, corporate development can mean any activity by either a small or large organization, non-profit or for-profit enterprise, which is employed to develop the corporation in some way, but activities commonly falling under corporate development are:

1. Phasing in or out of certain products or whole markets.
2. Mergers and acquisitions.

3. Long-term partnerships.
4. Divestitures and carve-outs.
5. Strategic alliances.

(Corporate Finance Institute 2019a)

Considering the importance of these activities makes it easy to see why corporate development is crucial for any successful company.

Corporate Development Teams or Functions

Recent corporate development studies conducted by several large consulting firms have emphasized that corporate development became more and more influential over the years and that strategy and strategic planning have become critical priorities for corporate development (Ernst and Young 2015; KPMG 2015). Strategic decisions companies make today will determine their future success. Therefore, they need to be based on an in-depth analysis of the company and its external environment. But since many companies today are confronted with fast-changing markets and technologies, such an analysis requires a lot of different skills, is very time-consuming, and must not be conducted once in a while, but more or less permanently. Therefore, corporate development activities are often initiated and implemented not by the company's chief executive officer (CEO), but by corporate development teams or functions, particularly in larger companies (Ernst and Young 2015).

The responsibilities of such corporate development teams have significantly increased in recent years, with more and more involvement in strategy, business transformation, technology advancement, and cost reduction in general (KPMG 2015). The vast majority of corporate development teams now report to the CEO or the chief financial officer (CFO), which places them close to the corporate center and reflects the importance of such teams.

Internal vs. External Focus

On the one hand, corporate development is a crucial inward-looking function for a company. The goal is to identify the company's strengths and weaknesses and fill gaps in the company's geographical outreach and product portfolio

(Corporate Finance Institute 2019a). A decent internal analysis helps to understand the organization's competencies, cost positions, and competitive viability in the marketplace. Detecting new potential business opportunities is one of the main responsibilities that corporate development has to accomplish.

On the other hand, corporate development is also an essential outward-looking function for an organization as it is necessary to conduct a thorough analysis of the external environment (Corporate Finance Institute 2019a). The primary purpose of the external analysis is to determine the opportunities and threats in an industry or any segment that will influence company success. External analysis, however, also includes analyzing macroeconomic, global, political, social, demographic, and technological factors that could affect the company (Corporate Finance Institute 2019b).

To help CEOs or corporate development teams to base their decisions on a profound analysis, a number of tools can be used to perform the internal as well as the external analysis. Tools commonly used are, for example, SWOT analysis, PESTEL analysis, Porter's Five Forces Model, scenario planning, BCG matrix, and VRIO analysis.

Concluding Remarks

All corporate development activities lead to organizational change and transformation. And even though such activities are often vital for company growth or even company survival, they are also challenging to implement and manage. While corporate development projects take many forms, they share one thing in common: a dismal record of success (Heimeriks 2014). For example, "leading practitioners of radical corporate reengineering report that success rates in Fortune 1,000 companies are well below 50 percent; some say they are as low as 20 percent" (Strebel 1996, p. 86). Especially mergers and acquisitions have a meager success rate and quite often destroy rather than create value (Meckl and Röhrle 2016). What is perhaps most striking is the fact that, despite extensive experience, few organizations are able to be continually successful. Therefore, recent

research has stressed the importance of corporate development capabilities (Bingham et al. 2012; Heimeriks 2014) and especially M&A capabilities (Trichterborn et al. 2016). However, especially research in the area of corporate development capabilities is still in its infancy, and the “use of novel methodological approaches is crucial to answer emerging questions and provide relevant insights to challenges in the corporate development literature” (Heimeriks 2014, p. 5).

Since corporate development activities involve and directly affect people in an organization’s internal and external environment, it is essential to conduct such activities in a responsible way. Accordingly, the possible effects of corporate change processes have become a significant field of study, and researchers have stressed the importance of good management practices (“change management”) and communication when it comes to corporate development and change (Bowman and Singh 1993; Senior 2002). It cannot be stressed enough that without effective employee communication, change is impossible and change management fails: “Whether organizational change results from a merger, acquisition, new venture, new process improvement approach, or any number of flavors-of-the-day management fads, employee communications can mean the success or failure of any major change program” (Barrett 2002, p. 219).

Summary

Corporate development is crucial for the evolution and survival of an organization. Overall, corporate development activities can cover very different strategic options and actions. In real business life, it can be observed that large corporations apply a portfolio of different corporate development activities. Like that these corporations are able to balance out the risk if one of these activities fails.

References

Barrett, D. J. (2002). Change communication: Using strategic employee communication to facilitate major

change. *Corporate Communications: An International Journal*, 7(4), 219–231.

Bingham, C. B., Heimeriks, K., & Schijven, M. (2012). Parallel learning: How firms build capabilities concurrently. *Academy of Management Proceedings*, 2012(1), 16732. Briarcliff Manor, NY 10510: Academy of Management.

Bowman, E. H., & Singh, H. (1993). Corporate restructuring: Reconfiguring the firm. *Strategic Management Journal*, 14, 5–14.

Corporate Finance Institute. (2019a). Corporate Development. <https://corporatefinanceinstitute.com/resources/careers/jobs/corporate-development-guide/>. Accessed 3 August 2019.

Corporate Finance Institute. (2019b). External Analysis. <https://corporatefinanceinstitute.com/resources/nowledge/strategy/external-analysis/>. Accessed 3 August 2019.

Ernst and Young. (2015). Corporate development today: driving strategy, accelerating growth. 2015 Global Corporate Development Study. [https://www.ey.com/Publication/vwLUAssets/ey-corporate-development-today-driving-strategy-accelerating-growth/\\$File/ey-corporate-development-today-driving-strategy-accelerating-growth.pdf](https://www.ey.com/Publication/vwLUAssets/ey-corporate-development-today-driving-strategy-accelerating-growth/$File/ey-corporate-development-today-driving-strategy-accelerating-growth.pdf). Accessed 3 August 2019.

Heimeriks, K. H. (2014). “Grow or grieve”: Understanding corporate development capabilities. Tilburg University.

Heitger, B., & Serfass, A. (2015). *Unternehmensentwicklung: Wissen, Wege, Werkzeuge für morgen*. Schaeffer-Poeschel.

KPMG (cutting through complexity). (2015). The evolving role of corporate development in banking. Fewer deals + more strategic projects = greater fulfillment. KPMG International. <https://assets.kpmg/content/dam/kpmg/pdf/2015/04/evolving-role-corporate-development-banking-v1-fs.pdf>. Accessed 3 August 2019.

Meckl, R., & Röhrle, F. (2016). Do M&A deals create or destroy value? A meta-analysis. *European Journal of Business and Economics*, 11(2).

Mishra, M. N. (2010). *Organisational behaviour and corporate development*. Mumbai: Himalaya Publishing House.

Senior, B. (2002). *Organisational change* (2nd ed.). London: Prentice Hall.

Strebel, P. (1996). Why do employees resist change? *Harvard Business Review*, 74(3), 86.

Trichterborn, A., Zu Knyphausen-Aufseß, D., & Schweizer, L. (2016). How to improve acquisition performance: The role of a dedicated M&A function, M&A learning process, and M&A capability. *Strategic Management Journal*, 37(4), 763–773.

Corporate Engagement

► Shareholder Engagement

Corporate Entrepreneurship

► Intrapreneurship

Corporate Environmental Management Evolution

► Corporate Environmental Management Maturity

Corporate Environmental Management Maturity

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Synonyms

Corporate environmental management evolution;
Environmental management taxonomies; Envi-
ronmental strategy development

Definition/Description

Corporate environmental (management) maturity (CEMM) indicates how an ecological strategy of a firm develops in time with increasing integration of eco or green practices into the business strategy. According to Kolk and Mauser (2002), corporate environmental management can be labeled as strategies, approaches, responses, or development/maturity stages. Various scholars have proposed different taxonomical models to classify CEMM with different stages and characteristics. While some of these models are conceptual, others are based on empirical evidence. However, all these models indicate a development over time from a reactive approach to a proactive strategy of

environmental responses with different transitional stages.

Introduction

Businesses are compelled to enhance the responsibility of their activities to encompass both ecological and social considerations and focus on shareholder profit maximization (Buysse and Verbeke 2003; Gunarathne and Lee 2020). The growing regulatory and stakeholder pressures have resulted in changing corporate managers' attitudes to bring environmental sustainability matters into the decision-making processes of corporations (Newman et al. 2020). Hence corporate environmental strategy has become an integral component of companies' contribution toward corporate sustainability and sustainable development (Landrum 2018). However, evidence shows that companies have displayed different levels of adoption of environmental management practices (Jabbour et al. 2010; Gunarathne and Lee 2019a; Park and Ahn 2012), exhibiting a different degree of intensity in their application of environmental strategy. As Jabbour (2015) mentions, "not all organisations adopt all of these practices, nor do they apply them with the same level of intensity" (p. 332), which gives rise to the concept of corporate environmental management maturity (CEMM) (or environmental management development). It explains the different intensity levels in which corporate ecological management strategies can be implemented (Jabbour 2015; Kolk and Mauser 2002).

Corporate Sustainability

The concept of corporate sustainability is rooted in the broader concept of sustainable development. According to Brundtland Commission (1987), sustainable development is the development that meets the needs of the present generations without compromising the ability of future generations to satisfy their need. Following this famous definition, Dyllick and Hockerts (2002)

define corporate sustainability as the ability of a firm to meet the needs of its stakeholders (both direct and indirect) without compromising the ability to meet future stakeholder requirements. However, there is considerable disagreement about the concept and lack of clarity on how best corporate sustainability management practices should be implemented internally. Hence, Schaltegger and Burritt (2018) suggest that a firm needs to plan, design, measure, report, and control economic, social, and ecological activities to achieve corporate sustainability management. By doing so, firms will realize sustainable development for themselves and contribute to the sustainable development of the society and economy. Hence, corporate sustainability implies managing three types of capital, viz., economic, social, and environmental, which require a broader definition than typically used in economics or ecology (Bansal 2005; Dyllick and Hockerts 2002).

By managing economic, social, and ecological aspects, corporate sustainability reflects attempts of a firm to contribute toward the broader sustainable development agenda. Traditionally the businesses have focused on reaching a business case through their environmental and social sustainability practices. However, corporate sustainability requires attention being paid simultaneously to the “natural case” and “social case” while achieving a “business case” for sustainability (Dyllick and Hockerts 2002; Elkington 1997). Further, corporate sustainability highlights the need to address the growing concerns and long-term business models (Dyllick and Hockerts 2002; Schaltegger et al. 2016). It is thus essential for an organization’s business strategy to embrace sustainable development principles and concepts (Welford 2013). Thus, corporate response to ecologically sustainable development is witnessed in a firm’s environmental practices and strategy.

Corporate Environmental Management

Corporate environmental management denotes integrating business practices and the

environment (Ormazabal and Sarriegi 2014). It is now considered another essential strategy for businesses to meet the expectations of the various stakeholders such as governments, customers, investors, media, environmental pressure groups, and the public (Gunaratne and Lee 2019a; Ormazabal et al. 2017). Corporate environmental management is concerned with the minimization of environmental impacts caused by an organizations’ business operations through the active deployment of technical and managerial activities of an organization (Cramer 1998). Holding a similar view to that of Cramer, Bansal (2005) suggests that corporations make an effort to reduce the size of their environmental impacts. Over the years, various tools, frameworks, methods, and practices have been developed to support the companies to minimize their environmental effects to achieve environmental sustainability (Buysse and Verbeke 2003; Ormazabal and Sarriegi 2014). By using these various mechanisms, organizations have introduced environmentally sound (or green) practices into corporate strategies (Sarkis 2001). Due to the importance of environmental considerations, many organizations presently consider environmental management activities at a strategic level (Ervin et al. 2013). Corporate concern for environmental sustainability is manifested through different strategies with different environmental practices (González-Benito and González-Benito 2006).

Various reasons or motivations have driven corporations to pursue environmental management practices. By analyzing multiple motives in the extant literature, Windolph et al. (2014) group them into three categories: seeking legitimacy, achieving market success, and realizing efficiency (improvement) gains. Legitimacy, sometimes referred to as approval or acceptance, is the corporate ambition to be perceived as “desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman 1995, p. 574). On the other hand, motivations for market success are driven by the consumers who increasingly demand green or environmentally friendly products and processes that mitigate environmental impacts or investors

who require sound and sustainable corporate practices in their investment decisions (Miles and Covin 2000; Windolph et al. 2014). The next motivation for the corporation to follow environmentally friendly procedures is the productivity or efficiency gains that could be achieved through minimizing waste, saving energy, or reducing carbon emissions (Shrivastava and Hart 1995; Valentine 2010). In addition to these three motivations, additional drivers of corporate environmental sustainability have been suggested. They include managers' personal values, beliefs, and/or management commitments, group affiliation, environmental sensitivity of the industry, and company size (Valentine 2010). Depending on these motivations, a company may exhibit its commitment to contribute toward sustainable development (Windolph et al. 2014) at various levels. This leads to the classification methods of CEMM.

Corporate Environmental Management Maturity (CEMM) Taxonomies

Evidence shows that even the organizations that face similar circumstances do not follow corporate environmental management practices (activities, applications, or strategies) at the same level of intensity (Gunarathne and Lee 2019a; Jabbour and Santos 2006; Ormazabal and Sarriegi 2014; Roome 1992). It is often highlighted that some organizations exhibit advanced corporate environmental management practices by developing sophisticated processes and systems while other organizations in similar conditions even do not comply with the existing regulations or have fundamental environmental practices (Roome 1992; Gunarathne and Lee 2019a; Maialle and Jabbour 2014). Hence, scholars have suggested different classification methods to provide taxonomical explanations on the different approaches adopted by corporations toward environmental sustainability. By proposing different classification approaches, these taxonomies aim to schematize companies' strategies at the firm level in carrying out environmental management activities. Scholars such as Potrich et al. (2019) and Kolk

and Mauser (2002) broadly categorize these taxonomical approaches into two: a) evolutionary stage models and b) typological models.

Many scholars argue that these environmental classifications or taxonomies broadly reflect two models or categories:

- a) Developmental/Maturity/Evolutionary models
- b) Nonprogressive/Typology models (Kolk and Mauser 2002)

Developmental models assume an advancement of firm-level environmental activities from some primary stages to advanced levels over time. Hence, they provide an organizational classification depending on the extent of development or improvement of their environmental management activities (Ormazabal et al. 2017). Furthermore, these models assume an increasing level of integration of ecological management when a firm advances from some initial stage to advanced stage (Kolk and Mauser 2002; Hass 1996; Gago and Antolin 2004; Jabbour and Santos 2006; Gunarathne and Lee 2019a). On the other hand, the *typologies or nonsequential models* that characterize companies do not assume such growing responsiveness (Gago and Antolin 2004; Kolk and Mauser 2002). In the typological models, a movement is possible, but it is not inherent as in the stage models (Hass 1996).

Prior literature suggests that maturity models have become more popular among researchers. This can be attributable to several reasons. First, due to the growing environmental concerns and stakeholder pressures, organizations increasingly pay attention and devote resources to improve their ecological responsiveness. Second, if implemented with the right strategies, these efforts can advance an organizational environmental management activity to an advanced level. Hence, maturity models present a better reality of what the organizations aim to achieve (Gunarathne and Lee 2019a).

On the other hand, a large body of literature analyses various aspects of maturity models. For instance, many researchers have conceptually or empirically attempted to define and discuss the characteristics of different stages of maturity

models (Potrich et al. 2019). Similarly, another strand of research has examined the support and use of other functions within an organization. For example, Jabbour et al. (2010) have analyzed human resource management, Teixeira et al. (2012) have investigated the relationship between environmental management and environmental-related training. Further, Ferreira et al. (2017) have discussed supply chain management in the corporate EMM stages. Finally, Gunaratne and Lee (2019b, 2021) discuss how managers use environmental and accounting information in different maturity stages.

Characterization of Maturity Models

Table 1 highlights different stages in environmental management maturity models (see Table 1). It also shows no consensus about the number of maturity stages or the characteristics of each stage (Potrich et al. 2019). However, most methods advocate three or four stages (Jabbour et al. 2010; Murillo-Luna et al. 2011; Gunaratne and Lee 2020). Therefore, this chapter also follows a three-staged model in describing the characteristics of each stage. The three stages are: reactive, preventive, and proactive.

Reactive Stage

The primary stage of CEMM is often characterized by a motive to meet the external environmental regulations or internal company demands such as certification standards (Roome 1992; Gunaratne and Lee 2019a). Since the environmental management activities are designed in response to the regulations or certification standards, this stage represents a passive, reactive environmental management strategy (Roome 1992; Ormazabal and Sarriegi 2014). The environmental management practices at this stage can also arise due to social pressures (Jabbour et al. 2010). Reactive level organizations only pay attention to a few selected environmental considerations stipulated in regulations (or certifications). For instance, the majority of the reactive level organizations focus on waste disposal or emission reduction activities as they constantly

Corporate Environmental Management Maturity, Table 1 Different EMM stages

Author(s)	Maturity stages of environmental management
Hunt and Auster (1990)	Beginner, firefighter, concerned citizen, pragmatist, and pro-activist
Roome (1992)	Noncompliance, compliance, compliance-plus, leading edge, and excellence
Shrivastava and Hart (1995)	Band-aid, more serious, and deep change
Hart (1997)	Prevention of prevention, environmental management in products, and sustainable development
Buyse and Verbeke (2003)	Reactive strategy, prevention of pollution, and environmental leadership
Jabbour et al. (2010)	Functional specialization, internal integration, and external integration
Valentine (2012)	Low hanging cherries, cost-saving investments, revenue enhancement, and diminishing returns
Ormazabal and Sarriegi (2014)	Legislation fulfillment, training, systematization, eco ₂ , eco-innovative, and leading green company
Garces-Ayerbe et al. (2016)	Laggards, initiated, proactive, and eco-innovative
Primc and Čater (2016)	Reactors, defenders, analyzers, and prospectors

receive regulators' attention. However, as regulations are enacted passively and do not reflect the latest development in ecological thinking, reactive level organizations do not have a chance to strengthen their competitive position from environmental management practices. As a result, a few selected individuals or units often carry out environmental strategies and management practices. Hence, the environmental management of organizations remains isolated in this phase with a low level of top management involvement (Jabbour et al. 2010).

Preventive Stage

Many organizations will witness some benefits of their environmental management activities.

	Preventive	Proactive	Reactive
Focus of environmental management activities	Compliance with regulations or certification requirements	Initiation of projects to improve resource utilisation	Exploration of market opportunities to improve firm's competitiveness
Company attitude towards environmental strategy	Perceived as an additional burden	Considered as a tool to realise cost savings and improve resource utilisation	Means of differentiation and a source of gaining competitive advantage
Top management support towards environmental activities	Limited	Focused on improving eco-efficiency	Continuous
Stakeholder support for firm's conservation activities	Minimum and often limited to internal stakeholders such as employees	Starting to receive the support of several stakeholders	High level of support across the value chain

Corporate Environmental Management Maturity, Fig. 1 Profile of CEMM levels. (Source: Developed based on Gunarathne (2015) and Jabbour et al. (2010))

Hence, they will move into this phase of environmental management maturity after pursuing a reactive strategy. Some scholars call this stage a transitional phase, most similar to a “compliance-plus” stage (Roome 1992). During this stage, organizations embed certain green practices into their corporate strategies. Accordingly, organizations in this stage gradually increase their involvement in environmental conservation and management activities (Jabbour et al. 2010). However, most organizations specialize in one environmental management activity (Potrich et al. 2019). Therefore, these activities are not well aligned with other business operations nor systematically integrated into the business strategy (Gunarathne and Lee 2019a). Due to the realization of cost savings, management attention and support for environmental activities start to receive. This could act as a potential trigger for more organizational wide support and developments toward corporate sustainability (Roome 1992).

Proactive Stage

This stage represents an advanced CEMM status where a business organization improves its competitive position in the external marketplace through its ecological practices (Jabbour and Santos 2006). According to Roome (1992), this stage

is similar to an “environmental excellence” and “leading edge” stage. However, other scholars suggest that further developments are possible, so this stage is not a final destination (Gunarathne and Lee 2020; Potrich et al. 2019). Since these organizations have followed green practices over a period of time, advanced systems have been developed internally with the support of many stakeholders. On the other hand, environmental management activities have become a part of the corporate strategy, and environmental considerations and values are a part of the organizational decision-making system (Jabbour and Santos 2006). Hence, environmental considerations have become a routine practice and part of the regular corporate decision-making process.

Some of the salient features of these three stages are summarized in Fig. 1.

Summary

Organizations display different levels of intensity in carrying out their environmental management practices and strategies. Two broad taxonomical models are available to categorize these corporate environmental management strategies. They are maturity and typology models. The environmental management maturity models offer a firm-level

classification approach based on integrating an organization's environmental management practices. These models assume that the firm-level environmental management strategies develop over time from basic to advanced procedures. Scholars have provided various maturity models with different stages and characterization. Although there is no agreement on how a firm develops its environmental management practices over time, the typical approach follows a three-staged maturity model. These three stages are reactive, preventive, and proactive. These stages differ in green activities' focus, company attitude toward ecological practices, top management support, and stakeholder engagement.

Cross-References

- [Corporate Sustainability](#)
- [Environmental Management](#)
- [Environmental Management Accounting](#)
- [Stakeholder Management](#)
- [Sustainable Development Goals](#)

References

- Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26, 197–218.
- Brundtland Commission. (1987). *Our common future: Report of the world commission on environment and development*. Oxford: Oxford University Press.
- Buyse, K., & Verbeke, A. (2003). Proactive environmental strategies: A stakeholder management perspective. *Strategic Management Journal*, 24, 453–470.
- Cramer, J. M. (1998). Environmental management: From 'fit' to 'stretch'. *Business Strategy and the Environment*, 7, 162–172.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11, 130–141.
- Elkington, J. (1997). *Cannibals with forks*. London: Capstone.
- Ervin, D., Wu, J., Khanna, M., Jones, C., & Wirkkala, T. (2013). Motivations and barriers to corporate environmental management. *Business Strategy and the Environment*, 22, 390–409.
- Ferreira, M. A., Jabbour, C. J. C., & Jabbour, D. S. B. L. (2017). Maturity levels of material cycles and waste management in a context of green supply chain management: An innovative framework and its application to Brazilian cases. *The Journal of Material Cycles and Waste Management*, 19, 516–525.
- Gago, R. F., & Antolin, M. N. (2004). Environmental management and strategic positioning of Spanish manufacturing industries. *Business Strategy and the Environment*, 13, 33–42.
- Garces-Ayerbe, C., Scarpellini, S., Valero-Gil, J., & Rivera-Torres, P. (2016). Proactive environmental strategy development: From laggard to eco-innovative firms. *Journal of Organizational Change Management*, 29, 1118–1134.
- González-Benito, J., & González-Benito, Ó. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the Environment*, 15, 87–102.
- Gunarathne, N. (2015). Fostering the adoption of environmental management with the help of accounting: An integrated framework. In M. M. Rahim & S. Idowu (Eds.), *Social audit regulation* (pp. 301–324). Cham: Springer.
- Gunarathne, N., & Lee, K. H. (2019a). Institutional pressures and corporate environmental management maturity. *Management of Environmental Quality: An International Journal*, 30(1), 157–175.
- Gunarathne, A. D. N., & Lee, K. H. (2019b). Environmental and managerial information for cleaner production strategies: An environmental management development perspective. *Journal of Cleaner Production*, 237, 117849.
- Gunarathne, A. D. N., & Lee, K. H. (2020). Eco-control for corporate sustainable management: A sustainability development stage perspective. *Corporate Social Responsibility and Environmental Management*, 27(6), 2515–2529.
- Gunarathne, N., & Lee, K. H. (2021). Corporate cleaner production strategy development and environmental management accounting: A contingency theory perspective. *Journal of Cleaner Production*, 308, 127402.
- Hart, S. L. (1997). Beyond greening: Strategies for a sustainable world. *Harvard Business Review*, 75(1), 66–77.
- Hass, J. L. (1996). Environmental ('green') management typologies: An evaluation, operationalisation and empirical development. *Business Strategy and the Environment*, 5, 59–68.
- Hunt, C. B., & Auster, E. R. (1990). Proactive environmental management: Avoiding the toxic trap. *MIT Sloan Management Review*, 31(2), 7.
- Jabbour, C. J. C. (2015). Environmental training and environmental management maturity of Brazilian companies with ISO14001: Empirical evidence. *Journal of Cleaner Production*, 96, 331–338.
- Jabbour, C. J. C., & Santos, F. C. A. (2006). The evolution of environmental management within organisations: Toward a common taxonomy. *Environmental Quality Management*, 16, 43–59.
- Jabbour, C. J. C., Santos, F. C. A., & Nagano, M. S. (2010). Contributions of HRM throughout the stages of

- environmental management: Methodological triangulation applied to companies in Brazil. *The International Journal of Human Resource Management*, 21, 1049–1089.
- Kolk, A., & Mauser, A. (2002). The evolution of environmental management: From stage models to performance evaluation. *Business Strategy and the Environment*, 11, 14–31.
- Landrum, N. E. (2018). Stages of corporate sustainability: Integrating the strong sustainability worldview. *Organization & Environment*, 31(4), 287–313.
- Maialle, G., & Jabbour, A. B. L. D. S. (2014). Evolutionary stages of environmental management in computer companies located in Brazil: Case studies. *International Journal of Business Innovation and Research*, 8, 300–315.
- Miles, M. P., & Covin, J. G. (2000). Environmental marketing: A source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, 23, 299–311.
- Murillo-Luna, J. L., Garcés-Ayerbe, C., & Rivera-Torres, P. (2011). Barriers to the adoption of proactive environmental strategies. *Journal of Cleaner Production*, 19, 1417–1425.
- Newman, C., Rand, J., Tarp, F., & Trifkovic, N. (2020). Corporate social responsibility in a competitive business environment. *The Journal of Development Studies*, 56(8), 1455–1472.
- Ormazabal, M., & Sarriegi, J. M. (2014). Environmental management evolution: Empirical evidence from Spain and Italy. *Business Strategy and the Environment*, 23, 73–88.
- Ormazabal, M., Rich, E., Sarriegi, J. M., & Viles, E. (2017). Environmental management evolution framework: Maturity stages and causal loops. *Organization & Environment*, 30, 27–50.
- Park, J.-H., & Ahn, Y.-G. (2012). Strategic environmental management of Korean construction industry in the context of typology models. *Journal of Cleaner Production*, 23, 158–166.
- Potrich, L., Cortimiglia, M. N., & de Medeiros, J. F. (2019). A systematic literature review on firm-level proactive environmental management. *Journal of Environmental Management*, 243, 273–286.
- Primc, K., & Čater, T. (2016). Environmental strategies in different stages of organisational evolution: Theoretical foundations. *Australasian Journal of Environmental Management*, 23, 100–117.
- Roome, N. (1992). Developing environmental management strategies. *Business Strategy and the Environment*, 1, 11–24.
- Sarkis, J. (2001). Manufacturing's role in corporate environmental sustainability – Concerns for the new millennium. *International Journal of Operations & Production Management*, 21, 666–686.
- Schaltegger, S., & Burritt, R. (2018). Business cases and corporate engagement with sustainability: Differentiating ethical motivations. *Journal of Business Ethics*, 147(2), 241–259.
- Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business models for sustainability. *Organization & Environment*, 29, 3–10.
- Shrivastava, P., & Hart, S. (1995). Creating sustainable corporations. *Business Strategy and the Environment*, 4, 154–165.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20, 571–610.
- Teixeira, A. A., Jabbour, C. J. C., & Jabbour, A. B. L. D. S. (2012). Relationship between green management and environmental training in companies located in Brazil: A theoretical framework and case studies. *International Journal of Production Economics*, 140, 318–329.
- Valentine, S. V. (2010). The green onion: A corporate environmental strategy framework. *Corporate Social Responsibility and Environmental Management*, 17, 284–298.
- Valentine, S. V. (2012). Policies for enhancing corporate environmental management: A framework and an applied example. *Business Strategy and the Environment*, 21(5), 338–350.
- Welford, R. (2013). *Corporate environmental management 3: Towards sustainable development*. New York: Routledge.
- Windolph, S. E., Harms, D., & Schaltegger, S. (2014). Motivations for corporate sustainability management: Contrasting survey results and implementation. *Corporate Social Responsibility and Environmental Management*, 21, 272–285.

Corporate Environmentalism

- [Environmental Responsibility](#)
- [Sustainable Marketing](#)

Corporate Family Responsibility

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Synonyms

[Family-friendly policies](#); [Wellness policies](#);
[Work-life balance](#)

Definition

Corporate family responsibility (CFR) is a company's commitment to the promotion of strategies and policies aimed at enhancing the workplace flexibility and facilitating employees' integration of work, family, and personal life. It rests on the idea that families and firms are not only "private goods" but "common goods," and considers the family a company's stakeholder. While corporate social responsibility (CSR) refers to the general and broad companies' responsibilities toward their different stakeholders, the environment, and the society at all, CFR is the specific responsibility toward companies' employees and their family community. Work-life balance (WLB) and employees' wellness policies are among the main tools for CFR implementation in both large companies and small and medium-sized enterprises (SMEs). CFR is thus understood as the specific manifestation of truly "family friendly" company policies that consider the family of a company's stakeholders and assume the WLB a strategic lever for personnel management and the CSR approach. When CEOs (chief executive officers) and entrepreneurs implement family-friendly policies, they increase both personal and professional productivity levels and reduce stress factors with positive impacts on performance. Therefore, CFR may be considered a potential driver for company's success (Tomaselli 2017).

Introduction

Corporate family responsibility (CFR) is an emerging topic within the corporate social responsibility (CSR) debate. Currently, a limited amount of studies has addressed this issue (IESE 2008; Fondazione Marco Vigorelli 2012; Strandberg 2009). However, in the last decade, companies have been progressively directing their attention to CSR policies addressed to employees, who represent the most relevant internal stakeholders' category internal stakeholders. Among these, work-life balance (WLB) policies play a critical role because they affect the internal organizational

climate as well as company's productivity. Prior studies pointed out that the diffusion of CSR is important for effective work-family balance policies aimed to reconcile people's work with private life, that is, work with responsibility toward one's family (Werbel and Walter 2002; Donati and Pradini 2006). The demand for such policies (Ponzellini and Tempia 2003) is increasing. The need for a balance between work and family responsibilities is associated with a higher quality of life (Greenhaus et al. 2003) and has been particularly acute starting from the increase in female employment (Catalyst 1998) and the changes in family's life cycle (Waismel-Manor et al. 2002).

Considering the family as a corporate's stakeholder means to deepen the CSR orientation toward employees stressing the advantages deriving from a better working environment, an employees' working in cohesive social contexts, a high level of solidarity and social control, and a social fabric that is economically and culturally rich. It thus implies that companies should attribute a plurality of meanings to work-related activities (Cartwright and Holmes 2006) and consider employees not only as economic resources but adopt an integral vision of development by considering employees and collaborators as people who are a key part of a rich fabric of interpersonal relations, starting from their family. Over-exploitation attributable to the increased intensification of labor and noncontrollable time investments produces strain among the employees and leads to conflicts in families and sometimes to family breakdown (Hochschild 1997; Rimashevskaya et al. 2017). Family is a "nexus" of relationships that has "its own needs" affecting employees' professional and personal life. Accordingly, the family should be considered as a relevant stakeholder in governing and managing a business (Faldetta 2008).

Key Issues

The theme of CFR is not particularly developed in the business economics literature and has emerged only recently within the CSR discourse. This topic crosses diverse disciplines and points of view

(economic, sociological, ethical, organizational, legislation, and anthropological) and is significant on both the theoretical and practical levels, because the need to balance work and family must be responded to with concrete instruments and policies aimed at improving the relationship between quality and satisfaction in both work and life. The growing need for effective policies to reconcile work with familial responsibilities has been pointed out by several studies (Fischer et al. 2000; Cartwright and Holmes 2006; Kodz et al. 2002; Yeandle et al. 2002), particularly for flexible hours, part-time and smart work, paid or unpaid parental leaves of absences and smart work (Bombelli 2003; Ponzellini and Tempia 2003; Eberhard et al. 2017).

In searching for a coherent perspective (Werbel and Walter 2002) the diffusion of CSR policies and practices becomes a fundamental driver to trigger effective work-family balance policies. In this regard, to date the emphasis has been mainly attributed to equal opportunity policies and diversity management and their positive impact on company outcome (in terms of reputation, internal climate, reduction of conflicts, improved productivity, etc.) while less attention has been put on the relation between WLB policies and the improvement of firm performance (Greenblatt 2002; Glass and Finley 2002).

Namely, the nexus between economic performance and work-family balance policies has not been adequately deepened and most of the policies currently adopted by corporations are oriented toward resolving short-term problems and immediate needs, and it is often difficult to identify and assess the longer-term economic benefits. This is attributable to the fact that the will and the opportunity to implement such policies cannot be determined only by economic reasoning (Butler et al. 2004).

A link between formal instruments (i.e., flexible work hours used to support employees in facing their family needs) and soft organizational factors (i.e., the organizational culture) has been proved by some empirical researches (Grover and Crooker 1995; Allen 2001; Anderson et al. 2002; Behson 2002, 2005). Indicators adopted to measure the personnel's morale, commitment,

production, and absenteeism demonstrate that there exist economic benefits deriving from the implementation of work-family balance tools. Managers seem to be more aware than their employees of the importance of these results (Kodz et al. 2002). Moreover, some studies pointed out that effective policies concerning the work-family balance positively impact on the quality and satisfaction of people both in their work and in their private life (Kapitány et al. 2005; Prandini and Tarroni 2005; Bould and Crespi 2008; Crespi and Bould 2008).

An in-depth analysis based on five companies that have introduced CFR practices, carried out through semi-structured interviews addressed to their CEOs, reveals the success of such policies in terms of both tangible and intangible benefits resulting from a growing attention of the top management toward the topics of CFR and work and family balance (WFB) policies (Tomaselli 2017) that overcomes the traditional sensitivity toward CSR and WLB policies. These initiatives have a more significant impact on women and positively affect their integration in the socioeconomic framework, particularly attributable to a reduction of reintegration time after maternity leaves (Bevan et al. 1999; Rode et al. 2002). Among the benefits for all the employees (both men and women) deriving from the implementation of WFB policies are: the increased employees' productivity, a growing length of employment (loyalty) and a turnover reduction, an increase in effectiveness of personnel selection and hiring procedures, a reduced resistance to change and a growth in creativity and individual contribution to innovation; an improved company's attractiveness (in terms of employer branding) (AIDP 2010).

Currently, family policies adopted by various states are diverse (Dex and Smith 2002; Fagan 2003; OECD 2002–2005, 2007) ranging from counties systems of social assistance that include an ample range of benefits and services for families (particularly diffused in Northern Europe) to countries where the benefits are scarce, that is, healthcare services for children and parents are inadequate, and there are more stay-at-home mothers (i.e., in Italy).

An empirical research carried out by the International Center for Work and Family (ICWF) at IESE Business School (Spain) aimed to assess the efforts spent by public and private organizations to favor a balance between work and family (IESE 2008) elicited to depict four different models of companies. “Systematically enriching corporations” distinguish themselves for a high level of responsible family culture; “discretionally enriching corporations” are those companies characterized by the presence of some WFB policies, while in “discretionally polluting” companies the aforementioned policies formally exist but are rarely adopted; finally, “systematically polluting” companies are those in which responsible family policies are definitely absent. Data pointed out that through WLB actions companies can increase employee productivity and enhance their creativity and loyalty (Chinchilla and Jimenez 2014).

According to the aforementioned research in 2009 the Italian Ministry of Equal Opportunity promoted a survey on 216 businesses, including both SMEs and large companies. Results pointed out that most of Italian companies were included into the “discretionally polluting” category. Only 2% were categorized as “systematically enriching” companies, thus pointing a gap compared to other countries. However, best practices of CFR have been developed under the General Directorate for Social Welfare and Family Policies at a regional and local level. One example is provided by the Region of Lombardy, which has placed the issue of reconciliation between family and work at the center of its policy agenda. Accordingly, in 2011 the regional public administration released a White Paper and developed a Roadmap to support the reconciliation of family and work life, implemented in 12 provinces.

Moreover, in Italy the “Marco Vigorelli Foundation” – FMV was set up in 2002 to promote the culture of company welfare and the diffusion of CFR at a scientific and managerial level. The Foundation’s mission is to deepen the knowledge of CFR and spread best practices based on the intuitions of the Milanese economist Marco Vigorelli about the close and non-negligible

relationship existing between business and family. The balance in the relationship between private life and work has always been considered a core topic for its social criticality and the delicate dynamics that it generates since too often it pushes mothers and fathers, especially if they are both committed to work, to put into practice not always successful balancing acts with the aim of not negatively affecting family relationships, that is the most valuable asset that the WLB and the most responsible companies try to preserve. Starting from the last decade the Foundation organizes an annual award addressed to post graduate and doctoral theses (young scholars) devoted to deepen the knowledge of CFR and spread best CFR practices, tools, and models. Recently the Foundation has started to publish the research on this topic in a specific series “the FMV-Corporate Family Responsibility Quaderni.” A multidisciplinary research project titled “CFR: a relational approach” was started a few years ago with a work team composed of sociologists, economists, and managers and aimed to link theory and practices among Family Responsible companies interested in testing the methodology for measuring the relational effects of CFR policies.

Future Directions

Corporate welfare, intended as the dimension of employee well-being and the sustainability of WLB in the broader framework of human resource management policies is included among the Sustainable Development Goals (SDGs) articulated in the numerous targets to be reached by 2030, according to the lines envisaged by the Agenda approved by the UN. Namely, it refers to company organization features with a focus on labor flexibility models, the relationship between WLB and new ways of performing tasks and identifying good practices and possible developments of these organizational settings.

According to these goals, the relevance of CFR emerges since there is a strong interdependence between family and work. To recognize this

interdependence as a dimension of sustainability is a key goal for companies, called to support employees' families, favor men and women participation to the labor market and enhance both human and relational capital. It is a question of considering the family as a bearer of interest towards (and for) the company, namely as a stakeholder. In other words, the issues lie in making companies aware that understanding the families' needs and supporting the efforts of families is not just a question of paying attention toward their employees, but considering the value of their familial relationships. This means making a further shift and "go beyond" through the implementation of family-friendly practices capable to transform a criticality into an opportunity, both for the employee – as the beneficiary of the conciliation interventions – and for the company that can count, therefore, on people "healthy carriers of relations". Neurosciences tell us that being new parents improves some important skills pointing out that the values of relational dynamics generated outside the workplace improve and make professional skills flourish, such as organizational and motivational abilities, innovation, and creativity.

CFR is therefore a new perspective that is gaining momentum within the CSR discourse related to economic, legal, psychological, and social features that positively affect companies' success. The advantages of CFR policies have been only partially assessed because most of them are intangible in nature and cannot be expressed through financial metrics. Moreover, benefits can be carefully appreciated only in a long term view. An effective CFR strategy should be based on a company's mission and governance system consistent to a "family-based orientation" that allows the implementation of tools capable to positively affect both work and life (Donati and Prandini 2008). In this regard, companies led by ethical motivations are aware that CFR policies represent an opportunity to improve both the personal and family quality of life, as well as the quality of the work environment and the organizational culture. Moreover, they are aware that the relative investments call for a cost/benefit analysis

capable to take into account both tangible and intangible outcomes.

Summary

CFR can be considered an innovative approach of business ethics and an essential component of CSR (Tomaselli 2019) whose theoretical framework is based on the idea that families and firms are "common goods" (Pulvirenti 2013). CFR policies posit a supportive corporate culture and find a fertile ground in companies that consider human capital, trust, and reciprocal loyalty (Roehling et al. 2001) as drivers of social and economic value. Drawing from the theory of human ecology CFR calls for a change of the cultural context through policies affecting both the individual and the organizational level aimed to balance and reconcile family and work life needs. On the one hand, the work-family conflict and stress in managerial and dual career-families require a work-family decision making in individuals and firms. On the other hand, it implies that companies implement human resources policies based on CFR initiatives (such as the experimentation with flexible incoming and outgoing timetables; vertical and horizontal part-time; job sharing; job rotation; smart work; professional and personal counseling, etc.) to change the organization culture and pursue a company management model familiarly responsible.

Cross-References

- [Corporate Social Responsibility](#)
- [Work-Life Balance](#)

References

- AIDP. (2010). *L'impresa Familiaramente Responsabile tra sostenibilità e competitività aziendale*. www.aidp.it/aidp/ALLEGATI/OTHER/2418.pdf4. Accessed 18 May 2019.

- Allen, T. D. (2001). Family-supportive. Work environment: The role of organizational perceptions. *Journal of Vocational Behavior*, 58, 414–435.
- Anderson, S. E., Coffey, B. S., & Byerly, R. T. (2002). Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of Management*, 28(6), 787–810.
- Behson, S. J. (2002). Which dominates? The relative importance of work-family organizational support and general organizational context on employee outcomes. *Journal of Vocational Behavior*, 61, 53–72.
- Behson, S. J. (2005). The relative contribution of formal and informal organizational work-family support. *Journal of Vocational Behavior*, 66, 487–500.
- Bevan, S., Dench, S., Tamkin, P., & Cummings, J. (1999). *Family-friendly employment: The business case*. London: Institute for Employment Studies.
- Bombelli, C. (2003, Settembre-Ottobre). Il lavoro e la vita: alla ricerca di un nuovo punto di incontro. *Sviluppo & Organizzazione*, 199, 69–77.
- Bould, S., & Crespi, I. (Eds.). (2008). La conciliazione famiglia-lavoro in Europa. *Sociologia e Politiche Sociali*, 11(1), 5–7.
- Butler, A., Gasser, M., & Smart, L. (2004). A social-cognitive perspective on using family-friendly benefits. *Journal of Vocational Behavior*, 65, 57–70.
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resources Management*, 16(2), 199–208.
- Catalyst. (1998). *Two careers, one marriage. Making it work in the workplace*. New York: Catalyst.
- Chinchilla, N., & Jimenez, E. (2014). *Corporate family responsibility: The core of social responsibility*. IESE, DPON-119-E, 10/2014 ICWF – Centro Internacional Trabajo y Familia, Department: Managing People in Organizations.
- Crespi, I., & Bould, S. (Eds.). (2008). Famiglia, gender e lavoro: politiche e pratiche nel contesto Europeo. *Sociologia e Politiche Sociali*, 11(1), 58–86.
- Dex, S., & Smith, C. (2002). *The nature and pattern of family friendly employment policies in Britain*. Bristol: Policy Press.
- Donati, P., & Prandini, R. (2006). *Buone pratiche e servizi innovativi per la famiglia*. Milano: F. Angeli.
- Donati, P., & Prandini, R. (Eds.). (2008). *La cura della famiglia e il mondo del lavoro. Un piano di politiche familiari* (Osservatorio nazionale sulla famiglia). Milano: F. Angeli.
- Eberahrd, B., Podio, M., Pérez Alonso, A., Radovica, E., Avotina, L., Peiseniece, L., Caamaño Sendon, M., Gonzales Lozano, A., & Solé-Pla, J. (2017). Smart work: The transformation of the labour market due to the fourth industrial revolution (I4.0). *International Journal of Business and Economic Sciences Applied Research*, 10(3), 47–66.
- Fagan, C. (2003). Working-time preferences and work-life balance in the EU: Some policy considerations for enhancing the quality of life, European Foundation for the Improvement of Living and Working Conditions.
- Faldetta, G. (2008). *Corporate family responsibility e work-life balance*. Milano: F. Angeli.
- Fischer, C. S., Hout, M., & Latham, N. (2000). *The time bind and god's time*. Berkeley: Berkeley Center for Working Families.
- Fondazione Marco Vigorelli (2012). Osservatorio CFR, rapporto-biennale-2011-2012-dellosservatorio-nazionale-sulla-famiglia, 17 maggio 2012. Retrieved at www.marcovigorelli.com/index.php/osservatoriocfr.html. Accessed 21 Feb 2019.
- Glass, J. L., & Finley, A. (2002). Coverage and effectiveness of family-responsive work-place policies. *Human Resource Management Review*, 12, 313–337.
- Greenblatt, H. (2002). Work/life balance: Wisdom or whining. *Organizational Dynamic*, 31(2), 177–193.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality life. *Journal of Vocational Behavior*, 63, 510–531.
- Grover, S. L., & Crooker, K. J. (1995). Who appreciate family-responsive human resource policies: The impact of family-friendly policies on the organizational attachment of parents and non-parents. *Personnel Psychology*, 48(2), 271–288. <https://doi.org/10.1111/j.1744-6570.1995.tb01757.x>. First published: June.
- Hochschild, A. R. (1997). The time bind: When work becomes home and home becomes work. *California Management Review*, 39(4), 79–97.
- IESE. (2008). *La tua azienda è Family-friendly? – Questionario di autovalutazione*. Retrieved at www3.iese.edu/ifrei/ifrei_italia/h0.asp. Accessed 21 May 2018.
- Kapitány, B., Kovacs, K., & Krieger, H. (2005). *Working and living in an enlarged Europe* (European Foundation for the improvement of Living and Working Conditions). Luxembourg: Office for Official Publications of the European Communities.
- Kodz, J., Harper, H., & Dench, S. (2002). *Work-life balance. Beyond the rhetoric* (Institute for Employment Studies, Report 384). London: IES.
- OECD. (2002-2003-2004-2005). *Bosses and babies: Reconciling work and family life*: Vol. 1, Australia, Denmark and the Netherlands; Vol. 2, Austria, Ireland and Japan; Vol. 3, New Zealand, Portugal and Switzerland; Vol. 4, Canada, Finland, Sweden and United Kingdom.
- OECD. (2007). *A synthesis of findings for OECD countries*. Paris: OECD.
- Ponzellini, A. M., & Tempia, A. (2003). *Quando il lavoro è amico. Aziende e famiglia: un incontro possibile*. Roma: Edizioni Lavoro.
- Prandini, R., & Tarroni, N. (2005). Le politiche e gli strumenti di conciliazione dei tempi. Esperienze e modelli organizzativi nel settore pubblico, privato e privato sociale. In *Osservatorio Nazionale sulla*

Famiglia, Famiglie e politiche di Welfare in Italia: interventi e pratiche (Vol. I, pp. 339–375). Bologna: Il Mulino.

- Pulvirenti, A. R. (2013). *Ethics and economics, family & firm corporate family responsibility, an innovative approach* (CERIS working paper 201308). Institute for Economic Research on Firms and Growth – Moncalieri (To) Italy, Now- Research Institute on Sustainable Economic Growth – Moncalieri (Torino), Italy. <https://ideas.repec.org/p/csc/cerisp/201308.html>. Ethics and Economics, Family & Firm Corporate Family Responsibility, an innovative approach. Accessed 21 Feb 2020.
- Rimashevskaya, N., Malysheva, M., & Pisklakova-Parker, M. (2017). Utilization of labour resources through matching professional and family roles. *The International Journal Entrepreneurship and Sustainability Issues*, 5(1), 138–149. [https://doi.org/10.9770/jesi.2017.5.1\(11\)](https://doi.org/10.9770/jesi.2017.5.1(11)).
- Rode, J. C., Rehg, M. T., Near, J. P., & Underhill, J. R. (2002). The effect of work/family conflict on intention to quit: The mediating roles of job and life satisfaction. *Applied Research in Quality of Life*, 2, 65–82.
- Roehling, P. V., Roehling, M. V., & Moen, P. (2001, Summer). The relationship between work-life policies and practices and employee loyalty: A life course perspective. *Journal of Family and Economic Issues*, 22(2), 141–170.
- Strandberg, C. (2009). *The role of human resource management in corporate social responsibility* (pp. 1–36). Issue brief and roadmap, report, Strandberg consulting, May 2009, Burnaby.. Retrieved at www.corostrandberg.com. Accessed 4 June 2018.
- Tomaselli, G. (2017). *Corporate family responsibility as a driver for entrepreneurial success*, p. 16 Working papers Series on social responsibility, ethics & sustainable business volume 6, 16, School of Computing, Communication and Business HTW Berlin, Germany, Bucharest, Romania: ASE Publishing.
- Tomaselli, G. (2019). Corporate family responsibility as a driver for entrepreneurial success. April 2019. https://doi.org/10.1007/978-3-030-10740-6_3, In *Advances in Ubiquitous Networking* (pp. 39–63). Paper presented at 6th ICSR Conference 2017, 8th International Conference on Social Responsibility, Ethics and Sustainable Business” at the University of Minho, September 28, 2017.
- Waismel-Manor, R., Moen, P., & Sweet, S. (2002). *What factors predict dual-earner middle-class couples feeling highly successful in their jobs, families, and balancing both?* Ithaca: Cornell Employment and Family Careers Institute.
- Werbel, J., & Walter, M. H. (2002). Changing views of work and family roles. A symbiotic perspective. *Human Resource Management Review*, 12, 293–298.
- Yeandle, S., Crompton, R., Wigfield, A., & Dennett, A. J. (2002). *Employers, communities and family-friendly employment policies*. London: Joseph Rowntree Foundation.

Corporate Finance

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Synonyms

Business corporate finance; Finance corporate

Definition

Zingales (2000) defines corporate finance as the study of the ways in which companies finance themselves. The adjective corporate serves to define the difference from other areas of financing, such as real estate financing or personal/individual financing. Hence, corporate finance encapsulates financing a business – not just an asset or an individual but rather the unique combination of assets and individuals that make up companies. The meaning of the verb “to finance” is “to raise or provide funds or capital for.” According to the aforementioned author, corporate finance covers three fundamental areas: capital structure, corporate governance, and evaluation.

In turn, Aswath (2001) incorporates into corporate finance: resource allocation (investment decisions), investment financing (decisions on capital structure), and whether the resources generated should be reinvested or distributed (dividends). In a more recent contribution, Faff et al. (2016) identify seven areas making up corporate finance: capital structure, payout policy, cash holdings, initial public offerings, seasoned equity offerings, mergers and acquisitions, and corporate governance.

In perfect markets, Modigliani and Miller (1958) argue that resources would flow freely. However, agency problems, information asymmetry, moral hazard, adverse selection, tax, and transaction costs weigh on financing and generate

market imperfections (Foley and Manova 2015; Stein 2003).

Introduction

According to Aswath (2001), companies deploy resources through allocating financing to meet different needs. The main function of corporate finance involves allocating resources in the most efficient possible way. Hence, investment decisions require the inclusion of not only sources of income generation (e.g., the introduction of new product lines or market expansion) but also means of saving resources (e.g., the development of more efficient systems). These also extend to the credit policies, backup inventory, and cash reserves traditionally included in working capital, which ultimately also constitute investment decisions. Within the scope of strategic decisions, investment decisions take on important roles and include the acquisition of non-current assets, the acquisition of other companies or seeking out new markets, for example. These decisions only compound the need to assess their profitability and compare them with a minimum acceptable reference rate of return with similar levels of risk for projects to appear attractive. This should include compensatory spreads for projects involving additional risks while also reflecting the financing structure deployed, i.e., own funds or debt regardless of the respective amounts.

In the case of companies listed on capital markets, debt might take the form of securities (usually ordinary). Private capital companies prefer instead to resort to the banking system and/or their owners. The fact that firms finance themselves through recourse to external capital and equity determines the average cost of capital necessary to maximizing the respective firm's valuation.

As regards the dividend policy, companies want investment opportunities providing surplus returns. However, the company only generates cash flows during certain life cycle stages that outweighs the need associated with good investments. Only under these circumstances are the conditions in effect for the company to return

surpluses to the owners of the capital. In private companies, this may translate into the scope for the owner withdrawing a proportion of the resources allocated to the business activity. In public companies, this translates into the payment of dividends or share buybacks.

Faff et al. (2016) present a more comprehensive approach to corporate finance by encapsulating a number of aspects that involve corporate activities more generally.

First of all, the capital structure and the broad debate established around the two core theories: trade-off and pecking order. According to trade-off theory (Modigliani and Miller 1963), the value of companies increases proportionately to their level of indebtedness as a result of the economies generated by the tax-deductible nature of interest paid on debt. However, higher levels of debt generate financial distress and greater probability of bankruptcy. According to this theory, companies should correspondingly seek to attain optimum levels of indebtedness. In turn, pecking order theory suggests that firms prefer internal financing to external financing (debt to equity when the firm issues bonds with different transaction costs driven by the asymmetric information between insiders and outsiders) (Myers and Majluf 1984).

In terms of payout policies, companies may either distribute dividends or repurchase shares. Dividend decisions consist of ascertaining the optimal volume of distribution for the results that still ensures sufficient self-financing – in support of investment decisions – and sufficient returns on company shares – able to increase their market values. The optimal dividend policy provides shareholders in general with the right balance between dividends and future company growth and therefore maximizes the market value of shares (Chu 2017). However, this is also susceptible to the influence of a number of factors such as the respective shareholder structure and management control, the informational value of the dividend announcement, the need for stable income, liquidity, the fiscal position of shareholders, leverage, profitability, size, and risk (Kaźmierska-Jóźwiak 2015; Yusof and Ismail 2016). When there are no obvious tax advantages to any of these strategies, share buybacks may

represent the rightful replacement for dividend distribution and correspondingly the option adopted in many countries (Au Yong et al. 2014; Brown et al. 2015).

In relation to cash holdings, three questions arise: what are their determinants, what is their ideal amount, and, finally, how to evaluate the sensitivity of the investment to the cash flows generated (Faff et al. 2016). The literature states two core reasons for firms to maintain a certain level of liquidity: with a precautionary motive related to future financial constraints, and with an agency motive related to the imperfections resulting from the dispersed ownership of publicly traded companies (Amess et al. 2015).

As a prerequisite to initial public offerings (IPOs) and seasoned equity offerings (SEOs), companies require strong incentives to raise their values and maximize results. For example, Liu et al. (2014) report that issuers experienced strong incentives to manage their IPO results and obtain higher offer prices prior to the abolition of the regulated pricing system in China. However, underpricing, defined as the difference between the offer price and the trading price on the first day, represents a frequent occurrence in these transactions.

The key discussions about mergers and acquisitions revolve around the following question: do companies enjoy a premium when they diversify their activities or, on the contrary, do they lose value (Faff et al. 2016)? In this context, two studies of Australian companies return contrasting results. On the one hand, Fleming et al. (2003) report that companies that diversified their portfolio decreased in value between 1988 and 1998; on the other hand, Choe et al. (2014) conclude that diversification generated a premium in the sample of companies they surveyed between 2008 and 2014.

At the corporate governance level, recent studies focus on how managers create or destroy company value. Managers are able to contribute to the creation of value in accordance with their acquired experiences (Gray and Nowland 2013) when: their level of specialization matches the business areas of companies (Gray and Nowland 2017), when female, given that female managers

demonstrate a greater capacity to moderate excessive company risk levels (Hutchinson et al. 2015), when the need expressed by companies at the level of consulting and high level financing (Lee and Lee 2014) and whenever there are cuts to the excessive remunerations they receive (Cheng et al. 2012).

Another relevant issue arises out of the ways in which financial intermediaries shape corporate governance activities. As a result of the information asymmetry to which creditors are subject to, problems of agency intensify to generate a number of aspects that are worth highlighting: (i) the difficulties encountered by owners and creditors in supervising company activities, (ii) managers or large investors pursuing “private benefits”; (iii) the difficulties of external agents in accordance with the scarcity of information represents a sufficiently strong threat to significantly alter the way management takes place; and (iv) in more monopolistic sectors, competition remains insufficient and thereby fostering more conservative systems of governance (Caprio and Levine 2002).

Within the scope of corporate finance, information asymmetries, moral hazard, and adverse selection condition the ability of firms to finance themselves (Jensen and Meckling 1976; Myers and Majluf 1984). Moreover, according to La Porta et al. (2008) and Levine (2005), in keeping with rising levels of capital market efficiency, companies display an increasing likelihood to resort to these types of markets.

In the credit market, the presence of information asymmetries occurs when companies have private and exclusive information regarding their intrinsic characteristics and the particular nature of their projects that are difficult to convey to creditors. This situation enables companies to define their strategies with some flexibility but resulting in some difficulties for the banking system in seeking to distinguish between different credit proponents (Langlais 1999). This leads to adverse selection that prevents banks from practicing differentiated interest rates and, in short, credit agreements adjusted to the actual risk levels of their proponents. Creditor difficulties in telling “good” from “bad” companies drive greater difficulties in accessing credit for the former when the

presence of the latter is significant (Stiglitz and Weiss 1981).

On the other hand, the creditor bank may find control difficult after signing the credit agreement with company behavior causing so-called moral hazard. Under these circumstances, banks as a rule then require higher interest rates and guarantees and impose more restrictive clauses. This problem is witnessed particularly in SMEs and often leads these companies giving up on good investment opportunities thereby restricting their performances (Degryse et al. 2004).

In recent decades, financial markets have experienced expansion thanks to a number of factors, including: increased exchange rate and interest rate volatility, market globalization, regulatory changes, financial innovations, and the development of derivative products (Krippner 2011). Expanding financial activities returns greater opportunities for the sharing of risks and drives innovations, large-scale investments, and economic growth. However, expansion has also widened and clouded risks in an increasingly opaque and complex system fraught with conflicts of interest (Partnoy 2003; Zingales 2015).

Key Issues

The study of financial decisions, investment, financing, and dividends, involves evaluating the effect they have on company value and consequently on shareholders wealth. Just as investment decisions shape the economic structure of the assets so do financing decisions determine the capital structure. Correspondingly, dividend policies determine company behaviors vis-à-vis their owners in deciding just what proportions of results are retained for investment purposes and those for distribution to shareholders (Miguel Hidalgo and Palenzuela 1990). According to these authors, financial decisions must emerge out of a simultaneous process resulting from company existing interdependently with market imperfections and with the consequences necessarily leading to partial and ongoing adjustments to long-term financial objectives.

According to San-Jose et al. (2013) the study of corporate finance incorporates two different

perspectives. The first approaches the financial decisions that managers take in order to make them more efficient; the second pertains to investor behaviors in financial markets. The impact of financial decisions on company values is influenced by the decisions managers make in terms of the retention, distribution, and allocation of financial resources. The financial function strives to capture the financial resources capable of creating value for the company (Ross et al. 2005). In turn, financial market theories focus on consumer behaviors and the selection of investment portfolios and asset valuation models, often within the framework of perfect capital market theory.

The scope of corporate finance intervention has undergone significant changes due to a set of factors that impose limits on its activities: information and communication technologies, financial globalization, uncertainty, speculation, and the fact that forward looking management is an increasingly important area encountering increased difficulties in keeping with traditional financial theories and hence the witnessing of dynamic behaviors. To this end, Tirole (2006) Van Horne and Wachowicz (2008) all report that corporate finance has changed significantly in the twenty-first century.

In the traditional world of finance, financing was studied only within the scope of liabilities. However, the modern concept takes into account the relationship between the return on assets and the cost of financing. Dividend policies, liquidity, and solvency have gained increasing relevance as business management mechanisms (Suárez 2014). From this point onwards, investment and financing-related issues and problem have required simultaneous analysis. New investment project selection methods and techniques have been developed so as to ensure more efficient allocations of capital within companies.

Profitability/risk analysis (particularly specific risk) experienced strong development in the 1960s following the development of the Capital Asset Pricing Model (CAPM) and the option value problem received a major contribution in 1970 with proposal of the Black-Scholes model (San-Jose et al. 2013).

In light of the above, the main aspects that have gained growing relevance in the field of corporate

finance are: (i) the financial structure of companies takes into account analysis of profitability/risk (Sanchís and Riberiro 1999); (ii) the relevance of the debt policy should incorporate updated market requirements and including interest rate (Suárez 2014), asset valuation based on interest rate risk, and the progressive usage of hedging instruments such as swaps, FRAs, futures, and options (Soldevilla 1988).

In recent years, corporate finance has become an integral part of strategic business management (San-Jose et al. 2013). For example, recourse to real options as a methodology for evaluating real investments alongside the efforts made to incorporate market imperfections into the study of different areas: taxes, transaction costs, and information asymmetry (Amram and Kulatilaka 2000).

Simultaneously, company financial resources require management not only actively but also predictively, thus incorporating the anticipation of those variables determining financial decisions and despite the fact that the models applied make significant recourse to historical data in efforts to pre-empt facts that did not previously occur (San-Jose et al. 2013).

How Do Sustainability Considerations Influence Corporate Finance Decisions?

The issue of sustainability as a growth phenomenon is rapidly entering in the economic and financial literature. Initially, the concept was linked to the environmental issues that took place at the United Nations in the 1970s and 1980s. The key concept of sustainability is associated with the explicit link that must prevail between present and future generations. The concept of sustainability in corporate finance addresses two issues. First, the question arises as to whether corporate finance is capable of meeting the needs of “future generations” (pension fund policy is a great example); secondly, long-term integrity and trust are ensured (Soppe 2004).

In the field of corporate finance, business sustainability encompasses the efforts of companies to limit their negative effects on the environment, local communities, and society in general, while generating benefits for owners and the economy.

A relevant issue arises from the sustainable competitive advantages reflected in the fact that companies survive and thrive in a competitive environment in the long run (Lev 2017).

Summary

Corporate finance focuses on studying the sources of financing, capital structure, financial contracts, and evaluating the investments that result from interactions between managers and investors. Its main concern is the taking of decisions that foster a balance between risk and profitability while maximizing business value. These decisions therefore fall into three broad categories: investment decisions, financing decisions, and dividend policy which, in accordance with modern financial theory, requires simultaneous analysis. The core areas of intervention span the capital structure, dividend policy, cash flow management, initial public offerings (IPOs), seasoned equity offering (SEOs), mergers and acquisitions (M&A), and corporate governance.

A fundamental issue in corporate finance derives from the efficient allocation of scarce resources to the different projects that companies aim to carry out. Interlinked with this issue, financial risk management has played an important role in considering the importance of protecting company value from a range of adversities, in particular credit risk, market risk, exchange rate risk, interest rate risk, among others, using hedges (sets of financial hedging instruments).

In perfectly competitive capital markets, as Modigliani and Miller (1958) expressed it, the number of participants is significantly high, ensuring that single factor may act upon the price of the market traded securities. However, in the real world, most financial decisions take place in situations in which markets are not necessarily efficient. Some of the features present in these markets arise from asymmetries of information and transaction costs leading to market participants lacking due awareness of the likelihood of risk and the profitability of securities, with imperfect competition and resource constraints prevailing at the level of both resources and investment opportunities.

New challenges have arisen in corporate governance, particularly with the emergence of behavioral finances as it is now perceived as imperative to incorporate the influences of the psychological, cognitive, emotional, cultural, and social dimensions into the decisions of investors, professionals, and subsequently into markets.

Cross-References

- Agency Theory
- Banks
- Corporate Governance, Measurement of
- Management
- Stakeholder Relationship Management
- Value Creation

References

- Amess, K., Banerji, S., & Lampousis, A. (2015). Corporate cash holdings: Causes and consequences. *International Review of Financial Analysis*, 42, 421–433. <https://doi.org/10.1016/j.irfa.2015.09.007>.
- Amram, M., & Kulatilaka, N. (2000). *Opciones reales*. Gestión: Barcelona.
- Aswath, D. (2001). *Corporate finance: Theory and practice* (International Edition). New York: Wiley.
- Au Yong, H. H., Brown, C., & Ho, C. C. Y. (2014). Off-market buybacks in Australia: Evidence of abnormal trading around key dates. *International Review of Finance*, 14, 551–585. <https://doi.org/10.1111/irfi.12037>.
- Brown, C., Handley, J., & O'Day, J. (2015). The dividend substitution hypothesis: Australian evidence. *Abacus*, 51, 37–62. <https://doi.org/10.1111/abac.12041>.
- Caprio, G., & Levine, R. (2002). Corporate governance in finance: Concepts and international observations. In *Financial sector governance. The roles of the public and private sectors* (pp. 17–50). Washington, DC: Brookings Institution Press.
- Cheng, P., Su, L., & Zhu, X. (2012). Managerial ownership, board monitoring and firm performance in a family-concentrated corporate environment. *Accounting and Finance*, 52, 1061–1081. <https://doi.org/10.1111/j.1467-629X.2011.00448>.
- Choe, C., Dey, T., & Mishra, V. (2014). Corporate diversification, executive compensation and firm value: Evidence from Australia. *Australian Journal of Management*, 39, 395–414. <https://doi.org/10.1177/0312896213499027>.
- Chu, Y. (2017). Shareholder-creditor conflict and payout policy: Evidence from mergers between lenders and shareholders. *The Review of Financial Studies*, 31(8), 3098–3121. <https://doi.org/10.1093/rfs/hhx142>.
- Degryse, H., Masschelein, N., & Mitchell, J. (2004). SMEs and bank lending relationships: The impact of mergers. National Bank of Belgium working paper (46). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1691599
- Faff, R. W., Gray, S., & Tan, K. J. K. (2016). A contemporary view of corporate finance theory, empirical evidence and practice. *Australian Journal of Management*, 41(4), 662–686. <https://doi.org/10.1177/0312896216632032>.
- Fleming, G., Oliver, B., & Skourakis, S. (2003). The valuation of multi-segment firms in Australia. *Accounting and Finance*, 43, 167–185. <https://doi.org/10.1111/1467-629X.00087>.
- Foley, C. F., & Manova, K. (2015). International trade, multinational activity, and corporate finance. *Economics*, 7(1), 119–146. <https://doi.org/10.1146/annurev-economics-080614-115453>.
- Gray, S., & Nowland, J. (2013). Is prior director experience valuable? *Accounting and Finance*, 53, 643–666. <https://doi.org/10.1111/j.1467-629X.2012.00481.x>.
- Gray, S., & Nowland, J. (2017). The diversity of expertise on corporate boards in Australia. *Accounting and Finance*, 57(2), 429–463. <https://doi.org/10.1111/acfi.12146>.
- Hutchinson, M., Mack, J., & Plastow, K. (2015). Who selects the ‘right’ directors? An examination of the association between board selection, gender diversity and outcomes. *Journal of Accounting and Finance*, 55, 1071–1103. <https://doi.org/10.1111/acfi.12082>.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kaźmierska-Józwiak, B. (2015). Determinants of dividend policy: Evidence from polish listed companies. *Procedia Economics and Finance*, 23, 473–477.
- Krippner, G. R. (2011). *Capitalizing on crisis*. Cambridge, MA: Harvard Business School Press.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The economic consequences of legal origins. *Journal of Economic Literature*, 46(2), 285–332. <https://doi.org/10.1257/jel.46.2.285>.
- Langlais, E. (1999). Les effets d'antisélection lorsque le principal et les agents ont des croyances différents – une illustration dans le cas di marché du crédit. *Revue D'Economie Politique*, 109(4), 513–533.
- Lee, K.-W., & Lee, C.-F. (2014). Are multiple beneficial directorships in East Asia? *Accounting and Finance*, 54, 999–1032. <https://doi.org/10.1111/acfi.12008>.
- Lev, B. (2017). Evaluating sustainable competitive advantage. *Journal of Applied Corporate Finance*, 29(2), 70–75.
- Levine, R. (2005). Finance and growth: Theory and evidence. In *Handbook of economic growth* (Vol. 1, pp. 865–934). Amsterdam/Heidelberg: Elsevier.
- Liu, J., Uchida, K., & Gao, R. (2014). Earnings management of initial public offer firms: Evidence of

- regulation changes in China. *Accounting and Finance*, 54, 505–537. <https://doi.org/10.1111/acfi.12006>.
- Miguel Hidalgo, A., & Palenzuela, V. A. (1990). The interrelationship of investment decisions: Financing and dividends in the large Spanish industrial company. *Esic Market*, (69), 115–139. Madrid: Pirámide.
- Modigliani, F., & Miller, M. (1958). The cost of capital. Corporate finance and the theory of investment. *American Economic Review*, 48, 261–297.
- Modigliani, F., & Miller, M. (1963). Corporate income taxes and the cost of capital: A correction. *The American Economic Review*, 53, 433–443.
- Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions do not have. *Journal of Financial Economics*, 13(2), 187–221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0).
- Partnoy, F. (2003). *Infectious greed: How deceit and risk corrupted the financial markets* (p. 119). New York: Times Books, 1995.
- Ross, S., Westerfield, R., & Jaffee, J. (2005). *Corporate finance*. New York: McGraw-Hill International Edition.
- Sanchis, J. R., & Riberiro, D. (1999). *Creation and management of SMEs*. Madrid: Diaz de Santos.
- San-Jose, L., Retolaza, J. L., Urionabarrenetxea, S., Ruiz-Roqueñi, M., & Azkunaga, A. (2013). The new paradigm of corporate finance: Ethics in finance, ICTs, financial globalization and stakeholder responsibility. *International Research Journal of Finance and Economics*, 103(1), 191–206.
- Soldevilla, E. (1988). International financing instruments for Spanish companies. *Booklets of Management*, 5, 7–27.
- Soppe, A. (2004). Sustainable corporate finance. *Journal of Business Ethics*, 53(1–2), 213–224.
- Stein, J. C. (2003). Agency, information and corporate investment. In *Handbook of the Economics of Finance*, 1(A), 111–165. Edited by G.M. Constantinides, M. Harris and R. Stulz. Elsevier Science B.V.
- Stiglitz, J., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393–410.
- Suárez, A. S. S. (2014). *Decisiones óptimas de inversión y financiación en la empresa*. Madrid: Ediciones Pirámide.
- Tirole, J. (2006). *The theory of corporate finance*. Princeton/Oxford: Princeton University Press.
- Van Horne, J., & Wachowicz, J. (2008). *Fundamentals of financial management* (13th ed.). Englewood Cliffs: Prentice-Hall, Inc., 2000.
- Yusof, Y., & Ismail, S. (2016). Determinants of dividend policy of public listed companies in Malaysia. *Review of International Business and Strategy*, 26(1), 88–99. <https://doi.org/10.1108/RIBS-02-2014-0030>.
- Zingales, L. (2000). In search of new foundations. *The Journal of Finance*, 55(4), 1623–1653. <https://doi.org/10.1111/0022-1082.00262>.
- Zingales, L. (2015). Presidential address: Does finance benefit society? *The Journal of Finance*, 70(4), 1327–1363. <https://doi.org/10.1111/jofi.12295>.

Corporate Financial Performance

- [Business Case of CSR](#)

Corporate Foundations

- [Corporate Philanthropy](#)

Corporate Giving

- [Corporate Philanthropy](#)

Corporate Global Citizenship CGC

- [Cross-Cultural Attitudes to CSR](#)

Corporate Global Responsibility

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Corporate Governance

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Synonyms

[Business administration](#); [Business management](#); [Company management](#); [Corporate control](#); [Corporate management](#)

Definition/Description

Corporate governance is a term used to describe accountability and control of business organizations, including the legal corporation. There are both broad and narrow definitions. A broad definition includes not only internal organizational structures and processes, such as the board of directors and members, but extends to include markets, employees, regulators, and other stakeholders (Hopt and Teubner 1984). A narrow definition limits the term to the interaction between at least the two decision-making bodies in the legal corporation, namely, the board of directors (Coffee 1986; La Porta et al. 2000; Shleifer and Vishny 1997).

Corporate governance is an interdisciplinary study (Clarke 2017). The topic is an area of analysis and research in law, economics, sociology, and management studies. The different disciplines examine rights and duties (law), incentives and efficiency (economics), norms and organizations (sociology), and decision-making and performance (management) in relation to corporate direction and control. As an interdisciplinary area of research, results of corporate governance research can be difficult to reconcile and synthesize due to methodological incompatibilities.

Of particular interest to economic analysis of corporate governance are four specific markets – the market for finance, the market for management talent, the product market, and the market for corporate control. Each of these markets exerts pressure on the management constraining some decisions while facilitating others. Further, each of these markets is subject to analysis by the different disciplines mentioned earlier.

Introduction

Corporate governance, although a term initially used in the 1970s, came to prominence in the early 1990s as governments sought to address a series of collapses and scandals of that era (Clarke 2017). Rather than turning to regulatory solutions

generated by government, businesses advocated self-regulatory approaches using codes. These corporate governance codes have become common practices around the globe. They combine basic legal concepts such as directors' duties and shareholders' rights with broader ideas of business ethics such as fairness and taking account of stakeholder interests.

Historical Background

The challenges of holding company authority accountable are not a new problem. It goes back to the earliest corporate law cases of the medieval era. In recent times, however, as corporate executives became increasingly powerful in the mid-twentieth century, with CEO's selecting board members who in turn set compensation packages and were to provide strategy and oversight, the need for protection of the interests of the company, its shareholders, and the broader public interest became increasingly important on a new scale (Conrad et al. 1971). While this phenomenon was of concern, it was only a series of scandals and problems that occurred in the late 1980s that regulators and financiers put significant pressure on companies to improve governance. In essence, they wanted to focus attention on senior executives to ensure that they were discharging their duties and fulfilling their roles in the best interests of the company. The basic premise was that directors needed to ensure their companies were run in a proper manner so that the business could be successful.

In the UK, the "The Committee on the Financial Aspects of Corporate Governance" issued report titled *Financial Aspects of Corporate Governance*. That report became known as the Cadbury Report, after Adrian Cadbury, the chair of the committee, became a standard for the development of subsequent corporate governance codes. In that report, corporate governance was defined as follows: "Corporate governance is the system by which companies are directed and controlled" (Financial Reporting Council 1992).

As noted, the landmark Cadbury Report spawned the UK's corporate governance code and further developments around the world. One of the most influential codes has been issued by the OECD. Initially published in 1999 as the OECD's *Principles of Corporate Governance*, it has been developed and amended and now named, the *G20/OECD Principles of Corporate Governance*. The latest iteration of the Principles defines corporate governance more broadly, elaborating it as follows:

Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. (G20/OECD)

Issues

The range of issues considered, researched, and regulated under the umbrella term "corporate governance" is broad and varies across jurisdictions. These issues are listed below as a set of questions followed by the general scope of answers:

Ownership. Who are the owners and what rights do they have? Owners may be long-standing insiders, such as family groups, or anonymous shareholders in public stock exchanges. Their rights range from direct powers of appointment to mere rights to receive information.

Control. Who has control rights? Parties that may have control rights can include insiders, owners, creditors such as banks, or employees through representative bodies such as found in supervisory boards of two-tier board models.

Law. What laws apply? And, what model of law is used? The focus of much legal discussion is on directors' duties and shareholders' rights. Directors, shareholders, and others may have very diverse rights under different jurisdictions. For example, while some jurisdictions may impose strict disciplining duties and

create extensive supervisory rights for regulators, other jurisdictions may grant rights to shareholders and expect them to exercise those rights as they see fit.

Finance. What choices are preferred and to be considered optimal? Different jurisdictions and industries will have different preferences for debt/equity ratios. The preferences involved as well as the control of those decisions are matters of corporate governance.

Growth. What is the best way to grow the business? Some locales place a strong emphasis on organic growth – the development of the business through its own efforts with its own resources. Other locales look to grow via merger and acquisition activity.

Takeovers. Are takeovers done amicably between collaborating or related companies? Or, are takeovers hostile? Where businesses are under threat from hostile parties, executives will operate the business differently and develop defensive strategies to avoid such takeovers. There is evidence that with the threat, executives will be encouraged to be more efficient with the use of resources.

Orientation. Should the corporation be governed to generate short-term profits or long-term growth? The answer to this question depends on the owners' goals and the environment in which the business is operating. Businesses operating in short-term share markets are under great pressure to generate short-term profits regardless of the long-term consequences.

Business Strategy. Should the business be focused on competitive strategies to drive share price? Alternatively, businesses can focus on production, quality, and sales volume. Such strategic decisions are intimately connected to corporate governance focus and rights.

Stakeholders. Are stakeholder interests important? Some systems ignore all stakeholders other than the shareholders. Other systems require corporate governance to attend to the interests of other parties such as employees, suppliers, and customers.

Codes and Principles

As noted, many of the solutions to corporate governance problems have been consolidated into codes. These codes are adopted by regulators, including stock exchanges, to provide guidance to companies about how their governance arrangements and processes are expected to be organized and carried out. The codes are often voluntary, particularly in the common situation where they are only applied to companies listed on stock exchanges (Aguilera and Cuervo-Cazurra 2004; Haxhi and Aguilera 2014; Sheehy 2019). In addition, they usually provide a wide range of discretion for executives in their implementation. The premise behind this wide discretion is that companies differ significantly in their industry, organization, strategy, and location and accordingly need discretion to effectively and efficiently respond to that context. This approach has been combined with the accountability obligations of corporate governance through a widely adopted approach to disclosure known as “comply and explain” (Keay 2014). Generally speaking, this approach, first expounded in the Cadbury Report, allows companies to either comply with the provisions of a code or explain why they have not complied, with the idea being that reasonable, legitimate explanations for non-compliance exist and may be more appropriate than needless, costly compliance.

While a variety of different codes exist, they all generally address the same issues. An exemplar is the G20/OECD Principles of Corporate Governance mentioned above. That instrument codifies six broad principles. These are (1) setting up a proper governance structure; (2) ensuring fair treatment of shareholders and appropriate rights; (3) proper dealings with institutional investors; (4) addressing stakeholder interests appropriately; (5) disclosure and transparency, and (6) clarity on board responsibilities. For a critical analysis, see Siems and Alvarez-Macotella 2015.

Theories

The range of theories to address these issues is as broad as the range of the issues themselves. Economics focuses on the conflict of interest between self-interested utility maximizing managers and owners. It contributes two significant theories: agency theory and transaction costs. Agency cost theory examines how executives as agents of owners (often mistakenly equated with shareholders) can exploit their superior knowledge to their own advantage and to the disadvantage of their principals/owners (Fama 1980; Panda and Leepsa 2017).

Transaction costs are the costs involved in carrying out exchanges (Coase 1937, Coase 1960). These costs include the costs associated with finding goods and services, negotiating for them, developing contracts, and enforcing such contracts. Transaction cost analysis examines the preference for hierarchical firms over open markets and particularly the role of bounded rationality and opportunism in firms.

Economics proposes a variety of solutions to these corporate governance problems based on aligning economic incentives in order to address the corporate governance challenges as set out in these theories.

The sociology of organizations offers different lenses on the problems of corporate governance. Rather than a focus on self-interest, this approach is focused on coordination to achieve organizational goals. In this vein, organizational studies take a stewardship approach and may include resource dependence (Pfeffer and Salancik 1978) or path dependence (Pierson 2000).

Stakeholder theory, appearing in both disciplines of management and law, views corporate governance as a means of coordinating groups of variously interested parties. These parties might be motivated by wages, brand loyalty, community well-being through stable employment, consumer activist agendas, organizational objectives, and a range of other matters (Blair and Stout 1999; Clarke 2016; Donaldson and Preston 1995; Freeman 1984; Sheehy 2005).

Law provides a range of solutions on the basis of distribution of rights and duties. These rights and duties are distributed among the parties to the corporation and need to be adjusted either by the state through prearranged corporate rules or by negotiation by the parties to the private constitution of the company (Sheehy 2004, 2006; Sheehy and Feaver 2014).

Summary

Corporate governance is a wide-ranging investigation into the systems of corporate control and accountability. It is a dynamic, multidisciplinary area of investigation and a paramount concern to investors, regulators, and other stakeholders who rely on effective corporate governance for products, services, and even pensions as retirement funds are increasingly directed to investment in stock exchanges around the globe.

Cross-References

- ▶ Board Committees and Corporate Governance
- ▶ Collaborative Governance
- ▶ Corporate Activism
- ▶ Corporate Manslaughter
- ▶ Environment, Social, and Governance (ESG)
- ▶ European Union Directive: The 8th Company Law Directive on Disclosure and Transparency
- ▶ Global Corporate Governance Institute (GCGI)
- ▶ Market for Corporate Control and CSR
- ▶ OECD Principles of Corporate Governance
- ▶ Private Finance Initiative
- ▶ Public Procurement and CSR
- ▶ Shareholder Democracy
- ▶ Sustainable Development Goals (UN Global Goals)

References

Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: What is the trigger? *Organization Studies*, 25(3), 415–443.

- Blair, M. M., & Stout, L. A. (1999). A team production theory of corporate law. *Virginia Law Review*, 85, 247–328.
- Clarke, T. (2016). The continuing diversity of corporate governance: Theories of convergence and variety. *Ephemera: Theory & Politics in Organization*, 16(1), 19–52. Retrieved from <http://ezproxy.canberra.edu.au/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bsu&AN=113584899>
- Clarke, T. (2017). *International corporate governance: A comparative approach* (2nd ed.). Routledge.
- Coase, R. (1937). The nature of the firm. *Economica*, IV, 386–405.
- Coase, R. (1960). The problem of social cost. *Journal of Law and Economics*, 3(1), 1–44.
- Coffee, J. C. (1986). Shareholders versus managers: The strain in the corporate web. *Michigan Law Review*, 85(1), 1–109.
- Conrad, A. F., Myles, L. M., Roger B., & George D. G. (1971). Functions of directors under the existing system. *Bus Law* 27(23).
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implication. *Academy of Management Review*, 20, 65–91.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy*, 88(2).
- Financial Reporting Council. (1992). *The financial aspects of Corporate Governance (Cadbury Report)*.
- Freeman, R. E. (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman.
- Haxhi, I., & Aguilera, R. V. (2014). Corporate governance through codes. *Haxhi I., & Aguilera, RV*, 1–3.
- Hopt, K., & Teubner, G. (1984). *Corporate governance and directors' liabilities: Legal, economic and sociological analysis on corporate social responsibility*. Berlin/New York: de Gruyter.
- Keay, A. (2014). Comply or explain in corporate governance codes: In need of greater regulatory oversight? *Legal Studies*, 34(2), 279–304.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1–2), 3–27.
- Panda, B., & Leepsa, N. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian Journal of Corporate Governance*, 10(1), 74–95.
- Pfeffer, J., & Salancik, G. (1978). *External control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Pierson, P. (2000). Path dependence, increasing returns, and the study of politics. *American Political Science Review*, 94(2), 251–267.
- Sheehy, B. (2004). Corporations and social costs: The Wal-Mart case study. *Journal of Law & Commerce*, 24, 1–55.
- Sheehy, B. (2005). Scrooge – The reluctant stakeholder: Theoretical problems in The shareholder-stakeholder debate. *University of Miami Business Law Review*, 14(1), 193–241.

- Sheehy, B. (2006). Shareholders, unicorns and stilts: An analysis of shareholder property rights. *Journal of Corporate Law Studies*, 6(1), 165–212.
- Sheehy, B. (2019). TNC code of conduct or CSR? A regulatory systems perspective. In M. M. Rahim (Ed.), *Global code of conduct on transnational corporations: Challenges and opportunities* (pp. 45–62). Springer.
- Sheehy, B., & Feaver, D. P. (2014). Anglo-American directors' legal duties and CSR: Prohibited, permitted or prescribed? *Dalhousie Law Journal*, 37(1), 347–395.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783. <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>.
- Siems, M., & Alvarez-Macotella, O. S. (2015). *The G20/OECD principles of corporate governance 2015: A critical assessment of their operation and impact*.

Corporate Governance (CG)

- [King III Report and CSR](#)

Corporate Governance Approach

- [Corporate Governance Perspectives \(Shareholder vs. Stakeholder Perspective\)](#)

Corporate Governance Bundles

- [Corporate Governance, Measurement of](#)

Corporate Governance Codes

- [OECD Guidelines for Multinational Enterprises](#)

Corporate Governance Control Systems

- [Auditors and Corporate Governance](#)

Corporate Governance Indices

- [Corporate Governance, Measurement of](#)

Corporate Governance Perspectives (Shareholder vs. Stakeholder Perspective)

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Synonyms

[Corporate governance approach](#)

Definition

The perspective of corporate governance is determined by the ultimate goal that the corporate governance system aims to achieve. The shareholder perspective advocates that the sole aim of corporate governance is to maximize shareholder value to protect the interests of shareholders. By contrast, under the stakeholder perspectives, the corporate governance system should be aimed at guaranteeing the interests of all the firm's stakeholders. Both perspectives should be regarded as complementary approaches, rather than competing positions. The stakeholder perspective broadens the scope of corporate governance. It supports that corporate governance systems should consider and balance the interests of all stakeholders, in which shareholders are a

constituency with legitimate rights as those held by the other stakeholders. Additionally, the consideration of stakeholder interest could be used as an instrument to legitimize the corporation, hence contributing to maintaining its existence for shareholders.

Introduction

The current UK Corporate Code (Financial Reporting Council, 2018) conceives corporate governance as it was originally defined in the 1992 Cadbury report. According to this report, “*Corporate governance is the system by which companies are directed and controlled. Boards of directors are responsible for the governance of their companies. The shareholders’ role in governance is to appoint the directors and the auditors and to satisfy themselves that an appropriate governance structure is in place. The responsibilities of the board include setting the company’s strategic aims, providing the leadership to put them into effect, supervising the management of the business and reporting to shareholders on their stewardship. The board’s actions are subject to laws, regulations and the shareholders in general meeting*” (Cadbury report, paragraph 2.5, emphasis added). This traditional definition of corporate governance regards shareholders as the sole constituency to whom managers should be accountable.

Although the shareholder conceptualization of corporate governance is still advocated by some academics and regulators nowadays (e.g., the abovementioned 2018 UK Corporate Governance Code), there is different approach to how corporate governance should be understood. Since the beginning of the 2000s, there has been several calls to broaden the scope of corporate governance, arguing that it should be a framework that governs “the structure of rights and responsibilities among the parties with a stake in the firm” (Aoki 2001 p. 11, emphasis added). Thus, all the constituencies that have a legitimate interest or are involved in the corporations, and not only shareholder, should be the focus of corporate governance. Letza et al. (2004) argue that each

alternative corporate governance perspective leads to different practices regarding the establishment of corporate governance systems and mechanisms. Based on the two conceptualizations presented above (shareholder vs. all parties with a stake), the authors distinguish two polarized perspectives to corporate governance: the shareholder and the stakeholder perspectives. On the one hand, the shareholder perspective claims that the key aim of corporate governance is the protection of shareholder interests by maximizing corporate value. On the other hand, the stakeholder perspective advocates that the main objective of corporate governance is to guarantee the interests of all of the firm’s stakeholders. Under this perspective, corporate governance is concerned with the configuration of relationships among all the constituencies that are directly or indirectly related to companies.

Both perspectives are the most relevant approaches for analyzing corporate governance systems. They rely on distinctive theoretical frameworks to represent the relationships among corporate actors and support the establishment of different mechanisms and measures as a means to achieve the goal of corporate governance (Letza et al. 2004). According to Ball et al. (2000), the shareholder and the stakeholder approaches to corporate governance are embedded in different business cultures of a country. The shareholder corporate governance perspective is related to common-law countries, such as Australia, Canada, United Kingdom, or USA. In these countries, firms are considered as tools to maximize the wealth of shareholders. By contrast, the stakeholder perspective is related to code-law countries, such as France, Germany, or Japan. In these countries, stakeholders are considered to be legitimately entitled to have an interest in firms.

Shareholder Perspective

Under the shareholder perspective, the goal of corporate governance systems is to protect the interests of shareholders and maximize their wealth. According to Letza et al. (2004), this perspective considers corporate governance a

private issue that supports the rights of shareholders as corporate owners and the obligation of the company to meet their interests. Therefore, under this approach, corporate governance comprises instruments and mechanisms seeking to guarantee that managers effectively allocate the resources of the company to increasing profits and consequently maximize shareholder value (Bushman and Smith 2001). This perspective is the classical approach to corporate governance, and it has historically been the one supported by corporate governance codes worldwide.

The shareholder perspective is grounded on classical theories of corporate governance, such as agency, stewardship, and resource dependence theories (John and Senbet 1998; Kiel and Nicholson 2003; Van den Berghe and Levrain 2004). These theories study the corporate governance factors that could affect shareholder value, as the final measure of the success of corporate governance. Shareholders (principals) of most modern companies delegate the day-to-day running of their firm to managers (agents). This situation creates a divide between ownership and control (Berle and Means 1932). In this context, agency theory advocates that agency problems could appear because managers may behave opportunistically to satisfy their own interests at the expense of shareholder value (Jensen and Meckling 1976). A contract should then be established between shareholders and managers. Corporate governance mechanisms should monitor that the former respect the contract. Conversely, stewardship theory suggests that managers are not always naturally inclined to commit opportunistic actions because they could have intrinsic and personal motivations to protect shareholder interests, such as reputation, success, social recognition (Donaldson and Davis 1994). Additionally, managers are expected to possess appropriate knowledge and skills to make the correct decisions in order to enhance shareholder value. Finally, resource dependence theory argues that managers and directors may provide companies with access to the appropriate resources to improve financial performance as a consequence of their contacts, their expertise, and their links with the environment (Pfeffer and Salancik 1978).

Several corporate governance mechanisms contribute to achieving the goal of the shareholder perspective of corporate governance. These mechanisms fall into two categories: internal and external (Fernández and Gómez 1999). The most relevant internal mechanisms are the annual general meeting of shareholders, the board of directors, the incentive system, and the ownership structure. The annual general meeting is the governing body of corporations and represents the rights of all shareholders. The board of directors is responsible of monitoring managers and should provide them with adequate strategic advice. The incentive system should incentivize the alignment of the interests of managers and shareholder by linking the remuneration of the former to the maximization of value for the latter. Finally, the ownership structure could contribute to minimizing agency problems if managers are owners of the company. External mechanisms are also useful in promoting the protection of shareholder interests. The most significant external mechanisms are the legal and regulatory systems, the capital market, and the labor market. The legal and regulatory systems may develop rules and norms that compel managers to behave responsibly. In this regard, it is noteworthy that self-regulation is more common in countries of shareholder corporate governance systems because it has been proved more effective (Letza et al. 2004). The capital markets could also influence managerial behavior. The share price of the firm represents a good assessment for the performance of managers. The threat of takeovers could also have a significant impact on managers. Additionally, the labor market may discipline managers as their wages and possibility of being hired by other companies depend on how they perform.

Stakeholder Perspective

Under the stakeholder perspective, the aim of corporate governance is to guarantee the protection of the interests of all of a company's stakeholders (Letza et al. 2004). This approach contrasts to the shareholder perspective because

it broadens the scope of corporate governance by considering that stakeholder interests are comparable to those of shareholders. In so doing, the firm should try to increase the welfare of all stakeholders and not just of its owners. This perspective emerged in the late twentieth century, when several academics started to advocate that all the constituencies that affect and/or are affected by the activities of a firm have certain rights over it (Freeman 1984). Employees, customers, suppliers, creditors, the environment, and even society as a whole may bear legitimate interests based on the stakeholder perspective of corporate governance. The recent inclusion of recommendation concerning stakeholders in corporate governance codes of some countries shows the change toward a stakeholder conception of corporate governance (Szabó and Sørensen 2013). Further, some definitions of corporate governance explicitly recognize the relevance of stakeholders. For instance, John and Senbet (1998, p. 372) state that “Corporate governance deals with mechanisms by which stakeholders of a corporation exercise control over corporate insiders and management such that their interests are protected.” By emphasizing the importance of stakeholders, this perspective strengthens the interrelated link between corporate governance and corporate social responsibility (Jamali et al. 2008). Corporate social responsibility aims to maximize “. . .the creation of shared value for their owners/shareholders and for their other stakeholders and society at large” (European Commission 2011 p. 6). Therefore, CSR represents a strategy that could help to fulfill the goal of corporate governance under the stakeholder perspective.

The stakeholder perspective is theoretically grounded on Freeman’s (1984) stakeholder theory, which argues that firms should be accountable to and managed for the purpose of the benefit of all stakeholders and not only of shareholders. Therefore, given that there could be different and competing interests among stakeholders, corporations need to properly balance their demands (Sternberg 1997). Following Donaldson and Preston (1995), Letza et al. (2004) identified two streams of the stakeholder theory. The normative stakeholder theory regards the fulfillment of

stakeholder interests as the “end” and emphasizes the significant role of corporations in society. The instrumental stakeholder theory regards the consideration of stakeholder interests as a “means” to legitimate corporate actions and increase corporate value. The latter is particularly related to the most prevalent approach to CSR, the instrumental approach, which considers CSR (and consequently stakeholder management) as a means to increase corporate wealth.

Internal mechanisms are more effective when considering the stakeholder perspective of corporate governance (Letza et al. 2004). Boards of directors play a relevant role in how firms respond to stakeholder interests by fostering corporate social responsibility policies (Khan et al. 2013) as they should provide managers with strategic advice. As a consequence of the growing importance of corporate social responsibility within overall corporate strategies (Porter and Kramer 2006), new corporate governance appeared, such as corporate social responsibility committees and sustainability reporting, with the aim of managing stakeholder interests (Money and Schepers 2007).

Reconciling Both Perspectives

The shareholder and the stakeholder perspectives of corporate governance may be regarded as competing approaches because they represent two polarized and antagonistic positions: satisfying the interests of the rest of the stakeholders could imply that the firm gives less attention to shareholder interests (Letza et al. 2004). This opposing relationship could be even more apparent when considering stakeholder theory in its most extreme and orthodox conception. According to Sternberg (1997), by focusing on the need to balance the interests of all corporate stakeholders, stakeholder theory avoids favoring one constituency over the others, as could be the case of shareholders under the shareholder perspective. She argues that stakeholder theory completely removes the possibility of achieving the objective of the shareholder perspective as it jeopardizes the rights of corporate owners.

Letza et al. (2004) suggest that, although this opposing view could be the most likely to be initially apparent, supporting one perspective does not actually exclude the other. None of them is superior to the other as they are not capable of explaining the reality of corporations individually. They argue that we need to critically reflect on the arguments and key points of each perspective to understand the dynamism that exists between them, as well as the contextual process that characterizes their relationship. Corporate governance systems are continuously evolving and adapting to the values and characteristics of the societies in which they operate. Therefore, one could be more appropriate at particular moment of time, while the other may prove more adequate at a different point of time.

Furthermore, drawing on a less stringent approach of stakeholder theory, both corporate governance perspectives may actually be considered as complementary. The stakeholder perspective considers that the main objective of corporate governance is to guarantee the interests of all of the firm's stakeholders. However, in so doing, it does not advocate the protection of stakeholder interests at the expense of the protection of the shareholder interests. It extends the scope of corporate governance by considering shareholders a specific type of stakeholder, with rights equal to those held by others (Money and Schepers 2007). This approach is grounded on the instrumental stream of stakeholder theory. Given that the fulfillment of stakeholder interests is used as means to protect shareholder interests, it is possible to, at least partly, achieve the goals of both corporate governance perspectives at the same time. This interdependent relationship between the perspectives suggests avenues for future research regarding whether the traditional elements and prescriptions of the shareholder perspective hold or not for the stakeholder perspective (García-Torea et al. 2016).

Cross-References

- Agency Theory
- Codes of Good Governance

- Governance Models
- Shareholder Rights
- Stakeholder Theory

References

- Aoki, M. (2001). *Towards a comparative institutional analysis*. Cambridge, MA: MIT Press.
- Ball, R., Kothari, S. P., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*, 29(1), 1–51.
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. New York: Macmillan.
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32(1–3), 237–333.
- Committee on the Financial Aspects of Corporate Governance and Gee and Co. Ltd. (1992). Cadbury report. The financial aspects of corporate governance.
- Donaldson, L., & Davis, J. H. (1994). Boards and company performance—research challenges the conventional wisdom. *Corporate Governance: An International Review*, 2(3), 151–160.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review*, 20(1), 65–91.
- European Commission (2011). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A renewed EU strategy 2011–14 for corporate social responsibility (com/2011/0681 final). Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52011DC0681>.
- Fernández, A. I., & Gómez, S. (1999). El gobierno de la empresa: mecanismos alineadores y supervisores de las actuaciones directivas. *Revista Española de Financiación y Contabilidad*, 100, 355–380.
- Financial Reporting Council. (2018). *The UK corporate governance code*. London: FRC.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- García-Torea, N., Fernández-Feijoo, B., & de la Cuesta, M. (2016). Board of director's effectiveness and the stakeholder perspective of corporate governance: Do effective boards promote the interests of shareholders and stakeholders? *BRQ Business Research Quarterly*, 19(4), 246–260.
- Jamali, D., Safieddine, A. M., & Rabbath, M. (2008). Corporate governance and corporate social responsibility synergies and interrelationships. *Corporate Governance: An International Review*, 16(5), 443–459.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.

- John, K., & Senbet, L. W. (1998). Corporate governance and board effectiveness. *Journal of Banking & Finance*, 22(4), 371–403.
- Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *Journal of Business Ethics*, 114(2), 207–223.
- Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11(3), 189–205.
- Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: A critical review of corporate governance. *Corporate Governance: An International Review*, 12(3), 242–262.
- Money, K., & Schepers, H. (2007). Are CSR and corporate governance converging?: A view from boardroom directors and company secretaries in FTSE100 companies in the UK. *Journal of General Management*, 33(2), 1–11.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper and Row.
- Porter, M., & Kramer, M. (2006). Strategy and society: The link between corporate social responsibility and competitive advantage. *Harvard Business Review*, 84(12), 42–56.
- Sternberg, E. (1997). The defects of stakeholder theory. *Corporate Governance: An International Review*, 5(1), 3–10.
- Szabó, D. G., & Sorensen, K. E. (2013). Integrating corporate social responsibility in corporate governance codes in the EU. *European Business Law Review*, 24, 781–828.
- Van den Berghe, L. A., & Levrau, A. (2004). Evaluating boards of directors: What constitutes a good corporate board? *Corporate Governance: An International Review*, 12(4), 461–478.

Corporate Governance Principles

- [Basel Recommendations on Corporate Governance Principles for Banks](#)

Corporate Governance Rating Systems

- [Corporate Governance, Measurement of](#)

Corporate Governance Reporting

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Synonyms

[Corporate social responsibility reporting](#); [Global reporting](#); [Reporting](#); [Sustainable reporting](#)

Definition

The corporate scandals proved the weaknesses of financial reports, and the attention was oriented to other mechanisms to improve corporate accountability and transparency. The corporate governance reporting (CGR), as a nonfinancial report, discloses to stakeholders voluntary information of the corporations' activities and its quality which is based on the corporate board structures and on the practical instruments used for assessing the degree of corporations' responsibility to apply the internal and external regulations.

Introduction

The digitalization and the crisis generated by COVID-19 raise many challenges for corporate governance disclosures. In the light of the pandemic crisis, the stakeholders require much information, not only financial information but also information that proves the sustainability of the corporations in relation to society and the environment.

The diversity of corporate reporting and the challenges such as the pandemic crisis make corporations pay more attention to providing information to stakeholders and shareholders, considering their expectations (Idowu et al. 2017). Moreover, annual reports disclose to stakeholders and shareholders mandatory and/or

voluntary information related to the main activities and responsibilities of the corporations.

The corporate financial report is a complex report that includes financial and other additional nonfinancial information related to corporate accountability. Therefore, in a corporate financial report, we will find information related to corporate governance, corporate social responsibility, risk evaluation, and intrinsic and extrinsic motivation.

As a result of mandatory laws and regulations, the financial report will disclose to stakeholders only the mandatory information. Thus, the corporations for providing their seriousness should disclose voluntary information related to the degree of involvement of corporate board and managers in investor protection and in promoting high transparency.

De Villiers and Dimes (2021), analyzing the triple corporate governance elements as determinants, mechanisms, and consequences, concluded that the information provided by CGR could provide stakeholders and shareholders with an overview of the relationship between internal corporate governance mechanisms and financial performance.

Considering the particularities of corporate governance, the structure of CGR usually contains general financial (i.e., board remuneration) and nonfinancial information related to the particularities of corporate governance in consensus with its mission and vision, the decisional structures of the corporation as the board of managers, the set of committees, the internal and external regulations, and some compensations for managerial staff.

First, the lack or low degree of transparency is a source of managers' reluctance about the amount and quality of information they must voluntarily disclose on CGR. Second, the national legislation and investor protection regulations directly influence the quality of CGR because of the particularities of corporate governance information disclosed.

Schiehl and Martins (2016), analyzing the relationship between effects of country- and firm-level governance mechanisms, concluded

that economic perspective predominantly guided the corporate governance research, and institutional perspective of specific governance mechanisms was not considered as relevant factor analysis in establishing the influence of country-level governance factors on firm-level governance mechanisms. Therefore, the national governance factors should be seriously considered when the stakeholders and shareholders evaluate a CGR.

The Impact of Legislation on Corporate Governance Reporting Quality

The corporations should consider the countries' legislation in which they carry out their activity. The national legislation directly influences the quality of CGR, and in the countries where the legislation has a low degree of dispersal of responsibilities, the information asymmetry is missing from CGR.

The national legislation is completed with social and cultural norms and contributes to the development of corporate social responsibility. Legislation in countries where corporate scandals have caused great harm to society as a whole has imposed strict rules that have been transposed into corporate governance codes, strengthening the role and responsibility of internal control. Therefore, regardless of the degree of internationalization of the corporations, specific articles of their governing code must comply with the country's legislation in which they operate.

However, regardless of the corporate governance code, the national legislation, the CGR is a mechanism that interprets corporate governance according to the availability of managers to disclose information and reduce information asymmetry (Burlea-Schiopoiu and Idowu 2016).

The quality of information disclosed by CGR is challenging to assess by stakeholders because of the lack of legislation (especially national legislation) that does not clearly distinguish between mandatory and voluntary information to disclose by corporations. The CGR, because of the many

reports (financial and/or nonfinancial) that corporations must prepare, become a complacency report with standard forms that provide stakeholders with only technical information without a logical interpretation, comparison, or justification.

The structure of many CGR looks like a puzzle with dispersed pieces and without a logical connection between them, and it is a consequence of the abundant and contradictory legislation and regulations. The dispersal of responsibilities also contributes to disclosing irrelevant information for stakeholders and shareholders (Burlea-Schiopoiu 2019). Therefore, the information scarcity from CGR results from external factors (the national legislation) and internal factors (managers' reluctance about the amount and quality of information they must voluntarily disclose).

Future Directions

Future research should be devoted to analyzing how to transform CGR from a description of corporation mechanisms and internal procedures into a powerful tool that will reduce information dispersion and improve corporate reputation (Burlea-Schiopoiu and Balan 2021). The internal and external communication channels will be evaluated as levers through which voluntary disclosure information will be strongly related to the corporate mission and vision as also Lai et al. (2019) considered. The information asymmetry presented in CGR will require special attention because the corporations should elaborate a transparency disclosure strategy and policy for improving their reputation. In the future, the quality of CGR will no longer be evaluated by its amount of information and complexity but in terms of the ease with which it will transmit the information even to those stakeholders who are not familiar with corporate mechanisms and procedures. Therefore, negative phenomena that influence the quality of CGR will be drastically reduced, and the report will become a relevant source of information for stakeholders and shareholders.

Summary

The CGR is an essential tool that contributes to increasing the corporate reputation by disclosing information requested by stakeholders, mainly by the public. The degree of transparency proved by GCR is strongly related to corporate sustainability and legitimacy and represents its business card. The quality of GCR is assessed in correlation with its reliability and the logical presentation of data by avoiding information asymmetry. Therefore, the companies should use the CGR in their external strategies and as a source of continuously improving the governance mechanisms. The question that should be laid out as a motif of GCR is the following: What information is important to disclose to prove a high degree of transparency and earn a good reputation? The company should answer using the method, out of the box and from the stakeholders' perspective.

Cross-References

- Corporate Social Responsibility Reporting
- Corporate Sustainability Reporting Index
- CSR Communication and Annual Reports
- Global Reporting Initiative
- Integrated Reporting for Sustainability
- Reporting Framework
- Sustainability Management and Reporting
- Sustainability Report and Sustainability Reporting
- Sustainability Reporting Guidelines
- Sustainable Reporting

References

- Burlea-Schiopoiu, A. (2019). The impact of triple bottom dispersal of actions on integrated reporting: A critical perspective. In S. O. Idowu & M. del Baldo (Eds.), *Integrated reporting: Antecedents and perspectives for organizations and stakeholders* (pp. 141–152). Switzerland: Springer Nature. <https://doi.org/10.1007/978-3-030-01719-4-7>.
- Burlea-Schiopoiu, A., & Balan, D. A. (2021). Modelling the impact of corporate reputation on costumers' behaviour. *Corporate Social Responsibility and*

- Environmental Management*. <https://doi.org/10.1002/csr.2113>.
- Burlea-Schiopoiu, A., & Idowu, O. S. (2016). The independence of the managers: An ethical dilemma. *International Journal of Social Entrepreneurship and Innovation*, 4(2), 152–171. <https://doi.org/10.1504/IJSEI.2016.076688>.
- De Villiers, C., & Dimes, R. (2021). Determinants, mechanisms and consequences of corporate governance reporting: A research framework. *Journal of Management and Governance*, 25, 7–26. <https://doi.org/10.1007/s10997-020-09530-0>.
- Idowu, O. S., Burlea-Schiopoiu, A., & Vertigas, St. (2017). Corporate social responsibility in times of crisis: A summary. Springer, Cham.
- Lai, A., Leoni, G., & Stacchezzini, R. (2019). Accounting and governance in diverse settings – An introduction. *Accounting History*, 24(3), 325–337.
- Schiehl, E., & Martins, H. C. (2016). Cross-national governance research: A systematic review and assessment (advancing the corporate governance research agenda). *Corporate Governance: An International Review*, 24(3), 181–199. <https://doi.org/10.1111/corg.12158>.

Corporate Governance, Measurement of

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Synonyms

Corporate governance bundles; Corporate governance indices; Corporate governance rating systems

Definition/Description

The increased focus on good governance and the development of best practice guidelines, often supported by legislation, has been in response to corporate scandals, such as Enron and WorldCom in the early 2000s and the 2008 banking crisis. Good governance is increasingly recognized as a process where the “best practices” of yesterday

become the standard practices of today. This increased focus has also coincided with a worldwide movement for corporate reporting on sustainability and corporate social responsibility (CSR) issues and a growing demand within the investment industry for investment products that are socially responsible (Benn and Dunphy 2013). Sustainable development is now part of the best practice model of corporate governance. There is a more equal recognition of stakeholders' interests and the role of not only economic but also social and environmental issues in laying the foundations for a new long-term model of economic growth. This is in contrast to the historic governing model that focused on the creation of shareholder value. However, despite increased attention and interest by policymakers and academics alike, a challenge that has not been unanimously resolved is the definition and measurement of “good corporate governance.” This chapter evaluates the main approaches to the measurement of corporate governance.

Why Measure Quality Corporate Governance

There is a view by some policymakers and academics that there is a positive association between the quality of corporate governance and corporate performance. A measure of corporate governance is required to test this proposition. Considerable attention has been directed at measuring best governance practice in academic literature. This information is then used to examine the link between corporate governance and corporate performance. Corporate performance is typically measured using profits, dividends, or share price increases. However, the findings are not unanimous – some studies have identified a link (MacAvoy and Millstein 2003); however, most show “mixed results without a clear-cut relationship” (Crowther and Aras 2016, p. 14). Tangential evidence from corporations suggest that they also believe there to be benefits from good corporate governance as many implemented voluntary changes to their corporate governance in the aftermath of the financial crisis. These steps could reflect a signal

by governing boards to regulators, the market, and the general public that they appreciate the social impact of weak governance (Carretta et al. 2010).

Indicators of Quality Corporate Governance

There are two main considerations regarding measuring governance quality: first identifying measures of governance, and second the variables employed as proxies for the measures identified.

Sources of information on good corporate governance: Governance requirements arise from four sources: (1) the requirements of the individual corporation's founding documents and other contractual documents, (2) corporate law within the operational jurisdiction, (3) relevant corporate codes of conduct, and (4) the requirements of regulators. These four sources are not separate and distinct as each influence, and have been influenced by the other, through the cultural, political, social, and historical circumstances of each country in which the corporate operates. For example, following the global financial crisis and banking failures in 2008, many jurisdictions introduced new laws and regulations to strengthen corporate governance. These changes were a direct response to a cultural change in the political and public perceptions of the role and impact of regulators and corporations on wider society and taxpayers.

Measures of good corporate governance: Researchers and regulators have attempted to identify "best practice" measures. Many of these measures are included in corporate law or in corporate governance codes. Examples of measurable variables that could be included in an index include CEO duality, proportion of nonexecutive directors, having a remuneration committee, a nominations committee, a risk committee, an audit committee, etc. Indeed, it would be expected that recommendations under corporate governance codes and corporate law would be included as a minimum. Examples of the criteria used by two of the main index providers are now outlined in brief. Most indices identify a number of measurable indicators of good corporate governance

and classify them into different areas. These areas typically center on board structure, equity structure, compensation, audit, and ownership (FTSE Research 2005). For example, Institutional Shareholder Services (ISS) collects information and analyzes it into four components of good corporate governance. Component one evaluates "board structure." This component includes information on board composition, composition of committees, board practices, board policy, and diversity. Component two evaluates "compensation programs." This component includes information on pay for performance, communications and disclosures, nonexecutive pay, and termination. Component three evaluates "shareholder rights." This component includes information on takeover defenses, shareholder meetings and voting rights, and procedures. Finally, component four evaluates "audit and risk oversight" (ISS 2019b). This component includes information on the external auditor, the audit, and accounting issues. Research has found a relationship between many of these measures, for example, board size, board composition (the fraction of independent directors), and director ownership (proportion of shares owned collectively by all directors) and board effectiveness (Faleye et al. 2011).

Limitations of Indices of Quality Corporate Governance

A variety of corporate governance indices are used to assess the quality of corporate governance. The indices are not homogenous; there are similarities but also differences in the underlying variables used to measure quality corporate governance. Most indices assume a "one-shoe-size-fits-all" approach that there is an optimal governance structure and any deviation from this reflects a governance problem. Yet most of these governance indices are based on structural measures that are easily measured. The problem lies in what they are not capturing. Research has identified a number of issues with current measures of quality corporate governance and empirical studies that examine the link between corporate governance, using these rating measures, and

performance. The problems identified include lack of inclusion of nonfinancial measures, omitted variables, use of a bundled index approach, endogeneity, and board dynamics. These are now discussed in turn.

Nonfinancial indicators: An underlying assumption of many academic studies is that corporates pursue financial outcomes as their primary objective and shareholders are the primary stakeholder. This approach does not consider performance in terms of the impact the corporate has on society and the environment. It is argued that this narrow approach is no longer valid given the increasing focus on the wider impact of weak corporate governance, particularly following the financial crisis of 2008, on society, communities, and taxpayers (Willems et al. 2012). Nonprofit research has attempted to address this, as financial outcomes are only one measure of nonprofit success; however, identifying a method to assess and compare corporate performance is more difficult, and there is no agreed measure or composite of measures of corporate performance (Newton 2015).

Omitted variables: Research has identified that some characteristics that are not included in indices contribute to effective governance, such as the quality of board meeting discussions (Wan and Ong 2005), and the indices often fail to account for the impact of the external context, for example, country, legal system, corporate factors, and industry. It is argued that optimal governance may vary across corporations and industry types that there is no “one-size-fits-all” model (Vagliasindi 2008) and though different industries or countries can learn from each other’s governance approaches they cannot simply apply an external governance model to their own industry or country (Petrovic 2008).

Criticism of a bundled approach: Indices are typically constructed from a wide range of indicators of corporate governance. They are criticized for using too many variables rather than focusing on the variables that “really matter,” a “kitchen-sink approach” (Bebchuk et al. 2009). They are criticized on the appropriateness of the selected variables and the weighting attached to each variable. Existing ratings either arbitrarily sum up several indicators into a single measure (Daines et al. 2010) or employ sophisticated but

completely opaque algorithms. Finally, it is argued that indices frequently fail to demonstrate the theoretical justification of the composition of indicators and the weighting of different variables (Schnyder 2012). Despite the weaknesses and criticisms of governance indices, it is argued that reducing the measures included in them is a step in the wrong direction, as it eliminates information about interactions between different corporate governance mechanisms. As Schnyder (2012) concludes, things should be kept as simple as possible, but not simpler.

Endogeneity and board dynamics: Even where a positive link is found between a governance measure and corporate value or performance, the research approach faces a series of criticisms. First is the consensus view that the relationship between governance and corporate performance is endogenous, simply put, there could be an error in the direction of causality, and all variables in governance are endogenous (Vagliasindi 2008). Second, there is often a lack of clarity on the level of analysis, for example, it may not be clear if the variable included is an individual director or the board as a group (Petrovic 2008). Moreover, board dynamics analysis can fail to consider the structural and contextual elements impacting governance and the interplay between these factors (Petrovic 2008).

These issues impact the validity and reliability of governance indices. They make definite “best practice” claims difficult and may explain some of the contradictory findings in the research with consequent challenges for governance indices (Bebchuk et al. 2013; Dumitrescu and Zakriya 2019). For example, it has proven difficult to show that even sophisticated professional measures of the quality of a corporate’s corporate governance system produced by different commercial providers are able to predict future performance (Schnyder 2012). In addition, corporate governance indices are subject to further criticism in respect of the data collection process.

Data Collection

A review of the literature identifies three main approaches to gathering data on governance

quality: benchmarking disclosures against an index of disclosures that are deemed to reflect governance quality, surveying individuals within the corporation, and measuring the volume of voluntary public disclosures. These are now critiqued in turn.

Benchmarking corporate disclosures to a corporate governance index: Indices to assess governance quality are created by researchers and professional organizations based on the criteria prescribed by legal and cultural, and recommended requirements established by policymaking bodies set up to promote good corporate governance, such as the UK Corporate Governance Code published by the Financial Reporting Council in the United Kingdom. The criteria are used to form a checklist of “ideal” corporate governance practices. Data is collected by benchmarking the information on corporate governance disclosed in corporations’ annual reports and/or website to the checklist. Coding usually involves awarding a score of one when the measure of quality governance is present and zero if there is no evidence of it. A cumulative score is determined for each corporation. This may be expressed in percentage terms. The higher the percentage, the higher the quality of corporate governance. The final percentage forms the index. The indices make it easier for investors to assess the quality of corporate governance as the resultant score is used to rate corporations relative to each other and over time. The score can also highlight the degree of risk an investor takes when he/she invests in a corporation. There is demand for this form of data collection, and several consultancy firms specialize in producing governance indices and collecting data based on these indices for investors. For example, ISS is the largest provider of information on governance to hedge funds, mutual funds, and similar organizations and provides Governance Quality Scores to its clients. These clients managed investments worth about \$4.2 trillion in 2019 (ISS 2019a). Corporate governance ratings also serve as inputs into tradable indices (Daines et al. 2010) such as those created by FTSE Group and Standard & Poor’s. Some of the more widely employed indices include MSCI ESG Metrics, ISS’s

Governance Quality Score, Sustainalytics ESG Risk Ratings, Standard & Poor’s Trucost ESG Analysis, Dow Jones Sustainability Index, and Business in the Community Corporate Responsibility Index. Indices highlight the importance of quality corporate governance and, through publicizing it, put pressure on corporates to conform.

Survey approach: A second approach to calculating data on governance quality is to survey individuals within the corporation. Surveys can either be sent to a single person or to multiple persons within the corporate. These surveys are usually addressed to the CEO or chair of the board, if a single survey is required, or to all board members, if a multiple survey approach is adopted. Examples of this method include the Carver Model and the Governing Board Effectiveness Model, where board effectiveness is assessed by analyzing the responses of board members to a survey (Carver 1997; Gabris and Nelson 2013). This approach encounters the obvious subjective and unique view of an individual respondent or difficulties in assessing a variety of respondents’ perceptions, which can vary widely between individuals (Willems et al. 2012). Researchers attempting this approach also face the trade-offs between multiple raters within a single corporate and a small sample of participant corporations or the unique views of single raters and a larger sample of corporations, with consequences for the validity and reliability of the results (Willems et al. 2012). These elements are thus costly and difficult, if not impossible, for individual investors, stakeholders, or regulators to assess as boards are not required to apply a universal measure of board performance assessment or publish the results of assessments under law or governance codes (Financial Reporting Council 2018).

Volume of voluntary disclosures: Finally, the level of voluntary disclosures by a corporation has been used as a measure of corporate governance quality (Brennan and Solomon 2008). The assumption is that the greater the volume of additional voluntary material provided on corporate governance, the greater the quality of corporate governance within the corporation. However, a focus on word count does not capture the

relevance of the information. In addition, over-disclosure in one area may compensate for omitted disclosures in other areas.

In summary, there are three main approaches to collecting data on governance quality: first measuring public disclosures against set governance criteria outlined in the relevant governance codes; second measuring organization governance through surveys; and finally measuring voluntary public disclosures, to create indices of governance quality.

Summary

Current measures are sourced from governance codes of practice, legislation, and regulations. These policy documents include recommendations and guidance for corporates and boards based on the literature and industry inputs and provide a practical starting point for assessing governance and developing governance indices (Financial Reporting Council 2018). However, it could be argued that corporate governance requires more than compliance with sets of principles or codes of practice, which are often the lowest common denominator for governance standards. Good governance is about human behavior and the role of corporates in society, how corporates are run, and how they relate to their principal stakeholders. Good corporate governance is about compliance in spirit with meaningful quality reporting and transparency for all stakeholders. However, measurement of governance faces considerable challenges including lack of inclusion of nonfinancial indicators, omitted variables, use of a bundled approach, endogeneity, and the relevance of board dynamics. In addition, questions are raised about the appropriateness of some of the data collection techniques. Despite these difficulties and questions about the association between corporate governance and financial performance (Vagliasindi 2008), it is reasonable to conclude that corporate governance matters to a corporate's performance, market valuation, and credibility. Corporate governance is seen as a tool to support the achievement of a corporate's goals and strategy, and investors are willing to pay a premium for well-governed corporates. Therefore, the quest to identify and

measure good corporate governance is ongoing and is likely to attract attention from academics and index providers alike.

The advances in corporate governance measurement to date have had a positive impact on corporate governance. The growth of an industry that supplies corporate governance indices is generating a demand for better measures of quality corporate governance. Despite criticisms of corporate governance indices, indices do provide a benchmark that enable changes in corporate governance over time to be monitored. It can be argued that the use of published indices has also impacted on the quality of corporate governance, that peer pressure has contributed to corporations seeking to improve their standing within these indices, and that this has resulted in a bunching at the top that diminishes the differences between corporations and reflects increasing compliance with good practice.

Cross-References

- [Culture, Tourism, and Sustainability \(Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism\)](#)
- [Directors and CSR](#)

References

- Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *Review of Financial Studies*, 22(2), 783–827.
- Bebchuk, L. A., Cohen, A., & Wang, C. C. Y. (2013). Learning and the disappearing association between governance and returns. *Journal of Financial Economics*, 108(2), 323–348.
- Benn, S., & Dunphy, D. (Eds.). (2013). *Corporate governance and sustainability: Challenges for theory and practice*. London/New York: Routledge.
- Brennan, N. M., & Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: An overview. *Accounting, Auditing and Accountability Journal*, 21(7), 885–906.
- Carretta, A., Farina, V., & Schwizer, P. (2010). Assessing effectiveness and compliance of banking boards. *Journal of Financial Regulation and Compliance*, 18(4), 356–389.
- Carver, J. (1997). *Boards that make a difference* (2nd ed.). San Francisco: Jossey Bass.

- Crowther, D., & Aras, G. (2016). Corporate governance and corporate social responsibility in context. In G. Aras & D. Crowther (Eds.), *Global perspectives on corporate governance and CSR* (pp. 23–64). Surrey: Gower Publishing.
- Daines, R. M., Gow, I. D., & Larcker, D. F. (2010). Rating the ratings: How good are commercial governance ratings? *Journal of Financial Economics*, 98(3), 439–461.
- Dumitrescu, A., & Zakriya, M. (2019). Governance, information flow and stock returns: Evidence from a natural experiment. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3170881>. Accessed 18 Mar 2019.
- Faleye, O., Hoitash, R., & Hoitash, U. (2011). The costs of intense board monitoring. *Journal of Financial Economics*, 101(1), 160–181.
- Financial Reporting Council. (2018). *The UK Corporate Governance Code* (July 2018), London: Financial Reporting Council. <https://www.frc.org.uk/getattachment/88bd8c45-50ea-4841-95b0-d2f4f48069a2/2018-UK-Corporate-Governance-Code-FINAL.pdf>. Accessed 29 April 2020.
- FTSE Research (2005). FTSE ISS corporate governance rating and index series – Measuring the impact of corporate governance on global portfolios, Apr 2005. http://www.corporategovernanceboard.se/UserFiles/Archive/462/2005-12-15_corporate_governance_rating_bilaga_1.pdf. Accessed 9 Mar 2019.
- Gabris, G. T., & Nelson, K. L. (2013). Transforming municipal boards into accountable, high-performing teams: Toward a diagnostic model of governing board effectiveness. *Public Performance and Management Review*, 36(3), 472–495.
- ISS Institutional Shareholder Services. (2019a). About ISS. <https://www.issgovernance.com/about/about-iss/>. Accessed 17 Mar 2019.
- ISS Institutional Shareholder Services. (2019b). ISS governance quality score. <https://www.issgovernance.com/file/products/qualityscore-techdoc.pdf>. Accessed 17 Mar 2019.
- MacAvoy, P. W., & Millstein, I. M. (2003). *The recurrent crisis in corporate governance*. New York: Palgrave Macmillan.
- Newton, A. N. (2015). Executive compensation, organizational performance, and governance quality in the absence of owners. *Journal of Corporate Finance*, 30, 195–222.
- Petrovic, J. (2008). Unlocking the role of a board director: A review of the literature. *Management Decision*, 46(9), 1373–1392.
- Schnyder, G. (2012). *Measuring corporate governance: Lessons from the 'bundles approach'* (Working paper no. 438). CBR Research Programme on Corporate Governance. University of Cambridge.
- Vagliasindi, M. (2008). *The effectiveness of boards of directors of state owned enterprises in developing countries* (Policy research working paper 4579). The World Bank, Washington DC.
- Wan, D., & Ong, C. H. (2005). Board structure, process and performance: Evidence from public-listed companies in Singapore. *Corporate Governance: An International Review*, 13(2), 277–290.
- Willems, J., Huybrechts, G., Jegers, M., Weijters, B., Vantilborgh, T., Bidee, J., & Pepermans, R. (2012). Non-profit governance quality: Concept and measurement. *Journal of Social Service Research*, 38(4), 561–578.

Corporate Homicide

► Corporate Manslaughter

Corporate Integrity

► Integrity Management

Corporate Issue Promotions

► Cause-Related Marketing

Corporate Management

► Corporate Governance

Corporate Manslaughter

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Synonyms

Corporate crime; Corporate death; Corporate homicide; Unlawful killing

Definition

When the catastrophic fire at Grenfell Tower in London in June 2017 claimed 72 lives and injured

another 70, it was termed corporate manslaughter by MP David Lammy (Hughes 2017).

Corporate manslaughter is a criminal offence committed by corporations, companies, or organizations. It is an act of homicide, i.e., (un)intentional harmful accidental, negligent, or reckless acts that lead to death(s). Only a few countries, however, have some kind of law to punish the offenders.

Some Dramatic Examples in History

There are many examples in corporate history where companies have been responsible for causing deaths of individual(s). Some of the more famous corporate manslaughter cases from around the world are:

UK

- Herald of Free Enterprise, a ferry which capsized in 1987 killing 193 people dead (Murray and Thimman 2016).
- Clapham Rail crash, where three trains collided in 1988 killing 35 people (Hidden 1989).
- British Petroleum in 2013 pleaded guilty to 11 counts of felony manslaughter in connection with Deepwater Horizon Rig explosion in 2010 (Department of Justice 2012).

Australia

- CSR and James Hardie, two asbestos companies who knowingly withheld the fatal nature of exposure to asbestos from 1000s of their miners (Blunden 2012).
- Esso Longford gas plant explosion in 1998 where two people died (Gooch 2002).

New Zealand

- Pike River Mine disaster, 2010, 29 people died in the mine explosions caused by methane gas (Macfie 2013).

India

- Union Carbide Limited, Bhopal, in 1984, a gas tank leak from a pesticide company which

killed 2500 and injured over 50,000 people (Dubey and Khandekar 1984).

Canada

- Westray mine explosion in 1992 where 26 miners died (Shaun 1993).

Statistics on Corporate Manslaughter

Reiman in his book “The Rich Get Richer and the Poor Get Prison” estimates that in 1972, the number of people in the USA dying from occupational hazards (diseases and accidents) was 114,000, whereas only 20,600 died as victims of personal homicide. Represented on a time clock for murder, there would be 1 personal killing every 26 min but: “ If a similar clock for industrial deaths were constructed...and recalling that this clock ticks only for that half of the population that is the labour force - this clock would show an industrial death about every four and a half minutes! In other words, in the time it takes for one murder on the time clock, six workers have died just trying to make a living!” (Reiman 1979, p. 26).

In a study conducted by Slapper (1993), he states that since 1965, in the UK, 18,151 people have been killed at work without a single company having been convicted for homicide.

The problem is how does one hold a company accountable? There have been laws in the past, but given the complicated nature of businesses and companies, culpability of the companies has always been difficult to establish or prove.

Early Legal Framework

In the UK, which is considered to be a pioneer in this context, the fundamental doctrine of identification, based on attribution, originated in 1940s. It established that a corporation is an “abstraction” and “its active and directing will must be sought in a person who is the very ego and center of its personality which is an agent or the board of directors” (Molan et al. 1996). According to Sullivan (2009), this doctrine implies that the actions

of senior responsible person(s) in charge of the company can be considered to be actions of the company itself making the company responsible for such actions. This makes the company directly culpable and holds it accountable. In other words, it is imperative to identify within the company, individuals who have a direct involvement with the homicide. Such individuals had to have a controlling authority within the corporation.

However, there have been very few convictions since. The reason is, while it might be easy to show gross negligence of individual(s) in smaller companies (see, for example, Lyme Bay disaster), it is very difficult to identify individual(s) in large complex corporations as the controlling mind(s). For example, prosecution charges were dropped in the cases of Kings Cross Fire in 1987 which killed 31 people, the Piper Alpha Oil Platform disaster in 1988 where 167 people died and the sinking of the Marchioness in 1989 where 51 people died. The reason being there was insufficient evidence to establish culpability on part of relatively senior controlling authority. In case of the Ladbroke Grove rail crash (also referred to as Paddington Rail crash) that occurred in October 1999, the Crown Prosecution Services decided not to bring manslaughter charges against any individuals or companies leading to a public outcry and inquiry.

Following this public inquiry, the corporations were successfully convicted on health and safety legislation and had to pay hefty fines. In April 2004, Thames Trains was fined a record £2 million after admitting violations of health and safety law in connection with the accident and ordered to pay £75,000 in legal costs ("Thames Trains fined," 2004). Bob Crow, general secretary of the rail workers' union, the RMT, said: "No amount of money can bring back those who lost their lives... We need a proper corporate manslaughter law so that bosses responsible for causing unnecessary deaths are put behind bars where they belong" ("Thames Trains fined," 2004). In the same context, Network Rail was fined £4 million in March 2007 and ordered to pay £225,000 in legal costs ("Paddington crash" 2007).

However, yet again, no single individual was identified and held responsible for the manslaughter based on the doctrine of identification.

Companies have the power to destroy lives and livelihoods as evidenced by, for instance, the BP oil spill case, and there is now a growing discussion of the idea that a company can and should be held to account for its criminal behavior or gross negligence.

Current Legal Developments

Following all the tragic corporate accidents, there was an urgent demand to fix the existing law. The Corporate Manslaughter and Corporate Homicide Act 2007 came into force in the UK becoming a law in 2008 (Roper 2018). This law threatens with tougher penalties to strengthen health and safety standards. A corporate manslaughter conviction now carries the threat of an unlimited fine, as well as so-called "publicity order," requiring every offender to effectively advertise its own conviction (Murphy and Peel 2009).

According to Price (2018), the Corporate Manslaughter and Corporate Homicide Act 2007 aims to move away for the identification doctrine which requires senior responsible individual(s) to be identified as the company themselves, and more towards an organizational model of corporate liability. He argues that inherent in large companies are structures or authoritative systems that emerge over time driven by the involvement of senior managers. These structures or systems form the employees' perception of the boundaries and direction of their work. He states that organizations impose such authoritative systems on their employees and as such establish a direct link between the organization and corporate culpability. This in turn makes the company responsible for its irresponsibility.

Corporate Manslaughter around the World

Corporate manslaughter is now a crime in several jurisdictions, including England and Wales and

Hong Kong (Jackson 2003). It enables a corporation to be punished and censured for culpable conduct that leads to a person's death. This extends beyond any compensation that might be awarded in civil litigation or any criminal prosecution of an individual (including an employee or contractor) (Jackson 2003).

In the USA, currently there is no corporate manslaughter law though there have been calls for corporate death penalty (Markoff 2012–13). The USA does have an Occupational Safety and Health Administration (OSHA) which imposes civil fines on companies for worker deaths (Mokhiber 2013).

In case of the USA, it is interesting to note that while Enron is considered to a textbook case of corporate misbehavior and fraud, majority of the charges brought against the company and its top bosses dealt with financial fraud and not corporate homicide. A pertinent question would be to ask whether Enron and its actions were responsible directly for at least one death – that of Richard Baxter.

New Zealand, Canada, and Australia all have some version of the corporate manslaughter law. In most of the rest of the world, laws to take a company to task for its criminal actions are almost nonexistent.

Corporate Manslaughter in the Context of Governance

It is now well accepted that the narrow focus of companies on shareholders rather than stakeholders is responsible for the short termism in company's decision-making process. This leads to making decisions which add to the shareholder wealth with little or no regard to stakeholder well-being. Classic cost-benefit analysis is done by companies to make sure that shareholders are happy while stakeholders pay the immediate price. Ed Freeman has long been advocating stakeholder theory as a way for more responsible corporate behavior (Freeman 1984). Despite this, disastrous accidents happen due to corporations having an arms-length cost-benefit analysis policy with health and safety measures.

Corporate manslaughter is a crime that is complicated to prove and indict especially in today's increasingly complicated multinational structures. It makes it even more pertinent to have accountability in such case and to have a law in place that allows requisite redressal of valid cases. Severe fines, penalties, and individual sanctions would serve as a deterrent in the future to companies tempted to put profits before people.

Cross-References

- [Accountability](#)
- [Asbestos](#)
- [Risk Management](#)
- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)
- [Whistleblowing](#)
- [Workplace Health Promotion](#)

References

- Blunden, A. (2012). *Corporate manslaughter laws in Australia*. https://www.ethicalpolitics.org/ablunden/pdfs/Corporate_Manslaughter_Laws_in_Australia.pdf. Accessed 12 Dec 2019.
- Department of Justice. (2012, November 15). *BP exploration and production Inc. agrees to plead guilty to felony manslaughter; environmental crimes and obstruction of congress surrounding deepwater horizon incident*. <https://www.justice.gov/opa/pr/bp-exploration-and-production-inc-agrees-plead-guilty-felony-manslaughter-environmental>. Accessed 12 Dec 2019.
- Dubey, S., & Khandekar S. (1984, December 31). Bhopal gas leak worst industrial disaster in history, 2500 people die, injures thousands. *India Today*. <https://www.indiatoday.in/magazine/cover-story/story/19841231-bhopal-gas-leak-worst-industrial-disaster-in-history-2500-people-die-injures-thousands-803517-1984-12-31>. Accessed 17 Dec 2019.
- Freeman, E. (1984). *Strategic management: A stakeholder approach*. Cambridge University Press. Reprint 2010. New York, US.
- Gooch, L. (2002, November 15). Coroner blames Esso for Longford disaster. *The Age*. <https://www.theage.com.au/national/coroner-blames-esso-for-longford-disaster-20021115-gdusgn.html>. Accessed 12 Dec 2019.
- Hidden, A. (1989). *Investigation of Clapham junction railway accident*. <http://www.railwaysarchive.co.uk/docsummary.php?docID=36>. Accessed 12 Dec 2019.
- Hughes, L. (2017, June 15). Labour MP David Lammy says Grenfell Tower tragedy is 'corporate manslaughter'. *The Telegraph*.

- Jackson, M. (2003). *Criminal law in Hong Kong* (p. 400). Hong Kong University Press. Hong Kong, China.
- Macfie R. (2013). *Tragedy at Pike River Mine*. Awa Press. Reprint 2014. Wellington, New Zealand.
- Markoff, G. (2012–2013). Arthur Andersen and the Myth of the Corporate Death Penalty: Corporate Criminal Convictions in the Twenty-First Century. *Journal of Business Law*, 15, 797. University of Pennsylvania.
- Mokhiber, R. (2013, July 22). The case for a corporate homicide law. *Huff Post*.
- Molan, M., Duncan, B., & Lanser, D. (1996). Legislating the criminal code: Involuntary manslaughter, Law Com no. 237. p. 125.
- Murphy, M., & Peel, M. (2009, April 24). Company charged with corporate manslaughter. *The Financial Times*. <https://www.ft.com/content/44e0c45a-3010-11de-88e3-00144feabdc0>. Accessed 17 Dec 2019.
- Murray, S. L., & Thimman, M. S. (2016). Fatigue and Accidents. In *Human fatigue risk management – improving safety in the chemical processing industry* (1st edn, pp 129–142). Academic Press. <https://doi.org/10.1016/B978-0-12-802412-6.00007-8>.
- Paddington crash prompts £4m fine. (2007, March 30). BBC News.
- Price, L. (2018). *Finding fault in organisations – Reconceptualising the role of senior managers in corporate manslaughter*. Cambridge University Press. <https://doi.org/10.1111/lest.12065>.
- Reiman, J. (1979). Rich get richer and the poor get prison: Ideology, class and criminal justice. Wiley. New York, US
- Roper, V. (2018). The corporate manslaughter and corporate homicide act 2007-a 10-year review. *The Journal of Criminal Law*, 82(1), 48–75.
- Shaun, C. (1993). *The Westray tragedy: A miner's story*. Halifax: Fernwood Publishing.
- Slapper, G. (1993). Corporate manslaughter: An examination of the determinants of prosecutorial policy. *Social and Legal Studies*, 2(4), 423–443.
- Sullivan, G. R. (2009). *The attribution of culpability to limited companies*. Cambridge University Press. <https://doi.org/10.1017/S0008197300100492>.
- Thames Trains fined £2m for Paddington crash. (2004, April 5). Guardian.

Definition

Since the 1980s and beyond, when the understanding of the Total Quality Management approach as an important management system for organizations, vision and mission for organizations has started to gain importance, and today it enables organizations to exhibit their differences as an important strategic tool. Due to the change and development that organizations face over time, changes have been observed in the content of vision, mission, and value concepts. Factors that increase competition such as changing environmental conditions, customer expectations, increasing awareness of conscious production and consumption, rapidly changing technology, and the emergence of new markets have made it necessary for organizations to consider sustainability as a part of their strategy in their vision, mission, and values.

Mission is a clear, unambiguous statement of an organization's reason for existence. Vision, on the other hand, is the point where the organization reveals its future purpose, works on, and wants to reach. It has a feature that contributes both to the present and to the future. Values are the ideals and principles that guide the thoughts and behaviors of an organization and define the culture of the organization. The harmony of mission, vision, and values will ensure the most appropriate use of the organization's resources, and it will coordinate the organization by shaping decisions and activities as an important guiding force.

Corporate Mission

Drucker (1974) defines mission as an existence of organization. It is a concept that emerged while searching for an answer to “What is our job?” which helps to determine the reason why organizations exist. The purpose of the organizational mission is to combine the various elements within the organization within the framework of a common purpose, to give the organization a strategic direction and to ensure that the resources are used in this direction. The mission describes the organization's reason for existence. As the mission

Corporate Mission, Vision, and Values

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Synonyms

Core values; Organizational goals; Organizational objectives; Organization's reason for existence

presents a leading feature in terms of corporate strategy, it might be assumed that it stands at the beginning of corporate strategy. From this view, in the strategy formulation process, and while choosing the most suitable one among the various alternatives encountered, the purpose of why the organization exists declared in the mission statement guides the corporate strategy (Ülgen and Mirze 2007).

Having a clear mission statement helps all members and managers discover and realize the purpose and reason for existence of the firm, so that internal and external factors can be prioritized while determining which resources to use when determining the strategies to be implemented. On the other hand, one of the most obvious benefits is that it provides a base and a framework for organizing businesses, departments, activities, and divisions around a common aim.

Clearly stated mission expected to have the following characteristics:

- It should reflect a goal that organizations want to achieve in the long run.
- It should include common and shared beliefs and values of the organization.
- It should encompass the entire organization as employees, organizations, suppliers, and customers.

Several studies that focus on the features of an effective mission statement – which is an important strategic management tool – indicate that a mission statement should contain nine components, including customers, products or services, markets, technology, concern for survival, growth and profitability, philosophy, self-concept, concern for public image, and concern for employees (David et al. 2014; Bart and Baetz 1996; O’Gorman and Doran 1999; Pearce II and David 1987).

Corporate Vision

Vision plays a very important role in achieving organizational goals and it is an opinion about the

future of the organization (Denison 2007). Corporate vision touches both the heart and the brain of the organization and clarifies values. Vision is a combination of the organization’s mission, goals, objectives, and values (Ülgen and Mirze 2007), and it is one of the most important strategic management tools.

Vision expresses common goals and beliefs so that it can be interpreted as a shared image of the future; at the same, time it is a statement that helps to develop strategies on the axis of core values and goals. Having a vision is critical in today’s competitive environment, organizations’ ability to cope with the changing world and to be successful in a global competitive environment requires change. The prerequisite for this change and development will be possible with the creation of a shared vision.

A shared vision creates a link between employees and the goals of the organization and gives motivation. In addition, creating a shared vision brings convenience to the organization in terms of making and implementing decisions. As the organizational structure becomes broader and more horizontal, decisions are increasingly made in decentralized units. In these circumstances, a clear vision acts as a compass.

Clearly stated vision is expected to have the following characteristics:

- It should be memorable, remarkable, and inspirational.
- It should be idealistic and original.
- It should increase the organizational commitment.

Corporate Values

In the lexical meaning, the concept of value is the importance of objects and events for a society, an individual, or a community, the purpose that can be symbolic or material, and abstract and common measures. Values are the beliefs and moral principles behind organizational culture. Values, which are a kind of set of rules, are a set of guiding rules that compel its members to show consistent behaviors in order for the organization to survive,

develop, and progress within certain limits. It defines how the organization does its job, what kind of behavior is in compliance with the rules in this process, how employees should behave, and what methods are acceptable in behavior and decision-making processes.

Values express the essential and permanent principles (Collins and Porras 1991) and management style of the organization. The most important function of the values is to guide behavior in various situations and conditions and to set specific standards to the individual (Hodkinson 1996). Considered from this perspective, organizations need to harmonize individual and organizational values in order to benefit from the values in the best way (Posner and Schmidt 1992). The underlying reason for this is that individual values guide the individual's own goals and behaviors while organizational values guide organizational goals, policies, and strategies in a broader framework (Wiener 1988).

The Role of Mission, Vision, and Corporate Values on Organizational Effectiveness

In the area of organizational studies, several researchers have focused on the strategic importance of the mission and vision statements in regard to organizational effectiveness. Successful organizations have an apparent perception of intention and direction that allows them to follow organizational aims and strategic purposes and presents a vision of how the organization will be seen in the long term (Hamel and Prahalad 1994; Mintzberg 1987, 1994). Organizations' underlying mission provides a meaning, purpose, and noneconomical effects at first sight and leads the members of the organization to behave compatible in a common mindset (Denison and Mishra 1995).

Regardless of the establishment purpose, the most important way for organizations to continue their existence is to find values suitable for them and to transfer them to their employees with the mission and vision developed in accordance with these values.

Summary

Mission is a clear statement of an organization's reason for existence. Vision, on the other hand, is the point on which the organization puts forward its future purpose and on which it works and wants to reach during its activities. The most important feature of the vision is that it contributes to both the present and the future of the organization. Values are the expression of the ideals and principles that define the culture of the organization. Ideals and principles are very important in terms of having the feature of directing the thoughts and behaviors of an organization. The harmony of mission, vision, and values will ensure the most appropriate use of organizational resources and will coordinate the organization by shaping decisions and activities. Therefore, in terms of organizational effectiveness, mission, vision, and values have strategic importance for the organization.

Cross-References

- ▶ [Corporate Communication](#)
- ▶ [Corporate Strategy](#)
- ▶ [Organizational Culture](#)
- ▶ [Value Creation](#)

References

- Bart, C., & Baetz, M. C. (1996). Developing mission statements which work. *Long Range Planning*, 29, 526–533.
- Collins, J. C., & Porras, J. I. (1991). Organizational vision and visionary organizations. *California Management Review*, 34(1), 30–52.
- David, M. E., David, F. R., & David, F. R. (2014). Mission statement theory and practice: A content analysis and new direction. *International Journal of Business, Marketing, and Decision Science*, 7(1).
- Denison, D. R. (1997). *Corporate culture and organizational effectiveness*. USA: Denison Consulting.
- Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2), 204–223.
- Drucker, P. (1974). *Management tasks responsibilities and practices*. New York: Harper and Row.

- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston, MA: Harvard Business School Press.
- Hodkinson, C. (1996). *Administrative philosophy*. West Yorkshire, United Kingdom: Emerald Group Publishing Limited.
- Mintzberg, H. (1987). Crafting strategy. *Harvard Business Review*, 65, 66–75.
- Mintzberg, H. (1994). *The rise and fall of strategic planning: Reconciling for planning, plans, planners*. New York: Free Press.
- O’Gorman, C., & Doran, R. (1999). Mission statements in small and medium-sized businesses. *Journal of Small Business Management*, 37, 59–66.
- Pearce, J., II, & David, F. R. (1987). Corporate mission statements: The bottom line. *Academy of Management Executive*, 1, 109–114.
- Posner, B. Z., & Schmidt, W. H. (1992). Values and the American manager: An update updated. *California Management Review*, 34, 80–94.
- Ülgen, H., & Mirze, S. K. (2007). *İşletmelerde stratejik yönetim*. İstanbul: Arıkan Yayınları.
- Wiener, Y. (1988). Forms of values systems: A focus on organizational effectiveness and cultural change and maintenance. *Academy of Management Review*, 13, 534–545.

Corporate Objectives

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Synonyms

[Corporate purpose](#)

Introduction and Description

The corporate objective is concerning in whose interests should a company be run. As any rational activity, a company also requires an objective to justify its behavior (Jensen and Meckling 1976), and meanwhile its performance can only be measured and evaluated after establishing such criteria. If no goals or expectations exist, it would be impossible to judge the performance of a company and to evaluate how well the jobs have been done by its directors and managers.

Moreover, the key to how obligations/responsibilities should be allocated for the best corporate governance greatly depends on such ultimate objective. If, for example, the ultimate corporate objective is for all stakeholder groups’ welfare, then a good corporate governance structure should underline their interests, and board directors should run the company for all stakeholders. Accordingly, corporate performance should no longer be solely determined by the share price and the like. In contrast, if shareholder wealth maximization is the corporate objective – i.e., shareholder interests are the primary concern of companies – the focal point would then turn to understanding their role and protecting their interests, which represents the best corporate performance under this approach. In this context, directors should run the company for shareholder wealth maximization, and the basic issue in corporate governance becomes whether shareholder interests can be effectively protected and maximized. Consequently, it is of vital importance to clarify the ultimate objective of the company, especially those large public ones, in order to solve corporate governance improvement issues, determine the extent to which companies should be directed, and managed and provide guidance to directors.

Importance

The corporate objective is arguably one of “the most important theoretical and practical issues confronting us today” because we need it to explain and guide corporate behavior (Walsh 2004). In the words of Professor Henry Hu (1997, p. 380), “the core objectives animate or should animate every decision a corporation makes.” Different objectives can lead to different diagnoses and solutions to corporate governance problems (Letza et al. 2004). It is also argued that “at the heart of the current global corporate governance debate is a remarkable division of opinion about the fundamental purpose of the corporation” (Jensen 2001). And the answer to this issue becomes increasingly important as the business companies’ influential impact on both individuals

and societies (Colombo 2008). If directors run a company in the wrong direction, harder efforts may produce worse results. Put simply, a governance theory cannot begin without a purpose (Carver 2010). Unfortunately, company law in most jurisdictions fails to set forth a corporate objective (Keay 2011). Though in theory members of companies are able to determine the corporate purpose by including it into corporate constitutions, few demand mandatory shareholder primacy. The vast majority of companies' articles do not include a corporate purpose.

Moreover, today's large public companies can hardly be seen as entirely private concerns, further complicating the issue. Companies, especially large public ones, are no longer private organizations – they have the ability to exercise social decision-making power (Parkinson 1993). In Professor Parkinson's words, "companies are able to make choices which have important social consequences: they make private decisions which have public results" (Parkinson 1993, p. 22). More concretely, Mary Stokes (1994, p. 107) points out that "[T]he company has become an organization whose significance almost rivals that of the state. It is the primary institution for organizing and employing much of our capital and labour resources and the primary supplier of goods and services in our community." Thus, as corporate behavior is limited by political, social, and economic environments, the extent to which members can determine purposes of their company is not unrestricted.

Variation

Admittedly, during the preliminary stage of a newly established company, it is usually those entrepreneurial shareholders who take the initiative to seek and recruit essential resources to run the start-up. While other corporate participants also play an important role and contribute indispensable investment, shareholders perform a no less significant role at this stage. Shareholders' contribution is crucial when a new company desperately needs initial monetary capital to purchase machines, raw materials and invest in business

projects, which is often the case for a start-up. More importantly, it is not uncommon for a start-up company to have overlapping management and shareholder bodies. Although other corporate participants like employees and suppliers afford equally or more valuable support to the success of the company and thereby should not be subordinated, due to such overlap, shareholders who maintain control (or directly manage the company) normally have a larger role to play at this stage.

However, alongside corporate growth, the contribution and role of shareholders become gradually less important, though it is difficult to mark exactly at which point. On the one hand, the company is no longer heavily dependent on equity capital to finance new business projects and corporate expansion. A mature company relies more on accumulated corporate profits with years of operation and debt funds. On the other hand, the classical separation of ownership from control is almost inexorable along with the expansion of the company. Widely dispersed shareholders can become rationally apathetic. Especially after adopting strategies of diversified and balanced portfolios, shareholders or institutional investors are less concerned about the success of any particular company than their overall portfolio. The interests of diversified shareholders can be different from those of the company. Furthermore, it is sometimes possible for a shareholder to wish one of her investee companies to fail in order to obtain higher aggregated proceeds from the portfolio. Due to the decoupling of interests from shares by borrowing shares or other modern financial arrangements, certain shareholders' personal interests, particularly certain types of funds, may run completely counter to the interests of a given company. Consequently, "[t]he old language of property and ownership no longer serves us in the modern world because it no longer describes what a company really is" (Handy 1997, pp. 26–27). It would also be too narrowly to define the property only as financial assets, human capitals, and alike provided by stakeholders should also be counted (Handy 1997).

On the contrary, other corporate participants continue to provide significant resources and

actively participate in corporate activities in pursuit of success. Unlike shareholders, who are able to mitigate risks through diversification, most other corporate participants such as employees cannot do so. Consequently, shareholders may not be particularly concerned about the success of a given company, while the welfare of other corporate participants is still closely tied to the very company they have contributed and invested in. As a result, for large public companies which are of course mature enough, there are few grounds for the shareholders to determine the corporate objective. Indeed, when a company transitions into a “mature” stage, it is questionable that the original founder’s objective, if any, remains unchanged.

The Debate

The corporate objective is not a new issue – the debate has been continuing for years. Berle (1932) and Dodd’s (1932) 80-year-old debate about corporate purpose continues today: Is the sole aim of companies to create benefits for shareholders at all times, or should broader concerns be taken into account? In the beginning, Berle asserted that all powers granted to corporation and management alike should always be exercised for the interests of shareholders as sole beneficiaries. But not long afterwards, Dodd (1932) questioned Berle’s doctrine of corporate power in trust, arguing that a company should perhaps consider the interests of people other than the owners, particularly in the public utility field. Berle (1932) responded that if the company is run not just for the shareholders’ interest, then in practice managerial power could not be effectively controlled, or, worse, the power of unchecked management might become absolute. However, it is not difficult to see that in his seminal work *The Modern Corporation and Private Property* (Berle and Means 1991, originally published 1932), co-authored with Gardiner Means, corporate power serves more than just the shareholders’ interest; it might also be regarded as in trust for society as a whole to a certain extent, as the so-called owners have surrendered their control and responsibility over the

corporation and corporate property. As a social institution, in the authors’ view, large modern corporations should at least in theory consider other corporate participants’ interests rather than solely the shareholders’ interests.

The source of confusion here is that Berle’s trust theory, which facilitates the development of fiduciary duties, is one of the most powerful weapons for the shareholder primacy approach. But in concluding *The Modern Corporation and Private Property*, Berle opened the question by suggesting that the corporation might have a broader responsibility to the wider community. In fact, Berle does not totally disagree with Dodd’s view. His main concern is that if managers are not solely accountable to stockholders, their discretionary power may become absolute in practice, because no alternative and reasonably enforceable mechanism exists for them to be accountable to multiple or other constituents (e.g., employees, customers, or community) as well.

Summary

Over time, two opposing academic schools have emerged: one is the shareholder model (i.e., shareholder wealth maximization approach), which argues that the primary goal of commercial companies is to maximize shareholder wealth, and the stakeholder model, which argues that the interests of non-shareholding stakeholder groups should not be subordinated to those of shareholders; otherwise society as a whole would suffer.

Cross-References

- [Shareholder Model](#)
- [Stakeholder Model](#)

References

- Berle, A. A. (1932). For whom corporate managers are trustees: A note. *Harvard Law Review*, 45(8), 1365–1372.
- Berle, A. A., & Means, G. C. (1991). *The modern corporation and private property*. New Brunswick: Transaction Publishers (originally published 1932).

- Carver, J. (2010). A case for global governance theory: Practitioners avoid it, academics narrow it; The world needs it. *Corporate Governance: An International Review*, 18(2), 149–157.
- Colombo, R. J. (2008). Ownership, limited: Reconciling traditional and progressive corporate law via an Aristotelian understanding of ownership. *Journal of Corporation Law*, 34(1), 247–292.
- Dodd, E. M. (1932). For whom are corporate managers trustees? *Harvard Law Review*, 45(7), 1145–1163.
- Handy, C. (1997). The citizen corporation. *Harvard Business Review*, 75(5), 26–27.
- Hu, H. T. C. (1997). Buffet, corporate objectives and the nature of sheep. *Cardozo Law Review*, 19(1), 379–407.
- Jensen, M. C. (2001). Value maximisation, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance*, 14(3), 8–21.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Keay, A. (2011). *The corporate objective*. Cheltenham: Edward Elgar.
- Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: A critical review of corporate governance. *Corporate Governance: An International Review*, 12(3), 242–262.
- Parkinson, J. (1993). *Corporate power and responsibility: Issues in the theory of company law*. Oxford: Oxford University Press.
- Stokes, M. (1994). Company law and company theory. In S. Wheeler (Ed.), *A reader on the law of the business enterprise*. Oxford: Oxford University Press.
- Walsh, J. P. (2004). Introduction to the “Corporate objective revisited” exchange. *Organization Science*, 15(3), 349–349.
- Yan, M. (2017). The corporate objective revisited: Part I. *Business Law Review*, 38(1), 14–20.

Definition

Corporate philanthropy is one of the oldest forms of CSR (Mescon and Tilson 1987). Corporate philanthropy is the CSR activity when the company provides financial or in-kind donations and support to a nonprofit organization. The focus is on direct contribution. Philanthropy is the voluntary and unconditional transfer of cash or another asset from a private company for community purposes (FASB 1993).

Corporate philanthropy refers to a one-way relationship, donation to beneficiaries (Fry et al. 1982). Others assume a two-way relationship and also link sponsorship to this concept (Saiia et al. 2003). Synonymous with corporate philanthropy is most often used the concept of donation and charity, of which there are many forms of realization. Merz et al. (2010) also interpret the scope of corporate philanthropy more broadly, including financial support for social and charitable causes, employee volunteering, and donations of material or service (Merz et al. 2010). According to Katamba (2011), philanthropic activities implemented on an ad hoc basis are mostly in the form of financial or in-kind donations.

Gautier and Pache (2015) classify the concept of corporate philanthropy into three groups. The first group includes approaches to the voluntary expression of a commitment to the common good. The second group is the treatment of the activity as a long-term, community-oriented investment. The third is a marketing approach. This grouping is also followed by the identification of charity, community investment, and trade categories (CECP 2012).

Corporate Philanthropy

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Synonyms

Corporate contributions; Corporate foundations; Corporate giving; Corporate volunteering; Philanthropy

Introduction

Corporate philanthropy (CP) is the most common and traditional way of corporate social responsibility (CSR). In many cases, it is only realized on an ad hoc basis, but strategic philanthropy is increasingly emerging by linking to company goals. Increasingly, companies are also looking to build long-term relationships in the case of philanthropy. In addition to donations, product

input, use of distribution channels, use of technical expertise, employee involvement, measurability, and traceability appear. Social media gives companies the opportunity to involve consumers in deciding which NGOs the company should support.

Kotler and Lee (2005) distinguish six social initiatives within CSR, three market driven: cause promotion, cause-related marketing, corporate social marketing, and three company driven: corporate philanthropy, workforce volunteering, socially responsible business practices, i.e., based on a CSR marketing approach, corporate philanthropy is one form of implementation of CSR.

Rangan et al. (2015) categorized CSR activities into three groups: He calls philanthropy actions that the company does not directly benefit from. It identifies activities that increase efficiency and effectiveness as an activity for better functioning. It also classifies activities related to the transformation of a company as a result of environmental or social problems (Rangan et al. 2015 in Manuel and Herron 2020). While based on this categorization, philanthropy is an activity interpreted broadly, a number of definitions help to define it more precisely. Williams (2003) also interprets philanthropy as part of CSR.

Carroll (1991) claimed that the highest level of the corporate CSR pyramid is philanthropic activity. It serves the expectations of society, where companies must behave as good corporate citizens. This may include the promotion of human well-being and goodwill and related programs. However, he also notes that philanthropy is only desirable after the other three levels, i.e., companies should be responsible economically, legally, and ethically first, followed by philanthropic behavior.

Types of Corporate Philanthropy

Corporate philanthropy can typically be implemented in three ways: corporate donation, corporate volunteering, and corporate foundations (Melé 2008; Gautier and Pache 2015).

Anheier and Leat (2006) distinguish three feasibility options for corporate philanthropy. There

is traditional charity that builds on support, typically in the immediate local setting, with the disadvantage that it is only good for symptomatic treatment but does not solve the root of the social problem itself. The aim of scientific philanthropy is to combat social problems through knowledge generation and charitable research. The new scientific approach focuses on the impact of corporate philanthropy, that is, the use of science to solve social issues, in which common value creation is realized by combining business and social goals. Schnurbein et al. (2016) complements this categorization with the concept of exclusive corporate philanthropy, the essence of which is that in philanthropy there is still opportunity for free choice, while other areas of CSR are increasingly deregulated, i.e., innovation and pluralism can prevail here.

The following possibilities of philanthropy can be distinguished (Kotler and Lee 2005):

- Monetary donation
- Offering grants
- Scholarships
- Donating products
- Donating services
- Providing technical expertise
- Ensuring the use of sales channels
- Ensuring the use of equipment.

However, there is a more thoughtful way of philanthropic activities that is more in line with corporate policies, this is strategic philanthropy. Strategic philanthropy is a form of philanthropy that creates value not only for the donated organization but also for the philanthropic company. Its solution is strategic donation, which simultaneously achieves social and economic goals by leveraging the company's specialized tools and expertise (Porter and Kramer 2002).

The importance of strategic philanthropy was also highlighted by Bruch and Walter (2005). The authors defined four types of philanthropy based on two perspectives – market-orientation and competence-orientation.

The market-oriented company shapes its philanthropic activities in accordance with the expectations and external needs of the stakeholders, it is more important to influence the attitudes of the

stakeholders than to achieve a social result. The goal of a competence-oriented company is to bring philanthropic activity in line with the company's core competence and business activities, which is characterized by a strong internal orientation, the pursuit of philanthropy efficiency, and unique value creation.

When applying peripheral philanthropy, companies rely on the expectations of stakeholders and expect a better competitive position. They carry out activities independent of their core business, which is ethically and economically beneficial, but unsustainable in the long run. Narrowed philanthropy, on the other hand, uses a company's core competencies by ignoring the needs of stakeholders. This, in turn, is a major disadvantage in a competitive environment. There is no strategy behind activities based on scattered philanthropy. It is characterized by lack of coordination, and the goals of support are not clear to managers and employees. Many times, the personal decisions of management are the determinants. This approach can be a good choice in severe crises where rapid action is needed, but the authors believe that a strategic approach can bring greater benefits. Strategic philanthropy is considered the most effective approach by taking into account both the needs of the stakeholders and the internal competence of the company. They are associated with successes such as increasing employee motivation, consumer demand, and building a strong corporate identity (Bruch and Walter 2005).

Fifteen years ago, the concept of venture philanthropy emerged from the side of the strategic approach, the essence of which is that the company views philanthropy as a social investment (Frumkin 2010). Most of all, the new generation of young entrepreneurs represents this approach, but its big disadvantage is that it puts too much pressure on nonprofits.

Drivers of Corporate Philanthropy

The drivers behind the realization of corporate philanthropy should be chosen separately based on whether it is individual, corporate, or industry

motivations. So it is important to treat the executive level separately from company-level and industry-specific motivations, as the leaders of the company make decisions about corporate philanthropic activities.

At the individual level, drivers can be divided into three groups. On the one hand, neoclassical economic theory can be based on the primary motivation, i.e., profit maximization itself. On the other hand, the agency model, which is also supported by Boatsmand and Gupta's (1996, p. 195) "corporate philanthropy can be modeled problem." Third, however, the ethical motivation of leaders also appears.

Company-level motivations are important because companies have different philanthropic attitudes that influence the realization of philanthropy. Motivation is primarily influenced by the sources themselves, whether the company has a separate framework for this, as companies with higher net revenues typically donate more (Burlingame and Frishkoff 1996; Dunn 2004). Advertising costs are also an important factor, as companies also act as PRs. They apply philanthropy (Levy and Shatto 1978), which aims to increase the corporate image. One of the important factors in the philanthropic motivation is also the composition of the board. Corporate philanthropy is an essential tool for internal members to maintain a better corporate image, while external members reject it citing the protection of shareholder interests. The last motivating factor identified by the authors is the social network, according to which the more extensive the social relations system of a leader, the more it supports the realization of philanthropic activities.

Influence at the industry level is also an important factor, as the impact of industry is 20–22% in the field of philanthropy (Amato and Amato 2007), which determines that companies align within the industry, which further strengthens the development of differences between sectors (Seifert et al. 2004). The structure of the industry itself strongly influences the extent of philanthropic activities, according to which monopoly and oligopolistic firms employ a higher proportion of philanthropic activities than firms operating in a competitive environment. At the same

time, it is also crucial for the maturity of the industry that emerging companies are less philanthropic than mature companies. Consumer orientation influences philanthropy in such a way that firms that are in direct contact with the consumer are much more likely to use philanthropy (Fry et al. 1982; Burt 1983; Clotfelter 1985; Feldstein 1975; Steinberg 1990).

Summary

However, when choosing corporate philanthropy as a CSR tool, it is worth considering the following issues:

- What is the purpose of corporate philanthropy, is it a charitable or self-interested activity?
- What does this really mean for the company, it is cost or profit?
- What topic should the company choose, connecting with or separating from its core business?

These challenges are worth thinking about for companies to truly realize the benefits of CP highlighted by Porter and Kramer (2002), such as increasing productivity, expanding the market, strengthening investment in the future workforce, and enhancing the corporate image.

Cross-References

- [Employee Volunteer Programs](#)
- [Foundations](#)
- [Venture Philanthropy](#)
- [Volunteering](#)

References

- Amato, L. H., & Amato, C. H. (2007). The effects of firm size and industry on corporate giving. *Journal of Business Ethics*, 72(3), 229–241.
- Anheier, H. K., & Leat, D. (2006). *Creative philanthropy: Toward a new philanthropy for the twenty-first century*. New York: Routledge.
- Boatsman, J. R., & Gupta, S. (1996). Taxes and corporate charity: Empirical evidence from micro-level panel data. *National Tax Journal*, 49(2), 193–213.
- Bruch, H., & Walter, F. (2005). The keys to rethinking corporate philanthropy. *MIT Sloan Management Review*, 47(1), 49–55.
- Burlingame, D. F., & Frishkoff, P. A. (1996). How does firm size affect corporate philanthropy? In *Corporate philanthropy at the crossroads* (pp. 86–104). Bloomington: Indiana University Press.
- Burt, R. S. (1983). Corporate philanthropy as a cooptive relation. *Social Forces*, 62(2), 419–449.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- CECP. (2012). *Giving in numbers* (2012th ed.). New York: Committee Encouraging Corporate Philanthropy.
- Clotfelter, C. T. (1985). *Federal tax policy and charitable giving*. Chicago: University of Chicago Press.
- Dunn, P. (2004). Professional corporate donation programs in Canada: An exploratory study. *Nonprofit and Voluntary Sector Quarterly*, 33(2), 334–345.
- FASB. (1993). *Statement of financial accounting standards no. 116: Accounting for contributions received and contributions made*. Norwalk: Financial Accounting Standards Board.
- Feldstein, M. (1975). The income tax and charitable contributions: Part I-aggregate and distributional effects. *National Tax Journal*, 28(1), 81–100.
- Frumkin, P. (2010). *The essence of strategic giving: A practical guide for donors and fundraisers*. Chicago: University of Chicago Press.
- Fry, L. W., Keim, G. D., & Meiners, R. E. (1982). Corporate contributions: Altruistic or for-profit? *The Academy of Management Journal*, 25(1), 94–106.
- Gautier, A., & Pache, A.-C. (2015). Research on corporate philanthropy: A review and assessment. *Journal of Business Ethics*, 126, 343–369. <https://doi.org/10.1007/s10551-013-1969-7>.
- Katamba, D. (2011). *Corporate social responsibility & corporate philanthropy: The thin line between*. The 2nd East African Grant Makers Conference, “State and nature of philanthropy in East Africa”, 29th–30th September 2011.
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility: Doing the most good for your company and your cause*. Hoboken: Wiley.
- Levy, F. K., & Shatto, G. M. (1978). The evaluation of corporate contributions. *Public Choice*, 33(1), 19–28.
- Manuel, T., & Herron, T. L. (2020). An ethical perspective of business CSR and the COVID-19 pandemic. *Society and Business Review*, 15(3), 235–253. <https://doi.org/10.1108/SBR-06-2020-0086>.
- Melé, D. (2008). Corporate social responsibility theories. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 47–82). Oxford: Oxford University Press.

- Merz, M. A., Peloza, J., & Chen, Q. (2010). Standardization or localization? Executing corporate philanthropy in international firms. *International Journal of Non-profit and Voluntary Sector Marketing*, 15(3), 233–252.
- Mescon, T. S., & Tilson, D. J. (1987). Corporate philanthropy: A strategic approach to the bottom-line. *California Management Review*, 29(2), 49–61.
- Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56–68.
- Rangan, K., Chase, L., & Karim, S. (2015). The truth about CSR. *Harvard Business Review*, 93(1/2), 40–49. In Manuel, T., & Herron, T. L. (2020). An ethical perspective of business CSR and the COVID-19 pandemic. *Society and Business Review*, 15(3), 235–253. <https://doi.org/10.1108/SBR-06-2020-0086>.
- Saia, D. H., Carroll, A. B., & Buchholtz, A. K. (2003). Philanthropy as strategy: When corporate charity ‘begins at home. *Business & Society*, 42(2), 169–201.
- Schnurbein, G., Seele, P., & Lock, I. (2016). Exclusive corporate philanthropy: Rethinking the nexus of CSR and corporate philanthropy. *Social Responsibility Journal*, 12(2), 280–294. <https://doi.org/10.1108/SRJ-10-2014-0149>.
- Seifert, B., Morris, S. A., & Bartkus, B. R. (2004). Having, giving, and getting: Slack resources, corporate philanthropy, and firm financial performance. *Business & Society*, 43(2), 135.
- Steinberg, R. (1990). Taxes and giving: New findings. *Voluntas: International Journal of Voluntary and Non-profit Organizations*, 1(2), 61–79.
- Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics*, 42(1), 1–10.

Corporate Political Activity (CPA)

► Corporate Activism

Corporate Purpose

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Definition

Corporate purpose can be regarded as the answer to the question “Why do I exist?” (Campbell and

Yeung 1991; Edmans 2017). Given that corporations are powerful institutions whose purpose is to “add value to society” (George et al. 2016, p. 1892), purpose boils down to a company’s reason for being, the role it plays in the world, how it creates value, and for whom. It would seem straightforward to think that companies exist to create value for any group affecting or being affected by its behavior, in other words stakeholders (Freeman 1984) and shareholders, the financial capital providers (Clarkson 1995). In everyday life, it is commonly understood that the purpose of practicing medicine is to heal or prevent, and that the purpose of the law is justice (Byron 1988), or, in consumer terms, that the purpose of a taxi ride is to move people from place to place and the purpose of water is to quench thirst. In other words, there is a human tendency to think of purpose in relation to the most typical use of goods and services. However, what constitutes corporate purpose is not as straightforward, despite shareholder value maximization representing “the most celebrated corporate target” (Loderer et al. 2010, p. 5), under the economic assumption that in a free market and in the absence of externalities, welfare is maximized when companies maximize value for shareholders (Pirson and Lawrence 2010). Externalities, however, do exist in the form of environmental, social, and governance (ESG) factors which constitute a key aspect of the contemporary corporate and investment context (Adler 2016; Powell 2020). ESG are environmental (e.g., waste management, carbon emission reduction, or water consumption), social (e.g., racial tensions or gender diversity, employee engagement, or human rights), or governance (e.g., director independence, executive compensation, or disclosure) factors representing risks and opportunities that relate to corporate purpose or how companies create sustainable value.

Since Aristotle (1981) and Plato (2003), questions around the *telos* (purpose) of business and what constitutes value, how and for whom should businesses create it, have occupied the greatest minds of the world. This entry refers to corporate purpose as sustainable value creation, sustainability relating to financial, social, and environmental aspects of value creation. *Financial* sustainability refers to a corporation’s financial health, its ability

to generate appropriate financial returns, and to honor its obligations both in the short and long run. *Social* sustainability relates to how a company serves societal needs and their evolution (for instance, by discovering natural solutions for sugar reduction in food and beverages, hence contributing to address the problem of diabetes); a corporation's impact on communities (for example, rain forest destruction for the production of palm oil and the consequential damages inflicted on communities). *Social* sustainability also refers to other aspects (and corporate goals), such as employee engagement, happiness and well-being, respect of human rights and dignity, or proactive management of the transition towards more responsible patterns of consumption. *Environmental* sustainability relates to the corporate contribution towards respect, care, and protection of the natural environment, for instance, through carbon emission reduction, energy and water consumption, or waste management and recycling, but also through highly innovative roll-outs of industry 4.0 technologies (artificial intelligence or automation technologies and machine learning) to make production more efficient, safer, and more conducive to positive environmental impact.

Introduction

In the twilight years of the twentieth century, “their world looked wonderful to people living in developed nations (...). Or so it seemed” (Starbuck 2005, p. 21). Scientists also realized that companies were using natural resources faster than their ability to regenerate them. The dawn of the twenty-first century looks quite different and is besieged by challenges. Political turmoil, economic insecurity, social unrest, climate crisis, corporate governance failures, and a crisis of trust towards corporations characterize our time. The world faces “overwhelmingly important challenges” (McGahan 2020, p. 8), despite economic, technological, and social progress.

In this context, corporate purpose has taken central stage and remains the object of debate in the social sciences and among policy makers, investors, and managers. To understand corporate

purpose, its development through history, contemporary views on this topic, and why business is under pressure to live its purpose by creating sustainable value for society as well as for investors (EU 2018; FT 2019), it is important to briefly review the evolution of the corporation and how this trajectory has influenced the evolution of corporate purpose, so that a more comprehensive understanding can be developed around the key issues of purpose and its future developments.

A Brief History of the Corporation

Considered one of “the most successful inventions in history” (Butler 1989, p. 99), throughout history the corporation has been a great contributor to and purveyor of economic development, education, and prosperity. The corporation has been instrumental to the development of humanity and is increasingly associated with the challenges of our time. The corporation is at the heart of the capitalistic system of wealth creation and represents a complex and highly influential social entity (Mayer 2017; Mayer et al. 2017; Williamson 1981). Corporations are omnipresent: they feed us, dress us, take care of our health, build our homes, workplaces, and the infrastructures by which we move and travel, create and manage our digital footprint, manage our savings, and insure us against a variety of risks.

The lineage of the modern corporation traces back to antiquity (Rowland 2005), the earliest examples being associations, universities, holy orders, and cities. Corporate purpose was designed to ensure the uninterrupted functioning of institutions which needed human governance. Historically, cities and churches were the first nonbusiness corporations (Fox 1996; Houseman 1993), while the business corporation only developed centuries later and for very specific purposes. The ancestors of the business corporation, dating back as early as the fourteenth century, were the chartered trading companies of the European economic powers in search of resources and colonies around the globe (McNulty 1972). The first entities for managing businesses were forms of corporations granted in the mid-sixteenth

century by royal charters, for economic purposes including, among others, earning a profit (Morley 2016). The merchant trading companies were partnerships established by royal or parliamentary decree, with the goal of protecting and developing monopoly trading (Rowland 2005), fostering discovery and economic development. As an extension of nations, states, or kingdoms, the origins of the merchant companies were rooted in public interests and also featured a profit purpose (Mayer 2013). The modern corporation was born in 1600, with the establishment of the East India Company under a monopoly and charter granted by Queen Elizabeth I for the development of trade to the east of the Cape of Good Hope. The East India Company represents “one of the world’s first multinationals” (Clegg 2017, p. 45) and its innovations featured the shareholder ownership model and the administrative structure of the modern corporation (Clegg 2017; Robins 2006).

The speculative excesses of high-profile merchant companies, such as the British South Sea Company in the early eighteenth century, damaged public approval of chartered trading companies (McNulty 1972). These excesses are relevant, feature among the first documented corporate scandals, and represent instances where corporate purpose seemed to be essentially about profit. The nineteenth century marked the beginning of freedom of incorporation and the origin of the private corporation. In 1811, the State of New York enacted an incorporation law no longer requiring a charter but simply a general account of the type of business to be undertaken (Perrow 2002; Rowland 2005). Similarly, in Britain, the Joint Stock Companies Act of 1844 allowed corporations to be created with a simple registration and an indicative, brief description of the nature of their activities. These historical developments marked the evolution of the corporation from a public instrument with a clearly defined public purpose to “an all-purpose legal mechanism for facilitating the carrying on of business within a market economy” (Rowland 2005, p. 292). It is at this stage that corporate purpose begins to have in profit “its leading element” (Williamson 1981, p. 1559). This brief history indicates that corporate purpose has historically been rooted in the pursuit of

economic and social goals. Only in the late twentieth century did the dominant aspect of purpose appear to be economic, its social dimension moving to the background, indicating an increasing disregard for how economic goals could be attained.

The Development of Corporate Purpose

Throughout the twentieth century and to the present day, corporate purpose has been of interest to many disciplines of the social sciences, such as the humanities, economics, corporate law, and management.

The humanities view organizations as social entities essential to the relational nature of mankind (Pirson and Lawrence 2010). Focus on purpose is connected to a generally accepted acknowledgment of the interdependence of business and society. Over 2400 years ago, in his work *The Politics*, Aristotle (1981) regarded human beings as social animals, with a tendency to associate, create, and live in communities. Sociability relates to the ability to empathize with others, to cooperate with and help fellow humans (Melé 2011), and offers an explanation for the roots of business organizations and society. In modern times, this view of humans extends to corporations, regarded as communities of people and to business endeavors as aiming at the creation of economic and social value (MacIntyre 2007). Theology offers a broader perspective on life, relevant to the business world (Loomis 2006), therefore important in understanding corporate purpose. Business is regarded as a pursuit of “theological significance” (Byron 1988, p. 525) and a “dignified activity” (Uddin 2003, p. 26), not just an activity to be tolerated or allowed. “The nature and purposes of corporations are unavoidably religious” (Colombo 2017, p. 814), as purpose is linked to serving society. In theology, human endeavors are neither atomistic nor altruistic, rather, they are about doing something for others on the condition of receiving something of fair value in return (Byron 1988; Hollensbe et al. 2014). This is an important point, supporting a view of corporations as human enterprises that are

commercial at heart and emphasizing the importance of *how* corporate goals are achieved. A considerable body of literature acknowledges that humans are born to interrelate, perceiving themselves as part of a bigger whole (Crocker and Canevello 2015; Rynes et al. 2012). Even though assumed to be self-interested (Miller 1999), humans do possess the ability to empathize, be compassionate, and are motivated by caring about others, as no person and no human endeavor (such as corporations) exists in a vacuum (Crocker and Canevello 2015; Mikulincer and Shaver 2005). In fact, among the root causes of the challenges of the world is a failure to consider the relational nature of the corporation (Cremers 2017; Kochan 2002) and a lack of regard by corporations for the effects of their actions on others. Somehow, since Adam Smith's observation in 1776 that profit as corporate purpose was by no means "all that it is needed" (Berry et al. 2013, p. 583), the social dimension of business undertakings has been overlooked or disregarded.

In economics, corporate purpose as shareholder value is "the most celebrated corporate target" (Loderer et al. 2010, p. 5), and it has been argued that "the ultimate purpose of the firm is to maximize profits" (Conner 1991, p. 123). A preoccupation with the optimal use of scarce resources runs through the history of economics, the corporation being an important element in the larger mechanism of the market economy, in turn regarded as an instrument for converting self-interest into social welfare. The system is assumed to "work itself" (Coase 1937, p. 387) and features a rational, self-interested *homo economicus* (Anderson 2000). In classical economics, corporations are organizations obtaining resources for production, and are supposed to make money through sales activities, although economists have long noted that money also needs to be embedded in moral and social norms (Polanyi 1944; Turnbull 1997; Smith 2010). Already in 1817, economist and entrepreneur Owen warned that corporate purpose as economic aims only would have far-reaching effects on society and needed to be tempered with "conscious social direction" (Polanyi 1944, p. 134). The Chicago School of neoclassical economics regarded

purpose as being about efficiency improvements and human motives driven by self-interest (Sen 2013; Stigler 1971). The common interpretation of Milton Friedman's (1970) publication in *The New York Times* holds that for Friedman, corporate purpose was to increase profits, however he added that this is to be achieved "so long as it stays within the rules of the game" (p. 22) and "while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom" (p. 33). Common wisdom has overlooked Friedman's attention to the *how* of purpose or how value is created. Given that rules of society, the law and ethical customs are contextual and changing, *how* economic goals are achieved is as important as the goals themselves. In neoclassical economics, a view remains that in the rational pursuit of one's own interest, there is no space for morality, social commitment, or care, since companies exist because they possess superior abilities to efficiently temper opportunistic behavior through the exercise of control (Williamson 1979). Nonetheless, neo-classical economists also noted that this reasoning has limitations (Coase 1960; Dobson 1999; Polanyi 1944), as it ignores the context of human actions and motivations, companies' broader economic objectives and the role a shared purpose can play in creating context for the evolution of a corporation (Ghoshal and Moran 1996). Thus, in economics, a nuanced view of corporate purpose can be found, and it is acknowledged that purpose might exercise a tempering effect on the legitimate business pursuit of economic goals. Corporate purpose can therefore play a role in the reconciliation of societal and business expectations with respect to corporate aims and *how* they are achieved.

In corporate law, it is quite difficult to find support for corporate purpose as shareholder value maximization (Deakin 2005). Ever since the creation of the notion of corporate personhood, academics and legislators have debated its purpose and the obligations of those who direct it (Lan and Heracleous 2010; Letza et al. 2004; Wallman 1999). In the USA, ever since the famous Berle-Dodd dialogue of the 1930s on the topic of in whose interests should a corporation be managed (Weiner 1964), common wisdom holds that powers granted to a corporation should be

exercised in shareholders' interests. However, a careful review of the dialogue indicates that Berle and Dodd agreed that a company should be managed in the interests of shareholders but disagreed on how other interests should be taken into account (Licht 2004). A substantial body of literature examines this topic (Allen et al. 2007; Bapuji et al. 2020; Blair 1995; Cremers et al. 2019; Hinna and Monteduro 2017; Mahoney and Qian 2013; Porter and Kramer 1999; Tirole 2001), and the meaning of shareholder value maximization remains the object of debate. Beyond terminology, what is really meant by shareholder value is maximization of the equity market price for the shares of listed corporations (Dobson 1999) or share price maximization (Hansmann and Kraakman 2000; Wallman 1999). This is possibly a flawed measurement of value to begin with, as the stories of WorldCom, Enron, or Lehman Brothers (among others) indicate. Some corporate law scholars hold a broad view of purpose (Blair and Stout 1999; Clarke 2013; Stout 2012, 2013; Weinstein 2013), while others note that not even countries assumed to be the most shareholder-friendly (such as the USA or the UK) have a legal requirement for managers and directors to act in the sole interest of shareholders (Loderer et al. 2010). In most legal systems, regulation requires or recommends acting in good faith and in the interests of the corporation (Clarke 2013; Deakin 2005), although what these interests might be is open to interpretation. In this regard, it is worth noting one of the most remarkable developments of the last decade (Mayer 2017) in the area of corporate personhood and purpose. Following growing dissatisfaction with shareholder primacy, legislators in the USA have allowed the incorporation of an entity as a public benefit corporation (B-corporation) (Alexander 2016; Mayer 2016), with a formal public purpose beyond commercial aims (Steingard and Clark 2016). Other countries such as France, the UK, and Italy have followed suit.

In management scholarship, although shareholder value is the "leitmotif of wealth creation" (Windsor 2001, p. 226), it has come under increasing scrutiny as corporate purpose (Martin et al. 2016). Stakeholders, shareholders and

society are increasingly exposed to the costs and risks of corporate actions (Letza et al. 2004; Phillips et al. 2003; Schneider and Scherer 2015; Turnbull 1997), as corporations are cultural and social systems (DiMaggio and Powell 1983; Judge et al. 2008), reflecting societal values and playing a broader role in our lives (Hatch 2013; Selznick 1957). A view has developed that commercial and social goals can coexist (Garriga and Melé 2004), and that the satisfaction of stakeholder interests can be instrumental to corporate purpose as sustainable value creation (Campbell 2007; Hillman and Keim 2001; Hillman et al. 2001; Kumar and Zattoni 2019; Mitchell et al. 1997; Ogden and Watson 1999). Revlon's use of chemicals linked to cancer in its products; Kimberly-Clark's destruction of forests for throw-away tissues; the mining industry's giants such as Glencore or BHP use of child labor in cobalt and lithium extraction, and the ethical and legal issues these pose to their customers (Coles 2019; Gunther 2015; Hume 2019), are all indications that purpose needs to assume a broader dimension.

Corporate Purpose in the Twenty-First Century

Reviewing the historical development of corporate purpose, the key insight of this much-debated concept and the contrasting views presented above, lies in the recognition that purpose has various dimensions (financial, social, environmental) which can be complementary, and that if corporations are to create sustainable value, there is a need to look beyond simply maximizing shareholder value (Edmans 2017; Hollensbe et al. 2014; Martin et al. 2016; Mayer 2017). The Edelman (2020) Trust Barometer, a survey with over 33,000 participants in 28 countries, continues to report a collapse in trust towards business. Such a pervasive crisis of trust has reached the level of a systemic threat to humanity (Edelman 2020). Expectations that business will promptly address the issue are high (Bansal and Song 2017; George et al. 2016; Hill 2019; Mayer 2017; Pirson et al. 2017), as trust, or the lack of it,

matters, as trust is indeed the “lubricant of society” (Luhmann 1979, cited in Pirson et al. 2017, p. 1). Therefore, a new consideration is needed of the way business is conducted and governed (Mayer et al. 2017; Metcalf and Benn 2012; Pirson and Lawrence 2010).

Through the exercise of their stewardship duties investors, as capital providers, increasingly integrate ESG factors in investment decisions (Espahbodi et al. 2019; Van Duuren et al. 2016). ESG factors represent business risks and opportunities that are anything but tangential to business, as they can impact a company’s bottom-line. ESG factors are fundamental to how corporations access capital and create sustainable value; in other words, they are fundamental to corporate purpose. ESG can act as indicators of risks and opportunities that may affect a corporation’s ability to create value and to attract capital. For instance, they can point to upcoming regulation (as was the case in the Facebook Cambridge Analytica scandal of 2016, which accelerated the European General Data Protection Regulation). They can be instrumental in shifting consumer preferences (for instance, towards healthier food and lifestyles) or affect a corporation’s ability “to produce people” (Hollensbe et al. 2014, p. 1229), in other words committed and dedicated employees.

ESG factors are intimately related to corporate purpose and represent many of the externalities of the contemporary business and investment context. They encapsulate potential risks and opportunities for both investors and companies along environmental, social, and governance dimensions. Throughout history, nature has been disruptive, yet climate change is accelerating the urgency of tackling environmental problems. Social unrest has also always existed, whether in ancient Greece due to wealth and land inequality (Fuks 1984), in the city of Norwich in Tudor England following disastrous harvests (Hoskins 1964), in Somalia, Rwanda, and the former Yugoslavia following poverty and unemployment in “the lost decade of the 1980s” (Chossudovsky 1997, p. 1786), or in Hong Kong in the summer of 2019 (Korner 2019). Governance issues (and scandals) are also not new, with regulation aimed

at improving governance effectiveness and strengthening control. What is different now is the immediacy, the scale and the global effects of the consequences of such events, giving added urgency and importance to the response to and anticipation of them, hence the centrality of corporate purpose and of the integration of ESG in the processes of value creation. ESG factors represent “a tragedy (...) and a golden opportunity for positive system change” (Kiernan 2007, p. 478), because they represent environmental factors (e.g., waste generation, carbon emission reduction, water or renewable energy consumption, or other aspects of the climate transition); social factors (e.g., gender diversity, social inequality and tensions, product safety, employee engagement, or human rights); and governance factors (director independence, executive compensation or disclosure), all linked to corporate purpose or how corporations create value for society as well as investors.

In the twenty-first century, corporations, particularly global corporations (Mayer 2016, 2017) have considerable market, social, and political power (Mayer et al. 2017; Starbuck 2014). They are becoming the new leviathans (Chandler and Mazlish 2005; Mayer 2013), swiftly exploiting regulatory gaps and national differences for their own benefit (Schneider and Scherer 2015). These “new supernatural organizations” (Beck 2008, p. 794) are among the “world’s most powerful social entities” (Phillips et al. 2003, p. 1) and are expected to contribute to finding solutions to the challenges of our time (Priem et al. 2018; Scherer and Smid 2000). Contemporary challenges are beyond governments’ capabilities, and public money will not be sufficient to finance a sustainable economy (EU 2018). Investment and business communities, therefore, have a role to play in building a sustainable future anchored in purposeful business. Initiatives such as *The Purposeful Corporation* (Big Innovation Centre 2017), launched in the UK; the call of the Academy of Management for the *Future of the Corporation* (Mayer et al. 2017; Phan et al. 2016); the *Future of the Corporation* program of the British Academy (2017); and US senator Elizabeth Warren’s

proposal of the *Accountable Capitalism Act* (Indap 2018) are testimony to the rising interest in corporate purpose and its role in the future of humanity. The corporation is in need of reinvention as a vehicle to promote the interests of society and investors (Mayer 2016, 2017). By placing corporate purpose at the heart of business, so that it can drive sustainable value creation, and by creating an investment and regulatory context in support of corporate purpose as the reason for being of corporations, there is a promise of positive, systemic change that can begin to address some of the challenges of this century.

Summary

This chapter presents an overview of corporate purpose or the reason why corporations exist. It traces its developments through the humanities, economics, corporate law and management scholarship through the twenty-first century, concluding with the key issues and future developments around corporate purpose as the creation of sustainable value along financial, social and environmental dimensions.

Cross-References

- [Corporate Objectives](#)
- [ESG](#)
- [Institutional Investors](#)
- [Shared Value](#)
- [Shareholder and Stakeholder Activism](#)
- [Stakeholders](#)

References

- Adler, P. (2016). Alternative economic futures: A research agenda for progressive management scholarship. *Academy of Management Perspectives*, 30(2), 123–128.
- Alexander, F. (2016). Delaware public benefit corporations: Widening the fiduciary aperture to broaden the corporate mission. *Journal of Applied Corporate Finance*, 28, 66–74.
- Allen, F., Carletti, E., & Marquez, R. (2007). Stakeholder capitalism, corporate governance and firm value. *University of Pennsylvania, University of Frankfurt, and Arizona State University working paper*. Retrieved March 4, 2020, from: <https://conference.nber.org/conferences/2007/si2007>
- Anderson, E. (2000). Beyond homo economicus: New developments in theories of social norms. *Philosophy & Public Affairs*, 29(2), 170–200.
- Aristotle. (1981). *The politics*. London: Penguin.
- Bansal, P., & Song, H. (2017). Similar but not the same: Differentiating corporate sustainability from corporate responsibility. *Academy of Management Annals*, 11(1), 105–149.
- Bapuji, H., Ertug, G., & Shaw, J. D. (2020). Organizations and societal economic inequality: A review and way forward. *Academy of Management Annals*, 14(1), 60–91.
- Beck, U. (2008). Reframing power in the globalized world. *Organization Studies*, 29(5), 793–804.
- Berry, C., Paganelli, M., & Smith, C. (2013). *The Oxford handbook of Adam Smith*. Corby: Oxford University Press.
- Big Innovation Centre. (2017). The purposeful company policy report. London. Retrieved March 3, 2020, from: https://www.biginnovationcentre.com/wp-content/uploads/2019/07/BIC_THE-PURPOSEFUL-COMPANY-POLICY-REPORT_27.02.2017.pdf
- Blair, M. M. (1995). *Ownership and control: Rethinking corporate governance for the twenty-first century*. Washington, DC: Brookings Institute.
- Blair, M. M., & Stout, L. (1999). A team production theory of corporate law. *Virginia Law Review*, 85(2), 247–328.
- British Academy. (2017). The future of the corporation program. Retrieved October 4, 2019, from: <https://www.thebritishacademy.ac.uk/research/future-corporation-research-programme>
- Butler, H. (1989). Contractual theory of the corporation. *George Mason Law Review*, 11(4), 99–125.
- Byron, W. (1988). Twin towers: A philosophy and theology of business. *Journal of Business Ethics*, 7(7), 525–530.
- Campbell, J. L. (2007). Why should corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Campbell, A., & Yeung, S. (1991). Creating a sense of mission. *Long Range Planning*, 24(4), 10–20.
- Chandler, A., & Mazlish, B. (2005). *Leviathans: Multinational corporations and the new global history*. Cambridge, UK: Cambridge University Press.
- Chossudovsky, M. (1997). Economic reforms and social unrest in developing countries. *Economic & Political Weekly*, 32(29), 1786–1788.
- Clarke, T. (2013). Deconstructing the mythology of shareholder value. A comment on Lynn Stout's "The shareholder value myth". *Accounting, Economics and Law: A Convivium*, 3(1), 15–42. Retrieved April 7, 2020,

- from: <https://www.degruyter.com/downloadpdf/j/ael.2013.3.issue-1/ael-2013-0006/ael-2013-0006.pdf>
- Clarkson, M. B. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Clegg, S. R. (2017). The East India Company: The first modern multinational? In C. Dörrenbächer & M. Geppert (Eds.), *Multinational corporations and organization theory: Post millennium perspectives* (pp. 43–67). Bingley: Emerald.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386–405.
- Coase, R. H. (1960). The problem of social cost. *Journal of Law and Economics*, 3(October), 1–44.
- Coles, I. (2019). Strategic minerals – The new global battleground. *Financial Times*, 21 June. Retrieved April 7, 2020, from: <https://www.ft.com/content>
- Colombo, R. J. (2017). Religious conceptions of corporate purpose. *Washington and Lee Law Review*, 74(2), 813–845.
- Conner, K. R. (1991). A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management*, 17(1), 121–154.
- Cremers, M. (2017). What corporate governance can learn from catholic social teaching. *Journal of Business Ethics*, 145(4), 711–724.
- Cremers, M., Guensey, S. B., Litov, L. P., & Sepe, S. M. (2019). Shadow pills and long-term firm value. *ECGI finance working paper no. 595*. Retrieved September 2, 2019, from: <https://papers.ssrn.com>
- Crocker, J., & Canevello, A. (2015). Relationship and the self: Ecosystem and ecosystem. In M. Mikulicener, P. R. Shaver, A. Simpson, & J. F. Dovidio (Eds.), *APA handbook of personality and social psychology. Vol. 3. Interpersonal relations*. Washington, DC: American Psychological Association.
- Deakin, S. (2005). The coming transformation of shareholder value. *Corporate Governance: An International Review*, 13(1), 11–18.
- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Dobson, J. (1999). Is shareholder wealth maximization immoral? *Financial Analysts Journal*, 55(5), 69–75.
- Edelman. (2020). Trust barometer 2020. Retrieved April 6, 2020, from: <https://www.edelman.com/trustbarometer>
- Edmans, A. (2017). Embedding purpose into the heart of business. *Governance*, March (273).
- Espahbodi, L., Espahbodi, R., Juma, N., & Westbrook, A. (2019). Sustainability priorities, corporate strategy and investor behavior. *Journal of Financial Economics*, 37(1), 149–167.
- European Union (EU). (2018). Financing a sustainable European economy. Retrieved April 6, 2020, from: https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf
- Fox, D. R. (1996). The law says corporations are persons, but psychology knows better. *Behavioral Sciences & the Law*, 14(3), 339–359.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Englewood Cliffs: Prentice-Hall.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times*, 13 September, 33, 22.
- FT. (2019). The company of the future: Profit and purpose. Retrieved from: <https://www.ft.com>
- Fuks, A. (1984). *Social conflict in ancient Greece*. Jerusalem: The Magnes Press.
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1/2), 51–71.
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 9(6), 1880–1895.
- Ghoshal, S., & Moran, P. (1996). Bad for practice: A critique of the transaction cost theory. *The Academy of Management Review*, 21(1), 13–47.
- Gunther, M. (2015). Under pressure: Campaigns that persuaded companies to change the world. *The Guardian*, 9 Feb. Retrieved February 19, 2020, from: <https://www.theguardian.com/sustainable-business/2015/feb/09/corporate-ngo-campaign-environment-climate-change>
- Hansmann, H., & Kraakman, R. (2000). The end of history for corporate law. *Harvard Law School, John M. Olin Center for Law, Economics and Business discussion paper series, paper 280*. Retrieved March 3, 2020, from: http://www.law.harvard.edu/programs/olin_center/papers/pdf/280.pdf
- Hatch, M. J. (2013). *Organization theory. Modern, symbolic, and postmodern perspectives*. Oxford: Oxford University Press.
- Hill, A. (2019). The limits of the pursuit of profit. *Financial Times*, 23 Sept. Retrieved April 7, 2020, from: <https://www.ft.com/content>
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22(2), 125–139.
- Hillman, A. J., Keim, G. D., & Luce, R. (2001). Board composition and stakeholder performance: Do stakeholder directors make a difference? *Business & Society*, 40(3), 295–314.
- Hinna, A., & Monteduro, F. (2017). Boards, governance and value creation in grant-giving foundations. *Journal of Management and Governance*, 21(4), 935–961.
- Hollensbe, E., Wookey, C., Hickey, L., George, G., & Nichols, C. (2014). Organizations with purpose. *Academy of Management Journal*, 57(5), 1227–1234.
- Hoskins, W. G. (1964). Harvest fluctuations and English economic history, 1480–1619. *The Agricultural History Review*, 12(1), 28–46.
- Houseman, G. L. (1993). *Questioning the law in corporate America: Agenda for reform*. Westport: Greenwood Press.

- Hume, N. (2019). BHP faces \$5bn lawsuit in UK over 2015 Brazil dam disaster. *Financial Times* 7 May. <https://www.ft.com/content/6202187e-70ea-11e9-bbf5-5c68069fbd15>
- Indap, S. (2018). Revisiting the principle of “shareholder primacy”. *Financial Times*. Retrieved September 24, 2019, from: <https://www.ft.com/content/78c26d32-bfa3-11e8-95b1-d36dfe1b89a>
- Judge, W., Douglas, T., & Kutan, A. (2008). Institutional antecedents of corporate governance legitimacy. *Journal of Management*, 34(4), 765–785.
- Kiernan, M. J. (2007). Universal owners and ESG: Leaving money on the table? *Corporate Governance: An International Review*, 15(3), 478–485.
- Kochan, T. (2002). Addressing the crisis in confidence in corporations: Root causes, victims, and strategies for reform. *Academy of Management Executive*, 16(3), 139–141.
- Korner, A. (2019). Hong Kong protests have united people of all ages. *Financial Times*, 6 September. Retrieved September 6, 2019, from: <https://www.ft.com/content>
- Kumar, P., & Zattoni, A. (2019). Farewell editorial: Exiting editors’ perspective on current and future challenges in corporate governance research. *Corporate Governance: An International Review*, 27(1), 2–11.
- Lan, L., & Heracleous, L. (2010). Rethinking agency theory: The view from law. *Academy of Management Review*, 35(2), 294–314.
- Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: A critical review of corporate governance. *Corporate Governance*, 12(3), 242–262.
- Licht, A. N. (2004). The maximands of corporate governance: A theory of values and cognitive style. *Delaware Journal of Corporate Law*, 29(3), 649–746.
- Loderer, C., Roth, L., Waelchli, U., & Joerg, P. (2010). Shareholder value: Principles, declarations, and actions. *Financial Management*, 39(1), 5–32.
- Loomis, W. (2006). Theology and corporate ethics. *Reviews in Religion and Theology*, 13(2), 149–151.
- Luhmann, N. (1979). *Trust: A mechanism for the reduction of social complexity*. New York: Wiley.
- MacIntyre, A. (2007). *After virtue. a study in moral theory* (3rd edn). Notre Dame, Indiana: University of Notre Dame Press.
- Mahoney, J. T., & Qian, L. (2013). Market frictions as building blocks of an organizational economics approach to strategic management. *Strategic Management Journal*, 34(9), 1019–1041.
- Martin, G., Farndale, E., Paaauwe, J., & Stiles, P. G. (2016). Corporate governance and strategic human resource management: Four archetypes and proposals for a new approach to corporate sustainability. *European Management Journal*, 34(1), 22–35.
- Mayer, C. (2013). *Firm commitment. Why the corporation is failing us and how to restore trust in it*. Oxford, UK: Oxford University Press.
- Mayer, C. (2016). Reinventing the corporation. *Journal of the British Academy*, 4, 53–72.
- Mayer, C. (2017). Who is responsible for irresponsible business? An assessment. *Oxford Review of Economic Policy*, 33(2), 1–25.
- Mayer, C., Wright, M., & Phan, P. (2017). Management research and the future of the corporation: A new agenda. *Academy of Management Perspectives*, 31(3), 179–182.
- McGahan, A. (2020). Guidepost trilogy – Claims on the corporation: Directions for stakeholder research in the field of management. Where does an organization’s responsibility end? Identifying the boundaries on stakeholder claims. *Academy of Management Discoveries*, 6(1), 8–11.
- McNulty, P. (1972). Predecessors of the multinational corporation. *Columbia Journal of World Business*, 7(3), 73–79.
- Mel  , D. (2011). The firm as a “community of persons”: a pillar of humanistic business ethos. *Journal of Business Ethics*, 106(1), 89–101.
- Metcalf, L., & Bann, S. (2012). The corporation is ailing social technology: Creating a “fit for purpose” design for sustainability. *Journal of Business Ethics*, 111(2), 195–210.
- Mikulincer, M., & Shaver, P. R. (2005). Attachment security, compassion, and altruism. *Current Directions in Psychological Science*, 14(1), 34–38.
- Miller, D. (1999). The norm of self-interest. *American Psychologist*, 54(12), 1053–1060.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Morley, J. (2016). The common law corporation: The power of the trust in Anglo-American business history. *Columbia Law Review*, 116(8), 2145–2197.
- Ogden, S., & Watson, R. (1999). Corporate performance and stakeholder management: Balancing shareholder and customer interests in the U.K. privatized water industry. *Academy of Management Journal*, 42(5), 526–538.
- Perrow, C. (2002). *Organizing America: Wealth, power, and the origins of corporate capitalism*. Princeton: Princeton University Press.
- Phan, P., Siegel, D., & Wright, M. (2016). Alternative forms of economic organization: Be careful what you wish for. *Academy of Management Perspectives*, 30(2), 117–122.
- Phillips, R., Freeman, R. E., & Wicks, A. C. (2003). What stakeholder theory is not. *Business Ethics Quarterly*, 13(4), 479–502.
- Pirson, M., & Lawrence, P. (2010). Humanism in business – Towards a paradigm shift? *Journal of Business Ethics*, 93(4), 553–565.
- Pirson, M., Martin, K., & Parmar, B. (2017). Formation of stakeholder trust in business and the role of personal values. *Journal of Business Ethics*, 145(1), 1–20.
- Plato. (2003). *The Republic* (2nd ed.). London: Penguin Books.
- Polanyi, K. (1944). *The great transformation. The political and economic origins of our time* (3rd ed.). Boston: Beacon Press.
- Porter, M. E., & Kramer, M. R. (1999). Philanthropy’s new agenda: Creating value. *Harvard Business Review*, 77(6), 121–130.

- Powell, J. (2020). Coronavirus is the acid test of ESG. Retrieved April 7, 2020, from: <https://ftalphaville.ft.com>
- Priem, R. L., Krause, R., Tantalo, C., & McFayden, M. A. (2018). Promoting long-term shareholder value by “competing” for essential stakeholders: A new, multi-sided market logic for top managers. *Academy of Management Perspectives*. Retrieved July 23, 2019, from: <https://journals.aom.org/doi/10.5465/amp.2018.0048>
- Robins, N. (2006). *The corporation that changed the world: how the East India Company shaped the modern multinational*. London: Pluto Press.
- Rowland, W. (2005). Recognizing the role of the modern business corporation in the “social construction” of technology. *Social Epistemology*, 19(2–3), 287–313.
- Rynes, S., Bartunek, J., Dutton, J., & Margolis, J. (2012). Care and compassion through an organizational lens: Opening up new possibilities. *Academy of Management Review*, 37(4), 503–523.
- Scherer, A. G., & Smid, M. (2000). The downward spiral and the US model business principles – Why MNEs should take responsibility for the improvement of world-wide social and environmental conditions. *Management International Review*, 40(4), 351–371.
- Schneider, A., & Scherer, A. (2015). Corporate governance in a risk society. *Journal of Business Ethics*, 126(2), 309–323.
- Selznick, P. (1957). *Leadership in administration*. New York: Harper & Row.
- Sen, A. (2013). The contemporary relevance of Adam Smith. In C. Berry, M. Paganelli, & C. Smith (Eds.), *The Oxford handbook of Adam Smith* (pp. 581–592). New York: Oxford University Press.
- Smith, A. (2010). *The wealth of nations*. Chichester, UK: Capstone Publishing.
- Starbuck, W. H. (2005). Four great conflicts of the twenty-first century. In C. L. Cooper (Ed.), *Management and leadership in the 21st century* (pp. 21–56). Oxford, UK: Oxford University Press.
- Starbuck, W. H. (2014). Why corporate governance deserves serious and creative thought. *Academy of Management Perspectives*, 28(1), 15–21.
- Steingard, D., & Clark, W. (2016). The benefit corporation as an exemplar of integrative corporate purpose. *Business & Professional Ethics Journal*, 35(1), 73–101.
- Stigler, G. J. (1971). Smith’s travels on the ship of state. *History of Political Economy*, 3(2), 265–277.
- Stout, L. A. (2012). *The shareholder value myth: How putting shareholders first harms investors, corporations and the public*. San Francisco: Berrett-Koehler.
- Stout, L. A. (2013). The troubling question of corporate purpose. *Accounting, Economics, and Law: A Convivium*, 3(1), 61–70. Retrieved April 5, 2020, from: <https://www.degruyter.com/view>
- Tirole, J. (2001). Corporate governance. *Econometrica*, 69(1), 1–35.
- Turnbull, S. (1997). Corporate governance: Its scope, concerns and theories. *Corporate Governance: An International Review*, 5(4), 180–205.
- Uddin, S. (2003). Understanding the framework of business in Islam in an era of globalization: A review. *Business Ethics: A European Review*, 12(1), 23–32.
- Van Duuren, E., Platinga, A., & Scholtens, B. (2016). ESG integration and the investment management process: Fundamental investing reinvented. *Journal of Business Ethics*, 138(3), 525–533.
- Wallman, S. M. H. (1999). Understanding the purpose of a corporation: An introduction. *Journal of Corporation Law*, 24(4), 807–818.
- Weiner, J. L. (1964). The Berle-Dodd dialogue on the concept of the corporation. *Columbia Law Review*, 64(8), 1458–1467.
- Weinstein, O. (2013). The shareholder model of the corporation, between mythology and reality. *Accounting, Economics, and Law: A Convivium*, 3(1), 43–60.
- Williamson, O. E. (1979). Transaction-cost economics: The governance of contractual relations. *Journal of Law and Economics*, 22(2), 233–281.
- Williamson, O. E. (1981). The modern corporation: Origins, evolution, attributes. *Journal of Economic Literature*, 19(4), 1537–1568.
- Windsor, D. (2001). The future of corporate social responsibility. *International Journal of Organizational Analysis*, 9(3), 225–256.

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Corporate Social Performance

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Synonyms

[Corporate accountability](#); [Creating shared value \(CSV\)](#); [Social performance](#)

Definition

Corporate social performance (CSP) is defined as a business organization's configuration of principles of social responsibility, processes of social responsiveness, and observable outcomes as they relate to the firm's societal relationships (Wood 1991, 2010).

Introduction

No consensus exists on how to measure responsibility (or Corporate Social Performance), and it is extremely difficult to evaluate it quantitatively.

To demonstrate that a company is socially responsible, it is necessary to translate the CSR principles into measurable variables by using standards and indicators, so that a social auditing process can be subsequently performed from which conclusions can be drawn about the

company's rating from a social and environmental perspective.

The process for determining whether a company is socially responsible (the social audit) consists of two stages:

- Standardization: this consists of the drafting, publishing and application of standards which lay down the principles for guaranteeing CSR.
- Certification: the procedure and the outcome of an independent agency's process of ensuring that a company abides by the standard, referred to as *screening or social rating*.

It is believed that more than 225 CSR standards or principles exist, as well as numerous certification processes for recognizing compliance with the respective CSR standards. Therefore, it has been proposed that the procedures employed for measuring social performance should be standardized and their number reduced.

Table 1 contains a list of the main standards, certification systems, and instruments that are used

to identify the extent of CSR within a company. Adherence to the standards, gaining the appropriate certificates, and drafting sustainability reports are thus considered as Corporate Social Performance actions. The asterisk indicates whether the three triple-bottom-line dimensions (economic, social/corporate governance, and environment) have been considered.

Codes of Conduct

The main ones are described below.

OCDE Guidelines for Multinational Enterprises

The *OCDE Guidelines for Multinational Enterprises*, published in 2000, are recommendations applied by governments to multinational corporations that operate or have their headquarters located in countries that have adopted the recommendations. They contain nonbinding principles and rules on responsible business conduct in a global context that conform to applicable

Corporate Social Performance, Table 1 Key instruments for measuring CSR

	Dimension		
	Economic	Social and/or corporate governance	Environmental
Codes of conduct			
OCDE Guidelines for Multinational Enterprises	*	*	*
United Nations Global Compact	*	*	*
ISO 26000	*	*	*
AA 1000	*	*	*
Management and certification systems			
Working conditions health and safety			
SA 8000		*	
OSHAS 18001		*	
Environmental management and diagnostics systems			
ISO 14001			*
EMAS			*
Carbon Disclosure Project (CDP)			*
Quality management systems			
EFQM	*	*	
ISO 9001	*	*	
Information generation			
GRI	*	*	*

Source: Adapted from Albareda and Balaguer (2007) and own elaboration

legislation and internationally recognized rules. The *Guidelines* are the only exhaustive and multilaterally agreed code of conduct for business responsibility that exist, which governments have undertaken to promote.

The recommendations contained in the *Guidelines* express the values shared by the governments of the countries that are the source of a large part of direct foreign investment and where the headquarters of many of the largest multinational corporations are based. The aim of the *Guidelines* is to encourage businesses to make a positive contribution to economic, environmental, and social progress throughout the world. The *Guidelines* concentrate on the following aspects: dissemination of information, human rights, employment and labor relations, the environment, combatting corruption, consumer affairs, science and technology, competition, and tax issues.

United Nations Global Compact

The UN Global Compact, launched in 2000, calls on companies to align their strategies and operations with ten universal principles, on human rights, the environment, labor laws and the fight against corruption, and to take steps to promote the Sustainable Development Goals (SDGs). By 2018, over 12,500 companies in more than 160 countries had signed up to the project.

ISO 26000:2010

ISO 26000 guides companies and organizations on how to operate in a socially responsible manner. This implies acting ethically and transparently in order to contribute to the health and wellbeing of society. It helps companies gain an understanding of what CSR is, helps to translate responsible behavior principles into concrete actions, and spreads social responsibility best practice across the globe.

It revolves around seven fundamental issues: organizational governance, human rights, labor practices, the environment, fair-trading practices, consumer affairs, and active participation and community development.

Unlike other ISO standards, ISO 26000 cannot be certified, as it is simply a guide on how to behave rather than a requirement laying down obligatory actions.

It is aimed at all types of organizations, regardless of their business activity, size, or location.

AA1000 AccountAbility Principles Standard 2008

The AccountAbility Principles Standard (AA1000APS) offers a framework that allows companies to identify, prioritize, and respond to the challenges of sustainability.

AccountAbility is a global leader in providing innovative solutions in the field of CSR and sustainable development. Since 1995, the AA1000 standards have been based on principles relating to questions such as corporate governance, business models, organization strategy, and assuring sustainability and stakeholder commitments.

Management and Certification Systems

Working Conditions Health and Safety

SA 8000

This is an auditable certification system, created by Social Accountability International in 1997 and updated in 2001. It aims to promote better working conditions throughout the value chain.

OSHAS 18001 (Occupational Health and Safety Assessment Series)

OHSAS 18001 is an internationally accepted standard that defines the requirements for setting up, implementing, and operating an effective Health and Safety Management System at work and which can be audited and certified externally. It was developed by the British Standards Institution (BSI). OHSAS 18001 was replaced by ISO 45001, the international standard on health and safety at work. The organizations already certified with the BS OHSAS 18001 must update their management system to the ISO 45001 standard by March 2021 at the latest.

Environmental Management Systems

ISO 14001

The ISO 14001 standard is the international standard for environmental management systems (EMS), which helps companies to identify, prioritize, and manage environmental risks as part of their usual business practice.

It was designed to be easily implemented by any organization, regardless of its size, industry, and geographic location. Several agencies have the task of conducting the certification process to verify whether or not companies are complying with the requirements set out in the standard.

EMAS (Eco-Management Quality Scheme)

This is a European Union voluntary standard, launched in 2009, that recognizes the organizations that have introduced an Environmental Management System and have committed to pursue continuous improvement, verified by independently conducted audits.

Carbon Disclosure Project (CDP)

This allows companies that use it to obtain a true diagnosis of their carbon footprint and to define a baseline for their emissions. As a whole, this initiative is also a methodological guide for evaluating the risks posed by companies' environmental management methods.

Quality Management Systems

EFQM (European Foundation Quality Management)

The EFQM model, as a total quality model, is a model for excellence that any organization can use and apply. It was created in 1988 by the European Foundation for Quality Management and is a results-orientated and customer-focused model. The management of this model relies on the participation of all members of the organization and takes account of ethical and social aspects.

Unlike other quality improvement models, the EFQM is based on self-assessment, which is not certified or accredited, and organizations may

perform the self-assessment process with or without outside support.

ISO 9001

The ISO 9001 forms the basis for quality management systems as it is an international standard that encompasses all the components of quality management a company must have in place in order to implement an effective system that allows it to manage and improve the quality of its products or services.

Information Generation *Global Reporting Initiative (GRI)*

Global Reporting Initiative was set up in 1997 as a joint initiative of the UN Environmental Programme (UNEP) and the CERES organization in order to raise the quality, accuracy, and usefulness of sustainability reports. It aims to create a global framework of voluntary information about the economic, social, and environmental impacts of businesses. To set up this framework, the GRI drafted what is called the *Sustainability Reporting Guidelines*, which have been periodically updated and improved since they were first published in 2000, including the GRI 2002, the G3, released in October 2006, and the current G4, approved in May 2013.

In all the guidelines, the *TBL focus* of the information is maintained through the separate provision of **58 economic, social, and environmental indicators** (with two levels of compliance based on the number of indicators about which information is provided: *Core* – less information and *Comprehensive* – more information). The G4 aims to be a reliable and credible framework on which to base sustainability reporting and which can be used by all organizations irrespective of their size, industry, or location. The goal of G4 is to enable reporting organizations to concentrate on the analysis of their economic, social, and environmental impact, especially negative impacts, including a description of their dialogue with stakeholders, the involvement of senior management, the commitments acquired, and the mechanisms for monitoring the improvement actions.

Future Directions

Corporate Social Performance will need to measure how companies comply with Sustainable Development Goals (SDGs) that were adopted on September 25, 2015, by 193 countries as a follow-up to the Millennium Development Goals. The SDGs focus on ending poverty, protecting the planet and ensuring prosperity for all, as part of a new sustainable development agenda. A total of 17 goals and 169 targets have been set up, to be achieved by 2030.

Cross-References

- [Corporate Social Responsibility](#)
- [Corporate Sustainability Performance](#)
- [Finance and CSR](#)
- [SAM Sustainability Indices](#)
- [Socially Responsible Investment](#)

References

- Albareda, L., & Balaguer, M. R. (2007). *La responsabilidad social de la empresa y los resultados financieros. En Responsabilidad Social Corporativa* (pp. 11–26). Barcelona: ACCID.
- Wood, D. (1991). Corporate social performance revisited. *The Academy of Management Review*, 16(4), 691–718.
- Wood, D. (2010). Measuring corporate social performance: A review. *International Journal of Management Reviews*, 12(1), 50–84.

Corporate Social Reporting

- [Sustainability Accounting](#)

Corporate social Responsibilities (CSR)

- [Cross-Cultural Attitudes to CSR](#)

Corporate Social Responsibility

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Synonyms

[Corporate accountability](#); [Creating shared value \(CSV\)](#); [Social responsibility](#); [Sustainability](#); [Sustainable development](#)

Definition

According to United Nations Industrial Development Organization (UNIDO) (2019), “Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns into their business operations and interactions with their stakeholders. CSR is generally understood as being the way in which a company achieves a balance of economic, environmental and social imperatives (‘Triple-Bottom-Line-Approach’), while at the same time addressing the expectations of shareholders and stakeholders. In this sense, it is important to draw a distinction between CSR, which can be a strategic business management concept, and charity, sponsorships or philanthropy. Even though the latter can also make a valuable contribution to poverty reduction, and directly enhance the reputation of a company and strengthen its brand, the concept of CSR clearly goes beyond that.”

The European Union’s Green Paper (2001) defines CSR as a concept “whereby firms integrate social and environmental concerns into their business operations and in their interaction with stakeholders on a voluntary basis.”

However, despite its long history, no consensus has been achieved on the definition of CSR (Sheehy 2015). Dahlsrud (2008) analyzed 37 definitions used by CSR researchers and concluded that they are based on five dimensions: the

environmental, social, economic, stakeholder, and charity dimensions.

Introduction

In the late 1990s, there was a significant surge in interest in CSR, arising out of the financial crisis and particularly following the dotcom boom, which had led to a credibility crisis among large corporations and undermined the legitimacy of large business concerns and even of the market itself in the eyes of the society (Albareda and Balaguer 2007). This scenario led to a growing demand for the relationship between business and wider society to be based on ethical and responsible behavior.

There is an increasing number of companies that are looking to get fully on board with CSR as they become more acutely aware that in today's market economy, their legitimacy as an operator is afforded by the players or **stakeholders** with whom the organization has a relationship: customers, staff, suppliers, competitors, nonprofit bodies, financial institutions, investors, and the community in general. The company's purpose is therefore broadened to encompass, not just maximizing company value for shareholders (shareholder focus), but also to meet the needs of all groups and individuals who affect or are affected by the company's business activity (stakeholder focus). Today, more heed is paid to the various groups of stakeholders, whose different concerns, demands, and expectations must all be listened to.

CSR is based on the concept of **sustainable development**, which was first coined by the Brundtland Committee (1987) and later adopted by the Rio de Janeiro Earth Summit in 1992. It is defined as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In this regard, the World Sustainable Development Council defines CSR as "the continuing commitment by business to contribute to sustainable economic development while improving the quality of life of the workforce and their families

as well as of the local community and society at large."

Based on this concept of Sustainable Development, Elkington (1997) introduced the phrase "**Triple Bottom Line**" (TBL) as applied to business management. He defines it as "a commitment to simultaneously strive towards economic prosperity, environmental quality and social justice." As such, the goal of a company should not focus purely on the financial bottom line, but should aim to operate in a balanced manner, taking account of the economic, social, and environmental aspects.

A variety of approaches to CSR exists across the globe. According to Vives and Peinado-Vara (2011), there are three distinct CSR perspectives, depending on the geographic region.

- **The United States:** It is fair to say that the United States is the society that has most clearly expressed its respect for the free market and for unfettered competition. Although the State has intervened occasionally to regulate the market during critical times, it has on the whole promoted the entrepreneurial spirit and individual enterprise. Within this framework, companies have played a significant social role. A preoccupation with work productivity and a concern for the environment led the culture of philanthropy to evolve into a more integrated understanding of CSR.
- **Europe:** Companies have incorporated the concept of sustainable development into their management models, with a greater degree of State intervention in social and economic matters.
- **Latin America:** Characterized by paternalism, a marked inequality in income distribution, a concentration of political, economic, and social power, widespread poverty, and insufficient regulation. Medium and large firms have helped to mitigate the inequalities through their philanthropic actions. Dismantling this paternalistic, dependent, and philanthropic culture and building another one based on social responsibility is a huge challenge that some business and society leaders have decided to take on.

Key Issues

Based on the above definitions, the following key characteristics of CSR can be defined:

- **Voluntary nature:** The decision of a firm to concern itself with social and environmental matters is a voluntary one rather than being legally imposed. In this respect, CSR goes beyond anything that is legally required.
- **Integration:** CSR initiatives should be integrated into the day-to-day operation of the company, in all its business divisions and areas. CSR cannot be sporadic, piecemeal, or a marginal concern.
- **Consistency:** The initiatives must be sustained over time. CSR is a shift in philosophy, culture and in the way of doing things, all of which must be permanently maintained.
- **Transparency:** Organizations that assume their responsibilities toward the society in which they operate must be ready to report diligently and truthfully about their actions and decisions in relation to aspects that are important to the various groups of stakeholders.

According to the UNIDO (2019), key CSR issues are environmental management, eco-efficiency, responsible sourcing, stakeholder engagement, labor standards, and working conditions, employee and community relations, social equity, gender balance, human rights, good governance, and anticorruption measures.

A properly implemented CSR concept can generate a variety of competitive advantages, such as enhanced access to capital and markets, increased sales and profits, operating cost savings, improved productivity and quality, an efficient human resource base, improved brand image and reputation, enhanced customer loyalty, and better decision-making and risk management processes.

In essence, CSR consists of consolidating financial success and gaining a competitive advantage by building a good reputation and earning the trust of people who work for the company or who live close to it.

CSR is not new. Most companies, especially small businesses, have always been close to their community and have tried to be a good member of

the society as long as business and commerce has existed. Indeed, many business leaders know instinctively that behaving correctly – satisfying customers, motivating staff, considering their suppliers, being an upstanding member of the community and protecting the environment – has an impact on financial return.

Briefly, **what does CSR bring to the company?**

- It can strengthen the corporate culture.
- With respect to the staff, it can contribute to attracting and retaining talent. Increased work-force productivity.
- It can be the basis for the business strategy, as a differentiating factor, providing a competitive advantage in the market. Access to new markets.
- It can help to earn the trust of customers, staff, shareholders, and suppliers.
- Easier access to capital.
- Affords the business legitimacy and helps to build loyalty.
- Enhances corporate image and reputation.
- Improved risk control.
- Contributes to the local environment and development.

Incorporating CSR into the corporate culture is not only, therefore, beneficial to society but also to the companies who introduce it. It fulfills the “win-win” approach, in which everyone benefits. Companies gain a strong **competitive advantage** over their rivals, since their actions in this field are valued positively by consumers. This leads to an improved brand image, better positioning on the market, easier access to capital, more stable relationships with their stakeholders and the creation of value.

But, **can it be confirmed that CSR is profitable?**

CSR is a very broad concept that includes many aspects and which does not take the same form in all sectors and industries (Waddock and Graves 1997). For this reason, there is no consensus on the methods of measuring responsibility (or the profitability of CSR), and it is extremely difficult to make quantitative valuations. This is one of the most important factors in establishing a conclusive relationship between a company’s financial and social performance.

Despite this difficulty, most of the research undertaken in this regard concludes that a management policy based on CSR criteria does not lead to a diminished financial performance, and points to the existence of a positive link, or a neutral one in some cases, between a company's social and financial performance.

One such piece of research is the study carried out by Roman, Hayibor, and Agle (1999), who developed the work of Griffin and Mahon (1997) by delving deeper into the link between social and financial performance. They concluded that out of the 52 studies analyzed, 33 confirmed the existence of a positive link between social and financial performance, 14 studies showed it to be neutral, whereas just 5 observed a negative link between the two evaluation measurements. The work by Margolis and Walsh (2001), which analyzed 122 studies on the link between CSR and financial performance, reached similar conclusions.

In another notable study, Simpson and Kohers (2002) looked at the relationship between CSR and financial performance in an attempt to decide whether there is any causality between them. Using data from the banking sector, the authors confirmed that there is a positive link between CSR and financial performance, but they were not able to determine whether a CSR policy leads to better financial performance or vice versa.

Introducing CSR should not therefore be considered as a cost, but as an investment, which will yield returns over the medium and long term, in both tangible terms (with savings on electricity, water, production processes, etc.) and intangible ones (with the company gaining competitiveness, improvements to the organization, structure, staff motivation, productivity, etc.). To conclude, a company with a CSR policy will likely be more competitive, and a greater investment in CSR will lead to improved financial performance in the medium to long term.

Future Directions

The social and economic changes of recent decades have clearly contributed to the **development of CSR as a business strategy**:

- **Economic globalization:** The colossal size of the organizations and multinational firms that operate in nearly every country in the world means that any decision they take can have an impact on the economy of those nations. It must also be remembered that these organizations have part of their production process or their supply chain in developing countries due to the lower production costs in these countries. In these areas of the world, the laws governing environmental and social issues are not on a level with the legislation of developed nations, which can occasionally lead to human rights violations. This has resulted in considerable social awareness about how large multinational corporations operate in these parts of the world.
- **Advances in communications:** The Internet as a vehicle of communication has enabled millions of people to learn about what is going on in the world in real time. It is possible to read about what any business is doing, and the benefits and threats of the products sold online, and on occasions it has led boycotts of large multinationals prompted by their irresponsible behavior.
- **Business scandals:** The big financial scandals in both the United States and Europe have generated considerable distrust with the stakeholders in the companies losing all credibility. Whereas at the beginning of 2008, climate change was at the top of companies' CSR agendas as they enjoyed a period of prosperity, following the fall of Lehman Brothers (one of the largest investment banks in the United States) in September 2008, with the ensuing financial and economic crisis, a questioning of values and the loss of trust that persisted for many years thereafter, CSR became more necessary than ever. As Warren Buffet warned, "only when the tide goes out, do you discover who's been swimming naked." As a result, a plethora of rules and laws have been drafted with the purpose of increasing information transparency within organizations.

The issue of CSR is receiving increased attention as a result of the 2030 Agenda for Sustainable Development.

Sustainable Development Goals (SDGs) were adopted on September 25, 2015 by 193 countries as a follow-up to the Millennium Development Goals. The SDGs focus on ending poverty, protecting the planet and ensuring prosperity for all, as part of a new sustainable development agenda. A total of 17 goals and 169 targets have been set, to be achieved by 2030, and their accomplishment calls for a collective effort from government, corporate, and civil society organizations.

Cross-References

- [Business Case of CSR](#)
- [Business Ethics](#)
- [Corporate Social Performance](#)
- [CSR and Women](#)
- [Disruptive Sustainability](#)
- [Environmental Responsibility](#)
- [Finance and CSR](#)
- [Inclusive Leadership](#)
- [Integrated Value](#)
- [SAM Sustainability Indices](#)
- [Social Obligations \(CSR\)](#)
- [Socially Responsible Investment](#)
- [Sustainable Sports Stadiums](#)

References

- Albareda, L., & Balaguer, M. R. (2007). La responsabilidad social de la empresa y los resultados financieros. In *Responsabilidad Social Corporativa* (pp. 11–26). Barcelona: ACCID.
- Commission of the European Communities. (2001). Green paper: Promoting a European framework for corporate social responsibility. http://europa.eu/rapid/press-release_DOC-01-9_en.pdf. Accessed 22 Sept 2019.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone.
- Griffin, J., & Mahon, J. (1997). The corporate social performance and corporate financial performance debate. *Business & Society*, 36(1), 5–27.
- Margolis, J. D., & Walsh, J. P. (2001). *People and profits: The search for a link between a company's social and financial performance*. Mahwah: Lawrence Erlbaum Associates.
- Roman, R., Hayibor, S., & Agle, B. R. (1999). The relationship between social and financial performance. *Business & Society*, 38(1), 109–117.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131, 625–648. <https://doi.org/10.1007/s10551-014-2281-x>.
- Simpson, W. G., & Kohers, T. (2002). The link between corporate social and financial performance: Evidence from the banking industry. *Journal of Business Ethics*, 35(2), 97–109.
- UNIDO. (2019). What is CSR? <https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr>. Accessed 22 Sept 2019.
- Vives, A., & Peinado-Vara, E. (2011). *La responsabilidad social de la empresa en América Latina*. Washington, DC: Fondo Multilateral de Inversiones, Banco Interamericano de Desarrollo.
- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal*, 18(4), 303–319.

Corporate Social Responsibility (CSR)

- [Corporate Sustainability](#)
- [Environment, Social, and Governance \(ESG\)](#)
- [John Gerard Ruggie and the UN Guiding Principles on Business and Human Rights](#)
- [King III Report and CSR](#)
- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)
- [Social Marketing, Development Education, and Corporate Social Responsibility: The Common Grounds Sustainability](#)

Corporate Social Responsibility (CSR) Management

- [Sustainability Management and Market Risk](#)
- [Sustainability Management Process](#)

Corporate Social Responsibility (CSR) Report

► Sustainability Report and Sustainability Reporting

Corporate Social Responsibility and Institutional Theory

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Synonyms

Institutionalism; Institutionalized environment; Institutions; Socially responsible behavior

Definition

Corporate social responsibility (CSR) and institutional theory are linked. The fundamental basis of the link between CSR and institutional theory is through legitimacy.

One of the features of the CSR practices adoption in business is the voluntary nature. Several authors reflect this fact in the definition of what should be a social responsibility.

CSR was defined by the European Commission (2001: 6) as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.” This orientation was reinforced by the European Commission that refers to a better behavior by companies through the adoption of credible and transparent social practices, indicating the transparency like an essential component. In order to achieve responsible business management, the

European Commission presented a new CSR definition as “the responsibility of enterprises for their impacts on society” (European Commission 2011: 7). Other authors define CSR “as the duty of the companies to the development of its stakeholders and to the avoidance and correction of any negative consequences caused by business activities” (Muthuri and Gilbert 2011: 467). This definition incorporates the notion that corporate social responsibility has responsibilities to the society.

There are a variety of CSR’s definitions, and most definitions make explicit reference to sustainable development and integrate the three pillars of the Brundtland Report: “environmental, social, and economic well-being” (Lamarche and Bodet 2018: 155).

Institutional theory “addresses the deepest and most resilient aspects of social structure; considers the processes by which structures, including schemas, rules, norms and routines, are established as authoritarian guidelines for social behaviour; asks how these elements are created, diffused, adopted, and adapted throughout space and time; and how they fall into decline and disuse” (Scott 2004: 2).

This theory emphasizes society’s expectations and behavior appropriately, which acts as a “taken-for-granted belief system” (Suchman 1995: 577). In other words, institutional theory “focuses attention on the existence of a set of differentiated and specialized cognitive and normative systems-institutional logics-and patterned human activities that arise and tend to persist, in varying form and content, in all societies” (Scott 1987: 500).

According to Brammer et al. (2012: 8), “applying the lens of institutional theory to the study of CSR, allows for a better understanding of business responsibilities in two chief aspects: the *diversity* of CSR and the *dynamics* of CSR.”

- *The diversity of CSR* – assuming different forms in different countries.
- *Dynamics of CSR* – the concept and its applications have changed over time (Brammer et al. 2012).

Thus, there is significant variation among countries in the meaning and motivation of CSR activities, exemplifying the following:

- In European countries, social responsibility is understood as the integration of socially responsible practices into the very activities of business and wealth creation (Blasco and Zølner 2010).
- In the United States of America, a philanthropic model predominates, whereby wealth is first created and then channeled into social causes through foundations (Montuschi 2004).
- Countries like India is dominated by family-owned companies and attribute charity and philanthropic activities to CSR (Bhaduri and Selarka 2016).

In fact, institutional theory, with its varied and long tradition in social sciences (Scott 2001), has been a useful theoretical lens for understanding the effects of the institutional environment on CSR behaviors of firms (Campbell 2007). Thus, the “approach in the *comparative CSR literature* reflects the variability in the relevance of CSR practices according to country institutional characteristics” (Witt and Miska 2019: 5).

As argued by Gond and Moon (2011: 3), CSR has “emerged in very different national contexts, reflecting different corporate governance, institutional, economic, political, social and ethical contexts,” being that CSR does not work in an empty social context and CSR practices are more likely to be adopted and become effective as they are incorporated into specific sets of institutions (Jackson and Apostolakou 2010).

Indeed, “Rather than seeing CSR purely as a realm of voluntary action, institutional theory suggests seeking to place CSR explicitly within a wider field of economic governance characterized by different modes, including the market, state regulation and beyond” (Brammer et al. 2012: 7).

Introduction

Institutional theory is based on three essential pillars of institutions – regulatory, normative,

and cognitive – to illustrate how institutions can define the nature and the extent of socially responsible corporate behaviors (Scott 2001). Thus, those three elements have a different emphasis and lead to different implications.

- *Regulative* (legal) elements “include rules, sanctions and regulations which tend to codify socially accepted corporate behaviour” (Muthuri and Gilbert 2011: 469).
- *Normative* (social) elements are the values and social norms that define the “rules of the game” (Marquis et al. 2007: 934). Normative values are set by a variety of social actors including the media, institutional investors, NGOs, educational and professional associations, and social movement organizations.
- *Cognitive* (cultural) elements “include cultural values, ideology and identity – cognitive frameworks encompass common or shared beliefs about what constitutes responsible corporate behaviour” (Muthuri and Gilbert 2011: 469).

The three pillars that act as support for institutional theory take on an emphasis different to give scope to what they interpret as legitimate organizations.

According to Suchman (1995: 574), *legitimacy* “is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.”

A legitimacy threat occurs “when a company’s behaviour is perceived as not in accordance with society’s norms” (Farache and Perks 2010: 236).

Suchman (1995) identifies three major types of organizational legitimacy that depend on different dynamics:

- *Pragmatic*, based on public self-interest
- *Moral*, based on normative approval
- *Cognitive*, based on understanding, goes beyond evaluation and self-interest and involves an affirmative support or mere acceptance of the organization, based on some acquired data of cultural consideration

Legitimacy theory “posits that organisations continually seek to ensure that they operate within the.

bounds and norms of their respective societies” (Brown and Deegan 1998: 22). These norms change across time, requiring the organization to be responsive, there being a “social contract” between the organization and those affected by the organization’s operations, and it is expected that the organization will comply with the terms of this “contract” and those expressed or implied terms are not static (ibid.).

The academic literature on institutions and CSR reflects the variation in the conceptualizations of visible institutions in the social sciences (Witt and Miska 2019).

Broadly speaking, there are three major forms of institutionalism: *sociological*, *historical*, and *rational choice* institutionalism (Hall and Taylor 1996).

- *Sociological institutionalism* defines institutions as “regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life” (Scott 2014: 56). Central to this approach is the phenomenon of isomorphism – “refers to the adaptation of an institutional practice by an organization” (Dillard et al. 2004: 509). Sociological institutionalism is “the most commonly used type of institutionalism in the study of CSR as well as in the business and management literature in general” (Witt and Miska 2019: 2).
- *Historical institutionalism*, by contrast, is more common in political science and socioeconomics, but to some extent also in parts of economics. Institutions here are seen as “humanly devised constraints that structure human interaction” (North 1990). That is, institutions are seen as political projects.
- *Rational choice institutionalism* is most commonly found in economics and in political science. In this conceptualization, engaging in CSR is a matter of self-interest rather than a concern with legitimacy or the result of the rules of the game created through political processes (Witt and Miska 2019). The basic

assumption underlying rational choice institutionalism is that actors are opportunistic (Williamson 1985).

Some works have investigated how companies’ CSR initiatives, practices, and approaches affect and change institutional settings and environments. The question of why would corporations behave in socially responsible and in different national contexts has been studied by several authors (Campbell 2007; Matten and Moon 2008).

Campbell (2007) presents an institutional theory on CSR that comprises a series of propositions that specify the conditions in which companies are more or less prone to behave in a socially responsible way.

In this regard, Campbell (2007: 951) defines *socially responsible companies* as those that “not knowingly do anything that could harm their stakeholders,” and “if corporations do cause harm to their stakeholders, they must then rectify it whenever the harm is discovered.” This author states that such behavior “may mean different things, in different places, to different people and at different times” (Campbell 2007: 950).

The theoretical framework developed by Campbell (2007) suggests that the relationship between the organization’s financial condition and its socially responsible behavior – associated with the substantive aspects of CSR – is mediated by institutional factors such as public and private regulation, the presence of NGOs and other independent organizations that monitor behavior, associative behavior among corporations themselves, and organized dialogues among corporations and their stakeholders.

The adoption of socially responsible behavior by a company depends on the country in which it operates. Companies tend to act with social responsibility as long as the normative institutions or cultures in a place create an adequate set of incentives to adopt the socially responsible behavior.

The way organizations relate to stakeholders depends on the set of institutions that surround them (Campbell 2007). This set of economic and political institutions affect and legitimize

organizational behavior through forces and pressures that act at the level of the external environment – at the macroeconomic/political level and at the organizational level – where organizations interact (DiMaggio and Powell 1983; Dillard et al. 2004; Campbell 2007).

The institutional environments take into account institutions (culture, regulation, and social norms) which influence and which are influenced by actors' interactions in a governance system (Muthuri and Gilbert 2011).

Institutions are social constructs defined as the set of cognitive, normative, and regulatory structures – understood as valid, appropriate, legitimate, and socially accepted – existing in the social environment where organizations operate (Meyer and Rowan 1977).

Some authors argue that the development of socially responsible behaviors through involvement in social projects (Margolis et al. 2007) improves the relationship with the main stakeholder groups (Freeman 1984).

Previous empirical studies have found that firms with better relationships with workers in countries with more competition, more robust legal enforcement mechanisms, better self-regulation of the sector, higher quality of management schools, and better macroeconomic environments act in a more socially responsible way (Chih et al. 2010).

According to Scott (1995), all organizations are socially constructed and therefore subject to institutional processes that shape the way they should assume and how they should behave and legitimize.

On the other hand, institutionalization “is the process whereby the practices expected in various social settings are developed and learned” (Dillard et al. 2004: 508).

According to Martinez and Dacin (1999), institutional theory focuses on the interaction between organizations and their institutional environment, on the effects of social pressures on organizations, and on the incorporation of these social expectations into organizational practices, procedures, and characteristics. Consequently, through an institutionalization process, organizations adopt positions, policies,

programs, and procedures and incorporate, internalize, and adopt values, norms, and organizational structures considered appropriate, rational, and socially valid, in order to legitimize their organization in the environment where it operates (Meyer and Rowan 1977).

Institutions have power and pressure organizations to seek the stability and conformity of their social behavior through processes of institutional isomorphism – coercive, normative, and mimetic (DiMaggio and Powell 1983). However, for Oliver (1991), organizations are not passive entities and respond strategically to the demands of the institutional environment, taking into account their personal interests.

Campbell (2007) admits that the various institutional pressures may be downward, but also admits behaviors of organizational resistance and proactivity to change the institutional status quo as a function of personal agendas (Oliver 1991; Dillard et al. 2004).

Several authors (Maxwell et al. 2000) identified positive contributions in the adoption of socially responsible behaviors in companies such as the following: avoid negative reactions from interest groups; reduce risks in regulatory threats; offer guarantees in financial institutions and insurance companies; reduce sanctions; and avoid legal demands. In other words, “non-conformity is usually punished, be it through the legal system or through social mechanisms such as boycotts; punishment is costly for firms, which implies that firms have an incentive to conform, or at least not to be seen as exceptionally deviant” (Witt and Miska 2019: 8).

However, “if today's CSR is associated with sustainability, its origins lie in defensive measures intended to respond to the societal criticism expressed by various social groups in face of the companies' economic and social “irresponsibilities” (Lamarche and Bodet 2018: 157). In fact, CSR legitimizes the activities of the company in the eyes of society and creates value for companies and for society and can also represent the image of excellence in both the internal and external environment (Gholami 2011).

In summary, institutions have been neglected in the current literature on CSR, which has

focused more on CSR outcomes than on its determinants (Jackson and Apostolakou 2010). Academic literature of institutional theory understands that the phenomena related to CSR are a fairly recent development (Brammer et al. 2012).

According to Brammer et al. (2012: 21), “the fact that CSR is ‘voluntary’ is less a defining feature of business–society relations and more a reflection of the institutional context of its initial inception.”

CSR does not work in an empty social context; CSR practices are “more likely to be adopted and become effective as they are incorporated into specific sets of institutions” (Jackson and Apostolakou 2010: 387). Hence, the institutional theory offers an extraordinary lens to understand and explain how and why CSR takes different forms in different countries (Brammer et al. 2012).

Summary

It is important to understand if there exists an institutionalized environment in the development of socially responsible practices and also to what extent the search for legitimacy is configured as the main motivation when it comes to adopting socially responsible practices.

CSR literature could focus on the level of explicit CSR – that is, the voluntary behavior of firms that goes beyond legal and societal expectations and produces social benefits.

New studies should explore the institutional perspective of voluntary forms of CSR, exploring the coevolution of CSR with institutional norms.

References

- Bhaduri, S. N., & Selarka, E. (2016). Corporate social responsibility – Guidelines and best practices. In *Corporate governance and corporate social responsibility of Indian companies* (pp. 33–42). Singapore: Springer.
- Blasco, M., & Zølner, M. (2010). Corporate social responsibility in Mexico and France exploring the role of normative institutions. *Business & Society*, 49(2), 216–251.
- Brammer, S., Jackson, G., & Matten, D. (2012). Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-Economic Review*, 10(1), 3–28.
- Brown, N., & Deegan, C. (1998). The public disclosure of environmental performance information – A dual test of media agenda-setting theory and legitimacy theory. *Accounting and Business Research*, 29(1), 21–41.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Chih, H. L., Chih, H. H., & Chen, T. Y. (2010). On the determinants of corporate social responsibility: International evidence on the financial industry. *Journal of Business Ethics*, 93(1), 115–135.
- Dillard, J. F., Rigsby, J. T., & Goodman, C. (2004). The making and remaking of organization context: Duality and the institutionalization process. *Accounting, Auditing & Accountability Journal*, 17(4), 506–542.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147–160.
- European Commission. (2011). Communication from the Commission to the European parliament, the council, the European economic and social committee and the committee of the regions – A renewed strategy 2011–14 for corporate social responsibility. pp. 3–15. Available: http://ec.europa.eu/enterprise/newsroom/cf/getdocument.cfm?doc_id=7010
- European Commission. Directorate-General for Employment. (2001). *Promoting a European framework for corporate social responsibility: Green paper*. Office for Official Publications of the European Communities. (accessible at: https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9)
- Farache, F., & Perks, K. J. (2010). CSR advertisements: A legitimacy tool? *Corporate Communications: An International Journal*, 15(3), 235–248.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach* (2nd ed.). New York: Cambridge University Press 2010. (First published under the Pitman Publishing imprint in 1984).
- Gholami, S. (2011). Value creation model through corporate social responsibility (CSR). *International Journal of Business and Management*, 6(9), 148.
- Gond, J. P., & Moon, J. (2011). Corporate social responsibility in retrospect and prospect: Exploring the life-cycle of an essentially contested concept. *ICCSR Research Paper Series*, 59, 1–40.
- Hall, P. A., & Taylor, R. C. R. (1996). Political science and the three new institutionalism. *Political Studies*, 44(5), 936–957.
- Jackson, G., & Apostolakou, A. (2010). Corporate social responsibility in Western Europe: An institutional mirror or substitute? *Journal of Business Ethics*, 94(3), 371–394.
- Lamarche, T., & Bodet, C. (2018). Does CSR contribute to sustainable development? What a régulation approach can tell us. *Review of Radical Political Economics*, 50(1), 154–172.

- Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2007). Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. *Ann Arbor, 1001*, 48109–41234.
- Marquis, C., Glynn, M. A., & Davis, G. F. (2007). Community isomorphism and corporate social action. *Academy of Management Review, 32*(3), 925–940.
- Martinez, R. J., & Dacin, M. T. (1999). Efficiency motives and normative forces: Combining transactions costs and institutional logic. *Journal of Management, 25*(1), 75–96.
- Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A conceptual framework for a comparative understanding of CSR. *Academy of Management Review, 33*(2), 404–424.
- Maxwell, J. W., Lyon, T. P., & Hackett, S. C. (2000). Self-regulation and social welfare: The political economy of corporate environmentalism. *Journal of Law and Economics, 43*(2), 583–618.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*, 340–363.
- Montuschi, L. (2004, September). La responsabilidad social de las empresas: la brecha entre los principios y las acciones. In *Anales*.
- Muthuri, J. N., & Gilbert, V. (2011). An institutional analysis of corporate social responsibility in Kenya. *Journal of Business Ethics, 98*(3), 467–483.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review, 16*(1), 145–179.
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly, 32*, 493–511.
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks: Sage Publications.
- Scott, W. R. (2001). *Institutions and organizations* (2nd ed.). Thousand Oaks: Sage Publications.
- Scott, W. R. (2004). Institutional theory. *Encyclopedia of Social Theory, 11*, 408–414.
- Scott, W. R. (2014). *Institutions and organizations: Ideas, interests, and identities* (4th ed.). Thousand Oaks: SAGE.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571–610.
- Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York: The Free Press.
- Witt, M. A., & Miska, C. (2019). Institutions and Corporate Social Responsibility. In Abigail McWilliams, Deborah Rupp, Donald Siegel, Günter K. Stahl, & David Waldman (Eds.), *The Oxford handbook of corporate social responsibility: psychological and organizational perspectives*, pp. 605–619. Oxford, UK: Oxford University Press.

Corporate Social Responsibility Disclosure

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Synonyms

CSR advertisements; CSR communications; Social responsibility disclosure

Definition

Corporate social disclosure is defined by Gray et al. (1987, p. ix) as:

... the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large.

In other words, “social and environmental disclosure can typically be thought of as comprising information relating to a corporation’s activities, aspirations and public image with regard to environmental, community, employee and consumer issues” (Gray et al. 2001: 329) and can include also, among other things, disclosures of information about the interaction of an organisation with its physical and social environment, energy, and product safety (Mathews 1993).

Companies face growing expectations from stakeholders engaging in social responsibility, and, consequently, they are expected to communicate corporate social responsibility (CSR) efforts (Beckmann et al. 2006).

The term *CSR advertisement* is not widely used and by definition means disclosing a “social instance” (Farache and Perks 2010: 235) and “represents an approved, formalised and official perspective on CSR within the corporation” (ibid), providing information about “a company’s commitment to environmental concerns, community

relations or the future of mankind, without any overt attempt to promote a specific product” (Schroder 1997: 277). On the other hand, CSR communication remains an “emerging field in academia, with research focusing on corporate social disclosure mainly through websites and corporate reports” (Farache and Perks 2010: 235).

The academic literature reveals different theoretical approaches to explaining the motivation and extent of corporate social disclosure. However, legitimacy theory and stakeholder theory become the dominant conceptual approaches in the literature on disclosure, being that legitimacy theory is widely used to explain social and environmental disclosure by corporations, focusing mainly on corporate social and environmental reports.

The literature examines numerous factors that can influence the social disclosure of companies, among others, the dimension, profitability, the indebtedness, the age of the company, the cultural and institutional context of the country, differences in governance systems, the type of industry, media visibility and social performance, the ownership structure, and the multiple quotation on the stock exchange. These factors are considered significant determinants to explain CSR disclosure level.

In addition to these factors, the nature and extent of corporate social disclosure seem to vary across countries (Gray et al. 1996). However, the difference in the level of disclosure of non-financial aspects may be the result of government policies, such as in European countries, in Sweden, France, Norway, the Netherlands, and Denmark, where environmental legislation has been introduced with a view to environmental disclosure in companies (Douglas et al. 2004).

In this sense, Douglas et al. (2004) argue that firms domiciled in a more developed country are likely to disclose more voluntary information than companies operating in less developed countries. Adams (1999) explains the differences between countries, highlighting the importance of environmental and ethical impacts on industry and political issues that have an impact on ethical behavior. Thus, there is a link between the political and economic context and the nature of social disclosure (Arnold and Hammond 1994; Hogner 1982),

or cultural context and disclosure (Adams and Kuasirikun 2000).

According to Fukukawa and Moon (2004: 48), there is a reason to expect companies’ communication about CSR to be directly aligned with their practice in light of issues about ethics, reporting, transparency, and accountability being “part and parcel of CSR.”

CSR disclosure (CSR D) is especially “important in reinforcing the effects of CSR on corporate reputation” (Branco and Rodrigues 2008a: 687) and “can be a sign of improvement in environmental and social behavior and, therefore, of reputation in these domains, because disclosure influences external perception of reputation” (ibid.). In adverse economic periods, companies need to disclose CSR information and convince their stakeholders that their activities are in line with their social values, and as investors are more concerned about corporate performance, social disclosure can be used to minimize such concerns (Mia and Al Mamun 2011).

Therefore, the purpose of social reporting is to protect the reputation of the company, as they use corporate social disclosure as a communication tool, with the main objective of influencing the image and reputation of companies to stakeholders (Hooghiemstra 2000).

Thus, academic studies suggest that reputation issues are an important factor in explaining the CSR D motivation since CSR reports are seen as a marketing tool (Thomson and Jain 2010). To that extent, CSR reports have become one of the main communication tools through which companies promote their stakeholders’ sustainability and socially responsible operations (Golob and Bartlett 2007). Although it does indicate that some companies use CSR disclosures as a tool to improve their corporate image during times of low confidence of the entrepreneurs, CSR disclosures are also used to generate trust among its stakeholders because they are essential for the company success.

Introduction

The communications process is “one of the key points in the dissemination of a CSR culture in the companies” (Lamarche and Bodet 2018: 157).

According to this authors, two explanations are invoked: “1) CSR remains a communications approach and therefore does not limit the companies’ financial performances; and 2) CSR permits an increase in the value of its intangible assets by strengthening its property rights or producing concrete proofs in response to ecological criticism” (Lamarche and Bodet 2018: 167).

According to the Communication from the European Commission, “disclosure of social and environmental information, including climate-related information, can facilitate engagement with stakeholders and the identification of material sustainability risks; is also an important element of accountability and can contribute to building public trust in enterprises” (European Commission 2011: 11).

There are different theoretical approaches to explain the motivation and extent of corporate social communication (Piatti 2014). In fact, several studies present the motivations underlying social disclosure: the agency theory (Jensen and Meckling 1976), stakeholder theory (Tilt 1994), theory of legitimacy (Guthrie and Parker 1990), institutional theory (Campbell 2007), theory of significance (Ross 1977), theory of property costs (Dye 1985), theory of contingency (Doupnik and Salter 1995), and economic policy theory (Guthrie and Parker 1990). However, legitimacy theory dominates the explanations of socio-environmental disclosures by focusing on the process of legitimization and the role of social disclosure in legitimacy strategies (Lindblom 1993). Thus, the study of voluntary social disclosures made by companies is based on legitimacy theory (Tilling and Tilt 2010).

According to Suchman (1995: 574), *legitimacy* “is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.” That is, legitimacy theory “posits that organisations continually seek to ensure that they operate within the bounds and norms of their respective societies” (Brown and Deegan 1998: 22).

The literature examines numerous factors that may influence corporate social disclosure being considered significant factors to explain the level of CSR disclosure, including size (Hackston and Milne 1996), profitability (Bowman 1978), the

indebtedness (Salamon and Dhaliwal 1980), the age of the company (Roberts 1992), the existence of a social responsibility body within the company (Cowen et al. 1987), the cultural and institutional context of the country (Gray et al. 1987), differences in governance systems (Aguilera and Cuervo-Cazurra 2004), the type of industry (Sweeney and Coughlan 2008), media visibility and social performance (Brammer and Pavelin 2004), the ownership structure, and the multiple listing on the stock exchange (Kiliç 2016).

Brammer and Pavelin (2004) observed a highly significant positive correlation between voluntary disclosure and corporate social performance. Adams (2002) examined some of the internal organizational factors that can influence media and ethics. The study revealed that the country of origin, the size of the companies, and the corporate culture were factors that influenced the decision-making process, regarding the publication of social disclosure. In fact, it is generally accepted that large companies advertise more than smaller firms (Patten 1991).

In fact, larger companies tend to be more visible to the relevant public (Brammer and Pavelin 2008), because “as the company becomes bigger, the number of stakeholders involved will also increase and with this increase, the burden of disclosure becomes heavier for the company since it has to cater to the needs of a bigger group of people” (Amran et al. 2008: 45).

According to Lopes and Rodrigues (2007), since disclosure is a complex function of several factors, economic issues cannot be studied in isolation from the institutional, political, and social framework from which the economic activity of any entity operates.

Academic studies suggest that reputation issues are an important factor in explaining the CSR motivation since CSR reports are seen as a marketing tool (Thomson and Jain 2010). In this sense, some authors argue that the purpose of social reporting is to protect the company’s reputation as it uses corporate social disclosure as a communication tool, with the main objective of influencing corporate image and reputation vis-à-vis stakeholders (Hooghiemstra 2000). Thus, the report allows formal compliance by the company with its various stakeholders and its conformity with

the production and distribution of charges and values (Gray et al. 1996), since CSR reports are viewed as a marketing tool to stakeholders, which are fundamental to “business success and survival” (Mia and Al Mamun 2011: 176).

In fact, “the major perception of CSR is that it can be an excellent tool for enhancing the legitimacy of the firm among its stakeholders and the development of a positive corporate image” (Morimoto et al. 2005: 318).

Mia and Al Mamun (2011) stated that companies need to disseminate information to legitimize their activities and meet the demands of various stakeholders, regardless of economic circumstances. The level of legitimacy is likely to vary between companies given that companies that are more visible to their stakeholders require a greater level of legitimacy (Branco and Rodrigues 2008a).

When a company’s legitimacy is claimed, threatened, or damaged, strategies must be developed to repair legitimacy (Suchman 1995).

According to Bebbington et al. (2008), legitimacy theory proposes that there are four ways in which an organization can obtain, repair, or maintain legitimacy if the “social contract” between itself and society is damaged. In this regard, Lindblom (1993) describes different strategies:

- i. To correct the behavior of their organization realigning it with the desires of society.
- ii. To change the perception that society has of their behavior, but not the behavior itself.
- iii. To transform the perception that society has of their behavior, manipulating it, deceiving it, or simply distracting its attention.
- iv. To indoctrinate society with the aim of modifying its expectations and accommodate them to the organization’s ends (Lindblom 1993: 13–17).

In summary, a company’s performance is legitimate when it is evaluated that it is fair and deserving of support, that is, when it is socially acceptable. Legitimacy, therefore, requires that reputation is maintained. In this perspective, in adverse economic periods, companies need to disclose information

and convince their stakeholders that their activities are congruent with their social values (Mia and Al Mamun 2011) because the disclosure of social and environmental information can be seen as an instrument to legitimize the company’s activity (Branco et al. 2008).

The studies on the explanatory factors of the motivations to disseminate information about CSR focus essentially on the study of how organizational internal factors influence CSR reporting policies, such as size, profitability, indebtedness, the sector of activity, the country of origin, the attitude of the executive directors, the age of the company, and the existence of social responsibility commissions (Douglas et al. 2004).

Literature shows a series of studies that have been carried out to examine the level of social disclosure and its categories in the annual reports and respective corporate websites in different countries, having concluded that the most important categories are *resources humans*, *involvement community*, *environment*, and *product* (El-Bannany 2007). In this sense, McMurtrie (2005) also argues that the issues that society considers important involve five major themes, and the ones most used in most corporate social disclosure surveys are *environment*, *energy*, *human resources management*, related issues with *products*, and interaction with the *community*.

The environmental and social information disclosure about which company activities may impact is typically voluntary (Gray et al. 2001). These authors distinguish between *voluntary disclosure* and *mandatory disclosure*: *mandatory disclosure*, “meaning that required by law or code of practice” (Gray et al. 2001: 332), and *voluntary disclosure* “refers to both disclosure in non-mandatory areas (e.g., in the UK, environmental or equal opportunity disclosures) and disclosure which, whilst relating to a mandated area (e.g., in the UK, numbers of employees) goes beyond the minimum disclosure required by rules” (Gray et al. 2001: 351).

The issue of CSR disclosure being voluntary versus mandatory has long been debated (Jain et al. 2015). Those who advocate voluntary disclosure point to “the increase in CSR reporting in the past decade, arguing that for a variety of

reason, firms have an incentive to disclose social and environmental behaviours without compulsion; the counter-argument questions the quality of such disclosures” (Jain et al. 2015: 3).

As to the motivations for voluntary social disclosure, Brammer and Pavelin (2004) advocate that it reduces information asymmetries between companies and external stakeholders, especially community investment, in relation to corporate policies and performance. However, social disclosure “may be only the formal fulfilment of certain requirements, and it may be used as a mere marketing strategy, which negates its deeper meaning” (Piatti 2014: 11) since not being mandatory, each company discloses the information that is most convenient to them.

The literature on CSR has concluded both on the gradual increase in the number of companies that adopt CSR practices and on the gradual increase of the information provided on CSR (Aşıcı and Bünül 2012, Gray et al. 2001, Hassan and Ibrahim 2012, KPMG 2013a, 2015, 2017). However, there are important differences in the relevance and quality of the published information (Prado-Lorenzo and Garcia-Sanchez 2010). As stated by the KPMG Survey of Corporate Responsibility Reporting 2017, “Governments, regulators and stock exchanges continue to play a key role in driving up CR reporting rates around the world” (KPMG 2017: 15).

In fact, according to KPMG (2017), in the three countries which have experienced the greatest increases in reporting since 2015 – Mexico, New Zealand, and Taiwan – a mix of new regulation, stock exchange requirements, and investor pressure have been instrumental increasing reporting. This study (KPMG 2017) shows that CSR reporting has also increased in the United Arab Emirates (UAE) since 2015.

Another important explanation for the strong growth in CR reporting in non-financial disclosure across a number of European Union (EU) countries could be the fact that it is possible that awareness of the EU Non-financial Reporting Directive has helped to boost reporting rates in some EU countries. The Directive is a key step toward increasing the importance of CR reporting, particularly in those

Member States where no such requirements previously existed.

In fact, under the Directive, companies that do not disclose their social, environmental, and Board diversity policies can be named publicly. So, this risk of reputational damage may already have convinced some non-reporters to start reporting with more expected to follow suit (KPMG 2017).

The EU Non-financial Reporting Directive – which requires large companies in the EU to disclose social, environmental, and diversity information – is the most significant legislative initiative across the EU to promote corporate responsibility reporting. But the real impact of the Directive will begin to be evident in 2019 or 2020 after these delays in transposition and in a transitional period as companies become more familiar with legislation and introduce new internal communication systems or adapt existing ones (KPMG 2017).

However, “many businesses in Eastern Europe are still focused on the financial bottom line rather than the triple bottom line – it’s fair to say that a culture of sustainability is yet to properly take hold across the region” (KPMG 2017: 15).

The proliferation of regulations requiring mandatory CSR disclosure is relatively recent. Table 1 shows a listing of the regulations issued by various countries in this regard.

As we can observe, there is a continued and growing interest in regulation, including corporate governance and disclosure requirements. But as stated by Olivier – Chief Executive, Accountancy Europe – (KPMG 2017: 12) “reporting is only an instrument; the benefits will come once CR objectives and practices are fully embedded in the business, which reporting can demonstrate but cannot achieve on its own.”

Summary

From the historical point of view, the new regulation has come out of crises or emerging issues. The future of CSR reporting will tend to evolve to fit new issues and drive the quality of implementation of existing issues.

Corporate Social Responsibility Disclosure, Table 1 CSR regulation by country

Countries	Mandatory requirements		Scope
Canada			
	1999	The Greenhouse Gas Emission Reporting Programme	Environmental
	1999	The National Pollutant Release Inventory (NPRI)	Environmental
	2002	Public Accountability Statements	Social
	2004	The TSX Timely Disclosure Policy	General sustainability/ethical social governance ESG/non-financial
	2010	Environmental Reporting Guidance	Environmental
	2014	The Extractive Sector Transparency Measures Act	Social governance
	2015	Disclosure on Corporate Governance/Gender Equality	Social governance
United Kingdom			
	2013	Quoted companies GHG reporting	Environmental
	2006	The Companies Act	General sustainability/ESG/non-financial
	2008	Climate Change Act (GHG reporting)	Environmental
	2012	UK Corporate Governance Code, 2012 (formerly the Combined Code)	Corporate governance
	2008	The Climate Change Act	Environmental
	2010	The Carbon Reduction Commitment (CRC)	Environmental
	2004	Pensions Act (1995) Amendments	Governance
	2015	Modern Slavery Act	Social
	2014	UK Corporate Governance Code (formerly Combined Code)	Governance
	2015	The Well-being of Future Generations (Wales) Act	General sustainability/ESG/non-financial
	2014	Reports on Payments to Governments Regulations	Social governance
France			
	2010	Art 224, Grenelle Act II, 2010	General sustainability/ESG/non-financial
	2010	Art 225 Grenelle Act II, 2010	General sustainability/ESG/non-financial
	2013	Law no 2013–619 (16 July 2013) – Article 8 on energy audits and energy management systems	Environmental
	2010	Code de l’Environnement, Livre II, Titre II, Article L229–25	Environmental
	2001	Law No. 2001–420 New Economic Regulations Act	Environmental
	2001	Law No 2001–397, 2001	Social
	1977	Law of 7 July 1977, Code du Travail, Article L2323–71	Social
	2010	Corporate Governance Code of Listed Corporations	Corporate governance
	2016	Law no 2016–138 (11 February 2016) against food waste – Article 4	Environmental
	2015	French Energy Transition Law – Articles 70 and 173	Environmental
Italy			
	2007	Legislative decree no. 32/2007, 2007	Environmental social
	2008	Ministerial Decree of 24 January 2008, 2008	Social
	2009	Legislative Decree no. 150/2009, 2009	General sustainability/ESG/non-financial
	2015	Law no 208 (B-Corps), 2015	General sustainability/ESG/non-financial

(continued)

Corporate Social Responsibility Disclosure, Table 1 (continued)

Countries	Mandatory requirements		Scope
Spain			
	2002	Royal Decree 1/2002	General sustainability/ESG/non-financial
	2002	ICAC Resolution of 25 March 2002	Environmental
	2007	National Accounting Plan, 2007	General sustainability/ESG/non-financial
	2010	CSR law of Extremadura, 2010	General sustainability/ESG/non-financial
	2013	Ministerial Order on Corporate Governance, 2013	Social governance
	2015	Decreto de 23 de Septiembre on public procurement, 2015	Environmental social
	2011	Spanish Sustainable Economy Law, 2011	CSR and corporate governance
Portugal			
	1985	Social Balance	Social
	2006	Law 19/2006 on access to environmental information	Social
	2006	Public Transport and Communications Enterprises Sustainability Report, 2006	General sustainability/ESG/non-financial
	2009	Social Balance Law 7/2009, 2009	Social
	2010	The Financial Reporting Accounting Standard no 26, 2010	Environmental
	2010	Corporate Governance Regulations, 2010	Governance
United States of America			
	1970	Clean Air Act (CAA), 1970	Environmental
	1971	SEC Regulation S-K, 17 C.F.R. § 229.101	Environmental
	1972	Clean Water Act (CWA), 1972	Environmental
	1972	Section 709(c), Title VII, Civil Rights Act of 1967, as amended by the Equal Employment Opportunity Act of 1972	Social governance
	1988	The Toxic Release Inventory (TRI), 1988	Environmental
	2002	The Sarbanes-Oxley Act, 2002	Governance
	2009	Presidential Executive Order 13514, 2009	Environmental
	2009	40 CFR Parts 86, 87, 89 et al. Mandatory Reporting of GHG Emissions, 2009	Environmental
	2010	California Transparency in Supply Chains Act, 2010	Social
	2010	US Environmental Protection Agency Proposed (effects since 2012)	Environmental
	2010	Regulation S-K, 2010	Environmental
	2010	Dodd-Frank Act, 2010	Social governance
	2010	SEC Guidance Regarding Disclosure Related to Climate Change, 2010	Environmental
	2011	Chemical Data Reporting (CDR) Rule issued under Toxic Substances Control Act (TSCA), 2011	Environmental
	2015	Clean Power Plan, 2015	Environmental
2014	NYSE Section 303A Corporate Governance Rules, 2014	Governance	
Denmark			
	2014	Recommendations on Corporate Governance, 2014	Governance
	2008 2015	Financial Statements Act 2008–2012 (from 2005, including 2008, 2013, and 2015 amendments)	General sustainability/ESG/non-financial
	2001	The Danish Financial Statements Act, 2001	Environmental

(continued)

Corporate Social Responsibility Disclosure, Table 1 (continued)

Countries	Mandatory requirements		Scope
United Arab Emirates			
	2010	Etidama Pearl Building Rating System (PBRs), 2010	Environmental
	2015	Federal Law No. (2) Concerning Commercial Companies (CCL), 2015	Environmental
	1999	Federal Law No. (23) for Protection of the Marine Environment, 1999	Environmental
South Africa			
	2008	Companies Act, 2008	Governance
	2002	Mineral and Petroleum Resources Development Act, 2002	Social
	1998	Employment Equity Act, 1998	Social
	2003	National Black Economic Empowerment Act, 2003	Social
	2010	Johannesburg Stock Exchange (JSE) Listing Requirement, 2010	General sustainability/ESG/non-financial
	2011	Pension Funds Act Regulation 28, 2011	Governance
Mexico			
	1988	Official Mexican Standard NOM-002-SEMARNAT-1998 on Wastewater Quality, 1998	Environmental
	2012	Federal Law on Anti-corruption Practices in Public Contracts, 2012	Environmental
	2014	National Emissions Register (RENE), 2014	Environmental
Malaysia			
	1955	Employment Act, 1955	Social
	1964	Factories and Machinery Act, 1964	Social
	1974	Environmental Quality Act, 1974	environmental
	1994	Occupational Safety and Health Act, 1994	Social Governance
	2006	Silver Book: Achieving Value Through Social Responsibility, 2006	General sustainability/ESG/non-financial
	2007	CSR Framework for voluntary reporting – Listing Requirements, 2007	General sustainability/ESG/non-financial
	2010	CSR Framework for voluntary reporting – Listing Requirements, 2007	Environmental Social Governance
	2015	Bursa Malaysia Amendments to Listing Requirements for Sustainability Statement in annual reporting, 2015	General sustainability/ESG/non-financial
	2012	Malaysian Code on Corporate Governance, 2012	Governance
Japan			
	1970	Waste Management and Public Cleansing Law, 1970	Environmental
	1998	Law concerning the Rational Use of Energy (1979) and Act on Promotion of Global Warming Countermeasures	Environmental
	2005	Mandatory GHG Accounting System, 2005	Environmental
	2001	The Pollutant Release and Transfer Register Law (PRTR), 2001	Environmental
	2002	End-of-Life Vehicles (ELV) Recycling Law, 2002	Environmental
	2005	Law Concerning the Promotion of Business Activities with Environmental Consideration, 2005	Environmental
	2006	Civil Aeronautics Act, 2006	Social
	2006	Railway Enterprise Act, 2006	Social
	2002	End-of-Life Vehicle (ELV) Recycling Law, 2002	Environmental
	2005	Law Concerning the Promotion of Business Activities with Environmental Consideration, 2005	Environmental

(continued)

Corporate Social Responsibility Disclosure, Table 1 (continued)

Countries	Mandatory requirements		Scope
	2014	Revised Cabinet Office Ordinance on the Disclosure of Corporate Affairs, 2014	Governance
India			
	2010	The National Green Tribunal Act 2010	Environmental
	2015	The Securities and Exchange Board of India (SEBI), Business Responsibility Reports, 2015	General sustainability/ESG/non-financial
	2013	Department of Public Enterprises (DPE) Guidelines on Corporate Social Responsibility and Sustainability for Central Public Sector Enterprises, 2013	General sustainability/ESG/non-financial
	1986	Environment (Protection) Act, 1986	Environmental
	2003	Corporate Responsibility for Environmental Protection (CREP), 2003	Environmental
	2015	The Companies Act (Section 135, Guidelines on Corporate Social Responsibility and Sustainability for Central Public Sector Enterprises), 2013. The Companies (Amendment) Act, 2015	Social environmental
	2003	SEBI Committee on Corporate Governance, quarterly compliance report, 2003.	General sustainability/ESG/non-financial
European Union			
	2011	Renewed EU 2011–14 Strategy for Corporate Social Responsibility, 2011	Social and environmental
	2014	European Union – Non-financial Reporting Directive 2014/95/EU	Social, environmental, and diversity information

Source: KPMG (2013b, 2017).

Increasingly specific requirements will be necessary to facilitate implementation of economic instruments such as trading schemes or carbon taxes, compelling companies to disclose more reliable and accurate information. For example, for requirements for more sophisticated disclosure related to tax evasion, a country-by-country breakdown of tax payments will be fundamental.

Regarding emerging markets, there is particular interest in socioeconomic impact, which will drive further disclosure regulation around impact assessment and valuation. Investors understand the business logic that underlines the concept of treating environmental, social, and governance issues as material. But many companies fail to report business logic, true value creation, and materiality effectively. Some leading stock exchanges, notably from emerging markets, are starting to mandate disclosure that requires not only reporting numbers but also a better description of the business logic and sustainability behind the numbers.

Cross-References

- [Social License to Operate](#)
- [United Nations Human Rights Committee](#)

References

- Adams, C. A. (1999). *The nature and processes of corporate reporting on ethical issues* (pp. 1–64). London: Cima.
- Adams, C. A. (2002). Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorising. *Accounting, Auditing & Accountability Journal*, 15(2), 223–250.
- Adams, C. A., & Kuasirikun, N. (2000). A comparative analysis of corporate reporting on ethical issues by the UK and German chemical and pharmaceutical companies. *European Accounting Review*, 9(1), 53–79.
- Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: What is the trigger? *Organization Studies*, 25(3), 415–443.
- Amran, A., Manaf Rosli Bin, A., & Che Haat Mohd Hassan, B. (2008). Risk reporting: An exploratory study on risk management disclosure in Malaysian

- annual reports. *Managerial Auditing Journal*, 24(1), 39–57.
- Arnold, P., & Hammond, T. (1994). The role of accounting in ideological conflict: Lessons from the South African divestment movement. *Accounting, Organizations and Society*, 19(2), 111–126.
- Aşıcı, A. A., & Bünül, Z. (2012). Green new deal: A greenway out of the crisis? *Environmental Policy and Governance*, 22(5), 295–306.
- Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, 21(3), 337–361.
- Beckmann, S., Morsing, M., & Reisch, L. (2006). Strategic CSR communication: An emerging field. In M. Morsing & S. Beckmann (Eds.), *Strategic CSR communication* (pp. 11–32). Copenhagen: DJOF.
- Bowman, E. H. (1978). Strategy, annual reports, and alchemy. *California Management Review*, 20(3), 64–71.
- Brammer, S., & Pavelin, S. (2004). Voluntary social disclosures by large UK companies. *Business Ethics: A European Review*, 13(2–3), 86–99.
- Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment*, 17(2), 120–136.
- Branco, M. C., & Rodrigues, L. L. (2008a). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics*, 83(4), 685–701.
- Branco, M. C., & Rodrigues, L. L. (2008b). Social responsibility disclosure: A study of proxies for the public visibility of Portuguese banks. *The British Accounting Review*, 40(2), 161–181.
- Branco, M. C., Eugénio, T., & Ribeiro, J. (2008). Environmental disclosure in response to the public perception of environmental threats: The case of co-incineration in Portugal. *Journal of Communication Management*, 12(2), 136–151.
- Brown, N., & Deegan, C. (1998). The public disclosure of environmental performance information – a dual test of media agenda-setting theory and legitimacy theory. *Accounting and Business Research*, 29(1), 21–41.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Cowen, S. S., Ferreri, L. B., & Parker, L. D. (1987). The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis. *Accounting, Organizations and Society*, 12(2), 111–122.
- Douglas, A., Doris, J., & Johnson, B. (2004). Corporate social reporting in Irish financial institutions. *The TQM Magazine*, 16(6), 387–395.
- Doupnik, T. S., & Salter, S. B. (1995). External environment, culture, and accounting practice: A preliminary test of a general model of international accounting development. *International Journal of Accounting*, 30, 189–207.
- Dye, R. A. (1985). Disclosure of nonproprietary information. *Journal of Accounting Research*, 23, 123–145.
- El-Bannany, M. (2007). A study of determinants of social disclosure level in UK banks. *Corporate Ownership and Control*, 5(1), 120–130.
- European Commission. (2011). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A renewed strategy 2011–14 for corporate social responsibility. pp. 3–15. Available: http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=7010
- Farache, F., & Perks, K. J. (2010). CSR advertisements: A legitimacy tool? *Corporate Communications: An International Journal*, 15(3), 235–248.
- Fukukawa, K., & Moon, J. (2004). A Japanese model of corporate social responsibility? A study of website reporting. *Journal of Corporate Citizenship*, 16, 45–59.
- Golob, U., & Bartlett, J. L. (2007). Communicating about corporate social responsibility: A comparative study of CSR reporting in Australia and Slovenia. *Public Relations Review*, 33(1), 1–9.
- Gray, R., Owen, D., & Maunders, K. (1987). *Corporate social reporting: Accounting and accountability*. Englewood Cliffs, London: Prentice-Hall International.
- Gray, R., Owen, D., & Adams, C. (1996). *Accounting & accountability: Changes and challenges in corporate social and environmental reporting*. London: Prentice Hall.
- Gray, R., Javad, M., Power, D. M., & Sinclair, C. D. (2001). Social and environmental disclosure and corporate characteristics: A research note and extension. *Journal of Business Finance & Accounting*, 28(3–4), 327–356.
- Guthrie, J., & Parker, L. D. (1990). Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting*, 3, 159–175.
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77–108.
- Hassan, A., & Ibrahim, E. (2012). Corporate environmental information disclosure: Factors influencing companies' success in attaining environmental awards. *Corporate Social Responsibility and Environmental Management*, 19(1), 32–46.
- Hogner, R. H. (1982). Corporate social reporting: Eight decades of development at US Steel. *Research in Corporate Performance and Policy*, 4(1), 243–250.
- Hooghiemstra, R. (2000). Corporate communication and impression management—new perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1–2), 55–68.
- Jain, A., Keneley, M., & Thomson, D. (2015). Voluntary CSR disclosure works! Evidence from Asia-Pacific banks. *Social Responsibility Journal*, 11(1), 2–18.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 1–78.

- Kiliç, M. (2016). Online corporate social responsibility (CSR) disclosure in the banking industry: Evidence from Turkey. *International Journal of Bank Marketing*, 34(4), 550–569.
- KPMG. (2015). Currents of change: The KPMG survey of corporate responsibility reporting 2015. <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/kpmg-survey-of-corporate-responsibility-reporting-2015-O-201511.pdf>
- KPMG. (2017). Currents of change: The KPMG survey of corporate responsibility reporting 2017. <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/kpmg-survey-of-corporate-responsibility-reporting-2015-O-201511.pdf>
- KPMG. (2013a). *The KPMG survey of corporate responsibility reporting 2013*. Amsterdam: KPMG International Global Sustainability Services.
- KPMG. (2013b). *Carrots and sticks: Sustainability reporting policies worldwide. Today's best practice, tomorrow's trends*. Netherlands: KPMG Advisory.
- Lamarche, T., & Bodet, C. (2018). Does CSR contribute to sustainable development? What a regulation approach can tell us. *Review of Radical Political Economics*, 50(1), 154–172.
- Lindblom, C. K. (1993, March). *The implications of organizational legitimacy for corporate social performance and disclosure*. Paper presented at the Critical Perspectives on Accounting Conference, New York.
- Lopes, P. T., & Rodrigues, L. L. (2007). Accounting for financial instruments: An analysis of the determinants of disclosure in the Portuguese stock exchange. *The International Journal of Accounting*, 42(1), 25–56.
- Mathews, M. R. (1993). *Socially responsible accounting*. London: Chapman and Hall.
- McMurtrie, T. (2005). Factors influencing the publication of social performance information: An Australian case study. *Corporate Social Responsibility and Environmental Management*, 12(3), 129–143.
- Mia, P., & Al Mamun, A. (2011). Corporate social disclosure during the global financial crisis. *International Journal of Economics and Finance*, 3(6), 174–187.
- Morimoto, R., Ash, J., & Hope, C. (2005). Corporate social responsibility audit: From theory to practice. *Journal of Business Ethics*, 62(4), 315–325.
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy*, 10(4), 297–308.
- Piatti, D. (2014). Corporate social performance and social disclosure: Evidence from Italian mutual banks. *Academy of Accounting and Financial Studies Journal*, 18(1), 11.
- Prado-Lorenzo, J. M., & Garcia-Sanchez, I. M. (2010). The role of the board of directors in disseminating relevant information on greenhouse gases. *Journal of Business Ethics*, 97(3), 391–424.
- Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: An application of stakeholder theory. *Accounting, Organizations and Society*, 17(6), 595–612.
- Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics*, 8, 23–40.
- Salamon, G. L., & Dhaliwal, D. S. (1980). Company size and financial disclosure requirements with evidence from the segmental reporting issue. *Journal of Business Finance & Accounting*, 7(4), 555–568.
- Schroder, K. C. (1997). Cynicism and ambiguity: British corporate responsibility advertisements and their readers in the 1990s. In M. Nava, A. Blake, I. MacRury, & B. Richards (Eds.), *Buy this book studies in advertising and consumption* (pp. 276–290). London: Routledge.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Sweeney, L., & Coughlan, J. (2008). Do different industries report corporate social responsibility differently? An investigation through the lens of stakeholder theory. *Journal of Marketing Communications*, 14(2), 113–124.
- Thomson, D., & Jain, A. (2010). Corporate social responsibility reporting: A business strategy by Australian Banks?. *Corporate Ownership & Control*, 7(4), 213–228.
- Tilling, M. V., & Tilt, C. A. (2010). The edge of legitimacy: Voluntary social and environmental reporting in Rothmans' 1956–1999 annual reports. *Accounting, Auditing & Accountability Journal*, 23(1), 55–81.
- Tilt, C. A. (1994). The influence of external pressure groups on corporate social disclosure: Some empirical evidence. *Accounting, Auditing & Accountability Journal*, 7(4), 47–72.

Corporate Social Responsibility in the EU

► European Framework on CSR

Corporate Social Responsibility in Tourism

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Synonyms

Green Tourism

Definition

The identification of a clear definition about the concept of corporate social responsibility in the tourism sector (TS) is complex due to the coexistence of different expectative from stakeholders regarding the firm's activities (Waligo et al. 2013). In this sense, nowadays, academics have not yet provided a clear definition of this phenomenon. However, the increasing number of nonfinancial reports yearly disclosed by firms that operate in the tourism and hospitality sector (KPMG 2017) could represent an effective driver for academics to extend this field of study.

One of the prior strategies adopted by policymakers about socially responsible practices in the tourism sector is represented by the Global Code of Ethics for Tourism (Fennell 2014) proposed by United Nations Tourism World Organization (UNWTO). The code follows the prior contribution collected on the Manila Declarations of 1980 on world tourism and of 1997 on the social impact of tourism, as well as on the Tourism Bill of Rights and the Tourist Code adopted at Sofia in 1985 under the aegis of WTO. Moreover, the code is composed of nine articles with several commas in order to describe in a more detailed way the principles that inspired the document. Nowadays, UNWTO has introduced further documents in order to extend part of the worldwide strategies on sustainable development to the tourism and hospitality sector. One of the most important contributions provided by UNWTO (2017) is represented by the proposal of a strong connection between tourism sectors and the 17 Sustainable Development Goals (SDGs).

Tourism and Sustainable Development

The complexity of the sector is related to its intrinsic characteristics that impact severely on firms' strategic planning. Specifically, the tourism and hospitality sector is a typical multistakeholder context where actors such as communities and incoming tourists present different expectative about firms' activities due to their different

perceptions about them. In this sense, firms inspired by ethical principle must identify strategies adequate to the expectative in order to satisfy the different categories of stakeholders' interests directly or indirectly from firms' activities. Furthermore, this evidence impacts on firm's measurement of socially responsible strategies. In fact, the sector's multistakeholder character needs the provisions of KPI adequate to describe the specific impacts of each activity on stakeholders. Specifically, problems such as pollution or human rights are perceived differently from stakeholders like local communities or consumers due to their different perceptions about firms' behaviors.

Moreover, from a strategical point of view, the complexity of the theme is not related only to firms' activities but also to the communication tools adopted by them due to the different stakeholders' backgrounds. In this sense, the identification of effective communication tools by firms represents a relevant strategic choice to engage with the designed stakeholders (Toelkes 2018). Specifically, a large part of them adopted strategic tools to disclose their nonfinancial performance such as reports and dedicated sections on their website. In this sense, the typical voluntarily character that characterized their CSR's communication improves the degree of heterogeneity of these kinds of information due the absence of consolidated framework and by the absence of institutional pressures made by third institutions such as regulators, think tanks, and NGOs.

According to this evidence, the comprehension of SE activities made by TS' firms represents a specific and not yet well-explored field of study due the intrinsic peculiarities that characterize the sector. In fact, according to prior studies, the CSR's communication is influenced typically by several factors such as firm size and culture of origin (Fifka and Drabble 2012). In this sense, the specific peculiarities of TS increase these criticisms due the existence of situations characterized by divergences between firms' size and profitability (Lansing and De Vries 2007) and firms' geographical position and owners' country of origin (Falk and Katz-Gerro 2016).

CSR in Tourism

Globalization has impacted severely on consumers' preferences in the tourism and hospitality sector (Zhang and Khare 2009). In fact, the last few years have been characterized by new tourists' exigences about their travel experience. Part of these new exigences could be reconducted to some aspects that characterize firms that operate in socially responsible ways. In this sense, a large part of tourism and hospitality firms adopted new strategies in order to interact in an effective way with these new consumers. Specifically, the current scenario is characterized by the introduction of new products and by the adoption of new strategies related to corporate social responsibility paradigms.

An example of tourism's product characterized by a strong relationship with socially responsible practices is represented by "Green Tourism." The market share related to Green Tourism has been characterized by an increasing growth caused by the progressive attention paid by tourists to ethical and sustainable aspects related to products and services offered by tourism firms. In this sense, in order to assure the reliability of the information provided by firms, the last years have been characterized by a progressive diffusion of ethical labels in order to certify them (Lebe and Vrecko 2015). However, about the role of labeling on tourism's social responsibility, some authors denoted skepticism due the possible use of impression management and greenwashing practices (Self et al. 2010). Moreover, the concept of Green Tourism could be extended to the destination. In fact, as evidenced in prior study, the degree of sustainable development characterizes a destination impact on tourists' preferences. In fact, prior studies denoted how the identification of a travel destination is influenced both by the offers and by its geographical localization (Baloglu and Mangaloglu 2001). Moreover, further studies denoted how the presence of negative externalities like pollution in areas not far from the destination impacts negatively on tourist's perception even if in absence of direct connections (Xu and Reed 2017).

Furthermore, as evidenced before, the adoption of socially responsible practices represents an effective strategy to increase the attractiveness of a destination for a specific group of consumers. A typical case study related to corporate social responsibility in tourism and hospitality is represented by the positive effects on ethnocentrism's phenomenon. Specifically, consumer ethnocentrism consists of the preferences to buy goods or services from the country perceived similar in characteristics to their country of origin (Shimp and Sharma 1987; Balabanis and Siamagka 2017). The comprehension of ethnocentrism represents a strategic driver for firms that would operate in foreign countries or foreign consumers. In this sense, this evidence is typically connected to sectors such as tourism and hospitality where tourists obviously come from other contexts (Kock et al. 2019). In this sense, engaging in an effective way with tourists that come from other countries represents an opportunity for firms that would increase their revenue through the interaction with new market segments.

According to this evidence, a way to reduce skepticisms or to increase firms' market share through the interaction with new categories of consumers is represented by the adoption of behaviors inspired by the paradigm of corporate social responsibility. In this sense, in order to share with stakeholders, the socially responsible practices adopted, a central role is covered by stakeholder engagement strategies (Stokes 2008; Tompkins et al. 2008; Herrera et al. 2018). In particular, in the tourism and hospitality sector, stakeholder engagement represents a typical tool to increase the social legitimacy of entities. In fact, as evidenced before, tourism social responsibility represents a complex field of studies because its comprehension needs the analysis of the impacts connected to categories of stakeholders typically less interested in firms' activities. Specifically, in tourism, a central role is covered by the local community because they in certain cases reject the presence of foreign firms that operate in their land as tourism enterprises (Khazaei et al. 2017). However, nowadays, only few studies have analyzed the peculiarities of foreign direct

investments in the tourism sector (Connelly et al. 2011). Moreover, academics denoted how the adoption of stakeholder engagement practices in order to improve the degree of acceptance by local community needs a specific analysis in order to adapt the communication to the effective exigences of stakeholders interested by firm presence (Dal Maso et al. 2017). In this sense, prior studies denoted how the reactions to nonfinancial reporting (Lock and Seele 2016; Diouf and Boiral 2017) and web reporting (Chapple and Moon 2005; Wanderley et al. 2008; Santos et al. 2016) in order to engage with stakeholders are influenced by countries of origin and cultural backgrounds.

Key Issues

As evidenced in prior sections, tourism social responsibility represents a stand-alone topic in corporate social responsibility due to its peculiarities. In fact, the coexistence of different expectative about firms' activities and the possible divergence between interests represents a complex phenomenon that needs specific analysis. In this sense, a central role will be covered by managers and policymakers in order to identify new operational paradigms that satisfy the different interests about social responsibility practices.

From a managerial point of view, firms will identify new tools in order to engage in a more effective way with their stakeholder. Specifically, as evidenced before, this activity needs the preliminary comprehension of firms' audience to clearly identify the real expectative about firms' social responsibility.

From a policymaker's point of view, tourism and hospitality remains a sector characterized by the absence of specific regulations about CSR. In this sense, the increasing attention paid to this topic by new categories of tourists and the large investment paid by firms to achieve green label introduce a new exigence for them.

Finally, from an academic point of view, CSR in tourism represents a not well-explored research area. In this sense, a limit for in-depth analysis is represented by the characteristics of this sector

that is typically composed by SMEs. However, according to prior studies about SMEs' CSR, academics will introduce new research in order to extend the knowledge on this topic and to promote the adoption of these practices.

Summary

As evidenced by Bebbington and Unerman (2018), the achievement of SDGs will be favored by the active contribution of the private sector. According to this evidence, the tourism and hospitality sector must continue to support and favor the adoption by firms of nonfinancial reports in order to promote their contribution to SDGs. However, the absence of a clear and largely adopted definition of corporate social responsibility in the tourism and hospitality sector represents a new challenge for academics in order to fill this gap through the identification of new paradigms. Moreover, the coexistence of different stakeholders' expectative about firms' activities suggests how the identification of a single definition is not possible. In this sense, future research will introduce in management studies new topics about the different concepts of sustainability that could be reconducted to the tourism sector.

Cross-References

► [Value Creation](#)

References

- Balabanis, G., & Siamagka, N. T. (2017). Inconsistencies in the behavioural effects of consumer ethnocentrism: The role of brand, product category and country of origin. *International Marketing Review*, 34(2), 166–182.
- Baloglu, S., & Mangaloglu, M. (2001). Tourism destination images of Turkey, Egypt, Greece, and Italy as perceived by US-based tour operators and travel agents. *Tourism Management*, 22(1), 1–9.
- Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: an enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31(1), 2–24.

- Chapple, W., & Moon, J. (2005). Corporate social responsibility (CSR) in Asia: A seven-country study of CSR web site reporting. *Business & Society*, 44(4), 415–441.
- Connolly, B. L., Ketchen, D. J., & Slater, S. F. (2011). Toward a “theoretical toolbox” for sustainability research in marketing. *Journal of the Academy of Marketing Science*, 39(1), 86–100.
- Dal Maso, L., Liberatore, G., & Mazzi, F. (2017). Value relevance of stakeholder engagement: The influence of national culture. *Corporate Social Responsibility and Environmental Management*, 24(1), 44–56.
- Diouf, D., & Boiral, O. (2017). The quality of sustainability reports and impression management: A stakeholder perspective. *Accounting, Auditing & Accountability Journal*, 30(3), 643–667.
- Falk, M., & Katz-Gerro, T. (2016). Cultural participation in Europe: Can we identify common determinants? *Journal of Cultural Economics*, 40(2), 127–162. <https://doi.org/10.1007/s10824-015-9242-9>
- Fennell, D. A. (2014). Exploring the boundaries of a new moral order for tourism's global code of ethics: an opinion piece on the position of animals in the tourism industry. *Journal of Sustainable Tourism*, 22(7), 983–996.
- Fifka, M. S., & Drabble, M. (2012). Focus and standardization of sustainability reporting—A comparative study of the United Kingdom and Finland. *Business Strategy and the Environment*, 21(7), 455–474. <https://doi.org/10.1002/bse.1730>.
- Herrera, M. R. G., Sasidharan, V., Hernández, J. A. Á., & Herrera, L. D. A. (2018). Quality and sustainability of tourism development in Copper Canyon, Mexico: Perceptions of community stakeholders and visitors. *Tourism Management Perspectives*, 27, 91–103.
- Khazaei, A., Elliot, S., & Joppe, M. (2017). Fringe stakeholder engagement in protected area tourism planning: inviting immigrants to the sustainability conversation. *Journal of Sustainable Tourism*, 25(12), 1877–1894.
- Kock, F., Josiassen, A., Assaf, A. G., Karpen, I., & Farrelly, F. (2019). Tourism ethnocentrism and its effects on tourist and resident behavior. *Journal of Travel Research*, 58(3), 427–439.
- KPMG. (2017). *The road ahead: The KPMG survey of corporate responsibility reporting 2017*. Zurich: KPMG International. Retrieved 20 Nov 2018.
- Lansing, P., & De Vries, P. (2007). Sustainable tourism: Ethical alternative or marketing ploy? *Journal of Business Ethics*, 72(1), 77–85. <https://doi.org/10.1007/s10551-006-9157-7>.
- Lebe, S. S., & Vrečko, I. (2015). Eco-labels and Schemes: A Requisitely Holistic Proof of Tourism's Social Responsibility?. *Systems Research and Behavioral Science*, 32(2), 247–255.
- Lock, I., & Seele, P. (2016). The credibility of CSR (corporate social responsibility) reports in Europe. Evidence from a quantitative content analysis in 11 countries. *Journal of Cleaner Production*, 122, 186–200.
- Santos, S., Rodrigues, L. L., & Branco, M. C. (2016). Online sustainability communication practices of European seaports. *Journal of Cleaner Production*, 112, 2935–2942.
- Self, R. M., Self, D. R., & Bell-Haynes, J. (2010). Marketing tourism in the Galapagos Islands: Ecotourism or greenwashing. *International Business & Economics Research Journal*, 9(6), 111–125.
- Shimp, T. A., & Sharma, S. (1987). Consumer ethnocentrism: Construction and validation of the CETSCALE. *Journal of marketing research*, 24(3), 280–289.
- Stokes, R. (2008). Tourism strategy making: Insights to the events tourism domain. *Tourism Management*, 29(2), 252–262.
- Toelkes, C. (2018). Sustainability communication in tourism – A literature review. *Tourism Management Perspectives*, 27, 10–21.
- Tompkins, E. L., Few, R., & Brown, K. (2008). Scenario-based stakeholder engagement: Incorporating stakeholders' preferences into coastal planning for climate change. *Journal of Environmental Management*, 88(4), 1580–1592.
- United Nations World Tourism Organization. (2017). Tourism and the sustainable development goals – journey to 2030. In *World Tourism Organization and United Nations Development Programme*, Madrid.
- Waligo, V. M., Clarke, J., & Hawkins, R. (2013). Implementing sustainable tourism: A multi-stakeholder involvement management framework. *Tourism Management*, 36, 342–353.
- Wanderley, L. S. O., Lucian, R., Farache, F., & de Sousa Filho, J. M. (2008). CSR information disclosure on the web: A context-based approach analysing the influence of country of origin and industry sector. *Journal of Business Ethics*, 82(2), 369–378.
- Xu, X., & Reed, M. (2017). Perceived pollution and inbound tourism in China. *Tourism Management Perspectives*, 21, 109–112.
- Zhang, Y., & Khare, A. (2009). The impact of accessible identities on the evaluation of global versus local products. *Journal of Consumer Research*, 36(3), 524–537.

Corporate Social Responsibility Reporting

- Corporate Governance Reporting
- Sustainability Accounting

Corporate Social Responsibility Reporting (CSRR)

- Sustainability Report and Sustainability Reporting

Corporate Social Responsibility Strategy

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Synonyms

Corporate citizenship; Corporate strategy; CSR strategy; Corporate responsibility (CR); Sustainability strategies

Definition

Scholars and academics agree that the book *Social Responsibilities of the Businessman* by Howard R. Bowen (1953) is the authentic definition of the phrase social responsibility. Ever since, the business community and modern literature have developed and discussed the concept using phrases like social responsibility, corporate responsibility, corporate citizenship, corporate strategy, sustainability strategies, etc. The idea has developed dynamically and quickly, philanthropic era, awareness era, issues era, and responsiveness era (Murphy 1978), and it wasn't until the 1990s that CSR began to emphasize ethics and sustainability (Carroll 2009).

The advancing development of corporate social responsibility (CSR) by the business community, scholars, and sustainability experts in the battle of the concept of CSR remains indefinite, wide, and ambiguous and is open to a multitude of interpretations (Preuss 2013). The effort to develop a concrete concept and definition of CSR is progressing toward the standardized social responsibility by ISO 26000 and reporting it through the standards provided by Global Reporting Initiatives (GRI 2016).

CSR strategy is described as the comprehensive cycle of planning, implementing, monitoring, assessing, and reporting of corporations' approaches to resolving social and environmental concerns, taking into consideration the most recent and potential evolution of the concept.

Strategies should be voluntarily included in a company's interaction with its stakeholders (CEC 2001, p. 6). The whole cycle has a long-term outlook, significant resource commitments, and, on occasion, significant structural changes (Bansal et al. 2015). It should be integrated into business organizations' core competencies and incorporated into various levels of the organization's strategy (Preuss 2013).

Introduction

After 1950, the idea of corporate social responsibility (CSR) was firmly established (Carroll 2009). Therefore, throughout the Industrial Revolution in the 1800s, CSR practices have begun to emerge. Companies' factory system in Great Britain and America has been blamed for several other social issues, including women's and child labor, as well as poverty. Companies began to be cautious regarding their employees' health and their productivity. Concerns about employees prompted philanthropy, although the distinction between an individual and business philanthropy was muddled at the time. The "community chest movement" helped define business philanthropy from 1918 to 1929 and is recognized as the first kind of philanthropy. Between 1920 and 1930, a period that is considered as "trusteeship management" took place. Corporate managers were in charge of maximizing stockholder wealth and establishing and maintaining a fair balance between customers, employees, and communities at this period. Companies began to be considered as institutions with a responsibility to meet societal obligations from the 1930s to the present (Agudelo et al. 2019).

The fact that companies donated gas to charities above all during the "philanthropic" era, which happened in the 1950s, led to an era of "awareness" from 1953 to 1967, where corporate responsibility in the community was highly valued. Companies had begun to focus on certain problems that were then deemed as "issues" era, such as racial discrimination and pollution, until roughly 1968–1973. Companies began adopting major management and organizational initiatives

to intervene in CSR concerns in the 1970s. Scholars began to develop the formal meaning of CSR in the 1960s as a result of its rapid rise. Issues including charity or philanthropy, employee welfare, and customer relationships were incorporated into business practices defined as social responsibility toward the end of the 1960s (Carroll 2009).

Many researchers recognized the relevance of a management approach to CSR in the 1970s (Carroll 2009), leading to recommendations for corporations to predict, plan, coordinate CSR, measure social performance, and institutionalize corporate social policy and strategy. Companies were therefore forced to build organizational procedures to comply with federal legislation in the areas of the environment, product safety, workplace discrimination, and occupational safety under the legislative initiative. Scholars developed related topics and themes of CSR, such as corporate social response, public policy, business ethics, and stakeholder theory/management, through research in the 1980s, which also overhauled CSR's concerns in relation to those issues and themes.

The 1980s was a time when ethical crises dominated the news, drawing public attention to corporate misconduct. A childhood scandal that lasted most of the 1970s and half of the 1980s, a corporate scandal that killed thousands of people in 1984, the Union Carbide Bhopal explosion in India, and a business in South Africa, Apartheid, and the Ivan Boesky insider trading scandal in the mid-1980s are all examples of these scandals (Carroll 2009). These scandals, which have been viewed as examples of corporate greed, have prompted the rise of alternative CSR issues such as stakeholder theory and business ethics.

Significant advancements in the field of business practice occurred throughout the 1990s. This milestone was celebrated by the establishment of Business for Social Responsibility (BSR), a non-profit organization that represents initiatives and professionals concerned with CSR. Community investment, environment, governance and accountability, marketplace, human rights, and workplace and business ethics were all included in BSR's definition of CSR (Carroll 2009).

The search for the truth about CSR lasted into the 2000s when an empirical study on themes like stakeholder theory, business ethics, sustainability, and corporate citizenship emerged. Through empirical research relating CSR or CSP to other relevant variables, new CSR concepts dominated the decade 2001–2002. The researchers discovered that job seekers consider corporate social performance (CSP) when evaluating potential organizations or corporations and that major characteristics of CSP include the environment, community relations, employee relations, diversity, and product concerns. CSR continued to rise in the 2000s, most especially in the European business community, and eventually became a global phenomenon (Carroll 2009).

Corporations have recognized CSR not just as a good deed based on a moral obligation to society but also as a business gain. Changes in the environment, particularly in the context of globalization and the internal market, have become a challenge for businesses, and this is where CSR may provide direct economic values. Companies can contribute to social and environmental goals by incorporating CSR as a strategic investment into their core business strategy, management, and operations, in addition to producing profits.

The shareholder strategy, the altruistic strategy, the reciprocal strategy, and the citizenship strategy are the four CSR strategic options proposed by Galbreath (2006) for business companies. According to Galbreath (2006), CSR is viewed as a component of an overall profit motivation that is only focused on increasing shareholder returns in shareholder strategy. When the entangled relationship between a company and the community is recognized and appreciated, it is referred to as an altruistic strategy. The reciprocal strategy is based on companies' becoming proactive in terms of social responsibility. Finally, a component of citizenship strategy is that it recognizes that stakeholders are diverse and each has different interests and expectations, and it balances the competing demands of the numerous groups that have an interest or are affected by the organization (Table 1).

There are four elements that could enable CSR to be more effectively handled in order to integrate

Corporate Social Responsibility Strategy, Table 1 CSR strategic options for business companies (Galbreath 2006)

	Shareholder strategy	Altruistic strategy	Reciprocal strategy	Citizenship strategy
Goal	Profit	Give back	Mutual benefits	Responsibility; transparency; sustainability; accountability
Vehicles	Rationalization/self-interest	“Checkbook” philanthropy	Public relations; sponsorships; partnerships; community activity; volunteering; cause-related marketing	Governance; applied ethics; stakeholders dialogue; input to/outflow of corporate strategy
Measurement	Financial results	Donations	Activity-based reporting	Triple bottom line; holistic
Benefactors	Shareholders/others indirect	Community groups and causes	The firm and the community	To firm: survival position, role; to partners of all sectors; to wider society
Benefits	Financial	May not be measured	Performance, market goals; human resources	Tangible plus potentially intangible
Timeframe	Short-term vision	Intermittent: possibly timed (e.g., annually)	Medium- to long-term planning	Long-term horizon

it strategically into a company's business strategy: (1) firm mission, (2) strategic issues, (3) markets, (4) consumer needs, (5) resources, and (6) competitive advantage (Galbreath 2009). CSR strategy must consider the expectations of certain stakeholders, the industry, and other levels of competition, as well as the company's mission or goals. The right reflection and knowledge of the environment and its impacts on the organization is in the domain of strategy once CSR has been integrated into the company's objectives. Social factors must also be considered when deciding which part of the market to select the target. In CSR strategy, market orientation and innovation are two crucial components in establishing customer needs. The ability to define the context of a CSR strategy by demonstrating how much resources are utilized to internalize some of the company's unique benefits is critical. In order to build and sustain competitive advantage, a company can consider how to incorporate social responsibility into strategy by understanding and addressing issues that have hampered its ability to achieve its mission of creating products/services that meet market needs through effective resource composition.

Companies' increasing efforts and commitment to design and implement CSR strategies have a widening of strategic challenges and a challenge on the sustainability of CSR efforts and impact; therefore, corporations are looking for a more defined method and framework to work with. Adopted by the UN as a development agenda since 2015, the SDG framework consists of 17 goals and 169 implementation strategies. Through the convergence of numerous tactics, the SDGs as a whole continue to work on the unfinished Millennium Development Goal (MDG) agenda, expand, and address new problems. The goals highlight the situation of poverty, sustainable development, and environmental, as well as the necessity for excellent global governance and partnerships to achieve these objectives (Lingham 2017).

Key Issues

Social responsibility and social issues are two variables that must be understood in order to comprehend strategic CSR. What society expects of a company is referred to as social responsibility,

and social issues are the variables that connect to the given responsibilities. These factors can have an impact on a company's capacity to meet its objectives as well as its social obligations. According to scholars, there are two types of social contracts: "formal," which refers to a company's explicit obligations such as following rules and regulations, creating jobs, paying taxes, etc., and "semiformal," which refers to society's implicit expectations of the company. Observance to global labor and environmental standards (e.g., SA 8000, AA 1000, ISO 14031) that are not required by law, triple bottom-line reporting, adhering to industry norms and codes of conduct, fulfilling brand promises, and contributing philanthropically to the community are among the implicit expectations of society for businesses (Galbreath 2009).

CSR has primarily been advocated by multinational corporations up to this point. It is, nonetheless, applicable to be implemented in all kinds of companies and activity sectors, from small and medium enterprises (SMEs) to MEs to multinational enterprises (MNEs). Many SMEs have demonstrated this by engaging in community involvement, creating awareness, and assisting in the dissemination of best practices. SMEs, including microbusinesses, are the largest employers and contributors to the economy.

Various global standards also have arisen in the business and development arenas to assist these enterprises in implementing CSR. There are currently over 400 various standards, principles, and codes of conduct, according to the International Labor Office's business and social initiatives (BSI). Many organizations have recognized these standards, such as ISO (International Organization for Standardization) 14,000 and 14,031 for the environment; Social Accountability (SA) 8000 for labor-related issues; the United Nations (UN) Declaration on Human Rights and the Environment; the Caux and Sullivan Principles for economic, social, and political justice and general CSR; and the OECD (Organization for Economic Cooperation and Development) Guidelines for Multinational Enterprises for general CSR. Firms are under increasing pressure to strategically examine a set of external benchmarks as

they develop CSR policy, with these and many other worldwide standards encompassing all potential dimensions of social responsibility (Galbreath 2009).

The majority of these responsible practices have an impact on employees and are linked to concerns like human capital investment, health and safety, and change management, whereas environmentally responsible practices are mostly applied in the manufacturing process. It has to do with natural resource management. This has become a significant challenge for companies looking to hire and retain competent workers. Lifelong learning, employee empowerment, better information throughout the company, better balancing of work, family, and leisure, greater workforce diversity, equal wages and career prospects for women, profit sharing and share ownership schemes, and concern for employability and job security are all related measures in this context. Employees who are unable to work due to disability or accident have also been demonstrated to save money when given active guidance and management (European Commission 2001).

Another significant development in society today is the requirement for increased accountability. Environmental, human rights (including employment issues), and social justice movements all around the world have put pressure on companies to be competitive with their CSR strategies. The contributions of companies to social concerns are examined by society, and since the Internet's invention, it has expanded outside the town where the business is located. Companies are expected to share their experiences with the general public and to serve as role models for other businesses. CSR has emerged as a critical component of business-society relations, with the media serving as a facilitator in this process (Toker 2019).

Summary

Over the last few years, there has been a considerable increase in public awareness of sustainability. Due to the advancement of technology and media, the global crisis comprises of social and

environmental challenges that are extensively addressed on various levels and contexts, across layers of society and identities. The battle of the concept of CSR continues to be indefinite, wide, ambiguous, and open to a variety of interpretations by the business community, scholars, and sustainability experts (Preuss 2013).

CSR was not really established until after 1950, according to history. However, throughout the Industrial Revolution in the 1800s, practices that referred to CSR may begin to emerge. Companies' factory system in Great Britain and America has been criticized for several other societal issues, including women's and child labor, as well as poverty. Ever since, CSR concepts have evolved, and the search for what CSR genuinely means has continued to this day. From the "philanthropic era," when companies donated a portion of their profits to help the community until social responsibilities are seen not only as altruistic or social obligations but also as a way for the company to benefit from them, social responsibilities have become more strategic.

Galbreath (2006) proposed four CSR strategic options for business companies to better understand this development, which are the shareholder strategy, the altruistic strategy, the reciprocal strategy, and the citizenship strategy. He also suggested four aspects to help understand CSR: (1) firm mission, (2) strategic issues, (3) markets, (4) customer needs, (5) resources, and (6) competitive advantage (Galbreath 2009). Build a competitive advantage by understanding and addressing the issues that have affected the ability of the company to achieve its mission, so that products/services can be produced to meet the needs of the markets that the company serves through effective resource composition, in order to build and sustain competitive advantage, which can help the company to explore ways in which social responsibilities can be built into the strategy.

To counterbalance the development in strategic CSR, standards have been made available by several relevant institutions in the business and development scene, for example, ISO 14000 and 14,031 for the environment; SA 8000 for labor-

related issues; the UN Declaration on Human Rights and the Environment; the Caux and Sullivan Principles for economic, social, and political justice and general CSR; and the OECD Guidelines for Multinational Enterprises for voluntary principles and standards with respect to CSR. Finally, there is a framework called SDGs that addresses more relevant strategic issues that companies can integrate into their CSR strategies.

Due to raising awareness of society, accountability was demanded more than ever by society. Companies are expected to share them with the general public and set an example for other companies to follow their steps. Finally, to support the development of this area, better knowledge and further research on the impact of CSR on business are needed. This could be an area for further research among companies, governments, and academic institutions.

References

- Agudelo, M. A. L., Jóhannsdóttir, L., & Davidsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*, 4(1), 1–23.
- Bansal, P., Jiang, F. G., & Jung, C. J. (2015). Managing responsibly in tough economic times: Strategic and tactical CSR during the 2008–2009 global recession. *Long Range Planning*, 48(2), 69–79. <https://doi.org/10.1016/j.lrp.2014.07.002>.
- Carroll, A. B. (2009). A history of corporate social responsibility: concepts and practices. In A. Crain, A. McWilliams, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford, UK: Oxford University Press.
- Commission of the European Communities. (2001). *Making a European area of lifelong learning a reality*. Brussels: COM 678.
- European Commission. (2001). *Green paper promoting a European framework for corporate social responsibility*. <https://ec.europa.eu/transparency/regdoc/rep/1/2001/EN/1-2001-366-EN-1-0.Pdf>. Accessed 15 Dec 2019.
- Galbreath, J. (2006). Corporate social responsibility strategy: Strategic options. *Global Considerations. Corporate Governance*, 6(2), 175–187.
- Galbreath, J. (2009). Building corporate social responsibility into strategy. *European Business Review*, 21(2), 109–127.
- Global Reporting Initiative. (2016). *GRI 101: Foundation*. Amsterdam: GRI. <https://www.globalreporting.org/standards/media/1036/gri-101-foundation-2016.pdf>. Accessed 31 Aug 2018.

- Lingham, L. (2017). Sustainable development goals and corporate social responsibility: Time to get counted. *NHRD Network Journal*, 10(1), 68–72. <https://doi.org/10.1177/0974173920170114>.
- Murphy, P. E. (1978). An evolution: Corporate social responsiveness. *University of Michigan Business Review*, 30, 19–25.
- Preuss, L. (2013). Corporate social responsibility. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Corporate social responsibility* (pp. 579–587). Berlin/Heidelberg: Springer. <https://doi.org/10.1007/978-3-642-28036-8>.
- Toker, H. (2019). CSR and media. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abereu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer.

Corporate Social Responsiveness (CSR)

- [Cross-Cultural Attitudes to CSR](#)

Corporate Social Trusteeship (CST)

- [Cross-Cultural Attitudes to CSR](#)

Corporate Societal Marketing

- [Cause-Related Marketing](#)

Corporate Strategy

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Synonyms

[Futuristic planning](#); [Goal setting](#); [Planning](#); [Visioneering](#); [Vision setting](#)

Definition/Description

Strategy is the main mechanism/outline through which an organization or individual seeks to attain its long-term targets or objectives, with accompanying defined guidelines or plans for achieving them, structured in a way that explains who is responsible for what, how the objectives will be achieved, and the tools required for attaining same.

Defining Strategy: Complex and Multifaceted

Several authors have proffered different definitions for strategic management, and despite the plethora of literature in strategy, there is no universally agreed definition. Indeed, even the broader study of strategy, i.e., strategic management, has been criticized by a Mintzberg (1987) as being unable to rely on a single definition of strategy. However, it is important to refer to one of the earliest definitions of strategy, which defines strategy as a process that deals with the outline of the entrepreneurial work of the organization, with organizational renewal and growth, and, more particularly, targeted at guiding the organization's operations (Hofer and Schendel 1978). This definition by Hofer and Schendel (1978) is not all encompassing but is only included here as one of the exemplars of the early definitions of strategy, seeing that it focuses on the concept as a “process,” i.e., a means to an end.

More recently, strategy has also been referred to as a “practice,” an approach which attempts to shift attention away from a mere focus on outcomes alone to a more comprehensive, in-depth analysis of what actually takes place while thinking and doing strategy (Golsorkhi et al. 2010). Having this process/practice divide in mind, a review of the chronological evolution of strategy definitions is provided in Table 1. The table explores different periods in the study of strategy, outlining how the definition of the concept has moved from its application in warfare to the current “practice” focus. Ten (10) definitions by

Corporate Strategy, Table 1 Perspectives of strategy across 30+ years

Author (year)	Strategy definition emphasis
Sun Tzu (320 B.C) in Giles (2013)	Focused on military strategy (Art of War), exploring strategic thinking for winning battles
Alfred Chandler (1962)	Explored the strategy-structure paradigm. Identifying strategy as the determination of long-term goals and adoption of courses of action for carrying out the same
Igor Ansoff (1965)	Investigated strategy within the context of incremental development of historical trends but argued that it cannot be used when dealing with surprises (unexpected events in external markets)
Hofer and Schendel (1978)	Conducted analysis of how firms should compete within a business environment and which business they should engage in
Porter (1980)	This study explores strategy from an industrial economics viewpoint, placing emphasis on industry analysis and the positioning of the firm within the industry
Mintzberg (1987)	Described strategy as a craft, using a striking image of the strategist making strategy as a potter crafts clay
Rumelt (1991)	Explained strategy as a reflection of the direction of an organization in competing for customers, resources, and revenue
De Wit and Meyer (1998)	Espoused strategy as process (operational), content, and context (based on the environment under consideration)
Hoskisson et al. (1999)	Outlined that strategic management involves pendulum-like swings, influenced by the firms' external environments and internal resources
Jarzabkowski (2005), Rouleau (2015)	Introduced the era of strategy-as-practice, which explores strategy as not being about investigating something that a firm has but what they do

seminal authors is provided, from which a synthesis is conducted to reach a conclusive definition.

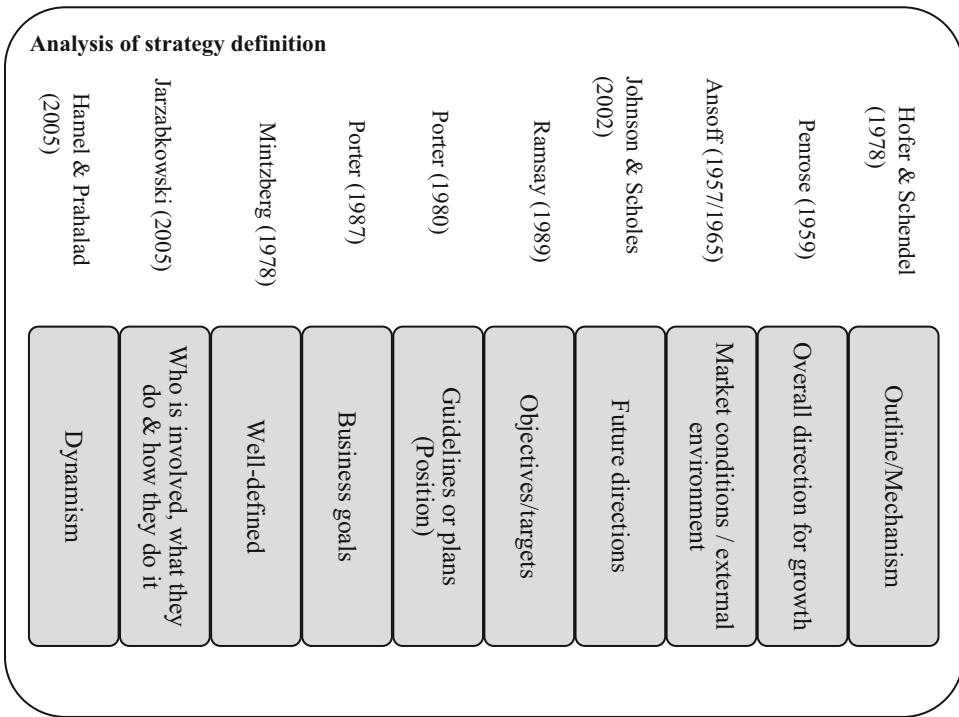
From Table 1, different views of strategy are presented, showing how the research domain has evolved over the years. Within the body of knowledge, the current arguments are around whether strategy should be approached as a “process” or “practice.” The process approach examines how the content of strategy influences the overall outcomes (Van de Ven 1992). The interest of strategy process approach is to explore the dynamic relationships between the firm’s competitive position, resources, and eventual outcomes (Chenhall 2005). The process stream also explores how strategy is designed, who is involved, and how individual differences (of managers) affect the overall strategy. The practice approach, on the other hand, seeks to understand how the people shaping strategy and the activities involved influence the overall outcomes (Rouleau 2015). Thus, defining strategy may involve a messy interchange between the process and practice views; however, such arguments lie outside the scope of this work as the focus is to define strategy. The definition adopted in this study is not superior to previous attempts at defining strategy,

as it is nearly impossible to condense the concept into a single definition. Adopting multiple definitions only fosters confusion rather than clarity, hence the justification for providing this synthesized definition. The reason for creating this unifying definition is that it:

- Considers the complex organizational areas of the firm (Hitt 2006)
- Takes key components in the business environment into consideration (Kald et al. 2000)
- Recognizes that markets are not stable/static (Prahalad and Hamel 1994)
- Takes key stakeholders into consideration (Jarzabkowski 2005)
- Explores realistic premises and issues within the firm (Rouleau 2015)

Based on this premise, the following definition is put forward:

Strategy is the main outline through which an organisation seeks to attain its long-term/future objectives, with accompanying well-defined guidelines or plans for achieving them, structured in a way that explains who is responsible for what, how the business goals will be achieved and the tools required for attaining them, while considering the overall



Corporate Strategy, Fig. 1 Analysis of the strategy definition

direction for growth and the dynamism of the external environment.

This definition encapsulates key themes in strategy definitions as previously used by seminal authors in the field. The definition is further dissected in the figure below (Fig. 1).

The definition above brings together perspectives of authors over half a century, strengthening its validity and inclusiveness. Again, it is important to re-emphasize that the definition does not aim to be one size fits one but a synthesis of multiple definitions based on years of seminal research into the topic. This definition can also be easily adapted to various industries as opposed to industry-specific definitions available within the literature. Lastly, this definition encapsulates the more recent strategy-as-practice (SAP) view, which considers practitioners (those involved in the work of strategizing), practices (how they go about it), and praxis (the tools involved in the work of strategy).

Summary

Strategy is a complex and multifaceted concept, which has evolved over decades from its early days of use in warfare to its current state of adoption in understanding organizations and this entry. The current definition has considered different contexts, ranging from the long-term nature of strategy to the practice dimensions of the concept (i.e., those involved in strategizing, the work they do, and the tools they use). The definition has also highlighted the specificity involved in strategy, as it needs to be formulated to achieve a defined goal. Essentially, if there is no goal/objective in mind, there is no strategy.

Cross-References

- [Corporate Social Responsibility Strategy](#)
- [Resource-based View](#)

References

- Ansoff, H. I. (1965). *Corporate strategy: An analytical approach to business policy for growth and expansion*. New York: McGraw-Hill. 15.
- Chandler, A. D., Jr. (1962). *Strategy and structure: Chapters in the history of the American Industrial Enterprise*. Cambridge, MA: MIT Press.
- Chenhall, R. H. (2005). Content and process approaches to studying strategy and management control systems. In *Controlling strategy: Management, accounting, and performance measurement* (pp. 10–36). New York: Oxford University Press.
- De Wit, B., & Meyer, R. (1998). *Strategy: Process, Content, Context* 2nd ed London. UK: International Thompson.
- Giles. (2013). *Sun Tzu on the art of war*. <https://doi.org/10.4324/9781315030081>.
- Golsorkhi, D., Rouleau, L., Seidl, D., & Vaara, E. (2010). Introduction: What is Strategy as Practice? In D. Golsorkhi, L. Rouleau, D. Seidl, & E. Vaara (Eds.), *Cambridge Handbook of Strategy as Practice* (pp. 1–20). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511777882.001>.
- Hitt, M. A. (2006). Spotlight on strategic management. *Business Horizons*, 49, 349–352. <https://doi.org/10.1016/j.bushor.2006.04.009>.
- Hofer, C. W., Schendel, D. (1978). *Strategy formulation: Analytical concepts*. New York. <https://doi.org/10.1080/08276331.1992.10600415>.
- Hoskisson, R. E., Wan, W. P., Yiu, D., & Hitt, M. A. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, 25(3), 417–456.
- Jarzabkowski, P. (2005). *Strategy as practice: An activity based approach*. Sage.
- Kald, M., Nilsson, F., & Rapp, B. (2000). On strategy and management control: The importance of classifying the strategy of the business. *British Journal of Management*, 11, 197–212.
- Mintzberg, H. (1987). The strategy concept I: Five Ps for strategy. *California Management Review*. <https://doi.org/10.2307/41165263>.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. New York: Wiley.
- Porter, M. E. (1980). *Competitive strategy*. New York: Free Press.
- Prahalad, C. K., & Hamel, G. (1994). Strategy as a field of study: Why search for a new paradigm? *Strategic Management Journal*. <https://doi.org/10.1002/smj.4250151002>.
- Rumelt R. P. (1991). How much does industry matter? *Strategic Management Journal* 12(3):167–185
- Rouleau, L. (2015). Studying strategizing through biographical methods: Narratives of practices and life trajectories of practitioners. In *Cambridge handbook of strategy as practice* (pp. 462–476).
- Van de Ven, A. H. (1992). Suggestions for studying strategy process: A research note. *Strategic Management Journal*. <https://doi.org/10.1002/smj.4250131013>.

Corporate Sustainability

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Synonyms

Corporate social responsibility (CSR); Environmental management; Sustainability management; Sustainability strategy

Definition

Companies' sustainability occurred as an important factor in successful business strategy and operations, and the idea has a large variety of perception between instructors and practitioners. One of the important meanings of sustainability in corporate practice is the triple bottom-line (TBL) approach. It shows the contribution of the company to environmental, social, and economic performance (Dyllick and Hockerts 2002; Elkington 1998; Montiel and Delgado-Ceballos 2014; Norman and MacDonald 2004; Yu and Zhao 2015). Basically, TBL approach supports the long-range success of the enterprise and the environment; it is not a single short-term one but focuses on all aspects of sustainability: economic, environmental (natural environment), and social (social environment).

However, several academics debate that the function of corporate governance is for achieving long-term corporate performance (Evans et al. 2006; Kolk 2008). Corporate governance must be integrated into the TBL mechanism to assess corporate sustainability. Therefore, to make collaborative sustainability assessment, it represents the corporate sustainability as an incorporation of environmental, social, governance, and economic performance. This is sometimes referred as quadruple bottom-line (QBL) sustainability.

According to Porter and Kramer (2006), some companies have failed in their commitment to social and environmental sustainability, because their business strategy was not tied to initiatives of

sustainability. Porter and Kramer emphasize that companies need to “recognize shared value for social responsibility, not as failure control or public related campaign.” Strategic disruption to sustainability efforts results in fragmentation of a corporation’s sustainability efforts, resulting in the inability to dealing with the TBL aspects of frustration and sustainability.

Introduction

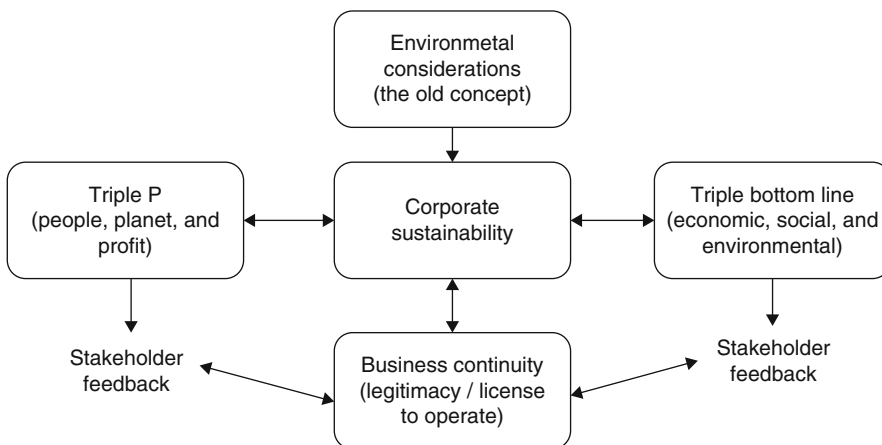
Many managers in the companies are increasingly aware of sustainability issues. Based on corporation’s view, sustainability includes economic, environmental, and social topics that can affect the businesses. Corporate sustainability has academical roots in the theory of stakeholder. Stakeholder theory identifies an organization is responsible to other stakeholders such as customers, suppliers, employees, and especially the larger community, not only to shareholders (Freeman 1984). Satisfying stakeholders’ claims is for various reasons, including maintaining a continuous supply and legitimacy of resources (DiMaggio and Powell 1983; Suchman 1995). Therefore, the sustainability approach in all companies should be based on stakeholder requirements.

Corporate sustainability is a dynamic idea and the particular environmental, economic, and social issues and priority that continually change the focus

of an organization. This can happen due to various reasons. The first one is the impact of internal and external environmental factors on the resources of the organization (Fig. 1).

These figures show three important perceptions. First, it indicates that the initial conceptualizations of sustainability have the environmentally friendly meaning, thus indicating a close perspective of its concept. The highlights of Seuring and Muller (2008) have been relatively narrow for environmental protection in early conceptualization of sustainability. However, in recent years, environmental protection has been highly recognized that only corporate sustainability subsets are available. Second, the figures are highlighted to be often argued in the study using the terms “triple P” and “TBL.” There are two points of view of the same idea. The figure above indicates that sustainability is an important thing of general business improvement. Corporate sustainability highlights that the most important stakeholder requirements must be systematically compliant. This is an organization’s legitimacy and licensing to continue their business in order.

The triple bottom-line approach cannot be described as traditional corporate accounting profit (the important point for calculation) plus environmental and social effects or else the profits of other enterprises are include social benefit. To enhance topics of accounting for social, environmental, and economic, there are a lot of business frameworks used around the world, including the EFQM



Corporate Sustainability, Fig. 1 The concept of sustainability (Asif et al. 2010)

Excellence Framework in Europe, the Baldrige Performance Excellence Framework in the United States, and the Australian Business Excellence Program in Australia. These assessment methods can support assessment and monitoring that are useful to stakeholders who want to know about TBL performance.

Key Issues

In corporate management, corporate sustainability has been knowledgeable by the vision of integrating environmental, social, and economic views. The “sustainability triangle” (Fig. 2) represents perception about management of sustainability (similar to Dyllick and Hockerts 2002; Schaltegger and Burritt 2005; Schaltegger et al. 2003).

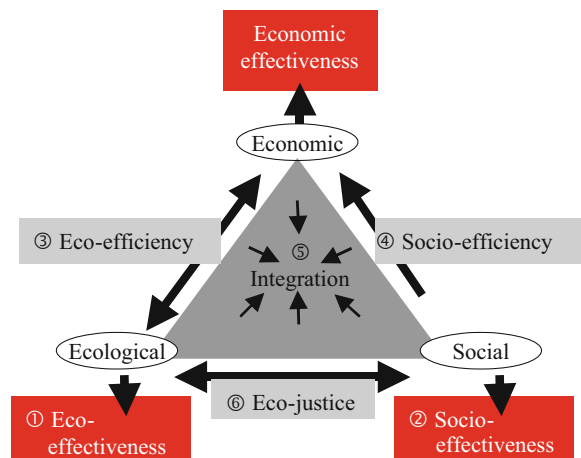
The Sustainability Triangle is intended to support three commonly recognized parts of corporate sustainability, namely: the social, environment and economic perspectives. This Triangle help analyzing the cooperation to promote relevant information from sustainability management and made the implementation contributions. The reason is to provide an explanation for every element independently and the interrelationships among them. In the figure above, each element is presented with the aid of using one of the three corners, and the interrelationships are presented by a line connecting each corner. In this way, the corners forms the effectiveness of the company to achieve each component

individually and absolutely measured. On the other hand, the line represents various possibilities, such as eco- and socioefficiency, as well as eco-justice which can be described the composite of the three views. Effectiveness is intended to improve management with a single dimension (such as avoided waste and support income for the poor areas). On the other hand, efficiency represents the relationship between various dimensions, e.g., socio-efficiency for the connection among the economic and social dimensions (e.g., earnings in poor areas per unit of additional sales).

Amini and Bienstock (2014) suggest a multi-dimensional meaning of corporate sustainability illustrated with the aid of using a framework (Fig. 3) that contains a number of urban issues regarding corporate sustainability. There are several aspects of this framework: (1) communication of sustainability activities/overall performance and business-level application; (2) the focus range of organization; (3) innovation of sustainability oriented; (4) economic/ecological-environmental/equity-social emphasis; and (5) compliance stance. There are four levels of sophistication that we recommend. The knowledge about various levels of sophistication into this framework is made to comprise the interplay each most of the five dimensions of sustainability in the CS meanings, in addition to the dynamics of the interplay for those dimensions over time, as recommended by Lozano’s TTSE (2008) and Baumgartner and Ebner’s (2010) levels of maturity (e.g., level 1, indicating only

Corporate Sustainability,

Fig. 2 The sustainability triangle of perspectives of corporate sustainability management (Schaltegger 2013)



Dimensions of Sustainability	Business Level Application & Communication	<i>Ill defined sustainability initiatives within organization; no external communication with respect to CS activities</i>	<i>Tactical level sustainability activities; few external communications with respect to CS activities</i>	<i>Strategic level sustainability activities; some quantification & external communication of CS performance</i>	<i>Intrinsically sustainable zero-waste oriented organization; public disclosure of highly granulated sustainability performance data</i>
	Scope of Organizational Focus	<i>No supply chain interaction</i>	<i>Limited interaction with supply chain</i>	<i>Some information/resource sharing within supply chain</i>	<i>Significant information, resource sharing & optimization efforts across supply chain</i>
	Sustainability Oriented Innovation	<i>Innovation activities are not sustainability related</i>	<i>Some awareness of relationship between innovation and sustainability</i>	<i>Innovation activities begin to involve multiple stakeholders</i>	<i>Zero-waste approach involving significant sustainability oriented innovation (SOI) efforts that involve multiple stakeholders</i>
	Economic/ Ecology-Environmental/ Equity-Social Emphasis	<i>Emphasis solely on economic sustainability</i>	<i>Primary emphasis on economic sustainability, tentative efforts toward ecological-environmental sustainability</i>	<i>Triple bottom line approach, economic, ecological-environmental, equity-social sustainability</i>	<i>Organization embraces a "triple top line" sustainability approach</i>
	Compliance Stance	<i>Sustainability activities limited to minimal efforts at regulatory compliance</i>	<i>Sustainability activities increase beyond minimal regulatory compliance, but are not systematically related to organizational strategy</i>	<i>Incorporation of regulatory compliance within organizational strategy; participation in development & evolution of sustainability regulation</i>	<i>Recognized industry thought leader that embraces and encourages zero-waste approach to sustainability regulation; recognition of importance of public-private partnerships</i>
		I	II	III	IV

Level of Sophistication (I = least sophisticated; IV = most sophisticated)

Corporate Sustainability, Fig. 3 Corporate sustainability framework (Amini and Bienstock 2014)

rudimentary or no efforts to sustainability, through level 4, signifying significant, integrated sustainability intention).

Business-Level Application and Communication: Corporate sustainability will only succeed if the part of an effort of overall strategic (Porter and Kramer 2006) is aware to the effect of available resources for competitive advantage that needs development of skills (Hart and Dowell 2010). Except that a company's commitment to sustainability is inherently strategic, there is little commitment to cultural changes related to internal communication or sustainability in the organization or to the stakeholders (Linnenluecke and Griffiths 2010; Porter and Kramer 2006).

Scope of Organizational Focus: Referring to Hansen et al. (2009) highlight, organizations need to reach both customers and suppliers, i.e., an

organizational supply chain to ensure that CS efforts are successful and meaningful. The most demanding organizations show no interaction with the supply chain when it comes to sustainability efforts. As the organization's sustainability commitment becomes more sophisticated, the sharing information and resources of the organization supply chain partners are rising. The most progressive organizations will make great efforts to inform, share resources, and optimize when trying to incorporate sustainability activities through the supply chain.

Sustainability-Oriented Innovation: Organizations that are inexperienced in sustainability tend to have a little awareness of the relationship among sustainability and innovation. As the organization becomes increasingly sophisticated with respect to CS, they recognize the synergies between

innovation and sustainability, sustainability efforts, and integrating innovation by adopting product stewardship and sustainable design (Hansen et al. 2009; Hart and Dowell 2010). Complex organizations are inclined to implicate several stakeholders in their efforts to innovation and sustainability. The companies take a zero-waste approach to sustainability and are committed to the innovation of multiple stakeholders based on true sustainability.

Economic/Ecological-Environmental/

Equity-Social Emphasis: Organizations with the least experience with CS only highlight the economic sustainability. The organizations are not interested in ecological-environmental sustainability and equity-social sustainability; they do not understand the relationship between the aspects of sustainability. The more sophisticated an organization is, the more it understands the importance of equity-social and ecological-environmental sustainability and moreover economic sustainability and attempts to present the topics in several ways. The progressive companies take a triple top-line approach that incorporates economic, ecological-environmental, and equity-social awareness into the strategic decision-making and make a design process from the beginning.

Compliance Stance: As an organization matures, their CS activities shift from complying with rules to working on the evolution and development of sustainability regulations. Demanding organizations are increasing awareness of a proactive approach to sustainability that can minimize compliance-related cost and cost of liability. The most progressive organizations with the ideological leader in the industry usually promote and take part in supporting the zero waste approach to sustainability regulation (Hart and Dowell 2010). The organizations should realize about the importance of working with organization within or beyond their industry, as well as nongovernmental and government agencies, to facilitate sustainability and fulfillment efforts. Compliance with environmental policies can be difficult. Nevertheless, from a strategic and competitive standpoint, companies can be proactive and sophisticated before they are forced to

participate in the development of environmental regulations, or even better, by complying with them.

The framework shown above emphasizes the link among regulatory compliance, business strategy, sustainability, and innovation; includes the role of corporate communications to sustainability; highlights the concerns of working with supply chain partners for a successful sustainability initiatives; and emphasizes the purpose of harmonizing the sustainability aspects (economic, equity-social, and ecological-environmental).

The connotations of the sustainability framework for practitioners include the implications of integrating sustainability into external communications and strategies of corporation with corporate stakeholders; the implications of involving an organization's supply chain in its attempts to sustainability; an example of a possibility synergistic effect among sustainability and innovation; the impact of integrating economic, ecological-environmental, and equity-social awareness in design processes and strategic decisions; and the ramifications of presenting as an industry thought leader in shaping sustainability regulations. In summary, this framework can help the assessment of sustainability activities and help organizations improve the sustainability level and maturity of their activities.

Summary

This series of studies shows that companies' investment in social and environmental programs can fascinate more resources, enhance the image of their corporate, and increase economic performance. The positive influence of social and environmental performance on economic performance presents evidence in supporting the hypothesis of the social impact (Cornell and Shapiro 1987; Freeman 1984; Pava and Krausz 1996; Preston and O'Bannon 1997).

Stakeholder theory recommends that a firm needs to make a value for stakeholder and shareholders, including employees, customers,

communities, suppliers, investors, and others involved in the organization (Freeman 1984). Stakeholder theory has provided a platform for learning the corporate sustainability's effect on corporate economic performance. Corporations that are responsible for a larger group of stakeholders will increase their economic performance and generate value (Driver and Thompson 2002; Harrison and Wicks 2013). Referring to stakeholder theory, the hypothesis of the social impact is interconnected relationships between a company and every individual who has social effects on the company through social drivers and barriers. Several supporters assume that good social performance, i.e., meeting the requirements of the company's stakeholder, will ultimately increase the economic performance (Preston and O'Bannon 1997). A company's involvement in environmental, social, and governance activities that reach the expectations of stakeholders will enhance the reputation of the company and give some positive influence on economic performance. Otherwise, disappointed stakeholders can create a negative influence on the economy by enhancing the perceived risks and the cost of capital. As a result, this brings to the hypothesis in the research.

Cross-References

- [Business Case of CSR](#)
- [Corporate Sustainability](#)
- [CSR and Sports](#)
- [Environmental Responsibility](#)
- [Sustainability Accounting](#)
- [Sustainable Entrepreneurship](#)
- [Sustainable Marketing](#)
- [Triple Bottom Line](#)

References

- Amini, M., & Bienstock, C. C. (2014). Corporate sustainability: An integrative definition and framework to evaluate corporate practice and guide academic research. *Journal of Cleaner Production*, 76, 12–19.
- Asif, M., Searcy, C., Zutshi, A., & Ahmad, N. (2010). An integrated management systems approach to corporate sustainability. *European Business Review*, 23(4), 353–367. <https://doi.org/10.1108/09555341111145744>.
- Baumgartner, R. J., & Ebner, D. (2010). Corporate sustainability strategies: Sustainability profiles and maturity levels. *Sustainable Development*, 18, 76–89.
- Cornell, B., & Shapiro, A. C. (1987). Corporate stakeholders and corporate finance. *Financial Management*, 16(1), 5–14.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. <https://doi.org/10.2307/2095101>.
- Driver, C., & Thompson, G. (2002). Corporate governance and democracy: The stakeholder debate revisited. *Journal of Management and Governance*, 6(2), 111–130.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, 8(1), 37–51.
- Evans, B., Joas, M., Sundback, S., & Theobald, K. (2006). Governing local sustainability. *Journal of Environmental Planning and Management*, 49(6), 849–867.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman – Ballinger.
- Hansen, E. G., Grosse-Dunker, F., & Reichwald, R. (2009). Sustainability innovation cube - a framework to evaluate sustainability-oriented innovations. *International Journal of Innovation Management*, 13, 683–713.
- Harrison, J., & Wicks, A. (2013). Stakeholder theory, value, and firm performance. *Business Ethics Quarterly*, 23(1), 97–124.
- Hart, S. L., & Dowell, G. (2010). A natural resource-based view of the firm: Fifteen years after. *Journal of Management*, 37(5), 1464–1479.
- Kolk, A. (2008). Sustainability, accountability and corporate governance: Exploring multinational reporting practices. *Business Strategy and the Environment*, 17(1), 1–15.
- Linnenluecke, M., & Griffiths, A. (2010). Corporate sustainability and organizational culture. *Journal of World Business*, 45, 357–366.
- Lozano, R. (2008). Envisioning sustainability three-dimensionally. *Journal of Cleaner Production*, 16, 1838–1846.
- Montiel, I., & Delgado-Ceballos, J. (2014). Defining and measuring corporate sustainability: Are we there yet? *Organization & Environment*, 27(2), 113–139.
- Norman, W., & MacDonald, C. (2004). Getting to the bottom of 'triple bottom line'. *Business Ethics Quarterly*, 14(2), 243–262.
- Pava, M. L., & Krausz, J. (1996). The association between corporate social-responsibility and financial performance: The paradox of social cost. *Journal of Business Ethics*, 15(3), 321–357.

- Porter, M. E., & Kramer, M. R. (2006). Strategy & society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84, 78e92.
- Preston, L. E., & O'Bannon, D. P. (1997). The corporate social-financial performance relationship: A typology and analysis. *Business & Society*, 36(4), 419–429.
- Schaltegger, S. (2013). Sustainability management. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Berlin/Heidelberg: Springer. https://doi.org/10.1007/978-3-642-28036-38_741.
- Schaltegger, S., & Burritt, R. L. (2005). Corporate sustainability. In H. Folmer & T. Tietenberg (Eds.), *The international yearbook of environmental and resource economics 2005/2006* (pp. 185–222). Cheltenham: Edward Elgar.
- Schaltegger, S., Petersen, H., & Burritt, R. (2003). *An introduction to corporate environmental management: Striving for sustainability*. Sheffield: Greenleaf.
- Seuring, S., & Muller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 16(15), 1699–1710.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approach. *The Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.2307/258788>.
- Yu, M., & Zhao, R. (2015). Sustainability and firm valuation: An international investigation. *International Journal of Accounting & Information Management*, 23(3), 289–307.

Corporate Sustainability and Responsibility

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Introduction

The terms corporate social responsibility “CSR” and corporate sustainability tend to be used either interchangeably or without clear attention to the difference (Sheehy and Farneti, 2021). The terms

focus on different but related areas of activity: business management, social action, and the natural environment.

In its essence, CSR is a form of international private business regulation focused on enterprises’ environmental and social impacts (Sheehy 2015). It includes a host of individual and collective rights as well as ethical and environmental issues. It has been a bottom-up push focused on business which has led to a response from global policy makers (Kuper 2005; Rasche and Waddock 2014; Sheehy 2017a, b; Voegtlin and Pless 2014). By way of contrast, corporate sustainability is a rather diverse set of ideas originating from environmentally focused activists, global development groups, and environmental professionals and specialists focused on business. Finally, although both terms refer to the concept of business ethics, they do so in quite different ways.

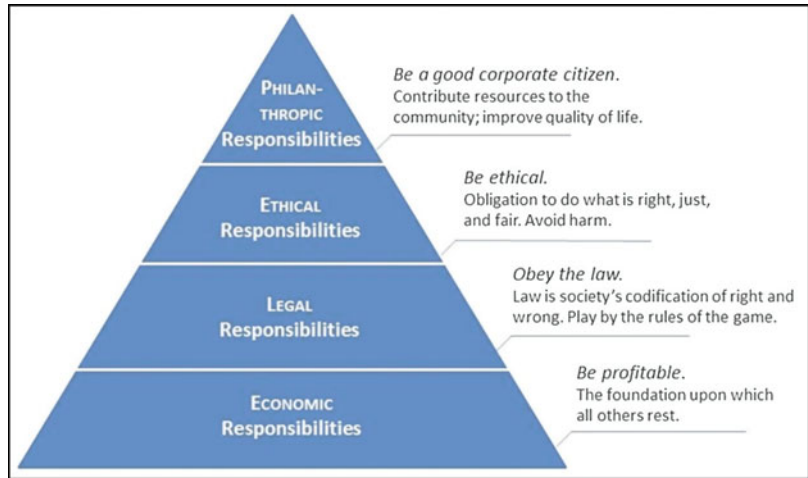
Both terms are added to the broader term sustainability. For example, accounting scholars Bebbington and Gray (1996) integrate the terms sustainability, sustainable development, and business stating, “at a minimum, the sustainable business is one that leaves the environment no worse off at the end of each accounting period than it was at the beginning.” This use conflates the terms with the global public policy agenda of sustainable development, most recently enacted as the Sustainable Development Goals.

Corporate Social Responsibility

CSR has been part of the business dialogue since the late 1920s. Two law scholars argued about the role and obligations of company directors. One argued that corporate managers were responsible solely to shareholders while the other argued that the corporate managers were statesmen [sic] to use their powers for the betterment of society (Sommer 1991). The debate was taken forward through the 1950s with Bowen’s classic work, the *Social Responsibilities of the Businessman* (Bowen 1953). A range of further developments in the business-and-society

Corporate Sustainability and Responsibility,

Fig. 1 Carroll's CSR Pyramid



discussions expanded the concept and obligation drawing in ever more concerns and parties leading to a vagueness around the term (Camilleri 2017). Archie Carroll created order by producing a hierarchical pyramid for categorizing and prioritizing business obligations when considering business-society relations (Carroll 1991) (Fig. 1).

Carroll proposed dividing CSR into four tiers of responsibilities prioritized from basic ones at the bottom to the ethical ones at the top. Carroll argued that the first responsibility is to be economically sound and then secondly to comply with the law. The third level of responsibility he posited was ethical. Executives were avoiding harm and contribute to positive justice by treating other parties fairly. Finally, at the top level, once all other obligations had been fulfilled, Carroll argued that the firm has philanthropic obligations.

CSR in theory and practice has developed slowly from consideration of directors' obligations, through a hierarchy of management choices, to the point where it can now be properly defined as: "international private business self-regulation" (Sheehy 2015). Sheehy's definition draws in international soft law norms directed at business organizations. In this definition, CSR is understood as regulatory in that it is a set of norms aimed at effecting business behavior – a type of soft law, rather than a business strategy.

Corporate Sustainability

Corporate sustainability is a concept that is significantly different from CSR. Like CSR, corporate sustainability accepts the view that companies have a wider responsibility beyond profit (Hahn and Figge 2011, 325). Unlike CSR, however, corporate sustainability is a much more recent concept with roots in environmental and global policy. In the former, it grew out of the corporate environmental movement, which arose in the 1970s to address a range of environmental disasters that captured public attention (Sheehy 2019).

Corporate environmentalism, however, was not an end point, and environmental concerns about the industry were swept up in economic and political globalization marked by, among other things, the increase in power of multinational enterprises over the intervening decades (Osterhammel and Petersson 2005; Scholte 2005). In this intervening period, business came to be viewed as a "partner" in society, and in this case, a global development partner. The term corporate sustainability thus arises from this confluence of concerns and the dynamic political landscape. The term corporate sustainability took on additional meaning as part of the effort to bring business into alignment with the UN's development program, the Sustainable Development Goals (SDGs).

The term "sustainability" can mean different things to a variety of constituencies. While there

may be no objection to the sentiments expressed by multiple stakeholders on the respective definitions for sustainable business, most of them are far from holistic. The sustainability systems may be too complex and varied, and their applications could be quite diverse. Some authors have attempted to relate sustainability with the corporations' responsible behaviors (Camilleri 2017). Dyllick and Hockert's widely accepted definition of the term "corporate sustainability" is most useful. They define corporate sustainability as "meeting the needs of a firm's direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities, etc.), without compromising its ability to meet the needs of future stakeholders as well" (Dyllick and Hockerts 2002). Their definition makes no explicit mention of environment although it is certainly implied. Others such as Hahn and Figge state that "there seems to be some implicit pragmatic consensus that corporate sustainability refers to some composite and multi-faceted construct that entails environmental, social, and economic organizational outcomes" (Hahn and Figge 2011, 327). These pillars are interconnected to each other where the economy is part of society, which is also a fundamental part of the larger ecological system. Corporate sustainability relies on six criteria: eco-efficiency, socio-efficiency, eco-effectiveness, socio-effectiveness, sufficiency, and ecological equity (Dyllick and Hockerts 2002). These corporate sustainability imperatives can be structured into value systems that could result in a better financial performance (Salzmann et al. 2005; Van Marrewijk 2003). A few researchers have developed (self)-assessment tools that could be used to audit, analyze, and interpret corporate sustainability (Van Marrewijk 2003). However, corporate sustainability may be contingent on different parameters (e.g., technology, regime, and visibility) that could vary across industries, plants, and countries (Salzmann et al. 2005). Corporate sustainability could reduce the downside operational risk as it comprises relevant measures that are intended to increase eco-efficiency and health and safety performance, among other issues (Porter and Kramer 2019; Camilleri 2014). This means that the economic

value of sustainable business strategies could be materialized in the long term (Weber 2008).

Notwithstanding, there are the long-term effects of corporate sustainability on intangible assets (e.g., brand value, employee loyalty) could be difficult to quantify (Salzmann et al. 2005; Dyllick and Hockerts 2002). Although some commentators have voiced their opposition to the normative calls in favor of the "sustainability rhetoric" (Salzmann et al. 2005), it may appear that we are witnessing a relentless progression from active antagonism, through indifference, to a strong commitment to actively furthering sustainability values, not only within the organization but across many industries and in our society as a whole. These recent developments imply that the organizations' commitment to responsible behaviors may represent a transformation of the corporation into a truly sustainable business that is adding value to the business itself, while also adding value to society and the environment (Camilleri 2016).

Beyond management disciplines, the term corporate sustainability refers to the assessment of business conduct with reference to the ecological limitations of the planet. Beginning with the limitations of the earth's ecosystems, this group of scholars works down to the level of industrial production to argue that for sustainability reasons, businesses must change their methods of production as part of a larger change society must have with respect to its relationship with the environment (Sjåfjell and Richardson 2015).

Summary

Corporate sustainability and CSR are related but distinct concepts. Corporate sustainability is derived from the corporate environmental movement. In contemporary use, it is a concept that begins with an analysis of the limitations of the earth's ecosystems. It then works down to the implications for business organizations. By way of contrast, CSR is a form of international soft law directing business behavior to align with global norms touching on social and

environmental practices as well as corporate governance.

Cross-References

- [Corporate Social Responsibility](#)
- [Corporate Sustainability](#)
- [CSR](#)
- [Sustainability](#)
- [Sustainable Companies](#)

References

- Bebbington, K. J., & Gray, R. H. (1996). Sustainable development and accounting: Incentives and disincentives for the adoption of sustainability by transnational corporations. In C. Hibbit, H. Blokdijk (Eds.), *Environmental Accounting and Sustainable Development* (pp. 107–151). Limperg Instituut: Amsterdam, The Netherlands.
- Bowen, H. (1953). *Social responsibilities of the businessman*. New York: Harper & Row.
- Camilleri, M. (2014). Advancing the sustainable tourism agenda through strategic CSR perspectives. *Tourism Planning & Development*, 11(1), 42–56.
- Camilleri, M. A. (2016). The corporate sustainability and responsibility proposition: A review and appraisal. In M. A. Camilleri (Ed.), *CSR 2.0 and the new era of corporate citizenship*. Hershey: IGI Global.
- Camilleri, M. A. (2017). Corporate sustainability and responsibility: Creating value for business, society and the environment. *Asian Journal of Sustainability and Social Responsibility*, 2(1), 59–74.
- Carroll, A. B. (1991). The pyramid of social corporate responsibility. *Business Horizons*, 34, 39–50.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141. <https://doi.org/10.1002/bse.323>.
- Hahn, T., & Figge, F. (2011). Beyond the bounded instrumentality in current corporate sustainability research: Toward an inclusive notion of profitability. *Journal of Business Ethics*, 104(3), 325–345.
- Kuper, A. (2005). Redistributing responsibilities – The UN Global Compact with companies. In A. Follesdal & T. Pogges (Eds.), *Real world justice: Grounds, principles, human rights, and social institutions*. Dordrecht: Springer.
- Osterhammel, J., & Petersson, N. P. (2005). *Globalization: A short history*. Princeton: Princeton University Press.
- Porter, M. E., & Kramer, M. R. (2019). Creating shared value. In *Managing sustainable business* (pp. 323–346). Dordrecht: Springer.
- Rasche, A., & Waddock, S. (2014). Global sustainability governance and the UN Global Compact: A rejoinder to critics. *Journal of Business Ethics*, 122(2), 209–216. <https://doi.org/10.1007/s10551-014-2216-6>.
- Salzmann, O., Ionescu-Somers, A., & Steger, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal*, 23(1), 27–36.
- Scholte, J. A. (2005). *Globalization: A critical introduction* (2nd ed.). Basingstoke/New York: Palgrave Macmillan.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648. <https://doi.org/10.1007/s10551-014-2281-x>.
- Sheehy, B. (2017a). Conceptual and institutional interfaces among CSR, corporate law and the problem of social costs. *Virginia Law & Business Journal*, 12(1), 95–145. Retrieved from SSRN: <http://ssrn.com/abstract=2156751>
- Sheehy, B. (2017b). Private and public corporate regulatory systems: Does CSR provide a systemic alternative to public law?. *UC Davis Business Law Journal*, 17, 1–55. Retrieved from <http://ssrn.com/abstract=2157316>
- Sheehy, B. (2019). CSR and environmental law: Concepts, intersections, and limitations. In A. McWilliams, D. E. Rupp, D. S. Siegel, G. K. Stahl, & D. A. Waldman (Eds.), *The Oxford handbook of corporate social responsibility* (2nd ed., pp. 261–282). Oxford/New York: Oxford University Press.
- Sheehy, B., & Farneti, F. (2021). Corporate Social Responsibility, Sustainability, Sustainable Development and Corporate Sustainability: What Is the Difference, and Does It Matter? *Sustainability*, 13(11), 5965.
- Sjåfjell, B., & Richardson, B. J. (2015). *Company law and sustainability*. Cambridge: Cambridge University Press.
- Sommer, A. A. J. (1991). Whom should the corporation serve – The Berle-Dodd debate revisited sixty years later. *Delaware Journal of Corporate Law*, 16, 33–56.
- Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2–3), 95–105.
- Voegtlin, C., & Pless, N. M. (2014). Global governance: CSR and the role of the UN Global Compact. *Journal of Business Ethics*, 122(2), 179–191. <https://doi.org/10.1007/s10551-014-2214-8>.
- Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, 26(4), 247–261.

Corporate Sustainability Management

- [Sustainability Management Process](#)

Corporate Sustainability Performance

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Synonyms

Corporate social performance; Corporate sustainable development performance; Triple bottom line (TBL)

Definition

Corporate sustainability performance (CSP) is a notion that reflects the outcome of the implementation of a firm's corporate social responsibility policies and practices. There has been a growing interest from both researchers and practitioners on understanding and assessing the results of a company's total sustainability efforts such as saving resources and energy, reducing environmental risks, adding value to communities, promoting sustainable consumption, and conducting effective corporate governance. Sustainability in the business context can be termed as "corporate sustainability" (see chapter ► "Corporate Sustainability Reporting Index"), referring to the integration of long-term social, environmental, and economic concerns into a firm's management and operations. That is, it represents the responsibility of the firm to the society that goes beyond maximizing shareholders' return. Then, CSP can be defined as the extent to which a company meets and balances current and future expectations of diverse stakeholders while safeguarding human, natural, and economic resources (Artiach et al. 2010). In other words, it reflects the general assessment of how effective and efficient corporate sustainability practices produce environmental, social, and economic changes. The essential idea behind CSP is that if a firm follows sustainable

development goals, it may increase its future value for both itself and those parties who are related.

Introduction

Nowadays, the business world shows higher levels of concern and a more proactive approach toward sustainability. It has become an integrative way of doing business including several issues such as environmental protection, reduction of carbon emissions, social justice, community relations, governance transparency, and labor rights (Baumgartner and Rauter 2017; Schaltegger et al. 2016). Such efforts also represent the increasing demand and pressure from diverse stakeholders who are paying increasingly more attention to environmental, ethical, and social performance besides economic one, which motivates them to reward or penalize corporations according to their sustainability activities and impact (Hahn et al. 2015). This responsiveness may threaten or strengthen a company's survival. Some industries such as energy, food, health, and medicine feel this pressure even more than others do (e.g., Chih et al. 2010; Chang et al. 2017; Pandey et al. 2019). As a result, measuring and reporting sustainability practices has become a significant task for corporations. The attention is growing worldwide where several national and international initiatives such as Global Reporting Initiative and UN Global Compact encourage, direct companies for reporting sustainability, and provide specific guidelines to do so.

Through the development of corporate sustainability research, the emphasis on CSP has emerged much more recently after the early discussions about the meaning, legitimacy, and extent of corporate sustainability for firms. Yet, it has become one of the fundamental concerns as the real value of corporate sustainability practices depends on to what extent their impact can be identified and measured. Wood's framework (1991) can be regarded as one of the early conceptualization of CSP where he argues corporate social performance depends on the principles of

social legitimacy, public responsibility, and managerial discretion. Based on these principles, CSP can be measured in terms of three corporate outcomes: social impact (e.g., desired good and services, pollution prevention, waste management, value creation for community), social programs used to put responsibility into effect, and policies developed to manage responsibility issues and stakeholder demands.

Lately, calls have been made to companies for moving toward a better integration of their sustainability initiatives in their decision-making processes and linking their sustainability efforts to financial performance. However, this linkage entails several trade-offs as companies face organizational constraints and other challenges in implementing their sustainability strategies (Van der Byl and Slawinski 2015). Managers are usually uncertain about how to reconcile sustainability and financial concerns. Hence, well-thought evaluation systems are required for deciding what sustainability projects should be pursued, which organizational resources should be allocated to these projects, and how to evaluate their social, environmental, and financial impact in short-term and long-term outcomes.

For evaluating CSP, different approaches have been discussed and introduced. Most of these models were developed by considering multiple corporate sustainability practices. Any improvements in these practices contribute to the total sustainability score of the firm. In early conceptualizations, only three facets – environmental, social, and economic – were offered to measure corporate sustainability, which was coined as the “triple bottom line” (Elkington 1997) (see chapter ► “Triple Bottom Line”). However, in recent years, this view is enhanced through the integration of new facets as higher emphasis has been given to different sustainability issues. For instance, the “economic, social and governance model” (ESG) has been offered as a new framework adding the health of corporate governance to existing CSP criteria. Moreover, studies increasingly argue the necessity of considering technological factors in assessing corporate sustainability.

More recently, emphasis is also given to the innovation aspect of corporate sustainability (Schaltegger et al. 2016). While innovation is usually described as the driving force behind economic and social change, sustainability has long been recognized as an innovative force carrying the potential of creating new products and processes by challenging the traditional ways of doing things. Triple bottom line can be regarded as an indicator of it, which has radically contested and changed the way corporate performance is evaluated. Sustainability also reflects the ability of an organization to explore new resources and capabilities for preparing itself to future conditions and needs beyond current ones.

The Link Between CSP and Firm Performance

A review of the literature reveals that in recent years, research on CSP–firm performance association have been significantly growing both theoretically and empirically (e.g., Goyal et al. 2013; Jo et al. 2015). There is an ongoing debate about how to insert corporate sustainability into business strategies and through which mechanisms the results of sustainability initiatives turn into economic outcomes for the firm. This debate emerges from the fundamental question of whether sustainability practices indeed contribute to the overall value of the firm. Prominent theories including stakeholder theory and resource-based view suggest that CSP may increase benefits for the firm through better relationships with key stakeholders. Improved stakeholder relationships (e.g., community, customer, and employee satisfaction) create positive reputation, ensure the continuation of access to critical resources, and improve the ability of developing new resources and capabilities, leading to a sustainable competitive advantage (Lozano et al. 2015). Additionally, the disclosure of sustainability provides relevant information and value for investors. In the end, CSP results in better financial performance.

Despite opposite arguments on the inefficient use of resources for satisfying conflicting interests

of multiple stakeholders, cumulative evidence indicates a positive impact of CSP on firm performance, and this is more so in technology-based service industries (Jung et al. 2018). Still, there is no universal formula for this relationship and it varies much according to the underlying social, legal, and economic context. Some studies found that the positive association depends on a set of other factors including firm size, leverage, R&D investments, marketing intensity, innovativeness, and the ability of product differentiation (e.g., Artiach et al. 2010; Chih et al. 2010). In addition, industries with rapid growth, changing market trends, and severe competition maximize the benefits of CSP (Chang et al. 2017). However, the CSP–firm performance relationship has been mostly examined in developed countries whereas studies from developing countries are quite limited.

In a comprehensive conceptual framework covering these relationships, Epstein and Roy (2001) claim that existing corporate strategies first provide sustainability performance with respect to different areas of business. In turn, this sustainability performance causes reactions from stakeholders including employees, customers, community members, government authorities, and investors. Each of these linkages is improved by the support of firm sustainability actions in the form of plans, programs, structures, and systems. In the final stage, positive stakeholder reactions bring about long-term financial performance. Thus, sustainability performance and stakeholder reactions act as intermediate outcomes that should be carefully monitored and managed. Finally, the feedback provided from reactions of diverse stakeholders is used to evaluate the appropriateness of company goals and strategies and to revise them if necessary (Lozano et al. 2015). Overall, the breadth of information passing through this framework allows managers to examine every step of sustainability and how these steps are interconnected so that they can make sustainable decisions for their business. Similar frameworks all argue that once organizational strategies, structures, and management initiatives are successfully aligned, a company will be in a better position to coordinate its activities and motive

the whole organization toward implementing sustainable strategies (Searcy 2012).

Determinants of CSP

Based on different approaches such as institutional perspective, resource-based view, resource dependency theory, and stakeholder theory, several internal and external context factors have been identified as significant determinants of CSP (e.g., Bansal 2005; Campbell 2007; Artiach et al. 2010; Chih et al. 2010). Perhaps, the largest and most consistent evidence regarding firm characteristics has been shown for the impact of organization size. Larger firms have higher visibility and public scrutiny, drawing attention from a wide range of stakeholders. Capacity to engage in sustainability practices also increase with organizational size as resources and capabilities that can be devoted become larger. Moreover, big firms usually have organizational slack permitting them to seek sustainable solutions. Financial capacity and health of the company (e.g., high return on equity, free cash flows, low debt financing) also increase the capability to undertake sustainability activities by allowing the company to act more flexibly and to meet stakeholder expectations at a larger extent (Artiach et al. 2010). Capacity for growth is another important determinant of CSP as R&D intensity as well as product innovations and differentiations lead to expanding business operations, all of which increase the opportunities to implement sustainability principles and strategies.

Ownership type and concentration were also found to be associated with CSP. Public companies and those companies whose ownership is less concentrated have a better sustainability performance. Higher public accountability prompts them to engage more in sustainability activities and such scrutiny is doubled when a firm is listed in multiple stock exchanges. Studies suggest that degree of internationalization and international experience also leads to better sustainability performance (Park 2018). Firms with international experience are in a better position to develop certain systems and structures for getting adapted into different economic, legal, and cultural

environments. They can also acquire the best knowledge available and better coordinate their sustainability practices across their operations.

Finally, top management characteristics such as managers' commitment to ethics, management capabilities, and corporate governance structure are suggested as key determinants of CSP (e.g., Crifo et al. 2019; Morioka and Carvalho 2016). It is argued that sustainability control systems based on certain standards and guidelines may offer the governance instruments necessary for generating any corporate sustainability effort and getting favorable performance results out of them. If these structures are integrated with the components of the supply chain, sustainable development initiatives will be better supported and positive results will be more likely.

Aside from firm attributes, environmental factors including legal, market, economic, and socio-cultural ones may also play role in predicting CSP. Evidence shows that stronger legal policies and regulations make firms engage in more sustainability activities. This is because failure to comply with these regulations incurs fines and penalties that the firm wants to avoid and it reduces the incentives to behave in irresponsible ways. However, weak economic environments (e.g., high inflation, low growth, low productivity) can make it difficult for firms to behave in sustainable ways. Mimicking other companies and media pressure can also stimulate a firm to make larger sustainability efforts. Firms are likely to imitate peers who have visible and well-defined sustainability activities and who are recognized for their favorable CSP. Besides increasing a firm's visibility and public scrutiny, media can also have an indirect effect through shaping institutional norms and mobilize social movements. Institutional pressures may also come from independent organizations such as business associations, institutional investors, NGOs, and community groups. Such self-regulation mechanisms are likely to increase sustainability engagement and CSP. Finally, the nature of firm's relationship with its stakeholders, the pressure they put on the firm, supply chain management systems, and the availability of interorganizational networks are also considered to be closely associated with CSP.

Besides these factors, studies indicate important differences in the sustainability performance of firms across industries regarding intensity of market competitiveness, uncertainty levels, and availability of resources (e.g., Maletic et al. 2018; Morioka and Carvalho 2016). If the market has high competition and ambiguity, firms act in more sustainable ways to increase their competitive advantage. If competition is low, the firm will have no interest in using sustainability strategies to gain competitive advantage. Taking all these factors into account, it can be concluded that coercive, normative, and mimetic institutional pressures in the environment as well as market conditions and demands from multiple stakeholders may bring a huge motivation to the firm for implementing corporate sustainability strategies. Yet, evidence shows that these influences might change over time regarding the age and industry experience of the firm. Overall, as Morioka and Carvalho (2016) claim, internal and external context factors together with key principles of corporate sustainability lead to the development of sustainable business processes and practices, which in turn, contributes to CSP with short-, medium-, and long-term effects.

Measurement of CSP

The existing forms of CSP assessment can be summarized in three categories. The first type of sustainability performance measures comprises the analysis of the information a firm communicates about its social responsibility efforts (e.g., Antolín-Lopez et al. 2016; Bansal 2005; Searcy 2012). The idea behind this is that when a firm engages more in responsibility activities, it intends to communicate and disclose these activities through available channels. On the other hand, if a firm has less social responsibility efforts or seeks to hide something such as a failure in fulfilling certain responsibilities, it avoids the communication. The second type of CSP assessment constitutes business rankings evaluating sustainability efforts of firms across multiple indicators (Bansal 2005). A number of independent firms have been established with the pure purpose

of sustainability assessment by examining firm policies, practices, and systems related to social environmental risks. The last form for CSP measurement includes the use of a set of direct financial market indicators such as Dow Jones Sustainability Index and Socially Responsible Investment Index, which are particularly essential for influencing investor decisions (Antolín-Lopez et al. 2016).

Several international, regional, and national organizations deal with the measurement of CSP. Some of these prominent institutions and frameworks are Global Reporting Initiative (GRI), International Integrated Reporting Council, International Standards Office (ISO), United Nations Global Compact, UN Conference on Trade and Development (UNCTAD), CFA Institute, European Academy of Business and Society, B-Corporation, and more recently, UN Sustainable Development Goals. Different stakeholders such as academics, investment rating agencies, and nongovernmental organizations have also developed their own CSP metrics and measures. These CSP guidelines or frameworks usually involve environmental, social, and economic factors, and the necessary information is taken from company disclosures.

Whatever assessment system is used, measurement of CSP almost always involves a set of underlying indicators. Sometimes, these indicators are used individually. However, a composite index (see chapter ► [“Corporate Sustainability Reporting Index”](#)) is often created based on a number of factors chosen from a pool of economic, environmental, and social sustainability disclosure items available in company reports and websites (Lee and Saen 2012; Docekalová and Kocmanová 2016). The benefit of using a composite index is the ease for interpreting diverse sustainability facets by a single figure, thus overcoming the complexity of the phenomenon and providing sensitized information while maintaining its underlying multidimensionality and information base. Both generic (e.g., Searcy 2012) and industry-specific (e.g., Labuschagne et al. 2005) indices are available, each one using different items, weights, benchmarks, and calculations. Despite the existing index multiplicity,

one can summarize the key CSP indicators used in available composite indices under four main sustainability categories as in Table 1 (based on different studies). Such integration and aggregation systems may also be used as a means for identifying the priorities for corporate sustainability improvements through comparisons across different sustainability facets and decomposition analysis. Firms can also assess their performance against competitors and make future business decisions by using these indices.

Several CSP measurement analysis tools have also emerged that can be subjective, objective, or a combination of the two. Some objective and quantitative methods include multi-criteria decision-making technique, multi-attribute utility approaches, data envelopment analysis, principle component analysis, entropy analysis, and TOPSIS-based methods. They may be used in tandem as well as individually. Fuzzy sets or fuzzy reasoning is commonly used to quantify verbal data. Recently, more graphical approaches such as similarity graphs have also been adopted.

Summary and Future Directions

One of the concerns about CSP is that there is still no broad agreement on how to measure it. Even though corporate sustainability is a complex and multidimensional phenomenon, the lack of clarity and standardization in its operationalization and the existence of a variety of metrics developed by different sources leads to important confusions for both practitioners and researchers. Therefore, there is still an ongoing debate on what aspects and dimensions of CSP should be accounted for and why. Enhanced CSP instruments are expected to provide companies a good viewpoint in decision-making and to allow comparisons among companies.

There is also a debate on the disproportionate emphasis on sustainability indices and metrics to evaluate CSP. Other aspects such as sustainability awareness, the nature of relationships with different stakeholders, and how these relations should be managed in an organization are often overlooked compared to the bulk research on quantitative sustainability indicators and relevant

Corporate Sustainability Performance, Table 1 Key corporate sustainability performance categories and indicators

Environmental indicators	Social indicators
Energy conservation (efficiency and savings; clean energy) The use and management of materials Fuel consumption Water consumption Waste management and recycling Emissions and pollution (e.g., carbon reduction, ecological footprint) Biodiversity Investments for environment (environmental management systems) Distribution and transportation Environmental risks Environmental compliance to laws and regulations	Human rights Code of ethics Labor relations (union membership, collective agreement, etc.) Equal access, treatment, and opportunities to employees Human capital (training and development) Health, safety, and security at work Good relations in the workplace Stakeholder participation Adding value to local community Adding value to customers Sustainable consumption (e.g., product safety and usefulness)
Economic and financial indicators	Governance indicators
Economic results (financial growth, profit, return on sales, cash flow, etc.) Costs (total costs, operational expenses, etc.) Investments (return on investments) Efficient use of assets and funds Productivity Supplier relations and contracts Innovation Credibility and economic sanctions Contribution to local, national, and global economy	Corporate strategies and policies Top management characteristics Effectiveness of corporate governance (e.g., board of director composition) Risk and crisis management Compliance with laws and regulations Involvement in politics and government relations Relations with other stakeholders

Source: Adopted from Searcy (2012), Lee and Saen (2012), Labuschagne et al. (2005), and Docekalová and Kocmanová (2016)

statistical analyses. Therefore, one of the future directions for improving the understanding of CSP may include internal processes, strategic human, information and external resources, awareness, perceptions, and the management of corporate sustainability. The ongoing research on how resources as inputs are transformed into sustainability results can be expanded. Moreover, CSP might be interpreted based on how stakeholders are assigned to different components of it. In this way, the gap between what is measured and what is managed can be reduced. Using different theoretical lenses, certain causes and mechanisms through which sustainability performance is attained in companies can be examined in more depth. Such investigations may also go beyond the individual firm and include significant upward (suppliers) and downward (distributors and buyers) members of the supply chain and other stakeholders such as employees, parent companies, community, NGOs, scientific institutes, competitors, media, and policy makers.

There are several unanswered questions regarding the design of a CSP system as well as the implementation and use of such a system. Numerous procedural, contextual, implementation, and content issues remain to be explored for developing a CSP system that meets the needs of business as well as the society (Searcy 2012). As companies face diverse stakeholder expectations, constantly changing concerns and a large set of options to handle sustainability challenges, a reliable system for assessing CSP becomes necessary. This system can be designed with policies and programs that are customized for the firm and linked to clear sustainability goals.

Cross-References

- [Corporate Responsibility Index](#)
- [Corporate Social Responsibility](#)

- Corporate Social Responsibility Reporting
- Corporate Sustainability
- Corporate Sustainability Reporting Index
- Sustainability Management and Reporting
- Triple Bottom Line
- United Nations Sustainable Development Goals 2030, The

References

- Antolín-Lopez, R., Delgado-Ceballos, J., & Montiel, I. (2016). Deconstructing corporate sustainability: A comparison of different stakeholder metrics. *Journal of Cleaner Production*, 136, 5–17.
- Artiach, T., Lee, D., Nelson, D., & Walker, J. (2010). The determinants of corporate sustainability performance. *Accounting and Finance*, 50(1), 31–51.
- Bansal, P. (2005). Evolving sustainability: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197–218.
- Baumgartner, R. J., & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*, 140, 81–92.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946–967.
- Chang, R. D., Zuo, J., Zhao, Z. Y., Zillante, G., Gan, X. L., & Soebarto, V. (2017). Evolving theories of sustainability and firms: History, future directions and implications for renewable energy research. *Renewable & Sustainable Energy Reviews*, 72, 48–56.
- Chih, H. L., Chih, H. H., & Chen, T. Y. (2010). On the determinants of corporate social responsibility: International evidence on the financial industry. *Journal of Business Ethics*, 93, 115–135.
- Crifo, P., Escrig-Olmedo, E., & Mottis, N. (2019). Corporate governance as a key driver of corporate sustainability in France: The role of board members and investor relations. *Journal of Business Ethics*, 159, 1127–1146.
- Docekalová, M. P., & Kocmanová, A. (2016). Composite indicator for measuring corporate sustainability. *Ecological Indicators*, 61(2), 612–623.
- Elkington, J. (1997). *Cannibals with forks: Triple bottom line of 21st century business*. Chichester: Capstone Publishing Limited.
- Epstein, M. J., & Roy, M. J. (2001). Sustainability in action: Identifying and measuring the key performance drivers. *Long Range Planning*, 34, 585–604.
- Goyal, P., Rahman, Z., & Kazmi, A. A. (2013). Corporate sustainability performance and firm performance research: Literature review and future research agenda. *Management Decision*, 51(1–2), 361–379.
- Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). Tensions in corporate sustainability: Towards an integrative framework. *Journal of Business Ethics*, 127(2), 297–316.
- Jo, H., Kim, H., & Park, K. (2015). Corporate environmental responsibility and firm performance in the financial services sector. *Journal of Business Ethics*, 131(2), 257–284.
- Jung, S., Nam, C., Yang, D.-H., & Kim, S. (2018). Does corporate sustainability performance increase corporate financial performance? Focusing on the information and communication technology industry in Korea. *Sustainable Development*, 26, 243–254.
- Labuschagne, C., Brent, A. C., & Van Erck, R. P. (2005). Assessing the sustainability performances of industries. *Journal of Cleaner Production*, 13(4), 373–385.
- Lee, K.-H., & Saen, R. F. (2012). Measuring corporate sustainability management: A data envelopment analysis approach. *International Journal of Production Economics*, 140(1), 219–226.
- Lozano, R., Carpenter, A., & Huisingh, D. (2015). A review of ‘theories of the firm’ and their contributions to corporate sustainability. *Journal of Cleaner Production*, 106, 430–442.
- Maletic, M., Maletic, D., & Gomiscek, B. (2018). The role of contingency factors on the relationship between sustainability practices and organizational performance. *Journal of Cleaner Production*, 171, 423–433.
- Morioka, S. N., & Carvalho, M. M. (2016). A systematic literature review towards a conceptual framework for integrating sustainability performance into business. *Journal of Cleaner Production*, 136, 134–146.
- Pandey, V., Vidal, N., Panwar, R., & Nafees, L. (2019). Characterization of sustainability leaders and laggards in the global food industry. *Sustainability*, 11(18), 5072.
- Park, S.-B. (2018). Multinationals and sustainable development: Does internationalization develop corporate sustainability of emerging market multinationals? *Business Strategy and the Environment*, 27, 1514–1524.
- Schaltegger, S., Ludeke-Freund, F., & Hansen, E. G. (2016). Business models for sustainability: A co-evolutionary analysis of sustainable entrepreneurship, innovation and transformation. *Organization & Environment*, 29(3), 264–289.
- Searcy, C. (2012). Corporate sustainability performance measurement systems: A review and research agenda. *Journal of Business Ethics*, 107(3), 239–253.
- Van der Byl, C., & Slawinski, N. (2015). Embracing tensions in corporate sustainability: A review of research from win-wins and trade-offs to paradoxes and beyond. *Organization & Environment*, 28(1), 54–79.
- Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review*, 16(4), 691–718.

Corporate Sustainability Reporting

► Sustainability Management and Reporting

Corporate Sustainability Reporting Index

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Synonyms

CSR index; Environmental index; Social index

Description

A sustainability reporting index is a synthetic and measurable information on a company's commitment in making its business activities more sustainable. In order to calculate it, researchers and/or specialized CSR rating agencies shall define a methodology for evaluating and weighing performances in each relevant areas (usually categorized into environment, social, and economic dimension – the so-called triple bottom line). The most diffused sustainability indices are those created by rating agencies (e.g., the DJSI or FTSE4Good) that assign scores to listed companies with the final goal of including or excluding them from a list of the best performers. These indices have a great importance not only for their impact on a company's reputation but also for providing information to investors that are becoming more and more interested in sustainable investments.

Introduction

Corporate social responsibility (CSR) and sustainability reporting is mainly a voluntary practice

diffused among large companies worldwide (KPMG 2013) that aim to increase transparency toward stakeholders on their strategies and practices that may have an impact on the environment and society. Reports are actually a mean to demonstrate awareness of their own responsibility toward society and environment.

This disclosure of nonfinancial matters – an umbrella term used to refer to qualitative and quantitative information different from financial data (Haller et al. 2017) – greatly evolved from the first attempts recorded in the 1960s and 1970s. In some national contexts, CSR, sustainability, and social or integrated reports have become compulsory for certain entities. Both voluntary and obligatory nonfinancial reports usually follow dedicated standards and guidelines that increase their credibility (Salvioni and Bosetti 2014). Global Reporting Initiative (GRI) guidelines, the Eco-Management and Audit Scheme (EMAS), the Organization for Economic Co-operation and Development (OECD) Guidelines for multinational enterprises and the International Organization for Standardisation's ISO 26000 – just to name a few – are common frameworks that set general principles and list key performance indicators (KPI) that companies can use to measure and report their economic, environment, and social performance. Reports actually provide a large amount of data for each category or area of impact and are full of details on company's sustainability policy and goals. This makes them difficult to read and synthesize. Comparison with competitors or other companies is also difficult if KPIs and reporting standards differ. Therefore, both academic researchers and firms specialized in CSR have begun to develop “global” indices that may favor a quick and comprehensive evaluation of company's involvement in sustainability and allow for intercompany comparisons.

Several research papers have developed a corporate social responsibility or sustainability index from the analysis of reports published by companies. Most of them rely on content analysis or text mining techniques to check for the presence and frequency of certain topics. Unfortunately, many researchers have developed their own framework

and method of evaluation, with or without weights, aiming to improve assessment reliability. Sometimes, they develop a specific sustainability reporting index to account for industry characteristics (see, e.g., Bonilla-Priego et al. 2014). As a consequence, there is not a common accepted framework or method used systematically to compare sustainability performance through time and space.

Similarly, consultancy firms specialized in CSR aspects have begun to evaluate companies' sustainability performance to assign them scores and create ranking lists. These firms are usually known as CSR rating agencies (see Waddock (2008) for an extensive discussion of these organizations). Also in this case, the methods of data collection and analysis vary (some focus on public reports only, while others integrate information through questionnaires, interviews or by screening specialized media), and it can become difficult to compare results across rating agencies (see Chatterji and Levine 2006 for this and other problems), thus undermining the ability of stakeholders to discriminate among more or less reliable ratings. However, consultancy firms have been more successful in creating indices used by stakeholders, and especially investors. Since investors are increasingly interested in the risks associated to ESG (environmental, social, and governance) issues and they tend to create portfolios that include sustainable companies (EY 2017), consultancy and rating firms have developed rating systems that allow the creation of sustainability stock indices (baskets of stocks referring to the most sustainable companies) that describe the financial performance of these businesses.

Functions of Stock Indices in General and Sustainability Stock Indices

In order to assess how a certain financial market is performing (e.g., the London Stock Exchange) and compare the return on specific investments, investors and financial managers usually refer to a stock market index, which is computed from the prices of selected stocks (typically a weighted

average). Therefore, indices show the market performance at a precise point in time, while their value changes when stock prices change.

Stock exchanges of all countries usually have several indices that consist of different hypothetical portfolios of securities representing a particular segment of the market. So, the London Stock Exchange continuously discloses performances of the FTSE 100, FTSE 250, FTSE 350, and FTSE All Shares, where the numbers refer to the amount of companies included in the index calculation (i.e., the 100, 250, or 350 most highly capitalized companies traded on the London Stock Exchange). The three most popular stock indexes for tracking the performance of the US market are the Dow Jones Industrial Average, S&P 500, and Nasdaq Composite, while the Stoxx Europe 50 is the popular market index of the largest blue-chip companies from 18 countries in the Eurozone.

Investors cannot invest directly in an index, so these portfolios are used for two main purposes: (1) as benchmarks and (2) for developing index funds. In the first case, indexes allow investors to compare the performance of individual stocks they purchase with more general market indicators. The need for benchmark comparisons had led to the creation of specific indices that refer to geographic segments of the market (e.g., stocks of companies from emerging markets) or to micro-sectors. Recently, many financial markets have also began to calculate sustainability indices that include a basket of stocks of companies that demonstrate to make all efforts necessary to minimize their negative impact on the environment, community, society, or economy. In the second case, indices are used by investment funds to offer to individual investors a financial product that replicates the index, that is, a product whose strategy is to buy and hold all stock constituents in an index. Individual investors cannot invest in an index without buying each of the individual holdings, which is generally too expensive from a trading perspective. Therefore, investment funds offer a low-cost way to invest in a comprehensive index portfolio, gaining exposure to a specific market segment of their choosing. The same logic can be replicated when investment funds aim to offer a sustainability-based portfolio to their clients.

A socially responsible investment (SRI) fund usually tries to invest in companies or governments with the best ESG scores because it is assumed that meeting ESG standards is likely to yield to higher returns, while reducing portfolio's risks. As any other fund, SRI funds seek to maximize medium- and long-term returns, but they do it searching for companies with robust corporate governance policies, which care for the environment and minimize potential regulatory, litigation, and reputational risks.

From a company perspective, being included in a sustainability index is like having a badge that identifies sustainability leaders because only the companies that meet certain minimum sustainability requirements are selected for index membership. It is a form of public endorsement of companies' attention toward the local environment and society. This increases a company's reputation among all its stakeholders and makes it more attractive to investors. Considering that there is an increasing amount of SRI funds, specialized investors attentive to company CSR practices and also traditional investors progressively more scrutinizing nonfinancial aspects of corporate performance, a company included in a social or sustainability index is in the position of being immediately classified as a good target for investors' portfolio.

Today, there are many different indices that promise to sort the most sustainable companies (see section "[Types of Indices and Rankings](#)"). The diffusion of these sustainability indices is due to the fact that it is difficult for managers and investors to know whether a company is actually engaged in responsible behavior. Institutional intermediaries that scrutinize, classify, and rank companies are held to provide reliable information. Their institutional endorsements (and reputation) can strongly influence market assessments of a firm's social responsibility.

Rankings and Classifications

The increasing importance for companies of the reputational impact associated to a third-party evaluation and the growing investors' demand

for ESG screening have generated a proliferation of private organizations that offer information services and rankings of companies based on their sustainability performance (Scalet and Kelly 2010).

In addition to information providers that collect and elaborate data to identify sustainable companies to be included in sustainability stock indexes, there are many other organizations that use their own evaluation method, assign scores, and prepare their own list. These organizations can be categorized into two groups:

1. Organizations that sell their services to both investors and companies that want to be evaluated
2. Not-for-profit organizations and research centers that want to improve the culture of sustainability and make stakeholders more informed

In the first case, organizations are ESG rating agencies that provide highly detailed information on companies but this information is sold to investors, SRI funds, and other subjects. Data can be customizable and besides assigning scores, they disclose information on company risks related to ESG and controversies and litigations. In addition, they help investors and investment funds to create financial products (a customized investment universe) that include sustainable companies. Another important group of clients of these organizations is made by companies or governments that want to be evaluated. While making the assessment, rating agencies offer guidance on how companies may better meet their CSR commitments. So, they suggest how to improve CSR policies or accompany a company in the path toward the achievement of a CSR certification or label.

In the second case, organizations are foundations or NGOs that want to increase people's awareness on the impact of corporations. Information is usually freely available and often refers to specific ESG areas. For example, the Human Rights Campaign Corporate Equality Index (Equality) is calculated every year and disclosed in the HRC's CEI report with the aim to describe policies and practices pertinent to lesbian, gay,

bisexual, and transgender employees of large US employers. In this case, scores and rankings are used to indicate the “Best Places to Work.” Similarly, the *NewsWeek* magazine annually discloses its environmental performance assessments of the largest publicly traded companies named “NewsWeek Green ranking” with reference to the United States (US 500) and the world (Global 500). In this case, data is obtained from Bloomberg, FactSet, Thomson Reuters, and the Carbon Disclosure Project. In addition, all companies are contacted for data verification once all available items of data have been obtained.

This distinction between ranking organizations becomes blurred when we consider CSR Hub and similar collectors of ESG information that provide access to corporate social responsibility and sustainability ratings to service subscribers paying an annual fee (usually investors, researchers, activists and managers interested in comparing CSR performance with competitors). These organizations do not make their own evaluation from questionnaires or by reading sustainability reports. They aggregate data coming from socially responsible investing research firms, well-known indexes, publications, and “best of” or “worst of” lists.

Although company evaluation methodology may appear different, there are many similarities. Most of these frameworks derive from existing reporting standards like GRI guidelines, ISO 26000, UN Global Compact, etc. All company evaluated receive a score (or several scores for each ESG dimension), so it is possible to compare sustainability performances with peers and through time. Scores can be expressed through numbers, letters (e.g., from A to F), or levels (e.g., ranging from advanced to robust, limited and weak).

Types of Indices and Rankings

There are several indices and rankings that serve a valuable information dissemination function. These are usually defined by specialist ratings agencies that select companies for their results in the three ESG areas or in specific fields or

thematic areas such as diversity. Below the main international sustainability indices are briefly described (the order of appearance does not reflect the degree of diffusion). For an evaluation of strengths and limitations of these indices see Firmialy and Nainggolan (2018).

Dow Jones Sustainability Indices (DJSI)

The first sustainability index calculated by the Dow Jones was launched in 1999. Today, DJSI is a family of several indices that assess economic, environmental, and social performance of companies stratified by industry. Indices refer to different geographical areas: DJSI World (subdivided into World, World enlarged, Emerging Markets), DJSI Regions (Asia, Europe, North America), and DJSI Countries. Every year the largest companies (in terms of float-adjusted market capitalization) are asked to respond to an extensive industry-specific questionnaire prepared by RobecoSAM, a specialist in sustainability investing that partners with DJ to perform the sustainability assessment and calculate the Total Sustainability Score (TSS) for each company. When a selected company does not respond to the questionnaire, the score is calculated through the use of publically available information. In addition, the score is integrated with public information (e.g., media and stakeholder commentaries) to check for crises situations and ESG risks that may have a damaging effect on a company’s reputation and business. Companies operating in alcohol, tobacco, gambling, armaments, adult entertainment, nuclear weapons, and nuclear power generation industries are excluded for ethical reasons.

For additional information: <https://www.robecosam.com/csa/indices/?r>

FTSE4Good Index Series

FTSE4Good is also an index series like the DJSI. It was launched in 2001 and scrutinizes company by geographical areas. In this case, the provider of stock market indices (both sustainable and traditional indices) is the FTSE Group, owned by the London Stock Exchange. Companies are included in the FTSE4Good based on the ESG rating assigned by one company of the group named FTSE Russell, which exclusively uses public

information of over 4,000 companies in 47 different financial markets. Its peculiarity is that it does not accept data or information privately provided by companies as this is held to improve the credibility of data and enhance transparency across the market. The index excludes companies due to their involvement in tobacco production, nuclear weapons, conventional weapon systems, or coal power industry.

For additional information: <https://www.ftserussell.com/products/indices/ftse4good>

STOXX® ESG Indices

STOXX provides ESG-screened versions of more than 40 benchmarks that meet the standard responsible-investing criteria of leading asset owners. Also in this case, there is a family of indices, including the ESG-version of global, regional, and emerging markets benchmarks (e.g., Stoxx Europe 50 ESG; Stoxx Australia 150 ESG; Stoxx Emerging markets 50 ESG). The screening is made by Sustainalytics. It excludes all companies that are not compliant with the UN Global Compact principles and companies involved in nonethical industries such as tobacco producers and manufactures of nuclear and chemical weapons. The most known index is the STOXX® Global ESG Leaders index that includes the world's leading companies in terms of ESG criteria. Then, there are other subindices referring to different ESG areas, like the STOXX® Global ESG Environmental Leaders and STOXX® Global ESG Social Leaders.

For additional information: <https://www.stoxx.com/index-details?symbol=SXWESGP>

MSCI ESG Indexes

Based on the annual analysis of ESG aspects of over 13,000 companies (stock issuers including subsidiaries), MSCI ESG Research LLC examines and rates organizations worldwide. Evaluations on ESG risks associated to the examined companies are offered to asset managers, asset owners, and banks. Ratings are expressed with letters (AAA, AA, A, BBB, etc.) and provide institutional investors looking for companies with high sustainability performance with the information needed to build their portfolio.

Ratings are then used to calculate the MSCI indexes, which are subdivided in different classes, each representing a main ESG strategy. For example, with reference to environmental aspects, there is an MSCI Climate Change Index that measures opportunities and risks associated with the transition to a low carbon economy and the MSCI Global Environment Index that includes securities of companies that derive at least 50% of their revenues from environmentally beneficial products and services like alternative energy, green building, or clean technology.

For additional information: <https://www.msci.com/esg-indexes>

Vigeo Eiris Indices

Vigeo Eiris is a rating company that manages a family of ESG indices, published on financial platforms such as Bloomberg and Datastream. They perform ESG research on about 4500 issuers and thematic research covering up to 10,000 issuers. The most famous is the Euronext Vigeo Eiris indices family, which refers to the highest-ranking listed European companies according to their ESG performance. Then, it also calculates the Ethibel Sustainability Indices (ESI), the Vigeo Eiris Best Emerging Market (EM) Performers ranking, and the CAC 40® Governance index, which is a thematic index focusing on companies' performance in terms of responsible corporate governance. Company assessment is based on an exclusive methodology (a framework of 38 sustainability criteria grouped into six domains) and also includes the analysis of any disputes.

For additional information: <http://vigeo-eiris.com/>

CDP "Climate Change A List"

CDP is a not-for-profit charity that ranks companies and cities based on environmental aspects only. It makes an annual company assessment (over 7000 participating companies in 2018) for the advanced approach to climate change mitigation. The best performing companies (around 140 companies) are included in the "Climate A List" that was established in 2011. The analysis is based on data and information provided by companies, which are evaluated on four

successive levels (communication, awareness, management, leadership) that represent the phases that a company goes through progressing toward environmental protection. Businesses receive a score from A to D–. F is given when a company requested to disclose its data and fail to do so.

For additional information: <https://www.cdp.net/en>

Standard Ethics Rating and Indices

Standard Ethics is an independent sustainability reporting rating agency that introduced in 2001 a standardized approach to sustainability ratings. From a methodological point of view, it separates Corporate Social Responsibility (CSR) from Sustainability, and its Standard Ethics Rating is an evaluation of the level of compliance of companies and sovereign nations on matters such as corporate governance and sustainability as indicated by documents and guidelines published by the United Nations (UN), the Organization for Economic Co-operation and Development (OECD), and the European Union (EU). Its business model is peculiar as it sells solicited ratings (i.e., upon a client's request, the company issues a rating that stems from a direct and regulated bilateral relationship). It does not provide consultancy services, does not sell services to investors, nor does it use the data collected for asset management activities.

Standard Ethics has created several indices subdivided by geographical areas (e.g., Standard Ethics European 100; Standard Ethics UK, Italian, French). Its indices are totally "Open Free," which means that the indices are freely usable as a benchmark in CSR and SRI.

For additional information: <http://www.standardethics.eu/>

Use of Sustainability Stock Indices in Academic Research

The presence of a company on a sustainability stock index or some ESG-related ratings helps to communicate higher standards for CSR. Hence, several studies use the inclusion or exclusion of companies in sustainability indices as signal or

proxy for CSR performance to then test hypothesis that link the impact of CSR performance on company's financial value.

For example, Adamska and Dabrowski (2016) demonstrate that the exclusion of Polish listed companies from the ethical RESPECT Index is taken into account by investors and consequently affects the rate of return on their shares. Similarly, Becchetti et al. (2012) reveal a significant market reaction to corporate exit from the Domini 400 Social Index, recognized as a CSR benchmark, between 1990 and 2004. Inclusion in a social index generates a strong positive stock market reaction regardless of whether the rating is good or bad (Cellier and Chollet 2016). Yet, market reaction is temporary. As demonstrated by Cheung (2011), addition or deletion from the Dow Jones Sustainability World Index generates a significant increase (decrease) in stock return but only on the day of change. Nevertheless, being listed in corporate sustainability indices remains a distinctive mark and research has demonstrated that companies included in such indices have higher price-to-book when compared to companies not listed (Carvalho and Tavares 2013). Testing whether the stock market values the inclusion/exclusion in a sustainability stock index is usually made recurring to event study analysis (Oberndorfer et al. 2013; Aureli et al. 2019) or adopting the Feltham and Ohlson (1995) valuation model as demonstrated by Kaspereit and Lopatta (2016).

Another stream of research refers to the reactions of evaluated companies. Inclusion, exclusion, or changes in CSR ratings should also motivate companies to adjust their behavior based on how they rank. However, Scalet and Kelly (2010) found that being dropped from a CSR ranking does not push firms to acknowledge and address problems related to their social and environmental performance.

Cross-References

- [Corporate Social Responsibility Reporting](#)
- [CSR Disclosure, Quality Measurement of](#)
- [CSR Disclosure Quality: Role of NEDs](#)

- Sustainability Report and Sustainability Reporting
- Sustainable Performance

References

- Adamska, A., & Dabrowski, T. J. (2016). Do investors appreciate information about corporate social responsibility? Evidence from the polish equity market. *Engineering Economics*, 27(4), 364–372.
- Aureli, S., Medei, R., Gigli, S., & Supino, E. (2019). The value relevance of environmental, social, and governance disclosure: Evidence from Dow Jones sustainability world index listed companies. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.1772>.
- Becchetti, L., Ciciretti, R., Hasan, I., & Kobeissi, N. (2012). Corporate social responsibility and shareholder's value. *Journal of Business Research*, 65(11), 1628–1635.
- Bonilla-Priego, M. J., Font, X., & Pacheco-Olivares, M. D. R. (2014). Corporate sustainability reporting index and baseline data for the cruise industry. *Tourism Management*, 44, 149–160.
- Carvalho, A., & Tavares, E. (2013). Does social responsibility enhance firm value and return in Brazil? *Corporate Ownership & Control*, 10(2–2), 253–257.
- Cellier, A., & Chollet, P. (2016). The effects of social ratings on firm value. *Research in International Business and Finance*, 36(issue C), 656–683.
- Chatterji, A., & Levine, D. (2006). Breaking Down the Wall of Codes: Evaluating Non-Financial Performance, Measurement. *California Management Review* 48(2), 29–51.
- Cheung, A. W. K. (2011). Do stock investors value corporate sustainability? Evidence from an event study. *Journal of Business Ethics*, 99(2), 145–165.
- EY. (2017). Is your nonfinancial performance revealing the true value of your business to investors? Accessed on 03 July 2019 from [https://www.ey.com/Publication/vwLUAssets/EY_-_Nonfinancial_performance_may_influence_investors/\\$FILE/ey-nonfinancial-performance-may-influence-investors.pdf](https://www.ey.com/Publication/vwLUAssets/EY_-_Nonfinancial_performance_may_influence_investors/$FILE/ey-nonfinancial-performance-may-influence-investors.pdf)
- Feltham, G. A., & Ohlson, J. A. (1995). Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research*, 11(2), 689–731.
- Firmially, S., & Nainggolan, Y. A. (2018). Constructing the ideal SRI (sustainability reporting index) framework for Indonesian market: Combined perspectives from rating agencies, academics, and practitioners. *Social Responsibility Journal*. article in press.
- Haller, A., Link, M., & Groß, T. (2017). The term ‘non-financial information’ – A semantic analysis of a key feature of current and future corporate reporting. *Accounting in Europe*, 14(3), 407–429.
- Kaspereit, T., & Lopatta, K. (2016). The value relevance of SAM's corporate sustainability ranking and GRI sustainability reporting in the European stock markets. *Business Ethics*, 25(1), 1–24.
- KPMG (2013). *The KPMG survey of corporate responsibility reporting 2013*. Accessed on 05 February 2018 from <https://assets.kpmg.com/content/dam/kpmg/pdf/2015/08/kpmg-survey-of-corporate-responsibility-reporting-2013.pdf>
- Oberndorfer, U., Schmidt, P., Wagner, M., & Ziegler, A. (2013). Does the stock market value the inclusion in a sustainability stock index? An event study analysis for German firm. *Journal of Environmental Economics and Management*, 66(3), 497–509.
- Salvioni, D. M., & Bosetti, L. (2014). Sustainable development and corporate communication in global markets, Symphonia. *Emerging Issues in Management*, 1, 32–51.
- Scalet, S., & Kelly, F. T. (2010). CSR rating agencies: What is their global impact? *Journal of Business Ethics*, 94(1), 69–88.
- Waddock, S. (2008). Building a new institutional infrastructure for corporate responsibility. *Academy of Management Perspectives*, 22, 87–108.

Corporate Sustainable Development Performance

- Corporate Sustainability Performance

Corporate Sustainable Innovation

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Synonyms

Corporate social innovation; Eco-innovation; Ecological innovation; Environmental innovation; Green innovation

Definition

Corporate sustainable innovation (see also ► [“Sustainable Innovation”](#)) seeks to simultaneously solve environmental and social problems and generate profits for the company (Delmas and Pekovic 2018). Its nature can be technological, organizational, social, or institutional (Rennings 2000).

In a narrow sense, corporate sustainable innovation can be defined as “new ideas, behavior, products and processes, (...) which contribute to a reduction of environmental burdens or to ecologically specified sustainability targets” (Rennings 2000, p. 322). In this sense sustainable innovation is often used interchangeably with notions “ecological” or simply “eco-innovation,” “environmental innovation,” and “green innovation.”

In its original, broader meaning, the term includes also a social dimension in addition to the environmental one (Schiederig et al. 2012). In a broader sense, including both social and ecological aspects, it is used synonymously with corporate social innovation (CSI) (Kanter 1999) (see ► [“Innovation and CSR”](#)).

Elements of Corporate Sustainable Innovation

Corporate sustainable innovation can be characterized by six elements (Schiederig et al. 2012):

1. Innovation object: product, process, service, and method
2. Market orientation: competitive advantage through user need satisfaction
3. Environmental/social aspect: reduction of negative or generation of positive environmental/social impact
4. Phase: full life cycle considered
5. Impulse: economical or ecological/social motivation
6. Degree of newness: firm level

The first two are defining elements of innovation in general, describing different innovation

objects (product, process, service, or method) and its main function, which is to satisfy user’s need and therefore be competitive on the market. The third element indicates that sustainable innovation seeks to reduce negative or generate positive social and/or environmental impact. This element is of relative and temporary nature, as it requires the comparison to existing intra- or interorganizational alternatives. The fourth aspect illustrates that the analysis of innovation’s environmental and social impact should be conducted for a full life cycle and for all input and output factors. Fifth, the motivation of the innovator to introduce sustainable solution may be economical or related to social mission. Finally, the last element suggests that a sustainable solution needs to be at least new to the innovating company in order to be classified as a sustainable innovation.

Innovation as a Driver of Corporate Sustainability

Since corporate sustainable innovation provides a public good by addressing social and environmental needs, its relationship with competitive advantage is even more uncertain than with typical commercial innovation. For this reason sustainable innovation has for long been underinvested (Delmas and Pekovic 2018). However, as global sustainability pressures change the competitive landscape, companies are being forced to innovate in this area (Nidumolu et al. 2009).

Innovation is perceived as the key to achieving the needed, strategic corporate sustainability that enables companies to meet stakeholder expectations and match the scale and urgency of the global problems without sacrificing their growth ambitions (Visser 2012; Osburg 2013). Corporate sustainable innovations of products, services, processes, as well as whole business models, help companies to tackle the root causes of their present irresponsibility and meaningfully contribute to sustainable development (Visser and Kymal 2014), by creating shared value (CSV) (Porter and Kramer 2011) (see ► [“Porter and Kramer’s \(2006\) “Shared Value”](#)”) or integrated value

(Visser 2018). While the first refers to “practices that enhance the competitiveness of a company while simultaneously advancing social and economic conditions in the communities in which it operates” (Porter and Kramer 2011, p. 6), the latter stands for “the simultaneous building of multiple capitals (notably financial, infrastructural, technological, human, social and ecological) through synergistic [and disruptive] innovation” (Visser 2018, p. 132).

There are five pathways for corporate sustainable innovation (Visser 2018):

1. Secure – innovation that helps communities prepare for and respond to emergencies and crises, for instance, solutions related to occupational health and safety, insurance cover, and emergency preparedness
2. Smart – use of technology to better connect citizens/customers to each other and allow them to access knowledge, share information, and give direct, immediate feedback
3. Shared – solutions that address issues of equity, access, diversity, and stakeholder participation
4. Sustainable (in narrower, ecological meaning) – innovation that enables shift to renewable energy and resources, closing the loop on production and moving to a low carbon society
5. Satisfying – high-quality services that satisfy human needs and promote well-being

Sustainable Business Model Innovation (See ► **“Sustainable Business Model Innovation”**)

Corporate sustainability is achieved not only through innovation in technologies, products, or services but also through business model innovation (Yang et al. 2017). Technology always needs suitable business models to achieve its commercial potential (Chesbrough 2007). Additionally, while technology innovation is limited to a specific industry, business model innovation is more generic and can be applied by organizations from various industries (Teece 2010) and in result has greater potential to be scaled up. Business model innovations have the potential to bridge the gap

between radical and systemic sustainable innovation and firm strategies, including the issue of economic performance at several levels (Boons and Lüdeke-Freund 2013). Thus corporate sustainable innovation within business models is discussed as major factor that can support the adoption of cleaner products and processes, sustainable supply chains, and further contributions to a transition toward sustainable consumption and production (Tukker et al. 2008).

Cross-References

- [Communication and Innovation](#)
- [Innovation and CSR](#)
- [Social Innovation](#)
- [Sustainable and Innovation process](#)
- [Sustainable Innovation](#)

References

- Boons F., & Lüdeke-Freund, F. (2013) Business models for sustainable innovation: state-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19
- Chesbrough, H., (2007) Business model innovation: it's not just about technology anymore. *Strategy & Leadership* 35(6),12–17
- Delmas, M. A., & Pekovic, S. (2018). Corporate sustainable innovation and employee behavior. *Journal of Business Ethics*. Springer Netherlands, 150(4), 1071–1088. <https://doi.org/10.1007/s10551-016-3163-1>.
- Kanter, R. M. (1999). From spare change to real change: The social sector as Beta site for business innovation. *Harvard Business Review*, 77(3).
- Nidumolu, R., Prahalad, C. K., & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation. *Harvard Business Review*, September, 56–64.
- Osburg, T. (2013). Social innovation to drive corporate sustainability. In T. Osburg & R. Schmidpeter (Eds.), *Social Innovation. Solutions for a Sustainable Future* (pp. 13–22). Berlin/Heidelberg. https://doi.org/10.1007/978-3-642-36540-9_2.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, Jan-Fe.
- Rennings, K. (2000). Redefining innovation – Eco-innovation research and the contribution from ecological economics. *Ecological Economics*, 32, 319–332.
- Schiederig, T., Tietze, F., & Herstatt, C. (2012). Green innovation in technology and innovation management –

An exploratory literature review. *R&D Management*, 42, 180–192.

- Teece, D. J. (2010) Business models, business strategy and innovation, *Long Range Planning*. Elsevier Ltd, 43(2–3), 172–194.
- Tukker, A., Emmert, S., Charter, M., Vezzoli, C., Sto, E., Andersen M. M., Geerken T., Tischner U., & Lahlou S., (2008) Fostering change to sustainable consumption and production: an evidence based view. *Journal of Cleaner Production* 16(11), 1218–1225
- Visser, W. (2012) *Future trends in CSR: The next 10 Years*. Available at: http://www.waynevisser.com/wp-content/uploads/2012/12/inspiration_csr_trends_wvisser.pdf. Accessed 22 June 2014.
- Visser, W. (2018). Creating integrated value through sustainable innovation: A conceptual framework. In M. Lars, F. Melissen, & S. O. Idowu (Eds.), *Sustainable business models principles, promise, and practice* (pp. 129–150). Springer.
- Visser, W., & Kymal, C. (2014). Creating integrated value: Beyond CSR and CIV to CIV. *Kaleidoscope Futures Paper Series*, 3.
- Yang, M., Evans, S., Vladimirova, D., & Rana, P. (2017). Value uncaptured perspective for sustainable business model innovation. *Journal of Cleaner Production*, 140, 1794–1804

Corporate Venturing

► Intrapreneurship

Corporate Volunteering

► Corporate Philanthropy

Corporate/Corporation

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Synonyms

Company

Definition/Description

The corporation is a legal concept found in most legal systems around the world (Stout et al. 2016). Its three main features are first, its independent existence, which allows it to operate within the legal system, entering into contracts and holding property, without engaging liabilities for the human people involved in those activities. Second, the corporation has perpetual existence which allows it to continue to exist regardless of the human people who may come and go in terms of its operations and participation. Third, the corporation operates through some type of formal management often known as directors and has members. As a concept, it has been part of western legal systems for about a thousand years.

Corporations are the preferred organizational form for businesses. They provide a number of advantages to those operating the business. Unlike partnerships or sole proprietorships, corporations allow limited liability for investors and agents, the pooling of resources, continual existence, and significant in terms of sustainability, uncompensated externalities such as pollution (Sheehy 2004a).

The term “corporation” or “corporate” is often misused. For example, it is often equated with the idea of business enterprise. A business enterprise may be composed of many corporations, in different relationships from partnerships and joint ventures to various types of relationships depending on shareholdings and hierarchies. For example, a corporation may be a parent company of one company while being a subsidiary of another. Another common misuse of the term corporate is found in its use as an adjective describing behaviors, protocols, or incentives. For example, “corporate dress” means dressing style appropriate for professional workplaces.

Introduction

The corporation is a legal idea with a long history in the Western tradition. Some scholars see it as stemming from the grave cults of ancient Greece

where a wealthy person would bestow assets on a group of people who would use those assets to keep the person's memory alive after his/her death. The modern corporation comes from the middle ages where a revival of Roman law brought the idea back to life and introduced it to Western legal traditions.

As it developed and its utility became clearer, the corporation became the preferred vehicle for business organizations. The modern business corporation is controlled by directors and has as its members, the shareholders.

There are a variety of models and understandings of the corporation. These come from the corporation's historical development, economics, and organization theory. These theories range from concession theories to economic theories of mere contracting to more robust models of socially embedded organizations with active hierarchies involved.

Corporation in the Legal System

The corporation is a concept, a creation of the legal system (Maitland 1893). It is a legal category and a grouping of rights and duties that form an actor or placeholder within the legal system. For legal purposes, the corporation is a fully formed person freely able to navigate the legal system. It can enter into contracts. It can hold property. It can sue people. It can be sued by people. It must pay taxes just like any other person. In fact, the corporation is properly referred to as a "legal person" and "artificial person" in contrast to a "human person" (Stout et al. 2016). It is referred to as a legal person because it has been created by the legal system. It is referred to as an artificial person because it is not a natural person born into the human race. Rather, it is a creation of the legal system and recognized within this system as the equivalent of a human person. Thus, this use of the term person helps understand how the legal system treats corporations.

Corporations are of many types. Not all corporations are used for business. For example, the City of London is a corporation as is the monarch

of the United Kingdom. Most universities are corporations as are many charities. Corporations that are used for business are referred to as "companies."

Corporations and companies, having their own existence within the legal system, do not depend for their existence on the people who may operate them. Those people occupy positions within these corporations but are distinct from the corporations themselves. This distinction is perhaps the most critical aspect of corporate theory but often the most difficult concept for people to understand (Sheehy 2016).

Corporate Creation and Organs

The corporation is created by filling an application form and registering it with the appropriate authority. Once it is registered, the authority declares it as a corporation, fully formed upon registration. The application form will include information about the parties to be involved. In a two-tiered system, the persons involved will be the directors and members. The directors form a board of directors while the members are not necessarily so organized. Together they form the corporate organs (Stout et al. 2016). In a dualistic board model, more common in civil law jurisdictions, the two boards – the board of directors and the board of advisors (at times composed of labor representatives) – will be considered organs. Where the corporation is a company limited by shares, the members of the company are referred to as shareholders.

The registration document will also refer to some type of corporate constitution – an internal rule system which constitutes the corporation providing for the organs and other rules. These rules may be supplied by the state or by the parties registering the corporation itself. The internal rules provide the basis of the governance of the corporation – who has what powers. These powers are divided between the board of directors and the members, with management powers usually granted to the directors.

Directors Duties

The main legal control on directors' powers is through a set of legal duties called "directors' duties." These duties, broadly speaking, require the directors to place the interests of the corporation ahead of their own personal interests. These duties can be thought of as creating a duty to look after the corporation as one would look after any other party in a relationship of dependency – a relationship known in law as a fiduciary relationship. While not all of the duties are fiduciary, most jurisdictions have an element of fiduciary obligation (Dalley 2001). Contrary to some business scholars, law does not require directors to focus on maximising shareholder value and ignore Corporate Social Responsibility (Sheehy and Feaver 2014).

Corporations, Sustainability, and Corporate Social Responsibility

Corporations are deeply implicated in the environmental crisis that the sustainability agenda aims to address (Sjåfjell and Bruner 2020). As legal actors with no agenda but wealth accumulation and as providing a shield for human persons who control it, the corporation is an ultimate vehicle for the exploitation of the natural environment (Sjåfjell et al. 2015). It throws off social costs while internalizing the profits generated by the activity (Sheehy 2004a).

Social Costs and Sustainability

Corporations, although artificial legal actors, have real-world effects. The reason they can do so is that they are able to hold property and enter into contracts for services. The result is that they are able to own and operate fossil fuel resources such as coal mines and oil fields, transportation services from airlines to cargo ships, and energy generation plants, all of which emit great amounts of greenhouse gases. Unlike human persons who might pause a moment to think about the consequences of their actions, legal persons have no

such desire. Companies are focused primarily on profit.

Companies lack incentives to pay for the costs of their pollution and the services they receive from the environment. Where governments have not imposed regulations on companies to compensate for these costs placed onto the public, they are free to do so allowing them to generate public, social costs while keeping the profits private for the shareholder members (Sheehy 2004a).

Directors Duties and Corporate Social Responsibility

Corporate social responsibility is an effort to limit the harms and distribute more widely the benefits of the corporation (Sheehy 2015). It is a form of private regulation. Some scholars take the position that directors are not permitted by law to spend money on matters that do not generate immediate shareholder benefit. Some finance scholars, for example, argue that the law requires directors to limit their discretion to wealth creation. This position is incorrect. The law grants directors wide discretion allowing them to invest the corporation's funds in any way that they believe will advance the interests of the corporation (Sheehy and Feaver 2014). A fundamental consideration is that directors do not have a legal duty to shareholders but to the corporation and that it is often not clear what the precise consequences of any investment of resources will be. Accordingly, a director's decision to invest in corporate social responsibility fits well within the scope of director discretion.

Theories of the Corporation: Understanding the Corporation

The corporation, as a legal construct with ramifications in other aspects of social life, is explained using a variety of models. These models have different focal points and provide different insights (Sheehy 2004b). Historical models of the corporation, a concession theory, reflect the privileged status of the corporation. It was a grant

or concession from the crown and often associated with a franchised monopoly, such as the East India Company. Later developments in the law allowed access to the corporation, as noted, through the mere application, and as a result, this concession model of the corporation has declined.

Some models have equated the company with the shareholders, and indeed, this position has been adopted by modern finance as providing the corporation's objective function (Jensen 2001). This position, while correct in certain instances, in many cases is incorrect. One problem with the model is that there is no single type of shareholder which can provide clarity on which decision to take. Some shareholders may be pursuing income while others are interested in capital gains. Still more troubling about this model is that the majority of shares traded on the large stock markets are held for a matter of seconds. It is difficult, if not impossible, to make decisions on the basis of the interest of these shareholders (Hu 1994).

A common theory following the era of the concession theory was the aggregate theory of the corporation. This theory viewed the corporation as no more humans collaborating and pursuing their collective interests via private contracts between members and directors, associated or aggregated together, forming a particular group. This view shifted the corporation from the public arena of the concession theory to the private arena which properly excluded government interference and public interest (Buxbaum 1984).

Economic models of the corporation focus not on the legal person (Bratton 1989) but on the concentrated economic activity that the corporate form generates (Bratton 1989). From an economic perspective, the corporation appears as little more than a location in a market with a higher density of contracting. There are parties internal to the corporation contracting – directors and shareholders – and parties external to the corporation contracting with it. These contracts may be for goods or services, both supplying and purchasing from the legal person. The state merely provides the default contract rules and nothing more (Easterbrook and Fischel 1991).

As analysts committed to the institution of markets, economic models see the corporation as operating within four markets which serve to constrain corporate behavior. These markets are the markets for finance, products, corporate control, and executive talent (Coffee 1984). These markets, combined with the default rules, the standard contractual terms provided by the state as a corporate constitution, provide the two-part economic regulatory model for the corporation.

Organizational models of the corporation explain it as a social actor, a marker of social space with an internal hierarchy focused on collaborative production. It attempts to understand the complexity of internal relationships beyond the highly stylized director-member dyad and into the live, dynamic relationships of people with different information, roles, and personalities. It also recognizes the corporation as a significant political and social actor (Bottomley 2007). Corporations lobby politicians for regulation favoring their own interests.

Corporate Reform

A core issue for corporate theorists is whether the corporation should be considered a public or a private matter. Given the overly large role of corporations in society – they employ the majority of the workforce in most developed economies and own the majority of assets – there is good reason to hold them to be public bodies. Nevertheless, they are set up and operated by parties acting in their private capacity, with private resources to pursue private ends.

Kent Greenfield points out that although the corporation is a unique creation of law it should not be founded on different principles. He argues that (1) the ultimate purpose of corporations should be to serve the interests of society as a whole, (2) corporations are distinctively able to contribute to the society goods by creating financial prosperity, (3) corporate law should further principles 1 and 2, (4) a corporation's wealth should be shared fairly among those who contribute to its creation, and (5) participatory, democratic corporate governance is the best way to

ensure the sustainable creation and equitable distribution of corporate wealth (Greenfield 2005). These principles, he argues, are more consistent with law as a whole. The legal system was created for public benefit. Accordingly, rebalancing the legal system's own creation to reflect that bias is more appropriate.

Summary

Corporations are legal entities or legal persons, distinct from the people who direct them or are members. They act in their own right and capacity. As such, they are able to pursue their own agendas single-mindedly without reference to other social actors and their constraints. Corporations are composed of directors and members (and in civil law jurisdictions, often a supervisory board). They are not required by law to advance the wealth of shareholders.

Corporations present a deep challenge for sustainability because they aggregate resources and use them to exploit the planet's social and environmental riches for private profit. Further, they do so with little regard for the ecology. Corporate social responsibility is one way in which parties have collaborated in efforts to reduce the harms generated by the corporate form.

Various understandings of the corporation provide insight into different aspects of the corporation. These theories are informative but contradictory among themselves.

Cross-References

- [Corporate Social Responsibility](#)
- [Directors and CSR](#)
- [Sustainability](#)

References

- Bottomley, S. (2007). *Constitutional corporation: Rethinking corporate governance*. Aldershot: Ashgate Publishing.
- Bratton, W. (1989). The new economic theory of the firm: Critical perspectives from history. *Stanford Law Review*, 41, 1471.
- Buxbaum, R. M. (1984). Corporate legitimacy, economic theory, and legal doctrine. *Ohio St. LJ*, 45, 515.
- Coffee, J. C. (1984). Regulating the market for corporate control: A critical assessment of the tender offer's role in corporate governance. *Columbia Law Review*, 84, 1445.
- Dalley, P. (2001). To whom it may concern: Fiduciary duties and business associations. *Delaware Journal of Corporate Law*, 26, 515.
- Easterbrook, F., & Fischel, D. (1991). *The economic structure of corporate law*. Cambridge, MA: Harvard Univ Press.
- Greenfield, K. (2005). *The failure of corporate law: Fundamental flaws and progressive possibilities*. Chicago: University of Chicago Press.
- Hu, H. T. C. (1994). Risk, time and fiduciary principles in corporate investment. *UCLA Law Review*, 38, 279–390.
- Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *European Financial Management Review*, 7(3), 297.
- Maitland, F. (1893). *The corporation aggregate: The history of a legal idea*. Cambridge, MA: Cambridge University Press.
- Sheehy, B. (2004a). Corporations and social costs: The wal-mart case study. *Journal of Law & Commerce*, 24, 1–55.
- Sheehy, B. (2004b). The importance of corporate models: Economic and jurisprudential values and the future of corporate law. *DePaul Business & Commercial Law Journal*, 2(3), 463–513.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648. <https://doi.org/10.1007/s10551-014-2281-x>.
- Sheehy, B. (2016). Explaining the corporation to non-specialists: A graphic approach. *University of Western Australia*, 40(2), 69–84.
- Sheehy, B., & Feaver, D. P. (2014). Anglo-American Directors' legal duties and CSR: Prohibited, permitted or prescribed? *Dalhousie Law Journal*, 37(1), 347–395. Retrieved from <http://ssrn.com/abstract=2157315>
- Sjåfjell, B., & Bruner, C. M. (2020). Corporations and sustainability. In B. Sjåfjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability* (pp. 1–12). Cambridge, MA: Cambridge University Press.
- Sjåfjell, B., Johnston, A., Anker-Sørensen, L., & Millon, D. (2015). Shareholder primacy: The main barrier to sustainable companies. In B. Sjåfjell and B. J. Richardson (Eds.), *Company Law and Sustainability: Legal Barriers and Opportunities*, Cambridge University Press, 79.
- Stout, L. A., Robé, J.-P., Irel, P., Deakin, S. F., Greenfield, K., Johnston, A., ... Morrow, P. (2016). *The modern corporation statement on company law*. Retrieved from SSRN: <https://doi.org/10.2139/ssrn.2848833>

Corporate-Business Ethics (CBE)

► Cross-Cultural Attitudes to CSR

Corporation

► Personhood and Sustainable Management

Corruption

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Synonyms

Bribery; Exploitation; Fraud; Malfeasance; Misconduct; Skimming

Definition

Corruption is a ubiquitous and intentional phenomenon that directly affects the national security, performance, and ethical values of people, organizations, corporations, governments, and communities. Moreover, it is difficult to choose one definition of corruption because there are many definitions in the literature, and each international organization has its definition depending on its mission. For this reason, we define corruption as an omnipresent phenomenon related to the human survival instinct that negatively affects communities, organizations, and countries.

Based on the definition of the dispersal of responsibilities as a phenomenon that “is generated by a misunderstanding of autonomy and self-governance and represents a motivation for managers to promote non-virtuous beliefs”

(Burlea-Schiopoiu and Idowu 2016, p. 152), corruption can be considered as a lack of virtue of individuals and/or groups.

Therefore, corruption will not disappear, and humanity must aim to reduce this negative phenomenon and bring it to a level of affordability by acting on reducing the rapacity of individuals and organizations.

Introduction

The twenty-first century has been marked by many civil societies’ struggles against corruption (the Middle East and North Africa was involved at the end of 2010 and the beginning of 2011 in the Arab Spring Revolution; in January 2011, Tunisia was the theater of Jasmine Revolution; and following Tunisia, in 2011, the Yemeni Revolution of Dignity started; November 21, 2013, was the starting point of Maidan Revolution in Ukraine).

Nowadays, we are confronted with two corruption paradoxes because as much corruption is analyzed and structured. The more measurement indicators and anti-corruption methods are developed, the more this phenomenon acquires new dimensions and develops, even in those countries where democracy is considered high.

Unfortunately, the legitimacy of law enforcement is still weak and continuously diminishes the trust of people in national and international institutions.

The second paradox refers to the crisis as the foundation of corruption. In times of crisis (economic, financial, pandemic, political), corruption finds the environment conducive to development.

Although it is a global phenomenon, corruption requires timely solutions depending on national and regional particularities.

Although greed is the source of any phenomenon of corruption, the way individuals act is different because they rely on different laws. The dispersal of responsibilities phenomenon can be considered a facilitator of corruption (Burlea-Schiopoiu and Idowu 2016; Burlea-Schiopoiu and Remme 2017).

Therefore, Burlea-Schiopoiu and Idowu (2016, p. 161) affirm, “The corruption is seen as second nature to the business organisation and this phenomenon negatively impacts managers’ virtuous beliefs and the flourishing of community.”

The relationship between DR and corruption is obvious, especially if we start from the definition of DR as a complex phenomenon that acts on many different levels of influence (e.g., economic, social, legal) and supplies irresponsible organizations with tools for illegal and unethical actions.

The Features of Corruption

The events from the last years (i.e., the COVID-19 crisis and international conflicts such as the Russian-Ukrainian war) proved that the international legislation rules and norms are not considered and, indirectly, they contribute to the manifestation of corruption.

In times of crisis, dispersal of responsibilities is the process that promotes corruption by providing tools that facilitate the manifestation of unethical behavior of individuals in a position to make decisions.

Civil society should become more decisive and more responsible so that, through its voice, it can make governments more and more accountable, promote inclusive politics, and contribute to the development of open economies.

In order to become strong, civil society must promote its values and punish its leaders for defending its promoted values and preventing acts of corruption that affect their standard of living and moral integrity.

Mass media plays an essential role in the fight against corruption and in promoting democracy, but sometimes the mass media itself is corrupted and enslaved to the interests of moguls (Johnston 2009).

Johnston (2009) considered that official moguls is one of the four corruption syndromes, influence markets, oligarchs and clans, and elite cartels.

The level of corruption and leadership, especially political leadership, makes the difference between democratic and not democratic countries,

between developed and underdeveloped countries, and between safe and unsafe countries.

Around the world are many examples that prove the relationship between corruption and the quality of life of the people (Gillanders and van der Werff 2022; Mugellinni and Villeneuve 2019). In order to reduce their vulnerability, civil society and mass media fight corruption, are proactive, and promote servant leadership that puts above public interests and not private interests.

The Complexity of Corruption

Corruption also manifests itself at the level of international bodies created to fight corruption (i.e., Benon Sevan, the former head of the United Nation’s oil-for-food program in Iraq).

Former presidents of democratic countries were convicted of corruption.

Recent examples are as follows: former Frenchman Nicolas Sarkozy received a custodial sentence – for corruption and influence. Finally, he was sentenced to a year in prison for illegally funding his 2012 reelection campaign; former South Korean President Lee Myung-bak was sent to prison for 17 years for bribery and embezzlement charges.

At the international level, many bodies are involved in the fight against corruption (i.e., the European Union, International Monetary Fund, Organization for Economic Co-operation and Development, Transparency International, United Nations, World Bank, World Trade Organization) which is both strong and weak points that favor dispersal of responsibility. International bodies fighting corruption must establish a joint and concerted strategy involving a common mission (fight against corruption) and detection mechanisms, measurement indicators, and joint sanctions.

Many factors positively or negatively influence corruption as a controversial phenomenon (Fig. 1).

The dispersal of responsibilities, legislation, leadership, and public policies positively influence corruption and can contribute to the development of unethical behavior.

Corruption, Fig. 1 The factors that influence the corruption



Legend: —————> Positive influence on Corruption
 - - - - -> Negative influence on Corruption

The dispersal of responsibilities by definition positively influences corruption because, as a complex system, it encompasses both the shortcomings of the legislation that creates the possibility of preferential interpretation of sanctions and the weaknesses of leadership and public policies that favor bribery.

Transparency and sustainability reduce corruption by eliminating the mechanisms that motivate individuals and organizations to promote unethical behavior (Hung et al. 2018).

Sanctions and control do not work if they are not correlated with an effective anti-corruption strategy, a strategy that must be reconfigured at very short intervals in order not to give the possibility of a corruption phenomenon perpetuating.

Profit for companies and material and financial gains for individuals are motivating factors for corruption. Therefore, the fight against corruption must create and implement mechanisms to discourage corruption for both individuals and organizations.

Actions to reduce corruption are aimed at both individuals and public and private organizations and include:

- Reducing bureaucracy.
- Digitization of the activity of public institutions.
- Developing financial mechanisms to improve the transparency of the way public funds are used.
- Inclusion in the integrated reports of the companies of some indicators that reveal the stakeholders' possible risks of corruption.
- Improving reputation and legitimacy by ensuring access to information for stakeholders.
- Reducing the exposure of individuals to actions that involve a particular risk of corruption, in parallel with the tightening of sanctions.
- Development of anti-corruption strategies and implementation of concrete action plans to continuously monitor the progress of the fight against corruption.

Corruption and Terrorism

Why are terrorist organizations and extremist groups so popular among people worldwide?

The answer is related to corruption because people no longer support corruption in political systems and want change to punish corrupt leaders.

The people are tired of fighting for democracy and against corrupt political leaders whose decisions affect their daily living standards and turn to extremist groups that they consider a viable alternative to corrupt governments, considering them capable of reducing corruption and promoting fair justice.

These organizations take advantage of people's dissatisfaction and act on civil society through psychological mechanisms, condemning corruption and presenting violence as a means of salvation and not repression.

Leaders of terrorist organizations promote violence as the most effective and legitimate tool to eradicate government-level corruption and punish corrupt politicians and civil servants.

In a democratic state, civil society has the right to elect its leaders and campaign to reduce corruption, but recent events underscore the importance of the fight against corruption regardless of the level of democracy in society.

Conclusion on the Perennially Corruption

Analyzing the history, sources, and motivational factors of corruption leads us to conclude that this phenomenon cannot be eradicated, but action can be taken to reduce it.

Corruption does not follow a particular political, national, regional, or cultural pattern because it manifests itself based on the mechanism of supply and demand. Therefore, anti-corruption actions must be focused on both supply and demand. Most anti-corruption sanctions have focused on "demand," with "supply" being held accountable and responsible for creating opportunities for corruption as it meets "demand."

Summary

Corruption continues to be a negative phenomenon at every level of organizations and society.

A new approach to corruption should be oriented to diminish it in correlation with the dispersal of responsibilities. The strong correlation between corruption and the dispersal of responsibilities promotes the confidence of leaders and managers in their unlimited power.

Paradoxically, unlimited power motivates people to promote corruption as a sign of their position in an organization or society.

Cross-References

- [Bribery](#)
- [Bribe Payers Index \(BPI\)](#)
- [Corruption Perception Index](#)
- [Fraud Prevention and Detection](#)
- [ISO 37001 Anti-Bribery Management Systems](#)
- [Public Procurement and CSR](#)

References

- Burlea-Schiopoiu, A., & Idowu, O. S. (2016). The independence of the managers: An ethical dilemma. *International Journal of Social Entrepreneurship and Innovation*, 4(2), 152–171. <https://doi.org/10.1504/IJSEI.2016.076688>.
- Burlea-Schiopoiu, A., & Remme, J. (2017). The dangers of dispersal of responsibilities. *Amfiteatru Economic*, 19(45), 464–476.
- Gillanders, R., & van der Werff, L. (2022). Corruption experiences and attitudes to political, interpersonal and domestic violence. *Governance*, 35, 167–185. <https://doi.org/10.1111/gove.12570>.
- Hung, M., Kim, Y., & Li, S. (2018). Political connections and voluntary disclosure: Evidence from around the world. *Journal of International Business Studies*, 49, 272–302. <https://doi.org/10.1057/s41267-017-0139-z>.
- Johnston, M. (2009). *Syndromes of corruption. Wealth, power, and democracy*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511490965>.
- Mugellinni, G., & Villeneuve, J. (2019). Monitoring the risk of corruption at international level: The case of the United Nations Sustainable Development Goals. *European Journal of Risk Regulation*, 10(1), 201–207. <https://doi.org/10.1017/err.2019.16>.

Corruption Perception Index

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Synonyms

Corruption; Public sector; Transparency; Transparency International

Definition

Corruption Perception Index (CPI) is measured annually by Transparency International, an organization created in 1993 with the aim of putting an end to corruption and promoting transparency. In accordance with this mission, the organization started to measure and publish Corruption Perception Index in 1995 as an indicator for corruption in the public sector. The research started with 41 countries in 1995, and now it sums data from 180 countries in the world. This constitutes an important progress in terms of transparency, contributing to a cleaner world and less corruption. When people have the information regarding issues like corruption and bribery, they become more prone to respecting the law and be good citizens. We can make comparisons between countries and understand the connection between this index and their wealth. If at the beginning the data were only some numbers in a document, with time and the evolution of the Internet and globalization, there came more benefits: data presented in a more graphic way, easy to understand and share, more details regarding each country in the study, the opportunity to compare data with those from previous years and see the evolution of a country or a region, and the possibility for everyone to download and share different resources provided by the Transparency International (summary, social media kit, regional results, global infographic, and others).

Introduction

The Transparency International is an NGO fighting against corruption and helping governments to manage this matter seen in many cases still as a taboo. Nowadays, the organization is present in almost 100 countries and is mostly known for measuring and publishing the Corruption Perception Index. As the name of this index states it, it measures the perceptions of the public on corruption because it is difficult to have a full image on the real corruption. We can only imagine the depth of the phenomenon in some countries. This does not mean that clean countries do not have corruption or that a bad score means everything is bad related to this aspect. But in perspective, we can have a clearer image on a country's background and transparency analyzing the data on the CPI of a country during several years. The main aim of fighting corruption was related to that of fighting poverty and helping poorer communities in having a chance to development. Corruption is an important risk that leads to an increased gap between countries' level of development.

Methodology for Calculating CPI

The Corruption Perception Index is according to the Transparency International Secretariat (2017) "independent, non-political and non-partisan." The methodology for its calculation is presented on the website in different languages, in a short version (Transparency International 2015a) and a more detailed and technical one. There are four steps that are ensuring a high level of reliability for the index and reduce the subjectivity: selecting the data sources (12 sources from 11 institutions) regarding the perception on corruption in the past 2 years; adjusting the scores in the data sources to the 0–100 scale where 0 is the most corrupt and 100 the cleanest country; calculating the average score for a country; and reporting the uncertainty and the standard error of CPI. In order to be included on the list of the countries for which the organization measures the CPI, there should be at least three data sources available that present data regarding the corruption in that country.

Impact

Even if CPI might seem just a number, the Transparency International had an important impact in the community, helping people take a stand and making it difficult for governments and officials to ignore the problem. According to the website of the Transparency International (www.transparency.org/news/story/hidden_costs), they contributed to the saving of two billion dollars in Czech Republic when a whistleblower reported corruption regarding the bidding process on cleaning waste and pollution in the country. The costs were overestimated. The result was that the bidding process started over and the government introduced changes in the procurement legislation.

The Transparency International (2015b) published a report on the impact made in the world of fighting corruption. They mention some important conventions against corruption they fought off (UN Convention Against Corruption from 2003, 176 countries being part of the convention, OECD Anti-Bribery Convention from 1997 banning international bribery that was previously even deductible in some countries). Other results include benchmarking good businesses and establishing a high standard for integrity, contributing to the 10th principle of anti-corruption in the UN Global Compact followed by 8000 companies that are socially responsible, including good governance in the Sustainable Development Goals since 2015, keeping climate finance clean (the case of Czech Republic is presented as an example), making public money transparent (not using public money for private matters; there are presented examples from Palestine, Pakistan, Honduras), encouraging people to speak up for their rights and freedom, offering expertise for creating a law for the right to information, and creating leaders at the summer schools organized by the Transparency International. All these efforts were successful because simple citizens, governments, and officials from all over the world trusted and supported the Transparency International in fighting for justice and integrity.

Solutions for Increasing CPI

People can get involved in the Transparency International activities in reporting corruption to Advocacy and Legal Advice Centres (ALACs) present in more than 60 countries. Since 2003 when the first center was opened, more than 200,000 people contacted them. CPI is based on the experts' opinions and targets the public sector corruption. The link between corruption in a country and the bad score of CPI is also a sign of the deterioration of other aspects in the country (poverty, unmet needs of the citizens, biased media, conflicts, unemployment, poor public services, a general lack of trust, lack of investors, lack of productivity).

Considering these consequences and implications of the phenomenon of corruption, citizens and governments should take serious measures to counter the effects of corruption and reduce the extent of the phenomenon, thus contributing to an increase of CPI. The solutions presented by the Transparency International (www.transparency.org/getinvolved) are contacting the Transparency International from your country, the EU Liaison Office, or the Transparency International Secretariat; if you witness an act of corruption, you can contact ALACs; other ways include joining anti-corruption global campaigns and global photo competitions, nominating a hero that fights against corruption for receiving an anti-corruption award, spreading the word, and sharing the banners of the Transparency International dedicated to this fight.

All these are ways in which simple individuals can make a difference in the community. There are numerous small acts of corruption accepted as a norm in many countries, because people got used to this reality. If you want a cleaner country, you have to start with you. Maybe just a small change is not so important for the big picture, but if you make lots of small changes, that will make an impact in the community, and in the long term the score of the CPI will increase.

Limitations of CPI

Thompson and Shah (2005, p. 7) mention the important bias included in the scores that stay at the foundation of calculating the CPI. They considered that “it is not clear that averaging these measures leads to greater accuracy.” Other limits they mentioned for the CPI are that averages of different aspects of corruption are not always comparable, the opinions of the experts are subjective, and there are some technical issues regarding the large standard error. Brown, Orme, and Roca (2010) consider that perception on corruption can be influenced in a great extent by media, thus influencing the way CPI is calculated. The authors use the term media or reflective bias. They, as Thompson and Shah, also question the experts’ assessments on corruption, considering them as biased or not fully aware of the reality in a country. In my opinion, these are just limitations we should consider, but we do not have to fall in the trap of considering CPI as a bad thing. Maybe the score is not always very accurate, but definitely there is something there about the corruption in a country. It is hard to believe that a country is clean and the score of CPI shows differently or vice versa. Roca and Alidedeoglu-Buchner (2010) continue the previous research showing that CPI is under a reflective bias and should be used cautiously especially in authoritarian countries where “corruption is probably underestimated.”

Madiche (2005) considers that CPI might also be seen a cause for a continuous bad image of country. The author appreciates that one of the problems of Nigeria in the twenty-first century is the bad image maintained also by this score; practically there is a label stuck with the country, and progress is difficult to make. This should be taken into consideration, but the results and the impact of the Transparency International’s activity cannot be denied. There are countries that evolved and improved their score and their image. Rohwer (2009) from Ifo Institute for Economic Research at the University of Munich also puts under the question the accuracy of the Transparency International’s Corruption Perception Index and the World Bank’s Worldwide Governance Indicators, appreciating they should be used cautiously because of the way they are constructed. The author highlights

the importance of stating that these are measuring perceptions of corruption, and not corruption like what CPI states in its name.

Summary

As Rohwer (2009) states, the importance of indexes like CPI is clear because they lead to other initiatives that are more accurate and transparent like the Transparency International’s Global Corruption Barometer that summarizes perceptions and experiences of the general public regarding the different aspects of corruption in a country. Wickberg (2013) from the Transparency International presents the strengths of CPI (includes numerous countries, is based on various data sources, has an important role for advocacy groups) and also its weaknesses (not making a difference between the types of corruption, lack in accuracy of perceptions, being too subjective). Soreide (2005) emphasizes the risks brought by not using correctly a score like CPI and appreciates that the CPI would increase “by creating incentives for states to improve their achievements on the OECD anti-bribery convention.”

There is no doubt that there are numerous limitations of the CPI in the way it is constructed or used, but we cannot deny its impact and its role in the world. People are becoming more aware of the corruption in their countries and are not willing to close their eyes anymore. Even if corruption is hard to be measured, CPI can be an indicator for what is happening in a country at least in a broader sense. The progress made by the Transparency International, the number of countries where they are present, and the high number of people that contacted their ALACs (more than 200,000) show us the need for having an international organization where citizens can report corruption acts. Of course, there were, are, and always will be critiques regarding CPI, but this is in fact good because it helps the Transparency International to improve its methodology for calculating CPI, and this happened in the past. Nowadays, the methodology is more transparent, and there are numerous press releases in various languages, thus contributing to the awareness regarding corruption and the need for fighting against it.

Cross-References

- [Corruption](#)
- [Corruption Perception Index](#)

References

- Brown, J., Orme, W., & Roca, T. (2010). Fear and loathing of the Corruption Perception Index: Does Transparency International penalize press freedom? Retrieved from <http://ged.u-bordeaux4.fr/ceddt158.pdf>
- Madiche, N. O. (2005). Corruption in Nigeria: How effective is the corruption perception index in highlighting the economic Malaise? *World Review of Science, Technology and Sustainable Development*, 2(3/4), 320–335.
- Roca, T., & Alidedeoglu-Buchner, E. (2010). Corruption perceptions: The trap of democratization, a panel data analysis. Retrieved from <http://ged.u-bordeaux4.fr/ceddt161.pdf>
- Rohwer, A. (2009). Measuring corruption: A comparison between the Transparency International's Corruption Perception Index and the World Bank's worldwide governance indicators. CESifo DICE report 3/2209. Retrieved from www.ifo.de/DocDL/dicereport309-rr2.pdf
- Soreide, T. (2005). *Is it right to rank?*. Paper prepared for the IV Global Forum on Fighting Corruption, Brasilia, 7–10 June 2005.
- Thompson, T., & Shah, A. (2005). Transparency International's Corruption Perception Index: Whose perceptions are they anyway? Retrieved from <http://siteresources.worldbank.org/PSGLP/Resources/ShahThompsonTransparencyinternationalCPI.pdf>
- Transparency International. (2015a). Corruption Perception Index 2015: Short methodology note.
- Transparency International. (2015b). Fighting corruption, demanding justice. Impact report. Retrieved from www.transparency.org/impact
- Transparency International Secretariat. (2017). Explanations of how individual country scores of the Corruption Perception Index are calculated. Press release, 27 Jan 2017. Retrieved from www.transparency.org/news/pressrelease/explanation_of_how_individual_country_scores_of_the_corruption_perceptions
- Wickberg, S. (2013). How to guide for corruption assessment tools. Retrieved from www.u4.no/publications/how-to-guide-for-corruption-assessment-tools.pdf

Websites

- www.transparency.org
www.transparency.org/getinvolved
www.transparency.org/news/story/hidden_costs

Corruption Warning

- [Whistleblowing](#)

Corruptions Perceptions Index

- [Bribe Payers Index \(BPI\)](#)

Cost Accounting

- [Management Accounting and Sustainability](#)

Cost Management

- [Management Accounting and Sustainability](#)

Cost of Taxes

- [Tax Uncertainty](#)

Cost-Benefit Analysis

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Synonyms

- [Benefit-Cost Analysis](#)

Definition

Cost-benefit analysis (CBA) is a decision-making process where the expected benefits of an activity are weighed against the expected costs of engagement. There are a variety of choices and methods available when implementing CBA. This can lead to distinct differences in calculated conclusions. In the area of energy and the natural environment such as identifying the quality and amount of natural resources available or being utilized, this methodology continues to be used in a variety of ways (Hanley and Spash 1993). Energy companies often apply CBA to decide if a new energy project should be undertaken (energy exploration, building or modifying energy producing infrastructure, energy technology research and development, etc.). The analysis may be applied for internal use by the company or in response to external regulation. Stakeholders external to the firm (environmental watch groups, regulators, consumers, etc.) often use CBA to evaluate ongoing or proposed operations or to assess activities of energy companies for their current or potential impact on society and the natural environment. Governments also design and implement policies by using CBA to ascertain the effects of promoting certain energy-related activities (e.g., production of clean energy or energy conservation) or discouraging certain environmentally harmful energy-related activities, such as pollution or overuse of natural resources (Hutton and Rehfuess 2006). While not without criticism, CBA remains a useful tool for evaluation in the area of energy and environment.

Introduction

There is no one set way to define how to conduct a cost-benefit analysis (CBA). However, it is useful to have a basic framework to understand how the CBA process can be used to advance energy and environmental concerns. To that end, decision-makers may apply a multistep CBA process, reflecting upon several areas of consideration prior to making a decision, such as one that poses a new form of energy and its impact on

people, the planet, and profits (i.e., the triple bottom line). The initial five steps are as follows: *define the activity, identify relevant stakeholders, identify cost and benefit sources, assign monetary values, and apply a decision-making criterion*. Assessing the uncertainty of a CBA analysis is sometimes valued as well, viewed as the sixth step.

Defining the activity refers to defining what activities that the cost-benefit analysis is being applied to and, perhaps just importantly, the activities being excluded from the analysis. For example, if considering a possible investment in a new nuclear plant, is one location being considered or multiple locations? If trying to assess the environmental effects of a new exploration for shale gas, are the immediate effects of the investment being assessed, or is the analysis also including the projected lifetime effects of the gas acquired? In other words, this initial step in the CBA process involves defining the scope of the activity being considered. This is important for deciding which costs and benefits need to be defined and ultimately included. Importantly, this step also determines the time horizon to be considered.

Identifying relevant stakeholders refers to figuring out for whom the costs and benefits are being incurred or accrued by, respectively. It also suggests a need to decide under what metric the impacts to stakeholders will be judged. For example, if a company is considering building a new refinery, are they only considering effects on internal stakeholders such as shareholders, or are they also giving consideration to external stakeholders such as those living in the vicinity of the refinery? This step is complementary to the first step, in that together they define the parameters of the overall goal(s) of the CBA (maximize lifetime organizational profit, maximize social welfare of those in a 5-mile radius, etc.). Of course, legal requirements may impact this step by requiring certain stakeholders to be considered as well as other types of external demands, such as pressures emanating from civic community groups or environmental watch groups. Even so, an organization may well make decisions that are consistent with its own philosophical vision,

mission, and values. Other additional ethical concerns may also be considered, stemming from external stakeholders beyond any regulatory compliance issues. As mentioned, when stakeholders, however defined, are considered, a decision about what metric to apply must be addressed. For example, how will the firm measure the well-being of those stakeholders? Are only monetary effects being considered, or are health impacts also part of the metric to determine well-being? Other concepts, like utility maximization or Pareto optimality, may or may not be incorporated. Forming a rationale for the decision to include these elements is a core component of this step.

Identifying cost and benefit sources involves cataloguing exactly what activities (or projecting what activities) are going to occur, when they will occur, and in what amounts. This is a necessary step prior to assigning monetary values. For example, suppose a company is considering the expansion of an existing oil refinery, in order to add capacity. This means decision-makers will likely need to incorporate a host of resources and account for them in CBA assessment effort. This might include construction needs, such as raw materials and labor hours. Additionally, elements like the amount of lost capacity should an existing facility have to be shut down for periods during construction should be considered as well. Depending on choices made in earlier steps, decision-makers may need to determine the cost of noise pollution, due to the construction. Such information requires projections about future yearly maintenance costs, as well as future yearly pollution levels. Of course, projections about the future amounts of added capacity and usage need to be included. Again, there may be many other potential sources and amounts of cost and benefit occurring at various points in time in the future. Therefore, this step involves substantial amounts of estimation, projection, and forecasting. It is expected that the farther out the time horizon extends, the uncertainties embedded within provisional estimates will increase.

Assigning monetary values refers to the need to assign a common unit of account for measuring

value to each of the identified costs and benefits from the previous step. Sometimes this is straightforward if the cost or benefit is realized in the current time period and a relevant market exists. In such cases, the market price can be used to figure out the monetary value of the cost or benefit. If there is a relevant market, but the cost or benefit will be realized in the future, then an estimate or projection of the future market price is needed. This requires an informed educated guess, likely prepared via use of a statistical or theoretical methodology to create a justifiable estimate. There are likely items that require inclusion, for which no market exists and so no price estimate or clear way to measure the variable's value is available. In such circumstances, a more sophisticated statistical and financial analysis may be needed in order to assign monetary values. For example, the labor hours to add capacity to a refinery this year are likely known (as labor markets with comparable wages exist). Additionally, future values of gasoline refined from oil may not be known. Because markets exist, projections about the market prices can be formed. However, there may be no market for the pollution levels the new refinery capacity adds to the environment, so forming a quality estimate of the value of this variable calls for more effort. As a result of the incorporation of multiple estimates, this step often adds substantial uncertainty to the CBA analysis, on top of the uncertainty from the previous step.

For non-monetary valuation such as pollution levels, there are two main methodologies: *revealed preference* and *stated preference*. With *revealed preference* methods, values are inferred from previously completed market actions. The concept is that embedded within these actions is information about the value of non-market activity, which can then be extracted. For example, in generating electrical power, a production function might be estimated, and the value of the spillover effects like pollution emissions can be teased out. With *stated preference* methods, surveys are conducted to estimate the impact values on affected stakeholders. For example, if a stakeholder lives near a refinery, what would the

party be willing to pay to move out of the range of the pollution emanated by the refinery? This information can reveal some information about their perception of the negative value of the pollution's impact.

Applying a decision-making criterion involves selecting a way to weigh the monetary values of costs and benefits against each other and ultimately decide whether the activity should proceed or not. There are many ways to do this in practice, but arguably the two most commonly used are *net present value* and *internal rate of return*. One issue that is common to both methods is that they recognize the time value of money. That is, dollars, whether gained as benefit or lost as expense, have different values depending on when they occur. Generally dollars received or spent closer to the present have a greater value than those received or spent in the future. This is due to issues such as risk, inflation, interest, and even stakeholder preferences. Much like CBA itself, these criteria are not without criticism. Particularly, there is a level of subjectivity in deciding how to weigh the costs relative to benefits over time (e.g., choosing a discount rate).

In *net present value* methodology, the estimated monetary values of the costs are subtracted off from the benefits to create a net benefits number for each point in time. Then a discount rate is estimated (or assumed) in order to account for the time value of money. The discount rate effectively weights or places a level of importance (or lack thereof) on the different net benefits based on when they occur in time. Those weighted net benefits are then added up to become one number called the net present value. Any activity that has a positive net present value is viewed favorably.

In *internal rate of return* methodology, the decision-maker selects a required rate of return, that is, a minimum rate of return that the activity must generate to be considered worthwhile. The required rate of return may be selected based on alternative uses, of the resources involved, and/or other estimation methods, including those applied on an ad hoc basis. Then, similar to the net present value calculation, the stream of net benefits is

calculated. However, rather than estimate or assume a discount rate, the calculation is done to solve for a discount rate consistent with zero net present value. That discount rate associated with zero is called the internal rate of return for the activity. If the internal rate of return is greater than the required return, then the activity is viewed favorably.

Finally, it is commonplace to conduct some type of additional analysis in order to account for (or assess) the uncertainty in the CBA estimate itself. Often this takes the form of a Monte Carlo simulation, scenario analysis, or other types of sensitivity analysis. It is important to recognize that the fundamental forward-looking nature of CBA suggests that there will always be some uncertainty to the analysis regardless of how careful and thorough the analysis is conducted.

CBA and Government Policy

In the United States, cost-benefit analysis has a long history dating back to the early 1800s where it was recommended by then Secretary of the Treasury Albert Gallatin for evaluating water projects (Clinch 2004). Today, CBA is required by the Environmental Protection Agency (EPA) for economically significant rules (i.e., rules with an economic impact over \$100 million) (National Center for Environmental Economics 2010). Similarly, in Europe, CBA has been a regulatory requirement since 2000 (European Union Regional Policy 2008). This application, in the context of satisfying regulation or being applied by regulatory authorities in policy design and enforcement, is how CBA is most widely known and undertaken in the energy and environmental areas.

A major area of ongoing concern is the potential for market failure. That is, as a result of actions taken by a private company, there are often negative spillover effects on third parties. A private energy producing organization has a legal obligation to maximize value for shareholders. They do not, however, always give equal or

sufficient consideration to stakeholders (i.e., the broader group impacted by organization's actions spillover effects) that may be impacted by the actions of the firm (e.g., energy exploration and extraction). As such, government policymakers may enact regulation to require private energy companies to undertake CBA that incorporates the impacts on stakeholders or the broader society in general. This amounts to requiring companies to consider the net social benefits, which incorporates potential spillover effects into their internal CBA analysis. Alternatively, or in addition to such regulation, policymakers may use CBA to consider specific policies (e.g., taxes or subsidies) to align incentives, supporting the energy company's needs with that of society and the natural environment.

For example, the European Commission recently implemented an energy (electricity and natural gas) infrastructure package with a multi-billion Euro budget (Meeus et al. 2013). This includes developing an efficient network for the transmission and storage of electricity and natural gas across Europe. That package represents, in part, spending to bring energy company incentives in line with public (i.e., social) needs. As part of that package, there are regulatory requirements to conduct CBA in order to identify what are called projects of common interest (PCI).

One of the overriding issues when applying CBA in the context of governmental policy is the criterion used to evaluate projects. The convention, based on economic theory, is to apply *Pareto optimality*. This is the concept that at least one person is made better off while no one is made worse off. To illustrate, the EPA in practice refers to the *potential Pareto criterion*. This criterion requires that the net benefits to society be a positive sum, reflecting the welfare effects of the activities on all affected groups. Thus, in practice, this criterion is applied using what is called the *Kaldor-Hicks test*. This test reflects that those who gain from a policy should potentially compensate those who are harmed by it, so that no individual is made worse off. An activity with positive net social benefits would pass this test.

CBA and Innovation

One overriding fact of CBA is that the intricacy of issues involved with the activities in the energy sector and its multifaceted interactions with the environment add to the complexity of conducting a CBA, creating doubt around its usefulness. This is partly due to the uncertainty that is inherent as new technology and new techniques are employed. To illustrate, one of the more recent phenomena in the energy sector has been the proliferation of unconventional oil and natural gas extraction through horizontal drilling and hydraulic fracturing. The estimates of the expected costs and benefits, especially from a societal point of view, are not easily obtained and may reflect gross inaccuracies (Jackson et al. 2014).

In terms of benefits, there is little experience with this type of extraction method, so estimating production amounts, as well as how that production will change over time, is highly uncertain. Moreover, estimating direct revenues generated from one particular well has a high level of uncertainty. Recent volatility in energy costs suggests that even when there are market prices established, it is rarely easy to forecast value. Further, to the extent unconventional sources allow energy substitution away from larger polluting sources such as a coal, there are likely to be spillover benefits. Estimating this added benefit is uncertain. But the potential to reduce climate change risks could be huge.

On the cost side, a major concern is that this type of extraction requires substantial amounts of water usage. The opportunity cost of the water, as well as the ability to substitute potable for non-potable resources, along with other recycled sources, adds yet more uncertainty about whether these costs are severe or limited. The ability to estimate the potential for water contamination is also a serious issue. Hydraulic fracturing, for example, creates fissures that could allow underground avenues for contaminants to enter a drinking supply. Drilling and the application of new technologies also carry a potential for

various threats like the implications of break-downs, creating air pollution emissions, and causing other unknown harms to the natural environment and sentient beings. Finally the potential risk of seismic activity is unclear.

As the demand for energy continues to increase around the world, this necessitates improvements toward conservation by both consumers and producers. But this also means working to produce more forms of renewable energy with greater efficiencies. Use of a CBA process is likely to be a central component of moving to achieve such efforts. As the complex issues of nonconventional energy extraction methods like hydraulic fracturing illustrate, new technologies will always require greater scrutiny to assess the potential effects on the net benefits accrued. Careful attention must be paid to how stakeholders are defined. When narrowly viewed, as the firm's shareholders, the broader impacts to stakeholders (people and the planet itself) may be overlooked. Given short-termism tends to be the focus of market-driven shareholder-based organizations (Sekerka and Stimel 2011), greater scrutiny toward increasing the consideration of costs and benefits over time remains a crucial aspect of conducting CBA in an ethical manner.

Summary

Despite the fact that there are inherent challenges and the details of any CBA are subject to valid criticism and review, it remains a useful tool. Cost-benefit analysis lends itself to transparency as it requires documentation of the steps undertaken and revealing the assumptions being made. CBA requires organization and thoroughness to be conducted effectively. It forms a logical and consistent process that can be understood by all. It also is a system of decision-making that is robust enough to be amenable to improvements while still maintaining its requisite properties. Given its practical usefulness and its role as a regulatory function, CBA will likely continue as a central element that

frames and guides decision-making in the energy sector. Let us hope that stakeholder issues and longer-term considerations for health and well-being of society and the natural environment will play a more dominant role in determining the merits of each step.

Cross-References

- Ecological Economics
- Environmental Accounting
- Environmental Assessment
- Environmental Impact
- Environmental Impact Assessment
- Impact Assessment
- United Nations Environment Program (UNEP)

References

- Clinch, J. P. (2004). Cost-benefit analysis applied to energy. In C. J. Cleveland (Ed.), *Encyclopedia of energy*. Oxford: Elsevier.
- European Union Regional Policy. (2008). Guide to cost benefit analysis of investment project. Retrieved January 11, 2015 from European Commission at <http://ec.europa.eu>.
- Hanley, N., & Spash, C. L. (1993). *Cost-benefit analysis and the environment*. Northampton: Edward Elgar.
- Hutton, G., & Rehfuess, E. (2006). Guidelines for conducting cost-benefit analysis of household energy and health interventions. Retrieved January 5, 2015, from World Health Organization at <http://www.who.int>.
- Jackson, R. B., Vengosh, A., Carey, J. W., Davies, R. J., Darrah, T. H., O'Sullivan, F., & Pétron, G. (2014). The environmental costs and benefits of fracking. *Annual Review of Environment and Resources*, 39, 327–362.
- Meeus, L., von der Fehr, N.-H., Azevedo, I., He, X., Olmos, L., & Glachant, J.-M. (2013). Cost benefit analysis in the context of the energy infrastructure package. Retrieved January 5, 2015, from THINK at <http://www.eui.eu>.
- National Center for Environmental Economics. (2010). Guidelines for preparing economic analyses. Retrieved January 10, 2015 from Environmental Protection Agency at <http://yosemite.epa.gov>.
- Sekerka, L. E., & Stimel, D. (2011). How durable is sustainable enterprise? Ecological sustainability meets the reality of tough economic times. *Business Horizons*, 54(2), 115–124.

Counterproductive Work Behaviors

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Synonyms

Deviant workplace behavior; Employee misconduct; Unethical behaviors; Workplace incivility

Definitions

Counterproductive work behaviors (CWB) are actions and behaviors employees engage in that detract from legitimate organizational goals or well-being and that bring about undesirable consequences for the organization or its stakeholders (Ones and Dilchert 2013, p. 645). Thus, CWB are any actions that violate legitimate organizational or stakeholder interests.

Introduction

Increased awareness of the ethical impact of counterproductive work behaviors in business has been reflected in the research. Counterproductive work behaviors are a serious problem for organizations, economies, and even society as a whole. Unethical employee behaviors can have tremendous negative consequences in such sectors, where employee decisions and behaviors may have detrimental impacts that extend far beyond the confines of the organization. They may impact the greater population, affecting all aspects of life.

Counterproductive work behaviors (CWB) refer to any actions taken by employees that are intended to harm the organization (Neuman and Baron 1998; Spector et al. 2006) or organizational stakeholders, mostly other employees. CWB usually have a detrimental impact on organizational performance (Marcus and Schuler 2004). Counterproductive work behaviors encompass a

spectrum of actions that harm employees or organizations and may include bullying, emotional abuse, revenge, retaliation, mobbing, and aggression. Depending on their frequency, form, and strength, these acts can range from severe, systematic, abusive bullying to milder, ambiguous episodes of workplace incivility (Spector et al. 2006). Kelloway and colleagues add that counterproductive work behaviors subsume behaviors such as theft, sabotage, workplace violence and aggression, incivility, revenge, and service sabotage (Kelloway et al. 2010).

Taxonomy of Counterproductive Work Behaviors

In the literature, as well as in practice, there are a number of terms used to denote negative behaviors that harm either organization or their employees as well as violate organizational and societal norms or standards. Due to nuances in terminology, not all terms are synonymous. The most common interchangeable terms used in this context include counterproductive, unreliable, deviant workplace behavior, organizational misbehavior, workplace incivility, or even organizational delinquency (Anderson and Pearson 1999). Many of these specific behaviors are often referred to as CWB in the literature and could be included in several or most of the terms and concepts.

Some researchers emphasize that unethical behavior is the most commonly used organizational term (Werbel and Balkin 2010), whereas others understand unethical employee behavior to be a part of counterproductive work behaviors (Ones and Wiernik 2018). Jacobs et al. (2014, p. 64) understand unethical behavior as referring to behavior that violates moral norms accepted by a larger community and that goes beyond local organizational norms (Kaptein 2008). The authors distinguished between counterproductive work behaviors and unethical behavior, arguing that CWB reflects violations of organizational norms, while unethical behaviors violate broader societal norms (Trevino et al. 2014). According to the researchers, CWB are scalable actions and

behaviors that employees engage in that detract from legitimate organizational goals or well-being and include behaviors that bring about undesirable consequences for the organizations or its stakeholders (Sackett and DeVore 2002; Ones and Wiernik 2018). Thus, CWB are any actions that violate legitimate organizational interests or stakeholders.

Despite many nuances in terminology and understanding of CWB, Ones and Wiernik (2018) proposed a consensus taxonomy of CWB. According to the authors, all CWB may be divided into behaviors that are harmful to individuals, organizations, and society at large (Ones and Wiernik 2018, p. 40) (Table 1).

CWB can be unethical if they are performed to exploit others for some other end. Thus, unethical behaviors may include lying, misrepresentation, cheating, bribery, operating with a conflict of interests, abusing one's position for personal ends, and breaking laws and regulations (Ones and Wiernik 2018, p. 37). Unethical behaviors are also more often associated with professional and senior and middle management than with lower levels of employees; however, this is not a sufficient and correct distinction between CWB and unethical employee behavior (Ones and Wiernik 2018). An important trait of CWB is a focus on behavior, not intent, as CWB do not need to be performed intentionally (Ones and Wiernik 2018; Spector and Fox 2005). This means that employees may engage in and perform

CWB accidentally or unknowingly. Moreover, CWB may be a result of both individual as well as collective actions. Most studies concerning CWB have focused on the causes of such behaviors which could help explain the phenomena and prevent CWB within the organization.

There are also other terms in the literature that are used in the context of unethical behaviors and CWB. Thus, employee deviance is defined as behavior that includes violating formal and informal organizational policies, rules, procedures, or specific job-related performance standards (Robinson and Bennett 1995). Then, organizational deviancy encompasses a wide array of counterproductive acts, such as theft, drug and alcohol abuse, lying, insubordination, vandalism, sabotage, absenteeism, and so called assaultive actions (Neuman and Baron 2005). Similarly there is organizational misbehavior which describes behaviors that involve any intentional behavior of employees that "violates core organizational and/or societal norms" (Vardi and Wiener 1996, p. 151). In this case, intentionality is a crucial aspect of different types of organizational misbehavior. According to the authors, misbehavior may be intended to benefit the self (i.e., instrumental actions designed to benefit the "actor" of the negative behavior), behavior that is intended to benefit the organization (e.g., misrepresenting corporate earnings to inflate stock prices), or misbehavior that is intended to inflict damage. In turn, workplace incivility concerns rude and disrespectful actions which demonstrate disregard for others in the workplace and violation of workplace norms for respect (Anderson and Pearson 1999, p. 455). In this case, the characteristic of incivility is that the "intent to harm is ambiguous" (Anderson and Pearson 1999, p. 456), whereas other forms of workplace aggression and mistreatment at work have the obvious intent to harm or injure someone physically or psychologically. Finally, organizational delinquency is understood as a wide syndrome that consists of elements of counterproductive acts, such as vandalism, sabotage, theft, lying, alcohol and drug abuse, and assaultive actions (Ones and Wiernik 2018).

Counterproductive Work Behaviors, Table 1 Simplified taxonomy of CWB. (Source: Based on Wiernik and Ones 2018, p. 41)

Counterproductive work behaviors	
Interpersonal CWB	Organizational CWB
Abuse/bullying (inappropriate verbal actions, aggression, interpersonal incivility)	Theft, misuse of organizational resources
Violence	Intellectual property violations
Discrimination	Unsafe behavior/disregard for others
Sexual harassment (inappropriate physical actions)	Alcohol and drug use
	Withdrawal
	Production deviance (poor quality of work)
	Sabotage

As it is difficult to determine the exact limits of individual constructs, they can generally be called negative behaviors in work settings. These negative behaviors break widely unregulated moral or organizational norms and may be classified as unethical behaviors. In the era of social responsibility, these have particular negative overtones.

The Most Common Causes of Counterproductive Work Behaviors

Among the most common antecedents of counterproductive work behaviors, researchers have identified both situational and individual factors.

- Research that focuses on situational factors explores how situational constructs are related to CWB (Skarlicki and Folger 1997). For example, interpersonal conflicts and job dissatisfaction are positively correlated with both interpersonal and organizational CWB. Moreover, CWB is usually a result of employee frustration, which may rise from situational constraints (Spector and Fox 2005). Furthermore, research has shown that employees who experience family responsibilities interfering with their work perform more CWB (and display lower citizenship behaviors) than do those who do not experience family – work interference (Mercado and Dilchert 2017).
- Another research stream focuses on individual factors and explains how individual differences in particular traits can be possible antecedents of CWB. According to the research, some personal traits (such as anger, attribution style, and attitudes toward revenge) have all been found to correlate positively with CWB, similar to negative affectivity, narcissism, and low self-control (Martinko et al. 2002).
- Finally, integrative approach underlines the importance of examining both the individual and situational factors along with their interactions in predicting CWB (e.g., Robinson and Bennett 1995; Martinko et al. 2002).

Spector and Fox identified the two most important causes of CWB: organizational factors, such as injustice, stressors, and personal factors, such as negative affectivity and hostile attribution bias. These factors, as well as their interactions, contribute to CWB (Spector and Fox 2005). Some studies have analyzed the physical, social, and organizational context of CWB. In general, negative and stressful experiences in the workplace, such as abusive supervision, problematic leadership, or incivility, lead to CWB. Sometimes even a single organizational event can have a strong impact on subsequent CWB (Kelloway et al. 2010).

According to the research, most cases of CWB result from unhappiness with the organizational situation. Organizational policies, procedures, and practices may unintentionally influence CWB. Moreover, HR practices associated mostly with performance appraisal and compensation may lead to employee misconduct (Werbel and Balkin 2010, p. 318). Werbel and Balkin suggested that certain rewards systems, such as sales commission plans and large cash bonuses, may encourage employees to engage in misconduct. According to authors, the greater the proportion of performance contingent upon individual incentive compensation in relation to base pay, the greater the likelihood of misconduct (Werbel and Balkin 2010, p. 320). Organizations that use outcome-based performance evaluations are likely to have employees who perceive higher benefits of misconduct and lower perceived costs of misconduct, compared to organizations that use behavior-based performance evaluations.

Consequences of CWB

As with other types of harmful behaviors, CWB have drawn considerable attention because of huge financial, personal, and organizational costs associated with counterproductive behaviors (Kelloway et al. 2010) and the many resulting negative consequences for both organizations and its main stakeholders – mostly employees.

Consequences of CWB on an organizational level:

- Financial losses – theft causes huge financial losses for most organizations (Kelloway et al. 2010); additional losses are incurred from damage caused by sabotage and lower productivity (taking long breaks, wasting resources), which are difficult to quantify in currency terms, and fines (penalties) that organizations must pay as a result of CWB are costs borne by the organization.
- Reputational losses – CWB are often widely discussed among employees. Depending on the scale and consequences of public revelations, the organization may suffer loss of customers, investors, and employee trust and even a decrease in brand credibility.
- Socio-psychological losses, including health costs – counterproductive work behaviors can be extremely costly to organizations in terms of labor turnover, distracting staff from regular work, and in costs associated with formal investigations and court cases. These can cost staff considerable anxiety and stress and ultimately affect their health. CWB lead to an unsafe and insecure environment with adverse effects on the performance and safety of employees. Finally, an uncomfortable and toxic organizational climate and stress result in lower engagement, causing further deterioration of the physical and mental well-being of employees or even loss of employees.

On the other side, there are also negative consequences of CWB on the individual level that can be even more costly, as they can significantly interfere in employee lives. Consequences of CWB on an individual level include (Turek 2012):

- Negative mood (anxiety, anger)
- Cognitive impairment (concentration problems)
- Psychological effects (low self-esteem, emotional problems, and even depression)
- Somatic impairment – health problems
- Organizational dysfunction (absenteeism, withdrawal, low productivity and commitment, conflicts, leaving work)

Regardless of the scale of the phenomenon and its essence, CWB have severe negative effects both on individuals, reducing their quality of life, and on the organization itself. Therefore, it is necessary not only to react quickly to such behaviors but to counteract them effectively.

Possible Preventative Actions Toward CWB

Research on CWB has increased in recent years because of the staggering costs that CWB are causing. Most of this research has focused on understanding why individuals engage in these behaviors and how these behaviors might be prevented. Most studies confirm that such measures should take a two-prong approach: first, focus on organizational activities related to relevant personnel and, second, focus on the unit and promotion and training of appropriate work attitudes and behaviors.

For trainings, it is important to increase employee sensitivity and awareness regarding CSR and CWB and support employees in their daily work through open communication and appropriate working conditions and a safe working environment. Others suggest the importance of hiring employees with personality traits that do not lean toward CSW and CWB in the first place. This is connected with managing the risk of hiring employees with tendencies to CWB. Employers may look for more conscientious and self-controlled employees who would be less likely to engage in CWB. Selection methods such as integrity tests, personnel screening, and pre-employment testing can be used to identify applicants who are less prone to CWB.

The second aspect of preventing CWB is the focus on the organizational context. Perceptions of fairness mediate the relationships derived from standard agency theory through positive and negative reciprocal behaviors. Therefore, boards and managers may focus on improving social welfare by initiating positive reciprocity and avoiding unnecessary, welfare-reducing

“revenge” behaviors, rather than aiming to limit CEO self-serving behaviors. A positive, organizational climate based on fair treatment may be one of the most important aspects of preventing CWB. Employees should be treated with trust, respect, and dignity. Thus, designing HR procedures and tools that are acceptable to employees and viewed as fair seems crucial. Procedures and tools connected with employee performance, rewards, and appraisal are sensitive and can cause bad employee experiences and create a sense of injustice. Furthermore, support for employees, employee assistance programs, and training in conflict management skills are also helpful. The more performance appraisal assessments are gathered from multiple and diverse sources (such as 360 degree feedback), the less will be the possibility of employee misconduct. In this context it is also important to take steps to reduce job stress in the organization.

Summary

Corporate social responsibility poses many challenges for organizations. Some of them relate to the disclosure of CWB, as well as effective prevention of such behaviors. Counterproductive work behaviors are actions that harm and violate organizational interests or stakeholders. CWB may be directed toward both individuals and organizations; therefore, they may result in many detrimental effects on these stakeholders and on the organization itself. Today, many cases of CWB have become public. These disclosures provide opportunities for effectively combating and even preventing such behaviors. Similarly, as with the taxonomy of CWB, possible ways of preventing CWB may focus on both individuals and on organizations. Corporate social responsibility within organizations may put special emphasis on creating a culture that promotes socially responsible employee behaviors and trains employees in this regard. Additionally, creating a workplace based on high ethical and moral values, such as respect, transparency, dialogue, and justice, and the construction of a

supportive work environment can effectively counteract CWB.

Cross-References

- [Corruption](#)
- [Fraud Prevention and Detection](#)
- [Mis-selling](#)
- [Sexual Harassment](#)
- [Whistleblowing](#)

References

- Anderson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *The Academy of Management Review*, 24(3), 452–471.
- Jacobs, G., Belschak, F. D., & Den Hartog, D. (2014). (Un) Ethical behavior and performance appraisal: The role of affect, support, and organizational justice. *Journal of Business Ethics*, 121: 63–76. https://www.researchgate.net/publication/256641582_UnEthical_Behavior_and_Performance_Appraisal_The_Role_of_Affect_Support_and_Organizational_Justice. Accessed Aug 31 2018.
- Kaptein, M. (2008). Developing a measure of unethical behavior in the workplace: A stakeholder perspective. *Journal of Management*, 34(5), 978–1008. <https://doi.org/10/bnfq7>.
- Kelloway, K. E., Francis, L., Prosser, M., & Cameron, J. E. (2010). Counterproductive work behavior as protest. *Human Resource Management Review*, 20, 18–25.
- Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: A general perspective. *Journal of Applied Psychology*, 89(4), 647–660.
- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment*, 10, 36–50.
- Mercado, B. K., & Dilchert, S. (2017). Family interference with work and its relationship with organizational citizenship and counterproductive work behaviors. *International Journal of Selection and Assessment*, 25(4), 406–415.
- Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management*, 24, 391–419.
- Neuman, J. H., & Baron, R. A. (2005). Aggression in the Workplace: A Social-Psychological Perspective. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 13–40). American Psychological Association. <https://doi.org/10.1037/10893-001>

- Ones, D. S., & Dilchert, S. (2013). Measuring, understanding, and influencing employee green behaviors. In A. H. Huffman & S. R. Klein (Eds.), *Green Organizations: Driving Change with I-O psychology* (pp. 115–146). New York, NY: Routledge.
- Ones, D. S., & Wiernik, B. M. (2018). Ethical employee behaviors in the consensus taxonomy of counterproductive work behaviors. *International Journal of Selection and Assessment*, 26(1), 36–48.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555–572.
- Sackett, P. R., & DeVore, C. J. (2002). *Counterproductive behaviors at work*. Thousand Oaks: Sage.
- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82, 434–443.
- Spector, P. E., & Fox, S. (2005). The Stressor-Emotion Model of Counterproductive Work Behavior. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 151–174). American Psychological Association. <https://doi.org/10.1037/10893-007>
- Spector, P. E., Fox, S., & Domagalski, T. (2006). Emotions, violence, and counterproductive work behavior. In E. K. Kelloway, J. Barling, & J. J. Hurrell Jr. (Eds.), *Handbook of workplace violence* (pp. 29–46). Thousand Oaks: Sage.
- Trevino, L. K., den Nieuwenboer, N. A., & Kish-Gephart, J. J. (2014). (Un) ethical behavior in organizations. *Annual Review of Psychology*, 65(1), 635–660. <https://doi.org/10/gckgb8>.
- Turek, D. (2012). *Kontrproduktywne zachowania praconików w organizacji*. Warszawa: Diffin.
- Vardi, Y., & Wiener, Y. (1996). Misbehavior in organizations: A motivational framework. *Organization Science*, 7(2), 151–165.
- Werbel, J., & Balkin, D. B. (2010). Are human resource practices linked to employee misconduct?: A rational choice perspective. *Human Resource Management Review*, 20(4), 317–326.

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Covestro AG

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Introduction

Covestro AG is headquartered in Leverkusen, Germany, with global operations, producing a vast range of raw materials based on polyurethane and polycarbonate for industries such as automotive, electrical engineering and electronics, construction and home products, and sports and leisure. Covestro, formerly one of the key pillars of BAYER AG then known as Bayer MaterialScience, was spun off in the fall of 2015.

The name Covestro is made from a combination of words that reflect the identity of the new company. The letters C and O come from collaboration, while VEST signifies the company is well invested in state-of-the-art manufacturing facilities. The final letters, STRO, show the company is strong. It is strong in innovation, strong in the market and with a strong workforce. (Thomas 2015)

Covestro provides unique products including isocyanates and polyols for cellular foams, thermoplastic polyurethane and polycarbonate pellets, as well as polyurethane-based additives used in the formulation of coatings and adhesives. These are materials the world depends on every day. For example, their high-tech polymers are used in nearly every area of modern life and in a wide range of sectors such as automotive, construction, health care, cosmetics, energy, electronics, and sports and leisure.

From a CSR and sustainability perspective, Covestro is interesting because of several aspects. During its early days, the company worked with John Elkington, author of *Cannibals with Forks: The Triple Bottom Line of twenty-first Century Business* and many more books focusing on the topics. During that time, Covestro was communicating about their triple bottom lines and then shifted the focus on sustainable development goals and finally adopting an intense focus on the circular economy in more recent years. This concept is interesting, because in order to make an undertaking such as Covestro totally circular/independent of nonrenewable resources, it would take exponential amounts of renewable electricity/energy that is currently unavailable. This is also why Covestro's leadership often and openly criticizes the slow expansion of wind and solar power, although critics argue they are merely externalizing their own responsibility to find a viable solution towards a circular economy.

The History

In 2015, when Bayer MaterialScience became Coverstro, top leadership often broadcasted a new mantra of being curious, courageous, and colorful. The company's first CEO, Patrick Thomas, often described the newly launched spinoff as something along the lines of a start-up with 80 years of history, 16,000 employees and €12 billion of revenues.

In the case of Covestro, the old proverb "history is preface" is highly relevant. Early in 2004, a major restructuring process was in full effect at Bayer in the divisions: Bayer Chemical, Bayer

Material Science, Bayer Pharma, and Bayer CropScience. Bayer Chemicals, and approximately a third of the BMS business and its production facilities, were transferred to the newly founded company, Lanxess. In November 2004, during an extraordinary shareholder meeting of Bayer AG, more than 99% of the shareholders voted in favor of a complete spin-off of Lanxess from Bayer. No real initial public offer happened; Bayer simply had the shares of this spin-off booked to their existing portfolios. Back then, stake- and shareholders had the perception that Bayer did not devote enough resources to set the new company up for success, and even though Lanxess managed to turn the business around many employees at the time paid a price for the restructuring.

Ten years later in September 2014, Bayer announced the spin-off and the IPO of the remainder of BMS. The renaming of BMS to Covestro took place on September 1, 2015. In comparison to Lanxess or Currenta, two divisions that were also once part of Bayer until their divestitures, Covestro experienced a privileged and well-nurtured separation from Bayer. Insiders who were active at Lanxess at the time had depicted a grim picture of what the company and its employees had to go through when they were spun off in 2004. Lanxess was in critical condition at the time, and it took a great deal of effort to keep the company stable, let alone transform it into one of Germany's leading specialty chemicals companies.

When Bayer was separating from BMS, market conditions were very different. Bayer was ready to realign its own portfolio, and the global economy was generally doing very well. A lot of resources were put into creating a narrative for this new company, its own brand identity and corporate culture. From marketing, public, and employer points of view, these measures were a total success. Its initial public offer of 24 Euros a share happened in September of 2015. By the end of January 2018, the stock price hit a record of around 95 Euros. Stock was sharply increasing, the initial anxieties felt by employees started to alleviate, and revenue and profits grew exponentially, quickly leading to respectable bonus

payments during the first years. In summary, at first glance the spin-off seemed to be a total success. The corporate culture, formed through the new mantra of being curious, courageous, and colorful, earning statements describing it as a start-up with 80 years of history offered a narrative of an extremely successful spin off. Almost everybody was happy.

After the spin-off, Covestro experienced an ideal market environment. In fact, it had a disproportionate market advantage at the time because of its toluene diisocyanate (TDI) production facilities, which were almost the only ones in the world that were operational. As of 2017, TDI became the main driver for Covestro's success. TDI is an organic compound that is extremely difficult to produce and is used in many processes such as manufacturing of mattresses, insulating materials, or coatings. Global demand for TDI has been insatiable for years, with demands that could not be met by suppliers. Companies like BASF, for example, could not get their own TDI production facilities online. Fast forward 2 years later, the situation at Covestro is vastly different from 2017, and TDI prices have been in steep decline due to a global oversupply of the compound.

Since then, Covestro has announced a general restructuring program to improve the company's performance. Further acquisitions have been made to complement its current portfolio. Time will show if the business units and the company as a whole will be able to distill the necessary synergies in order to maintain a pool position among its fierce and growing global competition. In 2020/2021, a major realignment of the young company took place, which was completed on July 1, 2021. The former three segments: polyurethanes (PUR), polycarbonates (PCS), and coatings, adhesives, specialties (CAS) were reshaped to seven, more customer centric, entities.

positioning under Patrick Thomas and Richard Northcote to a highly pragmatic, externalist approach under Thomas Toepfer and Markus Steilemann (Richard Northcote was the Chief Sustainability Officer of Covestro, who provided essential impulses such as integrating the UN SDGs into Covestro's sustainability program. He unexpectedly passed away in June of 2018.)

From a technical perspective, Covestro's road towards sustainability could be described as from carbon nanotubes to Cardyon carbon capture. In 2009, it was announced that Bayer MaterialSciences would expand its production of nanotubes, tiny cylinders of atoms that can be used for a wide variety of applications due to their electrical or mechanical properties. Examples of applications can be found in space- and aircrafts to reduce the weight and stress within components, as catalysts and in drug delivery systems as well as in applications related to conductivity in electronics (2009). The latest advance is Covestro's move towards partly replacing petroleum in plastics and synthetics with carbon dioxide as a base for its processes. The greenhouse gas that is one of the major causes for the climate crisis can serve as a valuable material source in plastic production. This revolutionary use of carbon dioxide is the result of the Cardyon process: reuse of CO₂ for polyols production developed in cooperation with the RWTH Aachen. From a perspective of circularity, this process answers many problems on the road to carbon neutrality. It saves fossil fuels, such as crude oil, of which the plastic industry is on track to account for 20% of total global oil and gas consumption by 2050. It further reduces the amount of atmospheric carbon dioxide because the carbon from CO₂ is essentially being recycled.

Mission/Objectives/Focus Areas

Several Key Milestones

To further have a better understanding of Covestro's sustainability trajectory, one would have to describe the development from the Bayer years to today. From a highly visionary

When an employee of Covestro is asked what he or she strives for as a member of the Covestro community, the answer is usually to make the world a brighter place. When company representatives speak at open forums or on the company's website, the mission, objectives, and focus areas

are improving the world through sustainable business processes, and by doing so, adding value. More recently, Covestro has a strong focus on the concept of circularity.

Climate change, growing world population, increasing urbanisation, hunger: global trends like these are enormous challenges. Covestro wants to contribute to overcoming them - with its wide range of innovative products and solutions. Because the high-quality plastics and their components that our company develops and produces are the key to a sustainable future. (*Our Objectives and Mission as a Company* | Covestro [n.d.](#))

This is the company purpose: We want to make the world a brighter place. Further, Covestro clarifies its purpose as giving the basic direction for its demonstrated responsible action for humanity and for generations to come, as well as the preservation of the natural foundations of life, while creating value in the tradition of “People, Planet, Profit.” While in 2015 3P was the guiding mantra, during more recent years, more emphasis is placed on broadcasting their efforts to become a circular business.

Covestro states very clearly that:

[...], the great social and economic transformation project to make the world climate-neutral and protect its shrinking resources. We will be fully circular – this is our vision that concretizes our purpose. (Our Objectives and Mission as a Company | Covestro [n.d.](#))

From its vision, Covestro derives its mission:

Our Mission dictates how we will achieve the Covestro vision: We want to promote innovation and growth with profitable products and technologies that benefit society and reduce the impact on the environment. (*Our Objectives and Mission as a Company* | Covestro [n.d.](#))

All of this is in line with Covestro’s core values that have been an important pillar of its communication strategy since day one of the spin-off of Bayer, namely – curious, courageous, and colorful. The fact is that Covestro is a small player (vs. BASF) with only limited impact when it comes to its product portfolio, value chains, IP/innovation portfolio, etc. The same can be said about its resources in comparison to the old Material Science days. For Covestro to truly be able to start a real a movement in the field of

circular economy cooperation and joint ventures with governments and on a B2B level are essential.

Structure of Governance/Leadership

In 2017, Markus Steilemann, a young and energetic executive with a long history at Bayer, became Chief Commercial Officer of Covestro and then Chief Executive Officer in June of 2018. Born in Germany in 1970, Steilemann graduated with a master’s degree in chemistry and chemical economics and a PhD in chemistry from RWTH Aachen University. His career began in 1999 at Bayer, holding several management positions with a focus in the Polycarbonates Business Unit at Bayer MaterialScience, the precursor company of Covestro, starting in 2008. Between 2013 and 2015, he led the BMS unit in China before joining the Board.

Considering further pros and cons, one should remember the former CEO, Patrick Thomas, occupied various positions at other companies in the industry prior to joining BMS. Conversely, Steilemann spent his entire career in the Bayer environment, a culture that is driven by hierarchy, and an authoritarian “my way or the highway” style of leadership that allows little room for mistakes (which does not come as a surprise considering the production of medicine and volatile chemicals does not leave much room for error). This mentality has permeated the entire company, and, like most of Bayer’s spin-offs, the remains of this culture can be seen and must be considered when further transforming the business to be prepared for today’s challenges. During interviews with several Covestro employees, it became clear that after the first honeymoon phase, a booming economy/business cycle right after the spin-off, sliding into recession, the pandemic, and, for the last year, struggling with intense energy cost, few at Covestro would still hold on to “the culture of a start-up tale.” To be fair, maybe that is not the ideal culture to strive for anyway.

Where several years back, Bayer’s structure would ease the losses of one division during a downturn, Covestro does not have that luxury

anymore and at times struggles with its newly gained independence. When the economic downturn started in early 2020, the leadership maintained in a sort of static position. Important investment decisions, strategic questions, etc., used to be answered in the prior Bayer construct by the very top and hardly by the actual divisions. A carve-out/spin-off must be for a corporation like it is for a child to learn how to walk. It is a process that takes time, and only time will show how a company performs under different market conditions. Yet, for this publication, due to Covestro's advances in the field of circularity, it is a fascinating company to observe from a sustainability perspective.

Activities/Major Accomplishments/Contributions

Here we could look back to a seemingly endless story of activities, major accomplishments, and contributions. Instead, we look at the latest activities to maintain focus on the current state of industry participants such as Covestro and sustainability. Industry experts know that Scope 3 emissions up and down the supply chain are very hard to measure and reduce, yet make up the majority of any product carbon footprint when it comes to CO₂ emissions. That is why the announcement that Covestro and LANXESS cooperate to produce more sustainable raw materials with reduced CO₂ footprint in January of 2023 is interesting. The announcement stated that these two Bayer spin-offs agreed on cooperating when it comes to the production of key basic chemicals, that Covestro uses certified renewable electricity for the energy intense electrolysis process in North Rhine-Westphalia and that this cooperation is going to lead to CO₂ emissions reduction up to 120,000 tons annually.

References

Covestro AG. (2009, January 27). *Bayer produziert winzige Nanoröhrchen*. Handelsblatt. <https://www.handelsblatt.com/technik/forschung-innovation/>

[chemie-bayer-produziert-winzige-nanoroehrchen/3097882.html](https://www.chemie-bayer-produziert-winzige-nanoroehrchen/3097882.html)

Covestro. (2023, January 25). Covestro and Lanxess cooperate to produce more sustainable raw materials with reduced CO₂ footprint. Covestro and Lanxess cooperate to produce more sustainable r. Retrieved April 13, 2023, from <https://www.covestro.com/press/covestro-and-lanxess-cooperate-to-produce-more-sustainable-raw-materials-with-reduced-co-footprint/>

Our objectives and mission as a company | Covestro. (n.d.). *Covestro AG*. <https://www.covestro.com/en/company/strategy/purpose-vision-mission>

Thomas, P. (2015, June 1). *Our new name – Covestro*. *Linkedin.com*. Retrieved January 8, 2023, from <https://www.linkedin.com/pulse/our-new-name-covestro-patrick-thomas/>

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Cradle 2 Cradle

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Cradle to Cradle

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Synonyms

2CC2; C2C; Cradle 2 cradle; Cradle to cradle design; Cradle-to-cradle

Definition/Description

Unlike the “cradle to grave” linear material flow, the term “cradle to cradle” (C2C) is used to explain an alternative approach that “waste” produced by industrial manufacturing processes can

be used in a new manufacturing cycle without degrading or downcycling the materials used in the process but rather improving the whole cycle. As a result, there is no such thing as “waste” under “cradle to cradle” flow. It is a more efficient process from an economic, environmental, and social perspective. One of the critical steps suggested for the implementation of the C2C approach is creating an inventory of materials used to produce a product and categorizing these materials into (1) an “X list,” which includes the most known harmful substances that must be discontinued and replaced; (2) a “gray list,” which refers to substances that, although problematic, are not harmful enough to be included in the “X list”; and (3) a “P list” (“positive list”), which includes substances defined as healthy and safe for use.

Introduction

Traditional industrial manufacturing processes are not sustainable from economic, environmental, and social perspectives. These processes are based on systems where goods are produced with a one-way and linear manufacturing flow (“cradle to grave”). Although efficient from an economic perspective, this approach to process is harmful to both the environment and ultimately humans. Alternatively, the “cradle-to-cradle” approach represents a cyclical flow of production that achieves better results in economic, environmental, and social terms.

Cradle to Grave (C2G)

The traditional way to deal with waste produced by traditional manufacturing processes is to dispose of it – by putting it into a landfill or burning it – or more recently by recycling it (Braungart et al. 2007). This approach is referred to as a “cradle to grave” (C2G) material flow (McDonough and Braungart 2002). It is a one-way, linear process where it is assumed that “raw materials are extracted from the environment, transformed into products and eventually disposed of” (Braungart et al. 2007).

Some of these materials can be recycled, leading some authors to refer to the process as “downcycling” rather than “recycling” (Braungart et al. 2007). This approach is taken because the materials used are not designed to be recycled and results in a downgrade in material quality (Braungart et al. 2007). Once a product has been recycled, the quality of its materials decreases, “making them suitable for use only in lower value applications” (Braungart et al. 2007). The “recycling” process, therefore, has ultimately a C2G linear approach (Braungart et al. 2007).

This C2G, including the recycling process and its failure to effectively reclaim waste, creates pollution or negative externalities. It jeopardizes not only the environment but also the welfare of all living beings. By polluting natural resources such as air, water, and soil, the manufacturing process is endangering the ecosystem and, consequently, human life as a whole.

Cradle to Cradle (C2C)

One alternative process to the C2G is “cradle to cradle” (C2C). This concept, coined by William McDonough and Michael Braungart in their seminal book “*Cradle to Cradle: Remaking the Way We Make Things*” (McDonough and Braungart 2002), embodies the alternative view that “waste” produced by industrial manufacturing processes can be used instead in a new cycle of manufacturing without downgrading the materials used (Braungart et al. 2007; El-Haggar 2007; Kumar and Putnam 2008). This view, therefore, claims that the orthodox concept of “waste” does not exist (McDonough and Braungart 2002). Unlike the one-way, linear approach of the C2G model, the C2C flow is viewed as a cyclical “metabolism” (Braungart et al. 2007) that enables manufactured products to “form a supportive relationship with ecological systems and future economic growth” (Braungart et al. 2007). This ecosystem approach enables “materials to maintain their status as resources and accumulate intelligence over time (*upcycling*)” (Braungart et al. 2007). Accordingly, “waste” resulting from manufacturing processes can be reclaimed and

used to enhance the cycle. This view emulates the cycle of nature by which “waste equals food” (McDonough and Braungart 2002; McDonough et al. 2003) and explains why the C2C model has been compared with biomimetic approaches (de Pauw et al. 2014). The conceptual foundation of the C2C concept is summarized by McDonough and Braungart in the following passage:

If humans are truly going to prosper, we will have to learn to imitate nature’s highly effective cradle-to-cradle system of nutrient flow and metabolism, in which the very concept of waste does not exist. *To eliminate the concept of waste means to design things – products, packaging, and systems – from the very beginning on the understanding that waste does not exist.* It means that the valuable nutrients contained in the materials shape and determine the design: form follows evolution, not just function. (McDonough and Braungart 2002).

Main Consequences of Cradle to Cradle

The C2C model has two main consequences. First, it not only reduces the harmful effects of industrial processes on the environment and society in general but also produces a positive impact. This model promotes “eco-effectiveness” (McDonough and Braungart 2002), which “moves beyond zero emission approaches by focusing on the development of products and industrial systems that maintain or enhance the quality and productivity of materials through subsequent life cycles” (Braungart et al. 2007). The C2C model, therefore, shifts the paradigm from consume and disposal to consumer and repurpose (McDonough et al. 2003). Under this approach, industrial production is no longer perceived as a generator of a negative ecological footprint but, instead, as a producer of positive ecological impacts (Rossi et al. 2008; Toxopeus et al. 2015). According to Toxopeus, de Koeijer and Meij, “[t]he Cradle to Cradle philosophy focuses on an ideological transition from ‘less bad’ to ‘more good’” (Toxopeus et al. 2015).

Second, the C2C model offers a more efficient economic result. The cyclical nature of the model, by eliminating the concept of waste, “supports and regenerates ecological systems and enables long-term economic prosperity” (Braungart et al. 2007). The C2C flow, therefore, eliminates the existing tension between economic growth and environmental protection (McDonough et al. 2003).

In sum, C2C “enables the creation of wholly beneficial industrial systems driven by the synergistic pursuit of positive economic, environmental and social goals” (Braungart et al. 2007), or stated differently, “C2C designs industrial systems to be commercially productive, socially beneficial, and ecologically intelligent” (McDonough et al. 2003).

Implementation

In their seminal book, McDonough and Braungart propose five steps to implement eco-effectiveness and the C2C process (McDonough and Braungart 2002). First, it is necessary to eliminate from industrial production those substances that are broadly recognized as harmful. This is called a “design filter” because it is an initial step of the production chain that discards harmful substances right from the product design.

Second, the product designer must select the substances used in the production process based on his or her personal preferences and available information. Product information that is usually available to the public is scarce. Consequently, the decision to use one product or the other – or one substance or another – in the manufacturing process must be made with the best information available, even if incomplete. In making this decision, designers should (1) ensure that the product or substance “does not contain or support substances and practices that are blatantly harmful to human and environmental health” (McDonough and Braungart 2002); (2) respect the people associated with the product, namely, producers, communities, carriers, and end consumers; and (3) prefer those products and substances that add creativity, delight, celebration, and fun.

Third, it is required to create a “detailed inventory of the entire palette of materials used in a

given product, and the substances it may give off in the course of its manufacture and use” (McDonough and Braungart 2002). For this, McDonough and Braungart propose to create three different lists: (1) an “X list,” which includes the most known harmful substances that must be discontinued and replaced; (2) a “gray list,” which “contains problematic substances that are not quite so urgently in need of phaseout” (McDonough and Braungart 2002); and (3) a “P list” (“positive list”), which includes substances defined as healthy and safe for use.

The fourth step is to activate the “positive list” and, based on it, design the product from beginning to end as a cyclical metabolism. Finally, the fifth step is reinventing the product. The new possibilities of economic, environmental, and social benefits derived from C2C allow a redefinition of the final product. Thus, the design of, for instance, a “car” can be redefined as the design of a “nutrvehicle.” This redesign and redefinition of the final product changes it from making cars with zero negative emissions to making cars that are “designed to release positive emissions and generate other nutritious effects on the environment” (McDonough and Braungart 2002).

Summary

To sum up, C2C is an alternative view that denies the traditional concept of “waste”. It argues that “waste” produced by industrial manufacturing processes can be reclaimed and used in a new manufacturing cyclical flow which is improved by the C2C process.

Cross-References

- [Strategy in a Circular Economy: Discussion of Opportunities and Limitations](#)

References

- Braungart, M., McDonough, W., & Bollinger, A. (2007). Cradle-to-cradle design: Creating healthy emissions –

- A strategy for eco-effective product and system design. *Journal of Cleaner Production*, 15(13–14), 1337–1348. <https://doi.org/10.1016/j.jclepro.2006.08.003>.
- de Pauw, I. C., Karana, E., Kandachar, K., & Poppelaars, F. (2014). Comparing biomimicry and cradle to cradle with ecodesign: A case study of student design projects. *Journal of Cleaner Production*, 78, 174–183. <https://doi.org/10.1016/j.jclepro.2014.04.077>.
- El-Haggar, S. (2007). *Sustainable industrial design and waste management: Cradle-to-cradle for sustainable development*. Academic. <https://doi.org/10.1016/B978-0-12-373623-9.X5000-X>.
- Kumar, S., & Putnam, V. (2008). Cradle to cradle: Reverse logistics strategies and opportunities across three industry sectors. *International Journal of Production Economics*, 115(2), 305–315. <https://doi.org/10.1016/j.ijpe.2007.11.015>.
- McDonough, W., & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things*. New York: North Point Press.
- McDonough, W., Braungart, M., Anastas, T., & Zimmerman, B. (2003). Applying the principles engineering of GREEN to cradle-to-cradle design. *Environmental Science & Technology*, 37, 434A–441A. <https://doi.org/10.1021/es0326322>.
- Rossi, M., Charon, S., Wing, G., & Ewell, J. (2008). Design for the next generation: Incorporating cradle-to-cradle design into Herman Miller products. *Journal of Industrial Ecology*, 10(4), 193–210. <https://doi.org/10.1162/jiec.2006.10.4.193>.
- Toxopeus, M. E., de Koeijer, B. L. A., & Meijb, A. G. G. H. (2015). Cradle to cradle: Effective vision vs. efficient practice? *Procedia CIRP*, 29, 384–389. <https://doi.org/10.1016/j.procir.2015.02.068>.

Cradle to Cradle Design

- [Cradle to Cradle](#)

Cradle-to-Cradle

- [Cradle to Cradle](#)

Cradle-to-Grave Analysis

- [Life-Cycle Analysis](#)

Creating Shared Value

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Synonyms

Common good; Shared good; Shared value; Thick value

Definition

Creating Shared Value (CSV) is a concept that brings business and society together so that entrepreneurial activity is profitable and increases the well-being of citizens in the local community.

Business Ethics Is about Responsibility

Responsible business activities follow lines that are desirable in terms of the objectives and values of society (Bowen 1953). This raises the question of how companies engage in business for societal good. The aim of Corporate Social Responsibility (CSR) is “maximizing the creation of shared value for their owners/shareholders and for their other stakeholders and society at large as well as identifying, preventing and mitigating their possible adverse impacts” (European Union Commission 2019, 3).

According to the classical understanding of CSR, a social engagement is a cost to the entrepreneur. Creating Shared Value (CSV) constitutes a profitable version of the traditional CSR. According to CSV, entrepreneurs create economic value by fostering societal value. This is with regard to an aim of redefining the neoliberal purpose of the corporation. The idea is that the competitiveness of the company correlates with the

well-being of citizens in a society (Porter and Kramer 2011).

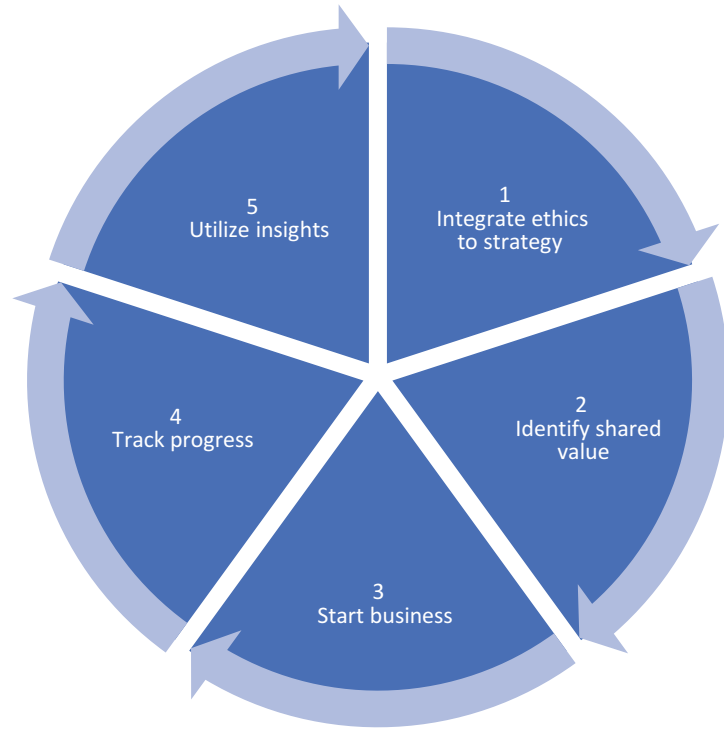
Concept of Creating Shared Value (CSV)

CSV is an extension of Stakeholder Theory (Freeman 1984). CSV applies an integrative approach to business ethics by doing business and finding solutions to societal challenges together (von Liel 2016). Also, Social Entrepreneurship (SE) integrates conscious moral behaviors into business activities (Bowen 1953). SE is a concept aiming at social benefits without targeting financial profitability. Benefits for society may be direct or indirect. Direct benefits can be services, gifts and care or buildings, scholarships and aid. Indirect benefits include employment. The entrepreneurial process may involve hiring a select group of people. (Tan et al. 2005.) There are similarities between SE and CSV. CSV is grounded in the circumstances where “companies have overlooked opportunities to meet fundamental societal needs” (Porter and Kramer 2011). However, in contrast to SE, CSV is aimed at fulfilling basic human needs in society alongside financial profitability (Beschoner 2013).

CSV is about enhancing the competitiveness of a company while simultaneously enhancing the social circumstances of the communities in which it operates (Porter and Kramer 2011). Enabling strong local ecosystems for business is a concrete way to create shared value. Strong ecosystems have a positive impact on productivity and innovation. They foster efficiency and ease of collaboration. Value can be created, for example, by relocating production back to its home markets. This is a special feature of CSV that cannot be found explicitly in related responsibility concepts (von Liel 2016).

Implementation of CSV is based on five principles. First, ethics are integrated into the business strategy. Then shared values are identified by combining societal problems and the purpose of the business activities. After that the business activities are ready to be started. Progress is tracked during the process and insights will be utilized to upgrade business activities (Fig. 1).

Creating Shared Value,
Fig. 1 Implementation of
CSV (Adapted from Porter
et al. 2012)



Future of CSV and Business Ethics

Integrative business ethics is a dynamic and critical reflection process of entrepreneurial activity in its context. In its widest sense, it is about integral profit maximization, social engagement, and environmental sustainability. In the midst of globalization, responsibility has focused more on decent work, multiculturalism, and transparency in recent years. This combination resonates with CSV because improving the living conditions of poor people is at the center of the concept (von Liel 2016). A major criticism of CVS is that it focuses mainly on economic and social challenges in society. In the other words, it does not offer a holistic point of view over business activities including adverse impacts such as waste, pollution, and CO₂ emissions. It could also be anchored deeper in organizational culture and the motivation of employees so that corporations seek socially acceptable goals in a socially acceptable manner (Crane et al. 2014).

Summary

Due to climate change, as well as a more and more evident ecological crisis, environmental issues will be in high demand in the near future. This raises a need for normative approaches such as Responsible Business Conduct (RBC), defined by the OECD as “making a positive contribution to economic, environmental and social progress with a view to achieving sustainable development, and avoiding and addressing adverse impacts related to an enterprise’s direct and indirect operations, products or services” (OECD 2011). In the future, business ethics concepts that integrate not only economic and social interests but also environmental targets in one objective function are needed. Therefore, the future of business ethics may lie in co-benefits. This means that business activities will co-benefit customers, employees, stakeholders/owners, society, and global development with regards to the intergenerational link.

Cross-References

- ▶ [Business Ethics](#)
- ▶ [Corporate Social Responsibility](#)
- ▶ [Shared Value](#)
- ▶ [Social Entrepreneurship](#)
- ▶ [Stakeholder Theory](#)
- ▶ [Triple Bottom Line](#)

References

- Beschorner, T. (2013). Creating shared value: The one-trick pony approach. *Business Ethics Journal Review*, 1(17), 106–112.
- Bowen, H. (1953). *Social responsibilities of the businessman*. New York: Harper.
- Crane, A., Palazzo, G., Spence, L., & Matten, D. (2014). Contesting the value of the shared value concept. *California Management Review*, 56(2), 130–153.
- European Union Commission (2019). Corporate social responsibility, responsible business conduct, and Business & Human Rights: Overview of Progress. Commission staff working document 143.
- Freeman, R. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- OECD. (2011). *OECD guidelines for multinational enterprises*. Paris: OECD Publishing.
- Porter, M., & Kramer, M. (2011). Creating shared value – How to reinvent capitalism – And unleash a wave of innovation and growth. *Harvard Business Review*, 89(1/2), 62–77.
- Porter, M., Hills, G., Pfitzer, M., Patscheke, S., & Hawkins, E. (2012). *Measuring shared value. How to unlock value by linking social and business results*. Geneva: Foundation Strategy Group.
- Tan, W., Williams, J., & Tan, T. (2005). Defining the ‘social’ in ‘social entrepreneurship’: Altruism and entrepreneurship. *International Entrepreneurship and Management Journal*, 1(3), 353–365.
- von Liel, B. (2016). *Creating shared value as future factor of competition. Analysis and empirical evidence*. Wiesbaden: Springer Nature.

Creating Shared Value (CSV)

- ▶ [Corporate Social Performance](#)
- ▶ [Corporate Social Responsibility](#)

Credit Cooperatives

- ▶ [Credit Unions and Credit Cooperatives](#)

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Credit Unions and Credit Cooperatives

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Synonyms

[Credit cooperatives](#); [Credit unions](#); [Finance](#); [Financial cooperatives](#); [Financial institutions](#); [Financial intermediary](#); [Financial intermediation](#)

Definition/Description

Credit unions are regulated financial cooperatives that are owned by their members, who are also their customers. They operate in relationship-based retail banking business (McKillop et al. 2020). A defining characteristic of credit unions is their membership requirement, known as a common bond (Emmons and Schmid 1998; Frame et al. 2002). The common bond specifies who is eligible to join a particular credit union. It is based on a social connection, which could arise through location of residence or place of work, occupation, membership of an association, or a combination of these (McKillop and Wilson 2015; Pavlovskaya et al. 2020).

Within their common bonds credit unions operate inclusively, by offering their services to members of all income levels and backgrounds. The early credit cooperatives, that preceded credit unions, were established in the 1800s to provide credit to artisans, traders, and farmers who were financially vulnerable and experiencing exclusion (Guinnane 2001, 2011). Modern credit unions remain nondiscriminatory and are committed to social responsibility, which is one of the operating principles of the international credit union movement (WOCCU 2017; Decker 2010; Stoffman 2017).

Credit unions' main purpose is not to make economic profits for distribution to shareholders or managers (Jenster and Overstreet 1990; Worthington 1998; Frame et al. 2002). Rather, they have a dual purpose to balance social and economic goals (Taylor 1971). Surpluses are distributed to members as dividends, used to improve the cost and quality of services, or retained to strengthen the institutions' capital base.

Introduction

The potential for credit unions and other financial cooperatives to promote sustainable development and sustainable finance continues to attract attention. Researchers and international bodies have commended financial cooperatives for operating sustainable business models that allowed them to be more stable and efficient than investor-owned banks during the global financial crisis (Groeneveld and de Vries 2009; Birchall and Ketilson 2009; Crear 2009; International Labour Office 2012; Birchall 2013; Becchetti et al. 2016). Another reason for interest in credit unions is their inclusive banking approach that improves access to financial services (Jones 2008a; NEF 2014; Muriuki 2019). Access to finance in appropriate forms is associated with several of the Sustainable Development Goals, including poverty reduction (SDG 1), food security (SDG2), good health (SDG 3), economic growth (SDG 8), social cohesion (SDG 11), and minimizing inequality (SDG 5, SDG 10) (Klapper et al. 2016; Kara et al. 2021).

The term financial cooperatives covers cooperative banks, savings, and credit cooperatives, *caisse populaires*, shinkin banks, banks that are owned by consumer or agricultural cooperatives, and credit unions (ILO 2012; McKillop et al. 2020). Croteau (1963) described credit unions as pure cooperatives, because they deal exclusively with their members. The World Council of Credit Unions (WOCCU), which is the global trade association and development agency for credit unions and savings and credit cooperatives, defines a credit union as a customer/member owned financial cooperative, democratically controlled by its members, and operated for the purpose of maximizing the economic benefit of its members by providing financial services at competitive and fair rates (WOCCU n.d.). This definition does not make explicit reference to credit unions' social goals, but social responsibility is one of the operating principles set out by WOCCU for credit unions. This entry explores the origins of credit unions, the status of the credit union movement, the principles that influence credit unions' operations and governance, and some key sustainability issues facing the movement.

Origins of Credit Unions

Modern credit unions are variants of cooperative institutions that originated in mid-nineteenth century in Germany to address the financial inequality experienced in some communities as the Industrial Revolution unfolded. Friedrich Raiffeisen, a Lutheran layman and mayor, established rural credit cooperatives for small farmers and rural laborers while Hermann Schulze-Delitzsch, who was a lawyer, judge, and politician, established urban credit cooperatives for artisans and shopkeepers (Guinnane 2011; Fonteyne and Hardy 2011). Although these two cooperative models were based in very different communities, they had common goals of responding to market failures that were caused by information problems. These failures limited access to finance for some people and resulted in a worsening of poverty. Guinnane (2001) explains that it was the "unusual circumstances" of some

people that made it too risky, too costly, or impossible for mainstream banking institutions to make decisions on their creditworthiness and serve them.

Early credit cooperatives addressed the information problems and lack of collateral that affected their members' ability to borrow elsewhere by using the preexisting social connections between them to form a common bond (McKillop and Wilson 2011). The common bond is a membership requirement that specifies who is eligible to join a particular credit union. Emmons and Schmid (1998) describe the common bond as the organizing principle of a credit union. Depending on the type of common bond, membership could be organized by residence, place of work, occupation, membership of an association, or a combination of these.

Organizing credit cooperatives' membership around preexisting social connections allowed these institutions to reduce information gathering and credit processing costs. They became better placed to discipline the behavior of members and reduce losses from bad debts (Black and Dugger 1981). The common bond created a source of competitive advantage for the credit cooperatives as it enabled them to become specialists in member intermediation that could make quick resource allocation decisions based on their members' reputation and savings profile (McKillop et al. 2007; McKillop and Wilson 2011). Fischer (1998) argues that the common bond helped to develop trust within credit cooperatives which lowered transactions cost to the point where the credit cooperatives could operate sustainably. Economic and social value outcomes were realized from the credit cooperatives' innovative business model because they executed intermediation efficiently and used local knowledge of population demographics to meet financial needs.

Modern credit unions are an adaptation of Raiffeisen style credit cooperatives (Goglio and Kalmi 2017). Compared to credit cooperatives organized around the Schulze-Delitzsch model, Raiffeisen's rural credit cooperatives were characterized by closed and tighter common bonds, were run by volunteers, and offered longer term loans (Guinnane 1995). De Vicq (2022) argues

that the Raiffeisen credit unions were deemed to be more successful in tackling poverty because of how they made loans unlike the Schulze-Delitzsch institutions whose lending policy was more like banks.

From Germany, the Raiffeisen style cooperatives spread first to France in 1882. Credit Agricole and Credit Mutuel, which are significant French financial institutions, emerged from the Raiffeisen model (ICA n.d.). In 1901, credit unions were established outside Europe, in Canada and then in the United States in 1909. Between 1941 and 1946 credit unions emerged in several Caribbean Islands followed by institutions in Australia in 1946, the Republic of Ireland in 1958, and Northern Ireland in 1960. England, Scotland, and Wales had their first credit unions in 1964, 1970, and 1974, respectively. According to the British Credit Union Historical Society, formal savings and credit cooperatives were first established in Africa in 1955 (BCUHS n.d.). Different factors shape and structure the development of credit unions in a given country. These include the level of financial development of a country at the time credit unions were introduced, the regulatory regime for credit unions, the competitive landscape, and the business models that credit unions adopt (Ferguson and McKillop 1997; Jones 1999; NEF 2014).

Around the world, the traditional core product offering of credit unions comprises savings and consumer loans, reflecting that their primary mission continues to be meeting consumers' credit and savings needs (Getter 2021). However, the product range has expanded in many countries to include current accounts and transaction banking. In the United States and Canada, for example, large professionally run credit unions can offer a wide range of products that allows them to compete with banks (Anderson and Liu 2013; Chatterji et al. 2021). Yet, they continue to be formally differentiated from banks by their dual social and economic goals and membership of the global credit union movement. In the United States, a federal income tax exemption enjoyed by credit unions further differentiates them from banks (Frame et al. 2002; McKillop and Wilson 2015).

The Credit Union Movement

Credit unions are referred to as being part of a movement, rather than an industry. In industries, firms compete directly. Credit unions only compete directly for market share, in instances where their common bonds overlap (McKillop et al. 2002). Movements comprise groups of people who pursue change together (Johnston 2014). Using a typology developed by Morris and Braine (2001), the credit union movement can be classified as a social responsibility and self-help movement in which a group of people work together to challenge certain conditions that affect the general population. Movements seek to bring about social change by attracting and mobilizing resources and taking collective action. McKillop and Wilson (2015) emphasize the self-help nature of credit unions and their strong emphasis on building social capital and empowering their members and local communities.

According to WOCCU's 2021 statistical report, there were 86,914 credit unions established in 118 countries serving approximately 394 million people. The overall penetration rate of credit unions is 12.69%, which masks an uneven global picture. In Ireland, for example, penetration is as high as 113% while in other countries, like Armenia, it is less than 1%. Thomas et al. (2008) found that the ability to offer additional services, support from other socially oriented stakeholders, notably the Catholic Church, and a sustained commitment to social responsibility and development were significant contributors to the success of Irish credit unions.

Regionally, the Caribbean records the highest overall penetration at 68.58%, followed by North America at 51.77%. The regions with the lowest penetration are Oceania and Asia at 4.13% and 5.92%, respectively. Europe has just under 10% penetration at 9.64%. Although credit unions developed from German credit cooperatives, cooperative banks rather than credit unions are the dominant form of financial cooperatives in Europe (McKillop et al. 2020). Africa and Latin America record less than 20% penetration, with 15.66% and 16.5% penetration, respectively. Occupational credit unions are the largest in the

world, but non-occupational community credit unions, like Vancity Credit Union in Canada with assets of \$21.7 billion and Golden 1st Credit Union in the United States with assets of \$18.48 billion, have achieved significant size and reach within their fields of membership (Forbes 2022; Advratings 2022).

There is a roughly even split between male and female users at 47% and 51%, respectively. Group membership accounts for 2%. Most credit union users, 71%, are in the 45–64 years age brackets. Marshall and Nat (2015) and Kleanthous et al. (2019) have highlighted credit union membership is skewed toward older people, suggesting that credit unions may be less appealing to a younger clientele. Kleanthous et al. (2019) suggested that an explanatory factor could be a lack of cooperative education targeted at young people which leaves them unaware of credit unions. Larson (2021) and Dopico (2021) identify that credit unions face technological limitations. These limitations may make credit unions unappealing to younger clientele who have been found to be more interested in the newest banking technologies (Harris et al. 2016; Krasonikolakis et al. 2020). The lack of appeal to a younger clientele gives cause for concern about the ability of credit unions to engage with and meet the prevailing needs of future generations.

Credit Union Operating Principles

In its Statement on the Cooperative Identity, the International Cooperative Association (ICA) sets out its four values and the principles by which these values are operationalized (ICA 2012). These values are self-help, self-responsibility, integrity, and solidarity. To reflect the status of credit unions as cooperatives, WOCCU has drawn from the ICA's statement to develop a set of international operating principles that articulates how credit unions should work to serve their members and society (WOCCU 2017). The ten principles fall under three categories – cooperative structure, service to members, and social responsibility.

The first category specifies the three features that credit unions have in common with all other cooperatives, but it also recognizes that although credit unions are autonomous, they are regulated institutions. Like all cooperatives, credit unions are member-owned, member-controlled institutions and operate with a democratic mandate. Each member has one vote irrespective of the amount they have saved in the credit union. Democracy, therefore, plays a key role in credit union's internal governance (Amess and Howcroft 2001; Spear 2004; Labie and Perilleux 2008; Jones et al. 2017).

Service to members covers a further three principles that define how credit unions deliver their products and create value as financial intermediaries. These principles are financial inclusion, financial sustainability, and maximizing member economic benefit. Financial inclusion means that credit unions do not discriminate against anyone who qualifies to become a member. Jones (2006), McKillop et al. (2007), and Gregory and Drakeford (2011) are among those who have emphasized that promoting financial inclusion should not be at the expense of a credit union's financial sustainability.

WOCCU developed a financial monitoring and business planning system known as PEARLS in the late 1980s to help strengthen credit union movements throughout the world (Evans and Branch 2002; Richardson 2009). PEARLS uses target ratios for key areas of credit union performance that contribute to financial sustainability. These are **Protection of assets**, **Effective financial structure**, **Asset quality**, **Rates of return and costs**, and **Liquidity and Signs of growth**. Members' economic benefit is maximized through providing appropriate products and by pricing products reasonably and fairly. Economic benefit is also distributed through dividends paid to members. As they return profits to their members, the members' deposits are known as shares (Getter 2021). However, while all members would receive dividends, some members could benefit more than others from product availability and pricing, depending on whether a credit union is saver or borrower dominated (Legget and Stewart 1999; Labie and Perilleux 2008). The result is that maximum

economic benefit will not accrue to all. Paradoxically, while all members are equal, all member groups may not be equal. Only neutral credit unions that are neither saver or borrower oriented are likely to benefit all member group equally (Patin and McNiel 1991; Bressan et al. 2013).

The final category, social responsibility, deals with how credit unions address society's problems by using cooperation, making meaningful connections and building relationships to deliver social value. The principles are financial literacy, network cooperation, community responsibility, and global vision. These four principles take account of credit unions' external stakeholders and of how credit unions cooperate with each other and with cooperatives generally to impact positively on local and global communities.

Financial exclusion is a key social responsibility issue (Decker 2004; Amaeshi et al. 2007). Providing education about the benefits of cooperative finance is one way of promoting financial inclusion. To address financial inclusion effectively through education and products, empathetic cooperation and joined up solutions between credit unions and other actors is required. Empathetic cooperation occurs when different stakeholders, perceiving barriers or social problems, collaborate to formulate and implement solutions together. The extent to which credit unions adhere to all these principles is debatable. For example, as the membership of a credit union becomes more diverse and affluent, the credit union's involvement in those activities that are dedicated to serving the needs of the poorest may diminish. Kleanthous et al. (2019) found that credit unions in Cyprus do not apply cooperative principles universally, but van Rijn (2022) concluded that US credit unions continue to reflect cooperative principles.

Credit Union Governance

Niederkoher and Ikeda (2005) distinguish between external, internal, and individual aspects of credit union governance. Regulatory governance is the main form of external governance. Financial

regulation and supervision provide standards, constraints, and oversight that covers different aspects of business ranging from scope of activities to financial sustainability, risk management, and conduct. Among other reasons, deposit-taking institutions attract external regulation because of the risks of contagion, widespread disruption, and reputational damage that can occur when they fail (Llewellyn 1999). When a credit union sector is in the formative or nascent stage of development, regulation tends to be more restrictive (McKillop and Wilson 2011). Regulators, because of their views about the risks that a type of organization's business strategy can pose to financial stability and regulatory objectives, may seek to limit their activities (Barth et al. 2004; Chow and Surti 2011).

Internal governance relates to democracy in credit unions which is operationalized in credit unions via the one person one vote system. Theoretically, owners/members can exercise their voice and power through their voting rights (Holmstrom 1999; McKillop and Wilson 2011, 2015). The caveat here is that concentrated membership and dynamic participation are needed for members' voice to be effective as a governance mechanism. Change in the size and composition of the membership can weaken members' voice as a governance mechanism. Research has shown instances where member participation in cooperatives is weak and the power of membership voice is not used effectively (Goth et al. 2012; Kleanthous et al. 2019).

Individual governance covers the obligation of credit union directors and managers to execute their duties with skill and to behave ethically and professionally. Arguments of the advantages of credit union governance include that it produces trust, may reduce the incidence of opportunistic behavior and could ensure a higher level of corporate responsibility, which could give them a comparative advantage because of its stakeholder approach (Amess and Howcroft 2001; Arthur et al. 2007).

In not-for-profits organizations like credit unions, boards have a key role to play in managing relationships with different external issue-

centric stakeholders as well as addressing the balance between customer groups in the membership (Cornforth 2004; Labie and Perilleux 2008; Spear et al. 2009). Conflicts could exist between borrowers and savers because of the dominance of one group (Patin and McNeil 1991; Mercer et al. 2019). While a majority of members may save more than they borrow, or vice versa, a credit union must always strike a balance between policies that benefit savers and those that benefit borrowers. If policies are skewed in the direction that benefits one group, it may be difficult for the credit union to remain a strong institution (Bressan et al. 2013; Vinh Vo et al. 2021).

At the heart of sustainability and sustainable management is the ability to deliver value for multiple stakeholders over time. Spear (2000) proposed that because credit union managers do not have pressures to distribute profits to external shareholders, they should be less opportunistic and less likely to exploit owner-members, particularly the vulnerable members of society. However, there could be a divergence between the interest of managers and the general interests of members. The directors are elected by members to vouchsafe their interest and play a stewardship role that requires them to collaborate with rather than control management. The board of directors is ultimately responsible for oversight of developing product market strategies that deliver sustainable growth, financial sustainability and social outcomes. Management of conflicting demands of stakeholders is essential to address the risk of drift in strategic direction to which organizations with social and economic goals are prone (Ebrahimi et al. 2014; Cornforth 2014).

Credit Unions and Inclusive Banking

The societal concerns that credit unions emerged to address impinge on sustainable development. Unequal and unfair treatment of consumers of financial services, high debt levels, restricted access to mainstream banking products, high-cost lending, health problems associated with financial difficulties still challenge society.

Financial exclusion is typically associated with income inequality and biases that are prevalent among certain groups in society, notably women, older people, minorities, and people with disabilities (Cihak and Sahay 2020; Aslan et al. 2017). Furthermore, the use of financial services is much more widespread in contemporary societies making it imperative for people to have access to financial services, if they are to participate fully in economic life (Martin 2002; Appleyard et al. 2016).

To realize their potential to address sustainability concerns through offering inclusive banking, credit unions need to reach more people and deliver on their capacity for impactful inclusive banking. Credit union penetration in most countries is low, requiring efforts to modernize and grow the movement globally. Jones (1999) argued that a combination of well-designed and targeted products and institutional measures that enhance a credit union's financial sustainability and capability to accommodate growth are crucial. In Britain, modernization of the credit union sector has been based on these principles (Jones 2008a, 2016; Decker 2010).

From a product perspective, access to banking, savings, affordable credit, and insurance products are the key elements of financial inclusion (HM Treasury 2007; Prabhakar 2022). Many credit unions cannot provide a full range of products due to capacity, operational, or regulatory constraints. They may need to work in partnership with other stakeholders to address these constraints. Collaborations may range from working with banks to access the payments systems or forming a credit union consortium to share the costs and risks of developing a new product. Jones (2008b) provides an account of how British credit unions formed a consortium to introduce current accounts. In all collaborations, it is important for a credit union to maintain and communicate a strong sense of identity and purpose to avoid strategic drift. This is because different understandings may exist across partners about the purpose and nature of credit unions. For example, the British government and some other stakeholders presented a view of credit unions that

either located them between banks and payday lenders or as alternatives to payday lender or as institutions that serve only the financially excluded (HM Treasury 2014; Lee and Brierley 2017).

For credit unions to continue to offer inclusive banking, they need to ensure that both the services they offer and the processes through which they are developed and distributed are useful to people, communities, and society. This means that apart from being nondiscriminatory, their services should not have detrimental impacts. Product governance aims to ensure that product development is responsible by providing oversight of the processes adopted when designing, manufacturing, and distributing products. The financial regulators' approach to product governance defines responsibility in terms of detriment to the customer (Bafin 2018; FCA 2023). It does not consider some product related responsibilities that arise when organizations have both economic and social goals or when there is an overlap between owners and customers.

Credit unions are susceptible to some governance failures in the area of product development. Product development is a means of value distribution, especially in credit unions where dividend payouts are low or where members' accounts do not attract interest payments. Inequitable value distribution can occur because of the domination of a particular customer groups. In order to distribute the surplus of a credit union in an equitable manner, it is imperative that the range of products that is available caters for different customer groups. An unbalanced focus on developing products for the unbanked would create a reputation of credit unions as "poor people's banks" that cannot adequately serve other customer groups (Jones 2008a; McKillop et al. 2011; Myers et al. 2012).

A second governance consideration is the likelihood of a drift in a credit union's strategic direction. This could occur because of conflicting demands of stakeholders and a high level of resource dependency of a particular credit union or the entire movement in a particular country. If resource dependency is high, a credit union may embark on collaborations that prioritize the

poverty or inclusion agenda of external stakeholders. Fuller and Jonas (2002) and Davis and Bockie (2001) highlight how partnerships between credit unions and the British government to address financial exclusion created tensions between the credit unions' autonomy and national legitimacy.

There is a fine balance between governments' partnering with credit unions to promote inclusion and limiting them only to achieving inclusion through poverty alleviating projects. The latter runs the risk of stigmatizing credit unions as institutions for poor people and preventing them from achieving the mix of members that is needed to support their financial sustainability. Rather than being inclusive, a credit union would become exclusive. Some commentators have warned that if credit unions are seen only as instruments to serve the needs of those who have little or no access to mainstream banking services or to compete against predatory lenders, then they will not develop into large, viable institutions because of this insularity (Ryder 2002; McKillop et al. 2007). Inclusive banking challenges credit unions to adopt a progressive universal approach by which they can adapt products to meet the needs of those who are excluded rather than create a separate suite for them (Gregory and Drakeford 2011; Decker 2021).

For credit unions, it is worthwhile to approach product development and accountability from the perspective of managing multiple stakeholders to maximize benefits for all groups and minimize conflicts. Inclusive banking involves being explicit about values *and* standards that are adopted to deliver services and their outcomes (Decker 2021). To maximize social and economic benefits, accountability to multiple stakeholders should be a priority. Accountability to membership and regulators is captured in the WOCCU principles, but accounting for social performance to a wider range of external stakeholders has not been widely practiced (Hyndman et al. 2002; McGrath 2008; Nembhard and Ketilson 2015). Without much external scrutiny of credit unions' social impact, their social credentials can easily be taken for granted.

Reporting on financial performance alone is unlikely to sustain attention on or motivate action

toward improving sustainability performance. Developing management information systems and metrics that can measure and inform readily on the social value added by a credit union will facilitate an evaluation of the extent which they remain true to cooperative values and WOCCU's operating and governance principles.

Summary

Credit unions are considered to have the potential to use relationship banking in local communities and appropriate products to contribute to the global pursuit of equality, welfare improvements, and sustainability. From their origins as cooperatives that emerged in response to the exclusion and disadvantage of particular groups in society, credit unions have become an integral part of financial systems and societies, offering choice and social value. Over time, they have developed and changed as they adapted to suit the specific contextual realities of the environments in which they exist. Their evolution confirms that appropriate products and the ability to reach into communities are key to promoting financial inclusion.

Credit unions' ability to continue playing a key role in building inclusive societies cannot be taken for granted. Whether credit unions can realize their full potential to contribute to sustainable development depends on several factors. These include their own financial sustainability, their ability to manage the risks that are inherent in lending to the unbanked, and those on low incomes and their ability to manage complex stakeholder relationships internally and externally. Credit unions' overlapping stakeholder constituencies present important challenges especially when considering the creation of value through the product offering. Case study research at country level into how credit unions manage conflicts, what resources and capabilities contribute to their strategic successes, and how they apply their unique cultural values would enhance contextual understanding of their challenges and how these could be addressed.

Cross-References

- [Inclusion](#)
- [Inclusive/Selective/Compliant Finance/Banking](#)

References

- Advratings. (2022). The largest US credit unions top 100 largest credit unions by asset size, 2022. www.advratings.com
- Amaeshi, K., Ezeoha, A. E., Adi, B., & Nwafor, M. (2007). *Financial exclusion and strategic CSR: A missing link in the sustainable finance discourse* (International Centre for Corporate social responsibility, research paper series, 49). Nottingham University Business School, Nottingham, UK.
- Amess, K., & Howcroft, B. (2001). Corporate governance structures and the comparative advantage of credit unions. *Corporate Governance*, 9, 59–65.
- Anderson, R. G., & Liu, Y. (2013). Banks and credit unions. *Competition is not going away*. The Regional Economist, pp. 4–9. www.stlouisfed.org
- Appleyard, L., Rowlingson, K., & Gardner, J. (2016). The variegated financialization of sub-prime credit markets. *Competition & Change*, 20(5), 297–313.
- Arthur, L., Scott-Cato, M., Keenoy, T., & Smith, R. (2007). Corporate social responsibility in your own backyard. *Social Responsibility Journal*, 3(2), 32–38.
- Aslan, G., Deléchat, C., Newiak, M. M., & Yang, M. F. (2017). *Inequality in financial inclusion and income inequality* IMF Working Paper WP/17/236. International Monetary Fund. Washington D.C., USA.
- Bafin. (2018). BaFin – expert articles – product governance.
- Barth, J. R., Caprio, G., Jr., & Levine, R. (2004). Bank regulation and supervision: What works best? *Journal of Financial Intermediation*, 13(2), 205–248.
- BCUHS. (n.d.). African credit unions – British credit union historical society. www.cuhistoryuk.com
- Becchetti, L., Ciciretti, R., & Paolantonio, A. (2016). The cooperative bank difference before and after the global financial crisis. *Journal of International Money and Finance*, 69, 224–246.
- Birchall, J. (2013). *Resilience in a downturn: The power of financial cooperatives*. Geneva: International Labour Office.
- Birchall, J., & Ketilson, L. H. (2009). *Resilience of the cooperative business model in times of crisis*. International Labour Organisation. Geneva, Switzerland.
- Black, H., & Dugger, R. H. (1981). Credit union structure, growth and regulatory problems. *The Journal of Finance*, 36(2), 529–538.
- Bressan, V. G. F., Braga, M. J., Resende Filho, M. D. A., & Bressan, A. A. (2013). Brazilian credit union member groups: Borrower-dominated, saver-dominated or neutral behavior? *BAR–Brazilian Administration Review*, 10, 40–56.
- Chatterji, A. K., Luo, J., & Seamans, R. C. (2021). Categorical competition in the wake of crisis: Banks vs. credit unions. *Organization Science*, 32(3), 568–586.
- Chow, M. J. T., & Surti, J. (2011). *Making banks safer: Can Volcker and Vickers do it?* (IMF working paper WP/11/236). International Monetary Fund. Washington D.C., USA.
- Cihak, M. M., & Sahay, M. R. (2020). *Finance and inequality* IMF Staff Discussion Note SDN/20/01. International Monetary Fund. Washington D.C., USA.
- Cornforth, C. (2004). The governance of cooperatives and mutual associations: A paradox perspective. *Annals of Public and Cooperative Economics*, 75(1), 11–32.
- Cornforth, C. (2014). Understanding and combating mission drift in social enterprises. *Social Enterprise Journal*, 10(1), 3–20.
- Crear, S. (2009). *Cooperative banks, credit unions and the global financial crisis*. Paper Prepared for the United Nations Expert Group Meeting on Cooperatives April 28–30, New York. Microsoft Word – Crear-WOCCU-v2-UN EGM – CUs and the Financial Crisis.doc.
- Croteau, J. T. (1963). *The economics of the credit union*. Detroit: Wayne State University Press.
- Davis, P., & Brockie, C. H. R. I. S. (2001). A mis-signalling problem? The troubled performance relationship between credit unions and local government in the UK. *Local Government Studies*, 27(1), 1–18.
- De Vicq, A. (2022). Caught between outreach and sustainability: The rise and decline of Dutch credit unions. *Business History*, 1–28. <https://doi.org/10.1080/00076791.2022.2151586>
- Decker, O. S. (2004). Corporate social responsibility and structural change in financial services. *Managerial Auditing Journal*, 19(6), 712–728.
- Decker, O. S. (2010). Exploring the corporate social responsibility agenda of British credit unions: A case study approach. *International Journal of Banking, Accounting and Finance*, 2(3), 275–294.
- Decker, O. S. (2021). Inclusive/selective/compliant finance/banking. In *Encyclopedia of sustainable management* (pp. 1–7). Cham: Springer International Publishing.
- Dopico, L. G. (2021). *The state of IT infrastructure and cybersecurity – Insights and self-assessment for credit unions* (Report no. 547). Centre for Emerging Technology, Filene Research Institute.
- Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, 34, 81–100.
- Emmons, W. R., & Schmid, F. A. (1998). *Credit unions and the common bond* (No. 1999/01). Centre for financial services working paper. <https://www.econstor.eu/bitstream/10419/78083/1/755407261.pdf>

- Evans, A. C., & Branch, B. (2002). Technical guide to PEARLS: A performance monitoring system. https://www.woccu.org/documents/PEARLS_techguide
- FCA. (2023). Product intervention and product governance sourcebook, financial conduct authority PROD.pdf. www.fca.org.uk
- Ferguson, C., & McKillop, D. (1997). *The strategic development of credit unions*. Wiley-Blackwell. Chichester, England.
- Fischer, K. P. (1998). Financial cooperatives: A “Market solution” to SME and rural financing (February 1998). CREFA WP 98-03. Available at SSRN: <https://ssrn.com/abstract=73990> or <https://doi.org/10.2139/ssrn.73990>
- Fonteyne, W., & Hardy, D. C. (2011). Cooperative banking and ethics: Past, present and future. *Ethical perspectives-Katholieke Universiteit Leuven*, 18(4), 491–514.
- Forbes. (2022). Vancity | company overview & news. www.forbes.com
- Frame, W. S., Karels, G. V., & McClatchey, C. (2002). The effect of the common bond and membership expansion on credit union risk. *Financial Review*, 37(4), 613–636.
- Fuller, D., & Jonas, A. E. (2002). Institutionalising future geographies of financial inclusion: National legitimacy versus local autonomy in the British credit union movement. *Antipode*, 34(1), 85–110.
- Getter, D. E. (2021). *The credit union system: Developments in lending and prudential risk management*. Congressional Research Service. https://www.everycrsreport.com/files/20200515_R46360_92cde11c82c015a5046d892ad72e33827d8de12a.pdf
- Goglio, S., & Kalmi, P. (2017). Credit unions and co-operative banks across the world. In J. Michie, J. R. Blasi, & C. Borzaga (Eds.), *The Oxford handbook of mutual, co-operative, and co-owned business*. Oxford: Oxford University Press.
- Goth, P., McKillop, D., & Wilson, J. (2012). *Corporate governance in Canadian and US credit unions*. Madison: Filene Research Institute.
- Gregory, L., & Drakeford, M. (2011). Just another financial institution? Tensions in the future of credit unions in the United Kingdom. *Journal of Poverty and Social Justice*, 19(2), 117–129.
- Groeneveld, J. M., & de Vries, B. (2009). European cooperative banks: First lessons from the subprime crisis. *The International Journal of Cooperative Management*, 4(2), 8–21.
- Guinnane, T. W. (1995). *Diversification, liquidity, and supervision for small financial institutions: Nineteenth-century German credit cooperatives* (Center Discussion paper no. 733). Economic Growth Center, Yale University.
- Guinnane, T. W. (2001). Cooperatives as information machines: German rural credit cooperatives, 1883–1914. *The Journal of Economic History*, 61(2), 366–389.
- Guinnane, T. W. (2011). The early German credit cooperatives and microfinance organizations today: Similarities and differences. In *The handbook of micro-finance* (pp. 77–100). Singapore: World Scientific.
- Harris, M., Cox, K. C., Musgrove, C. F., & Ernstberger, K. W. (2016). Consumer preferences for banking technologies by age groups. *International Journal of Bank Marketing*, 34(4), 587–602.
- HM Treasury. (2007). *Financial inclusion: The way forward*. London: HM Treasury.
- HM Treasury. (2014). British credit unions at 50 – Response to the call for evidence. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/389657/credit_unions_response_to_call_for_evidence.pdf
- Holmstrom, B. (1999). Future of cooperatives: A corporate perspective. *Liiketaloudellinen aikakauskirja*, 48, 404–417.
- Hyndman, N., Ferguson, C., & Oyelere, P. (2002). *Credit Unions in the UK: A study of their structure, growth and accountability*. London: Certified Accountants Educational Trust, The Association of Chartered and Certified Accountants.
- ICA. (n.d.). Friedrich Wilhelm Raiffeisen, International Cooperative Alliance. <https://www.ica.coop/fr/node/4891>
- International Cooperative Alliance. (2012). *The statement on the cooperative identity*. <https://www.ica.coop/en/cooperatives/cooperative-identity#:~:text=The%20Statement%20on%20the%20Cooperative,and%20democratically%20controlled%20enterprise.%E2%80%9D>
- International Labour Office. (2012). *What financial cooperatives can teach the big banks*. Available at Banking co-ops: What financial cooperatives can teach the big banks. www.ilo.org
- Jenster, P. V., & Overstreet, G. A., Jr. (1990). Planning for a non-profit service: A study of US credit unions. *Long Range Planning*, 23(2), 103–111.
- Johnston, H. (2014). *What is a social movement?* Polity Press. Cambridge.
- Jones, P. A. (1999). *Towards sustainable credit union development*. Manchester: ABCUL.
- Jones, P. A. (2006). Giving credit where it's due: Promoting financial inclusion through quality credit unions. *Local Economy*, 21(1), 36–48.
- Jones, P. A. (2008a). From tackling poverty to achieving financial inclusion: The changing role of British credit unions in low-income communities. *Journal of Socio-Economics*, 37, 2141–2154.
- Jones, P. A. (2008b). *Credit union current accounts*. Liverpool: ABCUL and LJMU.
- Jones, P. A. (2016). British credit unions: Transformation and challenge. In S. Karafolas (Ed.), *Credit cooperative institutions in European countries. Contributions to economics*. Cham: Springer.
- Jones, P. A., Money, N., & Swoboda, R. (2017). *Credit union strategic governance*. Manchester: Cornerstone Mutual Services.
- Kara, A., Zhou, H., & Zhou, Y. (2021). Achieving the United Nations' sustainable development goals through

- financial inclusion: A systematic literature review of access to finance across the globe. *International Review of Financial Analysis*, 77, 101833.
- Klapper, L., El-Zoghbi, M., & Hess, J. (2016). Achieving the sustainable development goals. *The role of financial inclusion*. Available online: <http://www.ccgap.org>. Accessed 23 May 2016.
- Kleanthous, A., Paton, R. A., & Wilson, F. M. (2019). Credit unions, co-operatives, sustainability and accountability in a time of change: A case study of credit unions in Cyprus. *International Journal of Social Economics*, 46(2), 309–323.
- Krasnikoulakis, I., Tsaropoulos, M., & Eng, T. Y. (2020). Are incumbent banks bygones in the face of digital transformation? *Journal of General Management*, 46(1), 60–69.
- Labie, M., & Périlleux, A. (2008). *Corporate governance in microfinance: Credit unions*. Solvay Business School, 08-003.
- Larson, K. (2021). *The future of digital transformation for credit unions* (Report no 536). Centre for Emerging Technology, Filene Research Institute. Madison, WI, USA.
- Lee, B., & Brierley, J. (2017). UK government policy, credit unions, and payday loans. *International Journal of Public Administration*, 40(4), 348–360.
- Leggett, K. J., & Stewart, Y. H. (1999). Multiple common bond credit unions and the allocation of benefits. *Journal of Economics and Finance*, 23(3), 235–245.
- Llewellyn, D. T. (1999). *The economic rationale for financial regulation* (Vol. 21). London: Financial Services Authority.
- Marshall, J., & Nat, M. (2015). *Are Credit unions doing enough to help young entrepreneurs?* (Filene report no 364). Filene Research Institute. Madison, WI, USA.
- Martin, R. (2002). *Financialization of daily life*. Temple University Press. Philadelphia, USA.
- McGrath, D. (2008). Social accounting in the credit union sector: GRI readiness. In *Conference on Pacific Basin Finance, Economics, Accounting and Management (PBFEM)* July (pp. 1–22). <https://researchoutput.csu.edu.au/ws/portalfiles/portal/9679011/>
- McKillop, D., & Wilson, J. O. (2011). Credit unions: A theoretical and empirical overview. *Financial Markets, Institutions & Instruments*, 20(3), 79–123.
- McKillop, D. G., & Wilson, J. O. (2015). Credit unions as cooperative institutions: Distinctiveness, performance and prospects. *Social and Environmental Accountability Journal*, 35(2), 96–112.
- McKillop, D. G., Glass, J. C., & Ferguson, C. (2002). Investigating the cost performance of UK credit unions using radial and non-radial efficiency measures. *Journal of Banking & Finance*, 26(8), 1563–1591.
- McKillop, D., Ward, A. M., & Wilson, J. O. S. (2007). The development of credit unions and their role in tackling financial exclusion. *Public Money and Management*, 27(1), 37–44.
- McKillop, D., Ward, A. M., & Wilson, J. O. (2011). Credit unions in Great Britain: Recent trends and current prospects. *Public Money and Management*, 31(1), 35–42.
- McKillop, D., French, D., Quinn, B., Sobiech, A. L., & Wilson, J. O. (2020). Cooperative financial institutions: A review of the literature. *International Review of Financial Analysis*, 71, 101520.
- Mercer, A. C., Póvoa, A., & Piccoli, P. (2019). Credit union member group domination under high interest rate environments. *Annals of Public and Cooperative Economics*, 90(3), 555–571.
- Morris, A., & Braine, N. (2001). Social movements and oppositional consciousness. In J. J. Mansbridge & A. Morris (Eds.), *Oppositional consciousness: The subjective roots of social protest, the subjective roots of social protest* (pp. 20–37). University of Chicago Press, London, Chicago.
- Muruiki, P. (2019). *Promoting Financial Inclusion: How credit unions are bringing financial inclusion to marginalised communities*. Paper presented to the Expert Group Meeting on Harnessing the Power of Cooperatives available at Promoting Financial Inclusion – Credit unions bringing financial inclusion to marginalised communities.
- Myers, J., Cato, M. S., & Jones, P. A. (2012). An ‘alternative mainstream’? The impact of financial inclusion policy on credit unions in Wales. *Public Money & Management*, 32(6), 409–416.
- NEF. (2014). Credit unions: International evidence, new economics foundation. 10a4037e9ad23a9909_o7m6bqci7.pdf. www.neweconomics.org
- Nembhard, J. G., & Ketilson, L. H. (2015). Identifying the appropriate indicators to measure the impact of credit unions and other co-operatives on their communities. In Eds Leslie Brown, Chiara Carini, Jessica Gordon Nembhard, Lou Hammond Ketilson, Elizabeth Hicks, John McNamara, Sonja Novkovic, Daphne Rixon, and Richard Simmons, *Co-operatives for Sustainable Communities: Tools to Measure Cooperative Impact and Performance* p. 180–204. Cooperatives and Mutuals Canada, Centre for the Study of Cooperatives, Canada.
- Niederkoher, K. C., & Ikeja, J. (2005). *Credit union governance white paper*. <https://www.woccu.org/documents/CUGovernance>
- Patin, R. P., Jr., & McNiel, D. W. (1991). Benefit imbalances among credit union member groups: Evidence of borrower-dominated, saver-dominated and neutral behaviour? *Applied Economics*, 23(4), 769–780.
- Pavlovskaya, M., Borowiak, C., Safri, M., Healy, S., & Eletto, R. (2020). The place of common bond: Can credit unions make place for solidarity economy? *Annals of the American Association of Geographers*, 110(4), 1278–1299.
- Prabhakar, R. (2022). *Financial inclusion*. House of Commons Library, Research Briefing 9533.
- Richardson, D. C. (2009). *Pearls monitoring system*. World Council of Credit Unions, Madison. https://www.woccu.org/documents/pearls_monograph

- Ryder, N. (2002). Credit unions and financial exclusion – The odd couple? *Journal of Social Welfare and Family Law*, 24(4), 423–434.
- Spear, R. (2000). The co-operative advantage. *Annals of Public and Cooperative Economics*, 71(4), 507–523.
- Spear, R. (2004). Governance in democratic member-based organisations. *Annals of Public and Cooperative Economics*, 75(1), 33–60.
- Spear, R., Cornforth, C., & Aiken, M. (2009). The governance challenges of social enterprises: Evidence from a UK empirical study. *Annals of Public and Cooperative Economics*, 80(2), 247–273.
- Stoffman, M. (2017). Credit union social responsibility: Their mission-driven difference. *Banking and Finance Law Review*, 33(1), 41–55.
- Taylor, R. A. (1971). The credit union as a cooperative institution. *Review of Social Economy*, 29(2), 207–217.
- Thomas, R., Cryer, R., & Reed, N. (2008). ‘Straight from the Horse’s mouth’: An empirical exploration of success in the Irish credit union movement. *Journal of Social Welfare & Family Law*, 30(2), 107–116.
- van Rijn, J. (2022). The cooperative identity at US credit unions. *Journal of Co-Operative Organization and Management*, 10(1), 100152.
- Vinh Vo, X., Le, T. Q., Anh Nguyen, T. L., & Luu, H. N. (2021). Who could we blame? The impact of strategic orientations on the failure of financial institutions. *Review of Pacific Basin Financial Markets and Policies*, 24(02), 2150011.
- WOCCU. (2017). *WOCCU International Operating Principles*. https://www.woccu.org/documents/2017_WOCCU_International_Operating_Principles#:~:text=The%20cooperative%20ethos%20supports%20the,which%20they%20work%20and%20reside
- WOCCU. (2021). *Statistical report 2021* Statistical Report. www.woccu.org
- WOCCU. (n.d.). *What is a credit union? Why credit unions* | World Council of Credit Unions. www.woccu.org
- Worthington, A. C. (1998). Testing the association between production and financial performance: Evidence from a not-for-profit, cooperative setting. *Annals of Public and Cooperative Economics*, 69(1), 67–83.

CRI

- [Business in the Community Index](#)

Crisis

- [Disaster Management](#)

Crisis Management

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Definition

Crisis management deals with endeavors to detect and foresee areas of potential crises, the development of activities and procedures designed to prevent crises from occurring or from an incident developing into a crisis, and minimizing the negative effects from a crisis that could not be prevented (Wilson 1992).

Introduction

In a business context, a crisis can be defined as a situation triggered by significant internal and/or external factors or by the escalation of smaller incidents that (1) has an enterprise-wide, multi-functional impact, (2) creates disruption in normal business operations, and (3) has the potential to harm the company’s reputation (PwC 2019). Crises are “either low probability or high consequence events that jeopardize the most fundamental goals of an organization” (Weick 1988). A crisis can have its roots in an organization’s external or internal environment (Perrow 2011). Examples are natural catastrophes like a fire or a storm, a security breach, a labor strike, or food poisoning (Miller 1987).

A crisis can strike any organization at any time (Vassilikopoulou et al. 2009). In a recent study conducted by consulting company PwC, 1430 out of 2084 senior executives in organizations reported that they had experienced at least one crisis in the past 5 years (PwC 2019). As such, crisis is now considered to be a common part of business (Kim 2014). Mitroff and Harrington (1996) has outlined that it is not a question of “if” a business will face a crisis but, rather, a question of “when,” “what type,” and “how prepared” an organization is to deal with it. If the

organization does not respond to the crisis immediately and in the right way, then the crisis can escalate into a catastrophe (Davies and Walters 1998). Irrespective of their severity, crises pose a serious threat to organizations. The factor that decides how well a company will endure a crisis is its capability to respond to that crisis (Vassilikopoulou et al. 2009). While some financial losses and reputational damages might be inevitable once a crisis happens, effective crisis management, defined as a series of functions or procedures to recognize, study, and forecast crisis issues, and set forth specific behaviors that would enable an organization to prevent or cope with a crisis (Darling et al. 1996), helps to control the negative effects and to protect the company's reputation (Stafford et al. 2002).

Crisis-Mitigating Strategies

One if not the important question when it comes to crisis management is: What can organizations do to identify potential crisis situations and to minimize risk? Research has suggested that some organizations are more likely to experience a crisis from the way they are managed and from the nature of the organization itself. Mitroff et al. (1989) have outlined that there are critical differences between organizations when it comes to their particular cultures, beliefs, and assumptions and that organizations could be described as fitting somewhere along a spectrum of being crisis-prone or crisis prepared.

- Crisis-prone organizations perceive crises as random or bad luck. The crisis-prone organization is egocentric, and this perception will limit its pre-preparedness (Davies and Walters 1998).
- Crisis-prepared organizations adopt both technical and behavioral actions to prepare for and manage their way through a crisis. They feel as part of a wider system of customers, suppliers, community, and shareholders and adopt a crisis management tactic since they accept that an elementary property of complex systems is to fail (Davies and Walters 1998).

Organizational strategies to become crisis-prepared and to mitigate risk and crisis often include the following:

- To set comprehensive and institutionalized norms and rules for handling safety problems
- To generate appropriate beliefs and assumptions constituting a corporate attitude toward safety
- To educate and train in safety culture
- To provide feedback to practitioners from incidents
- To use specialists, but supervise with widely experienced generalists (Davies and Walters 1998)

It must, however, be emphasized that despite all of the efforts an organization can put forth to mitigate risk, crises can occur and have to be managed (Kash and Darling 1998).

Managing Product-Harm Crises and CSR

One of the most common corporate crises is product-harm crises (Davidson and Worrell 1992). A product-harm crisis is defined as a well-publicized crisis concerning products which are faulty or not safe (Dawar and Pillutla 2000). Research found that many business leaders think that product safety-related crises have the greatest negative impact on corporate reputation (Kim 2014), but also that a positive corporate reputation built prior to a crisis could at least mitigate the negative impacts inflicted by a crisis (Dawar and Pillutla 2000; Grunwald and Hempelmann 2011). Especially, having positive prior corporate social responsibility (CSR) associations seems to be beneficial to a company in a product-harm crisis (Kim 2014).

Leadership During a Crisis

A crisis can throw an entire organization off track. It often takes organizations days, weeks, or even months to deliver an effective response, and even then, the responses often lack a long-term vision,

discipline, and structure (PwC 2019). To overcome this hurdle, a strong leader can help an organization (see also ► “Leadership”).

In a crisis, “leaders serve as a repository for people’s fears. Leaders can also act as a mirror reflecting a group’s anger, grief, resolve or joy on a much larger stage than is available to most. Leaders say in effect ‘I hear you’” (Useem 2001). Research has outlined that leaders are essential to lead organization through a crisis since managing a crisis by consensus does not work – short time, threat and the surprise elements of most crises imply that tough decisions need to be made quickly which leaves no room for discussions or evaluations on a broad scale (Sapriel 2003). Leaders (or leadership teams) can provide a vision of the aftermath of the crisis and rally all members of an organization under a mission.

In a recent survey, 91% of CEOs said they are in charge when a crisis hits, but 65% of CEOs also said that they feel most vulnerable about their ability to gather information quickly and accurately during a crisis (PwC 2019). Having implemented the right structures and behavioral norms (see above) before a crisis hits helps to overcome such problems.

Summary

A crisis is a critical situation that, if mismanaged, can inflict severe damage on an organization (Vassilikopoulou et al. 2009; Arpan and Pompper 2003). Crisis management is a discipline within the broader context of management. It aims to develop and manage skills and techniques required to identify, assess, and cope with crisis situations. Special attention is given to crisis-mitigating strategies, to the management of product-harm crises and CSR topics, as well as to leadership during crisis.

Cross-References

- CSR
- ISO 31000: Risk Management Guidelines
- Leadership

References

- Arpan, L. M., & Pompper, D. (2003). Stormy weather: Testing “stealing thunder” as a crisis communication strategy to improve communication flow between organizations and journalists. *Public Relations Review*, 29(3), 291–308.
- Darling, J., Hannu, O., & Raimo, N. (1996). Crisis management in international business: A case situation in decision making concerning trade with Russia. *Finnish Journal of Business Economics*, 4, 12–25.
- Davidson, W., & Worrell, D. (1992). Research notes and communications: The effect of product recall announcements on shareholder wealth. *Strategic Management Journal*, 3, 467–473.
- Davies, H., & Walters, M. (1998). Do all crises have to become disasters? Risk and risk mitigation. *Property Management*, 16(1), 5–9.
- Dawar, N., & Pillutla, M. M. (2000). Impact of product-harm crises on brand equity: The moderating role of consumer expectations. *Journal of Marketing Research*, 37(2), 215–226.
- Grunwald, G., & Hempelmann, B. (2011). Impacts of reputation for quality on perceptions of company responsibility and product-related dangers in times of product-recall and public complains crises: Results from an empirical investigation. *Corporate Reputation Review*, 13(4), 264–283.
- Kash, T. J., & Darling, J. R. (1998). Crisis management: Prevention, diagnosis and intervention. *Leadership and Organization Development Journal*, 19(4), 179–186.
- Kim, S. (2014). What’s worse in times of product-harm crisis? Negative corporate ability or negative CSR reputation? *Journal of Business Ethics*, 123(1), 157–170.
- Miller, W. H. (1987). Issue management: No longer a sideshow. *Industry Week*, 235, 125–129.
- Mitroff, I. I., & Harrington, L. K. (1996). Thinking about the unthinkable. *Across the Board*, 33(8), 44–48.
- Mitroff, I. I., Pauchant, T., Finney, M., & Pearson, C. (1989). Do (some) organizations cause their own crises? The cultural profiles of crisis-prone vs. crisis-prepared organizations. *Industrial Crisis Quarterly*, 3(4), 269–283.
- Perrow, C. (2011). *Normal accidents: Living with high risk technologies – Updated edition*. Princeton: Princeton University Press.
- PwC. (2019). Global Crisis Survey 2019. Online: <https://www.pwc.com/gx/en/forensics/global-crisis-survey/pdf/pwc-global-crisis-survey-2019.pdf>. Accessed 30 Sept 2019.
- Sapriel, C. (2003). Effective crisis management: Tools and best practice for the new millennium. *Journal of Communication Management*, 7(4), 348–355.
- Stafford, G., Yu, L., & Armoo, A. K. (2002). Crisis management and recovery how Washington, DC, hotels responded to terrorism. *The Cornell Hotel and Restaurant Administration Quarterly*, 43(5), 27–40.
- Useem, J. (2001, November 12). Leadership: What it takes. *Fortune Magazine*, pp. 89–90.

- Vassilikopoulou, A., Siomkos, G., Chatzipanagiotou, K., & Pantouvakis, A. (2009). Product-harm crisis management: Time heals all wounds? *Journal of Retailing and Consumer Services*, 16(3), 174–180.
- Weick, K. E. (1988). Enacted sensemaking in crisis situations. *Journal of Management Studies*, 25(4), 305–317.
- Wilson, B. G. (1992). *Crisis management: A case study of three American universities*. Doctoral dissertation, University of Pittsburgh, Pittsburgh.

Critical Corporate Social Responsibility

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Synonyms

Urgent CSR

Definition

The term Critical Corporate Social Responsibility (Critical CSR) has been suggested by Dr. Panagiotopoulos during the pandemic through his article “Novel CSR & novel coronavirus: Corporate Social Responsibility inside the frame of Coronavirus Pandemic in Greece” (Panagiotopoulos 2021). CSR is popular as big international corporations obtain more power than states and public society expects from them to behave as corporate citizens and contribute to several issues that burdens society and environment. This is also the case for the pandemic of novel coronavirus, COVID-19 that threats public health and global economy since the end of 2019. A big number of international firms have announced urgent CSR programs to protect their employees and local communities where they are active. The researcher has recognized the formation of a new type of CSR that comes up as a hybrid between the two main types of tactical and strategical CSR sharing characteristics from both. Critical CSR is a universal kind of CSR created

under the unprecedented conditions of the pandemic and the ensuing financial depression since similar corporate urgent CSR actions have been implemented worldwide.

Critical CSR is this type of CSR that is developed during unprecedented and critical circumstances that threat society and economy like the pandemic of COVID-19. Critical CSR is a hybrid between tactical and strategic CSR and the characterization of criticality refers to its ontological character since the pandemic threats humanity and economy either with the form of employees or customers. When commercial game is under threat of extinction this hybrid CSR is crucial and inevitable, and its value is critical for society, economy, and the company itself (Panagiotopoulos 2021).

Introduction

The last decades of twentieth century and at the beginning of twenty-first century there was a significant development in the theoretical complex of CSR. There have been suggested various definitions and criteria for categorization of CSR based on discrete aspects. CSR is the concept that calls corporations to consider social and environmental concerns to their decision-making process (European Commission 2001). CSR suggests the incorporation of sustainability principles by a company in order to achieve an equilibrium among (a) economy, (b) society and (c) natural environment (Elkington 1999) using the prism of Ethos (Carroll 1979, 2016; Frederick 1998) with its ancient Greek meaning. Ethos or ethics in modern English refers to a moral character who can distinguish good and bad, right, and wrong, and continues doing the right, good, ethical thing (Eisenstein 2020).

CSR comprises a set of actions that exceeds the simple compliance with the legislation and goes beyond the profit persuasion. However, designers of CSR policies are stimulated by the existed regulations and are inspired from statutes. Big size firms must develop CSR strategies that materialize their sustainability values even in the execution of their core activities under the usual conditions of a globalized world. However,

modern world is confronted a non-ordinary challenge, the pandemic of COVID-19. This pandemic has been proved an unexpected circumstance even though humanity has faced two more coronaviruses during twenty-first century having as main effect respiratory disease outbreaks and finally death. SARS developed in 2002 in China and MERS came up in 2012 in KSA. COVID-19 was first detected in China in 2019 and up to end of May 2020 had been spread all over the world except Antarctica. Both SARS and MERS were characterized by higher fatality rates than COVID-19 but the last achieves much easier dispersion causing millions of cases and deaths. World Health Organization (WHO) declared COVID-19 officially as a pandemic on 11th of March 2020 (Hewings-Martin 2020).

All governments have taken precautionary measures including several types of social distancing and lock-down to their societies and markets, respectively, targeting to break the chain of person-to-person dispersion. Although this pandemic concerns initially the health sector, it causes tremendous side effects in economy since these precautionary measures limit economic and commercial activities. Finally, this pandemic is transformed into an explosive mix that strokes public health and global economy on the same time. Such side effects of coronavirus are spread in every sector of economic activity, in primary, secondary, and tertiary sector since social distancing, disease, and deaths affect the occupation of workforce, disrupt the buying mood of consumers, and descend the psychology of the whole market. Indicatively there is decrease in agricultural production concerning the primary sector, reduction in the production of cars regarding the secondary sector, and extensive crisis in air transportation and tourism that burdens the tertiary sector.

The pandemic of COVID-19 has developed symmetrical characteristics because it hits evenly: a) the demand for goods and services and b) the demand and the offer of them (Panagiotopoulos 2021).

Consequently, companies must deal with the menace of coronavirus to society and global economy by altering their business plans under the

new pandemic conditions keeping their personnel, customers, suppliers, and rest stakeholders safe, protecting their profitability on the same time. This dual problem creates a challenge for companies that must prove their social sensitivity by designing Critical CSR programs for their employees and society (Panagiotopoulos 2021).

Theoretical Framework

Generally, companies design CSR programs that are categorized as strategic or tactical CSR. Strategic CSR concerns the embodiment of CSR principles and stakeholders' interests within a firm's strategy and everyday operations. Thus, the company is managed in the interests of a broad set of stakeholders to achieve maximum economic and social value over the medium to long term. Tactical CSR on the contrary refers to short-term managerial decisions about CSR programs of limited resources and minimal impact to company's everyday operations (Werther and Chandler 2006). Tactical CSR is planned to facilitate stakeholders' relationships with the organization in the short-term. Tactical CSR programs demand less resources, do not imply significant changes in firms' structure and operation. Therefore, tactical CSR programs could be designed and implemented swiftly, and they are usually reversible. Contrariwise, strategic CSR involves bigger commitments in budget and personnel, presupposes medium to long horizon for planning and execution, influences firms' operation and structure. Consequently, strategic CSR programs are more idiosyncratic to the organization, difficult to be copied by competitors, and reverse when business and economic environment is transformed (Bansal et al. 2015).

CSR is classified according to motives and actions held into three types: (a) ethical CSR, (b) altruistic CSR, and (c) strategic CSR. Ethical CSR in short focuses on firm's responsibility to avoid any detrimental action against society and environment (Carroll 1991). Altruistic CSR is a more advanced type by indicating exactly what ethical CSR does plus firm's contribution to current issues of society like carrying out

philanthropy even by having a negative financial impact on them (Lantos 2011). Strategic CSR goes one step further by considering that the satisfaction of firm's stakeholders operates as a necessary condition to fulfill firm's traditional goals for profitability (Jones 1995; Mc Williams and Siegel 2011).

A relevant term is Corporate Social Performance (CSP) that focuses on the quality of corporate efforts to execute the designed CSR plan. A definition suggested by D. Wood (1991) considers CSP an arrangement of CSR principles, processes of social responsiveness, related policies and programs. The evaluation of CSP operates as an answer to the question of how much a firm has embraced CSR principles and how intense are firm's efforts to implement its designed CSR policy (Panagiotopoulos 2021). Accordingly, there is a three-levels stratification of companies as: (a) reactive, (b) responsive, and (c) interactive (Preston and Post 2013; Sethi 1979) based on the nature of their CSP. A company that reacts in an issue for which its activities have a detrimental impact and takes actions to correct it could be reactive and its CSP is limited on that specific issue. A responsive firm has a stronger CSP than a reactive firm because it responds to relevant calls from public society to contribute to problems that may not be relevant with its activities. An interactive firm has already recognized the sphere of its stakeholders and has established channels of communication with them, thus there is an interactive relationship and a constant cooperation for sustainability issues independently whether they have direct or indirect connection with its core operations.

The alignment of a company's operation with the legislation belongs to ethical CSR and indicates a reactive company. Proportionally, corporations that pay attention to social issues which are either directly or indirectly interwoven with their operation develop altruistic CSR policies and are characterized as of responsive type. Last, an interactive company moves further by applying strategic CSR and develops significant CSP. From a different perspective, CSR concerns a firm's environment which could be categorized in internal and external environment. The internal

environment comprises mainly its employees and the external environment encompasses its customers, suppliers, partners, etc. and society in general (Carroll 1979; Cornelius et al. 2008; Werther and Chandler 2006).

It is expected the urgent CSR programs of companies during the pandemic could be classified either as strategic or tactical CSR. The plethora of CSR actions by international companies to tackle COVID-19 has offered a wide spectrum of urgent CSR activities for perusal. If these urgent CSR programs could be categorized either as tactical or strategical, based on their characteristics, probably there is no space for Critical CSR. On the contrary, if these brand-new CSR actions are not fit for the available definitions may the proposed term Critical CSR contributes to theoretical background of CSR.

Panagiotopoulos (2021) supports that this urgent CSR activity of firms due to the pandemic belongs neither in tactical nor strategical CSR policy of them. This new type of CSR called critical CSR since it is inescapable and crucial during this global crisis. It is the product of corporations' reaction and response to a brand-new phenomenon, a worldwide pandemic that causes a global financial depression too. Critical CSR is momentous since it assists employees and customers, society, states, and firms themselves to stay safe and withstand during this pandemic. This brand-new, universal type of CSR is necessary for companies and consists a chance for initiatives because whether they lose the opportunity to react properly and confront this pandemic, the governments will establish a strict legislative framework. Principally, critical CSR is inevitable having intense ontological nature because public health and global economy are under threat and firms should defend their human resources, their clients, and their market. If these factors face a serious threat, consequently, the financial game faces the fear of extinction. Eventually, critical CSR intensifies and upgrades CSR concept. Various characteristics of critical CSR could be exploited after the end of this crisis to reinforce the usual CSR strategy of corporations (Panagiotopoulos 2021).

Critical Corporate Social Responsibility, Table 1 Interconnections among several types of CSR (Panagiotopoulos 2021)

Theoretical analysis of critical CSR programs due to coronavirus			
Type of planning	Tactical or strategic	Tactical or strategic	Critical: both tactical and strategic
Types of CSR (Carroll 1991)	Ethical	Altruistic	Strategic
Type of company (Preston and Post 2013; Sethi 1979)	Reactive	Responsive	Interactive

The interconnections of the various terms about CSR types are presented in Table 1 (Panagiotopoulos 2021). Furthermore, Critical CSR becomes part of this theoretical complex proving that it operates as addendum of the existed theory and fits well with the already established concepts. As per Table 1 a reactive firm applies ethical CSR as part of a tactical or strategic CSR policy. A responsive firm implements altruistic CSR as part of a tactical or strategic CSR policy. The brand-new Critical CSR refers to strategic CSR and no to ethical or altruistic CSR because the pandemic is not a problem caused by its operation. Moreover, Critical CSR indicates an interactive type of company that has not exclusively implemented a simple donation to vulnerable groups or to the National Health System (NHS) due to the pandemic. Critical CSR encompasses for example big donations of specialized medical equipment of high economic value that designed in extremely short time under the unprecedented conditions of a pandemic and an economic recession, in cooperation with the NHS of a state. Furthermore, Critical CSR includes special CSR programs like the restructuring of production lines to cover needs created due to the pandemic and provisioning of the market with crucial products for the pandemic in reasonable pricing under agreement with the states.

Reciprocating CSR

The results generated from these urgent CSR actions could be very positive for firms

concerning both their internal and external environment. Several benefits accrue and support the reciprocating character of Critical CSR.

Concerning the internal environment of firms, the employees feel that their employer is caring for them and the society in whole. They feel satisfaction because their employer has listened their concerns about their safety. They could be proud because they contribute to the announced donations and other Critical CSR programs since they are part of their corporation and the distributed profits to society consist the results of their efforts. A new relationship could be established between employees and employers, characterized by the elements of loyalty and strong communication (Hameed et al. 2016). On the external environment of the firm, society appreciates companies that contribute to public issues and share their earnings with it, especially during a critical situation like a pandemic. The brand of a firm becomes more prestigious, and the firm earns respect from people who appreciate firm’s CSP for COVID-19. A socially sensitive profile is building and a new relationship with society and finally the market is constructed. Thus, Critical CSR activities increase firm’s external prestige and deepen internal respect from employees to their firms (Hameed et al. 2016).

If the previous economic crisis of 2008–2009 was about trust among people, firms, and governments (Sapienza and Zingales 2012; Stiglitz 2008), this double financial and health crisis is the chance for corporations to build the trust needed for their sustainable development. In the aftermath of the recent international financial crisis, there was a decline in public trust in

firms (Lins et al. 2017). Firms with strong CSR footprint manage to keep a better image during the severe recession when overall trust in companies was low. CSR in general enhances the trust among a firm and its stakeholders and increases its social capital. The experience from the recent depression of 2008–2009 have offered evidences for this reasoning although this connection predates the depression (Fitzgerald 2003; Lins et al. 2017).

Furthermore, modern researchers corroborate that CSR programs do not undermine the profitability of firms especially in case of strategic CSR as they manage to perform better in stock markets having higher stock returns in comparison with firms with much lower CSR footprint (Duchin et al. 2010). A lot of researchers support that there is a kind of reciprocity among a firm and its stakeholders. When a firm considers its stakeholders in decision-making processes and make investments for them, these stakeholders return a benefit with several tangible and intangible ways back to the firm (McWilliams et al. 2006). CSR in general, not exclusively Critical CSR, enhances the trust among a firm and its stakeholders and increases its social capital. Every action in the global bid to curb COVID-19 by the firms belongs in the field of civic engagement and thus maximizes their social capital (Scrivens and Conal 2013).

Especially in times of crisis a firm with increased social capital and organizational identification due to well established CSR strategy is more resistant due to its customers and rest stakeholders support (Ducassy 2013; Lins et al. 2017). This specific crisis that consisted by health and financial issues due to the pandemic offers a chance to companies to reconsider their CSR footprint and invest in their social capital by helping NHSs and people. This investment could be seen as an insurance policy for the foreseen financial downturn since a firm has the chance to be recognized as identifiably trustworthy significantly based on the conclusion that during the recent crisis of 2008–2009 companies with intense CSR activity performed better than others (Lins et al. 2017).

Epilogue

Although the current crisis has not as main characteristic a lack of trust to international markets and firms, there is strong skepticism of WHO's reactions, coalition of states' inertia, governments' choices, vaccinations policies, and the overall reaction of states and other authorities for COVID-19. Moreover, public society is concerned about firms' reaction to the pandemic and the forthcoming recession especially for layoffs. In the USA, the number of unemployed people due to the pandemic implications to the market was 20.5 million only in April of 2020 and this rise marks the worst jobless rate than the Great Depression of 1930s (US Bureau of Labor Statistics 2020). A lot of concerns have been raised that this pandemic could cause finally a kind of humanitarian crisis in both developed and developing world. Issues like the increased number of job loss due to global recession, food insecurity, and lack of personal protective equipment (PPE) for COVID-19 especially in areas where humanitarian response plans take place could harm further already vulnerable and burdened groups of people (United Nations 2020). Thus, the capacity of being trustworthy during an unexpectedly low-trust and high-risk period is valuable.

Critical CSR marks a paradigmatic management of such an unprecedented situation with a double health and financial crisis and provides data about modern firms' flexibility to adjust to turbulent conditions, its reactions to risk by investing in CSR in the threshold of a global recession, its ability to reform existed CSR policies promptly to catch up pandemic high pace of development, its long-range planning, and its willingness to support community. Finally, coronavirus era could be deemed as a chance for corporations to invest in Critical CSR programs, orient their business model toward sustainability, obtain a competitive advantage in comparison with the competition, and enhance their resilience to the forthcoming recession *ex ante* rather than *ex post*.

Summary

The pandemic of COVID-19 has caused very serious implications in public health, society, and economy. Corporations face unprecedented conditions, and they must survive amid a strong recession. Additionally, scheduled CSR programs are canceled or postponed due to the pandemic and the economic crisis. However, various stakeholders of firms expect from them to continue acting as corporate citizens and take precaution measures to protect their internal and external environment by supporting their employees, their customers, their partners, and society in general. Some corporations have managed to take initiatives to support public health by developing new unscheduled CSR programs like altering their production lines to produce critical products for the confrontation of the pandemic and donations of critical medical equipment. Companies have developed a brand-new type of CSR called critical CSR as their answer to the pandemic. Critical CSR is a universal phenomenon that comes up as a hybrid between tactical and strategic CSR. It enriches the theoretical background of CSR and offers useful services to states, societies, and the firms themselves.

Cross-References

- CSR
- Strategic CSR

References

- Bansal, P., Jiang, G. F., & Jung, J. C. (2015). Managing responsibility in tough economic times: Strategic and tactical CSR during the 2008–2009 global recession. *Long Range Planning*, 48(2), 69–79. <https://doi.org/10.1016/j.lrp.2014.07.002>.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505. <https://doi.org/10.5465/amr.1979.4498296>.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*, 1(1), 3. <https://doi.org/10.1186/s40991-016-0004-6>.
- Cornelius, N., Todres, M., Janjuha-Jivraj, S., Woods, A., & Wallace, J. (2008). Corporate social responsibility and the social enterprise. *Journal of Business Ethics*, 81(2), 355–370. <https://doi.org/10.1007/s10551-007-9500-7>.
- Ducassy, I. (2013). Does corporate social responsibility pay off in times of crisis? An alternate perspective on the relationship between financial and corporate social performance: Does CSR pay off? *Corporate Social Responsibility and Environmental Management*, 20(3), 157–167. <https://doi.org/10.1002/csr.1282>.
- Duchin, R., Ozbas, O., & Sensoy, B. A. (2010). Costly external finance, corporate investment, and the subprime mortgage credit crisis. *Journal of Financial Economics*, 97, 418–435.
- Eisenstein, L. (2020). What is the difference between business ethics and social responsibility? *Board Effect*. <https://www.boardeffect.com/blog/what-difference-between-business-ethics-social-responsibility/>. Accessed 6 Jan 2022.
- Elkington, J. (1999). *Canibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone/Wiley.
- European Commission. (2001). Green paper: Promoting a European framework for corporate social responsibility. Commission of the European Communities. https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9
- Fitzgerald, N. (2003). *Rebuilding trust in business. A perspective on corporate social responsibility*. Presented at the Unilever and London Business School, London.
- Frederick, W. C. (1998). Moving to CSR. *Business and Society*, 37(1), 40–59.
- Hameed, I., Riaz, Z., Arain, G. A., & Farooq, O. (2016). How do internal and external CSR affect employees' organizational identification? A perspective from the group engagement model. *Frontiers in Psychology*, 2016(7), 788. <https://doi.org/10.3389/fpsyg.2016.00788>.
- Hewings-Martin, Y. (2020). How do SARS and MERS compare with COVID-19? *Medical News Today*, April 10, 2010. <https://www.medicalnewstoday.com/articles/how-do-sars-and-mers-compare-with-covid-19>. Accessed 20 Jan 2022.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20(2), 404–437.
- Lantos, G. P. (2011). The ethicality of altruistic corporate social responsibility. *Journal of Consumer Marketing*, 19(3), 205–232.
- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of the American Finance Association*, LXXII(4). <https://doi.org/10.1111/jofi.12505>.

- Mc Williams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications*. *Journal of Management Studies*, 43(1), 1–18. <https://doi.org/10.1111/j.1467-6486.2006.00580.x>.
- Panagiotopoulos, I. (2021). Novel CSR & novel coronavirus: Corporate social responsibility inside the frame of coronavirus pandemic in Greece. *International Journal of Corporate Social Responsibility*, 6(1), 10. <https://doi.org/10.1186/s40991-021-00065-7>.
- Preston, L. E., & Post, J. P. (2013). *Private management and public policy: The principle of public responsibility*. Stanford: Stanford Business Books, an imprint of Stanford University Press.
- Sapientza, P., & Zingales, L. (2012). A trust crisis. *International Review of Finance*, 12, 123–131.
- Scrivens, K., & Conal, S. (2013). *Four interpretations of social capital: An agenda for measurement* (OECD statistics working papers. 2013/06) (Vol. 2013/06). <https://doi.org/10.1787/5jzbcx010wmt-en>.
- Sethi, S. P. (1979). A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. *Academy of Management Review*, 4, 63–74.
- Stiglitz, J. E. (2008). The fruit of hypocrisy. *Economics Opinion, The Guardian*, September 16.
- United Nations. (2020). *Anticipating the impacts of COVID-19 in humanitarian and food crisis contexts*. Food and Agriculture Organization of the United Nations.
- US Bureau of Labor Statistics. (2020). Coronavirus: Pandemic sends US jobless rate to 14.7%. *BBC*, May 8.
- Werther, W. B., & Chandler, D. (2006). *Strategic corporate social responsibility: Stakeholders in a global environment*. Thousand Oaks: Sage.
- Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review*, 16(4), 691–718. <https://doi.org/10.5465/amr.1991.4279616>.

Critical CSR

- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

Critical Point

- [Tipping Point](#)

Critical Social Responsibility

- [Power Equalizing](#)

Cromme-Kodex

- [German Corporate Governance Code](#)

Cross Border Equity

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Synonyms

[Border cohesion](#); [Border equity](#)

Definition

Borders historically constitute spaces of conflict, lines of separation, and administrative elements between states that have promoted constraints and barriers in the forms of relationship and articulation between neighboring countries or regions but separated administratively by a border line. “The development of cross-border zones presents considerable problems, generally spanning two different nation-states, each with their own legislation, administration bodies, tax and labor regimes, and frequently with different languages and other important components of identity” (Gualda, Frago, & Lucio-Villegas, 2011:24). They represent spaces that oscillate and positioning themselves between cooperation and conflict, building a geographical stop with its own socio-cultural and economic value, as a result of the different political and administrative interests that, over time, establish different meanings and forms of territorial appropriation. Due to their

geographical and administrative characteristics, they advocate processes of connection and interaction between their populations, with territorial effects beyond their political boundaries. The perceptions and conditioning of the border, linked to the barriers that these spaces embody, in articulation with the supports and programs developed, foster a growing relationship. This convergence and cooperation is the result of the approximations generated by physical and technological communication, but above all by the political approximations and institutions that work in these regions (public and private).

Socio-economic and administrative changes, along with the strengthening of information technology, fostering cooperative relationships of integration, are changing the role of the border, in order to reduce the disturbances and weaknesses that are associated with the management of cross-border areas, particularly in peripheral spaces. However, developmental inertia and disruption in governance and promotion continue to occur. In fact, the border regions of peripheral territories have structural disadvantages, depending on their relationship with the decision-making centers, their ability to mobilize and valorize resources, their territorial articulation, and the existing fiscal, labor, and cultural differences. Cross-border cooperation (CBC) seeks to strengthen flows, proximities, and synergies, promoting development dynamics or reinforcing existing good practices. "It becomes fundamental to reflect on cross-border cooperation, a process that is based on a more or less institutionalized cooperation between sub-national authorities with the aim of overcoming the various barriers created by national borders" (Perkmann, 2003:55).

Introduction

Borders represent in practice limits, whose history and geography reveal spaces of tension and even conflict with existing interests, constituting as barriers and simultaneously spaces of cultural hybridity. The borders corresponding to

peripheral regions far from areas of administrative decision-making and strong economic dynamism present penalizing indices of development, which should be the target of policies and programs that allow their reversal. The different context costs, positioning in relation to the larger economic dynamism, has contributed to its fragility and development support to promote employment and social well-being of their communities. In this context, border equity implies a perception of territorial specificity and cooperation, allowing border populations to access infrastructures, services, and equipment that guarantee equal opportunities and access to supplies and services. The knowledge of the territory's differentiating elements, the present context costs, and the innovation processes, allow communities to strive for greater social and economic equity, capable of fostering action processes adjusted to their realities/specificities and desires.

Meaning of the Border Region and Elements for Its Equity

As regiões fronteiriças significam espaços de delimitação territorial, linhas de separação entre estados construídas por meio de elementos geográficos ou por definição administrativa. They represent in practice limits, whose history and geography reveal spaces of tension and even conflict with existing interests, constituting as barriers and simultaneously spaces of cultural hybridity. The different context costs, positioning in relation to the larger economic dynamism, and cultural inertias has contributed to its fragility. In this context, border equity implies a perception of territorial specificity and cooperation, allowing border populations to access infrastructures, services, and equipment that guarantee equal opportunities and access to goods and services.

Over time, the border has constituted a barrier, not yet effectively overcome, which, in addition to the administrative delimitation between countries, represents cultural differentiation, levels of remuneration, public policies, taxation, and access to services, among others (Fernandes & Natario, 2014; Medeiros, 2018). In this context, programs and support have been created to minimize these

effects, to enhance the cohesion of these territories, and their value as internationalization spaces.

The changes and new positions, resulting from technological, economic, and social transformations, have fostered a growing interrelationship between territories, their economies, and policies, in a process of greater relationship and integration. The role of borders and their narratives of territoriality and national identity tend to become more sophisticated through cooperation and support programs, in order to mitigate the effects of their administrative specificities and associated contact costs (Lange, 2012; Medeiros, 2016). It should be noted that border regions are multi-peripheral in terms of their geographic positioning, their effective territorial integration, structural disadvantages, and the latent conflict between policies and levels of development (Hidalgo, Dominguez, & Benzinho, 2014).

Recognizing the territorial specificity of these regions and the structural problems, an approach and the development of interventions that generate greater social equity and territorial participation in the construction of greater cohesion are required. There is a growing concern and institutional and citizens' dynamics to "annul the border effect" through greater mobility, joint valorization of resources, defense of heritage, incentive to cooperation despite the continuous depopulation, aging, and weakening of the economy.

Thus, it can be seen that cross-border cooperation efforts have not achieved the main objectives of development and territorial cohesion desired. "There are still some difficulties arising from national policies, development asymmetries between nations, administrative and fiscal differences, and also their own historical inertia, which continues to feed fears on both sides of the border" (Fernandes & Natario, 2016:61).

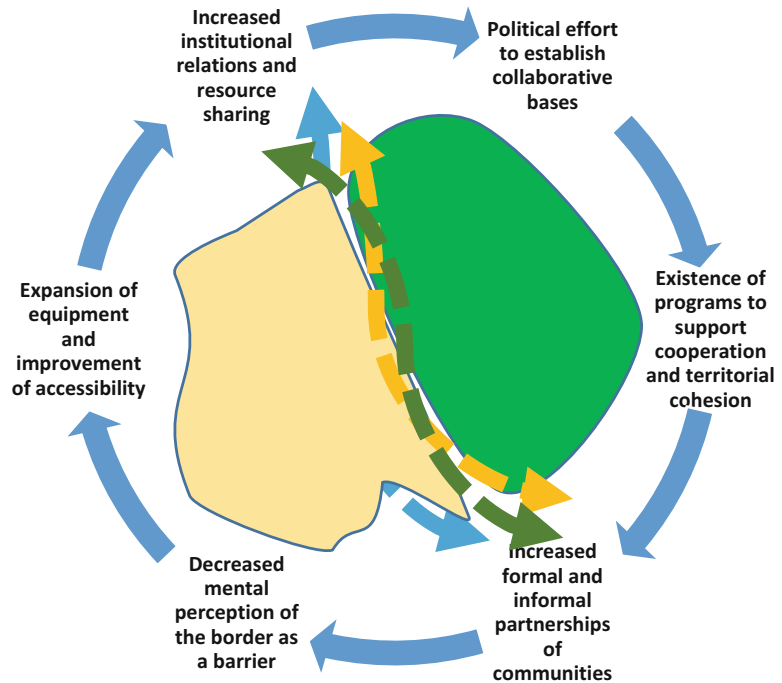
"The border does not disappear as identity with the physical separation line, but it can acquire new meanings for those who live there every day" (Pires & Lange, 2016:90). The connotations and perceptions that the border space receives are variable and circulate according to the need of the times, existing policies, and international

contexts. According to the occasion, the border is perceived – and said – as a local space, including territories on both sides of the dividing line as a single. At other times, the border is designated as an international place. In the border regions, cooperation is a vitalization and cohesion factor, fostering policies and programs that tend to attenuate the weaknesses that these dividing lines tend to represent and assume, promoting territorial equity (Fath & Hunya, 2001; Gualda et al., 2011). Cross-Border Cooperation (CBC) has been, within the objectives of the European Spatial Development Perspective (ESDP), a relevant process in making sustainable growth and territorial cohesion operational within the EU (ESPON, 2007; Medeiros, 2010, 2018).

The CBC has fostered agility in cross-border development relations between states, regional and local administrations, and between business and social associations, stimulating initiatives for cross-border rapprochement and cooperation (CPC, 2014; Medeiros, 2010; Salgado, 2010). These initiatives are presented in a context of transversality, solidarity and cooperation, strengthening the articulations in the territory and the players.

The border, due to its territorial specificity, requires a governance system based on approximations and compromises, solidarity and sharing, in order to generate synergic and resilient action contexts that promote collective benefits. Given their reduced dynamics, which is reflected in behavior of loss of demographic and socioeconomic vitality, with values well below national averages, these regions have been a major concern for development and cohesion in the European Union (Arencibia, González, & Cortés, 2013; Caramelo, 2007; EPSON, 2017). In this context, the EU has promoted programs and funds for the development and cohesion of the border, seeking to cancel the effects of peripherality and the contexts of proximity with strong economic and social differentiations.

The desired development and cohesion require forms of resistance and explicit cooperation, based on identities, economic assets, and ecocultural values in relation to the increasing

Cross Border Equity,**Fig. 1** Promoting factors of permeability, cooperation and territorial cohesion in border areas

rhythms of globalization (Faludi, 2010; Fragoso, 2009).

We have assisted to strategies to reduce the border effect, which has promoted and facilitated mobility among peoples and increased institutional relations, through policies, cooperation programs, community involvement, and the establishment of formal and informal channels of cooperation and rapprochement (Calderón, 2017; Domínguez, Aliste, Martínez, Natário, & Fernandes, 2013; Fernandes, 2019). Of these processes, it is worth mentioning: Increased mobility and transit infrastructure; strengthened political and institutional relations; increased social and cultural collaboration; community interest in partnerships and cooperative relations; administrative efforts to establish a basis for border collaboration; reduced mental perception of the border as a barrier (Fig. 1).

Territorial specificity and constraints in territorial valorization strategies, particularly in border areas, require economic, social, and territorial cohesion, with the definition of specific policies

of valorization and qualification, based on the territorial factors of the territory, the promotion of functions and generation of social equity in the search for regional development. Formal and informal relations, the development of common initiatives, the sharing of equipment and services, have contributed to the approximation and blurring of the border as an administrative representation.

Borders live in the permanent challenge of generating balance and sustainability of territorial development, promoting their position as an “international” space and ensuring the well-being and social equity of their communities. They require the recognition of their specificity and the necessary preservation of their resources (natural and cultural) and the promotion of border cohesion and equity. This requires the development of joint territorial management instruments (between the countries involved) and the encouragement of close and effective cooperation between institutions, businesses, and citizens.

Summary

Borders correspond to territories of specificity, where different policies and forms of governance collide, which require approximation, commitment, solidarity in the search for synergies, and collective benefits. In the context of the EU, land borders require the development of support programs, mobility and permeability policies, the promotion of infrastructures and facilities that guarantee equity for their communities, the capacity for resilience in the face of the costs of inherent contexts and the challenges of territorial cohesion.

References

- Arencibia, A., González, C., & Cortés, C. A. (2013). *La Cooperación Transfronteriza. POCTEP 2007–2013*. Amarú Ediciones. Salamanca.
- Calderón, F. J. (2017). Borders within Europe, border deactivation, cross-border cooperation and institutions: The Iberian Raya case. *Estudios fronterizos*, 18(36), 78–101. <https://doi.org/10.21670/ref.2017.36.a04>.
- Caramelo, S. (2007). *União Europeia, fronteira e território*. Oporto: Campo das Letras.
- Consultores de Políticas Públicas (CPC). (2014). Análise da situação económica, social e ambiental da zona transfronteriza de Espanha e Portugal. Doc. de Trabalho para a programação 2014–2020, Programa de Cooperação Transfronteriza Espanha Portugal. http://www.poctep.eu/sites/default/files/documentos/1420/Diagnostico_POCTEP_PT_V_07_04_145Mb.pdf
- Dominguez, L., Aliste, J., Martinez, I., Natário, M., & Fernandes, G. (2013). *Estudio Socioeconomico de la Frontera entre Portugal y España*. Salamanca: Edita Riet.
- ESPON. (2007). *Cross-border cooperation - cross-thematic study of INTERREG and ESPON activities*. Luxembourg: INTERACT.
- ESPON. (2017). Shrinking rural regions in Europe towards smart and innovative approaches to regional development challenges in depopulating rural regions. Luxembourg: ESPON 2020 monitoring committee.
- Faludi, A. (Ed.). (2010). *Cohesion, coherence, cooperation: European spatial planning coming of age?* New York: Routledge.
- Fath, J., & Hunya, G. (2001). *Cross-border economic co-operation on present and future EU borders, a summary of findings*. Enlargement research bulletin, 2. European Commission.
- Fernandes, G. (2019). Rural depopulation, social resilience and context costs in the border municipalities of Central Portugal. Dichotomies of social reorganization vs absence of public policies. *Economía Agraria y Recursos Naturales*, 19(1). <https://doi.org/10.7201/earn.2019.01.07>.
- Fernandes, G. & Natario, M. (2014). Especificidade Territorial e Reconfigurações nas Relações entre Recursos e Comunidades na Região de Fronteira CenCyL (Centro de Portugal - Castilha e Lyon). In Jacinto, R. (Coord.): *Espaços de Fronteira, territorios de esperança. Das Vulnerabilidades às Dinamicas de Desenvolvimento, Iberografias*, n°27, pp. 59–72. Centro de Estudos Ibéricos (CEI), Âncora editora.
- Fragoso, A. (2009). *Desarrollo comunitario y educación*. Xativa, Spain: Dialogos.
- Gualda, E., Fragoso, A., & Lucio-Villegas, E. (2011). The border, the people and the river: Development of the cross-border area between southern Spain and Portugal. *Community Development Journal*. Oxford University Press. <https://doi.org/10.1093/cdj/bsr064>.
- Hidalgo, A., Dominguez, J., & Benzinho, J. M. (2014). *Costes de Contexto Transfronterizos en el ámbito Empresarial- Territorio BIN-SAL* (p. 183). Diputación de Salamanca: OAEDER.
- Lange, E. (2012). De ‘Países Subdesenvolvidos’ à ‘Fronteira do Subdesenvolvimento’ – Contributo para um Debate Conceitual do Desenvolvimento, in *atas do 18th APDR Congress – Innovation and Regional Dynamics*, Junho 2012, pp. 47–59, Faro.
- Medeiros, E. (2010). Old vs recent cross-border cooperation: Portugal-Spain and Sweden-Norway. *Area*, 42(4), 434–443.
- Medeiros, E. (2016). Territorial cohesion: An EU concept. *European Journal of Spatial Development*, 60, 1–30. Retrieved from: <http://www.nordregio.se/Global/EJSD/Refereedarticles/refereed60.pdf>
- Medeiros, E. (2018). Should EU cross-border cooperation programmes focus mainly on reducing border obstacles. *Documents d’Anàlisi Geogràfica*, 64(3), 467–449. <https://doi.org/10.5565/rev/dag.517>.
- Perkmann, M. (2003). Cross-border regions in Europe: Significance and drivers of regional cross-border cooperation. *European Urban and Regional Studies*, 10(2), 53–171.
- Pires, I., & Lange, E. (2016). Quatro olhares sobre a raia ibérica: da fronteira «sentida» à fronteira «complexa». In J. Trillo Santamaria & I. Pires (Eds.), *Fronteras en la investigación peninsular: temáticas y enfoques contemporáneos Fronteiras na investigação peninsular: temáticas e abordagens contemporâneas* (pp. 89–106). Universidade de Santiago de Compostela.
- Salgado, A. R. (2010). La cooperación transfronteriza y sus consecuencias: hacia la reestructuración territorial en Europa. *Investigaciones Regionales*, 18, 141–152.

Cross-Border Management

► Cross-Cultural Management

Cross-cultural Approaches Toward CSR

► Cross-Cultural Orientations and CSR

Cross-Cultural Attitudes to CSR

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Synonyms

Corporate Global Citizenship CGC; Corporate social responsibilities (CSR); Corporate Social Responsiveness (CSR); Corporate Social Trusteeship (CST); Corporate-Business Ethics (CBE)

Definition

Corporate social responsibility has become the cornerstone of a firm's strategy globally. Irrespective of a firm's size, Corporate social responsibilities (CSR) hold prominence in the firm's chief characteristics. CSR can be explained as a notion that a firm's existence is not mere profit-seeking, it also implies the responsibility beyond the firm shareholders, that are other groups in the society and environment. It does not have to be necessarily enforced by the law, in fact, more cognitive (Jones 1980). It rather emerges when a firm aims consciously consider the wellbeing of those who are affected by its economic operations. While economic activities are considered themselves to uplift the

society by job creation and wealth generation, social harms are also accompanying them, meaning thereby workplace mistreatment and employee abuse, ecological concerns, consumer abuses, and so on. Five paramount phases of CSR are termed as Corporate Social Trusteeship (CST), Corporate Social Responsiveness (CSR), Corporate-Business Ethics (CBE), and Corporate Global Citizenship CGC (Weber and Wasieleski 2018).

The induction of cross-culture attitudes in CSR activities is significant. Companies may have their operations spread in different geographies and the culturally distinct location where one approach for all may not deem fit. Understanding the concept, cross-culture means the concept that people from different geographies and nations possess different backgrounds, ethics, and ethnicities which society usually shapes. With the advent of globalization, businesses have asserted high importance to cross-cultural integrations and address them. It extends from differences doing business operations to meticulous personal details like body language and expressions (Kopp 2019).

It poses a challenge for a company to cater the CSR operations in line with the cross-cultural different attitude and their respective requirements, and expectations, which should reflect inside and outside the firm and match the societal threshold.

Introduction

Industrialization and globalization have increased at an exponential pace since 1989. The emergence of the disintegration of the Soviet bloc, the European Union formation, the creation of the World Trade Organization (WTO), and the North American Free Trade Agreement (NAFTA) has changed the overall global economic and business outlook concepts. The inclusion of China in WTO and the US economic recovery from the rescission emergence of various giant multinational corporations have created a tendency to seek new raw material sources, the discovery of new markets, and especially, more cost-effective locations.

Some businesses gain success while others deem to fail as their capability to adapt to the cultural challenges, different international business demands they face are limited (Doremus et al. 1998; Ricks 1999; Apud et al. 2003; Tung 1982).

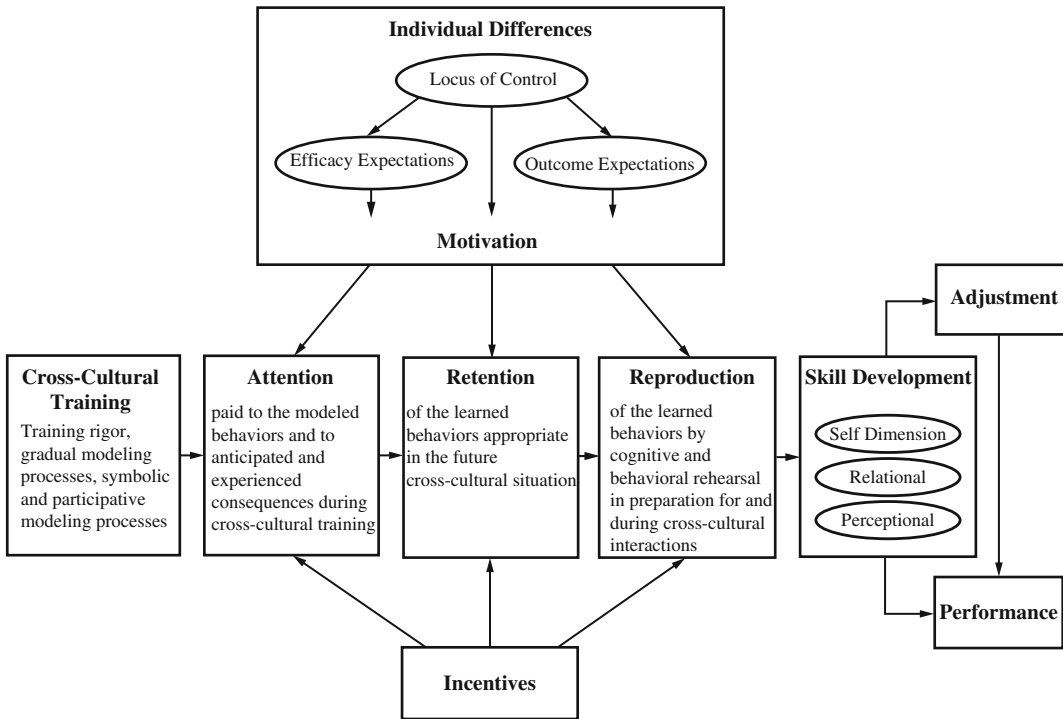
This leads to the expansion of the company's operations in a different country or location, initiating huge Foreign Direct Investment (FDI), but it also brings the question of the local community and environment compensation sufficiently. They are prone to the harmful impacts of the company's operations, meaning thereby, the production processes and use of natural resources for running a company's operations. Firms nowadays do imply critical emphasis to the CSR activities to address those segments, but the CSR activities should have a trickle-down beneficial effect on the society, on people, catering environment and in line with the culture of the particular society it functions in. CSR activities can create a win-win situation for the company and the environment. But merely implementing a global CSR program is not facile, it is vulnerable to challenges and cultural differentiations, as the global corporations are spread in continents. The companies' marketers and policymakers are obliged to be aware of these multiverse societal demands in the geographies they operate to contrive CSR policies accordingly (Tai and Chuang 2014).

The importance of addressing the cross-cultural issues and incorporating them into a company's CSR strategies is critical for a firm's survival and as well as goodwill. The significance of the subject can be observed in various studies. Around an estimated 50 to 45 percent of managers who are sent from the USA to other company locations overseas tend to fail aimed the unawareness of cross-cultural scenarios, costing approximately \$one million (Hill 2001). Moreover, above these costs are the intangible costs, that is, loss of opportunities, damage a firm's name and reputation, losing local goodwill and relationship with partners that hamper the firm even more (Storti 2001). Therefore, a firm's will to its CSR policies may be in good intent but the lack of awareness of cross-cultural integrations can lead to serious consequences.

Important Aspects

These challenges arising to the CSR strategies of the companies globally ask for a holistic approach. Termed as cultural competence, C.C, is an aspect that can succor firms deal with cross-cultural attitudes, which they come across internationally, which firms must consider while initiating CSR activities accordingly. C.C is drawn skills set for the firms, comprising of knowledge, training, and competence to cater successfully the cross-cultural attitudes, and behaviors towards their CSR strategies, particularly abroad. The eminent work of Black and Mendenhall (1990), highlighting prior literature, conjugates the cross-cultural training and abilities of the firms to incorporate the cross-cultural attitudes. These cross-cultural training and abilities are personal ones: the maintenance of self (mental health, psychological well-being, stress reduction, feelings of self-confidence), skills related to the fostering of relationships with host nationals, and cognitive skills that promote a correct perception of the host environment and its social systems. They mention the social learning theory, SLT, and a present model depicting the integration of elements of cross-cultural training and SLT, and how they interact in affecting cross-cultural skill development, adjustment, and performance. The social learning theory crowned by Bandura states that individuals learn from their experience and has four central elements: attention, retention, reproduction, and incentives.

Mentioned below the presented model, it is argued that individual differences have a cohesive impact on the training of key firms' personnel and the policies. Locus of control is an important factor in this vein, meaning thereby, it is a belief in individuals that events occur as per their actions and their abilities so higher efficiency and effectiveness will be ensured, corresponding to higher expectations as well. This transcends to more motivation eventually. These motivations will impact the cross-cultural training, will include more rigorous models for training, impact the attentions for learning about



Cross-Cultural Attitudes to CSR, Fig. 1 Model of cross-cultural training and training (Black and Mendenhall 1990)

cross-cultural behaviors, retention of the learned skills and imply them, reproduce the learned skills into meaningful interactions, help to develop the skills, adjusting to the cross-cultural attitudes, impacting performance eventually. Incentives also have a major role in retention, reproduction, and attention. Incentives can both be in the shape of external and internal. They are paramount as they influence the degree to which individuals follow the desired behavior that helps to manage the CSR activities in line with cross-cultural behaviors (Fig. 1).

The CSR strategies of the firm cannot ignore the fact that some delicate strategies for social benefits and compensation perspective tailored for a region might be completely stalemated and opposed in others. A detailed perspective to riposte is to first recognize the differences, then devise the CSR actions.

Recognition is the first step, and the recognition of culture is the premise of the firm's CSR. Awareness of the culture can be individualistic

or collectivistic, which is key to regale that particular society and understand which aspect is most important to give voice to in CSR activities, followed by respect for the traditions and customs adopted over time in the target society. Any CSR activity that contradicts the cultural values could end in a hoax for a company. Finally, to reconcile, that is, to map knowledge and cultural empathy to reach joint goals for social responsibility for the society and the company.

Summary

Companies are considering corporate social responsibility as a key element in their profile and delicate tremendous focus and resources to it. Societal pressure, regulations, the nature of the company, or competitive advantage are the prime causes of a company adopting CSR activities. Due to massive globalization, companies have

expanded internationally at a rapid pace. That brings challenges especially to address the cross-cultural attitudes and the same size fits all approach for CSR strategies is impractical. The provision asks for developing a special skill set, training, and awareness to the challenge and creates such harmony in the execution of CSR activities that they are serving the purpose of social and environmental benefits.

Cross-References

- ▶ [Corporate Social Responsibility Disclosure](#)
- ▶ [Corporate Social Responsibility Strategy](#)
- ▶ [Corporate Sustainability](#)
- ▶ [CSR: Evolution of Concept](#)

References

- Apud, S., Lenartowicz, T., & Johnson, J.P. (2003). Intercultural competence: What do practitioners really know? In *Proceedings, academy of international business south-east region conference*, Clearwater.
- Black, J. S., & Mendenhall, M. (1990). Cross-cultural training effectiveness: A review and a theoretical framework for future research. *Academy of Management Review*, 15(1), 113–136.
- Doremus, P. N., Keller, W. W., Pauly, L. W., & Reich, S. (1998). *The myth of the global corporation*. Princeton: Princeton University Press.
- Hill, C. W. (2001). *International business: Competing in the global marketplace*. Burr Ridge: Irwin McGraw-Hill.
- Jones, T. M. (1980). Corporate social responsibility revisited, redefined. *California Management Review*, 22(3), 59–67.
- Kopp, W. (2019). Academic Success and Retention: Assessing Variables that Make a Difference in a Baccalaureate Nursing Program (Doctoral dissertation, North Dakota State University).
- Ricks, D. (1999). *Blunders in international business* (3rd ed.). Oxford, UK: Blackwell Publishers.
- Storti, C. (2001). *The art of crossing borders*. London: Nicholas Brealey & Intercultural Press.
- Tai, F. M., & Chuang, S. H. (2014). Corporate social responsibility. *iBusiness*, 6(03), 117.
- Tung, R. L. (1982). Selection and training procedures of US, European, and Japanese multinationals. *California Management Review*, 25, 57–71.
- Weber, J., & Wasieleski, D. M. (Eds.). (2018). *Corporate social responsibility*. Emerald Group.

Cross-Cultural Management

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Synonyms

[Cross-border management](#); [Global management](#); [Global mindset](#); [Intercultural management](#); [Management of multiple cultures](#)

Description

Culture is something socially constructed and historically infused in people's beliefs, perceptions, and behavior. It has been defined as "the collective programming of the mind which distinguishes the members of one category of people from another" (Hofstede 1980). Since business is made by people, all organizational activities, from leadership to decision-making, are somehow impacted by culture. Cross-cultural management is the group of strategies and policies, usually adopted by international or multinational firms, aiming to improve the coordination and cooperation among employees and between staff and external business actors that embody different behavioral norms and interpersonal expectations due to their respective national cultures. The basic assumption of cross-cultural management is that there is the potential of misunderstandings in the context of relationships between individuals and organizations from differing cultural backgrounds. From the 1970s to the 1990s, culture was described as a barrier to interaction and source of frictions. Yet, recently, the idea of culture as a resource of organizational learning and competitive advantage also emerged. Companies that leverage from their multicultural workforce can better satisfy different clients and speed up knowledge transfers. Therefore, the goal of cross-cultural management studies is to help identify the characteristics of particular cultures, make comparisons, and provide insights on how to conduct the cross-cultural

interactions to both avoid conflicts and get benefits from the correct handling of cultural differences.

Introduction: International Business and the Encounter of Different National Cultures

Information technology, globalization, and fast transportation systems have made physical borders meaningless, but they have not really changed local beliefs, mindsets, and common practices that are rooted in national cultures. Globalization has made the world smaller but we do not have one borderless society. Divergent customs, conventions, and business practices still exist. The impact of national culture difference is relevant to all areas of business; therefore, managers need to know what to do and what not to do in certain countries or when working with partners and employees from other nations.

This means that managers working with foreign subsidiaries, suppliers, or customers located around the world need to develop adequate management skills: understand the behavior of people located around the world and manage different people to make them work in organizations where it is necessary to interact with subjects with several cultures. Studies of cross-cultural management, originated in the field of international business, actually aim to understand how managers and organizations shall deal with “international and multicultural spheres” (Adler 1983a, 1991). They focus on the international differences among managerial systems and organizational structures of firms located in different countries and link such differences to the domestic culture. While traditional international studies started in the 1950s ascribed country differences in managerial models to tangible and measurable aspects of the local context, such as its economic development, technological advance, or type of political and legal system (contingency approach), cross-cultural management research believes that local culture has a great impact on people and organizations’ behavior (cultural approach). Culture is more than a moderating variable; it is

conceived as the determinant of many managerial outcomes. Therefore, cross-cultural management studies seek to unveil how culture informs managerial systems, how tools and systems can be transferred from one country to another effectively, and how it is possible to improve the interaction of co-workers with different background cultures, and company’s interaction with foreign suppliers, customers, and alliance partners.

Researchers of cross-cultural management assume that globalization does not cause cultural convergence (i.e., more similar behaviors). Actually, globalization may reinforce unique beliefs and value systems (consider Muslim countries that hinder Western role models). The reality is that both convergence and divergence occur and managers need to understand and anticipate both patterns. Consequently, the old-fashioned thesis of Hickson et al. (1974) that sustains a culture-free approach to international business cannot be maintained. Moreover, if we adopt a culture-bound approach, it means that there is no unique best organizational model that may fit all firms around the world. If no universal model of organization structure exists, caution has to be used when trying to transfer managerial systems, tools, practices, or procedures from one organization (i.e., the holding company) to its international subsidiaries or, in case of a merger or an acquisition, from the acquirer company to the target organization.

Origin and Content of Cross-Cultural Management

Cross-cultural management is defined as “the study of management in a cross-cultural context. It includes the study of the influence of societal culture on managers and management practice as well as the study of the cultural orientations of individuals and organization members” (Thomas 2016). As originally stated by Adler (1983b), “the focus of cross-cultural management studies is the behavior of people from different cultures” working together within the same organization or in different organizations located in two or more cultures. Thus, it concentrates on the micro

level – the study of people – rather than on the macro level – the study of the organizations.

The development of cross-cultural management studies can be tracked back to the work of three key authors. In 1980, Hofstede classified the cultural orientation of more than 88,000 employees from 40 countries according to four dimensions (individualism/collectivism, power distance, uncertainty avoidance, and masculinity/femininity), then Adler (1991) examined the impact of culture on different organizational functions and departments. Few years later, Fons Trompenaars (1993) administered a questionnaire to over 15,000 managers from 28 countries to classify national cultures according to five dimensions, which are partially similar to Hofstede's dimensions.

All of these authors rely on the classic concept of culture developed by Western anthropologists in the 1950s (in particular relying on interpretative anthropology), which is conceived as a stable system of values, norms, and assumptions transmitted through socialization. All of them rely on sociological theories of social functions and structures, which provide taxonomies for analyzing cultures (Peterson and Soendergaard 2008) and focus on national culture, assuming that social behavior of individuals is deeply connected to national values and beliefs. Although they recognize the existence of difference layers of cultures (national, professional, industry, and corporate culture), national culture is the most important because it is rooted in the basic assumptions that “program the mind of people.” This is the first layer of culture that is the most difficult to change and depends on where we grew up. On the contrary, the corporate, industry and professional cultures are learned in the course of education, through training and in organizational life, related to practices and conventions, and therefore are subject to change.

Hofstede is undoubtedly the most cited author: Trompenaars (1993) credits Hofstede “for opening management's eyes to the importance of the [cross-cultural management] subject.” However, its work has been also criticized (Søderberg and Holden 2002), especially because he equates culture with national boundaries, while the today's

global and interconnected societies indicate that there are many multicultural realities within one single country. In other terms, boundaries within cultural communities are fluid and cultures are more subject to change.

Research on cross-cultural management assumes that cultural diversity may generate costly misunderstandings and business failure if not properly addressed. Ignoring or mishandling national differences can imply:

- Misreading the potential of cross-border acquisitions, mergers, or alliances
- Inability to conduct post-merger integration
- Inability to retain and motivate employees of different countries
- Inability to transfer practices and generate synergies from cross-fertilization
- Problems in managing expatriates located in foreign subsidiaries
- Marketing and advertising blunders

All these issues arise when a company goes abroad. Therefore, cross-cultural management is strictly related to international strategy (Bartlett and Ghoshal 1989). Until recently, the topic was often subsumed in texts on international management and there were very few texts devoted solely to cross-cultural management (see, for example, the book of Thomas and Peterson 2014), while today's cross-cultural research also embraces the study of similar issues due to different regional, professional, and organizational cultures.

Each issue represents a stream of research. So, there were studies focusing on international negotiation (Brett and Okumura 1998) as well as studies specialized in the management of global teams and expatriates (Steers et al. 2010). In addition, there are studies focusing on how companies (their top management) conceive cultural differences and consequently decide which international patterns to adopt (i.e., which type of structures and coordination mechanisms). These studies identify: (i) *international companies* that consider cultural diversity as a source of conflict and therefore try to impose the head quarter's culture universally, (ii) *multinational firms* that are aware of both problems and benefits related to

cultural differences and therefore favor the coexistence of differences, and (iii) *transnational corporations* where heterogeneity is considered essential and cultural interactions are welcomed. In this last situation, cultural differences are not an obstacle but represent a source of competitive advantage.

Another important field of analysis is the managerial mind and how managers shall develop global management skills to avoid cited negative issues. In this case, a manager can follow two main approaches: he/she can try to adapt to another culture (this is what expatriate do, when they have to work in a different country for several years, so they learn the language, the habits, etc.) or he/she can develop a multicultural mindset (this is necessary when the manager deals with several different countries and cultures) that can help understand why others behave as they do. In the first case, after a cultural shock, the manager thinks and behaves like a local. In the second case, it would be impossible for a manager to adapt to several different international encounters, therefore he/she learn (usually through specialized training) how to identify his or her cultural values and biases, and then develop a set of culturally appropriate interpersonal skills. Some authors refer to this ability to live and work in and across cultures, and to negotiate cross-cultural differences as the ability to develop a global mindset (Gupta and Govindarajan 2002; Levy et al. 2007). “An individual with a global mindset has an understanding and appreciation of local cross-cultural differences while maintaining the identity of their organization and a global view” (Groutsis et al. 2014).

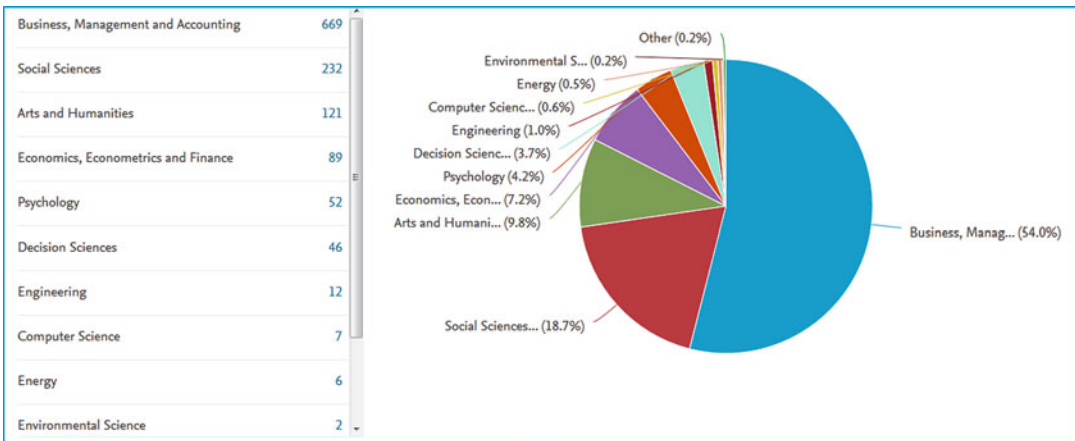
Most recent cross-cultural management research concentrates on the examination of individual behaviors and the psychological perspectives of culture (i.e., it follows from psychological studies of individual attitudes, values, or personality dimensions) (Leung and Peterson 2010). So, we can find studies on the impact of culture on work-related attitudes, leadership, change management, decision-making, conflict management, motivation, entrepreneurial orientation, and reward allocation (Kirkman et al. 2006). These studies of individuals and teams frequently draw

from the work of Harry Triandis (1972) who is considered a pioneer of cross-cultural psychology. They are becoming extremely important because the acquisition of knowledge from employees and partners has become the key source of competitive advantage and consequently, it is fundamental to know how to retain the best subjects and facilitate effective knowledge sharing within a multicultural environment.

Diffusion of Cross-Cultural Management Studies across Fields of Research

Cross-cultural management benefits from several contributing disciplines including psychology, sociology, anthropology, and organizational behavior. Therefore, research on this topic can be found in academic journals of different fields or subject areas. To illustrate this point, a research query on the Scopus database containing academic articles including “cross-cultural management” in the title, abstract or the keywords has been run. Figure 1 indicates that business studies represent the majority but many articles published in the field of Social Sciences, Arts and Humanities, and Psychology are also listed.

The same query indicates that after 1996 cross-cultural management studies began to flourish, with a peak of 50 articles published only in 2010. Contributions are spread throughout different journals; most of them focusing on international business (like the “Journal of International Business Studies,” “Journal of International Management,” “Management International Review,” and “Thunderbird International Business Review”) and human resource management (see, for example, “Journal of Global Mobility,” “International Journal of Human Resource Management,” and “International Journal of Intercultural Relations”). In addition, two reviews were recently founded to offer researchers the possibility to publish original research in cross-cultural aspects of management, work and organization: the “International Journal of Cross Cultural Management” and “Cross Cultural and Strategic Management.” The first one was launched in 2001 by Sage publication and included a contribution of



Cross-Cultural Management, Fig. 1 Documents by subject area

Hofstede (titled “Culture’s Recent Consequences: Using Dimension Scores in Theory and Research”) and a contribution of Triandis (titled “The Study of Cross Cultural Management and Organization: The Future”). The second one is published by Emerald, since 2016, and was renamed from “Cross Cultural Management: An International Journal,” originally dating back to 1994.

Cross-Cultural Management Versus Intercultural Management Versus Diversity Management

Research on cross-cultural management is often associated to intercultural management. Yet, their object of study is different. Cross-cultural management research is devoted to the study of cultural differences within and outside the organizational context. Therefore, studies of cross-cultural management often include the mapping of national cultures or use these categorizations to make comparisons and help managers to effectively handle differences. Intercultural research, in contrast, is focused more on the process of interaction among cultures and the social impact of this intercultural interaction during communication (Barmeyer and Mayrhofer 2008). The research conducted in the field of

intercultural management is concerned with “critical incidents” produced in communicative and cooperative situations, which are due to cultural differences. A great emphasis is given to linguistic and ethno-cultural differences. Its aim is to improve the quality of intercultural communication, relations, collaboration, and knowledge sharing. Consequently, research of intercultural management mainly belongs to the area of communications and it is circulated through specialized journals like “International Journal of Intercultural Relations” and “Journal of Intercultural Communication Research.”

Research on cross-cultural management has also some intersections with diversity management (Lorbiecki and Gavin 2000). Both assume that a heterogeneous work force may either hinder or favor productivity and profit depending on how it is managed. Both focus on human resource management, i.e., how to maximize employee’s knowledge and expertise to better achieve organizational objectives. However, diversity management differs for its broader scope and its socio-political dimension. Diversity management is more than a multicultural issue as its scope refers to any kind of element that can make people feel different and behave differently from others. Diversity is linked to several factors such as culture, generation (old vs. young), gender (male or female), thinking, religion, level of ability or

disability, sexual orientation, or marital status. Therefore, diversity management can be applied even in domestic companies whenever there are individuals with different preferences and orientation. In addition, diversity management is often conceived as a socio-political strategy, which identifies the companies that most care about employees and consequently best attract talented people (Ng and Burke 2005). Since diversity management includes activities that disseminate acceptance of and respect for various racial, cultural, societal, geographic, economic, and political backgrounds, employees do not feel discriminated. Most diversity management efforts refer to the creation of an inclusive culture, a place that is “safe for differences,” where it is possible to maximize the full potential of every individual. Therefore, employees are less stressed, feel free to make innovative proposal and work better so that both the company and its people benefit from the inclusive context.

Summary

Cross-cultural management was born within international business studies driven by the necessity to understand the behavior of people in organizations around the world. Thus, its prime focus is on organizational behavior across different national cultures. The main goal of cross-cultural research is to advance the general guidelines that may anticipate and minimize the issues and problems related to multicultural encounters and thus promote effective managerial actions. In today's knowledge era, cross-cultural management is particularly helpful in leveraging innovations and learning at the global level, as it helps managers understand how to obtain and exploit the knowledge from worldwide sources.

Cross-References

- [Competitiveness](#)
- [Cross-Cultural Attitudes to CSR](#)
- [Diversity of Boards](#)
- [Human Capital Management](#)

References

- Adler, N. J. (1983a). Cross-cultural management research: The ostrich and the trend. *Academy of Management Review*, 8, 226–232.
- Adler, N. J. (1983b). Cross-cultural management: Issues to be faced. *International Studies of Management and Organization*, 13(1/2), 7–45.
- Adler, N. J. (1991). *International dimensions of organizational behavior*. Boston: PWS-Kent.
- Barmeyer, C., & Mayrhofer, U. (2008). The contribution of intercultural management to the success of international mergers and acquisitions: An analysis of the EADS group. *International Business Review*, 17(1), 28–38.
- Bartlett, C. A., & Ghoshal, S. (1989). *Managing across borders*. Boston: Harvard Business School Press.
- Brett, J. M., & Okumura, T. (1998). Inter- and intracultural negotiation: US and Japanese negotiators. *Academy of Management Journal*, 41(5), 495–510.
- Groutsis, D., Ng, E. S., & Ozturk, M. B. (2014). Cross-cultural and diversity management intersections: Lessons for attracting and retaining international assignees. In M. F. Özbilgin, D. Groutsis, & W. S. Harvey (Eds.), *International human resource management* (pp. 23–46). New York: Cambridge University Press.
- Gupta, A. K., & Govindarajan, V. (2002). Cultivating a global mindset. *Academy of Management Executive*, 16(1), 116–126.
- Hickson, D., Hinings, C. R., McMillan, C. J., & Schwitter, J. P. (1974). The culture-free context of organization structure: A tri-national comparison. *Sociology*, 8, 59–80.
- Hofstede, G. (1980). Cultural consequences. In *International differences in work-related values*. London: Sage publications.
- Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2006). A quarter century of Culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies*, 37, 285–320.
- Leung, K., & Peterson, M. F. (2010). Globally distributed workforce: Social and international issues. In S. Zedeck, H. Aguinis, W. F. Casio, M. J. Gelfand, K. Leung, S. K. Parker, & J. Zhou (Eds.), *Handbook of industrial-organizational psychology* (pp. 771–805). Washington, DC: APA.
- Levy, O., Beechler, S., Taylor, S., & Boyacigiller, N. A. (2007). What we talk about when we talk about ‘global mindset’: Managerial cognition in multinational corporations. *Journal of International Business Studies*, 38(2), 231–258.
- Lorbiecki, A., & Gavin, J. (2000). Critical turns in the evolution of diversity management. *British Journal of Management*, 11, 17–31.
- Ng, E. S. W., & Burke, R. J. (2005). Person–organization fit and the war for talent: Does diversity management make a difference? *International Journal of Human Resource Management*, 16(7), 1195–1210.

- Peterson, M. F., & Soendergaard, M. (2008). *Foundations of cross cultural management, volume 1*. London: Sage Press.
- Söderberg, A. M., & Holden, N. (2002). Rethinking cross cultural management in a globalizing business world. *International Journal of Cross Cultural Management*, 2, 103–121.
- Steers, R. M., Sanchez-Runde, C. J., & Nardon, L. (2010). *Management across cultures. Challenges and strategies*. Cambridge: Cambridge University Press.
- Thomas, D. C., & Peterson, M. F. (2014). *Cross-cultural management* (3rd ed.). Thousand Oaks: Sage.
- Thomas, D.C. (2016). Cross-Cultural Management, Oxford Bibliographies Online. <https://doi.org/10.1093/obo/9780199846740-0074>.
- Triandis, H. S. (1972). *Analysis of subjective culture: An approach to cross-cultural social psychology*. New York: Wiley.
- Trompenaars, F. (1993). *Riding the waves of culture*. London: The Economist Book.

Cross-Cultural Orientations and CSR

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Synonyms

Cross-cultural approaches toward CSR; Cross-cultural orientations toward CSR; Cross-cultural perceptions of CSR; Cross-national differences in government involvement in CSR

Definition

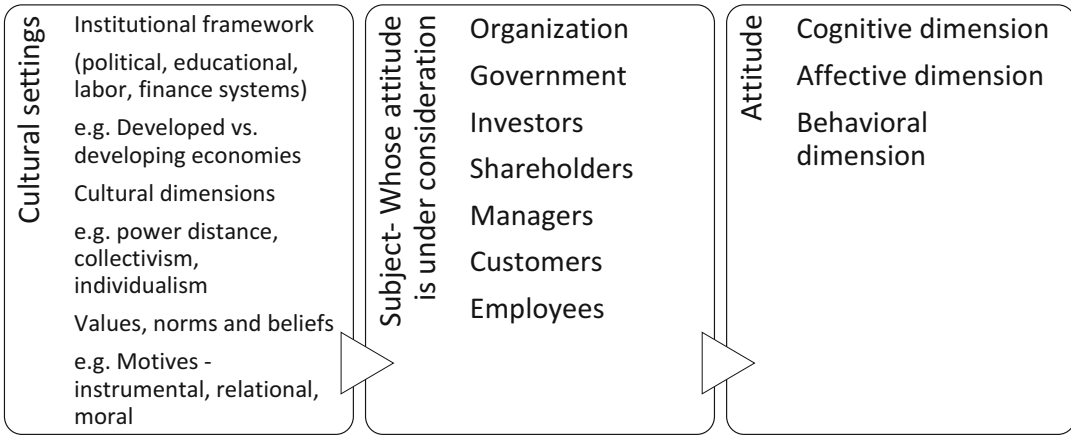
Cross-cultural attitudes to CSR refer to the possible responses that different groups (e.g., organizations and stakeholders) may hold toward CSR, based upon shared norms, values, and beliefs. Understanding cross-cultural attitudes to CSR requires addressing the cultural context and the cognitive, affective, and behavioral dimensions of attitudinal responses (Fig. 1).

While the cognitive dimension addresses understanding CSR as a construct (e.g., instrumental, relational, or moral approach), the affective dimension refers to the degree of favorableness or unfavorableness of the response to CSR. For example, while some consumers prefer products labeled as responsibly manufactured, others may show distrust toward ethically labeled products and/or services. The behavioral dimension refers to actions taken as a response to the CSR signal. For example, customers may buy CSR-labeled products, and employees may be more willing to accept a job offer from an employer who stresses CSR values.

Introduction

Corporate social responsibility (CSR) is a socially constructed concept (Dahlsrud 2008) that reflects the social imperatives and social consequences of business success; therefore, the understanding of CSR may differ in different cultural and national settings (Matten and Moon 2008). CSR relates to the concept of the role of business in society, its obligations, and its impact on stakeholders. While culture may be considered to be the system of fundamental meanings and beliefs shared by a particular group of people or a society and which may evolve over time (Hofstede 2005), attitude represents a disposition to respond positively or adversely toward a given object. Attitudes are not universal and may differ across cultures and borders in terms of underlying meanings and issues; therefore, attitudes toward CSR may vary in terms of differences in understanding CSR concepts or country-specific issues with which business may struggle (e.g., communication transparency, corruption, an aging society, unemployment, lack of health and safety insurance). In response to external pressures, organizations can be guided by different motives. These drivers can be divided into three groups:

- Instrumental motives related to self-interest (gaining power, acquiring rare resources)



Cross-Cultural Orientations and CSR, Fig. 1 Framework for understanding cross-cultural attitudes to CSR

- Relational motives associated with fostering relationships with particular stakeholder groups
- Moral motives based on ethical principles and standards, such as shared responsibility, sustainable development, and concern for future generations (Aguilera et al. 2007).

Under pressure, organizations formulate policies; implement standards, regulations, and certifications; and report on social issues (e.g., diversity, fair wages, social and environmental policies). Actions taken by organizations are aimed primarily at building credibility and creating a reputation that allows them to gain acceptance for their activities. This impacts organizational practices, the corporate culture, and specific guidelines for codes of conduct designed according to socially accepted norms and rules (Aguilera et al. 2007).

Following a proposed framework for understanding cross-cultural attitudes to CSR requires addressing the implications of the cultural context for (1) the development of CSR within a broader national framework both in developed and in developing countries; (2) exploring the organization's responses to CSR across different cultural settings; and (3) understanding individual perceptions of CSR and the significance of individual attitudes toward CSR, e.g., for customer choice or job offer acceptance.

The Development of CSR Within a Broader National Framework

The roots of our understanding of CSR are examined in the work of American researchers (Carroll 1999). Matten and Moon (2008) propose that long-standing, historically entrenched institutions create differences in CSR among various countries. The authors point at four key historical features of national institutional frameworks: the political system, the financial system, the education and labor system, and the cultural system – all of which influence the national business system.

In the USA, enterprises are perceived as social actors who play the role of citizens (Habisch 2003). A good citizen is characterized above all by the attitude of a “philanthropist” who actively supports society, including private individuals and entire enterprises. Therefore, CSR in this country has been mainly understood in terms of philanthropic issues (Porter and Kramer 2006), which may also become strategic for business development.

In Europe, social responsibility resulted from the role attributed to entrepreneurs as part of the socioeconomic system. It was perceived as a fundamental value embedded in the system, not subject to any discussion. Therefore, there was no need to communicate separately on the organization's strategies and practices or on the

social responsibilities of the firm. *Matten and Moon (2008)* note that the concept of CSR in Europe is not new but it is new to treat it as an element of corporate policy in relation to the social environment.

Jurgens et al. (2010) explain the difference between these two regions, acknowledging differences in the way they look at stakeholders and how relations with each group are managed. In North America, open debate on the role of entrepreneurs in society has influenced current legislation. While the European stakeholder model includes important stakeholder groups in the process of policy and decision-making, US firms reserve board representation for institutional investors or major shareholders (*Jurgens et al. 2010*). Also, *Matten and Moon (2008)* describe the institutional context of CSR, stressing the differences in the European and Anglo-American approach. The authors argue that, in Europe, CSR is implicitly embedded in corporate structures and culture but, in more individualistic cultures, as, e.g., the USA or the UK, CSR has evolved as separate practices and strategies built on the regular business model. The difference in the perception of corporate social responsibility in both cultural settings becomes visible primarily in the fact that many of its aspects, widely discussed in the USA, are considered in Europe to be an element of the socioeconomic order (*Habisch 2003*). First, development of common socioeconomic systems in European countries has encouraged open discussion on the role and responsibility of enterprise in society. As a result, the explicit idea of CSR, treated as an enterprise policy, has strongly influenced the contemporary concept of CSR in Europe.

The approach to a comparative understanding of CSR requires basic prerequisites, such as a functioning market and governmental and legal institutions that guarantee that business acts in line with societal interests. The existing civil society is responsible for articulating social values and preferences by which business is obliged to perform (*Matten and Moon 2008*). The impact of cultural settings in developing countries requires, therefore, a distinct perspective.

CSR in developing countries is oriented toward socioeconomic priorities necessitated by

underdeveloped infrastructures, such as poverty alleviation, supporting and increasing awareness of healthcare and environmental issues, and providing education and empowerment to marginalized groups. It might be defined as representing “the formal and informal ways in which business makes a contribution to improve the governance, social, ethical, labor and environmental conditions of the developing countries in which they operate, while remaining sensitive to prevailing religious, historical and cultural context” (*Visser 2009*, p. 131).

The role of CSR in developing countries is twofold:

1. Supporting: CSR must support political reforms in order to cover governance gaps that occur due to corruption or lack of resources in order to provide efficient social services (*Idowu et al. 2015; Visser 2009*), provide access to basic goods and services (*Prahalad and Hart 2002*), and respond to economic or social crises and catastrophes that cannot be managed by local services.
2. Controlling and monitoring: In developing countries, the role of CSR is to monitor and control investment initiatives in order to insure their economic, social, and environmental value and assess company activities according to their compatibility with international standards. Here, one of the most compelling topics is sustainability in the global supply chain, where, in addition to economic criteria, social and environmental criteria must also be considered. These strongly impact local economies and existing labor standards.

The main focus of CSR in developing countries may also differ. After providing a systematic review of CSR research in developing countries, *Visser (2009)* shows that, in Africa, the main focus is on the ethical dimension (e.g., ethics of colonialism and apartheid, prevalence of corruption and fraud, ethical investment, and individual ethics of South African managers). The author expects, however, that in the coming years, topics such as stakeholder engagement, social responsibility, and health issues (including HIV/AIDS) will move up on the agenda. In turn,

CSR in Latin America is strongly influenced by socioeconomic and political conditions, such as deforestation, unemployment, inequality, and crime (Visser 2009).

Organizational Responses to CSR Across Different Cultural Settings

This stream of research explores the importance of the cultural dimension as a predictor of CSR or corporate social performance (CSP). The most frequently used concepts refer to Hofstede's six cultural dimensions (Hofstede 2005). Findings, however, are mixed. According to Waldman et al. (2006), the individualism-collectivism dimension is one of the most important predictors of CSR. While it is argued that a collectivistic culture is more supportive toward the adoption of CSR (Waldman et al. 2006), cultures with high levels of power distance and pragmatism won't support this approach to any extent (Dawkins et al. 2016). In their study, Ringov and Zollo (2007) show that power distance and masculinity have a negative effect on CSR and environmental performance. Thus, they find no significant differences with respect to individualism and uncertainty avoidance (Ringov and Zollo 2007).

Ho et al. (2012) examined the impact of national culture and geographic environment on firms' CSP. Based on a global CSP database of companies from 49 countries, they determined that Hofstede's cultural dimensions are significantly associated with CSP. According to their study, higher CSP is significantly associated with cultures that are characterized by higher power distance, are more collectivist and more masculine, and exhibit more uncertainty avoidance (Ho et al. 2012). Halkos and Skouloudis (2016) argue that long-term versus short-term orientation and indulgence versus restraint positively affect CSR, while uncertainty avoidance has a negative effect. They find no significant effect for individualism, power distance, and masculinity (Halkos and Skouloudis 2016). Gallén and Peraíta's recent study (2018) examined CSR disclosure in

countries with higher and lower per capita GDP. The authors conclude that, "in countries with higher GDPPC, CSR disclosure is negatively related to individualism and masculinity and positively related to uncertainty avoidance and indulgence. When focusing on countries with a lower GDPPC, the results suggest that CSR disclosure is negatively related to power distance and positively related to uncertainty avoidance. Moreover, five of Hofstede's six cultural dimensions negatively affect sustainability disclosure in countries with middle GDPPC" (Gallén and Peraíta 2018, p. 2967).

The Significance of Individual Attitudes Toward CSR in Cross-Cultural Research

Referring to the second question – how cultural settings influence stakeholder responses toward CSR – researchers concentrate on the differences in individual sensitivity toward the specific issues identified in the CSR concept definition. The differences in individual attitudes toward CSR across borders help in understanding how CSR "works" in different contexts, both institutional and cultural. Here, individual reaction to the CSR message by different groups of stakeholders, such as customers, employees, job applicants, and managers, is investigated. A range of comparative studies shows that differences in manager attitudes toward CSR are influenced by values embedded in the national and organizational culture and their profession (Williams and Aguilera 2009) that may impact CSR outcomes at their firms (Aguilera et al. 2007; Hemingway and MacLagan 2004). In turn, as the degree of interest in CSR shown by consumers impacts company perceptions, cross-cultural analysis of customer attitudes toward CSR concentrates on its significance on the decision-making process. For example, Maignan (2001) found that customers in Europe (French and German) were more actively willing to support socially responsible organizations than were US consumers. Research shows that incorporating the CSR message into marketing campaigns in cross-cultural settings is more

influential in developed than in emerging economies (Auger et al. 2010).

CSR researched as one of the features of global brands generally evokes a positive company image (Becker-Olsen et al. 2011); however, companies shouldn't overlook the specific local circumstances which may impact customer behavior, such as attachment to local products; different levels of sensitivity toward ethical, social, or ecological issues; or awareness of ethical consumption and a sustainable chain of supply (Karaosman et al. 2015; Singh et al. 2008).

A separate field of research on cross-cultural attitudes toward CSR refers to the employee-employer relationship. While researching the impact of CSR on job attitudes, Dawkins et al. (2016) found that respondents from three different countries were willing to work for socially responsible firms to a similar extent; however, they came to their decisions in different ways. The dimensions of individualism-collectivism and power distance (according to the work of Hofstede 2005) seem to have a moderating effect on expectations toward CSR and job choice (Dawkins et al. 2016).

Final Comments

Research on cross-cultural attitudes to CSR is a broadly investigated field that holds the interest of researchers from all over the globe. While, in most cases, qualitative approaches use descriptive case studies and provide comparison of practices in different countries, the quantitative approach focuses on exploring the importance of the cultural setting for CSR disclosure, impact on CSP, and stakeholder sensitivity toward various aspects of CSR. The current state of knowledge provides substantive support for acknowledging culture and values as core determinants of varying approaches to CSR attitudes, both organizational and individual. The mixed and often contradicting findings, however, suggest that this field requires a more systemic approach and rethinking of methodological tools. Standardized questionnaires developed for some

cultural settings may work differently in diverse cultural settings. The socially constructed nature of CSR also encourages acceptance of the diversity of definitions and perspectives in cross-cultural research. However, this presents a great challenge for researchers to develop a systematic approach at all levels – micro, mezzo, and macro.

Summary

CSR may be differently perceived and adopted by different stakeholder groups, such as customers, employees, or investors. Specifying the subject means, therefore, addressing a distinct person or group of people who express their attitudes toward CSR. Thus, the cultural context not only determines individual responses and expectations toward organizations but also shapes the governance framework that impacts employees and other stakeholders within organizations. In this case, the task is to identify the attitude of an organization. This attitude may be reflected in approaches adopted by the organization toward CSR. For example, the cognitive dimension of CSR may be strategically or altruistically driven. It may be expressed as diverse policies and practices linked to philanthropy, public relations, risk and/or stakeholder management, and innovative business models or through incorporation of normative values into the corporate culture. Also, national governments may put more or less emphasis on CSR, and this may be reflected in national regulations and guidelines. This, in turn, will impact the organization's attitudes to CSR and may accordingly promote certain aspects of CSR (e.g., pro-environmental or anti-discriminatory practices).

Cross-References

- [Cross-Cultural Management](#)
- [Culture, Tourism, and Sustainability \(Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism\)](#)
- [Organizational Culture](#)

References

- Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3), 836–863. <https://doi.org/10.5465/amr.2007.25275678>.
- Auger, P., Devinney, T. M., Louviere, J. J., & Burke, P. F. (2010). The importance of social product attributes in consumer purchasing decisions: A multi-country comparative study. *International Business Review*, 19(2), 140–159. <https://doi.org/10.1016/j.ibusrev.2009.10.002>.
- Becker-Olsen, K. L., Taylor, C. R., Hill, R. P., & Yalcinkaya, G. (2011). A cross-cultural examination of corporate social responsibility marketing communications in Mexico and the United States: Strategies for global brands. *Journal of International Marketing*, 19(2), 30–44.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3), 268–295. <https://doi.org/10.1177/000765039903800303>.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13. <https://doi.org/10.1002/csr.132>.
- Dawkins, C. E., Jamali, D., Karam, C., Lin, L., & Zhao, J. (2016). Corporate social responsibility and job choice intentions. *Business & Society*, 55(6), 854–888. <https://doi.org/10.1177/0007650314564783>.
- Gallén, M. L., & Peraíta, C. (2018). The effects of national culture on corporate social responsibility disclosure: A cross-country comparison. *Applied Economics*, 50(27), 2967–2979. <https://doi.org/10.1080/00036846.2017.1412082>.
- Habisch, A. (2003). *Corporate Citizenship: Gesellschaftliches Engagement von Unternehmen in Deutschland*. Unternehmen und Gesellschaft. Berlin: Springer.
- Halkos, G., & Skouloudis, A. (2016). National CSR and institutional conditions: An exploratory study. *Journal of Cleaner Production*, 139, 1150–1156. <https://doi.org/10.1016/j.jclepro.2016.07.047>.
- Hemingway, C. A., & MacLagan, P. W. (2004). Managers' personal values as drivers of corporate social responsibility. *Journal of Business Ethics*, 50(1), 33–44.
- Ho, F. N., Wang, H.-M. D., & Vitell, S. J. (2012). A global analysis of corporate social performance: The effects of cultural and geographic environments. *Journal of Business Ethics*, 107(4), 423–433. <https://doi.org/10.1007/s10551-011-1047-y>.
- Hofstede, G. (2005). Culture's consequences: international differences in work-related values. (Abridged ed., 20. print) (Cross-cultural research and methodology series, Vol. 5) Newbury Park: Sage.
- Idowu, S. O., Schmidpeter, R., & Fifka, M. S. (Eds.). (2015). *CSR, Sustainability, ethics & governance. Corporate social responsibility in Europe: United in sustainable diversity*. Cham: Springer.
- Jurgens, M., Berthon, P., Papania, L., & Shabbir, H. A. (2010). Stakeholder theory and practice in Europe and North America: The key to success lies in a marketing approach. *Industrial Marketing Management*, 39(5), 769–775. <https://doi.org/10.1016/j.indmarman.2010.02.016>.
- Karaosman, H., Morales-Alonso, G., & Grijalvo, M. (2015). Consumers responses to CSR in a cross-cultural setting. *Cogent Business & Management*, 2(1), 119. <https://doi.org/10.1080/23311975.2015.1052916>.
- Maignan, I. (2001). Consumers' perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of Business Ethics*, 30(1), 57–72. <https://doi.org/10.1023/A:1006433928640>.
- Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424. <https://doi.org/10.5465/amr.2008.31193458>.
- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Prahalad, C. K., & Hart, S. L. (2002). The fortune at the bottom of the pyramid. *Strategy and Business*, 26, 1–15. <https://doi.org/10.19177/reen.v1e220081-23>.
- Ringov, D., & Zollo, M. (2007). The impact of national culture on corporate social performance. *Corporate Governance: The International Journal of Business in Society*, 7(4), 476–485. <https://doi.org/10.1108/14720700710820551>.
- Singh, J., de los Sanchez, S., del Mar Garcia, M., & del Bosque, I. R. (2008). Understanding corporate social responsibility and product perceptions in consumer markets: A cross-cultural evaluation. *Journal of Business Ethics*, 80(3), 597–611. <https://doi.org/10.1007/s10551-007-9457-6>.
- Visser, W. (2009). Corporate social responsibility in developing countries. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford: Oxford University Press.
- Waldman, D. A., Sully de Luque, M., Washburn, N., House, R. J., Adetoun, B., Barrasa, A., ... Wilderom, C. P. M. (2006). Cultural and leadership predictors of corporate social responsibility values of top management: A GLOBE study of 15 countries. *Journal of International Business Studies*, 37(6), 823–837. <https://doi.org/10.1057/palgrave.jibs.8400230>.
- Williams, C. A., & Aguilera, R. V. (2009). Corporate social responsibility in a comparative perspective. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford: Oxford University Press.

Cross-cultural Orientations Toward CSR

- [Cross-Cultural Orientations and CSR](#)
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Cross-cultural Perceptions of CSR

- [Cross-Cultural Orientations and CSR](#)
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Cross-national Differences in Government Involvement in CSR

- [Cross-Cultural Orientations and CSR](#)
-

Cross-national Value Chains

- [Global Value Chains](#)
-

CSR

- [Medicine and CSR](#)
 - [Social License to Operate](#)
 - [Social Responsibility According to ISO 26000](#)
-

CSR 1.0/2.0/3.0

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Synonyms

[Charitable CSR](#); [CSR Modes](#); [Defensive CSR](#); [Promotional CSR](#); [Strategic CSR](#); [Systemic CSR](#)

Description

Over the last six decades, corporate social responsibility has evolved significantly from simple philanthropy and ad hoc programs toward broader, integrated strategies and innovative business models. One influential model has been developed by Wayne Visser. Visser (2012a) presented corporate social responsibility development in five overlapping ages with the first four comprising CSR 1.0 and the fifth, being CSR 2.0. The five ages are (1) age of greed with defensive CSR; (2) age of philanthropy with charitable CSR; (3) age of marketing with promotional CSR; (4) age of management and strategic CSR; (5) age of responsibility and systemic CSR. In the age of responsibility and systemic CSR, CSR shifts from classic corporate social responsibility (CSR 1.0) toward an interactive, stakeholder-driven, and systemic approach of corporate sustainability and responsibility (CSR 2.0). The new CSR 2.0 model constitutes a reorientation of the purpose of business, shifting from serving shareholders toward serving society through the provision of products and services that enhance social welfare (Visser 2010). As such, it embraces **responsible capitalism**'s principles: productive investment (in opposition to financial speculation); long termism; transparency; full-cost accounting (internalization of externalities); inclusion (shared value creation and business at bottom of the pyramid – see ► [“Base of the Pyramid”](#)). Subsequent models have classified CSR's ages as CSR 1.0, CSR 2.0, and CSR 3.0.

CSR 1.0

The classic notion of corporate social responsibility, Visser argued, developed throughout four ages. First, the age of greed was characterized by its absolute dedication to the primacy of shareholder interest and trust in the “invisible hand” of the market. In this age, **CSR** is best described as **defensive or coerced** (Visser 2012b). Social and environmental initiatives are aimed purely at keeping civil pressure down and are undertaken only if and when it can be shown that shareholder value will be protected or promoted as a result

(Fleming and Jones 2013). Social and environmental programs are also harnessed in order to reduce political costs, avoid taxes and fees, and help a company to obtain certain benefits from the government and justify profits (Frias-Aceituno et al. 2014). The first age's ad hoc interventions are seen as a method to fend off regulation (Mullerat 2010, pp. 448–449) or avoid costly repercussion such as fines, lawsuits, consumer boycotts, and related decreases in sales (Husted and Salazar 2006).

In the second age, the age of philanthropy, there is a social expectation that business should give back to society and that rich should help poor (Visser 2012b). In other words, there was presupposition that wealth generation is inherently related with negative impacts on society and so should be recompensed. Thus, socially responsible activities need not be related to the core business strategy – they could focus on “altruistic” giving back to the society or compensating for negative impacts. In this age, there was no focus on attempts to minimize those impacts or change the very nature of business. This **charitable CSR**, of the philanthropy age, was limited to support of various social and environmental causes through donations and sponsorships. CSR was understood as a way in which the company redistributes value, rather than generates it, and was perceived as a cost or “as an ‘add-on’ luxury that can be only afforded by the most successful businesses” (Freeman and McVea 2001).

Third, in the age of marketing, CSR used to put a strong emphasis on the reputation and brand building. CSR is viewed as a PR tool (Visser 2012b). Such **promotional CSR** is rarely related to the core business strategy. Rather, the social initiatives are usually created by marketing or PR units and limited to cosmetic actions and glossy CSR reports (Porter and Kramer 2006). The basic and main objective of the business, as Professor Yunus (2007:16) argues, is to generate as much profit as possible regardless of the impact it might have on society and the environment. If the impact on society and the environment turns out to be sufficiently negative to attract undue attention, then management might decide to donate some portion of the profits for social

causes, making sure that their generosity attracts appropriate media attention. CSR has simply become a marketing and branding tool (Fleming and Jones 2013), often as greenwash (see ► “Greenwashing”) (Faust 2006).

Finally, in the age of management, social and environmental activities are related to the company's core business through adherence to CSR codes and implementation of adequate CSR management systems with policy development, goal setting, implementation, auditing, and reporting (Visser 2012b). CSR of this age includes strategic CSR (see ► “Strategic Management and CSR”) referring to instrumental premises of stakeholder theory (see ► “Stakeholder Theory”) (Donaldson and Preston 1995), assuming that “to maximize shareholder value over an uncertain time frame, managers ought to pay attention to key stakeholder relationships” (Freeman 1999).

In the age of management, stakeholder management (see ► “Stakeholder Management”) and CSR are proposed as appropriate alternatives to shareholder primacy. They provide managers with a strategic approach to understand new opportunities, identify risks, and make strategic decisions to exploit the first and minimize the latter. This approach, contrary to the CSR of previous ages, goes beyond cost-perspective and profit redistribution toward building **business case for CSR** (Visser 2012b). Firm voluntarily invests in social and environmental initiatives, but designs them in a way that supports realization of the core business strategy (Husted and Salazar 2006; Lantos 2002). This approach is based on win-win assumptions about business–society relations, neglecting, however, potential conflict of interests. It focuses on incremental improvements related to social and environmental issues that are aligned with business strategy.

Visser's “Curses of CSR 1.0”

Limitations of CSR were identified by Visser as “curses” and assigned to his CSR 1.0. Like other critics of CSR (e.g., Faust 2006; Fleming and Jones 2013; Yunus 2007), Visser argued that although the concept of CSR had many positive

social and environmental impacts, it failed to identify and address the root causes of the world's most serious problems. Failure of CSR 1.0, therefore, was identified by Visser as related to three factors, his **Triple Curses of Modern CSR** (Visser 2010). A brief description of each follows.

The Curse of Incremental CSR

Management systems harnessed for CSR strategies are rooted in the total quality management concept basing on the idea of incremental continuous improvement. "The incremental approach to CSR, while replete with evidence of micro-scale, gradual improvements, has completely and utterly failed to make any impact on the massive sustainability crises that we face, many of which are getting worse at a pace that far outstrips any futile CSR-led attempts at amelioration" (Visser 2010, p. 2).

The Curse of Peripheral CSR

In this situation, Visser argues that CSR is largely limited to the biggest, highly visible companies in developed countries or their subsidiaries (Visser 2012b). What is more, in this context, CSR plays a peripheral role in those corporations (Visser 2010). In most cases, organizational structures like CSR manager and CSR departments are created to address social expectations but are decoupled from the actual business activity (Meyer and Rowan 1977). These structures are peripheral, and the business still remains focused on shareholder value maximization and short-term financial measures (Visser 2010). CSR practices are not embedded in the firm's DNA, but remain as an "add-on" to the **"business as usual."**

The Curse of Uneconomic CSR

Visser argued that empirical research provides mixed results concerning the relation between CSR and corporate performance (Margolis and Walsh 2003; Orlitzky et al. 2003), making the core, business case, argument for CSR 1.0 nonsense (Visser 2012b). Addressing sustainability challenges, he argued, requires strategic change and substantial long-term investment that may be "economically rational over a generation or two."

This rationality, however, is not rewarded by financial markets that remain focused on short-term gains (Visser 2010).

Accordingly, Visser believed he could discern a new, emerging type of CSR which was termed CSR 2.0.

CSR 2.0

CSR 2.0 or **Corporate Sustainability and Responsibility** model has emerged as an answer to the identified shortcomings of CSR 1.0. The final age of the CSR evolution, argued Visser, is the age of responsibility. This new age drives new, systemic approach to business social and environmental practices. CSR 2.0 "focuses on identifying and tackling the root causes of company's present unsustainability and irresponsibility, typically through innovating business models, revolutionizing their processes, products and services and lobbying for progressive national and international policies" (Visser 2012a, p. 19). Within this approach, business and social goals are tied up with each other, and CSR becomes a defining element for company's business model (Boons and Lüdeke-Freund 2013). Making a positive contribution to society becomes a new business philosophy (Visser 2010). Firm integrates its core business strategy and customer value proposition with social and environmental issues (Becker-Olsen 2014, p. 169).

The underlying concept of CSR 2.0 was based on the Web 2.0 revolution. It was a metaphor using the emergence of social media networks, user-generated content, and open source approaches for the web which Visser believed could be applied to CSR (Visser 2012b). With the advent of Web 2.0, stakeholders became more connected, informed, and engaged in collaborative projects. In the field of business endeavors, broad social collaboration led to the withdrawal of the social license to operate granted to CSR 1.0 companies, forcing them to shift toward more systematic solutions integrated into the business DNA.

CSR 2.0, argued Visser, can be defined by five principles: (1) Creativity (C), (2) Scalability (S),

(3) Responsiveness (R), (4) Glocality (2); (5) Circularity (0).

Principle of Creativity

CSR 2.0 is driven by creativity and innovation. The key to achieving the needed, strategic corporate sustainability that could address multifaceted global social and environmental problems is innovation, particularly social innovation (Osburg 2013). In order to identify and tackle the root causes of their present irresponsibility and meaningfully contribute to sustainable development, while achieving integration with economic goals, companies need to revolutionize their processes, products, and services (Visser and Kymal 2014), as well as radically innovate their business models (Boons and Lüdeke-Freund 2013; Schaltegger et al. 2012; Tukker et al. 2008; Yang et al. 2017).

Principle of Scalability

The scale and urgency of global problems require scalable solutions (Visser 2010) that could move sustainability beyond niche markets of premium-priced products to the mainstream. For instance, companies may harness choice editing, i.e., an active process of controlling or limiting the choices available to consumers, in order to promote sustainable consumption. Another scalable strategy is the Long Tail of CSR aimed at extending the reach of CSR and improving its ability to address specific problems. The Long Tail requires: (1) democratization of CSR production tools by moving CSR beyond single department to the whole organization and beyond big multinationals to national companies and SMEs; (2) democratization of CSR distribution through employee participation, crowdsourcing, support of social entrepreneurs, and bottom of the pyramid strategies (see ► “Base of the Pyramid”); (3) connecting CSR supply and demand through cross-sector partnerships and stakeholder involvement (Visser 2012b).

Principle of Responsiveness

“CSR 2.0 requires uncomfortable, transformative responsiveness, which questions whether the industry or the business model itself is part of the solution or part of the problem”

(Visser 2010, p. 4). Responsiveness 2.0 includes positive and constructive lobbying, engagement in social media, stakeholder participation, and cross-sector partnerships, as well as transparency based on knowledge sharing (Visser 2012b).

Principle of Glocality

In the age of responsibility, companies need to act according to the “think global, act local” idea. CSR initiatives need to recognize local contexts and offer tailored solutions without sacrificing universal principles (Visser 2010).

Principle of Circularity

Circularity of CSR 2.0 refers to the Cradle-to-Cradle (see ► “Cradle to Cradle”) design framework characterized by three principles derived from nature: (1) everything is a resource for something else; (2) use of clean and renewable energy; (3) celebration of diversity (Visser 2012b). The concept is not limited to the environment, but focuses also on business’s role in feeding and replenishing social and human capital. “CSR 2.0 raises the importance of meaning in work and life to equal status alongside ecological integrity and financial viability” (Visser 2010, p. 6).

CSR 3.0

Some authors (McElhaney 2011; Schneider 2012) propose three-stage model describing the evolution of CSR. CSR 1.0 notion describes philanthropic unstructured activities with limited social impact and no business benefits. This stage corresponds with the CSR modes typical for the first three ages described by Visser. CSR programs without connection to the core business are often driven by marketing/PR and aimed at legitimizing business activity. CSR 2.0 is based on a strategic business case approach. CSR is viewed as a strategic management concept generating value added for the company. Although it is related to the core business strategy, it creates merely incremental changes and improvements. Finally, CSR 3.0 illustrates pro-active approach based on systemic, organization-wide changes, dialogue, and cooperation with and between external

stakeholders. CSR is viewed as an innovative business strategy that aims at **shared value** creation (see ► “Porter and Kramer’s (2006) “Shared Value””).

Summary

CSR 1.0/2.0/3.0 describes the evolution of the CSR concept over the last six decades. CSR has evolved from defensive or philanthropic, ad hoc initiatives (CSR 1.0), through strategic business case-driven programs (CSR 2.0) to systemic innovation-driven solutions based on integrated approach to business and society relations (CSR 3.0).

Cross-References

- Altruistic CSR
- Corporate Philanthropy
- CSR: Evolution of Concept
- Strategic CSR

References

- Becker-Olsen, K. L. (2014). The CSR conundrum: Understanding consumer response to corporate social responsibility. In R. L. Hill & R. Langan (Eds.), *Handbook of research on marketing and corporate social responsibility* (pp. 149–174). Cheltenham: Edward Elgar Publishing.
- Boons, F. M., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65–91.
- Faust, C. (2006). *What's wrong with corporate social responsibility?* Oxford: Corporate Watch.
- Fleming, P., & Jones, M. T. (2013). *The end of corporate social responsibility. Crisis and critique*. Sage Publications.
- Freeman, R. E. (1999). Divergent stakeholder theory. *The Academy of Management Review*, 24(2), 233–236.
- Freeman, R. E., & McVea, J. (2001). *A Stakeholder approach to strategic management*. Retrieved June 25, 2015, from <http://bit.ly/1pr95x3>
- Frias-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23(1), 56–72. <https://doi.org/10.1002/bse.1765>.
- Husted, B. W., & Salazar, J. de J. (2006). Taking Friedman seriously: Maximizing profits and social performance. *Journal of Management Studies*, 43(1), 75–91.
- Lantos, G. P. (2002). The ethicality of altruistic corporate social responsibility. *Journal of Consumer Marketing*, 19(3), 205–232. <https://doi.org/10.1108/07363760210426049>.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48, 268–305.
- McElhaney, K. (2011). CSR 3.0. TEDxPresidio.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony on JSTOR. *American Journal of Sociology*, 83(2), 340–363.
- Mullerat, R. (2010). *International corporate social responsibility: The role of corporations in the economic order of the 21st century*. Alphen aan den Rijn: Kluwer Law International.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441.
- Osburg, T. (2013). Social innovation to drive corporate sustainability. In T. Osburg & R. Schmidpeter (Eds.), *Social innovation. Solutions for a sustainable future* (pp. 13–22). Berlin Heidelberg. https://doi.org/10.1007/978-3-642-36540-9_2.
- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*. December.
- Schaltegger, S., Freund, F. L., & Hansen, E. G. (2012). Business cases for sustainability: The role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development*, 6(2), 95. <https://doi.org/10.1504/IJISD.2012.046944>.
- Schneider, A. (2012). Reifegradmodell CSR – eine Begriffsklärung und -abgrenzung. In R. Schmidpeter & A. Schneider (Eds.), *Corporate social responsibility. Verantwortungsvolle Unternehmensführung in Theorie und praxis* (pp. 18–38). Berlin, Heidelberg: Springer-Verlag.
- Tukker, A., Emmert, S., Charter, M., . . . Lahlou, S. (2008). Fostering change to sustainable consumption and production: An evidence based view. *Journal of Cleaner Production*, 16(11), 1218–1225. <https://doi.org/10.1016/J.JCLEPRO.2007.08.015>.
- Visser, W. (2010). The rise and fall of CSR: Shapeshifting from CSR 1.0 to CSR 2.0. *CSR International Paper Series*, 2.
- Visser, W. (2012a). *Future trends in CSR: The next 10 years*. Retrieved June 22, 2014, from <http://www.>

waynevisser.com/wp-content/uploads/2012/12/inspiration_csr_trends_wvisser.pdf

- Visser, W. (2012b). *The age of responsibility: CSR 2.0 and the new DNA of business*. London: Willey.
- Visser, W., & Kymal, C. (2014). Creating integrated value: Beyond CSR and CIV to CIV. *Kaleidoscope Futures Paper Series*, 3.
- Yang, M., Evans, S., Vladimirova, D., & Rana, P. (2017). Value uncaptured perspective for sustainable business model innovation. *Journal of Cleaner Production*, 140, 1794–1804. <https://doi.org/10.1016/J.JCLEPRO.2016.07.102>.
- Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. New York: PublicAffairs.

CSR Accountability

► CSR Communication

CSR Advertisements

► Corporate Social Responsibility Disclosure

CSR and Communication

► CSR and Media

CSR and Data Protection

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Synonyms

Data care; Information protection; Information security; Preventing information misuse

Definition

Data represent facts and concepts in a formalized manner suitable for processing and interpretation by humans or automatically. Data protection refers to the prevention of data misuse, particularly information about individuals (Toker 2015, p. 169).

Corporate Social Responsibility (CSR) is a business-related terminology that encourages companies to take responsibility for the impact of their activities on various stakeholders and the society at large. Data and information are both valuable content in this regard while data protection and privacy are controversial subjects in the CSR agenda.

Introduction

The various definitions of data mostly describe it as “sensory stimuli that we perceive through our senses,” “representing unstructured facts,” “facts about unidentified entities” (Bercic and George 2009, p. 192), “collected facts from observations or recordings about measurable events, objects or people,” “recording particular instances of reality” (Checkland and Holwell 1998, p. 171). According to these definitions, data acquire meaning only when processed by a human recipient, after which they are called information. Data is thereby “transformed to communicate meaning or knowledge, ideas or conclusions” (Davis and Olsen 1985; Senn 1990, p. 35).

Today, enormous amounts of data, known as “big data,” record details of individual events and objects. The word “data refers to the information for computer processing: for example texts, numbers, sounds, images which is suitable to be processed” (Toker 2013, p. 752). In this context, data protection refers to protecting unauthorized access to available data (Toker 2015). It protects people whose personal details are held on computers against improper use or storage of that data.

The second term, Corporate Social Responsibility (CSR), refers to a voluntary business movement that encourages companies to behave responsibly regarding the impact of their activities

on different stakeholders, such as customers, employees, communities, and the environment. It is also defined as “the continuing commitment by business to behave ethically and contribute to economic development, while improving the quality of life of the workforce and their families, as well as the local community and society at large” (World Business Council for Sustainable Development 2002). The EU’s definition also emphasizes the voluntary commitment of business in CSR, as “a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (EU 2002). Since the 1960s, CSR has been frequently referred to in both business and scholarly debates.

Recent CSR Action: Protection of Data

Faced with ever-increasing global problems, such as climate change, child labor, genetically modified foods, unsustainable forestry, and ozone depletion, CSR has emerged to describe the interest of the corporate world in these global challenges. Although there is no single definition of CSR, it has been described as the voluntary interaction of businesses with social and environmental concerns in their operations to maintain their ethical image and reputation. It has expanded rapidly so that Fortune Global 500 firms are currently spending more than \$20 billion a year on their CSR initiatives (Sutherland 2018). Accordingly, the amount of CSR information provided by companies grows rapidly every year (Perez et al. 2018), with more than 80% of Fortune 500 companies including CSR reports on their websites to inform their stakeholders about their CSR commitment and promote their public image (Lii and Lee 2012). The phenomenon has appeared on the boardroom agenda and is a mainstream practice in many organizations.

Another important contribution to society is the fast-growing use and demand of technology, which has opened up businesses to public scrutiny and empowered individuals as customers and concerned citizens. Today, internet and online

tools are an everyday necessity, such that the former head of the UN’s global telecommunications regulator has claimed that governments should regard the internet as basic infrastructure – just like roads, waste, and water. Global public opinion seems to overwhelmingly agree. The natural side effect of these technological developments is that our personal lives have become digitally available to search while data is much more personal and valuable. In line with this digitalization, Fortune 100 firms have embraced privacy as part of their CSR over the last 3 years. Events and crises have become increasingly related with data protection, and mainstream discourse about the role corporations should play in advancing and addressing social and global challenges. The recent data protection violations involving Facebook and Cambridge Analytica are an important example of how data has become “the new corporate currency” of the information age. Thus, data protection is an important challenge of the twenty-first century. Large amounts of customer-related data are collected and stored for marketing and other purposes to increase business revenue (Matwyshyn 2010), so ensuring information security and finding data protection solutions is for now an essential part of business CSR actions.

A general agreement in the field is that data protection is itself a new form of CSR and therefore consumer data protection and privacy is a natural part of the agenda for the business today. After the recent Facebook scandals, more people have understood the manipulative power of technology companies over their political and everyday lives. Accordingly, one strong monitoring actor, the Global Reporting Initiative (GRI), has added a new section regarding consumer privacy under product responsibility in its G4 CSR reporting schema. Similarly, the OECD Guidelines for Multinational Enterprises (MNE) also direct MNEs to take measures to secure personal data and respect consumer privacy. Through the CSR philosophy, corporations need to accept data protection and prioritize it as much as product quality or financial sustainability. Companies like Toshiba are already following suit by including data protection as a section in their annual

CSR reports (Toshiba 2014) while also adding information regarding the company's personal data protection policy and its management standards. All Toshiba managers receive information security education through its Privacy Mark Certification. In sum, the company is approaching data protection as a core business strategy and CSR initiative rather than as just an information security issue.

Various laws and regulations also safeguard privacy and protect data, which have resulted in major information companies facing fines in Europe. In 2018, the EU introduced a new law on data protection and privacy, called the General Data Protection Regulation (GDPR). The GDPR is designed to increase citizen privacy and confidentiality, and support their right to better control their personal information, including medical records, bank statements, and Internet searches (EU GDPR 2018). This recent law has greatly affected the privacy practices of companies globally while also shaping corporate responsibility programs. The law provides a right to receive clear and understandable information about who is processing personal data, what data, and why they are processing it (EU GDPR 2018). Particularly innovative, it gives the right to request one service provider to transfer your personal data to another service provider when switching internet social networks or cloud providers. Meanwhile, it gives a person the right "to be forgotten" for the first time. Individuals can now ask companies to delete their personal data as there is no legitimate reason for keeping it. Moreover, companies will need customer consent to process personal data, for which they will have to ask the customer while clearly indicating what use will be made of such personal data.

Privacy and data protection are most often associated with compliance with the relevant legislation. However, by promoting data protection, CSR could be a powerful tool to establish a business environment that respects privacy. A company that includes privacy and consumer data protection in its CSR agenda is expected to practice the following (Makarovic 2016):

- Develop a clear, visible, and comprehensive privacy policy for all consumers and stakeholders.
- Give consumers the opportunity to opt out of supplying and clearly explain the company's uses of their personal data.
- Integrate data protection management into the company's high-level decision-making processes by appointing a Data Protection Officer before using new data processing methods such as Big Data analysis.

Summary

The world faces diverse social issues attendant with growing populations, aging societies, fast-growing demands for energy, shortages of national resources, and global environmental problems. CSR is one business response to these challenges. In the new era, data protection has become an integral part of consumer/customer issues. Planet, People, Profit, and Protection (of personal data) is becoming a new part of CSR business language. Given all the reporting required for CSR, data protection seems the next logical step. Although views differ on the exact meaning of CSR, it is generally accepted that it entails going beyond what is legally required.

Today, consumers no longer rely on government institutions to legislate to safeguard data privacy. A responsible corporate policy can allow better and more sustainable data processing, thereby furthering the potential of data to improve human existence. There is a growing view that business needs to integrate a corporate commitment to privacy within the framework of CSR, and include the issue in CSR reports. To achieve socially responsible data protection, a business can follow the following guides:

- Embed and prioritize data protection and security in company management and processes.
- Be transparent to all stakeholders about the collection and the use of their data.
- Balance profit and citizens' benefits.
- Publish relevant statistics from anonymized data to improve society.

- Allocate revenue to awareness-raising activities to counter the negative effects of a data-centric society.

Organizations face two powerful forces, given recent trends and the EU's GDPR: first, there is the growing global pressure of regulatory requirements regarding data protection; second, customers and other stakeholders are increasingly aware about their privacy rights, which will encourage them to take action in their relationships with businesses.

Cross-References

- Data Care
- Information Misuse
- Information Security

References

- Balboni, P. (2018, May 21). *Data protection as a corporate social responsibility*. <https://www.paolobalboni.eu/index.php/2018/05/21/data-protection-as-a-corporate-social-responsibility/>. Accessed 15 Mar 2019.
- Bercic, B., & George, C. (2009). Investigating the legal protection of data, information and knowledge under the EU data protection regime. *International Review of Law, Computers & Technology*, 23, 189–201.
- Checkland, P. B., & Holwell, S. (1998). *Information, systems and information systems*. Wiley.
- Davis, G., & Olsen, M. (1985). *Management information systems: Conceptual foundations, structure and development*. McGraw-Hill.
- EU General Data Protection Regulation (EU GDPR). (2018). *EU data protection reform: Better data protection rights for European citizens*. European Commission. https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-citizens_en.pdf. Accessed 5 Mar 2019.
- European Union (EU). (2002). *Communication from the commission concerning corporate social responsibility: A business contribution to sustainable development*. Commission of the European Communities. COM(2002) 347 final. Brussels.
- Lii, Y., & Lee, M. (2012). Doing right leads to doing well: When the type of CSR and reputation interact to affect consumer evaluations of the firm. *Journal of Business Ethics*, 105, 69–81.
- Makarovic, B. (2016, August 18). *Privacy: Corporate social responsibility or compliance?* <https://aphaia.co.uk/en/2016/08/18/privacy-corporate-social-responsibility-compliance/>. Accessed 4 Apr 2020.
- Matwyshyn, M. A. (2010). CSR and the corporate cyborg: Ethical corporate information security practices. *Journal of Business Ethics*, 88, 579–594.
- Perez, A., De Los Salmones, M. M., & Lopez-Gutierrez, C. (2018). Corporate social responsibility in the media: A content analysis of business news in Spain. *Journal of Media Ethics*, 33(2), 66–79.
- Senn, J. (1990). *Information systems in management*. Wadsworth Publishing.
- Sutherland. (2018, 12 April). *Why protecting data is critical for CSR moving forward*. Blog. <https://www.sutherlandglobal.com/our-thinking/blog-protecting-user-data-critical-csr>. Accessed 10 May 2019.
- Toker, K. A. (2013). CSR and data protection. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 752–759). Springer.
- Toker, K. A. (2015). Data protection. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility: CSR, sustainability, ethics and governance* (pp. 169–170). Springer.
- Toshiba CSR Report. (2014, 2018). http://www.toshiba.co.jp/csr/en/report/pdf/report14_all.pdf and http://www.toshiba.co.jp/csr/en/report/pdf/report18_en.pdf. Accessed 15 Mar 2019.
- World Business Council for Sustainable Development. (2002). *The business case for sustainable development*. Report. <http://www.wbcsd.org/web/publications/business-case.pdf>. Accessed 11 Nov 2018.

CSR and Mass Media

- CSR and Media

CSR and Media

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Synonyms

CSR and communication; CSR and mass media; CSR and media relations; CSR and new media; CSR and social media; CSR communication strategy; Integrated CSR communication

Definition

In today's world, relations between business, state, and society are changing. CSR and the media are the main driver, an important player and sometimes an undeniable barrier to this. Both traditional and social media are crucial for public perceptions about what CSR is, what it should be, and how business responds to outside demands. Companies depend on the media for their CSR activities, with social media, more than traditional media, becoming a bulletin board for trade and commerce in the future. The media can make CSR newsworthy within an effective communication strategy.

Introduction

The media or mass media refers to various written and visual communication vehicles, ranging from newspapers to radio, television, music, and social media. Mass media production operates on a large scale to reach everyone in a society through television images and radio shows, newspaper articles, magazine ads, social media shares, YouTube videos, and Twitter texts. The Canadian communication theoretician Marshall McLuhan described our relationship with the media as that of fish who remain unaware that they are surrounded by water. The main goal for readers and audiences who consume media is to gain information and entertainment, so the media foremost inform us, entertain us, surprise us, or lead us. In the twenty-first century, "we can easily claim that the media is a central cultural phenomenon of our society" (Luhmann 2000, p. 1) because what we know about society we learn through the mass media. As a powerful agenda setter, it creates an arena for making political, social, cultural, and economic actors visible in public; it defines our everyday lives.

Faced with ever-increasing global problems, such as climate change, child labor, genetically modified foods, unsustainable forestry, and ozone depletion, CSR has emerged to describe the interest of the corporate world in these global challenges. Although there is no single, global

definition of CSR, it has been described as a voluntary interaction: "A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (EU Commission Green Paper 2001). These changes in business decision-making, which gives central importance to "ethical values, compliance with legal requirements, and respect for people, communities and the environment" (World Business Council for Sustainable Development 2002, p. 1), are a key feature of CSR today. CSR is a socially constructed phenomenon (Turker 2018, p. 5), which has been accepted as a responsibility of enterprises regarding their impacts on society (EC 2012).

History of CSR and Media Relations

The relation of business with the media regarding CSR dates back to the 1960s with Amnesty International and the World Wildlife Fund's (WWF) efforts and Rachel Carson's book *Silent Spring* (Griswold 2012). According to Hamilton, only a few articles in the New York Times referred to CSR from 1900 through the 1960s (Hamilton 2003, p. 5). However, its use exploded after awareness-raising activities in the 1970s, with stories focusing on pollution and shareholder actions around CSR debates. Thus, this era was characterized by "wild interest" in CSR. During the 1970s, CSR became a routine concept regarding the expected costs of doing business, in an era of "mainstreaming CSR." In parallel with the growing number of social and environmental problems, business organizations have started to adopt more sustainable and socially responsible ways of doing business. Consequently, CSR and sustainable development issues have become part of the regular media agenda since the 1990s. During the late 1990s, new concepts were added, such as global social investment, corporate reputation, and corporate social policy. Furthermore, media coverage of major conferences, such as the 1992 Earth Summit, the 2002 World Economic Forum's New York event, and the World Summit on Sustainable Development in Johannesburg, all helped

to increase media coverage of CSR issues. These international conferences also set the agenda for CSR coverage. It became no longer enough for corporations to do their bit for social causes. More importantly, they had to also share it with the general audience and become an example for others to follow (Toker and Tat 2018, p. 902). Indeed, the media have a huge role to play in how CSR is published or broadcast to the world at large through their agenda-setting function. Thus, the new era has created extensive media interest in and coverage of CSR-related topics (Matten and Moon 2004, p. 324). Meanwhile, we know there is a growing CSR-related interest in business and academia in North America and Europe (Carroll 1999; Wolf 2002; Matten and Moon 2004; Küskü and Zarkada 2004; Toker et al. 2016; Turker 2018).

Variables in CSR Media Relations

Today, society's increasing awareness of social responsibility has encouraged business CSR activities. The foremost reason for increasing media coverage of CSR is the importance of the topic for society at large. The increasing awareness of society regarding global problems and companies' role and responsibility to solve them have forced companies to be more active in CSR projects and programs. According to one survey in 2002, 80% of people thought business enterprises had a moral responsibility regarding society (MORI 2003). Ten years later, the public similarly emphasized honesty, integrity, and reputation as the three fundamentals to judge a company (IPSOS MORI Reputation Center 2012). Other studies have found that consumer awareness and knowledge of CSR activities are positively connected to their purchase intentions (Lee and Shin 2010; Jablonkai 2014, p. 214). Although society's CSR-related information needs also vary from country to country, there is clearly a general information desire. Americans are ready to hear about all the CSR activities of companies as frequently as possible, while 51% of Nordic citizens prefer minimal releases on websites (Jablonkai 2014, p. 215). A careful analysis of

target stakeholders in every country clearly indicates that the public want CSR-related content, making the media an important player in CSR communication.

The importance of CSR for different stakeholders, such as consumers, employees, investors, and ordinary people, is growing. CSR has been accepted as a civic responsibility or even a taken-for-granted business behavior. The media is the most important stakeholder for developing a company's corporate visibility and reputation. A company's media visibility makes information about the company accessible to the wider society. For example, firms with the highest ranking in the Corporate Reputation Index published by Fortune are those with more visibility in the media (Toker 2013).

Beside their face-to-face communication, more and more people use the media as a way of finding out what is happening around them (Baskin et al. 1997, p. 197). The media also have a significant influence on public opinion in the context of CSR (Carroll and McCombs 2003). This influence on the salience of CSR issues and the public agenda comprise the agenda-setting role of the news media (McCombs and Reynolds 2002). Agenda-setting theory emphasizes that the prominence of elements in the news influences their salience in the public agenda (Carroll and McCombs 2003). Thus, as an important stakeholder, the media starts public discussion and affects business performance, which helps to shape corporate reputation. The media can make CSR newsworthy provided the company has an effective CSR communication strategy.

Although the media has an important place in CSR communication, CSR and media relations also face some criticisms. Due to the sensitive nature of CSR communications, CSR initiatives clearly differentiate themselves from advertising in order to avoid being perceived as a corporate image tactic and PR tool. Consumers even prefer CSR initiatives to be communicated through "silent" channels, such as annual reports and websites (Pomering and Dolnicar 2009).

Beside these criticisms of companies' CSR communication strategies, some researchers criticize the limited or negative coverage of corporate

responsibility in the media as reflecting media hostility or ignorance about business. In fact, the problem is more complicated than accusing the actors in the process. Rather, both business and the media have to work harder to find ways to explain responsible business and corporate sustainability issues that are relevant to readers.

The main accusation regarding the media's treatment of CSR issues is that they cover the topic mostly as community involvement and charitable giving by companies. Of course, there are some notable exceptions, such as the serious, broad, and distinctive focus on the topic by the *Financial Times* and *New York Times International Edition*, regarding Ethical Corporation, Corporate Citizenship Briefing, Ethical Performance, CSRWire, etc. Another criticism is that the media gives preferential treatment to companies that are already known as CSR pioneers, such as The Body Shop and Ben & Jerry's, or only focuses on the mishaps of major companies, such as Shell (marine ecology, human rights), Norsk Hydro (environmental contamination), Mitsubishi Motors (sexual harassment), Texaco (racial discrimination), Nike (child labor), ExxonMobil (climate change), or Volkswagen (environmental corruption) (Good News & Bad 2002, p. 22).

Summary

The media's key characteristic is the wide and anonymous production for the masses, which reaches nearly everyone in society. The media so fully saturate our everyday lives that we are often unconscious of their presence and their level of influence. The media is also important for the social, economic, and political actors by creating an arena to make them publically visible. In short, what we know about society and the world we learn through the mass media's lenses. Accordingly, Mark-Herbert and von Schantz (2007, p. 6) claim that the "media deserves particular attention. What is portrayed in media will influence internal as well as other external stakeholders that in their own turn may affect others. Their role can be seen as ambassadors of message and opinions."

More and more people use the media to identify changes around them. Corporations today lean on social responsibility to "enhance overall corporate image, improve relations with political stakeholders, and foster brand recognition for corporate goods and services, as well as benevolent motivations of management" (Leisinger 2007, p. 326). A number of start-ups have incorporated CSR as the engine that powers their business model. For example, TOMS is perhaps best known as the one-for-one company: for each pair of shoes it sells, it donates one pair to someone in need. The company benefited in its early days from incredible media visibility, appearing in a 2006 issue of Vogue magazine, which helped greatly expand the company's footprint and profitability (Vogue 2006, p. 248). Thus, the media are the most essential element of strategic CSR communication today.

In the new era that we are facing, consumers expect businesses to be socially responsible, and they also demand to be informed about the issue. Therefore, strategic communication is essential for company survival. Through CSR activities they can maintain their ethical image and reputation. Accordingly, the amount of CSR information provided by companies grows rapidly every year (Tench et al. 2007; Perez et al. 2018), with more than 80% of Fortune 500 companies including CSR reports on their websites to inform their stakeholders about their CSR commitment and promote their public image (Lii and Lee 2012).

Although the media are important in CSR communication, there are some doubts about CSR and media relations. Media choice and media use for CSR activities can sometimes be perceived as a corporate image tactic and PR tool, rather than reflecting a firm's values and ethical commitments. It is therefore important to highlight the effectiveness of CSR communication efforts. Due to the sensitive nature of CSR communications, CSR initiatives cannot be advertised in the same way as products or services, which creates a much more complex challenge for marketers and advertisers. The border between public relations, advertising, and the real input of corporations in social development is envisioned by media. The question seems to be how the media can contribute to

societal development and successful CSR implementation rather than how to make CSR newsworthy. A successful CSR communication strategy and media relations start with asking what the guidelines are on how to construct, maintain, and develop a genuine CSR program for different types of media companies.

In short, CSR has become an important part of business-society relations with the media as a mediator in this process. Media companies are both carriers and barriers regarding the CSR and social development agendas. Research into news articles is needed to understand the relationship between business and media.

Cross-References

- [Corporate Responsibility](#)
- [Corporate Social Responsibility](#)

References

- Baskin, O., Aronoff, C., & Lattimore, D. (1997). *Public relations: The profession and the practice*. Boston: McGraw Hill.
- Carroll, A. B. (1999). Corporate social responsibility evolution of a definitional construct. *Business & Society*, 38(3), 268–292.
- Carroll, C. E., & McCombs, M. (2003). Agenda-setting effects of business news on the public's images and opinions about major corporations. *Corporate Reputation Review*, 6, 36–46.
- EU Commission Green Paper. (2001). Promoting a European framework for corporate social responsibility, COM (2001) 366 Final.
- European Commission (EC). (2012). A renewed EU strategy 2011–14 for corporate social responsibility. Position Paper, 7 March 2012. https://www.eurocommerce.eu/media/7237/position-csr-renewed_csr_strategy_2011-14-07.03.2012.pdf. Accessed 9 Feb 2018.
- Good news & bad: The media, corporate social responsibility and sustainable development. (2002). Sustainability, Ketchum and the United Nations Environment Programme, UK. Beacon Press.
- Griswold, E. (2012). How 'Silent Spring' ignited the environmental movement. <https://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html>. Accessed 20 July 2018.
- Hamilton, J. T. (2003). Media coverage of corporate social responsibility. The Joan Shorenstein Center on the Press, Politics and Public Policy Working Paper Series, 2003–3, President and Fellows of Harvard College.
- http://shorensteincenter.org/wp-content/uploads/2012/03/2003_03_hamilton.pdf. Accessed 16 Apr 2016.
- IPSOS MORI Reputation Center. (2012). Thinking reputation. *Newsletter*. <http://www.ipsos-mori.com>. Accessed 8 Aug 2015.
- Jablonkai, R. (2014). Communicating corporate social responsibility. In D. Türker, H. Toker, & C. Altuntas (Eds.), *Contemporary issues in corporate social responsibility* (pp. 143–161). Lanham: Lexington Books.
- Küskü, F., & Zarkada-Fraser, A. (2004). An empirical investigation of corporate citizenship in Australia and Turkey. *British Journal of Management*, 15, 57–72.
- Lee, K., & Shin, D. (2010). Consumers' responses to CSR activities: The linkage between increased awareness and purchase intention. *Public Relations Review*, 36, 193–195.
- Leisinger, K. M. (2007). Corporate philanthropy: The 'top of the pyramid'. *Business & Society Review*, 112(3), 315–342.
- Lii, Y., & Lee, M. (2012). Doing right leads to doing well: When the type of CSR and reputation interact to affect consumer evaluations of the firm. *Journal of Business Ethics*, 105, 69–81.
- Luhmann, N. (2000). *The reality of the mass media*. Stanford: Stanford University Press.
- Mark-Herbert, C., & von Schantz, C. (2007). Communicating corporate social responsibility – Brand management. *Electronic Journal of Business Ethics and Organization Studies*, 12(2), 4–11. http://ejbo.jyu.fi/pdf/ejbo_vol12_no2_pages_4-11.pdf. Accessed 10 April 2016.
- Matten, D., & Moon, J. (2004). Corporate social responsibility education in Europe. *Journal of Business Ethics*, 54, 323–337.
- McCombs, M., & Reynolds, A. (2002). News influence on our pictures of the world. In J. Bryant & D. Zillmann (Eds.), *Media effects* (2nd ed., pp. 1–16). Mahwah: Erlbaum.
- MORI. (2003). Corporate social responsibility research: Ethical companies. <http://www.ipsos-mori.com/research/publications/researcharchive/849/Ethical-Companies.aspx>. Accessed 8 Aug 2017.
- Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication: Stakeholder information, response and involvement strategies. *Business Ethics, A European Review*, 15(4), 323–338.
- Perez, A., De Los Salmones, M. M., & Lopez-Gutierrez, C. (2018). Corporate social responsibility in the media: A content analysis of business news in Spain. *Journal of Media Ethics*, 33(2), 66–79.
- Pomeroy, A., & Dolnicar, S. (2009). Assessing the prerequisite of successful CSR implementation: Are consumers aware of CSR initiatives? *Journal of Business Ethics*, 85(2), 285–301.
- Tench, R., Bowd, R., & Jones, B. (2007). Perceptions and perspectives: Corporate social responsibility and the media. *Journal of Communication Management*, 11, 348–370.
- Toker, H. (2013). Media CSR forum. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of*

- corporate social responsibility* (pp. 1643–1650). Berlin/Heidelberg: Springer.
- Toker, H., & Tat, M. (2018). Representation of corporate social responsibility in Turkish newspapers. *E-gifder*, 6 (2), 899–928.
- Toker, H., Turker, D., & Altuntas, C. (2016). Social responsibility education in Turkey. In D. Turker, C. Altuntas Vural, & S. O. Idowu (Eds.), *Social responsibility education across Europe: A comparative approach* (pp. 1–28). Berlin/New York: Springer Publishing.
- Turker, D. (2018). *Managing social responsibility: Functional strategies, decisions and practices*. Cham: Springer.
- Vogue magazine. (2006). Stepping up, issue 196 (10), 248.
- Wolf, M. (2002). Response to confronting the critics. *New Academy Review*, 1(1), 230–237.
- World Business Council for Sustainable Development. (2002). The business case for sustainable development. Report. <http://www.wbcsd.org/web/publications/business-case.pdf>. Accessed 11 Nov 2018.

CSR and Media Relations

► CSR and Media

CSR and New Media

► CSR and Media

CSR and Role of Government as a Regulator

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Synonyms

Institution

Definition

The government plays a central role in corporate social responsibility (CSR) as a regulator.

Although many academics define CSR as a voluntary approach, an increasing number of governments have introduced regulation making it mandatory.

In recent years, governments have started to discuss the implementation of common rules at the international level. A typical case study is represented by Directive 95/2014/EC about non-financial reporting, which represents a first attempt to harmonize non-financial reporting in Europe. Furthermore, governments play a central role even at the global level. Specifically, all worldwide governments have subscribed the 2030 Agenda, and their contribution has not been limited to subscription but includes steps for control in the private sector.

These new forms of regulation have covered different topics like nonfinancial reporting, control of GHG emissions and rewards for ethical business practices. However, the “real” role played by governments in corporate social responsibility is the subject of several differing opinions among academics. Some have shown how CSR practices connected to legal provisions are conducted as part of a bureaucratic approach to be compliant with the law, and not from an effective cultural change by businesses’ managers.

The Role of Governments in CSR

Recently, governments have deeply analyzed the opportunity to identify new policies and laws about CSR. In response, different governments have taken different approaches. Specifically, academics have been distinguished between “soft” and “hard” forms of regulation around CSR (Gjølberg 2011; Steurer et al. 2012).

The main differences between hard and soft forms of regulation are their different impacts on firms (Yan 2019). Specifically, “soft” regulation for CSR consists of a government’s provision of rules that encourage companies to be more ethical and sustainable. On the other hand, “hard” regulation consists of a set of mandatory provisions to reduce irresponsible behaviors. Moreover, nowadays it is possible to identify a new

form of hybrid regulation for CSR (Steurer et al. 2012). An example of this hybrid form of regulation is Directive 95/2014/EC. The “hard” side of the Directive is the mandatory provision for PIEs to disclose nonfinancial information, while the “soft” side is the opportunity for SMEs to prepare reports in accordance with the Directive (Venturelli et al. 2019).

The content of the Directive is innovative because many of the Member States did not yet have specific forms of regulation about CSR (Steurer et al. 2012). Since 2016, European governments have transposed the content of the Directive into their national legal systems. According to the “gold ban” principle, the transposition of the Directive by Member States has involved different degrees of adherence to the original contents (CSR Europe and Global Reporting Initiative 2017). Specifically, the transposition of the rule has led to changes about the mandatory provision of third-party independent assurance, the form and the substance of the information provided.

The Debate About CSR Regulation

Regulation in corporate social responsibility (CSR) has been widely analyzed by academics. It is a relevant yet complex issue because of the difficulty of assigning a set of mandatory rules to a voluntary behavior. Furthermore, conceptualizing corporate social responsibility has been made more difficult by the absence of a common definition. In recent years, academics and policymakers have provided several definitions of CSR.

At the academic level, some authors have tried to identify a widely adopted definition of CSR. The studies conducted by Dalshrud (2008) reported the existence of 37 definitions of CSR at the time of the study. The authors identified the most common definition of CSR through a word count meta-analysis. This analysis revealed many of the definitions consisted of activities not related to external pressure from governments. In particular, in some definitions the concept of “voluntary” is explicit.

At the policy level, the first definition of corporate social responsibility was provided by the European Commission (2011) who defined it as “the responsibility of enterprises for their impact on society” and noted that “therefore, it should be company led.” Furthermore, the European Commission assigns a supporting role to governments for the effective introduction of corporate social responsibility paradigms within enterprises. However, the European Commission suggests the provision of voluntary policies foremost, and only residually the introduction of mandatory provisions.

According to this evidence, governments play a central role in terms of regulation. However, the concept of CSR requires a direct contribution from companies through their personal beliefs about sustainability and ethics.

Summary

Sustainable development represents a new challenge for worldwide policymakers. Although CSR is considered as a “voluntary behavior” by academics, recently an increasing number of laws about this topic have been introduced. Furthermore, the political activity about CSR has been encouraged by the cooperation between Member States to establish a set of common rules about nonfinancial reporting. Moreover, in the 2030 Agenda, the UN has introduced an explicit provision about the role of governments to support the SDGs’ achievement through new forms of regulation.

Cross-References

► [Regulations](#)

References

- CSR Europe and Global Reporting Initiative. (2017). *Member states implementation of directive 2014/95/EU*. Available at: <https://www.accountancyeurope.eu/>

[wp-content/uploads/1711-NFRpublication-GRI-CSR-Europe.pdf](#)

- Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate social responsibility and environmental management*, 15(1), 1–13.
- European Commission. (2011). *Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A renewed EU strategy 2011–14 for Corporate Social Responsibility*. Available at: [https://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com\(2011\)0681/_com_com\(2011\)0681_en.pdf](https://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com(2011)0681/_com_com(2011)0681_en.pdf)
- Gjølberg, M. (2011). Explaining regulatory preferences: CSR, soft law, or hard law? Insights from a survey of Nordic pioneers in CSR. *Business and Politics*, 13(2), 1–31.
- Steurer, R., Martinuzzi, A., & Margula, S. (2012). Public policies on CSR in Europe: Themes, instruments, and regional differences. *Corporate Social Responsibility and Environmental Management*, 19(4), 206–227.
- Venturelli, A., Caputo, F., Leopizzi, R. and Pizzi, S. (2019). The state of art of corporate social disclosure before the introduction of non-financial reporting directive: a cross country analysis, *Social Responsibility Journal*, 15(4), 409–423.
- Yan, M. (2019). Corporate Social Responsibility versus Shareholder Value Maximization: Through the Lens of Hard and Soft Law. *Nw. J. Int'l L. & Bus.*, 40, 47.

CSR and Soccer

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Introduction

There is no clear definition of the term Corporate Social Responsibility (CSR), because it is used very inconsistently. According to ISO 26000, CSR generally means the “responsibility of an organization for the impact of its decisions and activities on society and the environment.” This definition applies to professional soccer clubs as well. The goal is the integration of social and ecological consciousness in decision-making processes.

There has been an increasing importance in assuming corporate social responsibility in sports and soccer management over the past 10 years. This article refers primarily to the German soccer market. It is striking that CSR is an interdisciplinary topic. It is studied by sports science, economics, and technological studies (Walzel 2019).

Soccer as a Commodity

No other sport inspires people around the world as much as soccer. Professional soccer clubs, originally oriented towards recreational and social interaction (the common good), became commercial enterprises (see ► “CSR and Sports”). Especially in recent years, professional soccer has recorded steady growth and climbing sales profits. Player wages are rising, transfer fees are reaching record highs, and media generated revenue is rising steadily. Soccer has become a major economic factor. As a result, the professional clubs are structured like modern business enterprises. Professional soccer is subject to continuous economization, commercialization, medialization, and professionalization. In addition to delivering athletic performance, the professional clubs must prove themselves financially. Most clubs have broken off their pro divisions into corporate entities.

In contrast to the negative effects of commercialization such as corruption, match-manipulation, and violence, soccer can also positively influence society because of its media coverage and public attention. Soccer reflects society, positively and negatively. The professional soccer clubs are oriented towards big enterprise and like many other businesses, the soccer clubs are aware of this responsibility and have integrated CSR measures (Walzel 2019). Nevertheless, soccer differs significantly from other economic goods and therefore the CSR measures differ as well (Walzel 2019) (see ► “CSR and Sports”).

According to Daumann (2015), the athletic performance of the soccer players and clubs is sold to the spectator. Of particular importance to

the entertainment value is the uncertain outcome of a game. This provides excitement and captivates the viewer. While the consumer expects reliability and transparency in other products, “sports performance” as a commodity thrives on the emotions of the fans. Another unique quality is the great public attention that soccer generates. Both positive and negative news about soccer are dominating the headlines. No other industry has such coverage. Professional sports have a very heterogeneous target group, which makes the product difficult to promote. The interests of the spectators vary.

Incentives

There are many reasons for professional soccer clubs to integrate CSR measures. One reason is the public attention that soccer draws to it. Another reason is the normative expectation of society. The professional soccer club used to be a part of the local community. Due to the commercialization, the professional soccer club has partly moved away from local interests. The hometown identification with the club and the players is decreasing. CSR measures can strengthen the relationship with the local community. Furthermore, CSR measures can be understood in response to societal changes and challenges. The coverage and media attention can be used to sensitize the audience to social problems. The clubs should serve as role models here. Ideally, CSR measures should be cost effective or even generate extra revenue. This could result in improved fan loyalty and gaining like-minded sponsors. There is also increasing social pressure. The stakeholders (fans, media, and sponsors) demand social commitment. Given the profits and privileged status of clubs, many take it for granted that clubs are socially engaged. If a club does not get involved, this could lead to image deterioration, a declining fan base, and negative publicity. Another reason to implement CSR practices is that other clubs already model this successfully. In addition, government can

support sports through appropriate regulations and policies. So far this has only been the case in Germany for the Green Goal Football World Cup 2006 and 2011 women’s campaign (Walzel 2019).

Areas of Action for CSR Measures

Many trends in the classic economy are imitated by professional soccer organizations – it is the same with CSR strategies. The first clubs started donating money to charity. Then they started to implement classic CSR measures. These involved in particular the areas of energy, water, emissions, and waste. For example, attempts were made to produce less waste, to save energy and water, and to minimize discharge of emissions (Weber 2019).

The areas of action in which professional soccer clubs engage are so diverse and vary by country. From country to country different priorities are set according to the social situation and degree of sports development. In general, the commitment is to social and environmental responsibility. Areas of involvement include health and education, fan outreach, sports and movement, children and adolescents, family, former players, violence and drugs, ethics, racism, and the environment. The variety of CSR measures makes comparability and control of the measures difficult.

Implementation and Impact of CSR Measures

The implementation of CSR measures takes place in different ways: for example, some soccer clubs or federations, like the German Football League (DFL), establish foundations, others have their own CSR department or staff units (Werheid and Mühlen 2019). CSR action includes local, regional, national, and international measures.

Successfully implemented CSR measures can bring pride and a higher level of identification of the fans with their club. CSR management can contribute to an image improvement of the

professional soccer club or sports federation. Well-executed CSR measures ideally lead to a perfect win-win situation for society and the sports organization (Ermes and Luthe 2019). To reach this outcome, it is important that the chosen CSR strategy fits the respective club. They should be perceived as selfless (Kulczycki and Königstorfer 2016). In this way, the cohesion of a society can be strengthened, the identification with a region or a country can be intensified, and further positive effects can be achieved. Athletic success cannot fully be planned but with well-implemented CSR measures, the soccer clubs' popularity can become independent of sporting success.

Ermes and Luthe (2019) have developed the following guidelines for individual and authentic CSR management:

- What does sustainability mean for my club?
- Why take responsibility?
- What goals do we want to achieve with the assumption of responsibility?
- What are the values of my club?
- Which stakeholder groups are there and what are their expectations of the soccer organization?
- Which stakeholder groups are particularly relevant for the soccer club, have a special influence or interest?

From these individual guidelines, CSR management can be developed. The interests of all stakeholders must be taken into consideration. The professional soccer clubs make a contribution to social responsibility. They must be able to strike a balance between corporate economic goals and social as well as environmental interests. Soccer sportsmanship stands for values such as solidarity, tolerance, and fairness. On one hand, this can be used for a positive image. On the other hand, the risk is greater: scandals spread faster due to public attention. This can lead to a negative club image. (Ermes and Luthe 2019).

To sum it up, research on the long-term effect of CSR in soccer is in its beginning stages and

more data is needed to issue conclusive statements.

Case Study: Soccer Club "Fußball-Club St. Pauli von 1910 e.V."

The implementation of CSR measures is just as varied as the areas of actions. Thus, the DFL has established a foundation, some clubs found junior sports academies, which support the educational and personal development of the young soccer players in addition to physical education.

In the following, CSR measures of the Fußball-Club St Pauli von 1910 e.V., commonly known as FC St Pauli, will be presented. FC St. Pauli is a German multi-division club, whose largest division is the soccer department. FC St. Pauli is currently playing in the 2nd Bundesliga. Unlike other professional clubs, St. Pauli has not outsourced its professional players to a corporation. The reasons are not only economical but also reflect social and philosophical values. FC St. Pauli is known for cultivating a very close relationship with its fans and supporters by taking a political position and addressing social challenges in their community (FC St. Pauli 2001).

The soccer club presents itself as down to earth and, despite commercialization, it conveys values that embody the sport such as tolerance and respect. In addition to athletic success, FC St. Pauli embodies a particular lifestyle. As a result, the club gains attractiveness media coverage and increases its network.

Despite increasing commercialization, FC St. Pauli is building a bridge between the club and its fans (Ermes and Luthe 2019). The identification of the fans with the club is thus independent of the team's athletic success.

As early as 2009, FC St. Pauli developed guiding principles that were approved by the club's president as binding from then on. Since then, these principles have been providing the foundation for contracts, agreements, etc., and serve as guidelines for members, employees, fans, and

volunteers. For example, FC St. Pauli selects sponsors and business partners who share the club's social and political values (FC St. Pauli 2009). In addition to economic aspects, the sale of merchandise and services at FC St. Pauli is characterized by the principles of social compatibility, variety of offers, sustainability, and ecology. The FC St. Pauli also has a CSR department involved in integrating these measures. As a local soccer club, FC St. Pauli is mainly involved regionally in issues such as social integration of refugees, neighborhood, and school projects. Even transregional initiatives such as "Refugees Welcome" are part of their CSR measures (FC St. Pauli 2019).

Because of all these described activities, FC St. Pauli is a great example for implementing CSR measures successfully.

Summary

CSR in the soccer industry is a relatively new and interdisciplinary field of research as it is discussed in different sciences. Due to its unique nature, soccer cannot be compared to other industries. Both, the areas of action in which the professional clubs engage in as well as their CSR measures have a broad spectrum. Successful CSR management can strengthen fan loyalty by promoting a positive image that is independent of athletic success. A prerequisite is the individually tailored and authentic CSR management. Soccer is highly suitable for incorporating CSR management because of its popularity, high media coverage, and public attention. In order to demonstrate the effects of CSR in soccer, long-term studies are needed.

Cross-References

- Corporate Sustainability
- CSR and Social Media
- CSR and Sports
- ISO 26000 Standard

References

- Daumann, F. (2015). *Grundlagen der Sportökonomie*. Konstanz/München: UVK Verlagsgesellschaft.
- Deutsche Fußball Liga. (2019). DFL Stiftung. <https://www.dfl.de/de/dfl-stiftung/>. Accessed 30 Oct 2019.
- Ermes, J., & Luthé, A. (2019). Partizipativ entwickelte Leitlinien und NRO-Kooperationen als gewinnbringende Instrumente nachhaltigen Managements in Profivereinen. In M. Werheid & M. Mühlen (Eds.), *CSR und Fußball: Nachhaltiges Management als Wettbewerbsvorteil – Perspektiven, Potenziale und Herausforderungen* (pp. 197–206). Berlin: Springer. <https://doi.org/10.1007/978-3-662-57967-1>.
- Kulczycki, W., & Königstorfer, J. (2016). Doing good in the right place: City residents' evaluations of professional football teams' local (vs. distant) corporate social responsibility activities. *European Sport Management Quarterly*, 16(4), 702–719.
- St. Pauli. (2001). FC-ST-Pauli – Die Satzung. <https://www.fcstpauli.com/verein/mitgliedschaft/satzung/>. Accessed 30 Oct 2019.
- St. Pauli. (2009). FC-ST-Pauli – Leitlinien: Die Leitlinien des FC St. Pauli. <https://www.fcstpauli.com/verein/leitlinien/>. Accessed 30 Oct 2019.
- St. Pauli. (2019). St. Pauli – Es ist unsere Verantwortung, diese Themen anzugehen. <https://www.fcstpauli.com/news/csr-leiter-michael-thomsen-im-interview/>. Accessed 30 Oct 2019.
- Walzel, S. (2019). Corporate Social Responsibility und Fußball – Ein Rückblick auf 10 Jahre internationale Forschung. In M. Werheid & M. Mühlen (Eds.), *CSR und Fußball: Nachhaltiges Management als Wettbewerbsvorteil – Perspektiven, Potenziale und Herausforderungen* (pp. 221–228). Berlin: Springer. <https://doi.org/10.1007/978-3-662-57967-1>.
- Weber, T. (2019). Orientierungsrahmen zur ökologischen Nachhaltigkeit für Sportvereine am Beispiel von Fußballbundesligisten. In M. Werheid & M. Mühlen (Eds.), *CSR und Fußball: Nachhaltiges Management als Wettbewerbsvorteil – Perspektiven, Potenziale und Herausforderungen* (pp. 3–28). Berlin: Springer Verlag. <https://doi.org/10.1007/978-3-662-57967-1>.
- Werheid, M., & Mühlen, M. (2019). Nachhaltiges Management im Fußball. In M. Werheid & M. Mühlen (Eds.), *CSR und Fußball: Nachhaltiges Management als Wettbewerbsvorteil – Perspektiven, Potenziale und Herausforderungen* (pp. 29–38). Berlin: Springer. <https://doi.org/10.1007/978-3-662-57967-1>.

CSR and Social Media

- CSR and Media

CSR and Sports

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Synonyms

Corporate sustainability; CSR and soccer; Cultural understanding; Sports and its social significance; Sports and values; Sustainability awareness

Definition/Description

Sports has a great significance in society. Therefore, it offers a perfect platform for CSR measures. The goal of CSR measures in sports is to overcome the dualism between ethics and economization. The areas of action cover personnel management, environmental management, value-added chain, corporate citizenship, and communication. Because of the existing diversity of sports, the CSR concept has to be adapted individually. One important requirement for successful implementation of CSR measures is that CSR is consistently anchored in the company's mission statement and implemented in the long term.

Introduction

For about 10 years, research has been dealing with Corporate Social Responsibility (CSR) in sports. This entry primarily refers to recreational sports, while the entry ► [“CSR and Soccer”](#) focuses on professional soccer clubs.

First of all, the term “sports” and its significance in society are explained. Subsequently, the areas of action of CSR measures will be presented and recommendations for a successful implementation of CSR measures will be given. Finally, the case study of sports clubs in Germany illustrates the possibilities of sports to engage in CSR.

Sports and Its Significance in Society

The term “sports” is used worldwide; however, a uniform definition is difficult. R  thig and Prohl (2003) summarize the problem as follows:

Since the beginning of the 20th century, sports has become a colloquial term used throughout the world. A precise or even clear conceptual definition can therefore not be made. What is generally meant by sports is less a question of scientific dimensional analysis, but it is much more determined by everyday use as well as by the historical and traditional involvement in social, economic, political and legal applications. In addition, the status quo of sportsmanship changes, expands and differentiates the concept of sports itself. (p. 493)

Sports has been anchored in our society since its earliest history. Already in ancient times spectators visited the Olympic Games (as early as 776 B.C.). Our sports as we know it today has its origins in England. In the eighteenth and nineteenth centuries, physical exercises and games were structured and organized. Regulations were established.

Today, sports is exercised all over the world and permeates all areas of society. There is a social significance, bringing together people of different backgrounds and social strata. Sports also teaches values such as respect, tolerance, and fair play. Children and adolescents learn to pursue a common goal and to accept rules. Participating in sports contributes to a sense of belonging and personality development. Another important aspect is the effect on physical and emotional well-being. Exercising sports increases physical and mental performance and contributes to maintaining good health. Furthermore, many athletes pursue aesthetic sports like body-building that aim for aesthetic as well as athletic expression. Expressive sports such as dance or figure skating emphasize the aesthetic and artistic expression of sports. For politics, sports is a way of connecting people, overcoming cultural differences and geographic borders. After all, sports is also an economic factor. The athletes need sports' facilities, sports equipment, and training opportunities. In professional sports, billions of Euros are earned. In 2017, for example, soccer player Neymar da Silva Santos J  nior transferred from

Barcelona to Paris Saint-Germain in a move worth €222 million, making him the most expensive player ever.

Sports as a Commodity

“Sports” differs significantly from other economic goods. Daumann (2015) describes a dual structure of the sports market. Thus, a distinction is made between the sports market and the entertainment market. The sports market describes the market consisting of supplier, products, and consumer for the athlete. The entertainment market sells the sports-generated performance of athletes or athletic teams to the interested audience. Suppliers are represented by the organizers of sports events and by the media. The two markets are very interdependent. On the one hand, the sports media industry cannot exist without the athletic performance. On the other hand, the sports market benefits from the sales profits of the entertainment market. In addition, follow-up markets are created. These include the media rights market, advertising rights market, sponsorship, and branding rights market.

A major factor in entertainment marketing is the emotional one: No other commodity causes so much enthusiasm. The loyal spectator will follow the games of his favorite team or athlete independent of their performance.

Since sports is a very special industry, CSR should focus on the unique features of sport’s social responsibility. Smith and Westerbeek (2007) have highlighted the characteristics for CSR and sports:

1. Mass media distribution and communication power

Due to mass media, sports offers a platform to reach a broad mass of people. This bears chances and risks at the same: News and scandals are spread almost simultaneously because of the public attention.

2. Youth Appeal

Sports has an inherent appeal to young people from both a participative and spectator viewpoint. Participation-based programs can

encourage young people to involve in CSR and sustainability measures, and elite athletes could serve as role models for emulation, especially in the field of CSR.

3. Positive health impacts

Exercising sports can help to keep in shape and stay healthy. Sports has innumerable physical health benefits such as improved cardiorespiratory and muscular fitness, coronary health, and cancer prevention.

4. Social interaction

Sports offers an ideal platform for encouraging social interaction. Probably overstated and with notable exceptions like aggression and violence, participating in sports can be a force for stability, democracy, and peace.

5. Sustainability awareness

Sports and sporting events can increase people’s awareness of environment and of sustainability. Programs promoting sustainability like the Olympic Games 2012 in London have the opportunity to reduce the environmental impact.

6. Cultural understanding and integration

Sporting events like the Olympic Games were established to connect young people of different cultures in a peaceful way. Sports promotes a shared sense of belonging and participation and may therefore also be an important tool for the integration of immigrants.

7. Immediate gratification benefits

Participating in sports can be fun and satisfying.

Due to the described characteristics and the thematic proximity, the sports industry is very suitable to integrate and implement CSR measures. The ideals of sports already reflect social responsibility. Sports has great potential to influence positive changes in society. The sports industry is also a communicator and enhancer of values and ideas to a broad range of people and especially to young people (Kolb 2014).

Therefore, CSR is becoming increasingly important in sports and sports organizations. In addition, traditional businesses use sports as a platform to implement their own sustainability measures.

Areas of Action of CSR and Sports

Many sports organizations have engaged in philanthropy, community involvement, health education, and issues such as inclusion and antidiscrimination. CSR and sports follows general CSR areas of action. These cover.

1. Personnel management
 - Recruiting
 - Personnel appraisal
 - Human resource development
2. Environmental management
 - Water management
 - Energy management
 - Waste management
 - Mobility management
 - Catering
3. Value-added chain
 - Do not enter into business relationships that violate human rights
 - Maintaining fundamental and human rights through fan culture
4. Corporate citizenship
 - Use synergy effects with other companies or organizations
5. Communication
 - By mission statement
 - Employees' identification with the chosen CSR strategy (Keller 2014)

Requirements of Successful CSR Implementation

Apart from clear goals and analysis of the outcomes, following requirements for a successful implementation of CSR measures are necessary:

- Linking the CSR strategy with the overall strategy of the sports organization
- Selection of CSR activities that fit the brand of sports organizations to ensure credibility and sustainability
- Communication of CSR activities through impactful branding in compliance with current trademark brokerage guidelines (differentiation, recognition, identification)

- Check for availability of the required structural, human, and financial resources
- Targeted use of sports organization-specific core competencies, such as training know-how, location, and media networking
- Involvement of partners, from nonprofit organizations, government agencies, and/or commercial enterprises, to the use of financial, structural, and personnel assets
- Involvement of officials and athletes as testimonials as role models
- Transparent documentation of CSR activities
- Constant willingness to learn and to optimize the chosen CSR strategy (Keller 2014)

Case Study: Sports Clubs in Germany

The structure of sports clubs in Germany is a special one that already includes some CSR aspects from the ground up. According to Fahrner (2012), "sports clubs are permanent associations of persons to pursue a common purpose." They are characterized by

- A central organizational basis
- Voluntary association in the legal form of the registered sports club
- Nonprofit sports club as prevailing legal form
- Association as a "legal entity" – members are not personally liable, liability is limited to club assets

In recreational sports, the nonprofit and charitable registered club outweighs. To qualify as a nonprofit, specific conditions must be met:

- Selfless promotion of the general public in the material, spiritual, or moral field of action
- Not for profit
- Nonexclusive, must be accessible for everyone
- Not limited to professional sports (combination of professional and amateur sports is possible)
- Funds available for statutory purposes only
- No profit sharing for club members
- No disproportionate or unrelated expenses
- Timely use of funds

The nonprofit sports club is checked by the tax office every 3 years (Fahrner 2012).

Advantages of a nonprofit sports club are tax benefits and exclusion of personal liability. Sports clubs should be accessible to everyone, so there are often special rates that allow disadvantaged people and families to participate in sports and thus in social life as well. According to a recent survey, the goals of sports clubs showed that above all the conveyance of values, the affordable training offers, the integration, and inclusion play an important role and joint activities are valued. Volunteering is also considered a high priority (statista 2019).

Since sports clubs offer an important social environment, they are often subsidized by local government. In addition to tax benefits, the sports clubs are partially funded financially. Potential profits are reinvested in the sports clubs or federation in alignment with the association's guideline. The sports clubs are primarily focused on member interests and needs. Decisions are made democratically by the members at a general meeting (Fahrner 2012).

Sports clubs shape our society and create social cohesion. Sports culture collectively mirrors societal values and tensions; therefore, both positive and negative behaviors are observed. Racism and discrimination unfortunately also occur in sports. Sports clubs have to adapt to the diversity of society (Lüders 2014). In addition, sports clubs are increasingly confronted with the rising expectations of their members. The willingness to volunteer decreases and the demographic change results in fewer members. Sports clubs have to deal with the commercialization of recreational sports. CSR offers a way to break away from the profit-oriented providers.

Due to the diversity of sports clubs, no clear CSR strategy can be recommended for all sports clubs. The sports clubs have their responsibilities and the areas of activity. They might also need the support of sports federations. Implementation of CSR could be realized by athletes acting as a role model, sports organizations, specific campaigns, and outsourced institutions like foundations (Trosien 2014).

Summary

Due to the diversity in sports, there is no CSR concept that fits all varieties of sports. It has to be adapted individually. The goal of CSR measures in sports is to overcome the dualism between ethics and economization. Ideally, a win-win situation is created for the companies as well as society. Businesses must therefore themselves be considered part of society and identify areas of conflict with the environment and communicate these issues with the stakeholders.

One important requirement is that CSR is consistently anchored in the company's mission statement and implemented in the long term.

In times of increasing commercial competition, sports clubs have the chance represent values by implementing CSR measures and increase the attractiveness for members this way.

Cross-References

- Corporate Sustainability
- CSR and Soccer
- CSR and Social Media
- Definitions of CSR
- ISO 26000 Standard

References

- Daumann, F. (2015). *Grundlagen der Sportökonomie*. Konstanz/München: UVK Verlagsgesellschaft.
- Fahrner, M. (2012). *Grundlagen des Sportmanagement*. München: Oldenbourg Wissenschaftsverlag GmbH.
- Hildebrandt, A. (2019). Evolution statt Revolution. Der Deutsche Fußball-Bund auf dem Weg zur Nachhaltigkeit? In A. Hildebrandt (Ed.), *CSR und Sportmanagement: Jenseits von Sieg und Niederlage: Sport als gesellschaftliche Aufgabe verstehen und umsetzen* (pp. 368–376). Berlin/Heidelberg: Springer Verlag. <https://doi.org/10.1007/978-3-642-54884-0>.
- Keller, C. (2014). Gesellschaftliche Verantwortung im Sport. In A. Hildebrandt (Ed.), *CSR und Sportmanagement: Jenseits von Sieg und Niederlage: Sport als gesellschaftliche Aufgabe verstehen und umsetzen* (pp. 110–124). Berlin/Heidelberg: Springer. <https://doi.org/10.1007/978-3-642-54884-0>.
- Kolb, A. (2014). Sport has the power to change the world. In A. Hildebrandt (Ed.), *CSR und Sportmanagement: Jenseits von Sieg und Niederlage: Sport als*

- gesellschaftliche Aufgabe verstehen und umsetzen* (pp. 100–110). Berlin/Heidelberg: Springer. <https://doi.org/10.1007/978-3-642-54884-0>.
- Lüders, C. (2014). Antidiskriminierung im Sport. In A. Hildebrandt (Ed.), *CSR und Sportmanagement: Jenseits von Sieg und Niederlage: Sport als gesellschaftliche Aufgabe verstehen und umsetzen* (pp. 22–36). Berlin/Heidelberg: Springer Verlag. <https://doi.org/10.1007/978-3-642-54884-0>.
- Röthig, P., & Prohl, R. (Eds.). (2003). *Sportwissenschaftliches Lexikon* (p. 493). Schorndorf: Hofmann.
- Smith, A. C. T., & Westerbeek, H. M. (2007). Sport as a vehicle for deploying corporate social responsibility. *Journal of Corporate Citizenship*, 25, 43–54.
- Statista. (2019). Eigenschaften und Ziele der Sportvereine in Deutschland im Jahr 2015. <https://de.statista.com/statistik/daten/studie/316281/umfrage/eigenschaften-deutscher-sportvereine/>. Accessed 20 Oct 2019.
- Trosien, G. (2014). Vorbilder aus dem Sport als Angebot für den sozialen Zusammenhalt einer Gesellschaft. In A. Hildebrandt (Ed.), *CSR und Sportmanagement: Jenseits von Sieg und Niederlage: Sport als gesellschaftliche Aufgabe verstehen und umsetzen* (pp. 60–73). Berlin/Heidelberg: Springer. <https://doi.org/10.1007/978-3-642-54884-0>.
- management styles, and relations with stakeholders to many activities. With the increasing competition and increasing environmental and social awareness, the expectation of the society is changing. The perspective that every product and service produced in the past creates a high economic value has now left its place to the understanding of how the products and services produced can benefit society. The fact that companies consider the benefit of society while carrying out their activities not only provides a competitive advantage, but also offers an important advantage in terms of the message it gives to all its stakeholders. Carroll (1979, 1991) considers social responsibility in four dimensions as economic, legal, ethical, and philanthropic responsibilities, and these responsibilities express the expectations imposed on the company as a whole by the company's stakeholders and society. It is possible to define the social responsibility activities carried out by the companies as the activities carried out to improve and increase the welfare level of the society.

CSR and Sustainability

► CSR Communication

CSR and Women

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Synonyms

Corporate social responsibility; Gender differences; Women; Women empowerment

Definition

Rapidly changing technology, as well as changing economic and social conditions cause changes in many issues from companies' strategies,

CSR Concept

The concept of social responsibility, which is included in H. Bowen's book *Social Responsibilities of Businessmen*, which was first published in 1953, is encountered with many different definitions in literature today. Bowen (1953) argues that businessmen should engage in social responsibility activities that coincide with the values and goals of society. The European Commission defines corporate social responsibility as the ability of companies to integrate social and environmental issues into their activities on a voluntary basis (European Commission, 2001).

Scholars from different disciplines seek to establish a consensus definition of the concept of social responsibility since the post-World War II (Carroll, 1991; Carroll & Shabana, 2010). Although economic interests seem to be the primary concerns of businesses, the perspective has expanded by the recognition of the idea that a business has social and environmental

responsibilities besides the economic interests and legal obligations (Carroll, 1979, p.497; Carroll & Shabana, 2010). CSR pyramid proposed by Carroll (1979, 1991) indicates that the business is required to fulfill its economic, legal, ethical, and discretionary (philanthropic) responsibilities simultaneously, so that a company has several responsibilities including “make a profit, obey the law, be ethical and be a good corporate citizen” (Carroll, 1991, p.39–42). Based on this, CSR refers to responsible behaviors and practices to company’s stakeholders, thinking and going beyond satisfying only shareholders’ interests and making efforts to develop balanced relations with all stakeholders of a company (Fernández-Guadano & Sarria-Pedroza, 2018). Within this context, it is considered that the CSR has significantly evolved from profit maximization for shareholders to value creation for the society (Branco & Rodrigues, 2007, p.5). Thus, CSR is considered as a value driver that leads to value creation for primary stakeholders. In this vein, the context of CSR has developed from philanthropy to value creation and afterward to the concept of shared value (Bosch-Badia et al., 2013, pp.12–13).

With the concept of social responsibility gaining importance for both academic circles and the business world, corporate social responsibility activities have become one of the important strategies that companies apply to raise awareness. It is basically a concept that brings together public, private, and nongovernmental organizations and directs them to work together for a purpose. Companies interacting with their environment must behave in line with the expectations of the society and act with a sense of responsibility while carrying out their activities. Beyond being a company that only produces goods and services, it is expected to display behaviors that consider its employees, protect the environment, and care about consumer rights. With this point of view, the fact that companies care about the interests of the society besides their own interests and deal with social problems will ensure that they reflect their social responsibility awareness to the society they belong to.

General Perspective of CSR and Women

CSR is considered a valuable instrument to promote gender equality in organizations so that equality and diversity seem to be the fundamental aspects of CSR. Recently, a growing number of companies are focusing on gender equality and launching CSR programs, toward empowering women both within the community and particularly in the workplace through increasing the participation of both the number and the role of women among the workforce in professional life and mitigating the problem of glass ceiling. With this purpose, CSR plays a significant and dynamic role that fosters gender equality (Sridevi, 2015).

Gender Differences

One of the research topics investigated within the scope of CSR, which has been debated from a wide range of disciplines in management literature, is the relationship between gender differences and CSR, or, in other words, the impact of gender differences on CSR practices. The empirical researches (i.e., Atakan et al., 2008; Luthar et al., 1997) reveal that gender is correlated to perceptions and evaluations of ethical behavior and ethical climate that female correspondents present more favorable ethical attitudes than males. Another research by Smith et al. (2001) indicate that women present more emphasis and attention to the extent to which a company fulfills its social and environmental responsibilities than do males. In the same vein, Marz et al. (2003) state that women significantly give more importance to social responsibilities of the companies than males.

In the context of gender, one of the indirect causes of the problems that the female gender faces in the society is the male-dominated perspective and its reflection on the behaviors. However, today’s society, which is developing day by day and its awareness is increasing, is reacting to this distinction. It arises from social, cultural, and economic phenomena on the basis of differences other than the biological differences that exist between men and women.

As customers, employees, suppliers, and members of society from a broad perspective, women

are stakeholders of companies. Gender equality, which is an important issue of corporate social responsibility, has to maintain its priority among the issues handled by companies (Grosser & Moon, 2005).

It is a known fact that women and men differ in their values from past to present, and this difference also shows itself when it comes to social responsibility. Many studies show that women are more concerned with environmental problems than men (Diamantopoulos et al., 2003), they are more concerned about environmental risks (Bord & O'Connor, 1997; Davidson & Freudenburg, 1996) and reveal that they take care to consume environmentally friendly products in their consumption habits (Mainieri et al., 1997). They claim that the most important reasons for this situation arise either from their biological characteristics, because they closely resemble nature with the effect of their reproductive roles, or that they are more aware of the exploitation on the environment with the effect of the paternalist structure in the society (Wehrmeyer & McNeil, 2000).

Women on Boards

Board of directors, which is an important part of the corporate governance system of companies (Vigano et al., 2011), is a mechanism that determines corporate social responsibility activities, which is a strategic activity (Arora & Dharwadkar, 2011; Dehaene et al., 2001). It is known that the decisions taken by the boards of directors have a significant impact on activities that fall within the scope of social responsibility such as health, environment, security, and philanthropy (Huse et al., 2009); from this perspective, the diversity of the boards will facilitate the determination of the needs of different stakeholder groups, especially with the increase in the number of women in the board. It is suggested that the decisions to be taken will have an impact on the determination and reshaping of social responsibility practices (Harjoto et al., 2015).

In the literature, it is stated that the higher the gender diversity in the boards of directors, the higher the level of corporate social responsibility

activities and the social mission of the company (Siciliano, 1996; Wang & Coffey, 1992; Williams, 2003). As a result of women's social and social aspects outweighing men, it is seen that they exhibit behaviors such as empathy at both individual and organizational level, caring about the problems at all levels of the society, protecting the values that are important for the society, and they tend to determine their corporate social responsibility strategy in this direction (Burgess & Tharenou, 2002; Ibrahim & Angelidis, 1994). It can be said that the sensitive behavior of women members toward the society due to the different perspectives they display in the boards has a stronger effect on corporate social responsibility issues (Burgess & Tharenou, 2002).

Women's Empowerment

Literature reveals that there is a bidirectional relationship between economic development and women's empowerment which refers to "*improving the ability of women to access the constituents of development—in particular health, education, earning opportunities, rights, and political participation*" (Duflo, 2012, p. 1053) so that the concept has gained particular attention by scholars. It is considered that women empowerment can be provided through CSR activities (Sarkar & Singh, 2016). Particular emphasis indicates that empowered women enable significant and positive changes such as children's education and their conditions, health and nutrition, gendering development, and finally this process catalyzes human development (Abraham, 2013). Additionally, it is proved that generating and increasing employment among women in the community and increasing their income contribute to international and sustainable development. According to the data provided by International Center for Research on Women (ICRW), empowering women promotes a high return on investment so that an increasing number of companies, in particular, Coca-Cola, Vodafone, Walmart, H&M, General Mills, and many others, have totally invested more than \$300 million and initiated several CSR projects and programs to support women's economic empowerment (ICRW, 2016).

Cross-References

► Corporate Social Responsibility

References

- Abraham, D. T. (2013). CSR and empowerment of women: The way forward. *AIMA Journal of Management & Research*, 7(1/4), 0974–0497.
- Arora, P., & Dharwadkar, R. (2011). Corporate governance and corporate social responsibility (CSR): The moderating roles of attainment discrepancy and organization slack. *Corporate Governance: An International Review*, 19(2), 136–152.
- Atakan, M. G. S., Burnaz, S., & Topcu, Y. I. (2008). An empirical investigation of the ethical perceptions of future managers with a special emphasis on gender—Turkish case. *Journal of Business Ethics*, 82, 573–586.
- Bord, R. J., & O'Connor, R. E. (1997). The gender gap in environmental attitudes: The case of perceived vulnerability to risk. *Social Science Quarterly*, 830–840.
- Bosch-Badia, M. T., Montllor-Serrats, J., & Tarrazon, M. A. (2013). Corporate social responsibility from Friedman to porter and Kramer. *Theoretical Economics Letters*, 3(3A), 11–15. <https://doi.org/10.4236/tel.2013.33A003>.
- Bowen, H. (1953). *Social responsibilities of the businessman*. New York: Harper.
- Branco, M. C., & Rodrigues, L. L. (2007). Positioning stakeholder theory within the debate on corporate social responsibility. *Electronic Journal of Business Ethics and Organization Studies*, 12(1), 5–15.
- Burgess, Z., & Tharenou, P. (2002). Women board directors: Characteristics of the few. *Journal of Business Ethics*, 37(1), 39–49.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 85–105. <https://doi.org/10.1111/j.1468-2370.2009.00275.x>.
- Commission of the European Communities. (2001). Green Paper: Promoting a European Framework for Corporate Social Responsibility, Brussels COM (2001), 366. http://europa.eu.int/comm/employment_social/social/csr/greenpaper.htm. Accessed 15 June 2022.
- Davidson, D. J., & Freudenburg, W. R. (1996). Gender and environmental risk concerns: A review and analysis of available research. *Environment and Behavior*, 28(3), 302–339.
- Dehaene, A., De Vuyst, V., & Ooghe, H. (2001). Corporate performance and board structure in Belgian companies. *Long Range Planning*, 34(3), 383–398.
- Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R., & Bohlen, G. M. (2003). Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Business Research*, 56(6), 465–480.
- Dufo, E. (2012). Women empowerment and economic development. *Journal of Economic Literature*, 50(4), 1051–1079.
- Fernández-Guadano, J., & Sarria-Pedroza, J. (2018). Impact of corporate social responsibility on value creation from a stakeholder perspective. *Sustainability*, 10(6), 2062. <https://doi.org/10.3390/su10062062>.
- Grosser, K., & Moon, J. (2005). Gender mainstreaming and corporate social responsibility: Reporting workplace issues. *Journal of Business Ethics*, 62(4), 327–340.
- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board diversity and corporate social responsibility. *Journal of Business Ethics*, 132(4), 641–660.
- Huse, M., Nielsen, S. T., & Hagen, I. M. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics*, 89(4), 581–597.
- Ibrahim, N. A., & Angelidis, J. P. (1994). Effect of board members gender on corporate social responsiveness orientation. *Journal of Applied Business Research (JABR)*, 10(1), 35–40.
- ICRW. (2016). *The business case for women's economic empowerment: An integrated approach*. Retrieved from <https://www.icrw.org/wp-content/uploads/2016/10/The-Business-Case-for-Womens-Economic-Empowerment.pdf>. Accessed on 16 June 2022.
- Luthar, H. K., DiBattista, R. A., & Gautschi, T. (1997). Perception of what the ethical climate is and what it should be: The role of gender, academic status, and ethical education. *Journal of Business Ethics*, 16(2), 205–217.
- Mainieri, T., Barnett, E. G., Valdero, T. R., Unipan, J. B., & Oskamp, S. (1997). Green buying: The influence of environmental concern on consumer behavior. *The Journal of Social Psychology*, 137(2), 189–204.
- Marz, J. W., Powers, T. L., & Queisser, T. (2003). Corporate and individual influences on managers' social orientation. *Journal of Business Ethics*, 46(1), 1–11.
- Sarkar, S., & Singh, P. (2016). *Corporate social responsibility: A way towards women empowerment* (Doctoral dissertation, Indian School of Mines, Dhanbad).
- Siciliano, J. I. (1996). The relationship of board member diversity to organizational performance. *Journal of Business Ethics*, 15(12), 1313–1320.
- Smith, W. J., Wokutch, R. E., Harrington, K. V., & Dennis, B. S. (2001). An examination of the influence of diversity and stakeholder role on corporate social orientation. *Business & Society*, 40(3), 266–294.

- Sridevi, J. (2015). Corporate social responsibility towards women empowerment. *International Journal of Administration and Governance*, 1(5), 35–37.
- Viganò, R., Zattoni, A., Hoskisson, R. E., & Huse, M. (2011). New perspectives on board research. *Journal of Management & Governance*, 15, 1–4.
- Wang, J., & Coffey, B. S. (1992). Board composition and corporate philanthropy. *Journal of Business Ethics*, 11(10), 771–778.
- Wehrmeyer, W., & McNeil, M. (2000). Activists, pragmatists, technophiles and tree-huggers? Gender differences in employees' environmental attitudes. *Journal of Business Ethics*, 28(3), 211–222.
- Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics*, 42(1), 1–10.

CSR Butterfly Effect

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Synonyms

Collective consciousness; Dependent co-arising; Oneness; Quantum theory

Definition

The butterfly effect used in chaos theory – a branch of mathematics focusing on the behavior of dynamical systems that are highly sensitive to initial conditions – describes how a small change in the initial state of a physical system can result in significant differences in a later state. The example posed by Edward Lorenz in his work, where the exact time of formation and path taken by a tornado can be influenced by minor perturbations such as the flapping of the wings of a distant butterfly several weeks earlier, diffused the term worldwide. In the field of corporate social responsibility (CSR), the CSR butterfly effect underlines how a slight change in initial social and environmental conditions can lead to widespread positive consequences. Corporate social initiatives include

philanthropy, volunteering, socially responsible business practices, cause promotions and activism, cause-related marketing, and social marketing as forms of corporate citizenship. Although research has focused on the fact that a flap of wings can be instrumental in generating a tornado, Lorenz also pointed out that it can be equally helpful in preventing a tornado, which is what CSR aims to do.

Introduction

Corporate social responsibility (CSR), defined in the Cambridge Dictionary as a company's sense of responsibility towards the community and environment in which it operates ([Cambridge Dictionary](#)), goes beyond compliance with regulatory requirements and that which is required by law and engages in actions that further social good, beyond the interests of the firm (McWilliams and Siegel 2001).

Corporate social initiatives include philanthropy, volunteering, socially responsible business practices, cause promotions and activism, cause-related marketing, and social marketing, as forms of corporate citizenship (Lee and Kotler 2013).

In the field of corporate social responsibility, the CSR butterfly effect underlines how a slight change in initial social and environmental conditions can lead to widespread positive consequences (Idowu et al. 2015).

The Butterfly Effect

The butterfly effect used in chaos theory – a branch of mathematics focusing on the behavior of dynamical systems that are highly sensitive to initial conditions – describes how a small change in the initial state of a physical system can result in significant differences in a later state (Kellert 1993; Boeing 2016).

The example posed by Edward Lorenz (1963) in his work, where the exact time of formation and path taken by a tornado can be influenced by

minor perturbations such as the flapping of the wings of a distant butterfly several weeks earlier, diffused the term worldwide.

Chaos theory, biology, and bioeconomy are all strictly correlated to economics. Although the themes of sustainability and the depletion of resources are already strongly present in economic thought with Adam Smith and Malthus, they find in Georgescu-Roegen, who cites the second theory of thermodynamics (Carnot 1979) – according to which at the end of each process the possibility that energy can still be used by someone else is always worse than at the beginning – their highest expression. Material degrades, and raw materials can be reused in the economic cycle only to a lesser extent and at the price of high energy expenditure. Matter and energy, therefore, enter the industrial process with a relatively low degree of entropy and come out with a higher entropy since spontaneous change for an irreversible process in an isolated system – one that does not exchange heat or work with its surroundings – always proceeds in the direction of increasing entropy (Drake 2018). Being two parts of an isolated system, the melting of ice in the arctic circle due to the ozone layer, for example, cannot be reversed – total entropy increases as the ice melts (Drake 2018).

From this derives the need to radically rethink economic science, making it capable of incorporating the principle of entropy and, in general, ecological constraints since a minimal change in initial conditions creates a significantly different outcome. Although research has focused on the fact that a flap of wings can be instrumental in generating a tornado, Lorenz also pointed out that the flap of a butterfly's wings can be equally instrumental in preventing a tornado (Lorenz 1963).

Corporate Social Responsibility

Moral obligations are deeply rooted in social relations and, as such, are an integral part of society. They are independent of the law and go beyond political boundaries (Castellani 2015). Social

responsibility is based primarily on the existence of moral constraints and identifies work not only as an economic or social factor but as a human factor, and as such it poses as an integral part of companies and their surrounding community (Regni 2006).

Moral obligations have always been inherent in society. However, the term social responsibility, together with the set of rules that define the moral duties of companies (economic, ethical, and environmental), entered the corporate world in 1930. The concept was introduced by Berle and Means, who identified the separation of power between management and property through the fulfillment and division of tasks, such as economic objectives on the one hand and legal obligations on the other. Their studies derived two key concepts of corporate social responsibility, stakeholder theory and stakeholder value, defined later by the work of Freeman (2010). In the 1980s, for the first time, sustainability was linked to society in the Brundtland Report (UN 1987), addressed to companies. The report focused on the aspects related to the healthiness of the workplace and the psychophysical well-being of employees in addition to the eco-sustainability of industrial production which was meant to safeguard the planet as a moral obligation towards future generations.

Over the course of time, the concept has been highly debated upon by different academic fields, and, due to the frenetic industrial expansion and globalization, it has passed from being considered a revolutionary and utopian theory to a decisive factor needed to address the ever-growing scarcity of resources (McWilliams and Siegel 2001; Aguilera et al. 2006; Lee and Kotler 2013). This brought to an increase in knowledge and attention by both investors and the public and to the need to reduce the increasingly widespread information asymmetry between the company and its stakeholders. A voluntary ancillary reporting method was introduced where the organization could describe its activities to its community of reference, the social or sustainability report – a report in which companies highlight the social impact of their activities and explain their remuneration policy and the commitments undertaken internally

(with employees) and externally (with the social context of reference) (Bebbington et al. 2009; Thijssens et al. 2016).

In South Africa the King Report published in 2010 favors the figure of corporate citizenship; the company in fact, like the citizen, has not only rights but also legal and moral obligations towards the environment in which it operates, and as a responsible operator it must protect, enhance, and invest in the environment itself to maintain these rights. From this point of view, the management action should be oriented to the achievement of objectives that create value for the company in the long term (Castellani 2015).

The idea of social responsibility is addressed not only to individuals, groups, and the community but also to private institutions and public bodies since they all share the same sphere of activity and produce effects that are potentially beneficial or harmful to all stakeholders. If companies can work globally and transnationally when it comes to profit, they can likewise assume globally ethical behavior. A company engaged in activities outside national borders should propose itself abroad with the same care and diligence that it employs in making economic choices in the community to which it belongs.

The Butterfly Effect Under the Corporate Social Responsibility Lens

Every action and non-action have an impact on the surrounding community, but for both managers and board members, the lasting effect is often hard to see because they tend to be focused on the present, in their term of service. The lack of short-term recognition and the fear of negative evaluations tend to outweigh the advantages of positive results which often tend to come at a much later time when the cause or the effects are muted or forgotten.

Hong and Sun (2000) cite butterfly effects as critical events to the normalization of diplomatic relations. In the 1970s relations between China and the USA had worsened during the Cold War. But thanks to an American player accidentally boarding the Chinese ping pong team's bus during

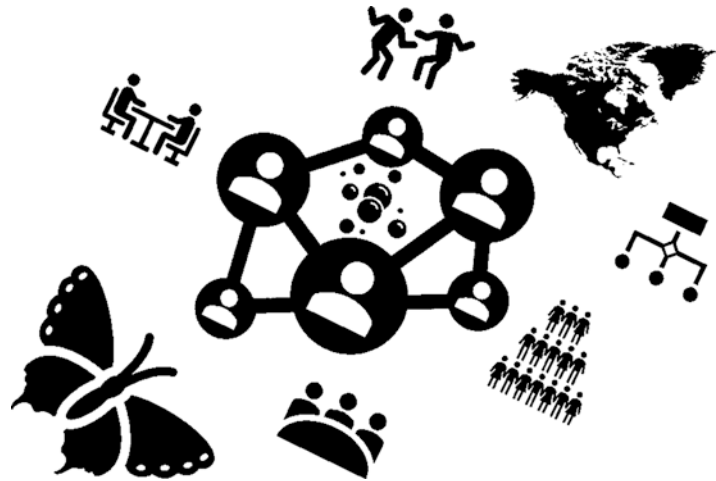
an international competition in Japan, friendly interactions began, resulting in the reconciliation between the countries (Strother 2016).

Mostly though, the butterfly effect is associated with a negative connotation. Two examples of adverse financial butterfly effects are the repeal of the Glass-Steagall Act – legislation that prevented commercial banks from merging with investment banks – by President Clinton in 1999, which brought to a spate of bankruptcies, including ENRON, and to the introduction of toxic financial instruments, such as CDOs (collateralized debt obligations) and CDSs (credit default swaps) into the market. The second example is when Alan Greenspan cut interest rates from 6% to 1% between 2000 and 2003 introducing NINJA – No Income, No Job, No Assets – mortgage loans, which brought to a global financial crisis (Visser 2010).

On a broader scope, the current economic paradigm has led to the enrichment of the top 1% of the population at the expense of the 99%; the rise in drug abuse and suicide rates; the non-acceptance of refugees; desertification; and, in general, the destruction of the natural environment (Laszlo 2019). Thus, on the contrary, protecting the dignity and promoting well-being can prevent the tornado caused by the flap of wings and address negative realities, becoming a force for good (Honeyman 2016; Nigri et al. 2017).

In organizations, beneficial social behaviors contribute to efficient business functioning, create a more pleasant work atmosphere, and increase the likelihood of helpful behaviors toward the organization and others (Isen and Baron 1991; Williams et al. 2000; Williams 2004). Many actions on behalf of the company or management can affect the community and the organization positively, from introducing new ways to save energy to returning emails or being coherent.

Leaders should be open to butterfly effects as possible solutions to crises (Strother 2016). A gentle nod of approval can boost morale healthily, and repeated expressions of appreciation can reduce employee attrition more than any complex appraisal system (Varghese 2010). A leader's attitude can subtly shift the organizational direction dynamically and substantially over time (Cummuta 2017) (Fig. 1).

CSR Butterfly Effect,**Fig. 1** Visual representation of the CSR butterfly effect**Summary**

The whole concept of the butterfly effect relies on the notion that everything is part of a more extensive system in which small changes in part of a system can result in more substantial changes to other parts of that system. In organizations, systems consist of people, information, and processes that work together and can best be understood in the context of relationships with each other and with other systems. By viewing problems as parts of an overall system and preparing for butterfly effects as the cause of crises, rather than only reacting to specific events, failures, or process problems can generate insights to understand how changes to parts of the system impact (positively or negatively) other parts of the system within and between organizations (Pensights 2013).

Social responsibility is a factor present in any economic activity, both locally and globally: working conditions can be harmful, pollution can damage the environment and endanger the well-being of the population, marketing strategies can increase unhealthy behaviors related to food and lifestyle, and research can be based on profit-making activities (UNESCO 2010). Thus, to intervene accordingly to create a positive butterfly effect, a systems perspective focusing on cyclical, rather than linear, cause-and-effect relationships is necessary and can be pursued by both management and companies (Pensights 2013).

Social initiatives should be an integral part of the goals of companies and should be integrated into their corporate structure (Nigri and Del Baldo 2018) introducing environmental protection, control, and transparency, accountability, and ethics. At the same current, management goals in organizational strategies should focus on generating prosperity, contributing to a healthy environment and improved well-being so that resources are optimized, negative consequences are minimized, and results are sustained in the long term.

Cross-References

- [Benefit Corporations](#)
- [Corporate Citizenship](#)
- [Workplace Health Promotion](#)

References

- Aguilera, R. V., Williams, C. A., Conley, J. M., & Rupp, D. E. (2006). Corporate governance and social responsibility: A comparative analysis of the UK and the US. *Corporate Governance: An International Review*, 14, 147–158. <https://doi.org/10.1111/j.1467-8683.2006.00495.x>.
- Bebbington, J., Higgins, C., & Frame, B. (2009). Initiating sustainable development reporting: Evidence from New Zealand. *Accounting, Auditing & Accountability Journal*, 22, 588–625. <https://doi.org/10.1108/09513570910955452>.

- Boeing, G. (2016). Visual analysis of nonlinear dynamical systems: Chaos, fractals, self-similarity and the limits of prediction. *Systems*, 4(4), 37. <https://doi.org/10.3390/systems4040037>.
- Cambridge Dictionary. <https://dictionary.cambridge.org/it/dizionario/inglese/csr>.
- Carnot, S. (1979). *Reflexions sur la puissance motrice du feu*. Librairie Philosophique J.
- Castellani, G. (2015). *Responsabilità Sociale d'Impresa*. Rome: Maggioli Editore.
- Cummuta, T. (2017). Leadership skills and the butterfly effect. *About Leaders*, May 21.
- Drake, G. W. F. (2018). *Entropy*. Encyclopædia Britannica, Inc. <https://www.britannica.com/science/entropy-physics>.
- Freeman, E. (2010). *Stakeholder theory: The state of the art*. Cambridge/New York: Cambridge University Press.
- Honeyman, R. (2016). *Il manuale delle B Corp. Usare il business come forza positiva*. Milano: Bookabook.
- Hong, Z., & Sun, Y. (2000). The Butterfly Effect and the Making of 'Ping-Pong Diplomacy'. *Journal of Contemporary China*, 9(25), 429–448. <https://doi.org/10.1080/713675951>.
- Idowu, S. O., Capaldi, N., Fifka, M. S., Zu, L., & Schmidpeter, R. (2015). *Dictionary of corporate social responsibility. CSR, sustainability, ethics and governance*. Cham: Springer.
- Isen, A. M., & Baron, R. A. (1991). Positive affect as a factor in organisational behaviour. *Research in Organizational Behavior*, 13, 1–53.
- Kellert, S. H. (1993). *In the wake of chaos: Unpredictable order in dynamical systems* (Science and its conceptual foundations). Chicago: University of Chicago Press.
- Laszlo, C. (2019). Strengthening humanistic management. *Humanistic Management Journal*. <https://doi.org/10.1007/s41463-019-00055-9>.
- Lee, N., & Kotler, P. (2013). *Corporate social responsibility: Doing the most good for your company and your cause*. Hoboken: Wiley.
- Lorenz, E. N. (1963). Deterministic nonperiodic flow. *Journal of the Atmospheric Sciences*, 20, 130–141. [https://doi.org/10.1175/1520-0469\(1963\)020<0130:DNF>2.0.CO;2](https://doi.org/10.1175/1520-0469(1963)020<0130:DNF>2.0.CO;2).
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26, 117–127. <https://doi.org/10.5465/amr.2001.4011987>.
- Nigri, G., & Del Baldo, M. (2018). Sustainability reporting and performance measurement systems: How do small- and medium-sized benefit corporations manage integration? *Sustainability*, 10, 4499. <https://doi.org/10.3390/su10124499>.
- Nigri, G., Michelini, L., & Grieco, C. (2017). Social impact and online communication in B-Corps. *Global Journal of Business Research*, 11, 87–104.
- Pensights. 2013. The butterfly effect: Managing your organization as a system. *Performance Excellence Network*, Nov 25.
- Regni, R. (2006). *Educare con il lavoro. La vita attiva oltre il produttivismo e il consumismo*. Rome: Armando Editore.
- Strother, S. C. (2016). Butterfly theory of crisis management. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance* (pp. 1–5). Cham: Springer. https://doi.org/10.1007/978-3-319-31816-5_883-1.
- Thijssens, T., Bollen, L., & Hassink, H. (2016). Managing sustainability reporting: Many ways to publish exemplary reports. *Journal of Cleaner Production*, 136, 86–101. <https://doi.org/10.1016/j.jclepro.2016.01.098>.
- UN. (1987). *Report of the World Commission on environment and development: Our common future*. Geneva: United Nations.
- UNESCO. (2010). Report of the International Bioethics Committee of UNESCO (IBC) on social responsibility and health. https://books.google.it/books/about/Report_of_the_International_Bioethics_Co.html?id=a_nFBIF_a4EC&redir_esc=y.
- Varghese, S. (2010). The butterfly effect and your employees. *Forbes*, May 17.
- Visser, W. (2010). CSR 2.0: From the age of greed to the age of responsibility. In W. Sun, J. Stewart, & D. Pollard (Eds.), *Critical studies on corporate responsibility, governance and sustainability* (Vol. 1, pp. 231–251). London: Emerald Group Publishing Limited. [https://doi.org/10.1108/S2043-9059\(2010\)0000001016](https://doi.org/10.1108/S2043-9059(2010)0000001016).
- Williams, S. (2004). The impact of mood on managerial perceptions. *Research and Practice in Human Resource Management*, 12, 128–139.
- Williams, S., Pitre, R., & Zainuba, M. (2000). Does mood influence organisational citizenship behaviour intentions? An experimental manipulation of affective state. *Research and Practice in Human Resource Management*, 8, 49–50.

CSR Butterfly Effect 2

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Synonyms

Butterfly effect; Chain of event; Random events

Definition

The butterfly effect is a metaphor that encapsulates the concept of sensitive dependence on initial conditions in chaos theory; namely that small differences in the initial condition of a dynamical

system may produce large variations in the long-term behavior of the system. It is a term that commonly interpreted to mean that small disturbances in the atmosphere may become amplified to give rise to large (or even catastrophic) effects, as might be suggested by chaos theory. The phrase “butterfly effect” was coined by Edward Lorenz, an American mathematician and meteorologist, and a pioneer of chaos theory in 1972 in his paper, *“Predictability: Does the Flap of a Butterfly’s Wings in Brazil Set off a Tornado in Texas?”*.

In the field of corporate social responsibility (CSR), the butterfly effect has become a metaphor for the seemingly insignificant events that can have large, widespread social and environmental consequences. Growing interdependence and interconnectedness have amplified risks and opportunities for consumers, employees, businesses, and governments, particularly civil society organizations. As a result, issues that were once peripheral or local now have global impact. CSR butterfly effect describes how a slight change in initial social and environmental conditions can lead to drastically different outcomes in the worldwide. For example, the flap of a butterfly’s wings in the scandal of sweatshops in Nike in the middle of 1990s was responsible for the boycott and bad reputation all over the world.

The butterfly effect occurs under two conditions: the system is nonlinear and each state of the system is determined by the previous state. In other words, the output at each moment is repeatedly entered back into the system for another cycle through the mathematical functions that determine the system.

Introduction

Chaos Theory and Butterfly Effect

The term “butterfly effect” itself is originally related to the work of Edward Lorenz, based on chaos theory. It was first described in the literature by Jacques Hadamard in 1890 and popularized by Pierre Duhem’s 1906 book. The idea that one butterfly could have a far-reaching ripple effect on subsequent events seems first to have appeared

in a 1952 short story by Ray Bradbury about time travel, although Lorenz made popular the term. In 1961, Lorenz was using a numerical computer model to rerun a weather prediction, when, as a shortcut on a number in the sequence, he entered the decimal .506 instead of entering the full .506127 the computer would hold. The result was a completely different weather scenario. Lorenz published his findings in a 1963 paper for the New York Academy of Sciences noting that “One meteorologist remarked that if the theory were correct, one flap of a seagull’s wings could change the course of weather forever.” Later speeches and papers by Lorenz used the more poetic butterfly. According to Lorenz, upon failing to provide a title for a talk he was to present at the 139th meeting of the American Association for the Advancement of Science in 1972, Philip Merilees concocted “Does the flap of a butterfly’s wings in Brazil set off a tornado in Texas” as a title.

Chaos theory is the study of nonlinear dynamics, where seemingly random events are actually predictable from simple deterministic equations. In a scientific context, the word chaos has a slightly different meaning than it does in its general usage as a state of confusion, lacking any order. Chaos, with reference to chaos theory, refers to an apparent lack of order in a system that nevertheless obeys particular laws or rules; this understanding of chaos is synonymous with dynamical instability, a condition discovered by the physicist Henri Poincare in the early twentieth century that refers to an inherent lack of predictability in some physical systems. The two main components of chaos theory are the ideas that systems – no matter how complex they may be – rely upon an underlying order, and that very simple or small systems and events can cause very complex behaviors or events. This latter idea is known as sensitive dependence on initial conditions, a circumstance discovered by Edward Lorenz (who is generally credited as the first experimenter in the area of chaos) in the early 1960s.

Lorenz in his book “The Essence of Chaos” describes chaos as behavior that is deterministic, or is nearly so if it occurs in a tangible system that

possesses a slight amount of randomness, but does not look deterministic. This means that the present state completely or almost completely determines the future, but does not appear to do so. How can deterministic behavior look random? If truly identical states do occur on two or more occasions, it is unlikely that the identical states that will necessarily follow will be perceived as being appreciably different. What can readily happen instead is that almost, but not quite, identical states occurring on two occasions will appear to be just alike, while the states that follow, which need not be even nearly alike, will be observably different. In fact, in some dynamical systems, it is normal for two almost identical states to be followed, after a sufficient time lapse, by two states bearing no more resemblance than two states chosen at random from a long sequence. Systems in which this is the case are said to be sensitively dependent on initial conditions. With a few more qualifications, to be considered presently, sensitive dependence can serve as an acceptable definition of chaos, and it is the one that we shall choose. "Initial conditions" need not be the ones that existed when a system was created. Often they are the conditions at the beginning of an experiment or a computation, but they may also be the ones at the beginning of any stretch of time that interests an investigator, so that one person's initial conditions may be another's midstream or final conditions. Sensitive dependence implies more than a mere increase in the difference between two states as each evolves with time. For example, there are deterministic systems in which an initial difference of one unit between two states will eventually increase to a hundred units, while an initial difference of a hundredth of a unit, or even a millionth of a unit, will eventually increase to a hundred units also, even though the latter increase will inevitably consume more time. There are other deterministic systems in which an initial difference of one unit will increase to a hundred units, but an initial difference of a hundredth of a unit will increase only to one unit. Systems of the former sort are regarded as chaotic, while those of the latter sort are not considered to constitute chaos, even though they share some of its

properties. Because chaos is deterministic, or nearly so, games of chance should not be expected to provide us with simple examples, but games that appear to involve chance ought to be able to take their place. Among the devices that can produce chaos, the one that is nearest of kin to the coin or the deck of cards may well be the pinball machine. It should be an old-fashioned one, with no flippers or flashing lights, and with nothing but simple pins to disturb the free roll of the ball until it scores or becomes dead.

Chaos surrounds us. Seemingly random events – the flapping of a flag, a storm-driven wave striking the shore, a pinball's path – often appear to have no order, no rational pattern. Explicating the theory of chaos and the consequences of its principal findings – that actual, precise rules may govern such apparently random behavior – has been a major part of the work of Edward N. Lorenz. In "The Essence of Chaos," Lorenz presents to the general reader the features of this "new science," with its far-reaching implications for much of modern life, from weather prediction to philosophy, and he describes its considerable impact on emerging scientific fields.

His theory called the butterfly effect stated that a butterfly could flap its wings and set air molecules in motion that in turn would move other air molecules – which would then move additional air molecules – eventually becoming able to influence weather patterns on the other side of the planet. For years, this theory remained an interesting myth. In the mid 1990s, however, the butterfly effect was proved to be accurate, viable, and worked every time. This is not a science book, but the point is, everything you do matters! Read the butterfly effect story that started with a school teacher from Maine who made one move 150 years ago that impacted an entire nation. He set off a "butterfly effect" that lasts to this day. "Without question, Andy Andrews is one of the most talented writers and speakers in the country. The butterfly effect is a beautiful, unforgettable story that can change the way you look at life. I loved it, and so will you!"

The Butterfly Effect in Corporate Social Responsibility

Lorenz's early insights marked the beginning of a new field of study that impacted not just the field of mathematics but virtually every branch of science – biological, physical, and social. For example, in environment, CO₂ emission of each car and greenhouse gas emission of each factory leads to global climate change; in the financial market, the butterfly effect was certainly evident throughout the financial world during the autumn of 2007 and beyond, as the meltdown of a relatively minor part of the US mortgage market brought global money and capital markets to their knees, while the demise of Lehman Brothers on September 15, 2008, pushed the entire system to the edge of collapse; in biology, a small change in a virus in monkeys in Africa creates a “thunderstorm” of an effect on the human population around the world with the appearance of the AIDs virus, local livestock contaminations (e.g., mad cow disease, avian flu) threaten stability of global health and global food supply chains; in evolution, small changes in the chemistry of the early Earth gives rise to life; and in psychology, thought patterns and consciousness altered by small changes in brain chemistry or small changes in physical environmental stimuli. The butterfly effect is also a common trope in fiction when presenting scenarios involving time travel and with “what if” scenarios where one storyline diverges at the moment of a seemingly minor event resulting in two significantly different outcomes.

In social and environmental science, the late twentieth century has shown that any human and business activity can have very many consequences on society and natural environment – foreseen and unforeseen, intended and unintended, beneficial and catastrophic. The CSR butterfly effect has been amplified by the increasing globalization, new technologies, and a rising tide of expectations among stakeholders about the social and environmental role of business over the past years. The evermore powerful stakeholders, particularly, civil society organizations wield wide influence. For example, since 1990, more than 100,000 new citizens' groups

have been established around the world. The balance of power has shifted in favor of individuals and small single-issue groups increasingly armed with tools and tactics that can easily be deployed through the internet. Trust in nongovernmental organizations (NGOs), citizens' groups, and online information sources have risen as inexorably as faith in business – Enron, WorldCom – has declined. In 1996, Nike found itself at the center of a fury after a New York Times column accused the company of profiting from “sweatshops” of “wretched origin” to create its athletic apparel. Soon Nike was at the center of an international controversy. International labor groups united and over 40 demonstrations occurred at Niketowns and universities across the United States.

The companies as they go global have increasingly encountered social and environmental risk. Globalization offers many opportunities to companies, but also poses novel sources of uncertainty and risks. Multiple business indicators show that the level of uncertainty for corporate leaders has increased, due in large part to:

- Large extended enterprises made up of independent organizations but with tremendous pressures to grow and perform as a unit
- Rapid rates of change in technology, connections, and information flows as a result of globalization
- Problems in managing scale using methods rooted in controlling all decisions across the entire extended enterprise

The result of the greater interdependencies and hidden vulnerabilities that businesses now face is an increased number of uncertainties in corporate decision-making. Current network-based operating models highlight the growing importance of the extended enterprise by establishing greater connectivity among and between stakeholders across the globe. This connectivity has also created entirely new stakeholders and requires innovative forms of risk management.

These changes in the operating model have led to a significant shift in market power – not just to customers and traditional investors but also,

and more importantly, toward stakeholders: communities, employees, regulators, politicians, suppliers, NGOs, and even the media. As a result of this shift in market power, “social risk” is a rising area of concern for global corporations. From a company perspective, social risk, like any other risk, arises when its own behavior or the action of others in its operating environment creates vulnerabilities. In the case of social risk, stakeholders may identify those vulnerabilities and apply pressure on the corporation for behavioral changes. As the ability to listen to corporate stakeholders’ perspectives on social issues becomes a competitive necessity, managing social risks will need to become more fully embedded in corporate strategy.

Globalization entails a paradox: the more interdependent we become, the more we seem to require order and yet foment change. Interdependence (through complexity) brings greater efficiency and effectiveness – but with it comes greater vulnerability. Corporations operating in the global economy are key players in a dynamic system. The higher the number of interactions, both implicit and explicit, that entities have with one another, the more factors are introduced that influence the overall relationship. The dynamic system effectively has more levers and pressure points than existed in the past, many of them critical to smooth operations and playing a role in the optimization of the whole. Those pressure points on business, most notably those pressures by civil society and stakeholders more broadly, constitute social and environmental risk. From a company’s perspective, social risk occurs when an empowered stakeholder takes up a social issue area and applies pressure on a corporation (exploiting a vulnerability in the earnings drivers – e.g., reputation, corporate image), so that the company will change policies or approaches in the marketplace.

From a civil society perspective, a company may well deserve criticism for its social practices. Think of Shell in Nigeria, Nike in Indonesia, oil spills such as the Exxon Valdez, upscale apparel retailers purchasing from sweatshop suppliers, unsustainable forestry practices by the timber industry, or big pharmaceutical companies going

into South African courts to keep imported generic AIDS treatment drugs out of that country, suffering one of the world’s highest HIV prevalence rates. Even where companies break no local laws, they may stand in violation of their own self-proclaimed standards or be accused of breaching international community norms.

Key Issues

Companies that operate in the new global environment need to devise systematic means for dealing with the challenges it poses. One of these challenges as “social risk” could be brought about by the butterfly effect. Civil society organizations in particular can campaign for changes in corporate behavior through protests, boycotts, trying to change purchasing patterns – or, increasingly, partnering with companies to achieve joint aims. The push and pull of these sectors constitutes a butterfly effect, posing both new risks but also opportunities.

A social risk may initially be “picked up” by the CSR antennae; there is no guarantee that is where it will remain. A host of “social risks” have begun as issues that were primarily understood and addressed by CSR departments. However, as those social risks continued to gain attention with civil society, public policy, and media outlets over time, senior managers were also forced to pay attention, as core business operation became impacted. The challenge faced by Nike as a result of conditions in its global supply chain is an example. The case of Nike illustrates more specific dangers of not linking CSR and stakeholder intelligence to core business processes, but also how one company fixed this disconnect to create a win-win outcome.

Therefore, companies should link a comprehensive CSR program (stakeholder engagement) with core business processes (risk management) as part of its overall approach to business performance. As Nike’s experience shows, not linking CSR and related stakeholder intelligence to core business processes can leave a company vulnerable, with no appropriate controls or countermeasures.

Future Directions

The emergence of a social risk brought about by the butterfly effect can have wide-ranging impacts on various aspects of business (from global operations to sourcing to public relations). Any number of stakeholders may transmit a social risk to various divisions in a company. Investors may create shareholder resolutions to change/evolve company policies. Customers may request changes in a company's environmental policies. Employees may raise concerns about outsourcing of jobs overseas. Suppliers may request coverage in a company's healthcare plan. While many of these feedback channels may be familiar to most large public companies, it is emergence of civil society scrutiny, and its resulting social risks, with which many companies are the least familiar and least equipped to manage.

Global companies face a new reality that has changed the nature of risk and risk management: networked operations and global value chains, empowered stakeholders, and the dynamic tension among sectors. The emergence of the new forms of social risk cannot be mitigated through traditional means. The new environment requires innovation by companies in both sensing and understanding these risks, and in adapting risk management systems to include new tools and network-based models of information sharing.

Corporate social responsibility programs are an effective means to provide strategic intelligence for managing social risks. Risk management by global companies should be adapted to include corporate social responsibility programs. CSR provides the framework and principles for stakeholder engagement, supplies a wealth of intelligence on emerging and current social issues/groups to support the corporate risk agenda, and ultimately serves as a countermeasure for social risk. Granted, effectively integrating CSR into core business functions can be difficult, as the experience of Nike illustrates.

Cross-References

- [Corporate Social Responsibility](#)
- [Sustainability Management and Market Risk](#)
- [Stakeholder Management](#)

References

- Anderson, D. R. (2005). *Corporate survival: The critical importance of sustainability risk management*, iUniverse, Inc.
- Author. (2008). Obituary of Professor Edward Lorenz Meteorologist whose description of the 'butterfly effect' helped to popularise chaos theory. *The Daily Telegraph*.
- Author. (2010). Butterfly effect could cause financial chaos. *Irish Times*.
- Beth Kytle, J. G. R. 2005. *Corporate social responsibility as risk management*. John F. Kennedy School of Government, Harvard University.
- Linda Spedding, A. R. (2007). *Business risk management handbook: A sustainable approach*. Oxford: CIMA Publishing.
- Lorenz, E. N. (1996). *The essence of Chaos.zip*. Seattle: University of Washington Press.
- Martin Reynolds, C. B., & Smith, M. J. (Eds.). (2009). *The environmental responsibility reader*. London: Zed Books.
- Ott, E. (2008). Edward N. Lorenz (1917-2008). *Nature*, 453, 300.
- Sheila, M. Bonini, L. T. M., & Oppenheim, J. M. (2006). When social issues become strategic? *The McKinsey Quarterly*, pp. 20–31.
- Sneller, R. (2009). Butterfly effect the perfect chaos to put markets back into flight. *Investment Week*, p. 40.
- Wheatley, M. J. (2006). *Leadership and the new science: Discovering order in a Chaotic world*. San Francisco: Berrett-Koehler Publishers.

CSR Communication

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Synonyms

[CSR accountability](#); [CSR and sustainability](#)

Definition/Description

Corporate social responsibility (CSR) is the “integration of an enterprise's social, environmental, ethical and philanthropic responsibilities toward society into its operations, processes and core business strategy in cooperation with relevant

stakeholders” (Rasche et al. 2017). Ethical considerations have risen along with a set of contingent social responsibilities that corporations are now asked to fulfill by society in order for corporations to be deemed sustainable. A key aspect of CSR is therefore accountability and how these activities are communicated to stakeholders. Indeed 93% of the world’s largest 250 corporations currently report on their sustainability performance (KPMG 2017). This information could be provided by annual reports, stand-alone reports, socially orientated advertising, CSR websites, or even social media campaigns. This entry focuses on the key trends in CSR reporting, starting with an introduction to the sustainability reporting context, followed by an overview of the evolution of published CSR reports. This leads into a discussion of the growing use of the Internet to disseminate CSR information through both corporate websites and social media platforms.

Sustainable Development

The Brundtland Report of 1987 provides the classic definition of sustainability as being any activity which “meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987). This is quite an aspirational definition, and it has been argued that it lacks practical and measurable outcomes for corporate implementation. Some years later, however, the sentiment of the Brundtland Report was given new impetus when, in September 2015, all 193 Member States of the United Nations adopted “Agenda 2030” a plan for achieving a more sustainable future for all with ambitions to end extreme poverty, fight inequality and injustice, and protect the planet. These aims are broken down into 17 Sustainable Development Goals (SDGs) which were set following consultation with governments, business, and citizens. It is recognized that all of society has a role to play in achieving these targets; however, given the globalization, size, and power of many corporate bodies, business is considered to have an

important function in achieving these targets, and often sustainability forms part of the CSR reporting remit. Indeed, the terms CSR and sustainability are often used interchangeably, and there is an increasing tendency to refer to the CSR report as the “sustainability report” (Aras and Crowther 2009).

It is widely agreed that future sustainability encompasses environmental, social, and economic aspects, and in a step toward making the United Nations (UN) 2030 Agenda and its SDGs more operationally achievable, the International Standards Organization (ISO) has developed numerous standards and supporting guidance. ISO 26000 is specifically focused on how corporations can operate in an ethical and transparent way, and it requires them to report on how they are addressing stakeholder demands in relation to sustainable development. Corporations can apply to have this certification to verify the quality of the activities currently being undertaken which recognizes the fact that sustainability reporting is increasingly used as a measure of corporate performance and is a value-driving activity.

Another key reporting mechanism when making disclosures on sustainability activities and CSR is the Global Reporting Initiative (GRI). The GRI is the most commonly used reporting framework with 75% of the world’s 250 largest corporates using it in their CSR reporting (KPMG 2017). GRI’s framework for sustainability reporting helps corporations identify, gather, and report on CSR activities in a clear and comparable manner. The GRI framework contains universal standards which can be applied at a foundation level (“GRI101”) moving into more general disclosures which include contextual information about the reporting entity (“GRI102”) and finally the management approach (“GRI103”) which reports on the managerial strategy in respect of each material topic. These material topics will vary according to the level of stakeholder interest, size, and nature of the corporation. Specific guidance on material items is provided under the topics: economic (“GRI 200”); environmental (“GRI 300”); and social (“GRI 400”) development.

The GRI is not just about developing a framework for reporting, it also has an important role in providing advice and guidance to support the framework's implementation. It also works closely with governmental bodies and stock exchanges in developing reporting policies. In 2009, the Sustainable Stock Exchange Initiative was created by the UN with a mission to "build the capacity of stock exchanges and securities market regulators to promote responsible investment in sustainable development and advance corporate performance on environmental, social and governance issues" (Sustainable Stock Exchange Initiative 2019). The legislative environment is also changing, and in December 2014, the European Commission (EC) has introduced a new directive obliging large multinational corporations (those with over 500 employees) to provide nonfinancial disclosures covering environmental-, social-, and employee-related human rights, anti-corruption, and bribery matters. This legislation came into effect in the United Kingdom and Ireland in 2017 with the aim of increasing the transparency of non-financial information in identifying key sustainability risks in order to raise investor and consumer confidence.

The guidance provided by the EC on this directive encourages reporting entities to utilize frameworks such as GRI and ISO26000 when drafting their disclosures. In the United States, corporations are required make climate change-related disclosures in Securities and Exchange Commission filings, and the Sustainability Accounting Standards Board was formed in 2011 which publishes industry-specific Sustainability Accounting Standards that advise what CSR disclosures should be included. These are just some of the moves globally in mandating CSR disclosures in order to encourage corporations to focus on a long-term sustainable approach to their activities. To date there are 42 countries in which the GRI Standards are referenced in government or market instruments, and it is hoped that in today's global business environment, this will help to increase the comparability of reports and lead to more efficient reporting practices (Carrots and Sticks 2019).

The Importance of CSR Reporting

Despite the guidance and regulatory developments discussed above, CSR reporting remains a largely voluntary activity. It is undertaken as corporations recognize that it is one of the key areas through which they can build and maintain relationships with external stakeholders such as customers, suppliers, governments, nongovernment organizations, and unions through continual communication. Much of the research on CSR is concerned with the so-called business case for CSR activities, with academics suggesting that a commitment to CSR is associated with positive consumer relationships; a higher return on investment; the ability to attract, motivate, and retain talented employees; and finally in the investment domain, gaining socially responsible investors (Du et al. 2011). Therefore, CSR without audience support is arguably pointless, and the form of corporate communication used in relation to these activities is key; however, it has been found that despite their successful efforts in developing CSR programs, corporations still have not found appropriate methods of effectively communicating these to their stakeholders (Kesavan et al. 2013).

CSR has been increasingly integrated into the financial reporting remit to assist users in making more informed long-term investment decisions reflecting a tighter coupling between CSR and the corporate's financial goals. Indeed, non-financial disclosures, including CSR and other voluntary disclosures, represent a much larger body of information on corporate activity than financial information in terms of volume and scope. Many corporates include CSR information as part of their annual report and financial statements; others issue a stand-alone CSR report; however, there is a small but increasing trend that has been toward integrated reporting (IR). The International Integrated Reporting Council states that "an integrated report is a concise communication about how a corporation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term" (International Integrated Reporting

Council 2017). IR is more than just combining the disclosure of financial information and non-financial information into one single document. It requires a new way of thinking about how a corporate operates. Instead of narrowly focusing on creating shareholder value from financial capital, a wider view that recognizes the various forms of capital resource available to the business including financial, intellectual, human, social, and natural capital and the utilization of the capital to create shared value for a range of stakeholders is taken under IR. These reports are not “bolt on” or in addition to financial reporting but rather mark a structural evolution in corporate reporting requiring a cultural shift in terms of integrated thinking, overall vision of the business, its risks and performances (financial and nonfinancial), and stakeholder integration. The complexity of this holistic approach to performance measurement is perhaps why only 14% of the world’s biggest 250 corporations choose to report in this way (KPMG 2017).

No matter the medium used for disclosure (annual statements, stand-alone report, or integrated reporting), the voluntary nature of the measurement and reporting of any of these CSR activities makes them open to management manipulation. Any disclosures made will only reflect those aspects of performance that corporations are willing to release. The term “greenwashing” has been coined to describe the selective disclosure of positive information about a corporation’s environmental or social performance while withholding negative information from stakeholders. Arguably if not complying with reporting requirements, the focus of CSR reporting should be to address the users’ information demands; however, there is an expectation gap between the two key parties in CSR disclosures, namely, the preparers and the users. This gap may limit the impact of CSR messages as the recipients may view them as being of little value and be skeptical of what they are being told.

If CSR reporting comes across as excessive self-promotion, it may be met with cynicism and distrust. One way in which corporations can help verify the quality of their nonfinancial reporting is

to obtain external assurance over the quantitative and qualitative disclosures being made, and indeed 67% of the top 250 corporations provide external assurance over their CSR disclosures (KPMG 2017). Studies have shown that investors perceive the report to be more credible where there is external assurance, particularly when this is provided by a professional accountant (Mitchelon et al. 2015). In supporting accountants in this work, the International Standard on Assurance Engagements (ISAE) 3000, *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, was developed by the International Auditing and Assurance Standards Board. ISAE 3000 came into force in December 2003 and is used by accounting firms to guide their assurance engagements on sustainability reports. Any assurance provided is designed to help ensure that the reporting meets stakeholders’ needs and expectations in relation to the disclosures made.

Networked Technologies for CSR Reporting

In addition to assurance, the use of networked communication via websites and social media has been used to make corporate messages on CSR much more credible and acceptable to stakeholders. This is because stakeholders are no longer passively receiving the messages being transmitted to them by corporations, but rather they are empowered to shape and evaluate its content. Through the use of networked technologies, people may interact in a dialogue to collaborate in the creation of content and setting of the corporate agenda. A poll of chief executives from major US corporations revealed 72% reported that social media has been used to communicate to the public about their CSR efforts, and 59% stated that the use of social media has had a positive impact on the quality of their communications with consumers (Kesavan et al. 2013).

The primary value of networked technology such as websites and social media as a dissemination tool for corporate messages including CSR

reporting is its dialogic aspect in engaging stakeholders in the CSR process. It shifts media communication from managing audiences to building and maintaining relationships, which to the end consumer may come as a welcome break from what are at times viewed as elite controlled and hierarchical corporate media structures (Lyon and Maxwell 2011). This provides corporations with a rich source of feedback presenting opportunities to monitor their external environment and better understand and engage with stakeholders in order to avoid or mitigate potential corporate crisis. Indeed, the discourse itself can be construed as positive affirmation of CSR activities, as a corporation's actions have motivated stakeholders to engage.

This dialogue, however, is of limited value until there is an iterative effort from the corporation and change in behavior as a direct response to the issues raised. When the negotiation has resonance with other corporate logics, such as value creation, then co-construction of the CSR agenda may result. Indeed, networked technologies have transformed the potential role of communication from dissemination of CSR activities to a joint co-creation of CSR strategy between managers and stakeholders called CCO (Communication Constitutes Organisation) in recognition of the ability of communication to influence a corporation (Schultz 2013). The first step a corporation has to take to enter dialogue and engage in CCO is providing the opportunity for stakeholders to do so across communication platforms such as corporate reports, websites, and social media.

Summary

Although the CSR agenda is set and measured internally by corporations, it is inherently stakeholder driven, and therefore stakeholder awareness and managing stakeholder feedback are key to reaping the strategic benefits of any CSR initiatives undertaken. Arguably the true benefits of nonfinancial reporting will be felt only when it is properly integrated with financial reporting and not treated as a separate activity. Ultimately

reporting is only an instrument; the benefits from CSR activities will come when they are fully embedded in the business, which reporting can demonstrate but cannot achieve on its own.

Cross-References

► [Directors and CSR](#)

References

- Aras, G., & Crowther, D. (2009). *The durable corporation*. Farnham: Gower Publishing.
- Carrots and Sticks. (2019). *Global trends in sustainability reporting regulation and policy* 2017. <https://www.carrotsandsticks.net/>. Accessed 15 March 2020.
- Du, S., Bhattacharya, C. B., & Sen, S. (2011). Corporate social responsibility and competitive advantage: Overcoming the trust barrier. *Management Science*, 57(9), 1528–1545.
- International Integrated Reporting Council. (2017). *What? The tool for better reporting*. <https://integratedreporting.org/what-the-tool-for-better-reporting/>. Accessed 15 March 2020.
- Kesavan, R., Bernacchi, M. D., & Mascarenhas, O. A. J. (2013). Word of mouse: CSR communication and the social media. *International Management Review*, 9(1), 58–66.
- KPMG. (2017). *KPMG international survey of corporate responsibility reporting 2017*. <https://home.kpmg/xx/en/home/insights/2017/10/the-kpmg-survey-of-corporate-responsibility-reporting-2017.html>. Accessed 15 March 2020.
- Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate environmental disclosure under threat of audit. *Journal of Economics & Management Strategy*, 20(1), 3–41.
- Mitchelon, G., Pilonali, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 3, 59–78.
- Rasche, A., Morsing, M., & Moon, J. (2017). *Corporate social responsibility, strategy, communication, governance*. Cambridge: Cambridge University Press.
- Schultz, F. (2013). Corporate social responsibility, reputation, and moral communication: A constructivist view. In C. Carroll (Ed.), *Handbook of communication and corporate reputation* (pp. 362–375). Oxford, UK: Blackwell Publishing.
- Sustainable Stock Exchange Initiative. (2019). <http://www.sseinitiative.org/>. Accessed 15 March 2020.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press. <http://www.un-documents.net/our-common-future.pdf>. Accessed 15 March 2020.

CSR Communication and Annual Reports

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Synonyms

[Annual financial statements and balance sheet](#); [Annual reporting](#); [Annual review](#); [Annual statement](#); [Managing of different organization communication tools](#); [Open communication](#); [Subtle communication and sensibilities of publics](#)

Definition

CSR Communication

CSR communication involves communicating by companies and other organizations to a broader range of interest groups apart from shareholders and creditors, including employees and even society as a whole about social, economic, and environmental aspects of the organization's performance rather than profit and financial position alone.

Annual Report

An annual report is a comprehensive report on company's activities throughout the preceding year. The single source of getting information about any company is their annual report because an annual report communicates to different stakeholders about a company's financial as well as nonfinancial performances.

Introduction

With the rapid spread of globalization, business leaders have begun to realize that we live in an interconnected world where mutual interdependence is the basis of our existence as well as our progress. For the survival and sustained growth of business itself, organizations have realized that it is essential not to limit their

thoughts and concerns within the boundary of the organization. Organizations have realized that longevity of any corporation requires it to earn the goodwill and this goodwill can be achieved by showing its responsiveness toward social responsibility. This would help them to build up a reputation which in turn would have a positive impact on their business. Hence CSR today is not just a part-time philanthropic activity but a strategic imperative directly linked to business results for long-term sustainability of organizations (Ghosh 2016). Constant information flow and growing social and environmental consciousness uphold corporate social responsibility (CSR) more as a business necessity than a mere option.

Communication of accurate, comprehensive, and timely information is important for efficient functioning of a capital market. With the emergence of corporate governance and various disclosure norms across the world and with the emergence of International Integrated Reporting, it has become important to study not just what is being communicated but how it is being communicated as well. In other words, both form and content of the communication are important. In fact, creative communication (presence of striking, relevant, and understandable content) is essential for a CSR communication plan. However, the communication of CSR practices is not merely transmission of information (i.e., objectives, intentions, activities); it goes beyond that because it is based on a continuous process of exploration, construction, negotiation, and modification among different actors (Christensen and Cheney 2011).

With modern communication technologies enhancing the scope of availability of information, stakeholders from all walks of life are making more informed decisions. Measures to communicate CSR efforts are now an essential part of businesses especially for a country like India where CSR communication has become mandatory. For a business to succeed, not only does a company have to engage in CSR, but they must also find ways to communicate their CSR endeavors to stakeholders in forms that resonate with them.

CSR Communication

Understanding the Concept

CSR communication has become a vital issue in building and sustaining the legitimacy of a company in the eyes of stakeholders. According to the definition provided by Podnar (2008), CSR communication is a process of anticipating stakeholders' expectations, articulation of CSR policy, and managing of different organization communication tools designed to provide true and transparent information about a company's or a brand's integration of its business operations, social and environmental concerns, and interactions with stakeholders. Recently, there have been many efforts made by authors globally to understand, explain, and justify CSR communication in terms of theories drawn from social and political theory. These theories can be seen as encompassing the *stakeholder theory* (Ullmann 1985), *legitimacy theory* (Lindblom 1984; Guthrie and Parker 1989; Patten 1992), *accountability approach* (theory) (Gray et al. 1987), and *political economy theory* (Cooper and Sherer 1984).

According to Ullmann (1985) with respect to *stakeholder theory*, organizations should regard social responsibility activities as an active management strategy; then only can one expect a positive relationship between stakeholder power, social performance, and social communication. In discussing the *legitimacy theory*, which is considered to be the dominant theory in the CSR communication research, one can see that it is based on the concept of social contract (Lindblom 1984; Guthrie and Parker 1989; Patten 1992; Hooghiemstra 2000). A company needs to engage in proactive CSR communication for society to regard it to be a good citizen (Guthrie and Parker 1989). For the purpose of legitimizing its actions, a company needs to justify its continued existence (Lehman 1983, from Guthrie and Parker 1989). As far as the *accountability theory* is concerned, Jackson (1982) regarded accountability as "explaining or justifying what has been done, what is currently being done and what is planned . . . [and]. . . involves therefore, the giving of information." Hence it can be the most useful ideological framework for analyzing communication of accounting information in

general and CSR disclosure in particular. There are a lot of limitations involved in the present system of accounting and accounting reports (Cooper and Sherer 1984) because it disregards social welfare and is biased toward the shareholders. However from the *political economy theory* perspective, accounting reports can be perceived as a tool for communicating social, political, and economic facets of a firm. The basis of all the theories that has developed so far speaks of the fact that, for corporate enterprises, the capacity to influence the CSR activities taken up by them depends on the capacity to communicate with different stakeholders and on the support obtained from them. Hence CSR communication has become crucial in today's scenario.

Benefits of CSR Communication

CSR communication enhances corporate image and its reputation. It not only helps to improve relationship with the whole gambit of stakeholders, but it helps to attract better skilled employees (Branco and Rodrigues 2006). Regular CSR communication enhances transparency by increasing the awareness about CSR activities and ensuring corporate transparency. It helps in supervision of CSR activities and thus discovering the weaknesses in CSR corporate strategy. CSR communication accelerated involvement of stakeholders by strengthening their position and their involvement in company decisions. It also supports cross-sector partnerships between businesses, government agencies, and nonprofit organizations (Vexlerova 2008).

Annual Report

Understanding the Document

According to Le Breton-Miller and Miller (2009), investors' and other stakeholders' decisions are largely influenced by the quality of information presented in annual reports. The single source of getting information about any company is their annual report because an annual report communicates to different stakeholders about a company's financial and nonfinancial performances, past or present performance, a

company's mission and vision, detailed financial performance through the financial statements, corporate governance or CSR activities, a company's strategy, risk management policies, and the future outlook. It is a report that every company must provide to its shareholders' at the annual general meeting. Rather it is a report that every investor must read. It is the most comprehensive means of communication between a company and its stakeholders, rightly called the pinnacle of corporate communications (Cohen 2002; Coy and Dixon 2004; Li 2008; Linsley and Shrivs 2006; Santema and van de Rijt 2001).

Purpose of an Annual Report

- Provides financial information – The financial information provided in the annual reports helps determine the current status of business, how the company is funding operations and growth, and how good the company is placed at making money for its investors.
- Accountability – Through the annual report, we can have an idea about how far the company has met its responsibilities and the financial reports which form a part of the annual report reflects the extent of performance of the organization.
- Decision making – The performance of the company that gets reflected in the annual reports helps a wide range of potential users for evaluating and making economic decisions.
- Promotion of the company – Inclusion of positive feedbacks from employees and customers or key developments of the company which are highlighted increases the readership of the report and appeals to new investors and customers. Thus the shareholders and stakeholders feel good about their investments in that company.

Key Constituents of Annual Report

The major components of the annual report reflect on the transparency and credibility of the company, giving a fair idea on the sustainability of business and how sound the business is. The major components are:

- Letter from the Chairman
- Ten-year financial summary
- List of directors and other officers
- Management discussion and analysis (MD&A)
- Director's report
- Corporate information
- General shareholders' information and corporate governance
- Financial statements and schedules

CSR Communication, Annual Reports, Indian Companies Act 2013

With the enactment of Section 135 of the Companies Act, 2013, India became the first country to include provisions of CSR in Company Law and make CSR expenditure mandatory for organizations based on pre-specified criteria. CSR is still a voluntary exercise left to the discretion of the organization in the rest of the world. However an encouraging aspect is that a growing number of countries have made communication of CSR activities undertaken by corporate mandatory. Thus, in countries such as Sweden, Norway, the Netherlands, Denmark, France, Australia, and China, either government regulations or stock exchange regulations or both require corporate to disclose their CSR activities through sustainability reporting. The distinguishing feature of Section 135 is that it not only makes communication of CSR activities mandatory but goes a step further to mandate CSR activities in the first place.

CSR activities undertaken by corporate in India can be communicated through annual reports via the following segments:

- *“Chairman Message”* – Even though this segment is voluntary in nature, CSR activities can be communicated via this segment.
- *“Separate section for CSR”* – Similarly even though this segment is voluntary in nature, CSR activities can be communicated via this segment.
- *“Director's report”* – This segment is mandatory as per Section 134 of the Company Act of 2013 and Regulation 34(2) (f) of SEBI

CSR Communication and Annual Reports, Table 1 Annual report on CSR

1	2	3	4	5	6	7	8
Serial no.	CSR project or activity identified	Sector in which the activity is covered	Projects or programs Local area or specify the state or district where project or program was undertaken	Amount outlay	Amount spent on the project or program	Cumulative expenditure up to the reporting period	Amount spent direct or through implementing agency
1							
2							
3							
	Total						

^aGive details of implementing agency

(LODR) Regulations 2015. CSR communication via this segment is mandatory.

- Rule 8 of the Companies (Corporate Social Responsibility Policy) Rules, 2014 provides the following:

The Board's Report of a company covered under these rules pertaining to a financial year commencing on or after the 1st of April 2014 shall include an annual report on CSR containing particulars specified in Annexure (Annexure 1). In case of a foreign company, the balance sheet filed under Section 381 (1) (b) shall contain an Annexure regarding report on CSR (Annexure 1).

Section 134(3) (o) of the Companies Act of 2013 requires that the report by the Board of Directors shall include the details of the policy developed and implemented by the company on corporate social responsibility initiatives taken during the year. If the company fails to spend 2% of average net profits during a financial year, the Board shall, in its report, specify the reasons for not spending the amount.

- “*Management discussion and analysis*” – This segment is mandatory as per Regulation 34(2) (f) of SEBI (LODR) Regulations 2015. It usually forms a part of the directors' report in an Annual Report or is an addition thereto. Majority of the organizations communicate

about their CSR activities via this segment as well.

- “*Business Responsibility Report*” (BRR) – SEBI has mandated inclusion of Business Responsibility Report (BRR) as a part of the Annual Report for top 500 listed entities as per Regulation 34(2) (f) of SEBI (LODR) Regulations 2015. Business Responsibility Report describes the initiatives taken by the listed entity from an environmental, social, and governance perspective. It forms a part of the annual report as specified by the Securities and Exchange Board of India, and it is prepared according to the format as specified by them (Annexure 2).

Key Issue

Although the annual report serves as a communication tool, its success shall be determined on the quality of information provided therein. That is why it is important to study not just how CSR information is being communicated but what is being communicated in order to gauge its relevance.

Cross-References

- [Communication and Innovation](#)
- [Communication of CSR Information](#)
- [Corporate Social Responsibility Reporting](#)
- [CSR Communication](#)

- CSR Communication and Perspective
- CSR Disclosure, Quality Measurement of
- CSR Disclosure Quality: Role of NEDs
- Disclosure
- Nonfinancial Disclosure
- Reporting

Annexure 1

Format for the Annual Report on CSR

Activities to Be Included in the Board's Report

1. A brief outline of the company's CSR policy, including overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programs.
2. The Composition of the CSR Committee.
3. Average net profit of the company for last 3 financial years.
4. Prescribed CSR Expenditure.
5. Details of CSR spent during the financial year:
 - (a) Total amount to be spent for the financial year;
 - (b) Amount unspent, if any;
 - (c) Manner in which the amount spent during the financial year is detailed below:
6. In case the company has failed to spend the 2% of the average net profit of the last 3 financial years or any part thereof, the company shall provide the reasons for not spending the amount in its Board report.
7. A responsibility statement of the CSR Committee that the implementation and monitoring of CSR Policy, is in compliance with CSR objectives and Policy of the company.

Annexure 2

Format for Business Responsibility Report

Section General Information about the company

Section B – Financial Details of the Company

Section C – Other Details

Section D – BR Information

1. Details of Director/Directors responsible for BR
2. Principle-wise (as per NVGs) BR Policy/policies

3. Governance related to BR

Section E – Principle – wise Performance (Principle – wise Performance further contains Principle 1 to Principle 9)

Principles to assess compliance with environmental, social and governance norms

Principle 1: Businesses should conduct and govern themselves with Ethics, Transparency and Accountability

Principle 2: Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle

Principle 3: Businesses should promote the wellbeing of all employees

Principle 4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized

Principle 5: Businesses should respect and promote human rights

Principle 6: Business should respect, protect, and make efforts to restore the environment

Principle 7: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner

Principle 8: Businesses should support inclusive growth and equitable development

Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner

References

- Branco, M. C., & Rodrigues, L. L. (2006). Communication of corporate social responsibility by Portuguese banks. A legitimacy theory perspective. *Corporate Communications*, 11(3), 232–248.
- Christensen, L. T., & Cheney, G. (2011). Interrogating the communicative dimensions of corporate social responsibility. In Ø. Ihlen, J. Bartlett, & S. May (Eds.), *Handbook of communication and corporate social responsibility* (pp. 491–504). Malden: Wiley-Blackwell.
- Cohen, D. (2002). *Quality of financial reporting choice: Determinants and economic consequences*. Dallas: School of Management, University of Texas at Dallas.

- Cooper, D. J., & Sherer, J. J. (1984). The value of corporate accounting reports: Arguments for a political economy of accounting. *Accounting, Organizations and Society*, 9(3/4), 207–232.
- Coy, D., & Dixon, K. (2004). The public accountability index: Crafting a parametric disclosure index for annual reports. *The British Accounting Review*, 36(1), 79–106.
- Ghosh, S. (2016). CSR Reporting: Research Findings and Insights. In Sahay B S, Das, Satyasiba, Chatterjee, Bhaskar, Subramaniam Gayatri and Rao Venkata R (edited), *CSR: The New Paradigm*, Bloomsbury.
- Gray, R., Owen, D., & Manuders, K. (1987). *Corporate social reporting: Accounting and accountability*. London: Prentice-Hall International.
- Guthrie, J. E., & Parker, L. D. (1989). Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research*, 19(76), 343–352.
- Hooghiemstra, R. (2000). Corporate disclosure and impression management – New perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1/2), 55–68.
- Jackson, P. M. (1982). *The political economy of bureaucracy*. London: Philip Allan.
- Le Breton-Miller, I., & Miller, D. (2009). Agency vs. stewardship in public family firms: A social embeddedness reconciliation. *Entrepreneurship: Theory and Practice*, 33(6), 1169–1191.
- Lehman, C. R. (1983). Statement in corporate social responsibility research. Working paper no. 3, Public Interest Section, AAA.
- Li, F. (2008). Annual report readability, current earnings and earnings persistence. *Journal of Accounting and Economics*, 45, 221.
- Lindblom, C. E. (1984). The accountability of private enterprise: Private – No. Enterprise – Yes. In A. M. Tinker (Ed.), *Social accounting for corporations*. New York: Marcus Weiner.
- Linsley, P. M., & Shrivies, P. J. (2006). Risk reporting: A study of risk disclosures in the annual reports of UK companies. *The British Accounting Review*, 38, 387–404.
- Patten, D. M. (1992). Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory. *Accounting, Organizations and Society*, 17, 471–475.
- Podnar, K. (2008). Guest editorial: Communicating corporate social responsibility. *Journal of Marketing Communications*, 14(2), 75–81.
- Santema, S., & van de Rijt, J. (2001). Strategy disclosure in Dutch annual reports. *European Management Journal*, 1, 101–108.
- Ullmann, A. (1985). Data in search for a theory: A critical examination of the relationship among social performance, social disclosure, and economic performance. *Academy of Management Review*, 10, 540–577.
- Vexlerova, M. (2008). Koncept CSR v praxi-pruvodce odpovednym podnikanim, pp. 27.

CSR Communication and Perspective

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Synonyms

Corporate communication; Organizational communication; Stakeholder communication; Strategic sustainability communication

Definition

In the current era, because a variety of stakeholders are demanding information about companies' Corporate Social Responsibility (CSR) activities, a CSR communication strategy is essential for business survival. Information supply has evolved from a strict, one-way company-controlled exercise toward a more interactive and even digital approach with online communication possibilities to a mass audience. Twenty-first-century corporate communication tools seek feedback from various stakeholders before trying to meet their demands through appropriate CSR communication. However, effective, strategic, tailor-made, and interactive communication remains the missing link in the practice of corporate responsibility. Today, companies need to differentiate their CSR communication tools according to the stakeholders, including online and traditional communication devices.

Introduction

The generally accepted CSR definition is “the voluntary efforts of enterprises to integrate social and environmental considerations into their activities and their interaction with all stakeholders” (European Commission 2001, p. 6). Another definition describes CSR as a voluntary commitment of business to exceed explicit and implicit social obligations (Parker 2008, p. 84). Although there is wide recognition regarding the importance of



CSR Communication and Perspective, Fig. 1 CSR stakeholders. Adapted from Kanji and Chopra (2010) and Hohnen and Potts (2007)

CSR, there is no consensus on its definition due to its varied nature (Turker 2018, p. 3). While research currently emphasizes different aspects of the phenomenon, the mostly highlighted reality is the global focus on CSR communication efforts. CSR communication is defined as the “building and maintaining of favourable reputations and relationships with key stakeholders” (Cornelissen 2004, p. 17). These stakeholders are both individuals and groups who can influence company decisions. As shown in Fig. 1, the basic stakeholders are government, local communities, employees, NGOs, trade unions, consumers, and shareholders, which have different levels of impact on companies. Currently, including stakeholders in CSR communication has been increasingly valued and accepted as a civic business attitude.

Communication outcomes vary depending on stakeholder characteristics (Toker 2013). Communication comprises message, content, and channel, which define the success of CSR communication outcomes (Fig. 2). Awareness and trust can be categorized as internal communication outcomes while loyalty, purchases, productivity advocacy, and amount of invested capital for investors are external

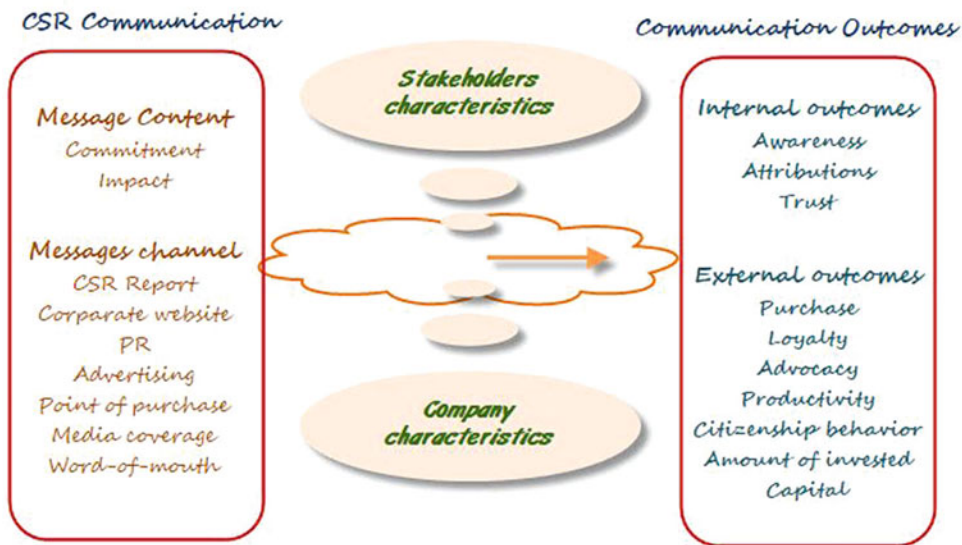
outcomes. Impact and the commitment are related to the content of CSR communication messages.

CSR communication channels and tools are the most essential elements of a CSR communication strategy. These are used in worldwide depending on corporate culture and country characteristics. Communication tools range from CSR reports, corporate website announcements and media coverage to sponsorship and PR activities, advertising and word of mouth. Although some communication tools, such as public relations and advertising, are more powerful and effective, they are not viewed positively by some stakeholders, such as consumers and NGOs (Jahdi and Acikdilli 2009, p. 106).

The Changing Nature of CSR Communication

A lot has changed since the powerful argument of economist Milton Friedman (1970) that related CSR with profit maximization in business. Now that this view no longer prevails, CSR has been a rapidly increasing practice, with businesses becoming increasingly interested, active and innovative.

Framework of CSR Communication



CSR Communication and Perspective, Fig. 2 Framework of CSR communication. Source: Adapted from Tonello (2011)

The phenomenon has appeared on the boardroom agenda in many organizations. Therefore, CSR communication has also evolved and entered a new stage. Certain characteristics need to be highlighted regarding the changing perception of CSR communication:

- *Varied information demands of stakeholders regarding CSR actions of business:*

As an important stakeholder of the CSR communication strategy, **consumers** not only expect businesses to be socially responsible but they also want to be informed about what companies are doing in the CSR field. “More information on a company’s social and ethical behavior would influence their purchasing decisions, therefore companies actively communicate their CSR activities” (Pomeroy and Dolnicar 2009; Dawkins 2004; Environs 1999). For example, in 2007, 97% of the largest firms in Europe communicated on corporate responsibility issues in their websites (Borglund et al. 2008). After the information phase, since CSR communication is a circular

process, companies continuously evaluate and respond to stakeholder attitudes and demands. However, this process needs a well-designed communication strategy and implementation of organizational communication based on stakeholder expectations, which is theoretically called the stakeholder involvement strategy.

Organizations should not underestimate the word-of-mouth communication channel of another important stakeholder group: **employees**. Because of social ties and wide reach, they are often considered a source of credible information. Thus, companies should include this group in their internal CSR communication strategy and find ways to convert them into CSR advocates.

Another important and specific stakeholder group, **NGOs, consultants, analysts, and investors**, act as counterparts to corporations. To communicate with this group, the company needs more professionalized and tailored action (Frostenson et al. 2011). Thus, CSR communication is also criticized for being aimed just at professionals through CSR reports. However, although CSR reports are an important tool to communicate with

opinion leaders and NGOs, CSR communication should also include the general public and consumers generally as its target audience. **The media** is another important stakeholder in the communication strategy. It may be skeptical about company messages and there may be potentially hostile reactions from the media, campaign groups, and others. However, despite these skeptical relations, getting positive media coverage on television or in the press, such as in *Business Ethics* or *Fortune* magazine, is much more effective than paid advertising. The diverse information requirements of different stakeholder groups also present special communication challenges.

- *CSR communication strategy should be carefully designed*

Besides the stakeholder information strategy, stakeholder response and stakeholder involvement strategies are the two other CSR communication strategies. For effective CSR communication, they define CSR as a circular process combining information, involvement, and response strategies. Therefore, to communicate CSR professionally, companies need to inform stakeholders about their CSR efforts as well as to simultaneously and continuously evaluate and respond to stakeholder attitudes and demands. Thus, communication becomes a circular, on-going process. This mechanism is important for at least two reasons. First, it might increase the accuracy of information by reducing information asymmetry among the parties. Additionally, it can ensure the transparency of the communication process with internal and external stakeholders.

Communication channels should be carefully chosen according to the CSR communication strategy. A company can communicate its CSR activities through official documents, such as annual CSR reports, website announcements, or press releases. It can also use traditional media tools, such as TV commercials, magazine or billboard advertisements, or use social media alternatives, even B2B communication possibilities, depending on the strategy and target group. In considering the best channel and the most effective CSR strategy,

communication includes the appropriate use in time and place of both traditional (e.g., CSR reports, press conferences, brochures, presentations advertisements) and technology-driven tools (e.g., CSR electronic forums, e-mails, web forms, website FAQs, blogs, electronic newsletters, Intranets, and audio and video podcasts). Among the different communication alternatives, CSR reporting and official company websites are the most common tools to disseminate CSR-related information to various stakeholder groups. Apart from CSR reporting, however, other traditional communication tools, such as personal contacts, public meetings, interviews, workshops, presentations, and business dinners, are considered “outdated” (Isenmann 2006, p. 253). Nevertheless, traditional tools still can be effective within a well-designed CSR strategy to support the overall communication strategy and remain appropriate for certain stakeholder groups.

- *CSR communication strategies should develop with technology:*

CSR communication is currently moving away from simply organizing press conferences or providing glossy brochures toward an advanced interactive, transparent, and dynamic approach with Internet-based tools, including e-mail, web forms, blogs, electronic newsletters, customer-provided web content, and Web 2.0 social media applications. Individualized online tools tailored to the target group, such as reports, brochures, press releases, newsletters, and presentations, are available to everyone in the public sphere (Toker 2013). As a result, companies need their CSR communication with different stakeholders to become more interactive and creative. Thus, information supply and dissemination have evolved from a one-way, company-controlled practice toward a more interactive approach. The Internet-based advanced CSR communication ensures online availability of external CSR documents, feedback possibilities through regular updates, easily accessed contact details, and automatic order forms. Other traditional communication tools, such as personal contacts, public meetings, presentations, and business dinners, are still effective and organized, yet have

limited ability to reach today's mass audiences (Isenmann 2006).

Summary

In his famous definition, Carroll (1979, p. 500) claims that the "social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time." Thus, he suggests integrating companies' social, environmental, ethical human rights, and consumer concerns into their business operations. Increasing competition in the business world and pressure from governments or society all require a stakeholder perspective to doing business. Companies must respond to the demands of all groups with legitimate stakes in the organization, from consumers and employees to the media or even future job applicants. To deal with this variety of stakeholders and their demands, communication is the natural linchpin (Turker and Toker 2017, p. 163) within the sustainability and social responsibility framework, known as CSR today. Because CSR is a very delicate matter, a key challenge is to minimize stakeholder skepticism and to convey favorable corporate motives in a company's CSR activities. In order to overcome stakeholder skepticism regarding CSR, a successful CSR communication strategy is essential for every company (Du et al. 2010).

The key issues related to CSR communication include questions surrounding what to communicate (message content), where to communicate (message channel), how to communicate (loud or salient communication tools), as well as an understanding of the company- and stakeholder-specific factors that impact the effectiveness of CSR communication.

A company should emphasize the convergence of social and business interests, and frankly acknowledge that its CSR endeavors are beneficial to both society and itself (Porter and Kramer 2002). There are a variety of communication channels through which information about a company's CSR activities or record can

be disseminated. Besides these communication channels, a company can focus on its commitment to a social cause in various ways, including donating funds, in-kind contributions or providing other corporate resources, such as marketing expertise, employee volunteering, and research and development capability dedicated to a cause.

Regardless of the good intentions of the company's CSR commitment, however, its CSR projects and other related philanthropic activities may be criticized as a form of PR and a marketing tool for promoting the company's image through cause-related marketing (Porter and Kramer 2002). Thus, some commentators label it as "window dressing," "hype," or a "fad" (Economist 2005; Cetindamar and Hopkins 2008, p. 402). Nevertheless, despite these harsh criticisms of CSR awards or celebrations of different institutions, a persistent emphasis on CSR projects in company interviews will lead and shape media interest, thereby contributing to the future perception of social responsibility.

Today, most companies need creative communication solutions to disseminate their corporate responsibility messages in a striking, relevant, and understandable way (Dawkins 2004). Moreover, due to the sensitive nature of CSR communications, CSR activities cannot be advertised in the same way as products or services (Pomeroy and Dolnicar 2009, p. 288), with consumers preferring less aggressive and "silent" channels, such as annual reports and websites.

However, while some organizations can take advantage of their social and sustainability concern, others cannot build their own "business case" at all. This significant variability among firms is partly related to each company's overall communication strategy. That is, it is not usually related to the amount or quantity of communication; rather, it is mainly related to how effectively they communicate such involvement (Dawkins 2004; Morsing and Schultz 2006). Different aspects of CSR communication, from message content and communication channels to company- and stakeholder-specific factors influence the effectiveness of CSR communication.

Future studies need to investigate how a company can best communicate its CSR initiatives to specific target audiences. CSR communication is a long-term process that requires an organizational awareness of internal and external stakeholders' changing expectations and demands. This in turn entails establishing sound communication externally and internally, depending on the cultural and organizational framework of the country.

The most important communication tasks are to design coherent and appealing messages, and then communicate them effectively to the general public and stakeholders. The new era needs well-designed and creative communication alternatives with the help of new media technology, although CSR reports still have an undeniable importance for all stakeholders.

Cross-References

- [Corporate Communication](#)
- [Stakeholder Communication](#)

References

- Borglund, T., De Geer, H., & Hallyvarson, M. (2008). *Vaerdeskapande CSR: Hur foretag tar socialt ansvar*. Stockholm: Norstedts.
- Carroll, A. B. (1979). A three dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4, 497–505.
- Cetindamar, D., & Hopkins, T. (2008). Enhancing students' responsibility towards society through civic involvement projects. *Innovations in Education and Teaching International*, 45(4), 401–410.
- Cornelissen, J. P. (2004). *Corporate communications: Theory and practice*. London: Sage.
- Dawkins, J. (2004). Corporate responsibility: The communication challenge. *Journal of Communications Management*, 9(3), 108–119.
- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, 12(1), 8–19.
- Economist. (2005). The good company-A survey of corporate social responsibility. <https://www.economist.com/special-report/2005/01/20/the-good-company>. Accessed 2 Feb 2019
- Enviro-nics. (1999). The millennium poll on corporate social responsibility. Enviro-nics. www.mori.com/polls/1999/millpoll.shtml. Accessed 12 Feb 2019.
- EU Commission Green Paper. (2001). Promoting a European framework for corporate social responsibility, COM (2001) 366 Final.
- Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. The New York Times magazine.
- Frostenson, M., Helin, S., & Sandstroem, J. (2011). Organising corporate responsibility communication through filtration: A study of web communication patterns in Swedish retail. *Journal of Business Ethics*, 100(1), 31–43.
- Hohnen, P., & Potts, J. (2007). Corporate social responsibility: An implementation guide for business. International Institute for Sustainable Development: Mantoba, Canada.
- Isenmann, R. (2006). CSR online: Internet based communication. In J. Jonker & M. C. Witte (Eds.), *Management models for corporate social responsibility* (pp. 247–254). Berlin: Springer.
- Jahdi, S. K., & Acikdilli, G. (2009). Marketing communications and corporate social responsibility (CSR): Marriage of convenience or shotgun wedding? *Journal of Business Ethics*, 88(1), 103–113.
- Kanji, G. K., & Chopra, P. K. (2010). Corporate social responsibility in a global economy. *Total Quality Management & Business Excellence*, 21(2), 119–143.
- Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication: Stakeholder information, response and involvement strategies. *Business Ethics, A European Review*, 15(4), 323–338.
- Parker, B. (2008). Corporate social responsibility: Renegotiating corporate citizenship. In B. E. Gup (Ed.), *Handbook for directors of financial institutions* (pp. 84–109). Cheltenham: Edward Elgar Publishing.
- Pomeroy, A., & Dolnicar, S. (2009). Assessing the prerequisite of successful CSR implementation: Are consumers aware of CSR initiatives? *Journal of Business Ethics*, 85(2), 285–301.
- Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56–65.
- Toker, H. (2013). Media CSR forum. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 1643–1650). Berlin/Heidelberg: Springer.
- Tonello, M. (2011). What board members should know about communicating corporate social responsibility. The Harvard Law School Forum on Corporate Governance and Financial Regulation. <http://blogs.law.harvard.edu/corpgov/2011/04/26/what-board-members-should-know-about-communicating-corporate-social-responsibility/>. Accessed 1 Feb 2019.
- Turker, D. (2018). *Managing social responsibility: Functional strategies, decisions and practices*. Cham: Springer.
- Turker, D., & Toker, H. (2017). Integrated sustainability and social responsibility communication. In K. Çaliyurt & Ü. Yüksel (Eds.), *Sustainability and management: An international perspective* (pp. 161–173). London/New York: Routledge.

CSR Communication Strategy

► CSR and Media

CSR Communications

► Corporate Social Responsibility Disclosure

CSR Disclosure Quality: Role of NEDs

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Synonyms

Board independence; Nonexecutive directors; Stakeholder communications; Sustainability reporting quality

Definition

Myriad studies have documented that organizations with more nonexecutive directors (NED) disclose higher quality information than others (Yekini et al. 2015, 2017). For example, Yekini et al. (2015) examined the impact of board composition on corporate community involvement disclosure (CCID) for a sample of UK-listed companies and found that having more NEDs on the corporate board enhances corporate social responsibility (CSR) disclosure quality. This finding provides insights to policymakers who are desirous of achieving optimal board composition. The finding also broadens our perception of the firm's interaction with its corporate and extended environment through high-quality disclosures.

Introduction

Besides having corporate boards composed of individuals that bring substantial experience, expertise, and skills, such as accountants, lawyers, as well as finance and marketing experts, corporate boards consist of community leaders. Studies such as Yekini et al. (2015) and Hillman et al. (2000) documented that community leaders are very crucial nonexecutive directors (NEDs) to corporations because they possess extensive experience and information that could guide the corporation on the impact of organizational activities on the society at large and its relationships with influential community groups. Having such community prominent figures on board is regarded as a strategic move because of the need for firms to adapt to the uncertain business environment by allowing ideas and suggestions from nonbusiness perspectives. In addition, such board composition consisting of NEDs is crucial to providing strategic direction such as utilizing the directors' influence on various community groups. Similarly, their presence on the board has been found to enhance corporate disclosures (Yekini et al. 2015). This explains the significant increase in regulation and corporate governance reforms that focused mainly on board composition.

Key Issues

In today's business world, corporate disclosures, especially CSR reporting, remain a valuable tool employed by corporations as evidence of corporate legitimacy. This is because CSR information is intended to communicate to stakeholders the intrinsic values of the organization (Yekini et al. 2021). It helps to clarify issues that could otherwise bring about distrust between a firm and its key stakeholders resulting from poor communication. Consequently, companies have to continuously maintain their societal legitimacy by strengthening their community recognition through effective communication with the community within which it operates and engagement with the community leaders. Neglecting these

could result in reputation risk to the firm. It is therefore important to mitigate the threats to reputation through frequent interaction between the company and its conferring public. To this extent, the literature recognizes the growing importance of high-quality CSR disclosures and has therefore sort to understand the impact of board composition on CSR disclosures (Yekini et al. 2015). The argument is that the composition of the board of directors where NEDs are well represented provides a crucial tool in enhancing the quality of CSR disclosures. This is because NEDs are seen as community leaders whose responsibility is to raise the concerns of their community at the board level and to maintain good relationships among their local community, the corporation, and the government. In addition, community representatives on the board provide an opportunity for firms to appreciate the impact of corporate action on the community of operation and consequently lead to modification in corporate strategy. This will in turn improve the interactions between the firm and the community within which it operates. Furthermore, addressing the issue of governance structure and the emphasis on increasing the representation of NEDs in the governance process is very crucial in meeting the recent global demand for transparency in governance and accountability.

Future Directions

The majority of studies on the impact of community influential NEDs on corporate disclosures have focused on disclosures in annual reports. However, given the advancements in, and the use of other communication media such as Twitter, Facebook, and other social media outlets, it will be interesting to examine the influence of NEDs on the quality of information released through these media. Future research may also explore other regions especially emerging economies with little or no corporate governance structure in place. Such markets and institutions are informal and quite distinct from those in developed economies such as the

UK or USA. More research is required to investigate the relationship between corporate disclosure quality and NEDs using samples from emerging economies.

Cross-References

- [Corporate Community Involvement](#)
- [CSR Disclosure, Quality Measurement of](#)
- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

References

- Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37(2), 235–256.
- Yekini, K., Adelopo, I., Androkopolous, P., & Yekini, S. (2015). Impact of board independence on the quality of community disclosures in annual reports. *Accounting Forum*, 39, 249–267.
- Yekini, K. C., Adelopo, I., & Adegbite, E. (2017). The impact of community expectations on corporate community involvement disclosures in the UK. *Accounting Forum*, 41, 234–252.
- Yekini, K. C., Omotoso, K., & Adegbite, E. (2021). CSR communication research: A theoretical-cum-methodological perspective from semiotics. *Business and Society*, 60(4), 876–908.

Further Reading

- Hillman, A. J., & Keim, G. D. (2001). Shareholder value. Stakeholder management and social issues: what's the bottom line? *Strategic Management Journal*, 22(2), 125–139.
- Marquis, C., Glynn, M. A., & Davis, G. F. (2007). Community isomorphism and corporate social action. *Academy of Management Review*, 32(3), 925–945.
- Matten, D., & Crane, A. (2005). Corporate citizenship: Toward an extended theoretical conceptualization. *Academy of Management Review*, 30(1), 166–179.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what counts. *Academy of Management Review*, 22(4), 853–886.
- Scherer, A. G., & Palazzo, G. (2011). The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies*, 48(4), 899–931.

CSR Disclosure, Quality Measurement of

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Synonyms

Classification; CSR report quality; Definition;
Dimensions; Evaluation; Sensemaking

Definition

Over the decades, there has been growing contention on how to define or measure disclosure quality. Scholars such as Beattie et al. (2004), Beretta and Bozzolan (2008), Yekini and Jallow (2012), and Yekini et al. (2015) all documented varied definition constructs and measurements of disclosure quality including describing disclosure quality as a problematic concept to construe. However, looking at disclosure quality from the perspective of the users of the reports, Yekini et al. (2021) provided a definition that looks at CSR disclosure quality from the context of sensemaking, arguing that the ability of users to draw meaning and the sense they can make out of the disclosed information should characterize the measure of quality (Yekini et al. 2021, pp. 879). Defining disclosure quality this way, therefore, raises some fundamental questions regarding the varied quantitative measures employed in previous studies.

Introduction

Extant literature documented diverse measures of disclosure quality. Some scholars measured quality by relying on certain criteria in the annual reports, for example, evidence disclosed or the nature or themes of the disclosure. Others believe that the location of the information could be indicative of its quality. Similarly, some authors used the volume of disclosure as a measure of quality;

they argued that the quantity of information can influence the quality. Furthermore, while some used analyst ratings, others constructed their own index by taking into consideration a combination of the various criteria. Nevertheless, the validity, scope, reliability, and comparability of the various measures have been queried and of concerns not only to researchers but also to corporate stakeholders, such as regulators, investors, and the media among others. Similarly, scholars have engaged in research relating to quality and reliability over the years. They seek out the best approach and measure for the quality of CSR reports given the narrative nature of the reports (Yekini et al. 2015). They questioned the cogency of the quantitative measures employed by previous studies. Some of the issues raised are whether CSR disclosures should be measured in terms of their quantity (i.e., their volume or their length) or their quality (i.e., their authenticity or reliability). And, if we decide on measuring its quality (authenticity or reliability), what should be the best measure or the best way to measure quality?

Key Issues

A thorough review of extant approaches to the measurement of CSR disclosure quality reveals that measuring the quality of CSR disclosures would depend on several factors. For example, Yekini and Jallow (2012) and Yekini et al. (2015) provided extremely useful criteria for quality measures. First, they considered the nature of the disclosure, whether financial, physical, or narrative. They defined physical as the display of verifiable evidence, for example, a photograph of the CSR theme such as a community project displayed to support the narrative or financial disclosure on community projects. Further, they considered the relevance of the disclosure, which they measured by the section of the annual report the disclosure is located. Gray et al. (1995) argue that the chairman's statements, for example, being a strategic section of the annual report, would usually contain information considered to be of high importance and of which management intends to have it widely read. Similarly, Yekini

and Jallow (2012) argued that specificity rather than quantity should characterize the quality of disclosures, that is, providing detailed description of the specific CSR activity is considered more important in measuring the quality of such disclosure. They argued further that, to measure disclosure quality, there is the need to adopt a weighting system whereby higher scores are assigned to verifiable disclosures and lower scores to narratives that have little or no substance in them (Yekini and Jallow 2012). However, extant literature did not provide a consensus on the allocation of points to disclosure quality classifications. Although Yekini and colleagues were able to justify their differential weighting scheme, arguing that classifications have different levels of information, while some contain more information, others contain fewer. Nevertheless, some schools of thought believe that scoring system is suitable only for the measure of the extent of disclosure as opposed to the quality of disclosures due to their subjective nature. In the last decades, however, this viewpoint has led to conflicting findings on the content and quality of CSR reports (Yekini 2017). The construct validity of the various measures used in the literature has been the subject of debates and contentions. The argument is that these various approaches lack fundamental theoretical conception and methodology. Price and Shank (2005, p. 90) believe that a comprehensive approach to measuring disclosure quality should take into consideration the point of view of the recipient of the information. Similarly, Yekini et al. (2021) argued that the focal point of quality measure should be the sense that users are able to make of the information. Sensemaking involves being able to conceptualize organizational values, which are otherwise incomprehensible, in a way to influence the perception of users of the information. Coupland and Brown (2004, p. 1328) described organizational values as *linguistic social constructs* and maintained that the best way to evaluate such constructs is through dialogical processes. Consequently, Yekini et al. (2021) proposed semiotics (a linguistic-based methodology and analytical tool) as a useful approach to examining the quality of CSR reports.

Future Directions

Research on measuring and defining CSR disclosure quality is gradually shifting focus toward the meaning or sense that the users of the reports can draw from the reports and the usefulness of the reports to the users. This was clearly illustrated in Yekini et al. (2021), through the application of semiotics, a linguistic analytical tool. Certainly, the need for a linguistic methodology in drawing meanings and thus making sense of corporate disclosures is very vital to the determination of CSR disclosure quality. However, advancement in technology, artificial intelligence (AI), and machine learning is beginning to redefine future research in this area. The application of AI is rapidly gaining ground in text analysis and mining and has become a very powerful tool for investigating human cognition and therefore disclosure quality measurements.

Cross-References

- [Corporate Community Involvement](#)
- [CSR Disclosure Quality: Role of NEDs](#)
- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

References

- Beattie, V., McInnes, B., & Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205–239.
- Beretta, S., & Bozzolan, S. (2008). Quality versus quantity: The case of forward-looking disclosure. *Journal of Accounting, Auditing, and Finance*, 23(3), 333–375.
- Coupland, C., & Brown, A. D. (2004). Constructing organizational identities on the web: A case study of Royal Dutch/Shell. *Journal of Management Studies*, 41(8), 1325–1347.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47–77.

- Price, R., & Shanks, G. (2005). A semiotic information quality framework: Development and comparative analysis. *Journal of Information Technology*, 20(2), 88–102.
- Yekini, K. C. (2017). Insights regarding the applicability of semiotics to CSR communication research. In D. Crowther & L. Lauesen (Eds.), *Handbook of research methods in corporate social responsibility* (pp. 241–264). Cheltenham/Northampton: Edward Elgar Publishing.
- Yekini, K., & Jallow, K. (2012). Corporate community involvement disclosures in annual report: A measure of corporate community development or a signal of CSR observance? *Sustainability Accounting, Management and Policy Journal*, 3(1), 7–32.
- Yekini, K., Adelopo, I., Andropoulos, P., & Yekini, S. (2015). Impact of board independence on the quality of community disclosures in annual reports. *Accounting Forum*, 39(4), 249–267.
- Yekini, K. C., Omotoso, K., & Adegbite, E. (2021). CSR communication research: A theoretical-cum methodological perspective from semiotics. *Business and Society*, 60(4), 876–908.

CSR in Developing Countries

- [CSR in Emerging Markets](#)

CSR in Developing Markets

- [CSR in Emerging Markets](#)

CSR in Emerging Countries

- [CSR in Emerging Markets](#)

CSR in Emerging Economies

- [CSR in Emerging Markets](#)

CSR in Emerging Markets

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Synonyms

[CSR in developing countries](#); [CSR in developing markets](#); [CSR in emerging countries](#); [CSR in emerging economies](#); [CSR in rising economic powers](#); [CSR in third world countries](#)

Definition/Description

Corporate social responsibility (CSR) rests on the premise that businesses and societies are interdependent. Businesses draw resources from the common pool and have to contribute back in terms of products and services for the members of society. In doing so, they have to act responsibly. Emerging markets are those economies that are on the trajectory of growth that is faster than other developing countries but they have yet to attain the developed economy status. There are certain defining characteristics of emerging markets that make them attractive destinations for investment. They also have some unique challenges facing them. CSR and emerging markets make a difficult combination as there are pros and cons of applying CSR in the context of emerging markets. CSR in emerging markets generally follows the global trends yet there are certain special features of CSR in individual emerging markets that make them unique.

Introduction

Corporate social responsibility (CSR) is a popular term and acronym that could mean different things to different people. The idea of CSR rests on the logic that business and society are

interdependent. The society is the source for resources and legitimacy to business. The business, on its part, must act in a responsible way and not harm the society and the natural environment. It should also strive to contribute to society and its members. When it does, the business can be considered as socially responsible.

There are several definitions of CSR. The definition of CSR from the World Business Council for Sustainable Development (WBCSD) states that it is “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large” (WBCSD 1998).

The definitions of CSR often refer to five dimensions of social, economic, environmental, stakeholder, and voluntarism. CSR is viewed from the perspective of its various dimensions, particularly the first three dimensions of social, economic, and environmental responsibilities to stakeholders. These responsibilities are generally performed voluntarily.

To understand the concept of CSR one could also see its explanations by international agencies. United Nations Industrial Development Organisation describes CSR as “a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives (‘Triple-Bottom-Line- Approach’), while at the same time addressing the expectations of shareholders and stakeholders” (UNIDO n.d.).

CSR is not a new phenomenon. It is a long established idea that people endowed with wealth and resources should conduct themselves in a socially responsible manner. CSR has been practiced in various forms since ancient times. Individuals and organizations involved in trade, commerce, and business have voluntarily or involuntarily discharged social responsibilities. Traditional forms of CSR have often been philanthropy, charity, and community relations. Since a long time, businesspeople having acquired wealth

and sought social approval and higher status within society through philanthropic acts, giving charity, and spending money on furthering community relations.

CSR is now a global phenomenon and movement with significant differences in the regions of the world. In recent years, voluntary initiatives in CSR have been a major trend in international business. There are several other significant developments including the setting up of organizations related to CSR voluntary work, consultancy firms specializing in CSR, growing interest in the investment community about CSR, and the growth of CSR as an academic discipline in higher education.

The Emerging Market

Traditionally, the world has been divided into types of economies based on the level of development measured by per capita gross national income. There are the developed economies such as Germany, Japan, and the United States. There are developing economies such as South Africa, Brazil, China, and India. Then there are the least developed economies most of them in Asia and Africa such as Cambodia and Ethiopia. Among the large number of developing economies are those that are growing relatively faster than the others and have a vast market. Such economies are referred to as the emerging market economies or emerging markets.

The term “emerging market” or “emerging market economy” is a popular term. The term was coined by economists at International Finance Corporation, a division of the World Bank, in 1981, while they were preparing to promote the first mutual fund of equity markets in developing countries. Since that time, the term has become widely known and is used frequently in media, foreign policy lexicon, investment fund industry, and references to multinationals. The word “emerging” has come to indicate those economies that have been growing fast in recent years. By 2030, emerging market economies are likely to account for 62% of total growth in global consumption, the equivalent of \$15.5 trillion in

spending. The growth is unequal with some developing countries developing faster than others.

There are certain defining characteristics of emerging markets. Over the past more than three decades the emerging market economies have opened up to global capital, technology, and mobility of people across the globe fundamentally changing their economic and business environments. Their gross domestic product (GDP) has been growing relatively faster than the global GDP and of the developed economies lifting millions of people out of extreme poverty. They have a burgeoning market of consumers particularly the middle classes. There is high demand for consumer products and services. There is an educated pool of people providing skills at relatively lower cost.

Despite the many redeeming features of emerging market economies, there are certain persistent problems that have been observed. Over the years, several of these emerging economies have faced financial crises. There is dearth of local talent and expertise to help run businesses effectively. Accessing finance and capital is difficult, and the cost of capital is often higher as compared to that in developed countries. Competition is not very intensive leading to weaker local companies that find it difficult to compete on the global level. Often, the government bureaucracies in these countries are inefficient and corrupt making it difficult to secure permissions and licenses to operate businesses. Even otherwise, corruption is endemic and foreign companies find it difficult to navigate the maze of regulatory mechanisms. They also face risks in evaluating the credentials of potential local business partners. The risks of operating are high leading to higher cost of operations. Contract enforcement is weak as judicial systems are inefficient. Customer credit is hard to access. Distribution of products and services poses stiff challenges as companies strive to lay down their network of supply lines. Such a long list of negatives can affect the prospects of emerging market economies preventing them from crossing the barrier of being emerging and ultimately becoming fully developed economies.

Starting with a few countries, the term emerging market has been expanding to cover a larger number of countries. There are several countries termed as emerging market economies depending on the criteria established by different institutions. Among the institutions that characterize economies as emerging are International Monetary Fund, Morgan Stanley Capital International, Dow Jones, and Standard and Poor's. There is agreement of considering these 15 countries as emerging economies: Brazil, Chile, China, Colombia, Hungary, Indonesia, India, Malaysia, Mexico, Peru, Philippines, Russia, South Africa, Thailand, and Turkey. Among these are the popular BRIC countries of Brazil, Russia, India, and China that are generally considered to be high on the ranking of emerging market economies. The list of emerging economies is subject to change as the parameters of the countries alter based on the criteria for considering a country as emerging market economy.

CSR and the Emerging Markets

Emerging market economies are seen as dynamic and growing in contrast to many developed economies that are viewed as stagnant and reaching the limits of their growth. Over the years, the focus of international business as well as commentators, analysts, and consultants has been shifting on the prospects of the emerging market economies.

The emerging market economies offer companies, both local and international, excellent opportunities. This leads to setting up manufacturing and service units in these economies. Rapid industrialization inevitably creates the problems of businesses encroaching upon the natural resources such as land, water, and air resources and livelihood of the indigenous population. The ideas of CSR and sustainability have taken roots in the developed nations due to long history of industrialization, stability in social, economic, and political conditions, the strength of legal systems, and well-established standards of business conduct. However, developing economies do not fare well on measures of CSR and sustainability.

They find themselves in a situation where they have to sacrifice considerations for the physical environment in favor of rapid industrialization. Often politicians and policy makers in developing economies put forth the logic that developed nations reached their present status of being developed through ignoring the physical environment so they, the developing economies, should not be subjected to unnecessary restrictions and asked to conform to stringent requirements that the developed nations never were required to follow.

The developing economies, particularly the emerging market economies, also believe that their nations are facing several problems such as poverty, deprivation, and social inequalities, corruption, and human rights violations. Besides, the emerging market economies face several other inherent problems such as unstable political conditions, irresponsible governance and profligate governments, and uncertainties related to foreign capital especially that invested in institutional investments such as equity markets. There are also the challenges of transition where rapid industrialization imposes social and political pressures that are hard to manage. The path from developing through emerging to developed economic status is strewn with many challenges and difficulties. In order to surmount these problems and deal with them, rapid industrialization and economic development is necessary. The emerging economies feel that they cannot be held back because of restrictive conditions of environmental protection and preservation.

The dilemma facing the emerging market economies of making a choice between rapid economic development at the cost of environment is a difficult one. There are trade-offs to be made. There are international regulations imposed by multilateral agencies such as the United Nations. There is a world economic order that is generally not favorable to the emerging economies. Their political and diplomatic clout is limited. Increasing interdependence between nations owing to the globalization and market reforms creates obligations that need to be fulfilled. In such a scenario,

the emerging market economies also need to be conscious of the social responsibilities of business. They have to conform to the global trends of having more corporate responsibility and accountability to the regulatory and other agencies. Overall, the emerging market economies have to walk a tightrope in managing the seemingly contradictory factors that they face.

CSR in the Emerging Markets

The focus of CSR has mostly been on the developed economies both in terms of theory and practice. CSR is established in developed country firms but it is becoming increasingly more important for firms in the developing countries especially in the emerging market economies. While much is known about CSR in developed countries, much less is known about the CSR practiced in the emerging market economies. However, three things are clear. First, the extent of adoption of CSR is higher in the developed countries as compared to that in developing countries. Second, the reason for the developing countries lagging behind their developed counterparts is their lower economic development. Third, CSR in developing economies may vary according to the specific conditions present in the countries and each emerging market may be unique and may also differ from the established CSR practices in developed nations. Such differences may be because of the cultural and value systems and the institutional environments in the emerging economies. Yet, there is a certain amount of diffusion of practices across the world mainly through the presence of multinational corporations that may direct and guide their local subsidiaries to adopt the CSR practices of their parent companies. Overall, the challenge, therefore, is to enable the developing nations turn into emerging e-economies and then graduate to being developed economies. Despite the lower economic development, CSR in emerging economies shows signs of dynamism and growth as well as adaptation through learning from the experiences of companies in developed economies.

It would be instructive as well as interesting to look at some specific emerging market economies in terms of their CSR profiles. A 2005 study of 127 listed companies on CSR in emerging markets, sponsored by the Organization for Economic Cooperation and Development (OECD), reveals that there is not much difference in the approaches to CSR between companies in the high-income OECD countries and the emerging market economies. Rather, there seems to be a surprisingly high level of comparability. Certain business sectors show relatively higher interest in CSR than others. Just as there is in the case of OECD countries, the emerging economies exhibit diversity in CSR policies and practices. CSR is a global phenomenon as evident in the case of several emerging economies and there is more formal engagement of companies in CSR activities. Despite being a global phenomenon, there are significant variations at the intra- and interregional levels. In several of the emerging market economies, CSR is a home-grown phenomenon rather than imitated or imposed from outside. The drivers of CSR in emerging market companies seem to be similar to those in the developed countries. Such drivers are measures to attract and retain employees, to improve market positioning, and to protect reputation (Baskin and Gordon 2005).

KPMG reports on CSR in South Africa suggest that South African companies do very well on CSR reporting but less enthusiastic on environmental matters. As evidence of context-specific CSR, the South African companies report on how they deal with AIDS among their employees and the setting of whistle-blowing hotlines for reporting corruption.

India has a long tradition of philanthropic and community programs. In recent years, corporate philanthropy is shifting toward corporate social investment. There is a growing trend toward reporting on CSR and sustainability in which the companies report their environmental impact. Another example of an emerging economy is that of Malaysia where the emergence of CSR is closely linked to the country's Vision 2020 development plan that emphasizes the government's policy to enhance standards of corporate governance and business ethics.

Summary

CSR operates on the principle of reciprocity between businesses and society. Both receive and give to each other in terms of resources and products and services. The term corporate social responsibility has been defined in various ways by different experts yet there is no unanimity in its meaning and interpretation. Generally, CSR is viewed as a balance between social, economic, and environmental imperatives that are also termed as the triple bottom lines. Although a new term, CSR has been practiced since long in its traditional forms such as philanthropy, charity giving, and community development. CSR is a global trend now and popular around the world.

Emerging market or emerging market economies are those developing countries that have grown faster than other developing countries in recent years. They also have some redeeming features such as large markets, educated populace, supporting government policies, and a desire to develop fast economically. They also face challenges of inept and corrupt governments, social and political pressures that resist change, and lack of access to high technology, expertise, and capital.

CSR poses a dilemma for the emerging market economies as it is viewed as restraining and limiting to the rapid industrialization that such economies seek. CSR imposes responsibilities on businesses that constrain their growth or prevent them from achieving their full potential. These economies also feel unfair treatment as the developed nations have achieved economic development at the cost of environment while the emerging trend is to place more emphasis on environmental protection and preservation. The emerging economies desire to get through the stage of developing through fast economic growth that leads to challenges of affecting sustainability adversely.

The adoption of CSR in emerging market economies lags behind that in developed nations. But they are fast catching up the global trends. There is wide variation in the practices of CSR in the emerging economies. Some of the

practices are global and common across countries but there are certain CSR practices that are specific to the context of a particular emerging economy.

Cross-References

- [Business Case of CSR](#)
- [Corporate Social Responsibility](#)
- [Corporate Social Responsibility Reporting](#)
- [Corporate Social Responsibility Strategy](#)
- [CSR Disclosure Quality: Role of NEDs](#)
- [CSR: Evolution of Concept](#)
- [Definitions of CSR](#)

References

- Defining emerging markets. (2017, Oct 5). *The Economist*. Retrieved from <https://www.economist.com/special-report/2017/10/05/defining-emerging-markets>
- Baskin, J., & Gordon, K. (2005). *Corporate responsibility practices of emerging market companies* (OECD working papers on international investment, 2005/03). OECD Publishing. <https://doi.org/10.1787/713775068163>
- UNIDO. (n.d.) What is CSR? (n.d.) Retrieved October 10, 2015, from <http://www.unido.org/en/what-we-do/trade/csr/what-is-csr.html>
- Watts, P., & Holme, L. (1998). *Corporate Social Responsibility: Meeting changing expectations*. Geneva: World Business Council for Sustainable Development. World Business Council for Sustainable Development (WBCSD) website is at: <http://www.wbcd.org/about.aspx>. The definition of CSR is taken from WBCSD Stakeholder Dialogue on CSR, The Netherlands, Sept 6–8, 1998 at file:///C:/Users/Admin/Downloads/MeetingChangingExpectations.pdf

CSR in Healthcare Sector

- [Medicine and CSR](#)

CSR in Nonprofit Sector

- [Accountability in Nonprofit Sector](#)

CSR in Rising Economic Powers

- [CSR in Emerging Markets](#)

CSR in Third World Countries

- [CSR in Emerging Markets](#)

CSR in Tourism

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Definition

Corporate social responsibility in tourism refers to the social responsibilities of tourism companies (economic, legal, ethical and discretionary expectations of a society) (Peters 2016).

Today's global tourism industry is of high economic importance (United Nations World Tourism Organization 2020; World Travel & Tourism Council 2019). On one hand, it has strong economic, environmental, and social impacts while at the same time relying on open healthy natural resources, a constructive social operating climate, and a positive economic environment. The tourism industry therefore needs to design tourism in a way that it shows positive values for societies and businesses at the same time. This can only be successful if companies are prepared to take social responsibility for their actions as well as planning those responsibilities to generate a competitive advantage (Fifka 2017a, b). Accordingly, corporate social responsibility (CSR) is a vital component of the tourism industry.

This chapter will start by discussing the challenge of defining CSR. This provides a baseline to explain the importance of CSR within the tourism industry. Of particular significance are thereby the four dimensions of CSR: community relations, employee relations, environmental issues, and product quality.

The last five decades have witnessed phenomenal growth and interest in corporate social responsibility (CSR) across different industrial sectors involving multinational corporations as well as small- and medium-scale enterprises (SMEs) in developed and developing countries. It is linked with increasing firm investments in CSR planning and implementation (Palacios-Marqués and Devece-Carañana 2013). However, CSR is a contested concept and hence lacks a universally accepted definition. The World Business Council for Sustainable Development (1999) defines CSR as the continuous commitment by business through behaving ethically in their trade and contributing to economic development and at the same time improving the quality of life of the workforce, their families, local community, and society at large. This implies that CSR is not a business event or activity but a main preoccupation of businesses which appears to be much of a strategic decision (Fernandez-Kranz and Santalo 2010) aimed at societal good beyond legal and industry obligations (Torelli et al. 2012). Social responsibility of businesses encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time (Carroll 1979, p. 500). A CSR commitment signifies a firms' acceptance to pursue and fulfill obligations that benefit societies and stakeholders in their value chain (McLachlan and Binns 2014). Kucukusta et al. (2013) conceptualized CSR as an organization's willingness to acknowledge and implement sociocultural and environmental obligations aside from their commercial duties. Accordingly, corporate social responsibility in tourism refers to the social responsibilities of tourism companies (economic, legal, ethical, and discretionary expectations of a society) (Peters 2016).

The increasing attention to CSR in business operations coincided with the exponential growth

in global tourism in the 1950s, where there were only 25 million international tourist arrivals to the reported 1.5 billion international tourist arrivals at the end of 2019 (United Nations World Tourism Organization 2020). The resultant mass tourism has exerted considerable pressure on diverse environmental and sociocultural resources and communities leading to adverse effects including noise pollution, water pollution, destruction of vegetation, congestion, despoliation of the environment, crime, and violence (Liu and Var 1986; Long et al. 1990; Milne 1990; Gursoy and Rutherford 2004). Recognition of the potentially devastating consequences of mass tourism in the 1960s led to the growth of concerns for visitor management in the 1970s and the birth of the green or alternative concept of tourism in the 1980s with the consequent growth of sustainable tourism in the 1990s (Swarbrooke 1999). Sustainable tourism was adopted to address implications of tourism for visitor need, environment, host community, and other industries (World Tourism Organization; WTO 2015). More recently, empirical evidence has linked tourism to climate change following increasing carbon dioxide emissions attributable to the consistent growth in tourism, in particular international tourism (De Vita et al. 2015; Kalayci and Koksall 2015; Zaman et al. 2016).

The need to adopt CSR in tourism became more pressing following the UN's Earth Summit of 1992 held in Rio de Janeiro, where actions to protect the environment were given utmost attention (United Nations Conference on Environment and Development 1992). The Summit sought to align global economic development agenda with the conservation of the environment (Agenda21). The emerging treaty enjoined countries to preserve tropical rainforest and endangered animal and plant species and reduce pollution and climate change through a reduction in the emission of carbon dioxide and other greenhouse gases as well as the cleaning and conservation of the environment (atmosphere, climate, landforms, hydrosphere, and oceans). It also pressured businesses to adopt a more proactive role in protecting the natural and social environment in its operating countries. For tourism this could even be argued

that the above outlined contextual circumstances make CSR implementation imperative. CSR in tourism and hospitality aims to protect the tourism resources found in the social, cultural, and the physical environment (Kasim 2006), both as attraction and for the host community.

The implementation of CSR in tourism is also in line with the regulations of the UNWTO, World Travel and Tourism Council, and the Green Hotels Association (Tsai et al. 2012). The UNWTO (2018) describes CSR as the tourism firms' extra-legal and extra-economical behavior to strengthen the business case of being a good business. Given the heterogeneity of firms involved, CSR activities in tourism are multifaceted. However, CSR strategies in tourism are categorized into four dimensions: community relations, employee relations, environmental issues, and product quality (Holcomb et al. 2007; Levy and Park 2011).

Community relation activities entail firm support is provided to communities through the implementation of charitable giving, educational initiatives, and volunteer programs. Furthermore, community relation CSR strategies also include monetary donations to support community activities and education, campaigns, and ventures that promote the welfare of the community, the assistance provided to communities to resolve the challenges faced, and the support for social issues (Boccalandro 2009; Tamajón and Aulet 2013; Turker 2009). CSR of community relations is contextualized and localized to resolve problems that directly affect a specific cultural group, considering their beliefs and values (Kang et al. 2016; Luo et al. 2019). To maintain community relations, tourism firms could, for example, use CSR to regulate tourists' influx through visitor sensitization campaigns (Karlsson and Dolnicar 2015; Appiah 2019) to ensure that tourist behavior conforms to that of the community, thereby maintaining a positive relationship.

Community CSR activities are necessary because tourism firms are often perceived as exploitive (Young 2006), linked to social vices, increase immorality and crime (Youn et al. 2018; Luo et al. 2019) and breakdown of ties in families and societies. These perceived immoral impacts on residents and patrons, especially the youths,

are felt severely by the host community leading to an occasional antagonistic attitude toward tourism development. CSR in tourism reduces these negative social perceptions and increases the acceptance of tourism business in existing communities, which also opens avenues for investment in other communities. The residents of host communities, on the other hand, are receptive to tourists when tourism firms implement CSR with social benefits to its members.

CSR employee relation strategies are about a company's level of involvement in employee-related issues, such as ensuring employees' health and safety, the provision of retirement benefits, favorable union relations, the safeguarding of health and safety in the workplace, employee training, the possibility of employee fringe benefits, and the provision of recreational activities (Paek et al. 2013). Other employee relation activities include showing concern for retired employees by allowing such retirees to transfer their medical insurance without underwriting (Kucukusta et al. 2013). As a labor-intensive industry, employee relation CSR is crucial in tourism, as it has implications for employee performance. According to Supanti et al. (2015), employees are a major stakeholder to CSR in tourism as they produce and deliver services to tourists. Studies have shown that tourism and hospitality employees of firms that implement CSR are more satisfied and committed (Youn et al. 2018; Appiah 2019) and are willing to put in more effort to drive corporate success (Islam et al. 2016). Potential and existing employees' sought to be associated with firms that implement CSR inwardly in the form of ensuring occupational safety and designing decent tasks (Hornig et al. 2018) and outwardly in the form of community and environmental support. In the future, this will gain further importance because of expected labor shortages.

Employees in the hospitality industry especially the housekeeping division are prone to hazards at work, and, as a 24/7 industry, employees work during all hours of the days of the week that can lead to a variety of work-family conflicts. CSR in tourism is therefore extended to include employees and their families

(Farrington et al. 2017) to reduce work-family conflicts associated with working in the tourism industry. This has become a human resource issue as job applicants choose hospitality firms to work in based on their CSR (Quinn 2013). Tourism firms through social relations uphold moral values of host communities through supporting the education of members of the community, providing skills training for the youth, and celebrating the local culture through staged events. In tourism, it is necessary for firms to undertake CSR in the areas of hiring members of the local community, paying high wages to local employees to increase income generation, employing women, and having women's presence in top management (Polonsky et al. 2013; de Grosbois 2015; Kang et al. 2016; Islam et al. 2016).

Tourism entails movement within local environments (**environmental issues**) to consume sociocultural features with a high risk huge for negative effects (Karlsson and Dolnicar 2015; Chi et al. 2019). Consequently, CSR strategies of tourism firms are dominated by environmental activities because consumers most value corporate efforts that are easily recognized and tangible to their destination experience (Levy and Duverger 2010). Furthermore, environmental activities aimed at mitigating the negative environmental and social impacts of tourism, are sometimes related to a reduction in operational cost thereby making such CSR activities appealing to tourism and hospitality firms (Kucukusta et al. 2013) aimed at mitigating the negative environmental impacts of tourism and supporting and sustaining the environments, society, and cultures consumed by tourists. CSR serves as a balance between the consumptive and preservative characteristics of tourism (Telfer and Sharpley 2008). A set of environmental practices of tourism firms is best described as "recycle, reduce, reuse, and replace." For instance, hotels often recycle a number of materials such as glass and paper, establish guidelines to reduce the use of resources and energy, reduce the use of packaging for food items, and remind guests and employees to switch off electrical appliances when not in use (Kucukusta et al. 2013). Tourism firms have been noted to exhibit resource-efficient practices such as employing

linen and towel reuse programs and installing energy-efficient appliances and low water flow fixtures (Levy and Park 2011). In addition, environmental CSR activities are evident in tourism firms through green/eco-certifications and the introduction and use of labels such as green and eco (Calveras 2015; Karlsson and Dolnicar 2015). Words of green, sustainable, and eco and alternative forms of mass tourism are associated with CSR in tourism and hospitality (Sheldon and Park 2011; McLachlan and Binns 2014; Supanti et al. 2015).

Even so, in particular, hotels and restaurants have been criticized for high consumption of water, energy, and nonreusable materials and generation of waste and environmental pollution (Kang et al. 2015; Youn et al. 2015; Farrington et al. 2017; Ghaderi et al. 2019). In relation to airlines, the proportion of carbon emission from airlines attributed to tourist movement is forecasted to rise (Cohen et al. 2014; Feng and Tseng 2017) relative to increasing international tourism contributing to human-induced climate change, therefore warranting CSR-action.

Other areas of potential for CSR activities are protected zones, where tourists sometimes have destroyed ecological lives through overcrowding and overuse of the physical environment. Accordingly, environmental CSR should be adopted in tourism to reduce climate change (Park and Levy 2014; Feng and Tseng 2017) and pollution and manage both the tourists and the physical environment. Tourism firms engage in this form of CSR by adopting ecologically friendly behavior of appropriate waste management, recycling, and using engines that emit fewer emissions among others.

However, CSR in the environment in terms of activity, frequency, and the amount of resource commitment is influenced by the impacts of tourism in a particular environment (Chi et al. 2019). Thus, tourism firms with perceived positive impacts are less likely to get involved in CSR, while those with high perceived negative environmental impacts would adopt CSR to reduce adverse effects. Closely related to this is the issue of resource dependence where tourism managers that depend on the natural resources or host

community's culture are inclined to socially responsible behaviors with a higher willingness to support and pursue programs to protect the environment (Chi et al. 2019) since these resources are the core of their business without which their existences are threatened. The tourism resources are the environment, and its protection translates into the preservation of resources.

The fourth dimension is **product quality**, where CSR is directed to improving the quality of goods and services offered to tourists. Tourists are known to have a preference for clean and quality environments with low levels of pollution, and hence tourism businesses are flourishing under such conditions. This includes issues of fulfilling international standards for safe drinking water, quality air, good roads, and safe food to attract tourists (Farrington et al. 2017), because customers are key to every business. Thus, CSR targeted at products (Ghaderi et al. 2019) will translate into increased sales as consumers seek quality products (Lee 2008).

Besides the foregoing CSR strategies, the UNWTO (2015) additionally identified important CSR fields in the areas of supplier relations, customer services, stakeholder involvement, and business operations (UNWTO 2010; International Trade Centre and World Tourism Organization 2015):

- CSR in **supplier relations** includes green and responsible purchases, protecting local suppliers and enhancing their prosperity, anti-corruption measurements, and avoidance of money laundering activities as well as supplier involvement in corporate decisions.
- **Customer service CSR** aims to ensure customer security and health and non-discrimination behavior in services delivered to clientele.
- CSR to enhance **stakeholder involvement** entails providing customer, staff, and host community with information and relationship management program to ensure appropriate participation.
- CSR of **business operations** includes certifications to show commitment and provide evidence for the adherence to norms, standards,

and eco-design as well as securing the professional development of staff through training and partnerships for education, a diversity management strategy, security and health services for all employees, the creation of wealth and its complementary benefits, anti-corruption measurements, and the avoidance of money laundering.

The goodwill of organizations through CSR benefits stakeholders, it provides increased profits for investors, higher dividends for shareholders, a quality product for consumers, more satisfied employees, and a better protection of the host community. Moreover, the adoption of sustainable business models (Calveras 2015) reduces material use, waste generated, and the amount of money spent on waste management.

Overall, the inclusion of CSR measurements in the strategic goals of tourism businesses has a number of positive impacts. For example, hotels that practice CSR perform well (Ghaderi et al. 2019) through a cordial relationship with their customers, employees, and the host community. Additionally, CSR programs in tourism operations sustain and restore a positive image and reputation (Graci and Kuehnel 2010; Han and Yoon 2015; Islam et al. 2016) of implementing firms. Other benefits of CSR are better financial performance (Lee and Park 2009; Kang et al. 2010; McLachlan and Binns 2014), the attraction of more customers (Lee and Shin 2010; McLachlan and Binns 2014; Luo et al. 2019), gaining a competitive marketing edge over competitors and substitutes (Farrington et al. 2017) through the enhanced image (McLachlan and Binns 2014), a higher self-respect for the firms' manager (Chi et al. 2019), and improved work attitudes of employees (Youn et al. 2018).

A strong factor influencing CSR measurements in tourism businesses is the size of the business. Firms with large customer bases and coverage effectively implement CSR (Ghaderi et al. 2019; Youn et al. 2015; Tamajon and Font 2013; Amponsah and Dartey-Baah 2011), while small- to medium-scale tourism firms assume a passive role of reacting to criticism of not

implementing CSR through occasional CSR activities (Baniya et al. 2019).

Even more, the implementation of CSR in tourism is faced with a variety of additional challenges. One of which is making all stakeholders, especially consumers, aware of CSR activities as a lack of awareness is synonymous with a perception to not implementing CSR (Shen et al. 2015; Luo 2018), rendering its role as a marketing tool ineffective. Tourism firms therefore have to adopt strategies of making their CSR known to stakeholders.

Summary

The global tourism industry creates a number of economic, social and environmental issues, while at the same time relying open healthy natural resources, a constructive social operating climate and a positive economic environment. To be successful, its operations need to be designed in a way that shows its positive values for societies and businesses. However, this can only be effective if companies are prepared to take social responsibility for their actions as well as planning those responsibilities to generate a competitive advantage. Accordingly, corporate social responsibility (CSR) is a vital component of the tourism industry. Consequently, CSR measurements should be included in the strategic goals of tourism businesses. As CSR programs in tourism operations sustain and restore a positive image and reputation, they lead to a better financial performance, attract more customers, help to gain a competitive marketing edge, facilitate a higher selfrespect for firm's manager and helps to improve work attitudes of employees. Yet, despite a variety of challenges, tourism firms have to adopt strategies of making their CSR known to stakeholders to be successful in such a competitive market.

Cross-References

► CSR

References

- Amponsah, K. T., & Dartey-Baah, K. (2011). Corporate social responsibility in Ghana. *International Journal of Business and Social Science*, 2(17), 107–112.
- Appiah, K. J. (2019). Community-based corporate social responsibility activities and employee job satisfaction in the U.S. hotel industry: An exploratory study. *Journal of Hospitality and Tourism Management*, 38, 140–148.
- Baniya, R., Thapa, B., & Kim, M. (2019). Corporate social responsibility among travel and tour operators in Nepal. *Sustainability*, 11(10), 2771.
- Boccalandro, B. (2009). Mapping success in employee volunteering: The drivers for effectiveness in employee volunteering and giving programs and Fortune 500. Bosten: Boston College Center for Corporate Citizenship.
- Calveras, A. (2015). Corporate social responsibility strategy in the hotel industry: Evidence from the Balearic Islands. *International Journal of Tourism Research*, 17, 399–408.
- Carroll, A. B. (1979). A three dimensional conceptual model of corporate performance. *The Academy of Management Review*, 4(4), 497–505.
- Chi, G. C., Zhang, C., & Liu, Y. (2019). Determinants of corporate social responsibility (CSR) attitudes: Perspective of travel and tourism managers at world heritage sites. *International Journal of Contemporary Hospitality Management*, 31, 2253.
- Cohen, S. A., Higham, J. E. S., Peeters, P., & Gossling, S. (2014). *Understanding and governing sustainable tourism mobility: Psychological and behavioural approaches*. Abingdon: Routledge.
- De Grosbois, D. (2015). Corporate social responsibility reporting in the cruise tourism industry: A performance evaluation using a new institutional theory based mode. *Journal of Sustainable Tourism*, 24(2), 1–25.
- De Vita, G., Katircioglu, S., Altinay, L., Fethi, S., & Mercan, M. (2015). Revisiting the environmental Kuznets curve hypothesis in a tourism development context. *Environmental Science and Pollution Research*, 22(21), 16652–16663.
- Farrington, T., Curran, R., Gori, K., O’Gorman, K. D., & Queenan, C. J. (2017). Corporate social responsibility: Reviewed, rated, revised. *International Journal of Contemporary Hospitality Management*, 29(1), 30–47.
- Feng, Z., & Tseng, Y. (2017). Corporate social responsibility in the tourism industry: Evidence from seasoned equity offerings. *Current Issues in Tourism*, 22(1), 91–106.
- Fernandez-Kranz, D., & Santalo, J. (2010). When necessity becomes a virtue: The effect of product market competition on corporate social responsibility. *Journal of Economics & Management Strategy*, 19(2), 453–487.
- Fifka, M. S. (2017a). Vorwort. In D. Lund-Durlacher, M. S. Fifka, & D. Reiser (Eds.), *CSR und Tourismus* (pp. vii–ix). Berlin: Springer Gabler.

- Fifka, M. S. (2017b). Strategisches CSR Management im Tourismus. In D. Lund-Durlacher, M. S. Fifka, & D. Reiser (Eds.), *CSR und Tourismus* (pp. 3–16). Berlin: Springer Gabler.
- Ghaderi, Z., Mirzapour, M., Henderson, C. J., & Richardson, S. (2019). Corporate social responsibility and hotel performance: A view from Tehran, Iran. *Tourism Management Perspectives*, 29, 41–47.
- Graci, S., & Kuehnelt, J. (2010). How to increase your bottom line by going green. *Green Hotels & Responsible Tourism Initiatives*, 1–28. <http://green.hotelscombined.com>.
- Gursoy, D., & Rutherford, G. D. (2004). Host attitudes toward tourism an improved structural model. *Annals of Tourism Research*, 31(3), 495–516.
- Han, H., & Yoon, H. J. (2015). Hotel customers' environmentally responsible behavioral intentions: Impacts of key constructs on decision in green consumerism. *International Journal of Hospitality Management*, 45, 22–33.
- Holcomb, L. J., Upchurch, S. R., & Okumus, F. (2007). Corporate social responsibility: what are top hotel companies reporting? *International Journal of Contemporary Hospitality Management*, 19(6), 461–475.
- Horng, J., Hsu, H., & Tsai, C. (2018). An assessment model of corporate social responsibility practice in the tourism industry. *Journal of Sustainable Tourism*, 26(7), 1085–1104.
- International Trade Centre and World Tourism Organization. (2015). *Tourism and trade: A global agenda for sustainable development*. Geneva: ITC.
- Islam, T., Ahmed, I., Ali, G., & Sadiq, T. (2016). Behavioral and psychological consequences of corporate social responsibility: Need of the time. *Social Responsibility Journal*, 12(2), 307–320.
- Kalayci, S., & Koksall, C. (2015). The relationship between China's airway freight in terms of carbon-dioxide emission and export volume. *International Journal of Economic Perspectives*, 9(4), 60–68.
- Kang, K., Lee, S., & Huh, C. (2010). Impacts of positive and negative corporate social responsibility activities on company performance in the hospitality industry. *International Journal of Hospitality Management*, 29(1), 72–82.
- Kang, J., Chiang, C., Huangthanapan, K., & Downing, S. (2015). Corporate social responsibility and sustainability balanced scorecard: The case study of family-owned hotels. *International Journal of Hospitality Management*, 48, 124–134.
- Kang, H. K., Lee, S., & Yoo, C. (2016). The effect of national culture on corporate social responsibility in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 28(8), 1728–1758.
- Karlsson, L., & Dolnicar, S. (2015). Does eco certification sell tourism services? Evidence from a quasi-experimental observation study in Iceland. *Journal of Sustainable Tourism*, 24(5), 1–21.
- Kasim, A. (2006). The need for business environment and social responsibility tourism industry. *International Journal of Hospitality & Tourism Administration*, 7(1), 1–22.
- Kucukusta, D., Mak, A., & Chan, X. (2013). Corporate social responsibility practices in four and five-star hotels: Perspectives from Hong Kong visitors. *International Journal of Hospitality Management*, 34, 19–30.
- Lee, K. (2008). Opportunities for green marketing: Yong consumers. *Marketing Intelligence & Planning*, 26(6), 573–586.
- Lee, S., & Park, S. (2009). Do socially responsible activities help hotel and casino achieve their financial goals? *International Journal of Hospitality Management*, 28(1), 1–6.
- Lee, K. H., & Shin, D. (2010). Consumers' responses to CSR activities: The linkage between increased awareness and purchase intention. *Public Relations Review*, 36(2), 193–195.
- Levy, S. E., & Duverger, P. (2010). Consumer perceptions of sustainability in the lodging industry: examination of sustainable tourism criteria. International CHRIE Conference-Refereed Track. 31.
- Levy, E. S., & Park, S. (2011). An analysis of CSR activities in the lodging industry. *Journal of Hospitality and Tourism Management*, 18(1), 147–154.
- Liu, C. J., & Var, T. (1986). Resident attitudes toward tourism impacts in Hawaii. *Annals of Tourism Research*, 13, 193–214.
- Long, P. T., Perdue, R. R., & Allen, L. (1990). Rural residents tourism perceptions and attitudes by community level of tourism. *Journal of Travel Research*, 28(3), 3–9.
- Luo, J. M. (2018). A measurement scale of corporate social responsibility in gambling industry from customer perspective. *Journal of Quality Assurance in Hospitality & Tourism*, 19(4), 460–475.
- Luo, M., Huang, Q. G., & Lam, F. C. (2019). Barriers to the implementation of corporate social responsibility in gaming industry. *Journal of Quality Assurance in Hospitality & Tourism*, 20, 528.
- McLachlan, S., & Binns, T. (2014). Tourism, development and corporate social responsibility in Livingstone, Zambia. *Local Economy*, 29(1–2), 98–112.
- Milne, S. (1990). The Impact of Tourism development in Small Pacific Island States: An Overview. *New Zealand Journal of Geography*, 89, 19–21.
- Palacios-Marqués, D., & Devese-Carañana, C. A. (2013). Policies to support corporate social responsibility: The case of telefónica. *Human Resource Management*, 52, 145–152.
- Park, S.-Y., & Levy, E. S. (2014). Corporate social responsibility: Perspectives of hotel frontline employees. *International Journal of Contemporary Hospitality Management*, 26(3), 332–348.
- Paek, S., Xiao, Q., Lee, S., & Song, H. (2013). Does managerial ownership affect different corporate social responsibility dimensions? An empirical examination of U.S. publicly traded hospitality firms. *International Journal of Hospitality Management*, 34, 423–433.

- Peters, M. (2016). Corporate social responsibility. In J. Jafari & H. Xiao (Eds.), *Encyclopedia of tourism* (pp. 192–193). Cham: Springer.
- Polonsky, M., Hall, J., Viececi, J., Akdemir, A., & Marangoz, M. (2013). Using strategic philanthropy to improve heritage tourist sites on the Gallipoli Peninsula, Turkey: Community perceptions of changing quality of life and of the sponsoring organization. *Journal of Sustainable Tourism*, 21(3), 376–395.
- Quinn, C. (2013). *Want to engage your employees in your CSR activities. Give them to choose*. Retrieved from <http://www.sustainablebrands.com>
- Sheldon, P., & Park, Y. S. (2011). An exploratory study of corporate social responsibility in the U.S. travel industry. *Journal of Travel Research*, 50, 392–407.
- Shen, L., Govindan, K., & Shankar, M. (2015). Evaluation of barriers of corporate social responsibility using an analytical hierarchy process under a fuzzy environment – A textile case. *Sustainability*, 7(3), 3493–3514.
- Supanti, D., Butcher, K., & Fredline, L. (2015). Enhancing the employer-employee relationship through corporate social responsibility (CSR) engagement. *International Journal of Contemporary Hospitality Management*, 26(7), 1479–1498.
- Swarbrooke, J. (1999). *Sustainable tourism management*. New York: CABI Publishing.
- Tamajon, L. G., & Font, X. (2013). Corporate social responsibility in tourism small and medium enterprises evidence from Europe and Latin America. *Tourism Management Perspectives*, 7, 38–47.
- Tamajón, L. G., & Aulet, X. F. (2013). Corporate social responsibility in tourism small and medium enterprises evidence from Europe and Latin America. *Tourism Management Perspectives*, 7, 38–46.
- Telfer, J. D., & Sharpley, R. (2008). *Tourism and development in the developing world*. London: Routledge.
- Torelli, J. C., Monga, S. A., & Kaikati, A. (2012). Doing poorly by doing good: Corporate social responsibility and brand concepts. *Journal of Consumer Research*, 38(5), 948.
- Tsai, H., Tsang, N. K. F., & Cheng, S. K. Y. (2012). Hotel employees' perceptions on corporate social responsibility: The case of Hong Kong. *International Journal of Hospitality Management*, 31(4), 1143–1154.
- Turker, D. (2009). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, 85, 411–427.
- United Nations Conference on Environment and Development, Earth Summit (1992). *Encyclopaedia Britannica*.
- United Nations World Tourism Organization. (2010). *Internal management in world organization*. Madrid: UNWTO.
- United Nations World Tourism Organization. (2018). *Tourism and the Sustainable Development Goals – Journey to 2030*. Madrid: United Nations Development Programme.
- United Nations World Tourism Organization. (2020). *World tourism barometer no. 18, January 2020*. <https://www.unwto.org/world-tourism-barometer-n18-january-2020>. Accessed 09 Feb 2020.
- UNWTO (2015) UNWTO World Tourism Barometer and Statistical Annex, January 2015. Madrid: United Nations World Tourism Organization.
- World Business Council for Sustainable Development. (1999). *Corporate social responsibility: Meeting changing expectations*. Retrieved from <http://www.wbcsd.org>
- World Tourism Organization. (2015). *Tourism and the Sustainable Development Goals*. Madrid: UNWTO.
- World Travel & Tourism Council (WTTC). (2019). *Travel & tourism economic impact 2019 world*. <https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2019/world2019.pdf>. Accessed 09 Feb 2020.
- Youn, H., Hua, N., & Lee, S. (2015). Does size matter? CSR in firm performance in the restaurant industry. *International Journal of Hospitality Management*, 15, 127–134.
- Youn, H., Lee, K., & Lee, S. (2018). Effects of corporate social responsibility on employee in the casino industry. *Tourism Management*, 68, 328–335.
- Young, A. (2006). *Gambling or gaming: Entertainment or exploitation*. England: Church of England Ethical Investment Advisory Group.
- Zaman, K., Shahbaz, M., Loganathan, N., & Raza, A. S. (2016). Tourism development, energy consumption and Environmental Kuznets Curve: Trivariate analysis in the panel of developed and developing countries. *Tourism Management*, 54, 275–283.

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CSR Pyramid

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Synonyms

[CSR model](#); [Ethical dimensions of CSR](#); [Hierarchy of CSR dimensions](#); [Layers of CSR](#)

Definition

The “CSR pyramid” by Archie B. Carroll is probably the most widespread and best-known model of CSR in the scholarly literature (see, e.g., Visser 2006, p. 33; Verfürth 2016, p. 32). It depicts a pyramid divided into four levels, which represent four kinds of responsibilities (economic, legal, ethical, and philanthropic), that organizations, especially companies, hold toward their stakeholders and society at large. Together, these four responsibilities constitute “total CSR” as Carroll calls it (Carroll 1991, p. 40).

Introduction

The famous CSR pyramid, published by Archie B. Carroll, shows four layers of responsibility in a hierarchical arrangement: an economic, legal, ethical, and philanthropic responsibility. The article in which the model was published for the first time still ranks as one of the most frequently downloaded articles from *Business Horizons* in the last 90 days (Elsevier Journals 2019). Accordingly, the CSR pyramid has significantly shaped the international perception of corporate social responsibility (Scherer and Patzer 2011, p. 322).

The Precursor Model

The preparatory work for the model dates back to 1979, when Carroll published his article “A Three-Dimensional Conceptual Model of Corporate Social Performance” (Carroll 1979). In this article, he offers a conceptual model that comprehensively describes essential aspects of corporate social performance (CSP). It aims to answer three major questions of concern for academics and managers alike:

1. What is included in corporate social responsibility?
2. What are the social issues the organization must address?
3. What is the organization’s philosophy or mode of social responsiveness? (Carroll 1979, p. 497)

In response to the first question “What is included in CSR?,” Carroll presents a four-part definition that addresses the entire range of obligations business has toward society. He states that companies have these four responsibilities:

- Economic responsibilities
- Legal responsibilities
- Ethical responsibilities
- Discretionary responsibilities (Carroll 1979, p. 499)

The graphical model he uses to illustrate these four categories displays a column consisting of four building blocks. The first and largest building block is at the base of the column and is called “economic responsibilities,” and the second largest is “legal responsibilities,” followed by “ethical,” and, finally, the smallest is “discretionary responsibilities” (later referred to as “philanthropic,” Carroll 1991). By choosing different proportions, Carroll suggests the relative magnitude of each responsibility. All four categories are not mutually exclusive nor are they supposed to represent a continuum with economic concerns on the one hand and social concerns on the other hand. The categories are not cumulative nor additive but are listed in the order of their assumed foundational importance and role and shall offer a classification scheme for the different kinds of social responsibilities business has (Carroll 1979, pp. 499–500).

In accordance with this four-part column model, Carroll then articulates a definition of CSR, which is based on societal expectations:

“The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point of time”. (Carroll 1979, p. 500)

Mark Schwartz has emphasized how Carroll’s four categories or domains of CSR have been used by numerous theorists in their development of more comprehensive CSR models or frameworks (Schwartz 2011). And two prominent business and society scholars, Wood and Jones, have observed that Carroll’s four CSR categories have “enjoyed wide popularity among Social Issues in

Management (SIM) scholars” (Wooda and Jones 1996, p. 45). Schwartz goes on to conclude that such use, as well as its acceptance and impact, suggests that Carroll’s CSR categories/domains, as well as his CSR pyramid, remain a leading paradigm of CSR in the SIM field (Schwartz 2011, p. 88).

With regard to the second question, Carroll strives to identify the “social issues” to which his conceptual framework for CSP can be applied. Carroll notes that issues change over time and differ from industry to industry. He further argues that there is no consensus on which social issues should be addressed precisely. Therefore, identifying social issues is an important aspect of CSP analysis. In later writings, he referred to these social issues as stakeholder issues. Turning to the third question, Carroll deals with the term “social responsiveness” as referring to the philosophy, mode, or strategy behind business’s managerial responses toward expectations of society and social issues. Response categories range from giving no response (doing nothing) to responding proactively (doing much) (Carroll 1979, p. 501). Finally, Carroll integrates all three aspects, i.e., the definition of social responsibility of business illustrated by the column model, the need for identifying social issues, and the degree of social responsiveness, into one three-dimensional, cube-like “corporate social performance model” (Carroll 1979, p. 503).

According to Max Clarkson, the development of Carroll’s three-dimensional model represented a new conceptualization of CSP. Clarkson was the first to refer to it as “Carroll’s cube” (Clarkson 1995, 245). He called it comprehensive and integrative and asserted that the “strength of its influence can best be judged by its longevity and that of its progeny” (Clarkson 1995, p. 245).

Carroll proposed that this three-dimensional CSP model might help managers to conceptualize key issues needing to be addressed in social performance, to categorize thinking about social issues, and to enhance planning and diagnosis in social performance. For academics, the CSP model intends to help to clarify and integrate various definitional strands (Carroll 1979, p. 504).

Description of the CSR Pyramid

In 1991, Carroll, drawing on his earlier work from 1979, developed his famous pyramidal model, which embraces the entire range of business responsibilities and is termed “the pyramid of corporate social responsibility” (Carroll 1991). The CSR pyramid extracted the basic definition of CSR from his CSP model and focused on developing it further. In 2014, researcher Jeremy Moon termed Carroll’s CSR pyramid one of the most “famous” and “influential” frameworks for studying the management of CSR (Moon 2014, pp. 20–21).

As in 1979, Carroll distinguishes four different categories of responsibility – economic, legal, ethical, and philanthropic – which together constitute “total” CSR.

The pyramid’s lowest layer, understood, thus, as the foundation of CSR, is the economic responsibility: Being a profitable company that provides society with goods and services is, according to this model, the basic prerequisite for all other levels of responsibility. Moon argues that a strength of the CSR pyramid is that it is founded on economic responsibility, and this reminds us that CSR extends to the core business (Moon 2014, p. 21). Like Milton Friedman (Friedman 1970), Carroll highlights the economically motivated, i.e., profit-oriented, production of goods and services as the fundamental responsibility of a company. Companies were given the sanction to provide society with goods, services, and jobs, and profit is the incentive or reward they were given. He argues further that the idea of a profit motive was transformed into a maximum profit motive at some point, and this is still a dominant mindset of many business people, even today. Also in line with Friedman, he offers some considerations that characterize a company’s economic responsibility, e.g., that it is important to perform in a manner consistent with maximizing earnings per share and to be committed to being as profitable as possible (Carroll 1991, pp. 40–41).

In the CSR pyramid, economic responsibility is reflecting the historical development as seen by Carroll, followed by the aspect of legal responsibility: Companies should not only operate

according to a legitimate profit motive but are also expected to comply with applicable laws. Laws and regulations are seen as “codified ethics” because they are based on notions of fair operations. Today, both economic and legal responsibilities should be seen as coexisting fundamental concepts of free-market economies. Legal responsibilities are further characterized, e.g., by the importance to perform in a manner consistent with the existing law and to comply with federal, state, and local regulations (Carroll 1991, pp. 40–41). In short, economic and legal responsibilities are “required” by society as conditions for operating and staying in business.

The third layer represents ethical responsibilities. In contrast to “codified ethics,” ethical responsibilities compel companies to behave in accordance with socially expected and ethically legitimized standards, norms, values, or expectations that have not been codified into law (yet). Carroll draws attention to the interdependence between the second and third layer of his model. On the one hand, changing ethics might precede new regulations and laws; on the other hand, the third layer shows that society has even higher expectations on managers to operate at levels above those required by law. Statements that help to characterize ethical responsibilities are, for example, that it is important to perform in a manner consistent with expectations of societal mores and ethical norms and recognize and respect new moral orientations adopted by society (Carroll 1991, p. 41). Whereas economic and legal responsibilities are “required” by society, ethical responsibilities are “expected” by society.

The top level of the pyramid is composed of “philanthropic responsibilities.” Unlike the first three responsibilities, this one is not directly related to how companies act in pursuing their goals but stands for what companies are willing to do voluntarily for the benefit of society or community, such as business contributions of financial or human resources for charitable purposes and community engagement. Philanthropic responsibilities can be distinguished from ethical responsibilities in that they are purely discretionary, i.e., there is no obligation based on an ethical principle or value demanding it. The society

expects companies to assume their ethical responsibilities, but if companies do not engage in activities or programs for promoting human welfare, they are not seen as behaving in an unethical manner. Therefore, philanthropy might be highly “desired” by society but is still not seen as required as the three other layers of the pyramid. Statements that summarize philanthropic components of CSR are, e.g., to perform in a manner consistent with the expectations of society in terms of charity or to assist the fine and performing arts (Carroll 1991, pp. 41–42). Carroll argued that the philanthropic responsibilities are often thought of in the category of businesses desiring to be good corporate citizens.

All four layers of the CSR pyramid constitute “total CSR” and, in terms of management, must be addressed simultaneously (Carroll 1991, p. 43). It is here that Carroll’s model significantly differs from the work of Friedman (1970). The first three layers more or less correspond to Friedman’s understanding of responsible management, which is “to make as much money as possible while conforming to the basic rules of society, both those embodied in the law and those embodied in ethical custom” (Friedman 1970). Friedman, however, emphasizes the economic responsibility and does not say much about legal and ethical responsibilities other than to mention them. He criticizes philanthropy – which, in his article, he actually treats as a synonym for social responsibility – as illegitimate in a corporate context because managers should be the agents of stockholders in the first place and thus be obliged to maximize profit instead of diminishing it by donating for “social purposes.” Carroll, by contrast, states that engaging in philanthropic activities goes hand in hand with “enlightened self-interest” of business as “good corporate citizens” (Carroll 1991, p. 43).

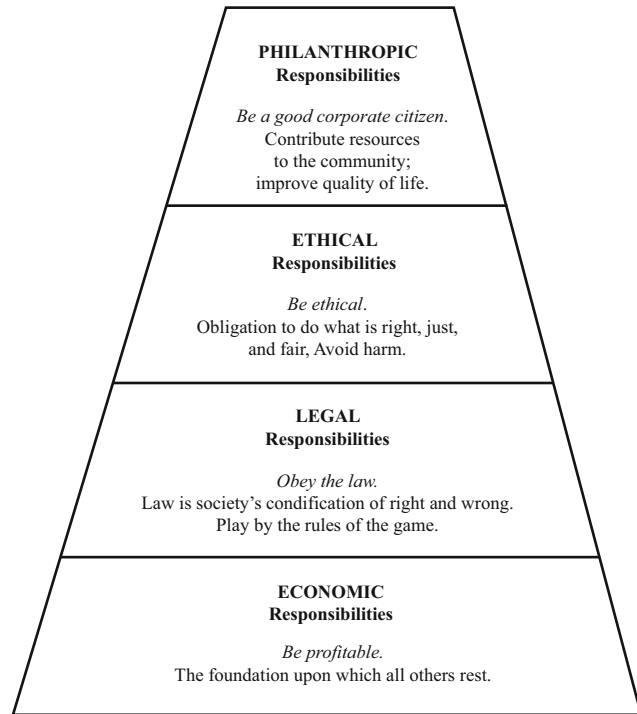
Carroll’s model serves as a framework to understand a company’s responsibilities as “required, expected, or desired” by society. These responsibilities, of course, may vary in magnitude because of company size, industry, philosophy, corporate strategy, etc. Nonetheless, to be socially responsible, all companies should strive to “be profitable, obey the law, be ethical

and, be a good corporate citizen” (Carroll 1991, p. 48). For these purposes, managers need to reconcile their objectives with those of their stakeholders. This is achieved by stakeholder management, i.e., describing, understanding, analyzing, and managing stakeholders and their interests (Carroll 1991, p. 43). He argues that five questions need to be addressed in order to achieve comprehensive stakeholder management:

1. Who are our stakeholders?
2. What are their stakes?
3. What opportunities and challenges are presented by our stakeholders?
4. What corporate social responsibilities (economic, legal, ethical, and philanthropic) do we have to our stakeholders?
5. What strategies, actions, or decisions should we take to best deal with these responsibilities? (Carroll 1991, p. 44)

In order to answer question no. 4, Carroll offers a stakeholder/responsibility matrix that helps managers to organize their thoughts. It shows the four types of responsibilities (economic, legal, ethical, and philanthropic) on the vertical axis of the matrix, in reflection to a listing of the important stakeholders of the company on the horizontal axis of the matrix. By analyzing the four types of responsibilities for each stakeholder, companies may maintain an analytical database to support their stakeholder management and, ultimately, decision-making. Carroll draws special attention to the linkage of ethical responsibility (third layer of his CSR pyramid) and major stakeholder groups. He distinguishes three types of management (immoral, amoral, and moral), which he previously defined in his article “In Search of the Moral Manager” (1987). Based on these three moral types, he outlines possible orientations toward five major stakeholder groups (owners, employees, customers, local communities, and the society at large). Carroll aims to gain a more comprehensive understanding of what it means to manage morally – his favored and recommended option of the three types of management morality – and of what this implies for interacting with stakeholders (Carroll 1991, pp. 46–47). Because it is intuitive in nature, Carroll’s CSR pyramid ranks high in popularity and acceptance in the CSR discussion (Mildenberger et al. 2007, p. 13).

CSR Pyramid, Fig. 1 The pyramid of corporate social responsibility (Carroll 1991, p. 42, Fig. 3)



Jeremy Moon argues that its simplicity is one of its major strengths (Moon, 21) (Fig. 1).

Criticism and Issues

As Carroll himself says, “no metaphor is perfect, and the CSR pyramid is no exception” (Carroll 1991, p. 42). The model has been criticized especially because of its hierarchical structure, even though Carroll himself states that all four layers are in constant and dynamic tension with one another. According to Visser, it is not fully clear why Carroll portrays the four different responsibilities as a hierarchy (Visser 2006, p. 43). Mildenberger/Khare/Thiede suggest that the hierarchical pyramidal form was chosen as a common method of presentation in economy and more or less reflects the relevance of the four responsibilities as perceived by managers (Mildenberger et al. 2007, p. 13). Carroll has argued that the sequence, with economic as the base, is foundational to the conduct of business and that economic sustainability is essential for the other

responsibilities to be relevant. If companies are not economically profitable and sustainable, the other responsibilities become less relevant. Carroll later confirms this hypothesis with empirical studies of the four responsibilities. The first study, published in 1985, showed that experts were capable of distinguishing among the four responsibilities. In addition, a conducted factor analysis ascertained that there are four empirically interrelated but conceptually independent components of corporate social responsibility. The weighting of the four layers within the model reflects the importance that 241 surveyed executives rate it (Aupperle et al. 1985). Another study, which measures the weighting of the four responsibilities by European managers, was published in 1996 (Pinkston and Carroll 1996) and later supported by the study of Edmondson/Carroll in 1999 (Edmondson and Carroll 1999).

Another point of criticism concerns the applicability of the CSR pyramid in different localities and in different organizational contexts. Visser argues that the pyramid is based on research in a US-American context. He goes on to say that in

developing countries, the order of the CSR pyramid would probably differ from Carroll's model: the economic responsibilities would still be given highest priority, followed by philanthropy and legal and ethical responsibility (Visser 2011, pp. 488–489). Also, Crane and Matten argue that although it is possible to apply Carroll's pyramid in Europe, there are certain differences, and the interdependencies of the layers would be different from those described by Carroll (Crane and Matten 2007).

Carroll had given thought to the applicability of the pyramid in the global context when in 2004 he set forth his pyramid of *global* corporate social responsibility and performance. Though he did not suggest a reordering of the four CSR categories, he suggested that the CSR pyramid could be used as a base point or framework for studying its applicability in diverse locales (Carroll 2004). It was implicit in this article that he was speaking of its applicability in developed economies. Its applicability in less developed countries or emerging economies was not addressed. Interestingly, however, many articles, dissertations, and theses are appearing on the scene today in which the CSR pyramid is being used as a foundational reference point for studying CSR in developing economies.

In addition to the criticism mentioned by Visser, the model does not comprise new emerging forms of companies, such as “social businesses,” as described, for instance, by Yunus and Weber (2010). These social enterprises' objective is to address social problems while being financially self-sustainable but not being as profitable as possible (see statement no. 2, Carroll 1991, p. 40). These new forms of businesses reinvest profits in the business itself in order to increase positive social impacts. For the most part, these innovative business forms (e.g., social enterprises, B-corps) began appearing years after the CSR pyramid was articulated. Further, the general public may look at these companies differently than they do CSR among mainstream companies. In later writings, Carroll distinguished the rise of CSR exemplar firms to include social entrepreneurship and B-Corps and leading CSR performers from what he termed “mainstream

adopters,” firms that did not have specific social agendas emanating from their initial formations. These mainstream adopters include conventional businesses that have adopted, practiced, and achieved various degrees of CSR excellence but did not have an initial social purpose (Carroll et al. 2018, p. 43).

Carroll's Pyramid of CSR: Taking Another Look

Partly in response to emerging questions, misinterpretations of the model, and criticisms, Carroll published a review article, in which he takes another look at his pyramid of CSR in order to discuss some aspects of the model that were not clarified when it was initially published. He once more emphasizes that the four responsibilities shall help to delineate in some detail a company's responsibility toward society (Carroll 2016, p. 2). He further points out that ethics permeates and saturates the pyramid and, thus, should be seen as a factor that is present in all of its layers. For example, in the economic responsibility category, the pyramid implicitly assumes a free enterprise society in which capitalism is seen as a legitimate, fair, and just system. In the legal responsibility, it is noted that most laws and regulations were initially created based upon ethical precepts. In the ethical responsibility category, ethics stands on its own, and in the philanthropic responsibility, business giving is sometimes ethically motivated by firms striving to do the right thing, whereas other firms may just be trying to enhance their reputations (Carroll 2016, p. 5). In short, the ethics dimension might be seen as cutting through and permeating all four categories of the pyramid.

Carroll describes that here are tensions and trade-offs when a company seeks to follow all four responsibilities (e.g., especially with regard to short-term and long-term profitability). But tensions and trade-offs are important decision points, and the layers of the pyramid do not necessarily have to be in complete opposition to one another (Carroll 2016, p. 8). The CSR pyramid should always be viewed in its entirety and not be

reduced to a stack of single responsibility layers. Carroll desires his pyramid to be understood as a “sustainable stakeholder framework” and one that is seen as an “integrated, unified whole” (Carroll 2016, p. 6). Its four components address different stakeholders with reference to the varying priorities in which stakeholders might be affected. In addition, the pyramid should be seen as a dynamic, adaptable framework that overarches into future generations and, therefore, can be called sustainable itself. According to Carroll, “A consideration of stakeholders and sustainability, today, is inseparable from CSR” (Carroll 2016, p. 6). Finally, Carroll again addresses the global applicability of his CSR pyramid within different geographical localities and different organizational contexts and suggests that future research will further explore these topics. Carroll concludes by saying that CSR, the pyramid of CSR, and related models and concepts face an optimistic future and are on a rising trajectory (Carroll 2016, p. 7).

Summary

The CSR pyramid is, according to Carroll himself, a model that constitutes “total CSR.” It depicts a triangle divided into four layers in a hierarchical arrangement, which represent four kinds of responsibilities (economic, legal, ethical, and philanthropic). Organizations, especially companies, should follow all four responsibilities hold toward their stakeholders and society at large (Carroll 1991, p. 40). There has been a lot of criticism and misinterpretations of the model especially with regard to the hierarchy of responsibilities, but still it is one of the most widespread and best-known models of CSR (see, e.g., Visser 2006, p. 33; Verfürth 2016, p. 32).

Cross-References

- Carroll, A.B.
- Corporate Social Responsibility (CSR)

References

- Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationships between corporate social responsibility and profitability. *Academy of Management Journal*, 28(2), 446–463.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1987). In search of the moral manager. *Business Horizons* (March–April 1987), pp. 7–15.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons* (July–August, 1991), 34(4), 39–48.
- Carroll, A. B. (2004). Managing ethically with global stakeholders: A present and future challenge. *Academy of Management Executive*, 18(2), 114–120.
- Carroll, A. B. (2016). Carroll’s pyramid of CSR: taking another look. *International Journal of Corporate Social Responsibility* 1, Article number 3. <https://doi.org/10.1186/s40991-016-0004-6>. Accessed on the 4th of September 2019.
- Carroll, A. B., Brown, J. A., & Buchholtz, A. K. (2018). *Business & society: Ethics, sustainability & stakeholder management* (10th ed.). Boston: Cengage Learning.
- Clarkson, M. B. E. (1995). A stakeholder framework for analysing and evaluating corporate social performance. *Academy of management review* 20:1, 92–117. In M. B. E. Clarkson (Ed.), *1998 the corporation and its stakeholders: Classic and contemporary readings* (pp. 243–273). Toronto: University of Toronto Press.
- Crane, A., & Matten, D. (2007). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization* (2nd ed.). Oxford University Press.
- Edmondson, V. C./ Carroll, A. B. (1999). Giving back: An examination of the philanthropic motivations, orientations and activities of large black-owned businesses. *Journal of Business Ethics*, 19, 171–179.
- Elsevier Journals. (2019). Most downloaded Business Horizons articles. <http://www.journals.elsevier.com/business-horizons/most-downloaded-articles/>. Accessed 28th October 2019.
- Friedman, M. (1970) The social responsibility of business is to increase its profit, *The New York Times Magazine*, September 13th 1970.
- Mildenberger, U, Khare, A., & Thiede, C. (2007) Corporate social responsibility – Theoriekonzepte und Praxisansätze. In: Himpel, F, Kaluza, B, Wittmann, J. (eds.) *Spektrum des Produktions- und Innovationsmanagements : Komplexität und Dynamik im Kontext von Interdependenz und Kooperation; Festgabe für Klaus Bellmann zum 65. Geburtstag*. - Wiesbaden: Gabler. https://www.hdm-stuttgart.de/science/scienceverzeichnis/55/CSR_Theoriekonzepte_und_Praxisansetze.pdf. Accessed on the 30th of October 2019, 1–22.

- Moon, J. (2014). *Corporate social responsibility: A very short introduction*. Oxford: Oxford University Press.
- Pinkston, T./ Carroll, A. B. (1996) A retrospective examination of CSR orientations: Have they changed? *Journal of Business Ethics*, 15/1996, 199–206.
- Scherer, A. G./Patzner, M. (2011) Corporate social responsibility. In: Assländer, M. S. (ed.) *Handbuch Wirtschaftsethik*, Stuttgart, 321–329.
- Schwartz, M. S. (2011). *Corporate social responsibility: An ethical approach*. Buffalo, NY: Broadview Press.
- Verfürth, N. (2016) Individuelle Verantwortung in Unternehmen. *Ethische Entscheidungsprozesse als Voraussetzung für Corporate Social Responsibility*, Wiesbaden.
- Visser, W. (2006) Revisiting Carroll's CSR pyramid: An African perspective. In: Huniche, M./ Rahbek, E. P. (eds.) *Corporate citizenship in developing countries—New partnership perspectives*, Copenhagen: Copenhagen Business School Press, 29–56.
- Visser, W. (2011). *The age of responsibility: CSR 2.0 and the new DNA of business*. West Sussex: Wiley.
- Wood, D. J., & Jones, R. E. (1996). Research in corporate social performance: What have we learned? In D. R. Burlingame & D. D. Young (Eds.), *Corporate philanthropy at the crossroads* (pp. 41–85). Bloomington: UP.
- Yunus, M./ Weber, K. (2010) Building social business: The new kind of capitalism that serves humanity's most pressing needs. Public Affairs, New York 2010.

Definition

When talking about the definition, there is no exact agreement on what corporate social responsibility (CSR) means. There are various definitions that take into account various dimensions. Andersen 2003 in (Dahlsrud 2006), defined CSR as the companies' interests with the emphasis on nature or environment for the future generation. Some claim the importance of identifying the stakeholders as they see CSR as the "obligations or duties of an organization to a specific system of stakeholders." Meanwhile, Lu et al. (2019) describe CSR as the responsibilities of companies on their vision and mission and also responsibility for the impacts on society. From these various approaches, in general CSR can be defined as a company's effort to contribute to sustainable development, which is denoted as development that meets existing generation's needs without endangering future generations' ability to meet their own needs and focuses on how to obtain the integration of economic, environmental, and social stringent requirements (Kim et al. 2014). To hold the companies accountable for their commitment on social responsibility, the framework for CSR reporting has evolved. Companies' activities that indicate the incorporation of economic, social, and environmental issues in their business activities and interactions with stakeholders are called CSR reporting. Nonfinancial information on a company's interactions with various stakeholders, as well as its physical and social surroundings, is included in CSR reporting (Orzel 2020).

CSR Report Quality

► CSR Disclosure, Quality Measurement of

CSR Reporting

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Synonyms

Cause-related marketing; Corporate citizenship; Corporate conscience; Social performance; Sustainable responsible business

Introduction

Civilization has evolved in the process of globalization, and this caused people's awareness on their existence to change which led them to have redefined expectations toward environment and affected their expectations regarding the role, function, and responsibilities of companies. To meet these new expectations, the term corporate social responsibility (CSR) was founded.

There is no exact agreement on the definition of CSR, but various definitions of CSR in management and organizational literatures have emerged for the last two decades. There are several approaches that are used to try to establish the definition of CSR which involves several dimensions such as economic, environmental, social, stakeholders, and voluntariness. For example, CSR is described by the World Business Council for Sustainable Development (WBCSD) as a commitment of corporations to contribute to sustainable economic development by working with employees, their families, the local community, and society as a whole to improve citizens' quality of life (Inyang et al. 2011). Meanwhile, the European Communities Commission takes a more commonly proposed approach to CSR, defining it as a concept in which corporations choose to contribute willingly to a better community and a cleaner environment. According to some academics, CSR refers to a company's overall relationship with all of its stakeholders (Tokoro 2007).

According to these definitions, CSR can be defined as a company's efforts to promote sustainable development, which means development that meets the needs of the current generation without jeopardizing the ability of future generations to meet their own needs and concentrates on how to achieve the integration of economic, environmental, and social stringent requirements (Kim et al. 2014). CSR encompasses a wide range of societal duties that should be fulfilled by corporations that operate within those societies. Specifically, CSR requires a company to identify its stakeholders and consider their needs, goals, and values in day-to-day decision-making.

Several institutions have attempted a strategy to get the commitment of corporations regarding social responsibility. In the 1960s, the Netherlands and France imposed rules on enterprises regarding domestic employee policies (Tallberg 2004). Renneboog et al. (2008) stated that in the 1980s, investment funds in the United States and the United Kingdom began to examine corporations' socially responsible behavior. There are several events that put the CSR efforts on the map such as Earth Summit that was held by the

UN in Rio de Janeiro, Brazil, in 1992 and was followed up by the declaration for sustainable development in 2002. During the 1990s, the ideas of social reports also developed vigorously (Hys and Hawryz 2012).

To hold the companies accountable for their commitment on social responsibility, CSR reporting mechanism emerged. Referring to the dimensions that are used in defining CSR, CSR reporting is disclosing the activities of businesses that indicate the incorporation of economic, social, and environmental concerns into their company operations and interactions with stakeholders. CSR reporting may also be described as nonfinancial information on a company's interactions with its many stakeholders as well as its physical and social surroundings (Orzel 2020).

Stakeholders play a vital role in constituting the definition of CSR reporting. Stakeholders are individuals and groups, both inside and outside of corporations, who are interested in the outcomes of their operations and have expectations for greater openness from the firms (Benn et al. 2016). Some scholars see CSR reporting as a technique for managing legitimacy in response to stakeholder institutional demands (Michelon et al. 2015). Scholars have theoretically suggested that open CSR reporting is part of the conversation between an ethical corporation and its stakeholders, which will leverage favorable business reputation through the legitimization of corporate's behavior (Pérez 2015).

Based on some research (Pérez 2015), CSR reporting may help organizations improve their image in the eyes of stakeholders, which will result in the favorable impression in the perspective of society and affect their business positively, for example, increase sales or trust from the customers (Pérez 2015). There are companies that no longer use CSR reporting as a whim but rather a genuine tool of strengthening their own reputation. To some extent, a transition from the concept which predicated CSR reporting as a mandatory measure, even in the absence of regulations, could be seen. CSR reporting can be seen as a tool that assists businesses in measuring, understanding, and communicating their economic, environmental, social, and governance performance, as well

as in setting objectives and responding appropriately to changes more effectively.

According to Turkel and Akan (2015), CSR communication can also be defined as a process of anticipating stakeholders' expectations, articulating CSR policy, and managing various organizational communication tools designed to provide true and transparent information about a company's or brand's integration of its business operations, social and environmental concerns, and interactions with stakeholders. CSR communication, in a broader sense, might be defined as a tool-oriented activity that relates to how CSR is communicated through reports, codes of ethics, principles, and standards, as well as the editing of CSR message content in advertising and marketing material. CSR communication is thus critical in all CSR operations, from strategic CSR conceptualization and implementation to CSR planning and execution.

When taking the stakeholders' expectation, it implies that it is not always in accordance with established norms or laws. When the ambitions of greater society, as represented by stakeholders, are not satisfied, society has the power to enforce their desires by going outside the law.

These expectations or demands may stem from what is often disparagingly referred to as "conventional morality." Ignoring or failing to take any claims into account when applying ethical norms to business, society, and stakeholders can still constrain business in ways other than by law, for example, by practicing social pressure and moral sanctions (such as boycotts, defamatory of company brand image, or publicizing harmful corporate actions). Thus, these kinds of repercussions should be expected by truly listening to what stakeholders may have in their aspirations, as well as keeping the community informed of the good deeds that have been done through reports and other communication channels.

Due to the unrelenting pursuit of responsible reporting of nonfinancial components of business entities, there have been growing needs for guidelines for quality reporting. This is when Global Reporting Initiative (GRI) emerged. GRI is a set of guidelines of CSR reporting that emerged in 1997. During this time, the Social Accountability

8000 (SA 8000) standard, a social accreditation standard for industries and organizations worldwide, has also emerged. In the year 2000, the United Nations Worldwide Compact debuted on the global corporate reporting arena (Hedberg and Von Malmberg 2003). More of this type of information is now accessible for global business organizations to use in reporting their non-financial operations. CSR reporting has been increasingly relevant in recent years for reasons of accountability, transparency, and good business practice.

The benefits from providing CSR for the stakeholders and public and general have been understood by many corporate organizations particularly in terms of how they deal with environmental, social, and governance elements of operational activities. Now there are many international reporting guidelines available to help companies that have aspirations to be socially responsible and provide the stakeholders with the information that is comprehensive regarding their social responsibility.

Key Issues

At the beginning, the main concern of CSR was environmental issues that could threaten the future of the planet Earth and the survival of mankind (Frederick 2018). The concern that companies may fail to notice possible problems from their actions and take steps to avert them has spurred the need to hold companies accountable through CSR. Since then, CSR has grown in depth and no longer just focuses on environmental issue, but also research and examine the significance of social and economic aspects of human welfare. This development has now been well-recognized and established topic of scientific research.

In the CSR field, the concept of "butterfly effect" is also acknowledged. The butterfly effect is a metaphor for little, insignificant events that may have large, far-reaching social implications. When operating within a specific local culture, there is an expectation that businesses will exercise benevolence while trying to bring along their rewards in the form of products, services, and

jobs. However, in reality, the emergence of foreign or international business can threaten the status quo of local, political, and social orders. As a result, enterprises should be held accountable for the consequences of their activities on the environment and communities that may be unable to protect themselves against infractions.

The good cause objective behind CSR often links the CSR effort with altruism, and this has been highly debated. Being altruistic comes with the underlying assumptions that corporate must take responsibility beyond their business activities. There are no other interests or added value besides giving back and contributing to sustainable development, which means that CSR is associated with a firm doing good deeds such as corporate volunteering, creating a foundation, giving back to the community, and so on. However, in the current view of CSR, creating such stakeholder value is neither an altruistic endeavor, nor is it just the fulfillment of stakeholder interests. Rather, CSR is viewed as a management idea that may help the organization.

Thus, this understanding also imply the potential added values that could be earned by companies when implementing CSR. There are three approaches that can explain on why a company should continue to implement CSR activities: first, the instrumental approach/“it’s good for business” that refers to positive business case; second, the ethical approach/“it’s the right thing to do” that insists on what’s morally obligatory thing to do; and, third, the hybrid approach/“we should do good, both financially and ethically,” which integrated the previous two arguments that it is, at the very least, the correct thing to do both financially and morally.

The four grounds for the business case for CSR are as follows: (1) firm reputation and legitimacy, (2) equal employment opportunity and cost and risk reeducation, (3) competitive advantage, and (4) establishing win-win scenarios via synergistic value creation. To recapitulate, proponents of cost and risk reduction arguments argue that CSR helps a company to take advantage of tax breaks or avoid rigorous and burdensome government regulations, lowering its operational costs (Okpara and Idowu 2013).

Many studies (Jamali 2008) imply that when the conventional pillars of business ethics fail, organizations are asked to develop new corporate strategies to demonstrate their ethical standards. Authors have noted that the disclosure of CSR information is part of the discussion between an ethical company and its stakeholders that helps justify corporate behavior and thus contributes to the corporate’s stellar reputation based on the various theories such as the institutional/legitimacy and agency theories (Table 1) (De Georgen 2008). There are also other approaches like impression management theory that see CSR reporting of public vehicle to help a company to influence people’s perception on their image or product and services they sell (Pérez 2015).

Competitive benefit arguments suggest that by adopting certain CSR activities, a corporation might develop strong ties with its stakeholders and gain their support through decreased staff turnover, access to a larger talent pool, and consumer loyalty. As a result, a company will be able to distinguish itself from its competitors. A corporate can also benefit from the disclosure of their good performance of CSR through CSR reporting which might result in enhancement of their legitimacy and reputation.

The keys to publishing CSR reports include defining accountability for stakeholders, establishing trusting relationships with those stakeholders, and cocreating values. To accomplish this, a corporation must establish bilateral contact with stakeholders rather than providing information to them unilaterally. Companies that see their CSR report as nothing more than a tool to display convenient corporate information and hide difficult facts from the report will fail to acquire the trust of stakeholders. Instead of just introducing management institutions, such organizations should create targets for the material assignment of environmental, social, and governance (ESG) concerns and specify obstacles in the evaluation of yearly achievements.

Tanimoto (Idowu et al. 2015) indicated that it is critical to improve the quality, trustworthiness, and comparability of CSR reporting information for the following reasons:

CSR Reporting, Table 1 Corporate reputation and stakeholder CSR reporting literature gaps and future research directions (Pérez 2015)

Theoretical approach	Perspective	References
Institutional/legitimacy theory	CSR reporting as a legitimacy and reputation management tool responding to pressures by stakeholders and driven by corporate identity communications	Patten (1992), Deegan (2002), de Quevedo et al. (2007), King and Whetten (2008), Nikolaeva and Bicho (2011), and Michelon (2011)
Impression management theory	CSR reporting as a public relations vehicle aimed at influencing people's perceptions	Gray et al. (1993), Elkington (1997), Hoogheemstra (2000), and Piechocki (2004)
Reputation risk management theory	CSR reporting conceived as both an outcome of and part of reputation risk management processes	Friedman and Miles (2001), Bebbington et al. (2008), and Unerman (2008)
Agency theory	CSR reporting as an essential tool for information exchange, the reduction of asymmetries, and the promotion of greater corporate transparency	Fama (1980), de la Fuente and de Quevedo (2003), Espinosa and Trombetta (2004), DeTienne and Lewis (2005)
Signaling theory	CSR reporting as a way to signal corporate reputations to stakeholders	Spence (1974), Toms (2002), and Watson et al. (2002)

- If each firm provided data based on its own criteria, it would be impossible to compare that data to data from other companies.
- If some information represents the performance of the central office while other information represents the performance of consolidated entities, it becomes difficult to indicate corporate performance as a whole due to a lack of standardized data.
- To earn more credibility from stakeholders, the application of GRI guidelines or the acceptance of third-party assurance is required to validate and certify the CRS report.

When firms include CSR into the heart of their company plan, CSR becomes more than simply an optional add-on activity, and they must then focus on holistic and integrated performance evaluation. When this occurs, issuing an integrated report rather than separate reports on financial and CSR becomes more common.

Another issue is how much control and facilitation the national government should have over CSR reporting. Some nations have public regulations requiring or encouraging publicly traded corporations to report non-financial concerns. The expectation of such a strategy is that strategic reporting will become a driving force in increasing stakeholder trust

and increasing value for both the firm and its stakeholders.

Summary

There are various approaches in defining CSR, but, in general, CSR could be seen as companies' efforts to contribute to sustainable development. Sustainable development is defined as development that satisfies the requirements of the present generation without affecting future generations' ability to satisfy their own needs and focuses on how to achieve the integration of economic, environmental, and social stringent (Kim et al. 2014). To hold the companies accountable for their commitment on social responsibility, CSR reporting mechanism was founded. By the definition, CSR reporting is disclosing the activities of businesses that indicate the incorporation of economic, social, and environmental concerns into their company operations and interactions with stakeholders (Orzel 2020).

According to certain study (Pérez 2015), CSR reporting may leverage a company's favorable image in the eyes of stakeholders, resulting in a positive reputation in the eyes of society, and affect their business positively, for example, increase sales or trust from the customers (Pérez 2015). Scholars have argued that the disclosure of

CSR information is part of the conversation between an ethical company and its stakeholders, which helps legitimize corporate behavior and therefore contributes to the corporate's positive reputation, depending on multiple theories such as the institutional/legitimacy and agency theories (De Georgen 2008). Companies that see their CSR report as nothing more than a tool to display convenient corporate information and hide difficult facts from the report will fail to acquire the trust of stakeholders.

References

- Andersen, S. L. (2003). Trajectories of brain development: point of vulnerability or window of opportunity? *Neuroscience & Biobehavioral Reviews*, 27(1–2), 3–18. [https://doi.org/10.1016/S0149-7634\(03\)00005-8](https://doi.org/10.1016/S0149-7634(03)00005-8).
- Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, 21(3), 337–361. <https://doi.org/10.1108/09513570810863932>.
- Benn, S., Abratt, R., & O'Leary, B. (2016). Defining and identifying stakeholders: Views from management and stakeholders. *South African Journal of Business Management*, 47(2), 1–11.
- Dahlsrud, A. (2006). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 1–13. <https://doi.org/10.1002/csr.132>.
- de Quevedo-Puente, E., Blanco-Mazagatos, V., & Castrillo, L. A. (2003). The trade-off between financial resources and agency costs in the family business: An exploratory study. *Family Business Review*, 20(3), 199–213. <https://doi.org/10.1111/j.1741-6248.2007.00095.x>.
- Deegan, C. (2002). Introduction: The legitimising Effect of Social and Environmental Disclosures – a Theoretical Foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311. <https://doi.org/10.1108/09513570210435852>.
- DeTienne, K. B., & Lewis, L. W. (2005). The Pragmatic and Ethical Barriers to Corporate Social Responsibility Disclosure: The Nike Case. *Journal of Business Ethics*, 60(4), 359–376. <https://doi.org/10.1007/s10551-005-0869-x>.
- Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Capstone: Oxford University Press.
- Espinosa, M. B., & Trombetta, M. (2004). The Reputational Consequences of Disclosure. *SSRN Electronic Journal* [Preprint]. <https://doi.org/10.2139/ssrn.511682>.
- Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 88(2), 288–307. <https://doi.org/10.1086/260866>.
- Frederick, W. C. (2018). Corporate Social Responsibility: From Founders to Millennials. in *Corporate Social Responsibility*. Bingley: Emerald Publishing Limited, 3–38. <https://doi.org/10.1108/S2514-175920180000002001>.
- Friedman, A. L. & Miles, S. (2001). Socially Responsible Investment and Corporate Social and Environmental Reporting in the UK: An Exploratory Study. *The British Accounting Review*, 33(4), 523–548. <https://doi.org/10.1006/bare.2001.0172>.
- Gardberg, N. A. & Fombrun, C. J. (2006). Corporate Citizenship: Creating Intangible Assets Across Institutional Environments. *Academy of Management Review*, 31(2), 329–346. <https://doi.org/10.5465/amr.2006.20208684>.
- De George, R. T. (2008). An American perspective on corporate social responsibility and the tenuous relevance of Jacques Derrida. *Business Ethics: A European Review*, 17(1), 74–86.
- Gray, R., Kouhy, R. & Lavers, S. (1993). Corporate Social and Environmental Reporting. *Accounting, Auditing & Accountability Journal*, 8(2), 47–77. <https://doi.org/10.1108/09513579510146996>.
- Hedberg, C. J., & Von Malmberg, F. (2003). The global reporting initiative and corporate sustainability reporting in Swedish companies. *Corporate Social Responsibility and Environmental Management*, 10(3), 153–164. <https://doi.org/10.1002/csr.38>.
- Hooghiemstra, R. (2000). Corporate Communication and Impression Management – New Perspectives Why Companies Engage in Corporate Social Reporting. *Journal of Business Ethics*, 27, 55–68. <https://doi.org/10.1023/A:1006400707757>.
- Hys, K., & Hawrysz, L. (2012). Corporate Social responsibility reporting. *China-USA Business Review*, 11(11), 1515–1524.
- Idowu, S. O., Capaldi, N., Fifka, M. S., Zu, L., & Schmidpeter, R. (Eds.) (2015). *Dictionary of corporate social responsibility: CSR, sustainability, ethics and governance*. New York: Springer.
- Inyang, B. J., Awa, H. O., & Enuoh, R. O. (2011). CSR-HRM nexus: Defining the role engagement of the human resources professionals. *International Journal of Business and Social Science*, 2(5), 118–126.
- Jamali, D. A. (2008). Stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *Journal of Business Ethics*, 82(1), 213–231. <https://doi.org/10.1007/s10551-007-9572-4>.
- Kim, M. S., Kim, D. T., & Kim, J. I. (2014). CSR for sustainable development: CSR beneficiary positioning and impression management motivation. *Corporate Social Responsibility and Environmental Management*, 21(1), 14–27. <https://doi.org/10.1002/csr.1300>.
- King, B. G. & Whetten, D. A. (2008). Rethinking the Relationship Between Reputation and Legitimacy: A Social Actor Conceptualization. *Corporate Reputation Review*, 11(3), 192–207. <https://doi.org/10.1057/crr.2008.16>.
- Lu, J., Ren, L., Lin, W., He, Y., & Streimikis, J. (2019). Policies to promote corporate social responsibility (CSR) and assessment of CSR impacts. *Business*

- Administration and Management*, XXII(1), 82–98. <https://doi.org/10.15240/tul/001/2019-1-006>.
- Michelon, G. (2011). Sustainability Disclosure and Reputation: A Comparative Study. *Corporate Reputation Review*, 14(2), 79–96. <https://doi.org/10.1057/crr.2011.10>.
- Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33, 59–78.
- Nikolaeva, R. & Bicho, M. (2011). The Role of Institutional and Reputational Factors in the Voluntary Adoption of Corporate Social Responsibility Reporting Standards. *Journal of the Academy of Marketing Science*, 39(1), 136–157. <https://doi.org/10.1007/s11747-010-0214-5>.
- Okpara, J. O., & Idowu, S. O. (Eds.) (2013). *Corporate social responsibility: Challenges, opportunities and strategies for twenty-first century leaders*. Berlin: Springer.
- Orzeł, B. (2020). Non-financial value creation due to non-financial data reporting quality. *Zeszyty Naukowe. Organizacja i Zarządzanie/Politechnika Śląska*.
- Patten, D. M. (1992). Intra-Industry Environmental Disclosures in Response to the Alaskan Oil Spill: A Note on Legitimacy Theory. *Accounting, Organizations and Society*, 17(5), 471–475. [https://doi.org/10.1016/0361-3682\(92\)90042-Q](https://doi.org/10.1016/0361-3682(92)90042-Q).
- Pérez, A. (2015). Corporate reputation and CSR reporting to stakeholders gaps in the literature and future lines of research. *Corporate Communications: An International Journal*, 20(1), 11–29. <https://doi.org/10.1108/CCIJ-01-2014-0003>.
- Piechocki, R. (2004). Transparency of Annual Sustainability Reports. *Corporate Reputation Review*, 7(2), 107–124. <https://doi.org/10.1057/palgrave.crr.1540215>.
- Renneboog, L., Ter Horst, J., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking & Finance*, 32(9), 1723–1742. <https://doi.org/10.1016/j.jbankfin.2007.12.039>.
- Sabate, J.M. de la F. and Puente, E. de Q. (2003). Empirical Analysis of the Relationship Between Corporate Reputation and Financial Performance: A Survey of the Literature. *Corporate Reputation Review*, 6(2), 161–177. <https://doi.org/10.1057/palgrave.crr.1540197>.
- Spence, M. (1974). Competitive and Optimal Responses to Signals: An Analysis of Efficiency and Distribution. *Journal of Economic Theory*, 7(3), 296–332. [https://doi.org/10.1016/0022-0531\(74\)90098-2](https://doi.org/10.1016/0022-0531(74)90098-2).
- Tallberg, J. (2004). The agenda-shaping powers of the EU council presidency. *Journal of European Public Policy*, 10(1), 1–19. <https://doi.org/10.1080/1350176032000046903>.
- Tokoro, N. (2007). Stakeholders and corporate social responsibility (CSR): A new perspective on the structure of relationships. *Asian Business & Management*, 6(2), 143–162.
- Toms, S. (2002). Firm Resources, Quality Signals and the Determinants of Corporate Environmental Reputation: Some UK Evidence. *The British Accounting Review*, 34(3), 257–282. <https://doi.org/10.1006/bare.2002.0211>.
- Türkel, S., & Akan, A. (2015). Corporate social responsibility (CSR) communication: a Turkish industry example. In *Integrated communications in the postmodern era* (pp. 151–174). London: Palgrave Macmillan.
- Unerman, J. (2008). Strategic Reputation Risk Management and Corporate Social Responsibility Reporting. *Accounting, Auditing & Accountability Journal*, 21(3), 362–364. <https://doi.org/10.1108/09513570810863941>.
- Watson, A., Shrives, P. and Marston, C. (2002). Voluntary Disclosure of Accounting Ratios in the UK. *The British Accounting Review*, 34(4), 289–313. <https://doi.org/10.1006/bare.2002.0213>.

CSR Reports

- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

CSR Risk

- [Social Risk](#)

CSR Strategy

- [Corporate Social Responsibility Strategy](#)

CSR: Evolution of Concept

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Synonyms

[Business ethics](#); [Sustainable development](#); [Triple bottom line](#)

Definition

Corporate social responsibility (CSR) can be defined as a “concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment” (European Commission 2001, p. 4). The basic notion of CSR “is the idea that it reflects the social imperatives and the social consequences of business success” (Matten and Moon 2008, p. 405). In that sense, the European Commission presented a new definition of CSR as “the responsibility of enterprises for their impacts on society” (European Commission 2011, p. 7).

The Communication of the European Commission at the end of 2011 underpinned the adverse effects of the economic and social crisis, as they have damaged consumer confidence and levels of trust in business and “have focused public attention on the social and ethical performance of enterprises” (European Commission 2011, p. 5).

CSR is an umbrella term overlapping with some and being synonymous with other conceptions of business–society relations (Matten and Crane 2005). The basic concept of social responsibility is related to moral and ethical issues concerning behavior and business decision-making, and to complex issues as environmental protection, safety, and health at workplace; relationship with local communities and consumers (Branco and Delgado 2011) is seen as a win–win strategy, as it potentially increases a company’s profitability and the well-being of stakeholders (Merino and Valor 2011). The core idea of this tool is the mutual dependence between the company and society, which in turn creates value for both, and can also represent the image of excellence both in the internal and external environment (Gholami 2011).

The CSR importance has “increased among managers, investors, shareholders, creditors, suppliers, customers, and policymakers due to accounting scandals over the past two decades” (Kiliç 2016, p. 550). Thus, there is a growing awareness that companies must be socially responsible and, to that extent, CSR “has become a key part in the strategies of companies around the globe to promote sustainable development” (Nawaiseh et al. 2015, p. 99).

There are a variety of CSR’s definitions, but most definitions make explicit reference to sustainable development and integrate the three pillars of the Brundtland Report: environmental, social, and economic well-being (Lamarche and Bodet 2018, p. 155). Thus, a wide range of labels, concepts, and constructs have been used to “describe and theorize the social phenomena that correspond to CSR—e.g., Businessmen Responsibility, Corporate Social Performance, Corporate Social Responsiveness, The Triple Bottom Line, Corporate Stakeholder Responsibility or Corporate Citizenship” (Gond and Moon 2011, p. 3), as a result of this dynamic, overlapping, and contextual character (*ibid.*).

The literature shows that there is no standardized definition of CSR and, although new concepts such as *corporate sustainability* and *corporate citizenship* have emerged, they are all related, and CSR remains the dominant concept (Carroll and Shabana 2010). In fact, the different approaches to CSR emphasize their contribution to sustainability (Lungu et al. 2011). In this sense, *sustainable development* is defined as a “model of triple-bottom-line” (Ebner and Baumgartner 2006, p. 3) which believes in an equal consideration of economics, social and ecological aspects, without compromising the ability of future generations to meet their own needs (Ebner and Baumgartner 2006; WCED 1987). As a result, *business success* is defined “as more than just maximizing profits and includes social and environmental benefits collaboratively aimed for all stakeholders” (Schaltegger and Burritt 2018, p. 254).

Most of the business ethics literature has emphasized the philanthropic character of voluntary social and environmental activities of companies (Carroll 1979). But *business ethics* “is more than just virtue, integrity, or character, it involves the application of one’s understanding of what is morally right and truthful at a time of ethical dilemma” (Lewis 1985, p. 383). In this sense, the literature indicates that “many of the business ethics failures in recent memory can be attributed to financialization,” or the vice in which “moral agents are overcome by inordinate desire for

wealth or greed” (Gerde and Michaelson 2018, p. 3).

There is significant variation among countries about CSR meaning. As stated by Votaw (1972, p. 25), CSR “means something, but not always the same thing, to everybody” and takes different forms in different countries (Brammer et al. 2012). In other words, “in European countries, social responsibility is said to be typically understood as the integration of socially responsible practices into the very activities of business and wealth creation” (Blasco and Zølner 2010, p. 217), but in the USA, a philanthropic model predominates whereby wealth is first created and then channeled through foundations into social causes (Montuschi 2004). Countries like India, for example, is dominated by family-owned companies, thus attributes charity to CSR and philanthropic activities (Bhaduri and Selarka 2016).

The Green Paper presented by the Commission of the European Communities (European Commission 2001) indicates the two dimensions of CSR – internal and external.

At the level of the internal dimension, the socially responsible practices of companies essentially involve workers and are related to issues such as investment in human capital, health, safety, and change management; while environmentally responsible practices relate in particular to the management of the natural resources used in the production process (European Commission 2001). The external dimension of a company’s social responsibility “extends beyond the doors of the company into the local community and involves a wide range of stakeholders in addition to employees and shareholders: business partners and suppliers, customers, public authorities and NGOs representing local communities, as well as the environment.” (European Commission 2001, p. 12).

The literature shows that CSR continues to be the widely used concept in the relations between business and society. It is presented as the “‘corporate’ or ‘organization’ component of sustainable development, aimed at providing company-level solutions to the worldwide ecological and social crisis” (Lamarche and Bodet 2018, p. 155). Thus, the concept of CSR seems to

“has a bright future because at its core, it addresses and captures the most important concerns of the public regarding business and society relationships” (Carroll 1999, p. 292), and should be philosophically aligned with ethics (Gerde and Michaelson 2018) and although CSR is a “controversial concept, everybody in the academic and business spheres agree that it is a fundamental strategy for achieving the sustainable development that our globalized world needs” (Souto 2009, p. 38).

Introduction

Corporate social responsibility (CSR) is not a new concept (Othman and Ameer 2009). CSR has been “under constant development since the beginning of 20th century” (Denisov et al. 2018, p. 63). In fact, “over the decades, the concept of corporate social responsibility has continued to grow in importance and significance” (Carroll and Shabana 2010, p. 85), and it is difficult to define CSR as a result of its “dynamic, overlapping and contextual character” (Gond and Moon 2011, p. 3).

In a historical perspective, the CSR concept has evolved significantly over the past 50 years and can be understood as an evolving concept (Carroll 1999). The initial idea argued that the sole purpose of a company was to *maximize profit* (Friedman 1970). In this sense, the only responsibility of business is “to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud” (Friedman 1970, p. 178). But while Friedman’s ideas are better known, his predecessor Theodore Levitt warned the business world about the dangers of social responsibility (Levitt 1958). Levitt (1958) argued that companies should aim to improve productivity and increase profits by acting honestly and in good faith, considering that social problems should be the responsibility of the state.

In Howard R. Bowen’s (1953) *Social Responsibilities of the Businessman* seminal book (Bowen 1953) one of the earliest classical

definitions of CSR emerged, marking the modern era of social responsibility (Carroll 1979). Bowen (1953, p. 6) defines CSR as “the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society of entrepreneurs to pursue policies, make decisions or follow lines of action that are compatible with the ends and values of our society.” In other words, this author considers that, because of their increasing size and proliferation, they had acquired a broad influence on the development of societies, and therefore this increased power should be accompanied by an increase in responsibility with CSR being the obligation of entrepreneurs adopts policies and practices that are appropriate to the goals and values of society (Bowen 1953).

According to Carroll (1999), the 1960s was marked by a significant increase in the attempt to formalize or define CSR and its importance for business and society. In this sense, Davis was one of the first and most extraordinary writers during this period to define CSR (Carroll 1999). This author defines social responsibility as the “businessmen’s decisions and actions taken for reasons at least partially beyond the firm’s direct economic or technical interest” (Davis 1960, p. 70).

McGuire (1963, p. 144), another contributor to the definition of social responsibility during the 1960s, argued that “the idea of social responsibilities, supposes that the corporation has not only economic and legal obligations but also certain responsibilities to society which extend beyond these obligations.” One of the characteristics of the 1960s was the absence of any interaction of social responsibility with financial performance (Lee 2008).

At the 1970’s the term *responsiveness* came to follow the concept of social responsibility when the need arose to build tools that could measure the social performance of companies. Thus, “corporate social *responsibility*, *responsiveness* and *performance* became the centre of discussions” (Carroll and Shabana 2010, p. 87). Manne and Wallich (1972) also made a significant

contribution to the CSR definition of CSR in the 1970s by introducing the concept of “*voluntary activities*.”

According to Carroll (1979), CSR included the idea that the corporation has not only economic and legal obligations but ethical and discretionary (philanthropic) responsibilities as well. Carroll’s “Three-Dimensional Conceptual Model of Corporate Social Performance” (1979, 1991) was the initial model of corporate social performance. This model consists of an integration of three aspects:

- Definition of social responsibility
- Identification of the social problems to which these responsibilities are linked (such as consumerism, environment, employment discrimination, product safety, occupational safety, and health)
- Philosophy of responsiveness (mode or strategy behind the corporate response to social responsibility), and social issues (reaction, defence, accommodation, and pro-action).

This conceptual model, widely accepted, describes four dimensions of social responsibility:

- *Economic* (the business institution is the basic economic unit in our society and as such, the responsibility to produce goods and services that society wants and sell them at a profit)
- *Legal* (laws and regulations, under which companies are expected to function)
- *Ethics* (society has business expectations beyond legal requirements being that ethical responsibilities are poorly defined and hence are among the most difficult to deal with)
- *Philanthropic* (they are responsibilities over which society has no clear message for the business)

Carroll (1991) argues that these four categories of CSR can be described as a pyramid, where economic responsibilities are the basis on which all others are based and without which they cannot be achieved, and discretionary/philanthropic responsibilities constitute the vertices. In other

words, Carroll (1991, p. 43) stated that “CSR firm should strive to make a profit, obey the law, be ethical, and be a good corporate citizen.”

The 1980s marked the beginning of the *business/business ethics* phase, where the focus became on the promotion of business ethics (Frederick 2008), initiating the link between CSR and corporate financial performance (Lee 2008). In this sense, *business ethics* refers to “interaction of ethics and economy for the good life in society” (Gerde and Michaelson 2018, p. 4).

Drucker (1984) concluded that profitability and accountability are complementary notions, as well as the notion that it is desirable for a business to “convert” social responsibilities into business opportunities.

The 1990s and 2000s became the era of global *corporate citizenship* (Frederick 2008).

The beginning of the twenty-first century was marked by a series of scandals, such as Enron; the Wall Street financial scandal in 2008; the scandal that hit the international financial markets around the London Interbank Offered Rate – LIBOR – in 2012; and the Volkswagen scandal, in 2015. It is also in this century that the concepts of *sustainability* or *sustainable development* emerge (Carroll and Shabana 2010).

However, if today’s CSR is associated with sustainability, “its origins lie in defensive measures intended to respond to the societal criticism expressed by various social groups in face of the companies’ economic and social ‘irresponsibilities’” (Lamarche and Bodet 2018, p. 157).

Thus, CSR has been gaining importance in business life (Lungu et al. 2011). Lungu et al. (2011, p. 460) stated that the “the business sector should play a proactive role in society, in addition to its economic purpose of making profits.”

Lantos (2001) concluded that there are three types of CSR:

- *Ethics* (minimum level of social responsibility and minimization of damages)
- *Strategic* (financially benefiting the business serving society in an extra-economic way)

- *Altruistic* (is uncertain, even irrelevant, and is outside the scope of corporate responsibility; it assumes that the company does not benefit from each other)

There are generalized differences in the understanding of CSR in a wide variety of countries, from the most developed to the least developed (Bhaduri and Selarka 2016):

- Canada, companies have developed CSR strategies in response to a growing increase in issues such as sustainable investments
- Asian countries, such as Hong Kong and Singapore, CSR means transparency and accountability, taking into account work and community
- Israel, companies cannot see the need to develop and provide specific information on CSR activities

Over the last half-century, there have been numerous conceptual changes of CSR. For example, *corporate citizenship* used as a synonym of CSR (Matten and Crane 2005), or the almost systematic use, since the 1990s, of the concept of *stakeholders* in the definition of CSR (Gond and Moon 2011).

Table 1 lists the numerous conceptual changes of CSR over the last half-century and illustrates the successive piling of social responsibility, managerial and academic concepts since the 1920s (Gond and Moon 2011).

Although these transformations have generally reflected solid conceptual developments (Wood 1991; Carroll 2008), changes in management practices and visions also reveal the spirit of the age as they accompany the management cycle and fashions (Economist 2005; Abrahamson 1996).

In summary, CSR has evolved significantly over the decades, and its definition is difficult due to the constant mutation of society. However, there are generalized differences in a great diversity of countries in relation to the understanding of CSR (Bhaduri and Selarka 2016) and the literature shows that CSR continues to be the widely used

CSR: Evolution of Concept, Table 1 Illustrative CSR concepts and definitions

Author(s)	Construct proposed	Definition provided	Focus/Perspective
Bowen (1953)	Businessmen social responsibility	It refers to the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of actions which are desirable in terms of the objectives and values of our society (p. 6)	Businessmen/ Normative/ Institutional
Davis (1960)	Corporate social responsibility	Businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest (p. 70)	Businessmen/ Normative/Beyond expectations
McGuire (1963)	Corporate social responsibility	The idea of social responsibilities supposes that the corporation has not only economic and legal obligations but also certain responsibilities to society which extend beyond these obligations (p. 144)	Corporation/ Normative/Beyond expectations
Walton (1967)	Corporate social responsibility	In short, the new concept of social responsibility recognizes the intimacy of the relationships between the corporation and society and realizes that such relationships must be kept in mind by top managers as the corporation and the related groups pursue their respective goals (p. 18)	Top managers/ Normative/ Institutional
Friedman (1970)	Business social responsibility	There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud (p. LAST)	Normative/Critical/ Profitfocus
Eells and Walton (1974)	Corporate social responsibility	In its broadest sense, corporate social responsibility represents a concern with the needs and goals of society which goes beyond the merely economic. Insofar as the business system as it exists today can only survive in an effectively functioning free society, the corporate social responsibility movement represents a broad concern with business's role in supporting and improving social welfare (p. 247)	Normative/ Institutional/ Ecological/Welfare focused
Frederick (1978 [1994])	Corporate social responsiveness	Corporate social responsiveness refers to the capacity of a corporation to respond to social pressures (1994, p. 247)	Corporation/ Institutional
Carroll (1979)	Corporate social responsibility	The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time (p. 500)	Business/Integrative
Epstein (1987)	Corporate social responsibility	Corporate social responsibility related primarily to achieving outcomes from organizational decisions concerning specific issues or problems which (by some normative standard) have beneficial rather adverse effects on pertinent corporate stakeholders. The normative correctness of the products of corporate action have been the main focus of corporate social responsibility (p. 104)	Corporations/ integrative/Normative
Frederick (1986)	Corporate social rectitude	Corporate social rectitude embodies the notion of moral correctness in actions taken and policies formulated. Its general value referent is that the body of sometimes dimly or poorly expressed but deeply held moral convictions that comprise the culture of ethics (p. 135)	Corporation/ Normative

(continued)

CSR: Evolution of Concept, Table 1 (continued)

Author(s)	Construct proposed	Definition provided	Focus/Perspective
Wood (1991)	Corporate social performance	A business organization's configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships (p. 693)	Organization/ Integrative
Maignan and Ferrell (2000)	Corporate citizenship	The extent to which businesses meet the economic, legal, ethical, and discretionary responsibilities imposed on them by their stakeholders (p. 284)	Corporation/ Stakeholder/ Integrative
McWilliams and Siegel (2001)	Corporate social responsibility	Here, we define CSR as actions that appear to further some social good, beyond the interest of the firm and that which is required by law (p. 117)	Corporation/Social good/Beyond requirements
Matten and Crane (2005)	Corporate citizenship	Corporate citizenship describes the role of the corporation in administering citizenship rights for individuals (p. 173)	Corporation/Political/ Institutional
Campbell (2006)	Corporate social responsibility	I view corporations as acting in socially responsible ways if they do two things. First, they must not knowingly do anything that could harm their stakeholders. Second, if they do harm to stakeholders, then they must rectify it whenever it is discovered and brought to their attention (p. 928)	Corporation/ Stakeholder/ Institutional/ Minimalist
Crouch (2006)	Corporate social responsibility	Behavior by firms that voluntarily takes account of the externalities produced by their market behavior, externalities being defined as results of market transactions that are not themselves embodied in such transactions. CSR is essentially _corporate externality recognition (p. 1534)	Corporation/ Transactional/ Externality focused
Basu and Palazzo (2008)	Corporate social responsibility	We can define CSR as the process by which managers within an organization think about and discuss relationships with stakeholders as well as their roles in relation to the common good, along with their behavioral disposition with respect to the fulfillment and achievement of these roles and relationships (p. 124)	Stakeholders/ Commongood/ Integrative

Source: Gond and Moon (2011, pp. 7–8)

concept in the relations between business and society.

Summary

CSR has always been perceived as a questionable concept. There is no standardized definition of CSR, mainly because it has no specific limits. CSR is generally perceived as a strategy which is economically beneficial in the long term. CSR is regulated through national and international self-regulatory measures without binding legal force (*soft law*) (Birindelli et al. 2015).

New methodologies are needed to measure corporate social responsibility. The literature (Margolis and Walsh 2003) identified sampling problems and raised concerns about the reliability and validity of measures of corporate social performance and financial performance, stressing the importance of developing models incorporating omitted variables, testing of measurement mechanisms and contextual conditions, and causal relationships between social performance and financial performance.

Despite academic literature stating a growing importance in relation to CSR, we have now witnessed a state of global alert since the new US President Donald Trump took office on

January 20, 2017. There are those who speak in “civilizational retrocession.” There are multiple media reports about Trump’s numerous negationist initiatives regarding the administration of former President Barak Obama, including environmental issues. In this regard, Trump even wrote on Twitter that “global warming was invented for and by the Chinese in order to make American industry uncompetitive.” We may be faced with a new CSR paradigm. New research should be directed at exploring the extent to which US environmental policy changes the concept of CSR.

References

- Abrahamson, E. (1996). Management fashion. *Academy of Management Review*, 21(1), 254–285.
- Bhaduri, S. N., & Selarka, E. (2016). Corporate social responsibility – Guidelines and best practices. In *Corporate governance and corporate social responsibility of Indian companies* (pp. 33–42). Singapore: Springer.
- Birindelli, G., Ferretti, P., Intonti, M., & Iannuzzi, A. P. (2015). On the drivers of corporate social responsibility in banks: Evidence from an ethical rating model. *Journal of Management & Governance*, 19(2), 303–340.
- Blasco, M., & Zölner, M. (2010). Corporate social responsibility in Mexico and France exploring the role of normative institutions. *Business & Society*, 49(2), 216–251.
- Bowen, H. R. (1953). *Social responsibility of the businessman*. New York: Harper and Row.
- Social Responsibility Journal*, 7(2), 202–217.
- Brammer, S., Jackson, G., & Matten, D. (2012). Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-Economic Review*, 10(1), 3–28.
- Branco, M. C., & Delgado, C. (2011). Research on corporate social responsibility and disclosure in Portugal. *Social Responsibility Journal*, 7(2), 202–217.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (1999). Corporate social responsibility evolution of a definitional construct. *Business & Society*, 38(3), 268–295.
- Carroll, A. B. (2008). A history of corporate social responsibility: Concepts and practices. In *The Oxford handbook of corporate social responsibility* (pp. 19–46). Oxford: Oxford University Press.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85–105.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2(3), 70–76.
- Denisov, I. V., Khachatryan, M. V., & Umnova, M. G. (2018). Corporate social responsibility in Russian companies: Introduction of social audit as assurance of quality. *Calitatea*, 19(164), 63–73.
- Drucker, P. F. (1984). Converting social problems into business opportunities: The new meaning of corporate social responsibility. *California Management Review*, 26(2), 53–63.
- Ebner, D., & Baumgartner, R. J. (2006). The relationship between sustainable development and corporate social responsibility. www.crrconference.org. 17 Sept 2007.
- ECONOMIST. (2005). The good company. Survey on corporate social responsibility. January, 20th. (2005) 1–4. [Consult. 15 Mai. 2014]. Available: http://www.odg.cat/documents/enprofunditat/Transnacionals_espanyoles/surveycsr_theeconomist.pdf
- European Commission. (2011). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A renewed strategy 2011–14 for corporate social responsibility. 3–15. http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=7010
- European Commission. Directorate-General for Employment. (2001). *Promoting a European framework for corporate social responsibility: Green paper*. Luxembourg: Office for Official Publications of the European Communities.
- Frederick, W. C. (2008). Corporate social responsibility: Deep roots, flourishing growth, promising future. In *The Oxford handbook of corporate social responsibility* (pp. 522–531). Oxford: Oxford University Press.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, September 13.
- Gerde, V. W., & Michaelson, C. (2018). Special issue: Global perspectives on business ethics from the 40th anniversary conference of the Hoffman Center for Business Ethics at Bentley University, 2016.
- Gholami, S. (2011). Value creation model through corporate social responsibility (CSR). *International Journal of Business and Management*, 6(9), 148.
- Gond, J. P., & Moon, J. (2011). Corporate social responsibility in retrospect and prospect: Exploring the life-cycle of an essentially contested concept. *ICCSR Research Paper Series*, 59, 1–40.
- Kiliç, M. (2016). Online corporate social responsibility (CSR) disclosure in the banking industry: Evidence from Turkey. *International Journal of Bank Marketing*, 34(4), 550–569.
- Lamarche, T., & Bodet, C. (2018). Does CSR contribute to sustainable development? What a régulation approach

- can tell us. *Review of Radical Political Economics*, 50(1), 154–172.
- Lantos, G. P. (2001). The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing*, 18(7), 595–632.
- Lee, M. D. P. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. *International Journal of Management Reviews*, 10(1), 53–73.
- Lewitt, T. (1958). The dangers of social responsibility. *Harvard Business Review*, 36(5), 41–50.
- Lewis, P. V. (1985). Defining ‘business ethics’: Like nailing jello to a wall. *Journal of Business Ethics*, 4(5), 377–383.
- Lungu, C. I., Caraiani, C., Dascalu, C., & Guse, R. G. (2011). An exploratory study on social and environmental reporting of European companies in the crises period. *Accounting and Management Information Systems*, 10(4), 461.
- Manne, H. G., & Wallich, H. C. (1972). *The modern corporation and social responsibility*. Washington, DC: American Enterprise Institute for Public Policy Research.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268–305.
- Matten, D., & Crane, A. (2005). Corporate citizenship: Toward an extended theoretical conceptualization. *Academy of Management Review*, 30(1), 166–179.
- Matten, D., & Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of CSR. *Academy of Management Review*, 33(2), 404–424.
- McGuire, J. W. (1963). *Business and society*. New York: McGraw-Hill.
- Merino, A., & Valor, C. (2011). The potential of corporate social responsibility to eradicate poverty: An ongoing debate. *Development in Practice*, 21(2), 157–167.
- Montuschi, L. (2004, September). La responsabilidad social de las empresas: la brecha entre los principios y las acciones. In *Anales*.
- Nawaiseh, M. E., Boa, S. S. A., & El-shohnah, R. A. Z. Y. (2015). Influence of firm size and profitability on corporate social responsibility disclosures by banking firms (CSRD): Evidence from Jordan. *Journal of Applied Finance and Banking*, 5(6), 97.
- Othman, R., & Ameer, R. (2009). Corporate social and environmental reporting: Where are we heading? A survey of the literature. *International Journal of Disclosure and Governance*, 6(4), 298–320.
- Schaltegger, S., & Burritt, R. (2018). Business cases and corporate engagement with sustainability: Differentiating ethical motivations. *Journal of Business Ethics*, 147(2), 241–259.
- Souto, B. F. F. (2009). Crisis and corporate social responsibility: Threat or opportunity? *International Journal of Economic Sciences and Applied Research*, 2(1), 36.
- Votaw, D. (1972). Genius becomes rare: A comment on the doctrine of social responsibility Pt. I. *California Management Review*, 15(2), 25–23.
- Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review*, 16(4), 691–718.
- World Commission on Environment and Development (WECD). (1987). *Our common future*. Oxford: The Oxford University Press.

CSR-Washing

► Greenwashing

Cultural Understanding

► CSR and Sports

Culture, Tourism, and Sustainability (Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism)

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Definition and Conceptual Framework

The relationship of culture, tourism, and sustainability in other words, social or socio-cultural sustainability of tourism including sustainable cultural heritage management for tourism is basically constructed upon the vulnerable and sensitive issues related to people: their values, their history, identity and living styles, their behaviors, attitudes, perceptions; their acceptance or rejection levels; and their emotions towards tourism.

The socio-culturally sustainable tourism system is comprised of all these “people” issues given priority while ensuring the “well-being” and “quality of life” of all stakeholders being involved to some extent, in the exchange of tourism products and services. In this system, the benefits provided by tourism and the costs incurred by the stakeholders concerned are to be conducted at tolerance limits for inhabitants (or beneficiaries) who are involved in decision-making and serving and users (or tourists).

The given description is inspired by the tourism literature in general and in particular by Hughes (1995) and Uysal et al. (2012). The latter two authors analyze the literature related to “cultural construction of sustainable tourism” and “the tourist area life cycle (TALC) and its effect on the quality-of-life (QOL) of destination community.” The essential points to consider for the construction of ethically correct and ever-evolving socio-culturally sustainable tourism systems are emphasized. Hughes (1995) studied the cultural construction of sustainable tourism considered along with the economic and environmental dimensions not separately, but together with the socio-cultural dimension and with the inclusion of all stakeholders. In the study by Uysal et al. (2012), the tensions or harmony in respect to the tourist area life cycle and the perception of quality of life at the destination are mentioned to show a positive relationship. In summary, as the life cycle of the destination evolves, quality of life increases parallel to increases in income and other benefits. In contrast, as the life cycle goes through a period of decline, the losses (overcrowding, pollution, etc.) and costs incurred by the destination increase due to the negative impacts of tourism. Also the quality of life at the destination declines.

Another aspect of the management of socio-culturally sustainable tourism is the cultural heritage management. Cultural heritage, tangible or intangible, represents the identity and cultural values of a group of people in a particular area. In the framework of cultural tourism or heritage tourism, this kind of valuable resource becomes commercially important as well. The advantages that cultural heritage tourism brings such as the preservation, protection, and revaluation of the tangible and intangible culture are desirable.

However, the undesired effects such as depreciation and destruction of heritage and the over-construction and overcrowding in the area and commodification and acculturation may occur in the case of unsustainable management. Attempts to manage the positive and negative results of cultural heritage management at the destination level may not be sufficient. A universal acceptance of heritage thus paves the way for greater protection of the universally acknowledged cultural heritage.

Socio-Culturally Sustainable Heritage Management

UNESCO (The United Nations Educational, Scientific and Cultural Organization) has the essential mission of officially registering the universally approved tangible and intangible cultural heritages all around the World. For a more sustainable management of cultural heritage and thus socio-culturally sustainable tourism, some descriptions have been indicated relating to the issues of the destination’s “socio-cultural carrying capacity” and “Limits for acceptable change” (LAC) in a study document realized by UNESCO (De Ascaniis et al. 2018). “Socio-cultural carrying capacity” is described as: “A tourism development threshold that draws a line between a development stage that does not create negative socio-cultural impacts on host communities and a development stage that does create negative socio-cultural impacts.” It is also added that: “When tourism operates beyond locals’ socio-cultural carrying capacity, there is a risk that host communities will act against tourism and tourists.” Also “LAC are usually set by local communities and draw the lines between what is acceptable and what is unacceptable in terms of socio-cultural tourism impacts in their locality” (De Ascaniis et al. 2018, p. 37). These two indicators or borderlines, as may be called, are important to consider while constructing a sustainable socio-cultural tourism and cultural heritage management system.

UNESCO World Heritage Convention accepted in 1972 by 24 countries was ratified in 2017 by 193 countries. UNESCO continues its

mission with its regularly modified “Operational Guidelines for the Implementation of the World Heritage Convention” and continue to lead the cultural heritage management worldwide. Improvements were made by The Budapest Declaration in 2002 which “seeks to ensure an appropriate and equitable balance between conservation, sustainability, and development” with 4Cs: “Credibility” of the List, effective “Conservation,” and increased “Capacity” and “Communication.” In 2007, a “fifth C” for “Communities” was added. In 2017, 1052 properties in 165 Member States were inscribed on the list, and there are also 1710 properties on Tentative Lists. Being on the list increases the advantage in terms of marketing and credibility of the cultural, natural, and mixed heritages (De Ascaniis et al. 2018).

Further local studies are made about the sub-indicators to reconcile sustainable tourism and cultural heritage management while trying not to create socio-cultural tension at the destinations. For sustainability in tourism, Landorf (2009) emphasized the need for a broader and more inclusive WHS (World Heritage Sites) structure of planning which includes the strategic planning and implementation and evaluation phases. A suggestion of a management plan is made including the main topics and indicators of: “Situation analysis (Tangible heritage, intangible heritage, land use and ownership, demographic characteristics, economic characteristics, economic benefits, heritage tourism activities, capacity of infrastructure, visitor details, integration); Strategic Analysis (Long term orientation, economic goals, environmental goals, social/community goals, heritage development goals, strategic alternatives, objectives support goals, capability based objectives, equitable objectives, quantifiable objectives); Values and Attitudes (Local values and attitudes, residents issues, attitudes to heritage, quality of life, vision alignment); Stakeholder participation (Stakeholder relationships, government participation, government influence, non-government participation, non-government influence, local participation, local influence, visitor participation, visitor influence)” (Landorf 2009, p. 66). In addition, the level of conformance of each WHS to these indicators is marked in the study.

Besides increasing the credibility of the destination and visits to that destination (De Ascaniis et al. 2018, Santa-Cruz and López-Guzmán 2017), cultural heritages are mentioned as a potential sustainability measure to increase tourism activities and income during the low season as indicated in a study carried out in Italy on the Island of Sardinia (Giudici et al. 2013). Santa-Cruz and Lopez Guzman (2017) emphasized the importance of tangible cultural heritage for the development of sustainable tourism as well as for the conservation of the heritage. In their study, they revealed that the tourist coming for cultural heritage is more highly educated, with a higher level of income, originating from many different nationalities. Additionally, the reasons for cultural heritage tourist’s visits are shown as seeking for new discoveries or historical sites or even their past hereditary. The study was carried out to discover the behaviors and travelling habits of the tourists during the high season.

As a more specific field of cultural tourism, a study was conducted on understanding the art museum visitors by Stylianou-Lambert (2011). Findings include a classification of the “filters” for the perception of the museums at home and at the destination: “Professional, art-loving, self-exploration, cultural tourism, social visitation, romantic, rejection, and indifference.” The idea of the “tourist gaze” that is adopted at the destination (Urry 2008) is supported and additionally it is indicated that their other “gazes” or “filters” are not abandoned while they are at the foreign destination. A further finding of this study concluded that if people do not visit museums at home, they will not visit them abroad either.

Another important issue about the management of the heritage in terms of sustainable tourism is the ownership and management of intangible cultural heritage for tourism purposes. When used in the framework of tourism, the intangible values as a part of the local daily life of inhabitants may be harmed and even completely changed by the customer value system. While the heritage values are commercialized, if they lose their originality and original value, they become objects of exchange which is called commodification of culture (George 2010, p. 381). Unfortunately, it is unavoidable sometimes. George

(2010) suggests creating a community cultural heritage fund in order to avoid this type of unsustainable result. In this way, it is supported that if the community is creator and owner of its own cultural resources, then there will be a much more fair distribution of benefits and protection of the values and rights. Nasser (2003) also suggests that sustainable tourism implications may be a solution to reconcile the objectives of commercial gain, development, building, reconstruction with the conservation, and protection of cultural heritage values.

Findings of a study by Van der Borg et al. (1996) show that, if the management is not sustainable in the destinations with heritage sites, it does not go further than the promotion. Then, mostly as a result of bad management, costs exceed the benefits and finally, the economic problems arise. Then tourism becomes a threat to the heritage itself, to economy, and to quality of life of the residents. The control of visitor flows is one of the guidelines suggested by the authors as a solution in their study conducted at seven European art cities of heritage: Aix-en-Provence, Amsterdam, Bruges, Florence, Oxford, Salzburg, and Venice.

The studies of cultural tourism are summed up under topics of “cultural consumption, cultural motivations, heritage conservation, cultural tourism economics, anthropology and the relationship with the creative economy” (Richards 2018). In the same study, the movement for the recent research and trends in cultural tourism is noted to be from tangible towards intangible heritage. In addition, the indigenous and minority groups are also the subject of a large coverage of geographical areas. Another point is the changing terms in social science such as “mobilities, performance, and creative turns” which evolve identification of “cultural tourism.” Future studies are suggested to develop around the transmodern cultures and the effects of new technologies.

Another study underlines the positive effect of cultural heritage on redefining the residents’ sense of place if the process of preservation and rehabilitation are managed sustainably. The same study discusses the politics of heritage and culture in the framework of the preservation and

rehabilitation in the Balkans and Turkey where many globally important tangible and intangible heritages of UNESCO are situated (Luke 2013).

In a study enlightening the impacts of tourism on the value of cultural heritage, it is stressed that cultural heritage management at destinations with developing economies should be culturally and naturally sensitive. It is required to create a sustainable tourism management system with a framework including an understanding of the spirit of the place and including all the stakeholders with a coordinated approach. The symbiotic relationship between people, environment, economy, and multisectoral nature of the tourism industry is indicated to be possible solely by this coordinated and inclusive approach to realize the sustainable development goals (Imon 2017).

An earlier study also indicated the importance of the “participation” for sustainable management tourism in all its aspects. Called “question of the commons” as mentioned by Briassoulis (2002), the overuse and misuse of the commons (the natural, cultural, and all kind of resources used and available for the tourism industry); the social justice problems (distribution of the benefits and the costs) may generate even the destruction, underutilization, and even abandonment of the facilities. So it is emphasized that the participation of all parties to the decision making and implication of the frameworks and systems of sustainable management of tourism is important.

Socio-Culturally Sustainable Tourism Management: Examples from Case Studies

As noted at the beginning, in the description of this part, the importance of tourist-resident relationships and interactions, sharings, and perceptions is underlined by a quite important part of the sustainability of cultural tourism case studies (Poria et al. 2013; Lin et al. 2017; Rasoolimanesh et al. 2017; Liang and Hui 2016; Styliadis et al. 2014; Lee 2013).

Findings of the tourists’ perceptions of WHS (World Heritage Site) designated heritage sites by Poria et al. (2013) conclude that the cultural

heritage categorization of tourists are in line with UNESCO criteria as “culturally famous” with its “significance to humankind.” Other responses of interviewees included that the heritage site “need not be ancient or objectively authentic” and “not required to be located in situ.” The perceptions of advantages and disadvantages of the site designation as WHS are mostly about its marketing value increase such as increase in sites’ popularity, price increase in housing/real estate in the area, unwillingness to continue to live in the area because of the overcrowdedness occurring as a result of tourist traffic.

On the contrary, the study of Styliadis et al. (2014) on the residents’ perspective and its impacts on the sustainability of tourism indicate that the economic, socio-cultural, and environmental impacts as well as the place image perceived positively by the residents play a positive role on their support of tourism development.

Lee (2013) emphasizes the importance of “community involvement” and “community attachment” of the residents for the sustainable tourism development for a case study realized in Taiwan.

A study carried out in Malaysia’s rural and urban WHS destinations in order to discover the residents’ perceptions on their community participation and support for tourism development showed that there was more appreciation and support for tourism at the urban site than the rural. The development of tourism thus the level of awareness for it was recorded to be higher in the urban site. The study focused on the importance of community participation in the decision-making process of tourism development and the conservation of WHS (Rasoolimanesh et al. 2017).

Recent studies bring forward value co-creation which includes resident-tourist interactions (Lin et al. 2017). The study of Lin et al. (2017) shows that in the case of positive perceptions of tourism development and life satisfaction, residents are more eager to value co-creation with the tourists. Otherwise, if the costs of tourism development are higher, residents are reluctant to participate in co-creation.

A study conducted of the residents’ attitudes towards tourism development in China shows that

the new TQOL (Tourism Quality of Life) measures include and prioritize the nonmaterial family and personal well-being issues. Additionally, the attitudes of the residents change according to their status; if they are living there for to make a living or as a place simply to live (Liang and Hui 2016).

Socially Sustainable Tourism Management

First, the tourist of today (at least in western countries) travels much more than the tourist of the past and it is possible that the tourist of tomorrow will travel even more frequently. Therefore, travelling, which was considered a “luxury good” in the past, is nowadays an integral part of people’s lives (Stylianou-Lambert 2011).

The motto of the ISTO (International Social Tourism Organization) is “A fair and sustainable tourism for all.” ISTO is working for the inclusion and the right for participation of all without any discrimination to tourism activities on both supply and demand sides. ISTO defends that even if people have budgetary or other limiting reasons to participate, everybody has the right to have holidays and benefit from the touristic offer during their holidays. In order to facilitate the inclusion and participation, ISTO organizes projects, for example, for youth tourism in Europe, for students with a limited budget in Africa, for the senior people, for accessible tourism (for disabled), and for families and applies them in different areas of the world (oits-isto.org, ISTO 2016–2017). Many studies exist explaining the importance, motivations, and benefits of participation of all people to tourism and the right for “tourism for all” (McCabe 2009; McCabe and Diekmann 2015; Minnaert et al. 2009, 2010; Carneiro et al. 2013).

The philosophy of ISTO is indicated to be in line with the SDGs (Sustainable Development Goals) (oits-isto.org). The 17 Sustainable Development Goals with their 169 subtargets are set by the agreement of United Nations in 2015 for Agenda 2030. The framework is set in order to end poverty, fight inequality and injustice, and fix climate change. And tourism is reported to having

the potential to contribute to meet all the goals directly or indirectly as it is an industry with an economic power representing 10% of world GDP, 30% of services exports, and 1 out of every 10 jobs in the World. The 17 goals are set as “no poverty,” “zero hunger,” “good health and well-being,” “quality education,” “gender equality,” “clean water and sanitation,” “affordable and clean energy,” “decent work and economic growth,” “industry, innovation, and infrastructure,” “reduced inequalities,” “sustainable cities and communities,” “responsible consumption and production,” “climate action,” “life below water,” “life on land,” “peace and justice,” and “partnership for the goals” (Tourism for SDGs). An example case: The Via Via Tourism Academy created some “Joker” projects of sustainable tourism at an inclusive level by integrating the SDGs: Smiles Tour Guide Training in Malawi, integrated SDGs, 8 decent work and economic growth, 4 quality education, 11 sustainable cities and communities, and 17 partnerships for the goals. Entwiga Community experience in Uganda; SDGs integrated; 8, 11, 10 reduced inequalities, 17 (SDGityourself 2017).

Similarly, Neto (2003) attracted the attention to “poverty alleviation” and “community participation” at the tourism practices mentioning a more social sustainability approach moving beyond the environmental protection. Chok et al. (2007) discussed the pro-poor tourism and tourism’s impact over poverty alleviation analyzing the discourse of the global politically involved participation and inequality problems. The authors have underlined that tourism is not a solution to all economic problems of a country. Nevertheless, the high potential of sustainable tourism development to overcome the negative issues such as political problems, inequalities, war, lack of security, and many others are not denied as the examples which struggle for existence given in this study. The key point is in creating agreements of more ethical and altruistic models of sharing the benefits.

It is impossible to implicate the SDGs properly on any field including tourism, without deeply understanding that the philosophy of sustainable development is primarily people and inclusion oriented, then follows the benefits – even the

unattended. The way to teach this reality to people, businesses, governments passes from education. Cotterell et al. (2019) put emphasis on the educational deficiency and necessity for the SDGs and tourism reconciliation. The authors select and exemplify the very few studies realized on each SDG and its integration with tourism.

Last, but not least, studies having a “people” side in the framework of sustainable tourism development include various elements, for example, related to local food and sustainable tourism experiences such as “cittaslow” which is encouraging the development of slow cities that keep their historical, natural, socio-cultural, and touristic features (Ekinci 2014). Another study shows that local food products bought at the destination represent for the tourist not only a symbol of the place in memory but also a benefit as an experience providing a deeper meaning of “self” (Sims 2009).

References

- Briassoulis, H. (2002). Sustainable tourism and the question of the commons. *Annals of Tourism Research*, 29 (4), 1065–1085.
- Carneiro, M. J., Eusébio, C., Kastenholz, E., & Alvelos, H. (2013). Motivations to participate in social tourism programmes: A segmentation analysis of the senior market. *Anatolia*, 24(3), 352–366. <https://doi.org/10.1080/13032917.2013.767212>.
- Chok, S., Macbeth, J., & Warren, C. (2007). Tourism as a tool for poverty alleviation: A critical analysis of ‘pro-poor tourism’ and implications for sustainability. *Current Issues in Tourism*, 10(2–3), 144–165. <https://doi.org/10.2167/cit303>.
- Cotterell, D., Hales, R., Arcodia, C., & Ferreira, J.-A. (2019). Overcommitted to tourism and under committed to sustainability: The urgency of teaching “strong sustainability” in tourism courses. *Journal of Sustainable Tourism*, 27(7), 882–902. <https://doi.org/10.1080/09669582.2018.1545777>.
- De Ascaniis, S., Gravari-Barbas, M., & Cantoni, L. (2018). *Tourism management at UNESCO World heritage sites*. ISBN 978-88-6101-018-5. Lugano: Università della Svizzera italiana.
- Ekinci, M. B. (2014). The Cittaslow philosophy in the context of sustainable tourism development; the case of Turkey. *Tourism Management*, 41, 178–189.
- George, E. W. (2010). Intangible cultural heritage, ownership, copyrights, and tourism. *International Journal of Culture, Tourism and Hospitality Research*, 4(4), 376–388.
- Giudici, E., Melis, C., Dessì, S., & Pollnow Galvao Ramos, B. F. (2013). Is intangible cultural heritage able to

- promote sustainability in tourism? *International Journal of Quality and Service Sciences*, 5(1), 101–114. <https://doi.org/10.1108/17566691311316275>.
- Hughes, G. (1995). The cultural construction of sustainable tourism. *Tourism Management*, 16(1), 49–59.
- Imon, S. S. (2017). Cultural heritage management under tourism pressure. *Worldwide Hospitality and Tourism Themes*, 9(3), 335–348. <https://doi.org/10.1108/WHATT-02-2017-0007>.
- ISTO (International Social Tourism Organization). Activity report 2016–2017. <http://www.oits-isto.org/oits/files/resources/1095.pdf>. Accessed 12 July 2019.
- ISTO (International Social Tourism Organization). Internet site. <http://www.oits-isto.org/oits/public/section.js?id=29>. Accessed 12 July 2019.
- Landorf, C. (2009). Managing for sustainable tourism: A review of six cultural world heritage sites. *Journal of Sustainable Tourism*, 17(1), 53–70. <https://doi.org/10.1080/09669580802159719>.
- Lee, T. H. (2013). Influence analysis of community resident support for sustainable tourism development. *Tourism Management*, 34, 37–46.
- Liang, Z., & Hui, T. (2016). Residents' quality of life and attitudes toward tourism development in China. *Tourism Management*, 57, 56–67.
- Lin, Z., Chen, Y., & Filieri, R. (2017). Resident-tourist value co-creation: The role of residents' perceived tourism impacts and life satisfaction. *Tourism Management*, 61, 436–442.
- Luke, C. (2013). Cultural sovereignty in the Balkans and Turkey: The politics of preservation and rehabilitation. *Journal of Social Archaeology*, 13(3), 350–370. <https://doi.org/10.1177/1469605313487622>.
- McCabe, S. (2009). Who needs a holiday? Evaluating social tourism. *Annals of Tourism Research*, 36(4), 667–688.
- McCabe, S., & Diekmann, A. (2015). The rights to tourism: Reflections on social tourism and human rights. *Tourism Recreation Research*, 40(2), 194–204.
- Minnaert, L., Maitland, R., & Miller, G. (2009). Social tourism as a potential measure to reduce social exclusion. *Annals of Tourism Research*, 36(2), 316–334.
- Minnaert, L., Stacey, J., Quinn, B., & Griffin, K. (2010). Social tourism for low-income groups: Benefits in UK and Irish context. In *Tourism and inequality* (pp. 126–143). Wallingford: CABI.
- Nasser, N. (2003). Planning for urban heritage places: Reconciling conservation, tourism, and sustainable development. *Journal of Planning Literature*, 17, 4. <https://doi.org/10.1177/0885412203251149>.
- Neto, F. (2003). A new approach to sustainable tourism development: Moving beyond environmental protection. *Natural Resources Forum*, 27, 212–222.
- Poria, Y., Reichel, A., & Cohen, R. (2013). Tourists perceptions of world heritage site and its designation. *Tourism Management*, 35, 272–274.
- Rasoolimanesh, M., Ringle, C. M., Jaafar, M., & Ramayah, T. (2017). Urban vs. rural destinations: Residents' perceptions, community participation and support for tourism development. *Tourism Management*, 60, 147–158.
- Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36, 12–21.
- Santa-Cruz, F. G., & López-Guzmán, T. (2017). Culture, tourism and world heritage sites. *Tourism Management Perspectives*, 24, 111–116.
- SDGityourself. (2017). ISTO internet site. <http://www.oits-isto.org/oits/files/resources/1097.pdf>. Accessed 12 July 2019.
- Sims, R. (2009). Food, place and authenticity: Local food and the sustainable tourism experience. *Journal of Sustainable Tourism*, 17(3), 321–336.
- Stylianou-Lambert, T. (2011). Gazing from home: Cultural tourism and art museums. *Annals of Tourism Research*, 38(2), 403–421.
- Styliadis, D., Biran, A., Sit, J., & Szivas, E. M. (2014). Residents' support for tourism development: The role of residents' place image and perceived tourism impacts. *Tourism Management*, 45, 260–274.
- Tourism for SDGs, A Platform Developed by UNWTO. Tourism and sustainable development goals. <http://tourism4sdgs.org/tourism-for-sdgs/>. Accessed 24 July 2019.
- Urry, J. (2008). *The tourist gaze*. Los Angeles/London/New Delhi/Singapore: SAGE.
- Uysal, M., Woo, E., & Singal, M. (2012). The tourist area life cycle (TALC) and its effect on the quality-of-life (QOL) of destination community. In M. Uysal et al. (Eds.), *Handbook of tourism and quality-of-life research: Enhancing the lives of tourists and residents of host communities. International handbooks of quality-of-life* (pp. 423–443). Dordrecht, Heidelberg, London, New York: Springer Science+Business Media B.V. https://doi.org/10.1007/978-94-007-2288-0_25.
- Van der Borg, J., Costa, P., & Gotti, G. (1996). Tourism in European cities. *Annals of Tourism Research*, 23(2), 306–321.

Custom

► Compliance

Customer Assistance

► Customer Service

Customer Care

► Customer Service

Customer Service

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Synonyms

Client service; Consumer service; Customer assistance; Customer care; Customer support; Service marketing; Support service

Definition/Description

Customer service focuses on solving problems for the customers to the satisfactory level. It provides the customer with the right information at the right time through all stages of the consumer decision journey. Covering all stages from consideration to the purchase and finally forming the overall customer experience. Customer service covers many different stages of customer interaction with company, and all these stages create positive or negative customer experience with the company, product, or brand.

Customer service is the place where customer starts the conversation with the company. This momentum is crucial since when customer decides to spend its time to talk to the company, they expect the absolute dedication and final solution to any question, demand, and expectation they may have. Customer service is one of the most important points of differentiation and competitive advantage for the company. Customer service not only solves problems for the customers but also collects feedback and information about the company, products, and brands in order to improve on the successful sustainable interaction of company and customer.

Customer service covers three main aspects when dealing with the customer, and they are speed, solution, and trust.

Speed

Interaction with the customers must be prompt and fast. Customers have no time to lose, and

they expect the problem to be solved now. They dedicated their time to the company, product, and brand, and they need this time to be well spent. Thirty seven percent of consumers expect a response to social media questions and complaints within 24 h (Mazareanu 2019).

Solution

When it comes to the solution, customer service provides professional, punctual, and accurate solution to the problem expressing high level of knowledge and skills on the matter.

Trust

If above two steps are met at the end, well-executed customer service builds trust between the customer and the company. People buy from those they trust. It is hard to build trust and yet so easy to lose it.

Introduction

As long as there have been customers, there has been customer service (Delbos 2017). At the open market, customers have their own seller while there are many. What is so special about the one they chose? It is service, trust, experience, and emotional build in customer service. It is “face-to-face” experience. Customers need that human touch, the feeling of honesty and importance. When customers experience excellent service, they experience friendly, responsive, and empathetic reaction from companies, whether it is about answering a question, offering advice, or accepting the return of faulty merchandise. It is Buttle (2009) who writes about empathy and responsiveness and its connection to humans. Bitner (2018) further explains that the quality of customer service is essential to building customer relationships.

Customer service is becoming of great importance within companies in today's competitive environment. According to Gartner (Tom McCall 2015), nearly all companies surveyed by Gartner (89%) believe that customer experience will be their primary basis for competition. Many companies look at customer service from both sides,

from the customer's point of view and the company's point of view, and try to meet the two. The best companies are focusing on customer experience, the role that customer service plays in a company's competitiveness – as the direct link to greater customer intimacy, greater brand loyalty, and faster brand growth (Greenberg 2010).

Bitner (2018) points out that services are deeds, processes and performances provided and developed by one entity or person for another entity or person. It is not only about the process, it is also the people who are running the process, the organization around the process, where it all must be done to the absolute perfection. As stated in MacDonald (2020), delivering great customer service is not only about handling the request when it has been received; it's also about the follow-up, the speed, and the quality.

It is argued by Nextiva (2019) that customer service department did not exist decades ago, and today they are a large part of any successful business. In traditional approach customers communicated with companies through mail, phone, and more recently email. In the old days, writing a mail to the company puts a great effort from the customers to start a dialogue. Today, customers' expectations grew, and the power is in their hands. There are several main types of customer services. It is possible to reach companies by phone or email or to go on social medias. Customers can also check the FAQ (frequently asked questions) or forums. There are online communities where consumers help each other. Video help is growing, e.g., YouTube, where customers seek solutions, help, and answer to their questions and problems. There are quite a few customer service channels available: from phone support, email support, on-site to live chat support, social media support, FAQ, customer self-service, video support, to omnichannel support. They differ from each other, and thus some of them are more suitable for certain business types than others (Sienkiewicz 2019).

Companies try to ensure that customers will be happy with the interaction when they connect with their product, customer service, sales staff, or marketing materials (Maechler et al. 2016).

Key Issues

Blunt and Hill-Wilson (2013) pointed out that customers had tried to get their problems resolved through traditional customer service channels, but the satisfaction was not to the expected level. When customers are not satisfied, they share this information with others. Bad news travels fast. According to Phillip (2017), “fast” has been replaced by “warp speed,” as social media has enabled anything to become viral and remain a few clicks away for eternity. The study from SuperOffice (MacDonald 2020) found that:

1. 62% of companies did not respond to a customer service emails.
2. 90% of companies do not acknowledge or inform the customer that an email has been received.
3. 97% of companies do not send a follow up email to customers to see if they are satisfied with the response.
4. Only 20% of companies are able to answer questions in full on the first reply.
5. The average response time to handle a customer service request was 12 hours and 10 minutes.

Above numbers show the enormous opportunity in building the competitive advantage based on customer service. Today, 89% of companies compete primarily on the basis of customer experience up from just 36% in 2010 (Hyken, 2018). This is the new battlefield for the companies. This is the new market, new way of doing business and compete. They do not compete on brands only but more and more on service, in creating superior customer experience. Sometimes companies are detached from the reality. If they do not listen to the customers, they are driving to the wrong directions. Research from Bain & Company (2005) shows that 80% of companies believe they deliver “super experiences”; only 8% of customers agrees.

Customer service is the new brand. Every brand must be carefully and sustainably treated as the most important asset of the company.

Customer service and sustainability are linked together. As Rosen (n.d.) points out, customer

service performance that is not sustainable can seriously harm relationship with your customers because companies create expectations for customers that companies are in time unable to meet. The sustainability is built in interaction with the customers and through customer service. Schofield (2018) explains that to build sustainability, the priority must absolutely be customer satisfaction and loyalty.

Future Directions

In today's connected world, customers expect to receive service on their own terms – anytime, anywhere (Microsoft 2017). Customer service is to be done to “one.” We are all different and we all need different services. Technology of today and tomorrow enables companies to have a personal approach to every single customer. It is important to find the best ratio of technology and personal, human touch. That is why omnichannel customer support is important. Customers sometimes use emails first or live chats or social media support, but often they make a phone call to talk to a living person. Greenberg (2010) explains that customers want to deal with individual humans, but otherwise be left alone to craft a personal approach to their interactions with you in the way that fits their desires – not yours as the company.

Establishing a lasting relationship with consumers is based not only on giving them what they want or knowing them well but also on gaining their trust (Fenech et al. 2016). Alexa from Amazon and Google assistant are personal virtual assistants that customers can talk to. Customers can ask them different questions, seek solutions, and ask for more information, and they will get the answers. It is a whole new way of interaction. Virtual assistants have the “human” touch: they listen, they give feedback, and they ask for more information in order to be able to help. Virtual assistants are new decision-makers and influencers. For example, if you ask to fix a problem on your television, a virtual assistant can assist you but can also offer you a new television,

that is, by the reviews, better than the one you have at home and influence you to buy a new one. The more trust virtual assistants build with their customers, the more power they gain to influence customer behavior. Trust lies at the core of good customer service (our research found that 76% of people say trust is key to good customer service), and it has to be established before users can be expected to take part in deeper engagements (Mindshare 2013).

Consumers not only expect personalized products and services as standard, they are also embracing different ways of buying or enjoying products and services (Fenech et al. 2016). To be able to personalize service, companies must use new technologies such as artificial intelligence together with big data. Hermani (2016) estimates that by 2020, 85% of customer service interactions will be automated.

Summary

Customer service offers support to the customers, and they give the final solution to customer's needs and expectations. Customers hold the power today, and they want to feel important. Companies who understand this will create trust and loyalty with their customers. It is so easy to lose the customer, or competition can win it over just by providing better service that leads to the better experience. The report from Microsoft (Microsoft 2017) reveals that 96% of respondents say customer service is important in their choice of loyalty to a brand. Customer service has the direct implication to the business success. It is becoming a vital part of the future of your business.

As Robert Murdoch said: “Big will not beat small anymore. It will be the fast beating the slow” (Bannister and Barrie 1999).

Cross-References

- [Business Case](#)
- [Customer Service](#)

References

- Bain & Company. (2005). How to achieve true customer-led growth. *Closing the Delivery Gap*, 12 p. Retrieved from <http://www.bain.com/bainweb/pdfs/cms/hotTopics/closingdeliverygap.pdf>
- Bannister, N., & Barrie, C. (1999). Murdoch's spin on the web. Retrieved July 30, 2019, from <https://www.theguardian.com/uk/1999/jul/02/3>
- Bitner, M. J. (2018). *Services marketing* (7th ed.). McGraw Hill Education. New York.
- Blunt, C., & Hill-Wilson, M. (2013). *Delivering effective social customer service*. Wiley: Cornwall, UK.
- Buttle, F. (2009). *Customer relationship management* (2nd ed.). Butterworth-Heinemann: London, UK.
- Delbos, S. (2017). The history of customer service. Retrieved July 29, 2019, from <https://www.brandembassy.com/resources/blog/the-history-of-customer-service-in-500-words>
- Fenech, C. (Deloitte), Thomson, R., Perkins, B., & Atkins, F. (2016). The Deloitte consumer review: Rethinking the customer experience to win, November 33. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/consumer-business/deloitte-uk-consumer-review-customer-experience.pdf>
- Greenberg, P. (2010). *CRM at the speed of light, Fourth Edition: Social CRM strategies, tools, and techniques for engaging your customers* (4 edn.). McGraw Hill; New York.
- Hermani, S. (2016). Customer experience statistics which will impact your business in 2016|Ameyo. Retrieved August 1, 2019, from <https://www.ameyo.com/blog/customer-experience-statistics-which-will-impact-your-business-in-2016>
- Hyken, S. (2018). Customer experience is the new brand. https://doi.org/10.1057/9781137464354_7.
- Maechler, N., Neher, K., & Park, R. (2016, March). From touchpoints to journeys: Seeing the world as customers do. *McKinsey Digital*, pp. 1–14.
- Mazareanu. (2019). Expected response time for social media questions or complaints: U.S. & worldwide 2018| Statista. Retrieved August 1, 2019, from <https://www.statista.com/statistics/808477/expected-response-time-for-social-media-questions-or-complaints/>
- McCall, T. (2015). Gartner predicts a customer experience battlefield – Smarter with Gartner. Retrieved July 20, 2019, from <https://www.gartner.com/smarterwithgartner/customer-experience-battlefield/>
- MacDonald, S. (2020). Customer Service Benchmark Report [New Study]. Available at: <https://www.superoffice.com/blog/customer-service-benchmark-report/> (Accessed: 20 April 2020)
- Microsoft. (2017). *2017 state of global customer service report 2 2017 State of Global Customer Service Report*. Retrieved from <http://info.microsoft.com/rs/157-GQE-382/images/EN-CNTNT-Report-DynService-2017-global-state-customer-service-en-au.pdf>
- Mindshare. (2013). *Humanity in the machine*. Mindshare: London, UK.
- Nextiva. (2019). 100 Essential \$ for 2019. Retrieved August 1, 2019, from <https://www.nextiva.com/blog/customer-service-statistics.html>
- Phillip, A. (2017). Council post: Candidate relationship management: Is neglect the new normal? Retrieved July 30, 2019, from <https://www.forbes.com/sites/forbescoachescouncil/2017/06/05/candidate-relationship-management-is-neglect-the-new-normal/#6ed1cd1f3e8e>
- Rosen, D. (n.d.). 3 steps to sustainable customer service performance. Retrieved November 3, 2019, from <https://www.customerservicemanager.com/3-steps-to-sustainable-customer-service-performance/>
- Schofield, J. (2018). How to build sustainability through customer service. Retrieved November 3, 2019, from <http://www.systemid.com/learn/how-to-build-sustainability-through-customer-service/>
- Sienkiewicz, A. (2019). 7 types of customer service: Pros & Cons [Examples] which to use? Retrieved August 1, 2019, from <https://www.tidio.com/blog/types-of-customer-service/#onsite-customer-service>

Customer Support

► Customer Service

Customer Value Creation

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Definition

The concept *customer value* has many meanings (Woodall 2003), but, from a marketing theory, two dominate: customer value refers to customers' perceptions of what they receive and in return for what they sacrifice (Zeithaml 1988). The creation of customer value has long been recognized as a central concept in marketing (Woodruff 1997) and the fundamental basis for all marketing activity (Holbrook 1994). There are two aspects to

customer value: desired value and perceived value (Woodruff 1997). Desired value refers to what a customer desires in a product or service. Perceived value is the benefit a customer believes he or she received from a product after it was purchased.

Anderson et al. (1997) define three kinds of customer value propositions: all benefits, favorable points of difference, and resonating focus. “All benefits” value propositions are based simply on listing the positive features and outcomes of buying and using the product or service.

A Customer Value Creation for Businesses

Value creation is the primary aim of any business entity. Creating value for customers helps sell products and services, while creating value for shareholders, in the form of increases in stock price, insures the future availability of investment capital to fund operations.

Creating customer value increases customer satisfaction and the customer experience. (The reverse is also true. A good customer experience will create value for a customer). Creating customer value (better benefits versus price) increases loyalty, market share, price, and efficiency and reduces errors.

Customer value creation is the most important and crucial part of every business. Being the important part, it is also a difficult part to be implemented in the business.

The executives should develop a clear strategy for creating customer value as this plays a very important role in determining the market share price of the company.

Customer value propositions are formulated by assessing the current market offerings, identifying what customers want, and then developing solutions that meet the market need for a product or service (Anderson et al. 1997). Figure 1 illustrates the customer value creation strategy; it is the author’s representation of the extant literature.

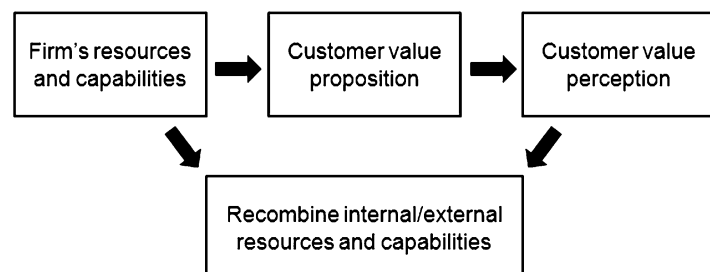
Shanker’s article examines the dimensions of customer value creation and provides a framework to help entrepreneurs, managers, and leaders of open-source projects create value.

A customer value proposition can be developed based on the points of value that an organization can create. In this respect, a customer value proposition must provide distinctive, measurable, and sustainable value (Anderson et al. 1997).

O’Cass and Ngo (2011) assert that a firm’s pre-emptive value-creation strategy is comprised of:

1. Performance value: This component is associated with the product attributes and the attributes’ performance. This relationship was also noted Woodruff (1997).
2. Pricing value: This component can refer to the fair price or the value price. The fair price refers to customers believing they are paying a fair price for a product or service; the value price refers to a price that justifies the benefits of purchasing a product.
3. Relationship value: This component refers to the firm’s efforts to create and deliver a hassle-free purchase and consumption experience.
4. Co-creation value: This component is added when customers find it beneficial to influence various parts of the business system to co-create or co-produce their own unique purchase and consumption experience.

Customer Value Creation, Fig.1 A firm’s value creation strategy (Shanker 2012)



According to Shastry (2018), knowing about what the customers want and working on the same may help you attract more customers. This can be done via surveys, polls, etc. It is important as you will be providing the customers exactly what they want.

It is very important that customer value creation is applicable in all the fields like business, service, education, education, etc. So, one should always focus on customer value creation as much as possible.

Identification of the customers as per various demographic and geographical aspects is very important to clearly understand what a customer will benefit from your product or service.

Understanding the need of customers and what your brand is offering to them is very important. A customer's benefit is calculated excluding the purchasing cost.

Customer value directly affects the reputation and profit of every company. So, planning and implementing the right strategy for achieving the same is very important.

The team should be clear in mind what they are going to focus in order to get connected with more and more customers and to get the best feedback from them.

The best way for customer value creation is the values you hold within your organization. The values like integrity, honesty, loyalty, etc.

According to Shastry these are best things to create a good customer value.

The above mentioned points were some of the necessary ways by which customer value can be created. So, after knowing the importance of customer value, one can benefit a lot if utilized effectively and to the fullest.

Creation of value for customers is a critical for marketers when developing new products and services or starting new businesses. The paper of Smith and Colgate presents new conceptual framework for marketers to ponder when

exploring ways to distinguish themselves, in the eyes of the customer, from others in the marketplace. This framework is built on the strengths of existing frameworks.

References

- Anderson, E. W., Fornell, C., & Rust, R. T. (1997). Customer satisfaction, productivity, and profitability: Differences between goods and services. *Marketing Science*, 16(2), 97. Published online: 1 May 1997.
- Holbrook, M. B. (1994). The nature of customer value: An axiology of services in the consumption experience. In R. T. Rust & R. L. Oliver (Eds.), *Service quality: New directions in theory and practice* (pp. 21–71). Thousand Oaks: SAGE.
- O'Cass, A., & Ngo, L. V. (2011). Examining the firm's value creation process: A managerial perspective of the firm's value offering strategy and performance. *British Journal of Management*, 22(4), 646–671. <https://doi.org/10.1111/j.1467-8551.2010.00694.x>.
- Shanker, A. (2012). A customer value creation framework for businesses that generate revenue with open source software, Technology innovation management review. March, pp. 18–20.
- Shastry, K. (2018). The 7 key principles of customer value creation, posted on conversion optimization, January 26, 2018.
- Woodall, T. (2003). Conceptualization 'value for the customer': An attributional, structural and dispositional analysis. *Academy of Marketing Science Review*, 12. Available at www.amsreview.org/articles/woodall12-2003.pdf.
- Woodruff, R. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25, 139.
- Zeithaml, V. A. (1988). Consumer perceptions of Price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22.

Cyclical Economy Business Models

► Product-Service Systems

D

Data Care

- [CSR and Data Protection](#)
- [Data Protection](#)

Data Protection

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Synonyms

[Data care](#); [Information misuse](#); [Information protection](#); [Information security](#)

Definition

Data refer to the facts and concepts about unidentified entities. Data become information after processing by human and/or IT tools. Data protection is the implementation of administrative, technical, or physical measures to guard against unauthorized access to data. Today, it refers to the prevention of the misuse of individual data.

Introduction

The term data is derived from Latin term “datum,” which means “something given.” Generally we

use the term “data” in different contexts to refer to raw material, facts, or statistics gathered by a researcher for analysis. Data are aperspectual, ahistorical, acontextual, unstructured facts, or raw materials that record particular instances of reality. After being recorded and processed, they become a systematic and filtered form of data called information. In other words, “data are formalized representations of information, making it possible to process or communicate” (Campbell and Shin 2011). The possible characteristics of data are as follows:

- Randomly collected raw material about a condition, event, idea, or an entity.
- An unorganized form of simple text and numbers requiring processing to draw conclusions.
- The input language for a computer in contrast to information as the output language for humans.
- Based on observations and records rather than specific information.
- Data collected by the researcher may or may not be useful, whereas information is valuable and useful in the given context and readily available to the researcher for use.
- Data is gathered with irrelevant facts and figures that need to be eliminated during the transformation into information.
- Data does not depend on information whereas information is generated from and therefore always depends on data.

The computing environment is fast-growing. During 2016, an estimated 5.5 million new devices were connected every day, with an expected 50 billion connected devices by 2020 (Harkins 2012). Nearly any device with an IP address will be able to communicate – and also be attacked – over the Internet. Since the sheer volume of information is exploding, business has quickly realized the value of massive unstructured data. The new era gives companies “vast opportunities to collect information from multiple online sources, and analyze and sell it to others” (Harkins 2012). Use and misuse are both possible, as recently experienced with the Facebook and Cambridge Analytica scandal. Consequently, two important controversial issues affect societal development: personalization versus privacy. Personalization focuses on collecting, analyzing, and reselling information about individuals, which began with mass-mailing campaigns before becoming routine through web capabilities. Through technology, companies can now store ever more personal information without explaining why. Moreover, their methods to protect and the time they keep such data are unknown.

This development has made privacy an important issue because “businesses increasingly seek to create online experiences tailored to the needs of individual users” (Harkins 2012). Privacy is the right and choice of the individual to reveal information to others (Westin 1967). It is thus guaranteed only if individuals have necessary knowledge about the data collected from them (Foxman and Kilcoyne 1993). Businesses aim to personalize services and offer targeted advertising based on each individual’s income and preferences. There are therefore immense conflicting desires for personalization and privacy, which have led to stricter laws and regulations to protect the privacy of individuals in the name of data protection. Data protection is “the implementation of administrative, technical, or physical measures to guard against the unauthorized access to data” (Toker 2015). It includes the ethical dilemmas, concerns, controversies, regulation of data misuse, and the legal and ethical precautions to avoid it, which we face as a twenty-first-century threat.

All countries link the free flow of information and data protection through a legal framework. On the one hand, individual privacy is challenged by widespread data collection and communication tools. On the other hand, the growing information economy depends on freedom for businesses to gather and distribute information. Although data protection is a legal issue between government and business, there is also a link between business ethics and the protection of customer data through the emerging CSR logic.

History of Data Protection

The protection of personal data is the right to be left alone, which was first named by Samuel Warren and Louis Brandeis more than a century ago. Privacy is considered a natural and key aspect of individual freedom that refers to the limits of an individual’s personal sphere. In contrast, the demand for transparency in business life has become a serious pressure in the globalized age.

According to Toker (2013), “The growing use of computers to store information about individuals has led many countries to pass laws in order to protect the privacy” and unauthorized access of others. After Germany passed the first data protection law in 1970, “in 1973 and 1980, one-third of the OECD’s 30 member countries enacted legislation intended to protect individuals against abuse of data related to them and to give individuals the right of access to data with a view to checking their accuracy and appropriateness” (Toker 2013).

In the United States, data collection in electronic commerce is still unregulated, except in health care, financial services, and children’s Internet use (Fernback and Papacharissi 2007). In contrast, privacy is more strictly protected in Europe (Baumer et al. 2004), which has proven to be a hurdle for US technology companies like Google operating there. Recently, Spain fined Facebook over one million euros for a privacy breach while the European Union (EU) fined the same company 110 million euros for not to link gathered data to WhatsApp accounts. The EU Data Protection Directive was adopted in 1995, whereby the EU Commission emphasized the

direct link between data protection and fundamental rights. In 2018, the EU introduced the General Data Protection Regulation (GDPR) to strictly protect data privacy, including medical records, bank statements, and Internet searches. This increases confidentiality for citizens while supporting their right to better control their personal information. GDPR gives people “a right to receive clear and understandable information about who is processing personal data, what data they are processing and why they are processing it” (EU GDPR 2018). The law gives individuals the right to transfer personal data to another service provider or ask a company to delete personal data to ensure the right “to be forgotten.” This recent law has greatly affected privacy practices of companies worldwide. It is also shaping corporate responsibility programs.

Recent data protection violations involving Facebook and Cambridge Analytica provide an important example to show that the data has become “the new corporate currency” of the information age. Therefore, data protection is an important challenge for the twenty-first century. Despite Europe’s legislative efforts, data privacy violations have occurred in DeutscheBank in Germany and T-Mobile in the UK. The main problem is that technology is changing too fast for privacy legislation to keep up. Incorporating data responsibility within the Corporate Social Responsibility (CSR) framework could provide an effective solution.

In sum, data protection is being elevated to a constitutional right. Although data protection refers to the prevention of the misuse of data, particularly information about individual people, and is mostly linked to laws and regulations, increasing societal pressure and public awareness has also forced companies to associate data protection with CSR in their business ethic approach and actions.

Summary

In simple terms, data is unorganized information or input, which is used to generate output, known as information. Data refer to facts and descriptions from which information can be extracted. Apps,

social media, e-commerce platforms, and consumer devices like mobile phones, commercial cameras, and even cars generate terabytes of data about individuals and the environment, which testifies that we live in an era of Big Data. Through such valuable data, companies know what consumers want even before consumers realize they want it. This new era should bring data responsibility in terms of data collaboration or ways for companies to share proprietary data for the public good. This suggests a new type of CSR for the twenty-first century.

Currently, many companies gather and store data for marketing and other purposes (Matwyslyn 2010). Companies face two major requirements to support a socially responsible and secure society: information transparency and data protection. As people depend more on technology and their lives go increasingly online, the protection of privacy as a human right is becoming more important than ever. This gives companies a huge responsibility to safeguard the privacy of the personal data which they collect.

Cross-References

- [Data Care](#)
- [Information Misuse](#)
- [Information Security](#)

References

- Baumer, D. L., Earp, J. B., & Poindexter, J. C. (2004). Internet privacy law: A comparison between the United States and the European Union. *Computers and Security*, 23(5), 400–412.
- Campbell, J., & Shin, M. (2011). *Essentials of geographic information systems*. USA: Saylor Publishing.
- EU GDPR (2018) EU data protection reform: Better data protection rights for European citizens. https://ec.europa.eu/commission/sites/beta-political/files/data-protection-factsheet-citizens_en.pdf? Accessed 5 March 2019.
- Fernback, J., & Papacharissi, Z. (2007). Online privacy as legal safeguard: The relationship among consumer, online portal, and privacy policies. *New Media and Society*, 9(5), 715–734.
- Foxman, E. R., & Kilcoyne, P. (1993). Information technology, marketing practice, and consumer privacy: Ethical issues. *Journal of Public Policy and Marketing*, 12(1), 106–119.

- Harkins, M. W. (2012). *Managing risk and information security: Protect to enable*. California: Apressopen.
- Matwyshyn, M. A. (2010). CSR and the corporate cyborg: Ethical corporate information security practices. *Journal of Business Ethics*, 88, 579–594.
- Toker, K. A. (2015). Data protection. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility: CSR, sustainability, ethics and governance* (pp. 169–170). Cham: Springer International.
- Toker, K. A. (2013). CSR and data protection. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 752–759). Berlin/Heidelberg: Springer.
- Westin, A. F. (1967). *Privacy and freedom*. New York: Atheneum.

Davos

- [World Economic Forum \(Davos\) II](#)

Davos Group

- [World Economic Forum \(Davos\) II](#)

Davos Summit

- [World Economic Forum \(Davos\)](#)

Debt Relief Systems: Equitable Allocation

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Synonyms

[Bankruptcy regulation](#); [Household bankruptcy](#); [Insolvency regulation](#); [Overindebtedness regulation](#); [Personal bankruptcy](#)

Definition

Personal debt relief systems are established by governments to manage overindebtedness problems within society. Personal debt relief systems are also referred to as personal insolvency and personal bankruptcy systems. Personal debt relief systems apply to natural persons and include self-employed individuals and individuals who are not self-employed. There is no consistent approach to personal debt relief; some countries enable a quick exit from the burden of debt, for example, the United States, whereas in other countries, a prolonged exit is favored, for example, full debt relief typically takes up to 3 years in Germany. This entry outlines the importance of debt relief systems to national sustainable development. We discuss personal debt relief systems in different countries, including the United States, England and Wales, Germany, and Ireland. The systems range from “straight” debt relief, which provides an immediate exit from prior debts, and debt consolidation, which strategically packages an individual’s debt into a consolidated loan and arranges repayment by the individual over a period of time depending on their disposable income. Finally, we conclude by examining the function of debt relief systems and how they can support sustainable development within a country.

The Importance of Debt Relief Systems to National Sustainability

Financial market deregulation in Europe in the 1980s resulted in increased competition between financial institutions, a wider range of consumer products, and easier access to credit. This resulted in increased personal debt levels. According to a study by Eurofound (2013), about 44% of the population in the European Union (EU) have substantial debt levels and many of these experience financial difficulties. The problem varies across countries within the EU, but nations with the greatest levels of personal debt include France (debt levels exceeded net disposable income at

106% in 2014), Germany (debt amounted to 94% of net disposable income in 2014), and Italy (debt amounted to 90% of net disposable income in 2014) (OECD 2017). The increase in consumer debt levels is seen as a cause for concern by global policymakers due to perceived links between consumer debt levels and national social and economic development. In particular, personal overindebtedness problems are deemed to be related to psychological and sociological consequences such as stress and social exclusion (Athreya 2004; Schicks 2013) and consumer confidence. On the one hand, consumer confidence affects demand and hence the economic outlook within a country. On the other hand, consumer confidence is related to the income capacity of an individual. When individual consumers face overindebtedness and possible bankruptcy in their future, their income productivity can decrease as a result of lost confidence and social and financial exclusion. Therefore, if sufficient numbers of the population are overindebted, the social and economic impact can significantly impact on a nation's sustainable development. Debt relief systems, which provide an exit for overindebted and bankrupt individuals, serve to reduce the negative impact of personal bankruptcy and hence contribute to a nation's sustainable development.

Personal Insolvency in Different Countries

Unlike business insolvency, which has existed in many countries for many years, personal debt relief systems have typically been implemented by governments since the late 1970s. A wave of financial deregulation in the 1980s led to increases in the availability of credit and a consequential increase in the number of overindebted individuals. National policymakers acted by introducing or reforming personal insolvency laws. As a result, country-specific approaches to the resolution of overindebtedness emerged. The United States was the first country to introduce personal insolvency regulation, allowing individuals to file for bankruptcy, under the US Bankruptcy Code in

1978. It was then followed by Denmark in 1984 and the United Kingdom (England and Wales) in 1986 (Ramsay 2017). The personal debt relief systems for the United States and some European countries are now outlined in brief.

United States: In the United States, individuals have two avenues for exiting from their current untenable financial position. These avenues are covered by two “chapters” in the Bankruptcy Code. Individuals can either file for bankruptcy under “Chapter 7” or “Chapter 13.” A Chapter 7 filing provides a quick exit for the individual. Under Chapter 7, individuals have to sell all their nonexempt assets. The funds received are used to repay their debt owing. The level of exempt assets is determined by state government in the United States. All other debts are discharged. Under a Chapter 13 filing, individuals do not get an immediate discharge from their historical debts. A Chapter 13 filing leads to a repayment plan for individuals with a regular income. It is also known as the “wage earner’s plan” (US Courts 2019). Under this filing, individuals sign up to repay their debts over a period of between 3 and 5 years. The individuals usually get to keep their assets. Their debts are not discharged. They are consolidated into a manageable debt plan that is administered by a Chapter 13 trustee. The individual makes one payment to the trustee, who distributes the funds to the relevant creditors.

There was much controversy and lobbying against Chapter 7 bankruptcy filings by creditors who argued that such an easy exit promotes dysfunctional consumption behavior by unethical individuals to the detriment of creditors. As a result, in 2005, the Bankruptcy Abuse Prevention and Consumer Act (BAPCA) came into effect to avoid the abuse of Chapter 7 bankruptcy filings by individuals. Now a “means test” for individuals is required before they are eligible for bankruptcy under Chapter 7. Any individual who has a monthly income that is greater than the state median has to be subjected to the means test to determine whether or not they qualify for a Chapter 7 filing. The means test includes evaluating their income over the previous 5 years to determine if their spending could be considered to be abusive (excessive). If it

is considered to be abusive, then their application will be dismissed or transferred for consideration under a Chapter 13 filing.

There are a variety of approaches to personal insolvency in European countries; however, most involve debt restructure and a repayment plan for individuals. The systems in England and Wales, Germany, and Ireland are now explained in brief.

England and Wales: The legislation covering insolvency in England and Wales is the Insolvency Act 1986. This legislation has been modified over time. The most recent change was the establishment in 2002 of the Enterprise Act. Under this Act an individual can apply for a Debt Relief Order (DRO) or Bankruptcy Order if he/she can't repay his/her debt. Individuals with debt under £20,000, who don't have much spare income and don't have their own home, are eligible to apply for a DRO. DROs enable eligible applicants to get a discharge from all their debts after a 12-month period. Under the Bankruptcy Order, individuals have to sell their assets to repay their debts, and all remaining debts are discharged after 12-month period (UK Government 2019).

Germany: In Germany, the first personal insolvency law, the Insolvency Act, *Insolvenzordnung-InsO*, came into effect in 1999 (König 2016). Under the Act, when individuals file for bankruptcy, they are required to first seek an out-of-court settlement with their creditors. Insolvency proceedings only arise if no agreement is reached. At the outset individuals are required to liquidate their assets to repay their creditors. In addition, the individual has to sign up to a period of 6 years "good conduct" after which any remaining debt will be discharged. However, this arrangement was deemed to have negative consequences for the individual and society; therefore, in 2014, an amendment to the Insolvency Act came into effect, which shortened the repayment period for individuals. Now individuals who repay at least 35% of all their debt balances can get their remaining debt discharged after 3 years (König 2016). This more lenient approach is deemed to be better for Germany's sustainable development and should improve societal welfare.

Ireland: In Ireland, policymakers have also moved toward quicker debt relief for individuals.

Historically, Irish legislation on personal insolvency was strict relative to other European countries such as Germany. Before 2012, individuals who filed for bankruptcy had to repay their creditors for a period of up to 12 years before they were able to obtain discharge from any remaining debts (Gerhardt 2009). As a result, most individuals sought arrangements with their creditors, rather than filing for bankruptcy. As a consequence of this punitive system, the bankruptcy rate in Ireland was low, with only five persons declared bankrupt and ten persons being declared exempt from their debt obligations in 2007. However, this system could not continue. The negative social impact of the financial crisis was particularly acute in Ireland. In the period before the financial crisis, the Irish economy experienced exceptional growth. This period became known as "Celtic Tiger." The buoyant economic environment resulted in a boom in the housing market and soaring personal debt. An immediate consequence of the financial crisis was a collapse of the housing market and credit rationing by finance providers. Suddenly, many individuals found that their properties were in negative equity, as the debt owed on their properties exceeded the new lower value of their properties. Their problems were compounded by a contraction in the job market, wage reductions, or pay freezes. The government had to act to cushion the societal impact of the downturn of the economic crisis and to enable individuals to start again. A review the insolvency rules in favor of shortening the discharge period to ease the burden on individuals was commissioned. As a result of this review, the new Personal Insolvency Act 2012 was enacted. The Act reduced the "good conduct" period from a maximum of 12 years to 3 years. This was further reduced to 1 year on the 29 January 2016.

It can be seen from these country-specific examples that the general consensus by policymakers is that personal bankruptcy is bad for society and the economy and that a fresh start is best for both the individual and the nation's sustainable development. Hence most are moving to shorter-term debt relief systems that offer a new start. However, there is debate about whether this approach is appropriate. This is now discussed.

Apportioning the Blame for Insolvency

Policymakers across countries are united in the view that personal debt relief systems are an important tool for managing social and economic problems. However, differences in debt relief design result from differences in policymakers' views in respect of who contributes most to the insolvency loss – the individual or the creditor. On the one hand, it could be argued that the loss arose because the creditor provided credit too freely that their credit assessment procedures should have averted the problem at the outset. If this is the view, the credit provider is deemed to have contributed most to the insolvency problem, and policymakers are more likely to design “consumer-friendly” debt relief systems that enable the consumer to exit quickly, and as a result, the creditor bears most of the burden of the loss. On the other hand, it could be argued that the loss arose because the consumer behaved unethically, by borrowing more than they could afford to pay back. If this is the view, then “creditor-friendly” debt relief systems are more likely to be implemented, requiring a greater repayment commitment from consumers.

Debt Relief Systems as a Policy Tool

In the United States, easier debt relief for an individual's overindebtedness is part of the government's toolkit, used to alleviate those who are least well off in society. In this respect, the US debt relief system is considered a form of insurance that becomes effective when personal financial hardship is not subsidized by welfare support and is most likely to arise when the individual sources debt to pay for health care. The belief is that individuals who get their debt discharged under Chapter 7 can have a “fresh start” quickly and regain their capital productivity, thus reducing costs to families, communities, and financial markets. Welfare systems are not as supportive in the United States as in many European countries, and hence a “consumer-friendly” approach is adopted. The difference with the systems evident in European countries is that, while a fresh start is

promoted, there is more emphasis on providing guidance. This usually involves financial education, debt reorganization, and debt restructure. The aim is to encourage responsible borrowing in the future.

Summary

Debt relief systems are in place so that individuals can discharge debt that they can no longer repay. During the process, the creditors' right to get their money back is sometimes less protected. As a result, an equitable allocation of cost among interested parties in bankruptcy proceedings should be maintained. Debt relief systems should not only provide an exit mechanism for overindebted individuals but should also ensure that both individuals and creditors bear their proportion of the costs resulting from bankruptcy. An equitable allocation encourages both responsible leading and borrowing and encouraging productivity from individuals. By providing an exit mechanism for overindebted individuals, debt relief systems help reduce the negative impact of household debt on a nation's sustainable development by easing its associated social and economic costs.

Cross-References

► [Conspicuous Consumption/Positional Goods](#)

References

- Athreya, K. (2004). Shame as it ever was: Stigma and personal bankruptcy. *Economic Quarterly*, 90(2), 1–19.
- European Foundation for the Improvement of Living and Working Conditions (Eurofound). (2013). *Household over-indebtedness in the EU: The role of informal debts*. Luxembourg: Publications Office of the European Union.
- Gerhardt, M. (2009). *Consumer bankruptcy regimes and credit default in the US and Europe: A comparative study* CEPS Working Document No. 318. Brussels: Centre for European Policy Studies. Available at: <https://www.ceps.eu/ceps-publications/consumer-bankruptcy-regimes-and-credit-default-us-and-europe/> [last accessed: 22 May 2020]

- König, N. (2016). *Personal insolvency dynamics in Germany and the UK: A SUR-TAR approach*, DEP (Socio-economics) Discussion Papers - Macroeconomics and Finance Series, No. 2/2016, Hamburg University, Department Socioeconomics, Hamburg. <https://www.econstor.eu/bitstream/10419/148216/1/847231186.pdf> [last accessed: 22 May 2020]
- OECD. (2017). *Household debt (indicator)*. Available at: <https://doi.org/10.1787/f03b6469-en>. [last accessed: 22 May 2020].
- Ramsay, I. (2017). *Personal insolvency in the 21st century: A comparative analysis of the US and Europe*. Oxford and Portland, Oregon: Hart Publishing.
- Schicks, J. (2013). The definition and causes of micro-finance over-indebtedness: A customer protection point of view. *Oxford Development Studies*, 41(1), 95–116.
- UK Government. (2019). Court claims, debt and bankruptcy. <https://www.gov.uk/options-for-paying-off-your-debts>. Accessed 18 Mar 2019.
- UK Government. (2020). *Applying to become bankrupt*, <https://www.gov.uk/bankruptcy>. [last accessed: 22 May 2020].
- US Courts. (2019). Chapter 13 – Bankruptcy basics. <https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-13-bankruptcy-basics>. Accessed 8 Mar 2019.

Decade of Education for Sustainable Development

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Synonyms

[Sustainable development](#)

Definition/Description

Having its origins in the education chapter of Agenda 21 of the 1992 Earth Summit the United Nations Decade of Education for Sustainable Development (DESD) ran from 2005 to 2014 (Unesco, N.D.). Addressing sustainable development through education served to raise awareness of the issues, broaden the scope of the message, and to educate to deliver transformation in thinking, policy, and practice.

Introduction

Working with educational partners to develop, trial, and scale up ESD provision the decade of work has delivered long-term results (Unesco, n.d.). The ultimate purpose of the change in thinking about sustainable development was to deliver a change in policy and practice (Borys, 2010; Tilbury, 2011). Identifying ways in which opportunities for learning can advance sustainable development and how these can be incorporated in and beyond the formal curriculum were part of the program aims (Tilbury, 2011). Real-world change can be brought about through education and ESD seeks to transform learning and the process of learning (Jorrit et al., 2020). The DESD recognized that sustainable development did not always have the presence it deserved in different phases of education, be that formal or informal and sought to address that by a whole systems approach. The United Nations Sustainable Development Goals (SDGs) provide the context and background to ESD and help inform the work of the program. The DESD has influenced work on the environment, society (culture), and the economy. Involving people, engaging communities, and using learning to deliver more sustainable futures helped mark the DESD as distinctive in its offer and approach. Its international approach also distinguished this program from the sole country approach. The international dimension allowed for learning and findings to be shared openly and transparently and from this, use of good practice could be more widely adopted. Government commitment to the DESD helped drive and motivate action and deliver the goal of new approaches to education for sustainable development. International cooperation and the buying into shared values helps create new opportunities that would not otherwise have arisen had the DESD not occurred. The 2009 Bonn Declaration was born of the DESD and it called for increased awareness of sustainability, that this should be driven by government and that quality education should be a priority. Encouraging dialogue through contact networks and including a range of stakeholders helps to promote a

democratic ideal and an inclusive approach to ESD helps to widen and potentially deepen the learning and the debate. Community engagement in ESD validates the approach and work being done. This socially inclusive approach and advancing the democratic ideal serve to address some aspects of the SDGs. Learning about ESD is formal and informal and is seen to occur not just in the classroom but beyond it, for example in the community. Learning involves being able ask questions that show some critical awareness of issues around ESD. Critical reflective thinking is built into and is a desired outcome of the overall ESD pedagogy. Educating for ESD should adopt an interactive approach and one that challenges established and often taken for granted positions. Active learning that has a theoretical underpinning but that is applied and practice-based helps embed knowledge, values, and skills. In a formal classroom environment suitable approaches to ESD learning might include case studies, role play, or among other things group discussions and debates. There is no “one right way” to deliver ESD and the approaches taken will vary according to the nature of the students, their level of knowledge, and the intended purpose or planned outcome of the learning. Story-telling and acting are good for educating about ESD in a supportive and non-threatening learning environment. Learning about ESD takes place throughout different phases of education and runs throughout students’ time in education. Undoubtedly, teachers play a prominent part in ESD and their support is critical to the delivery of successful outcomes. Education, in the myriad forms it can take, shapes and influences sustainable development. Being able to contribute to, participate in, and to engage with advancing sustainable development in thought, word, and deed is something all citizens should feel comfortable and confident doing. The voice of citizens who may previously have been less vocal on ESD will have had the opportunity and potential to be raised as a result of the many educational interventions made during the decade of work. Delivering change in practice requires a change of heart and mind and this is something DESD sought to do with purpose and gusto.

Complex challenges around the most appropriate ways for education to deliver sustainable development that could secure stakeholder agreement and consent was something addressed at the outset and throughout the life of the program. Challenging, questioning and reflecting were used to learn and develop and were built into the DESD to allow for deep learning to take place.

Summary

A sustainable future can, in part, be realized through ESD and the work done in the DESD served as a stimulus for discussion, debate, action, and progress (Unesco, [n.d.](#)). Today, ESD is widely recognized and a legitimate area of educational endeavor. ESD knowledge, skills, and indeed experiences are co-created through the process of learning and this serves to empower, enrich and enable learners. The DESD was a value adding program that delivered long term results.

Laure et al. (2016) undertook an 18-country study of ESD and they found that school-based primary and secondary phases of education reported improved quality provision, and a transformed curriculum. Subject knowledge and material content had a strengthened sustainability focus. ESD pedagogies contribute to new skills and knowledge that help deliver an approach to the economy and society that is more sustainable (Laure et al., 2016). ESD pedagogy is proven to be effective, and Tilbury (2011) has promoted this approach that emphasizes theory rich, applied learning, and problem solving. The future for ESD was enhanced by the work done during the decade that the program ran. This collective, program partnership approach led from the “top” and achieved buy-in from the “bottom” and the result was an increased shared ownership of the problems of ESD, and the potential educational solutions. A more sustainable tomorrow was partly the result of actions of past (DESD) and activities of the present (ESD). No one singular approach can “solve” the multiple challenges associated with sustainable development but educating for this now, as a result of DESD, has a more prominent

profile. DESD was only the start of an educational conversation and this is on-going and more pressing as the need find new ways to address sustainable development challenges is likely to increase as demands to address, for example, the climate emergency grow. New interventions for ESD need to be encouraged at a local level but they also need policy actions to be led by government.

References

- Borys, T. (2010). Decade of education for sustainable development – Polish challenges. *Problems of Sustainable Development*, 5(1), 59–70.
- Jorrit, H., Brock, A., Singer-Brodowski, M., & de Haan, G. (2020). Monitoring Progress of change: Implementation of education for sustainable development (ESD) within documents of the German education system. *Sustainability*, 12, no. 10, 4306.
- Laure, R., Nonoyama-Tarumi, Y., Mckeown, R., & Hopkins, C. (2016). Contributions of education for sustainable development (ESD) to quality education: A synthesis of research. *Journal of Education for Sustainable Development*, 10(2), 226–242.
- Tilbury, D. (2011). *Education for sustainable development: An expert review of processes and learning*. Paris: UNESCO: Education for Sustainable Development: An Expert Review of Processes and Learning – UNESCO Digital Library. Accessed 25-3-2023.
- Unesco. (n.d.). UN Decade of ESD (unesco.org). Accessed 23-3-2023.

Decarbonization

- [Net Zero Emission](#)

Decisions About What Are Right or Wrong

- [Marketing \(Ethics of\)](#)

Decoupling

- [Economic Sanctions](#)
- [Rebound Effects of Eco-efficiency](#)

Deep Throat

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Defense

- [Policy and Military Force Sustainability](#)

Defensive CSR

- [CSR 1.0/2.0/3.0](#)

Definition

- [CSR Disclosure, Quality Measurement of](#)

Definitions of CSR

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Synonyms

[Conceptualization of CSR; CSR meaning](#)

Description

Corporate social responsibility (CSR), in its fundamental meaning, refers to corporate practices that go beyond legal mandates on “trading, health and safety, human rights, consumer and environmental protection and reporting” (Katsoulakos and Katsoulacos 2007, p. 361). The literature is not unanimous about CSR definition, its scope, and principles (Garriga and Melé 2004; Marrewijk 2003) and, finally, as to whether firms

have any responsibility toward other stakeholders beside shareholders (Friedman 1970). “The definition of CSR is both complex and complicated” (Sheehy 2015, p. 625), what makes the understanding of the phenomenon difficult for academics, managers, politicians and citizens. While its complexity arises from the multifaceted nature of environmental, social, and economic problems, the complication comes from different agendas and interests of parties (including scholars, governments, managers, employees, NGOs) involved in the definitional effort.

Nevertheless, despite the complexity of the CSR phenomenon, the need to define it is growing. These definitional and conceptual inconsistencies hamper both academic debate, as well as corporate implementation (Goebbels 2002). The broad scope of CSR decreases its relevance to organizations and researchers (Marrewijk 2003). The precise CSR definition is the more desirable considering the fact that responsible and irresponsible corporate behavior have legal and economic consequences (Sheehy 2015).

Introduction

CSR is viewed as a building block for modern literature on business and society relationship. Although it started to be explored already in 1950s (Carroll 1999), it is still one of the most controversial and ambiguous concepts in management. CSR is described as knowledge “in a continuing state of emergence (...) not characterized by the domination of a particular theoretical approach, assumptions and method” (Lockett et al. 2006, p. 133). The CSR research has been largely developed in silos making it impossible to formulate any coherent theory. CSR has been defined from different academic lenses by scholars representing economics, business, law, and political sciences (Sheehy 2015). Thus, the understanding of the term ranges from profit sacrificing activity (Doane 2005; Friedman 1970; Karnani 2011a, b), marketing tool (Fleming and Jones 2013), business strategy aimed at creation of shared value (Porter and Kramer 2011) to global business norm (Muhle 2011).

Scholars started to point to the problems with defining CSR already in 1960s. “The phrase corporate social responsibility has been used in so many different contexts that it has lost all meaning” (Sethi 1975, p. 58), becoming “a nebulous idea” (Davis 1960). Over the last five decades, the rise of alternative concepts like CSR 2.0, corporate citizenship, corporate sustainability, or creating shared value (CSV) has only increased this definitional ambiguity.

Early Definitions

In the initial definition introduced by Bowen (1953 as cited in Carroll 1999), CSR was understood as “the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society” (p. 6). This institutional perspective on businessmen’s social responsibility provided a fertile ground for further academic discussion on the nature of CSR (Gond and Moon 2011).

In the 1960s, the literature on CSR expanded (Carroll 1999). One of the most influential contributors to the understanding of CSR was Davis (1960), who defined the term as “businessmen’s decisions and actions taken for reasons at least partially beyond the firm’s direct economic or technical interest” (p. 70). According to Davis (1960), “social responsibilities of businessmen need to be commensurate with their social power” (p. 71). If they fail to fulfill their obligations toward society, “other groups eventually will step in to assume those responsibilities and the power that goes with them” (Davis 1973, p. 314) – the rule known as “The Iron Law of Responsibility.”. Additionally, Davis (1960) was one of the first to point that some of the CSR activities can be justified as having potential positive impact on the firm’s performance in the long run; however, this relationship is “problematic” (p. 70).

Later McGuire (1963) pointed out that corporations have responsibilities that extend beyond economic and legal obligations. This was also highlighted by Davis (1973), who argued “that the social responsibility begins where the law

ends” (p. 313). The voluntary nature of CSR, as opposed to coercive, has been carried forward into many later definitions, including those presented by Walton (1967), Sethi (1975), Jones (1980), McWilliams and Siegel (2001), and the European Commission (2011).

In the 1970s CSR definitions not only proliferated but also became more specific (Carroll 1999). An important contribution came from the Committee for Economic Development (CED). CED’s basic assumption of CSR was that “business functions by public consent and its basic purpose is to serve constructively the needs of society – to the satisfaction of society” (CED 1971). The Committee presented three concentric circles of responsibility: (1) the inner circle – basic responsibilities for the efficient execution of the economic function; (2) the intermediate circle – responsibility to exercise the economic function with respect to social and environmental issues; (3) the outer circle – responsibility for improving the social environment.

A more instrumental view on CSR was presented by Eells and Walton (1974 as cited in Carroll 1999), who stated that “corporate social responsibility represents a concern with the needs and goals of society which goes beyond the merely economic” (p. 247). The authors elaborated that since the business system can only survive in an effectively functioning free society, CSR aims at improving social welfare.

According to Carroll (1979), CSR encompasses firm’s economic responsibility to investors and consumers, legal responsibility to the government, ethical responsibility to society, and discretionary (put differently, philanthropic or voluntary) responsibility to the community. Later, these categories were depicted in a form of pyramid with economic responsibility as the base (Carroll 1991). The author emphasized that the definition of CSR in order to be complete needs to encompass all kinds of responsibilities that a business has toward society and that also includes economic and legal categories. In the same time, he argued that managers need to take all of these responsibilities into consideration at all times.

Alternative Concepts

Gond and Moon (2011) described CSR as “chameleon concept” that kept changing its form, as several authors proposed alternative concepts. “Transformations of CSR occur not only at the skin level – with a change of concept (...) – but the CSR animal is also subject to multiple intra-cutaneous changes – the same label or acronym being transformed and redefined over time” (p. 12). Garriga and Melé (2004) proposed a fourfold classification of CSR theories and related approaches: (1) instrumental theories that view corporate social and environmental practices as means to achieve business goals (e.g., creating shared value); (2) political theories, which focus on the corporate responsibility stemming from the power that modern corporations hold in society (e.g., corporate citizenship); (3) integrative theories that focus on social demands toward firms and their approach to satisfying them (e.g., stakeholder theory or corporate social performance); and (4) ethical theories, based on ethical responsibilities of firms toward society (e.g., normative stakeholder theory, sustainable development). In practice, each CSR theory can be described with its assumptions in regard to four dimensions: profits, political performance, social demands, and ethical values.

Some of the most cited alternative concepts to CSR are presented in the following sections.

Corporate Social Responsiveness (CSR2)

“Corporate social responsiveness refers to the capacity of a corporation to respond to social pressures” (Frederick 1994, p. 247). CSR2 represents a transition from philosophical-ethical concept of corporate social responsibility (CSR1) that, as Frederick (1994) argues, was abstract and elusive, to action-oriented managerial approach focused on making organizations more responsive to forces from their environment. Social responsiveness can range on a continuum from reaction through defense and accommodation, to proaction (Carroll 1979).

Corporate Social Performance (CSP)

CSP is a three-dimensional model that incorporates the interaction between principles of CSR, processes of social responsiveness and outcomes of corporate behavior (Carroll 1979; Wartick and Cochran 1985; Wood 1991). In the final version of CSP model presented by Wood (1991), principles of CSR included Carroll's four categories of corporate responsibilities divided into three levels: (1) institutional – firm's generic obligation related with legitimacy granted by the society; (2) organizational – firm-specific responsibilities for outcomes of particular actions; (3) individual – managerial discretion. Environmental assessment, stakeholder management, and issues management were identified as processes of social responsiveness (Wood 1991). Finally, outcomes of corporate behavior encompassed not only policies, as proposed by Wartick and Cochran (1985), but also social impacts and programs (Wood 1991).

For some scholars CSP is simply a measure of CSR (McWilliams and Siegel 2000).

Stakeholder Theory

Stakeholder theory, popularized by Freeman in the 1980s (1984), assumes that a firm is a constellation of cooperative and competitive interests possessing intrinsic value (Donaldson and Preston 1995). With this assumption managers must formulate and implement strategies that satisfy all stakeholders, i.e., groups or individuals who are affected by or can affect company's strategies (Freeman and McVea 2001). Stakeholder theory is viewed as a complementary body of literature that offers operationalization of CSR (Matten et al. 2003). Although stakeholder management cannot be understood as a synonym to CSR, formulation and implementation of CSR strategy requires stakeholder dialogue and engagement (Greenwood 2007). Stakeholder management allows identification of specific groups, persons, and material issues a company should consider in its CSR activities (Carroll 1991).

Corporate Citizenship (CC)

According to the CC concept, a company is viewed as a rightful member of society with

particular rights and responsibilities (Matten et al. 2003). The literature provides three approaches to understand CC: (1) as a synonym for discretionary CSR, i.e., voluntary activities in the area of corporate philanthropy; (2) as a synonym for CSR; (3) as a corporate administration of citizenship rights in those areas, where governments fail to do so (ibidem).

Corporate Societal Responsibility

Andriof and McIntosh (2001) proposed the concept of corporate societal responsibility to address the limited interpretation of the term "social responsibility." While in Continental European cultures and languages "social responsibility" applies merely to social welfare issues, "societal responsibility" covers all dimensions of corporate impact on society.

Corporate Societal Accountability (CSA)

CSA, proposed by Goebbels (2002) as an alternative term for CSR, replaces the word "responsibility" with "accountability" in order to avoid similar problems as those related with the interpretation of the word "social."

Corporate Sustainability (CS)

The origins of CS are to be found in the concept of sustainable development, i.e., development that meets the needs of the present without compromising the ability of future generations to meet their own needs (UN 1987). CS can be understood as business contribution toward sustainable economies and society. Although traditional understanding of CS has been biased toward corporate environmental activities, recent research shows increasing interest in integrating social as well as economic aspects into this concept (Marrewijk 2003). As such, CS is inseparably linked with the triple bottom line (TBL) concept (Visser 2007) that introduces new approach to organizational performance measurement combining traditional financial bottom line with social and environmental performance (Elkington 1997).

CS, in its broad meaning that includes all three dimensions of sustainable development, is often

used as a synonym for CSR (Marrewijk and Werre 2003). However, Marrewijk (2003) calls to consider these two terms separately: CSR as a concept focused more on transparency, stakeholders dialogue, and reporting, and CS as an idea combining value creation with environmental and human capital management.

Corporate Sustainability and Responsibility 2.0 (CSR 2.0)

CSR 2.0 is a systemic approach to business and society relationship that involves product, process, and business model innovation as well as lobbying for progressive national and international policies. As such CSR 2.0 has potential to address the root causes of business present unsustainability and irresponsibility (Visser 2012).

Creating Shared Value (CSV)

Finally, CSV focuses on the integration of social and environmental issues with core business strategy and competitive advantage. Porter and Kramer (2011), who were the first to propose the idea of shared value, suggest that social needs can also define markets and become a source of innovation. By addressing social and environmental problems, companies can minimize internal costs and operational risks as well as identify new business opportunities.

Altruistic Versus Strategic Definition

In the literature there has been an ongoing debate whether CSR should be defined within altruistic or strategic approach. Within the first CSR is understood as “situations where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams et al. 2006). It is manager’s motivation that allows to differentiate between real, altruistic CSR and strategic CSR understood as a mere profit maximization strategy (Baron 2001). Involving in social responsibility firms should accept that costs of these activities may not imply any direct measurable economic returns

(Walton 1967). However, already in the 1970s authors pointed that business decisions may be motivated not by single, but multiple motives. Thus, distinguishing corporate social activities motivated purely by the desire to increase profit from those purely altruistic is difficult, if not impossible (Carroll 1999).

The alternative, strategic approach, popularized by Drucker (1984), Lantos (2002), Husted and Allen (2007), and Porter and Kramer (2011), just to name few authors, is based on the win-win assumption about business and society relations. It implies that a firm voluntarily invests in CSR, but designs a strategy so as to appropriate additional business benefits (Husted and Salazar 2006).

Toward Definitional Integration

One of the integrative definitions of CSR has been proposed by the European Commission (2011), which views it as a voluntary strategy integrating social, ethical, and environmental concerns with company’s core business activities in close cooperation with stakeholders. CSR aims at maximizing shared value creation for shareholders and other stakeholders, as well as prevention of negative impacts of business operations. With its definition, the European Commission stresses the importance of a comprehensive approach to CSR that covers all business processes. It builds on classical CSR definitions, including the Carroll’s categories of responsibilities and CED’s responsibility circles, and integrates them with alternative concepts that have been proposed over the last six decades, including CSV and stakeholder theory.

Another attempt to end the definitional ambiguity related to CSR was made by the International Organization of Standardization (ISO). ISO-26000 (ISO 2013), an international standard of social responsibility introduced in 2010, defines CSR as “responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that: (1) contributes to sustainable development, including health and the

welfare of society; (2) takes into account the expectations of stakeholders; (3) is in compliance with applicable law and consistent with international norms of behavior; (4) is integrated throughout the organization and practiced in its relationships.” The standard identifies seven interdependent subjects that define the scope of social responsibility: (1) Organizational governance; (2) Human rights; (3) Labor practices; (4) The environment; (5) Fair operating practices; (6) Consumer issues; (7) Community involvement and development.

Summary

Despite the lack of universal definition of CSR, its conceptualizations available in the literature are predominantly congruent, as they consistently refer to the same five dimensions (Dahlsrud 2008):

1. Economic – CSR is described in terms of a business operation and encompasses socio-economic and financial aspects.
2. Social – CSR deals with issues related to business and society relationship.
3. Environmental – CSR deals with issues related to the natural environment.
4. Voluntariness – while CSR activities go beyond legal mandates, regulations specify the minimum socially acceptable level of corporate responsibility.
5. Stakeholder – the optimal, firm-specific level of responsibility is determined by the relationship with stakeholders.

Therefore, as Dahlsrud (2008) argues, it is not the lack of one universally accepted definition that is problematic, but the fact that those available fail to present any guidance on how to manage CSR issues.

Cross-References

- Altruistic CSR
- Corporate Citizenship
- Corporate Social Performance

- Corporate Sustainability
- Corporate Sustainability and Responsibility
- Corporate Social Responsibility
- Creating Shared Value
- CSR: Evolution of Concept
- Strategic Corporate Social Responsibility
- Strategic CSR

References

- Andriof, J., & McIntosh, M. (2001). *Perspectives on corporate citizenship*. Greenleaf Publishing.
- Baron, D. P. (2001). Private politics, corporate social responsibility, and integrated strategy. *Journal of Economic Management Strategy*, 10(1), 7–45.
- Bowen, H. (1953). *Social responsibilities of the businessman*. Harper & Row.
- Carroll, A. B. (1979). Three-dimensional conceptual model of corporate performance. *The Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (1999). Evolution of a definitional construct. *Business and Society*, 38(3), 268–295.
- CED. (1971). *Social responsibilities of business corporations*. Committee for Economic Development.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1–13.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2(3), 70–76.
- Davis, K. (1973). The case for and against business assumption of social responsibilities. *Academy of Management Journal*, 16, 312–322.
- Doane, D. (2005). The myth of CSR. *Stanford Social Innovation Review*. <http://bit.ly/1GDeUOu>. Accessed 18 May 2021.
- Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65–91.
- Drucker, P. F. (1984). Converting social problems into business opportunities: The new meaning of corporate social responsibility. *California Management Review*, 26(2), 53–63.
- Eells, R., & Walton, C. C. (1974). *Conceptual foundations of business* (3rd ed.). Homewood: Irwin.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Gabriola Island: New Society Publishers.
- European Commission. (2011). COM(2011) 681, Communication from the Commission to the European

- Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A renewed EU strategy 2011–14 for Corporate Social Responsibility. <https://bit.ly/3eW7GRt>. Accessed 18 May 2021.
- Fleming, P., & Jones, M. T. (2013). *The end of corporate social responsibility: Crisis and critique*. London: Sage Publications.
- Frederick, W. C. (1994). From CSR 1 to CSR 2. The maturing of business-and-society thought. *Business & Society*, 33(2), 150–164.
- Freeman, R. E. (1984). *Strategic management – A stakeholder approach*. London: Pitman.
- Freeman, R. E., & McVea, J. (2001). *A stakeholder approach to strategic management* (No. 01–02). <http://bit.ly/1pr95x3>. Accessed 18 May 2021.
- Friedman, M. (1970, September 13). A Friedman doctrine – The social responsibility of business is to increase its profits. *The New York Times Magazine*. <https://nyti.ms/33VRsli>. Accessed 18 May 2021.
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1/2), 51–71.
- Goebbels, M. (2002). Reframing corporate social responsibility: The contemporary conception of a fuzzy notion. *Journal of Business Ethics*, 44, 95–105.
- Gond, J.-P., & Moon, J. (2011). Corporate social responsibility in retrospect and prospect: Exploring the life-cycle of an essentially contested concept. ICCSR research paper series, no. 59-201.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74(4), 315–327.
- Husted, B. W., & Allen, D. B. (2007). Strategic corporate social responsibility and value creation among large firms. Lessons from the Spanish experience. *Long Range Planning*, 40(6), 594–610.
- Husted, B. W., & Salazar, J. de J. (2006). Taking Friedman seriously: Maximizing profits and social performance. *Journal of Management Studies*, 43(1), 75–91.
- ISO (International Organization of Standardization). (2013). ISO 26000:2013. Guidance on social responsibility. <https://www.iso.org/iso-26000-social-responsibility.html>. Accessed 18 May 2021.
- Jones, T. M. (1980). Corporate social responsibility revisited, redefined. *California Management Review*, 22(3), 59–67.
- Karnani, A. (2011a). CSR stuck in a logical trap. *California Management Review*, 53(2), 105.
- Karnani, A. (2011b). “Doing well by doing good”: The grand illusion. *California Management Review*, 53(2), 69.
- Katsoulakos, T., & Katsoulacos, Y. (2007). Integrating corporate responsibility principles and stakeholder approaches into mainstream strategy: A stakeholder-oriented and integrative strategic management framework. *Corporate Governance: The International Journal of Business in Society*, 7(4), 355–369.
- Lantos, G. P. (2002). The ethicality of altruistic corporate social responsibility. *Journal of Consumer Marketing*, 19(3), 205–232.
- Lockett, A., Moon, J., & Visser, W. (2006). Corporate social responsibility in management research: Focus, nature, salience and sources of influence. *Journal of Management Studies*, 43(1), 115–136.
- Matten, D., Crane, A., & Chapple, W. (2003). Behind the mask: Revealing the true face of corporate citizenship. *Journal of Business Ethics*, 45, 109–120.
- McGuire, J. W. (1963). *Business and society*. McGraw Hill.
- McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal*, 21(5), 603–609.
- McWilliams, A., & Siegel, D. S. (2001). Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review*, 26(1), 117–127.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1–18.
- Muhle, U. (2011). *The politics of corporate social responsibility: The rise of a global business norm*. Campus.
- Porter, M. E., & Kramer, M. R. (2011, January–February). Creating shared value. *Harvard Business Review*.
- Sethi, S. P. (1975). Dimensions of corporate social performance: An analytical framework. *California Management Review*, 17(3), 58–64.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131, 625–648.
- UN (United Nations General Assembly). (1987). Report of the World Commission on Environment and Development. A/RES/42/187. Resolution adopted by the General Assembly 42/187. UN Documents Gathering a body of global agreements. <http://www.un-documents.net/a42r187.htm>. Accessed 18 May 2021.
- van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2–3), 95–105.
- van Marrewijk, M., & Werre, M. (2003). Multiple levels of corporate sustainability. *Journal of Business Ethics*, 44(2–3), 107–119.
- Visser, W. (2007). Corporate social responsibility and the individual. A literature review. Cambridge programme for sustainability leadership paper series no. 1.
- Visser, W. (2012). *The age of responsibility: CSR 2.0 and the new DNA of business*. Wiley.
- Walton, C. C. (1967). *Corporate social responsibilities*. Wadsworth.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *The Academy of Management Review*, 10(4), 758–769.
- Wood, D. J. (1991). Corporate social performance revisited. *The Academy of Management Review*, 16(4), 691–718.

Deforestation

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Synonyms

[Forest degradation](#)

Definition

The forest is a collection of tall trees, higher than 5 meters, that spread over a large area of land, more than 0.5 hectares, and are part of a specific biome. Forests cover a third of the planet Earth, approximately 4.06 billion hectares (FAO 2020), and are essential for the production of oxygen and for the reabsorption of CO₂ from the atmosphere. Deforestation is the process of destruction or thinning of forest vegetation carried out by human activities, driven by economic interest. This destruction exacerbates the effects of climate change in many areas such as the loss of biodiversity and ecosystem services, soil organic matter, the increased risk of landslides and floods, the increase in temperature and drought as well as soil erosion. In addition, millions of individuals live near forests and depend on them for their survival. Their destruction, therefore, entails a very high risk of poverty and important socio-economic problems. In addition to the activities of the wood industries (paper, furniture, construction, and energy), food multinationals (large monoculture plantations and intensive farming), local farmers (e.g., agricultural method of slash and burn), another factor that moves toward deforestation is the increase of the population and the consequent need for more spaces and infrastructures. In many territories, economic interests have also pushed criminals over time to organize themselves to circumvent the laws protecting forests.

Introduction

Forests are the green lungs of the planet. They are custodians of biodiversity and allow the reabsorption of climate-changing gases thanks to the chlorophyll photosynthesis of plants and through the carbon cycle. Without plants and chlorophyll photosynthesis, it would be difficult to imagine life on our planet. Forests provide ecosystem services that can be summarized in life support, provisioning, regulation and cultural values (MA 2005). Over the centuries, however, human activities have greatly transformed the appearance of forests all over the world, reducing their number and size, reducing “virgin” forests (i.e., forests that have not undergone any human contamination), due to the need to expand their settlements and for reasons of exploitation of resources. The FAO, Food and Agriculture Organization of the United Nations, in the report “The Global Forest Resources Assessment,” estimates that in the period 2015–2020, 10 hectares of forests per year disappeared due to deforestation (FAO 2020).

To date, these activities, however, show all their danger since, deforestation and the forest thinning, leaving space for land exploitation activities lead in a short time to important changes in the water cycle and soil fertility, increasing the risk of drying up with subsequent soil erosion. In this dramatic risk situation is the biodiversity of the flora and fauna preserved within the forests. Furthermore, fires, often started by human hands, destroy plants and reduce the sequestration of climate-altering gases and evapotranspiration.

Forests, therefore, are essential for maintaining global temperatures below 1.5 °C as expected by the Paris Agreement, COP 21. The IPCC, International Panel on Climate Change, in the Special Report “Global Warming of 1.5 °C,” underlines how essential it is to stay below 1.5 °C compared to pre-industrial levels. To date, it is estimated that this overcoming could take place by 2040 (IPCC 2018).

Many actions are implemented to protect the forests, and the biodiversity they preserve,

through the protection of the territories but also an important reforestation work. The largest rainforest on Earth, that of Amazonia, is the forest in which the attention towards deforestation is greatest. Legal activity is often replaced by illegal activity which causes not only the loss of the forest but also endangers the lives of the indigenous peoples who live in those territories.

Forests and Land Degradation

The large and small forests present on Planet Earth are currently subject to deforestation by humans. In the early 1900s, the presence of 5 billion hectares covered by forests was estimated, and more than one billion was lost towards the end of the century (Brown 2008). It is possible to identify various more or less evident causes of the motivations that push humans to exploit forests. In tropical and sub-tropical forests (in Latin America, Africa, and Southeast Asia) deforestation means economic, political interests, such as agricultural expansion, expansion of pastures, mining, wood trade, and infrastructure. Five main factors can be identified that move man to forestry: demographic factor, economic factor, political-institutional factor, and socio-cultural factor (Geist and Lambin 2001).

The growth of the world population brings with it the increase in pressure that the human being exerts within the natural systems in which he lives. The demand for more food, more resources, and more space brings with it economic and political choices that affect ecosystems.

The expansion of agricultural activities, with the intensification and growth of industrial agriculture, with the expansion of the meat industry, with increasingly large and intensive farms, changes the traditional techniques of cultivation and breeding and needs more industrial commitments, greater infrastructures for the transport of goods, roads; therefore, it requires a change of use and different exploitation of the soil, more intense and unsustainable in the long run.

The growth of agro-industrial plantations is among the most important causes of deforestation

in tropical forests. The Amazonia area is the main witness. The activities that derive from it, legal and illegal, mean that the effects are not linked to a single activity when deriving from aggregate activities and therefore more impactful: we speak of “growth coalitions.” The growth coalitions are made up of different social actors who, in agreement with each other, pool the resources available to achieve their goal (deforestation, regional development, and agricultural colonization) (Rudel and Horowitz 1993).

Furthermore, large farms that require large spaces enter the logic of deforestation due to the need for grazing of large herds of cattle, goats, and sheep. These farms are estimated to have a very high impact, due to the large consumption of water, the production of methane gas, and the degrading impact on the soil (Brown 2008).

The paper industry also has a strong impact on large forests, just think that WWF denounces that 10% of the population exploits 50% of paper present on the entire planet. In addition, the demand for paper will grow as the population grows by 2050 (Bragonzi 2013). Although many developing countries have over time tried to limit timber exports for processing industries, at least formally, the World Bank reports say that market distortions, with pricing policies that see a very low cost of timber, have a significant impact on the increasing demand for wood.

Beyond the most obvious causes, however, many studies highlight a very complex variables (social, cultural, political-economic, and technological) that are not easily identifiable but which significantly affect deforestation. The data from the OECD, Organization for Economic Cooperation and Development, for example, reveal that 5–10% of the timber present on the international market is attributable to illegal and unsustainable activities. Furthermore, deforestation by border farmers gives them a property right on the land, increasing the possibility of advancing deforestation activities due to the need to increase income and family income. The poverty of the border areas also brings with it the phenomenon of “Land Grabbing,” with multinational protagonists, large companies and foreign governments,

private, who buy the land to the detriment of the poorest farmers and shepherds (a phenomenon not properly defined but known with negative meaning) (Vieri and Calabrò 2016).

Agriculture poor in resources, with insufficient food production for the local populations, leads to the problem of hunger and the inconstancy of proper nutrition. These situations, linked to a too low income, marginalization of local populations, and rampant unemployment, lead to unstable socio-political situations, resulting in internal wars and rebellions.

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International Actions and Actors

Many actions should be implemented to strongly reduce the exploitation of forest resources. Among them, it is important to consider better management of resources and greater accountability and transparency of stakeholders and policy. Educating people about the importance of forests and protected natural areas, educating the younger generations to respect nature is certainly essential for creating a culture that is more attentive to the environment. Planting new trees for reforestation in the face of the exploitation of forest resources is certainly one of the most effective actions. Many institutions, NGOs, associations, companies have protected and promoted actions and policies in favor of forests.

Forest Stewardship Council

The Forest Stewardship Council is an independent, non-profit international non-governmental organization (NGO), established in 1993 to encourage responsible management of forests and plantations. The association is committed to providing rigorous certifications that provide important information about the origin of the

products and compliance with the rules for sustainable forest management. Important are the Forest Management Certification (FM), which requires among other things the protection of ecosystem services, and the Chain of Custody (CoC) Certification for wood products, wood products, and wood-based products, but also mushrooms, honey, cork, and other products from proper forest management. In its “Global Strategy 2021–2026,” FSC focuses on a vision for 2050, which sees better market mechanisms, better forest policies and governance, and greater communication with people regarding the importance of forests.

Greenpeace International

Greenpeace International is an NGO that has always been committed, with direct and non-violent actions, to denouncing the activities that destroy nature and the Planet. Greenpeace, concerning forests, has always been committed to denouncing deforestation activities, especially in the Amazon rainforest.

NAFA: National Aboriginal Forestry Association

NAFA, National Aboriginal Forestry Association, is an association that deals with the involvement of Aborigines in holistic or multiple-use management of forests, through their reconstruction, and the business opportunities that derive from it. In doing so, NAFA promotes the sustainable use of forest resources, the maintenance, and care of Aboriginal traditions, and self-government.

WWF: World Wide Fund for Nature

The WWF, World Wide Fund for Nature, is an NGO that deals with the protection of nature. It has long been involved in combating the deforestation of the Amazon and has now activated a reforestation program in the Peruvian Amazon, in the Madre de Dios area, restoring 250 hectares of forest. It has also reconstituted 167 hectares of Atlantic forest, between Brazil and Paraguay, to reach at least 9,000 hectares. Also in Borneo, WWF is engaged in constant dialogue with the Indonesian government to ensure the sustainable management of the forests of Thirty Hills, a protected area of 40,000 hectares where the Sumatran tiger lives.

The Amazon Rainforest

The Amazon Rainforest covers an area of approximately 6.7 million km² and covers nine states: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela, and French Guyana. Inside it flows the Amazon River, considered together with the Nile among the longest rivers in the world as well as being the river with the highest water flow. In the Amazon it is possible to trace about 10–15% of the known plant and animal species, however, among them, 265 species are at risk of extinction. The climate in the forest is equatorial. Deforestation is estimated to have caused a loss of 800,000 km² from the 1970s to today. The increase in temperatures associated with deforestation would cause an annual water decrease within the region (Alberti 2008) and at the current rate, the risk that the loss of further areas of the forest will lead to a 1.45 °C increase in temperatures by 2050 in Brazil compared to the annual average (Prevedello et al. 2019) is associated with a further probable decrease in rainfall. As pointed out by European research projects (Cordis), the great forest is at risk of a “circle of a progressive nuisance.”

According to the data made available by the WWF, there were about 30,000 fires in the month of August alone. The damage caused in Bolivia alone, in the Santa Cruz region, can be summarized as 3.5 million hectares destroyed (Ciarlariello 2019).

Many environmentalists try to denounce the bad health of the Amazon rainforest, associating themselves in the international discussion venues with the voices of the indigenous peoples living inside the forest and clamoring for respect for their home, showing the documented evidence of abuses that people live every day and the destruction waged.

International institutions, the UN, and many countries around the world are aware that protecting the Amazon means protecting the most important green lung on the planet. Tropical forests are among the hardest hit by deforestation. The countries of South America in the face of marked economic interests have not always responded with the same firmness. Illegal

associations, which derive important profits from the timber trade and from the cultivation of illegal substances, have responded with an escalation of murders of environmental activists who however have not appeased the complaints.

2030 Agenda for Sustainable Development

The 2030 Agenda, signed by 193 UN countries in September 2015, is an action program for achieving sustainable development by 2030. The Agenda is made up of 17 Sustainable Development Goals (SDGs) and 169 targets. In particular, SDGs 15, “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,” is centered on the need to protect forests and their ecosystems. Target 15.b also provides that developing countries are financed to ensure better management of forest resources and reforestation.

Keys-Issue

Deforestation, carried out without any care for ecosystems, cannot be sustainable in the long run. The loss of trees capable of removing climate-changing gases and releasing oxygen, changes in the water and carbon cycle, the loss of biodiversity, the change in land use and related activities, cannot be overlooked when it comes to the protection of forests and need adequate regulation and consequent control work. Forests are the lung of the Earth and as such must be treated and safeguarded from merely economic and political interests.

Future Directions

International policies that affect the limits to be imposed on deforestation will be necessary in the near future to prevent human activities from destroying one of the most precious assets of the

planet. Without forests, the increase in global temperatures will not find one of the main obstacles and there will be an increase in the incidence of climate change, with the growing fragility of the territories. Appropriate protection of the forests, especially the “virgin” ones, would allow not only indigenous peoples to continue living in the tradition as requested by them, but would also allow all native animal and plant species to live in their natural habitat. Important sectors such as timber, agro-industry and intensive farming, bioenergy, must necessarily be rethought with a view to sustainability and the protection of ecosystem services. The paper industry, which is also responsible for deforestation, will have to face the challenges of sustainable production, aimed at recycling, with the exploitation of ad hoc plantations that do not burden natural forests, with more equitable consumption. Many countries face deforestation with reforestation, planting new trees, and thus reconstituting forests destroyed by man’s greed. However, this activity does not apply to any type of territory: in unsuitable territories, the risk is that the water requirement of the tree drains the soil and disperses the little water present in the atmosphere, while in territories with mild and humid climates this activity of reforestation brings better benefits (Ferrara and Ferruggia 2007).

Many countries face deforestation with reforestation, planting new trees, and thus reconstituting forests destroyed by human, legal, and illegal activities. However, this activity does not apply to any type of territory, in unsuitable territories, the risk is that the water requirement of the tree drains the soil and disperses the little water present in the atmosphere, while in territories with mild and humid climates this activity of reforestation brings better benefits (Ferrara and Ferruggia 2007). The Royal Botanic Gardens of Kew identified 10 rules for reforestation in one of its publications: “1- protect existing forest first; 2-Work together (involving all stakeholders); 3-Aim to maximize biodiversity recovery to meet multiple goals; 4- Select appropriate areas for restoration; 5- Use natural regeneration wherever possible; 6- Select species to maximize biodiversity; 7- Use resilient plant material (with

appropriate genetic variability and provenance); 8- Plan ahead for infrastructure, capacity and seed supply; 9- Learn by doing (using an adaptive management approach); and 10- Make it pay (ensuring the economic sustainability of the project)” (Di Sacco et al. 2021).

The Covid-19 Pandemic has also revealed a correlation between the transmission of pathogens (especially zoonoses) and deforestation. Forests, which are in good health, protect humans from the risk of diseases originating from wildlife (ISPRA 2020).

The challenges to deforestation are many and important but the effort of all countries, of large multinational companies, will be necessary to achieve significant results in line with the need to achieve sustainable development.

Summary

Deforestation and forest degradation are activities dictated by economic and political interests. The agro-industry, the meat industry, and the pressures that derive from legal and illegal activities lead to the destruction of forest areas in the long term unsustainable. The loss of forest cover endangers biodiversity, the benefits of ecosystem services, and changes the water and carbon cycles. The change in land use, its exploitation, and the decrease in annual rainfall means that in the long run, it is losing its fertility with consequent drying up. In addition, the ongoing climate changes increasingly require the presence of plants for the removal of greenhouse gases in the atmosphere, which helps to contain global temperatures. However, large forests are increasingly endangered and a decisive intervention at global and especially local levels for their protection and care will become important in the near future, using the resources stored in them with a view to long-term sustainable development.

Cross-References

- [Carbon Balance](#)
- [Desertification](#)

References

- Alberti, G. (2008). Climate change, deforestation and the fate of Amazon. *Forest@ – Journal of Silviculture and Forest Ecology*, 5, 3–4. <https://doi.org/10.3832/efor0516-0005>.
- Bragonzi, S. (2013). Foreste e industria della Carta, WWF-Official Website, <https://www.wwf.it/pandanews/ambiente/foreste-e-industria-della-carta>. Accessed 19 Feb 2022.
- Brown, L. (2008). *Plan B 3.0 – Mobilizing to save civilization*. Earth Policy Institute.
- Ciariello, G. (2019). Il 2019 è stato un anno di fuoco per le foreste nel mondo, Wwf Website, <https://www.wwf.it/pandanews/ambiente/il-2019-e-stato-un-anno-di-fuoco-per-le-foreste-nel-mondo/>. Accessed 24 Feb 2022.
- Di Sacco, A., Hardwick, K., Blakesley, D., Brancalion, P. H. S., Breman, E., Cecilio Rebola, L., Chomba, S., Dixon, K., Elliott, S., Ruyonga, G., Shaw, K., Smith, P., Smith, R. J., & Antonelli, A. (2021). Ten Golden rules for reforestation to optimise carbon sequestration. *Biodiversity Recovery and Livelihood Benefits*. <https://doi.org/10.1111/gcb.15498>.
- FAO. (2020). Global forest resources assessment 2020: Main report. Rome. <https://doi.org/10.4060/ca9825en>.
- Ferrara, V., & Ferruggia, A. (2007). *Clima: istruzioni per l'uso – I fenomeni, gli effetti, le strategie* (pp. 165–168). Edizioni Ambiente.
- Geist, H. J., & Lambin, E. F. (2001). What drivers tropical deforestation? LUCC International Project Office 2001. https://www.pik-potsdam.de/members/cramer/teaching/0607/Geist_2001_LUCC_Report.pdf. Accessed 24 Feb 2022.
- IPCC. (2018). Summary for policymakers. In *Global warming of 1.5 °C. An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. Geneva: World Meteorological Organization.
- ISPRA. (2020). Foreste e Biodiversità, troppo preziose per perderle – le risposte alle domande più frequenti. <https://www.isprambiente.gov.it/files2020/notizie/FAQgiornatainternazionaleforeste3.pdf>. Accessed 9 May 2022.
- Millennium Ecosystem Assessment - MA. (2005). *Ecosystems and Human Well-being: Biodiversity Synthesis*. World Resources Institute, Washington, DC.
- Prevedello, J., Winck, G. R., Weber, M., Nichols, E., & Sinervo, B. (2019). Impacts of forestation and deforestation on local temperature across the globe. *PLoS One*, 14, e0213368. <https://doi.org/10.1371/journal.pone.0213368>.
- Rudel, T., & Horowitz, B. (1993). *Tropical Deforestation: Small Farmers and Land Clearing in the Ecuadorian Amazon*. New York: Columbia University Press.
- Vieri, S., & Calabrò, G. (2016). *Land Grabbing: Implicazioni Sociali ed Ambientali*. Calitatea-Access la Succ. ISSN 1582-2559. 17:152, pp. 71–76.

Degradation

► Pollution

Degrowth

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Synonyms

Delinking; GDP (gross domestic product); Green growth; Growth paradigm; Growth policy; Innovation; Limits to growth; Planetary boundaries; Postgrowth; Sustainable growth; Transformation; UN SDGs (sustainable development goals, Agenda 2030)

Description

Degrowth of (rich) economies could have two types of causes. Either it can be the result of system-immanent forces or it could be the result of political design based on changing political priorities. Mainstream economics is analyzing the first type of causes and has identified a couple of factors that contribute to explaining the decline of growth rates and the (potential) phase-out of economic growth. The second type, degrowth by design, is driven by the incompatibility of ambitious environmental sustainable development goals (as formulated e.g., in the Paris Agreement on climate change) with economic growth – given that eco-efficiency increases turned out too small for delinking environmental resource consumption from standard economic growth. In both cases, challenging new questions need to be answered: How to manage transformation to low (no) growth without economic crisis? How to cope with declining industries (stranded assets and qualifications)? How to resolve distributional questions and conflicts without growth? How to

mobilize financial resources (taxes, capital markets) for investment in new infrastructure? As degrowth is still widely perceived as irrelevant, not much research results are available to cope with these questions.

Why Degrowth? The Relevance of the Degrowth Debate

The academic and political debate on degrowth is of high and increasing relevance especially for advanced rich nations for two reasons:

1. **New policy priorities:** The United Nations Sustainable Development Goals (SDGs, Agenda 2030, <https://www.un.org/sustainabledevelopment>) replace one-dimensional economic growth by a more comprehensive goal system (Meadows et al. 1972; Boulding 1966; Latouche 2010). If economic growth is incompatible with goals of higher priority (especially climate and biodiversity protection), it is no longer desirable. This aspect is analyzed part 2. Controlled and managed degrowth could then be an explicit policy goal of sustainability policy.
2. **Fading growth dynamics:** Responsible (economic, social) science has to be prepared for a phase-out of economic growth. What is the Plan B, if the dynamics of the economic system no longer produces increases of GDP year after year? And if Plan A, the stimulation of economic growth by government policy, is not working? The assumption of and the hope for ever-lasting economic growth is naïve and careless. Part 3 discusses causes of declining growth rates.

For both reasons, it is urgent to reinforce research on long-term implications of no-growth economies as well as the design of critical transformation processes. Part 4 outlines some aspects of degrowth policy.

Is Growth Compatible with Sustainable Development?

Economic growth, the increasing production of goods and services in an economy is related to increasing resource inputs and impacts on

eco-systems. If these impacts are larger than the limits formulated in environmental SDGs (e.g., on climate protection and biodiversity), growth is incompatible with these SDGs and hence with SD in total. Development is “sustainable development” only if it includes all dimensions, the socio-economic as well as the environmental. The analytical question is if it is possible to “delink” growth and environmental impact. The empirical question is if there is evidence that this is actually happening (see Jackson and Victor 2019; Kurz 2019).

Economic growth is measured as increase of real GDP. GDP represents the value of all end products in one year and “real” means that price effects (inflation) are eliminated. There is a huge literature on the critique of the GDP concept and on the mismeasuring which it induces. And many proposals have been made to correct and to add (see Stiglitz et al. 2009). In fact, the GDP concept has been developed as a tool of output measurement. It has never been intended as an indicator for wealth. If at all, GDP/capita might serve this function.

If production (GDP) increases then environmental impacts I will increase too – ceteris paribus (if nothing else changes). However, this relation is not fixed but there is a connecting variable: eco-efficiency I/GDP:

$$I = I/GDP * GDP$$

If I/GDP declines, I can decline – even if GDP grows. For example, 2% p.a. GDP growth rate would increase the GDP by roughly 50% in the period 2020–2040. If the environmental protection goal is to reduce impact I over that period by 50% then the formula reads:

$$1/2 = I/GDP * 1,5 = 1/3 * 3/2$$

Eco-efficiency has to increase by a **factor 3**, that is, the environmental impact of producing one unit of GDP in 2040 is reduced to one third compared to 2020. This implies an annual increase of resource efficiency of more than 5%. So far, there is no empirical evidence that such efficiency increase rates are possible over many

years. Most OECD countries show rates of 1–2% p.a. (see Kurz 2014). More details on “factor 4” and “factor 5” are provided in Weizsäcker et al. (1997) and in Weizsäcker et al. (2009).

Ambitious efficiency increases (like factor 3 in two decades) could delink (decouple) economic growth and environmental impact. But this would require an “efficiency revolution” which has not materialized so far. Government policy options to change this seem to be very limited. Moreover, if successful, stimulation of eco-innovation will stimulate growth and thus the intended reduction of impact I. This is called “rebound effect” (see ► “Rebound Effects of Eco-Efficiency”).

Based on optimism about future eco-efficiency increases and on the neglect of rebound effects, the concept of “Green Growth” (see Kurz 2014; OECD 2011) nourishes hope that the growth paradigm can survive. While critics point to the lack of empirical evidence, defenders of growth refer to the chance of increases in the future. At least related to essential natural resources (like ozone layer, climate stability, ecosystem services), the survival of mankind depends on “save operating space” (Rockström et al. 2009). With technological over-optimism, planetary boundaries could be violated and processes triggered which are out of human control (tipping points). Without evidence for upcoming quantum leaps in eco-efficiency, economic growth is the variable which has to be controlled. Under given conditions, the only form of green growth is degrowth (in rich countries).

In sum, given the empirical trend in efficiency increase, growth and sustainable development (e.g., climate protection) are incompatible. This holds not only related to climate protection goals (SDG 13) but also to material flows (material efficiency) and to biodiversity (efficiency of land use). As delinking by high rates of efficiency increase fails, ambitious environmental goals turn into restrictions for output (GDP growth). It is then necessary that a smaller scale of output contributes to reduce input (of environmental resources). In macroeconomic terms, this means a decline of GDP (degrowth); the micro-fundament is less consumption of private households (sufficiency, changes in lifestyle). Either (rich) nations give up their growth goals and

growth policy or they will fail to comply with their SDGs and hence shift incalculable burdens on (grand-)children. Either give up income or given up moral integrity. If the environmental sustainable development goals dominate, growth is no longer desirable.

The next analytical step is to put the efficiency factor in a more general context by applying the so called **IPAT** equation (see Kurz 2014):

$$I = I/GDP * GDP/person * persons$$

$$\text{Impact} = \text{Technology} * \text{Affluence} * \text{Population}$$

For the reduction of environmental impact I, three strategic options are available:

- **I/GDP:** reduction of the impact per unit of output (GDP), that is, **eco-efficiency**.
- **GDP/person:** reduction of income per person which is related to a reduction of consumption expenditure, a fundamental change in lifestyle, that is, **sufficiency revolution** in the rich countries (► “Sufficiency”).
- **Persons:** In most rich, countries population is declining (and aging). This could not be much accelerated over the next two to three decades and hence this option will be neglected here.

Applied to climate change the formula reads:

$$CO_2 = CO_2/kWh * kWh/GDP * GDP/person * persons$$

The goal of reducing CO₂-emissions could be compatible with economic growth, if carbon intensity of the energy system (CO₂/kWh) and/or energy efficiency of the economy (kWh/GDP) decline. One scenario for decarbonization within two decades could be: reduction of CO₂ per unit of GDP by 50% and switching to renewable sources for the “rest” 50%; a decline of population would allow for slight increases of GDP/person.

The interesting additional component and option in this equation is GDP/person, that is, per capita income. Less income – and hence less consumption (with constant saving rate) – could

reduce environmental impact. This seems to be a rather dismal perspective. So far the explicit promise and job of economics has been to increase per capita incomes as the most important determinant for well-being/happiness. The challenging question therefore is whether the end of growth (growing incomes) would be the end of the pursuit of happiness (► [“Sufficiency”](#)).

What could sufficiency and degrowth actually contribute to SD and what is the price in terms of income reduction? The difference between a (moderate) business-as-usual (+2% p.a.) and a degrowth scenario (−1% p.a.) is quite significant, 49 + 18, that is, 67 percentage points (Table 1). In terms of average annual income, the initial annual income of, for example, 36.000 € either increases to 53.640 € or it declines to 29.520 €, a difference of 24.120 €. To “digest” and to manage such a swing in perspectives and biographies is unprecedented in the last decades.

In sum: The degrowth issue really matters, both in the individual dimension (as individual life-changer) and in the macro-economic dimension (reduction of GDP). As sufficiency has a vital role for SD, government policy has to change. Instead of growth policy it has to be sufficiency policy, that is, policy which enables people to live a good life with less consumption of goods and services. And it is crucial that the rate of eco-efficiency increase does not decline, an empirical question that cannot be answered as there is no experience with longer periods of degrowth.

Growth Fading Away? Degrowth Ante Portas?

There is a wide-spread fear (even in) rich countries that drivers of economic growth might dwindle, that inherent dynamics of capitalism (competition and innovation) is lost, and that the

promise of ever increasing income and wealth no longer holds (e.g., Gordon 2016). Empirical data on the long-term growth trends reflect declining growth rates in almost all countries and that the benefits of growth are concentrated on a small group at the top. Many factors have been identified and discussed as determinants and (weakening, fading) drivers that might be crucial in the end phase of the growth era:

- Innovation/technological progress weakens
- Aging population (tends to be less innovative)
- Nationalism (anti-globalization)
- Productivity growth decline
- Re-distributional policies over-burden the rich entrepreneurial class (negative incentive effects)
- Increasing welfare state (consumption instead of investment)
- Work-life-balance (less willingness to work hard)
- Decay of infrastructure (complementary to private investment)
- Monopolization (stifling competition)

Additional barriers result from environmental sustainable development goals and from changing lifestyles (► [“Sufficiency”](#)) which could stop economic growth or turn it negative:

- Decarbonization will be the end of fossil energy consumption, dematerialization requires the reduction of material flows, the protection of biodiversity will restrict land use.
- Population will (has to) decline and sufficiency reduces labor market participation.
- Capital stock (industry, buildings, infrastructure) declines in transformation processes as stranded assets increase.
- Technological progress will focus more on eco-efficiency instead of labor productivity.
- The sufficiency trend reduces consumers’ demand (with negative effects on firms’ investment) and leads to “secular stagnation” (Summers 2016).

Randers (2012) uses the following simple “forecast model”:

Degrowth, Table 1 Economic growth projections 2020–2040

Year	Growth rate % p.a				
	3	2	1	0	−1
2020	100	100	100	100	100
2030	134	122	110	100	90
2040	181	149	122	100	82

GDP=GDP/worker × worker

With a declining (and aging) workforce (working hours), growth depends on (increasing) labor productivity. If this also stagnates (aging, service economy), growth phases out, the economy is converging towards the “stationary state” (Mill 1848; Keynes 1930).

In sum: The traditional expansive forces of innovation, ingenuity, and effort will continue to be strong drivers of economic growth. In addition, governments promise to rekindle growth by “whatever it takes.” However, it would be naïve and over-optimism to hope that growth will prevail forever. It is wiser to be prepared for an age without growth – and it is the job of economists to analyze the consequences and to deliver the new concepts for stabilizing the economy and society, especially resolving distributional conflicts in the absence of a growing cake. The minimal consensus now seems to be to make economies less growth-dependent. In case of (exogenously) declining growth rates, society has to be prepared mentally, institutionally and physically (infrastructure). This would increase stability of a society (resilience), thereby reducing the success chances for radical political parties. Social stability should not be put to the test, instead preparations for the no-growth-world should be intensified (pension systems, etc.).

Degrowth Policy

If degrowth is a necessary and unavoidable consequence of ambitious environmental sustainable development goals, this has consequences for economic policy. Growth policy, that is, growth stimulating measures are obsolete and have to be replaced by a degrowth policy. Such a policy has not yet been formulated and tested. There is some experience with reducing GDP growth rates in a short-term business cycle context, for example, by increasing taxes and reducing government spending. But a systematic policy to control and to slow down economic expansion seemed to be irrational so far. Although the diagnosis of “uneconomic growth” has been formulated already years ago (Daly 1996), no policy concepts are available. Is it possible to control and to manage macroeconomic growth rates? How to end an almost 100 year

phase of economic growth (soft landing)? Is growth “feasible,” can it be “designed” (Victor 2008; Jackson 2009) or is immanent “systems dynamics” dominating (Randers 2012)? Degrowth is not just a little technical change of a few percentage points, for example, instead of plus 2% p.a. in the past to minus 1% in the future.

For economics as a discipline, this is the end of the growth paradigm, which has dominated economics and all fields of policy on a global scale after WW II (Olson 1973; Schmelzer 2016). In fact, the challenge is to formulate a new paradigm for the postgrowth era (see ► “Postgrowth”). Economic theory could start by replacing “growth” by the more open concept of (economic) “development” – as outlined by Schumpeter (1911). Core idea is economic development as an open decentralized search process without growth orientation but emphasizing permanent, sometimes disruptive change and transition processes which could be cumulative and destructive or rather smooth (by design). To this core, the environmental limitations have to be added to create a new paradigm of sustainable development. Research on degrowth and on the postgrowth paradigm is of increasing importance. But it is difficult and time-consuming to replace an established paradigm (Kuhn 1962).

For the reorientation of economic policy after the growth era, two different building blocks are needed:

1. A long-term vision to replace the promise of the growth paradigm of a better future by producing more goods and services. The farewell to the wealth promise as we knew it “more, bigger, faster” is a cultural revolution. As incomes will decline, additional wealth and well-being has to come from different sources, pursuit of happiness redirected: labor conditions, leisure time, fairness, inclusion, participation, etc. This is no less than a cultural revolution (Illich 1973). For some ideas on the pursuit of happiness in the postgrowth society, see entries on ► “Postgrowth” and on ► “Sufficiency”.
2. A medium-term concept for the transition process over the next two decades, the “Great

Transformation” (Polanyi 1944; WBGU 2011). How to initiate and to design a phase of declining GDP? The challenge is to slow down in a controlled process without chain reactions (spill-over, overshooting), without triggering a downward spiral and economic crisis. This would endanger social stability and acceptance for any (environmental) sustainability goals.

Degrowth is not for ever but (only) for a transition period until a “sustainable” level is reached and economic development is (again) within “planetary” boundaries. This is a rough description which can be formulated more precisely, for example, for CO₂-emissions (carbon-neutral economy), for biodiversity (zero additional land “consumption”), for material flows (bio-based circular economy). Once the scale of economic activity is compatible with these limits, degrowth converge towards a stationary state with zero-growth of GDP. Under the surface of macro stability, on the meso- and micro-levels, innovation and change will continue. Other measurement tools will be necessary – beyond the System of National Accounts (SNA) and GDP to reflect that this is not the end of progressive human development (e.g., Human Development Index HDI, Gross National Happiness GNH).

A first step in degrowth policy would be to stop all forms of growth policy: Abolish all growth-stimulating measures, for example, in the tax code, revise deregulation, stop unspecific subsidies for R&D. Laws which define growth as goal for government policy have to be abated. Government expenditure has to be restructured, for example, infrastructure investment: no new roads, runways, and terminals – bike lanes and public transportation instead.

Then environmental limitations have to be “translated” systematically into “caps” (maximum tolerable quantities) – from CO₂-emissions to parking lots. The transformation process is characterized by the gradual implementation of such limitations on natural resource consumption, e.g. the disposal of CO₂ in the atmosphere (Stern 2006). As burning of fossil fuels has to end (decarbonization), decisions on the phase-out of

certain processes, products, and industries are necessary. The impact will not spread equally across the economy but will be concentrated in certain industries and regions. Examples are the phase-out of

- (a) Fossil-fuel power plants in Germany by 2038 (Kohleausstieg). This decision has been prepared by an inclusive commission and will be accompanied by structural adaptation measures of about €40 billion (for regions and 20.000 employees).
- (b) Fossil-fuel engine in vehicles: Some countries plan to end admission of new fossil-powered (internal combustion) engines by 2030 (e.g., Netherlands, Norway, Sweden). If these cars are allowed to be driven for ten more years, the mobility sector would be decarbonized by 2040. This has dramatic consequences for one of the dominating industries (automobile industry plus suppliers) in countries like Germany and in specific regions. Half of the jobs could be lost within two decades.

Such transformation processes need careful planning and preparation to make the descent calculable and to prepare for a soft landing. The process is conflict ridden and much depends on the resilience of institutions. People will lose their jobs and some will learn that their qualification is no longer relevant. Therefore, retraining has to be organized and if this is not suitable compensation payments have to be financed. Without transformation planning and transformation funds, resistance will be massive – and in many cases “successful,” that is, delay the transformation process.

A major challenge for degrowth policy is to avoid “overshooting” reaction of the system, that is, a self-feeding crisis (economic tipping point) with huge losses for all (like financial crisis 2008). Traditional crisis intervention mechanisms (monetary and fiscal) might be overburdened with this job. Switching a development path is different from correcting a cyclical economic downturn (recession).

Companies are used to a growth world and have no idea how to thrive in a no-growth

environment – where average entrepreneurial talent might not be enough. What could government do to better prepare companies and managers for the no-growth world? More competition or more co-operation? Higher profits to kindle entrepreneurial spirits? More venture capital for start-ups?

Intragenerational justice under degrowth conditions means more redistribution of incomes and wealth. As vulnerable groups (low-income households) have to be protected from decline of income, higher income groups will have to pay more taxes. How will the privileged react? Do the lucky ones in the lottery of life understand their responsibility and are they willing to share (more) with the less privileged? As conflict potential increases, investment in social capital (inclusion, participation, dialogue, and conflict resolution mechanisms) is vital and required today. The better prepared it is, the less painful will be the birth of a postgrowth society.

Cross-References

- [Postgrowth](#)
- [Rebound Effects of Eco-efficiency](#)
- [Sufficiency](#)

References

- Boulding, K. E. (1966). The economics of the coming spaceship earth. In H. Jarrett (Ed.), *Environmental quality in a growing economy* (pp. 3–14). Baltimore: Johns Hopkins Press.
- Daly, H. E. (1996). *Beyond growth: The economics of sustainable development*. Boston: Beacon Press.
- Gordon, R. J. (2016). *Rise and fall of American growth: The U.S. standard of living since the Civil War*. Princeton/Oxford: Princeton University Press.
- Illich, I. (1973). *Tools of conviviality*. New York: Harper and Row.
- Jackson, T. (2009). *Prosperity without growth: Economics for a finite planet*. London: Earthscan.
- Jackson, T., & Victor, P. A. (2019). Unraveling the claims for (and against) green growth. *Science*, 366, 950–952.
- Jacobs, M. (2013). Green growth. In R. Falkner (Ed.), *The handbook of global climate and environmental policy* (pp. 197–214). Chichester etc.: Wiley-Blackwell.
- Keynes, J. M. (1930). Economic possibilities for our grandchildren. In *Essays in persuasion* (pp. 358–373). New York: W. W. Norton.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: Chicago University Press.
- Kurz, R. (2014). Green growth and sustainable development. In R. Moczadlo et al. (Eds.), *Regional and international competition – A challenge for companies and countries* (pp. 11–20). Pforzheim: Pforzheim University.
- Kurz, R. (2019). Post-growth perspectives: Sustainable development based on efficiency and on sufficiency. *Public Sector Economics*, 43(4), 401–422. <https://doi.org/10.3326/pse.43.4.4>.
- Latouche, S. (2010). *Farewell to growth*. Cambridge, UK: Polity Press.
- Meadows, D., et al. (1972). *The limits to growth. Report to the club of Rome*. New York: Universe Books.
- Mill, J. S. (1848). *Principles of political economy with some of their applications to social philosophy*. London: Longmans.
- OECD. (2011). *Towards green growth*. Paris: OECD.
- Olson, M. (1973). Introduction. The no-growth society. *Daedalus*, 102(4), 1–13.
- Polanyi, K. (1944). *The great transformation*. New York: Farrar & Rinehart.
- Randers, J. (2012). *2052: A global forecast for the next forty years, launched by the Club of Rome*. White River Junction: Chelsea Green Publishing.
- Rockström, J., et al. (2009). A safe operating space for humanity. *Nature*, 461, 472–475.
- Schmelzer, M. (2016). *The hegemony of growth: The OECD and the making of the growth paradigm*. Cambridge: Cambridge University Press.
- Schumpeter, J. A. (1911). *Theorie der wirtschaftlichen Entwicklung*. Berlin: Duncker & Humblot. Engl.: *Theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Stern, N. (2006). *The economics of climate change (Stern Review)*. London: Grantham Institute.
- Stiglitz, J. E., Sen, A., & Fitoussi, J.-P. (2009). *Mis-measuring our lives. Why GDP doesn't add up. Report by the commission on the measurement of economic performance and social progress*. New York/London: The New Press.
- Summers, L. (2016). The age of secular stagnation: What it is and what to do about it. *Foreign Affairs*, 95(2), 2–9.
- Victor, P. (2008). *Managing without growth. Slower by design, not disaster*. Cheltenham: Edward Elgar.
- WBGU German Advisory Council on Global Change. (2011). *World in transition. A social contract for sustainability*. Berlin: WBGU.
- WCED World Commission on Environment and Development. (1987). *Our common future*. New York: Oxford University Press.
- Weizsäcker, E. U. v., Lovins, A. B., & Lovins, L. H. (1997). *Factor four: Doubling wealth, halving resource use*. London/Sterling: Earthscan.
- Weizsäcker, E. U. v., et al. (2009). Factor five. Transforming the global economy through 80% improvements in resource productivity. In *A report to the club of Rome*. London/Sterling: Earthscan.

De-growth

- [Postgrowth](#)

Deliberation

- [Phronesis](#)

Delinking

- [Degrowth](#)
- [Postgrowth](#)
- [Rebound Effects of Eco-efficiency](#)

Demand-Side Management (DSM)

- [Energy Demand Management](#)

Demand-Side Response

- [Energy Demand Management](#)

Deming 14 Points Model

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What we need is cooperation and transformation to
a new style of management. – W. Edwards Deming

Synonyms

[Deming Management Method](#); [System of Pro-
found Knowledge \(SoPK\)](#)

Description

Deming 14 Points for management (Deming 1986) are 14 imperatives that Deming synthesized from his international consulting and teaching career spanning nearly four decades. According to Dr. W. Edwards Deming, these interrelated 14 Points work together to illustrate how the mechanistic style of management can be transformed to help everybody involved in the organization – employees, management, suppliers, and customers – to achieve long-term win. Deming 14 Points Model may also be used as “Deming Management Method” (Anderson et al. 1994), and they formed the core of the System of Profound Knowledge “SoPK” (Deming 1994).

Introduction

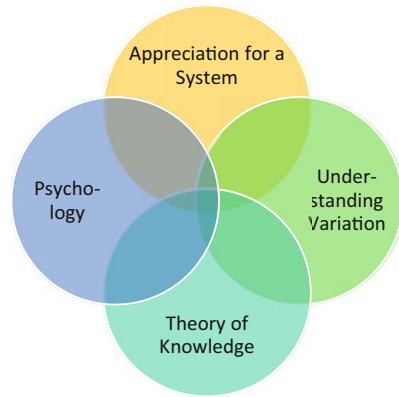
Deming 14 Points Model was grounded in Dr. Deming’s teaching of mathematics, statistics, and statistical quality control (SPC) methods (Shewhart 1931, 1939). His transformational management method was also informed by systems thinking and human psychology. In 1950, Dr. Deming was invited by the Union of Japanese Scientists and Engineers (JUSE) to teach the application of statistics to quality improvement in Japan. Dr. Deming’s teaching and consulting work in the 1950s played an instrumental role in helping Japanese producers revolutionize quality management and penetrate Western markets, which earned him global recognition as one of the top quality management gurus. Dr. Deming’s management philosophy and teaching were discovered by American manufacturing and service organizations in the 1980s when they faced stiff competition from Japanese products excelling in both quality and price. Established in 1951, the Deming Prize is an annual award given to both individuals for their contributions to the field of Total Quality Management (TQM) and businesses that have successfully implemented TQM (JUSE 2019).

Deming 14 Points Model and System of Profound Knowledge

Deming 14 Points are (Deming 1994):

1. Create constancy of purpose toward improvement.
2. Adopt the new philosophy.
3. Cease dependence on mass inspection.
4. End the practice of awarding business on the basis of price tag alone.
5. Improve constantly and forever.
6. Institute training on the job.
7. Institute leadership.
8. Drive out fear.
9. Break down barriers between departments.
10. Eliminate slogans, exhortations, and targets for the workforce.
11. Eliminate numerical quotas.
12. Remove barriers to pride in workmanship.
13. Encourage education and self-improvement.
14. Put everybody in the company to work to accomplish the transformation.

Deming elaborated these 14 Points as principles for transformation of Western Management in Chap. 2 of his book *Out of the Crisis* (Deming 1986, pp. 18–96). Deming's aim of proposing this new method of management is to halt the decline of American industry at the time and turn it upward. To this end, the Deming 14 Points Model provides insight into how things work, how they can be evaluated, and how they can be transformed. Some of the points focus on specific practice – for example, #4 End the practice of awarding business on the basis of price tag alone and #11 Eliminate numerical quotas. Other points focus on organizational structure design – for example, #9 Break down barriers between departments. It is important to note that no point stands alone. Effective implementation of the 14 Points *together* can lead to better thinking, extraordinary results, and win for everyone by stimulating different thinking, improving innovation, and enhancing life. Deming 14 Points were later integrated into the System of Profound Knowledge (SoPK) (Deming et al. 1992) which



Deming 14 Points Model, Fig. 1 Four interrelated areas of the Deming 14 Points Model (Deming 1994)

consists of four interrelated areas as illustrated in Fig. 1 (graph developed by the author).

Appreciation for a System

Deming defined system as “a network of interdependent components that work together to try to accomplish the aim of the system” (Deming 1994, p. 50). So the first thing to understand is the aim of the system. For businesses, the aim is to become competitive and to stay in business and to provide jobs by improving product and service. Deming compelled the management to awaken to this challenge and lead changes at the system level. To do so, the management must build understanding of the components of the production system, avoid the mistake of optimizing individual sub-components, and more importantly appreciate the interrelationships among the components. Cooperation is the key to achieving the aim of the organization. Therefore, “resolution of conflicts, and removal of barriers to cooperation, are responsibilities of management” (Deming 1994, p. 64).

Reducing Variation

All processes exhibit variation. Reducing variation can lead to improvement.

Used properly, statistical methods (Deming 1975) can help us understand variations in their context. There are two major types of variations. *Common cause variation* is random variation that is inherent to a stable system. Examples of

common cause inputs include people, equipment, knowledge/training environment, processes [and improvement], work policies, governance, and oversight performance management interactions/departments. *Special cause variation* is variation whose source is not inherent to a normal/stable system, but local or “fleeting events.”

According to resources published by the Deming Institute (<https://deming.org/>), common cause variation is distinguished from special cause variation by the following characteristics:

- Each factor contributes a small amount to the total variation.
- No one cause contributes significantly more than any other cause.
- All data are relevant for generating improvement.
- Asking “what happened?” is a low-yield and costly strategy.

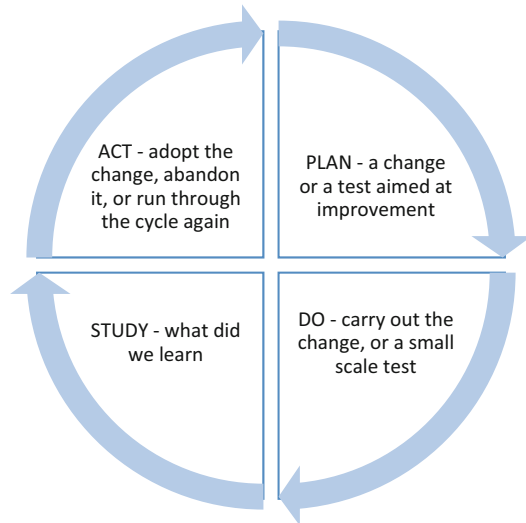
Special cause variation is distinguished by the following characteristics:

- Special cause has a more pronounced effect than any single common cause.
- Can be identified and is generally not a normal part of the work.
- Management asking “what happened” is a useful strategy.

Theory of Knowledge

Deming maintained that knowledge is built on theory rather than experience alone. A theory is not without the risk of being wrong. However, knowledge can develop through systematic revision and extension of theory based on comparison of prediction with observation. This knowledge building process can be implemented through the Plan-Do-Study-Act (PDSA) cycle (Deming 1986) (illustrated in author-developed Fig. 2).

A PDSA cycle demonstrates how theory can be constructed from experience. It is also a cyclical approach to help ensure constant product and process quality improvement. This approach often relies on statistical process control (SPC) to monitor current process. Furthermore, workers



Deming 14 Points Model, Fig. 2 PDSA cycle applies a scientific method to test and carry out improvements (Deming 1986)

are trained and motivated to assess problems and improve process or product.

A core instrument in the theory of knowledge is operational definition. “An operational definition puts communicable meaning into a concept. Adjectives like good, reliable, uniform, round, tired, safe, unsafe, unemployed have no communicable meaning until they are expressed in operational terms of sampling, test, and criterion” (Deming 1986, p. 276). Operational definitions enable the transaction of business by allowing common understanding within the organization as well as with suppliers and customers. They ensure the clarity in communication to spread knowledge of how things are done and how changes can be made.

Psychology

Deming’s philosophy of management fully embraces the belief that people are born with a natural inclination to learn and experience joy in work. It is the job of the management to nurture the positive innate attributes of people. Management must give employees the right tools, knowledge (e.g., training and education), and systems to be able to succeed. Creating progress in meaningful work is central to fostering a work

environment where people take pride in their work. To this end, PDSA serves as a practical tool which empowers people to create meaning and progress in their work.

Management also needs to understand that people differ from one another and manage the system accordingly. It is important to recognize what motivates people. Intrinsic motivation is powerful because we are all working toward things that are much bigger than the task on hand. Deming advised the management to drive out fear because setbacks have a stronger influence on people than does progress.

Summary

Deming 14 Points are a set of clear instructions to the management on how to achieve long-term success for everyone. Drawing on his lifelong research and practice, Deming developed a theory of management that rendered the mechanistic style of management obsolete. The core principles where the 14 Points originate from – appreciation of a system, understanding variation, a theory of knowledge, and psychology – remain highly relevant as the human race transforms the current way of doing things and cooperates in addressing the “wicked problems” (Buchanan 1992) such as climate change, biodiversity loss, and inequalities.

References

- Anderson, J. C., Rungtusanatham, M., & Schroeder, R. G. (1994). A theory of quality management underlying the Deming management method. *Academy of Management Review*, 19(3), 472–509.
- Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 5–21.
- Deming, W. E. (1975). On some statistical aids toward economic production. *Interfaces*, 5, 1–15.
- Deming, W. E. (1986). *Out of the crisis*. Cambridge, MA: MIT, Center for Advanced Educational Services.
- Deming, W. E. (1994). *The new economics for industry, government, education* (2nd ed.). Cambridge, MA: MIT, Center for Advanced Educational Services.
- Deming, W. E., Lloyd, D., & Crawford-Mason, C. (1992). *Understanding profound knowledge*. Chicago: Films Incorporated.

JUSE (Union of Japanese Scientists and Engineers). (2019). Deming Prize. http://www.juse.or.jp/deming_en/award/1026.html. Accessed 11 July 2019.

Shewhart, W. A. (1931). *Economic control of quality of manufactured product*. Milwaukee: ASQ Quality Press.

Shewhart, W. A. (1939). *Statistical method from the viewpoint of quality control*. Washington, DC: The Graduate School, Department of Agriculture, George Washington University.

Deming Management Method

► Deming 14 Points Model

Democratic Civil Society

► Social Sustainability

Dependent Co-arising

► CSR Butterfly Effect

Desertec

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Definition/Description

The Desertec concept was developed by the Trans-Mediterranean Renewable Energy Cooperation (TREC), a cooperation of scientists and the German section of the *Club of Rome* with the aim to tackle the key challenges of humankind – climate change, a secure energy supply for an increasing population, and water scarcity. Renewable energy mainly produced in the deserts

of North Africa together with renewable energy produced in Europe was supposed to secure the power supply in the EUMENA region (Europe, the Middle East, and North Africa) and to enable the operation of water desalination plants that could ensure the water supply in that area. Details of the concept were presented in a White Book (TREC 2007). In order to implement the concept, the Desertec Foundation was founded as a non-governmental organization in January 2009 followed by the Desertec Industrial Initiative (Dii GmbH) as a company with limited liability in October 2009.

The Concept of Desertec

“Clean Power from Deserts -Within 6 hours the world’s deserts receive more energy from the sun than humankind consumes within a year. This means that sufficient clean power can be generated from the world’s deserts to supply mankind with enough electricity on a sustainable basis. The DESERTEC Concept promotes the large-scale production of solar and wind power in the desert regions of the world, combined with a smart mix of photovoltaics, hydropower, biomass and geothermal energy” (Desertec Foundation n.d.).

The Desertec concept addressed the global challenges of climate change, limited availability of fossil fuels, and water scarcity (TREC 2007). It was intended to create a network that was able to provide electric power produced by renewable energy (see ► “Renewable Energy”) in the EUMENA region, which includes North Africa, the Middle East, and the European Union countries (Tagliapietra 2017).

Climate change was seen as the key challenge of human kind (see also ► “Climate Change”), since “Energy from sun, water from the skies and food produced by plants” are the most important parameters of human life which are determined by the key climate parameters “solar radiation flux density, clouds and precipitation and surface properties (mainly vegetation)” (TREC 2007). In the IPCC report of 2007, a change of climate due to human activities had been observed since 1759, and an increase of the

global temperature by $0.74^{\circ}\text{C} \pm 0.18^{\circ}\text{C}$ between 1906 and 2005 had been measured (IPCC 2007). Without a reduction of greenhouse gas emissions (see ► “Greenhouse Gases”), a further increase of temperature, which was supposed to be much faster than the temperature changes in previous periods, had to be expected.

Therefore, a reduction in the emission of greenhouse gases, especially carbon dioxide emissions by combustion of fossil fuels (see ► “Carbon Emissions”), was seen as mandatory. The limited availability of fossil fuels was also regarded as an issue: the global energy demand had been constantly increasing since 2007 (BP 2019) although the availability of fossil fuels and nuclear fuels like uranium and thorium is limited (BGR 2017) (see ► “Peak Oil”).

Another key issue addressed was the water scarcity especially in the MENA region (GEO 2000). Water scarcity and freshwater pollution were expected to be major emerging issues (see ► “Water”). In 2025 water scarcity of less than $1000\text{ m}^3/\text{person}/\text{year}$ was expected among other countries for Morocco, Algeria, Tunisia, Libya, and Egypt as well as the countries addressed in the MENA region (GEO 2000). Therefore desalination plants for seawater were proposed. The estimated energy consumption was around 4 kWh of electric power per cubic meter freshwater (TREC 2007).

Countries of the Middle East and North African region (MENA) region were supposed to cooperate with the European Union (EU27) in order to provide electric power for a renewable energy supply (see ► “Energy-renewable”).

Concentrated solar power plants (CSP) were regarded as the key element in power supply (DLR 2006) (see ► “Sustainability and Solar Energy”). It was suggested to concentrate direct solar radiation via collectors, generating high temperatures, and provide heat for efficient steam production. The generated steam could be used in the same way as the steam in conventional steam power plants which are powered by fossil or nuclear fuels. Since the storage of heat is technically feasible, this type of power plant could produce power on demand and during nighttime (Quaschnig 2016; TREC 2007). If longer

periods with not sufficient sunshine were expected, concentrated solar power plants could be combined with other heat sources such as fossil fuels or biofuels and be operated as hybrid plant (DLR 2006). One example of a hybrid installation of concentrated solar power with natural gas is the Ivanpah power plant in California which started operation in 2014 (NREL [n.d.](#)).

Concentrated solar power plants also “can provide steam for absorption chillers, industrial process heat or thermal seawater desalination” (DLR 2006). The feasibility of such concentrated solar power plants was also shown in another study (Trieb et al. 2009).

Other renewable energy sources proposed for the project were wind in the coastal regions of the EUMENA region with an estimated capacity of 2000 TWh/y, geothermal energy with an estimated power output of 4000 TWh/y, hydropower, and power from biomass using municipal and agricultural organic waste and wood (DLR 2006).

Due to geographic conditions, power plants using solar power were mainly proposed for the MENA region and southern Europe (mostly south of Spain and Italy); hydropower was proposed for hilly regions in Morocco, Spain, Scandinavia, and the Alps; wind for the coastal areas in Morocco, Spain, United Kingdom, France, and Poland, and geothermal energy for Italy and Iceland (TREC 2003).

To distribute the electric power derived from renewable energy, high-voltage direct current lines were proposed, since this system has lower transmission losses than high-voltage alternating current lines and enables the control of distribution and the direction of the current. The power supply to Europe should be derived by sea cables between Morocco and Spain, Tunisia, and Italy and a land power line through the Middle East. The installation of a “super-grid” was seen as a challenge, but its feasibility was asserted by DLR (DLR 2006).

Desertec Foundation

Desertec was first developed as a concept by the Trans-Mediterranean Renewable Energy

Cooperation (TREC) (Tagliapietra 2017). TREC was founded in 2003 by an initiative of the *German association of the Club of Rome*, the Hamburg Climate Protection Foundation, and the National Energy Research Center of Jordan (NERC) (e5 – European Business Council for Sustainable Energy e.V. [n.d.](#)). It formed a network of scientists, experts, and politicians, who were active in the field of renewable energy. The aim was the development of sustainable and renewable energy supply for Europe making optimal use of the locational advantage of the deserts in North Africa especially for solar thermal energy (Holznagel and Schumacher 2009).

The Desertec Foundation was founded as a nonprofit foundation on January 20, 2009, by scientists, politicians, and economists supported by Prince El Hassan bin Talal from Jordan and the *German Association of the Club of Rome* (Desertec Foundation [n.d.](#)). Target was the implementation of the Desertec concept for electric power supply basing on renewable energy in North Africa, Middle East, and Europe. The benefits of the project and the high energy potential of the desert regions should be communicated, and a framework for global transition to renewable energy should be established. Further knowledge transfer and scientific cooperation should be supported, and cooperation with the private sector should be promoted (Desertec Foundation [n.d.](#)).

Desertec Industrial Initiative Dii GmbH

In order to promote the cooperation with industry, the Desertec Industrial Initiative (Dii GmbH) with a headquarters in Munich was founded as company with limited liability in October 2009. Its aim was to support the implementation of the Desertec concept in the EUMENA region. Among others the founding members were ABB, Deutsche Bank, RWE, and First Solar. In 2012 Dii GmbH consisted of 21 shareholders, including technical conglomerate companies, energy companies, and banks. Another 36 companies were associated partners (Dii GmbH 2012). The objectives of Dii GmbH were described as follows:

- *Create a favourable regulatory environment*
- *Enable concrete reference projects*
- *Develop a Rollout Plan by 2050*

(Source Dii GmbH 2012)

Dii GmbH did not directly invest in renewable power projects but acted as a facilitator of power projects. It supported several renewable energy projects in the MENA region, but the focus was mainly on the electric power supply of the region (Calderbank 2013).

A drawback was the refusal of Spain to sign up an agreement to construct power interconnector to Morocco (Deign 2013). Increasing shares of renewable energy in the European markets started to be an issue (Calderbank 2013).

In 2013 the Desertec Foundation withdrew from the contract with Dii GmbH due to differences in the consortium concerning the question, whether the focus should be on power supply in Europe or the in the MENA region (Deign 2013; Mathiesen 2013). In 2014, 14 of 17 companies withdraw from the consortium. By the end of 2014, Dii GmbH was closed. Only three of its partners – RWE (Germany), ACWA Power (Saudi Arabia), and State Grid (China) – continued their cooperation in form of a consultant firm with its head office in Dubai (Balser 2014).

Outcome

Due to the end of the cooperation between the Desertec Foundation and the Dii GmbH and the withdrawal of many important stakeholders from Dii, the Desertec project was seen as a failure (Balser 2014).

The sustainability of the project was already disputed in 2011 (Klawitter and Schinke 2011) due to the focus on centrally regulated large-scale imports of renewable energy from the MENA region, a region with increasing demand for electricity (Zhang et al. 2017). Another issue was the energy security in the European states, if they relied on electricity imports from North Africa and the Middle East.

Interest in the project faded with increasing renewable energy production in Europe

(Calderbank 2013) and the Arabian Spring, which started in 2011. In 2014 the Desertec concept was abandoned. Nevertheless Desertec contributed to the setup of big CSP installations in Northern Africa. In 2016, for example, the first phase of the biggest CSP plant worldwide with an expected capacity of 500 MW was launched in Ouarzazate, Morocco (World Bank 2016). Parabolic troughs were used for Noor Ouarzazate I and Noor Ouarzazate II. In the third installation, Noor Ouarzazate III, heliostats have been used to concentrate the solar light on a tower. Noor Ouarzazate III has a gross production capacity of 150 MW and a storage capacity for thermal heat of 7.5 h of production (SolarPaces 2018).

In sum non-hydropower renewable power generation in the MENA region has increased tenfold and reached a production of almost 23 TWh (Zhang et al. 2017).

Summary

Desertec was a vision to create a network that provides electric power produced by renewable energy through the EU/MENA region, which is North Africa, the Middle East, and European Union countries (Tagliapietra 2017). The target was to solve the big challenges of human kind: climate protection, energy security, and freshwater supply.

The basic idea was that the world's deserts receive more energy from the sun within 6 h than humans consume in a year. Even if only a small part of this energy could be transformed into useful energy, e. g., electric power, the amount of energy which can be harvested in deserts was expected to be high enough to cover a significant share of the power demand of the whole EU/MENA region.

Further the water scarcity of the MENA region was addressed, and the idea was developed to build desalination plants which should be powered by renewable energy, especially concentrated solar thermal power plants in order to produce freshwater. This type of renewable power plant was suggested since there is a high solar radiation in the deserts of North Africa during

daytime, and power production during nighttime is also feasible when storing the heat (Quaschnig 2016). The generated power should be distributed to the EUMENA region via high-voltage direct current lines. It was proofed to be possible to cover high shares of the increasing power demand in the EUMENA region through renewable energy by 2050 (DLR 2006). For the implementation of this vision, the Desertec Foundation and Desertec Industrial Initiative (Dii GmbH) – a company with limited liability – were founded in 2009 with the target to develop guidelines to invest and finance the transnational power supply by 2050, providing studies of feasibility and showing feasibility in reference projects. Due to the lack of progress and conflicts about the main aim, the Desertec Foundation and the Dii GmbH stopped their cooperation in 2013 (Deign 2013; Mathiesen 2013). In 2014 the consortium of Dii GmbH was dissolved and transferred into a consulting firm (Balser 2014).

Cross-References

- Carbon Emissions
- Climate Change
- Energy-Renewable
- Greenhouse Gases
- Sustainability and Solar Energy
- Water

References

- Balser. (2014). Wüstenstrom-Projekt Desertec zerfällt in SZ. <https://www.sueddeutsche.de/wirtschaft/wuestenstrom-projekt-endgueltiges-aus-fuer-desertec-1.2172778>. Accessed 20 Feb 2019.
- BGR. (2017). BGR Energiestudie 2017 – Daten und Entwicklungen der deutschen und globalen Energieversorgung (21) – 184 8 Hannover.
- British Petrol (BP). (2019). Statistical review of world energy. <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>. Accessed 21 Feb 2019.
- Calderbank, S. (2013). Desertec abandons Sahara solar power export dream. *Euractiv*. <https://www.euractiv.com/section/trade-society/news/desertec-abandons-sahara-solar-power-export-dream/>. Accessed 21 Feb 2019.
- Deign, J. (2013). Desertec and Dii: The end of the affair. <http://analysis.newenergyupdate.com/csp-today/markets/desertec-and-dii-end-affair>. Accessed 20 Feb 2019.
- Desertec Foundation. (n.d.). <http://www.desertec.org/the-concept>. Accessed 20 Feb 2019.
- Deutsches Zentrum für Luft- und Raumfahrt, DLR. (2006). *Trans-Mediterranean interconnection for concentrating solar power final*. Report by German Aerospace Center (DLR), Institute of Technical Thermodynamics Section Systems Analysis and Technology Assessment, p. 29.
- Dii GmbH. (2012). Desert Power 2050: PV in a sustainable power system for EUMENA. http://www.desertec-uk.org.uk/reports/DII/DPP_2050_Study.pdf. Accessed 1 Nov 2019.
- e5 – European Business Council for Sustainable Energy e. V. (n.d.). Trans-Mediterranean Renewable Energy Cooperation (TREC). <https://www.e5.org/cooperations-spin-offs/trec/>. Accessed 26 Feb 2019.
- GEO 2000. (1999). *Global environmental outlook* (R. Clarke Ed.). UNEP. <https://www.unenvironment.org/resources/global-environment-outlook-2000>. Accessed 19 Feb 2019.
- Ho. (2014). Dii-Erfolg: “Schon 3 GW Erneuerbare in MENA”. *Solarify*. <https://www.solarify.eu/2014/12/06/040-dii-erfolg-schon-3-gw-ee-in-mena/>. Accessed 20 Feb 2019.
- Holznagel, B., & Schumacher, P. (2009). Wüstenstrom aus der Sahara für die finnische Sauna. *Natur und Recht*, 31, 164–170.
- IPCC. (2007). Summary for policy makers. In S. Solomon, D. Quin, M. Manning, Z. Chen, M. Marquis, K. B. Averyt, M. Tignor, & H. L. Miller (Eds.), *Climate change 2007, the physical science basis, contribution of working group I to the fourth assessment report of intergovernmental panel on climate change*. Cambridge, UK/New York: Cambridge University Press.
- Klawitter, J., & Schinke, B. (2011). *Desertec and human development at the local level in the MENA-region, a human rights-based and sustainable livelihoods analysis*. Stuttgart: Diakonisches Werk der EKD e.V..
- Mathiesen, K. (2013). Desert solar power partners Desertec Foundation and Dii split up in. *The Guardian*. <https://www.theguardian.com/environment/2013/jul/05/renewable-energy-desertec-foundation-dii>
- NREL 40. (n.d.). Ivanpah solar electric generating system. https://www.nrel.gov/csp/solarpaces/project_detail.cfm/projectID=62. Accessed 15 Dec 17.
- Quaschnig, V. (2016). *Concentrated solar power in understanding renewable energy systems* (2nd ed.). New York: Routledge.
- SolarPaces. (2018). Final testing for 150 MW Noor III Tower CSP. <https://www.solarpaces.org/final-testing-for-150-mw-noor-iii-tower-csp/>. Accessed 22 Feb 2019.
- Tagliapietra, S. (2017). The southern and eastern Mediterranean energy landscape. In *Energy relations in the*

Euro-Mediterranean a political economy perspective (pp. 43–100). New York: Springer.

Trans-Mediterranean Renewable Energy Cooperation (TREC). (2003). “TREC” for development, climate stabilisation and good neighbourhood. <https://www.dlr.de/tt/Portaldata/41/Resources/dokumente/institut/system/publications/Ammanpaper-small.pdf>. Accessed 19 Feb 2019.

Trans-Mediterranean Renewable Energy Cooperation (TREC). (2007). *Clean power from deserts – The DESERTEC concept for energy, water and climate security – white book*. In G. Knies, U. Möller, M. Straub (Eds.), Club of Rome, Hamburg. <http://www.terraviva.com/trec-whitepaper.pdf>. Accessed 1 Nov 2019.

Trieb, F., Schillings, C., O’Sullivan, M., Pregger, T., & Hoyer-Klick, C. (2009, September). *Global potential of concentrating solar power*. SolarPaces Conference, Berlin.

World Bank. (2016). World’s largest concentrated solar plant opened in Morocco. <http://www.worldbank.org/en/news/press-release/2016/02/04/worlds-largest-concentrated-solar-plant-opened-in-morocco>. Accessed 21 Feb 2018.

Zhang, X.-P., Ou, M., Song, Y., & Li, X. (2017). Review of Middle East energy interconnection development. *Journal of Modern Power Systems and Clean Energy*, 5, 917. <https://doi.org/10.1007/s40565-017-0335-7>.

Desertification

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Synonyms

[Land degradation](#); [Soil consumption](#)

Definition

Desertification is defined as the process of loss of chemical, physical, and biological capacities of the soil that degrade it to the point of making it arid and desert, with the disappearance of ecosystem services. Soil is a nonrenewable resource as approximately 2000 years are considered necessary for the regeneration of degraded soil, to the point of becoming inhospitable to life (Scholes and Noble 2001). Desertification is the “reduction

or destruction of the biological potential of the land that can lead to desert conditions” (UNEP 1977). This process is natural, both due to the erosive action of water and wind and due to human activity that through unsustainable practices, including agricultural ones, excessive grazing, deforestation, and land-use change, degrade the land by exploiting its natural properties to the point of impossibility of reuse. The ongoing climate changes, with the growth of temperatures and the decrease in rainfall, accelerate and increase the risk that more and more territories on the planet will soon see their neighboring deserts advance and more and more territories begin a slow but constant process of soil degradation.

Introduction

Especially in the last century, the desertification process has been affected by its rapid acceleration. After the Nairobi Convention in 1977 in Paris, the United Nations Convention to Combat Desertification (UNCCD) of 1994 was born out of concern about the evident ineffectiveness of the first actions put in place (Bologna 1998). The Paris Convention defined desertification as “land degradation in arid, semi-arid and dry sub-humid areas, attributable to various causes, including climatic variations and human activities” (UNCCD art.1.a) and introduced climate change as also the cause for the first time.

Land degradation is “the reduction or loss of ability to produce or maintain renewable natural resources due to external factors acting on the soil” (Ferrara and Ferruggia 2007). Decreased rainfall, drought, and increased temperatures but also microorganisms that, thanks to these factors, make their appearance in certain territories can lead to a greater risk of natural erosion. Large plantations and intensive agriculture, irrigation, large animal farms, urbanization, economic activities, related deforestation, exploitation, waterproofing, and destruction of the soil are among the causes of degradation and risk of erosion due to human beings.

For this reason, the UNCCD aims at sustainable development and hopes that national action plans (NAPs) will be implemented both to reduce soil degradation caused by climate change and to control related anthropogenic activities.

Desertification, the UNCCD Law Enforcement Actions

Desertification, one of the possible effects of land degradation, brings with it an environmental problem but also a social and economic one, especially in arid and semiarid territories (especially in the territories of the African continent). So all the participants in the 1992 Rio de Janeiro Summit, an important moment for the adoption of the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change, decided that the time had come to tackle the issue of advancement of deserts and soil degradation.

In 1994 in Paris, some criteria were decided that each territory should follow: it was necessary that the local populations could freely decide to act in contrast to land degradation if they had the tools and that they would treasure the mistakes of the past. A step forward was also needed, in some territories and on land and property law. It was necessary to integrate these planned actions within the national program of each country so that it could move toward sustainable development and that there was cooperation between countries that had encountered the same problem. The Paris Convention was signed by 170 countries and is considered one of the three Rio Conventions along with the two mentioned above.

In recent decades, unfortunately, the actions to combat climate change and desertification have not been sufficient to tackle the problem decisively. However, many actions have been taken to limit the advance of the deserts. Among these, the most important is the decision to create in 2007 the “Great Green Wall” in Africa to contain the great Sahara desert. This green wall, which is expected to cover 8000 km, is intended not only to combat climate change in the area but also to

improve the difficult living conditions of the populations living around the great desert and in the Sahel area.

The UNCCD in 2007 adopted a Strategic Plan 2008–2018 to create a strong collaboration at the institutional level for the fight against desertification and its effects, especially in countries most in difficulty in the face of advancing drought. The UN then adopted, in 2015, the 2030 Agenda to achieve sustainable development 2030. This Agenda, made up of 17 Sustainable Development Goals (SDGs) and 169 targets, provides for objective 15 “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.” The related third target of SDG 15 (15.3) places the fight against desertification at the center.

Subsequently, in 2017, the UNCCD, to follow up on this target, adopts the “2018–2030 Strategic Framework” (UNCCD 2017a) to achieve the “Land Degradation Neutrality” by 2030 defined as “A state whereby the amount and quality of land resources, necessary to support ecosystem functions and services and enhance food security, remains stable or increases within specified temporal and spatial scales and ecosystems” (UNCCD 2017b). In COP12 in Ankara, a “Scientific Conceptual Framework for Land Degradation Neutrality” was proposed to guide for achieving this goal. This proposal was approved in the subsequent COP13.

The Factors of Land Degradation

Within the Communication “Towards a Thematic Strategy for Soil Protection,” COM (2002) 179, the European Commission has identified eight factors that affect land degradation and lead, as an extreme consequence, to desertification:

- Erosion
- Decrease of organic matter
- Soil contamination: local or widespread

- Soil waterproofing
- Soil compaction
- Decrease in soil biodiversity
- Salinization
- Floods and landslides

The Great Deserts

There are three different types of deserts on Earth: hot, cold, or polar deserts.

Hot Deserts

Hot deserts are characterized by constantly high temperatures. The affected areas are subject to desertification due to human activities and climate change.

Sahara Desert

The Sahara desert covers an area of over 8,000,000 km², thus occupying an area equal to 27% of the entire African continent. This important desert falls within the borders of several states: Algeria, Chad, Egypt, Libya, Mali, Niger, Mauritania, Morocco, Sudan, and Tunisia. In the Sahara desert, 50–100 mm of rain/year falls, depending on the area, and summer and winter temperatures are between 45 °C and 50 °C in summer and 11 °C and 26 °C in winter. The high temperatures, however, also touched the area above 55 °C (Goudie 2002). The temperature fluctuations are very strong between day and night. The Sahara, like all deserts, expands during the winter season and then contracts during the summer season. Due to its considerable extension, it has several “eco-regions” within it which have different climatic, flora, and fauna characteristics, so that, in addition to the areas where the flora is completely absent, there are areas of savannah and Mediterranean steppe. The sandstorms of the Sahara desert are also known for their ability to cross the Mediterranean Sea, carried by the wind to northern Europe. Being the Sahara desert, a “hot” desert, due to human activities and ongoing climate change, it is expanding. According to some studies of the University of Maryland, carried out on its size, it has been found that the desert

has increased by 10% since 1920 (Thomas and Nigam 2018). The semiarid belt of the Sahel, to date, is more subject to erosion and seriously threatens the populations that inhabit the neighboring territories and their economies based mainly on agriculture. Lake Chad, which has lost around 90% of its basin in the past 50 years, is witness to this serious situation.

Kalahari

The Kalahari desert covers an area of approximately 930,000 km² (Logan and Silberbauer 2019) and is characterized by its red sand. Its extension sees it as part of the territories of Angola, Botswana, Namibia, and South Africa. Summer temperatures record variations from 21 °C to 46 °C, while in winter temperatures drop to −12 °C at night. The flora changes according to the desert area. To the south, the desert has a flora consisting of a few trees and dense scattered shrubs; in the center instead, it presents several species of acacia as well as shrubs and herbs. In the north, on the other hand, there is luxuriant vegetation, deciduous forests, and palm trees. The famous baobab tree lives in this desert. The flora that populates the Kalahari desert is composed in the south by various species of antelopes, wildebeests, and gazelles, while in the north (as for the flora) the fauna is much richer. There are elephants, giraffes, buffaloes, zebras, antelopes, and warthogs but also lions, leopards, and hyenas as well as other small rodents. From the studies carried out on groundwater, it has been possible to reconstruct the temperatures from the Pleistocene to today, and it has been found that the current temperatures are about 5.2 °C/1.5 °C higher than in the past (Kulongoski et al. 2004).

Rub 'al-Khali

The Rub 'al-Khali desert, the “empty quarter,” as the tradition of the populations of the Arabian Peninsula defines it (after the first three “empty” that tradition wants to be heaven, Earth, and sea), covering an area of 650,000 km², is the largest sand desert in the world and is home to important oil reserves. In fact, in its territory, there is the well of Ghawar, the largest in the world.

Its considerable extension places it within the national borders of Saudi Arabia, Jordan, Iraq, Kuwait, Qatar, the United Arab Emirates, Oman, and Yemen. The “star dunes” that form in this desert reach in some cases 250 m in height and are one of its most attractive peculiarities. The summer and winter temperatures that occur in this desert are between 47 °C and 51 °C in July and August and the minimum 12 °C in January and February. Precipitation does not usually exceed 35 mm/year. The fauna consists mainly of arachnids and rodents. The flora, where present, mainly consists of very sparse shrubs. The ongoing climate changes show a constant trend of the increase in temperatures (0.51 °C/decade in the wet season and 0.72 °C/decade in the dry season) and a reduction in rainfall in the interior and an increase in the coastal one (Almazroui et al. 2012).

Great Victoria Desert

The Great Victoria Desert covers an area of Australia of approximately 240,000 km². Temperatures are always hot with inverse lows that drop to no more than 18 °C. The rains recorded are not intermittent but between 150 and 230 mm/year (Pell et al. 1999). The flora covers less than 10% of the area and is mostly composed of acacias and desert vegetation; the fauna instead sees several species of reptiles and rodents, as well as mammals, such as the dunnart of the dunes, and different species of birds, including the Australian pheasant. The Great Victoria Desert, together with the other Australian deserts, is currently the subject of great attention due to the ongoing climate change. In 1995, it was estimated that over 42% of Australia's 5 km² was at risk of desertification due to the drought which has also proven to be a real danger to agriculture and ecosystems in recent years. The upsetting fires of 2020 that destroyed about 200,000 hectares of forests, protected areas, and natural parks in Australia highlight the fragility of this country in the face of the problem.

Cold Deserts

Cold deserts are characterized by high temperatures in summer and very cold in winter. These

deserts are subject to desertification due to human activities and climate change.

Gobi Desert

The Gobi desert covers an area of 1,530,000 km² (Heshmati and Squires 2013) and is part of the territories of Mongolia and China. The desert consists mainly of rock rather than sand, and its composition is chalk and halite. The recorded annual temperatures highlight large hikes between summer and winter with temperatures reaching −40 °C in winter and 45 °C in summer. The flora is mainly composed of grasses and small scattered shrubs. The fauna is composed of different species of animals: camels, Mongolian gazelles, and black-tailed gazelles. The presence of the Mongolian wolf is one of the most fearful predators for herbivores. In the Gobi desert, there are numerous rodents and different species of birds including the desert falcon and the highland buzzard. The data collected by the “Envisat” satellite, presented in Milan during the “Living Planet Symposium 2019,” have shown that human activity, from deforestation to sheep farming, is among the causes that are most causing the expansion of this desert causing great concern for local agricultural activities.

Patagonian Desert or Patagonian Desert

The Patagonian desert, or Patagonian desert, covers an area of about 673,000 km² and falls within the territories of Argentina and Chile. The Andes mountain range is the main cause of the dryness of this territory since it creates the so-called rain shadow. Rainfall in the Patagonian desert is less than 200 mm/year in 37% of the region. The average annual temperature varies from the north (15 °C) to the south of the region (3 °C) (Gaitán et al. 2019). The flora consists of shrubs typical of cold deserts, while the fauna sees among its most famous animals the lama, the armadillo, the Patagonian weasel, the puma, and the desert iguana. Studies carried out in this region reveal that the increase in temperatures due to ongoing climate changes, with the relative greater or lesser amount of rain falling annually, will cause an important change within ecosystems,

with a different growth of flora, more shrubs, and fewer types of grass, and a reduction in the biodiversity of the species. The change in the driest area will lead to an increasing dysfunction of the soil nutrient cycle with a significant increase in the risk of erosion. In 2000, the MARS (Spanish acronym for Environmental Monitoring Arid and Semiarid Regions) monitoring system was born, a network that has the task of providing and exchanging useful information between different research teams about the evolution of desertification of the Patagonian territory.

Polar Deserts

The polar deserts are characterized by perennial ice and snow, therefore by very cold temperatures. These deserts are not subject to desertification but are subject to temperature variations caused by human activities and climate change.

Antarctica

Antarctica covers an area surrounding the South Pole of approximately 13,100,000 km². Winter and summer temperatures range from -26°C in December and January to -55°C in July and August. Precipitation: less than 55 mm of water/year falls within the continent, while between 300 and 600 mm/year also falls on the coast depending on the temperatures; if more rigid, we will have less rainfall (the air contains less humidity). The fauna that populates Antarctica is made up of several species of penguins, and the sea is home to several large species of cetaceans. The bird species that populate Antarctica are mostly made up of albatrosses, procellarias, and seagulls. The flora consists mainly of mosses and lichens as well as several species of mushrooms in the coastal area. Animals and plants must be suitable to withstand the extreme temperatures present on this continent. For the preservation of the flora and fauna of Antarctica on December 1, 1959, the Antarctic Treaty was signed, also known as the Washington Treaty which “froze” any possible territorial claim by any of the 12 states that were signatories at the time. In 2019, 54 countries are adhering to the treaty. The ongoing climate changes also put the Arctic desert of Antarctica

in serious danger since the melting of its cap, due to the increase in global temperatures, could cause a sea level rise of about 66 m. It is estimated that 6400 tons of ice was lost in the period between 1992 and 2018, making it 40% responsible for the global rise in the seas (7.2 mm) (Shepherd et al. 2020).

Arctic

The Arctic covers a surface that extends from latitude $66^{\circ} 33' 44''$ north to the North Pole. Unlike Antarctica, it is not a continent but an ocean that also extends to the mainland, thus occupying the territories of many neighboring countries: the United States, Canada, Greenland, Iceland, and Russia. Winter temperatures reach up to -58°C in the winter and in summer it changes from -10°C to 10°C . The fauna of the Arctic is composed of mammals including the polar bear, wolves, foxes, and arctic hares. Species such as seals, walruses, and different types of cetaceans live in the seas. The flora is mainly composed of mosses and lichens but also 400 species of angiosperms and small shrubs. On the Arctic, as there is no treaty similar to that of Washington for Antarctica, the rules of international law are in force, in particular, those of the United Nations Convention on the Law of the Sea signed in 1982. Climate change, from the studies carried out, in the last 40 years has led to a sharp reduction in the extent of this Arctic desert.

Desertification: Human Activities

Deforestation carried out by humans, associated with the wood industry (for burning and construction), the paper industry, intensive agriculture, and the expansion of large farms, is among the most important causes of the creation of the so-called new deserts. The cutting of large forests brings with it a loss of humidity and soil protection; the subsequent intensive exploitation concludes the process of degradation of the organic substance (intended as living material or that has been) which makes it fertile. In this sense, both the “buffer capacity” of the soil, that is, the

ability to neutralize the acidifying substances (pH), and the “carbon cycle” must always be kept in mind.

The soil exploited with mechanization, new technologies (including innovative), and the increasingly search for a “simplification of agroecosystems” always leads to the greater fragility of the territories and the loss of their resilience capacity. The fragility of the soil, deforestation, and the decision to create pastures and livestock or intensive monocultures also creates a loss of both animal and vegetable biodiversities.

The issues of large animal farms for the meat industry, genetically modified organisms between crops, intensive monocultures, patents on seeds, and crops for energy purposes are much discussed today. The latter in particular is the subject of debate as they could, on the one hand, reduce the use of fossil fuels and therefore reduce CO₂ emissions, but, on the other hand, they would certainly produce competition on land use (and consequently economic and social instability) as well as have no guarantee of continuity of supplies (APAT 2008).

The human being with his activities is therefore the cause of the creation of deserts as well as their expansion. The need to advance and have more and more space derives from various needs: from greater production of food to feed a constantly growing world population up to the need to expand large production and urban centers.

The soil dedicated to agriculture is worked and exploited until its progressive loss of fertility. The use of chemical fertilizers and pesticides is also accelerator of its definitive sterility. Excessive irrigation systems also constitute soil salinization factors which are among the main causes of desertification.

Emblematic fishing boats are stranded in the sand of Lake Aral, between Uzbekistan and Kazakhstan, which has now become desert from a basin containing salty waters. From 1960 to 2016, the lake lost 75% of its waters due to human exploitation that diverted the two rivers that flowed into the basin for intensive cotton crops.

Desertification: Ongoing Climate Change

The natural causes that created the oldest deserts on the planet are “the air masses of dynamic anticyclones (i.e., anticyclones like that of the Azores) located in the subtropical belt, which oscillate moving north during the boreal summer (and winter austral), and southward in the northern winter (and the southern summer). The major world deserts are located right in correspondence with these permanent anticyclones” (Ferrara and Ferruggia 2007). This atmospheric circulation falls within the so-called Hadley cell. The natural deserts all have ancient origins. Just think that the Sahara started to expand its borders around 8000 years ago.

The ongoing climate changes, with increasing temperatures, the consequent change in the hydrological cycle (including extreme events of drought and floods with landslide and landslips), put the soil and its elements under greater stress. Intensive human exploitation of the soil causes these meteorological events to further and often permanently damage the soil, making it increasingly arid and no longer allowing it to be recovered.

Climate change, according to WMO forecasts, will cause a decrease in the yield of agriculture, bringing entire populations to their knees, especially in Africa and tropical regions. The salinization of agricultural land will instead affect farmers in South America. These changes will lead millions of people to migrate from their territories of origin in which it will become possible to live, thus feeding the phenomenon of climate migration.

Key Issue

The phenomenon of desertification is a phenomenon that leads more and more populations to wars and clashes (such as those in Darfur and Sahel) for the control of resources or forced migration due to the decrease in arable land in their territories. This is most noticeable in the poorest countries (Brown 2008).

Human activity is among the main causes of the advancement of existing deserts and the creation of “new deserts.” Intensive agriculture, pastoralism, intensive farming, and deforestation are among the main causes of desertification caused by the human hand.

The ongoing climate changes cause an increase in the aridity of the soil in hot and cold deserts. In polar deserts, it is not possible to speak of desertification as described in the definition, but the increase in global temperatures is leading to their transformation highlighted by a progressive reduction of ice.

Future Directions

Agriculture and pastoralism, together with other human activities, have always produced profound transformations of the territories. Climate changes related to these activities and related to natural climate cycles (anticyclones), with the action of water and wind, have then led to a strong acceleration of soil degradation. This degradation not only affects the already existing deserts but endangers many areas at risk of desert transformation.

Arid, semiarid, and dry subhumid areas are at risk of desertification all over the world. The fight against climate change, and therefore the human activities that cause it, must necessarily deal with the consumption and degradation of the soil. Only with programs aimed at sustainable use of the soil, attentive to the conservation of its chemical and biological characteristics, to reforestation, and to the contrast of soil consumption and waterproofing, can they stop the phenomenon of the advancement of deserts and can they put a stop to wars dictated by the resources and climatic migrations that affect and could still affect tens of millions of people.

Summary

Land desertification is the extreme and final consequence of factors such as erosion, decrease in organic matter, soil contamination (local or wide-spread), soil sealing, soil compaction, decrease in

soil biodiversity, salinization, floods, and landslides. It is possible to define the soil resource is a nonrenewable resource in the life of an individual and its maximum degradation to the desert is the cause of severe food, economic, and social problems, which lead to wars for the management of resources and migration. The great deserts are advancing not only for the unsustainable exploitation of the Earth but also for the ongoing climate changes that aggravate the drought of the arid and semiarid territories, complicating the living conditions of the populations.

Cross-References

- ▶ [Carbon Balance](#)
- ▶ [Climate Change](#)
- ▶ [Sustainability and Vulnerability](#)

References

- Almazroui, M., Nazrul, I. M., Jones, P. D., Athara, H., & Ashfaqur, R. M. (2012). Recent climate change in the Arabian Peninsula: Seasonal rainfall and temperature climatology of Saudi Arabia for 1979–2009. *Atmospheric Research*, 111, 29–45.
- APAT. (2008). Il suolo – la radice della vita, pp. 27–40, Roma, Dipartimento Difesa del Suolo – Servizio Geologico d’Italia. https://www.isprambiente.gov.it/files/pubblicazioni/pubblicazioniidipregio/3633_il_suolo_def.pdf. Accessed 16 Feb 2022.
- Bologna, G. (1998). Desertificazione. In *Equilibri, Rivista per lo sviluppo sostenibile* (pp. 93–98), Il Mulino. <https://doi.org/10.1406/1903>.
- Brown, L. (2008). *Plan B 3.0 – Mobilizing to save civilization* (pp. 93–97). Washington, DC: Earth Policy Institute.
- European Commission. (2002). Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions – “Towards a thematic strategy for soil protection”, /* COM/2002/0179 final */. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52002DC0179>. Accessed 16 Feb 2022.
- Ferrara, V., & Ferruggia, A. (2007). *Clima: Istruzioni per l’uso*. Milan: Edizioni Ambiente.
- Gaitán, J. J., Bran, D. E., & Oliva, G. E. (2019). Patagonian Desert. <https://doi.org/10.1016/B978-0-12-409548-9.11929-3>. Accessed 18 Feb 2022.
- Goudie, A. S. (2002). *Great warm desert of the world*. New York: Oxford University Press.

- Heshmati, G. A., & Squires, V. R. (2013). *Combating desertification in Asia, Africa and Middle East*. Dordrecht/Heidelberg/New York/London: Springer.
- Kulongoski, J. T., Hilton, D. R., & Selaolo, E. T. (2004). Climate variability in the Botswana Kalahari from the late Pleistocene to the present day. <https://doi.org/10.1029/2003GL019238>. Accessed 18 Feb 2022.
- Logan, R. F., & Silberbauer, G. B. (2019). Kalahari Desert. *Encyclopedia Britannica*. <https://www.britannica.com/place/Kalahari-Desert>. Accessed 17 Feb 2022.
- Pell, S. D., Chivas, A. R., Williams, I. S. (1999). Great Victoria Desert: Development and sand provenance. *Australian Journal of Earth Sciences*, 46(2), 289–299. <https://doi.org/10.1046/j.1440-0952.1999.00699.x>
- Scholes, R. J., & Noble, I. R. (2001). Climate change. Storing carbon on land. *Science*, 294(5544), 1012–1013.
- Shepherd, A., Ivins, E., Rignot, E., et al. (2020). Mass balance of the Greenland Ice Sheet from 1992 to 2018. *Nature*, 579, 233–239. <https://doi.org/10.1038/s41586-019-1855-2>. Accessed 18 Feb 2022.
- Thomas, N., & Nigam, S. (2018). Twentieth-century climate change over Africa: Seasonal hydroclimate trends and Sahara Desert expansion. *Journal of Climate*, 31(9), 3349. <https://doi.org/10.1175/JCLI-D-17-0187.1>. Accessed 18 Feb 2022.
- UNCCD. (2017a). The UNCCD 2018–2030 strategic framework. https://www.unccd.int/sites/default/files/inline-files/ICCD_COP%2813%29_L.18-1716078E_0.pdf. Accessed 18 Feb 2022.
- UNCCD. (2017b). Convention to Combat Desertification. Achieving land degradation neutrality. <https://www.unccd.int/actions/achieving-land-degradation-neutrality>. Accessed 16 Feb 2022.
- UNEP. (1977). United Nations Conference on Desertification. <https://na.unep.net/siouxfalls/des/unccdp1.php>. Accessed 18 Feb 2022.

Destruction

- [Disaster Management](#)

Deterioration

- [Pollution](#)

Determinants of Innovation

- [Capacity of Innovation](#)

Developing Countries

- [Emerging Markets](#)

Development

- [Postgrowth](#)
- [Sustainable Development Goals \(SDGs\)](#)

Development Education (DE)

- [Social Marketing, Development Education, and Corporate Social Responsibility: The Common Grounds Sustainability](#)

Development Management

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Synonyms

[Development organization](#); [Growth management](#); [Human development management](#)

Definition

The central theme is the development of weak areas; a development aimed at reducing the differences between countries to achieve new and more shared global geopolitical balances. Kofi Annan, not long ago, defined sustainable development as an abstract idea to be made real in this century. Today, building on the mistakes made, the step must be longer, as the development to which we must strive is sustainable, but also balanced and independent (Sciarelli and Rinaldi

2018). Foreign material and immaterial resources must be used for the creation of autonomous development, not a welfare state dependent on foreign aid. Capital and international skills are a key to launching development but they must have a beginning and an end.

In our opinion, economic and social growth must be based on the culture of a country, which means respecting local traditions, religions, languages, and leading all this toward a contemporary vision of the country itself and a connection with the surrounding world. The growth strategy must be the key to development for a country.

The definition of general and specific objectives, resulting from a careful strategic analysis, must be the basis on which to build any development path. The consideration of the actors involved and to be involved and the knowledge of the essential skills in the short and long term become necessary factors for planning a complex, balanced, and sustainable development. Development management becomes indispensable for the weakest areas of the world. More than a development model, development management is the indication of a growth path and tools to support strategic planning, capable of reconciling the needs of the population with political needs.

Introduction

Economic and social growth should be based on the culture of a country, on the respect for local traditions, religions, and languages. The growth strategy must be the key to a balanced, independent, and long-term human development for a country. The definition of the general and specific objectives, resulting from a careful strategic analysis, must be the basis on which to build any development path.

The consideration of the actors involved and to be involved, as well as the knowledge of the essential skills in the short and long term, become necessary factors for the planning of a complex, balanced, and sustainable growth. The awareness of the need, by national governments, to achieve successes and results in the short term of the

legislature makes the planning of an integrated and shared development path even more complex.

The set of needs of a development path of a country characterized by a medium or low human development, together with an unavoidable lack of skills, make it extremely difficult for a government to define priorities also in the short term. A model of sustainable development which, however, also has a short-term impact must involve the population through national and international civil society, through the communities, associations, foundations, national, and international NGOs already working in the territory. The use of foreign skills for development has the great limitation of poor knowledge of the territory. On the other hand, local territories may lack the professional skills needed to design development.

The creation of a working group composed of local nongovernmental actors and international professionalism could overcome these two problems (knowledge of the territory and skills), ensuring a contemporary vision of the local area. Civil society and the international community must, however, support the government and not become a para-state. In fact, associations, foundations, and NGOs must not replace the governments, but must become an amplifier of the state's actions both at central level and on local realities. In other words, they must become a real support for the development of the country, reconciling top-down and bottom-up strategies.

Key Issue

As many empirical studies have shown on the development of disadvantaged territories, the need to link structural causes with the contingent causes of nondevelopment is one of the keys to the success of a strategy. In reality, what we propose, rather than a development model, is the indication of a growth path and of the management support tools: development management model (Sciarelli and Rinaldi 2017a).

The path that we indicate in this work is based on the idea of the development life cycle, which presupposes that a country has the intention

to develop and therefore wants to start its path of growth.

When the country expresses its intention to start a development process, it is positioned in the start-up phase of the process. At this stage, the main actors are the sustainable development state (SDS), the international community (IC) – through bilateral or multilateral plans and the commitment of intergovernmental institutions (II) – and nongovernmental actors (NGAs). The first ones are the fulcrum of the process, even if the international community plays an important role at this stage, having the task of providing material and immaterial resources to the state for the start of the development process and for the realization of a balanced yet steady growth.

The NGAs, on the other hand, have the task of implementing the strategies and acting as intermediaries with the population, involving them. In the start-up phase, there are five programming steps: strategic analysis (A), identification of strategies (S), planning (P), implementation (I), and control (C). These steps use tools from different management approaches, such as the methods of job splitting, Gantt and Pert Chart, Milestone, planning for output and outcomes, Experiment, Solar System HRM, etc. (Sciarelli and Rinaldi 2017a).

The country that intends to start its development path, therefore, uses the indicated method, and composes the five steps with its own distinctive characteristics. In this way, it creates a development path for the single country: country analysis (CA), country strategy (CS), country planning (CP), country implementation (CI), and country control (CC). As is evident from the figure, the SDS and the IC intervene in this first phase, having the same weight in the development process, while the NGAs still have a limited weight.

If, however, in planning a development process, governments were able to include individuals from civil society and foreign capital and skills in the start-up phase, they would also be able to achieve results in the short term without losing the cultural and social elements needed.

In the hang-on phase, however, the country has the main task of maintaining growth and creating development, gradually abandoning material and

immaterial resources from abroad. Civil society and the local population are starting to play an important role in the planning of development. In a two-way strategic approach (top down and bottom up), population involvement is a key factor. The SDS, with a slight support of international institutions, however, represents the pivot of the development program.

In this phase, the actors mentioned above, combining the method and the tools with the distinctive characteristics of the country, progressively make up four development areas (CA, CS, CP, and CI), leaving the control as an interphase to monitor not only the implementation of the plan but also the use of the methodology in the previous phases. Nongovernmental actors, therefore, in the second phase, acquire a fundamental role, becoming an actor able to help the definition of planning and to implement the planned development program. As the population adopts a development perspective, civil society, which has meanwhile become richer, healthier, and better educated, heads the process together with the SDS.

The national group, made up of public, private, and civil society actors, therefore becomes sufficient for its own development and progressively moves away from foreign aid, until it realizes a real self-development. In fact, at the end of the hang-on phase, the country moves toward independent development, whose main actors are the SDS and the NGAs. These together form the strategic and operational planning of the country, they always implement it in a synergistic way and fully realize the development process based on a joint top-down and bottom-up approach. In self-development, the steps provided by the method are infinite, as the duration of the phase itself should be infinite. The progression of the first four steps is the same as in the previous phase, with the control phase that is repeated throughout the programming process, but this is repeated “n” times and does not end in a single cycle, like what happens in our country.

During the hang-on phase, however, it is possible that the country will not be able to progress toward an increasingly autonomous development and that instead shows the need for international

aid. In this case, the development process of that country will crystallize in the formation of a social state, that is, of a state that needs to be helped by foreign capital and skills. The welfare stage has an indefinable duration, as it is interrupted when the intention to develop is reborn and therefore the development lifecycle starts again. In this stage, the method can still be used for planning, even if at the moment of hybridization with the peculiarities of the country it is generally transformed into traditional international cooperation plans.

All the characteristics of our development creation and management model, therefore, represent the method for planning and implementing development, without obviously indicating its contents.

There are therefore universal elements – the three stages of the life cycle, the method, the universal development objectives (MDG and SDG) and the composition of the actors, and many specific elements – the duration of the plans, the objectives, the choice of strategies, methods for achieving results, involvement and implementation, the system for obtaining the necessary funds for the development process, and the consequent control systems. The characteristics of the development management are therefore given by: the consideration of the human development as a whole, in balance between the areas, long lasting and independent; the hybridization of different approaches; the division into three temporally differentiated phases; a two-way approach, top down and bottom up; the presence of many different actors; strategic planning based on the use of tools from different systems of economic and social science; the growing separation of national and international public actors, which characterizes the growth of autonomy; the peculiar structuring of the development plans; the involvement of the population; and the need for a country to define its own particular development process.

Summary

Development management is an innovative growth management idea that can be of great interest, especially for weak areas of the world.

These areas are actors, often passive, of Western development models or in any case deriving from economically strong countries which distort their cultural and social essence, then managing, furthermore, to have no effectiveness on the territory. In fact, the development models adopted by the international community often lead to welfare and not to self-development. Development management aims to achieve balanced human development that can truly realize the emancipation of weak areas from the strong international community (CI). The proposed idea is based on a development management divided into three phases, in which the second, hang on, turns out to be the decisive one, being able to decree the entry into a self-development system or bring the territory back into the welfare model. The leitmotiv of the development management idea is the possibility of making the areas autonomous, providing for an economic and organizational accompaniment of the IC in the first phase, a bottom-up involvement of the population and NGOs in the second phase, and the definitive departure from accompaniment of the international community in the third phase of self-development.

Cross-References

- [Actors of Development Management](#)
- [Development Program](#)
- [HRM of Sustainable Development Phases](#)
- [Lifecycle of Sustainable Development](#)

References

- Sciarelli, F., & Rinaldi, A. (2017a). Overall development management model: A new approach for emerging countries. Comparative analysis of six countries on two continents, special issue on “Integrating Research, Education, and Problem Solving (2017)” of the *Journal of Systemics, Cybernetics and Informatics (JSCI)*.
- Sciarelli, F., & Rinaldi, A. (2017b). *Development management of transforming economies. Theories, approaches and models for overall development*. London: Palgrave Macmillan.
- Sciarelli, F., & Rinaldi, A. (2018). *Il Macro-Management per le Aree Deboli del Mondo*. Milano: Franco Angeli.

Development of Innovation

- [Sustainable and Innovation Process](#)

Development of the Company

- [Corporate Development](#)

Development Organization

- [Development Management](#)

Development Program

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Synonyms

[Country human growth plan](#)

Definition

The development of a country cannot be confused with its economic growth. A country that grows economically but is made up of illiterates, for example, would be so unbalanced that it could not make the economic growth achieved sustainable and generalized. Income differentials are therefore only one of the variables. The health of a population and its education, in fact, are necessary variables for the balanced and sustainable development of a country.

Introduction

The development of a country cannot be confused with its economic growth. A country that grows economically but is made up of illiterates, for example, would be so unbalanced that it could not make the achieved economic growth sustainable and generalized. Income differentials are therefore only one of the variables. The health of a population and its education, in fact, are necessary variables for the balanced and sustainable development of a country.

Key Issue

Understanding the problems of a territory is often a requirement for a full understanding of the viable solutions.

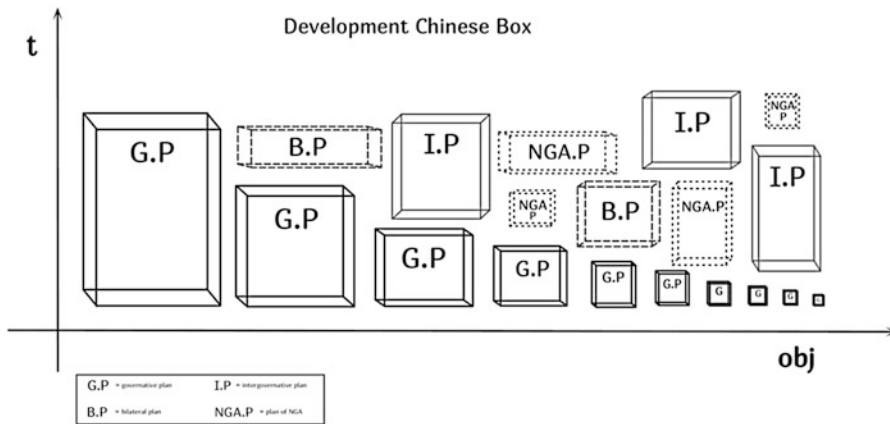
The most frequently followed paths in the strategic plans include: a phase of analysis of the state of the art; the definition of the vision; the definition of the general objectives; the indication of the actors involved and in some cases of the management modalities of the human resources involved; the budget; and the monitoring and control activities.

Internal and external communication is almost always lacking and very often, within the plan, we find no indications of budget and human resources. We also find no specific objectives in the strategic plans. Together with monitoring, specific objectives are often postponed to short- and medium-term plans.

Another element that links the strategic development plans is a reduced time frame. This often derives from the duration of the legislatures and from political stability (or instability). Analyzing the structure used today on average for strategic planning of development is a fundamental step to understand the limits and propose tools to improve its effectiveness.

It is possible to found various types of development plans (Sciarelli and Rinaldi [2017a](#)):

- Long-term strategic plans (10/30 years), defined by the current government, adopted and



Development Program, Fig. 1 Development Chinese boxes (Sciarelli and Rinaldi 2017a, b)

- Readapted by other governments
- Medium-term strategic plans (4/5 years), defined by the government and concluded in the government legislature:
 - Strategic sector plans (10/5 years), defined by the government and the competent ministry and then adopted and readapted by other governments.
 - Short-term operational plans (3/1 year), defined by the central government and by local administrations and implemented by them.

However, the territory is not a company that can realize its strategic plan in five years. The territory needs time. In transformation or transformable areas, the development path is long and the desired human development objectives cannot be achieved in three years. On the other hand, it is also true that territorial strategies are linked to political power and therefore generally are constrained to a limited time. These two elements cannot be reconciled with a serious path of human development. Unraveling and redoing the plans several times over time, like the canvas of Penelope, it is difficult to achieve a real and persistent development. Political instability is indeed one of the main obstacles to real development. The other anomaly is that, even when studying the “operational”

plans, that is, the annual, three-year ones or those concerning a specific activity plans, the results are postponed to other operational plans that will then take care of the implementation of the program.

All this structure creates a system of Chinese boxes (Fig. 1) that never allows to get to the implementation of the action and above all that, in the confusion, they lose the traces of the responsibility.

With such a system, there will always be a plan that was created, for example, to improve the education of tribal areas but then the implementation of this plan will be lost among the Chinese boxes of strategic planning, not allowing to understand the responsibility and to monitor the effects of the strategies themselves.

The truth is that one of the main problems is the transition from planning to implementation. As we have seen, all governments have strategic plans and operational plans, but in many cases there are no traces of programs dedicated to implementation, except in specific cooperation plans or linked to international funding. Frequently, the implementation of the strategic plan presented, subdivided in single activities, is then entrusted to civil society, nongovernmental bodies, volunteers, and international projects. Often, therefore, the strategic plan, even if it is articulated in hundreds of pages, represents more a strategic

orientation, more a declaration of intentions than a real long- or medium-term work program (Sciarelli and Rinaldi 2018).

Another emerging element is that the strategic plan is a formal necessity rather than a real need. In fact, now all countries to access funding and international competences must necessarily show a direction and structural capacity not only to develop a strategic plan, but also to complete it.

Summary

In our opinion, the main problems of country development planning are the proliferation of development program, the frequent overlapping, the poor implementation of the same, and the frequent impossibility of identifying the responsibility for the success or failure of the program. All this makes up the model of the Chinese boxes in a natural way, which also graphically represents the situation of the typical programming of the countries.

Cross-References

► [Development Management](#)

References

- Sciarelli, F., & Rinaldi, A. (2017a). Overall development management model: A new approach for emerging countries. Comparative analysis of six countries on two continents, special issue on “integrating research, education, and problem solving (2017)” of the *Journal of Systemics, Cybernetics and Informatics (JSCI)*.
- Sciarelli, F., & Rinaldi, A. (2017b). *Development management of transforming economies. Theories, approaches and models for overall development*. London: Palgrave Macmillan.
- Sciarelli, F., & Rinaldi, A. (2018). *Il Macro-Management per le Aree Deboli del Mondo*. Milano: Franco Angeli.

Deviant Workplace Behavior

► [Counterproductive Work Behaviors](#)

Devotional

► [Spirituality in Management](#)

Dialogue

► [Power Equalizing](#)

Dieselgate

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Synonyms

[Corporate scandals](#); [Emission scandal](#);
[Emissiongate](#)

Definition

Dieselgate is the popular name for the high-profile Volkswagen Group emission scandal that began in September 2015 following the discovery of software the company had installed in diesel engines since 2009 in order to let these engines perform favorably when it comes to harmful nitrogen oxide emissions in laboratory tests when compared to actual road tests and its publication in the media. The scandal resulted in a severely damaged reputation of the German car maker as well as severe personal, legal, and financial repercussions. Also, Dieselgate led to a change in corporate strategy at Volkswagen Group toward a long-term focus on developing electric vehicles. In the years following the original scandal, Dieselgate has become a category name for similar corporate scandals in the automotive sector, which appeared to be the rule rather than the exception.

Corporate Scandals

As long as there have been companies, corporate scandals have existed – the mere fact that behavior can be compromised, implies that, under certain circumstances, it will. Corporate scandals can be seen as a form of organizational crisis, which can be defined as “a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly” (Pearson and Clair 1998). Corporate scandals hence tend to imperil the continuity of business as usual and oftentimes an outright threat to the existence of organizations and, by implication, demand a swift and profound response to mitigate the effects and remedy the situation. As DeMott (2012, p. 468) writes, “natural disasters, political upheaval, bank panics and other financial crises, and massive technological failures may all precipitate crises for corporations and other organizations when unlikely risks materialize.”

Hoffman’s (1999) general description of a scandal as a public manifestation of misconduct suggests that behavioral irregularities and unethical practices are a root cause of scandals (cf. Zona et al. 2013). Indeed, scandals may be caused by violations of norms and values, either personal or social, including the rule of law, expectations that are held by corporate stakeholders or broader society, explicit or implicit corporate codes, and one’s principles. Especially in the context of an era in which corporate social responsibility (CSR) has become a focal point of attention for companies, scandals may easily occur as a consequence of companies comprising their own ethical standards and CSR claims.

The effects of a corporate scandal may be substantial; it can damage a company and its direct and indirect stakeholders in different ways. Examples of damage incurred by a corporate scandal include a tarnished reputation, plummeting stock value, legal, and financial punishment (Karpoff et al. 1999; Sullivan et al. 2007). However, individuals, including directors, managers, and employees, may also directly experience the effects of a corporate scandal,

for instance, through losing their position within the organization or through a compromised ability to find another equivalent job (Desai et al. 2006). In addition, corporate scandals may have societal effects, such as effects related to economic performance and environmental consequences, and political effects, including the need for establishing costly government bail-out schemes leading to political debate, lawsuits against corporate executives that may involve high-political figures, and pushes for tighter regulations.

It should be noted, however, that it is not its mere effect that makes the scandal a scandal, but also – and perhaps notably – unethical behavior that leads to that. This may include intentionally doing or not doing things, or negligence, even without intent.

Dieselgate: A Prominent Example of a Corporate Scandal

A number of poignant examples of corporate scandals have shaken the international business community over the last few years (Painter-Morland 2008, p. 1), including financial, accounting, and reporting scandals (e.g., Enron, WorldCom), product scandals (e.g., Danone), and environmental scandals. (e.g., BP, Shell). However, “no business scandal has precipitated greater interest in the ethics of business than the spectacular rise and precipitous fall of Enron,” Willmott wrote in 2011 (p. 96).

Obviously, no one could foresee at that point in time that 5 years later Volkswagen Group would be in the limelight with what appeared to be a landmark corporate scandal, popularly called Dieselgate. Hitting the presses in September 2015, Dieselgate became an emission scandal following the discovery of software that the company had been intentionally installing in order to deceive laboratory emission tests. Reinforced by the widespread media coverage of it, the malign ingenuity and pervasiveness of this ethical misconduct by one of the world’s largest companies and the fact that the company has made explicit sustainability claims regarding its products would

make Dieselgate a category name for similar corporate scandals in the automotive sector, which turned out to be the rule rather than the exception.

The Dieselgate scandal resulted in a severely damaged reputation for the German car maker as well as severe personal, legal, and financial repercussions. Also, Dieselgate led to a change in corporate strategy at Volkswagen Group, pivoting toward a long-term focus on developing electric vehicles.

The Unfolding of Dieselgate in a Nutshell¹

When Volkswagen Group issued its ‘Strategy 2018’ in 2007, it was clear that an underlying ambition of this strategy was to become the largest car manufacturer in the world. In addition, the strategy clearly set forth that sustainability was an important principle in achieving this strategy, taking responsibility for developing fuel efficient cars and substantially reducing harmful emissions.

In September 2015, the United States Environmental Protection Agency (EPA) confirmed that Volkswagen Group had been installing software (the so-called defeat or deceit device) in its diesel engines since 2009 with the objective of letting them perform favorably when it comes to NOx emissions in laboratory tests when compared to actual road tests. The findings of the EPA resulted from a study by the International Council on Clean Transportation that was commissioned in 2014 by the California Air Resources Board, aiming to investigate discrepancies in emissions between US and European car models. It appeared that the so-called clean diesels would emit up to 40 times more NOx in real-world driving and that the software was installed in some 11 million cars worldwide in model years 2009–2015. When the media quickly picked up on these results, Dieselgate was born.

Subsequently, authorities in several countries started to investigate Volkswagen Group. The company’s stock price plummeted in the days following the news, then CEO Martin Winterkorn (who was charged in the United States with fraud and conspiracy in May 2018) and several key managers were suspended. In April 2016, Volkswagen Group announced to spend €16.2 billion on remedying the emissions issues and the company planned to refit the affected vehicles as part of a recall campaign. In January 2017, the company pleaded guilty to criminal charges and agreed on a legal statement that set out how engineers had developed the so-called defeat devices, since diesel models could not pass US emission tests without them, and deliberately sought to conceal their use (Leggett 2017). Some months later, in April 2017, a US federal judge ordered Volkswagen to pay a criminal fine of US\$2.8 billion for rigging diesel-powered vehicles for the purpose of cheating on government emissions tests.

Analyses and reconstructions reveal that the occurrence of Dieselgate can be attributed to various causes. By the end of 2015, the company admitted that the scandal was caused by an entire chain of failures – it was seen as “the result of a combination of individual misconduct and mistakes in one part of the business but also flaws in company processes and a tolerance of rule-breaking” (Ruddick 2015). Later, former CEO Matthias Müller stated at the Volkswagen Group annual media conference and investor conference that the fraud was the work of lower-ranking employees, denying the involvement of members of the then management board of the company. Kerler (2018) writes that as politicians have been too lenient in their support for car manufacturers, they, too, can be seen as a cause of Dieselgate.

Responses to and Effects of Dieselgate

The Dieselgate scandal has had many effects and has triggered many responses, varying from the level of the company level to the academic world. Without pretending to be exhaustive, the following points provide an illustration of the various responses to and effects of Dieselgate.

¹ The information presented in the remainder of this paper is partly based on the Wikipedia pages in the Dutch and English language about Dieselgate.

- Volkswagen Group has clearly suffered from a tainted reputation, and the Dieselgate label will always be associated with the company. Next to its stock value falling with around one-third within a couple of days, the company also faced large fines and has had to pay a substantial compensation to authorities and clients. For instance, Volkswagen Group has been offering vouchers and trade-on bonuses to US clients and has committed to buy back nearly 500,000 2.0-liter vehicles, as part of a settlement in North America sales (Ewing 2016). While its US car sales dropped around one-quarter by the end of 2015 (Welch and Hull 2015), car sales in other countries, however, were hardly or not negatively affected by the Dieselgate scandal. In fact, due to aggressive marketing efforts, sales in November 2015 in South Korea increased with some 66 per cent compared to the previous year (Nam 2015).
- Dieselgate resulted in a host of legal consequences for Volkswagen Group and the scandal touches upon several legal issues on national and supranational level, including laws of unfair competition, contracts, torts, administrative, and criminal law. In addition, many private disputes have been settled (Nemeth and Morais Carvalho 2017: 35).
- From a corporate strategy perspective, Dieselgate can probably be seen as an additional impetus for the development of electric vehicles at the expense of combustion engines. In June 2016, Volkswagen Group announced plans to invest heavily in the production of electric vehicles. That month, Matthias Müller, the successor of the demitted-down CEO Martin Winterkorn, predicted that Volkswagen would introduce no less than 30 fully electric cars over the next 10 years, expecting that electric vehicles would account for around 25 per cent of the company's annual sales by 2025. The company said it planned to fund this development by making its operations more efficient and through cutting costs. Müller said that these changes would "require us – following the serious setback as a result of the diesel issue – to learn from mistakes made, rectify shortcomings, and establish a corporate culture that is open, value-driven, and rooted in integrity" (BBC News 2016). In November 2018, the Volkswagen Group published its plan to spend €44 billion in the development of electric, autonomous cars by 2023 (Taylor 2018). Also at the end of that year 2018, the company has been reported to say that its next generation of combustion cars will be its last, pursuing a radical shift to electric vehicles (Rauwald and Sachgau 2018).
- There were industry effects of the Dieselgate scandal as well. Research by Fracarolli Nunes and Lee Park (2016) showed that the fraud spread to surrounding companies within the automotive industry and through the supply chain. This market contamination is estimated at a cost of around US\$6.44 billion for American firms alone. Also from an industry perspective, transgressions of other car manufacturers have been reported since as Dieselgate raised awareness of the pollution caused by "clean diesels" and has increased scrutiny of combustion engines in general. Emission tests in multiple countries have shown that many cars fail to comply with emission regulations, while a 2016 French government report concluded that 4/5 of 86 different cars investigated failed to comply with emission laws, research by ADAC in that same year showed that 38 out of 40 tested diesel cars failed an NOx test since 2016.
- Obviously, the emissions that cars actually emitted but were covered up by the misleading of emission tests have had effects on public health and the environment. In the United States, the number of premature deaths caused by the fraud has been estimated to be 59 (Vaughan 2015). The actual impacts in Europe are bigger because of much greater popularity of diesel cars compared to the United States as well as a higher density of the population. Here, it has been estimated that over 44,000 healthy life years were lost (Oldenkamp et al. 2016). Axel Friedrich, a cofounder of the ICCT

was reported to say about Dieselgate that “it’s not just fraud – it’s physical assault” (Ewing 2016).

- Dieselgate has had multiple consequences from a political perspective. Besides the fact that lawsuits against the company suggest that politicians of German regional government that held positions in supervisory roles are also responsible for what happened at the company, Dieselgate also led to a push for tighter emissions regulation. However, in June 2016, documents that were leaked to the press indicated that in 2010, officials for the European Commission had already been warned by their inhouse science team that at least one car manufacturer was possibly using a NOx-related defeat device in order to bypass emission regulation. Member of the European Parliament Kathleen Van Brempt, then chair of the investigation of the scandal, said she found the documents shocking, and these raised serious concerns with regard to the future of commission officials: “These documents show that there has been an astonishing collective blindness to the defeat device issue in the European commission, as well as in other EU institutions” (Neslen and Harmsen 2016). In an article for The Verge, Kerler (2018) cites Ferdinand Dudenhöffer, a professor of Automotive Economics at the University of Duisburg-Essen, saying that “German politicians always thought they were helping the car industry by being soft on regulations and keeping their eyes shut.” As a consequence, most German voters now hold the opinion that the government was too lenient on Volkswagen as well as on other German car manufacturers, causing political turmoil.
- From an academic perspective, Dieselgate has also spawned a host of analyses in academic literature addressing topics including the effectiveness of regulations and economic incentives in the context of environmental policy (Zachariadis 2016), reflections on legal implications (Di Rattalma 2017), its detrimental implications for the wider market (Robertson 2017), and criminological perspectives (Spapens 2018).

Cross-References

- Business Ethics
- Crisis Management
- Fraud Prevention and Detection
- Greenwashing

References

- BBC News. (2016). VW plans huge investment to become electric cars leader. Accessed on 31 Jan at: <https://www.bbc.com/news/business-36548893>.
- DeMott, D. (2012). The stages of scandal and the roles of the general counsel. *2012 Wisconsin Law Review*, 463–494.
- Desai, H., Hogan, C., & Wilkins, M. (2006). The reputational penalty for aggressive accounting: Earnings restatements and management turnover. *The Accounting Review*, 81(1), 83–112.
- Di Rattalma, M. (Ed.). (2017). *The Dieselgate: A legal perspective*. Heidelberg: Springer.
- Ewing, J. (2016). Volkswagen not alone in flouting pollution limits. The New York Times, 9 June. Accessed on 31 Jan at: <https://www.nytimes.com/2016/06/10/business/international/volkswagen-not-alone-in-flouting-pollution-limits.html?module=Promotron®ion=Body&action=click&pgtype=article>.
- Fracarolli Nunes, M., & Lee Park, C. (2016). Caught red-handed: The cost of the Volkswagen Dieselgate. *Journal of Global Responsibility*, 7(2), 288–302.
- Hoffman, A. (1999). Institutional evolution and change: Environmentalism and the US chemical industry. *Academy of Management Journal*, 42(4), 351–371.
- Karpoft, J., Lee, D., & Vondryk, V. (1999). Defense procurement fraud, penalties, and contractor influence. *Journal of Political Economy*, 107(4), 809–842.
- Kerler, W. (2018). You thought Dieselgate was over? It’s not. The Verge, 18 September. Accessed on Jan 31 at <https://www.theverge.com/2018/9/18/17876012/dieselgate-volkswagen-vw-diesel-emissions-test-epa-german-auto-industry-mercedes-benz-bmw>.
- Leggett, T. (2017). VW papers shed light on emissions scandal. BBC News, 12 January. Accessed on Jan 31 at: <https://www.bbc.com/news/business-38603723>.
- Nam, I. (2015). Volkswagen sales in South Korea make sharp upturn. *The Wall Street Journal*, 3 December. Accessed on 31 Jan at: <https://www.wsj.com/articles/volkswagen-sales-in-south-korea-make-sharp-upturn-1449203756>.
- Nemeth, K., & Morais Carvalho, J. (2017). ‘Dieselgate’ and consumer law: Repercussions of the Volkswagen scandal in the European Union. *Journal of European Consumer and Market Law*, 1, 35.
- Neslen, A., & Harmsen, V. (2016). European commission warned of car emissions test cheating, five years before

- VW scandal. *The Guardian*, 20 June. Accessed on 31 Jan at: <https://www.theguardian.com/environment/2016/jun/20/european-commission-warned-car-maker-suspected-cheating-five-years-vw-scandal>.
- Oldenkamp, R., Van Zelm, R., & Huijbregts, M. (2016). Valuing the human health damage caused by the fraud of Volkswagen. *Environmental Pollution*, 212, 121–127.
- Painter-Morland, M. (2008). *Business ethics as practice: Ethics and the everyday business of business*. Cambridge: Cambridge University Press.
- Pearson, C., & Clair, J. (1998). Reframing crisis management. *Academy of Management Review*, 23(1), 59–76.
- Rauwald, C., & Sachgau, O. (2018). *VW says the next generation of combustion cars will be its last*. Accessed on 30 Jan at: <https://www.bloomberg.com/news/articles/2018-12-04/vw-says-the-next-generation-of-combustion-cars-will-be-its-last>.
- Robertson, J. (2017). The danger of Dieselgate: How Volkswagen's diesel scandal critically damaged the wider market. *Annals in Social Responsibility*, 3(1), 68–69.
- Ruddick, G. (2015). VW admits emissions scandal was caused by 'whole chain' of failures. *The Guardian*, 10 December. Accessed on 31 Jan at: <https://www.theguardian.com/business/2015/dec/10/volkswagen-emissions-scandal-systematic-failures-hans-dieter-potsch>.
- Spapens, A. (2018). The 'Dieselgate' scandal: A criminological perspective. In A. Spapens, R. White, D. Van Uhm, & W. Huisman (Eds.), *Green crimes and dirty money* (pp. 91–112). London and New York: Routledge.
- Sullivan, B., Haunschild, P., & Page, K. (2007). Organizations non gratae? The impact of unethical corporate acts on interorganizational networks. *Organization Science*, 18(1), 55–70.
- Taylor, E. (2018). *Volkswagen to spend 44 billion euros on electric, autonomous cars by 2023*. Accessed on 31 Jan at <https://uk.reuters.com/article/us-volkswagen-strategy-investments/volkswagen-to-spend-44-billion-euros-on-electric-autonomous-cars-by-2023-idUKKCN1NLIOM>.
- Vaughan (2015). VW emissions cheat estimated to cause 59 premature US deaths. *The Guardian*, 29 October. Accessed on 31 Jan at: <https://www.theguardian.com/environment/2015/oct/29/vw-emissions-estimated-to-cause-59-premature-us-deaths>.
- Welch, D., & Hull, D. (2015). Volkswagen of America November Vehicle Sales Down 24.7%. *Bloomberg*, 1 December. Accessed on 31 Jan at: <https://www.bloomberg.com/news/articles/2015-12-01/vw-brand-u-s-sales-tumble-25-in-november-amid-diesel-scandal>.
- Willmott, H. (2011). Enron narrative. In M. Painter-Morland & R. Ten Bos (Eds.), *Business ethics and continental philosophy* (pp. 96–117). Cambridge: Cambridge University Press.
- Zachariadis, T. (2016). After 'dieselgate': Regulations or economic incentives for a successful environmental policy? *Atmospheric Environment*, 138, 1–3.

- Zona, F., Minoja, M., & Coda, V. (2013). Antecedents of corporate scandals: CEOs' personal traits, stakeholders' cohesion, managerial fraud, and imbalanced corporate strategy. *Journal of Business Ethics*, 113(2), 265–283.

Digital Cities

- Smart Cities

Dimensions

- CSR Disclosure, Quality Measurement of

Direction

- Governance

Directive 2006/43/EC

- European Union Directive: The 8th Company Law Directive on Disclosure and Transparency

Director Remuneration

- Greenbury Report (UK)

Directors and CSR

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Synonyms

Society and governance; The board and CSR; The board and environment

Description/Definition

The corporate world is ever changing and evolving; there are emerging economies; digital technology is transforming the workplace; and corporates are becoming increasingly complex. It is not surprising therefore that corporate governance “the system by which corporations are directed and controlled” (Cadbury 1992) is also changing. Corporate governance has been narrowly defined as a means for protecting shareholders’ interests; however, in today’s operating environment whereby online media is constantly providing a stream of information on the corporates which we invest in, work for, and purchase from, it is not surprising that the sole objective of corporate governance systems, being the protection of shareholders’ interests and rights, may no longer be the case.

Corporate governance can be redefined more broadly as “the system of rules and regulations and practices by which we hold managers accountable and responsible for whatever performance society expects” (Haspeslagh 2010). This definition suggests a move toward a holistic stakeholder-driven approach to governance which embraces the fact that corporates have legal-, contractual-, social-, and market-driven responsibilities to non-shareholder stakeholders, including employees, investors, creditors, suppliers, local communities, customers, and policy makers. Corporate social responsibility (CSR) activities and disclosures are the main way in which corporates address these obligations as it involves the “integration of an enterprise’s social, environmental, ethical and philanthropic responsibilities towards society into its operations, processes and core business strategy in cooperation with relevant stakeholders” (Rasche et al. 2017, p. 6).

Boards of directors are the zenith of internal decision control systems of corporations and are therefore accountable not just in terms of financial performance to investors but also in terms of society as a whole’s expectations that this will be achieved in a sustainable way. The board of directors is in charge of the management of the business; they make the strategic and operational

decisions and are responsible for ensuring that all statutory obligations are met. They also need to do so in a sustainable way, and therefore CSR activities need to be managed. This chapter details director’s broad responsibilities within corporations in relation to CSR strategy and nonfinancial disclosures as well as addressing the need for them to continuously engage with internal and external stakeholders.

Director’s Responsibilities

The classical economic argument presented by capitalist Friedman is that “the business of business is business” and that management has one responsibility, and that is to maximize returns to shareholders, with social issues being resolved by the free market system and or governmental intervention. However, given the size, power, and expertise contained within corporates, it is increasingly argued that this is no longer the case and that they have a duty to act in the best interests of stakeholders as a whole. Indeed some believe it is the very purpose of the corporate to serve as a vehicle for coordinating stakeholders (Evan and Freeman 1988). Moreover, some global bodies have taken the view that information on CSR is important for investors. They have been promoting the inclusion of information on environmental, social, and governance (ESG) in reports aimed at investors. For example, in a recent publication *Fiduciary Duty in the twenty-first Century* (2015) by the UN Global Compact, UNEP Finance Initiative, Principles for Responsible Investment, and Inquiry into the Design of a Sustainable Financial System, it was concluded that “Failing to consider all long-term investment value drivers, including ESG issues, is a failure of fiduciary duty” (Sullivan et al. 2015, p. 9).

It is widely considered that in running corporates on behalf of the owners, directors have a number of “fiduciary duties” to the owners. Fiduciary duties have been developed through case law and are then typically codified in corporate law. For example, in Britain, the Companies Act 2006 states that a director:

- Only acts within the powers granted by the corporate's constitution
- Has a prime duty to promote the corporate's success (unless insolvent)
- Exercises independent judgment
- Exercises reasonable care, skill, and diligence in his/her role
- Avoids conflicts between his/her role and his/her personal interests
- Does not accept benefits from third parties which arise from his/her role
- Always declares to other directors his/her personal interest in any transaction or arrangement which the corporate proposes to enter into

There is a focus, of course, on protecting shareholders' interests; however the Companies Act 2006 aims to make a significant contribution to the corporate governance system in the UK by embedding in statute the concept of "enlightened shareholder value." The Act legally mandates shareholder value but with the proviso that it should be "enlightened" by specific statutory requirements designed to promote an "inclusive" approach toward the interests of stakeholders and to encourage a long-term view to be taken of corporate investment. Section 172 of the Companies Act (2006) places an obligation on directors to "have regard to" a range of other stakeholder interests in pursuit of their general duty "to promote the success of the company."

The financial statements are published as part of a corporate's annual report. Included within the annual report is a strategic report. This report supports the financial statements and, in addition, typically contains nonfinancial disclosures which should provide shareholders of the corporation with information that will enable them to assess how the directors have performed their duty to promote the success of the corporation, while having regard to the matters set out in section 172. The contents of the strategic report are covered under the Companies Act 2006 s414(C), which requires: a description of the corporate's strategy, objectives, and business model; an explanation of the main trends and factors affecting the corporate; a description of its principal risks and uncertainties; and an

analysis of the development and performance of the corporate, including key performance indicators. In making these disclosures the corporate must provide information about the environment, employees, social issues, community impact, human rights, and anti-corruption and anti-bribery matters if material. There is also a requirement to include disclosures on gender diversity across the workforce.

In addition to the disclosures required in the strategic report, the Department for Business, Energy & Industrial Strategy (BEIS) has published regulations which implement the EU nonfinancial reporting directive 2014/95/EU on disclosure of nonfinancial and diversity information by certain large undertakings and groups in their management reports. These regulations will apply to the financial years of qualifying "Public Interest Entities" (PIE) (broadly any corporate with over 500 employees) with reporting beginning on or after 1 January 2017. The aim of the regulations is to recognize the importance of nonfinancial information in identifying key sustainability risks and in an attempt to increase investor and consumer confidence.

The new regulations expand on the contents of the strategic report with further disclosures relating to the business model, principal nonfinancial risks and nonfinancial key performance indicators also being introduced, as well as specific bribery and corruption disclosures. Details on diversity policies including the age, gender, and educational and professional background of board members will also be required to be disclosed as part of the corporate governance statement.

The corporate governance statement is another form of nonfinancial disclosure in the annual report. The contents of this statement are driven by the UK Corporate Governance Code (2018) with which UK-listed corporates must comply or, where they do not comply, explain to investors why they do not. The UK Corporate Governance Code has stakeholder management and CSR at its heart, and Section 1 "Board Leadership and Company Purpose" contains the following principles:

- A. A successful corporate is led by an effective and entrepreneurial board, whose role is to

- promote the long-term sustainable success of the corporate, generating value for shareholders and contributing to wider society.
- B. The board should establish the corporate's purpose, values, and strategy and satisfy itself that these and its culture are aligned. All directors must act with integrity, lead by example, and promote the desired culture.
 - C. The board should ensure that the necessary resources are in place for the corporate to meet its objectives and measure performance against them. The board should also establish a framework of prudent and effective controls, which enable risk to be assessed and managed.
 - D. In order for the corporate to meet its responsibilities to shareholders and stakeholders, the board should ensure effective engagement with, and encourage participation from, these parties.
 - E. The board should ensure that workforce policies and practices are consistent with the corporate's values and support its long-term sustainable success. The workforce should be able to raise any matters of concern.

Integrating CSR Theory into the Boardroom

From the guidance outlined above, it appears that directors need a mechanism for integrating CSR activities into their corporate's strategy and operations; however, there is little guidance academically or practically on how to do this effectively. Many corporates engage in "stakeholder mapping" whereby stakeholders are identified and categorized according to different levels of engagement. Mapping of the stakeholder is usually done according to the level of interest that they have in the corporate's activities and the level of influence they have over the corporate's activities. The premise being that you cannot fulfill every stakeholder's expectations and directors should focus on satisfying expectations of the stakeholders who have a high level of interest and influence relating to the project. On the other hand, stakeholders having a high level of interest but low influence need to be merely kept informed

of the project status (Mitchell et al. 1997). Often this mapping is a visual exercise, and many corporates use technology to produce sophisticated continuous monitoring and reporting on stakeholder management.

Indeed, technology can be used in the integration process by communicating with stakeholders on CSR activities and generating live feedback through tools such as websites and social media. This ability to enter into "strategic conversations" has led to a substantial rethink on corporate communication recognizing that the dialogue can play a formative role in constituting, altering, and regenerating organization, termed communication constitutes organizations ("CCO") (Christensen and Cheney 2011). Under CCO, communication is a textual representation of how the corporate's strategy can evolve by iterative, continuous negotiation between corporates and society. When the negotiation has resonance with other corporate logics, such as value creation, then co-construction of the CSR agenda may result (Cooren et al. 2011). The first step a corporate has to take to enter dialogue and engage in CCO is providing the opportunity for stakeholders to do so across communication platforms such as corporate reports, websites, and social media.

Generate Internal "Buy In" for CSR

As well as integrating external stakeholders into the CSR process, CSR must be embedded fully into the decision-making of the corporate as a whole in order not to attract criticism for not "walking the talk" and considered a sign of bad management in general. In order for CSR to permeate into all aspects of the corporate's operations, there must be a combination of "hard wiring" and "soft wiring" approaches to its integration (de Wit et al. 2006). Hard wiring is the grounding of CSR in corporate systems and protocols, for example, employee selection criteria, codes of conduct, and CSR requirements as part of product development and social due diligence on new supplier relationships. Soft wiring on the other hand is the infusion of CSR into the culture of the corporate, for example, senior managers

acting as role models in relation to sustainable business practice, sustainability being a core cultural value, staff opinion surveys, socially responsible supplier practice, etc. This all requires constant communication, training, and advocacy throughout the corporate from the top down so as to permeate all decisions being made within the corporate.

Evidence indicates that management has an important impact on the outcomes of CSR projects (Waddock et al. 2002). The values of top management have an imprint on the corporate, which in turn influence decision-making processes, stakeholder engagement, and corporate social performance. However, even in a corporate with formalized CSR policies, procedures, and tradition, managers hold different and non-convergent views on CSR activities (Pedersen and Neergaard 2009). The alignment of managerial perceptions is an impossible task as they will always be influenced by a number of variables such as age, gender, tenure, education, religion, and so on. It can be argued that this diversity of thought is necessary to drive positive change through conflicts of opinion, but this tension needs to be carefully managed.

There are indications that CSR is gradually becoming infused and embedded in corporate governance with CEOs taking a leadership role for CR issues. Boardrooms are increasingly creating dedicated CSR subcommittees of the board which are focused on formulating CSR strategy, reviewing the progress against CSR key performance indicators, monitoring CSR compliance and risk management, and keeping the board up to date with CR issues (Spitzeck and Hansen 2010). It could be argued, however, that the use of CSR committees is poor CSR governance practice as it might isolate CSR issues from wider business strategy and operational decision-making, i.e., emphasizing the “bolt on” criticism of CSR activities.

Summary

Corporates which engage in CSR activities fall on a spectrum from “compliance strategy,”

whereby the corporate observes regulations and controls and measures predefined specific aspects of CSR performance through to an “integrated strategy” whereby CSR is underpinned in the core values of the corporate. The integrated strategy is based on the values and ethical decision-making of all the members of the corporate who in turn form its overall corporate culture (Crane and Matten 2004). The significance of boardroom leadership as a driver for CSR activities and corporate change with regard to sustainable practice cannot be underestimated; “top leadership has to believe and walk the talk. Staff and other stakeholders need to hear their leaders explain regularly what responsibility and sustainability means for the corporate, why it is important and how it is integrated with corporate purpose and strategy: what some people call ‘tone at the top’” (Bhalla 2013, p. 577). This should be explicitly linked to the stated values of the corporate as until it does, the true business case for CSR activities will never be achieved.

References

- Bhalla, V. K. (2013). *International business*. Delhi: Chand.
- Cadbury, A. (1992). *Committee on the financial aspects of corporate governance*. London: Gee.
- Christensen, L. T., & Cheney, G. (2011). Interrogating the communicative dimensions of corporate social responsibility. In Ø. Ihlen, J. Bartlett, & S. May (Eds.), *Handbook of communication and corporate social responsibility* (pp. 3–22). Oxford, UK: Wiley Blackwell.
- Companies Act. (2006). <https://www.legislation.gov.uk/ukpga/2006/46/contents>. Accessed 22 March 2020.
- Cooren, F., Kuhn, T. R., & Cornelissen, J. P. (2011). Communication, organizing and organisation: An overview and introduction to the special issue. *Organization Science*, 23, 118–137.
- Crane, A., & Matten, D. (2004). *Business ethics: A European perspective*. Oxford: Oxford University Press.
- de Wit, M., Wade, M., & Schouten, E. (2006). Hardwiring and softwiring corporate responsibility: A vital combination. *Corporate Governance*, 6(4), 491–505.
- Evan, W. M., & Freeman, R. E. (1988). A stakeholder theory of the modern corporation: Kantian capitalism. In T. Beauchamp & N. Bowie (Eds.), *Ethical theory and business* (pp. 75–93). Englewood Cliffs: Prentice Hall.

- Haspeslagh, P. (2010). Corporate governance and the current crisis. *Corporate Governance: The International Journal of Business in Society*, 10(4), 375–377.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *The Academy of Management Review*, 22(4), 853–886.
- Pedersen, R. E., & Neergaard, P. (2009). What matters to managers?: The whats, whys, and hows of corporate social responsibility in a multinational corporation. *Management Decision*, 47(8), 1261–1280.
- Rasche, A., Morsing, M., & Moon, J. (2017). *Corporate social responsibility, strategy, communication, governance*. Cambridge: Cambridge University Press.
- Spitzeck, H., & Hansen, E. G. (2010). Stakeholder governance: How stakeholders influence corporate decision making. *Corporate Governance: The International Journal of Business in Society*, 10(4), 378–391.
- Sullivan, R., Martindale, W., Feller, E., & Bordon, A. (2015). *Fiduciary duty in the 21st century*. London: United Nations Global Compact, Finance UNEP Initiative, PRI, Inquiry. <https://www.unpri.org/download?ac=1378>. Accessed 22 March 2020.
- Waddock, S., Bodwell, B., & Graves, S. B. (2002). Responsibility: The new business imperative. *Academy of Management Executive*, 16, 132–148.

Directors' Defense

► Business Judgment Rule

Directors' Discretion

► Business Judgment Rule

Disability Management

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Synonyms

Disability management logic; Disability manager;
 Diversity management

Definition

Disability management refers to a management orientation that focuses on people with disabilities and their enhancement, with the aim of adapting organizations of the socioeconomic systems (i.e., institutions and companies) and allow them and manage their needs (Mittler 2015). Disability is a holistic theme crossing different disciplines (Shakespeare 2014). According to the Convention on the Rights of Persons with Disabilities (UN 2006) it is to be understood as the result of the interaction between impairments and social, attitudinal and environmental barriers that hinder or limit participation (EC 2017). The Convention promotes the actions aimed at improving educational, training, and professional opportunities to avoid possible exclusion or marginalization of disable people from the work and the society as a whole. It represents a pillar in countries that have adopted it having to apply the Convention through measurable and accountable actions to the national community. Article 1 of the UN Convention takes over the World Health Definition (WHO 2001, 2011) and establishes that people with disabilities are those who present lasting physical, mental, intellectual, and sensory impairments that in interaction with barriers of different nature can hinder their fullness and participation in society on an equal basis with other people. This definition brings a novelty because it considers the disable people “linked to” their environment. Therefore, the problems related to disability no longer affect disables at an individual level but also the cultural and socioeconomic environment (Angeloni 2013).

Introduction

According to the first Report of the World Health Organization (WHO 2011) the estimated number of people with some form of disability would approach one billion. It counts for about 15% of the population worldwide, of which 80% is located in developing countries (Ottawa Charter for Health Promotion 2012).

Disability management has developed since the mid-1980s, especially in North America, while in Northern Europe it was introduced in the last decade. Some countries, such as Germany, Switzerland, the Netherlands, the USA, the UK, and Canada, are at the forefront, while others (China and Japan, Italy, and France) are on late in institutionalizing the disability management (Loyalka et al. 2014). Namely, in Italy the legislation ratified the Convention with Law 18 in 2009. The first initiatives date back to the 1990s (Torre 2007; La Torre et al. 2009). Currently, AIDIMA (Italian Association of Disability Manager) and SIDiMa (Italian Society of Disability Manager) are strongly committed in supporting the research and promoting the culture of disability management, as well as in training specialized professional figures. Both associations also collaborate with several actors (universities, businesses, public institution) on the national and international arena (the European Association of Service Providers for Persons with Disabilities, among others) with the aim to support the activity of disability managers (Mattana et al. 2011; Ferrucci 2014; Ravicchio et al. 2015; Mattana 2016).

Among the international standards aimed to protect the rights of persons with disabilities the UN Convention emerges decisively in 2006 (Baratella 2009; Foggetti 2017). Accordingly, many countries have adapted their legislation (Fondazione Serono 2016): in the United Kingdom by the Equality Act (2010), in France by the Loi Handicap was promulgated (2005), in Spain by the combined provision of the Liondau (2003) and the Ley de Dependencia (2006), among others.

In the last decade, conferences, projects, and training and educational initiatives on disability management have multiplied, attracting the attention of the scientific and business world. Several journals contribute to develop the international debate, including *Journal of Applied Research* or *Journal of Intellectual Disabilities*; *Neurological Science*; *Journal of Preventive Medicine and Hygiene*, among others.

The disability management deepens the diversity management logic (Cuomo and Mapelli 2007;

Nota et al. 2014; Konrad et al. 2016) by inspiring human resource management and companies' strategies, because in addition to workers or customers/users, people with disabilities are also owners, lenders, and suppliers (Migliaccio 2017).

Disability management attracts the interest of several scholars belonging to both managerial and economics fields (O'Brien 2013; Twigg 2005; Hancock and Pudney 2014; Silva and Vall-Castelló 2017). Moreover, the microeconomic-corporate approach has been investigated, even if diversity management was prevailing in attracting the attention of the international debate (Lu et al. 2015; Janssens and Zanoni 2014; Li et al. 2016; Holck et al. 2016).

Key Issues

Whoever elaborates in theory and in practice the diversity management strategies is the diversity manager, who can be internal or external to the corporate structure. The disability manager, more than a profession in itself, can be considered an additional "competence" aimed to integrate pre-existing professions (i.e., architect, lawyer, social worker). The role of disability manager can also change depending on different work contexts (private businesses, local authorities, schools, hospitals, etc.).

As a consequence, there is a need for transversal skills and training activities addressed to entrepreneurs and human resources managers in order to allow them to acquire the necessary skills and capabilities and ensure them that the inclusion of people with disabilities is a high-quality work experience for all employees and an opportunity for a company's growth and innovation.

Drawing from empirical studies disables' recruiting appears as a crucial phase (Nota et al. 2014). Organizational culture is among the factors that affect the recruitment and inclusion of disabled people in the workplace (Zappella and Dovigo 2014). Moreover, the employers' attitudes change according to different types of disabilities and are positive if they had previous positive experiences. Accordingly, disability management

policies are successful when they improve relationships and the quality of worker's productivity (Konrad et al. 2016). However, disability management is not yet a widespread practice despite companies show a growing interest in the role of disability managers and the beneficial effects of such practices (La Torre et al. 2009).

Some studies (Ravicchio et al. 2015) point out that the disability manager plays a key role in implementing smart working practices that favor inclusion and positively affects growth and organizational change. Therefore, it is important to identify and disseminate best practices and innovative labor policies. In this respect one can argue that there is a need to strengthen dialogue between companies, public and private recruiting services, training institutions, universities, to promote the education of future managers through postgraduate curricula and masters on disability management. One can find virtuous examples of disability management adopted by multinational companies, that in recent years have promoted good practices and dissemination events that are gradually spreading among small and medium-sized enterprises (SMEs), especially in organizations that have obtained certifications such as the SA 8000. In some countries (such as Italy, among others) tax incentives have been introduced to enhance diffusion among SMEs (i.e., tax reduction for productivity bonuses, partly converted into corporate welfare policies).

Future Directions

Disability leads us to reflect on what is fundamental in the personal and professional life. It claims for an economy for inclusion. A relevant contribution to the interpretation perspective of disability is offered by the disability studies, developed mainly in Anglo-American context, which underline the active role of people disabled in the process of transformation of society in an inclusive direction. Rather than focusing on the "disability issues" it is necessary to emphasize the value of the "person with disabilities." The welfare logic places people with disabilities in public or non-profit companies. However, this could not be

enough. A new economic and cultural approach should drive management's choices toward a sustainable growth capable to consider all people as a key resource, including people with disabilities. To do this, education plays a central role. For disabled education is to be conceived as a pillar of a life project built on self-determination and projected toward autonomy: a perspective of life possible only outside of a medicalized reading and disability assistance – conceived as a disease – and which appreciates disabled as resources and makes the potential of people with disabilities visible both as individuals and as groups capable of exercising a political role and social. A different interpretation of disability is introduced by the bio-psycho-social model of the ICF – International Classification of Functioning, Disability and Health (WHO 2001). According to this disability depends on several interrelated factors: physical conditions and biological endowment, contextual factors (environmental and personal factors). The ICF promotes a holistic approach and is aimed to study and intervene in individual and social contexts to guarantee an overall quality of the individual's life and overcoming the contrast between the medical and social approach, thus attributing to disability and handicaps distinctive meanings.

Within the international debate, a theoretical construct aligned with the principles of complexity and dynamism of the ICF is the Quality of Life approach (Schalock and Verdugo Alonso 2002) that "synthesizes a plurality of dimensions of people's lives from physical well-being e material to emotional well-being, from personal development to self-determination, from personal relationships to social rights and social inclusion" (Giaconi 2015, p. 13).

Within the 2030 Agenda for sustainable development (UN 2015) the paradigm of inclusion based on human rights permeates all 17 objectives, in order to free up people with disabilities from the still predominant invisibility condition. The paradigm of inclusive growth mirrors the development policies of the Convention on the Rights of Persons with Disabilities. European governments have become progressively more aware of the strategic importance of the

implementation of initiatives that address the issue of disability, although it is necessary to underline that more efforts should be spent, in particular in developing countries. While in certain cultural contexts the formal recognition of the rights of disabled has been achieved, to recognize a role social in its multiple dimensions, even in economics still represents a challenge.

An inclusive approach based on the valorisation of disability should be strengthened. Disability recalls the reality, often eluded, of the fragility of human existence. Recognizing and accepting this fragility is a necessary condition to pursue an inclusive economy. In the business context the basic problem is cultural in nature, because the enhancement of diversity and the consideration of diversity management among business strategies pass through a broader vision of growth and the achievement of long-term objectives. First, it requires the entrepreneurial and managerial commitment; second it claims for the adoption of a structured approach, affecting the recruitment and training activities, as well as the rewards and promotions systems. In Italy, despite the lack for an institutional framework on disability and diversity management, the Italian Society of Disability Managers supports for years several high-level training courses since there is a strong demand for specialization on these issues. The training activities must be diversified depending on the sector and nature of the firm. Moreover, some university (i.e., LUMSA) have set up Master to provide specialized knowledge and skills for the management of disability and diversity in companies (both private and public companies), business consultants, professionals, trade unions, and welfare plan designers. The disability managers are increasingly gaining momentum. The integration of two functions (welfare manager and disability manager) could render the role more effective since it allows a manager to operate in both private and public companies when they are involved in inclusion and enhancement programs for diversity and well-being in the workplace. The practical and cultural originality of the proposal lies precisely in the positioning of the expert in disability and diversity in the context of the broader skills on welfare in the company, with a view to the persons' welfare.

Summary

Diversity management manifests in a set of transversal business practices – under the “umbrella” of the corporate social responsibility policies – that affect the corporate culture, the strategy, the financial and control management system, the operational activities, as well as the system of relations with the stakeholders and the company reporting (Angeloni 2013; D’Amato 2009; Metallo et al. 2009; Migliaccio 2016). The growing attention paid by policy makers, businesses, and institutions to diversity management is attributable to the increased complexity of society, characterized by a multiplicity of social, cultural, and individual subjectivities tied to gender, age, ethnic origins, disability, sexual orientation, personality characteristics, cognitive styles, level of education, background, etc. In such a context disability management is conceived as a proactive strategy aimed at identifying and solving the factors that prevent people with any type of disability from accessing work (Geisen and Harder 2011). While diversity management consists in practices that an organization implements to create an inclusive climate and an organizational culture (Oberfield 2014), aimed to allow workers attitudes and capabilities flourish and ensure growth and success of their personal and professional paths, disability management is not only limited to a process or to a set of procedures (O’Brien 2013; Sabharwal 2014), but it represents a professional activity which considers all the relational aspects (personal contacts and interactions) that contribute to the success of disability management. Currently disability strategies are often implemented as a reaction to the problems of a single person or an organization, while empirical studies suggest to consider such problems in advance through appropriate policies and procedures for overcoming and preventing them (Geisen and Harder 2011). Namely, workplace disability management concerns all cases of disability from personal and congenital disabilities to those acquired during the working period (ranging from accidents to chronic-degenerative diseases). In this sense, disability management is conceived as a proactive strategy oriented to identify and

remove all the factors that prevent people, with any type of disability, from accessing to developing a professional path (Bruyère and Filiberto 2013; Rahim et al. 2017). This conception differs from a more restrictive one according to which disability management coincides with the return to work, of disable people who are already working.

Cross-References

- Diversity Management
- Inclusive Business

References

- Angeloni, S. (2013). Integrated disability management: An interdisciplinary holistic approach. *Sage Open Publications*, 3(4), 1–15.
- Baratella, P. (2009). *I Diritti della persona con disabilità. Dalla convenzione internazionale ONU alle buone pratiche*. Trento: Erickson.
- Bruyère, S., & Filiberto, D. (2013). The green economy and job creation: Inclusion of people with disabilities in the USA. *International Journal of Green Economics*, 7(3), 257–275.
- Cuomo, S., & Mapelli, A. (2007). *Diversity management. Gestire e valorizzare le differenze individuali nell'organizzazione che cambia*. Milano: Guerini e Associati.
- D'Amato, A. (2009). Il governo della diversità tra filosofia organizzativa e approccio strategico: il diversity e il disability management. In G. Metallo, P. Ricci, & G. Migliaccio (Eds.), *La risorsa umana diversamente abile nell'economia dell'azienda, Disability management e accountability* (pp. 229–262). Torino: Giappichelli.
- EC (European Commission). (2017). *Progress report on the implementation of the European disability strategy (2010–2020)*. Brussels: EC.
- Ferrucci, G. (2014). Disability and work inclusion in Italy: between unfulfilled promises and new disability culture. *Modern Italy*, 19(2), 183–197.
- Foggetti, N. (2017). *La tutela delle persone con disabilità nel diritto internazionale*. Vicalvi (FR): Key.
- Fondazione Serono. (2016). *Il quadro normativo e definitorio*. <http://www.fondazione-serono.org>. 14 gennaio 2018.
- Geisen, T., & Harder, H. G. (2011). *Disability management and workplace integration. International research findings*. London: Routledge.
- Giaconi, C. (2015). *Qualità della vita e adulti con disabilità. Percorsi di ricerca e prospettive inclusive*. Milano: F. Angeli.
- Hancock, R., & Pudney, S. (2014). Assessing the distributional impact of reforms to disability benefits for older people in the UK: Implications of alternative measures of income and disability costs. *Ageing and Society*, 34(2), 232–257.
- Holck, L., Muhr, S. L., & Villesseche, F. (2016). Identity, diversity and diversity management on theoretical connections, assumptions and implications for practice. *Equality, Diversity and Inclusion*, 35(1), 48–64.
- Janssens, M., & Zanoni, P. (2014). Alternative diversity management: Organizational practices fostering ethnic equality at work. *Scandinavian Journal of Management*, 30(3), 317–331.
- Konrad, A. M., Yang, Y., & Maurer, C. C. (2016). Antecedents and outcomes of diversity and equality management systems: An integrated institutional agency and strategic human resource management approach. *Human Resource Management*, 55(1), 83–107.
- La Torre, G., De Giusti, M., Mannocci, A., De Waure, C., Agostinelli, A., & Schena, S. (2009). Disability management: The application of preventive measures, health promotion and case management in Italy. *Journal of Preventive Medicine and Hygiene*, 50(1), 37–45.
- Li, C.-R., Liu, Y.-Y., Lin, C.-J., & Ma, H.-J. (2016). Top management team diversity, ambidextrous innovation and the mediating effect of top team decision-making processes. *Industry and Innovation*, 23(3), 260–275.
- Loyalka, P., Liu, L., Chen, G., & Zheng, X. (2014). The cost of disability in China. *Demography*, 51(1), 97–118.
- Lu, C.-M., Chen, S.-J., Huang, P.-C., & Chien, J.-C. (2015). Effect of diversity on human resource management and organizational performance. *Journal of Business Research*, 68(4), 857–861.
- Mattana, V. (2016). Il Disability Management in Italia: una rassegna degli studi basti su evidenza. *Impresa Progetto – Electronic Journal of Management*, 1, 1–19.
- Mattana, V., Loi, M., & Bellò, B. (2011). L'inclusione lavorativa dei disabili: uno studio esplorativo nella provincia del Medio Campidano. *Giornale di Psicologia*, 5(1–2), 1–20.
- Metallo, G., Ricci, P., & Migliaccio, G. (Eds) (2009). *La risorsa umana diversamente abile nell'economia dell'azienda, Disability management e accountability*. Torino: Giappichelli.
- Migliaccio, G. (2016). ICT for disability management in the net economy. *International Journal of Globalisation and Small Business*, 8(1), 51–72.
- Migliaccio, G. (2017). Disabled people in the stakeholder theory: A literature analysis. *Journal of the Knowledge Economy*, first online: 10 April. <https://doi.org/10.1007/s13132-017-0485-x>.
- Mittler, P. (2015). The UN Convention on the Rights of Persons with Disabilities: Implementing a paradigm shift. *Journal of Policy and Practice in Intellectual Disabilities*, 12(2), 79–89.
- Nota, L., Santilli, S., Ginevra, M. C., & Soresi, S. (2014). Employer attitudes towards the work inclusion of people with disability. *Journal of Applied Research in Intellectual Disabilities*, 27(6), 511–520.

- O'Brien, R. L. (2013). Economy and disability: Labor market conditions and the disability of working-age individuals. *Social Problems*, 60(3), 321–333.
- Oberfield, Z. W. (2014). Accounting for time: Comparing temporal and atemporal analyses of the business case for diversity management. *Public Administration Review*, 74(6), 777–789.
- Ottawa Charter for Health Promotion. (2012). <https://www.who.int/healthpromotion/conferences/previous/ottawa/en/>. Accessed 20 June 2018.
- Rahim, A., Oluwafemi, A., & Afolabi, A. (2017). Homogeneity and heterogeneity of the workforce: Leveraging on diversity management to build inclusive workplace (Organizacja I Zarządzanie, z. 100, pp. 409–425). Nr kol. 1972. <https://doi.org/10.29119/1641-3466.2017.100.31>.
- Ravichio, F., Repetto, M., & Trentin, G. (2015). Report Conclusivo Progetto Scintilla CNR. <http://scintilla.itd.cnr.it>. Accessed 13 July 2018.
- Sabharwal, M. (2014). Is diversity management sufficient? Organizational inclusion to further performance. *Public Personnel Management*, 43(2), 197–217.
- Schalock, R. L., & Verdugo Alonso, M. A. (2002). *Handbook of quality of life for human service practitioners*. Washington, DC: American Association on Mental Retardation.
- Shakespeare, T. (2014). *Disability rights and wrongs revisited*. London: Routledge.
- Silva, J. I., & Vall-Castelló, J. (2017). Partial disability and labor market adjustment: The case of Spain. *Labour Economics*, 48, 23–34. <https://doi.org/10.1016/j.labeco.2017.05.012>.
- Torre, T. (2007). Diversity management and disability. Indication form a research on Ligurian Enterprise. *Impresa Progetto – Electronic Journal of Management*, 2, 1–26.
- Twigg, J. L. (2005). The cost of illness, disability, and premature mortality to Russia's economy. *Eurasian Geography and Economics*, 46(7), 495–524.
- UN (United Nations). (2006). *Convention on the Rights of Persons with Disability*. New York: UN.
- UN (United Nations). (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: UN.
- WHO. (2001). World Health Organization. *International Classification of Functioning, Disability and Health*. Geneva: WHO.
- WHO. (2011). World Health Organization, World Bank. *World report on disability*. Geneva: WHO.
- Zappella, E., & Dovigo, F. (2014). A job good enough: The path to workplace inclusion in small and medium-sized companies in Northern Italy. In International Conference on the Future of Education (4th edn), Florence, 12–13 June 2014. Available at: https://www.academia.edu/6940386/A_Job_Good_Enough_the_Path_to_Workplace_Inclusion_in_Small_and_Medium_Sized_Companies_in_Northern_Italy. Accessed 10 May 2019.

Disability Management Logic

► Disability Management

Disability Manager

► Disability Management

Disaster Management

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Synonyms

Breakdown; Crisis; Destruction; Disruption; Emergency; Recovery

Definition of Disaster Management

A common definition of disaster management is difficult because the term disaster may refer to different situations, and the approaches to manage these situations can vary in scope and aim. A disaster usually refers to an unpredictable event with relevant negative consequences for people, businesses, and the environment. According to the magnitude of damages generated, disasters are detected from catastrophes. With reference to the speed of occurrence, disasters are classified as emergencies or not. Moreover, different literature streams focus on either industrial disasters, which are produced by companies in their ordinary activity (e.g., blow out of some plants) or natural disasters, which are incidence of natural hazard events (earthquakes, eruptions, floods, or cyclones). Managing a disaster is also a very broad definition, as the art of management can span from forecasting to preventing, planning,

solving disasters, and recovering the situation as it was before the disaster or improving it (disaster recovery).

The Nature of Disasters and Crises

A disaster is usually defined as an event, natural or caused by humans, sudden, or progressive, which so negatively affects an organization or community that people have to respond by taking exceptional measures (Carter 1991). Similar, but with some differences, is the concept of crisis, described as a situation faced by an individual or organization, which they are unable to cope with by the use of routine procedures and in which stress is created by sudden change (Booth 1993).

The interchangeability of crisis and disaster is due to the fact that both definitions refer to a situation that the affected person feels unable to cope with and both situations require extraordinary actions to be overcome. However, the concept of crisis has more a transformational connotation as it indicates a turning point that may lead to either positive or negative outcomes. While disasters are always linked to severe negative consequences, a crisis can have a potential negative outcome as well as a positive outcome like being a stimulus for innovation or making the person aware of new targets to achieve. In addition, management research has usually adopted the word crisis to refer to a situation caused by the organization itself, while disaster is used to describe a situation whose root is external, out of organization's control (Faulkner 2001).

This means that disasters are caused by external triggering events or natural events such as extreme weather conditions, and the organization or person is confronted with unpredictable catastrophic changes over which it has little control. On the contrary, crises are attributable to the organization itself because of inept management structures and practices, failure in functioning, inability to adapt to change and therefore to achieve organizational objectives and survival.

This distinction implies that disaster management is mainly recovery or being prepared to deal with the negative impacts caused by an

unpredictable event. Eventually, managers may grasp early warnings about the possible disaster. Instead, crisis management involves the definition of procedures and standards that tend to keep the organization along the desired track. If a crisis is due to internal problems or breakdowns, then managers may set all necessary systems to avoid crisis.

According to this early definition of crisis and disasters, researchers have somehow confused crisis management with risk management as demonstrated by the definition of crisis management provided by Fink (1986) as "the art of removing much of the risk and uncertainty to allow you to achieve more control over your destiny." Since then, the study of crisis management has largely evolved and different models, and frameworks for strategically managing crisis and disaster have been developed (Bundy et al. 2017).

Disaster Management

Disaster management is for today's organizations a necessary capability. Being able to manage a crisis or a disaster is required for survival because globalization has led all organizations to a greater exposure to political, economic, social, and technological changes and their possible negative consequences. The increase in population has generated urbanization and social problems that may hamper businesses and communities. Search for efficiency and productivity has generated excessive use of natural resources and environmental pollution, which are roots of natural disasters, and the greater use and dependence on technology that can break down have increased possibilities of risks, crises, and even disasters (Lee and Harrold 1999). In other terms, crisis and disaster management are important competencies for managers in both the private and public sector. As stated by Kash and Darling (1998), it is no longer a case of "if" an organization, it is rather a question of "when," "what type," and "how prepared" the organization is to deal with crises and disasters. This implies the need for managers to move from a current dominant reactive paradigm to a proactive and holistic approach, which can help dealing with chaos and change.

Disaster management should be conceived as a system of interconnected activities aimed at dealing with a disruptive and unexpected event that may seriously harm the organization. These activities vary depending on the specific situation/event, which can be classified in terms of time pressure (actions are needed immediately or not), extent of control (capability of the company to reduce the impacts with its actions), and magnitude of the incident (the intensity and scope of people involved can be high or low).

If a disaster is sudden and there are no previous warning, organizations are unable to prepare a plan before it arrives, and the range of possible responses is limited. Other disasters are preceded by signals and are slower; therefore, organizations may notice their emergence and even implement management responses as part of the normal management function.

The main stages in managing a disaster are (Ritchie 2004):

1. **Prevention and planning:** In this phase organizations can activate environmental scanning, using scenario planning to forecast risks and understand how risks can become disasters. The most important activity is developing action plans from scanning and defines emergency planning.
2. **Implementation:** This is the decision-making phase, when organizations evaluate alternatives of actions and select the most appropriate response strategy, decision speed is fundamental, and organizations need to have a responsive structure because people and financial resources shall be redeployed quickly to control or minimize the impact of the disaster. During this phase, it is fundamental to define a communication strategy (the company shall try to control messages and information over the disaster using media, appointing a spokesperson, or using public relations plans) and a collaborative strategy with stakeholders, because to resolve the crisis or disaster, it is necessary to have the collaboration of all stakeholders, both internal (e.g., employees and managers) and external (e.g., government agencies, media, general public).
3. **Evaluation and feedback:** This is the phase of resolution and restoration of normality when possible. A key aspect of this phase is the analysis and evaluation of organization's effectiveness in solving or softening the negative impacts of the disaster. Companies shall learn from the disaster and use feedback to improve planning. The disaster can be the turning point for a change in company's strategies or internal functioning.

These three phases of disaster management are linked to the life cycle stages of crises. Both crises and disasters actually go through series of progressive stages whose knowledge may help managers to decide which actions to take to stop crises moving into the next stage. According to the management literature, we can identify four stages in the life of a crisis or disaster:

- **Pre-event:** when the disaster has not yet occurred, therefore, actions can be taken to prevent it or mitigate the effects of potential disasters.
- **Emergency:** the stage when the disaster has hit the company or population and managers shall implement strategies of damage limitation.
- **Intermediate phase:** when people's short-term needs shall be satisfied (e.g., providing a house) and the main objective is to restore the community or the organization to normality as quickly as possible.
- **Long-term phase:** the phase of continuing recovery, continuous support of the affected people (e.g., counseling victims, repair of damaged infrastructure) and provision of suggestions, and feedbacks to improve prevention and revise disaster management strategies.

When focusing on disasters caused by businesses whose impact is limited to a narrow territory or scope of operations, managerial actions can be organized and conveyed to solve the situation. In case of large disasters that involve a huge amount of people like political crisis or huge natural disasters, it is much more difficult to identify the stages of the disaster and the proper actions to take. When several factors are involved, an intermediate phase can turn back to be an emergency because additional issues arise or the implementation phase can last forever because

coordination at the political or regional level is complicated, and communications, which lack of direction, increase confusion and inability to minimize damages.

Disciplines Involved

Disaster management does not only refer to businesses. Practices of managing natural disasters originated long time ago. Even the story of Noah's ark to save human kind and animals is a management strategy to cope with a disaster. Modern disaster management as set of strategies, standards, and coordinated efforts to address preparedness, mitigation, and response activities to harmful situations dates back to the mid-twentieth century when governments began to create systems aiming to protect citizens from wars.

Business researchers began to deal with this topic in the 1980s when first large-scale industrial disasters became public. Therefore, business literature should be integrated with knowledge developed in other fields of research and disciplines such as:

- Public relations and communication (because the use of communication to control crises and disasters is fundamental as well as to improve coordination between internal and external stakeholders)
- Geography and environmental management that may help in understanding natural hazards disaster management
- Leadership styles (because implementation and (in)effective crisis management is strictly related to the leadership function)
- Political science (because terrorism, political instability, and security crisis have pushed governments to develop disaster management strategies already long time ago)

Interconnections with such disciplines has led to the development and adoption among businesses of specific tools that help to react to early warnings of a disaster arriving. For example, contingency planning and emergency planning are strategies developed within the field of public civil protection that can also help businesses to

stop a crisis/disaster from occurring or to limit its impacts on business and society.

Contingency planning refers to the identification of alternative plans, which can be implemented if a disaster hits, for example, when an airplane crashes or a plant blows up. In this case, the plan can include finding free accommodations for all people involved or moving employees from one site to another one. These plans are helpful for less certain situations and can help resolve the situation quickly if they were to occur. Integrated emergency planning (mainly used in natural disasters) includes planning of advance warning systems, creation of a disaster management command center, and prepared coordination between emergency services and public authorities.

Summary

Despite the fact that there is a difference between the words risk, crisis, and disaster, these are closely interconnected and often used interchangeably. Within the field of businesses, it is important and almost a necessity in today's era to set a risk management strategy and a system for managing crises because if these risks are neglected and crises mismanaged, they may lead to disaster.

Cross-References

- [Crisis Management](#)
- [Pollution](#)
- [Risk Management](#)

References

- Booth, S. (1993). *Crisis management strategy: Competition and change in modern enterprises*. New York: Routledge.
- Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and Crisis Management: Integration, Interpretation, and Research Development. *Journal of Management*, 43(6), 1661–1692.
- Carter, W. N. (1991). *Disaster management: A disaster manager's handbook*. Manila: Asian Development Bank.

- Faulkner, B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22, 135–147.
- Fink, S. (1986). *Crisis management*. New York: American Association of Management.
- Kash, T. J., & Darling, J. (1998). Crisis management: Prevention, diagnosis and intervention. *Leadership & Organization Development Journal*, 19(4), 179–186.
- Lee, Y. F., & Harrauld, J. R. (1999). Critical issue for business area impact analysis in business crisis management: Analytical capability. *Disaster Prevention and Management*, 8(3), 184–189.
- Ritchie, B. W. (2004). Chaos, crises and disasters: A strategic approach to crisis management in the tourism industry. *Tourism Management*, 25, 669–683.

systemizing, defending, and recommending concepts of morally right and wrong conduct. It may be divided into four major areas of study, namely

- Meta-ethics
- Normative ethics
- Applied ethics
- Descriptive ethics.

In the context of sustainability management, usually, normative and applied ethics play a major role – the first one by trying to define values, norms, and rules that enable individuals as well as groups to live a good, decent, and peaceful life; the latter by applying these normative orientations to specific areas of decision and activity, such as medicine, engineering, digitization, economics, business, and management (see, e.g., Pieper 2003; Ricken 2003).

Descriptive ethics deals with the different answers that humanity represented by different religions, cultures, and institutions has found throughout time and history for the question of “how should we behave and treat each other” (One of the most famous projects of descriptive ethics in the late twentieth century is the so-called Project World ethos by Hans Küng (1990)). Meta-ethics is analyzing and systemizing overarching principles and formulas that allow for the definition of normative orientations with a legitimate claim of universal acceptance and validity (see, e.g., Spaemann 1986; Pieper 2003).

This part of practical philosophy also compares the different (scientific) approaches of normative ethics and develops categories for differentiating them. One of these categorizations is dividing ethics into teleological (derived from the Greek term “telos” = goal) and deontological (derived from the Greek term “deontos” = duty) approaches (see, e.g., Frankena 1973, p. 14).

From the perspective of teleological ethics, an action is morally justified, thus ethically correct, when it serves the achievement of an overall goal that is recognized as a highest value and/or last end of humanity (e.g., happiness, eternal life, justice, social welfare, and sustainable development). The legitimacy of an action is considered and justified with regard to the expected outcome (ex post). Internationally, Utilitarianism –

Disclosure

- [OECD Principles of Corporate Governance](#)
- [Whistleblowing](#)

Disclosure of CSR Information

- [Communication of CSR Information](#)

Disclosure–Performance Gap

- [Greenwashing](#)

Discourse Ethics

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Introduction: The Context of Discourse Ethics

Ethics, also known as moral or practical philosophy, is a scientific discipline dealing with

developed since the early nineteenth century by Jeremy Bentham (1784–1832) and John Stuart Mill (1806–1873) – is probably the best-known example for this category as it has become the normative foundation of modern, especially, neo-liberal economic and market theory. According to Bentham, the overarching scale of human action is benefit – if possible both of the individual and of the (largest) group (Bentham 2013, chapter I–II). In the economic and corporate (managerial economics) context, “benefit” has been translated by “wealth,” “growth,” respectively, by “profit” and “economic success” (see Kleinfeld 1998, p. 33).

A general critique of this category of ethical reasoning argues that it could be interpreted in a way that “the end justifies the means,” neglecting, thus, the evaluation of the ways to achieve the respective goal from an ethical viewpoint as well.

From the perspective of deontological approaches, in contrast, only decisions and activities which are following moral orientations with a legitimate claim of universal validity (e.g., the principle of reciprocity/mutuality, rationality, respect of human dignity, and freedom) are morally justified. The legitimacy of an action, thus, requires a check beforehand (a priori) whether the underlying motives, attitudes, or the guiding principles or “maxims” fulfill this requirement. The most famous example for this category is the practical philosophy of the German philosopher, Immanuel Kant (1724–1804), the principle used to check the universal validity is his Categorical Imperative:

Act only according to that maxim whereby you can, at the same time, will that it should become a universal law. (Kant 1911, p. 420)

One major critique of the Kantian ethics came up in the twentieth century against the background of two world wars as well as new societal and technological challenges like nuclear power, arguing that an ethical theory which is primarily referring to individual decision-making is not appropriate any more. German philosophers and sociologists, like Max Weber (1864–1920), criticized its mere focus on the individual motivation and inner attitude of the actor, neglecting the (long-term) consequences of activities that had

been qualified as morally legitimate. In his famous speech “Politik als Beruf,” held in 1919, at the University of Munich, Weber was contrasting this “ethics of conviction” with the need for an “ethics of responsibility” (Weber 1988, pp. 551–552), which was taken up by Hans Jonas later on: With his ethical approach developed in “Das Prinzip Verantwortung” (Jonas 1979), he laid the normative foundation of environmental ethics and an ethics of sustainable development including the responsibility toward future generations.

Against this background and historical situation, the German philosophers Karl-Otto Apel (born 1922) and Jürgen Habermas (born 1929) started to develop from the 1970s on a new version of deontological ethics called “discourse ethics.” On the one hand and in common with the Kantian ethics, it belongs to the tradition of cognitivist moral theory. This means that it follows the assumption that justifying the validity of moral norms can be done in a manner analogous to the justification of facts based on rational insight of human beings. The free will of Kantian ethics corresponds in discourse ethics to the free will of the individual to participate in an open and rational dialog. On the other hand, discourse ethics continues the tradition of theories acknowledging the importance of language and communication for reflection in general, for moral arguing in particular that had started with Aristotle’s “Rhetoric” and had been rediscovered in the nineteenth and twentieth century by philosophers like Hamann, Herder, and von Humboldt, respectively, Wittgenstein, and the Erlangen School of constructivist theory (for the historical context of discourse ethics. See, e.g., Böhler and Gronke 2011).

Mission, Objectives, and Principles of Discourse Ethics

One essential idea of discourse ethics is to determine ethical norms of behavior not only on the individual level but also by including the perspectives and rational arguments of those who would be potentially affected by the decisions and activities following these normative orientations

(Habermas 1983b, pp. 53–125). Unlike Kant, Apel and Habermas were convinced that the validity of a moral norm cannot be justified in the mind of an isolated individual reflecting on the world but only intersubjectively in processes of argumentation between individuals following a certain set of rules. The validity of a claim to normative rightness depends upon the mutual understanding achieved by individuals in argument (Habermas 1983a, p. 60; see also Kleinfeld 1998, p. 30).

Like Kant's Categorical Imperative, discourse ethics is a formal ethics, i.e., it only describes and prescribes the procedure needed to define moral orientations legitimately claiming universal validity, whereas the content, the object of the examination by this procedure, have to be raised in terms of hypothetical moral norms by the members of the society respectively by the members of the discourse community. The concrete determination of moral norms as legitimate or not takes place in a dialog which has to follow certain rules (Habermas) and requires certain preconditions called "presuppositions" by Apel. The actual criterion of normative validity of an orientation consists in the **consensus** that the persons involved in a discourse of this kind and quality achieve (Habermas 1983a, pp. 97–100).

The rules for such a discourse set up by Habermas are ranging from morally neutral, logical ones – like, e.g., that terms have to be used in the same meaning or that speakers are not allowed to contradict themselves – via dialectical ones with an ethical content – e.g., every speaker may only claim what he or she believes him/herself – to rhetorical rules like every individual who is able to speak and act may participate in a discourse and should not be hindered to do so by any internally or externally generated force (Habermas 1983a, pp. 97–100). They are prescribing an ideal situation of communication which according to Habermas and Apel are necessary preconditions for a true discourse.

Whereas Kant extracted moral principles from the necessities forced upon a rational subject reflecting on the world, Apel and Habermas, thus, extract moral principles from the necessities forced upon individuals engaged in the discursive

justification of validity claims. In the perspective of Apel, these are the kinds of idealization that individuals have to make in order to enable communication and argumentation at all, for instance, the mutual respect and the mutual acknowledgment of the ability of rational arguing of individuals involved in any kind of communicative activities.

In Habermas' version of discourse ethics, two principles are essential which have a similar status as the Categorical Imperative for the Kantian ethics:

1. The **principle of discourse "D"** stating that norms are valid only under the circumstance that they find (or may find) the agreement (Zustimmung) of all affected persons as participants of a practical discourse (Habermas 1983b, p. 103).
2. The **principle of universality "U"** which states that valid norms at the same time have to fulfill the precondition that in case of a general application of this norm the consequences and unintended effects which are (most probably) resulting for the interests of each individual can be accepted by all affected persons (and will be preferred to the consequences of any other (existing) rule or normative orientation) (Habermas 1983b, p. 75).
3. Universal validity, thus, will be fully achieved only if the perspectives of all, directly or indirectly by the norm affected, persons have been integrated into its determination and if these persons may agree to it (Habermas 1991, p. 59).

Apel is taking up the two principles from Habermas but formulates them much stronger in the form of an imperative maxim of action, thus getting closer to the Categorical Imperative of Kant:

Act only out of a maxim of which you, based on a real agreement with the affected persons (or their legitimate representatives) or – substitutional wise – based on a thought experiment, may assume that the consequences and unintended effects that most probably will result from its general application for the fulfillment of the interests of each individual could be accepted (unforcedly) in a real discourse by all affected persons/ parties. (Apel 1988, p. 123 (translated into English by the authors))

Besides, in addition to Habermas, Apel is demanding to carry out a practical discourse even if the conditions of an ideal discourse are not given yet. Even though the creation of these ideal conditions, mainly the assurance of a voluntary situation of dialog free from any kind of suppression and based only on the power of the stronger argument, remains an important goal for him too, there may be situations where getting into a practical discourse based on the ordinary rationale of a “strategic self-defense” has to be considered as the second best option and, as long as the presuppositions for an ideal discourse community do not exist, seen as a “duty of secondary status” (Apel 1988, p. 128).

Reception, Application, and Relevance of Discourse Ethics in the Context of Business Ethics and CSR

In principle, all kinds of applied ethics (see above) could become a field of application of the ideas and principles of discourse ethics, both of its ideal and of its practical version. The latter, for instance, could be realized by engaging experts and potentially affected parties in a (practical) discourse in order to find a consensus about controversial questions such as the legalization of drugs, the permission of abortion or of assisted suicide, or – more recently – about the need of a normative framework for the ethical implications of digitization and artificial intelligence.

One area of applied ethics which was using the theory of discourse respectively of dialog ethics explicitly as a foundation for some of its approaches was the discipline of business ethics in the German-speaking area of Europe, in the first place, the theory of Peter Ulrich, holder of the first chair of business ethics at the University of St. Gallen. In his books “Transformation der Ökonomischen Vernunft” (1987) and “Integrative Wirtschaftsethik” (1997), Ulrich demands a transformation of economic rationality by reconstructing its implicit utilitarianist ethical fundament with the categories of communicative ethics in the sense of Apel and Habermas to what

he calls a “rational social economy” (Ulrich 1987, pp. 269–304; see also Kleinfeld 1998, pp. 33–34).

Ulrich is restricting the use of this approach to the ideal discourse in the form of the “regulative idea of finding a consensus based on rational arguing” (Habermas 1983b, p. 55). This idea should be applied by economic theory itself in order to critically reflect and question its own underlying normative assumptions with the aim to (re)define economic rationality and the genuine purpose of economic activity. “Rational” in terms of Ulrich’s understanding are only those economic activities or institutions that “free and responsible citizens within a process of rational communication and understanding among all affected parties would define (respectively could have defined) as value creating” (Ulrich 1990, p. 133 (translated into English by the authors)).

Another example of applied discourse ethics – here in the sense and dimension of a practical discourse according to Apel – can be seen in one of the most important elements of a contemporary approach of CSR management, namely, in carrying out a dialog with at least the most important stakeholders of an organization. In order to understand and define stakeholder dialog as a form of a practical discourse in line with the above described, one major criterion that has to be considered in the identification of relevant stakeholders is their affectedness by the corporate decisions and activities, following the definition of stakeholder, e.g., of Edward Freeman (Freeman 1984, p. 25) as well as of the first international standard in the area of Social Responsibility Management: ISO 26000 (ISO 26000 2010, pp. 4 and 17).

While in clause 5 (ISO 26000 2010, pp. 17–18), the standard provides clear guidance about a proper identification and involvement process of relevant stakeholders in-line with the principle of ethical behavior and the other six principles of social responsibility defined in clause 4 (ISO 26000 2010, pp. 10–13), the development process of ISO 26000 itself can serve as an example for applying the ideas and the principles of discourse ethics in the form of a practical discourse.

The standard has been developed between 2004 and 2010 based on a huge global multi-stakeholder process, facilitated by the International Standard Organization ISO and, thus, following the specific rules of standardization set up by ISO: All ISO standards with the legitimate claim of being recognized as an international “norm” are developed in line with a certain set of rules. Next to the inclusion of as much countries as possible as well as of all stakeholder groups relevant for the respective topic, the most important ISO rule is to develop the content of the standard based on the principle of consensus. This means that the facilitators of the process try to create an agreement of all involved persons and parties, in particular, about the underlying terms and definitions. In the case of ISO 26000, the development process became the largest in the history of ISO, including the representatives of 99 countries and 6 stakeholder groups per country. In addition, the so-called D-Liaison-Organizations were invited, who were known to have a long-term expertise in the fields relevant for the different aspects of social responsibility such as ILO, UN Global Compact, The WHO, the European Business Ethics Network – EBEN, experts from the European Commission, etc. (ISO 26000 2010, p. V; Kleinfeld 2011).

The inclusive nature and procedural fairness of its development process, described above, its consensual orientation, and its transparency lead the outcome of this standard to possess a high level of legitimacy as a number of authors in the area of business ethics and CSR have acknowledged after its publication (see, for instance, Mueckenberger and Jastram 2010; Mena and Palazzo 2012).

Cross-References

- [Business Ethics](#)
- [Corporate Social Responsibility \(CSR\)](#)
- [Ethics](#)
- [ISO 26000 Standard](#)
- [Social Responsibility](#)
- [Stakeholder](#)
- [Stakeholder Dialogue](#)

References

- Anzengruber, A. (2003). *Einführung in die Ethik* (4th ed.). Düsseldorf: Patmos-Verlag.
- Apel, K.-O. (1973). Das Apriori der Kommunikationsgemeinschaft und die Grundlagen der Ethik: Zum Problem einer rationalen Begründung der Ethik im Zeitalter der Wissenschaft. In K. O. Apel (Ed.), *Transformation der Philosophie* (Vol. 2, pp. 358–435). Frankfurt am Main: Suhrkamp.
- Apel, K.-O. (1988). *Diskurs und Verantwortung. Das Problem des Übergangs zur postkonventionellen Moral*. Frankfurt am Main: Suhrkamp.
- Bentham, J. (2013). *An introduction in the Principles of Morals and Legislation*, German translation: *Eine Einführung in die Prinzipien der Moral und Gesetzgebung*. Saldenburg.
- Böhler, D., & Gronke, H. (2011). Diskurs. In *Neues Handbuch Philosophischer Grundbegriffe*. Freiburg.
- Frankena, W. K. (1973). *Ethics* (2nd ed.). Englewood Cliffs: Prentice-Hall.
- Freeman, R. E. (1984). *Strategic management. A stakeholder approach*. Boston: Pitman.
- Habermas, J. (1983a). *Moralbewußtsein und kommunikatives Handeln*. Frankfurt am Main: Suhrkamp.
- Habermas, J. (1983b). Diskursethik – Notizen zu einem Begründungsprogramm. In J. Habermas (Ed.), *Moralbewußtsein und kommunikatives Handeln* (pp. 53–125). Frankfurt am Main: Suhrkamp.
- Habermas, J. (1991). *Erläuterungen zur Diskursethik*. Frankfurt am Main: Suhrkamp.
- ISO 26000:2010. (2010). *Guidance on social responsibility*. Geneva.
- Jonas, H. (1979). *Das Prinzip Verantwortung. Versuch einer Ethik für die technologische Zivilisation*. Frankfurt am Main: Suhrkamp.
- Kant, I. (1911). *Grundlegung zur Metaphysik der Sitten*. In *Gesammelte Schriften* (Vol. 4). Berlin: Preussische Akademie der Wissenschaften.
- Kleinfeld, A. (1998). *Persona Oeconomica. Personalität als Ansatz der Unternehmensethik*. Berlin/Heidelberg: Physica-Verlag HD.
- Kleinfeld, A. (2011). *Fragen und Antworten zur ISO 26000*. Berlin: Beuth.
- Küng, H. (1990). *Projekt Weltethos*. München: Piper.
- Mena, S., & Palazzo, G. (2012). Input and output legitimacy of multi-stakeholder initiatives. *Business Ethics Quarterly*, 22(3), 527–556.
- Mill, J. S. (2014). *Utilitarianism/Der Utilitarismus*. English/German. Stuttgart.
- Mueckenberger, U., & Jastram, S. (2010). Transnational norm-building networks and the legitimacy of corporate social responsibility standards. *Journal of Business Ethics*, 97(2), 223–239.
- Pieper, A. (2003). *Einführung in die Ethik* (5th ed.). Tübingen et al.
- Ricken, F. (2003). *Allgemeine Ethik* (4th ed.). Stuttgart.
- Spaemann, R. (1986). *Moralische Grundbegriffe* (3rd ed.). München: C.H. Beck.

- Ulrich, P. (1987). *Transformation der Ökonomischen Vernunft. Fortschrittsperspektiven der modernen Industriegesellschaft* (2nd ed.). Bern/Stuttgart: Haupt.
- Ulrich, P. (1990). Wirtschaftsethik als Kritik der “reinen” ökonomischen Vernunft. In C. Matthiessen (Ed.), *Ökonomie und Ethik* (pp. 111–138). Freiburg.
- Ulrich, P. (2008). *Integrative Wirtschaftsethik. Grundlagen einer lebensdienlichen Ökonomie* (4th ed.). Bern/Stuttgart/Wien.
- Weber, M. (1988). Politik als Beruf. In J. Winckelmann (Ed.), *Gesammelte Politische Schriften*. Tübingen.

Discrimination

- [Speciesism](#)

Disposal

- [Sustainability of Waste Management Systems: Final Disposal](#)

Disproportional Ownership Mechanisms

- [Control-Enhancing Mechanisms \(CEMs\)](#)

Disruption

- [Disaster Management](#)
- [Disruptive Innovation](#)

Disruptive Innovation

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Synonyms

[Disruption](#); [Prototype Idea](#); [Sustaining Innovation](#); [Technology](#)

Introduction

Innovation consists a continuous challenge for every corporation which has the ambition to make the difference inside its market by obtaining a competitive advantage. Innovation is tied closely with technological leapfrogs. However, innovation is not exclusively about technology. The concept of innovation could be about a new technological achievement, a new idea, a new process, a new product or service, or a different way of thinking or usage of something. The continuous chase of dominance in market by corporations and humans' trend for continuous success has led companies to be unsatisfied by making just an innovation. They are interested in the rationalization of innovation, the successful repeat of innovation process, the practical employment and materialization of any innovation in their market, and the yielding of any possible benefit. Especially, disruptive innovation, a term that was introduced in 1995 (Christensen & Bower, 1995), seems to be a goal for more and more companies which wish to agitate the current status quo in their sector by bringing different products and services than competition even with less resources.

Definition

Disruptive innovation consists a process in which new entrants challenge incumbent firms, often despite inferior resources and offerings. This may occur through two alternatives. New-comers or small size firms may select overlooked segments of the market with a product considered inferior by incumbents' most demanding customers and later move up-market as their product is upgraded. Or they may form markets where no market exists and turn nonconsumers into consumers. Basic element in both scenarios is the caused disruption in the market. This kind of innovation is not about technology alone but rather the combination of technology and business model innovation (Hopp et al., 2018).

Disruptive innovation is a process and not just an amazing product or service, with specific starting and ending point that brings an offering by a small company from fringe to the mainstream (Christensen et al., 2015: 6).

Description

The word “disruption” delineates a process whereby a small company with limited resources achieves to challenge the major companies in the sector. As the incumbents have stabilized their dominance in the market and design new ways to increase their profitability by upgrading their products and services for their most important, demanding, and profitable clients they unintentionally show defiance of the needs of some low-end segments of the market by exceeding their needs and their buying capacity with their new products. This is the entering point for small players and/or newcomers to detect and target these overlooked segments and finally provide more proper products and services in more competitive pricing than dominant players. The reality that big players have shifted their interest to other segments has as consequence that they ignore and underestimate the intrusion in the market and are characterized by inertia instead of reacting promptly. Small companies continue their growth by expanding their targeted groups including even the main customers of the incumbents. Thus, small players scale up to the market by improving their quality continuously, but they always maintain the characteristics that have allowed them to enter the game so dynamically (Christensen et al., 2015).

Disruptive innovations don't catch on with mainstream customers until quality catches up to their standards (Christensen et al., 2015: 5).

A disruptive innovation concerns a detailed designed prototype product, service, or business model that unfolded gradually approaching more and more segments of the market, starting from a low-end niche and targets to mainstream customers. This initiative sources from a small company that manages to disrupt the main players of the market by placing a new, low-cost offering. The initial niche market acceptance yields profit

that funds further development of the offering or business model to upgrade its quality and capabilities. Afterward, it can earn new customers from other niche markets with higher standards. Mainstream customers gradually become aware of the innovation, and they start considering it as a potential purchase. When this purchase occurs in the level of mainstream customers, the disruption has occurred (Thomond & Lettice, 2002: 4).

Sometimes, the disruptive innovation evolves the birth of a new segment in the market that did not exist previously usually because of high-cost reasons. As a consequence, in the case of new-market footholds, the disruptive innovation implies that the small player manage to bring new customers in the game (Christensen et al., 2015: 5).

Sustaining Versus Disruptive

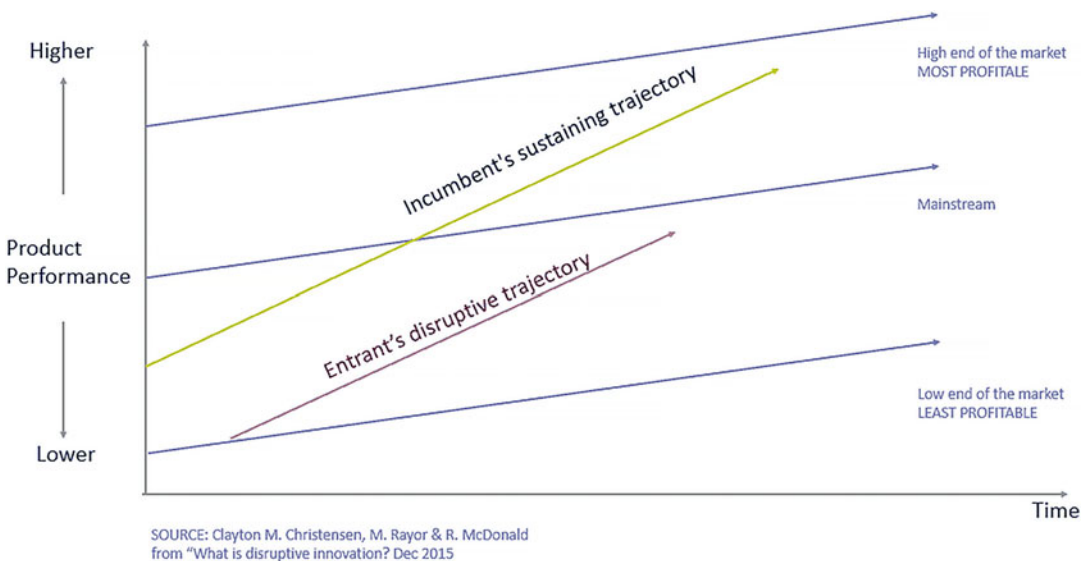
The term sustaining innovation is discrete than disruptive innovation because the first refers to cases where we have incremental improvements in existed products and services usually by companies that have big shares in the market. Disruptive innovation concerns revolutionary rather than evolutionary changes regarding technology, products, services, or business models. Incremental and evolutionary innovation consist improvement of already established offerings based on mainstream customers' expectations by major companies that control the biggest shares of the market. Evolutionary innovation assist big players to maintain and increase their customers (Christensen, 2013). Mainstream dominant companies pay much attention to their existing customers and especially to those that offer higher profit margins. Big players have a strong desire to fulfill the expectations of their high-end customers without any risk for their profitability. They are directed to any solution that is familiar, mature, and proximate; thus, they unintentionally put away themselves from any disruptive path that may hide risk and uncertainty. Furthermore, everyday business routine puts ordinary issues ahead of incumbents and they get used not to use disruptive thinking (Thomond & Lettice, 2002). Thus, this

adhesion of well-established companies to further develop their already high-end offerings put them away for the path of disruption. So, company's resources are directed more to sustaining innovation rather than disruptive innovation, since the first kind will most probably create more profit for the company (Christensen et al., 2015: 10–11).

Christensen (2013) describes as value network the frame within a company interacts with its customers, realizes their needs, expectations, issues, difficulties, receives feedback and acts based on that, competes with other companies, and chases profit. In incumbent companies, the consideration of major changes implies high risk, and thus the allocation of resources is directed toward sustaining rather than disruptive innovation. Trott (2001) claims that typical market research cannot push a firm to disruptive direction and possibly it can encircle a firm inside incremental innovation context (Trott, 2001).

The graph below presents the parallel paths of sustaining and disruptive innovation. Sustaining innovations brings a better version of an existed product. On the contrary, a disruptive innovation implies an offering with some prototype characteristics that initially is substandard in the eyes of

incumbent's customers because of its low pricing. They will reconsider their opinion up to the point that the quality will rise significantly as the small player moves upmarket. They find such offerings appealing when their quality satisfies their standards, and the competitive pricing makes them to proceed with purchase. At the point that small players have managed to earn clients from the major segments of the big companies, they have completed a disruption (Christensen et al., 2015: 4). Main characteristic of disruptive innovation is that it evolves low-end companies or new entrants that plan to satisfy the less demanding customers of the dominant companies with a "good enough" product in a cheaper price. This is how disruptive innovation works: The small companies move upmarket gradually and total pricing of the market moves down. Thus, disruption is in favor of the customers since the new offerings are tailored just to satisfy their needs and they are easier to be purchased than before (Christensen et al., 2015: 6). The challenge for every modern company is to establish a corporate culture and an R&D mechanism that will allow it to continually produce disruptive innovation as a stable response to market competition (Thomond & Lettice, 2002: 4).



Disruptive Innovation, Fig. 1 Sustaining Vs Disruptive Innovation (Christensen et al., 2015)

Disruptive Innovation in Depth

Disrupters are mainly interested in the design and application of the proper business model rather in the perfection of the first versions of their offerings. (Christensen et al., 2015: 6)

There are three kinds of disruptive innovation. The first consists of cases where low-end companies find a foothold with a good-enough new product and/or that satisfies low-end customers in pricing and quality. The second consists of cases where newcomers enter a wide market with a totally brand-new product and/or that is not initially competitive to the existed high-end products of the incumbents. In the third case, there is a newcomer that introduces a brand-new product to the world offering (business model, product, service, or combination of them) targeting exactly below the low-end zone of the customers of the market. In the first case, the big players overlook the smaller companies up to the point that low-end companies decide to move upmarket. In the second and third case, big players may not consider the totally brand-new product as a threat since they cannot understand its dynamic (Christensen et al., 2015: 10).

There are researchers that disagree with the use of the term “disruptive innovation” for any innovation like technological innovation, product innovation, service innovation, and business model innovation because they consider that these types even could cause disruption to incumbent companies; they have significant differences. These innovation types create different results having different main characteristics, and thus a generalization of them is not fruitful for better understanding. Christensen in 1997 had initially focused on disruptive technologies and later extended his theory by embracing products and business models (Markides, 2006).

Business model innovation consists in bringing a prototype business model in an already established market. The example of Amazon represents this term since it has contributed to the book retail business by using a discrete and new way of operating. EasyJet is another example of a successful business-model innovation (Markides, 2006).

Such a disruptive business model innovation should maximize the market either by attracting new customers or by increasing the consumption of the existed customers. Amazon and easyJet have managed to introduce an unusual business model and have expanded their markets. Both did not create a new product or service or even technology. They have managed to repurpose what an already existing product or service could be and could be offered to the public. Amazon, for example, achieved in its early steps to reform the book-selling service. A prototype business model reintroduces an ordinary product or service giving special characteristics to it. Thus, these disruptive innovators do usual business with an unusual way that implies much lower cost for them and their customers and disrupts the market. Since newcomers highlight different attributes of an offering, customer groups different from mainstream customers are interested in this offering, usually customers from the low-end level and/or totally new customers (Markides, 2006).

Disruptive innovation that is based on a new-to-the-world product disrupts consumers, producers, and retailers. It is very common in newly formed markets, a big number of start-ups to emerge with new products based on radical technology. This impressive increase in new entrants' number occurs well before a new market extends. The pace of innovation at the beginning of a new market is the highest achieved during its life cycle. Such a new market will start taking stable characteristics when most of these pioneers will be disappeared because finally a specific design will prevail. The early pioneers are not necessarily the companies that will become the incumbents in the new market. It seems that firms that enter in a niche before the prevalence of a specific technological solution have the chance to ride the wave of innovation and enjoy the benefits for their commercial application better than early pioneers. These companies do not outperform in the field of radical innovation but in the commercial field because they achieve to transform a niche to a big market, they build a brand, invest in marketing and distribution channels, and proceed with mass production and economies of scale (Markides, 2006).

A purely disruptive innovation that has all the characteristics of the theory of disruptive innovation is not going to be successful inevitably. Moreover, it is possible an effort by a small player that causes disruption in the market to be successful even if he has not followed all the theoretically correct steps of the disruption process (Christensen et al., 2015).

There is a common element between the case of disruptive innovation based on a new product where the latecomers take advantage from early pioneers and the case of disruptive innovation based on a new business model where small players disrupt the incumbents. Both take advantage with a product that is not the best quality wise. Latecomers manage to shift the decision-making from technical characteristics to others like pricing, quality, and branding and focus on a mass market segment. Disruptors like small players and new entrants with a new business model achieve to shift the decision-making process away from technical characteristics and branding to pricing and probably to redefine the content of their offering in comparison with the incumbents. It is pitying that early pioneers who have managed to develop technology and invent new products lose the advantage and the foothold in the market they have created, by the latecomers. Proportionally, early pioneers and incumbents react in a similar way. Both continue to invest in the incremental improvement of their products. Early pioneers have a product that covers the needs of the average user, and they continue to invest in its overengineering. Finally, they create a product that is more than good enough for the average user, and it is of high cost. The latecomers and small players notice that discrepancy, and they try to reach those who cannot afford to pay for a very expensive product which does more than what an average customer needs. Early adopters are interested in any new improvement, but the average customers prefer a balanced product with good technical characteristics and good pricing. Of course, there is a big difference between the two examples. In the case of disruptive product innovation, the latecomers dominate the game, but in the contrary, the small players with a prototype business model do not necessarily take the place of the incumbents. They probably earn an important share in the market which big players can afford to lose (Charitou & Markides, 2003).

Reaction to Disruptive Innovation

Disruptors often follow different business models than those of the incumbents and their success is based more on the functionality of their unusual business model rather in the superiority of their product or service (Christensen et al., 2015: 7).

The fact that the small size companies or newcomers respond either to low-end segment of the market or in a totally new niche indicates that there are fundamental differences from the mainstream and the high-end customers. Thus, the idea of a dominant company to imitate a small innovative company is extremely difficult and even risky because the biggest part of their customers has different expectations than the customers of the innovator. Furthermore, such transformation requires a different value chain, and all the aforementioned information may explain the reason behind the delay and reluctance of a big player to respond to such disruptive innovation challenge. Gradually, the innovative shift upward in the market and its proposal to the market start to compete with the major solutions proposed by the big players. At this point of time, as customers of the mainstream level get added in its customers' base, incumbents cannot overlook the phenomenon. However, it is difficult for an incumbent to respond with a nonsustaining innovation (Disrupt the Disruptor Strategy) since the introduction of a new business model is a vast transformation that demands time and has great risk. Christensen & Raynor (2013) suggest that at this certain point of development, the big players must react by creating a separate unit that will imitate the newcomers or they must buy the newcomer unless they wish to disappear themselves from the market. The resources from the mother company could assist the new unit to succeed quickly. On the contrary, Markides (2006) suggests that there is another strong alternative that is dictated by real business life. The innovator gets bigger and after a rapid growth reaches a limit that is an important but not a dramatic share of the pie of that market from the point of view of the incumbents. The dominant companies do not collapse, and they can continue as protagonists in their sector. The prototype business model is not necessarily better than the

traditional model; it may become dominant in the market, or it could take a respected percentage of a market. Therefore, a response by the incumbents like a parallel creation of a new unit, the full adoption of a new business model, the acquisition of the newcomer, the “disrupt the disruptor” strategy, and the closed follow-up without any special reaction remain as available options (Markides, 2018).

However, incumbents could consider the possibility to use a disruptive business model when: (a) They prepare their entrance in a new market, (b) they are in the middle of a crisis because their existed business model is superseded and they need a push, and (c) they are about to introduce a prototype product and they target to their mainstream customers (Markides, 2006).

A disruptive innovation when it comes from a well-established company, either this is a response to a first disruption in the market by a smaller company or it is not, usually demands a radical change in its value network. Real data indicate that incumbents can better tackle newcomers and outliers through sustaining innovation since they have the channels of communication, more resources for R & D, etc. Small size firms maintain better possibilities inside a disruptive innovation complex. However, this is not absolute. In any case, the dominant companies should neither ignore nor overreact to disruption invasions by abandoning parts of their core customers in the high end of the market. They should better follow up closely the disruption and seek for any new chances for growth (Christensen et al., 2015).

Disruptive strategic innovations are not necessarily superior to the traditional ways of competing, nor are they always destined to conquer the market. Rushing to embrace them can be detrimental for established companies when other responses, including ignoring the innovation, make more sense (Charitou & Markides, 2003: 2).

Summary

Disruptive innovation engages the concept of disruption in an already established market either by the rise of a small already existed firm or a newcomer that will bring a new prototype idea launching from the low-demanding customer

zone or in a new low-cost market. Disruptive innovators follow a process where they introduce a proper offering usually inferior in quality and with inferior resources. They often employ a combination of a new technology and a prototype business model. Disruption represents innovations that make products and services more accessible, affordable, and available to a larger population. They focus on customers' needs, and they transform a gap in the market into a chance for them to grow. Even if they manage to grow up and compete the incumbents, they may overtake them or coexist with them in the same wide market. The other side is consisted of the incumbents that have several options to examine and apply due to their higher capital power. However, their inherent features determine their choices as the same applies for newcomers and/or small companies.

For disruptive innovation, the key to organizational renewal may lie in the needs of the customers and/or the dynamic of a critical mass of noncustomers which could be transformed into new low-cost customers creating a new niche market (Hopp et al., 2018). Furthermore, the change of the general framework of the market or of the society in general with revolutions, wars, radical scientific achievement, etc. or just the finding of a clever way for economies of scale may indicate the path for some cases of disruptive innovation even though there were no pioneering companies that step forward unexplored territories but rather clever businessmen looking for chances (King, 2015).

In any case, the business reality is not defined by the already developed theory rather it finds always a new prototype and innovative ways to surprise everyone. Making predictions in business cases where there are incumbents that are challenged by disruptive innovation threats is of high risk.

Cross-References

- [Change Management](#)
- [Disruptive Sustainability](#)
- [Managing Change for Sustainability](#)
- [Reverse Innovation](#)
- [Sustaining Innovation](#)

References

- Charitou, C. D., & Markides, C. C. (2003, Winter). Responses to disruptive strategic innovation. *MIT Sloan Management Review*, 44(2).
- Christensen, C. M. (2013). *The innovator's dilemma: When new technologies cause great firms to fail*. Perseus Book LLC (Ingram). <https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4965541>
- Christensen, C. M., & Bower, J. L. (1995). Disruptive technologies: Catching the wave. *Long Range Planning*, 28(2), 155. [https://doi.org/10.1016/0024-6301\(95\)91075-1](https://doi.org/10.1016/0024-6301(95)91075-1).
- Christensen, C. M., & Raynor, M. E. (2013). *The innovator's solution: Creating and sustaining successful growth*. Harvard Business Review Press.
- Christensen, C. M., Raynor, M., & McDonald, R. (2015). The big idea: What is disruptive innovation? *Harvard Business Review*, 11.
- Hopp, C., Antons, D., Kaminski, J., & Salge, T. O. (2018, April 9). What 40 years of research reveals about the difference between disruptive and radical innovation. *Harvard Business Review*. <https://hbr.org/2018/04/what-40-years-of-research-reveals-about-the-difference-between-disruptive-and-radical-innovation>
- King, A. A. (2015). How useful is the theory of disruptive innovation? *MIT Sloan Management Review*, 57(1), 77–90.
- Markides, C. (2006). Disruptive innovation: In need of better theory. *The Journal of Product Innovation Management*, 23, 19–25.
- Markides, C. (2018, February). Disrupting your disruptor. *London Business School Think*. <https://www.london.edu/think/disrupting-your-disruptor>.
- Thomond, P., & Lettice, F. (2002). *Disruptive innovation explored*. In Concurrent engineering conference proceedings, p. 4.
- Trott, P. (2001). The role of market research in the development of discontinuous new products. *European Journal of Innovation Management*, 4(3), 117–126. <https://doi.org/10.1108/14601060110390585>.

Disruptive Sustainability

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Synonyms

Corporate social responsibility; Disruptive innovation; Sustainability

Introduction

Requirements toward sustainability are diffused in all aspects of business sector with continuously higher pace. This implies the corporate need for alternative solutions that could reduce environmental footprint and increase social profile. This corporate trend for sustainable transition could be transformed into a chance for companies to increase their corporate social performance (CSP) through innovation. Disruptive innovation in a wide context could consist a double way to foster changes toward sustainability and enhance corporate financial performance (CFP). As the demand for an absolute turn to sustainable solutions is maximizing, disruptive innovations for the sake of sustainability will be an ultimate challenge. These changes in markets, regulations, institutions, practices, technologies, etc. imply new niche markets and differentiation to value networks and finally a kind of disruption in the existed system. New ideas like Internet of Things (IOT), new healthcare and transportation solutions, smart cities, intelligent energy services and smart grids, and circular and sharing economy models could operate as lighthouses for a total transition to a new sustainable reality worldwide (Nasiri, Tura, & Ojanen, 2017).

Theoretical Background

Major changes are characterized as fit-and-conform when they are mild or stretch-and-transform when they are more radical and deeper. The urgency of the global problems, like climate change and environmental degradation of the planet, applies significant pressure for scientific innovations that could reduce human impact in nature. However, these changes cannot concern only science or technological products since business players should also change their spherical view of things. There is a general claim for sustainable transition directed to corporations, and disruptive innovation could operate as the proper vehicle for that. Technological and social innovations could function as enablers for disruptive sustainability transitions (Kivimaa, Laakso,

Lonkila, & Kaljonen, 2021). Geels and Schot (2007) describe disruption as an incremental and rare change of high impact in an incumbent system. They consider disruptive change as the cultivation of the proper conditions that could favor a transformation or a technological substitution process. On the contrary, the term “reconfiguration” refers to innovations that are employed to facilitate local issues and cause small improvements in the status of the market.

We should underline that the term “disruptive innovation” is not identical with the term “disruptive sustainability.” Disruptive innovation describes a prototype offering usually with inferior characteristics than competition, that is introduced by a small company, achieves to make a serious impact in the existed market and the incumbent companies. The main characteristic of disruptive innovation is that it involves low-end companies or new entrants that plan to satisfy the less demanding customers of the dominant companies with a “good enough” product at a cheaper price (Christensen, Raynor, & McDonald, 2015). Furthermore, “sustaining innovation” refers to incremental improvements in existed offerings in order to satisfy the most demanding customers and increase market share (Christensen, 2013). Therefore, there is a proportion between the dipoles of disruptive innovation and disruptive sustainability, on the one hand, and sustaining innovation and reconfiguration, on the other. Disruptive innovation toward sustainability is not used herein with the stringent abovementioned meaning that Professor Christensen has defined but within a much wider frame. This means that any prototype idea, either in the level of technology, business model, practice, product, or service that could disrupt the regime and destabilize the existed socio-technical-economic system by introducing something new that signals a transition to a more sustainable phase of a market, could be characterized as disruptive sustainability.

Definition Disruptive sustainability is about disruption related to sustainability transition where there is a significant change in the architecture of a socio-technical-economic system. This change should be of high-intensity impact and long term

pertaining one or more parameters of the system like incumbent technology and companies, infrastructure, markets, business models, regulations, strategies, practices, actors, value networks, behavior, and cultural models (Johnstone et al., 2020; Kivimaa et al., 2021).

Disruptive Sustainability Versus Disruptive Innovation

Sustainability transitions demand new knowledge, resources, and skills. A disruptive sustainable innovation implies a destabilization of the regime in case of a stretch-and-transform transition. On the contrary, in the case of a fit-and-conform transition there is no destabilization. A reconfiguration-based transition process concerns gradual change of the current situation and thus operates in a different way than disruptive innovation (Kivimaa et al., 2021). Thus, the cases of fit-and-conform transition and reconfiguration-based transition are closer to sustaining innovation. The extension of the initial meaning of disruptive technology to disruptive innovation that embraces cases like new business models, prototype products, or services indicates paths through which a disruptive system change could occur. There are two scenarios through which a prototype business model relates to disruptive system change: (a) disruption in business models as an outcome of disruptive technological innovation and (b) prototype business models that disrupt the incumbent system. Disruption limits the current value of existing corporate assets and makes obsolete existing business models of the major players (Lindberg, Markard, & Andersen, 2019). The example of electric vehicles and mobility-as-a-service, including ideas as car sharing, is such disruptive innovation toward a sustainability transition that disrupts the incumbent transport and energy companies with an innovative product and a service-oriented business model and a user-centric approach that breaks the established rules of the market (Kivimaa et al., 2021). As an innovative business model is disruptive itself, it could have great impact in a market affecting the core of its operation like in the case of sharing economy (Kivimaa et al., 2021).

A disruptive innovation does not necessarily imply that the incumbent firms will lose their dominance in the market. There are possible incumbents to share the market with new entrants and innovating small companies. Incumbents have a range of options as reaction to disruption like investment in sustaining innovation, adoption of a different business model, creation of a new business unit, the acquisition of a newcomer, the “disrupt the disruptor strategy,” or even absence of any reaction (Markides, 2018). In the case of disruptive sustainability, it is possible for a market to get enriched with new entrants like in the case of autonomous vehicles where companies from IT and telecommunications fields have entered the transportation sector (Skeete, 2018). However, in this case, it seems impossible that incumbent firms survive without any strategy against disruptors that includes a sustainable shift because sustainability consists a global necessity worldwide. Disruptive sustainability could cause changing of ownership from major players to newcomers, and moreover, a part of ownership could be allocated to customers, civil society, groups of citizens, other companies and government, or more local authorities like municipalities. It is expected that this could be the case in the field of transportation with the coming of renewable energy, electric cars, and autonomous vehicles. Elements like prosumerism and ownership sharing could in combination with the technologies reform the traditional sector of personally owned and manually driven cars. The privately owned mobility will be transformed into a transportation service where shared cars will look more like platforms, the core of the platform will be the software rather than the engine path, and a disruptive sustainability phenomenon will have taken place (Skeete, 2018).

The Transition from Old to New

A process of transition implies changes in practices, behavior, cultural models, ideas, and perceptions; therefore, it could be considered a

disruption. Disruptive sustainability could be distinguished to three categories: (a) disruptive innovation which causes changes in behavior and practices, (b) new developed practices that replace existed practices, and (c) significant changes in cultural models (Geels, 2010). The model of sharing electric cars could in the aftermath cause changes to the maintenance practices and processes. The car-sharing possibility and e-bikes could transform the urban habits of citizens. However, in the case of car-sharing practice, this change has the dynamic in a later stage to decrease the use of means of public transport, and this could be considered against environmental protection; thus, it could not be considered a sustainable transition. The mention in cultural models could pertain to corporate culture or a social culture. A corporate culture that easily accepts changes and focuses on continuous development could more easily produce innovation, adopt changes, and reposition itself closer to sustainability (Kivimaa et al., 2021).

Disruption and destabilization are two terms with similar but not identical content. Disruption is related with the speed or the intensity of the impact on the sociotechnical system. Destabilization is used to describe a phase or process of transition. The aggregation of functionality issues and the pressure from stakeholders of incumbents could define the dynamic of the destabilization. The speed of the transformation could be characterized either as fast or gradual. The intensity of the transformation could be measured using its magnitude which could be either large or small. In the next table, 4 discrete scenarios are presented: gradual or rapid change of large magnitude and gradual or rapid change of small magnitude. A transformation of small magnitude, even if it relates to a disruptive technology, does not consist a disruption in general; thus, it could not be considered disruptive sustainability. A reconfiguration-based transition process operates as opposite to disruption since reconfiguration expresses a distributed multisource system change including cumulative incremental regime change, and on the contrary disruption is a much rare occurrence (Kivimaa et al., 2021).

Disruption in sustainability transitions from the point of view of magnitude and speed of change

Range of magnitude	Gradual change	Rapid change
Large magnitude of change that concerns more than one disrupted parameter	A disruption that occurs incrementally in several steps and ends with the transformation of a whole system	A fast disruption that signals a breakdown of the existed system, and it is of stretch-and-transform type
Small magnitude of change that concerns a single disrupted parameter	Sustaining innovation that further improves existing system configurations	A fast disruption that is pertinent to a disruptive innovation and is of fit-and-conform type

Kivimaa et al. (2021)

Destabilization represents a lose alignment among the several parameters of a sociotechnical system where incumbents gradually reject well-established behaviors, perceptions, principles, and practices. Disruptive sustainability has been related to technologically advanced innovations. Such innovations can suggest solutions to existed problems regarding environment and provide benefits to community and corporations. Disruptive sustainability is not exclusively or solely based on technological advancements. It is more about a general disruption beyond technology which intervenes in multiple parameters of a sociotechnical system, and it is related to multiple changes in several levels of a market including changes in the list of major players, ownership, collapsing of existing business models, etc. (Kivimaa et al., 2021: 10–11).

A change toward sustainability in regulations, policy, and formal institutions concerns a significant transition that is followed by an important number of players in the market and stakeholders. The destabilization is presented as a de-institutionalization process where players follow new metarules signaling a refresh in regulations and a collapse of established barriers. There are two dipoles: incremental versus abrupt change and continuity versus discontinuity as the result of

transformation. Disruption from the institutional point of view evolves a process where an abrupt change causes a collapse of established institutions and their substitution with new ones. Examples of such disruptive sustainability changes in institutional level could be considered the reaction to the Great London smog with the new laws and the European decision for the decommissioning of nuclear power plants. Proportionally, a gradual change of extended magnitude could result in a completed transformation and a discontinuity of established institutions. This is the case with the improvement of transportation system in Finland that included the introduction of the Transport Service Act. In general, a disruptive sustainability change is more disruptive when it leads to discontinuity of an existed model rather than improving an existed model as addition (Kivimaa et al., 2021). For example, in the case of traditional transportation model, the use of biofuels and hybrid or electric cars acts supportively to the existed model putting away the car-sharing alternative model. Several innovations in the same sector do not necessarily lead to disruption. Consequently, in that case, these disruptive changes are toward sustainability in comparison with traditional fuels and transportation emissions, but they do not consist outstanding sustainable disruption comparing with the car-sharing model. Sometimes, the different point of view could lead to different conclusions.

Disruptive sustainability is a transition process that involves three discrete spheres: (a) landscape, (b) regime, and (c) niches. The term landscape describes macroeconomic conditions, environmental parameters, demographic changes, etc. Regime concerns the structure and operation of socio-technical system, incumbent companies, existed technologies, regulations, institutions, practices, etc. Niches refer to spaces where innovations and new ideas are created, tested, and flourished (Geels & Schot, 2007). The main idea is that several landscape actions apply top-down forces, and on the contrary various emerging niches cause bottom-up agitations that in total disrupt, destabilize, and destruct existed regime (Kivimaa & Kern, 2016).

A disruptive sustainable transition consists a creative destruction or destabilizing of old and the development of new (Kivimaa & Kern, 2016: 1). A disruptive sustainability transition cannot be just a mere technology innovation. It should be dissipated in all aspects of a socio-technical system. Thus, disruptive sustainability aims to systemic improvements based either on the continuity or the discontinuity of an existed model, system, market, behavior, practice, institution, etc. Such transitions could take place in the fields of production, consumption, transportation, energy, etc. These sustainable transitions need special conditions to flourish like secured niche spaces for innovations, processes of weakening incumbent regimes, etc. in order to form a window of opportunity for new players, new business models, new practices, etc.

Disruptive sustainability as a process implies the action of destruction of old through destabilization and the born and development of new. (Turnheim & Geels, 2012)

Disruptive Sustainability Policy Mixes

The formation of the proper conditions that could accelerate both opposite actions needs the application of certain policies. In the case of absence of policies that could assist the destruction of established regime, alternative brand new ideas may grow slowly or may be vanished (Kivimaa & Kern, 2016). The policies for the destabilization of incumbent could be either active or passive. A passive approach could be the withdrawal of state support, and on the contrary an active approach could involve prompt changes in regulations and institutions. Thus, a creative policy mix is necessary to boost disruptive sustainability transition.

Moreover, this kind of policy mix needs instruments that support its application in multiple layers. Some models of policy mixes have been developed that are used to welcome the introduction of such changes mainly for noninnovation purposes (Howlett & Rayner, 2007):

- The first model is based on layering, meaning that new targets and instruments could be just

added over the existed ones. Unfortunately, this aggregation of old and new ideas hides controversy and lacks functionality.

- The second model is based on a drift to new targets without replacement of existed instruments. Similarly, there is inhomogeneity between the tools and the goals.
- The third model consists the conversion of instruments without the withdrawal of old targets.
- The fourth model included changes in both instruments and targets by replacing the old with the new (Kern & Howlett, 2009).

Ideally policy mixes for transitions include elements of creative destruction involving both policies aiming for the creation of new and for destabilizing the old. (Kivimaa & Kern, 2016)

Advantages of Disruptive Sustainability for Corporations

Disruptive sustainability could facilitate the transition to a more sustainable form for each company thus toward a more sustainable world in total. Companies are skeptical regarding changes and especially those that demand important resources and could affect their core business. A strategy toward sustainability that is based on disruption could theoretically offer advantages to a company. These advantages should be considered during the decision-making process that is described by the term Operational Ethical Dilemma that has been developed regarding the design and implementation of a Corporate Social Responsibility (CSR) strategy (Panagiotopoulos, 2020). Disruptive sustainability could operate as the flagship of a CSR policy, and any possible benefit could be a reasoning in favor of disruptive sustainability programs. Such potential benefits are (Cochran & Wood, 1984; Maqbool & Zameer, 2018; Mc Williams & Siegel, 2011):

- Increased corporate financial performance (CFP)
- Enhanced reputation
- Better ranking in stock market indices
- Employee satisfaction and loyalty

- Customer satisfaction and loyalty
- Building of relations and trust with stakeholders
- Expanding consumer base with socially and environmentally sensitive citizens
- Elimination of risk for environmental scandals and governmental fines
- Entering new markets
- Green marketing
- Restructuring of processes and economies of scale in long term

A successful disruptive sustainability approach should be based on a transition from a profit-oriented to a socially and environmentally oriented philosophy and could entail several profits for an organization. A massive orientation toward disruptive sustainability from the side of corporations could be amplified by proper governmental decisions that could provide more incentives to them to examine sustainable solutions.

Epilogue

European Union (EU) has designed Green Deal as a European sustainability plan for the well-being and health of citizens and future generations. Indicatively, cornerstones of that are the following (European Commission, 2019):

- The green transition presents a major opportunity for European industry by creating markets for clean technologies and products.
- Renovating our homes and buildings will save energy, protect against extremes of heat or cold, and tackle energy poverty.
- Nature is an important ally in the fight against climate change.
- We can only solve the global threat of climate change by working with our international partners.
- Reducing greenhouse gas emissions by at least 55% by 2030 requires higher shares of renewable energy and greater energy efficiency.

As sustainability is becoming a global demand, disruptive sustainability should be enhanced.

However, such changes could have disadvantages regarding other levels of human welfare, and thus, a disruptive sustainability process is not automatically proper and fruitful. Disruption in technology, policies, institutions, market players and business models, and behaviors and practices should be examined at several levels. Disruptive sustainability should be a multiple level process that covers spherically any impact of a transition (Kivimaa et al., 2021):

- New models and possibly new markets could be born in accordance with new rules, policies, and laws.
- Established barriers should be collapsed for alternatives ideas to be materialized and new practices to be implemented with positive environmental footprint.
- Barriers for newcomers in the traditional markets should be collapsed, and incumbents and institutions should follow the wave of innovation and sustainability.
- The monopoly or oligopoly in ownership of resources cannot promote innovation and alternative thinking. The increased participations of new entrants and small companies could bring a creative change in traditionally operated markets.
- Any reward to alternative thinking that enhances creativity and disruption is welcome.

Disruptive sustainability consists a great challenge for the modern world. However, this transition should be made in a smooth way to mitigate any side effects and collateral damages like lack of training in new technologies for employees, unemployment, energy instability, technological accidents, etc. Proper preparation and willingness for adaptation are essential elements for a transition toward a more sustainable world where states, companies, and citizens are all participants.

Summary

The modern call for Sustainability could be complicated having both positive and negative impacts for companies and society. This kind of

transformation to a more sustainable world may need Disruptive Sustainability elements since there is not plenty of time for saving our planet. Disruptive Sustainability could be the way to boost the global reorientation toward sustainability worldwide. Disruptive Sustainability marks a transition process that has specific dynamic characteristics that differentiate it from other kinds like Disruptive Innovation or Sustaining Innovation. Disruptive Sustainability embraces a transformation process that starts with the destruction of the already existed status in a socio-technical-economic system and produces a more sustainable situation due to the resultant of many forces that pulling finally toward Sustainability.

Cross-References

- [Disruptive Innovation](#)
- [Innovation and CSR](#)
- [Managing Change for Sustainability](#)
- [Operational Ethical Dilemma](#)
- [Sustainability](#)

References

- Christensen, C. M. (2013). *The Innovator's dilemma: When new technologies cause great firms to fail*. Perseus Book LLC (Ingram). <https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=4965541>
- Christensen, C. M., Raynor, M., & McDonald, R. (2015). The big idea: What is disruptive innovation? *Harvard Business Review*, 11.
- Cochran, P. L., & Wood, R. A. (1984). Corporate social responsibility and financial performance. *Academy of Management Journal*, 27(1), 42–56. <https://doi.org/10.2307/255956>.
- European Commission. (2019). *A European Green Deal*. European Commission. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en
- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39(4), 495–510. <https://doi.org/10.1016/j.respol.2010.01.022>.
- Geels, F. W., & Schot, J. (2007). Typology of socio-technical transition pathways. *Research Policy*, 36(3), 399–417. <https://doi.org/10.1016/j.respol.2007.01.003>.
- Howlett, M., & Rayner, J. (2007). Design principles for policy mixes: Cohesion and coherence in 'New Governance Arrangements'. *Policy and Society*, 26(4), 1–18. [https://doi.org/10.1016/S1449-4035\(07\)70118-2](https://doi.org/10.1016/S1449-4035(07)70118-2).
- Johnstone, P., Rogge, K. S., Kivimaa, P., Fratini, C. F., Primmer, E., & Stirling, A. (2020). Waves of disruption in clean energy transitions: Sociotechnical dimensions of system disruption in Germany and the United Kingdom. *Energy Research & Social Science*, 59, 101287. <https://doi.org/10.1016/j.erss.2019.101287>.
- Kern, F., & Howlett, M. (2009). Implementing transition management as policy reforms: A case study of the Dutch energy sector. *Policy Sciences*, 42(4), 391–408. <https://doi.org/10.1007/s11077-009-9099-x>.
- Kivimaa, P., & Kern, F. (2016). Creative destruction or mere niche support? Innovation policy mixes for sustainability transitions. *Research Policy*, 45(1), 205–217. <https://doi.org/10.1016/j.respol.2015.09.008>.
- Kivimaa, P., Laakso, S., Lonkila, A., & Kaljonen, M. (2021). Moving beyond disruptive innovation: A review of disruption in sustainability transitions. *Environmental Innovation and Societal Transitions*, 38, 110–126.
- Lindberg, M. B., Markard, J., & Andersen, A. D. (2019). Policies, actors and sustainability transition pathways: A study of the EU's energy policy mix. *Research Policy*, 48(10), 103668. <https://doi.org/10.1016/j.respol.2018.09.003>.
- Maqbool, S., & Zameer, M. N. (2018). Corporate social responsibility and financial performance: An empirical analysis of Indian banks. *Future Business Journal*, 4(1), 84–93. <https://doi.org/10.1016/j.fbj.2017.12.002>.
- Markides, C. (2018, February). *Disrupting your disruptor*. London Business School Think. <https://www.london.edu/think/disrupting-your-disruptor>
- Mc Williams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource- based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495.
- Nasiri, M., Tura, N., & Ojanen, V. (2017). Developing disruptive innovations for sustainability: A review on impact of internet of things (IOT). *2017 Portland international conference on Management of Engineering and Technology (PICMET)*, 1–10. <https://doi.org/10.23919/PICMET.2017.8125369>.
- Panagiotopoulos, F. I. (2020). *Energy management and corporate social responsibility: The case of air- transportation*. University of the Aegean.
- Skeete, J.-P. (2018). Level 5 autonomy: The new face of disruption in road transport. *Technological Forecasting and Social Change*, 134, 22–34. <https://doi.org/10.1016/j.techfore.2018.05.003>.
- Turnheim, B., & Geels, F. W. (2012). Regime destabilisation as the flipside of energy transitions: Lessons from the history of the British coal industry (1913–1997). *Energy Policy*, 50, 35–49. <https://doi.org/10.1016/j.enpol.2012.04.060>.

Distinctive Competition

► [Conspicuous Consumption/Positional Goods](#)

Diverseness

► [Diversity](#)

Diversity

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Synonyms

[Assortment](#); [Diverseness](#); [Heterogeneity](#); [Heterogeneousness](#); [Manifoldness](#); [Miscellaneousness](#); [Multifariousness](#); [Multiplicity](#); [Variety](#); [Variousness](#)

Description

Diversity initiatives and management have become an important business imperative for the workforce of the twenty-first century (Roberson 2006). The traditional workforce, which was dominated by white, male workers, has started to shift by inclusion of females, minorities, ethnic groups, and workers with international origin. Organizations have understood the importance of diversity and inclusion matters and if managed effectively, their potential impact on the overall business performance.

Diversity is a concept that represents a variety of differences and similarities that exist among individuals (Wellner 2000). Four layers of diversity model as laid out by Gardenswartz and Rowe (2003) illustrate the different characteristics representing diversity. These four layers are: (1) organizational dimensions, (2) external dimensions, (3) internal dimensions, and lastly

(4) personality. Figure 1 illustrates the four layers of diversity model by Gardenswartz and Rowe.

The outer layer of the model, which represents organizational dimensions, includes functional attributes, management related attributes, union association, workplace, seniority, department unit/group, and work content.

External dimensions layer consists of geography, marital and parental status, appearance, work and educational background, religion, recreational and personal habits, and income.

Internal dimensions layer consists of age, race, ethnicity, physical ability, sexual orientation, and gender.

According to Washington (2008), organizational dimensions are characteristics where organization has some influence. External dimensions represent choices of the individuals or employees such as their life choices, preferences, and beliefs. Internal dimensions are mostly given by birth. And finally, personality traits imply consistency and stability and reflect people's characteristic patterns of thoughts, feelings, and behaviors (Diener and Lucas 2019).

Diversity, Sustainability, and Corporate Social Responsibility

The notion of diversity and its positive impact on sustainability is not free from debate. Penrose and Penrose (2009) states that each firm gets its unique character from the heterogenous nature of its productive services available. However, Van Knippenberg and Mell (2016) emphasize on the dual impact of diversity on group decisions. On the one hand, diversity encourages different opinions and serves as a catalyzer when making group decisions. On the other hand, diversity could cause frictions among people and hinders the group harmony. Although this debate has existed in prior literature, it is observed that successful execution of diversity management can generate synergies for the companies, create new opportunities, and even improve the innovation culture.

Innovation is an iterative practice that includes contact and interaction among the employees of the companies (Østergaard et al. 2011) and has



Diversity, Fig. 1 Four layers of diversity model by Gardenswartz and Rowe (2003)

strong ties to diversity. Østergaard et al. (2011) found out that employee diversity influences the likelihood that firms innovate and that diversity aspects cannot be ignored when assessing a firm's innovative capabilities.

Other important governance issues of today's corporate world are the composition of board of directors since board diversity can have significant implications on shareholder value. Carter et al. (2003) studied the nexus between board composition and company value for Fortune 1000 companies and indicated that there are important positive relationships between portion of women and minorities and of company value.

In addition, there is vast body of research regarding diversity management and corporate social responsibility (CSR). As a matter of fact, diversity management and CSR initiatives are often executed alongside one another (Maj 2018). CSR often serves as an umbrella for diversity initiatives (Maj 2017). When reporting corporate social responsibility, companies have utilized different methods of reporting such as "triple bottom line" or Global Reporting Initiative (GRI) (Dawkins and Ngunjiri 2008). Diversity has been a key dimension of corporate social repositionability reporting of the companies. Vast body of CSR research has utilized the Kinder

Lydenberg and Domini (KLD) ratings for CSR (Graves and Waddock 1994; Johnson and Greening 1999). KLD dimensions consists of (1) Environment, representing the impact on ecosystem, (2) Community, representing various contributions to wellbeing of the community, (3) Diversity, representing inclusion and advancement of minority populations, (4) Employee relations, and (5) Human rights (Dawkins and Ngunjiri 2008).

Summary

As mentioned earlier, diversity management has become an important business imperative in today's workforce environment and can be a key to growth in today's competitive environment, if managed well.

However, it is important to evaluate diversity within the context of geography. As a matter of fact, predominant diversity issues in each country may be different (Shen et al. 2009). Dimensions of diversity in western cultures can be significantly different from the dimensions of diversity in eastern cultures.

Effective human resource diversity management activities with recruitment, selection, training, and performance management of employees can enable good diversity practices in firms and eventually contribute to business performance. According to Shen et al. (2009), there is a continuing need for effective diversity management and Human Resource Management (HRM) plays an irreplaceable role in this regard.

Cross-References

- ▶ Board Diversity and Inclusivity
- ▶ CSR and women
- ▶ Diversity of Boards
- ▶ Employee participation/Ownership
- ▶ Inclusion
- ▶ Inclusive leadership
- ▶ Organizational culture
- ▶ Sustainable growth

References or Further Readings

- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate governance, board diversity, and firm value. *Financial Review*, 38(1), 33–53.
- Dawkins, C., & Ngunjiri, F. W. (2008). Corporate social responsibility reporting in South Africa: A descriptive and comparative analysis. *The Journal of Business Communication* (1973), 45(3), 286–307.
- Diener, E., & Lucas, R. E. (2019). Personality traits. *General Psychology: Required Reading*, 278.
- Gardenswartz, L., & Rowe, A. (2003). Diverse teams at work: Capitalizing on the power of diversity. *Society for Human Resource*.
- Graves, S. B., & Waddock, S. A. (1994). Institutional owners and corporate social responsibility. *Academy of Management Journal*, 37, 1034–1047.
- Johnson, R. A., & Greening, D. W. (1999). The effects of corporate governance and institutional ownership types on corporate social responsibility. *Academy of Management Journal*, 42(5), 564–576.
- Maj, J. (2017). Together or apart? Diversity management and corporate social responsibility in Polish enterprises. In *Sustainable economic growth, education excellence, and innovation management through vision 2020, Proceedings of the 29th International-Business-Information-Management-Association Conference, Vienna, Austria, 3–4 May 2017* (pp. 517–523). Norristown: INT Business Information Management Association (IBIMA). ISBN 978-0-9860419-7-6.
- Maj, J. (2018). Embedding diversity in sustainability reporting. *Sustainability*, 10(7), 2487.
- Østergaard, C. R., Timmermans, B., & Kristinsson, K. (2011). Does a different view create something new? The effect of employee diversity on innovation. *Research Policy*, 40(3), 500–509.
- Penrose, E., & Penrose, E. T. (2009). *The theory of the growth of the firm*. Oxford University Press.
- Pitcher, P., & Smith, A. D. (2001). Top management team heterogeneity: Personality, power, and proxies. *Organization Science*, 12(1), 1–18.
- Roberson, Q. M. (2006). Disentangling the meanings of diversity and inclusion in organizations. *Group & Organization Management*, 31(2), 212–236.
- Shen, J., Chanda, A., D'netto, B., & Monga, M. (2009). Managing diversity through human resource management: An international perspective and conceptual framework. *The International Journal of Human Resource Management*, 20(2), 235–251.
- Van Knippenberg, D., & Mell, J. N. (2016). Past, present, and potential future of team diversity research: From compositional diversity to emergent diversity. *Organizational Behavior and Human Decision Processes*, 136, 135–145.
- Washington, D. (2008). *The concept of diversity*. Durham: Washington & Company.
- Wellner, A. (2000). How do you spell diversity? *Training*, 37(4).

Diversity Management

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Synonyms

[Inclusive management](#)

Definition

Diversity relates to a complex concept encompassing various dimensions that may interweave to generate unique syntheses of human profiles, in various contexts, circumstances, and environments. Diversity management refers to the implementation of diversity in a company's day-to-day learning and managerial processes. It entails the activation of a managerial and communicative process that rests on accepting and leveraging on employees' and collaborators' similarities and differences that are considered as potential in an organization.

Introduction

Diversity has been conceived as “any mixture of items characterised by differences and similarities” (Thomas 1996, p. 5) tied to several dimensions (Loden 1996), including gender, ethnicity, age, physical qualities/abilities, sexual orientation, and race (Thomas and Ely, 1996). Additional dimensions (called “secondary dimensions” since they are less visible than the main dimensions) encompass native language, communication style, educational background, family history, religion, parental and marital status, work experience, income, and geographic location, among others. Moreover, tertiary dimensions comprise features such as beliefs, assumptions, perceptions, attitudes, feelings, values, and group norms (Rijamampianina and Carmichael 2005; Jirincova 2013). At the institutional level,

the EU has established six main dimensions (gender, age, disability, race and ethnicity, religion, and sexual orientation), while features such as education, profession, and family status have been included in the secondary dimensions.

According to these features, diversity management deals with the ways a company strategically manages the aforementioned dimensions of diversity in carrying out the activity, integrating practices and programs within the internal and external environment.

Diversity management rests on the awareness that a diverse workforce elicits creative potential useful to reconcile cultural boundaries and look for original solutions, innovative product concepts, and marketing proposals, thus increasing competitiveness and companies' resilience. Indeed, diversity management generates added value since it allows the organization to internalize differences among employees and collaborators by enhancing the unique contribution of each person to organizational purposes and strengthening the company's capability to face challenges and uncertainty.

Diversity management was first developed in the early 1990s in the United States, where large companies, called to manage a multi-ethnic population, first tackled the problem to improve the talent, skills, and competences of collaborators belonging to different races, religions, and backgrounds (Pless and Maak 2004). Over time, both the concepts of diversity and diversity management have progressively evolved, broadening the field of management of women and minorities in the workforce and gaining momentum in management theory and practice, thus overcoming the initial focus on demographic and legal aspects (i.e., the avoidance of laws for women and minorities).

In recent decades, both globalization and demographic changes have increased the diversity of the population and labor force. As a consequence, the issues of inclusion and diversity represent key points of both the political and business agenda.

In 2000 the EU released two directives to fight discrimination (Keil et al. 2007), respectively aimed to grant equal treatment regardless of racial

or ethnic origin (Council Directive 2000/43/EC; EC 2000) in the areas of education, employment, health care, social security, and access to goods and services (Keil et al. 2007), and to establish a framework for the unbiased management of employment and occupation concerning religion or beliefs, age, sexual orientation, and disability (Council Directive 2000/78/EC; EC 2000). Subsequently, every member country established its own national anti-discrimination law.

The European Commission (EC 2003) pointed out the benefits of diversity, emphasizing the growth in the organizational culture, the corporate reputation, and the attractiveness and retention of highly talented individuals, as well as improvement in productivity, innovation, and creativity.

Several studies have highlighted that the challenges triggered by global markets' increasing demand for innovation, creativity, and flexibility can be best fulfilled by the broadened pool of knowledge and experience found in a diverse workforce that is effectively managed (Cox and Blake 1991; Milliken and Martins 1996). In a globalized economy, a growing number of companies recognize the opportunities deriving from a multicultural workforce and are interested in promoting inclusive work conditions (Cox 2001).

Diversity management is based on an inclusive-oriented approach to management and governance. The culture of inclusion is fundamental to create an organizational culture where individuals from different backgrounds are committed to achieving common goals resting on the pillars of diversity management inclusiveness, integrity, and challenging assumptions and mindsets. In this vein, the founding principles of a human relations management system should include treating others with respect, acknowledging others and appreciating different opinions; encouraging participative decision-making and problem-solving processes; and demonstrating integrity and ethical reasoning. To put into practice these pillars and principles a consultative leadership style is necessary, as well as specific tools such as training programs, mentoring team development, and ongoing workshops. Inclusiveness requires encouraging people from different cultural backgrounds to share their experiences, knowledge, and standpoints, and also requires

trust, moral reliability, and coherence (Gilbert et al. 1999). The creation of an inclusive organizational environment implies a cultural change process to foster the creativity and innovation potential of a diverse workforce.

Competencies nurtured by the aforementioned founding principles and managerial tools translate into observable and measurable behaviors, such as recognizing other people as different but equal; active listening and trying to comprehend disparate points of view and opinions; incorporating different voices into the ongoing cultural discussion; improving team capabilities; and demonstrating integrity and advanced ethical reasoning, especially to tackle ethical dilemmas (Matthews 1998).

Several authors have suggested conceptual models useful to examine the antecedents and consequences of effective diversity management (Gilbert et al. 1999), while others have addressed attention to the process to effectively manage diversity (Cox and Beale 1997) and lead change (Kotter 1996). The graph below depicts the main steps (Fig. 1) that are necessary to implement an inclusive diversity culture through raising awareness of inclusion, establishing a vision of inclusion, reconsidering key management principles, and revising systems and processes.

In the first step a project team (i.e., the diversity steering committee) should be set up including people from diverse backgrounds. The company's goals to implement diversity should be defined in collaboration with the diversity steering committee. The goals should ensure the participation of all relevant divisions/areas/departments and define clear measurable criteria for achieving them.

The company's top management and key stakeholders should be supported by external consultants in delineating different scenarios of the business context from a long-term perspective.

Both the company vision and mission should be reframed and shared in accordance with the selected scenario, and the strategy should emphasize the way diversity management could be operationalized.

In a subsequent step, a diversity audit based on interviews addressed to stakeholder groups is useful to outline the appropriate actions for change.



Source: synetz – the management consultants www.synetz.de

Diversity Management, Fig. 1 Diversity management implementation. (Source: Keil et al. 2007, p. 14)

Finally, the process should be operationalized through the diversity team-building functions execution, the top/middle management leadership development programs; and the adoption of performance management appraisal tools useful to assess the diversity management outcome (Gen- tile 1994; Gardenschwartz and Rowe 1998).

A specific training manual for diversity management has been developed under the framework of the European Community Action Programme to fight discrimination and advocate for anti-discrimination legislation across the European countries (Diversity Training VT 2006/009 project; Keil et al. 2007). The guidelines point out that the involvement of the top leaders is fundamental to develop effective diversity management actions and create the conditions (Table 1) to become a successful diversity-oriented company.

The guidance was designed to accompany the diversity management components of the project in the European countries, as well as the managers and staff of employers’ organizations and practitioners.

Specific attention has been addressed by the EC to small and medium-sized enterprises in order to increase their awareness on diversity issues and contribute to filling in the gap for information and training (Table 2).

Without making a significant investment in both time and human resources, companies cannot fully embrace the valuing diversity paradigm.

Diversity Management, Table 1 Enabling conditions for diversity management

A clearly devised company strategy and vision, encompassing diversity as a long-term economic resource
Leaders’ awareness of the key role of diversity within the company mission
A transparent performance management system, shared by internal stakeholders
Teams nurtured by a set of competencies, talents, experiences, and personal attributes that facilitate innovation and creativity
Performance-based staff evaluation systems, aimed to avoid any discrimination
Innovative recruitment system, aimed to assess and encourage talented and diverse people

Source: Author’s elaboration

However, the efforts spent are counterbalanced by several benefits, including enhancing the cultural mix; improving market opportunities; strengthening external recognition and image; and enhancing organizational capital (Gilbert and Ivancevich 2000; Roosevelt 2006).

Key Issues

Discriminatory attitudes and behaviors in the workplace still represent major obstacles in developing diversity strategies and practices. As a

Diversity Management, Table 2 Diversity management implementation in SMEs

Steps	Contents
Analysis	Analysis of an SME's strengths, weaknesses, and issues
Recruitment	Decisions aimed to match job roles and staff profile, avoiding personal values and convictions in order to reduce turnover and increase staff retention
Explore new/potential markets and customers needs	Business strategy evolution based on staff creativity and training, since consumer diversity calls for staff diversity
Internal communication	Adoption of internal communication systems aimed to increase exchange of ideas, knowledge, and perspective and increase staff commitment
Image and reputation	Use diversity commitment as a tool to improve reputation and strengthen public relations policies
Evaluation	Assess costs and benefits of diversity policies
External support	Adoption of external consultants to strengthen diversity processes implementation within human resources management

Source: Our adaptation from Keil et al. (2007)

result, for many companies, approaches to raise awareness about diversity issues and policies are an essential part of the implementation of diversity management policies. Leveraging diversity requires a shift in assumptions about the organization's culture. Diversity impacts the management system at several levels of the organizational processes (motivational, interaction, visioning, and learning processes) (Rijamampianina and Carmichael 2005).

Drawing from the business cases included in the European project, some common features emerge as enabling factors, including the change of human resources management systems, the use of training programs, and the implementation of

support structures (EC 2005). The areas affected by the change of organizational factors encompass recruitment selection retention (i.e., employees' development and promotion), leadership development talent, employee networks, and community engagement. Moreover, effective management approaches rest on internal training initiatives useful to develop awareness of stereotypes and prejudices (e.g., the assumption of mobility as a rewarding factor for a successful career) and increase managers' competencies in diversity management, as well as the implementation of work-life balance projects, job sharing, and flexibility, and the adoption of policies to allow employees to take care of children and relatives, permits, and parental leave (Auen and Montgomery 2001).

Summary

To attain a sustainable growth, businesses must consider and manage the full potential that diversity can offer. Diversity and inclusion practices contribute to improving managerial skills, communication, and information-sharing; more generally they improve human capital and enhance market opportunities, external recognition, and image, thus raising companies' standing in society (i.e., developing partnerships with research institutions and NGOs, entering equality and diversity awards).

In Europe there are several successful examples. For instance, in 2006, some German companies started a voluntary campaign ("Diversity as a Chance") through the implementation of a charter of diversity aimed to create a work environment free of prejudice and a corporate culture focused on mutual respect and recognition of every individual (European Commission, EC 2005). Similar initiatives have been implemented in other countries, resting on the conviction that the promotion of diverse potentials yields economic benefits, generates positive effects on the company's reputation, and has a positive effect on the whole society.

In this vein, the dissemination of good practices is useful not only to explore opportunities and obstacles, but also to share good experience that allows companies to foster diversity management.

Cross-References

- [Change Management](#)
- [Disability Management](#)
- [Inclusion](#)
- [Work–Life Balance](#)

References

- Auen, R. S., & Montgomery, K. A. (2001). Applying an organizational development approach to creating diversity. *Organizational Dynamics*, 30(2), 149–161.
- Cox, T. H. (2001). *Creating the multicultural organization*. San Francisco: Jossey-Bass.
- Cox, T. H., & Blake, S. (1991). Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Executive*, 5(3), 45–56.
- Cox, T. H., & Beale, R. L. (1997). *Developing competency to manage diversity*. San Francisco: Berrett-Koehler.
- EC. (2000). Council directive 2000/43/EC. Council directive 2000/78/EC). European Commission publications on non-discrimination and diversity. http://ec.europa.eu/employment_social/fundamental_rights/public/pubst_en.htm
- EC. (2003). Study on methods and indicators to measure the cost-effectiveness of diversity policies in enterprises European Commission. October 2003. http://ec.europa.eu/employment_social/fundamental_rights/pdf/arc/stud/cbfullrep_en.pdf
- EC European Commission. (2005). *The business case for diversity – Good practices in the workplace*. Luxembourg: Office for Official Publications of the European Communities. ISBN 92-79-00239-2; European Commission, Directorate General for Employment and Social Affairs and Equal Opportunities; September 2005 Extraordinary Overview of DM in European companies! (November 2005). http://ec.europa.eu/employment_social/fundamental_rights/pdf/pubst/stud/busicase_en.pdf.
- Gardenschwartz, L. & Rowe, A. (1998). *Managing diversity: A complete desk reference and planning guide* (Revised Edition). New York: McGraw-Hill.
- Gentile, M. C. (Ed.). (1994). *Differences that work: Organizational excellence through diversity*. Boston, MA: A Harvard Business Review Book.
- Gilbert, J. A., & Ivancevich, J. M. (2000). Valuing diversity: A tale of two organizations. *Academy of Management Executive*, 14(1), 93–105.
- Gilbert, J. A., Stead, B. A., & Ivancevich, J. M. (1999). Diversity management: A new organizational paradigm. *Journal of Business Ethics*, 21, 61–76. <https://doi.org/10.1023/A:1005907602028>.
- Jirincova, M. (2013). Potential future managers and their opinion on the issue of diversity, inclusion and their possible use in management. *Journal of Competitive-ness*, 5(2), 37–50.
- Keil, M., Amershi, B., Holmes, S., Jablonski, H., Lüthi, E., Matoba, K., Plett, A. & von Unruh, K. (2007). *Training manual for diversity management antidiscrimination and diversity training*, VT/2006/009. *International Society for Diversity Management – idm* <http://www.idm-diversity.org>. September 2007. pp 1–45. Idm Human European Consultancy Strategic Thinking Equality and Mobility.
- Kotter, J. P. (1996). *Leading change*. Boston (MA): Harvard Business School Press.
- Loden, M. (1996). *Implementing diversity*. New York: McGraw-Hill.
- Matthews, A. (1998). *Diversity: A principle of human resource management* (Vol. 27, pp. 175–185). Public Personnel Management.
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21, 402–433.
- Pless, N. M., & Maak, T. (2004). Building an inclusive diversity culture: Principles, processes and practice. *Journal of Business Ethics*, 54(2), 129–147.
- Rijamampianina, R., & Carmichael, T. (2005). A pragmatic and holistic approach to managing diversity, chapter 3, general issues in management. *Problems and Perspectives in Management*, 1, 109–117.
- Roosevelt, T. R. (2006). *Building on the promise of diversity: How we can move to the next level in our workplaces, our communities, and our society*. New York: Basic Books.
- Thomas, R. R. (1996). *Redefining diversity*. New York: American Management Association.
- Thomas, D., & Ely, R. (1996). Making differences matter: A new paradigm for managing diversity. *Harvard Business Review*, 74(5), 79–90. (September–October 1996).

Diversity of Boards

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Definition

Corporate boards are viewed as the upper echelons of their firms, performing the critical tasks of overseeing and influencing the strategic actions of the firms. While controlling managerial decisions

and actions are fiduciary responsibilities (control tasks) of boards, they also participate and contribute to strategy process by providing advice and counsel (advisory tasks), initiating strategic proposals, and contributing to the implementation of strategic decisions (strategic tasks) (McKinsey 2016). How to enhance boards' performance has become a critical question for scholars, corporate leaders, and policymakers. In answering this question, this chapter focuses on the importance of board diversity with regard to directors' different functional backgrounds, educational backgrounds, and industry experiences. Whether such variety in the boardroom benefits the strategic actions of firms or not is considered. The chapter also addresses a greatly neglected issue which has enormous practical importance: the boardroom barriers. There are social, power-related, and cognitive boardroom barriers, which might limit the utilization of board diversity. When these boardroom barriers are acknowledged, a complementary question remains: how do scholars, corporate leaders, and policymakers make board diversity work?

Introduction

"Whether and how corporate boards affect organizational outcomes" is still one of the key questions in corporate governance and, to some extent, strategic management, which has continued to be relevant through the decades (Zahra and Pearce 1989; Krause 2017). However, recently it seems this inquiry is becoming more focused. Diversity is, slightly but steadily, increasing in the boardrooms (Catalyst 2018; Deloitte 2019). Corporate leaders are aiming to create diverse boards, expecting them to actively participate and contribute to the strategy process (Fairchild 2015). A recent survey of "The CEO Guide to Boards" by McKinsey (2016) revealed that strategy is, on average, the area to which boards give most of their attention. Accordingly, whether and how board diversity influences the strategic decisions of firms has become a timely and important topic which has enormous practical implications. But what is board diversity?

Although it is hard to provide a common definition of diversity in boardrooms, diversity simply means "variety" (Milliken and Martins 1996). Variety in boardrooms is commonly viewed as variety in directors' knowledge, skills, and professional experience, which is a reflection of directors' different functional background, educational background, and industry experience. However, "variety" is also referred to as "board heterogeneity," "knowledge/information diversity," "cognitive diversity," and "job-related diversity." From a practitioner's viewpoint, variety in boardrooms means the availability of a broader pool of relevant information and expertise and an increased number of perspectives on the strategic issues at hand (Fairchild 2015; McKinsey 2016). Using this information and evaluating different perspectives, diverse boards may contribute to the creation of strategic decisions more effectively and with more creativity (Rindova 1999). How?

Corporate leaders' initiatives in creating variety in boardrooms find considerable support in research, such that directors' different skills, knowledge, and professional experience enhance boards' ability to successfully perform board tasks (e.g., Kakabadse et al. 2018; Gabaldon et al. 2018) as well as their contributions to strategic decisions (e.g., Haynes and Hillman 2010). Research also demonstrates that such variety helps firms take better quality decisions (e.g., Sun et al. 2015) with a higher degree of creativity (e.g., Torchia et al. 2018).

However, while board diversity may mean variety in directors' skills, knowledge, and professional experience, at the same time, it may also mean separation and disparity (Harrison and Klein 2007). This is a critical specification as it introduces boardroom barriers in the discussions about whether board diversity benefits strategic decisions. For example, increasing numerical representation of women on boards has become a worldwide issue, and it seems investments of policymakers, institutional investors, as well as nongovernmental organizations (NGOs) to this end have been paying off (Catalyst 2018; Deloitte 2019). Women directors have different values (Eagly 2016; Post and Byron 2015) and different

knowledge and experience (Hillman et al. 2002; Singh et al. 2008) compared to their male counterparts. From this perspective, an increasing number of women on boards can be expected to increase variety in boardrooms, which might positively impact boards' contribution to strategic decisions. Indeed, this is one of the main economic arguments, which finds empirical support (e.g., Torchia et al. 2018; Triana et al. 2013), put forward by defenders of an increasing number of women at upper echelons. This line of thinking views gender diversity as a variety.

However, gender diversity can also mean separation, which may result in out-group/in-group or we/they separation in the boardroom (Harrison and Klein 2007). Gender is generally a salient observable among upper echelons, which can lead to the automatic and instant out-group categorization of female directors (Zhu et al. 2014). Out-group categorization of women directors in male-dominated boards (Groysberg and Bell 2013) might limit women directors' contributions to board decision-making and, accordingly, strategic decisions (e.g., Huse and Grethe Solberg 2006; Kakabadse et al. 2015). *From this perspective, whether and how variety influences strategic decisions can be better understood and explained when social barriers are taken into account.*

Likewise, board diversity may also mean variety and disparity. For example, it is not unusual to describe boardrooms as an arena for power games where representatives of major shareholders (i.e., directors with friendship ties to the CEO) or a set of white, male, experienced directors dominate boardroom discussions (Finkelstein 1992). Such asymmetric power held by the few in boardrooms results in the asymmetric use of resources, from information about financial reports to organizing informal meetings or social gatherings. Those few directors may be enriching variety in the boardroom but also creating high levels of disparity, by just those few benefiting from all resources. How would such power asymmetry impact the utilization of directors' different skills, knowledge, and professional experience? Research suggests that the presence of a high-power individual (e.g., Haynes and Hillman 2010) or power imbalance between directors (e.g., Triana et al. 2013) may

hinder boards' contribution to strategic decision-making. *From this perspective, whether and how variety influences strategic decisions can be better understood and explained when power-related barriers are taken into account.*

Considering how diversity may mean variety, but also separation and disparity, implies that there are social and power-related boardroom barriers that may limit the full use of directors' diverse talents on strategic decisions. However, the scholarly discussions and practices in policy and the corporate world are still centered on the questions of whether there should be more diversity in boardrooms and whether variety in directors' skills, knowledge, and professional experience benefits firms. Considering the research that provides considerable evidence in support of this variety and acknowledging the presence of boardroom barriers, there are two emerging questions, specifically, what the barriers are that limit the use of directors' diverse talent and how to make board diversity work.

Key Issues: Boardroom Barriers

Specifying board diversity as variety, separation, and disparity reveals two boardroom barriers that might limit the utilization of directors' different skills, knowledge, and professional experience on board tasks and, thus, on strategic decisions. A third boardroom barrier could be added to the list which rests on the idea that directors are expert decision-makers with unique knowledge and expertise, but they also have limited cognitive capacities. To be able to generate solutions to reduce or avoid the negative consequences of these boardroom barriers, the first step is to better understand the processes and mechanisms that create these obstacles, as well as their negative consequences.

Social Boardroom Barriers

Social categorization perspective, which incorporates social identity and self-identity theories and the similarity/attraction paradigm, explains the processes that lead to out-group/in-group or we/they separation in groups. Social categorization

perspective posits that individuals create and define their own place in society by categorizing themselves in social groups with some emotions and values significant to them regarding the group membership (Van Knippenberg et al. 2004). When a certain observable is salient (e.g., gender), out-group categorization tends to be automatic and instant (Gaertner et al. 1989). This leads to intergroup bias which refers to more favorable perceptions of, and attitudes and behavior toward, the in-group than the out-group (Van Knippenberg et al. 2004). As a result of intergroup bias, evaluations are based on category (e.g., woman versus man) rather than individual merit; negative attributes are exaggerated, and positive ones can be discounted; and permissible behavior of the stereotyped person is clearly constrained (Fiske et al. 1991).

Research has shown how the negative consequences of out-group categorization may impact group dynamics (Zhu et al. 2014). People cooperate more with in-group members compared to out-group members; out-group members are at a significant disadvantage for receiving rewards and positive evaluations compared to in-group members. Out-group members are less likely to be noticed for their positive behaviors, but they are more likely to be blamed for negative results. They are thus more likely to be perceived as less competent, and their knowledge and opinions are perceived as less relevant and credible. All in all, diversity's potential cannot be fully realized when some group members face the negative consequences of out-group categorization.

Directors are not immune to social categorization processes (Groysberg and Bell 2013), and gender, age, ethnicity, education, functional background, top executive experience, and industry background are salient features among directors (Zhu et al. 2014). Based on these factors, women directors can be instantly and automatically categorized as out-group members by a male director majority. Observable differences (e.g., gender) are at the center of discussions on social categorization processes because they are simply easy to observe and used as heuristic cues by group members to categorize themselves and others into similar in-groups and dissimilar out-groups. As a

matter of fact, when it is realized that there might be several subgroupings based on aforementioned salient features in the boardrooms, one important issue emerges – the demographic fault lines in boardrooms (Kaczmarek et al. 2012). Demographic fault lines are defined as hypothetical lines that divide a group into multiple subgroups based on the alignment of salient attributes (Lau and Murnighan 1998).

In this regard, diversity as separation can be better understood when the existence of board demographic fault lines are acknowledged, rather than only focusing on observable salient features. In turn, while board demographic fault lines can explain the subgroupings in boardrooms, out-group/in-group categorizations can be used to explain negative consequences of subgroupings on board performance (Kanadli et al. 2018; Westphal and Bednar 2005; Veltrop et al. 2015). One interesting point is that social categorization processes are automatic and instant particularly when the salient feature is observable. However, it should be noted that both board demographic fault lines and negative consequences of out-group categorization require activation.

Not all demographic fault lines can be expected to affect board functioning. If board demographic fault lines are activated – when they lead to the perception that the board is split into subgroups – board performance can be expected to be negatively affected (Veltrop et al. 2015). For example, following a merger and acquisition ((M&A) when firm A acquires firm B), the newly formed board can welcome women directors (from firm B), and a subgrouping may be observed based on gender (women directors versus male directors) in the board of the newly formed organization. Interestingly, the subgrouping may not be based on gender but rather on a division between newcomers and hosts. Additionally, if newcomers (firm B) are all younger directors than the hosts (firm A), a strong fault line could be detected, which can be expected to activate the perception of subgrouping in the newly formed board. In this stage, social categorization can be thought to occur in the boardroom: “we,” “they,” “in-group members,” or “out-group members.”

However, such instant and automatic out-group categorization does not imply per se that the aforementioned negative consequences of intergroup bias will be realized on out-groups (Van Knippenberg et al. 2004). Intergroup bias is typically inspired by threats or challenges to the value or the distinctiveness of group identity. For example, challenges can be social competition for status and prestige, outright derogation and discrimination of the group, and unequal status of subgroups and competitive interdependence between subgroups (Van Knippenberg et al. 2004). Following the M&A example, negative consequences of out-group categorization on newly appointed young directors can be felt when existing tenured directors perceive newcomers' behaviors and attitudes as a challenge or threat. The ability to operate effectively as a board, sharing unique information and communicating perspectives, becomes more difficult because the board is separated into salient subgroups (Li and Hambrick 2005).

In summary, without considering the effects of social barriers, any conclusion on the influence of board diversity on boardroom decision-making may be misleading.

Power-Related Barriers

The second set of boardroom barriers, which can be once again expected to limit directors' use of their diverse talent, refers to the "silencing impact" of power asymmetry felt by low-power directors in the presence of a high-power individual(s) (Pearce and Zahra 1991). A high-power individual in the boardroom is defined as someone who has the capability of overcoming resistance in achieving a desired objective or goal (Finkelstein 1992). A CEO or a chairperson will have such a capability, mostly because of their structural power (Finkelstein 1992). A CEO, being the leader of a firm, as well as a chairperson, being the leader of the board, can be specified as high-power individuals in the boardrooms, having structural power.

In boards where there is CEO duality structure (as is quite typical in the USA), a CEO might also be a chairperson in the board, enhancing his or her structural power. However, it is hard to claim that

this is the dominant structure across the corporate world and, hence, a CEO can often only attend board meetings as a chair. Non-duality may be a common practice in boards (particularly in Europe), and a CEO might be in the boardroom as a board member (Kakabadse and Kakabadse 2007). In the single structure board, there might be several reasons for the CEO to be present such as to answer questions regarding the issue under consideration. For example, a CEO can be the main bridge to, or communication channel between, the top management team and the board. Moreover, relatedly, a CEO may be the main possessor of firm-specific information as well as the knowledge that is essential for competent board work. In addition, a CEO might personally prefer to be present during board meetings, with the aim of controlling discussions and any possible rivalry to his/her leadership in the firm.

While most discussions on power focus on CEO duality and thus structural power as the source of power in boardrooms, there are other sources of power that should be considered, particularly with a view to understanding power asymmetries between directors in boardrooms. Finkelstein (1992) established four types of power: structural, ownership, expert, and prestige, each of which is pertinent to the board of directors. Structural power is rooted in formal position and hierarchical authority and indicates the human capital required for the job. Ownership power is related to equity ownership as well as founder status. A director possesses this power when he/she represents the will of the shareholders. Expert power can develop as a result of having exposure to many different functional areas and breadth of assignments as well as through organizational tenure or years of experience, indicating the task and job knowledge of the director. Prestige power develops from one's institutional environment based on personal prestige or status, reputation, and perceptions of influence (Finkelstein 1992). Prestige power may develop as a result of having a position on one or more boards, serving on influential committees, or having attended elite educational institutions (Finkelstein 1992), suggesting a certain level of knowledge and connections.

Accordingly, a tenured director who holds membership of nomination and/or compensation committees and multiple board appointments may in turn be perceived as high-power individual in boardrooms. Specifying power asymmetries in boardroom matters as a high-power individual may intentionally or unintentionally exert a “silencing effect” on the directors with lower power (Pearce and Zahra 1991). In teams with mixed-status individuals, the high-status individuals speak more and tend to exert influence over team discussions (Cleveland et al. 2000). In a board context, research shows that a powerful CEO may silence the different voices of directors during board discussions (Haynes and Hillman 2010). Women directors are considered to have lower power than their male counterparts because they are in general younger, lack committee memberships and top executive experience, and have held few or no multiple board appointments (Triana et al. 2013). Triana et al. (2013) show that only when women directors have power in male-dominated boards can they influence strategic decisions.

Power asymmetry in boardrooms can also be linked to age diversity, one of the emerging topics in the corporate world. The main idea is that firms should engage more and more in the use and adaptation of new technologies, which may require the appointment of young directors to boards. New generation of younger directors around the age of 40 (compared to average age of a director, 55–60) are thought to be better facilitators for adapting the latest technologies. However, it is highly likely that these younger directors lack the experience as a director, may not hold committee memberships, or have had multiple board appointments. Are boards really ready to utilize such low-power young directors’ talents in the presence of high-power individuals? Although research is limited, to date the answer seems to be equivocal (Ali et al. 2014).

In summary, without considering the effects of power-related barriers, any conclusion on the influence of board diversity on boardroom decision-making may be misleading.

Cognitive Barriers

It might be surprising to acknowledge that for almost half a century, and to some extent even now, the dominant theories of corporate governance have adopted a model of individual who is assumed to be rational (Ghoshal 2005). In other words, directors are assumed to be superheroes who have all the information to objectively make a decision that would maximize shareholders’ profit. Of course, there are alternative perspectives taking prominence positing that decision-makers are only of a limited (bounded) rational. The concept of bounded rationality refers to the notion that decision makers in organizations experience limits in their ability to process information and solve complex problems. (Van Ees et al. 2009). In this regard, like other individuals, directors have limited cognitive capacity in processing information. Boundary conditions of information overload occur when individuals reach a point at which they are unable to process any additional information (Tushman and Nadler 1978). Not recognizing that a director or board as a whole has limitations in absorbing and processing new information may result in the limited use of directors’ diverse talents as those directors may simply reach information overload (Khanna et al. 2014).

In this regard, perhaps one of the most important issues in the corporate world is board interlocking directorates. “An interlocking directorate occurs when a person affiliated with one organization sits on the board of directors of another organization” (Mizruchi 1996, p. 271). It is not surprising that having multiple board appointments is seen as a source of prestige power among directors. Interlocking directorates have been interpreted as an important source of professional experience, timely and relevant information, and diverse perspectives (Shropshire 2010). Therefore, board interlocks reveal some beneficial effects on strategic decision-making (e.g., Hambrick et al. 2015) as well as a diffusion of corporate practices (e.g., Tuschke et al. 2014). As mentioned, board tasks are complex and highly cognitive tasks which are surrounded by ambiguity, uncertainty, and volatility. How many boards a director can efficiently serve on, while absorbing unique information,

processing this information to produce individual perspective, and actively participating in board discussions about the strategic issues at hand?

Board interlocks create “a potential paradox whereby a focal firm benefits, on the one hand, from having access to greater amounts of information through its directors’ networks, but suffers, on the other hand, because of the high cognitive commitment this places on the directors, which limits their ability to effectively monitor and participate in the strategic decision-making process” (Khanna et al. 2014, p. 564).

There is also evidence that highly interlocked boards (at least half of the board members have more than three board appointments) may fail to effectively perform board tasks (Kaczmarek et al. 2014).

All in all, acknowledging social, power-related, and cognitive boardroom barriers, it would be unrealistic to expect the utilization of board diversity on the strategic actions of firms. Once the negative influence of these barriers on the utilization of directors’ different skills, knowledge, and professional experience are acknowledged, the question emerges of how to make board diversity work. Corporate leaders, policymakers, as well as board members can all take steps in dealing with boardroom barriers.

Future Directions: Dealing with Boardroom Barriers

Dealing with Social Barriers

Maybe the most important actor in dealing with social boardroom barriers is the chairperson. So, the first step would be the deliberate selection of a chairperson by corporate leaders. In specifying the leadership attributes of such a chairperson, policymakers and scholars would play a critical role. In some national context, policymakers have already been drawing a chairperson profile such that regulations, as well as best practices of board leadership, require the appointment of independent chairpersons (Kakabadse and Kakabadse 2007). Additionally, research shows that a chairperson with strong leadership efficacy generates

an open and safe boardroom and facilitates board discussions in a manner that encourages directors to actively participate and contribute to board discussions (Gabrielsson et al. 2007; Kanadlı et al. 2018). Leadership efficacy consists of certain behaviors, such as leading discussions, motivating and connecting each board member to best utilize their competencies, formulating proposals for decisions, and summarizing conclusions after board negotiation (Kanadlı et al. 2018). In this regard, a chairperson can be a key beneficiary of the variety in the boardroom while dealing with the results of out-group categorization in boardrooms (separation).

Dealing with Power-Related Barriers

It is common sense that to deal with power asymmetries in boardrooms, power should be decentralized. To this end, the selection of new directors can be one important step that might be taken by corporate leaders. Woman directors might be selected not only for compliance purposes to meet legal obligations (e.g., a gender quota was implemented in 2008 in Norway) but also for their competencies that may be a source of ownership, expertise, and prestige power. Additionally, newly appointed women directors can be simultaneously appointed to important committees, which would also increase women directors’ power in boardrooms. Even policymakers may have a stake in this. Making mandatory, nonfinancial disclosures on the gender profile of boards might maintain more transparency in board nominations, which might provide a source of prestige power for newly appointed women directors.

Moreover, the balancing of power can be complemented – or, in the case of power balancing becoming a problem, replaced – by specifying board norms that would aim to regulate the flow of resources to all directors irrespective of their level of power. For example, there might be a clear division of labor in board functioning and specific rules about the decision-making culture that can be characterized by inclusiveness, collaboration, and openness. It might be possible for a director to personally have access to a manager to

be able to get extra firm tacit knowledge without consulting the CEO or high-power individual who creates disparity in the boardroom. Board evaluations may also work in the same direction, neutralizing the impact of power asymmetries, by incorporating individual evaluations and evaluations of board work as a whole. Policymakers can play a critical role by demanding the disclosure of board evaluations, if not disclosed voluntarily by corporate leaders. All in all, decentralizing power in boardrooms and/or specifying board norms about accessing resources and board decision-making can be key to utilizing the benefits of variety in boardrooms while dealing with power asymmetries (disparity).

Dealing with Cognitive Barriers

Once again, corporate leaders may be careful in setting the criteria for selection of new directors, limiting the number of board interlocks a candidate director, chairperson, or even CEO may have. The search firm Stuart Spencer documented a recent trend (2013) that more and more companies prohibit their CEOs or other executives from sitting on other firms' boards. Moreover, it is not only companies that developed a negative attitude against multiple board appointments but also policymakers (e.g., FRC 2008, 2018; HM Treasury 2009).

In addition to limiting the information-processing demands of nonexecutive directors, relevant information shared by directors before board meetings can be also managed by the use of IT systems: instead of reading pages of reports, book records, and analysis, a specific IT system can be designed to serve the directors' needs, providing refined, tailored information out of the available vast amounts of data and information. Lastly, the number and length of board meetings might be carefully designed, and the chairperson might take responsibility for observing whether information overload is reached during board meetings. In summary, limiting the number of board appointments, benefiting from IT systems' ability to identify salient information, and managing the number and length of board meetings can be key to utilizing the benefits of variety in directors'

diverse talents without causing information overload for each director as well as the board as a whole.

Summary

Although there has been slow but steady progress toward boardroom diversity, it is unclear to what extent a diverse board makes use of the available talent. It all depends on the chairperson's skill and capability to harness the benefits of diversity in the boardroom. Board appointments and dynamics remain largely a black box as not much research have been done on the selection and appointment process in capturing diverse director's experiences as directors. It is usually the chairperson who spearheads the process of making the board a place that values the diversity of functional background, educational background, and industry experience. However, many boards are also recognizing the distinction between diversity and inclusiveness. Where diversity is counting the numbers, inclusiveness is making the numbers count. In order to be sustainable, boards need to improve on both dimensions and, in particular, overcome boardroom barriers – whether they be social barriers, power-related barriers, or cognitive barriers – in order to harness the talent of a diverse board.

Cross-References

- Governance
- Sustainability of Boards

References

- Ali, M., Ng, Y. L., & Kulik, C. T. (2014). Board age and gender diversity: A test of competing for linear and curvilinear predictions. *Journal of Business Ethics*, 125(3), 497–512.
- Catalyst. (2018). Women on corporate boards. <https://www.catalyst.org/knowledge/women-corporate-boards>. Accessed 13 Feb 2019.
- Cleveland, J. N., Stockdale, M., Murphy, K. R., & Gutek, B. A. (2000). *Women and men in organizations:*

- Sex and gender issues at work*. London: Psychology Press.
- Deloitte. (2019). Missing pieces report: The 2018 board diversity census of women and minorities on fortune 500 boards. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/center-for-board-effectiveness/us-cbe-missing-pieces-report-2018-board-diversity-census.pdf>. Accessed 13 Feb 2019.
- Eagly, A. H. (2016). When passionate advocates meet research on diversity, does the honest broker stand a chance? *Journal of Social Issues*, 72(1), 199–222.
- Fairchild, C. (2015). *How Macy's quietly created one of America's most diverse boards*. Fortune.
- Financial Reporting Council (FRC). (2008). The combined code on corporate governance. http://www.ecgi.org/codes/documents/combined_code_june2008_en.pdf. Accessed 23 Feb 2019.
- Financial Reporting Council (FRC). (2018). UK corporate governance code. <https://www.frc.org.uk/directors/corporate-governance-and-stewardship/uk-corporate-governance-code>. Accessed 23 Feb 2019.
- Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management Journal*, 35(3), 505–538.
- Fiske, S. T., Bersoff, D. N., Borgida, E., Deaux, K., & Heilman, M. E. (1991). Social science research on trial: Use of sex stereotyping research in Price Waterhouse v. Hopkins. *American Psychologist*, 46(10), 1049.
- Gabaldon, P., Kanadli, S. B., & Bankewitz, M. (2018). How does job-related diversity affect boards' strategic participation? An information-processing approach. *Long Range Planning*, 51, 937–952.
- Gabrielsson, J., Huse, M., & Minichilli, A. (2007). Understanding the leadership role of the board chairperson through a team production approach. *International Journal of Leadership Studies*, 3(1), 21–39.
- Gaertner, S. L., Mann, J., Murrell, A., & Dovidio, J. F. (1989). Reducing intergroup bias: The benefits of recategorization. *Journal of Personality and Social Psychology*, 57(2), 239.
- Ghoshal, S. (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4(1), 75–91.
- Groysberg, B., & Bell, D. (2013). Dysfunction in the boardroom. *Harvard Business Review*, 91(6), 88–97.
- Hambrick, D. C., Misangyi, V. F., & Park, C. A. (2015). The quad model for identifying a corporate director's potential for effective monitoring: Toward a new theory of board sufficiency. *Academy of Management Review*, 40(3), 323–344.
- Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32, 1199–1228.
- Haynes, K. T., & Hillman, A. (2010). The effect of board capital and CEO power on strategic change. *Strategic Management Journal*, 31, 1145–1163.
- Hillman, A. J., Cannella, A. A., & Harris, I. C. (2002). Women and minorities in the boardroom: How do directors differ? *Journal of Management*, 28, 747–763.
- HM Treasury. (2009). Walker review of corporate governance of UK banking industry. http://www.hmtreasury.gov.uk/walker_review_information.htm. Accessed 23 Feb 2019.
- Huse, M., & Grethe Solberg, A. (2006). Gender-related boardroom dynamics: How Scandinavian women make and can make contributions on corporate boards. *Women in Management Review*, 21(2), 113–130.
- Kaczmarek, S., Kimino, S., & Pye, A. (2012). Board task-related faultlines and firm performance: A decade of evidence. *Corporate Governance: An International Review*, 20(4), 337–351.
- Kaczmarek, S., Kimino, S., & Pye, A. (2014). Interlocking directorships and firm performance in highly regulated sectors: The moderating impact of board diversity. *Journal of Management and Governance*, 18(2), 347–372.
- Kakabadse, N. K., & Kakabadse, A. P. (2007). Chairman of the board: Demographics effects on role pursuit. *Journal of Management Development*, 26(2), 169–192.
- Kakabadse, N. K., Figueira, C., Nicolopoulou, K., Hong Yang, J., Kakabadse, A. P., & Özbilgin, M. F. (2015). Gender diversity and board performance: Women's experiences and perspectives. *Human Resource Management*, 54(2), 265–281.
- Kakabadse, A., Goyal, R., & Kakabadse, N. (2018). Value-creating boards – Diversity and evolved processes. *Journal of Creating Value*, 4(1), 22–41.
- Kanadli, S. B., Torchia, M., & Gabalton, P. (2018). Increasing women's contribution on board decision making: The importance of chairperson leadership efficacy and board openness. *European Management Journal*, 36(1), 91–104.
- Khanna, P., Jones, C. D., & Boivie, S. (2014). Director human capital, information processing demands, and board effectiveness. *Journal of Management*, 40, 557–585.
- Krause, R. (2017). Being the CEO's boss: An examination of board chair orientations. *Strategic Management Journal*, 38, 679–713.
- Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and fault lines: The compositional dynamics of organizational groups. *Academy of Management Review*, 23, 325–340.
- Li, J., & Hambrick, D. C. (2005). Factional groups: A new vantage on demographic fault lines, conflict, and disintegration in work teams. *Academy of Management Journal*, 48(5), 794–813.
- McKinsey. (2016). The CEO guide to boards. <https://www.mckinsey.com/featured-insights/leadership/the-ceo-guide-to-boards>. Accessed 5 Feb 2019.
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21, 402–433.
- Mizruchi, M. S. (1996). What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates. *Annual Review of Sociology*, 22, 271–298.
- Pearce, J. A., & Zahra, S. A. (1991). The relative power of CEOs and boards of directors: Associations with

- corporate performance. *Strategic Management Journal*, 12(2), 135–153.
- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of Management Journal*, 58(5), 1546–1571.
- Rindova, V. P. (1999). What corporate boards have to do with strategy: A cognitive perspective. *Journal of Management Studies*, 36, 953–975.
- Shropshire, C. (2010). The role of the interlocking director and board receptivity in the diffusion of practices. *Academy of Management Review*, 35(2), 246–264.
- Singh, V., Terjesen, S., & Vinnicombe, S. (2008). Newly appointed directors in the boardroom: How do women and men differ? *European Management Journal*, 26(1), 48–58.
- Sun, S. L., Zhu, J., & Ye, K. (2015). Board openness during an economic crisis. *Journal of Business Ethics*, 129, 363–377.
- Torchia, M., Calabrò, A., Gabaldon, P., & Kanadli, S. B. (2018). Women directors contribution to organizational innovation: A behavioral approach. *Scandinavian Journal of Management*, 34, 215–224.
- Triana, M. D. C., Miller, T. L., & Trzebiatowski, T. M. (2013). The double-edged nature of board gender diversity: Diversity, firm performance, and the power of women directors as predictors of strategic change. *Organization Science*, 25, 609–632.
- Tuschke, A., Sanders, W. G., & Hernandez, E. (2014). Whose experience matters in the boardroom? The effects of experiential and vicarious learning on emerging market entry. *Strategic Management Journal*, 35(3), 398–418.
- Tushman, M. L., & Nadler, D. A. (1978). Information processing as an integrating concept in organizational design. *Academy of Management Review*, 3, 613–624.
- Van Ees, H., Gabriëls, J., & Huse, M. (2009). Toward a behavioral theory of boards and corporate governance. *Corporate Governance: An International Review*, 17, 307–319.
- Van Knippenberg, D., De Dreu, C. K., & Homan, A. C. (2004). Workgroup diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89, 1008–1022.
- Veltrop, D. B., Hermes, N., Postma, T. J., & de Haan, J. (2015). A tale of two factions: Why and when factional demographic fault lines hurt board performance. *Corporate Governance: An International Review*, 23(2), 145–160.
- Westphal, J. D., & Bednar, M. K. (2005). Pluralistic ignorance in corporate boards and firms' strategic persistence in response to low firm performance. *Administrative Science Quarterly*, 50(2), 262–298.
- Zahra, S. A., & Pearce, J. A. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15(2), 291–334.
- Zhu, D. H., Shen, W., & Hillman, A. J. (2014). Recategorization into the in-group: The appointment of demographically different new directors and their subsequent positions on corporate boards. *Administrative Science Quarterly*, 59(2), 240–270.

Dividend

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Synonyms

[Dividend payout](#); [Dividend policy](#)

Definition

A dividend is defined as a payment made by corporations to its shareholders. It represents the distribution of the company's profits and rests on the principle of maximizing the wealth of shareholders (Baker et al., 2002). The profits generated by the company can be used in several ways – 1) it can be reinvested in the company (retained earnings) in the form of funds invested in new technologies, financing mergers, and acquisition, or 2) it can be retained in the form of cash reserves (deposits) to secure the future of the company. Retained earnings make for an important source of internal finance to the long-term growth of the company, while dividend payouts reduce the funds available at the company disposal.

Profit or a proportion of the profit can be also distributed to shareholders as cash payment or in the form of a dividend reinvestment plan as shares of stock, or other property. The dividend payout is the decision of the board of directors. The payment is distributed to shareholders on the basis of the class of shares owned.

The firm's propensity to pay dividends and the patterns of the payouts are one of the most dynamically developing themes in the finance literature. Analyses aim to explain the determinants of dividend policy in the institutional environment, e.g., investor protection increases the propensity to pay. Such determinants are also noted in the organizational context including the size of the company, its ownership structure, or composition of the board.

Dividend as the Return on Investment

Dividend Payments

Dividend is a payment to shareholders who possess stakes in the company. The underlying logic behind dividend payment is the shareholder expectation to enjoy the return of their investment (Baker et al., 2002; Vermalen, 2009). A shareholder has potentially two options to be compensated for providing funds for the company development.

The first way to enjoy the increase of wealth results from the increase of share prices (Andres et al., 2009) as compared to the moment of the share purchase. The increase of the share price increases the value of stake held by the shareholder. The monetary effect is achieved at the moment of the sale of the shares – the difference between the purchase and sale price is the return on investment for the shareholder. The increase of the share price takes place when the company performs well and reports positive financial results. Under the circumstances of the constant value of the firm, shareholders may also enjoy the increase of the share price when the number of shares outstandingly drops. With the stock repurchase and the lower number of shares outstanding, the price per share naturally increases.

The second way to enjoy the return of investment by shareholders is the distribution of profits in the form of dividends. According to the agency theory, shareholders in public corporations are the residual claimants (Eisenhardt, 1989). They are not compensated in the fixed scheme but have the residual rights (Fama and Jensen, 1983a, 1983b). This means that shareholders are not rewarded by schemes adopted for employees or executives who receive monthly fixed remuneration paid on the basis of the contract regardless of the company performance. Employees are protected by law and have these payments guaranteed (which may be ceased in extreme situations of financial distress). Shareholders however are not subject to fixed payments; they enjoy the return of investment only if the company generates profits (Vermalen, 2009). In the case of financial loss or the need for reinvestment, shareholders do not receive any payment (Vogel, 2005; Dore, 2008). Since the payment to shareholders is dependent

on the financial performance of the company, they are called residual claimants and bear the risk.

The dividend payment depends on the financial performance of the company and its investment requirement as well as the quality and engagement of the executive team. Agency theory identifies that managers have the tendency to behave opportunistically and maximize their own wealth at the expense of shareholders (Jensen and Meckling, 1976). Hence, shareholders willing to enjoy positive return of their investment in a firm introduce control mechanisms to discipline managers (Eisenhardt, 1989) and a set of constraints that forms the *ex post* distribution of wealth (Zingales, 1997). In the language of the principal-agent framework, monitoring and control mechanisms (corporate governance) are set to ensure that investors receive the return on their investments and in a consequence are encouraged to provide more funds for companies in future (Shleifer & Vishny, 1997). As argued by Easterbrook (1984:652), “dividends exist *because* they influence the firms’ financing policies, *because* they dissipate cash and induce firms to float new securities.”

Measuring Dividend Payment

Dividend payment is an attribute of a company which adds to the assessment of its performance and indicates to what extent the company intends to share the profit with its shareholders. The dividend payment is measured by three indicators:

- Dividend yield defined as annual dividend paid per share divided by the price per share

$$\text{dividend yield} = \frac{\text{annual dividend paid per share}}{\text{price per share}}$$

- Dividend per share understood as the sum of dividend paid divided by shares outstanding

$$\text{dividend per share} = \frac{\text{sum of dividend paid}}{\text{shares outstanding}}$$

- Dividend payout ratio defined as annual dividend per share divided by earnings per share

$$\text{dividend payout ratio} = \frac{\text{annual dividend paid per share}}{\text{earnings per share}}$$

- Alternatively, dividend payout ratio is measured as sum dividend paid divided by net income

$$\text{dividend payout ratio} = \frac{\text{sum of dividend paid}}{\text{net income}}$$

Types of Dividend Payments

Companies may pay dividends in a number of forms. The existing literature distinguishes the following types of dividend (Bragg, 2017):

- Cash dividend – represents cash paid to shareholders who own company shares. It is expressed in the sum of money paid per each share owned. It is the most common type of dividend payment. Cash dividend is a form of investment income and is usually taxable to the recipient in the year it is paid. From the accounting perspective, dividends paid are not viewed as an expense but as the deduction of retained earnings. They are neither presented in the income statement nor shown in the balance sheet. Cash dividends may be paid as regular dividends (e.g., paid annually) or as special dividends which are less likely to be repeated and take place under certain special circumstances. For the cash dividend, three dates are essential: the date of declaration, the date of record, and the date of payment.
 - Date of declaration is the date of the decision by the board of directors to pay a certain dividend amount in cash to shareholders who own shares of the company on a specific date.
 - Date of record represents the date when dividends are assigned to the holders of the company's stock.
 - Date of payment is the date when the dividend payment is issued to shareholders.
- Stock dividend also known as script dividend is a dividend payment made in the form of additional shares not in the cash payout. This stock may be in the form of additional shares issued by the corporation or by an affiliated company (for instance, a subsidiary). Stock dividends are issued in the proportion to shares owned. The issuance of the additional stock up to 25% of the total number of previously outstanding shares is called as a stock dividend. The issuance of the stock exceeding 25% of the total number of previously outstanding shares is known as a stock split. Stock dividend also means that a given sum of money is transferred from retained earnings to the capital stock. The scrip dividend works as follows: A company may not have sufficient funds to issue dividends in the near future, so instead it issues a scrip dividend, which is essentially a promissory note that declares that the company will pay the dividends later since in the current situation it does not possess sufficient funds.
- Property dividend is the form of a non-monetary dividend to investors, not in the cash or stock payout. They are a rare type of dividends and are represented by the form of assets and securities from the issuing corporation or its affiliated company (for instance, a subsidiary). Property dividend may take forms of products and services.
- Liquidating dividend is the sum of funds which was originally provided by shareholders and is returned to them usually in the case of liquidation and closing down of the company.
- Interim dividend is a *dividend* paid to shareholders made before the annual shareholder meeting and final financial statements.
- Other dividends represent other types of payments to shareholders taking the form of structured finance.

Dividend Policy

The Lintner's Model

Dividend policy is a term which describes patterns and practice of the profit distribution by a firm to its shareholders (Baker et al., 2002; Allen & Michaely, 2003). It is studied in relation to a firm's financing and investment decisions. Dividend policy is the outcome of decisions undertaken by managers. The seminal work by Lintner (1956) offered first insights on dividend policy.

Lintner argues that companies follow dividend adjustment process by applying target dividend payout ratio. This means that companies set long-run target for dividends to earnings ratios according to the amount of positive net-present-value (NPV) projects they have available. Since earnings do not reveal stable and predictable increases, dividend policy is not adjusted according to their annual changes. The dividend policy is changed once managers view earnings increases as sustainable. According to Lintner, dividend policy has two parameters: the target payout ratio and the speed at which dividends adjust to the target.

The Irrelevance of Dividend Versus the Relevance of Dividend

The irrelevance of dividend is an approach offered in opposition to the view of the relevance of dividend and rests on the premise that “the value of a company is determined by its assets and the cash flows generated by those assets and not by the way firms distribute cash flows to shareholders” (Baker & Weigand, 2015:128).

According to the dividend irrelevance theory, investors are indifferent with respect to a firm’s dividend policy. Whenever they want to receive cash payment, they can sell a portion of their portfolio of shares (Andres et al., 2009). This means that investors do not expect a premium for any particular dividend policy. The irrelevance of dividend was proposed by Miller and Modigliani (1961) who argue that in perfect capital markets, the dividend policy does not impact firm share price. Dividend policy does not have any effect on firm value since it is determined by optimal investments.

Theories of Dividend Payout

The existing literature offers a number of explanations pointing at factors which determine the way and form of dividend payments, the frequency of the payments, and the size of the payments. A significant role is played by the corporate governance framework – investor protection and efficient court system are believed to increase the dividend payout by listed companies (La Porta et al., 2000). The

willingness of the firm to pay dividend, known as the firm propensity to pay, is believed to be the result of motivations for executives and market reactions.

Numerous studies attempt to explain dividend policy and the firm’s propensity to pay dividends. The factors which determine dividend payout include firm profitability and size, stability of earnings, rate of growth, free cash flow, life cycle, and investment opportunities as well as governing structure (Benjamin & Zain, 2015). Despite intensive analyses, there is not one universal and highly recognized conceptual framework which would explain why companies pay dividends (Baker & Weigand, 2015). Interestingly, studies indicate that factors which were believed to determine dividends policy prove to be insignificant with no impact of the frequency and the magnitude of the payout (Moortgat et al., 2017). Thus, authors often refer to the terms of “dividend puzzles” or “dividend enigma.” The existing literature offers a number of conceptual frameworks to explain dividend policy (Bancer et al., 2009; Baker & Weigand, 2015) including the following perspectives.

Bird in the Hand Versus Irrelevance

According to the bird-in-the-hand framework, investors prefer the certainty of dividend payments versus the possibility of higher capital gains in future (Baker & Weigand, 2015). Hence, companies which are willing to keep their share price high should pay dividends.

Tax Clienteles

According to tax clienteles, dividend policy is a product of tax law. Specifically, since investors maximize after tax income (Farrar and Selwyn 1967), companies pay dividends to meet the expectations of their heterogeneous groups known as clienteles (Masulis & Trueman, 1988; Allen et al., 2000). According to tax clientele, approach investors prefer that the company would retain the earnings if tax rates are high. In addition, due to tax law dividends are less valuable than capital gains; they are to some extent replaced by stock repurchases (Baker et al., 2002; Skinner, 2008; Baker, 2009). The replacement of

dividends by share buybacks is noted in many countries and is discussed in the next section.

Signaling Perspective

According to the signaling perspective, dividend policy is a way in which companies communicate information to shareholders (Denis & Osobov, 2008). Dividend policy is an instrument to send the message about the company quality to mitigate the information asymmetries (Frankfurter & Wood, 2002). The signaling perspective offers an explanation for the widely observed pattern of dividend payouts – dividend smoothing. Since investors negatively react to declines in payouts, managers adjust and smooth their dividends to meet the formulated targets (Leary & Michaely, 2011).

Agency Theory

Agency theory is used as a competitive perspective to explain dividend policy. This theory assumes the existence of the conflict of interest between (1) shareholders and debtholders (Fama & Jensen, 1983a, b) and (2) between shareholders and managers (Shleifer & Vishny, 1997; Easterbrook, 1984). Debt covenants are used to mitigate the conflict between shareholders and debtholders. The conflict between shareholders and managers and the risk of expropriation by managers are mitigated by the monitoring role of large owners, the presence of independent directors on board, and the incentive function of executive compensation.

The pattern of dividend payouts reflects the existing conflicts. According to agency theory, dividends are paid to mitigate the divergent interest of shareholders and managers. The payout reduces the cash flow at the managerial disposal (Frankfurter & Wood, 2002). Generated profits instead of being spent on transaction which does not increase shareholder value (excessive diversification, mergers and acquisitions, and prerequisite consumption) are distributed to shareholders (Jensen, 1986).

Developing this framework, Rozeff (1982) investigates the impact of transaction costs and agency costs relating to external financing. He suggests that the optimal dividend policy provides a balance between transaction costs and agency costs.

Catering Theory

Catering theory was developed by Baker and Wurgler (2004) who argue that investors divide companies into two groups: dividend payers or dividend nonpayers. According to catering theory, the decision to pay dividends is driven by investor demand. Specifically, “managers cater to investors by paying dividends when investors put a stock price premium on payers and not paying when investors prefer nonpayers” (Baker & Wurgler, 2004:1125). This means that companies adjust their dividend policies to investor demand – dividend payers reduce or cease dividends when demand is low, and payers are traded at a discount, while nonpayers initiate dividend payments when demand for dividends is high and when investors place a premium on dividend-paying stocks.

The main shortcoming of catering theory refers to the fact that it models decisions on dividend initiations and omissions but does not explain the changes in the size of dividends. This limitation was addressed by Li and Lie (2006) who further develop catering theory and indicate that the decision on dividend payment and the magnitude of the change are related to the premium that investors place on dividends (De Rooij & Renneboog, 2009).

Life Cycle Theory

An alternative explanation of dividend payout rests on the assumption that the dividend policy is a derivative of the firm's stage in its life cycle. According to this theory, in the early stages of its growth a company is unlikely to pay dividends. When its investment requirements are high, financing is based on equity and cash flow remains negative (Toms, 2014). The firm is about to initiate the dividend payouts “when its growth rate and profitability are expected to decline in the future” (Baker & Weigand, 2015:133). Fatemi and Bildik (2012) show that large firms with high profitability as well as firms with low growth opportunities have a greater propensity to pay dividends.

Behavioral Framework

Since the above presented frameworks failed to explain the dividend policy, the alternative

approach known as behavioral framework is proposed. According to the behavioral framework, investors prefer dividends for psychological reasons such as self-control (Shefrin and Statman (1984), choice under uncertainty (Kahneman & Tversky, 1979), mental accounting, hedonic editing, and regret. Other factors include demographic attributes of investors such as age, income, and retirement status. Depending on their demographic characteristic and psychological preferences, investors may prefer, for instance, high and stable dividend in order to lower the inconvenience and reduce the cost of creating the needed cash flows by liquidating share holdings (Shefrin & Statman, 1984; Baker et al., 2002).

Replacement by Stock Repurchase

In recent years, many articles on dividends have reported significant change of trends in the payouts by companies. The discussion was initiated with the paper by Fama and French (2001) who document the dramatic decrease of the proportion of firms that pay dividends in the period 1980s–1990s. This observation was later supported by empirical studies (De Angelo et al., 2004) that indicate the decline of the number and the proportion of firms which pay dividends as well as the drop of the funds distributed in the form of cash dividends to shareholders. Initially, this trend was noted in the United States. Later it was known as “disappearing dividends” or “shrinking dividends” (Siegel, 2002) and revealed also in other countries globally (Denis & Osobov, 2008; Fatemi & Bildik, 2012).

The trend of disappearing dividends is explained by several arguments:

- The changing breakdown of listed companies – the firm characteristics determines the frequency and magnitude of the payout. Thus, with the changes in the population of companies listed on the stock exchanges, the propensity to pay dividends may change as well (Fatemi & Bildik, 2012).
- Growth investment opportunities and requirements for capital – the expansion of companies

in sectors characterized with technological advancement and the importance of innovation increases the demand for capital and lowers the firms’ tendency to pay dividends (Fama & French, 2001).

- The impact of tax law and the widespread replacement of dividends by share repurchases noted in both the USA and Europe (Wood, 2001; De Angelo et al., 2004; Ferris et al., 2006; Shiller, 2014; Farre-Mensa et al., 2014).

Dividend and Sustainability

The link between dividend payout and sustainability is significantly unexplored, yet it constitutes a potentially interesting and relevant avenue for further research. The main assumption of the board that decides about the dividend payout to shareholders should not have a negative impact on the company and undermine its prospects for future development with regard to strategy, innovation as well as ESG performance.

Cross-References

- Behavioral Finance
- Corporate Finance
- Corporate Governance, Measurement of
- Governance
- Shareholder Model
- Shareholder Theory/Shareholder Value

References

- Allen, F., Bernardo, A. E., Welch, I. (2000). The theory of dividends based on tax clienteles. *Journal of Finance*, 55, 2499–2536.
- Allen, F., & Michaely, R. (2003). Payout policy. In G. Constantinides, M. Harris, & R. Stulz (Eds.), *Handbook of the economics of finance* (Vol. 1, pp. 1–604). Elsevier.
- Andres, C., Betzer, A., Correia da Silva, L., & Goergen, M. (2009). Trends in dividends: Payers and payouts. In K. Baker (Ed.), *Dividends and dividends policy* (pp. 35–54). Hoboken: Wiley.
- Baker, K. (2009). *Dividends and dividends policy*. Hoboken: Wiley.
- Baker, H., & Weigand, R. (2015). Corporate dividend policy revisited. *Managerial Finance*, 41, 126–144.

- Baker, M., & Wurgler, J. (2004). A catering theory of dividends. *Journal of Finance*, 59(3), 1125–1165.
- Baker, H., Powell, G., & Veit, E. (2002). Revisiting the dividend puzzle. Do all of the pieces now fit? *Review of Financial Economics*, 11, 241–261.
- Bancel, F., Bhattacharyya, N., & Mittoo, U. (2009). Cross-country determinants of payout policy: European firms. In K. Baker (Ed.), *Dividends and dividends policy* (pp. 71–93). Hoboken: Wiley.
- Benjamin, S., & Zain, M. (2015). Corporate governance and dividends payout: Are they substitutes or complementary? *Journal of Asia Business Studies*, 9(2), 177–194.
- Bragg, S. (2017). *Types of dividend*, <https://www.accountingtools.com/articles/2017/5/16/types-of-dividends>.
- De Angelo, H., De Angelo, L., Skinner, D. (2004). Are dividends disappearing? Dividend concentration and the consolidation of earnings policy. *Journal of Financial Economics*, 72, 425–456.
- De Rooij, M., & Renneboog, L. (2009). The catering theory of dividends. In K. Baker (Ed.), *Dividends and dividends policy* (pp. 215–238). Hoboken: Wiley.
- Denis, D., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89, 62–82.
- Dore, R. (2008). Financialization of the global economy. *Industrial and Corporate Change*, 17(6), 1097–1113.
- Easterbrook, F. (1984). Two agency-cost explanations of dividends. *American Economic Review*, 74, 650–659.
- Eisenhardt, K. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(1), 57–74.
- Fama, E., & Jensen, M. (1983a). Separation of ownership and control. *Journal of Law and Economics*, 26, 301–325.
- Fama, E., & Jensen, M. C. (1983b). Agency problems and residual claims. *Journal of Law and Economics*, 26, 327–349.
- Fama, E., French, K. (2001). Disappearing dividends: changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60, 3–43.
- Farrar, D., & Selwyn, L. (1967). Taxes, corporate policy, and return to investors. *National Tax Journal*, 20, 444–454.
- Farre-Mensa, J., Michaely, R., Schmalz, M.C. (2014). Dividend policy, Ross School of Business Paper No. 1227, February 24.
- Frankfurter, G., & Wood, B. (2002). Dividend policy theories and their empirical tests. *International Review of Financial Analysis*, 11, 111–138.
- Fatemi, A., Bildik, R. (2012). Yes, dividends are disappearing: worldwide evidence. *Journal of Banking and Finance*, 36(3), 662–677.
- Ferris, S., Sen, N., Yui, H.-P. (2006). God save the Queen and her dividends: Corporate payouts in the United Kingdom. *The Journal of Business*, 79(3), 1149–1173.
- Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76, 323–329.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263–291.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Agency problems and dividend policies around the world. *Journal of Finance*, 55(1), 1–33.
- Leary, M., & Michaely, R. (2011). Determinants of dividend smoothing: Empirical evidence. *Review of Financial Studies*, 24(10), 3197–3249.
- Li, W., & Lie, E. (2006). Dividend changes and catering incentives. *Journal of Financial Economics*, 80(2), 293–308.
- Lintner, J. (1956). Distribution of income of corporations among dividends, retained earnings and taxes. *American Economic Review*, 46(2), 97–113.
- Masulis, R., & Trueman, B. (1988). Corporate investment and dividend decisions under differential personal taxation. *Journal of Financial and Quantitative Analysis*, 23, 369–386.
- Miller, M., & Modigliani, F. (1961). Dividend policy, growth and the valuation of shares. *Journal of Business*, 34(4), 411–433.
- Moortgat, L., Annaert, J., & Deloof, M. (2017). Investor protection, taxation and dividend policy: Long-run evidence, 1838–2012. *Journal of Banking and Finance*, 85, 113–131.
- Rozeff, M. (1982). Growth, beta, and agency costs as determinants of dividend payout ratios. *Journal of Financial Research*, 5(3), 249–259.
- Shefrin, H., & Statman, M. (1984). Explaining investor preference for cash dividends. *Journal of Financial Economics*, 13, 253–282.
- Shiller, R. (2014). Speculative asset prices. *The American Economic Review*, 104(6), 1486–1517.
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783.
- Siegel, J. (2002). *Stocks for the long run* (3rd ed.). New York: McGraw-Hill.
- Skinner, D. (2008). The evolving relation between earnings, dividends and stock repurchases. *Journal of Financial Economics*, 87(3), 582–609.
- Toms, S. (2014). The life cycle of corporate governance. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance* (pp. 349–364). Oxford: Oxford University Press.
- Vermalen, T. (2009). Maximizing shareholder value. An ethical responsibility? In C. Smith & G. Lenssen (Eds.), *Mainstreaming corporate responsibility* (pp. 206–218). Chichester: Wiley.
- Vogel, D. (2005). Is there a market for virtue? The business case for corporate social responsibility. *California Management Review*, 47(4), 19–45.
- Wood, A. (2001). *Death of the dividend?* CFO Europe, Research Report, December.
- Zingales, L. (1997). *Corporate governance*. Chicago: National Bureau of Economic Research.

Dividend Payout

► [Dividend](#)

Dividend Policy

► [Dividend](#)

Doing Good

► [Business Ethics](#)

Doing Well by Doing Good

► [Enlightened Self-Interest](#)

Domini Social Index

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Synonyms

[Domini Social Index 400](#); [MSCI KLD 400 Social Index](#)

Definition

The *Domini 400 Social Index* was initially founded by KLD's Amy Domini and is now known as the *MSCI KLD 400 Social Index*. It is a market cap-weighted stock index of 400 (out of 3000 of the largest in the United States) publicly traded firms which have met specific benchmarks of social and environmental distinction and

focuses on Socially Responsible Investing (SRI). The criteria for the index include high ratings based on Environmental, Social, and Governance (ESG) ratings. The companies must be headquartered in the United States and are primary listed on the NYSE or NASDAQ.

Companies included in this index have robust records of environmental and social excellence. In order to be included in this index, firms have to have made positive contributions to employee and human relations, product and environmental safety, and corporate governance. Those firms engaged in the business of alcohol, tobacco, civilian firearms, gambling, nuclear power, adult entertainment, genetically modified organisms (GMOs), and military weapons are routinely barred from being considered.

How the Social Index Works

The *MSCI KLD 400 Social Index* is independently maintained by *KLD Research & Analytics* and aspires to maintain similar sector weights as the MSCI USA Index. Firms are replaced from the index on a quarterly basis with those with higher ESG scores to maintain a fixed number of 400 securities based on one of three criteria: (a) if their ESG ratings decline below certain benchmarks, (b) if they are removed from the MSCI USA IMI index, or c) if they no longer pass exclusion criteria.

The index was established on May 1, 1990, as the *Domini 400 Social Index* and renamed as the *MSCI KLD 400 Social Index* in 2010. This was one of the first Socially Responsible Investing (SRI) indices, whose goal was to help socially conscious investors weigh social and environmental factors in their investment choices. This is a growing trend across many demographic and geographic corners of the world. Having a social conscience can be leveraged for competitive advantage for companies via their associations with shareholders.

The MSCI KLD 400 Social Index targets to own 90% large-cap stocks, 9% mid-cap, and 1% small-cap. As of July 2022, the indexes' largest holdings were Microsoft (MSFT), Facebook (FB), Google (GOOG), Proctor & Gamble (PG),

and Visa (V) – cumulatively they make up 21.5% of the index. Since the rechristening of the index in 2010 through January 2022, it has produced a return of 14.4% annualized.

In order to invest in the MSCI KLD 400 Social Index, one must buy the iShares MSCI KLD 400 Social ETF (DSI), an exchange-traded fund (ETF), formed in 2006. The assets under management (AUM) for the ETF is \$1.75 million, while the dividend yield is 1.5%. The shares are up 7.9% annualized since inception through January 2022. The ETF has the same top five holdings as the MSCI KLD Social Index.

Cross-References

- [Dow Jones Sustainability Index](#)
- [Forum Ethibel Sustainability Index](#)
- [Sustainability Report and Sustainability Reporting](#)

References

- Carini, C., Comincioli, N., Poddi, L., & Vergalli, S. (2017). Measure the performance with the market value added: Evidence from CSR companies. *Sustainability*, 9(12), 2171.
- Chatterji, A. K., Durand, R., Levine, D. I., & Touboul, S. (2016). Do ratings of firms converge? Implications for managers, investors and strategy researchers. *Strategic Management Journal*, 37(8), 1597–1614.
- Chen, J. (2019). MSCI KLD 400 Social Index. *Investopedia*. Updated November 27. https://www.investopedia.com/terms/d/domini_400.asp. Accessed 18 Sept 2020.
- Fatemi, A., Fooladi, I., & Tehranian, H. (2015). Valuation effects of corporate social responsibility. *Journal of Banking & Finance*, 59, 182–192.
- Grigoris, G. (2016). The challenges of corporate social responsibility assessment methodologies. *International Journal of Economics & Business Administration (IJEBA)*, 4(1), 39–55.
- Harjoto, M., & Laksmana, I. (2018). The impact of corporate social responsibility on risk taking and firm value. *Journal of Business Ethics*, 151(2), 353–373.
- Hasan, I., Kobeissi, N., Liu, L., & Wang, H. (2018). Corporate social responsibility and firm financial performance: The mediating role of productivity. *Journal of Business Ethics*, 149(3), 671–688.
- Luffarelli, J., & Awaysheh, A. (2018). The impact of indirect corporate social performance signals on firm value: Evidence from an event study. *Corporate Social Responsibility and Environmental Management*, 25(3), 295–310.
- Luo, X., Wang, H., Raithel, S., & Zheng, Q. (2015). Corporate social performance, analyst stock recommendations, and firm future returns. *Strategic Management Journal*, 36(1), 123–136.
- Massetti, B., Angelidis, J., & Murphy-Holahan, M. (2016). The quantification of social action in US corporations. *Journal of Leadership, Accountability & Ethics*, 13(2), 25–35.
- Mattingly, J. E., & Berman, S. L. (2006). Measurement of corporate social action: Discovering taxonomy in the Kinder Lydenburg Domini ratings data. *Business & Society*, 45(1), 20–46.
- McAlister, D. T., & Ferrell, O. C. (2016). Corporate governance and ethical leadership. In *Business ethics: New challenges for business schools and corporate leaders* (pp. 68–93). London, United Kingdom: Routledge.
- Rawhouser, H., Cummings, M., & Newbert, S. L. (2019). Social impact measurement: Current approaches and future directions for social entrepreneurship research. *Entrepreneurship Theory and Practice*, 43(1), 82–115.
- Roberts, R. W., & Wallace, D. M. (2015). Sustaining diversity in social and environmental accounting research. *Critical Perspectives on Accounting*, 32, 78–87.
- Sauer, D. A. (1997). The impact of social-responsibility screens on investment performance: Evidence from the Domini 400 social index and Domini Equity Mutual Fund. *Review of Financial Economics*, 6(2), 137–149.
- Sharfman, M. (1996). The construct validity of the Kinder, Lydenberg & Domini social performance ratings data. *Journal of Business Ethics*, 15(3), 287–296.
- Ur Rehman, R., Zhang, J., Uppal, J., Cullinan, C., & Akram Naseem, M. (2016). Are environmental social governance equity indices a better choice for investors? An Asian perspective. *Business Ethics: A European Review*, 25(4), 440–459.
- Von Wallis, M., & Klein, C. (2015). Ethical requirement and financial interest: A literature review on socially responsible investing. *Business Research*, 8(1), 61–98.

Domini Social Index 400

- [Domini Social Index](#)

Don't Make a Wave Committee

- [Greenpeace \(Environment\)](#)

Dow Jones Sustainability Index

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Synonyms

[Sustainability Index](#)

Definition

The Dow Jones Sustainability Indices are stock indices that capture companies that are among the best in regard to sustainability. Listed companies are evaluated according to ecological, economic and social aspects (ESG criteria). The evaluations by S&P Global take data, evaluations of questionnaires, industry-specific aspects and other criteria into account, using standardized procedures. The Index Group enables companies that act sustainably to be compared with non-sustainable companies and they do create a reference in terms of sustainability.

Introduction

The Dow Jones Sustainability Indices is a group of equity indices that focus on sustainability. Its beginning was in 1999, started by the US publishing house Dow Jones & Company. Since then, a number of indices have been added. Today the overall group of these stock indices includes various global or regional as well as country-specific indices. The best-known Dow Jones Sustainability Index (DJSI) World is globally oriented. Further (regional) examples are DJSI Europe, DJSI North America or DJSI Emerging Markets.

The Dow Jones Sustainability Indices focus on sustainability. All parts of the index group have in common that they rely on the best companies when it comes to sustainability.

In terms of the indices, sustainability means focusing on economic, ecological and social criteria. In this respect, not only purely economic aspects (such as in the better-known “Dow Jones Index” - the US stock index created in 1884) are taken into account. The consideration also goes beyond purely ecological aspects. Rather, sustainability is made up of economic, ecological and social aspects in their entirety, i.e. environmental, social and management-specific aspects.

The indices take into account and record listed companies and evaluate them based on ESG criteria (environmental, social, governance) according to the best-in-class principle. The basis for evaluating companies in terms of sustainability is the S&P Global ESG Score of the company.

Evaluations by S&P Global Inc., a US financial services provider, form the basis for the assessment of companies in terms of sustainability and thus of those companies that are considered for the relevant indices. The company S&P Global took over this task in 2020 from the previously active company RobecoSAM, a Swiss-based investment company.

Methodology for Identifying the Most Sustainable Companies

S&P Global recently evaluated around 7500 companies that cover about 90% of global market capitalization (S&P Global, [2022a](#)).

Based on this total number of companies in order of their market capitalization, those companies are selected that are among the largest publicly traded companies in their respective industries. The selected companies are analyzed by using the so-called ESG criteria. These ESG criteria are checked and evaluated. In the determination, data, evaluations of questionnaires, industry-specific aspects and other criteria are taken into account using standardized procedures (Günther, [2018](#)). These can be aspects of corporate governance, risk management, or compliance issues. Questions of environmental reporting and CO2 compensation are also conceivable. Topics such as employee development, compensation

structures and corporate citizenship also play a role. So – to sum it up – on the one hand, there are general criteria such as management systems, human rights and leadership or aspects within the supply chain. On the other hand, there are still branch-specific aspects and peculiarities of individual branches of the economy. It is necessary to mention, that regarding to specific indices that there are exclusion criteria aiming to exclude some kind of companies such as firearms, alcohol and tobacco, or adult Entertainment.

The so-called S&P Global ESG Score is ultimately determined on the basis of this overall picture. This score can range from zero to 100 points. The higher the S&P Global ESG Score, the more sustainable the company is compared to the industry under review. This selection process is known as the “best-in-class” principle. In this respect, the number of points determined serves to select the most sustainable companies. At this point it must also be mentioned that a certain fluctuation in observance and compliance – depending on the criterion – is conceivable. In this respect, the evaluated aspects are subject to permanent monitoring and at the same time the medium-term performance of the company is decisive with regard to compliance with the criteria.

The Dow Jones Sustainability Indices are based on the evaluations by S&P Global. For example, the top 10% of companies are globally considered in the DJSI. The top 20% are considered for the regional indices, and the top 30% for country-specific indices (S&P Global, 2022b). In this respect, it is ensured that, in accordance with the “best-in-class” principle, companies are considered that implement the best services in terms of sustainability.

S&P Global analyzes are carried out once a year. At the same time, the companies are also subject to monitoring throughout the year. Changes during the year are also possible.

The Sustainability Yearbook

Regardless of the indices, the company S&P Global publishes its analyzes annually in the

Sustainability Yearbook (S&P Global, 2022c). It includes those companies that are in the top 15% of their industry and have an S&P Global ESG Score no more than 30% below the top company in the industry. A total of 716 companies out of about 7500 companies were included in the 2022 yearbook. An overview including the ranking of these companies can be found online on the website von S&P Global.(S&P Global, 2022d). With a view to recognizing the companies within the yearbook, the company S&P Global also publishes awards depending on the S&P Global ESG Score achieved: companies that achieve at least 60 points in their industry and are only 1% behind the top companies in the industry receive a “Gold” standard (“Gold Class Sustainability Award”). Companies with at least 57 points and a difference of 1–5% from the top companies in the industry receive a “Silver” standard (“Silver Class Sustainability Award”). Companies that achieve at least 54 points out of a range from 5–10% in comparison to the top companies in the industry receive a “Bronze” standard (“Bronze Class Sustainability Award”). Companies that are in the top 15% of an industry and can show an improvement in the S&P Global ESG Score of at least 5% and at the same time show the largest increase in the industry compared to the previous year receive the “Industry Mover Sustainability Award”. All other companies without an award are listed as members.

Critical Appraisal of the Dow Jones Sustainability Indexes

On a positive note, the introduction of the Dow Jones Sustainability Indices has put sustainability on the agenda. The Index Group also enables companies that act sustainably to be compared with non-sustainable companies or with companies that only focus on sub-areas of sustainability (which, for example, only take ecological aspects into account). In this respect, the Dow Jones Sustainability Indices create a reference in terms of sustainability.

For companies, the consideration is an award, seal of quality and honor at the same time,

especially since sustainability is one of the most important future topics not only from a regulatory point of view, but also due to market aspects. Sustainable companies strengthen their own competitiveness. In times of a difficult search for qualified employees, employees choose their employers as to whether they are sustainable. When buying products, consumers attach importance to how and under what conditions products are manufactured with a view to human rights or environmental aspects. And investors pay attention to compliance with ESG criteria when investing. The Index Group gives precisely these stakeholders the opportunity to invest in “good” companies. In addition to the image factor - which should not be confused with greenwashing – the consideration of the “best-in-class” principle can certainly also encourage more sustainability in the economy by means of the competitive spirit. If a company recognizes that another company is successful because it focuses on sustainability, then it is encouraged to do more with regard to its own sustainability. In relation to the political objectives, one should not forget the topic of sustainable finance. The European Union, for example, aims to not only make capital markets more sustainable, but also to use financial flows as a transmission channel of the credit and capital markets to bring the real economy toward sustainable economic activities.

The system of the Dow Jones Sustainability Indices admittance can certainly be criticized. For example, small companies are excluded due to the size of the capital market considered. How the criteria are weighted - for example between general and industry-specific aspects - when determining the S&P Global Score is undoubtedly a topic of discussion again and again.

Summary

The Dow Jones Sustainability Indices are stock indices that focus on sustainability. Every part of the index group rely on the best companies regarding the ESG criteria (economic, ecological, and social criteria). The evaluations by S&P Global take data, evaluations of questionnaires, industry-

specific aspects, and other criteria into account, using standardized procedures. The Index Group enables companies that act sustainably to be compared with non-sustainable companies and they do create a reference in terms of sustainability. For companies, it is an honor and a seal of quality to be considered because finally investors take a look where to invest their money.

Cross-References

- [ESG](#)
- [Sustainable Finance](#)

References

- Günther, E. (2018). Dow Jones Sustainability Indexes. <https://wirtschaftslexikon.gabler.de/definition/dow-jones-sustainability-indexes-52306/version-275446>. Accessed April 11, 2022.
- S&P Global. (2022a). The sustainability yearbook 2022. <https://www.spglobal.com/esg/solutions/data-intelligence-esg-scores>. Accessed April 8, 2022.
- S&P Global. (2022b). DJSI index family. <https://www.spglobal.com/esg/performance/indices/djsi-index-family>. Accessed April 11, 2022.
- S&P Global. (2022c). The sustainability yearbook 2022. <https://www.spglobal.com/esg/csa/yearbook/>. Accessed April 8, 2022.
- S&P Global. (2022d). The sustainability yearbook 2022. <https://www.spglobal.com/esg/csa/yearbook/ranking/index.aspx>. Accessed April 8, 2022.

Downsizing

- [Employee Downsizing](#)

Drouth

- [Water Problems](#)

Dry Spell

- [Water Problems](#)

Dry Weather

- ▶ [Water Problems](#)

Dryness

- ▶ [Water Problems](#)

Dual Board

- ▶ [Two-Tier Board](#)

Dual Leadership Structure

- ▶ [Chief Executive Officer \(CEO Duality\)](#)

Duality of Power

- ▶ [Chief Executive Officer \(CEO Duality\)](#)

Durable Survival of the Organization

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Synonyms

[Economicità](#); [Enduring](#) outliving; [Long-lasting](#) survival

Definition

In the business administration literature, much attention has been paid to identifying the factors

allowing organizations to survive over time. Organizations are established with the need to satisfy human needs and with the prospect of lastingly surviving over time.

The concept of durable survival of the organization has been debated for several decades, but in recent years a lot has changed in the way of interpreting this phenomenon. Currently, the concept of durable survival of organizations is closely linked to the notions of sustainability and sustainable development. The latter was defined by Aras and Crowther (2009) as “a process which aims to fulfil human needs while also maintain the quality of the natural environment on an indefinite basis.”

In the traditional Italian business administration literature, the concept of lasting survival of business organizations is strongly linked to the concept of “economicità aziendale.” The latter is a positive property required to ensure that an “azienda” (roughly translatable as “organization”) can survive lasting over time. This contribution takes as a reference this concept, typical of a national business administration context since it can be a valid point of reference for reformulating the concept of lasting business survival in a contemporary and international point of view.

There are several interpretations and definitions of “economicità.” According to Sòstero (2003), these definitions can be located along an imaginary line with the following two extremes:

1. The “economicità” can be understood as the ability of the organization to *survive autonomously over time*, without the need for support from external agents.
2. It can be understood as *the success in achieving the purposes for which the organization was founded and for which it is kept alive*.

Among the many possible definitions falling within this imaginary line, we will refer to the following one, which is probably the most complete definition of “economicità.” According to Sòstero (2003), “the *economicità* is the organization’s ability to survive and to maximize the utility of its resources.” It depends both on the organization’s *performances* and on the achievement of *equilibrium conditions* allowing the organization

to lasting survive over time. The single parts of the definition will be in-depth examined in the “Performances and equilibrium conditions” section of this entry. Thereafter, the traditional Italian notion of “economicità” will be reformulated in the light of the “sustainability” concept which, in recent years, has been playing a crucial role in identifying the factors allowing organizations to survive over time and should be considered as a contemporary aspect of durability.

Introduction

The concepts presented in this entry are widely developed within traditional continental European accounting contexts and, in particular, in the Italian accounting and business administration literature. On the contrary, they are less popular in the Anglo-American context.

In the Italian accounting and business administration literature, the notion of durable survival of the “azienda” is very relevant. First of all, it is important to explain what the word “azienda” means. It is quite difficult to translate this concept into English. Many Italian accounting and business administration scholars tried to translate it into English to make clear to an international accounting and business administration community one of the most relevant concepts for the Italian accounting scholars. Some scholars tried to translate it with the word “concern” (AIDEA 1980), i.e., “the general category of administration unit (concern for-profit, non-profit and mixed ones), which tends to meet human needs through economic wealth” (Lipari 2012, p. 12).

In the Italian accounting and business administration literature, the distinction among the different types of “azienda” is very relevant and the conditions to achieve their durable survival vary according to their characteristics. Broadly speaking, a common distinction is made among:

(a) *Imprese* (roughly corresponding to “for-profit organizations”), i.e., organizations that allocate their goods and services to exchange on the market and whose main purpose is to achieve a profit.

(b) *Private not-for-profit organizations* (e.g., associations, foundations, and voluntary organizations). They mainly assign the goods and services produced to the consumption of their members (in the case of associations) or the supply to their community of reference (in the case of voluntary organizations and foundations) to achieve their statutory objectives.

(c) *Public not-for profit organizations* (e.g., public hospitals, schools, municipalities, etc.). They assign the goods and services produced to their community of reference to satisfy public needs.

The distinction among these three types of “azienda” is very important, since each pursues its specific institutional purposes (e.g., social, ethical, moral, economic, philanthropic, political, cultural, etc. aims) that can be very different, but all these organizations have in common the need to survive over time in a relatively autonomous way.

For reasons of simplicity, in the following, we will simply refer to the concept of “azienda” by translating it as “organization” (i.e., for-profit organization, not-for-profit organization, and mixed organization).

For a long time, the Italian accounting and business administration literature has identified two distinct objectives for the following types of “azienda”:

1. For for-profit organizations it was believed that the basic objective was the creation and distribution of a reasonable profit for the holders on own capital.
2. For not-for-profit organizations (both public and private) it was believed that the basic objective was the generic satisfaction of human needs, without pursuing profit goals.

However, the identification of two distinct purposes for for-profit and not-for-profit organizations has raised many doubts in doctrine, leading scholars to search for a universal goal, common to all types of organization, according to which each organization is established and maintained

(Gulluscio 2011, p. 23). Zappa (1956) has identified this objective in the survival of the organization, where the latter is interpreted as an economic institution that can last over time.

Only the organizations that manage to last over time can achieve their institutional goals on a stable basis. The durability of the organizations is independent of the permanence of people who have set up the organization itself and who operate in it at a certain time. The need to satisfy the organization's institutional goals does not only apply to the subjects who have established it and who operate in it at a certain time, but also to the people who will benefit from the organization's activity in the future.

The durable survival of the organization is closely connected to its *autonomy*. The latter should not be interpreted as total isolation from external influences, which are quite inevitable since the organization is an open social system. Autonomy means rather that the organization must be able to operate with the resources it manages to obtain, without the systematic recourse to third-party subsidies that condition its decision-making autonomy.

The organization's ability to persist over time and maintain a situation of relative autonomy, pursuing its institutional goals, depends on a set of *performances* and *equilibrium conditions* usually summarized in the concept of "economicità" and described in the next section of this entry.

Performances and Equilibrium Conditions

In this section, the definition proposed by Sòstero (2003) will be analyzed in detail. As already stated above, this is one of the most complete definitions of "economicità." According to it, "the *economicità* is the organization's ability to survive and to maximize the utility of its resources."

More in detail, it depends on two factors:

- (a) Performances
- (b) Equilibrium conditions

The *performances* are measured through the organization:

- Effectiveness
- Efficiency

The *equilibrium conditions* relate to these aspects:

- Economic
- Financial
- Monetary
- Owners' equity

As for the *performances* identified in the definition of "economicità," they include:

- *Effectiveness* (Gulluscio 2014a), commonly understood as the ability to achieve the desired purposes. In management and business administration, this term is commonly understood as "doing the right thing." With specific reference to the different types of "azienda" above-mentioned, effectiveness can be understood as their ability to satisfy their institutional goals. Effectiveness is therefore determined without taking into consideration the costs and is usually determined according to this formula:

$$\text{effectiveness} = \text{results/objectives}$$

There are relevant links between *effectiveness* and *efficiency* (i.e., the other performance mentioned in the definition of "economicità"). However, organizations can be effective without being efficient. This happens when the organization achieves specific results in a wasteful way.

- *Efficiency* (Gulluscio 2014b), which is usually defined in two different ways:
 - As the ability to minimize the resources used in comparison to the same result achieved
 - As the ability to maximize the result being equal the means employed

It is usually determined according to this formula:

efficiency = results achieved/resources used to achieve the results

As for the *equilibrium conditions* identified in the definition of “economicità,” they include:

- The *economic equilibrium*, i.e., the organization’s ability to operate in conditions allowing at least to restore the wealth consumed (Gulluscio 2014c). Depending on the type of organization considered, this equilibrium takes on different characteristics. In fact:
 - In *for-profit organizations*, this equilibrium is reached when revenues cover all costs and keep a reasonable margin for the return on equity.
 - In *not-for-profit organizations* (both public and private), this equilibrium is interpreted in a more restricted sense, i.e., as the ability to restore at least the wealth consumed during the organization’s operations. In fact, most public and private not-for-profit organizations sell the goods and services produced free of charge (or at lower prices than production costs). In these cases, it is important to assess whether the goods and services produced are useful to meet the institutional needs that the organization aims to satisfy. It is also important to compare the value of the utility that these goods and services have produced for users compared to the value of wealth consumed to produce them. In this way, it is possible to understand whether the organization can last durably over time, satisfying the needs of its community of reference, or if its activity is destined to cease because it cannot find forms of wealth restoration sufficient to cover the consumed resources.
- The *financial equilibrium* (Gulluscio 2014c), i.e., the adequate relationship between investments and financing.
- The *monetary equilibrium* (Gulluscio 2014c), which focuses on a short-term horizon, showing the organization’s ability to cover, at any time, payments through monetary assets.
- The *owners’ equity equilibrium* (Gulluscio 2014c), i.e., the organization’s ability to

accumulate and maintain a reasonable amount of assets compared to the funding needed to achieve the organization’s aims.

The equilibrium conditions above described are mutually connected and must be considered as minimum vital requirements for organizations. In other words, they represent necessary but not sufficient conditions to achieve the institutional aims of the organization and to ensure its durable survival over time.

Key Issues

One of the most complex factors to be considered to assess the durable survival of an organization is the economic equilibrium, i.e., *the organization’s ability to operate in conditions allowing at least to restore the wealth consumed*. Organizations failing to achieve this equilibrium can survive only through the systematic use of wealth restorations from third sources. As a consequence, these organizations lack their autonomy and are therefore destined to cease their activity.

To *restore at least the wealth consumed* means not just reintegrating exactly what was consumed, but also finding additional resources allowing the organization to grow and to adequately remunerate the stockholders (in for-profit organizations).

The economic equilibrium must be evaluated in a medium-long time horizon: Its lack in the short term does not necessarily compromise the organization’s durability. On the other hand, in the medium-long term, the organization’s autonomous survival skills are impaired if the economic equilibrium lacks.

The two main factors that must be considered in assessing the economic balance are the *finding of productive factors* and the *transfer of goods/services* produced. As for the finding of productive factors, in most cases, they are obtained against the payment of a price. However, there are some cases in which the production factors are obtained free of charge (e.g., work in voluntary organizations). In these cases, the purchase of inputs does not produce a direct impact on the economic equilibrium. As for the transfer of

goods/services produced, there is a significant difference between for-profit and not-for-profit organizations: The former usually sell their production at higher prices than production costs, while the latter (both public and private) often sell products/services for free or against prices below production costs. For the latter, the attainment of the economic equilibrium cannot disregard the contribution of non-operating items (e.g., transfers from other public entities, revenues different from exchange transactions, and revenues from non-operating items). In for-profit organizations, on the contrary, the economic equilibrium should primarily focus on operating items (i.e., operating revenues and expenses).

Future Directions

According to Freeman (1984), a stakeholder is anyone or an organization able to affect the fulfillment of organizational objectives through its action or who can be affected by the organization's actions. This concept is not stable over time; the identification of the organization's stakeholders is context and time-dependent. According to Mitchell et al. (1997), stakeholders are identified in those whose action matters to the organization. For these reasons, the concept of "stakeholders" is evolving over time. Several decades ago, organizational stakeholders were mainly identified in stockholders. Thereafter, other categories of subjects have gained importance in the communication processes of corporate information, e.g., customers, suppliers, the government, and lenders of credit capital. The recent increasing awareness of sustainable development goals (SDGs) leads to an increase in the number and type of subjects to whom it is considered important to report on the organizations' activity. The SDGs are 17 principles developed in 2015 by the United Nations as a worldwide call to action aimed at ending poverty, protecting planet earth, and ensuring that by 2030 people can enjoy peace and prosperity. In this context, everyone can be considered as a stakeholder. This point of view is coherent with Freeman (1984),

who argues that organizations are responsible to the whole society in which they operate.

The stakeholders to whom it is necessary to report the organization's work are increasingly broad categories of subjects. It follows that today more than ever, broader and more varied categories of stakeholders are considered important for the organizations' lasting survival (i.e., for its durability). The concept of "economicità" should therefore be revisited and expanded. From a viewpoint of sustainability and sustainable development, the aforementioned equilibrium conditions represent only one aspect to be met to guarantee the lasting survival of the organization. The four *equilibrium conditions* cited above (i.e., economic, financial, monetary, and owners' equity equilibria) simply represent an *internal* and *short-term*-oriented dimension for the organization. According to Aras and Crowther (2009), this dimension is called "finance," and consists of maintaining economic (and of course financial, monetary, and owners' equity) equilibria. It is one of the four dimensions of Aras and Crowther's (2009) model of sustainable development, displayed in Fig. 1. According to Aras and Crowther (2009), this dimension is the main goal of the organization. To survive over time, organizations must stably reach other three conditions, namely:

- Societal influence (i.e., ensuring social justice). This condition is reached through poverty reduction, protection of human rights, universal access to education, peace promotion, etc.
- Environmental impact (i.e., safeguarding the environment). This is an essential condition for preserving the availability of production factors to future generations.
- Organizational culture (i.e., developing spiritual and cultural values). This dimension is reached when societal and corporate values align in the individual.

The three conditions just mentioned are considered in the contemporary interpretation of the "simultaneous maximums" concept, to which we refer (cross-reference here to ► ["Theory of](#)

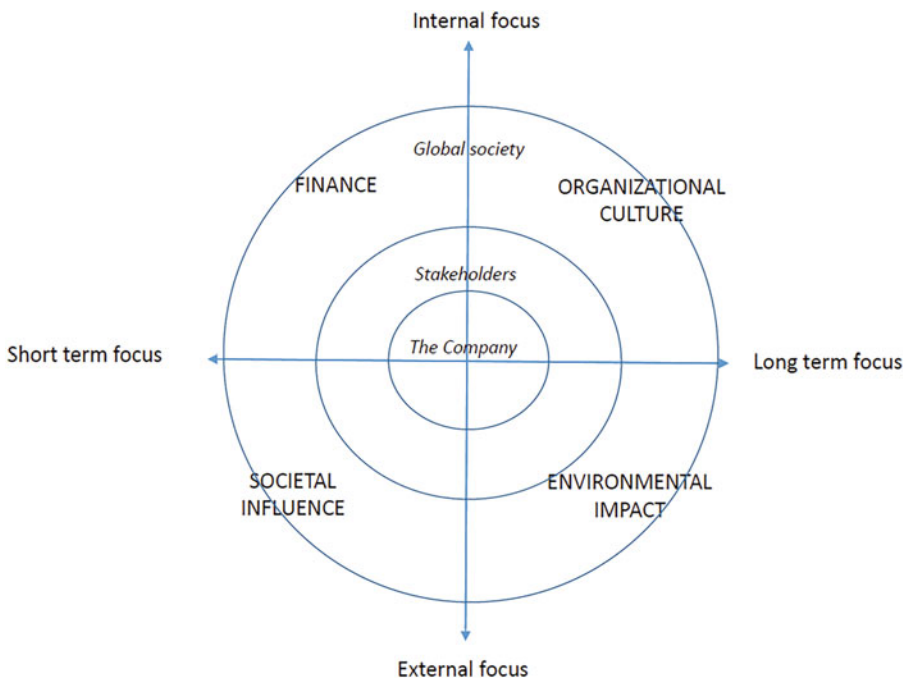
Simultaneous Maximums” to ► “Business Case of CSR” entry).

The concept of “*economicità*” presented in this entry is very broad: It includes the analysis of various dimensions necessary to achieve the lasting survival of different types of organizations (public, private, for-profit, and not-for-profit). In the international (and especially Anglo-American) literature, these same concepts are addressed, but normally this happens with a focus on single aspects considered one at a time and not through a single and comprehensive concept like the one examined here. International literature focuses, for example, on the concepts of effectiveness, efficiency and the various financial statement equilibria in different types of organizations, but it is not usual to address these issues by condensing them into a single concept applicable to all types of organization. Furthermore, few are the contributions focusing on the need to combine the internal and short-term-oriented dimensions (above named “finance”) with the other three dimensions presented above.

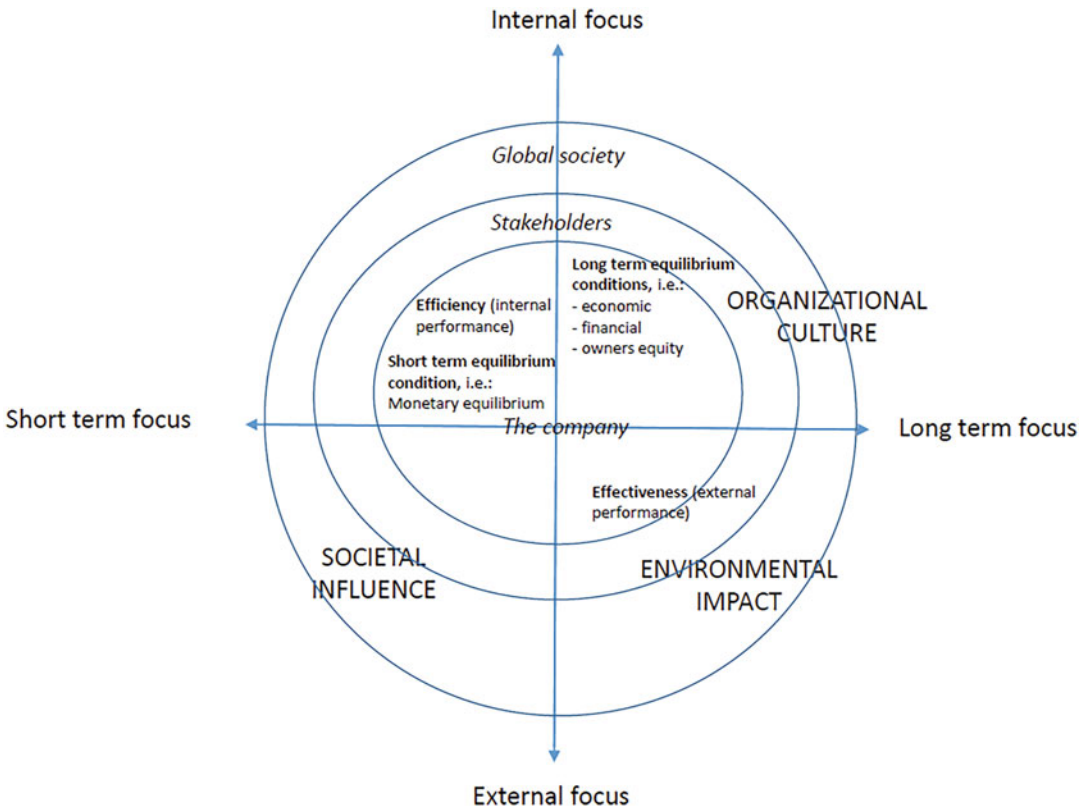
The traditional Italian concept of “*economicità*” can be reformulated in the light of the “sustainability” concept. The *economicità* can be therefore understood as the organization’s ability to lasting survive and to maximize the utility of its resources. It depends on various conditions having internal and external focus, and on the short-term- and long-term-oriented aspects, namely:

1. The organization’s performances
2. The achievement of equilibrium conditions allowing the organization to lasting survive over time
3. Ensuring social justice
4. Preserving the environment
5. Developing spiritual and cultural values

Figure 2 shows that three dimensions proposed by Aras and Crowther (2009) in their model of sustainable development (i.e., societal influence, environmental impact, and organizational culture) maintain the position they originally had in this model. Aras and Crowther’s dimension “finance” was divided into two parts:



Durable Survival of the Organization, Fig. 1 Aras and Crowther’s (2009) model of sustainable development



Durable Survival of the Organization, Fig. 2 Reformulation of the “economicità” concept in the light of sustainability (our adaptation from Aras and Crowther 2009)

- A short-term-oriented equilibrium condition, i.e., monetary equilibrium
- A long-term-oriented equilibrium condition, including economic, financial, and owners’ equity equilibria

As explained in the sections devoted to “Performances and equilibrium conditions,” only monetary equilibrium is short-term oriented, while the other three equilibria are medium-/long-term oriented.

Moreover, the “performances” included in the concept of “economicità” are placed within Aras and Crowther’s (2009) model of sustainable development according to their focus. Efficiency can, therefore, be considered as an internal performance dimension short-term oriented. Effectiveness, on the contrary, can be considered as an external performance dimension, since it relates to “doing

the right thing” for the organization and its stakeholders.

The reformulation of the “economicità” concept in the light of sustainability adapts an old concept of the Italian business administration theory to a more contemporary logic in which the survival of companies over time is conditioned to the achievement of sustainable development not only in the classic economic/financial/monetary/owners’ equity dimension but also in the other dimensions impacting on stakeholders and global society.

The development of an international debate on such a vast concept is indeed desirable since it can represent a future point of connection for accounting studies relating to an important dimension of corporate sustainability: Namely the financial and non-financial dimensions of sustainability, arising from financial statements and non-financial reporting data.

Summary

The old Italian business administration concept of “long lasting survival” of organizations has relevant links with the more modern and international notion of sustainability. The former has strong links with another classic notion of the Italian business administration tradition named “economicità.” The latter implies not only the achievement of economic and financial equilibria but also of social and environmental sustainability. The concept of “economicità” can be placed along an imaginary line with the following two extremes:

(a) A simple interpretation, according to which it is an organizational equilibrium. It is understood as the ability of the entity to survive autonomously over time without support from external parties.

(b) A more complex interpretation, i.e., the success of the entity in the achievement of the purpose for which it was founded and kept alive.

Broadening the field of observation from the concept of “economicità” to those of sustainability, an organization will have durable survival when it is able to achieve the objectives for which it was established and kept alive, in compliance not only with the abovementioned economic and financial equilibria (typical dimensions in financial reports) but also with the social and environmental objectives of its various stakeholders. In order to survive over time, contemporary organizations cannot limit themselves to producing products and services capable of satisfying the needs of their customers and users, and it is not even enough that the satisfaction of these needs takes place in conditions of economic and financial equilibria. It is necessary that all corporate stakeholder are adequately satisfied, even those who express expectations in the social and environmental sphere.

Cross-References

- [Business Case of CSR](#)
- [Sustainability](#)
- [Sustainable Development](#)
- [Theory of Simultaneous Maximums](#)

References

- Accademia Italiana di Economia Aziendale (AIDEA). (1980). *Gino Zappa founder of concern economics*. Papers of the hundredth anniversary of his birth. Milano: Arti Grafiche S. Pinelli.
- Aras, G., & Crowther, D. (2009). *The durable corporation. Strategies for sustainable development*. Cornwall: MPG Books Ltd. Gower.
- Freeman, R. E. (1984). *Strategic management. A stakeholder approach*. Boston: Pitman Publishing.
- Gulluscio, C. (2011). *Le aziende sanitarie pubbliche: riflessioni in tema di bilancio e di valore*. Rome: RIREA.
- Gulluscio, C. (2014a). Effectiveness. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility*. Cham: Springer International Publishing.
- Gulluscio, C. (2014b). Efficiency. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility*. Cham: Springer International Publishing.
- Gulluscio, C. (2014c). Economicità. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility*. Cham: Springer International Publishing.
- Lipari, C. (2012). Accounting in Palermo from Ancien Régime to contemporary age. In C. Lipari (Ed.), *Papers on accounting and accounting history*. Roma: RIREA.
- Mitchell, R. K., Agle, B. R., & Wood, D. S. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–866.
- Sòstero, U. (2003). *L'economicità delle aziende*. Milano: Giuffrè.
- Zappa, G. (1956). *Le produzioni nell'economia delle imprese, Tomo I*. Milano: Giuffrè.

Duties of Hospital Directors

- [Hospital Governance](#)

Dynamic Efficiency

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Synonyms

[Productive efficiency](#)

Definition

Dynamic efficiency is a core topic in economic growth analysis. Dynamic efficiency is concerned with the productive efficiency of a firm over a period of time. Therefore, dynamic efficiency is concerned with the optimum pace of innovation and investment to enhance manufacturing procedures that assist to decrease the average price curves in the long run. Investment in new machinery and technology, for instance, may allow labor productivity to rise. Implementing better working methods and better management of human capital may also require dynamic efficiency. For instance, better union connections that assist implement new work methods. A trade-off includes dynamic effectiveness. In the brief term, investing in better technology may entail greater expenses. But the company may not be able to enhance over time without this investment and innovation (Economics Help 2019).

The economy is said to be dynamically inefficient in situations where the population growth rate exceeds the stable state marginal product of capital, or where the economy consistently invests more than it earns in profit (Abel et al. 1986).

In 1998, a significant handbook on institutional financial evaluation was released by Wolfgang Kasper and Manfred E. Streit. The writers describe dynamic efficiency in this book as “an intrinsic quality for adapting, responding to, or developing fresh understanding.”

The Concept of Dynamic Efficiency

Productivity is, broadly speaking, a measure of how effectively an economy uses resources to generate economic output. Increasing the effectiveness of companies, public sector bodies, and nonprofit organizations can increase productivity. Economists generally differentiate between three kinds of efficiency: allocative efficiency, productive efficiency, and dynamic efficiency. The first two of these are static ideas of how much can be generated at a certain stage in time from a specified resource inventory. The third is a vibrant idea,

concerned with pushing out the boundaries of production possibilities and offering the community access over time to more and better products and services (Dolamare 2014):

- Allocative efficiency – ensures the allocation of resources between alternative uses in a manner that maximizes the well-being of the society.
- Productive effectiveness – defines the condition with the smallest possible average price of producing production. This happens when an organization, a sector, or an economy as a whole operates on its potential manufacturing border (i.e., generating the highest output from a set of inputs).
- Dynamic efficiency – means enhancing the effectiveness of allocation and production over time. This can involve developing fresh or better products and discovering better methods to produce goods and services. Learning, investment, and innovation are important components of dynamic efficiency.

Factors affecting dynamic efficiency:

- Investment – investing in fresh technology and enhancing capital can result in reduced expenses in future state of technology. Rapid technology development can allow companies to generate more for reduced expenses.
- Workers’ and managers’ motivation – do executives have incentives to take risks and innovate or is the company’s structure set up to promote stagnant growth?
- Finance access – a company that does not have access to finance will strive to invest in fresh capital that will allow reduced expenses.

Examples of dynamic efficiency: In 1923, one of the most efficient companies in the globe was Henry Ford’s automobile factory – making the most efficient use of assembly lines. Ford was the most effective car manufacturer throughout the 1920s and 1930s. However, it began to lose its competitive advantage by the 1950s and 1960s as Japanese vehicle companies innovated and enhanced car-building quality (Economics Help 2019).

Dolan and Lindsay (1988) provide a much more specific assessment of dynamic efficiency, particularly when it comes to distinguishing between static effectiveness and dynamic efficiency, which they describe as “a measure of the speed at which the frontier of manufacturing possibility changes over time.” In comparison, static effectiveness is described as “a measure of how near an economy reaches its manufacturing potential frontier.” In addition, Dolan and Lindsay refer to the pioneering contributions of Schumpeter in the field of dynamic efficiency and consider innovation and technological discoveries to be the primary forces behind it, although they do not neglect to mention the creative strength of entrepreneurship.

Dynamic efficiency requires resource allocation that ensures the financing of the optimal number of high-technology firms. For this aim, dynamic efficiency with interacting economic agents is needed (Schertler 2003).

Dynamic Efficiency Criterion

The economy is said to be dynamically inefficient in situations where the population growth rate exceeds the stable state marginal product of capital, or where the economy consistently invests more than it earns in profit. Tobin (1965) and Solow (1970) base their judgment that the economy is dynamically efficient based on estimates of the marginal efficiency of capital obtained from observed accounting profit levels. An alternative approach explains the dynamic efficiency in the light of the monetary variables. Therefore, in a competitive economy, the question of dynamic efficiency can be solved by comparing the amount of investment with the cash flows produced by manufacturing after salaries are paid (Abel et al. 1986).

Summary

Dynamic efficiency is a core topic in economic growth analysis. It is concerned with the productive efficiency of a firm over a period of time and to do that deals with innovation and enhancing. It requires resource allocation, and firms have criteria to be dynamic efficient.

Cross-References

► [Productive Efficiency](#)

References

- Abel, A. B., Mankiw, N. G., Summers, L. W., & Zeckhauser, R. J. (1986). Assessing dynamic efficiency: Theory and evidence. NBER Working Paper Series. Working Paper No. 2097. Cambridge, MA.
- Dolamare, R. (2014). Dynamic efficiency - The key to lifting Australia's productivity performance? Retrieved from https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/FlagPost/2014/March/Dynamic-Efficiency. Accessed 15 Aug 2019.
- Dolan, E. G., & Lindsay, D. E. (1988). Economics. In *5th edn*. New York: Dryden Press.
- Economics Help. (2019). Dynamic efficiency. Retrieved from <https://www.economicshelp.org/microessays/costs/dynamic-efficiency/>. Accessed on 02 Aug 2019.
- Schertler, A. (2003). *Dynamic efficiency and path dependencies in venture capital markets*. New York: Springer.
- Solow, R. M. (1970). *In Growth theory. An Exposition*. Oxford: Clarendon Press.
- Tobin, J. (1965). Economic policy towards growth, in *Collected Papers of James Tobin*, 1.

Further Readings

- O'Connell, S. A., & Zeldes, S. P. (1993). *Dynamic efficiency in the gifts economy*. *Journal of Monetary Economics*, 31(3), 363–379.
- Sengupta, J. K. (2000). *Dynamic and Stochastic Efficiency Analysis, Economics of Data Envelopment Analysis*. World Scientific, Singapore.

E

Early Adopter

- [Social Case of CSR](#)

Earth Summit

- [Earth Summit \(1992\)](#)
- [Local Agenda 21](#)

Earth Summit (1992)

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Synonyms

[Earth Summit](#); [Rio Conference](#); [Rio de Janeiro Earth Summit](#); [Rio Summit](#); [UNCED](#)

Definition/Description

The United Nations Conference on Environment and Development (UNCED), also known as “Earth Summit,” was held at Rio de Janeiro,

Brazil, from 3 to 14 June 1992 (UN [2019](#)). The Conference was the biggest summit that focused on the impact that socioeconomic activities had on the environment. It addressed crucial issues of climate change caused by human activity in an unprecedentedly global manner by bringing together leaders, policymakers, diplomats, scientists, media, and nongovernmental organization (NGO) representatives of 176 states and territories (UN [1992a](#)). Several United Nations (UN) organizations and specialized agencies, 35 intergovernmental organizations, and some 1500 nongovernmental organizations (NGOs) were also represented (UN [1992a](#)).

UNCED coincided with the World Environment Day (5 June), and the twentieth anniversary of the opening of the United Nations Conference on the Human Environment, held in Stockholm in 1972 (UN [1992a](#)).

A number of documents emerged from the Conference. On 14 June, it adopted the Rio Declaration on Environment and Development, and Agenda 21 – a comprehensive action plan for the sustainable development of the planet into the XXI century. A statement of principles for a global management, conservation, and sustainable development of forests was adopted. The United Nations Framework Convention on Climate Change and the Convention on Biological Diversity were opened for signature at UNCED, and they were signed by 154 States and 156 States,

respectively, and by one regional economic integration organization (UN 1992a).

Introduction

With the Cold War behind the world's back, the international community had recognized that a new form of communication needed to be set when decision-making about global problems was in order. At the time, climate change was not as widely considered a global threat of highest priority, but there were more and more evidences that proved the importance and urgency of the issue. Preparations of key issues and core documents began in 1989 after General Assembly resolution 44/228 of 22 December 1989 was adopted by the nations of the world that called for the United Nations Conference on Environment and Development, acknowledging the need for an integrated approach to environment and development questions (UN 1993), the Rio Conference was an important summit both because of the issues it addresses, and because of the large number of delegates. It included not only representatives of governments, but the nongovernment sector as well; it was covered by media from all around the world. The UNCED was the formal starting point of the sustainable development thread of work of the United Nations.

Subsequent events that followed the Rio Conference of 1992 were the signing of the Kyoto Protocol, the World Summit on Sustainable Development in 2002 (Rio + 10), the Rio + 20 Conference. The Conference of Parties (COP) to the United Nation Framework Convention on Climate Change (UNFCCC) became regular events since the adoption of the Convention. The most visible summit after the Rio Conference in 1992 is considered to be the Twenty-First Conference of Parties (COP21), also known as the 2015 United Nations Climate Change Conference, which led to the adoption of the Paris Agreement in 2015, considered by some to be a shift towards a soft global governance for climate change (Leal-Arcas and Carafa 2014).

The first Earth Summit was essentially the pioneer of the truly global environment and development dialog. It was characterized by the massive representation of the event in media and unprecedented number of participants that gathered for discussion panels and decision-making (UN 1993), with more than 10,000 journalists covering the Summit, and still is considered one of the key events in United Nations history in paving the way for the formation of the global sustainable development goals.

The Role of the Rio Conference in Sustainable Development

The Rio Conference of 1992 was the first and one of most important of many events that shape the third period of the sustainable development concept evolution (post-Brundtland report period).

It is from the Rio Conference and the documents that were adopted at the conference that three key elements of the contemporary sustainable development concept were identified: 1) the concept of economic development that is in line with existing ecological constraints; 2) the concept of needs in terms of resource redistribution to ensure the quality of life for all; and 3) the concept of future generations and responsibility to ensure long-term usage of resources, and guarantee the possibility for future generations to be able to benefit from a good quality of the environment (Klarin 2018).

Documents Adopted at the Rio Conference

As a result from the Earth Summit some very important documents – both political and legal ones – were adopted:

1. *Rio Declaration on Environment and Development*

The Rio Declaration on Environment and Development is one of the two main political

documents adopted at the Rio Earth Summit. It contains 27 principles of sustainable development on the rights and responsibilities of the United Nations. These principles also form the basis for future policy and decision-making, aiming at achieving balance between socioeconomic development and protecting the environment (UN 1993).

2. Agenda 21

The Summit also adopted the Agenda 21 – a thorough and broad-ranging program of actions to reach global sustainable development in the twenty-first century, which recommended a broad range of actions – from new ways to educate, to new ways to manage natural resources, and new ways to participate in designing a sustainable economy (UN 1993). Agenda 21 has been considered one of the most ambitious UN plans.

3. *Nonlegally binding authoritative statement of principles for a global consensus on the management, conservation, and sustainable development of all types of forests* – the document concerns environmental and developmental issues of forests, with the main goal set in them to maintaining and increasing forest cover and productivity in ecologically and economically sound ways. The principles affirm sovereign rights of states to utilize and manage forests in a consistent with sustainable development way. The principles focus on the development of inclusive, economically and socially, sustainable ways of governing forests. A call for strengthening the institutional mechanisms for sustainable forest management on the local, regional, and international level is made (UN 1992b).

4. United Nation Framework Convention on Climate Change (UNFCCC).

The UNFCCC entered into force on 21 March 1994 (UN 2020). Today, it has near-universal

membership. The 197 countries that have ratified the Convention are called Parties to the Convention (UN 2020).

The UNFCCC is a key legally binding convention that up to the Paris Agreement provided the main legal framework for international cooperation on combating climate change and limiting the effects of human activities that harm the environment.

The UNFCCC bound member states to act in the interests of human safety even in the face of scientific uncertainty. It set a goal to stabilize greenhouse gas concentrations. It states that such a level of greenhouse gas emissions should be achieved that would be sufficiently low to allow ecosystems adapt naturally to climate change (Kameyama and Kubota 2010). A system of reporting and monitoring greenhouse gas emissions was developed, and further policies and measures were introduced through the Kyoto Protocol and other latter documents attached to the Convention.

The Convention recognized the historical path dependence of the impact of human activity on the environment. For this reason the Convention put the major responsibility on developed countries (the so-called Annex 1 countries) to lead the way to a more environmentally responsible economic growth.

Industrialized nations agreed under the Convention to support climate change activities in developing countries. A system of grants and loans that has been set up is managed by the Global Environment Facility (GEF) (GEF 2018).

5. Convention on Biological Diversity – the objectives of the Convention are the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding (UN 1992c). The Convention promotes international economic and social

cooperation and stresses on the significance of changing production and consumption patterns in both national and international markets, as well as the importance of local and indigenous communities, as well as the inclusion of women in using and conserving resources (Kimball 1997).

6. United Nations Convention to Combat Desertification (UNCCD) – As one of the outcomes of the UNCED, Resolution 47/188 was adopted with the proposal for developing the draft of the UNCCD (Longjun 2011). The process that started at the Rio Conference ended with the endorsement of the UNCCD in 1994. The Convention came into force in 1996 with 193 parties that adopted the document (Longjun 2011). The objective of this Convention is to combat desertification and mitigate the effects of drought in countries experiencing these challenges. It focuses particularly in Africa. The Convention promotes action at all institutional levels and calls for the pursuit of sustainable development in these regions through long-term strategies and action, including through international cooperation and partnership arrangements (UN 1994a, b).

Long-Term Impact of the UNCED and Follow-Up Processes

The first Rio Conference initiated a multi-stakeholder dialog about sustainable development within the framework of the UN. Follow-up Summits to the UNCED were the Rio + 5, Rio + 10 (c. World Summit for Sustainable Development), and Rio + 20 Conferences.

Another major follow-up of the UNCED was the initiated Conference of Parties (COP) process to the UNFCCC. The implementation of the convention lead to the adoption of the Kyoto Protocol in 1997, and the quota system for national greenhouse gas emissions that is one of the most effective international measures for global warming combating (Roberts 2015).

Sustainable development which was coined as a term within the framework of UNCED became a major global goal. Both countries and

international organizations became highly engaged in the process of developing sustainable economies and societies (Klarin 2018).

Criticism of the Rio Conference

Despite the Rio Summit being the largest conference of this kind, it still faced some criticism. There have been opinions that UNCED did not produce enough binding principles of international environmental law that would be sufficient to protect the environment (Palmer 1992). A severe criticism is that the meeting failed in changing the essential characteristic of international environmental law, namely that it lacks central authority for creation and enforcement (Palmer 1992).

Summary

The United Nations play a vital role in the advancing of sustainable development on both a theoretical and practical level. The United Nations Conference on Environment and Development turned out to be a key event in both aspects. It provided the contemporary foundations of policymaking and coordination in the sphere of climate protection and sustainable development promotion.

The UNCED became the foundation for the process of evolution and promotion of sustainable development, and its impact is still sensed today in all follow-up processes that are taking place on both international and national levels. For that reason it has been considered one of the most important events in worldwide environmental action and sustainable development promotion.

Cross-References

- [Local Agenda 21](#)
- [Rio Declaration on Environment and Development](#)
- [United Nations Convention on Climate Change \(UNCCC\)](#)

References or Further Readings

- Global Environmental Facility (GEF). (2018). *UNFCCC COP18 Event*. <https://www.thegef.org/events/unfccc-cop18>. Accessed on 15 May 2020.
- Kameyama, Y., & Kubota, I. (2010). What are the “objectives” meant to be? A comparative study of multilateral environmental agreements on articles on objectives, with primary attention on the United Nations framework convention on climate change. *Environmental Economics and Policy Studies*, 11(1–4), 1–17. <https://doi.org/10.1007/s10018-009-0158-5>.
- Kimball, L. A. (1997). Institutional linkages between the convention on biological diversity and other international conventions. *Review of European Community and International Environmental Law*, 6(3), 239–248.
- Klarin, T. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics & Business*, 21(1), 67–94. <https://doi.org/10.2478/zireb-2018-0005>.
- Leal-Arcas, R., & Carafa, L. (2014). Road to Paris COP21: Towards soft global governance for climate change? *Renewable Energy Law and Policy Review*, 5(2), 130–135.
- Longjun, C. (2011). UN convention to combat desertification. In J. O. Nriagu (Ed.), *Encyclopedia of environmental health* (pp. 504–517). Burlington: Elsevier.
- Palmer, G. (1992). The Earth summit: What went wrong at Rio? *Washington Law Review*, 70/4, 1005-1027. https://openscholarship.wustl.edu/law_lawreview/vol70/iss4/1. Accessed 15 May 2020.
- Roberts, E. (2015). Coming full circle: the history of loss and damage under the UNFCCC. *International Journal of Global Warming*, 8(2), 141.
- United Nations (UN). (1992a). *United Nations yearbook 1992, Part 3, Chapter 23 Environment*. United Nations. <https://www.unmultimedia.org/searchers/yearbook/page.jsp?bookpage=i&volume=1992>. Accessed 10 Aug 2019.
- United Nations (UN). (1992b). *Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests*. United Nations, A/CONF.151/6.
- United Nations (UN). (1993). *Report of the United Nations Conference on environment and development*. United Nations, A/CONF.151/26/Rev.1 (Vol. I).
- United Nations (UN). (1994a). *United Nations convention to combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa, Paris, 14 October 1994*. United Nations Treaty Collection, 2, XXVII-10. Environment. https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-10&chapter=27&clang=_en. Accessed 10 May 2020.
- United Nations (UN). (1994b). *United Nations convention to combat desertification in those countries experiencing serious drought and/or desertification, particularly in Africa, Paris, 14 October 1994*. United Nations Treaty Series, vol. 1954, p. 3, available from https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-10&chapter=27&clang=_en.
- United Nations (UN). (2019). *United Nations conference on environment and development*. UN System Web Platform. <https://www.unsystem.org/content/united-nations-conference-environment-and-development-unced-1992>. Accessed 10 Aug 2019.
- United Nations (UN). (2020). *United Nations Treaty collection depositary*. https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&clang=_en. Accessed 15 May 2020.

Earth Summit 2002

- [Johannesburg Summit of 2002 on Sustainable Development](#)

Earth-Friendly Brands

- [Sustainable Brands](#)

Eco Jobs

- [Green Jobs](#)

Eco Taxes

- [Green Taxation](#)

Ecocultural Tourism

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Synonyms

Eco-cultural tourism; Ecocultural tourism experience; The ecocultural tourism

Definition

It's necessary to recognize that tourism and leisure visitors often take part in mixed portfolios of experiential activities that mix nature and culture, and these are not easily or exclusively classified.

Ecocultural tourism is considered a “concept in which ecological and cultural aspects of a landscape are combined to create a site for tourists” (Wallace and Russell 2004: 235). It is understood as a holistic approach in which communities articulate the cultural and ecological resources in the tourism fitment and increase notoriety associated with the values held by the territory, combining the patrimonial dimension, culture, and identity with the didactic dimension and citizen science. It considers sustainability and community participation crucial elements for the development of this form of tourism, regarding at the same time a necessary active involvement of local government in the development of the capacity for its realization.

At present the tourist experience seeks to achieve the different tourism resources of the destination/region, natural and cultural, trying to understand its origins and established relationships with communities. In this way, there is a value articulation in a composite product, reaching its origins, evolutions, and relations built, with its consequent materialization in the territory. The conceptual dimension of ecocultural tourism is based on the incorporation of knowledge and culture into the natural resources and the development services, perceiving the connections, the materializations, and the forms of appropriation by the local communities of the natural elements. In this context landscapes are the main arguments of ecoculture tourism, being interpreted at different geographical scales (and levels of detail) and reaching, in a combined way, the individual to the collective, allowing complete knowledge, that is, and figuratively, from the stone to the monument or the climate to community practices.

Introduction

Ecocultural tourism aims to protect natural and cultural values and pursues Sustainable Development Goals (SDGs) by supporting the conservation of natural resources and biological and landscape diversity and promoting geo-ecological protection for the well-being of local communities and their development. Ecocultural tourism is thus a result of complementarity between the geography of the place, the heritage, the ways of life, and the economic and sociocultural organization of the community. In this approach the community assumes a relevant role in the relationship with tourists and the territory, promoting the compression of the connections between traditions and socioeconomic and cultural practices with the geographical space, promoting value and experiences.

Significance and Territorial Impact of Ecocultural Tourism

Ecocultural tourism defines “destinations where both cultural and natural endowments are the prime attractions and thereby considered to be a potential strategy to support conservation of natural habitats along with economic sustainability” (Cajee 2014: 9). Ecocultural tourism values cultural identities, geodiversity, and ways of life in an interactive relationship that allows local people to build a sustainable future based on their natural and sociocultural resources, which appeal to their interpretation and sensory experience. It requires a process of collective responsibilities and operational empowerment, to achieve social and cultural empowerment, for which government entities should be articulators, inspirers, and financers of actions, seeking successful tourism development, particularly in peripheral areas of great socioeconomic weakness. The participation and involvement of the community are determinants for ecocultural tourism, as it is a key factor for these destinations and the legitimization of this product. The community is part of the cultural asset of this product, which is materialized in the

natural specificities and in the relationships promoted over time. The understanding of local ecocultural realities, the development of preservation processes, and heritage valuation, in connection with local geographic factors, structure this tourism.

Ecocultural tourism is recognized as sustainable and consubstantiates the integration of natural and cultural values, supporting geo-conservation and biodiversity. Simultaneously preserves the “identity of local communities and improves their socio-economic status, enhancing new development projects using local cultures or resources” (Gang 2011: 17).

Ecotourism has an unsustainable dimension (from the point of view of the relationship with the community and its sociocultural practices) and they consider that there should be an approach of greater inclusion and protection, promoting and strengthening the ecological and cultural binomial as a determinant for a deeper knowledge of territorial realities, their specificities, and interrelations developed over time.

Today, we seek to strengthen the ecocultural offer, proactively with the participation of the community in valuing the identities and ways of life, the traditions, and their affectations with the geographic dimension of the destination (Rotherham 2013). In this context, experiences and traditions valorization are preserved, landscapes are conserved, and patrimony is defended (natural and cultural), complementing the cultural aspect with environmental education.

The term ecotourism has been adopted widely as a generic description of tourism with a primary aim to interact with nature and at the same time to involve minimal negative impacts. Furthermore, there is an assumption that local communities will benefit from such tourism and that in the process of these interactions and activities, nature will be conserved (Roe et al. 1997).

“The concept of ecocultural tourism which is, therefore, a subset of ecotourism is framed by integrating ecotourism as a sustainable form of natural resource-based tourism and its prevalence culture” (Cajee 2014: 2). We are in an integrated

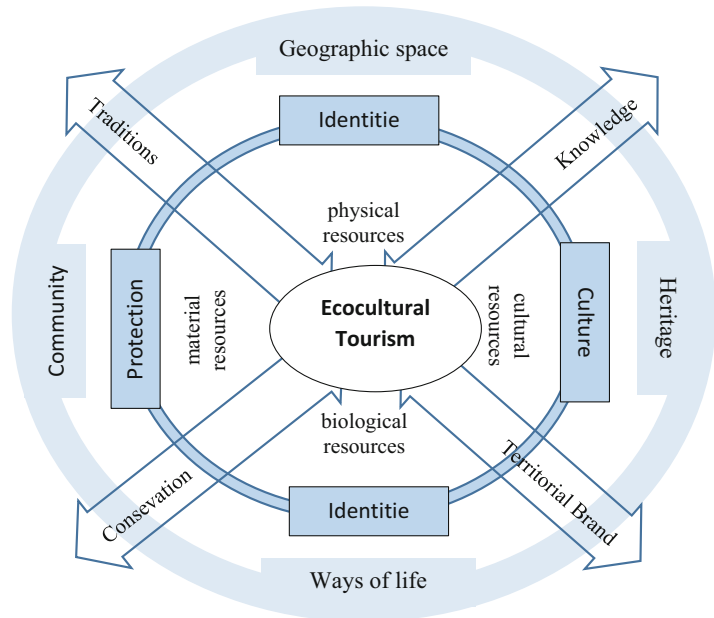
approach to tourism where ecological and cultural aspects of a landscape/territory are combined and provided an interpretive and experiential “scenario” for tourists. The geological and ecological elements and the cultural references combine to promote a broader and more advanced experience of the tourist destination, promoting the knowledge of established relations. The development of guides, roadmaps, and other information supports consolidating the experience and enriching the knowledge in turn of these resources.

The interplay between the human culture and the environment that it exists in, including but not limited to, the challenges of regaining and retaining this connection through means such as sustainable development. It corresponds to a way of authentically experiencing the local cultural and ecological identities (Tiberghien et al. 2017; Dowling 2010). It is an alternative to mass tourism, and with a close relationship with the community in a constructive way and preserving values and ways of life, particularly in rural and less developed areas, like mountains, low-density areas, and historical villages, many of these spaces are already integrated into natural parks, geoparks, and nature reserves among other classifications.

This leads us to consider an “integrated or hybrid concept of eco-cultural tourism based on stakeholders with broadly based interests and resources that combine ecological, heritage and cultural assets” (Rotherham 2013: 49). Given the growing interest of tourists in a wider knowledge of the realities of visits, knowing nature and its patrimony elements, besides the visual or aesthetic dimension, the incorporation of knowledge (science), environmental education, and appreciation of the local culture. At the same time, the relationship between the forms of appropriation and uses, cultural traditions, and ways of life takes on meaning in the tourist experience, which implies their preservation/conservation (Fig. 1). Ecocultural tourism is thus a result of complementarity between the geography of the place, the heritage, the ways of life, and the economic and sociocultural organization of the community (Wallace and

Ecocultural Tourism,

Fig. 1 Structuring elements of ecocultural tourism and its impacts on territorial valuation and sustainability



Russell 2004). These aspects generate differentiations, materialized in the landscapes, with different intensities of transformation, generating identity and even territorial mark, valuing touristically the territory, and demanding a growing effort in its promotion and the tourist reception capacities.

For an emerging tourism destination, the assessment and evaluation of “natural capital,” “heritage capital,” and “cultural capital” provides an overarching vision to better inform any models of potential development and possible conflicts. “The ecosystem diversity refers to the variety of habitats, biological communities and ecological processes within the ecosystems. It also involves the diversity of people who live there” (Poyya Moli 2008: 134).

Ecotourism is defined by The International Ecotourism Society as “responsible travel to natural areas that conserves the environment and improves the well-being of local people” (Wood 2002). This promotes an experience that inspires tourists to analyze, interpret, and understand the ecological system of the communities and their cultural identities in an integrated way and with preservation concerns (Fennell 1999; Jopp et al. 2021). Given this framework and the growing pretension of an integrated observation and interpretation of the natural conditions of the environment, in strict

interpellation with the human activities and forms of appropriation of the territory, that is between nature and sociocultural backgrounds, the term ecocultural best represents this tourist demand. It promotes, in a sustainable way, local development, the protection of natural and cultural resources, creating value and new opportunities for the territory, and articulating socioeconomic interests with preservation responsibilities.

In this concept, which adds more and more tourist practices, the community is fundamental, in the knowledge and dissemination of its tourist resources, in the maintenance of the ways of life and the traditions, incorporating continuity (preservation), differentiation, and economic value. In this context ecocultural tourism promote alternative and sustainable services while safeguarding the values of the ecosystem and social equity.

Summary

Ecocultural tourism is a result of complementarity between the geography of the place, the heritage, the ways of life, and the economic and sociocultural organization of the community. The local residents and governance are a fundamental role in the knowledge and dissemination of its tourist

resources, in the maintenance of the ways of life and the traditions, incorporating continuity, preservation, promoting territorial value, sustainability, and experiences based on cultural and natural identities and heritages.

Cross-References

- [Sustainability in Tourism Marketing \(Sustainable Tourism Marketing\)](#)

References

- Cajee, L. (2014). Eco-cultural tourism: A tool for environmental, cultural and economic sustainability (A case study of Darap Village, West Sikkim). *SHS Web of Conferences*. <https://doi.org/10.1051/shsconf/20141201029>.
- Dowling, R. (2010). Geotourism's global growth. *Geoheritage*. <https://doi.org/10.1007/s12371-010-0024-7>.
- Fennell, D. (1999). *Ecotourism: An introduction*. London: Routledge.
- Gang, C. (2011). Sustainable development of eco-cultural tourism in remote regions: Lessons learned from Southwest China. *International Journal of Business Anthropology*, 2(1), 123–135.
- Jopp, R., Kalantari, H., Lim, W. M., Min Wee, L., & Lim, A. (2021). Tourist segments of eco-cultural destinations. *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2021.1955843>.
- Poyya Moli, G. (2008). Eco-cultural tourism for biodiversity conservation and sustainable development of remote ecosystems in the third world. *International Journal of Hospitality & Tourism Systems*, 1(1), 36–46.
- Roe, D., Leader-Williams, N., & Dalal-Clayton, B. (1997). *Take only photographs, leave only footprints: The environmental impacts of wildlife tourism. Wildlife and development series no. 10*. London: International Institute for Environment and Development.
- Rotherham, I. (2013). Emerging concepts and case studies of eco-cultural tourism. In Raj et al. (Eds.), *Cultural tourism* Cabi Digital Library (pp. 74–87).
- Tiberghien, G., Bremner, H., & Milne, S. (2017). Performance and visitors' perception of authenticity in eco-cultural tourism. *Tourism Geographies*, 19(2), 287–300. <https://doi.org/10.1080/14616688.2017.1285958>.
- Wallace, G., & Russell, A. (2004). Eco-cultural tourism as a means for the sustainable development of culturally marginal and environmentally sensitive regions. *Research Article*, First Published December. <https://doi.org/10.1177/1468797604057326>.
- Wood, M. E. (2002). *Ecotourism: Principles, practices & policies for sustainability*. Burlington: The International Ecotourism Society.

Eco-cultural Tourism

- [Ecocultural Tourism](#)

Ecocultural Tourism Experience

- [Ecocultural Tourism](#)

Eco-efficiency

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Synonyms

[Ecological efficiency](#); [Environmental efficiency](#)

Definition

The term eco-efficiency originates from the fusion of two words, the noun “efficiency” and the adjective “ecological.” It was created in 1992 by the World Business Council for Sustainable Development and quoted in the publication “Changing Course” (Schmidheiny and Timberlake 1992).

It refers to the managerial attitude that aims at decreasing ecological damage while increasing the efficiency of the production processes; minimizing the use of energy, material, and water; recycling more by-products; and eliminating hazardous emissions or wastes.

The notion was publicized by the BCSD (Business Council for Sustainable Development) in 1992 during the World Conference on Environment and Development in Brazil and consists of offering goods and services at a competitive price, satisfying human urgencies and ensuring the quality of life while reducing

ecological impacts and resource exploitation throughout the life cycle to a degree at least in line with the carrying capacity of the Earth (WBCSD 2000).

Historical Development of the Concept

The impact of anthropic activities on the environment was first studied, during the 1970s, by Ehrlich and Holdren (1971), considered the founders of the ecological economics research field, which formalized the following equation:

$$Impact = f(Population, Affluence, Technology)$$

Before the abovementioned publication “Changing Course,” the notion of eco-efficiency was developed by McIntyre and Thornton (1978), but the term was formally created and explicated by Schmidheiny and Timberlake (1992). He asked for a change in the perception as a key part of the solution for stopping environmental degradation and achieving global sustainable development (Ehrenfeld 2005; WBCSD 2000).

Thanks to some forward-looking managers and thinkers, eco-efficiency evolved from an idea to a concrete, experimental, and applicable theory, culminating in the publication of the Environmental Performance and Shareholder Value report (Blumberg et al. 1997).

Von Weiszäcker et al. (1998), in the book titled *Factor Four*, reformulated the concept of efficiency and proposed a meaning of the term eco-efficiency. In their publication, efficiency is intended as something which enables the well-being of humanity to be separated from the consumption of resources. According to the authors, improving and calibrating efficiency, through a series of techniques and methodologies already available, it is possible to quickly reach a more rational use of resources, achieving environmental, social, and economic benefits.

Starting from the concept of efficiency, which, according to the ISO 9241 standard, indicates

the accuracy and completeness of the objectives achieved in relation to the resources spent, the adjective ecological characterizes the abovementioned objectives, ascribing them to the field of complex interactions and equilibria between living organisms and the surrounding environmental conditions, generated by natural abiotic and biotic components and by factors present in that particular environment.

The concept of eco-efficiency therefore indicates the ability of an organization to achieve the goals of construction, production, and supply of commodities and services using fewer and fewer resources and generating less and less waste and pollution. To understand the degree of eco-efficiency of a given eco-system, the consideration of three factors is relevant:

- The material, energy, and information flow that is determined in that context
- The interdependence of the organisms that live in that context
- The effectiveness of the material and immaterial flows taking place between the various levels of the ecosystem organization

According to the WBCSD, the strategies to achieve eco-efficiency consist in, on the one hand, reducing the dispersion of toxic materials and waste in general and, on the other hand, increasing the recyclability of materials and waste, the use of renewable resources, and the duration of components (WBCSD 2000; Lovins 2012).

Eco-efficiency Assessment

Considering the current economic turbulences, the environmental challenges and pressures for a more sustainable world, the new international standard UNI EN ISO 14045 named “Environmental management – Eco-efficiency assessment of product systems – Principles, requirements and guidelines” holds enormous and global potential.

The rule describes the principles, requirements, and guidelines for the eco-efficiency evaluation of a product system. The key objectives are:

- To establish a clear terminology and a common methodological framework for the evaluation of eco-efficiency
- To provide precise guidelines on the interpretation of the results of these assessments
- To encourage transparent and precise communication of the results

Eco-efficiency is a factor of sustainability that links the environmental performance of a product's life cycle to its value. In a world characterized by some full developing countries, the eco-efficiency assessment represents a management tool necessary to decrease the overall environmental impact.

Eco-efficiency is increasingly becoming an essential requisite for the success of companies. By applying ISO 14045, the user will be able to simultaneously manage the characteristics of environmental, commercial, and economic sustainability of their products and product systems.

The evaluation of eco-efficiency aims at optimizing the performance value of the product system on different levels, i.e., its raw materials, production, delivery, efficiency of use, or a mix of these. Value can be expressed in financial terms or in other forms, with one and the same result: doing more with less.

The steps of eco-efficiency evaluation of a product system include:

- The definition of the objective and the field of application of the assessment
- The environmental impact assessment
- The evaluation of the product system value
- The measurement of eco-efficiency
- The explanation of results (including the quality control of the evaluation)
- The reporting
- The critical review of the eco-efficiency estimation

Eco-efficiency can be considered realized by achieving the increase of the product or service value, the resource efficiency optimization, and the environmental impact reduction.

Eco-efficiency Measurement

The abovementioned definition by the WBCSD states that eco-efficiency is achievable if goods and services are produced at competitive prices meeting human urgencies and bringing quality of life by gradually decreasing the environmental impacts of products and resource exploitation during the whole life cycle management. Considering this definition, eco-efficiency accounting, aimed at the assessment phase, can be conducted through two main classes of measurement:

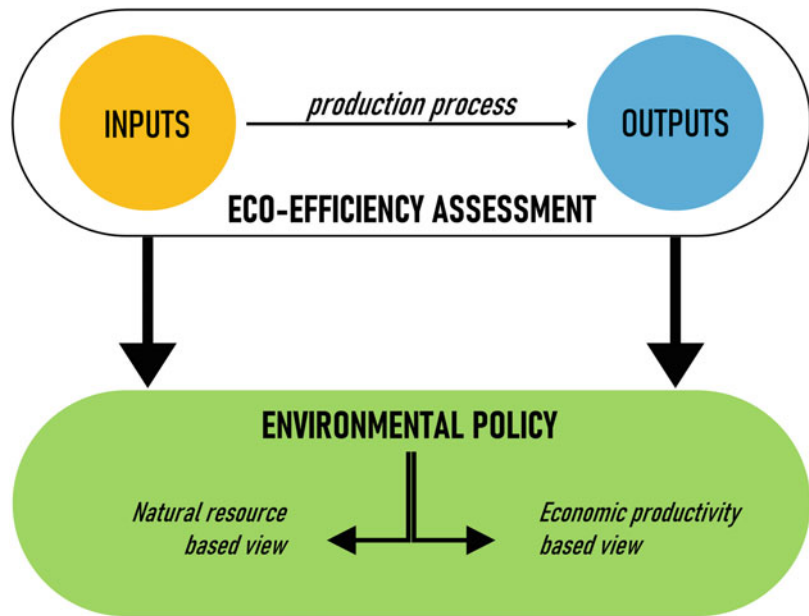
- Environmental productivity and its reciprocal, i.e., the environmental intensity of production
- The cost of environmental progress and its reciprocal, i.e., the environmental cost-effectiveness

Each of the indicators comprised in the two classes of measurement can be calculated for any unit conducting economic activities. This is possible because the latter always refer to cost and value, but also have a physical connotation, and thus unavoidably affect the environment (WBCSD 2000; Hupples and Ishikawa 2009).

The eco-efficiency indicators, mainly represented by ratios, can also be applied to a macro- or micro-level. The determination of the calculation methodology of eco-efficiency indicators at a micro-level can be conducted through the incremental eco-efficiency method, the win-win method, and the difference eco-efficiency method.

The first expresses the effects of the total value of a product system or alternatively its total connected environmental effects. The second method compares a historical reference situation, used as a benchmark, with new potential scenarios based on the use of innovations (Hupples and Ishikawa 2009). The third method, in line with the second, makes a comparison exclusively

Eco-efficiency,
Fig. 1 From eco-efficiency
 assessment to
 environmental policy.
 (Source: Personal
 elaboration)



between the two alternative innovations that potentially contribute mostly to the increase in eco-efficiency.

Since the ultimate goal of eco-efficiency assessment is to support the decision-making process toward optimality on a national/global scale (WBCSD 2000; Ruffing 2007; Huppel and Ishikawa 2009), scientific efforts are mainly addressed toward the improvement of macro-level measurements, which so far are less consistent and accurate (Ruffing 2007).

Policy Implications and Developments

Quantifying and evaluating eco-efficiency provides decision-makers with relevant information for drawing up policies addressed to sustainability, which, for example, consist in an expansion in environmental expenditure or a strengthening rule to avoid market failures. As shown in Fig. 1, assessing eco-efficiency through input- and output-oriented approaches support policymakers to evaluate if environmental policy should be addressed at minimizing input (natural resources savings) or maximizing output keeping constant input quantities (increased economic productivity) (Toma et al. 2016).

The policy strategies centered on the concept of eco-efficiency include Factor 4 and Factor 10 by WBCSD. Boulanger (2010) identified the key factors common to all eco-efficiency strategies, i.e., trust in technological innovation in terms of sustainability; companies as main drivers of transformation; trust in markets; and positive perception of growth.

The improvement of eco-efficiency, as a driving force for sustainability, has been questioned by Huesemann and Huesemann (2011). However, the new cradle-to-cradle and sustainable production and consumption approaches, assuming changes in lifestyles and production models, imply a key responsibility of companies as they consume and produce. The notion, the assessment, and the accounting of eco-efficiency can be useful tools for companies to achieve sustainable development, integrating two of its three axes, the economic and the environmental ones (Ehrenfeld 2005), making it easier to address social issues later (WBCSD 2000).

Summary

The term eco-efficiency originates from the fusion of two words, the noun “efficiency” and

the adjective “ecological,” coined in 1992 by the World Business Council for Sustainable Development. It refers to the managerial attitude that aims at decreasing ecological damage while increasing efficiency of the production processes; minimizing the use of energy, material, and water; recycling more by-products; and eliminating hazardous emissions or wastes. Quantifying and evaluating eco-efficiency provides decision-makers with relevant information for drawing up policies addressed at sustainable development, which, for example, consists in an expansion in environmental expenditure or a strengthening rule to avoid market failures. The notion, the assessment, and the accounting of eco-efficiency can be useful tools for companies to achieve sustainable development, integrating two of its three axes, the economic and the environmental ones, making it easier to address social issues later.

Cross-References

- [Ecological Economics](#)
- [Efficiency](#)
- [Life Cycle Management](#)
- [Rebound Effects of Eco-efficiency](#)

References

- Blumberg, J., Blum, G., & Korsvold, Å. (1997). *Environmental performance and shareholder value*. Geneva: World Business Council for Sustainable Development.
- Boulanger, P. M. (2010). Three strategies for sustainable consumption. SA.P.I.EN.S. – Surveys and Perspectives Integrating Environment and Society, (3.2). https://files.ifi.uzh.ch/hilty/t/Literature_by_RQs/RQ%20217/2010_Boulanger_Three_strategies_for_sustainable_consumption.pdf. Accessed 7 Sept 2019.
- Ehrenfeld, J. R. (2005). Eco-efficiency. *Journal of Industrial Ecology*, 9(4), 6–8.
- Ehrlich, P. R., & Holdren, J. P. (1971). Impact of population growth. *Science*, 171(3977), 1212–1217.
- Huesemann, M., & Huesemann, J. (2011). *Techno-fix: Why technology won't save us or the environment*. Gabriola, B.C.: New Society Publishers.
- Huppes, G., & Ishikawa, M. (2009). Eco-efficiency guiding micro-level actions towards sustainability: Ten basic steps for analysis. *Ecological Economics*, 68(6), 1687–1700.
- Lovins, L. H. (2012). Rethinking production. In *State of the World 2008* (pp. 60–72). London: Routledge.
- McIntyre, R. J., & Thornton, J. R. (1978). On the environmental efficiency of economic systems. *Soviet Studies*, 30(2), 173–192.
- Ruffing, K. (2007). Indicators to measure decoupling of environmental pressure from economic growth. *Sustainability Indicators: A Scientific Assessment*, 67, 211.
- Schmidheiny, S., & Timberlake, L. (1992). *Changing course: A global business perspective on development and the environment* (Vol. 1). Cambridge, MA: MIT Press.
- Toma, P., Massari, S., & Miglietta, P. P. (2016). Natural resource use efficiency and economic productivity. In S. Massari, G. Sonnemann, & F. Balkau (Eds.), *Life cycle approaches to sustainable regional development* (pp. 143–148). London: Routledge.
- Weizsäcker, E. U., Lovins, A. B., & Lovins, L. H. (1998). *Factor four: Doubling wealth-halving resource use: The new report to the Club of Rome*. London: Earthscan.
- World Business Council for Sustainable Development [WBCSD]. (2000). Eco-efficiency: Creating more with less impact. <http://www.ceads.org.ar/downloads/Ecoeficiencia.%20Creating%20more%20value%20with%20less%20impact.pdf>

Eco-footprint

- [Ecological Footprint](#)

Eco-friendly Brands

- [Sustainable Brands](#)

Eco-friendly Building

- [Green Building](#)
- [Sustainability and Sustainable Development in Real Estate Industry](#)

Eco-friendly Business Model

- ▶ [Sustainable Business Model](#)

Eco-friendly Economy

- ▶ [Green Economy](#)

Eco-friendly Innovations Performance Measurement

- ▶ [Eco-sustainability Innovations Performance Measurement](#)

Eco-innovation

- ▶ [Corporate Sustainable Innovation](#)
- ▶ [Sustainable Innovation](#)

Eco-innovations Performance Measurement

- ▶ [Eco-sustainability Innovations Performance Measurement](#)

Eco-justice

- ▶ [Social Justice](#)

Ecological Accounting

- ▶ [Environmental Accounting](#)

Ecological Brands

- ▶ [Sustainable Brands](#)

Ecological Consumption

- ▶ [Responsible Consumption](#)

Ecological Diversity

- ▶ [Biodiversity](#)

Ecological Economics

- ▶ [Environmental Economics](#)
- ▶ [Green Economy II](#)

Ecological Efficiency

- ▶ [Eco-efficiency](#)

Ecological Footprint

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Synonyms

[Eco-footprint](#); [Footprint](#)

Definition

In general, the **Ecological Footprint (EF)** can be described as “a way to measure the impacts of

human activities on Earth.” (Mariam et al. 2019, p. 60), especially on biocapacity (Wackernagel and Beyers 2019). It is a measurement tool to determine human demand on – and supply of natural resources, usually expressed in equivalent global hectares. The calculation is applied to determine humanities natural requirements at the global, national, regional, organizational, or individual level. In particular, it calculates how much biologically productive land and water area is needed to produce the appropriate resources and absorb the waste generated by a human population (Wackernagel and Beyers 2016). The EF is currently the most appropriate measure to judge the scale of maximum sustainability within the planetary boundaries (Toderoui 2010) understandable without the requirement of in-depth specialist knowledge. It is thus accessible to a broad audience (Best et al. 2008). At the same time, it provides a clear basis and framework for political and economic decision-makers in order to better assess their actions and long-term responsibility towards nature. Since its implementation in 1997, it has been continuously developed and adapted to external conditions.

History

The Ecological Footprint approach dates back to the early 1990s, when Rees (1992) and Wackernagel (1994) criticized the prevailing, largely unquestioned, economic view of natural resource usage and pointed out the resulting irreversible overexploitation. Initially, examples largely focused on urban areas in which consumption and the resulting “import” of resources exceeded the actual production capacity of the largely sealed area. In subsequent years, Rees and Wackernagel (1996) developed the concept of the Ecological Footprint, an instrument whose application extends beyond the boundaries of urban areas and enables the measurement of the global extent of anthropogenic overuse of natural resources. In addition to this visualization, the instrument serves to answer questions about the limits and limitations of anthropogenic resource

consumption, the global allocation of natural resources and their global sustainable use (Wackernagel and Rees 1996).

The first systematic attempt to calculate the Ecological Footprint and the biocapacity of nations began in 1997. Building on this determination of global biodiversity assessments, the Global Footprint Network (GFN) was established in 2003 to provide well-founded arguments to push political decisions forward and to ensure that all people are able to live sufficiently within the earth’s available resources. In order to come closer to achieving these objectives, GFN cooperates with policy makers on global, national, and regional levels and provides an accounting framework that quantifies the annual supply and demand for key ecosystem services, the National Footprint Accounts (NFA) (Lin et al. 2018). NFA are based on UN data sources, which allow the resilient determination of the Ecological Footprint for over 200 nations and enables the calculation back until 1961. Nowadays, the calculations are updated annually and fed with the newest available data (Global Footprint Network 2020a, online; for more information, see “National Footprint and Biocapacity Accounts 2019 Public Data Package”).

Methodology

Conceptually, the Ecological Footprint is based on “area as currency” to ask the question “How much nature does everything cost?” (Wackernagel and Beyers 2019, p. 17). The approach is based on two main determinants: biocapacity and Ecological Footprint.

Biocapacity describes the sum of biologically productive land and sea area available on a local to a global level, which provide the ecosystem services that humanity consumes (Borucke et al. 2013). It consists of humanities ecological budget and nature’s regenerative capacity (Wackernagel and Beyers 2019).

Ecological Footprint is the sum of land and water areas that are needed to produce the anthropological needs and to absorb the waste generated (sink function). The biologically productive land

and water areas used for calculation are divided into the six following Footprints:

- Carbon: The carbon footprint refers to the amount of emissions released as a consequence of human activities (Tokuc 2015). It is closely linked to fossil fuel use and therefore global climate change. The CO₂ emissions are converted into biologically productive areas necessary for absorbing those (GFN 2020b).
- Cropland: Cropland is the most bioproductive of all the land-use types and consists of areas used to produce food and fiber for human consumption, feed for livestock, oil crops, and rubber (Econation 2020). Due to lack of globally consistent data sets, current cropland Footprint calculations do not yet take into account the extent to which farming techniques or unsustainable agricultural practices may cause long-term degradation of soil. The cropland Footprint includes crop products allocated to livestock and aquaculture feed mixes, and those used for fibers and materials.
- Fish: The fishing grounds footprint is calculated based on estimates of the maximum sustainable catch for a variety of fish species. These sustainable catch estimates are converted into an equivalent mass of primary production based on the various species' trophic levels. This estimate of maximum harvestable primary production is then divided among the continental shelf areas of the world. Fish caught and used in aquaculture feed mixes are also included (GFN 2020b).
- Forest product: Forest land provides for two services: the forest product footprint, which is calculated based on the amount of lumber, pulp, timber products, and fuel wood consumed by a country on a yearly basis. It also accommodates the carbon footprint, which represents the carbon dioxide emissions from burning fossil fuels. The carbon footprint also includes embodied carbon in imported goods. It is represented by the area necessary to sequester these carbon emissions. The carbon footprint component of the Ecological Footprint is calculated as the amount of forest land needed to absorb these carbon dioxide emissions. Currently, the carbon footprint is the largest portion of humanity's Footprint (GFN 2020b).
- Grazing: Grazing land is used to raise livestock for meat, dairy, hide, and woolen products. The grazing land footprint is calculated by comparing the amount of livestock feed available in a country with the amount of feed required for all livestock in that year, with the remainder of feed demand assumed to come from grazing land (GFN 2020b).
- Built-up land: The built-up land footprint is calculated based on the area of land covered by human infrastructure – transportation, housing, industrial structures, and reservoirs for hydropower. Built-up land may occupy what would previously have been cropland (GFN 2020b).
- Additionally, areas that cannot be used biologically (cultivated areas, but also deserts and high mountains) are treated as neutral (Global Footprint Network 2009, online).

In order to relate the two factors Ecological Footprint and biocapacity, a common unit of measurement is necessary. This was created by GFN (2009) in the form of the global hectare (gha). Globally, there are about 12.2 billion hectares of biologically productive area (Wackernagel and Beyers 2019).

The bioproductivity of natural spaces and areas is strongly dependent on various factors such as geographical location, soil composition, climate, and human activities of cultivation. The gha therefore indicates the worldwide average bioproductivity per corresponding area. Global hectare areas provide specific information that goes beyond the pure size and weight of water and land areas (Wackernagel and Beyers 2010). This information is standardized through the application of the following factors and thus makes it possible to present the results in a globally comparable unit of measurement.

- Yield factors (YF's) explain the different productivity of countries for certain types of land use.

- Equivalence factors (EQF) convert the areas of different land use types with their respective global average productivity into their corresponding areas with the global average bioproductivity across all land use types. The EQFs vary according to land use type and year (Borucke et al. 2013).

The presentation in global hectares allows the addition and comparability of the Ecological Footprint and biocapacity of a given area and land use type. Human needs can thus be applied both locally and globally and express in easily understandable indicators how much biologically productive land and water is needed to provide the necessary resources and absorb the human waste. Hence a country's Footprint is the sum of all the cropland, grazing land, forest land, and fishing grounds required to produce the necessary goods its inhabitants consume, to absorb emitted waste, the production of energy, and to provide space for their infrastructure (Wackernagel et al. 2002).

It is differentiated between countries that are ecological creditors and those that are ecological debtors. A country with a biocapacity that exceeds their EF of consumption is considered an Ecological Creditor, for example, French Guiana, Gabon, Congo, Central African Republic, Uruguay. A country with an EF of consumption that exceeds their biocapacity is considered an Ecological Debtor, for example, Singapore, Bermuda, Barbados, Israel, Saudi Arabia (GFN 2020c).

The NFA determined 12.2 billion hectares of biologically productive land and water on our planet in 2019. Divided by the world's population in that year results in 1.6 global hectares per person. This area also needs to accommodate the wild species that compete for the same biological material and spaces as humans. In industrialized countries, however, this value is clearly exceeded; in nonindustrialized countries, it is often undershot, but even in such countries, the gha required per person tends to increase in terms of usage and population growth (Kitzes et al. 2009).

Further sources of information: An individual calculation is possible under: <https://www.footprintcalculator.org/>

while an average consumption by country can be found under: <http://data.footprintnetwork.org>.

Global Footprint Network

Global Footprint Network is an international non-profit organization founded in 2003, which envisions a future where all can thrive within the means of our one planet by making ecological limits central to decision-making (Global Footprint Network 2020b, online).

National Footprint Accounts

National Footprint and Biocapacity Accounts (NFAs) provide the core data required for all Ecological Footprint analysis worldwide.

The Accounts measure the ecological resource use and resource capacity of nations over time. Based on approximately 15,000 data points per country per year, the Accounts calculate the Footprints of more than 200 countries, territories, and regions from 1961 to the present (GFN 2020a, online).

Earth Overshoot Day

Earth Overshoot Day is the day when humanity has exhausted nature's budget for the year. For the rest of the year, society operates in ecological overshoot by drawing down local resource stocks and accumulating carbon dioxide in the atmosphere. The first Earth Overshoot Day was December 19, 1987. In 2017, Earth Overshoot Day occurred on August 2 (Earth Overshoot Day 2020, online).

Limitations of GF

In a review of more than 150 original papers and 50 interviews with international EF stakeholders, Wiedemann and Barrett (2010) outlined a number of EF limitations that mainly still hold true today:

- Limited role in public policy
- Limited in scope
- Missing alignment with UN System of Environmental and Economic Accounting

However, since then, the tool described and the data generated by the calculation are widely recognized. In more than a dozen countries, including France, Germany, Japan, etc., the results are already being used as basis for political decisions. However, despite the broad acceptance, application and possibilities offered by the EF calculation, the methodological approach is subject to limitations.

As the most important limitation, the GFN (Ewing et al. 2008) itself mentions the non-consideration of the formation of carbon dioxide caused by the combustion of fossil fuels. For these emissions, the Ecological Footprint assumes an area consumption in the form of forest that would be necessary to biologically bind the CO₂ produced. In addition, other important greenhouse gases such as methane are not taken into account.

Critics also point out that biodiversity is equated with biocapacity. The conservation of biological diversity is therefore not taken into account and natural space is reduced to anthropogenic benefits. Water is also regarded as a biologically neutral “circulation quantity” that is neither consumed nor produced and is therefore not taken into account in the approach. However, both variables belong to the “planetary boundaries” that scientists regard as vital for survival and are therefore particularly worthy of protection (McManus and Haughton 2006). As a result, the condition and health of flora, fauna, and humans are subordinated to the production and service of nature.

A further point of criticism is the low level of consideration given to the use of nuclear energy and the associated environmental problems and risks. Due to the insufficient calculation of, for example, energy consumption, waste heat, risks of nuclear accidents, or the storage of nuclear waste, countries with a high proportion of nuclear power

have a lower Ecological Footprint than countries with a high proportion of renewable energies. Furthermore, the calculation is generally based on past burdens and does not make any predictions for the future. The immense effects of the reactor accident in Fukushima, Japan, show, however, that the consideration of risks is of great importance.

In addition, there are limitations regarding the inclusion of waste. These are divided into three categories (Borucke et al. 2013):

1. Biodegradable waste is considered “neutral” and is therefore not included in the calculation.
2. Landfillable “normal” waste, which should actually enter the land area necessary for long-term landfilling. At present, however, only anthropogenic CO₂ is included.
3. Materials that are not produced by biological processes or not absorbed by biological systems (in particular plastics, but also toxic and radioactive substances). They do not have a defined Ecological Footprint, other indicators are needed for such waste.

This means that ultimately no waste in the colloquial sense is covered by the Ecological Footprint. Recycling is not explicitly recorded as it “automatically” reduces the footprint.

Nonrenewable resources such as copper, tin, coal, and oil come from outside the biosphere and have no Ecological Footprint as defined by the methodology. The “secondary consumption” of production such as energy consumption and other material consumption can be taken into account. Fossil fuels are a special case of nonrenewable resources, as they are at least within the biological cycle, even if they come from another age. The area needed to biologically bind the released CO₂ is set for them. If one wanted to define an area that would be necessary to regenerate fossil fuels, one would come across footprints that would be many hundreds of times larger than those calculated today (Moffatt 2000).

Summary

One of the main challenges of today is undoubtedly to find a solution for the ever-increasing demand for nature and natural resources within the finite limits of planet earth and the dramatic effects human create. The ever-growing world population devours immense resources to meet basic needs alone. Added to this are the resource-intensive lifestyles of the western world and the emerging economic powers.

These circumstances increase the pressure on nature, whose life support systems are often already overloaded. To ensure long-term well-being and peaceful coexistence, it is essential to reduce the environmental impact of resource use and ensure the regeneration of natural cycles. However, there needs to be some form of measurement of earth boundaries.

The Ecological Footprint provides an approach to reflect the increasingly dramatic situation in which recent years of rapid growth and massive use of fossil fuels have led. It is a tool for expressing complex issues in a standardized and easily understandable form and for ensuring international comparability.

Yet, the limitations should not be neglected. Above all, the limited ability to include hazards and pollutants, the human health factor and the very strong economization of natural spaces and resources are consistently criticized. It is therefore important that those responsible take the criticism seriously and into account in further development. If this is achieved within a manageable timeframe, it is quite conceivable that the EF can serve as an important indicator for political and economic decisions and raise awareness of the urgency of action (Kitzes et al. 2009).

Cross-References

- Carbon Footprint
- Ecology and Ecosystem
- Sustainability

References

- Best, A., Giljum, S., Simmons, C., Blobel, D., Lewis, K., & Hammer, M., et al. (2008). Potential of the ecological footprint for monitoring environmental impacts from natural resource use: Analysis of the potential of the ecological footprint and related assessment tools for use in the EU's thematic strategy on the sustainable use of natural resources. Report to the European Commission, DG Environment.
- Borucke, M., Moore, D., Cranston, G., Gracey, K., Iha, K., Larson, J., et al. (2013). Accounting for demand and supply of the biosphere's regenerative capacity: The National Footprint Accounts' underlying methodology and framework. *Ecological Indicators*, 24, 518–533.
- Earth Overshoot Day. Global Footprint Network. (2020). Global footprint network. Online available under <https://www.overshootday.org/about-earth-overshoot-day/>. Accessed 13 Feb 2020.
- Econation. (2020). Ecological footprint defined. <https://econation.co.nz/ecological-footprint-defined/>. Accessed 17 Apr 2020.
- Ewing B., Goldfinger, S., Wackernagel, M., Stechbart, M., Rizk, S., Reed, A., & Kitzes, J. (2008). The ecological footprint atlas 2008. Oakland: Global footprint network. Online available under https://www.footprintnetwork.org/content/images/uploads/Ecological_Footprint_Atlas_2008.pdf. Accessed 25 Nov 2019.
- Global Footprint Network. (2009). Ecological Footprint Standards 2009. Global Footprint Network. Online available under https://www.footprintnetwork.org/content/images/uploads/Ecological_Footprint_Standards_2009.pdf. Accessed 25 Nov 2019.
- Global Footprint Network. (2020a). Data and methodology: Global footprint network. Online available under <https://www.footprintnetwork.org/resources/data/>. Accessed 13 Feb 2020.
- Global Footprint Network. (2020b). Glossary: Global footprint network. Online available under <https://www.footprintnetwork.org/resources/glossary/>. Accessed 13th Feb 2020.
- Global Footprint Network. (2020c). Ecological deficit/reserve. http://data.footprintnetwork.org/?_ga=2.84895385.1862741422.1587136308-294294709.1587136308#. Accessed 17 Apr 2020.
- Kitzes, J., Galli, A., Bagliani, M., Barrett, J., Dige, G., Ede, S., et al. (2009). A research agenda for improving national ecological footprint accounts. *Ecological Economics*, 68(7), 1991–2007.
- Lin, D., Hanscom, L., Murthy, A., Galli, A., Evans, M., Neill, E., et al. (2018). Ecological footprint accounting for countries: Updates and results of the National Footprint Accounts, 2012–2018. *Resources*, 7(3), 58.
- Mariam, A., Maria, D., & Evangelia, T. (2019). The ecological footprint nowadays. *Open Schools Journal*, 1(3), 60–69.

- McManus, P., & Haughton, G. (2006). Planning with ecological footprints: A sympathetic critique of theory and practice. *Environment and Urbanization*, 18, 113.
- Moffatt, I. (2000). Ecological footprints and sustainable development. *Ecological Economics*, 32, 359–362.
- Rees, W. (1992). Ecological footprints and appropriated carrying capacity: What urban economics leaves out. *Environment & Urbanization*, 4(2), 121–130.
- Rees, W., & and Wackernagel, M. (1996) *Urban ecological footprints: why cities cannot be sustainable and why they are a key to sustainability*. Elsevier Science: New York.
- Toderiou, F. (2010). Ecological footprint and biocapacity-methodology and regional and national dimensions. *Agricultural Economic and Rural Development, New Series, Year VII*(2), 213–238.
- Tokuc, A. (2015). Carbon footprint. In S. Idowu, N. Capaldi, M. S. Fifka, L. Zu, & R. Schmidtper (Eds.), *Dictionary of corporate social responsibility. CSR, sustainability, ethics and governance*. Cham: Springer.
- Wackernagel, M. (1994). *Ecological footprint and appropriated carrying capacity: A tool for planning toward sustainability*. Vancouver: School of Community and Regional Planning. The University of British Columbia.
- Wackernagel, M., & Beyers, B. (2010). *Der Ecological Footprint. Die Welt neu vermessen*. Hamburg: Europäische Verlagsanstalt.
- Wackernagel, M., & Beyers, B. (2016). *Der Ecological Footprint. Die Welt neu vermessen* (2nd ed.). Hamburg: Europäische Verlagsanstalt.
- Wackernagel, M., & Beyers, B. (2019). *Ecological footprint. Managing our biocapacity budget*. Gabriola Island: New Society Publishers.
- Wackernagel, M., & Rees, W. (1996). *Our ecological footprint: Reducing human impact on the earth*. Gabriola Island: New Society Publishers.
- Wackernagel, M., Schulz, N. B., Deumling, D., Linares, A. C., Jenkins, M., Kapos, V., et al. (2002). Tracking the ecological overshoot of the human economy. *Proceedings of the National Academy of Sciences of the United States of America*, 99(14), 9266–9271.
- Wiedemann, T., & Barrett, J. (2010). A review of the ecological footprint indicator- perceptions and methods. *Sustainability*, 2, 1645–1693.

Ecological Innovation

- [Corporate Sustainable Innovation](#)

Ecological Justice

- [Social Justice](#)

Ecological Marketing

- [Green Marketing](#)
- [Sustainable Marketing](#)

Ecological System

- [Ecology and Ecosystem: Sustainability](#)

Ecology and Ecosystem

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Ecological Impact

- [Environmental Impact](#)

Synonyms

[Biota](#); [Ecosphere](#); [Environmental systems](#)

Introduction/Definition

Ecology is the scientific study of the interactions between living things and their environment's physicochemical components to comprehend the patterns these interactions cause in the geographic distribution and abundance of distinct animals (Schmitz 2013). Ernst Haeckel, a Darwin supporter, created the term “generelle morphology” in his book *Generelle Morphology*, published in 1866. According to Haeckel (1866), ecology is “the systematic study of organisms' relationships among themselves and their surrounding environment.” Abiotic and biotic ecosystem components and abiotic elements are all interconnected through nutrient cycles and energy fluxes (Tansley 1935). Ecosystem is the fundamental unit of ecology, consisting of autotrophic and heterotrophic components and abiotic influences (Odum and Barrett 1971). As a result, life processes in multi-species organism assemblages and their interactions with the abiotic environment impact ecosystem activity (Elmqvist et al. 2010).

Ecological processes enable the delivery of critical ecosystem services for human well-being (Costanza et al. 1997). Ecosystem services might be defined as people's ecological activities. In recent publications from the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), ecosystem services are described as nature's contributions to humankind (Díaz et al. 2018). This phrase incorporates positive and negative aspects of life that impact people's well-being. According to the Millennium Ecosystem Assessment, these positive contributions include providing, regulating, preserving, and cultural services (Leemans and De Groot 2003). It is critical to describe the analysis spatially and temporally when investigating ecological services. To govern the system to benefit both the environment and people, a plan that considers ecological conditions, service provision, and their consequences on people's lives must be developed (Alcamo et al. 2003).

Ecological Complexity and Organizational Levels

The environment's complexity might present itself in various ways (Loehle 2004). Ecosystems are well known in systems biology as complex adaptive systems (Hartvigsen et al. 1998). As a result, self-organizing systems grow under thermodynamic rules. Ecosystems will organize themselves such that energy degradation from incoming energy is hastened. They will change and adapt so that the ecosystem and its component systems have a better chance of survival (Schneider et al. 1994). Ecology studies organisms, populations, communities, ecosystems, landscapes, and the biosphere at many organizational levels, including the individual organism. Individuals and their interactions with their environment are organisms at the organismal level. Individuals of any species may be found in groups at the population level, valid for all species. A community, sometimes known as a “biotic community,” in an ecological setting comprises all the populations in a particular location (Odum and Barrett 1971). The interaction of live creature populations with nonliving environmental components as a system is referred to as the ecosystem level (Smith and Smith 2012). The word “landscape” refers to a collection of ecosystems that interact and are duplicated comparably over a vast region (Forman and Gordon 1986). In its ultimate form, the ecosphere is the world's most extensive and essentially autonomous biological system, including all of Earth's living species, which interacts with the physical environment to maintain a self-regulating and regulated pulsing state (Odum and Barrett 1971).

Ecosystem Ecology is the Study of Ecosystem Ecology

The two types of ecology are autecology (the study of individual organisms and populations) and synecology (ecology of the relationships among organisms and populations). Ecosystem

ecology is the approach used to execute synecology. The amount of energy or matter going through a system is considered the dimensional unit in the study of ecosystems (Jørgensen 2009). As a result, ecosystem ecology is concerned with the changes, movement, and accumulation of energy and matter in an ecosystem (Agren et al. 1998). The study of organisms' interactions with their environment is also included in ecosystem ecology (Chapin et al. 2011).

Over time, the phrase "ecosystem ecology" has grown and become more encompassing. The growing recognition of the interconnection of natural and social systems necessitates the use of holistic viewpoints (Raffaelli and Frid 2010). People's interactions with ecosystems are complicated by the importance of environmental consequences and services. Ecosystem ecology is the study of ideas derived from social-ecological stewardship that enables individuals to increase ecosystem resilience and human well-being due to social-ecological change (Chapin et al. 2011).

Ecosystem Services

According to MEA (2005), ecosystem services are the benefits that individuals get from ecosystems. They may also be defined as direct and indirect environmental benefits to human well-being (TEEB, 2010). This concept was motivated by the circumstances and means through which ecosystems and biodiversity aid human existence. These processes culminate in the creation of ecosystem goods (Daily 1997). As Costanza et al. (1997) defined, ecosystem goods and services are the benefits that individuals get from ecosystem functioning. According to more recent research, ecosystem services (together with other inputs) contribute ecosystem structure and function to human well-being (Burkhard et al. 2012a; Burkhard and Maes 2017). For ecosystems to provide benefits to humans, individuals (human capital), communities (social capital), and their built environment (built capital) must all be present. Therefore, ecosystem services may be regarded as a natural capital contribution to

human well-being that involves interaction with human, social, and constructed capital (Costanza et al. 2014). The Millennium Ecosystem Assessment (MEA, 2005) categorizes ecosystem services into four categories: provisioning services include food, raw materials, and energy (directly consumed by people). "Regulating services" are those that enable the regulation of other environmental media or processes. Cultural services are those that cater to people's cultural or spiritual needs. The term "supporting services" refers to ecosystem activities and processes that allow other services to operate (Lamarque et al. 2011). The Economics of Ecosystems and Biodiversity (TEEB) and the Common International Categorization of Environmental Services (CICES) are two different categorization systems that aim to better public knowledge of the ecosystem's benefits. Finally, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) approach proposes a core typology of values connected with nature and quality of life to guide policymakers in value assessment (IPBES 2017).

Approaches to Ecosystem Evaluation and Conservation

Ecosystem assessments are gaining popularity among scientists and policymakers (Maes et al. 2012). The Millennium Ecological Assessment (MEA) was the first global assessment to focus on the human impacts of environmental change. According to MEA results, 60% of the ecosystem services assessed have declined, creating problems to development, poverty reduction, and long-term environmental change adaptation measures (Haines-Young and Potschin 2010). In the face of global change, conservation efforts must strike a balance between the perspectives of socio-ecological systems and societal interests in ecosystem services, all while preserving ecosystem integrity and health (Ban et al. 2013; Palomo et al. 2014; Cumming et al. 2015). The ecosystem services approach (Cowling et al. 2008; Lopez-Hoffman et al. 2010) proposes conservation goals that include social, economic, and cultural

aspects of nature and intrinsic traits. The evolution of ecosystem-based management (EBM) is a method of considering the effects of management on multiple ecosystem services in an integrated systems approach. This example incorporates an ecosystem services approach into conservation and management while avoiding single-sector management, which has both socially and environmentally harmful “unintended consequences” (Christensen et al. 1996; National Research Council 1999; FAO 2003; Pikitch et al. 2004).

This EBM method provides managers with a framework for extending their perspectives and examining the numerous consequences of their decisions (Tallis and Polasky 2009). The economic value of ecosystem conservation is also essential for more effective biodiversity mainstreaming and a governance resource that can influence our individual and collective actions (CBD 2010). “Measuring” monetary values are necessary for better management decisions because they reveal ecological services’ socioeconomic relevance (Randall 1988; Daily et al. 2009). Spatial mapping of ecosystem services also helps accomplish various policy goals by allowing for the examination of trade-offs between service delivery at different levels (Troy and Wilson 2006; Naidoo et al. 2008; Vihervaara et al. 2010; Burkhard et al. 2012b). Quantitative geographic data may also be used to forecast net future gains or losses in ecosystem services and help build financial instruments for ecosystem investments (Maes et al. 2012). Since the European Commission’s professed goal for the Biodiversity Strategy to 2020 is to analyze ecosystems, there has been a growing need to evaluate and map ecosystem service supply and demand at all sizes, from transnational to small (Kasparinskis et al. 2018).

Summary

Comprehending ecosystems and their services are crucial for understanding nature’s ecological components and the connection of natural and social systems. Furthermore, including an ecosystem-based approach to conservation planning allows

for biodiversity protection while maintaining human well-being. This situation is a crucial step in the conservation process since it aids in the development of management plans and policy objectives. One method is to put a monetary value on ecological services.

Cross-References

► Conservation: Sustainability

References

- Agren, G. I., Ågren, G. I., & Bosatta, E. (1998). *Theoretical ecosystem ecology: Understanding element cycles*. Cambridge University Press.
- Alcamo, J., Ash, N. J., Butler, C. D., Callicott, J. B., Capistrano, D., Carpenter, S. R., Castilla, J. C., Chambers, R., Chopra, K., Cropper, A., Daily, G. C., Dasgupta, P., Groot, R. D., Dietz, T., Duraiappah, A. K., Gadgil, M., Hamilton, K., Hassan, R., Lambin, E. F., . . . Zurek, M. B. (2003). *Ecosystems and Human Well-being: A Framework for Assessment—Millennium Ecosystem Assessment*. Washington: Island Press.
- Ban, N. C., Mills, M., Tam, J., Hicks, C. C., Klain, S., Stoeckl, N., . . . Chan, K. M. (2013). A social–ecological approach to conservation planning: embedding social considerations. *Frontiers in Ecology and the Environment*, 11(4), 194–202.
- Burkhard, B., & Maes, J. (2017). Introduction. In B. Burkhard & J. Maes (Eds.), *Mapping Ecosystem Services* (p. 374). Sofia: Pensoft Publishers.
- Burkhard, B., de Groot, R., Costanza, R., Seppelt, R., Jorgensen, S. E., & Potschin, M. (2012a). *Solutions for sustaining natural capital and ecosystem services*.
- Burkhard, B., Kroll, F., Nedkov, S., & Müller, F. (2012b). Mapping ecosystem service supply, demand and budgets. *Ecological Indicators*, 21, 17–29.
- CBD. (2010). *Report of the Conference of the Parties to the Convention on Biological Diversity's Tenth Meeting*. Convention on Biological Diversity (CBD).
- Chapin, F. S., Matson, P. A., & Vitousek, P. M. (2011). *The idea of an ecosystem. Principles of Terrestrial Ecosystem Ecology is a book about the ecology of terrestrial ecosystems* (pp. 3–22). New York: Springer.
- Christensen, N. L., Bartuska, A. M., Brown, J. H., & others. (1996). The Report of the Committee on the Scientific Basis for Ecosystem Management of the Ecological Society of America. *Ecology Applications*, 6(3), 665–691.
- Costanza, R., D’Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O’Neill, R. V., Paruelo, J., Raskin, R. G., Sutton, P., & van den Belt, M. (1997). The value of the world’s ecosystem services and

- natural capital. *Journal of Experimental Psychology: General*, 136, 253–260.
- Costanza, R., de Groot, R., Sutton, P., van der Ploeg, S., Anderson, S.J., Kubiszewski, I., Farber, S., & Turner, R.K. (2014). Changes in the global value of ecosystem services. *Global Environmental Change*, 26, 152–158. <https://doi.org/10.1016/j.gloenvcha.2014.04.002>.
- Cowling, R. M., Egoh, B., Knight, A. T., O'Farrell, P. J., Reyers, B., Rouget, M., ... Wilhelm-Rechman, A. (2008). An operational model for mainstreaming ecosystem services for implementation. *Proceedings of the National Academy of Sciences*, 105(28), 9483–9488.
- Cumming, G. S., Allen, C. R., Ban, N. C., Biggs, D., Biggs, H. C., et al. (2015). Understanding protected area resilience: a multi-scale, social-ecological approach. *Ecology Applications*, 25, 299–319.
- Daily, G. C. (1997). Nature's services: Societal dependence on natural ecosystems.
- Daily, G. C., Polasky, S., Goldstein, J., Kareiva, P. M., Mooney, H. A., Pejchar, L., Ricketts, T. H., Salzman, R., & Shallenberger, R. (2009). Ecosystem services in decision making: time to deliver. *Frontiers in Ecology and the Environment*, 7(1), 21–28.
- Díaz, S., Pascual, U., Stenseke, M., Martín-López, B., Watson, R., Molnár, Z., Hill, R., Chan, K. M., Baste, I. A., Brauman, K. A., et al. (2018). Assessing nature's contributions to people. *Science*, 359, 270–272.
- Elmqvist, T., Maltby, E., Barker, T., Mortimer, M., Perrings, C., Aronson, J., De Groot, R., Fitter, A., Mace, G., Norberg, J., Pinto, I. S., & Ring, I. (2010). Biodiversity, ecosystems and ecosystem services. *The Economics of Ecosystems and Biodiversity*, 41–111.
- FAO- Food and Agriculture Organization. (2003). *FAO Fisheries Department Technical Report No. 4 (Supply 2)*. Rome: Food and Agriculture Organization.
- Forman, R. T. T., & Gordon, M. (1986). *Landscape ecology* (p. 619). New York: John Wiley.
- Haeckel, E. (1866). *Generelle Morphologie der Organismen. Allgemeine Grundzüge der organischen Formen-Wissenschaft, mechanisch begründet durch die von C. Darwin reformirte Descendenz-Theorie*, etc (Vol. 2).
- Haines-Young, R., & Potschin, M. (2010). The links between biodiversity, ecosystem services and human well-being. *Ecosystem Ecology: a new synthesis*, 1, 110–139.
- Hartvigsen, G., Kinzig, A., & Peterson, G. (1998). Use and analysis of complex adaptive systems in ecosystem science: Overview of special section. *Ecosystems*, 1, 427–430.
- IPBES (2017). IPBES Plenary 5 Decision IPBES-5/1: Implementation of the First Work Programme of the Platform, page 23; www.ipbes.net/event/ipbes-5-plenary
- Jørgensen, S. E. (2009). *Ecosystem Ecology*. The Netherlands: Elsevier.
- Kasparinskis, R., Ruskule, A., Vinogradovs, I., & Pecina, M. V. (2018). *The guidebook on ecosystem service framework in integrated planning* (p. 63). Faculty of Geography and Earth Sciences: University of Latvia.
- Lamarque, P., Quetier, F., & Lavorel, S. (2011). The diversity of the ecosystem services concept and its implications for their assessment and management. *Comptes Rendus Biologies*. <https://doi.org/10.1016/j.crvi.2010.11.007>.
- Leemans, R., & De Groot, R. S. (2003). *Millennium Ecosystem Assessment: Ecosystems and human well-being: a framework for assessment*. Island Press.
- Loehle, C. (2004). Challenges of ecological complexity. *Ecological Complexity*, 1, 3–6.
- Lopez-Hoffman, L., Varady, R. G., Flessa, K. W., & Balvanera, P. (2010). Ecosystem services across borders: a framework for transboundary conservation policy. *Frontiers of Ecology Environment*, 8, 84–91.
- Mace, G. M., Norris, K., & Fitter, A. H. (2012). Biodiversity and ecosystem services: a multilayered relationship. *Trends in Ecology & Evolution*, 27, 19–26. <https://doi.org/10.1016/j.tree.2011.08.006>.
- Maes, J., Egoh, B., Willemen, L., Liqueste, C., Vihervaara, P., Schägner, J. P., ... Bouraoui, F. (2012). Mapping ecosystem services for policy support and decision making in the European Union. *Ecosystem services*, 1(1), 31–39.
- MEA, Millennium Ecosystem Assessment. (2005). *Ecosystems and human well-being opportunities and challenges for business and industry*. Washington, DC: World Resources Institute.
- Naidoo, R., Balmford, A., Costanza, R., Fisher, B., Green, R. E., Lehner, B., Malcolm, T. R., & Ricketts, T. H. (2008). Global mapping of ecosystem services and conservation priorities. *Proceedings of the National Academy of Sciences*, 105(28), 9495–9500.
- National Research Council. (1999). *Sustaining marine fisheries*. Washington, DC: National Academy Press.
- Odum, E. P., & Barrett, G. W. (1971). *Fundamentals of ecology* (Vol. 3, p. 5). Philadelphia: Saunders.
- Palomo, I., Martín-López, B., Alcorlo, P., & Montes, C. (2014). Limitations of protected areas zoning in Mediterranean cultural landscapes under the ecosystem services approach. *Ecosystems*, 17, 1202–1215.
- Pikitch, E. K., Santora, C., Babcock, E. A., et al. (2004). Ecosystem-based fisheries management. *Science*, 305, 346–347.
- Raffaelli, D. G., & Frid, C. L. (Eds.). (2010). *Ecosystem ecology: A new synthesis*. Cambridge University Press.
- Randall, A. (1988). What mainstream economists have to say about the value of biodiversity. *Biodiversity*, 217, 217–23.
- Schmitz, O. J. (2013). *Ecology and ecosystem conservation*. Island Press.
- Smith, T. M., & Smith, R. L. (2012). *Elements of Ecology* (8th ed.). Boston: Benjamin Cummings. ISBN 978-0-321-73607-9.
- Tallis, H., & Polasky, S. (2009). Mapping and valuing ecosystem services as an approach for conservation and natural-resource management. *Annals of the New York Academy of Sciences*, 1162(1), 265–283.

- Tansley, A. G. (1935). The use and abuse of vegetational concepts and terms. *Ecology*, 16, 284–307.
- TEEB, T. E. (2010). The economics of ecosystems and biodiversity: mainstreaming the economics of nature: a synthesis of the approach, conclusions and recommendations of TEEB. Ginebra (Suiza): UNEP. <https://doi.org/10.1007/BF02331707>.
- Troy, A., & Wilson, M. A. (2006). Mapping ecosystem services: practical challenges and opportunities in linking GIS and value transfer. *Ecological Economics*, 60, 435–449.
- Vihervaara, P., Kumpula, T., Tanskanen, A., & Burkhard, B. (2010). Ecosystem services—a tool for sustainable management of human–environment systems. Case study Finnish Forest Lapland. *Ecological Complexity*, 7(3), 410–420.

Ecology and Ecosystem: Sustainability

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Synonyms

Bioecology; Bionomics; Ecological system; Economy of nature; Environmental biology

Definition/Description

The term “ecology” (bioecology; bionomics; environmental biology; economy of nature) is derived from ancient Greek; oikos means “household, house, or place to live” (Smith and Pimm 2007) and logos “speech, word, reason” (Dictionary Merriam-Webster 2018). Ecology is focused on the distribution and abundance of organisms, the interactions among organisms and between organisms and their environment, and structure and function of ecosystems (Begon et al. 2006; Maastik et al. 2004; Schulze et al. 2005). Ecology includes subdisciplines such as autecology,

population ecology, chemical ecology, evolutionary ecology, physiological ecology, plant ecology, aquatic ecology, applied ecology, paleoecology, community ecology, ecosystem ecology, landscape ecology, and global ecology. It attempts to synthesize understanding from interactions between organisms (biotic components) and between organisms and their physical environments (abiotic components), and from the interplay between both of these (Biology dictionary 2016).

An ecosystem is a dynamic complex of organisms (plant, animal, and microorganism), their communities, and their physical environments (air, water, and mineral soil) interacting as a functional unit (Maastik et al. 2004). The biotic and abiotic components interact through nutrient cycles and energy flows (Begon et al. 2006). Ecosystems can be of any size but each ecosystem has a specific, limited space (Schulze et al. 2005). Some scientists view the entire planet as one ecosystem (Likens 1992; Hugget 2017). The ecosystem approach is fundamental to managing Earth’s resources because it addresses the interactions that link biotic systems, of which people are an integral part, with the abiotic systems on which they depend (Chapin et al. 2011).

Introduction

Ecology means different things to different people (Table 1). The general topics of ecology are, for example, the nature of ecosystems, energy flow in ecosystems, the biogeochemical cycles in ecosystems, the ecology of populations, the organization and dynamics of ecological communities, and ecology and man (Kormondy 1969).

With the exception of the last one, all other concepts are related straightly to the nature dimension. The last one is considered to represent either a social or a political dimension or a cultural or ideological dimension (Spooner 1984). According to Spooner, the nature dimension directs attention to the systemic relationships that compose natural reality. A meaning of a social or political dimension concerns on power. It depends on where the actor stands in relation to others in an ecosystemic whole.

Ecology and Ecosystem: Sustainability, Table 1 Topics, dimensions, and focuses of the term “ecology” (Kormondy 1969; Spooner 1984)

Topics (Kormondy 1969)	Dimensions (Spooner 1984)	Focus (Spooner 1984)
The nature of ecosystems	Nature	Systemic relationships
Energy flow in ecosystems	Nature	Systemic relationships
The biogeochemical cycles in ecosystems	Nature	Systemic relationships
Ecology of populations	Nature	Systemic relationships
The organization and dynamics of ecological communities	Nature	Systemic relationships
Ecology and man	A social or a political dimension; cultural or ideological dimension	Power; values

A cultural or ideological dimension again is based on values. While ecology has many meanings, its key is a synthetic perspective that combines ideas, concepts, and approaches.

Environmental problems such as global climate change, acid rain, the stratospheric ozone hole, tropical deforestation, toxic wastes, ocean dumping, and eutrophication are huge threats for ecosystems and also as a part of nature for human beings. An ecosystem is comprised of plants and animals, their physical environment, and interactions of these two parts (Fosberg 1963; Strahler and Strahler 1976; Tansley 1935). Aquatic and terrestrial ecosystems produce the resource base of people not only today but also in the future. People are fundamentally dependent on the ecosystem services produced by aquatic and terrestrial ecosystems. The ecosystem services include provisioning services such as food, water, timber, and fiber; regulating services that affect climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling (Millennium Ecosystem Assessment 2005). Thus the

need to understand the ecological linkages at the level of ecosystems is crucial also for management, and ecology is a very important science for enterprises and other work communities. Ecological production can produce new ecological innovations and enhance the competitiveness of enterprises and improve cost efficiency in the long term, being sustainable in both the short and long term in terms of social economy. Environmental concern and sustainable development is a key pillar of corporate social responsibility.

Key Issues

The term “ecology” (*Oekologie, Oecologie*) was introduced by Ernst Haeckel in 1866. His original definition of ecology focused mainly on animals (Likens 1992, p. 6):

By ecology we mean the body of knowledge concerning the economy of nature – the investigation of the total relations of the animal both to its inorganic and to its organic environment; including above all, its friendly and inimical relations with those animals and plants with which it comes directly or indirectly into contact.

However, rather than on organisms and species, Haeckel’s purpose was to focus attention on relationships, especially relationships with the environment (Spooner 1984).

Since 1866, a large variety of ecological specialities or subdivisions have been formed. For example, autecology deals with individual organisms or species; synecology is a branch of ecology that deals with the structure, development, and distribution of ecological communities (Dictionary Merriam-Webster 2018); physiological ecology studies the responses of single species to environmental factors; population ecology focuses on the abundance, distribution, and distributional factors of individual species; community ecology studies the number of species found at a given location and their interactions; and ecosystems ecology concerns the structure and function of organisms and their abiotic environment, and how the parts interact to generate the whole; evolutionary ecology operates at all levels (Hall and Weis 2012). In terms of human beings, human ecology entails the interaction

between human groups and their social and physical environments (Gazzola and Querci 2017). Landscape ecology in its part is a highly interdisciplinary science in systems ecology. It integrates biophysical and analytical approaches with humanistic and holistic perspectives across the natural sciences and social sciences. It is the science of studying and improving relationships between ecological processes in the environment and particular ecosystems (Sarkar 2005). In 2017, Hugget presented the term global ecology what means according him the science of the Earth ecosystem. Its object of study is the entirety of life (animals, plants, microbes) and life-support systems (air, water, and soil) on the Earth, variously referred to as the biosphere, the ecosphere, the global ecosystem, Gaia, and the Earth system.

In an attempt to bridge the spectrum of ecological approaches and to promote synthesis and integration, the scientific staff of the Institute of Ecosystem Studies (New York) has proposed a new overarching definition of ecology (Likens 1992, p. 8):

Ecology is the scientific study of the processes influencing the distribution and abundance of organisms, the interactions among organisms, and the interactions between organisms and the transformation and flux of energy and matter.

Thus, ecology stresses synthetic view of nature, not a fragmented one. The main goal of ecology is to promote a holistic understanding of the interaction among and between biotic and abiotic elements.

The term “ecosystem” has had quite a long history and at various times interest has been focused on different aspects of its meaning (Table 2). So, there are also several definitions of the term ecosystem.

Tansley (1935) stressed the interaction between its living and nonliving components when he introduced the term. According to him an ecosystem is comprised of the whole complex of plants and animals (biome) and their physical environment (habitat). He also stated that through interactions of these two parts the ecosystem is maintained in approximate equilibrium. Lindeman (1942, p. 400) in his part defined an ecosystem to be “composed of physical-chemical-

Ecology and Ecosystem: Sustainability, Table 2 Definitions of the term “ecosystem”

Definitions	Researches
An ecosystem is comprised of the whole complex of plants and animals (biome) and physical environment (habitat)	Tansley (1935)
An ecosystem is “composed of physical-chemical-biological processes, active within a space-time unit of any magnitude”	Lindeman (1942)
An ecosystem is a functioning, interacting system what is composed of one or more living organisms and their physical and biological environment	Fosberg (1963)
[An ecosystem] is “any unit that includes all of the organisms. . . in a given area interacting with the physical environment so that a flow of energy leads to clearly defined trophic structure, biotic diversity, and material cycles. . . within the system”	Odum (1971)
An ecosystem is a whole formed of nonliving and living parts interacting with each other. They also stated an ecosystem tends to achieve a balance of the various processes and activities within it	Strahler and Strahler (1976)
“The functional ecosystem is the conception where biota are explicitly linked to the abiotic world of their surroundings”	Allen and Hoekstra (1992)
Ecosystem is the complex of interconnected living organisms inhabiting particular area or unit of space, together with their environment and all their interrelationships and relationships with the environment	Ostroumov (2002)
An ecosystem is a dynamic complex of plant, animal, and microorganism communities, and their nonliving environment such as air, water, and mineral soil interacting as a functional unit	Maastik et al. (2004)
[In ecosystem] the living (biotic) and nonliving (abiotic) components interact through nutrient cycles and energy flows	Begon et al. (2006)
Global ecosystem is the ever-changing product of interacting biological, physical, and chemical processes. Life depends upon interaction between living and nonliving elements of the Earth	Hugget (2017)

biological processes, active within a space-time unit of any magnitude.” According to Fosberg (1963), an ecosystem is a functioning, interacting system what is composed of one or more living organisms and their physical and biological environment. Later on, Odum elaborated the term defining it by this way:

Any unit that includes all of the organisms (i.e. the “community”) in a given area interacting with the physical environment so that a flow of energy leads to clearly defined trophic structure, biotic diversity, and material cycles (i.e. exchange of materials between living and nonliving parts) within the system is an ecological system or ecosystem. (1971, p. 8)

Thus, Odum described explicitly the nature of interactions and the characteristics that contribute to and result from the interactions. He also clearly indicates that the ecosystem exists “in a given area” and is thus identifiable geographically. Later on, the view of Maastik et al. (2004) and Begon et al. (2006) supported Odum (1971) emphasizing interaction between the living (biotic) and nonliving (abiotic) components. Strahler and Strahler (1976) in their part defined the ecosystem as a whole formed of nonliving and living parts interacting with each other as Tansley (1935) also did. Strahlers also stated that an ecosystem tends to achieve a balance of the various processes and activities within it. So, ecosystems have inputs of matter and energy, used to build biological structure, to produce and to maintain necessary internal energy levels, but material and energy are also transmitted outside the ecosystem. Allen and Hoekstra (1992, p. 52) provided the alternate, concept-oriented definition:

The functional ecosystem is the conception where biota are explicitly linked to the abiotic world of their surroundings. Systems boundaries include the physical environment. Size is not the critical characteristic, rather the cycles and pathways of energy and matter in aggregate form the entire ecosystem.

Thus they defined a “functional ecosystem” to emphasize processes, matter cycling and energy flow, instead of structure. Within a landscape and structural features, they used the term “population-community” ecosystems.

In the 2000s, Ostroumov (2002) stressed space and time perspectives like Lindeman (1942):

Ecosystem is the complex of interconnected living organisms inhabiting particular area or unit of space, together with their environment and all their interrelationships and relationships with the environment. It is characterized by the description of populations (abundance) of individual species; interspecies relationships; activity of organisms; physical and chemical characteristics of environment; flows of matter, energy, and information; and description of changes of these parameters with time. (2002, p. 141)

In 2017, Hugget in his part presented the term global ecosystem. Global ecosystem is the ever-changing product of interacting biological, physical, and chemical processes. It was born and is transforming as a result of the activities of organisms. The actions of organisms are individual, but processes in the atmosphere, sediments, waters, and landscapes integrate the effects of their actions. Life depends upon its interacting with the nonliving world.

The ecosystem can be regarded as the fundamental ecological unit because a biotic community, including human beings, cannot be clearly differentiated from its abiotic environment (Figs. 1, 2, and 3). It provides a conceptual framework for the study of the interactions among individuals, populations, communities, and their abiotic environments, and for the study of the change in these relationships with space and time.

Ecological understanding is required to develop environmental policies and to manage resources for the benefit of human beings. The future of the world’s human societies still depends upon natural resources. In fact, water, croplands, forests, and grasslands underpin the world’s economy supplying raw materials for industry. Moreover, natural landscapes reduce erosion and filter pollutants from air and runoff water. They also reduce extremes of flooding and provide food and fiber. In addition, the ecosystem services support cognitive, cultural, and spiritual dimensions of human life. Although the world situation is partly better nowadays, for example, actions taken under the Montreal Protocol have led to decreases in the atmospheric abundance of controlled ozone-depleting substances and the start of the recovery of stratospheric ozone (WMO 2018), a renewed sense of individual responsibility is yet needed.

Ecology and Ecosystem: Sustainability,**Fig. 1** Forest. (Photo: E. Jeronen)

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**Ecology and Ecosystem: Sustainability, Fig. 2** River. (Photo: E. Jeronen)

Such a sense of responsibility is vital for humans to manage, diminish, and attempt to prevent complex environmental problems.

The ecological responsibility of the commercial companies implies the integration of the environment protection requirements into the commercial activity (Mureşan et al. 2010). The goal of the ecological responsible action is “ecological sustainability” what refers to both environmental and social responsibility, ranging from issues of human rights to viability of local

communities and conservation of natural resources. The ways for achieving this goal may be a sense of personal ethical responsibility for restoring healthier communities and ecosystems; practices of renewal or involving minimal resources and waste in production and life activity; interconnectivity or acting with awareness of one’s relatedness to others in local, global, and biological webs and the impact of one’s actions on them; and promoting local well-being (Fenwick 2007).



Ecology and Ecosystem: Sustainability, Fig. 3 Swamp. (Photo: E. Jeronen)

Summary

Ecology (economy of nature) attempts to bridge the wide spectrum of ecological specialities or subdivisions by stressing synthetic view of nature. It integrates biophysical and analytical approaches with humanistic and holistic perspectives. Its goal is to synthesize understanding from interactions between biotic organisms, from interactions between organisms and their abiotic environments, and from the interplay between both of these.

Biotic and abiotic components and their interactions are properties of ecosystems. An ecosystem is regarded as the fundamental ecological unit which tends to achieve a balance of the physical-chemical-biological processes and activities within it with space and time. Understanding the ecological linkages at the level of ecosystems are crucial when developing environmental policies and to manage resources because human beings are fundamentally dependent on the ecosystem services produced by aquatic and terrestrial ecosystems. Enterprises and other work communities should utilize natural resources and raw materials in a sustainable manner,

thus reducing environmental pollution and climate change. Ecological sustainability concerns on issues of human rights to viability of local communities and conservation of natural resources. Ecological sustainability is not based only on corporations' ethical responsibility but also on individual ethical responsibility in everyday life.

Cross-References

- [Biodiversity](#)
- [Conservation: Sustainability](#)
- [Sustainable Development](#)

References

- Allen, T. F. H., & Hoekstra, T. W. (1992). *Toward a unified ecology*. New York: Columbia University Press.
- Begon, M., Townsend, C. R., & Harper, J. L. (2006). *Ecology: From individuals to ecosystems* (4th ed.). Oxford: Blackwell Publishing. ISBN-13: 978-1-4051-1117-1.
- Biology dictionary. (2016). *Ecology*. <https://biologydictionary.net/ecology/>. Accessed 12 Nov 2018.

- Chapin, F. S., Matson, P. A., & Vitousek, P. M. (2011). *Principles of terrestrial ecosystem ecology* (2nd ed.). New York: Springer Science+Business Media, LLC. https://doi.org/10.1007/978-1-4419-9504-9_1.
- Dictionary Merriam-Webster. (2018). <http://www.merriam-webster.com/dictionary>. Accessed 7 Nov 2018.
- Fenwick, T. (2007). Developing organizational practices of ecological sustainability: A learning perspective. *Leadership & Organization Development Journal*, 28(7), 632–645. <https://doi.org/10.1108/01437730710823888>. Accessed 9 Nov 2018.
- Fosberg, F. R. (Ed.). (1963). *Man's place in the island ecosystem*. Honolulu: Bishop Museum Press.
- Gazzola, P., & Querci, E. (2017). The connection between the quality of life and sustainable ecological development. *European Scientific Journal*. April 2017/SPECIAL/edition. ISSN 1857-7881 (Print) e - ISSN 1857-7431.
- Haeckel, E. (1866). *Allgemeine Anatomie der Organismen. Kritische Grundzüge der Mechanischen Wissenschaft von den Entwickelten Formen der Organismen Begründet durch die Descendents-Theorie*. Berlin: Druck und Verlag Georg Reimer. http://darwin-online.org.uk/converted/pdf/1866_Haeckel_A959.1.pdf. Accessed 7 Nov 2018.
- Hall, C., & Weis, J. S. (2012). Ecology. In J. Cutler (Ed.), *Encyclopedia of Earth*. Cleveland/Washington, DC: Environmental Information Coalition/National Council for Science and the Environment. <http://www.eoearth.org/article/Ecology>. Accessed 1 Nov 2018.
- Hugget, R. J. (2017). Global ecology. In *Encyclopedia of life support systems (EOLSS)* (Vol. 1, pp. 1–8). <https://www.eolss.net/sample-chapters/C09/E6-70-06.pdf>. Accessed 12 Nov 2018.
- Kormondy, E. J. (1969). *Concepts of ecology*. Englewood Cliffs: Prentice-Hall.
- Likens, C. E. (1992). The ecosystem approach: Its use and abuse. In O. Kinne (Ed.), *Excellence in ecology* (pp. 3–16). Oldendorf/Luhe: Ecology Institute. ISSN 0932-2205. <https://www.int-res.com/articles/eebooks/eebook03.pdf>. Accessed 5 Nov 2018.
- Lindeman, R. L. (1942). The trophic-dynamic aspect of ecology. *Ecology*, 23(4), 399–417.
- Maastik, A., Kajander, J., Heinonen, P., Hyvärinen, V., Karttunen, K., Kosola, M.-L., Ots, H., & Seuna, P. (2004). *EnDic 2004. Environmental dictionary (EnDic)*. Helsinki: Finnish Environment Institute (SYKE) and Finnish Meteorological Institute. <https://mot.kielikone.fi/mot/endic/netmot.exe?UI=e ned>. Accessed 1 Nov 2018.
- Millennium Ecosystem Assessment. (2005). *Ecosystems and human well-being: Synthesis*. Washington, DC: Island Press. <https://www.millenniumassessment.org/documents/document.356.aspx.pdf>. Accessed 12 Nov 2018.
- Mureșan, L., Poțincu, C.-R., & Duguleană, M. (2010). Ecological responsibility, component of the corporate social responsibility. In M. Grigoriu, V. Mladenov, C. A. Bulucea, O. Martin, & N. Mastorakis (Eds.), *Recent advances in risk management, assessment and mitigation. Proceedings of the international conference on Risk Management, Assessment and Mitigation (RIMA '10)* (pp. 318–322). Bucharest: Universitatea Politehnica. ISBN: 978-960-474-182-3; ISSN: 1790-2769.
- Odum, E. P. (1971). *Fundamentals of ecology* (3rd ed.). Philadelphia: W. B. Saunders.
- Ostroumov, S. A. (2002). New definitions of the concepts and terms ecosystem and biogeocenosis. *Doklady Biological Sciences*, 383, 141–143. <https://www.researchgate.net/publication/200577836>. Accessed 9 Nov 2018.
- Sarkar, S. (2005). *Biodiversity and environmental philosophy: An introduction*. Cambridge: Cambridge University Press.
- Schulze, E.-D., Beck, E., & Müller-Hohenstein, K. (2005). *Plant ecology*. Heidelberg: Springer.
- Smith, R. L., & Pimm, S. L. (2007). *Ecology. Encyclopedia Britannica*. <https://www.britannica.com/science/ecology>. Accessed 7 Nov 2018.
- Spooner, B. (1984). *Ecology in development: A rationale for three-dimensional policy*. Tokyo: United Nations University Press. <http://repository.upenn.edu/anthropapers/90>. Accessed 2 Nov 2018.
- Strahler, A. N., & Strahler, A. H. (1976). *Elements of physical geography*. New York: Wiley.
- Tansley, A. G. (1935). The use and abuse of vegetational concepts and terms. *Ecology*, 16, 284–307.
- WMO (World Meteorological Organization). (2018). *Executive summary: Scientific assessment of ozone depletion* (Global Ozone Research and Monitoring Project – Report, 58). Geneva: World Meteorological Organization. ISBN: 978-1-7329317-0-1. <https://www.esrl.noaa.gov/csd/assessments/ozone/2018/>. Accessed 8 Nov 2018.

Economic

► Life Cycle Sustainability Assessment

Economic Development

► Economic Sustainability and Development

Economic Disintegration

► Economic Sanctions

Economic Growth

- ▶ [Economic Sustainability and Development](#)
 - ▶ [Sustainable Growth](#)
-

Economic Growth and Productive Efficiency

- ▶ [Economic Sustainability](#)
-

Economic Model

- ▶ [Business Model](#)
-

Economic Sanctions

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Synonyms

[Boycotts](#); [Coercive measures](#); [Decoupling](#); [Economic disintegration](#)

Definition

The term economic sanctions refers to legally binding measures legislated by a governmental or administrative institution to reduce or to prevent commercial ties with a foreign official, entity, or country. Actors issuing sanctions include national governments, regional organizations such as the European Union, and international organizations such as the WTO and the United Nations Security Council, which has the right to impose coercive measures on UN member states for protecting and restoring international peace and stability. In difference to other means of

coercive diplomacy such as the cancellation of a sports event, economic sanctions unfold direct consequences for bilateral and international commercial ties including investment, trade, and access to credit for the sanctioned party creating legal obligations for domestic entities such as companies, banks, and even private persons. Economic sanctions tend to vary in scope and scale: Comprehensive measures target the counterparty's economy in its entirety, whereas smart or selective sanctions concentrate on specific entities for instance governmental organizations involved in human rights organizations or paramilitary groups.

Introduction

Economic sanctions are typically issued by governments or supranational organizations such as the European Union or the African Union in the form of a law or presidential decree and have the aim to reduce commercial ties with the targeted entity. On the contrary, the term boycott is more general. Although boycotts share the property of sanctions in the sense of measures to reduce or to stop commercial ties with a specific person, entity, or nation, the definition of boycott includes uncoordinated, informal, and spontaneous acts emerging from the population, driven by political groups within a country and directed against specific domestic or foreign actors. On the contrary, formal sanctions center exclusively on foreign actors outside of the immediate legislative reach of the sanctioning party including terrorist organizations, paramilitary units, or a foreign government officials. Comprehensive sanctions target the entire economy of the sanctioned country, whereas selective or smart sanctions target individuals or entities accused of violating norms of international law or human rights standards (van der Have 2020). The strictest form of comprehensive economic sanctions are embargoes leading to the complete prohibition of trade and investment, as it happened in case of UN Security Council Resolution 2397. Moreover, economic sanctions have manifold reasons and might originate in strategic considerations such as national interest

or issued as a reaction toward violations of human rights or international law (cf. Baldwin 2020). Due to its different focus, international sanctions need to be distinguished from extraterritorial legislation, which centers on general disclosures or certain compliance measures of companies to be taken in the event of human rights violations. In contrast to sanctions, normative implications deriving from extra-territorial legislation including the UK Modern Slavery and Human Trafficking Act or other legislation on supply chain with due diligence unfold no country-specific but rather general legal obligations to be realized by corporate actors (LeBaron and Rühmkorf 2019).

History of the Use of Economic Sanctions and Boycotts

Boycotts in general and economic sanctions in specific have accompanied human history arguably since the advent of statecraft. Early examples of the former include the boycott against the Hashemites (Brown 2004) or anti-Jewish boycotts in the nineteenth and twentieth centuries (e.g., Kreutzmüller 2015). More recently, boycotts or calls for boycotts have also been used or politically instrumentalized as a means to morally condemn the actions of specific companies or countries such as human rights violations. In 2019, boycotts hit Japanese companies, which did not apologize for war atrocities in Korea committed in the Second World War (Vekasi and Nam 2019). Likewise, human rights activists have been lobbying for boycotts in the cases of South Africa, Israel, Myanmar, and more recently China's Xinjiang province (cf. Kriebitz and Max 2020). Given a mixed record of historical experiences, some countries such as Germany and the United States have engaged in anti-boycott legislation to prevent discrimination and to coordinate foreign trade legislation. The US Anti-Boycott Act of 2018 for example prohibits "refusals or agreements to refuse to do business with or in a boycotted country," while anti-discrimination frameworks prevent boycotts on merchants or enterprises based on race, religion, and/or ethnicity.

The history of formal and legally formalized economic sanctions can be traced back to early writings on the role of sanctions as a "tool of statecraft" for enhancing national interest (Baldwin 2020; Blanchard and Ripsman 2008; Chan and Drury 2000). The acknowledgment of the economic factor in foreign affairs gave rise to coordinated sanctions appearing in the context of the Peloponnesian war (Brunt 1951) and later in the context of Napoleon's continental blockade. In the twentieth century, the U.S. economic sanctions have been formalized in the "Trading with the Enemy Act," which is still limiting trade to countries considered as adversaries. Likewise, the relevance of sanctions as tool of statecraft has been acknowledged in different versions of the National Security Strategy of the United States and other significant documents of key players in international affairs. More recently, the moral dimension of sanctions has become more pronounced, incorporated in the idea that sanctions are instruments to force leaders in authoritarian regimes to make concessions to human rights.

Current Use of Sanctions

In general, nation states are free to issue sanctions based on domestic and foreign policy considerations, what explains the wide use of sanctions in international politics. The decision with whom to trade, but also with whom not to trade is considered as domain and expression of national sovereignty. National sovereignty notwithstanding, UN member states are bound by some general principles in their conduct of trade relations. The Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States and the Vienna Convention on the Law of Treaties set out that countries have to act in accordance with the *pacta sunt servanda* principle and need to stick to their agreements including trade agreements. This allows the sanctioned party to retaliate with counter-measures, when sanctions conflict with bilateral or international treaties. More recently, human rights and other elementary norms of international law (see

Belgium v Spain (Second Phase) ICJ Rep 1970 3 at paragraph 33) have emerged as an evolving part of the *ius cogens* of international law (see van der Have 2020). The elevated status of human rights as part of international law and the subsequent acknowledgement of obligations *erga omnes* in case of grave human rights violations have received support by the International Court of Justice in *The Gambia vs. Myanmar Case* (see Becker 2020). Consequently, many scholars of international law (Ainley 2008; Becker 2020) have argued that nation states have perhaps even a moral duty to engage in sanctions, when responding to gross human rights violations or other grave violations of international law. While the understanding of sanctions as means to deter human rights violations and aggression has received increased acceptance by scholarship, the conduct of sanctioning is less bound by specific constraints such as proportionality. This concerns limitations arising from domestic law as well. In the case of many nation states, the adoption, renewal, or lifting of sanctions rather belongs to the domain *reservé* of the nation state, where the executive branch has considerable room for interpretation (22 U.S. Code § 2798) (Drury 2000). In the case of the United States, the President has the power and right to impose economic sanctions, which has been exercised in the cases of the Russian Federation, the Islamic Republic of Iran, or other countries.

Apart from sanctions by individual nation states, the Security Council of the United Nations has a specific responsibility for global matters and a particular right to engage in sanctions. According to Article 41 of the UN Charter, the UN Security Council has a mandate by the international community to apply sanctions (Article 41) that must be complied with by all UN member states. In the past, the United Nations have typically addressed gross human rights violations or actions destabilizing international peace as it has happened in the case of Rhodesia, Rwanda, Iraq, and North Korea. This includes specifically the notion of crimes against humanity, including slavery, genocide or severe violations of *ius in bello* (see Sadat 2013). Sanctions on Rwanda have been imposed for ending the

genocide of the Tutsi, while coercive measures imposed on Iraq had the target of eliminating weapons of mass destruction and extended-range ballistic missiles. Likewise, sanctions imposed on North Korea for example have been driven by the nuclearization of the Korean peninsula and ballistic missile tests by the government of the Democratic Republic of Korea (e.g., United Nations Security Council Resolution 2371; United Nations Security Council Resolution 2375).

In addition to the United Nations, regional organizations such as the European Union or African Union have become increasingly active in issuing economic sanctions. Here, one can distinguish between in-group and out-group sanctions. In-group sanctions focus on the members of the organization violating standards defined by the organization including for instance rule of law standards, while out-group sanctions focus on entities outside of the organization. According to Article 7 of the Treaty on European Union, the EU can suspend rights of a member state violating the principles of the European Union enumerated in Article 2, pertaining to human rights, democracy, and minority rights. The suspension of specific rights might therefore result in economic consequences. In terms of sanctions targeting non-members, the European Union has defined the character of restrictive measures as a means “to bring about a change in policy or activity by the target country, part of the country, government, entities or individuals,” while the African Union refers primarily to “unconstitutional changes” (Constitutive Act of the African Union 2000, Article 4(p)). The EU Guidelines on Implementation and Evaluation of Restrictive Measures (Sanctions) in the Framework of the EU Common Foreign and Security Policy refer explicitly to freezing of funds and economic resources, restrictions on admission, arms embargoes, embargoes on equipment that might be used for internal repression, other export restrictions, import restrictions, and flight bans. Both the regional organizations base economic sanctions on a unanimous decision of the member states.

Critique on the Use of Economic Sanctions

Apart from the general legal debate on the permissibility of sanctions, scholars have discussed the moral and legal grounds for imposing sanctions. One can distinguish here between a more general debate on the purpose of sanctions, their effectiveness and norm collision with the rights of innocent bystanders and the critique on specific use cases of sanctions – for example, in the cases of Iraq, North Korea, or the Russian Federation.

Vague Purpose: Some scholars (van der Have 2020) comment on the use of sanctions based on the argument that the purpose of sanctions is often ill-defined and dominated by conflicting or blurring moral, political, and domestic considerations. Literature provides indeed different and partly conflicting interpretations concerning the aim behind sanctions. In *Economic Statecraft*, Baldwin (2020) has referred to the importance of economic sanctions as a means to realize the national interest of the respective state. From this perspective, one can derive that the purpose of economic sanctions is the realization of national interest by advancing geopolitical priorities such as containment of geopolitical adversaries. This understanding has been set forth in formal legislation and been incorporated in different national strategies (e.g., the US National Security Strategy of 2017). An alternative viewpoint derives the justification of economic sanctions from human rights obligations. Here, we encounter theories stressing the preventive character of coercive measures and theories stressing the punitive character (van der Have 2020). Emphasizing the preventive character implies that economic sanctions should have the purpose of forcing state or non-state actors to stop human rights violations. Thus, economic sanctions are perceived as a tool to enhance the costs of maintaining human rights violations such as forced labor. On the contrary, prioritizing the punitive understanding of coercive measures means that sanctions are understood as a means to punish perpetrators of human rights violations (Gordon 2011). The punitive character of sanctions connects to the debate on smart sanctions, which aim at holding individuals or groups

of individuals accountable for human rights violations, for example, by denying them entry to the country issuing sanctions or by freezing their bank accounts (compare: Global Magnitsky Act, Title XII, Subtitle F of P.L. 114–328; 22 U.S.C. §2656). Apart from the general critique on the purportedly ill-defined purpose of sanctions, some opponents of sanctions express the view that sanctions on the basis of human rights conflict with the general understanding of sovereignty. This is supported by adherents of cultural relativism, which argue that human rights do not represent a universally valid concept. Based on this, human rights-based sanctions are seen by some as a disguise for geopolitical ambitions and as a form of colonialism, as most sanctions have been issued by countries, which have been historically involved in colonialism (Wall 1998).

Efficacy: The debate on purpose connects to the debate on efficacy of sanctions, as it assumes a linkage between the real consequences of sanctions to the desired aims by the entity issuing sanctions. Scholars criticizing international sanctions argue here that sanctions often fail to realize their aims (Grauvogel and von Soest 2014; McMahon 2006; Peksen and Drury 2009), in terms of preventing international law violations such as stopping conflicts or preventing human rights violations. Some policymakers and organizations highlight the fact that international sanctions have an adverse effect on human rights and the resolution of international conflicts (Saunders 2014), as discussed in the contexts of international sanctions on Cuba and Iran (Hudson 2020; Office of the High Commissioner for Human Rights 2020). On the contrary, proponents of sanctions argue here that sanctions have been efficient and a driving force for ending gross human rights violations such as apartheid and refer not only to the economic but also to the psychological and social effect of sanctions, especially in the case of sanctions focusing on individuals (cf. Blanchard and Ripsman 2008; McMahon 2006).

Trade-offs: The debate on efficacy also entails further input for the debate on the potential trade-offs arising from the different consequences on sanctions. Although sanctions might realize their

goal, they might conflict with international norms as they generate negative consequences for different actors and third parties (Peksen 2016; van der Have 2020). One aspect which has been noted is the rule of law principle, which is at stake when sanctions are addressing individuals, which do not have the chance to defend themselves against the issuer of sanctions. Another aspect concerns the right of third parties. Some scholars have noted here that sanctions might create adverse impacts in terms of the right to development and medical aid. This has been discussed in particular in the cases of Iran and North Korea, where sanctions are attributed by some to have come along with a significant toll on civilians (Nebehay 2017).

Inconsistency: Another aspect of critique is that sanction regimes are regarded as arbitrary and inconsistent, implying that some countries accused of violating human rights or destabilizing international affairs are sanctioned while others are not. Research (e.g., Drury 2000) has demonstrated that “relations with the target country” and “domestic factors” play an important role in explaining sanctions. Further research has been added to these points and particularly with the aspect of the unanimous decision mechanism in regional organizations. Similar aspects are raised in the context of consumer boycotts (Vekasi and Nam 2019).

The critique on sanctions, which stems from fundamentally different ideological, historical or theoretical bases has led to a more detailed debate on sanctions. Consequently, contemporary sanction frameworks have rather addressed individuals than entire nation states following the 1990s, although comprehensive sanctions remain still common. However, smart sanctions themselves are subject to scrutiny and critique, as they involve elements of prejudice and as they might conflict with the right to a fair trial. For compensating for these limitations, scholars (Reinisch 2001) have called for a stronger integration of legal principles such as proportionality in the design and application of sanction frameworks or human rights accountability (Reinisch 2001), in order to create an alignment between desired aims, efficacy and the rights of other parties.

Summary

Economic sanctions are legal measures applied by nation states and international organizations with the aim to reduce or cease commercial ties with a foreign official, entity or country. Sanctions might be based on different considerations pertaining to national interest or moral objectives. Historically, sanctions of the United Nations have typically addressed gross human rights violations or actions destabilizing international peace. On the contrary, the motives behind sanctions by nation states are harder to identify.

The frequent use of international sanctions notwithstanding, scholars in international law are divided on the very purpose of sanctions. For some sanctions are punitive measures aiming to hold perpetrators of international law accountable, for others they depict instruments of political statecraft aiming at realizing concrete objectives such as human rights improvements or disarmament. Consequently, the use of coercive measures in general and sanctions in specific belongs to the more controversial areas in the discourse on the interplay between commercial exchange, sustainable development and human rights. As a result, this debate connects to more fundamental assumptions in international law on state sovereignty, moral universalism and proportionality.

Finally, the key challenge of the discourse on economic sanction is the integration of the different discourses on social development, human rights and international affairs, to help policy makers and international companies to navigate authoritarian regimes in acknowledging geopolitical realities and improving conditions for groups adversely affected by international sanction frameworks.

Cross-References

- ▶ [Corporate Compliance](#)
- ▶ [Ethical Absolutism vs. Ethical Relativism](#)
- ▶ [Supply Chain](#)

References and Further Readings

- Ainley, K. (2008). Individual agency and responsibility for atrocity. In J. Renee (Ed.), *Confronting evil in international relations: Ethical responses to problems of moral agency*. Basingstoke: Palgrave Macmillan.
- Baldwin, D. A. (2020). *Economic Statecraft: New Edition*. Princeton University Press.
- Becker, M. A. (2020). The plight of the Rohingya: Genocide allegations and provisional measures in the Gambia v Myanmar at the international court of justice. *Melbourne Journal of International Law*, 21(2), 1–20.
- Blanchard, J. M. F., & Ripsman, N. M. (2008). A political theory of economic statecraft. *Foreign Policy Analysis*, 4(4), 371–398.
- Brown, D. (2004). *A new introduction to Islam*. Blackwell Publishing.
- Brunt, P. A. (1951). The Megarian decree. *The American Journal of Philology*, 72(3), 269–282.
- Chan, S., & Drury, A. (Eds.). (2000). *Sanctions as economic statecraft: Theory and practice*. Springer.
- Constitutive Act of the African Union (2000). Accessed February 21, 2022. <https://au.int/en/constitutive-act>.
- Drury, A. (2000). U.S. presidents and the use of economic sanctions. *Presidential Studies Quarterly*, 30(4), 623–642. Retrieved June 1, 2021, from <http://www.jstor.org/stable/27552138>.
- Gordon, J. (2011). Smart sanctions revisited. *Ethics & International Affairs*, 25(03), 315–335.
- Grauvogel, C., & von Soest, J. (2014). Claims to legitimacy count: Why sanctions fail to instigate democratisation in authoritarian regimes. *European Journal of Political Research*, 53(4), 635–653.
- Hudson, J. (2020, October 8). Trump administration to impose sanctions on Iran as Europe warns it will trigger humanitarian crisis. *The Independent*. Retrieved March 12, 2021. <https://www.independent.co.uk/news/world/americas/trump-us-iran-sanctions-europe-humanitarian-crisis-b883404.html>
- Kreutzmüller, C. (2015). *Final Sale in Berlin: The destruction of Jewish commercial activity, 1930–1945*. Berghahn Books.
- Kriebitz, A., & Max, R. (2020). The Xinjiang Case and Its Implications from a Business Ethics Perspective. *Human Rights Review*, 21(3), 243–265.
- LeBaron, G., & Rühmkorf, A. (2019). The domestic politics of corporate accountability legislation: Struggles over the 2015 UK modern slavery act. *Socio-Economic Review*, 17(3), 709–743.
- McMahon, R. (2006). *UN sanctions: A mixed record*. Council on Foreign Relations.
- Nebehay, S. (2017, November 20). North Korean women suffer discrimination, rape, malnutrition – U.N. Reuters. Retrieved March 12, 2021. <https://br.reuters.com/article/uk-northkorea-un-rights-idUKKBN1DK1EP>.
- Office of the High Commissioner for Human Rights. (2020). US must lift its Cuba embargo to save lives amid COVID-19 crisis, say UN experts [Press release]. United Nations. Retrieved March 21, 2021. <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25848&LangID=>
- Peksen, D. (2016). Economic sanctions and official ethnic discrimination in target countries, 1950–2003. *Defence and Peace Economics*, 27(4), 480–502. <https://doi.org/10.1080/10242694.2014.920219>.
- Peksen, D., & Drury, A. C. (2009). Economic sanctions and political repression: Assessing the impact of coercive diplomacy on political freedoms. *Human Rights Review*, 10, 393–411. <https://doi.org/10.1007/s12142-009-0126-2>.
- Reinisch, A. (2001). Developing human rights and humanitarian law accountability of the security council for the imposition of economic sanctions. *The American Journal of International Law*, 95(4), 851–872.
- Sadat, L. N. (2013). Crimes against humanity in the modern age. *American Journal of International Law*, 107(2), 334–377.
- Saunders, P. J. (2014, August 14). When sanctions lead to war. *New York Times*. <https://www.nytimes.com/2014/08/22/opinion/when-sanctions-lead-to-war.html>.
- Van der Have, N. (2020). The proposed EU human rights sanctions regime: A first appreciation. *Security and Human Rights*, 1(aop), 1–16.
- Vekasi, K., & Nam, J. (2019). Boycotting Japan: Explaining divergence in Chinese and south Korean economic backlash. *Journal of Asian Security and International Affairs*, 6(3), 299–326.
- Wall, C. (1998). Human rights and economic sanctions: The new imperialism. *Fordham Int'l LJ*, 22, 577.

Economic Sustainability

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Synonyms

Economic growth and productive efficiency

Definition/Description

The definitions of economic sustainability are various depending on the approach and sustainability

label used. In the inside approach, economic sustainability is interpreted either from the perspectives of very weak or weak sustainability. The former stresses how organizations stay in business looking at the issues of corporate turnover and brand reputation and considering these to be at the heart of economic sustainability (Doane and MacGillivray 2001). The latter links the concept with productive efficiency and economic growth (Foladori 2005). Within a business context, this means using the assorted assets of the company efficiently to allow it to continue functioning profitably over time (BusinessDictionary 2018). Economic growth may take place at the expense of natural resources, ecosystem services, or welfare if the total capital stock is maintaining through time (Turner 1993).

In the outside approach, it is looking first at the economic impacts an organization has on society emphasizing thus strong sustainability position. Economic sustainability is understood as economic development without any loss of ecological or social sustainability. Economic capital cannot grow at the expense of natural or social capital. Economic sustainability means the allocation of resources over time (Markulev and Long 2013) and also intergenerational equity (Anand and Sen 2000). It emphasizes a production system which offers the highest level of well-being for current and future generations (Markulev and Long 2013) without compromising future needs (Basiago 1999). Economic sustainability, as one of the sustainability pillar (Elkington 1994), is necessary to maintain the natural, social, and human capital required for income and living standards.

Introduction

The concept “triple bottom line” was first articulated by Freer Spreckley in 1981 in his publication *Social Audit: A Management Tool for Co-operative Working*. In this work, he argued that enterprises should measure and report on financial performance, social wealth creation, and environmental responsibility. Later on, the phrase was articulated more fully by John Elkington in 1994 and 1997. For him,

sustainability is the balance between the three pillars: environmental, social, and economic (Elkington 1994, 1997, 1998). Goodland (1995) has identified the overlap and interaction among all these three sustainability pillars, particularly the strong linkage which is between “environmental sustainability” and “economic sustainability.” According to Klarin (2018), environmental sustainability focuses on maintaining the quality of the environment which is necessary for conducting the economic activities and quality of life of people. Social sustainability strives to ensure human rights and equality, preservation of cultural identity, and respect for cultural diversity, race, and religion. Economic sustainability in its part is necessary to maintain the natural, social, and human capital required for income and living standards (Klarin 2018).

According to Hediger (2000) natural capital is defined as the base of the natural resources in a specific geographic area. It consists of the capital of the ecosystem or environmental capital, which includes the stock of renewable resources (currently used and also unused in economic processes), partially cultivated and natural soil, as well as the environmental factors that are necessary for the functioning of ecosystems. It determines the overall quality of the environment in the area and stocks of nonrenewable resources (Hediger 2000). Social capital is about the value of social networks, bonding similar people and bridging between diverse people, with norms of reciprocity (Dekker and Uslander 2001; Uslander 2001). Social capital is defined by the OECD (2016) as “networks together with shared norms, values and understandings that facilitate co-operation within or among groups.” It includes also the economic resources garnered from human interactions (Investopedia 2018). Human capital refers to knowledge, experience, and skills of an employee (Ross 2015).

Key Issues

The notion of “economic sustainability” was originated by Hicks. Hicks (1946, p. 172) defined “income” as “a man’s income as the maximum

value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning.” Traditionally, economists assumed that the supply of natural resources was unlimited. They placed emphasis on the capacity of the market to allocate resources efficiently and believed that economic growth would bring the technological capacity to replenish natural resources destroyed in the production process. Nowadays it is known that natural resources are not endless enough.

There are two ways to approach economic sustainability. According to Doane and MacGillivray (2001), the first one starts with how organizations stay in business and approach the issue from the inside. The second one, taking the outside or stakeholder view, looks first at the economic impacts an organization has on society. This is coherent to the argumentation of researchers including both neoclassical and ecological economics. Based on these approaches, the definitions of the concept economic sustainability are various (Table 1).

The inside view stresses either very weak or weak sustainability position. From the perspective of very weak sustainability position, “...economic sustainability is the ability of an economy to support a defined level of economic production indefinitely” (Economic Sustainability 2018). With the words of Friedman (1970), “The business of business is business.” Nature has predominantly instrumental value (O’Riordan 1996), and the present generation have the right to use it (Davies 2013). It is also believed that economic growth is a valid measure of “progress” (Williams and Millington 2004). Consequently, development is based on unfettered free market (Davies 2013). Overall stock of capital assets remains stable over time, and complete substitution between human and natural capital is possible. There is a link between willingness to pay and sustainable development.

According to weak sustainability, economic sustainability is equated with productive efficiency and economic growth (Foladori 2005). It means (BusinessDictionary 2018):

Economic Sustainability, Table 1 Definitions of economic sustainability (cf. Doane and MacGillivray 2001)

Definitions	References
“... There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud”	Friedman (1970, p. 6)
“... Economic sustainability is the ability of an economy to support a defined level of economic production indefinitely”	Economic Sustainability (2018)
“Tomorrow’s Company uses its stated purpose and values, and its understanding of the importance of each relationship, to generate its own success model from which it can generate a meaningful framework of performance measurement”	RSA (1995, p. 1)
[Economic sustainability means] “the use of various strategies for employing existing resources optimally so that that a responsible and beneficial balance can be achieved over the longer term. Within a business context, economic sustainability involves using the assorted assets of the company efficiently to allow it to continue functioning profitability over time”	BusinessDictionary (2018)
Economic sustainability is one of the pillars of sustainability. It is necessary to maintain the natural, social, and human capital required for income and living standards	Elkington (1994)
[Economic sustainability means] that economic systems support sustainable social and environmental outcomes, where economics is the process through which humans create social and environmental outcomes	Zadek and Tuppen (2000)
“Economic sustainability [is] the process of allocating and protecting scarce resources while ensuring positive social and environmental outcomes”	Doane and MacGillivray (2001, p. 3.0.2)
“Economic sustainability refers to practices that support long-term economic growth without negatively impacting social, environmental, and cultural aspects of the community”	Economic Sustainability – Sustainability (2018)

The use of various strategies for employing existing resources optimally so that a responsible and beneficial balance can be achieved over the longer term. Within a business context, economic sustainability involves using the assorted assets of the company efficiently to allow it to continue functioning profitably over time.

Economic growth can take place also at the expense of other issues, such as natural resources, ecosystem services, or welfare if the total capital stock is maintained through time (Turner 1993). Weak sustainability is related to the precautionary principle or safe minimum standards. According to this principle, some natural capital is critical, that is, nonsubstitutable (Turner 1993). It limits set on natural capital usage and sees that economic sustainability requires the maintenance of natural capital, which is necessary in order to avoid economic degrowth (Bartelmus 2003). Thus, the economic capital produced by current generations must compensate the loss of natural capital for future generations by investment in renewable resource substitutes of equal value (Fiorino 2011; Gibbs et al. 1998). According to Hediger (2000), economic capital is defined as a generalization of the production capacity of certain economies; it is the potential for generation of income. It consists of produced capital, nonmaterial assets, and natural resources, which are harvested or developed for the use in the economic transformation process, and it also determines the macroeconomic performance (Hediger 2000).

Some researchers have expressed concern about economic action based on the ideas of very weak and weak sustainability. For example, Foladori (2005) wrote that if economic sustainability is understood in terms of efficiency or growth where only technical changes are considered, such a narrow view bears the risk that outcomes and policy recommendations lead to unsustainable lifestyle, production, and consumption patterns.

The outside or stakeholder view stresses sustainability in terms of nondecreasing natural capital representing thus “strong sustainability” position. According to Zadek and Tuppen (2000), economic sustainability means that

economic systems support sustainable social and environmental outcomes, where economics is the process through which humans create social and environmental outcomes. Also Doane and MacGillivray (2001) support this idea, and Van der Vorst et al. (1999) stress that economic sustainability requires environmental and social sustainability. The practical, scientifically valid, and ethical goal of business is to systematically and proactively maintain “the possibility that human and other life will flourish on the earth forever” (Ehrenfeld 2000, p. 36). The idea that sustainability is the equivalent of the ability of providing to the following generations the same level of non-renewable resources and/or quality of environment than enjoyed by the present generation is emphasized (Cabeza Gutés 1996).

Economic sustainability is thus understood to be economic development that cannot cause a loss of ecological or social sustainability. An increase in economic capital cannot be at the expense of a reduction in natural capital or social capital. Economic sustainability is interpreted as the allocation of resources over time (Markulev and Long 2013) and seen as a matter of intergenerational equity (Anand and Sen 2000). The concept implies a production system that offers the highest level of well-being for current and future generations (Markulev and Long 2013) and satisfies present consumption levels without compromising future needs (Basiago 1999). It means that the net effective capital stock (the contribution of knowledge and adjusts for depreciation) must grow at the rate of population growth (Markulev and Long 2013).

As it has been described above, there are various definitions and views about economic sustainability. Which of these ones should prevail is a question of values among individuals and societies, and full agreement has yet to be reached.

Chen et al. (2008) are worried about that many organizations focus their attention on economic sustainability alone when improving their profitability, competitiveness, and market share. They argue that this single-minded focus on economic sustainability can only lead to short-term success.

Gupta (2014) has stated that economic sustainability requires that the economy is growing in a sustainable way and that the benefits of economic growth are equally distributed over the long term. Economic sustainability is inextricably linked to both environmental and social sustainability. This is demonstrated by the limits to growth. Already in 1972, Meadows et al. posit that economies will not be sustainable if natural resources are used beyond the limits and if society continues to depend on phenomena that drove growth in the past. Human development is in relation to global carrying capacity, and when human development reaches the Earth's carrying capacity, exhausted natural resources cannot be changed either with natural or produced resources; in other words there is an absolute natural restraint of human development (Holden et al. 2014). Thus, organizations need to satisfy the sustainability of environmental, social, and economic capitals simultaneously in order to succeed in the long run (Dyllick and Hockerts 2002).

Summary

According to the term triple bottom line, sustainability depends on the balance between the three pillars: environmental, social, and economic. Environmental sustainability focuses on maintaining the quality of the environment, social sustainability strives, e.g., to ensure human rights and equality, and economic sustainability is important when maintaining the natural, social, and human capital required for income and living standards. Complete sustainable development is not easy to achieve, while a certain pillar of sustainable development becomes sustainable, others can become unsustainable, especially with regard to environmental sustainability, on which the overall capacity of development depends.

The definitions of economic sustainability are various depending on the approach and sustainability label used. In the inside approach, economic sustainability is interpreted either from the perspectives of very weak or weak

sustainability. From the perspective of very weak sustainability, "...economic sustainability is the ability of an economy to support a defined level of economic production indefinitely." The core idea is how organizations stay in business. Weak sustainability links economic sustainability with productive efficiency and economic growth. Thus economic sustainability means the use of various strategies for employing existing resources optimally so that that a responsible and beneficial balance can be achieved over the longer term. In the outside or stakeholder view, "strong sustainability" position is emphasized. According to it, economic sustainability means that economic systems support sustainable social and environmental outcomes, where economics is the process through which humans create social and environmental outcomes.

On the background of various definitions and views about economic sustainability are different values among individuals and societies. Full agreement has yet to be reached.

Cross-References

- [Economic Sustainability and Development](#)
- [Sustainable Development](#)

References

- Anand, S., & Sen, A. (2000). Human development and economic sustainability. *World Development*, 28(12), 2029–2049. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.699.3587&rep=rep1&type=pdf>. Accessed 11 Dec 2018.
- Bartelmus, P. (2003). Dematerialization and capital maintenance: Two sides of the sustainability coin. *Ecological Economics*, 46(1), 61–81.
- Basiago, A. D. (1999). Economic, social, and environmental sustainability in development theory and urban planning practice. *The Environmentalist*, 19, 145–161.
- BusinessDictionary. (2018). Economic sustainability. <http://www.businessdictionary.com/definition/economic-sustainability.html>. Accessed 9 Dec 2018.
- Cabeza Gútes, M. (1996). The concept of weak sustainability. *Ecological Economics*, 17, 147–156.
- Chen, A. J. W., Boudreau, M.-C., & Watson, R. T. (2008). Information systems and ecological sustainability.

- Journal of Systems and Information Technology*, 10(3), 186–201. <https://doi.org/10.1108/13287260810916907>.
- Davies, G. R. (2013). Appraising weak and strong Sustainability: Searching for a middle ground. *Consilience: The Journal of Sustainable Development*, 10(1), 111–124.
- Dekker, P., & Uslaner, E. M. (2001). Introduction. In E. M. Uslaner (Ed.), *Social capital and participation in everyday life* (pp. 1–8). London: Routledge.
- Doane, D., & MacGillivray, A. (2001). Economic Sustainability – The business of staying in business, r&dreport. The SIGMA Project. http://www.projectsigma.co.uk/RnDStreams/RD_economic_sustain.pdf. Accessed 13 Dec 2018.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and Environment*, 11, 130–141. <https://doi.org/10.1002/bse.323>.
- Economic Sustainability. (2018). Definition of economic sustainability. <http://www.thwink.org/sustain/glossary/EconomicSustainability.htm>. Accessed 13 Dec 2018.
- Economic Sustainability – Sustainability. (2018). University of Mary Washington. <https://sustainability.umw.edu/areas-of-sustainability/economic-sustainability/>. Accessed 13 Dec 2018.
- Ehrenfeld, J. R. (2000). Colorless green ideas sleep furiously: Is the emergence of “sustainable” practices meaningful? *Reflections: The SoL Journal on Knowledge, Learning, and Change*, 1(4), 34–47. <https://doi.org/10.1162/152417300569935>.
- Elkington, J. (1994). Towards the sustainable corporation: Win-Win-Win business strategies for sustainable development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>.
- Elkington, J. (1997). *Cannibals with forks – Triple bottom line of 21st century business*. Stoney Creek: New Society Publishers.
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st century business. *Environmental Quality Management*, 6, 37–51.
- Fiorino, D. J. (2011). Explaining national environmental performance: Approaches, evidence, and implications. *Policy Sciences*, 44(4), 367–389.
- Foladori, G. (2005). Advances and limits of social sustainability as an evolving concept. *Canadian Journal of Development Studies*, XXVI(3), 501–510. <https://doi.org/10.1080/02255189.2005.9669070>.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, September 13. <http://umich.edu/~thecore/doc/Friedman.pdf>. Accessed 13 Dec 2018.
- Gibbs, D. C., Longhurst, J., & Braithwaite, C. (1998). ‘Struggling with sustainability’: Weak and strong interpretations of sustainable development within local authority policy. *Environment and Planning A*, 30, 135–1365.
- Goodland, R. (1995). The concept of environmental Sustainability. *Annual Review of Ecology and Systematics*, 26, 1–24.
- Gupta, N. (2014). Economics of sustainable development. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 19(12), Ver. II, 29–34. e-ISSN: 2279-0837, p-ISSN: 2279-0845.
- Hediger, W. (2000). Sustainable development and social welfare. *Ecological Economics*, 32, 481–492.
- Hicks, J. R. (1946). *Value and capital* (2nd ed.). Oxford: Clarendon Press.
- Holden, E., Linnerud, K., & Banister, D. (2014). Sustainable development: Our Common Future revisited. *Global Environmental Change*, 26, 130–139. <https://doi.org/10.1016/j.gloenvcha.2014.04.006>. Accessed 14 Dec 2018.
- Investopedia. (2018). Social capital. <https://www.investopedia.com/terms/s/socialcapital.asp>. Accessed 13 Dec 2018.
- Klarin, T. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics & Business*, 21(1), 67–94. <https://doi.org/10.2478/zireb-2018-0005>. ISSN 1331-5609; UDC: 33+65.
- Markulev, A., & Long, A. (2013). *On sustainability: An economic approach* (Staff Research Note). Canberra: Productivity Commission. <https://www.pc.gov.au/research/supporting/sustainability>. Accessed 11 Dec 2018. ISBN 978-1-74037-439-2.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W., III. (1972). *The limits of growth. A report for the Club of Rome's Project on the Predicament of Mankind*. New York: Universe Books. <http://www.donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf>. Accessed 13 Dec 2018.
- O’Riordan, T. (1996). Environmentalism on the move. In I. Douglas, R. Huggett, & M. Robinson (Eds.), *Companion encyclopaedia of geography* (pp. 449–476). London: Routledge. <http://www.univpgri-palembang.ac.id/perpus-fkip/Perpustakaan/East%20Phyllosopy/Economic%20Geography/COMPANION%20ENCYCLOPEDIA%20OF%20GEOGRAPHY.pdf>. Accessed 28 Nov 2018.
- Ross, S. (2015). What is human capital and how is it used? <https://www.investopedia.com/ask/answers/032715/what-human-capital-and-how-it-used.asp>. Accessed 13 Dec 2018.
- Spreckley, F. (1981). *Social audit: A management tool for co-operative working*. Leeds: Beechwood College. <http://www.setoolbelt.org/resources/1929>. Accessed 5 Dec 2018.
- The Organisation for Economic Co-operation and Development (OECD). (2016). What is social capital? Insights: Human Capital. <https://www.oecd.org/insights/37966934.pdf>. Accessed 13 Dec 2018.
- The Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA). (1995). *Tomorrow’s Company. RSA Inquiry, Tomorrow’s Company: The role of*

- business in a changing world. <https://tomorrowcompany.com/wp-content/uploads/2016/05/RSA-Inquiry-Tomorrow-Company-1995.compressed.pdf>. Accessed 13 Dec 2018.
- Turner, R. K. (1993). Sustainability: Principles and practice. In R. K. Turner (Ed.), *Sustainable environmental economics and management: Principles and practice* (pp. 3–36). London: Belhaven Press.
- Uslaner, E. M. (2001). Volunteering and social capital: How trust and religion shape civic participation in the United States. In E. M. Uslaner (Ed.), *Social capital and participation in everyday life* (pp. 104–117). London: Routledge.
- Van der Vorst, R., Grafe-Buckens, A., & Sheate, W. R. (1999). A systemic framework for environmental decision-making. *Journal of Environmental Assessment and Policy Management*, 1(1), 1–26.
- Williams, C. C., & Millington, A. C. (2004). The diverse and contested meanings of sustainable development. *The Geographical Journal*, 170(2), 99–104.
- Zadek, S., & Tuppen, C. (2000). *Adding values. The economics of sustainable business*. London: Corporate Reputation and Social Policy Unit, British Telecommunications.

Economic Sustainability and Development

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Synonyms

[Economic development](#); [Economic growth](#); [Economic sustainability](#); [SDGs](#); [Sustainability](#)

Definition

There is no consensus and institutional aspects on the definition, in general, economic sustainability indicates to implications or policies that support long-term stability in economic growth without negatively effecting social, environmental, economic, and institutional aspects. Well-known definition for the concept of economic sustainability

is provided by Solow (1974, 1991). According to him, economic sustainability refers distributional equity of capital for well-being to satisfy ourselves and future generations (Solow, 1974, 1991). Solow emphasizes that economic sustainability is a kind of moral obligation not only for future generations but also for those whose living standards are relatively low. In his famous paper “Sustainability: An economist’s perspective” (Solow, 1991), he emphasizes that:

... Sustainability as a moral obligation is a general obligation not a specific one. It is not an obligation to pre-serve this or preserve that. It is an obligation, if you want to make sense out of it, to preserve the capacity to be well of, to be as well off as we . . .

On the other hand, Milton Friedman as a founder of monetarist economic thought defines sustainability as “the business of the business is business” (Doane & Macgillivray, 2001).

Solow’s view can be explained as to save today’s economic opportunities (capital stock) to intergenerational well-being equity or for the future. So, it is not necessarily to increase capital stock. (Anand & Sen, 2000). Similar definition is proposed by Repetto (1985): The term economic sustainability is based on the living standards which suggest that because of resource scarcity, the economic system should be managed to maintain the resources for future generations that will be able to live in more equal living standards. Thus, for long-term economic sustainability both resilience and efficiency generally mean greater economies of scale are necessary (Goerner et al., 2009).

Introduction

The term sustainability became a widely used concept after the declaration of Brundtland Commission Report titled “Our Common Future” by WCED (, 1987) which defined it as “development that meets the needs of the present without compromising the ability of future generations to meet their own need.” (Anand & Sen, 2000).

Moreover, there are four pillars of sustainability: environmental, social, human, and economic.

Economic sustainability has four dimensions: economic, social, environmental, and institutional. Each of the dimensions is complex and interrelated. Thus, the term sustainability indicates to maintain the ability, capacity, and survival of each subtitle or dimension of sustainability (Spangenberg, 2005). So the main goal of the economic sustainability is to develop long-run sustainable values for all these dimensions. In more detail, environmental sustainability indicates physical environmental and natural resources and any implications to return to natural resources (natural capital) including recycling, renewable energy, drinking water, soil, fisheries, forests, sanitation (also known as ecological footprint), etc. Most of the debate on economic sustainability is based on environmental issues. Second, institutional sustainability refers to the implications or policies of particular institution regarding any institutional context of a particular institution including organizational structure, facilities, functions, etc. Third, social sustainability refers any policies or implications to improve or maintain social and human well-being supporting the ability of future generations (Spangenberg, 2005). If the forecasting about economic sustainability is reliable, economy is able to achieve long-run sustainability with all dimensions at micro and macro level (Doane & Macgillivray, 2001). So the main goal of economic sustainability is to maintain all the available resources in the long run.

The United Nations (UN) Sustainable Development Goals (SDGs) are a crucial tool toward economic sustainability. The seventeen development goals under the SDGs declared to reduce economic imbalances. In this context, these goals focus on the priorities which reduce inefficiency, effectiveness, uncertainty, and risk to maintain the resources in the long run. According to the SDGs, the priorities are reducing income inequality, poverty, unemployment, and wasting scarce resources by considering environmental elements (Niekerk, 2020).

Theoretical Debate

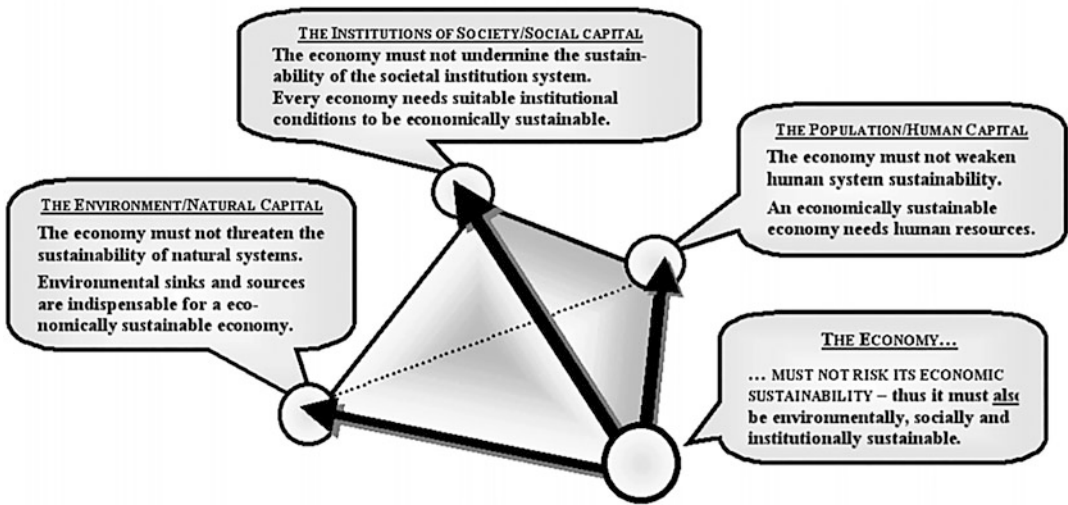
From Adam Smith, interest in economic sustainability is not the new debate in science economics. The main question of science economics is mainly about how we allocate scarce resource or how to achieve optimal or efficiency level of using these resources for human well-being. In the light of this framework, Classical economic thought assumed that supply and demand equation gives this balance (Doane & Macgillivray, 2001).

As of today, sustainable growth rate implicitly refers to the economic sustainability by economists as well as policy makers. In the economic theory, sustainability is mainly discussed as a part of economic development. Under this framework, much of the economic debate refers that the criteria of economic sustainability are based on innovativeness, and competitiveness (Rennings, 2000). On the other hand, the traditional criteria components of aggregate demand such as consumption and investment play a minor role in current literature (Spangenberg, 2005).

The below figure explains the economic sustainability interlinkages. According to the figure, economic sustainability analysis is set of the institutions of society as a source of social capital, the population as a source of human capital and the environment as a natural capital. Thus, the capital is the main determinant of economic sustainability and economic sustainability interrelated with social, environmental, and institutional sustainability (Spangenberg, 2005). In more detail, environmental sustainability refers any applications to sustain natural resources such as renewable energy or sustainability in human capital refers any applications to adequate education system. Additionally, institutional dimension indicates the reliability of legal and administrative framework (Fig. 1).

Summary

Economic sustainability refers applications and policies which support long-run economic growth



Economic Sustainability and Development, Fig. 1 The economic sustainability interlinkages. (Source: Spangenberg, 2005)

and development without negatively impacting the scarce resources. On the other hand, economic sustainability implicitly refers that sustainable steady GDP growth rate is around 2%. In the macroeconomic debate, the main criteria for economic sustainability are based on the “balance” like international trade balance, stability in overall price level, more equal income distribution, and sustainable debt levels. Thus, sustainable development and steady growth rate are usually implicitly assumed to be part of the concept of economic sustainability.

Cross-References

- [Economic Development](#)
- [Economic Growth](#)
- [Human Development Index \(HDI\)](#)
- [Index of Sustainable Economic Welfare](#)
- [Social Sustainability](#)
- [Sustainability Measurement](#)
- [Sustainability](#)
- [Sustainable Development Goals \(SDGs\)](#)
- [Sustainable Development](#)

References

- Anand, S., & Sen, A. (2000). Human development and economic sustainability. *World Development*, 28(12), 2029–2049.
- Doane, D., & MacGillivray, A. (2001). *Economic sustainability the business of staying in business*. The Sigma Project R&D Report. New Economics Foundation.
- Goerner, S. J., Lietaer, B., & Ulanowicz, R. E. (2009). Quantifying economic sustainability: Implications for free-enterprise theory, policy and practice. *Ecological Economics*, 69, 76–81.
- Niekerk, A. J. V. (2020). Inclusive economic sustainability: SDGs and global inequality. *Scientific Research on Sustainable Development Goals*, 12(3), 5427.
- Rennings, K. (2000). Redefining innovation ecoinnovation research and the contribution from ecological economics. *Ecological Economics*, 32, 319–332.
- Repetto, R. (1985). *The global possible: Resources, development, and the new century*. New Haven, CT: Yale University Press.
- Solow, R. M. (1974). Intergenerational equity and exhaustible resources. *Review of Economic Studies*, 41(5), 29–45.
- Solow, R. M. (1991). *Sustainability: An economist's perspective*. Woods Hole Oceanographic Institution: The Eighteenth J. Seward Johnson Lecture. Woods Hole, MA.
- Spangenberg, J. H. (2005). Economic sustainability of the economy: Concepts and indicators.

International Journal of Sustainable Development, 8(1/2), 47–64.

World Commission on Environment and Development (WCED). (1987). *The Brundtland Report: Our common future* New York. Oxford University Press.

Economic, Social, and Environmental Integration

- [Triple Bottom Line](#)

Economic, Social, and Environmental Performance

- [Global Performance](#)

Economicità

- [Durable Survival of the Organization](#)

Economy of Nature

- [Ecology and Ecosystem: Sustainability](#)

Economy Serving Life

- [Anthropological Sustainability](#)
- [Civil Economy](#)
- [Humanistic Management and Entrepreneurship](#)

Ecosphere

- [Ecology and Ecosystem](#)

Eco-sustainability Innovations Performance Measurement

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Synonyms

[Eco-friendly innovations performance measurement](#); [Eco-innovations performance measurement](#); [Environmental innovations performance measurement](#); [Green innovations performance measurement](#); [Sustainable value measurement](#)

Description

An abbreviated form of ecological sustainability is eco-sustainability. It refers to ecological contributions to sustainable development made highly efficient and effective. The term “efficient” refers to the use of as few natural resources as possible in any activity, and “effective” means using the right resources or conserving them to encourage more sustainable behavior. Innovation may refer to each phase, input, process, and output. Innovation also relates to the degree and extent of a novel product, service, procedure, or process that is unknown to the organizational form ranging from a single business organization to the whole industry. Innovation should create some type of value (typically financial) and build competitiveness. Eco-sustainability innovations result in the more efficient distribution of natural resources or their complete conservation within a social activity or business operation. Solar technologies, information technology, water-filtering systems, recycling initiatives, and other technologies leading to lower amounts of natural resources consumed or their complete replacement are all examples of eco-sustainability innovations. In short, eco-

sustainability innovations capture any sustainable positive environmental effect irrespective of its origin, size, and form. So, it relates to both technological and nontechnological innovations.

The second portion of the definition covers the field of performance measurement. In general, performance measurement is a set of methods for assessing qualitative and quantitative aspects of present business activities or end products, and their environmental effects. It is a complete measurement of any form of output/outcome, which generates reliable data on the effectiveness and efficiency of business activities. In traditional business management, performance measurement is typically a component of the company's control and analysis process to guarantee that the organization achieves its maximum financial gain. In distinction, sustainability management has to do with evaluating the company's success from a balanced economic, environmental, and social perspective. The meaning of performance is incorporated into the idea of environmental sustainability. The specific way with which a business uses natural resources determines whether it follows the sustainability principle. This notion defines whether something contributes to sustainable development or not.

The Importance of Sustainable Performance

Different stakeholders are constantly searching for innovative ways to reconcile the goals of economic growth, social justice, and environmental protection. Due to the negative impact that humans have on the environment, a transition is required to a zero or positive impact on the environment. Over the previous two decades, the environmental factors have undergone a dramatic and dynamic transition in reach, scope, depth, and orientation, so the term "sustainability" has gained widespread usage in everyday speech. Environmental issues used to be seen as a constraint to business growth; now they are seen as one of the core drivers of economic development

(especially from the EU perspective). In every society, humans face a broad range of challenges that used to be constraints, such as environmental protection, hunger, poverty, uneven resource distribution, biodiversity, gender equality, equal opportunity, and renewable energy, among many more. These sustainability challenges have formed a common framework and need for rethinking our civilization in future. Sustainability has become a common term in business, politics, technology, and culture because of the range of societal and environmental issues addressed by the sustainability platform. This broad framework encourages diverse types of sustainability innovation, performance, and measurement.

There is no doubt that innovations in technology and its applications have aided the progress of humanity, but it also must be acknowledged that civilization came to the point where it has to examine carefully if some sorts of technology are harmful to the Planet. As Watts (1999) points out, if technology only relies on linear thinking, it will harm the environment. However, modern technologies enable the necessary changes by providing new holistic solutions.

Eco-sustainability innovation is a dynamic concept that is not only important for our present convenience and for making our lives easier but also necessary for our long-term survival. Its role in society has only increased and gained in importance as anthropogenic causes of environmental degradation have increased (Azevedo, Brandenburg, Carvalho, & Cruz-Machado, 2014). Natural, "green," or ecological components are the source and real provider of any form of value generated or introduced in modern society. Human insights and emotions need resources from nature (plants, vegetables, fruits, for food). Extraction of natural resources is an inherent part of every creature's everyday existence. The issue is how to make the most of this extraction long term. The closer people get to nature, the more they are conscious of the natural constraints of their consumption. They understand that if they consume all the accessible food, wood, or water for 1 year, they will not be able to do so again in

subsequent years and beyond. The use of natural resources becomes more complex and apparent as production methods are improved. Technology and its advancements play an important role in organized manufacturing. Because they increase resource extraction efficiency, innovations are always useful.

Defining eco-innovation is not an easy task. As Colombo, Pansera, and Owen (2019) concluded, this is not a stable, monolithic concept but interpreted flexibly and subject to multiple, often contested, framings, and definitions. Fussler and James (1996) define eco-innovation as “the process of developing new products, processes or services which provide customer and business value but significantly decrease environmental impact.” Andersen (2002) defines environmental innovations as “innovations which are able to attract green rents on the market.” Driessen and Hillebrand (2002) state that green innovation “does not have to be developed with the goal of reducing the environmental burden,” but it “does, however, yield significant environmental benefits.” According to Kemp and Pearson (2007), eco-innovation is “the production, assimilation or exploitation of a product, production process, service or management or business method that is novel to the organization (developing or adopting it) and which results, throughout its life cycle, in a reduction of environmental risk, pollution and other negative impacts of resources use (including energy use) compared to relevant alternatives”. OECD (2008) defined eco-innovation as “the creation of new, or significantly improved, products (goods and services), processes, marketing methods, organizational structures, and institutional arrangements which, with or without intent, lead to environmental improvements compared to relevant alternatives.” Oltra and Saint Jean (2009) follow OECD’s, and Kemp and Pearson’s, definition and define environmental innovation as “innovations that consist of new or modified processes, practices, systems and products which benefit the environment and so contribute to environmental sustainability.” Arundel and Kemp (2009) partly adopt OECD’s definition and emphasize that eco-innovations “can be

motivated by economic or environmental considerations.” Andresen (2010) concludes that “eco-innovation concept unifies environmental and economic goals in emphasizing green competitiveness as a core driver for environmental improvement; in relation to policy, it seeks to forward greater synergy between environmental and innovation policy.” These examples illustrate the wide variety of notations, and the terms eco-innovation, environmental innovation, and green innovation are used interchangeably, and the perception of the related field has broadened from a focus on “greened” products or processes to the coherence of environmental aspects of physical items, virtual structures, and organizational procedures (Azevedo et al., 2014).

As Heidenreich, Spieth, and Petschnig (2017) stated, although the benefits of eco-friendly innovations for reducing emissions from industry and transportation are well known, companies sometimes invest heavily in such innovations while few customers are willing to adopt them (e.g., alternative fuel vehicles). The goal is to figure out whether something is sustainable and, if so, how to measure its contribution. Straková (2015) notes that the way a modern company handles (and dedicates to) its financial performance is almost identical to the way it handles its sustainability performance.

Innovations and Eco-sustainability Performance Measurement

At the corporate level, environmental sustainability must be assessed as accurately as possible and, if possible, quantified in monetary terms. The following are examples of quantifiable environmental effects: cubic meters of water or wood used, kWh of electrical energy consumed, kg or ton of paper or plastics utilized, and metric tons of greenhouse gases emitted.

There is a dispute over whether a firm should create such a large amount of value per environmental effect or if the impact decreases in order to be eliminated (as the value rises). It became an issue of maximizing production and minimizing

natural resources. Only drastic ecologically aware innovations may enable long-term changes in the ratio of generated value to ecological effect. It is important to note that Colombo et al. (2019) came to conclusion that “in the EU programmes has mostly become constructed around the notion of eco-efficiency” completely ignoring its complex and dialectic nature. In that sense, the most suitable approach is that of Figge and Hahn (2004), who address this issue with two variables: eco-efficiency and eco-effectiveness. Figge and Hahn addressed the issue of maximization or minimization by understanding eco-efficiency as a ratio of value created per environmental impact added (2004: 175). In short, they sought to maximize or minimize the process.

Callens and Tyteca (1999) added the notion of efficiency to their basic principles, which emphasized a metric of sustainability performance that reflected how much environmental resources were compared to the company’s economic activities. The study of Figge and Hahn demonstrated the significance of innovation in promoting sustainability, while their research resulted in a unique sustainability indicator called Sustainable Value Added (SVA). SVA is the amount of value added by companies that use natural resources more efficiently than other companies in the benchmark, allowing them to create more SVA. This affected sustainability assessment research, which had previously focused on businesses that invented ways to be more efficient than their competition in utilizing or conserving natural resources. The measurement of sustainability performance is always linked to innovations in the field of ecology or the environment protection, i.e., the so-called “green innovations.” Green innovations that make a sustainable contribution are distinguished in numerous new economic terms and business platforms such as eco-preneurs (Pastakia, 1998), eco-management (Vibert, 2004), eco-product, or/and eco-innovations. According to Birchall, Chanaron, Tovstiga, and Hillenbrand (2011), there is a measurement crisis of innovation performance as there are so many different models and instruments attempting to capture too many things,

some of which are not even important. It is important to add that some of these innovations cannot be quantified. In addition to that, we should not forget the main reason for measurement is to raise efficiency and effectiveness of decision-making process.

Green innovations also require organizational renewal to enable companies in translating sustainability goals into business strategies and operations (Taneja, Pryor, Gibson, & Toombs, 2012). Eco-innovation is the only effective way for companies to take serious steps to reduce their negative impact on the environment. Eco-innovation is made up of two elements: eco-product innovation and eco-process innovation (Sezen & Cankaya, 2013). Innovation as a product or a process for company growth is unquestionable; the question then becomes what sort of innovation is appropriate to help businesses achieve corporate sustainability objectives. According to García-Granero, Piedra-Muñoz, and Galdeano-Gómez (2018), the top 30 company performance indicators cited by academics are divided into four distinctive categories: product, process, organizational, and marketing. According to a meta-analysis conducted by Kuo and Smith (2018), propelling eco-innovation via R&D is the ideal approach for businesses when contributing to sustainability. This, in turn, demonstrates that no other initiative, not even the development of new technologies and materials, processes, and their continual transformation, can make a significantly greater impact.

According to Roscoe, Cousins, and Lamming (2016), the sustainability component of any innovation is provided by supply networks in their three-stage typology for eco-innovation growth. In this situation, the firm benefits from developing strong relationships with important suppliers because their R&D spills over to the company throughout the new product development process. In this scenario, small suppliers may provide innovative solutions. By this example, developing connections with tiny vendors might lead to significant ecological progress. A clear and measurable aim must first be decided to measure anything. There are several goals connected with

various sustainability concerns when it comes to long-term viability. A specific list of critical sustainability indicators or variables must be established for each firm when measuring environmental sustainability. These indicators must reflect the main aspects of the company's sustainability in relation to its core activities. For example, the following quantities can all be determined in a manufacturing firm: water consumed, electricity consumed, paper consumed, and plastics consumed, and related to that: recycled water, electricity from renewable resources, recycled paper, and recycled plastics.

For each energy variable, the proportion of fossil or renewable energy may be determined. This way, there are already eight variables that can be measured before and after the introduction of innovations that are expected to lead to positive eco-sustainability outcomes. The change in these variables' values is equivalent to the new value generated by the innovative technology in a sustainable manner (Fig. 1). The term "eco-sustainable" is then used to describe innovation.

The environmental impact of each innovation is determined by a variety of combinations. The sustainability dimensions for a specific invention vary materials, design, energy, user experience, maintenance, health, lifetime, and recycling period. The findings of Carrillo-Hermosilla, Del

Río, and Könnölä's (2010) study suggests that the capacity of eco-innovations to create new business possibilities and encourage sustainable societal change is dependent on the integration of sustainability dimensions into the innovation process.

One thing is certain: A wide range of models for assessing performance results from the diversity of solutions in environmental sustainability. An innovation, for example, might only refer to the ecological optimization of water usage in a production cycle. Water consumed, the water discharged, water reused or recycled, and water price/cost are some examples of performance indicators. In complex business processes, the evaluation of eco-sustainability innovations becomes more difficult. As a result, different measurement initiatives, such as the Global Reporting Initiative, have taken the lead in addressing this issue by attempting to establish a wide range of universal sustainability performance metrics across various industries and procedures. Sustainability management and performance management are two distinct but related concepts. The integration of financial and nonfinancial measures creates the incentive for organizations to focus on the holistic approach that considers all pertinent organizational variables, such as quality, customer experience, market access, supply chain operation

	Resource consumption				
Innovation effect	Electric energy (kWh)	Used water in cubic meters (m ³)	Paper (m ³)	Plastics (m ³)	Units of production
<i>Before</i>	1.200	50	1,2	3,5	170
<i>After</i>	970	35	0,9	2,9	230
	Sustainability ratios= Resource/unit of production				
<i>Before</i>	7,059	0,294	0,007	0,021	
<i>After</i>	4,217	0,152	0,004	0,012	
Difference between <i>Before</i> and <i>After</i> Sustainability ratios represents the area of sustainable performance caused by eco-innovations					

Eco-sustainability Innovations Performance Measurement, Fig. 1 The sustainability performance caused by eco-innovations

efficiency (such as product innovation), and business competitiveness, among others. García-Quevedo, Kesidou, and Martínez-Ros (2020) confirm the significance of nontechnical types of eco-innovation, such as environmental management systems (EMS), noting the cross-sectoral implementation of ISO 14001 in relation to energy consumption and pollution intensity as an example.

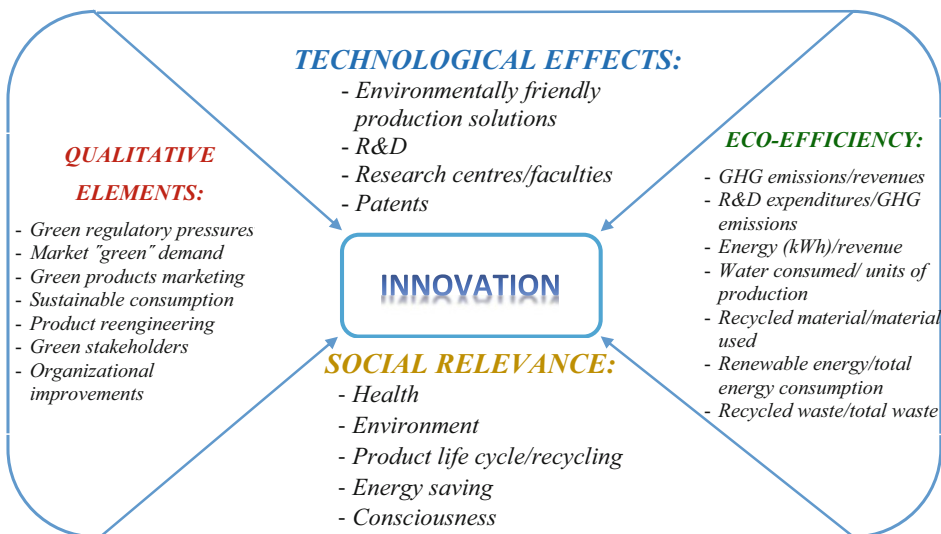
Based on all these characteristics of sustainability, it can be concluded that the measurement of sustainability performance can be represented as a creative grid of sustainability elements specific to each company or organization (Fig. 2).

The multidimensional approach outlined above is critical to understanding how innovative, long-term success is achieved through multidimensional connections. Every study and meta-analysis of business ecology innovations addresses and validates the multidimensional perspective described above (Karakaya, Hidalgo, & Nuur, 2014). There is a basic principle, and that is to evaluate if consumer-friendly eco-sustainability solutions are effective mechanisms for mitigating the harmful effects of business on the environment. This can only be

achieved by considering specific characteristics of every company, such as its organizational structure, culture, processes, environmental impact, employee characteristics, market share and focus, specific product development aspects, types of stakeholders, etc. Each company creates its own performance grid when it comes to eco-sustainability innovations.

Other Business Issues on Eco-sustainability Innovations Performance Measurement

Although many firms have a clear mission, they do not always apply it in their everyday operations. This can involve developing environmentally friendly products and services that address the needs of customers rather than only meeting demand to generate value. Not only business innovations should improve the value of the company in financial terms, but also this must be done at all levels and contents of the value creation process. This places ecological operational performance on a higher level in sustainability management. The eco-efficient content of a firm must



Eco-sustainability Innovations Performance Measurement, Fig. 2 Eco-sustainability Innovations Performance Measurement Grid

capture both financial, environmental, and social aspects of sustainable value. Using different metrics, such as the Innovation Patent Index (IPI), companies can assess innovation and innovation performance (Ponta, Puliga, & Manzini, 2021). The IPI is used to evaluate different aspects of corporate innovation and its application. A high IPI indicates that a firm's innovation may result in higher eco-sustainability performance within a short time abroad in different industries at the international level.

Another consequence is the use of green manufacturing/production. Even environmentally friendly companies employ ecologically beneficial technology to boost production efficiency. It is also worth noting that environmental sustainability is a continuing process that always results in an increase in organizational or business efficiency. The continuity of the environmentally sustainable innovation process is driven by the demand for high-quality products that have little or no environmental impact. Green production is always intended to reduce negative environmental effects, as it is in its nature. Green advances may help restore damaged natural resources for some types of manufacturing. The greatest illustration of this is a technology that captures carbon dioxide in a manufacturing process and converts it back into oxygen or the production of useful liquids like ethanol, or nanomaterials that can be utilized in the circular economy.

Summary

This entry presents the definitional context and sustainability relevance of innovations that improve environmental performance. There is general belief among various stakeholders that the introduction of greener technologies and more efficient and effective environmental management could help reduce the costs of environmental protection and contribute to economic prosperity. The principle of sustainable development requires eco-sustainability performance in

all processes and organizational forms. Eco-innovations improve sustainable performance in terms of efficiency and effectiveness, which can be measured using adaptable eco-indicators for individual industries. Eco-innovations should be evaluated as any technological or process improvement that ensures a more sustainable impact. Measuring the performance of environmental sustainability is a significant challenge for CSR. To measure the performance of eco-sustainable innovations, a variety of CSR indicators need to be defined for a given company or organization. Performance measurement in this sense is conducted as a set of indicators that are considered in managing the implementation and outcomes of environmentally sustainable innovations. Performance measurement of eco-sustainable innovations is primarily a combination of their technological impacts, social aspects, qualitative elements, and eco-efficiency quantification. The business outcomes of eco-innovations within industries can only be evaluated using a multidimensional sustainable performance framework, which is presented in this entry.

Cross-References

- [Corporate Sustainability Performance](#)
- [Eco-efficiency](#)
- [Sustainable Innovation](#)
- [Sustainable and Innovation Process](#)
- [Sustainable Performance](#)

References

- Andersen, M. M. (2002). Organising interfirm learning – As the market begins to turn green. In T. J. N. M. de Bruijn & A. Tukker (Eds.), *Partnership and leadership– Building alliances for a sustainable future* (pp. 103–119). Dordrecht: Kluwer Academic Publishers.
- Andersen, M. M. (2010). *Eco-innovation in the globalizing learning economy: The greening of National Innovation Systems, 8th international conference Globelics 2010*. <https://backend.orbit.dtu.dk/ws/portalfiles/portal/5871565/217+MajMunchAndersen%5B1%5D.pdf>. Accessed 29 Mar 2022.

- Arundel, A., & Kemp, R. (2009). *Measuring eco-innovation* (Working paper series: UNU-MERIT #2009-017). Maastricht: United Nations University. <https://core.ac.uk/download/pdf/231324293.pdf>. Accessed 29 Mar 2022.
- Azevedo, S. G., Brandenburg, M., Carvalho, H., & Cruz-Machado, V. (Eds.). (2014). *Eco-innovation and the development of business models - lessons from experience and new Frontiers in theory and practice*. Cham etc.: Springer.
- Birchall, D. W., Chanaron, J., Tovstiga, G., & Hillenbrand, C. (2011). Innovation performance measurement: Current practices, issues and management challenges. *International Journal of Technology Management*, 56(1), 1–20. <https://doi.org/10.1504/IJTM.2011.042492>.
- Callens, I., & Tyteca, D. (1999). Towards indicators of sustainable development for firms: A productive efficiency perspective. *Ecological Economics*, 28(1), 41–53. [https://doi.org/10.1016/S0921-8009\(98\)00035-4](https://doi.org/10.1016/S0921-8009(98)00035-4).
- Carrillo-Hermosilla, J., Del Río, P., & Könnölä, T. (2010). Diversity of eco-innovations: Reflections from selected case studies. *Journal of Cleaner Production*, 18(10–11), 1073–1083. <https://doi.org/10.1016/j.jclepro.2010.02.014>.
- Colombo, L., Pansera, M., & Owen, R. (2019). The discourse of eco-innovation in the European Union: An analysis of the eco-innovation action plan and horizon 2020. *Journal of Cleaner Production*, 214, 653–665. <https://doi.org/10.1016/j.jclepro.2018.12.150>.
- Driessen, P., & Hillebrand, B. (2002). Adoption and diffusion of green innovations. In W. Nelissen & G. Bartels (Eds.), *Marketing for sustainability: Towards transactional policy-making* (pp. 343–356). Amsterdam: IOS Press.
- Figge, F., & Hahn, T. (2004). Sustainable value added: Measuring corporate contributions to sustainability beyond eco-efficiency. *Ecological Economics*, 48(2), 173–187. <https://doi.org/10.1016/j.ecolecon.2003.08.005>.
- Fussler, C., & James, P. (1996). *Eco-innovation: A breakthrough discipline for innovation and sustainability*. London and Washington, DC: Pitman Publishing.
- García-Granero, E. M., Piedra-Muñoz, L., & Galdeano-Gómez, E. (2018). Eco-innovation measurement: A review of firm performance indicators. *Journal of Cleaner Production*, 191, 304–317. <https://doi.org/10.1016/j.jclepro.2018.04.215>.
- García-Quevedo, J., Kesidou, E., & Martínez-Ros, E. (2020). Driving sectoral sustainability via the diffusion of organizational eco-innovations. *Business Strategy and the Environment*, 29(3), 1437–1447. <https://doi.org/10.1002/bse.2443>.
- Heidenreich, S., Spieth, P., & Petschnig, M. (2017). Ready, steady, green: Examining the effectiveness of external policies to enhance the adoption of eco-friendly innovations. *Journal of Product Innovation Management*, 34(3), 343–359. <https://doi.org/10.1111/jpim.12364>.
- Karakaya, E., Hidalgo, A., & Nuur, C. (2014). Diffusion of eco-innovations: A review. *Renewable and Sustainable Energy Reviews*, 33, 392–399. <https://doi.org/10.1016/j.rser.2014.01.083>.
- Kemp, R., & Pearson, P. (2007). *Final report of the MEI project measuring eco innovation*. Maastricht: UM Merit.
- Kuo, T.-C., & Smith, S. (2018). A systematic review of technologies involving eco-innovation for enterprises moving towards sustainability. *Journal of Cleaner Production*, 192, 207–220. <https://doi.org/10.1016/j.jclepro.2018.04.212>.
- OECD (2008). *Sustainable manufacturing and eco-innovation: First steps in building a common analytical framework*. DSTI/IND(2008)16/REV1, Paris: OECD. [https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/IND\(2008\)16/REV1&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/IND(2008)16/REV1&docLanguage=En). Accessed 28 Mar 2022.
- Oltra, V., & Saint Jean, M. (2009). Sectoral systems of environmental innovation: An application to the French automotive industry. *Technological Forecasting and Social Change*, 76(4), 567–583. <https://doi.org/10.1016/j.techfore.2008.03.025>.
- Pastakia, A. (1998). Grassroots ecopreneurs: Change agents for a sustainable society. *Journal of Organizational Change Management*, 11(2), 157–173. <https://doi.org/10.1108/09534819810212142>.
- Ponta, L., Puliga, G., & Manzini, R. (2021). A measure of innovation performance: The innovation patent index. *Management Decision*, 59(13), 73–98. <https://doi.org/10.1108/MD-05-2020-0545>.
- Roscoe, S., Cousins, P. D., & Lamming, R. C. (2016). Developing eco-innovations: A three-stage typology of supply networks. *Journal of Cleaner Production*, 112(3), 1948–1959. <https://doi.org/10.1016/j.jclepro.2015.06.125>.
- Sezen, B., & Cankaya, S. Y. (2013). Effects of green manufacturing and eco-innovation on sustainability performance. *Procedia-Social and Behavioral Sciences*, 99, 154–163. <https://doi.org/10.1016/j.sbspro.2013.10.481>.
- Straková, J. (2015). Sustainable value added as we do not know it. *Teorija ir Praktika*, 16(2), 168–173. <https://doi.org/10.3846/btp.2015.453>.
- Taneja, S., Pryor, M. G., Gibson, J. W., & Toombs, L. A. (2012). Organizational renewal: A strategic imperative. *Delhi Business Review*, 13(1), 29–40.
- Vibert, C. (2004). *Theories of macro-organizational behavior: A handbook of ideas and explanations* (1st ed.). New York: Routledge.
- Watts, A. (1999). *The Tao of philosophy: The edited transcripts*. Singapore: Tutttled Publishing.

Ecosystem Approach

- [Business Ecosystems](#)
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Ecosystem Diversity

- [Biodiversity](#)
-

Ecosystems

- [Business Ecosystems](#)
-

Eco-technologies for Sustainable Food Sustainability

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Eco-tourism

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Ecovillage

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Education

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Education for Biodiversity

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Education for Biological Diversity

- [Biodiversity Education](#)
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Education for Sustainability in Curricula

- [Sustainability in Curricula \(SE\)](#)
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Education for Sustainable Development

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Synonyms

[Education for sustainable development \(EfSD\)](#); [Education for sustainable development \(ESD\)](#)

Description

Education for sustainable development (EfSD, ESD; hereinafter ESD) is based on two concepts: education and ► [sustainable development](#). The term education means “systematic schooling and training for work.” It is based on the Latin word “educare” (“bring up, rear, educate”). In a narrow sense, education refers to the process of passing on the knowledge and skills to be learned from one generation to the next. In the broadest sense, it refers to any act or experience that affects an individual’s mind, character, or physical ability (Jeronen 2012). According to Brundtland, sustainable development is a process

of change that improves the livelihoods of present and future generations without compromising the Earth's carrying capacity (WCED 1987). It is considered to have three dimensions: an ecological or an environmental dimension, a social and an economic one (Fien et al. 2009).

ESD is holistic and transformational, lifelong learning process which aims to enhance the cognitive, social, emotional, and behavioral dimensions of learning (UNESCO 2017b). It has been part of the sustainable development debate and decision-making process since 2009 (UN 2009). It is seen as an innovative concept that gives new meaning to the teaching and learning of sustainable development. It has contributed to the debate both on the learning objectives, content, and pedagogies needed for the transition to ► [sustainability](#) including future education; peace education; citizenship education; gender equality and respect for human rights; health education; education for the protection and management of natural resources; and education for sustainable consumption (Wals and Kieft 2010, p. 7). ESD seeks to balance human and economic well-being while taking into account cultural traditions and the sustainable use of the earth's natural resources. Key issues affecting ESD include, for example, globalization, the rise of the information and knowledge society, the utilization of diversity, and the need for the inclusion of marginalized groups and perspectives. ESD's practical perspective offers a holistic opportunity to teach and study issues and phenomena not only in formal education but also in non-formal education (Barth and Michelsen 2013).

The Beginning and Development of the Global Action Program

The Tbilisi Conference (1977) had a decisive impact on our understanding of the importance of environmental education (EE) from school education to lifelong learning. The aim of EE was to increase environmental awareness, develop skills to acquire and use information, develop environmental attitudes, and enable participation (Michelsen and Wells 2017). Since the

Tbilisi Declaration (1977), students' awareness of environmental problems and related practical skills have been developed through EE (Table 1) (UNESCO and UNEP 1977).

In 1987, Brundtland's report, "Our Common Future," set out a "global agenda for change" that included ideas for justice within and between generations; long-term goals for sustainable development, cooperation, and new forms of management (WCED 1987). Based on these views, the role of education in sustainable development was re-examined in 1992 at the United Nations Earth Summit on Environment and Development in Rio de Janeiro. The concept of education was unanimously linked to sustainable development in ► [Agenda 21](#). Preliminary ideas on Education for sustainable development (hereinafter ESD) are described in chapter "Promoting Education, Public Awareness and Training". This chapter describes four key issues in implementing ESD: (1) improving basic education, (2) reorienting existing education to promote sustainable development, (3) developing public understanding and awareness of sustainability, and (4) educating literate and environmentally conscious citizens (UN 1992). Agenda 21 promoted the debate on the role of education and training in sustainable development and the key role of sustainable development in education and training policy initiatives and actions both nationally and internationally in the coming years. In particular, international political and economic organizations (e.g., United Nations, Organization for Economic Co-operation and Development, Organization of American States) have promoted ESD by recognizing that education is the key to sustainability (McKeown 2002).

In 2000, discussions on the basis of previous publications produced the Millennium Declaration including Millennium Development Goals (MDGs). They drew attention to growing global problems, especially to challenges facing the countries of the southern hemisphere. Key issues were besides others extreme poverty and hunger, gender equality and rights, and children education (UN 2000, 2015b). Gender plays an important role in sustainable development. Gender stereotypes and norms shape the way men and women

Education for Sustainable Development, Table 1 History of the global action program (Huckle and Wals 2015; Michelsen and Wells 2017; UN 1987, 1992, 2000, 2002, 2009, 2012, 2015a, b, 2021; UN DESD 2014; UNESCO 2014, 2017; UNESCO and UNEP 1977)

Publisher (year)	Reports/issues	Publication place
UNESCO & UNEP Intergovernmental Conference on Environmental Education (1977)	Environmental education (EE)	Tbilisi, USSR
United Nations World Commission on Environment and Development (1987)	<i>Our Common Future</i> /sustainable development (SD)	Oslo, Norway
United Nations Conference on Environment & Development (1992)	<i>Rio Declaration</i> on Environment and Development: <i>Agenda 21</i> ; Education for Sustainable Development (ESD)	Rio de Janeiro, Brazil
United Nations Millennium Summit (2000)	<i>Millennium Declaration</i> : Millennium Development Goals (MDGs); challenges facing the countries of the southern hemisphere	New York, USA
United Nations World Summit on Sustainable Development (2002)	<i>Johannesburg Declaration</i> on sustainable development; United Nations Decade of Education for Sustainable Development (DESD 2005–2014)	Johannesburg, South Africa
United Nations World Conference on Education for Sustainable Development: Moving in to the Second Half of the UN Decade (2009)	<i>Bonn Declaration</i> ; ESD	Bonn, Germany
United Nations Conference on Sustainable Development (Rio + 20) (2012)	Post-2015 Development Agenda: <i>The Future We Want</i>	Rio de Janeiro, Brazil
Summit meeting of the UN Decade (2013)	Global Action Programme (Global Action Plan) (GAP)	Aichi-Nagoya, Japan.
United Nations Third International Conference on Financing Development (2015a)	Addis Abeba Action Agenda; a new global framework for financing sustainable development	Addis Abeba, Ethiopia
United Nations (2021)	2030 Agenda for Sustainable Development (<i>Agenda 2030</i>): Sustainability Development Goals (SDGs)	New York, USA

think and act. Lifestyle differences and social identities can also affect how individuals act in environmentally relevant situations. Gender inequalities, societal, and power issues are increasingly addressed in the debate on sustainable development. Also, Sustainable Development Goal 5 “Achieve gender equality and empower all women and girls” stresses gender equality stating (UN n.d.): “Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.” In sustainable discussions on the MDGs has been stated that changes in values, lifestyles, and policies worldwide are crucial to achieve a sustainable foundation (Huckle and Wals 2015). Transformative education is seen as a way to promote change in the thinking and action of individuals and cooperation between stakeholders.

The importance of Agenda 21 for education was reaffirmed at the World Summit on Sustainable Development in Johannesburg (2002). This culminated in the proposal of the UN Decade of Education for Sustainable Development for the period 2005–2014 (DESD 2005–2014, ESD Decade) (UN 2002/2004). The Johannesburg Declaration brought together all aspects of sustainable development with the aim of making education a key catalyst for change (Michelsen and Wells 2017). ESD Decade aimed to encourage changes in knowledge, values, and attitudes with the vision of enabling a more sustainable and just society for all (UNESCO 2017a). The change was thought to be achieved by integrating sustainable development values into all areas of learning (UNESCO 2005). According to the UN DSD (2014), “The **vision** of Education for Sustainable

Development (ESD) is a world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation.” ESD Decade triggered worldwide changes, particularly with regard to the role and understanding of ESD.

Key milestones in ESD culminated in the Bonn Declaration in 2009, which called on the ESD to actively promote gender equality and to create the conditions and strategies to share knowledge and experiences on social change and well-being for women (Michelsen and Wells 2017).

United Nations Conference on Sustainable Development (Rio + 20) launched the Agenda “The Future We Want” to guide development after 2015. It called for the establishment of common global goals to promote sustainable development. During Rio + 20 in 2012, an education working group prepared a paper “The Education We Need for the World We Want” (TEWN) in parallel with the official summit (Huckle and Wals 2015). According to the authors, the causes of the global crisis go beyond neoliberalism and its economic, social, and environmental impacts. They argue that global crisis is also an education crisis. The authors state that there is a need for critical and transformative education that respects human rights and the rights of the community to which people belong, and in particular promotes the right of citizens to participate in decision-making on sustainable development, for example (Huckle and Wals 2015).

The last conference concerning ESD Decade was held in Aichi-Nagoya in 2014. The aim of the declaration called “Global Action Programme” (Global Action Plan) (GAP) is to support and promote the process leading to sustainable development in all fields of education. GAP emphasizes the importance of leadership in the implementation of sustainable development projects in both formal and non-formal education. It calls on all stakeholders, in particular Ministries of Education together with other Ministries and educational institutions involved in education, to jointly promote the creation of knowledge on sustainable development and ESD (Huckle and Wals 2015).

The next milestone was reached in 2015 in discussions based on the Brundtland Report (1987), the Agenda 21 (1992), and the Millennium Development Goals (2000). In the Agenda for Sustainable Development (► [Agenda 2030](#)), 17 Sustainability Development Goals (SDGs) were presented. They apply to both developing and developed countries and cover both the ecological, social and economic dimensions of sustainable development, and the idea of inter- and intragenerational justice. The fourth goal (SDG4) “Quality education” promotes inclusive and high-quality education for all and lifelong learning (United Nations 2021).

Position of ESD in Formal, Non-formal, and Informal Education

ESD has been recognized internationally in three at the World Summit on Sustainable Development: the United Nations Conference on Environment and Development (UNCED) in 1992 in Rio de Janeiro, Brazil; the World Summit on Sustainable Development (WSSD) in 2002 in Johannesburg, South Africa; and the United Nations Conference on Sustainable Development (UNCSD) in Rio de Janeiro, Brazil. Its importance has also been emphasized in other key global agreements, such as the Paris Agreement (Article 12) (UNESCO 2017a).

ESD is part of the quality education included in the concept of lifelong learning. Both formal education (from pre-school to higher education), non-formal education (community education, adult education, and second-chance education), and in-formal learning (involuntary and an inescapable part of daily life learning) (Council of Europe 2021; Lockhart 2016) should be focused on issues of sustainable development. They should also promote sustainable development skills that are relevant to understanding and solving today’s social, economic, and environmental problems. ESD is recognized as a key instrument to achieve the SDGs (UNESCO 2017a).

Relationship Between EE and ESD

Regarding the relationship between EE and ESD, it is important to understand the extent to which they are interrelated and different. The content and pedagogical differences between EE and ESD are based on the country's or region's views on citizen participation and democracy.

Concerning the content dimension, Wals and Kieft (2010) describe three relationships between ESD and EE: (1) EE equals ESD, (2) EE is a part of ESD, and (3) EE and ESD have elements in common but are distinct (Wals and Kieft 2010). According to Hesselink et al. (2000), there is also a fourth relationship, and ESD is the successor to EE.

Two responses within the view of the equal relationship between EE and ESD can be seen. In some countries, EE continues to be developed and taught because people recognize it better than ESD (e.g., the USA). Others use ESD for strategic or practical reasons without changing their EE policy. In the latter case, development has led to the EE of sustainable development (e.g., Taiwan) or the EE of a sustainable society (e.g., Brazil) (Wals and Kieft 2010). When EE would become ESD, EE could lose some of its uniqueness, that is, the notion that humans are part of nature. ESD is more human-centered than EE. Such a development would eventually also impoverish ESD (McKeown and Hopkins 2007).

In some countries, the emergence of ESD has encouraged the reform of EE to become part of ESD (e.g., Vietnam and many Arab countries). The reason for the reform has been the perception that EE focuses too narrowly on environmental protection and natural resource management, as well as nature conservation. So, ESD is needed to increase the socioeconomic, political, and cultural dimensions. The integration of EE and ESD is thought to support the idea that, in addition to ecological sustainability, social considerations could be better taken into account in teaching and learning processes (Wals and Kieft 2010).

In some countries (e.g., The Netherlands, Canada, and Greece), ESD and EE are distinct, albeit partially overlapping. ESD is needed to bring important new dimensions that are not or only lightly addressed by EE (e.g., socioeconomic

and cultural dimensions). When the political, social, cultural, and economic views of EE and ESD are interpreted broadly, the concepts become almost synonymous. The same happens when they are interpreted narrowly with a focus on the environment and ecology (Wals and Kieft 2010).

Many see ESD as the next generation of EE that includes ethics, equity, and new ways of thinking and learning. According to this view, ESD is (Hesselink et al. 2000, p. 15):

- More future-oriented (careful examination of probable and possible futures)
- Critical of the predominant market and consumption driven society
- More sensitive to the different realities that challenge people around the world (sensitive to context)
- More systemic in dealing with complexity
- More community and solidarity oriented (as opposed to individualistic and self-promoting)
- Less concerned with product (behavioral outcomes)
- More concerned with process (creating the right conditions for social learning)
- More open to new ways of thinking and doing
- Preoccupied with linking social, economic, and environmental equity at the local, regional and global level.

Relationships Between ESD and Other Forms of Education

In addition to EE, there are many other forms of education related to the promotion of sustainable development. For example, from the perspective of the environmental dimension, in addition to EE, there is also a need for ► [biodiversity education](#) and climate change education. The socio-cultural dimension in its part includes peace education, global citizenship education, health education, and human rights education. Examples of economic education include Disaster Risk Reduction and the Program of Education for Emergency and Reconstruction (PEER) (Wals and Kieft 2010).

In addition, Global Learning for Sustainable Development (GLSD) is a new form of education with a focus on international sustainable development issues (Anderberg et al. 2008, p. 369). It addresses everyday problems, global processes, and conflicts and supports to understand the relationships between them. In these, all forms of education sustainable development issues can be addressed in an integrative way from multiple perspectives, disciplines and perspectives (Wals and Kieft 2010).

Information Technology Contributing to ESD

Information technology and Internet-based distance education, which allows for reduced costs and increased flexibility in offering materials, make high-quality lectures available to a wider audience (Wals and Kieft 2010). According to Kumpulainen and Mikkola (2015, pp. 24–25), information technology supports community learning in addition to individual learning. It has positive effects also on learners' shared information processing and thinking levels, and the development of ideas (Bowerman 2011). There is a serious problem with the use of the Internet in teaching. It will mainly achieve a globalizing world, leaving many developing countries out of the teaching and learning opportunities it offers. In addition to the digitalization of teaching methods, society is digitalizing. Learning the skills needed in working life develops learners' ability to critically evaluate things, develop new cultures, and innovate thinking and practices (Norrena 2013). Key issues in the development of both digital learning and teaching materials are collaborative and problem-based learning and the learner's independent action.

The Goal, Content, and Pedagogy of ESD

ESD is a holistic transformative education that addresses both the goal of education and learning objectives, content and outcomes, as well as pedagogy and learning environment. The goal of ESD

is to provide learners with information for responsible environmental action by supporting the values, knowledge, multidisciplinary skills, and understanding needed for sustainable environmental management, the promotion of social justice, and the eradication of poverty (Coriddi 2008; UNESCO 2017a). In particular, the ESD aims to promote SDG4 and Global Citizenship Education (GCED), but it is also important for achieving the other 16 SDGs. ESD is also useful in encouraging people to participate in action of sustainable development and to promote social, economic, and political change, as well as to change their own behavior.

ESD aims to develop competence so that individuals are able to look at their own actions taking into account current and future social, cultural, economic, and environmental impacts from a local and global perspective. Individuals should also be empowered to act in a sustainable way in complex situations, which may require them to participate in socio-political processes and change their societies towards sustainable development. In this case, the ability to work with actors with different value systems, as well as the ability to find meaningful compromises when stakeholder goals are conflicting are needed (Dale and Newman 2005).

ESD enables all individuals to contribute to the achievement of SDGs by providing the necessary knowledge and skills so that the individual can understand what the SDGs are pursuing and by developing the individual's environmental awareness to bring about the necessary change (UNESCO 2017a). ESD focuses on processed and traditional fact-based knowledge in order to take into account unpredictable changes in ecological and social systems (Dale and Newman 2005). On the content level, ESD is linked to an idea of universal concepts and human rights applicable to everyone, but at the same time, concrete links to the local circumstances and lifeworlds should also be taken into account (Biesta 2009). Incorporation of ESD into teaching-studying-learning processes contributes to the understanding of various global issues related to sustainable development, for example, climate change, poverty, human rights, globalization, equality issues,

professional ethics, and environmental challenges. Combining theory and practice supports students' ability to connect with the real world and encourages them to think of themselves as global citizens. This can be fostered a sense of global social responsibility (Leal Filho et al. 2018).

ESD is a holistic and transformative education. It does not only integrate content into the curriculum but also creates interactive learner-centered teaching and learning environments (Ghemawat 2017; UNESCO 2017a). The origin of ESD is problem-based education and the combination of inter- and transdisciplinary approach (Dale and Newman 2005). So, ESD calls for action-oriented pedagogy that supports self-directed and participatory learning, cooperation and collaboration, and formal, non-formal, and informal learning (UNESCO 2017a). The development of students' action strategies based on sound expertise, judgment, and problem-solving skills are thus in the core of teaching and learning processes (German Geographical Society 2012). According to Meyer (2006), cognitive, instrumental, social-communicative, and active learning are crucial in ESD.

Regarding pedagogy and the learning dimension, Wals and Kieft (2010) state that the concept of "education" in ESD can be understood in different ways depending on how much opportunity there is to participate, work independently, and think. When opportunities are scarce, ESD places more emphasis on teaching methods and knowledge transfer. Abundant opportunities, on the other hand, increase participation, independent work and thinking, and knowledge creation. The latter versions of ESD require alternative teaching and learning strategies that develop also new skills and competencies. Education should pay more attention to the qualities needed to promote sustainable development. The term "sustainable development skills" refers to the competencies needed to meet the challenges of sustainable development (Wals and Kieft 2010).

ESD Competencies

Competence describes the attitudes that individuals need in a given operating environment and

self-organization in a variety of complex contexts and situations (Rieckmann 2011). In order for individuals to be able to participate in sustainability issues, education needs to address sustainable development issues and promote sustainable development key competencies (UNESCO 2005). Key competences refer to transversal, multifunctional, and context-overall competencies that are considered particularly important in achieving societal goals that are important for a defined normative framework (e.g., sustainability) and that are important for all individuals (Rieckmann 2012). The ESD aims to develop key competencies that enable individuals to participate in sociopolitical processes and thus contribute to the transformation of society towards sustainable development (de Haan 2006). The most relevant key competencies are those for systemic thinking and handling of complexity, anticipatory thinking, and critical thinking (Rieckmann 2012).

ESD Implementation Challenges

According to Wals and Kieft (2010), despite progress, there are still a number of problems with the implementation of ESD. The following things are challenging (Wals and Kieft 2010, pp. 8–9):

- Generating financial support earmarked for ESD
- Reforming and re-orienting educational contents, methodology, and curricula to address ESD-based skills, knowledge, and values
- Facilitating and strengthening networking between schools, educational institutions/organizations, and other partners involved in ESD at national and international levels
- Putting more emphasis on non-formal and informal education
- Lack of ESD tools and materials
- Improving legal and regulatory measures that support ESD
- Designing ESD-professional development programs and ESD-pre-service training programs for teachers, educators, administrators, and leaders

- Establishing for deepening a national ESD strategy and developing commitment towards it
- Exchanging good examples, and sharing knowledge and experience
- Promoting ESD research, monitoring, evaluation, and dissemination
- Creating linkages between ESD and EE as well as with other forms of educations.

Ways Forward

According to Wals and Kieft (2010), the following actions are needed:

- 1) Awareness and understanding of the meaning and application of ESD should be raised through the media, especially among young people around the world.
- 2) Reorientation of curricula, teaching, and learning is necessary to strengthen sustainable development capacities (e.g., understanding complexity, perceiving connections and interdependencies, participating in democratic decision-making and processes, questioning routines).
- 3) The professional capacity of staff at schools, universities, and workplaces (e.g., concerning corporate social responsibility, CSR) should be increased.
- 4) Education on the relationship between ESD and the environment and cooperation between ESD and other forms of education should be increased.
- 5) In particular, topical ESD-promoting materials should be developed. Creating easy-to-use ESD information sharing platforms would facilitate the use of ESD resources.
- 6) International and regional cooperation should be supported.

Summary

ESD aims to find sustainable solutions to local and global problems through a transformative perspective. The core ideas of ESD are social

justice and cultural diversity. Today, the crucial goal is to learn to live sustainably. Achieving a sustainable foundation requires changes in values, lifestyles, and policies globally (Huckle and Wals 2015). This again requires education systems, educational institutions, and educators with a willingness to tackle sustainability problems and the ability to respond to them.

A useful way to promote thinking and behavioral change in individuals and enable cooperation between actors is transformative education. Its objective is to foster individuals' critical thinking and support them in changing their own reality. According to Sustainable Development Goal 5 (UN n.d.), education should address social and power aspects as well as gender inequality to reduce gender inequality and improve human well-being. Gender inequalities do not in themselves cause environmental problems, for example, climate change, the loss of biodiversity, or social problems. However, they affect the thinking and action of individuals and communities worldwide. Climate change and other environmental issues can best be addressed through cooperation between stakeholders based on scientific knowledge. Thus improving women's education and participation in society is important not only for human being but also for the planet.

Cross-References

- [Agenda 2030](#)
- [Biodiversity Education](#)
- [Ethics of Sustainability Education](#)
- [Local Agenda 21](#)
- [Sustainability](#)
- [Sustainable Development](#)
- [Sustainable Development Goals](#)
- [Transformative Learning](#)

References

- Anderberg, E., Nordén, B., & Hansson, B. (2008). Global learning for sustainable development in higher education: Recent trends and a critique. *International*

- Journal of Sustainability in Higher Education*, 10(4), 368–378. <https://doi.org/10.1108/14676370910990710>.
- Barth, M., & Michelsen, G. (2013). Learning for change: An educational contribution to sustainability science. *Sustainability Science*, 8(1), 103–119. <https://doi.org/10.1007/s11625-012-0181-5>.
- Biesta, G. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21, 33–46. <https://doi.org/10.1007/s11092-008-9064-9>.
- Bowerman, T. (2011). What are some advantages & disadvantages of collaboration in the classroom? http://www.ehow.com/info_7900311_advantagesdisadvantages-collaboration-classroom.html#ixzz11DKGPQFQ. Accessed 2 Jan 2012.
- Coriddi, J. (Ed.). (2008). *Policy & practice: A development education review*. Lisburn: NI Ltd.
- Council of Europe. (2021). Formal, non-formal and in-formal learning. <https://www.coe.int/en/web/lang-migrants/formal-non-formal-and-informal-learning>. Accessed 16 Aug 2021.
- Dale, A., & Newman, L. (2005). Sustainable development, education and literacy. *International Journal of Sustainability in Higher Education*, 6(4), 351–362. <https://doi.org/10.1108/14676370510623847>.
- de Haan, G. (2006). The BLK “21” programme in Germany: A “Gestaltungskompetenz”-based model for Education for Sustainable Development. *Environmental Education Research*, 12(1), 19–32. <https://doi.org/10.1080/13504620500526362>.
- Fien, J., Maclean, R., & Park, M.-G. (Eds.). (2009). *Work, learning and sustainable development*. Dordrecht: Springer.
- German Geographical Society. (2012). *Educational standards in geography for the intermediate school certificate with sample assignments*. Bonn: Selbstverlag Deutsche Gesellschaft für Geographie (DgG).
- Ghemawat, P. (2017). Strategies for higher education in the digital age. *California Management Review*, 59, 56–78. <https://doi.org/10.1177/0008125617717706>.
- Hesselink, F., van Kempen, P. P., & Wals, A. (Eds.). (2000). *ESDebate: International debate on education for sustainable development*. Cambridge, UK/Gland: IUCN.
- Huckle, J., & Wals, A. E. J. (2015). The UN decade of education for sustainable development: Business as usual in the end. *Environmental Education Research*, 21(3), 491–505. <https://doi.org/10.1080/13504622.2015.1011084>.
- Jeronen, E. (2012). Education. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Berlin: Springer. ISBN 978-3-642-28036-8.
- Kumpulainen, K., & Mikkola, A. (2015). Oppiminen ja koulutus digitaalisella aikakaudella [Learning and education in the digital age]. In M. Kuusikorpi (Ed.), *Digitaalinen oppiminen ja oppimisympäristöt* (pp. 9–45). Tampere: Suomen Yliopistopaino. (In Finnish).
- Leal Filho, W., Raath, S., Lazzarini, B., Vargas, V. R., de Souza, L., Anholon, R., et al. (2018). The role of transformation in learning and education for sustainability. *Journal of Cleaner Production*, 199, 286–295. <https://doi.org/10.1016/j.jclepro.2018.07.017>.
- Lockhart, A. S. (2016). Creating sustainable futures for all: Non-formal and informal programs and activities that promote the acquisition of knowledge and skills in areas of Global Citizenship Education (GCED) and Education for Sustainable Development (ESD). Background paper prepared for the 2016 Global Education Monitoring Report Education for people and planet. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000245625>. Accessed 16 Aug 2021.
- McKeown, R. (2002). *Education for sustainable development toolkit*. Knoxville: Energy, Environment and Resources Center, University of Tennessee. http://kpe-kardits.kar.sch.gr/Aiforia/esd_toolkit_v2.pdf. Accessed 14 Aug 2021.
- McKeown, R., & Hopkins, C. (2007). Moving beyond the EE and ESD disciplinary debate in formal education. *Journal of Education for Sustainable Development*, 1(1), 17–26. <https://doi.org/10.1177/097340820700100107>.
- Meyer, C. (2006). Außerschulische Lernorte. In H. Haubrich (Ed.), *Geographie unterrichten lernen. Die Neue Didaktik der Geographie Konkret*. München: Oldenburg.
- Michelsen, G., & Wells, P. J. (2017). From here to there: The UNITWIN/UNESCO Chairs Programme in the UN decade of education for sustainable development and the sustainable development goals. In G. Michelsen & P. J. Wells (Eds.), *A decade of progress on education for sustainable development reflections from the UNESCO Chairs Programme* (pp. 8–15). Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO), Educational Sector.
- Norrena, J. (2013). Opettaja tulevaisuuden taitojen edistäjänä. “Jos haluat opettaa noita taitoja, sinun on ensin hallittava ne itse” [A teacher as a promoter of future skills]. *Jyväskylän Studies in Computing*, 169. Jyväskylä: Jyväskylän yliopisto. Dissertation thesis. In Finnish.
- Rieckmann, M. (2012). Future-oriented higher education: Which key competencies should be fostered through university teaching and learning? *Futures*, 44(2), 127–135. <https://doi.org/10.1016/j.futures.2011.09.005>.
- UN (United Nations). (1987). Our common future. Report of the World Commission on Environment and Development. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>. Accessed 14 Aug 2021.
- UN (United Nations). (1992). Agenda 21. United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992. <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>. Accessed 14 Aug 2021.

- UN (United Nations). (2000). United Nations Millennium Declaration. United Nations A/RES/55/2 General Assembly, Agenda item 60 (b) 00 55951. Resolution adopted by the General Assembly [without reference to a Main Committee (A/55/L.2)] 55/2. <https://undocs.org/A/RES/55/2>. Accessed 14 Aug 2021.
- UN (United Nations). (2002/2004). Johannesburg Declaration on Sustainable Development. UN Department of Economic and Social Affairs. https://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm. Accessed 14 Aug 2021.
- UN (United Nations). (2009). Bonn Declaration. United Nations World Conference on Education for Sustainable Development: Moving in to the second half of the UN decade, Bonn. <https://unesdoc.unesco.org/ark:/48223/pf0000188799>. Accessed 14 Aug 2021.
- UN (United Nations). (2012). The future we want. Outcome document of the United Nations Conference on Sustainable Development, Rio de Janeiro, 20–22 June 2012. <https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf>. Accessed 14 Aug 2021.
- UN (United Nations). (2015a). Addis Abeba Action Agenda of the third international conference on financing development, Addis Abeba, 13–16 July 2015. <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35>. Accessed 14 Aug 2021.
- UN (United Nations). (2015b). The Millennium Development Goals Report. 2015 Time for global action for people and planet. [https://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20\(July%201\).pdf](https://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf). Accessed 14 Aug 2021.
- UN (United Nations). (2021). The 17 goals. <https://sdgs.un.org/goals>. Accessed 14 Aug 2021.
- UN (United Nations). (n.d.). Sustainable development goals. Goal 5. Achieve gender equality and empower all women and girls. <https://www.un.org/sustainabledevelopment/gender-equality/>. Accessed 27 Nov 2021.
- UN DESD (United Nations Decade of Education for Sustainable Development). (2014). Decade of Education for Sustainable Development. <https://www.desd.in/about.html>. Accessed 15 Aug 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2005). UN Decade of Education for Sustainable Development, 2005–2014: The DESD at a glance. <https://unesdoc.unesco.org/ark:/48223/pf0000141629>. Accessed 15 Aug 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2014). Aichi-Nagoya Declaration on Education for Sustainable Development. https://sustainabledevelopment.un.org/content/documents/5859Aichi-Nagoya_Declaration_EN.pdf. Accessed 14 Aug 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2017a). *Education for sustainable development goals – Learning objectives. Education 2030*. Paris: United Nations Educational, Scientific and Cultural Organization.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2017b). *A new roadmap for the Man and the Biosphere (MAB) programme and its world network of biosphere reserves MAB strategy (2015–2025). Lima action plan (2016–2025)*. Paris, France: United Nations Educational, Scientific and Cultural Organization.
- UNESCO (United Nations Educational, Scientific and Cultural Organization), & UNEP (United Nations Environment Programme). (1977). Intergovernmental Conference on Environmental Education, Tbilisi. https://www.gdrc.org/uem/ee/EE-Tbilisi_1977.pdf. Accessed 14 Aug 2021.
- Wals, A. E. J., & Kieft, G. (2010). Education for sustainable development. Research overview. *Sida Review*, 13, 1–54. <https://edepot.wur.nl/161396>. Accessed 14 Aug 2021.
- WCED (World Commission on Environment and Development). (1987). Report of the World Commission on Environment and Development: Our common future. UN documents gathering a body of global agreements. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>. Accessed 15 Aug 2021.

Education for Sustainable Development (= ESD)

► Education for Sustainable Environment

Education for Sustainable Development (EfSD)

► Education for Sustainable Development

Education for Sustainable Development (ESD)

► Education for Sustainable Development

Education for Sustainable Development in Curricula

► Sustainability in Curricula (SE)

Education for Sustainable Environment

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Synonyms

Education for Sustainable Development (= ESD)

Definition

ESD is an interdisciplinary learning perspective. ESD combines aspects of environmental education and development assistance. Economic, ecological, cultural, political, and social aspects in formal and informal learning environments are in focus.

The aim of BNE is to give individuals the opportunity to live actively and self-organized in terms of local, national, and global dimensions, as well as to consider the short-term and persistent effects of their own activities on the environment. This includes emotional, rational, and action-oriented components as well as the acquisition of judgment in different life situations. Almost every topic can be one of ESD, if it is focused with that interdisciplinary ESD view. This diversity requires a well-organized structure and focus for concrete teaching situations.

History of ESD

Over the last 20 years, the perspective of ESD has been established. It is now a key element of qualitative education and covers a wide range of educational areas, including social, economic, cultural, political, and environmental aspects. The starting point was the global political debate on the management and consumption of natural resources. Global environmental issues such as natural resource overuse or misuse, climate change, biodiversity distinctions, and lack of

knowledge about the main ideas of sustainable use were obvious. On the other side also, developmental assistance realized that environmental protection is one part of sustainable development processes. Nowadays it is visible that the earth has natural limits that must be taken into account (Hagedorn et al. 2019).

Back in 1987, the Brundtland Commission formulated the concept of sustainable development. It was about satisfying the requirements of the current world population and at the same time not jeopardizing the possibilities of coming generations. Today's natural state should at least be maintained, so that future generations have the same freedom to decide on their livelihood. The perspectives should remain the same for all generations.

In 1992, for the first time, Rio de Janeiro's final document focused on education alongside political and economic measures. The guiding principle should be sustainable development for humanity in the twenty-first century. Agenda 21, the environmental and development-oriented policy action program for global sustainable development, was signed by 170 governments. This can be seen as starting point for ESD. Chapter 36 of Agenda 21 (1992) mentions that the United Nations will "promote high quality education, public awareness and vocational education and training." This was the first time that sustainable development and education were on an official agenda.

The UN Decade of Education for Sustainable Development (2005–2014) aimed to anchor ESD in formal and informal education systems. This was a very ambitious goal. New networks and knowledge have been built to jointly address global issues such as climate change, poverty, and overuse of natural resources. During this time, ideas for sustainable development goals were developed, discussed, and finally formulated (Vey 2015). This period has also shown that it is very important to anchor ESD on the ground and that, in particular, young people and local communities are central to achieving the goal of a well-connected and informed society. It is necessary to improve the knowledge about sustainable development among teenagers (Holfelder 2016) as they are the ones to decide in future.

The next important political step was the 2030 Agenda for Sustainable Development. The United Nations agreed on 17 Sustainable Development Goals (SDGs). The five core messages People, Planet, Prosperity, Peace, and Partnership, the so-called 5Ps, are preceded as guiding principles. The SDGs consist of (1) no poverty, (2) no hunger, (3) good health and well-being, (4) high quality education, (5) gender equality, (6) clean water and sanitation, (7) affordable values and clean energy, (8) decent work and economic growth, (9) industry, innovation, and infrastructure, (10) reducing inequality, (11) sustainable cities and towns, (12) responsible consumption and production, (13) Climate action, (14) underwater life, (15) land life, (16) peace, justice and strong institutions, and (17) partnership for goals. Their image as shown in Fig. 1 can be found worldwide.

These goals were not only developed for a certain part of the world. They apply to all nations, including the industrialized countries. Therefore they all have development tasks. SDG No. 4, for example, should guarantee equitable, qualitative,

and comprehensive education for all people by 2030 and encourage permanent learning opportunities for all members of the society. Today in Germany educational success depends more on social background than in most other OECD countries (Baader and Freytag 2017). With regard to Agenda 2030 this must be critically questioned and changed.

ESD at Present

The concept of ESD has been legitimized by many decisions – from the United Nations to individual states and provincial governments. It is an open framework in which sustainable, competence-oriented education can be realized. ESD answers the question of what students should and can learn today. It can be realized, from kindergarten and elementary school (Stolltenberg 2009) to vocational college, as many examples show. Indicators to measure the influence of ESD in Germany have been developed and discussed (Michelsen et al. 2011).



Education for Sustainable Environment, Fig. 1 Source: UN Communication Material. <https://www.un.org/sustainabledevelopment/news/communications-material/>. 8.6.2019

ESD makes “railings” for sustainable development. The rule of constant natural capital and the rule of sustainable management become tangible in concepts such as efficiency, sufficiency, and resilience. This shows that strategies other than higher, faster, and more personal income are welcomed and considered. It is amazing what different types of resource use come into play. Shared working positions, the growing share of cars and bicycles are examples of intelligent dual use of resources. They are commonplace today, at least in larger modern cities. Beside necessary political decisions people are starting to think about their personal CO₂ production, and communities want to reduce their negative input or think about strategies to become more environmentally friendly. People’s awareness of sustainable development goals is increasingly coming to the fore, but on the other hand it is becoming more difficult to understand the complexity of individual decisions. What is needed, however, is the step toward awareness that this change is necessary and possible.

ESD activities focus on strengths and competences that promote sustainable development. This should help to find new answers to urgent actual problems. Instead of talking about threat scenarios, the ESD learning perspective emphasizes competences that should be promoted among participants in ESD education activities.

The focus is on key competences of the cognitive, socioemotional, and acting domain (Bormann and Haan 2008; Schreiber and Siegel 2016). The realignment of educational and learning processes means that everyone worldwide should have the opportunity to acquire appropriate knowledge and skills and moral and ethical bases for decision-making in their respective situation. These should enable humans to contribute to a sustainable future. Education and learning in all agendas, programs and activities needs to be strengthened to promote sustainable development. This includes lifelong learning activities (UNESCO 2014). They start at an early age, as small children are in a very sensitive phase of appropriating the world, and they last their entire life into old age. The UNESCO states that

necessary skills include system thinking, critical thinking, self-esteem, predictive skills, normative skills, strategic skills, collaboration skills, and integrated problem-solving skills (UNESCO 2017).

The basic understanding of ESD is that teachers and learners create knowledge together. This co-constructivist path is promoted through methods that support participatory, constructive, explorative, reflective, or discursive learning. It would be good if ESD will be more than a one-day activity, or at least integrated with other educational offerings. Learners should not be indoctrinated, but should be able to distinguish between approaches as described in the “Beutelsbacher Consensus” (Frech and Richter 2017). Education has to be thought of by the resource-oriented side and not by the fault-oriented side.

ESD deals with very different topics. There is a wide field of neighboring perspectives and concepts. These include Cultural Studies (Molderez and Ceulemans 2018), Peace Studies as well as Poverty Reduction Studies. Greater prosperity is a prerequisite in many poorer countries in order to achieve fairer conditions worldwide. Cultural Diversity Studies, Ecosystem Approaches (Adom̄ent and Leicht 2011), Democracy and Governance (Pāsnikowska-Lukaszuk and Wójcicka-Migasiuk 2017), Environmental Protection (Thomas et al. 2019), Natural Resource Management or Corporate Social Responsibility (Sodiq et al. 2019), and Production/Consumption Patterns (Puma et al. 2015) are included in many questions of ESD.

In school surveys, audits, and surveys, learners can acquire interdisciplinary knowledge and integrate new perspectives. Active and intrinsic learning should be encouraged. In future workshops, learners will be able to express their interests, knowledge, and commitment to shaping their living environment. If a larger political reference framework is chosen – such as, for example, federal or international politics, learners can simulate contradictory goals in plan or role-play games and train participation in collective decision-making processes. In

simulations they can actively experiment and proactively analyze and evaluate future developments. If possible, real projects should be involved. Last but not least, well-thought-out educational experts are in demand.

Today ESD is involved in formal and informal educational systems in many European countries (Bormann et al. 2016; Dlouhá et al. 2017; Stein et al. 2016; Takala et al. 2019). Educational activities work together and, in the best case a good integration of practice and theory takes place. It has reached a new quality to include non-formal education on a broad basis as part of the educational process. Non-formal education has a very high thematic and qualitative diversity. Therefore, there is, for example, in North Rhine-Westphalia in Germany, the ESD agency, which certifies educational offers, and so-called ESD centers, which network different education systems and establish qualitative education offers.

Finally, it should be possible to conserve natural resources and to distribute resources more equitably to all people and regions of the world than is currently the case. Hopefully this objective will be achieved without losing economic wealth, but with a wide range of alternatives to unsustainable use of natural and human resources.

Summary

ESD as an interdisciplinary learning perspective is intended to give the individual the opportunity to actively contribute to a world for all people, living together in partnership peace and prosperity, with a focus on the whole planet. Therefore, high-quality education for all age groups should be possible worldwide. A particular focus is on the competencies that must be developed through a variety of educational opportunities.

Cross-References

- [Environmental Education](#)
- [Sustainable Development Goals \(UN Global Goals\)](#)

References

- Adomßent, M., & Leicht, A. (2011). *Biologische Vielfalt und Bildung für nachhaltige Entwicklung: Schlüsselthemen und Zugänge für Bildungsangebote*. Bonn: Medienhaus Plump. Retrieved from http://web.archive.org/web/20120930234608/http://www.unesco.de/fileadmin/medien/Dokumente/Bibliothek/Biologische_Vielfalt_und_Bildung_fuer_nachhaltige_Entwicklung.pdf
- Agenda 21 (1992, Juni). Konferenz der Vereinten Nationen für Umwelt und Entwicklung Rio de Janeiro. Retrieved from https://www.un.org/Depts/german/conf/agenda21/agenda_21.pdf
- Baader, M. S., & Freytag, T. (Eds.). (2017). *Bildung und Ungleichheit in Deutschland*. Wiesbaden: Springer VS. Retrieved from <https://ebookcentral.proquest.com/lib/gbv/detail.action?docID=4902193>. <https://doi.org/10.1007/978-3-658-14999-4>
- Bormann, I., & Haan, G. (2008). *Kompetenzen der Bildung für nachhaltige Entwicklung* (1. Aufl.). s.l.: VS Verlag für Sozialwissenschaften (GWV). Retrieved from <http://gbv.eblib.com/patron/FullRecord.aspx?p=747869>
- Bormann, I., Hamborg, S., & Heinrich, M. (Eds.). (2016). *Educational governance: Band 34. Governance-Regime des Transfers von Bildung für nachhaltige Entwicklung: Qualitative Rekonstruktionen*. Wiesbaden: Springer VS.
- Dlouhá, J., Glavič, P., & Barton, A. (2017). Higher education in Central European countries – Critical factors for sustainability transition. *Journal of Cleaner Production*, 151, 670–684. <https://doi.org/10.1016/j.jclepro.2016.08.022>.
- Frech, S., & Richter, D. (2017). *Der Beutelsbacher Konsens. Bedeutung, Wirkung, Kontroversen* (1st ed.). Berlin: Wochenschau-Verlag (Didaktische Reihe). Retrieved from <https://ebookcentral.proquest.com/lib/gbv/detail.action?docID=4889428>
- Hagedorn, G., Loew, T., Seneviratne, S. I., Lucht, W., Beck, M.-L., Hesse, J., ... Zens, J. (2019). The concerns of the young protesters are justified: A statement by Scientists for Future concerning the protests for more climate protection. *GAIA – Ecological Perspectives for Science and Society*, 28(2), 79–87. <https://doi.org/10.14512/gaia.28.2.3>.
- Holfelder, A.-K. (2016). *Orientierungen von Jugendlichen zu Nachhaltigkeitsthemen*. Dissertation. <https://doi.org/10.1007/978-3-658-18681-4>.
- Michelsen, G., Adomßent, M., Bormann, I., Burandt, S., & Fischbach, R. (2011). *Indikatoren der Bildung für nachhaltige Entwicklung – ein Werkstattbericht: Bildung, Wissenschaft, Kultur, Kommunikation*. Bonn: Deutsche UNESCO-Kommission. Retrieved from http://web.archive.org/web/20170929200122/http://unesco.de/fileadmin/medien/Bilder/Publikationen/Indikatoren_der_BNE.pdf

- Molderez, I., & Ceulemans, K. (2018). The power of art to foster systems thinking, one of the key competencies of education for sustainable development. *Journal of Cleaner Production*, 186, 758–770. <https://doi.org/10.1016/j.jclepro.2018.03.120>.
- Paśnikowska-Lukaszuk, M., & Wójcicka-Migasiuk, D. (2017). Selected aspects of development towards energy efficient buildings. *Journal of Ecological Engineering*, 18(5), 137–143. <https://doi.org/10.12911/22998993/74633>.
- Puma, M. J., Bose, S., Chon, S. Y., & Cook, B. I. (2015). Assessing the evolving fragility of the global food system. *Environmental Research Letters*, 10(2), 24007. <https://doi.org/10.1088/1748-9326/10/2/024007>.
- Schreiber, J.-R., & Siege, H. (Eds.) (2016). Orientierungsrahmen für den Lernbereich globale Entwicklung im Rahmen einer Bildung für nachhaltige Entwicklung: Ein Beitrag zum Weltaktionsprogramm “Bildung für nachhaltige Entwicklung”: Ergebnis des gemeinsamen Projekts der Kultusministerkonferenz (KMK) und des Bundesministeriums für Wirtschaftliche Zusammenarbeit und Entwicklung (BMZ), 2004–2015, Bonn (2. aktualisierte und erweiterte Auflage). Berlin: Cornelsen. Retrieved from https://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2015/2015_06_00-Orientierungsrahmen-Globale-Entwicklung.pdf
- Sodiq, A., Baloch, A. A. B., Khan, S. A., Sezer, N., Mahmoud, S., Jama, M., & Abdelaal, A. (2019). Towards modern sustainable cities: Review of sustainability principles and trends. *Journal of Cleaner Production*, 227, 972–1001. <https://doi.org/10.1016/j.jclepro.2019.04.106>.
- Stein, S., Andreotti, V. d. O., & Suša, R. (2016). ‘Beyond 2015’, within the modern/colonial global imaginary?: Global development and higher education. *Critical Studies in Education*, 60(3), 281–301. <https://doi.org/10.1080/17508487.2016.1247737>.
- Stolltenberg, U. (2009). *Bildung für eine nachhaltige Entwicklung im Elementarbereich*. Retrieved from <https://www.bne-portal.de/sites/default/files/downloads/Ute%20Stolltenberg%20f%C3%BCr%20LP%202009.pdf>
- Takala, T., Tikkanen, J., Haapala, A., Pitkänen, S., Torssonen, P., Valkeavirta, R., & Pöykkö, T. (2019). Shaping the concept of bioeconomy in participatory projects – An example from the post-graduate education in Finland. *Journal of Cleaner Production*, 221, 176–188. <https://doi.org/10.1016/j.jclepro.2019.02.007>.
- Thomas, R. E. W., Teel, T., Bruyere, B., & Laurence, S. (2019). Metrics and outcomes of conservation education: A quarter century of lessons learned. *Environmental Education Research*, 25(2), 172–192. <https://doi.org/10.1080/13504622.2018.1450849>.
- UNESCO. (2014). *UNESCO-Roadmap zur Umsetzung des Weltaktionsprogramms “Bildung für nachhaltige Entwicklung”*. Bonn: Dt. UNESCO-Kommission. Retrieved from <http://www.bne-portal.de/sites/default/files/downloads/publikationen/DUK%20-%20Roadmap%20Weltaktionsprogramm%20BNE.pdf>
- UNESCO. (2017). Education for Sustainable Development Goals learning objectives. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000247444>
- Vey, C. (Ed.). (2015). *Bildung, Wissenschaft, Kultur, Kommunikation. UN-Dekade mit Wirkung: 10 Jahre “Bildung für nachhaltige Entwicklung” in Deutschland*. Bonn: Deutsche UNESCO-Kommission e. V. Retrieved from http://web.archive.org/web/20160507225809/http://www.unesco.de/fileadmin/medien/Dokumente/Bibliothek/UN_Dekade_BNE_2015.pdf

Education on Biodiversity

► Biodiversity Education

Education on Biological Diversity

► Biodiversity Education

Effective Leadership

► Charismatic Leaders

Effective Management

► Good Governance

Effective Rewards

► Sustainable Rewards

Effectiveness

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Synonyms

Efficacy; Helpfulness; Usefulness

Definition

Effectiveness can be defined as the aptitude to fulfill the desired purpose (Gulluscio 2014a).

It is typically represented through the ratio between *results* and *objectives*.

The latter can be understood as *outputs* or *outcomes*.

The outputs can be identified as the simple count of the number of goods or services supplied. Examples of outputs are the number of goods or services purchased, the number of hospitalization days for health care organizations, the number of lessons taught by universities, etc.

The outcome is a more complex concept, as it represents the effects that the goods or services provided have produced on satisfying the users' needs. Examples of outcomes are the effects of health care services on the improvement of patients' health or the effects of the lessons given on students learning.

It is easy to understand that, while it is quite simple to quantitatively measure the output, this is much more complicated for the outcome. The latter is usually estimated using a complex system of indicators aimed at judging the effects produced on final users.

According to Pavan and Reginato (2004), effectiveness can be expressed as:

- *Internal effectiveness*, i.e., the ratio between results and objectives analyzed as “output.” This result gives information about the aptitude

to succeed in a specific goal, but no information is provided about the aptitude to meet the expectations of external stakeholders.

- *External effectiveness* or *social effectiveness*, i.e., the ratio between results and objectives analyzed as “outcome.” This result explains whether the organization can satisfy the needs of external stakeholders.

Introduction

The concept of effectiveness presented in this entry refers to the different meanings of the term used in the sustainability management literature. Within this body of literature, the concept of sustainable development has progressively developed over time (Young and Tilley 2006, p. 403).

The first stage of attention to sustainable development emerged in the 1960s and 1970s when many corporations started giving attention to pollution control, building solutions aimed at reducing their impact on the natural environment.

In the 1980s the Brundtland Report (WCED 1987) stimulated the beginning of attention toward the concept of “sustainable development.”

In the 1990s the concept of “triple bottom line” (Elkington 1997) emerged.

During the 1980s and the 1990s, a second stage of attention toward sustainability-related issues emerged: Many companies understood the potential usefulness of environmental management practices in terms of cost savings. During this second stage of attention toward sustainability issues, companies mainly focused on the search for *efficiency* and *competitive advantage*, with the purpose of “doing more with less.” In this context, companies considered *eco-efficiency* as a win-win solution, i.e., as a solution enabling companies to achieve at the same time the goals of economic growth and environmental protection (Holliday et al. 2002).

The attention toward “sustainable development” and “triple bottom line” broadened the interpretation of corporate responsibility, understood not only under the economic aspect but also the natural (environmental) and social aspect. The

attention toward these three aspects of corporate responsibility recently is often referred to as *corporate sustainability*.

At the end of the twentieth century, the third stage of attention toward sustainability issues arose, with the emergence of the *eco-effectiveness* concept. The basic idea was that business practices cannot be limited to pollution control and eco-efficiency but must go further, including also business attention toward the restoration and enhancement of the environment. The inadequacy of eco-efficiency as a guiding criterion for business activity was underlined by various scholars (see Day 1998; Gray and Bebbington 2000; Walley and Whitehead 1994; Welford 1997). About sustainability accounting, the inadequacy of eco-efficiency as the main guiding criterion has been underlined by Gray and Bebbington (2000), who argue that most of the solutions related to eco-efficiency generated by firms are business centered rather than environment or sustainability centered.

Different Perspectives of Effectiveness

Starting from the limits of eco-efficiency to achieve sustainability objectives, McDonough and Braungart (1998) introduced the concept of “eco-effectiveness,” aiming at allowing organizations to be at the same time efficient, life sustaining, restorative, and regenerative. This was a significant innovation on the path to sustainability, shifting organizations to change their minds from the old “cradle-to-grave approach” to a new “cradle-to-cradle approach,” in which the principles of reduce, reuse, and recycle are applied to waste management.

Socio-effectiveness can be understood as the positive impact of an organization’s activities on society (Young and Tilley 2006, p. 405).

The emergence of effectiveness as a guiding principle for sustainability-oriented practices finds a milestone in two main publications:

- a) Dyllick and Hockerts (2002)
- b) McDonough and Braungart (2002)

According to Dyllick and Hockerts (2002), sustainable organizations cannot be limited to

being eco- and socio-efficient; they should also pursue the objectives of eco- and socio-effectiveness, sufficiency, and ecological equity. The latter is sometimes referred to as “ecological justice.”

There is a strong relationship between the concepts of effectiveness, efficiency, and equity. In a broad sense, effectiveness is the ability to achieve the desired purpose. Efficiency can be understood as: (a) the ability to minimize the resources used in comparison to the same result achieved or (b) the ability to maximize the result being equal the means employed (Gulluscio 2014b). Equity refers to the existence of equal rights for all the people or social groups for the satisfaction of their needs, both in a given moment and for different generations. In this sense, “ecological equity” refers to equal rights for all people or social groups to environmental resources (Young and Tilley 2006).

According to the authors, three main perspectives are to be considered within corporate sustainability, that is:

- 1) the *business* perspective
- 2) the *natural* perspective
- 3) the *societal* perspective

In the *business perspective* (i.e., considering business/economic sustainability), two main dimensions are considered: (a) eco-efficiency and (b) socio-efficiency. The most relevant criterion for judging the achievement of corporate sustainability is the organization’s *efficient use of natural capital*. This is an *eco-efficiency* measure usually determined as the economic value added by the organization concerning its aggregated ecological impact (Dyllick and Hockerts 2002, p. 136; Schaltegger and Sturm 1990, 1992, 1998). It refers to an organization’s efficient use of natural resources and is usually determined as the economic value added related to the organization’s aggregate ecological impact (Young and Tilley 2006, p. 408). “Eco-efficiency is reached by the delivery of competitively-priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life cycle, to a

level at least in line with the Earth's estimated carrying capacity" (Robins (Ed.) 1993, p. 8).

The main indicators for eco-efficiency currently used by firms include waste/pollution intensity and energy, water, and resource efficiency.

In the business perspective, another relevant criterion for judging the achievement of corporate sustainability is *socio-efficiency*, i.e., the relation between an organization's value added and its social impact (Dyllick and Hockerts 2002; Hockerts 1996, 1999; Figge and Hahn 2001). "It requires the minimization of negative impacts, such as accidents at work and the maximization of positive social impacts, such as training and health benefits" (Young and Tilley 2006, p. 408).

In the *natural perspective* (i.e., considering natural sustainability), two main dimensions are considered: (a) eco-effectiveness and (b) sufficiency. Organizations operating close to or beyond the environment's carrying capacity can never come to be fully sustainable. In this perspective, ecological sustainability must deal not only with relative improvements but also with absolute thresholds. Therefore, the main issue to be considered is not eco-efficiency but *eco-effectiveness*. The latter term "is used in different ways. It was used by Schaltegger and Sturm (1990, 1992, 1998) in the sense of technical effectiveness, which complements the economic value orientation to eco-efficiency. Braungart and McDonough (Braungart 1994; Braungart and McDonough 1998; MBCD 2001) on the other hand use the term in clear opposition to eco-efficiency: 'Long-term prosperity depends not only on the efficiency of a fundamentally destructive system, but on the effectiveness of processes designed to be healthy and renewable in the first place. Eco-effectiveness celebrates the abundance and fecundity of natural systems, and structures itself around goals that target 100 percent sustaining solutions (MBCD 2001)'" (Dyllick and Hockerts 2002, p. 136).

Within the natural perspective, another criterion usually employed is *sufficiency*, mainly interpreted as "an issue of individual choice rather than a single firm's responsibility. [...] Both eco-effectiveness and sufficiency are criteria looking at ecological sustainability as their main goal with business and

society as the main drivers for producing greater environmental good" (Dyllick and Hockerts 2002, p. 137). It emerges from the integration of environmental sustainability and social sustainability (Hockerts 1999, p. 6). It "refers to the actions of individual consumers to make responsible choices right through to consumers collectively boycotting or subverting corporate branding and marketing strategies that are believed to be environmentally harmful" (Young and Tilley 2006, p. 408). The following considerations can explain the concept of sufficiency: "Must we cut back? Since the late 1980s, the 'deep green' response to 'green consumerism' has been not to consume differently but to consume less. [...] Companies determined to remain at the cutting edge should be applying some form of 'need test' to their products or services [...] [which] provides an initial set of questions to get the process started" (Sustainability 1995, pp. 10–11).

In the *societal perspective* (i.e., considering social sustainability), two main criteria are considered: (a) ecological equity and (b) socio-effectiveness. *Ecological equity* "stands at the nexus of the relationship between the management of natural capital and social sustainability. While current generations consume large parts of the earth's natural capital, the bulk of damage is likely to be borne by future generations" (Dyllick and Hockerts 2002, p. 138).

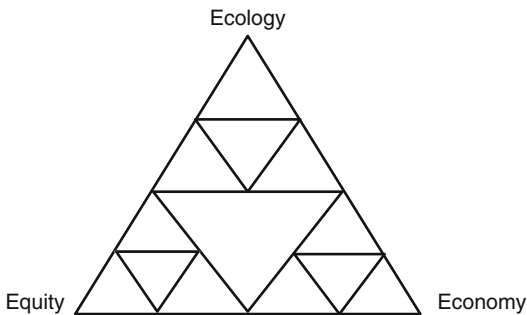
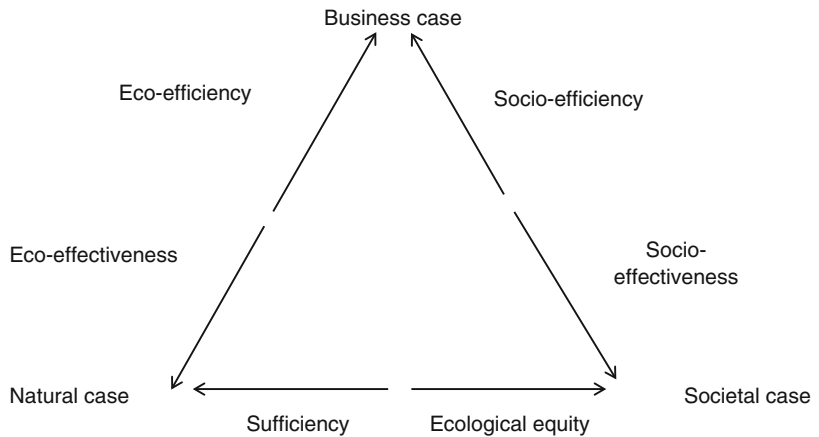
Socio-effectiveness examines the organization's "conduct not on a relative scale but rather in relation to the absolute positive social impact a firm could reasonably have achieved." It "refers to the assessment of a firm's absolute social performance. Are a company's products accessible and therefore benefiting all or just an elite few?" (Young and Tilley 2006, p. 408).

An overview of the three mentioned dimensions of corporate sustainability and the six connected criteria (including different types of effectiveness) is presented in Fig. 1.

McDonough and Braungart (2002) apply a triangular model similar to that of Dyllick and Hockerts (2002), introducing the concept of *triple top line thinking* which shifts the attention toward the beginning of the design process. In this model, there are three dimensions constantly connected:

Effectiveness,

Fig. 1 Three dimensions and six criteria of corporate sustainability. (Source: Dyllick and Hockerts 2002, p. 138)



Effectiveness, Fig. 2 Fractal triangle. (Source: Braungart and McDonough 2002, p. 253)

ecology, economy, and equity. They are represented in a fractal triangle (see Fig. 2) showing that every product is produced and used in an interconnected world. “Each of these schools of thought – capitalism, socialism, ecologism – was inspired by a genuine desire to improve the human condition. But taken to extremes – reduced to isms – the stances they inspired can neglect factors crucial to long-term success. Even ecological concern, stretched to an ism, can neglect social, cultural, and economic interests to the detriment of the whole system. In short, holding one of these concerns *the* ultimate goal often puts economy, ecology and equity at cross-purposes. So does measuring your performance by how well you are managing the bottom line liabilities that arise from these seemingly conflicting interests. Triple

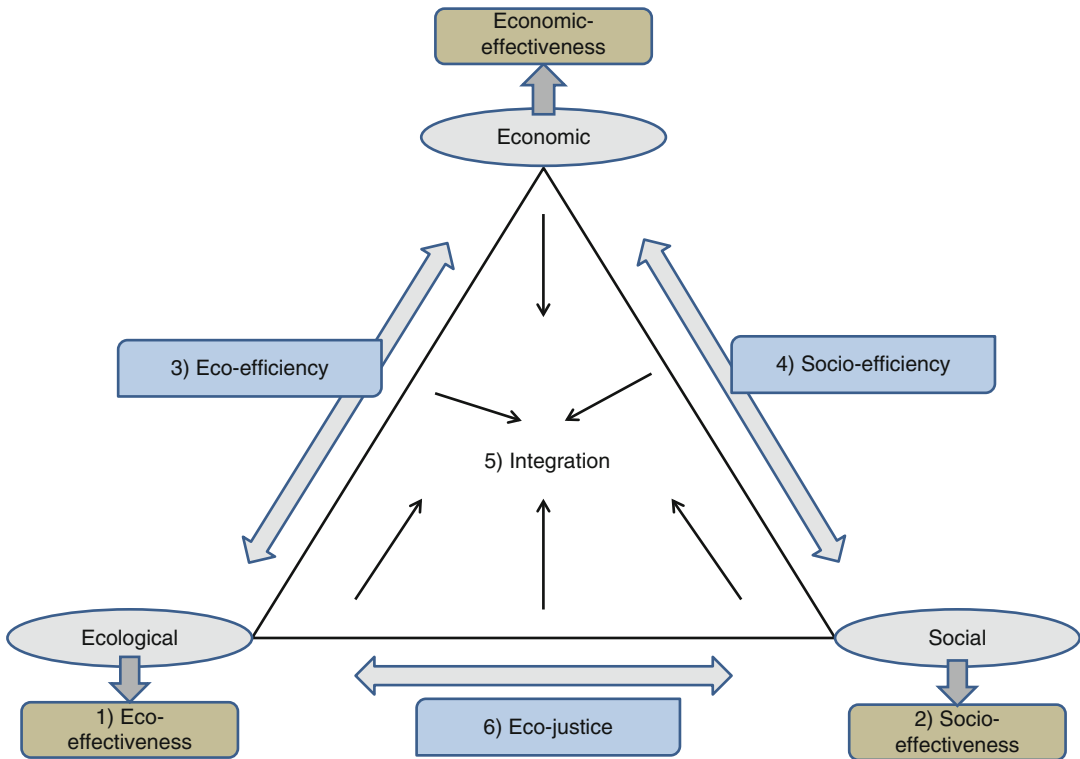
top line thinkers, rather than trying to limit the influence of one or the other of these value systems, discover opportunities in honoring the needs of all three” (McDonough and Braungart 2002, p. 254).

Key Issues

Corporate sustainability indicators include three main areas: (a) business, (b) natural, and (c) societal. Effectiveness is a measure recurring in these three dimensions but in different forms. According to the “Sustainability Triangle” (Fig. 3) proposed by Schaltegger ([forthcoming](#) in this Encyclopedia), effectiveness can be examined under an economic (i.e., business), ecological (i.e., natural), and social (i.e., societal) perspective. The integration of these three areas with of efficiency and effectiveness measures leads to a multidimensional perspective about sustainability management, as Fig. 3 displays.

Summary

Sustainability management is moving in the direction of integrating different perspectives (i.e., the business/economic, the natural/



Effectiveness, Fig. 3 The sustainability triangle of corporate sustainability management. (Source: Schaltegger and Burritt 2005, 189)

ecological, and the societal/social perspectives) and different dimensions (i.e., efficiency and effectiveness). This seems to be the most promising way to capture all relevant aspects of sustainability management and to move toward a multidimensional approach to sustainability issues.

Cross-References

- ▶ [Business Case of CSR](#)
- ▶ [Competitive Advantage](#)
- ▶ [Corporate Sustainability](#)
- ▶ [Efficiency](#)
- ▶ [Sustainability Accounting](#)
- ▶ [Sustainability Management](#)
- ▶ [Sustainable Entrepreneurship](#)
- ▶ [Triple Bottom Line](#)

References

- Braungart, M. (1994). Ein Wirtschaftssystem für 'intelligente Produkte' anstatt einer High-Tech Abfallwirtschaft. In K. Hockerts et al. (Eds.), *Kreislaufwirtschaft statt Abfallwirtschaft* (pp. 45–55). Ulm: Universitätsverlag.
- Braungart, M., & McDonough, W. (1998). The next industrial revolution. *The Atlantic Monthly*, 282(4), 82–92.
- Day, R. M. (1998). Beyond eco-efficiency: Sustainability as a driver for innovation, sustainable enterprise perspectives. In *Sustainable enterprise perspectives*. Washington DC: World Resource Institute.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone.
- Figge, F., & Hahn, T. (2001). *Sustainable value added – Measuring corporate contributions to sustainability*. Conference proceedings on the 2001 Business Strategy and the Environment Conference in Leeds, ERP Environment, Shipley, pp. 83–92.

- Gray, R., & Bebbington, J. (2000). Environmental accounting, managerialism and sustainability: Is the planet safe in the hands of business and accounting? In M. Freedman & B. Jaggi (Eds.), *Advances in environmental accounting and management* (Vol. 1). Amsterdam: JAI.
- Gulluscio, C. (2014a). Effectiveness. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility*. Springer International Publishing.
- Gulluscio, C. (2014b). Efficiency. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility*. Springer International Publishing.
- Hockerts, K. (1996). *The SusTainAbility Radar (STAR*)*, a step towards corporate sustainability accounting. Discussion paper. London: New Economics Foundation.
- Hockerts, K. (1999). The sustainability radar – A tool for the innovation of sustainable products or services. *Greener Management International*, 25, 29–49.
- Holliday, C. O., Schmidheiny, S., & Watts, P. (2002). *Walking the talk – The business case for sustainable development*. Greenleaf: Sheffield.
- MBCD. (2001). *Eco-effectiveness – Nature's design patterns*. www.mbcd.com/c2c_ee.htm
- McDonough, W., & Braungart, M. (1998, October). The next industrial revolution. *The Atlantic Monthly*.
- McDonough, W., & Braungart, M. (2002). Design for the triple top line: New tools for sustainable commerce. *Corporate Environmental Strategy*, 9(3), 251–258.
- Pavan, A., & Reginato, E. (2004). *Programmazione e controllo nello Stato e nelle altre amministrazioni pubbliche*. Milano: Giuffrè.
- Robins, N. (Ed.). (1993). *Getting eco-efficient, how can business contribute to sustainable development?* Report of the Business Council for Sustainable Development, First Antwerp Eco-Efficiency Workshop, November.
- Schaltegger, S. (forthcoming in this Encyclopedia). *Sustainability management*.
- Schaltegger, S., & Burritt, R. L. (2005). Corporate sustainability. In: Folmer H, Tietenberg T (eds) *The international yearbook of environmental and resource economics 2005/2006*. Edward Elgar, Cheltenham, pp. 185–222.
- Schaltegger, S., & Sturm, A. (1990). Ökologische Rationalität. *Die Unternehmung*, 4, 273–290.
- Schaltegger, S., & Sturm, A. (1992). *Ökologieorientierte Entscheidungen in Unternehmen*. Bern: Haupt.
- Schaltegger, S., & Sturm, A. (1998). *Eco-efficiency by eco-controlling*. Zürich: VDF.
- Sustainability. (1995). *Who needs it? Market implications of sustainable lifestyle*. London/Horgen: Sustainability Ltd/Dow Europe.
- Walley, N., & Whitehead, B. (1994). It's not easy being green. *Harvard Business Review*, 72(3), 46–50.
- Welford, R. (1997). *Hijacking environmentalism: Corporate responses to sustainable development*. London: Earthscan.
- World Commission on Environment and Development. (1987). *"Our common future" (the Brundtland report)*. Oxford: Oxford University Press.
- Young, W., & Tilley, F. (2006). Can business move beyond efficiency? The Shift toward Effectiveness and Equity in the Corporate Sustainability Debate. *Business Strategy and the Environment*, 15, 402–415.

Efficacy

- Effectiveness

Efficiency

- Resource Intensity

EIA

- Environmental Impact Assessment

Elasticity

- Resilience

Electrical Grid

- Smart Grid

Electronic Waste

- E-waste

Electronic Waste Recycling

- Waste Dumping

EMAS: Eco-Management and Audit Scheme

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Synonyms

Environmental management standard; Environmental management system; Environmental management system requirements

Definition

Eco-Management and Audit Scheme (EMAS) is the initiative proposed by the European Commission that presents guidelines and organizational infrastructure to allow organizations from different sectors to voluntarily participate in the scheme by the implementation of environmental management systems and demonstrate their advances through publicly available periodic environmental statements with information on their compliance with applicable legal requirements and their environmental performance (Regulation 2009). EMAS focuses on continuous improvements in the environmental performance of an organization by the establishment and implementation of environmental policy and management of their environmental aspects, the periodic evaluation of the performance of such system, and the provision of information on environmental performance to public opinion.

Voluntary Eco-Management and Audit Scheme

Eco-Management and Audit Scheme (EMAS) is the initiative of European Union to present guidelines and organizational infrastructure that will allow organizations from different sectors to implement Environmental Management System. The European Commission developed and

launched EMAS to enable organizations “to assess, report, and try to improve their environmental performance” (Laskurain et al. 2017, p. 7). The scheme is open to any type of organization from different sectors and countries, even from outside the European Union. As the standard for the Environmental Management System EMAS can contribute to sustainable development offering organizations good management practices to follow, and its implementation can be a manifestation of social responsibility. This kind of initiative belongs to the so-called soft policy instruments or voluntary instruments.

The objective of EMAS, as the legal regulation that introduced it states: “is to promote continuous improvements in the environmental performance of organisations by the establishment and implementation of environmental management systems by organisations, the systematic, objective and periodic evaluation of the performance of such systems” (Regulation 2009). In general, EMAS can help “to evaluate, report, and improve their environmental performance” (European Commission EMAS 2020).

Member states are responsible to organize functioning of the scheme. This means establishment of the Competent Body and the country EMAS register. “Competent Bodies shall establish procedures for the registration of organisations” (Regulation 2009). The organization may apply for one registration for all of its sites or only for some of those sites. The register should include information on environmental statement of organization and where it can be obtained. The information should be updated on a monthly basis. “The register shall be publicly available on a website” (Regulation 2009).

There were three important stages in the EMAS history. The first European certifiable environmental management scheme (EMAS I) was introduced by the Regulation 1836/93 in July 1993. Then in 2001 the revised Regulation (EC) No 761/2001 (EMAS II) appeared and finally Regulation (EC) No 1221/2009 (EMAS III) came into effect on 11 January 2010 (European Commission EMAS Publications 2020). The EMAS I was focused on the manufacturing industry only. “In 2001, EMAS

was revised to integrate ISO 14001 and to allow participation by all economic sectors. The focal point of the revision in 2010 was administrative relief for small- and medium-sized enterprises. Furthermore, the revision made it possible for sites outside the EU to participate” (Myszczyzyn 2017, p. 169).

“In 2017 Annexes I, II and III of the EMAS Regulation were amended to include the changes associated with the revision of the ISO 14001:2015 standard” (European Commission EMAS Publications 2020). EMAS III reference to the ISO 14001 requirements can be explained by the will to make EMAS more recognizable by companies from outside European Union as ISO 14001 is globally accepted standard.

EMAS Versus ISO 14001

EMAS refers to the standard proposed in ISO 14001 but add some new elements. The comparison between the two standards shows their deep similarity (see for example the comparison of the ISO 14001:2015 and the EMAS III in: Laskurain et al. 2017, p. 7). For the description of the functioning of ISO 14001 Environmental Management System please follow the link: ISO 14001.

EMAS adds five important elements above the ISO 14001 requirements:

- “Constant improvement of pro-environmental action by the necessity to renew the registration, to update the environmental statement and a continuous setting out of new environmental objectives” (Myszczyzyn 2017, p. 169).
- An initial environmental review is required in the process of implementation of the system (Regulation 2009).
- “Compliance with the legislation on the environmental protection guaranteed by the participation of government authorities in the system.
- Universal access of public opinion through open publications of environmental

statements, environmental reports” (Myszczyzyn 2017, p. 169).

- “Active involvement of employees in organizations and appropriate training” (Regulation 2009).

The annual statement of the registrant measuring should demonstrate progress against a number of key indicators. Membership in the initiative “can be suspended if progress is not deemed sufficient” (Whitford and Provost 2019, p. 34).

As the ISO 14001 presents the requirements for the environmental management system, it does not require to achieve certain levels of environmental performance (e.g., emission standards, indicators of resources used, or any other achievements levels). In the latest version of EMAS III “the need to establish a set of core indicators of environmental performance” is emphasized (Laskurain et al. 2017, p. 10).

In this light the choice between the ISO 14001 and EMAS is not a choice between two equivalent solutions. EMAS requires an initial environmental review, an annual statement and membership in EMAS can be suspended (Whitford and Provost 2019, p. 34). Because of the above, the EMAS can be perceived as more strict EMS than that offered by the ISO 14001 requirements. “ISO 14001 has requirements that are easier for many firms to meet than those of EMAS” (Whitford and Provost 2019, p. 35). That is one of the reasons why the winning EMS on the market is the ISO 14001. In recent years, companies have shown more preference for – in some sense – the less ambitious ISO 14001 standard.

EMAS Register

EMAS register statistics show organizations and sites that take part in the scheme. There are many differences between the levels of engagement in the particular Member Country. Most of the organizations registered come from: Austria, Belgium, Germany, Spain, Greece, Italy, and Poland. In September/October 2019 there were 3694

organizations and 12,664 sites registered (EMAS register 2020).

Regulation put the responsibility to promote EMAS on Member States that required them to “develop and implement specific measures aimed at greater participation in EMAS by organisations, in particular small organisations” (Regulation 2009). EMAS different popularity in particular European countries can be a result of different levels of engagement of public sector (government) in promoting it. In general, this engagement is crucial for the scheme development. The support of the government is crucial “to produce a stable pattern of incremental adoption over time” (Whitford and Provost 2019, p. 30). In other cases, implementation of ISO 14001 standard can be a good enough alternative for many organizations on the market.

Summary

Eco-Management and Audit Scheme (EMAS) is the initiative of the European Commission. It was created to enable voluntary participation of organizations in the scheme by the implementation of an environmental management system. EMAS as other environmental management systems (e.g., based on ISO 14001 standard) focuses on continuous improvements in the environmental performance. In order to implement the system, an organization needs to establish and implement environmental policy and manage their environmental aspects. This should be supported by the periodic evaluation of the performance of such system and the provision of information on environmental performance to public opinion. EMAS adds some crucial elements above the requirements presented by ISO 14001 standard. They include: the necessity to publish the environmental statement, making an initial environmental review, and creating opportunities to actively involve employees in organizations. In recent years, companies have shown more preference for ISO 14001 standard. Currently (in September/October 2019), there are 3694 organizations and 12,664 sites registered. Most of the organizations

come from: Austria, Belgium, Germany, Spain, Greece, Italy, and Poland.

Cross-References

- [Cradle-to-Cradle](#)
- [Eco-Efficiency](#)
- [Environmental Management System](#)
- [ISO 14001 Standard](#)
- [Quality Management](#)
- [Sustainability](#)

References

- EMAS Register. (2020). https://ec.europa.eu/environment/emas/emas_registrations/statistics_graphs_en.htm. Accessed 22 Jan 2020.
- European Commission EMAS. (2020). <https://ec.europa.eu/environment/emas/>. Accessed 22 Jan 2020.
- European Commission EMAS Publications. (2020). https://ec.europa.eu/environment/emas/emas_publications/policy_en.htm. Accessed 20 Jan 2020.
- Laskurain, I., Ibarloza, A., Larrea, A., & Allur, E. (2017). Contribution to energy management of the main standards for environmental management systems: The case of ISO 14001 and EMAS. *Energies*, 10(1758), 1–21. <https://doi.org/10.3390/en1011758>
- Myszczyński, J. (2017). Eco-management and audit scheme (EMAS) as an important element of the sustainable development policy on the example of Poland. In A. Auzina (Ed.), *Economic science for rural development. Proceedings of the international scientific conference no 45, integrated and sustainable regional development marketing and sustainable consumption* (pp. 168–175). Jelgava.
- Regulation. (2009). Regulation (EC) No 1221/2009 of The European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS).
- Whitford, A. B., & Provost, C. (2019). Government promotion of corporate social responsibility: Evidence from the EU eco-management and audit scheme. *Review of Policy Research*, 36(1), 28–49. <https://doi.org/10.1111/ropr.12321>.

Embedded Corporate Social Responsibility

- [Embedded CSR](#)

Embedded CSR

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Synonyms

Embedded corporate social responsibility;
New-generation CSR

Definition/Description

Embedded corporate social responsibility (embedded CSR) "...involves an organization's core competencies and integrates CSR within a firm's strategy, routines, and operations, and therefore affects all employees" instead of a peripheral CSR based on philanthropy and volunteering (Aguinis and Glavas 2013, p. 314). The peripheral CSR has similarity with the traditional CSR based on donations by charity organizations, whereas "the new-generation CSR appears when corporations embed CSR activities into their core business model, aim to achieve inclusive market development as well as provide solutions that help the bottom of the pyramid (BOP) while advancing their commercial and financial profitability" (Abdelhalim and Eldin 2019, p. 776).

What Do We Speak About When We Speak About Embedded CSR?

The definition of the corporate social responsibility by the European Commission in their Green Paper promoting a European framework for corporate social responsibility is "A concept through which the company voluntarily integrates the social and environmental dimensions in its business operations and in its relations with stakeholders" (COM 2001 366). Thus, there are

economic, environmental, and social dimensions. The term CSR addresses the obligations of an organization in a manner that benefits the society (Jamali and Neville 2011; Snider et al. 2003).

Even though literature on corporate social responsibility existed, a uniform definition for the term had not been created; rather, "parallel and sometimes confusing universes exist" (Waddock 2004 p. 5). This confusion motivated Aguinis and Glavas to divide CSR into the embedded and peripheral CSR to bring clarity to the term. They define embedded CSR as an approach that "...involves an organization's core competencies and integrates CSR within a firm's strategy, routines, and operations, and therefore affects all employees" (Aguinis and Glavas 2013, p. 314).

Whereas embedded CSR involves the entire organization, peripheral CSR means an approach where the corporate social responsibility "...is not integrated into an organization's strategy, routines and operations (e.g. philanthropy, volunteering)" and is and therefore perceived as not genuine with potentiality to cause negative perception by employees and consumers (Aguinis and Glavas 2013, p. 314).

Their definition is an acknowledged one; however, Smith and Bartunek (2013) have noted that philanthropy and volunteering also bring many benefits, such as strengthening company values, providing it a license to operate, developing employee and team engagement, and promoting the company brand, and for these reasons, they "are embedded almost by definition" (Smith and Bartunek 2013, p. 339).

As an additional note, an angle to the embedded CSR definition is of educational nature. There, the question is how CSR-related topics are taught in management schools; are they taught as "either specific CSR subjects (stand-alone CSR subjects) or as part of various subjects on the academic curriculum (embedded CSR subjects)" (Setó-Pamies et al. 2015)? In that context, embedded CSR refers to subjects that are rather added on top of another subject taught in a business school, management school, or university.

Why Does Embedded CSR Matter?

The European Commission has determined the goal for CSR as “maximizing the creation of shared value for their owners/shareholders and for their other stakeholders and society at large as well as identifying, preventing and mitigating their possible adverse impacts” (European Commission 2019, p. 3).

In addition to these, companies consider CSR attractive due to the competitive advantage it brings as it generates “favorable stakeholder attitudes and better support behaviors (e.g. purchase, seeking employment, investing in the company), but also, over the long run, build corporate image, strengthen stakeholder–company relationships, and enhance stakeholders’ advocacy behaviors” (Du et al. 2010). In addition, a company can attain a positive impact due to a socially responsible brand influence to their stakeholder engagement (Greening and Turban 2000; Carlini et al. 2019).

When company values, policies, and practices are determined and redetermined on a continuous basis, “learning takes place as CSR is embedded in business processes, and that once it has been integrated, in turn, it generates innovative practices, and finally, competitiveness” (Vilanova et al. 2009).

In addition to corporations and other large companies that are often the focal point when speaking about CSR, small- and medium-sized companies are also interested in the competitive advantage CSR could bring to them. Therefore, even though the CSR-related costs are more challenging for the small- and medium-sized companies than for corporations to carry, “CSR must not be considered as an ad hoc expense, rather it is integrated into company’s core business activities in such a way that it positively affects the company’s performance and its competitiveness by enhancing the developmental potential and reducing the risk profile” (Morsing and Perrini 2009, p. 6).

Thus, embedding CSR into an organization comprises integrating CSR into a company in all relevant management levels and having an impact to the company employees, with the aim to bring

the desired benefits, such as competitive advantage, caused by an enhanced brand image, employee engagement, and stakeholder engagement, to the organization that applies embedded CSR.

How to Integrate, or Embed, CSR into an Organization?

Various ways have been proposed to integrate, or embed, CSR into an organization.

Implementing the ISO standards is one of those ways. The ISO 9000 quality system standards (International Organization for Standardization 2015) could offer “a structural and infrastructural platform for organizations to develop and adopt corporate social responsibility (CSR),” whereas the ISO 26000 social responsibility standard could “facilitate a shift from customer focus to stakeholder focus hence creating a business-to-society orientation in organizations” (Castka and Balzarova 2008). The most recent version of the social responsibility standard is ISO 26000:2020 (International Organization for Standardization 2020). Valmohammadi (2014) found remarkable relations between CSR practices and the performance of the organizations and concluded that “community involvement and development plays an important role in enhancing organizational performance of organizations” (Valmohammadi 2014).

Even though utilization of the standard can cause positive impacts in the organizational practice and lead to an increased organizational performance (Valmohammadi 2014), companies may use the standard to signal their social responsibility as more embedded than the actual practice in the given organization and thus cause a false signal of the level of the integration (Moratis 2018).

Diane Swanson has proposed an organizing principle termed “discovery leadership” to reshape the management practice, to renew education in the field of management, and to emphasize the importance of CSR by the voice from the top from the management perspective (Swanson 1999, 2014).

Utilization of existing ways, such as business contracts, in an expanded manner could be one of the means to embed CSR into corporations. From this perspective, using contracts, contracting and contract management policies, processes, best practices, and tools to promote sustainability and to incentivize the green economy in organizations could be one of the means toward this end (Hirvonen-Ere 2019).

Summary

Embedded CSR means an approach that integrates CSR into an organization; and this is attained in a manner that involves its all core competences and affects all employees (Aguinis and Glavas 2013).

Embedded CSR brings several benefits to companies that apply it, such as competitive advantage. The competitive advantage is achieved via, inter alia, increased employee and stakeholder engagement and positive brand image (Greening and Turban 2000; Du et al. 2010; Carlini et al. 2019; Vilanova et al. 2009).

Embedded CSR, integrating CSR into the company, can be done via various management approaches. In addition to those, implementing ISO standards (Valmohammadi 2014), organization principles, and voice from the top from the management perspective (Swanson 1999, 2014) and utilization of contracts and contracting and contract management approach in an expanded manner (Hirvonen-Ere 2019) have been proposed.

Given the challenges of our time, in order to achieve the goals of corporate social responsibility in companies, the importance of CSR and embedded CSR in companies is likely to increase.

Cross-References

- Business Ethics
- Creating Shared Value
- Embedded Sustainability

References

- Abdelhalim, K., & Eldin, G. E. (2019). Can CSR help achieve sustainable development? Applying a new assessment model to CSR cases from Egypt. *International Journal of Sociology and Social Policy*, 39(9/10), 773–795. Emerald Publishing Limited 0144-333X. <https://doi.org/10.1108/IJSSP-06-2019-0120>. www.emeraldinsight.com/0144-333X.htm
- Aguinis, H., & Glavas, A. (2013). Embedded versus peripheral corporate social responsibility: Psychological foundations. *Industrial and Organizational Psychology. Perspectives on Science and Practice*, 6(4), 314–332.
- Carlini, J., Grace, D., France, C., & Iacono, J. L. (2019). The corporate social responsibility (CSR) employer brand process: Integrative review and comprehensive model. *The Journal of Marketing Management*, 35(2), 1–24.
- Castka, P., & Balzarova, M. A. (2008). Adoption of social responsibility through the expansion of existing management systems. *Industrial Management & Data Systems*, 108(3), 297–309. <https://doi.org/10.1108/02635570810858732>.
- Commission of the European Communities, Brussels, 18.7.2001 COM. (2001). 366 final GREEN PAPER promoting a European framework for corporate social responsibility.
- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*. <https://doi.org/10.1111/j.1468-2370.2009.00276.x>.
- European Commission. (2019). Corporate social responsibility, responsible business and conduct, and business & human rights: Overview of progress. Commission Working Document 143.
- Greening, D., & Turban, D. (2000). Corporate social performance as a competitive advantage attracting a quality workforce. *Business and Society*, 39(3), 254–280.
- Hirvonen-Ere, S. (2019). The way of business contracts: How to promote (transport) sustainability and incentivize the green economy via contract management. In E. Eftestøl-Wilhemsson, S. Sankari, & A. Bask (Eds.), *Sustainable and efficient transport* (pp. 182–211). Cheltenham/Northampton: Edward Elgar Publishing Ltd.
- International Organization for Standardization. (2015). ISO 9001:2015 Quality Management Systems. <https://www.iso.org/standards.html>
- International Organization for Standardization. (2020). ISO 26000:2020 Social Responsibility Standard. <https://www.iso.org/standards.html>
- Jamali, D., & Neville, B. (2011). Convergence versus divergence of CSR in developing countries: An embedded multi-layered institutional lens. *Journal of Business Ethics*, 102, 599–621. <https://doi.org/10.1007/s10551-011-0830-0>.

- Moratis, L. (2018). Signalling responsibility? Applying signalling theory to the ISO 26000 standard for social responsibility. *Sustainability*, 10, 4172. <https://doi.org/10.3390/su10114172>.
- Morsing, M., & Perrini, F. (2009). CSR in SMEs: Do SMEs matter for the CSR agenda? *Business Ethics: A European Review*. *Business Ethics, the Environment and Responsibility*. Wiley Online Library, 18(1), 1–6. <https://doi.org/10.1111/j.1467-8608.2009.01544.x>
- Setó-Pamies, D., Misericordia, D.-V., & Rabassa-Figueras, N. (2011). Corporate social responsibility in management education: Current status in Spanish universities. *Journal of Management & Organization*, 17(5), 604–620. <https://doi.org/10.5172/jmo.2011.17.5.604>. What is the role of business schools? Published online by Cambridge University Press. 2 Feb 2015.
- Smith, K. V., & Bartunek, J. M. (2013). Embedded versus peripheral CSR from the perspective of CSR professionals. *Industrial and Organizational Psychology*, 6(4), 338–341. <https://doi.org/10.1111/iops.12062>. Published online by Cambridge University Press. 7 Jan 2015.
- Snider, J., Hill, P., & Martin, D. (2003). Corporate social responsibility in the 21st century: A view from the world's most successful firms. *Journal of Business Ethics*, 48, 175–187.
- Swanson, D. L. (1999). Toward an integrative theory of business and society: A research strategy for corporate social performance. *Academy of Management Review*, 24(3). <https://doi.org/10.5465/amr.1999.2202134>.
- Swanson, D. L. (2014). *Embedding CSR into corporate culture: Challenging the executive mind*. Basingstoke: Palgrave Macmillan.
- Valmohammadi, C. (2014). Impact of corporate social responsibility practices on organizational performance: An ISO 26000 perspective. *Social Responsibility Journal*, 10(3), 455–479. <https://doi.org/10.1108/SRJ-02-2013-0021>.
- Vilanova, M., Lozano, J. M., & Arenas, D. (2009). Exploring the nature of the relationship between CSR and competitiveness. *Journal of Business Ethics*, 87(Suppl 1), 57–69. <https://doi.org/10.1007/s10551-008-9812-2>.
- Waddock, S. A. (2004). Parallel universes: Companies, academics, and the progress of corporate citizenship. *Business and Society Review*, 10, 758–769.

Embedded Quality Management Systems

► Integrated Quality and Environmental Management

Embedded Sustainability

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Synonyms

Integrated sustainability

Definition

The principles of embedded sustainability involve pursuing sustainable value, transforming business activities by offering smarter solutions in the life cycle and business value chain, as well as ensuring that sustainability is seen and taken by all as a responsibility (Annan-Diab and Molinari 2017;

Purkayastha and Rao 2017). Hence, embedded sustainability is often defined as incorporating environmental, health, and social value into the core business without sacrificing price or quality or charging a premium for being socially or environmentally conscious. Sustainability refers to achieving our goals without compromising the futures of coming generations (Elegbede et al. 2022, 2023). Along with natural resources, there are economic and social resources. Sustainability goes beyond environmental activism. Most conceptions of sustainability include considerations for social advancement and economic growth as well. It has a more decentralized grasp on productivity in the wider definition, a thorough understanding of environmental and social trends, as well as associated risks and possibilities, and may even promote innovation and experimentation that more generally improve it. Integrating all aspects of sustainability into a business element is known to improve embedded sustainability (Trollman and Colwill 2021). Businesses can incorporate sustainability through creative product and service design, investigation and appreciation, or reflection on experiences (Laszlo and Zhexembayeva 2011a). Embedded strategies address the growing demands on companies to define their mission and their strategy in line with the need to reorient globalization in favor of waste reduction, inequality reduction, a quick transition to a low-carbon economy, and biodiversity preservation (Elegbede and Guerrero 2016; Bertels and Dobson 2020). Clearly, embedded sustainability initiatives have a favorable effect on business productivity.

Concept of Embedded Sustainability

The practice of integrating environmental, health, and social value into a company's core operations without compromising quality or price, or, in other words, without charging a higher price for doing so, is known as embedded sustainability (Laszlo and Zhexembayeva 2011b). Environmental, health, and social principles are included in its primary business. The key to long-term success and growth is embedded sustainability, which

gives shareholders and the workforce new possibilities to discover purpose in organizational daily activities without sacrificing cost or quality. Every aspect of the business system must undergo a fundamental change in order to achieve embedded sustainability (IEDP 2011).

Sustainability involves adjustment, new knowledge, and cross-functional cooperation. Making this happen needs to fall under the purview of someone. The organization has included sustainability in its strategic plan and is making progress relative to its goals and objectives (Adams 2013). The organization's common objective vision, major strategy, and plans must include sustainability. Goals, material impacts, key performance indicators (KPIs), record keeping, target setting, and performance management are all necessary (Adams 2013).

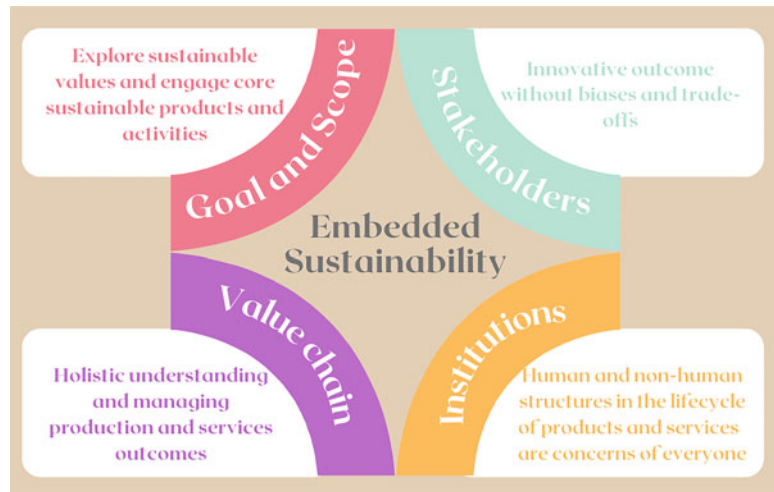
Embedded sustainability as an innovative and fascinating concept pushes stakeholders, including human and non-human components of the institutions and entities to have a clear goal and scope that explores sustainable values toward engaging core sustainability in production and business (Fig. 1). Moreover, this concept enables the institutional framework to go beyond business as usual across the whole life cycle of products or services, particularly when designing strategies for having a thorough knowledge and management of the company to satisfy consumers and other stakeholders. To assist businesses in integrating their projects into their daily operations and decision-making, the embedding sustainability initiative creates a variety of resources that are useful in production (Bertels and Dobson 2020). Embedded sustainability is a response to a fundamentally altered market reality that unifies profit, not just a more environmentally friendly strategy. It necessitates dedication to upholding the moral standards and core principles of any organization's operations.

Pillars of Embedded Sustainability

Specifically, social responsibility, economic growth, and the environment are the three pillars that support sustainable development for a

Embedded**Sustainability,**

Fig. 1 Components of embedded sustainability. (Adapted from Laszlo and Zhexembayeva 2011b)



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corporation. Prior to the importance of sustainability, three pillars were proposed. Explicitly incorporated into their formulation of organizations in a multidisciplinary and solutions-focused approach to sustainable development, the fundamentals of the sustainability framework are built on important and interconnected functions. Long-term commercial value can be generated when the purpose is integrated into all aspects of the company rather than being restricted to a sustainability team (Purvis et al. 2019). Because nearly all sustainable projects that are successful and scalable are driven by all three pillars simultaneously, the three-pillar framework is solutions-focused (Clune and Zehnder 2018).

The social pillar promotes implementing policies that advance societal well-being. Businesses should adopt flexible schedules and offer sufficient maternity and paternity incentive schemes in order to provide better engagement terms. Organizations should also offer enough opportunities for employee learning and growth to improve skills. Governments and other entities must be on the lookout for unfair practices in supply and production chains, such as child labor and worker exploitation. Organizations support the neighborhood. Through funding and grants, organizations can get involved in neighborhood projects including creating green spaces, schools, healthcare, and retirement homes and paternity incentive schemes in order to provide better engagement terms. Organizations should also offer

enough opportunities for employee learning and growth to improve skills. Governments and other entities must be on the lookout for unfair practices in supply and production chains, such as child labor and worker exploitation. Organizations support the neighborhood. Through funding and grants, organizations can get involved in neighborhood projects including creating green spaces, schools, healthcare, and retirement homes. Aside from providing grants and scholarships, organizations can also assist in promoting social harmony (Colson 2022). All these promote a societal approach to embedded sustainability.

For every firm, economic sustainability is frequently of the utmost importance. To achieve sustainability, a firm must be profitable. The economic pillar, however, opposes maximizing profits. Businesses must make profits while keeping in mind the other two pillars. Other actions that fall under the economic pillar include compliance, ecosystem governance, and job development. High employment rates help the economy and social welfare by creating jobs. According to the economic, social, and governance (ESG) criteria, this pillar is listed under corporate governance (Colson 2022).

The environmental pillar provides the legal framework, regulations, and other instruments of policy that address environmental issues. These challenges include the preservation of biodiversity, the conservation of natural resources,

animals, and threatened and endangered species, air and water pollution, treatment and disposal, environmental conservation, and solid waste management. This comprises financial incentives and market-based tools, including tariffs and tax relief, grants and subsidies, outreach programs, and education programs. The importance of the environment is further emphasized by SDGs 11, 13, 14, 15, and 16 (PFD 2022). At different levels, there exists a strong linkage between embedded environmental sustainability and the SDGs. Considering the global environmental sustainability goals and targets of the SDGs, it seeks to address critical environmental sustainability issues that affect the global environment and manage the escalating use of resources at various stages of development, which is known to cause environmental degradation. The environmental pillar advocates for improving air and water quality by reducing greenhouse gas emissions. It focuses on the welfare of the world (Colson 2022).

Embedded Sustainability Polarity

The concept of polarities is embedded in all transformation services as interdependent ideals that complement one another (Levknecht 2013). Most organizations, including those in the health sector, use it. Cells that are alive employ environmental polarity for an estimate. Local environments, such as districts, schools, and limited corporations, can use polarity management in resource exploitation. Creating sustainable value for polarities entails entities making decisions that take into account both the opportunities and dangers brought on by societal, environmental, and economic changes. To maximize the overall value collected, sustainable value creation demands systems thinking (Evans et al. 2017).

What Embedded Sustainability Means for Business Strategy

Sustainability is the incorporation of environmental, healthcare, and social benefit into the primary

strategy without compromising value or service and without charging additional fees for being socially or environmentally conscious. Managers underutilize the multiple levels of company value that embedding sustainability produces beyond just risk reduction or cost savings. In the world of business, sustainability refers to a company's plan to lessen the harm done to the environment as a result of its operations in a given market (IBM 2021). The goal of sustainability, therefore, entails unspoken decisions that are fundamental to company strategy, such as whether to explore progressive or revolutionary innovation and whether to eliminate negatives or create positive solutions. Productive, sustainable, and flexible business environments are integral to the foundations of economies and societies, like how wealth, job possibilities, and innovations produced by enterprises contribute significantly to life satisfaction (Woo 2020). Organizations must prioritize sustainability if they want to be relevant and competitive in today's marketplace. Stable business methods aim to employ resources that are renewable and non-polluting while also using less energy and materials. Sustainability will increase employee motivation to deliver better work, lower expenses, and have a 60% impact on operating profits. Implementing tactics that produce beneficial, long-lasting effects without jeopardizing the standard of living for future generations is the fundamental tenet of sustainability (Leeman 2022). Embedded sustainability helps organizations manage efficiency in the broadest sense more decentralizedly, has a deep understanding of social and environmental trends and possible consequences and prospects, and may even promote experimentation and innovation with better underside advantages (GP 2022). By incorporating sustainability into a company's fundamental business strategy, a corporation can increase value creation, manage risk, and solve the current environmental, social, and financial concerns facing the world (Mosher 2016). It allows a business to help with issues like the lack of water, climate change, inequality, and malnutrition. Utilizing alternative energy sources and carbon accounting, sustainability in business increases the effectiveness of energy management. Establishing

infrastructure that minimizes greenhouse gas emissions while protecting water resources and eliminating waste. Additionally, dynamic and effective supply chains are run to support a circular economy, stimulate reuse, eliminate waste, encourage sustainable consumption, and safeguard natural resources. Assessing risks and enhancing resilience while conforming to external norms and development objectives enables sustainable development (IBM 2021).

Implementation of Embedded Sustainability in the Business World

The implementation of a plan results in change that is intended to help the business or address a problem. Changes may be made to organizational development, budgets, budget allocations, processes, products, or services, among other things (Downes and Nicol 2020). Not underestimating the significance of implementation planning is vital for advancing a business. Everyone in a corporation is accountable for carrying out business implementation operations. All actions taken to fulfill one or more objectives in a company strategy are driven by implementation in the corporate sector. This applies to employees, managers, and firm executives. Each has significant responsibilities to ensure that their company successfully implements and executes strategic plans. However, the CEO ultimately bears responsibility for the execution plan's success. Furthermore, by incorporating embedded sustainability into business implementation, company employees at all levels can better understand their responsibilities and desired outcomes to work together toward a common goal, resulting in increased work performance and effective strategic goal implementation. Business implementation plans can ultimately help a company change for the better and flourish in a variety of important areas, such as corporate image, job satisfaction, organizational culture, income streams, and other critical areas. As a result, it promotes sensible corporate growth (Trollman and Colwill 2021). In the commercial world, one can accomplish goals such as obtaining clients, generating

income, or making a profit, among others, through implementation. Theoretically, there is no such thing as a "correct" or "incorrect" set of business objectives, but it is crucial to take the time to choose the most appropriate ones for your company and integrate them with sustainability goals (Trollman and Colwill 2021). The SMART (specific, measurable, attainable, relevant, and time-bound) framework is a trendy way to frame goals in embedded sustainability, and it can be helpful for creating objectives. It aids in the implementation of business setups throughout the world (Trollman and Colwill 2021). Embedding sustainability in business entails having a long-term approach to value creation by taking into account how the firm functions within ecological, social, and economic settings. Businesses who appreciate the significance of sustainability in a changing environment are seeking for methods to incorporate it into their business plans. Companies could explore investigating innovative methods to gather and understand data, being open in manufacturing and distribution processes, enhancing employee involvement, and implementing closed-loop production procedures throughout the supply chain to incorporate integrated sustainability in business (Trollman and Colwill 2021).

Achieving the Fundamental Goal

Ending poverty, preserving the environment, and ensuring everyone has access to peace and prosperity are all part of the sustainable development goals. These are the main tenets of the 2030 Agenda for Sustainable Development, which all UN member states accepted in 2015. (Vorisek and Yu 2020). Longer time horizons, a broader concept of value generation that encompasses system value, and alignment with the adaptability of the environmental, social, and economic context in which your organization operates are all factors that are taken into account by embedded strategies (Bertels and Dobson 2020). To eradicate poverty, safeguard the environment, and promote shared prosperity and peace is the sustainable development goal. These form the cornerstone of the 2030 Agenda for Sustainable Development, which was

endorsed by all UN member states in 2015 (Vorisek and Yu 2020). Longer time horizons and a larger knowledge of value generation, including systems value, are taken into account in embedded strategies in order to be regenerative and fit with the adaptability of the economic, social, and environmental setting in which your organization operates (Bertels and Dobson 2020). To boost business confidence, control threats, and fulfill a duty to support the global environmental agenda, the primary drivers are continual improvements in environmental, social, and governance (ESG) efficiency (Wijayasundara 2021). The country has a green power policy and may even benefit from the knowledge of high- and middle-income countries with similar environments. More generally, fulfilling the SDGs would require a flexible and interconnected global innovation system that actively links regions around the world, connects research actors with society, and promotes the co-production and exchange of locally relevant technology and knowledge (Stafford-Smith et al. 2017). ICT technology must therefore advance sustainably, and the creation of models must incorporate human understanding (Vinuesa et al. 2020). The use of sustainable business models can help organizations achieve their sustainability goals, generate and implement innovation for sustainability, integrate sustainability into their goals and operations, and gain a competitive edge (Bocken et al. 2014).

Embedded Future Sustainability

The future trends in defining sustainability embeddedness are social and ecological embeddedness. As an element of a sustainability transition, social embeddedness necessitates societal embedding. A shift in the relationships between economic players and the global ecosystems that benefit both is reflected in ecological embeddedness. Economy-wide integration is a side effect. However, in the existing capitalist system, economic factors limit the integration of sustainability (Trollman and Colwill 2021). Like quality, embedded sustainability is imperceptible. It is able to significantly motivate staff in addition

to providing consumers with products that are socially and environmentally conscientious. Most importantly, it makes it possible for wise businesses to increase revenue for both their stakeholders and stockholders in the future. Corporate sustainability with traits like embeddedness within the core business, providing sustainable value, and a transformative partnership is known as embedded sustainability. Excellent reading material with possible implications outside corporate audiences may be found in embedded sustainability. Making corporate sustainability a reality begins with incorporating sustainability into the strategic planning process, which is crucial but just the first step (Laszlo and Zhexembayeva 2011a). A company's brand and workplace culture can be impacted by sustainability, which can lead to new prospects and long-term growth. The planning, design, manufacturing, and maintenance processes must be fundamentally altered in order to achieve these advantages. For organizations to provide significant outcomes in the future, sustainability needs to be integrated throughout the entire structure. It is important to have visibility into performance indicators like resource utilization if sustainability is to be ingrained throughout a business. Companies have had access to this insight for longer thanks to advanced analytics (Leeman 2022). A number of frameworks (Trollman and Colwill 2021) address the business management imperative related to embedding sustainability. Embedded sustainability is utilized to create a novel paradigm to support innovative sustainable development that respects social and environmental embeddedness while acknowledging the impacts of the economic structure on business (Trollman and Colwill 2021). Through sustainability reports, important corporate governance resilience has been outlined as a decisive factor in a company's current engagement with the SDGs. In contrast, environmental, social, and governance (ESG) qualities like community relations are attributes that support embedded sustainability (Trollman and Colwill 2021). Thus, a plan for achieving a better, more viable future for everybody, with interwoven solutions. The objectives help formalize a common understanding of the need to eradicate poverty,

safeguard the environment, and guarantee that everyone lives in prosperity and harmony by the year 2030 (Bertels and Dobson 2020).

Ecological Entrepreneurship and Sustainable Food Systems

Beyond only advancing the economy, entrepreneurship has helped the modern world become more civilized. The concept of entrepreneurship is vast and complex. It involves investing significant time and effort, taking on the associated financial, psychological, and social risks, and reaping the benefits in the form of financial and personal happiness (Hisrich and Peters 1992). Initiating and carrying out projects that protect the environment, spread clean technologies, encourage recycling, and increase society's knowledge and awareness are all examples of ecological entrepreneurship. Its goal is to build a greener, more ecologically friendly economy (Mieszajkina 2016). It is commonly acknowledged that eco-entrepreneurship contributes significantly to reducing the adverse effects of businesses and individuals on the environment. It includes actions in the creation and implementation of clean production technologies (Huczek 2010), which use mineral resources sparingly, generate less pollution than they have in the past, and other technical measures taken to conserve resources and lessen or even eliminate any arduousness, pollution, and waste at the source, by putting non-technological innovations into effect, like new services and products, initiatives that have a minimal negative impact on the environment or allow for the most efficient use of resources to improve environmental education and develop ecological awareness programs. Depending on moral standards and the level of information regarding the ecological effects of acts made with respect to the environment, these complicated systems operate differently. The growth of eco-entrepreneurship is influenced by three primary categories of causes. The first group consists of tightening EU and international environmental standards, enhancing national and international legal regulations, streamlining

administrative processes, and providing financial incentives to promote environmental issues. The market for eco-friendly products and services is expanding quickly, which is the second category of variables. Consumer interest in purchasing organic goods is rising, which boosts manufacturers' output as the third set of elements (Mieszajkina 2016). The area of theoretical and applied research on sustainable development is growing. It is actively discussed in a variety of forums, national and international conferences, as well as scholarly and popular literature. A sustainable food system (SFS) is one that ensures everyone has access to food security and nutrient-dense food while maintaining the economic, social, and environmental foundations necessary to provide food security and nutrition for present and future generations. Sustainability is concerned with the economy, society, and environment. The sustainable development goals (SDGs) of the United Nations are centered on a sustainable food system. The SDGs, which were adopted in 2015, demand significant changes in agricultural production to eradicate hunger, ensure food security, and enhance nutrition by 2030. Many good things have come out of the advancements in food systems, particularly over the past three decades in developing nations. As the food industry has grown, these outcomes have included the increase of off-farm employment prospects as well as the expansion of food options beyond regional staples, satisfying customers' preferences for taste, form, and quality. The FAO's primary objectives, which include poverty alleviation, food security, and nourishment, are at the center of the food chain wheel framework (FAO 2014). These pertain to the three sustainability dimensions of social, environmental, and economic sustainability and are integrated into the system's overall performance. Entrepreneurship is crucial to the transformation of the global food supply chain toward environmental protection. The world's current food supply and its inherently unsustainable practices are inextricably linked to entrepreneurship. It is progressively promoting alternative activities to lessen the negative consequences of the global food system, such as fostering varied and local economies (Mars and Schau

2018). According to Barth et al. (2017) and Vlasov et al. (2018), embedding within the community is crucial for food production. Sharing information and networking is beneficial, and leveraging resources can be aided by trust and reputation in a socio-material setting (Bublitz et al. 2019; Batat 2021). Additionally, more sustainable ventures are more likely to be inspired when a place already has an entrepreneurial culture that supports sustainability (Enthoven and Brouwer 2020). Furthermore, because they rely on similar networks and frequently work together at multiple levels to establish sustainable food systems, stakeholders like the government and entrepreneurial actors who have an impact on entrepreneurship are difficult to separate in practice (Baldy and Kruse 2019; Desa and Jia 2020). The greater process of change can be captured by envisioning sustainable farming entrepreneurship as a continuous, periodic process of change rather than as a one-time picture of a company, product, or service. Entrepreneurship in the food industry that is sustainable is seen as a continuous cycle of development (van der Gaast et al. 2022). Innovation and entrepreneurship are essential for ensuring the longevity and resilience of our food production.

Sustainable Production

Sustainable production is the process of making or manufacturing goods using methods that are both economically sensible and minimize their adverse effects on the environment while preserving energy and other resources. Improved worker, community, and product safety is another benefit of sustainable production (EPA 2022). In the process manufacturing industry, eco-friendly manufacturing is getting more attention (Precog 2021). While maintaining societal safety and well-being all through the product life cycle, it seeks to create commodities with the least amount of natural resources and energy used and at the highest possible profit (Kumar and Mani 2021). Another name for this innovative new method of conducting business and adding value is

“sustainable manufacturing.” Numerous green products and practices that are popular and recognized in today’s society are the results of it. All types of businesses are now involved in programs and innovations that help create a healthier atmosphere, strengthen their competitive edge, lower risks, establish trust, encourage investment, draw clients, and make money (Wyckoff 2011). Using fewer resources, producing less waste, and emitting fewer emissions make it a more sustainable and effective system (Nasr 2022). The realization that present enterprises and lifestyles place too much emphasis on the economic side of things is what motivates sustainable manufacturing (Stark et al. 2016). Many organizations are interested in achieving sustainability because it can help them boost operational efficiency by cutting costs and waste, attracting new customers, gaining a competitive advantage, safeguarding, enhancing, and fostering the public’s trust, building a firm that will be successful in the long run, and adapting to regulatory opportunities and limits (EPA 2022). It is utilized in production, minimizes waste, and has a smaller negative influence on the environment. All layers of production, including the product, process, and system, should incorporate sustainable operations. The most crucial factor that must be taken into account by all industrial sectors is sustainable manufacturing. The life cycle assessment is the primary instrument for implementing sustainable manufacturing. It is a strategy to completely assess the environmental effects of various human activities, such as the creation of products and services by organizations (Posinasetti 2018). It can be used at the national or international level to identify environmental loads brought on by a society, a region, or an industrial sector. To achieve the objective of the earth’s self-recovery capabilities, three key concepts must be taken into account: decreasing the consumption of resources in the process, utilizing environmentally friendly materials, minimizing all forms of waste, and recycling and reusing as much material as is feasible (Posinasetti 2018). Avoiding ecological damage, eliminating pollution and emissions, limiting resource waste, consuming less energy, water, and other finite resources, and improving worker

and community safety are all aspects of sustainable manufacturing (Precog 2021).

Summary

Optimizing performance and minimizing resource footprints are two benefits of embedded sustainability for businesses. They create models that are driven by innovations that offer practical and long-lasting answers to problems with the environment and human health. For instance, embedded integrity promotes planetary well-being by guaranteeing that the earth's and ecosystems' integrity is preserved in a way that promotes organisms' well-being and the ability of numerous species and populations to continue in the future. The opportunity to discover the significance of life in the organization's system is expanded by embedded sustainability for stakeholders and employees. Therefore, the performance of businesses is positively impacted by embedded sustainability activities. Enhancing employee involvement, systems integration, and environmental protection are just a few of the economic and societal advantages that can result from incorporating sustainability into business operations and strategy.

Cross-References

- Embedded CSR
- Ocean Sustainability
- Risk Management
- Shared Community-Based Governance
- Sustainability of Boards
- Sustainability Standards and Standardization
- Sustainable Companies
- Sustainable Transition

References

- Adams, C. (2013). *Five essentials to embedding sustainability*. <https://drcaroladams.net/five-essentials-to-embedding-sustainability/>
- Annan-Diab, F., & Molinari, C. (2017). Interdisciplinarity: Practical approach to advancing education for

- sustainability and for the sustainable development goals. *The International Journal of Management Education*, 15(2), 73–83.
- Baldy, J., & Kruse, S. (2019). Food democracy from the top down? State-driven participation processes for local food system transformations towards sustainability. *Politics and Governance*, 7(4), 68–80.
- Barth, H., Ulvenblad, P. O., & Ulvenblad, P. (2017). Towards a conceptual framework of sustainable business model innovation in the Agri-food sector: A systematic literature review. *Sustainability (Switzerland)*, 9(9), 1620.
- Batat, W. (2021). How Michelin-starred chefs are being transformed into social bricoleurs? An online qualitative study of luxury foodservice during the pandemic crisis. *Journal of Service Management*, 32(1), 87–99.
- Bertels, S., & Dobson, R. (2020). *Embedded strategies for the sustainability transition: Setting priorities and goals aligned with systems resilience*. Embedding Project.
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Bublitz, M. G., Peracchio, L. A., Dadzie, C. A., Escalas, J. E., Hansen, J., Hutton, M., Nardini, G., Absher, C., & Tangari, A. H. (2019). Food access for all: Empowering innovative local infrastructure. *Journal of Business Research*, 100, 354–365.
- Clune, W. and Zehnder, A. (2018) The Three Pillars of Sustainability Framework: Approaches for Laws and Governance. *Journal of Environmental Protection*, 9, 211–240. <https://doi.org/10.4236/jep.2018.93015>.
- Colson, D. (2022). *The three pillars of sustainability: Economic, social and environment*. <https://www.transformationholdings.com/corporate-sustainability/3-pillars-sustainability/>
- Desa, G., & Jia, X. (2020). Sustainability transitions in the context of pandemic: An introduction to the focused issue on social innovation and systemic impact. *Agriculture and Human Values*, 37(4), 1207–1215.
- Downes, R., & Nicol, S. (2020). Designing and implementing gender budgeting—a path to action. *OECD Journal on Budgeting*, 20(2).
- Elegbede, I., & Guerrero, C. (2016). Algae biofuel in the Nigerian energy context. *Environmental and Climate Technologies*, 17(1), 44–60.
- Elegbede, I., Kaullysing, D., Lawal-Are, A., Saba, A., Ositimehin, K., Akinwunmi, M., Jinad, M., Kies, F., Pedro, S., & Adewumi, I. (2022). Ocean sustainability. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-031-25984-5_302-1.
- Elegbede, I., Lawal-Are, A., Favour, O., Jolaosho, T., & Goussanou, A. (2023). Chemical compositions of bivalves shells: *Anadara senilis*, *Crassostrea gasar*, and *Mytilus edulis* and their potential for a sustainable circular economy. *SN Applied Sciences*, 5(1), 1–12.

- Enthoven, M. P. M., & Brouwer, A. E. (2020). Investigating spatial concentration of sustainable restaurants: It is all about good food! *Annals of Regional Science*, 64(3), 575–594.
- EPA. (2022). *Sustainable manufacturing*. <https://www.epa.gov/sustainability/sustainable-manufacturing>
- Evans, S., Fernando, L., & Yang, M. (2017). Sustainable value creation—From concept towards implementation. In R. Stark, G. Seliger, & J. Bonvoisin (Eds.), *Sustainable manufacturing. Sustainable production, life cycle engineering and management*. Cham: Springer.
- FAO. (2014). *Sustainable food value chain development – Guiding principles*. Rome.
- Guardian Professional. (2022). *Embedded sustainability – The next big competitive advantage?* [Theguardian.com/sustainable-business/blog/embed-sustainability-competitive-advantage](https://www.theguardian.com/sustainable-business/blog/embed-sustainability-competitive-advantage)
- Hisrich, R. D., & Peters, M. P. (1992). *Entrepreneurship. Starting, developing and managing a new enterprise* (2nd ed.). Boston: Irwin.
- Huczek, M. (2010). Przedsiębiorczość ekologiczna a rozwój lokalny. *Przedsiębiorczość, Edukacja*, 6, 271–279.
- IBM. (2021, May). “Sustainability at a turning point” IBM Institute for Business Value.
- IEDP. (2011). <https://www.iedp.com/articles/embedded-vs-bolt-on-sustainability>
- Kumar, M., & Mani, M. (2021). Chapter 11 – Sustainability assessment in manufacturing: Perspectives, challenges, and solutions. In K. Gupta & K. Salonitis (Eds.), *Handbooks in advanced manufacturing, sustainable manufacturing* (pp. 287–231). Elsevier.
- Laszlo, C., & Zhexembayeva, N. (2011a). *Embedded sustainability the next big competitive advantage* (p. 288). Routledge Taylor & Francis.
- Laszlo, C., & Zhexembayeva, N. (2011b, April 25). Embedded sustainability: A strategy for market leaders. *The European Financial Review*. Retrieved January 15, 2023, from <https://www.europeanfinancialreview.com/embedded-sustainability-a-strategy-for-market-leaders/>
- Leeman, G. (2022). *How to embed sustainability in your business – and bottom line*. <https://www.the-future-of-commerce.com/2022/03/25/how-to-embed-sustainability-in-your-business/>
- Levknecht, L. (2013). *Using ‘polarity thinking’ to achieve sustainable positive*. <https://www.elsevier.com/connect/using-polarity-thinking-to-achieve-sustainable-positive-outcomes>
- Mars, M. M., & Schau, H. J. (2018). What is local food entrepreneurship? Variations in the commercially and socially oriented features of entrepreneurship in the Southeastern Arizona local food system. *Rural Sociology*, 83(3), 568–597.
- Mieszajkina, E. (2016). Ecological entrepreneurship and sustainable development. *Problemy ekorozwoju – Problems of Sustainable Development*, 12(1), 163–171.
- Mosher, M. (2016). *Sustainability incorporated: Embedding sustainability into a Company’s Core business strategies*. TriplePundit.
- Nasr, N. (2022). *How sustainable manufacturing could help reduce the environmental impact of industry*. <https://theconversation.com/how-sustainable-manufacturing-could-help-reduce-the-environmental-impact-of-industry-185672>
- Policy Forum on Development. (2022). *Working group: Environmental pillar of sustainable development*.
- Posinasetti, N. (2018). *Sustainable manufacturing: Principles, applications and directions*. <https://www.industr.com/en/sustainable-manufacturing-principles-applications-and-directions-2333598>.
- Precog. (2021). *What is sustainable manufacturing?* <https://www.precog.co/glossary/sustainable-manufacturing/>
- Purkayastha, D., & Rao, A. S. (2017). Embedding sustainability at Novo Nordisk: The compassion vs. competitiveness dilemma. In *Case studies in sustainability management* (pp. 22–45). Routledge.
- Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: In search of conceptual origins. *Sustainability Science*, 14, 681–695.
- Stafford-Smith, M., Griggs, D., Gaffney, O., Ullah, F., Meyers, B., Kanie, N., Stigson, B., Shrivastava, P., Leach, M., & O’Connell, D. (2017). Integration: The key to implementing the sustainable development goals. *Sustainability Science*, 12, 911–919.
- Stark, R., Seliger, G., & Bonvoisin, J. (Eds.). (2016). *Sustainable manufacturing – Challenges, solutions and implementation perspectives* (p. 283p). Cham: Springer International Publishing.
- Trollman, H., & Colwill, J. (2021). The imperative of embedding sustainability in business: A model for transformational sustainable development. *Sustainable Development*, 29(5), 974–986.
- van der Gaast, K., van Leeuwen, E., & Wertheim-Heck, S. (2022). Food systems in transition: Conceptualizing sustainable food entrepreneurship. *International Journal of Agricultural Sustainability*, 20(5), 705–721.
- Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., Felländer, A., Langhans, S. D., Tegmark, M., & Nerini, F. F. (2020). The role of artificial intelligence in achieving the sustainable development goals. *Nature Communications*, 11, 233.
- Vlasov, M., Bonnedahl, K. J., & Vincze, Z. (2018). Entrepreneurship for resilience: Embeddedness in place and in trans-local grassroots networks. *Journal of Enterprising Communities*, 12(3), 374–394.
- Vorisek, D., & Yu, S. (2020). *Understanding the cost of achieving the sustainable development goals* (Policy research working paper 9146).
- Wijayasundara, M. (2021). *5 key strategies to embed sustainability leadership: Businesses can take steps to ensure that sustainability thinking is spread throughout the organisation*. <https://www.fm-magazine.com/news/2021/sep/5-strategies-embed-sustainability-leadership.html>

Woo, C. (2020). *Embedding sustainability into business strategy and operations*. <https://www2.deloitte.com/global/en/blog/responsible-business-blog/2020/embedding-sustainability-into-business-strategy-and-operations.html>

Wyckoff, A. (2011). *About sustainable manufacturing and the toolkit*. <https://www.oecd.org/innovation/green/toolkit/48704993.pdf>

Embodiment

► [Inclusion](#)

Embracement

► [Inclusion](#)

Emergency

► [Disaster Management](#)

Emerging Economies

► [Emerging Markets](#)

Emerging Markets

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Synonyms

[Developing countries](#); [Emerging economies](#)

Introduction

Emerging markets differ structurally from modern economies. As Khanna and Palepu (2010, p. 6) note: “emerging markets reflect those transactional arenas where buyers and sellers are not easily or efficiently able to come together.” Differences between emerging and more developed markets can be found, for example, from markets’ capacity to tolerate external shocks and to provide stable enough operational environment for market actors to operate. Differences can also be found from the capacity of public institutions to support entrepreneurial activities, to provide financial opportunities for market actors, and to generate long-term predictability to the markets (Khanna and Palepu 1997). Due to these differences, modern markets have traditionally attracted more investments than emerging markets. This development, however, is changing, and during the past few decades, emerging markets have become significantly stronger players in the global economy (Kose and Prasad 2010).

A specific definition for the concept of the emerging markets is challenging to construct, and its development leads to diverse directions among scholars and practitioners. Some authors highlight the diverse opportunities and the overall socioeconomic potential of emerging markets (Agarwal et al. 2018; Ernst et al. 2014), whereas others adopt a more critical perspective arguing that the concept of emerging market carries the burden of colonialism and aims to extend Western version of capitalism into sociocultural contexts where it does not naturally belong (Akbar 2006). Regardless of the perspective, it must be emphasized that emerging markets are heterogeneous group of economies and societies that are in different stages on their way from closed and controlled economy to more open markets. It is also important to understand that emerging market is a strategically oriented concept that can be used to drive diverse agenda in different situations.

Key Sustainability-Related Issues in Emerging Markets

Sustainability change materializes in different ways in different parts of the world (Sachs 2015). While developed economies, especially in Europe and North America, are increasingly facing the negative side effects of their overconsumption, large emerging areas are continuing to increase consuming opportunities for their growing population to reach the northern living standard. As emerging market countries are, by definition, in the path of becoming more affluent, people in these countries are expected to have more purchasing power in the future. At the same time, in many emerging market countries, the economic growth is fast. Regardless of the relatively low basic level, economically more affluent middle class is enlarging and having more political power than before. Due to large number of people having more opportunities to consume, the major sustainability challenge is to decrease the negative environmental impacts of consumption.

It is important to consider the diversity of emerging market countries in sustainability management. The ecological carrying capacity of the globe cannot cope with increased consumption, especially if consumption stays material and energy intense as it has been since Industrial Revolution. To reduce the negative implications of increased consumption opportunities, businesses in emerging markets will need to shift toward utilization of sustainable and circular business models, which is very challenging task if the operational environment does not support such development (Levänen et al. 2018). This shift must be facilitated in different ways in different emerging market countries. Countries where institutions of environmental management are weak or not existing will need external support to build up well-functioning operational environment that supports sustainable development. Countries where institutions start to be in place will need support for companies to develop their business models toward increased sustainability.

Global sustainability challenges, such as climate change, biodiversity loss, and unsustainable use of natural resources, are serious threats at emerging markets, but challenges also vary between the countries. Many emerging market countries especially in the Global South are struggling with uncontrolled urbanization and large structural poverty, both of which bring in other problems including lack of basic services such as proper health care, energy, food, and safe drinking water. If urbanization happens rapidly and without planning, it may increase social and geographical segregation and accelerate sustainability challenges. At the same time, other emerging market countries, such as Brazil and Russia, suffer from other types of environmental and social hazards including forest fires and violations of human rights of indigenous peoples. Management of these diverse challenges requires different approaches and strategies in different contexts.

The sustainable systemic transition (see ► [“Systemic Transition”](#) in the chapter by Koistinen et al., this volume) is urgently required in solving the sustainability challenges and supporting the equal development in the emerging markets.

Summary

To avoid speaking about the “third world countries,” which contains a negative connotation, World Bank’s economist Antoine van Agtmael introduced term “emerging market” in 1981. Generally, emerging market refers to low-income level economies with limited functions. At the same time, these countries are in the process of development toward more affluent and more efficiently functioning modern economies. Majority of the emerging markets locate in Asia, Eastern Europe, Africa, and South America, the four largest, so-called BRIC countries, being Brazil, Russia, India, and China. Recently, more and more previously stagnant and poor economies join in the group of emerging markets. Currently, some of these countries

are among the fastest growing markets in the world.

Cross-References

- [Sustainable Tourism \(Sustainable Development of Tourism, Sustainable Tourism Management\)](#)

References

- Agarwal, N., Brem, A., & Grottke, M. (2018). Towards a higher socio-economic impact through shared understanding of product requirements in emerging markets: The case of the Indian healthcare innovations. *Technological Forecasting and Social Change*, 135, 91–98.
- Akbar, Y. (2006). A research agenda. *International Journal of Emerging Markets*, 1(1). <https://doi.org/10.1108/ijoe.2006.30101aaa.001>
- Ernst, H., Kahle, H. N., Dubiel, A., Prabhu, J., & Subramaniam, M. (2014). The antecedents and consequences of affordable value innovations for emerging markets. *The Journal of Product Innovation Management*, 32(1), 65–79.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 75(4), 41–43.
- Khanna, T., & Palepu, K. (2010). *Winning in emerging markets: A road map for strategy and execution*. Boston: Harvard Business Press.
- Kose, M. A., & Prasad, E. S. (2010). *Emerging markets: Resilience and growth amid global turmoil*. Washington, DC: The Brookings Institution Press.
- Levänen, J., Lyytinen, T., & Gatica, S. (2018). Modelling the interplay between institutions and circular economy business models: A case study of battery recycling in Finland and Chile. *Ecological Economics*, 154, 373–382.
- Sachs, J. (2015). *The age of sustainable development*. New York: Columbia University Press.

Emission Scandal

- [Dieselgate](#)

Emissiongate

- [Dieselgate](#)

Employee Downsizing

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Synonyms

[Downsizing](#); [Labor force reduction](#); [Layoffs](#); [Rightsizing](#)

Description

With regard to the business context, downsizing refers to the process of decreasing the number of employees on the operating payroll. Usually, downsizing is a strategic move implemented with the intention to improve firm performance (Cascio et al. 1996). Some researchers distinguish between downsizing and layoffs, with downsizing defined as a permanent reduction of employees and layoffs defined as a downscaling which is only temporary and where employees may later be rehired. Most often, however, the terms downsizing and layoffs are used interchangeably.

Companies use a number of methods in downsizing, including setting financial incentives for employees to take early retirement or providing opportunities for a transfer to subsidiary companies. Still, the practice used predominantly is to simply terminate the employment of a certain number of employees. Downsizing is sometimes necessary, but it should never be taken lightly since it can have a severely negative effect on people and companies (Datta et al. 2010).

Introduction

Downsizing, defined as the “*intentional, permanent, and systematic reduction of an organization’s workforce*” (Nixon et al. 2004, p. 1122), is a socially questionable strategic management practice that was once confined primarily to the

United States, but has become more and more omnipresent in recent years (Datta and Basuil 2015; Datta et al. 2010; Nègre et al. 2017). Especially during the recent economic crisis, news of corporate downsizing has been prominent in the media around the globe. It is, however, not a new phenomenon. Companies reduced their workforces also in the late 1980s and early 1990s using various methods such as layoffs, plant closures, and early retirement programs (Davidson et al. 1996). In addition, firm executives often claim that downsizing is an essential strategy to deal with the hostile and dynamic environment companies are embedded in, and which may even be crucial to a company's survival in times of economic turbulence or during recessions (Appelbaum et al. 1999; Budros 2002). Previous research, however, has shown that employee downsizings usually mean substantial losses for employees and the local community and are normally perceived as a breach of the social contract between a company and society (Nègre et al. 2017).

Effects of Downsizing

Presumably, firms reduce their workforce to improve their performance (Cascio et al. 1996), and newspaper stories often report that downsizing announcements lead to a stock price increase for companies making such announcements as the market views them as a positive sign regarding a firms' expected future profitability (Abraham 2004; McKinley et al. 1995; Neus and Walter 2009). Nevertheless, the political reaction against downsizing and the public criticism of this practice is high. And another point speaks against downsizing decisions: research found that the economic effects of downsizings on companies are not unambiguous. Downsizings often fail to bring the sought financial effects since the direct and indirect costs coming with them (e.g., reorganization costs, costs for social plans, severance payments, a negative impact on company reputation, declines in employee motivation or devotion) regularly prevail over the cost savings (Datta et al. 2010;

Cascio 2009; Flanagan and O'Shaughnessy 2005; McKinley et al. 2000).

Stock Market Effect of Downsizing

A number of empirical studies have closely examined the stock market's reaction to layoff announcements, with studies presenting mixed results (please see Datta et al. (2010) for an overview). While negative effects of downsizing have been found in most of these studies (e.g., Hillier et al. 2007; Lee 1997; Nixon et al. 2004; Worrell et al. 1991; among others), some studies found positive effects (e.g., Brookman et al. 2007; Chadwick et al. 2004; Chalos and Chen 2002; Collett 2004; Wayhan and Werner 2000), or no effects at all (e.g., Cascio et al. 1996). As a result, researchers have concluded that downsizing might result in differing effects in different situations (De Meuse and Dai 2013) and that especially the reason for a layoff and the financial condition of the company have moderating effects (Abraham 2004, 2006; Filbeck and Webb 2001).

Most researchers analyzing the relationship between downsizing and firm performance have explicitly or implicitly adopted an economic perspective and assume that companies implement downsizings to reduce costs, increase efficiency, and ultimately improve a company's financial performance (McKinley et al. 2000; De Meuse and Dai 2013). While early research investing this theory was mainly based on management and employee perceptions of the downsizing results, recent studies have primarily employed the event study methodology to investigate the financial consequences of a downsizing decision (Datta et al. 2010; Neus and Walter 2009). Worrell et al. (1991) can be treated as pioneers here as they were the first to study the link between downsizing announcements and stock prices using this methodology. In an event study, the realized returns to a company around a specific event (e.g., a downsizing announcement) are compared to a prediction of what those returns would have been without the event's occurrence. The difference between the realized and the predicted returns is then credited to the event under examination (Abraham 2004). Introduced by Dolley (1933) and mainly influenced by Fama et al.

(1969), the event study methodology can be seen as the standard method of measuring the influence of specific events or announcements on the stock price (Binder 1998).

Explanations for a Negative Effect of Downsizing

Explanations for the negative effect of downsizing on a company's financial performance are given by the *Psychological Contract Theory* (Morrison and Robinson 1997) and by the *Declining Investment Opportunities Hypothesis* (Elayan et al. 1998). The psychological contract comprises a set of reciprocal obligations that arise during an employee's tenure with a company (Rousseau 1989). De Meuse et al. (2004) outline that employees are expected to work hard and support the company's goals, while the company is seen as responsible for providing a stable environment, offering competitive wages, and providing prospects for individual progress and promotion. Therefore, employees will perceive layoffs as a breach of contract. This can, in turn, have an adverse effect on the behavior of the remaining employees and subsequently lead to lower firm performance (Morrison and Robinson 1997). Accordingly, investors will interpret layoff announcements as a sign of lower future performance, and the share price will drop. Elayan et al. (1998) further argued that layoff announcements might reveal that the company has fewer investment or growth opportunities as previously assumed.

The Effects of Downsizing on Surviving Employees

One of the most common reasons why downsizing companies perform below par is that they frequently only seem to think about the employees who are to be released but are not anticipating the decreased commitment and lower productivity the remaining employees exhibit after the downsizing (Isabella 1989). Downsizing normally causes resentment and resistance in surviving employees. Research has shown that employees often report decreased motivation and are less productive after layoffs, a phenomenon named the “*survivor syndrome*” (van Dick et al. 2016). So, unfortunately,

at a time where a company needs its employees at their best, they occur to be at their worst (Buchholz 1993).

Previous studies identified key concerns with regard to downsizing and surviving employees. It has been found that remaining employees are often misinformed or not informed at all about many important issues (e.g., their role in the newly structured company, the projected performance standards or extra work demands, whether or not certain key people in existing networks are leaving, or just, in general, the value of their expertise and know-how to the restructured company). Such information problems are further amplified by financial and job insecurities (Isabella 1989).

Summary

Downsizing refers to the process of decreasing the number of employees in a company and is usually a strategic decision to improve firm performance (Cascio et al. 1996). Research has shown that downsizings regularly fail to bring the anticipated financial results due to the fact that the direct and indirect costs of layoffs often outweigh the cost savings (Datta et al. 2010). Therefore, companies contemplating downsizing decisions should take into consideration all future consequences of layoffs before deciding on such a decision.

Cross-References

► [Event Studies](#)

References

- Abraham, S. E. (2004). Layoff announcements and employment guarantee announcements: How do shareholders respond? (Author abstract). *International Journal of Manpower*, 25(8), 729–740.
- Abraham, S. E. (2006). The market reaction to layoff announcements: A union-nonunion comparison. *International Journal of Manpower*, 27(5), 452–466.
- Appelbaum, S. H., Everard, A., & Loretta, T. S. H. (1999). Strategic downsizing: Critical success factors. *Management Decision*, 37(7), 535–552.

- Binder, J. (1998). The event study methodology since 1969. *Review of Quantitative Finance and Accounting*, 11(2), 111–137.
- Brookman, J. T., Chang, S., & Rennie, C. G. (2007). CEO cash and stock-based compensation changes, layoff decisions, and shareholder value. *Financial Review*, 42, 99–119.
- Buchholz, S. (1993). Creating our future: Leading change for competitive advantage. Workshop for Canadian National Railway (pp. 2–5).
- Budros, A. (2002). The mean and lean firm and downsizing: Causes of involuntary and voluntary downsizing strategies. *Sociological Forum*, 17(2), 307–342.
- Cascio, W. F. (2009). *Employment downsizing and its alternatives: Strategies for long-term success* (SHRM Foundation's effective practice guidelines series). SHRM Foundation.
- Cascio, W. F., Young, C. E., Davidson, W. N., Worrell, D. L., & Fox, J. B. (1996). Early retirement programs and firm performance. *Academy of Management Journal*, 39(4), 970–984.
- Chadwick, C., Hunter, L. W., & Walston, S. L. (2004). Effects of downsizing practices on the performance of hospitals. *Strategic Management Journal*, 25(5), 405–427.
- Chalos, P., & Chen, C. J. (2002). Employee downsizing strategies: Market reaction and post announcement financial performance. *Journal of Business Finance & Accounting*, 29(5–6), 847–870.
- Collett, N. (2004). Shareholders and employees: The impact of redundancies on key stakeholders. *Business Ethics: A European Review*, 13(2–3), 117–126.
- Datta, D. K., & Basuil, D. A. (2015). Does employee downsizing really work? In M. Andresen & C. Nowak (Eds.), *Human resource management practices, assessing added value* (pp. 197–221). Cham: Springer.
- Datta, D. K., Guthrie, J. P., Basuil, D., & Pandey, A. (2010). Causes and effects of employee downsizing: A review and synthesis. *Journal of Management*, 36(1), 281–348.
- Davidson, W. N., Worrell, D. L., & Fox, J. B. (1996). Early retirement programs and firm performance. *Academy of Management Journal*, 39(4), 970–984.
- De Meuse, K. P., & Dai, G. (2013). Organizational downsizing: Its effect on financial performance over time. *Journal of Managerial Issues*, 25(4), 324–344.
- De Meuse, K. P., Bergmann, T. J., Vanderheiden, P. A., & Roraff, C. E. (2004). New evidence regarding organizational downsizing and a firm's financial performance: A long-term analysis. *Journal of Managerial Issues*, 16(2), 155.
- Dolley, J. C. (1933). Characteristics and procedure of common stock split-ups. *Harvard Business Review*, 11(3), 316–326.
- Elayan, F. A., Swales, G. S., Maris, B. A., & Scott, J. R. (1998). Market reactions, characteristics, and the effectiveness of corporate layoffs. *Journal of Business Finance & Accounting*, 25(3–4), 329–351.
- Fama, E. F., Fischer, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International Economic Review*, 10(1), 1–21.
- Filbeck, G., & Webb, S. E. (2001). Information asymmetries, managerial ownership, and the impact of layoff announcements on shareholder wealth. *Quarterly Journal of Business and Economics*, 40(2), 31–47.
- Flanagan, D. J., & O'Shaughnessy, K. C. (2005). The effect of layoffs on firm reputation. *Journal of Management*, 31(3), 445–463.
- Hillier, D., Marshall, A., McColgan, P., & Werema, S. (2007). Employee layoffs, shareholder wealth and firm performance: Evidence from the UK. *Journal of Business Finance & Accounting*, 34(3–4), 467–494.
- Isabella, L. A. (1989). Downsizing: Survivors' assessments. *Business Horizons*, 32(3), 35–41.
- Lee, P. M. (1997). A comparative analysis of layoff announcements and stock price reactions in the United States and Japan. *Strategic Management Journal*, 18(11), 879–894.
- McKinley, W., Sanchez, C. M., & Schick, A. G. (1995). Organizational downsizing: Constraining, cloning, learning. *Academy of Management Perspectives*, 9(3), 32–42.
- McKinley, W., Zhao, J., & Rust, K. G. (2000). A socio-cognitive interpretation of organizational downsizing. *Academy of Management Review*, 25(1), 227–243.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22(1), 226–256.
- Nègre, E., Verdier, M. A., Cho, C. H., & Patten, D. M. (2017). Disclosure strategies and investor reactions to downsizing announcements: A legitimacy perspective. *Journal of Accounting and Public Policy*, 36(3), 239–257.
- Neus, W., & Walter, A. (2009). Kursgewinne Durch Entlassungspläne? Erste Ergebnisse aus Deutschland. *Perspektiven der Wirtschaftspolitik*, 10(1), 1–20.
- Nixon, R. D., Hitt, M. A., Lee, H. U., & Jeong, E. (2004). Market reactions to announcements of corporate downsizing actions and implementation strategies. *Strategic Management Journal*, 25(11), 1121–1129.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2, 121–139.
- van Dick, R., Drzensky, F., & Heinz, M. (2016). Goodbye or identify: Detrimental effects of downsizing on identification and survivor performance. *Frontiers in Psychology*, 7, 771.
- Wayhan, V. B., & Werner, S. (2000). The impact of workforce reductions on financial performance: A longitudinal perspective. *Journal of Management*, 26(2), 341–363.
- Worrell, D. L., Davidson, W. N., III, & Sharma, V. M. (1991). Layoff announcements and stockholder wealth. *Academy of Management Journal*, 34(3), 662–678.

Employee Empowerment

► Quality Empowerment

Employee Engagement

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Synonyms

Commitment; Empowerment; Involvement; Job engagement; Work engagement

Definition/Description

Employee engagement (EE) is one of the objectives of human resources management, since a greater EE with the company increase work performance through greater efforts, productivity, positivity, and efficiency. Employee engagement is determined by organizational, emotional, behavioral, and cognitive variables.

Introduction

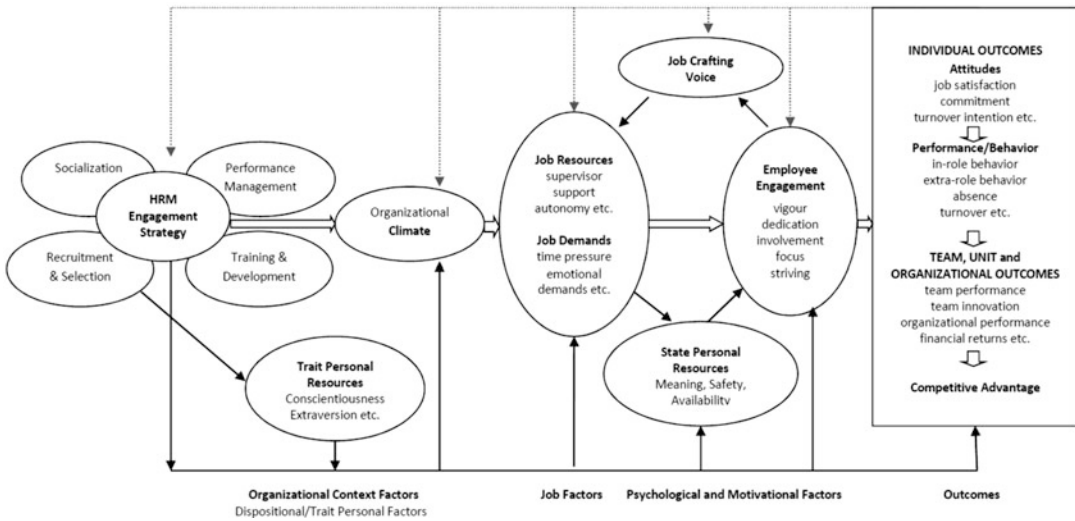
The concept employee engagement (EE hereafter) is contextualized in the human resources management (HRM) of companies (Guest, 2014). There are two opposing models well distinguished in the management of human resources from a normative perspective: traditional management and management by commitment (Tena et al., 2002). Traditional HRM, represented by Taylorism, advocates the maintenance of command hierarchies and the supervision of workers. In contrast, employee engagement is the key element of a management model based on increasing job engagement, where employees participate in

company decisions, and they are autonomous and assume greater responsibility.

The interest to increase the employees' engagement is greater currently due to the expected outputs. Previous studies in this field argue that greater engagement provides greater motivation to the employee, which makes them more creative and more innovative in their work and have more proactive behavior towards learning (Koner mann, 2012; Bakker & Xanthopoulou, 2013; Bakker et al., 2014). In addition, employees who are more committed to their company have less stress, are more proactive, and maintain better health (Bakker et al., 2014). At the organizational level, when employees have a higher level of employee engagement, they are capable of transmitting positive emotions to their collaborators in the company, which not only means an increase in individual performance but also it is positive for the whole team performance (Xanthopoulou et al., 2009). Last, but not least relevant, employee engagement is an important predictor of customer satisfaction, because the quality of the service increases and in the long term, customer loyalty also is increased (Harter et al., 2002; Salanova et al., 2005; Bakker et al., 2014).

Employee engagement cannot be considered an isolated term in HRM, because the level of EE will be affected by organizational aspects, behavioral aspects, and collective and individual perceptions of the employees. Figure 1 shows the *Strategic Engagement Model* proposed by Albrecht et al. (2015). According to this model, HR practices in the areas of recruitment and selection, socialization, performance management, training, and promotion, among others, generate a certain organizational climate that consequently generates different job demands (JDs hereafter). JDs are those requirements that need any kind of extra effort (physical, emotional, or cognitive) (Demerouti et al., 2001). JDs, as stress or work pressure, maintained over time produce fatigue and discomfort to employees; as a result, JDs are often considered predictors of burnout.

On the other hand, employees not only respond to JDs but also have job resources (JRs). Job resources "are those aspects of the job that help to achieve work goals, reduce job demands, or



Employee Engagement, Fig. 1 Strategic Engagement Model. (Source: Albrecht et al. (2015))

stimulate personal growth” (Bakker et al., 2014). That is why job demands-resources theory (JD-R model) (Bakker & Demerouti, 2014) has gained prominence to explain employee engagement, in addition to the fact that the model proposed by this theory is applicable to all work contexts. However, this is not the only theory that supports the study of employee engagement. As we mentioned before, human resources practices are essential to increase commitment, so there is a theory to explain EE in relation to HRM. Human Resource Development (HRD) theory focuses on managing and transforming the organization to reduce the gap between current performance and desired performance level (Kwon & Park, 2019).

Taking all the above into account, and returning to the *Strategic Engagement Model* (Fig. 1), EE depends on the way employees adapt their work to their personal characteristics (job crafting) and the employees’ perceptions and feelings (e.g., their motivation or feeling of labor safety) in relation to the job resources and job demands. All these previous variables form a particular atmosphere that will give rise to different degrees of engagement, and from this, companies obtain different outputs (Albrecht et al., 2015).

However, this combination of variables to obtain the EE cannot forget to include individual factors, such as the individual’s personality

(called *trait personal resources* in Fig. 1). Academic literature identifies several aspects of the personality that have a positive relationship with engagement, emotional stability, extraversion, and conscientiousness (Mäkikangas et al., 2013), as well as the personal resources affected by personality, such as self-efficacy, optimism, self-esteem, and work commitment (Xanthopoulou et al., 2009). The fact that the concept EE has positive impacts on the outputs of the company means that many authors have tried to define the concept in relation to a diversity of terms. However, the lack of unanimity to define and measure the concept does not make this concept a meaningless concept, but rather it needs to be understood within a context of related variables.

Definition of Employee Engagement

The definition of the term employee engagement appears in the literature with different nuances depending on whether the term is in relation to (a) the attitudinal and behavioral part of the employee; (b) the motivation, satisfaction, or work environment; or (c) the outputs obtained according to the level of engagement. However, despite the different definitions found, there are multiple similarities between them (Table 1).

Employee Engagement, Table 1 Definitions of employee engagement

Authors and year	Definition of employee engagement
Kahn (1990)	“Harnessing of organization members’ selves to their work roles: in engagement, people employ and express themselves physically, cognitively and emotionally during role performances” (p. 694)
Maslach and Leiter (1997)	“Engagement is characterized by energy, involvement, and efficacy, the direct opposites of the three-burnout dimensions. These authors argue that, in the case of burnout, energy turns into exhaustion, involvement into cynicism, and efficacy into ineffectiveness”
Schaufeli et al. (2002)	EE is “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74)
Wellins and Concelman (2005)	Engagement is “an amalgamation of commitment, loyalty, productivity and ownership” Engagement is “the illusive force that motivates employees to higher (or lower) levels of performance”
Macey and Schneider (2008)	Employee engagement is a desirable condition, has an organizational purpose, and connotes involvement, commitment, passion, enthusiasm, focused effort, and energy, so it has both attitudinal and behavioral components
Christian et al. (2011)	EE is “relatively enduring state of mind referring to the simultaneous investment of personal energies in the experience of work” (p. 95).
Shuck et al. (2017)	EE is “an active, work-related positive psychological state operationalized by the intensity and direction of cognitive, emotional, and behavioral energy” (p. 2)

Source: Authors

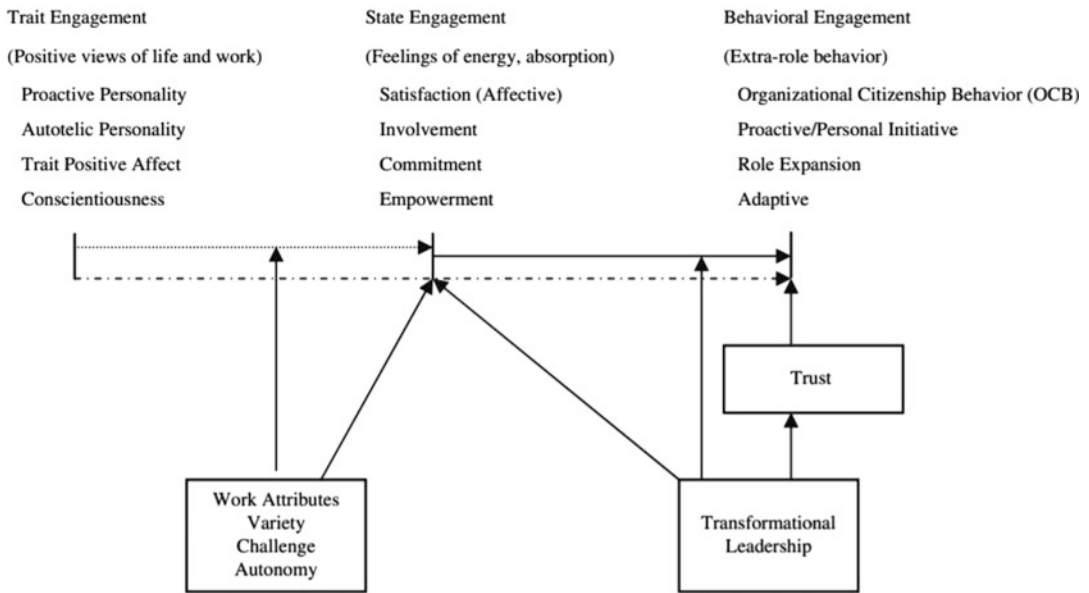
Most definitions mention that EE would derive in applying greater efforts in daily work, alluding to the behavioral part of the employee. Many contributions include in the definition of

engagement an emotional or personal component of the employee, noticing that the personality and the state of mind of the worker will also play a role in determining engagement. Finally, many definitions also focus on the development of engagement with an organizational purpose of increasing its performance and obtaining a more effective workforce.

HR Practices to Create Engagement

The creation of EE is not easy. It does not offer a single pattern of behavior through which, following a series of HR practices, companies can obtain the same result. Knowing concrete practices to increase EE would be interesting for practitioners in the HRM. In previous studies, we found a high level of agreement in the categories that should be considered to describe EE, although there are doubts when it comes to specific human resources practices. For example, it is not clear whether providing training to improve employee skills increases commitment (Truss et al., 1997). The same doubts occur with the performance-based pay system (Becker & Gerhart, 1996) or greater communication and autonomy (Osterman, 2000). Furthermore, specific HR practices often do not have the expected impact on employee engagement, and some Industrial Psychology studies defend the creation of engagement through the norm of reciprocity (Gouldner, 1960). According to the reciprocity rule, EE is generated when employees perceive that the company responds to their needs and concerns and that their work is being valued. If employees perceive that the company cares about them, they will respond to these stimuli with a greater degree of commitment.

However, communication between employees and company management will be essential to increase the desired perceptions in the employee (Tena et al., 2002). Adequate two-way communication between the employee and the manager (or company management body) will increase employee confidence. In this sense, the study by Macey and Schneider (2008) conceptualizes EE



Employee Engagement, Fig. 2 Framework for understanding the elements of employee engagement. (Source: Macey and Schneider (2008), p.6)

in three differentiated phases (see Fig. 2). Firstly, the EE will be determined by aspects of the employee's personality (such as proactivity, positivity, conscientiousness), to which conditioning aspects of the workplace will be added (such as nature of work, challenge, variety, and autonomy) that will moderate the result of the second phase "state engagement." To move to the third phase, "behavioral engagement" will be directly affected by the leadership style exercised in the company and indirectly by the trust generated between the parties. For this reason, practices related to communication and positive leadership will help build trust; and it is expected to increase the EE.

Main Measures of Engagement

The measurement of EE is not clear in the academic literature; in fact, in most studies, its measurement can be given by one or more psychological and behavioral components. Some of the most representative measurements of "employee engagement" would be classified in the following categories:

1. *Job satisfaction.* Employees assess their satisfaction with the company in different aspects. EE can be measured as direct evaluations of satisfaction with the company, manager, work group, job, and characteristics of the work environment (Burke, 2005). A measurement of engagement entirely based on satisfaction would present weaknesses however, since it is theoretically expected that with higher EE, higher levels of performance are found. Despite being correlated with engagement, satisfaction is sufficiently characterized by a sense of well-being and pleasantness connoting at best moderate levels of activation or energy (Macey & Schneider, 2008), but there is no any additional effort in the development of their work.
2. *Enthusiasm, dedication, or passion.* Enthusiasm is considered a measurement of commitment by some authors (Harter et al., 2003). Unlike satisfaction, which denotes a positive feeling toward the organization, when we refer to the enthusiasm of the worker, it would be referring to proactive attitudes, where the employee shows greater predisposition or

dedicates greater efforts at their discretion, beyond what is required to contribute to the company. According to those who advocate this type of commitment measurement, when a worker feels engagement, he would show high levels of energy, resilience, and perseverance in the face of difficulties (Bakker et al., 2014).

3. *Job commitment*: According to Macey and Schneider (2008), job commitment “is conceptualized as positive attachment to the larger organizational entity and measured as a willingness to exert energy in support of the organization, to feel pride as an organizational member, and to have personal identification with the organization.” Unlike the previous measurements, the commitment gives greater attention to the pride of belonging to the organization or the identification with its values.

These categories are not exclusive, and in some studies, they form combined measurements. There are also other proxy variables, perhaps less used to measure EE, such as *involvement*, where the degree of participation or contribution felt by the worker in their work would be given greater prominence, or *empowerment*, where aspects related to self-efficacy in the position, autonomy, or responsibility would come into play. Thus, EE is a multidimensional construct, whose measurement is complex and interrelates psychological, organizational, and behavioral aspects. Most of these measurements of engagement through multidimensional indicators are carried out through employee surveys, where they respond according to the degree of agreement or disagreement they have with representative phrases of the categories mentioned above. One of the most used scales that includes aspects classified into three categories (vigor, dedication, and absorption) is the questionnaire called *Utrecht Work Engagement Scale (UWES)* (Mills et al., 2012; Kwon & Park, 2019). There are also highly recognized questionnaires such as the *Employee Engagement Scale* which consists of three sub-constructs (cognitive, emotional, and behavioral) (Shuck et al. (2017), *Work Cognition Inventory (WCI)* (Nimon et al.,

2011), and *Intellectual, Social, Affective (ISA)* (Soane et al., 2012).

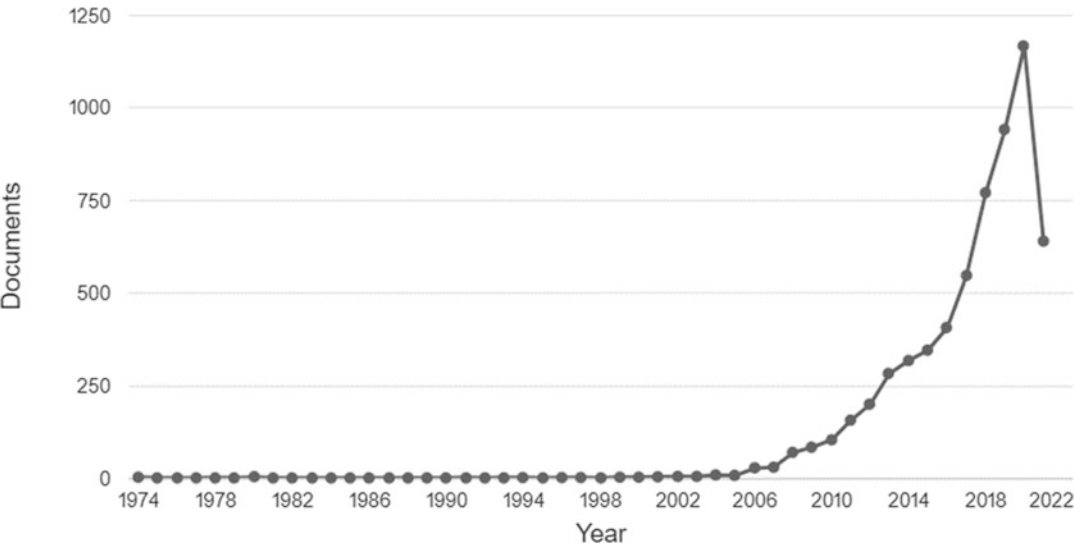
Employee Engagement in Academic Literature

Employee engagement has been studied in the academic literature with different purposes: on the one hand, the identification of HRM practices based on soft skills that allow increasing employee participation in the company and on the other hand, the focus on increasing employee commitment and as a consequence business performance.

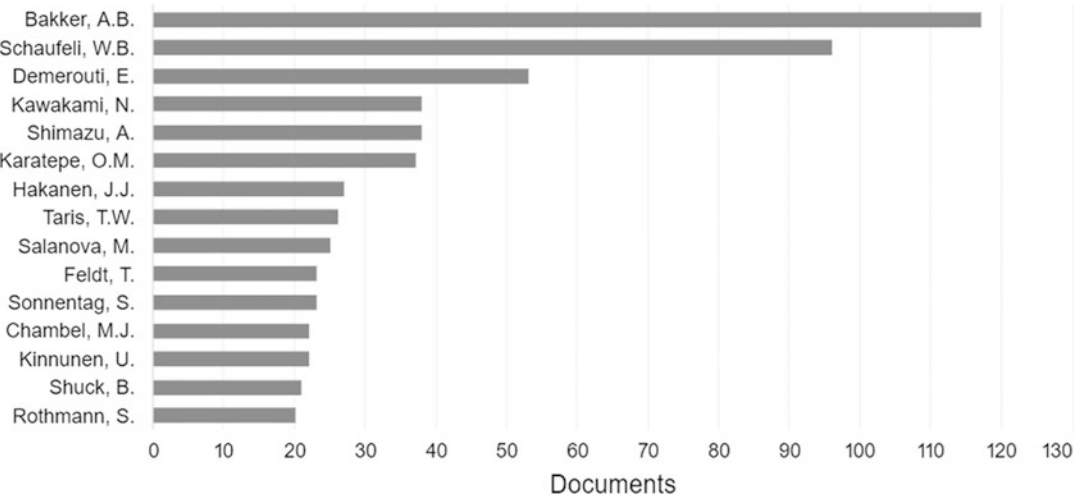
Figure 3 shows the evolution of the papers available in the Scopus Database with the following search criteria in the title, abstract, and keywords parameters: “employee engagement” or “job engagement” or “work engagement,” limiting the results to articles.

The studies related to employee engagement have a notable growth from 2005 onward, despite the fact that the first definition of the concept was published in 1990. In Fig. 4, we can see the 15 authors who have published the greatest number of publications on employee engagement. In this sense, the figure of Bakker, Shaufell, and Demerouti is noteworthy. These 3 authors have more than 50 papers in this area of research.

The journals that have published a greater number of papers on “employee engagement” are the *International Journal of Environmental Research and Public Health* and *Frontiers in Psychology*, both hosting more than 100 papers each. Table 2 shows the ranking of the five journals with the highest number of publications on the concept discussed. Finally, Fig. 5 shows how employee engagement has been treated in different subject areas, although research in the Business, Management, and Accounting area is predominant, since it has received 27.3% of all publications to date (Data consulted in July, 2021). The areas of Psychology, Social Sciences, and Medicine also stand out behind the aforementioned area, from highest to lowest importance following the order in which they have been mentioned.



Employee Engagement, Fig. 3 Evolution of articles with the concept “employee engagement”. (Source: Scopus Database on July, 2021)



Employee Engagement, Fig. 4 Most relevant authors about the topic EE. (Source: Scopus Database on July, 2021)

Key Issues and Future Directions

One of the main conclusions derived from the analysis of the concept “employee engagement” is that it is a construct affected by behavioral, emotional, organizational, and cognitive variables. This aspect makes it necessary to create complex models to

explain employee engagement, and that the results differ individually among the employees of an organization, since the personality and emotions of the individual affect their commitment to the organization. Regarding the definition of the term, there are various definitions, although most authors have many aspects in common. They highlight that the

EE shows a greater involvement of the employee that is made visible in a behavioral way with a greater effort and dedication in the work development, which will subsequently lead to higher performance. In its measurement, it is where the greatest divergences can be found, where the main proxies used are satisfaction, dedication, and commitment.

The concept of “employee engagement” is relatively new in the literature, since most studies are quite recent. In this sense, and

considering that the actions of HRM, the business management style, and the resources provided affect employee commitment, it will be necessary to analyze this concept in different sectors and employment contracts. Currently, many workers have jobs with less physical ties to their company and to the rest of the collaborators. This is, for example, the case of workers hired in a teleworking modality. It would be interesting to investigate whether there are significant differences in the level of engagement depending on the modality in which the work is carried out.

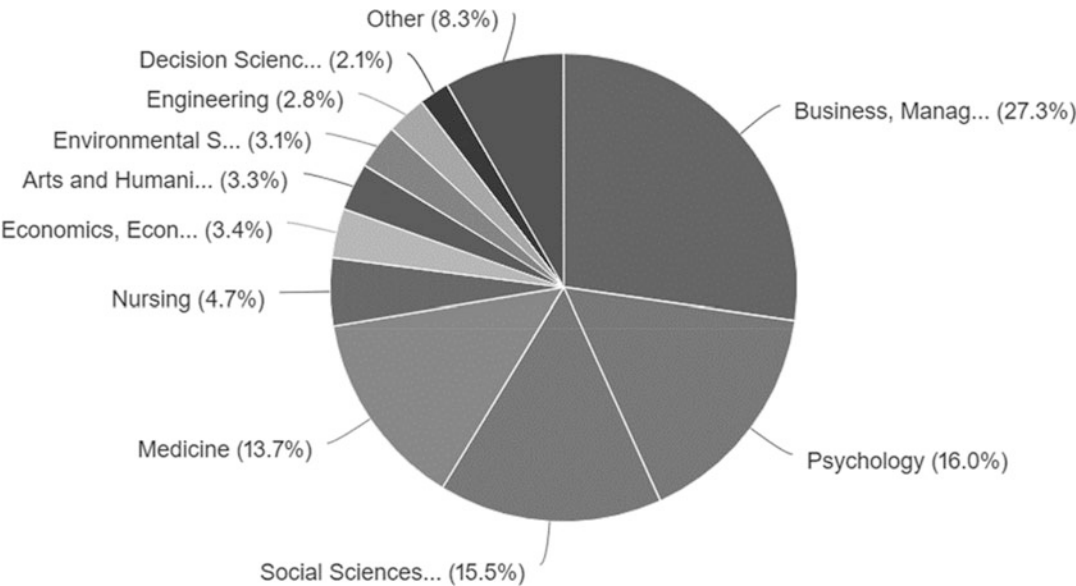
Employee Engagement, Table 2 Five highest-ranked journals, ordered by number of articles about the topic. (Source: Authors)

Journal	Number
<i>International Journal of Environmental Research and Public Health</i>	132
<i>Frontiers in Psychology</i>	110
<i>International Journal of Human Resource Management</i>	73
<i>European Journal of Work and Organizational Psychology</i>	70
<i>Journal of Vocational Behavior</i>	66

Source: Authors through information from Scopus Database on July, 2021

Summary

Increasing employee engagement is an aspect of growing interest in the field of management, more specifically in human resource management. However, there are certain aspects about this concept that must be considered: (1) It is not a simple measurement concept. (2) It is a concept that can be affected by organizational, emotional, behavioral, and cognitive variables, thus its explanation



Employee Engagement, Fig. 5 Evolution of articles with the concept “employee engagement”. (Source: Scopus Database on July, 2021)

requires complex models that show the relationship between a set of variables. This is confirmed by the “strategic engagement model.” It shows how engagement is affected by demands on employees, the resources offered to them, and individual variables of the worker. Regarding the definition of the term, this contribution provides current definitions that allude to attitudinal, behavioral, and motivational aspects of the employee, as well as the outputs derived from the employee engagement. Finally, two questions are answered: (1) How is employee engagement increased? and (2) How is engagement measured? Finally, a review of the academic literature is carried out, identifying the main authors and publications that have worked on the construction of the term, as well as future proposals to increase knowledge about it.

Cross-References

- [Job Engagement](#)
- [Work Engagement](#)

References

- Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness: People and Performance*, 2(1), 7–35.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review Organizational Psychology and Organizational Behavior*, 1(1), 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>.
- Bakker, A. B., & Xanthopoulou, D. (2013). Creativity and charisma among female leaders: The role of resources and work engagement. *International Journal of Human Resource Management*, 24, 2760–2779. <https://doi.org/10.1080/09585192.2012.751438>.
- Bakker, A. B., & Demerouti, E. (2014). Job demands–resources theory. In *Wellbeing: A Complete Reference Guide*, ed. C. Cooper, P. Chen, pp. 37–64. Chichester, UK: Wiley-Blackwell.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39, 779–801.
- Burke. (2005). *Employee engagement*. Retrieved May 4, 2005, from www.burke.com/EOS/prac_EmployeeEngagement.htm
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 309–311. <https://doi.org/10.1111/peps.12070>.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands–resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>.
- Gouldner, A. W. (1960). The norm of reciprocity. *American Sociological Review*, 25, 161–178.
- Guest, D. E. (2014). Employee engagement: A skeptical analysis. *Journal of Organizational Effectiveness: People and Performance*, 1(2), 141–156. <https://doi.org/10.1108/JOEPP-04-2014-0017>.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 205–224). Washington, DC: American Psychological Association. <https://doi.org/10.1037/10594-009>.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724. <https://doi.org/10.5465/256287>.
- Konermann, J. (2012). *Teachers’ work engagement. A deeper understanding of the role of job and personal resources in relationship to work engagement, its antecedents, and its outcomes* (Thesis). Enschede, Netherlands: University of Twente.
- Kwon, K., & Park, J. (2019). The life cycle of employee engagement theory in HRD research. *Advances in Developing Human Resources*, 21(3), 352–370. <https://doi.org/10.1177/1523422319851443>.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3–30. <https://doi.org/10.1111/j.1754-9434.2007.00002.x>.
- Mäkikangas, A., Feldt, T., Kinnunen, U., & Mauno, S. (2013). Does personality matter? Research on individual differences in occupational well-being. In A. B. Bakker (Ed.), *Advances in positive organizational psychology* (Vol. 1, pp. 107–143). Bingley, UK: Emerald. [https://doi.org/10.1108/S2046-410X\(2013\)0000001008](https://doi.org/10.1108/S2046-410X(2013)0000001008).

- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.
- Mills, M. J., Culbertson, S. S., & Fullagar, C. J. (2012). Conceptualizing and measuring engagement: An analysis of the Utrecht Work Engagement Scale. *Journal of Happiness Studies*, 13(3), 519–545. <https://doi.org/10.1007/s10902-011-9277-3>.
- Nimon, K., Zigarmi, D., Houson, D., Witt, D., & Diehl, J. (2011). The work cognition inventory: Initial evidence of construct validity. *Human Resource Development Quarterly*, 22, 7–35. <https://doi.org/10.1002/hrdq.20064>.
- Osterman, P. (2000). Work reorganization in an era of restructuring: Trends in diffusion and effects on employee welfare. *Ilr Review*, 53(2), 179–196.
- Salanova, M., Agut, S., & Peiró, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of burnout and engagement: A confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Shuck, B., Adelson, J. L., & Reio, T. G., Jr. (2017). The employee engagement scale: Initial evidence for construct validity and implications for theory and practice. *Human Resource Management*, 56, 953–977. <https://doi.org/10.1002/hrm.21811>.
- Soane, E., Truss, C., Alfes, K., Shantz, A., Rees, C., & Gatenby, M. (2012). Development and application of a new measure of employee engagement: The ISA engagement scale. *Human Resource Development International*, 15(5), 529–547. <https://doi.org/10.1080/13678868.2012.726542>.
- Tena, A. B. E., Roca-Puig, V., & Llusa, J. C. B. (2002). Compromiso con los empleados y estrategia competitiva: un análisis intersectorial su repercusión en los resultados. *Cuadernos De Economía Y Dirección De La Empresa*, 12, 267–290.
- Truss, C., Gratton, L., Hope-Hailey, V., McGovern, P., & Stiles, P. (1997). Soft and hard models of human resource management: A reappraisal. *Journal of Management Studies*, 34(1), 53–73.
- Wellins, R., & Concelman, J. (2005). Creating a culture for engagement. Workforce Performance Solutions (www.WPSmag.com).
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82, 183–200. <https://doi.org/10.1348/096317908X285633>.

Employee Green Behaviors

- [Employee Sustainability Behaviors](#)

Employee Involvement

- [Quality Empowerment](#)

Employee Misconduct

- [Counterproductive Work Behaviors](#)

Employee Participation/Ownership

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Synonyms

[Employee share ownership](#); [Employee shareholders](#); [Employee stock ownership](#)

Definition

Employee participation/ownership identifies the workers' shareholding in their employing company (Kaarsemaker et al. 2010; Kruse 2002; Sausser 2009). Thereby, the employee participation/ownership provides workers not only with their traditional prerogatives but also with cash-flow, dividend (Duncan 2001; Sengupta et al. 2007; Wagner et al. 2003) and control rights (e.g. decision-making involvement in company management and opportunity to achieve

information on firm operations/activities (Black et al. 2007; Kaarsemaker et al. 2010; Rousseau and Shperling 2003).

It is worth noting that the use of such governance tool dates back to the mid-1950s when the employee ownership has been adopted for the first time by a North American attorney and investment banker (i.e., Louis Kelso) (Blair 1995; Freeman 2007). Since then, the debate around the topic has strongly involved both academics and policy makers (Kalmi et al. 2005; Pierce et al. 1991; Poutsma et al. 2006). However, while at the beginning their discussion has been mainly focused on the use of such tool by the workers' cooperatives, from the 1980s onward it has shifted toward the adoption of employee stock ownership by corporations (Logue and Yates 1999; Park et al. 2004; Pierce et al. 1991).

Moving from these premises, the chapter provides an overview on the taxonomy and the aim of employee participation/ownership and illustrates the scholarly debate on the topic by focusing the attention on the issues related to its adoption.

Classification, Aim, and Scholarly Debate on Employee Participation/Ownership

Academics identify different specifications of employee participation/ownership and provide the categorization of the phenomenon under scrutiny on the basis of a number of factors. In particular, the most common classifications used for this governance tool are based on the proportion of workers with ownership stakes, the percentage of shares held by employees, the type of ownership (i.e., direct or indirect), and the rights provided to the beneficiaries by the ownership stakes (Kruse 2002; Sesil et al. 2003).

Overall, the employee ownership takes a variety of forms as workers can participate in the ownership of the related employer by acquiring, individually or collectively, a proportion of the company shares. In addition, the employee participation/ownership can be designed by limiting the beneficiaries to few workers or broadening the company

ownership to all the firm's employees. At the same time, the above-mentioned plan can hamper or expand the extent of the worker rights in terms of participation to the company profit, risks, and information sharing (Ben-Ner and Jones 1995).

With regard to the adoption of the tool under scrutiny, it is worth noting that the workers' participation/ownership can originate from an employee buy-out or the decision of existing owners to pass on the business to workers (Degeorge et al. 2004). However, in some cases, the employee participation/ownership stems from the use of incentive remuneration plans as it is one of the most common components of the grants rewarded to the related beneficiaries (Blasi et al. 2003; Core and Guay 2001; Lawrence 1987).

Despite the differences among the specific types of employee participation/ownership, the common feature of all the employee-owned firms is the ability to build a strong sense of involvement among the beneficiaries by fostering their active participation in the governance and managerial activities of the company (Black et al. 2007; Kaarsemaker et al. 2010).

From a theoretical standpoint, the rationale behind the adoption of the employee participation/ownership relies upon the tenet that the involvement of workers in the company ownership is able to align their conflicting interests to those related to firm owners as described by the agency theory (Berle and Means 1932; Jensen and Meckling 1976). Indeed, following this approach, scholars highlight that the governance tool under scrutiny limits the workers' opportunism and hampers their extraction of private benefits to the detriment of shareholders (Shleifer and Vishny 1997).

According to the agency proponents, this effect is mainly due to the ability of employee participation/ownership to modify the perspective of workers so as to identify themselves with the firm shareholders (Duncan 2001; Jensen and Meckling 1976). The underlying premise of the above-mentioned alignment relies on the reciprocal dependence between the beneficiary of the company outcomes and the firm performance (Pendleton 2006; Sausser 2009; Sengupta et al.

2007). Thereby, the employee participation/ownership links the workers' goals to the company results to provide them incentives to the firm value maximization by building the related motivation, commitment, and cooperation (Blasi et al. 2003; Duncan 2001; Wagner et al. 2003).

Based on these premises, both scholars and practitioners emphasize that the ownership involvement of workers offers a number of benefits to the company. First of all, it hampers their myopia and motivates employees to take value-maximizing decisions by discouraging the short-term opportunistic behavior (Fudenberg et al. 1990). Second, it prompts the beneficiaries of employee ownership to improve the quality of their performance while enhancing the related cohesion and productivity (McCarthy and Palcic 2012). Third, it supports the equitable distribution of the firm wealth among all the parties involved in the value creation (Harrison et al. 2018). Moreover, from a different standpoint, it is considered as a solution able to foster the inclusive participation of stakeholders to the company activities by increasing their involvement in the firm decision-making process (Bernstein 1976; Freeman 2007; Gates 1999; Grunberg et al. 1996).

Opposite conclusions are drawn by the opponents of employee ownership as they highlight that the involvement of workers is not only able to improve the conflicts with managers but it also limits the participation of workers and enhances the related risk exposure (Harrison et al. 2018; Storey et al. 2014).

Despite this criticism, from the 1970s onward (Freeman 2007), the employee participation/ownership has been widely spread used by Anglo-American and European companies alike (European Federation of Employee Ownership 2008; Mygind 2012; Park et al. 2004; Poulain-Rehm and Lepers 2013; Reeves Knyght et al. 2010). Illustrative of this phenomenon is the circumstance that the first studies on the employee share ownership date back to the late 1970s when academics have started to investigate the majority employee ownership (Long 1978).

In particular, literature in this tradition has explored the effects of the governance tool under scrutiny on the employee behavior (Rhodes and Steers 1981) and the workers' participation in the decision-making process of the related companies (Dewe et al. 1988; Hammer et al. 1982; Long 1981). In addition, earlier studies on the topic have examined the implications of employee ownership for trade unions (Hammer et al. 1982; Stern et al. 1983). Aside this line of inquiry, the researchers' attention has been also devoted to assess their perception by the company workers and the related outcomes for the adopters (Caramelli and Briole 2007; Freeman 2007; Heras-Saizarbitoria 2014; Klein and Hall 1988; Pendleton et al. 1998; Poutsma et al. 2006; Reeves Knyght et al. 2010; Wichman 1994).

At the same time, a second strand of research has explored the performance implications of the employee participation/ownership offering mixed interpretations of the phenomenon under investigation (Conte and Svenjar 1990; Frye 2004; Long 1980). In particular, some studies in this tradition have documented that the employee participation/ownership negatively affects the firm performance (Guedri and Hollandts 2008) as this governance tool concentrates the control over the company's activity without providing employees with an effective motivation to improve their productivity (Park and Song 1995).

However, opposite conclusions are drawn by a competitive strand of studies finding that the presence of employee share ownership enhances both the company profitability and the shareholder returns (Kruse and Blasi 1997; Kumbhakar and Dunbar 1993; Mitchell et al. 1990; Park and Song 1995; Sengupta et al. 2007).

Aside this line of inquiry, another group of research has explored the effects of the employee participation/ownership for the company survival. In particular, studies in this tradition have reported that the employee-owned firms survive longer than companies that are not characterized by the workers' share ownership (Blair et al. 2000; Blasi et al. 2013; Park et al. 2004).

Despite the benefits of using this governance tool, it is worth noting that there are remarkable differences among countries with respect to its presence (Kaarsemaker et al. 2010). Following a law and finance approach, this circumstance can be explained in the light of the legal protection of investors provided by the regulation in force in each setting (La Porta et al. 1998, 1999). In this regard, as suggested by the literature, the presence of limited investor protection can provide the beneficiaries of employee ownership with incentives for the entrenchment of shareholders and may also foster the extraction of private benefits to the detriment of the company (Bebchuk and Fried 2006; Dyl 1988; Jensen et al. 2004).

On the basis of these premises, proper policy-making interventions are called to strengthen the pivotal role played by the employee participation/ownership and remove the distortions of the limited investor protection in the countries where this tool can support the company growth and the value creation.

Summary

The manuscript illustrates the types of employee participation/ownership and discusses the rationale of the related adoption by providing an overview on the academic debate on the topic.

Cross-References

- [Agency Theory](#)
- [Compensation Effectiveness](#)
- [Corporate Governance](#)
- [Corporate Governance, Measurement of](#)
- [Shareholder Rights](#)
- [Volunteering](#)

References

- Bebchuk, L. A., & Fried, J. M. (2006). Pay without performance: Overview of the issues. *Academy of Management Perspectives*, 20(1), 5–24.
- Ben-Ner, A., & Jones, D. C. (1995). Employee participation, ownership and productivity: A theoretical framework. *Industrial Relations: A Journal of Economy and Society*, 34(4), 532–554.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: The Macmillan Company.
- Bernstein, P. (1976). *Workplace democratization: Its internal dynamics*. Kent: Kent State University Press.
- Black, B., Gospel, H., & Pendleton, A. (2007). Finance, corporate governance, and the employment relationship. *Industrial Relations: A Journal of Economy and Society*, 46(3), 643–650.
- Blair, M. (1995). *Ownership and control: Rethinking corporate governance for the twenty-first century*. Washington, DC: The Brookings Institution.
- Blair, M., Kruse, D., & Blasi, J. (2000). Is employee ownership an unstable form? Or a stabilizing force? In T. Kochan & M. Blair (Eds.), *Corporation and human capital*. Washington, DC: The Brookings Institution.
- Blasi, J., Kruse, D., & Bernstein, A. (2003). *In the company of owners: The truth about stock options (and why every employee should have them)*. New York: Basic Books.
- Blasi, J., Kruse, D., & Weltmann, D. (2013). Firm survival and performance in privately held ESOP companies. In D. Kruse (Ed.), *Sharing ownership, profits, and decision-making in the 21st century (Advances in the economic analysis of participatory & labor-managed firms)* (Vol. 14). Bingley: Emerald Group Publishing Limited.
- Caramelli, M., & Briole, A. (2007). Erratum to employee ownership and job attitudes: Does culture matter? *Human Resource Management Review*, 17(3), 290–304.
- Conte, M. A., & Svenjar, J. (1990). The performance effects of employee ownership plans. In A. Blinder (Ed.), *Paying for productivity: A look at the evidence*. Washington, DC: The Brookings Institution.
- Core, J. E., & Guay, W. R. (2001). Stock option plans for non-executive employees. *Journal of Financial Economics*, 61(2), 253–287.
- DeGeorge, F., Jenter, D., Moel, A., & Tufano, P. (2004). Selling company shares to reluctant employees: France Telecom's experience. *Journal of Financial Economics*, 71(1), 169–202.
- Dewe, P., Dunn, S., & Richardson, R. (1988). Employee share option schemes, why workers are attracted to them. *British Journal of Industrial Relations*, 26(1), 1–20.
- Duncan, W. J. (2001). Stock ownership and work motivation. *Organizational Dynamics*, 30(1), 1–11.
- Dyl, E. A. (1988). Corporate control and management compensation: Evidence on the agency problem. *Managerial and Decision Economics*, 9(1), 21–25.

- European Federation of Employee Ownership. (2008). Economic survey of employee ownership in European countries in 2008. <http://www.efesonline.org>
- Freeman, S. F. (2007). *Effects of ESOP adoption and employee ownership: Thirty years of research and experience (Working paper 07-01)*. Philadelphia: University of Pennsylvania. Organizational dynamics working papers https://repository.upenn.edu/cgi/viewcontent.cgi?article=1001&context=od_working_papers.
- Frye, M. B. (2004). Equity-based compensation for employees: Firm performance and determinants. *Journal of Financial Research*, 27(1), 31–54.
- Fudenberg, D., Holmstrom, B., & Milgrom, P. (1990). Short-term contracts and long-term agency relationships. *Journal of Economic Theory*, 51(1), 1–31.
- Gates, J. R. (1999). *The ownership solution: Toward a shared capitalism for the 21st century*. New York: Basic Books.
- Grunberg, L., Moore, S., & Greenberg, E. (1996). The relationship of employee ownership and participation to workplace safety. *Economic and Industrial Democracy*, 17(2), 221–241.
- Guedri, Z., & Hollandts, X. (2008). Beyond dichotomy: The curvilinear impact of employee ownership on firm performance. *Corporate Governance: An International Review*, 16(5), 460–474.
- Hammer, T., Stern, R., & Gurdon, M. (1982). Workers' ownership and attitudes towards participation. In F. Lindenfeld & J. Rothschild-Whitt (Eds.), *Workplace democracy and social change*. Porter Sargent: Boston.
- Harrison, J. A., Singh, P., & Frawley, S. (2018). What does employee ownership effectiveness look like? The case of a Canadian-based firm. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 35(1), 5–19.
- Heras-Saizarbitoria, I. (2014). The ties that bind? Exploring the basic principles of worker-owned organizations in practice. *Organization*, 21(5), 645–665.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. C., Murphy, K. J., & Wruck, E. G. (2004). Remuneration: Where we've been, how we got to here, what are the problems, and how to fix them. Harvard NOM Working Paper No. 04-28; ECGI – Finance working paper no. 44/2004. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=561305
- Kaarsemaker, E., Pendleton, A., & Poutsma, E. (2010). Employee share ownership. In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *The Oxford handbook of participation in organizations*. Oxford: Oxford University Press.
- Kalmi, P., Pendleton, A., & Poutsma, E. (2005). Financial participation and performance in Europe. *Human Resource Management Journal*, 15(4), 54–67.
- Klein, K. J., & Hall, R. J. (1988). Correlates of employee satisfaction with stock ownership: Who likes an ESOP most? *Journal of Applied Psychology*, 73(4), 630–638.
- Kruse, D. (2002). Research evidence on prevalence and effects of employee ownership. *Journal of Employee Ownership Law and Finance*, 14(4), 65–90.
- Kruse, D., & Blasi, J. (1997). Employee ownership, employee attitudes, and firm performance: A review of the evidence. In D. J. B. Mitchell, D. Lewin, & M. Zaidi (Eds.), *Handbook of human resource management*. Greenwich: JAI Press.
- Kumbhakar, S. C., & Dunbar, A. E. (1993). The elusive ESOP-productivity link. *Journal of Public Economics*, 52(2), 273–283.
- La Porta, R., Lopez de Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155.
- La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517.
- Lawrence, F. J. (1987). Employee perspectives on stock ownership: Financial investment or mechanism of control? *Academy of Management Review*, 12(3), 427–435.
- Logue, J., & Yates, J. S. (1999). Worker ownership American style: Pluralism, participation and performance. *Economic and Industrial Democracy*, 20(2), 225–252.
- Long, R. J. (1978). The relative effects of share ownership vs. control on job attitudes in an employee-owned company. *Human Relations*, 31(9), 753–763.
- Long, R. J. (1980). Job attitudes and organizational performance under employee ownership. *Academy of Management Journal*, 23(4), 726–737.
- Long, R. J. (1981). The effects of formal employee participation in ownership and decision-making on perceived and desired patterns of organizational influence: A longitudinal study. *Human Relations*, 34(10), 847–876.
- McCarthy, D., & Palcic, D. (2012). The impact of large-scale employee share ownership plans on labour productivity: The case of Eircom. *The International Journal of Human Resource Management*, 23(17), 3710–3724.
- Mitchell, D. J., Lewin, D. B., & Lawler, E. E. (1990). Alternative pay systems, firm performance, and productivity. In A. S. Blinder (Ed.), *Paying for productivity: A look at the evidence*. Washington, DC: The Brookings Institution.
- Mygind, N. (2012). Trends in employee ownership in Eastern Europe. *The International Journal of Human Resource Management*, 23(8), 1611–1642.
- Park, S., & Song, M. H. (1995). Employee stock ownership plans, firm performance, and monitoring by outside blockholders. *Financial Management*, 24(4), 52–65.
- Park, R., Kruse, D., & Sesil, J. (2004). Does employee ownership enhance firm survival? In V. Perotin & A. Robinson (Eds.), *Employee participation, firm performance and survival (advances in the economic analysis*

- of participatory & labor-managed firms*) (Vol. 8). Bingley: Emerald Group Publishing Limited.
- Pendleton, A. (2006). Incentives, monitoring and employee stock ownership plans: New evidence and interpretations. *Industrial Relations: A Journal of Economy and Society*, 45(4), 753–777.
- Pendleton, A., Wilson, N., & Wright, M. (1998). The perception and effects of share ownership: Empirical evidence from employee buy-outs. *British Journal of Industrial Relations*, 36(1), 99–123.
- Pierce, J. L., Rubenfeld, S. A., & Morgan, S. (1991). Employee ownership: A conceptual model of process and effects. *Academy of Management Review*, 16(1), 121–144.
- Poulain-Rehm, T., & Lepers, X. (2013). Does employee ownership benefit value creation? The case of France (2001–2005). *Journal of Business Ethics*, 112(2), 325–340.
- Poutsma, E., Kalmi, P., & Pendleton, A. D. (2006). The relationship between financial participation and other forms of employee participation: New survey evidence from Europe. *Economic and Industrial Democracy*, 27(4), 637–667.
- Reeves Knyght, P., Kouzmin, A., Kakabadse, N. K., & Kakabadse, A. P. (2010). Auditing employee ownership in a neo-liberal world. *Management Decision*, 48(8), 1304–1323.
- Rhodes, S. R., & Steers, R. M. (1981). Conventional vs. worker-owned organizations. *Human Relations*, 34(12), 1013–1035.
- Rousseau, D. M., & Shperling, Z. (2003). Pieces of the action: Ownership and the changing employment relationship. *Academy of Management Review*, 28(4), 553–570.
- Sauser, W. I. (2009). Sustaining employee owned companies: Seven recommendations. *Journal of Business Ethics*, 84(2), 151–164.
- Sengupta, S., Whitfield, K., & McNabb, B. (2007). Employee share ownership and performance: Golden path or golden handcuffs? *The International Journal of Human Resource Management*, 18(8), 1507–1538.
- Sesil, J. C., Kruse, D. L., & Blasi, J. R. (2003). Sharing ownership via employee stock ownership. In L. Sun (Ed.), *Ownership and governance of enterprises: Recent innovative developments*. London: Palgrave Macmillan.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783.
- Stern, R., Whyte, W., Hammer, T., & Meek, G. (1983). The union and the transition to employee ownership. In W. Whyte, T. Hammer, C. Meek, & R. Stern (Eds.), *Worker participation and ownership*. Ithaca: ILR Press.
- Storey, J., Basterretxea, I., & Salaman, G. (2014). Managing and resisting 'degeneration' in employee-owned businesses: A comparative study of two large retailers in Spain and the United Kingdom. *Organization*, 21(5), 626–644.
- Wagner, S. H., Parker, C. P., & Christiansen, N. D. (2003). Employees that think and act like owners: Effects of ownership beliefs and behaviors on organizational effectiveness. *Personnel Psychology*, 56(4), 847–871.
- Wichman, A. (1994). Occupational differences in involvement with ownership in an airline employee ownership program. *Human Relations*, 47(7), 829–847.

Employee Pro-environmental Behaviors

► Employee Sustainability Behaviors

Employee Rights

► Rights of Employees

Employee Rights and Freedoms

► Rights of Employees

Employee Share Ownership

► Employee Participation/Ownership

Employee Shareholders

► Employee Participation/Ownership

Employee Stock Ownership

► Employee Participation/Ownership

Employee Sustainability Behaviors

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Synonyms

Employee green behaviors; Employee pro-environmental behaviors; Environmental workplace behaviors; Environmentally sustainable work behaviors

Definition

As a relatively new concept, employee sustainability behaviors (ESB) refers to the workplace behaviors directed toward improving environmental, social, and economic sustainability in organizations that are performed by employees at any organizational level (Ciocirlan 2017). To identify the nature of ESB, a distinction is typically made between discretionary (voluntary, extra-role) sustainability efforts and those that are required (mandatory, in-role) based on congruence to the organization's internal standards and procedures (Norton et al. 2015; Boiral and Paillé 2012). The difference is essential as most discretionary sustainability behaviors are not recognized by formal organizational processes. While required ESB is performed within the typical job duties, voluntary ESB entails personal initiatives that go beyond task requirements and organizational expectations (Norton et al. 2015). While all behavioral categorizations of ESB (e.g., in-role vs. extra-role, low-intensity vs. high-intensity) rely on some common ideas and principles of ► [corporate sustainability](#), each has also its own unique set of determinants, conditions, processes, and outcomes.

Micro Foundations of CSR

The micro foundations of ► [corporate social responsibility](#) (CSR) – the roots of CSR that are based on individual actions and relationships – have a prominent role in explaining sustainable behavior in organizations. Even though corporate responsibility issues can be examined at different levels, individual-level analysis has been very limited compared to studies at institutional or organizational level (Aguinis and Glavas 2012). Despite this scarcity, there have been increasing attempts in identifying the fundamental processes of CSR by adopting theoretical perspectives and methods from the domains of organizational behavior, industry psychology, and HRM (e.g., Morgeson et al. 2013; Andersson et al. 2013; Renwick et al. 2016). The reason for this renewed interest is that the success of corporate sustainability initiatives largely depends on employee behaviors above and beyond formal organizational systems, policies, and programs. Understanding the individual motivations, emotions, attitudes, and socio-psychological mechanisms, and how all of them are linked to broader CSR outcomes have the potential to enhance our knowledge on corporate sustainability.

The benefits for examining micro foundations of CSR and employee sustainability behaviors can be summarized as follows: First, it makes it clearer why and how certain sustainability outcomes emerge in an organization (e.g., Glavas 2016; Strauss et al. 2017). Second, it provides valuable insights about how to conceptualize and measure employee- and team-based CSR activities (e.g., Ciocirlan 2017; Paille and Boiral 2013). Third, through these investigations companies might gain valuable insights on how to foster employee engagement in strategic CSR and sustainability practices of the organization (e.g., Lamm et al. 2015; Dumont et al. 2017; Kim et al. 2017). Finally, it can point out existing limitations and challenges regarding how to integrate sustainability principles and plans to daily work life (e.g., Strauss et al. 2017).

The Nature of Employee Sustainability Behaviors

Recent interest on ESB originates from a set of underlying factors. First, new and enhanced CS positions of firms mostly depend on individual champions questioning the status quo and advancing promoting sustainability initiatives. These champions are often typical employees with high environmental sensitivities who strive to bring a change toward sustainability in organizational outputs and processes. Related to this, the advance of various sustainability initiatives in an organization often arises as a result of employees' innovative ideas and suggestions. Most sustainability goals and strategies require direct and continuous involvement of employees in implementation and maintenance (e.g., diagnosis, documentations, controls, corrections) (Boiral and Paillé 2012).

In recent years, a number of different concepts have been offered to assess employee sustainability attitudes and behaviors at workplace. One noticeable construct is employee "green" or pro-environmental behavior, which refers to employees' engagement in visible actions and behaviors that are associated with and contribute to environmental sustainability (Ramus and Killmer 2007; Paille and Boiral 2013). Encouraging pro-environmental employee behaviors has become an essential part of creating a green workplace and an environmentally responsible organization (Renwick et al. 2016). Example green behaviors include saving electricity and other resources, avoiding waste, recycling office materials, and limiting paper printing.

Perhaps, the most widely discussed and surveyed employee sustainability behavior is organizational citizenship behavior for the environment (OCBE). It can be defined as employees' voluntary extra-role behaviors that are not explicitly acknowledged or rewarded, yet contribute to both mutual prosperity and organizational effectiveness regarding environmental issues (Boiral and Paillé 2012; Ramus and Killmer 2007). Corporate green initiatives are usually complex and time-consuming, thus it is difficult to fit them completely into formal job descriptions and work responsibilities. As voluntary extra-role

acts, OCBE include employee initiatives such as prioritizing environmental interests, suggestions, and initiatives aimed at reducing wastes, initiating sustainability programs, representing the organization at environment-related activities, engaging in environmental lobbying and activism, and collaborating with other departments to implement green technologies (Tosti-Kharas et al. 2017). In-role (required) environmental behaviors, however, are motivated by contributing to the core business such as adhering to organizational policies, changing work resources and methods, choosing responsible ones among given alternatives, and creating sustainable products. Because of their flexible, informal, and implicit nature, it is difficult to describe and measure OCBE accurately (Boiral and Paillé 2012). Nevertheless, certain measurements have been proposed and validated to analyze it.

Key Predictors of ESB

The answer to the fundamental question of what predicts ESB can be given regarding three types of antecedents: Individual factors, group and leadership factors, and organizational-level influences. Within the first type of predictors, personal values, similarity of these values with organizational values, pro-environmental attitudes and identity, concern with particular environmental and ethical issues and job factors typically shape employee commitment to CSR (e.g., Strauss et al. 2017; Norton et al. 2015). Values are deeply embedded in the decision-making process, thus they have a huge impact on how employees behave or willing to behave regarding environmental and social concerns (Tosti-Kharas et al. 2017). Evidence suggest that other factors including psychological and other development needs, self-efficacy beliefs, relational and moral motives as opposed to self-interest, collective self-esteem, prosocial identity, CSR knowledge and expertise (e.g., awareness of CSR guidelines, receiving CSR training), and long-term orientation are also associated with employee engagement in CSR (Aguinis and Glavas 2012; Strauss et al. 2017). Furthermore, perceived organizational support,

organizational commitment, and identification with the organization makes employees show stronger sustainability behaviors and encourage them to come up with creative sustainability ideas (Temminck et al. 2015; Tosti-Kharas et al. 2017).

Besides such individual influences, a second category of predictors reflect how leadership style, leader values, relationship with the leader, and group-level dynamics inform ESB. Research findings show that transformational leadership, responsible and ethical leadership style, commitment of the leader to CSR, and leaders' workplace sustainability behaviors are meaningfully linked to employees' sustainability concerns and behaviors (e.g., Robertson and Barling 2013; Renwick et al. 2016; Kim et al. 2017). Besides direct effects, leadership may also encourage ESB indirectly, in a combination with employees' own motivation and attitudes and through group dynamics. Hence, the work groups' sustainability beliefs and behaviors such as green advocacy do not only determine ESB alone but it also facilitates the impact of leadership (Kim et al. 2017).

The third type of predictors includes organizational-level influences, which shape voluntary sustainability behaviors at work. Studies show that organizational culture, organizational values, norms and practices toward sustainability, corporate environmental rules and practice, green HR policies, suggestion systems, and cross-functional communication can meaningfully improve ESB (e.g., Renwick et al. 2016; Temminck et al. 2015; Strauss et al. 2017; Morgeson et al. 2013). Such organizational dimensions trigger particular cognitive and emotional motives within the employee via highlighting the importance of context, capacity, and conditions for ethical conduct. Positive organizational factors also reduce the complications of sustainability for employees. For instance, the perception of support from the organization on sustainability issues make employees more committed and satisfied, leading to higher engagement in sustainability behaviors (Paille and Boiral 2013). Organizational climate also plays a significant role in fostering ESB. A pro-environmental (green) climate or an ethical climate can generate a caring and supportive

environment which stimulates employee involvement in sustainability behaviors.

It is worth noting that usually these three types of predictors influence ESB in an interactive manner. Thus, multilayer and multilevel models combining individual, group, and organizational level aspects provide a better and more realistic explanation of how ESB emerges and inspired within organizations.

Underlying Mechanism of ESB

Even though the existing knowledge on CSR mechanisms is limited, a number of models have been offered on the topic. For instance, Bolton and her colleagues (2011) found that CSR operates as a dynamic process which is composed of initiation, implementation, and maturation stages. The main CSR issues vary according to the nature of each step. In the early stages, there is no focus on the employees, neither as an essential stakeholder nor as an active participant in related initiatives. Arguments are limited to what CSR is and why it is required. Yet, as soon as implementation phase comes, employee involvement becomes evident and their internal stakeholder position is recognized. Employee contributions are observed most clearly when companies start to measure and evaluate CSR outcomes in the stage of maturation. This is because CSR engagement deeply affects employee attitudes, turning them into promoters of the organization's CSR activities. Overall, each and every phase of CSR development in an organization entails the involvement of employees coupled with a specific set of issues.

Aside such generic processes, organizational influences often translate their impact on ESB through socio-psychological mechanisms (Carmeli et al. 2017). Collectively held attributes such as care, altruism, honesty, ethical conduct, justice, and environmental sensitivity as well as the policies and structures built on such attributes in an organization make existing employees and newcomers more attracted to the organization, psychologically empowered, satisfied, and committed. In turn, employees become more willing to engage in sustainability behaviors. Thus, the

influence of contextual factors on ESB unfolds through the emergence of certain attitudes and affective reactions.

Some factors may also insert a conditional effect on all aforementioned relationships. Research findings suggest that supervisor commitment to ethics, trust in manager/supervisor, psychological contract, employee discretion, and issue salience can reinforce the relationships among individual and organizational predictors, employees' engagement in sustainability, and organizational outcomes (Paille and Boiral 2013). Additionally, some influences on ESB are conditional upon different leader (e.g., leadership style, leader's sustainability behaviors and attitudes) and team characteristics (e.g., team composition, norms, activities) (Norton et al. 2015).

Contributions to Individual and Organizational Outcomes

If employees work for a socially responsible company and participate in the organization's sustainability practices, their work engagement, perceived task significance, and in-role performance typically increase. Similarly, ESB is likely to improve employees' job satisfaction, sense of belongingness, commitment, and engagement in the work environment as well as their relationships with other organizational members (Aguinis and Glavas 2012; Carmeli et al. 2017). Besides, ECB has the potential to facilitate employee capability development, job performance, and creative output. ECB is also one of the key success factors of corporate sustainability as several studies display significant relationship between ESB and organization's environmental performance, reduced environmental impact, and effective organizational greening initiatives (e.g., Kim et al. 2017; Andersson et al. 2013). Additionally, sustainable dynamic capabilities of an organization are partly established by individual members' behaviors and characteristics such as adaptivity, proactivity, and pro-environmental attitudes (Strauss et al. 2017). Thus, corporate

sustainability performance as a whole is largely affected by individual sustainability actions (Ciocirlan 2017). One can also claim that extra-role behaviors of sustainability will eventually translate into stronger in-role behaviors where the issue of sustainability becomes a common way of thinking for employees.

Summary

The existing knowledge and recent research findings suggest that employee sustainability behavior is a new yet important phenomenon helping to understand how sustainability at individual-level emerges and develops within organizations, and what type of consequences it creates. As such, there have been increasing calls to both researchers and practitioners of CSR to integrate individual-level investigations of sustainability mechanisms and their results into strategic CSR thinking and initiatives. An ideal approach might be developing a multilevel and multidimensional framework where ESB is conceptualized as a product of an interface among individual employees, work groups, and organizational systems. Such a framework could provide precious information for evaluating the role of complex psychological, social and economic dynamics, and their interactions that produce ESB in organizations, which in turn promotes business sustainability.

With respect to practical implementations, companies have to fathom how to connect employee values, attitudes, and behaviors toward sustainability with ongoing job responsibilities and business operations. A couple of suggestions may include aligning employee and organizational values, clearly defining organizational long-term goals, making an economic and feasible case for sustainability, supporting sustainability champions in the organization, developing a sustainable knowledge and capabilities inventory, making sustainability initiatives more visible, and designing sustainable strategies with the involvement of employees.

Cross-References

- [Corporate Social Responsibility](#)
- [Corporate Sustainability](#)
- [Volunteering](#)

References

- Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of Management*, 38(4), 932–968.
- Andersson, L., Jackson, S. E., & Russell, S. V. (2013). Greening organizational behavior: An introduction to the special issue. *Journal of Organizational Behavior*, 34(2), 151–155.
- Boiral, O., & Paillé, P. (2012). Organizational citizenship behaviour for the environment: Measurement and validation. *Journal of Business Ethics*, 109, 431–445.
- Bolton, S. C., Chung-hee Kim, R., & O'Gorman, K. D. (2011). Corporate social responsibility as a dynamic internal organizational process: A case study. *Journal of Business Ethics*, 101, 61–74.
- Carneli, A., Brammer, S., Gomes, E., & Tarba, S. Y. (2017). An organizational ethic of care and employee involvement in sustainability-related behaviors: A social identity perspective. *Journal of Organizational Behavior*, 38, 1380–1395.
- Ciocirlan, C. E. (2017). Environmental workplace behaviors: Definition matters. *Organization & Environment*, 30(1), 51–70.
- Dumont, J., Shen, J., & Deng, X. (2017). Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values. *Human Resource Management*, 56(4), 613–627.
- Glavas, A. (2016). Corporate social responsibility and organizational psychology: An integrative review. *Frontiers in Psychology*, 7, 1–13.
- Kim, A., Kim, Y., Han, K., Jackson, S. E., & Ployhart, R. E. (2017). Multilevel influences on voluntary workplace green behavior: Individual differences, leader behavior, and coworker advocacy. *Journal of Management*, 43(5), 1335–1358.
- Lamm, E., Tosti-Kharas, J., & King, C. E. (2015). Empowering employee sustainability: Perceived organizational support toward the environment. *Journal of Business Ethics*, 128, 207–220.
- Morgeson, F. P., Aguinis, H., Waldman, D. A., & Siegel, D. S. (2013). Extending corporate social responsibility research to the human resource management and organizational behavior domains: A look to the future. *Personnel Psychology*, 66(4), 805–824.
- Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. *Organization & Environment*, 28(1), 103–125.
- Paillé, P., & Boiral, O. (2013). Pro-environmental behavior at work: Construct validity and determinants. *Journal of Environmental Psychology*, 36, 118–128.
- Ramus, C. A., & Killmer, A. B. (2007). Corporate greening through prosocial extrarole behaviours: A conceptual framework for employee motivation. *Business Strategy and the Environment*, 16(8), 554–570.
- Renwick, D. W., Jabbour, C. J., Muller-Camen, M., Redman, T., & Wilkinson, A. (2016). Contemporary developments in green (environmental) HRM scholarship. *International Journal of Human Resource Management*, 27(2), 114–128.
- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34, 176–194.
- Strauss, K., Lepoutre, J., & Wood, G. (2017). Fifty shades of green: How microfoundations of sustainability dynamic capabilities vary across organizational contexts. *Journal of Organizational Behavior*, 38(9), 1338–1355.
- Temminck, E., Mearns, K., & Fruhen, L. (2015). Motivating employees towards sustainable behaviour. *Business Strategy and the Environment*, 24, 402–412.
- Tosti-Kharas, J., Lamm, E., & Thomas, T. E. (2017). Organization or environment? Disentangling employees' rationales behind organizational citizenship behavior for the environment. *Organization & Environment*, 30(3), 187–210.

Employee Volunteer Programs

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Synonyms

Civil engagement; Employer supported volunteering; Helping activities; Skill-based volunteering programs; Volunteerism management

Definition

The idea of volunteering can be classified as a form of helping behavior where people, and volunteers, willingly devote and commit themselves to nonfinancially rewarded activities, especially in the third sector. Considering that organizations in the third sector are driven by the desire to contribute and achieve social goals, they mostly rely on volunteers to undertake most of their activities. Many factors such as unsustainable cost structure, lack of requisite skills, unemployment, and underemployment are influencing organizations, especially in the third sector to rely more on volunteers. Under the UK employment law such as Equality Act 2010 and the Employment Rights Act 1996, volunteers are not recognized as employees and not protected, undermining their contributions in enhancing social and economic prosperities of their community.

However, many organizations are now incorporating volunteering, in the form of employee volunteer programs (EVP), into their learning and development activities to enhance their reputation and engage with the local community. Despite its perceived benefits, the true social and economic impacts of EVP on the community, host organizations, parent organizations, and volunteers including its motivations should be sufficiently explored to establish how EVP can be integrated into the organization's strategy. With the increasing popularity of volunteering in most western countries, particularly in the UK, there should be more clarity about its motivations and value-creating capabilities to local and national economies. This entry, therefore, analyzes EVP, its benefits, and key issues for organizations and volunteers to make informed decisions about the implementation of EVP.

Introduction

Organizations engage with stakeholders, internal and external, through different mechanisms such as employee training and development, engaging in philanthropic activities, to improve their reputation and competitiveness. In recent times, organizations worldwide are showing increasing

interest in employee volunteer programs (EVP) also known as employer supported volunteering (ESV). Their intention is to enhance the reputation of organizations and provide opportunities for their employees to acquire more skills by undertaking unpaid volunteering activities during the work hour. With resource constraints, especially financial, the contributions of volunteers, particularly to organizations in the third sector, cannot be overemphasized. Many not-for-profit organizations rely on the pool of volunteers to facilitate their activities (Erks et al., 2021).

While volunteering is not new, with many people participating in unpaid activities in their free time, EVP is construed as a mechanism for organizations to support their employees by providing opportunities to participate in volunteering activities during work hours (Chartered Institute of Personnel and Development (CIPD), 2022). This concept is increasingly gaining traction across different sectors, especially in the third sector, due to its perceived benefits in enhancing organizations' social responsibility (Howard & Serviss, 2022) and contributions to employees' skills development (CIPD, 2022). According to Erks et al. (2021), volunteering offers benefits to non-profit (or host) organizations, parent organizations, volunteers, and the society in general.

Providing these opportunities, especially to full-time employees during work hours, is important due to time constraints and work pressure/demand, preventing many full-time employees from engaging in volunteering activities of their choice. Although there are perceived overt benefits from EVP, there are many ethical and moral issues that should be addressed to understand why organizations and employees elect to engage in volunteering activities. There is also the need to understand the impacts of EVP on colleagues who are not volunteering but must take extra job responsibilities when volunteers are away, especially in result-driven and goal-oriented organizations. EVP is expected to involve nonfinancially paid activities; it is not clear whether there are other work-based incentives and reward systems motivating employees to undertake volunteering activities. It is equally important to establish whether volunteering activities/programs represent the

interest of recipients, or they are another sideshow from organizations to distract stakeholders from key social and environmental issues associated with their operations.

Irrespective of its motivations and goals, there is evidence to suggest that EVP represents an opportunity for organizations and their employees to meet societal needs through nonfinancially rewarded activities. Despite the reported benefits in the literature, there is a need for more empirical evidence on practicality of EVP and whether volunteering activities during work hours make any real impacts. This argument echoes Erks et al.'s (2021) observation that studies have not sufficiently explored the benefits of EVP, especially to profit-making organizations that promote volunteering activities or employ volunteers. The purpose of this entry is to instigate debate about EVP by drawing scholars and practitioners' attention to many issues associated with EVP while challenging the dominant school of thoughts about its benefits. This debate should instigate evidence-based research on the governance and impacts on EVP and provide meaningful insights into how impactful volunteer programs can be designed and implemented.

Understanding EVP: Theoretical Perspectives

Studies (such as Erks et al., 2021; Howard & Serviss, 2022) have shown that EVP is underpinned by disparate of personal, psychological, and contextual factors. These factors are intrinsic and extrinsic, indicating that EVP is behavioral and can be examined using social-psychology theories. These theories include organizational citizenship behavior (Organ, 1997) and social exchange theory based on Gouldner's (1960) idea of reciprocity.

Organizational citizenship is construed as a concept often adopted whereby employees including managers are perceived as citizens (akin to citizens of a country) with duties or responsibilities beyond their formal contractual (or role-based) obligations. Organizational citizenship behaviors (OCB) are non-role-related

behaviors but contribute to the effective functioning of the organization. These behaviors can be broadly classified into altruism and generalized compliance dimensions. Based on their altruism dimension, OCB are employees' voluntary engagement or participation in organizations' activities and motivated to a larger extent by individual employee's internal disposition.

Contrary to OCB, social exchange theory (SET) posits that people continuously evaluate costs and benefits of their actions as a means of interacting with their society and environment. The theory places emphasis on motives to explain why two people or organizations enter a relationship while others may not. The theory resonates with the idea that people are rational in their thought process, always seeking to maximize rewards and minimize the associated costs. The cost-benefit analysis and its outcomes determine whether an individual will undertake an action or perform the focal behavior. Although EVP constitutes voluntary activities, SET proposes that employees may decide not to participate in a volunteering program if its perceived costs outweigh the perceived benefits.

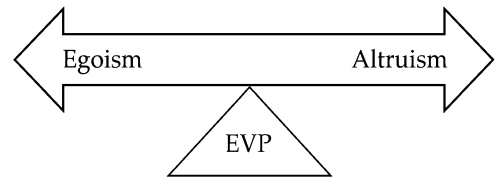
On the other hand, employees may be obliged to participate in a volunteering program if the program is initiated by their employer because of the influence of psychological contract on their behavior. The psychological contract can play a role in employee's behavior considering that employees' perceptions of their employer's expectations are mostly inaccurate and imprecise. Employees' behavior and their relationship with their employers are influenced by many implicit assumptions and expectations, forcing many employees to act beyond their formal contractual obligations to demonstrate their commitment. These assumptions and the expectations that employees can be rewarded by their employer through the organizational formal reward systems and opportunities, such as promotion and salary increase, may influence and contribute to employees' participation in EVP. Using this perspective, EVP is transactional, with employees expecting some forms of reward or compensation for their engagement in EVP within and outside the organization.

Key Issues

Although OCB has received many criticisms for its ambiguities (Organ, 1997) and is perceived to be conceptually misguided, the construct is attracting increasing interests from different scholars in various academic disciplines (Organ, 2018; Podsakoff et al., 2000). For example, Appelbaum et al. (2004) and Tsai and Wu (2010) investigated OCB using employees in Canada and Taiwan, respectively. According to Tsai and Wu (2010), the relationship between employees' job satisfaction and OCB among Nurses in Taiwan was observed to be positively significant. In other words, employees could feel a sense of belonging to organizations and perform discretionary roles that are not specified by their contractual roles when they are satisfied with their jobs including the work environment. This suggests that the propensity of employees to commit and be loyal to their organization and hence perform discretionary duties is strong when there is a perception of strong satisfaction about their jobs. This argument aligns with Licandro et al.'s (2022) observation that volunteer's satisfaction contributes positively to permanence in volunteering activities; however, they further reported that other factors, such as demographics including the level of education, influence the effects.

It should be noted that job satisfaction is subjective and attracts different interpretations that may exert inconsistent effects or relationships with citizenship behaviors as seen in many studies. For example, an employee may be satisfied with their employer/organization if there is an opportunity to volunteer outside the organization during work hours; however, another employee from the same organization may perceive no satisfaction if they undertake additional responsibilities due to colleagues undertaking EVP outside the organization (or formal job functions).

This hypothetical example suggests that employees may be generally satisfied when their personal needs are met by their employer which aligns with SET and can be construed as a form of egoistic behavior in some instances. Although job satisfaction is operationalized as antecedent of OCB, the explanation why people perceive job



Employee Volunteer Programs, Fig. 1 Conceptualizing motivations for Employee Volunteer Programs (EVP)

satisfaction is situational and subjective/personal and its effects on OCB can be mediated or moderated by culture (for instance, organizational culture and societal culture) and people's perceptions and values. For a better explanation of EVP from OCB standpoints, motivations for engaging in EVP represent disparate factors at opposite ends of a continuum rather than a distinct construct (Fig. 1).

On the one side of the continuum are egoistic motivations, and at the other extreme end are altruistic motivations with most people situated in between these two extremes. Based on this model (Fig. 1), what is perceived as volunteering activity may not be entirely voluntary, unpaid, and/or discretionary as there may be nonfinancial rewards or incentives, such as personal fulfilment and satisfaction, for participating in EVP. The main argument is that EVP is not entirely voluntary and non-rewarded, and self-interest contributes to why employees engage in EVP, although the influence of egoism can be subtle.

The nature of EVP including its impacts on the recipients and whether it allows the volunteer to apply their skills and develop new skills should be further examined to establish its true benefits. Also, how it is perceived by others within an organization, especially those who are not participating in EVP but must be responsible for additional tasks that contribute to the effectiveness and productivity of their organization. This chapter is not undermining EVP and argues that EVP can benefit an organization and its employees which on the aggregate may contribute to efficiency and effectiveness of the organization. However, the true costs of EVP on all stakeholders should be further explored and established. Consistent with Williams and Anderson (1991), this chapter

concludes that EVP can be directed toward individuals (OCB-I) and/or organizations (OCB-O). In many organizations, OCB-I and OCB-O are the two broad forms of helping behavior with OCB-I explaining helping behaviors rendered to colleagues and other individuals contrasting helping behavior toward the organization, OCB-O. Using the tenet of SET, OCB-O can be transactional, suggesting that employees might be expecting some form of incentives or rewards from undertaking OCB, for example, EVP, that contributes to the performance of the organization.

There should be more clarity about the constituents of EVP and who benefits from it including how it can be promoted in an organization. The key argument of this chapter is that the construct should be labeled skills-based volunteering program (SBVP), allowing employees to contribute their professional experience and skills to create value for the host organization while acquiring further skills that can enhance their employer/organization's effectiveness. According to Dempsey-Brench and Shantz's (2022) systematic literature review, employee skills-based volunteerism (ESBV) program is strategically driven and aligns with employee's skills, expertise, talents, and education to address the specific needs of host organizations. In other words, the needs of the target organization should be known before identifying and mapping the available relevant skill set, ensuring that employee's skills and expertise are matched with the organizational/strategic fit of the target organization. For any meaningful impacts and benefits, organizations introducing employee volunteer programs should co-create such programs with the target organization.

There could be challenges in designing and implementing employee volunteer programs without engaging with relevant stakeholders. This engagement is required because not all volunteering and discretionary programs would contribute to organizational effectiveness or be performed without any formal recognition of performance evaluation or reward system of an organization. While employees may decide to not/participate in the program, a fundamental question is whether volunteer programs that are underpinned by the organization's policies and/or

institutional requirements should be classified as voluntary/discretionary.

Nevertheless, EVP can be examined from OCB and SET perspectives and analyzed at institutional, organizational, leader, team, and employee levels for a better understanding of how EVP within an organization can be facilitated. Organizations should support their employees' voluntary initiatives and provide a mechanism on how the impacts from such programs could be realized to measure their effectiveness.

Summary

The popularity of EVP is increasing; however, this entry argues that more clarification about the constituents and impacts of EVP to stakeholders involved should be established. These clarifications are necessary considering CIPD's (2015) views that volunteering is traditionally linked to corporate social responsibility (CSR). However, organizations are now sensing the opportunity to introduce community-based volunteering programs to enhance their employees' development and the opportunity to connect with local communities.

On the one hand, it is important for organizations to analyze the effects of their operations on stakeholders and understand the needs of the stakeholders to effectively address the expectations/needs of recipient organizations through EVP. On the other hand, it is important for stakeholders, especially employees, to understand how their actions contribute to the effective functioning and productivity of their organization through voluntary and discretionary actions. While the former construed as CSR emphasizes the roles of organizations in the society beyond profit making (Moodaley & Telukdarie, 2023; Osobajo et al., 2022), the latter can be conceptualized as Organizational Citizenship Behavior (OCB) (Cheema et al., 2020; Organ, 1997), explaining roles of employees within an organization beyond their formal contractual obligations. The effects of EVP on colleagues who have not undertaken volunteering activities during work hours but

must undertake extra tasks should be further explored to establish the real impacts of EVP.

The main argument about EVP should demonstrate that organizational efficiency and performance are most likely due to some employees' actions and behavior, in/directly, that are beyond their formal job descriptions and rewards. Although these actions are supposed to be non-rewarded by the organization's formal reward systems, EVP, such as street cleaning and working in a charity shop, should be assessed based on its impacts on organizational efficiency and contributions in developing employees' skills and expertise. Organizations and employees should focus on skills-based volunteering programs instead of activities that add no value to host organizations and volunteers.

Cross-References

► Volunteering

References

- Appelbaum, S., Bartolomucci, N., Beaumier, E., Boulanger, J., Corrigan, R., Doré, I., et al. (2004). Organizational citizenship behavior: A case study of culture, leadership and trust. *Management Decision*, 42(1), 13–40.
- Chartered Institute of Personnel and Development. (2015). *From big society to the big organisation: The role of organisations in supporting employee volunteering*. https://www.cipd.co.uk/Images/from-big-society-to-the-big-organisation-role-organisations-supporting-employee-volunteering_tcm18-9054.pdf. Accessed 14 Mar 2023.
- Chartered Institute of Personnel and Development. (2022). *Employer-supported volunteering*. <https://www.cipd.co.uk/knowledge/strategy/volunteering/employer-supported-factsheet>. Accessed 14 Mar 2023.
- Cheema, S., Afsar, B., & Javed, F. (2020). Employees' corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of organizational identification and environmental orientation fit. *Corporate Social Responsibility and Environmental Management*, 27(1), 9–21.
- Dempsey-Brench, K., & Shantz, A. (2022). Skills-based volunteering: A systematic literature review of the intersection of skills and employee volunteering. *Human Resource Management Review*, 32(4), 100874.
- Erks, R. L., Allen, J. A., Harland, L. K., & Prange, K. (2021). Do volunteers volunteer to do more at work? The relationship between volunteering, engagement, and OCBs. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 32, 1285–1298.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161–178.
- Howard, M. C., & Serviss, E. (2022). The antecedents and outcomes of corporate volunteering: An employee- and organizational-level meta-analysis. *Journal of Managerial Psychology*, 37(2), 93–110.
- Licandro, O., Yapor, S., & Correa, P. (2022). Analysis of the personal factors of the volunteers as mediators between the satisfaction and the permanence in employee volunteering. *International Review on Public and Nonprofit Marketing*, 19(1), 127–151.
- Moodaley, W., & Telukdarie, A. (2023). Greenwashing, sustainability reporting, and artificial intelligence: A systematic literature review. *Sustainability*, 15(2), 1481.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10(2), 85–97.
- Organ, D. W. (2018). Organizational citizenship behavior: Recent trends and developments. *Annual Review of Organizational Psychology and Organizational Behavior*, 80, 295–306.
- Osobajo, O. A., Oke, A., Lawani, A., Omotayo, T. S., Ndubuka-McCallum, N., & Obi, L. (2022). Providing a roadmap for future research agenda: A bibliometric literature review of sustainability performance reporting (SPR). *Sustainability*, 14(14), 8523.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513–563.
- Tsai, Y., & Wu, S. W. (2010). The relationships between organisational citizenship behaviour, job satisfaction and turnover intention. *Journal of Clinical Nursing*, 19(23–24), 3564–3574.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17(3), 601–617.

Employer Brand Management

► Employer Branding

Employer Branding

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Synonyms

Employer brand management; External branding;
Internal branding; Internal marketing

Definition

Drawing from relationship marketing, Ambler and Barrow (1996) define employer brand as “the package of functional, economic and psychological benefits provided by employment and identified with the employing company” (Ambler and Barrow 1996, p. 187). Employer brand offers a value proposition for employees. It is aimed at differentiating and promoting the employer’s offer to attract new employees and maintain current employees. It may be developed based on different sets of values; however, it is important that the value proposition offered by the employer brand reflects the values embedded in the organizational culture. In turn, Miles and Mangold (2004) define employer branding (EB) as a “process by which employees internalize the desired brand image and are motivated to project the image to customers and other organizational constituents” (Miles and Mangold 2004, p. 67). By influencing individual behavior, employer branding will impact corporate performance and may be important for gaining a competitive advantage. It may be stated that building EB is oriented toward attracting candidates who will identify with the stated values and share them among customers (Foster et al. 2010; Heskett 1987). This assumption is well demonstrated by Ambler and Barrow who cite a leading retailer among their respondents: “if we have the best shops, with the best people, then we have the best word of mouth and

receive the best applications and then we will have the best shops” (Ambler and Barrow 1996, p. 186).

While defining employer branding, Sullivan (2004) states that it is “a targeted, long-term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm.” According to the Chartered Institute of Personnel and Development (CIPD), employer branding is a “set of attributes - often intangible – that makes an organization distinctive, promises a particular kind of employment experience, and appeals to those people who will thrive and perform to their best in its culture” (Walker and Higgins 2007, p. 3). Some researchers maintain that employer branding only refers to activities directed toward the external labor market (job applicants), while relations with employees constitute internal marketing or internal branding (Foster et al., 2010; Wilden et al. 2010).

Introduction

Due to increased competition on the labor market and difficulties in attracting qualified employees, enterprises must undertake activities to build their brand. Millennials particularly, with their sensitivities toward ethical issues, are encouraging firms to present their employer value propositions, including social and environmental responsibility, sustainability, corporate citizenship, etc. An employer brand (the so-called brand of “employer of choice”) is aimed at attracting a new workforce, retaining current employees, and reducing recruitment process costs by consolidating awareness of market participants in that brand.

The concept of employer branding (EB) emerged from research, where marketing tools were adapted to the employment context (Martin et al. 2005). Ambler and Barrow (1996) proposed transferring the traditional notion of marketing, based on the assumption of short-term transactional economics, to a more people-oriented model. They stated that “continuing good

relationships between the company and its customers necessarily involves the employees” (Ambler and Barrow 1996, p. 185). The authors proposed joining the separate disciplines of human resource management (HRM) and brand marketing into a single, conceptual framework. HRM stresses that people are the most important *resources* of the organization; however, in reality, organizational and employee interests might not be aligned. HRM was criticized, therefore, for ignoring the individual’s expectations and attitudes and accused of manipulative and unfair practices (Storey 1995). From the perspective of internal marketing, employees are considered to be *subjects* of company activities. By considering employees as internal clients, employer branding seeks to make an analogy of company-customer relations and link it to HRM. Organizations invest in promoting their products and services to their customers, building a corporate image so customers can identify with it and be loyal. Employer branding proposes to use a similar approach to managing relations with current and prospective employees.

Defining employer branding requires, however, distinguishing it from other familiar concepts linked to the employer’s image, identity, and reputation. In fact, companies have a set of

different images, including, e.g., the market image linked to the perception of the products and services offered by the company, the financial image that reflects the perceptions about financial performance, and the social image that refers to how the company is perceived in terms of its social performance and corporate social responsibility. Employer image is thus part of a broader framework of organizational image and refers to how the company is perceived as a place to work (Highhouse et al. 2009).

The term *employer brand* comes from HR practice and duplicates, to some extent, the concept of employer image. Lievens and Slaughter (2016) ask not to create any new concepts but to link to existing ones. They posit that the external employer brand refers to the organization’s employer image, while the internal employer brand corresponds to the organization’s identity. Respectively, external employer branding is considered a synonym for employer image management, and internal employer branding refers to identity management (Lievens and Slaughter 2016). However, due to the popularity of the term *employer branding* (Fig. 1) in both academia and HR practice, it is worthwhile to provide a systemic overview of its features.



Employer Branding, Fig. 1 The popularity of the terms employer brand, employer image, and employer identity from 2004 to 2018 (This graph was created with Google Trends. According to Google Trends graphical design, the numbers at the vertical axis (0–120) represent individual

interests in the search for the highest point on the graph. A value of 100 indicates the highest popularity of the password. A value of 50 indicates the password was half as popular. A value of 0 indicates that there is not enough data for the given password)

Internal and External Employer Branding

While marketing addresses its activities primarily toward customers, building an employer brand requires distinct activities aimed at two main groups of recipients: internal, current employees of the company and external, potential candidates who might be willing to apply for a job. According to this differentiation, two types of activities can be distinguished: [1] external branding, which is aimed at building the employer brand on the external labor market to increase the possibility of acquiring the best candidates by forming appropriate associations with the employer's brand, and [2] internal branding, which is aimed at shaping the company image among current employees, binding them to a given workplace, and increasing their satisfaction in this particular workplace.

Referring to **external employer branding**, Backhaus and Tikoo (2004) note that – similar to the customer decision-making process, which considers features of products or services – job applicants consider features of the job offer that, in their opinion, are linked to the employment relationship (Backhaus and Tikoo 2004).

According to Lievens and Highhouse (2003), the employer value proposition consists of two features: instrumental and symbolic. Instrumental features are concerned with objective, physical, and tangible attributes, such as working conditions, type of employment contract, work hours, vacations, rewards, and development opportunities. Symbolic features refer to subjective, abstract, and intangible attributes, such as perceived prestige, reputation, feeling of belonging, and appreciation (Lievens and Highhouse 2003). The symbolic characteristics help to create employer identity and differentiate and enhance the company's effectiveness in retaining the current workforce and attracting new employees. Both the subjective and objective aspects may vary according to the expected psychological contract (Backhaus and Tikoo 2004; Miles and Mangold 2004). The external employer brand is communicated through formal sources of communication, such as PR/marketing communication,

communication regarding employment issues and the recruitment process, and informal sources, such as employee recommendations and other applicant opinions on the recruitment process. Finally, the candidate arrives at a personal understanding of the employer brand based on personal experience with the recruitment process, communication processes, and the organizational culture.

Internal branding is often defined as the use of marketing tools to increase employee motivation and satisfaction, which are then expected to lead to increased satisfaction of external customers. The internal employer brand depends on employee experience with the organization's management systems, HR practices, procedures, organizational structure, and culture. The adoption of organizational values is, therefore, associated with increased employee identification with the organization and their involvement in the implementation of the stated organizational goals. Employees are perceived as internal clients, whose engagement and commitment help to spread the positive image of the company and build relations with customers, based on trust (Rafiq and Ahmed 2000). As the relationship between employee and employer is of a contractual nature, it is assumed that, regardless of different types of psychological contracts, the perceived commitment of the employer to fulfill its part of the contract influences employee engagement and satisfaction. With any violation of the psychological contract, the employer loses credibility. Reasons for an employer violating the psychological contract may vary, but the result may be an internal withdrawal, a decrease in engagement, loss of loyalty, or even leaving the job (Morrison and Robinson 1997).

Substantial Theories Behind the Employer Brand

The marketing literature provides two perspectives for understanding how brands work: [1] the brand may be viewed as a plan for decision-making that offers the consumer a choice, or [2] the brand may be viewed as a construct that may include symbolic meanings. Two different types

of associations may thus emerge for the consumer: the product may be seen as having functional-rational benefits, or the benefits may be perceived as symbolic or emotional. When the consumer chooses a product based on an analysis of the product's functional benefits, the decision is a rational one. If the consumer places more value on the attributes attributed to the product, the decision is more likely to be an emotional one. Backhaus and Tikoo (2004) note that, during recruitment, job candidates consider both the functional and symbolic benefits they perceive as related to the job. Functional benefits refer to the aspects related to the type of employment contract, working conditions, wages, working time, or holidays (aspects of an objective nature). Symbolic benefits refer to the perceived image, prestige, or social benefits resulting from working in a particular organization, such as recognition or affiliation.

Marketing literature assumes that the purchase of goods reflects the consumer's world view, identity, and lifestyle. In turn, recruitment literature provides three main theoretical explanations for how the employer brand works. According to the **person-organization fit**, candidates are assumed to make a comparison between their needs, traits, and values and what the employer brand represents. Candidates tend to choose an employer whose values are more in line with the candidate's world view (Cable and Judge 1996). The value fit explains why some applicants are particularly attracted to organizations which build their brand based on values that are important to job seekers. The theory of **social identity** (Ashforth and Mael 1989; Tajfel and Turner 1979) and **organizational identity theory** (Dutton et al. 1994) state that organizations may become an important part of employee self-concept and social identity. Social identity theory explains the relationship among the group's individuality and its self-assessment, e.g., employees from one team perceive themselves as an integrated and effective group versus other teams, which they perceive as less effective. It is assumed here that an individual's choice of a given organization reflects a positive self-view resulting from a sense of community with that organization. A positive

perception of an employer's brand makes a prospective employee more interested in identifying with and becoming a member of this particular organization (Backhaus and Tikoo 2004).

Additionally, the **signaling mechanism** (Rynes 1991) is used to analyze the behavior of job candidates who do not have direct experience with the organization. It is assumed that candidates interpret the results of the organization's activities, as well as information provided in the recruitment process, as signals that the organization possesses certain characteristics (e.g., the company cares for employees, is a leader in the industry, offers development opportunities). Commitment to stakeholders is interpreted as a potential signal that employees in a given organization will be treated well (Rupp and Mallory 2015). Similarly, signals that an organization is committed to environmental protection and conducts anti-discrimination or pro-social policies are associated with the intentions of job candidates who are more likely to work in an engaged organization or who, already as employees, are proud of the fact that the organization's activities correspond with their personal values (Greening and Turban 2000; Gully et al. 2013; Jones et al. 2014).

CSR-Based Employer Branding

Recent studies confirm that millennials are sensitive toward ethical issues (Howe and Strauss 2000). Millennials often indicate that they expect their future employer to demonstrate social responsibility, going beyond the regular economic context and narrow organizational interests.

Corporate social responsibility (CSR) is becoming an important element of employer branding communication. A range of studies point at a positive link between CSR and organizational reputation (Greening and Turban 2000; Backhaus et al. 2002) supporting the idea that job seekers are more likely to accept a job offer from a firm they consider to be socially responsible rather than from one with a poor CSR reputation (Behrend et al. 2009; Alniacik et al. 2011; Tsai et al. 2014). Klimkiewicz and Oltra (2017) propose, however, that it is not the specific content of

CSR communication that attracts job seekers, but rather their individual attitudes toward CSR and need for social recognition and identification. Based on a sample of millennial job seekers highly sensitive toward ethical issues, the authors show that only respondents with positive attitudes toward CSR were attracted to the CSR-based employer image, while respondents who were skeptical about the concept of CSR were less inclined to apply for a job with an employer considered to be socially responsible (Klimkiewicz and Oltra 2017).

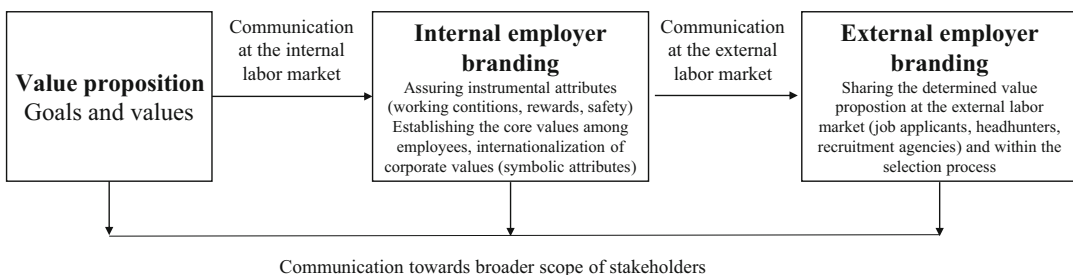
Practical Aspects of Building the Employer Brand

The concept of employer brand refers to the company's pursuit of a balanced strategy on the labor market, recruiting employees, fostering ties between these employees and the company, motivating employees to demonstrate desired behaviors, building an organizational culture, and shaping the image of the employer. The core values of the employer brand are as follows (Fig. 2):

1. Creating an attractive value proposition refers to the set of symbolic attributes that should enhance employer brand awareness and image, work to build the corporate reputation, and be consistent with the organization's identity and culture. The value proposition can be developed based on different sources, such as organizational culture and values, preferred leadership style, insights taken from employee

surveys, critical assessment of the perceptions of the current image, and analysis of labor market expectations.

2. Considering the perspective of current employees requires assuring that the value proposition meets expectations. As employees assess employer attractiveness, their current experience with functional benefits offered in the employment relationship plays an important role. Safe working conditions, supportive environment, fair compensation, and training and development opportunities create the basis for employees determining that the employer meets their expectations and fulfills its part of the contract. Symbolic attributes may be introduced through the organization's culture, declarations, and statements, as well as through internal and external communication. Internal communication should ensure awareness of the brand among employees, as well as give them the possibility of participating in the continuous improvement process of the organization. Firms often encourage employees to tell stories about their experiences with the company. This builds commitment and loyalty among employees and increases trust.
3. Considering the employee perspective refers to building the prestige of the organization and increasing employer attractiveness. The determined value proposition may be marketed toward an external audience, such as prospective employees, headhunters, or recruiting agencies. The organization actively uses various channels to reach candidates and become the "employer of choice," first within the recruitment process via job advertisements,



Employer Branding, Fig. 2 The employer branding process

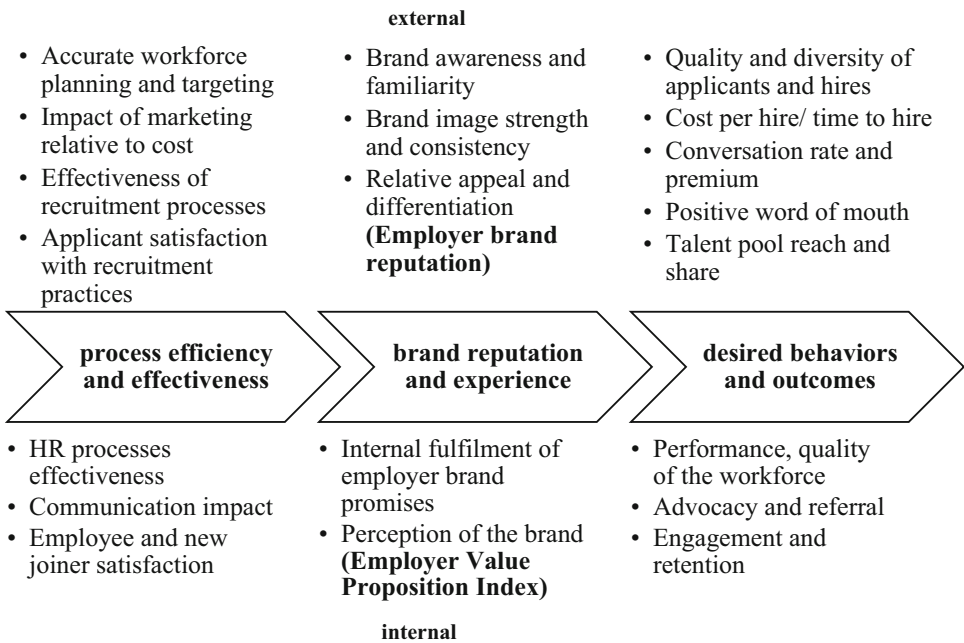
information on the website, recruiting portals, social media, job fairs, and materials for applicants, and second, within the selection process. A well-organized recruitment and selection process, professional staff, the setting where interviews are conducted, constructive feedback, and respect shown to all candidates – these are some examples of activities that impact the employer brand shared from candidate to candidate through word of mouth.

As with every investment, the employer brand requires systemic monitoring and assessment. The most common metrics used to measure the impact of the employer brand are based on employer league table rankings, such as Universum, “Great Place to Work,” employee turnover, and costs per hire. Analyzing the employer brand, however, requires going behind the recruitment metrics to consider measures of internal brand perception and engagement (Mosley 2014).

The literature reveals a range of propositions for constructing a scale for measuring the employer brand. Ambler and Barrow (1996) propose including three dimensions: functional, economic, and psychological. Highhouse, Lievens

and Sinar (2003) suggest measuring organizational attractiveness by assessing company attractiveness, intentions to pursue a job offer, and prestige. More extended scales refer to aspects such as development, application, and economic and social interest (Berthon et al. 2005); carrying, enabling, career growth, credibility and fairness, flexibility and ethical values, image of product and service brand, positive employer image, and global exposure (Srivastava and Bhatnagar 2010); and task, team, internationality, reputation, benefits, development, work-life balance, culture, diversity, and job security (Hillebrandt 2013). This variety of employer brand measurement scales reflects the crucial aspects of building effective employer brands.

A comprehensive framework for understanding employer branding proposed by Mosely (2014) differentiates the key employer brand measurements into three categories: [1] process efficiency and effectiveness, [2] brand reputation and experience, and [3] desired behaviors and outcomes. The author also indicates measures for assessing both internal and external impacts on process effectiveness and performance, communication, and individual satisfaction (Fig. 3).



Employer Branding, Fig. 3 Key employer brand measures (Source: Based on: (Mosley 2014))

Summary

The concept of employer brand responds to the current challenges of communication on the labor market. This approach should be in line with the current CSR approach, as adoption of marketing tools in the HRM field prompts companies to recognize their employees as internal clients, crucial for the company's success. In turn, CSR may be a part of employer branding used as a value proposition to attract employees. Additionally, employer branding encourages firms to take an analytical approach by capturing data to assess the internal and external workforce, as well as the effectiveness of HR processes and communication. Monitoring the employer brand also requires linking the determined EB metrics into desired outcomes and behaviors. This allows for a more comprehensive linkage between the organization's strategic orientation and human capital management.

Cross-References

- Brand Management
- CSR Communication
- CSR Disclosure Quality: Role of NEDs
- Organizational Culture

References

- Alniacik, U., Alniacik, E., & Genc, N. (2011). How corporate social responsibility information influences stakeholders' intentions. *Corporate Social Responsibility and Environmental Management*, 18(4), 234–245. <https://doi.org/10.1002/csr.245>.
- Ambler, T., & Barrow, S. (1996). The employer brand. *Journal of Brand Management*, 4(3), 185–206.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *The Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.2307/258189>.
- Backhaus, K., & Tikoo, S. (2004). Conceptualizing and researching employer branding. *Career Development International*, 9(5), 501–517. <https://doi.org/10.1108/13620430410550754>.
- Backhaus, K. B., Stone, B. A., & Heiner, K. (2002). Exploring the relationship between corporate social performance and employer attractiveness. *Business & Society*, 41(3), 292–318. <https://doi.org/10.1177/0007650302041003003>.
- Behrend, T. S., Baker, B. A., & Thompson, L. F. (2009). Effects of pro-environmental recruiting messages: The role of organizational reputation. *Journal of Business and Psychology*, 24(3), 341–350. <https://doi.org/10.1007/s10869-009-9112-6>.
- Berthon, P., Ewing, M., & Hah, L. L. (2005). Captivating company: Dimensions of attractiveness in employer branding. *International Journal of Advertising*, 24(2), 151–172. <https://doi.org/10.1080/02650487.2005.11072912>.
- Cable, D. M., & Judge, T. A. (1996). Person–organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294–311. <https://doi.org/10.1006/obhd.1996.0081>.
- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, 39(2), 239–263. <https://doi.org/10.2307/2393235>.
- Foster, C., Punjaisri, K., & Cheng, R. (2010). Exploring the relationship between corporate, internal and employer branding. *Journal of Product & Brand Management*, 19(6), 401–409.
- Greening, D. W., & Turban, D. B. (2000). Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & Society*, 39(3), 254–280. <https://doi.org/10.1177/000765030003900302>.
- Gully, S. M., Phillips, J. M., Castellano, W. G., Han, K., & Kim, A. (2013). A mediated moderation model of recruiting socially and environmentally responsible job applicants. *Personnel Psychology*, 66(4), 935–973. <https://doi.org/10.1111/peps.12033>.
- Heskett, J. L. (1987). Lessons in the service sector. *Harvard Business Review*, 65(03), 118–126.
- Highhouse, S., Lievens, F., & Sinar, E. F. (2003). Measuring Attraction to Organizations. *Educational and Psychological Measurement*, 63(6), 986–1001. <https://doi.org/10.1177/0013164403258403>.
- Highhouse, S., Brooks, M. E., & Gregarus, G. (2009). An organizational impression management perspective on the formation of corporate reputations. *Journal of Management*, 35(6), 1481–1493. <https://doi.org/10.1177/0149206309348788>.
- Hillebrandt, I. (2013). *Dimensions of employer brands*. Bamberg: Otto-Friedrich-Universität.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Knopf Doubleday Publishing Group.
- Jones, D. A., Willness, C. R., & Madey, S. (2014). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57(2), 383–404. <https://doi.org/10.5465/amj.2011.0848>.
- Klimkiewicz, K., & Oltra, V. (2017). Does CSR enhance employer attractiveness? The role of millennial job seekers' attitudes. *Corporate Social Responsibility*

- and *Environmental Management*, 24(5), 357–463. <https://doi.org/10.1002/csr.1419>.
- Lievens, F., & Highhouse, S. (2003). The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology*, 56(1), 75–102. <https://doi.org/10.1111/j.1744-6570.2003.tb00144.x>.
- Lievens, F., & Slaughter, J. E. (2016). Employer image and employer branding: What we know and what we need to know. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 407–440. <https://doi.org/10.1146/annurev-orgpsych-041015-062501>.
- Martin, G., Beaumont, P., Doig, R., & Pate, J. (2005). Branding: A new performance discourse for HR? *European Management Journal*, 23(1), 76–88. <https://doi.org/10.1016/j.emj.2004.12.011>.
- Miles, S. J., & Mangold, G. (2004). A conceptualization of the employee branding process. *Journal of Relationship Marketing*, 3(2–3), 2–3.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *The Academy of Management Review*, 22(1), 226–256. <https://doi.org/10.2307/259230>.
- Mosley, R. (2014). *Employer brand management: Practical lessons from the world's leading employers*. London: Wiley.
- Rafiq, M., & Ahmed, P. K. (2000). Advances in the internal marketing concept: Definition, synthesis and extension. *Journal of Services Marketing*, 14(6), 449–462. <https://doi.org/10.1108/08876040010347589>.
- Rupp, D., & Mallory, D. (2015). Corporate social responsibility: Psychological, person-centric, and progressing. *Annual Review of Organizational Psychology and Organizational Behavior*, 2, 211–236. <https://doi.org/10.1146/annurev-orgpsych-032414-111505>.
- Rynes, S. (1991). Recruitment, job choice, and post-hire consequences: A call for new research directions. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 399–444). Palo Alto: Consulting Psychologists Press.
- Srivastava, P., & Bhatnagar, J. (2010). Employer brand for talent acquisition: An exploration towards its measurement. *Vision*, 14(1–2), 25–34. <https://doi.org/10.1177/097226291001400103>.
- Storey, J. (1995). *Human resource management: A critical text*. London and New York: Routledge.
- Sullivan, J. (2004, February 23). The 8 elements of a successful employment brand. Retrieved from <https://www.ere.net/the-8-elements-of-a-successful-employment-brand/>. Accessed 2 June 2019.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In *The social psychology of intergroup relations* (Vol. 74, pp. 33–47). Monterey: Brooks/Cole.
- Tsai, Y.-H., Joe, S.-W., Lin, C.-P., & Wang, R.-T. (2014). Modeling job pursuit intention: Moderating mechanisms of socio-environmental consciousness. *Journal of Business Ethics*, 125(2), 287–298. <https://doi.org/10.1007/s10551-013-1919-4>.
- Walker, P., & Higgins, A. (2007). *Employer branding: a no-nonsense approach. Guide CIPD*. London: Chartered Institute of Personnel and Development.
- Wilden, R., Guderger, S., & Lings, I. (2010). Employer branding: Strategic implications for staff recruitment. *Journal of Marketing Management*, 26(1–2), 56–73. <https://doi.org/10.1080/02672570903577091>.

Employer Supported Volunteering

► Employee Volunteer Programs

Employment Engagement

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Synonyms

Employment involvement

Definition

Employee engagement has been defined in many different ways. Most often it has been defined as emotional and intellectual commitment to the organization (Baumruk 2004; Richman 2006; Shaw 2005) or the amount of discretionary effort exhibited by employees in their jobs (Frank et al. 2004).

In the academic literature, a number of definitions have been provided. Kahn (1990, p. 694) defines personal engagement as “the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances.” Thus, engagement means to be psychologically present when occupying and performing an organizational role.

It has been also defined as psychological presence but he goes further to state that it involves two critical components: attention and absorption.

Schaufeli et al. (2002) define engagement “as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.” They further state that engagement is not a momentary and specific state, but rather it is “a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior.”

Introduction

Employment engagement has become an important topic in recent years even if it has rarely been studied in the academic literature and relatively little is known about its antecedents and consequences.

Most of what has been written about employee engagement can be found in practitioner journals where it has its basis in practice rather than theory and empirical research.

The notion of “employment engagement” is quite similar to other notions in the organizations but with some differences.

Organizational commitment differs from engagement in that it refers to a person’s attitude and attachment toward their organization. Engagement is not an attitude; it is the degree to which an individual is attentive and absorbed in the performance of their roles. The focus of engagement is one’s formal role performance rather than extra-role and voluntary behavior.

Engagement also differs from job involvement. According to May et al. (2004), job involvement is the result of a cognitive judgment about the need-satisfying abilities of the job and is tied to one’s self-image. Engagement has to do with how individuals employ themselves in the performance of their job. Furthermore, engagement involves the active use of emotions and behaviors in addition to cognitions. May et al. (2004, p. 12) also suggest that “engagement may be thought of as an antecedent to job involvement in that individuals who experience deep engagement in their roles should come to identify with their jobs.”

In summary, although the definition and meaning of engagement in the practitioner literature often overlaps with other constructs, in the academic literature, it has been defined as a distinct and unique construct that consists of cognitive, emotional, and behavioral components that are associated with individual role performance. Furthermore, engagement is distinguishable from several related constructs, most notably organizational commitment, organizational citizenship behavior, and job involvement.

In literature, there are two streams of research that provide models of employee engagement. In his qualitative study on the psychological conditions of personal engagement and disengagement at work, Kahn (1990) interviewed summer camp counselors and organizational members of an architecture firm about their moments of engagement and disengagement at work. Kahn (1990) found that there were three psychological conditions associated with engagement or disengagement at work: meaningfulness, safety, and availability. In other words, workers were more engaged at work in situations that offered them more psychological meaningfulness and psychological safety and when they were more psychologically available.

In the study to empirically test Kahn’s (1990) model, May et al. (2004) found that meaningfulness, safety, and availability were significantly related to engagement. They also found that job enrichment and role fit were positive predictors of meaningfulness; rewarding co-worker and supportive supervisor relations were positive predictors of safety while adherence to co-worker norms and self-consciousness were negative predictors; and resources available were a positive predictor of psychological availability while participation in outside activities was a negative predictor. The other model of engagement comes from the burnout literature which describes job engagement as the positive antithesis of burnout noting that burnout involves the erosion of engagement with one’s job (Maslach et al. 2001). According to Maslach et al. (2001), six areas of work-life lead to burnout and engagement: workload, control, rewards and recognition, community and social support, perceived fairness, and values. They argue that job

engagement is associated with a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work. Like burnout, engagement is expected to mediate the link between these six work-life factors and various work outcomes. Although both Kahn's (1990) and Maslach et al.'s (2001) models indicate the psychological conditions or antecedents that are necessary for engagement, they do not fully explain why individuals will respond to these conditions with varying degrees of engagement. A stronger theoretical rationale for explaining employee engagement can be found in social exchange theory (SET). SET argues that obligations are generated through a series of interactions between parties who are in a state of reciprocal interdependence. A basic tenet of SET is that relationships evolve over time into trusting, loyal, and mutual commitments as long as the parties abide by certain "rules" of exchange (Cropanzano and Mitchell 2005).

Rules of exchange usually involve reciprocity or repayment rules such that the actions of one party lead to a response or actions by the other party. For example, when individuals receive economic and socioemotional resources from their organization, they feel obliged to respond in kind and repay the organization (Cropanzano and Mitchell 2005). This is consistent with Robinson et al.'s (2004) description of engagement as a two-way relationship between the employer and employee.

One way for individuals to repay their organization is through their level of engagement. That is, employees will choose to engage themselves to varying degrees and in response to the resources they receive from their organization. Bringing oneself more fully into one's work roles and devoting greater amounts of cognitive, emotional, and physical resources is a very profound way for individuals to respond to an organization's actions. It is more difficult for employees to vary their levels of job performance given that performance is often evaluated and used as the basis for compensation and other administrative decisions. Thus, employees are more likely to exchange their engagement for

resources and benefits provided by their organization.

In summary, SET provides a theoretical foundation to explain why employees choose to become more or less engaged in their work and organization. The conditions of engagement in both Kahn's (1990) and Maslach et al.'s (2001) model can be considered economic and socio-emotional exchange resources within SCT. When employees receive these resources from their organization, they feel obliged to repay the organization with greater levels of engagement. In terms of Kahn's (1990) definition of engagement, employees feel obliged to bring themselves more deeply into their role performances as repayment for the resources they receive from their organization. When the organization fails to provide these resources, individuals are more likely to withdraw and disengage themselves from their roles. Thus, the amount of cognitive, emotional, and physical resources that an individual is prepared to devote in the performance of one's work roles is contingent on the economic and socio-emotional resources received from the organization.

Key Issue

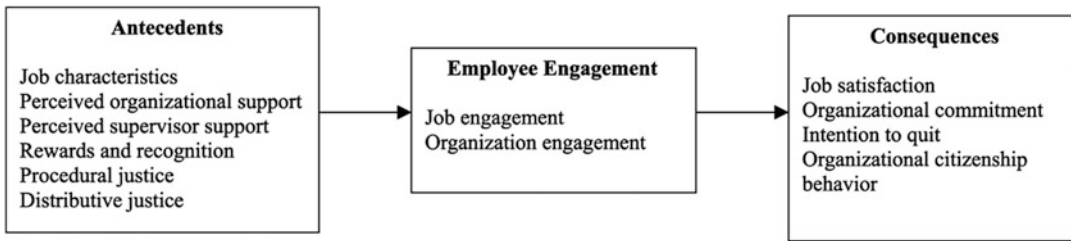
Although there is little empirical research on the factors that predict employee engagement, it is possible to identify a number of potential antecedents from Kahn's (1990) and Maslach et al.'s (2001) model.

The driving force behind the popularity of employee engagement is that it has positive consequences for organizations. There is a general belief that there is a connection between employee engagement and business results (Harter et al. 2002).

The model of antecedents and consequences of employee engagement developed by Sacks (2006) is represented in the following Fig. 1:

He provides one of the first empirical tests of the antecedents and consequences of employee engagement.

Other works found that difference in skills and abilities and disposition variables have impact on



Employment Engagement, Fig. 1 The model of antecedents and consequences (Sacks 2006)

E

the levels of employee engagement. In the same direction, others found that gender difference, personal values, culture, and climate of organizations also influence employee engagement.

Future Directions

Employee engagement is a meaningful construct that is worthy of future research. There are several avenues to consider. One area would be to investigate other potential predictors of job and organization engagement. There are other variables that might also be important for both job and organization engagement. For example, human resource practices such as flexible work arrangements, training programs, and incentive compensation might also be important for engagement. Future research could include a broader range of predictors that are linked to particular types of role engagement. Along these lines, future research should attempt to flesh out the types of factors that are most important for engagement in different roles (e.g., job, organization, and group).

Future research might also consider individual difference variables that might predict employee engagement. Several personality variables including hardiness, self-esteem, and locus of control are related to burnout and might also be important for engagement (Maslach et al. 2001). Self-efficacy has also been recognized as an important factor in burnout and engagement (Maslach et al. 2001). There is also some evidence that individuals with a strong exchange ideology are more likely to feel obliged to reciprocate a benefit (Cropanzano and Mitchell 2005). Thus, the

relationship between various antecedents and engagement might be stronger for individuals with a strong exchange ideology. Future research might test the moderating effects of exchange ideology for the relationship between antecedents and engagement.

A final area for future research is to study the potential effect of experimental interventions on employee engagement. There is some evidence that exchange-inducing interventions can invoke a sense of obligation on the part of individuals who feel obliged to reciprocate (Ganzach et al. 2002). Thus, future research might investigate the extent to which interventions can create a sense of obligation that leads individuals to reciprocate with higher levels of engagement. For example, training managers to be more supportive might be effective for improving perceptions of organizational support and caring. Job design interventions that provide employees with more autonomy and variety in their work as well as career management interventions might also be effective.

This is likely to be a fruitful area for future research given the increasing interest on the part of organizations to improve employee engagement and address the so-called engagement gap.

- There is a meaningful distinction between job engagement and organization engagement.
- A number of antecedent variables predict job and organization engagement.
- Job and organization engagement are related to individual consequences.
- Job and organization engagement mediate the relationship between antecedent variables and consequences.

Cross-References

- [Employee Participation/Ownership](#)
- [Employee Sustainability Behaviors](#)
- [Human Capital Management](#)
- [Occupational Safety and Health Administration](#)
- [Stakeholder Engagement](#)
- [Stakeholder Management](#)

References

- Baumruk, R. (2004). The missing link: The role of employee engagement in business success. *Workspan*, 47, 48–52.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31, 874–900.
- Frank, F. D., Finnegan, R. P., & Taylor, C. R. (2004). The race for talent: Retaining and engaging workers in the 21st century. *Human Resource Planning*, 27(3), 12–25.
- Ganzach, Y., Pazy, A., Ohayon, Y., & Brainin, E. (2002). Social exchange and organizational commitment: Decision-making training for job choice as an alternative to the realistic job preview. *Personnel Psychology*, 55, 613–637.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268–279.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11–37.
- Richman, A. (2006). Everyone wants an engaged workforce how can you create it? *Workspan*, 49, 36–39.
- Robinson, D., Peryman, S., & Hayday, S. (2004). *The drivers of employee engagement*. Brighton: Institute for Employment Studies.
- Sacks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600–619.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92.
- Shaw, K. (2005). An engagement strategy process for communicators. *Strategic Communication Management*, 9(3), 26–29.

Further Reading

- Bates, S. (2004). Getting engaged. *HR Magazine*, 49(2), 44–51.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1983). Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, E. E. Lawler III, P. H. Mirvis, & C. Cammann (Eds.), *Assessing organizational change: A guide to methods, measures, and practices* (pp. 71–138). New York: Wiley.
- Colarelli, S. M. (1984). Methods of communication and mediating processes in realistic job previews. *Journal of Applied Psychology*, 69, 633–642.
- Gonzalez-Roma, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, 68, 165–174.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading: Addison-Wesley.
- Johnson, G. (2004). Otherwise engaged. *Training*, 41(10), 4.
- Kahn, W. A. (1992). To be full there: Psychological presence at work. *Human Relations*, 45, 321–349.
- Kowalski, B. (2003). The engagement gap. *Training*, 40(4), 62.
- Kress, N. (2005). Engaging your employees through the power of communication. *Workspan*, 48(5), 26–36.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87, 698–714.
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology*, 86, 825–836.
- Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46, 655–684.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293–315.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88, 518–528.
- Spector, P. E. (1987). Method variance as an artifact in self-reported affect and perceptions at work: Myth or significant problem? *Journal of Applied Psychology*, 72, 438–443.

Employment Involvement

- [Employment Engagement](#)

Employment or Training

- ▶ [NEET Youngsters Management](#)

Empowering Girls

- ▶ [Hunger and Poverty](#)

Empowerment

- ▶ [Employee Engagement](#)

Emulation

- ▶ [Benchmarking](#)

Emulative Consumption

- ▶ [Emulative Consumption and Bankruptcy](#)

Emulative Consumption and Bankruptcy

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Synonyms

[Consumerism](#); [Emulative consumption](#); [Invidious consumption](#); [Sustainable consumption](#)

Definition

Conspicuous consumption is the notion that the key motivation behind consumer consumption behaviors is to signal wealth and status. It was initially proposed by Veblen in 1899. It theorizes that consumers display their wealth and position in the social hierarchy publicly through lavish expenditure on consumption, leisure activities, and services. Consumers distinguish themselves from those who are in lower social classes through conspicuous consumption. The theory was proposed to explain the evolution of a leisure class in the USA. Veblen argued that as the working class started to generate wealth, members of the leisure class, who do not work but depend on income from the working class, signal their superior position in the social hierarchy through private property, extensive leisure activities, and lavish consumption. The key to emphasizing superiority is to waste more money than is necessary. Over time the focus on leisure activities reduced due to the evolution of effective communication networks within and between the classes and improved mobility. Communities became more dispersed and not as close-knit as they used to be. In this environment signals of wealth and position are displayed more effectively through lavish expenditure on consumption and services, not leisure activities (Trigg 2001). Though conceptualized to explain the behavior of the leisure class in response to the increasing wealth of the working class in the late 1800s in the USA, it is also argued that conspicuous consumption behavior can be observed across all social classes (Veblen 1899), and it has an influence on sustainable development. Indeed, in recent decades policymakers have turned their attention toward promoting sustainable consumption. Sustainable consumption is defined as the consumption of goods and services that are produced in an economic manner using techniques and materials that do minimal damage to the environment, are socially equitable, and meet the basic needs of all humans.

Over the past few decades, policymakers have diverted attention to sustainable consumption, as a

means of achieving national sustainable development (Cohen 2005). The idea is that the promotion of sustainable consumption will address the environment costs and economic inequality associated with modern consumerist lifestyles. It is considered that when dealing with environmental issues, policymakers should not only focus their attention on the production side of industrial corporations but also need to encourage responsible consumption behavior from consumers. Consumption behaviors can have a social, economic, and environmental impact. In order to encourage responsible consumption behaviors, it is important to understand what drives consumption in the first place. Conspicuous consumption is one of the fundamental theories in explaining consumer behaviors. Conspicuous consumption is now examined.

Conspicuous Consumption and Emulative Consumption

Under the sociology of conspicuous consumption, social status can be signalled through luxury consumption. As a result, conspicuous consumption can be applied to explain emulative consumption among consumers. Emulative consumption suggests that most consumers consider their ideal consumption level as being in a level that is slightly higher than their affordability and emulate their consumption in accordance with those who have higher income. "The result is that the members of each (social) stratum accept as their ideal of decency the scheme of life in vogue in the next higher stratum, and bend their energies to live up to that ideal" (Veblen 1899, p. 84). The two concepts, conspicuous consumption and emulative consumption, frame consumer behaviors or consumption preferences as a tool used by individuals to establish or maintain their status in the social hierarchy.

Problems with the Concept of Conspicuous Consumption

From the outset, the concept of conspicuous consumption has received a lot of attention in the

consumer behavior literature. Its assumptions have been called into question. Conspicuous consumption assumes that taste can only "trickle down" from upper class to middle class and working class, and not vice versa (Bertrand and Morse 2016). The "trickle-down" model of tastes of consumption from upper class to middle class and working class is deemed to be too restrictive in modern society, as tastes of consumption can also be "trickle-round" (Trigg 2001). The "trickle-round" model implies that tastes are transmitted around in the social hierarchy, where consumers from the upper class, middle class, and working class influence each other. It has later been argued that there is also a "trickle-up" transmission of taste, from middle class and working class to upper class. Based on the original version of conspicuous consumption, two concepts are proposed in the literature to explain consumption behavior. These are called cultural capital and economic capital (Bourdieu 1984). Cultural capital captures consumption tastes and behavior that has been established over generations. For example, upper class individuals are more likely to have a taste for classical music and modern art. These are two examples of cultural capital that have developed over generations and are indicators of upper class social status. Many middle class individuals have generated "economic capital," a social status symbol that is derived from the accumulation of income. It is argued that the upper class, who have sufficient cultural capital, will strive to emulate middle class consumption in order to outflank them (Trigg 2001). Hence, the transmission of taste is not only "trickle-down" but also "trickle-up" and "trickle-round."

In addition, conspicuous consumption has been criticized as being out of date and limited, since social hierarchies that used to exist when it was first theorized in the late 1890s are less prominent today. In addition, it fails to capture post-modern lifestyles. The changes in consumer behaviors and lifestyles since the twentieth century have made the theory less relevant. As Mason (1998) explains, modern consumers pursue their social classes through adopting certain lifestyles and establishing personal images. The old way of displaying wealth through luxury goods

consumption is abandoned. Therefore, the theory of conspicuous consumption is out of date due to “the new cultural makeup of contemporary consumer society” (Trigg 2001, p. 104).

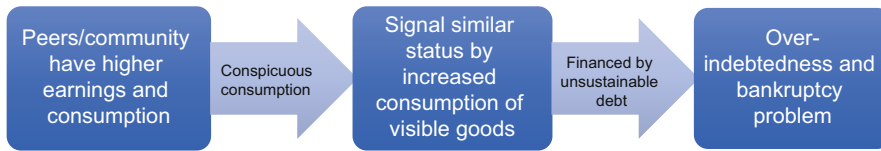
Nonetheless, there is also literature supporting Veblen’s theory. Christen and Morgan (2005) support Veblen’s theory and its application in modern consumers. They illustrate that conspicuous consumption can cause consumers to borrow money for consumption to “keep up with the Joneses.” Jaikumar and Sarin (2015) show that conspicuous consumption also exists in less developed areas due to the lack of attractiveness of alternative mechanisms to signal status as well as the lack of sufficient financial support locally to help prevent this kind of behavior.

Conspicuous Consumption and Bankruptcy

According to Veblen, consumers in each social class emulate the consumption behavior of the social class above them, and this kind of emulative behavior is one of the most important factors in determining consumer behavior. Consumers, through the purchase of goods that are slightly out of their affordability, achieve certain level of satisfaction in the identification of their social status in the society. Dwyer (2009) further develops this view and suggests that this kind of consumption behavior in modern society often evolves into a habit, a behavioral addiction that supports narcissistic behavior. As more people get addicted to purchasing goods for wealth identification, the emulative effect is diminished as the specific “luxury” goods purchased for the purpose of signalling social status become “standard” goods over time. In addition, consumers sometimes unconsciously consume conspicuously to maintain their standards of decency without trying to impress others (Trigg 2001). Consumer overindebtedness, and sometimes bankruptcy, can result from conspicuous and emulative consumption. As indicated by the theory of conspicuous consumption and its tendency to become a habit, consumers sometimes behave irrationally in consumption and can overspend on goods that are

beyond their affordability to display their wealth and for the pursuit of social status satisfaction. This kind of irrational consumption behavior tends to be persistent, and it results in consumers taking on debt than they can afford. Over time, the habit of conspicuous consumption increases the possibility of becoming overindebted or even bankrupt. This has a negative impact on a nation’s sustainable development. Overindebtedness can have negative impact on an individuals’ mental health and social status and also result in reduced income productivity.

Identifying and testing whether conspicuous consumption is associated with consumer overindebtedness is difficult as the main variables, conspicuous consumption and social status emulation, are hard to measure. Some studies on the impact of conspicuous consumption on consumer overindebtedness employ regional income distribution levels as proxies for measuring the potential for emulative behavior due to differences in social status inferred by differences in economic wealth (see, e.g., Christen and Morgan 2005; Zhu 2011; Georgarakos et al. 2014). The results of empirical studies suggest higher consumption by individuals leading to bankruptcy in regions where there is greater regional income variation indicating possible emulative consumption behavior (Adkisson and Saucedo 2012). Studies report that bankrupt individuals tend to spend at the same level as non-bankrupt individuals, and this occurs even when their respective incomes are lower (Zhu 2011). A reason forwarded by Zhu is that these individuals borrow more than they can afford, so they can consume in line with others who have higher income. Similarly, Georgarakos et al. (2014) find that conspicuous consumption has a significant influence on consumers’ debt levels. They report that the income level of a social circle is a significant indicator of the size of an individual’s loan. Specifically, the higher the perceived income of a social circle of individuals, the greater the risk that an individual with lower income levels will have higher debt levels and as a consequence experience financial difficulty. In these circumstances, the lower-earning individuals tend to borrow to emulate spending in line with their peers in the social circle. Consistent



Emulative Consumption and Bankruptcy, Fig. 1 Relationship between conspicuous consumption and bankruptcy

with these studies, Agarwal et al. (2016) illustrate that conspicuous consumption “serves as a mechanism for the relationship between keeping up with the Joneses and financial distress” (Agarwal et al. 2016, p. 3). Agarwal et al. (2016) found that consumers fund their emulative consumption using unaffordable debt when there are neighbors who have large lottery wins. Figure 1 illustrates the relationship between bankruptcy and conspicuous consumption behavior.

The motive of keeping up with those in a higher social hierarchy or displaying wealth within the current social hierarchy causes individuals to consume visible goods that are associated with the higher social status group. When the consumption is financed by unaffordable debt, then over time, an accumulation of debt results in overindebtedness, financial distress, and possibly bankruptcy.

While several studies have reported an association between emulative consumption and income equality, the results are not unanimous. Indeed, using USA state-level panel data from 1986 to 2003, Hwang and Lee (2017) find that there is a negative relationship between income inequality and the average level of conspicuous consumption. The explanation for their result is that the rich regard conspicuous consumption as “a strategic complement” to distinguish them from the poor. If income inequality is low, the rich are motivated to consume conspicuously to emphasize their higher status; however, the poor class is also motivated to consume conspicuously as it is easier for them to match the consumption of the rich who earn slightly more than them. If income inequality is high, the rich are less likely to consume conspicuously as their higher social status is more secure and the poor are less likely to try to emulate the rich as the gap is too great. Hence there is a decreased “marginal utility of conspicuous

consumption” in these circumstances. Hwang and Lee (2017) do not dispute the existence of conspicuous consumption by consumers; however, they argue that the relationship with income inequality is not straightforward.

Summary

In conclusion, conspicuous consumption has been a major theory in explaining consumer behaviors, and it has received both support and criticism from the literature. The fast-changing society as a whole means that people no longer acknowledge the old social hierarchy. Instead, different lifestyles are adopted, which focus more on individual choices and comfort. However, research identifies that emulative behavior still exists. Income inequality can trigger unsustainable consumption resulting in consumer overindebtedness. Studies have reported that some individuals consume more than they can afford to keep up with their peers. This, along with other factors, contributes to the increase in personal overindebtedness, which has a negative impact on a nation’s social and economic well-being. Policymakers are trying to promote sustainable consumption as a “new style” of consumption that they hope will substitute for the overconsumption of expensive luxury status goods. This should not only result in a better environmental footprint but should also reduce conspicuous consumption behavior.

Cross-References

- [Debt Relief Systems: Equitable Allocation](#)
- [Sustainable Development](#)

References

- Adkisson, R. V., & Saucedo, E. (2012). Emulation and state-by-state variations in bankruptcy rates. *The Journal of Socio-Economics*, 41(4), 400–407.
- Agarwal, S., Mikhed, V., & Scholnick, B. (2016). *Does inequality cause financial distress? Evidence from lottery winners and neighboring bankruptcies* (Vol. 16-4). Philadelphia: Federal Reserve Bank of Philadelphia.
- Bertrand, M., & Morse, A. (2016). Trickle-down consumption. *Review of Economics and Statistics*, 98(5), 863–879.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. London: Routledge.
- Christen, M., & Morgan, R. M. (2005). Keeping up with the Joneses: Analyzing the effect of income inequality on consumer borrowing. *Quantitative Marketing and Economics*, 3(2), 145–173.
- Cohen, M. J. (2005). Sustainable consumption in national context: An introduction to the special issue. *Sustainability: Science, Practice and Policy*, 1(1), 22–28.
- Dwyer, R. E. (2009). Making a habit of it: Positional consumption, conventional action and the standard of living. *Journal of Consumer Culture*, 9(3), 328–347.
- Georgarakos, D., Haliassos, M., & Pasini, G. (2014). Household debt and social interactions. *The Review of Financial Studies*, 27(5), 1404–1433.
- Hwang, S., & Lee, J. (2017). Conspicuous consumption and income inequality. *Oxford Economic Papers*, 69(4), 870–896.
- Jaikumar, S., & Sarin, A. (2015). Conspicuous consumption and income inequality in an emerging economy: Evidence from India. *Marketing Letters*, 26, 279–292.
- Mason, R. (1998). *The economics of conspicuous consumption*. Cheltenham: Edward Elgar Publishing.
- Trigg, A. B. (2001). Veblen, Bourdieu, and conspicuous consumption. *Journal of Economic Issues*, 35(1), 99–115.
- Veblen, T. (1899). *The theory of the leisure class: An economic study in the evolution of institutions*. New York: The Macmillan Company.
- Zhu, N. (2011). Household consumption and personal bankruptcy. *The Journal of Legal Studies*, 40(1), 1–37.

Enactment

- [Sense Making, Organizational](#)

Encompassment

- [Inclusion](#)

Endowment

- [Foundations](#)

Endowment Fund

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Synonyms

[Accounting](#); [Citizenship](#); [Fund](#); [Not-for-profit organization](#); [Own capital](#); [Responsibility](#)

Description

In the accounting perspective, an endowment fund is an account on the balance sheet on the moment of its foundation that represents the own capital of the not-for-profit organization. In the finance perspective, an endowment fund is a permanent source of capital dedicated to a specific mission. During its activity, this fund normally provides from a donor, increases, or decreases the value with more donations that could have restrictions (permanent fund must generally be held indefinitely to perpetuity) to be deductible for the donor.

Key Issues

The not-for-profit sector is essential to the society and governments to provide wide range of social and human services that they are unable to offer to specific citizens, such as elderly, babies and young in danger, alcohol, drugs and other chemical dependence, orphans, and special needs citizens. Indeed, the growth of this sector demands private donors and foundations, the media, and the society to financially support these organizations. But

the scrutiny and the accountability by nonprofit organizations (Calabrese 2011) require more public discussion and as Mansfield (1982, p. 61) defines “for what (purposes are the services intended), to whom (are the services delivered), when (are the services delivered), and by what means (are the services delivered).”

Knowing, that “accounting is the language of business” (Davidson et al. 1977, p. 1, Bloomfield 2008, p. 433) and among not-for-profit organizations, the funding accounting is a very important area of concern, the author agrees with Gross et al. (2005, p. 8) that claim, “donors and watchdog groups pay close attention to fundraising expense as a percentage of total expense.” Moreover, Hansmann (1990, p. 38) claims that “maintenance of an endowment is often viewed as an objective in its own right, rather than as simply a means to an end.”

It started, in the 1980s, in the USA, the promotion of the endowment model based on the portfolio managers of Yale University’s endowment fund and follow, in years 1990s, “Europe Countries with deregulation of capital markets” (Koedijk and Slager 2021, p. 19). Several researchers, such as Fabozzi and Koedijk (2021, p. 3) define endowment fund as “is characterized by a low allocation to traditional asset classes (equities, fixed income, and cash) and a high allocation to a large number of alternative investment classes (leveraged buyouts, venture capital, hedged funds, managed futures, private-market real estate, managed futures, natural resources/commodities, and infrastructure.” Also, Jacobs and Kobor (2021, p. 14) characterize as “pool of capital generally funded through donations for specific purposes, designed to support the present and future goals of nonprofit organization.”

Consequently, these organizations receive funds from the governments, public entities, corporations, and the society, because donors or other stakeholders provided financial resources and some of them define with specific elements (Keating and Frumkin 2003). Furthermore, Brown and Moore (2001, p. 570) present a schema of not-for-profit accounting framework based on the rule “to whom, for what.”

Consequently, the growth of the not-for-profit sector demands more accountability, ethics, evaluation, and governance practices that have, also, implications in not-for-profit management education (Bies and Blackwood 2008).

Some critics have been made to the endowment model, for example, Siegel (2008) argues that the organization survival can be threatened, if the endowment fund is also indebted or contains implied debt because of contractual capital calls that have been promised to managers but not yet delivered. Also, Siegel (2021) involves long-run prospects for the endowment model are favorable, because the model relaxes on many constraints that keep other types of investors from achieving maximal risk-adjusted return.

This increases the responsibility with disclosure of the annual report of the not-for-profit organizations that developed at local, regional, national, and international activities, and then they must provide accounting information system, specialized on not-for-profit organization, where donations and endowment funds are reported and explained.

Key Financial Issues

Since the financial vulnerability of the not-for-profit organization demands more needs of knowledge and understanding of other options to reduce these vulnerabilities (Tevel et al. 2015), Dryburg (2017, p. 1) presents definitions of endowment fund related with its role as stakeholder on the not-for-profit organization, such as the following:

To a donor, an endowment is a sum of money given to a charity for charitable purposes, with only the “income” being spent and “principal” being preserved; To an accountant, it is a fund which is “permanently restricted”; To a lawyer, it is an institutional fund not wholly expendable on a current basis under the terms of the gift instrument; To the not-for-profit organization board, the restricted endowment or “quasi-endowment” is created when the donor defines unrestricted funds or imposes a spending restriction; To the

investment management industry, it has a propensity for fund mergers, profit-sharing agreements, and other collaborative arrangements.

The author agrees with Hager (2001) when claims that more managers know about how accounting decisions affect their organization, more they can do to adopt strategic approaches to keep their organizations afloat. So, this raises from the practical contribution of boards that publish accounting standards or rules where this endowment fund is discussed.

Key Accounting Issues

In or after April of 1983, the International Accounting Standards Committee issued the International Accounting Standard (IAS) 20 – *Accounting for Government Grants and Disclosure of Government Assistance*, and, in April 2001, the International Accounting Standards Board (IASB) was issued that specify conditions to receive assistance may not be specifically related to the operating activities of the organizations (IFRS Foundation 2014, p. 1). Also, the disclosure of government grants must follow IAS (20.39) which is the following:

accounting policy adopted for grants, including method of balance sheet presentation nature and extent of grants recognised in the financial statements; the nature and extent of government grants recognised in the financial statements and an indication of other forms of government assistance from which the entity has directly benefited; and unfulfilled conditions and other contingencies attaching to government assistance that has been recognised attaching to recognised grants. (IFRS Foundation 2021, p. 10)

After June of 1999, the Financial Accounting Standards Board (FASB) issued the Financial Accounting Standard (FAS) 136 - *Transfers of Assets to a Not-for-Profit Organization or Charitable Trust that Raises or Holds Contributions for Others* provides guidance for funding accounting where an “, the return on investment of those assets, or both to not-for-profit organization—the beneficiary—that is specified by the donor a transfers assets (FASB 2021, p. 1). It is important

to specify that the FASB Statement no. 116 – *Accounting for Contributions Received and Contributions Made*, in paragraph 4 refers: “does not apply to transfers of assets in which the reporting entity acts as an agent, trustee, or intermediary, rather than as a donor or donee” (FASB 2021, p.1).

The Financial Accounting Foundation (FAF) published, in 2014, the Standard 958-Not-for-Profit Entities (NFP) that report the financial statements of NFP that must fulfill the US Generally Accepted Accounting Principles (US-GAAP). Indeed, this standard, on paragraph 45.14, details “when classifying an endowment fund, each source-original gift, gains and losses, and interest and dividends-must be evaluated separately” (FASB 2014, p.14). In addition, the paragraph 45.15 provides guidance about the net assets of an endowment fund in a statement of financial position, such as the following:

Permanently restricted net assets. For example, the portion of a permanent endowment that must be maintained permanently-not used up, expended, or otherwise exhausted-is classified as permanently restricted net assets; Temporarily restricted net assets. For example, the portion of a term endowment that must be maintained for a specified term is classified as temporarily restricted net assets; Unrestricted net assets. For example, a board-designated endowment, which results from an internal designation on unrestricted net assets, is not donor restricted and is classified as unrestricted net assets. (FASB 2014, p. 4)

Furthermore, Topic 958 clarifying the scope and the accounting guidance for contributions received and contributions made (FASB 2018, p. 8) stipulate restrictions of the donor “(donors include other types of contributors, including makers of certain grants) that specifies a use for a contributed asset that is more specific than broad limits resulting from the following: The nature of the NFP; The environment in which it operates; The purposes specified in its articles of incorporation or bylaws or comparable documents for an unincorporated association.”

A relevant condition is made on the FAS update of the not-for-profit entities (topic 958), where it is defined that “laws may extend those

limits to investment returns from those resources and to other enhancements (diminishments) of those resources. Thus, those laws extend donor-imposed restrictions” (FASB 2018, p. 8).

The Governmental Accounting Standards Board publish the Statement of the Governmental Accounting Standards Series no 54 with title Fund Balance Reporting and Governmental Fund Type Definitions focusing on funding commitments and other commitments; on paragraph 69 – Committed fund balance – Management’s Discussion and Analysis for State and Local Governments, including states, cities, towns, villages, and special-purpose governments (school and public utilities), defines that special revenue funds are “resources that are legally limited to a particular purpose by a government that cannot be used for any other purpose unless the government removes or changes the limitation by taking the same action it employed to impose the limitation or by taking a higher authority action” (GASB 2021, p. 33). And GASB (2021, p. 33) details that it has been eliminating the word “legally because it implies a restriction that is enforceable by law and may overstate the strength of the constraints that can be imposed by a government upon itself.” The Governmental entities should report information about these funds.

The Uniform Prudent Management of Institutional Funds Act (UPMIFA) is a law adopted in the USA that offers guidance to charitable organizations concerning the management of endowment funds held by NFP, and it allows to categorize a part of a donor-restricted endowment fund of perpetual duration as permanently restricted net assets. Also, the UPMIFA (NCCULS 2006, p. 218) defines on paragraph 4702 that endowment fund means an “institutional fund or part thereof that, under the terms of a gift instrument, is not wholly expendable by the institution on a current basis. The term does not include assets that an institution designates as an endowment fund for its own use.”

After January of 2015, in Portugal, the Order n° 262/2015-XIX of the Secretary of State for Tax Matters, of July 16, 2015 (MFSG 2015), approved

Accounting and Financial Reporting Standard for Not-For-Profit Entities (NFPE), approved by the Decree-Law n° 158/2009 (MFAP 2009), changed for Decree-Law n° 98/2015, 2 of June (MF 2015). This standard aims to establish the main aspects of recognition and measurement, with the adaptations inherent to this NFPE. Thus, this standard, on the section 3.5 (MF 2015: 20863), details that:

the endowment fund constitutes the residual interest of NFPE in assets after deducting liabilities. The endowment fund can include certain categories of items whose use may be restricted. At NFPE, the endowment fund comprises funds of those awarded by the founders of the entity or third parties, by the funds accumulated and other surpluses, as well as by subsidies, donations and legacies that the government or other regulation body or the legal norm applicable to each entity establish that they are to be incorporated in it.

Summary

The endowment fund has increased the scrutiny from the society, media, state regulators, and governments due to the public information and because of scandals (Vermeer et al. 2014), and even there are literature that focus in the aggressive accounting behavior in not-for-profit hospitals (Krishman and Yetman 2011).

The endowment fund could be detailed for different types, such as expendable endowment, restricted permanent endowment, and unrestricted permanent endowment, knowing that several authors (Flynn et al. 2000; Granof 2001) argue conflicts of interest, changes in the entity’s strategy (values, mission, vision, values), or restrictions in circumstances of management (Kearns 1994); the reputation of the donor and honor to pay it may restrict the endowment funds (Rossouw 2006).

Cross-References

- [Accountability in Nonprofit Sector](#)
- [Corporate Philanthropy](#)

References

- Bies, A. L., & Blackwood, A. S. (2008). Accountability, ethics, evaluation, and governance in nonprofit management education: Trends and treatment. *Journal of Public Affairs Education*, 13(3/4), 519–547.
- Bloomfield, R. (2008). Accounting as the language of business. *Accounting Horizons*, 22(4), 433–436.
- Brown, L. D., & Moore, M. H. (2001). Accountability, strategy, and international non-governmental organizations. *Nonprofit and Voluntary Sector Quarterly*, 30(3), 569–587.
- Calabrese, T. D. (2011). Do donors penalize nonprofit organizations with accumulated wealth? *Public Administration Review*, 71(6), 859–869.
- Davidson, S., Schindler, J. S., Stickney, C. P., & Weil, R. L. (1977). *Accounting: The language of business*. Glen Ridge: Thomas Horton and Daughters.
- Dryburg, E. (2017). *The law of endowments – The Uniform Prudent Management of Institutional Funds Act (UPMIFA)*. San Francisco: Adler and Corvin.
- Fabozzi, F. J., & Koedijk, K. (2021). Editors' introduction to the special issue on investment models. *The Journal of Portfolio Management, Investment Models*, 47(5), 1–5.
- FASB (Financial Accounting Standards Board). (2014). *Topic 958–205-45- not-for-profit entities. Other presentation matters*. New York: FASB. <https://www.fasb.org/>. Accessed 6 July 2021.
- FASB (Financial Accounting Standards Board). (2018). *Topic 958- not-for-profit entities. Clarifying the scope and the accounting guidance for contributions received and contributions made*. New York: FASB. <https://www.fasb.org/>. Accessed 5 July 2021.
- FASB (Financial Accounting Standards Board). (2021). *Reference library of standards*. New York: FASB. <https://www.fasb.org/>. Accessed 4 July 2021.
- Flynn, S., Leo, K., & Addison, P. (2000). *Financial reporting by not-for-profit entities*. Melbourne: CPA Australia.
- GASB (Governmental Accounting Standards Board). (2021). *Public information system*. Norwalk: GASB. <https://www.gasb.org/>. Accessed 7 July 2021.
- Granof, M. H. (2001). *Government and not-for-profit accounting – Concepts and practices*. New York: Wiley.
- Gross, M. J., McCarthy, J. H., & Shelmon, N. E. (2005). *Financial and accounting guide for not-for-profit organizations*. Hoboken: Wiley.
- Hager, M. (2001). Financial vulnerability, among arts organizations: A test of Tuckman-Cang measures. *Nonprofit and Voluntary Sector Quarterly*, 30(2), 376–392.
- Hansmann, H. (1990). Why do universities have endowments? *The Journal of Legal Studies*, 19(1), 3–42.
- IFRS Foundation (International Financial Reporting Standards Foundation). (2014). *IAS 20 accounting for government Grants and disclosure of government assistance*. New York: IFRS Foundation. <https://www.ifrs.org/>. Accessed 1 July 2021.
- IFRS Foundation (International Financial Reporting Standards Foundation). (2021). *Website of the international accounting standards*. New York: IFRS Foundation. <https://www.ifrs.org/>. Accessed 1 July 2021.
- Jacobs, K. E., & Kobor, A. (2021). Strategic asset allocation for endowment funds. In K. Koedijk (Ed.), *The Journal of Portfolio Management, Investment Models*, 47(5), 114–127.
- Kearns, K. P. (1994). The strategic Management of Accountability in nonprofit organizations: An analytical framework. *Public Administration Review*, 54(2), 185–192.
- Keating, E. K., & Frumkin, P. (2003). Reengineering nonprofit financial accountability: Toward a more reliable foundation for regulation. *Public Administration Review*, 63(1), 3–15.
- Koedijk, K., & Slager, A. (2021). New perspectives on investment models. *The Journal of Portfolio Management, Investment Models*, 47(5), 15–23.
- Krishnan, R., & Yetman, M. (2011). Institutional drivers of reporting decisions in nonprofit hospitals. *Journal of Accounting Research*, 49(4), 1001–1039.
- Mansfield, H. (1982). Accountability and congressional oversight. In L. Bruce, R. Smith, & J. Carroll (Eds.), *Improving the accountability and performance of government* (pp. 61–74). Washington: The Brookings Institution.
- MF (Ministério das Finanças). (2015). Decree-Law n° 98/2015. *Diário da República*, n° 98, 1ª Serie, 2 June.
- MFAP (Ministério das Finanças e da Administração Pública). (2009). Decree-Law n° 158/2009. *Diário da República*, n° 133, 2ª Serie, 7 July.
- MFSG (Ministério das Finanças-Secretaria Geral). (2015). Order n° 262/2015-XIX, of July 16, 2015. *Diário da República*, n° 146, 2ª Serie, 29 July.
- NCCUSL (National Conference of Commissioners of Uniform State Laws). (2006). *Uniform prudent Management of Institutional Funds act (UPMIFA)*. Chicago: NCCUSL. www.nccusl.org. Accessed 5 July 2021.
- Rossouw, J. (2006). Accounting requirements for donor-imposed restrictions and the restricted funds of not-for-profit organisations. *Meditari Accountancy Research*, 14(2), 33–49.
- Siegel, L. B. (2008). Alternatives and liquidity. *The Journal of Portfolio Management*, 35(1), 103–114.
- Siegel, L. B. (2021). Don't give up the ship: The future of endowment model. *The Journal of Portfolio Management, Investment Models*, 47(5), 144–149.
- Tevel, E., Katz, H., & Brock, D. (2015). Nonprofit financial vulnerability: Testing competing models, recommended improvements, and implications. *Voluntas: International Journal of Voluntary and Non-profit Organizations*, 26(6), 2500–2516.
- Vermeer, T. E., Edmond, C. T., & Asthana, S. C. (2014). Organizational form and accounting choice: Are nonprofit or for-profit managers more aggressive? *Accounting Review*, 89(5), 1867–1893.

Further Readings

- Cairns, A. C. (1992). The charter: A political science perspective. *Osgoode Hall Law Journal*, 30(3), 615–625.
- Danyluk, K. (1998). *Not-for-profit financial reporting guide*. Toronto: CICA.
- Engstrom, J. H., & Copley, P. A. (2004). *Essentials of accounting for governmental and not-for-profit organizations*. New York: McGraw-Hill-Irwin.
- Neville, A., Sauerwald, L., & Wright, P. (2001). Not for profit – But not for loss. *Australian CPA*, 71(11), 28.
- Wilson, E. R., & Kattelus, S. C. (2004). *Accounting for governmental and nonprofit entities*. New York: McGraw-Hill -Irwin.

Endurance

- [Sustainability \(World Commission on Environment and Development Definition\)](#)

Enduring Outliving

- [Durable Survival of the Organization](#)

Energy Biofuels

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Synonyms

[Biocombustibles](#); [Bioenergy fuels](#); [Bioenergy sources](#); [Energy bioliquids](#); [Energy biomass fuels](#)

Definition

Energy biofuels refer to fuels obtained indirectly, through physical, biological, and chemical processes, from biomass, which can be used also to supply internal combustion engines. Biomass is considered a renewable resource and therefore

also energy biofuels can be theoretically available without limits.

Traditionally, the use of biofuels was linked to the transport sector, i.e., for the transport activities as substitute of fossil fuels. In addition to this classical use, however, over the last few years there has been a rapid expansion of the biofuel application fields towards electricity and thermal generation and, particularly, towards cogeneration. In the current definition of biofuels, therefore, the link with the transport sector has been overcome and greater emphasis is placed on the heterogeneity of the applications, allowed by the spread of endothermic engines.

State of the Art

Energy biofuel production has increased globally in recent years, thanks to the support and incentives adopted by the various promoter countries. First- and second-generation biofuels are today the possible alternative for reducing the environmental impact and the security of energy supply, as well as an opportunity for job creation and rural development. However, a series of doubts have recently been raised about the alleged negative impacts due to the production of biofuels and to their real sustainability. Global targets on the production of biofuels will have a strong impact on land use and agricultural product prices. Uncertainties were also noted on the performance in terms of reduction of GHG emissions of biofuels compared to fossil fuels, especially when the change in land use is considered (Tyner and Taheripour 2008; Finco and Padella 2012; Khanna and Zilberman 2017).

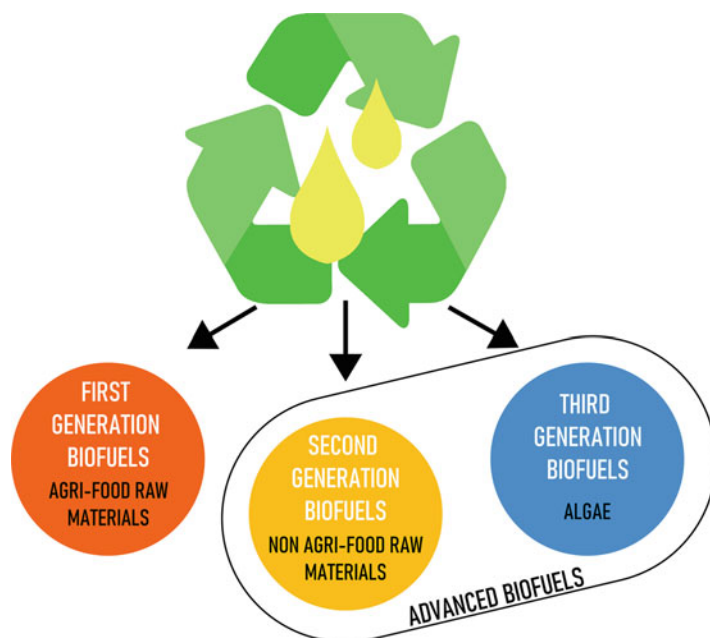
Types of Energy Biofuels

Based on the state of production techniques maturity and use, but above all the origin of the raw material used to produce them, biofuels stand out and are classified into three categories: first, second, and third generation (Fig. 1).

The first-generation biofuel category includes biodiesel, pure vegetable oils, bioethanol

Energy Biofuels,

Fig. 1 Classification of energy biofuels based on the origin of the raw materials used in the production process. (Source: Personal elaboration)



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produced from cereals and sugary raw materials, bio-ETBE (Ethyl Ter Butyl Ether produced from bioethanol), and biogas; their production and applications are already underway, while the main margins for improvement concern the reduction of production costs, the optimization of the energy balance, the increase in the energy yields of the engines, and the increase in the percentages of use in mixture with fossil fuels.

First-generation biofuels are produced, using conventional technologies, from sugars, starches, vegetable oil, or animal fats. Since these raw materials are also food resources, the “food versus fuel” debate is the main problem related to first-generation biofuels (Zhang et al. 2010; Graham-Rowe 2011). The production of first-generation biofuels is limited because it could have a negative effect on food availability and biodiversity (Koh and Ghazoul 2008).

Second-generation biofuels have been developed in order to cope with the growing demand for biofuels (Carriquiry et al. 2011). They are produced from nonedible crops or portions of edible plants that cannot be used as food and are therefore discarded, i.e., stems, shells, wood shavings, and skins.

The second-generation biofuel category includes bioethanol produced from ligno-

cellulosic raw materials, biohydrogen, syngas, bio-oil, biomethanol, biodimethylether, bio-MTBE, biobutanol, and synthetic diesel; their production has started on an industrial scale but it includes still many experimental plants. According to experts, second-generation biofuels make it possible to reduce greenhouse gas emissions more than the first-generation ones. The production of second-generation biofuels, however, is more complex, since it is necessary to extract the useful raw materials from woody or fibrous biomass (Naik et al. 2010; Sims et al. 2010).

Finally, third-generation biofuels are instead produced from algae, especially micro-algae (Shuba and Kifle 2018). The production of “oilgae,” or fuel derived from algae, involves the fermentation of carbohydrates present in algae (Demirbas 2011; Alam et al. 2015).

Second- and third-generation biofuels are also called “advanced biofuels.” An example of advanced biofuel still under development is the renewable diesel derived from hydrogenation (hydrogenation-derived renewable diesel – HDRD). HDRD is produced from animal fats or vegetable oils that are refined in oil refineries. This biofuel can be easily mixed with oil.

Carbon Neutrality and Energy Biofuel Policies

Biofuels have been considered over time good alternatives to fossil fuels because they would allow the achievement of carbon neutrality. In fact, biomass, during the combustion phase, releases carbon dioxide, which is readily reabsorbed by the plants, which are the source of the biomass. Through this closed cycle, the plants remove the carbon from the atmosphere through the chlorophyll photosynthesis, releasing it again when they are burned. In this perspective, biomass would represent theoretically a zero-impact raw material, since the carbon footprint of CO₂ emissions would be zero and would not affect the final carbon concentration in the biosphere (Muench and Guenther 2013).

The decision to carry out a turnover and to introduce advanced biofuels was driven by the increasing over time awareness that using edible raw materials to produce biofuels is not always sustainable. While on the one hand the first-generation biofuels register some environmental benefits in terms of potential net carbon footprint, even if debated (Sedjo 2011; Muench and Guenther 2013), on the other hand they contributed over time to the intensive cultivation of sugar cane, rapeseed oil, or corn, reserved exclusively to the fuel industry, thus removing land from food crops. In fact, apart from food security issues, first-generation biofuels are closely related to landgrabbing, deforestation, and the damaging effects of land change (iLUC - indirect Land Use Change) (Havlik et al. 2011).

The potential advantages of energy biofuels can be their biodegradability, the reduction of greenhouse gas emissions, the reduction of ozone levels in the lower layers of the atmosphere, and the reduction of VOC emissions (volatile organic compounds). But these advantages combined with the environmental disadvantages of deforestation and intensive agriculture, deriving from the use of herbicides, fertilizers, and pesticides, and added to water consumption for crop irrigation and transport (Miglietta et al. 2018), providing a final balance which is not always

convenient in a sustainability perspective. In fact, other factors need to be considered in assessing the environmental impacts, footprints, and sustainability of biofuels, e.g., emissions for the production and transport of biomass, irrigation and use of fertilizers, and emissions for the production and transport of biofuel. Thus, considering the entire life cycle management, from biomass production to distribution, not all biofuels can be considered carbon neutral or overall environmentally sustainable (Johnson 2009; Muench and Guenther 2013).

Summary

Energy biofuels refer to fuels obtained indirectly, through physical, biological, and chemical processes, from biomass, which can be used also to supply internal combustion engines. Biomass is considered a renewable resource and therefore also energy biofuels can be theoretically available without limits. Energy biofuels represent today the possible alternative for reducing the environmental impact and the security of energy supply, as well as an opportunity for job creation and rural development. Based on the state of production techniques maturity and use, but above all the origin of the raw material used to produce them, biofuels stand out and are classified into three categories: first, second, and third generation. First-generation biofuels are produced, using conventional technologies, from raw materials which are also food resources. Second-generation biofuels have been developed in order to cope with the growing demand for biofuels and to avoid the “food versus fuel” competition. They are produced from nonedible crops or portions of edible plants that cannot be used as food and are therefore discarded. Finally, third-generation biofuels are instead produced from algae, especially micro-algae. Considering the entire life cycle management, from biomass production to distribution, not all biofuels can be considered carbon neutral or overall environmentally sustainable.

Cross-References

- [Biodiversity](#)
- [Carbon Footprint](#)
- [Life Cycle Management](#)

References

- Alam, F., Mobin, S., & Chowdhury, H. (2015). Third generation biofuel from algae. *Procedia Engineering*, 105, 763–768.
- Carriquiry, M. A., Du, X., & Timilsina, G. R. (2011). Second generation biofuels: Economics and policies. *Energy Policy*, 39(7), 4222–4234.
- Demirbas, M. F. (2011). Biofuels from algae for sustainable development. *Applied Energy*, 88(10), 3473–3480.
- Finco, A., & Padella, M. (2012). *Biofuels economics and policy. Agricultural and environmental sustainability* (p. 208). Milano: Franco Angeli.
- Graham-Rowe, D. (2011). Beyond food versus fuel. *Nature*, 474(7352), S6.
- Havlík, P., Schneider, U. A., Schmid, E., Böttcher, H., Fritz, S., Skalský, R., et al. (2011). Global land-use implications of first- and second-generation biofuel targets. *Energy Policy*, 39(10), 5690–5702.
- Khanna, M., & Zilberman, D. (2017). *Handbook of bioenergy economics and policy: Volume II*. New York: Springer Science & Business Media.
- Koh, L. P., & Ghazoul, J. (2008). Biofuels, biodiversity, and people: Understanding the conflicts and finding opportunities. *Biological Conservation*, 141(10), 2450–2460.
- Miglietta, P. P., Giove, S., & Toma, P. (2018). An optimization framework for supporting decision making in biodiesel feedstock imports: Water footprint vs. import costs. *Ecological Indicators*, 85, 1231–1238.
- Muench, S., & Guenther, E. (2013). A systematic review of bioenergy life cycle assessments. *Applied Energy*, 112, 257–273.
- Naik, S. N., Goud, V. V., Rout, P. K., & Dalai, A. K. (2010). Production of first- and second-generation biofuels: A comprehensive review. *Renewable and Sustainable Energy Reviews*, 14(2), 578–597.
- Sedjo, R. A. (2011). *Carbon neutrality and bioenergy: A zero-sum game? Discussion paper No. 11–15*. Washington: Resources for the Future.
- Shuba, E. S., & Kifle, D. (2018). Microalgae to biofuels: ‘Promising’ alternative and renewable energy, review. *Renewable and Sustainable Energy Reviews*, 81, 743–755.
- Sims, R. E., Mabee, W., Saddler, J. N., & Taylor, M. (2010). An overview of second-generation biofuel technologies. *Bioresource Technology*, 101(6), 1570–1580.
- Tyner, W. E., & Taheripour, F. (2008). Policy options for integrated energy and agricultural markets. *Review of Agricultural Economics*, 30(3), 387–396.
- Zhang, Z., Lohr, L., Escalante, C., & Wetzstein, M. (2010). Food versus fuel: What do prices tell us? *Energy Policy*, 38(1), 445–451.

Energy Bioliquids

- [Energy Biofuels](#)

Energy Biomass Fuels

- [Energy Biofuels](#)

Energy Conservation: More Efficient Use of Energy

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Synonyms

[Consumption of energy](#); [Energy efficiency](#); [Energy management](#); [Energy saving](#)

Definition

Today, reaching energy is the most natural human requirement. Reliable, cheap, and clean energy supply has become the most important problem of recently for economic, social development, and humane living. It is known that 1.3 billion people in the world do not have the opportunity to benefit from energy. Unfortunately, energy resources are among the most important causes of war in the world.

The concept of energy saving is of vital importance in every daily field. Saving means “doing

the same job using less energy.” Conserving energy does mean not to the use of energy (Banerjee, 2015). It means using energy more efficiently by using known general methods, development procedures, and new technologies, and taking into account the standards of social life. It includes measures precautions to identify unnecessary usage areas of energy and to minimize or eliminate waste. In this way, the manufacturer can increase the competitiveness in the national and international area by producing the same amount of goods or services with less energy (URED, 2013).

There are two main ways of minimizing the carbon emissions caused by the burning of fossil fuels and preventing global warming produced by these emissions and the climate changes that occur accordingly: (1) using renewable and environmentally friendly energy sources instead of fossil fuels and (2) saving energy by using energy more efficiently. As can be appeared, saving in energy plays an important role in reducing carbon emissions.

Energy conservation is not using energy or using it limitedly, and it is using energy efficiently. Energy efficiency is the reduction of energy consumption per unit of service or product quantity without causing a decrease in the standard of living and service quality in buildings and production quality and quantity in industrial enterprises (Levine & Kendall, 2007). It is possible to contribute to the individual budget, the country’s economy, and the protection of the environment, without restricting the needs, by using energy efficiently in every phase of daily life while meeting the heating, lighting, and transportation needs, using electrical household appliances (Sait & Hussain, 2015; Wang & Moriarty, 2017).

Many institutions around the world encourage sustainable growth and private sector initiatives by investing in energy-efficiency projects. Organizations such as the World Bank, European Union, United Nations, International Finance Corporation are leaded. The aforementioned organizations continue their support by pioneering investments in energy efficiency, especially through several economic instruments such as

incentives and grants. However, many institutions at local or national scale continue to work in the field of energy efficiency. Universities, private sector, nongovernmental organizations, foundations, and associations come to the fore in this field. Moreover, governments and public institutions are working overtime to spread national awareness of energy efficiency. The main objectives of all these institutions and organizations in energy can be summarized as reachable of affordable, reliable, sustainable, and modern energy to everyone. Furthermore, efficient use of energy in production and consumption processes is accepted as a common denominator.

Energy Conservation in the World

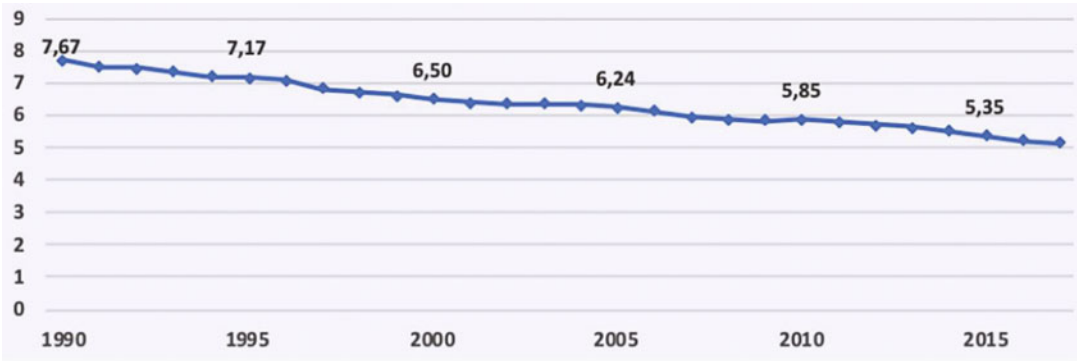
Population growth, globalization, rapid development in technology, a rise in income, and welfare have led to an increase in energy consumption since the mid-1900s in the world, and “fossil fuels” have been seen as the easiest way to meet this increasing demand. However, when the factors (limited resources, the oil crisis, increases in energy prices and its effects on the world economy, environmental pollution, climate change, etc.) are evaluated together, there is no solution other than turning to energy efficiency and renewable resources to get rid of this impasse.

Nowadays, energy efficiency has become a trend as the high amount of energy consumption naturally pushes countries towards efficient use of energy. Therefore, some countries lead in terms of energy saving. Especially, it is remarkable that developed countries are at the top of the list (Table 1).

One of the important indicators in energy efficiency is energy density. Energy density is a globally used indicator representing the amount of primary energy consumed per gross domestic product (GDP), and it gives an idea about the path taken in energy efficiency applications. The ideal condition for a country’s energy development is high per capita energy consumption and low energy intensity. The global energy density is shown in Fig. 1 (EIA, 2018).

Energy Conservation: More Efficient Use of Energy, Table 1 The ranking of leading countries in energy consumption (ACEEE, 2018)

Sort order	Country	Country score	Sort order	Country	Country score
1	Germany	75,5	14	Poland	51
2	Italy	75,5	15	India	50,5
3	France	73,5	16	Turkey	50
4	England	73	17	Indonesian	45
5	Japan	67	18	Australia	40,5
6	Spanish	65,5	19	Ukraine	38
7	Holland	65	20	Brazil	36,5
8	China	59,5	21	Russian	34,5
9	Taiwan	57	22	Thailand	29
10	Canada	55,5	23	South Africa	23,5
11	ABD	55,5	24	BAE	18
12	Mexican	54	25	Saudi Arabia	16,5
13	South Korean	52,5			



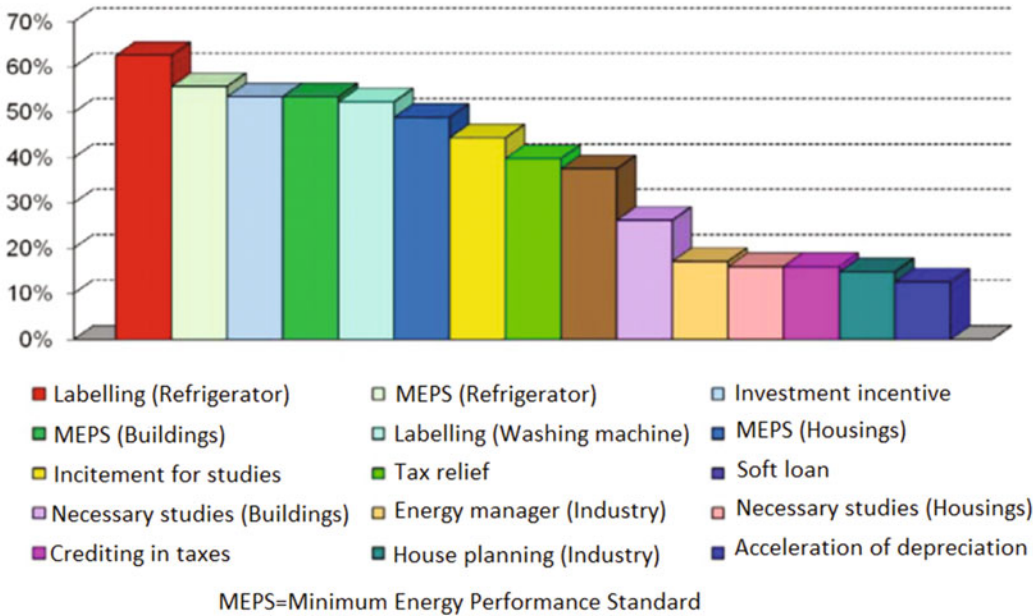
Energy Conservation: More Efficient Use of Energy, Fig. 1 Global energy density (1.000 BTU/\$ 2010 GSYIH*, 1990–2017) *Refers to 1,000 British Thermal

Units (British Thermal Units, BTUs) energy spent to produce 1 unit of GDP. Also, GDP is arranged according to purchasing power parity

However, using the GDP calculated for a country by converting it with a common exchange rate for comparison between countries does not give correct results due to differences in development/price level between countries (WEC, 2010). Therefore, purchasing power parity (PPP) has been developed to eliminate the price differences between countries and to compare real goods and services volumes. It is seen that using PPP instead of exchange rate in the calculation of energy density gives better results in comparison between countries/regions with different economic development levels.

The importance of energy efficiency is perceived differently by countries and different measures/solutions are applied. The precautions taken by countries on energy efficiency are shown in Fig. 2 (WEC, 2010).

However, experiences by this time show that the most important issue is that the state regulates (minimum energy efficiency (performance) standards, labeling, mandatory audits, having an energy manager, reporting consumption) as well as supporting energy efficiency practices in economic and financial matters (with incentives, tax relief, low-interest loans) and it leads (Martinez et al., 2019).



Energy Conservation: More Efficient Use of Energy, Fig. 2 Precautions taken for energy efficiency in the world

Energy Conversation in ABD

The USA was one of the countries that first realized the importance of the energy efficiency issue and has been on this subject with an increasing momentum since the 1970s. While an annual decrease of 0.5% was achieved in energy density from 1949 to 1973, an annual decrease of 2.7% between 1973 and 1980 and an annual decrease of 1.6% in the period 1980–2004 was achieved (U. S. EERE, 2014). As a result of these studies, in 2005, a savings of 70 quadrillion Btu (1.8 billion TEP) was provided, corresponding to \$ 700 billion in energy consumption (Rosenfeld, 2007).

As a result of the energy efficiency studies carried out in the USA, the following gains have been succeeded between 1973 and 2005: (1) Energy efficiency has become the largest and domestic energy source. (2) An equivalent contribution has been made to the removal of 1 billion cars from the roads in environmental protection. (3) With the improvement of the efficiency of the

refrigerators, there was no need to install an additional power plant of 30,000 MW. (4) As a result of the insulation applied in the buildings, 250 billion dollars saving equivalent to 4 billion barrels of oil per year and 1340 million tons less CO₂ emission to the environment has been achieved. (5) Ninety-seven nuclear power plant projects with a capacity of 107,000 MW, which were planned to be built, were canceled for the growing energy needs of the growing economy (No new nuclear power plant has been established since 1978). (6) Energy conservation in federal government buildings increased by 20% over the period 1985–2000 (Çengel, 2013).

The USA did not consider the above success in energy efficiency sufficient and prepared a National Action Plan named “Vision 2025.” The Vision 2025 Plan is organized around the following 10 goals (EPA, 2008):

Considering economic energy efficiency as a priority resource

Taking precautions to encourage energy (production/distribution) companies to invest in energy efficiency instead of new energy investments

Development of economy tests

Development of measurement, evaluation, and verification mechanisms

Improving mechanisms for determining effective (useful) energy efficiency projects

Developing policies for healthy energy efficiency practices

Aligning consumer prices and incentives for energy efficiency investments

Establishing modern/detailed energy billing systems

Establishing modern systems to effectively share and deliver the latest information on energy consumption/efficiency with consumers

Incorporation of the latest technologies in applications (e.g., cogeneration)

Energy Conservation in EU

As in all over the world, EU countries have started to work to reduce oil dependency/increase supply security, reduce energy costs/support competition, reduce unemployment, and protect the environment/reduce greenhouse gases from the beginning of the 1970s, when the oil crisis was experienced, and they planned to reduce energy intensity and has achieved considerable success in this (EC, 2005).

Between 1996 and 2007, a savings of 160 million TEP was achieved in 2007 with a 13% increase in energy efficiency in end users. Fifty-two percentage of these savings come from industry and 32% from transportation (EC, 2009). The change in energy consumption and energy intensity in the EU-25 countries between 1990 and 2020 is observed.

In EU countries, it is aimed to achieve a 20% reduction in greenhouse gases until 2020, to reach 20% of renewable resources in energy consumption, to decrease 20% below 1990 consumption in energy consumption, but it has been determined

that the target will not be achieved in terms of energy consumption (calculated rate 9–10%) (EC, 2011).

To achieve this projected target, a new energy efficiency directive was prepared and introduced in June 2011, considering that more initiatives should be taken as a result of the studies. This directive is planned to be started at the end of 2012 after the necessary procedures have been completed and to be initiated at the end of 2013. The new energy efficiency directives can be listed as follows:

Leading the government sector in energy saving

Receiving energy services suitable for the needs of consumers for maximum benefit and providing information

Improving energy efficiency in energy production and distribution

Raising awareness of the benefits of energy efficiency improvement in the industry

When the energy strategies of the EU countries based on three fundamentals are considered consideration from the new energy efficiency directive, it is thought that the following benefits will be provided:

1. In the field of sustainability: CO₂ emission reduction, limitation of environmental damage
2. In the field of supply security: Decrease of EU's energy dependency, a decrease of energy infrastructure investments, change of trade balance in energy
3. In the field of competitiveness: Decrease of € 200 billion annually in EU's energy bill in 2020, creation of two million new jobs by 2020, acceleration of R&D and markets for the global leadership of the EU (EC, 2011)

Summary

Energy conservation: It can be defined in two different terms as obtaining the same product or service (without compromising quality and

comfort conditions) with less energy and obtaining more products or services with the same unit of energy. In general, energy saving has a wide scope such as environmental protection, world and country economy, unemployment, and individual budget. In other words, energy efficiency is seen in many areas from energy acquisition to transmission and distribution, from production in industry to heating-cooling-lighting in the residential and service sector, from household appliances and office devices to transportation. As a result of the increase in population and the development of technology, the energy need (demand) increases, and when the existing production (supply) is not sufficient to meet this demand, new investments are made to meet this need. However, it is possible to meet the energy deficit with energy efficiency, which can be called as free energy (megawatt, megajoule in terms of negative energy in some sources) with investments to be made primarily in energy efficiency.

It is seen that global developments within the scope of energy conservation are discussed in the context of sustainability. Investments made in this field are in a critical position in building the world of the future. On the other hand, if countries do not continue to focus on energy efficiency and develop new strategies in this regard, the momentum registered in this area in recent years will face the risk of slowing down. Another important issue that should be emphasized here is, there are serious differences between countries in energy efficiency. Therefore, the developments in the aforementioned area should be universalized to the base and spread all over the world. In this direction, it is necessary to focus on the energy issue by setting certain broad cooperation proposals and targets.

Cross-References

- [Energy Demand Management](#)
- [Energy Management](#)

References

- ACEEE (American Council for an Energy-Efficient Economy). (2018). The 2018 International energy efficiency scorecard. Available from: <https://aceee.org/research-report/i1801>
- Banerjee, R. (2015). Importance of energy conservation. *International Journal of Innovative Research in Advanced Engineering (IJIRAE)*, 4(2):186–190. ISSN: 2349-2163.
- Çengel, Y. (2013). Yesterday, today and tomorrow of energy efficiency in the USA, 3rd Energy Efficiency Congress.
- EC (European Commission). (2005). Green paper on energy efficiency or doing more with less. Available from: <https://www.eea.europa.eu/policy-documents/com-2005-265-final-green>
- EC (European Commission). (2009). Energy efficiency trends and policies in the EU. Available from: <https://ec.europa.eu/energy/intelligent/projects/sites/iee-projects/files/projects/documents/overall-indicator-brochure.pdf>
- EC (European Commission). (2011). A new directive on energy efficiency. Available from: https://ec.europa.eu/energy/topics/energy-efficiency/targets-directive-and-rules/energy-efficiency-directive_en.htm
- EIA (Energy Information Administration). (2018). International energy statistics. Available from: <https://www.eia.gov/international/data/world>
- EPA (U. S. Environmental Protection Agency). (2008). National Action Plan for Energy efficiency vision for 2025: A framework for change. Available from: <https://www.epa.gov/sites/production/files/2015-08/documents/vision.pdf>
- Levine, S., & Kendall, K. (2007). Energy efficiency and conservation: opportunities, obstacles, and experiences. *Vermont Journal of Environmental Law*, 8(1). <https://doi.org/10.2307/vermjenvilaw.8.1.101>.
- Martinez, D., Ebenhack, B., & Wagner, T. (2019). *Energy efficiency: concepts and calculations* (1st ed.). Elsevier Publishing. ISBN: 9780128121115.
- Rosenfeld, A. (2007). California's success in energy efficiency and climate change: past and future. Available from: http://www.energy.ca.gov/commissioners/rosenfeld_docs/index.html
- Sait, H. H., & Hussain, A. (2015). Energy conservation strategies and peak loads management in sever climate countries. *Journal of Energy Technologies and Policy*, 5(2), 35–49.
- U. S. EERE (U. S. Energy Efficiency and Renewable Energy), Energy intensity indicators in the U. S. (2014). Available from: https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-22267.pdf
- UREDA (Uttarakhand Renewable Energy Development Agency). (2013). *Energy conservation handbook*. Available from: <https://ureda.uk.gov.in/upload/downloads/Download-7.pdf>

- Wang, S. J., & Moriarty, P. (2017). Strategies for household energy conservation. *Energy Procedia*, 105, 2996–3002.
- WEC (World Energy Council). (2010). Energy efficiency: a recipe for success. Available from: <https://www.worldenergy.org/publications/P81>

Energy Demand Management

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Synonyms

Demand-side management (DSM); Demand-side response; Load management

Definition

Energy can be supplied via many sources, from on-site generators to international interconnected power. However, energy consumption varies throughout days and seasons, and leads to peaks and valleys in the energy demand, when there is a maximum or a minimum demand. Stabilizing the relationship between demand and supply is a complex challenge; while traditional energy management approaches look for ways to match supply with demand, energy demand management, i.e., demand-side management (DSM), approach reverses the problem. It encompasses the management of energy after the meter and includes all the measures that can be taken by the consumer and actions of demand decrease, demand response, and market strategies form the basis of energy demand management. In a broader definition, energy policies for energy security, affordability, and emission (or carbon) management are emphasized. The actors of demand management are consumers, utility companies, network operators, and governing institutions. The consumers are

engaged and encouraged to change their energy use patterns through making conscious choices by knowing about amount and cost of their energy consumption. While governing institutions regulate energy demand management measures, regulations are implemented by the utility companies and network operators. Utility companies offer an increasing number of options for demand management and educate the public about them. Regulatory support, financial incentives, and new technologies are limiting issues for the implementation of energy demand management.

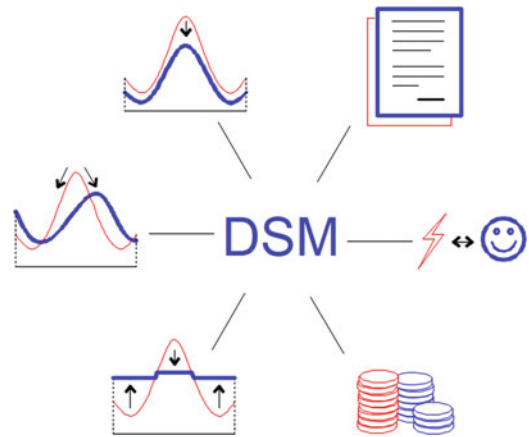
The Role of Energy Demand Management

Most of the consumed energy in the world is powered through the electricity distribution grid. There is a continuing increase in the global demand for energy even though some systems such as transportation and structures under extreme conditions are apart from the grid. The traditional energy management approach is matching increasing energy demand by increasing energy supply, which has been largely successful when the most common energy service was electricity generation from fossil fuel resources. Its success is mainly because generating electricity from fossil fuel resources is a very flexible system. In this context, the way to deal with increasing loads is to increase the capacity of power plants and building reserves for peak loads and losses in the system. The capacity for peak load is rarely used, therefore interconnecting with other countries or power stations and forming a wide network is a possibility, yet when a network becomes big, there is more chance that a glitch in one area will cause instability in other areas. In addition, 10–50% of electricity is lost during transmission and distribution in addition to losses related to conversion inefficiencies during its generation. Moreover, electricity generation has an impact on various environmental systems.

Since energy plays a more dominant role in peoples' lives, many countries are dependent on oil and gas imports from certain regions of the

world for providing energy resources like oil and natural gas, thus energy independence and energy security are important goals in the political agenda of these countries. The energy crises and growing environmental concerns have made it necessary to search for alternative and low carbon energy resources. This is also a reason to invest in and encourage more diverse and decentralized energy resources. Lowering carbon emissions from energy production is a concern in building new capacity. Each energy source has its advantages and disadvantages. Nuclear power is inflexible due to some technical and economic issues (Verbruggen 2008). Wind power is a mature and feasible technology and solar power is becoming more feasible yet their intermittent nature causes problems. Other technologies like hydrogen and wave power are expensive and require more research before implementation. Building new capacity and betterment of the traditional grid are still valid options; however the centralized structure of the traditional grid is not very suitable for integrating new power sources from renewables. The utilization of renewables would lead to decentralization and require new policy and regulatory solutions.

Energy demand management, i.e., DSM looks for ways to match demand to supply by pulling the consumer into the sector as a stakeholder. Evans et al. (2012) report that the term demand-side management (DSM) was first used in 1984 by Clark Gellings as “DSM activities are those of which involve actions on the demand (i.e., consumer) side of the electric meter, either directly or indirectly stimulated by the utility”. A limited definition of DSM only concentrates on electricity load, where the main instruments of DSM are demand decrease, demand response, and market strategies. Gellings (1985) also relates to planning, implementation, and monitoring of utility activities. In addition to activities, DSM establishes a dialogue between the suppliers and consumers for mutual benefits (Babu et al. 2008). Active collaboration becomes possible with the flow of energy and data in two directions (Costanzo et al. 2012). Hence, a broader scope includes nonelectric measures and loads such as thermal and transportation energy requirements. DSM strategies balance demand



Energy Demand Management, Fig. 1 Main strategies of DSM

and supply, in other words the needs of consumers and utilities mainly by educating, influencing, and changing energy use profiles of consumers. Main strategies of DSM are twofold; one side aims to manage the loads and increase management performance by demand decrease, load shift, and load response, while the other side emphasizes demand participation from the consumers and market with energy management, security, and affordability as main issues (Fig. 1).

Demand Decrease Strategies

From the consumer’s point of view, decreasing energy demand starts with “energy efficiency” and “energy conservation.” They can be sometimes used interchangeably; however, energy efficiency deals with decreasing the amount of energy for a service while energy conservation concentrates on decreasing the yearly total amount of energy consumption. In the context of DSM, energy efficiency is used as a permanent reduction in energy consumption. Since efficiency is a relative term, comparing the energy consumption of options requires the use of an index related to the amount of energy, costs, carbon, etc. Consumers and energy managers are the actors that decide, make the necessary investments, and continue to implement energy efficiency and conservation strategies.

From the utilities point of view, DSM is necessary to reach a desired load shape. Even if it is for a short period of time, the maximum demand plus a safety factor and reserve capacity (of around 20%) determines the necessity for the energy production and transmission infrastructure. Therefore, the most problematic area of this shape is caused by the peak demand, and instead of building extra capacity, utilizing strategies for “peak clipping” protects the grid. “Islanding” can also decrease the grid’s complexity, so that a large system can be formed of smaller pieces that can be connected to and easily isolated or detached from the system to shed the peak load. The utilities can make citizens aware of cost-effective ways to reduce energy consumption through education and financial incentives (Energy Research Group 1986).

Demand Response Strategies

Consumers can use non-intrusive elements to monitor, control, communicate, and self-heal. For instance “smart meters” can be connected to all appliances and the consumers can use them to save electricity via monitoring their energy consumption on their tablets, smartphones, etc., while the utilities can turn on devices like washing machines when there is minimum cost according to tariff or maximum production for renewables. The smart meters use machine learning and deep learning methods and can learn from usage data. They can also be programmed according to a variety of criteria including seasonality, usage duration, appliance consumption, consumption price (type of day, daily time bracket, etc.). Thus they can typically decrease energy consumption by 9–20%. The issues of cost, privacy, and accuracy create a resistance to using smart meters (Krishnamurti et al. 2012).

Utilities use the strategies of valley filling, load shifting, strategic conservation, strategic load growth, and flexible load shape to manage the shape of the electricity loads (Malik 2001). “Energy storage” system can be a part of the energy infrastructure in a variety of ways. It can be used to store the produced energy before going

to the system or can be placed between the system and the utilization of energy. It is mostly used for load management by arbitrage, which is storing energy at low demand or low-price times and feeding the system or services at peak times. Distributed electricity energy storage can enhance the efficiency of renewables and the grid, and reduce degradation time of grid elements, which also helps with decreasing upgrade costs of the infrastructure. Since high capacity electricity storage technologies can be expensive and most of the technologies are still at research stage, using distributed small-scale energy storage for demand can usually be more beneficial.

Energy resources and infrastructure can limit or empower the response strategies. Carbon reduction goals put political pressure on building more low carbon resources such as distributed or sustainable sources. Solar and wind power are of special interest since they are feasible and can be applied in nearly any location. Since the amount of energy generated from such resources shows high variance and uncertainty, such systems require increased frequency response and flexibility. Therefore, flexibility that demand management offers is more valuable in such systems. High electricity load on the network also necessitates flexibility by demand response. Good, Ellis, and Mancarella (2017) put increased efficiency in grid and efficiency investment and operation efficiency as the recognized benefits of demand management for applications with high ratios of renewable/decentralized energy. Yet, these systems have higher complexity, which carry more risk for failure.

Uncertainties in the supply of these resources require “dynamic management.” Some smartness in the system can help with integrating the actions of users connected to the grid. Management of some controller parameters is necessary to make the system more stable, however their measurement process and communication causes some delays, which can degrade a system’s performance. The delay times differ in wired or wireless power systems. The total measurement and communication delay can be in the order of 0.5–1 seconds. This time delay can cause instability in variables of voltage, current, angle, and

frequency. Real-time optimization would ensure robust control and help to improve performance and stability. Tariffs can also be generated to respond to high demand amounts or times.

Market Strategies

The energy sector is rapidly changing with new goals every year. Decarbonization goal of Paris agreement is a prequel, and more stringent goals will be set in the future. Such goals can only be reached by engaging both the utilities and consumers, in which DSM concentrates on. Warren (2014) reviews DSM policies under the headings of regulatory, financial, market based, and voluntary. One policy example is the Revised Energy Efficiency Directive of the European Union (2019), which gives responsibility to utilities “to help their consumers use 1.5% less energy each year.” Yet Apajalathi et al. (2015) argue that current European policies place conflicting demands on the utilities and create a complex organizational structure, which make it difficult to both comply with the regulations and make different business units work together efficiently to produce valuable service packages (Apajalahti et al. 2015). They also remark that the consumers can be skeptical about believing the energy company’s motives to save energy for their customers, which would lead to a decrease in revenues. Therefore, the consumers were not willing to invest in deep relations with the utility company, beyond basic energy efficiency advice.

One of the most discussed and implemented DSM market scheme is the utilization of demand response tariffs. The utilities start their analysis with accounting how much energy is consumed in which time periods. Time of use (TOU) tariffs aim to decrease peak load or stabilize the load in a long-time frame. Torriti (2012) investigated TOU tariffs by looking at data from 1446 smart meters. He found that the introduction of this tariff increased the average energy consumption by 13.69% while decreasing electricity bills by 2.21%. This 2-year study showed a marked

difference in load shape and peak hours, even between the 2 years of using the TOU tariff.

New business models can help to implement DSM measures more efficiently. For example, utilities and consumers to coinvest in renewable energy resources. Utility companies can help building new solar systems on roofs by unifying the owners of the houses, providing technical and managerial support, and incentivizing electricity bought from this renewable resource. In return customers will let their roofs to be utilized and buy local and decentralized electricity with a reduced fee. In this business model, consumers also become prosumers and a cooperation between prosumers, producers, and utilities (operators) arise. Public procurement mechanisms can also encourage new business models in some countries.

Energy use patterns mainly depend on socio-demographic variables. Abrahamse and Steg (2009) argue that changing the energy use patterns requires cognitive effort for the users, and psychological factors are the most significant during this process. Therefore changing through gaining environmental or energy consciousness is important, and either the government or the utility companies can educate or run campaigns. Another option is knowing about the amount and cost of their and their neighborhood’s energy consumption to benchmark their energy use against their peers in commercial and residential areas.

Summary

The annual consumption of electrical energy is continuously growing and is expected to increase. In addition to this increase in demand for electrical energy, system operators encounter various problems such as fluctuating consumption, inefficient operated generators for short periods due to peak load. Furthermore, consumption patterns of users change according to time in daily, monthly, and yearly cycles. Due to the aforementioned causes, demand sometimes falls well below the

average and at times it forces the network to perform at peak demand. In this situation, the peak demand occurs for a short time, and the power stations allocated to meet this demand remain idle at other times. Another problem experienced by many countries is mainly due to the sources used in energy production being imported from outside the country. Besides increasing the dependency on foreign countries, this situation causes the costs to be reflected on the user bills. Moreover, since the energy sector is one of the key sectors against climate change; new policies, especially regarding emissions reduction and balancing supply and demand is necessary. Due to the problems of today's network and possible future challenges, the structure and operation of the network need continuous improvement. In this context, DSM can be used to perform a particular job in many different ways that emphasize different requirements such as peak demand reduction, filling low demand times, strategic demand saving, strategic demand growth, load shifting, and flexible load shaping. Advanced intelligent load control within DSM aims to manage the loads and to increase the performance of management. From another point of view, the effectiveness of DSM measures is usually related to the importance given to DSM by policies. Decreasing energy consumption, responding to demand by managing the load and allocating available resources, and encouraging via policies and market tools are the main strategies of DSM. The monetary resources needed to ensure the widespread use of DSM approach can be obtained from the savings related to decreased plant installation and operation expenses, due to the decrease in the peak demand, and the gains from the electricity bills of the consumers. DSM requires both the consumers and utility companies to co-benefit from bettering the energy system and decreasing energy consumption. In addition to regulatory support, many financial incentives are provided; yet, trust between the consumers and the utilities has to be formed to decrease the amount of energy consumption and take mutually beneficial steps to better the network.

New technologies such as smart grid, smart meters, and energy storage systems are researched and implemented to make better use of the opportunities of DSM. In this context, smart cities can make more efficient use of resources. Renewable energy resources like wind, solar energy, and geothermal can be integrated into the energy systems via smart grids, this way sustainable energy resources can be a part of the smart city's automation. The local authorities can control the energy demand for transportation, lighting, and other necessary systems with the smart city concept. Energy policies need to consider the integration of all these systems and the connected smart grid. Spreading the demand in an intelligent way helps DSM. In the near future, DSM will be integrated into the energy sector in the planning phase. However, demand participation needs to be carefully planned for integration into the existing electricity market, because every new structure added to the system would bring new complexity and problems.

Cross-References

- ▶ [Building Energy Management](#)
- ▶ [Carbon Emissions](#)
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- ▶ [Sustainable Development Goals \(UN Global Goals\)](#)
- ▶ [Sustainable Energy](#)
- ▶ [Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators](#)

References

- Abrahamse, W., & Steg, L. (2009). How do socio-demographic and psychological factors relate to households' direct and indirect energy use and savings? *Journal of Economic Psychology*, 30(5), 711–720. <https://doi.org/10.1016/j.joep.2009.05.006>.
- Apajalahti, E. L., Lovio, R., & Heiskanen, E. (2015). From demand side management (DSM) to energy efficiency services: A Finnish case study. *Energy Policy*, 81, 76–85. <https://doi.org/10.1016/j.enpol.2015.02.013>.
- Babu, P. R., Divya, V. S., Venkatesh, K., Kodad, S. F., & Ram, B. S. (2008, July). Application of ANN and DSM techniques for peak load management a case study. In *2008 IEEE region 8 international conference on computational Technologies in Electrical and Electronics Engineering* (pp. 169–174). Danvers: IEEE. <https://doi.org/10.1109/10.1109/SIBIRCON.2008.4602568>.
- Costanzo, G. T., Zhu, G., Anjos, M. F., & Savard, G. (2012). A system architecture for autonomous demand side load management in smart buildings. *IEEE Transactions on Smart Grid*, 3(4), 2157–2165. <https://doi.org/10.1109/TSG.2012.2217358>.
- Energy Research Group. (1986). Energy research: Directions and issues for developing countries. IDRC.
- European Parliament Think Tank. (2019, January 16). *Revised energy efficiency directive*. [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2017\)595923](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2017)595923).
- Evans, A., Strezov, V., & Evans, T. J. (2012). Assessment of utility energy storage options for increased renewable energy penetration. *Renewable and Sustainable Energy Reviews*, 16(6), 4141–4147. <https://doi.org/10.1016/j.rser.2012.03.048>.
- Gellings, C. W. (1985). The concept of demand-side management for electric utilities. *Proceedings of the IEEE*, 73(10), 1468–1470. <https://doi.org/10.1109/PROC.1985.13318>.
- Good, N., Ellis, K. A., & Mancarella, P. (2017). Review and classification of barriers and enablers of demand response in the smart grid. *Renewable and Sustainable Energy Reviews*, 72, 57–72. <https://doi.org/10.1016/j.rser.2017.01.043>.
- Krishnamurti, T., Schwartz, D., Davis, A., Fischhoff, B., de Bruin, W. B., Lave, L., & Wang, J. (2012). Preparing for smart grid technologies: A behavioral decision research approach to understanding consumer expectations about smart meters. *Energy Policy*, 41, 790–797. <https://doi.org/10.1016/j.enpol.2011.11.047>.
- Malik, A. S. (2001). Modelling and economic analysis of DSM programs in generation planning. *International Journal of Electrical Power & Energy Systems*, 23(5), 413–419. [https://doi.org/10.1016/S0142-0615\(00\)00077-6](https://doi.org/10.1016/S0142-0615(00)00077-6).
- Torriti, J. (2012). Price-based demand side management: Assessing the impacts of time-of-use tariffs on residential electricity demand and peak shifting in Northern Italy. *Energy*, 44(1), 576–583. <https://doi.org/10.1016/j.energy.2012.05.043>.
- Verbruggen, A. (2008). Renewable and nuclear power: A common future? *Energy Policy*, 36(11), 4036–4047. <https://doi.org/10.1016/j.enpol.2008.06.024>.
- Warren, P. (2014). A review of demand-side management policy in the UK. *Renewable and Sustainable Energy Reviews*, 29, 941–951. <https://doi.org/10.1016/j.rser.2013.09.009>.

Energy Efficiency

- [Energy Conservation: More Efficient Use of Energy](#)
 - [Sustainable Energy](#)
-

Energy Efficiency in Public Building Procurement

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Synonyms

[Energy-efficient buildings](#); [Life cycle of buildings](#); [Public procurement of buildings](#)

Definition

The built environment plays a very significant role in responding to climate change. Decarbonizing the building sector includes developing the design and procurement processes to improve energy performance and sustainability of buildings. Public procurement process has a key role in this development.

This chapter describes factors that should be taken into account when applying energy efficiency targets to public procurement process of buildings. The procurement process has been extended to also cover the life cycle of the building, to emphasize the connection between the decisions made during the actual procurement process, and the performance values affecting

the building's energy efficiency, indoor air quality, and life cycle economy.

Introduction and Background

The built environment sector has a vital role in responding to the climate change. While buildings are responsible for nearly 40% of global carbon emissions, decarbonizing the sector is among the most cost-effective ways to mitigate the effects of climate breakdown (WGBC, 2019). Energy demand from buildings and buildings construction continues to rise, driven by improved access to energy in developing countries, greater ownership and use of energy-consuming devices, and rapid growth in global buildings floor area (IEA, 2020).

The EU has set new rules for energy efficiency, including target of at least 32.5% by 2030 at Union level, following on from the existing 20% target by 2020. This means that primary energy consumption in the Union should be reduced by 26%, and final energy consumption should be reduced by 20% compared to the 2005 levels. The revised directive will encourage using energy more efficiently and aims at reduced energy consumption for households and businesses, lowering energy bills, and providing incentives for producers/manufacturers to use new technologies and innovate (EC, 2019; EC, 2018).

The EU legislation obligates the public sector of the Member States to procure energy-efficient buildings without compromising the indoor climate quality and to do so with the efficient use of public money. Buildings are a major part of public procurements. The value of public buildings in Finland is about 45 billion euro (ROTI, 2019). With major purchasing power, municipalities have the potential to provide significant leverage when seeking to steer the building market toward energy efficiency improvements (Vinokurov et al., 2019).

However, municipalities struggle with financing their investments, and the maintenance and renovation backlog of buildings is rising (ROTI, 2019). Furthermore, the evolution of municipalities as public utility is changing (Weidner et al.,

2011), and thus the purpose of the municipality-owned buildings is changing. By selling and leasing back a property to a private partner (Public-Private Partnership PPP), the public sector could at the same time outsource the needed financing, speed up the process of energy efficiency investments in their buildings, and release capital for other public investments. The private party profits from the lease-back fees through the contract phase.

In a municipal building procurement process, the municipal building department applies local, national, and international energy efficiency strategies and targets, combined with project-specific targets. The minimum energy performance requirements for building procurement projects are given in each EU member state's buildings code. In addition to these, also other aspects need to be taken into consideration, for example, the requirements concerning building's functionality, safety, economy, and cultural and ecological aspects. The building systems should be safe to use and have high energy efficiency with low life cycle costs (Vinokurov et al., 2019). The biggest barriers in the implementation of energy efficiency measures in buildings include resistance for new technologies, lack of knowledge, and high investment cost of the new technology (Darko et al., 2017). In this chapter, two latter are assessed.

Energy Efficiency in Municipal Building Procurement Process

Insufficient understanding of how to integrate energy efficiency into building procurement process remains to be one of the barriers hindering the development toward sustainable construction. Municipal building department officers need more skills and knowledge to appropriately define the requirements, qualify suppliers, and identify energy-efficient design options. Also, unclear responsibilities and inefficient communication between the municipal building department and the project partners can jeopardize successful implementation of a building procurement project (Vinokurov et al.).

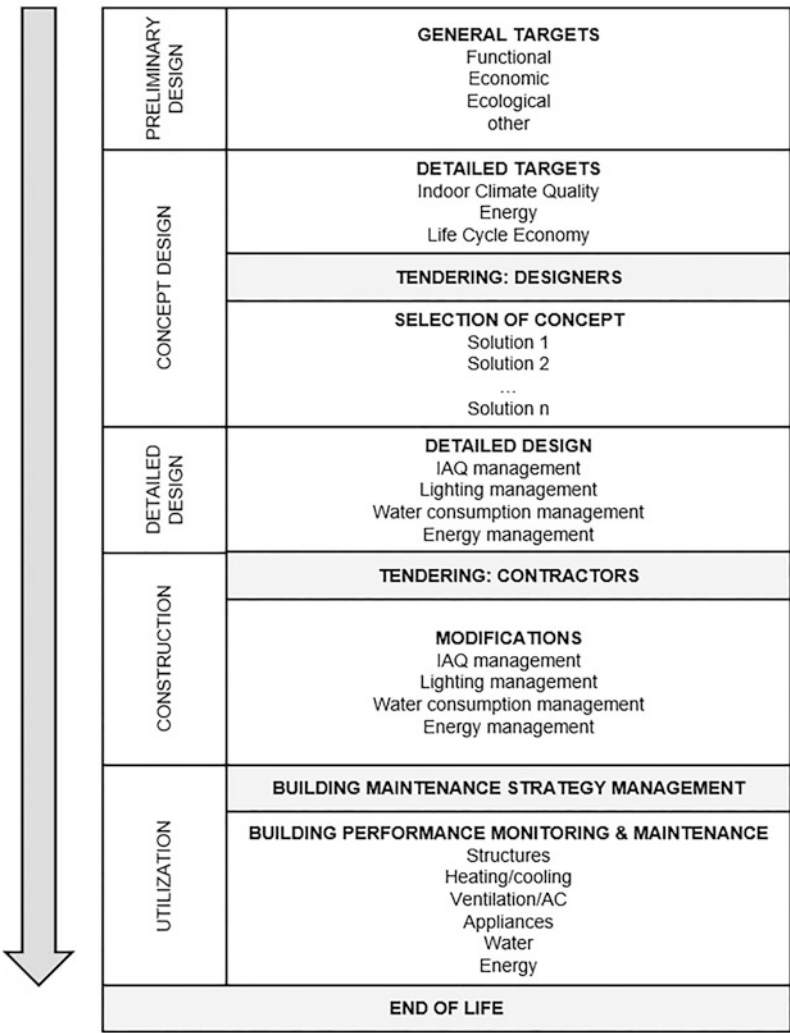
In the following, an example of municipal building procurement process is introduced. This example is from a Finnish middle-sized city (approx. 75,000 inhabitants), there are variations in the process between other Finnish municipalities, towns, and cities. In general, the procurement process described here follows the common framework by the EU and the Finnish national procurement legislation.

The Municipal Building Procurement Process
The municipal building procurement process includes several stages (Fig. 1). Initially, proper targets have to be set for the project and the

building, in order to ensure that the building will serve its purpose efficiently and economically throughout its lifetime. In Fig. 1, the procurement process has been extended from the more traditional span of “from preliminary design to the end of construction” to consider also the utilization period and end of life of the building. This has been done to point out, that the decisions made even in the preliminary stages of the design process, have high impact on the building’s performance throughout its lifetime.

In the **preliminary design phase**, the general targets are described. Such targets are:

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Fig. 1 An example of municipal building procurement process.
(Adapted from: Vinokurov et al., 2019)



- What kind of activities and functions should the building support (e.g., primary school, office, domestic).
- What kind of economical restraints are there (e.g., €/m², € in total).
- What are the ecological requirements (e.g., carbon footprint, share of recoverable building materials, use of recycled materials).

The preliminary targets should also confirm that the proposed building project is necessary to meet the demand in its field of operation. If a school is planned to be built, it must happen only if there is a demand for that. For example, a new school can replace an old one that has been banned for use due to severe indoor air quality problems, or it can meet the demand set by increasing number of children needing education.

In the **concept design phase**, more technical requirements are set for the project, for example:

- Energy class for the building (e.g., A, A+, A++, nearly zero energy building, plus energy building).
- Indoor air quality (e.g., in Finland: Indoor Air Class S2/S1).
- Greenhouse gas emission requirements for the building (e.g., kgCO₂-eqv./(m² a)).
- Life cycle economy requirements (e.g., €/m², €/student, €/patient).

After setting the above mentioned, still somewhat higher level technical requirements, the selection of the concept for the building is carried out. The main designer should be selected at this point, and the targets already set should be at the core of the designer tendering process. This way the main designer has good directions during the whole design process.

At the end of the design process a winner concept should have been chosen, to be forwarded to a more detailed design. This selection process involves several concept proposals, from which the concept that meets, or even exceeds, the requirements is selected. The selection should be made as transparent as possible. This can be done simply by giving weights for different requirements (e.g., energy performance, life cycle

costs), and then calculating weighted points for all concept alternatives. The alternative that gets the highest weighted score is the winner.

After the concept has been selected, a **detailed design process** is carried out. At this stage the detailed building systems design is carried out, including heat distribution, cooling systems, ventilation systems, pumps, fans, heat exchangers, electrical systems, water systems, sewage systems, etc.

In the design process, an architect is usually the main designer. In addition to this, several other designers are needed in the design of building systems, from the fields of:

- Electrical uses.
- Ventilation and air conditioning.
- Heating/cooling systems.
- Lighting systems.
- Building automation systems.
- Domestic water systems.
- Sewage systems.
- Communication systems.
- Alarm systems.
- Access control systems, etc.

In order to make sure that the coordination between all involved design parties is effective, it is natural that the responsibility for all design work is given to the main designer. The main designer then organizes adequate communication between the parties so that the requirements for the design can be met during the process. The final design is then approved by the client, in many cases the municipal building department.

After the detailed design, the **construction phase** can begin. The subcontractors are tendered, and the selected subcontractors will carry out the plan. It is likely that during the construction phase the subcontractors suggest changes to the plan. These changes may be, for example, material changes or device changes. These suggestions have to be approved by the designer, and the impacts on the building performance and costs have to be acknowledged at this point.

At the end of the construction phase the building is approved by the customer, and the **utilization phase** starts. At the beginning, there is a

warranty period, usually 2 years for the building project as a whole. During this time, the customer can claim improvements. Furthermore, there usually are longer warranty periods for different building systems and devices.

The utilization phase of buildings is typically several decades, for example, 50 years. Hence, the performance values of the building determine a significant part of the overall impacts of the building. The following questions follow the procured building through its lifetime:

- Does it serve its purposes, does it have high utilization rate?
- Is it energy efficient in its operation, does it utilize renewable energy?
- Is it a healthy and safe working/living environment for the occupants?
- Does it support the environmental targets set for the region?
- Is it economically feasible?

During its lifetime, a building can be “updated/ upgraded” by renovating it, or parts of it. Many technical systems and devices have much shorter technical lifetimes compared to the building frame and structures, hence they have to be replaced earlier. At these renovation points, also building performance can be upgraded to a better level, e.g., by replacing older technologies with novel and more efficient technologies.

At some point, the building reaches its “**end of life**” status. At this stage, rather some years before, the process starts from the beginning. First, there is a consideration of whether there is still a need for the services the building has offered. If the answer is yes, then it should be considered whether a renovation or demolition and new building construction project should be started.

The Factors Affecting Energy Use and the Environmental Impact

Climate change is the main driver behind the development of most technologies currently. The targets and requirements of carbon neutrality shape also buildings and building systems. Since buildings have long technical lifetimes, it is

important to be able to “predict” the future as much as possible already in the preliminary stages of the procurement process. In Fig. 2, the main factors of energy efficiency, energy economy, and environmental performance are presented in a building’s context.

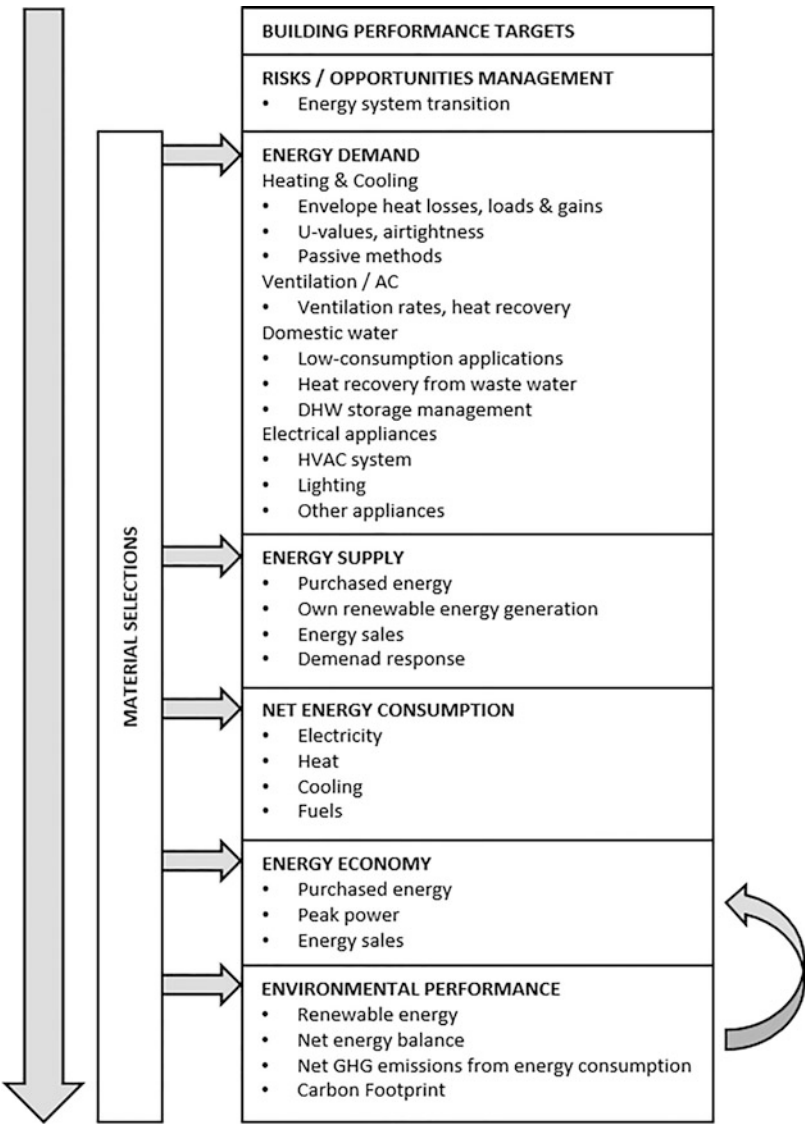
Already in the concept design phase, it should be noted that there may be some risks in the future, concerning what kind of selections are made. In order to avoid these risks, which will likely increase utilization costs, if realized, they should be included in the design process. For example, demand response options should be carefully considered when heating system is being selected. It is likely that there will be incentives for reducing peak loads in heating and electricity use, preparing for this will likely save costs during the long utilization period. Furthermore, the origin of consumed energy (heat/electricity) is significant: carbon neutrality means in practice using only renewable energy sources. Low energy consumption on all building systems is desirable, but not at the cost of decreasing the indoor air quality. On the contrary, increasing indoor climate quality, by for example increasing the ventilation rate, generally improves the comfort and productivity of occupants. In this context, increased energy consumption (higher ventilation rate results in more electricity consumption in the fans, more heating/ cooling demand, and also larger duct diameters may be needed to avoid noise from the system) should be compared against the upgrade effect of the service, i.e., indoor climate.

The Role of Indoor Climate Quality in Procurement

The indoor air quality (IAQ) has a significant impact on the comfort of the occupants. It has been shown (Allen et al., 2016; CABA, 2017) that there is a correlation between IAQ and productivity in office buildings: the more satisfactory the occupant feels the indoor environment is, the more he/she can concentrate on working. Also, there is a correlation between the decrease of IAQ and the increase of sick days in working environments (Milton et al., 2000). This translates more or less directly into extra costs. Hence, ensuring high standard IAQ leads likely to lower life cycle

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Fig. 2 The main factors of energy efficiency and environmental performance of a building. (Adapted from: Vinokurov et al., 2019)

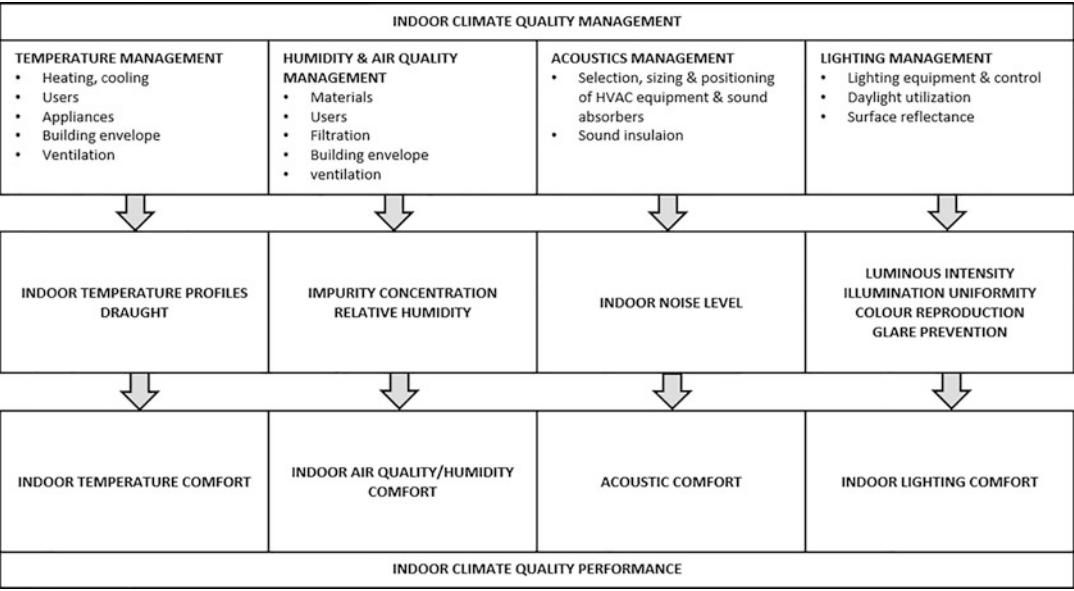


costs, when the building is considered including also the service it provides, i.e., productive process.

Ensuring high-level indoor air climate also minimizes the risks of health hazards during the utilization phase. For example, maintaining a low underpressure inside (compared to the outside) prevents excess moisture to concentrate inside the wall structures. It also means that in cooler climates there should not be any air leaks from inside to outside, since as the warm indoor cools down, at some point the water vapor starts to condensate. This may happen inside the building

structures and cause moisture problems. This problem does not occur, when an air leak is from outside to inside, since warmer air can hold more water vapor than cold air. However, the pressure difference should be kept as neutral as possible, to avoid any high air leakages through the building envelope.

In Fig. 3, the main factors of IAQ management are shown. Most of the building systems have some kind of impact on the IAQ, therefore proper IAQ management requires smart automation systems with communication between technical systems via applicable interfaces. In public buildings,



Energy Efficiency in Public Building Procurement, Fig. 3 The main factors of Indoor Air Quality management. (Adapted from: Vinokurov et al., 2019)

the occupancy rates may vary greatly during a day, a week, or seasonally. The system has to be able to adapt to the changes so that energy efficiency and high-quality standard indoor climate are maintained all the time.

Life Cycle Economy of a Building

The most important decisions affecting the life cycle economy of a building are made during the design phases. Furthermore, the major part of the life cycle costs will be realized during the long utilization period. For these reasons, the design process should be thorough and carefully executed, considering all necessary aspects. Special emphasis should be put on energy issues as energy generation plays a major role in climate change. Also, energy costs cause generally a major part of a building’s life cycle costs.

The energy sector is transforming from fossil to renewable, this causes significant changes in the energy system infrastructure. The main trend is electrification, which means that also in buildings heating of spaces will increasingly happen utilizing electricity. In practice this means utilizing different heat pump solutions in heating.

In Nordic countries, district heating (DH) has been an efficient way to generate and distribute heat energy locally. The district heating systems typically involve one or several large base load combustion plants, and they can be heat-only generation plants or combined heat and power (CHP) plants. Both processes have high system efficiency and can be operated using renewable energy sources, i.e., biomass or biogas. In addition to the base load plants, there can be smaller middle load and/or peak/reserve load units to be used during the colder periods, when more heating energy is needed. The structure of the regional heating system is built so that energy and cost efficiency can be maintained at high level in the whole system. Typically, the peak load units use fossil fuels to generate heat. However, their annual operation period is short, typically hours or days annually.

The combustion of fuels always produces CO₂ emissions to the atmosphere. For biofuels, energy generation is usually considered carbon neutral. Currently it is seen that in order to reach the overall carbon neutrality, CO₂ should not be released from the combustion plants in the future.

Possible requirements for CO₂ capture from the flue gases may increase heating costs in buildings connected to such DH grids. However, also the DH grids are under transformation and will likely shift slowly from centralized combustion plants toward utilizing more heat pumps and heat storages, resulting in lower CO₂ emissions.

Renewable energy can be generated on site, usually this means at least utilizing local photovoltaic (solar) power plant or heat generation by solar collector. Depending on the utilizable area for solar power production and consumption patterns of the building, at least some share of the electricity (and heating/cooling, via heat pumps) can be produced to compensate the energy demand of the building. During high solar intensity periods, even more energy than building's demand can be produced on site. This excess energy can be sold to the local grid, if it is allowed by the local electricity company. This requires a two-way electrical connection to the grid. Excess electricity can also be stored locally in batteries, such as building battery storages or even in electric vehicle batteries. Building dedicated battery storages are available, but still expensive currently. The market for electric vehicles is developing, the major car manufacturers have started to offer also full electric car models, in addition to plug-in models and hybrids. Integrating energy generation, storage, and demand response functionalities into building automation system enables building to be operated as a virtual power plant (VPP) in energy markets. As a practical example, see for instance Siemens (2020). Such operation will provide additional incomes for building manager/owner, while contributing positively to energy system flexibility needs.

The more a building has the ability of shaping its electricity (and heat) consumption during peak demand periods, the more cost efficient it will likely be. The costs caused by having the capability to adjust the consumption (smart monitoring and automation systems, two-way connections, batteries, EV charging poles, etc.) have to be compared with the savings they can bring throughout the life cycle.

Financing the Procurement by PPP Process

One of the biggest barriers in procurement of energy-efficient buildings is the high investment costs of new technology (Darko et al., 2017). Municipalities have a lot of investment needs in a variety of sectors, building sector being only one of them. Public-Private Partnership could be adopted as a financing method for public procurement for instance in the construction phase of a new building. Furthermore, the major renovation process of an old building is often postponed because of lack of finance and could be sped up with Public-Private Partnership.

There are different ways to execute PPP process and to share the responsibilities among parties. Usually the private partner is responsible at least for designing, building, and operating the building. The responsibilities are all specified in the contract (Tieva & Junnonen, 2009). Hereby Public-Private Partnership can be viewed not only as a financing method but also as a way of risk management: the public community hands the responsibility of the building to the private party (Weidner et al., 2011). In addition to the responsibility hand off, there is a smaller risk for the public sector about the building management, because the service fee is only paid in the case the service private party offers corresponds to what is agreed (Junnonen & Tieva, 2009). Also, if the building and its services are no longer needed after agreed lease-back time, the private partner will deal with the risk, if there is no other statement in the contract. The other benefit of PPP process to the public sector is usually fast building time, because the private sector wants to get the building up and running as soon as possible to get its profits (Tieva & Junnonen, 2009).

PPP contracts are complex and they require careful planning and negotiation. Along with good planning and finding a suitable private partner for the process, the contract negotiation phase is extremely important since the identification of risks is essential for successful procurement. (Tieva & Junnonen, 2009). Li et al. (2005) suggest ways to share the risks by their type to either the private or public partner. They also state that public sector should be better able to create strategies for risk allocation.

When talking about the building life cycle, also the user of the building should be addressed. The Public-Private-People Partnership (4P) aims to do just that, to have the user in the procurement process as a third party, emphasizing the user's actual needs (Kuronen et al., 2010).

Responsibilities of the Public Procurement Process

Including energy efficiency in the procurement process means in practice increased level of energy, environmental, and responsibility issues be introduced and added to the more traditional procurement system. It is the customer's benefit, if the responsibilities in the public procurement process are clear and transparent. Vinokurov et al. (2019) have suggested the following clarifications to be included in the procurement process for ensuring a good energy efficiency, indoor climate, and life cycle economy:

- *The building department steers the project, sets the energy efficiency targets for the project, and ensures that all project partners have sufficient and timely information, and resources to carry out the project successfully. Among the building department's responsibilities are:*
 - *Selection of the optimal concept design from the proposals of designers.*
 - *Approval of detailed designs.*
 - *Use of a professional consultant in those tasks that the building department lacks expertise. Outsourcing does not reduce the building department's responsibility in the project.*
- *The lead designer is responsible for the overall project design:*
 - *Performance targets for structural, electric, HVAC, and automation design processes.*
 - *Coordination of design tasks to ensure the overall energy efficiency targets of the project.*
 - *The lead designer keeps the building department up to date on the design work*

progress and its implications on the building's life cycle performance indicators.

Summary

In this chapter, an example of how to incorporate energy efficiency in the public procurement process has been introduced. The procurement process has been extended to cover also a building's life cycle, to point out the connection between the decisions made during the actual procurement process, and the performance values which contribute to energy efficiency, indoor air quality, and life cycle economy of a building.

References

- Allen, J. G., MacNaughton, P., Satish, U., Santanam, S., Vallarino, J., & Spengler, J. D. (2016). Associations of cognitive function scores with carbon dioxide, ventilation, and volatile organic compound exposures in office workers: A controlled exposure study of green and conventional office environments. *Environmental Health Perspectives*, 124(6), 805–812. <https://doi.org/10.1289/ehp.1510037>.
- CABA (Continental Automated Buildings Association). (2017). *Improving organizational productivity with building automation systems*. Research Report.
- Darko, A., Chan, A., Ameyaw, E., He, B., & Olanipekun, A. (2017). Examining issues influencing green building technologies adoption: The United States green building experts' perspectives. *Energy and Buildings*, 2017, 144. <https://doi.org/10.1016/j.enbuild.2017.03.060>.
- EC (European Commission). (2018). Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency.
- EC (European Commission). (2019). Factsheet: Energy Efficiency Directive. Available online: https://ec.europa.eu/energy/sites/ener/files/documents/energy_efficiency_factsheet.pdf. Accessed May 21, 2020.
- IEA (international Energy Agency). (2020). Available online: <https://www.iea.org/topics/buildings>. Accessed May 21, 2020.
- Kuronen, M., Junnila, S., Majamaa, W., & Niiranen, I. (2010). Public-private-people partnership as a way to reduce carbon dioxide emissions from residential development. *International Journal of Strategic Property Management*, 2010, 14. <https://doi.org/10.3846/ijspm.2010.15>.
- Li, B., Akintoye, A., Edwards, P. J., & Harcastle, C. (2005). The allocation of risk in PPP/PFI construction projects in UK. *International Journal of Project*

Management, 2005, 23(1). <https://doi.org/10.1016/j.ijproman.2004.04.006>.

Milton, D. K., Glencross, P. M., & Walters, M. D. (2000). Risk of sick leave associated with outdoor air supply rate, humidification, and occupant complaints. *Indoor Air*, 2000(10), 212–221.

ROTI-panel. (2019). Rakennetun omaisuuden tila 2019. Available online: https://www.ril.fi/media/2019/roti/roti_2019_raportti.pdf. Accessed May 27, 2020.

Siemens. (2020). A truly powerful shopping center. Available online: <https://new.siemens.com/global/en/company/stories/infrastructure/sello-virtual-power-plant.html>. Accessed May 25, 2020.

Tieva, A., & Junnonen, J.-M. (2009). Proactive contracting in Finnish PPP projects. *International Journal of Strategic Property Management*, 2009, 13. <https://doi.org/10.3846/1648-715X.2009.13.219-228>.

Vinokurov, M., Grönman, K., Hammo, S., Soukka, R., & Luoranen, M. (2019). Integrating energy efficiency into the municipal procurement process of buildings—Whose responsibility? *Buildings*, 2019(9), 45. <https://doi.org/10.3390/buildings9020045>.

Weidner, S., Gerhardt, J., Schaaf, J., & Riedel, N. (2011). PPP in urban development in Germany illustrated using two pilot projects in Leipzig. *Urban Models and Public Private Partnership*, 2011. <https://doi.org/10.1007/978-3-540-70508-6>.

WGBC (World Green Building Council). (2019). Bringing embodied carbon upfront. Coordinated action for the building and construction sector to tackle embodied carbon. World Green Building Council, September 2019.

Energy Engineering

► Sustainable Energy

Energy from Solar Photovoltaic

► Solar as a Sustainable Energy

Energy Management

► Energy Conservation: More Efficient Use of Energy

Energy Pricing for Households for Promoting Energy Efficiency

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Description

The energy pricing of a household customer includes pricing of the energy content (electrical energy in this case), pricing of the use of energy carriage network infrastructure (power grid, in case of electrical energy), and taxes, including energy taxation and value added tax. All these components could and should provide customers with incentives for energy efficiency.

In electricity markets, energy sales is typically opened for competition during deregulation, while electricity network operations remain in natural monopolies. These two sectors are different by nature, and thus, different pricing principles should be applied in each sector.

In energy wholesale markets, price is typically highly volatile, reflecting the varying output of the low marginal cost renewable generation. Pricing signals from wholesale markets should be passed toward end users to provide them incentives to use energy during the moments when there is abundant low-cost energy available, that is, during the low-price hours.

In network operations, the most suitable solution would be pricing method, which includes energy fee (cnt/kWh), peak power-based power fee (€/kW), and fixed stand-by fee (€/month). This would provide customers with incentives to efficient use of energy and decrease of peak power, while ensuring cost recovery for distribution system operator. Hence, such pricing is incentivizing efficient and sustainable use of energy.

Introduction and Background

The key objective for end users' energy bills is obviously to ensure cost recovery of the energy

system, including capital and operational expense of the generation facilities, fuel costs, emission allowance costs, costs of the network infrastructure, etc. This is ensured by having an appropriate price level that leads to reasonable revenue of the companies. However, intentionally or unintentionally, pricing also directs end users to adjust their energy usage so that their bill decreases.

For instance, if end users are charged by a fixed monthly fee (i.e., €/month), they pay the same price, no matter what is the amount of the consumed energy, and hence, such pricing system does not provide incentives to decrease the amount of energy consumed. However, if we provide certain price for the energy (i.e., €/MWh) and customers are charged by the amount of energy they consume, they get savings by decreasing energy usage, which will incentivize energy savings and energy efficiency improvements. Nevertheless, if we consider the issue from the system perspective, constant energy price might not be enough for optimal energy efficiency incentives, but optimal timing of the energy use and incentives for cutting the peak power should be also considered. This issue, that is design of the pricing from sustainability and energy efficiency viewpoint, will be discussed in this entry. Focus here is on the pricing of the electricity, which consists of energy price and network fee. However, similar principles can be applied as well, when planning the pricing of other energy vectors, such as heating, cooling, or gas.

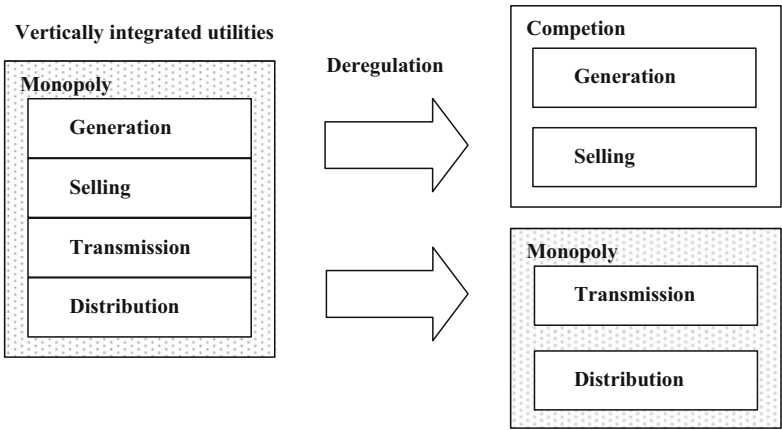
Energy Pricing for a Household

Typically, energy pricing of a small-scale customer, such as a household, consists of price of consumed energy, network fee, and taxes. All these could and should be designed so that there are incentives for energy efficiency improvements, that is, efficiency gains of a customer will lead to lower energy bill for them. However, at same time, it should be kept in mind that certain costs, such as amortization of the capital investments, are fixed. If pricing is not cost-reflective, it may happen that increasing energy efficiency in customer end decreases the energy bill of the customer, but does not have effect on the costs of the utility. In such a case, if it happens in large scale, utility is forced to increase its prices to ensure cost recovery, and economic feasibility of the customer-end energy efficiency investments are jeopardized. Hence, cost-reflectivity of the pricing is highly important to ensure that actions that customers are incentivized to carry out, are benefitting both utility and customer, in both the short and long run.

In deregulated electricity markets, electricity generation (wholesale market) and sales (retail markets) are or can be opened up for competition to have efficiency gains. In electricity transmission and distribution, again, natural monopoly is emphasized, as it would not be an efficient solution to build parallel networks. Typical organization of the industry before and after deregulation process is illustrated in Fig. 1. Deregulation of the

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Fig. 1 Organization of the electricity industry before (left) and after (right) deregulation of the electricity markets



industry has taken place worldwide after the beginning of 1990s. However, the present situation varies between market areas.

Pricing of the Energy in Electricity Markets

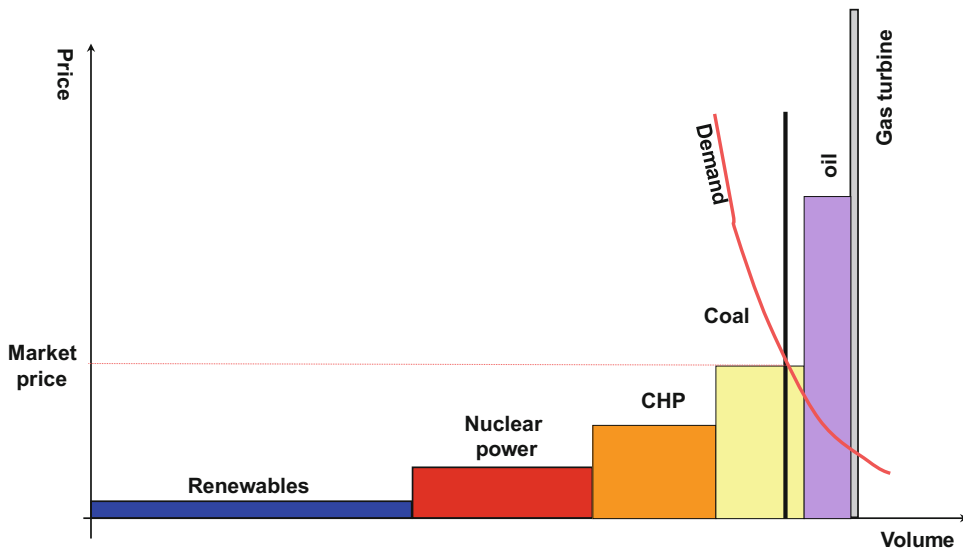
The key technical requirement of the power system is to maintain balance between supply (generation) and demand (load) at every moment. Similarly, in heating system, energy balance must be maintained, but in the case of the district heating, there is natural energy storage in the network, which means that momentary balance is not necessary, but balance is important in daily and hourly basis. Power system balance is typically maintained by dispatching of generation so that it meets the demand at every moment. However, as intermittent renewables (wind and solar) are accounting increasing share of the generation, there is need for demand side actions also for constant power balance maintenance. These demand side actions are called demand response (DR) or demand side management (DSM).

Wholesale electricity markets are typically organized as a power pool or exchange, where

actors can sell and buy electricity organized without counterparty risk. In day-ahead (DA) markets, energy is bought and sold for every hour of next day, while in intra-day (ID) markets, trading can be done 30–60 min before operating hour. Balancing and reserve power markets are used by system operator for real-time balancing of the supply and demand during the operating hour.

Pricing is usually based on auction, either by pay-as-bid or marginal pricing. Marginal pricing is mostly applied to promote cost-efficient equilibrium of demand and supply, by directing merit order so that generation is brought online in the order of the prices (low cost generation first), until the electricity demand is met. Marginal price, equal to all participants, independent of the actual offer/bid, is in the equilibrium of the supply and demand bids, illustrated in Fig. 2.

This type of pricing reflects the variation in the variable costs of the electricity generation. In moments when there is abundant amount of renewable (e.g., wind and solar) generation available, price is very low, as their variable cost is close to zero. However, when there is scarcity of the supply, price may peak, reflecting high costs of the supply, price may peak, reflecting high costs of the supply, price may peak, reflecting high costs of the supply (e.g., gas turbine in figure below). Hence, this type of pricing provides



Energy Pricing for Households for Promoting Energy Efficiency, Fig. 2 Price formation in wholesale market of the electricity (marginal pricing)

incentives for efficient use of resources. Seller's surplus, that is difference between marginal price and variable generation costs, ensure recovery of fixed costs. Marginal price also provides long-term investment signals, as price levels increase if there is scarcity of the generation resources. Trading is typically in hourly resolution, so that energy is bought/sold for a specific hour. Hence, price varies between hours, and volatility might be high, especially if there is significant amount of intermittent renewable generation. Trend is that time resolution in markets is increasing and markets are moving toward real time. For instance, in EU there is regulation to move from 1 h to 15 min balance settlement period (EU 2017).

However, this type of marginal pricing is applied only in wholesale market. Small-scale customers, such as households, typically pay constant price, in which the price of energy is constant during the contract period (e.g., 1 year), and wholesale prices reflect the retail prices only by changes in long-term price levels. Time-of-use (ToU) tariffs have been applied in many cases, but they have limited steering effects, as they typically incentivize shifting the loads from daytime to nighttime, but they do not take into account actual system state and varying output of the renewables or volatility of the wholesale price. Hence, the so-called real-time pricing, which is based on hourly prices and real-time measurement of the consumption of the energy, would incentivize shifting of consumption to low-price hours. Such pricing requires Advance Metering Infrastructure (AMI), also known as smart meters, being installed. For instance, in Finland every customer has a meter that measures hourly energy consumption and is remotely read once a day. Such metering infrastructure enables real-time pricing, and at the end of year 2018, about 9% of Finnish electricity customers had real-time priced electricity supply contract (Finnish Energy Authority 2019).

End user pricing based on varying wholesale market price incentivize implicit demand response of the consumers, as it provides benefits if customer cut loads during price peaks and/or shift loads from high price hours to low price hours. Typically, time shifting of the loads require

that there is either storage incorporated to load (e.g., heating and cooling, in which buildings provide natural heat storage capacity) or that customer is willing to change his/her daily routines. However, to ensure that flexibility of the demand lead to lower costs of the energy, flexibility should be included in the demand bidding in wholesale markets. If customer reacts to price signal of the wholesale markets after market closing, it might, at least in theory, have impacts on system balance, which increase the costs, as illustrated by Nardelli and Kühnlenz (2018). Furthermore, if customers move significant part of their consumption to low price hours, it may lead to congestions in local network, as Belonogova et al. (2013) have illustrated. However, this latter challenge can be eased by planning the pricing in electricity distribution so that it incentivizes customers to avoid load peaks. This is further discussed in following section.

Network Fee

As discussed above, although generation and sales are opened for competition during deregulation of the electricity sector, networks are recognized as natural monopolies. To prevent misuse of the monopoly, and to provide network companies with incentives for improvement of efficiency and quality of supply, they are regulated by authority. Regulation may focus on profits (rate-of-return regulation), prices (price cap), or revenues (revenue cap). Furthermore, they can include benchmarking elements (yardstick regulation). In practice, regulation is hybrid, containing elements from different theoretical models. Regulation methods vary from country to country as they are decided by national authorities. In some countries, prequalification of the network fees (tariffs) by regulator is required *ex ante*, while other countries let the network companies freely decide their price structures, and check *ex post* whether revenue or profit is below the cap. In any case, regulated companies are provided with regulatory framework; that is principles of defining of the revenue/price/profit cap. Typical approach, applied, for instance, in Finland, is to allow certain

rate of return and reasonable level of depreciation for network assets to ensure the companies can invest in network, and define reasonable level of operational expenses based on historic level of costs and certain annual efficiency improvement requirement. Inflation and some costs that are outside of the control of network company are typically treaded as pass-through cost items.

From the energy and resource efficiency viewpoint, network fee should provide energy end users with incentives to adjust their energy usage so that it does not cause increase in peak loads of the network that may lead to bottlenecks and reinforcement needs of grid. In theory, this would mean that price would vary based on the network load. However, in addition to monopoly

regulation, there are a number of constraints and drivers in planning of the network pricing. One of the constrains is spot pricing (aka point tariff), which means that price should not depend on the location of the customer within network area. This is a similar approach as in postal stamp tariffs; the customer is entitled to use the network in whole country or market area by a single tariff. Because of these constraints, theoretical optimal solution may not be feasible for practical implementation.

In addition to the above described, there are various criteria that should be taken into account in distribution tariff design. Key criteria for distribution network pricing have been illustrated by Honkapuro et al. (2017), see Table 1.

Energy Pricing for Households for Promoting Energy Efficiency, Table 1 Summary of the criteria for distribution tariffs (Honkapuro et al. 2017)

Criterion	Description
Cost-reflectivity	In this context, “cost-reflectivity” means that the distribution tariff structure reflects the cost structure of the distribution system operator within the limits of spot pricing. This supports fairness and neutrality of the tariffs for different customers. Further, the distribution tariffs shall generate sufficient revenue to ensure the operating conditions of the distribution system operator
Neutrality for third parties	This criterion indicates that the distribution tariff structure should not constrain or prevent the operation of third parties. Further, the primary objective of the distribution tariffs is not to generate new business options, e.g., for demand response services but rather ensure that the distribution tariff does not constrain the future operation of these third parties within the technical limits of the distribution system
Steering effects/Incentives for efficient use of electricity	The core idea of this criterion is that the distribution tariff is one of the components in incentivizing the customer for resource efficient use of electricity. In the long term, this will lead to a reduction in the total costs of the electric power system. The distribution tariff allows the customer to affect the amount of her/his distribution fee by her/his own actions and decisions
Feasibility of practical implementation	“Feasibility of practical implementation” means that the tariff structure can be implemented at a reasonable cost. The practical implementation of the basic functions of the tariff should be cost efficient and, as far as possible, realizable with the present and foreseeable systems and infrastructure (e.g., next-generation metering and ICT systems) in order not to cause unreasonable costs to the distribution system operators and customers. In the new tariff structure, also customer communications and contacts with customer services have to be taken account of initially or annually, e.g., if the power threshold is changed
Compliance	“Compliance” means that the tariff structure is not in conflict, e.g., with the present but also potential new tariffs provided by the electricity retailer. This criterion shall also take account of third parties’ future development trends in pricing
Intelligibility	“Intelligibility” means that the tariff structure, in other words, the set of rules according to which the customer’s distribution fee is determined, is consistent and simple enough as a whole. Based on the price list, the customer has to be able to comprehend the rationale behind her/his distribution fee without unreasonable effort

As we can see from the table above, there are multiple criteria, and some of them might even be contradictory. For instance, if the aim is to have good cost-reflectivity, the price structure has to contain various dynamic elements, and it becomes highly complex, which is opposite to intelligibility criteria.

Honkapuro et al. (2017) have arrived at a conclusion that network fee structure, which fulfills the above illustrated objectives, would be power-based pricing combined with energy-based and fixed fee. Such pricing includes a price component, which is based on the customer's measured peak load (€/kW), energy-based price component (cnt/kWh), and a fixed monthly fee (€/month). This would provide users with incentives to decrease their peak loads and energy consumption, of which both actions promote energy efficiency. Furthermore, such pricing would ensure stable incomes and adequate cost recovery for distribution system operators (DSOs). In theory, network pricing should be similar in consumption and production, that is, customer should be charged by same fee, if he/she is taking electricity from grid, or feeding it to grid. However, typically, in society, there is willingness to incentivize renewable micro-generation, and hence, network fee for micro-generation is inexistent or very limited.

Summary

The energy pricing of a household customer includes pricing of the energy content (electrical energy in this case), pricing of the use of energy carriage network infrastructure (power grid, in case of electrical energy), and taxes, including energy taxation and value added tax.

In electricity markets, energy sales is typically opened for competition during deregulation, while electricity network operations remain in natural monopolies. These two sectors are different by nature, and thus, different pricing principles should be applied in each sector.

In energy sales, wholesale price is typically formed based on the bids of the sellers and buyers. Marginal price reflects the varying cost of the most expensive generation form, which is needed

to fulfill the demand during an operating hour. This pricing method is promoting efficient use of the primary energy resources, as lowest variable costs is typically in those generation form, which does not have fuel costs (i.e., wind and solar). Price is highly volatile, especially if there is a significant amount of variable renewable generation in system. Customers should be provided incentives to use energy during the moments when there is abundant low-cost energy available, that is, during the low-price hours. However, it has to be ensured that customers' demand response do not increase system balancing costs.

In network operations, pricing is typically somehow regulated by the authority, to avoid the misuse of the monopoly position. Regulation may focus directly on prices, or on the revenues or profits. In this sector also, pricing should promote efficient use of infrastructure, in this case power distribution and transmission networks. In addition to that, pricing has several criteria, such as cost-reflectivity, neutrality, intelligibility, and it has to be feasible to implement. Based on recent research results, it seems that the most suitable solution would be the pricing method, which includes energy fee (cnt/kWh), peak power-based power fee (€/kW), and fixed stand-by fee (€/month). This would provide customers with incentives to efficient use of energy and decrease of peak power, while ensuring cost recovery for distribution system operator. Hence, such pricing is incentivizing efficient and sustainable use of energy.

However, when developing and introducing novel pricing schemes, it should be taken care that these pricing schemes do not cause energy poverty, and vulnerable customers, who may have difficulties to comprehend and follow the pricing incentives, are not preyed on. Important actions here are providing information and long enough transition periods for price changes.

Cross-References

- ▶ [Controlling the Building Energy Footprint](#)
- ▶ [Energy Efficiency in Public Building Procurement](#)

- Needs and Barriers for Local Energy Market Solutions
- Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators

References

- Belonogova, N., Valtonen, P., Tuunanen, J., Honkapuro, S., & Partanen, J. (2013). *Impact of market-based residential load control on the distribution network business*. Proceedings of CIRED 2013, Stockholm, June 2013
- European Commission Regulation 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.
- Finnish Energy Authority. (2019). National report 2018 to the agency for the cooperation of energy regulators and to the European Commission.
- Honkapuro, S., Haapaniemi, J., Haakana, J., Lassila, J., Partanen, J., Lummi, K., Rautiainen, A., Supponen, A., Koskela, J., & Järventausta, P. (2017). *Development options for distribution tariff structures and their impacts*. LUT Scientific and Expertise Publications, No. 65.
- Nardelli, P., & Kühnlenz, F. (2018). Why smart appliances may result in a stupid grid: Examining the layers of the sociotechnical systems. *IEEE Systems, Man, and Cybernetics Magazine*, 4(4), 21–27. <https://doi.org/10.1109/MSMC.2018.2811709>.

Energy Recovery

- Sustainability of Waste Management Systems: Energy Recovery

Energy Saving

- Energy Conservation: More Efficient Use of Energy

Energy-Efficient Buildings

- Energy Efficiency in Public Building Procurement

Energy-Renewable

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Synonyms

Alternative energy; Green energy; Inexhaustible energy; Renewable energy

Definition/Description

Energy is defined renewable energy (RE) if it is gained from sources which are not depleted by use or if the sources can be recovered in human time scale. In contrast to nuclear and fossil fuels, which are in principal limited resources (BGR 2017), renewable energy is infinitely available in a time frame relevant for humanity (Quaschnig 2016). Limitless sources for energy are geothermal energy, planetary energy, and solar energy.

Introduction

Availability of energy for heating, communication, illumination, and other purposes is crucial for modern societies and economies. Therefore, the security of energy supply is important. Increasing population and increasing standards of living led and lead to a continuous increase of energy consumption (BP 2019a). An increase of the global energy demand by more than one quarter (IEA 2018a) to around one third (BP 2019a) of today's demand by 2040 is expected due to the "increase in living standards, especially in India, China and whole Asia" (translated from BP 2019a). In the same press release, it is stated that renewable energy and natural gas contributes to the increase of energy supply by 85% and that electric power in 2040 will be mainly produced by renewable energy.

Why renewable energy? Climate change (see ► [“Climate Change”](#)) caused by increasing greenhouse gas emission (see ► [“Greenhouse Gas Emissions”](#)) was already identified as a major challenge in the 1980s (IPCC 1990). Carbon dioxide was identified as the most important factor for global warming (Hansen et al. 1981; IPCC 1990) (see ► [“Carbon Emissions”](#)).

Using energy from renewable sources has therefore got two benefits: In contrast to limited resources like fossil and nuclear fuels, sources of renewable energy are indefinite and the emissions of greenhouse gases only needs to be considered during the manufacturing, installation, and deconstruction phase of the plants for energy transformation. Application of wind, hydro, and solar power does not lead to greenhouse gas emissions, since no combustion or other chemical processes releasing greenhouse gases (GHG) take place. In case of bioenergy, there is only emission of CO₂ which was recently absorbed by the plants used for the bioenergy production. If new plants are grown to replace the plants used for bioenergy, it is assumed to be carbon neutral (Dunlap 2015, p. 393; Quaschnig 2016). In contrast fossil fuels contain carbon which was stored millions of years ago in plants and is now released by combustion as CO₂ (Dunlap 2015, p. 64.). Additionally mining of fossil fuels can lead to methane emissions, a powerful greenhouse gas (Quaschnig 2016) (see ► [“Greenhouse Gas Emissions”](#)).

Classification of Renewable Energy Due to the Sources

Solar

The sun is the most important source of renewable energy as it provides solar radiation. Solar radiation is transformed into heat by natural conversion. Due to differences in temperature, caused by inhomogeneous heating of the earth, wind is generated. The water cycle also depends on solar radiation, since solar heat causes the evaporation of water which is then condensed and precipitated in colder parts of atmosphere. Solar radiation is also necessary

for the production of vegetable biomass by photosynthesis.

Solar radiation is most intensive near the equator in the desert regions, where cloud formation is low. Most favored regions can be found in Mexico, the south of western USA, in the Andes regions of Peru, Chile and Argentina, northern Africa, the Arabian peninsula, Iran, Afghanistan, parts of China, and Australia (World Bank Group 2016). For the sustainability of solar power plants, see ► [“Sustainability and Solar Energy”](#).

Solar Thermal Energy

Solar radiation can be transformed into heat, which can either be used directly for heating and hot water supply (Streicher 2007) or, if heat levels are high enough, for the production of power by steam power plants (Weinrebe and Ortmanns 2007). For heating and hot water supply, flat plate collectors and vacuum tube collectors can be employed, which provide low to medium temperatures (ome 2012). In 2010 the total installed capacity of flat plate collectors and vacuum tubes was 200 GWh of thermal energy. Most of the installations were found in China, which had the highest share with 59%, followed by Europe with 13% and North America (USA and Canada) with a share of 8% (ome 2012).

Steam production requires higher temperature levels which can be achieved by concentrating solar radiation by solar collectors, lenses, or mirrors of different geometries (Weinrebe 2007). Linear collectors, mostly parabolic troughs which focus the sunlight on an absorber tube, are produced already in series. Fresnel collectors which consist of individually positioned distributed mirrors can also be applied (Quaschnig 2016). To get even higher temperatures, point concentrators are used which focus the sunlight on two axes. Mirrors with dual axis trackers that focus the sunlight optimally are called heliostats (Quaschnig 2016).

The generated steam can be used in the same way as steam in conventional steam power plants powered by fossil or nuclear fuels. Since storage of heat is technically feasible, this type of power plant can produce power on demand and during night time (Quaschnig 2016; TREC 2007). If

longer periods without sufficient sunshine are expected, the operation as a hybrid power plant is possible (DLR 2006). Concentrated solar power plants can be combined with biofuels as alternative heat source, for example.

In the Desertec concept (see ► “Desertec”), concentrated solar power plants (CSP) were the key element for the production of reliable power on demand (TREC 2007). Although the Desertec concept was abandoned in 2014, it helped initiating the construction of big CSP installations in Northern Africa. In 2016 the first phase of the biggest CSP plant worldwide with an expected capacity of 500 MW was launched in Ouarzazate, Morocco (World Bank 2016). Parabolic troughs were used for Noor Ouarzazate I and Noor Ouarzazate II. In the third installation, Noor Ouarzazate III, heliostats were used to concentrate the solar light on a tower. Noor Ouarzazate III has a gross production capacity of 150 MW and a storage capacity for thermal heat of 7.5 h of production (SolarPaces 2018).

Photovoltaic Power Plants

In contrast to solar thermal power plants, photovoltaic (PV) cells convert solar radiation directly into electric power by photovoltaic effect (Kaltschmitt and Rau 2007). Diffuse and direct radiation can be used to produce power without intermediate heat production. PV cells are produced as single cells, which are assembled in modules, also described as PV panel. A parallel or serial configuration of the cells is possible, but usually a serial assembling is preferred, since it can increase the voltage without increasing the current. The modules can also be combined – either in series or in parallel. PV cells produce direct current (DC) but most applications and the connection to the grid usually require alternating current (AC) for power supply. Therefore DC-AC converters – so called inverters – are applied to connect PV-panels to the grid or load (Twidell and Weir 2006).

Due to their modular composition, PV plants are scalable (Twidell and Weir 2006; Moore and Post 2008). Applications vary from small portable devices to installations of several MW. The largest single location photovoltaic park in 2017 was the

Kurnool Ultra Mega Solar park with 1000 MW Peak power (Statista n.d.; Jaiswal and Bhagavatula 2017). In contrast to solar thermal power plants which allow for the option to store heat, the power production of PV panels depends directly on solar radiation. This means that the power production is at its highest during noon and a high fluctuation depending on cloud formation can be observed. The high variation in power supply can be a challenge for the integration of PV power (Hashemi and Østergaard 2016). Depending on national regulations, the inverters connecting the PV modules to the grid require the option to actively reduce power supply when the grid is overloaded.

Wind Energy

The idea of transforming wind energy into mechanical energy that can be used for pumping (Taylor 2012, p. 302), drainage (Quaschnig 2016), or propelling ships (Ellabban et al. 2014) is quite old. In the age of steam engines and electrification, the use of wind power became less important (Quaschnig 2016). It was due to the oil crisis in the 1970s that wind power came back into focus. Today it is used almost exclusively for power generation.

Modern wind power plants have got a rotor which starts rotating as soon as it interacts with wind. We can distinguish two main types of wind turbines: horizontal axis and vertical axis machines (Twidell and Weir 2006).

Vertical axis machines can accept the wind from any direction without needing adjustment to the direction of wind. Since the wind power plants are not exposed to gravity induced strain, they could be very large in principle (Twidell and Weir 2006). But vertical axis machines often experience resonance in structure which can cause fatigue failures, and the torque of the wind can vary periodically, which leads to unwanted power periodicities in power output. Depending on the rotor type, the driving force is either drag or lift or a combination of both.

Horizontal machines can be differentiated further into upwind installation, in which the rotor meets the wind before it reaches the tower or downwind installations, in which the wind first

meets the tower and then the rotor. The last one is in principle self-orientating but has the disadvantage, that the tower in upwind position shades the blades. This causes extra wind turbulences in the path of the blades and leads to additional strain on the blades (Twidell and Weir 2006).

Upwind horizontal axis machines have to be adjusted to the wind, either by a tail or by a yawing mechanism. The dominant driving force is lift and the blades are constructed like airplane wings (Twidell and Weir 2006). Most common are upwind horizontal axis machines with three bladed rotors, since they operate more smoothly and quietly than two bladed rotors. Since the material demand increases with the number of blades, three-bladed turbines are the most effective solution for wind power plants (Twidell and Weir 2006).

To prevent an overload of the wind power plant at high wind speeds, the rotor speed is controlled either by a passive mechanism using the stall-effect or by active control that adjusts the blades using electric motors (pitch-control) (Quaschnig 2016).

To transform the kinetic energy into electric energy, an electric generator is necessary. To adjust the rotation of the wind turbine rotor of 15–20 rpm (round per minute) for a 1 MW turbine to the rotation of the generator of 1800 rpm, it requires gears (Salameh et al. 2018). But since they are exposed to high strain, they require much maintenance and the failing of one component would lead to a stop of power production. This is why wind power plants that operate without a gearbox have been developed in the last 10 years (ENERCON 2016).

Synchronous or asynchronous generators are employed for electricity production (Kaltschmitt et al. 2007a). Synchronous generators have a slightly higher efficiency but cannot be connected directly to the grid, since gusty wind can cause high strain (Kaltschmitt et al. 2007a). Asynchronous generators, also called induction generators, can be operated more flexibly by using a variable slip (slip denominates the difference between speed of stator and rotor). This allows for a better adaption to an inflexible grid (Quaschnig 2016), but leads to losses of efficiency.

Wind power plants only produce power when the wind blows, which makes preplanning of power production difficult. The power generation of wind power plants is proportional to the wind speed cubed, so areas with high wind speed are favored. In order to avoid turbulences, flat areas where roughness is not affecting wind speed and causing turbulences as well as mountain tops are optimal for the installation of wind power plants (Schaffarczyk 2012). In recent years, off-shore installations became more important since higher and more constant wind speed are observed here. Since the generated power of wind power plants increases with size, bigger plants are favored. The size of wind power plants has increased significantly in recent years. The average nominal power increased from 1.6 MW in 2009 to around 2 MW in 2014 (IRENA n.d.-a); in 2016 Enercon offered wind turbines with nominal power above 7 MW (ENERCON 2016).

Like other renewable power plants, wind power plants also have a negative impact during operation (Kaltschmitt et al. 2007b). Sound emissions during operation were an issue which could be reduced by technical measures like optimal wind energy converter design. The effects of infrasonic sounds were discussed but since certain distances to buildings have to be observed, also in order to minimize the effect by shadowing and disco effect by rotation of the blades, this has no measurable impact on population (Kaltschmitt et al. 2007b).

Negative impacts on birds and bats are widely discussed but a quantification of the impact on their population level is difficult (Diffendorfer et al. 2017). In many countries, Environmental Impact Analysis is required before installation, also in order to avoid negative impacts of wind energy converters on protected bird and bat species.

Hydropower

The potential energy of water in rivers can be used in hydropower plants for the production of electric power. Slopes are required to use the potential and kinetic energy of water, so this form of renewable energy is only available in mountainous regions

with rivers. Up to now this form has the second highest share of renewable energy in primary energy consumption (IEA 2019). Hydropower plants can be classified as run-of-river, storage, and pump storage.

Run-of-river hydropower plants gain the energy for electricity production from the flow of a river. Electricity production therefore strongly depends on the local river flow conditions and substantial daily, monthly, or seasonal variations are possible (Ellabban et al. 2014).

Storage hydropower plants have a water reservoir which enables power supply independent of the variability of the river flow. They also allow power supply on demand. Setting up a storage hydropower plant requires dam building. Usually the dam consists of concrete and steel. Both materials require a high amount of energy for production. Concrete also releases carbon dioxide during hardening (see ► “Carbon Emissions”). So in the construction phase, high amounts of carbon dioxide can be released.

Depending on the size of the reservoir, land is flooded which means that it is lost for settlements, farming, and wildlife. During the flooding process, plants are degraded by anaerobic decomposition, with the consequence that the very potent greenhouse gas methane is released (see ► “Greenhouse Gas Emissions”) (Demarty and Bastien 2011). To assess the whole impact of hydropower plants, environmental impact assessments are required (see ► “Environmental Impact Assessment”).

Pump storage hydropower plants are no energy sources but devices for the storage of electric power. If excess electric power is available, water is pumped into an upper reservoir. When additional electricity is needed, the water is released from the upper reservoir into the lower reservoir so that it drives turbines for electricity production (Quaschnig 2016).

In order to convert the kinetic energy of water into the kinetic energy of the turbine, different types of turbines for different amounts of flow rate and slope were developed. Impulse turbines, like the Pelton turbines, use the kinetic energy of the water. Reaction turbines, like Francis turbines, are driven by varying water pressure (Quaschnig

2016). Francis turbines can also be used to pump water and therefore they are often used in pump storage hydropower plants (Twidell and Weir 2006). In midsize to large hydropower plants, several turbines are operated in parallel. So individual turbines can be switched off, if not enough water flow is available or the demand drops. The goal is that the remaining turbines operate at their nominal power output (Quaschnig 2016). The efficiency of these turbines for the transformation of the kinetic energy of the water into kinetic energy of the turbine can be quite high (80–95%). The efficiency of a synchronous generator can be between 90% and 95% for small to medium sized installations and 95% and 99% in large plants (Jorde and Kaltschmitt 2007). Usually synchronous generators are used to produce electric power (Quaschnig 2016), but asynchronous generators are also suitable (Jorde and Kaltschmitt 2007).

Wave Energy Converters

Another option to use water energy is the usage of wave energy, but its conversion into electric power is only just being developed (Uihlein and Magagna 2016). Up to now no commercial power plants are in operation.

Bioenergy

Solar radiation also enables the growing of plants and the production of biomass. Biomass like wood can be directly used for heat production. Alternatively, thermo-chemical or bio-chemical processes can convert biomass into biofuels like charcoal, biodiesel, ethanol, or biogas, which can substitute conventional fuels like coal-briquettes, diesel, gasoline, or natural gas (Ellabban et al. 2014).

Biofuels can be differentiated by the phase state of the biofuel which is either solid, liquid, or gaseous. Another common classification differentiates between primary biofuels (derived from plants which are also used for food production like sugar cane, corn, vegetable oil), secondary biofuels (derived from plant residuals or plants which are not used for food production), and tertiary biofuels derived from algae (see ► “Algae Bioenergy”).

According to IEA, bioenergy has the highest share of all renewable energy forms with 9% share of the total primary energy supply (TPES) (IEA 2017).

The traditional biofuels wood and charcoal (derived from wood) are mostly used in developing countries for *“for cooking and heating, using inefficient open fires or simple cookstoves”* (IEA 2017 Bioenergy and biofuels) and have a share of 55.4% of the global bioenergy use (IEA 2017), while nontraditional heating-systems have a share of 24.7%. 12.4% of bioenergy is applied for electricity production and 6.3% for transportation (IEA 2017).

The most important modern biofuels are biogas derived from plants and manure (Meyer et al. 2018), biodiesel derived from vegetable oil (Widmann et al. 2009), and ethanol derived from starch and sugar containing plants (Senn et al. 2009). Compared to other renewable energy sources like wind and solar energy, biofuels have the advantage that they can be stored as conventional fuels (Ellabban et al. 2014).

The sustainability of bioenergy is controversial, since the use of arable land for biomass production competes with other uses like food, paper, and wood production (Morris and Scurlock 2012). Deforestation, greenhouse gas emissions by land use change (see ► *“Greenhouse Gas Emissions”*), and impact on soil quality are other factors which have to be considered (IPCC 2017). In dry areas, water that is used for irrigation can also be an issue (see ► *“Water”*). The incineration of biomass or biofuel only releases the carbon dioxide which has recently been taken up by the plant. But the growing and harvesting of plants requires energy, which might come from fossil fuels and this leads to an additional emission of carbon dioxide. Industrial fertilizers, based on nitrogen, are produced by the Haber Bosch process, which requires a high amount of energy and hydrogen which is usually derived from natural gas. In soil, denitrification can lead to emissions of nitrous oxide which is a very potent greenhouse gas (see ► *“Greenhouse Gases”*).

Geothermal

Geothermal energy is the heat energy inside the earth. The core of the earth has a temperature of around 4600 °C (Quaschnig 2016). In contrast to the high temperature of the core, the crust has got a low temperature. When going deeper, the temperature level quickly increases. By drilling, high temperature levels can be accessed, best in regions with geothermal anomalies, which can be found in Iceland, Italy, USA, Mexico, New Zealand, and Philippines (Quaschnig 2016). The heat can be used directly for heating, for the operation of heat pumps, or – if temperature levels are high enough – for the production of electric power (Dunlap 2015, pp. 380–385). At the beginning of the century, Iceland’s geothermal energy had a share of 55% of the primary energy consumption, providing 87% of the heat demand and 18% of annual power production (Gunnarsson 2002). In contrast to other renewable energy forms, it is not indefinite, since the heat removed from the reservoir is removed faster than it can be replenished by the heat flow from the interior. Depending on the size of the reservoir and the amount of heat that is removed, the lifetime of a heat reservoir can vary between a few and several 100 years (Dunlap 2015, p. 388). Power production by geothermal energy is projectable.

Planetary

Since the tides are caused by planetary attraction, using the energy of tides for power production is related to planetary energy. In contrast to waves, tides can be predicted with high certainty. But the number of places where the tidal range is high enough for energy harvesting is limited. Since the installations have to be close to the coast, the installation of energy conversion systems has a high impact on the environment. Up to now only few commercial power plants in Canada and United Kingdom are operated with tide power (Dunlap 2015, p. 350).

Relevance of Renewable Energy for the Energy Supply

“Hydroelectricity, wind and wave power, solar and geothermal energy and combustible renewables and renewable waste (landfill gas, waste incineration, solid biomass and liquid biofuels) are the constituents of renewable energy.” (BP 2019c). In contrast to fossil and nuclear fuels, for which the consumed or supplied amount of primary energy can be measured, renewable energy as primary energy occurs in free floating form. *“There is no single, unambiguous method for calculating primary energy from non-combustible energy sources such as non-combustible RE sources and nuclear energy”* (IPCC 2012, p. 10). Different methods are used to estimate the amount of primary energy sources. The IPCC for example uses the direct equivalent method, in which fossil fuels are accounted by their heat value, while renewable energy sources are accounted by the secondary energy (e.g., electricity) they produce (IPCC 2012, p. 10).

This method is also used in the Statistical Reviews of British Petrol. Hydropower, for example, is reported as consumption of hydroelectricity and biofuels have been included in oil consumption. The consumption of renewables for heat production has been excluded until now in the statistics of British Petrol (BP 2019c), while the International Energy Agency considers biofuels also for heat production. That is one reason for the deviation in share of renewable energy in primary energy consumption and supply of their statistics. Including heat production by biomass the International Energy Agency got a share of 14% in the total primary energy supply (IEA 2019) while BP, excluding biomass for heat production got a share of renewable energy of around 11% (BP 2019b) in the world's energy consumption.

A share of renewable energy around 14% is not much. Highest additions were obtained in the power sector, in which the share of renewables increased by 70% in 2017 (REN21) to 23.9% according to IEA (IEA 2018b). In the sector “heating” the share of renewable energy was

10.3%, in the sector transport the share of biofuels was 3.4% (IEA 2018b). The sector “cooling” was not announced. These sectors accounted for 80% of the global final energy demand (REN 21 2018). But they showed only small or no increase of renewable energy and only small increase of shares are expected (IEA 2018b).

As already mentioned, bioenergy has the highest share of all renewable energy forms with 9% share of the total primary energy supply (TPES) (IEA 2017). The second most important renewable energy is hydro power, the only renewable energy which has increased by 2.8% within the last 10 years (BP 2019b).

The most significant increase of renewable energy for power production was observed for wind energy: Installed capacity for wind power production has been increased from 178 GW installed capacity on-shore to 540 GW on-shore between 2010 and 2018 (IRENA n.d.-a). Additionally around 23 GW have been installed off-shore in 2018 (IRENA n.d.-a). In 2016 around 957 TWh of electricity were produced by wind power (IRENA n.d.-a).

Electricity production using solid biomass was around 372 TWh, using biogas 87.5 TWh, and using liquid biofuels 6.9 TWh (IRENA n.d.-b). Photovoltaic power plants produced around 300 TWh in 2016, CSP around 11 TWh (IRENA n.d.-c).

Sustainability of Renewable Energy Installations

Depending on the size of renewable energy installations and national regulations, an environmental impact assessment is required (see ► [“Environmental Impact Assessment”](#)). For a complete analysis of energy efficiency, resource efficiency, the impact on human health and environment, and the emissions of greenhouse gases, a life cycle analysis has to be performed (see ► [“Life Cycle Analysis”](#)). For an assessment of sustainability of installations of renewable energy, see ► [“Sustainable Energy”](#) and in case of solar energy ► [“Sustainability and Solar Energy”](#).

Summary

Even though the traditional use of biomass for heat is still most important, other forms of renewable energy like hydro, wind, modern bioenergy, and solar energy have become more relevant in recent years and a further increase is predicted.

In principal, renewable energies could guarantee indefinite energy supply with low or no carbon dioxide emissions. Only in the construction and deconstruction phases and in case of maintenance, carbon dioxide emissions can be significant. But the share of renewable energy which can be efficiently transformed into useful energy such as heat, electric power, or other forms depends on local conditions. Biomass is assumed to have the highest potential but the use of biomass for energy generation competes with its use in food production, and in the production of other goods made from plants. It also affects biodiversity. Hydropower plants consist of established technologies. In many countries, hydropower plants have been in operation for several decades but social impacts like the resettlement of villages, the impacts on landscapes, or on ecologically important sites can be quite high. Flooding can also lead to high methane emissions, when the area is not cleared of plant material before flooding.

Wind energy and the use of solar power have the advantage of lower impacts on ecological systems and less land-use but they highly depend on weather conditions and the prognosis of power production is difficult. Therefore, storage systems for energy will become more and more important.

In order to evaluate the sustainability of renewable energy forms, environmental impact assessments and life cycle analyses have to be performed.

Cross-References

- [Algae Bioenergy](#)
- [Carbon Emissions](#)
- [Climate Change](#)
- [Desertec](#)

- [Environmental Impact Assessment](#)
- [Greenhouse Gas Emissions](#)
- [Greenhouse Gases](#)
- [Life Cycle Analysis](#)
- [Sustainability and Solar Energy](#)
- [Sustainable Energy](#)
- [Water](#)

References

- British Petrol (BP). (2019a). Mehr Energie weniger Emissionen. https://www.bp.com/de_de/germany/presse/pressemeldungen/2019_pm-energy-outlook-2019.html. Accessed 20 Feb 2019.
- British Petrol (BP). (2019b). Statistical review of world energy. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>. Accessed 21 Nov 2019.
- British Petrol (BP). (2019c). Renewable energy. <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/renewable-energy.html>. Accessed 21 Feb 2019.
- Bundesanstalt für Geowissenschaften und Rohstoffe BGR. (2017). BGR Energiestudie 2017 -Daten und Entwicklungen der deutschen und globalen Energieversorgung, p. 21. 184 8 Hannover.
- Demarty, M., & Bastien, J. (2011). GHG emissions from hydroelectric reservoirs in tropical and equatorial regions: Review of 20 years of CH₄ emission measurements. *Energy Policy*, 39, 4197–4206.
- Deutsches Zentrum für Luft- und Raumfahrt, DLR. (2006). Trans-Mediterranean interconnection for concentrating solar power. Final Report by German Aerospace Center (DLR), Institute of Technical Thermodynamics Section Systems Analysis and Technology Assessment, p. 29.
- Diffendorfer, J. E., Beston, J. A., Merrill, M. D., Stanton, J. C., Corum, M. D., Loss, S. R., Thogmartin, W. E., Johnson, D. H., Erickson, R. A., & Heist, K. W. A. (2017). Method to assess the population-level consequences of wind energy facilities on bird and bat species. In J. Köppel (Ed.), *Wind energy and wildlife interactions. Presentations from the CWW2015 conference* (pp. 65–76). Berlin: Springer. https://doi.org/10.1007/978-3-319-51272-3_4.
- Dunlap, R. A. (2015). *Sustainable energy*. Cengage Learning, Stamford.
- Ellabban, O., Abu-Rub, H., & Blaabjerg, F. (2014). Renewable energy resources: Current status, future prospects and their enabling technology. *Renewable and Sustainable Energy Reviews*, 39, 748–764.
- ENERCON GmbH (2016) ENERCON wind energy converters. Technology & Service, Aurich. <https://www.enercon.de>

- enercon.de/fileadmin/Redakteur/Medien-Portal/broschueren/pdf/EC_TuS_en_092016_web.pdf. Accessed 20 Jun 2019.
- Gunnarsson, A. (2002, July 21–25) Geothermal power in Iceland. In *IEEE power engineering society summer meeting*. <https://doi.org/10.1109/PESS.2002.1043160>.
- Hansen, J., Johnson, D., Lacis, A., Lebedeff, S., Lee, P., Rind, D., & Russel, G. (1981). Climate impact of increasing atmospheric carbon dioxide. *Science*, 213, 957–966.
- Hashemi, T. S., & Østergaard, J. (2016). Methods and strategies for overvoltage prevention in low voltage distribution systems with PV. *IET Renewable Power Generation*, 11(2), 205–214. <https://doi.org/10.1049/iet-rpg.2016.0277>.
- Intergovernmental Panel on Climate Change (IPCC). (1990). In J. T. Houghton, G. T. Jenkins, & J. J. Ephraims (Eds.), *Climate change: The IPCC scientific assessment*. New York: Cambridge University Press.
- Intergovernmental Panel on Climate Change (IPCC). (2012). *Renewable energy sources and climate change mitigation* (Special report of the IPCC). New York: Cambridge University Press. <https://www.ipcc.ch/site/assets/uploads/2018/03/Summary-for-Policymakers-1.pdf>. Accessed 18 Nov 2019.
- Intergovernmental Panel on Climate Change (IPCC) (2017) *Special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (SR2)* (Special report of Imperial College, London). <https://pdfs.semanticscholar.org/184e/09a5cc9d30b366500705192449c72db413f0.pdf>. Accessed 20 Jun 2019.
- International Energy Agency (IEA). (2017). Bioenergy and biofuels. <https://www.iea.org/topics/renewables/bioenergy/>. Accessed 22 Feb 2019.
- International Energy Agency (IEA). (2018a). World energy outlook 2018 executive summary. <https://www.iea.org/weo2018/>. Accessed 20 Feb 2019.
- International Energy Agency (IEA). (2018b). World energy balances. <https://www.iea.org/topics/renewables/>. Accessed 22 Feb 2019.
- International Energy Agency (IEA). (2019). Total Primary Energy Supply (TPES) by source* World 1990–2016 on statistics, global energy data at your fingertips. <https://www.iea.org/statistics/?country=WORLD&year=2016&category=Energy%20supply&indicator=TPESbySource&mode=chart&dataTable=BALANCES>. Accessed 20 Feb 2019.
- International Renewable Energy Agency IRENA. (n.d.-a). Wind energy data. <https://www.irena.org/wind>. Accessed 21 Nov 2019.
- International Renewable Energy Agency IRENA. (n.d.-b). Bioenergy. <https://www.irena.org/bioenergy>. Accessed 25 Feb 2019.
- International Renewable Energy Agency IRENA. (n.d.-c). Solar energy. <https://www.irena.org/solar>. Accessed 25 Feb 2019.
- Jaiswal, A., & Bhagavatula, L. (2017). The world's largest solar park – Kurnool, India, NRDC. <https://www.nrdc.org/experts/anjali-jaiswal/worlds-largest-solar-park-kurnool-india>. Accessed 21 Nov 2019.
- Jorde, K., & Kaltschmitt, M. (2007). Hydroelectric power generation. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 349–384). Berlin/Heidelberg: Springer.
- Kaltschmitt, M., & Rau, U. (2007). Photovoltaic power generation. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 229–238). Berlin/Heidelberg: Springer.
- Kaltschmitt, M., Skiba, M., & Wiese, A. (2007a). Wind power generation, technical description. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 308–339). Berlin/Heidelberg: Springer.
- Kaltschmitt, M., Schröder, G., & Schneider, S. (2007b). Wind power generation, environmental analysis. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 343–348). Berlin/Heidelberg: Springer.
- Meyer, A. K. P., Ehimen, E. A., & Holm-Nielsen, J. B. (2018). Future European biogas: Animal manure, straw and grass potentials for a sustainable European biogas production. *Biomass and Bioenergy*, 111, 154–164. <https://doi.org/10.1016/j.biombioe.2017.05.013>.
- Moore, L. M., & Post, H. N. (2008). Five years of operating experience at a large, utility-scale photovoltaic generating plant. *Progress in Photovoltaics: Research and Applications*, 16, 249–259.
- Morris, D., & Scurlock, J. (2012). Bioenergy. In G. Boyle (Ed.), *Renewable energy power for a sustainable future* (pp. 117–184). Oxford, UK: Oxford University Press.
- Observatoire Méditerranéen de l'Energie ome. (2012). Solar thermal in the mediterranean region: Solar thermal action plan, OME report for GSWH-UNEP-UNDP, Nanterre. https://www.solarthermalworld.org/sites/gstec/files/news/file/2013-04-26/solar_thermal_action_plan_ome-mediterranean.pdf. Accessed 22 Feb 2019.
- Quaschnig, V. (2016). Concentrated solar power. In *Understanding renewable energy systems* (2nd ed.). New York: Routledge.
- Renewable Energy Policy Network for the 21st Century REN21. (2018). Transformation is picking up speed in the power sector, but urgent action is required in heating, cooling and transport. <https://www.connect4climate.org/article/transformation-power-sector-urgent-action-heating-cooling-transport-ren21>. Accessed 21 Nov 2019.
- Salameh, J. P., Cauet, S., Etien, E., Sakout, A., & Rambault, L. (2018). Gearbox condition monitoring

- in wind turbines: A review. *Mechanical Systems and Signal Processing*, 111, 251–264. <https://doi.org/10.1016/j.ymssp.2018.03.052>.
- Schaffarczyk, A. (2012). *Einführung in die Windenergie-technik*. München: Hanser Verlag.
- Senn, T., Friedl, A., & Gröngroft, A. (2009). Ethanolherzeugung und -nutzung. In M. Kaltschmitt, H. Hartmann, & H. Hofbauer (Eds.), *Energie aus Biomasse* (pp. 793–850). Berlin/Heidelberg: Springer. https://doi.org/10.1007/978-3-540-85095-3_15.
- SolarPaces. (2018). Final testing for 150 MW Noor III Tower CSP. <https://www.solarpaces.org/final-testing-for-150-mw-noor-iii-tower-csp/>. Accessed 22 Feb 2019.
- Statista. (n.d.). World's largest solar PV power plants worldwide 2017. <https://www.statista.com/statistics/217265/largest-solar-pv-power-plants-in-operation-worldwide/>. Accessed 22 Feb 2019.
- Streicher, W. (2007). Solar thermal heat utilization. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 123–170). Berlin/Heidelberg: Springer.
- Taylor, D. (2012). Wind Energy. In G. Boyle (Ed.), *Renewable energy power for a sustainable future* (pp. 297–362). Oxford: Oxford University Press.
- Trans-Mediterranean Renewable Energy Cooperation TREC (2007) Clean Power from Deserts White Book, TREC and Club of Rome, Hamburg.
- Twidell, J., & Weir, T. (2006). *Power from the wind in renewable energy resources*. Abingdon: Taylor & Francis.
- Uihlein, A., & Magagna, D. (2016). Wave and tidal current energy – A review of the current state of research beyond technology. *Renewable and Sustainable Energy Reviews*, 58, 1070–1081.
- Weinreb, G. (2007). Parabolic trough power plants. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 194–203). Berlin/Heidelberg: Springer.
- Weinreb, G., & Ortmanns, W. (2007). Solar thermal power plants. In M. Kaltschmitt, W. Streicher, & A. Wiese (Eds.), *Renewable energy* (pp. 171–181). Berlin/Heidelberg: Springer.
- Widmann, B., Kaltschmitt, M., Münch, E., Müller-Langer, F., Remmele, E., & Thüneke, K. (2009). Produktion und Nutzung von Pflanzenölkraftstoffen. In M. Kaltschmitt, H. Hartmann, & H. Hofbauer (Eds.), *Energie aus Biomasse* (pp. 711–768). Berlin/Heidelberg: Springer. https://doi.org/10.1007/978-3-540-85095-3_13.
- World Bank. (2016). World's largest concentrated solar plant opened in Morocco. <http://www.worldbank.org/en/news/press-release/2016/02/04/worlds-largest-concentrated-solar-plant-opened-in-morocco>. Accessed 21 Feb 2018.
- World Bank Group. (2016). Global solar atlas. <https://globalsolaratlas.info/?c=11.781325,55.722656,3&s=32.10119,86.484375>. Accessed 22 Feb 2019.

Enlightened Self-Interest

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Synonyms

Doing well by doing good; Self-interest rightly understood

Definition

Enlightened self-interest means a “self-interest rightly understood” where a person, a group, or an organization is “doing well by doing good.” These largely cited quotes are attributed to Alexis de Tocqueville regarding the first (Heffner 1956; Vearrier 2020) and often to Benjamin Franklin regarding the second. Helping others to achieve their interests is a premium manner to advance one's self-interest (Frimer et al. 2011).

The Merriam-Webster Dictionary defines Enlightened self-interest as “behavior based on awareness that what is in the public interest is eventually in the interest of all individuals and groups” (Merriam-Webster Dictionary 2022).

Corporate Social Responsibility (CSR) is a form of Enlightened self-interest (Keim 1978). The enlightenment of an organization is motivated by a self-interest, with the target to increase sales, strengthen the company brand, and inspire employees (Ptacek and Salazar 1997).

Background of the Enlightened Self-Interest

The background of the Enlightened self-interest is sometimes attributed to the religion-originated golden rule where one should treat others the way they wish to be treated themselves. Further, the background lies in the Age of Enlightenment, with thinkers such as Thomas Hobbes (Kavka

2021), Jean-Jacques Rousseau (Ptacek and Salazar 1997), and Adam Smith (Dwyer 2021). The synonym “self-interest rightly understood” refers to Alexis de Tocqueville (Heffner 1956; Vearrier 2020), and “doing good by doing well” is often assigned to Benjamin Franklin. Even before them, there are ties to the concept referring back to Plato and Aristotle at the era of the Ancient Greek (Xiang 2016).

At the beginning of this millennium, the Enron accounting scandal led to the largest bankruptcy in the history of corporate America and hit the Wall Street to its core (Healy and Palepu 2003). The aftermath of the Enron case questioned the business models and insufficient private corporate governance (Bratton 2001) as well as plain economic rationality and greed that are often considered as antonyms to Enlightened self-interest.

How to Implement Enlightened Self-Interest into an Organization?

Corporate social responsibility is an appearance of Enlightened self-interest. According to the European Commission, CSR is “a concept through which the company voluntarily integrates the social and environmental dimensions in its business operations and in its relations with stakeholders” (COM 2001 366).

Embedding (integrating) CSR into an organization is a way to implement the Enlightened self-interest approach into it. Embedded CSR occurs when organization’s core competencies are involved and the CSR is integrated throughout the company’s strategy, operations, and routines and thus impacting all employees, instead of peripheral CSR that builds upon philanthropic and voluntary activity (Aguinis and Glavas 2013).

Embedding CSR into an organization can be carried out by, among other things, deploying the standards of the International Organization for Standardization (ISO) (Valmohammadi 2014); by an organizing principle determined as “Discovery Leadership” and developing a corporate social responsibility performance model (Swanson 1995, 2008, 2014); and by utilizing existing methods in an expanded manner, such

as business contracts, contracting, and the contract management approach to promote the breakthrough of sustainability and incentivize the green economy (Hirvonen-Ere 2019). As the Enlightened self-interest approach underlies and in many cases motivates the corporate social responsibility course of action, these techniques could be applied, *mutatis mutandis*, to implement the Enlightened self-interest approach into an organization via embedded CSR.

In the networked economy, integrating values, such as Enlightened self-interest, in the business models of an organization is a success factor (Jansen et al. 2017). One solution to implement this into a profit or a nonprofit organization is via customization, innovation, and authenticity (Jansen et al. 2017). The relation between sustainability-oriented innovation and business models has been found important (Adams et al. 2016; Rohrbeck et al. 2013).

Among proposed solutions is cause-related marketing (CRM). CRM is the “corporate America’s lexicon for working in financial concert with a charity. It is marketing that ties a company and its product to a cause” (Ptacek and Salazar 1997, p. 9). One suggestion for CRM to further develop and reach the level of Enlightened self-interest is to perform it via “a properly designed CRM program” (Ptacek and Salazar 1997).

Why Does Enlightened Self-Interest Matter?

Simply put, organizations that apply Enlightened self-interest perform better than those who do not (Jansen et al. 2017; Meyer 2015).

While business models prevail over more traditional means to predict business outcomes, organizations that succeed in integrating values, such as those underpinning Enlightened self-interest, into their business models do better than those whose performance is based on the plain economic rationality (Jansen et al. 2017).

Regarding cause-relating marketing, the charity and the corporation engage in such a program due to mutual benefits. While a corporation committing to a CRM program desires increased sales,

elevated brand image, and sense of purpose among employees, the charity is in pursuit of funding, whereas the consumers crave social responsibility for a nice price (Ptacek and Salazar 1997).

However, it has been questioned whether doing good always leads to doing well and under which premises this could occur (Bhattacharya and Sen 2004; Busse 2016; Sen and Bhattacharya 2001).

If the company fakes doing good via sending pretended signals of their CSR activity (Siegel and Vitaliano 2007), the result may be the opposite and the company brand may suffer due to the company being perceived as a sham (Carlini et al. 2019; Scheidler et al. 2019).

Accordingly, regarding cause-related marketing, in case the elements relating to the charity, the corporation, and consumers that a duly designed CRM program would combine are left isolated, the result may be negative and be perceived as plain self-interest instead of Enlightened self-interest (Ptacek and Salazar 1997).

As an additional note regarding a relation between Enlightened self-interest, corporate social responsibility, and the corporate top management, a study among Asian manufacturing industry has found a relation between the company choice between embedded (integrated) or peripheral (philanthropic, volunteering) CSR and the top management behavior. Narcissistic behavior of the company CEO seems to lead to less integrated corporate social responsibility; companies with narcissistic CEOs seem to concentrate more to peripheral CSR instead of embedded CSR (Chen et al. 2021).

Future Research

One example of the areas of growing interest is the question of implementation (Adams et al. 2016). Another example is the search for a sustainability-related business model, at the same time questioning the current neoliberalistic ideology (Adams et al. 2016; Boons and Lüdeke-Freund

2013). Enlightened self-interest, corporate social responsibility (CSR), and embedded CSR are topics whose significance is likely to increase in the future. As these topics and their subcategories are broad, they offer several paths for future research.

Summary

The term Enlightened self-interest means “self-interest rightly understood,” a quote attributed to Alexis de Tocqueville, and “doing well by doing good,” a quote frequently accredited to Benjamin Franklin. At many occasions, the enlightened self-interest underlies and motivates corporate social responsibility. Companies that apply the Enlightened self-interest approach are often considered to perform better than those who apply plain self-interest build upon solely economic rationality. Companies that are doing good are doing well and better than those who do not.

Cross-References

- [Business Ethics](#)
- [Corporate Social Responsibility](#)
- [Creating Shared Value](#)
- [Embedded CSR](#)
- [Embedded Sustainability](#)
- [ISO 31000: Risk Management Guidelines](#)
- [Social Responsibility According to ISO 26000](#)
- [Sustainable Management](#)

References

- Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented innovation: A systematic review. *International Journal of Management Reviews*, 18(2), 180–205.
- Aguinis, H. & Glavas, A. (2013). Embedded versus peripheral corporate social responsibility: Psychological Foundations. *Industrial and Organizational Psychology. Perspectives on Science and Practice*, 6(4), 314–332.

- Bhattacharya, C. B., & Sen, S. (2004). Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. *California Management Review*, 47(1), 9–24.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- Bratton, W. W. (2001). Enron and the dark side of shareholder value. *Tulsa Law Review*, 76, 1275.
- Busse, C. (2016). Doing well by doing good? The self-interest of buying firms and sustainable supply chain management. *Journal of Supply Chain Management*, 52(2), 28–47.
- Carlini, J., Grace, D., France, C., & Lo Iacono, J. (2019). The corporate social responsibility (CSR) employer brand process: Integrative review and comprehensive model. *Journal of Marketing Management*, 35(1–2), 182–205.
- Chen, J., Zhang, Z., & Jia, M. (2021). How CEO narcissism affects corporate social responsibility choice? *Asia Pacific Journal of Management*, 38(3), 897–924.
- Commission of the European Communities, Brussels, 18.7.2001 COM (2001) 366 final GREEN PAPER Promoting a European framework for Corporate Social Responsibility.
- Dwyer, J. (2021). *The age of the passions: An interpretation of Adam Smith and Scottish enlightenment culture*. La Vergne: Birlinn.
- Frimer, J. A., Walker, L. J., Dunlop, W. L., Lee, B. H., & Riches, A. (2011). The integration of agency and communion in moral personality: Evidence of enlightened self-interest. *Journal of Personality and Social Psychology*, 101(1), 149.
- Healy, P. M., & Palepu, K. G. (2003). The fall of Enron. *Journal of Economic Perspectives*, 17(2), 3–26.
- Heffner, R. D. (1956). *Democracy in America* by Alexis de Tocqueville. Mentor, New York.
- Hirvonen-Ere, S. (2019). The way of business contracts: How to promote (transport) sustainability and incentivize the green economy via contract management. In *Sustainable and efficient transport*. Cheltenham: Edward Elgar.
- Jansen, W., Steenbakkers, W., & Jägers, H. (2017). *New business models for the knowledge economy*. London: Routledge.
- Kavka, G. S. (2021). *Hobbesian moral and political theory* (Vol. 6). Princeton: Princeton University Press.
- Keim, G. D. (1978). Corporate social responsibility: An assessment of the enlightened self-interest model. *Academy of Management Review*, 3(1), 32–39.
- Merriam-Webster Dictionary. (2022). Enlightened self-interest. <https://www.merriam-webster.com/dictionary/enlightened%20self-interest>
- Meyer, M. (2015). Positive business: Doing good and doing well. *Business Ethics: A European Review*, 24, S175–S197.
- Ptacek, J. J., & Salazar, G. (1997). Enlightened self-interest: Selling business on the benefits of cause-related marketing. *Nonprofit World*, 15, 9–9.
- Rohrbeck, R., Konnertz, L., & Knab, S. (2013). Collaborative business modelling for systemic and sustainability innovations. *International Journal of Technology Management*, 63(1/2), 4–23.
- Scheidler, S., Edinger-Schons, L. M., Spanjol, J., & Wieseke, J. (2019). Scrooge posing as Mother Teresa: How hypocritical social responsibility strategies hurt employees and firms. *Journal of Business Ethics*, 157(2), 339–358.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38(2), 225–243.
- Siegel, D. S., & Vitaliano, D. F. (2007). An empirical analysis of the strategic use of corporate social responsibility. *Journal of Economics & Management Strategy*, 16(3), 773–792.
- Swanson, D. L. (1995). Addressing a theoretical problem by reorienting the corporate social performance model. *Academy of Management Review*, 20(1), 43–64.
- Swanson, D. L. (2008). Top managers as drivers for corporate social responsibility. In Crane, A. (ed.) *The Oxford handbook of corporate social responsibility*, Oxford University Press, 227–248. (<https://doi.org/10.1093/oxfordhb/9780199211593.003.0010>, published online 2 September 2009).
- Swanson, D. L. (2014). Embedding CSR into Corporate Culture: Challenging the Executive Mind. Palgrave Macmillan.
- Valmohammadi, C. (2014). Impact of corporate social responsibility practices on organizational performance: An ISO 26000 perspective. *Social Responsibility Journal*, 10, 455.
- Vearrier, L. (2020). Enlightened self-interest in altruism (ESIA). *Hec Forum*, 32(2), 147–161. Springer Netherlands.
- Xiang, W. N. (2016). Ecophronesis: The ecological practical wisdom for and from ecological practice. *Landscape and Urban Planning*, 155, 53–60.

Enterprise Development

► Corporate Development

Enterprise Philanthropy

► Venture Philanthropy

Enterprise/Corporate Model

► Business Model

Entrepreneurial Orientation

► Intrapreneurship

Entrepreneurial Sustainability

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Synonyms

Business sustainable development; Sustainability in entrepreneurship

Definition

Sustainable entrepreneurship can be defined as an entrepreneurial action in which the production and exchange of goods and services represents an intermediate, or instrumental, goal in achievement different aims, both economic and non-economic.

In sustainable entrepreneurship, the concept of “gain” disregards the “economic” vs. “non-economic” bipartition tradition, to assume an autonomous space in which the focus on non-economic aspects does not compromise the achievement of purely economic objectives. In this sense, the non-economic targets are not considered as simple complements to those of an economic nature: it does not postulate a two-dimensional geometric space to be filled through a variable combination of the two types of objectives previously mentioned, but, on the contrary, it theorizes a multifaceted and three-dimensional concept of entrepreneurial space, which is interactive and

dynamic, and in which the two ideal elements of economic and non-economic purposes are not mutually exclusive but can be fed to each other, generating potential so-called win-win situations.

Introduction

Nowadays, one of the most discussed aspects, both at the academic and research level, and in the empiricism of the productive sector, is represented by the role of the entrepreneur and business organizations in modern economic systems.

Within the multitude of roles that the entrepreneur can embody, many have nothing or little to do with the constructive and innovative function that traditional economic theories conventionally attribute to this particular economic actor.

In this sense, Hobsbawm and Wrigley (1999) argue that:

It is often assumed that an economy of private enterprise has an automatic bias towards innovation, but this is not so. It has a bias only towards profit. It will revolutionize manufactures only if greater profits are to be made in this way than otherwise. (p. 18)

This means that the figure of the entrepreneur can also be represented, in the economic reality, with profoundly negative conceptual meanings, to the point of constituting – even – the emblem of a parasitic function (Baumol, 1996), in large of deeply damaging himself, the other entrepreneurs and, more generally, all the actors present in a given economic system (more or less widely, depending on the potentially generatable effects).

The central point of the discourse is that it must necessarily be recognized that entrepreneurship presents:

- An economic function, linked to the ability to create wealth or profit
- A social function, linked to the achievement of nonfinancial purposes

Following this distinction, the related ends may be different but, in any case, they can be referred to two main categories:

- Economic objectives, in which profit is included, in addition to many others.
- Social objectives, concerning the set of social, environmental, moral, and ethical purposes towards which each entrepreneurship naturally converges.

It is, however, useful to highlight that some authors (Baumol, 1996) believe, more specifically, that the effects resulting from the entrepreneurial action are specifically connected to the rules of the economic system and, more in detail, of the business context. In other words, it would be the rules and not the nature of the specific objectives pursued that would be the instrument, the levers by which concrete and real economic effects would be produced.

Nonetheless, recently, a general tendency to emphasize ethics and morality within the vast and varied social landscape is increasingly evident. This trend is even more evident in the economic context, where the reputational aspects of the organizations that are part of it have assumed an increasingly growing importance. On the other hand, this has also determined the need to ensure that the pursuit of social, environmental, moral, and ethical aims is achieved not by mere adherence to principles, rules, or regulations but rather by actual behavior directed towards such ambitious non-financial goals (Arjoon, 2005).

Precisely in this direction, corporate social responsibility and sustainability play a key role (Gonzalez-Perez & Leonard, 2013; Chetty et al., 2015), as disclosure, environmental performance, and, in general, social goals are closely connected to the reputation of any type of organization (Surroca et al., 2010; Tang et al., 2012), as a sustainable performance of success leads to a strong and well-valued reputation (Cho et al., 2012).

Indeed, the relationship of mutual dependence between entrepreneurship and the external environment implies that corporate social responsibility can be understood as an important tool for sustainability. In this sense, environmental and social problems do not represent a limitation for organizational performance but, on the contrary, an opportunity for the development of the

company and therefore capable of generating potentially economic value for the company itself (Porter & Kramer, 2006).

For these reasons, the sustainable development has gradually become one of the most discussed topics of our time, although it is necessary to highlight very different interpretations also on the correct meaning of the term “sustainability” applied to entrepreneurial activity.

For example, it is absolutely common to discuss problems related to the depletion of ozone in the atmosphere, the consequences deriving from increasingly anomalous climate changes with respect to seasonal variations, the progressive destruction of biodiversity, and many other issues that clearly demonstrate the absolutely negative potential for the future survival of the human species. In this respect, many authors have begun to argue that, unlike what is currently possible to imagine, entrepreneurial action has all the tools potentially able to ensure the preservation of natural ecosystems, significantly limiting the negative effects produced so far (e.g., Cohen & Winn, 2007; Dean & McMullen, 2007; Shepherd & Patzelt, 2011).

However, alongside the typical environmental problems, it is necessary to highlight that ethical and moral trends mentioned above are further confirmed in numerous and various social objectives that entrepreneurial action often has to face.

In this sense, it is also possible to argue that entrepreneurial action can support communities. Some authors (Peredo & Chrisman, 2006), for example, have theorized the concept of community-based enterprise, which can be defined as a social organization or process in which the community acts both as an entrepreneur and as a company to pursue economic, social, individual, and group objectives of a community: in other words, it pursues sustainable benefits in the short and long term which represent, in essence, the common good and which, mainly, allows us to express two very important logical points.

First, last example is particularly useful for demonstrating that economic profit is a fundamental and necessary element, but not sufficient for the correct and complete definition of

entrepreneurship (Venkataraman, 2019), since the concept of enterprise postulates a plurality of aims and objectives attributable (Peredo & McLean, 2006) and which can be, as previously specified, of an economic and social nature.

Second, this last clarification is very important because the careful reading of what has just been highlighted allows us to identify a common conceptual element which, in fact, also allows us to overcome the same distinction between economic and social objectives. Indeed, it is necessary to start from the fact that the scientific literature shows that there is no absolute consensus on the definition of “entrepreneur” and, considering the latter concept closely connected to the activity of “entrepreneurship”, on what he does in his “entrepreneurial” role (Peredo & McLean, 2006; Venkataraman, 2019).

The two aforementioned premises, therefore, make it possible to support the thesis that allows the recognition of the true commonplace of the conceptual figure of entrepreneurship and, for what has been explained above, of the entrepreneur: the real qualifying element would be the ability to create a significantly greater value, more than the traditional elements recognized in the past (profit, risk, uncertainty, creativity, etc.). The essential point, however, is that the elements deriving from the classical theories of entrepreneurship (Say, 1847; Schumpeter, 1974) are not alternative to the concept of value creation (Moore, 1995; Bozeman, 2007; Esposito & Ricci, 2015; Pavone et al., 2023) but rather the analytical species of it which would represent its genus.

Moreover, Say (1847) wrote that the entrepreneur requires such a combination of “moral” qualities of judgment, perseverance, and knowledge of the world, as well as of business.

Sustainable Entrepreneurship Definitions

Since profit is a fuzzy and multiform concept, it cannot be assumed as a possible absolute indicator of the capacity to create value of any type of economic organization. In this sense, some

authors highlight that although the economic profit of a company can be considered a reasonably useful indicator for estimating the ability to create value, however, it is also argued that the consideration of the social nature of economic activity limits enormously this indicative capacity because, in particular, profit should not be seen as the only absolute and indisputable measure of the ability to create value (Civitillo, 2021), also depending on the fact that it is not always able to always measure customer satisfaction. In this way, some studies show that a broader indication of the virtuous capacities of entrepreneurial activity could be the social impact (Dees, 2001) precisely because the indicators of financial performance would, in many cases, be partial and limiting (Moore, 2000; Ricci & Civitillo, 2018).

Taking inspiration from the reflections set out above, we can emphasize the following key-points about the modern concept of entrepreneurial activity:

- It goes beyond the consideration of profit or, more generally, of financial wealth as an element that is both necessary and sufficient for its exhaustive definition.
- It is built on the growing awareness that, on the contrary, elements typical of both the economic function and the social function of entrepreneurial activity are intertwined.
- Even if it is not possible to highlight a clear prevalence of one over the other, the social function is acquiring, in more recent times, an increasing importance, also due to some current trends relating to the world economy (e.g., Agenda 2030 and SDGs-Sustainable Development Goals).

Sustainable entrepreneurship can be defined as an entrepreneurial action in which the production and exchange of goods and services represents an intermediate, or instrumental, goal in achievement different aims, both economic and non-economic. For economic purposes, profit, income, wealth, assets, and any other element susceptible to an evaluation and an economic or monetary expression are meant; for non-economic purposes, we mean all the objectives that can be generated by

the entrepreneurial function that are not immediately and directly subject to an economic and monetary evaluation and expression: the well-being of the community, life expectancy, social education, equity, equal opportunity, preservation of nature and natural ecosystem, etc.

The balance between economic and non-economic purposes can be ideally represented by a spectrum in which:

- At one extreme, the entrepreneurial processes are located that exclusively pursue the economic purposes (e.g., enterprises).
- To another extreme, the business activities are placed that try to achieve only non-economic purposes (e.g., nonprofit organizations).
- Within the continuum, it is possible to identify countless combinations, in which the mix between economic and non-economic ends can be constructed in various ways, depending on the decisions of the entrepreneurship itself.

However, it is essential to specify that not all the productive combinations that can be placed within the described continuum are necessarily qualified as sustainable entrepreneurship: in fact, the conceptual subdivision between exclusive economic purposes and non-economic objectives is only ideal. Any entrepreneurial activity, even when it can be placed in one of the two abovementioned external points, contains the aims of both categories and, therefore, any entrepreneurial function can basically be placed within the spectrum.

Sustainable entrepreneurship, on the other hand, is the entrepreneurial typology in which the concept of “gain” disregards the “economic” vs. “non-economic” bipartition tradition, to assume an autonomous space in which the focus on non-economic aspects does not compromise the achievement of purely economic objectives. In sustainable entrepreneurship, the non-economic objectives are not considered as simple complements to those of an economic nature: it could be said that this type of entrepreneurship does not postulate a two-dimensional geometric space to be filled through a variable combination of the two types of objectives previously mentioned. On the contrary, sustainable entrepreneurship theorizes a multifaceted

and three-dimensional concept of entrepreneurial space, which is interactive and dynamic, and in which the two ideal elements of which it is composed, economic and non-economic objectives, are not mutually exclusive but, on the contrary, can be fed to each other, generating potential so-called win-win situations.

Summary

Nowadays, the role of the entrepreneur and business organizations in modern economic systems may be a particularly debated issue. It must necessarily be recognized that entrepreneurship presents:

- An economic function, related to the ability to create wealth or profit.
- A social function, related to the achievement of non-financial purposes.

Sustainable entrepreneurship can be defined as an entrepreneurial action in which the production and exchange of goods and services represents an intermediate, or instrumental, goal for the achievement of different ultimate goals that are both economic and non-economic.

The balance between economic and non-economic purposes can be ideally represented by a spectrum in which:

- At one extreme, the entrepreneurial processes that exclusively pursue the economic purposes (e.g. enterprises) are located.
- To another extreme, are placed the business activities that try to achieve only non-economic purposes (e.g. non-profit organizations).
- Within the continuum it is possible to identify countless combinations, in which the mix between economic and non-economic ends can be constructed in various ways, depending on the decisions of the entrepreneurship itself.

In sustainable entrepreneurship the concept of “gain” disregards the “economic” vs. “non-economic” bipartition tradition, to assume an autonomous space in which the focus on non-economic

aspects does not compromise the achievement of purely economic objectives.

Cross-References

- Auditing and Sustainability
- Corporate Sustainability
- Corporate Sustainability and Responsibility
- Corporate Sustainability Reporting Index
- Culture, Tourism, and Sustainability (Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism)
- Economic Sustainability
- Index of Sustainable Economic Welfare
- Sustainability Accounting
- Sustainability and Profitability
- Sustainability as a Management Approach
- Sustainability Report and Sustainability Reporting
- Sustainable Companies
- Sustainable Development
- Sustainable Performance
- Sustainable Reporting

References

- Arjoon, S. (2005). Corporate governance: An ethical perspective. *Journal of Business Ethics*, 61, 343–352.
- Baumol, W. J. (1996). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Business Venturing*, 11(1), 3–22.
- Bozeman, B. (2007). *Public values and public interest: Counterbalancing economic individualism*. Washington: Georgetown University Press.
- Chetty, S., Naidoo, R., & Seetharam, Y. (2015). The impact of corporate social responsibility on firms' financial performance in South Africa. *Contemporary Economic*, 9, 193–214.
- Cho, C. H., Guidry, R. P., Hageman, A. M., & Patten, D. M. (2012). Do actions speak louder than words? An empirical investigation of corporate environmental reputation. *Accounting, Organizations & Society*, 37, 14–25.
- Civitillo, R. (2021). *Management in the non-profit sector a necessary balance between values, responsibility and accountability*. New York: Routledge.
- Cohen, B., & Winn, M. I. (2007). Market imperfection, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22, 29–49.
- Dean, T. J., & McMullen, J. S. (2007). Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22, 50–76.
- Dees, J. G. (2001). *The meaning of social entrepreneurship*. https://web.stanford.edu/class/e145/2007_fall/materials/dees_SE.pdf
- Esposito, P., & Ricci, P. (2015). How to turn public (dis) value into new public value? Evidence from Italy. *Public Money & Management*, 35(3) 227–231.
- Gonzalez-Perez, M., & Leonard, L. (2013). *International business, sustainability and corporate social responsibility*. Bingley, UK: Emerald Group Publishing.
- Hobsbawm, E. J., & Wrigley, C. (1999). *Industry and empire: From 1750 to the present day*. The New Press.
- Moore, M. (1995). *Creating public value*. Cambridge and London: Harvard University Press.
- Moore, M. (2000). Managing for value: Organizational strategy in for-profit, nonprofit, and governmental organizations. *Nonprofit and Voluntary Sector Quarterly*, 29(1), 183–204.
- Pavone, P., Ricci, P., Calogero, M., & Capaccioni, P. (2023). A literature overview on data-driven value and accountability: Connecting the private and public dimensions. *Public Integrity*, 1–20.
- Peredo, A. M., & Chrisman, J. J. (2006). Toward a theory of community-based enterprise. *Academy of Management Review*, 31(2), 309–328.
- Peredo, A. M., & McLean, M. (2006). Social entrepreneurship: A critical review of the concept. *Journal of World Business*, 41(1), 56–65.
- Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Ricci, P., & Civitillo, R. (2018). Italian public administration reform: What are the limits of financial performance measures. In E. Borgonovi, E. Anessi Pessina, & C. Bianchi (Eds.), *Outcome-based performance management in the public sector* (pp. 121–140). Cham, Switzerland: Springer.
- Say, J. B. (1847). *A treatise on political economy*. Grigg, Elliot & Schumpeter, J. A. (1974). *The theory of economic development*. Oxford: Oxford University Press.
- Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed”. *Entrepreneurship Theory and Practice*, 35(1), 137–163.
- Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5), 463–490.
- Tang, A. K., Lai, K., & Cheng, T. (2012). Environmental governance of enterprises and their economic upshot through corporate reputation and customer satisfaction. *Business Strategy and the Environment*, 21, 401–411.
- Venkataraman, S. (2019). The distinctive domain of entrepreneurship research. In *Seminal ideas for the next twenty-five years of advances*. Emerald Publishing Limited.

Entrepreneurship Outlook

- [OECD Guidelines for SMEs](#)

Environment

- [Environment, Social, and Governance \(ESG\)](#)
- [Hunger and Poverty](#)
- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

Environment and Ethics in Sustainability

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Synonyms

[Moral principles](#); [Intrinsic value](#)

Definition

Environmental and ethics is a subfield of applied philosophy that examines the theoretical underpinnings of environmental values and more practical concerns, including societal attitudes, behaviours, and policies that aim to preserve biodiversity and ecosystems

Introduction to Environment and Ethics

Understanding the environment takes a wide variety of knowledge because it is such a broad and nebulous concept. Ethics is concerned with the values that direct people's actions. The philosophical field of environment and ethics, sometimes known as environmental ethics, examines the moral and ethical link between humans and the environment. It examines the moral bond between people and the planet, animals, and plants. In the 1970s, the science of protecting the environment was recognized as a legitimate academic field. Specialists tried to understand how business industries, technology, and the expanding worldwide population have an environmental impact. Ethics is the study of the rules that govern how people behave. Environmental ethics, with its internal conflicts and disagreements, can shed important light on international environmental politics. It covers the right and wrong things to do concerning many issues, such as environmental concerns. What is the right or incorrect activity concerning the environment, which is the goal of environmental ethics? Freedman (2018) identifies the tenets that best explain and outline the ethical interconnection of the environment with individuals. This concept emerged from the realization that environmental challenges as they are understood in the world require a fundamental cognitive foundation. Therefore, environmental ethics can promote scientific heterogeneity in global environmental politics by interacting with the philosophical background of the metanarratives that influence our conceptions of the human relationship and dependency on nature. Early environmental ethics focused on endowing nature with intrinsic value in addition to the operational one that had predominated for several centuries prior. These new ethics needed nature's intrinsic value as its basis to broaden ethics to other living things. Discussions over what would constitute the value-granting characteristic-tying humans and non-humans became exceedingly complicated and challenging (Light 2002; ICFE 2021). An ongoing goal of environmental ethics has been to encourage ways of living that improve a healthy, balanced relationship with nature. The idea and

basis of the environment are closely related to the development of human civilization on earth.

Environmental health is equally important to physical well-being (Macassa 2021). According to religious ethics, love, affection for creation, and justice are essential components (Tarcísio 2018). This situation encompasses Judaism, Islam, and Christianity (Mawil 2011; Hassan 2020). Because of these ideals, numerous legal challenges have also been created. It tries to bring about world peace. This concept was acknowledged in Article 17 of the Universal Declaration of Bioethics, adopted in 2005 at the UNESCO General Conference. According to international environmental law, people should coexist peacefully with the natural world. Global humanitarian organizations and organizations have adopted the notion of environmental ethics. The advancement of environmental ethics, environmental rights, and environmental justice is a significant issue for Friends of the Earth International. Environmental ethics must assess the degrees of value placed on beings other than humans before it can be said to remain a concern of humankind (Kopnina et al. 2018).

The Environmental and Ethical Importance

Applying ethics to the environment is necessary for environmental development, just as it is for business, medicine, engineering, law, and technology. It updates conventional notions of what is morally essential to consider living things like plants, animals, endangered species, ecosystems, and occasionally even the entire planet (Baker and Michael Richardson 1999; Palmer et al. 2014). This idea is significant for at least three connected reasons. To reach the goal of a green economy, global climate governance first looks to construct norms, regulations, and institutions to regulate conduct. To reorganize our connection to the planet and its inhabitants, we must be involved with sustainability technology's ethical part (Kothari 1994; Kibert et al. 2012).

Moreover, the need for fundamental rethinking is essential for humans to exist in nature, moving

beyond concepts of dualism and separation, as well as a radical rejection of the notion that humans are the only source of value, including all other living things and inanimate objects. Third, human behavior is seen by global environmental politics as a significant contributor to the issue. Thus, we must also look at the philosophical environment and the values that form it. When Routley (1973) asked if we needed a new sort of ethics, he made the first historical reference to environmental ethics. He created "the last man's" philosophical exercise. According to Liobikiene and Poškus (2019), the complexity of environmental protection acknowledges the root causes of environmental concerns highlighted towards the humanistic legacy for isolation of meta-conceptual previously discussed, strengthened by the influence of technological advancements and by a smug attitude toward nature. Technology has permeated every aspect of our life to the point where we regard them as incredibly important to survival (Valera 2020). A circle of responsibility for the natural world is added by environmental ethics, starting with domesticated animals as pets or cattle, followed by those utilized in zoos or for medical research. In addition, there are obligations toward wild creatures. If one hunts, do it compassionately (Erica and Michael 2021).

Types of Environmental Ethics

Environmental protection has been dominated by discussions of several ways to root the inherent value of nature for centuries, giving rise to several types, including animal rights, fundamental ecologism, property ethics, biocentrism, and feminist theory.

Animal Liberation: One of the most well-known representatives of all these pro systems of thinking is Peter Singer (1975). He gave a critical speech that helped launch the fight for animal liberation. Since Singer upholds the concept of equal representation of interests for all people, including nonhuman animals, there is no moral basis for exploiting animals. The equality

principle also enables Singer to reject and denounce inhuman treatment. Singer claims that the rationale for torturing, killing, and ignoring animals' existence comes from speciesism.

Land ethics: This was influenced by Aldo Leopold's writings (1887–1948). He suggests that we should value land philosophically, expecting the fundamental value of nature rather than economically. The works of Callicott (1999) aimed to create a conceptual part to land tenets that ordered more people than the researcher Leopold did. This researcher calls for a metaphysical transformation from an individual while advancing the notion that humans and nature, taken as a whole, are one new being.

Deep ecology is a third trend in environmental ethics and was put forth by Arne Naess (1973), who distinguished between superficial ecology and fundamental ecology, the latter defined by seven normative principles that offer a single implementation for ecosophical systems. Fundamental ecology differs from other forms of ecology in that it focuses on ontology, the consciousness of individual states, and tries to expand it further.

Ecofeminism: Ecofeminism is a fourth non-essential trend. It falls into two categories: firstly, acknowledging gender differences while also trying to value female traits that are underrated in Modern nations; and secondly, advocating the rejection of both masculinity and femininity in favor of creating a new culture. This term is known as the difference and the deconstructive models, according to Dobson (1995). The principal proponent of the deconstructive concept is Val Plumwood (1993, 2002), who contends that dualisms obstruct genuine advancements in ecofeminism. Male and females should oppose the dualized perspective on human identity and create a new culture that indeed acknowledges uniqueness as concurrent with, not apart from, nature (Plumwood 1993; Douglas and Michael 2017). It encourages the notion that transforming source to thinking is required in a non-patriarchal setting and entails rethinking knowledge, reality, and ethics.

Principles of Environment and Ethics

Using ethical principles as criteria or benchmarks allows us to assess our behavior. They are moral standards. Justice and sustainability, sufficiency and compassion, and solidarity and participation are fundamental pairs of concepts. They have roots in many civilizations, including Greek philosophy, religious doctrine, and the human condition contemplation.

Principle of justice: The conventional rule of law emphasizes that everyone has the right to be treated unless there is a valid reason not to. Although it can be undoubtedly pertinent to all ethical areas of the law, this principle applies to many problems. It is concerned with the unfairness of higher pollution and the inequalities in accessibility to the natural resource (clean food, air, and water), which often characterize lower-income regions rather than affluent suburbs. Justice is extended into the future via sustainability. The ethical concept of fairness is in play because it supports the requirement to balance the demands of those who live presently (both wealthy and less privileged) with the requirements of future generations. Therefore, environmental rules broadened the idea of fundamental justice that must include the future generation (Keith 2009).

Principle Sufficiency and Compassion

According to the sufficiency principle, all living things must have access to enough resources to survive and thrive. Intolerance of mismanagement of resources intended to be sufficient for people. Maintaining the standard of sufficiency places obligations on both individuals and human groups to ensure that everyone has access to the resources they require to keep a life of self-respect. These demands include sharing, living more simply, and exercising creativity. The idea of ethical significance denotes that something deserves moral care. This feeling is closely related to the ethical norm for sufficiency. It thus suggests that we consider what others need from us. It serves as the foundation for empathy. This principle may contrast with

the idea that there are not enough resources on earth to meet everyone's needs, particularly in some people's opinions. According to environmental ethics, humans must act to meet the needs of all living things, including other creatures, vegetation, and the environment.

Participation and Solidarity

The concept of solidarity challenges us to consider how we relate with each other. In a world where the economy is becoming more globalized, we are a part of a big, interconnected economic society where people on the other side of the globe provide our needs with goods and services. To be in a position of solidarity, we must consider this type of larger community and act in a way that shows concern for the welfare of others. The need for solidarity directs our attention to the concept of inclusion and enables those who may be affected by environmental policies to influence these same policies. Transparency, or the availability of the same information to everyone, is a prerequisite for genuine involvement. Environmental ethics emphasizes the need to consider people's moral character and behavior more than conventional environmental protection, which is primarily concerned with the intrinsic nature. Sandler (2005) states that human develop laws, advance policies, and behave toward nature according to their personality traits, attitudes, habits, and inclinations. Identifying environmental virtues and the character-based role that individuals play in applied protection is possible. Morality considers the growing significance of welfare in only modernization dialogues, connecting with the position of rightness in personal growth, attitudes, and ways of life, and integrating a feeling of instilling human attributes that improve a balanced and cohesive connection and interaction with the environment. It emphasizes protecting coming generations and the significance of virtue morality discourse in policy measures taken during an environmental setback. The conventional rule of justice states that

humans should be treated equally irrespective of their personality, unless there is a compelling cause to do otherwise.

Environment and Ethics in Theory and Practical

Environmental ethics, in theory, and practice, is about having the correct values and obligations for the natural environment. The study of environmental ethics has focused on finding and understanding the principles that have influenced how people interact with nature and the foundations of various interactions, such as reliance and connection. Direct or indirect connections exist between environmental ethics and effective governance, addressing these societal wellbeing challenges (Noor 2011). Environmental ethics is a moral framework regulating how people think, act, and behave when engaging with the environment. Internalizing environmental ethics helps people think morally, so they may consider social, economic, and environmental factors when implementing sustainable development (Heruyono et al. 2021). Environmental sustainability has ethical implications in addition to academic and practical ones. It can be incorporated into existing social work ethical statements that fully extend the ideals of justice in the natural environment field (Bowles et al. 2018). Environmental ethics are crucial and understanding their significance can help the environment and people.

Environment, Ethics, and Globalization

Environmental ethics is essential for sustainable development and protecting the environment in the present era, which dates to the earliest ancient civilizations (Noor 2011). Due to its consequences in the development discourse, it is already a global problem. However, most people in both developed and undeveloped nations are unaware of its significance. It is simple for everyone to set up their obligations and duties

effectively, which could result in sustainable growth while considering environmental ethics for our future generations to live in peace and happiness on our planet (Noor 2011). In the present world, the concept of the environment is entirely different. Today's environmental understanding is primarily micro-based. The environment and globalization policy openly acknowledge the importance of the natural environment to human survival (Bowles et al. 2018). Environmental philosophy and ethics, however, continue to be under-represented in most world environmentalism discourses and literature, despite the clear inadequacies of restricted disciplinary approaches. These current approaches are linked to socioeconomic, geopolitical, and ethical issues primarily represented by environmental pragmatism and virtue ethics. It educates us to lead healthy lives and to be supportive of human progress and the environment. This attribute is primarily found in international human rights law regarding internationally recognized law. Incorporating the necessity for environmental protection into the community is to achieve sustainable development. It has been a major undertaking for contemporary time, including the UN organization, its competent authorities, and other global and regional bodies. The effects of globalization on contemporary society are adverse because we lack a broad perspective or style of thinking. Some nations, including the USA, India, Sri Lanka, the UK, Bangladesh, the EU, and Pakistan, are concerned about the environment's devastation and contamination. They are involved in the development and environmental conservation problems. To achieve global sustainability, we must address sustainable practices, ethical planning, management challenges, and ethical tourism (Nicholas and Thapa 2010). In addition, most significant law schools, like Macquarie Law School, the Environmental Law Centre at the National University of Singapore (NUS), and the Pace Law School, have played crucial roles in addressing environmental and ethical issues both domestically and internationally. The worldwide concept of social work and any future Declaration

of Ethical Principles must incorporate sustainable development and the preservation of the environment (Bowles et al. 2018).

The Relationship Between Environmental Ethics and the Environmental Sciences

Environmental and ethical considerations are linked to development and a sustainable environment, respectively (Patra 2014). Various scientists from various professions and using various references have described domesticated animals as the entirety of the surrounding universe, including plants (Noor 2011). Environmental ethics defines man's moral and ethical responsibility to the environment. It considers the moral interrelationship between humans and the natural world and the kind of environmental decisions that individuals must make. Environmental ethics provides moral justification for societal policies that strive to preserve the environment and reverse environmental deterioration (Barman 2017). Science and technology have contributed to the modern era, and civilization now relies on technological development. Information technology and technology, in general, have significant adverse effects on the environment (Thomas 2006). According to Light (2002), environmental ethicists should concentrate on finding the best ways to assist the environmental community in reasonable conscientious justifications for favoring the initiatives upon whom our opinions currently generally coincide. Callicott (2018) asserted that humanistic environmental ethics should be important to human beings. Since this upcoming environmental issue is detrimental, the author continues, it is fundamentally a matter of global warming ethics. He acknowledged the necessity for an upgrade of environmental ethics.

Multidisciplinary research is involved in environmental ethics. Ability in biology, physics, law, economics, psychology, sociology, and philosophy is incorporated. Environmental protection concerns the preservation of animals, freshwater

use, fresh air, and mineral production and can be broadly divided into descriptive and normative categories (Envethics 2005). Environmental ethics studies how morally responsible humans should be toward the environment. In the 1970s, an area of philosophy called environmental philosophy was formed. The Population Bomb by Paul Ehrlich published in 1968, and Silent Spring by Rachel Carson published in 1962 both described how the widespread use of synthetic chemicals posed a severe threat to public health, being the cause of the extinction of wildlife. Both books were influential and released around the same time (ISE 2006).

We must adhere to the morals outlined in the holy scriptures such as Quran, Bible, gospel, and others because this topic has been treated in these religions in several ways (Mollah and Dastagir 2010; Ibrahim 1983; Alwazna 2016). Environmental ethics merely seeks to address the issues of how people ought to interact with their environment without having any special international environmental codes (Barman 2017). All human and natural qualities are a prerequisite for environmental ethics. It is necessary for a sustainable environment and future (Simon 2010).

According to some experts, the continents once broke apart, which is why they are progressively drifting away. It means that the movement disturbs the earth's surface. People are the only ones responsible for these issues and the injustice done to the environment. Science and technology have contributed to the modern era, and civilization now relies on technology. Information technology and technology, in general, have significant adverse effects on the environment (Mahdavi and Sojoodi 2021). Environmental ethics and rights are interconnected. Every living thing on earth has rights, and this includes the environment. It discusses the 1998 Aarhus Convention. It means having entrance to unpolluted, uncontaminated, and clean environments necessarily needed by everyone to survive. Additionally, they cover extensively the ecologically focused values, such as the opportunity to appreciate an unaltered landscape or the need for certain

insects to exist. Most activities rely on technologies, including the net, computers, and related tools that promote environmental research and sustainability.

Summary

The importance of environmental ethics in present-day society is indispensable. The value of environmental ethics in today's culture cannot be overstated. Our ability to live on this planet, our home depends on our adherence to current laws, regulations, and environmental ethics. It addresses issues such as environmental protection, ethical instruction, ancient traditions, and nature stewardship that are essential to humankind's continued sustainability on our planet. All ethics, including environmental ethics, aim to value life appropriately. The complete environmental ethic requires the best naturalistic and humanistic justifications for preserving ecosystems. We might be able to solve 90% of our problems or more if we cared more about how ethical issues are applied to all situations, including the environment. Environmental ethics and its methods can be beneficial in running our lives efficiently and creating a balance between humans and other creatures in the environment.

Cross-References

- [Discourse Ethics](#)
- [Environment and Ethics in Sustainability](#)
- [Ethical Theories II](#)
- [Ethics Management](#)

References

- Alwazna, R. Y. (2016). Islamic law: Its sources, interpretation and the translation of it into laws written in English. *International Journal for the Semiotics of Law*, 29, 251–260.
- Baker, E., & Michael Richardson, M. (Eds.). (1999). *Ethics applied* (2nd ed.). Simon & Schuster. Chapter 11 Ethics and the environment, pp. 407–437.

- Barman, M. (2017). *XVIII Annual International Conference Proceedings*.
- Bowles, W., Boetto, H., Jones, P., & McKinnon, J. (2018). Is social work really greening? Exploring the place of sustainability and environment in social work codes of ethics. *International Social Work*, 61(4), 503–517.
- Callicott, J. B. (1999). *Beyond the land ethic: More essays in environmental philosophy*. Front Cover. SUNY Press - Philosophy - 427 pages.
- Callicott, J. B. (2018). Environmental Ethics in the Anthropocene. *Transtext(e)s Transcultures 跨文本跨文化 Journal of Cultural Studies*, 13. <https://doi.org/10.4000/trans texts.1064>
- Carson, R. (1962). *Silent Spring*. Harmondsworth: Penguin Books, 1971.
- Dobson, A. (1995). *Green political thought*. New York: Routledge.
- Douglas, J. D., & Michael, J. T. (2017). Monstrosities: Religion, identity and belief. *Religions*, 8, 102.
- Ehrlich, P. R. (1968). *The population bomb*. Ballantine Books.
- Environmental Ethics, Educator Guide. (2005). Retrieved from the www.videoproject.com/www.envethics.org. The Goldman Environmental Prize.
- Erica, V. E., & Michael, A. (2021). Killing with kindness: When hunters want to let you know they care. *Human Dimensions of Wildlife*, 26(2), 179–195.
- Freedman, B. (2018). Chapter 1 ~ Ecosystems and humans. In *Environmental Science: a Canadian perspective*. <https://ecampusontario.pressbooks.pub/environmental science/chapter/chapter-1/>
- Hassan, A. (2020). Sustainable development and Islamic ethical tasks for Business-Organisations. In J. C. Sánchez-García & B. Hernández-Sánchez (Eds.), *Sustainable organizations - models, applications, and new perspectives*. IntechOpen. <https://doi.org/10.5772/intechopen.94992>.
- Heruyono, A., Herdiansyah, H. and Putri, LGS. (2021) Environmental ethics perspective in fostering environmental awareness in the Bandung eco-camp community. *IOP Conference Series: Earth and Environmental Science*, 802, 012050. <http://www.cep.unt.edu/ISEE2/2006/James.pdf>
- Ibrahim, O. (1983). *Towards an understanding of environmental Ethics from a Quranic perspective*. <http://www.ibrahimozdemir.com/Makaleler/EnvironmentalEthics.p>
- International Commission on the Futures of Education ICFE. (2021). *Reimagining our futures together: a new social contract for education*. 188p.
- International Society for Environmental Ethics ISE. (2006). *Newsletter, with issues in the news, conferences and events of interest, and a quarterly updating of the current bibliographic literature*. <http://www.cep.unt.edu/ISEE.html>
- Keith, D. (2009). Engineering the planet. In S. Schneider & M. Mastrandrea (Eds.), *Climate change science and policy*. Washington, DC: Island Press.
- Kibert, C. J., Thiele, L., Peterson, A., & Monroe, M. (2012). *The Ethics of sustainability*. Portal Rio. 266p.
- Kopnina, H., Washington, H., Taylor, B., John, J., & Piccolo, J. J. (2018). Anthropocentrism: More than just a misunderstood problem. *Journal of Agricultural and Environmental Ethics*, 31, 109–127.
- Kothari, R. (1994). Environment, technology, and Ethics. In L. Gruen & D. Jamieson (Eds.), *Reflecting on nature. Readings in environmental philosophy*. Oxford: Oxford University Press.
- Light, A. (2002). Contemporary environmental ethics. From metaethics to public philosophy. *Meta-philosophy*, 33(4), 426–449.
- Liobikiene, G., & Poškus, M. S. (2019). The importance of environmental knowledge for private and public sphere pro-environmental behavior: Modifying the value-belief-norm theory. *Sustainability*, 11, 3324.
- Macassa, G. (2021). Can sustainable health behaviour contribute to ensuring healthy lives and wellbeing for all at all ages (SDG 3)? A viewpoint. *Journal of Public Health Research*, 10, 2051.
- Mahdavi, S., & Sojoodi, S. (2021). *Impact of ICT on environment*, preprint (Version 1), available at Research Square <https://doi.org/10.21203/rs.3.rs-1020622/v1>
- Mawil, Y. I. D. (2011). *Islamic environmental ethics, laws and society*, 10p. Retrieved on 3 February from <http://www.mbcru.com/Texas%20Tech%20Mypage/Conservation%20Biology/Assignment%20Izzi%20DeenIslamicEcol.pdf>
- Mollah, R. I., & Dastagir, G. (2010). Faith-based ethical reform for social stability and sustainable development.
- Naess, A. (1973). The shallow and the deep, long-range ecology movement. A summary. *Inquiry*, 16(1–4), 95–100.
- Nicholas, L., & Thapa, B. (2010). Visitor perspectives on sustainable tourism development in the pitons management area world heritage site, St. Lucia. *Environment, Development and Sustainability*, 12, 839–857.
- Noor, M. (2011). Need to implement the environmental ethics to protect the society: A study on global perspectives for sustainable development. *African Journal of Business Management*, 5(26), 10387–10395.
- Palmer, C., McShane, K., & Sandler, R. (2014). Environmental Ethics. *Annual Review of Environment and Resources*, 39, 419–442.
- Patra, R. (2014). Environmental sustainability: Ethical issues. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 1(8), 35–40.
- Peter Singer's. (1975). Animal Liberation: A new ethics for our treatment of animals, by Peter Singer, Barbara MacKinnon, *Modern Schoolman* 54(4), 420–421.
- Plumwood, V. (1993). *Feminism and the mastery of nature*. New York: Routledge.
- Plumwood, V. (2002). *Environmental culture. The ecological crisis of reason*. New York: Routledge.

- Rachel Carson. (1962). *Silent Spring*. *American Chemical Society National Historic Chemical Landmarks*. <http://www.acs.org/content/acs/en/education/whatischemistry/landmarks/rachel-carson-silent-spring.html>. Accessed Month Day, Year.
- Routley, R. (1973). Is there a need for a new, an environmental, ethic? Reprinted in Zimmerman, M.E., Callicott, J.B., Warren, K.J., Klaver, I.J., & Clark, J. (eds) *Environmental philosophy. From animal rights to radical ecology* (4th ed.), 2005, Upper Saddle River: Pearson Prentice Hall.
- Sandler, L. (2005). The quest to make accessibility a corporate article of faith at Microsoft: Case study of corporate culture and human resource dimensions, with Peter David Blanck, *23 Behavioral Sciences & the Law*, 39, 26 p.
- Simon, P. J. (2010). Human virtues and natural values. *Environmental Ethics*, 28(4).
- Tarcisio, A. C. (2018). Religious establishment according to a substantive ethics of political justice. *Seção Temática*, 18(3), 4.
- Thomas, S. (2006). *Information technology and arbitration: Technology and arbitration: A Practitioner's Guide*. Kluwer Law International, Paperback.
- Valera, L. (2020). New technologies. Rethinking Ethics and the environment. In L. Valera & J. Castilla (Eds.), *Global changes. Ethics of science and technology assessment* (Vol. 46, pp. 29–43). Cham: Springer.

Environment, Social, and Governance (ESG)

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Synonyms

Corporate Governance; Corporate Social Responsibility (CSR); Environment, Society; Socially Responsible Investment (SRI); Sustainability

Introduction

Climate change is one of the global issues where individuals, nongovernmental organizations,

governments, and corporations make coalitions to face a common concern. Nowadays, public opinion pays attention to those firms that do not show defiance of environmental and societal issues and further topics like transparency, business ethics, females' employment rates and wages, etc. that could be covered by the term corporate governance. Thus, modern consumers and investors consider firms with environmental, social, and corporate governance criteria. Therefore, the term ESG criteria has been created. In brief, the ESG criteria include issues like pollution, gas emissions, waste management, climate change, biodiversity loss, ozone depletion, renewable energy sources, etc. regarding the environmental field. The social field includes topics like human well-being, safe and good working conditions, local communities, etc., and governance field is about business code of conduct, wages discrepancies, gender diversity, equal opportunities, etc. (Sciarelli et al., 2021: 42).

To achieve long-term sustainable growth, you need the right balance among system, people, and culture...

Jack Ma, Cofounder and executive chairman of the Alibaba Group (*Setting the New Agenda for CFOs: Understanding the Role of Intangibles in Value Creation*, , 2021)

ESG Advantages for Companies

It is acceptable in general that companies with ESG action enjoy recognition by consumers and investors. Two global researches by McKinsey (2009 & 2019) conclude that most of managers agree that ESG activities enhance a company's value (McKinsey & Company, 2020). There is evidence that ESG firms are characterized by better financial performance, surplus value for their shareholders, and less volatility during recession periods like the global crisis of 2007–2009 and the current crisis with the pandemic of COVID-19 (Albuquerque et al., 2020).

Many researchers support that ESG programs serve a product differentiation strategy for a firm. Environmentally and socially responsible consumers become more loyal because they

appreciate this kind of orientation of the company. There is evidence that socially responsible consumers operate as significant factors for firms' transformation, CSR policy, and risk profile (Albuquerque et al., 2019). Furthermore, the firm earns a lower price-elasticity of demand for its products or services. Thus, higher profit margins could be achieved, and better financial performance could be expected along with better resistance during depression periods (Albuquerque et al., 2019).

ESG stock shares are more resilient to a downturn of the stock market. The investors who are environmentally and socially responsible are more reluctant to sell off their shares, and this fact keeps relatively stable the stock market prices in comparison with competition (Heinkel et al., 2001). Stocks with ESG characteristics and strong advertising policy managed to perform successfully during the first year of the pandemic. Furthermore, companies which managed to protect their workforce and apply sustainable supply chain principles maintained higher returns than competition in the US stock market (Albuquerque et al., 2020). However, and this concerns both the depression of 2007–2009 and the current pandemic, it is complicated for researchers to discriminate whether the good performance of ESG firms is due to their ESG strategy or it is the bond of trust between them and the market (Albuquerque et al., 2020).

Corporate governance is crucial to the continuing operation of any firm, and it is not limited to serve shareholders' welfare. High level of corporate governance targets to transform companies to ESG highly ranked companies by deterring frauds and scandals that could destroy firm's reputation (Kantabutra & Saratun, 2013). Being socially responsible or enhancing your ESG footprint increases the value of a company either by raising earnings and cashflows or by limiting the discount rates. Even though the influence of ESG on profitability is poor, firms that pay attention to ESG criteria are less risky and it is not probable to expose themselves to reputational and catastrophic risks regarding environmental or societal issues (Cornell & Damodaran, 2020).

Of course, there is a totally opposite opinion stating that pollution should be cleaned up by society or state. There is the famous statement attributed to Friedman, even a lot of business people had applied this concept much earlier than his statement, that the unique target of a company is to create wealth for its shareholders (Friedman, 1970). ESG programs are considered just a field of conflict between managers and owners, and a smart way for managers to confuse deliberately shareholders gaining more benefits for them (Albuquerque et al., 2020).

Critical element of any successful ESG or CSR policy is communication. It is true that there is no agreement among all researchers regarding the positive impact of ESG activities to a firm's overall performance. However, there is clearly a positive relationship between a well-communicated public ESG program and a firm's value (Servaes & Tamayo, 2013).

ESG and SRI

Big international scandals with environmental and financial impact from the last decade of the twentieth century and the first two decades of the twenty-first century like Exxon Valdez, Bhopal, Nike, Parmalat, Volkswagen, etc. accelerate the development of environmental and social awareness of firms and funding agencies. The same applies for the big depression of 2007–2009 which has caused a big lack of trust between business world and people. Thus, fund managers have started assessing their investment strategies using ESG criteria expanding the horizons of their investments reducing the risks and creating new opportunities for their investments (Sciarelli et al., 2021: 41). As a result, investors have decided to align their investment decisions with their personal values and sensitivities and they have leveraged firms to voluntarily limit their negative footprint on society and environment (Vanwalleghem, 2017).

SRI is a modern kind of investment that combines the classical financial characteristics with the integration of environmental, social, and

corporate governance criteria (Michelson et al., 2004). From a strategic point of view, this signals the incorporation of business ethics into traditional investment decision-making. From the operational point of view, this new kind of funding serves the transition to sustainable development (Sciarelli et al., 2021: 41). Currently, banks and international funding agencies are attracted by SRI and eschew to invest in firms with high ESG risk like polluting firms (for example, oil exploration and production companies). As the percentage of green investors is getting higher year by year worldwide, companies with lack of ESG strategy will have problem to raise funding and will face an increased cost of capital. On parallel, there is a significant percentage of consumers with increasing trend that care about ESG and boycott socially irresponsible suppliers. In this case, top managers of companies are going to be engaged in the operational ethical dilemma where they have to decide whether they have to support a possible reformation of their activities toward a more sustainable model or they should not invest in CSR programs for the favor of other usually short-term goals (Panagiotopoulos, 2020). However, it is rare for a big international organization not to have a CSR policy since the popularity of CSR nowadays implies its existence (independently of the real level of its adoption in corporate activities) even bypassing the research that may require to reason it (Albuquerque et al., 2019).

SRI funds have increased their share in global market. The Social Investment Forum in the USA and the Social Investment Organization in Canada are examples of such organizations that count already more than twenty years in ESG investments. It is not clear whether such organizations eschew investments in low-ranked ESG firms because they prefer to extract satisfaction from their noninvolvement in risky activities or they leverage such firms to rethink their ESG transformation (Heinkel et al., 2001). SR or ethical or sustainable investments are taking increasing share of international funds in comparison with the recent past. This is caused by the increased interest for corporate social responsibility by

consumers and the developed social awareness by organizations, institutions, and funding agencies (Sciarelli et al., 2021: 39–41).

ESG and CSR

The ESG criteria consist another way to talk about CSR. CSR is a term that usually comes for corporations' side since it is their creation, expresses how they realize their corporate citizenship, and embraces the environment, local communities, and employees. On the contrary, ESG is a term that comes outside of companies' environment, mainly from institutions like banks and consulting firms when they want to refer to sustainability and CSR issues of business world. ESG has come up in the United Nations Principles of Responsible Investment Report, and its use by banks and consultants consists to collect further financial and nonfinancial information about the environment, society, and corporate governance issues in order to have a more spherical picture of a company's position in the market and to better assess any possible risk or chance prior to any investment (United Nations & Mercer, 2007).

Both concepts have the same meaning and target to mitigate the negative social, environmental, and economical impact that comes from a company's actions and furthermore, to increase the positive social, environmental, and economical impact of a company's operation. The recognition and the involvement of stakeholders' interests into the decision-making process of a company is a major way for the fulfillment of these goals. Examining ESG criteria through the consideration of CSR policy of a firm as part of its intangible assets unfolds various dimensions of intangible corporate value, facilitates banks to use knowledge about intangibles to reason lending decisions, and provides new management control perspectives and investors' investigations and decision-making (Setting the New Agenda for CFOs: Understanding the Role of Intangibles in Value Creation, 2021).

A corporation's endeavors inside the frame of CSR policy could be described by the term

Corporate Social Performance (CSP) meaning the conjugation of efficiency and effectiveness to apply their ESG plans. As ESG and CSR are getting more popular between companies, consumers, researchers, and market analysts, focus on CSP and its impact on market value comes into the spotlight. Several researchers (Oikonomou et al. 2012; Mc Williams and Siegel 2001) support that a successful CSP enhances market value because it reduces costs and idiosyncratic risk. Other researchers think that the investments in ESG consist waste of money, time, and workforce (Groening and Kanuri, 2013). However, the interaction between ESG and CSR with a firm's financial performance and market value cannot be defined so easily. The quality of CSP and the efficiency of communication of CSR policy to the market and the society are critical factors that could have big fluctuation; thus, the answer to such questions cannot be binary. Most studies have tried to correlate an intense CSP with benefits back to the firms (Mackey et al., 2007), and thus the research is limited in cases where there is a weak CSP and how this affects a firm's value. Despite the conflict regarding the positive or negative influence of CSR and ESG to the financial position of a firm, unequivocally everyone agrees that the consideration and perusal of ESG factors offers an all-around picture of a firm about its position inside the multiple environments where it is activated, local market, international markets, etc. It is therefore true that the knowledge about CSR or ESG parameters offers safety and a more efficient risk management to firms, institutions, and consultants (Bassen & Kovacs, 2008).

ESG Reporting

There have been a lot of efforts toward the direction of a comprehensive reporting of ESG policy of a company. There is need for international standards that could offer guidance to firms and institutions regarding the reporting of this non-financial information which could be critical for the viability of an organization. The United

Nation's Global Reporting Initiative (GRI) is the most popular reporting standards regarding CSR/ESG policies. There is the World Intellectual Capital Initiative (WICI) which consists an international reporting network that assists companies and their stakeholders to put on paper ESG issues and express their importance through measurements with Key Performance Indicators (KPIs). WIPI concentrates international organizations like OECD, the Enhanced Business Reporting Consortium (EBRC) and the EFFAS Commission on Intellectual Capital (EFFAS CIC), Japanese Ministry of Economy, Trade and Industry (METI), Waseda University, and University of Ferrara, European Financial Analysts, Commission of Intellectual Capital, European Commission (observer), European Investment Bank (EIB), World Intellectual Property Organization (WIPO) (observer), Brazilian Development Bank (BNDES), and Society for Knowledge Economics in Australia (SKE) (Bassen & Kovacs, 2008).

The traditional sources for business are tangible things like machinery, real estate property, vehicles, and other technological equipment like IT infrastructure, etc. Modern corporations tend to spend an increasing amount of money to intangible assets like public relations, know-how, branding, research and development, and CSR. These nonphysical resources either separately than the rest or in combination with other tangible or intangible resources cause a positive or negative impact to firm's total value. Materiality comes through the conjunction between financial and ESG considerations (Setting the New Agenda for CFOs: Understanding the Role of Intangibles in Value Creation, 2021).

There is dispute regarding the value of considering ESG criteria. There are researchers and businesspeople who treat them as being risk factors which have influence on investment performance and, on the other hand, had some others believe that they are just social issues. Recently, the evidence of materiality concerning ESG parameters is spread worldwide, and an increasing number of researches support that (United Nations & Mercer, 2007).

The publication of the Principles for Responsible Investment (PRI) suggested a standard for

the incorporation of ESG parameters into the investment process. The PRI consists a global guide for SRI, and ESG as a term has been embodied in the modern financial vocabulary having as main target to make ESG part of every investment analysis and decision-making process (United Nations & Mercer, 2007).

The discussion around ESG and CSR includes issues like the potential return to the companies that have socially and environmentally responsible attitude, and their ranking. However, an ESG ranking seems to be complicated since it contains a lot of parameters comprised in three different groups environment, society, and governance. A report had identified 70 firms which used to provide ESG ratings up to 2019 excluding organizations like investment banks, state institutions, etc. that examine firms based on their ESG criteria and provide relevant ranking. Including any kind of ESG ranking, Fish et al. detected more than 600 ESG ratings in 2018. All these ranking systems are not based on the same philosophy since they may contain different parameters, and even regarding the same parameters, they may count them with a different way. Each ESG ranking system has a different prioritization of a multitude of parameters based on the beliefs of its creators about what really matters. However, we could claim that there is a common pool with topics and from there several indicators may come up. Bloomberg uses an ESG system with a hundred twenty ESG criteria. The main topics with which the majority of criteria are related refer to climate change, biodiversity, carbon emissions, energy management, waste management, discriminations at workplace, diversity, human rights, corruption, etc. (Cornell & Damodaran, 2020).

European Union and ESG

There were specifically in Europe 12 trillion US dollars that were going to be directed to ESG investments in accordance with Bloomberg report on February 8, 2019. Lawrence Fink who is the CEO of Blackrock said that it is impossible for a firm to discriminate its ESG responsibilities from

its efforts for growth and that its development target passes through a combination of balance with stakeholders' interests (Cornell & Damodaran, 2020).

The European Green Deal is Europe's common plan for sustainable development. It has as target the high living standards of European citizens concerning their health and natural conditions, a Europe climate-neutral by 2050, and the protection, preservation, and development of EU's natural capital and biodiversity. An economy that works for people implies a just transition that produces working positions for all. Thus, the European economic system must become more sustainable. This demands a strong common European financial legislation and a clear guide for this economic transformation. This long-term goal must take into consideration the financial recovery from the COVID-19 pandemic and keep stable its orientation for a sustainable European economy (EU Taxonomy, Corporate Sustainability Reporting, Sustainability Preferences and Fiduciary Duties: Directing Finance towards the European Green Deal, 2021). Regulation (EU) 2020/852 outlines a framework for sustainable investments (the EU Taxonomy Regulation) that entered into force on 12 July 2020. Through this regulation, technical screening criteria are provided for examining whether a financial activity could be environmentally responsible. These parameters assist firms, banks, investors, and consultants to discriminate which policies, strategies, and financial activities could be characterized as environmentally responsible (EU Taxonomy, Corporate Sustainability Reporting, Sustainability Preferences and Fiduciary Duties: Directing Finance towards the European Green Deal, 2021).

There are stakeholders that worry whether the scheduled actions by a firm could satisfy ESG criteria, for example, by using the EU Taxonomy Climate Delegated Act because a possible failure may arise difficulties for fundraising for them. However, it should be highlighted that whether a firm has a policy that could be characterized as ESG responsible based on their compliance with EU Taxonomy, this does not exclude it from

raising capital and this does not mean that it is ESG irresponsible. The EU Taxonomy is a transparency tool that calls corporations and other economic factors to disclosure activities related with sustainable economy. Especially the percentage of the activities that comply with Taxonomy could operate as a comparative criterion for the assessment of corporate programs. The EU Taxonomy considers corporate activities as environmentally responsible whether they have a substantial rather than marginal impact especially to EU environmental objectives. The EU Taxonomy has defined the standards for substantial participation and absence of critical harm, having as reference the targets described by the European Green Deal. Other tools like the EU Ecolabel for retailing financial products and the EU Green Bond Standard are expected in the next years to further support the endeavors for a sustainable European economy (EU Taxonomy, Corporate Sustainability Reporting, Sustainability Preferences and Fiduciary Duties: Directing Finance towards the European Green Deal, 2021).

Anti- Epilogue: Shareholders Versus Stakeholders

In parallel to increased environmental concern and social focus on ESG issues, a main driver toward sustainability is that there is a big group of industries related to these emerging ESG issues that have a high potential to generate new sources of revenue and profit. Indicatively, this happens with the developing industry around CO₂ extraction, sequestration, and trading, all of which appear poised to grow rapidly over the next 5–10 years with liquidity also building in the CO₂ emission credit market. However, financial history has shown that today's promising new entrants do not necessarily become tomorrow's successful enterprises (United Nations & Mercer, 2007).

Friedman stated in 1962 that “*There is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it*

stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.” (Friedman, 1962). On the contrary, the announcement from the Business Roundtable in 2019 signed by several famous CEOs mentions that “*Each of our stakeholders is essential. We commit to deliver value to all of them, for the future success of our companies, our communities and our country.*” (Cornell & Damodaran, 2020).

Cross-References

- Corporate Governance
- Corporate Social Responsibility
- Stakeholders

References

- Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). *Resiliency of environmental and social stocks: An analysis of the exogenous COVID-19 market crash*. European Corporate Governance Institute.
- Albuquerque, R., Koskinen, Y., & Zhang, C. (2019). Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science*, 65(10), 4451–4469. <https://doi.org/10.1287/mnsc.2018.3043>.
- Bassen, A., & Kovacs, M. (2008). Environmental, social and governance key performance indicators from a capital market perspective. *Journal for Business, Economics & Ethics*, 9(2), 182–192.
- Cornell, B., & Damodaran, A. (2020). Valuing ESG: Doing good or sounding good? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3557432>.
- EU Taxonomy. (2021). *Corporate sustainability reporting, sustainability preferences and fiduciary duties: Directing finance towards the European green Deal*. European Commission.
- Friedman, M. (1962). *Capitalism and freedom (first)*. University of Chicago Press.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times*.
- Groening, C., & Kanuri, V. K. (2013). Investor reaction to positive and negative corporate social events. *Journal of Business Research*, 66(10), 1852–1860. S0148296313000301. <https://doi.org/10.1016/j.jbusres.2013.02.006>
- Heinkel, R., Kraus, A., & Zechner, J. (2001). The effect of green investment on corporate behavior. *The Journal of Financial and Quantitative Analysis*, 36(4), 431. <https://doi.org/10.2307/2676219>.

- Kantabutra, S., & Saratun, M. (2013). Sustainable leadership: Honeybee practices at Thailand's oldest university. *International Journal of Educational Management*, 27(4), 356–376. <https://doi.org/10.1108/095135413111316304>.
- Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *Academy of Management Review*, 32(3), 817–835. <https://doi.org/10.5465/amr.2007.25275676>
- McKinsey & Company. (2020). *The ESG premium: New perspectives on value and performance*. McKinsey & Company.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127. <https://doi.org/10.5465/amr.2001.4011987>
- Michelson, G., Wailes, N., Van Der Laan, S., & Frost, G. (2004). Ethical investment processes and outcomes. *Journal of Business Ethics*, 52(1), 1–10. <https://doi.org/10.1023/B:BUSI.0000033103.12560.be>.
- Oikonomou, I., Brooks, C., & Pavelin, S. (2012). The impact of corporate social performance on financial risk and utility: A longitudinal analysis. *Financial Management*, 41(2), 483–515. <https://doi.org/10.1111/j.1755-053X.2012.01190.x>
- Panagiotopoulos, I. (2020). *Energy management and corporate social responsibility: The case of air- transportation*. University of the Aegean.
- Sciarelli, M., Cosimato, S., Landi, G., & Iandolo, F. (2021). Socially responsible investment strategies for the transition towards sustainable development: The importance of integrating and communicating ESG. *The TQM Journal*, 33(7), 39–56. <https://doi.org/10.1108/TQM-08-2020-0180>.
- Servaes, H., & Tamayo, A. (2013). The impact of corporate social responsibility on firm value: The role of customer awareness. *Management Science*, 59(5), 1045–1061. <https://doi.org/10.1287/mnsc.1120.1630>.
- Setting the New Agenda for CFOs: Understanding the role of Intangibles in Value Creation. (2021). World Intellectual Capital Initiative.
- United Nations & Mercer. (2007). Demystifying responsible investment performance: A review of key academic and broker research on ESG factors. *United Nations*, 82. https://www.unepfi.org/fileadmin/documents/Demystifying_Responsible_Investment_Performance_01.pdf.
- Vanwalleghe, D. (2017). The real effects of sustainable & responsible investing? *Economics Letters*, 156, 10–14. <https://doi.org/10.1016/j.econlet.2017.04.008>.

Websites

- https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en
- <https://www.wici-global.com/>

Environment, Tourism, and Sustainability (Ecotourism Management, Environment and Sustainable Tourism)

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Definition and Conceptual Framework

“Only when the last tree has died and the last river been poisoned and the last fish been caught will we realize we cannot eat money”. (Prophetic Cree Proverb)

“On a finite planet, at human carrying capacity, a society driven by selfish individualism has all the potential for sustainability of a collection of angry scorpions in a bottle”. William Rees (Wackernagel and Rees 1996: xi)

Summary

The environmental dimension of the sustainable tourism will be dealt with under this topic by trying to understand environment, tourism and sustainability relationship. Comprised of this framework, the sustainable tourism practices respectful to environment, the most prominent called ecotourism, will be referred. In order to have a good understanding of the given subject, it is essential to be knowledgeable about certain issues related on the one side to tourism which is a very complex industry – of course with sustainability perspective – and on the other to environment which has a quite wide knowledge base for the existence of the world. Main terms related to environment attempted to clarify include biodiversity, ecological footprint, climate change, reduction of carbon emissions, and the like.

Conceived in 1990 by Mathis Wackernagel and William Rees at the University of British Columbia, the “ecological footprint” launched the broader “footprint” movement, including the “carbon footprint,” and is now widely used by

scientists, businesses, governments, individuals, and institutions working to monitor ecological resource use and advance sustainable development ([Global Footprint Network](#)). As underlined by William Rees, the environmental crisis that is present in the world today is beyond being a technical or environmental problem. The problem ingenerates because of the wrong sociocultural and behavioral practices. Cooperation of individuals within society along with proper behaviors must be taken into account toward protection of environment while benefiting from it economically; thus, sustainability perspective is emphasized (Wackernagel and Rees 1996).

Similarly the unwelcome results of over-individualism to meet the individualistic needs without considering any backfiring outputs over the same shared environment are tried to be symbolized in the following proverb given at the beginning of this part. As may be concluded from the Prophetic Cree proverb, if the resources of the world are inattentively overexploited for the sole aim of financial gain, harming the environment or even destroying it until extinction of certain species, then humankind will no more be able to find any resources in the end to continue to survive. Additionally, the money earned in the end will be meaningless; it will not feed the humans.

If tourism is not practiced sustainably, the same risk is valid for the outputs of this highly complex industry. Hence, the management of environment, tourism and sustainability means creating the balance between exploiting the natural and cultural heritage resources for the service of tourism industry and simultaneously protecting them. To be able to realize this aim, certain solutions are created by the perspective of sustainable tourism as exemplified by such participative practices as ecotourism, rural tourism, community tourism, agrotourism, voluntourism, heritage tourism, and so on.

Sustainable Tourism and Environment

Sustainable tourism from the environmental dimension tries to manage with participative systems to keep water, energy, and air clean while

avoiding the risks of environmental loss (the loss of biodiversity and environmental resources) and measures to prevent risks of overcrowding, over-exploitation, or extinction. The “participative system” exhibits the keyword and the way the management function of the sustainable tourism should work. If the focus is not primarily on the profit but on the sociocultural gain, then the locality will earn. And finally there will be a win-win situation for all the parties including the environment. The protection of the natural and cultural resources as well as the well-being of the people living harmoniously with their surroundings will not be a dream but reality. Thus, if the primary aim of the investment projects for the sustainable tourism is the protection and upkeep of resources while sharing the benefits with the guests and the local people, then the aim of gaining touristic socioeconomic value will happen to follow automatically.

That shows what the philosophy of the sustainability is: to live in harmony with the environment, keep biodiversity and natural heritage, and reduce carbon emissions and its effects on global warming and climate change. People and industries leave to the world their footprint in each of their actions while living. If they behave considerately toward the environment, their actions will not harm it. But this is not the case since the second half of the nineteenth century when people began the autonomous production and consumption and thus produce and consume more than they need, harming the world’s resources. Today, the inevitable consequences threatening even the humankind happen to appear such as the global warming and climate change. The people in the world should calculate their actions more stricter and prudent than ever if they wish the species of the world including themselves do not become extinct. Some measurements and precautions exist for the calculation of the steps more carefully such as “ecological footprint.” The ecological footprint is defined as “the only metric that measures how much nature we have and how much nature we use,” and it is noted that “the Footprint helps countries improve sustainability and well-being; local leaders optimize public project investments, individuals understand their

impact on the planet” ([Global Footprint Network](#)). Footprint in this respect is also mentioned as combined by certain other words such as “environmental footprint” and “carbon footprint” ([Safire 2008](#)).

Ecological footprint in the framework of tourism is mentioned by Hunter ([2002](#)) as “Touristic Ecological Footprint” (TEF). In this study, it is concluded that as a result of the production and consumption of all the tourism services such as transportation, accommodation, and food and beverage, there is a need to develop more sophisticated methods of measuring the footprint left by not only the consumer side but also the producer side.

In order to understand the environmentalist discourses, the study of Bäckstrand and Löfbrand ([2006](#)) may be referred. Three basic discourses are mentioned in their study: ecological modernization, green governmentality, and civic environmentalism. Accordingly, “the ecological modernization beginning from the 1980s and with the Brundtland report “Our Common Future” is a discourse of ecological modernization gained ground in Western industrial societies, which challenged the notion that modern civilization is facing ‘limits to growth’ as suggested by the Club of Rome in 1972. The distinct feature of ecological modernization is the compatibility of economic growth and environmental protection, a liberal market order and sustainable development”. By this discourse, forests are considered as “instrument for low-cost climate mitigation and maximized synergies”. “Alongside the market-oriented approach to environmental problem-solving proposed by ecological modernization, a discourse of green governmentality predominates in industrialized societies”. Forests are considered as “sinks and reservoirs of carbon” for this discourse. “The civic environmentalism discourse is associated with the 1992 United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, where the language of participation and ‘stakeholding’ entered the global environmental agenda”. By this discourse, forests are considered as “sources of biological diversity, livelihood and cultural values”.

A study going beyond discussing whether the tourism activities are environmentally sustainable or not tries to create reciprocally beneficial connections between tourism and environmentalism by emphasizing “the potential for tourism operators to play a more active role in cultivating an environmental practice that can persist beyond the ecotourist bubble” (Stoddart and Nezhadhossein [2016](#)).

Environmentally Sustainable Tourism Practices

The most strictly environmentally sustainable tourism practices are to be normally realized under the umbrella of ecotourism if a distinction is to be made. However, a confusion and diversion exist both in the academia and in the sector so as to where sustainable tourism borderlines begin and end especially apropos of ecotourism. In the earlier publications such as Weaver ([2001](#)), ecotourism is mentioned as a synonym to sustainable tourism, and even, it is classified as hard or soft in terms of conforming to the criteria of sustainability more or less strictly. On the other hand, in the more recent publications such as Cater et al. ([2015](#)), it is included in the totally sustainable portion of the tourism industry. Ecotourism is defined by The International Ecotourism Society as “Responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education” (TIES [2015](#)). Similarly, a study discussing the ecotourism in Belize prefers three local criteria which are told to be similar with the objectives of sustainable tourism, generation of local economic benefits, financial support for local protected area management, and local support for conservation. Besides, the results of this study prove for the local case studies of ecotourism that, in practice, the criteria of ecotourism or sustainability is only partly met, not fully (Lindberg et al. [1996](#)).

It is not the definitions or appellations that matter; what matters is the behavioral and attitudinal perspectives which create and determine the perception and implications toward a more

sustainable tourism respectful to environment. Here, the behaviors and attitudes may be classified basically into two bodies: individual and organizational. Individual part belongs to the guests and the people that they interact with while they consume the touristic products. This can vary from not picking up a flower, picking up the rubbish, or throwing away the rubbish to the places shown at the destination to preference of bicycle instead of car while wandering at the destination to reduce carbon emissions. The second body belongs to organizational behavior such as investing in sustainable projects not harmful to environment, using filters and necessary equipment for the protection of air and water, preferring renewable and saver systems for energy consumption, etc. Of course, this is not so easy after all the wrong patterns that have been practiced through long years. To change into the correct behavioral patterns toward environment, education has the most essential and central role among all other necessary precautions. Education for all parties involved in tourism carries importance, including guests and staff (TIES). However, the urgency of strong sustainability education especially for the tourism scholars is called by Cotterell et al. (2019) who additionally emphasized that in order to create future industry workers capable of being sustainability leaders, skill development in areas such as reflective thinking (Howlett et al. 2016), systemic thinking, compassion and empathy, and ethical practices (Wals and Blewitt 2010) need to be developed.

For defining the behavioral perspectives and interactions in the framework and decision-making process of the actors involved in sustainable tourism varies from the tourist to the local and central governmental authorities, some related terms are used such as “green tourism, green innovation strategy, green preferences of tourists, and green tourism products”. The benefit of using these terms on the level of the local economic and branding issues are also discussed (He et al. 2018). However, if ecotourism and its neighbor, sustainable tourism, are used purposefully for the sole purpose of branding without respecting and realizing the requirements and principles of ecotourism, then it becomes

“greenwashing” which has a negative value in meaning. Some, but not all, of greenwashing is reported to be as a reason of a lack of understanding the principles of ecotourism (Wood 2002). In a paper discussing the “ecotourism as a western construct,” it is noted that “the social appropriation of nature must be viewed in, and from, particular social, economic and political contexts. Failure to do so will only result in continued disappointment, frustration and resentment over the manifest shortfall between what ecotourism promises and what it delivers” (Cater 2006).

As indicated by Cater (1995), tourism is an industry which has many connections with many sectors and interests on varied levels while executing the operations, and it is suggested to increase the positive links of tourism with environment and to break the negative links by the accountancy procedures such as environmental auditing. In a study realized in Couran Cove Island Resort and Boondall Wetlands Reserve, Queensland, Australia, five types of environmental indicators proposed for the detailed and exhaustive checklist of tourism projects: “Fragility of ecosystems and biodiversity, waste disposal, water consumption, intensity of land use and physical impact, protection of the atmosphere, noise level and visual impact” (Lim and McAleen 2005). In another study, the extent to which certain criteria about the destination environmental competitiveness can be useful is discussed, and measures are suggested such as environmental impact and environmental quality management. In this same study, environmental quality management is divided into subcategories: “management by codes of conduct, by self-developed environmental practice, by certified or awarded best practice and by accreditation schemes” (Mihalic 2000).

Any destination should adopt sustainable practices in today’s fragile environmental state of the world. However, specifically for the natural reserves within a much more vulnerable ecological system which are opened to tourism, it is a must to create “balance between climate change, tourism growth and environmental protection” (Sun et al. 2019). Similarly, to create this balance and to reach correctly practiced ecotourism

activities, another study made in Indonesia signals that “social entrepreneurship” plays a key role (Situmorang and Mirzanti 2012). Unfortunately, it is found out that a major part of the carbon emissions were produced as a result of the commercial activities of tourism operations in the case of Jiuzhai Valley in China (Sun et al. 2019).

Another important aspect that needs to be studied and researched more to combine the environmental protection aspect with the ecotourism is “ecological restoration” (ER). Blangy and Mehta (2006) showing the example cases from Belize and Central Africa attract the attention to the importance of the ecological restoration, ecodolges, and the creation of linkage between ecotourism. This connection together not only creates livelihoods in the little localities that otherwise would be deserted for the city center but also contributes to the revival of the biodiversity. Additionally, the voluntary participation of the tourists supports this fruitful win-win scene (Blangy and Mehta 2006).

Tourism activities influence climate change at the global scale (Wang et al. 2019). The contribution of CO₂ produced by energy consumption associated with tourism activities to climate warming is between 4.6% and 7.8% (UNEP and UNWTO 2008). Tourism also causes water shortages on the regional (Gössling et al. 2012) and local scales (Cole 2014) and ecological deficits at some tourism destinations (Castellani and Sala 2012).

The impacts of tourism activities on the environment have begun to be measured more concretely in the more recent studies such as Wang et al. (2019). It is promising as well as difficult to conduct this type of a multidisciplinary study and is very well needed by the sector as well as by the world, to pay the costs incurred to environment and to take precautions for the future of tourism and the survival of the world. In this study, “tourism heat footprint” (THF) method is applied in order to find out the heating effect of “accommodation, catering, transportation, human body, sight-seeing, entertainment, shopping, and waste disposal” on glacial changes. The results

of the study show that “In the context of global climate change, the THFs generated by large-scale tourism activities within the Yulong and Hailuoguo tourism zones have significant local temperature increasing effect. And these temperature increases have had a cumulative effect on glacial changes. This effect is contrary to the sustainability of glacial tourism and destinations” (Wang et al. 2019).

Cross-References

- Sustainable Tourism (Sustainable Development of Tourism, Sustainable Tourism Management)
- Sustainability in Tourism Marketing (Sustainable Tourism Marketing)

References

- Bäckstrand, K., & Lövbrand, E. (2006). Planting trees to mitigate climate change: Contested discourses of ecological modernization, green governmentality and civic environmentalism. *Global Environmental Politics*, 6, 50–75. <https://doi.org/10.1162/152638006775991911>.
- Blangy, S., & Mehta, H. (2006). Ecotourism and ecological restoration. *Journal for Nature Conservation*, 14, 233–236.
- Castellani, V., & Sala, S. (2012). Ecological footprint and life cycle assessment in the sustainability assessment of tourism activities. *Ecological Indicators*, 16, 135–147. <https://doi.org/10.1016/j.ecolind.2011.08.002>.
- Cater, E. (1995). Environmental contradictions in sustainable tourism. *The Geographical Journal*, 161(1), 21–28.
- Cater, E. (2006). Ecotourism as a Western construct. *Journal of Ecotourism*, 5(1&2), 23–39.
- Cater, C., Garrod, B., & Low, T. (2015). *The encyclopedia of sustainable tourism*. London, UK: CABI.
- Cole, S. (2014). Tourism and water: From stakeholders to rights holders, and what tourism businesses need to do. *Journal of Sustainable Tourism*, 22, 89–106. <https://doi.org/10.1080/09669582.2013.776062>.
- Cotterell, D., Hales, R., Arcodia, C., & Ferreira, J. A. (2019). Overcommitted to tourism and under committed to sustainability: The urgency of teaching “strong sustainability” in tourism courses. *Journal of Sustainable Tourism*, 27(7), 882–902. <https://doi.org/10.1080/09669582.2018.1545777>.
- Global Footprint Network Web Site. <https://www.footprintnetwork.org/our-work/ecological-footprint/>

- Gössling, S., Peeters, P., Hall, C. M., Ceron, J., Dubois, G., Lehmann, L. V., & Scott, D. (2012). Tourism and water use: Supply, demand and security—an international review. *Tourism Management*, 33, 1–15. <https://doi.org/10.1016/j.tourman.2011.03.015>.
- He, P., He, Y., & Xub, F. (2018). Evolutionary analysis of sustainable tourism. *Annals of Tourism Research*, 69, 76–89.
- Howlett, C., Ferreira, J. A., & Blomfield, J. (2016). Teaching sustainable development in higher education: Building critical, reflective thinkers through an interdisciplinary approach. *International Journal of Sustainability in Higher Education*, 17(3), 305–321.
- Hunter, C. (2002). Sustainable tourism and the touristic ecological footprint. *Environment, Development and Sustainability*, 4, 7–20.
- Lim, C., & McAleen, M. (2005). Ecologically sustainable tourism management. *Environmental Modelling & Software*, 20, 1431–1438.
- Lindberg, K., Enriquez, J., & Sproule, K. (1996). Ecotourism questioned case studies from Belize. *Annals of Tourism Research*, 23(3), 543–562.
- Mihalic, T. (2000). Environmental management of a tourist destination A factor of tourism competitiveness. *Tourism Management*, 21, 65–78.
- Safire, W. (2008, February 17) Footprint. https://www.nytimes.com/2008/02/17/magazine/17wwln-safire-t.html?partner=rssnyt&emc=rss&_r=0. Accessed 1 Aug 2019.
- Situmorang, D. B., & Mirzanti, I. R. (2012). Social entrepreneurship to develop ecotourism. *Procedia Economics and Finance*, 4, 398–405. [https://doi.org/10.1016/S2212-5671\(12\)00354-1](https://doi.org/10.1016/S2212-5671(12)00354-1).
- Stoddart, M. C. J., & Nezhadhossein, E. (2016). Is nature-oriented tourism a pro-environmental practice?: Examining tourism-environmentalism alignments through discourse networks and intersectoral relationships. *The Sociological Quarterly*, 57(3), 544–568. <https://doi.org/10.1111/tsq.12148>.
- Sun, R. H., Ye, X. L., Gao, J., Zhu, Z. F., & Du, J. (2019). Study on carbon footprint and spatial distribution characteristics of human activities in Jiuzhai Valley scenic area. *Applied Ecology and Environmental Research*, 17(4), 7477–7493. https://doi.org/10.15666/aeer/1704_74777493.
- TIES. (2015). Web site of The International Ecotourism Society. <https://ecotourism.org/what-is-ecotourism/>. Accessed 26 Aug 2019.
- UNEP, & UNWTO. (2008). *Climate change and tourism: Responding to global challenges*. Madrid: UNEP/Earthprint.
- Wackernagel, M., & Rees, W. (1996). *Our ecological footprint: Reducing human impact on the earth*. Gabriola Island/Philadelphia: New Society Publishers.
- Wals, A. E. J., & Blewitt, J. (2010). Third-wave sustainability in higher education: Some (inter)national trends and developments. In P. Jones, D. Selby, & S. Sterling (Eds.), *Sustainability education: Perspectives and practice across higher education* (pp. 55–74). Oxon: Earthscan.
- Wang, S., Du, J., Li, S., He, H., & Xu, W. (2019). Impact of tourism activities on glacial changes based on the tourism heat footprint (THF) method. *Journal of Cleaner Production*, 215, 845–853.
- Weaver, D. B. (2001). *Encyclopedia of ecotourism*. Wallingford: Cabi International Publishing.
- Wood, M. E. (2002). *Ecotourism: Principles, practices & policies for sustainability*, United Nations Publication. http://wedocs.unep.org/bitstream/handle/20.500.11822/9045/-Ecotourism_%20%20Principles,%20Practices%20and%20Policies%20for%20Sustainability-2002518.pdf?sequence=2. Accessed 26 Aug 2019.

Environmental

► Life Cycle Sustainability Assessment

Environmental Accountability

► Environmental Transparency

Environmental Accounting

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Synonyms

Accounting for the environment; Ecological accounting; Environmental cost accounting; Waste management accounting

Definition

Environmental accounting is the process that determines and accounts for the impact that

organizations and companies have on the, mainly ecological, environment. Once having activated the process of determining and accounting for the environmental variable, the organization and company need to translate this initial choice into a trend to consider in all long- or short-term decisions made by them. Rather, it is a matter of accounting for the consumption and depletion of natural or environmental resources (Baldarelli et al. 2017). In order to activate this process, which is also termed eco-efficiency (Burrit and Shaltegger 2001), there may be various methods foreseen, among which are the need for the organization to hold an environmental certification, the will of the property and/or managers, as well as other causes.

Once having activated the process of determining and accounting for the environmental variable, it is necessary that the organization and company translate this initial choice into a trend to consider in all long- or short-term decisions made by them.

This process allows us to consider the organization and company approach directed toward the reduction and/or recovery of environmental harm caused by their activity. Such an approach may be defined as “weak” in relation to depletion of environmental resources.

As an alternative to the previous one, we may consider a certain company behavior directed toward preventing and improving environmental resources adopting this logic in the long-term strategic trend. The organization must involve the environmental variable in decision-making process. The environmental variable must become the essential element of company mission and governance along with financial and economic ones. This second approach can be defined as “strong.”

Measurement of Environmental Variable: Conceptual Network

The environmental variable can be measured and disclosed following these different dimensions where progressively we can have financial

measures, intermediate measures, and integrated measures (Baldarelli et al. 2017).

Financial measures are inside of the financial statement, so they don't appear and remain as a sort of shadow accounting. Intermediate measures consider both those that are inside of the financial statement and those that are elaborated using other information (Baldarelli et al. 2017).

Integrated measures consider some indicators that are relative to involve statistics elaboration using physical and economic indicators (Baldarelli et al. 2017).

Environmental accounting, from the standpoint of accounting measurement and financial reporting, considers environmental costs, environmental revenues, and environmental budget (Burrit and Shaltegger 2001).

Environmental costs measure: “Resources expended to evaluate, prevent and correct ‘shortcomings’ deriving from actions which, potentially, generate a negative effect on human, animal and vegetable life” (Miolo Vitali 2009:230). They are based on the natural resource to which they are addressed – water, air, soil, waste, and noise – and can be internal and/or external environmental costs.

Some examples of environmental costs are management of waste and external emissions, training on environmental topics, research and development linked to the environment, and workers' safety as well as their satisfaction (Mio 2002).

Environmental revenue derives from the “sale” of goods that were previously regarded as disposal costs, such as ecological bales of recycled material, such as plastic, paper, and glass.

The environmental contribution margin is very important to compare the traditional calculation of the contribution margin, that is the result of the unitary price of sale less variable cost per unit, with the environmental emission for each product or service. So the evaluation of the best product/service not only is based on economic calculations but is considering the environmental variable too, such as pollution and waste.

The environmental budget is the account that contains quantitative results concerning the environmental impact of the enterprise, such as

environmental revenues, environmental costs, costs of environmental management, and environmental investments (Mio 2002; Shrivastava 1995; Porter and Van der Linde 1995).

Costs of environmental management are relative to the development of internal responsibilities concerning environmental damage that the organization or company has caused.

Environmental investment is an implementation process by which the company expects to produce a more positive impact on the environment.

From Environmental Accounting to Weak and Strong Approach

At the current state of the art, different company behaviors may be listed between the “weak” and “strong” approaches.

Only by having eco-efficiency permeate throughout company culture, it is possible to affirm that the company will adopt the environmental variable in all decision-making aspects as well as in all management control activities with its relative tools.

This process may be developed by following various stages, though it is, nevertheless, necessary that the organization or the company gradually separates environmental accounting from the financial one. This is because, in financial accounting, information regarding the environmental variable only emerges indirectly. In environmental accounting, on the other hand, information concerning the environmental variable is stated by following methods and criteria that are both accounting and extra-accounting ones, amongst which are statistical indicators. This allows environmental accounting to acquire the inter-disciplinary nature to contribute to complete environmental information.

Summary

In this entry the meaning of environmental accounting is explained involving some tools to

measure and disclose environmental variables and information by organizations and companies. That information is not immediately available in financial statements, but it is required to record them in a separate environmental accounting. Among them, the definition of environmental costs and revenues, environmental contribution margin, and the environmental budget are included.

Cross-References

- [Sustainability in Economy of Communion Enterprises](#)
- [Sustainable Modernity](#)

References

- Baldarelli, M. G., Del Baldo, M., & Nesheva-Kiosseva, N. (2017). *Environmental accounting and reporting. Theory and practice* (CSR, sustainability, ethics & governance-series). Cham: Springer International Publishing.
- Burrit, R., & Shaltegger, S. (2001). *Eco-efficiency in corporate budgeting*. Luneburg: Centre for Sustainability Management.
- Mio, C. (2002). *Il budget ambientale. Programmazione e controllo della variabile ambientale*. Milano: EGEA.
- Miolo Vitali, P. (2009). *Strumenti per l'analisi dei costi*, III ed. Torino: Giappichelli.
- Porter, M. E., & Van Der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review*, September–October.
- Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *The Academy of Management Review*, 20(4), 936–960.

Environmental Analysis

- [Environmental Assessment](#)

Environmental and Natural Resource Economics

- [Environmental Economics](#)

Environmental and Natural Resources Law

► [Environmental Law](#)

Environmental and Social Viability of Solar Energy

► [Sustainability and Solar Energy](#)

Environmental Appraisal

► [Environmental Assessment](#)

Environmental Assessment

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Synonyms

[Environmental analysis](#); [Environmental appraisal](#); [Environmental systems analysis](#)

Definitions

Environmental assessment is a concept that is often confused with Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) (Arts and Morrison-Saunders 2012). Environmental Assessment is a term broadly used to describe the various systemic

assessments conducted by experts to identify, estimate, and evaluate the environmental impacts associated with the disparate human activities to mitigate likely negative effect and support decision making (Andersson et al. 2016; Jain et al. 2012). It is a tool for integrated environmental planning where the sociocultural, economic, and ecological systems of the world are brought to perspective (Gnansounou and Raman 2019). EIA and SEA are examples of the many approaches used in environmental assessment. While EIA is an anticipatory and participatory method for identifying, predicting, and analyzing the possible impacts of a proposed project on the physical environment, as well as the associated social, economic, and health impacts, SEA is a set of analytical and participatory processes for incorporating environmental considerations into policies, plans, and programs that might have impact on the environment. Other common tools include Life Cycle Assessment (LCA) and Material Flow Analysis (MFA) (Andersson et al. 2016; Gnansounou and Raman 2019).

Introduction

The era of industrial revolution was largely characterized by a high-income economy, improved standards of living, and technological breakthroughs such as steam power, textile, communication, and transport technologies, among others. However, these gains came with a number of environmental concerns: air pollution, water pollution, climate change, hazardous waste, and land degradation (Todua et al. 2006; Salami 2019). It was only in the last third of the twentieth century that the negative consequences of human development and industrialization on the overall earth's ecological balance were duly recognized (Ambala et al. 2006; Essays, UK 2018). To therefore maintain the long-term viability of the environment to sustain life, conscious efforts were made to increase environmental awareness and environmental factors began to play a significant role in development planning while stringent environmental regulations were enacted. In 1962, environmental awareness began to receive a stronger

public and global impetus following the publishing of Rachel Carson's book titled "The silent spring." This publication, in simple terms, beamed light on the harmful implications of growing use of pesticide on the global environment and its sustainability. The "Silent spring" is believed to have motivated the launching of a massive movement that consistently put pressure on governments and led to the evolution of the practice of environmental assessment (EA) (Modak and Biswas 1999; Matemilola et al. 2019).

EA affords the opportunity to provide evidence-based approaches to support decision-making as it relates to the protection of the environment and public health (Jain et al. 2012). Also, it encompasses several processes such as negotiation, participation, and monitoring that are essential in the identification of the likely environmental impacts of a proposed human activity and how they can be mitigated. These impacts can either be direct, indirect, or cumulative (Modak and Biswas 1999). A direct impact is as a result of the direct interaction between an activity with an environmental, social, or economic component. While an indirect impact is a secondary impact that arises as a result of changes to a direct impact through complex pathway. A cumulative impact is defined as the result of additive and aggregative actions producing impacts that accumulate incrementally or synergistically over time and space. It is pertinent to note that besides impacts identification and prediction, EA enhances and strengthens the relationship between government, industry, environmentalist, and the public through the exchange of information, public participation, and the recognition of susceptible environmental factors (Ambala et al. 2006; Modak and Biswas 1999).

Environmental Factors

Prior to the assessment of the impacts of a proposed activity on the environment, the prerequisite requirement is to identify and describe the environmental characteristics that might be affected by such activity. Notable environmental factors include surface and sun-surface water,

land, air, plant, animal life, etc. Consideration is also given to socioeconomic factors such as income, number of jobs, and future land use (Modak and Biswas 1999).

Environmental Assessment Tools and Methodologies

The complexities and dynamics involved in the technical systems process of decision-making to engender sustainability have brought about the evolution of various environmental assessment tools over the last three decades. These tools are built on a system perspective to create a decision support system for policy formulation in the public sector and for investment and strategy decisions in the private sector (Weiner and Matthews 2003; Andersson et al. 2016). Depending on the context, scope, and scale application, and the targeted environmental system, environmental assessment can be achieved with various tools/methodologies including: life cycle assessment (LCA) for assessment of products and services, material flow analysis (MFA) for evaluation of flow of resources in a specified region, cumulative impact assessment (CIA) for identifying additive and interactive effect (Andersson et al. 2016), strategic environmental assessment (SEA) for examining the potential implications of proposed policies, plans and program on environmental components (Loayza 2012), and environmental impact assessment (EIA) for evaluating environmental and socioeconomic impacts of proposed development (Morgan 2012).

An LCA involves the quantification of the impacts of products and services on the environment. It entails the evaluation of the resources consumed as well as the associated emission throughout the life cycle of such a product or service. LCA was defined and standardized by the International Standards Organization (ISO) within the procedural framework of ISO 14040–14043, and it has four major stages, namely goal and scope definition, life cycle inventory, life cycle impact assessment, and interpretation.

MFA, also known as material and energy flow analysis (MEFA), allows for the comparison of

processes or products by determining the energy and mass balance. This method establishes the input-output relationship and assumes that the higher the quantity of resources used, the higher the impact (Andersson et al. 2016).

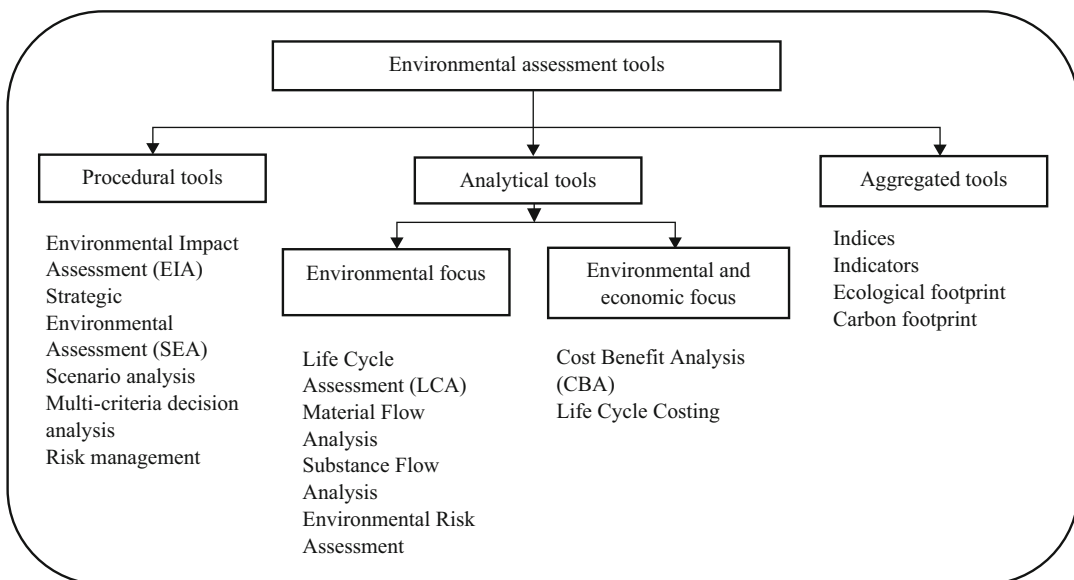
EIA is a tool for identifying the environmental and social impacts at different phases (construction, operation, and decommissioning) of a proposed development in order to evaluate alternative approaches, and to design mitigative, management, and monitoring measures. EIA is carried out to ensure that avoidable environmental damages are not caused by a proposed development (Essays, UK 2018).

CIA is concerned with the assessment of the potential environmental and social impacts that may result from the combined influence of more than one human activity (Weiner and Matthews 2003). Here, impacts are viewed from a broad system-wide perspective. CIA is usually carried out as part of an EIA, and this is necessary to determine potentially significant consequences of a proposed development in combination with other activities or projects (Andersson et al. 2016).

SEA, unlike other tools, is concerned with the systemic evaluation of environmental implications of proposed policies, plans, or programs. It provides the opportunity of identifying avoidable effects at the earliest stage of decision-making (Loayza 2012).

However, because these tools have different applications and targeted systems, their structure, procedures, and method of presentation of results also differ. Thus, environmental assessment tools are classified into procedural, analytic, and aggregated tools (Fig. 1).

- I. Procedural tools: These tools are usually used for integrating environmental, economic, and social factors in decision-making and ensuring stakeholders' engagement in reaching a consensus solution. Examples are Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA).
- II. Analytical tools: These are often standardized tools for calculating and quantifying material, energy, and economic flows. A good example is Life Cycle Assessment (LCA) which is standardized in ISO 14040 and 14044.



Adapted from: Andersson, et al. (2016)

Environmental Assessment, Fig. 1 Classification of environmental assessment tools (Adapted from: Andersson, et al. (2016))

III. Aggregated tools: These types of tools are designed for easy monitoring and communication of complex systems. Such tools aggregate technical information into a format that can be clearly and easily communicated and interpreted. Examples are indicators and indices.

Summary

Environmental assessment or environmental systems analysis fast became a veritable decision-making tool with the growing need for structured handling of complex systems relating to global environmental concerns. The system perspective of EA has led to the evolvement of several assessment tools that were standardized. Commonly used EA tools are life cycle assessment (LCA), material flow analysis (MFA), environmental impact assessment (EIA), Strategic Environmental Assessment (SEA), cost benefit analysis (CBA), and carbon footprint.

Cross-References

- [Environmental Impact](#)
- [Environmental Protection Agency](#)
- [Environment, Tourism, and Sustainability \(Ecotourism Management, Environment and Sustainable Tourism\)](#)
- [Integrated Quality and Environmental Management](#)

References

- Ambala, C., Ocholla, W., Nkambwe, M., & Chenje, M. (2006). *Training Manual on Integrated Environmental Assessment and Reporting in Africa*. s.l.: Africa Environment Outlook (AEO).
- Andersson, K., Brynolf, S., Landquist, H., & Svensson, E. (2016). Methods and tools for environmental assessment. In K. Andersson, S. Brynolf, J. F. Lindgren, & M. Wilewska-Bien (Eds.), *Shipping and the environment* (pp. 265–293). Berlin/Heidelberg: s.l.:Springer.
- Arts, J., & Morrison-Saunders, A. (2012). *Assessing impact: Handbook of EIA and SEA follow-up*. s.l.: Routledge.
- Essays, UK, 2018. Origin history and development of EIA environmental sciences essay. [Online] Available at: <https://www.ukessays.com/essays/environmental-sciences/origin-history-and-development-of-eia-environmental-sciences-essay.php?vref=1>
- Gnansounou, E., & Raman, J. K. (2019). Wide scope environmental assessment of biofuels. In *Biofuels: Alternative feedstocks and conversion processes for the production of liquid and gaseous biofuels* (2nd ed., pp. 163–196). s.l.: Academic Press.
- Jain, R., Urban, L., Balbach, H., & Webb, M. D. (2012). Environmental assessment in engineering and planning. In *Handbook of environmental engineering assessment* (pp. 1–17). s.l.: Elsevier Inc.
- Loayza, F. (2012). Guidance notes on tools for pollution management: Strategic environmental assessment. In *Getting to green – A sourcebook of pollution management policy tools for growth and competitiveness* (pp. 1–11). Washinton, D.C: The World Bank Group.
- Matemilola, S., Adedeji, O. H., Elegbede, I., & Kies, F. (2019). Mainstreaming climate change into the EIA process in Nigeria: Perspectives from projects in the Niger Delta Region. *Climate*, 7(2), 29.
- Modak, P., & Biswas, A. K. (1999). Introduction to EIA. In *Conducting environmental impact assessment in developing countries*. s.l.: United Nations University Press.
- Morgan, R. K. (2012). Environmental impact assessment : the state of the art. *Impact Assessment and Project Appraisal*, 30(1), 5–14.
- Salami, H. A. (2019). A comparative life cycle assessment of energy use in major agro-processing industries in Nigeria. *Journal of Energy Research and Reviews*, 3 (4), 1–11.
- Todua, L., Girgvliani, D., Gobejishvili, T., & Khelaia, N. (2006). *A guide to strategic environmental assessment: Georgian perspective*. Tbilisi: UNDP.
- Weiner, R. F., & Matthews, R. (2003). Assessing environmental impact. In *Environmental engineering* (4th ed., pp. 13–30). Burlington: Butterworth-Heinemann.

Environmental Awareness

- [Sustainability Education and Environmental Awareness](#)

Environmental Biology

- [Ecology and Ecosystem: Sustainability](#)

Environmental Business Coalition

► [World Business Council for Sustainable Development](#)

Environmental Capital

► [Natural Capital](#)

Environmental City Branding

► [Sustainable City Branding](#)

Environmental Compliance Audit

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Synonyms

[Certification audit](#); [Surveillance audit](#)

Definition

Rapidly increasing pollution levels, over exploitation of natural resources, accumulation of toxic waste, soil erosion, and continuous environmental degradation have become some of the major environmental concerns these days impacting biodiversity, ecology, and quality of life on the Earth. It has been realized that industry and business are the key contributors to this grave situation and must now take responsibility for their actions and practices harming environment. Public concerns on these issues have led to enactment of

various laws and regulations at national and international levels requiring business to reduce their adverse environmental impacts. Violation of these statutes can result in hefty penalties, stringent legal action, and even closure of business. Large number of companies across the world have started designing their environment policies, programs, and management systems to prevent and control emissions, preserve natural resources, and reduce environmental impacts. With these legislative and social trends, assessment of environmental performance for ensuring compliances has become an important part of an organization's environmental management system (EMS) so as to mitigate environmental risks and related environmental liabilities. Environmental compliance audits are conducted to verify that a company's operations and practices are in compliance with applicable environmental laws, regulations, standards, and company's own environmental policies. Such audits not only help organizations to assess their current compliance status, but also lead to timely detection of noncompliances so that corrective actions can be taken to improve compliance position.

Introduction

The term environmental auditing has its origin in the 1970s, when companies in the USA started undertaking voluntary environmental audits to evaluate their environmental performance and to avoid remediation costs and fines (EPA 1997). Cahill and Kane traced the beginning of the use of environmental auditing as a management tool in the 1970s for actions taken by the Securities and Exchange Commission (SEC) which led public companies in the USA to perform internal environmental audits to find the extent of their environmental liabilities (Cahill and Kane 1989). This played a significant role in establishing environmental auditing as a key compliance verification practice in the USA. During the late 1980s, when environmental issues started getting attention at international levels, these audits became popular in other countries also. Since, 1996,

International Standard Organization (ISO) has issued number of standards on environmental management and audit systems. ISO 14000 family of standards on environmental management provide guidance to entities on general principals to be followed in managing their environmental responsibilities and in execution of environmental audits (ISO n.d.). Adoption of these standards by companies has provided an impetus to the use of environmental audits. In the twenty-first century, companies across the world have started going for voluntary environmental audits to deal proactively with environment-related issues.

Different authors have defined the term environmental audit differently. One of the commonly accepted definitions of environmental audit was given by the International Chambers of Commerce (ICC) in 1989. According to (ICC 1989), “Environmental audit can be defined as a management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of helping safeguard the environment by a) facilitating management control of environmental practices; and b) assessing compliance with company policies which would include meeting regulatory requirements.” These audits are used by the management to check efficiency and effectiveness of a concern’s environmental management system in meeting its environmental targets. Environmental audits also help in evaluating concern’s compliance with the applicable environmental laws.

There are broadly three types of environmental audits, namely, environmental compliance audits, environmental performance audits, and environmental financial audits (INTOSAI, WGEA 2007). Environmental compliance audits are conducted to ensure compliance with pertinent environmental laws and regulations to which an organization is subject in order to reduce/eliminate environmental risks and potential environmental liabilities. Environmental performance audits aim to assess whether an organization is effective in producing desired environmental results in a cost-efficient manner. The purpose is to ensure application of environmental policies, practices, and

management systems in such a way so as to improve overall environmental performance of the organization. Environmental financial audits are conducted to verify accuracy and authenticity of environmental financial information given in different documents, statements, and reports prepared by a concern. These audits aim at ensuring that all material environmental costs, benefits, assets, liabilities, and contingencies are duly recognized, properly valued, and adequately reported to the concerned stakeholders.

Environmental Compliance Audit

The most common type of environmental audit is environmental compliance audit. The definitions of environmental audit given by many agencies have emphasized the compliance aspect of environmental audits.

According to US Environment Protection Agency (EPA), “Environmental auditing is a systematic, documented, periodic and objective review by regulated entities of facility operations and practices related to meeting environmental requirements” (EPA 1986).

According to the World Bank, “Environmental audit is a methodical examination of environmental information about an organization, a facility or a site to verify whether or to what extent, they confirm to specified audit criteria. The criteria may be based on local, national or global environmental standards” (ASOSAI 2006).

Thus, environmental audits are usually conducted to verify compliance status of an entity as required by legislation, standard, agreement, or as defined under company’s environmental policy. Environmental compliance audits are different from routine audit of a concern’s EMS or environmental impact assessment (EIA). EIAs are mostly conducted before commencement of a project to predict its potential environmental effects, whereas a routine periodic examination of EMS aims to prevent and control adverse environmental impacts and, thereby, improve environmental performance of the organization. These are usually internal audits. The focus of environmental

compliance audit is on compliance aspect of company's operations. However, the results of EIA can be used by compliance auditors.

Objectives of Environmental Compliance Audits

Businesses these days are subject to number of legal requirements relating to environment. These requirements may range from obtaining emission permits, submitting environmental due diligence certificates, disclosing information on chemical leaks, handling of hazardous material or disposal of toxic waste, and filing various documents with regulatory authorities. Many businesses especially small and medium enterprises (SMEs) find it difficult to comply with these requirements as these are mostly technical and complex. Keeping track of frequent changes in existing legal requirements as well as new environmental regulations is another challenging task. In the recent years, regulations have become more stringent, authorities are putting lot of efforts to ensure strict enforcements, and chances of detection of non-compliances have increased significantly. Non-compliances may lead to huge financial, legal, and reputational loss for business as well as management. To avoid legal actions and penalties arising from failure to comply with environmental regulations, companies across the world have started using compliance audits as a preventive tool. The basic purpose of an Environmental compliance audit is to reveal any actual or potential environmental violations and to alert the corporate management so that necessary remedial actions can be undertaken on time (Majumdar 2011). The compliance auditor aims "to develop and implement an environmental compliance audit program in such a way so as to avoid administrative, civil, or criminal fines, penalties, or injunctions" (Lucks 2017). Thus, an environmental compliance auditor checks compliance status of existing operations, detects current and potential compliance gaps, and suggests remedial measures so that these gaps can be corrected on time before any action is taken by regulatory authorities leading to real environmental liabilities.

Types of Environmental Compliance Audit

An environmental compliance audit can be voluntary or mandatory. Voluntary environmental compliance audits are preventive in nature. These are conducted by organizations proactively to detect variations from legal requirements and to design remedies before these deviations convert into liabilities. Mandatory compliance audits are compulsory under some statute. Environmental audits are voluntary in most of the countries (Majumdar 2011). Unlike statutory financial audits which are mandatory in many countries, usually there are no regulatory requirements for companies to go for environmental compliance audits. These audits can be conducted by a team of internal auditors who are specially appointed for this purpose. But management in big companies often prefer that environmental compliance audits are conducted by external independent auditors as noncompliances to environmental laws may mean huge risk for top management who are mainly responsible for legal compliances.

Further, an environmental compliance audit can be multimedia or specific audit. While a multimedia compliance audit deals with all environmental regulations applicable on a business (e.g., laws relating to air, water or noise pollutions, energy conservations, management of hazardous waste, emissions, etc.), a specific compliance audit is concerned only with one specific law or regulation. Carbon audit, permit audits, specific requirement audits, certification audits, surveillance audits, audits for eco-labeling, audits under ISO, safety and health audits, and GHG audits are examples of specific compliance audit.

Benefits of Environmental Compliance Audits

Environmental compliance audits result in number of benefits for the organization. These audits are conducted with the objective of helping management in ensuring compliance with applicable environmental statutes, environmental standards, and companies' policies and, thereby,

facilitate controlling of environmental risks, costs, and liabilities. Some other benefits of environmental compliance audit include the following:

- Helps management in understanding complex legal requirements and designing environmental policies and EMS accordingly
- Helps in timely submission of environmental compliance data to regulatory authorities
- Increases awareness of employees and management about number of pertinent environmental issues
- Leads to conservation of scarce resources and reduction in related costs
- Helps in improving environmental performance of the company
- Gives competitive advantage to the company through green production and marketing
- Helps in meeting stakeholders' expectations and enhancing their confidence in the company
- Improves public image of the concern
- Helps in getting due diligence certificates which may be required at the time of getting loans, permits, and grants
- Helps to minimize health and safety hazards in factories and retaining workforce
- Helps in improving emergency response system and disaster management

Compliance audit reports can be used to fight cases of damages and injuries filed against companies by third parties for violation of environmental laws. If on the basis of environmental compliance audit report, a concern decides to report past noncompliances to authorities voluntarily, it may request for lenient settlements from authorities (Majumdar 2011). Regulatory authorities also encourage such voluntary reporting as without going for detailed checks and tedious site inspections, they can get to know about compliance status of the organization. These audit reports can also be used by financiers, property buyers, investors, and other stakeholders who might be interested in knowing about environmental compliance status of the organization before dealing with it.

Compliance Audit Process

Like any other audit, environmental compliance auditor also follows a standard procedure for auditing which starts with preaudit steps and goes till submission of audit report. Important aspects of this process include determination of:

Audit objective: The objective of compliance audit is to verify whether activities of the organization are in compliance with environmental laws, standards, and company's proposed plans and strategies. The focus area may be all environmental laws or a specific environmental law or regulation.

Audit criteria: National and international environmental laws, regulations, rules, agreements, applicable standards, ordinances, codes, disclosure requirements, and corporate policies.

Scope of audit: Scope and frequency of an environmental compliance audit depend upon nature, size, and complexity of business and prudence of the auditor.

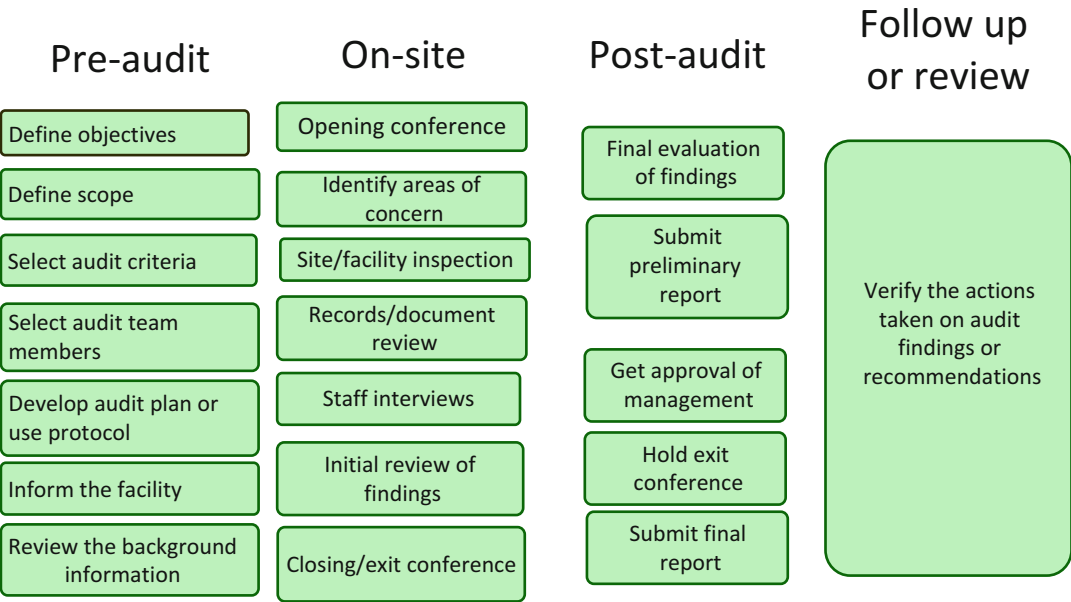
Audit team: It should consist of members having technical knowledge about environmental issues, legal expertise, and knowledge of audit procedures.

Preparation of audit plan and protocol: An auditor can make his own checklist or use standard protocols.

Obtaining knowledge about business activities, relevant environmental laws, compliance history, company's environmental policy, goals, environmental management and audit system, internal controls, etc.

After going through these steps, an auditor performs onsite audit. Information is collected through documents, files, records, questionnaires, forms, interviews, etc. Both analytical and substantive procedures are used to collect and analyze data against set audit criteria. After thorough analysis of collected data, the auditor drafts his report which is placed before management for discussion. Once management gives it approval, a final report is prepared and submitted. It is expected that a high quality compliance report should not only highlight noncompliances but also contain recommendations for improvement in current and potential compliance status. This report provides

Process of Environmental Audit



Environmental Compliance Audit, Exhibit 1 Process of environmental audit. (Source: Pahuja (2013))

the basis for improvement and benchmarking. Periodical review and follow-ups are done to see if recommendations are implemented. Exhibit 1 outlines steps involved in environmental compliance audits:

Summary

Due to ever increasing environmental laws and regulations, compliance and compliance audits have become the latest buzzword in the environmental community (Majumdar 2011). In today’s regulated environment, ignorance of law cannot be taken as an excuse for noncompliance. Violations and noncompliances may bring huge legal, financial, and reputational repercussions for a company and its management. There are growing social and legal pressures on the business to take steps to prevent and reduce harmful impacts of its operations on the environment. In this scenario,

conducting an environmental compliance audit is no longer optional for an organization. Environmental compliance audits are increasingly being used by corporations across the world as a sound precautionary and preventive measure to ensure the effectiveness of EMS in dealing with compliance issues. Now these audits are being designed in such a way so as to go beyond detecting noncompliances in existing operations. Focus these days is on proactive management of EMS for regular, periodic assessment of company’s operations in order to reduce compliance gaps, control environmental risks, reduce environmental costs, and improve environmental performance of the entity.

Cross-References

- [EMAS: Eco-Management and Audit Scheme](#)
- [Environmental Protection Agency](#)
- [ISO 14001 Standard](#)

References

- ASOSAI. (2006). *Guidance on conducting environment audit, 8th ASOSAI Research project*, pg 8. <http://iced.cag.gov.in/wp-content/uploads/2013/02/ASOSAI-GUIDANCE-For-ENVIRONMENTAL-AUDITING.pdf>. Last accessed 3 Feb 2020.
- Cahill, L., & Kane, R. (1989). *Environmental audits*. Rockville: Government Institutes Inc.
- EPA. (1986). *Environmental auditing policy statement*. <https://www.epa.gov/sites/production/files/2014-10/documents/auditingpolicystatement.pdf>. Last accessed 25 Jan 2020.
- EPA. (1997). *Environmental Audit program design guidelines for Federal agencies*. <https://www.epa.gov/sites/production/files/documents/envaudproguidemas.pdf>. Last retrieved 3 Feb 2020.
- ICC. (1989). *International chamber of commerce, 'environmental auditing'*. Paris: ICC.
- INTOSAI, WGEA. (2007). *Working Group on Environmental Auditing, 'Evolution and trends in environmental auditing'*.
- ISO. (n.d.). *ISO 14000 family of standards on environmental management*. <https://www.iso.org/iso-14001-environmental-management.html>
- Lucks, G. (2017). *Environmental compliance auditing in California, Chapter 84*. Retrieved from <http://beyondcompliance.net/wp/wp-content/uploads/2017/11/Audit-Chapter-2017-Update.pdf>. Last accessed on April 23, 2021.
- Majumdar, S. (2011). Voluntary environmental compliance auditing: A primer. *Fordham Environmental Law Review*, 7, 817.
- Pahuja, S. (2013). Environmental audit. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Berlin/Heidelberg: Springer.

Environmental Concerns

- [Sustainability of Boards](#)

Environmental Cost Accounting

- [Environmental Accounting](#)
- [Environmental Management Accounting](#)

Environmental Disaster

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Synonyms

[Anthropogenic disaster](#); [Man-made disaster](#)

Definition/Description

Disasters are defined as events that can originate from both nature and humans although the line between the two can blur, producing “unnatural” disasters (Bates 2002). Geological, hydrological, and atmospheric disasters such as earthquakes, volcanic eruptions, landslides, rocks falling, avalanches, drought, flooding, storms, lightning strikes, and hurricanes are considered to be natural disasters (Adeniran 2013). Environmental disasters are man-made, anthropogenic ones; it means that they are caused by human activity. Human activity can change the environment abruptly or gradually (Bates 2002). Environmental disasters affect agriculture, biodiversity, the economy, and human health. Unnatural disasters are result from an interaction of natural and anthropogenic disruptions in the environment. According to Jacobson (1988, p. 16), they are “normal events whose effects are exacerbated by human activities.” Technological disasters are entirely anthropogenic, but like natural disasters, they are temporally acute (Bates 2002). Environmental pollution or depletion can produce also the anthropogenic deterioration of an ecosystem (Schnaiberg and Gould 1994).

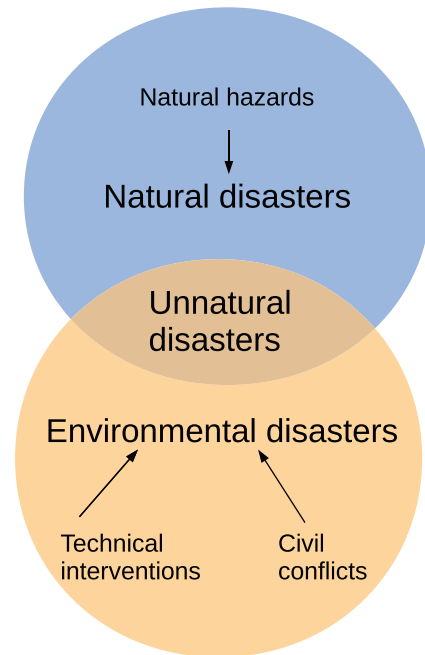
Introduction

The quality of the built environment, both natural and man-made, depends on its management, that is, its process of control, and organization. According to Adeniran (2013), there can be forces that cause events that lead to unsafe built environment for water, land, and air inhabitants. While these forces are generally categorized into natural and man-made, their resultant effects are multifarious, calamitous, and disastrous. These resultant effects are generally called disasters (Adeniran 2013). Disaster occurs in different parts of the world at different times and in various scales leaving behind various magnitude of loss to lives and properties. A natural disaster is the consequence of a natural hazard (Bhargava 2011) which affects human activities. An anthropogenic or man-made disaster is a result from technological inventions or from civil conflicts. Disasters may also occur from natural forces like earthquake or volcanic eruption acting negatively on man-made inventions like buildings, boats, ships, cities, and artificial islands. Such disasters are called unnatural disasters (Adeniran 2013).

The aim of environmental management is to reduce or completely eliminate the vulnerability of the environment to disaster through prevention, mitigation, preparedness, or capacity building. In the European Union (EU), it has been emphasized the idea about to make individuals and local communities more reactive and better equipped to cope with catastrophes (Amaratunga et al. 2015). The European Commission (EC) (2013) in its part has identified awareness-raising of the general public to be important concerning disaster prevention. Disaster education is a critical basis for resistance and recovery in many disasters because emergency agencies may not be able to help all people.

Key Issues

Disasters are defined as events that can originate from both nature and human beings and cause



Environmental Disaster, Fig. 1 Disaster types (Adeniran 2013; Bhargava 2011; Gunn 2004)

losses of life, property, and social value, as well as stopping or interrupting human activities (Bates 2002) (Fig. 1).

Natural environmental disasters are any natural occurrences that cause widespread distress, usually including loss of human life and notable damage to socio-ecological systems and property (Bhargava 2011). They may cause large-scale damage from which recovery is either impossible or long term. They have the power to shake the universe. Natural environmental disasters can happen at any time or place. They are the consequence of natural hazards. A hazard is a situation which poses a level of threat to life, health, property, or environment (Bhargava 2011). Examples of hazards are volcanic eruption, earthquake, landslide, flood, cyclones, cold waves, drought, thunderstorm, heat waves, mudslides, and storms which affect human activities. Gunn (2004) shows that although technology has given humankind enormous control over the environment, it has also proven to be a threat to our survival.



Environmental Disaster, Fig. 2 (a, b) Deterioration of environment. (Photos: E. Jeronen)

Environmental disasters (man-made or anthropogenic disaster) are results from technological inventions and civil conflicts (Adeniran 2013). According to Adeniran (2013), examples of the previous ones are aircraft, automobiles, and industrial developments and the latter ones riot, unethical, non-professional, and careless endeavors like fire outbreak, damaged pipelines, building collapse, chemical spill, road accident, food poisoning, epidemic industrial disaster, crisis, deforestation, war, environmental pollution, and plane crash, among others. Gunn (2004) categorizes the environmental disasters into a number of subtypes – for example, industrial explosions, mining disasters, dam failures, oil spills, nuclear energy catastrophes, and terrorism. Still yet, disasters may occur as a result from an interaction of natural and anthropogenic disruptions in the environment. Unnatural disasters are again deaths and damages that result from human acts of omission and commission (Adeniran 2013).

Natural, environmental, and unnatural disasters may affect catastrophic event that causes a lot of casualties, injuries and deaths, and destruction of human property and disturbs ecosystems stability (Bhargava 2011). The anthropogenic deterioration of an ecosystem may be caused by either pollution or depletion (Schnaiberg and Gould 1994). Pollution means the presence of pollutants (e.g., substances, noise, radiation,

contaminating pathogens) in the environment in such a quantity, concentration, or duration, that may cause harm on human health, on the proliferation of living organisms and on the equilibrium of ecosystems, making the environment unfit for human use. Pollution threatens the quality of life, the preservation of cultural heritage, and the aesthetic values of communities (Bhargava 2011). Depletions may concern only a single species in a given environment (Schnaiberg and Gould 1994). Direct additions stem from the release of toxic substances into the environment that gradually affect ecosystems and human life (Bates 2002). According to Bates (2002), deterioration of environment may also be a result from the gradual removal of some part of the ecosystem (Fig. 2a and b). As depletion worsens, the people who depend on this resource have to search for some way to compensate. For example, farmers may practice agriculture that depletes soil fertility at a rate that exceeds the ability of the soil to replenish itself. As harvests decline, these farmers must find other ways to produce food or income. This process is demonstrated well in places where intensive agriculture has expanded into inappropriate environments, such as deserts and tropical rainforests.

Negative impact of pollution on the equilibrium, the quality of life, the salvage of cultural heritage, and the aesthetic values of human communities is called degradation (Bhargava 2011). Gradual degradation of the atmosphere by

additional carbon dioxide and other greenhouse gasses again may cause sea levels to rise as much as 1 m by the middle of the next century (Myers 1993, 1997). This process is due with the current global warming trend that is human expansion of the “greenhouse effect” – warming that results when the atmosphere traps heat radiating from Earth toward space (NASA 2018; Oreskes 2004).

Disasters occur in different parts of the world at different times and in various scales leaving behind various magnitude of loss to lives and properties. Damage and death tolls can be assessed, but it is impossible to place a price on the socioeconomic effects on the world as a whole. Psychological impact, cultural treasures, and human potential are things that can never be recovered. Disasters’ potential hazards are not preventable, but their damage can be reduced, and humans’ abilities to cope with disasters can be increased. Because human behaviors surrounding the issue of coping with unforeseen events are related to each individuals’ levels of preparedness, knowledge, and consciousness, identifying levels of knowledge and awareness about disasters, and working to increase their knowledge and awareness, will provide preventive and protective support for societies (Dikmenli et al. 2018). Disaster awareness is not limited to taking action during or after a disaster but also includes taking necessary precautions and making preparations before disasters begin.

Concepts such as security culture, risk culture, and preparation culture are disaster awareness-related concepts. With this in mind, education is used intensively to spread disaster culture in society (Benadusi 2014). Disaster awareness can be taught both to children (Johnson et al. 2014) and adults (Preston 2012). Besides the development of a greater awareness of the risks and more detailed technical knowledge about disaster, it is important to involve the population in identifying the specific threats inherent in their local context and the most appropriate solutions for mitigating them (Benadusi 2014). According Preston (2012, p. 1), disaster education “includes not only school-based initiatives and public information campaigns but also family and community learning, adult education and popular culture.” This

can be best achieved through the dynamic and sustained involvement of all concerned parties (Djalali et al. 2014; Wang 2016). New disaster education strategies are designed to stimulate the ability of individuals and social groups to protect themselves in cases of catastrophe (Benadusi 2014). If disaster awareness can be raised in all people, protective and preventative behaviors against disasters will be developed, which will minimize the damage and loss of life and property from threats that may arise from disasters. People with disaster consciousness have enough information about disasters and may be aware of potential threats and risks and consequently can make an action plan for disasters and act correctly during a disaster. Empowerment of citizens can be developed with continued education, efforts, and campaigns concerning environmental awareness.

Community disaster education is an integral component of disaster management around the world. Its main goal is to promote public safety. It also seeks to reduce damages caused by disaster and to build community disaster resilience (Dufty 2012). Disaster resilience means the ability of a community not only to resist and recover from a disaster but also to adapt to the changes that the event may cause. It includes the ability of a community to learn from the disaster and to improve its networks, systems, and capabilities for the next event. So, the term “disaster education” can be used for all education, communications, and engagement activities that lead to learning before, during, and after an emergency or disaster (Dufty 2018). Disaster education should be tailored to the individual’s and local community’s learning needs. Individually, it may begin developing understanding of individual ecological footprints. The ecological footprint accounts document how much of the annual regenerative capacity of the biosphere, expressed in mutually exclusive hectares of biologically productive land or sea area, is required to renew the resource throughput of a defined population in a given year – with the prevailing technology and resource management of that year (Monfreda et al. 2004). In local community education, Webber et al. (2017) emphasize participative engagement and learning related to all aspects of local emergency management

planning. Subsequently, good environmental practices should be included to people's lifestyle.

Summary

Disasters are defined as events that can originate from both nature and human beings and cause losses of life, property, and social value, as well as stopping or interrupting human activities. Natural disasters are the consequence of natural hazards, and they can happen at any time or place. Environmental disasters (man-made or anthropogenic disaster) are results from technological inventions and civil conflicts. The release of toxic substances into the environment can have acute or gradual effects on ecosystems and human life. Technological disasters are entirely anthropogenic, but like natural disasters, they are temporally acute. Gradual degradation of the atmosphere by additional carbon dioxide and other greenhouse gasses again is due with the current global warming trend that is human expansion of the greenhouse effect. Depletions may concern only a single species in a given environment or degradation of the ecosystem as a whole.

Disasters' potential hazards are not preventable, but their damage can be reduced, and humans' abilities to cope with disasters can be increased. Disaster awareness can be taught to all members of a society. Disaster education includes both school-based initiatives, public information campaigns and also family and community learning, adult education, and popular culture. People, who are aware of disaster threats and risks and have knowledge about disasters, may have protective and preventative behaviors against disasters. Consequently, they can make an action plan for disasters and act correctly during a disaster which will minimize the damage and loss of life and property caused by disasters.

Cross-References

- Biodiversity
- Ecology and Ecosystem
- Sustainable Development
- Weak Sustainability

References

- Adeniran, A. J. (2013). Environmental disasters and management: Case study of building collapse in Nigeria. *International Journal of Construction Engineering and Management*, 2(3), 39–45. <https://doi.org/10.5923/j.ijcem.20130203.01>. <http://article.sapub.org/10.5923.j.ijcem.20130203.01.html>. Accessed 13 Nov 2018.
- Amaratunga, R. D. G., Faber, M., Haigh, R. P., Indirli, M., Kaklauskas, A., Lill, I., Perdikou, S., Rochas, C., Sparf, J., Perera, S., Thayaparan, M., & Velazquez, J. (2015). Disaster resilience education and research roadmap for Europe 2030. <http://usir.salford.ac.uk/37270/>. Accessed 15 Nov 2018.
- Bates, D. C. (2002). Environmental refugees? Classifying human migrations caused by environmental change. *Population and Environment*, 23(5), 465–477.
- Benadusi, M. (2014). Pedagogies of the unknown: Unpacking 'culture' in disaster risk reduction education. *Journal of Contingencies & Crisis Management*, 22(3). <https://doi.org/10.1111/1468-5973.12050>.
- Bhargava, R. (2011). Environmental disasters in history. *Bhatter College Journal of Multidisciplinary Studies*, 1 (1). Special Issue on Earth, Nature, Environment, Ecosystem and Human Society. ISSN: 2249-3301. <http://bcjms.bhattercollege.ac.in/environmental-disasters-in-history/>. Accessed 13 Nov 2018.
- Djalali, A., Della Corte, F., Foletti, M., Ragazzoni, L., Ripoll Gallardo, A., Lupescu, O., Arculeo, C., von Arnim, G., Friedl, T., Ashkenazi, M., Fischer, P., Hreckovski, B., Khorram-Manesh, A., Komadina, R., Lechner, K., Patru, C., Burkle, F. M., & Ingrassia, P. L. (2014). Art of disaster preparedness in European Union: A survey on the health systems. *PLOS Currents Disasters*, 1. <https://doi.org/10.1371/currents.dis.56cflc5c1b0deae1595a48e294685d2f>.
- Duffy, N. (2012). Learning for disaster resilience. In *Proceedings of the Australian & New Zealand disaster and emergency management conference* (pp. 150–164). Brisbane, April 2012, Earth, Fire and Rain. https://works.bepress.com/neil_duffy/9/. Accessed 22 Nov 2018.
- Duffy, N. (2018). A new approach to disaster education. The International Emergency Management Society (TIEMS) Annual Conference, Manila, 13–16 November 2018. https://www.academia.edu/37825155/A_new_approach_to_disaster_education?email_work_card=view-paper. Accessed 22 Nov 2018.
- Dikmenli, Y., Yakar, H., & Konca, A. S. (2018). Development of disaster awareness scale: A validity and reliability study. *Review of International Geographical education online (RIGEO)*, 8(2), 206–220. <http://www.rigeo.org/vol8no2/Number2Summer/RIGEO-V8-N2-2.pdf>. Accessed 10 Nov 2018.
- EC (European Commission). (2013). Disaster risk reduction in increasing resilience by reducing disaster risk in humanitarian action. Humanitarian Aid and Civil Protection. DG ECHO Thematic Policy Document, 5. http://ec.europa.eu/echo/files/policies/prevention_preparedness/DRR_thematic_policy_doc.pdf. Accessed 15 Nov 2018.

- Gunn, A. M. (2004). *Unnatural disasters. Case studies of human-induced environmental catastrophes*. Westport: Greenwood Press. ISBN: 0-313-31999-5.
- Jacobson, J. L. (1988). *Environmental refugees: A yardstick of habitability* (Worldwatch Paper, 86). Washington, DC: Worldwatch Institute.
- Johnson, V. A., Ronan, K. R., Johnston, D. M., & Peace, R. (2014). Evaluations of disaster education programs for children: A methodological review. *International Journal of Disaster Risk Reduction*, 9, 107–123.
- Monfreda, C., Wackernagel, M., & Deumling, D. (2004). Establishing national natural capital accounts based on detailed ecological footprint and biological capacity assessments. *Land Use Policy*, 21, 231–246.
- Myers, N. (1993). Environmental refugees in a globally warmed world. *Bioscience*, 43, 752–761.
- Myers, N. (1997). Environmental refugees. *Population and Environment: A Journal of Interdisciplinary Studies*, 19, 167–182.
- NASA (National Aeronautics and Space Administration). (2018). Climate change causes: A blanket around the Earth. <https://climate.nasa.gov/causes/>. Accessed 13 Nov 2018.
- Oreskes, N. (2004). The scientific consensus on climate change. *Science*, 306(5702), 1686. <https://doi.org/10.1126/science.1103618>. <http://science.sciencemag.org/content/306/5702/1686.full>. Accessed 13 Nov 2018.
- Preston, J. (2012). *Disaster education*. Rotterdam: Sense Publishers.
- Schnaiberg, A., & Gould, K. A. (1994). *Environment and society: The enduring conflict*. New York: St. Martin's Press.
- Wang, J.-J. (2016). Study on the context of school-based disaster management. *International Journal of Disaster Risk Reduction*, 19, 224–234.
- Webber, D., Gissing, A., Duffy, N., & Bird, D. (2017). Community participation in emergency planning: NSW State Emergency Service case study. *Australian Journal of Emergency Management*, 32(2), 28–34. https://works.bepress.com/neil_duffy/55/. Accessed 22 Nov 2018.

Environmental Disclosure

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Synonyms

Carbon accounting reporting; Environmental reporting; Green accounting and reporting

Description

Environmental disclosure refers to the voluntary or mandatory communication of information that shall help company's stakeholders to recognize the impact of business decisions on the environment. Disclosed information usually includes narratives about company's environmental programs and policies, compliance with local environmental legislation, achievement of environmental certifications or awards, adoption of environmental management systems, description of environmental risks, as well as quantitative information like environmental indicators or measures related to the amount of waste produced, the usage of natural resources, emissions, company expenses, and investments made to reduce possible negative impacts on the environment. This information can be found in annual reports, stand-alone environmental reports, or sustainability reports. In addition, companies may be obliged to disclose specific environmental information to the public, government authorities, or agencies to account for their ecological footprint. For example, in the United States, most manufacturing firms and utilities are required to provide to the Environmental Protection Agency (EPA) annual estimates of toxics released into the environment and the EPA makes this information publicly available.

Corporate Environmental Reporting: From Voluntary to Mandatory Obligations

Company' disclosure on environmental aspects has moved through years from simply demonstrating a company's commitment to the environment to communicating rich environmental performance data.

According to Fifka (2012), corporate practice of disclosing environmental information dates back to the 1980s when Western companies began to focus on emissions and waste generation caused by manufacturing activities. The first companies to release stand-alone environmental

reports were those in the petrochemical sector, while the mining sector started producing dedicated reports more slowly in the 1990s. In that period, companies had to respond to stakeholders that began scrutinize companies operating in environmentally sensitive industries such as energy and mining, which were responsible for oil spills, blowout, and other disaster causing severe consequences for people and wildlife (Patten 1992; Darrell and Schwartz 1997).

Then, by the end of 1990s, corporate reporting started considering the social and the environmental dimension simultaneously in a joint report attached or published alongside traditional financial reports. After Elkington's (1998) triple-bottom-line concept of people, planet, and profit, companies have actually began to adopt reporting standards and frameworks, like the GRI's sustainability reporting framework first launched in 2000, that suggest to jointly disclose social, environmental, and economic aspects.

Environmental disclosure has been a voluntary practice for many decades. The reason for such practice was attributed to the fact that the publicly available information was incomplete, too much focused on financial aspects, and did not allow investors to adequately assess who are the best companies; therefore, better performers are willing to disclose environmental information to signal their superior position. A competing explanation indicates that companies use voluntary environmental disclosure to reduce their exposure to social and political pressures by projecting an image of environmental awareness.

According to the latest explanation (base on legitimacy theory), companies operating in environmentally sensitive industries such as oil and gas, chemical, and forestry are considered to be more active in providing environmental information because they need to legitimize their actions in the eyes of society (Niskanen and Nieminen 2001; Patten 1991; Neu et al. 1998). In other terms, environmental disclosure is a mean of addressing the exposure firms face with regard to the social environment. Consequently, the worse the environmental performance is, the greater

company disclosure will be (Aerts and Cormier 2009).

Environmental disclosure has been mainly a voluntary practice but several national governments already introduced requirements related to specific aspects, sometimes limited to selected industries or types of companies. Norway is a pioneer in this field as it introduced environmental reporting regulations in 1989. However, the Norwegian Accounting Act that specifies which enterprises are subject to environmental regulation imposed only a general obligation (i.e., to provide information pertaining to the environmental impact of running the business, including inputs and products) and delegated to the national accounting standard body the description of requirements. Denmark issued its Green Accounts Act in 1995 that required about 1200 high-pollution enterprises to announce green accounting report. France is one of the most advanced countries that adopted laws requiring companies to disclose environmental aspects in their annual reports (The NRE Act of 2001, the Grenelle I of 2009 and the Grenelle II of 2010). In other countries, narrative disclosures are mandated by regulatory agencies such as the Securities and Exchange Commission (SEC) in the United States. Some countries have preferred issuing recommendations and have delegated accounting bodies to regulate environmental disclosure. This is the case of Spanish environmental accounting standards (ICAC) issued in 2002, which obliged companies to provide a more comprehensive disclosure in their annual reports (Llena et al. 2007).

Environmental disclosure obligations derive from the commitments of nations to mitigate the negative impact of business activities on the environment, reduce global warming and climate change. Nations' engagement toward environmental protection is attested by the widespread participation in signing the United Nation Framework Convention on Climate Change (UNFCCC) in 1992, the Kyoto Protocol in 1997, and the Copenhagen Accord in 2009. Yet, the interest in environmental matters dates back to the Stockholm Declaration proposed by the United Nations Environment Programme in

1972 (Sohn 1973) and the Brundtland Report (United Nations 1987) that gave rise to environmental movements in several branches of business, politics, and society.

The European Union and its member states are extremely sensitive toward safeguarding the environment and have launched several initiatives to oblige companies to be more transparent on environmental issues. For example, the EU issued the Directive 2003/87/EC establishing an EU emissions trading system (EU ETS), the Accounts Modernization Directive 2003/51/EC, which requires a mandatory addition to the directors' report on relevant environment and employee matters using key performance indicators commencing on 2005, the Regulation 1013/2006 on waste transfer and the latest Directive 2013/34/EU on nonfinancial information that obliges large public entities to provide information on environmental aspects together with information on societal and governance aspects.

The shift from voluntary to mandatory reporting is attributed to the fact that companies were found to overemphasize their positive contribution to the environment while disregarding negative impacts in their communication. Research realized that environmental information was not genuine and of good quality. Green washing and impression management were quite relevant (Cho et al. 2014).

Regulation is held to increase the quality and volume of environmental disclosure. Demonstrating that regulation has a real positive impact on disclosure quality is albeit difficult. Some studies indicate that companies do not fully comply with the reporting regulations (Criado-Jiménez et al. 2007). However, regulation has undoubtedly a greater impact than any other form of soft rules as demonstrated by Fallan (2016) and Frost (2007), who describe how legally binding disclosure regulation has a stronger influence on environmental reporting compared to requirements and recommendations contained within standards. Yet, in some countries like China, it is still not clear what is the impact of national obligations on these matters (Situ and Tilt 2018).

Accounting Studies on Environmental Disclosure

According to Gray and Laughlin (2012), one of the early responses in academia to the environmental agenda is the so-called "green accounting" or "accounting for the environment" phenomenon. Appeared in the 1980s, after the work of Professor Peter Wood, this "green" approach drew heavily from the longer and more substantial social accounting literature, although its uptake implied – for some years – the abandonment of many wider social concerns (Owen et al. 1997). The main goal of green accounting was to measure, record, and disclose the impacts of corporate environmental activities on a company's financial status through a set of accounting systems. In other terms, it attempted to factor environmental costs into the financial results of operations. Unfortunately, green accounting lost its disruptive role in the 1990s, when environmental issues were integrated with social issues in stand-alone reports, separated from financial accounts.

The interest of accounting researchers in social and environmental reporting is demonstrated by the several special issues launched by academic journals (see, for example, *Accounting Forum* (1995, vol. 19, no. 2/3), *Accounting, Auditing & Accountability Journal* (1991, vol. 4, no. 3), *European Accounting Review* (2000, vol. 9, no. 1), *Accounting, Organization and Society* (1992, vol. 17, no. 5). In addition, new specialist journals in the field of accounting were launched like "*Social and Environmental Accountability Journal*" (the CSEAR house journal), "*Sustainability Accounting, Management and Policy Journal*" and "*Advances in Environmental Accounting and Management*."

A popular field of research is related to the level of disclosure and the identification of corporate and the country-specific determinants of environmental disclosure. Therefore, much effort has been devoted to find the best method for assessing firm's commitment to environmental aspects and transparency in communicating it. Several authors counted the number of words, sentences, or pages linked to environmental aspects in the annual report. After this, the relation between specific

variables and the amount of disclosures was tested (Deegan and Gordon 1996; Milne and Adler 1999; Neu et al. 1998). Clarkson et al. (2008) developed a scorecard in collaboration with an environmental disclosure expert to assess the firms' true environmental commitment and related environmental exposures. This scorecard – based on GRI guidelines – is held to be very comprehensive and complete; therefore, it has been applied in several empirical studies.

Another key topic of investigation is the relationship between environmental disclosure and environmental performance because authors hypothesized that higher disclosure does not mean greater care for the environment. Although, sometimes there are inconsistent results, it seems that better information is usually associated to more polluting industries (Clarkson et al. 2011; Fontana et al. 2015).

Several studies also discuss on the value-relevance of environmental disclosures by examining how investors evaluate company's environmental practices described in annual reports (Cormier and Magnan 2007), while other research focuses on theoretical explanations for environmental disclosure (i.e., the recur to signaling theory, legitimacy theory, and stakeholder theory).

Carbon Accounting Reporting

A quite recent trend within the field of environmental disclosure is carbon accounting: a means of measuring the direct and indirect emissions to the earth's biosphere of carbon dioxide and its equivalent gases from industrial activities. Carbon accounting does not have one unique definition, as it covers a wide range of activities related to the calculation, measurement, verification, reporting, etc. of carbon emissions at the international, national, company, and individual level.

Carbon accounting is discussed in political studies as well as among engineering studies. With the field of accounting and with reference to corporations, carbon accounting has been mainly supported by the work of accounting professors Jan Bebbington and Carlos Larrinaga (Bebbington and Larrinaga 2008; Larrinaga

2014), who consider carbon accounts as a basis for implementing actions to improve company performance in relation to the climate change impact. In fact, they consider three accounting implications of global climate change for companies: financial accounting of emission allowances under EU ETSs; accounting and reporting for climate change risks to corporate performance; and accounting and reporting for the uncertainty associated with climate change.

As described by Ascui (2014) in his review of carbon accounting in the social and environmental accounting literature, there are many empirical studies on the techniques used by companies to account for carbon emissions. These studies fall under the umbrella label of “environmental management accounting” and can be classified according to the approach used by companies for assessing business-related carbon emissions. Three main approaches can be identified. First, the bottom-up approach, also called process-based life cycle assessment (LCA), that focuses on gas emissions of a certain product or organization by analyzing every process in which emissions occur. This approach is used by the ISO 14040 standard on environmental management. Second, companies may use the top-down approach, also known as input–output model that allows identifying emissions sources and can help detect carbon emissions along long supply chains. Finally, there is the “hybrid” approach that combines both the process-based and input–output-based data models. On one hand, using the logic of the bottom-up approach companies can get more accurate data, while on the other hand, the top-down approach allows to account for emissions even where there is lack of process-based data.

Studies on environmental management accounting have strongly contributed to improve corporate practices as they have developed models for enterprises, being very practical oriented and less normative than traditional, social, and environmental accounting research. For example, Bradley et al. (2013) put forward a model for estimating emissions for small- and medium-sized enterprises, while Tsai et al. (2012) used a case study with a Taiwanese pulp

and paper company to integrate information about the cost of carbon and other externalities through Activity-Based Costing.

At the moment, the dominant and most widely used framework for carbon accounting is the Greenhouse Gas (GHG) Protocol, developed by the World Business Council for Sustainable Development and the World Resources Institute. Based on this GHG protocol, the Carbon Disclosure Project (CDP) has developed standards for reporting the results of carbon accounting to stakeholders. In the last 20 years, many voluntary frameworks and schemes have been developed to report the carbon emissions of businesses to investors or other stakeholders (see, for example, the guidelines of ISO 14031 on environmental performance evaluation). The aim of these standards is to increase transparency, favor comparability among companies and provide an evaluation tool for institutional investors and other stakeholders. However, neither these frameworks nor the obligation for carbon reporting under the Kyoto Protocol, EU ETS, and EU Integrated Pollution Prevention and Control Directive seem to have produced reports that are useful for investors. First Solomon et al. (2011) and then Haigh and Shapiro (2012) demonstrate that public climate change reporting is not useful for decisions of financial investors.

Finally, it has to be noted that also accounting bodies have tried to define reporting standards for carbon emissions. In 2005, there was the first attempt made by the International Accounting Standards Board (IASB) through its International Financial Reporting Interpretations Committee (IFRIC) to regulate the financial accounting of carbon allowances, but it failed. The IFRIC Interpretation no. 3 on Emission Rights was withdrawn after criticism by the European Union on how IASB was trying to accounting for emission rights from an environmental ethics standpoint.

Summary

Accounting for an organization's environmental impacts is fundamental in today's era of climate change and increasing amount of industrial

disasters causing severe negative consequences for the society and the environment. Capturing the effects of companies' environmental actions in their financial statements as green accounting is trying to do is yet not likely to happen. However, voluntary and mandatory disclosure of environmental aspects is developing through the issuance of standards and regulations.

In the 1990s, the rise of carbon accounting had made environmental aspects a key topic in the agenda of companies and nations. In the accounting literature, this caused an increasing emphasis on environmental, rather than social, accounting. However, green or carbon accounting cannot be considered in isolation as environmental aspect have critical social implications like negative impacts on the poorest sections of society, mainly in developing countries where people suffer from the consequences of climate change.

Cross-References

- [Carbon Emissions](#)
- [CSR Communication](#)
- [Ecological Footprint](#)
- [Environmental Transparency](#)

References

- Aerts, W., & Cormier, D. (2009). Media legitimacy and corporate environmental communication. *Accounting Organizations and Society*, 34(1), 1–27.
- Asci, F. (2014). A review of carbon accounting in the social and environmental accounting literature: What can it contribute to the debate? *Social and Environmental Accountability Journal*, 34(1), 6–28.
- Bebbington, J., & Larrinaga, C. (2008). Carbon trading: Accounting and reporting issues. *European Accounting Review*, 17(4), 697–717.
- Bradley, P., Druckman, A., & Jackson, T. (2013). The development of commercial local area resource and emissions modelling – Navigating towards new perspectives and applications. *Journal of Cleaner Production*, 42, 241–253.
- Cho, C. H., Patten, D. M., & Roberts, R. W. (2014). Environmental disclosures and impression management. In R. P. Hart (Ed.), *Communication and language analysis in the corporate world* (pp. 217–231). Hershey: IGI Global.

- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4–5), 303–327.
- Clarkson, P. M., Overell, M. B., & Chapple, L. (2011). Environmental reporting and its relation to corporate environmental performance. *Abacus: A Journal of Accounting Finance and Business Studies*, 47, 27–60.
- Cormier, D., & Magnan, M. (2007). The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective. *Ecological Economics*, 62, 613–626.
- Criado-Jiménez, I., Fernández-Chulián, M., Husillos-Carqués, F. J., & Larrinaga-González, C. (2007). Compliance with mandatory environmental reporting in financial statements: The case of Spain (2001–2003). *Journal of Business Ethics*, 79, 245–262.
- Darrell, W., & Schwartz, B. N. (1997). Environmental disclosures and public policy pressure. *Journal of Accounting and Public Policy*, 16(2), 125–154.
- Deegan, C., & Gordon, B. (1996). A study of the environmental disclosure practices of Australian corporations. *Accounting and Business Research*, 26, 187–199.
- Elkington, J. (1998). Partnerships from Cannibals with forks: the triple bottom line of 21st century business. *Environmental Quality Management*, 37–51.
- Fallan, E. (2016). Environmental reporting regulations and reporting practices. *Social and Environmental Accountability Journal*, 36(1), 34–55.
- Fifka, M. (2012). The development and state of research on social and environmental reporting in global comparison. *Journal für Betriebswirtschaft*, 62, 45–84.
- Fontana, S., D'Amico, E., Coluccia, D., & Solimene, S. (2015). Does environmental performance affect companies' environmental disclosure? *Measuring Business Excellence*, 19(3), 42–57.
- Frost, G. R. (2007). The introduction of mandatory environmental reporting guidelines: Australian evidence. *Abacus*, 43(2), 190–216.
- Gray, R., & Laughlin, R. (2012). It was 20 years ago today: Sgt pepper, accounting, Auditing & Accountability Journal, green accounting and the blue meanies. *Accounting, Auditing & Accountability Journal*, 25(2), 228–255.
- Haigh, M., & Shapiro, N. A. (2012). Carbon reporting: Does it matter? Accounting. *Auditing & Accountability Journal*, 25(1), 105–125.
- Larrinaga, C. (2014). Carbon accounting and carbon governance. *Social and Environmental Accountability Journal*, 34(1), 1–5.
- Llena, F., Moneva, J. M., & Hernandez, B. (2007). Environmental disclosures and compulsory accounting standards: The case of Spanish annual reports. *Business Strategy and the Environment*, 16(1), 50–63.
- Milne, M., & Adler, R. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12(2), 237–256.
- Neu, D., Warsame, H., & Pendwell, K. (1998). Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23(3), 265–282.
- Niskanen, J., & Nieminen, T. (2001). The objectivity of corporate environmental reporting: A study of Finnish listed firms' environmental disclosures. *Business Strategy and the Environment*, 10(1), 29–37.
- Owen, D., Gray, R., & Bebbington, K. J. (1997). Green accounting: Cosmetic irrelevance or radical agenda for change? *Asia-Pacific Journal of Accounting*, 4(2), 175–198.
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy*, 10, 297–308.
- Patten, D. M. (1992). Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory. *Accounting, Organizations & Society*, 17(5), 471–475.
- Situ, H., & Tilt, C. (2018). Mandatory? Voluntary? A discussion of corporate environmental disclosure requirements in China. *Social and Environmental Accountability Journal*, 38(2), 131–144.
- Sohn, L. B. (1973). The stockholm declaration on human environment. *Harvard International Law Journal*, 14(3), 423–515.
- Solomon, J. F., Solomon, A., Northon, S., & Joseph, N. L. (2011). Private climate change reporting: An emerging discourse of risk and opportunity? Accounting. *Auditing & Accountability Journal*, 24(8), 1119–1148.
- Tsai, W. H., Shen, Y.-S., Lee, P.-L., Chen, H.-C., Kuo, L., & Huang, C.-C. (2012). Integrating information about the cost of carbon through activity-based costing. *Journal of Cleaner Production*, 36, 102–111.
- United Nations. (1987). Report of the World Commission on Environment and Development: "Our Common Future". Retrieved from: https://www.are.admin.ch/dam/are/it/dokumente/nachhaltige_entwicklung/dokumente/bericht/our_common_futurebrundtlandreport1987.pdf.download.pdf/our_common_futurebrundtlandreport1987.pdf

Environmental Economics

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Synonyms

Ecological economics; Environmental and natural resource economics; Natural resource economics

Definition

Since 1960s environmental economics has become a subdiscipline of economics which integrates mainly welfare economics and growth. The root of this subdiscipline is the US Resource for the Future (RFF) research institute in year 1950s (Pearce 2002). The science economics is the discipline of the allocation of scarce resources. As a branch of economic, environmental economics is the practices and policies of environmental issues in an economic system to maintain the resources in the long run. This branch focuses on the cost and benefit analysis of the environmental and natural resources. Moreover, the methodology of the environmental economics is based on the positive and normative analysis by building economic models. The empirical literature on this area mainly focus on rationality and consistency test (Viscusi 2014).

Introduction

In the late 1960s, most developed countries began to concern about the natural environment and pollution. Economists also began to be interested in reasons and solutions for environmental problems (Maler 1974). Meanwhile, environmental degradation and pollution are perceived as crucial threats to economic development and economic growth (Munasinghe 1993). Environmental economics is a sub-discipline of economics that examines the impact of environmental problems, its subjects are often not included in mainstream economic theories. These issues are mainly based on environmental goods such as air and water that have utility but with no prices attached.

In parallel with the change in global environmental problems, environmental economy issues are also a rapidly changing field. Environmental economics focuses on the analysis and modeling of the cost of environmental damage (pollution, deforestation, deterioration of ecosystems,

climate change, etc.) generated directly or indirectly by economic activities and human behaviors, and the development of regional and global environmental policies. In the second half of the twentieth century, when environmental concerns began as a result of progress in environmental science and the development of tools and techniques in the study of environmental problems, scientific studies examining the relationship between environment and economics began to increase and gained importance.

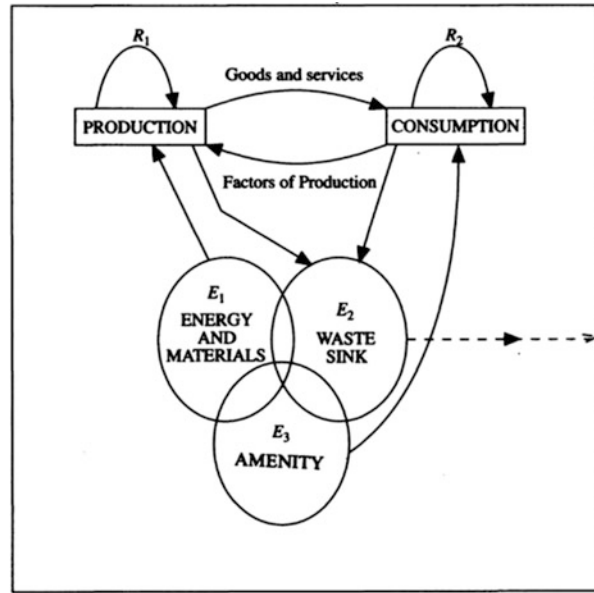
The environment is a global concern today. In recent years, environmental economics integrates to the policy instruments or policy implications such as environmental taxation or UN Sustainable Development Goals (SDGs) (Pearce 2002). Environmental economics requires a multidimensional approach because of its interdisciplinary in nature. How economic units respond to environmental issues will depend largely on the behavior of these units in the face of scarcity.

Interlinkages Between the Economy and the Environment

Thus, environmental economics provides an analytical framework for examining the relationships between environment and economics. Moreover this field helps to identify environmental problems and search for the solutions. This field of economics aims to determine and analyze environmental policies to allocate natural resources more efficiently.

Hanley et al. (1997) show the interlinkages between the environment and the economy. In an economy, exchanges of goods, services, and production factors take place between production (supply side) and consumption (demand side) of the economy. The supply side extracts $E1$: energy and materials (such as oil and iron) as an input or production factors to transform into outputs (goods and services) to demand side of the economy and some which are waste products. The loops R_1 and R_2 indicate recycling of resources in production process. As a supplier of production

Environmental Economics, Fig. 1 The link between economy and the environment



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process, the second role of environment is as a sink for waste materials. Thus, the natural resource provides three types of functions to an economy: natural resources based raw materials, serves as a sink to absorb or recycle the waste products, and amenity services to support human well-being (e.g., stabilization of the global climate) (Munasinghe 1993) (Fig. 1).

Environmental economics is mainly based on the theories and assumptions of neoclassical economics (Tietenberg and Lewis 2016). Neoclassical economics suggests economic value mainly dependent on social well-being (Hanley et al. 1997). T. Malthus, D. Ricardo, and J.S. Mill paved the way for the prediction that the limited nature of natural resources, in other words, would be scarce and, if natural resources were scarce, would lead to a decline in economic growth and consequently a reduction in social returns (Barnett and Morse 2011). Before the last quarter of the twentieth century, neoclassical economists laid the groundwork for the “marginal” concept and theories and the basis of methodological analysis of environmental economics. Pareto’s “Pareto efficiency” and A. Marshall and Pigou’s “Externality” and “Market Failure” studies contributed

to the foundations of environmental economics (Perman et al. 2013).

In early times, when economic activities were less than they are today, environmental problems were not considered as in today. Economists have sought methods to solve this market failure (Maler 1974). As in other fields of economics, environmental economics use models and quantitative techniques such as econometrics and also experimental economics to investigate the relationships between economics and environment. Moreover, game theory provides to address environmental issues. For example, the interaction between firms and policy makers over cuts in carbon dioxide emissions (Hanley et al. 1997). The economic cost and benefit analysis also provides tools and models to deal with the environmental issues.

Key Issues

Concepts such as carbon trading, congestion pricing, sustainable development, renewable energy trading, energy, depletable resources, ecosystem goods and services, and economics of pollution control are the key issues in this field of

economics (Batabyal and Nijkamp 2001). The study of environmental economics also covers market failure, economic incentives for environmental protection, transboundary pollution problems, pollution taxes, tradable pollution permits, economics of natural resources, renewable and nonrenewable resources economics, the economics of forestry, economic cost and benefit analysis, and the sustainable development. Tietenberg and Lewis (2016) indicate some key issues and questions in environmental economics:

- How does the science economics respond to scarcities?
- Many environmental problems involve a degree of uncertainty and risk. What is the role of political economy in controlling environmental problems?
- Can economic and political institutions as well as policy makers respond to these problems effectively?
- What is the role of economic and political system to sustain economic development and to preserve environmental sources for the future economic activity?

Summary

Environmental economics as a branch of economics considers the environmental and natural resources. Moreover, microeconomics examines the environmental economics in the light of the following terms and concepts including market failure, price discrimination, externalities, and public goods (Thampapillai and Ruth 2014).

Cross-References

- [Cost-Benefit Analysis](#)
- [Ecological Economics](#)
- [Externalities](#)
- [Index of Sustainable Economic Welfare](#)
- [Market Failure](#)
- [Natural Resources](#)
- [Public Goods](#)

References

- Barnett, H. J., & Morse, C. (2011). *Scarcity and growth: The economics of natural resource availability*. New York: RFF Press.
- Batabyal, A. A., & Nijkamp, P. (2001). *Introduction to research tools in natural resource and environmental economics*. New Jersey: World Scientific Book Chapter.
- Hanley, N., Shogren, N. F., & White, B. (1997). *Environmental economics: In theory and practice*. London: Macmillan Press.
- Maler, K. G. (1974). *Environmental economics: A theoretical inquiry*. New York/London: RFF Press.
- Munasinghe, M. (1993). Environmental economics and sustainable development. World Bank environment paper no.3, The World Bank, Washington, DC
- Pearce, D. (2002). An intellectual history of environmental economics. *Annual Review of Energy and the Environment*, 27, 57–81.
- Perman, R., Ma, Y., Common, M., Maddison, D., & McGillvray, J. (2013). *Natural resource and environmental economics*. Harlow: Addison Wesley.
- Thampapillai, D. J., & Ruth, M. (2014). *Environmental economics: Concepts, methods and policies*. New York: Routledge.
- Tietenberg, T., & Lewis, L. (2016). *Environmental and natural resource economics*. Routledge.
- Viscusi, W. K. (2014). The value of individual and societal risks to life and health. In *Handbook of the economics of risk and uncertainty* (Vol. 1, pp. 385–452). North Holland: Elsevier.

Environmental Education

- [Sustainability Education and Environmental Awareness](#)

Environmental Effect

- [Environmental Impact](#)

Environmental Efficiency

- [Eco-efficiency](#)

Environmental Footprint

► [Environmental Impact](#)

Environmental Governance

► [Environmental Protection Agency](#)

Environmental Impact

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Synonyms

[Ecological impact](#); [Environmental effect](#); [Environmental footprint](#)

Definition

The environment is regarded as the source from which living organisms extract all (natural) resources necessary for their survival and development. It can also be viewed as a medium within which ecological functions occur naturally. An environment can however be considered as natural environments, artificial environments, cultural environments, work environments, or digital environment (Abaza et al. 2004; Speight 2015). Based on the foregoing, an environmental impact can be said to be any type of environmental change, whether chemical, physical, or biological, which occurs as a result of human activities. Such activities are capable of causing direct or indirect effect

on the health of the population, economic and/or social activities, values of ecological resources, and biota (Hanania et al. 2020; Morgan 2012).

Introduction

The conflict between economic development and environmental protection is a very important issue to consider before starting any human activity that can cause negative environmental effects. Environmental impacts have become an issue of global concern since the 1960s in the attempt to facilitate an equilibrium between economic development and environmental protection. Industrialized countries with stable economies tend to favor environmental protection, while developing countries that try to compete in the global market tend to favor economic development (Pan et al. 2019). However, despite the concern, there seem to be generally less than adequate efforts to indeed protect the environment as may be evident from the frequency of environmental accidents even in the developed world affecting soil quality, water resources, and the human society at large (Morgan 2012; Pan et al. 2019). For example, in an industrial facility, the impact may extend beyond the direct exposure of workers at the facility and its immediate environments to emission of hazardous substances: energy production from the facility may stimulate changes in local climate from heating effects; industrial burning of fossil fuel can also increase climate change effect from CO₂ emission; mineral mining activities and siting of facility can cause soil contamination and damage of ecosystems; while emitted contaminants can infiltrate into local hydrology and food chain to ultimately affect the biotic population. The full range of the impacts of such activities can be extensive, complex, and highly unpredictable (Neff 1981; Moreira 1992).

Classification of Environmental Impact

Environmental impacts are primarily classified into direct, indirect, and cumulative impacts.

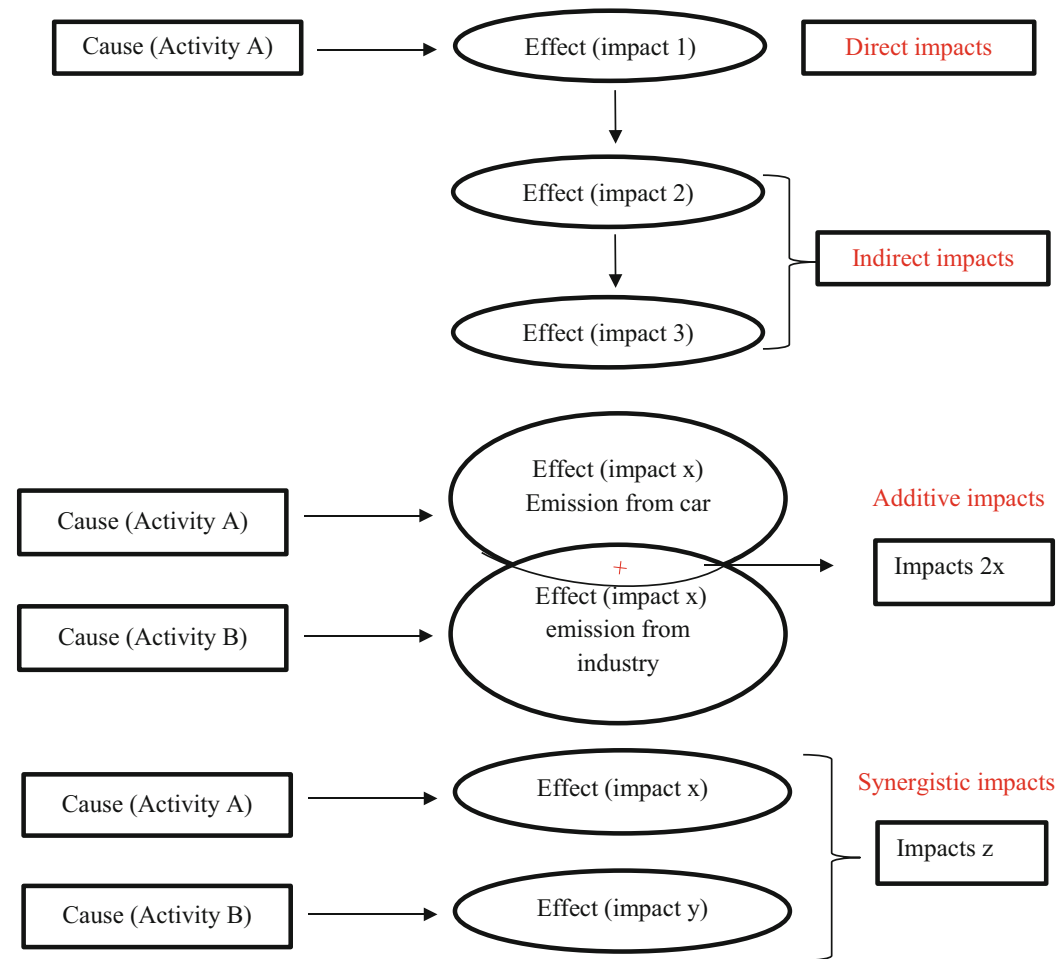
Direct Environmental Impacts

Direct impact exists when there is a direct interaction between an activity and any environmental component (Fig. 1) (Pan et al. 2019). This type of impact usually forms a cause and effect relationship thus is usually easy to detect and predict. A good example is the loss of biodiversity resulting from local deforestation activities or discharge of effluent from an industrial effluent treatment plant (ETP) into a community river that causes water toxins to increase thereby causing the water quality to decline (Tszmokawa and Hoban 1997). In another example, the use of fertilizers helps improve farm productivity by

supplying rapid nutrients to plants. However, leaching can result when there is excessive rainfall or irrigation that washes the nutrients such as nitrates and sulfur below the roots of the plant causing soil acidification and ground water contamination, and a direct environmental impact of fertilizer application on the soil (Wiederholt and Johnson 2017).

Indirect Environmental Impacts

This type of impact is sometimes referred to as secondary or chain impacts. Indirect impacts are not usually obvious and are more difficult to predict relative to direct impact (Fig. 1) (Sanchez



Source: Adapted from Tszmokawa & Hoban, 1997

Environmental Impact, Fig. 1 Types of environmental impacts

2006). It exists when a secondary or chain reaction is caused by an action (Pan et al. 2019). Such impact does not appear as a direct result of an activity, rather it occurs from a network of interactions or complex impact pathways. This type of impact is felt at a location far away from the cause or many years after the causal action had taken place. For example, ambient air SO_2 rise due to stack emissions may deposit on land as SO_4 and cause acidic soils (Tszmokawa and Hoban 1997). Also, in further consideration of environmental impacts of fertilizers, continuous use of fertilizers can cause nutrient accumulation which can be washed into water bodies in different location. When nutrients from a fertilized farm runoff into water bodies, they stimulate algae growth that depletes dissolved oxygen and causes eutrophication. This is an indirect environmental impact on water body in different location caused by fertilizer use on a farmland (Wiederholt and Johnson 2017).

Cumulative Impact

Cumulative impacts are changes caused by the interaction of an action with other past, present, and future actions (DEAT 2004). They typically result from either an additive, synergistic, or multiplicity effects of more than one action (Fig. 1). This type of impact can emanate from the incremental effect of an activity when it interacts with another similar or different effect from other activities that have been completed, are ongoing, or have to be completed in the future (Roudgarmi 2018). Such impact may constitute an insignificant impact separately but can become significant when combined with other impacts. A cumulative impact is additive when more than one impact that exhibits a similar character interacts to create a bigger impact. For example, runoff of nutrients from a fertilized farm may not be sufficient enough to significantly deplete dissolved oxygen in a water body but runoff from two or more fertilized farms can combine to cause significant reduction of oxygen to the extent that it becomes lethal to aquatic lives. Synergistic environmental impact takes place when more than one impact that exhibit different character interact to create

bigger impact. For example, in addition to depletion of amount of dissolved oxygen caused by runoff of nutrients from fertilized farm, oil spillage from exploration activity from a nearby oilfield will cause both chemical toxification as well as coating and smothering effect on aquatic lives. These effects will combine to form a devastating impact on the aquatic environment (Tszmokawa and Hoban 1997).

These three main classifications of environmental impacts may also be categorized based on the characteristics of the impacts into:

Positive and Negative Environmental Impact

An environmental impact is said to be positive if it supports the improvement of any environmental factor or parameter. For example, a project to relocate a population from a slum or shanty to a block of energy saving apartment or to develop a waste management system for a local community or to restore a river forest will create a positive environmental impact. On the other hand, where an activity results in a damage that deteriorates the quality of the environment or its components, a negative environmental impact is said to have taken place. Examples of negative environmental impacts include emission of industrial effluents into the atmosphere or water bodies without proper treatment and bush burning activities to prepare agricultural land for farming season (Pan et al. 2019). However, some activities can create both positive and negative environmental impacts. For example, the use of organic manure for farming can significantly improve soil nutritional composition and texture, but long-term use can cause accumulation of some nutrient and consequently loss of excess nutrient to the environment through erosion to water bodies and cause eutrophication (Wiederholt and Johnson 2017).

Local, Regional, and Strategic Environmental Impact

A local impact exists when an activity causes an environmental impact only within the place of the activity and does not extend to other regions. For example, a mining activity will usually cause a

local environmental impact. When the environmental impact spreads beyond its local surrounding to other regions, such as road construction, regional impact is said to have occurred (Pan et al. 2019). A strategic impact takes place when an activity causes an effect that transcends regional to national or international boundaries, such as the construction of Akosombo dam in Ghana on the Volta lake which stretches across six West African countries (Gyau-Boakye 2001; Pan et al. 2019).

Immediate, Medium, Long-Term and Cyclic Environmental Impact

When an action causes an effect to happen instantaneously or within a short time of the action, an immediate environmental impact is said to have occurred. For example, an immediate environmental impact is experienced by fish which die in a river due to the release of toxic compounds. A medium-term impact is represented in the effect of runoff of nutrients from a fertilized farm into a river which may not be noticeable until after a few years when there will be algae bloom that will cause eutrophication (Pan et al. 2019; Wiederholt and Johnson 2017). The bioaccumulation of contaminants (like methyl mercury) in the food chain is an example of long-term environmental impact because it takes time for these effects to appear, and when effects occur at regular time intervals, this is called a cyclic environmental impact (Pan et al. 2019; Biswas 2000).

Temporary and Permanent Environmental Impact

A temporary impact happens when an action causes a change that can be remediated within a short or medium term. An example of a temporary environmental impact is the leakage of oil (petroleum) to the coast, which is gradually absorbed by the environment over time. A permanent impact however takes place where the effect of an action will last for a long-term or remain permanent. Radiation is an example of a lasting environmental impact and its effects can take several years (Pan et al. 2019).

Reversible and Irreversible Environmental Impact

The combustion of tires results in pollution of the air which dissipates over time and the air returns to its original state, and this is an example of a reversible impact. Erosion resulting from excessive rain is an irreversible impact on the environment, since it takes thousands of years for the soil to regain its mass and fertility (Pan et al. 2019).

Summary

Environmental impact is any kind of alteration, whether beneficial or adverse, to any environmental component, physical, chemical or biological, which results from human activities. Industrialization brought about many environmental problems, thus the need to balance developmental goals with environmental protection became a common concern of the world. Environmental impacts of developmental project have now become an important consideration before project execution. Environmental impacts are generally classified into direct, indirect, and cumulative impact. However, depending on their characteristics, they can also be classified into positive and negative impacts; local, regional, and strategic impacts; immediate, medium, long-term and cyclic impacts, and temporary and permanent impacts; reversible and irreversible impacts.

Cross-References

► [Environmental Protection Agency](#)

References

- Abaza, H., Bisset, R., & Sadler, B. (2004). *Environmental impact assessment and strategic environmental assessment: Towards an integrated approach*. Geneva: United Nations Environment Programme (UNEP).

- Biswas, A. K. (2000). Scientific assessment of the long-term environmental consequences of war. In J. E. Austin & C. E. Brush (Eds.), *The environmental consequences of war: Legal, economic, and scientific perspectives* (pp. 303–315). Cambridge, UK: Cambridge University Press.
- DEAT. (2004). *Cumulative effects assessment, integrated environmental management, information series 7*. Pretoria: Department of Environmental Affairs and Tourism (DEAT).
- Gyau-Boakye, P. (2001). Environmental impacts of the Akosombo dam and effects of climate change on the Lake levels. *Environment, Development and Sustainability*, 3, 17–29. <https://doi.org/10.1023/A:1011402116047>.
- Hanania, J., Reyes, W., Stenhouse, K., & Donev, J. (2020). *Environmental impact*. Retrieved March 21, 2020, from Energy Education: https://energyeducation.ca/encyclopedia/Environmental_impact.
- Moreira, I. (1992). Evaluation of environmental impacts in Brazil: Background, current situation and future perspectives. In *Manual of evaluation of environmental impacts*. Curitiba: SUHREMA/GTZ.
- Morgan, R. K. (2012). Environmental impact assessment: The state of the art. *Impact Assessment and Project Appraisal*, 30(1), 5–14. <https://doi.org/10.1080/14615517.2012.661557>.
- Neff, T. L. (1981). Environmental impacts. In *The social costs of solar energy* (pp. 60–69). <https://doi.org/10.1016/b978-0-08-026315-1.50011-0>.
- Pan, R., Wild, A. C., Drecksler, L. R., & Gonçalves, A. C. (2019). Environmental impact: Contextualization and current reality. *Journal of Experimental Agriculture International*, 29(4), 1–8. <https://doi.org/10.9734/JEAI/2019/45803>.
- Roudgarmi, P. (2018). Cumulative effects assessment (CEA): A review. *Journal of Environmental Assessment Policy and Management*, 20(2), 1–18. <https://doi.org/10.1142/S1464333218500084>.
- Sanchez, L. E. (2006). *Environmental impact assessment: concepts and methods* (2nd ed.). São Paulo: Oficina de Textos.
- Speight, J. G. (2015). Environmental impact. In *Handbook of offshore oil and gas operations* (pp. 257–303). Larame: Elsevier Inc. <https://doi.org/10.1016/b978-1-85617-558-6.00009-x>.
- Tszmokawa, K., & Hoban, C. (1997). *Road and the environment: A handbook*. Washington, DC: The International Bank for Reconstruction and Development/THE WORLD BANK.
- Wiederholt, R., & Johnson, B. (2017). *Environmental implications of excess fertilizer and manure on water quality*. Retrieved June 3, 2020, from North Dakota State University: <https://www.ag.ndsu.edu/publications/environment-natural-resources/environmental-implications-of-excess-fertilizer-and-manure-on-water-quality>

Environmental Impact Assessment

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Synonyms

EIA

Description

The premises of environmental impact assessment (EIA) lie in the Earth's limited environmental carrying capacity (Mebratu 1998; Meadows et al. 2005; Rockström et al. 2009; Steffen et al. 2015), the concept of sustainable development (WCED 1987), and the rise of public environmental awareness and concern (Jay et al. 2007). EIA first emerged as a formal process in the 1960s–1970s (Pope et al. 2004; Jay et al. 2007). Common applications of EIA include life cycle assessment (LCA) of product systems (ISO 14040: 2006; ISO 14044: 2006) and legislation-driven assessment of planned projects (Jay et al. 2007; Morgan 2012). EIA can take many forms in terms of the selection of environmental impact categories, impact indicators, and the spatiotemporal scope of impacts. EIA can serve as a preventive tool through which researchers, authorities, or decision-makers can better understand potential environmental impacts or identify current environmental hotspots within operations to improve environmental sustainability. Future EIA developments include quantifying positive environmental impacts (Sala et al. 2013; Dyllick and Rost 2017; Grönman et al. 2019), assessing environmental impacts and sustainability from a holistic, as opposed to reductionist, perspective (Ketola 2010; Laurent et al. 2012; Bjørn and

Hauschild 2013), developing understanding about microlevel impacts on macrolevel environmental sustainability (Dyllick and Muff 2016; Ryberg et al. 2018a; Ryberg et al. 2018b; Kühnen et al. 2019), and performing regionalized assessments of environmental impacts within LCA (Mutel et al. 2019).

Introduction/History

The term environmental impact assessment (EIA) has a dual meaning in contemporary literature. It can take the form of a broad umbrella concept that encompasses assessments of the environmental impacts of various activities, organizations, products, or people, and related assessment methods. Second, EIA is often understood as a legislation-driven stakeholder-participatory procedure through which the environmental impacts of proposed projects can be assessed. Historically, these two EIA concepts have evolved from environmental/sustainability assessment research and legislation.

Generally speaking, the scientific justification for EIA and its normative background lie in the absolute limits of the Earth's environmental carrying capacity. Economist Thomas Robert Malthus (1766–1834) presented a theory of environmental limits that highlighted how resource scarcity represents a limit to growth (Mebratu 1998). This concept was extended in 1972 when the Club of Rome acknowledged the planetary boundaries of economic growth in a report entitled “Limits to Growth” (Meadows et al. 2005). More recently, Rockström et al. (2009) and Steffen et al. (2015) quantified planetary boundaries and the safe operating space for humanity in their globally recognized research.

The early theories of limits to growth preceded the famous definition of sustainable development (Mebratu 1998) that was published in the United Nations World Commission on Environment and Development (WCED) report, which is also known as the Brundtland report, “Our Common Future” in 1987 (WCED 1987). The publication of the report represented a major political turning point (Mebratu 1998) and fueled a wide-scale

international debate. The more recent Sustainable Development Goals (SDGs) set by the United Nations established macrolevel environmental sustainability targets (UN 2015). Sustainable development is currently understood as a nested concept in which social and economic sustainability depend on environmental sustainability (Griggs et al. 2013).

The international standards of environmental management published by the International Organization for Standardization (ISO), in particular the standards on environmental life cycle assessment (LCA) of product systems, have widely contributed to how EIA is perceived. As a result of a participatory multistakeholder preparatory process, the first LCA standard ISO 14040, which covered the principles and framework of LCA, was published in 1997 (ISO 2019a), followed by a series of three further LCA standards (ISO 14040: 2006). ISO 14042, which was published in 2000, specifically addressed impact assessment (ISO 2019b) that is also known as life cycle impact assessment (LCIA) which is a mandatory phase of LCA (ISO 14040: 2006). Jolliet et al. (2004) first defined the overall framework of LCIA that presents the connections and available assessment methods and models between environmental pressures and impact categories (Jolliet et al. 2004; Veronesi et al. 2016). Currently, LCA is presented in ISO 14040 and ISO 14044, which were both published in 2006 (ISO 14040: 2006; ISO 14044: 2006). LCIA methods have actively developed since the 2000s (Hauschild et al. 2013; Mutel et al. 2019).

A specific and globally well-known application of EIA – to evaluate the potential environmental impacts of planned projects (such as industrial and agricultural activities, energy production, construction projects, waste management, traffic planning, or major changes to existing operations) – was originally designed in the late 1960s and early 1970s (Pope et al. 2004; Jay et al. 2007) in response to rising public environmental awareness and concern (Jay et al. 2007). This was fueled by the oil crisis and environmental disasters of the 1970s, for example, the Seveso accident in 1976. Principle 17 of the Rio Declaration on Environment and Development,

which was set at the United Nations Earth Summit in 1992, further contributed to the implementation of project-related EIA within national policies (UN 1992). Public demand for this specific branch of EIA is high, and the EIA process has been widely implemented in legislation within both developed and developing economies (Jay et al. 2007; Morgan 2012). This preventive EIA procedure facilitates the detection of potentially adverse environmental impacts of (major) projects, and authorities can withhold the permission to proceed in case of significant environmental risks (Jay et al. 2007). The EIA procedure includes hearings of potentially affected stakeholders (Glucker et al. 2013).

In parallel to the implementation of EIA in national policies, environmental issues were widely adopted within business in the 1990s (Ketola 2010). Historically, the consideration of the negative impacts that production processes have on the environment has shifted focus from reducing end-of-pipe emissions to improving efficiency throughout the supply chain and from a reductive to a preventive approach (Linnanen et al. 1997). Efficiency improvements typically reduce resource use and waste, thereby saving money for businesses and reducing negative environmental impacts. From the environmental sustainability management perspective, such efficiency improvements are business as usual (Ketola 2010). Emerging business approaches to EIA involve the identification of the positive environmental impacts of existing or future products or services (Dyllick and Roth 2017) and businesses' contribution to macroenvironmental sustainability (Dyllick and Muff 2016).

Environmental Impact Pathways

The causes of environmental impacts can be categorized in different ways. In general, the subjects that are of interest in EIAs are individuals/consumers, commercial or noncommercial organizations, processes, products, services, projects, events, countries, societies, and/or policies. A consumption-based approach or a production-based/regional approach can be used in EIA; for

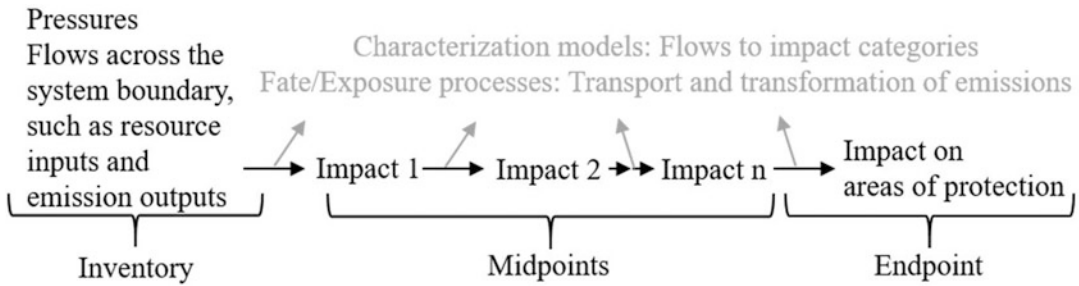
example, while modeling national-level environmental impacts (UNEP 2010). Environmental impacts are caused both by resource extraction from the environment (input to a process), such as materials or energy, and by releases into the environment (output from a process), such as pollutant emissions (ISO 14040 2006; Verones et al. 2016).

EIA has the potential to depict impacts on a spatially and temporally wide range. Spatially, environmental impacts reach from local to global level (Jeswani et al. 2010). Some impacts are typical at a local level (e.g., water scarcity), while some are global (e.g., climate change). From the LCA perspective, a product system may cause environmental impacts globally, if the production processes of components, chemicals, energy, fuels, etc., are widely included in the system boundaries of the assessment. Similarly, the temporal scope of environmental impacts is broad, ranging from short-term to long-term impacts (Jeswani et al. 2010).

The EIA of projects considers the environmental impacts in the specific local context that the project is implemented in both the short and long term (Jeswani et al. 2010). In contrast, LCA is typically time and location independent (Jeswani et al. 2010). However, regionalization of the characterization of impacts in LCA has been actively developed during the past decade (Mutel et al. 2019) and environmental impacts are increasingly quantified based on specific local conditions rather than universal models.

Figure 1 depicts the causal impact pathway; that is, how environmental pressures/interventions (UNEP 2010), or using LCA terminology: flows across the boundaries of the system under assessment (ISO 14040 2006), impact the environment; and how potential impacts are typically assessed, especially within LCA.

Environmental impacts can be direct or indirect, and the impact pathway can form a complex network. Therefore, the environmental impacts can be modeled at different points of the impact pathway. The modeling approaches employed in LCA are midpoint and endpoint modeling. Areas of protection describe different aspects of the environment that are ultimately affected or



Environmental Impact Assessment, Fig. 1 Impact pathway (Jolliet et al. 2004; ISO 14040 2006; Finnveden et al. 2009; UNEP 2010)

damaged when impacts reach the endpoint, at which they can be assessed. Typically, areas of protection include the quality of the natural environment, natural resources, man-made environment, and human health (Jolliet et al. 2004; Finnveden et al. 2009). The sensitivity of the receiving environment (ecosystems, animal species, plants, people) that is exposed to the pressure may determine the severity of the impact. LCIA characterization models aim to cover the relevant cause-effect chains/impact pathways/fate and exposure and link the pressures to the environmental consequences (Frischknecht et al. 2016).

as freshwater ecotoxicity, marine ecotoxicity, and terrestrial ecotoxicity. Characterization factors are required to calculate the environmental impacts of a chosen category. Characterization factors define the extent of the impacts within the selected impact category due to inventory results in a defined unit. For example, according to IPCC (2007), the global warming potential impacts of greenhouse gas emissions can be calculated as carbon dioxide equivalents (CO₂eq) using the following characterization factors: CO₂ 1 kg_{CO₂eq}/kg_{CO₂}, methane 25 kg_{CO₂eq}/kg_{CH₄}, and nitrous oxide 298 kg_{CO₂eq}/kg_{N₂O}.

LCIA Methods

The principles for carrying out LCIA in LCA are standardized in the ISO 14040 standard. In this part of the LCA, potential environmental impacts are quantified based on the life cycle inventory (LCI) results. In the goal and scope definition of an LCA study, the LCIA method, impact methods, and categories are typically selected. An LCIA method represents a set of LCIA impact categories. Typical LCIA methods are, for example, CML, ILCD, Eco Indicator 99, ReCiPe, and TRACI. Some of the LCIA methods provide a wide range of impact categories, but some are more concentrated to a narrower perspective, such as toxic impacts. LCIA methods consist of impact category groups – for example, eutrophication and ecotoxicity – and these groups may consist of one or several impact categories, such

Environmental Impact Indicators

EIA provides both quantitative and qualitative information about environmental impacts, typically in the form of quantitative and qualitative indicators, respectively. For example, in LCA, environmental impacts are quantified, whereas qualitative environmental assessment may require the inclusion of stakeholder panels who are interviewed to elicit insights into the perceived environmental impacts (Jeswani et al. 2010). Environmental impact indicators are widely applied in corporate environmental reporting, marketing, environmental product declarations, product labeling, benchmarking, and environmental monitoring practices (Frischknecht et al. 2016).

Environmental indicators can be simple or more complex aggregate indicators (indices)

(Heink and Kowarik 2010). Quantitative indicators can further depict both the quantity and quality of the environment; for example, the impacts water extraction has on the water quantity available to other local users (water scarcity) or the impacts emissions have on water quality (water degradation) (ISO 14046 2014). The UNEP/SETAC Life Cycle Initiative has been developing a globally harmonized set of environmental impact category indicators (UNEP 2016).

When interpreting the significance of different environmental impacts, environmental impact indicators can optionally be normalized in LCA, which involves calculating the magnitude of the impact category indicator relative to reference information. Indicators can further optionally be weighted by converting, and possibly aggregating, indicator results across impacts. Impact categories may further be sorted and ranked (ISO 14044 2006). One approach to evaluating environmental impacts is through monetary valuation of different environmental impacts. For example, a review by Förster et al. (2019) demonstrated the cost-if-lost approach to highlighting the economic value of ecosystem services, an approach that may be useful in political decision-making processes. Environmental management standards define environmental performance indicators (EPIs) that provide information on how an organization manages its potentially adverse or beneficial impacts on the environment. The organization may select key performance indicators among the EPIs that are especially significant (ISO 14031 2013).

Footprints are typical environmental indicators that represent specific environmental impacts. They are used for reporting environmental performance (Ridoutt et al. 2016). Ridoutt et al. (2016) suggest that while LCIA impact categories eventually affect areas of protection predefined by the LCA community, footprint metrics address the specific areas of concern defined by the interests of stakeholders. A variety of approaches can be employed to quantify various footprint indicators, both LCA-based and other, and harmonization has been attempted (Ridoutt et al. 2016). Although their scope is narrow, the quantification of LCA-

based footprints shares features with the quantification of the more comprehensive environmental impact category indicators (Ridoutt et al. 2016). The two internationally standardized LCA-based footprints are carbon footprint (ISO 14067 2018) and water footprint (ISO 14046 2014). In the EU, the Commission has recommended the use of the LCA-based Product Environmental Footprint (PEF) methodology for assessing the broader environmental impacts of goods and services (2013/179/EU; JRC 2019), and respectively, the Organization Environmental Footprint (OEF) method for assessing impacts at an organization level (2013/179/EU).

Alongside reducing negative environmental impacts, there is an increasing interest in creating and measuring positive environmental impacts (Bjørn and Hauschild 2013), unburdening the environment (Kravanja and Čuček 2013), positive footprints (Dyllick and Muff 2016), net positivity (Dyllick and Rost 2017), and environmental handprints (Biemer et al. 2013; Grönman et al. 2019; Kühnen et al. 2019). One of the most recent positive metrics to emerge is the LCA-based carbon handprint, which compares the carbon footprint of the users of a novel product/service with that associated with the use of a baseline product or service (Grönman et al. 2019). The carbon handprint, which is created if the novel product reduces the users' carbon footprint in comparison to the baseline product, is assigned to the novel product/service and its provider (Grönman et al. 2019). Norris (2019) presented a similar general definition of handprint.

Future Directions

Some unresolved challenges remain in the field of EIA. Scientists have highlighted how, although sustainability and environmental management practices are becoming increasingly common in companies, the state of the environment is globally deteriorating (Dyllick and Muff 2016). Thus, there is an inherent need to measure truly effective microlevel (e.g., companies) contributions to macrolevel (regional/global) sustainability

(Dyllick and Muff 2016), or vice versa, translate global environmental challenges or targets, such as the SDGs, into measurable and assessable microlevel actions (Muff et al. 2017).

A sustainability management challenge that contributes to the disconnect between the microlevel and macrolevel environmental sustainability is that the EIA perspective tends to be excessively reductionist. LCA is, by default, a holistic approach in that it aims to expand the perspective from the environmental impacts of a single production process to the cradle-to-grave life cycle of a product, thus giving product designers and decision-makers information that can help avoid environmental problem-shifting between life cycle stages. However, the selection of environmental impact categories in LCA studies is often limited (Laurent et al. 2012). According to Ketola (2010) or Bjørn and Hauschild (2013), this represents a relative approach to environmental sustainability. In EIA, the focus has widely been on climate change impacts, although carbon footprint is deficient in representing environmental sustainability in terms of other environmental impacts (Laurent et al. 2012). Furthermore, Heijungs et al. (2014) stated that the environmental sustainability of isolated activities cannot be decided because absolute environmental limits can be established as planetary boundaries. That is, environmental sustainability is absolute and universal (Ketola 2010; Bjørn and Hauschild 2013). From the sustainability management perspective, a holistic approach to conducting EIA is required to avoid undesirable and unpredictable consequences and problem-shifting (Laurent et al. 2012).

Dyllick and Rost (2017) state that achieving true and universal product sustainability requires the assessment and optimization of the positive impacts of products. Earlier, Sala et al. (2013) concluded that LCA-based methodologies should be developed so that they can be used to enhance positive impacts while also fulfilling the traditional function of avoiding negative impacts. Recently, positive indicators have emerged, and this development is expected to continue. For example, area-of-concern-specific handprint indicators, in addition to the climate change-oriented

carbon handprint (Grönman et al. 2019), are likely to emerge. The positive approach can further help to understand businesses' contribution to macrolevel sustainability: Kühnen et al. (2019) developed a broader handprint methodology that considers the positive contribution businesses make to the SDGs. A future harmonization between different handprint approaches may be required, possibly through standardization.

Another recent attempt to decrease the gap between microlevel and macrolevel environmental sustainability concerned the introduction of an LCIA methodology that is linked to the planetary boundaries and the absolute sustainability approach (Ryberg et al. 2018a; Ryberg et al. 2018b). This PB-LCIA quantifies the safe operating space occupied by the activities under assessment. The method can aid companies to understand the impacts of their activities with reference to the planetary boundaries and, thereby, make more macroenvironmentally sound decisions (Ryberg et al. 2018a).

Abdoli et al. (2019) suggested a System-of-Systems (SoS) approach that was designed to offer a more comprehensive modeling of the environmental impacts of product systems through LCA. A SoS comprises the product system and the surrounding systems with which it interacts. The approach is intended to capture the rebound effects that are unforeseen in simple product system modeling. When rebound effects are included in LCA, the resulting total environmental impacts can be larger and more realistic than those impacts modeled directly from the product system (Abdoli et al. 2019).

Regionalized assessment of environmental impacts within LCA has the potential to increase the accuracy of LCA studies and reduce uncertainties in the quantified environmental impacts. Further development of regionalized EIA is expected. Challenges and development needs are related to regional data availability globally, lack of harmonization in determining and weighting the regionalized characterization factors of environmental impacts, insufficient quantification of uncertainty factors, and inconsistent metadata and data formats (Mutel et al. 2019). Furthermore,

new impact categories are continually being developed within LCA. For example, Maier et al. (2019) recently presented a conceptual framework for the assessment of global value chain biodiversity.

Cross-References

- Carbon Footprint
- Carbon Handprint
- Integrated Quality and Environmental Management
- Life Cycle Assessment

References

- 2013/179/EU. Commission Recommendation of 9 April 2013 on the use of common methods to measure and communicate the life cycle environmental performance of products and organisations.
- Abdoli, S., Kara, S., & Hauschild, M. (2019). System interaction, system of systems, and environmental impact of products. *Manufacturing Technology*, 68(1), 17–20. <https://doi.org/10.1016/j.cirp.2019.04.051>
- Biemer, J., Dixon, W., & Blackburn, N. (2013). Our environmental handprint: The good we do. 2013 1st IEEE conference on technologies for sustainability (SusTech), 1–2 August, 2013. <https://doi.org/10.1109/SusTech.2013.6617312>.
- Bjørn, A., & Hauschild, M. Z. (2013). Absolute versus relative environmental sustainability: What can the cradle-to-cradle and eco-efficiency concepts learn from each other? *Journal of Industrial Ecology*, 17(2), 321–332. <https://doi.org/10.1111/j.1530-9290.2012.00520.x>.
- Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. *Organization and Environment*, 29(2), 156–174. <https://doi.org/10.1177/1086026615575176>.
- Dyllick, T., & Rost, Z. (2017). Towards true product sustainability. *Journal of Cleaner Production*, 162, 346–360. <https://doi.org/10.1016/j.jclepro.2017.05.189>.
- Finnveden, G., Hauschild, M. Z., Ekvall, T., Guinée, J., Heijungs, R., Hellweg, S., Koehler, A., Pennington, D., & Suh, S. (2009). Recent developments in life cycle assessment. *Journal of Environmental Management*, 91(1), 1–21. <https://doi.org/10.1016/j.jenvman.2009.06.018>.
- Friskhnecht, R., Jolliet, O., Milà i Canals, L., Pfister, S., Sahnouné, A., Ugaya, C., & Vigon, B. (2016). Motivation, context and overview. In UNEP, Global guidance for life cycle impact assessment indicators – volume 1 (pp. 30–39). Retrieved 10 June 2019, from <https://www.lifecycleinitiative.org/training-resources/global-guidance-lcia-indicators-v-1/>
- Förster, J., Schmidt, S., Bartkowski, B., Lienhoop, N., Albert, C., & Wittmer, H. (2019). Incorporating environmental costs of ecosystem service loss in political decision making: A synthesis of monetary values for Germany. *PLoS One*, 14(2). <https://doi.org/10.1371/journal.pone.0211419>.
- Glucker, A. N., Driessen, P. P. J., Kolhoff, A., & Runhaar, H. A. C. (2013). Public participation in environmental impact assessment: Why, who and how? *Environmental Impact Assessment Review*, 43, 104–111. <https://doi.org/10.1016/j.eiar.2013.06.003>.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., Steffen, W., Glaser, G., Kanie, N., & Noble, I. (2013). Sustainable development goals for people and planet. *Nature*, 495(7441), 305–307. <https://doi.org/10.1038/495305a>.
- Grönman, K., Pajula, T., Sillman, J., Vatanen, S., Kasurinen, H., Soininen, A., & Soukka, R. (2019). Carbon footprint – An approach to assess the positive climate impacts of products demonstrated via renewable diesel case. *Journal of Cleaner Production*, 206, 1059–1072. <https://doi.org/10.1016/j.jclepro.2018.09.233>.
- Hauschild, M. Z., Goedkoop, M., Guinée, J., Heijungs, R., Huijbregts, M., Jolliet, O., Margni, M., De Schryver, A., Humbert, S., Laurent, A., Sala, S., & Pant, R. (2013). Identifying best existing practice for characterization modeling in life cycle impact assessment. *The International Journal of Life Cycle Assessment*, 18, 683–697. <https://doi.org/10.1007/s11367-012-0489-5>.
- Heijungs, R., de Koning, A., & Guinée, J. B. (2014). Maximizing affluence within the planetary boundaries. *The International Journal of Life Cycle Assessment*, 19, 1331–1335. <https://doi.org/10.1007/s11367-014-0729-y>.
- Heink, U., & Kowarik, I. (2010). What are indicators? On the definition of indicators in ecology and environmental planning. *Ecological Indicators*, 10, 584–593. <https://doi.org/10.1016/j.ecolind.2009.09.009>.
- IPCC. (2007). Climate change 2007: The physical science basis. Contribution of working group I to the fourth assessment report of the intergovernmental panel on climate change https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf
- ISO 14031. (2013). Environmental management. Environmental performance evaluation. Guidelines. 2nd edn.
- ISO 14040. (2006). Environmental management. Life cycle assessment. Principles and framework. 2nd edn.
- ISO 14044. (2006). Environmental management. Life cycle assessment. Requirements and guidelines.
- ISO 14046. (2014). Environmental management. Water footprint. Principles, requirements and guidelines.
- ISO 14067. (2018). Greenhouse gases. Carbon footprint of products. Requirements and guidelines for quantification.
- ISO. (2019a). ISO 14040: 1997. Retrieved 23 May 2019, from <https://www.iso.org/standard/23151.html>

- ISO. (2019b). ISO 14042: (2000). Retrieved 23 May 2019, from <https://www.iso.org/standard/23153.html>
- Jay, S., Jones, C., Slinn, P., & Wood, C. (2007). Environmental impact assessment: Retrospect and prospect. *Environmental Impact Assessment Review*, 27(4), 287–300. <https://doi.org/10.1016/j.eiar.2006.12.001>.
- Jeswani, H. K., Azapagic, A., Schepelmann, P., & Ritthoff, M. (2010). Options for broadening and deepening the LCA approaches. *Journal of Cleaner Production*, 18(2), 120–127. <https://doi.org/10.1016/j.jclepro.2009.09.023>.
- Jolliet, O., Müller-Wenk, R., Bare, J., Brent, A., Goedkoop, M., Heijungs, R., Itsubo, N., Peña, C., Pennington, D., Potting, J., Rebitzer, G., Stewart, M., Udo de Haes, H., Weidema, B. (2004). The LCIA midpoint-damage framework of the UNEP/SETAC life cycle initiative. *The International Journal of Life Cycle Assessment* 9(6), 394–404. <https://doi.org/10.1065/lca2004.09.175>.
- JRC. (2019). Suggestions for updating the product environmental footprint (PEF) method. Retrieved 10 June 2019, from <https://ec.europa.eu/jrc/en/publication/suggestions-updating-product-environmental-footprint-pef-method>
- Ketola, T. (2010). Five leaps to corporate sustainability through a corporate responsibility portfolio matrix. *Corporate Social Responsibility and Environmental Management*, 17, 320–336. <https://doi.org/10.1002/csr.219>.
- Kravanja, Z., & Čuček, L. (2013). Multi-objective optimization for generating sustainable solutions considering total effects on the environment. *Applied Energy*, 101, 67–80. <https://doi.org/10.1016/j.apenergy.2012.04.025>.
- Kühnen, M., Silva, S., Beckmann, J., Eberle, U., Hahn, R., Hermann, C., Schaltegger, S., & Schimid, M. (2019). Contributions to the sustainable development goals in life cycle sustainability assessment: Insights from the handprint research project. *Nachhaltigkeits Management Forum*, 27, 65–82. <https://doi.org/10.1007/s00550-019-00484-y>.
- Laurent, A., Olsen, S. I., & Hauschild, M. Z. (2012). Limitations of carbon footprint as indicator of environmental sustainability. *Environmental Science and Technology*, 46, 4100–4108. <https://doi.org/10.1021/es204163f>.
- Linnanen, L., Markkanen, E., & Ilmola, L. (1997). *Ympäristöosaaminen – Kestävän kehityksen haaste yrittäjöhdolle* (“Environmental know-how – The sustainable development challenge for corporate management”). Helsinki: Otaniemi Consulting Group.
- Maier, S. D., Lindner, J. P., & Francisco, J. (2019). Conceptual framework for biodiversity assessment in global value chains. *Sustainability*, 11, 1841. <https://doi.org/10.3390/su11071841>.
- Meadows, D., Randers, J., & Meadows, D. (2005). *Limits to growth: The 30-year update*. London: Earthscan.
- Mebratu, D. (1998). Sustainability and sustainable development: Historical and conceptual review. *Environmental Impact Assessment Review*, 18(6), 493–520. [https://doi.org/10.1016/S0195-9255\(98\)00019-5](https://doi.org/10.1016/S0195-9255(98)00019-5).
- Morgan, R. K. (2012). Environmental impact assessment: The state of the art. *Impact Assessment and Project Appraisal*, 30(1), 5–14. <https://doi.org/10.1080/14615517.2012.661557>.
- Muff, K., Kapalka, A., & Dyllick, T. (2017). The gap frame – translating the SDGs into relevant national grand challenges for strategic business opportunities. *The International Journal of Management Education*, 15, 363–383. <https://doi.org/10.1016/j.ijme.2017.03.004>.
- Mutel, C., Liao, X., Patouillard, L., Bare, J., Fantke, P., Frischknecht, R., Hauschild, M., Jolliet, O., Maia de Souza, D., Laurent, A., Pfister, S., & Verones, F. (2019). Overview and recommendations for regionalized life cycle impact assessment. *The International Journal of Life Cycle Assessment*, 24, 856–865. <https://doi.org/10.1007/s11367-018-1539-4>.
- Norris, G. (2019). Net positive methodology summary. Retrieved 10 June 2019, from https://static1.squarespace.com/static/5af56b9436099b397b0c0ec7/t/5c5d6091e5e5f0151eac4f31/1549623442097/Net+Positive+Project_Methodology+Summary_Jan+2019.pdf
- Pope, J., Annandale, D., & Morrison-Saunders, A. (2004). Conceptualising sustainability assessment. *Environmental Impact Assessment Review*, 24(6), 595–616. <https://doi.org/10.1016/j.eiar.2004.03.001>.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., de Wit, C. A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R. W., Fabry, V. J., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., & Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461, 472–475. <https://doi.org/10.1038/461472a>.
- Ridoutt, B. G., Pfister, S., Manzano, A., Bare, J., Boulay, A.-M., Cherubini, F., Fantke, P., Frischknecht, R., Hauschild, M., Henderson, A., Jolliet, O., Levasseur, A., Margni, M., McKone, T., Michelsen, O., Milà Canals, L., Page, G., Pant, R., Rauegi, M., Sala, S., & Verones, F. (2016). Area of concern: A new paradigm in life cycle assessment for the development of footprint metrics. *The International Journal of Life Cycle Assessment*, 21, 276–280. <https://doi.org/10.1007/s11367-015-1011-7>.
- Ryberg, M. W., Owsianiak, M., Richardson, K., & Hauschild, M. Z. (2018a). Development of a life-cycle impact assessment methodology linked to the planetary boundaries framework. *Ecological Indicators*, 88, 250–262. <https://doi.org/10.1016/j.ecolind.2017.12.065>.
- Ryberg, M. W., Owsianiak, M., Clavreul, J., Mueller, C., Sim, S., King, H., & Hauschild, M. Z. (2018b). How to bring absolute sustainability into decision-making: An industry case study using a planetary boundary-based methodology. *Science of the Total Environment*, 634, 1406–1416. <https://doi.org/10.1016/j.scitotenv.2018.04.075>.
- Sala, S., Farioli, F., & Zamagni, A. (2013). Progress in sustainability science: Lessons learnt from current methodologies for sustainability assessment: Part 1. *The*

- International Journal of Life Cycle Assessment*, 18, 1653–1672. <https://doi.org/10.1007/s11367-012-0508-6>.
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., de Vries, W., de Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347 (6223). <https://doi.org/10.1126/science.1259855>.
- UN. (1992). The Rio declaration on environment and development. Retrieved 23 May 2019, from http://www.unesco.org/education/pdf/RIO_E.PDF
- UN. (2015). Transforming our world: The 2030 agenda for sustainable development. Retrieved 28 May 2019, from <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- UNEP. (2010). Assessing the environmental impacts of consumption and production – priority products and materials. Retrieved 7 June 2019, from http://www.unep.fr/shared/publications/pdf/dtix1262xpa-priorityproductsandmaterials_report.pdf
- UNEP. (2016). Global guidance for life cycle impact assessment indicators – volume 1. Retrieved 10 June 2019, from <https://www.lifecycleinitiative.org/training-resources/global-guidance-lcia-indicators-v-1/>
- Verones, F., Henderson, A. D., Laurent, A., Ridoutt, B., Ugaya, C., & Hellweg, S., (2016). LCIA framework and modelling guidance. In UNEP, Global guidance for life cycle impact assessment indicators – volume 1 (pp. 40–57). Retrieved 10 June 2019, from <https://www.lifecycleinitiative.org/training-resources/global-guidance-lcia-indicators-v-1/>
- WCED (World Commission on Environment and Development). (1987). *Our common future* [e-document]. Retrieved 11 April 2016, from <http://www.un-documents.net/wced-ocf.htm>

Environmental Index

- [Corporate Sustainability Reporting Index](#)

Environmental Innovation

- [Corporate Sustainable Innovation](#)

Environmental Innovations Performance Measurement

- [Eco-sustainability Innovations Performance Measurement](#)

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- [Sustainable Investment](#)

Environmental Jobs

- [Green Jobs](#)
- [Green Jobs Social Life Cycle Assessment](#)

Environmental Justice

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Environmental Law

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Synonyms

[Environmental and natural resources law](#)

Definition

Environmental law is the collection of laws, regulations, agreements, and common law that governs how humans interact with their environment (Sands and Peel 2012; Fracchia 2018). The purpose of environmental law is to protect the environment and create rules for how people can use natural resources. Environmental law involves a series of laws, policies, and procedures enforced by various agencies with the goal of protecting the environment. Environmental law often overlaps other laws to act as an extra layer of legal protection.

A related but distinct set of regulatory regimes, now strongly influenced by environmental legal

principles, focus on the management of specific natural resources, such as forests, minerals, or fisheries. Other areas, such as environmental impact assessment, may not fit neatly into either category, but are nonetheless important components of environmental law.

Customary international law is an important source of international environmental law. These are the norms and rules that countries follow as a matter of custom, and they are so prevalent that they bind all states in the world. When a principle becomes customary, law is not clear-cut, and many arguments are put forward by states not wishing to be bound. Examples of customary international law relevant to the environment include the duty to warn other states promptly about icons of an environmental nature and environmental damages to which another state or states may be exposed and Principle 21 of the Stockholm Declaration.

Numerous legally binding international agreements encompass a wide variety of issue areas, from terrestrial, marine, and atmospheric pollution through to wildlife and biodiversity protection. International environmental agreements are generally multilateral (or sometimes bilateral) treaties (a.k.a. convention, agreement, protocol, etc.). Protocols are subsidiary agreements built from a primary treaty. They exist in many areas of international law but are especially useful in the environmental field, where they may be used to regularly incorporate recent scientific knowledge. They also permit countries to reach agreement on a framework that would be contentious if every detail were to be agreed upon in advance. The most widely known protocol in international environmental law is the Kyoto Protocol, which followed from the United Nations Framework Convention on Climate Change.

Driven by fear of a disintegration of the internal market, concerns over portraying a less mercantile image of the EU, as well as the intention of safeguarding ecosystems and species under threat, a European environmental policy has thus gradually emerged (De Sadeleer 2014).

The broad category of environmental law may be broken down into a number of more specific regulatory subjects. While there is no single

agreed upon taxonomy, the core environmental law regimes address environmental pollution.

Five major laws are the Clean Air Act (CAA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act (CERCLA/SARA).

A body of law intended to protect the environment, by regulating activities that cause pollution, such as fossil fuel emissions and the dumping of wastes; by prohibiting certain inconsistent uses of land designated as federal parkland; and by providing regimes of protection for endangered species.

The EU and its Member States have a wide range of laws to protect human health and the environment. The Commission (European Commission) is tasked with ensuring that Member States comply with these laws. Preventive measures are more effective and considerably cheaper than having to undo the damage caused by unsustainable practices. That's why the Commission promotes a proactive approach that begins with informal discussions and support to apply the EU rules.

The Seven Environmental Principles:

1. Nature knows best.
2. All forms of life are important.
3. Everything is connected to everything else.
4. Everything changes.
5. Everything must go somewhere.
6. Ours is a finite earth.
7. Nature is beautiful and we are stewards of God's creation.

The Evolution of EU Environmental Policy and Legislation

The evolution of EU environmental law and policy since the 1960s offers an interesting perspective from which to examine how the European project has remarkably expanded from the specific economic sphere of market integration to address new social challenges.

Overall, however, during the 1960s and early 1970s, it would still have been premature to think of a coherent set of EU environmental rules. Legal scholars tend to describe the EU's attitude to environmental protection at this stage as "incidental," "responsive," and "unarticulated" (Brinkhorst 1993, p. 9). The development of European policies in the environmental sector as well as in other areas concerning social welfare was regarded as a necessary element in the process of economic integration itself (Scott 1998, p. 10) and evolved primarily according to the contingent economic, political, and social circumstances (Hildebrand 2002).

Building upon these initial developments, the environmental policy of the EU started to become more consistent during the 1980s. The third EAP (1982–1986) contributed to shaping the direction of EU environmental legislation and policy at this stage. In particular, it emphasized prevention and a rigorous approach based on emissions reduction, rather than a quality-oriented approach, which would instead have left it to the Member States to determine the most cost-effective ways to achieve environmental quality objectives (Hanf 1997; Knill and Lenschow 1998; Knill and Duncan 2007).

Later the European Union (EU) has been buffeted by a range of crises since 2007, not least the economic and financial crisis. One potential victim of this economic malaise is environmental policy ambition. It is well-established that during economic crises, environmental policy (Burns et al. 2019) slips down the agenda with long-term consequences for environmental quality. The EU has sought to cast itself as a global environmental leader, but that leadership has in large part rested upon its ability to set ambitious policy goals at home. The future environmental policy trajectory and leadership of the EU may be under threat as the Union struggles to emerge from the economic crisis. This entry presents a comprehensive and robust analysis of all environmental policy outputs adopted by the EU over a 10-year period covering the crisis. This legislative analysis is supplemented by interviews with policy stakeholders. The article finds evidence of waning ambition over the period under analysis,

but a range of explanatory variables emerges from the interviews, which suggests that the diminution in EU environmental policy ambition is driven by a mix of factors and maybe likely to persist over the longer term.

In the 2008 Communication on Implementing Environmental Law, the European Commission identified specific strategies which tend to combine the enforcement powers of the Commission itself with an "ex ante approach" based primarily on the prevention of breaches. It focused particular attention on the design of legislation, involving a variety of actions and activities aiming to promote information, public consultation, and guidance for public authorities in the concrete application of EU environmental rules (European Commission 2008).

Interdisciplinary and cross-cutting nature of the climate change issue has acted as the main driver in focusing the EU's attention on the environmental- and climate-related aspects of energy, transport, and industrial policies. In this respect, the environmental dimension of EU energy policy is one of the most remarkable developments in the past few years (Schmitt and Schulze 2011).

Yet, the often difficult relationship between climate and energy policy and other environmental concerns points to one of the most pressing challenges that the EU is facing at present: reconciling the pursuit of competitive economic growth with the objectives of sustainability and environmental protection (Orlando 2013).

Yet, despite the shortcomings in realizing these ideals in practice, it is possible to share Ludwig Krämer's opinion that since the EU is also "the only region in the world which has publicly committed itself to try to reconcile economic growth, social concerns and environmental protection," it can, in this respect, offer a model to other countries or regions worldwide (Kramer 2007, p. 355).

About that the European Commission launched an ambitious 2020 strategy calling for a new era of sustainable, inclusive, and low carbon growth Communication from the Commission, Europe 2020, a strategy for smart, sustainable, and inclusive growth, 2020 final, 3 March, Brussels [Google Scholar]).

Summary

The work examines the fundamental aspects of environmental laws. After a definition with the reference subcategories, it summarizes the fundamental laws and the Seven Environmental Principles. It ends with the evolution of EU environmental policy and legislation since 1960 to nowadays.

Cross-References

- [Environmental Protection Agency](#)
- [Environmental Responsibility](#)

References

- Brinkhorst, L. J. (1993). The road to Maastricht. *Ecology Law Quarterly*, 20(1), 7–23.
- Burns, C., Eckersley, P., & Tobin, P. (2019). EU environmental policy in times of crisis, EU environmental policy in times of crisis. <https://doi.org/10.1080/13501763.2018.1561741>.
- De Sadeleer, N. (2014). *EU environmental law and the internal market*. Oxford, UK: Oxford University Press.
- European Commission. (2008). Enforcing EU environmental law, benefits and achievements. ISBN 978-92-79-64012-4, <https://doi.org/10.2779/565984>.
- Fracchia, F. (2018). Environmental law. Principles, definitions and protection models. Editoriale Scientifica, Collana: Studi di attualità giuridiche.
- Hanf, K. (1997). Air pollution policy in the European Union. In R. Baker (Ed.), *Environmental law and policy in the European Union and the United States* (pp. 125–146). Westport: Praeger.
- Hildebrand, P. (2002). The European Community's Environmental Policy, 1957 to '1992': From incidental measures to an international regime? *Environmental Politics*, 1(4), 13–44. <http://ec.europa.eu/environment/legal/law/pubs.htm>
- Knill, C., & Duncan, L. (2007). *Environmental politics in the European Union. Policy-making, implementation and patterns of multi-level governance*. Manchester: Manchester University Press.
- Knill, C., & Lenschow, A. (1998). Coping with Europe: The impact of British and German administrations on the implementation of EU environmental policy. *Journal of European Public Policy*, 5(4), 595–614. <https://doi.org/10.1080/13501769880000041>.
- Kramer, L. (2007). European environmental law: Innovative, integrative- but also effective? In P. Demaret, I. Govaere, & D. Hanf (Eds.), *European legal dynamics* (pp. 345–356). Brussels: P.I.E., Peter Lang.
- Orlando, E. (2013). The evolution of EU policy and law in the environmental field: Achievements and current challenges, *Transworld*, April, pp. 1–23.
- Sands, P., & Peel, J. (2012). *Principles of international environmental law*. Cambridge, UK: Cambridge University Press.
- Schmitt, S., & Schulze, K. (2011). Choosing environmental policy instruments: An assessment of the environmental dimension of EU energy policy. In J. Tosun, & I. Solorio (Eds.), *Energy and Environment in Europe: Assessing a Complex Relationship? European Integration online Papers (EIoP)*, 15, Special Mini-Issue 1. <http://eiop.or.at/eiop/texte/2011-009a.htm>.
- Scott, J. (1998). Law, legitimacy and EC governance: Prospects for 'partnership'. *Journal of Common Market Studies*, 36(2), 175–194.

Environmental Management

- [Corporate Sustainability](#)
- [Integrated Quality and Environmental Management](#)
- [Sustainability Management Process](#)

Environmental Management Accounting

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Synonyms

[Environmental cost accounting](#); [Environmental-related management accounting](#); [Sustainability management accounting](#)

Definition/Description

In a broad sense, environmental management accounting can be considered to identify, collect, record, analyze, and communicate physical and monetary environmental information for managers in internal decision-making (UNSDS

2001). The physical environmental management accounting provides information on the “use, flows and destinies of energy, water and materials (including wastes),” and monetary environmental management accounting supplies information about the “environment-related costs, earnings and savings” (International Federation of Accountants, IFAC 2005, p. 19). Although environmental management accounting’s primary function is to aid internal decision-making by supplying information for the corporate managers, this information can also be used by various other stakeholders, including regulators, investors, suppliers, and customers.

Introduction

Due to growing regulatory, social, and stakeholder pressures, organizations worldwide have started to follow various environmental management strategies and practices. In order to successfully implement these strategies and practices, organizations not only need to set sustainability goals but measure, evaluate, and communicate the progress toward the achievement of these goals regularly. As Schaltegger et al. (2017) suggest, it is essential to have accounting and management control systems to provide organizational decision-makers information for two purposes. First, they can act favorably toward environmental and sustainability initiatives if information about the undesirable ecological and social impacts are provided. Second, decision-makers and stakeholders can compare different environmental and sustainability alternatives by considering the sustainability impacts. Accordingly, various environmental and sustainability accounting practices, tools, and approaches, such as environmental management accounting, have emerged to support the businesses when implementing environmental and sustainability practices (Gunaratne and Lee 2019).

As environmental management accounting is an evolving discipline, it is challenging to find a universally accepted definition or boundaries for environmental management accounting (Burritt 2004; Burritt et al. 2002; IFAC 2005).

Nonetheless, the inadequate conceptualization, the notions, and tools of environmental management accounting have been used widely in research and practice (Schaltegger and Burritt 2010).

The aforementioned UNDS’s broad definition of environmental management accounting highlights two important features about the information supplied through the subject:

- (a) Environmental management accounting furnishes information about various ecological domains. Depending on the organization, these domains can range from raw materials, water, waste, energy, carbon, chemicals, and biodiversity.
- (b) Environmental management accounting information on these multiple domains can be expressed in physical and monetary terms (Burritt et al. 2002).

The first feature highlights that it is possible to have multiple environmental management accounting tools that focus on these numerous domains. The latter feature implies that environmental management accounting could be operated as physical environmental management accounting (PEMA) and monetary environmental management accounting (MEMA) systems. The physical environmental management accounting systems provide the information about the company activities’ impacts on the ecological environment expressed in various physical units as tons, cubic meters, liters, and joules. Conversely, the monetary environmental management accounting systems highlight the information about a company’s impacts on the economic system. These impacts can be expressed in financial measurement terms such as dollars or pounds. For instance, the cost of an environmental license fee or water or energy cost is expressed in monetized terms. Usually, these accounting systems can be considered further developments or extend traditional accounting systems’ scope (Burritt et al. 2002). In general, there is a connection between physical and monetary environmental management accounting systems. Commonly, the physical measures are identified or collected by

different departments, such as identifying energy consumption by the engineering department. When a financial value is assigned for these physical measurements, usually monetary environmental management accounting would occur (Gunaratne et al. 2014). However, this is not always the case. For instance, there can be several physical measurements for which a financial value is not assigned, or it is impossible to allocate an economic value. For example, a manufacturing company may record waste generation in tons without giving a monetary value. Although there are some tools and approaches for monetary value assignment, they will most likely have remained as physical measurements in an organization's book due to much skepticism. Similarly, a plantation company would keep the biodiversity records such as the number of flora and fauna species in their sites without assigning a monetary value. There can be some monetary environmental management accounting information in a similar vein that would not have a physical measurement, such as license fee and environmental fines.

Intending to provide a broad understanding of the different dimensions of environmental management accounting, Burritt et al. (2002), in their famous article entitled "Towards a Comprehensive Framework for Environmental Management Accounting," offers a framework. Accordingly, environmental management accounting information can be viewed along three dimensions:

- (a) Time frame (it can provide environmental information about past or future periods).
- (b) Nature of information (it can provide monetary or physical information).
- (c) Length of time frame (it can provide information about short or long terms).

- (d) Frequency (it can provide information on an ad hoc or routine basis).

Having combined these four dimensions, Burritt et al. (2002) offer the following comprehensive framework for environmental management accounting (refer Fig. 1).

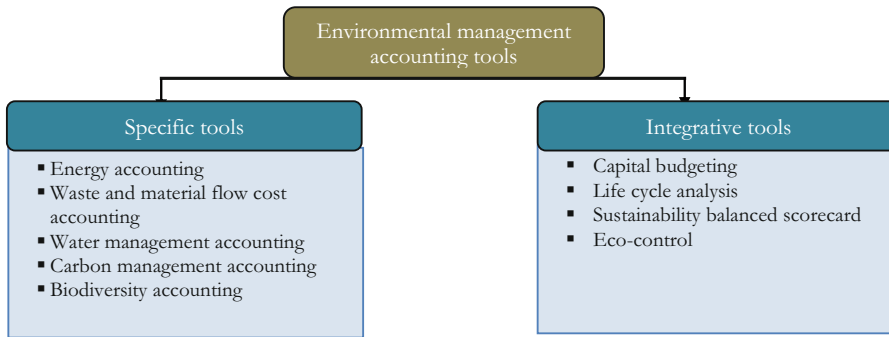
The framework suggests that organizations can use a wide range of environmental management accounting tools to fall into different quadrants. Since environmental management accounting is designed to provide a broad set of principles, concepts, approaches, and techniques that support the management to implement environmental strategies successfully, it does not represent another environmental management tool (Christ and Burritt 2013; IFAC 2005). Therefore, Bennett et al. (2002) posit environmental management accounting as the interface between the internally focused management accounting and an organization's environmental strategies. More specifically, it has been suggested as a decision support tool to aid the implementation of corporate environmental management strategies (Schaltegger and Burritt 2010). Environmental management accounting decision support role is viewed broadly, including planning, decision-making, control, and performance evaluation (Passeti et al. 2014).

Environmental Management Accounting Tools

It is generally acknowledged that corporate sustainability is implemented with the application of sustainability management tools, including environmental management accounting (Horisch et al.

		Monetary		Physical	
		Short term	Long term	Short term	Long term
Past-oriented	Routine				
	Ad-hoc				
Future-oriented	Routine				
	Ad-hoc				

Environmental Management Accounting, Fig. 1 Comprehensive environmental management accounting framework. (Source: Burritt et al. (2002))



Environmental Management Accounting, Fig. 2 Domain-based classification of environmental management accounting tools. (Source: Gunarathne and Lee, 2021).

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2015; Windolph et al. 2014b). Environmental management accounting tools denote “accounting instruments and systems that support companies to implement corporate environmental sustainability” (Horisch et al. 2015). Prior studies exhibit that organizations worldwide have adopted or applied a set of environmental management accounting tools (Christ and Burritt 2013; Ferreira et al. 2010; Gunarathne et al. 2021; Qian et al. 2018). Due to the evolving nature of environmental management accounting, the number of tools is expanding to introduce new tools or modification of existing management accounting tools to suit the organizational circumstances and requirements (Christ and Burritt 2013; Gunarathne et al. 2014; Parker 1997). Some of the commonly used environmental management accounting tools are listed below:

- Energy accounting.
- Waste and material flow cost accounting.
- Water management accounting.
- Biodiversity accounting.
- Life cycle costing.
- Eco-control.
- Environmental activity-based costing.
- Carbon management accounting.
- Environmental capital budgeting.
- Sustainability balanced scorecard.

Depending on the environmental domains these tools deal with, they can be categorized into two: (a) specific and (b) integrative/integrated

(refer Fig. 2). The specific environmental management accounting tools deal with a single ecological domain such as energy (energy accounting) and carbon (carbon management accounting). In contrast, the integrative tools need the information supplied by different specific environmental management accounting tools. For instance, the application of environmental capital budgeting or sustainability balanced scorecard requires the information provided by various domain tools such as energy accounting and material flow cost accounting.

Functional Roles of Environmental Management Accounting

These environmental management accounting tools and practices serve different managerial functions of an organization. Management accounting, a broad discipline in which environmental management accounting is rooted, considers several functional accounting roles. They are planning, decision-making, controlling, and performance evaluation functions (CIMA 2005; Drury 2009). According to Tillema (2005), these management accounting functions can be broadly divided into accountability (control or stewardship) and decision-making. Similarly, the following functional dimensions of environmental management accounting and their specific accounting tasks can be highlighted (see Table 1).

Environmental Management Accounting,
Table 1 Accounting tasks of environmental management accounting

Functional role	Accounting task
Decision-making	Decisions on cost and efficiency improvements
	Cost-volume-profit decisions such as break-even point and optimum production levels
	Pricing decisions
	Decisions on special one-off orders
	Make or buy decisions (insourcing and outsourcing decisions)
	Long-term capital investment decisions
	Replacement decisions
	Investment decisions such as mergers, acquisitions, and divestitures
	Expansion decisions (such as new products/services, equipment, processes, customers, and markets)
	Discontinuation decisions (such as products and services, customers, markets, and departments)
Control and stewardship	Budget preparation
	Statements for actual output analysis
	Variance analysis
	Setting performance targets and indicators
	Reporting of the achievement of actual results
	Comparison of actual against targets for performance evaluations
	Analysis and revision of targets Managing risk

Source: (Drury 2009; Gunaratne and Lee 2019; Tillema 2005)

Benefits of Environmental Management Accounting

Environmental management accounting benefits could be broadly categorized into three: compliance, eco-efficiency, and strategic position (IFAC 2005; Windolph et al. 2014a). The benefits of compliance could be seen in two ways. One way, it supports internally established environmental policies and benchmarks. Environmental management accounting is required to monitor

and track the success of these initiatives regularly. The other important way environmental management accounting benefits compliance is with external regulations and certifications/standards. For example, in many countries, a government authority (such as the Environmental Protection Agency in the USA and Australia and Central Environmental Authority in Sri Lanka) continuously supervises companies' environmental performance. In these circumstances, environmental management accounting is vital to ensure compliance with externally imposed regulations by providing the requisite information for the regulators. Sometimes, even in the absence of a business case, companies may have to implement environmental management and environmental management accounting. As stated by Fairchild (2008), traditionally, it is believed that costly investment in green production could be value reducing; hence there must be incentives for the organizations from the governments and other relevant regulators to invest in environmentally friendly activities. As suggested by Porter and van der Linde (1995), strict environmental regulators can encourage efficiency improvements and innovations within organizations and lead to competitive advantages.

Eco-efficiency denotes the concurrent improvements in organizational environmental performance and cost reduction and resource unitization activities. Adding a life cycle perspective to the definition of eco-efficiency, the World Business Council for Sustainable Development emphasizes that these cost reduction and resource efficiency activities should be followed throughout the life cycle of a product or service (Verfaillie 2000). According to Williamson et al. (2006), organizations can be motivated to adopt environmental management practices voluntarily for two reasons: (a) to achieve "the business case" and (b) to improve "business performance." The business case motive highlights the improvements in return to the shareholders and investors to become more attractive to the other stakeholder groups such as customers, supply chain partners, public, and employees. Business performance motive stresses cost reduction

and efficiency. Hence, eco-efficiency is viewed as a combined effect of both business case and business performance. Organizations cannot achieve cost reductions in energy, material, and water without proper accounting and control mechanisms like environmental management accounting. Most organizations focus on cost reduction, process improvements, and even the generation of additional revenue. Cost categorization frameworks in environmental management accounting allow identifying different environment costs for various purposes to aid decision-makers (see EPA 1995 and IFAC 2005 for more details). Hence accurate costing and pricing of products again contribute to the proper distribution of resources through demand and supply mechanism in the interest of the environment and broader society.

The strategic position resembles the use of environmental management and accounting to create a strategic value in the organization. In this way, environmental management accounting contributes to the marketing strategy to boost the company image. This further benefits company by way of attracting environmentally conscious customers, suppliers, and investors. Windolph et al. (2014a) refer to this aspect as motivation for market success. Further, Fairchild (2008) states that companies have an incentive to voluntarily invest in environmental policies since it creates a favorable impact on the company in the minds of “green-conscious” consumers and investors, strengthening the strategic position. Environmental management accounting provides reliable statistics and requisite information to devise an effective communication stagey to inform the stakeholders about an organization’s environmental practices and impacts.

Roadblocks to Environmental Management Accounting

Although there are many benefits, the implementation of environmental management accounting faces several limitations and challenges. Owing to these challenges, managers usually get incorrect,

omitted, or misread ecological information for decision-making. Accordingly, organizational decisions do not consider the full environmental impacts of the decisions being made (IFAC 2005; Burritt 2004).

There are several limitations in the implementation of environmental management accounting at the firm level. First, due to the limited management awareness, organizations do not place enough importance on identifying, collecting, processing, or considering environmental information in their organizations. Lack of management awareness and support do not allow environmental management accounting systems to develop in an organization. Second, due to the insufficient communication links between the accounting departments and other divisions that collect environmental information, managers do not get enough support in decision-making (Burritt 2004). Third, many organizations do not separately track and process environmental data due to the traditional bookkeeping systems. For instance, the cost of energy and waste management can be still considered as overheads. Due to this pooling of environmental costs in general overheads, decision-makers do not get the accurate information to lead to informed decisions. Finally, due to the highly internal oriented management practices, organizations do not seek to get the support of their value chain partners in their environmental management activities. For instance, organization do not get sufficient information about the environmental footprint of the raw material and other components from the suppliers. Accordingly, the decision-making process will lead to sub-optimal decisions as the entire life cycle environmental impacts of the resources will not be considered (Gunaratne and Lee 2019).

These challenges could arise due to organizational-specific reasons, inherent limitations of conventional management accounting practices, or as a combination of both. Irrespective of the underlying cause, scholars have often highlighted that environmental management accounting practices are not implemented comprehensively or systematically owing to these

reasons. Evidence shows that in many organizations, environmental management accounting practices have been adopted on an ad hoc basis in response to specific pressures. Therefore, organizational environmental management activities have not derived stakeholders' full support or given full benefits to the organization and society (Bartolomeo et al. 2000; Gunarathne and Lee 2015).

Summary

Environmental management accounting identifies, collects, records, analyzes, and communicates physical and monetary environmental information for various stakeholders. It is therefore not another environmental management tool but a broad set of accounting principles, techniques, and practices that supply information along four dimensions: (a) time frame (past or future), (b) nature of information (monetary or physical), (c) length of time frame (short or long terms), and (c) frequency (ad hoc or routine basis). There are specific or integrative environmental management accounting tools that will facilitate either decision-making or control and stewardship functions. By pursuing environmental management, accounting organizations can derive three broad types of benefits: ensuring compliance, achieving eco-efficiency, and strengthening strategic position. However, there can be various limitations that will inhibit the successful implementation of environmental management accounting.

Cross-References

- [Contingency Theory](#)
- [Corporate Sustainability](#)
- [Environmental Management](#)
- [Global Reporting Initiative](#)
- [Integrated Reporting](#)
- [Management Accounting and Sustainability](#)
- [Sustainability Reporting](#)
- [Sustainable Development Goals](#)

References

- Bartolomeo, M., Bennett, M., Bouma, J., Heydkamp, P., James, P., & Wolters, T. (2000). Environmental management accounting in Europe: Current practice and future potential. *The European Accounting Review*, 9(1), 31–52.
- Bennett, M., Bouma, J. J., & Wolters, T. (2002). *Environmental management accounting: Informational and institutional developments*. Dordrecht: Springer Science & Business Media.
- Burritt, R. (2004). Environmental management accounting: Roadblocks on the way to the green and pleasant land. *Business Strategy and the Environment*, 13(1), 13–32.
- Burritt, R., Hahn, T., & Schaltegger, S. (2002). Towards a comprehensive framework for environmental management accounting: Links between business actors and environmental management accounting tools. *Australian Accounting Review*, 12(2), 39–50.
- Christ, K. L., & Burritt, R. L. (2013). Environmental management accounting: The significance of contingent variables for adoption. *Journal of Cleaner Production*, 41, 163–173.
- CIMA (Chartered Institute of Management Accountants). (2005). *CIMA official terminology*. Oxford: CIMA Publishing.
- Drury, C. (2009). *Management accounting for business*. Andover: Cengage Learning.
- Environmental Protection Agency (EPA). (1995). *An introduction to environmental accounting as a business management tool: Key concepts and terms*. Washington, DC: EPA.
- Fairchild, R. J. (2008). The manufacturing sector's environmental motives: A game-theoretic analysis. *Journal of Business Ethics*, 79(3), 333–344.
- Ferreira, A., Moulang, C., & Hendro, B. (2010). Environmental management accounting and innovation: An exploratory analysis. *Accounting, Auditing & Accountability Journal*, 23(7), 920–948.
- Gunarathne, N., & Lee, K.-H. (2015). Environmental Management Accounting (EMA) for environmental management and organisational change: An eco-control approach. *Journal of Accounting & Organizational Change*, 11(3), 362–383.
- Gunarathne, N., & Lee, K.-H. (2019). Environmental and managerial information for cleaner production strategies: An environmental management development perspective. *Journal of Cleaner Production*, 237, 117849.
- Gunarathne, N., & Lee, K.-H. (2021). Corporate cleaner production strategy development and environmental management accounting: A contingency theory perspective. *Journal of Cleaner Production*, 308, 127402.
- Gunarathne, A. D. N., Ranasinghe, A. B., & Peiris, S. (2014). *Guidelines on environmental management accounting for Sri Lankan enterprises*. Colombo: CMA.
- Gunarathne, A. D. N., Lee, K. H., & Kaluarachchilage, P. K. H. (2021). Institutional pressures, environmental

management strategy, and organisational performance: The role of environmental management accounting. *Business Strategy and the Environment*, 30(2), 825–839.

- Hörisch, J., Johnson, M. P., & Schaltegger, S. (2015). Implementation of sustainability management and company size: A knowledge-based view. *Business Strategy and the Environment*, 24(8), 765–779.
- International Federation of Accountants (IFAC). (2005). *International guidance document on environmental management accounting (EMA)*. New York: IFAC.
- Parker, L. (1997). Accounting for environmental strategy: Cost management, control and performance evaluation. *Asia-Pacific Journal of Accounting*, 4(2), 145–173.
- Passetti, E., Cinquini, L., Marelli, A., & Tenucci, A. (2014). Sustainability accounting in action: Lights and shadows in the Italian context. *The British Accounting Review*, 46(3), 295–308.
- Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *Journal of Economic Perspectives*, 9(4), 97–118.
- Qian, W., Hörisch, J., & Schaltegger, S. (2018). Environmental management accounting and its effects on carbon management and disclosure quality. *Journal of Cleaner Production*, 174, 1608–1619.
- Schaltegger, S., & Burritt, R. (2010). Sustainability accounting for companies: Catchphrase or decision support for business leaders? *Journal of World Business*, 45(4), 375–384.
- Schaltegger, S., Etxeberria, I. A., & Ortas, E. (2017). Innovating corporate accounting and reporting for sustainability – Attributes and challenges. *Sustainable Development*, 25, 113–122.
- Tillema, S. (2005). Towards an integrated contingency framework for MAS sophistication: Case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research*, 16, 101–129.
- United Nations Division for Sustainable Development (UNSD). (2001). *Environmental management accounting: Procedures and principles*. New York: United Nations.
- Verfaillie, H. A. (2000). *Measuring eco-efficiency: A guide to reporting company performance*. Geneva: WBCSD.
- Williamson, D., Lynch-Wood, G., & Ramsay, J. (2006). Drivers of environmental behaviour in manufacturing SMEs and the implications for CSR. *Journal of Business Ethics*, 67(3), 317–330.
- Windolph, S. E., Harms, D., & Schaltegger, S. (2014a). Motivations for corporate sustainability management: Contrasting survey results and implementation. *Corporate Social Responsibility and Environmental Management*, 21(5), 272–285.
- Windolph, S. E., Schaltegger, S., & Herzig, C. (2014b). Implementing corporate sustainability. What drives the application of sustainability management tools in Germany? *Sustainability Accounting, Management and Policy Journal*, 5(4), 378–404.

Environmental Management Standard

- [EMAS: Eco-Management and Audit Scheme](#)

Environmental Management System

- [EMAS: Eco-Management and Audit Scheme](#)

Environmental Management System Requirements

- [EMAS: Eco-Management and Audit Scheme](#)
- [ISO 14001 Standard](#)

Environmental Management Taxonomies

- [Corporate Environmental Management Maturity](#)

Environmental Marketing

- [Green Marketing](#)
- [Sustainable Marketing](#)

Environmental Movement

- [Environmentalism Movement](#)

Environmental Place Marketing

- [Sustainable City Branding](#)

Environmental Protection Agency

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Synonyms

[Environmental assessment](#); [Environmental compliance audit](#); [Environmental governance](#); [Environmental impact](#); [Environmental law](#)

Definition

The *Environmental Protection Agency (EPA)* of the United States was formed on July 9, 1970, by President Richard Nixon, and began operations on December 2, 1970. It is an autonomous administrative agency of the *United States Federal Government* responsible for all things related to environmental protection. The organization is headed by someone chosen by the President and confirmed by the Senate. This is not a cabinet division, even though the administrator receives a cabinet position. The agency is headquartered in Washington D.C. and has ten regional offices and 27 laboratories.

Key Functions

The EPA is primarily responsible for environmental assessment, research, and education. It enforces national standards on an assortment of environmental regulations, in discussion with governments at all levels including state, local, and tribal. As of 2020, the organization had nearly 13,000 employees – half of whom are engineers, scientists, and environmental protection specialists, while the rest consist of legal, public affairs, financial, and information technologists.

There are ten EPA regions throughout the United States. The central EPA office delegates monitoring and enforcement responsibility to these regional offices. The agency controls include enforcing fines, authorizations, and other actions. They likewise work with industries and all echelons of administration in a wide range of voluntary pollution deterrence programs and energy preservation efforts. While many public health and environmental groups feel positively about the agency, some critics believe that they commit government overextension by enhancing frivolous regulations on business and property owners.

History of the EPA

The impact of human activity on the environment has been a major concern since the mid-twentieth century. Rachel Carson's book in 1962, *Silent Spring*, educated the public about the damaging impact of the arbitrary use of pesticides on the environment. Minor bills were introduced in Congress leading to the *Resources and Conservation Act of 1959 (RCA)* and later served as a model for the *National Environmental Policy Act of 1969 (NEPA)*, which was signed into law on January 1, 1970. As a consequence, the *Council on Environmental Quality (CEQ)* was created, which was responsible for creating an environmental impact statement (EIS) which detailed the environmental impacts for all major federal actions on the environment.

The *Environmental Protection Agency (EPA)* was founded in 1970, and William Ruckelshaus was the agency's first administrator. It began overseeing pollution control programs and pesticide programs from the *United States Department of Agriculture* and the *United States Department of the Interior*. EPA began with 5,800 employees, and their budget for the first year was \$1.4 billion. The agency began as a technical assistance agency setting goals and standards and then gradually began operating more as a regulatory agency by proposing new acts and amendments, such as the

Clean Air Act (CWA), which recognized a nationwide agenda for tackling water quality, including mandatory pollution control benchmarks, in conjunction with the states. The *Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)* was passed in 1972, requiring the EPA to examine the safety of all pesticides available in the market.

Other major Acts passed in the 1970s include the *Safe Drinking Water Act* in 1974, requiring the agency to develop mandatory federal standards in cooperation of state agencies for all public water systems, serving 90% of the US population. The Toxic Substances Control Act (TSCA) was passed in 1976 and was related to the manufacturing, labeling, and usage of commercial products. The agency gained the authority to create a national inventory listing of chemicals, test them, and regulate their production and use. The *Resource Conservation and Recovery Act (RCRA)* was approved in 1976 improving the earlier *Solid Waste Disposal Act* of 1965. In collaboration with states, it enabled the agency to develop regulations for solid and hazardous waste and setting national goals for waste disposal, energy conservation, waste reduction, and ensuring environmentally sound management of waste.

The 1980s saw the expansion and creation of more regulations by the organization. The *Comprehensive Environmental Response, Compensation, and Liability Act* (also identified as “Superfund” approved in 1980) authorized the agency to broaden their scope for those responsible for polluted by prior dangerous waste removal, and establishing a funding mechanism for assessment and cleanup. After the Chernobyl disaster in Ukraine in 1986, the EPA constructed an interagency group, including workers from the *Nuclear Regulatory Commission*, *National Oceanic and Atmospheric Administration*, and the *Department of Energy*, to oversee the situation. The *Emergency Planning and Community Right-to-Know Act* was enacted the same year, which enabled the agency to collect data on lethal chemicals and convey the information with the community. The following year, in 1987, the agency united with several

international organizations to form the *Montreal Protocol*, which was responsible for investigating the implications of stratospheric ozone depletion. The year 1990 saw the passage of the amendments of the *Clean Air Act* and newer methods by the EPA.

Laws and Programs

The EPA has principled enactment power for several federal environmental laws including the *Clean Air Act*, *Clean Water Act*, *Comprehensive Environmental Response, Compensation, and Liability Act*, *Emergency Planning and Community Right-to-Know Act*, *Federal Insecticide, Fungicide, and Rodenticide Act*, *Resource Conservation and Recovery Act*, *Safe Drinking Water Act*, *Toxic Substances Control Act*, and *Frank R. Lautenberg Chemical Safety for the 21st Century Act*. Additional laws where the EPA has a contributing role or provides assistance to other agencies are the following: *Engendered Species Act*, *Energy Independence and Security Act*, *Energy Policy Act*, *Federal Food, Drug, and Cosmetic Act*, *Food Quality Protection Act*, *National Environmental Policy Act*, *Oil Pollution Act*, and *Pollution Prevention Act*, among others.

The EPA has also started other key programs to support the prime missions. Some of the major central plans include the following: Air quality and radiation protection, Ambient standards (*National Ambient Air Quality Standards (NAAQS)*), *State Implementation Plans (SIPs)*), Stationary Air Pollution Source Standards (*National Emissions Standards for Hazardous Air Pollutants (NESHAPs)*), Motor source standards (*Motor Vehicle Emission and Fuel Standards*, and *Clean Fuel Vehicles*), Radiation Protection Program (*Radioactive Waste Management*, *Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) Program*, and *Radiation Standards for Air and Drinking Water Programs*), Science and Regulatory Standards (*National Pollutant Discharge Elimination System (NPDES)*, *Nonpoint Source*

Pollution Programs), Land, Waste, and Cleanup involving regulation of underground storage tanks, hazardous site cleanup, the Land Disposal Restrictions Program, the Oil Spill Prevention Program, and Chemicals and Toxics where the agency often reassesses all pesticides legally sold in the United States.

Other programs include the *EPA Safer Choice* program, branded earlier as *Design for the Environment (DfE)*, which helped customers and businesses identify and choose products with safer chemical materials, without forgoing quality or performance. Through the *Safer Detergents Stewardship Initiative (SDSI)*, environmental leaders who willingly commit to the use of safer surfactants are lauded. The *Energy Star* program is a voluntary program that encourages energy efficiency by an efficient usage of appliances, office equipment, lighting, home electronics, and more. The *Smart Growth Program* began in 1988 and helps communities protect healthiness and the ecosystem, create economic opportunities, and provide appealing and affordable neighborhoods for individuals across all socioeconomic levels. The *Brownfields Program* was passed in 2002 and provides grants and tools to local governments for the assessment, and revitalization, of brownfield lands. The *National Environmental Education Act* of 1990 helps to enhance the environmental literacy of citizens, while *Clean School Bus USA* seeks to alleviate children's exposure to diesel exhaust by eliminating excessive school bus idling. Finally, the agency has also established geographical programs for specific water resources such as the *Chesapeake Bay Program*, the *National Estuary Program*, and the *Gulf of Mexico Program*.

Global Presence of the EPA

EPA participates in several bilateral cooperative programs with many countries around the globe. This allows developing countries to benefit from the US leadership in building apt and successful environmental plans. As mandated by the

Antarctic Science, Tourism, and Conservation Act of 1996, regulations are in place to also assess the nongovernmental activities (including tourism) in this region. The agency also works with several countries in the Asia and the Pacific to safeguard global environment and public well-being. These include the following: Australia, China, Japan, Singapore, South Korea, and Vietnam. The work in Latin America and the Caribbean is done primarily in Brazil, Chile, Guatemala, Honduras, Costa Rica, and Peru and involves the provision of environmental tools and intelligence to aid governmental and nongovernmental organizations to lessen environmental ruin.

EPAs' work in Eurasia has lasted for over two decades and involves collaboration with Russia, Central Asia, the Caucasus, and Ukraine in the areas of environment, science, and technology. The United States association with Europe also goes back several years in maintaining economic and political alliances. They have jointly addressed environmental protection impacts on climate and worked on enhancing a purer environment around the globe. In the Middle East, the EPA's environmental collaboration focuses primarily on improving environmental governance, water pollution, water security, clean fuels and vehicles, and pollution prevention. Their work is mostly done in Morocco, Israel, and Saudi Arabia.

The three countries of North America – Canada, Mexico, and the United States – are involved in several collaborations to protect their shared environment. The EPA implements environmental contracts bilaterally and trilaterally with both partners. The United States-Mexico-Canada (USMCA) Free Trade Agreement and Environmental Cooperation Agreement (ECA) was operative on July 1, 2020, updating and replacing the *North American Free Trade Agreement (NAFTA)* and *North American Agreement on Environmental Cooperation (NAAEC)*, signed in 1994. Another major project is the *North American Development Bank (NADB)*, a binational institution established by the governments of the United States and Mexico to provide financing to

support environmental infrastructure projects. Finally, the EPA's environmental program in sub-Saharan Africa is dedicated to tackling the region's growing urban and industrial contamination concerns, such as air and water quality, electronics waste, and indoor air from cookstoves.

Summary

The EPA is beholden to the laws passed in Congress – appropriations statutes determine the amount of money that the agency can spend on each program. The agency, however, has the power of issuing regulations to various environmental situations and enforces the requirements, as long as a rationale for why a regulation is needed is provided. A major problem that persists even a half a century after the agency was founded is that the major programs regarding air, water, and waste and other programs remain unconnected, or placed in “silos,” and efforts are in place to have a stronger coordination between these divisions.

The agency has also focused its work on environmental justice. This has meant taking into account the neighborhoods where the underprivileged and minority populations live into special consideration when approving environmental legislation. Many of these concerns are local, and hence difficult to address by a federal agency, such as the EPA. Conflicting political ideologies in successive administrations can also be a factor in affecting the motivation for environmental enforcement. EPA is answerable to various constituencies, contends for resources, and tackles an eclectic range of damages to the environment. The agency is responsible for preventing and detecting environmental crimes, informing the public of environmental enforcement, and setting and monitoring standards of air and water pollution, hazardous wastes, and chemicals. From monitoring the fuel economy of automobiles to addressing climate change issues, the EPA has to address a myriad of challenges, including a lack of resources, and self-regulation of policies in order

to serve not only a country, but also all of humanity.

Cross-References

- ▶ [Environment and Ethics in Sustainability](#)
- ▶ [Environmental Assessment](#)
- ▶ [Environmental Compliance Audit](#)
- ▶ [Environmental Disaster](#)
- ▶ [Environmental Disclosure](#)
- ▶ [Environmental Governance](#)
- ▶ [Environmental Impact](#)
- ▶ [Environmental Impact Assessment](#)
- ▶ [Environmental Law](#)
- ▶ [Environmental Transparency](#)
- ▶ [Integrated Quality and Environmental Management](#)

References/Further Reading

- Anand, R. (2017). *International environmental justice: A North-South dimension*. United Kingdom: Routledge.
- Firestone, M., Berger, M., Foos, B., & Etzel, R. (2016). Two decades of enhancing children's environmental health protection at the US Environmental Protection Agency. *Environmental Health Perspectives*, 124(12), A214.
- Kagan, R. A., Thornton, D., & Cunningham, N. A. (2017). Motivating management: Corporate compliance in environmental protection. In *Crime and regulation* (pp. 203–230). Routledge.
- Lester, J. (2018). *Environmental injustice in the US: Myths and realities*. United Kingdom: Routledge.
- Lewis, H., Gertsakis, J., Grant, T., Morelli, N., & Sweatman, A. (2017). *Design+ environment: A global guide to designing Greener Goods*. United Kingdom: Routledge.
- Neumayer, E. (2017). *Greening trade and investment: Environmental protection without protectionism*. United Kingdom: Routledge.
- Pettenger, M. E. (Ed.). (2016). *The social construction of climate change: Power, knowledge, norms, discourses*. United Kingdom: Routledge.
- Portney, P. R. (Ed.). (2016). *Public policies for environmental protection*. New York: Routledge.
- Romero, J. A., Freedman, M., & O'Connor, N. G. (2018). The impact of Environmental Protection Agency penalties on financial performance. *Business Strategy and the Environment*, 27(8), 1733–1740.

- Schaltegger, S., & Burritt, R. (2017). *Contemporary environmental accounting: Issues, concepts and practice*. United Kingdom: Routledge.
- Schaltegger, S., Burritt, R., & Petersen, H. (2017). *An introduction to corporate environmental management: Striving for sustainability*. United Kingdom: Routledge.
- Weidema, B. P. (2017). Market information in life cycle assessment. *Danish Environmental Protection Agency, Danish Ministry of the Environment. Environmental Project No. 863*.

Environmental Report Following GBS Standard

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Synonyms

[Socio-environmental report](#); [Sustainability report](#)

Definition

Environmental reporting comprises the set of disclosure practices and tools pertaining to the effects of business interaction and the environment. It depends on environmental accounting, which encompasses specific sub-information systems that aim to measure, assess, and monitor environmental costs and performances that are often excluded from financial accounting.

In Italy, the environmental accountability model has been put forward by the GBS (Gruppo di Studio per il Bilancio Sociale), which is the primary association for scientific research on social and environmental reporting, and it serves as a national “standard setter.” Its social and sustainability reporting standard (GBS 2013) underlines the environmental impacts of organizations’ activities as regards the sustainable development objectives. The suggested environment communication system incorporates financial and non-financial information based on quantitative and qualitative data concerning an organization’s environmental performance in a specific period.

Introduction

The environment has been expressed as the natural physical space that encompasses the air, water, land, fauna, flora, and nonrenewable resources (minerals, fossil fuels, etc.) surrounding people and organizations (2001/453/EC). The European recommendation on the “recognition, measurement and disclosure of environmental issues” aimed to enhance the quality, transparency, and comparability of environmental information and yielded the earliest guidance for the disclosure of environmental information in the companies’ annual reports.

The growing awareness of the crucial role of environmental resources and their impact on the whole community at a local, regional, and international level necessitates an integration of environmental issues within every organization’s decision-making process (Baldarelli et al. 2017). Both doctrine and practice recognize the relevance of financial and nonfinancial environmental information in listed corporations’ annual reports and determined that financial types of sustainability disclosures (i.e., environmental management costs, allocations for potential liabilities and environmental investments) have market significance (O’Dwyer 2003; Moneva and Cuellar 2009). However, there is not a consolidated methodology practical for directly or indirectly determining the extent of environmental impact.

After the directive mentioned above, a key turning point in the regulatory evolution of financial reporting materialized with the directive 2003/51/EU – addressed to socio-environmental impacts. Moreover, the need to meliorate organizations’ environmental disclosure resulted in the enactment of the 2013/34/EU and the 2014/95/EU directives (NFRD). The latter is centered on the disclosure of non-financial and diversity information by public interest entities (PIE) – certain large undertakings and groups with more than 500 employees and that have either a balance sheet total of more than EUR 20 million or a net turnover of more than EUR 40 million – that are required to include a non-financial statement in their annual report. At present, the NFRD requires information about the environment, social and employee issues, human rights, and bribery and

corruption and underpins the assumption that non-financial information is indispensable for moving toward a sustainable global economy by combining long-term profitability with social justice and environmental protection. The non-financial declaration (the so-called NFD) should be incorporated in the annual report “to containing information to the extent necessary for an understanding of the undertaking’s development, performance, position and impact of organizations’ activity, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters” (EU 2014, p. 4). In providing this information, organizations that comply with the provision of the 2014 directive (entered into force in Italy in 2016) may be dependent on national frameworks (i.e., the GBS standard), or international ones (i.e., the OECD Guidelines for Multinational Enterprises, the Global Reporting Initiative and the Eco-Management and Audit Scheme).

In Italy, the GBS has been recommending non-financial disclosure for decades (Mio and Venturelli 2013). The GBS is a not-for-profit association that aims to promote scientific research on social reporting and diffusing corporate social responsibility implementation among private, public, and not-for-profit organizations. Since its establishment in 2001, the GBS has been appealing to institutions, scholars, practitioners, and professionals, including several Italian Universities, the National Order of Chartered and Professional Accountants (CNDCEC) and the National Association of Auditors (ASSIREVI). The GBS teams up with national and international organizations and encourages several research groups to spread knowledge through conferences, books, newsletters, and the website, which provide research documents and the standard for free.

Since the first standard’s publication (GBS 2001), a growing number of social and sustainability reports have been released by Italian organizations. The standard has been further refined and a renewed version was issued in 2013 (GBS 2013) to entail the environmental stakeholders in the undertaking of the calculation of value added and its distribution. In addition, research document No. 3 “Environmental Reporting and Value

Added” (GBS 2007) and No. 11 “Social and environmental reporting for corporate groups” (GBS 2010) have been published as the result of a thorough research on environmental accountability. Like many other processes and product standards, the GBS guidelines are an illustration of soft law, which is concerned with framing the problem and producing an operational and theoretical construct to support the transparency and comparability of social and environmental reporting (Baldarelli 2007).

The decision to issue the environmental reporting can also bring about the drafting of an independent environmental report, especially in companies operating in high environmental impact sectors (e.g., oil and gas). In this case “the qualitative and quantitative information should be transposed in a sequence that takes on the guise of a Chart of Environmental Accounts (CEA)” (GBS 2013, p. 55) that has been outlined to elaborate a comprehensive and autonomous environmental report (GBS 2013, pp. 61–68).

Key Issues

The GBS standard (GBS 2013) can be implemented by all companies called to/interested in realizing a socio-environmental report, regardless of the variety of environmental issues derived from the size and nature of the businesses’ activities. The standard is consistent to the international guidelines of Global Reporting Initiative, the most diffused environmental certifications (EMAS and ISO 14001) and other national and international standards.

The report includes: (1) the identity of the organization and its context; (2) the reclassification of financial accounting data and the estimation and distribution of value added; and (3) the socio-environmental report. It could be accompanied by additional sections and an appendix.

Information on socio-environmental perspectives should be succinctly introduced in the first part of the report by indicating the salient aspects of the socio-environmental context, followed by the explanation of the principles and values that prompt the mission and the main economic,

social, and environmental purposes. Strategies and policies should be described, including environmental management issues and prospects. The standard supports the notion of sustainable development and draws attention to the environmental impacts of business activities in two specific sub-sections of the report aiming to describe the social and environmental dimension, respectively.

Financial and non-financial information must be incorporated to make the overall organization’s situation comprehensible. The second section of the report must include environmental information of a financial nature (reclassification of financial accounting data) to estimate the value added produced by an organization including the revenues and costs (Table 1) of an environmental nature below presented.

The balance of the components mentioned above permits stakeholders to evaluate the impact of the management of environmental aspects on the outcomes of a fiscal year. The result is represented by the net global value added. Moreover, an elaborate analysis of these components must be given in the third section of the report, where data are used to calculate relevant indicators.

In the prospect dedicated to the analysis of the distributed value added, the environment is

depicted as an internal stakeholder. The statement should include the following categories of costs: payments to the Public Administration; payments to human resources; payment for liabilities/loans; remuneration of equity capital; donations; value dedicated to keep and implement the value equity; and the environment.

The third section of the report – referred to as the socio-environmental report – consists of a qualitative and quantitative description of the results realized by an organization, compared with its commitments, actions set in motion, and effects on stakeholders. Results are expressed by using metrics, comparisons, and narratives and are complemented by evidence and opinions. The socio-environmental report should permit various stakeholders to appraise what the organization has accomplished and gauge the organization’s environmental behavior. Moreover, it should allow the organization to engage stakeholders and sustain relationships with them.

To this end, the section should be an orderly series of information pertaining to the corporate identity statement (values, mission, strategies, and policies), qualitative/quantitative information, and indicators that aim to indicate the company’s environmental identity (see GBS 2013, Table 5.11), the direct environmental aspects (see GBS 2013, Table 5.12) and the indirect ones (see GBS 2013, Table 5.13).

The identity indicated the environmental policy, the management systems, and environmental certifications and studies (i.e., life cycle assessment), the adoption of the emission trading scheme, as well as details about any projects falling within the application of the environmental impact assessment. In addition, information about the governance structure and its orientation to adopt the best available technology in line with environmental evolution should be incorporated. In particular, the environmental identity should be presented by providing information on the production site, the technological plants and production processes, the environmental problems that the company faced, the eventual controversies and types of damage generated, the current (or planned) environmental policies and programs, and the monitoring activities. Data should be presented through readable information. For

Environmental Report Following GBS Standard,
Table 1 Costs and revenues pertaining to the management of environmental issues

Costs	Revenues
Raw materials consumption	Sales revenues
Cost of services	Increase of working orders pertaining to environmental product/ goods
Costs for leases	Other revenues/incomes related to the management of environmental issues
Cost of employees	Environmental contributions
Amortizations and depreciation of environmental assets	Extraordinary revenues/incomes
Allocation of funds for environmental risks	
Other allocations for the management of environmental issues	
Other environmental costs and charges	
Expenses for interest	
Extraordinary costs/ expenses	

Source: our elaboration from GBS (2013), p. 32

example, the information about the production site should summarize the production activities and locations, a plan of the areas that have been built and the green areas along with information about future plans.

Results should be consistent with the organizational dimension and the productive and operating dimension. Environmental information pertaining to water use, greenhouse gas emissions, and the use of materials should be grouped into three sections: (1) data on environmental costs; (2) account data on environmental costs, and (3) evaluation of environmental costs.

Quantitative data cover the production, consumption, and environmental impacts triggered by the corporate activity so as to monitor environmental performance. Environmental expenditures encompass the costs of initiatives set in motion to prevent, reduce, or repair damages to the environment (i.e., pollution, waste, noise, compromise of biodiversity), for example, disposal and avoidance of waste, protection of the environment, noise reduction, and protection of biodiversity and the landscape. In accounting terms, the environmental expenditures should keep up the characteristic of “specificity.” The balance among environmental revenues and costs highlights the environmental management impact. An elaborate analysis of environmental components includes data on air, soil, subsoil, and water emissions, aggregated by categories of pollutants and complemented by the measurement methodologies that have been implemented (i.e., direct measurements, sampling, etc.). Moreover, it should contain environmental performance indicators pertaining to environmental training and education activities, and the consumption of energy and non-recyclable materials.

Direct environmental aspects pertain to activities over which the organization has direct management control, including: the analysis of emissions, resource consumption, waste and liquid effluents, as well as corporate behaviors concerning the landscape (fauna, flora, aesthetic), ecosystem, and biodiversity. Waste generation should be indicated by typology, according to the European Waste Catalogue (EWC), and by distinguishing between municipal waste, hazardous and nonhazardous. The analysis is structured

into six elements (costs, financing, revenues and investments, matrix of the process/variables, analysis of resource consumption, emission and waste). For each resource, the quantity and consumption trend and the percentage of recycling should be indicated.

Indirect environmental aspects can derive from an organization’s interaction with external entities. Information accounts for environmental impacts that are indirectly connected to the production processes, including: the product life cycle, suppliers and their position in the value chain, carriers of auxiliary services, customers, and consumers.

Finally, the social-environmental report can incorporate additional sections dedicated to: stakeholders’ opinions; improvement of the report and assessments of appointed third parties. In fact, the report elicits dialogue and involvement of stakeholders whose comments and advice contribute to complete and improve future socio-environmental reports.

Future Directions

The environmental report has been designed as a voluntary tool that describes the relationships between companies and the environment and the effort they make to improve efficiency in the use of environmental resources. Companies that operate in sectors characterized by high environmental impact (i.e., the petrochemical and chemical industries) are among the first to publish environmental reporting, as well as companies belonging to the service sector (e.g., transport and telecommunications and waste management). The majority of multinationals have gradually made the environmental report part of their habitual practice, since it is a useful risk management tool and can be integrated with other corporate external communication instruments.

Data to be comprised within the environmental report are often already available in the company but, in most cases, must be retrieved and organized to support the decision-making process. The report should be understood as a dynamic tool that can evolve over time. Such evolution must be sought by both doctrine and practice, required

greater attention to educating students and the new generations because, despite an increasing attention to convey environmental performance, a sore point is represented by the authentic orientation to environmental sustainability (Gray et al. 2014).

Summary

The socio-environmental report recommended by the GBS contributes to improving the disclosure of information addressed to stakeholders, focusing on the environmental dimension and the related direct and indirect aspects. It provides a qualitative and quantitative description of the results accomplished by an organization, compared with its commitments, the actions undertaken, and the effects on stakeholders. The description of the environmental policy underlines the effort made to strategically deal with environmental problems and offer the organization an opportunity to critically rethink its business model and assess the coherence between the environmental approach and the declared corporate values.

Cross-References

- [Ecological Accounting](#)
- [EMAS: Eco-Management and Audit Scheme](#)

References

- Baldarelli, M. G. (2007). New perspectives in inter-company relations, social responsibility (CSR) and social, ethical and environmental accounting in Italy by way of the Government CSR-SC project: Theory and praxis. *Economia Aziendale 2000web*, 1, 1–26.
- Baldarelli, M. G., Del Baldo, M., & Nesheva-Kiosseva, N. (2017). *Environmental accounting and reporting. Theory and practice*. AG Cham: Springer International Publishing.
- European Union (EU). (2014). *Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014*. Brussels/Strasbourg: European Union.
- GBS. (2001). *Standard di Base. Principi di redazione del bilancio sociale*. Milano: Giuffrè.
- GBS. (2007). *Environmental report and added value* (Research Document No. 3). Milano: Giuffrè.
- GBS. (2010). *Social and environmental reporting for corporate groups* (Research Document No. 11). Milano: Giuffrè.
- GBS. (2013). Social reporting. In *Principles and standard for sustainability reporting* (The National Association for Scientific Research on the Social Reporting). Milano: Giuffrè.
- Gray, R., Adams, C. A., & Owen, D. (2014). Accountability, social responsibility and sustainability. In *Accounting for society and the environment*. Harlow: Pearson.
- Mio, C., & Venturelli, A. (2013). Non-financial information about sustainable development and environmental policy in the annual reports of listed companies: Evidence from Italy and the UK. *Corporate Social Responsibility and Environmental Management*, 20 (6), 340–358.
- Moneva, J. M., & Cuellar, B. (2009). The value relevance of financial and non-financial environmental reporting. *Environmental and Resource Economics*, 44, 441–456.
- O'Dwyer, B. (2003). The ponderous evolution of corporate environmental reporting in Ireland. Recent evidence from publicly listed companies. *Corporate Social Responsibility and Environmental Management*, 10, 91–100.

Environmental Reporting

- [Environmental Disclosure](#)

Environmental Resources

- [Marine and Coastal Resources](#)

Environmental Responsibility

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Synonyms

[Corporate environmentalism](#); [Corporate social responsibility](#); [Corporate sustainability](#); [Environmental law](#); [Environmental standards](#); [Sustainability](#)

Definition

Environmental responsibility is the idea that business organizations have an obligation to consider their impact on the natural environment. This obligation may be found in either the laws of the relevant jurisdiction(s) where they operate or in a broader moral obligation as an actor in society. The impact may be as a result of business consumables, production processes, or final outputs. Thus, businesses may have an environmental responsibility with respect to decisions about inputs, including sourcing, process choices, which may involve more or lesser impacts and discharges into the natural environment, and the environmental impacts of the specific goods or services they are supplying.

Environmental responsibilities are found in various hard and soft law instruments. Legal environmental responsibilities can be litigated in the courts, whereas other responsibilities may have different implications for the business, from membership in industry associations, voluntary accreditations, brand value, and social license.

Introduction

Historically, the effects of human activity on the natural environment have largely been ignored. Only after the Industrial Revolution did the effects become clear as skies over industrially active cities darken from the increased levels of smoke generated by coal powered factories and related processes. Polluted lakes and rivers became more common interfering with the use of adjoining lands and facilities. In the first instance, the courts were used to respond to these environmental issues as litigants invoked the laws of nuisance to address the issues.

This limited, court-based approach, despite the passing of rudimentary legislation in the 1850s, continued into the mid-twentieth century when significant pollution events drew public attention and significant concern and pressure to the issue. These events included an extended period of smog over the city of London, “The Great Smog,” a river catching fire in New York state

among others (Sheehy 2019a). At the present time, the phenomenon of global warming is widely acknowledged harmful environmental impact of human activity, the majority of which result of industrialization, its processes, and products. A range of responses have been developed including the idea of “environmental responsibility” in both public and private spheres.

The environmental responsibility is an idea that connects actions and their consequences in the context of business and the natural environment. It is a perspective that places demands on businesses to create not only economic value but to include social value by re-aligning their corporate objectives with stakeholder management and addressing environmental responsibility (Camilleri 2018). In its essence, environmental responsibility is the idea that a business that has a harmful impact on the natural environment (and they all do) has a responsibility to remedy or address that impact. Environmental responsibilities can be conceived of as being of two types: legal including contractual and moral.

Moral Environmental Responsibility

The moral argument for environmental responsibility is relatively straight forward. Where a party despoils something, that party is presumed to have a responsibility to remedy it. A fundamental problem in the case of the environment comes from its character as being generally available and belonging to no one – an area referred to historically as “the commons.” This characterization of the natural environment as a commons has two implications. First, as a result of the natural environment being a commons, any party has a right to use it as desired and no person has a right to demand another to refrain from using and despoiling it. Second, while in preindustrial contexts, the commons could be used by all and a general set of norm constrained misuse and excessive use, the rise of capitalism, and industrialization changed the extent of the impact as well as the underlying institutions of society itself. The change of norms from using the commons for sustenance living to using them to maximize individual profits led to

over exploitation of commons and destruction of the natural environment (Cox 1985; Crowe 1969; Hardin, 1968; Ostrom 2008).

Where the benefit as well as the costs was equally shared, a norm of fairness was in operation and there was little need to impose a distinct environmental responsibility to remedy for despoilation. Once that model was upturned by industrialization and capitalism, and exploitation of nature done at a scale where despoilation deprived others of benefit or imposed costs on them, a reconsideration of the norms underpinning unrestricted approach to the commons is required. In other words, the moral argument comes from the unequal destruction and benefit derived from the exploitation of the natural environment. Thus, where a party has benefited from exploitation of the natural environment, a responsibility exists to remedy that harm for the benefit of those who have lost that resource.

This moral argument has been institutionalized in ideas such as “social license,” “corporate social responsibility,” “corporate citizenship,” and “corporate environmentalism” (Sheehy 2012, 2015; Sheehy and Farneti 2021). These arguments have been advanced by various parties and been used to influence management decisions. To a significant degree, this argument has been institutionalized by making the business case for implementing technologies to reduce environmental impacts. Basically, the business case is creating an argument for business decision-makers demonstrating that investing in environmental improvements will benefit the financial performance of the business. Many commentators argue that companies that practiced social and environmental responsibility did well by doing good, in the long run (Camilleri 2017). In other words, the environmental norm has been changed and subordinated to for-profit norms of business. Nevertheless, there is still strength in the moral argument as expressed in the term social license. Activities such as boycotts, condemnation on social media, as well as positive engagement in environmentally focused programs are reactions at least to some degree to the moral argument.

Legal Environmental Responsibility

The legal argument for environmental responsibility is developed out of a category of law referred to as tort law. That category of law allows parties to seek remedies for noncriminal harms including pollution. A basic principle of law is a right not be interfered with and a correlative duty or obligation not to interfere with others. Following from this principle, where an industrial activity spoiled the environment and interfered with the rights of others, the law placed a duty to compensate the harmed party. The general approach of tort law did not differentiate between environmental harms and any other harm. Subsequently, there have been both legislative and soft law developments.

Legislated Environmental Responsibility

The development of environmental law in the contemporary era can be traced back to the initial legislation in the UK, the *Smoke Nuisance Abatement (Metropolis) Act 1853*. Subsequent legislation and reforms have continued there and elsewhere to the present day. The result of this legislation was to replace the initial legal approach, which provided remedies to parties harmed by pollution and other industrial activities on a case-by-case basis with a legislative, society wide approach to address the mounting environmental issues.

As a result, legislation has been passed in many jurisdictions to address various types of pollution such as air quality, water quality, waste management, contaminant clean-up, and general chemical safety. These legislative instruments often create a regulatory organization with rights and duties with respect to monitoring, standard setting, and prosecution of breaches of duties. The result is that prosecution of environmental harms does not depend on the initiative and resources of private individuals; rather, the burden has been shifted to government. The problem remains, however, that law provides a remedy only after an environmental harm has been done.

Soft Law Environmental Responsibility

At the level of international law, a set of three broad principles has emerged. These are the principles of prevention, polluter pays, and the precautionary principle (De Sadeleer 2002; Sheehy 2019a). The first principle requires proactive efforts to prevent pollution in the first place by use of appropriate technology, processes, and safeguards to ensure a minimal standard of environmental protection occurs. The second principle acknowledges that pollution will occur, that the costs do not simply disappear into the atmosphere but must be paid by someone. The principle requires the business that creates pollution and presumably benefits from that creation pays the cost rather than off-loading to other individuals or society at large. The final principle, the precautionary principle, takes a different approach. It is based on an acknowledgment that some aspects of the environment are critical, irreparable, and/or inherently worthy of preservation, and further that it would be unwise to risk harm to those aspects. Accordingly, rather than taking a remedial or repayment approach, the wiser approach is to avoid the harm by taking a precautionary approach.

In their essence, these principles prescribe a set of approaches to environmental responsibility. As international principles, they have been accepted as just to all and necessary to protect the environment from the problem of industrial pollution. They have been enacted not only in the international legal system but also in many other regional and national legal systems.

A major method of developing, participating, and implementing environmental responsibility is through various private soft law initiatives (Abbott and Snidal 2000). These soft law initiatives are found in many industries and put forth by several actors. Perhaps most well-known, the ISO1400 standard, provides a template for business organizations to manage their environmental impact. Other well-known standards include the standards of the Forestry Stewardship Council and the Marine Stewardship Council. These standards, often codified, are adopted by business organizations on either the business case as

mentioned above or purely moral grounds or some combination of the two.

As soft law, these standards of environmental responsibility, often codified, do not have the force of hard law (Sheehy 2019b). There is no court to which one can bring offenders who breach these standards. Nevertheless, they are useful in directing, at least to some degree, decision-making within organizations. As no business is wholly stand alone, some of these standards are implemented through contractual arrangements in supply chains (Rahdari et al. 2020). For example, a large retailer may demand that all wood used in the manufacture of its products be sustainably sourced as certified by compliance with the Forestry Stewardship Council standards (Vandenberg 2006).

Economic Rejection of Environmental Responsibility

Economics as a discipline identifies no responsibility or duty. Rather, it uses categories of costs and benefits. In economic terms, pollution is simply a cost. As analyzed by Ronald Coase, these social costs are merely matters of property rights, which ought to be traded by private parties to pursue their own private interests (Coase 1960). The solution to pollution – that is, environmental responsibility – in an economic framework is simply expanding property rights such that a right to cleaner environment could be litigated.

This economic approach has been a major obstacle to other approaches to environmental responsibility. From an economic perspective, destruction of the environment is a cost, which only needs to be addressed by payment rather than ecological preservation. Where a party has property rights over something, which may have an environmental impact, there is no moral obligation to preserve or refrain from maximum exploitation of the environment. Indeed, there is an economic incentive to destroy it to maximize profit. Further, as economics holds that there are always commensurate goods, there is no reason to refrain from destruction of the natural environment. As a result, economic norms encourage

environmental destruction in the absence of costs imposed by law on that destruction.

Summary

Environmental responsibility is an idea based on conceptions of fairness. In a nutshell, the idea is that business organizations that benefit from the exploitation of the natural environment have duty to minimize their environmental impact and an obligation to compensate society at large for their negative impacts. These responsibilities are founded in both moral and legal norms. The legal norms are found in national, international, and private soft law systems. At the international level, the norms are prevention, polluter pays, and the precautionary principle. Economics opposes any responsibility and instead prefers financial incentives and penalties.

Cross-References

- [Corporate Environmentalism](#)
- [Corporate Social Responsibility](#)
- [Corporate Sustainability](#)
- [Soft Law](#)

References

- Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.
- Camilleri, M. A. (2017). Corporate sustainability and responsibility: Creating value for business, society and the environment. *Asian Journal of Sustainability and Social Responsibility*, 2(1), 59–74.
- Camilleri, M. A. (2018). Theoretical insights on integrated reporting: The inclusion of non-financial capitals in corporate disclosures. *Corporate Communications: An International Journal*, 23(4), 567–581.
- Coase, R. H. (1960). The problem of social cost. In *Classic papers in natural resource economics* (pp. 87–137). London: Palgrave Macmillan.
- Cox, S. J. B. (1985). No tragedy of the commons. *Environmental Ethics*, 7(1), 49–61.
- Crowe, B. L. (1969). The tragedy of the commons revisited. *Science*, 166(3909), 1103–1107.
- De Sadeleer, N. (2002). *Environmental principles: From political slogans to legal rules*. (S. Leubusher, Trans.). Oxford: Oxford University Press.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162, 1243–1248.
- Ostrom, E. (2008). Tragedy of the commons. In *The New Palgrave dictionary of economics* (Vol. 2).
- Rahdari, A., Sheehy, B., Khan, H. Z., Braendle, U., Rexhepi, G., & Sepasi, S. (2020). Exploring global retailers' corporate social responsibility performance. *Heliyon*, 6(8), e04644.
- Sheehy, B. (2012). Understanding CSR: An empirical study of private regulation. *Monash University Law Review*, 38(2), 103–127.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648.
- Sheehy, B. (2019a). CSR and environmental law: Concepts, intersections, and limitations. In *The Oxford handbook of corporate social responsibility: Psychological and organizational perspectives* (pp. 260–282). Oxford UK: Oxford University Press.
- Sheehy, B. (2019b). TNC code of conduct or CSR? A regulatory systems perspective. In M. M. Rahim (Ed.), *Global code of conduct on transnational corporations: Challenges and opportunities*. Cham, Switzerland: Springer.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter?. *Sustainability*, 13(11), 5965.
- Vandenbergh, M. P. (2006). The new Wal-Mart effect: The role of private contracting in global governance. *UCLA Law Review*, 54, 913.

Environmental Social Governance (ESG) Risk

- [Social Risk](#)

Environmental Standards

- [Environmental Responsibility](#)

Environmental Strategy Development

- [Corporate Maturity](#)
- [Environmental Management](#)

Environmental Sustainability

- ▶ [Green, Circular, and Bio Economy](#)

Environmental Systems

- ▶ [Ecology and Ecosystem](#)

Environmental Systems Analysis

- ▶ [Environmental Assessment](#)

Environmental Taxes

- ▶ [Green Taxation](#)

Environmental Transition

- ▶ [Transition Sustainability](#)

Environmental Transparency

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Synonyms

[Environmental accountability](#) (both with a different connotation or meaning; see below); [Environmental disclosure](#)

Definition

Environmental transparency concerns the willingness of companies or organizations to share information on environmental performance with people who are interested (Wong et al. 2021). The International Monetary Fund (IMF) defines environmental transparency as “a process by which information about existing conditions, decisions and actions is made accessible, visible and understandable” (IMF 1998, p. v). Thus, environmental transparency refers to communication of information about the environmental impacts of a company’s activity. Environmental transparency also covers aspects of governance and control of companies or organizations, both from an inside and outside perspective (e.g., the perspective of the management of a company and the perspective of citizens). Environmental transparency can be defined as “the degree to which information is available to outsiders that enables them to have informed voice in decisions and/or to assess decisions made by insiders” (Florini 2007, p. 5). The idea of governance and control from several perspectives is also reflected in the definition of environmental transparency by Gupta and Mason (2014), who define the term as “disclosure of information intended to evaluate and/or steer behavior” (Gupta and Mason 2014, p. 357).

The term environmental disclosure is similar and sometimes used interchangeably, but disclosure has a slightly different connotation compared to transparency: It reflects a company’s responsibility with regard to activities having a negative impact on the environment, in response to a legal requirement to inform clients, shareholders, or other actors.

Another term related to environmental transparency is environmental accountability. Environmental accountability implies that companies take responsibility for their actions, the environmental impact, and the consequences thereof (Suadiye 2021).

Environmental Transparency: Trends and Concepts

Environmental transparency is strongly linked to the right of the public, to be informed about environmental impacts of companies that might affect citizens (Florini 2007). In the 1980s, industrial accidents like the Bhopal disaster in 1984 led to new legislation, for example, in the USA, where the Emergency Planning and Community Right to Know Act was passed in 1986 (Durant 2017). This Act was different from previous legislation in the sense that it represents an environmental transparency approach: Through the Act it was mandatory for companies to disclose emission data, information about toxic substances released had to be filed in the Toxics Release Inventory. Sharing of emission data resulted in a significant reduction of emissions and initiated better environmental performance of companies (Ramkumar and Petkova 2007). Since then, many countries have introduced similar legislation providing citizens with a right to know and access to environmental information (Fox 2007). Such an approach is also referred to as regulation by revelation (Durant 2017; Ramkumar and Petkova 2007). More recently, climate change, environmental pollution, and the current use of natural resources call for sustainable forms of consumption and production. Mostly, production and consumption of goods are associated with negative impacts on the environment, e.g., waste production, pollution of air, water, and soil, and emissions of greenhouse gases. Therefore, companies take steps toward more sustainable production, as business operations, which significantly harm the environment or deplete natural resources, are not sustainable (Suadiye 2021). In other words, environmental transparency can make a contribution to transforming economy toward sustainability.

To protect healthy living environments in a better way, governments and authorities provide governance by promoting the open availability of information. This way they create opportunities for more participation and access to information regarding the quality of the environment. The idea of environmental governance is that access to

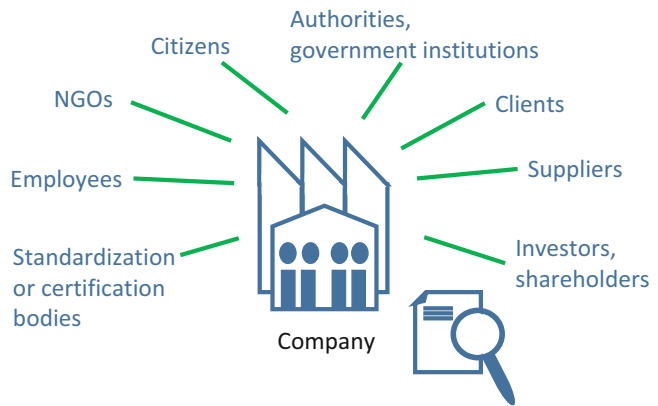
information on the one hand enables people to participate in informed decisions, and on the other hand motivates companies to improve environmental performance of their operations (Durant 2017).

Environmental transparency is based on the willingness of companies to share information about environmental management and environmental performance. Among some scientists (e.g., Wong et al. 2021), there is considerable confidence that environmental transparency can achieve more accountability, better governance, and thereby reduce environmental risks. Companies adopt environmental accountability practice, i.e., an attitude of acknowledging responsibility for operations and their environmental consequences (Darbishire 2010; Wong et al. 2021). However, practice shows that there is no clear-cut relationship between transparency and accountability (Nadesan 2011). There are several reasons for this. One reason is that companies often do not report directly to citizens (Nadesan 2011). Furthermore, information might not be disclosed clearly or in a suitable format for critical evaluation. Also, if information about environmental releases does not result into sanctions, e.g., due to a lack of capacity at authorities, transparency does not directly result in accountability (Fox 2007). This means that more efforts are needed to slow and turn the global environmental decline, citizens need to take more responsibility for environmental governance, e.g., as consumers (Axelrod and VanDeveer 2019).

Governance in the context of sustainable development puts a focus on accountability, transparency, participation, and access to justice (Bond et al. 2013). Regarding the aspect of financial accounting, financial information is required about environmental economic impacts. Examples for financial impacts of environmental issues caused by the company's activities include environmental fees or fines, costs of site closure in case a site needs to be abandoned, decreased value of production installations due to pollution, and liabilities caused by pollution or emissions (Schaltegger and Burrit 2000). Relevant information about environmental economic impacts needs to be described and quantified financially, because

Environmental Transparency,

Fig. 1 Stakeholders and target groups of environmental transparency (see Nadesan 2011; Schaltegger and Burrit 2000; Wong et al. 2021)



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costs (for fees, site closure, or liabilities) can be considerable. So, disclosure of environmental economic impacts helps to create transparency and accountability in relationships with different stakeholders such as shareholders, investors, non-governmental organizations (NGOs), and citizens (Schaltegger and Burrit 2000). Figure 1 gives an overview of different stakeholders, which are target groups of environmental transparency.

Voluntary Versus Mandatory Regimes of Environmental Transparency

Generally, there are two types of transparency regimes. They can be either voluntary or mandatory (Durant 2017; Nadesan 2011). Voluntary regimes of environmental transparency are set up, used, and monitored by actors of the private sector (e.g., industries or NGO), and are followed on a voluntary basis. Examples for such voluntary transparency codes are guidelines developed by the Global Reporting Initiative (GRI) or ISO 14001 standards for environmental management (Durant 2017; GRI 2022).

Mandatory regimes of environmental transparency are binding and enforced by authorities based on existing laws and regulations. There are numerous environmental transparency codes or regulations, which entail a right to know (i.e., a right of the public to be informed about hazardous substances or environmental releases of companies or organizations that might affect people). Examples like the Basel Convention on the

control of transboundary movement of waste or the Emergency Planning and Community Right-to-Know Act mentioned earlier (Durant 2017; Fox 2007; Ramkumar and Petkova 2007). In a similar way, the European Air Quality Directive and Water Framework Directive, both have reporting requirements and therefore can also be regarded as right-to-know legislation (Makuch and Pereira 2012).

The disclosure of information can be “soft,” i.e., informal or “hard,” i.e., more formal (Wong et al. 2016). The latter forms of disclosure comprise disclosures linked to environmental management systems (e.g., ISO 14001), disclosures linked to certification or related to environmental performance indicators, and such related to capital spending. “Soft” disclosures are releases of information in a less formal way, e.g., on a website or via trainings (Wong et al. 2016).

Environmental Transparency in International Legislation and Guidance Documents

Some authors see an increased momentum for transparency and describe the development of an expanding number of international laws and regulations about environmental transparency as a “transparency turn” (Gupta and Mason 2014). According to Nadesan (2011), NGOs and activists played an important role through their calls for more transparency on both social (e.g., related to labor rights) and environmental transparency.

Early milestones of international legislation include the 1969 US-EPA National Environmental Policy Act and the 1976 US Toxic Substances Control Act. More recently, in 1998, the Aarhus Convention on access to information, public participation in decision-making, and access to justice in environmental matters was signed. The focus of this convention is on the interaction between the public and authorities. It jointly addresses environmental and human rights and provides a procedure for government transparency, accountability, and environmental protection (Bond et al. 2013; Wolf 2013). In 2000, the Cartagena Protocol on Biosafety was set up to protect biodiversity from genetically modified organisms, describing procedures of advance informed agreement and provision of information. This Protocol is similar to other right-to-know and informed consent legislation like the Basel Convention and the Rotterdam Convention, which aim at better governance of risks of safe transboundary movement of hazardous chemicals through more transparency and more right to know of governmental institutions, NGOs, or citizens. Furthermore, the European Chemicals Policy on Registration, Evaluation, Authorization, and Restriction of Chemicals, REACH, has a strong transparency component, as it gives companies the responsibility to share information on chemicals produced and marketed in the EU. These developments underline that it is important for stakeholders to receive relevant nonfinancial information (Bond et al. 2013). The Non-Financial Reporting Directive (NFRD, Directive 2014/95/EU) describes the regulations regarding disclosure of nonfinancial environmental and social information, which needs to be provided by large companies. Social information comprises work, human rights, corruption as well as diversity-related information.

Private labels also reflect disclosure and the right to know of consumers to be able to take informed decisions (Gupta and Mason 2014). Voluntary reporting activities of companies, e.g., the Global Reporting Initiative (GRI), which was launched in 1997, has produced the first set of integrated standards for sustainability reporting (Suadiye 2021) and thereby provided

important guidance for the practical implementation.

Environmental policy evaluation shows that regulation through transparency works in many cases (Durant 2017; Wisner et al. 2010). However, the evaluation yields mixed results, with respect to normative (i.e., pertaining to the right of the public to know about impacts), procedural (i.e., regarding procedural processes and participation), and substantive effects (i.e., concerning the actual reduction of emissions) of transparency (Durant 2017; Gupta and Mason 2014). This is further explained in the following paragraph.

Benefits and Challenges of Environmental Transparency

Environmental transparency is expected to motivate companies to improve their environmental performance and to make the change to a more sustainable production. Looking at scientific literature, the main body of research discusses environmental transparency positively (Gupta and Mason 2014; Wehmeier and Raaz 2012). Looking at the connotations and the way how environmental transparency is described, positive connotations very clearly outweigh negative ones (Wehmeier and Raaz 2012) and support the general idea that organizations or companies should be more transparent, but also indicate a lack of critical reflection of the concept. Positive effects described are organizational benefits, higher level of trust, more ethical behavior, better reputation, legitimacy, higher accountability, better understanding, and compliance (Wehmeier and Raaz 2012). Marshall et al. (2011), for example, found that high-polluter-industry companies tend to share more information voluntarily and suspect that this is due to pressure of NGOs and citizens. The negative aspects mentioned in the study were far less frequent: conflicting with other demands, protection of business secrets, disadvantage to competitors, and loss of control over information.

Wisner et al. (2010) found that good environmental performance often is related to good financial performance. They could show that environmental performance is positively

associated with environmental proactivity. In addition, the study revealed that those companies, which score better in environmental disclosure, also score better in environmental performance. On a societal level, more information is considered to foster more informed decisions of citizens, which is supposedly linked to more democracy (Christensen and Cheney 2015).

However, evaluating different forms of access to information by citizens or NGOs might not be easy (Hillebrandt 2021). In practice, environmental transparency effects show successes and setbacks. Challenges are due to the (partly voluntary) nature of environmental transparency activities (Durant 2017). Companies or organizations often are reluctant to change and disclosure might not always be desired within companies. One example illustrating the challenges of environmental transparency with respect to normative, procedural, and substantive effects is a group of chemicals called the poly- and perfluoroalkyl substances (PFAS). PFAS are chemicals used in a wide range of consumer products such as fast-food packaging, firefighting foams, or home textiles (Eschauzier et al. 2012). PFAS are present as contaminants in the surroundings of sites where companies produced these substances (Wickham and Shriver 2021). With regard to the normative effects of transparency, for PFAS there are indications that the right to know was not granted adequately: Companies were found to withhold information for strategic reasons (Richter et al. 2018), resulting in a considerable asymmetry of information between companies, authorities, and citizens. On a procedural level, it is not straightforward for agencies and authorities to hold companies accountable, e.g., if the substances are not sufficiently regulated in a country (with advisory values rather than binding limit values, Wickham and Shriver 2021). In addition, reaching substantive effects in the case of PFAS is difficult as the substances are technically hard to deal with, among others due to their persistence and a lack of published data (Eschauzier et al. 2012; Wickham and Shriver 2021). Other general reasons for setbacks are a lack of resources in implementation, e.g., at authorities

or government bodies, which regularly suffer from decreasing budgets (Durant 2017). Furthermore, transparency and responsible governance might take second priority to financial interests (Durant 2017; Gupta and Mason 2014). In addition, the ability and capacities of NGOs or citizens to deal with negative and complex information on environmental quality might be limiting (Durant 2017).

Summary

Environmental transparency refers to the willingness of companies or organizations to make information on environmental performance publicly available. The term implies aspects of communication of information as well as aspects of governance, self-regulation, and control of companies. It is expected to motivate companies to improve their environmental performance to avoid negative impact on reputation (the so-called regulation by revelation approach). If companies opt for environmental transparency strategies, there are voluntary and mandatory types of transparency codes. Even though many companies adopt environmental transparency regimes, the positive expectations are not always met. Failures are caused by lack of resources, priority of financial interests, or lack of capacities of NGOs or citizens.

Cross-References

- [CSR Reporting](#)
- [Environmental Disclosure](#)
- [European Union Directive: The 8th Company Law Directive on Disclosure and Transparency](#)
- [Global Reporting Initiative](#)

References

- Axelrod, R. S., & VanDeveer, S. D. (2019). *The global environment: Institutions, law, and policy* (5th ed.). Thousand Oaks: CQ Press.
- Bond, A. J., Morrison-Saunders, A., & Howitt, R. (2013). *Sustainability assessment: Pluralism, practice and progress*. London: Routledge.

- Christensen, L. T., & Cheney, G. (2015). Peering into transparency: Challenging ideals, proxies, and organizational practices. *Communication Theory*, 25(1), 70–90. <https://doi.org/10.1111/comt.12052>.
- Darbishire, H. (2010). *Proactive transparency: The future of the right to information?* World Bank. <https://openknowledge.worldbank.org/handle/10986/25031>. Accessed 4 Dec 2022.
- Durant, R. F. (2017). Regulation-by-revelation. In R. F. Durant, D. J. Fiorino, & R. O'Leary (Eds.), *Environmental governance reconsidered: Challenges, choices, and opportunities* (pp. 337–367). Cambridge: The MIT Press.
- Eschauzier, C., de Voogt, P., Brauch, H. J., & Lange, F. T. (2012). Polyfluorinated chemicals in European surface waters, ground- and drinking waters. In T. Knepper & F. Lange (Eds.), *Polyfluorinated chemicals and transformation products. The handbook of environmental chemistry* (Vol. 17, pp. 73–102). Berlin/Heidelberg: Springer.
- Florini, A. (2007). The battle over transparency. In A. Florini (Ed.), *The right to know: Transparency for an open world* (pp. 1–18). New York: Columbia University Press.
- Fox, J. (2007). The uncertain relationship between transparency and accountability. *Development in Practice*, 17(4–5), 663–671. <https://doi.org/10.1080/09614520701469955>.
- GRI, Global Reporting Initiative. (2022). *Full set of GRI standards*. <https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/>. Accessed 31 Aug 2022.
- Gupta, A., & Mason, M. (2014). Transparency and international environmental politics. In M. M. Betsill, K. Hochstetler, & D. Stevis (Eds.), *Advances in international environmental politics* (pp. 356–380). Basingstoke: Palgrave Macmillan. https://doi.org/10.1057/9781137338976_14.
- Hillebrandt, M. Z. (2021). Access to environmental information in the EU a great policy no-one needs? *Journal of Common Market Studies*, 59(5), 1051–1068. <https://doi.org/10.1111/jcms.13164>.
- International Monetary Fund. (1998). *Report of the working group on transparency and accountability*. Washington, DC: International Monetary Fund.
- Makuch, K. E., & Pereira, R. (2012). *Environmental and energy law*. Chichester: Wiley-Blackwell.
- Marshall, R. S., Brown, D., & Plumlee, M. (2011). Driving to distraction or disclosure? Shareholder activism, institutional investors and firms' environmental transparency. In S. C. Jain & B. L. Kedia (Eds.), *Enhancing global competitiveness through sustainable environmental stewardship* (pp. 153–183). Cheltenham: Edward Elgar.
- Nadesan, M. (2011). Transparency and neoliberal logics of corporate economic and social responsibility. In Ø. Ihlen, J. L. Bartlett, & S. May (Eds.), *The handbook of communication and corporate social responsibility* (pp. 252–275). Hoboken: Wiley. <https://doi.org/10.1002/9781118083246.ch13>.
- Ramkumar, V., & Petkova, E. (2007). Transparency and environmental governance. In A. Florini (Ed.), *The right to know: Transparency for an open world* (pp. 279–308). New York: Columbia University Press.
- Richter, L., Cordner, A., & Brown, P. (2018). Non-stick science: Sixty years of research and (in)action on fluorinated compounds. *Social Studies of Science*, 48(5), 691–714. <https://doi.org/10.1177/0306312718799960>.
- Schaltegger, S., & Burritt, R. L. (2000). *Contemporary environmental accounting: Issues, concepts and practice*. Sheffield: Greenleaf.
- Suadiye, G. (2021). Contemporary developments on sustainability accounting and reporting: An overview perspective. In T. Aksoy & U. Hacıoglu (Eds.), *Auditing ecosystem and strategic accounting in the digital era. Contributions to finance and accounting* (pp. 59–72). Cham: Springer. https://doi.org/10.1007/978-3-030-72628-7_3.
- Wehmeier, S., & Raaz, O. (2012). Transparency matters: The concept of organizational transparency in the academic discourse. *Public Relations Inquiry*, 1(3), 337–366. <https://doi.org/10.1177/2046147X12448580>.
- Wickham, G. M., & Shriver, T. E. (2021). Emerging contaminants, coerced ignorance and environmental health concerns: The case of per- and polyfluoroalkyl substances (PFAS). *Sociology of Health & Illness*, 43(3), 764–778. <https://doi.org/10.1111/1467-9566.13253>.
- Wisner, P. S., Epstein, M. J., & Bagozzi, R. P. (2010). Environmental proactivity and performance. In M. Freedman, B. Jaggi, & M. Freedman (Eds.), *Sustainability, environmental performance and disclosures* (pp. 105–127). Bingley: Emerald Publishing Limited.
- Wolf, S. (2013). Access to EU environmental information: EU compliance with Aarhus Convention. *ERA Forum*, 14, 475–491. <https://doi.org/10.1007/s12027-013-0327-7>.
- Wong, C. W. Y., Lai, K.-H., Lun, Y. H. V., & Cheng, T. C. E. (2016). *Environmental Management. In: Environmental Management. SpringerBriefs in Applied Sciences and Technology*. Springer, Cham. https://doi.org/10.1007/978-3-319-23681-0_1.
- Wong, C. W. Y., Wong, C. Y., Boon-itt, S., & Tang, A. K. Y. (2021). Strategies for building environmental transparency and accountability. *Sustainability*, 13(16), 24. <https://doi.org/10.3390/su13169116>.

Environmental Workplace Behaviors

► Employee Sustainability Behaviors

Environmental, Eco, Green, and Social Entrepreneurship

► Sustainable Entrepreneurship

Environmental-friendly Consumption

► Responsible Consumption

Environmentalism Movement

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Synonyms

Environmental movement

Definition

Environmentalism is an ideological, political, and social movement that seeks to protect the natural environment. Environmental social movement organizations focus their actions on saving natural areas, changing lifestyles, promoting an ecological worldview, supporting sustainability policy battles, recycling, replacing environmental inequities with justice, and supporting green consumerism (Haluza-DeLay 2008:205). In various ways, environmentalism tries to lobby for sustainable development and the protection of the natural environment through changes in public policy and individual behavior (Arora 2017). At the core of this movement is the transformation of environmental ideology from anthropocentric to ecocentric, where the human species is only part

of nature (O’Riordan 1981; Pepper 1989). Therefore, environmentalism reflects opposition to the destruction of the natural environment by increasing the rate of economic development and anxiety about the decreasing quality of human existence. Environmentalists note the impact of, i.e., overpopulation and overconsumption as destructive factors. Representatives of this movement are concerned for the impact of problems arisen from industrial development and urbanization, such as resources and waste, pollution on human life. Environmentalist movements are very diverse and represented by a range of organizations, as well as through the actions of individuals.

Environmental Movement

Environmentalism as a complex of social movements first appeared in response to the rapid urbanization, industrialization, and closing of the frontier that launched the Progressive Era in the 1890 (Gottlieb 1993:13). As a modern mass movement, environmentalism began in the 1960s and 1970s. It is worth mentioning that one of the first manifestations of the effort to pay more attention to the environment was the establishment of Earth Day (celebrated annually on April 22). This can be seen as the culmination of an era of protest and as prefiguring the different approaches within contemporary environmentalism (Gottlieb 1993:35). For the first time, Earth Day was organized in 1970 by Wisconsin senator Gaylord Nelson (in September 1995 he was awarded the Presidential Medal of Freedom for his services in this field).

Initially, ecological activities were associated with the negative consequences of the industrial revolution (such as air pollution). The first representatives of environmentalism believed that the government, rather than the free market, needs to protect the environment and provide conservation of resources (Elliott 2018).

The roots of environmentalism can be seen in environmental philosophy and environmental ethics. Environmental philosophy extends the typical boundaries of ethics to the nonhuman

world (► [Environmental Ethic](#)). The first concepts and actions in this area focused mainly on the protection of natural resources. From this perspective, three of them should be identified as pioneering. First concept that highlights the need to conserve resources was created by Gifford Pinchot (1865–1946), the chief of the US Forest Service. The biocentric approach in environmental philosophy was represented by John Muir (1838–1914), founder of the Sierra Club (till now, Sierra Club is one of the most enduring and influential grassroots environmental organization in the United States that fights for Earth's natural resources). An important figure worth mentioning here is also Aldo Leopold (1887–1948), a professor of wildlife management who participated in the designation of the first national wildlife area in America – Gila National Forest in New Mexico (in 1924).

The first publications that initiated modern environmental movement include among others *The Silent Spring* (Carson 1962) and *The limits to Growth* (Meadows et al. 1972). Carson paid particular attention to the role of pesticides and their negative impact on animal and human life. *The Limits to Growth*, a book published by the Roman Club, is analyzing the future of humanity facing the increase in number of inhabitants of the Earth and depletion of natural resources.

In the 1980s, the ecological movement split and radical organizations began to form within. These include Earth First! (which propagates the slogan, “No compromise in the defense of Mother Earth”), Friends of the Earth, and Greenpeace. In their activities they used a range of radical behaviors. Radical environmentalists have shown new interest in deep ecology. In the late 1980s, environmental movements also arose and argued that all people have the right to a safe and healthy environment. The result of their activities was the establishment of an Office of Environmental Justice in 1992. This agency coordinates efforts to address the needs of vulnerable populations by decreasing environmental burdens, increasing environmental benefits, and working collaboratively to build healthy, sustainable communities (Offices of Environmental Justice in Action 2019).

In the 1990s, the actions of the environmental movements focused mainly around problems that could have been solved only by international diplomacy (among others: global warming, acid rain, ozone depletion, biodiversity, and disappearance of rainforests). At that time, in 1987 the Montreal Protocol was finalized (global agreement to protect the stratospheric ozone layer by phasing out the production and consumption of ozone-depleting substances (ODS)) and in 1997 the Kyoto Protocol (international agreement linked to the United Nations Framework Convention on Climate Change, which commits its parties by setting internationally binding emission reduction targets).

As Schnaiberg emphasized (1980), the role of the social structures is very important in the modern world, because through it environment is commodified. Processes such as modernization and industrialization accelerate the use of natural resources. Issues such as global warming, population growth, and the exhaustion of fossil fuel resources are being addressed by environmentalist to the present day. From this perspective, the actions of the environmental movements can be interpreted as a desire to create a sustainable society (► [Managing Change for Sustainability](#)). Although the idea of sustainability often means more than environmental awareness, much of the growth of its popularity can be attributed to the mainstreaming of environmentalism (Tretter 2012:2). Dunlap and Liere (1978) suggested that the rise of environmental movement is linked to the growing acceptance of a new ecological paradigm of worldview (view that human actions have substantial adverse effects on a fragile biosphere).

Environmental behavior can take many forms. Cleveland et al. (2002:293–305) identified six types of pro-environmental behaviors, among them:

- Activist – activities consist mainly in supporting environmental organizations as well as participation in environmental demonstrations. Activists' goal is to influence larger populations.
- Avoider – focus on avoiding products that are harmful to the environment.

- Green consumer – they can be called eco-consumers who believe that buying green products can contribute to solving environmental problems.
- Utility saver – performed any action that minimizes the use of utilities (turning off all lights before leaving home, saving water while washing dishes) to preserve the environment.
- Recycler – made any effort to deal with recycled or recyclable products. This type of behavior might be influenced by social norms.
- Green passenger – are willing to take public transportation and/or reduce the use of passenger vehicles because he/she realizes the negative impact on greenhouse gas emissions on the environment.

Early Environmental Legislation

One of the goals of environmentalists' activities is lobbying for the environment and influencing the law in this area. Over the years, many laws on environmental protection and sustainable development have been enacted. First legal acts related to environmental protection (► [Environmental Law](#)) were the following:

- Clean Air Act (1956) – response to the Great Smoke of London (1952). Numbers of measures to reduce air pollution and the emission of gasses, grit, and dust from chimneys were introduced.
- Sea Birds Preservation Act (1869) – first act to protect wild birds in the United Kingdom. It was designed to reduce the effects of shooting and egg collecting during the breeding season (Barclay-Smith 1959).
- National Environmental Policy Act (NEPA) signed by Richard M. Nixon (in 1970). It states that all federal agencies must conduct a formal process before taking any action that could have a significant impact on the environment. Environmental Protection Agency was created under this law. Its basic task is to conduct research, monitoring, setting standards, and enforcing environmental law (► [Environmental Protection Agencies](#)).

Key-Related Issues

There are several key issues related to environmentalism which should be highlighted. Among them are urban sprawl, renewable energies, sustainable development, and ecological footprint.

Urban sprawl: the process of expanding urban territories to areas with less intensive urbanization, such as suburbs and rural areas, resulting from growing population. It is an uncontrolled process resulting from the demand for new construction and environmentally harmful development practices. Stoel describing this process pointed to a number of environmental consequences. Among them: traffic congestion, air and water pollution (Stoel 1999).

Renewable energies: energy sources, the use of which is not associated with their long-term deficit, because their resource is renewed in a short time (renewable raw materials). Such sources are among others: wind, solar radiation, precipitation, tides, sea waves, geothermal energy, and recycled uranium. The opposite of these are nonrenewable energy sources, i.e., sources whose resources regenerate very slowly or not at all: crude oil, coal, natural gas, and uranium extracted from minerals (► [Energy-Renewable](#)).

Sustainable development: a way of farming in which meeting the needs of the present generation will not reduce the chances of meeting the needs of future generations. In sustainable development, the natural environment is its foundation, economy is considered as a tool, and society's well-being is a goal (► [Sustainable Development](#)).

Ecological footprint: index enabling the estimation of the consumption of natural resources in relation to the possibility of their reproduction by the Earth.

Summary

Environmentalism is the first ideology to be deeply rooted in the natural science; furthermore it cannot be easily located in the left-right ideological spectrum (Cahn and O'Brien 2015). Environmentalism is taking up the problems of

environmental protection, and human's place in the world also emphasizes the interdependencies between human and nature. Bowers and Apffel-Marglin (2005) in their analyses of worsening environmental problems emphasized the role of culture and processes such as modernization and industrialization. In a short period of time, humans impact on the environment decides on the quality of life, and in the longer term, on the survival conditions of human populations. In practice, there are different ways in which environmental concerns are expressed. Stern (1999:82) suggested that all environmental movements have common elements in their beliefs and values – human action has the potential for adversely affecting the biophysical environment, changes in the biophysical environment can harm things people care about, and steps should be taken to avoid at least some harmful actions.

Environmental problems are one of the most important challenges for humanity. In the attempts to solve them, as well as to reduce the negative impact of man on the environment, the role of politics and individual choices is important. Environmentalism has been called the “most enduring and important social movement of the twentieth century” (Andersen and Thiele 2000). In the history of environmentalism and environmental movements, there were many events that can be called milestones. Environmentalists could be related to the number of significant accomplishments. According to Earth Day Network the fight for a clean environment continues with increasing urgency, as the ravages of climate change become more apparent every day (www.earthday.org/history/).

It should also be indicated that the achievements and leadership of grassroots environmental activists from around the world are honored by various awards. One of them is the Goldman Environmental Prize. In 1990 Richard and Rhoda Goldman, marriage of philanthropists, established this Prize as a way to demonstrate the international nature of environmental problems. In 1990 Richard and Rhonda Goldman, marriage of philanthropists, established this Prize as a way to demonstrate the international nature of environmental problems and reward

individual efforts to protect the environment. (see <https://www.goldmanprize.org/>).

Cross-References

- Ecological Economics
- Ecological Footprint
- Energy-Renewable
- Environment and Ethics in Sustainability
- Environmental Disaster
- Environmental Impact
- Environmental Law
- Environmental Protection Agency
- Environmental Responsibility
- Green Economy
- Sustainable Development

References

- Andersen, M., & Thiele, L. (2000). Environmentalism for a new millennium: The challenge of coevolution. *Ecology*, 81, 2057–2058. <https://doi.org/10.2307/177296>.
- Arora, N. D. (2017). *Political science for civil services mains examinations*. New Delhi: McGraw Hill Education Private Limited.
- Barclay-Smith, P. (1959). The British contribution to bird protection. *Ibis* 101(1):115–122
- Bowers, C. A., & Apffel-Marglin, F. (Eds.). (2005). *Rethinking Freire: Globalization and the environmental crisis*. Mahwah: Lawrence Erlbaum Associates.
- Cahn, M. A., & O'Brien, R. (2015). *Thinking about the environment: Readings on politics, property and the physical world: Readings on politics, property and the physical world*. New York: Routledge.
- Carson, R. (1962). *Silent Spring*. Boston: Houghton Mifflin Company.
- Cleveland, M., Kalamas, M., & Laroche, M. (2012). “It’s not easy being green”: Exploring green creeds, green deeds, and internal environmental locus of control. *Psychology & Marketing*, 29, 293–305. <https://doi.org/10.1002/mar.20522>.
- Dunlap, R. E., & Van Liere, K. D. (1978). The “new environmental paradigm”. *The Journal of Environmental Education*, 9(4), 10–19. <https://doi.org/10.1080/00958964.1978.10801875>.
- Elliott, L. (2018). Environmentalism. Encyclopedia Britannica. <https://www.britannica.com/topic/environmentalism>. Accessed 23 Dec 2019.
- Gottlieb, R. (1993). Reconstructing environmentalism: Complex movements, diverse roots. *Environmental History Review*, 17(4), 1–19. <https://doi.org/10.2307/3984644>.

- Haluza-DeLay, R. (2008). A theory of practice for social movements. *Environmentalism as a social habitus. Mobilization: The International Quarterly*, 13(2), 205–218.
- Meadows, D. H., et al. (1972). *The limits to growth: A report for the Club of Rome's project on the predicament of mankind*. New York: Universe Books.
- O'Riordan, T. (1981). Environmental issues. *Progress in Geography*, 5(3), 393–407. <https://doi.org/10.1177/030913258100500304>.
- Offices of Environmental Justice in Action. https://www.epa.gov/sites/production/files/2017-09/documents/epa_office_of_environmental_justice_factsheet.pdf. Accessed 10 Dec 2019.
- Pepper, D. (1989). *The roots of modern environmentalism*. London: Routledge.
- Schnaiberg, A. (1980). *The environment: From surplus to scarcity*. Oxford: Oxford University Press.
- Stern, P. C. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Research in Human Ecology*, 6(2), 81–97.
- Stoel, T. B. (1999). Reining in urban sprawl. *environment: science and policy for sustainable development* 41 (4):6-11
- The Goldman Environmental Prize. <https://www.goldmanprize.org/>. Accessed 10 Dec 2019.
- Tretter, E. (2012). Contesting sustainability: 'SMART growth' and the redevelopment of Austin's eastside. *International Journal of Urban and Regional Research*, 37, 297–310. <https://doi.org/10.1111/j.1468-2427.2012.01166.x>.

Environmentally Conscious Economy

- [Green Economy](#)

Environmentally Friendly Building

- [Green Building](#)

Environmentally Friendly Communities

- [Sustainable Communities](#)

Environmentally Friendly Technologies for Food Sustainability

- [Green Technology for Food Sustainability](#)

Environmentally Responsible Lighting Design (ERLD)

- [Sustainable Lighting Design](#)

Environmentally Sustainable Work Behaviors

- [Employee Sustainability Behaviors](#)

Environmentally-friendly Marketing

- [Sustainable Marketing](#)

Environmental-Related Management Accounting

- [Environmental Management Accounting](#)

Environmental-Social-Governance (ESG) Criteria

- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

Enviropreneurial Marketing

- [Green Marketing](#)

Equal Opportunities

- [Equality of Opportunity](#)
-

Equal Opportunity

- [Equality of Opportunity](#)
-

Equality

- [Board Diversity and Inclusivity](#)
 - [Power Equalizing](#)
-

Equality of Opportunities

- [Equality of Opportunity](#)
-

Equality of Opportunity

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Synonyms

[Equal opportunity](#); [Equal opportunities](#); [Equality of opportunities](#)

Definition

Several fields of study engaged with the concept of equality of opportunity (EO), such as philosophy, political theory, ethics, and law.

Despite the different conceptions and approaches flourished on EO, the core shared meaning concerns the idea that individuals should have equal prospects for developing their life. This deals with outcome distributions of various types, such as economic capital and work positions, forms of social capital such as social networks and affiliation, and forms of cultural capital such as education (e.g., Lynch & Baker, 2005).

A state of EO corresponds to the absence of circumstances (such as family socioeconomic and cultural background, ethnic origin, gender, age, etc.) and related barriers, prejudices, or preferences that influence individual achievements. Thus, different outcomes achieved by people are justified only on their personal choices, efforts, skills, and competencies. Hence, the only disparities in an equitable society are due to individual decisions.

Introduction

An equal society has more possibilities to prosper (e.g., World Bank, 2006). Indeed, exogenous factors on the individual income and employment prospects reduce the chances of growth. Furthermore, persistent inequalities in the initial opportunities constitute traps that prevent certain population groups' participation in economic activity and are disadvantageous for growth.

Accordingly, since the mid-1970s, the European Union and numerous governments have undertaken policies supporting EO. Then, several private and public organizations, universities, and colleges have imitated them (Brine, 1995).

Although EO is closely related to the concepts of equity, justice, and fairness, they are not synonymous. Indeed, while the latter concepts rely upon a normative criterion defining what is equitable, just, and fair, the concept of EO refers to people holding an identical status (or similarly having equal conditions); hence it does not necessarily imply equality. In this regard, the concept of vertical equity requires different treatments for individuals with peculiar characteristics.

Consequently, inequalities related to circumstances beyond an individual's control should be eliminated or compensated for by public intervention (e.g., Peragine & Biagi, 2019).

EO encompasses several concepts (Bagirole, 1997). Formal EO is the absence of direct (unfair) discrimination. Therefore, any deliberate discrimination must be relevant and meritocratic. For example, job interviews should only discriminate against applicants on the grounds of their job competences.

Substantial EO is the absence of indirect discrimination. It requires society to be fair and meritocratic. For example, no one should drop out of school for economic reasons.

Formal EO does not imply substantive EO. Firing every employee who gets pregnant is formally equal, but in substance it harms women more.

In this sense, the discourse on EO has recently joined that of diversity and inclusion policies aimed at compensative actions (sometimes called positive actions, e.g., Galizzi & Siboni, 2016). These are interventions undertaken mainly in the workplace and by educational institutions. They aim to remove barriers and contrast past discrimination suffered by specific groups (such as ethnic minorities, women, and the disabled), as well as to enhance management performance and research by increasing diversity in human resources and students (e.g., Healy & Noon, 2010).

Accordingly, several policies have been promoted both by European Union and by member states to protect the human rights of people with disabilities and support disability management practices by organizations. Such policies discard the perspective of the medical model that understands disability as a disease, conceiving it instead as a social relationship that involves the characteristics of people and the environment based on the bio-psychosocial model.

The policy of equality in opportunity of employment adopted by the European Personnel Selection Office is also part of this line. It aims to increase the diversity of its talent pool and help European Civil Service be fully representative of the diversity of the European citizens it serves.

Approaches to EO

Several approaches have been implemented for EO policies (e.g., Brine, 1995).

According to Welfarist Economics, EO emerged to address the limits of the principle of efficiency of markets by proposing an approach aiming at a distributional justice criterion. This approach highlights the potential trade-offs between equity and efficiency, which socioeconomic policies often focus on. For instance, tax reforms are often biased on equity at the expense of efficiency, while the trade-off could be solved by defining specific social welfare criteria (Peragine & Biagi, 2019).

The Welfarist approach is based on measuring individual achievements to justify welfare measures. However, it does not provide information on the fairness of the process by which individuals attain a certain economic and social status. Hence, the concept of EO has been introduced to go beyond the analysis of (in)equality of outcomes (income, health, education, etc.), approaching the definition of "opportunities" as the relevant space to design social policies. The fairness of a given distribution does not derive from the outcomes resulting from that distribution but rather from the consequences derived from the sets of choices that individuals can undertake. A given economic and social status distribution can be considered fair if individuals achieve the result on a level-playing field and comply with the rules. Furthermore, in the debate over the last decades, many political philosophers have added that a society could be considered equitable if opportunities are equally distributed rather than outcomes (e.g., Dworkin, 1981; Cohen, 1989; Arneson, 1989).

Accordingly, in a society, disparities in outcome distribution if generated by personal choices are less blameworthy than those caused by predetermined factors over the control of individuals.

This highlights the role of individual responsibility in evaluating social arrangements, acting as an incentive for individuals to exert more effort. Also, support for redistribution policies increases when people believe that existing inequalities are due to unequal opportunities.

Since the 1990s, the economic literature has intensely engaged in developing frameworks to capture each specification of the EO concept.

Both individual responsibility and the source of inequality in the assessment of social states have motivated several declinations of EO (Peragine & Biagi, 2019). In particular, two competing principles have been identified at the core of the Egalitarian approach of EO. The first (principle of compensation) maintains that society has to compensate for unfair differences in individual outcomes when caused by differences in circumstances. The second (principle of reward) suggests that inequalities in outcomes due to different efforts experienced by people are equitable and should not be compensated.

According to Lynch and Baker (2005), EO corresponds to the equality of condition. Equality of condition implies empowering individuals to assure them similar real options to live a good life. Specifically, equality of conditions is expressed through five key dimensions, which are autonomous but refer to each other. The first dimension concerns resources: economic, social, cultural, and environmental assets as well as time and health care resources. The second dimension is that of respect and recognition, which concerns acceptance of the fact that each individual enjoys the rights and privileges related to citizenship in the country where he or she lives and openness to a critical dialogue on differences. The third dimension concerns love, care, and solidarity; being cared for is a prerequisite for adequate human development, and societies should be arranged to facilitate it. For instance, the education system can support people educated about care and solidarity relations, and employment, transportation, and neighborhoods should be structured to facilitate caring for vulnerable people. The fourth dimension related to power; traditional liberal civil and political rights with a more egalitarian, participatory politics and the extension of democratic principles to all areas of society, particularly the economy and the family, reduce inequalities. The last dimension, working and learning, implies that everyone has the right to access potentially satisfying work. There should be limits to the imbalance in work burdens, and people should be

compensated for unequal burdens. All kinds of work should be considered, both paid and unpaid, including familiar caregivers and solidarity. At the same time, equality in learning should ensure that everyone has engaging and satisfying learning to assure human development.

Insights into the European Union Discourse of EO

The Treaty of Rome (1957), which established the European Economic Community, in Article 119, states that men and women must receive equal pay for the same work, hence the request to member states to adopt legislation to guarantee no work discrimination based on sex. It also introduced a broader debate on EO considering the egalitarian democratic aspirations of Western liberal democracy. Specifically, Europe is committed to equal opportunities and equality of treatment for people regardless of gender. In fact, it develops measures to pursue “gender mainstreaming” in all areas of economic, social, cultural, and family life. According to European Commission (2005, p. 5), “Gender mainstreaming is a tool to better understand the causes of inequalities between women and men in our societies and come up with appropriate strategies to tackle them. The goal is to achieve equality between women and men.”

After becoming the European Union (1992), in 1997, the Treaty of Amsterdam gave it new competencies and strengthened the principle of nondiscrimination. Then, the fight against discrimination promoted by Europe has gone beyond gender, also addressing those related to race and ethnic origin, religious belief, disability, age, and sexual orientation. As a result, the European Union’s commitment to equal opportunities and nondiscrimination is present in all its policies, including those aimed at promoting regional development.

According to Brine (1995), the development of the discourse on EO in the European Union advanced in three main ways: first, approving several Action Programs for the Equal Opportunities of Women, giving the understanding of

European intention behind legislation and policy, and providing a statement of priorities for action and funding; second, establishing an Equal Opportunities Unit to produce and evaluate the Action programs on EO; and third, introducing the European Social Fund, the structural fund aimed at supporting workers' vocational training and retraining.

Concerning interventions in gender equality over the last decades, the European Union has set up equal treatment legislation, gender mainstreaming, integration of the gender perspective into all other policies, and specific measures for the advancement of women. These interventions have made significant progress, such as the increasing number of employed women and accessing better education and training. Despite this, gender gaps remain. In the labor market, women are still overrepresented in lower-paid sectors and underrepresented in decision-making positions, with severe vertical and horizontal segregation phenomenon particularly in academia, science, and technology fields (e.g., EC, 2021; Siboni et al., 2016).

Moreover, since 2016, the European Institute for Gender Equality (EIGE) has been established as a European Union-initiated body dedicated exclusively to gender equality. Under EIGE, the Gender Equality Index has been formulated and is annually published as a key benchmark for gender equality in European countries.

Among the initiatives and strategies on equality, diversity, and inclusion, recently the European Commission adopted the Strategy for Gender Equality 2020–2025 (EC, 2020). This Strategy aims to eliminate in Europe gender-based violence, sexual discrimination, and structural inequality between women and men and establish equality between women and men, girls and boys, in all their diversity. The Strategy is structured around six themes: freeing from violence and stereotypes; thriving in a gender-equal economy; leading equally throughout society; gender mainstreaming and an intersectional perspective in European Union policies; financially supporting actions in gender equality in the EU; and addressing gender equality and women's empowerment across the world. Implementation

of the Strategy presupposes a dual approach that combines gender mainstreaming with specific targeted actions to achieve gender equality. Notably, this initiative is innovative in introducing and integrating the intersectional perspective. The intersectional approach focuses on the experiences of discrimination arising from the intersection between sex and gender with other characteristics pertaining to personal identity (such as colour, ethnic origin, religious belief, and disability) (EIGE, 2022).

Summary

EO embraces a wide range of concepts, definitions, and interventions.

While formal EO, such as the absence of direct discrimination, is established by law and codes of ethics, these can do nothing against indirect discrimination. Thus, substantial EO requires interventions and actions to remove barriers and contrast discrimination in workplace, education, economic life, and society. Sometimes it involves the use of affirmative actions (or positive actions), policies aimed at giving a specific advantage to an under-represented group (e.g., women, the disabled, ethnic minorities), for instance by adopting targeted training opportunities or a targeted redistribution of resources, in order to correct a situation of inequality. These actions imply, on the other hand, that the group favoured by the situation of inequality to be corrected suffers a disadvantage. In a sense, the pursuit of substantial EO shifts the “starting point” further back in time. Consequently, the EO enriches its meaning, aims, and tools combining with the concepts of diversity and inclusion.

This work outlines origins and definition of EO, different approaches to EO, and provides an insight to the European policy and strategy on EO.

Cross-References

- [Affirmative Action](#)
- [Board Diversity and Gender Quotas](#)
- [Board Diversity and Inclusivity](#)

- ▶ Corporate Social Responsibility
- ▶ CSR and Women
- ▶ Discrimination
- ▶ Disability Management
- ▶ Diversity
- ▶ Diversity Management
- ▶ Equality
- ▶ Ethics
- ▶ Human Rights
- ▶ Index of Sustainable Economic Welfare
- ▶ Labor Rights
- ▶ Nondiscrimination
- ▶ Social Case of CSR
- ▶ United Nations Human Rights Committee

References

- Arneson, R. (1989). Equality of opportunity for welfare. *Philosophical Studies*, 56, 77–93.
- Bagihole, B. (1997). *Equal opportunities and social policy: Issues of gender, race and disability*. London: Longman.
- Brine, J. (1995). Equal opportunities and the European social fund: Discourse and practice, *Gender and Education*, 7(1), 9–22. <https://doi.org/10.1080/713668457>. <https://files.eric.ed.gov/fulltext/ED392927.pdf>. Accessed 26 April 2022.
- Cohen, G. A. (1989). On the currency of Egalitarian justice. *Ethics*, 99, 906–944.
- Dworkin, R. (1981). What is equality? Part 2: Equality of resources. *Philosophy and Public Affairs*, 10(4), 283–345.
- EC – European Commission. (2005). *EQUAL guide on gender mainstreaming*. Office for Official Publications of the European Communities. ISBN 92-79-00128-0. https://ec.europa.eu/employment_social/equal_consolidated/data/document/gendermain_en.pdf. Accessed 05 May 2022.
- EC- European Commission. (2020). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A union of equality: Gender equality strategy 2020–2025*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152>. Accessed 05 May 2022.
- EC- European Commission. (2021). *She figures 2021 gender in research and innovation statistics and indicators*. Publications Office of the European Union. https://ec.europa.eu/info/publications/she-figures-2021_it. Accessed 05 May 2022.
- EIGE – European Institute for Gender Equality. (2022). *Glossary & thesaurus*. <https://eige.europa.eu/thesaurus/terms/1263>. Accessed 5 May 2022.
- Galizzi, G., & Siboni, B. (2016). Positive action plans in Italian universities: Does gender really matter? *Meditari Accountancy Research*, 24(2), 246–268.
- Healy, G., & Noon, M. (Eds.). (2010). *Equality, inequalities and diversity. Contemporary challenges and strategies*. Basingstoke: Palgrave Macmillan.
- Lynch, K., & Baker, J. (2005). Equality in education. An equality of condition perspective. *Theory and Research in Education*, 3(2), 131–164.
- Peragine, V., & Biagi, F. (2019). *Equality of opportunity: Theory, measurement and policy implications*. EUR 29957 EN, Publications Office of the European Union. <https://doi.org/10.2760/640390>, JRC118542.
- Siboni, B., Sangiorgi, D., Farneti, F., & De Villiers, C. (2016). Gender (in) accounting: Insights, gaps and an agenda for future research. *Meditari Accountancy Research*, 24(2), 158–168.
- World Bank. (2006). *World development report 2006: Equity and development*. Washington: The World Bank/Oxford University Press.

Equator Principles

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Definition

The Equator Principles (EP) is a risk management framework and common financing criteria, incorporated by financial institutions, for determining, assessing and managing environmental and social risks when financing projects. It aims to provide a standard benchmark for due diligence and monitoring procedure to support social and environmental risk decision-making. The framework ensures that the projects that the financial institutions supports are operating in accordance with social and environmental friendly standards. The EP “apply globally, to all industry sectors and to five financial products: (1) Project Finance Advisory Services; (2) Project Finance; (3) Project-Related Corporate Loans; (4) Bridge Loans and (5) Project-Related Refinance, and Project-Related Acquisition Finance” (The Equator Principles Association 2023, p.1). The EP is reviewed and revised periodically in order to adopt the ongoing learning practices and evolving

changes. The fourth Equator Principles (the newest version, EP4) was released in November 2019 and came into effect on 1 October 2020.

Introduction

As of March 2023, 138 Equator Principles Financial Institutions (EPFIs) in 38 countries have officially adopted the Equator Principles, known as the EP members, offering the majority of international project finance in emerging and developed financial markets. All members must comply the EP standards in the process of managing social and environmental risk when financing projects. What's more, the Equator Principles Association provides governance rules for EPFIs to follow up in the process of managing, administering and developing the EP and the EP association. In particular, the EP governance document specifies the rules of unincorporated association.

Equator Principles Financial Institutions (EPFIs) are committed to implementing the EP in internal social and environmental policies, procedures and standards for financing projects and will not provide Project Finance (or other four financial products) to projects where the client will not, or is unable to, comply with the Equator Principles (The Equator Principles Association 2023). While the Equator Principles are not intended to be applied retroactively, the EPFIs will apply the ten equator principles to the financing of expansion or upgrade of an existing project (The Equator Principles Associations 2023). Mandated EPFIs are expected to share relevant environmental and social information with other mandated firms to achieve the goals made by the Equator Principles Association. In addition, EPFIs acknowledge the application of the EP could make contribution to achieve the objectives of the United Nations Sustainable Development Goals (SDGs).

Nowadays, the Equator Principles have gradually increased the attention on social standards and responsibility.

The Equator Principles have fulfilled their responsibility to human rights in line with the

United Nations Guiding Principles (UNGPs) on Business and Human Rights by implementing human rights due diligence. They also recognised that their members play a significant role in the objectives of the 2015 Paris Agreement, such as the application in the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) under the Equator Principles. The EP Association provides a platform to engage with a broad range of stakeholders, including non-governmental organisations (NGOs), clients, and industry bodies. More important, the EPs provide guidance to support members in developing their own Environmental and Social Risk Management Systems.

The Ten Equator Principles

Principle 1: Review and Categorisation

Principle 2: Environmental and Social Assessment

Principle 3: Applicable Environmental and Social Standards

Principle 4: Environmental and Social Management System and Equator Principles Action Plan

Principle 5: Stakeholder Engagement

Principle 6: Grievance Mechanism

Principle 7: Independent Review

Principle 8: Covenants

Principle 9: Independent Monitoring and Reporting

Principle 10: Reporting and Transparency

Summary

The Equator Principles is a baseline and provides framework for developing individual, internal environmental and social policies and procedures. The Equator Principles do not create any rights in, or liability to, any person, public or private. Financial institutions adopt and implement the Equator Principles voluntarily and independently, without reliance on or recourse to the International Finance Corporation, the World Bank Group, the Equator Principles Association,

or other EPFIs (The Equator Principles Association 2023). In a situation where there would be a clear conflict between applicable laws and regulations and requirements set out in the Equator Principles including confidentiality obligations, the laws and regulations of the relevant host country shall prevail (The Equator Principles Association 2023). Since the release of EPs in 2003, some scholars have assessed the voluntary approach of the EPs (Missbach 2004; Richardsons 2005; Wright and Rwabizambuga 2006; Scholtens and Dam 2007; Macve and Chen 2010; Conley and Williams 2011). Some EPs members have adopted the 10 principles, but certain levels of concerns on the integrity (e.g., bank lobby issues) still exist. The monitoring procedure on these EPs mandate banks still needs more improvements.

Cross-References

- Ethical Investing
- Impact Investing
- Socially Responsible Investing
- Sustainable Finance

References

- Conley, J. M., & Williams, C. A. (2011). Global banks as global sustainability regulators?: The equator principles. *Law & Policy*, 33(4), 542–575.
- Macve, R., & Chen, X. (2010). The “equator principles”: A success for voluntary codes? *Accounting, Auditing & Accountability Journal*, 23(7), 890–919.
- Missbach, A. (2004). The equator principles: Drawing the line for socially responsible banks? An interim review from an NGO perspective. *Development*, 47(3), 78–84.
- Richardson, B. J. (2005). The equator principles: The voluntary approach to environmentally sustainable finance. *European Energy and Environmental Law Review*, 14(11), 280–290.
- Scholtens, B., & Dam, L. (2007). Banking on the equator. Are banks that adopted the equator principles different from non-adopters? *World Development*, 35(8), 1307–1328.
- The Equator Principles Association. (2023). About the equator principles. *The Equator Principles Association*, p.1. <https://equator-principles.com/about-the-equator-principles/>. Accessed 01 March 2023.
- Wright, C., & Rwabizambuga, A. (2006). Institutional pressures, corporate reputation, and voluntary codes of conduct: An examination of the equator principles. *Business and Society Review*, 111(1), 89–117.

Equilibrium

- Resilience

Equitable Trade

- Fairtrade

Equity

- Social Sustainability

ESG

- Shareholder and Stakeholder Activism

ESG Index

- SAM Sustainability Indices

Estrela Geoparque

- Geopark Serra da Estrela

Estrela UNESCO Global Geopark

- Geopark Serra da Estrela

Ethic of Love

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Synonyms

Anti-oppressive ethics; Justice ethics; Social justice; Social precautionary principle; Social sustainability

Definition

Business ethics as a field in the broader area of philosophy recognizes the moral nature of corporations, managers, and shareholders as inseparable from the operations of the business (Moriarty 2017). There is an inconclusive debate in the literature as to whether a corporate entity can be morally responsible or whether it is to be located in the employees and stakeholders (French 1979; Friedman 2007). The Rawlsian (1971) idea of justice as fairness and virtues ethics theory (Hartman 2015) as desirable qualities of character are used to recommend the adoption of an ethic of love. An ethic of love that is fair and caring is particularly relevant for businesses where there is contestation with other stakeholders about the corporation's responsibilities. As such it regards both the corporate entity and the people who act on behalf of the corporation as having moral responsibilities, albeit that these might involve different orders of legal and moral accountability. An ethic of love extends on the Rawlsian notion of justice to address this moral issue of corporate entity and actors' moral responsibility. It extends conventional business ethics to situate love and justice as the interlinked moral baseline for business (Brueckner and Ross 2020).

Western philosophy identifies several forms of love such as eros – romantic love; philia – friendship and shared goodwill; agape – parental love and an altruistic love for strangers, animals,

and nature, and; storge – love of family and community. Love is understood by some of the greatest leaders for social change as a powerful and potentially transformative resource that can unite people for nonviolent struggles across boundaries of politics, economic systems, class, culture, and country (Gandhi 2013; King 1957; Mandela 2013).

Love is more than a feeling, rather it comprises actions as ethical and political capacities that are crucial for socio-ecological justice work (Godden 2017). hooks (1994) explains that the ethic of love brings people to an increased concern for issues of domination and injustice and a desire to understand and challenge the interconnected nature of systems of domination. Elsewhere hooks (2001) explains that an ethic of love requires the demonstration of care, respect, knowledge, and responsibility in situations of conflict and violence.

Introduction

Landes (2020) identifies the area of adversarial ethics that derives from a concern about the limited moral premise of the desirability of competition which is inherent capitalist logic. He explains that “adversarial contexts, although genuinely specific in nature, do not justify as much departure from common morality than it is often assumed” (Landes 2020, p. 1). Adversarial ethics suggests that parties in competition or conflict in the business context should be subject to some moral strictures to discourage harmful or deceptive behavior (Landes 2020). The love ethic bridges the interests and differences between competing or conflicting stakeholders and engages the power disparities to gauge the proper order of responsibilities of the stakeholders. Stakeholder theory in business (Freeman 2010) gives credence to regarding all interested and impacted parties being regarded as legitimate actors in conflict situations. It is thus not sufficient for corporations to regard their moral responsibility as being only to make profits for the shareholders.

In terms of sustainable development, a love ethic involves seeking justice for adversely

impacted stakeholders where there is a failure of corporate social responsibility (CSR) by a business entity (Ross 2017a, 2020a). It comprises concerted actions based on socio-ecological justice (White 2009, 2017), social sustainability, and the social precautionary principle. Socio-ecological justice refers to actions to address social injuries, environmental harm, and harm to nonhuman animals caused by development (Ross 2020b). Social sustainability is not possible without socio-ecological justice and brings attention to the human costs and impacts of development (O’Faircheallaigh 2013; Tester 2013). The social precautionary principle needs to be considered alongside environmental precautions to ensure no harm is done to humans and nonhuman animals. The social precautionary principle is an extension on the Rio Declaration of 1992 in relation to environmental precautionary principle (United Nations Global Compact 2020).

The love ethic encompasses all forms of love where the defining features they have in common being the presence of care, nonviolence, and fairness in relationships. The language of love can be controversial and has many contested meanings. For present purposes it is to be noted that the idea of love as eros is often reduced to love as sex and this reductionist thinking is unhelpful for justice work. This is not to say love as a romantic attachment has no place in justice struggles, as deep ecologists (Macy 2019) argue people need to be “in love” with the planet to sustain the work that is needed.

It is important to understand love as a political capacity which is necessary for justice work to ensure a deep connection with the dignity, rights, and equal moral worth of oppressed groups. Without this deep loving connection and engagement, it is easier to justify tyrannical actions or to blame people for causing their unjust situations (Nussbaum 2013). Further, a love ethic needs to be interlinked with trans species equality to avoid species domination by humans (Braidotti 2013). Trans species equality challenges anthropocentrism which rests on a dualism between the superiority of humans and the exploitation and use of nonhuman animals, other sentient beings, and planet earth (White 2018).

The means and ends of socio-ecological justice work become closely aligned when guided by an ethic of love. The idea of adversely impacted activist stakeholders walking the talk of anti-oppressive ethics and theories is central to justice work. An anti-oppressive approach recognizes that violence cannot be used in the name of a loving ethics. The purpose of socio-ecological justice work is to challenge and resist harm and unfairness. The International Federation of Social Workers (2018) argues that violence can be addressed by challenging negative discrimination; recognizing diversity; distributing resources equitably; challenging unjust policies and practices; and working in solidarity to enable social inclusion. One implication is that in an ecological conflict situation, discrimination or violence against protesters (Poulos and Haddad 2016) cannot be challenged by reversing the discrimination or violence toward the powerful actors (e.g., businesses, governments, financiers) by the powerless social groups (e.g., adversely impacted stakeholders, including animals and the environment). Efforts to obtain accountability for harm need to be nonviolent. That is, justice work needs to invite cooperation by appealing to the moral good in the stakeholders. It is not about the use of force, threats, or violence (King 1999) as this would be morally incongruent. But neither is it a matter of capitulating to the harm caused by economic and species inequality and the unchecked plunder of a business-as-usual approach by, for example, many multinational business entities (Conde 2017).

The key aim in social justice struggles in the business sector is to achieve accountability for violence and harm done as a result of the business operations. When the business entities responsible for social injury and environmental harm decline invitations to problem-solve the issues and to be accountable, an ethic of love can guide activist stakeholders’ next steps (Ross 2020a, b). Gandhi’s values-based leadership in India’s independence struggle was guided by Ahimsa, the Hindu term for love (Gandhi 2013). Central to Gandhi’s leadership approach was the moral integrity derived from modeling love and nonviolence in his personal life and public work

(DiSalvo 2013). Martin Luther King (1957) was influenced by Gandhi's work and he believed that justice for black people in America was to be sought by the appeal to moral force not the use of violence.

Struggles for environmental justice and sustainability stand in this tradition of nonviolent, grassroots campaigns utilizing people power. Research shows that justice struggles that avoid violence, build on community strengths and needs, and listen to the wisdom of the people during the conflict are more successful in achieving social change (Chenoweth and Stephan 2011). For example, Ross and Puccio (2020) describe an interlinked set of challenging and resistive strategies, focused on holding the government accountable for not providing public safety and protection. As part of long-term, home grown community activism, the local resident's activist group lobbied the state government. This involved providing evidence and appeals to the government in relation to pollution from a multinational mining company and the breaching of its licensing obligations. All the strategies are nonviolent, working within the policies and consultation processes of government. Other initiatives have also been undertaken when government and industry, for example, failed to undertake independent air monitoring around the alumina refinery. The independent bucket brigade was a local resourced effort to obtain air samples using airtight buckets during pollution events that could be analyzed by an independent source, to support community claims of harm (Community Alliance for Positive Solutions, CAPS 2020).

The Sustainability Issue

There is an international groundswell occurring with natural resource extraction industries and agri-businesses at the center of an increasing number of ecological conflicts with activist groups (see examples in Ross et al. 2020). This is because these types of industries use the environment and nonhuman animals as part of their wealth creation. Research has shown that people will tend to resist industry in their localities when they perceive it as

a threat to their safety, social amenities, ecosystems, and cultures (Pedersen 2014).

Conflicts with adversely impacted stakeholder groups can be unwelcome and very costly to a corporation's public image and "social license to operate" (Trebeck 2008, p. 353). In recent decades there has been an international recognition of the importance of linking the economic aspects of business with environmental and social factors. The language of achieving this triple bottom line (Elkington 1997) as part of good business practices has provided a leverage point for environmental victim activism (White 2009) to question and challenge unsustainable and unjust operations. CSR is a phrase used by businesses to articulate how they are acting to add a social value to their profit-driven entities (Models of Success and Sustainability, MOSS 2015). CSR is a top down, industry defined, and controlled set of public statements relating to a commitment by businesses to act in a socially responsible manner toward their shareholders and host community (MMSD 2002). Moriarty describes CSR as:

Actions by businesses that are (i) not legally required, and (ii) intended to benefit parties other than the corporation (where benefits to the corporation are understood in terms of return on equity, return on assets, or some other measure of financial performance). (2017, n.p.)

Typically, though, CSR is limited to philanthropic gestures in local communities with little acknowledgment of inconsistencies between words, image, and actions (Ross 2017b). For example, in 2008 BHP Billiton was accused of corporate irresponsibility due to the failure to remedy ongoing contamination at a copper oxide plant in Tintaya, Peru (Anguelovski 2008). Just 2 years prior when this issue was occurring, the Western Australian Chamber of Commerce and Industry (2006) praised BHP Billiton for its substantial contribution to health, safety, and sustainability.

The issue for sustainability managers and activists seeking socio-ecological justice is that to date, no amount of well-organized, love ethic informed and nonviolent strategies has shifted the global balance of power toward sustainable

industries, communities, and landscapes. Even so, some collective capacity has been achieved by the linking up of resistance efforts by similarly impacted groups. Some examples of activism are: “Shut the Gate” in Australia to support farmers resisting fracking on their properties which have been greatly assisted by social media campaigns; calls for public inquiries into industry pollution; and class legal action into water contamination from fire retardant chemical pollution at Australian military bases. People power in a range of forms across many different countries, and situations provide many examples and clues for how to mount successful challenges to unsustainable and unjust business operations in specific contexts (Brueckner and Sinclair 2020).

The flow on issue is that the significance of often hard won successes may not be recognized due to the backlash from industry interests, including the media and by elites such as climate change naysayers. For example, threats of job cuts (Alcoa and Western Australian port workers strike) or jobs not eventuating (Adani coal development in Queensland) and removal of financial support to communities and local governments (Alcoa in relation to Yarloop after a major bush-fire) can be severe and depleting of the confidence of people to stand up for justice. To counter this push back from big business and the elites, there is a need to ensure the lessons and achievements of the justice work are not lost and are shared on to other eco-justice activist groups as needed. Further, the challenge for activist groups and their supporters is maintaining hope in the struggles that often do not have quick solutions or a clear win for the people and the environment. An abiding belief in the power of nonviolence and love to address complex human-made problems can sustain this hope.

An Ethic of Love Model for Sustainable Development

The significance of an ethic of love in environmental justice work is evident in the area of community work for transformational change

and sustainable structural change. Godden (2018) describes how a love framework guided research with community workers in Timor-Leste. The coresearcher collaborative inquiry created the following statement of their love guided practice:

Domin mak hanesan hahalok nebe ita hatudu liu husi manera oi-oin hodi ema seluk bele sente ho diak: liberdade, demokrasia, toleransia, moris, adaptasaun, unidade no felisidade [Love is actions that we show through a variety of ways so that other people feel freedom, democracy, tolerance, alive, adaptation, unity and happiness]. (Godden 2018, p. 90)

A love ethic can provide practical guidelines for sustainability managers and activists irrespective of the particularities of each situation where sustainability is under threat. Ross (2017a) describes a principles-based model that articulates the responsibilities of key stakeholders according to one of three interlinked principles. Thus, in situations of ecological conflict, the government, who is the regulator of industry, has the responsibility to enact the social precautionary principle. This is to occur out of deference to the wisdom of the people impacted by the industry’s operations. The industry entity needs to enact social (and other forms of) sustainability relevant to the issues in the conflict. The impacted stakeholders have a responsibility to seek social justice by speaking up, assisting in establishing evidence of adverse impacts and by contributing to identifying a just outcome (Ross 2017a).

All three parties meet to undertake respectful, power-equalized, and evidence-based discussions and negotiations. The outcomes sought from these nonexploitative dialogues are government accountability to its people; corporate social sustainability in addressing the substance of the conflict; and justice for the impacted stakeholders (Ross 2017a, 2020a). Failures of responsibility by the government and/or the corporation will be failures of moral integrity of the leaders of each constituency. A robust and loving appeal to act with moral integrity will allow a discernment of the practical actions needed in what is usually a contested complexity of issues, agendas, and solutions. It is always the preserve of justice

activists to resist: dominant, self-serving constructions of the issue; being positioned as the problem; and having no choice but to accept the status quo or inadequate solutions being offered.

A love ethic in situations of intractability by the powerful entities involves a resistance to unsustainability and injustice at every opportunity. Gandhi believed that “underserved suffering touches the heart and mind of even the oppressor” (DiSalvo 2013 p. 138). He also recognized the limits of litigation and appeals to the laws of the land when these same laws are designed to protect the interests of the elites of society. Resistance must be nonviolent but can match the power of the dominant groups who are committing environmental crime and causing social injuries. The idea of active resistance is based on people’s right to defend and protect their lives, livelihoods, and homelands. It can take many forms such as noncooperation with unjust laws and harmful practices; nonviolent civil disobedience; protests; strikes; and campaigns (Sharp 2012).

Summary

An ethic of love can guide stakeholders toward just and sustainable processes and outcomes in situations of ecological conflict between businesses and communities. Love is a contested idea and its use in ecological conflict situations is not widely accepted. Nevertheless, it does provide an ethical approach that builds on a long tradition of nonviolent social movements for justice, peace, and environmental protection. The adaptation of an ethic of love based on research with stakeholders in a community/industry conflict in Australia identifies three key principles for sustainable management. These principles are social justice; the social precautionary principle; and social sustainability. Sustainability efforts guided by these principles will ensure the means and ends are aligned. Violence cannot create justice and sustainability. An ethic of love opens up spaces between stakeholders to practice sustainability in their interactions and negotiations.

Hope is anchored in small steps forward and acts of good will in challenging situations.

Cross-References

- [Adversarial Ethics](#)
- [Ethics and Ethical Theories](#)
- [Inclusive Leadership](#)
- [Power Equalizing](#)
- [Social Justice](#)
- [Social Sustainability](#)

References

- Anguelovski, I. (2008). Environmental justice concerns with transnational mining operations: Exploring the limitations of post-crisis community dialogues in Peru. In C. O’Faircheallaigh & A. Saleem (Eds.), *Earth matters: Indigenous peoples, the extractive industries and corporate social responsibility* (pp. 198–221). Sheffield: Greenleaf Publishing.
- Braidotti, R. (2013). *The posthuman*. Malden: Polity Press.
- Brueckner, M., & Ross, D. (2020). Eco-activism and social work: In the public interest. In D. Ross, M. Brueckner, M. Palmer, & W. Eaglehawk (Eds.), *Eco-activism & social work: New directions in leadership and group work* (pp. 3–25). London: Routledge.
- Brueckner, M., & Sinclair, L. (2020). International experiences with social licence contestations. In D. Ross, M. Brueckner, M. Palmer, & W. Eaglehawk (Eds.), *Eco-activism & social work: New directions in leadership and group work* (pp. 111–122). London: Routledge.
- Chamber of Commerce and Industry Western Australia. (2006). *Corporate social responsibility: A submission to the Australian Government Corporations and Markets Advisory Committee*. Perth: CCI (W.A.).
- Chenoweth, E., & Stephan, M. (2011). *Why civil resistance works: The strategic logic of nonviolent conflict*. New York: Columbia University Press.
- Community Alliance for Positive Solutions (CAPS). (2020). *The Yarloop story on one page*. <https://caps6218.org.au/about-us/>
- Conde, M. (2017). Resistance to mining: A review. *Ecological Economics*, 132, 80–89.
- DiSalvo, C. (2013). From lawyer to civil disobedient: A microcosm of change. In T. Sethia & A. Narayan (Eds.), *The living Gandhi: Lessons of our times* (pp. 118–141). New Delhi: Penguin Books.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Mankato: Capstone.
- Freeman, R. (2010). *Strategic management: A stakeholder approach*. Boston: Pitman.

- French, P. (1979). The corporation as a moral person. *American Philosophical Quarterly*, 16(3), 297–317.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. In W. Zimmerli, M. Holzinger, & K. Richter (Eds.), *Corporate ethics and corporate governance* (pp. 173–178). Berlin: Springer.
- Gandhi, R. (2013). Gandhi's journey to ahimsa. In J. Sethia & A. Narayan (Eds.), *The living Gandhi: Lessons for our times* (pp. 101–117). New Delhi: Penguin Books.
- Godden, N. (2017). The love ethic: A radical theory for social work practice. *Australian Social Work*, 70(4), 405–416.
- Godden, N. (2018). Love in community work in rural Timor-Leste: A co-operative inquiry for a participatory framework of practice. *Community Development Journal*, 53(1), 78–98.
- Hartman, E. (2015). *Virtue in business: Conversations with Aristotle*. New York: Cambridge University Press.
- hooks, b. (1994). *Outlaw culture: Resisting representations*. New York: Routledge.
- hooks, b. (2001). *Salvation: Black people and love*. New York: William Morrow.
- International Federation of Social Workers (IFSW). (2018). *Global social work statement of ethical principles*. <http://ifsw.org/policies/statement-of-ethical-principles/>
- King, M. L. (1957). *Loving your enemies*. http://okra.stanford.edu/transcription/document_images/Vol04Scans/315_17-Nov-1957_Loving%20Your%20Enemies.pdf
- King, M. (1999). *Mahatma Gandhi and Martin Luther King: The power of nonviolent action*. Paris: UNESCO Publishing.
- Landes, X. (2020). Adversarial ethics. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management* (pp. 1–5). Cham: Springer.
- Macy, J. (2019). *Joanna Macy and her work*. <https://www.joannamacy.net/main>
- Mandela, N. (2013). *Long walk to freedom*. New York: Hachette Digital.
- Mining, Minerals & Sustainable Development (MMSD). (2002). *Breaking new ground*. London: Earthscan Publications.
- Models of Success & Sustainability (MOSS). (2015). *What is CSR and how does it benefit business?* http://www.moss.org.au/MC_WhatIsCSR
- Moriarty, J. (2017). Business ethics. In E. Zalta (Ed.), *Stanford encyclopedia of philosophy* (Fall 2017 Edition). <https://plato.stanford.edu/archives/fall2017/entries/ethics-business>
- Nussbaum, M. (2013). *Political emotions: Why love matters for justice*. Cambridge, UK: The Belknap Press of Harvard University Press.
- O'Faircheallaigh, C. (2013). Registered native title bodies corporate and mining agreements: Capacities and structures. In T. Bauman, L. Streiein, & J. Weir (Eds.), *Living with native title: The experiences of registered native title corporations*. Canberra: AIATSIS Research.
- Pedersen, A. (2014). Landscapes of resistance: Community opposition to Canadian mining operations in Guatemala. *Journal of Latin America Geography*, 13(1), 187–214.
- Poulos, H., & Haddad, M. (2016). Violent repression of environmental protest. *Springerplus*, 5(230), 1–20.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Ross, D. (2017a). A research-based model for corporate social responsibility: Towards accountability to impacted stakeholders. *Journal of Corporate Social Responsibility*, 2(8), 1–11.
- Ross, D. (2017b). Dynamics of corporate social responsibility in Australia's mining sector: A critical sociological analysis. In M. Aluchna & S. Idowu (Eds.), *The dynamics of corporate social responsibility: A critical approach to theory and practice* (pp. 187–222). Bern, Switzerland: Springer.
- Ross, D. (2020a). The love ethic practice method. In D. Ross, M. Brueckner, M. Palmer, & W. Eaglehawk (Eds.), *Eco-activism & social work: New directions in leadership and group work* (pp. 125–142). London: Routledge.
- Ross, D. (2020b). *The revolutionary social worker: The love ethic model*. Brisbane: Revolutionaries.
- Ross, D., & Puccio, V. (2020). Homegrown activism in Yarloop. In D. Ross, B. Brueckner, M. Palmer, & W. Eaglehawk (Eds.), *Eco-activism and social work: New directions in leadership and group work*. London: Routledge.
- Ross, D., Brueckner, M., Palmer, M., & Eaglehawk, W. (Eds.). (2020). *Eco-activism and social work: New directions in leadership and group work*. London: Routledge.
- Sharp, G. (2012). *From dictatorship to democracy: A conceptual framework for liberation*. London: The Merlin Press Ltd.
- Tester, F. (2013). Climate change as a human rights issue. In M. Gray, J. Coates, & T. Hetherington (Eds.), *Environmental social work* (pp. 102–118). New York: Routledge.
- Trebeck, K. (2008). Exploring the responsiveness of companies: Corporate social responsibility to stakeholders. *Social Responsibility Journal*, 4(3), 349–365.
- United Nations Global Compact. (2020). *The ten principles*. <https://www.unglobalcompact.org/abouttheGC/thetenprinciples/index.html>
- White, R. (2009). Environmental victims and resistance to state crime through transnational activism. *Social Justice*, 36(3), 46–60.
- White, R. (2017). Corruption and the securitisation of nature. *International Journal for Crime, Justice and Social Democracy*, 6(4), 55–70.
- White, R. (2018). Ecocentrism & criminal justice. *Theoretical Criminology*, 22(3), 342–362.

Ethical Absolutism vs. Ethical Relativism

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Definition

Ethical absolutism and ethical relativism are positions in ethics about the existence of objective values and intrinsically moral acts. Ethical absolutism is a position which argues for the existence of objective values and intrinsically moral acts. As such there can exist moral principles which are always valid and correct. Ethical relativism is a position that holds that moral values are relative to some further instance.

Ethical Absolutism

There seem to be moral principles which humans hold intuitively valid and correct. For example, various formulations of the “golden rule,” the gist of it being that we should treat others as we would want to be treated. This idea can be found in many moral and religious teachings. Moreover, it seems that people regardless of culture or any other factor hold this, and similar, principles and their fundamental values as true and valid. Moral absolutism is an ethical position where it is argued that moral principles, values, and rules which are always true exist. Ethical absolutism also implies that actions are intrinsically right or wrong. An excellent example of absolutism in ethics can be found in the deontological theory of a German philosopher Immanuel Kant and his idea of the categorical imperative. Actions which can pass the test of the categorical imperative should be followed in every situation, no matter the specific consequences. Christianity may serve as another example, God’s commandments are considered always valid and are expected to be obeyed.

Ethical Relativism

Although different position than ethical absolutism, ethical relativism is also supported by many examples from contemporary and historical experience. For example, already in primary school children can catch a glimpse that what we think about stealing, lying, or slavery was not always the same everywhere in the world or every point in history. There were times when slavery was just a fact of life, accepted and considered normal. Also, children very early on become aware that some practices which are considered in our society to be morally unacceptable today might be acceptable and present in some other society at the same time. Ethical relativism is a position which takes those examples into account stating that moral principles are relative to different factors and there are no objective values as such nor are there intrinsically right or wrong actions.

In ethics, several types of ethical relativism exist depending on the factors in focus which contribute to moral values being relative (Baghrmian and Carter 2018). For example, cultural relativism will simply descriptively take into account that people in different cultures judge actions differently. Descriptive relativism, simply put, describes that there are differences in moral beliefs and principles from culture to culture and something which is encouraged in one may be sanctioned in the other. It is essential to add that in descriptive relativism, it is not only about differences in ethical judgments but in the basic principles themselves (Frankena 1973, p. 109). Both cultural and descriptive relativism look at cultural diversity and as such draw heavily from disciplines such as cultural anthropology.

Normative relativism, another version of ethical relativism, is about principles and not cultural differences. In essence, normative relativism will put forward a principle stating that what is good for one individual or society is not considered like that for another individual or society. This principle can be considered just like another version of descriptive relativism, but it does not stop there. The principle will continue to state that what is “really” good in one case will not be in another (Frankena 1973, p. 109). Normative relativism

makes it difficult to talk about universal moral systems, and it may end up claiming that there is no possibility to ever know the absolute truth.

Third relativist position talks about the justification of moral judgments so it can be called meta-ethical relativism. This position will claim that there is no rational justification possible to consider one ethical judgment better than the other. Although all this may be the case, differences in opinions on ethics should not be taken as a reason to hold every ethical position as having the same value.

An example of relativism in ethics is the classic utilitarian approach where the justification for action is found in the consequences of that action. In other words, utilitarianism will focus on the goals of a proposed action, and actions should be judged right if their consequences are good, i.e., if they increase the amount of good in the world.

Cross-References

- [Ethics and Ethical Theories](#)
- [Utilitarianism](#)

References

- Baghrmian, M., & Carter, J. A. (2018). Relativism. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Winter 2018 Edition). <https://plato.stanford.edu/archives/win2018/entries/relativism/>. Accessed 24 Feb 2019.
- Frankena, W. K. (1973). *Ethics* (2nd ed.). Englewood Cliffs: Prentice-Hall.

Ethical Banking

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Synonyms

[Ethical investing](#); [Green banking](#); [Impact investing](#); [Social banking](#); [Socially responsible investing](#); [Sustainable banking](#)

Definition

Ethical banking is a fairly broad term that refers to the bank's business integration with sustainable development goals or social, environmental, and ethical (SEE) criteria. In other words, ethical banking aims to encompass a sustainable and ethical banking system involving eco- and social-friendly practices. Both internal and external driving forces may motivate conventional banks to transform into ethical banks. Internal driving forces may rise from shareholders, board of directors, and employees. External driving forces may come from the general public, governments, local societies, nonprofit-making governmental organizations (NGOs), customers, and competitors. Although there are no clear definition and regulatory rules that distinguish ethical banks from conventional banks, ethical banks voluntarily follow some ethical beliefs/principles in their finance and investment projects. Ethical banks may also be stimulated to develop more sustainable products, for instance, green funds or environmental, social, or ethical investment funds. Ethical banks value their universal existence by providing transparent corporate information and positive social and environmental impacts to the public. In general, ethical banks seek to promote fair-trade opportunities and provide social enterprise supports and ethical consumerism while making financial and lending decisions. The term "ethical" can be used interchangeably with social banking, green banking, or sustainable banking. For example, banks can claim themselves as ethical banks by supporting local green initiative projects. According to the definition of Schultz (2010) in the Green Bank report, green banking involves banks' engagement in eco-friendly conscious practices. It aims to reduce carbon footprint from their banking activities, such as online banking or paperless banking applications.

Business Objectives

Business ethics will become irrelevant if banks choose profit maximization as the primary

business objective. One way to enhance the operation of banks' business is to incorporate social, environmental, and ethical (SEE) issues by building up corporate social responsibility (CSR) guidelines within the traditional banking business model (San-José et al. 2011). However, this is not precisely to be all-inclusive ethical commitments when making financial decisions. According to San-José et al. (2011), ethical bank owners can decide the company's rules and objectives on the aspects of SEE issues. The business acts by following its moral beliefs, standards, and regulation to determine its essential value. The decision from the owners related with ethical issues is a big challenge.

Various synonyms have been used in practice with the concept of ethical banking, such as Triodos banking, Islamic banking, green banking, sustainable banking, and environmental or social banking. All of them have an ethically related business objective. For example, Triodos Bank, established in the Netherlands in 1980, is a specialist ethical savings bank. The aim is to invest in businesses that seek to address social and environmental issues, such as solar energy, healthcare, and charities. In addition, savers can make an agreement on their investments to finance a particular industry or project; business loans are limited to the organizations which are involved in sustainable development projects. It is well known that a firm's corporate governance performance and its social, environmental impacts have become the leading performance indicator in the industry. According to the Association of British Insurers' (ABI) study in 2008, firms with good corporate governance produced 18% higher returns than firms with poor corporate governance; shareholders suffer from low returns by investing in a poorly governed firm (Selvaggi and Upton 2008). San-José et al. (2011) identify that transparency of information, placement of assets, guarantees, and participation make ethical banking different from other traditional banks (such as saving banks, commercial banks). The objective of ethical banking seeks both economic and social benefits, which can fit into a socioeconomic model.

The Environmental Issues

Due to the emphasis on environmental issues, banks initially concentrate on the "direct" or "internal" issues related to banks' business processes, such as electricity, water, and paper usage issues. The potential energy saving of banks is enormous, as can be seen from the achievements of these proactive companies. For example, Dutch banks agreed with the Dutch government to cut their energy by 25% from a 1996 baseline by 2006 and achieved a successful result (Jeucken and Bouma 1999). UBS and NatWest Group achieved similar result. Some of the financial services firms also use renewable energy to improve their internal environmental performance. For example, the Rabobank Group uses solar energy. The Co-operative Bank in the UK introduced the first biodegradable credit card in 1997, in support of Greenpeace (Jeucken 2001). Generally speaking, banks' energy-saving actions are cost-effective, not because of legislative pressure. Credit Suisse has developed an instrument to measure its environmental impacts, which summarized that energy usage is by far its most profound impact, accounting for 90% of all cumulative pollution within the organization (Jeucken 2001). UBS used a similar approach named "Environmental Performance Evaluation." Other environmental reports from banks also conclude that energy is one of the most significant aspects. The measurement of environmental performance and comparison of that performance between banks, however, remains challenging.

Furthermore, banks have been disinclined to promote environmental focus from the external side. Banks recognize these as "external" issues or "indirect" issues associated with the products of banks provided. The banks' products themselves do not pollute the air, water, and land and even do not produce hazardous chemicals. Instead, it is the users who can have an impact on the environment. The funds' channel through the banks' lending schemes may indirectly cause environmental damages. Banks, therefore, need to have an incentive to understand the environmental implications when making lending decisions, primarily how the loans will be used in practice. As

debated by many scholars, banks' lending activities could be associated with potential threats to the natural environment (Sarokin and Schulkin 1991; Thompson 1998). Thompson and Cowton (2004) also argued that a bank's lending portfolio impacts the natural environment. Overall, how banks perceive and deal with its social and environmental responsibility associated with their lending activities is still under debate in recent decades.

Future Directions

It is very objective to determine what is ethical and claim to be an ethical bank. It is impossible to have a universal definition that distinguishes ethical banks from conventional banks. Ethical banks are regulated similarly to traditional banks and must abide by the same regulatory rules. Although many ethical banks voluntarily become ethical, certain levels of supervisory and regulatory ethical policies or ethical codes of conduct are needed to set up the rules. According to Cowton and Thompson (2000), banks who signed the United Nations Environment Programme (UNEP) statement did not act significantly different from the non-signatories. Hence, an external regulatory body or monitor body needs to be in place to set minimum acceptable legal standards. Certain degrees of enforcement methods should be in place to make ethical codes to be more effective.

Cross-References

- Banks and the Sustainable Development Goals
- Corporate Social Responsibility
- Definitions of CSR
- Environment, Social, and Governance (ESG)
- Environmental Impact
- Finance and CSR
- Inclusive/Selective/Compliant Finance/Banking
- Islamic Banking
- Social Responsibility
- Socially Responsible Investing and Finance

References

- Cowton, C. J., & Thompson, P. (2000). Do codes make a difference? The case of bank lending and the environment. *Journal of Business Ethics*, 24(2), 165–178.
- Jeucken, M. (2001). *Sustainable finance and banking: The financial sector and the future of the planet*. London: Routledge.
- Jeucken, M. H., & Bouma, J. J. (1999). The Changing environment of banks. *Greener Management International*, 27, 21–35.
- San-José, L., Retolaza, J. L., & Gutierrez-Goiria, J. (2011). Are ethical banks different? A comparative analysis using the radical affinity index. *Journal of Business Ethics*, 100(1), 151–173.
- Sarokin, D., & Schulkin, J. (1991). Environmentalism and the right-to-know: Expanding the practice of democracy. *Ecological Economics*, 4(3), 175–189.
- Schultz, C. (2010). What is the meaning of green banking? *Green Bank Report*, 2, 127–131.
- Selvaggi, M., & Upton, J. (2008). Governance and performance in corporate Britain. In *Report from the Association of British Insurers Research and Investment Affairs Departments*, pp 461–488.
- Thompson, P. (1998). Bank lending and the environment: Policies and opportunities. *International Journal of Bank Marketing*, 16(6), 243–252.
- Thompson, P., & Cowton, C. J. (2004). Bringing the environment into bank lending: implications for environmental reporting. *The British Accounting Review*, 36(2), 197–218.

Ethical Behavior

- [Ethics](#)
- [Integrity Management](#)
- [Marketing \(Ethics of\)](#)

Ethical Codes

- [Codes of Conduct in Greece](#)

Ethical Conduct

- [Business Ethics](#)

Ethical Conflict

► Ethical Dilemmas

Ethical Consumerism

► Consumer Social Responsibility (CnSR)

Ethical Consumptions

► Consumer's Social Responsibility Communication (CNSRC)

Ethical Dilemmas

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Synonyms

Ethical conflict; Ethical problems; Moral conflict;
Moral dilemmas; Moral problems

Definition

Ethical dilemmas refer to those situations in which the individual has to choose between two alternatives that are both considered unacceptable from a moral point of view. The decision maker is in a conflictual state of mind and needs to analyze the problem more thoroughly in order to make the best decision in those circumstances. In most cases, the individual will have to make a compromise. One of the strongest dilemmas in the literature is known as *Sophie's choice* after the novel with the same name

written by William Styron in 1979 or the trolley dilemma. When facing with an ethical dilemma, the decider has the following choices: one of the opposing alternatives or not choosing anything at all. In order to make the best or the right decision in a specific situation, the individual should address the right questions and formulate as clear as possible the ethical dilemma and the alternatives, as well as the consequences for each decision (alternative 1, alternative 2, or no alternative). For clarifying these issues, a person should communicate the problem to a person he/she trusts or a specialist in ethical problems that could help him/her with the decision. The concept of ethical dilemmas should be an important part of ethical trainings conducted in organizations, thus helping the employees in the decision-making process and contributing to a higher level of morality within the company. People are confronted with these types of dilemmas both in their personal and professional lives, so an important role is played by education (formal and nonformal) and lifelong learning.

Introduction

According to Cambridge Dictionary ([n.d.](#)), a dilemma refers to a “situation in which a difficult choice has to be made between two different things” someone could do. So, an ethical or a moral dilemma is a particular type of dilemma that involves moral principles and norms. If someone has to choose between eating an apple or an orange, this could be seen as a dilemma but not as an ethical dilemma. When faced with an ethical dilemma, the decision maker takes into account his or her own moral principles and values. There is no correct answer to an ethical dilemma, which is also dependent on the cultural context of the decider. Some decisions could be seen as moral in some countries and in others as immoral. Fernando (2009) defines ethical dilemmas in business as a situation in which the decision maker has to choose between two alternatives that impact both the stakeholders and also the profitability and competitiveness of the company.

The main characteristics of an ethical dilemma are – it presents two alternatives; it reflects a conflictual state; the alternatives are both unacceptable from a moral perspective; the alternatives are analyzed through the lens of moral principles; and it requires an in-depth analysis of all aspects involved. There are different types of ethical dilemmas, starting from the simplest ones to the ones that are very complicated and extreme, involving the lives of other people around us (*Sophie's choice* when a mother has to choose which of her children will be killed and the *trolley dilemma* when someone has to choose between one or five individuals to die). There is no precise solution for ethical dilemmas, but the literature presents a few strategies that can help individuals better address these conflictual situations and prepare them for the choices they will have to make.

Types of Ethical Dilemmas

Hanson (2014) appreciates that there are six main ethical dilemmas with which any professional in any field is dealing with: a worthwhile work in which the individual creates an equilibrium between the market needs, and someone's skills and values; work versus family dilemma, the individual having to choose between these two facets of his/her life; going with the crowd despite of his/her own beliefs; following misleading leaders or staying loyal to his/her moral values; being a positive change agent in the organization even if no one is doing anything; and using someone's skills for the career or for the common good of community.

Another classification of ethical dilemmas is made by McConnell (2014) but in a more abstract way: epistemic versus ontological dilemmas (in epistemic dilemmas, the decider knows which is the correct decision; meanwhile in ontological dilemmas, the decider has difficulty in choosing one of the two alternatives because of their similarity in terms of morality); self-imposed (an internal conflict) versus those imposed by the society (someone from the outside making pressures on the subject to choose

between two alternatives); and obligation dilemmas (the decider has the obligation to choose at least a feasible alternative) versus prohibition dilemmas (all feasible alternatives are forbidden).

Kidder (2009) presents four common ethical dilemmas closer to those presented by Hanson. These are: truth versus loyalty (personal honesty or loyalty to others); individual interest versus community interest; short term versus long term (decisions in the present affect the future); and justice versus mercy for the individuals affected.

Weiss (2008, p. 98) presents ethical dilemmas from the perspective of the levels where they might arise: "the individual level, the organizational level, the industry level and the societal, international and global level." Collins (2017) classifies ethical dilemmas in conscious and unconscious; in conscious dilemmas, the decision maker knows which decision is bad and which is wrong but is still inclined to choose the wrong one for the benefits brought afterward; meanwhile in unconscious dilemmas, the decision maker is not aware of the moral connotation of his or her decision.

According to Dignum (2019), the decisions that follow the ethical dilemmas are different because people have different perspectives, are coming from various cultures, and have different religions and different political views. Ethical dilemmas are linked to the cultural background of a person because his/her moral values dictate the solution to a dilemma, and many of these answers are influenced by someone's culture (Pettifor and Ferrero 2012; Muller and Desmond 1992; Pitta et al. 1999). As Pitta, Fung, and Isberg (1999, p. 242) put it, "a country's culture is directly related to the ethical behavior of its managers." Thus, there are different perspectives on ethical issues and dilemmas in accordance with someone's culture and also different laws. Graafland, Kaptein, and Mazereeuw-van der Duijn Schouten (2006, p. 53) analyze the relationship between ethical dilemmas and religion, stating that "the frequency with which dilemmas arise is directly related to various aspects of religious belief."

Strategies for Solving Ethical Dilemmas

The process of solving an ethical dilemma is similar with the process of decision-making; it involves a decision maker, a few alternatives, and a strategy used in order to increase the chances of making the best decision in some specific circumstances. Sometimes, there is no right decision, but a decision should be made to reduce the casualties, such as in Sophie's choice or the trolley dilemma.

There are numerous opinions and views regarding this issue in the professional literature, most of them being adjusted to the field the ethical dilemmas appear (healthcare, business, administration, etc.). McGoff (2017) mentions the following three strategies: reconcile the ethical dilemmas using "and" instead of "versus" (short and long term, the individual and the community, truth and loyalty, and justice and mercy); have the outcome in mind; and insure the commitment of the group affected by the decision. Kidder (2009, p. 23) developed the three principles that could help individuals make better decision when facing ethical dilemmas: end-based (refers to the utilitarianism and implies doing the greatest good for the greatest number), rule-based (the decision is made according to a standard such as in Kantianism), and care-based (choose what you would want others to choose if you were impacted by the others' decision).

Sweetwood (2016) presents a six-step method to solve an ethical dilemma: never lie; take your time to think; take into account the legalities involved; consult with experts in the field; choose a strategy based on logic and facts; and have confidence in your decision and communicate it to the others. Forester-Miller and Davis (2016) created a seven-step model for ethical decision-making: identifying the problem, applying the Code of Ethics, determining the dimension of the dilemma, establishing the potential solutions for solving the dilemma, taking into account the consequences for each solution and choosing the best one, and evaluating the chosen solution and implementing it. This process is similar with any other process for decision-making.

Other strategies for choosing the best alternative when facing an ethical dilemma might involve answering questions such as: Is it legal? Is it in accordance with your code of honor/will you sleep well doing that? If it will be made public, how would you feel about it? And what would your close friends and family think of your decision and of you doing that? Coughlan and Connolly (2008) take into account two main elements that the employees consider when solving their ethical dilemmas: justification and emotions. The same link between emotions and ethical dilemmas is presented by Linehan and O'Brien (2017) who highlight the importance of expectations from other people to the way individuals make ethical choices.

Jennings (2014) proposes six steps for solving ethical dilemmas in business: have knowledge on all the available facts about a situation; establish the information that is needed and is not available for the moment; analyze the impact of a potential decision regarding the ethical dilemma on all stakeholders; list all alternatives for solving the dilemma; evaluate the alternatives taking into account all consequences and costs; and choose a recommendation for resolving the ethical dilemma.

According to Saleem (2006, p. 276), there are ethical tools that can be used by the management of an organization in order to help employees better handle ethical dilemmas. Thus, the author mentions ethics committees which train the employees on issues regarding ethics at the workplace and also having ethics officers inside the organization or from outside the company that have expertise in dealing with this type of problems. Other ethics tools that can be used are ethics codes, having a dedicated phone line for whistleblowers, and having procedures and policies. All these create an ethical background that encourages employees to express their concerns on ethical matters in the organization and try to find out solutions for solving the ethical dilemmas they have.

No matter what strategy the individuals use, there is no perfect solution for an ethical dilemma. Some are more complex than others, requiring a

thorough analysis, and some others have to be solved instantly, the individual not having the possibility to wait if he/she wants to make a decision (Sophie's choice or trolley dilemma is a dilemma that has to be solved rapidly). If an ethical dilemma does not pass the legality test (meaning that one of the alternatives is not legal), the choice is simple, but otherwise, things get more complicated. In other circumstances, all alternatives seem bad, but not choosing anything would be worse.

Ethical Dilemmas in Business

According to Ferrell, Fraedrich, and Ferrell (2009, p. 63), ethical dilemmas in business refer to one of the following issues "abusive or intimidating behaviour, lying, conflicts of interest, bribery, corporate intelligence, discrimination, sexual harassment, environmental issues, fraud, insider trading, intellectual property rights, and privacy issues." Kibert et al. (2012) mention that the *development of technology* also brings ethical dilemmas related to individuals' privacy, data security, or some consequences that can interfere with people's rights or the environment we live in.

Arrington (2017) presents the *paradox of consumerism* and highlights the idea that consumption choices can bring ethical dilemmas for consumers of fashion items. Thus, the author argues that there is a paradox in this ethical dilemma of these consumers, because they say they decide what garments they buy taking into account ethics, but their decisions reveal the opposite. Culiberg and Bajde (2014) also address the implication of consumers who participate in the tax evasion process not requiring a receipt or accepting to not receive one. Other works related to ethical consumerism and the ethical dilemmas among consumers are presented by Lingnau, Fuchs, and Beham (2019) in a study about sustainable coffee production, by Longo, Shankar, and Nuttall (2019) who highlight the connection between ethical dilemmas and the knowledge on a sustainable life. Moraes et al. (2017) present the ethical dilemma in consumption of luxurious jewelries and offer the example of diamond rings; in

their example, the ethical dilemma refers to buying or not buying a ring if the exact origin of the diamond is not exactly known in order to be sure that is not a cover for unethical business.

Knox (2020, p. 449) refers to the *ethical dilemmas in corporate social responsibility* stating that companies are dealing with the decision to implement socially responsible programs for the community or be socially responsible to the stakeholders. For the author, ethical dilemmas mean a conflict between two "ethical imperatives" that in this specific example are both honorable.

Another type of ethical dilemma in business is mentioned by Zhang et al. (2019) who refer to the *dilemma in financial reporting* as a consequence of product harm crisis. The authors mention that some managers facing this problem choose to save the situation on a short run despite the unfortunate consequences on the long run in order to present a financial report that does not look so bad in the stakeholders' eyes.

Clarke and Boersma (2017) consider the complexity of a *global supply chain* and the multitude of ethical dilemmas that arise related to employment and environment and present the example of Asian plants that produce components for Apple. Even if this is one of the most powerful companies in the world, financially speaking and also in terms of brand value, the company did not succeed to solve these ethical dilemmas in its value chain.

Monnot et al. (2019) bring attention to the ethical dilemma of *overpackaging* in retailing, companies having the option to choose less packaging and protect the environment or to overpackaging and ensure that the consumers' intentions will not change because of the lack of visual stimulation.

Ciulli, Kolk, and Boe-Lillegraven (2019) mention the ethical dilemma related to food waste and recovery. At first glance, it would seem that it is ethical for retailers to donate the food close to its expiration date, but as the authors highlight, some managers fear their reputation will suffer and they will be perceived as not being efficient in organizing their business. As a solution, the authors present the concept of the digital platforms which connect the business that wants to reduce food waste with potential recipients.

Summary

Ethical dilemmas refer to two conflicting alternatives or potential behaviors that are not satisfying or acceptable from a moral perspective. As the professional literature shows, there are different types of ethical dilemmas with different complexity and strongly dependent on the cultural and religious beliefs of an individual. There are different strategies that can help individuals in making ethical choices and solve their dilemmas following the same pattern as in the case of a decision-making process. Ethical tools such as ethical codes, ethical committees, ethical trainings, ethical audits, and ethical phone lines that ensure anonymity and procedures and policies inside the organization can all be beneficial in the process of helping employees to resolve their ethical dilemmas. These can appear at individual level, at a society level, or at an organizational level. Related to consumers' ethical dilemmas, it might be helpful to increase the awareness on ethical issues at the level of a society and introduce ethics courses in formal education. Progress has brought with it a wider range of ethical dilemmas that should be addressed carefully.

Cross-References

► Ethics and Ethical Theories

References

- Arrington, D. W. (2017). Ethical and sustainable luxury: The paradox of consumerism and caring. *Fashion, Style, & Popular Culture*, 4(3), 277. Gale Academic OneFile.
- Cambridge Dictionary. (n.d.). Dilemma. Retrieved from <https://dictionary.cambridge.org/dictionary/english/dilemma>
- Ciulli, F., Kolk, A., & Boe-Lillegraven, S. (2019). Circularity brokers: Digital platform organizations and waste recovery in food supply chains. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04160-5>.
- Clarke, T., & Boersma, M. (2017). The governance of global value chains: Unresolved human rights, environmental and ethical dilemmas in the apple supply chain. *Journal of Business Ethics*, 143, 111–131. <https://doi.org/10.1007/s10551-015-2781-3>.
- Collins, D. (2017). *Business ethics: Best practices for designing and managing ethical organizations* (2nd ed.). Thousand Oaks: Sage.
- Coughlan, R., & Connolly, T. (2008). Investigating unethical decisions at work: Justification and emotion in dilemma resolution. *Journal of Managerial Issues*, 20(3), 348–365. Retrieved from www.jstor.org/stable/40604615.
- Culiberg, B., & Bajde, D. (2014). Do you need a receipt? Exploring consumer participation in consumption tax evasion as an ethical dilemma. *Journal of Business Ethics*, 124, 271–282. <https://doi.org/10.1007/s10551-013-1870-4>.
- Dignum, V. (2019). Ethical decision-making. In *Responsible artificial intelligence. Artificial intelligence: Foundations, theory, and algorithms*. Cham: Springer.
- Fernando, A. C. (2009). *Business ethics and corporate governance*. New Delhi: Pearson Education India.
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2009). *Business ethics: Ethical decision making and cases 2009 update* (7th ed.). South-Western: Cengage Learning.
- Forester-Miller, H., & Davis, T. E. (2016). Practitioner's guide to ethical decision making. Retrieved from www.counseling.org/docs/default-source/ethics/practitioner-39-s-guide-to-ethical-decision-making.pdf
- Graafland, J., Kaptein, M., & Mazereeuw-van der Duijn Schouten, C. (2006). Business dilemmas and religious belief: An explorative study among Dutch executives. *Journal of Business Ethics*, 66, 53–70. <https://doi.org/10.1007/s10551-006-9054-0>.
- Hanson, K. O. (2014). The six ethical dilemmas every professional faces. Retrieved from www.bentley.edu/sites/www.bentley.edu.centers/files/2014/10/22/Hanson%20VERIZON%20Monograph_2014-10%20Final%20%281%29.pdf
- Jennings, M. M. (2014). *Business ethics: Case studies and selected readings* (8th ed.). Stamford: Cengage Learning.
- Kibert, C. J., Thiele, L., Peterson, A., & Monroe, M. (2012). The ethics of sustainability. Retrieved from www.cce.ufl.edu/wp-content/uploads/2012/08/Ethics%20of%20Sustainability%20Textbook.pdf
- Kidder, R. M. (2009). *How good people make tough choices: Resolving the dilemmas of ethical living* (Revised ed.). New York: Harper Collins.
- Knox, B. D. (2020). Employee volunteer programs are associated with firm-level benefits and CEO incentives: Data on the ethical dilemma of corporate social responsibility activities. *Journal of Business Ethics*, 162, 449–472. <https://doi.org/10.1007/s10551-018-4005-0>.
- Linehan, C., & O'Brien, E. (2017). From tell-tale signs to irreconcilable struggles: The value of emotion in exploring the ethical dilemmas of human resource professionals. *Journal of Business Ethics*, 141, 763–777. <https://doi.org/10.1007/s10551-016-3040-y>.
- Lingnau, V., Fuchs, F., & Beham, F. (2019). The impact of sustainability in coffee production on consumers'

- willingness to pay—new evidence from the field of ethical consumption. *Journal of Management Control*, 30, 65–93. <https://doi.org/10.1007/s00187-019-00276-x>.
- Longo, C., Shankar, A., & Nuttall, P. (2019). “It’s not easy living a sustainable lifestyle”: How greater knowledge leads to dilemmas, tensions and paralysis. *Journal of Business Ethics*, 154, 759–779. <https://doi.org/10.1007/s10551-016-3422-1>.
- McConnell, T. (2014). Moral dilemmas, the Stanford encyclopedia of philosophy. Edward N. Zalta. Retrieved from <https://plato.stanford.edu/archives/fall2014/entries/moral-dilemmas>
- McGoff, C. (2017). How to solve ethical dilemmas in a way that works for everyone. Retrieved from <https://www.inc.com/chris-mcgooff/make-tough-decisions-more-easily-get-your-team-on-board-using-these-3-tips.html>
- Monnot, E., Reniou, F., Parguel, B., & Elgaied-Gambier, L. (2019). “Thinking outside the packaging box”: Should brands consider store shelf context when eliminating overpackaging? *Journal of Business Ethics*, 154, 355–370. <https://doi.org/10.1007/s10551-017-3439-0>.
- Moraes, C., Carrigan, M., Bosangit, C., Ferreira, C., & McGrath, M. (2017). Understanding ethical luxury consumption through practice theories: A study of fine jewellery purchases. *Journal of Business Ethics*, 145, 525–543. <https://doi.org/10.1007/s10551-015-2893-9>.
- Muller, J. H., & Desmond, B. (1992). Ethical dilemmas in a cross-cultural context. A Chinese example. *Western Journal of Medicine*, 157(3), 323–327. Retrieved from www.ncbi.nlm.nih.gov/pmc/articles/PMC1011287/.
- Pettifor, J., & Ferrero, A. (2012). Ethical dilemmas, cultural differences, and the globalization of psychology. In *The Oxford handbook of international psychological ethics*. Oxford University Press. Retrieved from www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199739165.001.0001/oxfordhb-9780199739165-e-3.
- Pitta, D. A., Fung, H. G., & Isberg, S. (1999). Ethical issues across cultures: Managing the different perspectives of China and the USA. *Journal of Consumer Marketing*, 16(3), 240–256. MCB University Press. Retrieved from <http://home.ubalt.edu/ntsbpitt/ethics.pdf>
- Saleem, S. (2006). *Business environment*. New Delhi: Pearson Education India.
- Sweetwood, M. (2016). The 6-step method for managing any ethical dilemma. Retrieved from www.entrepreneur.com/article/270909
- Weiss, J. (2008). *Business ethics: A stakeholder and issues management approach with cases* (5th ed.). San Francisco: Berrett-Koehler Publishers.
- Zhang, S., Jiang, L., Magnan, M., & Su, L. N. (2019). Dealing with ethical dilemmas: A look at financial reporting by firms facing product harm crises. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04375-6>.

Ethical Dimensions of CSR

► CSR Pyramid

Ethical Education

► UN Principles on Responsible Management Education

Ethical Guidelines

► Corporate Codes of Conduct

Ethical Investing

- Ethical Banking
- Socially Responsible Investing and Finance

Ethical Investment

- Socially Responsible Investment (SRI)
- Sustainable Investment

Ethical Problems

► Ethical Dilemmas

Ethical Purchasing

► Consumer Social Responsibility (CnSR)

Ethical Shopping

- [Consumer Social Responsibility \(CnSR\)](#)

Ethical Sourcing

- [Consumer Social Responsibility \(CnSR\)](#)

Ethical Theories II

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Synonyms

[Behavior theories](#); [Bioethics theories](#); [Moral principles](#); [Morals theories](#)

Definition

Ethical theories are that set of philosophical-juridical theories that try to define a human behavior deontologically defining it right, legitimate or wrong, and illicit. A particular aspect of ethics is the bioethics or ethics of life.

Introduction

Trying to find what is philosophically and legally right and what is wrong is the task of the scholars of ethical theories. In parallel with the growth of scientific experimentation, the need to define some human activities deontologically has also grown. In the past, these answers were provided especially by the religion that also regulated the activities of the followers culturally (Marini 2012). Today the interference of scientific research and the experimentation of techniques that open up unexplored future scenarios are interposed on a line that is difficult to define and

requires important insights by scholars of these disciplines. We talk about these scenarios in the field of bioethics.

Bioethics contains in its studies animal tests, analysis, and experimentation activities on embryos and the human genome, on the use of stem cells in the treatment of rare and incurable diseases in our present, of genetically modified organisms (GMOs), and of their inclusion within the animal and human food trade, the development of nanotechnologies.

These ethical issues are also associated with those relating to the environment and the conservation of natural ecosystems and victims of the great climatic upheavals caused by human activities.

ἦθος – Behavior

The word ethics derives from the Greek word “ἦθος – behavior” which in its widest form gathers the human, political, juridical, and moral aspects. But in its narrowest sense, it describes the philosophical aspect of the search for a right or wrong “behavior,” of good or evil. In ancient Greece from Homer to Hesiod, from Socrates to Aristotle, philosophers wondered what good was, what behavior led to “virtue.” Aristotle, who introduced the term “ethics,” saw good as an essential nature of man. Happiness is the ultimate goal and is reached with a life according to reason.

All societies, religions, and groups have their principles and rules of conduct. These principles led to the construction of ethical theories. Society is a system that organizes individuals to allow their lives through standards recognized by all its members. If law and morality are called upon to apply these standards, bioethics deals with problems relating to the emergence of new phenomena. If the law and morals judge phenomena, bioethics, the ethics of life, study them to assess the risks and benefits of it, possibly including changing the standards themselves. With the advancement of science and research, the boundary of ethics has considerably shifted.

Bioethics tries to take a holistic approach by studying complex entities in their entirety by

examining interactions between multiple elements rather than the individual elements in a separate manner (Stoeklé et al. 2019). Especially in the last few decades, the bioethical debate has focused on very current issues that have seen the involvement of communities in addition to political participation, which is also religious. Among these issues considered relevant, we find animal tests, xenotransplantation, genome engineering, assisted fertilization and euthanasia, stem cells, and experiments on embryos, GMOs, and nanotechnologies.

Animal tests are part of the new problems that the citizens of many countries are paying great attention to. After the atrocities of Nazism in the Germany of the Second World War and after the Nuremberg trial, the prohibition of experiments on human beings was established. The Helsinki Declaration and the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1974) and the resulting Belmont Report set the goal of creating protection about research on human beings by drawing up principles of respect, charity, and justice.

For this reason, subsequent experiments have been conducted with animal tests, to which it was decided to also support a high risk of death to obtain scientifically significant results. During the last century, however, the question was raised about the ethics of animal experiments, raised by a social conscience that is increasingly attentive to the idea that human or animal life should always be protected. It has also been shown that animals fully experience exposure to the experiment and suffer a lot (Ferdowsian and Beck 2011).

Thus, in the near future, animal experiments will give way to experiments conducted with the use of new technologies. Analysis technologies, computer models, and cell cultures in vitro will increasingly help to achieve this important goal. Computers, new software, and specialized computer models that can be used and created soon will increasingly help develop an understanding of biology. Thanks to their use, the practice of vivisection can cease and space will be given to a new limit on the use of guinea pigs.

The problem of *xenotransplantation* is always linked to the theme of animals. This type of

practice involves the transplantation of cells, tissues, or organs from one animal to another of different species.

We often hear of *genome engineering*, that is, the practice that involves the insertion of human genes into the animal gene to produce cells, tissues, or organs that the human body does not reject, an immunological barrier to be investigated on which many studies took place, considering it foreign to itself (Platt and Bach 1991). Xenotransplantation will become important for clinical emergencies and in the absence of donors of human organs, but the ethical debate remains open whether or not it is the right practice to carry out.

Cloning has raised the ethical debate for its possible application to the human race. Genetic engineering has placed the study of the human genome at the center of this topic. DNA manipulation has seen bioethics scholars oppose the possibility of changing characteristics of the human being through scientific practices (eugenics). Within this research, we include studies on human embryos. Such studies that would include trials are prohibited in many countries. The ethical debate on the use of *stem cells* concerns the possibility of extracting undifferentiated cells of three types: totipotent, capable of transforming into any part of organic tissue; pluripotent, they transform into many tissues but not all; and unipotent, only cells of a type. Embryonic stem cells are at the center of the ethical debate although it is forbidden in many countries to find such cells from embryos that are not intended for assisted reproduction.

Assisted fertilization and *euthanasia* are two other hot topics for those who debate about ethics. The first is a much-debated topic since it does not only concern couples who need assistance to have a child but is part of a very articulated debate that sees heterologous fertilization as a topic of discussion that is carried out with a partner third to the couple, cloning, surrogacy, and sometimes trade and experimentation on embryos for research purposes. The second is a particularly delicate issue because not only does it provide an ethical analysis on the possibility of privately choosing to die but, as we speak of “assisted

suicide,” it also involves the involvement of third parties and therefore non-negligible legal aspects. Relevant in the development of a reflection on the subject of euthanasia is the condition of the applicant, who often, in the countries where this practice is allowed, is ill with very serious and incurable diseases as well as degenerative diseases. The patient who, due to the illness, experiences a constant malaise and pain asks to die to put an end to his suffering. Euthanasia involves two types of actions: a “commissive,” which requires that a person materially practices euthanasia on the patient, and the other “omissive,” that is, let the patient die without applying any type of therapy to him. In both cases, the ethical-moral-legal problem is not easy to solve and is dealt with differently from country to country (Barcaro 1998).

As mentioned in the area of bioethics investigation, the problem related to *genetically modified organisms* or *GMOs* is also included. These organisms undergo a modification of part of the genome through genetic engineering techniques to manipulate a given characteristic. Since the beginning of the laboratory experiment, the scientific community and the political world have magnified these bodies to carefully evaluate both their potential and their risks. To date, the debate on the marketing of genetically modified organisms is very heated among countries that have decided to include them, albeit in small quantities, and others that still today prefer not to market them. Although there is no scientific evidence of GMO risk cases, consumers, especially in the European Union, are very reluctant to see them marketed in their market. The European Union itself applies very stringent assessments on the potential risk related to the use of GMOs for food purposes. Their presence must also be reported precisely and clearly on the product label.

Still in Europe, one wonders if GMOs can cause environmental damage. Seven factors are evaluated:

the persistence and invasive potential of the genetically modified plant; the transfer of genes from the plant to microorganisms; the interactions of the genetically modified plant with the target

organisms; the interactions of the genetically modified plant with nontarget organisms; the impact of cultural practices; the effects on biogeochemical processes; and the effects on human and animal health (Arpaia and Paoletti 2015).

Various types of damage to the environment are therefore feared. It is feared that pollen may be dispersed or that DNA is spread directly into the soil through the roots, which can lead to an involuntary spread of the gene inserted in the genetically modified plants and transfer their characteristics to other individuals; it is feared that the genes expressed may directly or indirectly damage other organisms leading to a significantly negative impact on biodiversity; it is feared that organisms harmful to plants adapt to the genes expressed by genetically modified plants, becoming more difficult to control even in “traditional” crops. All these concerns require an accurate analysis, a careful evaluation of the scientific data already in possession, and a calculation of the probabilities that a risk factor can materialize.

The development of increasingly sophisticated technologies has led to the emergence of large technologies in the order of nanometers: *nanotechnologies*. Nanotechnology operates in a multidisciplinary field moving from mechanical and chemical engineering to molecular biology and bioengineering. These new and sophisticated technologies, besides having a practical application in IT, have an important application in medicine and at a pharmacological level (drug delivery). We also study possible applications such as “utility fog,” objects that change shape, within robotics projects or as weapons for military purposes.

The debate on the development and use of nanotechnology has not failed to develop especially for this last aspect with the concern that more and more deadly weapons of mass can be built that is difficult to counteract. A research carried out by the University of Wisconsin, which aimed to question public opinion on these technologies, reveals that the opening to enlargement and their use was more opposed by those who had a certain religious affiliation and a certain cultural belonging. Obviously the more the issues invest in

the daily life of the citizens, the more an ethical and moral problem is raised about what is good and what is not.

Environmental ethics, instead, is born from the awareness of the human being of the surrounding nature: of plants, animals, and ecosystems in their entirety and complexity. What passed in the 1970s of the last century is the attention to the study of the natural environment and the true increase in interest in the subject (Rolston 2003). And yet the ethics of the environment is not easy to apply if we think that in today's world, it would mean implementing all those actions that put the current development model into question.

If we want to pay attention to the ethics of the environment, it would quickly lead to contrasting global warming, limiting demographic growth, questioning the current consumption and distribution of wealth, as well as demanding greater inclusion of women and indigenous conditions.

This is because nature and human life have always intertwined destinies and a cure for the former means taking care of the latter. Men must include nature in their concept of ethics that too often took into consideration the relationships between them but not the relationships with nature, leading to not taking care of them and destroying the delicate ecosystems. Just think of extinct species due to man, destroyed forests, global warming, intensive fishing, resource exploitation, land use, and air and water pollution.

Climate change and the relative extreme weather events that bring entire populations to their knees are the most dramatic demonstration of neglect in the management of the balance between man and nature, especially in the last two centuries. Man has not paid attention to resources and has not paid attention to the thousands of species with which he shares his home.

Yet since the 1970s, various approaches to environmental ethics have been born: humanistic ethics; animal welfare ethics; biocentrism, deep ecology, and land ethics; theological environmental ethics which have developed the ethics of eco-justice; community ethics with worrying circles; the ethics of environmental virtues; axiological environmental ethics; political ecology;

the ethics of sustainable development, bioregionalism, and ecofeminism; postmodern environmental ethics; and local ethics.

Probably the error was to empty nature of its intrinsic value, justifying its exploitation with the achievement of a higher value. Human ethics have not considered the importance of natural spontaneous lives but have only thought of well-being for the benefit of human preferences. Environmental ethics takes into account all the life forms of the planet and reassigns to them an intrinsic value that it is up to the human being to protect.

Key Issues

The difficulty today is to be able to establish the ethical limits in bioethics in respect to all the communities interconnected by globalization, considering the different religious beliefs and the multiethnic cultural sensitivities while at the same time covering the road of the future at the same speed with which research and science make discoveries.

At the same time, environmental ethics clashes with the reality of a development model that has caused ongoing climate change.

Future Directions

The scientific discoveries of the last century have been unprecedented and have led to a better life of human being on our planet. The technology and the development of research, especially in the genetic field, have further increased the knowledge available in the medical field.

Globalization has meant that such knowledge was spread rapidly throughout the world as never before had been possible before this century.

The future of bioethics is to always study the benefits and risks of scientific research and to draw attention to those human studies that could often lead to unknown and unprecedented paths without knowing the results.

The future of environmental ethics will instead be that of recreating harmony between man and

nature, within a sustainable development that is the fulcrum of human activities.

Cross-References

- [Confucian Ethics](#)
- [Environment and Ethics in Sustainability](#)
- [Ethical Theories II](#)
- [Ethics](#)
- [Ethics and Ethical Theories](#)
- [Leadership Ethics](#)

References

- Arpaia, S., & Paoletti, C. (2015). Valutazione del rischio degli ogm in europa: principi e obiettivi. pp. 7–11. http://old.iss.it/binary/publ/cont/15_43_web.pdf
- Barcaro, R. (1998). *L'eutanasia. Un problema paradigmatico della bioetica*. Milano: Angeli. https://www.academia.edu/1173013/Eutanasia_un_problema_paradigmatico_della_bioetica.
- Ferdowsian, H. R., & Beck, N. (2011). Ethical and scientific considerations regarding animal testing and research. *PLoS One*, 6(9), e24059. <https://doi.org/10.1371/journal.pone.0024059>.
- Marini, L. (2012). *Diritto internazionale e comunitario della bioetica*. Giappichelli: Torino.
- Platt, J. L., & Bach, F. H. (1991). *Transplantation: The barrier to xenotransplantation*. In *Transplantation*, 52(6), 937–947.
- Rolston H. III (2003). *Environmental ethics*. In Bunnin, N., & Tsui-James, E. P. (Eds.). *The Blackwell Companion to philosophy* (pp. 517–530). Oxford: Blackwell Publishing.
- Stoeklé, H. C., Deleuze, J. F., & Vogt, G. (2019). Society, law, morality and bioethics: A systemic point of view. *Ethics, Medicine and Public Health*, 10, 22–26. <https://doi.org/10.1016/j.jemep.2019.06.005>.

Ethical Tourism

- [Sustainable Tourism](#)

Ethically Based CSR

- [Authentic CSR](#)

Ethics

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Synonyms

[Ethical behavior](#); [Moral philosophy](#); [Morality](#)

Definition

Ethics (often used synonymously with moral philosophy) goes back to the ancient Greek *ethos* (ἦθος; habit, custom, as well as ἦθος; which can be translated as character and manner of mind) (Werner 2021). It can be described as a philosophical discipline that tries to answer the questions of *how should mankind live*, what is *good* and what is *bad* or what is *right* and what is *wrong* (Gewirth 1960). Derived from this, ethics tries to answer the question of which values, beliefs, and motivations underlie people to act in a certain way and what goals are being pursued (Singer 2021). Ethics attempts to answer those questions on an abstract, philosophical level as well as to address everyday human behavior and to establish codes and guidelines for action in sometimes challenging situations (Deigh 2010). Philosophers have been trying to find those answers for millennia, until today without a final, all-encompassing definition. The philosophical debate has rather illustrated the social, political, technical, and religious conditions of the epochs as well as the personal perspectives and beliefs of the philosophers and practitioners, which finally resulted in a variety of approaches and the differentiation of the term.

Introduction

The question of ethics and morality has preoccupied people since thousands of years. The first traditions date already back about 5000 years and originate from Mesopotamian societies.

Later evidence can be found in Egypt and Hebrew communities as well as the famous Greek philosophers, from whom the most detailed discussions of these issues have been handed down (Larue 2000). Perspectives and approaches have changed due to spatial and temporal circumstances and led to different debates and differentiations. Aristotle and Plato, for example, tried to answer the question of what is *good* and what is *bad* in terms of behavior that is virtuous and pursues the goal of a happy life and a clear conscience (Buchanan and Powell 2015). Younger philosophers like Thomas Hobbes, who had a very negative view of human beings, believed that moral behavior only took place on the basis of reason and fear and David Hume on the contrary argues that there are no higher universal ethical principles, but that moral behavior is driven by emotion (Gewirth 1960). With the famous *categorical imperative*, Immanuel Kant tried to find a universal answer on the question of ethical behavior, as well as a practically feasible concept of ethics and moral. Until today his definition is one of the best known and probably most controversially discussed guidelines of ethical action (Johnson and Cureton 2022). Critics accuse Kant's statement as very close to, or even a paraphrase of the *golden rule* which has existed in similar forms in various cultures since thousands of years. Further critics of Kant's maxim argue that supporters of a discriminatory political system, for example, would be perfectly compliant with Kant's principle, but at the same time absolutely unethical in their actions (Werner 2021).

More recent philosophers who have been concerned with the definition of ethics and moral action such as Richard M. Hare came to the conclusion that a universally applicable moral judgment would need to consider all people affected and target their maximum possible satisfaction (Gewirth 1960). Hare was immediately criticized by John L. Mackie who stated that a universal moral judgment needs to consider individual desires and feelings which makes Hare's perspective impossible (Vinten 2015). Unlike ancient examinations, which were often focused on the question for a happy life, today's philosophers pay

greater attention to the issue of justice. Examples are provided by Peter Unger (1996) or Thomas Pogge (2002) for whom ethical behavior is strongly linked to responsibility, solidarity, human rights, and global inequality. Another development which is becoming increasingly important is the practical application of ethics. Applied ethics tries to translate the historical debate into an applicable set of norms for various areas of human activity such as business ethics, medical ethics, etc.

This brief historical review illustrates the scope of the debate on ethics and the challenge to develop a universal definition that embraces different perspectives, opinions as well as temporal and spatial circumstances. This complexity is well illustrated and simultaneously extended by technical innovations such as the world-wide-web or global challenges, for example climate change or the coronavirus outbreak.

The following sub-disciplines help to encompass the entirety of the term ethics (Werner 2021).

1. *Meta Ethics* – is mainly dealing with the origin and meaning of ethical behavior and principles. The main objective is not to explain or justify them, but rather to explore or criticize behavioral norms or attitudes and moral judgments.
2. *Descriptive Ethics* – is mainly dealing with the description of behavior, norms of behavior, and behavior-related attitudes and value judgments.
3. *Normative Ethics* – is mainly dealing with the evaluation, content, and criteria for behavior, behavioral norms, and behavior-related attitudes and moral judgments, either for general norms or specific practical examples.

Applied Ethics – can be assigned to the category of *Normative Ethics*. *Applied Ethics* describes the systematic application of ethical norms and principles of moral behavior in different fields of human activity to provide a framework or a moral map to confront sometimes difficult issues (Singer n.d.). The following examples illustrate this differentiation and practical application.

Business Ethics

Business ethics describes the transfer of ethical principles into business relations and activities such as employee management, protection of environment, and corporate social responsibility etc. On a corporate level it includes the synergy of a company's core values such as honesty, trust, respect and fairness into its policies, practices, and decision-making. It furthermore aims to provide guidelines of what is right or wrong governance and behavior in a business environment. However, due to cultural influences, ethics in organizations varies by society, person, and the condition in which actions are taken. The successful application therefore requires their acceptance by all members as a guiding framework for interaction (Donaldson and Walsh 2015; Ferrell et al. 2019).

Environmental Ethics

Environmental issues and the increasing destruction of nature in most parts of our planet raise various ethical questions, including the ancient issue of the intrinsic value of nature and whether we are obliged to preserve nature for our descendants or if we as humans are responsible for survival of whole species of animals which many are under serious threat or already extinct due to our enormous expansion and extreme consumption of resources. Environmental ethics tries to answer those and other questions and confront perspectives like those of supporters of our growth-driven capitalist symptoms who would probably ask their calculators for the answer (Brennan and Norva 2021).

Animal Ethics Britannica Online

Animal ethics deals with the question, if humans have the right to use animals for their benefit. Historically and in people's minds there still exists the assumption that the status of nonhuman animals is by nature inferior to that of humans.

Derived from such a position it is completely obvious to use animals for entertainment, medicine, fashion, scientific advancement, pets, and food as it has been for years. Since at least the 1970 and the famous publication of *Animals, Men and Morals: An Inquiry into the Maltreatment of Non-humans* by Stanley Godlovitch et al. this perspective is increasingly questioned. Supporters of animal rights are convinced that humans have the moral duty to recognize animals as to have feelings such as fear or joy and therefore deserve to live as they wish (Singer n.d.)

Application for Ethical Correct Acting

A final example which demonstrates the actual relevance of *Applied Ethics* in recent times is the App which supports users to act ethically correct, developed by the Markkula Center for Applied Ethics at Santa Barbara University (2021). It also illustrates the evolution of the use of the term and the alienation from a philosophical discussion of moral action to an unquestioned, bite-size preparation for consumers.

Summary

The term ethics goes back to the ancient Greek word *ethos*, meaning character or manner of mind. However, the history of ethics goes back to the development of human societies. It tries to answer questions such as what is wrong, right, good, bad, or how humankind should behave. Sub-disciplines are meta-ethics, descriptive ethics, normative ethics, and applied ethics.

At its core it is concerned with human values, beliefs, and motivations that determine human actions. Ethical theories were developed by Aristotle, Plato, Thomas Hobbs, Immanuel Kant, Richard M. Hare, John L. Mackie, and others. Consequently, approaches to ethics changed and were extended over time. Today, practical application of ethics can for example be found in business ethics, animal ethics, and ethical correcting action.

Cross-References

- [Business Ethics](#)
- [Core Values](#)
- [Ethical Dilemmas](#)

References

- Brennan, A., & Norva, Y. S. (2021). *Environmental ethics*. Retrieved January 29, 2022, from <https://plato.stanford.edu/archives/win2021/entries/ethics-environmental/>
- Buchanan, A., & Powell, R. (2015). The limits of evolutionary explanations of morality and their implications for moral progress. *Ethics*, 126(1), 37–67.
- Deigh, J. (2010). *An introduction to ethics*. Cambridge University Press: Cambridge
- Donaldson, T. J., & Walsh, J. P. (2015). Toward a theory of business. *Organizational Behavior*, 35(1), 181–207. <https://doi.org/10.1016/j.riob.2015.10.002>.
- Ferrell, O. C., Harrison, D. E., Ferrell, L., & Hair, J. F. (2019). Business ethics, corporate social responsibility, and brand attitudes: An exploratory study. *Journal of Business Research*, 95, 491–501.
- Gewirth, A. (1960). Meta-ethics and normative ethics. *Mind Association*, 69(274), 187–205.
- Johnson, R., & Cureton, A. (2022). *Kant's moral philosophy*. Retrieved January 29, 2022, from <https://plato.stanford.edu/archives/spr2022/entries/kant-moral/>
- Larue, G. A. (2000). Ancient ethics. In P. Singer (Ed.), *A companion to ethics* (pp. 29–40). Blackwell Publishers. Oxford Singer: Oxford
- Markkula Center for Applied Ethics. (2021). University of Santa Barbara. Retrieved January 29, 2022, from <https://www.scu.edu/ethics/ethics-resources/a-frame-work-for-ethical-decision-making/>
- Pogge, T. W. (2002). Moral universalism and global economic justice. *Politics, Philosophy & Economics*, 1(1), 29–58. <https://doi.org/10.1177/1470594X02001001002>.
- Singer, P. (Ed.). (2000). *A companion to ethics*. Blackwell Publishers.
- Singer, P. (2021). *Ethics*. Retrieved January 29, 2022, from <https://www.britannica.com/topic/ethics-philosophy>
- Singer, P. (n.d.). *Applied ethics*. Retrieved January 29, 2022, from <https://www.britannica.com/topic/ethics-philosophy/Applied-ethics>
- Unger, P. K. (1996). *Living high and letting die: Our illusion of innocence*. Oxford University Press: New York
- Vinten, R. (2015). Mackie's error theory: A Wittgensteinian critique. *Revista Kinesis*, 7(13), 30–47. <https://philarchive.org/archive/VINMETv1>
- Werner, M. H. (2021). *Einführung in die Ethik*. J. B. Metzler Verlag: Berlin

Further Reading

- Darwall, S. (1998). *Philosophical ethics*. Boulder: Westview Press.
- Moore, G. E. (1903). *Principia ethica*. Dover Publications: Mineola
- Singer, P. (Ed.). (2000). *A companion to ethics*. Blackwell Publishers.

Ethics and Compliance Committee

- [Board Committees and Corporate Governance](#)

Ethics and Ethical Theories

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Definition/Description

Ethics is one of the philosophical disciplines concerned with understanding human behavior in the context of morality. Sometimes ethics is also called moral philosophy. Concerning method, ethics can have a descriptive method in which “that what is” is described in the context of human moral behavior and a normative method in which “that what should be” is at the center. Ethics as a philosophical discipline has various goals, but they can be listed as follows: understanding human action in the moral context and providing guidelines on human morally right action. Ethics meets its goals in several ways: (1) by providing a description of human action, (2) by helping to understand the essence of human action in regard to moral qualities, (3) by providing guidance for decision-making in

order to act in a morally correct way, and (4) by providing insight in what is considered to be specifically humane way of acting. In the course of history, three most influential normative ethical theories are virtue ethics, duty ethics, and consequentialist ethical theories.

Introduction

Human beings are forced to make decisions in their lives; even abstaining from making a decision is a decision. In most situations, there are already guidelines, experience, rules, role models, or habits which can help in making a decision, but every once in a while, there is no apparent help provided from any of the sources on what to do and what is the right decision. In such cases, ethics should help people make better decisions or at least minimize the risk of making poor decisions.

Ethics in one part, surpasses purely academic discussion on morality and moral judgments because moral decisions are part of everyday human life and they are also reflected in common questions such as “What should I do?” On the other hand, the philosophical discipline of ethics is a science about morals, and it deals with human action and character. Morals are a collection of basic rules and ways of acting which specific society deems as appropriate and proper. Ethics is also sometimes called moral philosophy. It is important to emphasize that the results of this kind of research do not stop purely on the academic level but are expected to be disseminated to everyday situations. Due to all this, ethics is a practical philosophical discipline.

Generally saying two approaches can be used when discussing morality. One approach is so-called normative ethics which tries to describe human action from a moral perspective. The second approach is normative ethics where criteria for moral decision-making are being offered and where universal moral systems are being developed.

Freedom as a Necessary Condition for Moral Responsibility

One of the presupposing conditions that have to be in place in order to discuss the morality of one's actions is that the agent acting is free. Freedom in this sense can be understood in two different ways: internal and external freedom. Internal freedom means that people are capable of rational thought and are aware of their actions. In other words, they are not internally obstructed in deciding their action, e.g., due to illness, addiction, or similar. On the other hand, external freedom means that people are not forced to act or that their actions and decisions are not obstructed in any external way. Examples of external obstruction might be being physically restrained or threatened. If the condition of freedom is not fulfilled, people should not be held morally responsible for their actions.

Descriptive Ethics

Descriptive ethics describes the behavior of human beings, their beliefs, and their values. Also, this kind of approach tries to find answers to questions such as: What is the source of morals? What is the nature and status of moral statements? Can morality be rationally established? In short, descriptive ethics deals mostly with what things “are.” In this approach, the state of things and specific facts about morality are mostly in focus. Prescribing moral rules or telling others what kind of persons they are should usually be avoided. A particular subpart of descriptive ethics is called metaethics. As part of metaethics, the true nature of morals is sought by analyzing the contents of moral statements. Generally saying, descriptive ethics is an essential way of describing and thus improving understanding of moral situations, rules, and solutions.

The primary difference between normative and descriptive ethics is that normative ethics does not deal with what things are. Instead, it tries to prescribe “what should be.” The goal of normative

ethics is establishing a universal system of morality. That means that (1) it is acceptable for all people (or even for all rational beings) and (2) is objective. For systems which have these two characteristics, it is also possible to have enough authority to compel people to follow them.

Normative Ethics

Three great traditions or theories in normative ethics are virtue ethics, duty ethics, and consequentialist ethics. What is similar to all three is that they start from the idea that it is possible to establish morality rationally. This approach is called cognitivism, and the attitude is that it is possible to know the truth about the “real” system of morality and to give universally acceptable reasons for it. All three theories have the same goal and that is to establish a universal system of morality.

Virtue (Aretaic) Ethics

The oldest ethical theory posits human excellence or virtue at its center. Ancient Greek philosophers such as Socrates, Plato, and Aristotle belonged to this tradition. Generally saying, it is with the ancient Greek philosophers that ethics as a philosophical discipline started. Socrates is considered to be a founder of philosophical ethics, while Aristotle is the first one who made it into a system, created the terminology, and called it “ethics.”

The main line of questioning that virtue ethics is concerned answering is questions related to virtues. For example: What kind of a human should I be? What kind of human do I wish to be? What kind of a human being should I be in order to fulfill the need I have as a human? It might be said that, as a part of this tradition, it is more fundamental to “be good” and then to “do good.” Emphasis is on the agent performing the act, and not so much on the act itself. In the virtue ethics framework, human character supersedes human actions. Because of that, the basic question is not “What should I do?.” Instead, the basic

question is “What would a good man do in a situation like this?” Knowing what someone good would do helps and directs the behavior of others. Being virtuous means being good. Ethicists working in this tradition created a list of virtues that people should have. For example, Aristotle emphasized wisdom, courage, temperance, and prudence. These lists do not have to end at four virtues. List-making activities can get out of hand. For example, some philosophers counted as many as 100 virtues that a person should have.

Every ethical theory has its positive and negative aspects. A downside to virtue ethics is found in mentioned lists of virtues that supposedly every human being ought to have. Such a list in a hierarchical fashion still does not exist. It seems that in order to create such a hierarchical list of virtues, there should be one principle which would determine the place of every virtue on that list. If such a principle wants to be implemented, it has to be borrowed from some other ethical tradition. So, if the situation calls for judgment between two or more virtues which can be manifested, it is not easy to know which one should come first, which one after that, and so on. Another negative side to virtue ethics is that it does not give a list of actions which are not allowed at all or are bad in themselves (e.g., murder or treason). So technically, if a good person commits treason, that act is not bad in itself. Such thinking goes against common moral intuition. On the other hand, on the positive side, it seems that this ethical tradition takes into account the complete human being and strives to provide answers to questions such as who we are and who should we be. At the same time, it keeps in mind the quality of human beings, our needs, wants, and the meaning of life and at the same time emphasizing virtues, education, and practice.

Duty (Deontological) Theory

Deontological theory points out that we are obligated to do certain things no matter what. For example, like Immanuel Kant, one of the representatives of this theory would say, we always have to treat another human being as a goal and

not as a means to an end. The most important thing is that this theory supposes that some actions are wrong in themselves, and we should not act like that. On the other hand, some actions are right, and we are obligated to do them no matter what.

While virtue theory searches for the list of virtues which are necessary to have in order to be a “good person,” deontological ethics emphasizes duty as the main criteria for making moral decisions. Probably the most influential theory in this tradition was created by a German philosopher, Immanuel Kant. Kant’s theory is best described through the categorical imperative. Kant’s categorical imperative, in one of its formulations, states the following: “act only by that maxim through which you can at the same time will that it becomes a universal law.” Let us imagine a situation in which two ethical rules state something exactly opposite as the right thing to do. The first rule states: It is morally right to speak the truth. The second rule states: It is morally right to lie. What would happen if the second rule is made universal, and not the first one? First, let us look at what makes lying possible. Lying, as an act, is possible only if a minority of people does it. If everybody told lies all the time, it would be impossible to believe anything anyone said. Lying would be made practically impossible because everybody would expect a lie. If an ethical rule “it is morally right to lie” is lifted to the status of a universal law, the consequences would be that the act of lying would be impossible. If so, then lying is not morally permissible.

Negative sides of deontological theories are that they are often too formalistic, and there is a possibility for conflict of duties. One example could be to keep a promise to a co-worker (keeping promises is a duty) even if that means that someone might lose a job because of our actions (not harming others is also a duty). It is possible that sometimes we cannot resolve the conflict among two or more duties or that sometimes actions, which we are obligated to do, have negative consequences. On the upside, duty ethics gives a strict list of allowed and prohibited duties which are more or less aligned with our everyday

moral intuitions. Besides, it also frequently provides answers to doubts when we are in no position to foresee the consequences of our actions. Last, it allows us to overcome human weakness by putting forward duties which have to be upheld no matter what other factors outside of our control might be involved.

Consequentialist (Teleological) Theory

In the consequentialist ethical tradition, there is only one criterion for deciding if something is right or wrong action. That deciding element is the consequence(s) purpose of that action. In said tradition, the action is right if its consequences are good. For consequences to be good, it usually means that they increase the amount of good in the world. The most influential theory in this tradition is utilitarianism where “good” is being understood as “utility” which in turn equals “happiness.” Two most well-known proponents of such a theory are Jeremy Bentham and John Stuart Mill.

Common to all utilitarian theories is the so-called principle of utility formulated by Jeremy Bentham. The principle states: “By the principle of utility is meant that principle which approves or disapproves of every action whatsoever, according to the tendency it appears to have to augment or diminish the happiness of the party whose interest is in question: or, what is the same thing in other words, to promote or to oppose that happiness.” (Bentham, 1789).

There are further divisions in this strategy depending on the content of what is perceived as good, or good for whom. For example, a wanted goal might be a physical pleasure (physical hedonism) or mental pleasure (intellectual hedonism). It can also be a pleasure for the individual (ethical egoism) or the collective (ethical universalism or utilitarianism).

The main issue put in front of such strategy is that if the ultimate criterion is a consequence of one action, this might lead to the idea that means are justified by presumed good consequence. In this sense, it might be possible that, for example,

	Virtue theory	Duty theory	Consequentialist theory
Representatives	Socrates, Plato, Aristotle	Immanuel Kant	Jeremy Bentham, John Stuart Mill
Basic question(s)	What kind of a human should I be?	What should I do?	What outcome do I want to achieve?
Notable ideas	Man's character supersedes man's actions so the basic question is not what I should do, or which moral law should I follow, but what would a good man do in a situation such as this.	We are obligated to do certain things no matter everything else.	Actions are right if their consequences are good, i.e., if they increase the amount of good in the world.
Emphasized	Agents	Acts	Goals

Ethics and Ethical Theories, Fig. 1 Overview of three great traditions of normative ethics

theft and hard work were both morally worthy if they were to lead to the same consequence. Besides this, it is often hard to predict the precise consequences of our actions. On the positive side, these theories avoid the conflict of duties or the nonexistence of a hierarchical list of duties. Having only the consequence in mind helps to make decision-making a lot easier (Fig. 1).

Cross-References

- [Confucian Ethics](#)
- [Ethics](#)
- [Utilitarianism](#)

References

Bentham, J. (1789). Introduction to the principles of morals and legislation. In J. Bowring (Ed.), *The works of Jeremy Bentham* (pp. 1838–1843). New York: Russel & Russel.

Ethics in Sustainability Education

- [Ethics of Sustainability Education](#)

Ethics Management

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Synonyms

[Business ethics](#); [Management of ethics](#); [Managing ethics](#); [Managing the ethics](#); [Organization of ethics](#); [Organizing ethics](#)

Definition

Ethics management is different from ethical management or ethics of management, being synonymous with management of ethics. It is a part of management that deals with providing an ethical climate in organizations, both public and private, using specific tools such as ethical codes, ethical committees, ethical hotlines, whistleblowing procedures, ethical audit, and ethical trainings. Kaptein (2012, p. 42) defines it as “the systematic and coherent development of activities” meant to fulfil the stakeholders’ expectations. The author

highlights that ethics management is about organization of ethics and could be seen both as “discipline and practice.” The practical aspect of ethics management is also mentioned by Menzel (2012, p. 13) that considers the four components of ethics management: “hiring, performance, training and auditing.” These components imply that ethics management is used only by managers, but the principles and the tools of ethics management should be known and applied by all employees in an organization. For example, having whistleblowing procedures in a company is part of ethics management, but these should be beneficial for both the employers and the employees, being meant to maintain an ethical climate inside the company and a good image and reputation in the community. Trevino and Nelson (2010, p. 208) attribute the importance of ethics management to the “media attention to scandals in American business” because there is a strong connection between ethics management and preventing wrongdoing in a company, thus avoiding the image deterioration. More and more consumers buy products and services from the companies that are perceived as having an ethical climate.

Introduction

Ethics management has specific tools used to prevent wrongdoing in an organization. The efficiency of these tools depends on the communication strategy of the company. If there is a good ethical code but this is not properly disseminated to the employees, the efficiency is affected. Ethics management has numerous benefits, creating loyalty among the employees, contributing to a better image and thus attracting consumers, and reducing the number of ethical problems in the company. As Alford and Bebensee (2010, p. 91) state, ethics management reduces “the likelihood of violations and improve the image of the firm.” According to Laasch and Conaway (2014, p. 140), “ethics management tools are managerial means by which to improve ethics performance.” It is useful to understand the role played by ethics management, the authors

highlighting the connection with a company’s performance. Menzel (2010, p. 51) appreciates that ethics management tools “range from soft” measures (e.g., “exemplary leadership”) to “more concrete measures” (e.g., ethical audits and trainings).

Ethics Management Tools

Ethical Codes/Codes of Conduct

The most known and used tool by the companies is represented by ethical codes or codes of conduct. There are different terms used for these: codes of conduct, ethical codes, ethics codes, codes of ethics, and ethics codes of conduct. According to Collins English Dictionary (www.collinsdictionary.com/dictionary/english/ethical-code), the “ethical code is a set of moral principles used to govern the conduct of a profession,” and according to Merriam-Webster dictionary (www.merriam-webster.com/dictionary/code%20of%20ethics), the code of ethics is “a set of rules about good and bad behavior.” Both definitions have in common the set or rules or moral principles, but the latter is more comprising, not being limited to a specific profession. And the reality of business ethics nowadays shows us that these codes govern all activities and behaviors in an entity, be it public or private. These codes bring numerous benefits for companies, but with a few conditions. First, these codes should be communicated to all the employees and managers in a company, otherwise even if a code is very good and complete, the advantages will not be seen in practice. Mika (2010, p. 37) highlights that codes of ethics are “ineffective and not useful for corporations” when there is a “wrong implementation” of them.

But if these codes are well disseminated, they contribute to creating a more ethical climate inside the organizations and improve its image among consumers, thus creating loyalty. The main aim of ethical codes is to prevent bad behaviors or as Gilman (2005) states, to “guide behavior,” but there should also be some punitive measures against these behaviors if they occur. These codes are for people who “want to act ethically,” because bad people are not interested in the rules

included in such codes. Slobodkin (1993, p. 337) appreciates that some codes are better than others because they “eliminate as many dilemmas as possible.” Communication is another important element of a good code of ethics.

Ethical Committees

Another important and very frequently used tool by companies is the ethics or ethical committee. This is “a formal group of individuals . . . ensuring ethical decision-making in an organization” (McDonald 2014, p. 396). So, the main aim is similar with that of ethics codes of conduct with the exception that this is a body that applies the punitive measures against wrongdoing, if there are violations of the moral rules stated in the codes.

Unfortunately, there are both public and private entities that fail with the prevention characteristic of ethics committees, these meeting only after something bad has happened. As with ethical codes that have to be communicated to all employees, ethical committees should meet on a regular basis in order to efficiently prevent bad behaviors. An ethical committee should have a structure that offers a voice to all the parties involved in the organization’s activities (employees, owners, managers, customers, shareholders, and ethics experts). According to Deloitte (2014, p. 7), the main goal of this committee is to “ensure that the company behaves like a responsible corporate citizen” and covers all areas (sustainability, the environmental and social impact, the safety of the working place, and fair relations with all stakeholders).

The main responsibilities of these ethical committees are – ensure a proper communication of the values and rules included in the ethics code, offer guidance for the employees that are facing an ethical dilemma, create a space for debates on ethical matters, discuss ethical violations, apply punitive measures against those who violated the rules in the ethical code, create the possibility for employees to use ethical hotlines safely, without retaliation against them, communicate periodically about the cases brought to its attention, and revise ethical codes if they are incomplete or outdated.

Ethical Hotlines and Whistleblowing Procedures

These tools are related in most cases, because for ensuring anonymity to whistleblowers (those employees that reveal wrongdoing in a company), there is a real need to offer a dedicated ethical hotline. But these ethical hotlines can also be used by those employees who have an ethical dilemma and do not want to reveal themselves. Ethical hotlines can be extended to other means of communication such as a dedicated e-mail or a mail-box. The main goal of this tool is to increase the ethical climate of the organization, to prevent wrongdoing, to reduce the number of ethical problems, and to protect whistleblowers from retaliation. Sometimes, for confidentiality reasons and for the employees to feel safer, these hotlines are outsourced to a company specialized in these matters. Even if the main target is represented by the employees, the companies’ business partners can also use them, thus increasing the trust between companies and ensuring a clean business environment.

Whistleblowing procedures are meant to protect whistleblowers from retaliation, and they should be included in a good ethical code. For efficiency, these procedures should be communicated to the staff, otherwise the employees will not feel safe to reveal the wrongdoing. These tools (ethical hotlines, whistleblowing procedures) should be correlated with the other tools used in ethics management in order to be efficient (ethical codes, ethical committees, and ethical trainings) and included in the company’s strategy.

Ethical/Ethics Trainings

According to Kaptein (2012, p. 166), an ethics training is meant to “improve and safeguard the ethics of an organization.” Usually, these programs are conducted by ethics experts from outside the company that help the employees to be better prepared to cope with ethical dilemmas they are facing at work. The main functions of ethics trainings are – to communicate the ethics codes of the company to the employees and have a debate on it, to analyze real case studies involving ethical issues, to have interactive meetings with the employees in order to adjust the

program to their needs, and to have Q&A sessions to explain them how to deal with their problems and how they can reveal wrongdoing without retaliation. Liao and Teng (2010, p. 16) conducted a research and they concluded that “ethics training leads to higher employee satisfaction,” so this tool of ethics management provides many benefits for the company: a more ethical climate and more satisfied and productive employees. Even if these ethics trainings are good, if the employees do not treat them seriously, they do not aim their target, so the company’s manager should make the employees understand their importance.

Ethical/Ethics Audit

This is a tool that provides a “systematic evaluation of an organization’s ethics program and performance to determine whether it is effective” (Ferrell et al. 2009, p. 233). These tools, in order to be efficient, should be regularly conducted. The ethics audit can be internal and external, both with advantages and disadvantages. The internal audit is conducted by someone inside the company, specialized in ethics, having the advantage of being very well informed of the company’s problems, but also the disadvantage of being too subjective. On the other hand, the external specialist that conducts the ethics audit is more objective but might not have the full picture on the company’s problems.

As the other tools of ethics management, ethics audits are helpful because they lead to a cleaner environment in the company, improve the company’s image, and build trust and loyalty with the customers, the partners, and the employees. The audits help the company identify the weaknesses and implement a strategy for having a more ethical climate.

Summary

Ethics management is an important area of management and should be implemented by all organizations, both public and private. Its tools (ethics codes, committees, audits, trainings, and whistleblowing procedures) have to be

communicated to all the parties involved in the company’s activities (employees, customers, and business partners) and made public (on the company’s website or social media channels and in annual reports). This communication strategy combined with ethics management will help the company to build a strong image in the community, showing that it is a socially responsible organization. An ethics code will be effective if it includes all the problems met by the staff at their workplace, an ethical training will be successful if the employees will be active and involved in Q&A sessions, and ethics hotlines will help whistleblowers to reveal the wrongdoing if they ensure anonymity. In order to be efficient, all tools should be implemented with the employees’ participation.

Cross-References

- Ethical Dilemmas
- Whistleblowing

References

- Alford, J. M., & Bebensee, M. A. (2010). Managing workplace ethics can generate competitive advantage. *Journal of Business & Economics Research*, 8 (1), 87–92.
- Deloitte. (2014). The social and ethics committee and the Management of the Ethics Performance of the company. Retrieved from www2.deloitte.com/content/dam/Deloitte/za/Documents/governance-risk-compliance/ZA_SocialAndEthicsCommitteeAndTheManagementOfEthicsPerformance_04042014.pdf
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2009). *Business ethics: Ethical decision making and cases* (7th ed.). South-Western: Cengage Learning.
- Gilman, S.C. (2005). *Ethics codes and codes of conduct as tools for promoting an ethical and professional public service: Comparative success and lessons*. Retrieved from www.oecd.org/mena/governance/35521418.pdf
- Kaptein, S. P. (2012). *Ethics management: Auditing and developing the ethical content of organizations*. Kluwer Academic Publishers.
- Laasch, O., & Conaway, R. N. (2014). *Principles of responsible management: Global sustainability, responsibility, and ethics*. Cengage Learning.
- Liao, W. C., & Teng, M. Y. (2010). The relationship between ethics training and employee satisfaction: A mediator of corporate responsibility practices. *The*

Journal of Human Resource and Adult Learning, 6(1), 9–18. Retrieved from www.hraljournal.com/Page/2%20Wen-Chih%20Liao.pdf.

McDonald, G. (2014). *Business ethics*. Cambridge University Press.

Menzel, D. C. (2010). *Ethics management for public administrators: Building organizations of integrity*. M.E. Sharpe.

Menzel, D. C. (2012). *Ethics management for public administrators: Leading and building organizations of integrity* (2nd ed.). M.E. Sharpe.

Mika, A. (2010). *The importance of codes of ethics*. Master Thesis. Diplomica Verlag GmbH.

Slobodkin, L. (1993). The complex of questions relating evolution to ethics. In M. H. Nitecki & D. V. Nitecki (Eds.), *Evolutionary ethics*. SUNY Press.

Trevino, L. K., & Nelson, K. A. (2010). *Managing business ethics* (5th ed.). Wiley.

Websites

www.collinsdictionary.com/dictionary/english/ethical-code

www.merriam-webster.com/dictionary/code%20of%20ethics

Ethics of Adversaries

► Adversarial Ethics

Ethics of Climate Change

► Climate Ethics

Ethics of Sustainability Education

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Synonyms

[Ethics in sustainability education](#)

Definition

Ethics of sustainability education (see ► [Ethics](#); ► [Sustainability Education and Environmental Awareness](#)) is not a definite concept nor does it have a clear definition. It could be understood in at least three ways. First, it could denote that *ethics* is the focus of *sustainability education*, that is, sustainability education emphasizing ethics, for example, through sustainability focused learning content, or critical ethical teaching or learning processes. Second, it could mean an *educational* view of *sustainability ethics*, or the search for educational tools to promote the ethics of sustainability. The first and second interpretations are overlapping and indistinct, and both could be either a content or a methodical choice, or both (see Dahl 2015; Valera and Preece 2020). Third, the ethics of sustainability education raises questions about the ethical concerns that appear when implanting the issue of sustainability through education, which means that the third definition is interested in the *intrinsic ethical dilemmas* related to *sustainability education*. This third view is thus primarily theoretical and reveals that sustainability can be implemented in various ways in education, dependent on the degree of normativity in the educational practice (Wolff 2011, 2020). Increasingly, the role of education in relation to sustainability is seen as a tool for transformation, but transformation as a learning process (see ► [Transformative Learning](#)) is complicated and sometimes questionable. Therefore, sustainability education needs to be discussed from an ethical view. In that discussion, all three definitions above are interconnected, even if the last is the most crucial.

Introduction

The signs of global climate change (see ► [Climate Change](#)) have become increasingly visible, and weather changes take place frequently and suddenly. This happens even in unexpected places causing tremendous disasters for people and other parts of nature (NASA 2021; Swain et al. 2020). Consequently, biodiversity (see

► **Biodiversity**) is declining, and human migration is increasing, because of extreme weather circumstances (McCoy et al. 2014). The COVID-19 pandemic has also shown that sudden dangers may turn up and change human life independent of where people live and how much they earn (UN DESA 2021). However, the extent of these jeopardies is not the same everywhere nor for all world inhabitants, and neither are the implements for handling the risks. In this situation, political measurement like footprints (see ► **Ecological Footprint**, ► **Carbon Footprint**), planetary boundaries, and payments for ecosystem services are not enough; they may even be deceptive. The measurements are not apolitical or uncontroversial (Smith 2019). Since they only count physical limitations, they easily neglect the social and cultural margins (Butler 2017; Fricker 2002; Smith 2019) or forget to see the power (see ► **Power Equalizing**) structure this counting is trapped in (Smith 2019). Butler (2017, p. 59) argues that “humanity needs to appraise its stocks and prospects, environmentally and socially; the threats civilization faces are far higher than most experts and governments acknowledge.” The climate change dilemma requests consideration of what human life is aiming for, and ethics has a central role in that debate (Gardiner 2010).

When instrumental methods fail, the underlying ethical perspectives appear. Unequal conditions especially create ethical matters (Banks 2020) but also ecological matters. Therefore, more and more voices are asking for a paradigm shift for new values and altered economic, social, and political ideologies (see, e.g., Becker 2011; Biermann 2021; Kallis 2011; Wolff 2020). The United Nation’s 2030 Agenda and the SDGs (see ► **Sustainable Development Goals (SDGs)**, ► **Sustainable development**), like many other education policy documents, request change and transformation, and they also address education (UN 2015). Researchers increasingly ask for sustainability education that is transformative and interdisciplinary, even transdisciplinary (see ► **Transdisciplinary Learning**) (Baumber 2021). Therefore, an ethical perspective on sustainability education is crucial, but the question is how and to

what extent education can contribute to the changes the alarming unsustainability situation calls for.

All since the 1970s, education has been regarded as an important tool to contest the challenges of unsustainability, but the methods are ambiguous and the theory base is vague. The empirical studies do not consider who learns about what and why – learning just seems to happen. Researchers studying sustainability transition seldom refer to learning built on in-depth learning theories (Gerlak et al. 2018; Van Mierlo et al. 2020). To propose education as a rescuer of a globe in crisis might overestimate how far or deep education can reach, at least if education remains unchanged. Even if education has an urgent role, it is questionable whether unaided it can make the world sustainable. The education systems may even reinforce unsustainability.

The definition of “ethics of sustainability education” at the beginning of this text is tripartite. Since all three ways of understanding ethics of sustainability education are intertwined, all of them will be discussed in the sections that follow. However, emphasis lies on the third description, the intrinsic ethical dilemmas (see ► **Ethical Dilemmas**) that relate to sustainability education. Ethical discussion starts with some background on how ethics could be interpreted in that context.

Ethics

Ethics, or moral philosophy, is one of the main branches of philosophy and is concerned with understanding human behavior in the context of morality and, thus, with what are morally right or wrong conduct and good or bad characters (some philosophers treat “ethics” and “morals” as distinct) (e.g., Banks 2020). Ethics has most often dealt with human relations and human welfare, but according to Banks, ethics also includes the welfare of animals and whole ecosystems. Ethical reflections include meta-, descriptive, and normative perspectives (Banks 2020). Metaethics problematizes the meaning and utilizing of moral concepts and the justification of moral judgments. Ethics deals with theories of moral values and

provides guidelines for action, whereas normative ethics considers the rules of conduct.

Examples of *ethical questions* are as follows: How should we live? What shall we aim at? Is it right to be dishonest if the aim is good? In connection with sustainability issues, ethical questions are as follows: Is it just to live a wealthy life while others are starving? Is it wrong to clone humans or to use animals in medical research? Do animals have rights? Is it right that people in countries with weaker legislation when it comes to protecting nature and securing labor rights produce food and equipment to be consumed in richer countries? Very difficult ethical questions are as follows: Which obligations does this generation have to future generations? How can people living now defend the rights of those not yet living?

Ethics is often discussed in relation to *values* (see ► [Value](#), ► [Value Creation](#)), but the two concepts, ethics and values, are not synonyms. Whereas ethics is a set of rules governing the behavior of a person, values refer to the beliefs which a person has a lasting preference for, or in other words the degree of importance of something. Value theory “concerns which things are good or bad, how good or bad they are, and, most fundamentally, what it is for a thing to be good or bad” (Hirose and Olson 2015, p. 1). Both ethics and values are central when discussing sustainability issues.

For ages, it has been tempting to create *ethical theories* as guidelines for decisions. The main ethical theories are *consequentialism*, *deontology* (duty ethics), and *virtue ethics* (see ► [Ethical Theories II](#)). These are all mainly based on Western philosophy, which turned out to be limited, overlooking other views and moral concepts (Wareham 2017). Even if the Western theories are extensive, they are not diverse enough to include moral ideas from the entire world and are not always suited to producing sustainability outlooks.

Sustainability and Ethics

Sustainability is intrinsically related to ethics, and ethics is central both to individual and at the social

level (Becker 2011; Kibert et al. 2011). Sustainability ethics covers humans’ relationships with others of their own species and their relationships with other species and to nonliving nature. In addition, sustainability ethics includes not yet living creatures and other parts of nature under circumstances that no one can even imagine.

Ethical traditions shape people’s thinking and acting and are context dependent. Therefore, other cultures and their ideas have to be heard in the sustainability debate. In addition to Western cultures, African, Asian, Eastern European, and a great number of indigenous people’s conceptions of the world also have to be acknowledged in the sustainability discourse (e.g., Callicot 2014; Wareham 2017). Several more ethical theories than the three already mentioned have emerged since the middle of the twentieth century, like deep ecology and new materialism giving non-human nature a central role. Arne Næss, who was influenced by the thoughts of Gandhi and Spinoza, was the builder of *deep ecology* or what he called *ecosophy*. Deep ecology sees humans as integrated parts of a nature and is a distinction to *shallow ecology* with a tendency to regard humans as superior to the nonhuman world. In addition, Næss (2003) emphasized comprehensible thoughts and actions and did not think about environmentalists as reliable educators if they hide what they believe in, since morality involves controlling physical and mental desires. When mastering their desires, people have reached self-knowledge and thus happiness. Gandhi (1938) calls this *Swaraj*.

Other branches of ethics are ecofeminism, stressing the connection between the domination of women and nature, environmental pragmatism with a strong practical interest (Palmer et al. 2014), and care ethics emphasizing care about other humans as well as nonhuman nature (Johns-Putra 2013). The feminist Karen Barad (e.g., 2003) has initiated a post-humanistic ontology emphasizing that humans are not externally “in” nature but active “parts” of nature like other (nonhuman) material agents. “We do not obtain knowledge by standing outside of the world; we know because ‘we’ are of the world” (Barad 2003, p. 829). In contemporary philosophy, worldviews

prioritizing individuals and their self-realization prior to collectives or nonhumans increasingly meet critique (Callicot 2014; Johns-Putra 2013). Likewise, voices stressing the neglecting of future creatures become louder.

Ethics as the Focus in Sustainability Education

In the policy document *Our Common Future*, sustainable development is defined as a development that “meets the needs of the present without compromising the ability of future generations to meet their needs” (UN NWCED 1987, p. 16). According to this definition, contemporary society members are responsible for people living now as well as of future generations. The present generations are not allowed to deprive coming generations from the necessities they might need to live a good life (Kibert et al. 2011). This calls for vast changes in thinking, policies, and economic assumptions, since many world inhabitants already lack essentials. Low-income countries face pressing problems and may be unable to afford to care for anything other than the present. Furthermore, future generations of poor countries are likely to be among those hit hardest by climate change and environmental degradation. Therefore, people in high-income countries have an obligation to care for the most vulnerable and their future. The now living humans also need to realize essential changes in their existence to prevent future humans from suffering and enable them to have a humane life and fulfill basic human needs. It is a huge challenge in terms of human rights, to ensure the future generations the same opportunities as the present generation (Bos and Düwell 2016). When opening these kinds of issues for the students to reflect on and discuss, the complexity of the entire sustainability problematics becomes visible.

In the book *Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability*, Shilling (2018, p. 3) proposes ethical questions. They could build a good framework for ethical discussions in a sustainability education context:

Something should be sustained, but what? The planet’s non-renewable resources, South America’s economy, or a privileged country’s lifestyle? And for what purpose? To aid developing nations, grizzly bears in Montana, Indigenous peoples, or a Fortune 500 company? And underneath it all, who gets to answer those questions?

From an ethical perspective, sustainability education must encourage critical understanding and engagement in all the dimensions of sustainability, from ecological to social justice values (Dahl 2015). Ethically based sustainability education has to uncover prejudices and norms that regulate human actions. In addition, it encourages students to think independently, to question deep-rooted principles and power constellations in the social contexts they are part of, and to overthrow generally defended arguments (Wolff 2011). Sustainability education develops the students’ ability to analyze critically, discuss, find alternatives, choose and decide, and creatively go beyond previous knowledge and understanding. This acknowledges that sustainability education is more than content knowledge within the various disciplines and recognizes that its holistic and transformative nature depends on students developing a sense of agency and empowerment. Besides cognitive skills, sustainability engages emotions and embodied experiences. That is, students not only learn to understand but also to act sustainably. Students have much to bring to the learning situation themselves, sometimes more than the teachers. Sustainability calls for student-centered methods, encouraging the students to become active collaborative learners in dynamic learning environments without clear limits between teachers and learners (Jeronen et al. 2017).

An Educational View of Sustainability Ethics

From an educational view, ethics have to do with how and what to plan, teach, and learn about moral sustainability-related issues. Therefore, it includes the objectives, the learning content, the methods, and process evaluation. Understanding

the enormous challenge of human-induced climate change and its effect on human societies is a relevant and illustrative example of a complicated educational issue (e.g., Skarstein and Wolff 2020). The climate change dilemma requires both humans with deep scientific knowledge and understanding of how humans influence the climate. To understand the dilemma in all its complexity demands knowledge from many disciplines.

Yet, learning of sustainability ethics-related issues not only demands cognition but also emotions and embodied learning. Sustainability is a human challenge related to political and cultural issues initiating not only questions about the past and the presence but also very tricky questions about the future. This strongly relates to ethics.

According to Hamilton (2017), it is problematic that humans use their autonomy without responsibility. He calls for an alternative attitude to nature, which would be built on a thorough understanding of power and responsibility. He wishes to take a cognitive leap that is a shift from primarily focusing on humans and their culture to a focus on the Earth's systems and on how humans influence these systems. Hamilton wants humans to learn to reflect on the limits of the planet, instead of concentrating on fulfilling their own egoistic dreams.

Since ethics are shaped in collaboration, education focusing on ethics and values flourish in an open all-inclusive process, in which mutual viewpoints promote growth and learning (Strahovnik 2017). The sustainability issues become ethical topics and are addressed in various subjects both inside the learning institutions and in cooperation with external partners. To help the students adapt to sustainability, the learning institutions need to implement sustainability comprehensively and convincingly, which means they have to act as sustainability models at a whole institution level (Wals 2020). Sustainability needs to become a motto or ethos not only in education but also in the managing of educational institutions and in their interactions with the rest of

society (Wolff and Ehrström 2020; Zilliacus and Wolff 2021).

Intrinsic Ethical Dilemmas Related to Sustainability Education

Similar to other social fields, education is not neutral but closely entangled to myriad political and economic systems. To make a difference, education needs new foundations. At this point, the main contemporary educational questions are as follows: What is the most crucial role of education today, and what will it be in the future? How can education best prepare people for present and future challenges? Answers on these and other current educational questions need reflective ethical considerations. A profound change from valuing profit to prioritizing the future of the planet is a transformation built on ethics. In such a process, ethics also has to be the core of education. When education is the core, a new question emerges: What education is intrinsically ethical?

In educational contexts, ethics can play a role as both a method and an aim. When ethics implies a method, it activates the learners morally and encourages them toward a transformation that may even be unpredictable. However, if ethics is taught as a preset aim, sustainability becomes a norm. With sustainability as a fixed aim, the educators transmit their view of what sustainability is or ought to be and have a clear picture of what competencies the students need or which goals the students have to reach. As an alternative, the teacher gives the students an opportunity to envision the future rather than normatively guiding them in a specific direction. The students need skills to live in a future nobody knows anything about.

When education has aimed at sustainable development as a process or sustainability as an aim, its envois have repeatedly emphasized the need to change students' attitudes. However, researchers have increasingly rejected this normative quest for changed attitudes and stated that this is unethical. Instead, they want discussions on what ethics entails in a sustainability learning

context. Therefore, there has been an ongoing debate regarding the teaching of values and attitudes in sustainability education (Jickling 1991; Wolff 2011). Purposefully changing someone's behavior, not to talk about thinking, is all but an easy mission, and it is also disputable. It raises the question about what purposefully changing somebody's attitudes means and when and where such undertakings are defensible. Jickling and Spork (1998) argue that education has to strive toward people who know how to think, instead of adapting to predetermined behavior goals. The same problem occurs when education is driven by preset competence outcomes (see Lange 2018, 2019). Iverson (2016) claims that sustainability initiatives cannot focus on developing only individual-level competencies, like being aware of personal consumption, and reducing waste and energy. It also has to encourage the students to act and advocate for changes in policy and practices. This includes understanding of the root causes of unsustainability.

Some critical voices go further and progressively articulate that teaching has to become activism. This argument occurs in many sustainability and educational contexts. Sustainability relates to environmental, anti-globalization, and anti-colonial movements, as well as marginalized knowledge and feminist ideas (Muzzin and Tripp 2005). Feminist environmentalists claim that "speciesism" (biases favoring one's own species and thus giving humans greater moral rights than nonhuman animals) or discrimination against nonhuman species contributes to the planetary degradation. Unquestionably, there are many intersections between the arguments in the contemporary critical discourses. Feminists as well as anti-racists mean that inequity is the basis of both war and poverty, and both feminists and indigenous voices stress respect for the Earth (Muzzin and Tripp 2005).

An interesting example of alternative education is a small girls' school in India, in which they have experimented with a Gandhian philosophical approach as a combination of education, research, and activism. The option could be called a "whole school approach" in which the girls are trained in a

vocation, but many other aims are also apparent, especially a good character. Personal features that are encouraged are "self-sufficiency, inner discipline, upliftment of others, the social and environmental good, responsibility, kindness, compassion, tolerance and strong work ethic" (Germein and Vaishnava 2019, p. 254). These character features are fostered in an environment in which the students simultaneously learn, do and make, play, work, and take responsibility. The formative assessment focuses on the intellectual and conceptual development but also on physical, emotional, and social abilities, as well as skills, values, leadership, and teamwork. The ambition is to educate girls who have skills and a strong identity and see themselves as actors in the world. This is a trial to renew education through an ethical approach. Even if it might raise arguments and some may regard this as old-fashioned, it is context-adjusted and shows that contemporary education can and has to focus on other aims than strictly instrumental.

Podger, Mustakova-Possardt, and Reid (2010), three researchers from the USA, Australia, and Austria, present a somewhat similar approach addressing students and their learning in a higher education context. In a theoretical study, they practice a "whole person approach," in which they encourage critical consciousness (cf. Freire 1974) and consider learning, work, and identities as being interlinked: "when a person can relate their own sense of identity – from moral, to work-oriented for instance – to broad issues and responsibilities for sustainability, they manifest a will to learn" (p. 348).

Summary

Educational institutions are not free mediators in the sustainability process. Individuals and institutions are all intensely embedded in societies with values that are steadily created in diverse discursive practices. The power within these practices produces discourses setting the rules that legitimate the truth (Foucault 2006). Discourses produce knowledge that relates to a broader episteme

(structure of knowledge), which are specific for various historical periods (Foucault 2006). Every time and in every situation when policy makers, managers, researchers, or lecturers choose educational methods or goals, or details in study programs, timetables, or process of examination, their actions are parts of a complexity power network that transmits values and norms (Wolff 2011). In addition, there are always conflicting norms and interests, which make it challenging to address the sustainability aims and implement sustainability in study programs and courses. It is demanding to initiate an unpredicted transformation on both individual and collective levels, if both educational policy and practice are driven by normative goals aiming in incompatible directions. An important aim of sustainability education is to make all these aims perceptible. In the end, all knowledge is value-loaded and ethics-based (Jickling 2005).

One can ask what the future prospects of education are. Unsustainability is a result of colonialism and an extended overestimation of humans striving for growth and perfection (Wolff 2011). To stop mischievous development, to heal and rebuild a damaged planet, and to recognize all humans as equal is a demanding task, and it takes time. It will require policy making and technical innovations but, first and foremost, new perspectives of what it means to be human. The modern worldview may be obsolete, and the idea of individual liberty and capitalist economy is worn out. Humanity needs altered worldviews that recognize the role and rights of nonhuman nature and future life on Earth (Zilliacus and Wolff 2021). The ethical-political foundation of modernity has become delicate and needs to be improved to become more sensitive to diverse cultures and ecological boundaries and to recognize temporal and spatial challenges. An education without emphasis on ethics is worthless in that situation.

In conclusion, sustainability challenges require ethical considerations of many kinds. Yet, they could be divided into four ethical dimensions that are worthwhile considering when planning

sustainability education (see also Sauvé 1999; Wolff 2011):

1. The sphere of the self, in which people develop their self-relations and own identities
2. The social sphere, in which people interact with other species members (family, friends, and others) and relate to the entire social sphere of cultural, social, political, economic, vocational, religious, and other social fields
3. The sphere of one's relationship to the biophysical environment (the nonhuman world)
4. The sphere of the future that is the unknown challenges of future life on Earth

Sustainability education needs to display, interpret, and negotiate how these spheres interact and develop. Humans shape their sustainability understanding and activities through their view of themselves, of social relations, and of the entire planet now and in the future. These interacting ethical dimensions are not separate or hierarchical but steadily changing and developing. And they all stretch from the neighborhood to the entire planet and from history and hidden historical misconduct through the present toward the future.

It is the role of education to encourage the students to criticize normative assumptions and to find new perspectives striking a balance between collective and individual interests and between long-term and short-term goals. Education needs to empower the students and give them courage to deal with what is the most important educational endeavor: to ensure life on a vital planet today and in the future.

Cross-References

- Biodiversity
- Climate Change
- Culture, Tourism, and Sustainability (Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism)
- Dialogue

- Environment and Ethics in Sustainability
- Ethical Dilemmas
- Ethics
- Ethics and Ethical Theories
- Power Equalizing
- Sustainability Education and Environmental Awareness
- Sustainable Development
- Sustainable Development Goals (SDGs)
- Transformative Learning
- Value
- Value Creation

References

- Banks, S. (2020). *Ethics and values in social work* (5th ed.). London: Bloomsbury Publishing.
- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801–831. <https://doi.org/10.1086/345321>.
- Baumber, A. (2021). Transforming sustainability education through transdisciplinary practice. *Environment, Development and Sustainability*, 1–18. <https://doi.org/10.1007/s10668-021-01731-3>.
- Becker, C. (2011). *Sustainability ethics and sustainability research*. Dordrecht: Springer.
- Biermann, F. (2021). The future of ‘environmental’ policy in the Anthropocene: Time for a paradigm shift. *Environmental Politics*, 30(1–2), 61–80. <https://doi.org/10.1080/09644016.2020.1846958>.
- Bos, G., & Düwell, M. (Eds.). (2016). *Human rights and sustainability: Moral responsibilities for the future*. London: Routledge.
- Butler, C. D. (2017). Limits to growth, planetary boundaries, and planetary health. *Current Opinion in Environmental Sustainability*, 25, 59–65. <https://doi.org/10.1016/j.cosust.2017.08.002>.
- Callicott, J. B. (2014). Recontextualizing the self in comparative environmental philosophy. In J. B. Callicott & J. McRae (Eds.), *Environmental philosophy in Asian traditions of thought* (pp. 377–390). Albany: SUNY Press.
- Dahl, A. L. (2015). Ethics in sustainability education. In V. Thoresen, D. Doyle, J. Klein, & R. Didham (Eds.), *Responsible living*. Cham: Springer. https://doi.org/10.1007/978-3-319-15305-6_3.
- Foucault, M. (2006). *The archaeology of knowledge* (A. M. S. Smith, Trans., 4th reprint). London: Routledge.
- Freire, P. (1974). *Education for critical consciousness*. London: Bloomsbury Academic.
- Fricker, A. (2002). The ethics of enough. *Futures*, 34(5), 427–433. [https://doi.org/10.1016/S0016-3287\(01\)00069-6](https://doi.org/10.1016/S0016-3287(01)00069-6).
- Gandhi, M. K. (1938). *Hind Swaraj or Indian home rule*. Ahmedabad: Navajivan Trust.
- Gardiner, S. M. (2010). Ethics and climate change: An introduction. *Wiley Interdisciplinary Reviews: Climate Change*, 1(1), 54–66. <https://doi.org/10.1002/wcc.16>.
- Gerlak, A. K., Heikkilä, T., Smolinski, S. L., Huitema, D., & Armitage, D. (2018). Learning our way out of environmental policy problems: A review of the scholarship. *Policy Sciences*, 51(3), 335–371. <https://doi.org/10.1007/s11077-017-9278-0>.
- Germein, S., & Vaishnava, N. (2019). Thinking differently: An education for the Anthropocene from Uttarakhand, India. *Australian Journal of Environmental Education*, 35(3), 250–261. <https://doi.org/10.1017/aee.2019.26>.
- Hamilton, C. (2017). *Defiant earth: The fate of humans in the Anthropocene*. Hoboken: Wiley.
- Hirose, I., & Olson, J. (2015). Introduction to value theory. In I. Hirose & J. Olson (Eds.), *The Oxford handbook of value theory* (pp. 1–9). New York: Oxford University Press.
- Iverson, S. V. (2016). Beyond recycling: Developing “deep” sustainability competence. In *The contribution of social sciences to sustainable development at universities* (pp. 55–71). Cham: Springer. https://doi.org/10.1007/978-3-319-26866-8_4.
- Jeronen, E., Palmberg, I., & Yli-Panula, E. (2017). Teaching methods in biology education and sustainability education including outdoor education for promoting sustainability: A literature review. *Education Sciences*, 7(1), 1. <https://doi.org/10.3390/educsci7010001>.
- Jickling, B. (1991). Environmental education, problem solving, and some humility please. *The Trumpeter*, 8(3), 153–155. <http://www.trumpeter.athabascau.ca/index.php/trumpet/article/view/1169>. Accessed 2 December 2021.
- Jickling, B. (2005). The wolf must not be made a fool of: Reflections on education, ethics and epistemology. In L. J. Muzzin & P. Tripp (Eds.), *Teaching as activism: Equity meets environmentalism* (pp. 35–45). London: McGill-Queen’s.
- Jickling, B., & Spork, H. (1998). Education for the environment: A critique. *Environmental Education Research*, 4(3), 309–328. <https://doi.org/10.1080/1350462980040306>.
- Johns-Putra, A. (2013). Environmental care ethics: Notes toward a new materialist critique. *Symploke*, 21(1), 125–135. <https://uwethicsofcare.gws.wisc.edu/wp-content/uploads/2020/03/Johns-Putra-Environmental-Care-Ethics.pdf>. Accessed 29 November 2021.
- Kallis, G. (2011). In defense of degrowth. *Ecological Economics*, 70(5), 873–880. <https://doi.org/10.1016/j.ecolecon.2010.12.007>.
- Kibert, C. J., Thiele, L., Peterson, A., & Monroe, M. (2011). The ethics of sustainability. <https://www>.

- cce.ufl.edu/wp-content/uploads/2012/08/Ethics%20of%20Sustainability%20Textbook.pdf. Accessed 29 November 2021.
- Lange, E. A. (2018). Transforming transformative education through ontologies of relationality. *Journal of Transformative Education*, 16(4), 280–301. <https://doi.org/10.1177/1541344618786452>.
- Lange, E. A. (2019). Transformative learning for sustainability. In W. Leal Filho (Ed.), *Encyclopedia of sustainability in higher education* (pp. 1954–1966). Cham: Springer. https://doi.org/10.1007/978-3-030-11352-0_104.
- McCoy, D., Montgomery, H., Arulkumaran, S., & Godlee, F. (2014). Climate change and human survival. *BMJ (Online)*, 348, g2351. <https://doi.org/10.1136/bmj.g2351>.
- Muzzin, L. J., & Tripp, P. (2005). Overview. In L. J. Muzzin & P. Tripp (Eds.), *Teaching as activism: Equity meets environmentalism* (pp. 3–21). London: McGill-Queen's.
- Næss, A. (2003). The deep ecological movement: Some philosophical aspects. In A. Light & H. Rolston (Eds.), *Environmental ethics: An anthology* (pp. 262–274). Maiden: Blackwell.
- NASA (National Aeronautics and Space Administration) (2021). Global climate change: Vital signs of the planet. <https://www.climate.nasa.gov/>. Accessed 7 December 2021.
- Palmer, C., McShane, K., & Sandler, R. (2014). Environmental ethics. *Annual Review of Environment and Resources*, 39, 419–442. <https://doi.org/10.1146/annurev-environ-121112-094434>.
- Podger, D. M., Mustakova-Possardt, E., & Reid, A. (2010). A whole-person approach to educating for sustainability. *International Journal of Sustainability in Higher Education*, 11(4), 339–352. <https://doi.org/10.1108/14676371011077568>.
- Sauvé, L. (1999). Environmental education: Between modernity and postmodernity: Searching for an integrating educational framework. *Canadian Journal of Environmental Education*, 4, 9–36. <https://www.cjee.lakeheadu.ca/article/view/317>. Accessed 1 December 2021.
- Shilling, D. (2018). Introduction: The soul of sustainability. In M. K. Nelson & D. Shilling (Eds.), *Traditional ecological knowledge: Learning from indigenous practices for environmental sustainability* (pp. 3–14). New York: Cambridge University Press.
- Skarstein, F., & Wolff, L. A. (2020). An issue of scale: The challenge of time, space and multitude in sustainability and geography education. *Education Sciences*, 10(2), 28. <https://www.mdpi.com/2227-7102/10/2/28>.
- Smith, T. S. (2019). *Sustainability, wellbeing and the post-human turn*. Cham: Palgrave Macmillan.
- Strahovnik, V. (2017). Ethics and values education. In M. A. Peters (Ed.), *Encyclopedia of educational philosophy and theory* (pp. 769–774). Singapore: Springer. https://doi.org/10.1007/978-981-287-588-4_167.
- Swain, D. L., Singh, D., Touma, D., & Diffenbaugh, N. S. (2020). Attributing extreme events to climate change: A new frontier in a warming world. *One Earth*, 2(6), 522–527. <https://doi.org/10.1016/j.oneear.2020.05.011>.
- UN (United Nations). (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. <https://www.sdg.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>. Accessed 30 November 2021.
- UN DESA (United Nations Department of Economic and Social Affairs). (2021). *Highlights 2020–2021: Towards sustainable development for all*. https://www.cdn.un.org/desa/Highlight_Report_2020-2021.pdf. Accessed 4 December 2021.
- UN NWCED (United Nations World Commission on Environment and Development). (1987). Our common future. The Brundtland Report. <https://sustainabledevelopment.un.org/content/documents/5987Our-common-future.pdf>. Accessed 4 December 2021.
- Valera, L., & Preece, G. S. (2020). Challenging sustainability: From deconstruction to reconstruction. *Cosmos and History: The Journal of Natural and Social Philosophy*, 16(1), 298–315. <https://cosmosandhistory.org/index.php/journal/article/view/846>. Accessed 13 December 2021.
- Van Mierlo, B., Halbe, J., Beers, P., Scholz, G., & Vinke-de Kruijf, J. (2020). Learning about learning in sustainability transitions. *Environmental Innovation and Societal Transitions*, 34, 251–254. <https://doi.org/10.1016/j.eist.2019.11.001>.
- Wals, A. E. (2020). Sustainability-oriented ecologies of learning: A response to systemic global dysfunction. In R. Barnett & N. Jackson (Eds.), *Ecologies for learning and practice: Emerging ideas, sightings, and possibilities* (pp. 61–78). New York: Routledge.
- Wareham, C. S. (2017). A duty to explore African ethics? *Ethical Theory and Moral Practice*, 20(4), 857–872. <https://doi.org/10.1007/s10677-017-9826-x>.
- Wolff, L.-A. (2011). *Nature and sustainability: An educational study with Rousseau and Foucault*. Saarbrücken: Lambert. <https://www.doria.fi/handle/10024/130752>. Accessed 30 September 2021.
- Wolff, L. A. (2020). Sustainability education in risks and crises: Lessons from Covid-19. *Sustainability*, 12(12), 5205. <https://doi.org/10.3390/su12125205>.
- Wolff, L.-A., & Ehrström, P. (2020). Social sustainability and transformation in higher educational settings. *Sustainability*, 12(10), 4176. <https://doi.org/10.3390/su12104176>.
- Zilliacus, H., & Wolff, L.-A. (2021, Published online). Climate change and worldview transformation in Finnish education policy. In P. William (Ed.), *Oxford research encyclopedia of education*. New York: Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1676>.

Ethics of Taxation

► Fiscal Fairness

EU Communication CSR

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Synonyms

Text

Description

Public authorities like the European Union (EU) play an essential part in helping and encouraging companies to operate their business in responsible ways. In the last two decades, the EU has realized a combination of voluntary and obligatory actions to advance corporate social responsibility (CSR). In 2011, the Commission of the EU announced its renewed CSR strategy. This renewed strategy entails general approaches to promote CSR and combines them with more detailed approaches for certain sectors and policy areas (EU Commission 2011). Three years later, in October 2014, the Commission of the EU published Directive 2014/95/EU, making the disclosure of nonfinancial and diversity information mandatory for large companies of public interest (EU Commission 2014). In March 2019, a staff working document (SWD(2019) 143) provided a progress overview on different CSR areas (especially “Responsible Business Conduct” and “Business and Human Rights”) (EU Commission 2019a).

Introduction

Companies have a significant influence on the lives of people around the world and the citizens in the EU – not just with regard to the products and services they sell, the jobs they offer, or the opportunities they generate, but also because they implement and shape working conditions, are

contributing to innovation, education, and training, address human rights issues, and influence the environment and people’s health. Since the early 1990s, the European Union has shown a keen interest in CSR. The EU Commission came up with its own CSR definition, describing CSR as the “*responsibility of enterprises for their impact on society*.” According to the EU Commission, CSR should be company-driven. However, the EU has also acknowledged that public authorities need to fulfill their supporting role and that voluntary policy measures and, where required, complementary regulations need to be developed and implemented (EU Commission 2019b).

The most important steps and publications of the EU are outlined below.

CSR Milestones Within the EU

- In 1993, the president of the European Commission at this time, Jacques Delors, called upon Europe’s business community and asked all business leaders to become more active and to work against social exclusion.
- In March 2000, the Council of Ministers made a new appeal, asking companies and their leaders to develop and adopt more sustainable approaches in their business conduct.
- In 2001, the CSR interest of the EU was highlighted by the publication of a Green Paper entitled “*Promoting a European framework for corporate social responsibility*” (download here: https://www.jussempier.org/Resources/Corporate%20Activity/Resources/greenpaper_en.pdf). Green Papers of the EU, in general, are documents published to encourage the debate on certain topics and this Green Paper aimed to start a wide-ranging discussion on how the EU could advance CSR at both the European and global level. In particular, this Green Paper launched a debate on how existing experiences could be used for future changes and intended to encourage the development of new and innovative practices. In addition, it encouraged discussions about how to bring greater transparency to CSR reporting and the possibilities of increasing the credibility and

reliability of CSR reporting through evaluation and validation. This EU publication suggested an approach based on the extending of partnerships and networks which would enable all actors to exchange ideas and actively participate (EU Commission 2001).

- In 2002, the Commission of the EU published the first Communication regarding CSR, entitled *“A business contribution to sustainable development”* (download here: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2002:0347:FIN:en:PDF>). This Communication included the first widely accepted European definition of CSR: *“CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with stakeholders on a voluntary basis”* (EU Commission 2002) and a European action framework for CSR. Furthermore, it proposed setting up an EU Multi-Stakeholder Forum on CSR. The goal was to promote transparency and convergence of CSR practices and instruments. The Communication also outlined that the EU Commission is committed to further promoting the incorporation of CSR principles into EU policies (EU Commission 2002).
- In 2006, the second Communication of the EU concerning CSR was published. The title was *“Implementing the Partnership for Growth and Jobs: Making Europe a pole of excellence on Corporate Social Responsibility”* (download here: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0136:FIN:en:PDF>). This Communication focused on growth and jobs. It highlighted the implementation of CSR within relevant European policies and several established CSR entities, especially the “European Alliance for CSR” and the “European Multi-Stakeholder Forum on CSR.” Furthermore, it outlined the support for CSR research (EU Commission 2006).
- In October 2011, the EU Commission published a further Communication on CSR (download here: http://ec.europa.eu/enterprise/policies/sustainable-business/files/csr/new-csr/act_en.pdf). It built on the previous Communications (2002, 2006, see above) and set several milestones for public CSR policies in Europe and beyond (EU Commission 2011). Already the title “renewed EU strategy for CSR” made clear that the EU has a clear policy strategy for CSR. In this Communication, the Commission introduced a new understanding of CSR. The EU no longer refers to CSR as voluntary action beyond compliance but rather outlines that every company causes impacts which it is responsible for (EU Commission 2011). In doing so, the EU communication stresses that CSR is in the interest of both companies and the society as a whole and therefore follows the idea of “shared value,” a business concept made popular by Kramer and Porter (2011) (Martinuzzi 2012).
- In October 2014, the EU Commission published Directive 2014/95/EU, which deals with the disclosure of nonfinancial and diversity information, often referred to as CSR reporting. This Directive sets the rules for the disclosure of CSR information for large companies. By now, large companies in the EU are mandated to disclose certain information on how they conduct their business and how they manage social and environmental challenges. According to the EU, this Directive helps consumers, investors, policymakers, and other stakeholders to assess the CSR performance of large companies. At the same time, it encourages these companies to develop and implement a responsible approach to business (EU Commission 2014).
- In March 2019, the EU Commission issued a staff working document (SWD(2019) 143). This document provided an overview of the progress made regarding the implementation of corporate social responsibility. It covers environmental, social, ethical, customer, and human rights aspects (EU Commission 2019a).

The EU is very active in promoting CSR and has a CSR strategy in place. Nevertheless, the political scope governments have concerning CSR is considerable. Therefore, actual CSR policies are

determined by the social-political history of a country as well as by government majorities.

EU Definition of CSR

In 2011, the EU published a new and by now widely accepted definition of CSR. It defines CSR as “the responsibility of enterprises for their impacts on society.” Furthermore, the Commission has outlined that in order to fulfill their social responsibility, “enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders” (EU Commission 2011). The goal is to maximize the creation of shared value, meaning the value for the company owners/shareholders as well as the value for all other stakeholders and the society at large. At the same time, responsible business conduct enables companies to detect, mitigate, and avoid possible adverse effects of their business activities (EU Commission 2011).

Cross-References

- Definitions of CSR
- Shared Value

References

- EU Commission. (2001). *Green paper – Promoting a European framework for corporate social responsibility. COM(2001) 366 final*. Luxembourg: Publications Office of the European Communities.
- EU Commission. (2002). *Communication from the Commission concerning corporate social responsibility: A business contribution to sustainable development. COM(2002) 347 final*. Brussels: Commission of the European Communities.
- EU Commission. (2006). *Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee. Implementing the partnership for growth and jobs: Making Europe a pole of excellence on corporate social responsibility. COM(2006) 136 final*. Brussels: Commission of the European Communities.
- EU Commission. (2011). *Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee and the Committee of the Regions. A renewed EU strategy 2011–14 for corporate social responsibility. COM (2011) 681 final*. Brussels: European Commission.
- EU Commission. (2014). Directive 2014/95/EU of the European Parliament and the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. *ABIEU L*, 330, 1–9.
- EU Commission. (2019a). *Commission Staff Working Document, SWD (2019) 143 final. Corporate social responsibility, responsible business conduct, and business & human rights. Overview of progress*. Brussels: European Commission.
- EU Commission. (2019b). Internal market, industry, entrepreneurship and SMEs. Corporate social responsibility & responsible business conduct. https://ec.europa.eu/growth/industry/corporate-social-responsibility_en. Accessed 24 June 2019.
- Kramer, M. R., & Porter, M. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Martinuzzi, A. (2012). CSR und Wettbewerbsfähigkeit. In A. Schneider & R. Schmidpeter (Eds.), *Corporate social responsibility* (pp. 619–633). Berlin/Heidelberg: Springer.

EU Corporate Citizenship

- European Framework on CSR

EU Corporate Social Responsibility Policy

- European Framework on CSR

EU Corporate Social Responsibility Strategies

- European Framework on CSR

EU Corporate Sustainability

- European Framework on CSR

EU CSR

► [European Framework on CSR](#)

EU Environmental, Social and Governance

► [European Framework on CSR](#)

EU Guidelines on Corporate Social Responsibility

► [European Framework on CSR](#)

Eudaimonic Management

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Synonyms

[Flourishing](#); [Functioning](#); [Self-development](#)

Definition

Eudaimonic (or eudaemonic) management is an approach inspired by a philosophical tradition dating from Aristotle. Throughout times, eudaimonia – human flourishing – has received different interpretations, starting as an ethical conception of the good life and evolving toward a psychological theory of happiness understood as ongoing self-realization. Despite the diversity of characterizations, the concept of eudaimonia has maintained its main focus on the good or happy life defined by the realization of one's capacities, virtues, potentialities, and so forth. It has also kept its dynamic aspect: eudaimonia is not a state, but a

continuous process. One is truly happy if she engages in activities that feed her *daimon* (spirit). In that context, eudaimonic management consists in importing eudaimonic psychology within the firm in order to identify managerial responsibilities toward employees, particularly in terms of work environment and career development. Eudaimonic management prioritizes the self-realization of employees by helping them to achieve their potential, their inner *daimon*. Since different eudaimonic approaches have been proposed over the last three decades (e.g., self-determination theory, psychological well-being, personal expressiveness, positive psychology), eudaimonic management could take various forms. Nonetheless all forms of eudaimonia define happiness as living or functioning well in contrast with feeling good, which is characteristic of hedonic approaches.

In the *Nicomachean Ethics*, Aristotle characterizes *eudaimonia*, literally the “good (-eu), spirit (-daimon),” as the ultimate good. To be eudaimonic – or act eudaimonically – consists in being virtuous and bettering one's higher capacities (related to the mastery of reason, the upper part of the soul). The ancient conception could be read as elitist and moralist, articulating a view of where the good life depends on following thick ethical principles.

Since the antiquity, eudaimonia has evolved. Over the last decades, it has received various interpretations and experienced a revival outside philosophy, especially among happiness researchers (e.g., Edward L. Deci, Richard M. Ryan, Alan S. Waterman, Corey L. M. Keyes, Carol Ryff, Martin P. Seligman). Most of the interpretations have abandoned, or at least attenuated, the ethical dimension of the Aristotelian formulation. The core idea of the ultimate good as a continuous process of one's self-betterment remains. The moral content has, however, been watered down, and virtues are not anymore strictly defined, considered as applying to everyone or offering a blueprint of the good life.

In short, contemporary eudaimonists claim not to advance anymore a moral theory that prescribes a strict and univocal way of life. They acknowledge individuals' differences of capacities, skills,

inclinations, or, as Martin Seligman (2004) puts it, “character strengths.” Eudaimonia has been transformed into a pluralistic psychological conception of self-achievement. Then, to be eudaimonic can take various forms and, at the extreme, each person has to discover her or his singular *daimon* and to develop it.

In that context, modern eudaimonic theories can serve to determine management responsibilities when it comes to employees’ work environment, tasks, career opportunities, and so forth. They advocate for managers having the duty to cater for employees’ self-realization and flourishing.

Two main reasons could justify such a duty. A first one is deontic. In the footsteps of Immanuel Kant, it could be argued that the respect due to employees *as persons* (which encompasses their interests, skills, etc.) requires to “use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means” (Kant 1997, p. 38). This duty is reinforced in the case of individuals and institutions having a significant “social power” of affecting people’s life conditions (Davis 1960). Managers would have “socio-human” responsibilities toward employees, proportionate to managers’ capacity to interfere into employees’ lives, to help them to flourish.

A second reason is consequentialist. Relying on evidence asserting that employees who function well are more productive at work and, therefore, contribute more to the firm’s activities, the argument is to point the mutually advantageous situation created by eudaimonic management. Employees will feel more fulfilled by evolving in a context that better challenges their abilities and, as a result, they will help to build a more efficient organization (Harter et al. 2002).

Once clarified the justifications for managers’ duties, it is necessary to specify the forms that such duties could take. More precisely, it is important to determine the features of eudaimonic management: what principles would it follow and how?

For answering this question, one ought to adopt a stance on eudaimonia, that is, a psychological formulation of what eudaimonia is, what it entails, and how it can be pursued. There are several possibilities, and the most prominent

include the self-determination theory (Ryan and Deci 2017), psychological well-being (Ryff and Keyes 1995), personal expressiveness (Waterman 1993), and positive psychology (Seligman 2004).

These eudaimonic formulations share the fundamental idea that individuals, in order to flourish, function, or fulfill their potential, need to benefit from a specific context characterized by specific conditions. To that respect, the self-determination theory is emblematic. For individuals to flourish in their personal or professional life, three basic psychological needs have to be addressed: autonomy, competence, and relatedness.

Autonomy. Literally, it (*autos*-, self, *-nomos*, law) refers to the fact that individuals are their own source of normativity, they are self-regulating, viz. they are able of obeying to rules they have rationally endorsed. They need to feel in charge of their life, to sense that they are self-standing and have the faculty of taking decisions. In the professional realm, individuals need to have some mastery about how to organize their workload and tasks. To that respect, command and control forms of management undermine autonomy by imposing external pressure and decreasing the need for critical endorsement.

Competence. Individuals need to feel that their skills are properly used and recognized by their social networks. Moreover, they need to feel adequate, that is, they have a fair understanding of their environment and are able to pose acts that contribute in an efficient manner to their life and their environment. In work context, managers have a tremendous impact on how this is fulfilled. They can valorize employees’ competences and offer them adequately challenging tasks where they can grow and properly recognize their achievements. To the opposite, they can offer either not enough or too much challenging activities that will undermine one’s sense of efficacy.

Relatedness. Individuals need to feel socially included. It is about being part of a broader community to which one can contribute in a meaningful manner. To that respect, managers have a duty to foster a peaceful and

collaborative work environment where employees have the opportunity to socialize and find support when facing hardship and difficulties.

Overall, self-determination theory posits that individuals can be motivated by extrinsic or intrinsic aspirations. The former are external to the individuals. They are centered on materialistic values or rewards such as fame, money, prestige, and status. In contrast, the latter rely on internal rewards, that is, self-development and improvement. The self-determination theory claims that the three basic psychological needs are better fulfilled by intrinsic aspirations. Such motivations are stronger and reinforce one's sense of autonomy, competence, and relatedness. Intrinsic aspirations positively correlate to mental well-being while extrinsic aspirations are related to poor mental health (Kasser 2003).

Therefore, eudaimonic management is an umbrella term. It describes activities and settings crafted in order to support basic psychological needs' fulfillment by relying, as much as possible, on intrinsic motivations. Concrete implications are that along the traditional pay raises and status promotion, managers ought to design an environment where employees have a significant latitude for managing their workload, where their competences are properly put to use and stimulated, and where they feel included into their professional community.

To some extent, eudaimonic management could be seen as a manner of implementing corporate social responsibility within the firm. It also highlights the importance of a healthy corporate culture that is based on respect.

Summary

Eudaimonic management represents an attempt to apply to work relations the principles and lessons coming from well-being research. More precisely, its goal is to root management in eudaimonia, that is, to support the employees in adequately challenging their skills and

flourishing. In this sense, eudaimonic management sets socio-human responsibilities, which are justified by either the respect due to employees as persons or the mutual benefits created by a thriving workforce. Although there are many ways in which management could be eudaimonic, self-determination theory offers a clear framework and guidelines by positing the importance of fulfilling three basic psychological needs in order to have functioning employees. Those needs are autonomy, competence, and relatedness. For addressing them, managers and executives ought to rely more on intrinsic motivations than on extrinsic ones, that is, to increase the part of self-realization on one's abilities, proper recognition of one's talent, inclusion in a corporate community in comparison to material rewards (e.g., money) and prestige.

Cross-References

- [Awareness Management](#)
- [Development Management](#)
- [Diversity Management](#)
- [Ethics Management](#)
- [Human Capital Management](#)
- [Management](#)
- [Spirituality in Management](#)
- [Stakeholder Management](#)

References

- Aristotle. (2009). *The Nicomachean ethics*. Oxford: Oxford University Press.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2(3), 70–76.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. (2002). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. Keyes & J. Haidt (Eds.), *Flourishing: The positive person and the good life* (pp. 205–224). Washington, DC: American Psychological Association.
- Kant, I. (1997). *Groundwork of the metaphysics of morals*. Cambridge, UK: Cambridge University Press.
- Kasser, T. (2003). *The high price of materialism*. Cambridge, MA: MIT Press.

- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: The Guilford Press.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological Well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727.
- Seligman, M. P. (2004). *Authentic happiness*. New York: Simon & Schuster Ltd..
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (Eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64(4), 678–691.

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Introduction

As explained on its website (ECGI [n.d.](#)), the European Corporate Governance Institute (ECGI) is an international, scientific, nonprofit association, founded in 2002 under Belgian law, which attempts to provide a forum for debate and dialogue between academics, legislators, and practitioners, on the main issues of corporate governance in order to promote best practices. It draws on the finest minds in academia from all over the world to tackle some of the most important issues that face businesses and governments

today. It uses the power of research to change ideas, influence practice, and formulate policy to benefit all of us.

History

Previously to its foundation in 2002, it was established on 15 October 2001 as an international scientific nonprofit association under Belgian law in accordance with its original Articles of Association (ECGI [n.d.](#)).

Through the initiative of ECGI directors and members, the European Corporate Governance Research Foundation (ECGRF) was launched in May 2016 (it was established in November 2013 by Belgian Royal Decree), with the main goal of providing the ECGI with sufficient funding and support to embark on a more ambitious and wide-ranging program of research activities (ECGRF [n.d.](#)).

Mission/Objectives/Focus Areas

The main goal of the Institute is to improve corporate governance through fostering independent scientific research and related activities. To that end, ECGI undertakes, commissions, and disseminates dominant research on corporate governance. Additionally, it can provide advice on the formulation of corporate governance policies and the development of best practices, as well as undertake any other action designed to improve the understanding and execution of corporate governance (ECGI [n.d.](#)).

By encouraging the interaction between several disciplines, such as economics, management, law, and finance, it serves as a useful reference for academics working on corporate governance-related issues in Europe and all around the world (ECGI [n.d.](#)).

Since its foundation in 2019, and thanks to the loyal support of its research members, institutional partners, patrons, and network of academic and practitioner members, the ECGI has achieved, among others, the following (ECGI [n.d.](#)):

- It has published more than 800 Working Papers on important topics.
- It has acquired nearly 600 members from more than 50 different countries.
- It has hosted over 20 international conferences and many workshops.
- It has provided training for 18 doctoral students.
- It has compiled a directory of over 460 International Corporate Governance Codes.
- It boasts three Nobel Laureates from among its founding members.

The ECGI maintains close links not only with all its institutional members but also with other organizations that are active in the field of Corporate Governance, such as the International Corporate Governance Network (ICGN) and the Global Corporate Governance Forum (GCGF).

Membership and Structure of Governance

Membership of the Institute is open to both individuals and organizations, and there are six categories of membership (ECGI [n.d.](#)):

- Institutional membership, which is opened to companies, institutions, and enterprises.
- Academic institutional membership, which is open to universities, business schools, or other academic bodies.
- Academic membership, which is open to individuals employed by or engaged in full- or part-time study in any accredited university or educational institution.
- Practitioner membership, which is open to private individuals and also to those in companies, institutions, and enterprises who wish to join in their own right.
- Patron membership, which is opened to legal entities or individuals interested in corporate governance. Patron members are patrons of the European Corporate Governance Research Foundation (ECGRF) and are appointed in

agreement with the boards of ECGI and ECGRF.

- Research membership, which is opened to individuals who have been appointed Fellows or research members by the ECGI.

The ECGI distributes the work of the research members through its extensive global network. On its website (ECGI [n.d.](#)), it offers extensive research reports, publications, and conferences free of charge, although payment is required for specific reports.

As far as the governance of the ECGI is concerned, it is headed by a Board of Directors, all of them being impartially committed to furthering the goals and mission of the Institute. Furthermore, in order to ensure the academic independence of the Institute, a majority of directors are drawn from academia. There are also directors closely linked to the private and public sectors. The Board Chairperson must be a non-academic and does not have to be a member of the Institute. The Vice-Chairperson, on the other hand, must be an academic.

At present, the Chairman of the Institute is the practitioner member Mr. Guy Jubb, Honorary Professor at the University of Edinburgh. He has played a leading role in developing and implementing best practice in corporate governance and stewardship in the UK and around the world. He was elected interim Chairman of ECGI in August 2018.

At present, the position of Vice-Chairperson of the Institute is waiting to be confirmed.

The Institute's current Executive Director is Dr. Marco Becht, Professor of Corporate Governance at the Solvay Brussels School for Economics and Management of the Université Libre de Bruxelles, the French-speaking University of Brussels.

As explained on its web page (ECGI [n.d.](#)), the ultimate authority is the General Assembly, which comprises all the Members of the Institute, each of whom has one vote. The powers of the General Assembly are detailed in the Articles of Association. It meets at least once a year, providing a forum not only for the ongoing governance of

the Institute but also an opportunity for members to meet, interact, and debate matters of importance and topicality.

A number of committees (the Research Committee, the Fellowship Committee, the Research Member Committee, the Research Member Engagement Committee) have been appointed to undertake specific functions of the Institute (ECGI [n.d.](#)). The actions recommended by these committees have to be approved by the ECGI Board and ultimately the members (ECGI [n.d.](#)).

ECGI Codes Database

The ECGI database provides an exhaustive compilation of codes, principles of corporate governance, recommendations, and corporate governance reforms in Europe and elsewhere (ECGI [n.d.](#)). It includes (Adams 2017) good governance codes promulgated at the country level and good governance codes promulgated at the international level, such as those of the Organization for Economic Cooperation and Development (OECD), the European Bank for Reconstruction and Development (EBRD), and the Commonwealth. For some countries it includes not only final versions of codes but also updates to the codes, proposals, draft codes, etc.

Cross-References

- [Codes of Good Governance](#)
- [Corporate Governance](#)

References

- Adams, R. B. (2017). Boards, and the directors who sit on them. In *The handbook of the economics of corporate governance* (Vol. 1, pp. 291–382). North-Holland.
- ECGI. (n.d.). European Corporate Governance Institute. Retrieved June 2019, from <https://ecgi.global/>
- ECGRF. (n.d.). European Corporate Governance Research Foundation. Retrieved June 2019, from <http://www.ecgrf.org/>

European Framework on CSR

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Synonyms

[Corporate social responsibility in the EU](#); [EU corporate citizenship](#); [EU corporate social responsibility policy](#); [EU corporate social responsibility strategies](#); [EU corporate sustainability](#); [EU CSR](#); [EU Environmental, Social and Governance](#); [EU guidelines on corporate social responsibility](#); [Sustainable business](#)

Definition

Generally speaking, Corporate Social Responsibility (CSR) is a type of self-regulation by business (Sheehy 2015). Public authorities, including both European Union (EU) member governments and European institutions, provide guidelines and, on some occasions, complementary regulation to support CSR implementation. The European Commission identifies CSR as the responsibility of corporations for “their impact on society” (European Commission [n.d.](#)). Corporations take the lead in implementing CSR norms through integration of “social, environmental, ethical, consumer, and human rights concerns into their business strategy and operations” (European Commission [n.d.](#)).

In terms of CSR policies and initiatives, the EU is the leading jurisdiction, as is evidenced by the publication of the *Green Paper: Promoting a European framework for Corporate Social Responsibility* (“the Green Paper”). As early as 2001, the EU took that role through the official launch of the CSR debates on a European scale in 2001. It has sustained this position through more recent efforts at exporting CSR values via its free

trade agreements. Over the past two decades, the EU has significantly contributed to CSR development (Idowu et al. 2015). Specifically, it has established a comprehensive CSR framework, both within the EU and externally in its interactions with non-EU trading partners.

Introduction

Corporate social responsibility (CSR) is a concept that has been around for quite some time (Sheehy 2015). Over the last few decades at the organizational level, CSR has evolved from “a nice thing to do,” to a strategic option, to an essential element for a successful business, a growing economy, a cohesive society, and a sustainable future (European Commission, n.d.; Association of Corporate Citizenship Professionals n.d.). At a society-wide level, CSR is now best understood as global business law (Sheehy 2015).

The European Union (EU) is the leading jurisdiction in terms of CSR policies and initiatives. The development of CSR in the EU has been driven by two key factors: proactive CSR strategies voluntarily adopted by corporations themselves, and external pressure from various stakeholders such as employees, investors, consumers, civil society, and public authorities (CSR Europe 2010).

Corporations are the ultimate implementers of CSR norms. Most EU corporations practice CSR, or at least some form of it, with a broad goal of mitigating negative impacts of their daily business activities and contributing to sustainable economic growth, social inclusion, and environmental protection (European Commission 2001). Public authorities, particularly under the leadership of EU institutions, that is, the European Parliament and the European Commission, have also played a critical role in initiating CSR debates, and promoting CSR practices.

The Private Framework

Literature on CSR first appeared in the 1930s when scholars debated about director's duties

and the social performance of corporations (Berle 1932; Dodd 1932). As could be expected, early CSR movements, both in Europe and elsewhere, were largely driven by corporations themselves (CSR Europe 2010). Corporations continue to play a critical role in CSR improvements. As the key actors and ultimate implementers of CSR principles, corporations adopt private or industry CSR standards, and build them into their business framework.

There are numerous CSR standards developed and adopted by the business sector; however, they generally address four main areas of responsibility: environmental responsibility, economic responsibility, philanthropic responsibility, and ethical responsibility, which includes human rights, labor rights, and social responsibility in a general sense (Stobierski 2021). In spite of these corporate efforts and investment, there is still a lack of both universally accepted CSR standards and a comprehensive framework. It is now broadly accepted that voluntary self-regulation is insufficient to achieve necessary outcomes given the wide spectrum of social and environmental issues that need to be addressed (The International Finance Corporation 2011).

Public authorities in the EU assumed a role as the main driver of CSR, adopting a two-layered approach. At the EU level, it has developed a comprehensive CSR framework. At the international level, the EU has been exporting CSR norms through the sustainable development (TSD) provisions of its free trade agreements (FTAs) (Hush 2018). The following sections examine the public frameworks established by the EU institutions, both within the EU and externally.

The Public Framework: Major CSR Developments at EU Level

The milestones of CSR development at EU level are as follows.

The EU institutions' CSR efforts can be traced back to 1999 when the European Parliament passed the *Resolution on EU Standards for European Enterprises Operating in Developing*

Countries: Towards a European Code of Conduct, and called for the establishment of a CSR framework that governs EU corporations' overseas business activities (European Parliament 1998).

In 2000, at the Lisbon Summit, EU heads of Member States made a pledge to “make Europe the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with [...] greater social cohesion” (European Committee of the Regions n.d.). They agreed to make CSR policies an important priority of the “Lisbon Strategy” (Wouters and Chanet 2008).

In 2001, with the publication of the landmark *Green Paper*, the EU officially announced its commitment to developing a comprehensive CSR framework (European Commission 2001). This step is often seen as the starting point of the EU's CSR policies and initiatives (Tencati et al. 2004). The *Green Paper* outlined the EU's holistic approach toward CSR at both European and international level. It highlighted a range of CSR concerns, such as the environment and natural resources, labor standards, human rights, as well as other social concerns arising from business activities (European Commission 2001). Although corporations were the primary actors in terms of adopting management practices that reflect CSR values, the *Green Paper* called for collaboration by all stakeholders including corporations, social partners, public authorities, and civil society organizations, in an effort to promote CSR practices and to contribute to the improved governance of business (European Commission 2001). Extraterritorially, the *Green Paper* suggested that the EU could export CSR values through international and regional trade agreements (Jacur 2018).

In 2002, the European Commission published its first Communication on CSR: *Communication from the Commission concerning Corporate Social Responsibility: A Business contribution to Sustainable Development* (“the 2002 Communication”). As compared to the 2001 *Green Paper*, the overall view on EU CSR strategies remained largely unchanged (Wouters and Chanet 2008); however, the 2002 Communication took an important step forward by proposing to establish

“an EU action framework for CSR” (European Commission 2002). As part of this proposal, the EU Multi-Stakeholder Forum was launched to “improve the knowledge about CSR and facilitate the exchange of experience and good practice” between corporations as well as with their stakeholders (European Commission 2002). The 2002 Communication was known for laying “the foundation for a common understanding of CSR in Europe” (Mullerat 2013).

In 2006, the European Commission published its second Communication on CSR: *Implementing the Partnership for Growth and Jobs: Making Europe a Pole of Excellence on CSR* (“the 2006 Communication”). This Communication acknowledged that the EU needed “a public climate in which entrepreneurs are appreciated [...] for making a fair contribution to addressing societal challenges,” which in turn helps “inspire more European enterprises to go beyond their minimum legal obligations in favor of society and sustainable development” (European Commission 2006). The European Alliance for CSR (“the Alliance”) was created to “give greater political visibility to CSR” (European Commission 2006). Through this political initiative, the Alliance achieved two important goals. First, it helped leading EU corporations “develop[...] a series of practical tools on key issues” (European Commission 2011). Second, it helped develop a wider partnership involving not only corporations but also many more stakeholders. Strengthened dialogue and cooperation contributed to the identification of priority areas for EU action, including awareness-raising and best practice exchange, support to multistakeholder initiatives, cooperation with Member States, consumer information and transparency, research, education, small and medium-sized enterprises, and the international dimension of CSR (European Commission 2006).

In 2011, the European Commission published another Communication on CSR, *A Renewed EU Strategy 2011–14 for Corporate Social Responsibility* (“the 2011 Communication”), and stressed that improving CSR was in the interests of both corporations and society as a whole. Importantly, it stated that CSR was no longer “voluntary action beyond compliance” (Martinuzzi et al. 2011), but

“the responsibility of enterprises for their impacts on society” (European Commission 2011).

The 2011 Communication also unveiled an identification of the key challenges faced by the EU. As of 2011, some EU corporations had not fully integrated CSR norms into their business operations; a small number of EU corporations also allegedly violated labor rights and human rights. Furthermore, although more than half of the EU Member States had already developed nation-wide CSR strategies, action plans, or policy documents, the rest, predominantly Eastern European countries (Martinuzzi et al. 2011), still lacked “national policy frameworks to promote CSR” (European Commission 2011). To overcome these challenges, the EU highlighted eight priorities: enhancing the visibility of CSR and disseminating good practices; improving and tracking levels of trust in business; improving self- as well as co-regulation processes; enhancing market reward for CSR; improving company disclosure of social and environmental information; further integrating CSR into education, training, and research; emphasizing the importance of national, regional, and local CSR policies; and better aligning European and global approaches to CSR (European Commission 2011).

In 2015, the EU endorsed the United Nations’ Sustainable Development Goals (SDGs) (EUR-Lex n.d.) and somewhat problematically started referring to CSR as “sustainable development” (Sheehy and Farneti 2021). In the following year, the European Commission published another Communication, *Next Steps for a Sustainable European Future: European Action for Sustainability* (“the 2016 Communication”), and reinforced the EU’s commitment to sustainable development. The 2016 Communication developed two important work streams to support the implementation of SDGs. The first stream focused on policy development, particularly the integration of the SDGs into the broad European policy framework. The second stream aimed to develop forward-looking strategies based on reflection; specifically, it “prepar[ed] for the long-term implementation of the SDGs” beyond 2020 (European Commission 2016).

In 2019, the European Commission published the *Reflection Paper: Towards a Sustainable Europe by 2030* (“the Reflection Paper”). At EU level, the Reflection Paper reaffirmed that “the SDGs [were] endorsed at the highest EU political level,” and a monitoring and implementation mechanism was to be set up soon (European Commission 2019). At the international level, while consolidating policies at EU level, the report stated that the EU should put more effort into the establishment of international frameworks, particularly through trade agreements, multilateral negotiations, as well as working with international organizations (European Commission 2019).

Over the last two decades, the EU has made some impressive progress in creating an impactful CSR framework, both within the EU and externally, and it is striving to improve the system for a more sustainable future.

The Public Framework: The International CSR Framework

As noted, since the 2000s, the EU has taken a leading role in promoting CSR globally, and it has done so through introducing and institutionalizing CSR norms in the international trading system. All EU trade agreements negotiated since that time, often referred to as “New Generation” FTAs (Madner 2017; Makarenko and Chernikova 2020), incorporate explicit TSD provisions or dedicated TSD chapters to address broader CSR concerns. These provisions and chapters usually address environmental sustainability, labor standards, business-related human rights, and other responsible business conduct (Gantz et al. 2011; Harrison et al. 2019). This section describes how the EU has contributed to the establishment of an international CSR framework, with a particular emphasis on the EU’s innovations.

The EU’s program of exporting CSR values through FTAs began in 2000 with its geographically broad Cotonou Agreement—an agreement with African, Caribbean, and Pacific (ACP) states. This Agreement was significant because it marked

the beginning of the EU's endorsement of the concept of "sustainable development" in a trade agreement, addressing broader CSR concerns via the international trading system. In the Preamble of the Cotonou Agreement, the EU and the ACP states affirmed "their commitment to work together towards the achievement of the objectives of [...] sustainable development [...]" (Cotonou Agreement 2000).

The EU further strengthened its international commitment to CSR with the publication of the above-noted landmark *Green Paper* in 2001. What was significant in this regard was the EU's promotion of extraterritorial applications of CSR principles (Jacur 2018). The EU moved further ahead in the international CSR sphere by signing the Economic Partnership Agreement (EU-Cariforum EPA 2008) with the CARIFORUM states (LSE 2021). This agreement holds its first set of explicit TSD provisions in a trade agreement.

These provisions drew attention specifically to the importance of conforming to internationally recognized labor and environmental standards (EU-Cariforum EPA 2008). For example, Article 72 (b) requires investors to "act in accordance with core labor standards as required by the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, 1998, to which the EC Party and the Signatory CARIFORUM States are parties" (EU-Cariforum EPA 2008). In 2010, the EU advanced its international CSR agenda further by signing an FTA with South Korea (EU-South Korea FTA 2011). This agreement stepped up the EU's CSR efforts by creating a dedicated TSD chapter and establishing a separate dispute resolution mechanism to ensure compliance. Since 2010, all EU FTAs have dedicated TSD chapters, with a broad scope of TSD norms; however, the main focus is on labor and environmental matters arising from business activities (LSE 2021).

TSD arrangements of the New Generation FTAs can be found in the EU's trade agreements with, for example, Central America, Ukraine, Georgia, Canada, Japan, Singapore, the United Kingdom, Moldova, Vietnam, Colombia, Peru, and Ecuador. These New Generation FTAs are an essential component of the EU's broad CSR

framework. Specifically, they supported and were an integral part of the EU's CSR broader initiatives, such as the *Trade for All* strategy (2015) which pushed for a more responsible trade and investment policy (European Commission 2015), the *15-point Action Plan* (2018) which focused on improving the enforcement of TSD rules, and the *Trade Policy Review* (2021) which considered further actions on effective implementation, particularly the "the possibility of sanctions" for violations of TSD rules (European Commission 2021).

To establish a more effective CSR framework at the international level, the EU has been pioneering new ideas in some of its most recently negotiated FTAs. The first innovation is the joint administration of the TSD implementation. The EU and its trading partners set out a procedure in FTAs for them to meet regularly and discuss how they can work collaboratively to improve CSR compliance. Recently concluded EU FTAs invite non-nation-state parties, such as civil society organizations, to get involved and provide social input to improving TSD rules and compliance, although traditionally non-nation-state parties are excluded from participation in these state-to-state dialogues and cooperation. For example, the 2016 EU-Canada Comprehensive Economic and Trade Agreement (CETA) successfully engaged non-nation-state parties in the administration of TSD chapters. Under the CETA, civil society organizations can contribute to TSD discussions through a joint Civil Society Forum (CETA 2016). This innovation is an important step forward as it enables members of civil society to share their knowledge, expertise, and experience that are particularly relevant to the legitimacy of the TSD rules as well as their implementation.

As for TSD dispute resolution, allegations of violations of TSD rules under existing EU FTAs cannot be brought through the legally binding general dispute resolution procedures (LSE 2021). They are subject only to voluntary dispute settlement mechanisms (DSMs) designed specifically to resolve TSD issues (LSE 2021). Under the multi-step voluntary DSMs, government consultation is the first step that parties can take to resolve a TSD dispute (LSE 2021). If the parties

fail to reach a mutually satisfactory resolution, they then move onto the next step: setting up a panel of experts to examine the matter (LSE 2021). The expert panel has no power to adjudicate; it only plays an advisory role and provides non-binding recommendations. In this context, it is then up to the parties to decide whether they will take the panel's advice, or have a further discussion based on the panel's recommendations (LSE 2021). If the parties choose to reject or ignore the panel's advice, they face no legal consequences. For example, articles 16.17 and 16.18 of the EU-Japan Economic Partnership Agreement (2019), articles 12.16 and 12.17 of the EU-Singapore FTA (2019), and articles 13.16 and 13.17 of the EU-Vietnam FTA (2019) all describe similar voluntary DSMs for TSD matters, particularly in relation to government consultations and panels of experts. This voluntary approach precludes the possibility of imposing legally binding trade sanctions on non-complaint parties, including in the event of serious TSD violations such as importing goods made with child or slave labor (LSE 2021).

Recognizing the weakness of the existing collaborative system, the EU has recently unveiled a new TSD approach to trade agreements. Based on a thorough review of the existing TSD provisions and their enforcement, the European Commission published a Communication: *The Power of Trade Partnerships: Together for Green and Just Economic Growth* in 2022. In this document, the EU proposed the imposition of trade sanctions on parties that breach core TSD provisions. This sanction-based TSD approach is to be applied to ongoing and all future FTA negotiations (European Commission 2022). Following this initiative, the EU-New Zealand FTA concluded in June 2022 made "the most ambitious sustainability commitments in a trade agreement ever" (Kelly and Doidge 2022). The new provisions have replaced the voluntary DSMs and are designed specifically to resolve TSD disputes with legally binding general dispute settlement procedures.

For example, Chapter 26 Article X.2 of the EU-New Zealand FTA states, "[this general dispute settlement procedure] shall apply with

respect to any dispute between the Parties concerning the interpretation and application of the provisions of this Agreement [...] unless otherwise provided in this Agreement" (The EU-New Zealand FTA 2022). In other words, in the event of serious violations of core TSD commitments, trade sanctions, such as temporary suspension of trade concessions, can be imposed as measures of last resort.

Summary

The EU has changed the environment in which EU corporations operate; it has also made significant contributions to global practice through its CSR leadership. It has done so through its forward-looking policy and steady development. Looking toward the future, it is clear that the EU has the ambition and ability to further improve responsible business practices both within the EU and internationally through its FTAs (Davidsson 2002). However, there are many obstacles still hindering the successful development and implementation of CSR norms. These challenges include the fact that not all EU members and not all EU corporations perform equally in terms of CSR compliance; and globally, ineffective compliance monitoring and enforcement mechanisms impede the effectiveness of the EU's TSD rules (Wagner 2017). The EU's CSR initiatives, while a good step, have yet to change corporate behaviors necessary to prevent the serious damage to the environment and the society as a whole that the world is facing (Chen & Sheehy 2023). Thus, although good initial steps, there remains a long road ahead.

Cross-References

- [Definitions of CSR](#)
- [EU Communication CSR](#)
- [Fair Trade](#)
- [OECD Principles of Corporate Governance](#)
- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

References

- Association of Corporate Citizenship Professionals (ACCP). (n.d.). Corporate social responsibility: A brief history. <https://accp.org/resources/csr-resources/accp-insights-blog/corporate-social-responsibility-brief-history/#:~:text=Howard%20Bowen%2C%20an%20American%20economist,called%20Social%20Responsibilities%20of%20the>.
- Berle, A. A., Jr. (1932). For whom corporate managers are trustees: a note. *Harvard Law Review*, 45, 1365–1372.
- Chen, A., & Sheehy, B. (2023). Exporting corporate social responsibility through free trade agreements: Improving coherence in the EU's new-generation trade and sustainable development FTAs. *Texas International Law Journal*, 58, forthcoming.
- Comprehensive Economic and Trade Agreement Between Canada of the One Part, and the European Union and its Member States, of the Other Part ["CETA"], October 30, 2016. http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf.
- CSR Europe. (2010). A guide to CSR in Europe country insights by CSR Europe's national partner organizations. https://www.fundacionseres.org/lists/informes/attachments/1036/guide_to_csr_csr%20europe.pdf.
- Davidsson, P. A. (2002). Legal enforcement of corporate social responsibility within the EU. *The Columbia Journal of European Law*, 8, 529–556.
- Dodd, E. M. (1932). For whom are corporate managers trustees? *Harvard Law Review*, 45, 1145–1163.
- Economic Partnership Agreement between the CARIFORUM States, of the one part, and European Community and its Member States, of the other part, EU-Cariforum ["EU-Cariforum EPA"], Oct. 15, 2008. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:289:0003:1955:EN:PDF>.
- EU-New Zealand FTA. (June 30, 2022). https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/new-zealand/eu-new-zealand-agreement/text-agreement_en.
- EUR-Lex. (n.d.). Sustainable development goals. <https://eur-lex.europa.eu/EN/legal-content/glossary/sustainable-development-goals.html>.
- European Commission. (2006). Press release: launch of "European Alliance for Corporate Social Responsibility". https://ec.europa.eu/commission/presscorner/detail/en/IP_06_358.
- European Commission. (2022). Press release: Commission unveils new approach to trade agreements to promote green and just growth. https://ec.europa.eu/commission/presscorner/detail/en/ip_22_3921.
- European Union, European Commission. (2001). Green paper: Promoting a European framework for corporate social responsibility (COM(2001) 366 final). <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0366:FIN:en:PDF>.
- European Union, European Commission. (2002). *Communication from the Commission concerning corporate social responsibility: a business contribution to sustainable development* (COM (2002) 347 final). <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2002:0347:FIN:EN:PDF>.
- European Union, European Commission. (2006). *Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee: Implementing the partnership for growth and jobs: Making Europe a pole of excellence on CSR* (COM(2006) 136 final). <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0136:FIN:EN:PDF>.
- European Union, European Commission. (2011). *Communication of the European Communities, Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee: A renewed EU strategy 2011–14 for Corporate Social Responsibility* (COM(2011) 681 final). <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0681:FIN:EN:PDF>.
- European Union, European Commission. (2015). *Trade for all: Towards a more responsible trade and investment policy*. (COM (2015)497). http://trade.ec.europa.eu/doclib/docs/2015/october/tradoc_153846.pdf.
- European Union, European Commission. (2016). *Next steps for a sustainable European future European action for sustainability* (COM(2016) 739 final). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0739&from=EN>.
- European Union, European Commission. (2019). *The European Commission, reflection paper towards a sustainable Europe by 2030*. https://ec.europa.eu/info/sites/default/files/rp_sustainable_europe_30-01_en_web.pdf.
- European Union, European Commission. (2021). *Trade policy review – An open, sustainable and assertive trade policy* (COM (2021) 66 final). https://trade.ec.europa.eu/doclib/docs/2021/february/tradoc_159438.pdf.
- European Union, European Commission. (n.d.). *Corporate social responsibility & responsible business conduct*. https://single-market-economy.ec.europa.eu/industry/sustainability/corporate-social-responsibility-responsible-business-conduct_en.
- European Union, European Committee of the Regions. (n.d.). *The Lisbon strategy in short*. <https://portal.cor.europa.eu/europe2020/Profiles/Pages/TheLisbonStrategyinshort.aspx#:~:text=The%20aim%20of%20the%20Lisbon,jobs%20and%20greater%20social%20cohesion%22>.
- European Union, European Parliament. (1998). *Report on EU standards for European Enterprises operating in developing countries: towards a European Code of Conduct* (Report - A4-0508/1998). https://www.europarl.europa.eu/doceo/document/A-4-1998-0508_EN.html.
- European Union, European Parliament. (2021). *Sustainability provisions in EU free trade agreements: review of the European Commission action plan*. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698799/EPRS_BRI\(2021\)698799_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698799/EPRS_BRI(2021)698799_EN.pdf).

- Free Trade Agreement between the European Union and Its Member States, of the One Part, and the Republic of Korea of the Other Part ["EU-South Korea FTA"], May 14, 2011. [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22011A0514\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22011A0514(01)).
- Gantz, D. A., Reetz, C. Y., Aguilar-Alvarez, G., & Paulsson, J. (2011). Labor rights and environmental protection under NAFTA and other U.S. free trade agreements. *The University of Miami Inter-American Law Review*, 42, 297–366.
- Harrison, J., Barbu, M., Campling, L., Richardson, B., & Smith, A. (2019). Governing labor standards through free trade agreements: Limits of the European Union's trade and sustainable development chapters. *Journal of Common Market Studies*, 57(2), 260–277. <https://doi.org/10.1111/jcms.12715>.
- Hush, E. (2018). Where no man has gone before: The future of sustainable development in the comprehensive economic and trade agreement and new generation free trade agreements. *Columbia Journal of Environmental Law*, 43, 93–112.
- Idowu, S. O., Schmidpeter, R., & Fifka, M. S. (2015). *Corporate social responsibility in Europe: United in sustainable diversity*. Switzerland: Springer.
- International Finance Corporation. (2011). Corporate social responsibility: private self-regulation is not enough. <https://openknowledge.worldbank.org/bitstream/handle/10986/11072/661030BRI0Box365730B00PUBLIC00PSO0240CSR.pdf?sequence=1&isAllowed=y>.
- Jacur, F. R. (2018). Corporate social responsibility in recent bilateral and regional free trade agreements: an early assessment. *European Foreign Affairs Review*, 23(4), 463–483.
- Kelly, S. & Doidge, M. (2022). A trade deal with the EU makes sense for NZ, but what's in it for Europe? symbolically, a lot. <https://theconversation.com/a-trade-deal-with-the-eu-makes-sense-for-nz-but-whats-in-it-for-europe-symbolically-a-lot-186637>.
- LSE (2021). Comparative analysis of TSD provisions for identification of best practices to support the TSD review. https://trade.ec.europa.eu/doclib/docs/2021/september/tradoc_159810.pdf.
- Madner, V. (2017). A new generation of trade agreements: an opportunity not to be missed? In S. Griller, W. Obwexer, & E. Vranes (Eds.), *Mega-Regional Trade Agreements: CETA, TTIP, and TiSA: new orientations for EU external economic relations* (pp. 307–313). Oxford: Oxford University Press.
- Makarenko, A., & Chernikova, L. (2020). "New Generation" EU free trade agreements: A combination of traditional and innovative mechanisms. In J. Kovalchuk (Ed.), *Post-industrial society* (pp. 109–122). Switzerland: Springer Nature Switzerland AG.
- Martinuzzi, A., Krumay, B., & Pisano, U. (2011). Focus CSR: the new communication of the EU commission on CSR and national CSR strategies and action plans. https://www.esdn.eu/fileadmin/ESDN_Reports/2011-December-The_New_Communication_of_the_EU_Commission_on_CSR_and_National_CSR_strategies.pdf.
- Mullerat, R. (2013). Corporate social responsibility: A European perspective. https://aei.pitt.edu/43368/1/Mullerat_CSR_Europa.pdf.
- Partnership agreement between the members of the African, Caribbean and Pacific Group of States of the one part, and the European Community and its Member States, of the other part ["Cotonou Agreement"], June 23, 2000. https://eur-lex.europa.eu/resource.html?uri=cellar:eebc0bbc-f137-4565-952d-3e1ce81ee890.0004.04/DOC_2&format=PDF.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 1–17.
- Stobierski, T. (2021). Types of corporate social responsibility to be aware of. *Harvard Business School Online*. <https://online.hbs.edu/blog/post/types-of-corporate-social-responsibility>.
- Tencati, A., Perrini, F., & Pogutz, S. (2004). New tools to foster corporate socially responsible behavior. *Journal of Business Ethics*, 53, 173–190.
- Wagner, A. (2017). The failure of corporate social responsibility provisions within international trade agreements and export credit agencies as a solution. *Boston University International Law Journal*, 35, 195–221.
- Wouters, J., & Chanet, L. (2008). Corporate human rights responsibility: A European perspective. *The North-western Journal of Human Rights*, 6, 1–105.

European Management Forum

► World Economic Forum (Davos) II

European Union Directive: The 8th Company Law Directive on Disclosure and Transparency

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Synonyms

Directive 2006/43/EC

Definition

The 8th Company Law Directive on Disclosure and Transparency (Directive 2006/43/EC) represents one of the main initiatives launched by the European Commission to enhance financial reporting' transparency. In detail, the Directive 2006/43/EU introduced a first set of rules to harmonize auditing procedures at the European level. Building on the main issues identified by academics and practitioners, the Directive identified a set of minimum requirements to enhance the overall quality of assurance processes, which represented one of the main criticisms identified during the initial phase of accounting harmonization in Europe. At the same time, the Directive also introduced additional ethical and professional requirements to raise the quality of the control processes adopted by the external auditors.

Auditing Harmonization in Europe

Since the second half of the twentieth century, the European Commission have considered accounting harmonization as one of the main goals to achieve. Accounting harmonization represents a strategic driver for the development of the European financial market because of the opportunity to favor the exchange of reliable and comparable information between companies and users. In this regard, many initiatives were launched to identify a common taxonomy to enhance the quality of the accounting processes (Nobes and Parker 2010). Within this scenario, the most relevant directives for accounting unification were the IV and the VII. The two directives, respectively, contributed to the debate through the introduction of more stringent requirements regarding the substance and form of financial statements (IV Directive) and through the definition of an organic set of rules on consolidated financial statements (VII) (Adamo 2001). Furthermore, in 1995 the process of accounting information received a new impetus as a result of the initiative taken by the party of the International Organization of

Securities Commissions (IOSCO), which started an initial discussion with the International Accounting Standards Committee (IASC) regarding the identification of appropriate accounting standards to be applied in the context of multinational companies (Murphy 2000).

The need to identify a set of common metrics to disclose financial information impacted also on auditing processes. In fact, an effective accounting harmonization requires also a subsequential analysis of the main issues related to auditing processes, which represent the main tools used by practitioners to verify the reliability of the information disclosed by companies. Considering that criticism, the European Commission launched two preliminary initiatives to integrate European regulation with specific rules about auditing processes:

- 15 November 2000: Recommendation on quality assurance for the statutory audit in the European Union: minimum requirements.
- 16 May 2002: Recommendation on Statutory Auditors' Independence in the EU: A Set of Fundamental Principles.

The two initiatives were followed by the publication of the final draft of the Directive 2006/43/EC in June 2006, which established rules concerning the statutory audit of annual and consolidated accounts (European Commission 2006). The Directive introduced substantial and formal requirements for auditors, such as the provision of more strict criteria in terms of educational background, professional knowledge, and practical training. In detail, the Directive 2006/43/EC consists of 55 articles and by the following 12 chapters:

- Chapter I — Subject Matter and Definitions
- Chapter II— Approval, Continuing Education and Mutual Recognition
- Chapter III — Registration
- Chapter IV — Professional Ethics, Independence, Objectivity, Confidentiality and Professional Secrecy

- Chapter V — Auditing Standards and Audit Reporting
- Chapter VI — Quality Assurance
- Chapter VII — Investigations and Sanctions
- Chapter VIII — Public Oversight and Regulatory Arrangements Between Member States
- Chapter IX — Appointment and Dismissal
- Chapter X — Audit Committee
- Chapter XI — International Aspects
- Chapter XII — Transitional and Final Provisions

Although the introduction of a wide number of items, the main novelties identified by the 8th Directive can be summarized in the 8 clusters identified by Tiron-Tudor and Boța-Avram in their pioneer research published in (2013). According to the authors, the main novelties of the Directive consist of the new requirements about confidentiality and professional secrecy of client information, public oversight over statutory auditors, audit quality assurance, independence and objectivity of the statutory auditors, disclosure of audit fees, audit firm transparency, auditing standards, and audit committees.

In the last few years, the Directive 2006/34/EU has been updated by the European Commission. In 2014, the European Union adopted a relevant reform of the EU Statutory Audit Market through the publication of two legal instruments: the Directive 2014/56/EU amending Directive 2006/43/EC on statutory audits of annual accounts and consolidated accounts (the Audit Directive) and Regulation No 537/2014 on specific requirements regarding statutory audit of public-interest entities (the Audit Regulation). The aims of the reform could be synthesized in four different needs: enhancing transparency, reinforcing auditors' independence, promoting competition between Big4 and small auditors, and strengthen pan-EU supervision. In this regard, the current debate about auditing harmonization in Europe is characterized by an increasing attention paid by academics about the main initiatives and consultations launched by policy makers and standard setters (Krivogorsky 2011).

Summary

Harmonization is a key topic in accounting research. However, only a few parts of accounting literature consider the main implications related to auditing harmonization, which represents a standalone topic in accounting research. In this regard, the analysis of the Directive 2006/43/EC represents a key pillar for an effective comprehension of the real effects related to the introduction of more strict requirements by Member States. Within this scenario, accounting scholars could cover a pivotal role to bridge the knowledge gap between academia and practitioners.

Cross-References

► [Regulation](#)

References

- Adamo, S. (2001). *Problemi di armonizzazione dell'informazione contabile: processi, attori, strumenti, un modello interpretativo*. Milano: Giuffrè.
- European Commission. (2006). *Directive 2006/43/EC of the European Parliament and of the Council on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC Text with EEA relevance*.
- Krivogorsky, V. (2011). *Law, corporate governance and accounting: European perspectives* (pp. 1–293). <https://doi.org/10.4324/9780203828496>.
- Murphy, A. B. (2000). The impact of adopting international accounting standards on the harmonization of accounting practices. *International Journal of Accounting*, 35(4), 471–493. [https://doi.org/10.1016/s0020-7063\(00\)00074-1](https://doi.org/10.1016/s0020-7063(00)00074-1).
- Nobes, C., & Parker, R. (2010). *Comparative international accounting*. Harlow: Pearson.
- Tiron-Tudor, A., & Boța-Avram, C. (2013). European Union directive: The 8th Company Law Directive on disclosure and transparency. In *Encyclopedia of corporate social responsibility* (pp. 1097–1104). https://doi.org/10.1007/978-3-642-28036-8_316.

Evaluation

- ▶ Audit
- ▶ CSR Disclosure, Quality Measurement of

Evaluative Judgments

- ▶ Legitimacy Theory II: Legitimacy Judgments

Event Studies

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Description

The so-called event study is a statistical method. It is commonly used to evaluate the influence of a specific event on firm value (MacKinlay 1997; McWilliams and Siegel 1997). An example would be the announcement of a mass layoff. With the help of an event study, it can be analyzed if investors believe this layoff creates or destroys firm value. Other events often analyzed with the event studies include mergers and acquisitions (M&A), earnings announcements, investment decisions, or corporate social responsibility-related issues (MacKinlay 1997; McWilliams and Siegel 1997).

In an event study, the actual observable returns to a company given an event are compared to return predictions (the assumed returns that would have been achieved if no event had occurred). Any difference is attributed to the event under investigation. Introduced by Dolley (1933) and mainly influenced by Fama et al. (1969), the event study method has become the standard way of measuring stock price reactions to some announcement or event (Binder 1998). The wide variety of possible applications has

made the event study method commonplace in economic, finance, and accounting research, and the number of empirical studies using this method is huge.

Introduction

The event study method is founded on the assumption that markets are efficient (efficient market hypothesis or theory). The underlying efficient market theory is one of the dominant themes in academic and financial economics literature since the 1960s (Elton et al. 1995). It states that “*security prices at any point in time “fully reflect” all available information*” (Fama 1970, p. 388). According to this hypothesis, security prices provide an unbiased estimate of the discounted value of a firms’ future cash flows. Furthermore, they accurately reflect all available information if the financial market is efficient in its ability to absorb information relevant to the value of stock prices and security prices as they instantly adjust to new information (Fama 1991; Fama et al. 1969; Harrison and Freeman 1999).

Since this is evidently an extreme null hypothesis, Fama (1970, 1991) distinguished three different types of market efficiency: the weak form, the semi-strong form, and the strong form efficiency. In the weak form, the efficient market theory states that current prices on traded assets (e.g., stocks, bonds, or property) already contain all information given by historical prices. To fulfill the necessities of the semi-strong form of efficiency, it is mandatory that current prices on traded assets contain all information given by historical prices, fully reflect all publicly available information, and change very rapidly to the new publicly available information. Finally, strong form efficiency additionally demands that current prices on traded assets reflect all information, public and private. The overall idea behind the event study method is to attribute abnormal returns (defined as the difference between actual observable returns and expected ones) to an event (Binder 1998). Thus, the event study method can

be used to investigate stock price reactions as an answer to the announcement of unforeseen events (Fama et al. 1969). The event study method is based on the assumption that capital markets are semi-efficient, i.e., that there is a fast reaction of capital markets to the new publicly available information.

In academic literature, different ways of conducting an event study are used and debated (Bowman 1983; Peterson 1989; Santomero 1991; Strong 1992). However, management research usually follows the recommendations of McWilliams and Siegel (1997) and MacKinlay (1997) concerning the design of an event study. Therefore, this standard method for conducting an event study is outlined below.

Method Explanation

The publication day of an event under investigation is taken as the event or announcement date. In case there were several announcements for the same event at different points in time, the earliest announcement encompassing the relevant information is defined as the announcement date. If the announcement date cannot be identified with certainty or if there were only speculations, but no specific announcements, an event should not be taken into account. The time around the announcement date, the so-called event window, is used to measure abnormal returns. It is often starting the day before the announcement date and ending on the day after the announcement date (3-day event window). It is important to keep in mind that both the precise determination of the announcement date as well as the length of the event window influence the quality of an event study. Since the event window length is inversely linked to the quality of the results (Brown and Warner 1985, p. 12), MacKinlay (1997) postulates that a 2-day event window is sufficient to incorporate all relevant information and at the same time mitigates the appearance of noise (e.g., because of overlapping events). Therefore, the event window often only includes both the announcement day ($t = 0$) and the next day ($t = +1$), reflecting the ideal event window

length recommended by MacKinlay (1997). If overlapping events are observed within the event window of a specific event, an event should be deleted from the sample to ensure accuracy of the data.

Selection of Normal and Abnormal Returns and Test Statistics

Usually, discrete returns are used to estimate the expected returns of the stocks under investigation. All deviations of the observed returns from the expected returns, which are presumably caused by stock-influencing information (e.g., the announcement of employee layoffs), are interpreted as abnormal returns (McWilliams and Siegel 1997). In other words, the abnormal return is the difference between the actual ex-post return of a security over a selected event window and the security's expected return over the same event window (MacKinlay 1997). The abnormal return can be calculated, and this is mostly done using the market model. The equation for the abnormal returns is as follows:

$$AR_{i,t} = R_{i,t} - E(R_{i,t} | X_{i,t})$$

with $AR_{i,t}$ as the abnormal return of the security i on day t , $R_{i,t}$ as the return of the security i on day t and $E(R_{i,t} | X_{i,t})$ as the expected return of the security i on day t for when considering the estimated market model.

The market model outlined by Sharpe (1963) is usually taken to calculate the expected returns. The equation is given as follows:

$$R_{i,t} = \alpha_i + \beta_i * R_{m,t} + u_{i,t}$$

with $R_{m,t}$ as the rate of return on a market portfolio on day t , α_i as the parameter of the market model, β_i as the systematic risk of security i and $u_{i,t}$ as the error term. The needed parameter estimates of the market model can be obtained from regression analysis over an event preceding the estimation period.

Once the market model parameter estimates are obtained, it is possible to calculate the abnormal returns of security i on day t by subtracting the expected return within the event window from the actual return within the event window. The

following equation (Brown and Warner 1985) needs to be used:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i * R_{mt}$$

These calculated abnormal returns are now assumed to echo the stock market's reaction to the announcement. In the next step, the abnormal returns calculated for each company for each day around an event are taken to calculate the average cumulative abnormal returns $\overline{CAR}_{(t_1, t_2)}$ for the event window (time period (t_1, t_2)) for the whole sample. The equation is given by Fama et al. (1969) as follows:

$$\overline{CAR}_{(t_1, t_2)} = \frac{1}{N} \sum_{j=1}^N \sum_{t=t_1}^{t_2} AR_{it}$$

With $\overline{CAR}_{(t_1, t_2)}$ as the average cumulative abnormal returns during time period t and AR_{it} as the abnormal return of stock i on day t. After the CARs have been computed, statistical tests should be used to assess whether or not the average cumulative abnormal return differs significantly from zero. The test hypothesis is given as follows:

$$H_0 : E(\overline{CAR}_{(t_1, t_2)}) = 0 \quad \text{vs.} \quad H_1 : E(\overline{CAR}_{(t_1, t_2)}) < > 0$$

To test for the significance of the calculated abnormal returns, one can use parametric tests (t-tests) or a non-parametric test (Wilcoxon Sign Rank).

Event Study Tools and Implementation

Event studies are often implemented and analyzed with the help of statistical analysis software (e.g., Stata, Matlab, or R). In addition, apps and desktop tools which help to perform event studies exist (e.g., <https://eventstudytools.com/> or <https://eventstudymetrics.com/>).

Summary

The overall idea behind the event study method is to attribute abnormal returns (defined as the

difference between actual and expected returns) to an event (Binder 1998). In general, an event study is a systematic examination of the average impact of a certain event on the price of a particular type of (corporate) asset. Event studies constitute an established research method among researchers in the fields of accounting, finance, management, and marketing. The standard event study method employs a 2–3 day event window and uses the market model of Sharpe (1963) to calculate the expected returns.

Cross-References

- [Corporate Sustainability Reporting Index](#)
- [Employee Downsizing](#)

References

- Binder, J. (1998). The event study methodology since 1969. *Review of Quantitative Finance and Accounting*, 11(2), 111–137.
- Bowman, R. (1983). Understanding and Conducting Event Studies. *Journal of Business Finance & Accounting*, 10(4), 561–583.
- Brown, S. J., & Warner, J. B. (1985). Using Daily Stock Returns. *Journal of Financial Economics*, 14(1), 3–31.
- Dolley, J. C. (1933). Characteristics and procedure of common stock split-ups. *Harvard Business Review*, 11(3), 316–326.
- Elton, E. J., Gruber, M. J., & Blake, C. R. (1995). Fundamental economic variables, expected returns, and bond fund performance. *The Journal of Finance*, 50(4), 1229–1256.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25(2), 383–417.
- Fama, E. F. (1991). Efficient capital markets: II. *The Journal of Finance*, 46(5), 1575–1617.
- Fama, E. F., Fisher, L., Jensen, M., & Roll, R. (1969). The adjustment of stock prices to new information. *International Economic Review*, 10(1).
- Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives. *Academy of Management Journal*, 42(5), 479–485.
- MacKinlay, C. (1997). Event Studies in Economics and Finance. *Journal of Economic Literature*, 35(1), 13–39.
- McWilliams, A., & Siegel, D. (1997). Event Studies in Management Research: Theoretical and Empirical Issues. *Academy of Management Journal*, 40(3), 626–657.

- Peterson, P. P. (1989). Event Studies: A Review of Issues and Methodology. *Quarterly Journal of Business and Economics*, 28(3), 36–66.
- Santomero, A. (1991). Money Supply Announcements: A Retrospective. *Journal of Economics and Business*, 43(1), 1–23.
- Sharpe, W. F. (1963). A simplified model for portfolio analysis. *Management Science*, 9(2), 277–293.
- Strong, N. (1992). Modelling Abnormal Returns: A Review Article. *Journal of Business Finance & Accounting*, 19(4), 533–553.

Event Sustainability Management Systems – Requirements with Guidance for Use

► ISO 20121 Standard (Event Sustainability)

E-waste

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Synonyms

[Electronic waste](#)

Definition

E-waste or electronic waste is any electrical or electronic equipment that has been discarded, including working and broken equipment tossed in the garbage or donated to a charity store. These are hazardous since the toxic chemicals that innately percolate from the buried metals are very harmful to living organisms. Over 60 million tons of e-waste is currently created every year, equivalent to all of the business airlines ever manufactured. In 2022, the total e-waste output would be equivalent to more than 400 cruise ships. If all of the e-waste of the world in a given

year would be placed in a line, it would be over 77 miles long, and it would take over an hour of highway driving to get to the end.

Only a less than a fifth of it is recycled. This form of waste is worse than other types since the materials needed to make them are usually toxic and hazardous and are likely to pose risks to individual's health and security and the environment. After discussing the various types of e-waste, statistics of the growth of e-waste are provided, followed by the discussions of the major ordeals, disposal options, and a conclusion.

Types of E-Wastes

There are many types of E-Wastes. With the proliferation of technology, their variety continues to grow. Some of the major examples under the primary categories are as follows:

Communications and IT Devices

Smartphones, desktop and laptop computers, monitors, circuit boards, and hard drives

Electronic Utilities

Electrical cords, Fitbits, heating pads, heart monitors, lamps, massage chairs, night lights, smart lights, smart watches, television remotes, and treadmills

Home Appliances

Electric cookers, fans, heaters, home entertainment devices, and microwaves

Home Entertainment Devices

Blu-ray players, copiers, DVDs, fax machines, printers, stereos, televisions, and video game systems

Office and Medical Equipment

Audio and video equipment, autoclave, copiers and printers, cords and cables, defibrillator, dialysis machines, imaging equipment, IT servers, network hardware, phone and PBX systems, power strips and power supplies, Wi-Fi dongles

Growth of E-Waste

Over 60 million tons of e-waste is currently created each year – according to Statista (2022); the amount has steadily increased from 33.8 million tons in 2010 to over 60 million tons today and is expected to be almost 75 million tons by 2025 (see Fig. 1). The e-waste produced annually is worth over \$62.5 billion, more than the nominal GDPs of nearly half of the countries in the world.

As shown in Fig. 2, as of 2020, Asia produces the largest volume of e-waste (23 million), followed by the Americas (North and South) (12 million tons), Europe (11 million tons), Africa (3 million tons), and Oceania (1 million tons). Yet, per capita, Europe produces the most e-waste at 35.6 lb. per person, followed by Oceania (35.4 lb.), and the Americas (29.2 lb.). Asia and Africa's per person contributions are much lower at 12.3 lb. and 5.5 lb., respectively.

Even though the advanced nations create the most e-waste, between 70% and 80% of the world's e-waste (equivalent to between 3 and 9 million tons) is sent to the landfill sites in developing nations, where it is sorted and sold or burned to extract materials. The world's largest e-waste scrapyards are in Agbogbloshie, an area in Accra, Ghana. It receives over 225,000 tons of e-waste every year.

E-waste grew at a rate of 21% a year between 2014 and 2020. Based on current trends, the total amount of e-waste will reach 74 million tons, nearly doubling the output from 2014.

Ordeals with E-Waste

With the proliferation of electronic devices, the three major problems with e-waste are the potential harm that they do to the environment, our health, and data security issues. They are discussed below.

Environmental Hazard

If not disposed properly, e-waste can be harmful to the environment, since it can contain toxic materials such as lead, mercury, and cadmium. These

materials can leach into the soil and water supply if e-waste is not properly handled, causing damage to ecosystems and potentially posing a risk to human health. Hence, they need to be properly disposed so as not to harm the environment.

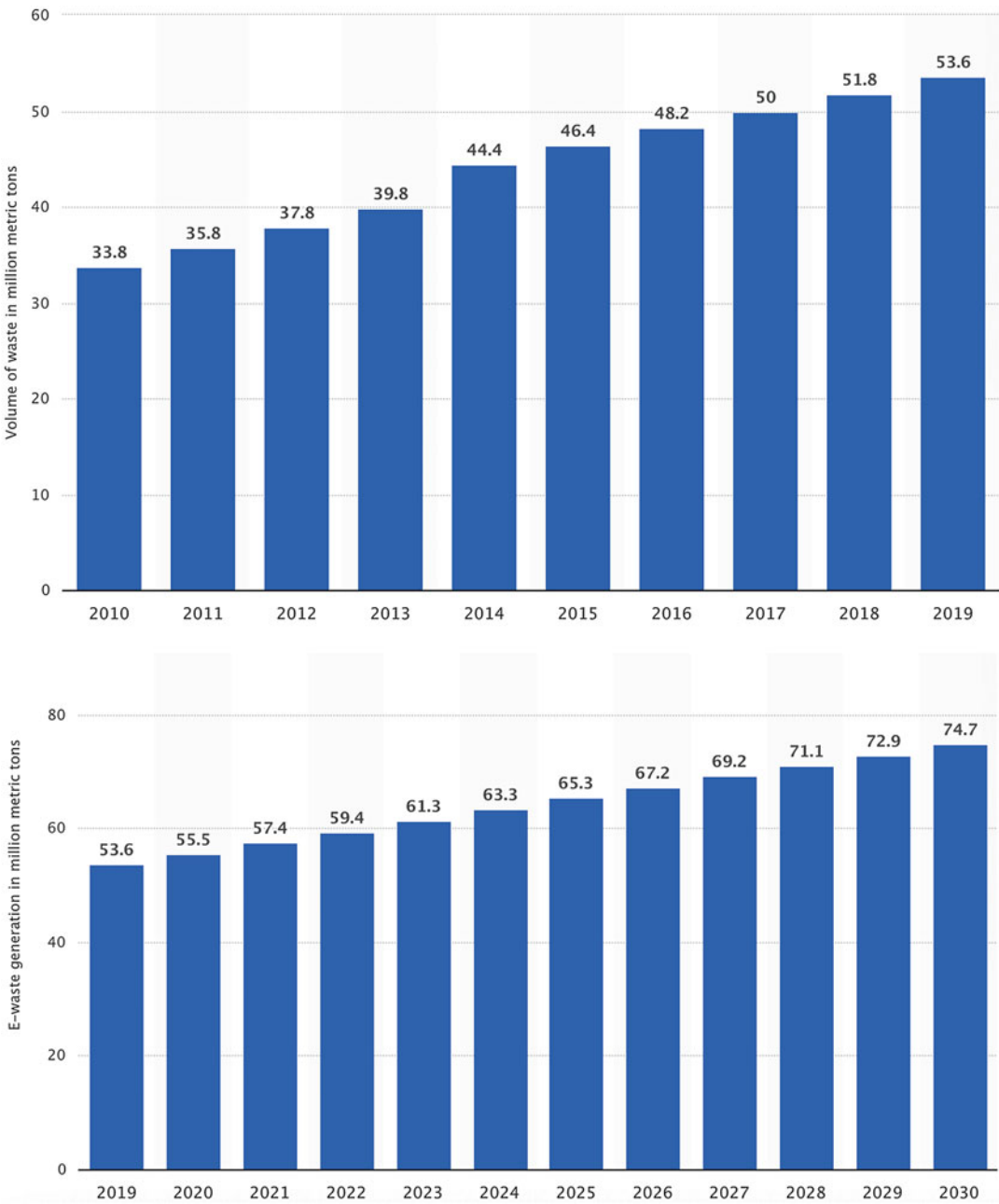
Specifically, the environment can be harmed in three primary ways:

- *Air contamination:* The shredding and melting of e-waste releases dust particles in the atmosphere and causes increased pollution. In 2020, nearly 90 million tons of carbon dioxide contaminated the atmosphere from refrigerator and air conditioning e-waste alone, contributing to nearly 0.3% of global greenhouse emissions that year.
- *Soil contamination:* The improper disposal of e-waste in landfills causes heavy metals and flame retardants to seep directly into the soil. A computer and a monitor require 500 lb. of fossil fuels and 50 lb. of chemicals, which contaminate the soil if not disposed properly.
- *Water contamination:* Heavy metals can leak from the soil to the groundwater causing severe damage through acidification and toxification.

Health Hazard

The e-waste also releases greenhouse gases harming human health, as well as that of wildlife. It particularly harms the health of people living or working close to the e-waste recycling sites. This is especially true of sites around developing countries. There are over a thousand harmful substances including nickel, lead, and mercury. Health problems include changes in thyroid function, adverse neonatal outcomes, temperamental and behavioral swings, and diminished lung functions.

Individuals exposed to e-waste are at greater risk of stillbirths, premature births, and spontaneous abortions and are more likely to have greater DNA damage. Their children are typically shorter and have reduced birth weights. There are currently over 18 million children and adolescents working in the e-waste processing sectors. The toxic chemicals in e-waste typically cause them to be of smaller size, and have less developed organs.

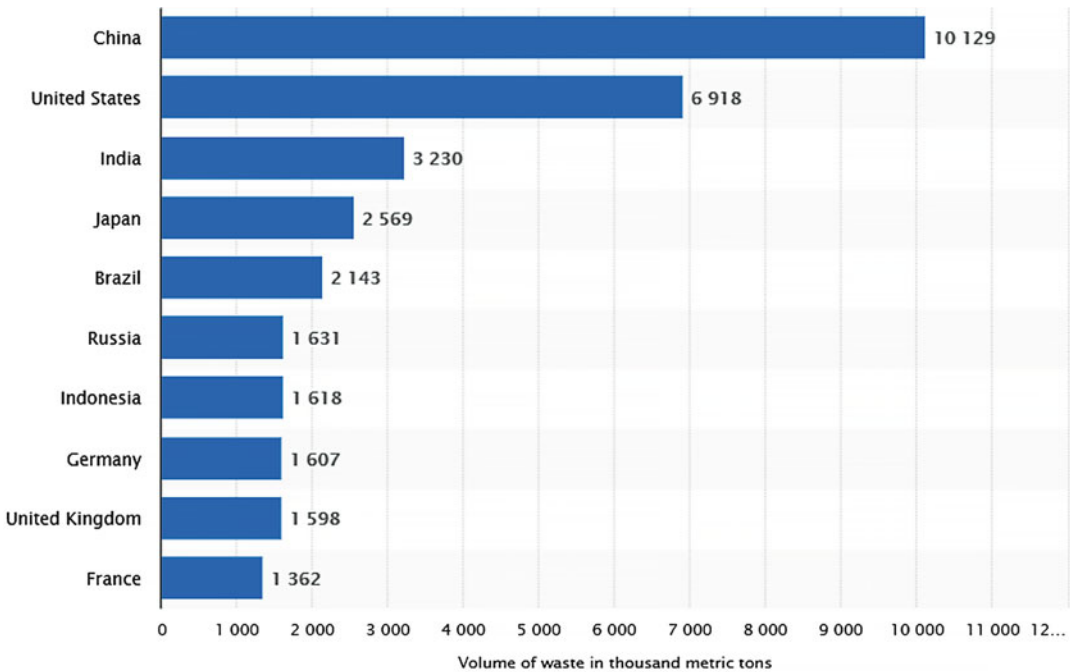


E-waste, Fig. 1 E-waste generated worldwide from 2010 to 2019 and projected between 2019 and 2030 (in million metric tons). (Source: Statista (2023))

Data Security

If not disposed properly, critical documents and serial numbers may be used by miscreants for stealing someone’s identity. For both businesses

as well as individual consumers, care must be taken to discard the hard drive in one’s computer or the memory stick in a smartphone. Although several disposal methods exist, none are as



E-waste, Fig. 2 E-waste generation by country (2020) [in thousand metric tons]. (Source: Statista (2023))

foolproof as physically destructing or dismantling the electronics equipment. One must, however, be careful, since many of these devices are likely to explode if dismantled incorrectly. Businesses should be particularly careful about protecting their customers and employees' data because of harsh legal liabilities.

independent e-waste recycling firms that take responsibility of handling the disposal of old electronic devices. A third option is to donate e-waste to organizations that can reuse or repurpose the equipment. Several nonprofit organizations, schools and other institutions, and libraries look to using the donated electronics either as is or after repair.

Disposal and Recycling Options of E-Waste

It is critical to properly dispose of e-waste to prevent harm to the environment, and to ensure that valuable materials are recovered and reused. By properly managing e-waste, the environmental impact of electronic devices can be reduced, hence promoting sustainable resource management.

There are several modes of properly disposing of e-waste. The best option is to recycle e-waste at certified facilities. Most major electronics manufacturers and retailers offer e-waste recycling programs. Additionally, there are

Summary

The world is beginning to have a much greater appreciation for the management of e-waste. Switzerland initiated the first e-waste program in 1991 with the introduction of a system to recycle refrigerators, and soon adding many more electronic devices to the list. By the turn of the twenty-first century, the European Union had adopted similar e-waste recycling programs for member nations.

Most countries in the world have now followed in their footsteps. Global organizations such as the UN agencies, the World Economic Forum, the

Global Environment Facility, and the World Business Council for Sustainable Development have continued to push for a continued revamping of laws governing the disposal of electronics products. In the USA, even though there are no federal laws governing e-waste, over half the states have enacted their own e-waste laws. Most major retailers in the USA and elsewhere have generous e-waste recycling policies regardless of where the product was bought.

With the annual value of e-wastes being greater than the GDP of many countries – now totaling over 7 kilograms for every person on the planet or the equivalent in weight to all the commercial aircraft ever built, disposing them properly has become imperative. Nearly 80% of e-waste is improperly disposed, much of it in developing countries. That needs to change because of health, pollution, and security impacts as well as a loss of scarce and valuable raw materials.

Members of the *UN E-Waste Coalition* including *UN Environment*, *Global Environment Facility*, the *World Economic Forum*, and the *World Business Council for Sustainable Development* have called for an overhaul of the e-waste disposal system underlining the need for a circular economy where resources are valued and reused so as to minimize environmental impacts and create good sustainable jobs.

Cross-References

- ▶ [Basel Convention on the Control of Hazardous Wastes](#)
- ▶ [Basel Declaration on the Control of Hazardous Wastes \(Basel Convention\)](#)
- ▶ [Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment](#)
- ▶ [Sustainability of Waste Management System: Treatment and Separation for Material Recovery](#)
- ▶ [Sustainability of Waste Management System: Waste Generation and Collection](#)

- ▶ [Sustainability of Waste Management Systems: Energy Recovery](#)
- ▶ [Sustainability of Waste Management Systems: Final Disposal](#)
- ▶ [Waste Dumping](#)

References/Further Reading

- Álvarez Etxeberria, I., & Aldaz Odriozola, M. (2018). The social reputation of European companies: Does anti-corruption disclosure affect stakeholders' perceptions? *Corporate Social Responsibility and Environmental Management*, 25(5), 713–721.
- Balde, C. P., Kuehr, R., Blumenthal, K., Gill, S. F., Kern, M., Micheli, P., ... & Huisman, J. (2015). *E-waste statistics: Guidelines on classifications, reporting and indicators*. IAS-SCYCLE, Bonn: United Nations University.
- Cucchiella, F., D'Adamo, I., Koh, S. L., & Rosa, P. (2015). Recycling of WEEE: An economic assessment of present and future e-waste streams. *Renewable and Sustainable Energy Reviews*, 51, 263–272.
- Environmental Protection Agency. (2023). Cleaning up electronic waste. Accessed at: <https://www.epa.gov/international-cooperation/cleaning-electronic-waste-e-waste>
- Garlapati, V. K. (2016). E-waste in India and developed countries: Management, recycling, business and biotechnological initiatives. *Renewable and Sustainable Energy Reviews*, 54, 874–881.
- Grant, K., Goldizen, F. C., Sly, P. D., Brune, M. N., Neira, M., van den Berg, M., & Norman, R. E. (2013). Health consequences of exposure to e-waste: A systematic review. *The Lancet Global Health*, 1(6), e350–e361.
- Heacock, M., Kelly, C. B., Asante, K. A., Birnbaum, L. S., Bergman, Å. L., Bruné, M. N., ... & Kamel, M. (2015). E-waste and harm to vulnerable populations: A growing global problem. *Environmental Health Perspectives*, 124(5), 550–555.
- Kahhat, R., Kim, J., Xu, M., Allenby, B., Williams, E., & Zhang, P. (2008). Exploring e-waste management systems in the United States. *Resources, Conservation and Recycling*, 52(7), 955–964.
- Khetriwal, D. S., Kraeuchi, P., & Widmer, R. (2009). Producer responsibility for e-waste management: Key issues for consideration—learning from the Swiss experience. *Journal of Environmental Management*, 90(1), 153–165.
- Kumar, A., Holuszko, M., & Espinosa, D. C. R. (2017). E-waste: An overview on generation, collection, legislation and recycling practices. *Resources, Conservation and Recycling*, 122, 32–42.

- Li, J., Zeng, X., Chen, M., Ogunseitan, O. A., & Stevels, A. (2015). "Control-alt-delete": Rebooting solutions for the e-waste problem. *Environmental Science & Technology*, 49(12), 7095–7108.
- Lundgren, K. (2012). *The global impact of e-waste: Addressing the challenge*. Geneva: International Labour Organization.
- Miller, G. Z., Tighe, M. E., Peaslee, G. F., Peña, K., & Gearhart, J. (2016). Toys, décor, and more: Evidence of hazardous electronic waste recycled into new consumer products. *Journal of Environmental Protection*, 7(03), 341.
- Nnorom, I. C., & Osibanjo, O. (2008). Overview of electronic waste (e-waste) management practices and legislations, and their poor applications in the developing countries. *Resources, Conservation and Recycling*, 52(6), 843–858.
- Plambeck, E., & Wang, Q. (2009). Effects of e-waste regulation on new product introduction. *Management Science*, 55(3), 333–347.
- Robinson, B. H. (2009). E-waste: An assessment of global production and environmental impacts. *Science of the Total Environment*, 408(2), 183–191.
- Statista. (2023). Electronic Waste Worldwide. Accessed at: <https://www.statista.com/topics/3409/electronic-waste-worldwide/>
- Terazono, A., Murakami, S., Abe, N., Inanc, B., Moriguchi, Y., Sakai, S. I., & Wong, M. H. (2006). Current status and research on E-waste issues in Asia. *Journal of Material Cycles and Waste Management*, 8(1), 1–12.
- Wang, F., Huisman, J., Meskers, C. E., Schluep, M., Stevels, A., & Hagelüken, C. (2012). The Best-of-2-Worlds philosophy: Developing local dismantling and global infrastructure network for sustainable e-waste treatment in emerging economies. *Waste Management*, 32(11), 2134–2146.
- Widmer, R., Oswald-Krapf, H., Sinha-Khetriwal, D., Schnellmann, M., & Böni, H. (2005). Global perspectives on e-waste. *Environmental Impact Assessment Review*, 25(5), 436–458.
- Yu, J., Williams, E., Ju, M., & Shao, C. (2010). Managing e-waste in China: Policies, pilot projects and alternative approaches. *Resources, Conservation and Recycling*, 54(11), 991–999.
- Zeng, X., Song, Q., Li, J., Yuan, W., Duan, H., & Liu, L. (2015). Solving e-waste problem using an integrated mobile recycling plant. *Journal of Cleaner Production*, 90, 55–59.

Examination

► Audit

Executive Compensation

► Executive Remuneration and CSR

Executive Pay

► Executive Remuneration and CSR

Executive Remuneration and CSR

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Synonyms

Bonuses; Executive compensation; Executive pay; Executive salaries; Pay packages; Stock options

Definition

The financial payments and benefits (the complete package) paid to high-ranking executives of a company as compensation for their respective jobs conducted for the company are widely termed as executive remuneration. The said high-ranking executives often bear the designations of president, vice-president, senior director, chief (executive, operating, financial, or treasury) officer, managing director, etc. among others.

The different components of the executive remuneration include:

- Base salary
- Bonus
- Stock options
- Stock grants (restricted stock plans)

- Pension
- Benefits (car, healthcare etc.)
- Perquisites (perks – like driver, company airplanes, etc.)

Base salary is the initial rate of compensation – usually based on the position which usually takes into account education and qualifications.

Bonus is an annual compensation based, if not completely then partly, on performance of the company. It is an incentive for managers to achieve (usually) quantitative targets such as increased revenues or profits or earning per share (EPS), etc. The incentive can also be turning a company around or a new corporate strategy, etc.

Stock options are most often offered to the managers to align the interests of shareholder and managers. The aim originally was to alleviate agency conflict. However, it has been seen that stock options have the tendency to fuel short termism in the decision-making process.

Stock grants are restricted stock plans whereby the liquidation of the stocks is staggered so as to ensure relatively longer-term commitment of the managers.

Pension is the payment paid out periodically to the employee when the said employee retires. It is a fund into which the employee, the employer, and the state may add sums of money over the employed years.

Benefits and perks are sometimes used as synonyms and are all the other extras that are added to the remuneration package, such as vehicle, accommodation, first-class air fare or charter services, etc.

Background

Executive remuneration is discussed widely and regularly and is in the dock because of the (perceived) excesses. The executive compensation has and should justifiably be higher than that of a worker. The reason is that the responsibilities of these two positions differ dramatically. The current divide between these pay positions is

however very debatable. The ratio of CEO-to-worker pay in 1965 was 20:1. In other words, for every dollar that a worker made, the CEO made \$20; in 1995, the ratio was 123:1, and in 2017, it was 312:1 (Mishel & Schieder, 2018).

The dramatic and steep hike in executive compensations is driven by stock-related payments. Stocks or shares carry a certain risk and therefore need to be compensated for. Despite accounting for this, the level of executive pays has defied gravity. Post-financial crises, from 2009 to 2018, median CEO pay of S&P 600 companies increased 95%. Using the same yardstick, for the same period, the median worker's pay rose by 20% (Roe & Papadopoulos, 2019).

Substantial bonuses, to the tune of \$20 billion, drawn from the bailout funds were paid out to themselves in 2009 by the Goldman Sachs, AIG, Bank of America, and Merrill Lynch among others, prompting President Obama to call the financial institutions “shameful” (Story & Dash, 2009). Nine banks that together lost \$81 billion received the biggest chunk of bailout funds to the tune of \$32.6 billion. These banks then paid some of their traders and bankers about \$one million each in bonuses (Story & Dash, 2009).

What happened to the bailout funds given to those who were partly responsible for the financial crises has been a textbook example of moral hazard at its best. The fact that most ordinary people will now have to take a cut in their retirement pensions and/or have to work way long past their retirement ages to make ends meet has fueled the outrage toward excesses of the boardroom. This justified anger led to calls of wider regulation on executive compensation in the USA.

This resentment was not limited to the USA. Hardline stance on executive compensation was also adopted by France and in Germany (Moffett, 2009; Inman, 2009). Backed by the EU Parliament, France, German, Italy, Luxembourg, the Netherlands, Spain, and Sweden jointly called for a ban on all guaranteed bonuses and deferral of all other bonuses over several years. Germany and France have also brought in rules to cap and tax bonuses in a move to reform the banking

sectors (Collins, 2009). In the UK, the government in 2009 announced that a one-time 50% corporate tax on all banking bonuses above £25,000 would be imposed (Spanier & Tobin, 2010).

Justification of High Salaries

On a year-on-year basis, there is a distinct ratcheting up of the executive compensation. This can be due to many reasons.

The argument that is most omnipresent in justifying high salaries to the executives is that, to attract and retain good caliber, one has to hang a good carrot. To retain good people is supposedly very difficult since they get head hunted or are tempted by better offers. Companies therefore offer very attractive pay packages so that their top executives resist the temptation to go elsewhere.

Another argument that is used to justify high pay is the “top of the industry” claim. If a company is a market leader, then it needs the right talent to maintain this leadership position. This is because at this level, even a minor slip-up can be very expensive. A CEO who is well versed with the product and financial markets and with strategizing and has charisma, personality, and the courage to lead a company will of course not come by cheap.

Another oft-cited reason is the “peer group” practice. This is fairly common in the industry. Here, when deciding upon the compensation for top executives, businesses of similar type and size are used for setting up the peer group. The compensation paid out by this peer group is then used as a benchmark to decide upon the compensation package for the said top executives. A matched package, if not better, is the usual outcome of such peer group analysis. Interestingly, in reality, it is very common to have bigger companies in the peer group – causing at times big hikes in executive pays.

Yet another reason is simply hiking up of the bonuses when top executives change their job from one big company to the other.

Executive Remuneration and CSR

The size of executive compensation and the serious divide it leads to in the society are causes for concern. There are many arguments provided by the industry that such high remuneration is justified and there are equal arguments which insist that the disparity between a worker’s pay and an executive’s pay is totally unjustified.

However, it is clear that the level of pressure at the very top of the company is way different from that on the shop floor. The top executives are not only responsible for themselves but for the whole company. Wrong decisions can cause severe consequences on all stakeholder levels which also includes many a times the economy itself. Unlike a worker who can usually go home at the end of the working day, the top executive is never really free from the organization given his/her responsibilities. This in many ways allows for the higher level of compensation.

The issue is not that the compensation is high but that it is “too” high. Unfortunately, it is very difficult to pin the right figure for compensation, and several efforts have been made on both the company and regulatory levels to rein in the excessive pay packages. Shareholders have also been encouraged to use their “say on pay” to curb the excesses.

While it is only fair that consistently good company performance and added value to the shareholders should be rewarded commensurately, it is also fair to prevent serious disparity of pays. The responsibility of a company is to maximize its shareholder wealth while upholding its social and ethical responsibilities. In this particular context, it can only be achieved if the executives at the top accept their responsibility toward proactively limiting the relentless ratcheting up of remuneration to prevent the serious disparity.

Cross-References

- [Accountability](#)
- [Auditors and Corporate Governance](#)

- Bonuses (Employee for Performance)
- Directors and CSR
- Greenbury Report (UK)
- Shareholder and Stakeholder Activism
- UK Corporate Governance Code (2010)

References

- Collins, S. (2009, September 10). Buzek backs calls to limit bankers' pay. *Europolitics*. https://www.stjornarradid.is/media/innanrikisraduneyti-media/media/evropumal09/europolitics_3814_10092009.pdf. Accessed 7 August 2020.
- Inman, P. (2009, September 1). France and Germany declare war on bankers' bonuses. *The Guardian*. <https://www.theguardian.com/business/2009/sep/01/france-germany-demand-bonus-sanctions>. Accessed 5 August 2020.
- Mishel, L., & Schieder, J. (2018, August 16). CEO compensation surged in 2017. *Economic Policy Institute*. <https://www.epi.org/publication/ceo-compensation-surged-in-2017/>. Accessed 5 August 2020.
- Moffett, S. (2009, March 28). France faces pressure over bonuses as Natixis sets \$94.6 million payout. *The Wall Street Journal*. <https://www.wsj.com/articles/SB123820103115262379>. Accessed 5 August 2020.
- Roe, J., & Papadopoulos, K. (2019, April 16). 2019 U.S. executive compensation trends. [Online forum post]. Harvard Law School Forum on Corporate Governance. <https://corpgov.law.harvard.edu/2019/04/16/2019-u-s-executive-compensation-trends/>. Accessed 5 August 2020.
- Spanier, G., & Tobin, L. (2010, January 15). Bankers hunt for ways to avoid 50% income tax. *Evening Standard*. <https://www.standard.co.uk/business/markets/bankers-hunt-for-ways-to-avoid-50-income-tax-6709817.html>. Accessed 7 August 2020.
- Story, L., & Dash, E. (2009, June 30). Bankers reaped lavish bonuses during bailouts. *The New York Times*. <https://www.nytimes.com/2009/07/31/business/31pay.html>. Accessed 7 August 2020.

Executive Salaries

- Executive Remuneration and CSR

Explicit CSR

- Sunken CSR and SMEs

Exploitation

- Corruption

Exploitative Business Practices

- Shadow Trades

Extensive Wealth

- Abundance (CSR)

External Auditors

- Auditors and Corporate Governance

External Branding

- Employer Branding

External Costs

- Externalities

External Directors

- Non-executive Director (NED)

External Economy

- Externalities (Economics)

Externalities

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Synonyms

External costs; Market failure; Side effects; Spill-over effect

Definition

Externalities are positive and negative side effects that come from producing or consuming a good or service. The effect is not brought about by those affected. The affected third party – an individual or an organization, or society – has no control over the creation of that cost or benefit, as externalities are associated with the cause–effect chain.

Externalities as a Phenomenon

Henry Sidgwick (1901) was the first economist to articulate the “spillover effects” of production and consumption. After him, Arthur C. Pigou (1932) formalized the concept of “externalities.” Pigou’s externality theory was dominant in economics until Ronald Coase published “The Problem of Social Cost” (Coase 1960). Externality dominates the theory of economic policy (Buchanan and Stubblebine 1962).

The idea of a market economy is based on smart and rational consumer choices. These choices guide markets toward the best outcome. However, in the current global economy rational choices are difficult to make as producers and consumers are located far from each other. Long product manufacturing chains include externalities that are not reflected in the prices of products and services and whose existence is difficult to identify. For example, in Europe, a large proportion of daily commodities are made in Asia.

Market failure may occur if the prices of products and services do not tell consumers the truth. The price of a good or service gives a distorted message to the consumer. Maximilian Auffhammer states that the slow response to climate change is “the biggest environmental market failure in human history” (Auffhammer 2018, p. 33). Even if the cost of climate change to society is difficult to determine, worldwide perspective on Arctic change reveals that releasing of methane from permafrost has an average global price tag of 60 trillion USD in the absence of mitigating action (world economy in 2012 was 70 trillion USD). Vast majority of the cost will be paid by developing countries. They will face extreme weather, lower agricultural production, and health problems (Whiteman et al. 2013; Cook et al. 2013).

There are technological and pecuniary externalities. Polluting of the water supply is an example of the technological externality that affect people in non-market way. Opposite to this, pecuniary externalities occur through the market. A new industry may reduce the value of capital by capturing customers of the other employers. Also, it may raise labor costs for other employers in the area (Hashimzade et al. 2017).

Positive and Negative Externalities

In Finland the saying “money smells” refers to the positive and negative effects of having a paper mill in your local area. In European Union, cycling provides annual benefits worth 24 billion euros, and walking around 66 billion euros, respectively. Opposite to this the annual social cost of automobility is 500 billion euros (Gössling et al. 2019). Thus, mobility presents both positive and negative externalities for society and citizens.

A positive externality causes an indirect benefit to an individual, an organization, or society. For example, planting trees makes people’s properties more attractive while also reducing air pollution (Mayhew 2015). An example of a positive externality might be growing apple trees, which also provide a good source of nectar for honeybees, thus benefiting the beekeeper (Manley et al.

2019). Thus, positive externalities are the effects of an activity that are pleasant or profitable but for which no price can be charged, such as the fertilization of fruit trees by bees.

Negative externality causes an indirect cost to an individual, an organization, or to society, “which does not have to be paid for by those carrying out the activity” (Hashimzade et al. 2017). An example of a negative externality could be, for instance, where pollution from an industrial plant impacts agricultural land, damaging plant life and affecting the livelihood of farmers nearby (Manley et al. 2019). Another common example is toxic emissions from industrial plants, where the people in the surrounding area that are harmed by the emissions have to bear a cost to mitigate the harm caused to them (Mayhew 2015). There is, however, “no externality until the law gives the cost bearer a right to be free of the costs imposed” (Adelstein 2017).

Toward a Transparent, Real-Cost Economy

Much of the true cost of the material well-being of people living in industrialized countries is outsourced to the soil, the atmosphere, people at the bottom of product processing chains, and especially to future generations. Social costs increase injustice in the world because the disadvantages of producing a particular product may only affect those who do not use the product or otherwise benefit from it. At the global level, the pollution of the workers’ working environments is already more harmful than malaria (Mills-Knapp et al. 2012). In other words, the price of many products and services is too low, because the social costs that come from producing or consuming a good or service are not included in the price (Parry et al. 2014). This leads to market failure. According to van den Bergh (2012) “system complexity, lock-in, and bounded rationality mean that the mainstream economic view of externality regulation is not accurate.”

In a society, sustainability transformations are easier to implement if all products and services in

the economy correctly reflect their indirect environmental and social impacts. This can serve to guide the daily decisions of consumers, producers, investors, and innovators toward sustainability (van den Bergh 2012). For example, when extracting, transporting, and processing coal, a waste stream is generated. Together with combustion these externalities are linked to multiple health and environment hazards, whereas the external costs of genuinely renewable sources of energy, such as wind and solar power, are remarkably lower. In 2005 terms, the greenhouse impacts and health damage costs of different power generation technologies in Europe were (Biegler 2009; also Castleden et al. 2011):

- 58 eur/MWh for brown coal
- 41 eur/MWh for black coal
- 4 eur/MWh for nuclear power
- 0.9 eur/MWh for on-shore wind power

It is usually argued that governments should take steps to eliminate negative externalities by means of taxation or other penalties. Transparent pricing, including the social costs and benefits of producing and consuming goods and services, is an essential solution for a rational market economy where citizens’ choices eliminate bad solutions and allow good solutions to thrive. The costs of pollution and depletion of natural resources due to the production and consumption of products can be more fully integrated into product prices, for example, through sin taxes. Pigouvian tax, for example, discourages “activities that impose a net cost of production onto third parties and society” (Pigou 1932).

Externalities in the Future

When externalities are identified, the negative externality can be decreased, and the positive externality increased. However, if people are not aware of the externality, they will not see the need to do anything about it (Horowitz 2013). For example, giving birth induces both positive and negative externalities. Many current tax, welfare, and school policies subsidize children. If

emissions restrictions are imposed, there may be pressure to make population policy less pronatalist, as the induced population externality is generally large. In theory, the optimal population is achieved through a planning policy “that can be implemented with emissions taxes (or caps) and child taxes” (Bohn and Stuart 2015). The issue is sensitive, and it is related to climate anxiety.

In a society, the role of claim-makers is essential. They persuade others that something is an externality. According to Best (1989) “claim-makers may be social movement activists, company representatives, scientists, members of the mass media, politicians, teachers, or anyone who has a bumper sticker, signs petitions or through conversation supports a cause.” What is an externality depends on the information that people have.

Companies are responsive to customers’ demands because their profitability depends on them. The power of consumers is increasing as people have more information available and more opportunities to share information. A single positive or negative observation can fast gain global attention. As this awareness increases, ecologically and socially unsustainable businesses lose their competitive edge. This was not possible on such a large scale before the current opportunities presented by social media.

Eliminating the negative externalities of a business may require transforming the entire production or service process. Increasing awareness of our planet’s finite resources and of mounting inequality is changing consumer behavior. The importance of low price as the sole determinant of consumer choice has already started to dwindle in well-being societies (Salonen et al. 2014). A way forward is offered by circular economy, as exemplified by collaboration in nature: “Bees require nectar from plants, and plants require pollination. So when plants were producing nectar and did not need pollination, beekeepers paid farmers for the right to put their hives on farmers’ fields, and when plants were producing little nectar but needed pollinations, farmers paid beekeepers. There was no regulation, tax, or subsidy involved” (Steelman 2004).

Summary

Externalities are side effects that come from producing or consuming a good or service. They are associated with the cause-effect chain. Including the costs of externalities to the prices of goods and services is a way forward because market failure may occur if the prices of products and services give a distorted message to the consumer. Sustainability, then, is the outcome of internalizing externalities. For example, societies could be supported toward sustainability by a global carbon tax, reflecting future externalities associated with different scenarios of human-induced climate change. A well-designed carbon pricing program motivates changes in a society. Since 1990, carbon pricing has been introduced in many national and subnational jurisdictions around the world. However, mainstreaming of a carbon price will require building political will, for example, by conscious consumers or grassroots activism (Fang 2019). Pricing through charges, levies, taxes, and permits helps “avoid leakages associated with unilateral action, voluntary restraint or technological standards on a limited set of products” (van den Bergh 2012). Overall, it seems that the holistic accountability of producers is an essential factor in solving the future challenges of citizens and societies on our finite planet. Optimal externality regulation would assure sustainable development.

Cross-References

- [Corporate Social Responsibility](#)
- [Externalities \(Economics\)](#)

References

- Adelstein, R. (2017). *The exchange order: Property and liability as an economic system*. Oxford: Oxford Scholarship Online.
- Auffhammer, M. (2018). Quantifying economic damages from climate change. *Journal of Economic Perspectives*, 32(4), 33–52.

- Best, J. (1989). *Images of issues: Typifying contemporary social problems*. New York: Aldine De Gruyter.
- Biegler, T. (2009). *The hidden costs of electricity: Externalities of power generation in Australia*. Melbourne: Australian Academy of Technological Sciences and Engineering. Available at <https://apo.org.au/sites/default/files/resource-files/2009/03/apo-nid4196-1189331.pdf>
- Bohn, H., & Stuart, C. (2015). Calculation of a population externality. *American Economic Journal: Economic Policy*, 7(2), 61–87.
- Buchanan, J., & Stubblebine, C. (1962). Externality. *Economica*, 29(116), 371–384.
- Castleden, W., Shearman, D., Crisp, G., & Finch, P. (2011). The mining and burning of coal: Effects on health and the environment. *The Medical Journal of Australia*, 195(6), 333–335.
- Coase, R. H. (1960). The problem of social cost. In C. Gopalakrishnan (Ed.), *Classic papers in natural resource economics*. London: Palgrave Macmillan.
- Cook, J., Nuccitelli, D., Green, S., Richardson, M., Winkler, B., Painting, R., Way, R., Jacobs, P., & Skuce, A. (2013). Quantifying the consensus on anthropogenic global warming in the scientific literature. *Environmental Research Letters*, 8(2), 1–7.
- Fang, C. (2019). Carbon pricing: Correcting climate change's market failure. *Sustainability: The Journal of Record*, 11(4), 162–166.
- Gössling, S., Choi, A., Dekker, K., & Metzler, D. (2019). The social cost of automobility, cycling and walking in the European Union. *Ecological Economics*, 158, 65–74.
- Hashimzade, N., Myles, G., & Black, J. (2017). *A dictionary of economics* (5th ed.). Oxford University Press.
- Horowitz, J. (2013). How to create an externality. *Journal of Economic and Social Policy*, 15(2).
- Manley, W., Foot, K., & Davis, A. (2019). *A dictionary of agriculture and land management*. Oxford: Oxford University Press.
- Mayhew, S. (2015). *A dictionary of geography* (5th ed.). Oxford: Oxford University Press.
- Mills-Knapp, S., Traore, K., Ericson, B., Keith, J., Hanrahan, D., & Caravanas, J. (2012). *The world's worst pollution problems: Assessing health risks at hazardous waste sites*. Zurich/New York: Green Cross Switzerland/Blacksmith Institute.
- Parry, I., Heine, D., Lis, E., & Li, S. (2014). *Getting energy prices right: From principle to practice*. Washington, DC: International Monetary Fund.
- Pigou, A. C. (1932). *The economics of welfare* (3rd ed.). London: MacMillan.
- Salonen, A., Fredriksson, L., Järvinen, S., Korteniemi, P., & Danielsson, J. (2014). Sustainable consumption in Finland – The phenomenon, consumer profiles and future scenarios. *International Journal of Marketing Studies*, 6(4), 59–82.
- Sidgwick, H. (1901). *The principles of political economy* (3rd ed.). London: Macmillan.
- Steelman, A. (2004). Jargon alert: Externality. *Econ Focus*, Federal Reserve Bank of Richmond, SPR, 1–6.
- van den Bergh, J. (2012). What is wrong with “externality”? *Ecological Economics*, 74, 1–2.
- Whiteman, G., Hope, C., & Wadhams, P. (2013). Vast costs of Arctic change. *Nature*, 499, 401–403.

Externalities (Economics)

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Synonyms

External economy; Market externalities; Spillovers; Technical externalities

Definition

An externality or external economy is a microeconomic term referring to a cost or benefit when the consumption or production decisions of goods and services cause an impact on third parties which are not reflected in the market price (OECD 2019). In economic activity, producer (supply side of the economy) and consumer (demand side of the economy) are the first and second parties, while third parties refer to other economic agents or units which are indirectly affected (Economics Online 2019). The concept of externalities explains the effect of market interactions on external agents. In a free market economy, producers and consumers play a key role in a market mechanism. Any market decision may lead to misallocation of resources and/or market failure. The consumption decision and production decision directly affect the externalities which are called spillovers.

Arthur C. Pigou is one of the first economists who indicate the concept of externalities in his book *The Economics of Welfare* in 1920. Pigou noted that individual economic units consider

their interests instead of considering any externalities. Pigou used alcohol to explain the term externalities. Alcohol production leads to positive externalities for the suppliers, while the sale of alcohol leads to negative externalities to consumers (Pigou 2009).

Introduction

An externality is a cost or benefit which produces by an economic unit but effects third parties, unrelated to that unit. Externalities play a crucial role on economic growth. The effect of a market mechanism on third parties who is external called also spread effect. Externalities may be positive or negative. If the effect provides benefit to third party is known as positive externalities while the effect provides cost third party is known as negative externalities. Corporations are the key sources of externalities. Corporate social responsibility projects are examples for externalities while the air pollution as result of production is known as negative externalities.

Since the year 1930s, welfare economists began to discuss on the externalities which work through the market mechanism mainly competitive market structure. So that, in economic theory, externalities have been explained as a market failure. Thus, macroeconomic policies and interventions are applied as a regulatory solution tool to this problematic such as taxation.

Positive Externalities and Negative Externalities

An externality is indirectly related to the production or consumption (Pressbooks 2019). Almost all externalities create cost (losses) or benefit (gain). Third parties or economic agents have no control over externalities. A technical externality is another concept which indicates the cost or benefit of the externalities. Many economists focus on technical externalities as

a market failure. Furthermore, policymakers and government authorities also use this concept to evaluate the macroeconomic decision such as government intervention, regulation, taxation, etc. Finally, externalities can be either positive or negative.

Externalities are negative when the externality may increase the cost to the economy or third-party economic agents. Air pollution emitted by a factory that affects the nearby area is an example of negative externalities (Investopedia 2019). Additionally, chemicals dumped by a business organization may kill fish, animals, or plant life nearby. Here in this example, the production process of a factory is not directly related to the environment.

Externalities are positive when the externality may increase the benefit to the economy or third-party economic agents. Research and development (R&D) and similarly corporate social responsibility (CSR) projects conducted by a supply side of the economy are well-known examples of positive externalities. These projects increase benefit to the economy as well as society as a whole. Construction of a road is another example of positive externalities which opens a new residential area or increases the number of tourists, new businesses, etc. (OECD 2019).

Consumption Externalities and Production Externalities

Consumption externalities and production externalities are the two forms of positive externalities and positive externalities. Both forms of externalities may arise if the social cost/benefit is greater than the individual cost/benefit.

Consumption externalities: Negative consumption externalities (social cost) occur when the consumption of a good or service results to costs or losses to third parties. A smoker causing a second-hand smoke, who does not smoke but is affected by smoking, is an example. Positive consumption externalities (social benefit) occur when

the consumption of a good or service results to benefit or gain to third parties (Intelligent Economists 2019). As an example of this term, education not only improves personal skills but also increases the gain of society.

Production externalities: Negative production externalities (social cost) occur when the production of a good or service results to costs to third parties. Producing furniture by cutting down forests leads to negative externalities to people as well as the environment. Positive production externalities (social benefit) occur when the production of a good or service results to benefit or gain to third parties. As an example of this term, planting flowers to land makes the residential area better to look.

Market-Based Solutions to Overcome Externalities

Market-based solutions focus on market tools to reduce in which externalities are taken into account. After the 1980s, governments enacted regulations and legislations to reduce the externalities, for instance, environmental regulations and acts, direct controls, health legislations, etc.:

Taxation is another tool to overcome the issue.

Fiscal policymakers may impose higher tax rates to goods or services causing the externalities. Pigovian tax which was named by economist A. Pigou focuses on the negative externalities. This tax aims to reduce market failure that causes externalities, for instance, taxing polluters.

Subsidies are also tools to reduce the effect of externalities. Subsidies are usually in the form of monetary benefits such as tax reduction, giving grants that are given by the government authorities to supply side of the economy (Investopedia 2019).

Property Right. Establishment of property right is another solution for externalities (Economics Online 2019).

Regulation. Government authorities or policymakers may impose regulation to limit or reduce the effect of externalities.

Charities channeling donations, encouraging behaviors and moral codes, etc. are other forms of private solutions against externality.

Providing more information to economic decision-making units to increase awareness.

Summary

Externalities effect both economic growth and development. These concepts are helpful to understand the growth differences among countries. Externalities may appear as positive externalities or negative externalities. Moreover, while positive externalities are benefit, negative externalities are cost of an economic activity. Well known example is environmental pollutions as a result of production process.

Cross-References

- Externalities
- Market Failure
- Technical Externalities

References

- Economics Online. (2019). Retrieved from https://www.economicsonline.co.uk/Market_failures/Externalities.html. Accessed 2 Aug 2019.
- Intelligent Economists. (2019). Retrieved from <https://www.intelligenteconomist.com/externalities/>. Accessed 2 Aug 2019.
- Investopedia. (2019). Retrieved from <https://www.investopedia.com/terms/e/externality.asp>. Accessed 2 Aug 2019.
- OECD. (2019). Retrieved from <https://stats.oecd.org/glossary/detail.asp?ID=3215>. Accessed 2 Aug 2019.
- Pigou, A. C. (2009). *The economics of welfare*. New Jersey, USA: Transaction Publishers.
- Pressbooks. (2019). Retrieved from <https://pressbooks.bccampus.ca/uvicecon103/chapter/5-1-externalities/>. Accessed 6 Sept 2019.

Further Reading

- Blinder, A. (1987). *Hard heads, soft hearts: Tough-minded economics for a just society*. New York: Addison-Wesley.
- Coase, R. (1960). The problem of social cost. *Journal of Law and Economics*, 3(1), 1–44.
- Cowen, T. (1992). *Public goods and market failures*. New Brunswick: Transaction Publishers.
- Friedman, D. (1996). *Hidden order: The economics of everyday life*. New York: Harper Business.
- Schultze, C. (1997). *The public use of private interest*. Washington, DC: Brookings Institution Press.
- Viscusi, W. K. (1994). *Cigarette taxation and the social consequences of smoking* (NBER Working Paper No. 4891). Cambridge, MA: National Bureau of Economic Research.

Extra Compensation

- [Bonuses \(Employee for Performance\)](#)

Exxon Valdez

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Synonyms

[Ocean pollution](#); [Oil spill](#); [Sustainability management](#); [Sustainable development](#); [Wildlife](#)

Definition

Around midnight on May 24, 1989, the oil tanker Exxon Valdez grounded on the pristine Alaskan coasts. Such an environmental disaster resulted in more than 10 million gallons of oil being spilled into the waters of Prince William Sound, affecting a natural habitat that had remained virtually intact up to that date. This entry dissects its main causes

and the subsequent consequences for the global ecosystem.

Introduction

The modern concept of sustainability management requires total concern with a series of moral-ethical principles in which all members of society are committed to self-sustainable economic development (Stead and Stead 1992), promoting initiatives and measures aimed, among other aspects, to prevent future environmental crises or disasters. In addition to creating a cleaner and more environmentally responsible planet, the aim is to prevent the recurrence of environmental catastrophes of the magnitude of the Exxon Valdez disaster, whose severity would be a turning point in the field of sustainability management. In fact, it served as a sad example of what can happen anywhere and anytime, if the right measures are not taken beforehand. It should be borne in mind that until not so long ago there were territories that were still inaccessible to human beings that shielded multiple species of plants and animals. In these habitats, the lack of human interference allowed a continuous regeneration and revitalization of the biosphere, guaranteeing the survival of a good number of living beings that proliferated in an environment conducive to their existence. At the same time, the inaccessibility of these areas made them traditionally excluded from the main commercial circuits or that their natural resources were massively exploited, coexisting with native human communities that to survive were limited to carrying out entirely sustainable practices, in harmony with the environment. Alaska, “The last frontier,” was probably, if not the last, one of these last natural sanctuaries, until the fateful grounding of the Exxon Valdez.

The history of human progress is linked to the history of navigation. Names of famous vessels such as Endeavour, Golden Hind, Mayflower, Santa Maria, or Victory evoke key events in the history of mankind. Scientific knowledge, culture, and commerce spread across the seas but also

plagues such as slavery, epidemics, and countless wars and unequal conquests. In the case of the Exxon Valdez disaster, it was originally just another mega oil tanker that often plied the crystalline waters of the Alaskan Gulf on its way to its terminal at Valdez, the Trans-Alaska Pipeline terminus. But in 1989, this ship eventually generated the largest oil spill in history, precisely in a huge, virgin environment that, until then, had remained untouched by the effects of global pollution. This event must be historically contextualized based on how Alaska entered late in the world geopolitical scene, passing through the hands of various nations that began to be interested in it because of its vast natural resources. The East Coast of North America has always been the “dark side” of the New World for the European colonizers. Despite its name, the Pacific Ocean has by far the highest level of winds, streams, and storms of all the seas. On the other hand, it was not yet known exactly the abundance of natural resources of this area of the planet to attract the attention of the world powers of the time. The Spanish Crown was the first to make an appearance in those latitudes; however, its possession was more nominal than effective, hence the few settlements that were founded in this area (e.g., San Blas).

Towards the first half of the seventeenth century, the successive Russian expeditions of S. Dezhnev, V. Bering, or A. Chirikov turned the northernmost corner of North America into a clear expansionist objective until this nation made the unclaimed territory its own with the foundation of a temporary settlement in the current Kodiak Island (Three Saints Bay), later transferred to the place that today constitutes modern Kodiak (Pavlovskaya Gavan 1792). Based on the papal bull *Inter caetera* (1493) and the Treaty of Tordesillas (1494), the Spanish Crown tried to assert its acquired rights over the area, by dispatching several expeditions that founded, among others, the current Valdez (Puerto de Valdés 1790) and Cordova (Puerto Córdoba 1790). Finally, Spain desisted from further colonization of those territories to become stronger in the Upper California, where it began to create settlements such as San Diego (1769), Monterey (1770), or San Francisco (1776). Curiously, the origin of the foundation of

the current Californian macro conurbations was a collateral effect of that period, being practically any tiny Alaskan port older than the current San Francisco (Ritter 2020). In honor of the future king of the United Kingdom, J. Cook’s expedition named the sound around the villages of Cordova and Valdez as Prince William Sound (1778), one of the gateways to Alaska from the south, where the grounding of the Exxon Valdez occurred during the night of March 24, 1989.

The Grounding of the Oil Tanker Exxon Valdez

Navigation along the coasts of Prince William Sound counts with three natural enemies: the sudden storms that depend on the changeable meteorology of the area, the frequent icebergs, and the Bligh Island Reef. Thus, upon leaving the terminal, Exxon Valdez’s controls used the automatic pilot to accelerate the journey, but fearing the threat of icebergs, they had to revert to the non-automatic sailing mode. This maneuver eventually led the ship straight to its doom, running onto the reef. As in so many other environmental catastrophes, it can be determined that the tragedy could have been avoided and that the human factor was the culprit once again. As it was later proved, the maneuver carried out by the vessel was completely illogical and inopportune, and it was even rumored that some of its crew members were drunk during the navigation (Ott 2008; Leacock 2009). Other voices such as Egan (1989) are even more severe, pointing out that the command crew operated under the effects of three harmful elements: “Drinking, Fatigue, and Complacency.” This lack of professionalism was inconceivable given that Exxon, the owner of the ship, had extensive experience in the industry and that it was one of a considerable number of oil companies with interests in the area, including ARCO, British Petroleum, Union, Mobil, Phillips, Amerada-Hess, or Home oil (Hameedi 1988). None of these companies had ever observed such a reckless maneuver to leave port, the crude oil being was carried without any notable incidence over time (Morris and Loughlin 2013), but

in the case of the Exxon Valdez, it seems that arrogance also turned out to be another important contributing factor. In this way, the captain of the vessel J. J. Hazelwood warned of the disaster at 12:26 am. (Adasiak et al. 1990): “We’ve fetched up!, ah!, hard aground!, north of Goose Island, off Bligh Reef and, ah!, evidently leaking some oil and we’re gonna be here for a while and, ah!, if you want, ah!, so you’re notified.” Figure 1 provides an approximate image of the Exxon Valdez grounding area.

Consequences of the Oil Spills

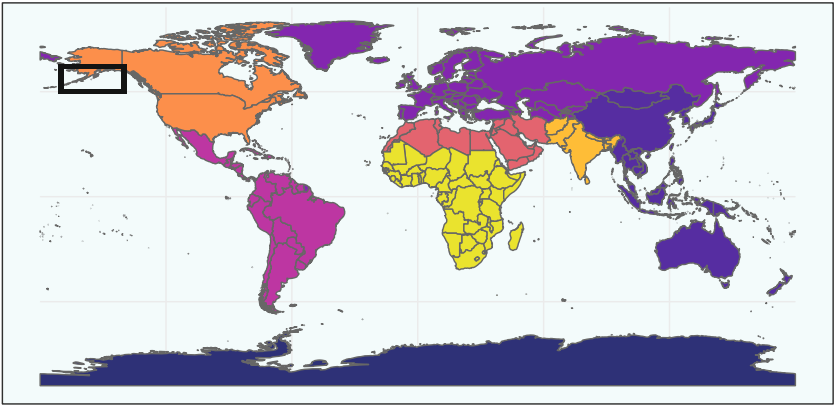
Once stranded in Prince William Sound, 11 million gallons of oil were released along the Eastern Gulf of Alaska, spanning about 1100 km of coastline (Loughlin 2013). In the early days of the event, the spill extended more than 900 km from the point where the disaster began (60.8400°N 146.8625°W), impacting several protected wilderness areas such as Aniakchak National Monument and Preserve; Chugach National Forest; Katmai National Park and Preserve; Kenai Fjords National Park; and Kodiak, Alaska Maritime, and Alaska Peninsula/Becharof National Wildlife Refuges (Hofman 2013). Figure 2 exhibits a quantitative comparison of the oil spilled as a result of the grounding in equivalent terms (barrels, gallons, and liters), showing the before and after of the disaster. It should be noted that since the oil was spread over an estimated area of 26,000 km² or almost 20% of the intricate Prince William Sound coastline was affected, the first phase of the massive cleanup (1989) was extremely complicated, hence the Alaska Office of Technology Assessment deemed that only about 3–4% of the oil spilled could be recuperated (Morris and Loughlin 2013).

Following the disaster, a triennial NRDA (Natural Resource Damage Assessment) was implemented (NOS 2021), whereby this ambitious project attempted to restore the degradation of the coastal habitat between 1989 and 1992, with particular emphasis on the regeneration of the wildlife, especially, birds (Wiens et al. 2004), fishes (Short et al. 2003), crustaceans (Armstrong

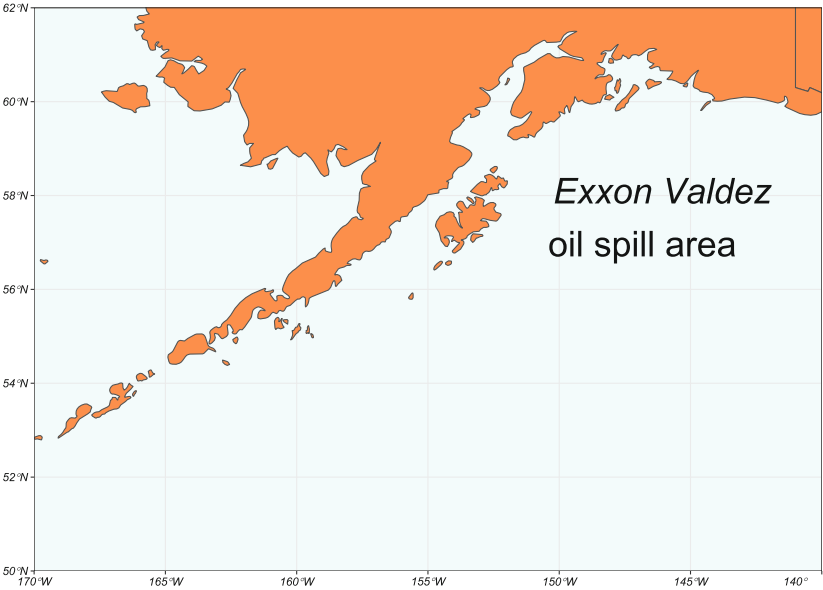
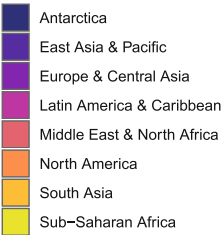
et al. 1995), mollusks (Fukuyama and Hoff 2000), and marine and terrestrial (Loughlin 2013). Among the extended list of endemic species that have been most affected may be listed, among others, the pink salmon (Murphy et al. 1998), the otters (Dean et al. 2002), the seals (Hoover-Miller et al. 2001), the brown bear (Sellers and Miller 1999), the orca whales (Matkin et al. 2008), the harlequin duck (Harwell et al. 2012), the cormorant (Lance et al. 2001), or the bald eagle (Bowman et al. 1997).

Summary

Alaska’s destiny could be compared to that of a beautiful and rich lady, who lives far away from the rest, and who from time to time is pursued by some unexpected tragedy. In the course of its history, three key events can be distinguished that would definitely lead to the depletion of its natural resources from the native populations and to the progressive degradation of its ecosystem: The Russian colonization of the seventeenth century, which would cause the indiscriminate hunting and the semi-slavery of the aborigines who were literally massacred. An example of this period is the Awa’uq Massacre (1784), at the same time that sailors exterminated the Steller’s sea cow (*Hydrodamalis gigas*). The second period to take into account was the Klondike Gold Rush (1899), an event that meant the construction of several railroad lines in areas previously unknown to most westerners, with the subsequent deforestation, erosion, and overharvesting of renewable resources (Periferakis 2019). The last episode was the discovery of the Prudhoe Bay oil wells in 1968, the largest oil reserve in the United States, and one of the largest in the world. In fact, the Exxon Valdez tragedy began here, since the construction of the Trans-Alaska Pipeline System, which begins precisely in this area, required the entire peninsula to be zig-zagged from North to South by a pipeline network that has had more than 500 spill oils since its opening. Evidently, the damage caused to the boreal, terrestrial, and marine fauna at first seemed irreparable because it meant a total breakdown of the native



a) Location of the grounding on the World Map.

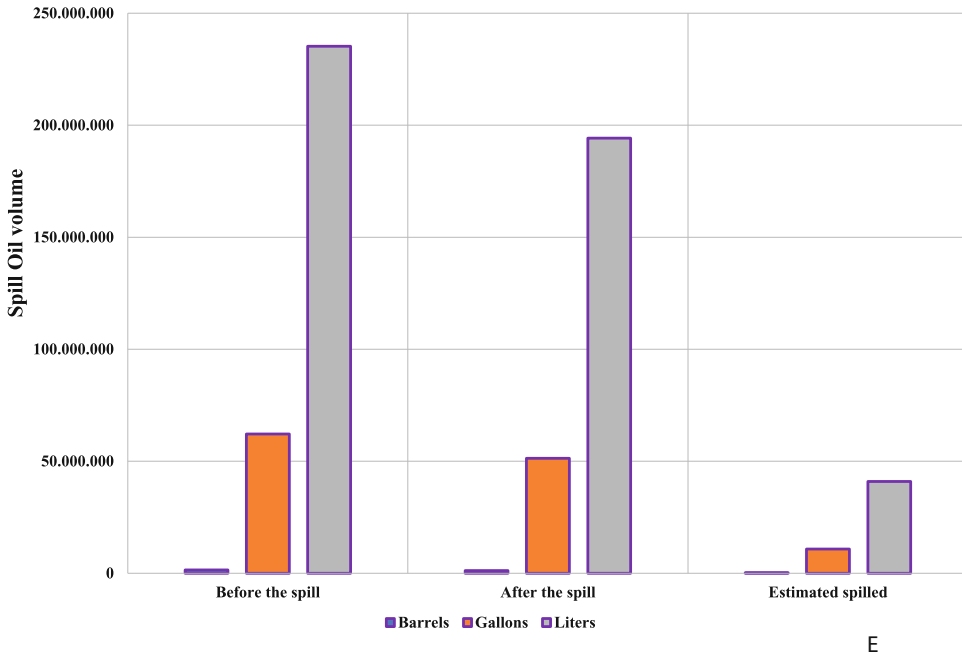


b) Location of the grounding on the Alaskan coasts.

Exxon Valdez, Fig. 1 Exxon Valdez grounding area. (Source: Own elaboration)

environment, but it has been recovering progressively after a conscientious supervision of the macro oil tankers that dock in Valdez. Much less

has been pointed out about the repercussions of the Exxon Valdez disaster among the human beings. To begin with, the damage caused to the



Exxon Valdez, Fig. 2 Volume of Exxon Valdez oil spill. (Source: Own elaboration)

natural environment resulted in the drastic alteration of the livelihoods of local populations, mainly fishing (Picou et al. 1992) and, to a lesser extent, tourism. With respect to the former, this activity has been revitalized but has not yet reached pre-Exxon Valdez levels. In relation to touristic initiatives, sustainable tourism has begun to bear fruit among visitors who are aware that the only way to preserve the environment is from a sustainable perspective (Coddington 2015).

It should be noted that the emotional impact among the civil society of the area was really devastating (Gill et al. 2012, 2016), since in a matter of hours, many of them lost their way of life, observing how the idyllic environment in which they were living seemed to be lost forever. Consequently, part of the population experienced problems of depressive-traumatic symptoms, especially the natives of the area (Miraglia 2002), who once again saw how the greed of Westerners was damaging their ancestral land (Palinkas et al. 1993). In spite of the progress achieved, it is clear that the entire area has not yet been regenerated and, much less, the

environment has not been returned to its original state but at least it is worth celebrating the commitment to the regeneration of nature itself based on its own sustainability, giving an opportunity to new cutting-edge techniques based on bioremediation (Atlas and Bragg 2009).

The implications of the Exxon Valdez disaster with the area of sustainability management are quite evident given its worldwide repercussions, both as an unprecedented environmental catastrophe and for Exxon, the shipowner, which had to face several billion-dollar lawsuits due to the damage caused to the Alaskan coastline. Harrald et al. (1990) argue that the tragedy provided extra motivation for corporations to combat environmental pollution and to establish contingency plans in turbulent environments in which the risks assumed by each firm are disclosed to policymakers and public opinion. Similarly, Harrald et al. (1992) point out that the disaster represented a redefinition of public and private organizational structures aimed at redesigning the business responsibility to handle the magnitude of these types of events. In short, the disaster implied an organizational improvement based on

three points: the anticipation of emerging phenomena that the business might face, cooperation with each stakeholder, and the establishment of a high-performance decision-making unity. It should be remarked that after the vessel was repaired in July 1990, it sailed again a few months later under multiple denominations (Dong Fang Ocean, Exxon Mediterranean, SeaRiver Mediterranean, S/R Mediterranean, Mediterranean, and Oriental Nicety). However, the devastation left by its grounding along the coast of Alaska will take considerably more time to be reversed.

Cross-References

- Biodiversity: Sustainability
- Environmental Disaster
- Environmental Impact
- Sustainability, Peak Oil
- Sustainable Energy
- Sustainable Transportation

References

- Adasiak, A., Richter, C. K., & Spivey, P. (1990). *Spill, the wreck of the Exxon Valdez. Final report*. Anchorage: Alaska Oil Spill Commission.
- Armstrong, D., Dinnel, P., Orensanz, J., Armstrong, J., McDonald, T., Cusimano, R., Nemeth, R., Landolt, M., Skalski, J., Lee, R., & Huggett, R. (1995). Status of selected bottomfish and crustacean species in Prince William sound following the Exxon Valdez oil spill. In P. Wells, J. Butler, & J. Hughes (Eds.), *Exxon Valdez oil spill: Fate and effects in Alaskan waters* (pp. 485–547). West Conshohocken: ASTM International.
- Atlas, R., & Bragg, J. (2009). Bioremediation of marine oil spills: When and when not – The Exxon Valdez experience. *Microbial Biotechnology*, 2(2), 213–221.
- Bowman, T., Schempf, P., & Hodges, J. (1997). Bald eagle population in Prince William sound after the Exxon Valdez oil spill. *Journal of Wildlife Management*, 61(3), 962–967.
- Coddington, K. (2015). The ‘entrepreneurial spirit’: Exxon Valdez and nature tourism development in Seward, Alaska. *Tourism Geographies*, 17(3), 482–497.
- Dean, T., Bodkin, J., Fukuyama, A., Jewett, S., Monson, D., O’Clair, C., & Van Blaricom, G. (2002). Food limitation and the recovery of sea otters following the ‘Exxon Valdez’ oil spill. *Marine Ecology Progress Series*, 241, 255–270.
- Egan, T. (1989, May 22). Elements of tanker disaster: Drinking, Fatigue, complacency. *New York Times*. <https://www.nytimes.com/1989/05/22/us/elements-of-tanker-disaster-drinking-fatigue-complacency.html>. Accessed 29 Sept 2020.
- Fukuyama, A., & Hoff, R. (2000). Effects of residual Exxon Valdez oil on intertidal *Protothaca staminea*: Mortality, growth, and bioaccumulation of hydrocarbons in transplanted clams. *Marine Pollution Bulletin*, 40(11), 1051–1056.
- Gill, D., Picou, J., & Ritchie, L. (2012). The Exxon Valdez and BP oil spills: A comparison of initial social and psychological impacts. *American Behavioral Scientist*, 56(1), 3–23.
- Gill, D., Ritchie, L., & Picou, J. (2016). Sociocultural and psychosocial impacts of the Exxon Valdez oil spill: Twenty-four years of research in Cordova, Alaska. *Extractive Industries and Society*, 3(4), 1105–1116.
- Hameedi, M. (1988). Natural and historic setting, Chapter 1. In D. Shaw & M. Hameedi (Eds.), *Environmental studies in port Valdez, Alaska. Lectures notes on coastal and estuarine studies* (Vol. 24). Berlin/Heidelberg: Springer.
- Harrauld, J. R., Marcus, H. S., & Wallace, W. A. (1990). The EXXON Valdez: An assessment of crisis prevention and management systems. *INFORMS Journal on Applied Analytics*, 20(5), 14–30.
- Harrauld, J. R., Cohn, R., & Wallace, W. A. (1992). “We were always re-organizing...”: Some crisis management implications of the Exxon Valdez oil spill. *Industrial Crisis Quarterly*, 6(3), 192–217.
- Harwell, M., Gentile, J. H., & Parker, K. (2012). Quantifying population-level risks using an individual-based model: Sea otters, harlequin ducks, and the Exxon Valdez oil spill. *Integrated Environmental Assessment and Management*, 8(3), 503–522.
- Hofman, R. (2013). Foreword. In T. Loughlin (Ed.), *Marine mammals and the Exxon Valdez* (pp. xiii–xvi). San Diego: Academic.
- Hoover-Miller, A., Parker, K., & Burns, J. (2001). A reassessment of the impact of the Exxon Valdez oil spill on harbor seals. *Marine Mammal Science*, 17(1), 111–135.
- Lance, B., Irons, D., Kendall, S., & McDonald, L. (2001). An evaluation of marine bird population trends following the Exxon Valdez oil spill, Prince William Sound, Alaska. *Marine Pollution Bulletin*, 42(4), 298–309.
- Leacock, E. (2009). *The Exxon Valdez oil spill, environmental disasters series*. New York: Facts On File.
- Loughlin, T. (2013). Preface. In T. Loughlin (Ed.), *Marine mammals and the Exxon Valdez* (pp. xvii–xviii). San Diego: Academic.
- Matkin, C., Saulitis, E., Ellis, G., Olesiuk, P., & Rice, S. (2008). Ongoing population-level impacts on killer whales *Orcinus orca* following the ‘Exxon Valdez’ oil spill in Prince William Sound. *Alaska*, 356, 269–281.
- Miraglia, R. (2002). The cultural and behavioral impact of the Exxon Valdez oil spill on the native peoples of

- Prince William sound, Alaska. *Spill Science and Technology Bulletin*, 7(3–4), 75–87.
- Morris, F., & Loughlin, T. (2013). Overview of the Exxon Valdez oil spill 1989–1992, Chapter 1. In T. Loughlin (Ed.), *Marine mammals and the Exxon Valdez* (pp. 1–22). San Diego: Academic.
- Murphy, M., Heintz, R., Short, J., Larsen, M., & Rice, S. (1998). Recovery of Pink Salmon spawning areas after the Exxon Valdez oil spill. *Transactions of the American Fisheries Society*, 128(5), 908–918.
- NOS. (2021). *What is a natural resource damage assessment?* National Ocean Service. National Oceanic and Atmospheric Administration, U.S. Department of Commerce. <https://oceanservice.noaa.gov/facts/nrda.html>. Accessed 24 Sept 2020.
- Ott, R. (2008). *Not one drop: Betrayal and courage in the wake of the Exxon Valdez oil spill*. White River Junction: Chelsea Green Publishing.
- Palinkas, L., Petterson, J., Russell, J., & Downs, M. (1993). Community patterns of psychiatric disorders after the Exxon Valdez oil spill. *American Journal of Psychiatry*, 150(10), 1517–1523.
- Periferakis, A. (2019). The Yukon Gold Rush: Early examples of the socioeconomic and environmental impact of mining, number 7, Bulletin of the geological Society of Greece. In *Proceedings of the 15th international congress of the geological society of Greece*. Harokopio University of Athens.
- Picou, J., Gill, D., Dyer, C., & Curry, E. (1992). Disruption and stress in an Alaskan fishing community: Initial and continuing impacts of the Exxon Valdez oil spill. *Organization Environment*, 6(3), 235–257.
- Ritter, H. (2020). *Alaska's history*, revised edn. West Margin Press.
- Sellers, R., & Miller, S. (1999). Population dynamics of brown bears after the Exxon Valdez oil spill. *Ursus*, 11, 73–78.
- Short, J., Rice, S., Heintz, R., Carls, M., & Moles, A. (2003). Long-term effects of crude oil on developing fish: Lessons from the Exxon Valdez oil spill. *Energy Sources*, 25(6), 509–517.
- Stead, W. E., & Stead, J. G. (1992). *Management for a small planet: Strategic decision making and the environment*. London: SAGE.
- Wiens, J., Day, R., Murphy, S., & Parker, K. (2004). Changing habitat and habitat use by birds after the Exxon Valdez oil spill, 1989–2001. *Ecological Applications*, 14(6), 1806–1825.

F

Factor 4

- [Rebound Effects of Eco-efficiency](#)

Factors Influencing the Capacity for Innovation

- [Capacity of Innovation](#)

Fair Trade

- [Fairtrade](#)

Fairtrade

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Synonyms

[Equitable trade](#); [Fair trade](#)

Definition

Fairtrade is a term which has two distinct concepts. First, it is an institutional arrangement between producers in developing countries, and supply chain participants and ultimate consumers aimed to improve the working conditions and increase the revenues of producers. It provides an alternative to free trade which considers international trade as simply a buyer looking to purchase a product at the cheapest price possible. Rather, fair trade considers the impact of production on local population and the unfairness that can result from power imbalances between wealthy developed world purchasers looking to buy in bulk on the spot market and poorer, developing world producers who do not have the means to even out fluctuations or options to rapidly change livelihoods in response to market conditions. Fairtrade changes the way trade works through changing market institutions to provide better prices, decent working conditions, and a better deal for producers in developing countries (Nicholls, 2010). The second use of the term fair trade is as the name of an organization, Fairtrade Labelling Organizations International e.V., known commonly as “Fairtrade International” (“Fairtrade”) – an organization that implements a fair trade trading system.

Nature of Fairtrade

Fairtrade aims to enable producers to receive a larger share and a more stable market for their products with the result that they are able to better their lives and control their future. It aims to challenge businesses and governments by connecting consumers more closely with producers who make their products (Nicholls, 2010). Such trade focuses on conducting trade on the basis of concerns beyond mere finance. It aims to bring into the equation such matters such as environmental conditions, human rights, and labor laws.

Fairtrade benefits small-scale businesses in communities with limited social and economic resources, and it creates opportunities for community improvement. It is operationalized by small businesses and the communities (Nicholls, 2010). It can be described as a trading system developed collaboratively between parties in the developed and developing worlds, based on notions of equality and dignity, the main aim of which is to improve equity in international trade. It stands as an alternative to the international free trade system which views trade in purely financial terms, as a transaction in competitive global markets.

Fairtrade aims to offer producers in the developing world better trading conditions in terms of net proceeds and stability, as well as securing the rights of marginalised groups, better wages, standardised working conditions and protecting children (Gendron et al., 2009).

In essence, fair trade connects producers more directly to consumers. It provides consumers with information about and means to address the needs for social justice experienced by producers in the developing world. Consumer support for these social justice initiatives enables not only developing world producers to have better livelihoods but also Fairtrade organizations to advocate for broader reforms of the international trading system to improve matters of justice on a larger scale. It allows people to buy products that align with their values and principles (Watson, 2007).

As an organization, Fairtrade is a producer-driven initiative, which, although centrally coordinated, provides producers with a strong voice at

every level of the organization – from how it invests to operations of local organizations to voice in Fairtrade's global decision-making processes (Nicholls, 2010). Fairtrade businesses work hand in hand with the marginalized groups, hence ensuring that favorable conditions in terms of working conditions and environmental factors are met (Renard, 2003). The benefits of fair trade extend broadly to the community and include improved education, healthcare, and environmental sustainability (Le Mare, 2008).

Ethical and Economic Foundations

Ethically, fair trade rests on a foundational argument that the production process is a process with ethical characteristics – from treatment of employees, women, and children to community impacts and environmental sustainability impacts. Further, it acknowledges that economic transactions are not necessarily fair. Economic transactions can reflect power differentials and information asymmetries which can be exploited. The lack of commensurability both in terms of products and producer options—i.e. the limited choices producers and vendors in developing countries have—can tip the balance excessively in favour of more powerful buyers in the developed world.

The implications of the recognition of these issues are wide-reaching. It implies that consumers need to be aware of the methods and costs of production and not only price or physical qualities of products and services they consume. Consumers ought to be aware of and be concerned about the ethics of the processes by which goods and services are created and distributed (Hira & Ferrie, 2006). Further, the recognition creates a moral ought or call to action, in terms of purchasing decisions with respect to products. It implies a consumer choice to support exploitative practices in international trade and consumption of commodities produced in unfair conditions or to support fairness more broadly.

Fairtrade can be distinguished from apparently similar movements that challenge conventional methods of production. For example, the organic

food movement, which proposes that conventional production processes are undesirable, offers an alternative product which is argued to be an inherently better product (free of pesticides). By way of contrast, fair trade products have the same physical characteristics as other competitive goods. For example, a fair trade chocolate bar may have precisely the same amounts of cocoa, sugar, and fat as a non-fair trade chocolate bar (Hira & Ferrie, 2006). Rather, the difference is in the processes of production and trade. These processes imbue the product with a different ethical quality, a set of values that have a particular worth to the consumer.

Economically, fair trade was driven in part as a response to the free trade movement which swept across the world in the 1980s following shifts in monetary policies associated with Reagan in the USA and Thatcher in the UK. Free trade at a theoretical level is considered fair because the parties are free to determine what is a fair price for their goods. They are deemed to be willing to buy and sell only for a price that they believe is fair to them. There are many problems with this model, including massive public subsidies to some parties and unequal bargaining power between buyer and seller.

The obvious unfairness of free trade in agricultural products came to public attention as a result of publicity work by NGOs. For example, massive agricultural subsidies granted to developed world producers, exacerbating the poverty and poor work conditions in the developing world, became common knowledge through campaigns such as Oxfam's "Make Trade Fair" (Aaronson & Zimmerman, 2006). In such difficult circumstances, further harm and exploitation may well result as people become more desperate to survive.

Historical Foundations

The fair trade movement traces its beginnings back to popular concerns for social justice and a sense that free trade agreements were not serving either producer or consumer interests. These social justice concerns included concerns about the failure to address extreme poverty despite

increased trade and increased levels of wealth gaps between the rich and poor (Hira & Ferrie, 2006). The Fairtrade organization began as a small movement which, by many accounts, started more than 30 years ago by the launch of a Max Havelaar brand of coffee in the Netherlands. The core idea was that trade could be founded upon something other than pure economic norms, that is, on ethical principles (Hira & Ferrie, 2006). The Fairtrade founders argued that such conducting trade on nonmarket norms required little additional effort or cost and provided significant benefit to developing world producers. Further, they argued that fair trade demonstrates a wider conceptualization and greater impact resulting from developing world producer determinations of development and a significant step away from developed world ideas and practices such as foreign aid and related finance-focused initiatives (Watkins & Fowler, 2002; Hira & Ferrie, 2006).

There are two main versions of fair trade. The first version focuses on the exploitative nature of global capitalism particularly in international trade and aims to create a new alternative system based on new institutions. This alternative set of market institutions is used for fair trade products. It operates through a different set of norm makers, distribution channels such as NGOs (nongovernmental organizations), or "alternative trading organizations" (ATOs). The second version, one supported by Oxfam, is more experimental, trying new ways to promote more equitable trade by using existing trade institutions, including commercial retailers (Hira & Ferrie, 2006). The second, less radical version of fair trade looks to integrate CSR policies into supply chains from primary industry producers to retailers.

Fairtrade System: Fairtrade International and Certifications

Fairtrade International operates by developing standards which are then disseminated from primary producer to retailer. The standards are product specific rather than for the whole of an organization. It provides advice and support to

help producers comply with standards and so participate in the Fairtrade trading system by receiving the well-known green and blue swirls on black background logo. That logo is properly referred to as the Fairtrade Labelling Organizations International (FLO) certification mark.

Over the past 20 years, sales of fair trade goods – particularly those labeled with an FLO certification – have grown exponentially. Fairtrade International leads the independent global movement for trade justice, and as a branded organization, it is the most widely recognized fair trading standard in many leading markets (Anderson et al., 2014).

Fairtrade offers four important benefits for producers. These, as identified by Ronchi, are “(1) *stable prices* that cover the costs of sustainable production; (2) *market access* that enables buyers to trade with producers who would otherwise be excluded from market; (3) *partnership* (producers are involved in decisions that affect their future) and (4) *empowerment of farmers and workers* (assistance for producer organisations to understand more about market conditions and trends and to develop knowledge, skills and resources to exert more control and influence over their lives)” (Ronchi, 2002).

Fairtrade places obligations and restrictions on producers. For example, to be truly fair, producers are required to pay minimum wage, to adopt and ensure safe working conditions, and to contribute to environmentally sustainable practices. Similarly, it constrains buyers. For example, fairtrade sets a minimum price to provide a floor for prices. Having a floor, allows farmers to invest in complying with fairtrade obligations and continue to operate in adverse conditions such as when their particular commodity is flooding a global market. Normally, this event would and drive prices down below the floor price (Parrish et al., 2005).

Critics of Fairtrade

The fair trade economic model has limitations that generate criticism (Reed, 2009). Fairtrade organizations, for example, are criticized for working with companies that have track records of

unethical behavior or are currently engaged in unfair practices in their international trade (Reed, 2009). These concerns are real and need to be considered carefully. Companies that have suffered reputational harm may change executive leadership which may in turn cause them to change course. Of course, the possibility remains that there will be no change of course but merely an effort to use Fairtrade as a shield; however, that is less likely given the thoroughness of the standard and the important point of Fairtrade International's policy of certifying products but not companies.

The fair trade economic model also faces challenges. Some critics argue that it contains an inherent structural contradiction: if the minimum price for fair trade products is too high, the low level of sales will make the product unviable and unable to deliver on its promise of increased revenues to producers. If, however, the floor price of fair trade products is lower and competitive with non-fair trade products, while the sales volume may increase, the impact on poverty reduction will be insignificant because there is not the excess money generated to address the issue (Sylla, 2014). Thus, a problem remains on how to balance fairness with consumer demand in competitive markets.

Perhaps as Rosenthal says, “fair trade” could be more accurately described as “trade which is less unfair.” In fact, in certain instances such as those discussed above, fair trade can mean less money for a producer (Mookerjee, 2019). The engagement with Fairtrade International and compliance with the Fairtrade International standard can be expensive. In addition, if demand for fair trade products is too low, producers may not be able to sell all their products with a fair trade label, thereby forcing them to sell their products with the Fairtrade production and compliance costs but without the fair trade premium.

Summary

Fairtrade aims to resolve fairness problems between producers and consumers. It does so by way of introducing different values and systems

that reduces the unfairness common in trade related to agricultural and other primary industries.

References

- Aaronson, S. A., & Zimmerman, J. M. (2006). Fair trade: How oxfam presented a systematic approach to poverty, development, human rights, and trade. *Human Rights Quarterly*, 28, 998.
- Anderson, M., Booth, P., & Mohan, S. (2014). Crossfire: 'Does Fairtrade have more impact than conventional trade or trade certified by other sustainability standards?'. *Food Chain*, 4(1), 7–13.
- Gendron, C., Bisailon, V., & Rance, A. I. O. (2009). The institutionalization of fair trade: More than just a degraded form of social action. *Journal of Business Ethics*, 86(1), 63–79.
- Hira, A., & Ferrie, J. (2006). Fair trade: Three key challenges for reaching the mainstream. *Journal of Business Ethics*, 63(2), 107–118.
- Le Mare, A. (2008). The impact of fair trade on social and economic development: A review of the literature. *Geography Compass*, 2(6), 1922–1942.
- Mookerjee, M. (2019). Do we still need fair trade? *Journal of Fair Trade*, 1(2), 1–5.
- Nicholls, A. (2010). Fair trade: Towards an economics of virtue. *Journal of Business Ethics*, 92(2), 241–255.
- Parrish, B. D., Luzadis, V. A., & Bentley, W. R. (2005). What Tanzania's coffee farmers can teach the world: A performance-based look at the fair trade–free trade debate. *Sustainable Development*, 13(3), 177–189.
- Reed, D. (2009). What do corporations have to do with fair trade? Positive and normative analysis from a value chain perspective. *Journal of Business Ethics*, 86(1), 3–26.
- Renard, M. C. (2003). Fair trade: Quality, market and conventions. *Journal of Rural Studies*, 19(1), 87–96.
- Ronchi, L. (2002). *The impact of Fair Trade on producers and their organizations: A case study with Coocafé in Costa Rica*. Policy Research Unit. Sussex: University of Sussex.
- Sylla, N. (2014). *The fair trade scandal: Marketing poverty to benefit the rich*. Ohio University Press.
- Watkins, K., & Fowler, P. (2002). *Rigged rules and double standards: Trade, globalisation, and the fight against poverty*. Oxfam.
- Watson, M. (2007). Trade justice and individual consumption choices: Adam Smith's spectator theory and the moral constitution of the fair trade consumer. *European Journal of International Relations*, 13(2), 263–288.

Fake News Control

- [Media Ethics](#)

Family Business

- [Family-Owned Firms](#)

Family Entrepreneurship

- [Family-Owned Firms](#)

Family Firms

- [Family-Owned Firms](#)

Family Relationships

- [Social Capital, Measurement of](#)

Family-Friendly Policies

- [Corporate Family Responsibility](#)

Family-Owned Companies

- [OECD Principles of Corporate Governance](#)

Family-Owned Firms

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Synonyms

Family business; Family entrepreneurship; Family firms

Definition

The definition of a unique concept is also challenging, as there is a diversity of definitions exposed by the different researchers (Chua et al. 1999). Family-owned businesses, in general, perform differently from non-family business, have a different capital structure, present the family as the main ties inside the management and board of directors, and use family governance to organize the expectations of the family to the company's management.

Because of that, board of directors is one of the parts of the family firm's governance structure (Miroshnychenko et al. 2021). Astrachan et al. (2002) use the variables power, experience, and culture to explain the influence of family in family-owned-business.

According to Gersick et al. (1997), family businesses are those who have family members in property and business management. Also, according to Patel and Chrisman (2014), they are a corporate type that can reconcile economic and non-economic goals. They are defined as a family ownership and control on a firm and vision for how the firm will benefit the family, potentially across generations (Chua et al. 1999; Patel and Chrisman 2014).

Some of the goals in the family firms exist as a form of longevity through investment, innovation, risk reduction, and increased sales. They use, as strategies, the observation of their resources to preserve socio-emotional characteristics and financial wealth, inherited or transmitted by beliefs and social norms that distinguish them from non-family companies. Gersick et al. (1997) to cross the boundaries of corporate and economic interests (Bornholdt 2005), and maintain the necessary balance between organizational and family interests through formal policies (Stalk and Foley 2012). Litz (2008) argues that family businesses rely on family-specific resources, and this business family seeks company support to achieve their goals.

Family organizations are that one's identified by the possession of control of partners belonging to one or more families, when family interactions and shared interests have some level of trust

(Granovetter and Granovetter 2000), sharing resources, information, and knowledge (Stewart 2003). Family control is identified in several regions and in different legal systems, in them being part of the United States, Western Europe, and East Asia (Anderson and Reeb 2003; Franks and Mayer 2001; Gadhoum et al. 2005; Lee 2006).

It is also verified that all concepts that define dynamics (Casillas et al. 2007) and specificities (Debicki et al. 2009) of family businesses circulate around the control, structure, property, and power that the family exercises, and the participation of the family in the management of the company, adjusted by the ideal of succession to the following generations. However, there are authors who disregard the obligation of the existence of control or property to define the company only by family origin (Martins et al. 1999).

Background

Family-Owned Businesses (FOB) represents one of the predominant forms of ownership and management in economic systems worldwide (Gomez-Mejia et al. 2010; Ho et al. 2020; Morck and Yeung 2003; Peng and Jiang 2010; Segura and Formigoni 2014; Yoshikawa and Rasheed 2010).

It is estimated that 70% of the global GDP is generated by family firms (Russel Reynolds Associates 2019), which provide 60% of the companies in the world and are responsible for 50% of the jobs. Family firms represent the main form of business organization in the world (La Porta et al. 2002).

According to Morck and Yeung (2003), this type of management and ownership has been important to free-market economies along the centuries, as names such as Rothschild, Medici, Ford, Thompson, and Krupp, among others are well known as family business and reflect the size and importance of the family inside the businesses.

The economic impact of family business in the firm control is substantial according to Miroshnychenko et al. (2021). It means that the

growth of family-owned business usually presents 2% more than non-family ones.

In addition to being responsible for expanding wealth, generating jobs and income because of the quantity of family firms and proportion around the world, family-owned businesses have also raised the volume of publications in recent decades (Basco-Rodrigo 2010), showing scientific relevance in this matter. However, scientific research is still evolving. To the extent that this importance is recognized, scientific interest focused on understanding these organizations is notably growing (Miroshnychenko et al. 2021) through reflective studies on the development of this field of research (Ramírez-Pasillas et al. 2021).

This interest can be noted by the intense production of articles, frameworks, and research developed by authors around the world and by frameworks and business models developed by Family Business Associations, as is the case with models developed in the United States, Europe, Asia, and Latin America. New models in family businesses and structures such as Family Firm Institute (FFI 2021) and Family Business Network (FBN 2021), among others, are designed to assist professionals who deal directly with issues related to this type of organization.

Summary

Family-Owned Businesses (FOB) represents one of the predominant forms of ownership and management in economic systems worldwide. Family businesses are those who have family members in property and business management. Also, they are a corporate type that can reconcile economic and non-economic goals. They are defined as a family ownership and control on a firm and vision for how the firm will benefit the family, potentially across generation.

Cross-References

- [Corporate Governance](#)
- [Corporate Social Performance](#)
- [Corporate Social Responsibility \(CSR\)](#)

References

- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S & P 500. *Journal of Finance*, 58(3), 1301–1328. <https://onlinelibrary.wiley.com/doi/abs/10.1111/1540-6261.00567>
- Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem1. *Family Business Review*, 15(1), 45–58. <https://doi.org/10.1111/j.1741-6248.2002.00045.x>
- Basco-Rodrigo, J. T. (2010). Tipo de orientación familiar y prácticas de dirección y gobierno. Un estudio aplicado a las empresas familiares españolas. *Revista Europea de Dirección y Economía de La Empresa*, 19(2), 129–144. <https://dialnet.unirioja.es/servlet/articulo?codigo=3185174>
- Bornholdt, W. (2005). *Governança na empresa familiar: Implementação e prática*. Porto Alegre: Editora Bookman.
- Casillas, J. C., Díaz, C., & Vázquez, A. (2007). *Gestão da empresa familiar: Conceitos, casos e soluções*. São Paulo: Thomson Learning.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(1), 19–39. <https://journals.sagepub.com/doi/10.1177/104225879902300402>
- Debicki, B. J., Matheme, C. F., Kellermanns, F., & Chrisman, J. J. (2009). Family business research in the new millennium. *Family Business Review*, 22(2), 151–166. <https://doi.org/10.1177/0894486509333598>
- Family Business Network (FBN). (2021). Family Business Network 2021. <https://www.fbn-i.org/>. Accessed 12 May 2020.
- Family Firm Institute (FFI). (2021). Family Firm Institute. <https://www.ffi.org/>. Accessed 4 June 2020.
- Franks, J., & Mayer, C. (2001). Ownership and control of German corporations. *Review of Financial Studies*, 14(4), 943–977. <https://doi.org/10.1093/rfs/14.4.943>
- Gadhoun, Y., Lang, L. H. P., & Young, L. (2005). Who controls US? *European Financial Management*, 11(3), 339–363. <https://doi.org/10.1111/j.1354-7798.2005.00287.x>
- Gersick, K. E., Davis, J. A., Hampton, M. M. C., & Lansberg, I. (1997). *Generation to generation: Life cycles of the family business*. Boston: Harvard Business School Press.
- Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies*, 47(2), 223–252. <https://doi.org/10.1111/j.1467-6486.2009.00889.x>
- Granovetter, E., & Granovetter, M. (2000). Social networks. In C. M. Lee, W. F. Miller, M. Gong Hancock, & H. S. Rowen (Eds.), *The Silicon Valley edge: A habitat for innovation and entrepreneurship* (pp. 218–247). Stanford: Stanford University Press.
- Ho, J., Huang, C. J., & Karuna, C. (2020). Large shareholder ownership types and board governance. *Journal*

- of *Corporate Finance*, 65, 101715. <https://doi.org/10.1016/j.jcorpfin.2020.101715>.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2002). Corporate ownership around the world. *Journal of Finance*, 54(2), 471–517. <https://doi.org/10.1111/0022-1082.00115>.
- Lee, J. (2006). Family firm performance: Further evidence. *Family Business Review*, 19(2), 103–114. <https://doi.org/10.1111/j.1741-6248.2006.00060.x>.
- Litz, R. A. (2008). Two sides of a one-sided phenomenon: Conceptualizing the family business and business family as a Möbius strip. *Family Business Review*, 21(3), 217–236. <https://doi.org/10.1177/08944865080210030104>.
- Martins, I. G. S., Menezes, P. L., & Bernhoeft, R. (1999). *Empresas familiares brasileiras: Perfil e perspectivas*. São Paulo: Negócio.
- Miroshnychenko, I., De Massis, A., Miller, D., & Barontini, R. (2021). Family business growth around the world. *Entrepreneurship Theory and Practice*, 45(4), 682–708. <https://doi.org/10.1177/1042258720913028>.
- Morck, R., & Yeung, B. (2003). Agency problems in large family business groups. *Entrepreneurship Theory and Practice*, 27(4), 367–382. <https://doi.org/10.1111/1540-8520.t01-1-00015>.
- Patel, P. C., & Chrisman, J. J. (2014). Risk abatement as a strategy for R&D investments in family firms. *Strategic Management Journal*, 35(4), 617–627. <https://doi.org/10.1002/smj.2119>.
- Peng, M. W., & Jiang, Y. (2010). Institutions behind family ownership and control in large firms. *Journal of Management Studies*, 47(2), 253–273. <https://doi.org/10.1111/j.1467-6486.2009.00890.x>.
- Ramírez-Pasillas, M., Lundberg, H., & Nordqvist, M. (2021). Next generation external venturing practices in family owned businesses. *Journal of Management Studies*, 58(1), 63–103. <https://doi.org/10.1111/joms.12566>.
- Russel Reynolds Associates. (2019). 2019 Pan-European RRA study on family-owned business. [https://www.russellreynolds.com/en/Insights/thought-leadership/Documents/Pan-European RRA family owned study.pdf](https://www.russellreynolds.com/en/Insights/thought-leadership/Documents/Pan-European_RRA_family_owned_study.pdf). Accessed 5 July 2020.
- Segura, L. C., & Formigoni, H. (2014). A Influência do Controle e Gestão Familiar no Endividamento das Empresas Abertas Brasileiras: Um Estudo Quantitativo. *Brazilian Business Review*, 11(6), 50–74. <https://doi.org/10.15728/bbr.2014.11.6.3>.
- Stalk, G., & Foley, H. (2012). Avoiding traps that can destroy family businesses. *Harvard Business Review*, 90(1), 25–27. https://newsletters.isb.edu/FamilyBusiness-Newsletter/File/Article_Summary_04_Jan_2016.pdf.
- Stewart, A. (2003). Help one another, use one another: Toward an anthropology of family business. *Entrepreneurship Theory and Practice*, 27(4), 383–396. <https://doi.org/10.1111/1540-8520.00016>.
- Yoshikawa, T., & Rasheed, A. A. (2010). Family control and ownership monitoring in family-controlled firms in Japan. *Journal of Management Studies*, 47(2), 274–295. <https://doi.org/10.1111/j.1467-6486.2009.00891.x>.

Further Reading

- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20(1–2), 293–315. [https://doi.org/10.1016/0304-405X\(88\)90048-7](https://doi.org/10.1016/0304-405X(88)90048-7).
- Mustakallio, M., Autio, E., & Zahra, S. A. (2002). Relational and contractual governance in family firms: Effects on strategic decision making. *Family Business Review*, 15(3), 205–222. <https://doi.org/10.1111/j.1741-6248.2002.00205.x>.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737–783. <https://doi.org/10.1111/j.1540-6261.1997.tb04820.x>.
- Siebel, J.-F., & Zu Knyphausen-Aufsess, D. (2011). A review of theory in family business research: The implications for corporate governance. *International Journal of Management Reviews*, 14(3), 280–304. <https://doi.org/10.1111/j.1468-2370.2011.00317.x>.
- Steiger, T., Duller, C., & Hiebl, M. R. W. (2015). No consensus in sight: An analysis of ten years of family business definitions in empirical research studies. *Journal of Enterprising Culture*, 23(1), 25–62. <https://doi.org/10.1142/S0218495815500028>.
- Tagiuri, R., & Davis, J. (1996). Bivalent attributes of the family firm. *Family Business Review*, 9(2), 199–208. <https://doi.org/10.1111/j.1741-6248.1996.00199.x>.
- Wellalage, N. H., Locke, S., & Scrimgeour, F. (2012). Does one size fit all? An empirical investigation of board structure on family firms' financial performance. *Afro-Asian Journal of Finance and Accounting*, 3(2), 182–194. https://econpapers.repec.org/article/idsafasfa/v_3a3_3ay_3a2012_3ai_3a2_3ap_3a182-194.htm.
- Zellweger, T. M., Nason, R. S., & Nordqvist, M. (2011). From longevity of firms to transgenerational entrepreneurship of families: Introducing family entrepreneurial orientation. *Family Business Review*, 25(2), 136–155. <https://doi.org/10.1177/0894486511423531>.

Farmed Fishery

- [Aquaculture and Blue Farming](#)

Feminism

- [Poff-Michalos Procedure, The](#)

Fiedler's Contingency Model

- [Contingency Theory](#)
-

Fiedler's Contingency Theory

- [Contingency Theory](#)
-

Fiedler's Theory of Leadership

- [Contingency Theory](#)
-

Finance

- [Banks and the Sustainable Development Goals](#)
 - [Credit Unions and Credit Cooperatives](#)
-

Finance and CSR

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Synonyms

[Financial sustainability](#); [Responsible finance](#);
[Sustainable finance](#)

Definition

Responsible finance is offering financial services in an accountable, transparent, and ethical manner. By definition, responsible finance must focus on financial service providers, (their practices, what they do or do not do) and on clients (mainly aimed at improving their capacities to access and use high quality financial services) (Yamini and Bhat 2012).

The Responsible Finance Forum (2011) defines Responsible Finance as “coordinated public and private sector interventions that encourage and assist financial service providers and their clients in improving their understanding and approaches, practices, and behaviors that can eventually contribute to creating more transparent, inclusive, and equitable financial markets.”

Responsible Finance is also linked to financial inclusion and consumer protection enabling individuals and firms to participate in and benefit from the formal financial system (The World Bank 2020).

Introduction

The need to introduce a framework for social responsibility into the world of finance has given rise to what is known as sustainable finance. This new direction expands on the analysis of economic behavior (classic financial theory) and agent psychology (behavioral finance), including their moral and social behavior, to focus on a triple-bottom line: social, environmental, and financial performance.

Financial intermediaries, particularly credit institutions, play an active role in countries' economic and social development through their capacity to select investment and consumer projects, to manage risks, and to make decisions about who can access capital and the activities to be funded. They carry a large weight of social responsibility in the fight against poverty, social inequality, and sustainable development. The finance sector is waking up to this responsibility and to the economic consequences of evading it. Its economic function is no longer limited to being a mere intermediary of capital flows and properly managing the financial risks. It must assess and manage other types of ethical, social, and environmental risks and offer products and services that contribute to a more humane development of the planet in response to the demands of consumers who are ever more concerned about how their savings are invested and shareholders taking a greater interest in the economic impact of certain types of unsustainable behavior.

Key Issues

CSR in the banking sector (as in other business sectors) has **five distinct dimensions** (Muñoz and de la Cuesta 2010):

1. Financial. Maximizing a company's profitability over the long-term, which translates into an increased value for the shareholders, thereby generating wealth and fostering job creation in society.
2. Corporate. The implementation of policies of good corporate governance and information transparency relating to all spheres of the company's business, which unquestionably stamp out corrupt practices within the organization.
3. Human Resources. Acting responsibly within the domain of human resources, nurturing the company's human capital, and pursuing diversity in staff training that will fire employees' motivation and commitment and in turn lead to greater productivity and a keener interest in their work, thus contributing to the added value of the company.
4. Environmental. Social requirement to respect the environment in which the company operates to ensure the sustainable use of the natural resources available to society.
5. Social. Investments in social projects in order to pay back to society part of the benefits the company reaps when people use its products or services.

Implementing CSR affects banking institutions in both their internal and external aspects.

- a) Internally. CSR implies transferring environmental and social responsibility to the bank's **internal management**. This requires compliance with the International Labour Organisation (ILO) conventions and with Human Rights, gender equality and other requirements related to employment matters. In relation to the environment, it necessitates a sustainable use of energy, staff training in sustainability, better recycling practices, and an improved energy performance. In the social sphere, it requires

getting involved in society through the sponsorship of cultural, educational, and welfare activities or through charity donations.

- b) Externally. Integrating CSR into the basic business of **banking intermediation** and financial market investment requires taking on board environmental and social considerations in product design, credit and investment policies and the business strategy in general, including risk assumption. These areas would include socially responsible savings products and investment funds and ethical deposit accounts. It also covers credit and investment products that assess the social and environmental impact of the activity to be financed, channeling more savings to responsible projects and innovative technologies.

Knowledge of the main social and environmental risks of the finance business is necessary to create a roadmap for implementing CSR policies in financial institutions that are looking to avoid such risks (Fernández 2014).

1. Over-indebtedness. In their quest for greater profits, financial institutions can drive levels of indebtedness above the reasonable limits, leading to detrimental economic and social consequences in the medium and long-term (inability to repay the debt, property repossession, etc.). Banking institutions are responsible for correctly assessing and managing the lenders' risks and for ensuring that the loan is used in a prudent manner, avoiding over-indebtedness.
2. Financial exclusion. The concentration of the banking sector and the ensuing branch closures can lead to growing levels of geographic financial exclusion. Access to financial services is identified as an essential factor in social cohesion, alongside basic banking services, positive discrimination for certain social groups (people with few resources, ethnic minorities, students, the disabled, rural population, etc.), and regional development, in need of capital flows.
3. Evictions. Closely linked to financial exclusion is the loss of one's home or business premises

- due to mortgage nonpayment. Banking responsibility necessarily requires adapting the products sold to the needs and capacities of the groups served, including an assessment of their financial education and the application of good banking practice, such as assets in lieu of payment, debt renegotiation, access to social rents, etc.
4. Other risks to avoid and behaviors to encourage in the financial sector:
 - a) Need for the financial inclusion of small and medium enterprises (SMEs).
 - b) Avoid the selling of hybrid products (such as preferential shares and subordinated debt) without assessing the suitability or appropriateness of the product for the client, or clients with insufficient financial knowledge.
 - c) Avoid money laundering.
 - d) Avoid trading with companies that may be involved in serious breaches of human rights. These activities may include funding, particularly of large projects (project finance), institutional investment and asset management.
 - e) Environmental impact and climate change. The direct environmental impact of banking operations has traditionally been viewed as low, even neutral, compared with the industrial sector. But banking must assume an indirect responsibility, through the projects it finances, which often have a significant environmental impact.
- Implementation of totally transparent lending policies in Developing Countries.
 - Codes of Conduct: disclosure of policies that will have a clear impact on various business areas so that clients and suppliers are aware of the standards under which they will be judged.
 - Adoption of social inclusion policies to improve access to banking services for groups in society who may be excluded due to a variety of reasons.
 - Information system that encompasses social, environmental and corporate governance factors, whose main indicators are reflected in a sustainability report previously verified by an independent agency.

Future Directions

The UN estimates the gap in financing to achieve the Sustainable Development Goals (SDGs) to be \$2.5 trillion per year in developing countries alone (UNCTAD 2014). SDGs were adopted on 25 September 2015 by 193 countries and focus on ending poverty, protecting the planet and ensuring prosperity for all as part of a new sustainable development agenda. A total of 17 goals and 169 targets have been set, to be achieved by 2030.

Therefore, responsible finance has a key role to play in achieving Sustainable Development Goals by financing the gap and promoting investment products that help to achieve the goals.

Cross-References

- [Corporate Social Performance](#)
- [Corporate Social Responsibility](#)
- [SAM Sustainability Indices](#)
- [Socially Responsible Investment](#)

References

- In summary for a financial institution to be considered socially responsible, it must assume and comply with several principles (Pampillón Fernández et al. 2010).
- The application of the guidelines and principles of the UNEP Statement by Financial Institutions on Environmental and Sustainable Development.
 - Apply an environmental screening of their clients' operations, including the application of environmental performance measures.
 - Support for financial initiatives in the community, adapted to local needs and requirements.
- Fernández, B. (2014). Principales riesgos sociales y ambientales del negocio bancario en tiempos de crisis. Cátedra Telefónica-UNED de Responsabilidad Corporativa y Sostenibilidad. Available at: <http://www.>

spainsif.es/sites/default/files/upload/publicaciones/01_2014_RiesgosBancaCrisis.pdf

Muñoz, M. J., & de la Cuesta, M. (Eds.). (2010). *Finanzas sostenibles*. La Coruña: Netbiblo.

Pampillón Fernández, F., de la Cuesta González, M., Muñoz Torres, M. J., Fernández Izquierdo, M. A., & Ruza y Paz-Curbera, C. (2010). Introducción: La responsabilidad social corporativa y el sistema financiero. In *Finanzas Sostenibles* (pp. 1–58). Spain: Netbiblo.

Responsible Finance Forum. (2011). Advancing responsible finance for greater development impact. Consultation draft. Available at: <https://responsiblefinanceforum.org/wp-content/uploads/2014/08/ResponsibleFinanceReport.pdf>

The World Bank. (2020). Responsible financial access. Available at: <https://responsiblefinance.worldbank.org/en/responsible-finance>

UNCTAD. (2014). World investment report 2014. Investing in the SDGs: An action plan. United Nations conference on trade and development. Available at: https://unctad.org/en/PublicationsLibrary/wir2014_en.pdf

Yamini, A. V., & Bhat, S. (2012). MicroSave briefing note # 128. Responsible finance: Concepts and challenges. Available at: <https://www.findevgateway.org/sites/default/files/mfg-en-paper-responsible-finance-concepts-and-challenges-jul-2012.pdf>

Finance Corporate

- [Corporate Finance](#)

Financial

- [Sustainability and Solar Energy](#)

Financial Activism

- [Shareholder and Stakeholder Activism](#)

Financial Communication

- [Public Relations and Finance](#)

Financial Cooperatives

- [Credit Unions and Credit Cooperatives](#)

Financial Inclusion

- [Inclusive/Selective/Compliant Finance/Banking](#)

Financial Innovation

- [Mezzanine Finance](#)

Financial Institutions

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Fiscal Fairness

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Synonyms

[Ethics of taxation](#); [Tax fairness](#)

Definition

Fiscal ethics is the normative analysis of the fiscal rights and duties of citizens and residents (taxpayers), viz., the distribution of the fiscal burden across a given population. This burden includes taxes but also deductions and exemptions. Fiscal ethics is concerned with the justifications of specific tax architectures, i.e., how to render a system fair (fiscal fairness). It is the first step toward a full-fledged theory of justice.

However, while distributive justice focuses on principles that should guide the repartition of resources collected through, fiscal ethics deals with the principles that should apply to such collection. Efficiency, equality, individual responsibility, merit, and other principles can be used to determine and modulate the tax burden, as they can justify the distribution of resources. While crucial, the topic has attracted little attention among ethical theorists. One of the reasons is that taxation is perceived as being only instrumental to redistribution. Therefore, the ethical qualities of a tax system would be a strict function of the redistributive performance of such a system and how it enables specific, valued, redistributive schemes. However, one may argue that taxation contains intrinsic ethical dimensions in relation to the core justifications of taxation (why taxing?); the choice of a tax base, e.g., income, wealth, or consumption (what to tax?); and the manner taxation is undertaken (how taxing?).

Introduction

Taxation is key for modern states. It generates the resources necessary for providing public goods and services as well as for funding poverty alleviation, social safety net, and redistribution. Taxation is sometimes judged to be valuable beyond the goods, services, and other material advantages it permits financing. For instance, it would promote human development or the civilizing process. As written in the Journal of the House of Representatives of the State of Vermont (October Session, 1851): “Taxation is the price which we pay for civilization, for our social, civil and political institutions, for the security of life and property, and without which, we must resort to the law of force.”

In spite of its importance for industrialized countries, taxation is a largely disregarded topic in ethical and political theory, with few exceptions (e.g., Gaisbauer et al. 2015; Murphy and Nagel 2002). The main reason is that redistribution, namely, what to do once monetary resources have been collected, is perceived as the crux of the matter, the collection being simply

instrumental. Put differently, taxation would be morally neutral, its value being derived from the manner resources are redistributed.

Fiscal ethics fill this lacuna by covering the following issues:

1. *Why taxing at all*, i.e., what could justify that public institutions collect part of individuals and organizations' resources? Put differently, why having taxes instead of something else, such as voluntary contributions, or nothing?
2. *What taxing*, i.e., which is/are the right tax base(s), i.e., income, consumption, or wealth, and for which reasons?
3. *How taxing*, i.e., which rates to impose in a flat or progressive system (with which brackets)? With which specific rules, e.g., allowances, exemptions, etc.?

Fiscal ethics is central in democracy, especially for states with ambitious social programs and substantial responsibilities for providing public goods and services, such as welfare states. Arguably, the manner that specific schemes are designed as well as the arguments used for supporting them are important for tax acceptance, i.e., how taxpayers tolerate the fiscal burden.

A common misconception is to confound taxpayers and citizens. However legal residents are also taxed, e.g., on their income or value-added tax (VAT), and illegal ones do not escape all their fiscal duties. Even if the latter are part of the shadow economy through non-declared jobs, they still pay tax on their daily expenses, for instance, the VAT. In addition, not only physical persons are taxed; juridical persons are too (e.g., corporate tax) even if different conditions and tax rates may apply.

Fiscal ethics covers several kinds of issues.

Why Taxing

The first relates to why leveling taxation at all (instead of, for instance, relying on voluntary contributions or private purchases) for paying for public goods, services, social protection, insurance programs, redistribution, and so forth. Various, non-mutually exclusive, reasons could justify why taxing.

One justification is grounded in efficiency. Paid taxes are individual and organization contributions to the purchase of collective goods and services, which economists define as "public goods" (Samuelson 1954). The argument describes members of political communities as pooling their resources for buying goods and services such as national defense, schools, hospitals, roads, bridges, etc. (Davis 1998). Taxes are then the "bills" sent to each potential user of these services.

Insurance programs are a prominent kind of public services. The main programs – national healthcare, unemployment benefits, and public pensions – use a sizeable portion of the welfare states' budget. In that context, taxes can be equated to premiums paid for being eligible to insurance provided (or simply funded) by the state (or by public agencies).

Contributions to public insurance significantly diverge from premiums paid to private companies because they usually do not follow a strict actuarial logic, i.e., they do not strictly reflect one's risk exposure. For instance, smokers do not pay more than non-smokers for having their medical services and drugs covered by public healthcare. Moreover, contributions are usually bundled with other taxes, making the relation between premiums and risk exposure looser. Finally, since such contributions are bundled with other taxes (e.g., on income), they tend to reflect one's ability to pay. Individuals and organizations contribute proportionally to their financial capacity, i.e., income or wealth.

The public goods and services argument is rooted in efficiency. The state is justified to tax the potential beneficiaries of public goods and services, i.e., citizens and residents, due to higher efficiency than private actors for providing or paying for these goods and services. Since goods and services, such as national defense, are non-rival and non-excludable, i.e., individuals cannot be barred from enjoying them and their level of consumption does not, theoretically at least, reduce the amount available to other individuals, it creates a risk of free riding, i.e., individuals not contributing, which the state is better equipped than markets to handle, due to its power of constraint.

The efficiency argument applies to public insurance too. States are more efficient than private actors and markets at providing public insurance, i.e., protection against risks, because they have substantially more resources than most private actors for fulfilling their obligations, because by insuring the whole population, risks can be more precisely calculated (so-called *Law of Large Numbers*; the larger a sample is, the more the risk distribution can be calculated while being stable), because states can monitor more closely their population and impose some preventive measures (for reducing adverse selection and moral hazard) and can commit future generations (Moss 2002).

A second justification for taxation consists in underlining the advantages of being part of a political community. Those advantages go beyond public goods and services. They encompass stability and social cooperation. Put differently, individuals and organizations *directly* benefit from being included in a political community through public goods and services but also *indirectly*, through the quality of interpersonal relations and social networks sustained or rendered possible by public institutions. In other words, through taxation individuals pay for the advantages they receive living in a steady and pacified society that is conducive to strong cooperation and high-quality social capital.

A third justification relies on equality. One might claim that states should guarantee to their residents some basic level of material equality as a matter of respect or for strategic reasons, such as avoiding the disruptive effect of too large inequalities. Furthermore, since democratic states are assumed to express popular will, redistribution and taxation could be interpreted as manifestations of what individuals and organizations (consider they) owe to each other.

In any case, the argument posits that taxes are instrumental for redistribution (by simply collecting resources), or redistributive in themselves (by modulating the contributions based on, for instance, the ability to pay or wealth). Nonetheless, taxation is not a neutral instrument. It conveys its own norms, independently of how resources are used, how they are collected express

different political priorities, views on fair social cooperation and carry different outcomes. For instance, it is not equivalent to finance public spending by a progressive wealth tax, VAT, or a flat income tax.

Finally, taxes could be seen as vehicles for inclusion. By paying taxes, citizens and residents actually manifest their commitment to the political community. Vice versa, by imposing specific taxes on residents, public institutions spell out the conditions for inclusion. In other words, taxing has an expressive value. It enacts individuals and organizations' political membership.

Other reasons could justify the very existence of taxes. Nonetheless the key idea is that taxes are more than instruments for redistribution. They have a longer reach and various ethical implications.

Tax Bases

The second issue is encapsulated in the question: *what taxing*, i.e., which tax base (income, consumption, wealth, or something else) to choose or how to distribute the fiscal burden over different bases? Each base generates specific supporting reasons, objections, and so forth.

Although this justificatory dimension is central for fiscal ethics, the issue is less visible for public policy. The reason is that states levy taxes on several or all bases, the only difference being how the whole tax burden is spread across the different bases. Nonetheless, the issue of what taxing is conceptually important, and such a choice (or the repartition of the tax load between the different bases) has ethical underpinnings and political consequences (e.g., in terms of tax acceptance).

Ethical underpinnings are noticeable in the common pool allegory (Hobbes 1996). The pool symbolizes the resources of a society that people augment by their work or reduce through consumption. The allegory usually serves to tackle income tax, which equates taxing entities according to their contribution to the pool. The apparent unfairness of such a tax is sometimes used to advocate for choosing other bases (or changing the distribution of the tax load across the various bases). One of such propositions is to

tax spending (or consumption), i.e., individuals' use of the pool rather than their contribution to it (Kaldor 1955). This illustrates the ethical dimensions embodied in fiscal issues.

The choice of a tax base manifests what taxpayers (think they) owe to each other. This aspect is, however, obscured by the libertarian view according to which taxes are about the state (illegitimately) seizing individuals' resources. This view opposes the state and taxpayers, downplaying a crucial point. Taxation cannot be reduced to confiscation. Along with law, it also articulates the (mutual) duties of members of a given society. Fiscal ethics is about revealing, discussing, and ironing out such duties.

Returning to the common pool allegory, the three main tax bases are income, spending (consumption), and wealth.

Income Tax

Income tax is an umbrella denomination. Although it is typically understood as referring to tax levied on earned income, i.e., gained from labor-like salaries, it covers all sorts of income, such as land income, return on capital, loan interest, and so forth. States usually levy taxes on income no matter the origin, but they impose different rates depending on the kind of income. The most discussed form is the tax on earned income.

Taxing income is claimed to offer several advantages. First, it is quite transparent and straightforward, since people are usually aware of how much they earn. Second, it is easy to implement, especially in a withholding (or retention) system where income payers collect the tax. Third, it can appear fair to tax people in proportion to their ability to pay. It mirrors the intuition that is fair that contributions to the provision of public goods and services are adjusted, to some extent, to one's financial capacity. Furthermore, public institutions could be considered as having a duty to promote some level (to be defined) of material equality. Income tax could then help to fulfill this duty depending on how it is implemented, e.g., progressivity.

Objections against taxing (too heavily) income usually rely on one of these two arguments: the

right to one's own labor (figured by income) and the tax's disincentive or deterrent effect.

The first argument is grounded on the idea that *individuals are entitled to the fruit of their labor* represented by income. The argument could be traced back to John Locke (1988), who claims that individuals have a right of property on their body and on the value created by their work as long as enough of the common resources is left to others (so-called Lockean Proviso). In short, individuals are entitled to their income and so do not deserve to be deprived of it.

There is little controversy about the fact that individuals have a prima facie right of appropriation on the fruits of their labor. This does not, however, imply that such a right is absolute and applies to the totality of their income. It could be argued that individuals' income partly results from using public goods and services, for which an income tax compensates. It could also be claimed that individuals, for earning their income, rely on the work of other individuals, which contribution is only partially reflected by the wages paid to them.

Hence, the issue is *how much of their income do individuals deserve or merit?* One could claim that rights are independent from merit or desert in the sense that they are unconditional by nature. Individuals should enjoy their rights independently of what their acts. However, this argument is not clear-cut. Some basic rights (e.g., freedom of movement) might be restricted due to perceived (lack of) merit, which is the case for incarcerated criminals. Therefore, to some extent, it makes sense to coin the issue of entitlement in terms of merit or desert.

In any case, the debate is not so much whether individuals are entitled to anything, but rather to *how much*. Few authors, mainly libertarians, deny the legitimacy of the state to provide public goods and services and consequently tackle the legitimacy of taxation. Conversely, fewer argue that individuals are entitled to nothing. So, the ethical discussion happens between these two extremes, captured by the *how much* interrogation.

The second kind of objection raises the risk of a disincentive or deterrent effect. In case of

excessive taxation, taxpayers may either work less (reducing the general prosperity and tax revenues) or slide into the shadow economy (reducing tax revenues). The argument relies on the empirical assumption of individuals being significantly responsive to material rewards (money) when deciding how much to work or whether to declare their activities.

As for the previous objection, the relevant debate is centered around *how much*: how much tax pressure leads individuals to reduce their work *in a proportion that is actually harmful* or to enter the shadow economy? In other words, common objections do not forcibly undermine the principle of taxing income but raises the issue of what an efficient level could be. The discussion calls for empirical evidence provided by studies investigating the reaction of a given population to various tax levels.

Spending Tax

The second tax base is spending or consumption. Such taxes can be indirect (e.g., sales tax or value-added tax), i.e., paid out of the goods or services being consumed, or direct (e.g., expenditure tax), i.e., paid out of the whole consumption of an entity. The main justification for such taxes is that individuals and organizations should pay taxes proportionally to their use of resources (the famous “common pool”). The case for a spending tax is strengthened by growing concerns about the preservation of natural resources, reduction of energy consumption, and decrease of the carbon footprint.

The basic justification for indirect spending taxes is the ease of implementation, explaining why many countries have adopted them. There are usually few brackets (different rates), sometimes only a flat rate and collection is assumed by sellers. Another advantage is that such taxes are immediately responsive to surges of the economic activity. When the economy expands, spending rises mechanically, which leads to an increase in tax collection. This reactivity could turn into a disadvantage during crises since the contraction of tax collection will closely mirror the economic downturn.

The main objection against indirect taxes such as VAT is their regressive nature. They burden

proportionally more modest individuals than wealthier due to the higher propensity to consume of the former. For instance, sin taxes on alcohol, tobacco, snacks, fat food, or soft drinks are known to strain more modest budgets. Indirect taxes cannot be modulated according to one’s resources; they apply to anyone at the same rate, which strengthens the concerns about their regressive nature.

The fundamental justification for direct taxes such as an expenditure tax lies in the flexibility they offer in comparison to indirect taxes. The latter are easy to implement but at the same time they are usually insensitive to one’s income or wealth, and, therefore, are regressive. The main comparative advantage of a spending tax is that it applies to one’s whole volume of consumption and can be modulated according to one’s use of collective resources.

Some authors advocate for consumption (or spending) tax in order to tame excessive or conspicuous consumption (Frank 1999). The argument is that individuals use consumption for signaling their relative standing. Therefore, social patterns of consumption are deeply affected by individual willingness to appear cool, successful, etc. This implies that part of consumption, and the strain imposed on collective (natural and produced) resources, is not determined by absolute needs but by relative considerations, interpersonal comparisons, and the desire of social recognition.

The problem is that individuals tend to consume more than required for fulfilling their needs. This excessive consumption is claimed not to bring lasting satisfaction, because it applies on positional goods (goods which bring satisfaction relatively to their social scarcity, i.e., how restricted their access is). Moreover, the more individuals consume (especially positional goods), the more they raise the collective standards of appropriate spending, the more everyone feels pressured to increase their expenditures for not falling behind, preserving access to specific social groups or networks, and so forth.

In that context, and assuming that the evaluation of the situation is correct, a spending tax with an incremental rate (cf. below) is sometimes advanced as a possible solution (among others

such as scaling down commercial advertisements). The idea is to tax people on their spending with escalating marginal rates, i.e., that higher amounts of consumption will be taxed at a proportional higher rate. The justification is that people should pay more in proportion of their spending, the rising pressure they impose on common resources, and on their peers for spending more.

Such a proposition attracts criticisms on both the very principle of such a tax and the incremental design. The main criticism is derived from the ownership argument above. It is to say that individuals are entitled to their income (and ensuing wealth) and, therefore, entitled to use it as they please. Again, few deny that individuals and entities have a *prima facie* right to decide for themselves how to use their income or wealth, but it does not follow that such a right cannot be constrained. For instance, individuals and entities cannot, everything else being equal, use their resources for harming someone else.

By arguing that excessive consumption creates social costs which are, to some extent, unescapable (also labeled as positional externalities [Frank 2008]), incremental consumption tax seems to be justified in terms of the harm principle (Mill 1859), i.e., that public institutions are legitimate to interfere with private decisions if it harms other individuals. The strength of the argument correlates with the extent of excessive consumption. If such consumption turns out to be marginal or insignificant, the justification for taxing consumption at an incremental rate loses most of its force.

Wealth Tax

The last tax base is wealth. While income reflects a flux at a given moment, wealth represents a stock that is the result of past fluxes. Wealth thus provides a more accurate image of one's ability to pay at a given moment of time. Moreover, it offers a superior tax base than income for fulfilling state's egalitarian duties since income is simply one of the sources of wealth and what matters is what taxpayers' net worth (which income does not capture).

In addition to egalitarian reasons, an empirical claim could be made in support of wealth tax.

It is to assert that individuals and collective entities benefit from public goods and services in proportion to their wealth. For instance, large fortunes benefit materially much more from the stability offered by a functioning state, rule of law, police, and judicial system, than poor citizens. Furthermore, it could be argued that large accumulations of wealth remain difficult (except for few individuals) in societies without a functioning state because of the difficulty to protect large properties against envious behaviors. Therefore, rich individuals should contribute more in absolute terms (and also perhaps relatively to their wealth through a progressive tax) than poorer ones.

However, there is an issue of efficiency. Public institutions may experience difficulties to adequately evaluate taxpayers' wealth due to the various forms taken by wealth (money, financial assets, real estate properties, company stocks, and so forth), but also due to the extended possibilities for fiscal evasion (e.g., by locating bank accounts in tax havens, by using dummy persons or shell corporations).

This explains the popularity of taxing wealth when wealth is passed on from one legal proprietor to another. Since for enjoying wealth, individuals and entities need, at some point, to declare it for guaranteeing their rights, one technique consists in taxing wealth when property is transferred. An example is inheritance tax, which is to tax individuals who receive wealth from someone else (usually deceased). However, the problem of misdeclaration and concealment of assets exists for wealth too.

Another argument supports taxing inherited wealth: the fact that the receiver from wealth has a less strong claim to the enjoyment of such resources. If it is reasonable to assume that in many cases the original owner owed its material affluence to her or his work, such a justification is lessened in the case of the receiver. It is more difficult (although not impossible) to argue that the heirs have *deserved* or *merited* their wealth.

As for the previous bases, wealth taxation needs to answer some objections, which for most of them mirror the objections addressed to income tax. On the one hand, individuals should be entitled to the accumulated fruits of their labor. On the

other hand, taxing (too heavily) wealth could have a disincentive effect on work, lead individuals to underreport their wealth, or leave the country for a more fiscally lenient destination. This last point opens the question of fiscal competition between states.

The Tax Structure

Most of the debates surrounding fiscal ethics have actually more to do with how to tax rather the tax bases in themselves. The issue raised by *how to tax* relates to the tax structure, i.e., the different tax brackets. This is a technical issue. However, the key idea underlying the choice of a tax structure is how to distribute the tax burden across a population? More precisely, it is about fair calculations of one's tax duties.

Taxes can be levied in three main forms: lump sum, flat, and progressive. A lump-sum tax is fixed amount imposed to all taxpayers. Examples include poll taxes, public toll roads, tourist taxes (fixed amount paid per night and collected by hotels), etc. Lump-sum taxes have the virtue of simplicity. They are easy to calculate (a single amount) and implement. However, such simplicity has shortcomings. It lacks flexibility, especially when public institutions are searching to design a structure that is responsive to taxpayers' situations (e.g., ability to pay) and behaviors (e.g., excessive consumption, increased wealth or income). It is also highly regressive, i.e., the rate of taxation decreases in relation of taxpayers' resources. Toll roads are less burdensome for wealthy drivers than modest ones.

A flat tax applies a fixed rate to all taxpayers on their income, wealth, inheritance, benefits, expenses, consumption, or something else and independently of their situation (e.g., affluence). Examples of flat taxes are VAT (although in some countries VAT has several brackets, e.g., on luxury products) and income tax (e.g., in many post-communist countries). The main advantage of a flat tax is the simplicity of calculation and implementation. Its main drawback is its regressivity. It is more burdensome for materially vulnerable people. Although the proportionality guarantees that taxpayers' contributions are sensitive to their material situation, it is insensitive to inequalities.

A progressive tax is structured around several rates (or brackets) depending on taxpayers' material situation. Examples of progressive taxes include income tax in many industrialized countries. The idea is to increase the fiscal burden in relation to one's resources based on the ability to pay. Depending on the design of brackets, progressive taxes can have strong redistributive effects. If this aspect is valuable from an egalitarian perspective, it also implies that (steeply) progressive taxes are less likely to be accepted by the most affluent taxpayers.

Summary

Fiscal ethics encompasses analyses of the design of a tax system. The objective is tax fairness, i.e., a tax architecture that can be judged as just by the taxpayers. In detail, fiscal ethics cover three main issues: *why taxing*, i.e., why public institutions are legitimate to capture part of individuals and organizations' material resources; *what to tax*, i.e., on which base (mostly income, consumption, or wealth) to levy taxes or, more accurately, how to spread the fiscal burden across bases; and *how to tax*, i.e., concretely how to implement taxes, especially how to calculate different taxes (lump-sum or fixed amount, a flat rate or different rates included in a progressive architecture). When considering these issues, fiscal ethics can mobilize political principles such as equality or efficiency that needs to be precisely defined.

Cross-References

► [Conspicuous Consumption/Positional Goods](#)

References

- Davis, E. (1998). *Public spending*. London: Penguin Books.
- Frank, R. (1999). *Luxury fever: Money and happiness in an era of excess*. Princeton: Princeton University Press.
- Frank, R. H. (2008). Should public policy respond to positional externalities? *Journal of Public Economics*, 92(8–9), 1777–1786.

- Gaisbauer, H. P., Schweiger, G., & Sedmak, C. (2015). *Philosophical explorations of justice and taxation: National and global issues*. Basel: Springer.
- Hobbes, T. (1996). *Leviathan*. Cambridge, UK: Cambridge University Press.
- Kaldor, N. (1955). *An expenditure tax*. London: Routledge.
- Locke, J. (1988). *Two treatises on government*. Cambridge, UK: Cambridge University Press.
- Mill, J. S. (1859). *On liberty*. London: John W. Parker and Son, West Strand.
- Moss, D. (2002). *When all else fails: Government as the ultimate risk manager*. Cambridge, MA: Harvard University Press.
- Murphy, L., & Nagel, T. (2002). *The myth of ownership: Taxes and justice*. New York: Oxford University Press.
- Samuelson, P. A. (1954). The pure theory of public expenditure. *Review of Economics and Statistics*, 36(4), 350–356.

Fish Resources

► Marine and Coastal Resources

Fisheries

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Synonyms

[Aquaculture](#); [Hatchery](#); [Seafood production](#)

Definition

Defining fisheries is not a straightforward task. It involves several components that make its definition context-dependent. They are usually determined based on the manner of production, type of aquatic habitat, the section of the marine habitat targeted, type of gear used, method of fishing, class of boats, fish species (or assemblages) targeted, and scale of production. In fisheries science, a fish is not restricted to the biological definition of an organism with a backbone, gills, and fins. Fish instead refers to all the natural aquatic resources that can be subtracted. Finfishes, however, tend to be the most abundant and vital. Therefore, a fishery (plural; fisheries) refers to any activity or entity involved in fish rearing or harvesting. Simply put, it is an arrangement that consists of the raising of fish, also called culture fisheries, or the harvesting of fish from the wild also referred to as capture fisheries. It is also considered an entity engaged in raising or harvesting fish, which is determined by an authority.

Introduction

Fisheries are a critical part of social existence because they contribute to the economics and livelihood of people in the World (Canty and Deichmann 2022; Whitfield et al. 2022). This activity involves capturing, rearing, and processing fish products with ubiquitous uses and benefits such as subsistent and small scale, recreational and touristic, and commercial and industrial. There are about 60 million people involved in fisheries, including capturing fish from the wild and restricted rearing of the fish (FAO 2018). Globally, Asia has the highest participation in fisheries, and Latin America and the Caribbean are the least regarding their involvement in fisheries (FAO 2018). The main aim of fisheries is to achieve maximum and continuous production, referred to in fisheries science as the Maximum Sustainable Yield (MSY), which the World nations have committed to pursue in fisheries through the *Law of the Sea* (Martell and Froese 2013).

Fisheries may be commercial or industrialized, mostly large-scale artisanal, primarily small-scale, subsistent, recreational, and ornamental. Commercial fishing involves the exploitation of wild fish resources, usually from the deep sea or broad pelagic areas (e.g., Tuna fishery), contributing to the supply of fish demand (Canty and Deichmann 2022; Griffiths et al. 2019). Artisanal fisheries use low-technology gears to catch inland and coastal fisheries resources; it also implies traditional fishing practices and is usually practiced by individual fishing households. Recreational fisheries, also called sport fishing or angling, are defined as the art of fishing for pleasure (Hughes 2015). Ornamental fisheries refer to unique fishes admired for their color and beauty.

Fisheries can be classified based on habitat and salinity as marine, brackish, and freshwater engaged in habitats such as sea, ocean, river, lakes, wells, and ponds, all affecting the chemical and biological nature of the seafood caught from the exercise (Wijayanto et al. 2021). Marine fisheries are conducted in habitats of salinity of around 35ppt (parts per thousand in all oceans and seas across the globe), without neglecting estuarine regions where salty oceans and rivers meet, mangroves, and reefs (Wijayanto et al. 2021). In comparison, marine fisheries occupy the largest share of seafood produced globally. Brackish fisheries are conducted between 0.5 and 30 ppt in water bodies with high salinity but lower freshwater values (Wijayanto et al. 2021). In contrast, freshwater fisheries are done in salinity habitats of 0.5ppt or less (Dyldin et al. 2020; Morita 2021).

Types of Fisheries

The fundamental definition of fisheries comes from the interaction between fishes and other invertebrates (fish, hereafter) in the marine environment (Cashion et al. 2018). Fisheries provide 17% of the total animal protein consumption across the World, and its importance has been increasing during the last years. However, global capture fisheries have remained relatively static (surrounding 90 million tonnes) for the previous

40 years (FAO 2018). The latter might be explained by the limited production rate of exploited populations, which is conditioned to population size and the ecosystem's carrying capacity (Schaefer 1991). The carrying capacity is related to the extension of ecosystems, and it increases with distance from shore, from inland to the open ocean. So the distance from shore modifies the level of technology (cost, effort) involved in the fishing process (Islam et al. 2022; Whitfield et al. 2022).

On the other hand, technology implied for fishing varies with the degree of economic development of the ventures to pursue highly valued fishery resources. Thus, relevant differences in fish production exist between developed and developing economies, inland and marine ecosystems, demersal and pelagic fisheries, and the ecosystem impacts related to each fishery. Fishing gears, defined as *"the equipment used for fishing,"* can be classified by several factors, however, considering that technology implied in the fishing process is related to the effort needed and the scale of the catch. Then, we use technology as the main classifying factor, from artisanal to highly industrialized fisheries (FAO 2009).

Artisanal fisheries could be defined as low-technology fisheries (Rousseau et al. 2019a). This sector is often referred to as small-scale fisheries. It comprises a wide variety of fishing-gear categories: bag nets, cast nets, hand/tools, encircling nets, gillnets, lines, pots or traps, seines, and many other kinds of nets or tools that vary regionally (Cashion et al. 2018). This sector contributes to ~25% of the catch in volume but 90% of employment in capture fisheries (FAO 2018) and the global number of vessels (Rousseau et al. 2019b).

Industrial fisheries (large-scale) imply much more technology in the fishing process, higher catches, and more sophisticated preservation methods. The fishing gears used in large-scale fisheries refer to bottom and pelagic trawls, long-lines, purse seines gillnets, and many others, including dredge, pots or traps, and a mixture of fishing gears (Cashion et al. 2018).

While artisanal fisheries provide more than 50% of animal protein consumed in developing

countries at affordable prices, industrial fisheries look for higher-valued species. For example, the bluefin tuna (*Thunnus thynnus*) can reach prices of 547 €/kg in Japanese markets (Mylonas et al. 2010). Also, fisheries employ 40.4 million people (FAO 2018). However, despite their social and economic benefits, global fishing still faces several management issues such as illegal and unreported fishing (IUF), bycatch, discards, habitat alteration, and air and ocean pollution.

Key Issues

There is a strong correlation between governance and IUF, and unfortunately, there is not a comprehensive policy to govern the high seas, which comprises 60% of the marine environment (IUCN 2020). Also, IUF can represent 40-60% of reported catches in developing countries (Agnew et al. 2009; Cisneros-Montemayor et al. 2013). Additionally, IUF is closely related to the catch of protected species (e.g., *Totoaba macdonaldi*) that compromises survivorship of species in danger of extinction as the Mexican porpoise. However, bycatch of nontargeted marine species occurs in legal fisheries too. It threatens charismatic species such as sea turtles, seabirds, marine mammals, and sharks, along with species of ecological importance but without market value (Cambiè et al. 2020; Glemarec et al. 2020; Peltier et al. 2016).

Another critical issue is the discards, defined as marine species that are thrown overboard because they have no market value, are too small, damaged, or inedible, discards surround 10 million t per year (Zeller et al. 2018). It just does not represent a waste of potential source protein (for direct or indirect consumption). It contributes to altering ecosystem structure while adding food for small predators and scavengers and reducing oxygen availability due to its decomposition.

Any fishing gear inherently interacts with the physical environment. However, the impact of that interaction depends on many factors, such as the gear configuration, towing speed, depth, and type of substrate. The effects of fishing in marine habitats include unintentional mortality of marine

species, loss of physical structures used for shelter, feeding, or mating, the resuspension and burying of organic ions and organic material, and the reduction of resilience and biological productivity (NRC 2002, Kraus and Diekmann 2018).

Also, the high use of fossil combustibles (706 L of fuel per one tonne of fish caught, on average) contributes to air pollution (Parker and Tyedmers 2015). Also, fishing vessels contribute to marine pollution through plastic garbage thrown into the ocean or ship casualties, although its contribution remains unclear (Jambeck et al. 2015).

Fisheries Management and Policy

Fisheries management is a complex process of gathering, analyzing, planning, deciding, allocating resources, formulating, and enforcing fisheries regulations. It is usually controlled by the designated fisheries management authority in control of the immediate and future activities of interested parties to ensure sustainable productivity of the natural resources. Recent developments have motivated the improvement upon the previous concept of management, which focuses on single fisheries or single fisheries necessitating an ecosystem undertone. A broader approach referred to as ecosystem-based fisheries management (EBFM). As its name implies, it involves the integration of ecosystem consideration in management, leading to more effective ecosystem conservation and sustainability.

Fisheries and Sustainable Development Goals (SDGs)

The SDGs goals and structures are necessary to fisheries, particularly the 14th SDG (life below water), i.e., conserve and sustainably use the oceans, seas, and marine resources for sustainable development. The goal is linked with all the other purposes because fisheries are considered an interdisciplinary area of food security. The goal ensures that fish harvesting should be regulated and overfishing IUU (illegal, unreported, and

unregulated) fishing, including destructive fishing, should be stopped. The ultimate goal is to restore fish stocks to produce the best maximum economic yield and maximum sustainable yield, which can be achieved with science and policy-based management plans. Furthermore, the goal considers avoiding subsidies on fisheries that lead to excess exploitation, increasing the economic benefits of emerging and least developing countries from the sustainable use of fisheries resources, and therefore, not limiting the empowerment of the access right of small-scale fisheries, adhering to all local, regional, and international laws and provisions (FAO 2018).

Summary

No doubt, the world depends so much on fish which is among the essential living resources. Total 15% of protein needs is supplied by finfishes globally, and over 90 million tons of finfish is exploited from the wild (Ormerod 2003). Fishes are incredibly diverse, making them highly relevant and ecologically essential in conserving aquatic resources, managing the marine ecosystem, and regulating its environment. Paradoxically, there is an increasing development of management challenges that negatively impact production, available stocks, quality of habitat, global diversity, trophic structure, and composition of fish communities. Although these challenges are natural or anthropogenic, anthropogenic influences are usually more impactful and even pave the way for biological impacts. The main problems of freshwater bodies include pollution, alien fish introduction, habitat modification, water flow obstruction, and dam regulation, among others. For marine systems, direct and overexploitation affects the habitat and the fish and other aquatic life. The environment is linked to the marine habitat, such as the atmospheric, terrestrial, and coastal impact on the water or habitat quality. Climate change is currently influencing and is predicted to impact more seriously on fisheries and aquaculture in the future, especially in vulnerable areas. Lastly, for fisheries to be sustainable, there is a need

to not only improve data quality to reinforce governance and social inclusiveness in fisheries but strengthen international regulations for trawling and other fishing exploitation activities and promote blue growth at the local, national, regional, and international levels under the context of the ocean decade of action.

Cross-References

► Blue Economy

References

- Agnew, D. J., Pearce, J., Pramod, G., Peatman, T., Watson, R., Beddington, J. R., & Pitcher, T. J. (2009). Estimating the worldwide extent of illegal fishing. *PLoS ONE*, 4(2). <https://doi.org/10.1371/journal.pone.0004570>.
- Cambiè, G., Jribi, I., Cambera, I., Vagnoli, G., Freggi, D., & Casale, P. (2020). Intra-gear variation in sea turtle bycatch: Implications for fisheries management. *Fisheries Research*, 221(April 2019), 105405. <https://doi.org/10.1016/j.fishres.2019.105405>.
- Canty, S. W., & Deichmann, J. L. (2022). Do small-scale fisheries have the capacity to provide food security to coastal populations? *Fish and Fisheries*.
- Cashion, T., Al-Abdulrazzak, D., Belhabib, D., Derrick, B., Divovich, E., Moutopoulos, D. K., Noël, S. L., Palomares, M. L. D., Teh, L. C. L., Zeller, D., & Pauly, D. (2018). Reconstructing global marine fishing gear use: Catches and landed values by gear type and sector. *Fisheries Research*, 206(October), 57–64. <https://doi.org/10.1016/j.fishres.2018.04.010>.
- Cisneros-Montemayor, A. M., Cisneros-Mata, M. A., Harper, S., & Pauly, D. (2013). Extent and implications of IUU catch in Mexico's marine fisheries. *Marine Policy*, 39(1), 283–288. <https://doi.org/10.1016/j.marpol.2012.12.003>.
- Dyldin, Y. V., Hanel, L., Fricke, R., Orlov, A. M., Romanov, V. I., Plesnik, J., ... Kochetkova, M. O. (2020). Fish diversity in freshwater and brackish water ecosystems of Russia and adjacent waters. *Publications of the Seto Marine Biological Laboratory*, 45, 47–116.
- FAO. (2009) Fishery Glossary FAO Fisheries and Aquaculture Department, FAO, 2014; Terminology(A9.1FI)/CPAM, FAO, 2014. <http://www.fao.org/faoterm/en/?defaultCollId=21>. Accessed on 9 Apr 2020.
- FAO. (2018). *The State of World Fisheries and Aquaculture 2018 - Meeting the sustainable development goals*. <http://www.fao.org/3/I9540EN/i9540en.pdf>
- Glemarec, G., Kindt-Larsen, L., Lundgaard, L. S., & Larsen, F. (2020). Assessing seabird bycatch in gillnet fisheries using electronic monitoring. *Biological Conservation*, 243(February), 108461. <https://doi.org/10.1016/j.biocon.2020.108461>.

- Griffiths, S. P., Allain, V., Hoyle, S. D., Lawson, T. A., & Nicol, S. J. (2019). Just a FAD? Ecosystem impacts of tuna purse-seine fishing associated with fish aggregating devices in the western Pacific Warm Pool Province. *Fisheries Oceanography*, 28(1), 94–112. <https://doi.org/10.1111/fog.12389>.
- Hughes, R. M. (2015). Recreational fisheries in the USA: economics, management strategies, and ecological threats. *Fisheries Science*, 81(1), 1–9.
- Islam, M. M., Nahiduzzaman, M., Acosta, R., Mome, M. A., & Wahab, M. A. (2022). Status and potential of an ecosystem approach to fisheries management (EAFM) in Bangladesh. *Ocean & Coastal Management*, 219, 106068.
- IUCN. (2020). *Ten principles for high seas governance*. International Union for conservation of nature. [https://www.iucn.org/downloads/10_principles_for_high_seas_governance_final.pdf. Accessed 9 Apr 2020].
- Jambeck, J. R., Ji, Q., Zhang, Y.-G., Liu, D., Grossnickle, D. M., & Luo, Z.-X. (2015). Plastic waste inputs from land into the ocean. *Science*, 347(6223), 764–768. <https://doi.org/10.1126/science.1260879>.
- Kraus, G., Diekmann, R. (2018). Impact of Fishing Activities on Marine Life. In: Salomon, M., Markus, T. (eds) *Handbook on Marine Environment Protection*. Springer, Cham. https://doi.org/10.1007/978-3-319-60156-4_4
- Martell, S., & Froese, R. (2013). A simple method for estimating MSY from catch and resilience. *Fish and Fisheries*, 14(4), 504–514. <https://doi.org/10.1111/j.1467-2979.2012.00485.x>
- Morita, K. (2021). Reverse migration of adult pink salmon (*Oncorhynchus gorbuscha*) to the sea after their return to freshwater. *Environmental Biology of Fishes*, 1–8.
- Mylonas, C. C., de la Gándara, F., Corriero, A., & Ríos, A. B. (2010). Atlantic bluefin tuna (*Thunnus thynnus*) farming and fattening in the Mediterranean sea. *Reviews in Fisheries Science*, 18(3), 266–280. <https://doi.org/10.1080/10641262.2010.509520>.
- National Research Council, NRC (2002). *Effects of trawling and dredging on seafloor habitat* (1st ed.). National Academy Press. <https://doi.org/10.17226/10323>.
- Ormerod, S. J. (2003). Current issues with fish and fisheries: Editor's overview and introduction: Overview on fish and fisheries. *Journal of Applied Ecology*, 40(2), 204–213. <https://doi.org/10.1046/j.1365-2664.2003.00824.x>.
- Parker, R. W. R., & Tyedmers, P. H. (2015). Fuel consumption of global fishing fleets: current understanding and knowledge gaps. *Fish and Fisheries*, 16(4), 684–696. <https://doi.org/10.1111/faf.12087>.
- Peltier, H., Authier, M., Deaville, R., Dabin, W., Jepson, P. D., van Canneyt, O., Daniel, P., & Ridoux, V. (2016). Small cetacean bycatch as estimated from stranding schemes: The common dolphin case in the northeast Atlantic. *Environmental Science and Policy*, 63, 7–18. <https://doi.org/10.1016/j.envsci.2016.05.004>.
- Rousseau, Y., Watson, R. A., Blanchard, J. L., & Fulton, E. A. (2019a). Defining global artisanal fisheries. *Marine Policy*, 108(July), 103634. <https://doi.org/10.1016/j.marpol.2019.103634>.
- Rousseau, Y., Watson, R. A., Blanchard, J. L., & Fulton, E. A. (2019b). Evolution of global marine fishing fleets and the response of fished resources. *Proceedings of the National Academy of Sciences of the United States of America*, 116(25), 12238–12243. <https://doi.org/10.1073/pnas.1820344116>.
- Schaefer, M. B. (1991). Some aspects of the dynamics of populations important to the management of the commercial marine fisheries. *Bulletin of Mathematical Biology*, 53(1–2), 253–279. <https://doi.org/10.1007/BF02464432>.
- Whitfield, A. K., Able, K. W., Blaber, S. J., & Elliott, M. (Eds.). (2022). *Fish and Fisheries in Estuaries: A Global Perspective*. John Wiley & Sons.
- Wijayanto, D., Bambang, A. N., Nugroho, R. A., Kurohman, F., & Nursanto, D. B. (2021). Effect of salinity on growth and benefit-cost ratio of Asian seabass reared in artificial media. *Aquaculture, Aquarium, Conservation & Legislation-International Journal of the Bioflux Society*, 14(5), 3000–3005.
- Zeller, D., Cashion, T., Palomares, M., & Pauly, D. (2018). Global marine fisheries discards: A synthesis of reconstructed data. *Fish and Fisheries*, 19(1), 30–39. <https://doi.org/10.1111/faf.12233>.

Fisheries Committee for the West Central Gulf of Guinea

► [Fisheries Committee for the West Central Gulf of Guinea \(FCWC\)](#)

Fisheries Committee for the West Central Gulf of Guinea (FCWC)

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Synonyms

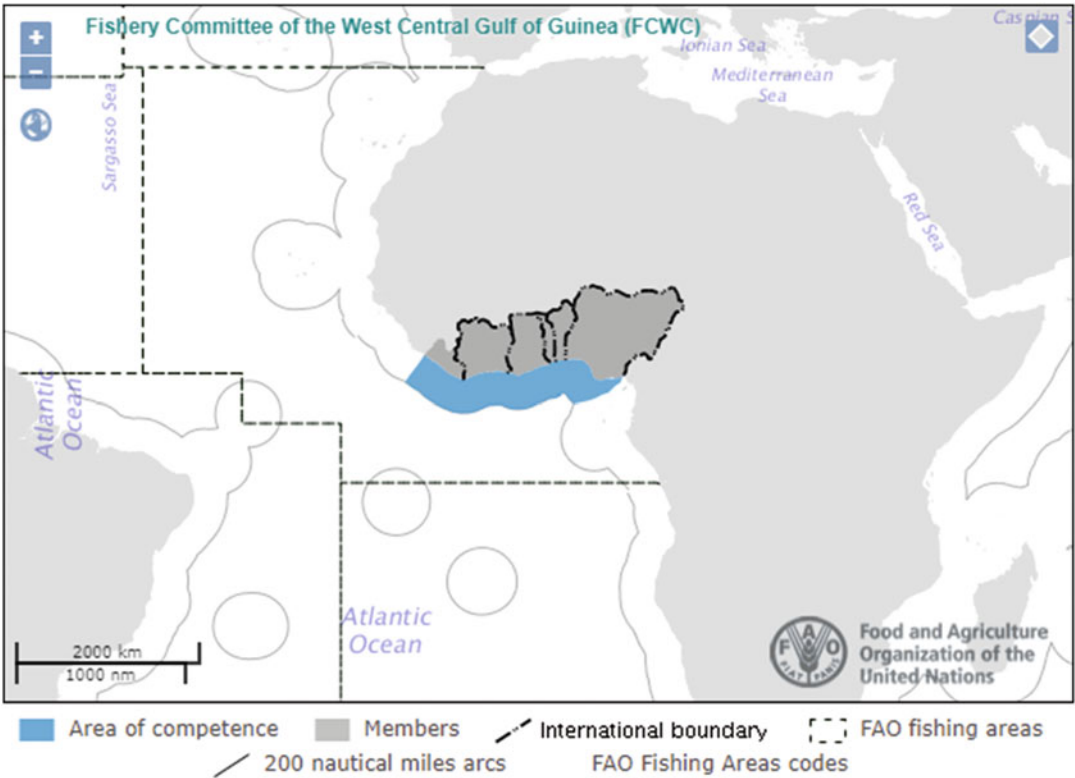
[Fisheries Committee for the West Central Gulf of Guinea](#); [Fisheries sustainability](#); [Regional cooperation](#); [Regional fisheries management organization](#)

Introduction

In addition to other marine resources, the West and Central African façade of the Atlantic Ocean is abundantly rich in fish biomass (UNEP 2016; Okafor-Yarwood 2019; Okafor-yarwood et al. 2020), with countries having several shared fish stocks. However, myriad challenges confront the sustainability of these resources including over-fishing by foreign vessels; poor management of fisheries stocks; low participation of stakeholders in fisheries management; and illegal, unregulated, and unreported fishing (IUU fishing) activities. Overcoming these challenges in a sustainable manner, therefore, calls for regional as well as international cooperation. In line with this need, the Fisheries Committee for the West Central Gulf of Guinea (FCWC) (*Comité des Pêches pour le Centre-Ouest du Golfe de Guinée*) was established in November 2007 by

the Cotonou Convention as an intergovernmental organization to promote regional cooperation among its member and ensure sustainable management and conservation of marine resources under the national jurisdiction of its Contracting Parties. The six countries that make up the FCWC’s membership include Benin, Cote d’Ivoire, Ghana, Liberia, Nigeria, and Togo. Equipped with the capacity to enhance policy and institutional reforms, and the commitment to garner support for regulations and improved governance, the FCWC has since inception remained on the frontline of rebuilding and maintaining robust fisheries resources, creating sustainable livelihoods for small-scale fishers and improve intra-regional and international trade of fish and fishery products within its jurisdiction. The FCWC’s area of competence covers the Territorial Seas and the Exclusive Economic Zones (EEZ) of its member states (Fig. 1). Its

F



Fisheries Committee for the West Central Gulf of Guinea (FCWC), Fig. 1 Competence area of the Fisheries Committee of the West Central Gulf of Guinea (FCWC). (Source: FAO 2020)

activities are conducted in English and French language, and its Secretariat based in Tema, Ghana.

The History

The journey to establish the FCWC started in July 2005 during the sixth meeting of the Ministerial Conference on Fisheries Cooperation among the African States bordering the Atlantic Ocean (COMHAFAT) in Rabat, Morocco, when the United Nations Food and Agricultural Organization (FAO) was asked to evaluate the possibility of establishing a subregional committee of fisheries in the west-central part of the Gulf of Guinea. FAO acceded to this request and seven months after (March 2006) the organization had produced the feasibility study which was later reviewed at a meeting held in Cotonou, Benin Republic on the 12th–13th of April 2006 by the fisheries directors of Benin Republic, Cote d'Ivoire, Ghana, Liberia, Nigeria, and Togo. Following the review, the six directors approved the project to establish a subregional committee of fisheries, called the Committee of Fisheries for the West Central of the Gulf of Guinea (FCWC).

To solidify the fisheries directors' approval, a ministerial meeting was held in Abidjan, Côte d'Ivoire, in July 2006, to accept the proposals. It was eureka, as the Ministers unanimously signed what is now known as the "*Declaration of July 2006, establishing the Committee of Fisheries for the West Central of the Gulf of Guinea (FCWC)*", and also approved the hosting of its Secretariat in Tema, Ghana. Following these events, the first Ministerial Conference of November 2007 in Cotonou, Benin Republic, approved the "*Convention for the Establishment of the Fishery Committee for the West Central Gulf of Guinea*" as well as the "Rules of Procedure of The Fisheries Committee for West Central of Gulf Guinea."

Mission, Objectives, and Focus Areas

The FCWC is poised to promote authentic transnational cooperation between countries within

its jurisdiction, to foster effective management, appropriate conservation, and development measures capable of ensuring sustainable development of fisheries resources. The FCWC activities are predicated on an overarching goal "to ensure the sustainable development of the fisheries resources in the FWC Convention Area"; driven by five "strategic technical" goals/objectives, and one "strategic functional objective which guides the specific intervention areas under its 2011–2020 Strategic Plan (FCWC 2020).

The objectives put together include:

1. Rebuild and maintain robust fisheries resources through policy reforms, cooperative regulatory planning, good governance, and improvements in institutions.
2. Develop and implement appropriate management frameworks that ensure fisheries resources are harvested sustainably, improved intra-regional and international trade of fish and fishery products, and maximum economic and social benefits are obtained from the fisheries.
3. Develop the capacity of Members' small-scale fishers and other operators to create sustainable livelihoods for their people from the sustainable harvest, processing, and marketing of their fisheries resources.
4. Enhance national capabilities for efficient, cost-effective, and sustainable fisheries monitoring, control, and surveillance, and establishing mechanisms for effective regional cooperation in Monitoring, Control and Surveillance (MCS) and enforcement to stop illegal, unreported, and unregulated (IUU) fishing in the West Central Gulf of Guinea.
5. Strengthen cooperative research and ensure that resource-related decisions are based on sound knowledge, scientific methodology, and best information available.
6. Our Strategic organizational/functional goal is "To ensure the effective implementation of the Committee's work through results-based management, improved communication, and better financial, human and knowledge management systems and tools."

Structure of Governance

The 2007 Convention that established the FCWC and its Rules of Procedure has explicitly laid down organizational competences of different governance structures of the FCWC. The Conference of Minister or Ministerial Council stands as the apex decision-making component of the FCWC's governance structures; followed by the Advisory Coordinating Committee (ACC) made up of one Directors of Fisheries nominated from each Contracting Party; and a Secretariat that is composed of Staffs who coordinates and run the everyday affairs of the FCWC (Fig. 2).

Rule 15 of the FCWC's Rules of Procedure leaves the final decision-making power in the hands of the Conference of Ministers by consensus. However, rule 16 of the same Rules of Procedure specified otherwise in the occasion that all efforts to decide by consensus have been exhausted, and as a last resort, a decision can be taken via the majority of votes by Contracting Parties present. The ACC is duty-bound (under article 9.5 and 10 of the Convention) to hold regular meetings at least twice a year, preferably at its headquarters in Tema, Ghana, and the second meeting in the country hosting the Conference of Ministers. Pursuant to article 9.4 of the Convention, the position of Chairperson of the ACC shall be held by the representative of the Contracting Party holding the chairmanship of the Conference of Ministers at the time of the meeting.

The Secretariat serves as the executive arm of the FCWC and performs its functions according to functions stipulated in article 12 of the Convention. The Secretary-General is appointed by the Conference of Ministers for a period of 5-years renewable and must be a national from one of the Member States. S(He) runs the everyday affairs of the FCWC secretariat including staffing and ensures that Contracting Parties are informed of any issues or matters which may be of interest to the FCWC including the communication of the annual report to the Contracting Parties and to observers at least 30 days before the opening of the regular meeting.

Activities and Major Accomplishments

As the need for a continuous mechanism of funding is necessary to sustain the activities of the FCWC's Secretariat, the structure of the Secretariat and a permanent funding mechanism to support the FCWC's activities was adopted in 2008. Acknowledging the menace posed by IUU Fishing within its jurisdiction, Fisheries Ministers in the six countries converged in Accra in 2009 to proclaim the "*Ministerial Declaration of Accra, combating illegal fishing and adoption of the regional action plan against illegal fishing.*"

On 13 December 2013 marked another milestone in the unwavering commitments of the FCWC towards sustainable management of



Fisheries Committee for the West Central Gulf of Guinea (FCWC), Fig. 2 Organizational structure and decision-making loops of the FCWC

fisheries resources under its competence, as the “Convention on minimum requirements for access to the fishery resources of the area of the fisheries committee for the West Central Gulf of Guinea” was adopted by Ministers of Fisheries from the six member states. Acknowledging the importance of transnational data and information sharing in enhancing sustainable fisheries management, another landmark “*Convention on the pooling and sharing of information and data of the area of the FCWC*” was adopted in Abidjan on 12 December 2014.

Acknowledging the FCWC as a thorough intergovernmental organization, the Parliament of the Republic of Ghana on 7 December 2015 ratified the headquarters agreement of the FCWC, listing the immunities, privileges, exemptions, and facilities granted to the organization – giving the organization a legal status similar to that of a diplomatic corps, empowering it to be functional and achieve its objectives as an intergovernmental institution.

The development of a strategic plan from 2011 through 2020 to guide the FCWC’s activities marks a great milestone and a clear indication of the Committee’s giant strides in ensuring fisheries and marine sustainability within its area of jurisdiction. The thoughtfulness and quality within the process, tactical and operational aspects of the strategic plan, unequivocally affirmed that the FCWC is truly on the path of driving the region towards sustainable fisheries and blue economy development in the region. Apart from working on the 10 projects that have been identified for the implementation of its strategic plan, the FCWC has also continued engagement with regional and international partners on several other related projects including: Building Transparency in West Africa; Fisheries Intelligence and Monitoring Control and Surveillance Support in West Africa; Improved Regional Fisheries Governance in West Africa; etc.

and changed the context of fisheries sustainability, and how achieving it must be addressed in West and Central Africa. The FCWC is achieving this by promoting a sustainable development path as an overall strategy and adopting an ecosystem approach to fisheries management that put sustainability as the primary agenda item. Overall, the FCWC has fostered a process where strategic regional choices are made by relevant national fisheries authorities, based on common challenges, and has been able to adapt these interpretations to fit the political and economic context in which they work. In doing so, the FCWC is reconstructing national and regional policy agendas to take account of human capital needs, information technologies, and environmental issues.

References

- FCWC (2020). Retrieved 15 August 2020 from the Fisheries Committee of West and Central Africa official page <https://fcwc-fish.org/>
- Food and Agricultural Organisation. (2020). Fisheries Committee for the West Central Gulf of Guinea (FCWC). In *Regional fishery bodies summary descriptions*. Retrieved 3 Jul 2019 from <http://www.fao.org/fishery/rfb/fcwc/en>
- Okafor-Yarwood, I. (2019). Illegal, unreported and unregulated fishing, and the complexities of the sustainable development goals (SDGs) for countries in the Gulf of Guinea. *Marine Policy*, 99, 414–422. <https://doi.org/10.1016/j.marpol.2017.09.016>.
- Okafor-yarwood, I., Pigeon, M., Alexandra, A., Ridgway, C., Adewumi, I., & Joubert, L. (2020). *Stable seas: Gulf of Guinea*. <https://doi.org/OEF.2020.043>
- UNEP. (2016). *Regional oceans governance: Making regional seas programmes, regional fishery bodies and large marine ecosystem mechanisms work better together*. Retrieved from <http://munin.uit.no/bitstream/handle/10037/10316/article.pdf?sequence=2&isAllowed=y>

Summary

In summary, the advent of the FCWC has brought together cooperative decision-making,

Fisheries Sustainability

► [Fisheries Committee for the West Central Gulf of Guinea \(FCWC\)](#)

Five Capitals Framework (Forum for the Future)

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Synonyms

[Framework for sustainability](#)

Definition/Description

The Five Capitals model developed by the Forum for the Future assists companies in devising sustainable strategy and assimilation of sustainable initiatives in their management practices (Forum for the Future, [n.d.-b](#); Sitnikov, [2013](#)). The model “provides a basis for understanding sustainability in terms of the economic concept of wealth creation or ‘capital’” and links company to the external environment in the long run (Forum for the Future [b](#)). Through the model, a company can develop a vision of sustainable operations, products, and services, all with the goal of value maximization. The interdependence of the five capitals is well established, so any modification of one can have a profound impact on other capitals. Many organizations utilize the model to develop the strategy, while stating their goals and operationalizing them through Sustainable Development Goals (SDG) goals or Environmental, Social, and (Corporate) Governance (ESG) ratings. The model stood the test of time and remains prevalent concept for understanding countless seeming unrelated subjects and overall sustainable activity.

Forum for the Future

The Forum for the Future is one of the leading global sustainability initiatives (Forum for the Future, [n.d.-a](#)). This English nonprofit organization has been working with businesses, governments, and societies on numerous sustainability issues for over 25 years. Most recently, their focus was shifted by five key dynamics: biosphere breakdown, economics crisis and reform, tech and governance nexus, equitable transitions, and regenerative openings (Forum for the Future, [2020](#)). The mentioned dynamics are destabilizing the sustainability systems, and seriously altering years of hard work. Most notably the Forum for the Future developed the framework for sustainability called The Five Capitals Model (Forum for the Future [b](#)).

The Five Capitals Framework

Many organizations utilize the five capitals framework to develop or shape their sustainability strategy. The five capitals model calls for sustainable wealth creation or “capital” (Ivory & Ascui, [2019](#)) in contrast to the Friedman doctrine (CFI, [2022b](#)). Organizations use five types of capital: natural, social, human, manufactured, and financial for the creation of products or services (Forum for the Future, [n.d.-b](#); Owen & Kemp, [2012](#); Porritt, [2012](#)).

The Five Capitals Model

Organizations use five types of capital to create products or services and attempt to maintain or even enhance the capitals. The model entices organizations to consider how different capitals influence each other and how they impact long-term profitability.

Natural capital, also known as environmental, is the natural resources. All organizations rely on natural capital as they need energy and have an environmental impact as they create waste. Organizations should consider that some resources are not renewable (i.e., oil, gas), while others are

(i.e., timber, water, and grain), and with that in mind, try to organize more balanced operations. Further, organizations can enhance natural capital by recycling, reusing, substituting scarce materials with more abundant ones, using renewable energy sources, etc. The importance of such goals is emphasized in the 2030 Agenda for Sustainable Development which was adopted unanimously by the 193 members of the United Nations (UN) in September 2015 (The Grantham Research Institute on Climate Change and the Environment, 2018). The agenda was operationalized through the 17 Sustainable Development Goals (SDG) and 169 targets (United Nations, [n.d.-c](#); United Nations, [n.d.-d](#)) widely used by both private and public sectors across the world. The following SDGs are focused on environment and natural resources:

- Goal 12: Responsible Consumption and Production
- Goal 13: Climate Action call for action to combat climate change and its impacts
- Goal 14: Life Below Water
- Goal 15: Life on Land

Human capital includes health, skills, knowledge, intellectual contributions, motivation, etc. Organizations depend on a workforce to function, so they want to ensure individuals are healthy, motivated, skilled, and ready to work. To maintain and enhance human capital, organizations should invest in their workforce, provide training and education, provide fair compensation, create opportunities for advancement, support a high standard of health, and so forth. Several SDGs (United Nations, [n.d.-a](#); [n.d.-d](#)) address these issues, including:

- Goal 3: Good Health and Well-being. The goal is tightly connected to goal 1: No Poverty, goal 2: No Hunger, and goal 6: Clean Water and Sanitation.
- Goal 4: Quality Education.

Social capital is a value added to economic output through human relationships, such as networks, communication channels, communities, schools, and similar. These social relationships are necessary for organizational effectiveness.

Inside the company, individuals build trust through interactions and share cultural values, and ultimately organizations operate effectively. Social interaction is equally important in the external environment, as companies operate in the wider society. Organizations can enhance their social capital by being responsible, paying taxes, obeying laws, minimizing negative social impact, providing safe working conditions through ethical sourcing, and so on. Goals (United Nations, [n.d.-b](#); [n.d.-d](#)) corresponding to this type of capital are:

- Goal 5: Gender equality
- Goal 8: Decent Work and Economics Growth

Manufactured capital includes real estate, infrastructure, and technologies owned, leased, or controlled by the organization. Organizations can sustain competitive advantage through manufactured capital while improving efficiency and sustainability. Some of the measures organizations can use to grow their manufactured capital include modular manufacturing systems, zero-waste and zero-emission production systems, reverse logistics with the remanufacturing system, industrial ecology, etc., many of which are represented in the following SDGs (United Nations, [n.d.-d](#)):

- Goal 7: Affordable and Clean Energy
- Goal 9: Industry, Innovation and Infrastructure
- Goal 11: Sustainable Cities and Communities

Organizational assets in the form of currency that can be owned and traded compose financial capital. They typically include notes, shares, and bonds and reflect the power of other types of capital. Financial capital is the traditional measure of business performance. Sustainable organizations have to understand how economic value is generated. Organizations can enhance financial capital by distributing created wealth, building strong supplier and customer relationships, effectively managing risk, building brand and reputation, and so forth. One of the SDGs (United Nations [d](#)) related to the financial capital is:

- Goal 10: Reduced Inequality

The final goal, goal 17: Partnerships for the Goals (United Nations, n.d.-e, para. 2), is focused on facilitation of the sustainable development goals, through global partnerships and joint responsibility of all stakeholders. As mentioned at the beginning, the mentioned 17 goals have 169 interrelated and often interdependent targets, so clearly many goals could be related to the several capitals.

The five capitals model remains at the core of conceptual framework, yet the SDGs are more apparent in many organizations. The most common is Environmental, Social, and (Corporate) Governance (ESG) rating, adopted by numerous agencies. Many millennials are investing in companies that are more closely aligned with their values, and often pursuing socially responsible investing strategy (Corporate Finance Institute, 2022a). As the proportion of millennials is growing in total number of investors, so is the importance of ESG ratings. Even though ESG ratings are quite popular, they are quiet immature, relative, and not standardized. Companies are using different approaches for forming their ESG score: Some are more data-driven, while others are based on analyst's judgment (Bloomberg, n.d.; Hale, 2021).

Summary

In this entry, the Five Capitals Framework originally developed by the Forum for the Future is presented. The importance of the framework is emphasized given its principal conceptual clarity. The framework remains a predominant tool for developing sustainable strategy within organizations. Often it is operationalized though different approaches like SDG goals or ESG ratings. Standardization of ratings remains the biggest challenge in the future.

Cross-References

- ESG
- SIGMA Management Framework

References

- Bloomberg. (n.d.). Global Environmental, Social & Governance – ESG Data. <https://www.bloomberg.com/professional/dataset/global-environmental-social-governance-data/>. Accessed May 22, 2022.
- CFI (Corporate Finance Institute). (2022a). ESG (Environmental, Social and Governance). <https://corporatefinanceinstitute.com/resources/knowledge/other/esg-environmental-social-governance/>. Accessed May 22, 2022.
- CFI (Corporate Finance Institute). (2022b). Friedman Doctrine. <https://corporatefinanceinstitute.com/resources/knowledge/finance/friedman-doctrine/>. Accessed May 22, 2022.
- Forum for the Future. (2020). The Future of Sustainability Report. https://www.thefuturescentre.org/wp-content/uploads/2020/11/Future-of-Sustainability-2020_Time-to-transform.pdf. Accessed May 22, 2022.
- Forum for the Future. (n.d.-a). Reinventing the way the world works. <https://www.forumforthefuture.org/reinventing-the-way-the-world-works>. Accessed May 22, 2022.
- Forum for the Future. (n.d.-b). *The five capitals - A framework for Sustainability*. <https://www.forumforthefuture.org/the-five-capitals>. Accessed February 6, 2022.
- Hale, J. (2021). The Morningstar sustainable-investing framework. Morningstar. <https://www.morningstar.com/articles/1058990/the-morningstar-sustainable-investing-framework>. Accessed May 22, 2022.
- Ivory, S., & Ascui, F. (2019). Evaluating corporate sustainability in the Agrifood industry using a five capitals framework. In *Abstract from 9th annual Australasian business ethics network conference 2019*. Melbourne, Australia.
- Owen, J. R., & Kemp, D. (2012). Assets, capitals, and resources: Framework for corporate community development in mining. *Business and Society*, 51(3), 382–408. <https://doi.org/10.1177/0007650312446803>.
- Porritt, J. (2012). The five capitals framework. In I. J. Porritt (Ed.), *Capitalism as if the world matters* (pp. 157–167). Routledge. <https://doi.org/10.4324/9781849770675>.
- Sitnikov, C. S. (2013). SIGMA Management Framework. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 2149–2156). Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-28036-8_578.
- The Grantham Research Institute on Climate Change and the Environment. (2018, February 26). *What are the Sustainable development goals (SDGs)?* <https://www.lse.ac.uk/granthaminstitute/explainers/sustainable-development-goals-sdgs/> Accessed March 24, 2022.
- United Nations. (n.d.-a). Goals, 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. <https://sdgs.un.org/goals/goal4>. Accessed March 21, 2022.
- United Nations. (n.d.-b). Goals, 8 Promote sustained, inclusive and sustainable economic growth, full and

productive employment and decent work for all. <https://sdgs.un.org/goals/goal8>. Accessed March 21, 2022.

United Nations. (n.d.-c). Goals, 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. <https://sdgs.un.org/goals/goal15>. Accessed March 24, 2022.

United Nations (n.d.-d). The 17 Goals. <https://sdgs.un.org/goals>. Accessed 21 March 2022.

United Nations. (n.d.-e). Goals, 17 Strengthen the means of implementation and revitalize the global partnership for sustainable development. <https://sdgs.un.org/goals/goal17>. Accessed March 19, 2022.

Flexibility

► Resilience

Flexibility Mechanism Under the Kyoto Protocol

► Clean Development Mechanism (CDM): Benefits and Project Cycle

Flourishing

► Eudaimonic Management

Food Design Innovation

► Sustainable Food Design and Innovation

Food Industry

► Traditional and New Sustainable Production Methods in Food Industry

Food Safety

► Food Security

Food Security

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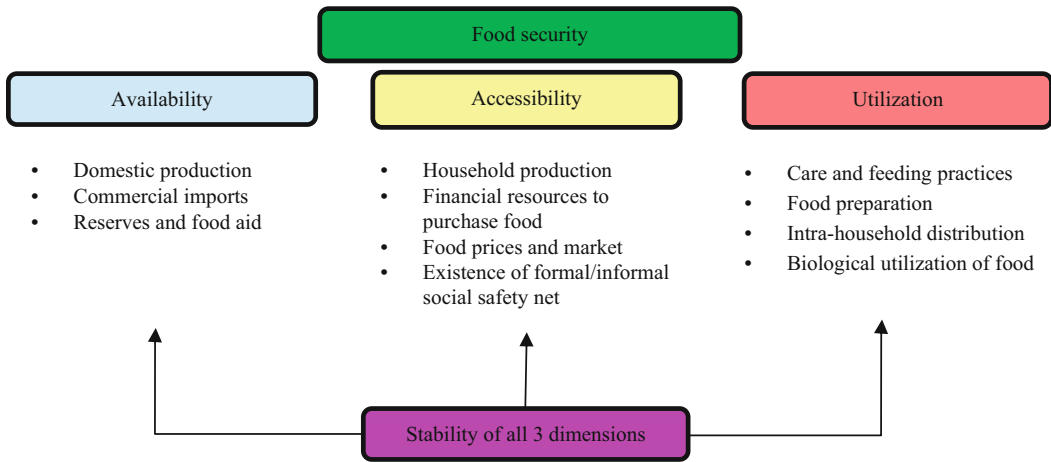
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Synonyms

Food safety; Food sufficiency; Nutrition security

Definition

Food security is a situation that exists when all people have physical, social, and economic access to sufficient, safe, and nutritious food at all times that meets their nutritional needs and nutritional preferences for an active and healthy life (Berry et al. 2015). At the household level, food security means access to enough food for an active and healthy life by all members of a household (FAO 2019). Overall, food security requires at a minimum: availability of foods that are adequately nutritional and safe for consumption; assured ability to possess such foods in a socially acceptable manner (i.e., without acquiring the foods through coping strategies as emergency supplies, aid, scavenging, stealing, etc.) (Coleman-Jensen et al. 2019). This definition includes four main dimensions of food security, namely availability, access, use, and stability (Fig. 1). Food availability refers to the extent to which food is physically or potentially present, including aspects of production, reserves, markets and transport, and wild food. It refers to sufficient quantities of food of appropriate quality, supplied through domestic production or imports, including food aid. The second dimension is access to food. If food is present or is potentially present, another key question is whether households and people have sufficient access or not, or whether they have adequate resources or rights to obtain adequate food for



Food Security, Fig. 1 The pathway of the dimension of food security. (Source: Adapted from Matemilola and Elegbede 2017)

nutrition. A third dimension is the use of food, which refers to the question of whether households maximize the consumption of adequate nutrition and energy. The last dimension is food stability, which refers to the condition in which a population, a household, or an individual has food security (i.e., all other three dimensions are present) at all times (Behnassi and Yaya 2011; Matemilola and Elegbede 2017).

Background to the Concept of Food Security

In 1991–1992, 1.2 billion people were malnourished worldwide, dropping to 991 million in the 2000s and 821 million in 2018 (FAO 2019). However, the number of malnourished people (i.e., those facing chronic food shortages) has increased in the past 3 years. The UN FAO has blamed the growing number of undernourished population on the rising rate of conflicts especially in the developing parts of the world and climate-related factors such as the El Niño phenomenon (Roser and Ritchie 2020). Food insecurity is one of the most significant problems in the world today. In fact, for many countries, food security remains a major challenge. Despite positive economic progress, widespread hunger problems are often overlooked. As can be inferred from the State of the World’s Food and Nutrition Report (SOFI), treating sufficient, safe, and nutritious

food to maintain an active and healthy life is a major challenge for society today. As of early 2019, FAO report reveals that global prevalence of undernourishment stands at 10.8% which implies that 821.6 million people are undernourished. The report further reveals that Africa is the worst hit part of the world with starvation at prevalence level of 19.9% while Northern America and Europe have a combined prevalence of less than 2.5% (FAO 2019). Conflicts in Yemen, Nigeria, and South Sudan have devastated homes and increased food prices, while a drought in Somalia has destroyed the agricultural economy. In an extreme case, those facing severe starvation can lose their lives. Dominic Macrorley, CEO of Concern Worldwide, said that “as the world progresses in the fight against hunger, around 800 million people are still condemned to hunger every day” (Roser and Ritchie 2020).

The pioneer work in the study of linkage between food security and population dates to 1798 when Reverend Thomas Robert Malthus published his writing “An Essay on the Principle of Population” which promoted the concept of Malthusianism. Malthusianism is built on the theory (Malthusian theory) that population growth is potentially exponential while food supply growth is linear. Malthusian theory establishes that there is a food shortage due to the presence of too many people in relation to the amount of food supply and, therefore, exacerbated long-term food insecurity (Smith 2015). It has been shown overtime

that a growing population accompanied by a growing demand for more food contributes to the undernutrition of the whole population. For example, it has been found that significant increases in several populations lead to increased use of water and land, which in turn affects agricultural productivity. Likewise, a recent survey points out that population growth will have a major impact on food availability and will contribute to food conflicts, especially in the north and center of South America, in sub-Saharan Africa, and in Southeast Asia (Etana and Tolossa 2017; Campbell et al. 2016).

The term “food security” first emerged at the World Food Conference in 1974. At the conference, food security was defined in terms of food supply as “assuring the availability and price stability of basic foodstuffs at the international and national levels” (Matemilola and Elegbede 2017; Brown 1981). The concept of food security has however evolved since the 1974 World Food Conference with the most recent definition emerging at the World Food Conference of 2009 in what is now generally considered the standard definition of food security. Food security is now considered to exist when “all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” This definition introduces the four dimensions that illustrate the pathway of food security from the food production stage (availability) to household (accessibility) to individual (utilization) and the consistency thereof (stability) (Fig. 1) (Berry et al. 2015; Tian et al. 2016; FAO 2011).

Challenges to Food Security

Food security has become an issue of serious concern for governments and policy makers as it affects the lives of millions of people across the world. The following are some important factors that constitute barriers to food security:

I. Population Growth

Population has perennially been a key driving force for many environmental and resource challenges (BCFN 2010). While

history has established that the global arable land size is fixed, the world population has continued to grow at an alarming rate especially in countries of the global south. However, population growth means increased pressure on food supplies and the fixed cultivable land. Thus, despite the growth in the total global grain production, there has been downturn in the amount of grain per person and total grain reserves (Behnassi and Yaya 2011).

II. Politics and Corruption

Politicians often recognize the importance of food security and how much a prevalent hunger among their subjects can subvert their public acceptance. However, they are often caught in the middle of addressing the public needs and the demands of the powerful corporate firms and vested interest of other nations since public food sufficiency may not imply corporate profit sufficiency and may reduce dependence on other big nations. Thus, international and corporate lobbying especially in the developing countries greatly influence agricultural policies in a way that favors the interests of industrialized powerful countries and corporate organizations (BCFN 2010).

III. Inadequate National and International Policies

Many countries are being ravaged by poverty and hunger not because of lack of resources but due to inefficient policies relating to agriculture, local and international trade, and other support sectors. Such poor policies that have affiliation with agriculture can have devastating effect on food security as hunger and malnutrition may persist or even worsen (Behnassi and Yaya 2011). Therefore, the development drive of many countries has failed on the back of poor policies and initiatives in sectors that have interdependence with agriculture causing food prices to rise, production to dwindle, or inaccessibility (Matemilola and Elegbede 2017).

IV. Climate Change

The phenomenon of climate change has become an important driver in the global food equation playing a significant role in the food security of many countries especially in the less developed nations. Climate change

is affecting the global temperature and biophysical feature of many regions making it difficult for farmers to predict seasonal patterns. This situation is affecting crop yield and stability of food supplies (Behnassi and Yaya 2011). Though, the developed economies are guilty of contributing the major share of global emission, and with the emerging economies such as China, India, and Brazil towing similar path, the implication of the less developed countries is expected to be more devastating than ever (Campbell et al. 2016).

V. Conflicts and Insecurity

Postindependence wars, civil conflicts, and insurgency create a sense of insecurity. In many parts of the world especially in the less developed regions, armed conflicts have been on the rise interrupting food production and causing displacement of agrarian communities. In many of the conflict-affected countries, a significant proportion of the households and farms are small-scale or subsistence farmers, who are usually confronted with high degree of income uncertainty while some households are engaged in agricultural commodity supplies. In this case, any form of armed violent conflict will create shock that will interrupt the socio-economic fabric of this region. Such conflicts depending on the magnitude can lead to destruction of farmlands or cause farmers to vacate their farmland for safety. Also, where economic activity of the region is affected, people have less disposable income making food items less affordable and increasing prevalence of food insecurity (Martin-Shields and Stojetz 2019).

Summary

Food security as a concept originated in 1974 at the World Food Conference, where the global leaders had gathered at a time of food crisis to discuss international food problems. At this time, food security was primarily considered in terms of food supply problems – of assuring the availability and to some degree the price stability of basic foodstuffs at the international and national level. However, the concept of food security has

evolved and expanded since then to incorporate at a minimum the availability of foods that are adequately nutritional and safe for consumption as well as the assured ability to acquire such foods in a socially acceptable manner. However, food security faces a number of challenges including inadequacy of agricultural and food practices and policies, climate change and global warming, international and local politics and corruption, and civil conflict and insecurity.

References

- BCFN. (2010). *The challenges of food security*. Parma: Barilla Center For Food & Nutrition/The European House-Ambrosetti.
- Behnassi, M., & Yaya, S. (2011). Food crisis mitigation: The need for an enhanced global food governance. In M. Behnassi, S. Draggan, & S. Yaya (Eds.), *Global food insecurity* (pp. 93–125). Dordrecht: Springer. https://doi.org/10.1007/978-94-007-0890-7_8.
- Berry, E., Dermeni, S., Burlingame, B., Meybeck, A., & Conforti, P. (2015). Food security and sustainability: Can one exist without the other? *Public Health Nutrition*, 18(13), 293–302. <https://doi.org/10.1017/S136898001500021X>.
- Brown, L. (1981). World population growth, soil erosion, and food security. *Science*, 214(4524), 995–1002. <https://doi.org/10.1126/science.7302578>.
- Campbell, B. M., Vermeulen, S. J., Aggarwal, P. K., Corner-Dolloff, C., Girvetz, E., Loboguerrero, A. M., ... Wollenberg, E. (2016). Reducing risks to food security from climate change. *Global Food Security*, 34–43. <https://doi.org/10.1016/j.gfs.2016.06.002>.
- Coleman-Jensen, A., Gregory, C. A., & Rabbitt, M. P. (2019). *Food Security in the U.S.: Measurement*. Retrieved from United States Department of Agriculture (USDA) Economic Research Service: <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx>
- Etana, D., & Tolossa, D. (2017). Unemployment and food insecurity in urban Ethiopia. *African Development Review*, 29(1), 56–68. <https://doi.org/10.1111/1467-8268.12238>.
- FAO. (2011). *The state of food and agriculture 2010–2011: Women in agriculture – closing the gender gap for development*. Rome: Food and Agriculture Organization of the United Nations.
- FAO. (2019). *2019 – the state of food security and nutrition in the world (SOFI): Safeguarding against economic slowdowns and downturns*. Rome: Food and Agriculture Organization of the United Nations.
- Martin-Shields, C. P., & Stojetz, W. (2019). Food security and conflict: Empirical challenges and future opportunities for research and policy making on food security and conflict. *World Development*, 119, 150–164. <https://doi.org/10.1016/j.worlddev.2018.07.011>.

- Matemilola, S., & Elegbede, I. (2017). The challenges of food security in Nigeria. *Open Access Library Journal*, 04, 1–22. <https://doi.org/10.4236/oalib.1104185>.
- Roser, M., & Ritchie, H. (2020). *Hunger and Undernourishment*. Retrieved March 23, 2020, from OurWorldInData.org: <https://ourworldindata.org/hunger-and-undernourishment>
- Smith, P. (2015). Malthus is still wrong: We can feed a world of 9–10 billion, but only by reducing food demand. *The Proceedings of the Nutrition Society*, 74(3), 187–190. <https://doi.org/10.1017/S0029665114001517>.
- Tian, J., Bryksa, B. C., & Yada, R. Y. (2016). Feeding the world into the future – food and nutrition security: The role of food science and technology†. *Frontiers in Life Science – Focus Issue: Food & Agriculture*, 9(3). <https://doi.org/10.1080/21553769.2016.1174958>.

Food Sufficiency

► Food Security

Footprint

► Ecological Footprint

Forest Degradation

► Deforestation

Forest Stewardship Council

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Synonyms

FSC

Description

Some timber traders as well as social and environmental non-governmental organizations (NGOs) negotiated the establishment of the Forest Stewardship Council (FSC) in San Francisco in 1991 (Cadman, 2011). Two years later, representatives from ten countries met in Toronto, Canada, for the founding meeting of the FSC. Finally, as a result of the intensive negotiations, the FSC was registered in 1994. It created a new model of a market-based protection instrument to promote responsible forest management and trade (WWF, 2014/2020). According to Pattberg (2005), the FSC is based on the principles of sustainable development. The standards of responsible forest management defined by the FSC make it possible to promote globally and nationally responsible forest management.

Introduction

Our images of the forest are dominated by a strong aesthetic and ideal if not as romantic charge. For many, the forest is also a soul landscape (Fig. 1). Recreational use of forests is diverse and common. Forests also play an important role in maintaining and sustaining life. Without healthy and well-maintained forests, climate change will intensify, and biodiversity is declining (Fig. 2). The production of bio-based and low-carbon products and services will also be jeopardized.

There is still no globally agreed legally binding agreement to prevent deforestation, although as early as 1992, the United Nations Rio Summit decided to develop a forest management plan to meet the needs of present and future generations. Consultation processes were held in ten countries between 1990 and 1993 to determine the level of support required for the global certification program for natural and plantation forests. The founding meeting in Toronto in September 1993 was attended by 130 participants from 26 countries (Cadman, 2011). The Forest Stewardship Council (FSC) was established the following year. Its first forest certification scheme served as the standard for a new market-based protection



Forest Stewardship Council, Fig. 1 Protected forest. (Photo: Eila Jeronen)

instrument to promote responsible forest management and trade (WWF, 2014/2020). Today, the FSC is supported by several environmental and social non-governmental organizations, and it has served as a model for other certification schemes.

Key Issues

Establishment and Development of the FSC

The FSC is a non-profit, independent membership-based organization that aims to promote responsible forest management around the world through forest management standards, an accreditation or certification system, and trademarks. The FSC was established as a result of strategic discussions with stakeholders in 1993 (Cashore et al., 2007). The chosen strategy satisfied various associations, trade unions, and indigenous interest groups. The founding members included, e.g., the World Wide Fund for Nature (WWF), Greenpeace, and Friends of the Earth. In 2005, the FSC had more than 600 individual and organizational members including large



Forest Stewardship Council, Fig. 2 Management forest. (Photo: Eila Jeronen)

corporations (e.g., IKEA) and well-known environmental organizations (e.g., Natural Resources Defense Council, The Nature Conservancy, Rainforest Action Network, and Rainforest Alliance) (Pattberg, 2005). In 2019, there were a total of 1177 members operating on different continents (FSC, 2019). New individual and organizational members have joined the FSC since then, most recently in early 2021 (FSC, 2021).

Basics of Operation

The FSC enables forest management issues to be discussed and resolved on a country-by-country and global basis. The new global principle sets out three strategies, each with its own goals (FSC, 2021, p. 13) (Table 1).

FSC aims to promote responsible forest management worldwide by encouraging forest owners, foresters, and buyers of wood products to adhere to best social and environmental practices through certification. FSC has succeeded well in its goal, as evidenced by the fact that many boreal, temperate, and tropical forests, which are owned publicly, privately, or by communities, are managed in accordance with FSC standards.

The FSC's work is based on the internationally agreed 10 principles for forest stewardship (FSC, 2004) (Table 1) and 56 criteria that specify the content of the regulations (Cadman, 2011). The principles and criteria define which practices are considered "environmentally appropriate, socially beneficial and economically viable management of the world's forests" (FSC, 2006, p. 1; FSC,

Forest Stewardship Council, Table 1 The strategies and goals of the FSC Global Strategy 2021–2026 (FSC, 2021, p. 13)

Strategies	Goals
1. Co-create and implement forest solutions	1.1 Engage members and stakeholders to drive change as a community for co-creation of solutions 1.2 Streamline policies and standards toward outcome orientation 1.3 Enhance verification and integrity 1.4 Expand the reach of FSC and its relevance in the fight against climate change and loss of biodiversity
2. Transform markets	2.1 Advance FSC in value chains that have the highest potential for contributing toward our 2050 vision 2.2 Accelerate the market uptake of FSC-certified products and ecosystem services 2.3 Unleash the power of data to demonstrate positive outcomes 2.4 Scale up benefits for indigenous peoples, communities, smallholders, and workers
3. Catalyze change	3.1 Advance the mission through stronger alliances, coalitions, and partnerships 3.2 Increase FSC’s relevance for governments 3.3 Leverage sustainable finance/investment for forest stewardship 3.4 Accelerate awareness of the value of forests

2021, p. 11). Environmental standards apply to, e.g., use of pesticides, harvesting methods, biodiversity conservation zones, and rules on forest conversion (Table 2).

Institutional Organization

The FSC is a membership association operating at national and international levels (Pattberg, 2005) (Fig. 3). The highest organ is General Assembly

(GA) (FSC 2004) which is made up of individual members or delegates of member organizations. GS is held every 3 years, and its task is to discuss and guide the FSC’s activities. The GA is divided into economic, social, and environmental chambers, and each chamber continues to be divided into subchambers (Northern and Southern division) (Cadman, 2011; Pattberg, 2005). The economic chamber consists of either for-profit or non-profit representatives of commercial forestry. The social chamber consists of indigenous peoples’ organizations and social movements. This includes non-profit non-governmental organizations (NGOs) and unions. The environmental chamber is made up of non-profit NGOs whose governing bodies are renewed by regular elections or appointments (Cadman, 2011).

In the FSC, all interests are equally represented, as all chambers and subchambers have the same voting weight (FSC, 2004). The GA elects a director board to which each chamber sends three members for a 3-year term. Representation of northern and southern representatives alternates between four and five, alternating every 3 years. The director board decides on the approval of national representatives, FSC initiatives, and the annual budget and approves new standards. The International Secretariat in Bonn, Germany, is responsible for operational work. Its work is supervised by the executive director (director general), appointed by and responsible to the director board (Cadman, 2011; Pattberg, 2005).

The role of local and national actors is to encourage local participation, to support the implementation, and to monitor certification activities. They also develop and test regional standards (Cadman, 2011). Bringing a national perspective to standardization and certification activities is important.

Standardization Process

The development of standards includes next phases (Cadman, 2011):

- Initiation (requesting standards and setting up committees, staff, and working groups).

Forest Stewardship Council, Table 2 Principles for forest stewardship (FSC, 2004, p. 15)

Principles	
1. Compliance with laws and FSC principles	“Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria”
2. Tenure and use rights and responsibilities	“Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established”
3. Indigenous peoples’ rights	“The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected”
4. Community relations and workers’ rights	“Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities”
5. Benefits from the forest	“Forest management operations shall encourage the efficient use of the forest’s multiple products and services to ensure economic viability and a wide range of environmental and social benefits”
6. Environmental impact	“Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest”
7. Management plan	“A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated”
8. Monitoring and assessment	“Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts”
9. Maintenance of high conservation value forests	“Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach”
10. Plantations	“Plantations shall be planned and managed in accordance with Principles and Criteria 1–9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world’s needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests”

- Development (public consultation, drafting, testing, resolution (disputes and adoption)).
- Implementation (publication, review, and revision).

National working groups are responsible for developing national standards with the aim of finding locally effective solutions. However, solutions must comply with the FSC principles and criteria before they can be approved. The certification process begins at the request of the forest owner or forest manager. The basis for the assessment is an approved national standard, if one exists. In the absence of a national standard, the certifier will use their own standard, which should be in line with recent decisions of the General Assembly (Cadman, 2011).

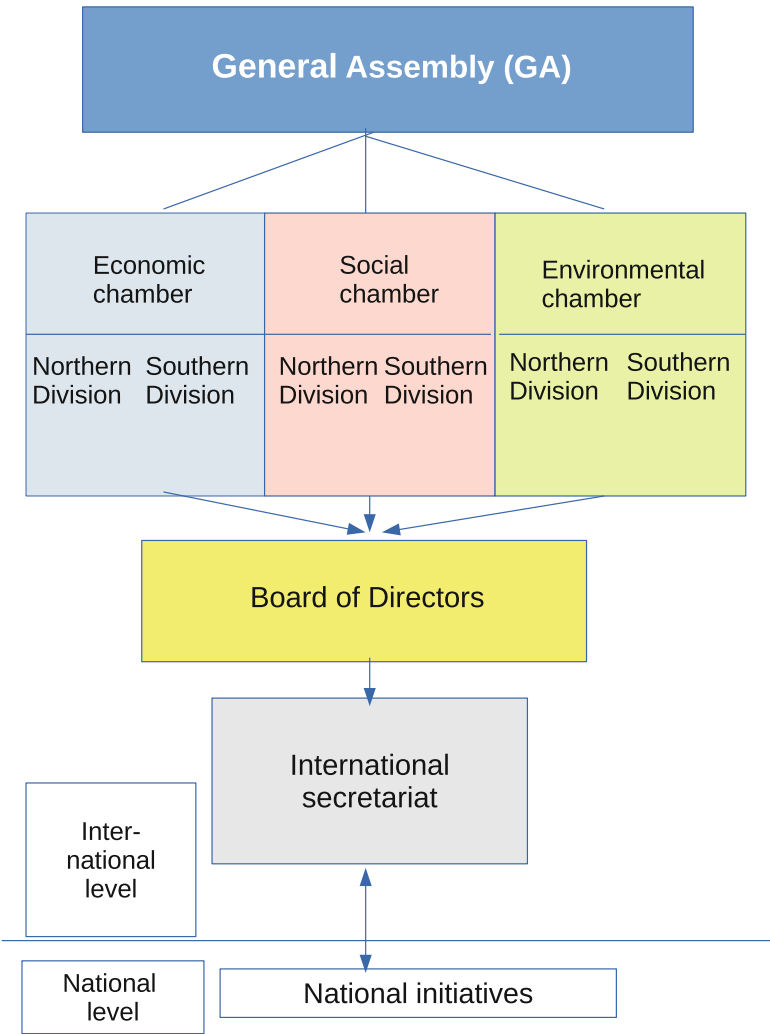
The standards produced by the FSC are:

- The global forest management standards, which form the basis for the development of national and regional standards.
- The custody standards to define rules in the production chain.
- The standards for the accreditation of independent certifiers.

All standards are developed by the Standards and Policies Unit of the International Secretariat and approved by the director board. The standard-setting process includes also negotiations with stakeholders (Pattberg, 2005).

Another important thing in private regulation is implementation, which includes

Forest Stewardship Council,
Fig. 3 Institutional organization of the FSC. (Cadman, 2011; Pattberg, 2005)



certification, accreditation, and labeling. The FSC certification has used for other interventions as an example of responsible management of renewable resources (Chaplin-Kramer et al., 2015). The certification process confirms that the agreed basic management or output standards have been met. Accreditation refers to the process of accrediting the certifying organizations based on some general rule. Labeling refers to the process and practice that allows the label to be affixed to products or production chains.

The forest owner can be issued a certificate if the forest management has complied with the FSC forest management standards. On the

basis of this certificate, they can market their products as certified wood and use the FSC logo. A chain of custody certificate, on the other hand, is issued for the labeling of wood products. It includes the phases of wood processing, wholesale and retail. It can be granted for the labeling of wood products if certified and non-certified wood are not intertwined (Pattberg, 2005).

Pros and Cons of FSC’s Forest Certification Schemes

For years, the FSC had a monopoly on forest certification. Since the beginning of the

millennium, there has been international competition in the sector (FAO, 2005). Debate still exists about the merits of forest certification schemes. The evaluation of certification schemes should take into account positive and negative, direct and indirect, short- and long-term, as well as intentional and unintended effects (OECD, 2002).

In general, the FSC certification process is considered successful (Pattberg, 2005). This is evidenced by the support given to it by environmental associations and public organizations. The FSC certification influences the debate on sustainable forestry as well as national forest policy through various mechanisms. In addition to standardization, the FSC also contributes by supporting the finding of solutions to environmental problems and the dissemination of information to stakeholders, as well as by providing a learning environment not only for the FSC members but also for independent organizations. These mechanisms support international approaches to implementing sustainable development by creating and maintaining a new kind of institutionalism among private actors (Pattberg, 2005).

Moore et al. (2012) have shown that social and community actions were developed in the FSC-certified organizations. This was reflected, for example, in the increase in preparation of forest management plans, implementation of forest inventory programs, establishment of spatial information systems, control of exotic invasives, chemical safety monitoring, and biodiversity. Also public consultations and program reports as well as expansion of public relations and information were increased. This finding is also supported by the results of Cerutti et al. (2014) showing that FSC-certified concessions enable more active and effective negotiations between the local population and the logging company. Cerutti et al. also noticed that FSC-certified forest management units were found to provide better housing and living conditions, health insurance, and access to medical facilities for workers and also to encourage benefit-sharing mechanisms and a more equitable redistribution of profits to local communities. In addition, Moore et al. (2012) found that

environmental system chain-of-custody tracking, internal program monitoring, natural heritage planning, management review systems, and commitment to continuous improvement were increased. Van Kuijk et al. (2009), in their part, have shown that well-managed production forests, including FSC-certified forests, have more species-friendly effects than conventionally logged forests. In the light of the examples described above, it appears that FSC certification prompted improved environmentally, socially, economically, and sustainable forest management.

Masters et al. (2010) and Moore et al. (2012) argue that forest certification is a robust approach to promoting the social and economic sustainability of forests. Moore et al. (2012) state that there are differences both between certifiers, in the regional standards, and in the implementation of the FSC standards. In line with the certification principle of continuous improvement, the FSC standard is focused on management systems and internal records. Most FSC changes were made in the environmental/forest management component. Almost as much, there were economic/systemic changes and social/legal changes. The most frequent environmental changes concerned new forest management plans, old-growth reserves, and forest inventory programs. The custody chain, the publication of the forest plan, stakeholder meetings, and community consultation also changed frequently as a result of the FSC (Moore et al., 2012). In the new global strategy, the FSC reports that it will develop new approaches, taking into account the value of forests and the benefits of forest management so that society can accept these approaches (FSC, 2021).

The FSC has been criticized since its establishment. The legitimacy of the FSC has been questioned both nationally and internationally. In the FSC, stakeholder groups negotiate a legitimate authority over the use of forest resources (Eden & Bear, 2010), so the FSC lacks democratic legitimacy (Cashore, 2002). The most well-known critic of the FSC from major international organizations has been Greenpeace. It has critically assessed the FSC's performance and made recommendations to improve the organization's credibility. For example, Greenpeace has stated that

there is a lack of guidance by FSC on High Conservation Value Forest interpretation and implementation and guidance on “High-Risk” situation concerning, e.g., Congo Basin (Greenpeace, 2010). In 2018, Greenpeace did not renew its FSC membership (Greenpeace, 2018). Also according to Korteland (2007), there are many problems in FSC certification concerning environmental impact as overall trade impact, marginal environmental impact, and poverty impact concerning trade and social impacts in developing countries (Table 3).

In its new target program, the FST seeks to respond to the criticisms it has received. It tells to develop solutions “to help halt deforestation, grow the world’s forest area and improve its quality, including forest conservation as well as restoration of degraded or converted areas to more natural conditions” (FSC, 2021, p. 10). In these

ways, the FSC seeks to meet global challenges and the goals of the UN Sustainable Development and the Paris Agreement. Reconciling forest protection and economic exploitation is not easy. It may succeed under favorable conditions through careful planning based on the environmental, social, and economic sustainability pillars of the triple bottom line.

Summary

The Forest Stewardship Council (FSC) is a member organization of individuals and communities operating at the national and international levels. Environmental organizations, indigenous interest groups, trade unions, foresters, and large retailers established it to create and implement forest management guidelines and rules in 1993. In the standardization process it has developed, the FSC has sought to combine ethical views related to the environment with social and business principles. The organization is led by the General Assembly (GA), which has three chambers (economic, social, and environmental). The GA elects a director board to which each chamber sends three members. The FSC’s operational work is the responsibility of an international secretariat under the supervision of the executive director appointed by and responsible to the director board. The FSC’s work is based on the internationally agreed principles and criteria which define which practices are considered “environmentally appropriate, socially beneficial and economically viable management of the world’s forests.” Over the years, FSC has supported the activities of its stakeholders nationally and globally through responsible forest management standards. If the forest management is found to comply with the FSC forest management standards, the landowner will be issued a certificate entitling them to market their products as certified wood and use the FSC logo. Despite many good achievements, the FSC has been criticized since its establishment. For example, the legitimacy of the FSC has been questioned, and its policies and activities have been criticized.

Forest Stewardship Council, Table 3 Impact-based critiques (Korteland, 2007)

Impact type	Critiques
1. Environmental impact Overall trade impact	Certification is limited on a global scale: both demand and supply are geographically skewed toward northern countries
2. Marginal environmental impact	There is a lack of quantitative evidence revealing that compliance with the FSC standards on which certification is based actually improves forest management The FSC uses vague conditions in their certification process The effectiveness of the criteria an sich to improve environmental quality is questionable FSC’s actual impact in a global sense seems to be limited what concerns on environmental problems
3. Poverty impact	
Trade impact developing countries	There is no evidence that labeling acts as a barrier to trade for less developed countries
Social issues	Especially less-resource groups lack access to the FSC label

References

- Cadman, T. (2011). Forest stewardship council. In T. Cadman (Ed.), *Quality and legitimacy of global governance. Case lessons from forestry* (pp. 45–74). Palgrave Macmillan.
- Cashore, B. (2002). Legitimacy and the privatization of environmental governance: How non-state market-driven (NSMD) governance systems gain rule-making authority. *Governance*, 15(4), 503–529.
- Cashore, B., Auld, G., Bernstein, S., & McDermott, C. (2007). Can non-state governance “ratchet-up” global environmental standards? Lessons from the forest sector. *Review of European Community and International Environmental Law*, 16(2), 158–172.
- Cerutti, P. O., Lescuyer, G., Tsanga, R., Kassa, S. N., Mapangou, P. R., Mendoula, E. E., Missamba-Lola, A. P., Nasi, R., Ekebil, P. P. T., & Yembe, R. Y. (2014). *Social impacts of the Forest Stewardship Council certification: An assessment in the Congo basin. Occasional Paper 103*. Bogor: CIFOR. Indonesia.
- Chaplin-Kramer, R., Jonell, M., Guerry, A., Lambin, E. F., Morgan, A. J., Pennington, D., Smith, N., Atkins Franch, J., & Polasky, S. (2015). Ecosystem service information to benefit sustainability standards for commodity supply chains. *Annals of the New York Academy of Sciences*, 1355, 77–97.
- Eden, S., & Bear, C. (2010). Third-sector global environmental governance, space and science: comparing fishery and forestry certification. *Journal of Environmental Policy and Planning*, 12(1), 83–106.
- FAO (Food and Agriculture Organization of the United Nations). (2005). *State of the World's forests 2005*. Rome.
- FSC (Forest Stewardship Council). (2004). *Looking to the future, annual report 2003*. Forest Stewardship Council.
- FSC (Forest Stewardship Council). (2006). *About us | Forest Stewardship Council*. <https://fsc.org/en/about-us>. Accessed 17 March 2021.
- FSC (Forest Stewardship Council). (2019). *FSC public search*. <https://info.fsc.org/membership.php>. Accessed 17 March 2021.
- FSC (Forest Stewardship Council). (2021). *Members | forest stewardship council*. <https://fsc.org/en/members#new-members-2021>. Accessed 17 March 2021.
- Greenpeace. (2010). *Holding the line with FSC*. <https://wayback.archive-it.org/9650/20200504144104/http://p3-raw.greenpeace.org/international/Global/international/publications/forests/2011/Holding%20the%20Line%20Reloaded%20-%20Nov%202010.pdf>. Accessed 18 March 2021.
- Greenpeace. (2018). *Greenpeace International to not renew FSC membership*. <https://www.greenpeace.org/international/press-release/15589/greenpeace-international-to-not-renew-fsc-membership/>. Accessed 18 March 2021.
- Korteland, M. (2007). *Eco-labelling: to be or not to be?: Desirability of eco-labels from an environmental and poverty perspective*. Delft, CE.
- Masters, M., Tikina, A., & Larson, B. (2010). Forest certification audit results as potential changes in forest management in Canada. *The Forestry Chronicle*, 86(4), 455–460.
- Moore, S. E., Cubbage, F., & Eicheldinger, C. (2012). Impacts of Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) Forest Certification in North America. *Journal of Forestry*, 110(2), 79–88. <https://doi.org/10.5849/jof.10-050>.
- OECD (Organisation for Economic Co-operation and Development). (2002). *Glossary of key terms in evaluation and results based management*. Paris: Development Assistance Committee (DAC). OECD. <https://www.oecd.org/dac/evaluation/2754804.pdf>. Accessed 18 March 2021.
- Pattberg, P. (2005). What role for private rule-making in global environmental governance? Analysing the Forest Stewardship Council (FSC). *International Environmental Agreements*, 5, 175–189. <https://doi.org/10.1007/s10784-005-0951-y>.
- Van Kuijk, M., Putz, F. E., & Zagt, R. J. (2009). *Effects of forest certification on biodiversity*. Tropenbos International.
- WWF (Global Forest & Trade Network). (2014/2020). *The Impact of Forest Stewardship Council® (FSC) certification*. https://www.fsc.org/assets/panda.org/downloads/fsc_research_review.pdf. Accessed 16 March 2021.

Formal CSR

- [Sunken CSR and SMEs](#)

Formation

- [Inclusion](#)

Forum

- [World Economic Forum \(Davos\) II](#)

Forum Ethibel

- [Forum Ethibel Sustainability Index](#)

Forum Ethibel Sustainability Index

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Introduction

Forum Ethibel aims to help companies sustain an energetic balance between economic progress, environmental protection, and social responsibility. Ethibel-labeled investment funds hold shares in companies listed in their Register. The amalgamation of data on sectors, firms, and ESG (i.e., Environmental-Social Factors-Good Governance) with their appraisal by a panel of experts known as the Register Committee helps create the Investment Register of the company.

Anchors of Forum Ethibel

The first anchor of Forum Ethibel is “Trendsetter,” which explicates its values and vision on sustainability by examining quantitative data. The second anchor, “Investment Register,” maintains a roster of firms and nations to which the Forum Ethibel filters have been applied. The Register seeks to

maintain a balanced sectoral and geographical spread so as to enable fund managers to build financially and technically balanced portfolios.

The Register uses a funnel approach by first collecting data about firms, sectors, and ESG scores from Moody’s ESG Solutions. The Register has firms and nations chosen based on financially and technically sound portfolios as reflected by their annual reports, websites, and additional information from other stakeholders such as trade unions and environmental organizations.

The next step is to use a “sustainability filter” that has both positive and negative components. For firms, the positive considerations include having solid and ambitious policies, effective utilization of resources, and evidence of assessable results. The avoidable components include no involvement in arms, gambling, nuclear-powered energy, or tobacco, while for nations, they must not be involved in conflict, war, or serious crisis situations and not be violating labor laws or human rights. For nations, the metrics include how well they protect the environment, follow the rule of law, and are committed to social protection and solidarity.

Rating Criteria

Each firm receives a score based on a reflection of how well they have performed with respect to their competitors in the same sector. The strong scores range between A, B, or C. Those that are outstandingly strong or innovative are labeled as Pioneers (A), those with the best scores within their sectors, labeled as Best in Class (B), while those with above sector average get a “C.” A “D” is assigned to those below sector average, an “E” to those far below average and/or not transparent, while those firms engaged in armaments, gambling, nuclear energy, or tobacco are rated “M.” Those rated as A, B, or C are automatically included in the Investment Register, while those receiving ratings of D, E, or M are excluded.

The Investment Register is a dynamic entity updated six times yearly – every sector is assessed biennially. Not only is the current status of the firm assessed, but also their future potential

Forum Ethibel Sustainability Index, Fig. 1 The two labels issued by Forum Ethibel. (Source: <https://www.forumethibel.org/>)



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evolution. They are notified of their evaluations and whether or not they were added or excluded from the Register. The decisions based on the appraisals are always broadcast to the public after informing each firm.

Labels and Certificates

Forum Ethibel offers two labels (Fig. 1) based on sustainable investment practices: Ethibel PIONEER (scores of A or B) and Ethibel EXCELLENCE (scores of A, B, or C).

Labels are issued under stringent conditions outlined in a contract. Forum Ethibel regularly checks to see whether firms are meeting the terms of the agreement. The funds also include government bonds and those issued by international institutions; the labels do not indicate the “financial quality” of a fund, such as their expected return or risk profile.

Forum Ethibel also grants certificates (Fig. 2) to validate that a product or service is in compliance with corporate social responsibility (CSR) conditions. Certificates are typically issued for short periods, ranging from one trimester to a year, and periodic audits are carried out to ensure that the client continues to meet the benchmarks. Certificates are given for a wide range of products,



Forum Ethibel Sustainability Index, Fig. 2 Certificate Issued by Forum Ethibel. (Source: <https://www.forumethibel.org/>)

such as reinvestments in socio-ethical programs, verification of carbon reduction programs, and solidarity and impact investments.

Cross-References

- [Business Ethics](#)
- [Corporate Responsibility Index](#)
- [Corporate Sustainability Reporting Index](#)
- [Domini Social Index](#)
- [Happy Planet Index](#)
- [Human Development Index \(HDI\)](#)
- [Index of Sustainable Economic Welfare](#)

Further Reading

- Charlo, M. J., Moya, I., & Muñoz, A. M. (2015). Sustainable development and corporate financial performance: A study based on the FTSE4Good IBEX Index. *Business Strategy and the Environment*, 24(4), 277–288.
- Demirel, B., & Erdogan, M. (2016). Corporate sustainability reporting in the BIST sustainability index. *International Journal of Business and Social Research*, 6(10), 21–31.
- Dočekalová, M. P., & Kocmanova, A. (2016). Composite indicator for measuring corporate sustainability. *Ecological Indicators*, 61, 612–623.
- Grigoris, G. (2016). The challenges of corporate social responsibility assessment methodologies. *International Journal of Economics & Business Administration (IJEBA)*, 4(1), 39–55.
- Hockerts, K. (2015). A cognitive perspective on the business case for corporate sustainability. *Business Strategy and the Environment*, 24(2), 102–122.
- Information was synthesized from the website <https://www.forumethibel.org/>. Accessed 4 Aug 2022.
- Jankalova, M. (2016). Approaches to the evaluation of corporate social responsibility. *Procedia Economics and Finance*, 39, 580–587.
- Liao, P. C., Xia, N. N., Wu, C. L., Zhang, X. L., & Yeh, J. L. (2017). Communicating the corporate social responsibility (CSR) of international contractors: Content analysis of CSR reporting. *Journal of Cleaner Production*, 156, 327–336.
- Liern, V., & Pérez-Gladish, B. (2018). Companies' selection methods for inclusion in sustainable indices: A fuzzy approach. In *Complex systems: Solutions and challenges in economics, management and engineering* (pp. 365–380). Springer.
- Miralles-Quiros, M. D. M., Miralles-Quiros, J. L., & Arraiano, I. G. (2017). Sustainable development, sustainability leadership and firm valuation: Differences across Europe. *Business Strategy and the Environment*, 26(7), 1014–1028.
- Orsato, R. J., Garcia, A., Mendes-Da-Silva, W., Simonetti, R., & Monzoni, M. (2015). Sustainability indexes: Why join in? A study of the 'Corporate Sustainability Index (ISE)' in Brazil. *Journal of Cleaner Production*, 96, 161–170.
- Rahdari, A. H., & Rostamy, A. A. A. (2015). Designing a general set of sustainability indicators at the corporate level. *Journal of Cleaner Production*, 108, 757–771.
- Schäfer, H. (2016). 26 corporate social responsibility rating. In *A handbook of corporate governance and social responsibility* (pp. 449–461). Routledge, Oxfordshire, UK.
- Siew, R. Y. (2015). A review of corporate sustainability reporting tools (SRTs). *Journal of Environmental Management*, 164, 180–195.
- Skouloudis, A., Isaac, D., & Evaggelinos, K. (2016). Revisiting the national corporate social responsibility index. *International Journal of Sustainable Development & World Ecology*, 23(1), 61–70.

Foundations

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Synonyms

Charitable trust; Endowment; waqf

Background

The nonprofit sector is characterized by a great diversity of activities, organizations, and institutions (Anheier 2022). Especially, charitable foundations are well-known social institutions in the third sector due to their philanthropic projects (e.g., Rockefeller Foundation, Bill and Melinda Gates Foundation, and Nobel Foundation). The history of foundations dates back thousands of years: Some researchers traced back the origins of foundations to the library of Alexandria (Coon 1938). These early forms operated locally with a limited amount of assets used for grantmaking. In the Middle Ages, the Christian church took over an important role in the increasing value of foundations. In the Islamic world, *waqfs* are known as an equivalent to foundations (Kiger 2022; Ali and Oseni 2021).

The growth of foundations over the recent decades depends on many contextual factors. Therefore, countries around the world face quite different experiences with the roles performed by this special social institution: While in the early twentieth century, American foundations had an important leadership part, European countries experienced a foundation boom in the last two decades of the twentieth century (Anheier 2022). Since the national institutional framework differs broadly for foundations around the world, cross-national data on foundations is difficult to access (Toepler 2018; Salamon and Anheier 1993). However, a consistent rise in the total number of foundations is observed in many countries (Anheier et al. 2018; Anheier 2022). In Germany,

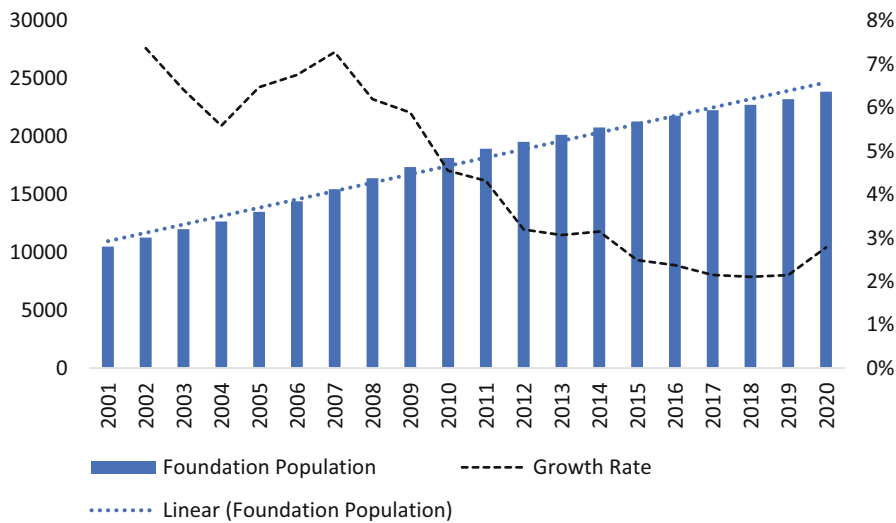
for example, the number of foundations established according to civil law increased from 10,503 in 2001 to 23,876 in 2020, but the yearly growth rate dropped slightly from 7% in 2001 to 3% in 2020 (see Fig. 1).

Definition and Perspectives on Foundations

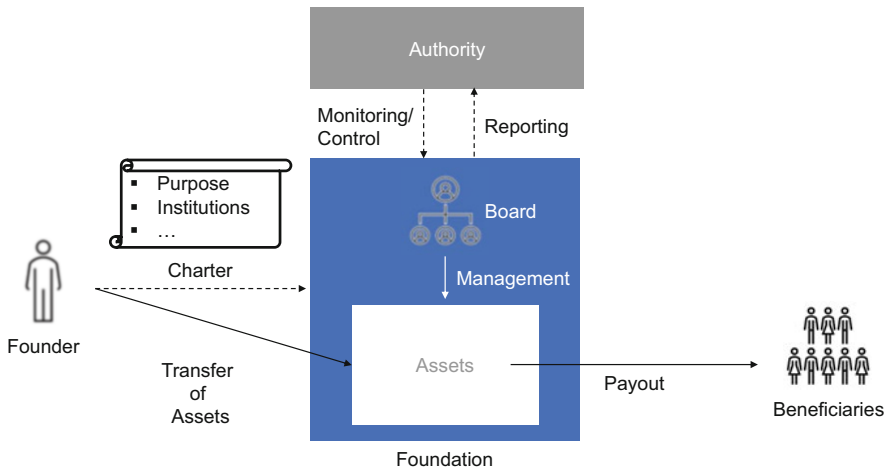
Although the importance of foundations is growing globally, research on foundations is still at an early stage (Toepler 2018; Anheier 2022) and was dominated by works on US foundations for a long time (Jung 2020; Adloff 2015). Consequently, the definition of these traditional institutions remains opaque (Toepler 2018). For some researchers, foundations remain “black boxes” (Bethmann et al. 2014). In contrast to membership-organized associations, foundations are institutions without owners and members. They offer an institutional framework for a long-term commitment to different projects and perform functions of an intermediary. Hence, the important internal governance mechanism provided by ownership rights is malfunctioning. Moreover, external governance mechanisms are lacking as well since foundations typically are not left to market discipline.

Using structural and operational features (Anheier et al. 2017; Salamon and Anheier 1992), a stylized foundation is characterized by five elements (see Fig. 2):

- (1) Founder oriented: Over its life cycle, a foundation is a persistent expression of the charismatic intentions of the founder (Adloff 2015).
- (2) Asset-based: The longevity characteristic of foundations is achieved by the transfer of proprietorship of assets from the donor to the institution. The assets are the base to success and failure of foundations (Anheier and Leat 2018).
- (3) Self-governed: In addition to the transfer of assets, the donor usually must file a charter when incorporating a foundation. Basically, the charter defines the purpose and the institutions of the foundation. Although foundations are often well known for charitable purposes, other purposes can be pursued as well (Anheier 2022). Furthermore, the charter is set up to offer guidance to the board of directors that is responsible for the management of the transferred assets. However, other issues can be regulated in the charter as well.
- (4) Non-profit distributing: Income generated from asset management is not distributed to



Foundations, Fig. 1 Foundations in Germany from 2001 to 2020. (Source: own figure based on data from Bundesverband Deutscher Stiftungen 2021)



Foundations, Fig. 2 Stylized definition of a foundation. (Source: own figure)

shareholders but paid out to the beneficiaries. Asset management follows the purpose/mision of the foundation codified in the charter (Fritz and von Schnurbein 2015; Toepler 2004).

- (5) Supervised: In compensation for the missing ownership rights, the management of foundations is monitored and controlled by authorities. Typically, foundations are asked to present financial and nonfinancial reports. This is the base for checking the accountability of foundations (Carolei 2022).

Theoretical research on foundations is scattered across different disciplines and is advancing slowly (Jung 2020). Research in law focuses on comparative law on foundations' governance (Thomsen 2014; Hopt et al. 2009) and addresses the regulation on foundations (Toepler and Abramson 2021; Hopt et al. 2009). Besides, some parts of the literature analyze tax-related issues (Seer 2021; Hopkins 2016).

Economic analysis of foundations can be structured by referring to the structural and operational definition proposed above (see Fig. 2). First, accepted agency-theory for institutions offers guidance for the analysis of foundations as well (Jensen and Meckling 1976). Accordingly, the board of management is acting as an agent on

behalf of the founder and the beneficiaries (principals). The corresponding general information risk, the hidden information risk due to asymmetric information between principal and agent, and agency risks resulting from the delegation of decision-making authority offer starting points for a detailed economic analysis (Kaufman 2021). However, the strong assumptions in agency-theory neglect nonfinancial utility or emotions of the founders that is an important context factor for setting up a foundation. Therefore, drawing on the socio-emotional wealth theory (Gómez-Mejía and Herrero 2021; Zellweger and Astrachan 2008) grounded in prospect theory can offer a second research avenue for the analysis of foundations (Kaufman 2021). In addition, management literature addresses stakeholder approaches (Stahl 2014). Other parts of theoretical economic literature emphasize the role foundations perform in supporting social innovations by referring to behavior-based organizational theories (Bethmann 2019; Jaskyte et al. 2018; Bethmann 2014; Heutel and Zeckhauser 2014). Besides, the challenges resulting from the asset-based characteristic offer research avenues in corporate finance-related research (Kremer and Achleitner 2022; Kaufman 2021; Anheier and Leat 2018).

Finally, research in social science addresses the role and advantages of foundations, as well as

policy recommendations on the regulatory framework (Anheier et al. 2019; Toepler 2018; von Reeden 2015).

Regulatory Framework for Foundations

Beyond the sketched stylized governance structure, a great variety of foundation forms can be observed around the world (Anheier 2018; Hopt et al. 2009). In some parts of the world, foundations are low regulated because of their character as self-organized institutions that emerged to balance conflicts between private and public interests. In contrast, foundations in other countries operate in a highly regulated environment or sometimes even are not allowed at all (Toepler 2018). This regulatory response addresses the lack of governance mechanisms linked to the transfer of property rights and provides a legal definition of foundations as well (Toepler 1998).

Especially in Europe, the legal framework for foundations is expressing different policy approaches and cultural factors. Therefore, as part of the general revision of corporate law, the European Union (EU) in 2012 presented a proposal for a European Foundation Statute (EFS). This new European legal form (Fundatio Europaea) was supposed to increase foundations' cooperation across EU member states and to facilitate cross-border tax law treatment (Breen 2014). Although promoted broadly by many researchers and foundation umbrella organizations, the proposal was not negotiated successfully. In the end, the UK, the Netherlands, Denmark, Austria, and Slovakia rejected the EFS initiative by using their veto rights (Breen 2015).

Based on the stylized structure presented above, some primal elements can be derived for the set-up of a regulatory framework for foundations (see Table 1). In line with the five characteristics of the foundation phenomenon, five main fields of regulation are typically addressed in the regulatory framework for foundations. This conceptual framework can be used by policy makers to reflect on the current foundation law critically and to develop a more rational regulatory framework (Markworth 2021; Hopt et al. 2009).

Foundations, Table 1 Basic regulatory framework for foundations (source: own figure)

Conceptional criteria of foundations	Basic elements for the regulatory framework
Founder	Rights Taxation
Asset-based entity	Legal personality Formation Purpose and statutes Liquidation Taxation
Foundation self-governance	Board of directors Other organs Activities
Beneficiaries	Rights Taxation
Supervision	State supervisory authority Public register Information and inquiries Approval of fundamental decisions Enforcement measures Reporting, disclosure, auditing

Moreover, the key features of the framework can be used by researchers for a comparative cross-country comparison of foundation ecosystems (Philanthropy Advocacy 2021; Anheier and Toepler 1999; Toepler 1998).

Empirical Evidence of Foundations

Corresponding to the range of introduced regulatory issues, many different types of foundations exist in real life (Table 2). Furthermore, since many context factors influence the ecosystem of foundations and foundation law, comparable data for a cross-national analysis of the empirical evidence of foundations is difficult to obtain (Anheier 2022). Thus, current research on foundations refers to qualitative research approaches and mainly focuses on developed countries (Giacomin and Jones 2021).

The classification of foundations can refer to legal, socio-economic, and other criteria (see Table 2). For legal explorations into the nature of foundations, the first four criteria are crucial (Kaufman 2021): According to the basic legal

Foundations, Table 2 Basic types of foundations (source: own figure)

Criteria (non-conclusive)		Type of foundation		
Legal	Legal framework	Civil law	Public law	Case law
	Regulator	Self-regulated	State-regulated	
	Establishment	Dedication	In case of death	
	Taxation	Taxable	Tax-exempt	
Socio-economic	Donor	Individual	Legal entity	
			Private	Public
	Purpose	Charity	Non-charity	
	Business model	Operating	Financial	
	Field of activities	Economic	Non-economic	
			Social	Other
	Term	Infinite	Finite	

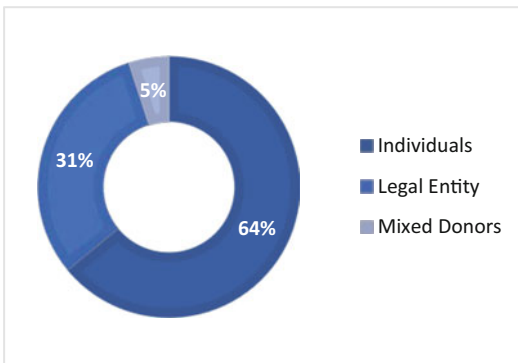
framework, foundations can be formed by civic, public, and case law (see Table 2). The regulatory framework that must be considered for the formation of a foundation can be set by different regulators (see Table 2). Based on the way of establishment, foundations are formed by dedication or in case of death. Finally, foundations can be taxable or tax-exempt. In contrast, the socio-economic analysis of foundations mainly refers to five other criteria: According to the criterion of the donor, foundations can be private or public. Moreover, the distinction based on the purpose pursued by the foundation leads to the classification of charity (philanthropic) and non-charity foundations. The business model adopted by a foundation can be operational. Likewise, foundations can act as financial intermediaries by making grants generated by asset portfolio management. Using the field of activities as a criterion leads to the classification between economic and non-economic foundations (see Table 2). Finally, the term of a foundation can be infinite or finite (see Table 2).

Charitable foundations which emerged around the world at the turn of the nineteenth century are the best-known foundation type in real life. Typically, these foundations were set up by individuals, focus on charity purposes communicated in the statutes, and typically display activities in non-economic areas (Table 2). While this type of foundation originally operated own business (e.g., hospitals, schools, and universities), today these institutions focus on grantmaking activities based

on the income generated from asset portfolio management respecting the purpose of the founder (Jung 2020). Since societal challenges outweigh other foundation purposes, investment concepts in line with the United Nations Sustainable Development Goals (SDGs) are becoming more and more important for the investment policy of foundations (Kremer and Achleitner 2022). This voluntary set of investment principles offers guidance to plausible actions for incorporating environmental, social, and governance (ESG) factors into investment practice (Stühlinger 2018; Tizian and von Schnurbein 2015). In addition to the establishment by individual persons, many foundations are set up nowadays by a legal entity (see Table 2). Accordingly, corporate foundations and public foundations are further manifestations in real life. In Germany, for example, in March 2021, 31% of the foundation population was set up by legal entities (see Fig. 3). The predominant type within, the corporate foundation, is characterized by three criteria: First, it is a separate legal entity operating separately from parent company; second, it is operating for a charity purpose and not for economic reasons; third, it is funded and controlled by a for-profit entity (Roza et al. 2020). In line with the increasing number of corporate foundations, researchers from different fields are becoming increasingly interested in this type of foundation (Gehring 2021; Roza et al. 2020; Bethmann and von Schnurbein 2015).

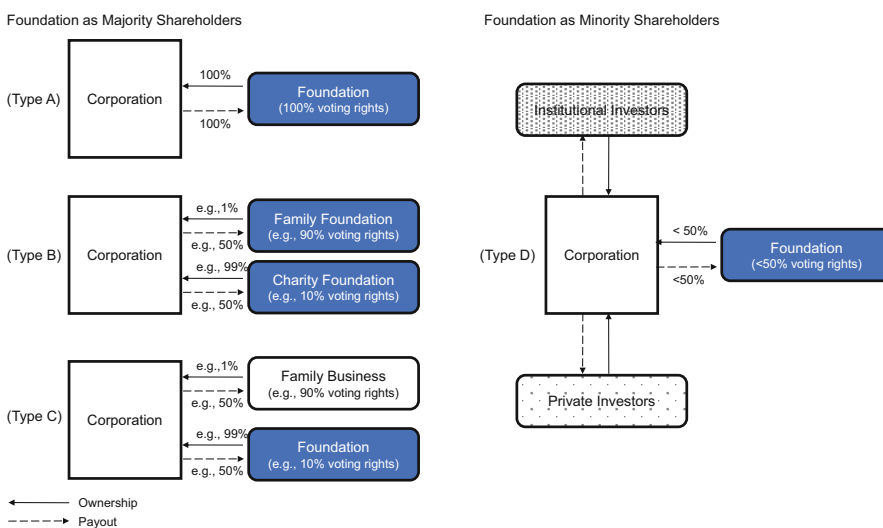
Private and corporate charitable foundations as legal entities compete with other legal forms

(Toepler 2019). Depending on the specified purpose, the benchmark can be a not-for-profit corporation, an association, or a charity trust. In recent years, different governments around the world made a lot of efforts to introduce new legal forms: For example, in the USA, Italy, and France benefit corporations were already regulated (Colinveaux 2022; Ferrarini and Zhu 2021). In Germany, the benefit corporation is currently undergoing the legislative process, additionally reforms on foundation law are initiated (Markworth 2021; Weitemeyer 2020; von Oertzen 2019).



Foundations, Fig. 3 Donors of German foundation in March 2021. (Source: own figure based on data from Bundesverband Deutscher Stiftungen 2021)

Because of the longevity focus and their openness to customized design, industrial foundations, or foundation-owned firms (FoF) are another prominent type of foundation (Stiftung Familienunternehmen 2021; Schienke 2018; Thomsen and Rose 2004.). Industrial foundations are autonomous nonprofit entities that own a majority interest in one or more conventional business firms (Block et al. (2020); Thomsen and Rose 2004). Industrial foundations can perform the role of a majority shareholder (see Fig. 4, left side). Accordingly, economic analysis can be based on the existing research on blockholder ownership (Achleitner et al. 2020). Type A is the simplest construction of an industrial foundation where the foundation owns 100% of the corporation. Type B is offering a customized solution by referring to two foundations, a family foundation and a charity foundation, as the owner of the company. This construction allows a separation of ownership and voting rights and takes into consideration tax challenges. With Type C the corporation is owned by a combination of foundation and family business. In contrast to these three types, foundation can become a minority shareholder as well (see Fig. 4, right side). Accordingly, other private and/or institutional investors take over control of corporate basic



Foundations, Fig. 4 Basic types of industrial foundations. (Source: own figure; based on Fleisch 2018)

decisions. Type D can be combined with Type B and Type C on the left side.

Very often the foundation is set up by the company founder, and the founder's family sometimes continues to have influence on management decisions by using customized models (see Fig. 4, left). Accordingly, the prevention of family conflicts is one key factor in the explanation of FoF (Kaufman 2021). At present, industrial foundations are a phenomenon in Northern Europe and sometimes include well-known multinational global players: for example, Aldi (Germany), Ikea (Sweden), Bertelsmann (Germany), Heineken (Netherlands), and Carl Zeiss (Germany). Previously, this type of foundation was also common in the USA until the Tax Reform Act of 1968 which prohibited FoF. Although the interdiction was reversed in 2018, industrial foundations did not recover in the USA (Hansmann and Thomsen 2021). Accordingly, tax law is a key factor in encouraging industrial foundations as well (Fleisch 2018). However, the lack of ownership and missing information on the foundation's governance internal structure result in a lack of transparency (Achleitner et al. 2020). Currently, the potential of FoF in overcoming short-termism and contrasting short-term profitably is discussed in economic research (Thomsen et al. 2018). Therefore, industrial foundations are supposed to play a significant role in addressing sustainable development goals and transforming the financial system to be more sustainable (Stühlinger 2018).

Cross-References

- [Impact Investing](#)
- [Institutional Investors](#)

References

- Achleitner, A.-K., et al. (2020). Foundation ownership and shareholder value: An event study. *Review of Managerial Science*, 14, 459–484.
- Adloff, F. (2015). Foundations and the charisma of giving: A historical sociology of Philanthropy in Germany and the United States. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 26, 2002–2022.
- Ali, S. N., & Oseni, U. A. (Eds.). (2021). *Waqf development and innovation: Socio-economic and legal perspectives*. London: Routledge.
- Anheier, H. K. (2018). Philanthropic foundations in cross-national perspective: A comparative approach. *The American Behavioral Scientist*, 62, 1591–1602.
- Anheier, H. K. (2022). *Nonprofit organizations: Theory, management, policy* (3rd ed.). New York: Routledge.
- Anheier, H. K., & Leat, D. (2018). *Performance measurement in philanthropic foundations: The ambiguity of success and failure*. New York: Routledge.
- Anheier, H. K., & Toepler, S. (Eds.). (1999). *Private funds, public purpose: Philanthropic foundations in international perspective*. New York: Kluwer Academic/Plenum Publishers.
- Anheier, H. K., et al. (2017). *Stiftungen in Deutschland*. Wiesbaden: Springer/Nature.
- Anheier, H. K., et al. (2018). Foundations in Germany: A portrait. *The American Behavioral Scientist*, 62, 1639–1669.
- Anheier, H. K., Lang, M., & Toepler, S. (2019). Civil society in times of changes: Shrinking, changing and expanding spaces and the need for new regulatory approaches. *Economics*, 13. <https://doi.org/10.5018/economics-ejournal.ja.2019-8>.
- Bethmann, S. (2014). *Stiftungen und soziale Innovationen*. Center for Philanthropic Studies (CEPS), Working paper series, 1.
- Bethmann, S. (2019). *Foundations and social innovations*. Center for Philanthropic Studies (CEPS), Working paper series, 16.
- Bethmann, S., & von Schnurbein, G. (2015). Effective governance of corporate Foundations Center for Philanthropic Studies (CEPS), Working Paper Series, 8.
- Bethmann, S., von Schnurbein, G., & Studer, S. (2014). Governance-systems of grantmaking foundations. *Voluntary Sector Review*, 5, 75–95.
- Block, J., et al. (2020). Performance of foundation-owned firms in Germany: The role of foundation purpose, stock market listing, and family involvement. *Journal of Family Business Strategy*, 11. <https://doi.org/10.1016/j.jfbs.2020.100356>.
- Breen, O. B. (2014). The European foundation statute proposal: Striking the balance between supervising and supporting European Philanthropy? *Nonprofit Policy Forum*, 5, 5–43.
- Breen, O. B. (2015). Allies or adversaries? Foundation responses to government policing of cross-border charity. *International Journal of Not-for-Profit Law*, 17, 45–71.
- Bundesverband Deutscher Stiftungen (Ed.). (2021). Facts and figures. <https://www.stiftungen.org/en/home/german-foundations/facts-and-figures.html>.
- Carolei, D. (2022). Accountability beyond corporations: The applicability of the OECD guidelines for multinational enterprises to non-profit organizations. *Nonprofit Policy Forum*, 13, 31–47.
- Colinvaux, R. (2022). Speeding up benefits to charities: Donor advised fund and foundation reform. *Boston College Law Review*, 63, 2621–2666.

- Coon, H. (1938). *Money to burn*. London/New York/Toronto: Longmans/Green.
- Ferrarini, G., & Zhu, S. (2021). *Is there a role for benefit corporations in the new sustainable governance framework?* European Corporate Governance Institute, Law working paper series 588/2021. <https://doi.org/10.2139/ssrn.3869696>.
- Fleisch, H. (2018). Unternehmensverbundene Stiftungen. *Stiftung und Sponsoring/Rote Seiten*, 21, 1–20.
- Fritz, T., & von Schnurbein, G. (2015). Mission investing in Europe – A meta-analysis. CEPS. Center for Philanthropic Studies (CEPS), Working paper series, 5.
- Gehring, T. (2021). Corporate foundations as hybrid organisations: A systematic review of literature. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 32, 257–275.
- Giacomin, V., & Jones, G. (2021). Drivers of philanthropic foundations in emerging markets: Family, values and spirituality. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-021-04875-4>.
- Gómez-Mejía, L., & Herrero, I. (2021). Back to square one: The measurement of socioemotional wealth (SEW). *Journal of Family Business Strategy*. <https://doi.org/10.1016/j.jfbs.2021.100480>.
- Hansmann, H., & Thomsen, S. (2021). The governance of foundation-owned firms. *Journal of Legal Analysis*, 13, 173–230.
- Heutel, G., & Zeckhauser, R. (2014). The investment returns of nonprofit organizations: Part I. *Nonprofit Management & Leadership*, 25, 41–57.
- Hopkins, B. R. (2016). *The law of tax-exempt organizations* (11th ed.). Hoboken: Wiley.
- Hopt, K. J. et al. (2009). Feasibility study on a European Foundation Statute: Final report. www.researchgate.net/publication/280664243_Feasibility_study_on_a_European_foundation_statute_final_report.
- Jaskyte, K., Amato, O., & Sperber, R. (2018). Foundations and innovation in the nonprofit sector. *Nonprofit Management & Leadership*, 29, 47–64.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- Jung, T. (2020). The non-profit Sector's rich relations: Foundations and their grantmaking activities. In H. K. Anheier & S. Toepler (Eds.), *The Routledge companion to nonprofit management* (pp. 410–425). London: Taylor & Francis Group.
- Kaufman, G. (2021). *Stiftung und Konflikt*. Wiesbaden: Springer/Gabler (Dissertation Universität Siegen, 2021).
- Kiger, J. C. (2022). Philanthropic foundation. *Encyclopedia Britannica*. <https://britannica.com/topic/philanthropic-foundation>.
- Kremer, M., & Achleitner, A.-K. (2022). Put your money where your heart is – Investor orientations and endowment portfolio investments in German Foundations. <https://doi.org/10.2139/ssrn.3855497>.
- Markworth, D. (2021). Das Stiftungsrecht am Scheideweg. *Neue Zeitschrift für Gesellschaftsrecht*, 25, 100–111.
- Philanthropy Advocacy (Ed.). (2021). *Comparative highlights of foundation laws: The operating environment for foundations in Europe*. <https://philea.eu/how-we-can-help/knowledge/legal-and-fiscal-country-profiles>.
- Roza, L., et al. (Eds.). (2020). *Handbook on corporate foundations: Corporate and civil society perspectives*. Cham: Springer Nature.
- Salamon, L. M., & Anheier, H. K. (1992). In search of the non-profit sector II: The problem of classification. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 3, 267–309.
- Salamon, L. M., & Anheier, H. K. (1993). Measuring the non-profit sector cross-nationally: A comparative methodology. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 4, 550–554.
- Schienze, T. (2018). Die Beteiligung gemeinnütziger Stiftungen an Unternehmen. *Betriebs-Berater*, 75, 2012–2017.
- Seer, R. (2021). Aktuelle Entwicklungen im Gemeinnützigkeitsrecht. In B. Andrick et al. (Eds.). *Jahreshefte zum Stiftungswesen* (Vol. 14, pp. 92–98).
- Stahl, B. (2014). *Stakeholderorientierte Führung großer Stiftungen*. Wiesbaden: Springer/Gabler (Dissertation HHL Leipzig, 2014).
- Stiftung Familienunternehmen (Ed.). (2021). *Stiftungsunternehmen in Deutschland – Gesetzliche Grundlagen, Ökonomische Motive, Reformvorschläge*. München. www.familienunternehmen.de
- Stühlinger, S. (2018). *In need of classification: Current perceptions of impact investing in the German and Swiss foundation sectors*. Center for Philanthropic Studies (CEPS), Working paper series, 13.
- Thomsen, S. (2014). Comparative corporate governance of non-profit organizations. *European Company and Financial Law Review*, 11, 15–30.
- Thomsen, S., & Rose, C. (2004). Foundation ownership and financial performance: Do companies need owners? *European Journal of Law and Economics*, 18, 343–364.
- Thomsen, S., et al. (2018). Industrial foundations as long-term owners. *Corporate Governance: An International Review*, 26, 180–186.
- Tizian, M. F., & von Schnurbein, G. (2015). *Mission investing in Europe: A meta-analysis*. Center for Philanthropic Studies (CEPS), Working paper series, 5.
- Toepler, S. (1998). Foundations and their institutional context: Cross-evaluating evidence from Germany and the United States. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 9, 153–170.
- Toepler, S. (2004). Ending payout as we know it: A conceptual and comparative perspective on the Payout requirement for foundations. *Nonprofit and Voluntary Sector Quarterly*, 33, 729–738.
- Toepler, S. (2018). Toward a comparative understanding of foundations. *The American Behavioral Scientist*, 62, 1956–1971.
- Toepler, S. (2019). Do benefit corporations represent a policy threat to nonprofits. *Nonprofit Policy Forum*, 9. <https://doi.org/10.1515/npf-2018-0021>.

- Toepler, S., & Abramson, A. (2021). Government/foundation relations: A conceptual framework and evidence from US Federal Government's partnership efforts. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 32, 220–233.
- von Oertzen, C. (2019). Aktuelle Stiftungsstrukturen. *Betriebs-Berater*, 76, 2647–2654.
- von Reeden, S. (Ed.). (2015). *Stiftungen zwischen Politik und Wirtschaft*. Berlin/Boston: De Gruyter.
- Weitemeyer, B. (2020). Unternehmen in Verantwortungsseigentum? In S. Grundmann et al. (Eds.), *Festschrift für Klaus Hopt zum 80. Geburtstag* (pp. 1419–1431). Berlin/Boston: De Gruyter.
- Zellweger, T., & Astrachan, J. (2008). On the emotional value of owning a firm. *Family Business Review*, 21, 347–363.

Framework for Sustainability

- [Five Capitals Framework \(Forum for the Future\)](#)

Frameworks

- [Sustainability Standards and Standardization](#)

Fraud

- [Corruption](#)

Fraud Prevention and Detection

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Term and Definition

The term “fraud” has at least two different meanings, of which one is referring to a certain way of

acting, the second to a person who acts accordingly.

This entry deals with the activity related meaning which again has to be differentiated and may be defined as follows:

1. An intentional deception, that is, the perversion of truth, practiced in order to induce another to give up something of value, in most cases the possession of property, or to surrender a (legal) right
2. The act of deceiving, misrepresenting, or cheating, also known as “trick” or a piece of “trickery,” with the aim of gaining an unfair advantage (See e.g. Merriam Webster Dictionary).

In a business-related context, intentional fraud is a severe criminal offence. The US American Association of Fraud Examiners (ACFE) (ACFE: Report to the Nations – 2018 Global Study on Occupational Fraud and Abuse 2018) distinguishes between three primary categories of fraud, listed below in the order of their frequency of occurrence:

- Asset misappropriation
- Corruption
- Financial statement fraud (ACFE 2018, p 10).

Fraud in this definition, thus, is used as an overall concept for morally wrong, harming, and mostly criminal behavior in a corporate and business context.

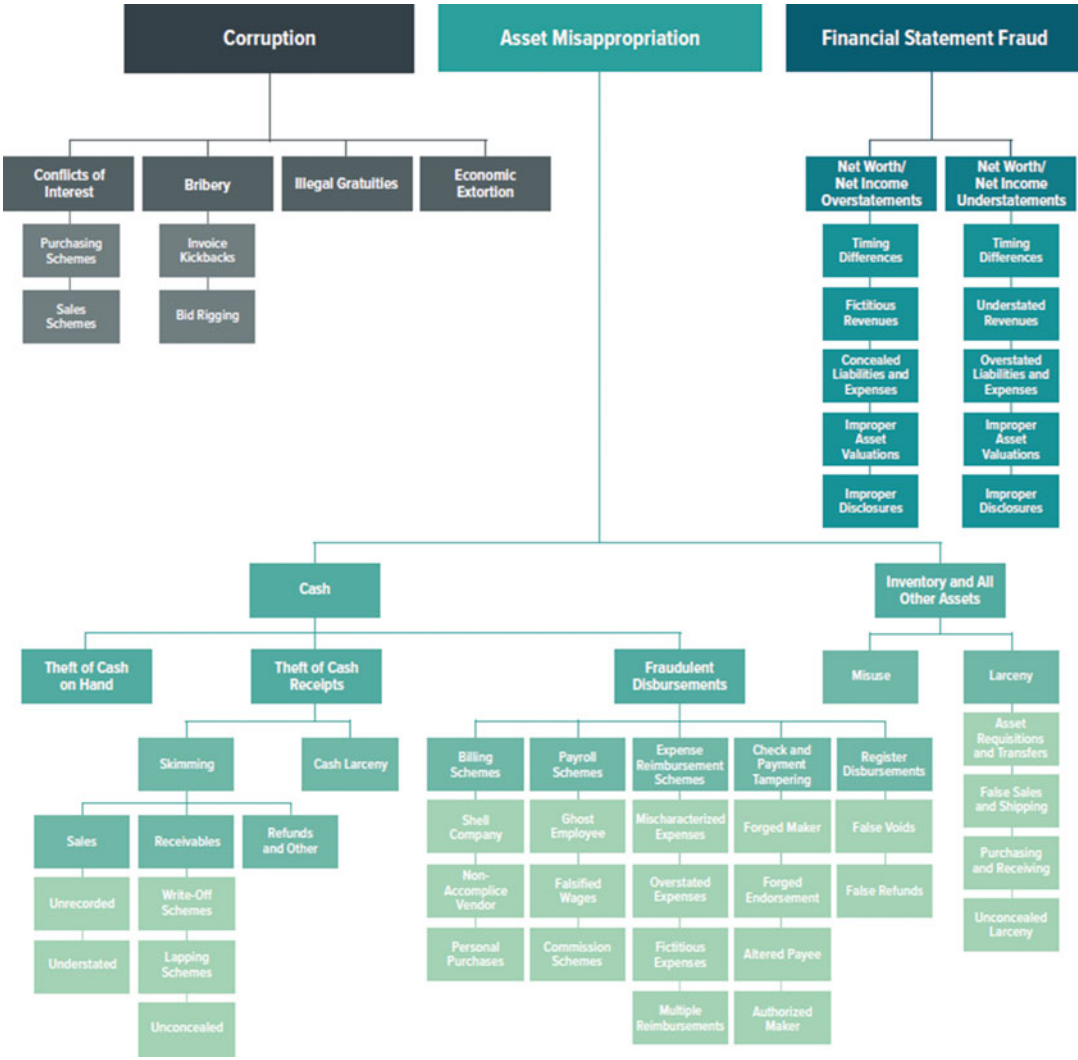
Categories of Fraudulent Behavior in a Corporate Context

For illustrating the different types of fraudulent behavior, the so-called *fraud tree* is often used in literature (Grüninger 2020, p 43). In its 2018 report to the Nations, the ACFE calls this tree *Occupational Fraud and Abuse Classification System* (ACFE 2018, p 11). Following this classification, the first branch – corruption – is subdivided into conflicts of interest, bribery, granting undue advantages, and economic extortion, whereas the second branch – asset

misappropriation – is differentiated into financial and other property damages, including theft and fraudulent disbursements on the one hand, respectively misuse and larceny on the other hand. The third branch deals with the manipulation of financial statements, distinguishing, for example, between net worth respectively net income overstatements and understatements. Fraudulent behavior belonging to this branch of the fraud tree may include, for instance, wrong period end accrual, fictitious or understated revenues, as well as improper asset valuations and disclosures (Fig. 1).

From the perspective of preventing fraud, this classification should be further divided into the categories of *fraud against the company* and *corporate misconduct* (Grüniger 2020, p 45). The former is relating to those types of criminal behavior which are damaging the company itself, corresponding in the fraud tree mainly to the branch of asset misappropriation; the latter is including forms of criminal activities which, at least in the short run, lead to advantages for the company such as corruption and financial statement fraud. In order to prevent these types of

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Fraud Prevention and Detection, Fig. 1 Occupational fraud and abuse classification system (the Fraud Tree). (Figure taken from the ACFE report, ACFE 2018, p. 11)

fraud effectively, different approaches and instruments have to be applied: Whereas the risk that fraud against the company takes place may be mitigated by thorough internal and external control mechanisms, the avoidance of corporate misconduct requires a more encompassing approach, for example, in the form of a values based compliance and integrity management, focusing on the development of a corporate and leadership culture that support ethical behavior and integrity (Grüninger 2020, p 46; see also below).

Reasons and Preconditions of Fraudulent Behavior: The Fraud Triangle

The underlying assumptions of anti-fraud-management have been illustrated for the first time in the late 1940ies by Donald R. Cressey, a pioneer in the area of business criminology, in the form of the so-called *fraud triangle*. In the context of a survey among 200 business criminals, Cressey analyzed the preconditions under which individuals commit a crime in a corporate context, in particular fraud (See e.g. Wells 2014). The outcome of his study was that at least three factors have to coincide, that is, take place at the same time, namely

1. A subjectively felt pressure – which Cressey mainly explained with financial needs, whereas later research revealed as main motives external pressure to reach certain goals and targets of the company
2. A subjectively felt “good” opportunity, often based on the (insider) knowledge of the potential offender about internal processes, control mechanisms, etc. and how they can be successfully avoided
3. A personal justification in the form of a self-convincing moral rationalization and excuse of the planned action (e.g., “this is s.th. the company owes to me,” “it is only fair if I take this in return”) (Wells 2014, p 36).

To burst at least one of the three sides of the triangle was considered as key for preventing

fraud. For being the best influenceable factor by an organization, the second aspect was regarded as the most appropriate one. Prevention of fraud, thus, should focus on clearly indicating to potential offenders that due to effective (internal) control mechanisms the chances to successfully commit a crime are very low.

Later surveys, however, for example, by the German criminologist Kai D. Bussmann in collaboration with PriceWaterhouseCoopers (Bussmann 2004, 2009), showed that one of the strongest factors of countering fraudulent behavior is the self-binding and commitment of individuals to moral values such as honesty and integrity. It could be proven that in the situation of potentially using an opportunity to commit fraud, before rational reflection – for example, about the probability that the wrong behavior will be detected or about the gravity of punishment in case of detection – even starts, something else comes into effect: the so-called *value filter* (Bussmann 2004, p 37; Kleinfeld 2020, p 766).

Effective anti-fraud-management of and in organizations, therefore, has to be embedded into a management of and by values which had been promoted already in the 1990ies in the context of the Business Ethics debate in the United States and in Europe (Wieland 2020, pp. 31–33; Kleinfeld, dito).

Prevention and Detection of Fraud

In general, anti-fraud-management consists of three main tasks:

- Fraud auditing
- Fraud prevention
- Fraud detection (Wells 2014, p 24).

The first area, *fraud auditing*, is often supported by external accountants and covers the analysis of units, departments, sectors, general and specific corporate processes, etc., which are considered to be fraught with risk. In the case of detected fraudulent activities, this may include the elucidation and the refurbishment of incidents, the investigation, and repatriation of damages as well

as a critical examination of the existing internal control mechanisms.

In the context of the next step, the *fraud prevention*, solutions, and instruments to guard an organization against all kinds of fraud and to minimize existing or potential risks of becoming a victim of fraudulent behavior have to be identified, developed, and implemented. As mentioned above, different kinds of fraud require different methods of prevention: Against financial or other forms of material damages resulting from fraud types such as deception or misappropriation which can be summarized under the category of *fraud against the company*, an internal control system which is state of the art may be rather helpful and successful (Grüninger 2020, p 46). In constellations where the motivation of fraudsters is not as clearly driven by personal interests or simply by criminal energy; however, a more systemic approach of prevention is needed, including the identification of organizationally induced reasons and motives of fraudulent behavior such as unwritten rules being transported by the existing corporate culture, explicit or implicit incentive mechanisms, pressure to succeed, etc. The prevention of fraud belonging to this category of *corporate misconduct*, as Grüninger names it, needs an equally complex and holistic answer.

Fraud detection, finally, deals with the important process of systematically identifying risks of fraudulent behavior as well as potential indicators for it, so called red flags, often carried out in the form of internal or external detection audits. In the case of concrete suspicion, usually external auditors are asked to investigate. In specific cases of potential criminal behavior such as money laundering, computer-based forensic investigation instruments are used. In the meantime, the majority of examinations to detect fraud activities are at least IT-assisted (See e.g. Grüninger 2020, p 62). An important role in the detection of fraud also play *whistleblowing systems* – in the form of either external ombudspersons or of sophisticated digital solutions – who are able to guarantee the protection of the anonymity of the informer while being in dialogue with him or her. The latter is an

important factor to check the plausibility of a received tip whereas maintaining the anonymity of a whistleblower in the majority of cases is the prerequisite for him or her to speak up at all, in the first place because of impending reprisals (Tur 2020, pp. 875–878).

One of the first frameworks which defined clear standards for effective prevention of fraud and other forms of criminal behavior were the US Sentencing Commission Guidelines, in its first version published in 1991 (US Sentencing Commission 2018). They added to the classical anti-fraud-management scheme described above another dimension: the need of appropriately *responding* to criminal behavior by the company (Grüninger 2020, p 61). Next to investigating and analyzing the reasons for the detected fraud, this includes a systematic fraud reporting and, most importantly, to consequently sanction all kinds of fraudulent behavior independent from the hierarchy level where it took place. This is not only important for the internal and external credibility but also for the preventive effect and improvement of anti-fraud-measures. Prevention, detection, and an appropriate reaction to fraud, thus, are forming an important, interdependent circle and have become a minimum requirement of corporate programs in the area of anti-fraud and compliance management (Grüninger 2020, pp. 61–62).

Effective Fraud Prevention: Compliance and Integrity Management

Another important step on the path to effective anti-fraud-management was the publication of the Sarbanes Oxley Act (SOX) in 2002, again by the United States as a reaction to the spectacular “cooking the books” – scandals around the companies Enron and WorldCom – only topped, perhaps, by the recent scandal at the German company WIRECARD. The new law made compliance and compliance management mandatory for all companies worldwide if they want to be listed at any stock exchange located in the United States. Until then, in Europe, only the financial

sector had heard of and practiced “compliance” in a corporate context (Kleinfeld, Martens 2018, p 6).

Compliance in the definition of the SOX and other frameworks at that time were based on a narrow understanding, equating it with legal and rule conformity being achieved mainly by measures of control and deterrence. This started to change with the 2004-version of the US Sentencing Commission Guidelines which recommended to embed all corporate measures to prevent and fight criminal activities in a holistic “compliance and ethics program.” Apart from preventing and detecting criminal conduct, an “organizational culture” should be promoted that “encourages ethical conduct and a commitment to compliance with the law” (Wieland, p 20; US Sentencing Commission, Guidelines, § B2.1). In 2010, a similar passage was taken up in the UK Bribery Act (UK Bribery Act 2010, principle 2).

This new and much broader understanding of compliance and compliance management reflected a debate which had already taken place in the 1990ies in the context of the young discipline of Business Ethics in the USA and in Europe. It was dealing with the question whether (legal) compliance could be considered as a minimum requirement of corporate ethical behavior, or not. Starting point of the controversial discussion was the hypothesis that a so-called integrity approach (See e.g. De George 1993, Paine 1994, Becker 1998), based on a positive idea of the human being, on a management of and by values, on the conscious development of corporate culture, as well as on the intrinsic motivation and commitment of the organizational members (Kleinfeld 2020, pp. 764–766), would be significantly more effective than a pure compliance approach, concentrating on controlling and sanction mechanisms only (Kleinfeld and Martens 2018, p 7; Schöttl 2018, pp. 38–41). This assumption, among others, was backed by the research of criminologists, as mentioned above, and today may be considered as a widespread position, held at least by experts in the field (Wieland 2020; Grüninger 2020; Kleinfeld 2020).

A European example for a guidance standard based on the integrity approach has been

developed by the Centre for Business Ethics (ZfW), the research institute of the German Business Ethics Network – EBEN Germany, in the late 1990ies already. The certifiable standard ValuesManagementSystem, (ZfW 1998) which established itself in some “sensitive” sectors such as the construction industry, describes the necessary elements and steps for creating a management system which is able to effectively prevent fraud by developing an integrity fostering corporate culture in the context of a values based compliance management. The four main processing levels of the guidance document include:

1. The *codification* of normative orientations in the form of core values, principles based on the ethical commitment and the self-image of an organization and their translation into more concrete guidelines, policies and procedures
2. The *implementation* by integrating these normative orientations into the formal and informal corporate governance mechanisms, such as the strategic decision-making, into operational processes, daily routines and procedures, incentive systems, etc., as well as into all functional management areas (HR, sales, purchasing, etc.). The implementation process should be accompanied by appropriate communication, training, and personnel development measures with a clear focus on management and leadership style
3. The *systemization* by developing a continuous implementation and improvement process, in the first place by combining it with already existing management instruments or management systems, for example, in the area of quality, risk, environmental, or CSR management, which are appropriate for the size and complexity of the organization. This step includes the establishment of regular internal controlling, monitoring, reporting, and auditing activities as well as internal speak-up or whistleblowing instruments
4. The *organization* of the values based compliance management which, above all, had to make clear to all internal and external stakeholders of the organization that the main responsibility for compliance, integrity, and

the implementation of the existing normative orientations lie on the side of the (top-) management, whereas operational functions only support it

Cross-References

- [Bribery](#)
- [Business Ethics](#)
- [Compliance](#)
- [Corporate Culture](#)
- [Corruption](#)
- [Integrity](#)
- [Values Management](#)

References

- ACFE (2018): *Report to the Nations, 2018 Global Study on Occupational Fraud and Abuse*. <https://s3-us-west-2.amazonaws.com/acfepublic/2018-report-to-the-nations.pdf>. Accessed on 15 July 2020.
- Becker, T. E. (1998). Integrity in organizations: Beyond honesty and conscientiousness. *Academic Management Review*, 23(1), 154–166.
- Bussmann, K. D. (2004). Kriminalprävention durch Business Ethics. Ursachen von Wirtschaftskriminalität und die besondere Bedeutung von Werten. *Zeitschrift für Wirtschafts- und Unternehmensethik (zfwu)*, 5(1), 35–50.
- Bussmann, K. D. (2009). Compliance in der Zeit nach Siemens. Corporate Integrity, das unterschätzte Konzept. *Betriebswirtschaftliche Forschung und Praxis*, 61(5), 506–523.
- De George, R. T. (1993). *Competing with integrity in international business*. New York: Oxford University Press.
- Grüninger, S. (2020). Grundlagen einer werteorientierten Compliance. In J. Wieland, R. Steinmeyer, & S. Grüninger (Eds.), *Handbuch compliance management* (pp. 41–72). Berlin: Erich Schmidt Verlag.
- Kleinfeld, A. (2020). Effektives compliance management durch interaktive Schulung und Kommunikation. In J. Wieland, R. Steinmeyer, & S. Grüninger (Eds.), *Handbuch compliance management* (pp. 755–780). Berlin: Erich Schmidt Verlag.
- Kleinfeld, A., & Martens, A. (Eds.). (2018). *CSR und Compliance. Synergien nutzen durch ein integriertes Management*. Berlin/Heidelberg: Springer Gabler.
- Paine, L. S. (1994). Managing for organizational integrity. *Harvard Business Review*, 72(2), 109–117.
- Schöttl, L. (2018). Integrity Management als Brücke zwischen CSR- und Compliance Management. In A. Kleinfeld & A. Martens (Eds.), *CSR und Compliance. Synergien nutzen durch ein integriertes Management* (pp. 35–47). Berlin/Heidelberg: Springer Gabler.
- Tur, K. (2020): Effektive Hinweisgebersysteme: Eigenschaften, Implementierung, Management, in: Wieland, J., Steinmeyer, R., Grüninger, S. (ed.): *Handbuch compliance management*, Berlin 2020, pp. 871–900.
- UK Bribery Act (2010): Guidance document. <http://www.justice.gov.uk/downloads/legislation/bribery-act-2010-guidance.pdf>. Accessed on 15 July 2020.
- US Sentencing Commission (2018): 2018 Guidelines Manual. <https://www.ussc.gov/sites/default/files/pdf/guidelines-manual/2018/GLMFull.pdf>. Accessed on 15 July 2020.
- Wells, J. T. (2014). *Principles of fraud examination* (4th ed.). Hoboken: Wiley.
- Wieland, J. (2020). Integritäts- und Compliance-Management als Corporate Governance – konzeptionelle Grundlagen und Erfolgsfaktoren. In J. Wieland, R. Steinmeyer, & S. Grüninger (Eds.), *Handbuch compliance management* (pp. 15–40). Berlin: Erich Schmidt Verlag.
- Wieland, J., Steinmeyer, R., & Grüninger, S. (2020). *Handbuch Compliance Management*. Berlin: Erich Schmidt Verlag.
- ZfW – The Centre for Business Ethics. (1998). ValuesManagementSystem – standard and guidance document. <https://www.dnwe.de/wp-content/uploads/2019/03/wms-english.pdf>

Freshwater Culture

- [Aquaculture and Blue Farming](#)

Fringe Benefits

- [Bonuses \(Employee for Performance\)](#)

FSC

- [Forest Stewardship Council](#)

FTT

- [Tobin Tax](#)

Functioning

- ▶ Eudaimonic Management

Fundraising

- ▶ Cause Promotions

Fund

- ▶ Endowment Fund

Futuristic Planning

- ▶ Corporate Strategy

G

G20

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Synonyms

Group of twenty; New group of twenty

Definition/Description

The Group of Twenty (G20) is an international intergovernmental forum, made up of 19 countries and the European Union, which represents the world’s major developed and emerging economies. The G20 members together represent 73% of global GDP (Statista 2021), 80% of international trade (EC 2021), and two-thirds of the world’s population (World Population Review 2021). Because the forum brings together the countries considered to be of systemic importance to the global economic and social order, it is considered to be one of the most influential regular international events that have a significant role in setting the paths for future economic growth and ensuring stability of global markets (Kirton 2015).

The first G20 forum was conducted in 1999 as a meeting of finance ministers and central bank governors of the 19 + 1 members. For the first 10 years of its existence, the forum continued to

be a meeting on ministerial level. In 2008, in the rise of the global financial crisis, G20 was for the first time held on a leaders’ level. Ever since, the G20’s central event is the meetings of leaders, but it holds meetings on the ministerial and expert levels as well (Kirton 1999).

Since its establishment, the forum has transformed from a ministerial level coordination and discussion forum for addressing issues of public finance to the international body where leaders of the biggest economies in the world gather to discuss and address the most crucial of global long-term economic and structural challenges (Kirton 2015).

History of the G20

The current G20 forum was announced by the financial ministers of the G7 with the idea to establish an informal mechanism for dialogue among systemically important countries (G20 2018). On 25 September 1999, in an attempt to broaden dialogue between countries, the finance ministers and central bank governors of the G7 countries invited their “counterparts from a number of systemically important countries from regions around the world” to a meeting in Berlin in December 1999 (G20 2018). The main aim of the new forum, as issued in a joint communique, was to promote dialogue “among systemically important countries within the framework of the Bretton Woods institutional system” (G20 2018).

In that way, the new Group of Twenty (G20) forum of finance ministers and central bank governors was kick-started at the 1999 meeting of the finance ministers of G7 (Postel-Vinay 2014, p. 5). It was created as a platform for informal dialogue aiming to enhance coordination on important economic and financial issues among the systemically significant economies (Kirton 2015, p.16).

Only later, in the midst of the global financial crisis of 2008, did the G20 debut summits of the heads of state. In Washington (2008) and Pittsburg (2009), this broader forum of cooperation was acknowledged to be of a now higher importance for global coordination than the G8 (returned to G7 after the exclusion of Russia in 2014) (G20 Research Group 2019b).

The G20 added a leader-level summit in November 2008 to cope with the then arising global financial crisis. Much like the G8 (currently G7), membership in the G20 was restricted in accordance with the forum's mission, with it becoming an influential club of the world's high ranking powers (Kirton 2015, p.16).

The vision of a new global governance system which could foster a wider scope of relevant political decision-makers inspired the creation of different cooperation forums throughout the years, some of them considered a direct precursor to G20, and others – like the Asia-Pacific Economic Cooperation (APEC) forum in 1989 – only partially related and more locally focused (Kirton 2015, p.16).

A direct precursor to the G20 is the G22 group, also known as the Willard Group, after a hotel in Washington, DC, where the meeting took place (G20 2018). After the G22 meeting, a more representative forum was created. The G33 framework of cooperation was formed to facilitate dialogue between 33 industrialized countries. The G33 is considered the immediate predecessor of G20 (2018).

The G20 in Modern International Relations

The G20 member countries are Argentina, Australia, Brazil, Canada, China, France,

Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States, and the European Union (G20 Research Group 2019a).

G20 member countries cover 60.8% of the world's land area, generated 85.2% of global gross domestic product (GDP), and were home to 64.3% of the world's population in 2013 (Eurostat 2013). The intergovernmental forum is considered to be the largest high-level cooperation initiative in the international relations system.

Compared to the G8, the G20 is considered to be a more representative summit which provides a forum for coordination not only to industrialized nations but to emerging economies as well (Larionova and Kirton 2015). In the light of the rising complexity of international interdependence, as well as the economic convergence between emerging economies and established economic leaders, the G20 is naturally connected to the G7, with the G7 remaining a forum for cooperation of the developed nations, whose decisions and statements do have an impact on political dialogue on the G20 level as well (Larionova and Kirton 2015).

The G20 does not have a permanent secretariat, and the agenda for the annual summits is proposed and prepared by the member that is to organize the next annual summit. The G20 summits are hosted by a different member country each year. The funding of the summit is provided by the host country. Each year the next presidency is decided based on rotation and regional representation. To ensure continuity of the talks, a coordination between the previous, the present, and the forthcoming presidency is set up (Alexander et al. 2016).

The countries are represented by the country officials of the highest level in accordance with their governmental structures. Each year, heads of state gather to discuss topics of strategic cooperation. Another important part of the G20 summit is considered to be the meetings of the members' financial ministers (Kirton 1999).

The European Union is a full member of the G20, alongside three of its Member States, France, Germany, and Italy, and it is represented

at the G20 summits by the President of the European Commission and the President of the European Council (2021).

The Managing Director of the IMF and the President of the World Bank, as well as the chairpersons of the International Monetary and Financial Committee and Development Committee of the IMF and World Bank can participate in the G20 summit discussions (G20 Research Group 2019a) (Table 1).

The G20 in Numbers (World Population Review 2021; Worldometer, 2021; Statista 2021; EC 2021)
 19 countries + EU
 Representing 4,682,214,273 people (excluding the countries from the EU that are not part of the G20 as separate stakeholders) (World Population Review 2021)
 A total of 78,401,514 km², equivalent to more than ½ of the total world land cover. (Worldometer, 2021)
 73,19% of global GDP* (Statista 2021).
 Around 80% of global trade (EC 2021)
 *Data is for 2019.

Participation of Other Countries and International Organizations

At the invitation of each presidency, key international organizations participate in G20 meetings

to provide substantive inputs and enrich the discussion.

Countries that are not represented at the G20 could attend the meetings if they were invited by one or more members of the forum. This is typically the case of Spain, which despite being one of the 20 biggest economies, is not formally a member of the G20, only through its European Union representation. Spain has a permanent invitation to attend the G20 forums (EC 2021).

International organizations that provide insights into particular problems of discussions attend G20 Working Groups. The OECD has a particular role in G20 meetings, as it participates in all G20 Working Group meetings and provides data, analytical reports, and proposals on specific topics, either solely or jointly with other international organizations (OECD 2019).

Summary

The G20 is nowadays considered one of the most important regular international leader summits. The discussions held at the forum are of key interest to various stakeholders, including other governments, international organizations, international business, and citizens. The

G20, Table 1 List of all G20 meetings (August 2021)

First meeting	14–15 November 2008	United States; Washington DC
Second meeting	April 2009	United Kingdom; London
Third meeting	24–25 September 2009	United States; Pittsburgh
Fourth meeting	26–27 June 2010	Canada; Toronto
Fifth meeting	11–12 November 2010	South Korea; Seoul
Sixth meeting	3–4 November 2011	France; Cannes
Seventh meeting	18–19 June 2012	Mexico; Los Cabos, San Jose del Cabo
Eight meeting	5–6 September 2013	Russia; St. Petersburg
Ninth meeting	15–16 November 2014	Australia; Brisbane
Tenth meeting	15–16 November 2015	Turkey; Antalya, Serik
Eleventh meeting	4–5 September 2016	China; Hangzhou
Twelfth meeting	7–8 July 2017	Germany; Hamburg
Thirteenth meeting	30 November–1 December 2018	Argentina; Buenos Aires
Fourteenth meeting	28–29 June 2019	Japan; Osaka
Fifteenth meeting	21–22 November 2020	Online (Saudi Arabia)
Sixteenth meeting	30–31 October 2021	Italy

Source: G20 Research Group (2021). G20 Summits. University of Toronto. <http://www.g20.utoronto.ca/summits/index.html>

forum is not a classical international organization and therefore has no permanent staff and office. Instead, it is organized by a different country each year. Results from the forum have a great political significance and an impact on both international politics and international economics.

Cross-References

► [World Economic Forum \(Davos\)](#)

References

- Alexander, N., Löschmann, H., & Schuele, W. (2016). *The rotating G20 presidency: How do member countries take turns?* The Green Political Foundation. <https://www.boell.de/en/2016/11/30/rotating-g20-presidency-how-do-member-countries-take-turns>. Accessed 2 Aug 2021.
- EC (European Commission). (2021). *G20*. https://ec.europa.eu/info/food-farming-fisheries/farming/international-cooperation/international-organisations/g20_en. Accessed 15 Aug 2021.
- Eurostat. (2013). *Glossary: Group of Twenty (G20)*. [https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Group_of_Twenty_\(G20\)](https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Group_of_Twenty_(G20)). Accessed 15 May 2020.
- G20. (2018). Osaka Summit website. <https://g20.org/en/>. Accessed 9 Oct 2019.
- G20 Research Group. (2019a). *G20 backgrounder*. University of Toronto. <http://www.g20.utoronto.ca/g20backgrounder.htm>. Accessed 9 Oct 2019.
- G20 Research Group. (2019b). *The G20*. University of Toronto. <http://www.g20.utoronto.ca/g20whatisit.html>. Accessed 1 Oct 2019.
- G20 Research Group. (2021). *G20 summits*. University of Toronto. <http://www.g20.utoronto.ca/summits/index.html>. Accessed 15 Aug 2021.
- Kirton, J. (1999). *What is the G20? G20 Research Group*. University of Toronto. <http://www.g20.utoronto.ca/g20whatisit.html>. Accessed 9 Oct 2019.
- Kirton, J. (2015). Changing global governance for a transformed world. In M. Larionova & J. J. Kirton (Eds.), *The G8-G20 relationship in global governance*. Surrey: Ashgate Publishing.
- Larionova, M., & Kirton, J. J. (2015). *The G8-G20 relationship in global governance*. Surrey: Ashgate Publishing.
- OECD (Organisation for Economic Co-operation and Development). (2019). *About the G20*. OECD. <http://www.oecd.org/g20/about/>. Accessed 8 Oct 2019.
- Postel-Vinay, K. (2014). *The G20: A new geopolitical order*. Palgrave Macmillan US.
- Statista. (2021). *Share of global gross domestic product from G7 and G20 countries in 2019 and projections for 2025*. <https://www.statista.com/statistics/722962/g20-share-of-global-gdp/>. Accessed 2 Aug 2021.
- Worldometer. (2021). World population by country. Retrieved <https://www.worldometers.info/worldpopulation/population-by-country/>. Accessed 15 May 2021.
- World Population Review. (2021). *G20 countries*. <https://worldpopulationreview.com/country-rankings/g20-countries>. Accessed 2 Aug 2021.

G7

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Synonyms

G8; Group of eight; Group of seven

Definition

The G7 (Group of Seven) is an informal association of seven of the world’s largest leading industrialized economies – the USA, Canada, United Kingdom of Great Britain, France, Germany, Italy, and Japan – with Russia being the eighth member. The European Union is sometimes called “the 9th member,” as it has a right to attend and participate in G8 summits, but cannot be a host (University of Toronto 2019b).

The G7 cooperation operates through annual meetings of the heads of state of the countries from the group. The aim of the meetings is for leaders to discuss and coordinate action on crucial global economic and political challenges. G8 annual meetings take place in member countries who take turns at hosting the summit. The G8 also holds a number of ministerial level meetings throughout the year. The presidency of the group rotates annually among member countries, with the rotation order being: France, the USA, the UK,

Russia (suspended), Germany, Japan, Italy, and Canada (University of Toronto 2019a).

Historically, the G8 cooperation began in 1975 with the leaders of six industrialized nations gathering in France (the group first came to be known by the name Group of Six) (Margaret Thatcher Foundation 2019). It was later on with the inclusion of Canada and Russia (the latter being part of the group between 1997 and 2014) that this format of cooperation became known as the G8. Because of the rising influence of emerging economies, in 2009, as one of the results from the global financial crisis, the G7 (then still G8) was formally recognized to be of lesser importance than the Group of Twenty (G20) (Schmucker and Gnath 2010).

History of the G7

The G8 discussion forum originates in the 1970s. Its predecessor, formally known as the Library Group, was a similar informal periodic meeting of financial government representatives (Margaret Thatcher Foundation 2019).

The first summit was organized by the French President Valéry Giscard d'Estaing, and it was held in Chateau de Rambouillet, France, in 1975 (Margaret Thatcher Foundation 2019). The original members of the G6 that gathered in 1975 were France, Germany, Italy, Japan, the UK, and the USA (University of Toronto 2019a). At the time issues of the 1970s oil crisis and the post-Breton-Woods international monetary disorder dictated the need for close coordination between industrialized countries (Barry 2002).

It was at this first summit that the members of G6 agreed to meet annually (Margaret Thatcher Foundation 2019). In 1976 the G6 became the G7 when Canada attained membership (University of Toronto 2019a). In 1994 Russian representatives began to hold separate meetings with leaders of the G7 after the group's summits – a communication format which came to be known as the Political 8 (P8), or G7 + 1. In 1997 Russia became a guest observer, and a full participant in the 1998 G7 summit, with which the G8 was formed (Lin et al. 2006). Russia was excluded from the G8

after the Crimea crisis in 2014 (University of Toronto 2019a), with the forum logically being renamed to G7.

The Role of G7 in the International System

The G7's main purpose is to provide a forum for coordination between leaders of industrialized countries on crucial political and economic issues such as conflict resolution, promotion of trade, and coordination of actions for global economy issues. The agenda is set according to the necessities of the international circumstances.

The association does not have the governance structure of a typical organization in the sense that it has neither headquarters, nor permanent staff. The annual summit is preceded by groundwork for the discussion that is to be held on the summit, and it is executed by diplomatic agents. The summit is followed by a number of ministerial level meetings (University of Toronto 2019a).

The meetings and decisions taken at the G8 have led to collective action on different topics such as disease countering campaigns and announcement of development programs. The decisions taken at the G7 and the highlights of the discussion opinions are convened to the United Nations system as well. The G7's role in the international system has been conceived as intertwined with other international organizations (Kirton 2006).

Following the Pittsburg Summit of G20 in 2009, it was announced that the G20 would become the new primary coordination summit format for tackling global political, social, and economic issues, gradually giving way to the more inclusive format of G20 which includes structurally important emerging economies such as China and Brazil (Larionova and Kirton 2015).

The G7 and the Other Gs

The G7 has been one of the most influential informal cooperation forums in international relations

since it has been a coordination place for the world's most developed countries and world economic leaders. However, recent decades witnessed the rise of new economic superpowers such as China, and the ever-increasing importance of regional economic and political leaders such as Brazil and the countries of ASEAN. For that reason, the G7 has been considered to become a less relevant forum for the system of international decision making and international coordination. In 2008, amid the rise of the global financial crisis, at the Washington summit the G8 formally declared the much wider G20 forum as the more important cooperation gathering (Larionova and Kirton 2015).

In light of the rising complexity of international interdependence, as well as the economic convergence between emerging economies and established economic leaders, the G20 is naturally connected to the G7, with the G7 remaining a forum for cooperation of the developed nations, whose decisions and statements do have an impact on political dialogue on the G20 level as well (Kirton 2010; Larionova and Kirton 2015).

However, the G7 still contributes significantly in decision making complementing the much more diverse G20, as smaller groups of like-minded members tend to cooperate faster and reach to a decision on an emerging issue faster than forums hosting more diverse interests (Morin et al. 2019).

G8 Summits and Global Governance

The G7 is not a classic intergovernmental organization, in the sense that it does not have a Charter, headquarters, or permanent administration. G7 summits are held usually on an annual basis, with the member countries taking turns to host the meetings. The EU as an observer has no right to host G7 summits. The G7 does not create legally binding documents as a result from the meetings, rather it communicates the decisions taken at the summit through communiques or other political documents. This informality has been considered to provide a flexibility in the forum's mandate that

might be more efficient in decision making of emerging issues than traditional international organizations (Morin et al. 2019).

G7 summits have been considered as key regular meetings for political agenda setting within the international community. Which member country will host the meetings is decided on a rotational basis. The 2020 G7 meeting was hosted by the USA, and the 2021 G7 summit was hosted by the UK, with the main focus being the countries' recovery from the global COVID-19 pandemic (SDG Knowledge Hub 2021).

The G7 is considered to provide governance through three ways of interaction: through nonbinding self-commitments of its members to coordinate their national policies; through coordination with and within international institutions; and through the inclusion of private actors. While political dialogue and publicly announced self-commitments have been gaining the most of attention in G8 activities, it is more and more evident that policy coordination within a larger international framework, and nongovernmental organizations (NGOs), business and civil society engagement is essential to all G7 activities (Gstöhl 2006).

Action of G7 on the Topic of Environment and Development

As an informal body of coordination between the world's most developed countries, the G7 has been looked at when development issues are raised. The countries from the G7 have repeatedly turned their attention to issues of developing countries. In response to the proposed New Partnership for Africa's Development (NEPAD) initiative by African countries, the G7 launched a number of initiatives and agreements (Black 2012). A so-called "Third Way" to Africa initiative was launched despite it has been considered a continuation of the already established power dynamics between developed and developing countries (Black 2012).

Another key international problem that is strongly dependent on the actions taken by the

most developed countries is climate change governance, and advances into environmental protection regulations. Climate change emerged as an issue for G7 governance at the Tokyo Summit held on June 28–29, 1979 (Kirton and Kokotsis 2015). The second German-hosted Bonn Summit on May 2–4, 1985, brought a rediscovery of direction-setting achievements, defining “climate change” for the first time as an issue of national priority, having G7 leaders declare that environmental protection to be as equally valuable as economic growth (Kirton and Kokotsis 2015, p. 51). In terms of approving international legal principles of environmental regulations, G7 leaders have adopted and reaffirm the “polluter pays” principle, which is a fundamental principle in international greenhouse gas emissions regulation (Kirton and Kokotsis 2015, p. 51).

There have been a number of perceptions on the G7’s role in environmental governance. Some have argued that it has been a key stakeholder to the doctrine of liberal environmentalism where economic and market values are dominant (Kirton and Kokotsis 2015, p. 4). The G7 is also analyzed as a proponent of the paradigm of “embedded ecologism,” and as a stakeholder in the context of institutionalized international interdependence on critical issues such as climate change and biodiversity dynamics (Kirton and Kokotsis 2015, p. 5).

Criticism of G8

The criticism most commonly addressed toward the G7 is that it is a representative of the rich developed nations only and is not able to address the issues in global governance (Barry 2002).

The forum has also been criticized of not being representative in relation to the interests of multiple key stakeholders in the international system (Barry 2002). Despite the exclusive nature of the G7 is to some extent limiting the power of its political decisions, it is still a forum that provides crucial information about the political opinions of key actors in the sphere of international politics.

Summary

The G7 (G8) group has been deemed as the pivot of the “rich countries” in international politics and coordination. In recent years, most notably since the rise of the global financial crisis of 2008, the G7 has its place as a main high-level forum for political coordination to the more representative G20.

Despite that, the G7 is still a significant forum for political dialogue between the most developed countries in the world, and its statements and decisions are still an important factor for political decision-making in various fields of international relations, ranging from economic and developmental issues to environmental protection ones.

Cross-References

- [G7](#)
- [G20](#)
- [World Economic Forum \(Davos\)](#)

References

- Barry, T. (2002). G8: Failing model of global governance. *Foreign policy in focus*. <https://www.globalpolicy.org/global-taxes/42819.html>. Accessed 10 June 2020.
- Black, D. (2012). The G8 and Africa: A partial reckoning. *Global Governance*, 18, 441–447.
- Gstöhl, S. (2006). Governance through government networks: The G8 and international organizations. *The Review of International Organizations*, 2(1), 1–37. <https://doi.org/10.1007/s11558-006-9004-8>.
- Kirton, J. (2006). Implementing G8 economic commitments: How international institutions help. Paper prepared for a 2006 G8 pre-summit seminar “on the road to St. Petersburg: The role of international organizations in implementing G8 commitments”. State University Higher School of Economics (SU-HSE), Moscow and the G8 Research Group, University of Toronto. http://www.g7.utoronto.ca/scholar/kirton2006/kirton_institutions_060622.pdf. Accessed 10 June 2020.
- Kirton, J. (2010). Why the world needs G8 and G20 summitry: Prospects for 2010 and beyond. Paper prepared for the Center for Dialogue and Analysis on North America (CEDAN), Tecnológico de Monterrey (ITESM). <http://www.g7.utoronto.ca/scholar/index.html>. Accessed 10 June 2020.
- Kirton, J., & Kokotsis, E. (2015). *The global governance of climate change: G7, G20, and UN leadership*. Ashgate.

- Larionova, M., & Kirton, J. J. (Eds.). (2015). *G8 – G20 relationship in global governance*. London/New York: Routledge.
- Lin, M., Morson, A., Muravska, J., & Verli, D. (2006). *Russia and the G8: An overview of Russia's integration into the G8*. G8 Research Group. Toronto: University of Toronto.
- Margaret Thatcher Foundation. (2019). The G7 summits: Declassified records published for the first time. <https://www.margaretthatcher.org/archive/G7.asp>. Accessed 2 Oct 2019.
- Morin, J., Dobson, H., Peacock, C., Prys-Hansen, M., Anne, A., Bélanger, L., & Vallet, E. (2019). How informality can address emerging issues: Making the most of the G7. *Global Policy*. <https://doi.org/10.1111/1758-5899.12668>.
- Schmucker, C., & Gnath, K. (2010). From the G8 to the G20: Reforming the Global Economic Governance System. GARNET working paper no: 73/09. <http://www.g20.utoronto.ca/biblio/7310.pdf>. Accessed 20 June 2020.
- SDG Knowledge Hub. (2021). G7 Leaders' Summit in 2021. <https://sdg.iisd.org/events/g7-leaders-summit-2021/>. Accessed 18 Aug 2021.
- University of Toronto. (2019a). What are the G7 and G8? <http://www.g7.utoronto.ca/>. Accessed 2 Oct 2019.
- University of Toronto. (2019b). What does the G stand for? Group! <http://www.g8.utoronto.ca/g.html>. Accessed 2 Oct 2019.

G8

- [G7](#)

Gamesmanship

- [Competitive Advantage](#)

GCGI

- [Global Corporate Governance Institute \(GCGI\)](#)

GDP (Gross Domestic Product)

- [Degrowth](#)
- [Postgrowth](#)

Gender Differences

- [CSR and Women](#)
- [Poff-Michalos Procedure, The](#)

Gender Discrimination

- [Board Diversity and Inclusivity](#)

General Will

- [Social Contract](#)

Genetically Engineered Organisms

- [Genetically Modified Organisms \(GMOs\)](#)

Genetically Modified Organisms (GMOs)

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Synonyms

[Genetically engineered organisms](#); [Genetically modified products](#); [Transgenic organisms](#)

Definition

The World Health Organization defines genetically modified organisms (GMOs) as “organisms (i.e. plants, animals or microorganisms) in which the genetic material (DNA) has been altered in a

way that does not occur naturally by mating and/or natural recombination” (WHO, 2014). The technique by which the genetic materials are altered is known as *recombinant DNA technology* or *genetic engineering*. Basically, *Genetic engineering* is a technique of genetic manipulation where the genetic materials from a living organism are harvested, modified, or recombined (i.e., manipulated with other genes) and replaced in the same or a different organism to obtain the desired traits. The final products of genetic engineering or gene manipulation are the GMOs synonymously known as transgenic organisms. *Genetic engineering* is successfully employed to (1) treat medical conditions such as genetic defect – gene therapy – (2) develop medicines and vaccines; (3) develop crops that are resistance to drought, cold, flood, or herbicides; (4) enhance growth of animals or plants; (5) shorten the maturity or ripening time of fruits, vegetables, and grains; and (6) enable an organism to produce something, which normally it would not do by itself (e.g., producing human insulin from a microorganism to treat diabetes), among others. As a result, a wide variety of GMOs such as GM crops and animals, GM microorganisms, GM foods, GM medicine, GM vaccines, GM biologics, GM cosmetics, GM pesticides, and GM industrial feed-stock is developed for various uses by consumers. Although the topic of GMOs is fascinating, a detail discussion about all GMOs and their various aspects is beyond the scope of this paper. Therefore, this paper discusses on the use of GMOs in medical and pharmaceutical research and food and agriculture followed by their safety, benefits, and risks. Finally, the paper discusses about the labeling requirements of GMOs based on the American and European approaches.

Medical and Pharmaceuticals Research

Genetic engineering has long been employed in medical and pharmaceuticals research to understand the causes and symptoms of diseases; develop new medicines, biological organs, and other medical essentials for treatment; and invent vaccines for the prevention of diseases, among

others. For example, in 1978, the first genetically engineered human insulin was developed by inserting the genetic sequence of human insulin into the gene of a bacterium (*Escherichia coli*). Similarly, GM animals, also known as transgenic animals, have been created as a substitute for human organ donors to produce specific tissues and organs to be transplanted into human – a process known as xenotransplantation. Another application of GMOs is the development of genetically engineered pharmaceuticals protein such as α -1-antitrypsin (AAT) to treat emphysema (a lung disease) and cystic fibrosis (an inherited disease of the secretory gland). AAT is produced in milk of GM sheep by incorporating human gene to it, which carries code for synthesis of AAT. Further, gene therapy – genetic modification of human – is gaining popularity to treat some cancers and rare metabolic diseases. For example, sickle cell anemia (a hereditary disease that destroys red blood cell) can be treated by incorporating a desired gene (β -globin) into the stem cell of the patient and putting it back to the patient, which eliminates the need for a matching donor.

In addition to treatment of diseases, GMOs are being used to prevent diseases as well. For example, edible vaccines in GM tomatoes and GM potatoes have been developed to prevent measles, cholera, foot and mouth disease, and hepatitis B, C, and E by producing an antigenic protein (pathogen) in fruits or edible parts of a plant (Abeyesundara et al., 2017). When these fruits or edible parts are eaten, the antigenic protein gets absorbed into the bloodstream and stimulates the immune system to develop immunity against the pathogen from which the antigen was derived. Such vaccines are painless, cost-effective, and easier to transport, store, and administer than the traditional injectable vaccines, thereby offering an array of benefits, particularly to the developing countries. Further research is underway relating to the effectiveness of GM edible vaccine.

Besides prevention and treatment of diseases, GMOs are enormously used in the areas of medical and pharmaceutical research. The use of transgenic animal models such as mice, rabbits, and rodents is considered as one of the best

methodologies to understand the functions and role of gene in the context of susceptibility, clinical presentation, progression, and response to therapeutic intervention of diseases. For instance, transgenic rodents are extensively used to study the physiological function of specific gene and its disease biology at the level of the whole organism. Transgenic rodents are also exclusively used by the pharmaceutical companies for disease modeling and drug development. Because of the similarity in physiology and functions of genes between humans and rodents, critical aspects of disease pathology and disease processes can be experimentally created in transgenic rodents to understand the underlying disease mechanisms and develop new therapeutic drugs. Indeed, transgenic animal models have proven vital to test the efficacy, safety, and toxicity during the early stages of drug development. Transgenic animal models are also used to replace the nonhuman primate (NHP) models to express specific human genes, which can replace the use of NHP for testing drug interaction with that gene in human and NHP. In fact, WHO has approved the use of a transgenic mouse model to test neurovirulence of an oral polio vaccine – developed by GlaxoSmithKline – that was previously tested in NHP (GlaxoSmithKline, 2014). Alike human, transgenic animals are equally in use to conduct research for animal kingdom. Thus, it appears that medical and pharmaceutical researches seem to be impossible without the use of GMOs.

Now the question arises: what is the role of genetic engineering and GMOs in food and agriculture? The following sections focus on the role of GMOs in food and agriculture, its safety, benefits and risks, and labeling requirements.

Food and Agriculture

The most controversial area in the kingdom of GMOs is the GM food. Foods, such as bread, sour dough, sour milk and cream, yogurt, cheese, sour vegetables, fermented meat, vinegar, wine, and beer, among others, require fermentation technique. This technique is simple and produces foods of improved nutritional quality and high biological value. Because of

the simplicity of the technique, it is particularly beneficial for developing countries where rate of malnutrition is high and requires supply of nutritionally improved and easy-to-prepare foods. The influence of microorganisms is thus of great importance to produce quality foods and improve nutritional status of people. On the other hand, GM foods are derived from organisms whose genetic material such as DNA has been altered through the insertion of genes from one organism into a second organism in order to suppress, encourage, or otherwise alter particular genetic traits in the second organism (ECR, 1999).

Genetically modified produces benefit to both consumers and farmers in terms of lower prices, greater benefits for sustainability, and nutritional value. Genetically modified foods are also beneficial in prevention and treatment of deficiency diseases. For example, to prevent blindness caused by the lack of vitamin A in many developing countries, scientists have developed *golden rice* that contains carotenoids, a precursor of vitamin A. Similarly, GM rice known as *iron rice* with increased iron content has been developed to “counteract iron deficiency by altering its genome through the insertion of a gene from the *Aspergillus niger* fungus” (Pandey et al., 2011). Other examples of foods that may contain GM ingredients are the following: bread, pastry, biscuits, and snacks; flour from soy; oil from soybeans, cotton and canola; cornmeal and corn; sweets, chocolate, and ice cream; lecithin and milk from soy; glucose or glucose syrup from maize; sugar from sugar beets; meat substitutes; and other ingredients and additives, among others. Although benefits of GM foods contribute to GM food marketing and its technology transfer (Rodríguez-Entrena et al., 2013), transmission of GMOs into the environment and the marketing of GM foods have resulted in a public debate in many parts of the world, particularly relating to the safety of GM food and lack of trust in the technology. As a result, national and international laws, guidelines, and institutional structures have been designed to govern the use of DNA in GMOs by using basically the two approaches. The first – product-based – approach is “grounded in the principle that the products of recombinant DNA technology

are not inherently riskier than those made by conventional production methods” (Spohn, 1996). Therefore, it is redundant to formulate policies to regulate them. The second – process-based – approach is “founded on the idea that genetic modification has inherent risks and therefore requires additional specific studies, case-by-case analyses, and adaptations of pre-existing regulatory structures” (Oda, 2003). The following sections of the paper describe safety of GMOs, analyze benefits and risks, and explain the labeling requirements based on the American and European approaches.

Generally Recognized as Safe (GRAS)

GRAS is a US measure of food safety. The USA has declared GM foods as generally recognized as safe (GRAS), making it the largest producer of GM foods (James, 2012). The reason for the high demand of GM foods is that the GM technology increases harvest productivity by controlling pest- and herbicide-based diseases, and this decreases cost of production (Reilly, 1989). The GRAS statement influences positively consumers’ responses to GM food acceptance. The Canadian government also continues to promote GM foods as safe and inexpensive and stresses that GM foods are similar to natural-grown foods. Thus American and Canadian consumers find GM foods to be low risks and an excellent alternative to natural foods.

However, European policymakers view the GM technology as new and respond differently from the USA and Canada. Members of EU recommend “a risk assessment and demand a moratorium on the environmental release of such organisms until binding Community safety directives have been drawn up” (Isaac and Hobbs, 2002). As a result, the EU has established a strict regulatory framework to trace GMOs and its derived products to undergo an authorization process that aims to guarantee safety for human, animal, and environmental health. Following the European regulatory framework, Brazil enacted their own laws and oversight mechanism and created agencies in 2005 to safeguard activities relating to GMOs.

Benefits and Risks

GM food consumption can be measured in term of its benefits and risks posed by it (Ayyagari et al., 2011). Studies indicate that GM crops can save agricultural input and losses from pests, thus improving agricultural productivity (Huang et al., 2008). For example, insect resistance is achieved by incorporating into the plant a gene that induces the resistance. Virus resistance is achieved by introducing virus genes that cause plant diseases, making the plant less vulnerable to the diseases hence increasing productivity. Herbicide tolerance is achieved through the introduction of a gene from a herbicide-resistant bacterium, thus significantly lowering the use of herbicides. Indeed, GM crops have been adopted by millions of farmers in developed and developing countries.

However, as the technology of gene modification is relatively new and complex, fears abound that GM food may carry serious risks both to human health and environment. Some of the human risks in terms of GM foods relate to effects of (1) toxic and allergenic transgenic proteins on foods, (2) transgenic proteins on plant metabolism, (3) herbicides and their metabolites on the resistant crop varieties and species, and (4) transfer of transgenic constructions, primarily into the genomes of bacteria symbiotic with humans and animals such as *Escherichia coli*, *Lactobacillus (acidophilus, bifidus, bulgaricus, caucasicus)*, *Streptococcus thermophilus*, *Bifidobacterium*, etc. Environmental risks highlighted by Kulikov (2005) are (1) erosion of the crop varieties as GM plants are derived from the limited set of parental varieties; (2) cross-pollination with the wild-grown plants, resulting in decline in biodiversity of plants and emergence of super weeds; (3) transfer of the constructions to rhizosphere microflora; (4) toxic transgenic proteins affecting nontarget insects and disrupting the trophic chains; and (5) rapid development of resistance to the phytophagous insects, bacteria, fungi, and other pests.

Labeling

The USA and EU perceive different risks and benefits associated with GM foods due to their

biotechnology-based laws and policies (Sheingate, 2006). In the USA, GM foods are not labeled even though more than two-thirds of products in stores are GM foods (Byrne, 2010). On the other hand, countries in the EU and Russia have the mandatory labeling requirements for GM foods (CFS 2013). Sand (2006) states that the legal obligations to reveal risk information exist at four distinct levels in terms of disclosure to (1) governments, by environmental impact statements for the planning or licensing of specified projects, environmentally hazardous activities, risk-prone industries, or dangerous goods; (2) citizens, under *right-to-know* schemes for specified workplace environments or for the benefit of communities adjoining industrial facilities; (3) investors as part of corporate financial accounting schemes; and (4) consumers through a variety of labeling schemes ranging from hazard warnings to product-related or process-related certifications of

contents or origin. In China, the Ministry of Agriculture ensures that consumers have the *right to know* about GM food by making GM labeling mandatory (Kou et al., 2015). Regardless of evidence of harm, consumers have a right to know about the contents of what they are eating. Consumers do worry about the effects of GM foods on their health and environment (Shewfelt, 2016). Indeed, misleading claims relating to sugar and nutrition need to be verified. A credible labeling can maximize consumer awareness about GM foods and minimize health-related risks (Vecchio and Annunziata, 2015).

However, it is also argued that labeling GM foods may not be useful to consumers as they do not only rely on the label-based information but also on the diversity of the supply of food products which in fact may curtail consumer's choices. Further, GM labels may mislead some or many



Photo 5/17

Two featherless chickens peck around in some grass May 22, 2002 at the Hebrew University in Rehovot. Israeli scientists at the Agriculture department of the university have genetically engineered bare-skinned chickens as part of a research project to develop succulent, low fat poultry that is environmentally friendly. The naked chicken, as the bird has been dubbed, would also save poultry farmers large amounts of money on ventilation to prevent their chickens from overheating.

REUTERS/Havakuk Levson

Genetically Modified Organisms (GMOs), Fig. 1 Genetically Modified Featherless Chickens (GM, 2020)

consumers by making them falsely believe that the government thinks that GM foods do pose risks to health or the environment because it is not easy to show the benefits (Legge and Durant, 2010). Precisely for this reason, GM food labeling in EU may indicate that the GM food is not good. GMO opponents tend to frame the issue by eliciting emotions and impairing scientific evidence, whereas GMO proponents stress scientific evidence and its benefits.

Future Directions

It is interesting to note that countries have varying degree of acceptance of GMOs depending upon the interplay of political and social orientations. Some countries (e.g., the USA, Argentina, and Canada) overwhelmingly support GMOs, whereas others (e.g., France, USSR) oppose it. Although food products are generally recognized as safe and low involvement products, consumers may get highly involved, and their anxiety heightened due to the unpredictable nature of GM foods (Hughner et al., 2007). Further, it is a daunting task for consumers to establish veracity of claims as they may not have the necessary scientific and technical knowledge of GM technology or the resources such as the laboratory, leading to consumer mistrust. In this regard, the consumers would greatly benefit from more balanced and consistent information on GM food labeling requirements.

Governments in many developing countries have shown reluctance to approve cultivation of GM crops. This may be due to inadequate safety information availability about the technology and poor understanding of potential benefits and risks of GM crops. Therefore, it is recommended that feasibility study be conducted relating to GM food acceptability and GM technology marketability before GM food commercialization. Almeida et al. (2015) find that some farmers are willing to cultivate GM seeds after receiving information on the potential benefits and risks of the technology. European farmers and industrial food producers

may miss the opportunity to profit from the benefits of GMO use. Because the regulation is at EU level, this is applied equally to all farmers and producers, leaving no one with competitive advantages for that reason. The next generation of GMOs and GM foods will be unimaginable – scientists are eager to grow featherless chicken (Fig. 1) to save time to undress them and hence higher productivity in addition to the enhanced nutrients (GM, 2020) of course, designer babies too – more beautiful!



'Designer babies' could be just two years away, expert claims

By Jack Guy, CNN

Updated at 6:24 AM on Tuesday, November 19

(CNN) • Genetically-modified babies are "highly desirable" to help protect people from disease and could be created ethically within two years, according to a new scientific paper.

Cross-References

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References

- Abeyesundara, A. T., Aponso, M. M., & De Silva, G. O. (2017). A review on edible vaccines: A novel approach to oral immunization as a replacement of conventional vaccines. *International Journal of Food Sciences and Nutrition*, 2(4), 19–22.
- Almeida, C., Massarani, L., & Moreira, I. D. C. (2015). Perceptions of Brazilian small-scale farmers about genetically modified crops. *Ambiente and Sociedade n São Paulo*, 18(1), 193–210.
- Ayyagari, R., Grover, V., & Purvis, R. (2011). Techno-stress: Technological antecedents and implications. *MIS Quarterly*, 35, 831–858.
- Byrne, P. (2010a). *Labeling of genetically engineered foods, fact sheet no. 9.371. Food and nutrition series, September 2010*. Fort Collins: Colorado State University Extension.
- Byrne, P. (2010b). *Labeling of genetically engineered foods. Fact sheet no. 9.371. Food and nutrition series, September 2010*. Fort Collins: Colorado State University Extension.
- CFS. (2013). *Center for food safety, about genetically engineered foods*. Washington, DC. <http://www.centerforfoodsafety.org>. Accessed 20 Jan 2020.
- GM. (2020) *Chicken pic: http://www.reuters.com/news/pictures/slideshow?articleId=USRTXTZ7A#a=1*. Accessed 27 Jan 2020.
- ECR. (1999). European Community Report, Harnessing the Potential of Modern Microbiology.
- GlaxoSmithKline. (2014). *The role of transgenic animals in biomedical research a publication of GlaxoSmithKline communications and government affairs*. <https://jp.gsk.com/media/503246/role-transgenic-animals-policy.pdf>. Accessed 30 Jan 2020.
- Huang, J., Hu, R., Rozelle, S., & Pray, C. (2008). Genetically modified rice, yields and pesticides: Assessing farm-level productivity effects in China. *Economic Development and Cultural Change*, 56, 241–263.
- Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behavior*, 6, 94–110.
- Issac, G. E., & Hobbs, J. E. (2002). GM food regulations: Canadian debates. *Canadian Journal of Policy Research*, 3(2), 105–113.
- James, C. (2012). *ISAAA brief 43, global status of commercialized biotech/GM crops: 2011* (ISAAA briefs, February 7, 2012). Ithaca/New York: International Service for the Acquisition of Agri-biotech Applications. <http://www.isaaa.org>. Accessed 27 Jan 2020.
- Kou, J., Ping, Q., Tang, L., & Zhang, X. F. (2015). Agricultural GMOs safety administration in China. *Journal of Integral Agriculture*, 14, 2157–2165.
- Kulikov, A. M. (2005). Genetically modified organisms and risks of their introduction. *Russian Journal of Plant Physiology*, 52(1), 99–111.
- Legge, J. S., Jr., & Durant, R. F. (2010). Public opinion, risk assessment, and biotechnology: Lessons from attitudes toward genetically modified foods in the European Union. *Review of Policy Research*, 27(1), 59–76.
- Oda, L. (2003). Proposta da Associação Nacional de Biossegurança ao novo Projeto de Lei de Biossegurança do Brasil.
- Pandey, A., Kamle, M., Yadava, L. P., Muthukumar, M., Kumar, P., Gupta, V., Ashfaq, M., & Pandey, B. K. (2011). Genetically modified food: Its users, future prospects and safety assessments. *Biotechnology*, 9, 444–458.
- Reilly, J. M. (1989). Consumer effects of biotechnology. *Agriculture Information Bulletin*, 581(December), 1–11.
- Rodríguez-Entrena, M., & Salazar-Ordóñez, M. (2013). Influence of scientific–technical literacy on consumers’ behavioral intentions regarding new food. *Appetite*, 60, 193–202.
- Sand, P. H. (2006). Labelling genetically modified food: The right to know. *European Community & International Environmental Law*, 15(2), 185–192.
- Sheingate, A. D. (2006). Promotion versus precaution: The evolution of biotechnology policy in the United States. *British Journal of Political Science*, 36(2), 243–268.
- Shewfelt, R. L., & Shewfelt, R. L. (2016). How does food processing change the nutritional value of foods? *Definition Processing Food*, 107–123.
- Spohn, S. G. (1996). The making of environmental policy decisions. In F. B. Rudolph & L. McIntire (Eds.), *Biotechnology. Science, engineering, and ethical challenges for the twenty-first century* (pp. 246–259). Washington, DC: Joseph Henry Press.
- Vecchio, R., & Annunziata, A. (2015). Willingness-to-pay for sustainability-labelled chocolate: An experimental auction approach. *Journal of Cleaner Production*, 86, 335–342.
- WHO. (2014). World Health Organization. Frequently asked questions on genetically modified foods – May 2014. https://www.who.int/foodsafety/areas_work/foodtechnology/Frequently_asked_questions_on_gm_foods.pdf?ua=1. Accessed 27 Jan 2020.

Genetically Modified Products

► Genetically Modified Organisms (GMOs)

Genuine Progress Indicator (GPI)

► Index of Sustainable Economic Welfare

Geoconservation and Tourism

► Geotourism and Sustainability

Geo-engineering

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Synonyms

Climate engineering; Climate intervention; Climate modification

Definition

Geoengineering, or climate engineering, designates technologies that can or could be, in a more or less distant future, deployed for altering Earth's climate. The goal is to counterbalance climate change or some of its effects (e.g., temperatures' surge). Their attractiveness stems from nations' difficulties for coordinating cuts in carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions such as methane, nitrous oxide. Geoengineering technologies are commonly divided into two categories: *carbon dioxide removal* (CDR) and *solar radiation management* (SRM). CDR consists in extracting CO₂ from the atmosphere and storing it. Techniques vary from enhancing natural processes, e.g., by reforesting large areas and increasing photosynthesis, to more complex steps like installing capture devices on factories. SRM is about ramping out the albedo, i.e., Earth's capacity of reflecting solar radiation. SRM can or potentially could be achieved through various means: stratospheric aerosol injection of chemical components as sulfuric acid, spraying sea water droplets from boats for generating more white clouds (so-called cloud whitening), painting in white

streets (as in Los Angeles) and roofs, and so forth. The two sets of technologies (and the subsumed techniques) do not generate the exact same technical, political, and ethical issues, even if there is some overlap. If CDR remains in general uncontroversial on the principle (notwithstanding problems regarding the storage itself), SRM raises serious governance and distributive concerns.

Introduction

Humanity has constantly shaped its “natural” environment, modifying vegetal species, domesticating animals, and altering landscape features. This influence is particularly visible since the Neolithic, when an agricultural revolution took place coupled with the spread of animal husbandry among other transformations. However, the scale of man-driven changes has been dramatically deepening in modern history. By burning fossil fuels along the industrialization process, the concentration of GHG in the atmosphere has been soaring, which impacts the whole Earth. Changes have been so drastic and profound that some scientists consider that we are now in the *Anthropocene* (derived from “anthropo-” human and suffix -cene used for designating geological series/epochs during the Cenozoic period, from 66 million years until now), a geological epoch which main force is humanity (Crutzen and Stoermer 2000).

Geo-, or climate, engineering is often presented as an answer to such transformations, which explains why the topic is gathering momentum (e.g., Shepherd 2009). It started to be tested after World War II. For instance, during the Vietnam War cloud seeding attempts were made for causing intense rains and disrupting the supply of Vietnamese insurgents on the Ho Chi Minh trail. Other major military powers had research programs.

From a civilian perspective, geoengineering can be interpreted as humanity fully assuming its responsibility by either canceling out its adverse influence on the climate (and returning to a hypothetical, “unaltered,” situation) or by pushing changes in a different, less harmful, direction. However, it is strongly criticized for various reasons.

One objection is that it perpetuates the Promethean project of shaping Earth according to human needs and desires, which is morally reprehensible. Another is the uncertainty carried by large-scale intervention in the Earth system, especially considering the complexity and fragmentary knowledge of the climate. Such an intervention may potentially generate broader and more serious climatic risks. Therefore, prudence would be crucial. A distinct criticism is to underline the most likely disparate impact of geoengineering on different regions. Indeed, it would not affect evenly world areas. For instance, sulfur aerosols might diversely alter precipitations all over the globe, some places receiving more and others less than previously.

Therefore, geoengineering raises at least three issues: one of (moral) acceptability (is it a legitimate activity?), one of governance (when and how to implement it?), and one of redistributive justice (how to allocate *fairly* the benefits and burdens resulting from climate manipulation? How to compensate those who suffer from these interventions?)

An Intentional Alteration

In the past, human beings have altered the environment, mainly at a local or regional scale for the best as for the worst (e.g., Easter Island, extinction of Australian megafauna). The Anthropocene is the first (still debated) geological epoch where humans are the driving force and, since recently, are aware of their impact. Although humans have been modifying the climate, geoengineering is more serious. It does not only refer to humans transforming the climate, but to doing so on purpose. Therefore, even if, conceptually, geoengineering could be voluntary or involuntary (climate change itself is the most prominent example of the latter since humans have not attempted at altering the climate, it has happened as a by-product of economic activity), geoengineering defines *intentional climate* transformation by means developed to this end.

There are two main families of technologies, each being characterized by technical specificities (e.g., degree of maturation, costs, risks, and

uncertainties) and ethical dimensions (e.g., governance, redistributive effects).

Carbon Dioxide Removal (CDR)

CDR technologies have in common to attempt at capturing and sequestering carbon in different kinds of “reservoirs” (plants, ocean bottom, deep geological layer, and so forth). The ultimate goal is to address the cause of climate change by lowering the concentration of CO₂ in the atmosphere.

The term designates a large array of techniques. Reforestation, afforestation (planting in areas without previous significant tree cover), or the development of wetlands can be counted as geoengineering since, under specific circumstances, it contributes to trapping carbon. To some extent, these are techniques which are the most accessible, but with an impact that may not be immediately noticeable. Also, they are land-use intensive, meaning that they require large spaces for being implemented, which is problematic considering the current growth of the world population.

Other techniques such as ocean fertilization (e.g., sprinkling iron on oceans for stimulating phytoplankton and photosynthesis) or biochar (burning biomass in the absence of oxygen) adopt a more interventionist approach by interfering into natural processes. Along means that mimic or support natural processes, CDR refers to costly technologies, still under development. A possibility is to capture CO₂ right at the point of emission through filters, i.e., at the chimney of the factory or power plant. An alternative is to pump CO₂ directly out of the atmosphere.

In general, if most options are, at least theoretically, practical, many remain (extremely) difficult to implement since they demand further development and ambitious investments. Therefore, the feasibility of CDR on a significant scale stays speculative. Moreover, storage may create serious hazards. For instance, if kept at the bottom of oceans, carbon may endanger marine life, especially when drifting. Depending on the deposit location, there could also be the risk of deadly

leaks like what happened during the Lake Nyos disaster in Cameroon in 1986.

The necessary investments and large-scale feasibility explain why CDR is usually less discussed than SRM. However, some carbon capture technologies have started to be developed by private companies. Moreover, since some of the techniques consist in supporting natural processes, so appearing at first sight less disruptive, it explains why concerns seem to be more focused on SRM.

Solar Radiation Management (SRM)

SRM is a second family of geoengineering technologies. The purpose is to diminish the radiative forcing (i.e., the amount of solar power absorbed by Earth) through an intensification of Earth's albedo (i.e., reflectivity). This could be done by improving the reflective properties of buildings, roads, etc. for instance by white painting them. An alternative is to have boats pumping in the air seawater droplets, which will lighten marine clouds and enhance their reflectivity. A controversial technique is to use specially designed aircraft that will drop in the stratosphere (second layer of the atmosphere comprised between the troposphere and the mesosphere) sulfur that will dim the atmosphere, e.g., sulfuric acid, sulfur dioxide, hydrogen sulfide.

SRM covers various techniques, few being immediately implementable at low cost (e.g., roof painting), others requiring more investments (e.g., stratospheric injection) whereas some flirting with science fiction (e.g., space reflectors). In addition, SRM technologies differ according to their zone of intervention: ground or sea level (roads, roofs, marine cloud whitening), stratosphere (e.g., sulfur aerosols), or space for the most ambitious (e.g., reflectors).

Among these techniques, stratospheric injection stands apart. The principle is to mimic the effect of a major volcanic eruption (on the model of the Pinatubo in 1991 but on a larger scale) by injecting sulfate in the stratosphere (so the particles remain floating for 1–2 years). The result is enhanced albedo, i.e., more sunlight reflected.

This technology attracts most of the attention and critiques, primarily because it is actively promoted by researchers and companies (e.g., David Keith and his SCoPEX, Bill Gates) whereas being attainable at low costs but high uncertainty. Furthermore, a state with enough resources for developing specific aircrafts could start geoengineering on its own (Smith and Wagner 2018). Contrary to options such as space reflectors, it appears to be feasible under reasonable assumptions and in the short run.

In addition, aerosol injection will have widespread effects, creating winners and losers at the global scale, stressing questions of international governance. Critiques suspect that it will lead to increase the temperature of stratosphere, deplete the ozone layer, and diminish precipitation worldwide. More worryingly, it does not tackle the fundamental issue – the concentration of CO₂ and other GHG such as methane – and focalize instead on one symptom: the rise of heat. Finally, by desynchronizing the amount of CO₂ with global temperatures, it triggers a risk of “termination shock” if coming to a sudden end. Such a shock could lead to a brutal surge in heat along with extreme events or, even, to upset climate for a long period by crossing a tipping point.

Reasons for Geoengineering

The major reason for considering geoengineering is the inability of national governments to agree on and enforce drastic emission cuts. This incapacity is exemplified by the failure of negotiations led since the 1992 Earth Summit in Rio especially under the United Nations Framework Convention on Climate Change (UNFCCC). If no significant progress is made on mitigation, trying to actively counterbalance climate change appears to be the main alternative to the status quo, which is precisely what geoengineering promises.

The overall situation has the traits of a tragedy of the commons (Hardin 1968). The majority of governments has the same short-term interests: pursuing development by burning, presumably cheap and readily available, fossil fuels which

by-product is a massive release of CO₂ and other GHGs in the “common” (atmosphere). However, all nations would be better off if they could collectively agree on decarbonizing their economy by relying on renewable energies. Such a decision would slow down and, at some future point in time hopefully, lower GHG concentration and, thus, preserve the “common,” which is in the best interest of every country in the long run. This conflict between short-term and long-term interests explains why most countries have a strong incentive to free ride by refusing to reduce or cheating on their GHG release: leaving to other nations the burden of mitigation.

In that context, geoengineering is regularly presented (e.g., Keith 2013) as offering several advantages. First of all, it will permit to gain time for reaching a global agreement on drastic GHG cuts. In sum, geoengineering, especially under the cheaper and more quickly feasible forms, will allow to keep in check GHG concentration and temperatures while implementing mitigation and adaptation strategies.

In rarer instances, advocates present it as a “plan B” or a plan of last resort, i.e., a fallback solution if mitigation fails. The idea is to mobilize climate engineering in the case of all other options (mostly GHG cuts) falter. Critiques contend that mitigation is the first best solution everything considered and geoengineering creates so much uncertainty.

Climate engineering can nonetheless be seen as necessary, especially when considering the current course of GHG emissions. Since there is little chance to respect the Paris Agreement (2015) (due to lack of reforms and the opposition of countries such as the United States), past and present emissions have been setting the world on a path for global warming well over 2°C for 2100, and the adverse consequences will last for centuries, if not longer. For avoiding the worst of it, it is vital to initiate “negative emissions” as soon as possible, viz., more carbon is removed from than pumping into the atmosphere every year. Considering our current emissions and the existing concentration of GHG, natural processes (even enhanced) may be insufficient. Therefore, CDR would be a necessary evil. Since humanity has

been changing the climate through fossil-fuel combustion, geoengineering could be interpreted as a manner of assuming responsibility for the Anthropocene.

Many of its advocates do not consider it as a panacea. Rather, they see it as an option for buying time for pursuing mitigation and adaptation or as a last-resort alternative if everything else fails. Furthermore, they claim that since geoengineering under one form or another should be on the table, there is an obligation to undertake scientific research on the topic for taking informed political decisions, point that is contested.

Reasons Against Geoengineering

Geoengineering in itself, more particularly SRM (stratospheric aerosols), is at the core of heated debates (e.g., Hamilton 2013). Paradoxically, advocates and critiques agree that it generates risks, uncertainties, as well as winners and losers. The points of contention are the nature, extent, and seriousness of such risks, the amount of uncertainty (adverse effects that escape probabilistic assessment), and the pertinence of scientifically investigating the options.

The most radical opponents argue that the very fact of researching and discussing these technologies render them more acceptable by decision makers and the general public. It also lures citizens and governments to pursue “business-as-usual.”

A worse problem is that it breeds moral hazard. Since governments, corporations and citizens know that there might be some “solutions” to tame climate change and most of its adverse consequences, they may feel less pressured to cut their emissions. To some extent, geoengineering may curtail efforts to successfully tackle the present situation in exchange for some inefficient, unrealistic, or very dangerous alternatives.

This last objection applies as much as to deploying than researching geoengineering. Other criticisms revolve around the following issues.

Geoengineering is bad in itself because it interferes with nature, which is intrinsically wrong. However, it could be replied that the choice is

not between disturbing the nature and abstaining from doing it since humanity is already dramatically changing the climate. Moreover, one could claim that doing nothing equates disrupting natural cycles of carbon for instance.

A variant of this criticism is to underline that by engineering the climate, humans are playing God. They pursue the Promethean project of dominating and modeling nature, the very project that has guided industrialization. It would then constitute the last step of hubris (i.e., arrogance) in the face of nature.

Another set of objections focuses on the possible negative consequences. Geoengineering would be morally problematic not so much in itself, but because of probable outcomes. Such a claim relies on risk assessment and stresses the unfavorable balance between potential benefits and costs. The “termination shocks” evoked for stratospheric aerosol injection fall within this category.

A formulation of this claim is to underline the risks of messing up with complex (and not properly understood yet) natural mechanisms. Climate engineering would generate too much uncertainty with looming catastrophic harms that would be global. Some version of the precautionary principle (idea that actions should be suspended in presence of extraordinary risks or grave uncertainty) comes into play in this line of argumentation.

Another criticism, opposite to the previous, is to stress the inefficiency of geoengineering in adequately addressing climate change (and challenges of the Anthropocene such as species mass extinction) by being incapable of cutting CO₂ and other GHG within a reasonable timespan. Stated differently, it offers poor “fixes” to the most serious difficulty humanity has faced. Geoengineering would then represent a fatal distraction, leading to waste time on the adaptation and, more importantly, mitigation agendas.

A third type of problem is properly political and raises the double issue of (distributive) justice and governance. Geoengineering is most likely to produce divergent effects depending on geographical locations. Some regions will benefit from a more clement climate whereas others will be affected by harsher than usual meteorological conditions (e.g., droughts, floods, hurricanes). In addition, it may

decrease rainfalls at the planet scale, warm the stratosphere, and deplete the ozone layer.

First, because of the high probability of disparate impacts, it would be necessary to negotiate internationally any geoengineering strategy. However, on this aspect, global politics suffer from the same shortcoming that pushes for geoengineering at first place: the extreme difficulty, if not impossibility, to coordinate sovereign countries. This is worsened by the fact that all outcomes are arduous to properly foresee before the actual implementation.

Second, once measures are set in motion, some will win, others will lose. A basic principle of justice posits that, in a situation where harms cannot be averted, victims ought to be compensated. This obligation is reinforced when individuals suffer from no fault of their own, have not agreed (which is very likely), and are hurt by actions undertaken by other individuals for their own benefits. In short, many will endure what economics call negative externalities, i.e., costs imposed on them without their consent to the advantage of other parties. Pollution is a common example.

The justice dimension goes beyond the present generations. If geoengineering legitimately underlines the fair distribution of benefits and burdens for the current generations, such questions are amplified when future ones are considered. Since transformations brought by climate change and geoengineering will deeply affect the daily life of human beings during centuries (if not more), future generations have a stake in decisions made now. Thus, before tampering with the climate, it is morally required to take into account the interests of the humans to come. The challenge is then to determine how to integrate such interests.

Considering the current international relations, it is very unlikely that sovereign states agree on a compensatory scheme. Thus, it is highly probable that geoengineering will produce unjust outcomes without redress. A further issue is the threat of ill-intended use. In line with its military past, it is possible to have governments deciding to conduct, for instance, stratospheric aerosol injection as a weapon.

The risk of malevolent deployment and difficulties of cooperation highlights a fundamental

shortcoming: (almost) absent and defective international governance. Due to the fact that geoengineering has broad and disparate effects, many of which cannot be foreseen, it would require that countries coordinate their efforts for research, planning, implementation, and management of the outcomes. However, climate change has the characteristics of a tragedy of commons, which jeopardizes any global governance.

Summary

Geoengineering refers to technologies that aim at altering the climate. The objective is to counterbalance the impact of climate change. These technologies are usually classified into two categories: carbon dioxide removal (CDR) and solar radiation management (SRM). CDR consists in extracting CO₂ from the atmosphere and storing it deep in the oceans or within Earth. SRM consists in increasing the albedo, i.e., Earth's capacity of reflecting back solar radiation. Geoengineering is reaching a momentum due to countries' inability to coordinate for addressing steeply rising greenhouse gas emissions and concentration. Therefore, climate engineering is seen as an option for gaining time in order to implement serious mitigation and adaptation measures. However, such an option has to answer various criticisms which stress the human arrogance underlying the whole project, the risks and uncertainties and the adverse impacts on part of the population. In any case, geoengineering is facing the same problem as other domains of climate policies: the lack of coordination among countries which tend to free ride on the necessary emissions cuts.

Cross-References

► [Climate Ethics](#)

References

Crutzen, P. J., & Stoermer, E. F. (2000). The 'Anthropocene'. *Global Change Newsletter*, 41, 17–18.

Hamilton, C. (2013). *Earthmasters: The Dawn of the age of climate engineering*. New Haven: Yale University Press.

Hardin, G. (1968). The tragedy of the commons. *Science*, 162(3859), 1243–1248.

Keith, D. (2013). *A case for climate engineering*. Cambridge: MIT Press.

Shepherd, J. G. (2009). *Geoengineering the climate: Science, governance and uncertainty*. London: The Royal Society.

Smith, W., & Wagner, G. (2018). Stratospheric aerosol injection tactics and costs in the first 15 years of deployment. *Environmental Research Letters*, 13(12), 1–11. <https://doi.org/10.1088/1748-9326/aae98d>.

Geopark Estrela

► [Geopark Serra da Estrela](#)

Geopark Serra da Estrela

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Synonyms

[Estrela Geoparque](#); [Estrela UNESCO Global Geopark](#); [Geopark Estrela](#)

Definition

Serra da Estrela corresponds to a mountain territory in the central inland of Portugal, with relevant resources of geological and geomorphological interest, associated with its formative history and glacial modeling. The diversity of elements and forms associated with glaciations, the biodiversity, and the identities of the local ways of life promote Estrela as a natural laboratory, a space for education and science. In its territorial dimension, it integrates nine municipalities with an area of

2216 km² and a population of 170,000 inhabitants. The classification of Estrela Geopark by UNESCO implied a revaluation and a new dimension for its development and sustainability, by promoting a holistic strategy, based on its geography, natural heritage, cultural references, and the self-esteem of its communities (Fernandes; Castro & Tracana, 2021). Geopark Estrela has the mission of contributing to the protection, valorization, and dynamization of the natural and cultural heritage, with special emphasis on geological heritage, to deepen and disseminate scientific knowledge, promoting tourism and sustainable development of the Serra da Estrela. On the whole, Geopark seeks the development of an integrated development strategy, allied to enhancing heritage, fostering geoconservation, education, and tourism, and supported the construction of development strategies for the well-being of communities.

Introduction

The geodiversity and biodiversity of the Serra da Estrela, structured by its geomorphology and the marked presence of glacial and periglacial traces, establish in this mountain a natural heritage that is associated with the ways of life and cultural identities and support the classification as a UNESCO World Geopark. These elements, due to their preservation and heritage value, consolidate the natural laboratory dimension of this territory and the educational, scientific, and touristic value of this mountain. The geoconservation of heritage is one of the most important activities of a geopark, in the context of sustainable development of the territory, promoting the implementation of projects for the preservation of natural spaces, environmental education, enhancement of tourism, and activities that increase the welfare of local communities.

Estrela UNESCO Global Geopark

Estrela Geopark integrates the globality of mountain territory of Serra da Estrela, which gives it a geographical identity and territorial symbolism,

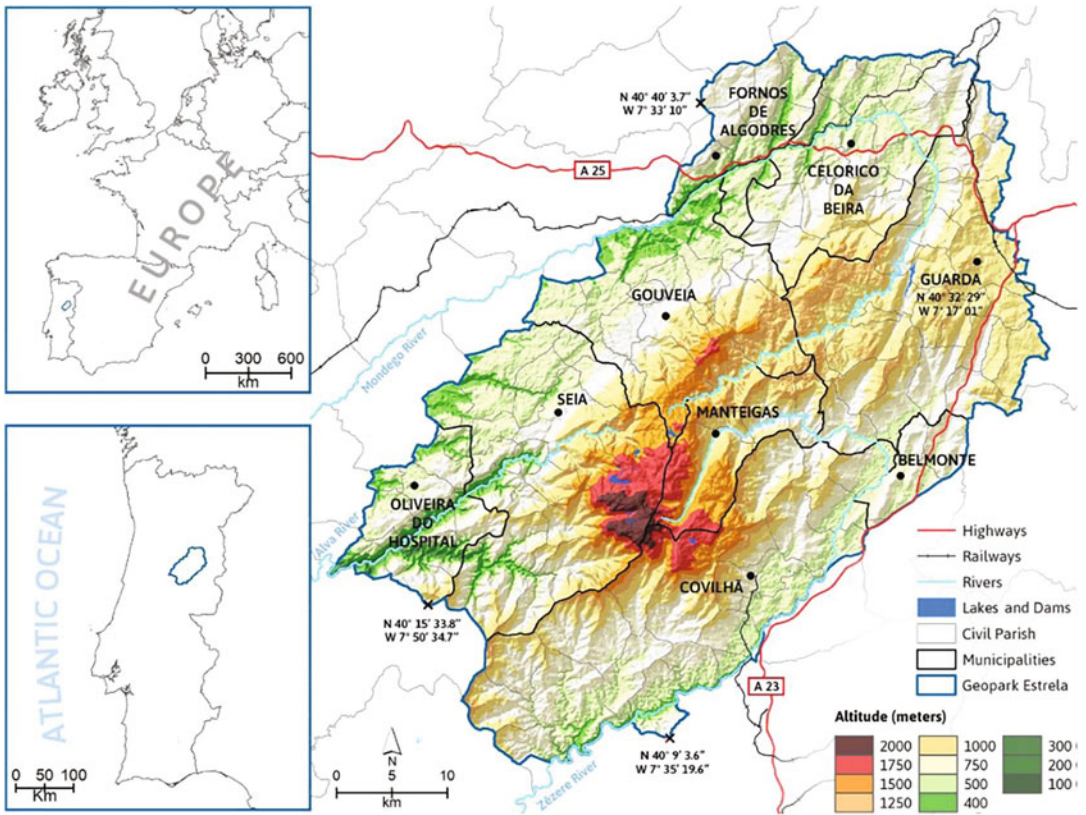
framed in a space bounded to the southwest by Serra do Açor, to the south by Cova da Beira, extending until the contact with the surface of the Iberian plateau to the northeast of Portugal. The Serra da Estrela represents the highest mountain in mainland Portugal, with 1993 meters in the Alto da Torre, and has a protection status (protected area) its classification as Parque Natural da Serra da Estrela (PNSE) (Fig. 1). The territory of the Estrela Geopark encompasses an extended area to include the main geological formations and processes that contributed to its geodiversity and classification as UNESCO Global Geopark (Fig. 2).

Serra da Estrela is the highest mountain range in mainland Portugal, is part of the Iberian Central Cordillera, and is “bounded by fault scarps, granite massifs occupy the central area forming a summit plateau between ci. 1400 and 2000 m, while surrounding the core area, there is an interplay with schists and greywackes” (Vieira, 2004: 38). The territory translates a differentiated mosaic of landscapes, as a result of geological transformations, climatic contrasts, and forms of occupation over time, creating an ecocultural memory to be valued and preserved.

Geodiversity highlights are the following: “glacial landscape with geosites of international scientific relevance; a rich diversity of geosites of national relevance (e.g. tectonic, periglacial, granite landforms, hydrogeological, petrological and mining); numerous geosites with very high educative and touristic relevance; excellent access to most geosites; long history of geological and geomorphological research” (Gomes et al., 2018: 89).

The Estrela Geopark: Axes of Action

For geoconservation and environment, it is intended to establish a geoconservation strategy in which all natural values should be included, covering not only biodiversity but also geodiversity, promoting actions that consider in a holistic and integrated way all the ecocultural heritage and ensure careful and sustainable management procedures, capable of recognizing the vulnerability of this heritage and its valorization in collective strategies and with the effective participation of the communities.



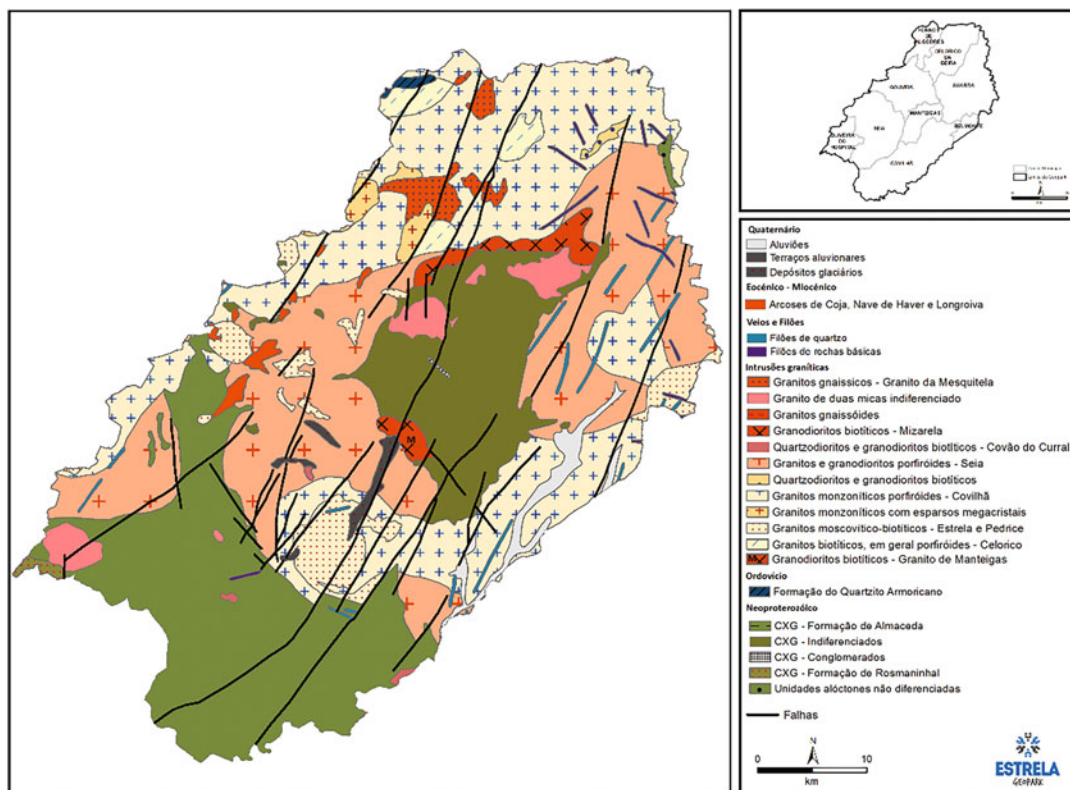
Geopark Serra da Estrela, Fig. 1 Associação Estrela Geoparque – location and altimetry map

A strategy is implemented in the territory that aims to increase scientific knowledge, through a network of science and education, thus allowing to make the Estrela Geopark a competitive pole in research in mountain areas and the promotion of geosciences. Establish partnerships with several higher education institutions and research centers allow to develop studies and achieve capabilities for a better knowledge of natural history, in particular geomorphology, climatic conditions, and ongoing changes that affect the Serra da Estrela region and its heritage. Thus, and with a focus on various areas, such as geology, biology, or tourism, new, better-grounded strategies can be put in place that will contribute to the sustainable development of the territory.

Geopark Estrela has defined an innovative geoconservation strategy that allows the monitoring, valuation, and integration of the different 124 geosites, assessing their degree of

vulnerability resulting from both natural and anthropogenic processes (Fernandes et al., 2016; Gomes et al., 2017; Gomes et al., 2018).

Education is a pillar of geotourism and the sustainability of heritage for visitors and local communities. The means and supports for knowledge, didactic interpretation, and dissemination are crucial both for the enhancement and protection of these resources. Geotourism allows the promotion of geological heritage, science, and community valuation, promoting awareness for a concerted geoconservation. Geoparks emphasize a collective development strategy, promoting the conciliation of responsibilities (environmental, social, and economic) that are currently projected in a solidary and cooperative way in the municipalities of Serra da Estrela in actions of enhancement, conservation, and territorial promotion, through the creation of Estrela Geopark.

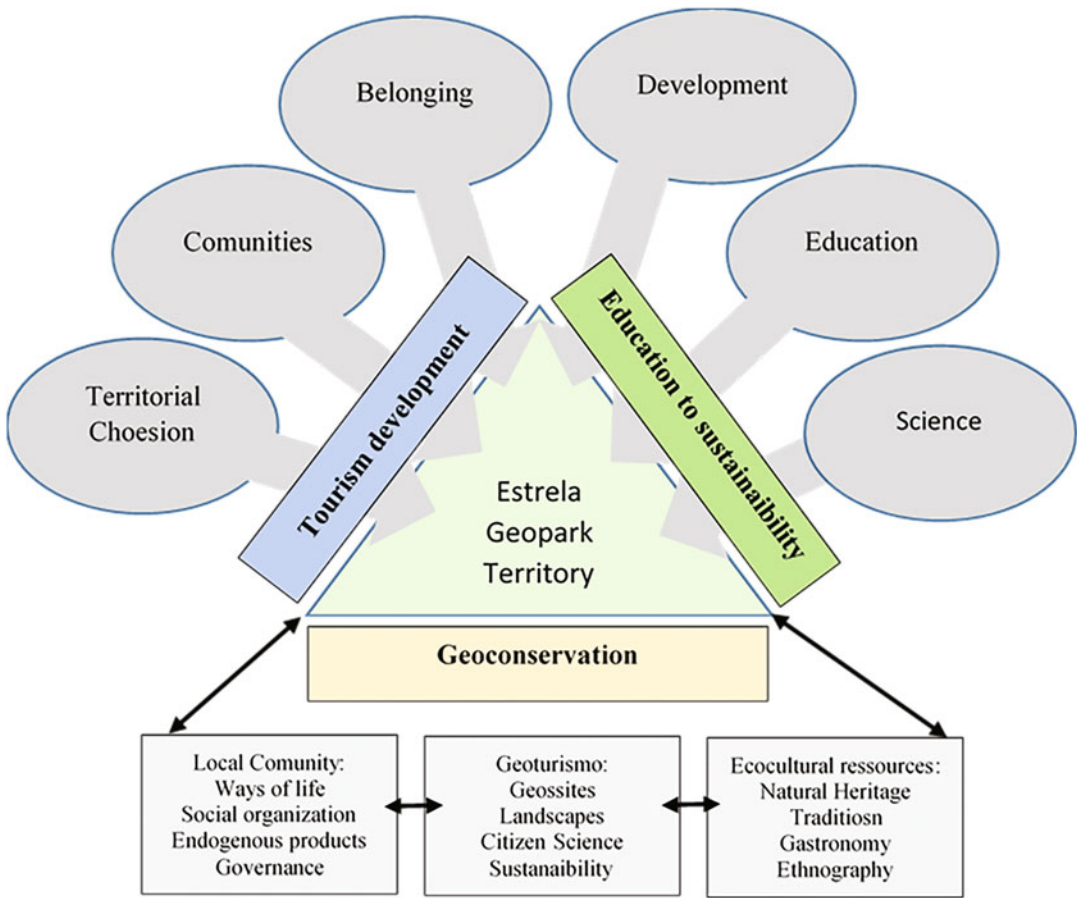


Thus, education or geoeducation, in the scope of the world Geoparks of UNESCO, is a key instrument for the awareness of communities and the recognition of the importance of preservation of the geological heritage (Brilha, 2004; Brilha, 2005; UNESCO, 2015). Tourism corresponds to a relevant process for the economy of the communities and important contribution to the valorization of the Geopark's resources, allowing: to expand tourist demand; to develop differentiated tourist products; to strengthen protocols and partnerships among the different players; to strengthen a tourist brand based on heritage and culture; to bring the community closer to the managing entities; and to promote support for the destination's qualification and territorial cohesion.

Communication assumes a prominent role in the knowledge, appreciation, and attraction of the Estrela Geopark, being determinate in an integrated and participative development

strategy (Fernandes et al., 2021) (Fig. 3). The communication promotes a bigger conscience of the Estrela Geopark brand, its value, and territorial and patrimonial meaning, foment the spreading and dissemination of the territory and its patrimonial, didactic, scientific, and cultural values, and generates a bigger attraction for tourists and investments, generating opportunities for the local population and the creation of jobs and services.

As tourism is a determining factor in the economy of the region, the focus should be on this given a more sustainable and diversified offer. For this, it is necessary to make a bet on other tourist aspects such as Nature Tourism, Scientific Tourism, and Wellness Tourism. A focus on a new development policy focused on the above elements will allow for the creation of new investment opportunities that can therefore contribute to mitigating the demographic trends currently observed.



Geopark Serra da Estrela, Fig. 3 Conceptual framework of the Estrela Geopark and effects on the valorization of the territory

As a UNESCO program is in the pipeline, the 2030 Agenda Sustainable Development Goals must be taken into account. The International Geoscience and Geopark Program (IGGP) is one of the instruments of the United Nations to implement this agenda, and some objectives, such as the Reduction of Inequalities (SDG 10), reducing inequalities within and between countries, the Climate Action (SDG 13), urgent measures to mitigate this global problem, and Sustainable Cities and Communities (SDG 11), contributing to the sustainability of the classified territories.

Final Remarks

The territory of the Estrela Geopark has an unmistakable geological heritage, with its focus on the

most important forms associated with glacialism, periglacialism, and fluvioglacialism in Portugal, some of them of international relevance. Its landscapes and mountain environment make this territory a “living laboratory” for studying the Earth dynamics, linked to climate change and natural hazards, mountain ecosystems, and tourism. However, in addition to the natural heritage the ancient history of human occupation enriches this classification, examples being the ancient practice of transhumance that is part of the culture of this territory, and which is the origin of the real name of this mountain – Estrela.

The classification of Estrela as a UNESCO Global Geopark results from a collective development strategy, anchored in the geological heritage and the valorization of the territory, articulating education, science, and tourism. It brings a

challenge and a responsibility for the governance, particularly to improve sustainability strategies, promoting networking among the different actors in the territory. This classification fosters identity, preservation, and self-esteem for the community.

Summary

Estrela Geopark comprises a geographically defined territory, with resources of geological and geomorphological interest of international relevance. The Estrela Geopark allows for enhancing, disseminating, and preserving resources that allow the promotion of educational, scientific, touristic, and social strategies in an articulated and transversal way. The diversity of resources (natural and cultural), the richness of its heritage, and the singular character of the landscape make Estrela a geography with an identity and ability to promote sustainable development, combining a strong tourist brand.

Cross-References

► [Geotourism and Sustainability](#)

References

- Brilha, J. (2004). *A importância dos Geoparques no Ensino Divulgação das Geociências*. Universidade do Minho.
- Brilha, J. (2005). *Património Geológico e Geoconservação: a conservação da Natureza na sua vertente geológica*. Universidade do Minho.
- Fernandes, G., Castro, E., Firmino, G., & Ferreira, A. (2016). Geoparks and regional and local development: Aspiring Estrela Geopark. *European Geoparks Conference*. <https://doi.org/10.13140/RG.2.2.28770.94405>.
- Fernandes, G. P., Castro, E., & Tracana, R. B. (2021). Tourism as a strategy for geo-education and cultural valorization of territories: Promoting ecocultural values and Geoconservation in Estrela Geopark, Portugal. In F. Brandão, Z. Breda, R. Costa, & C. Costa (Eds.), *Handbook of research on the role of tourism in achieving sustainable development goals* (pp. 117–137). IGI Global. <https://doi.org/10.4018/978-1-7998-5691-7.ch007>.
- Fernandes, G., Tracana, R. B., Castro, E., & Fernandes, M. (2021). Geoeducation and tourism in Estrela UNESCO global Geopark (Portugal) and its contributions to the construction of a sustainable destination. In A. Mandić & L. Petrić (Eds.), *Mediterranean protected areas in the era of overtourism*. Cham: Springer. https://doi.org/10.1007/978-3-030-69193-6_7.
- Gomes, H., Fernandes, M., Castro, E., & Vieira, G. (2017). The (serra da) Estrela Aspiring Geopark (Portugal): Preserving geoheritage, while promoting science and its links to local communities. *Geophysical Research Abstracts Vol. 19, Conference Paper, EGU General Assembly*.
- Gomes, H., Castro, E., Loureiro, F., Patrocínio, F., Firmino, G., Vieira, G. & Fernandes, M. (2018). The Geoconservation Strategy in Estrela Geopark. *Proceedings 8th International Conference on UNESCO Global Geoparks*, Italy.
- UNESCO. (2015). *Statutes of the International Geoscience and Geoparks Programme and Operational Guidelines for UNESCO Global Geoparks*: UNESCO, Paris, 16p.
- Vieira, G. (2004). *Geomorfologia dos Planaltos e Altos Vales da Serra da Estrela. Ambientes frios do Plistocénico Superior e Dinâmica Atual*. PhD Tesis, Universidade de Lisboa, CEGOT, p. 724.

Geosustainable Tourism

► [Geotourism and Sustainability](#)

Geotourism and Sustainability

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Synonyms

[Geoconservation and tourism](#); [Geosustainable tourism](#); [Geo-tourism and sustainability](#)

Definition

Geotourism can be described as trips to places of geological relevance where an experience of observation, interpretation, and learning is

developed with the several components of geodiversity of a territory, where the relationship between nature and the community is established in a symbiotic way, including scientific research, education, and cultural development. In this framework, geology induces processes and strategies of territorial valorization, promoting scientific research, geoconservation, and development with the promotion of tourist services associated with geotourism and the involvement of local communities. The relationship between the natural heritage elements of a territory, the associated scientific and didactic value, and the recognition of their value and interest (economic and social) for the communities implies increasing responsibility in their preservation and in the development of good practices of heritage management and promotion of social welfare. Geotourism, which involves direct contact with a territory and its geological elements, is an active site of interpretation and learning, associated with the displacements, paths, and routes constituting a dynamic tourist practice, involving knowledge in a relationship with nature and healthy physical activity. Geotourism, in terms of the importance that its territorial experience represents, implies the involvement of several players (public and private), including administrative entities, training and research institutions, local associations, and the communities themselves, in an articulation of knowledge, interests, and capacity that contribute to development and sustainability.

Introduction

The relationship between the territory, the scientific and didactic value of geological resources, the valorization of outdoor experiences, the preservation of heritage elements, and the interest of communities in their preservation foster processes of tourism valorization. Geodiversity and geological heritage are currently emerging as factors of sustainable development of rural and natural areas, associated with culture and lifestyles of the respective communities and fostering interest and attraction for tourists, particularly when

framed in classified and protected spaces, such as Natural Parks or UNESCO Global Geoparks.

Geotourism, Territorial Valorization, and Sustainability

Geotourism reveals itself as an opportunity for enhancement and sustainability of markedly natural territories, whose greatest resource is nature itself and the elements that structure its landscape, promoting territorial recognition, preservation, and tourism interest. In this context, and considering the effects that can be perceived, there are four basic aspects associated with geotourism: heritage (natural and cultural), preservation, interpretation, and sustainability. This approach translates a differentiating perspective of the tourist perception and appropriation of the territories, in which the landscape and its structuring elements are at the center of the concept itself and constitute the inducing factors for displacement, interpretation, learning, and recreation. In a broad sense, the landscape represents and materializes the natural, historical, and cultural processes through which territories are built and identified, promoting, at different scales of observation, a tourist experience with geology and territory. Etymologically, geotourism comes from the terms “geo” and “tourism.” The first refers to the Earth while the second refers to the experience of travel. Geotourism allows tourists to come into contact with the geological elements and geomorphological structures of a site or territory, stimulating the interpretation of the landscape, and promoting the acquisition of knowledge about natural history and the development of communities and their ways of life. In 2002, the National Geographic Society, in conjunction with the Travel Industry Association, defined geotourism as a “tourism modality, sustains, enhances and values the geographical character of a place and its environmental, cultural, aesthetic and patrimonial components, as well as the well-being of its residents” (Stueve et al. 2002). Newsome and Dowling (2010, p. 8) defined it “as a form of natural area tourism that specifically focuses on geology and landscape. It promotes tourism to

geosites and the conservation of geo-diversity and an understanding of earth sciences through appreciation and learning. This is achieved through independent visits to geological features, use of geo-trails and view points, guided tours, geoactivities and patronage of geosite visitor centres.” According to Arouca Declaration (2011), geotourism is defined as “tourism that sustains and enhances the identity of a territory, considering its geology, environment, culture, aesthetic values, heritage and the well-being of its residents.”

Promoting geotourism is to promote a territory, to unravel a story of millions of years of geological formation, a heritage for humanity that should be known, understood, and protected. It is the use of infrastructure and access to services needed to create wealth and to promote resources that support social and economic activities.

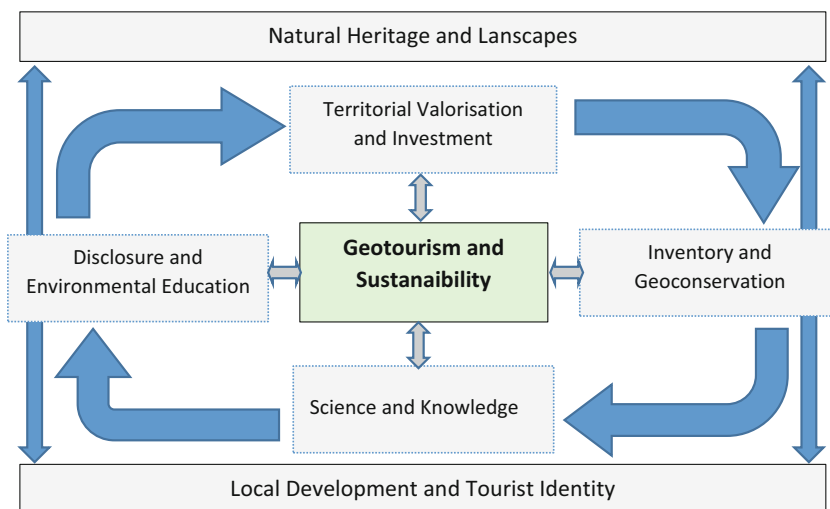
This is a holistic approach that, by valuing geology, includes culture, history, and the ways of life of communities, embodying in the landscape the origin and identity of places and territories, in a sustainable tourism position that allows the conservation and enhancement of geological, biological, and cultural heritage, with benefit and well-being for its communities.

In terms of structuring, geotourism aims to fully understand and appreciate the environment, and the fact that the abiotic elements (from geology to climate) must be previously known, considering that these are determinants and configurators of the biotic elements produced locally. Thus, the physical/natural components influence the cultural landscape and consequently set conditions for how communities have settled and evolved. This approach relates the dimension of the environment and its components to a greater connection for resident and tourist populations with the environment in which they live or visit (Newsome and Dowling 2018).

Thus, geotourism brings contributions and responsibilities for geoconservation and environmental education both for residents and for those who visit the spaces of relevant geological interest (Rodrigues and Neto de Carvalho 2010; Shekhar et al. 2019). It is considered as a sustainable, educational, and locally beneficial practice,

through the contributions generated and associated with the tourism services involved. The involvement of local communities stimulates the process of valuation and conservation of geological resources, expands locally the supply of goods and services, and improves the quality of the tourist experience (Frey 2003; Mignon 2018). In this context geotourism can be a tool to generate income for the conservation management of resources, in addition to social and cultural benefits associated with tourism and leisure activities. The income generated or achieved (namely by heritage and/or environmental recognition) can finance geoconservation projects, research, educational materials, infrastructure or support equipment, and the development of a territorial brand. Thus, there are undoubtedly complementarities between local communities and tourists, in terms of geo-interpretation and revenues from tourism activities, which have an impact on geoconservation and broadening community incomes (Ehsan et al. 2012). Based on natural heritage and landscapes, geotourism promotes its inventory and the extension of its knowledge (Hose 2005), in a process of qualification of the destination for adequate responses to the demand, and simultaneously to benefit the local development and an image of protection associated with the territory.

Geotourism corresponds to a form of tourism based on natural heritage, supported by geological elements, but including the diversity of biotic and abiotic elements that structure the landscape, sanctioning sustainable development (Fig. 1). Thus, the basis of a geotourism strategy must be the didactic value of geosites, their local importance, and their connection to the territory as a whole, in a participatory and inclusive logic, allied to processes conducive to local development (Dowling 2009; Henriques et al. 2011; Hose 1995). The valences of its promotion are fundamental for the development of a work of valorization and dissemination. But education is not just for students. Education is one of the foundations of geotourism. Upon receiving the information the geotourist is learning through the didactic interpretative instruments that are provided. The monumentality, rarity, and scenic



Geotourism and Sustainability, Fig. 1 Structuring elements of geotourism and territorial sustainability

expression of the geological elements and structures imply their greater notability, visitation interest, and conservation. Thus, the more appealing geological resources are, the greater the interest in interpretation and more effective the dissemination and interest of visitors in the interpretation of these sites. Consequently, it is easier to transmit geoconservation and sustainability values, while involving the populations through the perceived value.

Geodiversity, through the physical expression it brings to locations, allows the construction of their identity, appearing “as a representation (an ideal that reveals meaning) as a material existence (the reality of living conditions)” (Harner 2001, p. 12). It must be said that cultural and biological aspects, appear intertwined or associated with the geology of the place, promoting a composite approach, thus fostering the preservation of geodiversity. These interconnections as analysis and interpretation allow that tourists can enjoy, learn and disclose the destination. This integrated approach of the landscape and local ways of life with the geological elements potentiates the development of tourist and didactic itineraries and routes, contributing to the promotion of its conservation and even its recognition as a natural laboratory (Ehsan et al.

2012; Hose & Vasiljević 2012). It is considered that associated with a tourism strategy there must be a territorial strategy supported by the valuation of endogenous resources, which enhances the development of tourism products in these areas of relevant natural value. “The articulation between geodiversity, biodiversity, history and local culture not only increases the potential of geotourism, but also diversifies and complements the offer, leveraging development strategies and social welfare” (Fernandes et al. 2021, p. 124).

Geology and geotourism have their most expressive representation in the Global Geoparks of UNESCO. “A Geopark is an area with a significance geological heritage, with a coherent and strong management structure and where a sustainable economic development strategy is in place” (UNESCO 2006, p. 2).

Geoparks stimulate economic activity and sustainable development through geotourism. The growing interest in knowledge of the land and its natural characteristics, associated with a brand such as UNESCO, expands and diversifies the number of visitors, and encourages, simultaneously, the entrepreneurship associated with services, commerce, crafts, and industry, as well as the self-esteem of communities through territorial

recognition and the potential associated with local geoproducts. This process of territorial affirmation and involvement of the various players requires a firm commitment and the development of a partnership with long-term public and political support to ensure geoconservation and the satisfaction of the several economic, social, and cultural local actors.

Geotourists, in search of an experience strongly related to the geographic aspects of a territory, intend to develop in loco the understanding and perception of the natural heritage, especially the geological one, and its implications in the structuring of landscapes and ways of life. Concerns with the conservation of geodiversity imply the development of efforts, including monetary efforts (concept of use) to visit these sites, seeking their qualification and the well-being of the local communities. At the same time they promote respect, valorization, and perpetuation of local culture as identity and self-esteem factors of their populations.

In this context, the UNESCO Global Geoparks promote the development and sustainability of territories whose geography, geological heritage, and cultural identities are of international interest and relevance. Geotourism emerges as a crucial activity in governance, in which the potential benefits offered by its development enable, in addition to heritage protection (including geological heritage and geodiversity), a collective strategy that is articulated with science, education, and the progressive welfare of communities, promoting territorial sustainability.

Summary

Geotourism corresponds to a form of tourism based on the visitation of natural heritage, with emphasis on geological elements and geodiversity, promoting a structured interpretation of the landscape and its ecocultural identities, seeking the conservation and enhancement of their identities (natural and cultural), and the development and sustainability of these places and social living heritage.

Cross-References

► Geotourism and Sustainability

References

- Dowling, R. (2009). Geotourism's contribution to local and regional development. In C. Neto de Carvalho & J. C. Rodrigues (Eds.), *Geoturismo & desenvolvimento local* (pp. 15–37). Idanha-a-Nova.
- Ehsan, S., Leman, M., & Begum, R. (2012). Geotourism: A tool for sustainable development of geoheritage resources. *Advanced Materials Research*, 622–623, 1711–1715. https://www.researchgate.net/publication/271983173_Geotourism_A_Tool_for_Sustainable_Development_of_Geoheritage_Resources.
- Fernandes, G. P., Castro, E., & Tracana, R. B. (2021). Tourism as a strategy for geo-education and cultural valorization of territories: Promoting ecocultural values and geoconservation in Estrela Geopark, Portugal. In F. Brandão, Z. Breda, R. Costa, & C. Costa (Eds.), *Handbook of research on the role of tourism in achieving Sustainable Development Goals* (pp. 117–137). IGI Global. <https://doi.org/10.4018/978-1-7998-5691-7.ch007>.
- Frey M. L. (2003). Geopark Vulkaneifel: Geopotential, touristic valorization, and sustainable development. *Proceedings of the 2nd European Geoparks Network Meeting*, Lesvos 3–7 October 2001, pp. 29–44.
- Harner, J. (2001). Place identity and copper mining in sonora. México. *Annals of the Association of American Geographers*, 91(4), 660–680.
- Henriques, M., Pena dos Reis, R., Brilha, J., & Mota, T. (2011). Geoconservation as an emerging geoscience. *Geoheritage*, 3, 117–128.
- Hose, T. A. (1995). Selling the story of Britain's stone. *Environmental Interpretation*, 10–12.
- Hose, T. A. (2005). Geo-tourism—appreciating the deep time of landscapes. In M. Novelli (Ed.), *Niche tourism: Contemporary issues, trends, and cases* (pp. 27–37). London: Elsevier.
- Hose, T. A., & Vasiljević, D. A. (2012). Defining the nature and purpose of modern geotourism with particular reference to the United Kingdom and South-East Europe. *Geoheritage*, 4, 25–43. <https://doi.org/10.1007/s12371-011-0050-0>.
- Migon, P. (2018). Geoheritage and geotourism. A European perspective, by T.A. Hose (Ed.). *The heritage matters series*, volume 19. Boydell Press, Woodbridge. 336 pages. Hardbac, IN Geologos 24, 2, pp. 173–174. <https://doi.org/10.2478/logos-2018-0017>.
- Newsome, D., & Dowling, R. K. (2010). The future of Geotourism: Where to from here. In D. Newsome & R. K. Dowling, R. K. (Eds.), *Geotourism: The tourism of geology and landscape* (pp. 231–244). Oxford: Goodfellow Publishers.

- Newsome, D., & Dowling, R. (2018). Geoheritage and geotourism. In E. Reynard & J. Brilha (Eds.), *Geoheritage. Assessment, protection, and management* (pp. 305–321). Amsterdam, The Netherlands: Elsevier.
- Rodrigues, J. C., & Neto de Carvalho, C. (2010). Património geológico no Geopark Naturtejo: Base para uma estratégia de geoturismo. *E-Terra*, 18(11), 1–4.
- Shekhar, S., Kumar, P., Chauhan, G., & Thakkar, M. (2019). Conservation and Sustainable Development of geoheritage, geopark, and geotourism: A case study of Cenozoic Successions of Western Kutch. *Geoheritage*. <https://doi.org/10.1007/s12371-019-00362-5>.
- Stueve, A. M., Cooks, S. D., & Drew, D. (2002). *The geotourism study: Phase I – Executive summary*. Washington: Travel Industry Association of America. 22 p.
- UNESCO. (2006). *Global geoparks network. Geoparks Secretariat, Global Earth observations section*. Paris: Division of Ecological and Earth Sciences, UNESCO.

Geo-tourism and Sustainability

► Geotourism and Sustainability

German Code of Best Practices

► German Corporate Governance Code

German Corporate Governance Code

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Synonyms

Cromme-Kodex; German code of best practices; German self-discipline code of corporate governance; German self-regulation code of corporate governance

Definition

The German Corporate Governance Code (GCGC) was introduced in 2002 to provide best practices of direction, control, and communication. The GCGC focuses on board composition, powers, responsibilities, and functioning, with the purpose of guiding companies to address deficiencies in their corporate governance and enhance transparency.

The GCGC is a form of soft law: in opposition to so-called hard law (i.e., mandatory legislation imposing corporate governance mechanisms), the GCGC is a self-discipline tool, which contains recommendations and suggestions that companies can choose to implement on a voluntary basis. More exactly, the Code establishes stricter corporate governance standards addressed to German listed companies and other corporations with access to capital markets, although non-listed companies are also encouraged to follow the Code.

According to the German Corporation Act and the Code itself, companies must declare their compliance with the GCGC in a specific statement; otherwise, they must explain the reasons why their behavior deviated from it. This solution derives from the “comply-or-explain” principle, which guarantees flexibility to companies with different size and shareholding structure and increases their transparency on corporate governance. Overall, the comply-or-explain principle enables each business to implement the most effective corporate governance system, in line with its own peculiarities.

An effective implementation of the GCGC also requires ethical and responsible behavior to ensure the company’s development in the interest of all shareholders, workforce, and other stakeholders. To this aim, since 2019 the GCGC has also promoted sustainable value creation, recommending the fair balance of economic, social, and environmental factors.

Introduction

Since the last decade of the twentieth century, an intense debate on corporate governance issues has

fueled the diffusion of codes of best practices. Germany officially adopted its corporate governance code in February 2002, 10 years after the UK had introduced its first code of best practice, the Cadbury Code, thus beginning a process of corporate governance improvement (Aguilera and Cuervo-Cazurra 2004) that would have spread all over the world.

Like other countries, Germany developed its code of best practices in an effort to quell criticisms and mistrust against its corporate governance system. However, the reasons behind the rethinking of German corporate governance were different from those prevailing abroad. Indeed, governance reforms in other countries had been usually undertaken after facing corporate failures or scandals (Enron, WorldCom, Parmalat, etc.), originated or amplified by a lack of ethics and transparency in business relationships and weak mechanisms of internal and external control (Mueller 2014). Conversely, Germany needed to enhance its governance model in order to make it more attractive to foreign investors and more understandable for the international community (Cromme 2001; Cromme 2005).

In this regard, the introduction of the German Corporate Governance Code (GCGC) should be considered as part of a more extensive corporate governance reform that started in the country in the mid-1990s, as a consequence of globalization and increasing competition, privatization, and liberalization of capital markets (Cromme 2005). Such changes were affecting the peculiar insider and relationship-based system that had long prevailed in Germany: in other words, a system marked by employees' participation to corporate governance ("codetermination") and strong connections and interlocks between industry and banks (Salvioni and Bosetti 2006; Astori and Bosetti 2010).

Bank loans were usually the most important source of funding for German companies. Banks traditionally benefited from the national legislation, which ensured great protection to creditors and paid lower attention to stockholders (Cromme 2005) and, in particular, minority shareholders (Rott 2009).

This situation became unsustainable with the advancing globalization of financial markets, which could offer new financing opportunities to German companies, especially listed ones. This could also counterbalance the decrease in financing from banks and governments, whose investments had slowed as a consequence of privatization (Cromme 2005). Unfortunately, despite the opportunities emerging in capital markets, German companies were often met with suspicion from foreign investors, who complained about their lack of transparency in corporate governance. This was indeed a weakness of German companies, in which relevant information was frequently internalized, as typical of insider systems (Rott 2009). Therefore, information asymmetry between managers, large stockholders, and banks, on the one hand, and minority shareholders, on the other, seemed to endanger the possibility for German companies to attract foreign investors.

Furthermore, even the existing rules on corporate governance that would have reassured the international community were difficult to find and understand because they were dispersed in different laws. In the 1990s, for example, a wave of legal initiatives had led to the enactment of the Securities Trading Act (1994), the Restructuring Act (1995), the Takeover Code (1995), the Control and Transparency in Business Law (1996), and the Third Act on the Promotion of Financial Markets (1998) (Cromme 2005; Goergen et al. 2008).

At the beginning of the millennium, corporate governance rules for German companies, and especially for those more exposed to possible interest from international financial markets, called for a comprehensive reorganization. In addition, to gain foreign investors' trust, it was essential to explain how corporate governance was practiced in Germany, based on the peculiarities of the country's business system. In May 2000, a government commission chaired by Professor Theodor Baums started to work on corporate governance issues and to reform the German Stock Corporation Law. In 2001, the Baums Commission concluded that German listed companies

needed a code of best practices and recommended the nomination of a separate commission to draw up such a document. To this end, on September 6, 2001, the Minister of Justice appointed a special commission under the chairmanship of Professor Gerhard Cromme, who had already been a member of the Baums Commission. The Cromme Commission was composed of 13 members representing different parties: large and medium non-financial firms, banks and investment companies, the stock exchange, employees, auditors, and the academia (Rott 2009). Such composition did not include politicians, which strengthened the independence of the Commission from the Ministry of Justice (Cromme 2001).

The Cromme Commission continued the work started by the Baums Commission. Moreover, it considered the recent experiences of two private initiatives promoted by a Berlin-based group of experts and the Frankfurt Panel on Corporate Governance, which had drafted two very different corporate governance codes in June and July 2000 respectively (Lütz et al. 2011). Although the different conception and content of the said codes, which had probably been equivocated in the German context (Werder et al. 2005), both the initiatives contributed to expanding the national debate on corporate governance; in particular, they stressed the necessity to adopt a common corporate governance code that should have helped German companies compete in the international environment.

From 2002 to 2022, 16 editions of the GCGC were published under the chairmanship of four different experts (Gerhard Cromme, Klaus-Peter Müller, Manfred Gentz, and Rolf Nonnenmacher), covering the key aspects of German corporate governance and its evolution.

While presenting amendments year after year, the structure of the Code remained largely unchanged until the 14th edition, released in 2017. After that, the GCGC was rethought with reference to the types of provisions provided and their contents, as well as the fundamental approach that German companies were expected to adopt in the exercise of corporate governance.

For the first time, the GCGC that was published in December 2019 introduced a

sustainability-based approach, underlining the company's role in the community and its responsibility toward society. Accordingly, the Code recommended that the potential effects of social and environmental factors on the business success should be properly taken into account by the corporate governance boards in charge of strategic and operating decisions.

The strong link between corporate governance, a company's economic growth, and sustainability, which had been made explicit in 2019, was further explained in the next update of the GCGC. In fact, the edition dated April 28, 2022, and currently in force presents sustainability as a leading principle for both the supervisory board and the management board, that is, the bodies on which the two-tier German corporate governance system is founded and the main addressees of the Code.

GCGC Provisions

The GCGC is a self-regulation tool (Lütz et al. 2011), which aims at improving corporate governance by means of “principles” (previously known as “prescriptions”), “recommendations,” and “suggestions” (Stiglbauer and Velte 2012). As principles derive from the law, they are mandatory for German listed companies and all other addressees of the Code. Conversely, recommendations and suggestions, which are introduced by the verbs “shall” and “should” respectively, consist in the national and international best practices that the GCGC intends to spread. The Code puts much more emphasis on recommendations than on suggestions; indeed, the comply-or-explain principle (Werder et al. 2005; Talaulicar and Werder 2008; Wilcox 2011; Seidl et al. 2013; Luo and Salterio 2014; Salvioni et al. 2015) applies just to the former. More exactly, Section 161(1) of the Stock Corporation Act obliges companies to publish an annual compliance declaration clarifying the reasons why they have deviated from recommendations. On the contrary, no explanation is required in case of departure from suggestions, which intend to inspire advancements in corporate governance.

Legal Basis, Addressees, and Aims of the GCGC

The GCGC finds its legal basis in Section 161 (1) of the Stock Corporation Act, which requires that every year listed corporations and other corporations issuing securities other than shares on capital markets declare their compliance with the Code. Therefore, the GCGC is primarily addressed to the said companies, although it can also be voluntarily adopted by non-listed enterprises.

The GCGC was originally issued on February 26, 2002, with the dual purpose of providing capital market observers with “a catalogue for evaluating good corporate governance” and designing a framework for individual companies to fill in. To remain effective, the Code underwent constant review and adaptation to the national and international developments of the business context. Up to now, the GCGC has been amended 15 times, even if its nature and basic content have largely remained the same until 2019.

The most significant improvement involved the Code’s inspiration and took place in the editions dated December 16, 2019, and April 28, 2022, respectively, which officially recognized the importance of sustainability for the achievement of companies’ best interests.

However, the Code has primarily served for many years to address the major criticisms to the German corporate governance system raised by foreign investors. In this regard, the GCGC has dealt with and explained, *inter alia*, the following matters, which still constitute a major part of the Code.

- *Stronger focus on shareholders’ interests.* The GCGC emphasizes shareholders’ rights and makes their exercise easier, for example, through the promotion of proxies bound by instructions and the Internet broadcasting of general meetings. This strong orientation to shareholders’ protection counterbalances the traditional emphasis of the German law on creditors’ protection.
- *Two-tier model of corporate governance.* The GCGC contains provisions to favor a positive

cooperation between the *supervisory board*, appointed by the shareholders and the employees’ representatives, and the *management board*, appointed by the supervisory board and responsible for running the company and creating value for shareholders, employees, and all other stakeholders. The promotion of a closer cooperation between the two boards required by the German legislation is essential to reassure foreign investors, who are much more familiar with the Anglo-American one-tier model. Since the latter consists of a single board including both executive and non-executive directors, it is supposed to be the most efficient corporate governance model as concerns the information flows, as well as the most effective one in relation to internal controls. However, the German supervisory board exercises a monitoring and consulting function toward the management board, similar to the non-executive directors who advise and control the executives in the Anglo-American one-tier system. The GCGC stresses the interaction between the supervisory board and the management board in order to improve the quality of corporate governance, for example, through a better and wider discussion of business opportunities and risks, strategies, and performances.

- *Greater transparency on German corporate governance.* The GCGC intends to increase transparency on decision-making processes and remuneration systems, for the benefit of all capital market operators and supervisors. According to the GCGC, the corporate website is a useful tool to reduce information asymmetry between large and minority shareholders; moreover, the usage of the Internet favors the timely dissemination of information. All listed companies must disseminate interim reports on their financial results, prepared in accordance with internationally recognized accounting and reporting principles. Companies are also expected to disclose all the performance incentives for members of the management board and the supervisory board. Unlike other codes, the German one allows rewarding the supervisory board members with a performance-

related remuneration linked to the sustainable growth of the company. Since this rule allows the supervisory board members to be rewarded for their contribution to the company's long-term success, the provision is certainly in line with the search for dialogue and cooperation between the supervisory board and the management board promoted by the GCGC. In addition, the rule stimulates the supervisory board to give suggestions and formulate assessments taking account of the social and environmental impacts of the company's activity.

- *Independence of supervisory board members.* Independence in the exercise of control functions is largely appreciated by minority shareholders and the financial community; however, independence could be questioned in a traditional relationship-based system. For this reason, the GCGC provides several rules to strengthen the independence of the supervisory board. Among others, independence must be guaranteed with respect to controlling shareholders, members of the management board, and major competitors of the company. Moreover, the risk that a conflict of interest arising from internal relationships may undermine the independence of the supervisory board is managed by imposing strict limits on its composition (e.g., the supervisory board can include no more than two former members of the management board). Finally, any and all members whose independence is put at risk by a relationship with a customer, a supplier, a lender, or any other business partner are required to provide in-depth and honest information to the supervisory board.
- *Auditors' independence.* Over the years, the GCGC has contributed to ensuring reliable controls on financial disclosure by requiring transparency on any relationships (professional, financial, etc.) between the statutory auditors and the company which could jeopardize the independence of auditing. An example of this lies in the consulting services the auditors provided or may provide to the company in the future.

The two most recent editions of the GCGC, released in 2019 and 2022, have stressed the connection between the company's best interests and the ability to manage activities with a sustainable approach. This emerges from the new emphasis of the Code on social and environmental issues, the proper management and disclosure of which are necessary for the company to obtain stakeholders' trust and consequent legitimacy to operate. To this end, the Code recommends that sustainability is put at the heart of management and supervision.

Therefore, the management board shall:

- Systematically identify and assess threats and opportunities associated with social and environmental factors
- Consider ecological and social impacts of corporate processes
- Reflect social and environmental concerns in corporate strategies and goals
- Implement an internal control system and risk management processes focused on both financial and non-financial matters
- Collect and process sustainability-related data, which shall be used in internal analyses and must be published in well-structured CSR reports

Similarly, the monitoring and advisory tasks performed by the supervisory board must also encompass sustainability issues in order to ensure valuable support to the management board. Obviously, this presupposes the appointment of supervisory board members who shall possess the desired skills and expertise in the sustainability issues relevant to the company and its group. In this regard, the GCGC influences the profile of the candidates to the supervisory board who should be proposed to the shareholders' meeting and the employees.

Likewise, the Code recommends that the audit committee, which must be established within the supervisory board to perform controls on the company's accountants and internal control system, includes members with knowledge and experience in the fields of sustainability reporting and assurance.

Finally, the GCGC contains provisions to promote diversity and gender participation, in line with today's ever-increasing demand for equal opportunities for all those who have the necessary knowledge, skills, and expertise to guide a business. On this specific matter, the Code provides principles and recommendations about the appointment of women to both the boards and top-management levels, thus supplementing the mandatory laws adopted in the country in 2015 and 2021 to define the composition of the supervisory board and the management board respectively. As concerns this subject, it is interesting to note that the German legislation imposes a 30% gender quota in the composition of the supervisory board, while it only requires the presence of one woman in management boards consisting of more than three members, regardless of the total dimension of the body. For this reason, the Code recommends that the supervisory board takes diversity into account when management board members are selected; in addition, the Code makes the supervisory board responsible for the respect of the legally required gender participation on the management board, but it also permits the supervisory board to adopt a higher female quota in the management board. Moreover, the Code addresses the appointment of female managers to executive positions, which is a task reserved for the management board. According to the GCGC, the management board must stipulate targets for the percentage of women in the two management levels below the board itself, and it shall consider diversity when it makes appointments to executive positions.

Compliance Rates

Several studies show that the GCGC has been widely accepted since its first introduction (Cromme 2005). The official compliance rates are calculated every year by the Berlin Centre of Corporate Governance on behalf of the GCGC Commission, based on the responses to a questionnaire administered to the GCGC addressees. Such survey has limitations, such as non-response

bias from companies that do not properly apply the Code; however, the data has revealed a positive trend as concerns the acceptance of both recommendations and suggestions since the very first years after the GCGC introduction (Stiglbauer and Velte 2012). From 2004 to 2010, the average compliance rate with recommendations grew constantly from 80% to 85.8%; similarly, an increase from 58% to 63.5% was registered for suggestions, despite a decrease to 57.5% in 2008.

A further survey confirmed the large acceptance of the GCGC (Werder and Turkali 2015). In 2014, the average compliance rate with recommendations reached 83.6%, signaling a notable improvement from 79.8% of the previous year, probably due to the implementation of some new recommendations introduced in the 2013 edition. In the same period, the application of suggestions reached 65.1%, with a moderate increase from 63.9%.

Given the importance of recommendations and related disclosure requirements in case of deviation, it is not surprising that recommendations always present higher compliance rates than suggestions do. In addition, whereas no suggestion reached a 100% compliance rate in 2014, 11 recommendations were implemented by all the surveyed companies (Werder and Turkali 2015). Such recommendations, *inter alia*, strongly encouraged:

- A more detailed specification of the management board's information duties toward the supervisory board
- The annual publication of the company's corporate governance report and corporate governance statement
- The use of by-laws for regulating the management board's activities
- Measures to prevent conflicts of interest for the management board members
- The role of the supervisory board chairman

Significant differences also emerged from the comparison between companies listed in different stock market segments according to their size

(Werder and Turkali 2015). For instance, in 2014 the compliance rates in the DAX index (i.e., the blue-chip index including the 30 German largest companies listed on the Frankfurt Stock Exchange) were 96.2% for recommendations and 78.3% for suggestions, while they were the lowest of all (68.4% and 53.3% respectively) in the General Standard segment. Moreover, a significant number of recommendations found application in all DAX companies, whereas they were disregarded in other market segments. Another study (Rapp et al. 2017) discovered full compliance with the GCGC (100%) by 10 DAX companies and 9 MDAX companies.

Empirical evidence demonstrates that bigger companies are better inclined to implement the GCGC provisions. This can be explained by their higher exposure to the international financial markets, which makes them a potential target for institutional investors. Therefore, such companies commit themselves to implementing corporate governance best practices in order to reduce risks (Stiglbauer and Velte 2012), strengthen shareholder confidence and raise capital. On the other hand, the relevant efforts necessary to improve corporate governance structures and procedures in accordance with the Code could be an obstacle for smaller companies to full compliance.

Summary

Since its first edition, the GCGC has drawn attention to the following topics:

- Shareholders' and general meetings
- Cooperation between management board and supervisory board
- Management board: tasks, responsibilities, composition, remuneration, and conflicts of interest
- Supervisory board: tasks and responsibilities, chairman's duties, internal committees, composition, remuneration, conflicts of interest, and efficiency review
- Transparency
- Reporting and audit of the annual financial statements

Even if the table of contents remained the same from 2002 to 2017, amendments were constantly introduced to maintain the consistence of the Code with the emerging issues of corporate governance in the German context. In particular, an appendix was included in the four editions released between 2013 and 2017 to help companies provide information on the structure of the remunerations paid to management board members.

Evidently, compensation policies have great importance for the sustainable and durable growth of companies. In particular, variable components of the remuneration can be used to guide the management behavior toward long-term goals, which should be set considering the different expectations converging in the company. In this regard, the remuneration of management board members has been increasingly linked to the achievement of social and environmental targets, in addition to financial ones, in line with the growing demand for sustainable management practices.

It is therefore anything but a coincidence that remuneration policies have attracted widespread attention in the two most recent editions of the GCGC, the contents of which can be classified as follows:

- Management and supervision
- Appointments to the management board
- Composition of the supervisory board
- Supervisory board procedures
- Conflicts of interest
- Transparency and external reporting
- Remuneration of the management board and the supervisory board

From a structural viewpoint, the main novelty lies in the statement of principles, which summarizes the essence of the most important legal rules. Moreover, companies are supposed to describe how they have implemented the principles, in accordance with the "apply-and-explain" approach: this supplements the comply-or-explain rule, which already works for recommendations. Transparency and clarity are indeed crucial to the proper assessment of a company's corporate governance system (Ștefănescu 2014).

With regard to contents, the most significant innovation consists in the sustainability-oriented approach that the GCGC supports and encourages more widely than in the past. Sustainability has become a reference for all the main corporate processes, from strategy setting to internal monitoring and external communication of results. In the GCGC currently in force, sustainability is also contemplated in relation to compensation policies: stronger principles and recommendations specifically establish that the management board remuneration shall create right incentives and provide adequate payment for the performance rendered, still remaining socially acceptable. Moreover, the remuneration system shall include a variable part linked to the achievement of agreed strategic targets, in order to stimulate the company's sustainable development in the long term. Individual payments of management board members must also be disclosed in a clear and understandable way in an annual remuneration report.

To conclude, it can be observed that the stipulations contained in the many editions of the GCGC can be distinguished into internal and external mechanisms of corporate governance (Rott 2009), both inspired by a socially responsible and sustainable management approach in the long run.

Internal mechanisms include prescriptions, recommendations, and suggestions about shareholders' rights and the functioning of the annual general meeting, as well as the composition and activities of the two boards (i.e., management board and supervisory board). The only two provisions of the Code concerning codetermination are also classifiable as internal mechanisms, which provide for the respect of the Codetermination Act in the composition of the supervisory board and the possibility for employees' representatives to prepare supervisory board meetings separately from shareholders' representatives.

External mechanisms refer to the procedures and tools to enhance transparency on corporate facts; reduce information asymmetry between large stockholders, minority shareholders, and all other stakeholders; and

improve the quality and credibility of the company's communication.

The co-existence of rules on internal and external mechanisms of corporate governance proves that the Code's purpose is twofold. On the one hand, the GCGC safeguards the traditional aspects of German corporate governance, such as the two-tier model and codetermination. On the other hand, the Code intensifies shareholders' and stakeholders' protection in a way that should make German listed firms more appealing in the international financial context. In this regard, the application of the Code should result in a more resolute capital market orientation of German firms, and it should extend some peculiarities of outsider systems to Germany's insider one, thus accelerating the path of convergence induced by globalization.

Cross-References

- ▶ [Anglo-American Board Model \(One-Tier\) Versus European Model \(Two-Tier\)](#)
- ▶ [Anglo-American Model vs. Continental Europe Model](#)
- ▶ [Corporate Governance](#)
- ▶ [Two-Tier Board](#)

References

- Aguilera, R. V., & Cuervo-Cazurra, A. (2004). Codes of good governance worldwide: What is the trigger? *Organization Studies*, 25(3), 415–443.
- Astori, R., & Bosetti, L. (2010). Corporate governance systems facing the economic crisis. In G. T. Papanikos (Ed.), *International developments in management research* (pp. 37–62). Athens: Athens Institute for Education and Research.
- Cromme, G. (2001). Remarks on the publication of the draft German Corporate Governance Code. Düsseldorf, December 18, 2001. Available at <http://www.dcgk.de/en/press.html>. Accessed 6 January 2019.
- Cromme, G. (2005). Corporate governance in Germany and the German Corporate Governance Code. *Corporate Governance: An International Review*, 13(3), 362–367.
- Goergen, M., Manjon, M. C., & Renneboog, L. (2008). Is the German system of corporate governance

converging towards the Anglo-American model? *Journal of Management and Governance*, 12(1), 37–71.

- Luo, Y., & Salterio, S. E. (2014). Governance quality in a “comply or explain” governance disclosure regime. *Corporate Governance: An International Review*, 22(6), 460–481.
- Lütz, S., Eberle, D., & Lauter, D. (2011). Varieties of private self-regulation in European capitalism: Corporate governance codes in the UK and Germany. *Socio-Economic Review*, 9(2), 315–338.
- Mueller, D. C. (2014). Corporate governance and the state. *Competition and Regulation in Network Industries*, 15(2), 177–192.
- Rapp, M. S., Strenger, C., & Wolff, M. (2017). Kodexakzeptanz 2017. Analyse der Entsprechenserklärungen von DAX- und MDAX-Gesellschaften zum Deutschen Corporate Governance Kodex (Fassung 5. Mai 2015). HHL Center for Corporate Governance.
- Rott, R. (2009). A systemic evaluation of the German corporate governance code: The battle between inconsistency and persistence. In F. J. Lopez Iturriaga (Ed.), *Codes of good governance around the world* (pp. 187–214). New York: Nova Science Publishers.
- Salvioni, D. M., & Bosetti, L. (2006). Corporate governance report and stakeholder view. *Symphonya. Emerging Issues in Management* (*symphonya.unimib.it*), (1), 24–46.
- Salvioni, D. M., Gennari, F., Bosetti, L., & Almic, A. (2015). The audit committee in the EU emerging countries. In S. Boubaker & D. K. Nguyen (Eds.), *Corporate governance and corporate social responsibility: Emerging markets focus* (pp. 211–234). Singapore: World Scientific Publishing.
- Seidl, D., Sanderson, P., & Roberts, J. (2013). Applying the ‘comply-or-explain’ principle: Discursive legitimacy tactics with regard to codes of corporate governance. *Journal of Management and Governance*, 17(3), 791–826.
- Ștefănescu, C. A. (2014). Transparency and disclosure requirements – An analysis of corporate governance codes. *Atlantic Economic Journal*, 42(1), 113–114.
- Stiglzbauer, M., & Velte, P. (2012). Compliance with the German corporate governance code and firm performance: A ten-year experience. *International Journal of Behavioural Accounting and Finance*, 3(1–2), 5–23.
- Talaulicar, T., & Werder, A. V. (2008). Patterns of compliance with the German corporate governance code. *Corporate Governance: An International Review*, 16(4), 255–273.
- Werder, A. V., & Turkali, J. (2015). Corporate governance report 2015: Kodexakzeptanz und Kodexanwendung. *Der Betrieb*, 24, 1357–1367.
- Werder, A. V., Talaulicar, T., & Kolat, G. L. (2005). Compliance with the German corporate governance code: An empirical analysis of the compliance statements by German listed companies. *Corporate Governance: An International Review*, 13(2), 178–187.
- Wilcox, J. C. (2011). Comply-and-explain: Should directors have a duty to inform? *Law and Contemporary Problems*, 74(1), 149–159.

German Self-Discipline Code of Corporate Governance

► German Corporate Governance Code

German Self-Regulation Code of Corporate Governance

► German Corporate Governance Code

GHG

► Greenhouse Gases

GHG Accounting

► Accounting for Greenhouse Gas (GHG) Emissions

GHG Emissions

► Greenhouse Gas Emissions

Gift Economy

► Collaborative Consumption

Gig Economy

► Collaborative Consumption

Global Carbon Cycle

► Carbon Balance

Global Climate Change

- [Climate Change](#)

Global Climate Finance

- [Climate Finance](#)

Global Compact

- [Global Governance](#)
- [United Nations Global Compact](#)

Global Competitiveness Index

- [Competitiveness](#)

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Synonyms

[GCGI](#)

Address with Web Link

<http://gcg-csr.org/>

Introduction

Nicholas Capaldi founded the Global Corporate Governance Institute (GCGI) in 2013. The

Institute came into being to overcome the myopia of limited perspectives, outworn doctrines, tired prior agendas, and vested interests that have besieged our world. The Institute intends to bring together global scholars and practitioners from different fields with business/academic/cultural/religious and political leaders to form a global alliance dedicated to rethinking and integrating value issues into management practice, education, and development. The GCGI is a company limited by guarantee and registered in England. The GCGI has started to do this and continues its drive to meeting its mission through international conferences, seminars, and workshops, which it has organized in different countries around the world. As at the time of this writing, the GCGI has sponsored and championed conferences in four of our continents in the following countries: the UK (2014), China (2015), Germany (2016), Australia (2017), Spain (2018), United Arab Emirates (2019); the (2020) meeting will be held in Portugal (2020). Plans include South Africa in 2021 and Mexico in 2022. The Institute has continued to seek alliances with several companies and higher education institutions to meet the global call for a sustainable world. The Institute has evolved into an umbrella organization. It encourages, contributes to the formation of, and participates in other organizations and educational programs. A few examples include those run by the International Training Centre of the International Labour Organization (ITC-ILCO) under the leadership of Professor Liangrong Zu and Cologne Business School. The GCGI is also involved in a wide variety of local sustainability organizations such as the one founded by Professor Mara Del Baldo in Urbino, Italy, and an International CSR Forum organized by London Metropolitan University, UK, in July 2018. Plans include multiple conferences per year, an annual seminar for graduate students, and an annual summer workshop for junior scholars.

Brief History

After the successful publication of the *Springer Encyclopedia of Corporate Social Responsibility*,

Professor Nicholas Capaldi, Legendre- Soulé Distinguished Chair in Business Ethics at Loyola University, New Orleans, USA, suggested to Samuel Idowu, the editor-in-chief of the *Encyclopedia*, that a conference be held in London to bring together as many of the contributors as possible. Contributors were drawn from about 52 countries spread across the globe; many of these contributors understandably became members of the GCGI and have continued to support its global activities in the drive to make our world sustainable.

The first conference was held at the Surrey University in 2014 and was not only successful as a conference but it also made us realize the potential of creating a continuous global network of scholars to foster the research, publication, and general educational possibilities – in short, the social responsibility of a scholarly network. All the participants were convinced that the organization had a role to play in the globalized world of the second millennium.

Professors Idowu of London Metropolitan University and Professor Rene Schmidpeter of the Cologne Business School had already established a connection with Springer Publishing. Joined by and under the leadership of Professor Capaldi, the Global Corporate Governance Institute was established, and it included plans for an annual conference, publication of conference proceedings, lifetime achievement awards, summer schools, and a new journal, *The Journal of Corporate Social Responsibility*. The GCGI hopes to establish a certification process for different grades of member of the Global Institute soon.

Mission/Objectives/Focus Areas

Vision and Values: How We Work

The GCGI works with scholars, practitioners, and business to build a sustainable future for all the occupants of planet Earth.

The principles of sustainable business practices that the GCGI encourages all global citizens both corporate and individual are encompassed in the following:

- Have in place responsible and ethical corporate leaders and employees.
- All corporate entities, regardless of whether they are profit seeking or not profit seeking, free themselves from all forms of discrimination and unethical practices.
- All entities to glaringly embed responsible behavior through their core activities.
- Respect all international agreements on human rights and labor issues.
- Manage responsibly their actions in the following core areas of social responsibility social, environmental, and economic.
- Work with other partners to promote actions that would sustain our world.

Structure of Governance

The GCGI is managed by its three Executive Directors – the Chief Executive Officer and President – Professor Nicholas Capaldi, Loyola University, New Orleans, USA; the Deputy Chief Executive Officer and First Vice President Dr. Samuel O Idowu, London Metropolitan University, London, UK; and Vice President and Director of Operations Professor Rene Schmidpeter, Cologne Business School, Cologne, Germany. These three senior executives are supported by a Board of Directors whose role is to assist the GCGI in ensuring that the Institute continues to be fit for its purpose and a rotating Academic Advisory Board. The Boards, including the editorial advisory Board of the *Journal of Corporate Social Responsibility*, meet annually at the annual conference site.

Activities/Major Accomplishments/Contributions

1. In the Community

Its members work collaboratively to address key social issues and the needs of their local communities in relation to education and research, employability, and social economic development.

2. In the Environment

It supports and encourages its members and the organizations the work in to reduce their carbon emissions in the attempt to reduce the adverse impact of their activities on climate change.

3. Internationally

The GCGI aims to inspire, support, and challenge global CSR scholars and students to increase their positive impact on the environment where they operate and through their activities in order to become a catalyst for change in society.

References

<http://gcg-csr.org/>

Global Corruptions Barometer

► [Bribe Payers Index \(BPI\)](#)

Global Goals

► [United Nations Sustainable Development Goals 2030](#), The

Global Governance

Carmen Parra
Chair Solidarity Economy (CSE), Abat Oliba
CEU University, Barcelona, Spain

Synonyms

[Agenda 2030](#); [Collaborative Governance](#); [Global compact](#); [Global partnership](#); [Globalization](#); [Sustainable development](#)

Definition

Global governance is linked to the current trend that develops large-scale rules, leaving aside the dominant political structures of the twentieth century. In this way, civil society and the individual have taken over, with the states and international organizations taking a back seat (Callies & Renner 2009). An example of this paradigm shift is found in the post-Cold War scenario in which there is concern for the environment, the resolution of conflicts through non-judicial means, or the growing presence of civil society reclaiming respect for human rights.

A definition of global governance refers to the set of rules governing society's relationships on a global scale. Global governance refers to a contract that regulates global relations based on issues of concern to people such as the environment, migratory movements, terrorism, and corruption, among others (Cooper 2019).

There are therefore as many types of global governance as there are issues to develop. Below are some of the subjects that are being developed globally:

Environmental Governance and Management of the Planet

Climate change, oceanic and atmospheric pollution, nuclear risk and that of genetic manipulation, reduction and extinction of resources and biodiversity, and above all, a development model that does not respect the planet are examples of diverse ways in which this accelerated and probably irrevocable impact manifests itself.

Of the various areas of global governance, environmental management is the one that most urgently requires a global response to the crisis in the form of collective actions carried out by the human community as a whole (Tubiana & Martimon 2005). These actions should help strengthen the progressive construction of the global community through common objectives (Najam et al. 2007).

These objectives include quality leadership, a sound environmental policy with effective cohesion and coordination, good management of the

institutions that make up the environmental governance system, and, finally, the dissemination of environmental concerns and actions in other areas of international policy and action (Foro por una nueva gobernanza mundial (FnGM) 2009).

Economic Governance

International financial institutions have been unable to resolve market failures, which led to the 2008 crisis, and remain opaque and undemocratic organizations (Peemans 1992).

The market economy alone is unable to meet the needs of the population. Liberal capitalism is becoming a machine that produces more wealth concentrated in only a few hands, and leads the world community into chaos over the absence of redistribution.

Political and Institutional Governance

The construction of responsible global governance to adapt the political organization of society to globalization implies the formation of democratic political legitimacy at all levels of the territory (local, state, regional, and global) (Barnett & Duvall 2004).

Governance of Peace, Security, and Conflict Resolution

The bellicose environment that results from actions such as the fall of the Berlin Wall in 1989 or the attack on the Twin Towers in 2001 have produced a competitive nationalism in international relations that has contributed to increasing military budgets and scientific innovation, which has contributed to greater global insecurity (Zürn 2018a). Wars and conflicts have their causes in economic inequalities, social conflicts, religious sectarianism, territorial disputes, and control of key resources such as water and land. In all cases, a profound crisis of global governance is exposed.

The proposals for the governance of peace, security, and conflict resolution should devote more resources to improving people's lives (health, housing, food, work, etc.) and to education, including education in the values of peace, social justice, unity, and diversity (Brand 2005).

Governance of Education

Education suffers from severe budgetary constraints, affecting the quality of teaching as a public service. There are 80 million children (of which 44 million are girls) who do not go to school, and the exclusion of marginalized groups is increasing (26 million disabled children and 30 million children affected by various conflicts).

While universal access to education is essential, it must also be accompanied by an improvement in learning outcomes, especially in literacy and basic skills essential to poverty reduction (Zürn 2018b).

However, the growth of new technologies, especially the Internet, has developed a genuine global community of production and exchange of goods that is changing the behavior of society exponentially.

Global Governance Framework

Global governance is not a static concept, rather it changes depending on the historical moment in which you want to define its content (Andreani 2001). For example, in the years of the Cold War, global governance aimed to regulate and limit the power of states to avoid imbalances and the breakdown of the status quo.

Today, global governance seeks to gain weight in the fate of the world through actions that are above the power of states. This seeks to reduce the differences between political organizations. These differences are present between the public and the private, the inequalities and the rights of each legal system.

In this sense, the establishment of effective global governance, different from a standardized global government, needs to establish common rules to ensure social cohesion on a global scale (Coleman 2012). However, this strengthening of civil society highlights the problem that states must accept the loss of some of their sovereignty in favor of global governance.

However, the existing differences (environment, security, corruption, etc.) make it necessary to abandon bilateralism in favor of collective

action. The result of this paradigm shift results in a new model of representation and management with a global scope based on the issue to be resolved and not on the subjects involved in solving the problem (Diez et al. 2011).

All this has resulted in the birth of a civic consciousness led by movements and organizations that respond with solutions on a global scale, following principles based on integration and solidarity.

Effects of Global Governance: From States to Regions

Given the loss of prominence of the state in the area of global governance, a new construction is being proposed in which national governments gain prominence through their internal transformation and the construction of new forms of coexistence that best reflect real relationships between societies (Beck 2019).

The manifestations of this new form of state would be characterized by:

- The suppression of the distinction between internal affairs and foreign affairs.
- Mutual interference in internal affairs.
- The refusal to use force as a means of conflict resolution and, therefore, the codification of self-applicable rules of conduct.
- The progressive decline in the importance of borders.
- Security based on transparency, and reciprocal openness.

This paradigm shift does not mean that the state continues to represent the interests of citizens through social cohesion, the provision of public services, the exercise of law and justice, redistribution, and solidarity.

Nonetheless, articulated and democratic global governance means giving prominence to citizens and civil society through proposals in which local communities become the foundations of building global governance, together with the Citizens' Assemblies (Deacon et al. 2003).

The Basic Principles of Global Governance

Global governance is characterized by following a series of principles tacitly accepted by global actors in response to the problems identified worldwide.

Legitimacy

This principle implies that persons exercising authority are considered trustworthy on the basis of the common good and that society is based on an ethical and respected foundation (Calame 2019).

There exists a vicious cycle between legitimacy of international institutions and global governance due to the existence of gaps at the global level in issues of morality, legal foundations, and democratic recognition, among others. For example, the United Nations is often seen as a sham, with its democratic legitimacy limited by the right of veto of some large countries in the Security Council (Calame & Gustavo 2008).

In this sense, a common legal basis must be used to establish the necessary legitimacy (Keohane 2011). The establishment of this foundation can be based on three pillars: the UN Charter, the Universal Declaration of Human Rights, and the Charter of Human Responsibilities.

Exercise of Citizenship

Global governance involves the involvement of all in a common destiny, which would allow a balance between rights, power, and responsibilities, and that no power is exercised without control (Miller 2007).

The exercise of citizenship, therefore, is a necessary condition for the creation of any new global governance model.

Efficacy

Public and private institutions must demonstrate their competence and their ability to respond to the needs of society. However, in the absence of a form of political organization of the world community that is responsible and legitimate, it is the market that dominates international relations.

This makes global governance irresponsible and inefficient from the point of view of social needs and therefore illegitimate from a political point of view (Scholte 2007).

Cooperation

Everyone can contribute to strengthening the common good, while global governance should serve to organize relations and cooperation between different types of actors, both public and private, and between administrations according to commonly established procedures (Ocampo 2015).

This form of collaboration is the result of increased interdependence in organizations and civil society actors with each other, including the creation of forms of associations between public institutions.

Equality

Finding solutions to the problem of inequality is one of the goals of global governance. As a result, strong systems of solidarity and redistribution will need to be established to ensure the reduction of inequalities on the planet.

Global Governance Issues

Globalization implies the internationalization of the rules that regulate life on the planet. However, these transformations have been shown to be insufficient to meet the needs of world public policy. For example, moral deficiencies, democratic recognition, and the lack of charismatic leaders have created a deficit in the legitimacy of existing regimes (Keping 2018). All this can be improved by creating spaces for dialogue through the creation of the organization of global governance and the sharing of its objectives.

As for the formulation of objectives, the 17 SDGs show us how a program that pursues the preservation of humanity and the planet has enormous difficulties when regarding its application. One of the causes that could be argued to justify its failure is that citizen participation was non-existent throughout the elaboration process.

Global Organizations and Global Governance

While states remain powerful actors in global society, trust has diminished in their ability to adequately address the emerging challenges of a complex and interdependent world. This leads to demands for new approaches to international governance (Dingwerth & Pattberg 2006). In the absence of a global state that can serve as a basis for a democratic order, it is important to strengthen the role of international institutions to achieve an international governance space.

In this sense, the growth in the number of international institutions reflects the desire to replace the logic of states that pursue national interests, with the deliberative legitimacy present in international relations that are generated in these types of organizations.

However, it must be borne in mind that global governance is questioned about the democratic legitimacy and accountability of international institutions (Buchanan & Keohane 2006). Legitimate limits need to be established in order to develop the global exercise of power through their ability to structure processes of reasoning and deliberation in global society. To avoid this insecurity, control mechanisms have been created that seek global monitoring, such as:

- The establishment of international standards that set rules to control global policy.
- The creation of classifications and mappings based on neutral concepts.
- The construction of a common language that allows knowledge and experience sharing.

Intergovernmental institutions have been joined in recent decades by a wide variety of non-state actors, from transnational corporations, NGOs, and indigenous peoples, among others. Social media have facilitated the dispersion of information by giving voice to social movements, global audiences, and media organizations (Jaeger 2007).

The result seeks to convert all these non-state entities into sources of independent authority with a global voice.

References

- Andreani, G. (2001). Gouvernance globale: origines d'une idée. *Politique étrangère*, 3, 549–568.
- Barnett, M., & Duvall, R. (Eds.). (2004). *Power in global governance. Cambridge studies in international relations*. Cambridge University Press.
- Beck, U. *El Estado cosmopolita*. <https://world-governance.org/en/node/479> (Accessed 18 November 2019).
- Brand, U. (2005) Global Governance as a Hegemonic Discourse of International *Review of International Political Economy*, Vol. 12,(1) 155–176. Taylor & Francis, Ltd.
- Buchanan, A., & Keohane, R. O. (2006). The legitimacy of global governance institutions. *Ethics & International Affairs*, 20(4), 405–437.
- Calame, P. (Coord.) Por una gobernanza mundial eficaz, legítima y democrática. World Democratic Forum. <https://world-governance.org/en/node/387> (Accessed 9 December 2019).
- Calame, P. & Gustavo, M. (2008). *Puntos principales para la discusión con la Secretaría de Naciones Unidas, en Reforma de la ONU y refundación de la gobernanza mundial*. Dossier Gobernanza Política e institucional. (FnGM) Foro por una nueva Gobernanza global.
- Callies, G.-P., & Renner, M. (2009). Between law and social norms: The evolution of global governance. *Ratio Juris*, 22(2). <https://doi.org/10.1111/j.1467-9337.2009.00424>.
- Coleman, W. D. (2012). Governance and global public policy. In D. Levy-Four (Ed.), *The Oxford handbook of governance*. <https://doi.org/10.1093/oxfordhb/9780199560530.013.0047>.
- Cooper, R. El Estado postmoderno. <https://revistas.uam.es/index.php/relacionesinternacionales/article/view/4829>. Accessed 18 November 2019.
- Deacon, B., Olilla, E., Koivusalo, M., & Stubbs, P. (2003). *Global Social Governance*. Helsinki: Themes and Prospects.
- Diez, T., Bode, I., & Fernandes Da Costa, A. (2011). *Key concepts in international relations*. SAGE.
- Dingwerth, K., & Pattberg, P. (2006). Global governance as a perspective on world politics. *Global Governance*, 12, 185–203.
- Foro por una nueva gobernanza mundial (FnGM). Por qué un foro para una nueva gobernanza mundial?. <https://www.coredem.info/article189.html>. Accessed 8 December 2009.
- Jaeger, H. M. (2007). Global civil society and the political Depolicization of global governance. *International Political Sociology*, 1(3), 257–277. <https://doi.org/10.1111/j.1749-5687.2007.00017.x>.
- Keohane, R. O. (2011). Global governance and legitimacy. *Review of International Political Economy*, 18(1), 99–109. Taylor & Francis.
- Keping, Y. (2018). Governance and good governance: A new framework for political analysis. *Fudan Journal of the Humanities and Social Sciences*, 11(1), 1–8.
- Miller, C. A. (2007). Democratization, international knowledge institutions, and global governance. Wiley Online Library (Accessed 1 March 2020).
- Najam, A., Papa, M., & Taiyab, N. (2007). Gobernanza ambiental mundial: elementos de un programa de reforma. In C. J. Cleveland (Ed.), *Encyclopedia of earth*. Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment.
- Ocampo, J. A. (ed.), (2015). *Gobernanza global y desarrollo nuevos desafíos y prioridades de la cooperación internacional*. Cepal, Buenos Aires.
- Peemans, J.-P. (1992). Territorios y mundialización: retos del desarrollo. *Historia Crítica*, 6, 15–33. <https://doi.org/10.7440/historit6.1992.02>.
- Scholte, J.A. (2007) *Civil Society and the Legitimation of Global Governance (CSGR)* Working Paper 223/7 (March).
- Tubiana, L. & Martimort-Asso, B.(2005) Gouvernance internationales de l' environnement: les prochaines étapes. *Synthèse* (1) Institut du développement durable et des relations internationales.
- Zürn, M. (2018a). *A. Theory of global governance: Authority, legitimacy, and contestation*. Oxford University Press.
- Zürn, M. (2018b). Contested global governance. *Global Policy*, 9(1), 138–145.

Global Leadership

- Sustainable Leadership

Global Management

- Cross-Cultural Management

Global Mindset

- Cross-Cultural Management

Global Network

- Competitiveness

Global Partnership

► Global Governance

Global Performance

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Synonyms

Corporate global responsibility; Economic, social, and environmental performance; Shared value; Sustainability

Definition

Corporate performance is not an easy concept to define because it developed during the time according with external conditions and corporate approaches. Starting from Friedman (1962) who emphasized the dominance of the economic performance for shareholders to the stakeholder theory by Freeman (1984) that emphasized the corporate responsibility for all stakeholders, the ability by company to act according with different types of responsibility (legal, ethical, economic, social, environmental) was stressed.

The traditional concept of performance becomes a concept of global performance that embraces different performance measures, engages stakeholders in the creation of value, and leads to a reconsideration of the traditional relations with other actors of company's value chain and competitors.

Therefore, global performance means corporate actions are not limited to business boundaries but should produce value shared with society, taking place in the social progress according with a sustainable corporate approach.

Introduction

The concept of corporate performance is usually implied, but a precise definition proves to be elusive because of the variety of facets this concept is associated with.

Since the publication of the *Wealth of Nations* by Adam Smith (1776), for more than 200 years, the view of a firm which obtains its resources from investors, employees, and suppliers to produce goods and services for its customers dominated. According with this view, corporate performance is the financial return to the firm's owner from the consumption of tangible resources (Donaldson and Preston 1995).

The increasingly dynamic business environment, together with the change in the traditional factors of production, with an emphasis on immaterial resources, highlights that the concept of corporate performance cannot be reduced only to profitability or economic results. The spread of the concepts of corporate social responsibility (CSR) and sustainability extends the definition of corporate performance: company success is no longer based only on criteria of economic performance, but it is linked to the optimization of environmental and social performance too, according with the logic of corporate global responsibility and the creation of value in the long term.

This approach is based on the ability by company to balance the interests of all those who contribute with resources and consensus to the current and future company's success, generating satisfying results for all of them. It follows that the economic results are strongly influenced by the ability to maintain positive relationships with all relevant stakeholders (Freeman 1984; Carroll and Buchholtz 2006), leading to a profound change in the valuation of company's performance. The meaning of this last one becomes global considering the interrelations among competitive, economic, and socio-environmental variables and the concept of shared-value (that is the ability by company to create value for itself and accordingly for community) becomes crucial (Porter and Kramer 2011).

Theoretical Framework

The shareholder view (Friedman 1962) emphasized for long time the dominance of company's economic performance to satisfy financial expectations of shareholders. This often means the excessive stress for short-term profits in particular by boards of corporate governance systems characterized by wide dispersed ownership (the so-called outsider system of corporate governance), with the aim to obtain positive judgments by the financial markets and to reconfirm their role. This attention for short-term performance implies the risk of unethical conducts by boards oriented to personal or relevant shareholders' interests to the detriment of other stakeholders' categories. At the same way, unethical and fraudulent actions in corporate governance systems with concentrated and stable ownership (the so-called insider systems of corporate governance) were often caused by the will of majority shareholders, usually members of the board, to put economic performance over time under stress, increasing the company's value as a personal asset (Salvioni and Gennari 2016).

The diffusion of CSR principles and the valorization of stakeholder perspective (Freeman 1984; Freeman and Dmytriiev 2017) emphasize the concept of global corporate responsibility, going beyond the profit as the unique measure of corporate performance.

The different theories in the context of CSR highlight different aspects of performance.

According with social contract theory, the company's performance is evaluated as the adherence of corporate behaviors to what society implicitly expects business to operate, that is, the concept of compliance (Gray et al. 1996). According with legitimacy theory (Suchman 1995), performance expresses the use of power by business in a manner that society consider responsible and desirable, giving the company legitimacy to operate. Stakeholder theory (Freeman 1984) emphasizes the relationships between the company and its stakeholders as a source of competitive advantage. This approach promotes the equilibrium among economic, social, and

environmental performance in the long term, affirming a governance attitude aimed at balancing the natural trade-offs among the interests of different stakeholders that could be apparently at odds with one another (Goedhart et al. 2015).

Scholars suggested various models to depict and measure this new concept of global performance.

Carroll established four categories or domains of CSR, building a pyramid where economic responsibility is placed as the base because it is a foundational requirement in business. Being at the base of the pyramid, it must be strong to support the entire edifice, that is, society's other expectations toward enterprises (Carroll 1991). The order of the categories of responsibilities (economic, legal, ethical, and discretionary at the top) portrays the fundamental nature of these categories to the business existence in society: economic and legal responsibilities are required, and ethical and discretionary responsibilities are expected and desired. In particular, economic responsibility is about the production of goods and services that society wants; legal responsibility regards the respect of rules under which business is expected to operate; ethical responsibility is about the additional behaviors and activities which are not codified into law but are expected to business by society; and discretionary responsibilities are left to individual choice. The pyramid of CSR is intended to be seen from a stakeholder perspective wherein the focus is on the whole, instead of the different parts (Carroll 2016).

Based on this framework, the social corporate performance considers three aspects: one pertains to all that is included in the definition of social responsibility (the four categories of responsibilities); the second concerns the range of social issues management must address (e.g., environment, discrimination, product safety, etc.); the third is the philosophy of social responsiveness (reaction, defense, accommodation, proaction). This conceptual model remarks that social responsibility is not separate and distinct from economic performance, but it is part of the global responsibility of business. Therefore, economic

performance doesn't disappear in discussions about CSR; actually, it must be considered in a wide perspective of business that includes also the society's expectations.

Elkington (1994) depicted the CSR as a framework composed of social, environmental (or ecological), and financial dimensions. The triple bottom line (TBL) accounting expands the traditional reporting framework to take into account social and environmental performance in addition to financial one. The traditional measure of corporate profit is the bottom line of the profit and loss account, the second is the bottom line of the company's people account (a measure of how socially responsible an organization has been throughout its operations), and the third is the bottom line of the company's planet account (a measure of how environmentally responsible it has been). This model remarks the fact corporate performance should be accountable according with a global view where different dimensions nurture each other.

Porter and Kramer (2006, 2011) measure the performance as the ability by company to produce shared value, generating economic value in a way that also produces value for society, by addressing its challenges, connecting company success with social progress. Companies can pursue shared value opportunities on three levels: reconceiving products and markets (that means focusing on revenue growth, market share, and profitability which arise from the environmental, social, or economic development benefits delivered by a company's products and services); redefining productivity in the value chain (that is, the improvement in internal operations); and enabling cluster development (that derives from improving the external environment for the company through community investments and strengthening local suppliers, local institutions, and local infrastructures in ways which also enhance business productivity). For each shared value opportunity, companies identify and track both social and business results; their parallel goals are to address a social problem and improve business performance.

Therefore, over time the concept of performance became broader, including all the

dimensions of corporate success which together guarantee the company's survival in the long run, thanks to the ability to establish and manage relations with key stakeholders. In other words, the corporate global performance is the capability by company to satisfy stakeholders' expectations: when it happens, stakeholders keep giving resources and consensus to company, nourishing a virtuous business cycle that increases further consensus and resources.

Key Issues

In the last decades, because of the spread of CSR theories, the concept of corporate performance became global, including different dimensions of business results. The global success of the company in the long run is based on a balanced contribution by economic, social, and environmental conditions of success. In general, corporate performance is the capability by company to produce outputs and outcomes coherent with the stakeholders' expectations in the long run according with a sustainable approach to do business. This approach modifies the company's attitude toward economic results promoting the maximization of economic performance, according with a long-term vision that creates more value for everyone (shareholders included). In fact, the valorizations of CSR and the importance of the stakeholder view affirm a governance approach aimed at promoting the creation of corporate value over time, suggesting going beyond the excessive short-termism that characterizes short-sighted boards, this last often related to the relationship between the firm's owners and the management.

In this context, the management of stakeholder relationships becomes a source of competitive advantage (Hillman and Keim 2001; Brondoni 2003; Salvioni et al. 2016; Salvioni and Gennari 2017), depending both on the company's enhancement of connections among economic, competitive, and socio-environmental variables to be included in the strategies and the company's systems of accountability to communicate the performance results to stakeholders (Bosetti 2015).

The change in the approach toward CSR changes also the governance variables and their key performance indicators (KPIs): the awareness of a global concept of performance drives a global strategy idea, requiring the redesign of the internal control system and the connected tools for measuring and managing performance. Understanding the link between stakeholders' expectations and the company's needs, achievable thanks to stakeholders' contributions, is a critical aspect in the development of corporate goals and strategies. In addition to traditional financial performance indicators, new indicators about social and environmental dimensions should be added too, and new tools for the performance measurement should be developed. Measurement makes CSR strategies tangible for internal and external stakeholders too.

The communication needs are often the drivers for the insertion of socio-environmental indicators in the management processes. The virtuous cycle where the stakeholders' resources make possible the business activities which generate results appreciated by stakeholders is based on an effective communication by company. The extension of the concept of corporate performance implies also the extension of the conveyed information: the communication is intended to be global, that is, referred to the global responsibility company has toward its stakeholders.

This new way of reporting and communication has both internal and external benefits. Internal benefits for company can include a better understanding of risks and opportunities, the emphasis on the link between financial and nonfinancial performance, the benchmarking, and the assessing of global performance with respect to laws, norms, voluntary initiatives, and other companies. External benefits are mainly connected with enabling stakeholders to understand the company's true value and its capability to create shared value, demonstrating how company influences and is influenced by expectations about sustainable development in the long run, improving reputation and relations with stakeholders.

Companies can communicate their performance about different dimensions of responsibilities by means of separate reporting: financial

statements for economic dimensions, and social and/or environmental reporting for socio-environmental dimensions. Instead of separate reports, the integrated reporting is a way to give a joint view on global performance. It aims at communicating how a company creates value in the short, medium and long term, considering various forms of tangible (as financial) and intangible (as intellectual, human, social and relationship, natural, etc.) capital. The integrated reporting gives a united view on the interrelation among the different measures of performance, emphasizing the systemic idea of business. The ability of an organization to create value for itself enables financial returns to the providers of financial capital. This is interrelated with the value the organization creates for other stakeholders, society, and environment through a wide range of activities, interactions, and relationships. When these are significant for the organization's ability to create value for itself, they are included in the integrated reporting (IIRC 2013).

The importance of a global communication has led also the European Commission to intervene with a Directive (2014/95/EU) regarding disclosure of nonfinancial information by certain large undertakings and groups.

Summary

The competitive context is making CSR even more complicated, considering the global impact of this issue and the global engagement requested to nations, companies, organizations, and citizens (see ► [“United Nations Agenda 2030 on Sustainable Development Goals, The”](#)). Companies need to be aware of this, and they need tools to reduce their exposure to “responsibility failures,” managing the relations with stakeholders and creating shared value according with a sustainable strategic approach.

Having a global view on different stakeholders' expectations is the first step to organize business activities in order to satisfy these expectations, creating value for stakeholders and company itself. The traditional concept of performance becomes a concept of global performance

that embraces financial, social, and environmental performance measures, engages stakeholders in the creation of value by company, and leads to a reconsideration of the traditional relations with other actors of company's value chain and competitors.

The multidimensionality of performance requires new CSR performance measurement frameworks (as CSR Balanced Scorecard, GRI Guidelines, AA1000s, etc.). CSR-related tools can support a developmental approach to CSR, encouraging innovation and continuous improvement on the basis of partnerships and joint communicating and engaging with stakeholders (European Commission 2003).

Engaging with stakeholders, which are the individuals, groups of individuals, and/or organizations that are affected by or can affect an organization's activities, and responding to their concerns improve corporate performance (AccountAbility 2015). A quality stakeholder engagement can lead to more equitable and sustainable social development by giving those who have a right to be heard the opportunity to be considered in decision-making processes; help to determine the most important issues for sustainability management and reporting; enable better management of risk and reputation; allow for the pooling of resources (knowledge, people, money, and technology) to solve problems and reach goals that cannot be reached by single organizations; enable understanding of complex operating environments; enable learning from stakeholders; inform, educate, and influence stakeholders in ways that can improve their decisions and actions, which in turn will have an impact on the organization and society; and contribute to the development of trust-based and transparent stakeholder relationships (AccountAbility 2015, pp. 5–6).

The corporate performance expresses the ability to manage the key drivers for success within the entire value chain: the global performance refers also to the global value produced by all the actors involved into business. Network-based business models are developing, because of the awareness that rigid resource-based systems are

becoming obsolete. Value is seen as a stakeholder-based concept where the performance expectations of all participants must be met for the continuous success of the value chain network. This is achieved by integrating and coordinating the assets, processes, and capabilities of stakeholders to create an optimal value output, such that each stakeholder's resources receive satisfactory returns. In this context, the cooperative arrangements or networking is the necessary response to global and less predictable markets.

A new exclusive vocabulary accompanied this “new economy” approach (Walters 2009): collaboration (that describes the overall willingness of organization to seek and implement customer-based solutions using shared resources and producing shared benefits), co-destiny (used to ascertain the extent to which members of a business coalition share the same objectives, strategies, and values), co-opetition (that describes the situation in which competitors work together to meet individual goals using mutual facilities) are increasingly widespread words.

Hence, the change in the corporate vision embracing CSR approach involves all of the aspects of the business: corporate goals, strategies, performance indicators, reporting, and relations with stakeholders. The success of CSR in business depends on the motivation and the engagement of all actors involved for the development of a real culture of sustainable development. Corporate boards can have a pivotal role, appearing as “change agents” (Maritz et al. 2011), in favoring the adoption of a concept of global corporate performance.

Cross-References

- [Integrated Reporting for Sustainability](#)
- [Milton Friedman](#)
- [Porter and Kramer's \(2006\) “Shared Value”](#)
- [Stakeholder Theory](#)
- [Triple Bottom Line](#)
- [United Nations Agenda 2030 on Sustainable Development Goals, The](#)

References

- AccountAbility. (2015). AA 1000. Stakeholder engagement standards. https://www.accountability.org/wp-content/uploads/2016/10/AA1000SES_2015.pdf. Accessed 30 May 2019.
- Bosetti, L. (2015). Social networks and stakeholder engagement. Evidence from global compact lead participants. *Journal of Strategic and International Studies*, 10(6), 44–56.
- Brondoni, S. (2003). Network culture, performance and corporate responsibility, Symphonya. *Emerging Issues in Management*, 1, 8–24.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (2016). Carroll's pyramid of CSR: taking another look. *International Journal of Corporate Social Responsibility*, 1(3), 1–8.
- Carroll, A. B., & Buchholtz, A. K. (2006). *Business and society: Ethics and stakeholder management* (6th ed.). Ohio: Thompson, Mason.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence and implication. *The Academy of Management Review*, 20(1), 65–91.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- European Commission. (2003). *Mapping instruments for corporate social responsibility*. Luxembourg: European Commission Directorate-general for Employment and Social Affairs.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. New York: Pitman.
- Freeman, R. E., & Dmytriiev, S. (2017). Corporate social responsibility and stakeholder theory: Learning from each other. *Symphonya. Emerging Issues in Management*, 2, 7–15.
- Friedman, M. (1962). *Capitalism and freedom*. Chicago: University of Chicago Press.
- Goedhart, M., Koller, T., & Wessels, D. (2015). The real business of business. In Koller, T., Goedhart, M., & Wessels, D. (Eds), *Valuation: Measuring and Managing the Value of Companies*. Hoboken: John Wiley & Sons.
- Gray, R., Owen, D., & Adams, C. (1996). *Accounting and accountability: Changes and challenges in corporate social and environmental reporting*. Harlow: Prentice Hall Europe.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22(2), 125–139.
- IIRC. (2013). The International 'IR' Framework. International Integrated Reporting Council. <http://integratedreporting.org/resource/international-ir-framework/>. Accessed 30 May 2019.
- Maritz, R., Pretorius, M., & Plant, K. (2011). Exploring the interface between strategy-making and responsible leadership. *Journal of Business Ethics*, 98, 101–113.
- Porter, M. E., & Kramer, M. R. (2006). Strategy society. The link between competitive advantage and CSR. *Harvard Business Review*, 84, 78–92.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*, 89, 62–77.
- Salvioni, D. M., & Gennari, F. (2016). Corporate governance, ownership and sustainability. *Corporate Ownership and Control*, 13(2), 606–614.
- Salvioni, D. M., & Gennari, F. (2017). CSR, sustainable value creation and shareholder relations. *Symphonya. Emerging Issues in Management*, 1, 36–49.
- Salvioni, D. M., Gennari, F., & Bosetti, L. (2016). Sustainability and convergence: The future of corporate governance systems? *Sustainability*, 8(1203), 1–25.
- Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. London: W. Strahan.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20, 571–610.
- Walters, D. (2009). Understand the value chain network, understand the market, understand the industry and understand the customer. *Journal of Transport and Supply Chain Management*, 3(1), 97–119.

Global Reporting

► Corporate Governance Reporting

Global Reporting Initiative

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Synonyms

GRI; GRI reporting; Sustainability reporting

Definition

The Global Reporting Initiative (GRI) is a non-profit organization, established in 1997, which issues guidelines for companies to follow when

drawing up sustainability reports. GRI Standards represent the global best practice for reporting on a range of social, economic, and environmental impacts of business.

Introduction

GRI is an international NGO that provided the first globally accepted framework for comprehensive sustainability reporting. The aim of the initiative is to promote Corporate Social Responsibility (CSR) through publishing guidelines for producing voluntary sustainability reports worldwide. A quarter of a century ago, it would have been almost unthinkable for listed companies to be pressured into reporting on their economic, social, and environmental impacts since sustainability reporting was then not widely practiced. Since that time, CSR has become mainstream and sustainability reporting has become common practice. Moreover, GRI's founding of sustainability issues has become a mainstream area for every stakeholder. According to a recent study, more than 90% of the world's largest companies issue sustainability reports and 75% of them are using the GRI schema. Through its support on reporting the GRI, it has helped to identify and report the sustainability impacts of many companies which provided benefits to countless people and the environment. Today, shareholders are pushing for increased CSR reporting. In 2017, more than half of shareholder resolutions involved requests for more ESG information (Eccles, and Klimenko 2019).

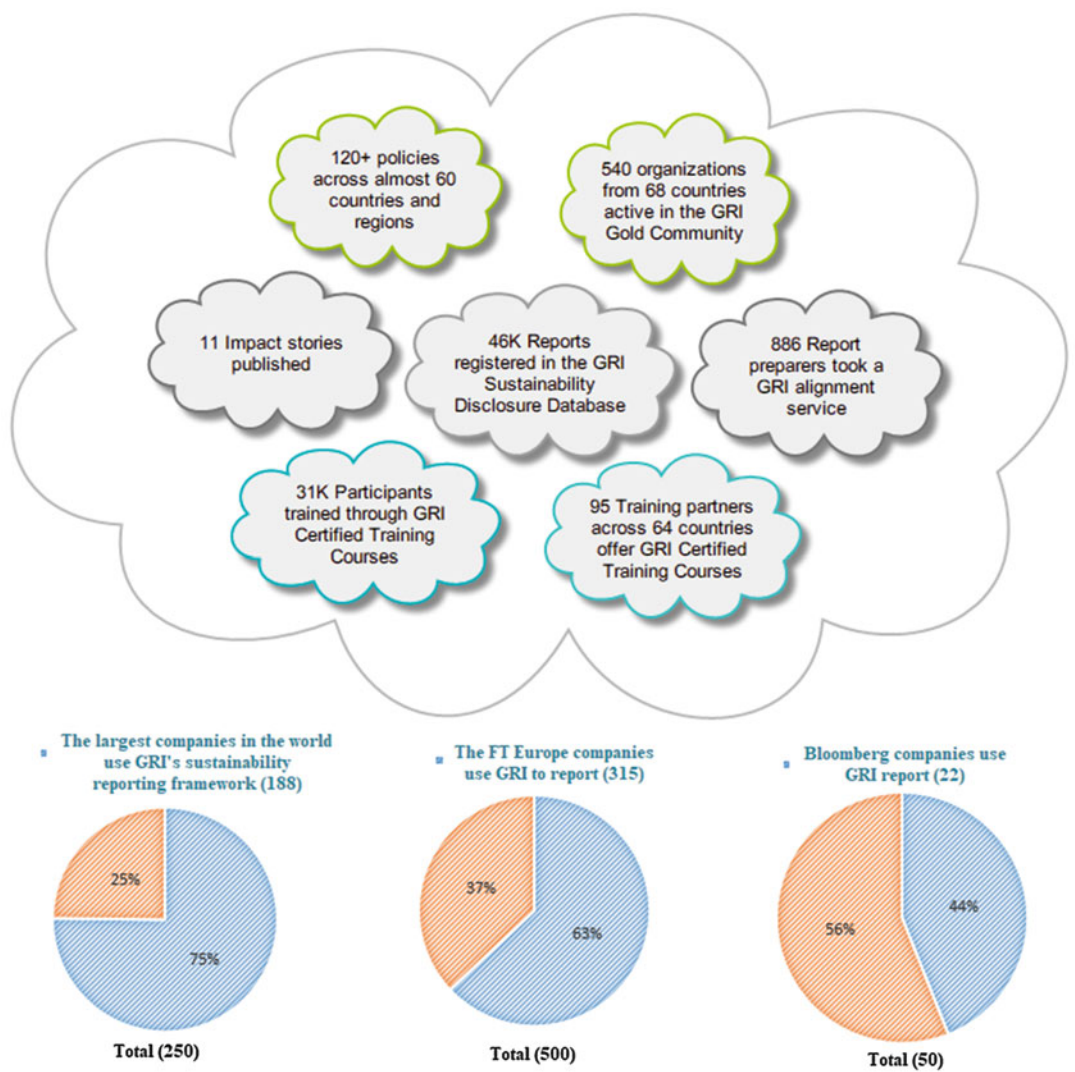
GRI emerged during the 1990s to coordinate pressure on companies to make reporting common practice. It was established in 1997 in Amsterdam by the Coalition of Environmentally Responsible Economies (CERES) in collaboration with the UN Environment Programme (UNEP), through an alliance of multinational companies, NGOs, labor organizations, academics, and environmental organizations – but not including governments (Carroll and Buchholtz 2009). GRI itself is an independent international organization that issues guidelines for companies to follow when drawing up

sustainability reports. Sustainability reports are those reports which organizations publish information on their economic, environmental, social, and management performance (being either GRI-based, GRI-referenced, or non-GRI reports).

GRI, as an international initiative, is an important step for the further development of CSR. Although there is no single, global definition of CSR, it has been described as a voluntary interaction in 2001 (EU Commission Green Paper 2001), and then the EU revised its definition and accepted as a responsibility of enterprises regarding their impacts on society (Turker 2018, p. 5) (EC 2012). A new, more widely accepted definition of CSR is as “a private self-regulatory scheme” (Sheehy 2015, p. 628). According to Sheehy, CSR can be treated as a type of international private law or private self-regulatory initiative. This institutional definition highlights the rules, norms and beliefs, and the actors involved in those institutions (Sheehy 2015, p. 639). From that point of view, if the CSR is an effort to regulate industrial organizations' decisions and objectives for purposes of lessening industrial harms and increasing public welfare, it needs a regulatory infrastructure or a framework to create and adjudicate the rules (Sheehy 2019). The Global Reporting Initiative (GRI) is an organization which serves as infrastructure to institutionalize the norms by collecting, classifying and describing, and disseminating them among industry, and the participants are expected to modify their behavior to conform to those norms (Sheehy 2015, p. 639).

Today, 93% of the world's largest 250 organizations report on their sustainability performance. In this context, GRI Sustainability Reporting Standards (GRI Standards) have become the most widely used sustainability disclosure standards worldwide. According to GRI, 13,353 organizations produced 52,623 sustainability reports, of which 31,727 used the GRI standards (Fig. 1, GRI, 2019).

GRI's explicit goal was “to harmonize the numerous environmental and sustainability reporting systems at the time and create free access to standardized, comparable and consistent information about corporate performance” (Toker 2015). A GRI report contains “50 core



Global Reporting Initiative, Fig. 1 GRI in numbers (2019). (Adapted from GRI web site 2019)

environmental, social, and economic indicators with distinct metrics for companies, depending on their industry sector and operations” (Szejnwald 2011). The cost of producing a sustainability report ranges from \$100,000 for a basic GRI to more than \$3 million for complex organizations such as Shell or Nike (Luftig and Ouellette 2012). When the company uses the GRI-reporting structure, they need to use the GRI Sustainability Reporting Framework and GRI Content Index, which consists of A, B, and C levels (report types: G3, G3.1, G4, and GRI Standards) (GRI 2017).

The Measures and Key Elements of GRI

The first official edition of GRI Guidelines was released in June 2000. In total, 31 companies piloted tests of the Guidelines. The second GRI edition soon followed after an international symposium which gathered labor, international NGOs, and investors from all over the world. It was used to create a global multistakeholder network. In 2002, a second edition of the Guidelines (G2) was released at the World Summit on Sustainable Development. In 2006, the third

100 Series Universal Standards			
GRI 101 Foundation The starting point for using the GRI Standards		GRI 102 General Disclosures Used to report contextual information about the organization	
		GRI 103 Management Approach Used to disclose how the organization manages impacts related to each of its material topics	
200 Series Economic		300 Series Environmental	
GRI 201 Economic Performance GRI 202 Market Presence GRI 203 Indirect Economic Impacts GRI 204 Procurement Practices GRI 205 Anti-corruption 2016 GRI 206 Anti-competitive behavior		GRI 301 Materials GRI 302 Energy GRI 303 Water GRI 304 Biodiversity GRI 305 Emissions GRI 306 Effluents and Waste GRI 307 Environmental Compliance GRI 308 Supplier Environmental Assessment	
		400 Series Social	
		GRI 401 Employment GRI 402 Labor/Management Relations GRI 403 Occupational Health and Safety GRI 404 Training and Education GRI 405 Diversity and Equal Opportunity GRI 406 Non-discrimination GRI 407 Freedom of Association and Collective Bargaining GRI 408 Child Labor GRI 409 Forced or Compulsory Labor	
		GRI 410 Security Practices GRI 411 Rights of Indigenous Peoples GRI 412 Human Rights GRI 413 Local Communities GRI 414 Supplier Social Assessment GRI 415 Public Policy GRI 416 Customer Health and Safety GRI 417 Marketing and Labeling GRI 418 Customer Privacy GRI 419 Socioeconomic Compliance	

Global Reporting Initiative, Fig. 2 GRI's topic-specific standards. (Adapted from GRI Annual Report 2016–2017)

generation of Guidelines (G3) was released (Brown et al. 2007).

There are four key elements in GRI framework:

- Sustainability-reporting guidelines include principles and performance indicators for defining report, content, and quality. The third edition of the Guidelines – the G3 – was published in 2006.
- There are performance indicators in the guidelines which include definitions and other information to assist report writers and to ensure consistency in the interpretation of the performance indicators.
- Sector supplements complement the guidelines with defining sector-specific performance indicators.
- Technical protocols are providing guidance on the boundary of the report.

GRI has had significant advances in recent years converting from guidelines to standards in 2016. These standards are an evolution of the GRI G4 Sustainability Reporting Guidelines, which were released in 2013, and have since been widely adopted. Changing the GRI “Reporting Guidelines” to “Standards” indicates a higher level of specificity and allows greater rigor in reporting activities. In addition, GRI adopted a new modular approach for easier updates. By 2017, GRI Standards included GRI 303, GRI 403, GRI 201, and GRI 306 (Fig. 2).

GRI is also working closely with companies to support the reporting process, and provide data for researchers. In order to improve the quality of this process, GRI certified 17 software tools providers in 2017 to accurately incorporate GRI Standards into their various reporting tools (GRI 2017).

There are ongoing developments that show an increasing interest in sustainability reporting and GRI Standards in the business world. For example, launching an Arabic translation of the GRI Standards allowed sustainability reporting to be more accessible to companies reporting in that language. Additionally, the GRI Standards are

also integrating sustainability reporting with the goals of GSD. Moreover, GRI and the UN Global Compact established close partnership on empowering businesses to prioritize SDG goals. This move allows companies that work with GRI to not only map their efforts onto SDGs but also contribute more holistic approach for the accomplishment of these goals.

Summary

The Global Reporting Initiative (GRI) is an independent institution to develop and disseminate globally accepted sustainability reporting guidelines for organizations on their social, economic, and environmental activities or products. It has spent the past 20 years providing a framework for companies to report social, economic, and environmental standardized performance.

GRI has become the blueprint for organizations to define, report, and improve their sustainability programs. The ultimate aim of developing and using GRI Standards is to contribute to a sustainable global economy via globally accepted credible reporting standards. This greater transparency will empower the companies, their stakeholders, and shareholders to make better decisions to achieve global sustainability.

Today the question is no longer whether companies should report but what they should be reporting on. The aim is to make the industry sustainable better aligning capital with the global sustainability agenda. GRI supports organizations worldwide that communicate and understand their impacts on critical sustainability issues, such as climate change, human rights, governance, and social well-being. This level of awareness leads to action that can create social, economic, and environmental benefits for everyone.

Cross-References

- [Corporate Responsibility](#)
- [Corporate Responsibility Index](#)

- Corporate Social Responsibility
- Sustainability Reporting
- Sustainability Reporting Guidelines

References

- Brown, H. S., de Jong, M., & Lessidrenska, T. (2007). *The rise of Global Reporting Initiative (GRI) as a case of institutional entrepreneurship*. Working paper, 36. Cambridge, MA: John F. Kennedy School of Government, Harvard University. https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/programs/cr/files/workingpaper_36_brown.pdf. Accessed 24 Oct 2019.
- Carroll, A. B., & Buchholtz, A. K. (2009). *Business society: Ethics and stakeholder management*. Mason: Cengage Learning.
- Eccles, R., & Klimenko, S. (2019). The Investor Revolution Harvard Business Review. <https://hbr.org/2019/05/the-investor-revolution>. Accessed 26 Feb 2020.
- EU Commission Green Paper. (2001). Promoting a European framework for corporate social responsibility, COM (2001) 366 Final.
- European Commission (EC). (2012). A renewed EU strategy 2011–14 for corporate social responsibility. Position Paper, 7 March 2012. https://www.eurocommerce.eu/media/7237/position-csr-renewed_csr_strategy_2011-14-07.03.2012.pdf. Accessed 24 Oct 2019.
- Global Reporting Initiative (GRI) standards. Reporting on sustainability issues that matter most. (2017). Whitepaper. New York: WSP/Parsons Brinckerhoff. https://www.wsp.com/-/.../US/.../pdf-WSP-Whitepaper_GRI-. Accessed 25 Feb 2018.
- GRI. (2017). Annual report 2016–2017. The Global Reporting Initiative. www.globalreporting.org/. Accessed 26 Jan 2019.
- Luftig, J. T., & Ouellette, S. M. (Eds.). (2012). *Business performance excellence*. London: Bloomsbury.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131, 625–648.
- Sheehy, B. (2019). TNC code of conduct or CSR? A regulatory systems perspective. In M. Rahim (Ed.), *Legal regulation of corporate social responsibility* (pp. 45–62). Cham: Springer.
- Szejnwald, B. H. (2011). Global reporting initiative. In T. Hale & D. Held (Eds.), *Handbook of transnational governance: Institutions and innovations* (pp. 281–289). Oxford, UK: Polity Press.
- Toker, H. (2015). Global reporting initiative. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility: CSR, sustainability, ethics and governance* (p. 281). Cham: Springer International.
- Turker, D. (2018). *Managing social responsibility: Functional strategies, decisions and practices*. Cham: Springer.

Global Reporting Initiative Standards

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Synonyms

GRI

Definition

The Global Reporting Initiative (GRI) is one of the world's most influential nonprofit organizations that publishes guidelines on nonfinancial information. GRI defines itself as a pioneer of sustainability reporting, and it has largely contributed to enhancing the quality and diffusion of this kind of reporting in both developed and emerging countries since the end of the twentieth century.

GRI firmly believes that fair, effective, and transparent reporting on the economic, social, and environmental performance of an organization produces broad benefits for the organization itself, but also for its stakeholders and society at large.

For this reason, GRI performs varied and complex activities, supporting organizations that are committed to sustainability reporting. In addition to its main activity as a globally recognized standard-setter, GRI encourages dialogue on sustainability reporting through conferences, summits, and strategic partnerships. Moreover, GRI offers chargeable services to individual organizations and professionals involved in the sustainability reporting process.

Introduction

The Global Reporting Initiative (GRI) is an international organization that provides companies and other entities with guidance for the proper preparation of sustainability reports (Herriott 2016).

According to GRI, an entity that regularly draws up and publishes sustainability reports can better understand the various risks to which it is subject, the opportunities to be seized and the link between financial and nonfinancial performance, with a consequent improvement in the long-term strategic planning. Moreover, an organization devoted to sustainability reporting can more easily compare its performance with the laws, regulations, and voluntary codes concerning the social and environmental impacts of corporate activities. This also prevents the organization from being involved in social, environmental, and corporate governance failures. In addition, systematic sustainability-reporting processes strengthen the corporate reputation and build trust.

From a stakeholder's perspective, sustainability reporting fosters a better knowledge of entities' ethical principles, vision, mission, and goals, and it supports a deeper appreciation of their performance, including social and environmental. For all these reasons, sustainability reporting has the power to channel financial resources toward the organizations that can most likely use them in the most profitable and equitable way.

GRI adopts a multistakeholder approach in all phases of its standard-setting activity, from the initial proposal of a standard to its final approval. This has certainly contributed to enhancing GRI's reputation in the international arena. Therefore, we have witnessed an increasing adoption of the 2016 GRI Standards in all kinds of companies, from multinational and large firms to SMEs, operating in advanced economic systems as well as in developing ones.

The GRI Standards have replaced various generations of GRI Guidelines. The GRI Standards build on the "in accordance" principle and the materiality analysis (Torelli et al. 2020; Beske et al. 2020; Safari and Areeb 2020), which were already proposed in the previous Guidelines, known as G4 (Slacik and Greiling 2019). Since the introduction of the G4, companies must comply with the "in accordance" principle, which allows the adoption of the "core" option or the "comprehensive" one in order to report with different levels of detail. In any case, a materiality analysis is required to identify significant issues to

be discussed in the report. However, the shift from the G4 Guidelines to the GRI Standards determined important changes too. Among others, the GRI reporting principles concerning the report content and quality became mandatory. On the contrary, the introduction of the GRI Standards made the use of specific Sector Standards only recommended, in spite of the compulsory nature of the former Sector Guidelines. In fact, the application of a Sector Standard is now mediated by the materiality principle, which not only provides companies with a wider margin of discretion, but also increases their responsibility for the implemented reporting choices.

GRI also manages a Sustainability Disclosure Database, where it collects all types of sustainability reports. In August 2019, the Database hosted over 55,500 reports from nearly 14,000 organizations, and 60% of those documents (i.e., approximately 33,000) were GRI reports.

GRI's activity also includes a range of report services, the organization of global and local events, and the development of projects alongside prestigious partners. All these activities are run by the staff employed at the GRI headquarters in Amsterdam, the Netherlands, and in the regional hubs and offices around the world. In 2018, GRI had little more than 100 employees (GRI 2018a).

GRI is a global network that can rely on several sources of funding, including corporate sponsorship of events and project grants from governments and foundations. Moreover, GRI finances itself through the sale of report services and the collection of fees and donations from its Community members. The GRI Community comprises approximately 600 companies, governmental and nonprofit entities, consultancy and accountancy organizations, rating agencies, academia, and research institutes.

The History

GRI was founded in Boston in 1997 on the initiative of two American nonprofit organizations – the Coalition for Environmentally Responsible Economies (CERES) and the Tellus Institute – that encouraged investors and companies to

consider social and environmental issues in their decision-making processes. Originally, GRI operated as a project department of CERES with the mandate of developing a framework for environmental reporting. The framework should have supported an accountability mechanism to enable investors to verify whether the companies declaring to adopt the CERES Principles for responsible environmental conduct were indeed respecting them (GRI [n.d.](#)).

In 1998, GRI introduced a multistakeholder Steering Committee, which recommended the inclusion of social, economic, and governance issues in the scope of the framework. A broader interest in sustainability therefore began to replace GRI's initial focus on the environment. Soon after, GRI launched the first edition of its *Sustainability Reporting Guidelines* (2000), the core of its reporting framework.

In 2001, GRI was separated from CERES, and in the following year, it was relocated to Amsterdam where it was established as a “*stichting*,” the Dutch word for a nonprofit foundation. Moreover, GRI received formal recognition as a UNEP-collaborating organization during an event in the presence of Kofi Annan, then UN Secretary General. In 2002, the second version of the GRI Guidelines (“G2”) was also presented at the UN World Summit on Sustainable Development in Johannesburg.

The year 2003 was a milestone year for GRI, which enhanced stakeholder dialogue and cooperation. On the one hand, GRI introduced an Organizational Stakeholders Program, allowing its core supporters and funders (including companies, civil society, mediating institutions, academia, the workforce, and public and intergovernmental agencies) to contribute to GRI governance with their expertise and experience in sustainability matters and sustainability reporting. On the other hand, a new governance body called the Stakeholder Council started to operate as a multistakeholder forum in charge of advising the Board of Directors about strategic issues.

Three years later, GRI published the third generation of its Guidelines (“G3”), the development of which had required a multistakeholder approach involving over 3000 experts from

businesses, civil society, and the workforce. The G3 Guidelines were launched during GRI's Global Conference on Sustainability and Transparency in Amsterdam, the first in a series of events that since then has gathered participants from all over the world, including emerging markets. Four other Global Conferences were organized in 2008, 2010, 2013, and 2016 after the success of the first one, attracting thousands of experts in sustainability reporting, practitioners, and representatives of different stakeholder groups to the Dutch capital.

In the meantime, the growing demand for information about a company's social and environmental impacts and the need for comparable reports led to the establishment of GRI focal points – today known as regional hubs – in all the continents. In order to improve sustainability reporting at country level, reach more potential users of Guidelines, and better understand the information needs of local report users, GRI set up offices in Brazil (2007), Australia (2008), China (2009), India (2010), the USA (2011), South Africa (2013), and Colombia (2014).

In addition, GRI published several Sector Supplements to the basic Guidelines. In doing so, GRI intended to provide organizations from specific industries with highly focused guidance, to help them divulge better-structured information on how they had faced the typical social and environmental issues of their sector. Over the years, Sector Supplements have been issued for Financial services (2008), Electric utilities (2009), Food processing (2010), NGOs (2010), Mining and metals (2011), Airport organizations (2011), Construction and real estate (2011), Oil and gas (2012), Media (2012), and Event organizers (2012).

Further topics concerning gender and human rights were also added to the GRI Guidelines in 2011, when an improved edition (“G3.1”) was released. In the same year, GRI inaugurated a Sustainability Disclosure Database to collect any kind of sustainability report, both GRI- and non-GRI-based.

In 2012, GRI actively participated in the work of the Rio+20 United Nations Conference on Sustainable Development, promoting several side

initiatives. Moreover, GRI cooperated with UNEP as secretariat of the Group of Friends of Paragraph 47, a multigovernment network that aimed to enhance the disclosure of corporate sustainability information.

In 2013, GRI issued the fourth version of its Guidelines (“G4”) (Jones et al. 2016; Kumar et al. 2018; Mori Junior and Best 2017) and launched a free web-based tool (“G4 Online”) presenting the Guidelines’ content in a dynamic format.

The year 2014 can be considered a turning point in GRI’s history, due to a profound transformation of its governance. GRI separated the standard-setting function from fundraising and all other activities. The former was attributed to the newly established Global Sustainability Standards Board (GSSB), whereas the latter remained under the responsibility of the Board of Directors. Other governance bodies were also established with the aim of assuring the independence of the standard-setting body, greater transparency, and broader representation of all GRI’s stakeholders.

The first significant achievement of this dual governance structure was the release of an advanced framework for sustainability reporting, namely the GRI Standards, in October 2016 (Gallego-Álvarez et al. 2018; Parsa et al. 2018). The Standards, which had been prepared by the GSSB and submitted to public consultation, have a modular structure and present greater flexibility, clearer requirements, and simpler language than the previous Guidelines.

Finally, the most recent years have been characterized by a significant engagement of GRI with the United Nations Global Compact (UNGC) to improve the reporting on the Sustainable Development Goals (SDGs). In September 2016, GRI and UNGC signed an agreement to colead an Action Platform, supported by the Principles for Responsible Investment (PRI), in order to accelerate corporate reporting on SDGs. The major players of the global investment community, who had convened in Stockholm in May 2017, warmly welcomed the Action Platform. This project also opened the way to several reporting tools for measuring a company’s performance in light of the SDGs. Among others, GRI and UNGC published the following:

- “Analysis of the Goals and Targets” (September 2017)
- “In Focus: Addressing Investor Needs in Business Reporting on the SDGs” (July 2018)
- “Integrating the SDGs into Corporate Reporting: A practical Guide” (August 2018)

Mission and Focus Areas

GRI has a vision: “a thriving global community that lifts humanity and enhances the resources on which all life depends” (GRI 2018a). To make all of this happen, the GRI’s mission is “to empower decisions that create social, environmental and economic benefits for everyone” (GRI 2018a).

To accomplish its mission, GRI has determined four strategic pillars or focus areas (GRI 2018a):

1. Production of standards and guidance to advance sustainable development, also promoting stakeholder engagement on emerging issues.
2. Harmonization of the sustainability landscape in the effort to become the reference point for sustainability reporting, also through cooperation with other organizations.
3. Efficient and effective sustainability reporting, marked by higher quality of the information divulged and less burden on the reporting organizations.
4. Collaboration with all third parties (e.g., policy makers, regulators, stock exchanges, and investors) to enhance transparency and promote a widespread and effective use of sustainability information.

GRI is also aware of its vast potential as an agent of change toward the achievement of the SDGs (GRI 2016a). Through the continuous improvement of its sustainability reporting standards, GRI intends to support the fulfillment of the 2030 Agenda by helping the private sector make better-informed decisions, based on a balanced consideration of social, economic, and ecological aspects. The final purpose of GRI is to contribute to a more inclusive and greener economy, in which companies may positively affect civil

society and the environment, particularly in developing countries and in relation to the emerging challenges that humanity faces.

In the context of the 2030 Agenda, GRI has chosen to cooperate with the UN and other international organizations to achieve *Target 12.6*, established within *Goal 12* on Responsible Consumption and Production. In fact, Target 12.6 encourages companies, especially large and transnational ones, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

Finally, GRI is committed to drawing the attention of policy makers, regulators, and corporations toward the following issues: human rights, climate change, good governance and anticorruption, SMEs, trade facilitation and sustainability, capital markets, and gender equality.

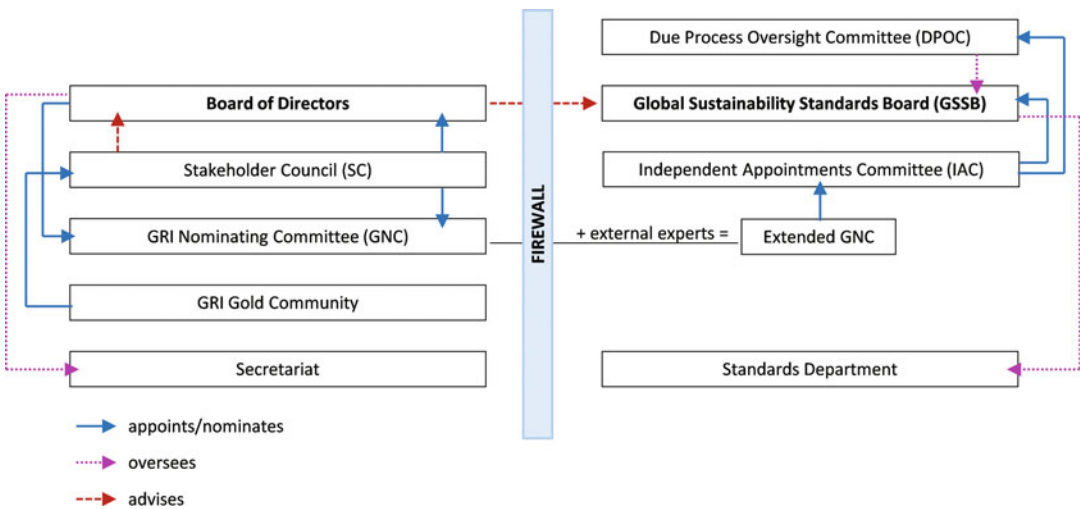
Structure of Governance

GRI has a dual governance structure, which was approved in October 2014 after the appointment of Michael Meehan as Chief Executive. Through the reform of its governance structure, GRI aimed to ensure the complete independence of its standard-setting process. Independence is a strict

requirement for GRI to be accepted by regulators and in all relevant forums as a public reporting standard-setter (GRI 2014). For this reason, in GRI’s reformed governance the Board of Directors delegates the authority to develop and approve the reporting Standards to an independent and dedicated body, the Global Sustainability Standards Board (GSSB). All other activities remain under the responsibility of the Board of Directors.

The governance reform has also safeguarded the global multistakeholder principle, one of GRI’s essential and long-standing features. In other words, GRI recognizes the key role of stakeholders in all strategic decisions, including the appointment of its most important bodies. Moreover, full transparency in all governance processes is guaranteed to GRI’s stakeholders and the whole audience.

Figure 1 shows the dual governance structure currently in force. GRI’s governance is based on two subsystems, which are separated by an organizational firewall established between the bodies involved in the standard-setting process and those responsible for all other activities. This official separation avoids interference between the bodies forming each subsystem, although the two subsystems must interact according to a specific protocol.



Global Reporting Initiative Standards, Fig. 1 GRI dual governance structure. (Source: Adapted from *GRI Annual Report 2016–2017*, p. 40)

Each subsystem comprises bodies with different powers and tasks, such as appointment of members, strategic decision-making, administration, daily management of operations, and oversight. Furthermore, the composition of each body should guarantee the representation of stakeholders of a different nature and geographical origin, according to the multistakeholder approach that lies at the core of GRI's governance philosophy.

All governance bodies have a 3-year mandate, which is usually renewable once for another 3-year term; however, one-third of the members must be replaced (or reelected) every year. All members serve on a voluntary basis, with the sole exception of reimbursement for travel expenses.

In GRI's dual governance structure, the Board of Directors and the GSSB remain at the top of the two subsystems.

The *Board of Directors* is GRI's highest governing body, with administrative powers and oversight responsibilities (GRI 2018b). It determines GRI's mission and purpose, approves strategies and business plans, selects the Chief Executive (normally from its own members), supports them and reviews their performance. The Board also ensures the effective functioning of GRI's organizational structure; in particular, it is responsible for finding the financial resources necessary for the organization to operate and for verifying their prudent and efficient use. Moreover, the Board oversees internal control procedures and external auditing. Finally, it interacts with other governance bodies, including the GSSB to which it provides input and advice on relevant matters. The Board must meet at least twice a year.

The Board of Directors is appointed by the *Stakeholder Council* (SC). The SC is a formal multistakeholder forum that also advises the Board and the Chief Executive on strategic issues and makes broad recommendations on GRI's future policy (GRI 2016b). The SC comprises up to 50 members in representation of all regions of the world (East Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, North America,

and South Asia and Sub-Saharan Africa) and all constituencies (i.e., stakeholder categories). More exactly, the SC is composed of the following constituencies:

- *Business enterprises*, which hold 40% of seats
- *Investment institutions*, such as asset owners and managers, development banks, stock exchanges, and rating agencies, which have the right to occupy 15% of seats
- *Labor organizations* (e.g., trade unions), which are entitled to 10% of seats
- *Mediating institutions*, such as consultants, assurance providers, and any other expert and organization providing reporting-related services, which hold 20% of seats
- *Civil society organizations* engaged in social, environmental, and governance issues, which cover 15% of seats

Evidently, each constituency may contribute to the debate on sustainability-reporting priorities and the need for transparency with different perspectives. Similarly, specific concerns tend to arise in diverse regional contexts and deserve to be discussed during the SC meetings. In order to make sure that all the positions and views are fairly considered, the SC charter states that each constituency should include at least one representative from each geographic area of the world.

The SC, which meets in person at the annual general meeting and may have further video- and teleconferences, supports the mission of GRI by taking active part in its sponsored events.

The election of the SC is a complex process, which is managed in a transparent, open, and objective way by a devoted governance body, namely the *GRI Nominating Committee* (GNC). The composition of the GNC is mixed, as it comprises the chair and two other members of the Board of Directors, and the chair and two other members of the SC currently in office, for a total of six members. The GNC identifies possible candidates to the SC and recommends their appointment in representation of the SC constituencies. In this regard, the GNC makes its recommendations to:

- The Organizational Stakeholders, also known as the *GRI GOLD Community* and corresponding to GRI's core supporters
- The SC itself, given that only one-third of the body is up for consideration on an annual basis

The procedure involves two phases. In the first phase, the *GRI GOLD Community* nominates 60% of SC members. In this phase, each *GOLD Community* member votes for a candidate from their own constituency. In the second phase, the SC itself appoints the remaining 40% of SC members, regardless of constituency.

The governance subsystem centered on the Board of Directors is completed by the *Secretariat*, an executive team based in Amsterdam. The Secretariat manages GRI's activities in order to implement the Board's strategic plans and the SC's recommendations. The team is led by the *Chief Executive*, who is also a member of the Board and supervises all operations. At present, management processes are carried out in five departments:

- *Operations*: The department is in charge of day-to-day management, with focus on human resources, finance, information technology, and governance.
- *Reporting Standards*: The department is responsible for maintaining, developing, and enhancing GRI's Sustainability Reporting Framework.
- *Development*: The department is entrusted with the implementation of GRI's funding strategy and partnerships with donors, and it receives reports from GRI's regional hubs around the world.
- *External Affairs*: The department is charged with GRI's communication strategy and external relations.
- *Network Engagement*: The department has broad responsibility in relation to report services, training and coaching, stakeholder relations, and coordination of regional hubs.

The second governance subsystem relates to GRI's standard-setting activity, which falls under the remit of the *Global Sustainability Standards*

Board (GSSB). This is an independent entity introduced by the governance reform of 2014 and established under the auspices of the Board of Directors. The sole responsibility of the GSSB is to prepare and approve generally accepted standards for sustainability reporting and their interpretations in the public interest. In the context of sustainability reporting, serving the public interest means promoting transparency on social, environmental, and economic matters and providing guidance that can adequately support informed decision-making.

According to the GSSB Terms of Reference (GRI 2018c), the body shall be composed of 15 members drawn from all the GRI constituencies: 5 members from business enterprises and 2 from each of the other stakeholder groups, in addition to 2 eminent persons to hold the positions of Chair and Vice-Chair. All GSSB members shall be chosen according to their professional competence, practical experience and awareness of the sustainability reporting environment, ability to analyze issues, communication skills, integrity, objectivity and discipline, and commitment to GRI's vision and mission (GRI 2015).

Several rules and procedures aim to preserve the necessary independence of the GSSB.

First, nobody shall simultaneously hold positions in the GSSB and another GRI governance body; in addition, a period of 12 months shall elapse before an individual who has already served in other GRI governance bodies becomes eligible for the GSSB.

Second, a public funding base – separate from those of all other GRI activities – is reserved to the GSSB to protect it from vested interests.

Third, the members of the GSSB are selected and nominated by a qualified *Independent Appointments Committee* (IAC), which is made up of 5 members with high reputation, undisputable integrity, and solid background in sustainability reporting. In turn, the IAC is appointed by the so-called *Extended GNC*, including the 6 members of the GNC and 3 external experts from the field of international standard-setting (e.g., IOSCO, ILO, and UNEP) (GRI 2015).

Fourth, in the fulfillment of its tasks the GSSB must strictly adhere to a *Due Process Protocol* that safeguards the quality of the whole standard-setting process in the public interest and emphasizes the multistakeholder approach. The Protocol regulates the creation and release of GRI *Standards* and their *Interpretations*, which are cumulatively defined authoritative pronouncements of the GSSB. The process involves not only the GSSB, but also the GRI Board of Directors and Stakeholder Council, both in an advisory capacity. In addition, the GSSB may create temporary *Technical Committees* and *Project Working Groups* to obtain technical consultations. The entire procedure is supervised by the *Due Process Oversight Committee* (DPOC), which is appointed by the IAC and comprises five senior individuals of high reputation and expertise in sustainability reporting. More precisely, the DPOC provides assurance that the standard-setting activity has been conducted in full compliance with the Due Process Protocol, thus strengthening the confidence of policy makers, investors, and the general audience to the GRI Standards (GRI 2016c).

Activities and Major Accomplishments

GRI is mainly known for its internationally recognized standard-setting activity in the field of sustainability reporting. However, GRI runs many other activities and provides services to a number of organizations, as described below.

Standard-Setting Activity

GRI's standard-setting activity is carried out by the GSSB, in accordance with the Due Process Protocol that imposes the following steps (GRI 2018d):

1. *Project identification and prioritization.* The GSSB identifies potential new projects, taking account of recommendations and comments from the Board of Directors, the SC, and other entities interested in a reporting standard. However, such views are not binding for the GSSB.
2. *Project commencement.* The Standards Division prepares a project proposal, based on a consultation within the GSSB. The GSSB can approve, modify, or reject the proposal, which is also presented to the Board of Directors and the SC in order to collect their opinions on the matters included in the project.
3. *Formation of technical committees and project working groups.* The GSSB may establish Technical Committees and Project Working Groups to obtain technical advice on significant matters. Such bodies are only temporary, and their composition should respect the multi-stakeholder principle.
4. *Development of proposed standard.* The GSSB is entitled to hold a roundtable, submit the proposed Standard to a public consultation, or even carry out a field test. Members of the GSSB who vote for an exposure draft demonstrate their satisfaction with the proposal.
5. *Public exposure.* An approved draft Standard is submitted to public comment through its publication on the GSSB website for at least 60 days. Anyone can access the draft Standard free of charge; moreover, all opinions and suggestions must be recorded and divulged on the GSSB website.
6. *Consideration of respondents' comment on an exposure draft.* The GSSB must analyze all comments and use them to decide whether the draft requires a revision or even further exposure.
7. *Approval of standard or reexposure.* The final revised version of the Standard is approved by the GSSB. The GSSB may also submit the revised content to a new exposure, clearly explaining the reasons for this.
8. *Release of final standard.* The process is completed when the GSSB issues the final Standard. To proceed with this final step, the Chair of the GSSB shall inform the DPOC that the whole process has been conducted according to the Due Process Protocol, and it shall obtain a positive response from the DPOC.

As summarized in the History section, GRI had released four generations of Guidelines before introducing the GRI Standards. These latter were

issued in October 2016 and became the solely accepted ones for the reports published from 1 July 2018 onward.

The GRI Standards consist of a set of modular, interrelated standards, each of which can be revised and updated by the GSSB separately from the others. The Standards are classified in the following series:

- The *Universal series* (GRI 100), which comprises 3 Standards. These Standards explain how to use the Standards, identify the information to be disclosed with reference to the company's profile, strategy, ethics and integrity, governance, stakeholder engagement practices, and reporting process, and require the description of how the company manages material topics.
- The *Economic series* (GRI 200), which includes 6 Standards. These Standards concern information such as the company's economic performance, market presence, and anti-corruption practices.
- The *Environmental series* (GRI 300), which is composed of 8 Standards. These Standards focus on the disclosure of the company's impact on natural resources (in terms of materials, energy, water, biodiversity, emissions, and waste) and supplier environmental assessment.
- The *Social series* (GRI 400), which contains 19 Standards. These Standards regulate the disclosure of information on labor topics (employment, labor relations, training, occupational health and safety, equal opportunities, and child and forced labor), human rights and local community matters, customer health and safety, and supplier social assessment.

Each company is expected to report "in accordance" with the Standards, selecting between the "core" option, which supports the preparation of a less detailed report, and the "comprehensive" option, which results in an in-depth report. Regardless of the option selected, the company will only disclose information on material matters, i.e., those reflecting the significant economic, environmental, and social impacts of the

company's activity and that substantively affect stakeholders' decisions.

Similarly to the previous Guidelines, the GRI Standards have maintained a sustainability-reporting framework based on principles for defining the content of sustainability reports (stakeholder inclusiveness, sustainability context, materiality, and completeness) and ensuring the quality of the information disclosed (accuracy, balance, clarity, comparability, reliability, and timeliness).

Conferences and Summits

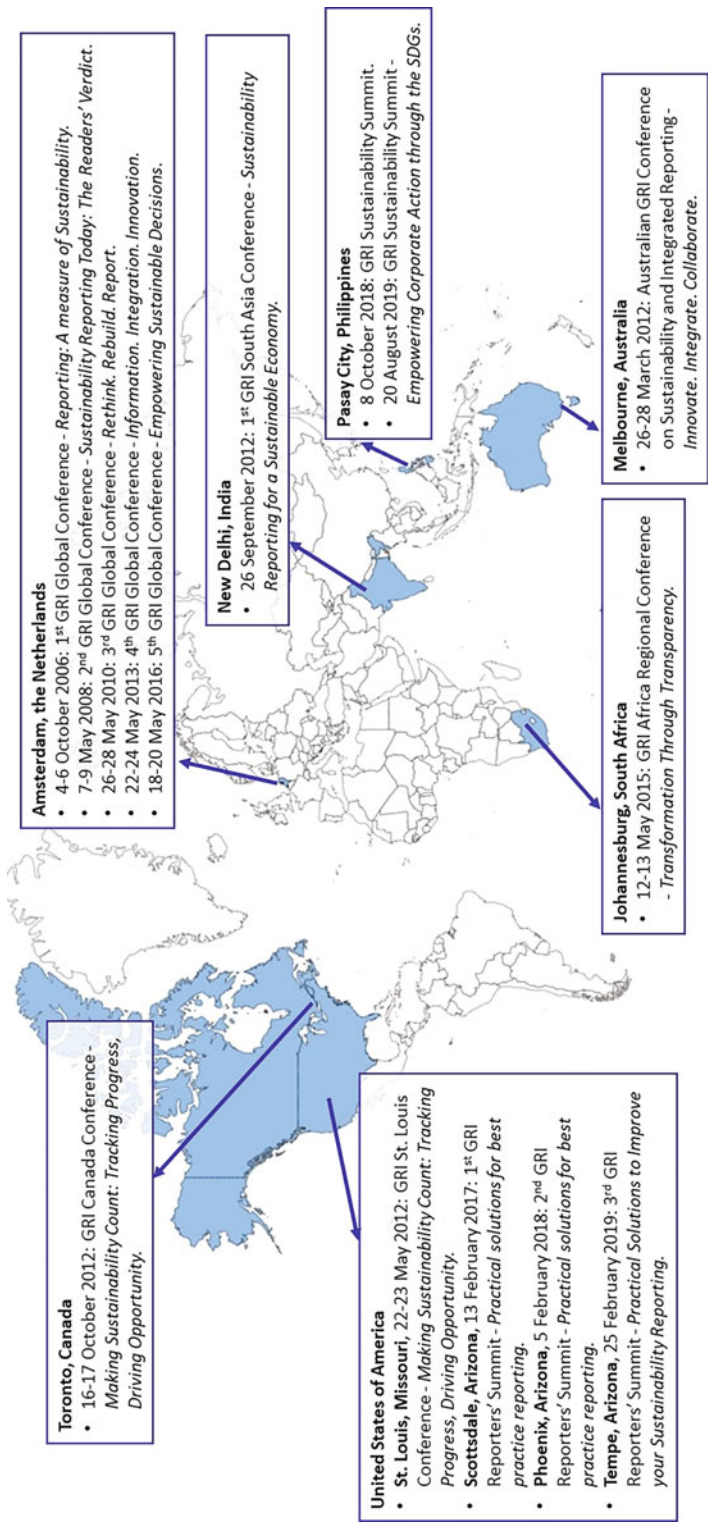
GRI organizes conferences and summits to meet its stakeholders and encourage dialogue on sustainability reporting. Thanks to the increasing popularity of GRI over the years, such events have attracted thousands of participants from all over the world, also offering valuable opportunities for networking and learning in an inclusive context. Since 2006, GRI has hosted five global conferences in Amsterdam to discuss the emerging issues in sustainability and understand the contribution of sustainability information to the improvement of corporate strategies. Moreover, in 2012 the GRI hubs in Australia, North America, and South Asia started to organize regional conferences and summits. Figure 2 presents GRI's main events from 2006 to 2019.

Services Offered to Reporting Organizations and Professionals

GRI offers a wide range of chargeable services to support the preparation of sustainability reports. In doing so, GRI contributes to the improvement of information quality and usability to meet the public interest.

GRI has established a Certified Training Program. In the last decade, over 250 training sessions were attended by nearly 35,000 participants in Europe, the Americas, Africa, Asia, and Oceania (GRI 2019).

The Certified Training Program includes face-to-face courses provided in local languages by selected partners, who also discuss local case studies. The courses can be basic or advanced: While the basic courses ensure an essential knowledge of GRI Standards, the advanced



Global Reporting Initiative Standards, Fig. 2 GRI conferences and summits. (Created by this Author)

courses focus on specific topics (such as materiality and stakeholder engagement).

GRI offers e-learning programs too. These are designed for a wider audience, including all those who want to acquire an introductory knowledge and understanding of sustainability reporting and GRI Standards, but do not need an official certification.

Another learning opportunity consists in one- or two-day tailored seminars arranged for small groups, such as managers and employees of a company's sustainability department.

Individuals who want to demonstrate their knowledge of the GRI Standards, particularly after participation in a Certified Training Program, can take an exam online. Successful candidates receive a 3-year Certificate of Achievement, and their names are listed on the GRI website.

GRI has also created software applications and tools, such as the Digital Reporting Tool, to make the collection of information easier for the reporting organizations and ensure the publication of more robust and transparent reports.

On request, GRI provides several report services like content feedback, Standards alignment test, and process support. An organization can pay for the Disclosure Review Service, through which GRI checks the content of its sustainability report and gives recommendations about the necessary adjustments to align it with the Standards. This service usually covers stakeholder engagement and materiality sections and the disclosure of the management approach to sustainability. In addition, a company can request a Published Report Review Service, which is conducted by GRI staff members as an exclusive seminar.

Strategic Partnerships

GRI has set up partnerships and alliances with other organizations that believe in the importance of fair and transparent reporting for inclusive and sustainable growth. As this also corresponds to Target 12.6 of the 2030 Agenda on SDGs, one of the most recent partnerships undertaken by GRI has led it to cooperate directly with the UN. However, many other effective collaborations between GRI, governmental, and nonprofit institutions have already taken place in previous years.

Since 2010, GRI has collaborated with OECD to spread the combined adoption of OECD's Guidelines for Multinational Enterprises, which provide guidance on sustainable practices, and GRI's reporting framework. In OECD's view, as well as in GRI's, the disclosure of nonfinancial information is indeed a key factor of sustainable development worldwide.

GRI has also a long history of working with the UN Global Compact (UNGC), which dates back to 2010 when the two organizations signed a Memorandum of Understanding. Since then, GRI's reporting framework has been officially accepted for the preparation of the UNGC annual Communication on Progress, a document that demonstrates an entity's commitment to the Ten Principles of the Global Compact.

GRI and UNGC have also signed an alliance with the Earth Charter Initiative, with the purpose of building a just, sustainable, and peaceful global society in the twenty-first century.

GRI's partnership with the United Nations Environment Programme (UNEP) started in 2002 and led to two major outputs: the GRI Financial Services Sector Supplement (2008) and an annual study on global trends in sustainability-reporting regulation and policy, titled "Carrots and Sticks."

GRI took also part in the development of ISO Guidance Standard on Social Responsibility (ISO 26000), released in November 2010. Shortly after the issue of ISO 26000, GRI published a document to highlight the link between the social responsibility areas considered in Guidance and the need for transparency.

With reference to the disclosure of information on corporate environmental performance, GRI has joined efforts with CDP (previously known as Corporate Disclosure Project). Since May 2013, the organizations have cooperated to make their reporting tools more usable for companies, in order to prevent duplication of information on the impacts of climate change, water consumption, air pollution, etc.

Furthermore, GRI has established a partnership with the International Finance Corporation (IFC), the largest global institution focused on the private sector in developing countries. The

partnership aims to raise awareness on the necessity of transparency in the private sector's organizations. Moreover, it intends to encourage investment in companies that adopt the best corporate governance practices and have achieved valuable social and environmental performance.

Fair and equitable growth of developing countries is also at the core of GRI's collaboration with the United Nations Conference on Trade and Development (UNCTAD). Launched in 2008 and then renewed in 2017, this alliance focuses on responsible investment and the global value chain.

Furthermore, GRI and its most important partners (including UNCTAD, UNGC, UNEP Finance Initiative, and the Principles for Responsible Investment) support the Sustainable Stock Exchanges (SSE) Initiative. The SSE Initiative is a worldwide multistakeholder platform that involves stock exchanges, regulators, and investors and encourages listed companies to disseminate well-structured nonfinancial information to the markets.

GRI's strategic partners also include governments, multilateral donors, and foundations, which have provided GRI with significant financial support in this decade. Among others, GRI has run programs funded by the Swedish International Development Cooperation Agency (SIDA), the Swiss State Secretariat for Economic Affairs (SECO), the UK Department for International Development (DFID), the Australian Department of Foreign Affairs and Trade (DFAT), the Robert Wood Johnson Foundation, the Alcoa Foundation, and the Spanish Fundación ONCE.

Summary

In over 20 years of activity as an internationally recognized standard-setter, GRI has largely contributed to the global diffusion and continuous improvement of sustainability reporting.

GRI's success is mainly attributable to two main factors: the multistakeholder approach that GRI adopts in the production of sustainability reporting standards, on the one hand, and the

strong independence and transparency characterizing its whole work, on the other.

Since the beginning of this century, the growing interest in sustainability matters and non-financial reporting has resulted in the establishment of a number of GRI's regional hubs around the world and in a wide range of services provided to organizations and professionals. Indeed, GRI has systematically encouraged and accompanied thousands of organizations in the preparation of their sustainability reports, which have become increasingly complete, effective, and reliable. Moreover, GRI has supported professionals determined to improve their knowledge and expertise in sustainability reporting practices.

Thanks to GRI's valuable efforts, sustainability reporting enables a greater understanding of the mechanisms that organizations use to properly balance their economic performance and social and environmental concerns.

Cross-References

- [Corporate Social Responsibility](#)
- [ISO 26000 Standard](#)
- [Nonfinancial Information](#)
- [Reporting Framework](#)
- [Sustainability Reporting](#)
- [Sustainable Development](#)

References

- Beske, F., Haustein, E., & Lorson, P. C. (2020). Materiality analysis in sustainability and integrated reports. *Sustainability Accounting, Management and Policy Journal*, 11(1), 162–186.
- Gallego-Álvarez, I., Lozano, M. B., & Rodríguez-Rosa, M. (2018). An analysis of the environmental information in international companies according to the new GRI standards. *Journal of Cleaner Production*, 182, 57–66.
- GRI. (2014). *GRI's new governance structure*. November.
- GRI. (2015). *Independent appointments committee. Terms of reference*. October.
- GRI. (2016a). *GRI's contribution to sustainable development*. April.
- GRI. (2016b). *Rules and procedures for the GRI stakeholder council*. 29 September.

- GRI. (2016c). *Due process oversight committee. Terms of reference*. October.
- GRI. (2018a). *GRI annual report, disclosure 102–2*.
- GRI. (2018b). *Rules and procedures for the GRI board of directors*. October.
- GRI. (2018c). *Global sustainability standards board. Terms of reference*. October.
- GRI. (2018d). *Global sustainability standards board. Due process protocol*. October.
- GRI. (2019). *Training course information*. Retrieved November 1, 2019, from <https://www.globalreporting.org/services/training/certified-training-partners/trainings-in-numbers/Pages/default.aspx>
- GRI. (n.d.). *GRI's history*. Retrieved November 23, 2019, from <https://www.globalreporting.org/information/about-gri/gri-history/Pages/GRI's%20history.aspx>
- Herriott, S. R. (2016). *Metrics for sustainable business. Measures and standards for the assessment of organizations*. New York: Routledge.
- Jones, P., Comfort, D., & Hillier, D. (2016). Managing materiality: A preliminary examination of the adoption of the new GRI G4 guidelines on materiality within the business community. *Journal of Public Affairs*, 16, 222–230.
- Kumar, R., Pande, N., & Afreen, S. (2018). Developing a GRI-G4-based persuasive communication framework for sustainability reporting (SR): Examining top 10 Indian banks. *International Journal of Emerging Markets*, 13(1), 136–161.
- Mori Junior, R., & Best, P. (2017). GRI G4 content index: Does it improve credibility and change the expectation–performance gap of GRI-assured sustainability reports? *Sustainability Accounting, Management and Policy Journal*, 8(5), 571–594.
- Parsa, S., Roper, I., Muller-Camen, M., & Szigetvari, E. (2018). Have labour practices and human rights disclosures enhanced corporate accountability? The case of the GRI framework. *Accounting Forum*, 2(1), 47–64.
- Safari, M., & Areeb, A. (2020). A qualitative analysis of GRI principles for defining sustainability report quality: An Australian case from the preparers' perspective. *Accounting Forum*, 44(4), 344–375.
- Slacik, J., & Greiling, D. (2019). Compliance with materiality in G4-sustainability reports by electric utilities. *International Journal of Energy Sector Management*, 14(3), 583–608.
- Torelli, R., Balluchi, F., & Furlotti, K. (2020). The materiality assessment and stakeholder engagement: A content analysis of sustainability reports. *Corporate Social Responsibility and Environmental Management*, 27, 470–484.

Global Value Chains

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Synonyms

Cross-national value chains; Global supply chains; GSCs; GVCs

Definition/Description

The value chain represents the set of activities necessary to manufacture a good or service, each of which generates added value to the product, which represents a more strategic management approach. The concept of Global Value Chains (GVCs) represents the international extension of this definition. GVCs focus not only on the firm competitiveness, as the value chain theory aims, or the movement of final products, as classical international trade theories have analyzed, but on the cross-national transfer of tasks, having special relevance to the value added or generated by these tasks. GVCs and their role in the economic performance of countries, industries and firms have been extensively discussed in the management and economics literature.

Introduction

Since Mikel Porter first presented the concept of value chain (Porter 1985) as a basic framework for developing a corporate strategy to promote firm competitiveness, the conception has significantly evolved to new dimensions beyond the firm, thanks to the globalization and the new industrial revolution based on technology and information.

The advances in transports and communication technologies and the reduction of trade barriers facilitated and fostered international trade, based on faster, cheaper, safer, and more efficient

Global Supply Chains

► Global Value Chains

transactions, which led to globalization. The term globalization, although widely used and difficult to conceptualize, can be summarized in a very basic way, and in relation only to its economic dimension, such as the export and import of goods and services, international capital mobility, labor mobility, and technical knowledge across national borders (Freeman 2018).

This new global context helped that many companies decided to relocate (offshoring) and outsource (outsourcing) many activities to third countries. Nowadays, manufacture process and services can be “sliced” in production units, each corresponding to a different task. These production units are relocated to those places where the work can be done most efficiently, often in a third country (Inomata 2017). The efficiency gains obtained from lower cost of production factors, particularly labor, the access to raw materials, or more favorable taxation systems, among others, were proportionally higher than the rise in transaction costs associated with logistics and communications.

Within this context, the manufacture of goods and the provision of services were no longer always produced in the same company, or in the same country, but can involve many companies, in different countries. It can even involve the same company, in different countries, that is, a multinational enterprise (MNE). (An international company is that one with export and import operations. A Multinational Enterprise (MNE) is one that has investments in two or more countries. All multinational companies are international; however not all international companies are multinational.) Thus, Global Value Chains emerged (GVCs), in which the relevant issue is not only the firm competitiveness, as the value chain theory aims, or the movement of final products, as classical international trade theories have analyzed, but also the cross-national transfer of tasks, focusing on the value added or generated by these tasks (Inomata 2017).

As multinational companies increased, and global value chains became longer and more complex (greater number of activities, increasingly specialized and carried out in different locations and countries), world economies were more

integrated and more interdependent. This makes more difficult to conceive national industries as self-contained systems and national economic performance as endogenous (Sturgeon and Memedović 2011). Since the 1990s, global value chains became one of the main drivers of economic development and structural changes at all levels of economic activity: companies, industries, countries, regions, and the global economy (Sturgeon and Memedović 2011). In recent years, events such as the 2008 financial crisis or the Covid-19 pandemic, a new industrial revolution based on information technologies and social and cultural changes that demand a more sustainable economy have generated changes and new trends in the configuration of GVCs. These new trends are generating structural changes in international trade and national economies in which firms play again a crucial role.

GVCs and their role in the economic performance of countries, industries and firms have been extensively discussed in the management and economics literature. The present work does not aim to perform a detailed review about GVCs literature. Instead, we try to facilitate a comprehensive understanding of the concept of GVCs. We first discuss the origin and evolution of the concept, by explaining key concepts and different conceptualizations of the term. Secondly, we summarize the main GVC analytical approaches. Finally, we discuss the recent changes and future perspectives generated by the rise of the sustainable economy and the arrival of the industrial revolution 4.0.

What Is a Global Value Chain? Origin and Conceptualization

The concept of value chain arose within the field of strategic management, as a tool to increase the efficiency and competitiveness of companies through the organization of transactions that take places during the production process. Over time, as companies began to organize production activities in different locations and outsource part of its production to third companies, the concept of value chain began to coincide and interact with

another relevant concept for business management such as supply chains, to that time mainly related to logistics. The parallelism between value and supply chains began to be even greater when, in line with the fall in trade barriers and advances in communication and transport technologies, companies started to relocate part of their activities beyond their national markets (offshoring), and in many cases, outsource tasks and services in third countries (outsourcing). It is at this time where value chains take a leading role in the development and understanding of international trade and national and regional economies, until they become a key element of global economic development and of countries.

Despite the relevance of GVCs, and the studies that have conceptualized the term and developed methodologies for its analysis, there is not always a consensus on its definition and use. The large number of economic activities and areas of knowledge in which they are relevant, as well as the different approaches to their study, for companies, industries, countries, and international trade, means that the definition and use of the term is not always clear and that it is even used as a synonym or replaced by other related concepts. In addition, the concept of GVC is in continuous development, and it evolves hand in hand with changes in the environment. Then, firstly, we try to present in a simple and clear way what a GVC is and its relation with other relevant terms.

Michael Porter first defined the concept of value chain as a set of activities that a firm performs to deliver a valuable product or service to the market (Porter 1985). The value added in the product is the result of the aggregation of the value added in each of different activities. In order to be competitive, the company must analyze how efficient it is in performing each of these tasks and outsource to the market or relocate to another location those in which it is not able to be efficient enough. The efficiency of each activity determines cost and margins, that is, firm's profitability. So, this model has been a key strategic management tool to understand the value creation process in organizations, and improve their competitiveness. According to Porter, a value chain can be broken into five primary activities: inbound

logistics, operations, outbound logistics, marketing and sales, and service. Porter's definition also considers four secondary activities that support primary activities in one or more of the primary ones: procurement, human resource management, infrastructure, and technological development.

The concept of value chain can be divided in two. On the one hand, a simple value chain describes the full range of activities required to bring a product or service from conception, through the different phases of production, and delivery to final consumers. On the other hand, in order to describe a more complex reality, the extended value chains consider also more activities and agents involved in the development of the product or service. Even, in the reality, the configuration of a value chain can be interconnected and interrelated with other value chain. Thus, in many occasions the definition of a value chain includes activities that are part of other value chains (Kaplinsky and Morris 2000).

A previous concept related to value chain is the supply chain. Originally, the supply chain had a conception more oriented to operations management and to logistics. The supply chain was defined as the set of operations and processes necessary to produce and deliver a product to the consumer. Later, with the globalization of production chains, production processes became more integrated and interrelated, and while their efficiency increased, so did the complexity of their management. As a result, supply chain management went beyond logistics, increasingly incorporating other business and management functions within and between companies (Jones et al. 2019). According to Lariviere (2018), supply chains are all the resource and processes required to fulfill the demand for products, both the physical ones and nonphysical assets. In the same line, Chopra and Meindl (2010) indicated that a supply chain consists of all agents (manufacturers, suppliers, transporters, warehouses, retailers, and customers) and, within each organization, all the functions involved, directly or indirectly, in fulfilling a customer request. This last definition, to a certain extent, reflects the two conceptions – that of the original value chain in the internal

dimension of the company and that of the supply chain, more oriented toward the logistics that takes place between the different stages of the production of a good or service.

In summary, a supply chain is the set of logistics activities, physical and nonphysical resources used to manufacture and make a product or service available to the consumer, that is, it has a more operational focus. On the other hand, the value chain represents the set of activities necessary to manufacture a good or service, each of which generates added value to the product, which represents a more strategic management approach.

The concept of GVCs or global supply chains (GSCs) is the international extension of these definitions (Jones et al. 2019), simply due to the fact that the activities that occur in these chains have been developed in different countries. The production is divided not only within a factory or a single firm but also in production and commercial chains that link multiple firms, facilities, infrastructures, and companies located in different countries, which conform a value adding chain of activities (Sturgeon and Memedović 2011). That is why many authors consider GVCs as the evolution to an international dimension of Porter's value chain concept, in a new context such as that of a globalized economy. These authors define the GVC as the set of activities that it is necessary to develop to obtain a good or service, and that take place in two or more countries. This is the case of Nguyen et al. (2021) who consider the global value chain as a "globalized production line in which many countries participate in various stages including concept, manufacturing, and logistics."

However, there are authors who defend that the GVC is not an extension of Porter's value chain, but something else. Inomata (2017) considers that different from a GVC based on Porter's value chain concept focused in how value distribution structure affects the internal firm's configuration, the main objective of GVC studies is to explore the interplay between value distribution mechanisms and organization of the cross-border production–consumption nexus. This is a conceptualization more based in the definitions provided by Global Value Chains Initiative (2000–2005), later improved by Gereffi et al. (2005). These

authors provided definitions focused on the governance structure of organizing international production networks, with an international trade approach. According to these authors GVC studies have to pay attention to the forms of transactions between stakeholders since the way transactions take place reflects power relations between the parties, which ultimately determine value distributions along the value chain.

In reality, in most cases, the use of some definitions or others depends on the approach from which they are made, that is, what is being analyzed, and from what dimension of knowledge. It is not equally understood what a GVC is when studying the organization of activities in a firm, than when considering the implications for international trade. In order to further clarify this issue, the next section briefly overviews the main approaches when studying the phenomenon of global value chains.

Global Value Chain Analytical Approaches

To discuss the different approaches with which GVCs are analyzed, we draw on the review work carried out by Jones et al. (2019), who in a simple and very didactic way grouped the GVC analytical approaches into four major categories (Table 1), of which we discuss the two of them more related to firm's management, the supply management and the industry/product approaches.

Supply Chain Management

One of the main contexts in which GVCs are considered is related with supply chain management (SCM) from the firm's perspective. SCM is a business analytical framework used by companies to improve firm competitiveness in the context of global manufacture processes (Jones et al. 2019). The development of the SCM coincides in time with the appearance of the value chain concept, and with the internationalization of the activity of companies, time at which the study of logistics and operational activities evolves toward a more multidisciplinary and integrative management dimension.

Global Value Chains, Table 1 Major global value chain (GVC) analytical approaches

Analytical approach	Description
Supply chain management	A business analytical framework from the firm's perspective on how a firm can enhance competitiveness in the context of GVCs
Industry or product case studies	In-depth GVC analysis from the industry's perspective, such as value distribution along a supply chain, key play
Input-output based analytical approaches	Quantitative analysis from a macro perspective, by applying the input-output framework to measure a country's specialization in global production networks and its GVC participation
Other analytical approaches	Applications of general and partial equilibrium models, as well as gravity models, for GVC-related analysis

Source: Jones et al. (2019)

The vision of the SCM has evolved since its conception as a tool for coordinating the tangible functions of the activity, manufacture, and logistics (Lee and Billington 1992) along the entire value chain, from raw material to the end user (New and Payne 1995), both in the internal tasks and relationships within the organization, and external ones with suppliers and customers throughout the supply chain. At present, it is more identified with a cross-functional function that applies an integrated business approach for maximizing value creation and achieving sustainable competitive advantages (Jones et al. 2019). This new vision does not consider the supply chain as just another function of the business activity but as a strategic function that integrates all the tangible and intangible aspects that interact in it, from logistics and production, to the necessary management and information systems (Park et al. 2013; Stadler 2015).

Industry or Product Case Studies

The structure that a value chain adopts and the interactions and relationships that occur between its agents condition and determine the

competitiveness and success not only of companies but also of products and industries as a whole. On the other hand, policy makers demand information in order to implement governance actions and develop policies that favor the competitiveness of their companies and the economic development and well-being in their territories. Furthermore, society and consumers increasingly demand greater transparency in the operation of GVCs, in order to know where and how the goods and services they consume are produced, as well as the way in which value creation is distributed throughout.

There is a great variety of analyses, from those works that are limited to identifying the steps in the value chain, the involved agents and the direction of the flows between them, to the works that manage to determine the competitive relationships between the agents and the added value that is generated at each stage. The scope of the works is conditioned by the availability of information, and in the case of GVC, obtaining information is even more costly and complicated. As a general rule, the more information a methodology provides, the greater the amount of information that is needed, and therefore, its application is more difficult and involves a greater consumption of resources, both in time and money. The studies that best characterize the global value chain are usually static, due to the enormous consumption of resources involved in carrying them out or the inability to obtain the information.

Future Directions: Toward a More Sustainable GVCs

The effects of GVCs depend on the particular case conditioned by multiple factors such as the production stage, location, product, or regulations among others (Jones et al. 2019). GVCs condition the competitiveness and economic development of companies and countries, and the participation in them generates opportunities, not only in terms of increasing international trade but also in accessing resources, technologies, and knowledge and developing efficiency and productivity gains. In the case of employment, in developed countries

there is no consensus on the impact of GVCs on total employment (Jones et al. 2019), but in developing countries, participation in GVCs generates a prior positive impact on employment, since demand for skilled labor increase, local workers receive trainings; and then, workers also move from MNEs to local firms, bringing acquired skills and knowledge with them (Taglioni and Winkler 2016). However, in some cases development is not sustained over time, redundancy of low-skilled labor occurs, and countries end up immersed in the middle-income trap. (A country in the middle-income trap is the one that has lost its competitive advantage in the export of manufactured products because of the rise in wages due to the economic development experienced. However, it does not have the capacity to match the more developed economies and the high value-added markets.)

In the last 10 years, GVCs have undergone profound changes according with several economic, political, technological and social structural changes. Since the financial crisis of 2008, the economic recovery has reduced the GVCs production length (the number of activities or stages during the production process), and more and more tasks, although may continue to be offshored or outsourced, are carried out in the same country. Furthermore, recent events have evidenced the fragility of GVCs, due to the failure of one of its stages, as in the case of Suez Canal obstruction in 2021, and the risks to citizens' health and safety, such as in the case of the COVID-19 crisis. Below we summarize some of the main drivers behind the transformation of GVCs in the coming years.

Nowadays, there is a political and social trend in favor of a Green economy, more socially and environmentally sustainable, and firms are gradually incorporating sustainability criteria in their production processes and in their organizations. Thus, methodologies such as the Life Cycle Assessment (LCA) or the Social Life Cycle Assessment (S-LCA) emerge to facilitate organizations to evaluate and incorporate into their management the criteria and priorities included in the Sustainable Development Goals (SDGs), in the context of the 2030 Agenda for Sustainable

Development. These new methodologies are based on a value chain vision, in which the different stages in the production processes are analyzed, considering how the different activities, whether direct or indirect, generate social and environmental externalities. In the case of multinational companies, the GVC approach is essential to be able to make an adequate evaluation of these externalities.

Many companies and products are efficient from an economic point of view, but they are not environmentally and socially sustainable. This gives rise to the emergence of reshoring, that is, the return of the production activities to the countries of origin. Reshoring minimizes or eliminates outsourcing costs (Nguyen et al. 2021) and enhances internal collaboration across firms' departments (Wan et al. 2019). On the other hand, the return of activities facilitates in many cases a more environmentally sustainable production, and positive social impacts, increasing employment, wealth, and taxes. In most cases, governments of developed countries favor reshoring by reforming tax policies, removing business barriers, and increasing domestic manufacturing capacity. On the other hand, developing countries that carry out these tasks see their participation in GVCs at risk (Rasel et al. 2020).

These changes take place thanks to the fact that the industrial revolution 4.0 is taking place in parallel. The global economy is gradually transforming from an economy based on manufacturing to a digital economy based on technological advances, information, and data, characterized by a fusion of technologies between physical, digital, and biological spheres (Nguyen et al. 2021). This process has given rise to the so-called Globalization 4.0 (Schwab 2018) in which social and environmental criteria take a greater relevance (Bridge 2002) and production is less dependent on labor, since many tasks performed by workers are replaced by technology.

The combination of a globalization that adopts the postulates of a green economy and the environmental and social objectives of the 2030 agenda with the industrial revolution 4.0 create a new paradigm for firms and country development and sustainability. There are opportunities for

development thanks to a new positioning in the development of global value chains based on new technologies. However, there is a risk that this new globalization will worsen the situation in countries that have already fallen into the middle-income trap. The role of international organizations and governments in matters of governance will be essential to enable companies to be competitive and sustainable in this new era.

Summary

Many authors consider GVCs as the evolution to an international dimension of Porter's value chain concept, in a new context such as that of a globalized economy. GVC analytical approaches can be grouped into four categories: supply chain management, industry or product case studies, input-output based analytical approaches, and other analytical approaches. The effects of GVCs depend on the particular case conditioned by multiple factors such as production stage, location, product, or regulation. The global economy is gradually transforming into the so-called Globalization 4.0 in which social and environmental criteria take greater relevance, so there are opportunities for development to enable companies to be competitive and sustainable in this new era.

Cross-References

- [Blue Circular Economy](#)
- [Life Cycle Management](#)
- [Social Life Cycle Assessment](#)
- [Supply Chain](#)
- [United Nations Sustainable Development Goals 2030, The](#)
- [Value Chain Analysis](#)

References

- Bridge, G. (2002). Grounding globalization: The prospects and perils of linking economic processes of globalization to environmental outcomes. *Economic Geography*, 78(3), 361–386.
- Chopra, S., & Meindl, P. (2010). *Supply chain management*. Hoboken: Prentice-Hall: Pearson Education.
- Freeman, R. B. (2018). Globalization and labour. In Macmillan Publishers Ltd (Eds.), *The New Palgrave dictionary of economics*. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95189-5_2573.
- Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). The governance of global value chains. *Review of International Political Economy*, 12(1), 78–104.
- Inomata, S. (2017). Analytical frameworks for global value chains: An overview. In *Global Value Chain Development Report 2017*. Washington, DC: World Bank.
- Jones, L., Demirkaya, M., & Bethmann, E. (2019). Global value chain analysis: Concepts and approaches. *Journal of International Commerce and Economics*, 2019, 1–29.
- Kaplinsky, R., & Morris, M. (2000). *A handbook for value chain research* (Vol. 113). Brighton: Institute of Development Studies, University of Sussex.
- Lariviere, M. A. (2018). Supply chains. In Macmillan Publishers Ltd (Eds.), *The New Palgrave dictionary of economics*. London: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-95189-5_2044.
- Lee, H. L., & Billington, C. (1992). Managing supply chain inventory: Pitfalls and opportunities. *MIT Sloan Management Review*, 33(3), 65–73.
- New, S., & Payne, P. (1995). Research frameworks in logistics: Three models, seven dinners and a survey. *International Journal of Physical Distribution and Logistics Management*, 25(10), 60–77.
- Nguyen, D. P., Vo, X. V., Nguyen, V. C., Mai, X. D., & Duong, Q. K. (2021). Sustainable development for Vietnam's economy in the context of globalization and industrial revolution 4.0. In *Sustainability and environmental decision making* (pp. 281–310). Singapore: Springer.
- Park, A., Nayyar, G., & Low, P. (2013). *Supply chain perspectives and issues: A literature review*. Hong Kong: WTO and Fung Global Institute.
- Porter, M. E. (1985). *The competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Rasel, S., et al. (2020). Coming home and (not) moving in? Examining reshoring firms' subnational location choices in the United States. *Regional Studies*, 54(5), 704–718.
- Schwab, K. (2018). Globalization 4.0 – What does it mean?. World Economic Forum. Available at: <https://www.weforum.org/agenda/2018/11/globalization-4-what-does-it-mean-how-it-will-benefit-everyone/>
- Stadtler H. (2015) Supply Chain Management — An Overview. In: Stadtler H., Kilger C. (eds) Supply Chain Management and Advanced Planning. Springer, Berlin, Heidelberg. https://doi.org/10.1007/3-540-24814-5_2
- Sturgeon, T. J., & Memedović, O. (2011). Mapping global value chains: Intermediate goods trade and structural change in the world economy. United Nations Industrial Development Organization (UNIDO). Development Policy and Strategic Research Branch Working Paper 05/2010.

- Taglioni, D., & Winkler, D. (2016). *Making global value chains work for development* (Trade and development series). Washington, DC: World Bank.
- Wan, L., et al. (2019). Reshoring: Does home country matter? *Journal of Purchasing and Supply Management*, 25(4). <https://doi.org/10.1016/j.pursup.2019.100551>.

Global Warming

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Synonyms

Climate change disasters; Climate warming;
Greenhouse effect; Increasing climate change

Definition

Before defining the concept of global warming, the concept of the greenhouse effect must be explained to better understand this definition. The greenhouse effect can be explained as the following:

One part of the oscillated radiation from the sun is directly reflected into space by the atmosphere; others are absorbed by the earth. A significant segment of the long-wave radiation emitted from the heated earth is absorbed by the atmosphere and is reflected to the earth, and one part is sent directly into space (Dinçer et al. 2010). As the gases in the atmosphere are more permeable to short-wave rays coming from the sun and less permeable to long-wave radiation emitted from the earth due to the accumulated greenhouse gases, the parts close to the ground become warmer than expected. This is called the greenhouse effect (see Fig. 1).

The natural greenhouse effect, in fact, is not caused by the problem of global warming. Significant increases in greenhouse gas emissions have occurred during the short period since the Industrial Revolution (Dinçer et al. 2013). Greenhouse

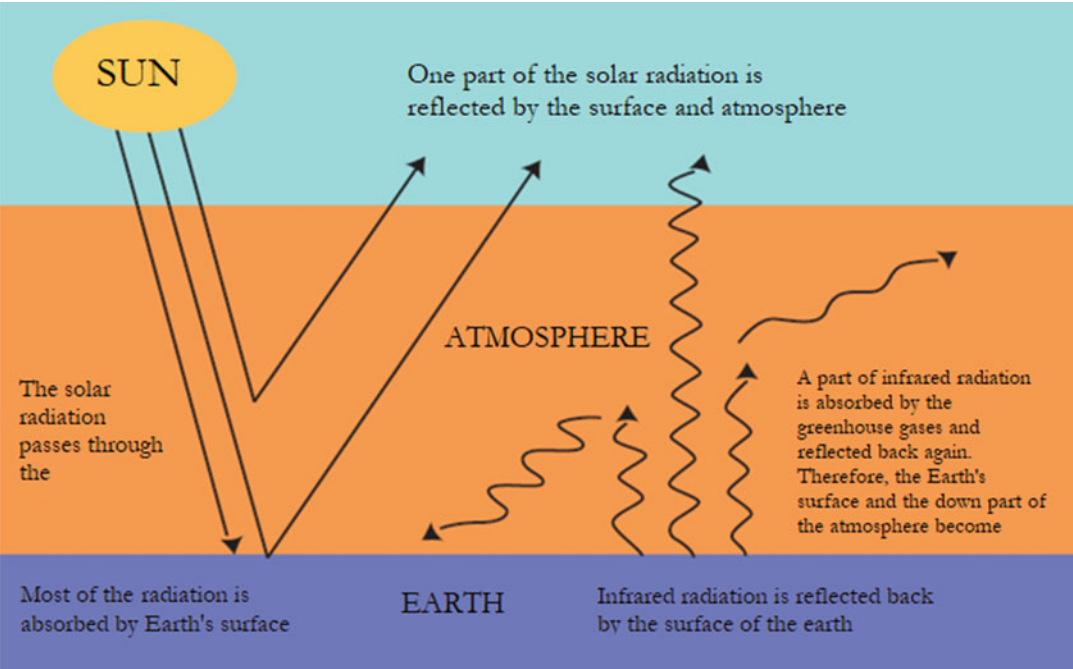
gases, which have long life and have been in the atmosphere for decades, accumulate in the atmosphere. This increased greenhouse gas concentration, like a blanket, captures the long-wave rays emitted from the earth and reflects them back to the world. This cumulative greenhouse effect causes the earth's surface to warm up more than it should naturally. In other words, depending on the rapid increase in the accumulation of greenhouse gases released into the atmosphere, the increase in temperature observed on the earth and in the lower parts of the atmosphere as a result of the strengthening of the natural greenhouse effect is called global warming.

Increasing the concentration of greenhouse gases in the atmosphere leads to the strengthening of the natural greenhouse effect, which allows living things to live at a temperature by providing energy balance (Türkeş 2001). The augmented greenhouse effect disrupts the world's energy balance and causes the earth to warm up more than expected. In this respect, the average surface temperature has increased by about 0.9 °C from the beginning of the twentieth century to nowadays (IPCC Climate Change 2013; Djalante 2019). While the increase in the average surface temperature, which is called global warming, causes climate change, on the one hand, the global warming process continues to increase due to the changing climate (Eco Securities 2006). Furthermore, several climatic feedback mechanisms, driven by external forces, such as solar activities, volcanic activities, and changes in the Earth's orbit, raise violence in the heating process. Global warming steps are shown in Fig. 2.

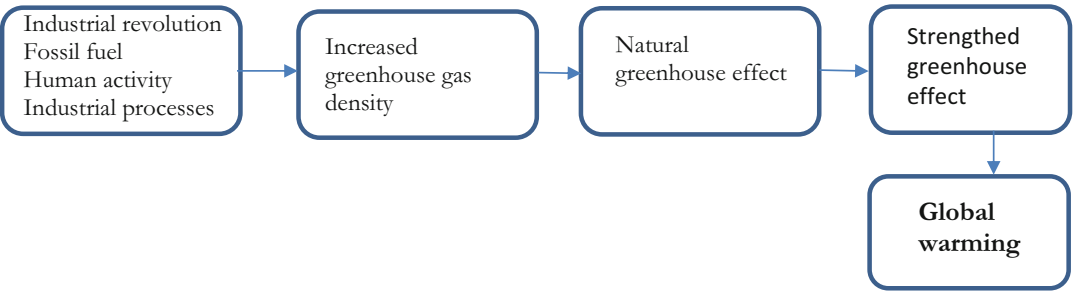
Greenhouse Gases Effective in Global Warming

Rays returning to space, especially infrared charged rays in sunbeams which reflected into the atmosphere from the sun to the earth, is prevented by greenhouse gases. Therefore, global warming occurs, and as the number of greenhouse gases in the atmosphere increases, the greenhouse effect augments.

The main types of greenhouse gases in the atmosphere are water vapor (H₂O), carbon



Global Warming, Fig. 1 The greenhouse effect (Cesur 2014)



Global Warming, Fig. 2 Global warming process

dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulfur hexafluoride (SF₆).

Carbon dioxide (CO₂): Carbon dioxide is the most common type of greenhouse gas in the atmosphere and contributes the most to global warming. Its ratio in greenhouse gases is 82%. Because, carbon dioxide transmits on a large scale to the short-wave rays directly from the sun, while retaining long-wave rays emitted from the earth. It has been found that CO₂, which has not changed in the atmosphere for

millions of years, has increased by 31% since the beginning of the Industrial Revolution. While the annual increase of CO₂ in the atmosphere in the 20 years before 1990 was 0.4%, the increase in the following years ranged from 0.2% to 0.8% (Earth System Research Laboratory). Most of the CO₂ released into the atmosphere due to human activity is caused by the fossil fuels used extensively. 80% of the greenhouse gas effect produced by developed countries in the world and 60% of the total greenhouse gas effect globally is composed of carbon dioxide.

Methane (CH₄): It has the most greenhouse effect after CO₂ in the atmosphere. The amount has increased by 151% since the beginning of the Industrial Revolution and continues to raise. Nearly half of the current methane gas emissions result from the use of fossil fuels, the burial of waste and residues, human activity, such as animal husbandry and rice farming.

Nitrous oxide (N₂O): It has raised by 17% since the Industrial Revolution. Approximately one-third of the nitrous oxide released into the atmosphere accrues during the use of soils open to agriculture, the chemical industry and the production of cattle fodder. The amount of N₂O in the atmosphere is gradually increasing.

Halocarbons: Halocarbon gases such as chlorofluorocarbons (CFCs) are released using sprays in the perfume industry and coolers into the atmosphere. These gases by convert O₃ in the ozone layer of the atmosphere to oxygen and its derivatives cause the ozone layer to become thin. Thus, because of the ozone layer which holds a large part of the ultraviolet rays coming from the sun is thinner, more than ultraviolet rays come to the world and cause various damages and warming on the earth. Halocarbon gases are also gases that cause global warming by holding the sun's rays reflected the atmosphere.

Ozone (O₃): The ozone layer in the atmosphere both plays a very important role in making the world a habitable planet by absorbing excess ultraviolet rays from the sun, and it also provides a living environment for living things by staying at certain degrees of the earth's temperature by being a greenhouse effect gas.

Carbon monoxide (CO): It is very dangerous having too much in the atmosphere since toxic gas. CO, which also has a greenhouse effect in the atmosphere, is mostly released to the atmosphere as a result of human activity. More CO is emitted from fossil fuels that are not burned well and their level in the atmosphere is increasing.

The ratio of greenhouse gases in the atmosphere is quite low (less than 0.1%). To maintain the balance of climate systems on earth, although they are present in low levels in the atmosphere, it is very important to maintain the levels of greenhouse gases in the atmosphere at the previous

level. The average temperature of the earth is about 15 °C. If the greenhouse gases were not in the atmosphere, the Earth's temperature would be much lower than it is now, so there would be no chance of living being in the world. When the ratio of greenhouse gases in the atmosphere increases, as a result of global warming, the icebergs in the poles and high mountains will begin to melt, and there will be no possibility for plants and animals to survive because of forest fires due to extreme heat. As the seas get warmer, the melted CO₂ will be given to the atmosphere and the greenhouse effect will continue to incrementally.

Greenhouse gases causing global warming; mostly due to combustion of fossil fuels (energy generation, heating etc.), industry (energy-related and energy-exterior such as cement production with chemical processes), transport, land use change, waste management, and agricultural activities (energy-related and energy-exterior such as stubble burning, paddy production, livestock breeding and fertilizer use). Table 1 shows the types of greenhouse gas emissions from some industrial activities. Table 2 presents the relative impact of greenhouse gases and annual growth rates (Alper and Anbar 2007).

Greenhouse gases have a very long life and the concentration of greenhouse gases in the atmosphere is determined by the emissions of greenhouse gases 300 years ago or earlier. Therefore, the global emission level should be less than the present consideration for maintaining atmospheric greenhouse gas concentrations at a certain level. Although specific targets are not defined, the goal of keeping the carbon dioxide volume in the atmosphere at 550 ppm is a widely used measure. On the other hand, most scientists state that even this level may be too high to prevent significant climate change impacts (Henderson et al. 2018; Nicholas 2007). The Intergovernmental Panel on Climate Change (IPCC) estimates that there is a 60% reduction in global greenhouse gas emissions to achieve this goal (Rogelj et al. 2012). But, developed countries will need to reduce their greenhouse gas emissions to higher rates (such as 80–90%) for allowing less developed countries to complete their economic growth and progress.

Global Warming, Table 1 Greenhouse gas emissions resulting from industrial production

Greenhouse gases emissions	CO ₂	CH ₄	PFC/HFC	N ₂ O	SF ₆
Aluminum production	✓	✓	✓		✓
Other metals production such as magnesium	✓	✓			✓
Manufacture of Iron-steel and alloy that including iron	✓	✓			
Nitric and adipic acid production	✓			✓	
Ammonia production	✓				
Urea, fertilizer and petrochemical production	✓			✓	
Other materials production adding on cement, lime and mortar	✓				
Petroleum and gas production	✓	✓			
Electricity generation	✓	✓		✓	
Coal mine	✓	✓			
Regional heating	✓				
Pulp production	✓	✓			
Wood/charcoal production	✓	✓			
Halocarbons and SF ₆ production			✓		✓
Agricultural crop production such as palm oil	✓	✓			
Sugar and alcohol factories	✓	✓			
Waste/trash management	✓	✓			

Global Warming, Table 2 Relative and annual increase rates of greenhouse gases

Greenhouse gases	PFC/HFC	CH ₄	O ₃	N ₂ O	CO ₂
Relative effect (%)	15–25	12–20	8	5	50–60
Annual rise rate (%)	4–5	1	0.5	0.2	0.3–0.5

Whereas, this is very difficult to achieve in an environment where world energy demand is increasing. The International Energy Agency estimates that world energy demand in 2030 will be 50% higher than in 2005 (United Nation Climate Change Agency 2018; Sullivan 2006).

Effects of Global Warming

The world climate system has sometimes entered a period of heating or cooling ever since thousands or even millions of years and has undergone conditions that we might call abnormal (Khan 2019; Kweku et al. 2017). Separately the known Glacial and Interglacial periods, disasters have occurred as a result of volcanic activities and their results have been reflected in climate changes that lasted for months, hundreds and even thousands of years. Especially in the last 30 years, very different from the previous climate changes, causing many natural

disasters which trigger cumulative and influencing each other, occurrence event chains with global warming phenomenon raised (Peters et al. 2013). It is mentioned that the problems will continue due to the increasing global warming and that the future of human beings and other living beings will be in danger as a result of catastrophic irreversible disasters.

Some events caused by global warming are as follows:

Glaciers in the arctic and high mountains continue to melt due to increased global warming. Sea level has raised by 15–20 cm in the last 20 years.

The ozone layer absorbs most of the ultraviolet rays from the sun and protects living things from the harmful effects of these rays. Halocarbon gases, such as CFCs, which cause the atmosphere's ozone depletion, increases global warming due to more greenhouse effects.

Depending on global warming that causes climate changes,

Natural disasters such as flood, landslide, and erosion have increased. Slowly falling rain takes most CO₂ gas, even the SO₂, and H₂S gases into the body, and falls to the ground. Meanwhile, the greenhouse and polluted gases in the atmosphere are cleaned. But rapid and excessive rainfall contributes little to the reduction of greenhouse gases in the atmosphere.

While the heating of the earth and the atmosphere warms the seas and oceans, reducing the number of species here, it increases the effects of global warming by releasing the dissolved CO₂ into the atmosphere.

Global warming will reduce the capacity and reserves of watersheds and enhance environmental pollution as a result of increasing need. Water is mandatory for life, and human social and physical life is closely correlated to the use of water.

Desertification will become widespread in the world because of excessive temperature rise.

Increased forest fires will spread epidemic diseases here with aridification of the climate.

Extremely hot and cold will increase mutations in chromosome number and structure of living organisms and will lead to a change in the hereditary structures of living things.

Frozen soils in the Polar Regions will be thawed as a result of global warming and will release the greenhouse gases in their bodies for thousands of years.

Global warming will gradually reduce the temperature difference day and night.

Atmospheric disasters such as tornadoes and lightning will increase.

Global warming will trigger the chain of acid rains and many natural disasters.

Overheating will reduce the water capacity of lakes and rivers.

Sudden climate changes as a result of global warming will increase the disease by making it difficult for the body to achieve homeostasis.

All these negative events will incline a depression of morale, which will lead to sensitization of the mental structure and increase of disputes.

Human Role and Effects in Global Warming

The rapid mechanization process after the Industrial Revolution, changes in the production and consumption structure, population growth, and urbanization brought forth the intense need for energy. Especially after the Second World War, the economic growth demands of the countries brought about an increase in energy demand. This energy need is mostly met from fossil fuels such as coal, petroleum, and their derivatives, causing the destruction of the environment and changing the composition of the atmosphere. In this process, the concentration of carbon dioxide, which is one of the greenhouse gases, caused by the use of fossil fuel, has increased gradually in the atmosphere. The CO₂ concentration, which was almost constant at 280 ppm in the pre-industrial revolution period, exceeded 400 ppm as of 2014. In 2018, it reached an average of 408.52 ppm. Moreover, as a result of deforestation, agricultural activities, wrong land use, and industrial processes, other greenhouse gases such as methane, nitrous oxide, and fluorinated gases increased in the atmosphere during this period.

The main reason for global warming is that the concentration of greenhouse gases in the atmosphere is much higher than the required values. Therefore, the main source of greenhouse gas emissions is the rapidly increasing economic activities with the Industrial Revolution. This is seen from the rise in the number of greenhouse gases in the atmosphere since the Industrial Revolution.

Global climate modeling related to global warming predicts an increase in average surface temperatures between 1.4 °C and 5.8 °C between 1990 and 2100. In the 5th evaluation report of the intergovernmental panel on climate change (IPCC) published in 2013, it is stated that global warming on the climate system is an indisputable and human influence in this warming is clearly present. The following determinations are referred.

Warming in the global climate is certain and the lasts for 30 years, the hottest year passing through the sequential 30 years since 1850, the

hottest 10 years of the twenty-first century. The total heating between 1850–1900 and 2003–2012, calculated based on the longest single data set available, is 0.78 °C. The expected increase in global temperatures will probably be between 1.5 °C and 4.5 °C. Global average surface temperature data in the 1901–2012 period during the longest period in which regional trends could be adequately calculated showed a linear increase of 0.89 °C. The atmospheric concentration of carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) increased more than ever in 800,000 yearly periods. CO₂ densities increased by 40% compared to the pre-industrial period. Paleoclimatological data probably indicates that the 1983–2012 period was the hottest 30-year period in the last 1400 years in the Northern Hemisphere. Greenland and Antarctic ice shields continue to shrink by losing mass. Furthermore, these ice shields continue to decrease in Arctic sea ice mass and spring snow cover in the Northern Hemisphere in the last 20 years. The sea level rise rate observed since the mid-nineteenth century is greater than the average rise rate in the previous 2000 years. The average global sea level increased by 19 cm between 1901 and 2010. It will continue to rise during the twenty-first century. On a global scale, high numbers of cold days and nights are probably decreased, and the number of hot days and nights increased. Except for one scenario, global warming will continue after 2100 based on all new IPCC scenarios. More than 90% of the energy accumulated in the oceans of the period 1971–2010 is linked to global ocean warming and will continue in the twenty-first century. The heat will pass from the surface to the deep ocean, affecting ocean circulation. According to the period 1986–2005, the change in the global average surface temperature during the 2016–2035 period is likely to be in the range of 0.3–0.7 °C.

Summary

Global warming, seen as one of the biggest environmental problems threatening our world, has most importantly emerged as a result of fossil

fuel use, industrialization, energy production, forest depletion, other human activities, and economic growth and population increased accelerated this process. In parallel with the rapid rise of carbon dioxide and other greenhouse gas levels in the atmosphere since the Industrial Revolution, a significant increase also in average temperatures has been observed.

Global warming will cause changes in the ecosystem. If the increase in global average temperatures exceeds 1.5–2.5 °C, the risk of depletion of approximately 20% to 30% of plant and animal species will raise. In the case of increased temperature of 1.5–2.5 °C and accompanied by the concentration of carbon dioxide in the atmosphere to this, significant changes in the structure and function of the ecosystem, ecological interactions of species, and geographical distribution of species are expected. Ecosystems are at risk; these are particularly glaciers, coral reefs and coral islands, northern forests and tropical forests, and poles and Alps.

Changes made by global warming in climatic conditions, environment, and ecosystem will also affect people's lives. For example, there will be migration from regions where the effects of global warming are intense to other regions. These migrations will bring along other problems. People will be able to accept lower salaries to work in regions with more favorable climate. In these regions, real estate prices and house rents will tend to increase. Depending on the effects of climate change, expenses of people may increase. Except for migrations, the increase in regional or inter-country differences may lead to an increase in unrest, fights, and conflicts. Terror incidents may increase, and regional or inter-country conflicts may arise in the sharing of water resources.

Outside of sectors such as agriculture, energy, and tourism, global warming will affect many other sectors directly or indirectly. The sectors most sensitive to emission reduction policies are energy-intensive sectors such as cement, aerospace, metal, and mining and the transportation sector and fossil fuel consuming products such as automobiles. Besides food, construction, insurance, and banking sectors will also be affected by global warming. Not only manufacturers but

consumers will be adversely affected by global warming. The most important risk for consumers owing to global warming will be price increases in food and energy products.

As a result, since global warming occurs as a result of human activities, the excessive and unconscious use of fossil fuels that causes this should be discontinued, and restriction should be introduced. On the other hand, depending on the rapid increase in world population, population growth should be kept within acceptable limits, because of efforts for the solution of these people's food, shelter, warming, and health problems which giving more emissions of greenhouse gases into the atmosphere that increasing air, soil, and water pollution. The human efforts that meet the energy needs from other sources instead of fossil fuels should be increased. Clean energy should be provided by making more use of sun, wind, sea current, sea wave, geothermal, and rivers. Unconscious use of consumables should be avoided in efforts to raise the level of life. Moreover, all precautions should be taken as soon as possible to ensure that natural events occur within their cycle.

Cross-References

- [Climate Change](#)
- [Deforestation](#)
- [Greenhouse Effect](#)
- [Greenhouse Gases](#)

References

- Alper, D., & Anbar, A. (2007). The effects of global warming on the world and Turkey's economy. *DEÜ Sosyal Bilimler Enstitüsü Dergisi*, 9(4), 15–54.
- Cesur, A. (2014). Global warming and climate change. http://www.mta.gov.tr/v3.0/sayfalar/hizmetler/kutuphane/ekonomi-bultenleri/2014_18/b18_17-21.pdf. Accessed 12 October 2016.
- Diñçer, İ., Midilli, A., Hebaşlı, A., & Karakoç, T. H. (eds.) (2010). *Global warming: Engineering solutions*. New York: Springer Publishing.
- Diñçer, İ., Çolpan, C. Ö., & Kadioğlu, F. (2013). *Causes, impacts and solutions to global warming*. New York: Springer Publishing.
- Djalante, R. (2019). Key assessments from the IPCC special report on global warming of 1.5°C and the implications for the Sendai framework for disaster risk reduction. *Progress in Disaster Science*, 1, 1–5.
- Earth System Research Laboratory, Monthly Average Mauna Loa CO2. <http://www.esrl.noaa.gov/gmd/ccgg/trends/>. Accessed 5 July 2019.
- Ecosecurities. (2006). Global climate change: Risk to bank loans. http://www.unepfi.org/fileadmin/documents/global_climate_change_risk.pdf, 70. Accessed 29 Jan 2010.
- Henderson, R. M., Reinert, S. A., Dekhtyar, P., & Migdal, A. (2018). climate change in 2018: implications for business, *Harvard Business School Report*. <https://www.hbs.edu/environment/Documents/cli-mate-change-2018.pdf>. Accessed 26 May 2018.
- IPCC Climate Change. (2013). *The physical science basis, contribution of working group I to the fifth assessment report of the of the intergovernmental panel on climate change* (1st ed.). Cambridge/New York: Cambridge University Press.
- Khan, A. A. (2019). Why would sea-level rise for global warming and polar ice-melt? *Geoscience Frontiers*, 10, 481–494.
- Kweku, D. W., Bismark, O., Maxwell, A., Desmond, K. A., Danso, K. B., Oti-Mensah, E. A., Quachie, A. T., & Adormaa, B. B. (2017). Greenhouse effect: Greenhouse gases and their impact on global warming. *Journal of Scientific Research and Reports*, 17(6), 1–9.
- Nicholas, S. (2007). *The economics of climate change: The stern review* (1st ed.). Cambridge: Cambridge University Press.
- Peters, G. P., Andrew, R. M., Boden, T., Canadell, J. G., Ciais, P., Le Quere, C., Marland, G., Raupach, M. R., & Wilson, C. (2013). The challenge to keep global warming below 2 °C. *Nature Climate Change*, 3, 4–6.
- Rogelj, J., Meinshausen, M., & Knutti, R. (2012). Global warming under old and new scenarios using IPCC climate sensitivity range estimates. *Nature Climate Change*, 2(4), 248–253.
- Sullivan, R. (2006). *Managing investments in a changing climate*. London: The Institutional Investors Group on Climate Change (IIGCC).
- Türkeş, M. (2001). Weather, climate, severe weather events and global warming, T.C. General Directorate of State Meteorological Affairs Seminars for the Year 2000, 1, pp. 187–205.
- United Nation Climate Change Agency, Yearbook of Global Climate Action. (2018). https://unfccc.int/sites/default/files/resource/GCA_Yearbook2018.pdf. Accessed 11 Aug 2018.

Global Warming Awareness

- [Clinton Global Initiative](#)

Global Warming Potential

- [Carbon Footprint](#)

Globalization

- [Clinton Global Initiative](#)
- [Global Governance](#)

Glocalism

- [Glocality](#)

Glocality

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Synonyms

[Glocalism](#); [Glocalization](#); [Grobalization](#); “[Think Global, Act Local](#)”

Definition

Glocality refers to the confluence in certain social activities between the local and the global. Specifically it has to do with the social groups (person, company, organization, or community) that “think globally and act locally.” The term glocality refers specifically to organizations or social groups adapting their goods and/or services to the different local environments where they operate, but without losing their characteristics and/or advantages that make them globally competitive. The glocality represents an important advance of the globalization phenomenon where

people and organizations can approach different situations with a perspective that gives them a better understanding of the situations that organizations face in their international operations (Tien and Talley 2012; Rao 2010).

Introduction

According to Roudometof (2018), it is impossible to discuss the global without touching the local. As the definition indicates, glocality is the mixture between the global and the local. It is a hybrid of two concepts that have different essences, these are globalization and localization. Glocality is also considered as a response to globalization through the reinforcement of the cultural identity of each society (Maynard 2003; Rao 2010). This concept has been used to explain the impact of globalization in different areas of society (Giuliannotti and Robertson 2012).

This combination of words exemplifies in its simplest way a product or service that is developed and distributed globally but is adapted with unique characteristics for a specific market (Shamsuddooha 2008). The first to mention the term glocality was Robertson (1992), this term is mainly related to sociology. It is important to understand how these two concepts are intertwined to reach glocality.

First, it is important to note that the term globalization is relatively new, it appeared in the 1960s but took relevance during the 1990s (Beyer 2007) but not the phenomenon itself. Globalization is a phenomenon that has existed for hundreds of years. Some authors (Friedman 2006) point out that this phenomenon began when Christopher Columbus landed in America at the end of the fifteenth century. Moreover, globalization is also considered to exist since primitive man from Eurasia crossed the Bering Strait and began to populate America (Tropea 2014). However, the first antecedent of the term globalization is proposed by Marshall McLuhan in the 1960s (Adam 2016) with his term “global village.” Later, one of the first to coin the term “globalization” as such was Theodore Levitt (1983) with his classic article “The Globalization of the Markets.” Although the boom of the term takes up much strength

during the 1990s due to the development of the Internet in the everyday life.

Second, localization is a broader term. In order to narrow the term we refer to the business-centric location. According to the foregoing we can understand that this term comprises several elements such as physical closeness with customers, competitors, and suppliers (Rydehell et al. 2018). In addition, a suitable location refers to important benefits for companies such as knowledge of customers and their environment, as well as development of business networks. Also a suitable location allows companies to have access to sources of innovation and development of new technologies.

In this vein, Dunning (1980) points the location as an advantage for the international expansion of companies. It states that within the benefits of localization not only the basic factors of production are found (land, labor, and capital), the local market structure, policies, and laws of the country's governments are also included. According to Villena (2000), the local has been grouped into four analysis units such as: state-national, regional, urban, and community-local.

However, the word "glocality" derives from the Japanese term "Dochakuka" which is the elaboration of global products, procedures, and services to be adapted to specific needs of a culture (Prakash and Singh 2011; Robertson and Giulianotti 2006; Salazar 2005). Given the above, glocality is understood as a way of acting on the business strategy. It seeks to develop strategies, products, and/or services of a global nature, but at the same time that they have the quality to be offered with specific characteristics for a market or group of markets with specific needs. The above with the aim of taking advantage of the benefits of globalization and localization together.

Key Issues

It is important to mention that there is no current glocality theory (Roudometof 2015). According to Robertson (1992) the interdependence of the universal and the particular is the essence of globalization. The above means that globalization makes many elements of everyday life common

in other parts of the world. For example, the use of credit cards, travel, and airports. But on the contrary also in every part of the world these common elements have their own characteristics.

Although glocality does not have its own identity as a theoretical reference, there are three main currents that have addressed the glocality. As noted above, the first to use the term glocality was Robertson (1992), who stated that glocality is included within globalization, that is, an integral part of the globalization phenomenon. The way this happens is that the global interprets the local in such a way that they manage to interact within each other.

The second current on the glocality is proposed by Ritzer (2003, 2004) in response to the contributions made by Robertson (Roudometof 2015). This current replaces the globalization as "grobalization" which is a phenomenon with imperialist ideas of the different international actors (for example, nations, firms, and organizations), which have as main objective to impose on others. Therefore, Ritzer (2003) asserts that globalization is used to promote the "grobalization" of culture. This current indicates that the local exists outside the global.

Finally there is a third current to address the glocality. This gives autonomy to the glocality, that is to say that it is a phenomenon different from the globalization and therefore it has to be approached from another perspective (Alexander 2003). The important thing is to understand the way in which the global and the local interact in modern societies (Roudometof 2015).

Afterward, it is inferred that the glocality is presented as an advance in the phenomenon of globalization, it allows to understand the connections between the global and the local (Salazar 2005). It is one of the ways in which globalization is currently implemented. It is important to mention that the difference between glocality and globalization is that the first is a way that has adopted globalization to increase its intensity and influence in societies. The awareness of companies of the importance of the specific needs of consumers worldwide has triggered an increase in globalization in the markets.

How to exemplify the interaction between the global and the local? A classic example is using

the multinationals, natural agents of the glocality. In a country other than that of origin, multinationals can carry out two strategies. The first is a globalized strategy which refers to the development of strategies considering the world as a single market. Applying this strategy standardizes products and processes in the world. The second, localization strategy refers to applying specific tactics for a particular market, for example, car brands sell some models in some markets and in others not (Prakash and Singh 2011).

Another example of glocality is what happens with Indian films showed in India. In order to be more attractive to the local audience these films present characteristics of Hindu culture such as costumes and music. Despite the foregoing these films include global elements such as Westernized costumes, locations in different parts of the world (Rao 2010). The previous examples allow to visualize and understand the interaction between the global and the local as strategy in companies and in industries.

The use of the globalized strategy and the localized strategy in a joint manner is a sample of glocality. It is important to mention that glocality not only applies in the field of business, but it also applies in different knowledge bodies such as sociology, geography, and marketing. This is important because it is possible to be approached from different perspectives.

However, it is important to mention that glocality is not a new phenomenon, it has existed since globalization emerged. It was discovered due to the vertiginous progress of globalization. This breakthrough generated new ways of being able to interact with the various social actors to strengthen the globalized movement, in whether the glocality is a refined and focused form of globalization (Khondker 2005).

In addition, glocality allows to use the best of both worlds. Specifically the benefits of localization such as the environment, consumer characteristics, and access to the region's own resources, as well as the benefits of globalization such as competitiveness, product diversity, and access to information. This somehow increases the success of companies in global markets.

According to the above, what are the key areas of the glocality phenomenon? The first refers to the place of glocality within globalization, if it is within the same phenomenon, whether it can be considered separately or if it is a breakthrough in the globalized world (Alexander 2003; Ritzer 2003; Robertson 1992). Depending on where it is, it can be better analyzed. The second refers to understanding the impact that glocality has had in the various social and economic fields. This impact generates several questions about the effectiveness of this phenomenon for the different societies of the world.

Future Directions

Some research areas relevant to literature are identified. One of them refers to reducing the shortcomings of globalization, such as: inequalities in economic development, social exclusions, and loss of sovereignty (Bretos and Marcuello 2017). These shortcomings have represented important challenges for all social actors because they have generated problems to improve the transfer of benefits and equal development. It is also important to analyze the depth, that is, the degree to which it is possible: "Glocalize" without losing the essence of what it is and power in this way increases its benefits. The third challenge focuses on explaining the breadth of the glocality, this is about how far it covers, whether it covers only one sector, a society, an industry, or has already expanded in all areas.

Finally it is important to empirically test the glocality. It is important to analyze specific cases of companies that have glocalized their operations in order to understand what specific strategies they use. It is also appropriate to understand the differences in these strategies according to their country of origin and the international markets where they apply them.

Summary

Glocality, since the social point of view, is the point where local and global converge. In a

practical approach the term is associated to the adaptation and standardization of goods and services for different markets. Some scholars have asserted that glocality is not only a new kind of globalization, but is an advance of this. The glocality in the literature is represented for three main body of knowledge: first, glocality is an integral part of the globalization; second, it states that the local exists outside of the global; and third, glocality is a new phenomenon that is not related to globalization.

It is important to point out that glocality is not exclusive for business and management decisions, also it is useful to explain phenomenon for other social sciences. The essence of glocality is adapt the global to the local preferences without losing its global essence. On this regard it is important to understand the degree to which it is possible to adapt, not all the products and services have the same degree of adaptation. Furthermore, it is essential to understand the role that plays glocality in globalization phenomenon, in the way that we can understand this, we can do a better use of this as strategy.

Cross-References

► [Glocalization](#)

References

- Adam, I. (2016). What would McLuhan say about the smartphone? Applying McLuhan's tetrad to the smartphone. *Glocality*, 2(1), 3. <https://doi.org/10.5334/glo.9>.
- Alexander, J. (2003). *The meanings of social life: A cultural sociology*. Oxford: Oxford University Press.
- Beyer, P. (2007). Globalization and glocalization. In J. A. Beckford & N. J. Demerath III (Eds.), *The Sage handbook of the sociology of the religion* (pp. 98–117). Sage. <https://doi.org/10.4135/9781848607965.n6>.
- Bretos, I., & Marcuello, C. (2017). Revisiting globalization challenges and opportunities in the development of cooperatives. *Annals of Public and Cooperative Economics*, 88(1), 47–73.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9–31.
- Friedman, T. L. (2006). *The world is flat: A brief history of the twenty-first century*. New York: Farrar, Straus and Giroux.
- Giulianotti, R., & Robertson, R. (2012). Glocalization. *The Wiley-Blackwell Encyclopedia of Globalization*. <https://doi.org/10.1002/9780470670590.wbeog254>.
- Khondker, H. H. (2005). Globalisation to glocalization: A conceptual exploration. *Intellectual Discourse*, 13(2), 181–199.
- Levitt, T. (1983). The globalization of markets. *Harvard Business Review*, 61(3), 92–102.
- Maynard, M. (2003). From global to glocal: How Gillette's sensor excel accommodates to Japan. *Keio Communication Review*, 3(25), 57–75.
- Prakash, A., & Singh, V. B. (2011). Glocalization in food business: Strategies of adaptation. *Asian Journal of Technology & Management Research*, 1(1), 1–21.
- Rao, S. (2010). "I need an Indian touch": Glocalization and bollywood films. *Journal of International and Intercultural Communication*, 3(1), 1–19. <https://doi.org/10.1080/17513050903428117>.
- Ritzer, G. (2003). Rethinking globalization: Glocalization/globalization and something/nothing. *Sociological Theory*, 21(3), 193–209.
- Ritzer, G. (2004). *The globalization of nothing*. Thousand Oaks: Pine Forge Press.
- Robertson, R. (1992). *Globalization: Social theory and global culture*. London: Sage.
- Robertson, R., & Giulianotti, R. (2006). Futbol, globalización y glocalización. *Revista Internacional de Sociología*, 64(45), 9–35.
- Roudometof, V. (2015). Theorizing glocalization: Three interpretations. *Current Sociology*, 1–18. <https://doi.org/10.1177/1368431015605443>.
- Roudometof, V. (2018). Recovering the local: From glocalization to localization. *Current Sociology*, 1–17. <https://doi.org/10.1177/0011392118812933>.
- Rydehell, H., Isaksson, A., & Lofsten, H. (2018). Business networks and localization effects for new Swedish technology-based firms's innovation performance. *The Journal of Technology Transfer*, 1–30. <https://doi.org/10.1007/s10961-018-9668-2>.
- Salazar, N. B. (2005). Más allá de la globalización: La "glocalización del turismo". *Política y Sociedad*, 42(1), 135–149.
- Shamsuddooha, M. (2008). Globalization to glocalization: A conceptual analysis. *SSRN Electronic Journal*, 1–11. <https://doi.org/10.2139/ssrn.1321662>.
- Tien, C. Y., & Talley, P. C. (2012). "Think globally, act locally": "Glocalization" in Taiwanese higher education. *International Journal of Business and Social Sciences*, 3(15), 124–130.
- Tropea, A. L. (2014). *Poblamiento de América: Nuevas expectativas para un antiguo debate. Un análisis evolutivo de evidencias arqueológicas, antropológicas, históricas, genéticas y lingüísticas*. Buenos Aires.
- Villena, S. (2000). Globalización y multiculturalidad: Pueblos indígenas y medio ambiente en la Amazonia. *Perfiles Latinoamericanos*, 9(17), 95–122.

Glocalization

► Glocality

Goal Setting

► Corporate Strategy

Good Governance

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Synonyms

[Able leadership](#); [Board performance](#); [Effective management](#); [Good stewardship](#); [Governance](#)

Definition

Good governance is a challenging process resulting from a symbiosis between the mission of organization and the laws governing the smooth running of its activity, and also it is based on a series of quantitative assessments of reporting practices, indices, and reports that link performance governance that could contribute to the development of a performance improvement strategy. Finally, good governance is a complex concept with profound implications in the approach of an organization regarding social responsibility and business ethics, in full agreement with ensuring its legal responsibilities.

Introduction

The financial scandals that started in the second part of the twentieth century led to the need to develop

financial-accounting and managerial tools that would lead to the prevention and elimination of frauds and abuses. Financial scandals related to Enron, Exxon Valdez, WorldCom, and other multinational companies have shown that an inefficient allocation of short-term financial resources will have systemic consequences for long-term investments. Thus, an action was taken to reform the structure of organizations and capital markets by adopting stock market regulations and rethinking the duties and responsibilities of managers of large companies.

From the point of view of Anglo-American literature, good governance ensures that decisions are made and implemented in order to increase the well-being of the owners, which leads to actions that compensate for the need to protect shareholder risk and managers' responsibilities, by encouraging managers to take risks in order to increase shareholder income, but, on the other hand, managers must respond to the interests and other stakeholders, including the interests of employees. Holmstrom and Kaplan (2003) consider that it was exaggerated to present the negative results of US corporate governance failures, because, in the long run, US stock returns continue to outperform those of almost all other economies, suggesting that systemic losses are not too serious.

In a good governance process, organizations intertwine their strategies with the motivational elements of the stakeholders and analyze the role of their shareholders and of the boards of directors in promoting their own interests. Good governance offers a chance for both regulators and regulations to play a role in regulating employment in a way that serves all stakeholders in the best way possible. For example, regulatory authorities want to correlate social values with economic incentives and also to discourage corruption. On the other hand, stakeholders influence companies to react effectively to their values, and thus develop internal regulation to respond to challenges in the most effective way.

The complex concept of good governance implies stakeholder involvement in decision making, and the use of appropriate tools rather than governance programs leads to problem solving in a network system and decentralized power (Burlea-Schiopoiu et al. 2014).

Good governance aims to promote ways to comply with regulations and to put into practice responsible regulation that will synthesize some contradictory theories. As a result, medium- and long-term strategies need to be ordered in a pyramid-like hierarchy that encompasses more cooperative strategies that will prevent organizational failure.

Key Issues

The Features of Good Governance

The role of good governance is to prevent conflicts of interest and to protect the interests of investors through a set of rules and functional relationships that are established, on the one hand, between the management of the organization and the board of directors, and, on the other hand, between the shareholders and other stakeholders (Burlea-Schiopoiu and Popa 2013). Therefore, good governance contributes to a more efficient use of financial, human, and material resources, which leads to increasing investor confidence and other stakeholders in the management of the organization and, implicitly, to increasing the organization's reputation.

A number of elements are defining for good governance to provide the opportunity for both regulators and regulations to serve all stakeholders in the best possible way:

- Assessing the need for implementation of an organizational reform addressing issues of governance
- Analyzing how the implementation of a new set of governance rules will affect the interests of stakeholders
- Identifying key elements that influence the relationship between governance and the ethical principles of the organization
- Analyzing how the implementation of good governance system will increase the efficiency of organization.

A good governance involves a clear understanding of the roles of key actors involved in this process, such as board of directors,

management, shareholders, and relations between key actors and other stakeholders.

Organizations' failures and certain unethical managerial behaviors highlight the need for organizations to pay more attention to governance practices. The need to raise equity can have a positive impact on governance, especially if managers have to borrow to finance the acquisition of shares and then are forced to increase performance in order to repay the loans.

It should not be overlooked that the state needs to create an adequate regulatory environment to ensure that newly established relationships between newly privatized companies, financial and nonfinancial stakeholders, and lending institutions will focus on increasing economic efficiency and will promote organizational restructuring and technological modernization. In the underdeveloped market systems from the important transition economies, there are also measures that increase the entrepreneurial competences together with the development of the systems of good governance.

Monitoring, incentives, and other types of governance mechanisms are conceptualized and operationalized as independent, each having its own unique ability to influence the organization's strategies and performance (Cucari 2019). Thus, governance practices should be analyzed in interconnection and complementarity with the potential costs of the governance process.

The Impact of Principles on Good Governance

The divergence that is between the corporate governance systems depending on the institutional, legal, and cultural context of the organizations generated the idea that a sound good governance practices requires an effective exercise of ownership rights, setting standards transparency and fiduciary responsibility of the board of directors, establishing a remuneration policy for managers and for the members of the board, clauses regarding the disclosure of transactions with affiliated parties, a stronger protection of minority shareholders and an increased potential for shareholders to control the boards of directors, administration and participate in decision making.

Many international organisms and organizations elaborated principles of good governance.

Thus, the Council of Europe elaborated the Strategy on Innovation and Good Governance at local level, in 2008, and in this strategy are mentioned 12 principles. These principles play an important role in guidance of organization in issues related to accountability, legitimacy, efficiency and effectiveness, fairness and transparency, quality control, rule of law and regulatory framework, ethics, and financial management.

The organizations recognize the importance of principles in a good governance process, because using the principles the stakeholders cooperate in order to improve both the efficiency and reputation of their organization.

The respect and the putting into practice of the principles of good governance have a strong impact on the decision-making processes and transform governance into a strategic instrument that foster sustainability (Edgar et al. 2006).

Future Directions

In the future, a new approach to governance will be needed to effectively increase organizational standards and reduce corruption, because the good governance process comes from a conceptual context that analyses how organizational decision-making strategies intertwine with the specificity of their activity, based on executor fiduciary obligations and stakeholder involvement.

Cross-References

- Collaborative Governance
- Corporate Governance
- Corporate Governance, Measurement of
- Corporate Governance Perspectives (Shareholder vs. Stakeholder Perspective)
- ISO19600 Compliance Management Systems
- Stakeholder Governance and Citizen Science

References

Burlea-Schiopoiu, A., & Popa, I. (2013). Legitimacy theory. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility*

(pp. 1579–1584). Berlin/Heidelberg: Springer-Verlag. https://doi.org/10.1007/978-3-642-28036-8_471.

Burlea-Schiopoiu, A., Tudor, S., Dragulin, I., & Ileana, D. (2014). The challenges of the European social fund for corporate governance in Romania. In *Proceedings of the 10th European conference on management leadership and governance ECMLG 2014, VERN' University of Applied Sciences, Zagreb, Republic of Croatia 13–14 November 2014* (pp. 9–17). Academic Conferences and Publishing International Limited, UK.

Cucari, N. (2019). Qualitative comparative analysis in corporate governance research: A systematic literature review of applications. *Corporate Governance*, 19(4), 717–734.

Edgar, L., Marshall, C., & Bassett, M. (2006). *Partnerships: Putting good governance principles in practice* (pp. 1–19). Ottawa: Institute on Governance.

Holmstrom, B., & Kaplan, S. (2003). The state of US corporate governance: What's right and what's wrong? *Journal of Applied Corporate Finance*, Summer, 15(3), 8–20.

Good Leadership

- Sustainable Leadership

Good Stewardship

- Good Governance

Governance

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Synonyms

Administration; Direction; Handling

Definition

Governance refers to processes of rule whenever they occur (Bevir 2012, p. 29).

Introduction

There is a vast amount of literature covering the concept of governance. Governance is used widely to point to either theoretical underpinnings of governing or to the practice of governing on a local, national, or international level. Pierre and Peters (2020, p. 1) point out that governance is an umbrella concept spanning different meanings from policy networks, public management, coordination of sectors of the economy, to public-private partnerships, and collaboration between public and private organizations. Baseline to all this is that the concept of governance still lacks a unified interpretation (Asaduzzaman and Virtanen 2016; Pierre and Peters 2020, p. 1).

As was hinted in the previous paragraphs, government and governance are related concepts, but they are not the same. Bevir (2012, p. 28) distinguishes between the concepts both on an empirical and on a theoretical level. On a theoretical level, governance is the process of governing by organized (e.g., government) or not organized (e.g., markets and networks) agents. On the empirical level, governance refers to a shift in how public and private institutions have changed since the late twentieth century.

Since the literature on governance is vast, this entry is limited to explaining the concept of governance from various perspectives. This entry starts with the etymology of the word governance and a typical textbook definition of the concept and expands this basic understanding.

Starting Points: Etymology and a Working Definition(s)

The etymology of the word governance is Latin *gubernare* (and Greek *kybernan*), which means “to steer” or “to pilot” (e.g., a ship).

A textbook definition of the term governance includes the following meanings: (1) “the activity or process of governing”; (2) “a condition of an ordered rule”; (3) “those people charged with the duty of governing or governors”; (4) “the manner, method or system by which particular society is governed” (Rhodes 1996). Kooiman (2003, p. 3) at the very beginning of its treatise defines

governance as: “a mix of all kinds of governing efforts by all manner of social-political actors, public as well as private; occurring between them at different levels, in different governance modes and orders.” Furthermore, he points out to the difference between governing and governance saying that: “Governing can be considered as the totality of interactions, in which public, as well as private actors, participate, aimed at solving societal problems or creating societal opportunities; attending to the institutions as contexts for these governing interactions; and establishing a normative foundation for all those activities. Governance can be seen as the totality of theoretical conceptions on governing” (Kooiman 2003, p. 4).

Bevir (2007), a prolific author on governance, points out that the concept of governance gained in popularity in the 1980s and 1990s with the change in how the state governed public institutions. In that period there was an organizational move from hierarchy toward markets, quasi-markets, and networks. This is the context from which the concept of governance is present today in language.

Governance in Contemporary Times

Governance is not a new concept. If looking in the context of governing society or a state, the meaning of the word is probably as old as societies themselves. As long as there are organized groups, there is a need for “guidance,” “steering,” and the “process of rule.” With the development of modern states, the word government slowly replaced the word governance, which was dominant in the medieval period (Bevir 2012, p. 43).

On the other hand, governance relates more explicitly to changes in the state, due to neoliberal reforms, from the closing three decades of the twentieth century. Before them, a structure that was the dominant model of enabling state governance was hierarchy and bureaucracy. As Pierre and Peters (2020, p. 5) explain it: “The State – conceived of as the epitome of the collective interest – was thus distinctly separated from the rest of society but governed society by imposition of law and other forms of regulation.”

From the 1970s the state hierarchic bureaucracy, once believed to be the enabler of social homogeneity, was riveted with a crisis (Bevir 2012, p. 45). The rationale for the mentioned neoliberal reforms was that the state was becoming inefficient in governing when compared with the markets. Thus, the state should create policies but not engage in the direct delivery of services (Bevir 2007).

Bevir (2007), when describing neoliberal ideas, drawing on the work of Osborne and Gaebler (1992), compares making policy decisions (suggested role of the government) and delivering services (not anymore the role of the government) to steering and rowing. The point is that the government is no longer suited for rowing and that delivery of services should be ensured and regulated by the market, competition, and customers. For example, a country might decide to introduce a system where students can choose which school they want to attend and are not limited to a single option of public educational institutions. By creating a public sector to be more like the private, emphasizing more market and network forms of organization, the new governance on both the local and global levels was the result (Bevir 2012, p. 46). The result of such changes would be smaller governments achieved through the privatization of provisioning civil services (Rhodes 1996). As Sharma (2018) puts it, the neo-liberal usages' concept of governance refers to a minimalist state.

Closely connected to the neoliberal reforms and thus to governance is the concept of new public management. According to Rhodes (1996), new public management has two meanings. On the one hand, it refers to managerialism in that the public sector is to be led more like the private with all its characteristics such as performance evaluations, professional management, service to the customer, and similar. On the other hand, new public management also refers to new institutional economics in the context of introducing competition to public service. This approach is more common in the Anglo-Saxon states than in states in the development and transition. Developing and transitioning states started to adopt these ideas only after external pressure (Bevir 2007).

Corporate Governance

Governance is often discussed as "corporate governance." In the expression "corporate governance," governance refers to a system by which organizations are directed and controlled. Rhodes (1996) describes three principles that are applied both to private and public organizations: (1) openness and disclosure of information, (2) integrity and completeness in dealing, and (3) and accountability of individuals for their actions. The principles such as these should be operationalized in organizations.

The principles that he outlined are consistent with principles outlined by the OECD (2015) and the EU White Paper on European Governance (2001). For example, in the mentioned White paper, European Governance is explained through the principles driving forward transparency of institutions and inclusion of the civil society in decision making as well as creating a regulatory framework emphasizing responsibility (*Glossary of Summaries – EUR-Lex* n.d.).

Good Governance

In the economic context, the attribute "good" is often connected with the concept of governance. Such a constructed idea of "good governance" is connected to the efficiency of providing services. The concept of good governance thus emerged in discussions on economic development where institutions such as the International Monetary Fund and the World Bank started using "good governance" as one of their criteria for granting loans (Bevir 2007).

For example, the International Monetary Fund (1997, p. 3) considers two spheres as the aspects of governance that are relevant to them. The first sphere is the management of public resources. This sphere encompasses things like reforms of the public sector and administrative procedures. The other sphere of governance relevant to the International Monetary Fund is the development of a regulatory environment for the private sector. Basically, as Bevir (2007) explains: "The concept of good governance was thus defined by

institutional barriers to corruption and by the requirements of a functioning market economy. It was defined as a legitimate state with a democratic mandate, an efficient and open administration, and the use of competition and markets in the public and private sectors.”

Different international organizations, then the World Bank and the International Monetary Fund, will emphasize different criteria for “good governance” that are more aligned with their purpose. For example, UNICEF might explore “new governance solutions that directly affect child well-being” (*Governance* n.d.).

Conclusion

After reviewing the literature, Asaduzzaman and Virtanen (2016) conclude their treatment of the concept of governance with the following: “(. . .) we can say that the concept of governance applies to multiple forms of collective action. However, it is about more strategic aspects of steering of a society: the larger decisions about direction and roles. That is, governance is not only about *where to go* but also about *who should be involved in deciding* and in what capacity.”

Their findings seem to be aligned with what is presented in this entry. In this overview of the governance concept, we have pointed out that governance is an umbrella term covering both the process of governing and structures that enable rule. Furthermore, governance is different from government. Usually, governance is what the government does in society. Also, governance is the way how organizations are structured. Traditionally organizations are structured in some hierarchical model, but since the end of the twentieth century, new ways of how organizations function and are organized are appearing. This is partly due to neoliberal reforms that have been taking place since 1970s and are in favor of organizing states and state functions similarly to how private organizations are organized. Finally, very often, together with the concept of governance, there are also concepts of corporate governance and good governance. Corporate governance relates to understanding, both theoretical and

practical, how organizations are directed. Good governance often appears in the context of better delivery of services and economic development. In such a context, the concept of good governance is used to emphasize and direct the progress of elements in society, which are essential for the organization, which is assessing the situation.

Cross-References

- ▶ Auditors and Corporate Governance
- ▶ Authority vs. Bureaucracy
- ▶ Codes of Good Governance
- ▶ Collaborative Governance
- ▶ Corporate Governance
- ▶ Corporate Governance Perspectives (Shareholder vs. Stakeholder Perspective)
- ▶ Corporate Governance Reporting
- ▶ Corporate Governance, Measurement of
- ▶ Environment, Social, and Governance (ESG)
- ▶ Environmental Governance
- ▶ European Corporate Governance Institute
- ▶ German Corporate Governance Code
- ▶ Global Corporate Governance Institute (GCGI)
- ▶ Global Governance
- ▶ Good Governance
- ▶ Hospital Governance
- ▶ Islamic Governance
- ▶ King III Report and CSR
- ▶ Leadership Communication
- ▶ Management
- ▶ OECD Principles of Corporate Governance
- ▶ Shared Community-Based Governance
- ▶ Stakeholder Governance and Citizen Science
- ▶ Tracing Corporate Governance to Its Roots
- ▶ UK Corporate Governance Code (2010)

References

- Asaduzzaman, M., & Virtanen, P. (2016). Governance theories and models. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance* (pp. 1–13). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-31816-5_2612-1.
- Bevir, M. (2007). Governance. In *Encyclopedia of governance* (pp. 364–380). Thousand Oaks: Sage Publications.

- Bevir, M. (2012). *Governance: A very short introduction* (1st ed.). Oxford: Oxford University Press.
- European Governance – A White Paper. (2001). *Official Journal of the European Communities*, 44, C287/1–C287/29.
- Glossary of summaries – EUR-Lex*. (n.d.). Retrieved June 19, 2020, from <https://eur-lex.europa.eu/summary/glossary/governance.html>
- Governance*. (n.d.). Retrieved June 20, 2020, from <https://www.unicef.org/globalinsight/governance>
- International Monetary Fund. (1997). *Good governance. The IMF's role*. Washington, DC: International Monetary Fund.
- Kooiman, J. (2003). *Governing as governance*. London: Sage Publications. <https://doi.org/10.4135/9781446215012>.
- OECD. (2015). *G20/OECD Principles of Corporate Governance 2015*. OECD Publishing. <https://doi.org/10.1787/9789264236882-en>.
- Osborne, D., & Gaebler, T. (1992). *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. Reading: Plume.
- Pierre, J., & Peters, B. G. (2020). *Governance, politics and the state* (2nd ed.). London: Red Globe Press.
- Rhodes, R. A. W. (1996). The new governance: Governing without Government. *Political Studies*, 44(4), 652–667. <https://doi.org/10.1111/j.1467-9248.1996.tb01747.x>.
- Sharma, A. K. (2018). Governance: The concept and its dimensions. *Indian Journal of Public Administration*, 64(1), 1–14. <https://doi.org/10.1177/0019556117735443>.

Governance Concerns of the Board of Directors

- [Sustainability of Boards](#)

Governance Models

- [Authority vs. Bureaucracy](#)

Government-Provided Services

- [Social Care](#)

Great Transformation

- [Transition Sustainability](#)

Green Accounting and Reporting

- [Environmental Disclosure](#)

Green Banking

- [Ethical Banking](#)

Green Brands

- [Sustainable Brands](#)

Green Building

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Synonyms

[Eco-friendly building](#); [Environmentally friendly building](#); [Sustainable building](#)

Definition

Green buildings show high performance while making a low-environmental impact. Several prescriptive certification systems/schemes rate buildings according to compliance with their metrics or points, thus confirm the performance of the buildings they certify. A more flexible and traditional way to build green is to follow guidelines while

considering the environmental impacts of the building. Green building systems can have different aims and priorities; therefore, the metrics and the weight of each criterion are subject to change according to the system, the building type, targeted stage of certification, etc. The systems have not been in place for a long time. The pioneering systems were created by either scientific or professional organizations and started as a voluntary initiative. Yet, the systems have finished their infancy period and solved some of the initial concerns with a flexible structure that encourages innovation, best practices, and ongoing updates; thus, many local or national authorities encourage or require compliance with certain certification/rating systems. The issues of cost and complexity limit the utilization of green buildings. How much they cost must be identified before deciding to use a system. The complexity of the system necessitates experts, who can assess the aim, criteria, or metrics to define goals from the design phase to the postoccupancy phase. While the complexity of a system usually increases with each update, affordable and simpler systems are preferred. Schemes for large scales such as neighborhoods maximize benefits while minimizing costs.

Green Building Rating Systems

Most of the humans are spending a significant portion of their lives indoors; therefore, the building sector is undoubtedly one of the most important industrial and economic sectors that affect the quality of life and the environment. In modern architecture styles, buildings could be evaluated on their own, without showing any regard to their environments. This common approach and rapid urbanization exacerbated many environmental concerns. The most significant concerns are increasing temperatures and changing climate, which necessitate that living conditions and building practices change to adapt to existing and future conditions. Various measures are taken, and policies are implemented for buildings worldwide. Green buildings are known to cause less impact on the environment while providing

healthy and productive indoor conditions; thus, green building/settlement/city concepts are gaining importance and popularity.

The concept of green building has different connotations in different countries and lifestyles. Usually, a prescriptive perspective related to certification schemes comes to mind. The definition in a broader sense includes design and implementation suitable for a sustainable and environmentally friendly lifestyle. For this purpose, there are various examples of good practice that can be seen all around the world. While green buildings were first focused on decreasing environmental impacts of buildings, the issue of sustainability entered and widened the scope. Green building rating systems are one of the most common tools in the attempt to deliver sustainable buildings. The green building rating systems evaluate the performance of a building in terms of certain criteria and provide a certificate.

Getting a green building certification is usually voluntary; however, sometimes countries encourage or insist on green building certification for certain types of buildings by integrating them with building codes or giving them a priority for public procurement. For green building procurement, it is necessary to regulate the procedures and principles regarding the establishment of evaluation and certification systems and determining the duties, qualities, and responsibilities of those who will take part in the evaluation and certification process. More systems are being developed, and existing certification systems are evolving with time. They are developed or maintained by independent organizations. Meanwhile, many countries have their own Green Building Councils that can help with the development or implementation of green building certification systems. On the one hand, many countries have their certification systems, on the other hand, the most common green building certification systems worldwide are spreading by being more flexible or adapting to the local conditions by making specialized certification categories.

The selection of a green building-rating system is significant since all the systems have the same aim of lowering the building's environmental

impacts, yet their ways to reach it vary. Therefore, a system in alignment with the aims of the project must be chosen. The system goals must be similar to the project goals with regards to the building type, the development phase of the project, the environment and site conditions, the applicability and availability of the systems in the area, the suitability, and measurability of the criteria, or opportunities to innovate. The considerations at the design phase include goal setting, integrated design, looking at the project as a whole, life cycle costs, energy modeling, carbon calculations, water use, material use, health concerns, reduction of heat island phenomena, and light pollution. At the construction phase, sustainable construction practices, detailing, and changes during construction and commissioning need deliberation. Yet, at the operation phase metering, ongoing performance evaluation and maintenance require careful thought. The earlier these issues are considered, the higher benefit can be obtained with the least cost.

The certification process starts with choosing a certification scheme and registering. For the most part, the building professionals learn about the relevant documents and upload them to the website before construction starts and continue updating them or marking their progress as the construction continues. The commissioning of the system and the actual performance are also usually a part of the scheme and need documentation. A third party that manages the certificates can inspect the documentation or the actual building. Usually, professionals licensed by the system's authority are the only ones that can perform evaluations, and in some systems they only help, or their presence accounts for more points or compliance. Continuous monitoring and inspection are not usually a part of systems. However, decertification is possible when noncompliance is discovered.

The globally most widespread certification systems include Leadership in Energy and Environmental Design (LEED) from the USA, Building Research Establishment Environmental Assessment Method (BREEAM) from the UK, Green Star from Australia, BQE, Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB)

from Germany, Assessment Standard for Green Building from China, and Comprehensive Assessment System for Built Environment Efficiency (CASBEE) from Japan.

Criteria for Green Buildings

Green building systems rate buildings into usually four to six grades depending on the system. They differentiate between shades of green depending upon compliance or the number of points earned. The main challenge that distinguishes green buildings from initiatives such as zero carbon, zero energy, and nearly zero energy buildings is considering the many issues simultaneously. Therefore, the performance assessment of a building is performed according to the criteria determined by a green building system. Applications will be made based on these criteria; therefore, criteria and subcriteria must be clearly defined. Thus, the development or improvement of a green building system requires discerning the relevant key criteria. For this reason, many researchers evaluate and compare different systems on their handling of a specific criterion, such as “energy,” “indoor environment,” or “water,” while a smaller number focuses on identifying key criteria across many systems. Illankoon et al. (2017) conducted a deductive literature review and found “site,” “water,” “energy,” “indoor environmental quality,” “material,” “waste and pollution,” and “management” to be key criteria.

The criteria and their weights are not fixed and can change even within different versions of a system. Most of the systems have either different categories or weights for different building types such as new buildings, renovations, offices, residential buildings, schools, etc. Some categories also encompass larger areas such as neighborhoods. While there are many valid concerns for sustainable and green buildings, the buildings cannot be considered independent of their sites. Hence their relationship to their surroundings, neighborhood, city, natural environment, and climate is important. Site selection and planning on a larger scale make it possible to create and

implement mitigation and adaptation strategies such as changing transportation options, revitalizing ecosystem services and natural habitats, moderating the microclimate, etc.

The three pillars of sustainability are not equally thought in most of the green building systems. Environmental issues are given the most weight, with “energy” having the highest weight in most of the systems. This concern is because the energy spent for heating, cooling, ventilating, and lighting to provide user comfort in buildings is almost half of the total energy in the world, and buildings are the largest source of carbon emissions; therefore, they can have the largest impact on global emissions in the most cost-effective way. Mass, orientation, building materials, and cooling and heating needs of buildings, and the climate are the primary considerations associated with energy use and greenhouse gas emission levels. Moreover, global emissions in urban areas can be reduced by up to 58% by 2050 with only measures taken in buildings (Colenbrander et al. 2019). However, there is a significant gap between design and operational consumption as in the case with conventional buildings. Hence, although green buildings usually perform better than conventional buildings, they do not perform as well as expected.

The second most prioritized issue through systems is “indoor environmental quality,” which encompasses subcriteria related to human health and well-being, and most of the social aspects in the systems. However, the criteria extremely vary between systems and applications in countries; therefore, it is hard to infer general principles (Thatcher and Milner 2012). Also, both objective measurements and subjective surveys are simultaneously applied or one of them is used to evaluate occupant satisfaction of green buildings, showing that the results for green buildings are better than conventional buildings mainly because occupants are more tolerant of green buildings (Geng et al. 2019). El Asmar et al. (2014) point out that the buildings can perform better than indicated by the LEED certification as the certification process focuses more on design and construction issues, rather than the occupation phase.

Other socioeconomic and environmental aspects include more efficient use of “materials” and “water.” Besides, the “waste” generated from construction and demolition activities also accounts for around one-fourth of global waste, meaning reduce, reuse, and recycle principles (3Rs) can be utilized to manage waste. Yet, “management” is not a separate criterion in most of the systems. However, sustainable management practices also aim to reduce the environmental impact of buildings, and their principles are similar to green building criteria (Alfalah and Zayed 2020). A further discussion of Illankoon et al. (2017)’s key criteria show that they cover more than 93% of the credit points for seven common international systems. Yet, nearly a third of the credit points for CASBEE were not covered by the key criteria, especially region-specific targets such as “earthquake resistance.”

Each green building system has its guidelines and checklists to instruct the relevant actors, such as developers, designers, planners, engineers, and suppliers. The systems can use simple checklists or complex calculations to take many considerations into account. The rating systems often refer to local building codes and regulations, and other specialized standards and product certifications during their processes. Some examples include compliance with environmental management (such as ISO 14000 Series) or energy management (ISO 50000 Series).

The systems can also have different priorities for different building types such as residential, commercial, healthcare, educational, and existing buildings. Another consideration is the scale of the project, the issues of a district or neighborhood development can also be regarded. In contrast to prescriptive systems, toolkits such as SB Tool provide a flexible framework to develop green building systems per the necessities of the users.

Most of the changes related to the climate and sustainable development goals agreed by the whole world must occur in the building sector, and the building sector should lead these changes. Significant issues for sustainable design and practice such as urban heat island phenomena, embodied energy, ecosystem services, and education and awareness are usually not addressed. In this

context, economic aspects are not prominent in green building rating systems, since this aspect has the lowest number of dedicated criteria (Park et al. 2017). But, revising existing green building systems to add other criteria and expanding them with continuous updates are both possible and accepted practices.

Economic Aspects of Green Buildings

Green buildings cannot be considered independent of costs since the cost is very important for sustainability in the construction industry. The initial cost of green buildings is assumed to be higher than normal buildings because of costs associated with certification including costs for registration, consultation, added implementations, and certification. These costs are paid by the building owners or developers, while third party institutions issue the certificates based on their declarations and calculations. Also, integrated design, certification, and sustainable construction processes can add more time and associated costs to the building.

It should be noted that the perception that a green building necessarily costs higher is a misconception. The general trend in the construction industry is to keep the initial investment costs of buildings low; as a result, the maintenance and energy costs rise; thus, the life cycle cost of the building increases. When the cost, thermal and visual comfort, and energy efficiency analyzes are done considering their life cycle, the evidence of green buildings being more expensive is inadequate. While the higher rating of a green building usually corresponds to higher implementation costs (Kats 2003), which is the main cause for higher initial costs, the cost of a green building decreases with the spread of green buildings and green building technologies. Moreover, claims of lower maintenance costs and additional benefits such as better health and fewer absences signify that building green is an economic option, and an evaluation about certain sustainability-related characteristics can be added to valuation reports (Lorenz and Lützkendorf 2008). However,

optimization of life cycle costs for the considered case is necessary.

Green building design is similar to good design, so the question of “what kind of benefits does being a green building get?” arises. High initial costs make green building investments undesirable for landlords and developers. While tenants may find green buildings attractive because of advertised lower operational costs and higher comfort, the results of studies comparing green buildings and conventional buildings in terms of value and rent prices are ambiguous and change between building type and country. Yet, Ambec and Lanoie (2008) made a systematic review of the literature and report that there is a paradigm shift from environmental protection being a burden to it being a necessity in the industry since environmental and economic performances are positively linked. Thus, many incentives, grants, financing, and government initiatives encourage or require compliance with sustainable and green building criteria.

Summary

The significance of environmental problems is becoming more evident these days. Meanwhile, green buildings look for opportunities to improve outdated practices. And the research about green buildings reports many beneficial environmental impacts including decreasing urban heat island phenomena, decreasing resource and water use, reutilizing wastewater and resources, decreasing emissions to air and water, improving indoor air quality, improving waste management, improving the site environment, making use of green/blue infrastructure and building elements, and disseminating best practices. Therefore, it becomes imperative that normal construction practices follow the way of green buildings. However, since all the systems must balance several issues, they can be criticized depending on their focus being on energy consumption, indoor environmental quality, or economic factors instead of other significant issues.

There are many systems and ways to build green; therefore, choosing the way forward is the

key issue. The goals of the project can be selected according to the building type, the development phase of the project, the environment and site conditions, the applicability and availability of the systems in the area, the suitability and measurability of the criteria, or the opportunities to innovate. The earlier these issues are considered, the higher benefit can be obtained with the least cost. Green buildings can either follow a prescriptive methodology to get a certification or follow more traditional and flexible guidelines in harmony with the natural environment. Achievements so far have shown that “green buildings” are not just conveyed by following prescriptive rules, but by supporting sustainability goals, and improving users’ quality of life. As such, being prescriptive is a point of criticism.

Performance criteria and weight percentages of the criteria are necessary for the development of new systems and assessment of existing systems. Evermore stringent environmental targets are imposed over time. The additional expenses and expertise limit the spread of green practices; therefore, more affordable and simpler systems can make green buildings more accessible to the masses. Green buildings usually have higher initial costs than conventional buildings as the rating of the green building goes up. Yet, as the number of green buildings increases, so does the number of available and affordable technologies; thus, their costs decrease. Besides, systems that utilize green buildings and green building principles in bigger scales such as neighborhoods are spreading. Many cities in the world have begun to show how cities can transform with good public transport, green public spaces, and resilient infrastructure. Thus, green buildings are an important tool for the future of urban development.

Cross-References

- [Building Energy Management](#)
- [Carbon Emissions](#)
- [Energy-Renewable](#)
- [Renewable Resource](#)
- [Smart Cities](#)

- [Sustainability and Sustainable Development in Real Estate Industry](#)
- [Sustainability Measurement](#)
- [Sustainable Communities](#)
- [Sustainable Construction Management](#)
- [Sustainable Development Planning](#)
- [Sustainable Energy](#)

References

- Alfalah, G., & Zayed, T. (2020). A review of sustainable facility management research. *Sustainable Cities and Society*, 55, 102073.
- Ambec, S., & Lanoie, P. (2008). Does it pay to be green? A systematic overview. *The Academy of Management Perspectives*, 45–62.
- Colenbrander, S., Lazer, L., Haddaoui, C., Godfrey, N., Lobo, A., Clarkson, H., ... & Altenburg, T. (2019). Climate emergency, urban opportunity: How national governments can secure economic prosperity and avert climate catastrophe by transforming cities.
- El Asmar, M., Chokor, A., & Srour, I. (2014). Occupant satisfaction with indoor environmental quality: A study of the LEED-certified buildings on the Arizona State University campus. In ICSI 2014: Creating Infrastructure for a Sustainable World (pp. 1063–1070).
- Geng, Y., Ji, W., Wang, Z., Lin, B., & Zhu, Y. (2019). A review of operating performance in green buildings: Energy use, indoor environmental quality and occupant satisfaction. *Energy and Buildings*, 183, 500–514.
- Illankoon, I. C. S., Tam, V. W., Le, K. N., & Shen, L. (2017). Key credit criteria among international green building rating tools. *Journal of Cleaner Production*, 164, 209–220.
- Kats, G. (2003). *Green building costs and financial benefits* (pp. 2–8). Boston: Massachusetts Technology Collaborative.
- Lorenz, D., & Lützkendorf, T. (2008). Sustainability in property valuation: Theory and practice. *Journal of Property Investment & Finance*, 26, 482.
- Park, J., Yoon, J., & Kim, K. H. (2017). Critical review of the material criteria of building sustainability assessment tools. *Sustainability*, 9(2), 186.
- Thatcher, A., & Milner, K. (2012). The impact of a ‘green’ building on employees’ physical and psychological wellbeing. *Work*, 41(Supplement 1), 3816–3823.

Green Business Model

- [Sustainable Business Model](#)

Green Circular Economy

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Synonyms

Circular economy

Definition

According to the Ellen Macarthur Foundation (2013), the circular economy consists in: *“Looking beyond the current take-make-dispose extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital.”* Recently, many policy makers have started to pay attention to this new operational paradigm. Specifically, the attention has been driven from the exigence to mitigate the risks of climate change.

The wide adoption of this new organizational model has been characterized by several criticisms by private firms due to its organizational implications. In fact, as evidenced by the Ellen Macarthur Foundation, an effective transition to this new paradigm represents *“a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits.”* Moreover, some researchers have identified internal and external enablers and obstacles to the adoption of circular business models. In this sense, a central role will be covered by policy makers in order to support the voluntary adoption of more sustainable business models by worldwide firms.

The Circular Economy Paradigm

The evolution of our industrial economy has been dominated since the early days of industrialization by a fundamental characteristic: a linear model of resource consumption called “take-make-dispose.” The companies collect and extract raw materials and use them to make a product; they then sell the product to consumers, who throw it away when it no longer performs the function for which it was purchased.

This system worked well until the end of the last century because the low cost of resources, traditionally considered abundant, supported economic growth in the most advanced countries. The reuse of materials, more expensive than the use of virgin material, was therefore not a reason to exist from an economic point of view. Today, however, the commodity market is much more volatile and the prices of so-called “commodity” goods, fundamental elements for industry, have risen sharply over the past few years. Because of this, many companies and many countries are starting to modify their industrial model so as to be less dependent on those resources that are becoming increasingly scarce; the transition is made even more urgent by the fact that demographic trends indicate a growth of the world population in the next 30 years of more than 2 billion people.

Environmental issues are certainly not new to the world of economics and industry, and important strides have been made in this regard. However, focusing exclusively on increasing efficiency while remaining in a linear perspective can only delay the inevitable consequences of finite resources. In this sense, academics (Haas et al. 2015) have shown how only 6% of all materials processed by the global economy are recycled and contribute to closing the loop. Furthermore, the authors denoted how the EU-27 are slightly above the global averages.

Nowadays, an increasing number of scholars have started to identify a new operational framework in order to favor the adoption of a new form of business models by the enterprises.

Furthermore, the exigence to align firms' strategies to SDGs has supported the evolution of this new field of study (Schroeder et al. 2019).

According to Lüdeke-Freund et al. (2019), the systematic analysis of the current literature about circular economy reveals the existence of six different types of business models theoretically related to the circular economy paradigms. The six types of business models are as follows: "Repair & Maintenance," "Reuse & Redistribution," "Refurbishment & remanufacturing," "Recycling," "Cascading and repurposing," and "Organic Feedback." Furthermore, an analysis performed by Pieroni et al. (2019) on a cluster of 92 research papers has highlighted the exigence to develop new studies about circular economy in order to identify new tools useful for an effective transition to this new approach.

Another theoretical classification defined "ReSOLVE" was introduced by the Ellen MacArthur Foundation (2015). The ReSOLVE represents one of the main frameworks used to assess the degree of circularity of a business model. Building on the idea that circularity can be achieved through different strategies, it consists of six approaches, which are synthetized by the following items: regenerate, share, optimize, loop, virtualize, and explore. The six dimensions are characterized by a high degree of dependency due to the need to adopt a holistic approach based on the integration of different processes. Thus, even in the absence of a direct connection with them, organizations will impact positively or negatively on all the six dimensions through their actions (Manninen et al. 2018; Yadav et al. 2020).

Nowadays, practitioners have started to evidence the strong relationship between circular economy and climate change. In particular, this evolution has been driven from the Ellen MacArthur Foundation (2019) which covers historically a central role within the debate about circular economy. In this sense, the concept of "circular economy" will be characterized in the next years for further changes in order to identify a new form of paradigm useful for the achievement of a highest degree of worldwide sustainable development.

Summary

The increasing stakeholders' pressure about sustainable development has imposed to firms, practitioners, and policy makers the identification of new paradigms. Currently, many firms have started to adopt voluntarily a new form of business models inspired by the circular economy's paradigms. Their contribution will be relevant for the achievement of the SDGs. In fact, one of the main innovations which characterize SDGs is represented by the explicit call in action of the private sector. However, nowadays, only a few parts of the worldwide firms have started to adopt circular's business models. In this sense, in the next years, the policy makers will identify a new form of policies in order to sustain the circular economy paradigm. Finally, the contribution of the academics will be determinant due to the lack of evidences about this new form of business model.

Cross-References

- Circular Economy
- Circular Economy in the Built Environment

References

- Ellen MacArthur Foundation. (2013). Towards the circular economy. *Journal of Industrial Ecology*, 2, 23–44.
- Ellen MacArthur Foundation. (2015). Growth within: A circular economy vision for a competitive Europe. Cowes, UK: Ellen MacArthur Foundation; www.ellenmacarthurfoundation.org
- Ellen MacArthur Foundation. (2019). Completing the picture: How the circular economy tackles climate change. https://www.ellenmacarthurfoundation.org/assets/downloads/Completing_The_Picture_How_The_Circular_Economy_Tackles_Climate_Change_V3_26_September.pdf
- Haas, W., Krausmann, F., Wiedenhofer, D., & Heinz, M. (2015). How circular is the global economy?: An assessment of material flows, waste production, and recycling in the European Union and the world in 2005. *Journal of Industrial Ecology*, 19(5), 765–777.

- Lüdeke-Freund, F., Gold, S., & Bocken, N. M. (2019). A review and typology of circular economy business model patterns. *Journal of Industrial Ecology*, 23(1), 36–61.
- Manninen, K., Koskela, S., Antikainen, R., Bocken, N., Dahlbo, H., & Aminoff, A. (2018). Do circular economy business models capture intended environmental value propositions? *Journal of Cleaner Production*, 171, 413–422, Elsevier Ltd.
- Pieroni, M. P., McAloone, T., & Pigosso, D. A. (2019). Business model innovation for circular economy and sustainability: A review of approaches. *Journal of Cleaner Production*, 215, 198–216.
- Schroeder, P., Anggraeni, K., & Weber, U. (2019). The relevance of circular economy practices to the sustainable development goals. *Journal of Industrial Ecology*, 23(1), 77–95.
- Yadav, G., Mangla, S. K., Bhattacharya, A., & Luthra, S. (2020). Exploring indicators of circular economy adoption framework through a hybrid decision support approach. *Journal of Cleaner Production*, 277, 124186, Elsevier Ltd.

Green City/Town

- [Sustainable Communities](#)

Green Communities

- [Sustainable Communities](#)

Green Compensation

- [Green Rewards](#)

Green Construction

- [Sustainable Construction Management](#)

Green Consumerism

- [Consumer Social Responsibility \(CnSR\)](#)

Green Consumption

- [Responsible Consumption](#)

Green Economy

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Synonyms

[Eco-friendly economy](#); [Environmentally conscious economy](#)

Definition

Green economy is an economy that combines bioeconomy and social justice principles in the pursue of ecosystem resilience and human well being.

Introduction

Green economy refers to an economic system that in the words of the UN “aims at improving human well-being and social equity by internalizing its environmental impacts and significantly reducing ecological risks and scarcities.” The founding principle of the green economy is that the search for a reduced dependence on natural resources drives innovation capabilities towards the reduction of hidden diseconomies, the use of renewable inputs, and a higher systemic resilience that provides a better quality of life for all within the ecological limits of the planet.

Green economy has a complex and science-based nature, because the correct interpretation of the different interests at stake requires a rigorous and objective understanding of social, economic, and environmental phenomena.

Despite the fact that there is no internationally agreed definition of green economy, in recent years, green economy principles have been widely adopted and green economy has emerged as a strategic priority for many governments in their pursuit of sustainable development. In fact, it provides a conceptual framework that helps identifying and investing in environmentally friendly and socially equitable solutions that link economic, social, and environmental considerations and help achieving long-term economic development.

Green economy shares the orientation toward profit and value-creation which are the cornerstones of more traditional – and still dominant – forms of the economy. Despite that, it introduces a previously suspended commitment to inclusiveness, equality, and waste prevention that is relevant at both micro- and macrolevels. While traditional economies represent a threat to the attainment and maintenance of a healthy environment and equitable access to ecosystem services and do not guarantee a fair allocation and management of externalities, which are all crucial aspects of sustainable development, green economy aspires to do the opposite and to increase the legitimacy and attractiveness to investors of greener products and services.

History

Starting in the 1960s, scientists began demonstrating that continued human population growth, combined with increased human affluence, was outpacing technological efficiency improvements in the long term and, thus, harming the sustainability of the mainstream development model.

Grounding on this debate, the term “green economy” was introduced by economists in the late 1980s, not least to facilitate dialogue with policy makers on the inner nature of sustainable development and its implications for the economy. Among the first documents that mention this term are the 1989, 1991, and 1994 reports for the UK government by Pearce, Markandya, and Barbier entitled, respectively,

“Blueprint for a Green Economy,” “Greening the World Economy,” and “Measuring Sustainable Development.”

Following these early contributions, the concept of green economy became widely used first in the debate on the contribution that industrial economy should offer to environmental policy and then to analyze the economic origins and consequences of problems such as climate change, deforestation, ozone depletion, and resource loss in the developing world. In particular, the term became popular in the scientific community engaged in an attempt to operationalize ecological economics theories (Shmelev 2016) and propose a reformulation of the concept of firm competitiveness.

By virtue of increasing scientific support and the UN push for “green stimulus packages,” the concept of green economy rapidly became central in the policy debate. Not surprisingly, it also became also a cornerstone of the policy response to the financial crisis and concerns of a global recession in late 2000s.

In 2008 the United Nations Environment Programme (UNEP) launched its Green Economy Initiative to provide analysis and policy support for investment in green sectors and for greening environmentally unfriendly sectors. Through this initiative, UNEP ensured global research and country-level assistance encouraging policymakers to support environmental investments within the context of sustainable development.

In 2009 UNEP published a report entitled Global Green New Deal (GGND), which condensed a mix of policy actions that, also by means of a clear directionality to stimulus funding and targeted and appropriate fiscal and social protection policies, would help foster economic recovery and, at the same time, improve the sustainability of the world economy.

In the same year, the UN General Assembly asked the Nobel laureate economist Joseph Stiglitz to chair a commission that was established to examine reforms of the global financial and monetary system. Similarly, the Gates Foundation contributed to the 2011 Cannes G20 Summit with a report on innovative financing mechanisms for development (Barbier 2012).

As scientists formulated the rationale for investments in the green economy as a means to address a variety of concerns including the food crisis, energy crisis, water scarcity, biodiversity and ecosystem loss, climate security, and desertification (Gouvea et al. 2013), several concepts such as sharing (see ► [“Sharing Economy”](#)), circularity (see ► [“Circular Economy”](#)), collaboration, solidarity, resilience, opportunity, and interdependence became representative of related operationalization pathways. Evidence of the structuration of this extended taxonomy can be found in the UN Environment report “Uncovering pathways towards an inclusive green economy,” published in 2015.

From that moment on, green economy was acknowledged as a conceptual framework that legitimates an increasing number of tools for achieving sustainable development, sometimes even with a specialization on specific topics, like in the case of the focus on climate change in international summits such as the UN Climate Change Conference in Copenhagen and the 2012 UN Conference on Sustainable Development (Rio+20).

As highlighted in the Green Economy Report released by UNEP in 2011 under its Green Economy Initiative, the worldwide popularity of green economy is constantly increasing, with no countertrends and, over the past decade, it has emerged as a strategic priority for many governments and intergovernmental organizations.

In 2011, the UN Environment Management Group released the report “Working Towards a Balanced and Inclusive Green Economy” which is a system-wide perspective on green economy that, by systematizing the main experiences of countries that have embarked on a path of transformation of their economies into drivers of sustainability, identifies and clarifies the use of green economy and other related terms in different contexts. Besides the aim to define the major challenges of this century, this report represents the first systemic update of the taxonomy of the phenomenon that, leveraging an increasing number of experiences, will provide a progressively clearer understanding of the interrelated dynamics in the operationalization of the above-mentioned

sharing, circularity, collaboration, solidarity, resilience, opportunity, and interdependence. The need to classify green economy initiatives, which nowadays cover many diverse concepts at different levels of intensity, is widely recognized as a continuous exercise aimed at capitalizing on the learning process to improve understandings of the different degrees of substitutability and trade-offs between environmental and economic benefits (Loiseau et al. 2016).

General Principles

In a broader view, green economy emphasizes opportunities to advance both ecological and social performance as drivers of a prosperous financial system. This means giving green investments an increasing legitimization among traditional economy actors not just because of the widely felt sense of urgency of searching for alternative pathways to achieve the goals of the 2030 Agenda for Sustainable Development (Dittmar 2014), but also because of the actual possibility of ensuring an inclusive and long-term generation of added value. From this perspective, green economy provides attractive directions on how to leverage an inclusive life-cycle perspective, which accounts for a variety of dimensions ranging from ecology to jobs, fairness, social inclusion, income, and health, in the development of strategies with the ambition to pass the test of environmental, social, and economic sustainability.

Inclusiveness is a key concept that refers to the minimization of negative impacts throughout the lifecycle of products and services through a multi-stakeholder and trans-generational approach. Inclusiveness is thus an ambitious goal that requires synergies among industrial, environmental, and social policies built on the coordination of a variety of interventions that include green funding, procurement, tax and regulation, monitoring and reporting, process and product standards, incentives, capacity building, and awareness raising campaigns. By leveraging the economic, social and environmental rationales for waste reduction, eco-innovation, resource

efficiency, and use of renewable sources, the resulting policies are expected to foster a radical transformation of entire industries by thinking out of the box to find how to radically change existing unsustainable, or weakly sustainable, processes. As an example, the second principle of green chemistry, i.e., “synthetic methods should be designed to maximize the incorporation of all materials in the process into the final product,” shows how waste and hazardous material management policies can push scientists and practitioners to rethink the concept of efficiency in chemicals manufacture towards the use of just what is necessary and under control (Sheldon 2016).

Inclusiveness also highlights a nontechnocratic orientation. The green economy approach is intrinsically multidisciplinary, offering solutions from technological innovation (which is relevant to unlock a new and more efficient relationship between progress and the use of resources) to psychology (which is relevant because of the need to achieve lasting behavioral changes) (Borel-Saladin and Turok 2013). As a consequence, green economy does not involve standardized implementation of social/environmental product/process techniques or management systems. Nor is it just about conformity to standards to obtain labels, e.g., based on the measurement of carbon and environmental footprints. Since the most marginalized or vulnerable groups are often particularly exposed to environmental hazards at home and at work, green economy is instead a creative tension towards new ways to firstly account for multiple stakeholders’ perspectives on the substitution of nonrenewable and hazardous chemical materials, the creation of green jobs (Smit and Musango 2015), and the contribution to holistic conservation of natural resources and ecosystem services. This means that, as an example, a low carbon economy based on the use of renewable energy and materials fully complies with green economy principles only if, on the one hand, it promotes synergies with interventions aimed at increasing resilience to climate change and, on the other hand, it also takes into account the related ecosystem and social changes, and the residual tradeoffs with economic sectors that

directly depend on biological resources such as agriculture, forestry, and fisheries (Gasparatos et al. 2017). Similarly, introducing solar power generation into traditional production processes is still not green economy, for which it is necessary to ensure – among others – responsible sourcing and end-of-life management of the photovoltaic cells, so as to avoid often disregarded life-cycle impacts in remote areas. To this end, the reformulation of value propositions and business models enabled by holistic investigation of the product/service value chain are typically a necessary amendment to traditional technocratic and efficiency-driven formulations.

The Variety of Approaches for Green Economy Implementation

Because of its multifaceted nature, turning green economy into action is a complex task. The outcomes of green economy policy vary from simple limitations of the “action space” of the brown economy (Droste et al. 2016) to green initiatives that, depending on their extension and depth, lead to incremental or radical changes in traditional industries (Marcus et al. 2016).

Given its inclusive and holistic goals, green economy more likely challenges entire supply chains than single firms. It thus should be considered that the greening of supply chains is an evolutionary process that cannot be fully planned from a deterministic perspective, but requires preserving a variety of competing alternative solutions, so as to avoid the introduction of lock-ins and the waste of tangible and intangible capital (Rizzi et al. 2013). Since going green should be considered a trial and error process, it is not surprising that the resulting variety of heuristics has still not provided the large number of governments on the planet that have adopted green economy policies in the two decades (i.e., since the first Rio Earth Summit) with a clear and standardized way to address “sustainable development” (Dittmar 2014).

Heterogeneity in implementation approaches is evident when looking at the number of alternatives that stem from the convergence of social

capital, natural capital, and life-cycle perspectives in full cost accounting. As an example, the International Monetary Fund has introduced a “Green Fund” initiative to stimulate responsible global monetary policy that moves towards biodiversity valuation and a more official and universal means of biodiversity finance. Others, like the Zero Emissions Research and Initiatives, target not less but radically zero emissions and waste. The International Chamber of Commerce (ICC), instead, promotes green economy initiatives with a primary target on the mutual reinforcement of economic growth and environmental responsibility to support progress on social development via a consolidation of open and competitive markets. Even the scientific community tends to refer to the green economy as resource-focused, whereas in principle it should acknowledge the underpinning role of all ecological processes and should be more inclusive of salient social aspects at the local level (D’Amato et al. 2017).

More generally, the structuration of the discourse on green economy presents a variety of interrelated priorities and patterns that depend on the different foci on such polar concepts as scarcity or limits, means or ends, and reductionism or unity (Bina 2013). Despite their differences, all the emerging approaches converge to enabling a related variety of initiatives that contribute to drive global investments toward the overall annual financing demand to green the global economy.

In this context, the European Union (EU) green economy policy presents one of the most comprehensive coordination efforts in linking together growth, job creation, poverty reduction, natural capital investments, transaction taxes, cleaner technologies, energy and resource efficiency, low-carbon development, innovation, the use of ICT, and both the local and global reduction of unsustainable uses of natural resources. To this end, the EU view the green economy from a macroeconomic perspective to promote overarching, instead of fragmented, policies. The basic assumption is that filling the knowledge gaps that are necessary to enable the shift towards green economy requires, in line with the Porter hypothesis (Porter and Linde 1995), an

increasingly spontaneous commitment of private resources to pursue the triple bottom line (see ► [“Triple Bottom Line”](#)) in all industries and at different levels. Such spontaneous commitment should be driven by the expectation of reasonable benefits and achievements in term of competitive advantage. The resulting coordination of policies for sustainable development thus consists of a broad set of interventions that go beyond government action to involve the private sector. These interventions target, in particular, the creation of the enabling conditions (e.g., re-skilling of the existing workforce) that correct market and governance imperfections and failures and the introduction of suitable economic incentives to producers and consumers to pursue a green, clean, low-carbon economic trajectory. As new technologies are necessary to cope with availability, safety, quality, and security of scarce resources (Gouvea et al. 2013), since the initiation of the Horizon 2020 program, the EU has coordinated green policies with large-scale research funding frameworks. This encompasses different levels of technological readiness, including the demonstration of the business case for lighthouse experiences, in which costs externalized onto society via ecosystems are reliably traced back to, and accounted for as liabilities of, the entity that does the harm or neglects an asset. This is, in fact, considered a key mechanism for boosting eco-entrepreneurship and supporting people in starting their own green business and thus in increasing opportunities to improve their standard of living. Workshops and online and offline opportunities for storytelling have been widely used to promote the spreading of successful experiences as well.

There is thus increasing acknowledgment of the importance of both the technological and non-technological nature of green initiatives. Thus, nowadays, not surprisingly, to promote a green economy, the emergence of charismatic leaders is needed to escape from the threat of a deadlock due to the resistance to change of incumbents, which limits the capability to seize win-win opportunities, together with systemic perspectives and skills in negotiation and inter-organizational planning strategies (Rizzi et al. 2014). Besides

charismatic leadership, as trust carriers, certifications and ecolabels are often considered a reliable way to provide a third-party demonstration of the actual performance of green investors and, thus, to boost the replication of greening practices in a globalizing economy.

Of course, green economy is not free from shortcomings. The lack of firm commitment of world leaders to the principles discussed in the Rio+20 summit shows how difficult orchestration is at the global level. Skeptics highlight that its metrics are still in dispute, and there is uncertainty on the relationship between actions and the size and timing of the benefits for humans and ecosystems. Even more, while these benefits are often global, the efforts are typically highly visible and local, while the internalization of externalities and the correction of market failures through measures that might pay for themselves are still not fully proven at large scale (Borel-Saladin and Turok 2013).

Still, green economy is nowadays the most ambitious, articulated, and lofty effort to harness scientific knowledge and capabilities in an attempt to steer traditional economies towards a sustainable future. Regardless of implementation difficulties, green economy principles are destined to be remembered because there is no way to escape the dependency of human beings on ecosystems.

Cross-References

- [Bioremediation](#)
- [Blue Economy](#)
- [Circular Economy](#)
- [Greenwashing](#)
- [Sharing Economy](#)
- [Triple Bottom Line](#)

References

- Barbier, E. B. (2012). The green economy post Rio+20. *Science*, 338(6109), 887–888. <https://doi.org/10.1126/science.1227360>.
- Bina, O. (2013). The green economy and sustainable development: An uneasy balance? *Environment and Planning C: Government and Policy*, 31(6), 1023–1047. <https://doi.org/10.1068/c1310j>.
- Borel-Saladin, J. M., & Turok, I. N. (2013). The green economy: Incremental change or transformation? *Environmental Policy and Governance*, 23(4), 209–220. <https://doi.org/10.1002/eet.1614>.
- D'Amato, D., Droste, N., Allen, B., Kettunen, M., Lähinen, K., Korhonen, J., ... Toppinen, A. (2017). Green, circular, bio economy: A comparative analysis of sustainability avenues. *Journal of Cleaner Production*, 168, 716–734. <https://doi.org/10.1016/j.jclepro.2017.09.053>.
- Dittmar, M. (2014). Development towards sustainability: How to judge past and proposed policies? *Science of the Total Environment*, 472, 282–288. <https://doi.org/10.1016/j.scitotenv.2013.11.020>.
- Droste, N., Hansjürgens, B., Kuikman, P., Otter, N., Antikainen, R., Leskinen, P., ... Thomsen, M. (2016). Steering innovations towards a green economy: Understanding government intervention. *Journal of Cleaner Production*, 135, 426–434. <https://doi.org/10.1016/j.jclepro.2016.06.123>.
- Gasparatos, A., Doll, C. N. H., Esteban, M., Ahmed, A., & Olang, T. A. (2017). Renewable energy and biodiversity: Implications for transitioning to a green economy. *Renewable and Sustainable Energy Reviews*, 70, 161–184. <https://doi.org/10.1016/j.rser.2016.08.030>.
- Gouvea, R., Kassicieh, S., & Montoya, M. J. R. (2013). Using the quadruple helix to design strategies for the green economy. *Technological Forecasting and Social Change*, 80(2), 221–230. <https://doi.org/10.1016/j.techfore.2012.05.003>.
- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkanen, K., ... Thomsen, M. (2016). Green economy and related concepts: An overview. *Journal of Cleaner Production*, 139, 361–371. <https://doi.org/10.1016/j.jclepro.2016.08.024>.
- Marcus, A., Shrivastava, P., Sharma, S., & Pogutz, S. (Eds.). (2016). *Cross-sector leadership for the green economy: Integrating research and practice on sustainable enterprise*. New York: Springer.
- Porter, M. E., & van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *Journal of Economic Perspectives*, 9(4), 97–118. <https://doi.org/10.1257/jep.9.4.97>.
- Rizzi, F., Bartolozzi, I., Borghini, A., & Frey, M. (2013). Environmental management of end-of-life products: Nine factors of sustainability in collaborative networks. *Business Strategy and the Environment*, 22(8), 561–572. <https://doi.org/10.1002/bse.1766>.
- Rizzi, F., Frey, M., Testa, F., & Appolloni, A. (2014). Environmental value chain in green SME networks: The threat of the Abilene paradox. *Journal of Cleaner Production*, 85(1), 265–275. <https://doi.org/10.1016/j.jclepro.2014.09.001>.
- Sheldon, R. A. (2016). Green chemistry and resource efficiency: Towards a green economy. *Green Chemistry*, 18(11), 3180–3183. <https://doi.org/10.1039/C6GC90040B>.

- Shmelev, S. (Ed.). (2016). *Green economy reader: Lectures in ecological economics and sustainability*. New York: Springer.
- Smit, S., & Musango, J. K. (2015). Towards connecting green economy with informal economy in South Africa: A review and way forward. *Ecological Economics*, 116, 154–159. <https://doi.org/10.1016/j.ecolecon.2015.04.022>.

Website Citations

- https://ec.europa.eu/europeaid/sectors/environment/environment-and-green-economy/green-economy_en. Accessed 1 Mar 2019.
- <https://www.unecce.org/sustainable-development/green-economy/what-does-green-economy-mean.html>. Accessed 1 Mar 2019.
- <https://www.unenvironment.org/explore-topics/green-economy>. Accessed 1 Mar 2019.

Green Economy II

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Synonyms

Ecological economics; Low carbon or decarbonised economy; Natural capital

Definition

The green economy is regarded as an economy that has the goal to reduce environmental dangers and ecological shortages and aims at sustainable development, avoiding environmental degradation (Ocampo et al. 2011; UNEP 2011). In other words, the green economy is the result of greater human well-being and social fairness, considerably diminishing environmental risks within the ecological boundaries of the planet.

The United Nations Environment Programme (UNEP) approach to the green economy is a demonstrated approach, to classify change as

transformative and to distinguish some drivers of change (technological, economic, and ideological), despite being analyzed in an OECD context (Lederer et al. 2018), where there is few organized and compared information about socio-technological changes in developing country contexts. The green economy has become integrated into the economic growth agendas at the national level, frequently joined by arguments that give more easy green economy agendas interpretations for economic growth and market freedom (Caprotti and Bailey 2014).

The exam of the green economy cultural-economic construction is a possible analysis of the green economy perspective and has a neoliberal sense as it aims to place market logic as a key point of sociotechnical transitions to sustainable and low-carbon futures (Caprotti and Bailey 2014). This ecological modernization and green growth approach assume that transformational change comes bottom-up and thinks that economic transformation in the form of economic development can lead to green changes (Lederer et al. 2018).

Despite this perspective might be a strong interpretation of the green economy, a closer analysis of environmental resources management could bring different alternatives to the meaning of the green economy (Caprotti and Bailey 2014).

Introduction

In the last years, the concept of green economy has gained importance, politically and in business, since it was considered one of the central themes of the Conference of Sustainable Development, of the United Nations, in 2012 (Caprotti and Bailey 2014). In addition, as the European Union definition states, green economy is the “economy that can secure growth and development, while at the same time improving human well-being, providing decent jobs, reducing inequalities, tackling poverty and preserving the natural capital upon which we all depend” (DGICD-EU 2018, page 1), which promotes a pathway for sustainable development in a paradigm shift that not focus on economic growth as the ultimate goal but instead

in this driver of growth based on greener policies, market, and business practices, recognizing that resource efficiency and natural capital are the focus for the economy in the long run (DGICD-EU 2018). Therefore, the green economy, in different approaches, was promoted to catalyze national policy development and transnational collaboration toward sustainable development, poverty eradication, intragenerational and intergenerational even-handedness, enhanced economic performance and fair use of resources (Caprotti and Bailey 2014; Allen and Clouth 2012).

In this perspective green economy is a compatible concept with the sustainable development one, but it also implies some dangers and questions. There is the fear that this concept reinforces protectionist trends, boosts the constraints linked with financial international cooperation, and makes available new forces that would reinforce international inequities (Ocampo et al. 2011).

It was highlighted market-based trajectories to accomplishing the transition to the green economy and asked for close cooperation between government and business to achieve this greener and resource-efficient economy perspective. These trajectories involve combined study in order to reach knowledgeable research on the deficiencies and potentialities of the green economy (Caprotti and Bailey 2014; Khor 2011).

This article pretended to discuss the green economy concept and the main implementation items such as the main sectors to develop, indicators, and a roadmap designed to achieve it. Considering that the goal of the article is on concept definition, it will begin with the main perspective of the green economy concept and discuss the main approaches to accomplish it.

The Concept of a Green Economy

The term green economy was first used, in 1989, in a report produced by a group of environmentalist economists titled *Blueprint for a Green Economy* (Pearce et al. 1989). In 2008, the term was reused within the discussions on the political response to the multiple global crises. In

consequence of the financial crisis and global recession concerns, UNEP defended the idea of “green stimulus packages,” and some specific areas were pinpointed to be supported with a large-scale public investment that could relaunch a “green” economy (Atisson 2012).

This concept, in its broader perspective, has a holistic character and incorporates the three pillars of sustainability-sustaining and sustainability-promoting economic, environmental, and social welfare and its focus on intergenerational equity (Ocampo et al. 2011). It seems that, like sustainable development, the concept of the green economy is an oxymoron which intends to deal with partly contradictory, different interests and strategies, giving them a certain legitimacy and coherence (Brand 2012).

The Organization for Economic Cooperation and Development (OECD) members, in 2009, embraced the green growth economic policy as its long-term strategic course until the years 2030 and 2050 (Porfiriev 2013). As Brand (2012) stated, the European Union (EU) considered it important to attempt to decrease the use of resources and increase their efficiency since they were the main instruments for handling environmental problems and resource scarcities and improving European attractiveness. The EU’s plan goes in the same direction as the Green Growth Strategy of OECD, which supports the reinforcement of both economic and environmental policies and emphasizes innovation to uncouple development from natural capital reduction (OECD 2011).

The United Nations Department of Economic and Social Affairs (UNDESA) presents the notion of the green economy as a different development paradigm, in a huge technological change by scaling up clean technologies, waste reduction, and sustainable farming (UNDESA 2011). This perspective implies a paradigm shift, such as the concept of sustainable development. In a society where economic growth is still concentrated on measuring GDP (gross domestic product), above any other indicator, the green economy will compel to include other concepts and indicators for the analysis and discussion of economic growth, as the green economy aims to be low carbon,

resource efficient, and socially inclusive (UNEP 2011). This paradigm shift represents a problem since it's impossible for businesses in a global scenario of resource-intensive production and consumption patterns to engage easily in a new paradigm (Brand 2012).

This proposal of another paradigm that promises evolution while shielding the Earth's ecosystems, which is based on improving the quality of life of people consistent with sustainable development, designs a trajectory, departing from the system that originated problems to happen and addressing proactively those issues and to prevent them (Ocampo et al. 2011). This paradigm shift will still take some time to be realized, even if several countries already present some programs that indicate the demand for green growth or economic low carbon strategies. Our history shows some structural constraints where dominant economic and political forces present difficulties to be weakened regarding these proposals of the green concept (Brand 2012). This skepticism that Brand (2012) states is not only due to the existing political strategies in guiding the governments toward global competitiveness and geopolitical interests, in a free trade scenario performed by powerful institutions, but also because market and profit drive development technologies will ensure the promotion of sustainability, particularly in a dominant social orientation development without regarding the risks, the increasing exploitation of nature with power relations unbalanced, and reluctant to lose control.

The risks of this perspective of concept pointed out by Khor (2011) are the one-dimensional manner, purely environmental, without fully reflecting the development, equity, and the international dimensions; its "one size fits all" perspective, in which all countries are treated in the same way and it should take into account the country levels and phases of progress and the urgencies and settings of developing countries, considering the principle of differentiated; the inappropriate use of the environment and/or the green economy for trade protectionist means (e.g., imposing of "carbon taxes" or "border adjustment tax" on products); misuse of environment claims as a masked way by countries to endorse the access of their

goods and services into international markets; subsidy attribution on the more rich countries to the research and development (R&D) of environmentally sound technologies which puts other countries in disadvantage, especially since they lack the financial resources; implementation of environmental canons for products that some countries are incapable to meet the canons face losing their exports; and use of green economy claim as a condition to access for support, credits, and debt rescheduling or relief to countries. Therefore, there is a necessity to detect and deal with the trade-offs that may be involved at different phases of progress and with different environment capabilities and trials.

Another definition of green economy and in a narrower conceptualization, when seen as the inclusion of the economic activity styles and goods that contribute to the increased life quality and living environment while also transforming the manufacturing process and making it more efficient. So, it's considered as the development, production, and technology and equipment use that diminish pollutant emissions and greenhouse gases, monitor and forecast climate change, and create resource conservation and renewable energy technologies. Other features of the green economy can also be included, such as design and technology use; materials that shield buildings from wide temperature variations, humidity, and wind; and manufacturing of environmentally friendly products, specifically consumer goods (like medicine and household essentials that contain no chemical additives) and agricultural products (foodstuffs and natural fibers) (Porfiriev 2013).

Green Economy and the Economic Growth

The green sector of the economy is characterized by exceptionally rapid growth, especially relative to the general economic slowdown of 2008–2012 that can be explained, mainly, by three factors: the first two are very related to a clean and safe environment and the risk minimization of climate change, since green technologies have fewer

risks and are smaller in scale than twentieth-century industrial technologies, and a third factor is the concentration of scientific research and the high level of technological development of green enterprises that enable the faster transition to the new (sixth) wave of innovation (Porfiriev 2013).

To meet the challenges of increasing economic growth and awareness of the ecological limitations of global development, already noticeable climate change, and increasing social inequalities, UNEP and other institutions, like OECD and EU, agreed on the concept of a green economy as the driver for more sustainable growth of the economy and society (Lederer et al. 2018; UNEP 2011). This concept is interconnected with the concept of sustainable development since it acknowledges and reflects its concerns and incorporates its three pillars (economy, environment, and society), giving a highlight to how the environmental policies help to achieve sustainability at a low cost (Zhou et al. 2018). A green economy emphasizes an efficient and functioning economy needed to achieve progress and has an optimistic view of the technological innovation and market instruments to make the economic sectors greener (Lederer et al. 2018; Pegels et al. 2018).

To achieve its goals, this green economy concept calls for governments to take more direct responsibility and intervention in the economy to guide (in the form of subsidies, formulation and implementation of green policies) and promote the changes needed within the social and economic paradigm (Lederer et al. 2018; UNEP 2011). According to projections until around 2050, most countries will experience rapid growth and a visible increase in the green energy sector in general with emphasis on the green energy sector (Porfiriev 2013). Solving problems through a variety of institutional and regulatory reforms, tax-based and cost-effective economic policy and tools (OECD 2011) can be a path.

The key challenge is how we can move in the direction of an economic system that will benefit more people in the long term. Making the transition to a green economy will require a major change in thinking about development and expansion, the production of products and services, and consumption habits, as has already been said. This

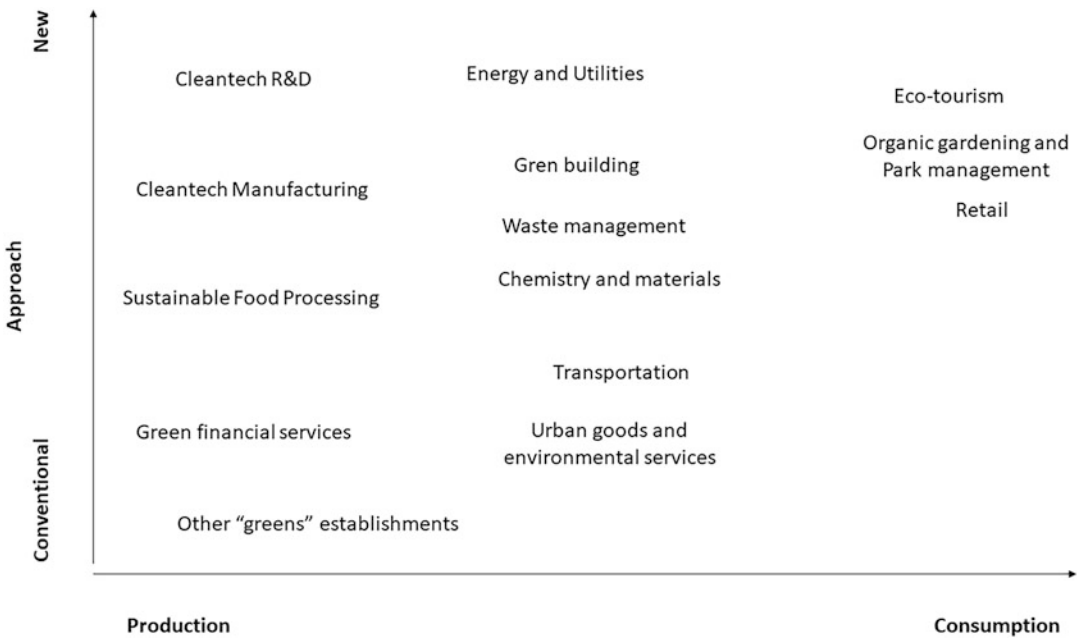
shift will not happen merely because of better knowledge of effects, dangers, or economic study despite the acknowledgment of being one of the best answers to global crises, especially in managing social and environmental issues (Andreica et al. 2014).

Several sectors are considered key for the 2% of global GDP investment advocated by UNEP to achieve green transformation with national and international political reform drivers: agriculture, buildings, energy, cities, fisheries, forests, industry, water, tourism, transport, and waste management (Andreica et al. 2014).

In the map shown in Fig. 1, the green business sectors are grouped into several categories, based on an analysis of the industries in the UNEP report. The darkest shades represent the areas most referred of every industry sector in the report within the range of the traditional business (vertical axis) and of the business related to production and consumption issues (horizontal axis). It's also possible to visualize the influence of government, universities, nonprofit organizations, trade unions, professional associations, and regional innovation systems, at the bottom of the figure. Other ways to make the transition to a green economy have also been defined. Karl Burkart (2012) argues that the green economy should be based on six sectors: renewable energy, green buildings, sustainable transport, water management, waste management, and soil management. These sectors will be the pillars of future growth and sustainable development to achieve.

To access the green economy, a framework of indicators was created by OECD to regularly monitor the progress and status of green growth, following three main areas (Tóthné 2014): green conversion of important areas, the economic investment and their related consequence in production and service; "decoupling and efficiency" to measure resource efficiency and productivity and the uncoupling of economic activity from resource use and related environmental impacts; and combined indicators of development and well-being mentioning various initiatives.

Each country may select and prioritize a different set of indicators (shown in Table 1) depending on its level of economic development



Green Economy II, Fig. 1 Sectors of the green economy. (Source: Adapted from Andreica et al. (2014))

Green Economy II, Table 1 Selected green indicator groups and topics

Indicator groups	Indicators
Environmental resources, economic productivity	Carbon and energy productivity Resource efficiency: material nutrients, water Multifactor productivity
Natural assets	Renewable stocks, nonrenewable stocks Biodiversity and ecosystems
Environmental dimension of quality of life	Environmental health and risks Environmental services and amenities
Economic potentials and policy responses	Technology and innovation Environmental goods and services International financial flows Prices and transfers Skills and training Regulation and management Approaches
Socioeconomic context and characteristics of growth	Economic growth and its structure Productivity and labor market, education, income Sociodemographic patterns

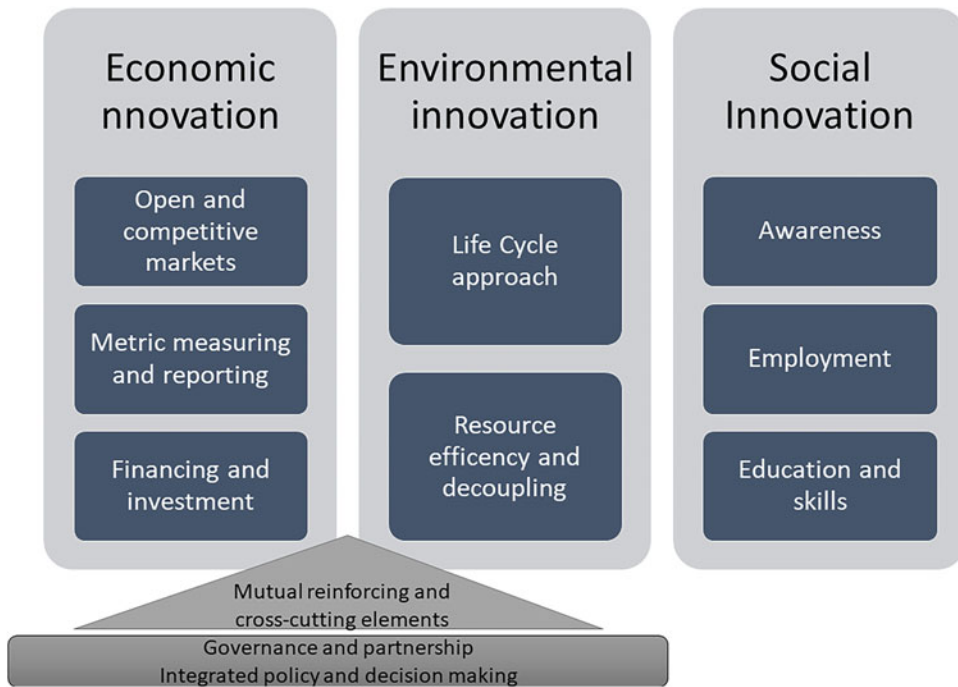
Source: Tóthné (2014)

and natural resource usage ratio, and other indicators can be added if important and relevant, as occurred in recent years (http://www.oecd.org/environment/indicators-modelling-outlooks/Highlights_Green_Growth_Indicators_2017.pdf).

The International Chamber of Commerce (ICC), when publishing the Green Roadmap for the green economy, outline the interdependences of the three dimensions of sustainable development and integrates them in a holistic perspective as advocated by UNEP, giving highlight to the role of business companies in obtaining solutions to common global challenges and establishing conditions.

ICC roadmap argues that collaboration between business companies and economic sectors is essential in order to make the transition to a green economy, proposing ten conditions as a framework for green growth on a set of interdependent policies and actions, as shown in Fig. 2.

The path to a greener economy is an ongoing process, but it has the potential to achieve sustainable development while reducing poverty on a



Green Economy II, Fig. 2 Green economy roadmap. (Source: adapted from ICC (2012))

high scale and velocity because it derives from a change in the social paradigm and a rethinking approach to the economy. Public policy, as a regulation, is important to provide direction through standards and targets, and public investments are crucial to enhance natural capital, new sectors, and technologies. In doing so public policies and investment will be the main source of growth and economic development when supported with additional investment in human capital, management, and technical skills.

Since it's a change of thinking and redefinition of the conventional methods of assessment of wealth, success, and well-being, moving toward a green economy will require a joint effort, a collaborative transition of world leaders, civil society, and leading businesses.

Summary

The green economy concept and operationalization have grown and developed in different

forms in different regions, depending on the strengths and weaknesses of each economy and of each nation, and it promotes a context of a safe and fair transition, in line with global challenges for sustainable development. State investments and policies are needed for the transition to a green economy which can have a role in decoupling economic growth from increasing current consumption of natural resources irrationally. The green economy is a complex but doable activity with enormous benefits, especially in the long term. In the actual context, economic growth is possible, but subject to certain conditions.

This perspective of growth and paradigm transition to sustain the transformation needed for the green economy make us expect a diffusion and convergence of environmental policy instruments, the emergence of green consciousness in national and international contexts, and the political strategy related to it. This ideal transformation is set, also, into the development of a socioeconomic model that builds on

service-based activities that don't demand material input and rely mainly on local activities and employment to foster social and ecological investments in infrastructures (Lederer et al. 2018).

This implies a policy change that doesn't regard the fact that similar structural drivers do not, necessarily, produce similar outcomes: the technological and economic factors do not make an effect automatically; they must be related to specific problems and turned into an appropriate solution (Lederer et al. 2018). However, if the change requires action and different actors, there is none stronger to enable and promote change than the state despite the state structures tend to favor the externalization of ecological costs, inhibiting environmental protection and merging with the deep-rooted mode of capitalist development.

References

- Allen, C., & Clouth, S. (2012). *A guidebook to the green economy*. New York: UNDESA.
- Andreica, A., Balu, P. E., & Balu, O. F. (2014). Green economy-from theory to practice. *Calitatea*, 15(S1), 523.
- Atisson, A. (2012, October 20). *Life beyond growth – The history and possible future of alternatives to GDP-measured growth-as-usual*. New Delhi: OECD Global Forum on Measuring Well-Being for Development and Policy Making.
- Brand, U. (2012). Green economy–The next oxymoron? No lessons learned from failures of implementing sustainable development. *GAEA-Ecological Perspectives for Science and Society*, 21(1), 28–32.
- Burkart, K. (2012). *How do you define the green economy*. <http://www.mnn.com/green-tech/research/innovations/blogs/how-do-you-define-the-green-economy#>
- Caprotti, F., & Bailey, I. (2014). Making sense of the green economy. *Geografiska Annaler: Series B, Human Geography*, 96(3), 1–6.
- DGICD-EU – Directorate-General for International Cooperation and Development. (2018). The inclusive green economy in EU development cooperation – An innovative approach at the intersection of the EU's planet, people and prosperity objectives. In *Reference document no 25*. Brussels: European Commission. Available at: <https://op.europa.eu/en/publication-detail/-/publication/a7a02150-01ad-11e9-adde-01aa75ed71a1/language-en/format-PDF/source-106362454>.
- ICC. (2012). *Green economy roadmap*. International Chamber of Commerce. Available at: <https://iccwbo.org/>.
- Khor, M. (2011). *Risks and uses of the green economy concept in the context of sustainable development, poverty and equity*. Geneva: South Centre.
- Lederer, M., Wallbott, L., & Bauer, S. (2018). Tracing sustainability transformations and drivers of green economy approaches in the global south. *The Journal of Environment & Development*, 27(1), 3–25.
- Ocampo, J., Cosbey, A., & Khor, M. (2011). *The transition to a green economy: Benefits, challenges and risks from a sustainable development perspective*. Report by a panel of experts to Second Preparatory Committee Meeting for United Nations Conference on Sustainable Development. Departamento de Asuntos Económicos y Sociales de las Naciones Unidas/Programa de las Naciones Unidas para el Medio Ambiente (PNUMA)/ Conferencia de las Naciones Unidas sobre Comercio y Desarrollo (UNCTAD).
- OECD. (2011). *Towards green growth*. Paris: OECD – Organisation for Economic Co-operation and Development. Available at: <https://www.oecd.org/greengrowth/48012345.pdf>.
- Pearce, D. W., Markandya, A., & Barbier, E. (1989). *Blueprint for a green economy*. United Kingdom: Earthscan.
- Pegels, A., Vidican-Auktor, G., Lütkenhorst, W., & Altenburg, T. (2018). Politics of green energy policy. *The Journal of Environment & Development*, 27(1), 26–45.
- Porfiriev, B. (2013). “Green” economy: Realities, prospects and limits of growth. Moscow: Carnegie Moscow Center. (English version).
- Tóthné, K. S. (2014). Green growth in the OECD: State of the art. *Theory, Methodology, Practice*, 10(2), 59. Available at: http://tmp.gtk.uni-miskolc.hu/volumes/2014/02/TMP_2014_02_06.pdf.
- UNDESA (United Nations Department of Economic and Social Affairs). (2011). *The great green technological transformation. World economic and social survey*. New York: UNDESA.
- UNEP. (2011). *Towards a green economy: Pathways to sustainable development and poverty eradication*. United Nations Environment Programme (UNEP). Available at: www.unep.org/greeneconomy.
- Zhou, Y., Pan, M., Zhou, D. K., & Xue, L. (2018). Stakeholder risk and trust perceptions in the diffusion of green manufacturing technologies: Evidence from China. *The Journal of Environment & Development*, 27(1), 46–73.

Further Readings

- Barry, J., & Eckersley, R. (2005). *The state and global ecological crisis*. London: MIT Press.
- Boehnert, J. (2016). The green economy: Reconceptualizing the natural commons as natural capital. *Environmental Communication*, 10(4), 395–417.
- Gasparatos, A., & Willie, K. (2015). *Biodiversity in the green economy*. London/New York: Routledge.

- Held, D., Roger, C., & Nag, E.-M. (Eds.). (2013). *Climate governance in the developing world*. Cambridge: Polity Press.
- Kenis, A., & Lievens, M. (2015). *The limits of the green economy: From re-inventing capitalism to re-politicising the present*. London: Routledge.
- Meadowcroft, J., & Fiorino, D. J. (2017). *Conceptual innovation in environmental policy*. Cambridge: The MIT Press.
- Pearce, D., Markandya, A., & Barbier, E. (2013). *Blueprint 1: For a green economy*. London: Routledge.
- Scoones, I., Newell, P., & Leach, M. (2015). *The politics of green transformations. Pathways to sustainability*. Abingdon: Routledge.
- Steinberg, P. F., & VanDeveer, S. D. (2012). *Comparative environmental politics. Theory, practice, and prospects*. Cambridge: MIT Press.
- United Nations Secretary-General. (2014). *The road to dignity by 2030: Ending poverty, transforming all lives and protecting the planet. Synthesis report of the secretary-general on the post-2015 agenda*. New York: United Nations.

Green Energy

- ▶ [Bioremediation](#)
- ▶ [Energy-Renewable](#)

Green Events

- ▶ [Sustainable Events](#)

Green Finance

- ▶ [Climate Finance](#)

Green Finance/Investing

- ▶ [Socially Responsible Investing and Finance](#)

Green Globe 21

- ▶ [Green Globe Certification](#)

Green Globe Certification

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Synonyms

[Green Globe 21](#)

Definition

Green Globe = 3S (safety, security, sustainability)

The Green Globe certifies hotels, resorts, conference centers, and other tourist attractions, ensuring that these tourism providers are the safest and the most secure in the world. It sets the highest standards in the field of sustainability.

Green Globe does not only provide a certificate but also offers training, education, and marketing services in a total of 83 countries around the world. The Green Globe Certification Standard is based on an internationally recognized set of criteria developed over 15 years by the Green Globe organization and awarded to companies with green solutions and a sustainable future.

The Green Globe initiative was launched in 1994 as a result of the UN Conference on Environment and Development in 1992. It is currently available in 83 countries around the world. To participate in the program, accommodations and other tourism providers must not only meet the specified set of requirements but also participate in Green Globe training, as well as seek the help of accredited consultants. The set of requirements includes systems developed for sustainability management, conscious management of social and economic impacts, protection of cultural heritage, and management of environmental impacts (Green Globe 2021).

Introduction

The Green Globe Certification primarily assesses the sustainability performance of tourism service

providers and their supply chain partners in a structured way. The standard includes 44 core criteria and more than 380 compliance indicators. The application of indicators depends on the type of certification, the geographical area, and other local factors. The standard is reviewed and updated annually.

The Green Globe 21 certification program was established in 1994 to prevent the tourism industry from being further regulated by governments. It is the only certificate in the world based on the principles of Agenda 21 sustainable development (Peřan 2008). It is supported by the Sustainable Tourism Cooperative Research Center.

The Green Globe Certification was established in 1998, which is an environmental certification for companies. The certificate does not entitle you to use the logo based on performance, but shows the commitment of the company. Green Globe has become an international environmental accreditation scheme, working with CRC Sustainable Tourism in Australia, forming an alliance with PATA Green Leaf, the Caribbean Alliance for Sustainable Tourism, and Green Key. These work platforms were operated in the following countries: the UK, Australia, South-East Asia, Caribbean, and Scandinavia. As a result of the expansion, Green Globe has become the largest network in the area, with international coverage as well as very little market penetration. The Asia-Pacific branch is the most active in this area, as through cooperation with the Tourism Industry Association of New Zealand (TIANZ), it is New Zealand's most aggressive eco-label, and it can make the most impact in this area. Since 2001, a complete package called "The Green Globe Path to Sustainable Travel and Tourism – As simple as ABC" has been prepared for sub-sectors of various industries, as well as training sessions in Australia and New Zealand (Font 2002).

The Green Globe (2021) also accepts locally developed standards, but basically builds on international standards:

- Global Sustainable Tourism Criteria
- Global Partnership for Sustainable Tourism Criteria (STC Partnership)

- Baseline Criteria of the Sustainable Tourism Certification Network of the Americas
- Agenda 21 and principles for Sustainable Development endorsed by 182 Governments at the United Nations Rio de Janeiro Earth Summit in 1992
- ISO 9001/14001/19011 (International Standard Organization)

In drawing up its audit program, which also requires an independent auditor, it relied on ISO 19011: 2002.

It is possible to obtain the Green Globe Certification in the following sub-sectors of tourism (Green Globe 2021):

- "Attraction
- Business (Whole Sale/Retail)
- Congress Center, Meeting Venues
- Cruise Ships (River & Ocean)
- Golf Course
- Hotel & Resort
- Meeting & Events
- Organization
- Restaurant
- Spa, Health Center
- Transportation (Mass Transportation, Bus Company, Limousine Service, Car Rental)
- Travel Industry (Tour Operators, Destination Management Company, Meeting & Incentive Industry)."

Certification Levels

Those who meet all the criteria will be granted Certified Member status. Businesses are inspected annually, and more than 50% of the indicators must be met to maintain status. The main topics are (Green Globe 2021):

- Sustainable management
- Social/economic
- Cultural heritage
- Environment

The Certified Member requires an independent audit every 2 years and a mandatory on-site audit

every 2 years. Gold Member status can be obtained by five service providers certified for five consecutive years and inspected in accordance with the regulations. Services certified for ten consecutive years can already be granted Platinum Member status, which is the highest level of certification (Green Globe 2021).

Advantages of Green Globe

Green Globe has the following benefits for tourism:

- 10% energy and water savings
- 7% staff safety improvements
- 7.5% consumer growth
- 1 million web audiences
- Media access per month

Companies can claim the following benefits with membership (Green Globe 2021):

- Because service providers use fewer resources and operate more efficiently, they can save money.
- Can connect and reach consumers who expect verified green credentials.
- Because they are constantly reviewing the operational process, they are better able to manage risks.
- Joining an industry-leading group means debt.
- Improve the brand image for companies by strengthening the green dimension.

Summary

Green Globe membership ensures that certified companies are successful in terms of sustainability for the company, the employees, the local community, and the environment, as they meet the following requirements (<https://greenglobe.com/about/>):

- They are committed to sustainability in management and operation.
- They are committed to reducing their use of energy and water and to reusing and recycling materials.

- They protect local culture and heritage.
- They have a sustainability plan, setting more than 300 targets that affect all levels of companies.
- They promote diversity and inclusion in the workforce.
- They act in accordance with local laws; promote equality, health, well-being, and human rights; and support global initiatives to prohibit the exploitation of children.

The importance and significance of the Green Globe International Standard for Sustainable Tourism is demonstrated by its two-decade history, the Global Sustainable Tourism Council also acknowledges it, and the Green Globe is an affiliate member of the UNWTO.

Cross-References

- [Green Economy](#)
- [Green Marketing](#)

References

- Font, X. (2002). Environmental certification in tourism and hospitality: Progress, process and prospects. *Tourism Management*, 23, 197–205.
- Green Globe. (2021). Green globe certification. <https://greenglobe.com/green-globe-certification/>, <https://greenglobe.com/certification-levels/>, <https://greenglobe.com/standard/>, <https://greenglobe.com/benefits/>. Assessed 15 Dec 2020.
- Petău, I. C. (2008). The importance of certification schemes in sustainable development of tourism. *Annals of the University of Oradea, Economic Science Series*, 17(2).

Green Growth

- [Degrowth](#)
- [Postgrowth](#)

Green Innovation

- [Corporate Sustainable Innovation](#)

Green Innovations Performance Measurement

► [Eco-sustainability Innovations Performance Measurement](#)

Green Investment

► [Sustainable Investment](#)

Green Jobs

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Synonyms

[Eco jobs](#); [Environmental jobs](#); [Green-collared jobs](#); [Sustainability jobs](#)

Definition/Description

Green jobs are defined as work in agriculture, industry, services, and administration that contributes to preserving or restoring the quality of the environment (UNEP 2008). They are considered to be a combination of traditional environmental science and engineering, combined with an orientation toward new regulations and a sustainability paradigm (Deitche 2010, p. xii).

The green jobs concept is part of a bigger trend in economics formally titled “green growth,” which refers to more environmentally sustainable production and distribution, as well as green finance. The public sector has been turning toward adopting policies that reflect the “green economy” paradigm as well (Deschenes 2015).

In terms of economic development, green jobs have been perceived as such jobs that have the dual

benefit of mitigating environmental challenges as well as helping green growth (Deschenes 2015). However, in terms of regarding green jobs, it has been a challenge to define which jobs exactly fit in this category. There is not a single list of criteria defining green jobs (Kouri and Clarke 2012). In the same time, more and more (both public and private) organizations acknowledge the importance of promoting a green job market development (Kouri and Clarke 2012).

Green jobs are present in both production and in the service sector. A special form of green jobs are the jobs in the renewable forms of energy sector (wind, hydropower, wind, geothermal energy, etc.). Another more specific form of green jobs has been considered the jobs that involve education, training, and raising public awareness – such careers turn to (Bronwyn Llewellyn 2008, p. 48).

Defining Green Jobs

The problem of defining green jobs is largely due to lack of formal international definition in either legal practice or in academia. For that reason a number of cognitive frames of perception of green jobs have emerged. A study from 2006 identifies five major frames in which green jobs are perceived:

- (i) Environment–economy bridge
- (ii) Green entrepreneurship
- (iii) Nascent industry creation
- (iv) Structural adjustment
- (v) Internal industry transformation (Kouri and Clarke 2012)

The academic treatments of the green jobs concept highlight the difficulties in defining the concept. However, despite having no clear border of the definition, the green job notion has been extensively developed as policy action by different countries.

Green Job Policies and Practices

Despite the lack of a universal categorization of the green job concept, most countries have implemented the green jobs notion in their economic policies and statistics. According to a 2012

report of the International Labor Organization (ILO), at least half of the global workforce (around 1.5 billion people) is engaged at least partially by the transition toward greener economies (ILO 2012). The ILO forecasts that more than eight million new jobs will be created globally.

In their efforts to advance the environmental economy sectors, countries invest in different projects and processes. Besides from the socially driven goal to protect the environment, environmental sustainability has been considered one of the promising fields for investing in research and development for achieving economic growth (Deschenes 2015). To stimulate green growth, investing in green technology and innovation is set as a priority by both developed and developing countries.

Green finance is regarded to play a role in environmental damage mitigation related to the impact of climate change on the economic system. Climate change poses new risks for the natural and economic systems, and finance toward the mitigation of these risks is stepping up. Green finance has begun to play more significant role as a facilitator of green growth (Noh 2019).

Governments have been stimulating enabling conditions for green transformation and green growth in different sectors – agriculture, buildings, energy finance, forestry, manufacturing, metallurgy and mining, transportation, waste and water management, etc. Measures to increase green growth and to create green jobs include stimulus packages, encouraging investment in sustainable business, financing research and development, etc. (Noh 2019).

However, governmental budget constraints ensure that green finance requires various market mechanisms for green growth investment. Private financing of green projects, however, is still associated with a high risk and low return of investments, for which reason the growing green finance sector relies on different investment tools (Noh 2019).

It has been a disputed topic whether tourism could be included as a target sector for green growth (Bronwyn Llewellyn 2008).

Box 1 Green Jobs in the Energy Sector

Renewable energy has been considered one of the core sectors of the green economy and green job market. Recent reports by the International Renewable Energy Agency (IRENA) state that in 2019 more than 11.5 million people were employed in the renewable energy sector globally. The highest number of estimated direct and indirect jobs in renewable energy is in China, with the country having more than 4,000,000 people employed in the sector. India, Brazil, the EU, and the USA are among the other global leaders in number of green energy jobs (IRENA 2020).

Green Jobs and the Labor Market

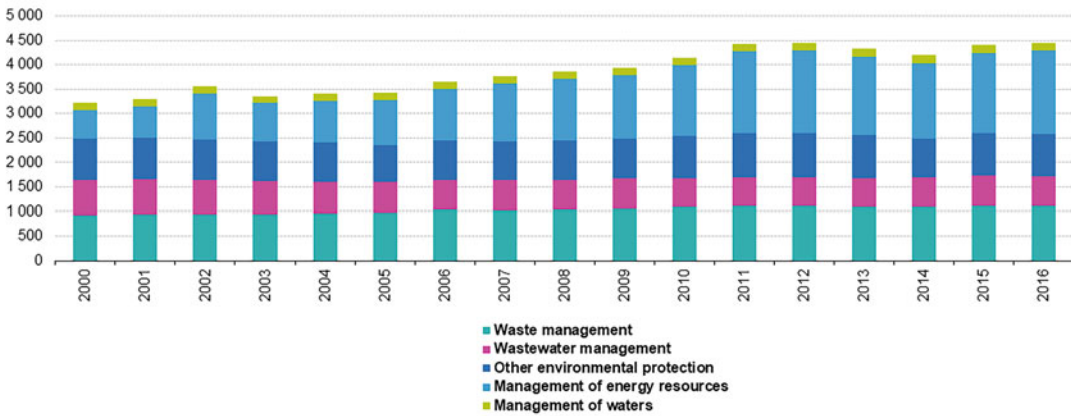
Despite that the scope of green jobs can vary, it has been estimated that the role of such workplaces is rising in the labor markets (Fig. 1).

A rise in demand for high-skilled professionals has created a hard-to-fill gap in some green job markets. A significant difference between low-skilled and high-skilled labor supply repeatedly raises the questions about the role of education and training in securing the required labor force for the green economy. The main issue in education related to green jobs has two dimensions.

On the one hand, an inability of education and training systems to respond to the demands of the growing green industry is defined as a problem (Maclean et al. 2018). Universities and training centers have been working together with businesses and industries in the sector to resolve this problem. More and more do business-university partnerships address this issue by creating joint programs and practical trainings.

The other barrier that education has in the sphere of high-skilled green labor force training meets is related to the prospective students' preferences. A shortage of prospective students choosing to specialize in green skills in demand,

Employment in the environmental economy, by domain, EU-28, 2000–16
(thousand full-time equivalents)



Note: Data for EU-28 are estimated by Eurostat.
Source: Eurostat (online data code: env_ac_egss1)

eurostat

Green Jobs, Fig. 1 EU's Environmental economy employment. (Source: Eurostat (2019). Environmental economy – statistics on employment and growth. [https://](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth)

ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth. Accessed 9 October 2020)

as well as structural problems such as lack of employer incentives to invest into transferable skills training and the existence of stereotypes are additional such obstacles to achieving the optimal number of students training for the high-skilled green jobs segment (Maclean et al. 2018).

In order to overcome the shortage in green jobs supply, the United Nations Environment Program (UNEP) and the International Labor Organization (ILO), in cooperation with the International Trade Union Confederation (ITUC) and the International Employers Organization (IEO), launched the UN Green Jobs Initiative in 2008 (UNEP 2008; ILO 2019).

and practical aspects confirms the tendency toward economic transformation than more sustainable economies and green growth.

Due to the development of instruments for green growth funding, the green jobs labor market has witnessed a considerable rise in the last decade. However, there are still some structural challenges that the green job market has, which concern the demand for highly skilled labor. Through associating education with the green growth notion, new programs and showcasing of the benefits of green professions have been launched by educational institutions in order to attract more people into these spheres of professional training.

Summary

Green jobs are an essential factor for sustainable development. The understanding that an environmentally sustainable economy has to be created with thought of economic development is addressed by creating new job markets in green jobs, training professionals, and investing in green technology.

Green jobs are an essential part of the green growth economic paradigm. The rapid development of the green jobs sector in both conceptional

Cross-References

- [Economic Development](#)
- [Environmental Protection Agency](#)
- [Green Economy](#)
- [Green Growth](#)
- [Sustainable Development](#)

References

- Bronwyn Llewellyn, A. (2008). *Green jobs: A guide to eco-friendly employment*. Adams Media.

- Deitche, S.M. (2010). Green collar jobs. Environmental careers for the 21st century. Praeger.
- Deschenes, O. (2015). Green jobs. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp. 372–378). Elsevier.
- Eurostat. (2019). Environmental economy – statistics on employment and growth. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth. Accessed 9 October 2020.
- ILO (International Labour Organisation). (2012). *Working towards sustainable development: Opportunities for decent work and social inclusion in a green economy*. ILO.
- ILO (International Labour Organisation). (2019). Green Jobs. <https://www.ilo.org/global/topics/green-jobs/lang%2D%2Den/index.htm>. Accessed 9 October 2019.
- IRENA (International Renewable Energy Agency). (2020). Renewable energy and jobs – Annual review. International Renewable Energy Agency. <https://www.irena.org/publications/2020/Sep/Renewable-Energy-and-Jobs-Annual-Review-2020>. Accessed 9 August 2021.
- Kouri, R., & Clarke, A. (2012). Framing “green jobs” discourse: Analysis of popular usage. *Sustainable Development*, 22(4), 217–230. <https://doi.org/10.1002/sd.1526>.
- Maclean, R., Jagannathan, S., & Panth, B. (2018). *Education and skills for inclusive growth, green jobs and the greening of economies in Asia: Case study summaries of India, Indonesia, Sri Lanka and Viet Nam*. Springer.
- Noh, H. J. (2019). Financial strategies to accelerate green growth. In J. D. Sachs et al. (Ed.), *Handbook of green finance: Energy security and sustainable development* (pp. 37–63). Springer.
- UNEP (United Nations Environment Programme). (2008). United Nations Environmental Programme Background Paper on Green Jobs. https://www.michigan.gov/documents/nwlb/UNEP_Background_on_Green_Jobs_236033_7.pdf. Accessed 5 October 2019.

Further Readings

Green Growth Knowledge Portal: <https://www.greengrowthknowledge.org/>

Green Jobs Social Life Cycle Assessment

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Synonyms

Circuition; Communal; Community based; Environmental jobs

Definition

The global environmental awareness has given rise to many terms that were not emergent before. In particular, the terms related to sustainability are of keen interest. More businesses and societies as a whole are trying to shift the focus more towards the green terms, sustain bile solutions, and effect resources use. In this regard, green jobs and the social life cycle assessment of them are an emerging concept.

Green jobs creation is the concept that emphasises on value creating activities, focusing on environmental protection to uplift the conditions of economic and employment generation for local areas (Zimmermann and Simpson 2013). Moreover, two other variables having an impact on green job creation are effectiveness of managerial and public policies which enhance the green job creation activities (Mintzberg 1973).

Green jobs are a broad concept which is conceptualized as an employment in clean energy sectors or environmentally conscious conditions. There is no globally accepted definition of what constitutes a green job. Mostly the definitions that statistical agencies and researchers use term them as employment in clean energy or the production of environmentally friendly goods and services. While few researchers define green jobs precisely as the jobs which emerge as a result of green growth policies, in this regard, the United Nations Environmental Program (UNEP), which sets some criteria for a job to be called a green job, mentions that it must offer adequate wages and support workers' rights and sufficient safety conditions at workplace.

It is pertinent to mention the Green Goods and Services Survey (GGS) from the USA. It considered two definitions for the green jobs concept:

They present output-based and process-based definitions.

1. “Jobs in businesses that produce goods and provide services that benefit the environment or conserve natural resources.”
2. “Jobs in which workers’ duties involve making their establishment’s production processes more environmentally friendly or use fewer natural resources” (Deschenes 2013).

Similar definitions have been accepted in other countries too, naming Germany and France where a single definition does not exist, but major focus is given on environmental and clean energy-related fields. The definition in Germany points to “employees who produce environmental goods and services, or employees involved in environment-related activities.”

As the sustainability related concerns rose specially after Burtland report (1987), the concern about including the social and economic factors into the life cycle of a product. The discussion about inclusion of socio-economic factors in the life cycle of goods started in 1990s, with the publication of The Society of Environmental Toxicology and Chemistry (SETAC) Workshop Report: “A Conceptual Framework for Life Cycle Impact Assessment” (Fava et al. 1993). In the year 2004, United Nations Environment Programme (UNEP)/SETAC life cycle initiative acknowledge a need for inclusion of social criteria into LCA. The term from LCA transcended to S-LCA, defined as a systematic process of utilization of the optimal available science to congregate optimal available data to report on the social impacts, negative or positive, in a life cycle of a product from initiation to disposal. SLCA are used to inform the management, or a concerning body, about the social impact by communicating, identifying, and reporting impacts, which further helps to formulate policies and strategies (Benoît et al. 2010).

Introduction

Green concept, primarily as mentioned by Kenneth Odera (1850–1928), surfaced in the Garden City Movement, by Sir Ebenezer Howard that showed the issues of a green economy for localities and cities (Zimmermann and Simpson 2013). The green jobs’ definitions mainly focus on energy from renewable sources and their efficiency, reduction in pollution, addressing the green house gases, recycling, public awareness, and trainings. United Nations Environment Programme (UNEP) in 2007 with the International Labour Organization (ILO) discussed the concept of Green Jobs to promote the economic and

environmental growth and urge governments for green investments. The aim was more job creation and to change the social life cycle of existing jobs into more sustainable practices.

Green jobs in the initiation phase of their social life cycle require high investments in establishing newer innovative technologies and methods of production, training the human resource. They are also developed special zones for investments, in green jobs, like Silicon Valley, namely, and East Asian Countries, which also can create inequalities globally not having the equal universal opportunities, and specially the exclusion of female workforce. Furthermore, the technological changes that appear as a result of moving towards greener jobs are also dynamic. Moving into newer technologies, policy shifts also alter the social life cycle substantially. Newer training needs, and technology adoption might not be uniformed and evenly distributed in all regions (Mulvaney 2014).

Frameworks for Green Jobs Social Life Cycle

Understanding the green jobs social life cycle is complemented by development of frameworks by researchers. Frameworks established by researchers have been studied by Sureau et al. (2018) that have pointed out different characteristics of green jobs social life cycle.

Value-Based Frameworks

Different researchers are divided into value-based frameworks which can be used in the context of green jobs’ social life cycle.

Benoît and Mazijn (2009) purpose several options to reduce risks and chalk out procedures for purchasing, reporting, marketing, planning, and development of public policies. They focused on social and socio-economic impacts of processes throughout their life cycle. They assessed impact of jobs on stakeholders.

Dreyer et al. (2005) in the same value-based domain worked at the decision making. Green jobs involve decision making at critical moments where you have to make choices in shifting the company policies towards greener practices other

than the usual operations. They also researched on the impacts of jobs on the stakeholders in detail and worked in the field of practices in jobs that are related to workers, their performance, and how are they treated. Green jobs consider the treatment of workers fairly as one of the prime factors, and the social life cycle throughout the job revolves around it.

Kruse et al. (2008) discussed the social impacts of the choices made by policy makers and customers' practices and compare different jobs for the same products. They primarily discussed production-related green jobs.

Context-Oriented Frameworks

Wangel (2014) focused on Nussbaum capabilities and results from SLCA models to make new chains and the contexts that enable value delivered to stakeholders. He sees the impact and effects of green jobs on stakeholders.

Mathe (2014) discussed the impacts of industry on the ecosystem and the matching of the principals and their impacts on the environment.

Theory-Structured Frameworks

Reitingering et al. (2011) focused on performing comparative analysis on industries to find the optimal process within the industry, sector, or organizations. The social life cycle of green jobs depended on the degrees of freedom and working of the stakeholders.

Garrabé and Feschet (2013) argued at increasing the modification in green jobs to increase the social and economic impact by modernization and improved decision making process that leads to newer activities, better productivity, and change in location and increased lifecycles for green job ensuring better economic and social outputs.

Macombe (2013) and Gaasbeek and Meijer (2013) focus on the role of decision making in social life cycle, the commencement of technology, and the cause effect relationship and how they impact green jobs.

Applicability-Oriented Frameworks

In these frameworks, the researchers focused on the applicability of different standards and practices on green jobs throughout the social life cycle.

Labuschagne et al. (2005) discuss the management purposes, social sustainability impacts of new technologies, engineering, and processes. The impacts on the local communities due to the process adopted by companies in their green job formations.

Fontes (2014) worked on social metrics side of social life cycle for green jobs. He aimed to highlight the areas for improvements, assistance in decision making, and communication throughout the lifecycle. He assessed the performance in green jobs in its impact on local communities and society.

Summary

The green jobs have been embraced by the authorises and a step towards realizing the dream of sustainable environments. The social life cycle of green jobs is complex as their impact on societies is taken differently, and more regulations, rules, laws, and customs are applied on green jobs than regular jobs. From inception to disposal, every stage in green jobs is observed to see how social and economic are being impacted. Where the green jobs are considered to be the custodian of sustainability practices, it is also in the initiation stage that requires more investments. The social impacts on the society are a win-win situation for both society and economically as the economic activity generation helps the society and environment too and lesser harmful impacts are transmitted on them.

Cross-References

- [CSR: Evolution of Concept](#)
- [Green Circular Economy](#)
- [Green Economy](#)
- [Green Jobs](#)
- [Life-Cycle Analysis](#)

References

- Benoît, C., & Mazijn, B. (2009). Lignes directrices pour l'analyse sociale du cycle de vie (ASCV) des produits. PNUE, 104p.

- Benoît, C., Norris, G. A., Valdivia, S., Ciroth, A., Moberg, A., Bos, U., ... Beck, T. (2010). The guidelines for social life cycle assessment of products: Just in time! *The International Journal of Life Cycle Assessment*, 15(2), 156–163.
- Blok, K., Huijbregts, M., Patel, M. K., Hertwich, E., Hauschild, M., Sellke, P., ... & Meijer, E. (2013). Handbook on a novel methodology for the sustainability impact of new technologies.
- Deschenes, O. (2013). *Green jobs* (IZA Policy Paper no. 62). IZA.
- Dreyer, A., Blodau, C., Turunen, J., & Radke, M. (2005). The spatial distribution of PAH depositions to peatlands of Eastern Canada. *Atmospheric environment*, 39(20), 3725–3733.
- Feschet, P., Macombe, C., Garrabé, M., Loeillet, D., Saez, A. R., & Benhmad, F. (2013). Social impact assessment in LCA using the Preston pathway. *The International Journal of Life Cycle Assessment*, 18(2), 490–503.
- Gorka, S. M., Fitzgerald, D. A., Labuschagne, I., Hosanagar, A., Wood, A. G., Nathan, P. J., & Phan, K. L. (2015). Oxytocin modulation of amygdala functional connectivity to fearful faces in generalized social anxiety disorder. *Neuropsychopharmacology*, 40(2), 278–286.
- Kramers, A., Höjer, M., Lövehagen, N., & Wangel, J. (2014). Smart sustainable cities—Exploring ICT solutions for reduced energy use in cities. *Environmental modelling & software*, 56, 52–62.
- Kruse, A. (2008). Supercritical water gasification. Biofuels, Bioproducts and Biorefining. *Innovation for a sustainable economy*, 2(5), 415–437.
- Macombe, C., Leskinen, P., Feschet, P., & Antikainen, R. (2013). Social life cycle assessment of biodiesel production at three levels: a literature review and development needs. *Journal of Cleaner Production*, 52, 205–216.
- Mintzberg, H. (1973) Strategy-Making in Three Modes. *California Management Review* 16, (2):44–53.
- Moreira, R. L. S. F., Fontes, W. D. D., & Barboza, T. M. (2014). Dificuldades de inserção do homem na atenção básica a saúde: a fala dos enfermeiros. *Escola Anna Nery*, 18(4), 615–621.
- Mulvaney, D. (2014). Are green jobs just jobs? Cadmium narratives in the life cycle of photovoltaics. *Geoforum*, 54, 178–186.
- Perlis, R. H., Smoller, J. W., Fava, M., Rosenbaum, J. F., Nierenberg, A. A., & Sachs, G. S. (2004). The prevalence and clinical correlates of anger attacks during depressive episodes in bipolar disorder. *Journal of affective disorders*, 79(1–3), 291–295.
- Reiting, C., Dumke, M., Barosevic, M., & Hillerbrand, R. (2011). A conceptual framework for impact assessment within SLCA. *The International Journal of Life Cycle Assessment*, 16(4), 380–388.
- Sureau, S., Mazijn, B., Garrido, S. R., & Achten, W. M. (2018). Social life-cycle assessment frameworks: A review of criteria and indicators proposed to assess social and socioeconomic impacts. *The International Journal of Life Cycle Assessment*, 23(4), 904–920.
- Terunuma, A., Putluri, N., Mishra, P., Mathé, E. A., Dorsey, T. H., Yi, M., ... & Ambis, S. (2014). MYC-driven accumulation of 2-hydroxyglutarate is associated with breast cancer prognosis. *The Journal of clinical investigation*, 124(1), 398–412.
- Zimmermann, M., & Simpson, R. (2013). Green urban economy: Agenda setting for the urban future. In *The economy of green cities* (pp. 3–10). Dordrecht: Springer.

Green Logistics

► Sustainable Logistics

Green Marketing

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Synonyms

[Environmental marketing](#); [Ecological marketing](#);
[Enviropreneurial marketing](#)

Definition

Green Marketing is a set of marketing strategies and activities defined and created to facilitate transactions of goods and/or services with the goal of satisfying the needs and desires of environmentally sustainable consumer concerns. Consequently, the way products and/or services are produced, commercialized, distributed, and detached must respect the environmental and sustainability concerns of the consumers and must be clearly and reliably stated and demonstrated.

Introduction

Due to a growing group of consumers that are more and more concerned with the environmental preservation and protection, facing this new environmental paradigm, companies have reorganized themselves and defined new strategies to ease new positions on markets, with marketing being given great responsibility in their design and implementation and, therefore, positioning themselves as more socially responsible in terms of products, operations, and performance.

The purpose of marketing, in the context of the demand for sustainability, is to achieve optimal satisfaction of consumer desires, allowing the use of environmental functions in the form of products or services, without exceeding the external limits determined in the search for this sustainability (Van Dam and Apeldoorn 1996). Sustainable marketing should help to find defensible exchanges between business and environmental concerns. It takes on, among other things, an attraction for increasing business horizons and continuing value on profit. Through proactive marketing, which measures consumers' needs and expectations and offers the market the appropriate choices to meet their needs, it is possible to achieve sustainability (Sheth and Parvatiyar 1997). The allegation that marketing serves social needs by informing consumers of the availability of goods and services in order to improve their quality of life can only be supported if the perspective of communication and its techniques are informative. This implies that marketing has an educational function, channeling the needs of current and potential consumers to products, services, or ecological activities (Sheth and Parvatiyar 1997). Implicit to this statement is the assumption that marketing efforts are also aimed at reforming inefficient and environmentally friendly consumption habits: "Changing consumption patterns can involve positive incentives, new products and development of processes and prices against certain consumer practices" (Sheth and Parvatiyar 1997: 7).

The ability of marketing to identify and develop consumer choices for society and meet your current needs without harming the ability to meet your

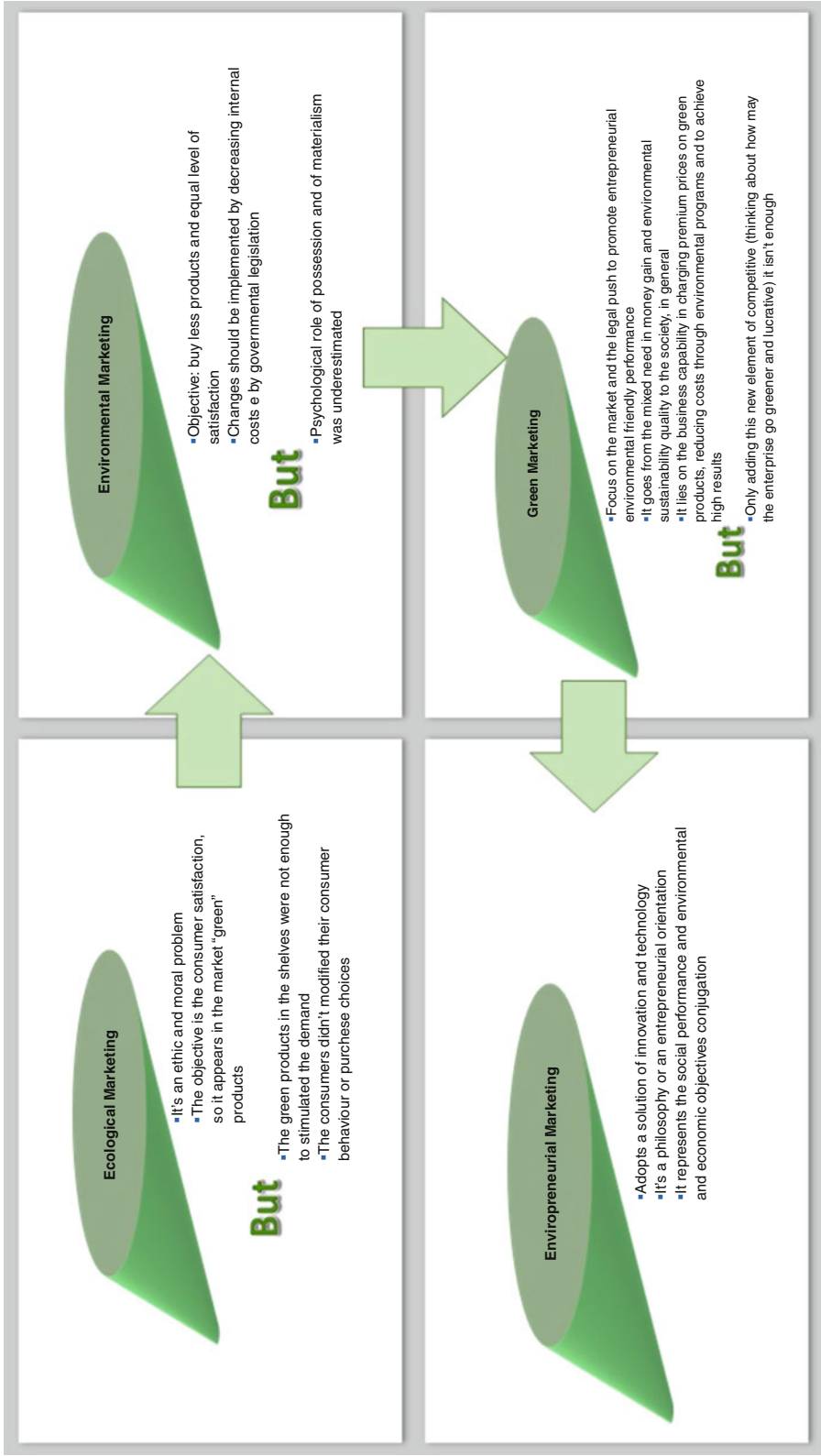
future needs allows you to develop "green" products in a way that improve poor environmental conditions. As such, the concept of "green" product assumes that environmental consequences are the most important determinants of its acceptability rather than the satisfaction of the company or the profit of the company. The truly "green" product is the one that becomes the consumer's first choice as long as it meets the individual's consumer needs alongside their needs of a healthy and sustainable physical environment (Sheth and Parvatiyar 1997). These two types of needs are not conflicted; both occur simultaneously.

Bearing in mind the concept of "green" product, marketing managers found that environmental themes usually provide a source of competitive advantage (Schultz II and Holbrook 1999). Therefore, companies focus on the problem of sustained growth or development (Elkington 1994; Hart 1997; Ruckelshaus 1989) while managers aspire to the Ecological (Fisk 1974), Environmental (Polonsky and Mintu-Wimsatt 1995), Green (Ottman 1997; Wasik 1996), and more recently to Enviropreneurial (Kilbourne 1995; Hartman and Stafford 1998; Menon and Menon 1997; Kangun et al. 1991) products.

From Ecological to Enviropreneurial Marketing

The marketing process of incorporating the environmental concern into its concept, strategies, and operations suffered a transformation during several years, focusing on different perspectives, as shown in Fig. 1, before green marketing gaining common usage, as it is used today, namely ecological; environmental; green; and enviropreneurial.

The first framework developed to integrate environmental concerns into marketing, the Ecological Marketing concept as Kotler's (1986) called it, has a social marketing base that states that the main goal of business is to identify market needs, desires, and interests and develop products targeted to satisfy the consumers in a more effective and efficient way than its competitors, preserving at the same time the consumer's and society well-being



Green Marketing, Fig. 1 – Incorporation of the environmental concerns within the marketing concept (Adapted from Paiva and Proença 2011).

(Wasik 1996). This social marketing concept has the main idea underlined that marketing is part of a holistic management perspective (Xue et al. 2018). The products are evaluated on how they are produced, packaged, transported, consumed, and dispensed (Wasik 1996).

The Ecological Marketing concept (Henion and Kinnear 1976; Fisk 1974) emphasize business managers recognition of the ecological crisis, which leads to business taking responsibility and alter their management practices and work to avoid this crisis (Gordon et al. 2011; Hunt 2011; Van Dam and Apeldoorn 1996). However, having environmentally friendly products was not sufficient to have market success since the consumers and supporters of environmental protection and preservation weren't enough to stimulate properly the demand and therefore have a business that is rather valuable (Van Dam and Apeldoorn 1996). At this time, most of the consumers weren't predisposed to change their behavior and adopted collectively more environmental preservation and protection actions.

The Environmental Marketing viewpoint arouse into the market by trying to influence consumers that they could achieve higher levels of satisfaction by buying fewer products. In doing so, it was not expected to just recognize environmental problems to make behavioral changes but also to change the social paradigm, leading to buying less. This perspective translated the social need of production with less waste and lower consumption into market-oriented management (Gordon et al. 2011; Hunt 2011; Van Dam and Apeldoorn 1996) supported by business costs reductions and governmental legislation. Yet, changing social paradigms is not easy task and takes time; the consumption in large quantities and/or variety, i.e., the hyper consumption of modern Western society has proven to be a strong opposition to this perspective. The psychological role of possession and materialistic consumption was taken too lightly by both Ecological and Environmental marketing (Van Dam and Apeldoorn 1996).

The process of integration for the environmental concerns into the marketing concept evolved and the Green Marketing perspective arouse as a

result of the business need to answer to the growing market demand of "environmentally friendly" products. Therefore, the moral and social motives underlined in the previous perspectives were replaced by market pressures and competitive needs (Van Dam and Apeldoorn 1996). These three perspectives are the combination between the need to reach profit and the sustainability of the environment quality (Gordon et al. 2011; Hunt 2011; Van Dam and Apeldoorn 1996).

The Green Marketing focuses on the market and the legislative push to promote a "friendly" business performance of the environment and is seen as an interaction process between the consumers' sensitivity to the environment, the competitive intensity and the legislative intensity (external political and economic strengths), and the environmental awareness of managers, i.e., the increased sensitivity of entrepreneurs to the environment within the business (Langerak et al. 1998). The success of green marketing is reflected in the responses of consumers and the financial performance of the business. The implications of the performance of green marketing are fundamentally based on the ability of the business to collect premium prices on green products, reduce costs through environmental programs, and perform to produce high results (Ottman 1997; Wasik 1996). The business appealing for environmental issues grew but the macroaspect of the subjects was ignored since the concept of sustainability in the marketing framework does not only imply adding a new element of competitiveness, it is also not enough to analyze the extent to which the "green" companies can be profitable and act accordingly (Gordon et al. 2011; Hunt 2011; Van Dam and Apeldoorn 1996).

However with the success of Green Marketing point of view and the growing number of products and services introduced into the market, some problems were identified (Menon and Menon 1997) that could only be solved if the integration of the environmental concerns were translated into the a single Enviropreneurial Marketing strategy.

The Enviropreneurial Marketing perspective is the result of the definition and implementation process of marketing activities beneficial to the

business and to the environment since the main goal is to create returns through the exchanges that will satisfy the business aims in economic and social terms (Menon and Menon 1997). This perspective considers that environmental degradation is the result of the interaction of human experience, technological growth, and economic development. Thus, these same forces must be at the root of the solution for environmental problems and not the legal pressure, the laws of command and control, and the increased regulation of activities; so, ecological and innovation technologies are proposed as strategic options to develop competitive advantages and solve environmental problems (Wong et al. 2015; Shrivastava 1995). Enviropreneurial Marketing is therefore different from the previous as it adopts a solution of innovation and technology (new forms of production, packaging, and distribution and new forms of destruction or recycling of waste in the production or consumption) rather than a public and legal pressure solution and it represents the confluence of social performance and environmental and economic goals (Menon and Menon 1997). As some authors stated (e.g., Stopford and Baden-Fuller 1994; Coddington 1993; Hunt and Auster 1990, referred to by Menon and Menon 1997), this point of view is a business philosophy as one of the core values that guide this strategic marketing perspective is the view that the imperatives of the environment can be market opportunities rather than business constraints. So, this perspective has a social marketing performance, intrinsic to its nature and objectives of the strategies and tactics (Menon and Menon 1997).

In many business cases this last perspective offers an accomplishment of social responsibility concern. So, to them, now, when put to practice their environmental concerns already underpin an environmental philosophy (Paiva and Proença 2011). This transpires not only a climate of credibility, but also allows business to focus on strategic and operational actions that are market oriented, from an essentially green point of view. For this reason, it is allowed to call Green Marketing to the integration, in marketing, of the environmental sustainability of business companies.

Green Marketing

The Green Marketing concept, as discussed before, express the demand of environmental sustainability in business and it is transferred into business, within its business strategy, in a holistic perspective (throughout its goal definition until the more operational details to be implemented). Nowadays, not only society has changed into a more sustainable paradigm but also business are addressing the market in a new perspective since consumers are seen as human beings looking to have a full and healthy lives, where their values and sensitiveness are projected in the materials goods they acquire and the lifestyle they live (Ottman 2017). An ecologically and socially responsible business associates environmental stakeholders in cooperative alliances and works with suppliers, retailers, and local governments (Yu et al. 2017; Wong et al. 2015) to manage environmental and social issues throughout their products value chain to seek profit and business contribution for society and the planet, as shown in Table 1.

Green Marketing, Table 1 – The new green marketing paradigm

	Conventional marketing	Green marketing
Consumers	Consumers with lifestyles	People with lives
Products	“Cradle to grave” Globally sourced One size fits all	“Cradle to cradle” Locally sourced Regionally tailored
Marketing	Products–end benefits Selling One-way communication Paid advertising	Values Educating and empowering Creating community Word of mouth
Corporate	Secretive Reactive Independent and autonomous Competitive Departmentalized Short-term oriented/profit maximizing	Transparent Proactive Interdependent/ allied with stakeholders Cooperative Holistic Long-term oriented/triple goals (profit, environment, and social contribution)

Source: Adapted from Ottman 2017

The new paradigm of the green marketing concept, as observed in Table 1, implies a more transparent and proactive and cooperative firm that answers to the consumers' needs in a more holistic approach in which the business companies have different strategies to response to the market challenges.

Summary

The environmental and sustainable consumers concern in integration into business management, in its constant seek of needs and human concerns and overall society adaptation, had different perspectives over time. Consequently, marketing was named in different ways until the denomination of "Green Marketing" became more widely used due to its simplicity in aggregating several sustainable environmental questions and concerns, in the consumers' and business perspective. Today, the Green Marketing concept integrates a holistic perspective, questioning the different entrepreneurial activities in an environmental and sustainable context. This concept is based on the ecological marketing moral and ethical vision, in a market perspective, using marketing tools, legislation, and social pressures of various stakeholders to promote an entrepreneurial and environmental performance seeking the balance between consumer's sensitivity to the environment, competitive and legal intensity, and the conscious and environmental sensitivity of the managers and entrepreneurs.

There are different strategic options, and operational guidelines, to define a Green Marketing route in this meeting of social performance and environmental and economic goals.

This becomes more urgent since the consequences of environmental destruction are already being felt. It is critical to promote this marketing perspective and help business to offer a sustainable answer to society's needs, becoming agents of positive social and environmental "zero" impact.

Cross-References

- Sustainable Marketing
- Sustainable Marketing II

References

- Coddington, W. (1993). *Environmental marketing: Positive strategies for reaching the green consumer*. New York, USA: McGraw-Hill Companies.
- Elkington, J. (1994). Toward the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Fisk, G. (1974). *Marketing and the ecological crisis*. Nova Iorque: Harper and Rowe Publishers.
- Gordon, R., Carrigan, M., & Hastings, G. (2011). A framework for sustainable marketing. *Marketing Theory*, 11(2), 143–163.
- Hart, S. L. (1997). Beyond greening: Strategies for a sustainable world. *Harvard Business Review*, 67–76.
- Henion, K. E., & Kinneer, T. C. (1976). *A guide to ecological marketing. Ecological marketing*. Columbus: American Marketing Association.
- Hunt, S. D. (2011). Sustainable marketing, equity, and economic growth: A resource-advantage, economic freedom approach. *Journal of the Academy of Marketing Science*, 39(1), 7–20.
- Hunt, C. B., & Auster, E. R. (1990). Proactive environmental management: Avoiding the toxic trap. *MIT Sloan Management Review*, 31(2), 7.
- Kangun, N., Carlson, L., & Grove, S. J. (1991). Environmental advertising claims: A preliminary investigation. *Journal of public policy & marketing*, 10(2), 47–58.
- Kilbourne, W. E. (1995). Green advertising: Salvation or oxymoron? *Journal of Advertising*, 24(8), 7–24.
- Kotler, P., Stelman, M., Nogueira, D. A., & Simões, R. (1986). *Administração de marketing: análise, planejamento e controle*.
- Langerak, F., Peelen, E., & van der Veen, M. (1998). Exploratory results on the antecedents and consequences of green marketing. *Journal of the Market Research Society*, 40(4), 323–335.
- Menon, A., & Menon, A. (1997). Enviropreneurial marketing strategy: The emergence of corporate environmentalism as market strategy. *Journal of Marketing*, 61, 51–67.
- Ottman, J. A. (1997). *Green marketing: Opportunity for innovation*. USA: NTC Business Books.
- Ottman, J. (2017). *The new rules of green marketing: Strategies, tools, and inspiration for sustainable branding*. UK: Greenleaf Publishing.
- Paiva, T., & Proença, R. (2011). *Marketing Verde*. Lisbon, Portugal: Actual Editora.
- Polonsky, M. J., & Mintu-Wimsatt, A. T. (1995). *Environmental marketing: Strategies, practice, theory and research*. New York: The Haworth Press.
- Schultz, C. J., II, & Holbrook, M. B. (1999). Marketing and the tragedy of the commons: A synthesis, commentary, and analysis for action. *Journal of Public Policy & Marketing*, 18(2), 218–229.
- Sheth, J. N., & Parvatiyar, A. (1997). Ecological imperatives and the role of marketing. In M. J. Polonsky & A. Mintu-Wimsatt (Eds.), *Environmental marketing – Strategies,*

practice, theory and research. New York, USA: Haworth Press.

- Shrivastava, P. (1995). Ecocentric management for a risk society. *Academic Management Review*, 20(1), 118–138.
- Stopford, J. M., & Baden-Fuller, C. W. (1994). Creating corporate entrepreneurship. *Strategic Management Journal*, 15(7), 521–536.
- Van Dam, Y. K., & Apeldoorn, P. A. (1996). Sustainable marketing. *Journal of Macromarketing*, 16(2), 45–56.
- Wasik, J. F. (1996). *Green marketing and management: A global perspective*. Oxford, UK: Wiley.
- Wong, C. Y., Wong, C. W., & Boon-Itt, S. (2015). Integrating environmental management into supply chains: a systematic literature review and theoretical framework. *International Journal of Physical Distribution and Logistics Management*, 45(1/2), 43–68.
- Xue, W., Marks, A. D., Hine, D. W., Phillips, W. J., & Zhao, S. (2018). The new ecological paradigm and responses to climate change in China. *Journal of Risk Research*, 21(3), 323–339.
- Yu, W., Ramanathan, R., & Nath, P. (2017). Environmental pressures and performance: An analysis of the roles of environmental innovation strategy and marketing capability. *Technological Forecasting and Social Change*, 117, 160–169.

Green Pay

► Green Rewards

Green Real Estate Development

► Sustainability and Sustainable Development in Real Estate Industry

Green Rewards

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Synonyms

Green compensation; Green pay; Pro-ecological rewards

Definition

Green rewards systems are rewards policies, programs, procedures, and tools designed to preserve and protect the environment through increasing pro-ecological employee awareness, attitudes, and behaviors. As one of the CSR rules is “do no harm,” green rewards programs are primarily aimed at reducing the negative environmental impact (footprint) of the organization and its employees (Beck-Krala and Klimkiewicz 2018). These programs are designed to create and strengthen attitudes and behaviors that support pro-ecological activities.

Introduction

Rapid environmental changes and catastrophes caused by irresponsible and devastating human activities have drawn our attention to the need to preserve the natural environment. It is obvious that only an integrated effort and comprehensive action taken on all three levels: individual, organizational, and societal can bring about the desired results. Increased awareness of the necessity for such action by many employers has resulted in the implementation of many programs and initiatives which constitute new approaches in management. These have been labeled *green management*, *pro-ecological management*, or *environmental management* (Ahmad 2015). This comprehensive approach toward green management focuses on increasing awareness and promoting desirable behaviors (see Jackson et al. 2011) of the organization’s most important stakeholders (employees, managers, clients, etc.). Most actions, however, are directed toward internal stakeholders – employees. In fact, both the literature and practice have shown an increase in organizational sustainable development activities through the introduction of appropriate practices and tools in human resources management (HRM) (Renwick et al. 2012). This approach is called Green Human Resources Management (GHRM) (Jabbour 2011; Renwick et al. 2012). GHRM practices include recruitment and selection, training, performance management, rewards systems, and

involvement (Jackson et al. 2011; Renwick et al. 2012).

According to the Chartered Institute of Personnel and Development study (CIPD), HR professionals believe they should actively support the organization in pro-ecological activities (Renwick et al. 2012, p. 36). Rewards may play an important role in engaging employees in pro-ecological initiatives and promoting environmentally friendly employee attitudes and behaviors. Embedding green practices in HR, particularly in rewards, can reduce the company's environmental footprint and enhance the likelihood of a company's sustainability (Renwick et al. 2012; Yong et al. 2019). This new direction in green management – *green rewards* – is gaining more and more attention in practice, but few publications have explored this issue (Beck-Krala and Klimkiewicz 2018).

The Idea and Context of Green Rewards

Green rewards are a part of green HRM that is designed to build employee identification with the organization's environmental goals. Green rewards systems are rewards policies, programs, procedures, and tools that are aimed toward preserving and protecting the environment through increased pro-ecological employee awareness, attitudes, and behaviors. As one of the CSR rules is “do no harm,” green rewards programs are primarily aimed at reducing the negative impact (footprint) of the organization and its employees on the environment (Beck-Krala and Klimkiewicz 2018). Green pay and rewards systems consider financial and nonfinancial rewards for organizational members whose attitudes or behaviors are conducive to environmental management (Jabbour 2011). In fact, most companies that present a comprehensive approach toward green rewards integrate both financial and nonfinancial formal and informal rewards programs that are linked to green and responsible employee behaviors. A comprehensive, clear, and consistent green rewards approach integrates programs and procedures from the total rewards package. Examples include programs aimed at reducing pollution,

reducing water and energy consumption in the workplace, and volunteering programs that recognize pro-ecological initiatives directed toward protecting the local environment, such as cleaning the local forest or river or planting trees, where the best team or individual is recognized for these efforts but not necessarily compensated financially.

Green rewards are also closely connected with *green performance management* (GPM), another aspect of GHRM. Employers can appraise employee behaviors and the environmental results of these behaviors to assess their contribution to organizational pro-ecological goals. Employees may be evaluated on green criteria. Green performance is measured according to environmental measures and may also be a basis for accrued bonuses, rewards, or pay raise. Green performance indicators may be connected with environmental incidents, environmental responsibilities, reduction of carbon emissions, communication of environmental concerns, etc. Both green rewards and green performance are directed toward environmentally positive employee behaviors within the organizational context. Such programs may also influence employee behavior in their private lives. Another important *green* topic in the literature is called *green work-life balance* (Muster and Schrader 2011). Employees who fulfill their workplace responsibilities are also consumers in private life. This view considers employee behaviors and attitudes both at work and outside work. This balance means that organizations offer incentive programs that support pro-ecological behaviors at work as well as educating and increasing employee awareness so they can effectively reduce their negative environmental footprint.

Classification and Examples of Pro-environmental Employee Rewards Programs

Green human resources practices, such as green rewards, may strengthen the motivation and involvement of employees in shaping the green organizational culture and introducing environmental innovations or even reducing the negative

impact (e.g., controlling the indicators) on the environment. Depending on the organizational strategy and main goals, various programs are offered. These programs are also diversified, depending on the sector, industry, type of influence that the organization has on its environment, and the role of the employee within the organization (Klimkiewicz 2017). One classification that concerns the goals of green rewards programs was offered by Jackson et al. (2011), who identified:

- Incentive programs that reward the pro-ecological behavior of employees
- Incentive programs for eco-innovations
- Programs that educate and support pro-ecological activities in private life

Rewards play an integral role in initiating environmentally friendly activities involving employees as a part of green initiatives and also initiating changes and innovations in existing processes.

According to other *general classifications*, green rewards programs may be divided into financial, nonfinancial, individual and team-oriented, formal and informal, and addressed to managers and employees, as well as targeted at internal and external stakeholders (Beck-Krala and Klimkiewicz 2018).

Financial green rewards programs include increases, bonuses, and prizes dependent on the attainment of environmental criteria and objectives and reducing the organization's negative environmental impact. Such programs may be linked to the organization's strategic objectives or result directly from the organization's CSR strategy. These programs are usually targeted at employees and managers at all levels. A look at the popularity of green financial rewards programs reveals an increase in linking managerial compensation with pro-environmental goals – up from 15% in 2012 to 24% in 2014 (McCullough 2014).

Nonfinancial green rewards programs have a tremendous potential for motivating employees (Renwick et al. 2012). Due to the range of the impact of these programs and the various groups

of stakeholders they address, they can also be divided into those targeted toward internal stakeholders (supporting ecological actions on the job and in the workplace) and those motivating employees to take action for external stakeholders (supporting ecological actions outside the workplace). Within the organization, most financial programs link bonuses or increases to the realization of ecological goals closely connected with organizational activity, for example, reducing the amount of resources used for production or work. Most nonfinancial programs, on the other hand, are directed outside the organization, as they can realize, for example, important purposes for the local community. Giving employees the opportunity to realize pro-ecological projects during work time can be viewed as financing the work-time pool dedicated for this purpose (Renwick et al. 2012). Employees have the opportunity to realize their own ecological ideas and develop competence based on the organization's infrastructure. This benefit can be considered as part of a balanced incentive system (Jackson et al. 2011). Nonfinancial recognition programs reward employees for pro-ecological activities with material prizes, such as paid extra free time, public praise, certificates and trophies, or ceremonial galas and dinners (Table 1).

Some examples of various incentive programs aimed at increasing awareness of environmental protection and involving employees in pro-ecological activities include the following:

- Intel Corporation (IT), where each employee's compensation is linked to ecological criteria
- Alcoa (aluminum company), where employees earn a bonus based on green carbon reduction targets and improving safety at work (McCullough 2014)
- Chevron's energy group and GlaxoSmithKline (pharmaceutical company), where employee compensation is bound to reduced use of resources and reduced environmental impact, enabling financial savings, improved work processes, and reduced resource consumption (Brammer et al. 2015).
- Eco-innovation group programs at Xerox (Earth Awards)

Green Rewards, Table 1 Financial and nonfinancial green rewards programs

Green financial rewards (pay and incentives)
Pay increases dependent on achieved environmental goals
Individual and team incentives based on ecological criteria, such as ecology innovation programs, giving environmental benefits to employees, such as water and electricity use reduction programs in the workplace, greater use of recycling, and reuse of paper in the workplace
Individual and team financial bonuses for actions taken and achievements in the field of environmental protection
Financial awards for employee suggestions and solutions that significantly reduce the organization's negative impact on the environment (eco-innovations)
Incentive programs rewarding development of employee competencies in the field of environmental protection, e.g., knowledge of environmental legislation in the industry
Long-term incentives that link executive compensation with achievement of environmental goals
Green nonfinancial rewards
Additional benefits offered to employees in order to protect the environment, called green benefits, which can be related, for example, with transport (green travel)
Benefits that support socially responsible behavior and environmental attitudes not directly related to environmental protection
Nonfinancial employee recognition programs for environmental initiatives
Time frame for pro-environmental action/ecological projects. The paid-for-work time, when employees voluntarily engage in such activities is geared toward increasing employee motivation and engagement. Projects implemented in this way may be imposed by leaders or be employee initiatives.

Source: Based on Renwick et al. 2012; Beck-Krala and Klimkiewicz 2018

- Dow Chemical and ICI Americas, where employee green suggestions and exceptional achievements in this area result in incentive and bonus programs (Arulrajah et al. 2015).

Employers may also offer green travel which includes rewards aimed at reducing the carbon footprint and promoting a greater awareness of environmental protection for travel and employee transport. Green tax exemptions promote the use of transport that is less harmful to the environment – bicycles, electric scooters, and electric cars. Finally, green recognition includes nonfinancial rewards programs for employees, such as company-wide public recognition, paid vacations, or gift certificates. Nonfinancial rewards lead to pride and internal satisfaction and more effectively encourage eco-initiatives.

Benefits

Green rewards programs support the organization's strategic goals in this area and enable the branding of the employer as responsible, an important consideration for younger employees

when choosing a place to work. Thus, green rewards build the company's image and help to obtain financial benefits (Report: Business and Ecology, 2011). Studies have shown that the long-term performance of companies linked to financial rewards leads to a reduction in environmental pollution, giving a greater scope for prevention of pollution (Berrone and Gomez-Mejia 2009). Research also shows that green rewards improve employee relations and shape their attitudes and awareness of environmental protection. In turn, motivation and engagement are listed among the benefits of company green initiatives (Report: Business and Ecology, 2011), which show that changing attitudes of employees and increasing their involvement may be an unintended consequence of pro-environmental policies.

One of the greatest benefits of providing eco-friendly rewards programs is building employee engagement. Integration of the interests of many stakeholders is the basis for high employee engagement (Beer and Eisenstat 2009). The socially responsible employer's actions in the area of environmental protection support the sense of material safety of employees and safety

in the workplace (e.g., healthy working conditions, secure pay at a decent level). Studies conducted in Denmark show that incentive programs that combine employee participation and environmental advocacy within organizations are extremely effective. The introduction of financial bonuses has increased participation of employees in green initiatives when they were given the opportunity to perform such activities during their work time (Forman and Joergensen 2001).

Benefits obtained in the psychological dimension can also be significant. The literature points to promoting employee self-confidence and respect for diversity in the workplace and building a sense of belonging to a group where values are respected. As a consequence, the number of counterproductive employee behaviors is often diminished, as these are often a result of the lack of loyalty to the employer and co-workers. Environmental and local community action gives employees a sense of authenticity and sense of work (Bauman and Skitka 2012). In turn, CSR activities positively influencing the image of the employer also give a sense of pride to the employee for working for a socially responsible company.

Summary

The system of employee rewards is an important factor in Green Human Resources Management. Although the literature addressing this issue is rather scarce, it does contain some tips for shaping rewards programs that support responsible and environmentally friendly behavior. Green rewards systems are rewards policies, programs, procedures, and tools that are aimed toward preserving and protecting the environment through increasing pro-ecological employee awareness, attitudes, and behaviors. As one of the CSR rules is “do no harm,” green rewards programs are primarily aimed at reducing the negative impact (footprint) of the organization and its employees on the environment. A comprehensive, green rewards approach shows the consistent integration of many programs and procedures from the total rewards package and results from a clear,

sustainable CSR policy that does not just focus on one initiative. In practice, there are various types of green rewards programs.

It has been argued that employees may feel more motivated by nonfinancial rewards through green rewards, such as recognition and praise (Jabbour 2011; Jackson et al. 2011); however, the integration of both types of rewards seems to work the best.

Cross-References

- Corporate Sustainability Performance
- Employee Volunteer Programs
- Environmental Impact
- Work–Life Balance

References

- Ahmad, S. (2015). Green human resource management: Policies and practices. *Cogent Business & Management*, 2(1), 1030817. <https://doi.org/10.1080/23311975.2015.1030817>. 1–13.
- Arulrajah, A., Ophata, H. P., & Nawaratne, N. J. (2015). Green human resources management practices: A review. *Sri Lankan Journal of Human Resource Management*, 5(1), 1–16.
- Bauman, C. W., & Skitka, L. J. (2012). Corporate social responsibility as a source of employee satisfaction. *Research in Organizational Behavior*, 32, 63–86. <https://doi.org/10.1016/j.riob.2012.11.002>.
- Beck-Krala, E., & Klimkiewicz, K. (2018). Reward programs supporting environmental organizational policy. *Human Resources Management, Poland*, 6, 41–56.
- Beer, M., & Eisenstat M. (2009). High commitment, high performance: How to build a resilient organization for sustained advantage. San Francisco, CA: Jossey-Bass.
- Berrone, P., & Gomez-Mejia, L. R. (2009). The PROS and CONS of rewarding social responsibility at the top (PDF download available). *Human Resource Management*, 48(6), 959–971. <https://doi.org/10.1002/hrm.20324>.
- Brammer, S., Hoejmose, S., & Millington, A. (2015). *Managing sustainable global supply chains. Framework and best practices*. Canada: Network for Business Sustainability. nbs.net.
- Forman, M., & Joergensen, M. S. (2001). The social shaping of the participation of employees in environmental work within enterprises – experiences from a Danish context. *Technology Analysis & Strategic Management*, 13(1), 71–90. <https://doi.org/10.1080/09537320120040455>.

- Jabbour, C. (2011). How green are HRM practices, organizational culture, learning and teamwork? A Brazilian study. *Industrial and Commercial Training*, 43(2), 98–105.
- Jackson, S., Renwick, D., Jabbour, C., & Carmen, M. (2011). State-of-the-art and future directions for green human resources management: Introduction to the special issue. *German Journal of Research in Human Resources Management*, 25(2), 99–116.
- Klimkiewicz, K. (2017). The role of ESG-based compensation in sustaining the supply chain. *Journal of Reverse Logistics*, 1, 12–17.
- McCullough, D. G. (2014, June 26th). Putting your money where your mouth is: companies link green goals to pay. *The Guardian*.
- Moxey, P. (2016). *Incentivizing ethics. Managing incentives to encourage good and deter bad behavior*. Editors. <http://www.transparency.org.uk/publications/incentivising-ethics-managing-incentives-to-encourage-good-and-deter-bad-behaviour/>. Accessed 2 Feb 2017.
- Muster, V., & Schrader, U. (2011). Green work-life balance: A new perspective for green HRM. *German Journal of Research in Human Resource Management*, 25(2), 140–156.
- Renwick, D., Redman, T., & Maguire, S. (2012). Green human resource management : A review and research agenda. *International Journal of Management Reviews*, 15(1), 1–14.
- Sahakiantis, I., Festing, M., & Steger, T. (2015). Paying your employee right: Exploring the concept of socially responsible rewards. In *Uncertainty is a great opportunity. Presented at the EURAM 2015*. Warsaw: Kozminski Academy.
- Yong, J. Y., Yusliza, M. Y., & Fawehinmi, O. O. (2019). Green human resources management. A systematic literature review from 2007 to 2019, BJ. Available at: www.emeraldinsight.com/1463-57771.htm

Green Spin

- [Greenwashing](#)

Green Sustainable Technology

- [Phytoremediation](#)

Green Swan

- [OECD Principles of Corporate Governance](#)

Green Taxation

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Synonyms

[Eco taxes](#); [Environmental taxes](#); [Green taxes](#); [Pigouvian taxes](#)

Definition

Green Taxation, also known as Environmental Taxation, involves the use of taxation to promote more responsible environmentally taxpayers' behavior, through tax penalties, in order to punish the polluting behavior, or tax benefits to encourage good behaviors. Definitions of this concept can also be found outside the scientific context, for instance, according to the Carbon Brief Staff (2013) this concept "...is commonly used to refer to a package of government measures intended to encourage expansion of low-carbon power, subsidise home insulation and tackle fuel poverty." Additionally, the United Kingdom Government (2012) states that "Environmental taxes are defined as those which meet all of the following three principles: (i) the tax is explicitly linked to the government's environmental objectives; (ii) the primary objective of the tax is to encourage environmentally positive behaviour change; (iii) the tax is structured in relation to environmental objectives, for example: the more polluting the behaviour, the greater the tax levied."

Moreover, the concept of green taxation is inextricably linked with the concept of Green Tax Reform. This type of tax reform seeks to introduce environmental taxes, thereby replacing much of the traditional taxation on companies (income and capital), labor income, and contributions to social security systems, in order to reduce unemployment levels (Álvarez et al. 1998; Alves

and Palma 2004). Thus, the Green Tax Reforms presuppose the obtaining of a double gain, denominated by effect of the “double dividend”: the environmental gain and the reduction of unemployment, by tax relief on labor.

Introduction

The idea of taxing pollution is not new, its first reference is associated with the British economist Arthur Cecil Pigou, in 1920, that is why the green taxation is also known as Pigouvian Taxes (Sandmo 2003).

The “polluter-pays principle” is a generally accepted basic principle of environmental law, which was partly based on that old idea of taxing pollution. This principle has two different currents concerning to its application form: on the one hand, those who defend its direct application, in particular through greenhouse gas emission quotas; on the other hand, those who support the indirect payment, mainly through environmental taxes that penalize polluting behavior.

In this scope, since the 1990s, most studies on Green Taxation intend to ascertain the best way to apply the “polluter-pays principle”: the direct application or the use of Green Taxation. Thus, several authors developed studies, mainly based on mathematical models of general equilibrium, where they conclude that the application of Green Taxation results in better environmental results than the use of direct environmental tools, such as greenhouse gas emission quotas (Baranzini et al. 2000; Goulder et al. 1999; Hong 2015; Sandmo 2003).

The importance of taxation as an environmental “tool” was recognized in the academic context but also by several organizations with key roles in the international environmental context, such as the EU (European Union) and the OECD (Organization for Economic Cooperation and Development), in consequence, it has been extended to a great number of countries.

Despite the widespread use of Green Taxation by countries not belonging to the European Community, in fact it is based on a reform advocated in the European Union in 1993. Thus, the European

Union’s “White Paper on growth, competitiveness and employment,” known, as already referred to, as Green Tax Reform, relies on the following assumptions: (i) introduction of green taxes that substitute the traditional forms of taxation; (ii) integrated economic and environmental objectives; (iii) use of taxation as an environmental “tool”; (iv) obtaining of a double positive effect, referred to in the literature as the “double dividend,” that is, to obtain, also, economic gains, for instance, by reducing unemployment, through social security contributions reduction (Álvarez et al. 1998; Borrego 2016; Bovenberg and Mooij 1995).

In relation to the “double dividend” effect: the “first dividend,” that is, the environmental gain, is consensual in the previous literature; however, the “second dividend” is a controversial issue in academia.

In relation to the authors who defend the existence of a second positive gain, there are two lines of research around the type of gain, with, on one hand, the European authors defending that the second dividend is the decrease in the levels of unemployment and, on the other hand, the North American authors defending that the second dividend are the gains of efficiency and competitiveness of the economy (Bovenberg and Mooij 1995; Lee and Misiolek 1986; Terkla 1984).

There are also some authors who question the existence of a positive impact on employment, or on the economy, provoked by the introduction of green taxation: some of them conclude that this “second dividend” does not exist, others verify that the second impact exists, however, it is negative, that is, the Green Taxation has a negative impact on employment or on economy, mainly because that type of taxation affects the consumption.

Despite this controversy over the “second dividend,” some studies have gone further and point to the existence, in some countries, of a “third dividend”. Thus, in recent years, in studies on developing countries, as well as in some countries with major problems of budgetary stability, has been identified another gain: “the reduction of poverty” or “the budgetary balance” (Heerden et al. 2006; Pereira and Pereira 2014).

The analysis, classification, and evolution of green taxation have also been the subject of studies in some countries (Álvarez et al. 1998; Barde and Owens 1996; Borrego 2016; Carreira et al. 2007). For instance, Barde and Owens (1996, 11) conducted a study on the application of eco-taxes in OECD countries and found that in those countries “The ‘greening’ of taxes can be done in two complementary ways. One involves the restructuring of existing taxes by raising the relative prices of products (...) that generate more pollution (...). A second approach is to introduce new ‘eco-taxes’ specifically aimed at raising the prices of products which create pollution. . .” and Álvarez et al. (1998) evaluated the type of Green Tax Reform in some pioneer countries in its implementation and proceeded to its classification. According to these authors the Green Tax Reforms can assume two different types, depending on the extent of the reforms implemented: **Partial Reforms** (adaptation of the existing tax system to give it an environmental concern) or **Integrated Reforms** (giving rise to an innovative tax system, where environmental taxation plays a major and preponderant role). Some Nordic countries as the Netherlands, Denmark, and Sweden have been pioneers in the implementation of integrated Green Tax Reforms. Borrego (2016) replicated the study of Álvarez et al. (1998) in Portugal and classified Portuguese green tax reform as a partial one. Carreira et al. (2007) analyzed the Portuguese tax legislation and found that the tax system was beginning to show signs of environmental concerns.

There are also studies that refer to the resistance of organized industrial lobbies against the application of Green Taxation. In this context, Daugbjerg and Svendsen (2001) and Svendsen et al. (2001) argue that Green taxation is against the interests of the polluters and some of them can easily mobilize resources to move political influences, in order to put barriers to such type of taxation.

In addition, in the last years, a few studies, that aim to quantify the impact of Green Taxation on the environment, have also emerged (Alberini and Bareit 2017; Ciccone 2014; d’Haultfoeuille et al. 2014). For instance d’Haultfoeuille et al. (2014)

analyzed the effect of the introduction in France, in 2008, of a bonus/malus system (tax benefits or penalties) on car purchasing: for the least polluting, it was conceded a benefit and for the most polluting it was applied a penalty. The authors found that this environmental tax measure had a negative effect on the environment, as the measure was poorly designed and still applied benefits to the purchase of vehicles that had a considerably high level of pollution. Alberini and Bareit (2017) replicated an identical study in Switzerland and obtained similar conclusions. Ciccone (2014) sought to assess the impact of the tax penalty on the purchase of polluting vehicles introduced, in Norway, in 2007, to the purchase of new, less-polluting vehicles, and found that the impact had been positive on the increase in the purchase of less polluting vehicles.

Lastly, it is relevant to understand this topic from a previous literature perspective, but also to understand its potential for future research. In the context of Green Taxation, there are several future research lines that can be explored, from which the following should be highlighted.

Based on the concern for the planet’s sustainability and the relation between green taxation and the circular economy, it is necessary to identify the green tax reforms performed by the different countries or regions, in order to assess how they actually contribute to the environmental preservation.

At the same time, in a close relationship between green taxation and Circular Economy, it is important to analyze how green taxes contributed to effective changes in economic agents and consumers’ behavior, by influencing their investment decisions, manufacturing and exploration methods, consumer habits, among other attitudes/decisions with environmental impact.

It is not, therefore, enough the creation of green tax measures; it is necessary to monitor their impact in the environmental context, seeking to understand the determinants of their success or failure, contextualized in the cultural, environmental, and even historical specificities of the countries. Thus seeking to contribute to the creation of innovative environmental tax policies, but also assertive in the objectives that they intend to achieve.

It is also important to bear in mind that, in relation to environmental tax measures aimed at promoting more environmentally responsible citizens and companies' behavior, the greater the environmental success of the measure, the bigger is its tax "cost," so it is important to quantify the amount of uncollected tax or of the tax benefit granted to understand its impact on tax revenue.

It is important to highlight that a new methodological approach is desirable, leading to the construction of an index of green taxes, which aims to measure the contribution of a tax system (or specific tax) to the preservation of the environment, which will allow the analysis of the evolution, both in relation to the same country and between countries.

Key Issues

The Green Taxation, in the law context, is classified, as referred to by Nabais (2005), as a form of State intervention in favor of the fight for environmental protection and it falls within the sphere of extra-taxation, that is "a set of rules which only formally form part of the tax law, because their main or dominant purpose is the attainment of certain economic or social results and not the obtaining of revenues to cover public expenditure" (Translated from Nabais 2005, 336).

In the tax systems context, Green Taxation may be the result of an integrated tax reform, that is, by substituting the traditional taxation, or alternatively, it may appear as additional rules to traditional taxes without replacing them. In addition, green taxation can take the form of taxation on consumption, corporate, and individual taxation, among other forms.

Summary

Green taxation is the use of taxation to encourage taxpayers' good behavior in the environmental context. Green taxation is thus a powerful tool for the environment. Taxpayers, in order to obtain tax benefits or to avoid paying higher taxes or fees, adopt more environmentally responsible behavior.

Cross-References

- Circular Economy
- Environmental Management
- Environmental Sustainability

References

- Alberini, A., & Bareit, M. (2017). The effect of registration taxes on new car sales and emissions: Evidence from Switzerland. *Resource and Energy Economics*, 56, 96–112. <https://doi.org/10.1016/j.reseneeco.2017.03.005>.
- Álvarez, X. C., Gago, A., & Labandeira, X. (1998). Green tax reform: Facts and experiences. *Australian Tax Forum*, 14(3), 361–379.
- Alves, M. R., & Palma, C. (2004). Impostos ambientais e o duplo dividendo: Experiências europeias. [Working Papers de Economia N° 14]. Universidade de Aveiro, Aveiro. <http://econpapers.repec.org/RePEc:ave:wpaper:142004>. Accessed 4 January 2018.
- Baranzini, A., Goldenberg, J., & Speck, S. (2000). A future for carbon taxes. *Ecological Economics*, 32(3), 395–412. [https://doi.org/10.1016/S0921-8009\(99\)00122-6](https://doi.org/10.1016/S0921-8009(99)00122-6).
- Barde, J. P., & Owens, J. (1996). The evolution of eco-taxes. *The OECD Observer*, (198), 11. Organisation for Economic Cooperation and Development.
- Borrego, A. C. (2016). Diploma da Fiscalidade Verde – Finalmente uma fiscalidade ambiental integrada em Portugal? *Revista de Gestão Social e Ambiental*, 10(3), 51–68. <https://doi.org/10.24857/rgsa.v10i3.1163>.
- Bovenberg, A. L., & Mooij, R. A. (1995). Environmental taxes, international capital mobility, and inefficient tax systems: Tax burden vs tax shifting. *International Tax and Public Finance*, 5, 7–39.
- Carbon Brief Staff. (2013). Analysis: What are green taxes, could they be scrapped, and what would the effect be. Carbon Brief, Clear on Climate. <https://www.carbonbrief.org/analysis-what-are-green-taxes-could-they-be-scrapped-and-what-would-the-effect-be>. Accessed 5 September 2017.
- Carreira, F. A., Peixe, F., & Lima, R. (2007). A Fiscalidade e o Ambiente: O Caso Português. *Ciência e Técnica Fiscal*, 420, 301–342.
- Ciccone, A. (2014). Is it all about CO2 emissions? The environmental effects of a tax reform for new vehicles in Norway (No. 19/2014). Memorandum, Department of Economics, University of Oslo. <https://www.econstor.eu/handle/10419/119548>. Accessed 6 September 2017.
- d'Haultfoeuille, X., Givord, P., & Boutin, X. (2014). The environmental effect of green taxation: The case of the french bonus/malus. *The Economic Journal*, 124(578). <https://doi.org/10.1111/eoj.12089>.
- Goulder, L. H., Parry, I., Williams, R. C., III, & Burtaw, D. (1999). The cost – Effectiveness of alternative instruments for environmental protection in a second-best

- setting. *Journal of Public Economics*, 72(3), 329–360. [https://doi.org/10.1016/S0047-2727\(98\)00109-1](https://doi.org/10.1016/S0047-2727(98)00109-1).
- Heerden, J. V., Gerlagh, R., Blignaut, J., Horridge, M., Hess, S., Mabugu, R., & Mabugu, M. (2006). Searching for triple dividends in South Africa: Fighting CO₂ pollution and poverty while promoting growth. *The Energy Journal*, 27(2), 113–141.
- Lee, D. R., & Misiulek, W. S. (1986). Substituting pollution taxation for general taxation: Some implications for efficiency in pollution taxation. *Journal of Environmental Economics and Management*, 13, 338–347. [https://doi.org/10.1016/0095-0696\(86\)90004-5](https://doi.org/10.1016/0095-0696(86)90004-5).
- Nabais, J. C. (2005). *Por um Estado Fiscal Suportável. Estudos de Direito Fiscal*. Coimbra: Almedina.
- Pereira, A. M., & Pereira, R. M. (2014). Environmental fiscal reform and fiscal consolidation: The quest for the third dividend in Portugal. *Public Finance Review*, 42(2), 222–253. <https://doi.org/10.1177/1091142113485803>.
- Terkla, D. (1984). The efficiency value of effluent tax revenues. *Journal of Environmental Economics Management*, 11, 107–123. [https://doi.org/10.1016/0095-0696\(84\)90010-X](https://doi.org/10.1016/0095-0696(84)90010-X).
- United Kingdom Government. (2012). Definition of environmental tax published. <https://www.gov.uk/government/news/definition-of-environmental-tax-published>. Accessed 5 September 2017.

Readings

- Daughbjerg, C., & Svendsen, G. (2001). Designing green taxes in a political context: From optimal to feasible environmental regulation. 5th Nordic environmental research conference: The Ecological Modernisation Society. www.hha.dk/nat/WPER/01-17_gts.pdf. Accessed 28 April 2018.
- Hong, L. C. (2015). Investigation into what the Malaysian Public wants from environmental protection tax laws in Malaysia. In International conference on accounting studies, Johor. https://www.researchgate.net/publication/281628882_INVESTIGATION_INTO_WHAT_THE_MALAYSIAN_PUBLIC_WANTS_FROM_ENVIRONMENT_PROTECTION_TAX_LAWS_IN_MALAYSIA. Accessed 28 September 2017.
- Sandmo, A. (2003). Environmental taxation and revenue for development. [Discussion paper: World Institute for Development Economics Research, 2003/86,1–27]. <http://www.wider.unu.edu/stc/repec/pdfs/rp2003/dp2003-86.pdf>. Accessed 2 July 2015.
- Svendsen, G. T., Daughbjerg, C., Hjøllund, L., & Pedersen, A. B. (2001). Consumers, industrialists and the political economy of green taxation: CO₂ taxation in OECD. *Energy Policy*, 29(6), 489–497. [https://doi.org/10.1016/S0301-4215\(00\)00145-2](https://doi.org/10.1016/S0301-4215(00)00145-2).

Green Taxes

► Green Taxation

Green Technology

► Bioremediation

Green Technology for Food Sustainability

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Synonyms

Clean technology for food sustainability; Eco-technologies for sustainable food sustainability; Environmentally friendly technologies for food sustainability

Definition

Green technology is increasingly being applied in different areas of the food sector (Zaffar 2018). The most important reason for this is the increase in awareness and sensitivity concerning environmental protection in food production and consumption (Shafiei and Hooman 2017). For example, stricter regulations about the chemicals used in food production and the problems that arise from waste processing have prompted manufacturers to find new, alternative methods which cause less damage to the environment. In this context, green technology in the food industry plays a major role in food sustainability. These technologies and techniques include, among other things, wastewater treatment, solid waste treatment, reducing the environmental footprint, climatic intelligent food production, and green extraction (Kesavan and Swaminathan 2018). Using these and similar sustainable food production techniques has now become a necessity in the production process. This is because the levels of production obtained as a result of these techniques is either very difficult or impossible to achieve

with more traditional techniques, while at the same time ensuring sustainability and complying with relevant regulations and public expectations. Therefore, these applications have both technical and economic potential (Tambovceva and Tereshina 2018).

Introduction

Food plays a vital role in human life. Food production systems have therefore predominantly evolved in local systems and then been transformed into more complex global networks of production, consumption, and trade. In this way, the global food system incorporates many national, regional, and local food systems. These systems interact with people's lives, industry, and nature. Therefore, it is also linked to population. The world's population is expected to be 8 billion in 2030, which means that an increase of 50% in food supplies is forecast for that year (Akinwale et al. 2011). Accordingly, as the world population increases, the consumption of resources will increase. In this case, there will be reflections to the industry. Increasing demand for food as a result of world population growth necessitates changes in food production and consumption because there are at least 1.3 billion people whose lives depend on food and agriculture-based livelihoods (Fanzo 2018). However, the food and drink industry consumes 5.3% of global industrial energy, and the European food and drink industry accounts for 1.8% of Europe's total water use. Therefore, for the future of the world, resources need to be managed efficiently and strategies developed for sustainable food production. Therefore, the idea of "sustainable development" or "sustainability" has become increasingly prominent across the globe, and applied and discussed at international, national, regional, and communal level including food (Bibri et al. 2020). All resources involved in food production need to be used as efficiently as possible. More innovative approaches will improve the sustainability of food production. This can be by adapting to modern production technologies, such as Industry 4.0 principles.

Progress in food production also affects developments in other areas, such as environmental protection, the circular economy, biodiversity, and importantly, the development of green technology.

Green technology is the use of science and technology facilities to produce environmentally friendly products (Guillard et al. 2018). The term is also used for the use of clean technologies to produce goods (De Melo et al. 2014). As an example, green technology is a concept that is intertwined with many areas of food production, from farm to fork (Zaffar 2018). It can be used in place of many expensive and environmentally unfriendly technologies. Processes using green technology bring sustainable production in many areas. Besides environmental practices, the processes in which sustainable production principles are applied also support political and social sustainability, because economic, environmental, and social dimensions are among the basic elements of sustainable development (Klarin 2018).

The sustainability flow facilitated by green technology is nature-friendly. While meeting the needs of people, it tries to do it with the least waste and in the most economical way (Kristinsson and Jörundsdóttir 2019). From this point of view, it is appropriate to consider the concept of sustainability, which comes with the use of green technology, on the basis of social, economic, and environmental factors. In summary, the current chapter includes information on the applicability of green technology and sustainability, the sectors that it addresses, and the advantages of sustainable food production.

Green Technology

Green technology is a very comprehensive term that blends economic and environmentally friendly technologies in daily life. One of its most powerful characteristics is that it protects natural resources. For example, with the use of green technology, it is possible to reduce the use of fossil fuels, because the fossil fuels such as oil and coal are some of significant factors in global warming. When they are burned, they produce

pollutants. The pollutants decrease oxygen level, increase carbon dioxide level, and are contributors to acid rain, causing global warming (Oleksy 2018). Another example of green technology is the use of technology to generate energy from the sun. The use of photovoltaic panels producing electricity from the sun on roads and pavements is one of the uses in this scope (Xiang et al. 2018). In the food industry, green technology is used in alternative energy use for food dehydration applications, creating a green supply chain, eco-label applications, and using bioplastics as packaging (Clark et al. 2016). Hence, the scope of green technology is very wide (De Melo et al. 2014). It is sometimes difficult to subcategorize its activities. But it can be clearly stated that the green technology is accumulation of activities that protect balance in nature. In other words, it is a unity of technological tools that can be used to meet the needs of people without destroying the natural heritage that passes down from generation to the other in society.

Sustainability

Sustainability is literally defined as maintaining the ability to exist while ensuring the continuity of diversity and efficiency (Surampalli et al. 2020). There is now a general consensus that world resources and the environment are moving towards the exhaustion limit as a result of human activities. Sustainability, which is considered from this point of view, can only be achieved by using the resources offered by nature at a speed that allows them to be renewed automatically (Armanda et al. 2019). The use of the concept of sustainability is flexible. It is possible to use this concept in ways such as sustainability of food production, sustainability of forests, sustainability of wetlands, sustainable cities, sustainable agriculture, and sustainable architecture (Surampalli et al. 2020). The concept of sustainability is also related to the definition of sustainable development that constitutes the basis for the concept of sustainable development, which is one of the main parameters in the development and welfare levels of societies. The introduction of the concept of

sustainable development in the global sense was first made in the report entitled *Our Common Future* by the World Environment and Development Commission (Bruntland 1987). In this report, sustainable development was defined as the development that meets the daily needs without endangering the ability of nature to respond to the needs of future generations. While using resources, it also needs to be renewed. If this balance in the use of resources is established healthy, the balance of natural resources will not be damaged (Tu et al. 2019). Because, human life depends on natural resources, but these are not infinite (Fernando et al. 2019). At this stage, the concept of sustainable development comes into play. Sustainable development means creating a balance between nature and humanity (Klarin 2018). This balance is provided by all beings (Bibri et al. 2020). Ensuring the sustainability of the balance in the use of resources is a product of success in the management of the process. In other words, concepts such as technology, environment, energy, natural resources, and their connection with each other should be well understood in order to ensure a good balance in resource use (Fernando et al. 2019). For example, it is not possible to ignore the factor of environmental protection in a food production where natural resources are used effectively. At the same time, this production must be well planned in terms of energy use. In addition, this production is expected to contribute to the country's economy within a sustainable framework. Therefore, sustainability is a holistic concept (Surampalli et al. 2020). The concept of food sustainability can be considered as one of the prominent dimensions of sustainability in terms of increasing world population, increasing new resource requirements, rising energy prices, and climate change (Shafiei and Hooman 2017).

Food Sustainability

Basically, the food industry processes agricultural raw materials into food and beverage products. Food sustainability, of course, aims to produce good quality food. Besides, the concept of food sustainability implies sustainability principles to a wide process ranging from raw materials to

equipment to be used in the production of quality food products, from packaging to waste (Surampalli et al. 2020). Among the topics evaluated in this context, it is necessary to evaluate different parameters such as energy consumption, the minimization of greenhouse gas emissions, resource and waste management, water and wastewater management and packaging, coordination of agricultural activities, food transportation, and assessment of environmental impacts (Armanda et al. 2019).

Sustainable Food Production

Sustainable food production involves transforming agricultural raw materials into quality, healthy food and beverage products by taking into consideration all the processes, from production to consumption, from raw material procurement to water and energy use, from resource utilization to waste management, and from packaging to distribution channels (United Nations World Population Prospects 2015 revision). It is predicted that food production will have to increase by at least 70% by 2050 in order to satisfy an increasing population and settlement levels. However, the increased demand for habitable land as a result of the expanding population will cause tensions because more agricultural land will also be needed to satisfy food demand. Limited water and energy resources will also push the community to find alternative solutions to establish a sustainable life (FAO 2009). In addition to this problem, sustainable food products must contain a sufficient and balanced composition of energy and nutrients that support health, that is, the nutrients of these foods need to be varied and intensive (Kesavan and Swaminathan 2018).

As one of the requirements for a sustainable life, the principles of sustainable food production must be applied correctly. The methods used should address the principle of environmental protection, which is one of the fundamental principles of sustainability and should have global awareness. Global food production methods also need to change to minimize their negative impact on the environment and support the world's future food production capacity. As in other

human actions, food production has an impact on climate change, drought, soil degradation, and destruction of biodiversity (Charles et al. 2014). It is estimated that 25% of global greenhouse gas emissions are directly caused by grain production, livestock, and forestry. Cereal and livestock sectors use 70% of fresh water resources and cover up to 60% of the earth with forestry (Rojas-Downing et al. 2017). Thus, it is necessary to consider the concept of sustainable food production on a larger scale. That is, instead of thinking that this concept serves only food production in quality, it should be evaluated as a whole, including preventive activities along with producer and consumer and environmental factors.

The European Commission is examining how best to reduce the environmental impact of food production and how to limit waste in the food supply chain (Taghikhah et al. 2020). It is possible to reach this goal through the use of current technologies and technical knowledge (Sala et al. 2017). In order to adapt food production to the principles of sustainability, a number of institutions have devised plans to use natural resources more efficiently, better preserve natural resources, protect marine resources, produce food from sustainable sources, use environmentally friendly food packaging techniques, and reduce food waste (Zaffar 2018). For example, it is expected that the area suitable for food production will be planned in a geography that is efficient in terms of energy and water use. Or, it is preferable to position the food production company in an area compatible with the raw material supply in order to ensure that the transportation of the raw material to be used in food production is economical and that the environment and product quality are not adversely affected. In addition, fertilizers and pesticides have been started to be used more responsibly to prevent water and soil pollution. Also, raw materials for food packaging are selected from low-priced cellulosic materials that are recyclable and biodegradable (Kamani et al. 2019). The use of new forms of food packaging materials to replace the unsustainable ones is the other one of the steps taken in this direction (Nielsen et al. 2020).

Types of Food-Related Green Technologies

Wastewater Treatment

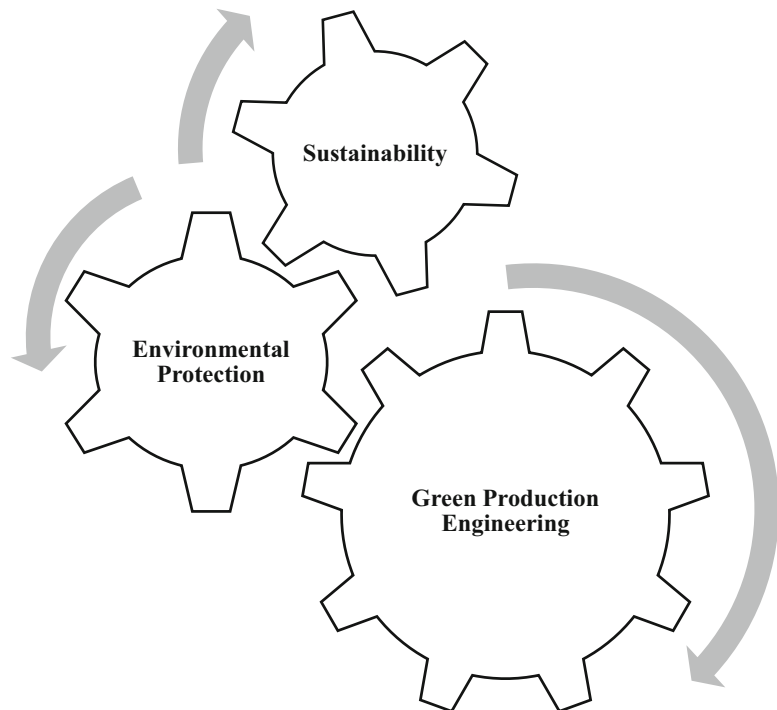
With the acceleration of industrialization and population growth in recent years, existing water resources are being exhausted and polluted rapidly. This situation brings with it an increase in the need to provide water and food and causes a shortage of water (Molden 2013). Hence, efficient use of water resources is a critical topic, regardless of whether the waste treatment technique is conventional or more modern. As well as the removal of undersirable substances from water, the other important issue is the technique used in the water treatment process. The technique used for wastewater treatment should be consistent with the principles of sustainability. In other words, there has to be environmental awareness or social and environmental responsibility for the technology used (Surampalli et al. 2020). Traditional methods for wastewater treatment use physical, chemical, and biological treatment processes (Crini and Lichtfouse 2019). In recent years, wastewater has begun to be evaluated differently from the materials that need to be disposed of. Due to the

water and nutrient content of wastewaters, wastewater becomes a kind of raw material and the techniques used in the treatment of wastewater are developing rapidly.

These approaches are based on the principles of green production. Green production engineering, as a sub-branch of food and chemical engineering, contributes to environmental protection within the framework of sustainability (Fig. 1) and is very suitable for innovation in the field of wastewater treatment. Figure 1 shows the basic elements that are necessary for the implementation of environmental sustainability principles. This structure has an importance to understand how sustainability, environmental protection, and green engineering principles are linked to each other and are implemented. If the principles of sustainability are not known, information cannot be obtained about the principles to be adopted for environmental protection. Since the sum of these elements is an input for awareness building in green engineering practices, it is difficult to link green production with environmental sustainability in a situation where the concept of sustainability is not briefly mentioned.

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Fig. 1 Relation of green production with environmental sustainability (Sezen and Cankaya 2013)

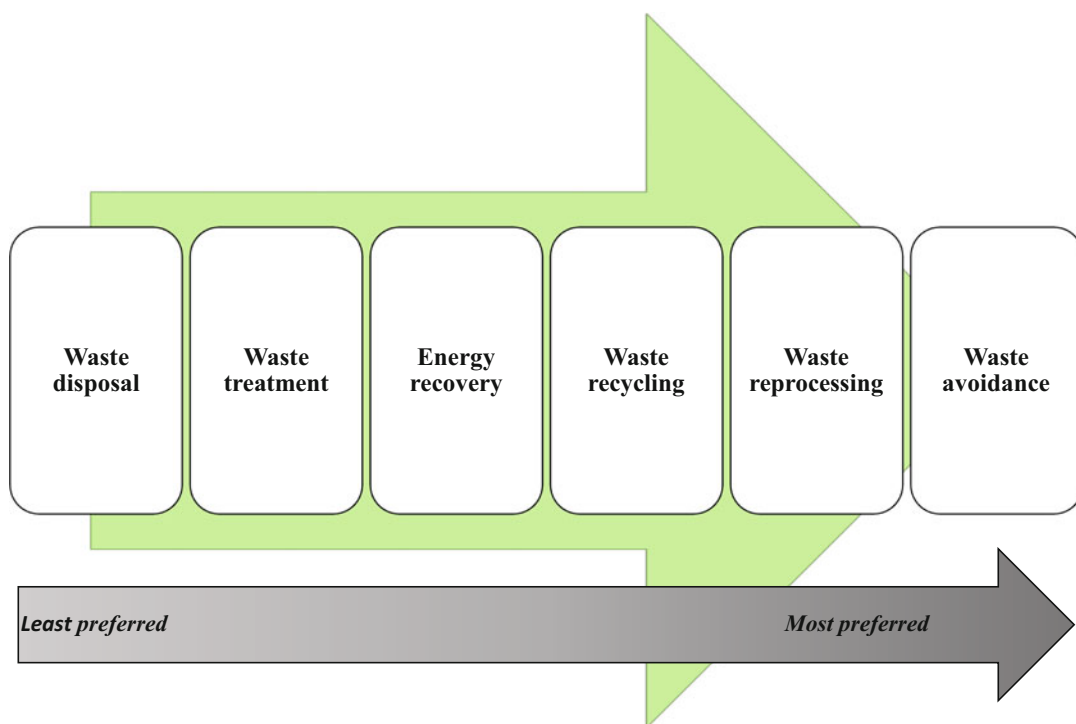


Examples of modern techniques used in this context are the use of green technology. Green technology can be recognized as a cheaper and technically emergent method for wastewater treatment, and provides an alternative to the high cost of conventional steps (Neoh et al. 2016). It has become increasingly more important in the food and chemical industry. In green wastewater treatment, the balance of oxygen and carbon dioxide is considered, along with alternative ways to clean wastewater. Examples of green technology approaches include the adaptation of modern biofiltration techniques; new-generation bioreactor designs; a new bioremediation approach; and electrowinning and electrocoagulation techniques. Integration of membrane bioreactor with various wastewater treatment systems is one of application areas of green technology (Neoh et al. 2016). In this process, small molecular weight of organic micropollutants can be retained compared to conventional activated sludge process. This process offers advantages such as having smaller footprint, less sludge production,

higher separation efficiency, and highly improved effluent quality as compared to conventional activated sludge treatment (Esquivel-Hernández et al. 2017).

Solid Waste Treatment

Solid waste treatment is another technological approach that is used in green food production (Fig. 2). The solid waste management hierarchy aims to evaluate all waste management steps as a whole and to ensure sustainability both environmentally and economically (Antonopoulos et al. 2014). Effective waste management is possible only by combining all methods. According to the solid waste management hierarchy, the most preferred step is to prevent and reduce waste at its source. In cases where waste production cannot be prevented, reuse and recycling stages are applied. For waste types where recycling is not possible, landfill method is also implemented. When ordered from most preferred to least preferred, the basic elements that make up the solid waste management hierarchy can be specified as



Green Technology for Food Sustainability, Fig. 2 Solid waste treatment hierarchy (Antonopoulos et al. 2014)

waste disposal, waste treatment, energy recovery, waste recycling, waste reprocessing, and waste avoidance. For an effective integrated waste management, waste characterization, performance conditions, reliable data, and sufficient cost information are required (Guerrero et al. 2013). According to all this information, waste management steps are determined. The importance of the use of natural resources in food production as well as the method of disposal of solid waste after production are core issues for solid waste treatment applications (Shadi 2015). It is important to manage waste because the process not only relates to its disposal. The type and quality of materials used in food production and the technical knowledge of the processors are all important issues. The philosophy of eco-friendly process construction should also be based on solid waste management (Ulucak and Khan 2020).

Open burning, dumping into the sea, incineration, and hog feeding are some examples of traditional solid waste treatment methods, all of which have disadvantages. However, researchers in the food industry have developed some sustainable techniques using green engineering and waste/energy management to provide alternative processes.

Reduction of Ecological Footprint

As the impact of environmental problems becomes ever more evident, new concepts are emerging to draw attention to these problems. The concept of ecological footprint is one of them (Galli et al. 2016). Ecological footprint is a method developed to calculate the burden that a certain population has on nature as a result of production and consumption activities and to determine how much it should return to the ecosystem (Mancini et al. 2016). These methods measure the biocapacity needed to reproduce the natural resources consumed by an individual, community, or a specific human activity and, if possible, eliminate the resulting waste through current technology and resources. Biocapacity is shown in a global hectare (kha) unit (Labib et al. 2018).

A number of concepts are used in the calculation of the ecological footprint: the consumption

footprint, ecological footprint of production, farmland footprint, forest footprint, grassland footprint, construction footprint, fishing field footprint, carbon retention footprint, global hectare, ecological deficiency, and ecological reserve. Some of them are expressed in Table 1 (Wu et al. 2019). When these areas are examined, it is seen that food production comprises all of them. The carbon footprint effect of the components specified in the table is more than the effects of all other components. The carbon footprint, which accounts for about 60% of all damage, is also considered the fastest growing one (Mancini et al. 2016). Carbon footprint measures carbon dioxide (CO₂) emissions associated with fossil fuel use (Pandey et al. 2011). For example, the use of fossil fuels such as coal, oil, and natural gas during manufacturing process directly results in carbon emissions in an organization. Likewise, gasoline that a person burns in order to drive his car releases a certain amount of carbon directly into the atmosphere. In the ecological footprint calculations, the measured amounts for CO₂ are converted into biologically productive areas necessary for absorbing this CO₂ (Labib et al. 2018). In order to make a reliable measurement system in terms of sustainability within the concept of the ecological footprint, it is also necessary to convey

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Table 1 Six main areas of ecological footprint (Wu et al. 2019)

Number	Area name	Definition
1	Carbon (energy)	Forest area that will be required to absorb carbon dioxide from individuals' energy consumption
2	Farmland	The grain area that will be required to produce cereals consumed by the individual
3	Grassland	Grazing area required to produce the required animal products
4	Forest	The amount of forest area required to produce wood and paper
5	Fishing	You will have to produce sea fish and seafood sea area
6	Construction	The land area you will need to build residential areas and infrastructure



information and results by an authorized organization. One of the institutions established to achieve these goals is the Global Footprint Network (GFN). GFN provides a key indicator of sustainability in order to measure the human impact on the planet's ecosystems (Galli et al. 2016). This indicator examines the balance between natural resource supply and demand arising from human activities. As it can be seen from the developments, some new methods should be established in order to reduce ecological footprint (Ulucak and Khan 2020). Green technology can be given as an example (Neoh et al. 2016). It is clear that applying green technology in food production supports the sustainability principle by reducing the ecological footprint. Because, energy is efficiently utilized in green technologies then it will help to reduce the harmful environmental effects (Kamani et al. 2019). For example, food-enzyme engineering is an area that has been implemented for many years. The use of enzymes in the reduction of the ecological footprint in the context of green food production is achieved through life cycle assessment (LCA) (Oxenboll and Ernst 2008). The LCA method allows for the environmental impacts of different food production techniques to be communicated to users and enables users to make comparisons. The use of enzymes as environmental biocatalysts to reduce the ecological footprint can be given as an example of an innovative green technology application (Jegannathan et al. 2011). Enzymes help to reduce the waste that is produced after agri-food raw material processing. Therefore, they help protect the environment and reduce material requirements in the process steps, thus leading to a decrease in carbon footprint by applying "green production" in modern approach compared to environmentally unfriendly methods.

"Climatic Intelligent" Food Production

Food safety is a concept with many subdivisions in theory and practice. In these subdivisions, some area-specific parameters are used such as quality, biochemistry, health, shelf life, contaminants, etc. (Cao et al. 2019). These parameters associated with the concept of food safety include demographic structure, diet, climate change, food

waste, food storage conditions, food production capacities, the income status of consumers, and environmental effects on food. It is also possible to see the impact of environmental conditions on each of these parameters. Moreover, even their interaction with each other can create a new assessment dimension for the field of food safety (Tsagkaris et al. 2019). For example, trying to reduce food loss and production waste can result in savings in food consumption. This may also reduce acceleration in new food demands within the scope of environmental protection, food loss, and food waste because the factors from production to consumption will be reevaluated by the producer and the consumer by considering the food safety parameters (Galanakis 2019). Hence, the issue of reducing food waste plays a decisive role in the protection of environmental balance, and the efficient use of resources. In this context, ways can be determined to adopt green food production principles for sustainable food production and food safety. Application of green technology is one of them. In this way, a significant reduction in greenhouse gas emissions could be achieved in food sector. Sustainable and eco-friendly management practices within the scope of green technology practices, as well as product innovation, promote efficiency in resource use (Fernando et al. 2016). This is of great importance in food production, which may be based on limited process opportunities (Hiç et al. 2016). For this reason, food storage conditions, food production capacity, and climate conditions can be evaluated within the scope of green technology applications. However, there is a need to determine a strategy to manage interactions between food safety parameters. Otherwise, changes in environmental and economic conditions for the coming years may lead to fluctuations in food supply demand and quality (Taghikhah et al. 2020).

In this context, the possible disadvantages arising from climate change, which is one of the other parameters for food safety, can be reduced by using appropriate production techniques. In addition, climate change needs to be taken into account different production plans, such as urgency in dealing with illness-related disruptions, the need to take measures against disasters,

and the need to make area-based investments. These plans provide confidence in the food chain as well as reinforcing food safety elements (Cao et al. 2019).

Climate change is likely to harm food safety and may also reduce agricultural productivity as it directly affects all living organisms and their ecosystem, which is formed as a result of their mutual relationship with the sterile environment that surrounds them, through health, water resources, and nutrition, and especially natural disasters (Scheub 2016). In this context, the agricultural sector is considered to be the most likely to be affected by climate change, as it is directly dependent on nature, climate conditions, and weather conditions. In addition, the ability of agricultural activities to provide vital resources increases the importance of climate change in this area (Rojas-Downing et al. 2017). To decrease these potential impacts, producers may need to use innovative technologies, sustainable agri-food production techniques, and other innovative technical options, such as the production of biodegradable bioplastics, the development of innovative irrigation techniques, and the establishment of a gray water recycling system (Zaffar 2018). In this context, new initiatives such as the production and distribution of climatic smart food and adaptation strategies to implement new food systems are being developed within the scope of green food production. These initiatives will both make food safer and serve the authorities' goal of mitigating climate change.

Green Extraction

Extraction of natural products has been carried out probably since the discovery of fire. Prior to extraction, people tried to extract materials by immersing them in basic solvents like water, oil, etc. (Uzel 2018). Many civilizations from East to West such as Egyptians, Phoenicians, Arabs, Indians, Greeks, Romans, etc. applied various extraction methods including maceration, distillation, etc. to produce foods, perfumes, and natural extracts (Esquivel-Hernández et al. 2017). Extraction is the transfer of one or more compounds in the solid or liquid phase to another liquid phase using the different solubility properties of the food

material (Zia et al. 2020). The extraction step is an indispensable part of most analytical processes. In recent years, there has been an increasing demand for advanced extraction techniques (Zia et al. 2020). Because, advanced extraction techniques such as microwave extraction, ultrasound-assisted extraction, and the use of pulsed power technology in extraction have advantages such as short processing time, preserving the natural properties of the material, and being cheaper and more environmentally friendly (Belwal et al. 2018). The reason for this is that it is suitable for automation, short extraction time, reduction in organic solvent consumption and in sample preparation, and prevention of pollution in analytical laboratories (Uzel 2018a).

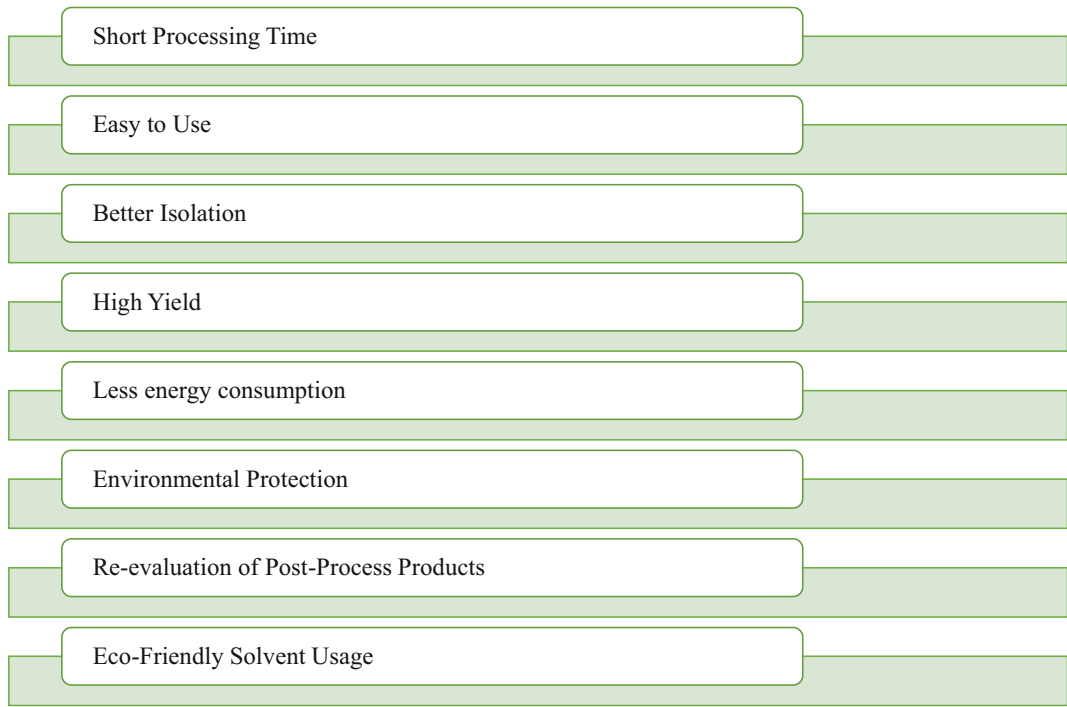
Parallel to the development of new technologies, the basic understanding of extraction principles in green food production has advanced. The extraction that applies the principles of green production is called green extraction which reduces energy consumption and allows use of alternative solvents and renewable natural products while ensuring a safe extract and quality (Uzel 2018b). Progress in extraction technology has led to new trends in sample preparation. Therefore, conventional extraction techniques in which conventional organic solvents are used for the recovery of bioactive constituents from food material with or without heat treatment have been replaced by nonconventional extraction techniques that extract bioactive constituents in a shorter time with higher recovery capacity such as microwave-assisted extraction, supercritical fluid extraction, and pressurized liquid extraction (or accelerated solvent extraction) (Esquivel-Hernández et al. 2017). Purpose of all these techniques is to obtain or isolate the desired compound out of food materials. The similarity in these conventional and nonconventional green extraction methods, which is based on the principles of mass transfer and diffusion, is the possibility of operating at high temperature and pressure, which significantly increases the speed of the extraction event (Esquivel-Hernández et al. 2017).

The green extraction technique has many advantages over conventional techniques. For example, it does not harm the natural structure of

the food product, it is lower in cost than nongreen techniques, it is easy to apply, it does not harm the natural structure of the food and the solvent used, and the processing time is short (Fig. 3). Because the resources can be managed efficiently in green extraction technology, it results in cost reduction and in better use of energy. The extraction process uses clean solvents such as water and reusable CO₂ that are environmentally friendly. After extraction, CO₂ can be eliminated and recycled by lowering the pressure and the extracted compound can be recovered without solvent residue. This reduces the number of steps in post-extraction treatment. The before- and after-extraction processes are simple as well as practical during sample preparation and processing. It is enough to control the process temperature and pressure during the extraction process (Esquivel-Hernández et al. 2017). Some green extraction techniques are discussed below.

Pressurized Liquid Extraction (PLE): One of the new extraction techniques, pressurized

liquid extraction (PLE), is also called accelerated solvent extraction (Belwal et al. 2018). PLE equipment has a sealed high-pressure extraction cell that maintains the food sample, allowing higher temperatures and pressure to be applied during the extraction process. The elevated pressure allows the extraction solvent to be in liquid form at higher temperatures. Subcritical water extraction or pressurized hot water extraction is a typical example of PLE. In this extraction technique, it is possible to use water as an extraction solvent. The extraction system utilizes water below critical conditions. Critical conditions consist of two terms: critical temperature and critical pressure. The critical temperature is the value at and above which the vapor of the solvent cannot be liquefied, no matter how much pressure is applied. The critical pressure is the value above which the characteristic liquid and gas behavior of the solvent do not exist. Hence, when the critical temperature and critical pressure are reached, the gas and liquid solvents result in only one phase,



Green Technology for Food Sustainability, Fig. 3 Some advantages of green extraction technology (Esquivel-Hernández et al. 2017)

the supercritical phase, having the same properties. The critical temperature and pressure of water that is used in PLE applications are 374 °C and 22.1 MPa, respectively (Nakilcioglu and Otles 2014). Hence, the water used as the extraction solvent in PLE systems can be safely used in order not to cause harm to the environment. For this reason, this extraction technique can be evaluated as a green extraction application. The use of water is important because it reduces extraction cost and is environmentally friendly because it results in nonsolvent waste (De Melo et al. 2014).

Microwave-Assisted Extraction (MAE): Microwaves are high-frequency electromagnetic waves (300–300,000 MHz). The principle of heating using microwave energy is based on the direct effect of the microwave on the molecule through the transmission of ions and the dipole rotation. In most applications, these two mechanisms occur simultaneously. In this way, ionic conduction, which forms the basis of microwave-assisted extraction, is realized. Ionic conduction is the electrophoretic migration of ions when a magnetic field is applied. The solution used in extraction resists this ion flux and the solution heats up with the effect of friction. Microwave-assisted extraction produces the ability of microwaves to absorb energy in conjunction with the dielectric constant of polar chemicals which is utilized while the principles of ionic conduction are used. Microwave-assisted extraction can be applied using two different techniques. The first one is a closed-vessel application where the temperature and pressure are under control. The other is an open-vessel application, where the system is under atmospheric pressure. Microwave-assisted extraction enables faster heat generation, shorter extraction times, and extracts in better quality. It has been reported that it also reduces solvent consumption and increases the efficiency of the extraction. It has been proposed as an efficient, economical, and environmentally friendly method in the literature (Uzel 2018a). Microwave applications have been used in the food industry for different purposes for many years (Silva et al. 2010). With this application, the efficiency of the extraction process can be increased (Uzel 2018a). Its advantages include being time- and cost-

effective, and not harmful to the environment. Considering also that microwave-assisted extraction can decrease or eliminate the utilization of organic solvents during extraction, it can be regarded as a green extraction technique (Silva et al. 2010).

Pulsed Electric Field (PEF)-Assisted Extraction: PEF is one of the nonthermal food processing methods. The basic principle of the pulsed electric field system is that the food material placed between two electrodes is exposed to short and intense electric pulses at micro- or millisecond intervals and at an impact intensity range of 10–80 kV/cm, and the bioactive compound to be extracted is released from the food material (Donsi et al. 2010). Compared with traditional methods, pulsed electric field applications have been observed to produce better quality products due to enhancement of mass transfer of water and valuable compounds to be extracted from food materials (Mohammed and Ayman 2012). In this technique, the sensory properties and physical quality changes of food can be kept to a minimum. One of its biggest advantages is that it can be used effectively in the inactivation of microorganisms by keeping the nutritional value, color, texture, and aroma in the best way due to the low process temperature in unprocessed foods. At the same time, the energy efficiency of the pulsed electric field process is high and the product is obtained at minimal cost. In recent years, PEF-assisted extraction has been used in several fields such as extraction of valuable compounds from biological materials in food processing, biotechnology, and medicine for the introduction of different molecules into the cell, etc. (Blahovec et al. 2017). Using the PEF extraction technique, it is also possible to reach a remarkable yield at low temperature even if water is used as a solvent. Thus, the environmental benefit of the PEF technique can be clearly seen (Kokosa 2019).

Supercritical Fluid Extraction (SFE): SFE is defined as the dissolution and recovery of food stuff in a fluid under supercritical conditions that is above critical temperature and critical pressure values. Critical temperature and pressure are conditions in which the solvents used in the extraction behave as if they are in a single

phase, called the supercritical phase, regardless of their physical states (Nakilcioglu and Otlles 2014). Following extraction, the targeted extract is separated from the extraction fluid by reducing the pressure (De Melo et al. 2014). One parameter that is related with supercritical fluid extraction is the density of the supercritical fluid. The density can be controlled using changes in temperature and pressure. The supercritical fluids are selected according to the application in which they are to be used and are chosen by reference to their cost; availability; nonflammable and non-combustible properties; not being harmful to the environment or product; and being inert. Another important parameter to express the supercritical fluid extraction efficiency is thermal conductivity. The thermal conductivity (λ) of a material is a measure of its ability to conduct heat (Xu et al. 2018). It varies with temperature, pressure, or density of the liquid, and under supercritical conditions. It decreases with increasing temperature. Hence, supercritical fluid extraction process can be regarded as one of techniques that applies green technology principles (Zia et al. 2020).

Summary

Food production is a process in which agricultural resources and raw materials are organized to meet the needs of people. Sustainability of this process is one of the basic requirements of sustainable food production. Sustainability as an element of sustainable development is essential for the management of development plans of almost all countries (Armanda et al. 2019). Although definitions about sustainable development may vary, it is based on three basic approaches: economic development, environmental sustainability, and social integration (Mantlana and Maoela 2019). The differences in the structure of societies also make the size of the intersection sets of these three approaches different. Therefore, the application of green technology is one of the key components in ensuring the welfare of a society by referring to the relation between economic and environmental developments and social integration aiming to

provide social welfare, economic advantage, and environmental protection. Hence, it can clearly be seen that the green technology offers new perspectives such as wastewater treatment, solid waste treatment, reduction of ecological footprint, “climatic intelligent” food production, and green extraction for sustainability in food production. These include an enhanced concern for the quality and safety of food products, increased preference for natural products over synthetic ones, and broadened regulations related to nutritional and toxicity levels of active ingredients. They also have driven green food technology to become the primary alternative to conventional food production methods that have various drawbacks such as high cost, long process time, low yield, etc. The increase in the number of products that are produced using green production techniques increased awareness in consumers to discuss new discoveries in the field. For instance, they are willing to pay more attention for green products that are produced by using green technologies in order to contribute to environmental protection for the development and welfare of society (Boztepe 2012). To conclude, it can be stated that with increasing concern about the use of food production methods, green technology is gaining popularity faster than ever before. The future looks promising for the use of green technology, with new sustainable techniques being developed for other novel uses in the food processing industry.

Cross-References

► Green Technology

References

- Akinwale, M. G., Gregorio, G., Nwilene, F., Akinyele, B. O., Ogunbayo, S. A., & Odiyi, A. C. (2011). Heritability and correlation coefficient analysis for yield and its components in rice (*Oryza sativa* L.). *African Journal of Plant Science*, 5(3), 207–212.
- Antonopoulos, I. S., Perkoulidis, G., Logothetis, D., & Karkanias, C. (2014). Ranking municipal solid waste treatment alternatives considering sustainability

- criteria using the analytical hierarchical process tool. *Resources, Conservation and Recycling*, 86, 149–159.
- Armanda, D. T., Guinée, J. B., & Tukker, A. (2019). The second green revolution: Innovative urban agriculture's contribution to food security and sustainability – A review. *Global Food Security*, 22, 13–24.
- Belwal, T., Ezzat, S. M., Rastrelli, L., Bhatt, I. D., Daglia, M., Baldi, A., . . . Anandharamakrishnan, C. (2018). A critical analysis of extraction techniques used for botanicals: Trends, priorities, industrial uses and optimization strategies. *TrAC Trends in Analytical Chemistry*, 100, 82–102.
- Bibri, S. E., Krogstie, J., & Kärrholm, M. (2020). Compact City planning and development: Emerging practices and strategies for achieving the goals of sustainable development. *Developments in the Built Environment*, 4, 100021.
- Blahovec, J., Vorobiev, E., & Lebovka, N. (2017). Pulsed electric fields pretreatments for the cooking of foods. *Food Engineering Reviews*, 9, 1–11.
- Boztepe, A. (2012). Green marketing and its impact on consumer buying behavior. *European Journal of Economic & Political Studies*, 5(1), 5.
- Bruntland Commission. (1987). *Our common future: Report of the world commission on environment and development*. New York: Oxford University Press.
- Cao, X., Huang, R., & Chen, H. (2019). Evaluation of food safety and quality parameters for shelf life extension of pulsed light treated strawberries. *Journal of Food Science*, 84(6), 1494–1500.
- Charles, H., Godfray, J., & Garnett, T. (2014). Food security and sustainable intensification. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 369(1639), 20120273.
- Clark, J. H., Farmer, T. J., Herrero-Davila, L., & Sherwood, J. (2016). Circular economy design considerations for research and process development in the chemical sciences. *Green Chemistry*, 18(14), 3914–3934.
- Crini, G., & Lichtfouse, E. (2019). Advantages and disadvantages of techniques used for wastewater treatment. *Environmental Chemistry Letters*, 17(1), 145–155.
- De Melo, M. M. R., Silvestre, A. J. D., & Silva, C. M. (2014). Supercritical fluid extraction of vegetable matrices: Applications, trends and future perspectives of a convincing green technology. *The Journal of Supercritical Fluids*, 92, 115–176.
- Donsi, F., Ferrari, G., & Pataro, G. (2010). Applications of pulsed electric field treatments for the enhancement of mass transfer from vegetable tissue. *Food Engineering Reviews*, 2(2), 109–130.
- Esquivel-Hernández, D. A., Ibarra-Garza, I. P., Rodríguez-Rodríguez, J., Cuéllar-Bermúdez, S. P., Rostro-Alanis, M. D. J., Alemán-Nava, G. S., . . . Parra-Saldívar, R. (2017). Green extraction technologies for high-value metabolites from algae: A review. *Biofuels, Bioproducts and Biorefining*, 11(1), 215–231.
- Fanzo, J. (2018). The role of farming and rural development as central to our diets. *Physiology & Behavior*, 193, 291–297.
- Fernando, Y., Wah, W. X., & Shaharudin, M. S. (2016). Does a firm's innovation category matter in practising eco-innovation? Evidence from the lens of Malaysia companies practicing green technology. *Journal of Manufacturing Technology Management*, 27(2), 208–233.
- Fernando, Y., Jabbour, C. J. C., & Wah, W. X. (2019). Pursuing green growth in technology firms through the connections between environmental innovation and sustainable business performance: Does service capability matter? *Resources, Conservation and Recycling*, 141, 8–20.
- Food and Agriculture Organization of the United Nations (FAO). (2009). *How to feed the world in 2050*. Rome: FAO.
- Galanakis, C. M. (Ed.). (2019). *Saving food: Production, supply chain, food waste and food consumption*. London: Academic.
- Galli, A., Giampietro, M., Goldfinger, S., Lazarus, E., Lin, D., Saltelli, A., . . . & Müller, F. (2016). Questioning the ecological footprint. *Ecological Indicators*, 69, 224–232.
- Guerrero, L. A., Maas, G., & Hogland, W. (2013). Solid waste management challenges for cities in developing countries. *Waste Management*, 33(1), 220–232.
- Guillard, V., Gaucel, S., Fornaciari, C., Angellier-Coussy, H., Buche, P., & Gontard, N. (2018). The next generation of sustainable food packaging to preserve our environment in a circular economy context. *Frontiers in Nutrition*, 5, 121.
- Hiç, C., Pradhan, P., Rybski, D., & Kropp, J. P. (2016). Food surplus and its climate burdens. *Environmental Science & Technology*, 50(8), 4269–4277.
- Jegannathan, K. R., Chan, E., & Ravindra, P. (2011). Biotechnology in biofuels – A cleaner technology. *Journal of Applied Sciences*, 11(13), 2421–2425.
- Kamani, M. H., Eş, I., Lorenzo, J. M., Remize, F., Roselló-Soto, E., Barba, F. J., . . . & Khaneghah, A. M. (2019). Advances in plant materials, food by-products, and algae conversion into biofuels: Use of environmentally friendly technologies. *Green Chemistry*, 21(12), 3213–3231.
- Kesavan, P. C., & Swaminathan, M. S. (2018). Modern technologies for sustainable food and nutrition security. *Current Science*, 115(10), 1876–1883.
- Klarin, T. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics and Business*, 21(1), 67–94.
- Kokosa, J. M. (2019). Selecting an extraction solvent for a greener liquid phase microextraction (LPME) mode-based analytical method. *TrAC Trends in Analytical Chemistry*, 118, 238–247.
- Kristinsson, H. G., & Jörundsdóttir, H. Ó. (2019). Food in the bioeconomy. *Trends in Food Science & Technology*, 84, 4–6.

- Labib, S. M., Neema, M. N., Rahaman, Z., Patwary, S. H., & Shakil, S. H. (2018). Carbon dioxide emission and bio-capacity indexing for transportation activities: A methodological development in determining the sustainability of vehicular transportation systems. *Journal of Environmental Management*, 223, 57–73.
- Mancini, M. S., Galli, A., Niccolucci, V., Lin, D., Bastianoni, S., Wackernagel, M., & Marchettini, N. (2016). Ecological footprint: Refining the carbon footprint calculation. *Ecological Indicators*, 61, 390–403.
- Mohammed, M., & Ayman, H. A. E. (2012). Pulsed electric fields for food processing technology. In A. A. Eissa (Ed.), *Structure and function of food engineering* (pp. 275–306). London: InTech Open Publications.
- Molden, D. (Ed.). (2013). *Water for food water for life: A comprehensive assessment of water management in agriculture*. London: Routledge.
- Nakilcioglu, E., & Ötleş, S. (2014). BasınçlıÇözgenEkstraksiyonu ve Gıda Sanayiiindeki Uygulamaları. *Akademik Gıda*, 12(2), 88–94.
- Neoh, C. H., Noor, Z. Z., Mutamim, N. S. A., & Lim, C. K. (2016). Green technology in wastewater treatment technologies: Integration of membrane bioreactor with various wastewater treatment systems. *Chemical Engineering Journal*, 283, 582–594.
- Nielsen, T. D., Hasselbalch, J., Holmberg, K., & Strippel, J. (2020). Politics and the plastic crisis: A review throughout the plastic life cycle. *Wiley Interdisciplinary Reviews: Energy and Environment*, 9(1), e360.
- Oleksy, E. M. (2018). The chemical causes and social effects of acid rain. *The Downtown Review*, 5(1), 7.
- Oxenbøll, K., & Ernst, S. (2008). Environment as a new perspective on the use of enzymes in the food industry. *Food Science and Technology*, 22(1), 35–37.
- Pandey, D., Agrawal, M., & Pandey, J. S. (2011). Carbon footprint: Current methods of estimation. *Environmental Monitoring and Assessment*, 178(1–4), 135–160.
- Rojas-Downing, M. M., Nejadhashemi, A. P., Harrigan, T., & Woznicki, S. A. (2017). Climate change and livestock: Impacts, adaptation, and mitigation. *Climate Risk Management*, 16, 145–163.
- Sala, S., Anton, A., McLaren, S. J., Notarnicola, B., Saouter, E., & Sonesson, U. (2017). In quest of reducing the environmental impacts of food production and consumption. *Journal of Cleaner Production*, 140(2), 387–398.
- Scheub, U. (2016). *Terra preta: How the world's most fertile soil can help reverse climate change and reduce world hunger*. Berkeley: Greystone Books Ltd..
- Sezen, B., & Cankaya, S. Y. (2013). Effects of green manufacturing and eco-innovation on sustainability performance. *Procedia-Social and Behavioral Sciences*, 99, 154–163.
- Shadi, K. F. (2015). Waste minimization benefits and obstacles for solid industrial wastes in Malaysia. *IOSR Journal of Environmental Science, Toxicology and Food Technology (IOSR-JESTFT)*, 8(2), 43–52.
- Shafiei, M. W. M., & Hooman, A. (2017). The importance of green technologies and energy efficiency for environmental protection. *International Journal of Applied Environmental Sciences*, 12(5), 937–951.
- Silva, V. M., Costa, W. F., Visentainer, J. V., Souza, N. E., & Oliveira, C. C. (2010). Development of a green microwave assisted extraction method for triazine herbicides determination in soil samples. *Journal of the Brazilian Chemical Society*, 21(6), 1045–1051.
- Surampalli, R. Y., Zhang, T. C., Goyal, M. K., Brar, S. K., & Tyagi, R. D. (2020). *Sustainability: Fundamentals and applications*. Hoboken: Wiley.
- Taghikhah, F., Voinov, A., Shukla, N., Filatova, T., & Anufriev, M. (2020). Integrated modeling of extended agro-food supply chains: A systems approach. *European Journal of Operational Research*, 288(3), 852–868.
- Tambovceva, T., & Tereshina, M. (2018). Economic potential of “green” economy in development of rural territories. In *Economic science for rural development conference proceedings* (Vol. 48, pp. 259–267). Jelgava: LLU ESAF.
- Tsagkaris, A. S., Nelis, J. L., Ross, G. M. S., Jafari, S., Guercetti, J., Kopper, K., ... Salentijn, G. I. (2019). Critical assessment of recent trends related to screening and confirmatory analytical methods for selected food contaminants and allergens. *TrAC Trends in Analytical Chemistry*, 121, 115688.
- Tu, C., Suweis, S., & D’Odorico, P. (2019). Impact of globalization on the resilience and sustainability of natural resources. *Nature Sustainability*, 2(4), 283–289.
- Ulucak, R., & Khan, S. U. D. (2020). Determinants of the ecological footprint: Role of renewable energy, natural resources, and urbanization. *Sustainable Cities and Society*, 54, 101996.
- United Nations, Department of Economic and Social Affairs, Population Division. (2015). *World population prospects: The 2015 revision, methodology of the United Nations population estimates and projections*. Working Paper No. ESA/P/WP.242. New York: United Nations.
- Uzel, R. A. (2018a). Microwave-assisted green extraction technology for sustainable food processing. In *Emerging microwave technologies in industrial, agricultural, medical and food processing* (pp. 159–178). London: InTechOpen.
- Uzel, R. A. (2018b). Impact of ultrasound-assisted extraction on supercritical recovery of valuable compounds from dry pine needles. *International Journal of Food Engineering*, 4(1), 8–13.
- Wu, M., Wei, Y., Lam, P. T., Liu, F., & Li, Y. (2019). Is urban development ecologically sustainable? Ecological footprint analysis and prediction based on a modified artificial neural network model: A case study of Tianjin in China. *Journal of Cleaner Production*, 237, 117795.
- Xiang, B., Cao, X., Yuan, Y., Sun, L., Wu, H., & Haghighat, F. (2018). A novel hybrid energy system combined with solar-road and soil-regenerator:

Dynamic model and operational performance. *Energy Conversion and Management*, 156, 376–387.

Xu, X., Chen, J., Zhou, J., & Li, B. (2018). Thermal conductivity of polymers and their nanocomposites. *Advanced Materials*, 30(17), 1705544.

Zaffar, A. S. (2018). Towards sustainable development: A review of green technologies. *Trends in Renewable Energy*, 4(1), 1–14.

Zia, S., Khan, M. R., Shabbir, M. A., Aslam Maan, A., Khan, M. K. I., Nadeem, M., . . . Aadil, R. M. (2020). An inclusive overview of advanced thermal and non-thermal extraction techniques for bioactive compounds in food and food-related matrices. *Food Reviews International*, 1–31. <https://doi.org/10.1080/87559129.2020.1772283>.

Green Tourism

- [Corporate Social Responsibility in Tourism](#)
- [Sustainable Tourism](#)

Green Vehicles

- [Sustainable Transportation](#)

Green Village

- [Sustainable Communities](#)

Green, Circular, and Bio Economy

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Synonyms

[Bio economy](#); [Circular economy](#); [Environmental sustainability](#)

Definition

The green economy has been defined as a low-carbon, resource-efficient, and socially inclusive economy that serves as a vehicle to achieve the Sustainable Development Goals (SDGs) by improving people's well-being and social equity while also protecting the planet from resource exploitation and environmental risks (Georgeson et al., 2017).

The SDGs establish a new imperative for the green economy, paving the way for more environmentally friendly technologies and investments (Jänicke, 2012). These latter include a variety of activities, actions, and programs carried out by institutions as well as public and private organizations in order to increase energy and resource efficiency, protect biodiversity, reduce pollution and carbon emissions, and generate employment and human well-being. The green economy is based on long-term development because it helps to shift the economy's focus (in terms of investment, capital and infrastructure, employment, and skills) to positive social and environmental outcomes around the world.

Introduction

The green economy emerged as a key policy imperative at the United Nations Conference on Sustainable Development (Rio + 20) in 2012, but the concept dates back to the late 1980s (Pearce et al., 1989). Since its inception, the green economy has regarded natural assets (also known as “commons”), such as natural capital, considered critical to both the economy and society (Bailey & Caprotti, 2014; Barbier, 2012; Ferguson, 2015).

Despite its popularity following the financial crisis, the green economy concept has now been internationally disseminated and is considered a pillar of global, regional, and national policies (Bina, 2013; Bina & La Camera, 2011; Schmalensee, 2012; Tienhaara, 2014).

The project “Inclusive Green Economy Policy Making for SDGs: From Implementation to Evaluation” within the European context aims to achieve the aforementioned objectives through

two main elements. The former – Development and Implementation of an Inclusive Green Economy Policy Review methodology – is finalized to analyze countries' experiences with green economy policy implementation as well as their existing frameworks for selected SDGs. The review, which has been piloted in three countries, assesses the progress of key sectors as well as selected cross-sectoral policies. The latter, titled “Further Development and Application of an Integrated Green Economy Modelling Tool,” aims to improve countries' understanding of the cross-sectoral impacts of inclusive green economy policies while also tailoring the modeling tool to a specific country's context and sectoral focus. Therefore, it advocates for a meso and regional approach to sustainable economic growth through regional, sub-regional, and national policies covering green finance, technology, and investments and assisting countries with mainstreaming macroeconomic policies to support the transition to a green economy. Furthermore, the green economy is founded on some fundamental pillars that should guide the socioeconomic behaviors of businesses, citizens, and institutions at both the macro and micro levels: sustainable consumption and production, as well as resource efficiency. On the one hand, the goal of reducing waste generation and emissions across the entire life cycle of processes and products should drive both consumption and production (Fig. 1). On the other

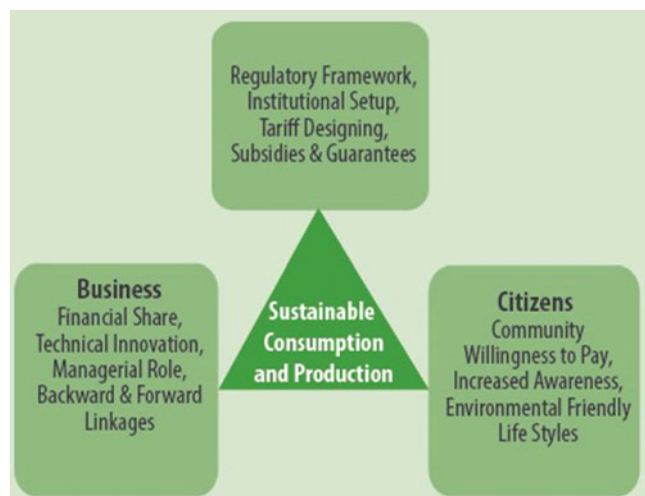
hand, resources should be used to create value for society as a whole, while the amount of resources required, as well as of emissions and waste generated per unit of product/service, should be reduced.

The green economy takes into account the critical interdependence of the economy, society, and environment. Its promotion is dependent on collaboration among various stakeholders (multi-stakeholder collaboration), which is essential for supporting and strengthening long-term changes in consumption and production patterns. UN Environment (UNEP, 2011) has increased its engagement with the private sector, which is a key actor in promoting the green economy, in addition to governments and non-profit organizations.

Key Issues

The concept of green economy is frequently associated with those of circular economy and bio economy, which share the goal of reconciling economic, environmental, and social goals. “The three concepts are currently mainstreamed as key sustainability avenues in academia and policymaking” (D’Amato et al., 2017, p. 716). However, such concepts are based on different assumptions and manifest in various ways. Green economy can be assumed as a mainstream

Green, Circular, and Bio Economy, Fig. 1 The pillars of sustainable consumption and production. (Source: Abaza, 2012, United Nations Development Programme (UNDP))



concept for environmental sustainability, incorporating features relative to circular and bio economies such as eco-efficiency, renewables, and nature-based solutions (Murray et al., 2015; OECD, 2011). While the circular and bio economies are more focused on resources, the green economy addresses the role of ecological processes. Furthermore, in terms of the social dimension, the latter emphasizes certain aspects at the local level (e.g., eco-tourism and education).

However, in sustainability research, the three concepts have been considered interconnected (Loiseau et al., 2016), and the relationship between the concepts has been highlighted (Ollikainen, 2014; Székács, 2017). Authors argue for their reciprocal integration by comparing the sustainability strategies derived from these concepts because they all trigger/elicit the path toward a more sustainable economy. Although they are global concepts, “differences at a regional level exist” (D’Amato et al., 2017, p. 716) because they have been contextualized in accordance with specific institutional frameworks and are supported by ad hoc national policies.

Several contributions have highlighted the variation in underlying assumptions and visions, as well as viewpoints and objectives of policies and actions aimed at operationalizing sustainability (D’Amato et al., 2016).

Both circular economy and bio economy are part of the political agenda at a global level. Namely, the EU has formulated bio economy and circular economy policies in the last decade (EC 2012; 2015). Green economy has been promoted internationally by UNEP and has been operationalized through several regional policies (Murray et al., 2015).

From a scientific standpoint, green economy and bio economy predominate over circular economy in the United States (USA, 2012). They are all thoroughly researched in Europe. The green economy debate is most prevalent on a global scale, in both developed and developing countries. Circular economy and bio economy, on the other hand, are more researched in transitional and developed economies. Sustainable development, green investments, tourism, business education employment, recycling re-use, reduction in

product life cycle, renewables in energy production, conservation, and land use are some of the topics covered in green economy research, whose contributions are published in journals focused on environmental, ecological economics, and natural resources. As a result, while the green economy incorporates elements from both the bio economy and the circular economy, topics are more focused on nature-based solutions, green investments, and conservation. Among the major sustainability aspects included in the green economy construct, the following are associated with the environmental dimension: conservation, water, land, biodiversity, food, and security; and the social dimension: sustainable development; green investments, tourism, business, employment, and education. Furthermore, the concepts of green growth and green frugality are included in the green economy (see D’Amato et al., 2017). The former refers to the coexistence of economic growth and environmental sustainability, which is fostered by ecological adaptation and resilience. The latter refers to the use of nature-based solutions to supplement or replace technological solutions, based on an understanding of the ecological limits to growth.

Summary

The green economy is a critical component of the twenty-first century’s sustainable development agenda. Green entrepreneurs are assumed to be the drivers of the transition to a green economy in the current debate because they are key actors in negotiating the tension between the green economy and the mainstream economy in their business activities. Green economy, bio economy, and circular economy are all concepts that embrace the idea of holistic economic growth (Tomaselli et al., 2017). Some authors, however, argue that none of them are based on strong sustainability because unlimited growth cannot be reconciled with strong sustainability (Lorek & Fuchs, 2013). Other authors contend that green economy and circular economy are more focused on long-term sustainability than bio economy (Loiseau et al., 2016). Given the global context, green economy has incorporated key elements of circular and bio

economy, such as clean technology and renewable energy (Eaton, 2013).

Ultimately, considering these concepts as complementary rather than isolated and competing, that of green economy appears to be the most inclusive (D'Amato et al., 2017). All have gained traction globally, attracting the attention of political, economic, and societal actors such as industries, academia, non-governmental organizations, and policymakers, among others. Furthermore, despite their differing assumptions and operationalization strategies, it is critical to highlight the concrete actions and impacts because the three concepts share the goal of reconciling economic, environmental, and social goals.

Cross-References

- [Eco-efficiency](#)
- [Green Growth](#)
- [Renewable Energy](#)
- [Sustainable Development](#)

References

- Abaza, H. M. (2012). *Green economy in action: Articles and excerpts that illustrate green economy and sustainable development efforts*. UNDP - United Nations development programme. New York: UNDP.
- Bailey, I., & Caprotti, F. (2014). The green economy: Functional domains and theoretical directions of enquiry. *Environment and Planning*, 46, 1797–1813.
- Barbier, E. (2012). The green economy post Rio+20. *Science*, 338, 887–888. <https://doi.org/10.1126/science.1227360>.
- Bina, O. (2013). The green economy and sustainable development: An uneasy balance? *Environment and planning*. *Government and Policy*, 31, 1023–1047.
- Bina, O., & La Camera, F. (2011). Promise and shortcomings of a green turn in recent policy responses to the 'double crisis'. *Ecological Economics*, 70, 2308–2316.
- D'Amato, D., Droste, N., Chan, S., & Hofer, A. (2016). Green economy: Pragmatism or revolution? Perceptions of young researchers on social ecological transformation. *Environmental Values*, 26(4), 413–435. <https://doi.org/10.3197/096327117X14976900137331>.
- D'Amato, N., Droste, B., Allen, B., Kettunen, M., Lähinen, K., Korhonen, J., Leskinen, P., Matthies, B. D., & Toppinen, A. (2017). Green, circular, bio economy: A comparative analysis of sustainability avenues. *Journal of Cleaner Production*, 168(1), 716–734. <https://doi.org/10.1016/j.jclepro.2017.09.053>.
- Eaton, D. (2013). Technology and innovation for a green economy. *Revue of European, Comparative & International Environmental Law*, 22, 62–67. <https://doi.org/10.1111/reel.12020>.
- EC (European Commission) (2012). Innovating for sustainable growth. A bioeconomy for Europe European environmental agency, Brussels: EC. http://ec.europa.eu/research/bioeconomy/pdf/official-strategy_en.pdf. Accessed 5 February 2017.
- EC (European Commission) (2015). Closing the Loop - an EU Action Plan for the Circular Economy. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM/2015/0614.
- Ferguson, P. (2015). The green economy agenda: Business as usual or transformational discourse? *Environmental Politics*, 24(1), 17–37.
- Georgeson, L., Maslin, M., & Poessinouw, M. (2017). The global green economy: A review of concepts, definitions, measurement methodologies and their interactions. *Geo: Geography and Environment*, 4(1), 1–24.
- Jänicke, M. (2012). 'Green growth': From a growing eco-industry to economic sustainability. *Energy Policy*, 48, 13–21.
- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, P. K., Leskinen, P., Kuikman, P., & Thomsen, M. (2016). Green economy and related concepts. *Journal of Cleaner Production*, 139, 361–371.
- Lorek, S., & Fuchs, D. (2013). Strong sustainable consumption governance – Precondition for a degrowth path? *Journal of Cleaner Production*, 38, 36–43. <https://doi.org/10.1016/j.jclepro.2011.08.008>.
- Murray, A., Skene, K., & Haynes, K. (2015). The circular economy: An interdisciplinary exploration of the concept and application in a global context. *Journal of Business Ethics*, 140(3), 369–380. <https://doi.org/10.1007/s10551-015-2693-2>.
- OECD (Organisation for Economic Co-operation and Development). (2011). Towards green growth. *OECD Publishing*. <https://doi.org/10.1787/9789264111318-en>.
- Ollikainen, M. (2014). Forestry in bioeconomy e smart green growth for the humankind. *Scandinavian Journal of Forest Research*, 29, 336–360. <https://doi.org/10.1080/02827581.2014.926392>.
- Pearce, D., Markandya, A., & Barbier, E. (1989). *Blueprint for a green Economy*. London, U.K: Earthscan.
- Schmalensee, R. (2012). From 'green growth' to sound policies: An overview. *Energy Economics*, 34, S2–S6.
- Székács, A. (2017). Environmental and ecological aspects in the overall assessment of bioeconomy. *Journal of Agriculture and Environmental Ethics*, 30, 153–170. <https://doi.org/10.1007/s10806-017-9651-1>.
- Tienhaara, K. (2014). Varieties of green capitalism: Economy and environment in the wake of the global financial crisis. *Environmental Politics*, 23(2), 187–204.

- Tomaselli, M. F., Hajjar, R., Ramòn Hidalgo, A. E., & Fernández, V. (2017). The problematic old roots of the new green economy narrative: How far can it take us in reimagining sustainability in forestry? *International Forestry Review*, 19(1), 1–13.
- UNEP (United Nations Environment Programme). (2011). *Towards a Green Economy: pathways to Sustainable Development and Poverty Eradication*. www.unep.org/greeneconomy
- USA (United States of America). (2012). National bioeconomy blueprint. *Industrial Biotechnology*, 8, 97–102. <https://doi.org/10.1089/ind.2012.1524>.

Green/Environmental Supply Chain Management

► Sustainable Chain Management

Greenbury Report (UK)

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Synonyms

Director Remuneration; Remuneration Report

Definition/Description

The *Greenbury Report on Directors Remuneration* (1995) (hereafter called the *Greenbury Report*) was one of the first comprehensive governance codes directly addressing executive and director remuneration. The *Greenbury Report* was commissioned by the Confederation of British Industry in response to public concerns over recently privatized public utilities and the salaries and bonuses earned by executives, while they implemented job cuts, and service price increases. The *Greenbury Report* recommended an independent remuneration committee, linking executive

pay to corporate financial and operational performance measures, and increased the requirements for disclosure and transparency on directors' remuneration. However, the credibility of the *Greenbury Report* was challenged due to the composition of the group; it was not deemed to be independent of the sector it was to investigate, and it was argued that its recommendations did not go far enough.

The financial crisis of 2008 highlighted the failure of the *Greenbury Report's* recommendations for limiting excessive executive pay. In particular, the *Walker Review of the Banking Sector* found that performance-based bonus schemes in banking corporations that are supposed to align executive objectives with shareholder objectives increased corporate risk in the period leading up to the financial crisis. In addition, during the crisis, executive pay in large publicly listed corporations (PLCs) continued to increase, while workers' wages stagnated. Therefore, despite Greenbury's recommendations, executive pay continued, and still continues, to be a concern for the public and policymakers alike. Nonetheless, improved transparency on remuneration and a greater linking of pay to performance followed from the *Greenbury Report* and most corporations now include operational measures linked to performance and sustainability.

Introduction: The Problem of Excessive Executive Pay

Corporate governance mechanisms are traditionally seen as devices for reducing agency costs between shareholders and managers. These costs arise from mismatched incentives, information asymmetry, and a belief that executives are self-serving at the expense of shareholders. However, the role of governance is changing. Regulators and governments are increasingly employing governance tools that impose public responsibilities on corporations, including measures that seek to equalize wealth distribution, promote workforce diversity and equality, and pursue environmental objectives (Choudhury and Petrin 2018). The result of this is that executive pay, particularly in PLCs, is deemed to be of interest to a society at large as the public, either directly through

individual shareholdings or indirectly via institutional investors such as pension schemes, invested in them. Therefore, stakeholder theory argues that the public's interests should be protected by the board and not sacrificed for executive rewards. The public is interested in the sustainability of corporations, as this ensures economic stability, a strong financial sector, and employment. Recent corporate failures have increased the public's concern about financial performance-based pay packages that incentivize excessive risk-taking. Further public concerns have also arisen due to actions taken by corporations in response to the financial crisis. For example, many corporations implemented freezes on workers' wages and started to employ workers on a casual basis, using zero-hour contracts. The growth of these contracts have raised broader societal issues of distributive justice and fairness (Villiers 2010), particularly as these austerity measures were not typically applied to executive pay packages.

Background to the Greenbury Report

The *Cadbury Report on Financial Aspects of Corporate Governance* (1992) included recommendations on executive pay and the establishment of a remuneration board subcommittee. Within 2 years of the *Cadbury Report*, excessive executive pay again became a hot issue as politicians highlighted recent utility privatizations that created 50 millionaires among the executives. A key media focus was the 75% pay increase for the chairman of British Gas, Cedric Brown, which resonated with a society suffering from high unemployment, resulting in demonstrations from the public and small shareholders at the corporation's annual general meeting (Jones and Pollitt 2002). The issue was highly embarrassing to a government that made utility privatization one of its key policy objectives. The government approached the Confederation of British Industry to investigate the matter. It subsequently appointed Sir Richard Greenbury, Chairperson and CEO of Marks and Spencer, to investigate and produce a report and recommendations.

The terms of reference of the *Study Group on Directors' Remuneration* (hereafter called the "Group") were "to identify good practice in determining directors' remuneration and prepare a code of such practice for use by UK PLCs" (Greenbury 1995, p. 9). Directors and boards of large PLCs were the focus of the Group though the *Greenbury Report* highlighted that the principles also applied to smaller listed corporations and to other senior executives. The aim of the Group was not necessarily to reduce executive pay, rather to provide a means of establishing a balance between executives' pay and their performance and enhancing accountability and transparency on executives' pay. The final *Greenbury Report* was produced in 1995 and focused on providing recommendations in four main areas, including:

- Remuneration committees
- Remuneration policy for executive and non-executive directors
- Service contracts and compensation on termination
- Disclosure

These are now discussed in turn.

Remuneration Committees

The *Greenbury Report* recommends all PLCs establish a remuneration committee as a subcommittee of the board and that it be assigned full responsibility for all matters relating to executive pay. Where this is not done, the board must explain why and outline the alternative arrangements which have been put in place in the annual report. The intention for the creation of remuneration committees was to prevent executives from designing their own pay packages.

The *Greenbury Report* recommends that the remuneration committee: has a clearly defined terms of reference that ensures there is a corporation-wide policy on remuneration; determines individual remuneration packages for each executive; and reports directly to shareholders on all matters relating to executive remuneration. The *Greenbury Report* recommends that membership

of the remuneration committee should comprise only non-executive directors as they have no direct personal financial interest in executive remuneration. In addition, membership is not to include directors with other executive directorships, as this could result in the bidding up of one another's remuneration. The remuneration committee members are to have a good knowledge of the corporate and its executive directors and a full understanding of shareholder concerns. As a result, Greenbury rejected proposals that the remuneration committee include independent members from outside of the corporation as they would lack the recommended level of knowledge. However, this was deemed to be a weakness as a way around this could have been included, such as ensuring that appropriate training or access to relevant expert advice is provided to the remuneration committee. The *Greenbury Report* recommends that a minimum of three directors make up membership of the remuneration committee in large corporations. Finally, the report recommends that the fees of non-executive directors, some of whom will be members of the remuneration committee, are determined by the whole board.

Remuneration Policy

The underlying basis for the remuneration policy outlined in the *Greenbury Report* is that executive remuneration should be sufficient to attract and retain the appropriate executive talent though avoiding paying more than is necessary for this purpose. To determine the appropriate remuneration, the *Greenbury Report* recommends the remuneration committee identify an appropriate comparator group of corporations and investigate how performance and remuneration are linked in those corporations and how pay is divided between the various fixed elements, such as basic salary, benefits in kind, and variable elements, such as annual bonus and long-term incentives. The *Greenbury Report* identifies a role for both annual bonuses and long-term incentive schemes to encourage and reward executive performance. It is recognized that the mix of rewards

based on short-term and long-term indicators will vary between corporations and are established by the remuneration committee; however, the *Greenbury Report* does emphasize that bonuses are based on financial or operational measures that are "relevant, stretching and designed to enhance the business" (*The Greenbury Report*, 1995, p. 39). Similarly, the report recommends that long-term incentive schemes, including share option schemes, are payable only where stringent performance criteria are met, criteria that measure some aspect of the corporate's performance. Bonuses paid partly in the form of shares should be held for a minimum period of time, to create a long-term focus for the executives and to align their interests more closely with shareholders. A well-designed scheme should ensure that any "windfall gains" are aligned with actual improvements in corporate performance. Finally, the *Greenbury Report* highlights that performance targets need not be restricted to financial measures. They can include "operational" measures of performance, for example, quality or customer service. This recognition of nonfinancial performance measures enables remuneration committees to include sustainability targets such as reducing emissions in performance-based remuneration packages.

For non-executive directors, the *Greenbury Report* recommends fixed fees based on time required for the role. It also counsels against setting remuneration that is linked to performance. It is argued that a fixed fee structure is more likely to maintain independence. This indicates a stewardship view of the role of non-executive directors and contrasts with the stance taken in the *Greenbury Report* for executive remuneration which is firmly set in an agency framework.

Service Contracts

The *Greenbury Report* recommends that director service contracts are on a 1-year basis, to avoid large termination payments due to early termination of 3- to 5-year contracts. Payments for contract termination are not to be included in employment contracts and, should be negotiated

if the situation arises and reflect the reasons for the termination. Poor performance is not rewarded with a generous exit package, and compensation payments should be phased, rather than awarded as a lump-sum. These payments should cease when the director secures new employment.

Disclosure

To improve accountability and transparency on remuneration, the *Greenbury Report* requires full disclosure of information on all aspects of executive remuneration. The primary method of disclosure is the *Report of the Remuneration Committee* included in a company's annual report. The remuneration committee report will outline the corporate's general policy toward executive remuneration and provide detailed information on the actual remuneration packages of the individual executives and the breakdown per executive of the elements of the packages. The remuneration committee report should also outline the measures of performance used to determine rewards, how these relate to the long-term corporate objectives, and how rewards are linked to the measures themselves. In addition, details on the composition of the comparator groups and how they have performed are to be included.

To further align shareholder and executive interests, the *Greenbury Report* recommends that corporations seek a non-binding, advisory vote from shareholders on long-term incentive schemes. However, the *Greenbury Report* did not recommend a vote on the remuneration committee report or the full executive pay details.

Criticism of the Greenbury Report

The Confederation of British Industry, the Institute of Directors, and political opposition criticized the *Greenbury Report* and commented that it had not gone far enough in regulating business behavior (Jones and Pollitt 2002, p. 21). The main criticisms of the *Greenbury Report* are now outlined in brief.

It was claimed that a weakness underlying the *Greenbury Report* was that it was a reactive report,

commissioned in response to public criticisms of remuneration packages enjoyed by executives in recently privatized utility corporations. Yet despite being commissioned in response to the behavior of executives in setting their own pay in utility corporations, interim reports did not address utility corporations, although this was rectified in the final report (Jones and Pollitt 2002).

It was argued that the *Greenbury Report* promoted a tick-box approach to good governance and executive remuneration. It enabled corporations, considered to have "excessive" executive compensation packages, to claim best practice by complying with the recommendations in the *Greenbury Report*. For example, British Gas, one of the corporations whose behavior led to the commissioning of the report, claimed it was at the leading edge of best practice simply because it disclosed its policies (Jones and Pollitt 2002, p. 21)!

Weaknesses were also documented in respect of its recommendations. The focus on the "knowledge of the corporation" as the basis for excluding external members from the remuneration committee implicitly excludes newly appointed directors, yet newly appointed directors are arguably the most independent. Thus, there is an implicit trade-off between director independence and knowledge of the corporation. This conflict could have been eliminated had the *Greenbury Report* recommended that the remuneration committee seek counsel from external expert advisors and external consultants. New directors would not be eliminated from being members of the remuneration committee as they could gain advice from these experts when required. The inclusion of external remuneration advisors was later recognized in the revised Combined Code 2003, and the use of external experts is now a common practice. There is no guidance on how remuneration committees can deal with potential challenges and conflicts in the *Greenbury Report*.

It was argued that the *Greenbury Report* and working group were self-serving, consisting mostly of executives who benefitted from the status quo and were unlikely to recommend any radical new proposals (Jones and Pollitt 2002; Price 2016). The Group lacked representation from and engagement with other stakeholders,

such as small shareholders, employees, customers, and the media whose voices led to the creation of the Group (Jones and Pollitt 2002, pp. 19–20). For example, the *Greenbury Report* required that the remuneration committee have an “understanding of shareholder concerns”; however, shareholders had limited involvement with the working group that was established to review executive remuneration, and specific procedures for gaining an understanding of shareholder concerns were not included. The Group defended their decision not to include measures such as “say-on-pay” in the *Greenbury Report* as shareholders already had opportunities to raise their concerns at corporate annual general meetings (*The Greenbury Report*, 1995, pp. 32–33). However, the Group failed to consider the rights of small shareholders whom had demonstrated outside the British Gas annual general meeting as they did not feel listened to by the board or by the large institutional shareholders. This failure to consider shareholder views on executive pay was tackled by legislators in 2002, when UK corporate law introduced a requirement that corporates conduct an advisory “say-on-pay” at the annual general meeting (Petrin 2015).

It was argued that the publication of pay and benchmarking remuneration policy against comparator corporates could have had an inflationary effect on executive pay (Hughes 1996). With respect to benchmarking, there was limited guidance on what corporates should be included in the comparator group, leaving it open to manipulation by unscrupulous executives.

There were no financial incentives provided in the *Greenbury Report* for non-executive directors, yet non-executive directors would comprise the remuneration committee and set the remuneration policy. Further, it was noted that the recommendation for flat fees for non-executive roles was not supported by evidence (Hahn 2006; Hahn and Lasfer 2010). Indeed, it was claimed that flat fees could have negative consequences as they could relieve non-executives from the burden of responsibility for financial loss as a result of their errors. Moreover, Hahn (2007) reported no association between attendance at meetings and non-executive director fees and concluded that flat fees do not encourage effort.

Despite these weaknesses, there was a significant improvement in the quality and quantity of disclosures relating to directors and executive remuneration following the *Greenbury Report*. However, it is claimed that the increased disclosure and transparency did not translate into the desired results, as remuneration disclosure often lacked clarity on the relationship between performance and rewards (Petrin 2015). In addition, most remuneration committees were not independent, and few corporations gave their shareholders a vote on pay, despite shareholder concerns about executive compensation (Petrin 2015).

Summary

Prior to the *Greenbury Report*, the absence of reporting requirements on remuneration committees resulted in opaque remuneration decisions that were difficult to challenge. The *Greenbury Report* and subsequent measures, that target the pay-setting process, have demonstrated that governance can improve the regulation of executive pay. In addition, it is claimed that the links between pay and performance have improved (Petrin 2015; Ndzi 2016). The *Greenbury Report* also introduced the option of nonfinancial performance measures which most corporations now include in the determination of executive pay. Indeed, several studies have found an increasing use of sustainability targets in executive incentive schemes (Abdelmotaal and Abdel-Kader 2016; Clarke 2013; Labini et al. 2019). Thus, investors can identify corporates committed to the long-term interests of shareholders and society by assessing their remuneration policies.

However, despite the improvements in transparency and accountability, the 2008 global financial crisis revealed it was still possible for executives to receive immense salaries and bonuses while running up toxic debts and unsustainable levels of risk in the corporations they governed. Thus, shareholders continued to be exposed to unacceptable levels of risk associated with excessive executive pay. Moreover, it is now evident that corporate failure does not only impact on shareholder wealth. The economic fallout in the aftermath of the financial crisis verified

how important the financial industry and corporate success is to society at large.

The principle established in the *Greenbury Report*, that corporate boards are best suited to determine their directors' remuneration, still stands. However, leaving executive pay to boards, the continued existence of gray areas and a lack of enforcement procedures tends to lead to ever-increasing executive pay and the associated risks not only to shareholders but to society.

Cross-References

- [Agency Theory](#)
- [Corporate Activism](#)
- [Executive Remuneration and CSR](#)
- [Governance](#)
- [Higgs Report \(UK\)](#)
- [Social Justice](#)
- [Stakeholder](#)
- [Stakeholder Theory](#)
- [Walker Review \(2009\) on Banks' Corporate Governance](#)

References

- Abdelmotaal, H., & Abdel-Kader, M. (2016). The use of sustainability incentives in executive remuneration contracts: Firm characteristics and impact on the shareholders' returns. *Journal of Applied Accounting Research*, 17(3), 311–330.
- Choudhury, B., & Petrin, M. (2018). Corporate governance that 'works for everyone': Promoting public policies through corporate governance mechanisms. *Journal of Corporate Law Studies*, 18(2), 381–415.
- Clarke, T. (2013). Deconstructing the mythology of shareholder value: A comment on Lynn Stout's "the shareholder value myth". *Accounting, Economics and Law*, 3(1), 15–42.
- Greenbury, R. (1995). *Directors' remuneration: Report of a Study Group*. [Greenbury report]. London: Gee Publishing Ltd..
- Hahn, P. D. (2006). How not to pay your outside directors: Determinants of non-executive director remuneration in the UK. In *European Financial Management Association Annual Meeting* (pp. 1–48). London: European Financial Management Association.
- Hahn, P. D. (2007). *Vanishing Board Meetings: Has Governance Doomed the Board Meeting?* 4th annual conference on Corporate Governance & Internal Audit. Birmingham.
- Hahn, P. D., & Lasfer, M. (2010). The compensation of non-executive directors: Rationale, form, and findings. *Journal of Management and Governance*, 15(4), 589–601.
- Hughes, J. J. (1996). The Greenbury report on directors' remuneration. *International Journal of Manpower*, 17(1), 4–9.
- Jones, I. W., & Pollitt, M. G. (2002). Who influences debates in business ethics? An investigation into the development of corporate governance in the UK since 1990. In I. W. Jones & M. G. Pollitt (Eds.), *Understanding how issues in business ethics develop* (pp. 14–68). London: Palgrave Macmillan.
- Labini, S. S., Iannuzzi, A. P., & D'Apolito, E. (2019). "Responsible" remuneration policies in banks: A review of best practices in Europe. In M. La Torre & H. Chiappini (Eds.), *Socially responsible investments* (pp. 5–36). Cham: Palgrave Pivot.
- Ndzi, E. (2016). Directors' pay regulation: "One goal two approaches". *International Journal of Law and Management*, 58(3), 337–352.
- Petrin, M. (2015). Executive compensation in the United Kingdom – Past, present, and future. *The Company Lawyer*, 36, 195.
- Price, M. J. (2016). *A retrospective on the Greenbury provisions*. Newcastle upon Tyne: University of Newcastle.
- Villiers, C. (2010). Controlling executive pay: Institutional investors or distributive justice? *Journal of Corporate Law Studies*, 10, 309.

Green-Collared Jobs

- [Green Jobs](#)

Greenhouse Effect

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Synonyms

[Climate change](#); [Climatic warming](#); [Global warming](#)

Definition

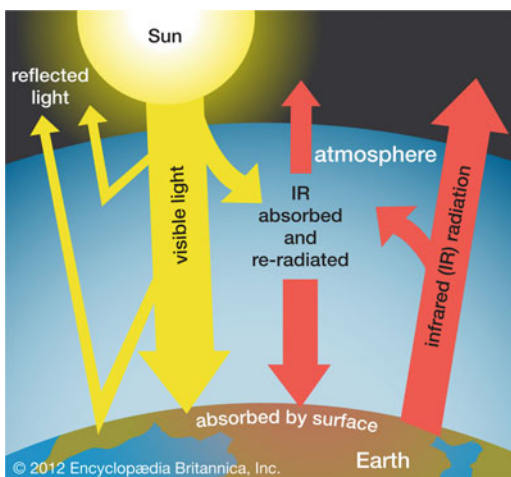
The greenhouse effect is the natural process of warming of the earth surface. When infrared radiations from the sun reaches the earth, some of these radiations are reflected back into space while the rest is absorbed and re-radiated by atmospheric gases called greenhouse gases (see Fig. 1). This phenomenon is generally referred to as the greenhouse effect (Lallanila 2018). Life on earth depends on energy from the sun and about 30% of the sunlight that beams toward earth is deflected by the outer atmosphere and scattered back into the space. The remaining 70% reaches the earth's surface and is reflected back again as a type of slow-moving energy called infrared radiation (Khan 2017); the heat produced as a result of this infrared radiation is naturally trapped by the greenhouse gases (GHGs) – carbon dioxide, methane gas, water vapor, etc., thereby keeping the earth warm enough for living organisms to survive. However, in recent times and due to overwhelming effects of global civilization and industrialization, human activities have led to surge in the concentration of these GHGs in the atmosphere, in excess of their threshold concentrations, thereby leading to rise in temperature and warming of the planet earth – otherwise known

as global warming. This human-induced greenhouse effect has also resulted into significant changes in the climatic conditions of the different regions of the world. The temperate region of the world is characterized with a rise in sea level, frequent flooding, hurricanes, and tornadoes, while the tropical region experiences incremental rise in temperature leading to a drastic fall in sea level, water scarcity, more famines, and spread of diseases (Olaoye et al. 2017). According to information provided by the Intergovernmental Panel on Climate Change (IPCC), the increase of anthropogenic GHGs emission have been greatly intensified by human activities, such as burning of fossil fuels, industrialization, deforestation, and land degradation (IPCC 2018).

Introduction

The famous Swedish chemist Svante Arrhenius has coined the term “greenhouse effect” at the turn of the century and it simply implies the capture of heat from the atmosphere by greenhouse gases such as water vapor, methane, and carbon dioxide; these gases are naturally present in the earth's atmosphere (Gedzelman 2016). The greenhouse effect can either be natural or human-induced; the natural greenhouse effect takes place due to the presence of naturally occurring greenhouse gases which help to keep the earth at a temperature that is suitable for survival. This phenomenon is equally important in pulling the average global temperature up; without the effect of this natural greenhouse gases, the average earth's temperature would have been -18°C which is far below freezing temperature of water. On the contrary, the induced greenhouse effect is as a result of the increase in concentration of these greenhouse gases beyond their respective threshold values within the planet earth; this is most times due to the imbalances between carbon source (emission of gases from human activities and natural systems) and carbon sink (removal of greenhouse gases from the atmosphere) (Lallanila 2018; Khan 2017).

Since the industrial revolution, human activities such as the burning of fossil fuels (coal, oil, and



Greenhouse Effect, Fig. 1 The greenhouse effect. (Source: Encyclopædia Britannica 2020)

natural gas) have caused the release of tremendous amount of CO₂ into the atmosphere; however, forests which have served the earth as carbon sink has been overly degraded leading to the buildup of carbon concentration in the atmosphere and capture of excess heat – global warming. This human-induced greenhouse effect is likely to significantly alter the global climate, with serious consequences for the human survival especially in the developing countries (Matemilola et al. 2019a). Arrhenius had estimated in the nineteenth century that if burning fossil fuels caused atmospheric CO₂ levels to double, global temperatures could rise by 5 °C. Similarly, it has been estimated that the average global surface temperature could be about 1–2 °C higher than the current temperature (Gedzelman 2016).

Carbon dioxide appears to be the most common greenhouse gas; however, several other gases emitted by human activities also have greenhouse effects such as methane (CH₄), water vapor (H₂O), chlorofluorocarbons (CFC), nitrous oxide (N₂O), ozone (O₃), and carbon tetrachloride (Ramanathan et al. 1985). Though the most abundant gases in the atmosphere are nitrogen and oxygen, these are diatomic compounds and do not contribute to the greenhouse effect. Methane is estimated to be 21 times more powerful than carbon dioxide with an atmospheric lifespan of approximately 12 years. Nitrogen oxide is 310 times more potent as a greenhouse gas than carbon dioxide and has an atmospheric life span of 120 years. It is also important to note that methane and carbon dioxide are widely emitted when burning fossil fuels and that nitrogen oxide is generated during agricultural activities as well as when burning solid waste, while gaseous fluorides mainly come from industrial activities (National Research Council 2001; Olaniyi et al. 2014; Ramanathan et al. (1985).

Impact of Greenhouse Effect on the Environment

Global Warming

Increasing the concentration of greenhouse gases decreases the outgoing infrared radiation and as a result of this anomaly, the earth's climate changes

to restore the balance between incoming and outgoing radiation (EPA 2017). To achieve this balance, the excess heat warms up the earth's surface and the lower atmospheres thereby leading to an increase in the average temperature of the planet earth. This temperature increase causes faster evaporation on land. Many dry areas, including the western part of America, Southern Africa, India, and Australia, are experiencing more severe droughts. The amount of land on the earth suffering from drought conditions has doubled since 1970. This has occurred even as total global rainfall has increased by an estimated 10% (Khan 2017; Matemilola et al. 2019a). Furthermore, Latake et al. (2015) reported that global average surface temperature is likely to increase by 1.4 °C to 5.8 °C by the end of 2100. This projection takes into account the effects of aerosols which tend to cool the climate as well as the delaying effects of the oceans which have a large thermal capacity. However, there are many uncertainties associated with this projection such as future emission rates of greenhouse gases, climate feedbacks, and the size of the ocean delay (Latake et al. 2015).

Sea Level Rise

The impacts associated with human-induced greenhouse effect are directly and indirectly linked. For example, if global warming continues as a result of increase in the earth's average temperature, the sea level will continue to rise due to two different phenomena – melting of from polar sheet/mountain glaciers and thermal expansion of sea water (Latake et al. 2015; Warrick and Farmer 1990). Latake et al. (2015) affirmed the prediction that the earth's average sea level will likely rise by 0.09–0.88 m between 1990 and 2100.

Potential Impact on Human Life

A measurable rise in sea level will have a serious economic impact on low coastal areas and islands, for example, increasing the rates of beach erosion along the coasts and increasing sea level by squeezing fresh groundwater for a considerable interior distance (EPA 2017; Karl and Trenberth 2003). The effect of global warming can affect the general circulation of the atmosphere and thus modify the pattern of global precipitation as well

as the soil water content on several continents. The loss of coastal wetlands could certainly reduce fish populations, especially crustaceans. While global precipitation is expected to increase, it is unclear how regional rainfall patterns will change. In some areas, there may be more precipitation, while in others, there may be less. In addition, higher temperatures would likely increase evaporation. These changes would likely create new tensions for many water management systems (Latake et al. 2015).

Summary

Greenhouse effect occurs due to the presence of water vapor, carbon dioxide, methane, and some other gases, referred to as greenhouse gases in the earth's atmosphere. Of these greenhouse gases, water vapor is the most potent and is responsible for about 60% of the total greenhouse effect, while carbon dioxide is the most abundant and the standard for measuring the global warming potential (GWP) of all other gases. Greenhouse effect occurs naturally but can also be induced by human activities mostly due to the burning of fossil fuels such as coal, oil, and gas.

Cross-References

► Global Warming

References

- Encyclopædia Britannica. (2020). *Greenhouse effect*. Retrieved May 29, 2020, from <https://www.britannica.com/science/greenhouse-effect>
- EPA. (2017, February 14). *Understanding global warming potentials*. United States Environmental Protection Agency. Retrieved from <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>
- Gedzelman, S. D. (2016). Is global warming good, or was Arrhenius erroneous? *Weatherwise*, 70(1), 30–39. <https://doi.org/10.1080/00431672.2017.1248744>.
- IPCC. (2018). Global warming of 1.5°C. In V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. Shukla, ... T. Waterfield (Eds.), *An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change*. Geneva: Intergovernmental Panel on Climate Change.
- Karl, T. R., & Trenberth, K. E. (2003). Modern global climate change. *Science*, 302(5651), 1719–1723. <https://doi.org/10.1126/science.1090228>.
- Khan, M. Z. (2017). Causes and consequences of greenhouse effect & its catastrophic problems for earth. *International Journal of Sustainability Management and Information Technologies*, 3(4), 34–39. <https://doi.org/10.11648/j.ijsm.20170304.11>.
- Lallanila, M. (2018). What is the greenhouse effect? *Live Science*. Retrieved from <https://www.livescience.com/37743-greenhouse-effect.html>
- Latake, P. T., Pawar, P., & Ranveer, A. C. (2015). The greenhouse effect and its impacts on environment. *International Journal of Innovative Research and Creative Technology*, 1(3), 333–337.
- Matemilola, S., Adedeji, O. H., Elegbede, I., & Kies, F. (2019a). Mainstreaming climate change into the EIA process in Nigeria: Perspectives from projects in the Niger Delta region. *Climate*, 7(2), 29.
- Matemilola, S., Elegbede, I. O., Kies, F., Yusuf, G. A., Yangni, G. N., & Garba, I. (2019b). An analysis of the impacts of bioenergy development on food security in Nigeria: Challenges and prospects. *Environmental and Climate Technologies*, 23(1), 64–84. <https://doi.org/10.2478/rtuect-2019-0005>.
- National Research Council. (2001). *Climate change science: An analysis of some key questions*. Washington, DC: National Academies Press.
- Olaniyi, O., Funmilayo, O., & Olutimhin, I. (2014). Review of climate change and its effect on Nigeria ecosystem. *International Journal of Environment and Pollution Research*, 2(3), 70–81.
- Olaoye, J., Adegite, J., & Salami, H. (2017). Development of a laboratory scale biodiesel batch reactor. *International Research Journal of Engineering and Technology*, 4(12), 1698–1704.
- Ramanathan, V., Cicerone, R. J., Singh, H. B., & Kiehl, J. T. (1985). Trace gas trends and their potential role in climate change. *Journal of Geophysical Research*, 90 (D3). <https://doi.org/10.1029/JD090iD03p05547>.
- Warrick, R., & Farmer, G. (1990). The greenhouse effect, climatic change and rising sea level: Implications for development. *Transactions of the Institute of British Geographers*, 15(1), 5–20. <https://doi.org/10.2307/623089>.

Greenhouse Gas (GHG) Management

► Carbon Management

Greenhouse Gas Emissions

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Synonyms

Carbon emissions; GHG emissions

Definition

Greenhouse gases (GHGs) are those gases in the atmosphere that trap the heat of the sun and make the Earth warmer. This heat trapping property of GHGs is known as greenhouse effect. Greenhouse effect occurs naturally in the atmosphere and is essential to keep the planet warmer for the survival of living beings. The relentless march toward development and industrialization since the time of Industrial Revolution has led to unprecedented increase in GHG emissions in the atmosphere accelerating this greenhouse effect and resulting in rise in Earth's surface temperature. Global warming and the resultant climate change caused by an abundance of GHGs in the atmosphere have become one of the most serious global threats today causing health, ecological, and survival crisis. Their existing and potential impacts include glacier retreat, decline in Arctic sea ice, increasing sea levels, extreme weather conditions, changing crop growth, and altered rainfall and snow patterns. International mechanisms such as IPCC (1988), UNFCCC (1992), Kyoto Protocol (1997), and Paris Agreement (2015) are combined international efforts convened by the United Nations aiming to deal with the situation.

Introduction

"Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific

wavelengths within the spectrum of terrestrial radiations emitted by the Earth's surface, the atmosphere itself and by clouds. This property causes greenhouse effect" (IPCC 2018). This greenhouse effect keeps the Earth warmer without which the Earth would have been too cold to be suitable for living systems. In the past few decades, the burning of fossil fuels in various industrial processes, electricity generation and transportation, extensive clearing of forests for residential and industrial buildings, and other development activities have led to significant increase in the emission of GHGs. The abundance of GHGs in the atmosphere has caused an increase in average global temperature on the Earth leading to substantial climate impacts including the harm to well-being of humans and ecological systems. "Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems" (IPCC 2014b). In the present scenario, it has become inevitable that various countries should work together for international action on adaptation and mitigation so as to reduce GHG emissions and combat climate change.

Main GHGs in the Atmosphere

"Water Vapour (H_2O), carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4) and ozone (O_3) are the primary GHGs in the Earth's atmosphere" (IPCC 2018). Other important GHGs in the atmosphere are "Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆)" (UNEP 2018). These gases are found in lesser quantities but have high global warming potential. The amount of GHG emissions in the atmosphere due to human activities is constantly increasing. In order to control the unprecedented rise in GHG emissions in the postindustrialization period, parties to UNFCCC entered into an agreement at Kyoto, Japan, in 1997, known as Kyoto Protocol. The Protocol set the binding obligations for developed nations to reduce

GHG emissions. During its first commitment period (2008–2012), Kyoto Protocol covered emission of six main GHGs namely, “Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulfur Hexafluoride (SF₆)” (UNFCCC 2020a).

Thus, the key GHGs emitted by human activities are the following:

- Carbon dioxide (CO₂) – Emissions of CO₂ naturally occur in the atmosphere as part of the carbon cycle through animal and human respiration, ocean and other atmospheric changes. The burning of fossil fuels for different human activities is the main source of CO₂. A number of industrial processes (such as chemical process, cement production), commercial activities (such as heating), or residential activities (such as cooking, electricity use, and waste disposal) lead to emission of CO₂ in the atmosphere. Deforestation, clearing of land for agriculture and other uses, and degradation of soil also cause increased concentration of CO₂ in the environment.
- Methane (CH₄) – Methane is also a substantial component of the natural gases and is related with all hydrocarbon fuels. Emissions of methane are also associated with agricultural activities, animal husbandry, waste management, energy use, and biomass burning.
- Nitrous oxide (N₂O) – N₂O is released naturally from a number of biological sources in soil, water, and forests. Significant amounts of N₂O emissions also take place during agricultural activities, waste water treatment, combustion of fossil fuel, fertilizer utilization, and chemical processes in the industry.
- Fluorinated gases (F-gases) – F-gases include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These result from a variety of industrial and manufacturing processes, refrigerants, and other human activities. F-gases are emitted in smaller quantities than the other GHGs, but they have high potency and lifespan in the atmosphere and are often referred to as high global warming potential (GWP) gases.

Though there are many GHGs in the atmosphere, Carbon dioxide is the main GHG accounting for more than three-fourth of total GHGs (Olivier et al. (2017)). According to IPCC report on climate change, “CO₂ emissions from fossil fuel combustion and industrial processes contributed about 78% to the total GHG emissions increase from 1970 to 2010, with similar percentage contribution for the period 2000–2010” (IPCC 2014a). Therefore, GHG emissions are usually measured in terms of their carbon dioxide equivalent. “In order to convert emissions of a GHG into CO₂ equivalent, these emissions are multiplied by the GHG’s Global warming potential (GWP)” (US, EPA 2019a). Each GHG’s effect on global warming (GWP) depends upon its concentration in the atmosphere, its life in the atmosphere, and the intensity with which it can impact the warming of the planet.

Sources of GHG Emissions

“GHG emissions can also be categorized into Biogenic and anthropogenic types” (IPCC 2018). While biogenic emissions are caused by natural biological processes like decomposition of vegetative matter, human activities such as burning of fossil fuels, deforestation, etc. lead to anthropogenic emissions. The primary sources of anthropogenic GHG emissions are the following (US, EPA 2019b), Olivier et al. (2017):

1. Transportation: This sector includes movement of people and goods through various means of transport. Burning of fossil fuels (mainly petroleum-based fuels) for running cars, airplanes, ships, etc. is one of the main sources of GHG emissions. GHG emissions from combustion of petroleum-based products result in emission of mainly CO₂. Small amounts of methane and other gases are also emitted during fuel combustion.
2. Electricity generation: Electricity generation involves burning of fossil fuels such as coal and natural gas leading to the emission of a lot of CO₂ and a smaller amount of other GHGs. Some GHG emissions take place during

transmission and distribution of electricity. At the time of electricity end-use also, some emissions take place.

3. Industrial and mining activities: Various industrial activities require burning of fossil fuels for energy which leads to GHG emissions. In addition, chemical processes used in industry and leaks from various processes also contribute to GHG emissions.
4. Commercial and residential activities: Different commercial and industrial activities such as heating, cooking, waste management, and disposal lead to the release of GHGs. Leaks from air conditioners and refrigerators are also a source of GHG. Waste water management contributes to methane and NO₂ release.
5. Agricultural activities: GHG release from this sector comes from livestock, crop production, and other activities. Livestock produce a large amount of methane when digesting food. Manure from livestock also contributes to methane and NO₂ emissions.
6. Land use and forestry: Forests help in regulating the climate by absorbing CO₂ from the atmosphere (sinks). Due to massive deforestation and altered land use, this positive effect is lost. In addition, when trees are cut, the carbon stored in them is released leading to high concentrations of CO₂ in the atmosphere.

Thus, human activities are affecting the natural carbon cycle both ways. On the one hand, activities such as burning of fossil fuels or various agricultural and industrial activities are adding more and more GHGs in the atmosphere; on the other hand, deforestation and altered land use are affecting the capacity of natural sinks to absorb CO₂ from the atmosphere.

According to US EPA, in 2017, main sources of GHG emissions in the USA included the following:

Source	Percentage of total GHG emissions in USA in 2017 (%)
Transportation	28.9
Electricity production	27.5
Industry	22.2

(continued)

Source	Percentage of total GHG emissions in USA in 2017 (%)
Commercial and residential	11.6
Agriculture	9
Land use and forestry	11.1

Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2017. Retrieved from US, EPA (2019b)

GHG Emissions by the Economic Sector

GHGs can also be segregated on the basis of economic activities that result in their emissions. According to a report by IPCC, the following were the main sectors responsible for global GHG emissions in 2010:

Economic activity	Percentage of 2010 global GHG emission (%)
Electricity and heat production	25
Industry	21
Agriculture, forestry, and other land use	24
Transportation	14
Buildings	6
Other energy	10

Source: IPCC (2014b). Retrieved from US, EPA (2019c)

“Since 1970, CO₂ emissions have increased by about 90%. Seventy-eight percent of the total GHG emission increase from 1970 to 2011 has resulted from combustion of fossil fuels and other industrial processes. Agriculture, deforestation and other land use changes have been second largest contributors” (IPCC 2014b).

Global GHG Emissions by Country

According to UNEP (2018), “the top four emitters of GHGs are China, the USA, EU28, and India. These together contributed to 56% of total GHG emissions over the last decade. In 2017, while China was responsible for 27% of total global GHG emissions, EU’s share in the global GHG emissions was 9% and the USA accounted for

13% of total global emissions. Due to its huge population, India's share in GHG emissions was 7.1%, though its per capita emissions were low". "While the top 3 emitters (China, the EU and USA) together- accounted for about half of the total GHG emissions, the bottom 100 countries contributed only 3.5%" (Friedrich et al. 2017).

Combating Climate Change: Mitigation and Adaptation

Climate change is one of the major global problems today. To deal with this problem, an urgent need was felt for policies at regional, national, and international levels. Since the late 1980s, the United Nations is making concerted efforts to bring together different countries in dealing with the problems caused by GHG emissions, global warming, and the resultant climate change. IPCC (1988), UNFCCC (1992), Kyoto Protocol (1997), and Paris Agreement (2015) are some of the combined efforts led by the United Nations which indicate increasing mitigation potential and suggest cost-efficient mitigation measures. In 2015, countries reached a landmark agreement at Paris with the main aim of strengthening the global responsibility to deal with the threat of climate change. The Paris agreement set the target of "keeping the global temperature rise in this century well below 2 °C above the pre-industrial levels and to pursue efforts to limit the temperature further to 1.5 °C" (UNFCCC 2020b). In order to achieve the targets set in the Paris Agreement, countries are required to strengthen their Nationally Determined Contributions (NDCs) and enhance the effectiveness of their domestic climate policies.

Adaptation and mitigation are the two important approaches to deal with GHG emission-related climate change at international level. "Adaptation and mitigation are complementary strategies for reducing and managing the risks of climate change" (IPCC 2014b). Mitigation, in this context, refers to human efforts to reduce the sources of GHGs or to increase the sinks that can absorb them (UNEP 2018).

Various mitigation measures include the following:

- Efficient utilization of fossil fuels during industrial processes, transportation, and electricity generation
- Fuel switching to less carbon-intensive non-fossil fuels such as hydroelectricity, bio-fuels, etc.
- Use of renewable energy sources, such as wind and solar energies which are almost nonemitting
- Conservation of energy at different points mainly at end use
- More efficient use of fossil fuels in electricity generation
- Carbon capturing as a by-product before it enters the atmosphere and its sequestration
- Improving fuel efficiency in transport or machines with advanced design, material, and technology
- Improving operating practices such as regular maintenance of machines, vehicles, etc.
- Reducing travel demand through measures such as work from home, online conferences, etc.
- Recycling
- Training and awareness of employees and public on energy conservation and less emitting practices
- Waste and waste water management
- Reducing leakages from ACs and refrigerators
- Land and crop management such as manure management, livestock management, etc.
- Afforestation to increase sinks to absorb CO₂ from the atmosphere

Summary

Global warming caused by an abundance of GHGs in the atmosphere is leading to unwanted changes in the climate. It has been widely recognized that climate change is one of the most serious challenges faced by the world today endangering the health and survival of living beings on the Earth. "Continued emission of GHGs will cause further warming and long-

lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive and irreversible impacts for people and eco-systems. Limiting climate change would require substantial and sustained reductions in GHGs which, together with adaptations, can limit climate change risks” (IPCC 2014b). Since GHG emissions are mainly caused by burning of fossil fuels, a shift from fossil fuels to nonfossil fuels and renewable energy sources should be the top agenda of various governments. In addition, other mitigation measures such as conservation of energy and water, sustainable transportation, green building, cleaner fuels, sustainable agriculture and industrial activities, reforestation, responsible consumption, and recycling are also required to reduce GHG emissions in the atmosphere. An urgent need is there to reduce the dependence of economic, industrial, and developmental activities on energy use and the resulting GHG emissions.

Cross-References

- Carbon Emissions
- Climate Change
- Global Warming
- Greenhouse Gases
- IPCC
- Kyoto Protocol

References

- Friedrich, J., et al. (2017). This interactive chart explains world's top 10 emitters and how they've changed. Source: <https://www.wri.org/blog/2017/04/interactive-chart-explains-worlds-top-10-emitters-and-how-theyve-changed>. Last retrieved on 30 May 2019.
- IPCC. (2014a). IPCC AR5 climate change 2014: Mitigation of climate change, technical summary. Source: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_technical-summary.pdf. Last retrieved on 14 April 2019.
- IPCC. (2014b). AR5 climate change 2014: Mitigation of climate change. Source: <https://www.ipcc.ch/report/ar5/wg3/>. Last retrieved on 12 April 2019.
- IPCC. (2018). Annexure 1. Glossary in special report on global warming of 1.5 degree celcius. Source: <https://www.ipcc.ch/sr15/chapter/glossary/>. Last retrieved on 20 May 2019.
- Olivier, J. G., et al. (2017). Trends in global CO₂ and total greenhouse gas emissions 2017 report. Source: <https://www.pbl.nl/en/publications/trends-in-global-co2-and-total-greenhouse-gas-emissions-2017-report>. Last retrieved on 30 May 2019.
- UNEP. (2018). The emission gap report. Source: http://wedocs.unep.org/bitstream/handle/20.500.11822/26895/EGR2018_FullReport_EN.pdf?sequence=1&isAllowed=y. Last retrieved on 20 May 2019.
- UNFCCC. (2020a). Kyoto protocol: Targets for the first commitment period. Source: <https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period>. Last retrieved on 20 Oct 2020.
- UNFCCC. (2020b). The Paris agreement. Source: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>. Last accessed on 1 July 2020.
- US, EPA. (2019a). Overview of greenhouse gases. Source: <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>. Last retrieved on 25 May 2019.
- US, EPA. (2019b). Sources of GHG emissions. Source: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>. Last retrieved on 30 May 2019.
- US, EPA. (2019c). Global greenhouse gas emissions data. Source: <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>. Last retrieved on 30 May 2019.

Greenhouse Gas Footprint or Climate Footprint

- Carbon Footprint II

Greenhouse Gases

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Synonyms

GHG

Definition/Description

Greenhouse gases (GHG) are gases which are able to absorb and to emit infrared radiation. Most of

the incoming solar radiation is let in by GHG heating up earth's surface. The heat is emitted from earth's surface as infrared radiation, which is partly absorbed by GHG and thus prevented to escape to space (Ma 1998). This trapping of heat energy is named Greenhouse Effect (see ► [“Greenhouse Effect”](#)). By increasing the amount of atmospheric GHG, as for example water vapor, carbon dioxide, methane, nitrous oxides, and chlorofluorocarbons, which absorb infrared radiation, global temperatures increased within the last century already by around 1 °C (Lindsey and Dahlman 2018) (see ► [“Climate Change”](#)).

Introduction

Gases, which absorb and emit infrared radiation, are named greenhouse gases (GHG) in analogy to a greenhouse. In greenhouses glass plates are permeable for radiation in the visible range (400–800 nm wavelength). Part of the visible radiation is absorbed and transformed into infrared radiation, which cannot permeate through the glass plate, so it is trapped and the interior of the greenhouse is heated up.

Like glass plates, GHG are permeable for incoming solar radiation energy, which is partly absorbed on earth's surface and transformed into infrared radiation (IR). IR is partly directly emitted into space, partly absorbed by GHG. GHG emit part of the absorbed IR radiation back to the surface, which is heated up by the additional radiation (see ► [Greenhouse Effect](#)). Without greenhouse gases, most important water vapor, earth would have a temperature of around −18° instead of around +15 °C (Ma 1998). Naturally occurring greenhouse gases are water vapor, carbon dioxide, methane, nitrous oxide, and ozone (Kondratyev and Varotsos 1996; Montzka et al. 2011). Due to human influence, the proportion of these gases in the atmosphere increased. In addition, non-natural GHG were emitted, which is causing global warming (Montzka et al. 2011). The effect of GHG to global warming depends on the ability to adsorb IR radiation and the life time of the GHG in atmosphere (Myhre et al. 2013).

Since CO₂ is the most important GHG, the global warming potential of other greenhouse gases is usually given in carbon dioxide equivalents (CO_{2e}), means the equivalent of the global warming potential of CO₂ (see ► [“Carbon Emissions,”](#) ► [“Greenhouse Gas Emissions,”](#) ► [“Climate Change”](#)). As unit usually kilogram or metric ton (t) is used (Krey et al. 2014).

Regulations of GHG Emission

In 2015 in Paris a worldwide agreement was achieved, that temperature change should be kept below 2 °C. Additional actions should be taken to keep temperature increase below 1.5 °C (UNFCCC 2015) (see also ► [“Climate Change”](#)). This agreement was preceded by the Montreal protocol 1989 (Heath 2017), which regulated the emission of gases with depletion potential of ozone in the stratosphere (ODS), and the Kyoto protocol (UNFCCC n.d.). In the first period of the Kyoto Protocol, the emission reduction targets for carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) were defined (UNFCCC n.d.). In the Doha amendment, nitrogen trifluoride was added to the list of GHG (UNFCCC 2013).

GHG Regulated by the Kyoto Protocol

Carbon Dioxide

Carbon dioxide CO₂ is occurring naturally as part of the biological and geological carbon cycle (Sundquist 1985). Additional CO₂ is released by human activities, most important combustion of fossil fuels (IEA 2016) (see ► [“Carbon Emissions”](#)). CO₂ has also several applications in industry: In chemical processes, for example, urea production, CO₂ is used as raw material (Behr 1987). CO₂ enriched atmosphere is used in food packaging for increasing conservation of fruits, meat, and other perishables. In fire extinguishers, CO₂ can be applied for class A and B fires (Skaggs 1998). Also the use of CO₂ as

nonflammable refrigerant is discussed (Tsamos et al. 2017) for replacing flammable refrigerants or refrigerants with higher global warming potential as fluorocarbons and hydrofluorocarbons. Nevertheless CO₂ emission caused by industrial applications of CO₂ is up to now negligible compared to the CO₂ emissions caused by burning fossil fuels, steel, and cement production (see ► “Carbon Emissions”).

Methane

Methane CH₄ is occurring naturally as product of anaerobic microbial processes (Schubert 2011) or by “*thermogenic degradation of organic matter in sedimentary rocks*” forming “*the major commercial natural gas reservoirs*” (Etiope and Sherwood Lollar 2013). Small amounts of CH₄ are formed by natural inorganic chemical reactions (Etiope and Sherwood Lollar 2013).

Montzka et al. estimated that two thirds of present total emissions of CH₄ are caused by human activities, most important agriculture, extraction of fossil fuels, and less important waste treatment (Montzka et al. 2011).

CH₄ is the most important component of natural gas (Oyeneyin 2015), an important fossil fuels, which is expected to overtake coal in 2030 (IEA 2018). World natural gas consumption increased from 2516 MBTU to 3752 MBTU in 2017 (IEA 2018) (since composition of natural gas differs for different production sites natural gas is traded internationally in US \$ in per energy unit, given in million British thermal units (MBTU) (BP 2019)).

CH₄ is also used in chemical processes, for example, for production of hydrogen (Wang 2015), which is applied in refining of oil and fertilizer production.

CH₄ has a lifetime of around 9 years in atmosphere and is oxidized by hydroxyl radicals (OH*) to CO₂. Increasing CH₄ ratios in atmosphere are expected to lead to decreasing hydroxyl radicals, which are consumed in this reaction, which leads to a positive feedback mechanism: The more CH₄ is already in atmosphere the longer is the life time of CH₄ in atmosphere (Montzka et al. 2011). Since ozone forms hydroxyl radicals, increasing ozone amounts in the troposphere would on the

other side lead to decreasing CH₄ shares (Su et al. 2012).

According to emission statistics collected by Janssens-Maenhout et al., methane emissions increased from around 12 Gt CO_{2eq} 1970 to ca. 14 Gt CO_{2eq} in 2012 (Janssens-Maenhout et al. 2017, p. 17), which makes methane the greenhouse gas with second highest impact for global warming (see ► “Greenhouse Gas Emissions,” ► “Climate Change”). The share of CH₄ of the total GHG emissions decreased between 1970, when methane had a share of 27%, to 19% in 2012 (Janssens-Maenhout et al. 2017, p. 9). Reason was the shift of developing countries from agricultural societies (with large share of methane emissions) to industrialized economies with increasing fossil CO₂ emissions (Janssens-Maenhout et al. 2017, p. 9).

Nitrous Oxide

Nitrous oxygen N₂O is part of the natural nitrogen cycle (Hofman and Van Cleemput 2004). Applications of N₂O are in medicine as anesthetic (Banks and Hardman 2005) and as propellant in whipped cream (Igoe 2011). Acetylene is combusted at higher temperature if N₂O is provided as oxidants instead of air, which is used for welding and in atomic absorption spectroscopy (Willis et al. 1968). The property of improving combustion can also be used for engines of racing cars (Germane 1985).

Use of fertilizer increases direct emission of N₂O by increasing the amount of reactive nitrogen (Cofman Anderson and Levine 1986). N₂O is also formed as reaction product of nitrogen oxides, which are emitted by combustion of fossil fuels and chemical processes, for example, production of nitric and adipic acid (Montzka et al. 2011).

Montzka et al. estimated in 2011 that around 40% of all N₂O emissions were caused by anthropogenic activities. Emissions of N₂O increased from around 2 Gt CO_{2eq} (1970) to around 6 GtCO_{2eq} (2012) (Janssens-Maenhout et al. 2017, p. 17), which makes it the third most important GHG. Estimated lifetime of N₂O in atmosphere is around 120 years (UNCC 1995). N₂O is very stable in the troposphere. When transported to the stratosphere, it is destroyed by

photocatalytic reactions (Ussiri and Lal 2013). Since N₂O leads to depletion of ozone in stratosphere, it is discussed that it will be the “dominant ozone depleting substance in the 21st century” (Ravishankara et al. 2009). However, up to now it is not listed as ODS in the Montreal protocol and its amendments.

Hydrogen Fluorinated Carbons (HFCs)

Hydrogen fluorinated carbons HFCs were first regulated by Kyoto protocol. They replaced chlorinated fluorinated carbons (CFCs) and hydrogen chlorinated fluorinated carbons (HCFCs) as GHG with ODS (Kuo 2012, p. 25). Of concern is the long life time of HCFCs and HFCs (see also Table 1). Not all of them, which were produced, have been emitted yet but some of them are stored in “banks” reservoirs of produced but not yet released chemicals. “Most chemicals in banks

will ultimately be emitted unless destroyed” (Montzka et al. 2011). Therefore, it is expected that emissions can rise in future. Montzka et al., for example, estimated that 2005 in the USA only 25% of the halocarbons in the bank were accessible for destruction.

In the Kigali amendment to the Montreal protocol, which entered into force 01.01.2019, a fading out of production and use of HFCs has been decided to take place in three phases: “...a group of developed countries starting HFCs phase-down from 2019. Developing countries will follow with a freeze of HFCs consumption levels in 2024 and with a few countries freezing consumption in 2028” (United Nations Environment 2019).

Sulfur Hexafluoride

Most sulfur hexafluoride SF₆ is used as insulating gas in high voltage applications (Kieffell et al.

Greenhouse Gases, Table 1 GHG regulated by the Kyoto Protocol in the first commitment period

Species	Chemical formula	Lifetime in atmosphere (years)	Global warming potential (time horizon) 20 years	Global warming potential (time horizon) 100 years	Global warming potential (time horizon) 500 years
Carbon dioxide	CO ₂	variable §	1	1	1
Methane	CH ₄	12 ± 3	56	21	6.5
Nitrous oxide	N ₂ O	120	280	310	170
HFC-23	CHF ₃	264	9100	11,700	9800
HFC-32	CH ₂ F ₂	5.6	2100	650	200
HFC-41	CH ₃ F	3.7	490	150	45
HFC-43-10mee	C ₅ H ₂ F ₁₀	17.1	3000	1300	400
HFC-125	C ₂ HF ₅	32.6	4600	2800	920
HFC-134	C ₂ H ₂ F ₄	10.6	2900	1000	310
HFC-134a	CH ₂ FCF ₃	14.6	3400	1300	420
HFC-152a	C ₂ H ₄ F ₂	1.5	460	140	42
HFC-143	C ₂ H ₃ F ₃	3.8	1000	300	94
HFC-143a	C ₂ H ₃ F ₃	48.3	5000	3800	1400
HFC-227ea	C ₃ HF ₇	36.5	4300	2900	950
HFC-236fa	C ₃ H ₂ F ₆	209	5100	6300	4700
HFC-245ca	C ₃ H ₃ F ₅	6.6	1800	560	170
Sulfur hexafluoride	SF ₆	3200	16,300	23,900	34,900
Perfluoromethane	CF ₄	50,000	4400	6500	10,000
Perfluoroethane	C ₂ F ₆	10,000	6200	9200	14,000
Perfluoropropane	C ₃ F ₈	2600	4800	7000	10,100
Perfluorobutane	C ₄ F ₁₀	2600	4800	7000	10,100
Perfluorocyclobutane	c-C ₄ F ₈	3200	6000	8700	12,700
Perfluoropentane	C ₅ F ₁₂	4100	5100	7500	11,000
Perfluorohexane	C ₆ F ₁₄	3200	5000	7400	10,700

Source: UNCC (1995)

2016). Other applications are in medicine (Assi and Gregor 2001) and as tracer gas (Calver et al. 2005). It is assumed to be the GHG with the highest global warming potential (see Table 1). Around 80% of SF₆ emissions are caused by use in high voltage applications (Kieffell et al. 2016), where replacement is difficult. At the moment gas mixtures also containing GHG with lower global warming potential or reduced SF₆ contents are discussed as substitutes (Kieffell et al. 2016).

GHG Controlled by the Doha Amendment: Nitrogen Trifluoride

Nitrogen trifluoride NF₃ is used in *“electronics industry, mainly for equipment cleaning, for the etching of microcircuits, and for manufacturing liquid crystal flat panel displays and thin-film photovoltaic cells”* (Weiss et al. 2008). It replaced perfluorinated carbons and it was assumed to be mostly destroyed in these processes (Arnold et al. 2013). Nevertheless measurements in atmosphere showed an increase of NF₃. Due to high life time, it is a very potent GHG (17,200 higher than CO₂) (Alsema et al. 2007). In 2015 it was added in the list of GHG controlled by international protocols (UNFCCC 2013).

GHG Covered by the Montreal Protocol

Emission of gases, which lead to ODS, are addressed in the Montreal protocol and in following amendments, latest the Kigali amendment (Heath 2017). Since these gases, especially chlorofluorocarbons (CFCs), carbon tetrachloride, methyl chloroform, methyl bromide, and halogen alkanes are also potent GHG with long lifetime, reduction of the emission of these gases led also to a reduction of global warming (Montzka et al. 2011). All these gases have no natural sources and emissions of these substances in atmosphere decreased already since the late 1990s from around 9 Gt CO_{2eq} to around 1 Gt CO_{2eq} (Montzka et al. 2011).

CFCs are nontoxic and nonflammable chemicals, which were used in *“manufacture of*

aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerant” (Elkins 1999). They were primarily replaced by HCFCs, which have a lower ODS and lower lifetime (WMO 2010). Now HCFCs are also controlled by the amendments of the Montreal protocol (Montzka et al. 2011). Other substitutes were hydrofluorocarbons (HFCs) (UNCC 1995).

In contrast to CFCs, HCFCs, and HFCs carbon tetrachloride, methyl chloroform, and methyl bromide, used, for example, as solvents, in fire extinguishers and dry cleaning are also toxic and harmful for environment; therefore, their emission should be strictly avoided (Gestis Stoffdatenbank n.d.).

Not Regulated Greenhouse Gases

Water Vapor

Water vapor is assumed to be the largest contributor to the natural greenhouse effect (UNFCCC 2000; Myhre et al. 2013). Its presence in the atmosphere is not directly affected by human activity, since water vapor caused by irrigation and power plant cooling has negligible impact on the water cycle (Myhre et al. 2013), but is controlled by temperature (UNFCCC 2000). *“For that reason, scientists consider it a feedback agent, rather than a forcing to climate change”* (Myhre et al. 2013).

It is estimated that share of water vapor in atmosphere is in average around 5000 ppm (parts per million) (Blasing 2016). Warmer atmosphere will contain more water vapor, so a positive feedback effect by increasing temperature was expected (Rind et al. 1991) (see ► *“Global Climate Change”*). The role of water vapor in climate models is crucial due to its high impact. Water vapor can reinforce the heat absorption (Ma 1998). On the other hand more water vapor can lead to more cloud formation. Clouds have a positive feedback by trapping outgoing thermal radiation, but they increase also the amount of solar radiation reflected back to space (Ma 1998). A positive feedback of increasing water vapor content predicted by early climate

models has already been confirmed by satellite data 1991 (Rind et al. 1991).

Ozone

Ozone O₃ is in the stratosphere an important trace gas, since it absorbs ultraviolet radiation, which otherwise could cause severe damage to living organisms on the Earth's surface (Kondratyev and Varotsos 1996). The primary natural source for ozone in the troposphere is subsidence of stratospheric ozone (Mann 2019). Anthropogenic air pollution leads also to ozone formation by photocatalytic reaction of pollutants as hydrocarbons and carbon monoxide with nitrogen oxides (Andersson-Sköld and Janhäll 1995). The formation of ozone is increased at temperatures above 32 °C, which will occur more often with increasing global temperature (Knowlton et al. 2004). It is a greenhouse gas with high radiative absorption and short life time (Montzka et al. 2011). Due to its low life time, ozone is not considered as a GHG with long lasting effects but as “*near-term climate forcers*” (NTCFs) as those compounds whose impact on climate occurs primarily within the first decade after their emission” (Myhre et al. 2013). On the other side ozone can form hydroxyl radicals by photocatalytic reaction, which reacts with many GHG (Su et al. 2012; Shindell et al. 2009). Tropospheric ozone is also a major irritant to human health and vegetation (Knox et al. 2012).

Summary

In the Kyoto protocol 1997 (UNFCCC n.d.), the Doha-Amendment (UNFCCC 2013) and the Paris Agreement 2015 (UN 2015) emission reduction targets for GHG were set. Additionally GHG with potential to damage the ozone layer were regulated by the Montreal protocol and its amendments.

Carbon dioxide, methane, and nitrous oxide emitted by anthropogenic activities are mainly responsible for the global temperature increase, which was observed in the last century. Water vapor is also a GHG but its content in atmosphere is controlled by temperature, not directly by

human activities. Increase of water vapor in atmosphere due to higher temperature lead to a positive feedback. These GHG are also emitted by natural processes; nevertheless the emissions by mining and burning fossil fuels, agriculture, and other human activities are causing climate change. Other GHG, as hydrofluorocarbons, sulfur hexafluoride, and nitrogen trifluoride are not formed by natural processes. The amount of their emission is low, but since most of them have long life times, their emission lead to long lasting effects on global climate. Ozone is a short lived GHG with high radiative absorption. Increasing amounts of ozone in the troposphere are caused by pollution. But ozone contributes also to formation of hydroxyl radicals which react with GHG, contributing to destruction of other GHG.

Cross-References

- ▶ Carbon Emissions
- ▶ Climate Change
- ▶ Greenhouse Effect
- ▶ Greenhouse Gas Emissions

References

- Alsema, E. A., de Wild-Schoten, M. J., Fthenakis, V. M., Agostinelli, G., Dekkers, H., Roth, K., & Kinzig, V. (2007). Fluorinated greenhouse gases in photovoltaic module manufacturing: Potential emissions and abatement strategies. In *22nd European photovoltaic solar energy conference*, Milan, pp. 1356–1366. <https://dspace.library.uu.nl/handle/1874/27296>. Accessed 25 Aug 2019.
- Andersson-Sköld, Y., & Janhäll, S. (1995). Simulations of ozone formation from different emission sources in Sweden. *Water, Air, and Soil Pollution*, 85, 2045–2050. <https://doi.org/10.1007/BF01186135>.
- Arnold, T., Harth, C. M., Mühle, J., Manning, A. J., Salameh, P. K., Kim, J., Ivy, D. J., Steele, L. P., Petrenko, V. V., Severinghaus, J. P., Baggenstos, D., & Weiss, R. F. (2013). Nitrogen trifluoride global emissions estimated from updated atmospheric measurements. *Proceedings of the National Academy of Sciences of the United States of America*, 6, 2029–2034. <https://doi.org/10.1073/pnas.1212346110>.
- Assi, A., & Gregor, Z. (2001). The use of intravitreal gases in nonvitrectomised eyes. *Eye*, 15, 497–506.

- <https://www.nature.com/articles/eye2001162.pdf?origin=ppub>. Accessed 26 Aug 2019.
- Banks, A., & Hardman, J. G. (2005). "Nitrous oxide" continuing education in anaesthesia. *Critical Care & Pain*, 5, 145–148. <https://doi.org/10.1093/bjaceacp/mki039>.
- Behr, A. (1987). Use of carbon dioxide in industrial organic syntheses. *Chemical Engineering & Technology*, 10, 16–27. <https://doi.org/10.1002/ceat.270100103>.
- Blasing, T. J. (2016). Recent greenhouse gas concentrations. Web. <https://doi.org/10.3334/CDIAC/atg.032>.
- British Petrol (BP). (2019). BP statistical review of world energy 2019. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>. Accessed 20 Aug 2019.
- Calver, A., Holbrook, A., Thickett, D., & Weintraub, S. (2005). Simple methods to measure air exchange rates and detect leaks in display and storage enclosures. *ICOM Committee for Conservation*, 2, 597–609. http://www.cwallor.de/vitrinentest/calver2005_air_exchange.pdf. Accessed 26 Aug 2029.
- Cofman Anderson, I., & Levine, J. S. (1986). Relative rates of nitric oxide and nitrous oxide production by nitrifiers, denitrifiers, and nitrate respirers. *Applied and Environmental Microbiology*, 51, 938–945. <https://aem.asm.org/content/aem/51/5/938.full.pdf>. Accessed 27 Aug 2019.
- Elkins, J. W. (1999). Chlorofluorocarbons (CFCs). In *Environmental geology. Encyclopedia of earth science*. Dordrecht: Springer. https://doi.org/10.1007/1-4020-4494-1_55.
- Etiopie, G., & Sherwood Lollar, B. (2013). Abiotic methane. *Reviews of Geophysics*, 51, 276–299. <https://doi.org/10.1002/rog.20011>.
- Germane, G. J. (1985). *A technical review of automotive racing fuels*. SAE technical paper 852129. <https://doi.org/10.4271/852129>.
- Gestis Stoffdatenbank. (n.d.). http://gestis.itrust.de/nxt/gateway.dll/gestis_de/000000.xml?f=templates&fn=default.htm&vid=gestisdeu:sdbdeu. Accessed 25 Aug 2019.
- Heath, E. (2017). Amendment to the Montreal protocol on substances that deplete the ozone layer (Kigali amendment). *International Legal Materials*, 56(1), 193–205. <https://doi.org/10.1017/ilm.2016.2>.
- Hofman, G., & Van Cleemput, O. (2004). *Soil and plant nitrogen*. Paris: International Fertilizer Industry Association.
- Igoe, R. S. (2011). Part I ingredients dictionary. In *Dictionary of food ingredients* (pp. 3–160). Boston: Springer.
- International Energy Agency IEA. (2016). CO₂ emissions from fuel combustion highlights. https://emis.vito.be/sites/emis.vito.be/files/articles/3331/2016/CO2EmissionsfromFuelCombustion_Highlights_2016.pdf. Accessed 21 June 2019.
- International Energy Agency IEA. (2018). World energy outlook 2018. <https://ethz.ch/content/dam/ethz/special-interest/mavt/process-engineering/separation-processes-laboratory-dam/documents/education/ccs%20notes/World%20Energy%20outlook%202018.pdf>. Accessed 21 Aug 2019.
- Janssens-Maenhout, G., Crippa, M., Guizzardi, D., Muntean, M., Schaaf, E., Olivier, J. G. J., Peters, J. A. H. W., & Schure, K. M. (2017). *Fossil CO₂ and GHG emissions of all world countries*, JRC107877, EUR 28766 EN (p. 17). Luxembourg: Publications Office of the European Union. <https://doi.org/10.2760/709792>. ISBN 978-92-79-73207-2.
- Kieffel, Y., Irwin, T., Ponchon, P., & Owens, J. (2016). Green gas to replace SF₆ in electrical grids. *IEEE Power and Energy Magazine*, 14, 32–39. <https://doi.org/10.1109/MPE.2016.2542645>.
- Knowlton, K., Rosenthal, J. E., Hogrefe, C., Lynn, B., Gaffin, S., Goldberg, R., Rosenzweig, C., Civerolo, K., Ku, J.-Y., & Kinney, P. L. (2004). Assessing ozone-related health impacts under a changing climate. *Environmental Health Perspectives*, 112, 1557–1563. <https://doi.org/10.1289/ehp.7163>.
- Knox, A., Evans, G. J., Lee, C. J., & Brook, J. R. (2012). Air pollution monitoring and sustainability. In R. A. Meyers (Ed.), *Encyclopedia of sustainability science and technology*. New York: Springer.
- Kondratyev, K. Y., & Varotsos, C. A. (1996). Global total ozone dynamics impact on surface solar ultraviolet radiation variability and ecosystems. *Environmental Science and Pollution Research*, 3, 153–157. <https://doi.org/10.1007/BF02985523>.
- Krey, V., Masera, O., Blanford, G., Bruckner, T., Cooke, R., Fisher-Vanden, K., Haberl, H., Hertwich, E., Kriegler, E., Mueller, D., Paltsev, S., Price, L., Schlomer, S., Urge-Vorsatz, D., van Vuuren, D., & Zwickel, T. (2014). Annex II: Metrics & methodology. In O. Edenhofer, R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, S. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlomer, C. von Stechow, T. Zwickel, & J. C. Minx (Eds.), *Climate change 2014: Mitigation of climate change. Contribution of working group III to the fifth assessment report of the intergovernmental panel on climate change*. Cambridge, UK/New York: Cambridge University Press.
- Kuo, J. (2012). Technological options for reducing non-CO₂ GHG emissions. In W. Y. Chen, J. Seiner, T. Suzuki, & M. Lackner (Eds.), *Handbook of climate change mitigation*. New York: Springer.
- Lindsey, R., & Dahlman, L. A. (2018). Climate change: Global temperature. National Oceanic and Atmospheric Administration (NOAA). <https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature>. Accessed 26 Aug 2019.
- Ma, Q. (1998). Greenhouse gases: Refining the role of carbon dioxide. National Aeronautics and Space Administration (NASA), Goddard Institute for Space Studies. https://www.giss.nasa.gov/research/briefs/ma_01/. Accessed 22 Aug 2019.

- Mann, M. E. (2019). Greenhouse gas. Encyclopædia Britannica Inc. <https://www.britannica.com/science/greenhouse-gas>. Accessed 26 Aug 2019.
- Montzka, S. A., Dlugokencky, E. J., & Butler, J. H. (2011). Non-CO₂ greenhouse gases and climate change. *Nature*, 476, 43–50. <https://doi.org/10.1038/nature10322>.
- Myhre, G., Shindell, D., Bréon, F.-M., Collins, W., Fuglestad, J., Huang, J., Koch, D., Lamarque, J.-F., Lee, D., Mendoza, B., Nakajima, T., Robock, A., Stephens, G., Takemura, T., & Zhang, H. (2013). Anthropogenic and natural radiative forcing. In T. F. Stocker, D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, & P. M. Midgley (Eds.), *Climate change 2013: The physical science basis. Contribution of working group I to the fifth assessment report of the intergovernmental panel on climate change*. Cambridge, UK/New York: Cambridge University Press. Anthropogenic and Natural Radiative Forcing. http://www.climatechange2013.org/images/report/WGIAR5_Chapter08_FINAL.pdf. Accessed 27 Aug 2019.
- Oyeneyin, B. (2015). Introduction to the hydrocarbon composite production system. *Developments in Petroleum Science*, 63, 11–128. <https://doi.org/10.1016/B978-0-444-62637-0.00002-6>.
- Ravishankara, A. R., Daniel, J. S., & Portmann, R. W. (2009). Nitrous oxide (N₂O): The dominant ozone-depleting substance emitted in the 21st century. *Science*, 326, 123–125. <https://doi.org/10.1126/science.1176985>.
- Rind, D., Chiou, E.-W., Chu, W., Larsen, J., Oltmans, S., Lerner, J., McCormick, M. P., & McMaster, L. (1991). Positive water vapour feedback in climate models confirmed by satellite data. *Nature*, 349, 500–503. <https://www.nature.com/articles/349500a0>. Accessed 26 Aug 2019.
- Schubert, C. J. (2011). Methane, origin. In J. Reitner & V. Thiel (Eds.), *Encyclopedia of geobiology* (Encyclopedia of Earth Sciences series). Dordrecht: Springer.
- Shindell, D. T., Faluvegi, G., Koch, D. M., Schmidt, G. A., Unger, N., & Bauer, S. E. (2009). Improved attribution of climate forcing to emissions. *Science*, 326, 716–718. <https://doi.org/10.1126/science.1174760>.
- Skaggs, S. R. (1998). Examining the risk of carbon dioxide as a fire suppressant. In *Halon options technical working conference*, pp. 261–268. https://www.nist.gov/sites/default/files/documents/el/fire_research/R0000286.pdf. Accessed 23 Aug 2019.
- Su, M., Lin, Y., Fan, X., Peng, L., & Zhao, C. (2012). Impacts of global emissions of CO, NO_x, and CH₄ on China tropospheric hydroxyl free radicals. *Advances in Atmospheric Sciences*, 29, 838–854. <https://doi.org/10.1007/s00376-012-1229-2>.
- Sundquist, E. T. (1985). Geological perspectives on carbon dioxide and the carbon cycle. In E. T. Sundquist & W. S. Broecker (Eds.), *The carbon cycle and atmospheric CO₂: Natural variations archaic to present* (Vol. 32). <https://doi.org/10.1029/GM032p0005>. ISBN: 9780875900605
- Tsamos, K. M., Ge, Y. T., Santosa, D., Tassou, S. A., Bianchi, G., & Mylona, Z. (2017). Energy analysis of alternative CO₂ refrigeration system configurations for retail food applications in moderate and warm climates. *Energy Conversion and Management*, 150, 822–829. <https://doi.org/10.1016/j.enconman.2017.03.020>.
- United Nations (UN). (2015). The Paris agreement. https://unfccc.int/sites/default/files/english_paris_agreement.pdf. Accessed 22 Aug 2019.
- United Nations Climate Change UNCC. (1995). Climate change 1995, the science of climate change: Summary for policymakers and technical summary of the working group I report. p. 22. <https://unfccc.int/process/transparency-and-reporting/greenhouse-gas-data/greenhouse-gas-data-unfccc/global-warming-potentials>. Accessed 25 Aug 2019.
- United Nations Environment. (2019). World takes a stand against powerful greenhouse gases with implementation of Kigali Amendment. Press release. <https://www.unenvironment.org/news-and-stories/press-release/world-takes-stand-against-powerful-greenhouse-gases-implementation>. Accessed 26 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (2000). Climate change information sheet 3, Greenhouse gases and aerosols. <http://unfccc.int/cop3/fccc/climate/fact03.htm>. Accessed 26 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (2013). Report of the conference of the parties serving as the meeting of the parties to the Kyoto protocol on its eighth session, held in Doha from 26 November to 8 December 2012. <https://unfccc.int/resource/docs/2012/cmp8/eng/13a01.pdf#page=2>. Accessed 25 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (2015). Adoption of the Paris agreement – Proposal by the President – Draft decision –/CP.21. <https://unfccc.int/resource/docs/2015/cop21/eng/109.pdf>. Accessed 15 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (n.d.). Kyoto protocol – Targets for the first commitment period. <https://unfccc.int/process-and-meetings/the-kyoto-protocol/what-is-the-kyoto-protocol/kyoto-protocol-targets-for-the-first-commitment-period>. Accessed 23 Aug 2019.
- Ussiri, D., & Lal, R. (2013). The role of nitrous oxide on climate change. In *Soil emission of nitrous oxide and its mitigation*. Dordrecht: Springer.
- Wang, Q. (2015). Hydrogen production. In W. Y. Chen, T. Suzuki, & M. Lackner (Eds.), *Handbook of climate change mitigation and adaptation*. New York: Springer.
- Weiss, R. F., Mühle, J., Salameh, P. K., & Harth, C. M. (2008). Nitrogen trifluoride in the global atmosphere. *Geophysical Research Letters*, 35. <https://doi.org/10.1029/2008GL035913>.
- Willis, J. B., Rasmuson, J. O., Kniseley, R. N., & Fassel, V. A. (1968). The temperature of the nitrous

oxide- acetylene flame. *Spectrochimica Acta Part B: Atomic Spectroscopy*, 23, 725–730.

World Meteorological Organization (WMO). (2010). Scientific assessment of ozone depletion: 2010, Global ozone. https://www.wmo.int/pages/prog/arep/gaw/ozone_2010/documents/Ozone-Assessment-2010-complete.pdf. Accessed 25 Aug 2019.

Greening the Supply Chain

► Sustainable Supply Chain Management

Greenpeace (Environment)

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Synonyms

[Don't make a wave committee](#); [Rainbow warriors](#)

Introduction

There will be a day when birds will fall from the sky, the animals that populate the woods will die, the sea will turn black and the rivers will flow poisoned. That day, men of all races will unite as rainbow warriors to fight against the destruction of the Earth. – Kwakiutl legend

Greenpeace is an environmentalist and pacifist nongovernmental organization (NGO) founded in Vancouver in 1971 by Patrick Moore, Robert Hunter, and Dorothy Stowe. Over the years it has stood out for its anti-war actions against nuclear tests, whaling, trawling, global warming, and environmental pollution. In particular, the

organization's actions have, over time, been in contrast with the policies of unlimited exploitation of natural resources (Weyler 2004).

The History

Greenpeace was born on September 15, 1971, led by Jim Bohlen, Irving Stowe, and Paul Cote and journalists Robert Hunter of the *Vancouver Sun*, Ben Metcalfe of the “Canadian Broadcasting Corporation,” and Bob Cummings of the “Georgia Strait” who sailed from Vancouver on board of an old fishing boat, the Phyllis Cormack renamed Greenpeace, toward Amchitka Arctic island of the USA (Alaska) in order to stop the nuclear tests that were taking place on the island. That first action of the then “Don't Make a Wave Committee”, which seemed to have been unsuccessful, found instead the support of the public opinion that supported the request to stop the nuclear experimentation on the island. The meeting in return with the Kwakiutl Indians who exposed to the crew the prophecy of the “Rainbow Warriors” is still told today as particularly significant for the organization. With the financial and volunteer support, a second “Greenpeace Too” expedition was possible, and after the protests that arose from the nuclear test of November 6, 1971, the USA and Canada decided not to carry out new tests on the island of Amchitka which has since become a nature reserve for birds (Weyler 2004).

In 1972 in the Mururoa atoll, the first action against atomic tests in the French atmosphere was held. The then head of mission, David McTaggart, along with a crew of five embarked on the “Vega” ship and approached the atoll where the nuclear tests were scheduled. Although in a first attempt the test was only delayed, in a second the French boarded the ship and injured David McTaggart. A member of the crew will be providential in managing to photograph the event and make it known throughout the world, forcing France to abandon the atmospheric tests.

In 1975 Greenpeace embarked on its famous battle in contrast to the limitless hunt for whales that were leading cetaceans to extinction.

Greenpeace, in contrast to the IWC (International Whaling Commission), decided to act directly against fishing fleets; in particular, they chose a Soviet ship in the northern Pacific. The activists' rubber dinghies interposed between the cetaceans and the whaling ships to block the trajectory of the harpoons. In 1982 the IWC voted a moratorium against whaling still in force today.

In 1985 the Rainbow Warrior was hit and sunk a few minutes before midnight. His crew had recently completed the "Exodus" operation, in the Rongelap Atoll, which called for the evacuation of the citizens of the island of Mejato as requested by their representatives in the Parliament of the Marshall Islands. There were too many cases of thyroid cancer, leukemia, and fetal malformations in this area, caused by American nuclear tests between 1948 and 1956. Greenpeace photographer Fernando Pereira died in the sinking of the Rainbow Warrior. The responsibility for the incident was attributed to the French secret services, but the French government denied direct involvement. A few months later, however, Defense Minister Charles Hernu decided to resign from his post.

Mission/Objectives/Focus Areas

The mission of the organization is the protection of the environment through the denunciation and the non-violent protest of the crimes against it. Greenpeace seeks to raise awareness among the public having as its main objective a change of course of daily habits and lifestyles to prevent them from leading, as it is happening, to the destruction of nature and our planet.

In particular, Greenpeace seeks to raise awareness about an energy revolution, against climate change in progress, protecting oceans and forests and biodiversity and promoting sustainable agriculture and a sustainable food style.

The investigations carried out by the organization are based on documents and scientific research reports, and for this very rigorous approach, the action has grown in importance.

From the outset, the (economic) independence of the organization was fundamental, since by not

accepting money from governments, political parties, and companies, it bases its work on the thousands of supporters who, with private donations, express their sharing of the idea of environmental protection.

Structure of Governance

Greenpeace has a network of 26 organizations located in 55 countries around the world as well as a coordination body "Greenpeace International" based in Amsterdam.

Greenpeace also has a dense network of volunteers and activists, people of all ages who dedicate their time to campaign development and local promotion of the organization without compensation.

Increasingly important has become over time the support of journalists and photojournalists who document the actions.

To date, around 2.8 million supporters are involved.

The currently active naval fleet consists of:

- Rainbow Warrior III (2011)
- Esperanza (1984)
- Artic Sunrise (1975)
- Beluga II (2004)
- Argus (1977)
- Sirius (1951)

Activities/Major Accomplishments/Contributions

Greenpeace is currently very active in the campaign against climate change that is changing the lives of millions of people and that, if not stopped in time, could lead to further dangers for the life of man and living beings on earth. This is also why it has activated the "Save the Arctic" campaign because the melting of Arctic glaciers is taking place with a decidedly faster speed than could be imagined. The local populations are losing out because the animals they eat begin to disappear, and for this reason, they are increasingly forced to emigrate. At the same time, polar bears, seals, and

walruses are put to the test by retreating ice, and all too often, they are no longer able to survive.

Thus the organization's activity also focused on fossil fuels which caused this climate change with a tough campaign against the major oil producers and drilling and the airgun technique. The case of the 1995 Shell Brent Spar platform went to the record. A group of activists coordinated by Harald Zindler protest trying to get off a helicopter on the platform. Rejected with hydrants, their video will travel around the world raising public opinion against Shell (Jordan 2001).

Greenpeace is committed to defending ecosystems and forests against deforestation and intensive agriculture. His campaign has focused particularly on GMOs, which have always been the subject of an international debate due to the impact they can have on the health of human beings.

The historical campaign is to save whales from intensive hunting, but also against the intensification of fishing with incorrect techniques toward nature, which by not correctly respecting the natural cycle seriously endangers the marine balance.

More recent campaigns are those against intensive farming and disposable plastics.

Cross-References

- Biodiversity: Environment
- Biodiversity: Sustainability
- Communication Climate and Culture
- Ecology and Ecosystem: Sustainability
- Global Warming
- Sustainability and NGOs
- Sustainable Development

References

- <https://it.wikipedia.org/wiki/Greenpeace>
<https://www.greenpeace.org/international/>
<https://www.greenpeace.org/italy/>
 Jordan, G. (2001). *Shell, Greenpeace and the Brent spar*. Basingstoke: Palgrave Macmillan.
 Weyler, R. (2004) *Greenpeace how a group of ecologists, journalists, and visionaries changed the world*. Vancouver: Rodale Books.

Greenpeace (NGO) II

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Definition/Description

Greenpeace is an international nongovernmental organization that is focused on attracting public interest on environmental issues. Greenpeace states its mission as “to protect the planet in all its diversity and promote peace and non-violence” (Greenpeace 1999). The environmental issues that Greenpeace concentrates on cover climate change, use of nuclear power, use of hazardous chemicals, deforestation, ocean and terrestrial ecology, and genetic engineering. Since none of the environmental consequences of these issues are individual concerns of any specific country, Greenpeace carries out its activities worldwide. As one of the most recognized environmental organizations in the globe, Greenpeace maintains its operations in over 55 countries through its coordinating body in Amsterdam and regional offices in 41 countries. Organizational policy of Greenpeace is annually decided on the council that is made up of the representatives from each of the regional offices. The council meetings enable coordination of diverse actions and joint planning of the campaign program and each regional office carries out their campaigns accordingly (Eden 2004).

The organization owes its vast recognition mainly on professionalized campaigning skills that is built on environmental direct-action tactics, ecotage, nonviolent protests, boycotts, lobbying, and research (Obach 2007). Since its establishment, the organization has been in continuous confrontations with powerful industries. Such events organized by Greenpeace target raising the environmental issues to public awareness by attracting the attention of mass media. Greenpeace relies on funding from individual supporters and foundation grants and does not accept any form of financial support from

governments or corporations in order to maintain its independence. Greenpeace is known as one of the pioneering NGOs that employs face-to-face fundraising method where fundraisers recruit new supporters and ask for monthly direct debit donations in public areas (Krebber et al. 2016).

The History and Major Accomplishments

Greenpeace was founded in Vancouver-British Columbia in 1971 by environmental activists with the goal of drawing attention to underground nuclear testing which was being initiated by the US military in Aleutian island of Amchitka. With the earthquake-prone nature of Amchitka, the activists feared the explosions that would occur during nuclear testing would cause devastating consequences for the area which housed endangered wildlife. In order to stop the testing, the activists planned to sail to the area with the vessel they named Greenpeace, green representing their ecological concerns and peace representing their stands against military action. Even though their ship was forced to return by the US navy, upon their arrival the activists found that their first major action ignited a significant public interest and non-negligible compassion for their cause. This effect of the activists' direct action eventually led to the termination of the nuclear testing in Amchitka and the island was later declared a bird sanctuary. After the success, the name of the vessel took off and it became the name of the organization. Later that year, a similar achievement was achieved by the young organization as they stopped atmospheric nuclear weapons testing of the French Navy in its tracks (Greenpeace 1999).

In 1975, Greenpeace went beyond campaigning against nuclear activities and set up *Project Ahab* with the aim of protecting the whales from commercial hunting. Its initial actions under Project Ahab took place in North Pacific against Japanese and Soviet fleets and later with Soviet and Scandinavian fleets in North Atlantic (Balser and Carmin 2002). Step by step, the protests were widened in scope to cover direct actions towards protection of other marine animals (such as seals, dolphins, and sea turtles) and preservation of marine fauna in

general. During these events, Greenpeace documented the commercial hunts which helped raising public concern that later elevated into international protests.

By the 1980s, funding network of Greenpeace grew significantly and the agenda of the organization started to expand accordingly. During these years, Greenpeace aimed at publicizing the environmental issues of energy and toxic waste. In 1985, French Foreign Intelligence Services planted a bomb in *Rainbow Warrior* (a vessel of Greenpeace) which was docked in Port of Auckland and was scheduled to sail to protest against the nuclear test in Moruora. In this attack, a Greenpeace photographer drowned. This tragic event resulted in significant growth of Greenpeace supporters (Eden 2004).

In 1990s, Greenpeace put a significant effort towards raising public awareness on climate change and ozone depletion. It was in the beginning of the 1990s when Greenpeace introduced refrigerators named as "Greenfreeze" which are completely free of ozone depleting and global warming chemicals (Conrad 1995). This new technology that Greenpeace has brought to life had carried the refrigerator industry towards an ecofriendly status and thus became a solid step against the major criticism on Greenpeace that "It does not offer any solution, but constantly criticizing." For this accomplishment which encouraged "green consumerism," Greenpeace was awarded by United Nations Environment Programme (1997). By the 2000s, Greenpeace had become increasingly professionalized and adopted its current structure. This new structure allowed Greenpeace to branch out all around the globe and monitor environmental threats that might otherwise be overlooked. Today, Greenpeace maintains its function as an influential environmentalist organization and keeps environmental concerns as a subject matter.

Summary

Grown from a small radical group, Greenpeace today is considered as one of the most influential environmental NGOs. Greenpeace focuses on the

environmental issues such as climate change, use of nuclear power, use of hazardous chemicals, deforestation, ocean and terrestrial ecology, and genetic engineering. Since its inception, the organization carries out campaigns exposing the environmental abuse by governments and multinational corporations in each of these issues. Actions of the organization stand out especially in terms of their success in attracting media attention and raising public consciousness. Beside the direct actions that Greenpeace is mostly recognized with, the organization employs nonviolent protests, boycotts, lobbying, and research in order to reach its goals. While the professional activists carry out rather dangerous protests, ordinary members are employed for fundraising activities.

Cross-References

- [Environmentalism Movement](#)
- [Greenpeace \(Environment\)](#)
- [Sustainability and NGOs](#)

References

- Balser, D., & Carmin, J. (2002). The interpretive basis of action: Identity and tactics in environmental movement organizations. *Academy of Management Proceedings*, 2002, 1–6.
- Conrad, J. (1995). Greenfreeze: Environmental success by accident and strategic action. In M. Jänicke & H. Weidner (Eds.), *Successful environmental policy: A critical evaluation of 24 cases* (pp. 364–378). Berlin: Sigma.
- Eden, S. (2004). Greenpeace. *New Political Economy*, 9(4), 595–610.
- Greenpeace. (1999). Greenpeace International (homepage). <https://www.greenpeace.org/international/explore/about/50-years/>. Accessed 20 Aug 2019.
- Krebber, F., Biederstaedt, C., & Zerfuß, A. (2016). Online campaigning and offline lobbying: Public affairs strategies of Greenpeace Germany. In E. Oliveira, A. D. Melo, & G. Gonçalves (Eds.), *Strategic communication for non-profit organisations* (pp. 103–120). Delaware: Vernon Press.
- Obach, B. (2007). Greenpeace. In P. Robbins (Ed.), *Encyclopedia of environment and society* (pp. 825–826). Thousand Oaks: Sage Publications.
- UN. (1997). 1997 ozone awards to be presented to 23 individuals/organizations on 16 September (press release). <https://press.un.org/en/1997/19970910.ENDEV445.html>. Accessed 20 Aug 2019.

Greenwashing

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Synonyms

[Bluewashing](#); [CSR-washing](#); [Disclosure–performance gap](#); [Green spin](#); [Symbolic corporate environmentalism](#); [Whitewashing](#)

Description

Greenwashing is an “umbrella term” for behaviors that mislead consumers regarding the organization’s environmental performance (Lyon and Montgomery 2015). It describes situation, when there is a mismatch between, what organization communicates, and what it actually does in terms of its environmental responsibility. While companies are the primary greenwashing actors, broad review of literature reveals cases of this practice conducted by governments, politicians, university administrators, research organizations, environmental policy experts, industries, and NGOs (Lyon and Montgomery 2015).

The phenomenon of greenwashing emerged as “CSR’s evil twin” (Jong et al. 2017). Potential benefits of corporate social responsibility (CSR), such as license to operate, increased reputation, consumer purchase intentions, and loyalty or reduced capital costs (Doh et al. 2010; McWilliams and Siegel 2011), provide incentives for organizations to engage in environmental programs, and communicate about them. In regard to their environmental performance and communication, organizations can be divided into four types: (1) vocal green organizations that combine good environmental performance with positive communication about their environmental performance; (2) silent green organizations that do not communicate about their good environmental performance; (3) silent brown organizations that do not communicate about their bad environmental

performance; and (4) greenwashing organizations that positively communicate while actually having bad environmental performance (Delmas and Burbano 2015).

Other related terms used in the literature describing this phenomenon are green spin (Alves 2009), the disclosure–performance gap (Font et al. 2012), symbolic corporate environmentalism (Bowen 2014), bluewashing (washing through the United Nations and Global Compact brand) (Laufer 2003), and CSR-washing (broader term used in relation to social and environmental corporate activities) (Pope and Wæraas 2016).

Greenwashing Typologies

The literature offers several complementary taxonomies for greenwashing that encompasses different misleading behaviors ranging “from slight exaggeration to full fabrication” (Lyon and Montgomery 2015, p. 225). Two basic types include **firm-level greenwashing**, e.g., selective disclosure and **product-level greenwashing** regarding environmental benefits of a particular product or service (Delmas and Burbano 2015).

Parguel et al. (2015) distinguish between **executional and claim greenwashing**. The first is defined as the use of nature-evoking elements (e.g., imagery) in advertisements and other promotional materials that help organization to enhance its eco-friendly image. The latter is understood as the use of textual arguments concerning the product or the company that create a misleading environmental claim. Claim greenwashing can be divided into seven “sins,” as identified by TerraChoice (2010):

1. The sin of the hidden trade-off – when one environmental issue is emphasized at the expense of other more serious concerns
2. The sin of irrelevance – when an environmental issue unrelated to the product is emphasized
3. The sin of lesser of two evils – when an environmental claim about the product might be true but distracts the consumer from greater environmental impact related with the whole product category

4. The sin of fibbing – when environmental claims are a lie
5. The sin of no proof – when environmental claims are not backed up by evidence or third-party certification
6. The sin of vagueness – when a marketing claim is poorly defined or broad that it can get easily misunderstood by the consumer
7. The sin of worshipping false labels – when marketers create a false suggestion or certification-like image to mislead consumers

Lyon and Montgomery (2015) build on and expand previous typologies, basing on a broad conception of greenwash. The authors distinguish seven varieties of this phenomenon:

1. Selective disclosure that would also include legitimization strategies companies use to report “negative aspects” (Hahn and Luelfs 2014)
2. Empty green claims and policies or the so-called “cheap talk”
3. Dubious certifications and labels
4. Co-opted NGO endorsement and cross-sectoral participation
5. Ineffective public voluntary programs, including bluewashing (Laufer 2003)
6. Misleading narrative and discourse
7. Misleading visual imagery

Drivers of Greenwashing

Delmas and Burbano (2015) propose a broad theoretical framework describing the drivers that lead brown organizations to positively communicate their environmental performance. The drivers can be divided into three following levels: external, organizational, and individual.

External Drivers

One of the most important drivers of greenwash is lax and uncertain regulatory environment, which allows firms to mislead stakeholders with low risk of being punished. In this weak regulatory activist group, NGOs and media informally monitor corporate green communication and expose greenwashing practices. However, while public

exposure and greenwashing scandals may lead to reputational damages, they do entail any legal risk, what makes them less effective. Indeed, empirical studies have shown that greenwashing is attenuated by external scrutiny in the form of NGO and regulatory pressures (Kim and Lyon 2015).

Another group of external drivers include market forces. For instance, pressures from consumers and investors regarding environmental performance encourage brown companies to create false eco-image. As argued by Meyer and Rowan (1977) in their study on organization myth and ceremony, companies, for the purpose of attaining legitimacy within their environments, are “prone to construct stories about their actions” (Mizruchi and Fein 1999, p. 656) that correspond to stakeholder expectations, but are decoupled from actual business operation. Additionally, organizations tend to model themselves intentionally or unintentionally (through influence of consultants and employees hired from other companies) on more legitimate or successful competitors (DiMaggio and Powell 1983). Thus, the more companies in the industry invest in environmental programs and positively communicate about it, the more likely it is for brown organizations to greenwash.

Testa et al. (2018) show that although institutional pressures generally strengthen the internalization of proactive environmental practices, the various stakeholders behind these pressures can play different roles (either support the integration of environmental practices or encourage superficial adoption). While pressures of public authorities and activists do not force managers to increase integration of environmental aspects in firm’s operations, shareholders, suppliers, banks, and other financial institutions have a positive influence on the honest corporate environmentalism. Pressures from customers and industrial associations encourage greenwashing.

Organizational Drivers

Potential benefits (increased access to green consumers, socially responsible capital, and legitimacy) and costs (communication costs, as well as costs related with legal actions) of

greenwashing vary with basic firm characteristics. Consumer products firms, large publicly traded companies, and manufacturing firms are more likely to engage in greenwashing. While the first face greater levels of consumer pressure related to environmental concerns than service or business-to-business firms, large, the second face higher pressure from investors, including socially responsible investors than smaller, private firms. Finally, the last, manufacturing firms operating in environmentally and socially sensitive industries (e.g., pharmaceutical, textile, gas and oil, and automotive) can count on higher legitimacy benefits related with environmental communication (Delmas and Burbano 2015). Additionally, growing firms are more likely to engage in greenwashing as they expect an increased interaction with stakeholders in the regulatory arena (Kim and Lyon 2015).

From the cost side, larger firms with well-known brands, especially those in consumer products industries, are most likely to be the target of public scrutiny, what increases potential costs of greenwashing (Delmas and Burbano 2015). Likewise, firms that operate in more environmentally damaging sectors, particularly those in countries where they are more exposed to scrutiny and global norms, are less likely to engage in selective disclosure (Marquis et al. 2015). However, more-profitable firms are more immune to reputational crises and bottom-line shocks. It is also easier for them to handle costs related with fines and litigation (Delmas and Burbano 2015).

Other internal drivers of greenwashing are related with incentive structure, ethical climate, age of the organization, and internal communications systems (Delmas and Burbano 2015). Incentive system that rewards managers for reaching arbitrary financial marketing and PR goals often results in unethical behavior, including greenwashing practices. Greenwashing is more likely to occur among organizations with egoistic rather than principled ethical cultures. Further, greenwashing is also more likely to be prevalent in larger and older firms that are usually characterized by higher organizational inertia. Organizational inertia, understood as the tendency of mature organizations to be resistant to strategic

changes, can explain mismatch between declarations of environment protection and actual implementation of these activities. Finally, low effectiveness of firm internal communication and the lack of interactions between marketing/PR departments and product development, production, and packaging departments can act as a driver of unintentional greenwashing.

Individual-Level Psychological Drivers

Under conditions of uncertainty and limited or imperfect information, cognitive tendencies such as narrow decision framing (e.g., short-term focus), hyperbolic intertemporal discounting (e.g., inconsistency between long-term goals and short-term behavior), and optimistic bias (i.e., tendency to overestimate and underestimate the likelihood of positive and negative events, respectively) may also contribute to greenwashing.

The Consequences of Greenwashing

Greenwashing is cited as having negative effect on consumer, investor, and NGO's confidence in corporate environmental activities, eroding markets for sustainable products, socially responsible investment, and increasing the risks for lawsuits for false and misleading statements (Alves 2009; Delmas and Burbano 2015; Nyilasy et al. 2014). The phenomenon threatens the effectiveness of genuine environmental efforts and the global transition towards sustainable economy (Jong et al. 2017). What is more, greenwashing not only has detrimental consequences for the society, but also, as empirical research shows, does not pay off for the organizations themselves (Berrone et al. 2017).

Results of recent studies indicate that benefits of greenwashing are temporary and are limited to short-term image improvement (Baldassarre and Campo 2016). The literature provides empirical evidence that greenwashing has negative effect on overall performance indicators (Jong et al. 2017). For instance, Walker and Wan (2012) find negative effect of greenwashing on financial performance of top performing Canadian firms in industries with negative impact on environment.

Wu and Shen (2013) investigate motives for corporate social responsibility and relationship between CSR and financial performance in banking industry. The authors identify three motives for banks to invest in CSR: strategic choice, altruism, and greenwash. While the results of the study show that CSR positively associates with financial performance, this relationship is nonexistent for banks practicing greenwashing. Similarly, Du (2015) shows that while corporate environmental performance is significantly positively associated with cumulative abnormal returns around the exposure of misleading practices, for greenwashing this relationship is negative.

Other authors (Berrone et al. 2017) provide evidence that different environmental actions have different impact on environmental legitimacy. The study shows that environmental patents are effective in producing legitimacy, regardless of the company's credibility or the level of normative scrutiny it faces. High visibility and implementation costs of environmental patents make them the strongest signal among the environmental actions studied. Other actions, such as environmental pay policies, environmental board committees, participation in government's environmental program, or environmental trademarks, constituting weak signals, are less likely to be seen authentic. They build legitimacy only when the company has strong credibility. In other circumstances, especially in the presence of vigilant environmental NGOs, they are counterproductive.

The potential benefits and costs of greenwashing for companies have been also traced in experimental studies on the influence that such practices have on consumers. However, the results of this investigation are still inconsistent. On the one hand, Spack et al. (2012) present evidence that although consumers are able to assess the honesty of firm communication, the mere presence of any eco-claim positively affects purchasing intention. Similarly, the study by Atkinson and Kim (2014) indicates that consumers use rationalization in order to balance their skepticism of greenwashed communication and ultimately accept the claims. Parguel et al. (2015) show that executional greenwashing in the form of

nature-evoking elements in advertisements is effective in misleading consumers in their evaluation of a brand's ecological image, especially if they have low knowledge of environmental issues.

On the other hand, Chen and Chang (2013) find that greenwashing increases consumer confusion and perceived risk, reducing consumers' trust towards product's environmental performance. Parguel et al. (2011) investigate the influence of independent sustainability ratings on consumers' attitude towards CSR communication. The results show that in the case of CSR communication a poor sustainability rating has a negative influence on corporate brand evaluations, since consumers perceive sustainability activities of the brand as not intrinsically motivated. Nyilasy et al. (2014) show that low environmental performance has negative effect on brand attitude and that this effect is strengthened by the greenwashing communication. Additionally, Majláth (2017) finds that greenwashing information significantly decreases the ad evaluation. Finally, the recent study by Jong et al. (2017) indicates that even when consumers know that green claim is untrue or misleading, greenwashing organizations create a more favorable image than silent brown organizations. However, the results of the study also show that greenwashing has a detrimental effect on perceived communicative integrity and does not affect consumers' purchase intentions, "so it is a useless, myopic strategy" (Jong et al. 2017, p. 24).

Solutions to Greenwashing

The literature on greenwashing describes three specific mechanisms for deterring this phenomenon: pressure from civil society, ecolabeling, and government regulation and legislation (Lyon and Montgomery 2015). First strong environmental groups may limit greenwashing through public exposure of dishonest corporate behavior. The power of civil society is additionally reinforced by the emergence of social media that not only stimulates free flow of information among stakeholders leaving most the corporations "naked"

(Tapscott and Ticoll 2003), but also enables stakeholders to self-organize and impose real, tangible pressure on organizations (Shirky 2008). Another approach to deterring greenwashing is the use of environmental certification by trusted third parties (ecolabeling), such as Fairtrade, Rainforest Alliance, FSC, or EU Ecolabel. However, the proliferation of organizations issuing ecolabels together with poor monitoring and usage of false ecolabels results in information overload and consumer confusion. Finally, government oversight and regulation are viewed as important mechanisms reducing dishonest environmental communication.

Cross-References

- CSR Communication
- CSR Communication and Annual Reports
- Corporate Social Responsibility Disclosure
- Environmental Disclosure

References

- Alves, I. M. (2009). Green spin everywhere: How greenwashing reveals the limits of the CSR paradigm. *Journal of Global Change and Governance*, 11(1), 1–26.
- Atkinson, L., & Kim, Y. (2014). "I drink it anyway and I know I shouldn't": Understanding green consumers' positive evaluations of norm-violating non-green products and misleading green advertising. *Environmental Communication*, 9, 37–57.
- Baldassarre, F., & Campo, R. (2016). Sustainability as a marketing tool: To be or to appear to be? *Business Horizons*, 59(4), 421–429.
- Berrone, P., Fosfuri, A., & Gelabert, L. (2017). Does greenwashing pay off? Understanding the relationship between environmental actions and environmental legitimacy. *Journal of Business Ethics*, 144(2), 363–379. <https://doi.org/10.1007/s10551-015-2816-9>.
- Bowen, F. (2014). *After greenwashing: Symbolic corporate environmentalism and society*. Cambridge: Cambridge University Press.
- Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of Business Ethics*, 114, 489–500.
- Delmas, M. A., & Burbano, V. C. (2015). The drivers of greenwashing. *California Management Review*, 54(1), 64–87.
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American*

- Sociological Review*, 48(2), 147. <https://doi.org/10.2307/2095101>.
- Doh, J. P., Howton, S. D., Howton, S. W., & Siegel, D. S. (2010). Does the market respond to an endorsement of social responsibility? The role of institutions, information, and legitimacy. *Journal of Management*, 36(6), 1461–1485.
- Du, X. (2015). How the market values greenwashing? Evidence from China. *Journal of Business Ethics*, 422, 547–574. <https://doi.org/10.1007/s10551-014-2122-y>.
- Font, X., Walmsley, A., Cogotti, S., McCombes, L., & Hauesler, N. (2012). Corporate social responsibility: The disclosure-performance gap. *Tourism Management*, 33, 1544–1553.
- Hahn, R., & Luelfs, R. (2014). Legitimizing negative aspects in GRI-oriented sustainability reporting: A qualitative analysis of corporate disclosure strategies. *Journal of Business Ethics*, 123, 401–420. <https://doi.org/10.1007/s10551-013-1801-4>.
- Jong, M. D. T. De, Harkink, K. M., & Barth, S. (2017). Making green stuff? Effects of corporate greenwashing on consumers 1–36. <https://doi.org/10.1177/1050651917729863>.
- Kim, E., & Lyon, T. P. (2014). Modesty in corporate sustainability disclosure greenwash vs brownwash: Exaggeration and undue modesty in corporate sustainability disclosure.
- Kim, E., & Lyon, T. P. (2015). Greenwash vs. Brownwash: Exaggeration and undue modesty in corporate sustainability disclosure. *Organization Science*, 26(3), 705–723. <https://doi.org/10.1287/orsc.2014.0949>.
- Lauffer, W. S. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, 43(3), 253–261.
- Lyon, T. P., & Montgomery, A. W. (2015). The means and end of greenwash. <https://doi.org/10.1177/1086026615575332>.
- Majláth, M. (2017). The effect of greenwashing information on Ad evaluation, 92–104. <https://doi.org/10.14207/ejsd.2017.v6n3p92>.
- Marquis, C., Toffel, M. W., & Zhou, Y. (2015). *Scrutiny, norms, and selective disclosure: A global study of greenwashing*. Boston: Harvard Business School.
- McWilliams, A., & Siegel, D. S. (2011). Creating and capturing value. Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495. <https://doi.org/10.1177/0149206310385696>.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony on JSTOR. *American Journal of Sociology*, 83(2), 340–363.
- Mizruchi, M. S., & Fein, L. C. (1999). The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44(4), 653. <https://doi.org/10.2307/2667051>.
- Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions, 693–707. <https://doi.org/10.1007/s10551-013-1944-3>.
- Parguel, B., Benoit-Moreau, F., & Larceneux, F. (2011). How sustainability ratings might deter “greenwashing”: A closer look at ethical corporate communication. *Journal of Business Ethics*, 102, 15–28. <https://doi.org/10.1007/s10551-011-0901-2>.
- Parguel, B., Benoit-Moreau, F., & Russell, C. A. (2015). Can evoking nature in advertising mislead consumers? The power of “executional greenwashing”. *International Journal of Advertising*, 34(1), 107–134.
- Pope, S., & Wæraas, A. (2016). CSR-washing is rare: A conceptual framework, literature review, and critique. *Journal of Business Ethics*, 137(1), 173–193. <https://doi.org/10.1007/s10551-015-2546-z>.
- Shirky, C. (2008). *Here comes everybody: The power of organizing without organizations*. New York: The Penguin Press.
- Spack, J. A., Board, V. E., Crighton, L. M., Kostka, P. M., & Ivory, J. D. (2012). It’s easy being green: The effects of argument and imagery on consumer responses to green product packaging. *Environmental Communication*, 6, 441–458.
- Tapscott, D., & Ticoll, D. (2003). *The naked corporation: How the age of transparency will revolutionize business*. New York: Free Press.
- TerraChoice. (2010). The sins of greenwashing. Home and family edition 2010: Report on environmental claims made in the North American consumer market. Retrieved from <http://sinsofgreenwashing.com/index35c6.pdf>
- Testa, F., Boiral, O., & Iraldo, F. (2018). Internalization of environmental practices and institutional complexity: Can stakeholders pressures encourage greenwashing? *Journal of Business Ethics*, 147(2), 287–307. <https://doi.org/10.1007/s10551-015-2960-2>.
- Walker, K., & Wan, F. (2012). The harm of symbolic actions and green-washing: Corporate actions and communications on environmental performance and their financial implications. *Journal of Business Ethics*, 109, 227–242.
- Wu, M., & Shen, C. (2013). Corporate social responsibility in the banking industry: Motives and financial performance. *Journal of Banking and Finance*, 37, 3529–3531.

GRI

- [Global Reporting Initiative](#)
- [Global Reporting Initiative Standards](#)

GRI Reporting

- [Global Reporting Initiative](#)

Grobalization

- ▶ [Glocality](#)

Group of Eight

- ▶ [G7](#)

Group of Seven

- ▶ [G7](#)

Group of Twenty

- ▶ [G20](#)

Growth

- ▶ [Innovation and Territorial Development](#)
- ▶ [Rebound Effects of Eco-efficiency](#)
- ▶ [Sustainable Economic Growth](#)

Growth Cycle

- ▶ [Lifecycle of Sustainable Development](#)

Growth Management

- ▶ [Development Management](#)

Growth Paradigm

- ▶ [Degrowth](#)
- ▶ [Postgrowth](#)

Growth Policy

- ▶ [Degrowth](#)
- ▶ [Postgrowth](#)

GSCs

- ▶ [Global Value Chains](#)

Guidance on Social Responsibility

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Synonyms

[The international standard on social responsibility](#); [The ISO standard on social responsibility](#)

Definition

ISO 26000:2010 – “Guidance on Social Responsibility” is one of the most popular standards for social responsibility (ISO [2017b](#)). ISO 26000:2010 was created in 2010 by more than 500 different stakeholders gathered around the ISO Working Group on Social Responsibility (ISO/WG–SR) – and reviewed and confirmed in 2017 – “so this version remains current” (ISO [2020a](#)). ISO 26000:2010 aims at assisting contemporary organizations to contribute to sustainable development by encouraging them to go “beyond the basic legal compliance” (ISO [2018a](#)). This standard aims at offering a more complete and extensive understanding of social responsibility – “while complementing, not replacing – existing tools and activities” (ISO [2018a](#)). Moreover, it aims at offering support, guidance, and recommendations on how

contemporary organizations can execute daily tasks in a socially responsible manner and tends to clarify, simplify, and support different activities aimed at achieving sustained success (ISO 2010). Since it does not contain requirements, ISO 26000:2010 is not a certification standard – “any offer to certify or claims to be certified to ISO 26000 would be considered as misrepresentation of its intent and purpose” (ISO 2018a). To date, ISO 26000:2010 has been successfully implemented in more than 80 economies and is one of the documents “upon which the European Commission built its corporate social responsibility (CSR) strategy” (ISO 2017b).

Introduction

To date, most contemporary organizations have been starting to pay much more attention to social responsibility and socially responsible behavior. Strong organizational efforts and joint “commitment to the welfare of society” are becoming much more significant for all of the stakeholders and interested parties concerned with the overall organizational performance and an organization’s ability to successfully carry forward (ISO 2018a). This seems to stress out the growing significance of (corporate) social responsibility, social equity, and organizational governance (ISO 2018a). Such social responsibility and socially responsible behavior shall, ultimately, contribute to sustainable development (ISO 2018a). The need to explore some of the concepts further was first recognized in 2001 by the ISO Consumer Policy Committee (ISO/COPOLCO). As a result, in 2003, the ISO Technical Management Board (ISO/TMB) set out “the ISO Ad-Hoc Group on Social Responsibility (ISO/AHG–SR)” to explore these concepts further (ISO 2008). Following the guidelines and recommendations from the ISO conference (2004) – “the ISO Working Group on Social Responsibility (ISO/WG–SR)” was established to develop the standard on social responsibility, today known as ISO 26000:2010 (ISO 2008).

The concept of sustainable development (as developed in ISO 26000:2010) can be defined

as “a form of development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (ISO 2018b). Accordingly, an organization’s contribution to sustainable development (“and its impact on the society and an environment”) – can be defined as social responsibility (ISO 2018b). Social responsibility can be defined as “the responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that contributes to sustainable development, takes into account the expectations of stakeholders, is in compliance with the applicable law and consistent with the international norms of behavior, and is integrated throughout the organization and practiced in its relationships” (ISO 2018b). Considering that all organizations shall contribute to sustainable development (not just corporate businesses) – the previously established term “the corporate social responsibility” was replaced with the term “the social responsibility” – as it now seems to be much more appropriate (ISO 2010).

Benefits of Adopting ISO 26000

According to ISO (2018a), adopting ISO 26000 can lead to several benefits –

- Ensure a competitive advantage at the market and enhance global competitiveness;
- Enhance the morale, engagement, and the commitment of employees;
- Enhance attracting and retaining employees, customers, and other stakeholders;
- Strengthen the organization’s reputation, brand, and image at the local community;
- Strengthen the relationship with the financial community (e.g., donors and sponsors);
- Strengthen the relationship with the global community (e.g., governments and media);

Principles

As stated by several ISO documents, the strategic goal for most contemporary organizations shall be

seen as “to maximize the organizational contribution to sustainable development” (ISO 2010). Aiming to achieve the aforementioned goal, organizations should address the following principles (Clause 4 of ISO 26000:2010 offers guidance on these seven principles) (ISO 2010) –

- “[Principle 1] Accountability”
- “[Principle 2] Transparency”
- “[Principle 3] Ethical Behaviour”
- “[Principle 4] Respect for Stakeholders Interest”
- “[Principle 5] Respect for the Rule of Law”
- “[Principle 6] Respect for International Norms of Behaviour”
- “[Principle 7] Respect for Human Rights”

Accordingly, ISO (2010) suggested that contemporary organizations should always act by following these principles – even when found in the most difficult situations and contexts.

Structure

The content of seven clauses of ISO 26000:2010 can be summarized as follows (ISO 2010) –

- **Clause 1** defines the scope and “certain limitations and exclusions”;
- **Clause 2** offers the terms and definitions of social responsibility;
- **Clause 3** defines the concept of social responsibility, as well as, all of the key factors that have influenced the development of the concept of social responsibility;
- **Clause 4** offers “guidance on seven principles of social responsibility”;
- **Clause 5** defines two fundamental approaches when addressing social responsibility – it explores the linkages “between an organization, stakeholders, and the society,” and the seven core subjects (as well as issues and expectations) of social responsibility;
- **Clause 6** explores the seven core subjects of social responsibility: for each subject – the scope of the subject, the relationship between subjects and social responsibility, “associated

principles and considerations, and all related actions and expectations”;

- **Clause 7** explains how to “integrate social responsibility throughout the organization” by raising awareness and capacity building of “governance, systems, and procedures”;
- **Annex A** offers “examples of voluntary initiatives and tools for social responsibility”;
- **Annex B** offers abbreviated terms used in ISO 26000:2010;

Figure showing the schematic overview of ISO 26000:2010 can be found at the ISO platform (ISO 2020b).

Core Subjects

There are seven core subjects of social responsibility given in Clause 6 of ISO 26000:2010, with the associated social responsibility issues, actions, and expectations (ISO 2018b) (Table 1)–

Figure showing the seven core subjects of ISO 26000:2010 can be found in ISO 26000:2010 (ISO 2010).

Sustainable Development Goals (SDGs)

Although ISO 26000:2010 was developed “before the United Nations (UN) 2030 Agenda” and UN Sustainable Development Goals (SDGs) – it offers more than 450 guidelines and “recommendations related to its main principles and core subjects of social responsibility that help organizations contribute to the SDGs” (ISO 2018b). Not only does ISO 26000:2010 assist organizations from around the world to act in a socially responsible manner – but it also assists them to develop specific tools and actions that should be undertaken for this purpose (ISO 2018b). According to ISO (2018b), these actions usually line up with other regulations and international norms of behavior, as “the Universal Declaration of Human Rights” and “the International Labour Organization Core Conventions on Labour Practices” (ISO 2018b).

Guidance on Social Responsibility, Table 1 The seven core subjects of social responsibility. (Source: adapted from ISO 2018b)

Core Subjects/ Issues	Title	Clause
Core Subject 1	“Organizational Governance”	6.2.
Core Subject 2	“Human Rights”	6.3.
Issue 1	“Due Diligence”	6.3.3.
Issue 2	“Human Right Risk Situation”	6.3.4.
Issue 3	“Avoidance of Complicity”	6.3.5.
Issue 4	“Resolving Grievances”	6.3.6.
Issue 5	“Discrimination and Vulnerable Groups”	6.3.7.
Issue 6	“Civil and Political Rights”	6.3.8.
Issue 7	“Economic, Social, and Cultural Rights”	6.3.9.
Issue 8	“Fundamental Principles and Rights at Work”	6.3.10.
Core Subject 3	“Labour Practices”	6.4.
Issue 1	“Employment and Employment Relationships”	6.4.3.
Issue 2	“Conditions of Work and Social Protection”	6.4.4.
Issue 3	“Social Dialogue”	6.4.5.
Issue 4	“Health and Safety at Work”	6.4.6.
Issue 5	“Human Development and Training in the Workplace”	6.4.7.
Core Subject 4	“The Environment”	6.5.
Issue 1	“Prevention of Pollution”	6.5.3.
Issue 2	“Sustainable Resource Use”	6.5.4.
Issue 3	“Climate Change Mitigation and Adaptation”	6.5.5.
Issue 4	“Protection of Environment, Biodiversity, and Restoration of Natural Habitats”	6.5.6.
Core Subject 5	“Fair Operating Practices”	6.6.
Issue 1	“Anti-Corruption”	6.6.3.
Issue 2	“Responsible Political Involvement”	6.6.4.
Issue 3	“Fair Competition”	6.6.5.
Issue 4	“Promoting Social Responsibility in the Value Chain”	6.6.6.
Issue 5	“Respect for Property Rights”	6.6.7.
Core Subject 6	“Consumer Issues”	6.7.
Issue 1	“Fair Marketing, Factual, and Unbiased Information and Fair Contractual Practices”	6.7.3.
Issue 2	“Protecting Consumers’ Health and Safety”	6.7.4.
Issue 3	“Sustainable Consumption”	6.7.5.
Issue 4	“Consumer Service, Support, and Complaint and Dispute Resolution”	6.7.6.
Issue 5	“Consumer Data Protection and Privacy”	6.7.7.
Issue 6	“Access to Essential Services”	6.7.8.
Issue 7	“Education and Awareness”	6.7.9.
Core Subject 7	“Community Involvement and Development”	6.8.
Issue 1	“Community Involvement”	6.8.1.
Issue 2	“Education and Culture”	6.8.2.
Issue 3	“Employment Creation and Skills Development”	6.8.3.
Issue 4	“Technology Development and Access”	6.8.4.
Issue 5	“Wealth and Income Creation”	6.8.5.
Issue 6	“Health”	6.8.6.
Issue 7	“Social Investment”	6.8.7.

According to ISO (2018b), ISO 26000:2010 assists contemporary organizations to –

- Evaluate how organizations impact society and contribute to sustainable development;
- Determine and manage expectations of stakeholders and interested parties;
- Determine the most relevant issues and prioritize actions according to them;
- Comply with international documents, and conform with other rules and regulations;
- Implement and coordinate social responsibility principles throughout the organization;

The ISO 26000 Post Publication Organization (PPO) was established by ISO/TMB in 2010 (and was disbanded July 18, 2018) as “a non-formal body (e.g., committee, working group)” (ISO 26000 INFO 2020c). The ISO 26000 PPO aimed at developing documents that support the understanding of ISO 26000 (ISO 26000 PPO 2017). Following the conclusions derived from stakeholders meeting that was held in 2016, in Stockholm (Sweden), ISO 26000 PPO aimed at assisting ISO to develop a special guide on ISO 26000:2010 and SDGs (ISO 26000 PPO 2017). Although this guide “did not consider UN SDG 17 nor the alphabetical goals as these are oriented towards states and not towards organizations” (ISO 26000 PPO 2017) – the guide offered guidelines on how organizations can contribute to the UN 2030 Agenda and the UN SDGs by using ISO 26000:2010 “as a complementary tool” (United Nations 2019).

This guide offered two different approaches (ISO 26000 PPO 2017) –

- Table A: From Issue to Target – can be used to identify which of the ISO 26000:2010 actions contributes to which UN SDGs and targets.
- Table B: From Target to Issue – can be used to identify which UN SDGs and targets are not yet covered by the ISO 26000:2010 actions and recommendations.

As mentioned by ISO 26000 INFO (2020c), disbanning the ISO 26000 PPO (2010–2018) after

8 years of developing the ISO 26000 global community had several consequences –

- All real and potential, current and future (global and regional) questions regarding the adoption of ISO 26000:2010 will be carried through the ISO Central Secretariat and ISO/TMB, local questions will be carried through National Standards Bodies (NSBs).
- The review of ISO 26000:2010 (every 3–5 years) will be conducted by the ISO/TMB.
- All documents developed by the ISO 26000 PPO will not be adapted and/or updated – at least – “unless and until a new version of ISO 26000 is formed and recognized”.

There is a belief that a complete and comprehensive understanding of social responsibility and socially responsible behavior (as concepts used in ISO 26000:2010) shall contribute to the achievement of SDGs (ISO 2020d). The global recognition of ISO 26000:2010 shall be seen as crucial for “ensuring that the SDGs are met and our planet’s sustainability secured” (ISO, 2020d).

Summary

ISO 26000:2010 refers to the most popular international standard on social responsibility that is meant to be implemented by contemporary organizations that tend to execute daily tasks in a socially responsible manner. ISO 26000:2010 was created as a result of the growing needs of more than 500 stakeholders to address social responsibility and sustainable development. ISO 26000:2010 aims at assisting contemporary organizations to contribute to sustainable development by offering a more complete and comprehensive understanding of (corporate) social responsibility and socially responsible behavior. ISO 26000:2010 is not a management system standard – it contains guidelines, not requirements – so it is not meant to be certified to. Following the guidelines and recommendations given in ISO 26000:2010 – contemporary organizations shall add value, enhance employees’ morale, engagement, commitment,

strengthen the local and the global community, and contribute to the achievement of the SDGs.

Cross-References

- Integrated Management Systems
- Integrated Quality and Environmental Management
- ISO 14000 Standards Series
- Quality Management

References

- ISO. (2008). *ISO and Social Responsibility*. https://www.iso.org/files/live/sites/isoorg/files/archive/Ref1002/socialresponsibility_2006-en.pdf. Accessed July 14, 2020.
- ISO. (2010). *ISO 26000:2010 Guidance on Social Responsibility*.
- ISO. (2017b). NEW PUBLICATION HELPS ORGANIZATIONS GET FULL BENEFIT FROM ISO 26000 FOR SOCIAL RESPONSIBILITY. <https://www.iso.org/news/ref2198.html>. Accessed July 14, 2020.
- ISO. (2018a). *Discovering ISO 26000*. <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100258.pdf>. Accessed July 14, 2020.
- ISO. (2018b). *ISO 26000 and the SDGs*. <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100401.pdf>. Accessed July 14, 2020.
- ISO. (2020a). *ISO 26000:2010 Guidance on social responsibility*. <https://www.iso.org/standard/42546.html>. Accessed July 14, 2020.
- ISO. (2020b). *ISO platform*. <https://www.iso.org/obp/ui/#iso:std:iso:26000:ed-1:v1:en>. Accessed July 14, 2020.
- ISO 26000 INFO. (2020c). <https://iso26000.info/ppo/>. Accessed July 14, 2020.
- ISO. (2020d). *ISO 26000 in the Post-2015 Development agenda*. <https://www.iso.org/news/2016/01/Ref2039.html>. Accessed July 14, 2020.
- ISO 26000 Post Publication Organization. (2017). *Linkages between ISO 26000:2010 and the Sustainable*

Development Goals (SDGs). <https://iso26000.info/wp-content/uploads/2017/02/ISO-26000-Protocol-ISO2600-and-SDGs-in-detail.pdf>. Accessed July 14, 2020.

United Nations. (2019). ISO 26000 and the SDGs. <http://17goals.org/iso-sdgs/>. Accessed July 14, 2020.

Guidelines

- Sustainability Standards and Standardization

Guidelines for Good Corporate Governance

- Codes of Good Governance

Guiding Principles

- UN Guiding Principles on Business and Human Rights

Guiding Principles for Business and Human Rights

- UN Guiding Principles on Business and Human Rights

GVCs

- Global Value Chains

Hampel Report (UK)

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Description

The *Hampel Report* is the shortened name for the *Final Report of the Committee on Corporate Governance* published by the Committee on Corporate Governance (1998) (hereafter called the “Hampel Committee”) under the chairmanship of Sir Ronald Hampel. The *Hampel Report* presents an assessment of the extent to which the objectives of best practice recommendations on corporate governance, as detailed in the *Cadbury Report* (1992) and the *Greenbury Report* (1995), were being achieved by corporates listed on the London Stock Exchange (notably FTSE 100 corporations). In addition to this, it also provides further recommendations to public-listed corporations on methods of providing enhanced protection to their shareholders and advises shareholders on how to strengthen their voice in investee corporations. The report establishes a set of principles of best practice in corporate governance, many of which persist in the present-day *UK Corporate Governance Code* (FRC 2018). This entry begins by setting the background to the

report. Next the findings of the committee, its recommendations, and the principles of the report are reviewed. Finally, the significance and effectiveness of the *Hampel Report* is evaluated.

Background

Established in 1995, upon the initiative of the Financial Reporting Council, the Hampel Committee’s objectives were, firstly, to review the implementation of the Cadbury recommendations; secondly, to address issues emerging from the *Greenbury Report*; and thirdly, to “look afresh” at the roles of directors, shareholders, and auditors in corporate governance (para. 1.6). The committee consulted with corporations and individuals including public corporations and institutional investors. The output from the committee’s investigations, the *Hampel Report*, notes enhancements in transparency and accountability with respect to trading results, audited financial statements, operations, and remuneration stemming from the work of the Cadbury and Greenbury committees. However, it advises that corporate governance extends beyond accountability. The Hampel Committee concurred with its predecessors to the extent that rigid governance rules are inconsistent with the diversity of circumstances and experiences among corporates and sought to avoid encouraging a box-ticking approach to governance. The *Hampel Report* distinguishes governance principles from guidelines,

noting that the former tends more to provoke inquiry into the manner of application rather than simply whether, or not, they are being applied. In this vein, the *Hampel Report* submits principles of corporate governance and recommends that corporates include in their annual reports a narrative statement of how they apply the relevant principles, to their particular circumstances (para. 2.1).

The principles in relation to directors, shareholders, and auditors are now summarized.

Directors

Section A of the principles, which deals with directors, reinforces the importance of separating the roles of chief executive officer and chairman to effective board leadership (principle A2). The *Hampel Report* advocates the appointment of a senior independent board member as a potential sounding board in circumstances where concerns cannot be conveyed to the chairman and suggests details of the senior independent director be disclosed in the annual report (para 3.18). The *Hampel Report* extends the work of Cadbury by emphasizing the role of nonexecutive and independent directors in avoiding executive dominance (principle A3). To reduce the ability of a dominant director to control appointments, the report recommends a formal procedure for board appointments implemented primarily through a nominations committee (principle A5). A further consideration is duration of service. In respect of this, the recommendations of institutional investors, including the UK National Association of Pension Funds and the Association of British Insurers, that directors be re-elected every 3 years are acknowledged (para 3.21) and reflected in the principles (principle A6). With regard to service contracts, the *Hampel Report* supports a reduction of directors' contracts to 1 year where feasible (para 4.9). Such a reduction would further limit the potential for directors to become entrenched within the corporate, by virtue of their tenure.

The report notes the dependence of board effectiveness on the form, timing, and quality of the information it receives from management. While the *Hampel Report* does not signify who should have responsibility to ensure an adequate supply of information to the board, reference is made to the *Cadbury Report's* view that it is the chairman's responsibility to ensure the board is briefed on all issues arising at board meetings (para 3.4). The *Hampel Report* also supports Cadbury on the area of induction and training of new directors, commenting that further periodic training is equally as important as initial training (para 3.5).

Section B of the principles addresses remuneration. The Hampel Committee could not fully assess the extent to which the objectives of the Greenbury committee were being achieved as only one full reporting cycle had occurred between the implementation of the Greenbury recommendations on 31 December 1995 and the finalization of the *Hampel Report*. However, the *Hampel Report* explicitly sets out the principle that no one executive director should be involved in the determination of his own pay (principle B2). There is some deviation from the Greenbury recommendations, which places the responsibility for disclosure of remuneration arrangements with the remuneration committee, as the *Hampel Report* places responsibility for disclosure of remuneration with the whole board (principle B3).

The recommendation by Greenbury that remuneration be disclosed in annual reports caused controversy. Despite this, the *Hampel Report* strongly advocates continuance of transparent reporting, though acknowledges that it may result in upward pressure on pay, given the competitive market for managerial talent (para 4.5). In addition, the level of detail in remuneration disclosures is acknowledged as often excessive; however, this is attributed to the legal and regulatory infrastructure in place, whereby disclosures are required to satisfy multiple requirements of various constituencies. In response to the view that the recommended disclosures are excessive, the *Hampel Report* welcomes streamlining the

legal and regulatory requirements and encourages authorities to explore the scope for simplification (para 4.16). The Greenbury recommendations on linking pay to performance as a means of promoting the maximization of shareholder wealth are supported (para 4.6). The *Hampel Report* advances this by urging remuneration committees to use informed judgment in devising remuneration schemes that are specific to the corporate's circumstances. It is advised that the design of such schemes ought to be understandable from a shareholder's perspective (para. 4.7). To further promote understandability, the *Hampel Report* advocates clear and accurate disclosure of directors' pensions, noting they represent a long-term cost to the corporate (para 4.19) and supports the *Greenbury Report* in the recommendation that shareholders be invited to approve all long-term incentive plans (para 4.20). Consistent with the *Greenbury Report*, the *Hampel Report* holds short of recommending a need for shareholder approval of the remuneration report, reasoning that shareholders may choose to vote against all of the annual report and financial statements, if their concern is sufficiently strong (para 4.21).

Finally, in recognition of the difficulties encountered in the compensation of departing directors, the *Hampel Report* recommends that corporates make detailed provision at the outset as to the payments a director would be entitled to, in the event of early termination of contract (para 4.10).

Shareholders

The *Hampel Report* is clear in its view of the fiduciary duty of corporate directors. In paragraph 1.6 it states that "The single overriding objective shared by all listed companies, whatever their size or type of business is the preservation and the greatest practical enhancement over time of their shareholders' investment." This provides overwhelming support for the primacy of shareholders over other stakeholders. To this end, section C of the *Hampel Report* includes principles relating to

both the role of shareholders and the relationships that listed corporations maintain with their shareholders. In particular, the *Hampel Report* emphasizes the importance of engagement and dialogue between the corporation and its shareholders.

The Hampel Committee's work came at a time when institutional ownership of UK-listed shares was high; the *Hampel Report* claims that 60% of UK-listed corporate shares were in the hands of institutions such as pension and insurance funds (para 5.1). These institutions employ market experts and are specialist in investing funds. Yet despite the high percentage of institutional ownership, research undertaken by the Hampel Committee found a lack of meaningful engagement and voting at investee corporations by institutional investors (para 5.2; 5.7; 5.10), with some exceptions (para 5.3). In response to this finding, the *Hampel Report* urges institutional shareholders to take responsibility for their investments and to make considered use of their votes (principle C1). Moreover, the report advocates dialogue between institutional investors and listed corporations (principle C2). However, the *Hampel Report* acknowledges that the number of opportunities for such engagement is limited in practice. The *Hampel Report* recommends that major institutions review voting guidelines to ensure consistency with each other and with best practice recommendations in governance (para 5.8).

Consideration is also given to smaller private investors by pointing toward the AGM as an opportunity for their contribution to the governance of the corporations in which they invest (principle C4). The *Hampel Report* welcomes initiatives to facilitate an improved flow of information to private shareholders by the UK Department of Trade and Industry and HM Treasury (para 5.25).

Financial Statements, Internal Control, and Auditors

The principles set out in section D are relevant to both listed corporations and auditors. The Hampel

Committee expands the focus given by the Cadbury Committee on the capacity of the annual financial statements to provide a balanced and understandable assessment of the corporate's position and prospects. The Hampel principles encompass the extent to which the annual report and other relevant reports to shareholders and other stakeholders provide such a view (principle D1). It also notes that internal control extends beyond financial controls to include operational, compliance, and risk management which may also impact shareholders' interests (principle D2). The principles echo the views of the Cadbury Committee regarding the audit committee's composition and responsibilities (principle D3). Specifically, it reinforces the recommendations made in the *Cadbury Report* that the audit committee consist of a majority of independent members; take primary responsibility for reviewing the strength of internal control; and take primary responsibility for the quality and accuracy of financial information disclosed to shareholders (para 4.35). With regard to the external auditor, the *Hampel Report* is careful to acknowledge the dual role of the auditor to report to shareholders in accordance with its legal and regulatory requirements, while reporting to the board privately on operational and other matters (principle D4). The potential for audit firms' reliance on single corporations for income from both audit and non-audit services to impair independence is noted, and bodies within the profession (para 6.8) and audit committees (para 6.9) are encouraged to review this risk.

Summary

The *Hampel Report* is primarily recognized for reinforcing the importance of corporate governance as a method of shareholder protection and for its emphasis on the positive contribution of governance to corporations (Short et al. 1999). It emphasizes the importance of taking a "principles" approach to corporate governance rather than creating recommendations that can be

achieved by undertaking a "tick-box" exercise. This shift in emphasis makes the *Hampel Report* one of the most important documents in the evolution of corporate governance codes in the UK. Nevertheless, it is argued that the *Hampel Report* did not go far enough. For example, Dignam (1998) argued that some of the *Hampel Report's* short-term-oriented references, such as those relating to 1-year limits on directors' contracts (para. 4.9), are inconsistent with the pursuit of long-term governance issues. Indeed, this is now generally regarded as a key element to sustainable corporate success (UK Stewardship Code 2012, principle 1).

Furthermore, Webb et al. (2003) consider that the report does not provide sufficient recommendations to counter free-rider problems which have long been acknowledged as a barrier to effective shareholder activism. Finally, the *Hampel Report's* clear support for the primacy of shareholders is no longer supported by policymakers. It has been replaced by a view that directors have a fiduciary duty toward a wide range of stakeholders that includes shareholders (Sullivan et al. 2015). Its criticisms notwithstanding, the *Hampel Report* did highlight the importance of shareholder engagement and dialogue and paved the way for the Financial Reporting Council's publication of the *Combined Code on Corporate Governance* (1998). This *Code* and its subsequent editions provided the framework for the governance of UK and Irish-listed companies for the following 12 years. Many of the core principles of the *Hampel Report* endure in the current *UK Corporate Governance Code*. Indeed, the current *UK Corporate Governance Code* is reflective of the *Hampel Report* in various respects, including but not limited to its unambiguous recommendations that the roles of the board's leaders be separated (provision 9); that the board performs an important role in managing operational and compliance as well as financial risk (provision 29); and that directors' involvement in the determination of their own remuneration should be avoided (principle Q).

Cross-References

- [Higgs Report \(UK\)](#)
- [UK Corporate Governance Code \(2010\)](#)

References

- Cadbury, A. (1992). *Committee on the financial aspects of corporate governance*. London: Gee.
- Dignam, A. (1998). A principled approach to self-regulation? The report of the Hampel committee on corporate governance. *Company Lawyer*, 19(5), 140–154.
- Financial Reporting Council. (1998). *The combined code on corporate governance, June 1998*. London: Financial Reporting Council.
- Financial Reporting Council. (2012). *The UK stewardship code, September 2012*. London: The Financial Reporting Council Ltd. [https://www.frc.org.uk/getattachment/d67933f9-ca38-4233-b603-3d24b2f62c5f/UK-Stewardship-Code-\(September-2012\).pdf](https://www.frc.org.uk/getattachment/d67933f9-ca38-4233-b603-3d24b2f62c5f/UK-Stewardship-Code-(September-2012).pdf). Accessed 16 Mar 2020.
- Financial Reporting Council. (2018). *The UK corporate governance code, July 2018*. London: The Financial Reporting Council.
- Greenbury, R. (1995). *Directors' remuneration: Report of a study group chaired by sir Richard Greenbury*. London: Gee Publishing.
- Hampel Committee on Corporate Governance. (1998). *Committee on corporate governance, final report*. London: Gee.
- Short, H., Keasey, K., Wright, M., & Hull, A. (1999). Corporate governance: From accountability to enterprise. *Accounting and Business Research*, 29(4), 337–352.
- Sullivan, R., Martindale, W., Feller, E., & Bordon, A. (2015). *Fiduciary duty in the 21st century*. London: United Nations Global Compact, Finance UNEP Initiative, PRI, Inquiry. <https://www.unpri.org/download?ac=1378>. Accessed 21 Feb 2019.
- Webb, R., Beck, M., & McKinnon, R. (2003). Problems and limitations of institutional investor participation in corporate governance. *Corporate Governance: An International Review*, 11(1), 65–73.

Handling

- [Governance](#)

Happiness

- [Sufficiency](#)

Happy Planet Index

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Synonyms

[HPI](#)

Definition/Description

The Happy Planet Index (HPI) is a complex index that aims to measure sustainable well-being and happiness of nations (HPI 2020). It compares how efficiently residents of different countries are using natural resources to achieve long lives and high well-being.

The Happy Planet Index comprises of four main indicators – life expectancy, experienced well-being, inequality of outcomes, and ecological footprint (HPI 2016). It measures the relation between these four components in calculating the overall levels of sustainable well-being of nations.

The index shows data in an interactive way, with possibilities to both view rankings of countries by each criterion separately, and as an overall result. The index often shows that despite having higher index ranking on overall income and life expectancy, wealthy Western countries “often seen as the standard of success” do not rank as highly on the overall Happy Planet Index. Instead, the index shows that several countries in Latin America and the Asia Pacific region lead the way by achieving high life expectancy and well-being with much smaller ecological footprints.

The HPI calculates the sustainable well-being of more than 140 countries (HPI 2016).

Unlike other indices that measure happiness, the HPI puts a stress on the balance between individual well-being and ecological status of the surrounding environment (HPI 2020). It aims to emphasize on acknowledging that individual

well-being strongly depends on the state of the environment one lives in as well as the overall incomes and life expectancy (HPI 2020). The index provides a measurement of the levels of happiness in a nation a bit different than some of the more popular happiness indices, and a different – more oriented toward environmental balance – point of view on the “happiness on a collective level” understanding.

Description of the Index

The Happy Planet Index measures the levels of happiness in more than 140 countries. It focuses on four different criteria to derive the overall HPI index measure (HPI 2020).

The Happy Planet Index (HPI) is a complex index that comprises four elements – ecological footprint, well-being, life expectancy, and inequality (HPI 2016).

- **Life expectancy** – the average number of years an infant born in that country is expected to live if prevailing patterns of age-specific mortality rates at the time of birth in the country stay the same throughout the infant’s life. Data is taken life expectancy data for the year 2012, prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations. The Happy Planet Index uses an inequality-adjusted life expectancy index which is calculated using the UNPD data, adjusted through an Atkinson index that takes into account not only the mean life expectancy but the geometric mean life expectancy as well (HPI 2016).
- **Experienced well-being** – the experienced well-being element of the Happy Planet Index is calculated using the Gallup World Poll data. The Gallup World Poll measures the life satisfaction of people in different countries by establishing the average of all responses from within the population of a country. The Happy Planet Index uses an inequality-adjusted experienced well-being element, which is derived through an Atkinson indices for experienced well-being (HPI 2016).
- **Inequality of outcomes** – a measure of how unequal the distribution of life expectancy and experienced well-being scores are within a particular country. The inequality of outcomes measure is the difference in the product of mean life satisfaction and mean experienced well-being, and the product of inequality-adjusted life satisfaction and inequality-adjusted experienced well-being, expressed as a percentage. The index uses an inequality-adjusted experienced well-being (HPI 2016).
- **Ecological footprint** – the average amount of land needed, per head of population, to sustain a typical country’s consumption patterns. It includes the land required to provide the renewable resources people use (most importantly food and wood products), the area occupied by infrastructure, and the area required to absorb CO₂ emissions. Crucially it is a measure of consumption, not production. This means that, for example, the CO₂ associated with the manufacture of a mobile phone made in China but bought by someone living in Chile will count toward Chile’s ecological footprint, not China’s. ecological footprint and is expressed using global hectares as a standardized unit (HPI 2016).

The Happy Planet Index is calculated for a given country by combining the main components in the following equation (HPI 2016):

$$\text{Happy Planet Index} \approx \left(\frac{\text{Life expectancy}}{\text{x Experienced wellbeing}} \right) \times \text{Inequality of outcomes/Ecological Footprint}$$

The index provides a website visualization of the data with color-coded world maps that show the levels of happiness in all countries measured. The color coding follows the traffic light paradigm.

Measuring Happiness

In 2011, the UN General Assembly adopted resolution 65/309 titled *Happiness: Towards a Holistic Definition of Development* with which it

invited member states to measure the levels of happiness of their peoples and use the data for a guide for public policy decision-making (UN 2011). In 2012 the resolution was followed by the first UN High-Level Meeting on *Wellbeing and Happiness: Defining a New Economic Paradigm* (Royal Government of Bhutan 2012). A whole new movement in measuring national well-being emerged that focused not so much on standard criteria as GDP for measuring well-being but instead trying to focus on more intangible factors associated with the feeling of happiness and life satisfaction of people.

More well-known periodical measurements of national happiness are the World Happiness Report of the UN and the Happiness Index. The Gross National Happiness concept has been of growing interest among scholars and policy makers, with the nation state of Bhutan even having implemented an official Gross National Happiness Index of the country (Metz 2014).

The debate around measuring happiness has been a hot topic in economics (Weimann et al. 2014), sociology, psychology, and political science. It has always been a topic of dispute on whether happiness could be measured at all, as it is too much a subjective category (Bates 2009). Happiness has mostly been object of thought on the individual, rather than collective level. However, recent advances in social science have, however, led to the reconsideration of the standard statistical measurements of success and welfare in different countries. Until recently, GDP per capita has been considered the main and most important number for measuring the success of the members in a society. However, it is recognized that this index brings little or no actual knowledge of the happiness of people in a country (UN 2011).

Including different additional factors (as inequality levels, institutional performance, and good governance), a more precise picture of the actual state of people's satisfaction is being introduced in recent years.

However, it is still a difficult task to establish a firm connection between factors such as consumption, social inclusion, good governance, etc., and the elusive category of happiness.

Summary

The Happy Planet Index is an instrument for measuring the overall well-being and life satisfaction of nations emphasizing on the feeling of satisfaction, longevity, and ecological footprint. It is a tool that can help enrich the perspective of levels of happiness within a nation. However, measuring happiness is still an elusive task for statistical analysis, as the feeling of happiness is still a highly subjective and individual-specific psychological category.

Cross-References

► [Index of Sustainable Economic Welfare](#)

References

- Bates, W. (2009). Gross national happiness. *Asian-Pacific Economic Literature* 23 (2):1–16
- Happy Planet Index (HPI) (2016). Briefing Paper 2016 Happy Planet Index. Retrieved at <https://static1.squarespace.com/static/5735c421e321402778ee0ce9/t/57e0052d440243730fd03f3/1474299185121/Briefing+paper+-+HPI+2016.pdf> (Accessed on 13 May 2020).
- Happy Planet Index (HPI) (2020). About the HPI. Retrieved at <http://happyplanetindex.org/about>. (Accessed on 13 May 2020).
- Metz, T. (2014). Gross National Happiness: A Philosophical Appraisal. *Ethics and Social Welfare* 8 (3):218–232
- Royal Government of Bhutan (2012). The Report of the High-Level Meeting on Wellbeing and Happiness: Defining a New Economic Paradigm. New York: The Permanent Mission of the Kingdom of Bhutan to the United Nations. Thimphu: Office of the Prime Minister
- United Nations (UN) (2011). General Assembly resolution 65/309. Happiness: towards a holistic approach to development, A/RES/65/309 (25 August 2011), available from undocs.org/en/A/RES/65/309.
- Weimann, J., Knabe, A., & Schöb, R. (2014). *Measuring happiness: The economics of well-being*. Cambridge, MA: The MIT Press.

Hatchery

► [Fisheries](#)

Hazard Management

- [ISO 31000: Risk Management Guidelines](#)

HDI

- [Human Development Index \(HDI\)](#)

Health

- [Hunger and Poverty](#)
- [Malnutrition and Sustainable Management](#)
- [Workplace Health Promotion](#)

Health and Safety

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Synonyms

[Occupational health and safety](#); [Occupational hygiene](#); [Workplace health surveillance](#)

Definition

Health and safety in the workplace, also known as occupational health and safety and occupational hygiene, is a multidisciplinary field that involves medicine, law, management, and organizational studies. It relates to the employer's duty to provide a safe workplace as a necessary condition to preserve workers' health and well-being.

To fulfill such legal and social responsibilities, employers have to identify health and safety hazards, i.e., anything that has the potential to harm workers or provoke illnesses. Hazards may consist in work materials, equipment, work methods

and practices, workplace layout, and microclimate. Moreover, hazards may derive from workloads and other organizational aspects. The combination of the likelihood that somebody may suffer an occupational injury or disease and the estimated consequences for that person and for others (such as colleagues and visitors) determine the so-called occupational risk, which employers are supposed to minimize through the implementation of occupational health and safety risk management.

The provision of healthy and safe working conditions is also required by the 2030 Agenda for Sustainable Development, which specifically aims to ensure a decent work to all people (SDG 8) and to support good health and well-being (SDG 3).

Introduction

In today's macroeconomic system and business environment, sustainability is the key to long-term success. Organizations that intend to properly balance their financial results with ecological concerns and the well-being of people cannot disregard occupational health and safety. Ensuring safe and healthy conditions for all workers and contractors is broadly perceived as a fundamental part of corporate responsibility. However, the frequency of work-related injuries and diseases is still too high and provokes serious consequences for the individuals who are directly affected, their families, and society at large.

On a strictly economic basis, the International Labour Organization (ILO) estimates that more than 4% of the world's GDP is lost every year because of accidents at work and occupational illnesses (ILO 2022). Besides, work-related health problems give rise to major expenditures for governments and enterprises.

Social disparity also derives from occupational health and safety. Death and disability resulting from hazardous work is the main cause of poverty for many families. Moreover, as poor countries are those with the highest concentration of work-related injuries and diseases, the lack of effective measures to face this problem may even widen the gap between developing nations and advanced ones.

According to the ILO, a vicious circle emerges from insufficient health and safety in the workplace and involves workers' economic and social spheres. In fact, poor health reduces people's working capacity, with repercussions for their productivity and salaries, on the one hand, and life expectancy, on the other. Obviously, all of this also affects the quantity and quality of human resources that companies may employ, as well as the amount of financial resources available for investment in health and safety measures, which could even decrease.

Governments, which are expected to combat social inequalities and poverty, should therefore adopt remedies for irregular and low-quality employment and lack of social protection. Their commitment should also be accompanied by the efforts of labor and business organizations to improve workplace health and safety culture, which must be a priority in the pursuit of sustainable development worldwide.

Not surprisingly, occupational health and safety is one of the fields covered by the 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015 in order to achieve 17 Global Goals (also known as the Sustainable Development Goals or SDGs) concerning peace and prosperity for people and the planet. Health and safety in the workplace is mainly related to two of the Global Goals, namely, SDG 3 and SDG 8, to be achieved by 2030.

SDG 3 concerns "Good health and well-being" and it is classified as a "health goal." Among others, SDG 3 includes Target 3.9, which aims at a substantial reduction in the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination. Evidently, this requires rethinking the industrial processes that still use dangerous substances and replacing these latter, in order to minimize the number of workers exposed to harmful consequences, whether immediately or in the long term.

SDG 8 regards "Decent work and economic growth"; therefore, it is considered a "jobs goal." SDG 8 comprises Target 8.8, which calls for the protection of labor rights and the promotion of safe and secure working environments for all workers, including migrant workers, in particular

women migrants, and those in precarious employment. An organization that effectively addresses this matter can turn the vicious circle described above into a virtuous one, which generates advantages not only for the workers, but also for the organization itself and society.

Indeed, an organization that provides healthy and safe working conditions creates a positive climate for workers, which increases their attachment to work and their productivity in performing tasks; in addition, it plays a pivotal role in trust building, thus making internal relationships easier. External relations also benefit greatly from a healthier and safer workplace, because this helps strengthen the company's image and market position and obtain approval from stakeholders, which is an essential requirement for sustainable success.

Occupational Health and Safety as a Global Issue

Health and safety in the workplace is a fundamental right of any worker and it should be a primary goal of all organizations (Koradecka 2010; Burke et al. 2016; Reese 2016). Ensuring well-being of workers and preventing work-related injuries and diseases are also the main objectives of strategic programs that complement mandatory law provisions in a number of countries.

For example, the "EU Strategic Framework on Health and Safety at Work 2014–2020" aims to improve the implementation of existing rules on health and safety in the European Union, especially through the promotion of effective occupational risk management in small enterprises. Moreover, the Strategic Framework intends to raise awareness on new and emerging risks, also taking into account the ageing of the EU's workforce.

At supranational level, the commitment of the International Labour Organization (ILO), the World Health Organization (WHO), and the Organisation for Economic Co-operation and Development (OECD) is crucial for achieving a sound cooperation between governments, trade unions, and employer organizations, so that occupational health and safety can actually be implemented in

businesses. Indeed, health and safety at work is still an open question, despite the broad debate on work-related issues that constantly occupies political, economic, and social agendas of institutions all over the world.

All business organizations are therefore supposed to take an active role, establishing processes aimed at managing occupational risks. To be effective, occupational health and safety risk management should eliminate or at least reduce incidents, which OHSAS 18001:2007 defined as “work-related event(s) in which an injury or ill health (regardless of severity) or fatality occurred, or could have occurred.”

Incidents can be classified into two categories: accidents, if an injury or illness actually occurs, and near-misses, if no injury or illness occurs (Marek and Bugajska 2010). Investigating and understanding the causes of near-misses is fundamental to avoiding future accidents.

Occupational injuries are wounds or damages to the body, which can be originated by physical, chemical, biological, or psychosocial factors. For example, occupational injuries include burns due to chemical substances or fire, but also muscle pain caused by lifting, pulling, pushing, and carrying materials or equipment, as well as bruises, lacerations, and broken limbs from slipping or tripping, falling from heights (roofs, ladders, stairways, and scaffolding), running into a glass door, and being hit by falling objects and broken glass.

Work-related diseases result from exposure to one or more risk factors arising from work activities. Occupational illnesses can be classified into skin diseases or disorders (contact dermatitis, rash, ulcers, etc.), respiratory illnesses (silicosis, pneumonitis, rhinitis, asthma, etc.), poisoning (by mercury, arsenic, carbon monoxide, etc.), hearing and vision loss, work-related cancer, stress, and mental health disorders.

Occupational injuries and illnesses can be fatal, when they lead to the death of the victim within one year of the accident, or not-fatal, when the victim survives (Eurostat 2013). Nonfatal accidents can have temporary or permanent effects on the worker’s health, including living with a disability. Firm-level and macroeconomic consequences can also derive from nonfatal

accidents, such as absence from work; in the most serious cases, workers may be forced to change job or even leave the labor market.

Unfortunately, our economic systems are still in great need of better health and safety at the workplace, as the following data on occupational accidents and diseases clearly confirm.

- a) According to the ILO, occupational accidents and work-related diseases cause 2,300,000 deaths worldwide every year. In addition, 313,000,000 nonfatal injuries result in extended absence from work. The estimated economic impact of poor occupational health and safety practices corresponds to more than 4% of Gross Domestic Product each year (ILO 2022).
- b) In 2019, the EU-28 witnessed 3,140,950 non-fatal accidents (determining at least four calendar days of absence from work) and 3,408 fatal accidents, corresponding to an incidence rate of 1,603 nonfatal accidents and 1.74 fatal ones per 100,000 persons employed. Moreover, work-related accidents more frequently involved men (68% of nonfatal accidents) than women (32%), due to two main factors: the large employment of men in highly hazardous sectors like mining, manufacturing, and construction, and the frequent resort to part-time contracts by women, who spend fewer hours at the workplace than men do (Eurostat 2022).
- c) In 2019, the US private sector reported about 2,800,000 nonfatal injuries and occupational illnesses, with a total incidence rate of 2,800 per 100,000 full-time equivalent workers. Moreover, 5,333 workers died from an occupational injury, accounting for 3.5 per 100,000 full-time equivalent workers. About 20% (1,061) of worker fatalities in private industry were in construction (Bureau of Labor Statistics, United States Department of Labor 2022).

However, the situation is even more alarming, because the official statistics underestimate the phenomenon of occupational injuries and diseases. This is due to the fact that, in some countries, accidents are not systematically reported to the competent agencies. Sometimes, this lack of

reporting depends on the will to hide accidents. Moreover, workers and employers omit to inform the authorities about work-related injuries and illnesses where the legislation does not provide financial incentives to do so: this even happens in some European countries, such as Sweden and the Netherlands (Brück and Lissner 2017).

The context described above requires great attention and specific interventions, as occupational well-being and the prevention of accidents have not only social implications. In a macro-economic perspective, governments are responsible for promoting healthier and safer workplaces, because this increases productivity (thanks to less absenteeism and turnover), diminishes healthcare costs, keeps older workers in employment, and encourages the research for harmless work methods and technologies.

Benefits are also evident for enterprises, in terms of fewer lost working days, fewer threats of legal action to deal with, and better relations with trade unions and public agencies. Workers who appreciate the employer's commitment to health and safety and are involved in training programs are more motivated, with positive effects on their productivity. Generally speaking, companies that care for their personnel's health and safety are perceived as socially responsible, and this boosts their reputation and their relationships with banks, suppliers, customers, and the society at large. In some countries, companies are also financially rewarded if they implement healthy and safe workplaces: for instance, German companies that demonstrate an above-average performance in terms of occupational health and safety benefit from lower insurance premiums, tax reduction, and public grants.

Responsibilities for Health and Safety in the Workplace

The prevention of occupational injuries and illnesses is strictly connected to the formal adoption of a proactive policy and the implementation of a management system, which can also receive an independent third-party certification (e.g., ISO 45001).

In particular, companies of any size and sector should carry out regular assessments of their occupational risks, based on the positive cooperation between employer and workers (or trade unions, acting as employees' representatives). In addition, many other actors from inside and outside the company are involved to ensure effectiveness of occupational risk management.

First of all, public agencies like the European Agency for Safety and Health at Work (EU-OSHA) and the US Occupational Safety and Health Administration (OSHA) contribute to raising awareness of occupational issues. Their activity includes publishing guidelines and standards to help companies implement an appropriate health and safety management system. These agencies also provide training and assistance to firms and develop online interactive tools (e.g., the OiRA project launched by the EU-OSHA) that organizations can directly use in their risk assessment processes. Furthermore, they disseminate information, statistics, and technical reports in order to support the activities of tripartite networks comprising government bodies, employer associations, and trade unions.

At firm-level, employers are responsible for providing a workplace free from serious hazards (Alli 2008). In this regard, they must examine the equipment, substances, and working methods to establish whether they are dangerous for workers. This is an important phase in the risk assessment process, which can obtain better outcomes if it is performed in cooperation with the employees. For this reason, the employer must constantly consult and involve the workers (or their representatives), who have direct knowledge of existing and potential risks to their own health and safety. The cooperation is also critical to the selection of measures to eliminate or reduce hazards.

Other responsibilities of the employer include:

- Keeping the personnel informed about the occupational risks identified and the measures implemented to deal with them
- Providing instructions, assistance, and training, particularly to new and young workers who may have difficulties in perceiving and understanding risks

- Providing collective measures and personal equipment to safeguard workers' health and safety
- Monitoring the effectiveness of collective measures and the proper usage of personal equipment
- Organizing first aid and emergency procedures
- Providing medical examination and taking into account the personal conditions of vulnerable workers, such as pregnant women and people with disabilities
- Conducting investigations after an accident has occurred, recording the results and using them to improve the workplace conditions
- Reporting occupational injuries and illnesses to the national agency and ensuring access to the company's medical records

In large companies, the employer's responsibilities are normally attributed to the CEO, who fulfills them with the support of other managers and under the supervision of the board of directors or a devoted committee. For example, the legislation of several Canada's provinces and the best practices of corporate governance implemented in the country require the establishment of a health and safety committee within the board. The committee is entrusted with developing and implementing appropriate policies and reviewing the company's performance with respect to industrial health and safety matters.

Workers are the other essential actors in occupational risk management. Workers have the right to be informed and consulted with reference to occupational hazards and preventive and protective measures, submit proposals, and receive adequate instructions and training. At the same time, workers must alert their supervisors about perceived risks, use personal protective equipment, and take care of their own health and safety and of that of any other person who may be affected by their conduct.

Especially in complex enterprises, the effectiveness of occupational risk management also depends on the involvement of professionals and consultants, including occupational physicians

with different expertise, such as ergonomists, microbiologists, noise and vibration specialists, occupational hygienists, and psychologists. Doctors provide advice and medical support in the workplace. In particular, they contribute to health surveillance by performing routine check-ups, looking for early signs of work-related stress and illnesses, administering questionnaires to the employees, and keeping records (HSE 2013).

Finally, independent auditors can be hired to provide objective and unbiased opinions on the entire health and safety risk management system.

Occupational Risk Management

Occupational risk management aims to protect workers' health and safety. Regular processes of occupational risk management help employers eliminate hazards from the workplace or at least reduce the likelihood for workers to be harmed while performing their activities (Taylor et al. 2004).

To be effective, occupational risk management requires collecting complete and appropriate information on the hazards in the workplace. Employers are responsible for identifying and removing materials and equipment, as well as rethinking work methods that could potentially provoke nonfatal or fatal injuries to workers, or cause illnesses with immediate symptoms or with occurrence in the long term.

Two aspects must be considered to properly analyze hazards:

- a) The likelihood that they actually harm workers.
- b) The expected severity of impact, i.e., how serious the consequences can be for the workers and, therefore, for the company. Sometimes the assessment must also focus on possible effects for the public, such as visitors and neighbors: for example, a broader consideration of the impact is necessary when the analysis regards industrial processes involving the use of highly flammable materials.

The combination of the likelihood that a hazard can actually harm somebody and its expected impact is defined risk. Health and safety risk assessment is a complex activity, which helps the employer prioritize occupational risks and decide which ones to tackle first. Dealing with such risks means eliminating hazards through the replacement of dangerous substances with harmless ones and the adoption of a different design of work procedures in order to prevent workers from being injured. When definitive solutions cannot be arranged, the employer must look for other types of risk response based on reasonable measures to reduce the likelihood and/or the expected impact of occupational risks.

In order to plan adequate risk responses, the employer should take into account the latest advancements in science, medicine, and technology. Recent developments could in fact have emphasized the existence of risks that were not identified in the past, and could have provided new solutions. For this reason, risk management should never be considered completed and concluded; on the contrary, the employer should periodically review the procedures in place and the materials and equipment in use within the organization and examine the opportunity or necessity to change them with less harmful ones.

Except for particularly dangerous materials and activities, the law does not prescribe how to manage occupational risks. In the same way, there are no mandatory provisions establishing to what extent employees can be considered protected from hazards. It is the employer's responsibility to evaluate this and decide how to proceed, also bearing in mind the measures that have already been implemented within the company. If those measures do not appear appropriate, they must be strengthened; alternatively, new ones must be introduced.

In each company, the pursued level of prevention and protection depends on the dominating risk philosophy (Bosetti 2015). If the board of directors in large companies or the employer in small ones are particularly averse to taking risks, the health and safety risk management system will probably include training of personnel and

pervasive controls to eliminate or reduce the hazards, in the best interest of the workers. Moreover, the commitment to health and safety shown by the board or the employer can encourage all the personnel to pay attention while performing their tasks, so that dangerous conducts can be avoided; indeed, workers must take reasonable care of their own and their colleagues' health and safety.

The whole process of occupational risk management can deliver better outcomes for both the workers and the employer if it is carried out through a collaborative approach between the parties. Consultation and involvement of employees is indeed fundamental for the employer to acquire better knowledge and understanding of all the workplace hazards. As employees are directly exposed to the hazards, even on a daily basis, their suggestions can add value to the whole process. Experts in health and safety issues with background and experience in the specific industry of the company should also be engaged in the process. Similarly, other employers, managers, entrepreneur associations, and trade unions can provide important insights toward a healthier and safer workplace.

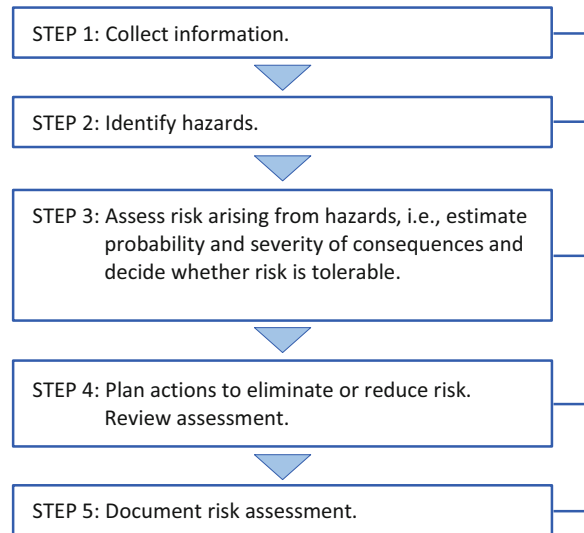
According to the European Agency for Safety and Health at Work (EU-OSHA 2007), occupational risk management should take place as shown in Fig. 1, irrespective of the company's size and activity.

Collection of the Information Necessary for Implementing Occupational Risk Management

The process starts with the collection of information concerning the workplace, the activities carried out and all the different types of workers operating not also in the company's premises, but also elsewhere (e.g., drivers who spend their working day on the road and salesmen who visit clients' offices and customers' homes). In-depth knowledge and understanding of the company's structures, processes, and personnel composition is essential to identify the occupational hazards and determine whether preventive and protective measures are needed. The employer should, *inter alia*, collect information regarding:

Health and Safety,

Fig. 1 Steps in occupational risk management. This figure shows the five steps for implementing effective processes of occupational risk management within an organization of any size and industry. Created by this Author, based on EU-OSHA (2007)



- The workplace layout. For example, is there enough space to walk from a workstation to another without being hit by pieces of machinery or furniture? Is the workstation organized in such a way as to be comfortable for the workers, or are they compelled to do unnatural movements to reach and use the working tools? Are there bare electrical wires in the workshops or in the offices?
- The equipment, tools, and materials used. For example, does the equipment contain sharp and protruding parts? Do the processes employ chemicals that could provoke burns, or do they release toxic gases?
- The jobs performed. For example, what risks to health and safety can be associated to the activity of a glassmaker, a carpenter, a building constructor, a bank clerk, a secretary, a teacher, a driver, a lab researcher, a nurse, a surgeon, and so on? Obviously, every job entails exposure to peculiar hazards. Moreover, in a company several different jobs are normally performed, such as manual and administrative jobs. This requires careful observation of each position included in the company's organizational chart, in order to identify the possible sources of injury and illness for each of the jobs performed in the company.
- The composition of the personnel, with focus on so-called vulnerable workers. For example, are there new or expectant mothers, agency and temporary workers, new or young workers, migrant workers, homeworkers and lone workers, or people with disabilities or illnesses? Workers belonging to these categories are often exposed to specific risks, which require greater attention in the process of occupational risk management. Table 1 provides some examples.
- The hazards identified in the past and the measures already in place to deal with them.
- The accidents, near misses, and cases of occupational diseases occurred to the company's personnel or in the company's sector in the past.
- The latest scientific and technological studies pinpointing new and emerging risks and those suggesting more advanced solutions for already known risks.
- The evolution of health and safety laws, with emphasis on the new requirements introduced.

This wide range of information can be obtained from a number of sources: direct observation of the workplace, the activities and the personnel, employee interviews, technical data on the equipment and materials used in the production, reports on occupational accidents and diseases occurred in the company or the sector, studies on the effects

Health and Safety, Table 1 Vulnerable workers and protection needs

Vulnerable workers	Reasons for additional care in protecting vulnerable workers' health and safety
New or expectant mothers	They cannot lift or carry heavy loads; they need rest; they cannot be exposed to biological and chemical agents; they are more exposed to work-related stress.
Agency and temporary workers	They could have little experience with the assigned tasks; they could have limited knowledge of how machines operate.
New and young workers	They could have little experience with the assigned tasks; they could have limited knowledge of how machines operate. As specifically regards young workers, they often have little awareness of existing and potential risks, also due to lack of maturity.
Migrant workers	They could have little experience with the assigned tasks; if they do not speak the same language of the employer and the other employees, they could have difficulties in understanding instructions on how to perform the activities and how to deal with hazards.
Homeworkers	As they perform activities such as, e.g., working with adhesives and soldering, at their own home, they are not constantly monitored and this could lead them to put little attention in the operations, with higher risk for their health and safety.
Lone workers (e.g., construction workers, salesmen, truck drivers, and home care nurses)	Working without direct supervision could expose them to verbal or physical violence. Working in isolation can affect their social life.
People with disabilities or illnesses	They could need reasonable adjustments of the workplace, including extra equipment and changes to layout in order to overcome physical barriers.

Created by this Author, based on HSE (2014)

of pollutants released by the company's industrial processes, and other scientific and technical publications.

Hazard Identification

Once the information has been collected, the employer must use it to identify what hazards really exist in the company. Many hazards are job-based and sector-based (see examples in Table 2), whereas others can be found in any organization.

The most common hazards are associated with slippery surfaces, hot and cold materials, micro-climate (temperature, sun radiation, humidity, and airflow), noise, electrical lighting, sitting in a poor posture, moving machines, working on ladders, lifting loads, handling tools, driving in the traffic, etc. Some other hazards are related to the organization of the work, regardless the company's activity or sector: for example, night and early morning shifts can alter the sleep and make it

difficult to have a normal social life. Hazards also include violence at work, such as verbal abuse, threats, mobbing, and psychological hazards.

A psychological hazard many employees are exposed to is work-related stress (Health and Safety Authority 2011; Biron et al. 2012), i.e., excess of pressure at work or pressure that lasts for a long time. Stressed employees perceive the work environment as too demanding compared to their ability to cope. Sometimes, stressed workers desire larger autonomy and more prestigious assignments, and the impossibility to reach these objectives increases their feeling of frustration. Work-related stress has psychological, physical, behavioral, and organizational implications. It can seriously put the employee's health at risk, because it can influence his or her psychological status, even leading to depression, and provoke physical discomfort, disorders, and illnesses. In addition to this, work-related stress can affect the

Health and Safety, Table 2 Examples of activity-based and sector-based hazards

Activity or sector	Hazards
Office work	Slips and trips; obstacles on the route; microclimate; noise; posture; computers and screens; wires and cables; office equipment (chair stability, arm and foot supports, etc.); continuous work in front of the screen; problems with eyesight; musculoskeletal pain.
Construction	Falls from heights; trench and scaffold collapse; electric lines; workplace transport; repetitive motion injuries; exposure to dust; failure to use personal protective equipment.
Food preparation, cooking, and service	Slips and trips; obstacles on the route; handling heavy items (flour sacks, pieces of meat, etc.); contact with steam, hot water, hot oil and hot surfaces; handling knives; failures of electrical and gas appliances; contact with chemical cleaning products; drunken customers.
Drycleaners	Use of chemical products and chlorinated solvents; musculoskeletal pain from handling heavy/bulky clothes; burns from ironing; slips and trips; verbal abuse and threatening behavior from customers; failures of electrical appliances.
Call center	Stress due to lack of control on timing/frequency of incoming calls; verbal abuse from customers; noise and overlap of voices; voice loss; poor hygiene of headset; slips and trips; office equipment (chair stability, arm and foot supports, display screen equipment, etc.).

Created by this Author, based on: EU-OSHA (2007); Examples of risk assessment retrieved from the Health and Safety Executive’s website, <http://www.hse.gov.uk>, 4 August 2022

organization’s productivity and climate, especially if stressed workers become careless or slow in performing their tasks and refuse to cooperate with their colleagues.

Risk Assessment

Since risk management is an expensive and time-consuming process, the employer has to prioritize health and safety risks in order to establish which ones require to be managed. The decision depends on the outcomes of risk assessment, which estimates risk likelihood and impact. In this phase, previous experience is useful to establish the likelihood that a specific hazard will materialize and the impact it will produce in terms of employees harmed, types of injuries occurred (fatal or non-fatal ones, with temporary or permanent impairment), and working days lost. Broader considerations should also involve the estimated cost of reputational damage that can follow an accident.

Different qualitative and quantitative techniques (Dougherty 1999; Frame 2003) can be applied to assess occupational risks; however, all of them express risk as a combination of likelihood and impact. For example, the likelihood of a hazard (e.g., falls due to slippery floor) can be low, medium, or high, according to how often that hazard has materialized in the past (e.g., once a week, once a month, once a year); the impact can be null, moderate, medium, or extreme, according to the injuries occurred (e.g., no injury, bruises, broken legs or arms, fractures leading to disability).

Priority will be given to the occupational risks with the highest probability of occurrence and the most severe estimated effects; by contrast, risks with very low probability and limited impact will not require any treatment.

Risk Treatment

When an occupational risk is not tolerable by the company, a risk response is adopted to eliminate it at all or to reduce its probability and/or impact.

At first, the employer should adopt collective protective measures, whose selection should be discussed with the employees directly exposed to the risk or their representatives. In this sense, risks for health and safety may be managed through the modification of work methods, the replacement of dangerous substances (a solution that also reduces the environmental impact of

business processes), a different organization of working time and breaks, building improvements to assure better ventilation, lighting and climate, and so on.

Training is a significant collective measure to protect the health and safety of the personnel. Thanks to the professional skills they have acquired, trained workers know how to use machinery and tools in the correct way and how to carry out dangerous processes. Most of all, trained workers are aware of the risks to which they are exposed, so they are stimulated to remain vigilant in any circumstance. Trained and experienced workers can also serve as mentors for young and newly hired workers; in particular, mentoring is a convenient method for sharing not only skills and competencies, but also a positive health and safety culture (Alli 2008). All of this contributes to the reduction of incidents, with clear benefits for all personnel.

For risks that cannot be eliminated or properly reduced through collective measures, the employer must provide the workers with personal protective equipment (PPE) and teach them how to use it. The employees receive their PPE free of charge and are responsible for its correct usage and conservation. Tables 3 and 4 identify some examples of PPE whose adoption is sometimes

imposed by law: for example, using PPE at work is prescribed in construction and industrial productions that could harm body parts (eyes, head, neck, ears, hands, lungs, etc.).

Risk Reporting

The last step in occupational risk management consists in documenting the process and its outcomes. All the steps must be described in a detailed report, also specifying which people have cooperated with the employer to identify hazards, assess risks, select and implement measures to deal with them, and monitor and review the whole process.

An accurate report should also focus on the risks that have actually occurred. All accidents should be investigated, possibly by independent auditors, to discover their causes and promptly eliminate or contain them. Investigating near misses is also necessary to constantly improve risk prevention within the company.

Risk reporting is important for demonstrating the commitment of the employer to assure adequate health and safety on the workplace, in compliance with the law and in accordance with the expectation of primary stakeholders, such as the personnel, trade unions, and public agencies entrusted with the supervision of occupational issues.

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Health and Safety, Table 3 Personal protective equipment to prevent body injuries

Parts of the body requiring protection	Hazards	Examples of personal protective equipment (PPE)
Eyes	Chemical splash; dust; gas; bright and glaring light	Safety spectacles and goggles; face screens; visors
Head and neck	Impact from falling or flying objects; hair caught in machinery	Safety helmets; hairnets; welding masks; sanitary bonnets
Ears	Noise	Earplugs; earmuffs
Hands and arms	Abrasion; hot and cold temperatures; cuts and punctures; chemical splash	Gloves; sleeves; cotton gloves; anti-vibration gloves
Feet and legs	Wet, hot, and cold conditions; slipping; cuts and punctures; chemical splash	Safety boots; safety shoes; water resistant boots; knee-pads
Lungs	Dust; gas; oxygen-deficient atmospheres	Filtering face masks; disposable masks; respirators
Whole body	Heat; chemical splash; contaminated dust	Overalls; aprons; disposable clothing

Created by this Author, based on HSE (2014)

Health and Safety, Table 4 Personal protective equipment and emergency equipment to be used in particular circumstances

Circumstance	Hazards	Examples of personal protective equipment (PPE) or emergency equipment
Working at height	Falls	Safety harnesses and ropes; non-slip outsole with cleats and other safety footwear
Roadworks	Collisions and risk of being run over	Flags; warning barrier tape; traffic control chain; mobile traffic signs
Fire protection	Burns; breathing problems	Smoke detectors; fire sprinklers; fire extinguishers; fire hoses; respirators
First aid	Worsening of the sick or injured person	First aid kit; traditional and aluminum emergency blankets; stretchers; resuscitation equipment and defibrillator

Created by this Author

Summary

The evolution of the business environment requires a rethinking of health and safety risk management. Nowadays, the traditional “zero-harm” approach is no longer sufficient; instead, companies should implement a pro-active approach, based on the awareness that health and safety risk management can be a powerful means of value creation in the long term. This is also consistent with the sustainable approach promoted by the 2030 Agenda, which calls for a sound integration of business prosperity, people’s well-being, and low environmental impact.

In this regard, involvement and consultation of employees has a broader scope than mere compliance with the law. Employees’ involvement should be interpreted as a form of stakeholders’ engagement, which tends toward wider purposes: not only the identification of occupational hazards and the selection of preventive measures, but also the factual recognition that employees deserve to take part in corporate decision-making, since they play a key role in the company’s sustainable success. Moreover, it has been largely proved that employees’ engagement increases workers’ motivation and loyalty to the company, with a positive impact on productivity, quality of work and corporate financial performance.

The modernization of occupational health and safety also requires to enlarge its focus in order to include emerging psychosocial risks like bullying and harassment. The comprehensive wellness of each worker should therefore constitute the final

aim and main care of occupational risk management, which should also be integrated with quality management systems.

However, the effective adoption of a more responsible approach depends on the full determination of the company’s leadership. Strong commitment toward a more participative governance is indeed crucial to face the new challenges of occupational health and safety.

Cross-References

- Occupational Safety and Health Administration
- SA8000 Standard
- SA8000 Standard II

References

Alli, B. O. (2008). *Fundamental principles of occupational health and safety*. Geneva: ILO.

Biron, C., Karanika-Murray, M., & Cooper, C. (Eds.). (2012). *Improving organizational interventions for stress and well-being: Addressing process and context*. East Sussex: Routledge.

Bosetti, L. (2015). Risk management standards in global markets. In S. Brown, S. Larsen, K. Marrongelle, & M. Oehrtman (Eds.), *Proceedings of the 3rd virtual conference Quaesti* (Vol. 3, pp. 81–86). Zilina.

Brück, C., & Lissner, L. (2017). Workers’ compensation and economic incentives. OSHwiki. https://oshwiki.eu/wiki/Workers%E2%80%99_compensation_and_economic_incentives.

Bureau of Labor Statistics, United States Department of Labor. (2022). *Injuries, illnesses, and fatalities*. <https://www.bls.gov/iif/>. Data extracted in August 2022.

- Burke, R. J., Clarke, S., & Cooper, C. L. (Eds.). (2016). *Occupational health and safety*. New York: Routledge.
- Dougherty, T. M. (1999). Risk assessment techniques. In L. J. DiBerardinis (Ed.), *Handbook of occupational safety and health*. New York: Wiley.
- EU-OSHA (European Agency for Safety and Health at Work). (2007). Safety and health at work is everyone's concern. Nurnberg.
- Eurostat. (2013). *European Statistics on Accidents at Work (ESAW) – Summary methodology*. Luxembourg: Publications Office of the European Union.
- Eurostat. (2022). *Statistics explained*. <http://ec.europa.eu/eurostat/statistics-explained>. Data extracted in August 2022.
- Frame, J. D. (2003). *Managing risk in organizations*. San Francisco: Jossey-Bass, Wiley.
- Health and Safety Authority. (2011). Work-related stress. A guide for employers. Republic of Ireland.
- HSE (Health and Safety Executive). (2013). Managing for health and safety. London.
- HSE (Health and Safety Executive). (2014). The health and safety toolbox. London.
- ILO (International Labour Organization). (2022). *Safety and health at work*. <https://www.ilo.org/global/topics/dw4sd/themes/osh/lang%2D%2Den/index.htm>. Retrieved 4 Aug 2022.
- Koradecka, D. (Ed.). (2010). *Handbook of occupational safety and health*. Boca Raton, Florida: CRC Press, Taylor and Francis Group.
- Marek, K., & Bugajska, J. (2010). Occupational diseases. In D. Koradecka (Ed.), *Handbook of occupational safety and health*. New York: Chapman and Hall/CRC.
- Reese, C. D. (2016). *Occupational health and safety management: A practical approach* (3rd ed.). Boca Raton, Florida: CRC Press, Taylor and Francis Group.
- Taylor, G. A., Easter, K., & Hegney, R. (2004). *Enhancing occupational safety and health*. Oxford: Elsevier.

Health and Values Marketing

- [Social Marketing](#)

Health System

- [Medicine and CSR](#)

Health Value

- [Healthcare Value](#)

Healthcare

- [Medicine and CSR](#)

Healthcare Governance

- [Hospital Governance](#)

Healthcare Value

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H

Synonyms

[Health value](#); [Value in healthcare](#)

Definition

Healthcare value has been defined as “the satisfaction of expressed and latent health needs of single individuals and of the community, respecting the objectives established by health planning (at national level, regional level, etc.), timely, in comfort conditions, without waste of resources, maintaining the conditions of economic and financial balance, with the parallel social balance, enhancing the intellectual capital and guaranteeing the knowledge development and improvement in the medical and health sector” (Gulluscio 2011, 2013).

This definition focuses first and foremost on public health organizations, describing the process of generating and distributing value performed by public and private health institutions, notwithstanding in which welfare state model they operate.

Introduction

The supply of healthcare services has great social relevance. It is therefore connected with

sustainability and social responsibility issues. In fact, health is one of the most relevant needs of human being and of the entire administered community. Health services can be supplied by public administrations, private organizations, or by a combination of them.

The concept of value is very relevant for public and private, profit and nonprofit organizations since all of them pursue the common goal of creating and distributing value among their stakeholders. To create value just for one category of stakeholders is not enough; organizations improve their survival probability over time meeting the needs of several stakeholders. This happens through the creation and distribution of value to the various stakeholders of the organization.

It is therefore interesting to identify and analyze the characteristics of the value that healthcare organizations (especially those operating in the public sector) should produce and distribute. This value will henceforth be referred to as “healthcare value.” The production and fair distribution of this value is the main goal that all healthcare organizations should pursue.

In this introduction, the most relevant definitions of healthcare value are presented. The following section is devoted to an in-depth analysis of the definition here proposed.

According to Porter and Teisberg (2006), healthcare value is “the patient outcomes per dollar spent.” Three main aspects emerge from this definition:

- (a) Value is here interpreted under a specific point of view, i.e., in the patient’s perspective. In fact, the patient can be understood as the most important stakeholder in the value production process.
- (b) In the process of healthcare value creation, it is important to consider the outputs (i.e., the amount of services provided) and the inputs, but the most relevant element to be considered is the outcome in terms of patient’s health.
- (c) The value creation process can be synthesized through the “value equation,” i.e.,

Outcome (actual results of care in terms of patients’ health) cost.

At the numerator, the outcome is a multi-dimensional data, incorporating the satisfaction felt by patients, such as survival, the sustainability of the recovery, and functional status.

At the denominator, cost includes the expenses related to a specific care occurrence for a single patient and also total costs connected to the whole care cycle for each patient’s medical state.

According to Fielden (2011), healthcare value can be understood as “useful outcomes divided by the cost of achieving those outcomes.” Even in this definition, the most relevant aspect of value is the improvement of patients’ health.

According to AQA Alliance (2006), healthcare value is “a measure of specified stakeholder’s (such as an individual patient’s, consumer organization’s, payer’s, provider’s, government’s, or society’s) preference-weighted assessment of a particular combination of quality and cost of care performance.” In this case, the perspective of value seems to be broader than in previous definitions, since it is interpreted in a multi-stakeholder point of view instead of in the simple patient’s perspective. Moreover, this definition has a subjective focus, as it emphasizes the valuations and preferences of a specific stakeholder. There are also relevant points in common between this definition and the previous definitions of healthcare value. In fact, similarly to previous definitions, according to AQA, healthcare value is the end result of a couple of elements: costs and care quality.

AQA’s definition is the starting basis for Chung et al. (2008)’s definition, according to which “healthcare value is a measure of a stakeholder’s utility for a particular combination of quality and output.” In this definition, the main element emerging is the notion of “utility.” Healthcare value is therefore interpreted as a metric for evaluating stakeholder’s utility, i.e., the well-being (or contentment) that a stakeholder using a healthcare service perceives. The authors suggest to measure this value through the stakeholder’s willingness to pay for the service. This definition focuses on the relationship between quality and

output. It differs from AQA's definition since the latter focuses on the relationship between quality and cost.

Muir Gray (2011) analyzed the notion of healthcare value has been widely analyzed by, specifying that it can be explored from distinct stakeholders' perspectives, i.e.:

- (a) In the *payer's* standpoint: the maximization of value is reached if it is not possible to raise the good or to reduce the bad reallocating a single euro from one group of patients to another or from one place to another.
- (b) In the *patient's* standpoint, healthcare value depends on both the *outcome* and the *way of delivering the care*.
- (c) In the *clinician's* standpoint, healthcare value is maximized when his/her time is profitably employed since the scarcest resource for clinicians is their time.
- (d) In the *manager's* standpoint, the maximization of healthcare value is reached when it is possible to offer health services maximizing satisfaction and minimizing disbenefits, gathering the needs of financiers and persistently ameliorating the standing of service.

According to Muir Gray, healthcare value is maximized with the achievement of *optimality*, i.e., the balance between costs and benefits of healthy activities.

The definitions presented in this section predominantly zoom in on the relationship between costs and benefits/utilities. Save Muir Gray, all of them consider a single stakeholder at a time.

The following section analyzes the multi-stakeholder definition presented at the beginning of this contribution, inspecting its single elements.

Meaning of the Concept of Healthcare Value

The definition of healthcare value here proposed considers it as "*the satisfaction of expressed and latent health needs of single individuals and of the community, respecting the objectives established by health planning (national, regional, etc.)*,

timely, in comfort conditions, without waste of resources, maintaining the conditions of economic and financial balance, with the parallel social balance, enhancing the intellectual capital and guaranteeing the knowledge development and improvement in medical and health sector."

Like Muir Gray's definition (and differently from other definitions reported in the introduction of this contribution), this definition is manifold, taking into account various stakeholders and needs to fulfill. The main elements of this definition will be analyzed in the following.

First of all, the definition relates to *health needs*. According to the World Health Organization (WHO), health is a state of physical, psychic, and social well-being, and not the simple absence of sickness or infirmity. The interventions in support of health can be extremely broad: prevention, diagnosis, care, rehabilitation, etc. Moreover, healthcare services are sometimes collective services, i.e., services where the individual share of use cannot be or can difficultly be identified (e.g., in prevention and hygiene).

The proposed definition also refers to *expressed* and *latent* health needs. In the case of *expressed* health needs, health administrations must deliver services according to specific users' requests. In the case of *latent* health needs, health administrations must deliver services not specifically requested by any user, but useful to play a part in the whole enhancement of the community's health status, e.g., in the case of preventive screening.

The definition also mentions the "*respect of the objectives established by public health planning (at national, regional, etc. level)*." Implicit in this part of the definition is the reference to the achievement of *internal effectiveness*.

The satisfaction of health needs should also happen in *timely* and *comfort conditions*. This means that *external effectiveness* should be achieved, delivering services in quality conditions (with patient and caregiver-friendly services, in welcoming and accessible structures, etc.).

The definition also refers to the *absence of resources' waste*, i.e., in *efficiency* conditions.

Moreover, the ability of health administrations to durably operate and survive over time needs the

achievement of *economic and financial equilibrium*, which are conditions emerging from financial statement data.

Anyway, economic and financial equilibrium is not enough to guarantee the health organization's survival. It is also necessary to achieve the *social balance*, understood as a condition in which the general public assigns higher utility to health performances as compared to the resources (like taxes, prescription charges, etc.) necessary to supply the health services.

Reference is also made to an *organizational environment* encouraging the fulfillment of *intellectual capital's* expectancy. In health care organizations, this condition is very relevant, since the connection with patients is essential not only for the performances' effectiveness but also for the patients' felt quality.

The definition also refers to "*knowledge development and improvement in the medical and health sector.*" In other words, healthcare organizations should be able to enhance knowledge, competences, and skills, to promote *progress in the medical and health field*. This happens through research and development of scientific, technical, and medical knowledge, which allow an improvement of care and health conditions for single citizens and the whole community. Healthcare organizations can contribute to scientific, technical, and medical knowledge improvement in two main ways:

- (a) *Directly*, i.e., promoting *research* activity. This usually happens for university hospitals and other structures devoted to research.
- (b) *Indirectly*, i.e., through informing and personnel retraining on research outcomes of other institutions.

Key Issues

There is no single definition of healthcare value. Many definitions focus on the balance between costs and utilities of health services. Other concentrate on the relationship between costs and benefits. In many cases, the focus is on a single

stakeholder at a time. Among the many healthcare stakeholders, most definitions focus on the *patient*, probably because he/she can be considered as the *privileged stakeholder*, i.e., the stakeholder whose satisfaction allows approximately to satisfy also the needs of all other stakeholders.

There are various stakeholders interested in healthcare services, and their needs sometimes conflict. This is why some definitions of healthcare value adopt a multi-stakeholder perspective.

The most relevant stakeholders of healthcare organizations are:

- Citizens
- Health and non-health personnel
- Other public administrations
- Suppliers
- Research centers and universities
- Professional associations
- Trade unions
- Volunteers' associations
- Media

Summary

Healthcare value literature should focus, in the future, to the analysis of the different stakeholders' expectations and, therefore, should provide multi-stakeholder interpretations and definitions.

Prospects for healthcare value literature include the measurement of this value (see Porter 2010). In fact, given the complexity and multidimensionality of healthcare value, its measurement is quite complicated. Whereas inputs (e.g., the purchase cost of production factors) and outputs (e.g., the number of medical checks or surgeries) are quite easy to "measure," it is much more complicated to measure the outcomes of healthcare activities (e.g., the consequences of a health treatment on the patient's health conditions). The latter aspect should be the object of future research and application in the practice.

Cross-References

- ▶ Customer Value Creation
- ▶ Human Rights
- ▶ Medicine and CSR
- ▶ Public Value
- ▶ Stakeholders
- ▶ Sustainable Development Goals (SDGs)
- ▶ Value in Healthcare

References

- AQA Alliance. (2006). *AQA principles of 'efficiency' measures..* Available at: <http://www.aqaalliance.org/files/PrinciplesofEfficiencyMeasurementApril2006.doc>
- Chung, J., Kaleba, E., & Wozniak, G. (2008). *A framework for measuring healthcare efficiency and value. Physician consortium for performance improvement, work group on efficiency and cost of care.* American Medical Association.
- Fielden, J. (2011). *A chance to optimize "value" in the NHS. The financial squeeze and proposed reforms create an opportunity to put value at the heart of NHS.* *BMJ*, 342, d3244.
- Gulluscio C. (2011), Le aziende sanitarie pubbliche: riflessioni in tema di bilancio e di valore, Rirea, Rome.
- Gulluscio, C. (2013). Value and CSR in the public health sector. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Heidelberg-Berlin: Springer.
- Muir Gray, J. A. (2011). *How to get better value healthcare* (2nd ed.). Oxford: Oxford Press.
- Porter, M. E. (2010). What is value in health care? *The New England Journal of Medicine*, 363, 2477–2481.
- Porter, M. E., & Teisberg, E. O. (2006). *Redefining health care. Create value-based competition on results.* Boston: Harvard Business Review Press.

Health-Oriented Marketing

- ▶ Social Marketing

Heedfulness

- ▶ Mindfulness

Helpfulness

- ▶ Effectiveness

Helping Activities

- ▶ Employee Volunteer Programs

Heterogeneity

- ▶ Diversity

Heterogeneousness

- ▶ Diversity

Hierarchy of CSR Dimensions

- ▶ CSR Pyramid

Higgs Report (UK)

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Description

The *Review of the Role and Effectiveness of Non-Executive Directors* (Higgs 2003), hereafter called the *Higgs Review*, was published in 2003. It is called the *Higgs Review*, after Derek Higgs, the lead author. The review was commissioned by

the UK government to provide an independent assessment of the role and effectiveness of non-executive directors. The terms of reference of the review were to assess the effectiveness and independence of non-executive directors; the extent to which they delivered accountability to shareholders; issues related to their remuneration; the role of the *Combined Code*; and potential means of strengthening independence.

The *Higgs Review* offers guidance to non-executive directors and the chairman and sets out a wide-ranging set of suggested amendments to the provisions of the *Combined Code*. The chapter begins by setting the background to the review. Then its guidance and recommendations are reviewed. The entry concludes with an assessment of the impact of the review.

Background

At the turn of the century, accounting failures and collapses of major US firms, such as WorldCom and Enron, caused global policy makers to turn their spotlight to corporate governance. In the USA a prescriptive rules-based approach resulted. The New York Stock Exchange amended its rules, and the Securities and Exchanges Commission enacted corporate governance legislation through the Sarbanes-Oxley Act, 2002. The scandals also caused policy makers across the globe to review their approach to corporate governance. The Financial Reporting Council led an investigation into *Developing the Guidance on Audit Committees* (the *Smith Report*) which was published in 2003, and the UK government commissioned an independent review of the role and effectiveness of non-executive directors led by Derek Higgs. As a result of this review, the UK government continued to refrain from introducing strict legislation on corporate governance. Instead the *Higgs Review* proposed changes to the *Combined Code on Corporate Governance* (1998) (hereinafter the *Code*) particularly with regard to (1) the role of the board; (2) the role of the chairman; (3) the role of non-executive directors; (4) the role of a senior independent non-executive director; (5) board effectiveness; (6) recruitment and appointments

to the board; (7) induction, development, evaluation, and the supply of information to non-executive directors; (8) terms of engagement; (9) the audit and remuneration committees; (10) the liability of non-executive directors; (11) and shareholder relations. The key recommendations are now outlined.

The Role of the Board

The UK government's commissioned review of the role and effective of non-executive directors coincided their reform initiative to modernize company law. At this time there was a burgeoning view, reflected in academic literature and by policy makers, that a focus by directors on shareholder value may be detrimental to other stakeholders and society at large (Armour et al. 2003; UK House of Commons Trade and Industry Committee 2003). Therefore, the appraisal considered directors' duties to promote the success of the corporate for the benefit of its shareholders while taking account of the need to foster relationships with employees, suppliers, customers, communities, and the environment. Consistent with the government's work in this regard, the *Higgs Review* does not refer to the primacy of shareholders but suggests the *Code* simply states that "the board is collectively responsible for promoting the success of the company by directing and supervising the company's affairs" (suggested principle A1). This is a move away from shareholder wealth maximization as inferred in the *Hampel Report* toward corporate sustainability. The *Review* takes the view that the success of the corporate is the primary objective that directors should be pursuing. This objective is usually congruent with shareholder wealth maximization; however, it encourages directors to take a long-term view in their decision-making. The provisions suggested in principle A1 recommend that the annual report include a description of how the board operates, distinguishing between decisions taken by the board and those taken by management and detailing the number of and attendance at board and committee meetings. The effective functioning of very large and small boards is

questioned, and the review recommends reducing board size (para 4.9). The *Review* stops short of proposing specific recommendations on board size, suggesting “an effective board should not be so large as to become unwieldy. It should be of sufficient size that the balance of skills and experience is appropriate for the requirement of the business and that changes in the board’s composition can be managed without undue disruption” (suggested provision A.3.1).

The Role of the Chairman

The *Higgs Review* found a splitting of the roles of CEO and chairman in almost 90% of listed corporates. This initiative was first recommended by the *Cadbury Report* (1992) and later reaffirmed by the *Hampel Report* (Hampel Committee on Corporate Governance 1998) and subsequent *Combined Codes*. Given that the benefits of separation are widely acknowledged (para 5.3), the *Higgs Review* continues with the recommendations of Cadbury and Hampel by recommending that the roles of the CEO and chairman should be separated if not already done so (suggested provision A.2.1).

The Role of Non-executive Directors

While not recommending that a legal distinction between the responsibilities of executive and non-executive directors is required, the *Higgs Review* recommends that the *Combined Code* should provide a description of the role of non-executive directors. In general, the *Higgs Review* advises that non-executive directors should support executive directors in their leadership of the business and should monitor their conduct (para 6.6). In terms of specific areas of duty and responsibility, the *Higgs Review* suggests that non-executives should contribute to strategy; monitor the performance of management; be satisfied with the reliability of financial information and the adequacy of financial controls and systems for managing risk; take responsibility for the remuneration, appointment, and removal of executives and take

a prime role in the appointment, remuneration, and removal of management and in succession planning (suggested provision A.1.4).

In addition, to defining their role, the *Higgs Review* also recommends that non-executive directors meet as a group, on their own, at least once a year, and compliance with this recommendation should be reported in the annual report. Finally, the *Higgs Review* puts the onus on non-executives to ensure that they have the knowledge, experience, and time to make a positive contribution to the board of directors. It is recommended that the prospective non-executive examines the existing board when evaluating whether they can make a positive contribution to the board.

The Senior Independent Non-executive Director

The recommendation that the board has a senior independent non-executive director that serves as a link between major shareholders and the board is strongly supported in the *Higgs Review* (para 7.5). To support this, the *Higgs Review* suggests that the nature of the role be clarified. In particular, it recommends that the senior independent non-executive director be available to address any shareholder concerns that cannot be resolved by contact with the chairman or CEO (suggested provision A.3.6). It is also recommended that the senior independent non-executive director chairs meetings of non-executive directors when the chairman cannot be in attendance (suggested provision A.1.5).

Board Effectiveness

The *Higgs Review* recognizes the need for an effective supply of timely, corporate-specific information to the board which can be best achieved through an executive presence. It is thus suggested that the *Combined Code* clarifies the need for balance by stressing the importance of strong executive representation on the board (suggested provision A.3.2). Independent

oversight is also regarded as fundamental to the strength of the board as a corporate governance instrument, particularly with respect to the functioning of the board's committees. Hence, the *Higgs Review* recommends that at least one half of the board consist of independent non-executive directors (suggested provision A.3.5). This goes further than the *Combined Code* that recommended that not less than one third of the directors should be non-executive. The potentially valuable contribution made by non-executive directors affiliated with the corporate is acknowledged and executive directors should take care not to preclude their inclusion on the board (para 9.6). Consistent with the statutory position taken in the UK, the review suggests that directors' decisions ought to be taken objectively within the interests of the corporate (suggested provision A.3.3).

In terms of non-executive directors, it is recommended that a definition of independence be included to reduce ambiguity surrounding the term. The *Higgs Review* suggests that a non-executive director is independent when the board considers that he/she is independent in character and judgment. Moreover, relationships and circumstances deemed both to effectively and potentially impair a director's objectivity are outlined (suggested provision A.3.4). In particular, a non-executive director may not be considered independent if he/she has been an employee of the corporate within the last 5 years; has had a material business relationship with the corporate within the last 3 years; receives remuneration from the corporate beyond the non-executive director's fee; has close family ties or cross-directorships; is a significant shareholder; or has served on the board for more than 10 years. Finally, the *Higgs Review* recommends disclosure of all independent non-executive directors in its annual report.

Recruitment and Appointment

The *Higgs Review* sets a vision of *meritocracy in the boardroom* (para 10.8) which requires a range of skills and attributes acquired through a diversity of experiences and backgrounds suited to

meet the changing needs of the business (para 10.1). To achieve this, the *Higgs Review* recommends that all boards have a nomination committee. This extends the requirement in the *Combined Code* that recommended this practice when boards are not small. The nomination committee's role in maintaining the appropriate board composition is linked to its independence of judgment, and hence, it is suggested that it comprise a majority of "independent" non-executive directors and be chaired by an "independent" non-executive director (suggested provision A.4.1). It goes further than the *Combined Code* at the time, which did not refer to the need for independence on the nomination committee.

Of concern to the Higgs's research team was the "high level of informality" surrounding the processes used to appoint non-executive directors. The *Higgs Review* notes that this lack of formality could be detrimental and "lead to an overly familiar atmosphere in the boardroom." To address the potential problem, the review recommends that formal recruitment policies be designed that include an evaluation of the skills, knowledge, and experience required from the candidate as a crucial prerequisite (suggested provision A.4.3). It is recommended that the nomination committee's work in this respect be disclosed in the annual report, indicating the nature of external advice or open advertising used or an explanation as to the lack thereof (suggested provision A.4.10). Disclosure in the annual report of the activity of the nomination more generally is also deemed necessary. Specifically, it is suggested that the number of committee meetings held and the level of attendance at each be stated (suggested provision A.1.2). The *Higgs Review* also designated responsibility to the nominations committee to ensure that prospective non-executive appointees to the board are made aware of the commitment expected of them in terms of time, committee membership, and involvement outside of board meetings (suggested provision A.4.4). When investigating the role of non-executive directors, Higgs found that lack of time commitment was one of the main criticisms made of non-executive directors. Transparency to shareholders is emphasized, and it is recommended that the

board explains to shareholders the justification for each appointment (suggested provision A.4.5). The *Higgs Review* found little evidence of succession planning and suggested that the nominations committee be able to satisfy itself that a framework is in place to support orderly succession to maintain an appropriate balance of skills on the board (suggested provision A.4.9).

Induction, Development, Evaluation, and the Supply of Information to Non-executive Directors

The *Higgs Review* points out that the value of skills, knowledge, and experience relies upon a director's awareness of where they may be applied. Thus, the provision of a formal, comprehensive and tailored induction to new non-executive directors is deemed necessary (suggested provision A.5.6). With regard to the maintenance of a suitable balance of skills and knowledge on the board, the review suggests that an annual performance appraisal should be conducted by means of assurance that the board remains fit for purpose (suggested provision A.6.1). Consistent with the general promotion in the *Higgs Review* of transparency, it is recommended that the performance of such an appraisal and the manner in which it is conducted should be disclosed in the annual report (suggested provision A.6.2). In addition, the *Higgs Review* recommends that the chairman, supported by the corporate secretary, should assess the information needs of the board. The executive directors should prepare a report on these information needs and be prepared to verify its accuracy, reliability, and compliance with the law and relevant standards (suggested provision A.2.5). Equally, non-executive directors have a responsibility to ensure that the information presented to them is of sufficient quality to enable them to perform their duties in, for example, the areas of nomination, remuneration, and audit. They are encouraged to seek clarification if necessary (suggested provision A.5.1). The corporate secretary's role in ensuring good communication is highlighted, and it is recommended that they be accountable to the

board through the chairman on all governance matters (suggested provision A.5.2).

Terms of Engagement

Consistent with recommendations emerging from parallel work conducted in the government's Company Law Review, the *Higgs Review* proposes that the *Combined Code* recommends disclosure of non-executive directors' terms of engagement (suggested provision A.4.11). The *Higgs Review* notes the potential for annual reelection of directors to promote a culture of short-termism and suggests that non-executive directors should normally be expected to serve two 3-year terms with the corporate. It is acknowledged that longer service may be justified for directors who add particular value to the board, but only as an exception which should be explained to shareholders (suggested provision A.7.3). Reelection is deemed appropriate after 9 years for non-executive directors (suggested provision A.7.3). The *Higgs Review* also recommends that limits be included in the *Combined Code* on the number of non-executive director roles an executive director can hold. Specifically, the review recommends that full-time executive directors should only take on one non-executive directorship and should not become chairman of a FTSE 100 corporate. Moreover, no individual should be chairman of more than one FTSE 100 corporate. This recommendation caused much controversy as many executive directors held several roles on the boards of other corporates. In addition, the recommendations made no reference to limits on the number of roles a non-executive director could hold.

In terms of the remuneration of non-executive directors, the *Higgs Review* endorses payment on the basis of fixed fees, for example, an annual fee and meeting attendance fees. The *Higgs Review* considers the benefits and drawbacks to the holding of shares by non-executive directors and acknowledges that an ownership stake may serve to align their interests with those of shareholders but stresses the potential that the granting of share options as an element of non-executive director

remuneration may encourage an undesirable focus by non-executive directors on share price rather than on underlying corporate performance. Hence such a practice is discouraged (suggested provision B.1.7). However, payment in shares instead of being paid by cash is endorsed so long as the non-executive director's shareholding does not represent a large proportion of his wealth. Resignation by directors in circumstances where the director has critical concerns with the running or actions of the board is viewed as an option of last resort. In such circumstances, it is recommended that the director informs the chairman in writing of his resignation accompanied by an explanation for the decision to do so such that it may be circulated to all board members (suggested provision A.1.6).

The Audit and Remuneration Committees

Mindful of the need to avoid any one individual exerting undue influence over the board's decision-making activities, the *Higgs Review* recommends that no director sit on the nomination, audit, and remuneration committees, concurrently (suggested provision A.3.7). This recommendation does not apply to smaller corporations. The review does not dwell upon the role of the audit committee, rather it endorses the recommendations put forward concurrently by the *Co-ordinating Group on Auditing and Accounting Issues* under Sir Robert Smith (Para 13.7). The composition and role of the remuneration committee is considered. The *Higgs Review* recommends the remuneration committee comprise at least three members and that membership be restricted to independent non-executive directors (suggested provision B.2.1). The responsibilities of the remuneration committee are recommended, at a minimum, to include: setting remuneration for all executive directors and the chairman, including pension rights and any compensation payments, and setting the level and structure of remuneration for senior executives (suggested provision B.2.2). In support of transparency, the

Higgs Review recommends disclosure of the remuneration committee's activity, in terms of meeting frequency and attendance (Suggested Provision A.1.2).

Liability of Non-executive Directors

The review in this area found that potential liability does not appear to deter individuals from assuming board positions. Consideration is given to the need to provide directors and officers with limited liability insurance. Insurance is a basic protection for non-executive directors against law suits by third parties. By providing insurance, corporates may avoid the need to indemnify directors against such law suits (para 14.19). Hence, it is suggested that the *Combined Code* should refer to this need (suggested provision A.1.7). Guidance for corporates on the exact nature of the insurance which should be provided to directors by the City of London Law Society, the Institute of Chartered Secretaries and Administrators, the Association of British Insurers, and the British Insurance Brokers Association is welcomed in the *Higgs Review*. The review recommends that corporates should supply details of their insurance cover to potential non-executive directors, before they are appointed.

Relationships with Shareholders

Consistent with the *Hampel Report*, the *Higgs Review* advocates dialogue between directors and shareholders at the annual general meeting, in relation to issues concerning their roles (suggested provision C.2.3). The *Higgs Review* proposes that the senior independent non-executive director regularly attend meetings of management with major shareholders to develop an understanding of shareholders' concerns. The senior independent non-executive director should then communicate key concerns back to the other non-executive directors and the full board as appropriate (suggested provision C.1.2). However, this recommendation does not preclude

non-executive directors from attending such meetings. The review recommends that meetings with major shareholders be included as part of non-executive directors' induction (suggested provision C.1.3). The *Higgs Review* endorses the financial community's use of the *Institutional Shareholders' Committee Code of Activism*, which outlines best practice for institutional investors to promote their members' interests through more active engagement as shareholders (suggested provision E.2.1). It also opines that attendance by institutional shareholders' at AGMs where practicable be recommended in the *Combined Code* (suggested provision E.1.4).

Summary

The *Higgs Review* addresses the role of non-executive directors and the issue of independence with considerable rigor. It ought to be commended for its treatment of the issues of induction and development of, and supply of information to, non-executive directors – an area which arguably required deeper consideration than what had previously been conducted by predecessors. Indeed, the review's attention to board processes is regarded as one of its strengths, a welcomed nuance at a time when much consideration of the board's role converged upon financial accountability (McNulty et al. 2005). There is still an emphasis on shareholders as the key stakeholders, as little reference is made to other stakeholders in the review. However, it can be argued that such focus was beyond the scope of the terms of reference of the review. Critics view the recommendation to appoint a senior independent non-executive director as potentially encouraging a concentration of excessive power at the top of the corporate (Aguilera 2005). Yet this is a role which, over the years to follow, received increasing recognition in public corporates and in codes of best practice alike. The advice put forward in both the *Higgs Review* and the *Smith Report* was incorporated into the revised *Combined Code* (2006), much of which was retained in the Financial Reporting Council's Guidance on Board

effectiveness accompanying *UK Corporate Governance Code* (2010), the guidance which replaced the *Combined Code* in 2010 as revised biennially thereafter.

Cross-References

- [Hampel Report \(UK\)](#)
- [UK Corporate Governance Code \(2010\)](#)

References

- Aguilera, R. V. (2005). Corporate governance and director accountability: An institutional comparative perspective. *British Journal of Management*, 16, S39–S53.
- Armour, J., Deakin, S., & Konzelmann, S. J. (2003). Shareholder primacy and the trajectory of UK corporate governance. *British Journal of Industrial Relations*, 41(3), 531–555.
- Cadbury, A. (1992). *Committee on the financial aspects of corporate governance*. London: Gee.
- Financial Reporting Council. (1998). *The combined code on corporate governance, June 1998*. London: Financial Reporting Council.
- Financial Reporting Council. (2010). *The UK corporate governance code, July 2010*. London: The Financial Reporting Council.
- Hampel Committee on Corporate Governance. (1998). *Committee on corporate governance, final report*. London: Gee.
- Higgs, D. (2003). *Review of the role and effectiveness of non-executive directors*. London: Department of Trade and Industry.
- McNulty, T., Roberts, J., & Stiles, P. (2005). Undertaking governance reform and research: Further reflections on the Higgs review. *British Journal of Management*, 16, S99–S107.
- Smith, R. (2003). *Audit committees combined code guidance*. London: The Financial Reporting Council.
- UK House of Commons Trade and Industry Committee (2003). *The White paper on modernising company law, sixth report of session 2002–3*. <https://publications.parliament.uk/pa/cm200203/cmselect/cmtrdind/439/439.pdf>. Accessed 22 Mar 2019.

High Volumes of Data

- [Big Data and Data Mining](#)

Higher Education Social Responsibility

- [University Social Responsibility](#)

Highest Global Oil Production Level

- [Sustainability, Peak Oil](#)

High-Rise

- [Tall Building Sustainability](#)

HIHD

- [Human Development Index \(HDI\)](#)

Holistic Development

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Synonyms

[Integral development](#); [Integral ecology](#); [Sustainable development](#)

Definition

Holistic development is based on alternative assumptions contrasting with the neoclassical *homo oeconomicus* model and is focused on the ends, rather than only the means, of economic interactions.

Holistic development provides a philosophical people-centered understanding of how socio-economic systems and organizations should work to foster human beings and allow them to thrive. Conceptual tools for implementing this vision compel a set of anthropological assumptions and a peculiar relation between humanistic and technical knowledge (Sen 1988).

In recent decades this paradigm – that involves economic, ethical, environmental, and social dimensions – has been put to use in companies' business models. Furthermore, it has been connected to the notion of sustainable development (Elkington 1994). When implemented in managing and governing a business, holistic development is built on a system of moral values, which are person-centered and anthropologically based, incorporated and promoted by the managers, entrepreneurs, and company stakeholders (Argiolas 2006). Indeed, it is multidimensional in nature and aimed at creating shared value triggered by purpose-driven firms (Cohen and Warwick 2006; Carrol 2000; Del Baldo 2015).

Introduction

The need for caring of our 'common home' lies at the core of the international political, scientific, and managerial debate. A renewed environmental, economic, and social ecology capable of integrating concerns for people and the planet requires a collective contribution to the common good and presupposes responsibility people and organizations have in regard to a multi-dimensional development. In this vein, businesses are called to contribute to achieve holistic development, linking the competitive, social, ethical, and environmental dimensions (Sorci 2007) and pursuing a socio-competitive synthesis (Molteni 2004). From the viewpoint of holistic development, each business choice and action manifests an orientation responsive to the consequences of choices on stakeholders, including the socio-economic and environmental system in which the company is embedded. Several studies have pointed out that a holistic

perspective on development is necessary to overcome poverty, inequality, and environmental degradation across the globe (Bebbington 2007; Bouckaert et al. 2007; Ketola 2008; Zsolnai 2015). This need has also been emphasized by the Encyclical Letter *Laudato Si* (Pope Francis 2015) that addressed the integral ecology construct, intended as a renewed environmental, economic, and social ecology that integrates concerns for people and the planet, suggesting a more moderate lifestyle which seeks holistic knowledge and respect for the human and social dimensions of life (Zsolnai 2015). The Encyclical Letter stresses the need for moral-based conduct in daily life, including the business context, called to operationalize fundamental values that have an anthropological connotation (Catturi 2003, Melé 2009 and 2012; Argandoña 2003) and nurture authentic relationships. “There can be no ecology without adequate anthropology” (Pope Benedict XVI 2009; Pope Francis 2015, p. 96).

This urgency also concerns the need to adopt coherent leadership approaches capable of facing the human roots of past and current crisis (Guardini 1998). As Pope Francis pointed out, “We lack leadership capable of striking out on new paths and meeting the needs of the present with concern for all and without prejudice towards coming generations” (Pope Francis 2015: 39). This partly explains the failure of global summits which do not provide proper authentically driven leadership capable of taking the bold decisions necessary in periods of deep crisis.

New institutional and business models capable of incorporating the common good and assuming ethical responsibility (Visser 2011; Del Baldo 2014) are necessary. In past decades the objectives of holistic development have been sidelined, and the idea of unlimited growth has prevailed (Pope Francis 2015). Therefore, a distinctive change, as marked by the sustainable development goals, presupposes a turn toward holistic development.

Transparency and dialogue in decision-making at all levels (micro, meso, and macro level), and a shared orientation toward multi-dimensional development, requires transparency

and dialogue in decision-making and with external stakeholders, particularly at the local level, with local institutions and the community. In this regard, the notion of the territory shifts from an idea of a geographic place to the complex system of tangible and intangible resources historically determined and culturally grounded. The focus is therefore on the network of relations among a plurality of actors, including public institutions, businesses, and civic and not-for-profit organizations, that share common behaviors and values. In other words, the territory’s relational infrastructure represents the social capital that drives virtuous socio-economic and environmental contexts.

Key Issues

To achieve sustainability, a firm has to revitalize its business model (Stubbs and Cocklin 2008; Abdelkafi and Täuscher 2015; Johnson et al. 2008). This implies orienting the company culture, enhancing the leadership model, and strengthening the set of person-centered values and transforming them into business practices. All these changes involve intra- and inter-organizational networks formed by different stakeholders belonging to the wider societal systems (Del Baldo 2016).

A holistic model of business development (Sciarelli 2007) rests on an enlightened stakeholder theory (Jensen 2002) and the stewardship theory (Davis et al. 1997). Both the theoretical frameworks allow for the application of ethical values in corporate choices, such as the principles of solidarity and trustworthiness with stakeholders. Namely, the stewardship theory – founded on sociological traditions – rests on a concept of a human being (i.e., the entrepreneur and the manager) whose decisions are inspired by both economic motivations (extrinsic and tangible) and social and emotive motivations (intrinsic). In the business context, these principles nurture a cohesive governance based on trust oriented to long-term success and to a purpose-driven business model. The need for sustainable

business models has recently gained momentum because many approaches to corporate responsibility have failed to link a firm's sustainability orientation to the core business (Visser 2011), avoiding camouflaged approaches (Bocken et al. 2014; Looser and Wehrmeyer 2015).

Summary

The way in which holistic development can be pursued depends on how sustainable business models are constructed by actors involved in the value creation (Boons and Lüdeke-Freund 2013). In this respect, consistent leadership models (i.e., ethical leadership and responsible leadership) are crucial because entrepreneurs and managers play a key role in shaping the organizational culture and the decision-making process that affect their everyday routine, as well as intra-organization procedures and structures (Melé 2012; Del Baldo 2016).

Ethical leadership rests on personal traits and behaviors such as integrity and transparency in communication with stakeholders (Brown 2005; Capaldi 2013).

Responsible leadership facilitates the involvement of stakeholders and the creation of a cohesive internal and external community cemented by values and moral convictions (Jones 2014). The 'pillars' by which responsible leaders guide the company toward holistic development include stakeholder consideration, communication, empowerment, inclusion, and long-term orientation (Magni and Pennarola 2015).

In summary, holistic development rests on a business model consistent with a leadership model that allows companies to share a strategic orientation toward an integrated development paradigm.

Cross-References

- Responsible Leadership
- Sustainable Business Model

References

- Abdelkafi, N., & Täuscher, K. (2015, July 2). Business models for sustainability from a system dynamics perspective. *Organization Environment*. <https://doi.org/10.1177/1086026615592930>.
- Argandoña, A. (2003). Fostering values in organizations. *Journal of Business Ethics*, 45, 15–28.
- Argiolas, G. (2006, October 5–7). The good management. Drivers of corporate social orientation towards a multi-dimensional success. In *International conference The Good Company*, Rome.
- Avery, G., & Bergsteiner, H. (2011). Sustainable leadership practices for enhancing business resilience and performance. *Strategy & Leadership*, 39(3), 5–15.
- Bebbington, J. (2007). *Accounting for sustainable development performance*. London: CIMA Publishing/Elsevier.
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- Bouckaert, L., Opdebeeck, H., & Zsolnai, L. (Eds.). (2007). *Frugality. Rebalancing material and spiritual values in economic life*. Oxford: Peter Lang Academic Publishers.
- Brown, M. T. (2005). *Corporate integrity. Rethinking organizational ethics and leadership*. Cambridge: Cambridge University Press.
- Capaldi, N. (2013). How American spiritual capital inform business and affects the common good. In S. Groschl (Ed.), *Uncertainty, diversity and the common good. Changing norms and new leadership paradigms* (pp. 25–40). Surrey, UK: Gower.
- Carrol, A. B. (2000). Ethical challenges for business in the new millennium: Corporate responsibility and model of management morality. *Business Ethics Quarterly*, 10(1), 33–42.
- Catturi, G. (2003). Valori etici e principi economici: equilibrio possibile. *Studi e Note di Economia*, 3, 7–37.
- Cohen, B. R., & Warwick, M. (2006). *Value-driven business: How to change the world, make money and have fun*. San Francisco: Berret-Koehler Publishers.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47.
- Del Baldo, M. (2014). Corporate social responsibility, entrepreneurial values and transcendental virtues in Italian SMEs. *International Journal of Business and Social Science*, 5(6), 25–51.
- Del Baldo, M. (2015). Holistic development. In S. O. Idowu, N. Capaldi, M. S. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility* (pp. 306–307). Cham: Springer.

- Del Baldo, M. (2016). From theory to practice or from practice to theory in implementing an effective CSR approach? Insights from Italian corporate territorial responsibility projects. In M. Alcuha & S. O. Idowu (Eds.), *The dynamics of corporate social responsibility. A critical approach in theory and practice*. Berlin/Heidelberg: Springer.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Francis, P. (2015). *Laudato Si', Encyclical letter on care for our common home*. Rome: Vatican Press.
- Guardini, R. (1998). *The end of the modern world* (9th ed.). Wilmington, DE: ISI Books.
- Jensen, M. C. (2002). Value maximization, stakeholder theory, and the corporate objective function. *Business Ethics Quarterly*, 12(2), 235–256.
- Johnson, M. W., Christensen, C. C., & Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86, 50–59.
- Jones, J. (2014). Leadership lessons from Levinas: Revisiting responsible leadership. *Leadership and the Humanities*, 2, 44–63.
- Keleher, L. (2018). Integral human development: Development of every person and of the whole person. In *Routledge handbook of development ethics* (pp. 29–34). London: Routledge.
- Ketola, T. (2008). A holistic corporate responsibility model: Integrating values, discourses and actions. *Journal of Business Ethics*, 80, 419–435.
- Looser, S., & Wehrmeyer, W. (2015). Doing well or doing good? Extrinsic and intrinsic CSR in Switzerland, UWF. <https://doi.org/10.1007/s00550-015-0360-9>. 1:14, published online August 14, 2015.
- Magni, M., & Pennarola, F. (2015). *Responsible leadership. Creare benessere, sviluppo e performance a lungo termine*. Milano: Egea.
- Melé, D. (2009). *Business ethics in action. Seeking human excellence in organizations*. Hampshire, GB: Palgrave Macmillan.
- Melé, D. (2012). *Management ethics. Placing ethics at the core of good management*. Hampshire, GB: Palgrave Macmillan.
- Molteni, M. (2004). *Responsabilità sociale e performance d'impresa. Per una sintesi socio-competitiva*. Milano: Vita e Pensiero.
- Pope Benedict XVI. (2009). Encyclical Letter Caritas in Veritate. Citta' del Vaticano: Libreria Editrice Vaticana.
- Sciarelli, S. (2007). *Etica e responsabilità sociale nell'impresa*. Milano: Giuffrè.
- Sen, A. (1988). The concept of development. *Handbook of Development Economics*, 1, 9–26.
- Sorci, C. (Ed.). (2007). *Lo sviluppo integrale delle aziende*. Milano: Giuffrè.
- Stubbs, W., & Cocklin, C. (2008). Conceptualizing a sustainability business model. *Organization & Environment*, 21, 103–127.

- Visser, W. (2011). The nature of CSR leadership: Definitions, characteristics and paradoxes. *CSR International Paper Series*, 4, 1–10.
- Zsolnai, L. (2015, June 19–20). *Prudence in management and economic wisdom*. Lecture presented at the “Virtues and Vices in Economics and Business” International workshop, Catholic University of Leuven, Leuven.

Honesty

- Integrity

Hospital Accountability

- Hospital Governance

Hospital Checks and Balance

- Hospital Governance

Hospital Directors' Responsibility

- Hospital Governance

Hospital Governance

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Synonyms

Clinical governance; Duties of hospital directors; Healthcare governance; Hospital accountability; Hospital checks and balance; Hospital directors' responsibility; Hospital governing bodies; Structure and composition of hospital board

Definition

Hospital governance represents a term relatively complex to define. Indeed, by identifying a process-focused notion, research has recognized the existence of different levels of governance as well as of two main components (Sarto et al. 2014; Saltman et al. 2011). Specifically, literature claims the presence of three levels of hospital governance: macro, meso, and micro. The former is related with the national government decisions influencing and affecting the overall structure of a national health service in terms of financing and number/type of organizations. Differently, the meso (and intermediate) level of hospital governance is concerned with the decision-making at the hospital organizational level and identifies the governing and strategic structures and processes (Eeckloo et al. 2004, 2007). The meso level also deals with the resources allocation needed to reach the strategic goals (Daily et al. 2003; Sarto et al. 2014). Finally, the hospital governance micro level encompasses the operational management of human resources and clinical services. Despite each level presents different characteristics and refers to different individual/institutions responsible of the decision-making, there are a number of interactions among them that are crucial for the functioning of the overall hospital governance system (Saltman et al. 2011). From a different standpoint, literature suggests that the hospital governance involves both the clinical and the economic governance (Kirkpatrick et al. 2014). The former concerns the way in which governing bodies at different levels (meso, micro, and macro) monitor and guarantee the appropriateness and the quality of the care process. The latter includes the monitoring of the financial resources management (Sarto 2015).

Introduction

It is worth noting that the relevance of governance issues in hospitals starts from the recent strong changes that have distinguished the worldwide healthcare sector. Indeed, this setting is facing various problems, such as rising costs, sweeping technology, and rising service expectations

(Bodenheimer and Fernandez 2005). Healthcare organizations are required to respond to the increased need of efficiency and effectiveness as well as to respect the budget constraints (Catuogno et al. 2017). In this regard, the growing costs have determined a debate between equity and efficiency (Erwin et al. 2019). From a different standpoint, healthcare organizations are additionally interested by the increasing demands for greater patient safety and the growing ethical requirements (Hamilton 2008). On the one side, these problems and requirements have been sorted through the introduction of the NPM principles and rules in the provision of healthcare services (Hood 1991). On the other side, they have led to the rise of healthcare regulation requiring a balance between efficiency and effectiveness (Nunes et al. 2007) and a stringent accountability process (Fisher et al. 2007).

As far as our topic is concerned, the above-mentioned challenges have overall highlighted the relevance of governance models (Ford-Eickhoff et al. 2011) and have called the attention of scholars belonging to the governance field toward this kind of organizations (Hamilton 2008; Erwin et al. 2019; Sarto et al. 2014; Bodenheimer and Fernandez 2005). From a practical point of view, all these pressures have led the European countries to introduce a number of measures to face the economic sustainability worries as well as to satisfy citizens' call for greater accountability on the effectiveness and quality of the health services (Kirkpatrick et al. 2013). Indeed, also in light with the assumption of NPM, policy makers have introduced alternative models of hospital governance that, differently from the traditional "professional bureaucracy" (Mintzberg 1979), are influenced by the managerialist ideology (Hood 1991), in the aim to make public hospitals more autonomous, with extended independence in decision-making processes (Aidemark and Lindkvist 2004). These changes have modified the existing institutional structures by introducing, for example, the roles of Chief Executive Officer (CEO) and board of directors (Saltman et al. 2011), recognizing the crucial issue of governance mechanisms in such complex organizations (Sarto et al. 2016).

Hospital Features and Hospital Governance

By focusing the attention on the meso level of hospital governance, it is interesting to explore the role, the composition, and the structure of the governing body (e.g., board of directors). In order to appreciate them, it is worth noting that there exist some hospital features that have influenced its governance issues (Eeckloo et al. 2007). The overall assumption is that hospitals are characterized by a *high stakeholder sensitivity*, that is, the high dependence of such organizations from external and internal stakeholders (Von Nordenflycht 2010).

Indeed, first of all, hospitals are professional service firms (Jarzabkowski and Fenton 2006; Cuccurullo and Lega 2013), whose decision-making process is highly diffused among different internal stakeholders. Indeed, as suggested by Glouberman and Mintzberg (2001), this kind of organization is characterized by the presence of four worlds of actors that determines their high “internal pluralisms”: (a) the world of cure (doctors’ community); (b) the world of care (nurses and other professional workforces around the patient); (c) the world of the administrative hierarchy (managers); and (d) world of the governing bodies (boards). Literature suggests that each category represents different cultural and social contexts, sets of activities and mind-sets (Denis et al. 2001; Sarto et al. 2014).

The high stakeholder sensitivity of such organizations is also amplified by the crucial role played by patients that have experienced an empowerment process. Indeed, over the last decades, patients have become active agents in managing illness and healthcare, by surrendering varying amounts of control to healthcare professionals in order to gain the right expertise, technology, and compassion (Powers and Bendall 2004; Martin 2011).

In addition, the high stakeholder sensitivity depends on the strong knowledge intensity of the healthcare organizations (Von Nordenflycht 2010; Huse 2007). As hospitals are professional services firms, their output relies on a substantial body of complex knowledge embodied in the

individuals (Winch and Schneider 1993). Indeed, the hospital’s main strategic asset is the intellectually skilled workforce that lies not only in hospital executives but also in its frontline workers, such as doctors and nurses (Grant 1996; Von Nordenflycht 2010).

Finally, the high stakeholder sensitivity is determined by the typical ownership status assumed by healthcare organizations. Indeed, most of worldwide hospitals are public-owned organizations, which are characterized by the lack of shareholders who are legally entitled to the residual claims, and where the owners are de facto a larger and diverse set of stakeholders such as tax payers/citizens, patients, GPs, government authorities, and health insurers (Sarto et al. 2014). Due to this phenomenon, healthcare organizations are defined as characterized by high level of “external pluralism” and the emphasis is moved toward the above-mentioned external stakeholders (Von Nordenflycht 2010).

Building on these assumptions, scholars suggest that the high stakeholder sensitivity has required the establishment of a particular configuration of governing body, in terms of *role*, *structure* and *composition* (Capasso and Pascarella 2011; Veronesi and Keasey 2015; Vining and Weimer 2005). For what concerns the role, in the healthcare sector, scholars observe that boards mainly perform the philanthropic and fiduciary role (Kane et al. 2009), as organizations should be oriented to answer the needs of several stakeholders (Del Vecchio 2006). Indeed, in these contexts, the accountability role is crucial and hospital boards are mainly interested in disclosing the effective and efficient achievement of firm strategic objectives, above all in favor of the community (Ramsay and Fulop 2010). Turning the attention to the board structure, research highlights that hospitals should opt for a collegial dualistic model. Indeed, compared to the monocratic one, this kind of governing body allows the inclusion of several stakeholders, with positive implications for decision-making process. Moreover, scholars suggest to prefer the dualistic model rather than the monistic one. Indeed, on the one side, it allows to overcome some coordination problems typical of large teams, on the other side, it supports the separation

of members devoted to managerial and strategic tasks (e.g., executives) from those devoted to accountability activities (e.g., patients) (Sarto et al. 2017). Shifting the focus on board composition, scholars suggest that the high stakeholder sensitivity requires the involvement of several external and internal stakeholders in the governing body (Flannigan and Power 2008). In terms of external actors, literature recommends the involvement of local community members and patients (Veronesi and Keasey 2015), by following the example of the Foundation Trusts that represent a new hospital organizational form in UK (Greenhalgh et al. 2010; Sarto et al. 2014). From a different standpoint, the strong knowledge intensity characterizing hospitals requires a high involvement of knowledge workers in governing body such as doctors and nurses (Flannigan and Power 2008; Sarto and Veronesi 2016).

The Literature on Hospital Governance

A recent literature review has identified the existence of three main research streams in the field of hospital governance: (i) the NHSs governance models, (ii) the board and top management team, and (iii) the role of doctors (Sarto et al. 2014). The first stream is composed by studies investigating the macro level of hospital governance and exploring the characteristics of the governance models employed in different kinds of healthcare organizations of the worldwide NHSs. These articles mainly employ conceptual and qualitative methodologies in order to assess the introduction of those models borrowed from the corporate world (Barnett et al. 2001; Eeckloo et al. 2004). Moreover, these studies investigate how the models have changed over time due to the introduction of new laws and regulations (Gorsky 2008; Stolzenberg 2000; Weil 2003). The second stream of research investigates the meso level of the hospital governance and is composed by articles analysing the board of directors. More specifically, these papers explore this governing body in terms of role (Alexander et al. 2009; Molinari et al. 1993), activities, structure, composition, and processes (Golden and Zajac 2001; Judge and Zeithaml 1992; Young et al. 1992). This

research stream also covers topics such as the CEO-board interface (Alexander et al. 1993; Alexander and Morlock 1985; Brickley et al. 2010; Molinari et al. 1997; Morlock et al. 1985) and the CEO and Top management's compensation and evaluation (Brickley and Van Horn 2002; Molinari et al. 1997). These studies are mainly quantitative and explore the effectiveness of hospital governance structures and the related implications for the organizational performance. Finally, the third and more copious stream of research still concerns the meso level of hospital governance but explores the clinicians' involvement in the hospital governance process. These articles have investigated the performance implications of the doctors and nurses' participation in the governance and management of healthcare organizations (Ham and Dickinson 2008; The King's Fund 2012), by suggesting that greater clinicians' involvement at the strategic decision-making level has several benefits for hospital outcomes.

The Role of Clinical Leadership in Hospital Governance

By focusing the attention on the role of doctors and nurses in governance, the empirical research suggests that the degree of clinicians' involvement in top managerial positions greatly varies across countries. In this regards, some studies document that, in US, clinical CEOs represent only the 4% of total hospital CEOs, and this figure is lower in the present compared to the past (Goodall 2011; Gunderman and Kanter 2009). Similar conclusions are drawn in UK, where board members with clinical background are about 26.03% and clinical CEOs are on average 22% (Veronesi et al. 2013). Different findings are instead reported in continental Europe, as studies document that most of top managers hold a clinical background (e.g., 59% in Italy; 63% in France; 71% in Germany) (Kuntz and Scholtes 2013; Sarto et al. 2019; Dorgan et al. 2010).

Concerning the implications of medical managers' role, literature has mainly suggested that higher doctors and nurses' participation in strategic leadership roles, involves a number of positive

implications for healthcare performance (Jiang et al. 2009; Prybil et al. 2012; The King's Fund 2011; Veronesi et al. 2013, 2014). Indeed, empirical research on clinical leadership has investigated its effects above all on the management of financial resources, the quality of care and the hospital social performance (Sarto and Veronesi 2016). Most of studies belonging to this stream have suggested that greater doctors and nurses' involvement in governance positions may have wider benefits for health services, possibly improving their efficiency, quality, and social performance (Jiang et al. 2009; Prybil et al. 2012; The King's Fund 2011; Veronesi et al. 2013, 2014). Indeed, "in a health care system that is complex, troubled, and challenging," physicians bring "a unique set of skills to the business of medicine" (Falcone and Satiani 2008, p. 88) by providing the organizational management systems with critical advantages. Clinical-managers are better able to interpret the clinical issues and to understand their patients' needs (Lister 2000, 2007). Also, they benefit from an improved communication with medical staff as well as greater credibility, legitimacy and support by the same (Dorgan et al. 2010; Witman et al. 2010). In this sense, healthcare organizations will experience, on the one side, better strategic decisions, on the other side, a higher level of their implementation. Again, prior research has suggested that the medical involvement in directorship positions is frequently established to strengthen clinicians' "commitment to cost containment" (Succi and Alexander 1999, p. 1). This combined with their medical knowledge could determine a better allocation of resources, whose related changes are more easily implemented, thanks to the clinical-managers legitimacy among clinical staff (Molinari et al. 1995; Veronesi et al. 2014). Finally, clinical managers positively influence the hospital social performance due to their ethical beliefs and professional norms (Bai 2013; Bai and Krishnan 2015).

Notwithstanding the positive effects enlightened by the above-mentioned studies, opposite conclusions are provided by a number of articles that have asserted that the involvement of doctors and nurses in governance roles is often counter-productive. Papers belonging to this tradition claim that clinicians' involvement in hospital

governance could have negative implications for the management of financial resources and the hospital social performance due to a number of reasons. First of all, clinicians' participation in the governance processes could determine the emergence of some conflicts among clinicians-turned managers and career managers. Moreover, medical-leaders could experience a role conflict involving decisions made at the expense of financial performance to protect the clinical needs. Additionally, clinical managers could be not able to effectively perform the managerial tasks due to their educational deficiencies in business and accounting areas. Finally, with regard to the social performance, hospital outcomes can be negatively affected by the presence of clinical-managers especially due to the conflict of interests of private doctors in leadership positions (Sarto and Veronesi 2016; Sarto et al. 2019).

Cross-References

- [Accountability](#)
- [Auditors and Corporate Governance](#)
- [Corporate Governance](#)
- [Corporate Governance Perspectives \(Shareholder vs. Stakeholder Perspective\)](#)
- [Health and Safety](#)
- [One-Tier Board](#)
- [Residual Claimant Theory](#)
- [Theoretical Paradigms of the Board of Directors](#)
- [Two-Tier Board](#)

References

- Aidemark, L. G., & Lindkvist, L. (2004). The vision gives wings. A study of two hospitals run as limited companies. *Management Accounting Research*, 15(3), 305–318.
- Alexander, J., & Morlock, L. (1985). Multi-institutional arrangements: Relationships between governing boards and hospital chief executive officers. *Health Services Research*, 19(6), 675–699.
- Alexander, J., Fennell, M. L., & Halpern, M. T. (1993). Leadership instability the influence hospitals: Relations of board-CEO and organizational growth and decline. *Administrative Science Quarterly*, 38(1), 74–99.

- Alexander, J., Lee, S.-Y. D., Wang, V., & Margolin, F. (2009). Changes in the monitoring and oversight practices of not-for-profit hospital governing boards 1989–2005: Evidence from three national surveys. *Medical Care Research and Review*, 66(2), 181–196.
- Bai, G. (2013). How do Board size and occupational background of directors influence social performance in for-profit and non-profit organizations? Evidence from California hospitals. *Journal of Business Ethics*, 118(1), 171–187.
- Bai, G., & Krishnan, R. (2015). Do hospitals without physicians on the board deliver lower quality of care? *American Journal of Medical Quality*, 30(1), 58–65.
- Barnett, P., Perkins, R., & Powell, M. (2001). On a hiding to nothing? Assessing the corporate governance of hospital and health services in New Zealand 1993–1998. *The International Journal of Health Planning and Management*, 16(2), 139–154.
- Bodenheimer, T., & Fernandez, A. (2005). High and rising health care costs. Part 4: Can costs be controlled. *Annals of Internal Medicine*, 143(1), 26–31.
- Brickley, J. A., & Van Horn, R. L. (2002). Managerial incentives in nonprofit organizations: Evidence from hospitals. *The Journal of Law and Economics*, 45(1), 227–249.
- Brickley, J. A., Van Horn, R. L., & Wedig, G. J. (2010). Board composition and nonprofit conduct: Evidence from hospitals. *Journal of Economic Behavior and Organization*, 76(2), 196–208.
- Capasso, A., & Pascarella, G. (2011). *L'azienda Sanitaria. Innovazione tecnologica, evoluzione organizzativa e governo clinico*. Milano: Francoangeli.
- Catuogno, S., Arena, C., Saggese, S., & Sarto F. (2017). Balanced performance measurement in research hospitals: The participative case study of a haematology department. *BMC Health Services Research*, 17(1), 522–532.
- Cuccurullo, C., & Lega, F. (2013). Effective strategizing practices in pluralistic settings: The case of Academic Medical Centers. *Journal of Management and Governance*, 17(3), 609–629.
- Daily, C. M., Dalton, D. R., & Cannella, A. A. J. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3), 371–382.
- Del Vecchio M. (2006). Nuove tendenze nelle strutture di governo: Interpretazioni e riflessioni a margine di un documento della Regione Emilia Romagna. In E. Anessi Pessina, & E. Cantù (Eds.), *Rapporto OASI 2006. L'aziendalizzazione della sanità in Italia*. Milano: EGEA.
- Denis, J. L., Lamothe, L., & Langley, A. (2001). The dynamics of collective leadership and strategic change in pluralistic organizations. *Academy of Management Journal*, 44(4), 809–837.
- Dorgan, S., Layton, D., Bloom, N., Homkes, R., Sadun, R., & Van Reenen, J. (2010). *Management in healthcare: Why good practice really matters*. London: McKinsey and LSE (CEP).
- Eeckloo, K., Van Herck, G., Van Hulle, C., & Vleugels, A. (2004). From corporate governance to hospital governance. Authority, transparency and accountability of Belgian non-profit hospitals' board and management. *Health Policy*, 68(1), 1–15.
- Eeckloo, K., Delesie, L., & Vleugels, A. (2007). Where is the pilot? The changing shapes of governance in the European hospital sector. *The Journal of the Royal Society for the Promotion of Health*, 127(2), 78–86.
- Erwin, C. O., Landry, A. Y., Livingston, A. C. & Dias, A. (2019) Effective governance and hospital boards revisited: reflections on 25 years of research. *Medical Care Research and Review*, 76(2), 131–166.
- Falcone, R. E., & Satiani, B. (2008). Physician as hospital chief executive officer. *Vascular and Endovascular Surgery*, 42(1), 88–94.
- Fisher, E. S., Staiger, D. O., Bynum, J. P. W., & Gottlieb, D. J. (2007). Creating accountable care organizations: The extended hospital medical staff. *Health Affairs*, 26(1), w44–w57.
- Flannigan, A., & Power, P. (2008). Health care governance: Introduction. *Australian Health Review*, 32, 7–9.
- Ford-Eickhoff, K., Plowman, D. A., & McDaniel, R. R. (2011). Hospital boards and hospital strategic focus: The impact of board involvement in strategic decision making. *Health Care Management Review*, 36(2), 145–154.
- Glouberman, S., & Mintzberg, H. (2001). Managing the care of health and the cure of disease – Part II: Integration. *Health Care Management Review*, 26(1), 70–84.
- Golden, B. R., & Zajac, E. J. (2001). When will boards influence strategy? Inclination x power = strategic change. *Strategic Management Journal*, 22(12), 1087–1111.
- Goodall, A. H. (2011). Physician-leaders and hospital performance: Is there an association? *Social Science and Medicine*, 73(4), 535–539.
- Gorsky, M. (2008). Community involvement in hospital governance in Britain: Evidence from before the National Health Service. *International Journal of Health Services Planning Administration Evaluation*, 38(4), 751–771.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Gunderman, R., & Kanter, S. L. (2009). Perspective: Educating physicians to lead hospitals. *Academic Medicine*, 84(10), 1348–1351.
- Ham, C., & Dickinson, H. (2008). *Engaging doctors in leadership: What we can learn from international experience and research evidence?* Coventry: NHS Institute for Innovation and Improvement, Academy of Medical Royal Colleges and Health Services Management Centre, University of Birmingham.
- Hamilton, D. (2008). The challenge of sustainable hospital building. *Frontiers of Health Services Management*, 25(1), 33–36.

- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3–19.
- Huse, M. (2007). *Boards, governance and value creation. The human side of corporate governance*. New York: Cambridge University Press.
- Jarzabkowski, P., & Fenton, E. (2006). Strategizing and organizing in pluralistic contexts. *Long Range Planning*, 39(6), 631–648.
- Jiang, H. J., Lockee, C., Bass, K., & Fraser, I. (2009). Board oversight of quality: Any differences in process of care and mortality? *Journal of Healthcare Management*, 54(1), 15–30.
- Judge, W., & Zeithaml, C. (1992). An empirical comparison between the board's strategic role in nonprofit hospitals and in for-profit industrial firms. *Health Services Research*, 27(1), 47–64.
- Kane, N. M., Clark, J. R., & Rivenson, H. L. (2009). The internal processes and behavioral dynamics of hospital boards: An exploration of differences between high- and low-performing hospitals. *Health Care Management Review*, 34(1), 80–91.
- Kirkpatrick, I., Bullinger, B., Lega, F., & Dent, M. (2013). The translation of hospital management models in European health systems: A framework for comparison. *British Journal of Management*, 24, S48–S61.
- Kirkpatrick, I., Hartley, K., Kuhlmann, E., & Veronesi, G. (2014). Clinical management and professionalism. In E. Kuhlmann (Ed.), *The Palgrave international handbook of healthcare policy and governance*. London: Palgrave Macmillan.
- Kuntz, L., & Scholtes, S. (2013). Physicians in leadership: The association between medical director involvement and staff-to-patient ratios. *Health Care Management Science*, 16(2), 129–138.
- Lister, E. D. (2000). From advocacy to ambassadorship: Physician participation in healthcare governance. *Journal of Healthcare Management*, 45(2), 108–118.
- Lister, E. D. (2007). Physicians in the boardroom. *Healthcare Executive*, 22(4), 58–61.
- Martin, G. P. (2011). The third sector, user involvement and public service reform: A case study in the co-governance of health service provision. *Public Administration*, 89(3), 909–932.
- Mintzberg, H. (1979). *The structuring of organizations*. Englewood Cliffs: Prentice Hall.
- Molinari, C., Morlock, L., Alexander, J., & Lyles, C. A. (1993). Hospital board effectiveness: Relationships between governing board composition and hospital financial viability. *Health Services Research*, 28(3), 358–377.
- Molinari, C., Alexander, J., Morlock, L., & Lyles, C. A. (1995). Does the hospital board need a doctor? The influence of physician board participation on hospital financial performance. *Medical Care*, 33(2), 170–185.
- Molinari, C., Hendryx, M., & Goodstein, J. (1997). The effects of CEO-board relations on hospital performance. *Health Care Management Review*, 22(3), 7–15.
- Morlock, L., Alexander, J., & Hunter, H. M. (1985). Formal relationships among governing boards, CEOs, and medical staffs in independent and system hospitals. *Medical Care*, 23(10), 1193–1213.
- Nunes, R., Rego, G., & Brandão, C. (2007). The rise of independent regulation in health care. *Health Care Analysis*, 15(3), 169–177.
- Powers, T. L., & Bendall, D. (2004). Improving health outcomes through patient empowerment. *Journal of Hospital Marketing and Public Relations*, 15(1), 45–59.
- Preker, A. S., & Harding, A. L. (2003). *Innovations in health service delivery: The corporatization of public hospitals*. Washington: World Bank.
- Prybil, L. D., Levey, S., Killian, R., Fardo, D., Chait, R., Bardach, D., & Roach, W. (2012). *Governance in large nonprofit health systems. Current profile and emerging patterns*. Lexington: Commonwealth Center for Governance Studies.
- Ramsay, A., & Fulop, N. (2010). *The healthy NHS board a review of guidance and research evidence*. London: National Leadership Council.
- Saltman, R., Durán, A., & Dubois, H. (2011). *Governing public hospitals. Reform strategies and the movement towards institutional autonomy*. Copenhagen: European Observatory on Health Systems and Policies.
- Sarto, F. (2015). *La governance delle aziende ospedaliere. Il ruolo del medico-manager*. Padova: CEDAM.
- Sarto, F., & Veronesi, G. (2016). Clinical leadership and hospital performance: Assessing the evidence base. *BMC Health Services Research*, 16(2), 85–97.
- Sarto, F., Cuccurullo, C., & Aria, M. (2014). Exploring healthcare governance literature: Systematic review and paths for future research. *Mecosan*, 91, 61–80.
- Sarto, F., Veronesi, G., Kirkpatrick, I., Cuccurullo, C. (2016). Exploring regionalism in public management reforms: The case of the Italian hospital sector. *Policy and Politics*, 44(4), 525–545.
- Sarto, F., Saggese, S., & Catuogno, S. (2017). Peculiarità degli ospedali pubblici e riflessi sul governo aziendale: verso una governance partecipativa. *Azienda Pubblica*, 1, 33–50.
- Sarto, F., Veronesi, G., & Kirkpatrick, I. (2019). Organizing professionals and their impact on performance: The case of public health doctors in the Italian SSN. *Public Management Review*, 21(7), 1029–1051.
- Stolzenberg, E. A. (2000). Governance change for public hospitals. *Journal of Healthcare Management*, 45(5), 347–350.
- Succi, M. J., & Alexander, J. (1999). Physician involvement in management and governance: The moderating effects of staff structure and composition. *Health Care Management Review*, 24(1), 33–44.
- The King's Fund. (2011). *The future of leadership and management in the NHS. No more heroes*. London: The Kings Fund.
- The King's Fund. (2012). *Leadership and engagement for improvement in the NHS: Together we can*. London: The King's Fund.

- Veronesi, G., & Keasey, K. (2015). Patient and public participation in the English NHS: An assessment of experimental implementation processes. *Public Management Review*, 17(4), 543–564.
- Veronesi, G., Kirkpatrick, I., & Vallascas, F. (2013). Clinicians on the board: What difference does it make? *Social Science and Medicine*, 77, 147–155.
- Veronesi, G., Kirkpatrick, I., & Vallascas, F. (2014). Does clinical management improve efficiency? Evidence from the English National Health Service. *Public Money and Management*, 34(1), 35–41.
- Vining A. R., & Weimer D. (2005). Economic perspective on public organizations. In E. Ferlie, L. E. Lynn, & C. Pollitt (Eds.), *The oxford handbook of public management*. Oxford: Oxford University Press.
- Von Nordenflycht, A. (2010). What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35(1), 155–174.
- Weil, T. P. (2003). Governance in a period of strategic change in U.S. healthcare. *The International Journal of Health Planning and Management*, 18(3), 247–265.
- Winch, G., & Schneider, E. (1993). Managing the knowledge-based organization: The case of architectural practice. *Journal of Management Studies*, 30(6), 923–937.
- Witman, Y., Smid, G. A. C., Meurs, P. L., & Willems, D. L. (2010). Doctor in the lead: Balancing between two worlds. *Organization*, 18(4), 477–495.
- Young, G. J., Beekun, R. I., & Ginn, G. O. (1992). Governing board structure, business strategy, and performance of acute care hospitals: A contingency perspective. *Health Services Research*, 27(4), 543–564.

Hospital Governing Bodies

► Hospital Governance

Hostile Takeover

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Synonyms

Acquisitions (also M&A); Buyout; Corporate raid/raider; Takeover; Unfriendly takeover

Definition

A hostile takeover is when one company, namely, the acquirer buys another company, namely, the target whose management is against the acquisition. Hostile takeovers imply animosity and reluctance. This is usually manifest on part of the target management because in most hostile takeovers, the incumbent management of the target is replaced with a new one.

Hostile takeovers happen when the target management rejects the offer made by the acquirer. The acquirer can then come back with a new offer, in other words, the acquirer can continue to pursue the target.

There are many ways the acquirer can pursue the target, such as,

- Make a *Tender Offer* – here the acquirer makes a fixed price offer which is usually above the market price for the “target” shares.
- Conduct a *Proxy Fight* – here the acquirer approaches the shareholders of the target directly in an attempt to convince them to use their votes to replace the reluctant members of the management with new, more agreeable ones. Here most often, a simple majority of the shareholders is sufficient to vote out the unwilling target management.
- Make a *Creeping Tender Offer* – here the acquirer simply buys shares of the “target” in the market. Once the necessary percentage of shares have been acquired, the acquirer can initiate change in the management of the “target.”

Hostile takeovers are more often seen in countries where the external ownership of the shares is high. External ownership means that a greater number of the issued shares of a company are available for trade in the market, whereas internal ownership is when large chunks of the shares are in the hands of a few shareholders like banks or institutional shareholders. External share ownership therefore allows easier access whereby it is easier to gain control of the target company.

Background

Companies are bought (taken over) for a myriad of reasons. Some such reasons are lateral or vertical expansions, cost reductions, gaining access to different markets or products, competitive strategies, simple consolidations, adding value by restructuring, selling the acquired company piecemeal for profit, etc.

Takeovers have been happening for a very long time. While contested in some circles, Louis Wolfson is considered by many as one who practically developed the idea of market for control by consistently and most times successfully engaging in hostile takeover in the 1940s and 1950s. He seemed to have the knack of identifying undervalued or mismanaged assets and would raid these either by making tender offers or conducting proxy fights. He would then go on to sell these assets at profits (Sobel 2000).

Stock markets function as a means for controlling management performance. In other words, share prices reflect the decisions and capabilities of the management. Takeovers, hostile or friendly, can be viewed as a market correction mechanism. If the management of a company does not manage its assets efficiently to generate maximum value for its shareholders, then the unhappy shareholders sell their shares in the company and look for better options. The resulting low demand for the company's shares therefore makes the company a relatively cheap acquisition, thus, making it a good target. The rationale for such acquisitions is that the incumbent management is incapable of generating good value from the assets in place. The acquirer considers itself to be in a better position to generate and deliver higher value with the same said assets, either by bringing in a new and efficient management or simply restructuring the business or even breaking it up and selling it off in pieces. The acquisition is then made and very often the incumbent management is replaced with a new one. The aim, once again, is to generate higher value from the assets in place.

In countries, such as the UK and USA, where the percentage of the shareholding is external, there is a higher level of takeover activity.

Countries like Germany and Austria, where the internal shareholding is higher, experience relatively less takeover activity.

Examples of Hostile Takeovers

- Time (US), Warner (US), and Paramount (US) – Time was in the process of merging with Warner when Paramount made a hostile bid. The shareholders of Time were in favor of Time-Paramount merger, but the courts ruled in favor of the Time Management which argued that the Time-Warner merger was in the long-term interest of the company (Saporito 1989).
- Cadbury (UK) and Kraft (US) – Kraft made an offer for Cadbury which was rejected by the Cadbury board. Since Cadbury is almost an institution in the UK, the UK Government also got involved in this hostile cross-border takeover. Kraft made a new offer and eventually Cadbury gave in to an offer of just over \$19 billion (Moeller 2012).
- Sanofi-Aventis (France) and Genzyme (US) – Genzyme had research and products in pipeline that Sanofi-Aventis wanted. Genzyme had rejected their (friendly) offer twice and then the bidding turned hostile. Sanofi-Aventis approached Genzyme's shareholders directly. Eventually Genzyme was taken over by the French company in a deal valued at \$20.1 billion.
- Continental (German)-Schaeffler (German) – is often mentioned as one of the fiercest fought boardroom battles and cost the CEO of Continental, Mr. Manfred Wennemer, his job. Continental had rejected Schaeffler's offers previously. Schaeffler eventually got Continental for around €12 billion in 2008 (The New York Times 2008).

The pertinent issue with hostile takeover is, why is there this hostility? It usually is the fear of losing control or job, or it could be a dramatic change in company philosophy, or it could be the threat of discontinuation of the traditional business model. Given, some such reasons, most companies that

suddenly face unwanted takeover attempts need time to regroup strategize.

Some Classic Defense Mechanisms

There are many defense tactics against a hostile takeover available to the target company. One often hears the term “shark repellent” used as a synonym for takeover defense mechanisms. They, on their own, all have rather entertaining names and the classic ones are the following:

- *White Knight or White Squire* – where the target is bought (taken over) by a friendly company or investor rather than the black knight (the unfriendly bidder). The friendly company usually agrees to retain the incumbent management and most often the acquisition itself is on much more favorable terms. For example, Merck made a hostile bid for Schering and Bayer came to rescue as white knight in 2006 (The Pharma Letter 2006).
- *Poison Pills* – is a collective name for defense strategies, like Flip in, Flip out, Preferred stock plans, etc. The aim of the poison pill is to make the target less attractive to the bidder. This could be achieved, for instance, by making the deal expensive for the bidder. For example, Netflix put in place a “Flip In” in response to the investor Carl Icahn Buying 10% of Netflix’s stock in 2012 (BBC News 2012).
- *Crown Jewels* – usually the last resort, this defense mechanism is the selling off of the most valuable asset the target has to make it unattractive to the bidder. These crown jewels could be both tangible – like a successfully beta tested drug, or intangible – like patents. For example, ABN AMRO tried to sell its crown jewel – the LaSalle Bank Corporation to Bank of America to make itself less attractive to the RBS consortium who made a hostile bid for ABN AMRO. ABN AMRO at the

time was negotiating an acquisition with Barclays who had offered to buy ABN in 2007 (Sterling 2007).

- *Golden Parachute* – originally, are substantial compensations or benefits given to certain key people in the organization in the event they are removed from the organization as a result of a takeover or M&A activity. This usually takes the form of stock options, severance pays, bonuses, etc. Golden parachutes are put in place to once again make the target relatively expensive, since these contracts have to be honored. It is also a way to provide a relatively easier landing after being terminated from work for the personnel. For example, Meg Whitman, when she was the CEO of Hewlett-Packard, contractually stood to get about \$91 million in case of change of control at the company and \$51 million in case she was fired (Bort 2015).
- *Pac-Man* – here the potential target turns around and makes a counteroffer to buy the potential acquirer. This is usually done to intimidate the acquirer. The target may use all means possible to conduct a Pac-Man defense including raising debt, using its own cash, etc. For example, at first, Porsche for some years attempted unsuccessfully to buy Volkswagen. However, in 2012, Volkswagen bought Porsche completely (Topman 2012).

It is important to note that the defense mechanisms most often buy time for the target to regroup and decide upon further strategy. Defense strategies are not fool proof, in that they do not guarantee that a hostile takeover attempt will not happen. The defense strategies however, do allow the target to consider its options. For instance, in 2011, Clorox, the maker of cleaning products rejected an offer made by investor Carl Icahn stating that it undervalued the company. Clorox responded by implementing the defense strategy – Poison Pill to fend off further attempts and to secure better valuation in the market for control (De La Merced 2011).

CSR and Hostile Takeovers

A company should be able to protect itself from unwanted takeover attempts. This is because it allows the management to focus on the business

Hostile Takeover, Table 1 Pros and cons of hostile takeover

Target	Acquirer
Pros	
• The target company’s management manages the assets more efficiently to avoid being taken over in the first place	• Can extract efficiently higher value from assets in place
• In case of a takeover, the target company’s assets can be used more efficiently to deliver added value	• Can acquire assets relatively cheaply
• By having requisite defense mechanisms in place, the target can achieve better valuations	• Can add to existing product market or other aspects of currently business
• Shareholders of the target most often win in a hostile takeover	
Cons	
• Incumbent management is very likely replaced	• Hostile takeovers can be long drawn, and hard fought
• Business might be broken up and sold piecemeal	• In the presence of defense mechanisms, takeovers can quickly become expensive
• Business ethos/model might very likely change	• Key personnel may leave the target organization post takeover making it relatively unattractive
• Job losses across the board are likely	• Expected or planned synergies may prove to be elusive
• Company management may resort to unethical behavior to prevent takeover	• Hostile takeovers may be afflicted by the winners curse often reflected in falling share prices of the acquirer when the hostile takeover is announced
• Acquirers can create undue pressure on the target management to sell	• Could lead to a debt overhang for the acquirer due to the acquisition

and generate value for the shareholders without worrying about being taken over. Another added advantage of having defense mechanisms in place is that the target company can negotiate a higher price for their assets.

However, having too many defense mechanisms in place is considered to be unhealthy for the long-term prospects of the company. The entrenchment hypothesis posits that anti-takeover/defense mechanisms could in the long-run cause management entrenchment. In other words, if the management is not afraid of being taken over, given that they have requisite defense mechanisms in place, then they are quite likely to feel secure, in that they won’t lose their jobs in the event of takeover. The threat of takeover, the hypothesis implies, makes the management perform well in the long-term interest of the company.

If the target management hostility towards the acquisition stems from the fear of job losses or dilution of power, then it is considered unethical. The overriding purpose of any organization is to maximize shareholder value, and if a takeover achieves this, then it should happen. If the target management places its self-interest before the long-term interest of the company and thereby its share/stakeholders, then it is unethical.

The CSR of a company should aim to have in place a fair, transparent, and accountable corporate governance so as to enable objective decision making in the event of hostile takeovers.

Summary

The table below summarizes the pros and cons of hostile takeover for the target company and the acquirer (Table 1).

Cross-References

► [Mergers and Acquisitions](#)

References

- BBC News. (2012, November 5). Netflix takes poison pill to ward off Icahn takeover. *BBC News*. <https://www.bbc.com/news/business-20214401>. Accessed 6 Aug 2020.
- Bort, J. (2015, March 15). Julie Bort HP CEO Meg Whitman will get a monstrous payout if she's ever fired. *Business Insider*. <https://www.businessinsider.com/whitman-gets-51-million-if-hp-axes-her-2015-3?r=DE&IR=T>. Accessed 7 Aug 2020.
- De La Merced, M. (2011 July 18). Clorox rejects Icahn's takeover bid. *The New York Times*. <https://dealbook.nytimes.com/2011/07/18/clorox-rejects-icahn-takeover-bid/>. Accessed 7 Aug 2020.
- Moeller, S. (2012, January 9). Case study: Kraft's takeover of Cadbury. *Financial Times*. <https://www.ft.com/content/1cb06d30-332f-11e1-a51e-00144feabdc0>. Accessed 7 Aug 2020.
- Saporito, B. (1989, November 20). The inside story of Time Warner. *CNN*. https://money.cnn.com/magazines/fortune/fortune_archive/1989/11/20/72769/. Accessed 7 Aug 2020.
- Sobel, R. (2000). *Dangerous dreamers: The financial innovators from Charles Merrill to Michael Milken*. New York: Beard Books.
- Sterling, T. (2007 April 26). 2 Bidders fighting for Amro. *The Philadelphia Inquirer*. https://www.inquirer.com/philly/business/20070426_2_bidders_fighting_for_Amro.html. Accessed 6 Aug 2020.
- The New York Times. (2008, August 21). Continental-Schaeffler deal ends takeover standoff. *The New York Times*. <https://www.nytimes.com/2008/08/21/business/worldbusiness/21iht-21tire.15493510.html>. Accessed 7 Aug 2020.
- The Pharma Letter. (2006, April 3). Bayer tops Merck KGaA's bid for Schering AG to create German drug heavy-weight. *The Pharma Letter*. <https://www.thepharmaletter.com/article/bayer-tops-merck-kgaa-s-bid-for-schering-ag-to-create-german-drug-heavy-weight>. Accessed 6 Aug 2020.
- Topman, G. (2012, July 5). Volkswagen swallows Porsche. *The Guardian*. <https://www.theguardian.com/business/2012/jul/05/volkswagen-buys-porsche>. Accessed 7 Aug 2020.

Household Bankruptcy

- [Debt Relief Systems: Equitable Allocation](#)

HPI

- [Happy Planet Index](#)

HR and Corporate Social Responsibility

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Synonyms

[Human rights](#)

Definition

The adoption of ethical behaviors during the relationship with the human resources (HR) represents one of the main concepts of the corporate social responsibility (CSR) paradigm. The comprehension of the relationship HR-CSR required a multi-dimensional analysis due to the high degree of complexity that characterizes the dynamics between employees and firms. Specifically, the social dimension of CSR includes all the issues and concerns that revolve around the sustainable work systems and the sustainable human resource management. In these terms, the International Labour Organization (ILO) has been working on raising awareness on the social dimension of sustainability in international law. Its efforts have been recognized by the United Nations in the Agenda 2030. In particular, the SDG 8 “decent work and economic growth” promotes better working conditions and sustainable growth (Di Vaio et al. 2020).

The first perspective of analysis is represented by the direct impacts of the employees' behaviors on the outcomes of the enterprises. In fact, the adoption of unethical behaviors by the staff members could impact negatively on the overall degree of socially responsible activities implemented by the companies. From another point of view, the quality of the work and the performances of the employees are strongly linked with the level of work engagement felt by workers. In these terms, CSR social actions need to be perceptible by the employees (Farid et al. 2019).

The second contribution is represented by the impacts of the firms' strategies on employees' well-being. In fact, the companies could influence the behaviors of the employees through the definition of unethical strategies. On the contrary, the new idea of CSR of "being sustainable by codeveloping with society" requires the participation of the employees for the pursuit of the established goals. Thus, employees need to be a relevant element of the companies that are aiming to achieve sustainable business processes (Chen and Hung-Baesecke 2014). Furthermore, the overall degree of HR's well-being represents part of several indexes that evaluate the overall degree of adherence to the CSR paradigms by the business enterprises.

The HR and the CSR: A Multidimensional Relationship

The concept of sustainable development has been characterized by several evolutions over the years. These evolutions have been favored by the increasing attention paid by academics and policy makers to the sustainable development themes. Specifically, contrarily to the past, the concept of sustainable development is currently characterized by the inclusion of nonenvironmental themes such as the eradication of poverty, the provision of health services for communities, and human rights (Sachs 2012). Furthermore, the policy makers have developed the concept of Triple Bottom Line (TBL) that consists of environmental, social, and economics themes (Sneddon et al. 2006). The definition of the TBL social dimension has been at the center of the debate among CSR scholars. Specifically, it is considered as the measurement and assessment of the organization's impact on the social system in which it operates at local, national, and global level (Elkington 1998).

The social themes are strongly related to the activities of the companies. In fact, firms impact on social themes both through their internal relationships and through their interaction with the external entities. In particular, these processes are interested by the direct involvement of the HR that represents the "human capital" of

the enterprises. In this sense, it is obvious that the adoption of socially responsible behaviors could not be related to the existence of a direct involvement of the employees within the processes. However, the direct involvement of the employees within the processes could be interested by several criticisms caused by the possible existence of conflicts or barriers. Also, it has emerged how the CSR guidelines that have been proposed in the last years do not offer practical contributions in supporting the companies to reach the social sustainability, but provide only assessment tools (Miller et al. 2007). A large number of academics have highlighted that the contributions of the HR to the CSR are several (Voegtlin and Greenwood 2016). In fact, the dynamics role covered by them within the processes required a separate analysis that distinguishes between the socially responsible practices adopted to increase the well-being of the HR and the socially responsible practices directly promoted by the employees (Morioka et al. 2017).

The well-being of the HR has been widely analyzed by academics. The relevance of the topics is related to the increasing attention paid by entrepreneurs to the well-being of the HR. Specifically, several studies have started to empirically test the existence of positive externalities related to the adoption of practices inspired by the exigence to increase the overall degree of HR satisfaction about their jobs. In this sense, some authors have started to discuss about the existence of "humanist" enterprises that operate through business models inspired by a high degree of attention to the HR needs (Del Baldo 2020). Furthermore, other studies have analyzed the systemic impacts of the adoption of socially responsible behaviors on employees. Specifically, these studies have suggested that the development of strategies inspired by the exigence to support the HR during their activities could generate positive externalities on the entire communities (Simone et al. 2019). In addition, according to Hutchins and Sutherland (2008), the realization of sustainable social practices in HR management should involve not only the single company sphere, but also the supply chain. This integrated

approach can be carried out through a strategic selection of the suppliers. Furthermore, prior studies have highlighted that the voluntary adoption of socially responsible practices by the HR could favor the achievement of a highest degree of legitimacy by the business enterprises. In particular, academics have underlined the strategic role covered by the HR within the processes related to the achievement of a social license to operate (SLO) in foreign countries. In fact, an increasing number of MNEs have started to hire local HR in order to adequate their practices to the exigence of the local communities (Forstenlechner and Mellahi 2011).

Summary

The HR are a central part of companies. The development of the human capital represents one of the main strategies to favor the adoption of socially responsible practices. In fact, the two-way relationship that characterizes the connection HR-CSR required the provision of adequate strategies in order to favor the transition to more socially responsible paradigms. Although the literature have highlighted the existence of positive impacts generated by the involvement of the HR, nowadays only a few number of enterprises have started to develop new stakeholder engagement strategies in order to favor dialogue with employees. According to this evidence, academics could favor the development of these practices through the analysis of case studies.

Cross-References

► Employment Engagement

References

- Chen, Y. R. R., & Hung-Baesecke, C. J. F. (2014). Examining the internal aspect of corporate social responsibility (CSR): Leader behavior and employee CSR participation. *Communication Research Reports*, 31(2), 210–220. <https://doi.org/10.1080/08824096.2014.907148>.
- Del Baldo, M. (2020). Company case study 8: Cucinelli – A humanistic enterprise for a sustainable growth and a sustainable world. In *Intrinsic CSR and competition* (pp. 241–259). Springer International Publishing. https://doi.org/10.1007/978-3-030-21037-3_15.
- Di Vaio, A., Palladino, R., Hassan, R., & Alvino, F. (2020). Human resources disclosure in the EU directive 2014/95/EU perspective: A systematic literature review. *Journal of Cleaner Production*, 257, 120509. <https://doi.org/10.1016/j.jclepro.2020.120509>.
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of sustainability*. Gabriola Island, BC; Stony Creek, CT: New Society Publishers.
- Farid, T., Iqbal, S., Ma, J., Castro-González, S., Khattak, A., & Khan, M. K. (2019). Employees' perceptions of CSR, work engagement, and organizational citizenship behavior: The mediating effects of organizational justice. *International Journal of Environmental Research and Public Health*, 16(10). <https://doi.org/10.3390/ijerph16101731>.
- Forstenlechner, I., & Mellahi, K. (2011). Gaining legitimacy through hiring local workforce at a premium: The case of MNEs in the United Arab Emirates. *Journal of World Business*, 46(4), 455–461. <https://doi.org/10.1016/j.jwb.2010.10.006>.
- Hutchins, M. J., & Sutherland, J. W. (2008). An exploration of measures of social sustainability and their application to supply chain decisions. *Journal of Cleaner Production*, 16(15), 1688–1698. <https://doi.org/10.1016/j.jclepro.2008.06.001>.
- Miller, E., Buys, L., & Summerville, J. (2007). Quantifying the social dimension of triple bottom line: Development of a framework and indicators to assess the social impact of organisations. *International Journal of Business Governance and Ethics*, 3(3), 223–237. <https://doi.org/10.1504/IJBGE.2007.014314>.
- Morioka, S. N., Bolis, I., Evans, S., & Carvalho, M. M. (2017). Transforming sustainability challenges into competitive advantage: Multiple case studies kaleidoscope converging into sustainable business models. *Journal of Cleaner Production*, 167, 723–738. <https://doi.org/10.1016/j.jclepro.2017.08.118>.
- Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The Lancet*, 379(9832), 2206–2211. [https://doi.org/10.1016/S0140-6736\(12\)60685-0](https://doi.org/10.1016/S0140-6736(12)60685-0). Lancet Publishing Group.
- Simone, C., Conti, M., & La Sala, A. (2019). Firm, territory and local community: Lessons learned from the Olivetti's model. *Capitale Culturale*, 2019(20), 403–428. <https://doi.org/10.13138/2039-2362/2109>.
- Sneddon, C., Howarth, R. B., & Norgaard, R. B. (2006). Sustainable development in a post-Brundtland world. *Ecological Economics*, 57(2), 253–268. <https://doi.org/10.1016/j.ecolecon.2005.04.013>.
- Voegtlin, C., & Greenwood, M. (2016). Corporate social responsibility and human resource management: A systematic review and conceptual analysis. *Human Resource Management Review*, 26(3), 181–197. <https://doi.org/10.1016/j.hrmr.2015.12.003>.

HRM of Sustainable Development Phases

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Synonyms

Human Resource Management model; Organizational model for development

Definition

The HRM model envisaged for sustainable development is able to be suitable for achieving results, because it is based on the involvement of excellent professional, it is productive and non-chaotic, motivated, and managed in a peculiar but efficient way, without losing ethical feelings, social commitment, and the cultural choice that remain at the base of the organizational system dedicated to the construction of the human development of a country. For these reasons, we recover the operating model of the solar system. This model well represents the organizational system of the Human Resource Management for development.

The solar system is the planetary system made up of a variety of celestial bodies kept in orbit by the gravity of the Sun. The Sun is the SDS: with its energy, that is, producing human and economic forces, it allows the survival and growth of the system.

Through an increasingly transformational leadership (its gravitational force), it keeps all the planets that follow pre-established orbits around it.

Like the solar wind that propagates creating the atmosphere, so governance generates the organizational culture (adhocracy) that propagates in the organization and permeates the whole environment in which the process of development moves.

Thus, governance, through its leadership style, regulates the functioning (orbits) of strategic and operational plans (planets).

The major risk that this system presents in the model is: “if the sun dies, the solar system dies.”

Introduction

The new theories on sustainable development and ecological economics provide a more complete view of the elements that make up sustainability. In fact, more and more importance is given to the human variable, understood both as the work and as the capital that is created by human beings.

A fundamental component of human development is equity. Every person has the right to live a fulfilling life, in accordance with her values and aspirations. Inequality reduces the speed of human development, and in some cases it can even prevent it at all.

Literature defines organizations in various ways. From Coase in 1937 to Armstrong and Stephens in 2008 (Armstrong and Stephens, 2008), the definitions of the companies followed one another, keeping only one constant element: the shared work.

The organization, in our opinion, consists of “people working together in a collaborative way.”

Key Issue

The sustainable development of a territory requires a double level of action: a top-down action by national and local governments and a bottom-up action by the nongovernmental actors present on the territory. It also requires a division into three strategic phases. It is therefore necessary to imagine a complex management of human resources to achieve the development objective.

The organizational structure destined for the development process is a complex structure, because, especially in the start-up phase, different actors participate.

In our opinion, the most effective structure for a flexible organization that has to develop multiple and contemporary projects linked just by

general services is that of a project first and then a matrix, with a first functional level of corporate. The evolving organization, coming from a hierarchical system, must initially be based on clan culture (with high motivation and trust), but then must strive towards an adhocratic organizational culture, that is, a division into small groups supported by professional staff bodies. This structure is necessary above all for a dimensional development.

To avoid that the structure tends to organizational chaos, it is essential to contain the ample flexibility necessary to work with the transformational leadership style, which must be integrated with a transactional style, to increase the motivation of the human resources employed.

The correct model for a long-term development program should be linked to a matrix structure. It should also be permeated by an adhocratic organizational culture and be conducted with a trans-transformation/transactional hybrid leadership style.

The possibility of linking to the imagined model a system of ethical, economic, cultural, and social rewards becomes necessary to motivate existing resources and to reduce the emigration of valid professional skills towards cities and other sectors.

In this way, the HRM model envisaged for sustainable development is able to be suitable for achieving results, because it is based on the involvement of excellent professional, it is productive and nonchaotic, motivated, and managed in a peculiar but efficient way, without losing ethical feelings, social commitment, and the cultural choice that remain at the base of the organizational system dedicated to the construction of the human development of a country.

The start-up phase of development is based on a strong commitment to organizational planning and monitoring. The goal is to develop the best organizational system capable of achieving results in the short term, through the involvement of external, international, and local human resources.

In all countries (both developed and under-development and in transformation), it is necessary to link the commitment to growth to a system

of ethical, economic, social, and cultural values, both local and international.

The organizational model of the hang-on phase derives directly from the HRM of the previous phase. There are some factors that differentiate it slightly: the peculiarities that link it to the country, the need to reconcile a model that provides for the stable coexistence of a top-down and a bottom-up system, as well as the recent supremacy of the Sustainable Development State.

Therefore, at this stage, it is necessary to identify a model that is not already found in existing theoretical models in business economics. In fact, the peculiarities on which it is based and which represent the strong point of the functioning of the system do not find a precise correspondence in a single theorized system.

For this reason, we recover the operating model of the solar system, already used for the NGOs. This model well represents the organizational system of the Human Resource Management for development (Fig. 1) (Sciarelli, 2015).

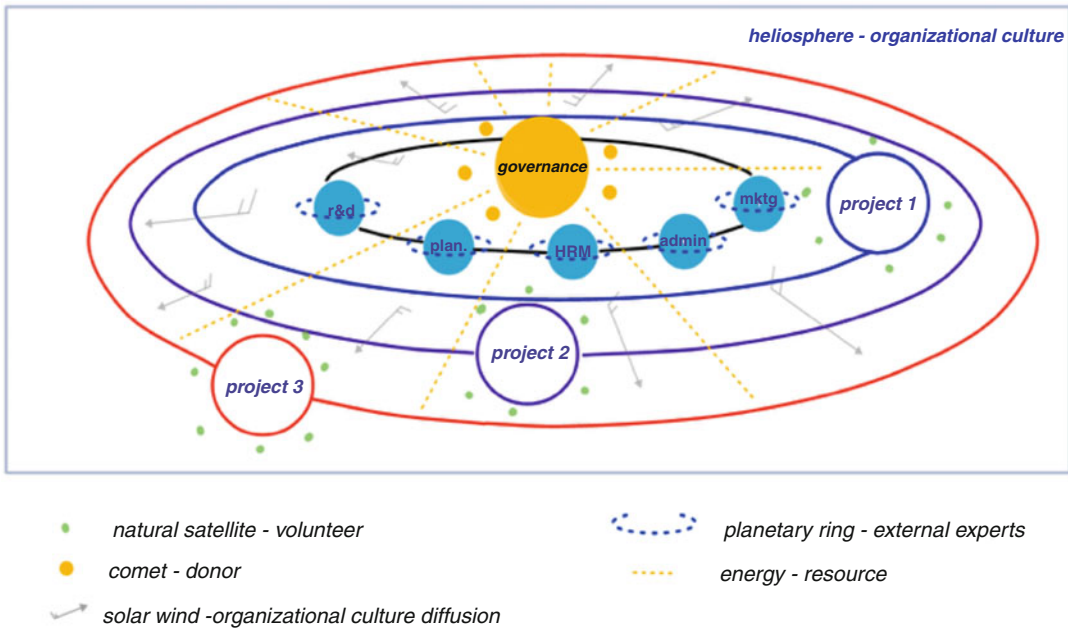
The solar system is the planetary system made up of a variety of celestial bodies kept in orbit by the gravity of the Sun. The Sun is the SDS: With its energy, that is, producing human and economic forces, it allows the survival and growth of the system.

Through an increasingly transformational leadership (its gravitational force), it keeps all the planets that follow pre-established orbits around it.

Like the solar wind that propagates creating the atmosphere, so governance generates the organizational culture (adhocracy) that propagates in the organization and permeates the whole environment in which the process of development moves.

Thus governance, through its leadership style, regulates the functioning (orbits) of strategic and operational plans (planets).

Around the planes, like the satellites of the planets, there are NGOs (Hasmath and Hsu, 2015), foundations, companies, or NGAs (Newman et al., 2018; Satar, 2018). Instead, around governance, like comets, are intergovernmental agencies and the international community. While the orbits of the planets (i.e., the operation of the planes) are regular and regulated, those of smaller



HRM of Sustainable Development Phases, Fig. 1 HRM – Solar System (Sciarelli and Rinaldi 2017)

bodies, such as satellites and comets (non-governmental actors and the international community), are less stable. The evaluation of their contribution, for this reason, presents significant risks.

Every single plane is, therefore, like an independent planet, although regulated by the general laws that permeate the solar system. The solar system includes a different working group and external professionals, who, like the planetary rings that are composed of different materials, surround it and support it.

The major risk that this system presents in the model (i.e., “if the sun dies, the solar system dies”) is slightly mitigated in the organizational model of development. In the hang on phase, in fact, the fall of the government and therefore the replacement of the SDS do not involve the “death” of the development system, even if it certainly brings about its change. This is however a critical aspect of the system that must still find a solution (Sciarelli and Rinaldi, 2018).

The HRM model envisaged for sustainable development is able to be competitive with the

outside, because it possesses excellent professionalism, it is productive and not chaotic, motivated, and managed in a peculiar yet efficient way, without losing ethical feelings, social commitment, and the cultural choice that remains at the base of the organizational system.

In this phase, the great task of the scientific community, as evolved planetary rings, is to provide a professional technical support for the organizational functions of planning and management of human resources and not taking time away from development but providing the right skills and educating local resources.

Countries that are in a self-development phase can maintain HRM based on the solar system model. The leadership moves on a more transactional style, the organizational culture remains linked to a managed adhocratic system, the structure confirms a distinct matrix structure between the functions of corporate and the action plans. The difference with the previous phase is only in the composition of human resources that are mainly national, regional, or local.

The HRM of the countries that are in the welfare state, on the other hand, is completely different. In fact, it typically consists of a centralized, functional, traditional organizational system. In this case, the organizational culture is linked to the hierarchy with a centralized control and a very high use of the bureaucracy, and the leadership style is transactional or even dictatorial.

Summary

Human resources are the necessary basis for the development of nations. The capital and natural resources are passive factors of production. Humans, on the other hand, are the active agents who accumulate capital, exploit natural resources, build social, economic, and political organizations, and lead forward national development.

Therefore, the human resource is considered as an important “energy” on which to structure development and above all its sustainability.

Therefore, an important step to be taken for the sustainable development of an area and its globalization must to be level the skills of human resources.

An organization, in our opinion, consists of “people working cooperatively together.”

Cross-References

- [Development Management](#)
- [United Nations Development Programme](#)

References

- Armstrong, M., & Stephens, T. (2008). *Management and leadership: A guide to managing for results* (2nd ed.). London: Kogan Page.
- Hasmath, R., & Hsu, J. Y. (Eds.). (2015). *NGO governance and management in China*. London: Routledge.
- Newman, A., Mayson, S., Teicher, J., & Barrett, R. (2018). Recruiting, managing and rewarding workers in social enterprises. *The International Journal of Human Resource Management*, 1–10.
- Satar, M. (2018). Managing people in social entrepreneurship ventures- top two takeout’s from a doctoral survey.

Global Journal of Commerce and Management Perspective, 7(1), 23–25.

Sciarelli, F. (2015). Human resource management for sustainable development – Solar system for NGO. In *Proceeding of Sustainable Development Conference 2015*, Bangkok, Thailand, 5–7 Luglio 2015.

Sciarelli, F., & Rinaldi, A. (2017). *Development management of transforming economies. Theories, approaches and models for overall development*. London: Palgrave Macmillan.

Sciarelli, F., & Rinaldi, A. (2018). *Il Macro-Management per le Aree Deboli del Mondo*. Milano: Franco Angeli.

HSE Program for Chemical Sector

- [Responsible Care](#)

Hubbert Curve

- [Peak Oil](#)

Hubbert Peak Model

- [Peak Oil](#)

Human and Social Board Capital

- [Board Capital](#)

Human Assets Management

- [Human Capital Management](#)

Human Capital Management

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Synonyms

Human assets management; Human potential management; Strategic human resources management

Definition

The human capital management (HCM) approach enables organizations to analyze, measure, and evaluate how their internal policies and practices create value (Accounting for People Task Forces 2003; Baron and Armstrong 2008). Organizations review their strategic goals and then develop measures to evaluate their performance in achieving these goals. As HCM is concerned with the added value people provide for organizations, it is perceived as a bridging concept that describes the link between HR practices and business performance, creating the basis for a competitive advantage.

Human capital (HC), together with social and organizational capital, builds intellectual capital. HC refers to the specific knowledge, skills, and ability to develop and innovate processed by people in an organization. While acknowledging the importance of people to the organization, HCM stresses the need for managing and evaluating information about people as organizational assets to determine their input in achieving the organization's strategic goals. The value of HC depends upon its potential to contribute to the competitive advantage or core competencies of the firm (Baron and Armstrong 2008).

The Micro-Foundational Level of Human Capital

The definition of HC has evolved over time. The concept of human capital derives from the economic literature, where it was defined as “the knowledge, information, ideas, skills, and health of individuals” (Becker 1964, 2002, p. 1). The Organisation for Economic Co-operation and Development (OECD) (2001) defines HC as the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being. The World Bank defines HC as the productive capacity embodied in individuals, with special focus on its contribution to economic production (World Bank 2006). According to this concept, expenditures on personal development (schooling, trainings, and medical care) raise earnings by improving the health or behavior and habits of employees. Economists, therefore, regard these kinds of expenditures as investments in human capital. HC is a specific form of assets, apart from financial or physical capital, which yield income over long periods of time. It is unique in the sense that people cannot be separated from their knowledge, skills, health, or values the way they can be separated from their financial and physical assets (Becker 2008).

Individuals who invest in their education increase their skills and knowledge, are more productive than those who are less well-trained, and earn more as a result of this investment. Thus, human capital theory proposes that employees possess a certain knowledge and skill set gained via education and which can be “rented out” to employers (Ehrenberg and Smith 2018), thus generating value for the organization. Following this concept, costs associated with remuneration, training and development, and career progression should be redefined (Baron and Armstrong 2008; CIPD 2017; Scarbrough and Elias 2002).

Scholars note, however, that treating people as assets is a questionable practice. Employees cannot be treated as passive assets to be bought, sold, and replaced. They are workers who possess

control over these assets – their knowledge and skills – and the extent to which they decide to engage these assets to reach organizational goals depends on them (Davenport 1999).

At the individual level, the core aspects that help develop HC consist of employee training and creating opportunities for learning and career management. The majority of studies have found that HC investments in training generally improve outcomes, such as employee productivity, job performance, rate of turnover, job satisfaction, attitudes, empowerment, teamwork, and commitment. The literature shows mixed results, however, regarding investments in general skills (graduate degree). Some studies have found that these investments can lead to increased mobility and employees are more likely to leave the organization, while other studies stress that these investments are perceived as positive by employees and have no effect on turnover (CIPD 2017).

Human Capital at the Organizational Level

HC is not owned by the organization but is secured through the employment relationship. Human capital can be, therefore, explored at two levels: individual and organizational. At the individual level, HC refers to the characteristics possessed by an individual; at the organizational/unit level, HC refers to the aggregated accumulation of individual HC that creates value for the organization (Wright and McMahan 2011). The capital that is brought by people to the organization is developed by experience and training and leads to the organization, gaining a competitive advantage.

At the organizational level, the literature discusses HC in the context of a resource-based view [(RBV), capability and dynamic capability (DC), perspectives of the firm] and a knowledge-based view (KBV). According to RBV, the organization possesses a unique bundle of valuable tangible or intangible resources, capabilities, and competencies, whereas the combination of these helps to create a sustainable competitive advantage (Barney 1991).

Many firms operate in dynamic and turbulent environments, so they need to be able to transform their constituent resource base, knowledge, and capabilities to remain aligned with external and internal circumstances (Danneels 2002). DC theory proposes an extension of RBV that shows how investment in HC can facilitate employee- and firm-level capabilities through which organizations can gain and maintain a competitive advantage over time in changing environments (Rothaermel and Hess 2007). In turn, KBV treats knowledge as the most important resource of the firm. Organizations able to manage and exploit asymmetries in explicit and tacit knowledge can gain a sustainable competitive advantage (Grant 1996). KBV stresses how the ability to value, assimilate, and apply new knowledge (e.g., absorptive capacity) allows organizations to adapt and respond to changing customer demands (Cohen and Levinthal 1990).

Human Capital: Multilevel Framework

Most definitions of HC focus on the individual level of analysis and stress the knowledge, skills, abilities, and other characteristics of individuals (KSAOs). The extensive number of studies shows, however, growing interest in the organizational outcomes of HC.

In response, a unified approach among individual and organizational perspectives of HC has been proposed. Ployhart et al. (2014) propose distinguishing features between HC resources and strategic HC resources, both of which relate to organizational-level outcomes. The authors define human capital resources “as individual or unit-level (collective) capacities based on individual KSAOs that are accessible for unit-relevant purposes, that is, best practices” (Ployhart et al. 2014, p. 381). At the individual level, HC resources represent a specific KSAO (e.g., an employee can handle specific procedures, can communicate with customers in foreign languages). At the organizational level, HC resources relate the impact of workforce engagement on organizational outcomes, such as customer satisfaction, productivity, employee turnover, or accidents (CIPD 2017).

More recent multilevel HC literature discusses the mutual relationship between the impact of individual level HC and organizational-level performance, including the reverse direction of the relationship, e.g., how the learning climate will enhance employee engagement and extra-role behaviors (Eldor and Harpaz 2016).

Human Capital Management Approach

The literature provides a range of definitions of human capital management. The Accounting for People Task Force defines HCM as an approach to personnel management that treats it as a high-level strategic issue and seeks systematically to analyze, measure, and evaluate how personnel policies and practices create value. Defining HCM as an approach that enables organizations to analyze, measure, and evaluate how their internal policies and practices create value reflects the need for managing and evaluating information about organizational assets and their input in achieving strategic goals (Accounting for People Task Forces 2003, p. 22). Baron and Armstrong (2008) state that HCM provides the basis for strategic HRM through measurement and analysis leading to evaluation, diagnosis, and action. In turn, Kearns stresses that HCM is a holistic, organization-wide, and system-based approach that deals with the development of human potential expressed as organizational value (Kearns 2007). The concept of HCM stresses two core aspects: (1) the current value of HC can be measured in the organization and (2) the future value of HC can be enhanced through investment. Therefore, strategic HR focuses on the practices that can impact HC and explore the mediating mechanisms through which HR practices may drive organizational performance (Wright and McMahan 2011).

Measurement of Human Capital

The basic question for HC refers to the way it is accumulated and becomes obsolete. The economics literature provides three main approaches that

derive a measure of the stock of human capital from information on its various components. The stock of human capital can be measured according to (Task Force on Measuring Human Capital 2016):

1. The cost-based approach, where HC is calculated as being the depreciated value of the stream of past investments, including investments coming from the individual, the family, employers, and governments.
2. The lifetime income-based approach, where HC is measured by summing up the discounted values of all future income streams that all individuals in the population expect to earn throughout their lifetime.
3. The indicator-based approach estimates HC based on educational output indicators.

The need for measuring the value of HC and exploring how it should be managed to gain a sustainable, competitive advantage remains the core aspect of human capital management. According to the CIPD, measurement of the impact of HC on organizational goals (such as customer satisfaction or innovation and service delivery) is difficult, as the outcomes are also influenced by other contextual factors. They state that “Given the complexity of organizations and the various approaches to managing human capital, measurement can be challenging. The context of the organization is also a fundamental aspect of human capital measurement: the emphasis for measurement is no longer on absolute measures of human capital, but instead context-specific information to enable informed decision-making” (CIPD 2019). CIPD groups HC data according to the different aspects of HR (CIPD 2019):

- Workforce composition: demographics data including age, gender, and ethnicity.
- Recruitment and retention: number of resignations/vacancies/applications, length of service.
- Skills, qualifications, and competencies: levels of expenditure on training, types of training provided, length of time to reach competence levels, data on training needs.

- Performance management: performance management results, productivity and profitability data, targets set and met, levels of customer satisfaction, customer loyalty.
- Employee relations and voice: findings from employee attitude surveys.
- Pay and benefits: overall wage costs, distribution of individual performance-related pay awards, level of total rewards package.
- Regulatory compliance includes data on the compliance of employees with established standards and guidelines in particular disciplines.
- Organizational development and design includes data on skills mix, and talent pipelines.

In turn, Wright and McMahan (2011) distinguish three types of HC measures: subjective, proxies, and direct assessment.

Subjective measures assess the perception of HC among managers and enable a deeper understanding of HC in organizations. Frequently, these measures employ Likert scales or anecdotal evidence to gain information about particular organizations. One example is as follows:

- (a) “Our employees have a suitable education for accomplishing their job successfully.”
 - (b) “Our employees are well-trained to accomplish their jobs successfully.”
 - (c) “Our employees have suitable work experience for accomplishing their jobs successfully.”
 - (d) “Our employees are well-skilled professionally to accomplish their jobs successfully.”
- Carmeli and Schaubroeck (2005)

Proxies used for estimating HC (i.e., stand in for other quantities that cannot be directly measured) are more prevalent in the economic and macro-organizational areas. The literature, however, provides examples of using proxies for providing insight into the role of human capital in organizational performance (Wright and McMahan 2011). For example, Hitt et al. (2001) assess HC in law firms using proxies as:

“quality of law school attended by partners,” “experience as partners in the current law firm,” and “total partner experience in the legal field.”

Direct assessment approaches to measuring HC come from the field of psychology and are linked to individual traits as important aspects of HC (e.g., personality traits, emotional stability, extraversion, educational success, level of education achieved, years of experience). When using direct measures, it is important to note that the number of years spent in education does not assess the quality of the education.

Sustainable Approach Towards Human Capital Management

Human capital management enables organizations to identify, analyze, and manage the interdependencies between HC and business performance. The changing business environment also forces organizations to adapt to new circumstances and respond to the expectations of external and internal stakeholders.

Certain concepts and approaches may be perceived and developed by using the perspective of corporate sustainability and corporate social responsibility (CSR). In the case of HC, they may be seen in the language used to express the concept by OECD. In 1996, OECD defined HC as “the knowledge that individuals acquire during their life and use to produce goods, services or ideas in market or non-market circumstances” (OECD 1996); in 2001 the definition was changed to: “the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being” (OECD 2001, p. 18). The purpose of HC development was shifted from the business performance to “personal, social, and economic well-being.” This also encourages scholars and organizations to think in broader terms about the way HC is maintained and developed within the organization.

An example of an aligned model of HCM that refers to the perspective of corporate

sustainability and CSR was proposed by van Marrewijk and Timmers (2003). The authors suggested an analysis of the relationship between the organization and the employee, not through the perspective of an economic contract but through a complex work situation in which employees need to find alignment of values, goals, and responsibilities of individuals and the collective. The authors propose that this alignment be evidenced in three domains: (1) personal and company values (corporate identity and values); (2) human operations – when operational and supporting processes take place in a context of dialogue and alignment, the degree of empowerment and individual performance indicators are in mutual agreement and align the personal characteristics of HC with the collective needs of the organization; and (3) human development, where the tempo of development inside and outside the organization should be aligned, along with the direction and extent of competence development with respect to individual employees (Van Marrewijk and Timmers 2003). The researchers concluded that this kind of alignment can both increase organizational outcomes and help organizations overcome challenges.

Summary

The concept of HCM is concerned with the added value people provide for organizations and provides linkage between HR practices and business performance, creating a basis for a competitive advantage. Therefore, organizations strive for strategic goals and set measures in order to evaluate their performance. HC can be considered at both individual and organizational levels. Recent studies describe HC also as a multilevel construct and indicate both personal and organizational outcomes. As HC is perceived as one of the most important assets enabling innovation and adaptation to changing circumstances, organizations invest in HC maintenance and development. Thus, workers, not companies, possess control over these assets. It is necessary, therefore, for

organizations to seek alignment of individual and organizational goals and interests.

Cross-References

- [Human Capital Management](#)
- [Social Capital, Measurement of](#)

References

- Accounting for People Task Forces. (2003). *Accounting for people*. London: DTI.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>.
- Baron, A., & Armstrong, M. (2008). *Human capital management: Achieving added value through people*. London: Kogan Page.
- Becker, G. S. (1964). *Human capital*. New York: Columbia University Press.
- Becker, G. S. (2002). The age of human capital. In E. P. Lazear (Ed.), *Education in the twenty-first century* (pp. 3–8). Stanford. Retrieved from https://www.hoover.org/sites/default/files/uploads/documents/0817928928_3.pdf. Accessed 31 Aug 2019.
- Becker, G. S. (2008). Human capital. Retrieved from <http://www.econlib.org/library/Enc/HumanCapital.html>. Accessed 31 Aug 2019.
- Carmeli, A., & Schaubroeck, J. (2005). How leveraging human resource capital with its competitive distinctiveness enhances the performance of commercial and public organizations. *Human Resource Management*, 44(4), 391–412. <https://doi.org/10.1002/hrm.20081>.
- CIPD. (2017). *Human capital theory: assessing the evidence for the value and importance of people to organisational success: Technical report*. Retrieved from https://www.cipd.co.uk/Images/human-capital-theory-assessing-the-evidence_tcm18-22292.pdf. Accessed 31 Aug 2019.
- CIPD. (2019). Human capital measurement and reporting. Retrieved from <https://www.cipd.co.uk/knowledge/strategy/analytics/human-capital-factsheet>. Accessed 31 Aug 2019.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128. <https://doi.org/10.2307/2393553>.
- Danneels, E. (2002). The dynamics of product innovation and firm competences. *Strategic Management Journal*, 23(12), 1095–1121. <https://doi.org/10.1002/smj.275>.
- Davenport, T. O. (1999). *Human capital: What it is and why people invest it* (The Jossey-Bass business & management series, 1st ed.). San Francisco: Jossey-Bass.

- Ehrenberg, R. G., & Smith, R. S. (2018). *Modern labor economics: Theory and public policy* (13th ed.). New York: Routledge, Taylor and Francis Group.
- Eldor, L., & Harpaz, I. (2016). A process model of employee engagement: The learning climate and its relationship with extra-role performance behaviors. *Journal of Organizational Behavior*, 37(2), 213–235. <https://doi.org/10.1002/job.2037>.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122. <https://doi.org/10.1002/smj.4250171110>.
- Hitt, M. A., Biermant, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal*, 44(1), 13–28. <https://doi.org/10.2307/3069334>.
- Kearns, P. (2007). *What's the future for human capital?* (Repr). *Executive briefing*. London: Chartered Institute of Personnel and Development.
- OECD. (1996). *Measuring what people know*. Paris. Retrieved from https://www.oecd-ilibrary.org/education/measuring-what-people-know_9789264065482-en. Accessed 20 Aug 2019.
- OECD. (2001). *The well-being of nations: The role of human and social capital*. Paris. Retrieved from Centre for Educational Research and Innovation website: <http://www.oecd.org/site/worldforum/33703702.pdf>. Accessed 20 Aug 2019.
- Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. (2014). Human capital is dead; long live human capital resources! *Journal of Management*, 40(2), 371–398. <https://doi.org/10.1177/0149206313512152>.
- Rothaermel, F. T., & Hess, A. M. (2007). Building dynamic capabilities: Innovation driven by individual-, firm-, and network-level effects. *Organization Science*, 18(6), 898–921. <https://doi.org/10.1287/orsc.1070.0291>.
- Scarborough, H., & Elias, J. (2002). *Evaluating human capital* (Research report, 1. publ). London: CIPD.
- Task Force on Measuring Human Capital. (2016). *Guide on measuring human capital*. New York/Geneva. Retrieved from UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE website: <https://unstats.un.org/unsd/nationalaccount/consultationDocs/HumanCapitalGuide.web.pdf>. Accessed 20 Aug 2019.
- Van Marrewijk, M., & Timmers, J. (2003). Human capital management: New possibilities in people management. *Journal of Business Ethics*, 44(2), 171–184. <https://doi.org/10.1023/A:1023347715882>.
- World Bank. (2006). *Where is the wealth of Nations?* Washington, DC: World Bank.
- Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: Putting ‘human’ back into strategic human resource management. *Human Resource Management Journal*, 21(2), 93–104. <https://doi.org/10.1111/j.1748-8583.2010.00165.x>.

Human Development Index (HDI)

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Synonyms

HDI; HIHD; Social welfare measurement

Definition

HDI is an average measure of basic human capacities as well as a brief measure of human development by means of social and economic development. HDI measures a country's average achievements in four areas. These are years of schooling, expected years of schooling, life expectancy at birth, and gross national income per capita. This practical instrument monitors and compares the development of countries over time (Investopedia 2019).

Introduction

Economists have long considered the Gross National Product (GNP) per capita as a core variable to measure and explain the economic development of a country. GNP per capita fails to capture developmental progress and dimensions of human welfare – in particular the living standard, health, schooling, life expectancy, etc. An alternative measure has been provided by the United Nations Development Programme (UNDP) in its *Human Development Report* (HDR) based on the “Human Development Index” (HDI). HDR defines human development as “a process of enlarging people's choices” (Kelley 1991).

The HDI is an index developed by the United Nations (UN) to calculate and compare nations'

economic development level. The Human Development Index (HDI) is a composite statistical methodology of key variables of human well-being. Since the last few decades, the United Nations Development Programme (UNDP) performs both standard HDI methodology and the long-run Historical Index of Human Development (HHID) which was developed by Leandro Prados de la Escosura. Although the characteristics of the two indexes are almost the same, the difference arises in how the index variables are rooted. Explicitly, HHID segregates from HDI in calculation of adult literacy, educational enrolment rates and gross domestic product (GDP) (Roser 2019).

Objectives of the HDI

The HDI is also a crucial tool to evaluate a nations' potential economic development level besides considering the economic growth rate. According to the *Human Development Report*, human needs must be centered on economic development (Anand and Sen 1994). One goal of the HDI is to explain policies for sustainable development level. Thus, the HDI can also help government authorities and policymaker, asking why two countries have the same GNP per capita but different index values (UN Development Programme 2019). However, the HDI has been discussed by the policymakers for not showing meaningful information on the standard of living. Moreover, definitions, measurement, and the inclusion of the components are also a problem which varies from country to country. Thus, HDI values help policymakers and institutions to develop and indicate their development plans.

History of HDI

The HDI is rooted in Amartya Sen's "capabilities" hypothesis to analyzing well-being, which indicates the results (such as living standard, access to health, education, and goods) over means (such as

GNP per capita) (Sen 1985). The "capabilities" approach to human well-being refer to the ability of a human being, rather than on what they already have (Stanton 2007). Economic institutions and policymakers have attempted to extend the index of human well-being that shed light on both ends and means of development. In 1966, the United Nations Research Institute for Social Development (UNRISD) published a "level of living index" as one of the earliest indexes that had categories for physical needs, cultural needs, and higher needs (income) (Stanton 2007). The United Nations Development Programme (UNDP) launched the first annual *Human Development Report* (HDR) in 1990 (Neumayer 2001). HDR indicates the concept of "human development" and achievement toward human well-being (Stanton 2007).

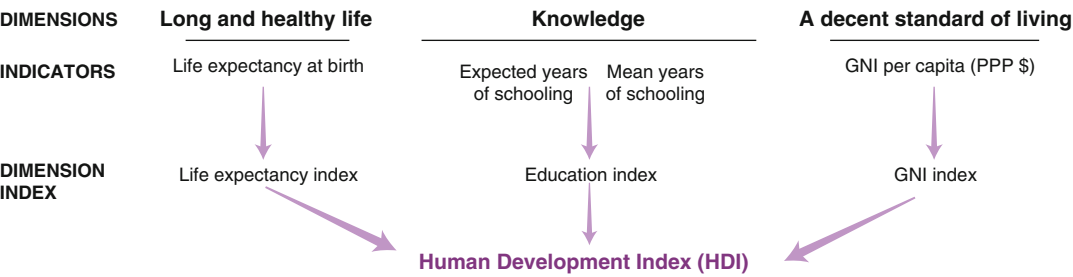
How Is the HDI Measured?

The HDI calculation starts with the calculation of a "deprivation index" for each selected indicator of human development (Kelley 1991). The HDI indicates an index which applies to three main variables of human development: life expectancy, level of knowledge, and a reasonable living standard (Roser 2019). Four indicators are used to calculate (Fig. 1):

Life expectancy
Expected schooling years
Average schooling years
GNP per capita

There are two steps to calculate HDI:

First, each of these indicators is normalized to scale between 0 and 1 and determines maximum and minimum levels for each indicator. In detail, life expectancy at birth is equal to 0 when life expectancy is 20 and equal to 1 when life expectancy is 85, as same as for schooling years or expected schooling years. Moreover, GNP per capita is also calculated and normalized between



Human Development Index (HDI), Fig. 1 Human Development Index (HDI) (Source: Komlos and Snowdon 2005)

0 and 1 levels that are given the highest GDP per capita and the lowest GDP per capita level. So, the HDI is quite sensitive to the choice of minimum and maximum values for each human development indicator (Kelley 1991).

Second, aggregating the three-dimensional indices to produce the HDI (UNDP 2019). The Human Development Report Office (HDRO) forecasts the unknown variables by performing econometrics and other quantitative methods (UNDP 2019). The *Human Development Report* based on the HDI results introduced four-country groupings of human development level: low, medium, high, and very high human development (UNDP 2019).

Summary

Human Development Index (HDI) is a practical instrument to calculate and compare nations’ economic development level. The outputs of the index are beneficial for generating strategies and policies to advance the life of the society. The United Nations Development Program (UNDP) set forth some dimensions to measure the development level such as life expectancy, expected schooling years, average schooling years, and gross national product per capita. There is a two-stage calculation method.

Data Sources (UNDP 2019)

- Life expectancy variable: United Nations Department of Economic and Social Affairs (UNDESA)
- Expected years of schooling: United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics, ICF Macro Demographic and Health Surveys*
- United Nations Children’s Fund (UNICEF) Multiple Indicator Cluster Surveys and Organization for Economic Co-operation and Development (OECD)
- Mean years of schooling: UNESCO Institute for Statistics, ICF Macro Demographic and Health Surveys, UNICEF Multiple Indicator Cluster Surveys, and OECD
- GNP per capita: World Bank (WB), International Monetary Fund (IMF)
- United Nations and its group of other international institution statistics division

Cross-References

► [Human Development Index \(HDI\)](#)

References

Anand, S., & Sen, A. K. (1994). *Human development index: Methodology and measurement* (Human Development Report Office Occasional Papers). New York: UNDP

Investopedia. (2019). Human Development Index – HDI. Retrieved from <https://www.investopedia.com/terms/h/human-development-index-hdi.asp>. Accessed 7 Aug 2019.

Kelley, A. C. (1991). The human development index: “Handle with care”. *Population and Development Review*, 17(2), 315–324.

Komlos, J., & Snowdon, B. (2005). Measures of progress and other tall stories. *World Economics*, 6(2), 87–135.

Neumayer, E. (2001). The human development index and sustainability: A constructive proposal. *Ecological Economics*, 39(2001), 101–114.

- Roser, M. (2019). Human Development Index – HDI. Retrieved from <https://ourworldindata.org/human-development-index>. Accessed 7 Aug 2019.
- Sen, A. K. (1985). *Commodities and capabilities*. Amsterdam: North Holland.
- Stanton, E. A. (2007). *The human development index: a history* (Political Economy Research Institute Working Paper Series Number 127). University of Massachusetts, Amherst.
- UNDP – United Nations Development Programme. (2019). United Nations Development Programme: Human Development Reports. Technical Notes. Retrieved from http://hdr.undp.org/sites/default/files/hdr2018_technical_notes.pdf. Accessed 10 Aug 2019.

Further Reading

- Human Development Reports (HDR). United Nations Development Programme: HDR. Retrieved from <http://www.hdr.undp.org/> Accessed 2 Aug 2019.
- Noorbakhsh, F. (1998). A modified human development index. *World Development, Elsevier*, 26(3), 517–528.

Human Development Management

- [Development Management](#)

Human Justice

- [Social Justice](#)

Human Potential Management

- [Human Capital Management](#)

Human Relationships

- [Social Capital, Interpretation of](#)

Human Resource Management model

- [HRM of Sustainable Development Phases](#)

Human Rights

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Synonyms

[Civil rights](#); [Civil liberties](#); [Constitutional rights](#); [Natural rights](#); [Unalienable rights](#)

Definition

Human rights represent rights that are universal and inalienable, and are possessed by all people regardless of race, gender, nationality, or any other status. As such, the concept of human rights is a relatively modern concept, but the ideas behind the concept have long been known in philosophy. Although various philosophers mostly agree on the power that human rights carry, as well as on their formal properties, the point of disagreement lies in the source of human rights. There are various attempts to justify human rights, and the most famous are those from religion, legal positivism, sociology, and natural law. Apart from philosophy, the ideas that supported the development of the modern concept of human rights are also hidden in legal documents. This entry offers a description of the history of philosophical ideas as well as legal documents that led to the development of the modern concept of human rights, as well as a critique of them.

Introduction

Human rights are defined as rights that belong to every human being regardless of nationality, gender, race, religion, language, or any other status. Human rights derive from the fact that someone is a human being and as such contains a quality from which moral norms for action arise. Although it is considered that at the same time as humans we have human rights, the formal implementation of human rights in law and declaration is more modern history. On the other hand, the very idea of human rights existed long before any legal implementation of them. The ideas of the principles underlying the idea of human rights, the equality, and universality of the moral law can be found in early philosophical writings.

Justification in Philosophy

Philosophy and the idea of human rights are closely related, if not intertwined. Rather, philosophy is needed to justify the existence and promotion of human rights. Many people take the validity of human rights for granted but philosophers do not like human complacency, so they look for valid reasons for the establishment and implementation of human rights. Human rights derive from moral laws, and moral law deals with what ought to be the case, not with what is or is perceived to be the case. We cannot look for the justification of the moral law in empirics since it deals with norms and not empirically available facts. The justification of the moral law, as well as the human rights that derive from them, should be sought in moral philosophy.

History of Human Rights

Philosophical considerations and arguments about natural law and natural rights are important because they precede and anticipate the concept of human rights. Knowledge of philosophical assumptions enables a better understanding of one's own views on human rights. Without understanding the philosophy that shapes attitudes, the

attitudes themselves will be unclear. Also, knowledge of philosophical considerations offers an understanding of the moral justifications behind human rights, thus becoming faithful to them. This is extremely important in countries that have not legally implemented human rights. After all, knowledge of philosophical considerations enables open communication, rejecting any dogmas.

History of Human Rights in Philosophy

The beginning of the idea of human rights begins with Aristotle, who in the 300 BC argues in favor of the existence of natural law (Aristotle 2004). Natural law represents a system of justice that does not arise from society or culture, but from nature itself, therefore it is common to all people. Natural law is universal and it applies to every human being at every time preceding contingent social and historical conditions. Aristotle believes that certain principles of natural laws are arrived at by practicing reason or virtues without being influenced by prejudices or personal desires. Natural law serves to make a comparison with the artificially created laws of certain societies and to assess their legitimacy. The difference between natural law and legal justice is that natural law does not have to be introduced as formal law to be valid while legal justice by definition has to be introduced into formal law to be valid. The ideas of natural law from Aristotle are taken over and elaborated by the Stoics of the Hellenistic period, and later of the Roman period. The idea itself becomes extremely popular and is mentioned in various works of art, such as Sophocles' *Antigone*, who opposes Creon by burying her brother, referring to the natural law that is above kings. After the Stoics, the idea of natural law flourished in the Middle Ages, where Christian philosophy and theologians took over. The most famous among them is St. Thomas Aquinas who argues in favor of natural law that originates from God who has given human beings immutable and inalienable rights because people are created in His image. St. Thomas Aquinas goes a step further and says that legal laws are not legitimate laws if they contradict natural laws. In a situation of conflict between these two laws St. Aquinas

believes that one should follow the natural law, necessarily violating the legal one (Aquinas 2007). The idea of God as the Creator and Giver of natural law begins to weaken with the disappearance of feudalism, and secular theories of natural law begin to appear as a replacement. The credit for separating natural law from religion goes mostly to Hugo Grotius.

Grotius believed that the natural characteristic of human beings is the social impulse that leads them to live in peace and harmony with others. An action that corresponded to the nature of people as rational beings was good, and an action that undermined that order was bad. For him, natural law was the dictate of right reason (Rommen 1936). Although Grotius removes the idea of God from natural law, these arguments were not strong enough to survive, therefore John Locke, as one of the leaders of the idea of natural law in the Enlightenment, returns God to the center of the theory. Locke believed that every man has natural rights, regardless of whether political institutions recognize this or not. Natural rights derive from natural law, and natural law derives from God – a discerning discernment of God's will gives us a definitive and authoritative moral code. The individual has the duty of self-preservation towards God, and the realization of self-preservation requires the existence of the right to life, liberty and property. Governments are formed exclusively for the promotion and protection of natural rights. Therefore, natural rights also serve as a limit to the authority and jurisdiction of the state. Locke goes further than St. Thomas Aquinas and writes that it is morally justified to take up arms if the state does not systematically and deliberately protect human rights (Locke 2016). In his philosophy, Locke provides a precedent for the establishment of legitimate political authority based on natural rights. Also, he builds the idea of natural rights from natural law, which is closest to what we consider today as the concept of human rights. Considering how the Age of Enlightenment wanted to break the connection between the state and the Church, the current at that time was not completely satisfied with Locke's theory, so someone was needed who would completely

exclude God from natural rights. Arguments for such expulsion were provided by Immanuel Kant, who based his natural rights and necessity for self-preservation on the authority of human reason. For Kant, morality rests in the condition in which my being is obligatory for all human beings; doing the right thing is determined not by acting in accordance with one's own desires or God's desires but by acting in accordance with a maxim that all rational individuals are bound to accept. Kant calls it the categorical imperative: it acts according to that rule which you can wish to become a universal law (Kant 2005). Kant's moral philosophy is extremely abstract, but what he deserves credit for is that he justified human dignity by possessing reason. According to him, every natural right derives from the formal properties of human reason, and not from the will of a superhuman being. With his arguments, Kant popularized the universality of natural rights as well as equality and moral autonomy.

History of Human Rights in Legal Documents

Knowing the course of philosophical thought that preceded today's concept of human rights, but also that is hidden in the concept itself, we have a better understanding of them. Based on this, an overview of the legal documents that enabled the development of human rights will be offered.

The first civilizational legal documents that resemble the concept of modern human rights can be dated to more than 1500 years BC. Although such ancient legal records remind us of today's concept of human rights, they cannot be equated with human rights because such laws were not universal: They were valid only for a certain society. Also, the ruler, resident and slave did not have equal rights in any matter.

The first such legal document is the Ur-Nammu Code written in stone in the ancient language of the Sumerians in the 2000 BC. The code mentions the provisions of respect for the human being such as not to commit murder or kidnapping. Three hundred years after the code, the law of King Hammurabi, who ruled Babylon in the first half of the 1700 BC, was written down. His law was also carved in stone and bears certain hints of ideas of justice and protection. Such a law

prescribed, among other things, that slaves must not be abused, that people must be protected by the law, and that the ruler must be guided by the law, and not arbitrarily rule as he wishes. Furthermore, from 539 BC there is a legal document of Cyrus the Great, the first king of Persia, called the Cylinder of Cyrus. Cyrus Cylinder gave freedom to slaves, brought racial equality, and allowed people to choose the religion they wanted. The provisions of the Cyrus Cylinder are parallel to the first four articles of the UN Universal Declaration of Human Rights, and the text has been translated into all six official languages of the United Nations. After the Cylinder of Cyrus, a major shift towards human rights was created by a document from 1215 called the Magna Carta or Great Charter. The Great Charter was signed by King John of England, and it mentions the right to own private property. In addition, the Great Charter also talks about the protection of individuals from the imposition of excessive taxes.

After the previously mentioned documents comes the Age of Enlightenment, in which the concept of human rights undergoes a revolution with the frequent issuance of legal documents. Thus, in 1628, the Petition of Rights was issued, which the English Parliament sent to King Charles I as a declaration of civil liberties. More than 100 years later, in 1787, the US Constitution was issued, which defined the fundamental rights of citizens, as well as visitors to the state, as well as limitations on the activities of political bodies. In 1791, just 4 years later, as part of the aforementioned constitution, the Charter of Rights was issued, which grants freedom of religion, speech, and action, and prohibits the authoritarian taking of property, life, or freedom of a human being by another human being or political institutions. Also, this Charter allows the right to own weapons as a possible defense in case the government becomes authoritarian and starts to violate these rights. While the American Revolution culminated with the aforementioned Charter, the French revolution culminated with the Declaration of the Rights of Man and Citizen in 1789. The declaration demands that all citizens be provided with property, security, freedom, and the possibility of resistance to possible oppression of these rights.

The Declaration also notes that these rights are limited to allowing others to enjoy those same rights. After the Age of Enlightenment in 1864, the Geneva Convention was held. The theme of the Geneva Convention was the treatment of soldiers and people in war, and it declares the obligation to provide care to wounded and sick people in war, regardless of nationality, race, or other status. Also it states that attacks on Red Cross personnel, i.e., medical and humanitarian aid personnel, are prohibited. The modern concept of human rights was realized in 1948 after the horrors of the Second World War when the United Nations, led by Eleanor Roosevelt, published the Universal Declaration of Human Rights. Roosevelt called the published declaration the international Magna Carta – for all humanity. The declaration consists of 30 articles that emphasize basic political and civil rights such as freedom of thought, expression, religion, and association, but also economic, social, and cultural rights such as the right to education and the right to fair payment. The Declaration refers to negative freedoms such as freedom from torture or slavery and to positive freedoms such as freedom of movement. The declaration does not take the position that certain rights are more important than others, but instead refers to universality, indivisibility, and interdependence. The UN's Universal Declaration of Human Rights was supplemented by later documents. Thus, in 1953, a legal document called the European Convention for the Protection of Human Rights and Freedoms was issued, and in 1966, a document called the International Covenant on Economic, Social and Cultural Rights. American historian Samuel Moyn argues the thesis that the full concept of human rights came to life after those documents – in 1968 (Moyn 2011).

Where Do Human Rights Come From?

In a brief overview of the history of the philosophical idea of the concept of human rights, it is evident how different philosophers justify the concept of human rights in different ways. For some, God is needed to justify the dignity of every human being, while for others, human

reason is sufficient. Although all philosophers agree on the power of human rights as well as their formal properties and objects, the arguments in support of human rights are often different – sometimes even diametrically opposed. The further continuation of the text aims to determine the main theories of the justification of human rights. The central question in justifying them is where they come from, and the main theories are religion, natural law, positivism, and sociological theories.

Religion

In various religions around the world, the concept of human rights is not directly mentioned, but they are imbued with the concepts of higher laws that come from God and are superior to secular laws. In Christianity, in the first book of the Bible, the Book of Genesis, it is mentioned that God created man in his own image, which implies certain truths about man: That he possesses dignity and requires a special relationship with himself in relation to other living beings. Furthermore, the Koran mentions that every human being possesses dignity, while the holy book of the Hindus, the Bhagavad Gita, mentions that he who sees God in every human being truly sees. The religion believes that human rights come from God, that each person is special because God created them, and that these rights are inalienable because they come from an eternal being, therefore no contingent authority can take them away. The problem with the derivation of human rights from a supernatural being is that the question arises as to which rights derive exactly? It is not uncommon for different religious experts of the same religion to differ in their answers to that question. Also, although God created all human beings, it is often found that certain religions have different rights depending on whether it is a woman or a man. Also, in certain religions non-believers and believers of other religions are often treated inhumanely. However, if someone wants to exclude God from the story of human rights, more problems arise than solutions, because the necessary metaphysics of human rights is eliminated and human dignity is difficult to explain in secular terms.

Natural Law

The idea of natural law originates from Aristotle, who himself mentions an unmoved mover in his philosophy, but for him this unmoved mover is not a God but a necessary metaphysical concept. Natural law represents the idea that justice is acting in accordance with human reason. Practicing human reason leads to the identification of human rights. Any action that affirms human beings as rational is good, and any action that nullifies human reason is bad. Arguments in favor of the natural law can be found among religious thinkers, but unlike most of the Enlightenment, they see its cause in God, and not in reason as such. The problem that arises with the natural law theory is that it brings new questions into the discussion such as where do people get reason from? The reason why religious authors accept the natural law theory is that they look to reason as proof that we are made in the image of God. On the other hand, the Enlightenment has a problem in explaining where reason comes from as the backbone of human rights. Also, the theory of natural law has problems with determining concrete rights that would be treated as inalienable. Depending on the understanding of the concept of nature, different theorists of natural law will give different human rights.

Legal Positivism

Legal positivism denies any possibility of acquiring human rights a priori and considers that the source of human rights is the state. If the state has prescribed something by law, it is a right, and if not, then it is not a right. Legal positivism is based on empirical facts and does not deal with the question of what laws should be because it believes that such a question has no place in the theory of law. Given that it is based on empirical facts, it denies any intervention of a supernatural being, but also natural law, thus denying the metaphysical aspects of human rights. The problems arising from legal positivism are multiple. Positivists believe that the law must be followed just because it is the law regardless of whether it is moral or not. They do not distinguish between law and morality because morality is not an empirical construct and therefore should not even be used in

this discussion. It follows from such an attitude that people who lived under some extremely immoral laws, such as some in the Second World War, had to follow them because the state said so. The theory of legal positivism was often invoked by various authorities of despotic regimes. Although the theory contains many shortcomings, it is good in that it emphasizes the importance of the state to recognize that something is a right due to the formation of a legal body that would promote the said right. It is necessary that it does not remain only on recommendations and considerations, but that the rights are also implemented in the legal law.

Sociological Theories

With the development of psychology, anthropology, sociology, and other human sciences, the sociological theory of law also appears. Sociological theory is based on the fact that human rights arise from human interests, therefore by acquiring knowledge about human interests we also acquire knowledge about human rights. Ensuring the essential interests of human beings is the main basis on which human rights can be morally justified. Sociological theory focuses on the identification of social and biological prerequisites that are necessary for a human being to lead a minimally good life. Human rights are justified on the basis of their instrumental value to ensure the necessary conditions for minimum human well-being. The fundamental interests of man would be life, knowledge, play, aesthetics, socialization, religion, and intelligent and reasonable discussion. Each individual must recognize these interests and, as part of that, respect other people's interests because it is in their interest. In sociological theory, respect for human rights stems from self-interest, not from altruism or benevolence. It also follows from such a theory that the goal of legal and political institutions is not to promote the common good but personal interests. The criticism of this approach lies in the fact that people often act altruistically without satisfying their personal interests. Also, this approach is based on the assumption that all individuals are equally

vulnerable to each other, therefore they will respect other people's interests. In reality, what happens often is someone is more vulnerable than the other, therefore they will not respect the interests of the subject in order to satisfy their own interests. After all, people are diverse and interests vary depending on culture, and even when they have the same interests, the ways to satisfy those interests are often not the same.

Criticism

The modern concept of human rights is popular and widely accepted due to the positive atmosphere that the concept itself carries. No, although the concept exudes positive connotations, abuses of it are possible, so there was no lack of criticism of the very concept of human rights. The same criticisms can be divided into criticisms of individual philosophers and group criticisms of individual philosophical schools.

Criticism by Individual Philosophers

Modern criticism questions the universality of human rights. Universality makes human rights too abstract and thereby deprives them of their meaning. Hannah Arendt, a philosopher who survived the Holocaust, recalls how, after the Jews were stripped of their right to citizenship in the Second World War, the only appeal left was to abstract human rights. If someone is not granted citizenship, then that person has no political and legal institutions that would fight for his human rights. With the abolition of the right to citizenship, the Jews turned from an active and realized political subject into an object that is at the mercy or displeasure of others. What makes people bearers of human rights is not the mere fact that they are people, but the fact that they have the possibility and ability to create political societies that are promoters and defenders of human rights. The lesson that the Jews learned in the Second World War was not to focus more on human rights per se, but to form political and legal bodies that would defend their right to citizenship, and that is

why they created the state of Israel after the Second World War. Arendt believes that human rights are smaller and weaker than the rights of civil rights. The holder of human rights is always in an inferior position because he depends on others, while civil rights are created by citizens and are represented by a clear political and legal body. Furthermore, the famous German philosopher Carl Schmitt also criticizes human rights, but from a different position. He believes that any military intervention aimed at restoring human rights is actually at its core an act of power, not an act of principle. Schmitt takes a similar position as certain theologians such as St. Thomas Aquinas, who says that other countries should not interfere in the business of overthrowing a dictator in another country, because one can never know whether the situation will be better or worse. The best modern example of this thought would be the situation with the US intervention in Libya, where many theorize that the overthrow of Gaddafi in the name of human rights left a much worse situation than with him. In addition, Schmitt agrees with Arendt and says that human rights are too abstract. He understands the call for human rights in the American and French revolutions, but also before that, as a call to fight against despotic regimes, but that by no means meant that the era of universal human rights had arrived. The fact that the world does not have a universal government that would have the authority to distribute universal rights and that the world is divided into different states and political societies means that there is no such thing as an individual bearer of human rights. In Schmitt's and Arendt's critique of human rights lies the greatest paradox of human rights: They are created in the circles of illegally recognized political institutions and as such can serve as a source of acts of manifesting unjustified power (Chandler 2017).

Criticism by Philosophical Schools

In addition to individual criticisms of human rights, there are also entire philosophical schools that disagree with the concept of human rights.

Thus, for example, philosophers who support moral relativism do not agree with the concept of human rights. Human rights are based on the idea of moral universalism, and this idea is the opposite of moral relativism. Moral relativism believes that moral principles are not formed a priori but are a product of the society and time in which we live. As evidence for their claim, moral relativists present the fact that there are societies with totally different moral beliefs, sometimes even the opposite. On the contrary, it is often possible to find that there are different moral beliefs in the same society. Moral relativists criticize the current concept of human rights because they believe that Western societies have imposed their values on them by emphasizing civil-political liberties over socio-political rights and in favoring individual rights over group rights. On the other hand, observing that there are different moral concepts in different societies does not justify moral relativism because there are societies that do not respect any human rights. Moral relativists mostly do not defend such societies, but various dictators, to defend their actions, appeal to moral relativism. Also, there are moral norms that are recognized in all societies, such as the prohibition of incest. In addition to moral relativism, there is also an epistemological criticism of human rights, which is based on the fact that there is no rational or metaphysical justification for them, but that they are based on human emotions. According to epistemic criticism, morality resides in the heart, not in the head, therefore no amount of exercise of reason can reveal moral norms. In its desire to remove metaphysics from human rights, epistemic criticism removed reason, depriving man of the greatness he deserves as a creature.

Conclusion

Human rights represent universal and inalienable rights that every human being possesses simply by being human. The realization of human rights in a legal document is an activity of the modern

world, but the very idea of human rights existed in ancient civilizations. Given that the idea of human rights is closely related to moral philosophy because it deals with norms and not empirical facts, most discussions about the idea itself can be found in philosophical writings. Although philosophers mostly agree on the power that human rights carry, they differ on the issue of the origin of human rights, so some claim that they come from God, some from natural laws, and some simply from legal acts of the state. No theory is perfect, but what is important is that everyone recognizes the importance of human rights as such and works to ensure that they are recognized and promoted in the world, thus making the world and the society around us safer and more pleasant to live in.

Summary

Human rights are rights that all people possess regardless of race, gender, nation, or any other attribute, and by definition, they are inalienable. This concept of human rights is a relatively modern concept, but the ideas behind it have developed throughout history, mostly through philosophy. This entry offers an account of the history of the development of the modern concept of human rights, showing at the same time the development of ideas as well as the legal documents that accompanied them.

Cross-References

- [Business Compliance Initiatives](#)
- [HR and Corporate Social Responsibility](#)
- [John Gerard Ruggie and the UN Guiding Principles on Business and Human Rights](#)
- [United Nations Human Rights Committee](#)

References

Aquinas, T. (2007). *Summa theologiae*. New York: Cosimo, Inc.

- Aristotle. (2004). *The Nicomachean ethics*. London: Penguin Classics.
- Chandler, D. (2017). Contemporary critiques of human rights. In M. Goodhart (Ed.), *Human rights: Politics and practice* (3rd ed., pp. 111–224). Oxford: Oxford University Press.
- Kant, I. (2005). *The moral law: Groundwork of the metaphysics of morals*. Milton Park: Routledge.
- Locke, J. (2016). *Second treatise of government*. North Charleston: CreateSpace Independent Publishing Platform.
- Moyn, S. (2011). The first historian of human rights. *The American Historical Review*, 116(1), 59–79.
- Rommen, H. A. (1936). *The natural law: A study in legal and social history and philosophy*. Carmel: Liberty Fund.

Human Well-Being

- [Social Sustainability](#)

Humane Enterprise

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Humanism in Business

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Humanistic Enterprise

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Humanistic Management and Entrepreneurship

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Synonyms

Economy serving life; Humane enterprise;
Humanism in business

Definition

Humanistic management and entrepreneurship (HME) is both “a new economic paradigm (Melé 2009) as well as an alternative view of the firm (Fontrodona and Sison 2006; Sison 2007)” (as quoted in Spitzeck 2011). HME provides a normative perspective on how business should be conducted according to ethical, social, and environmental sustainability and a positive empirical research agenda on how businesses are created or reformed accordingly. HME represents a collection of theoretical stances, strategical studies, and empirical enquiries aimed to overcome the idea of the economic discipline as being eminently a science of “value” and propose the idea of it being the science of “values” (Pirson 2014). Indeed, it seeks to explore how nonstrictly related economic variables (such as spirituality, cultural and artistic sensibility, and commitment to justice and democracy) affect economic behavior, entrepreneurship, governance, and business models. This paradigm thus entails the need to bridge technical knowledge, social sciences, and humanities contributions in order to pursue socially oriented goals of the firm, the economic system, and of the economic discipline.

Introduction

In the last two decades humanistic management, together with the reflection on Humane Enterprise, has collected a significant number of studies that focus on reforms keen on more sustainable, socially oriented, and values-based business models, as a way to face “grand challenges” of our time (Waddock 2020; Eisenhardt et al. 2016). Due to its feature of “economy serving life,” HME is presented as a field of study with its own peculiar ability to confront social consequences and impact of economic downturns, such as the one followed to the 2008 Great Recession, rising inequality, climate change (Schlag and Melé 2020), and, recently, Covid-19 pandemic; moreover, its scholars seek to monitor and contribute to the meeting of the UN 2015 SDGs objectives. Although similar insights had circulated before, only recently HME has acquired sufficient scholarly coherence, a significant number of contributions, and has reached so wide an audience to be considered a reliable theoretical framework with a distinctive perspective (Melé 2013). Given its status of a *paradigm in the making*, this perspective is subject to a continuous stream of research aimed to detail and discuss its main features (Pirson et al. 2014) and to provide additional formalization to its framework (Parente 2018).

In the late second half of the twentieth century the term humanistic management has been discussed as a way to conceive management as being linked above all with human motivation (Herzberg 1976; Swart 1973) and as a practice entrenched with a wider understanding of life and society, focusing on motives for action exceeding profit-related goals (Lilienthal 1967; Cunningham and Tichy 1983). Indeed, one of the pillars of the HME paradigm, the idea of the firm as a community-based organization rather than an individual-centered organization, had already been discussed during the 1970s (Drucker 1973). During the 1990s, the idea of focusing on individuals, their values, and their particular desires and talents when doing business began to circulate among scholars and business actors who were concerned with human needs and societal

development within production process (Aktour 1992; French and Bell 1999). The latter suggestion can be conceptually tied to a wider understanding of the issue of dignity in workplace and of the benefits of inclusion and involvement for workers (Barnard 1968; Handy 1999). The circulation (among others) of these perspectives, although not explicitly framed as HME, has paved the way for a more comprehensive theory of the firm as an economic organization built around human needs instead of the other way around, a vision alternative to economicism that has been systematized and summarized by HME recent conceptualization (Melé 2013).

By collecting the abovementioned insights and by adding to them a reform program for business and management with systematic ambitions, in the first decade of the twenty-first century the effort to provide a humanistic management paradigm with its own distinctive features and methodology has reached its peak. More on the point, scholarly efforts in the field have been focused on providing humanistic management with a proactive approach rather than a reactive one (Pirson 2014) focusing on proposal rather than more on critique of previous and competing approaches. Although humanistic management still lacks a unique definition, it compels a set of perspectives bond together by a conceptualization provided as follows: “a management that emphasises the human condition and is oriented to the development of human virtue, in all its forms, to its fullest extent” (Melé 2003: 79).

In order to pursue this vision, HME develops coherent frameworks able to explain motivations and consequences of humanistic oriented business behavior and to provide business models based on the understanding of the economic sphere as being embedded within meaningful horizons that would otherwise escape economic explanation. Therefore, it addresses the impact of concerns for what is “higher” than the profit dimension: such as beliefs in transcendence and religious values, as well as profane ideas of greater good, as part of individuals and communities’ life (Bouckaert and Zsolnai 2012); it addresses concerns for integral ecology (Jakobsen and Zsolnai 2017) and local communities (Del Baldo 2018, 2020), thus for

what is “surrounding” production. In the same manner, it addresses concerns for what is “below” the entrepreneurial and managerial level, by bettering working conditions and preserving dignity in workplace, also linked to participation, cooperation, and workers’ involvement in the goals of the firm (Pirson 2019; Mollner 2011).

Based on evidence that nor the profitability argument alone nor the moral concern taken on its own are able to explain responsible behavior (Spitzeck 2011), HME has developed a theoretical understanding of the variety of values-based motivations and goals that can be pursued, by adopting a multidisciplinary vision. HME engages in the discussion of variables that rest within the area of overlap in between economy and society, by proposing the merging of noneconomic knowledge with the economic discipline (Greenhalgh et al. 2020).

Moreover, as a result of the growing interest in humanistic management both at a theoretical level and as a set of good practices analyzed through empirical evidence, the humanistic management network has been created to provide international and organized support to the development, discussion, and dissemination of this perspective (Spitzeck et al. 2009).

Key Issues

“The challenge of Humanistic Management,” as it has been defined by Melé (Melé 2003, 2013), rests on both the possibilities and the difficulties of the transition from economicism to humanism. Challenges connected to this transition are twofold: a *pars destruens* focused on the critique of the current economic system, both in its concrete manifestations (such as shareholder value approach, Spitzeck 2009) and in its underpinning theoretical assumptions (Fontrodona and Sison 2006), and a *pars construens* required to outline what should replace such a system (Pirson et al. 2014; Setter and Zsolnai 2019).

To successfully fulfill this two-folded mission, HME has developed three main levels of discussion. The first is the anthropological level, where

HME is defined as a process of community building through business practices and visions: “Humanistic management does not only consider the individual but it aims at building communities because it considers business enterprise to be a community of persons” (Melé 2003: 82). The idea of community is defined by cooperation given anthropological assumptions: “We possess a natural tendency to cooperate, out of necessity in a world of scarce resources and harsh environment but also out of the social nature of human beings” (Schlag and Melé 2020: 1). This vision is opposed to the one of *homo oeconomicus* and of agency theory and seeks to replace it by affirming the validity of the Aristotelian model of the *Zoon Politikon* (Fontrodona and Sison 2006). Moreover, it involves a vision of the human condition that conceptually engage the Arendtian notion of work that should replace the one of labor (Arendt 1958) as well as suggesting that entrepreneurship and management can be conceived as, following Arendt, proper *action*, in its politically and socially engaged aspects. This vision tries to answer to the “Why” doing business in a humanistic driven way is possible.

The second level tackled by HME is the epistemological level concerning how this paradigm can be understood in the light of previous debates in the field and how it allows to overcome updated business visions that are not able to cope with current crises and challenges (Parente et al. 2018). This level of analysis sheds new light on humane entrepreneurship as a practice influenced by a global strategic posture: “the understanding of entrepreneurial strategic behavior, encapsulating in such a behavior an inclination toward human resources, nature, and society” ((Parente et al. 2018). This vision tries to answer to the “How” humanistic based business models can be organized within the current economic system.

The third level of analysis is the one aiming to provide, through HME approaches, pressure to reform the economic discipline starting from business studies and business ethics contributions (Dierksmeier 2005). HME is thus conceived as a sustainable, radical alternative to the current mainstream “shareholder capitalism” vision due to the fact that “Such shareholder capitalism is

usually seen as unbalanced and unsustainable” (Spitzeck et al. 2009). This idea entails a scholarly effort to revise the nexus between the microeconomics and macroeconomics dimensions where business studies insist: “With the increasing severity of a multitude of crises, it becomes ever more evident that the dominating Anglo-Saxon model of shareholder centered capitalism falls short with regard to its sustainability and life-conduciveness on a systemic level, organizational level, and individual level” (Pirson et al. 2014). The proposed *pars construens* focuses on affirming that the economic discipline should focus on values as well as on value (Pirson 2017; Dioguardi 2017; Melé 2013). Ever since the cornerstone reflection by Amartya Sen *On Ethics and Economics* has been circulated (Sen 1987) both scholars and business actors have faced the logics of the entanglement of the two spheres. By looking at the firm as a social actor (Solomon 1992; Sacconi 1991) HME rests on the idea that the analysis of its functioning, aims, and needs cannot be reduced to economic performance or competitive advantage, but rather accounts for broader causes and consequences. Both these causes and consequences cannot be investigated focusing on updated notions of value but has to be discussed in the light of values informing entrepreneurial vision, firm culture, workers participation, and other intangible assets.

Indeed, the theoretical framework proposed by HME allows to overcome the traditional vision of the economic discipline as being concerned only with quantitatively measurable and objectively observable variables resulting as outputs of human actions. In line with the scope of its research and with the object analyzed, HME ultimately promotes a qualitative understanding of business interactions. This can certainly lead to critiques and skepticism on the possibility to rigorously approach: “anything that is not objectively observable in human conduct—emotions, beliefs, values, symbolic representations, which are all thought to be of little significance in understanding economic actions” (Screpanti and Zamagni 2005). Nevertheless, the orientation toward a humane economy is growing out of a neglected but longstanding tradition (Jackson

2016; Röpke 1960) and HME posits itself as being the vanguard of a renewed interest in business ethics. Change in paradigms within the economic discipline is more common than is usually understood: As Alfred Marshall argued, the history of economic thought shows that this sphere of knowledge does not progress in a linear way but rather by disruption, revisiting of previous neglected ideas, epistemological leaps. HME establishes itself with confidence that this intuition poses the base for a plurality of approaches and it is the more true for a performative discipline such as business studies are (Locke and Spender 2011; Waddock 2020). Ultimately, the study of business affects the way business is conducted; therefore, the abovementioned twofold effort is undergone by scholars working within HME approach in order to provide accuracy and coherence between theoretical framework, methodology, and object of the study. This last level of analysis tries to answer the “by Who” and “Where” the transition to an economy based on humanistic values can be promoted; indeed, enhancing HME ability to investigate and, at the same time, influence the business sphere, leads to the circulation of this perspective both inside and outside the academia: “Humanistic management is emerging as a response to the economistic paradigm prevalent in today’s business schools, corporations, and society” (Laszlo 2019).

Summary

HME is a recent field within business ethics studies. Its privileged object of study is the humanistic enterprise (as an ideal type as well as in its concrete examples) with its distinctive features, its conditions of possibility of existence subject to certain economic systems and models of capitalism, its desirability as a goal of transition processes from nonhumanistic business models to it, its ways of implementation, and its underpinning motives for adoption and enhancement. Moreover, HME seeks to grasp relevant motives influencing business actors in the choice of pursuing humanistic and virtue-based leadership styles, governance models, and decision-making processes able to balance ethical and profitability

goals, by providing a coherent framework for their description, discussion, and explanation. Indeed, HME provides a paradigm able to evaluate the impact of nonstrictly related economic variables on economic and business behavior, as well as able to argue for a transition from economic reductionism to humanism by focusing on values informing economic interactions. Therefore, scholars involved in HME research are ultimately concerned with understanding whether this paradigm represents a well-designed framework to discuss and explain some praiseworthy exceptions to the maximizing self-interest-based model of the *homo oeconomicus*, or rather it can represent a source of large-scale change in the business sphere.

Cross-References

- [Business Ethics](#)
- [Corporate Social Responsibility](#)
- [Shared Value](#)

References

- Aktour, O. (1992). Management and theories of organizations in the 1990s: Toward a critical radical humanism. *Academy of Management Review*, 17, 407–431.
- Arendt, H. (1999) [1958]. *The human condition*. The University of Chicago Press.
- Barnard, C. (1968). *The functions of the executive*. London: Oxford University Press.
- Bouckaert, L., & Zsolnai, L. (2012). Spirituality and business: An interdisciplinary overview. *Society and Economy*, 34(3), 489–514.
- Cunningham, M. E., & Tichy, N. (1983). Planning for humanism. *Journal of Business Strategy*, 3, 87–90.
- Del Baldo, M. (2018). CSR, innovation and human resource management: The renaissance of Olivetti’s humanistic management in Loccioni Group, Italy. In H. Lu, R. Schmidpeter, N. Capaldi, & L. Zu (Eds.), *Building new bridges between business and society. CSR, sustainability, ethics & governance*. Springer.
- Del Baldo, M. (2020). Company case study 8: Cucinelli – A humanistic enterprise for a sustainable growth and a sustainable world. In W. Wehrmeyer, S. Looser, & M. Del Baldo (Eds.), *Intrinsic CSR and competition*. Palgrave Macmillan.
- Drucker, P. (1973). Managing the public service institution. *The Public Interest*, 33, 43.
- Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand challenges and inductive methods:

- Rigor without rigor mortis. *Academy of Management Journal*, 59(4), 1113–1123.
- Fontrodona, J., & Sison, A. J. G. (2006). The nature of the firm, agency theory and shareholder theory: A critique from philosophical anthropology. *Journal of Business Ethics*, 66, 33–42. <https://doi.org/10.1007/s10551-006-9052-2>.
- French, W. L., & Bell, C. H. (1999). *Organizational development: Behavioral science intervention for organizational improvement*. Englewoods Cliffs: Prentice Hall.
- Greenhalgh, A. M., Allen, D. E., & Nesteruk, J. (2020). Preface to the special issue: Bringing the humanities and liberal learning to the study of business. *Humanistic Management Journal*, 5, 153–158.
- Handy, C. (1999). The new language of business. *Director*, 52, 50–53.
- Herzberg, F. (1976). *The managerial choice: To be efficient and to be human*. Homewood: Dow Jones-Irwin.
- Jackson, K. (2016). Epistemology in business education. Challenging the ideologies. In M. Schlag & J. A. Mercado (Eds.), *Free markets with solidarity & sustainability facing the challenge*. Washington, DC: The Catholic University of America Press.
- Jakobsen, O., & Zsolnai, L. (2017). *Introduction: Why integral ecology is needed for reforming business, contributions to conflict management, peace economics and development* (Vol. 26, pp. 3–11). Bingley: Emerald Publishing.
- Laszlo, C. (2019). Strengthening humanistic management. *Humanistic Management Journal*, 4, 85–94.
- Lilienthal, D. E. (1967). *Management: A humanistic art*. New York: Colombia University Press.
- Locke, R. R., & Spender, J. C. (2011). *Confronting managerialism*. London: ZedBooks.
- Melé, D. (2003). The challenge of humanistic management. *Journal of Business Ethics*, 44, 77–88.
- Melé, D. (2013). Antecedents and current situation of humanistic management. *African Journal of Business Ethics*, 7(2), 52.
- Mollner, T. (2011). Mondragon: Could something like this be in our future? In H. Von Kimakowitz, M. Pirson, H. Spitzack, & C. Dierksmeier (Eds.), *Humanistic management in practice*. London: Palgrave Macmillan.
- Parente, R., El Tarabishy, A., Vesci, M., & Botti, A. (2018). The epistemology of humane entrepreneurship: Theory and proposal for future research agenda. *Journal of Small Business Management*, 56(S1), 30–52.
- Pirson, M. (2019). A humanistic perspective for management theory: Protecting dignity and promoting well-being. *Journal of Business Ethics*, 159, 39–57.
- Pirson, M., Steinvorth, U., Largacha-Martinez, C., & Dierksmeier, C. (Eds.). (2014). *From capitalistic to humanistic business*. Palgrave Macmillan.
- Röpke, W. (1960). *A humane economy*. Chicago: Henry Regnery.
- Sacconi, L. (1991). *Etica degli affari*. Milano: Il Saggiatore.
- Schlag, M., & Melé, D. (2020). Building institutions for the common good. The practice and purpose of business in an inclusive economy. *Humanistic Management Journal*, 5, 1–6.
- Screpanti, E., & Zamagni, S. (2005). *An outline in the history of economic thought*. Oxford University Press.
- Sen, A. (1987). *On ethics and economics*. Malden: Blackwell Publishing.
- Setter, O., & Zsolnai, L. (Eds.). (2019). *Caring management in the new economy*. Palgrave Studies in Sustainable Business.
- Solomon, R. C. (1992). *Ethics and excellence: Cooperation and integrity in business*. Oxford University Press.
- Spitzack, H. (2011). An integrated model of humanistic management. *Journal of Business Ethics*, 99, 51–62.
- Swart, J. C. (1973). The worth of humanistic management: Some contemporary examples. *Business Horizons*, 16, 41–50.
- Waddock, S. (2020). Will businesses and business schools meet the grand challenges of the era? *Sustainability*, 12 (15), 6083.

Humanitarian CSR

- [Altruistic CSR](#)

Human-Made Waste/Pollution

- [Consumerism](#)

Hunger

- [Hunger and Poverty](#)
- [Malnutrition and Sustainable Management](#)

Hunger and Poverty

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Synonyms

[Education](#); [Empowering girls](#); [Environment](#);
[Health](#); [Hunger](#); [Local democracy](#); [Nutrition](#);
[Self-reliance](#); [Social cohesion](#); [Water and sanitation](#)

Definitions

Poverty and hunger are multidimensional phenomena. According to the National Research Council (2006), hunger refers to a life-threatening lack of food or short-term physical discomfort as a result of food shortage. The United Nations Food and Agriculture Organization (FAO) estimates that about 10.7% of the world's total population are suffering from chronic malnutrition (FAO 2017).

Food production is enough to feed the world population. The main problem is that many people in the world still do not have a minimum income level to buy nutritious food for their own. The Hunger Project estimates that about 11% of people are living in poverty and survive on 1.90 USD or less per day (The Hunger Project 2019). According to the World Bank (WB 2019), 1.90 USD or below income level per day is known as extreme poverty. The majority of people in extreme poverty live in rural areas and are poorly educated and under 18 years of age. With hunger, children suffer the most from poverty. Poverty has various forms including lack of minimum level of income and related resources to ensure sustainable livelihood; inadequate housing; discrimination; inadequate access to schools, health care, electricity, and safe water; social and economic exclusion; etc. (The United Nations 2019; The World Bank 2019). Moreover, for those who have been able to move out of extreme poverty, it is usually temporary.

Hunger and Poverty in the World

Almost half of the hungry people live in low-income countries; moreover, Africa (sub-Saharan region) has the highest prevalence of undernourishment, and Southern Asia (including India, Pakistan, and Bangladesh) has the highest number of undernourished population (FAO et al. 2017). Children are the most disadvantaged group experiencing undernutrition. It is estimated that annually about 45% of children die because of undernutrition (UNICEF, WHO, and

WB 2018). It should be noted that undernutrition increases the effect of diseases such as measles, malaria, pneumonia, and diarrhea (world hunger 2018).

Food insecurity also refers to the inability to access foods that are safe and nutritionally adequate. Malnutrition is a condition resulting from insufficient intake of a biologically necessary minimum level of nutrients. In this concept, the focus of hunger is undernutrition (National Research Council 2006). There are two types of undernutrition:

- Protein-energy malnutrition (PEM): lack of calories and protein that are necessary for key body functions. PEM is the key variable when world hunger is calculated.
- Micronutrient: vitamin and mineral deficiency. There are three key micronutrient deficiencies, vitamin A, iron, and iodine (world hunger 2018).

Solutions to Poverty and Hunger

Poverty and hunger and their various forms have become international priorities during the last decade. The 1996 World Food Summit and the Millennium Declaration of 2000 addressed poverty and hunger to achieve sustainable development. Three UN organizations, FAO, IFAD (International Fund for Agricultural Development), and WFP (World Food Programme), have been working to address hunger, poverty, and food security-related issues (FAO 2019). The World Bank Group's mission is also announced as "Our Dream Is a World Free Poverty" (The WB 2019).

Poverty is a crucial cause of hunger. Other major reasons are climate change and natural disasters (Hillestad 2019). The low-income countries are usually unable to deal with these disasters. On the other hand, hunger also causes poverty. Thus, both dimensions are interrelated (The Hunger Project 2019). Solutions against hunger and poverty aim to empower disadvantaged people to improve their access to income and nutritious food. There are several possible

solutions and actions against hunger and poverty:

- Boost women's economic impact and labor force participation rate.
- Help implement microfinance programs, subsidies, funds, and grants.
- Introduce income-generating activities and training to increase household income.
- Provide agricultural support (The Hunger Project 2019).
- Provide cash transfer or cash for work programs.
- Health and nutrition programs provide training on signs of the illness early and help to prevent malnutrition (Action against Hunger 2019).
- Food aid and school feeding as a form of food aid.
- Closing the resource gap: policies and resource mobilization issues at the national level.
- Nongovernmental organizations (NGOs) to addressing poverty and hunger.
- Corporate social responsibility (CSR) projects (FAO 2019).
- Investing in human capital through education, health, family planning, and nutrition (Binswanger and Landell-Mills 1995).

Summary

Poverty and hunger are multidimensional phenomena. They are inseparably linked with each other. The poverty is a crucial cause of hunger and the hunger is able to be considered a factor of extreme poverty. The rural households are the reflections of the consequences of phenomena. Poverty and hunger and their various forms have become international priorities during the last decade. The specialized organizations deal with these issues in an urgency.

Cross-References

- [Economic Development](#)
- [Food Security](#)
- [Malnutrition and Sustainable Management](#)

References

- Action against Hunger. (2019). Global poverty and hunger. Retrieved from <https://www.actionagainsthunger.org/global-poverty-hunger-facts>. Accessed 02 Aug 2019.
- Binswanger, H. P., & Landell-Mills, P. (1995). *The World Bank's strategy for reducing poverty and hunger: A report to the development community. Environmentally sustainable development studies and monographs series monograph. No.4*. Washington, DC: The World Bank.
- Food and Agriculture Organization. (2017). The future of food and agriculture: Trends and challenges. Retrieved from <http://www.fao.org/3/a-i6583e.pdf>. Accessed August 2019.
- Food and Agriculture Organization. (2019). FAO, IFAD and WFP join efforts to eradicate hunger and malnutrition in Latin America and the Caribbean from <http://www.fao.org/americas/noticias/ver/en/c/1070151/>. Accessed 02 Aug 2019.
- Food and Agriculture Organization, International Fund for Agricultural Development, UNICEF, World Food Programme, & WHO. (2017). The state of food security and nutrition in the world 2017: Building resilience for peace and food security. Retrieved from <http://www.fao.org/3/a-i7695e.pdf>. Accessed July 2019.
- Hillestad, S. (2019). The relationship between hunger and poverty. The Borgen Project. Retrieved from <https://borgenproject.org/the-relationship-of-hunger-poverty/>. Accessed 02 Aug 2019.
- National Research Council. (2006). *Food insecurity and hunger in the United States: An assessment of the measure*. Washington, DC: The National Academies Press. Accessed 8 Aug 2019.
- The Hunger Project. (2019). Poverty. Retrieved from <https://www.thp.org/issues/poverty/>. Accessed 07 Aug 2019.
- The United Nations. (2019). Poverty. Retrieved from https://unstats.un.org/unsd/demographic/products/worldswomen/WW2010Report_by%20chapterBW/Poverty_BW.pdf. Accessed 2 Aug 2019.
- The World Bank. (2019). Poverty Retrieved from <https://www.worldbank.org/en/topic/poverty> Accessed 2 August 2019.
- UNICEF, WHO, & The World Bank. (2018, May 14). Levels and trends in child malnutrition. UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates Key findings of the 2018 edition. Retrieved from <http://data.unicef.org/wp-content/uploads/2018/05/JME-2018-brochure-.pdf>. Accessed 8 July 2019.
- World Hunger. (2018). Hunger notes. Retrieved from <https://www.worldhunger.org/world-hunger-and-poverty-facts-and-statistics/>. Accessed 10 Aug 2019.

Further Readings

- Institute of Development Studies. (n.d.). Hunger and nutrition commitment index. Retrieved from <http://www.hancindex.org/>.

- International Food Policy Research Institute. (2014). 2014 global food policy report.
- International Food Policy Research Institute. (2015). 2015 global hunger index. Retrieved from <https://www.ifpri.org/publication/2015-global-hunger-index-armed-conflict-and-challenge-hunger>.

Hybrid Companies

► Benefit Corporations

Hybrid Finance

► Mezzanine Finance

Hybrid Organizations

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Synonyms

Hybrids

Definition

The term hybrid refers to those organizations that combine different institutional logics and/or organizational forms and identities in an unprecedented way (Battilana and Dorado 2010).

Institutional logics are meant as socially constructed and historical patterns of assumptions, practices, values, beliefs, and rules by which people provide meaning to their daily activities (Ocasio 1997; Suddaby and Greenwood 2005; Thornton 2004), guiding actors' behavior in activities. Examples of institutional logics are the market, social development, economic sustainability, medical professionalism, etc. (Greenwood et al. 2010). Practical manifestation

of one or more legitimated institutional logics results in an organizational form which is characterized by structures and practices within an institutional context (i.e., commercial business, public organizations, private charities, etc.) (Haveman and Gualtieri 2017).

Hybrids are those organizations that pursue contradictory institutional logics (goals) and/or do not fully fit into established categories of organization forms (i.e., commercial business, public organizations, charities, etc.). Typical examples of hybrid organizations are those operating simultaneously in social/environmental and economic fields such as microfinance banks, cooperatives, hospitals, social entrepreneurship, etc. (Boyd et al. 2017). Social enterprises that combine charity to business have recently been widely studied by scholars (Mair and Marti 2006; Seelos and Mair 2005).

Managing hybrids presents many challenges because of some peculiar conditions under which they operate, such as the presence of a wide variety of stakeholders, the tension of the organization toward different, and often conflicting, goals, and the its engaging in divergent activities (Alexius and Staffan 2019). Hybrids struggle to balance multiple interests and goals at the organizational level, within forms of organization whose boundaries are not always unambiguously defined.

Hybrid organizations have the peculiarity to operate by mixing different institutional logics and/or distinct organizational forms (Battilana and Dorado 2010; Pache and Santos 2013; Mair et al. 2015).

Institutional logics are socially constructed and historical patterns of assumptions, practices, values, beliefs, and rules (Haveman and Gualtieri 2017; Ocasio 1997; Suddaby and Greenwood 2005; Thornton 2004). Actors use logics to give meaning to the activities they perform in every situation. When studying organizations, the logics represent the objectives to which the organization aims (Haveman and Gualtieri 2017). Social development, profit, market, economic sustainability, etc., are just some examples of a very large number of institutional logics currently in existence (Greenwood et al. 2010). The particularity of

hybrid organizations is that they struggle to address multiple institutional logics at the same time. For example, hybrids have the capacity to bond traditionally for-profit logics with traditional nonprofit logics (Pache and Santos 2013).

Organizational forms (Dart 2004), on the other hand, represent consolidated practices that result from the adoption, within a specific context, of one or more logics (Thornton 2004). For example, an entity can assume the organizational form of a non-for-profit enterprise as a result of practices and routines aimed at pursuing a “social development” logic as main organizational goal. Historically, organizational forms such as commercial businesses, public organizations, and private charities embraced distinct organizational forms. The boundaries between organizational forms were sharp, and there was a close connection between the type of organization and its form. Commercial businesses, public organizations, and private charities were associated, respectively, with the private, public, and nonprofit sectors (Doherty et al. 2014).

Hybrid organizations, as mentioned, do not embrace a single, defined organizational form. On the contrary, their distinctive feature is that they use a “hybrid” organizational form (Battilana et al. 2017). The reason for this organizational form hybridization lies in the fact that they respond to different, and sometimes conflicting, institutional logics (Greenwood et al. 2010; Thornton 2004). Consequently, the emerging organizational forms should have eclectic nature in order to address different logics. For example, a hybrid organization, in order to pursue both social and economic goals, can mix private charities with commercial business forms and vice versa.

The recent interest in hybrid organizing arises from the increasing number of entities that, pursuing different goals, combine aspects of multiple organizational forms (Ménard 2004). Indeed, in recent years, there is an increasing number of organizations whose mission is not alternatively economic or social/environmental but a mix of the two. In this sense, for example, there are for-profit organizations that engage also in social and environmental issues and, on the other hand, many social organizations aiming to reach economic

sustainability in order to preserve their ability to provide welfare services to the community in the long term (Battilana and Dorado 2010). There are many examples of such organizations (Boyd et al. 2017). State-owned enterprises may also compete on the marketplace for economic sustainability reasons. Microfinance organizations are a fast-developing phenomenon that aims to combine the banking with the social development logic. There are many hybrid organization examples in the social housing and hospital business in which social and economic purposes are mixed together (Battilana and Lee 2014). Social entrepreneurship combines traditional for-profit entrepreneurship with a mission to change society (Mair and Marti 2006; Battilana et al. 2015). It offers new ideas on how to stimulate for more socially sustainable and acceptable business strategies and forms of organization that contribute directly to sustainable development. It also suggests the tendency of corporations to take on great respect social responsibility in order to achieve the common good additional returns for shareholders.

According to many scholars, hybrid organizations are likely to achieve greater social and economic targets as they combine competencies and perspectives of many different logics. In this sense, the abundance of different prospective and views represents a valuable asset and a competitive advantage over the mono-focused entity. The result is expected to be higher value, and the organization is stronger to meet the challenges in the long term (Battilana and Dorado 2010).

Generally, societies measure the performance of organizations and reward those that generate value while remove those that destroy it. The logics beneath the actions of hybrids, because of their multifaceted and divergent nature, make it very difficult to measure the value generated by the organization and, consequently, can lead to biased assessments. As a result, the community does not always have the instruments to measure which entities are destroying value and how to exclude them (Mair and Marti 2006). The issue of measurement of performance within multi-mission organizations is a much-debated issue precisely because of its complexity and its impact on social value. Furthermore, due to the difficulty

of performance measurement, hybrids can be challenging to manage (Alexius and Staffan 2019; Ebrahim et al. 2014; Lauesen 2016; Mair et al. 2015). The different and contrasting missions addressed by hybrids result in unclear actions to be undertaken. The presence of multiple stakeholders complicates the mechanism through which decisions are taken and can lead to inactivity and inefficiency. In this sense, the management of hybrid organizations should be composed mostly by skilled professionals as they are expected to be able to balance between contrasting interests and goals (Pache and Santos 2013). Indeed, it is not easy to estimate the general value produced by the organization when one indicator is reduced in favor of the increase of another.

In some cases, the process of “hybridization” of organizations is processed by commercial companies merely for symbolic reasons (Pache and Santos 2013). However, the majority of hybrid companies originate because the complexity of the market requires to address multiple matters at the same time. For example, a performing case of hybrid organization is the microfinance phenomenon. Microfinance banks provide small loans to needy people who could never reach the traditional credit market. By combining social and banking logics, microfinances capture an otherwise unserviceable slice of the market (Battilana and Dorado 2010).

Insights for Future Research

Future research on hybrids should focus on the development of the still undiscovered areas of this model and on the implementation of methods to overcome their evident limitations.

There is a need to deepen the model of the hybrids in the different geographical contexts, investigating whether there are territorial peculiarities that can influence their development and structure. In addition to territorial differences, it is interesting to study if and how the organizational model of hybrids is influenced by the nature of the different objectives pursued.

It is important to go deeper into the issue of governance and management of hybrids which, as

seen, is a highly complex aspect due to the vague character of the focus on organizational objectives. The issue of measuring the performance of hybrids is an extremely crucial issue in determining their social role in generating value (social, economic, and environmental). In addition, measuring the nonfinancial performance of hybrids is a fundamental tool to overcome the problems of debate around how to balance the different and conflicting interests involved in hybrid organizations.

Summary

Typical examples of hybrid organizations include microfinance banks, cooperatives, hospitals, social entrepreneurship, charities, etc., which operate concurrently in social/environmental and economic fields. Hybrid organizations pursue contradicting institutional logics (goals) and/or do not entirely fit into predetermined categories of organization structures (i.e., commercial business, public organizations, charities, etc.). Hybrids can combine conventionally for-profit logics with traditionally non-profit logics and reorganize organizational forms in unexpected ways. Due to the peculiar conditions under which hybrids operate, such as the presence of a wide variety of stakeholders, the mixed organizational form, the organization’s tension toward different and frequently conflicting goals, and its divergent activities, hybrid management presents numerous challenges. In practice, the measuring of performance within multi-mission companies is a highly disputed topic due to its complexity and impact on societal value. Additionally, hybrids might be tricky to maintain due to the difficulties of performance measurement. The opposing and dissimilar missions conducted by hybrids result in ambiguous measures to be made. However, most hybrid organizations are founded because the complexity of the market necessitates addressing many issues simultaneously. A successful example of a hybrid organization is the microfinance phenomenon. Future studies on hybrids should concentrate on the governance and management of hybrids, which is a

highly complicated element due to the ambiguous nature of the focus of the organizational objective. Mainly, monitoring the performance of hybrids is a critical factor in determining their social role in generating value (social, economic, and environmental).

Cross-References

- [Cooperatives](#)
- [Hybrid Organizations](#)
- [Social Enterprise](#)
- [Social Entrepreneurship](#)

References

- Alexius, S., & Staffan, F. (2019). *Managing hybrid organizations: Governance, professionalism and regulation*. London: Palgrave Macmillan.
- Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial micro-finance organizations. *Academy of Management Journal*, 53(6), 1419–1440.
- Battilana, J., & Lee, M. (2014). Advancing research on hybrid organizing – Insights from the study of social enterprises. *The Academy of Management Annals*, 8(1), 397–441.
- Battilana, J., Sengul, M., Pache, A. C., & Model, J. (2015). Harnessing productive tensions in hybrid organizations: The case of work integration social enterprises. *Academy of Management Journal*, 58(6), 1658–1685.
- Battilana, J., Besharov, M., & Mitzinneck, B. (2017). On hybrids and hybrid organizing: A review and roadmap for future research. In *The SAGE handbook of organizational institutionalism* (Vol. 2, pp. 133–169). Los Angeles: Sage.
- Boyd, B., Henning, N., Reyna, E., Wang, D., Welch, M., & Hoffman, A. J. (2017). *Hybrid organizations: New business models for environmental leadership*. London: Routledge.
- Dart, R. (2004). The legitimacy of social enterprise. *Non-profit Management and Leadership*, 14(4), 411–424.
- Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *International Journal of Management Reviews*, 16(4), 417–436.
- Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, 34, 81–100.
- Greenwood, R., Diaz, A. M., Li, S. X., & Lorente, J. C. (2010). The multiplicity of institutional logics and the heterogeneity of organizational responses. *Organization Science*, 21(2), 521–539.
- Haveman, H. A., & Gualtieri, G. (2017). Institutional logics. In R. Aldag (Ed.), *Oxford research encyclopedias entrepreneurship, organization theory, organizational behavior, research methods*. Oxford: Oxford University Press.
- Lauesen, L. M. (2016). *Sustainable governance in hybrid organizations: An international case study of water companies*. London: Routledge.
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44.
- Mair, J., Mayer, J., & Lutz, E. (2015). Navigating institutional plurality: Organizational governance in hybrid organizations. *Organization Studies*, 36(6), 713–739.
- Ménard, C. (2004). The economics of hybrid organizations. *Journal of Institutional and Theoretical Economics (JITE)/Zeitschrift für die gesamte Staatswissenschaft*, 160(3), 345–376.
- Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal*, 18(S1), 187–206.
- Pache, A. C., & Santos, F. (2013). Inside the hybrid organization: Selective coupling as a response to competing institutional logics. *Academy of Management Journal*, 56(4), 972–1001.
- Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business Horizons*, 48(3), 241–246.
- Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50(1), 35–67.
- Thornton, P. H. (2004). *Markets from culture: Institutional logics and organizational decisions in higher education publishing*. Palo Alto: Stanford University Press.

Hybrids

- [Hybrid Organizations](#)

Hydrogen

- [Sustainable Energy](#)

Hydroponics

- [Aquaculture and Blue Farming](#)

Ice

- [Water](#)

ICSA

- [Institute of Chartered Secretaries and Administrators \(ICSA\)](#)

IDCP

- [UN Declaration on Cleaner Production](#)

Ideal-Driven CSR

- [Authentic CSR](#)

Ideals

- [Core Values](#)

Illegitimate Business

- [Shadow Trades](#)

Illicit Trade

- [Shadow Trades](#)

Impact Assessment

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Definition

Impact assessment is an overarching concept and can generally be defined as a systematic procedure to evaluate the consequences of an action or plan which has been or will be performed (IAIA 2009; Lawrence 2013). Other definitions focus on the facilitating role of impact assessment, as it leads to better decision-making by providing information to identify, predict, and evaluate the effects of an

action, plan, or project (Smith 2014). In an impact assessment, the situation with an implemented action or plan is compared to a situation without the action or plan implemented.

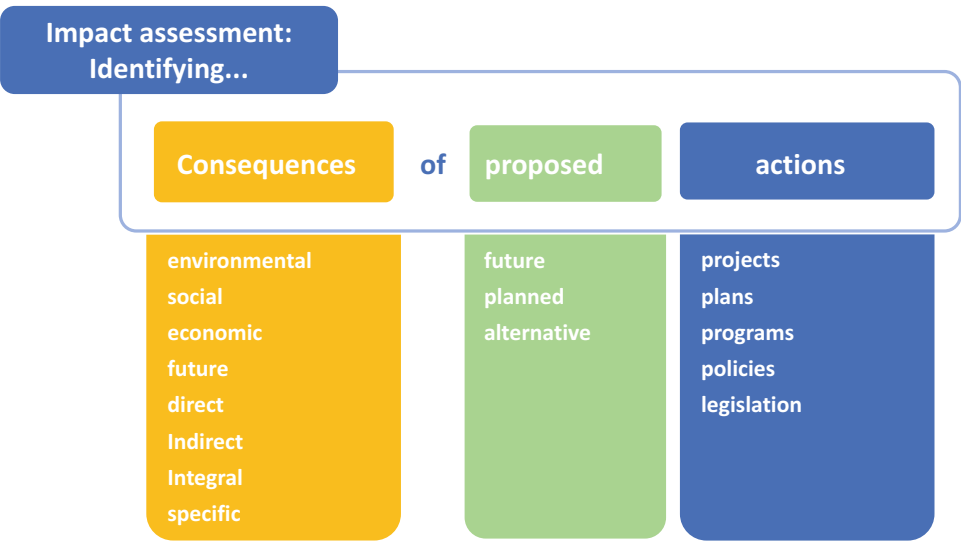
Impact assessment as a general overarching concept can be applied in various contexts mainly to analyze data and integrate scientific results into decision-making. Furthermore the technique can be used within regulatory frameworks, according to guidelines or as a process management tool to improve a project, plan, or program.

There are different kinds of impact assessments; these include among others Environmental Impact Assessment (EIA), the oldest form of impact assessment with a focus on environmental consequences of projects or plans; Regulatory (or policy) Impact Assessment (RIA), assessing the impact of newly proposed regulations or policies; Strategic Environmental Assessment (SEA), an impact assessment on the strategic policy, planning, and programming level; Sustainability Impact Assessment or Sustainability Assessment (SA), accounting for an integrated assessment of the three aspects of sustainability; and Social Impact Assessment, mainly aiming at the evaluation of social aspects.

Introduction

In the 1960s and 1970s, the awareness of the growing impact of human activities on environmental resources at a local, regional, and global level increased. In 1970 the National Environmental Policy Act became effective in the United States and set a formal procedure for EIA as one of the oldest types of impact assessment (Glasson et al. 2012; Morgan 2012). Similarly, a European Directive on EIA triggered an increased application of EIA in European countries so that to date most countries have national and/or regional EIA systems and regulations (IAIA 2009).

At present the general concept of impact assessment is widely applied in various forms. Impact assessment procedures were established with the primary aim to provide detailed information about the consequences of proposed interventions in numerous sectors. The data supplied can support the decision-making process, and, if required, suitable follow-up actions can be derived. An illustration of the variety of general applicability of the concept for decision-making is given in Fig. 1.



Impact Assessment, Fig. 1 Outline of impact assessment as a general systematic procedure to evaluate the consequences of a range of planned actions with a variety of aspects to consider

Approaches and Types of Impact Assessment

There are different approaches to impact assessment (IAIA 2009). The technique can either be used as:

- An analytical tool to analyze effects of an action, project, or plan gathering and preparing information for a better, more evidence-based decision-making process.
- A formal tool within a legal or regulatory framework. If performed as a legally required instrument, the application of the method can be strengthened. However if the procedure is carried out merely to fulfill formal requirements, this can affect the quality of the outcome of the assessment procedure (Morgan 2012).
- A process management tool to improve a project, plan, or program. From the start of the project, plan, or program, stakeholders and target groups can be involved in the process; thereby the assessment can contribute to an overall sharpening of the objectives of the project and can improve participation of stakeholders and target groups during all stages of the process.

A growing number of new forms of impact assessments are applied in various sectors. They differ with regard to their subject and can range from biodiversity impact assessment to social impact assessment. There is also a diversity with regard to the width of scope, which means that an EIA can be performed with a narrow scope on biophysical environment or with a wider scope including social and economic aspects, for example. Furthermore some impact assessments can be limited to a specific aspect or target an individual project only, whereas others can have a higher level of integration and evaluate strategic alternatives. An EIA can be performed with a focus on the project level in opposite to an SEA with a focus on strategic decision-making regarding programs or policies (Glasson et al. 2012; IAIA 2009; OECD 2010).

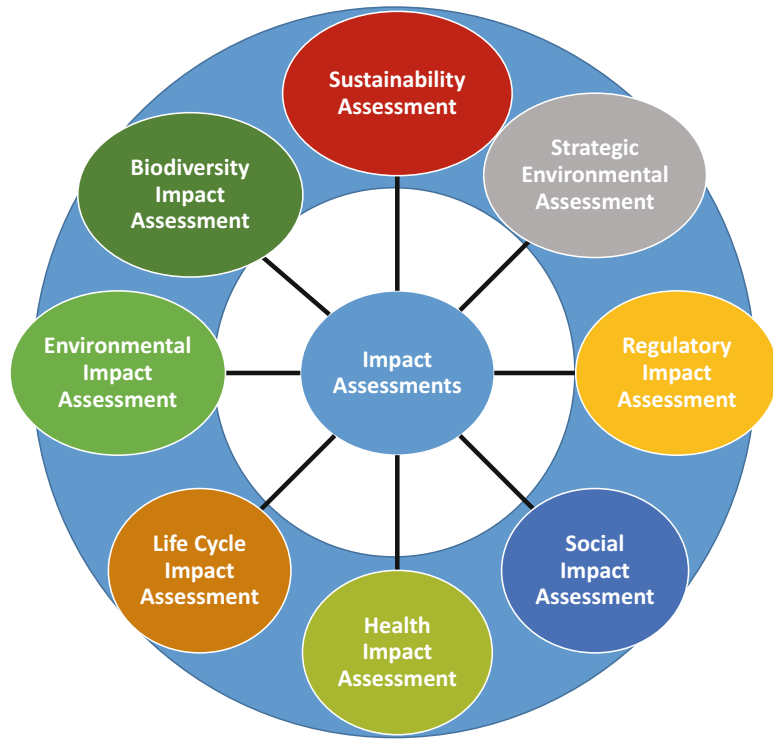
As depicted in Fig. 2, frequently used types of impact assessments include, but are not limited to, the following:

- EIA, an assessment of the environmental consequences of a project, plan, policy, or program, prior to making a decision on the implementation of the action proposed (see chapter on Environmental Impact Assessment)
- SEA, an assessment on the strategic level directed toward integrating environmental, economic, and social aspects effectively in plans, programs, or policies (see chapter on Strategic Environmental Assessment)
- RIA (Regulatory Impact Analysis or Regulatory Impact Assessment) a form of assessment evaluating positive as well as negative consequences of new regulations and policies
- Sustainability Assessment (SA), sometimes also referred to as Sustainability Impact Assessment, an integrated, non-sectoral assessment on a strategic level addressing economic, environmental, and social consequences of policies, plans, or programs (Bond et al. 2012; OECD 2008).
- Social Impact Assessment (SIA), a specific, sectoral type of impact assessment with a focus on social aspects
- Biodiversity Impact Assessment, an impact assessment integrating biodiversity conservation and equitable, sustainable use of biodiversity into impact assessment (Geneletti 2016)
- Life Cycle Impact Assessment (LCIA), a form of impact assessment performed as one of the phases of life cycle analysis (Hauschild and Huijbregts 2015)

So the variety of approaches and types of impact assessments is large. Regarding the principles of impact assessment in practice and quality criteria, issues relevant to impact assessment in general can be identified. Important key principles of impact assessment are transparency, efficiency, and proportionality. Several authors have addressed the role of quality in the field of impact assessment (Bond et al. 2018; Morgan 2012). For impact assessment to be effective – i.e., impact

Impact Assessment,

Fig. 2 Types of impact assessment, depending on context differing in focus and or width of scope. Sustainability Assessment and Strategic Environmental Assessment are more comprehensive and more integrated types of assessment; Health Impact Assessment and Social Impact Assessment are more specific and more sectoral types of assessment



assessment improving a process, action, or outcome – several dimensions of impact assessment quality can be identified including efficiency which implies reaching good outcomes under given conditions and in compliance with regulatory specifications. An additional proof of a good quality will be the fact that stakeholders perceive the process or outcome as reliable and are enabled to change and learn (Bond et al. 2018).

Impact Assessment as a Concept to Support Sustainable Development

Impact assessment is well established worldwide, especially in form of EIA and SEA (Morgan 2012). In many countries both a steadily developing legislative basis and an increasing support of science-based decision-making enhance the use and quality of impact assessment. A large number of guidelines and practitioners' documents are available (see, e.g., the website of IAIA, <https://www.iaia.org/resources>).

While initially a large proportion of the forms of impact assessment was rather specific and sectoral (e.g., EIA with a strong focus on impacts on the biophysical environment), more recently developing “new-generation” impact assessments such as SEA or SA are more comprehensive, which reflects the growing awareness of sustainable resource management and sustainable development across communities, sectors, and generations (Bond et al. 2012; Smith 2014). Growing pressure on natural resources and challenges of equity within and between generations creates a need for new concepts of impact assessment (Smith 2014; Morgan 2012). New forms of impact assessment are evolving.

However, in practice, strong interests in economic growth potentially impair the protection of environmental resources. If environmental, social, and developmental issues are difficult to combine in an acceptable way for all stakeholders, integration of different aspects of sustainable development remains challenging, and more guidance might be required on how to

achieve sustainable development through prioritizing adequately (Riley 2016). Seeking a good balance between the three aspects of sustainability and avoiding a simplistic trade-off of one of the aspects requires continuing attention.

Current trends to improve future impact assessment also involve procedures which are more adaptive, deliberative, and participative (Lawrence 2013). New impulses emerge in the fields of collaborative rationality like better ways of dealing with differences in the level of knowledge and the accessibility of information among stakeholders (Bäcklund et al. 2010; Morgan 2012). In the European Impact Assessment System, a collaborative generation of knowledge is already implemented in guidance documents and needs to be put into practice increasingly. Due to the growing plurality of stakeholders, different types of knowledge have to be integrated in the impact assessment process. This growing plurality also makes it more likely that important aspects of sustainability will be covered. This way impact assessment can be a collaborative trajectory of participatory learning and support sustainable development (Bäcklund et al. 2010).

Summary

Impact assessment is a systematic procedure to evaluate the consequences of an action or plan which has been or will be performed. There are a growing number of types of impact assessment differing in the issues addressed, the width of scope, and the level of integration. More recently evolving types of impact assessment are characterized by a wider scope. They are more comprehensive and integral to facilitate the decision-making in sustainable development.

Cross-References

- [Environmental Impact Assessment](#)
- [Social Impact Assessment](#)

References

- Bäcklund, A. K., Bousset, J. P., Brogaard, S., Macombe, C., Taverne, M., Ittersum, van, M.K. et al. (2010). Science-policy interfaces in impact assessment procedures. In: F. M. Brower & M. van Ittersum (Eds.), *Environmental and agricultural modelling: Integrated approaches for policy impact assessment* (pp. 275–294). Dordrecht: Springer.
- Bond, A., Morrison-Saunders, A., & Pope, J. (2012). Sustainability assessment: The state of the art. *Impact Assessment and Project Appraisal*, 30(1), 53–62.
- Bond, A., Retief, F., Cave, B., Fundingsland, M., Duinker, P. N., Verheem, R., & Brown, A. L. (2018). A contribution to the conceptualisation of quality in impact assessment. *Environmental Impact Assessment Review*, 68, 49–58.
- Geneletti, D. (2016). *Handbook on biodiversity and ecosystem Services in Impact Assessment*. Cheltenham: Edward Elgar Publishing.
- Glasson, J., Therivel, R., & Chadwick, A. (2012). *Introduction to environmental impact assessment*. London: Routledge, Taylor & Francis.
- Hauschild, M. Z., & Huijbregts, M. A. J. (2015). Introducing life cycle impact assessment. In M. Z. Hauschild & M. Huijbregts (Eds.), *Life cycle impact assessment. LCA compendium – The complete world of life cycle assessment* (pp. 1–16). Dordrecht: Springer.
- IAIA (International Association for Impact Assessment). (2009). What is impact assessment? https://www.iaia.org/uploads/pdf/What_is_IA_web.pdf. Accessed 20 Feb 2019.
- Lawrence, D. P. (2013). *Impact assessment: Practical solutions to recurrent problems and contemporary challenges*. Hoboken: John Wiley and Sons Incorporated.
- Morgan, R. K. (2012). Environmental impact assessment: The state of the art. *Impact Assessment and Project Appraisal*, 30(1), 5–14.
- OECD. (2010). Guidance on sustainability impact assessment. <http://www.greengrowthknowledge.org/resource/guidance-sustainability-impact-assessment>. Accessed 20 Feb 2019.
- Organisation for Economic Co-operation and Development (OECD). (2008). OECD sustainable development studies conducting sustainability assessments. https://www.oecd-ilibrary.org/environment/conducting-sustainability-assessments/sustainability-impact-assessment-european-approaches_9789264047266-3-en. Accessed 20 Feb 2019.
- Riley, S. (2016). Prioritising the environment in sustainable development: Lessons from Australian environmental impact assessment. In V. Mauerhofer (Ed.), *Legal aspects of sustainable development* (pp. 271–288). Cham: Springer.
- Smith, L. G. (2014). *Impact assessment and sustainable resource management*. London: Routledge, Taylor & Francis.

Impact Investing

- ▶ [Ethical Banking](#)

Impact Investment

- ▶ [Sustainable Investment](#)

Implicit CSR

- ▶ [Sunken CSR and SMEs](#)

Implicit vs. Explicit CSR

- ▶ [Anglo-American Model vs. Continental Europe Model](#)

Important Stakeholders

- ▶ [Sustainable Stakeholder Dialogue](#)

Improvement

- ▶ [Innovation and Territorial Development](#)

Impulse Control Disorder

- ▶ [Compulsive Buying](#)

Impulsive Buying

- ▶ [Compulsive Buying](#)

In Vivo Research

- ▶ [Animal Testings](#)

Incentive Compensation

- ▶ [Bonus](#)

Incentive Remuneration

- ▶ [Bonus](#)

Incentive System

- ▶ [Bonuses \(Employee for Performance\)](#)

Incineration

- ▶ [Sustainability of Waste Management Systems: Energy Recovery](#)

Inclusion

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Synonyms

[Admittance](#); [Embodiment](#); [Embracement](#);
[Encompassment](#); [Formation](#); [Incorporation](#);
[Involvement](#)

Description

While there is a rich body of research in the area of diversity, inclusion has emerged as a fairly recent area of exploration (Nair and Vohra 2015). Some researchers argue that recently there has been a shift from diversity to inclusion in the workforce of the twenty-first century (Hays-Thomas and Bendick 2013). Eventually, both diversity and inclusion have become recognized as instrumental in improving business outcomes. One could argue that diversity and inclusion complement each other when it comes to improving business outcomes.

While diversity's primary focus is the composition of organizations and teams, inclusion's primary focus is taking the composition one step further and encouraging mixed groups to actively participate and be involved in organizations' activities and decision-making (Roberson 2006; Nair and Vohra 2015). Hence, inclusion can be described as "the degree to which an employee is accepted and treated as an insider by others in a work system" (Hope Pelled et al. 1999). Inclusion is an active process of change or integration, as well an outcome, such as a feeling of belonging, indicating that it is both a process and an outcome associated with it (Deloitte 2013).

Inclusion Framework for Uniqueness and Belongingness

Shore et al. (2011) introduced a 2×2 framework for inclusion to propose both uniqueness and belongingness as main parameters that create feelings of inclusion in the employees (See Fig. 1).

According to this framework, low belongingness and low value in uniqueness result in exclusion, where individual does not view himself or herself as an insider to the organization. Assimilation outcome is achieved with high belongingness and low value in uniqueness where an individual feels like an insider and conforms to the dominant culture. Differentiation outcome is achieved with high value in uniqueness and low belongingness where they are not treated as insiders, but their unique contribution is seen as valuable for the organization.

According to the authors, only high belongingness and high value in uniqueness create the feelings of inclusion where the individual views himself or herself as both an insider to the organization and unique within the work group.

This framework shows the complexity of inclusion since it involves the feelings of individual employee and highlights the fact that diversity alone cannot be sufficient to result in inclusion feelings.

	Low Belongingness	High Belongingness
Low Value in Uniqueness	Exclusion Individual is not treated as an organizational insider with unique value in the work group but there are other employees or groups who are insiders.	Assimilation Individual is treated as an insider in the work group when they conform to organizational/dominant culture norms and downplay uniqueness.
High Value in Uniqueness	Differentiation Individual is not treated as an organizational insider in the work group but their unique characteristics are seen as valuable and required for group/ organization success.	Inclusion Individual is treated as an insider and also allowed/encouraged to retain uniqueness within the work group.

Inclusion, Fig. 1 Inclusion framework, Shore et al. (2011)

Summary

Although inclusion has emerged as a recent area of exploration (Nair and Vohra 2015), it is evident that there is significant shift into this area in the literature. One body of research highlights the impact of inclusion on the organizational performance and business outcomes.

Ferdman et al. (2010) argue that collective feeling of inclusion in an organization is positively associated with group performance indicators, and this relationship is moderated with the diversity of group's membership. Empirical study by Sabharwal (2014) proposes that diversity alone is not sufficient to improve workplace performance and that workplaces become productive only if employees can freely express their opinions and when employees eventually contribute to the decision-making in their respective organizations. According to Mor Barak (2022), employee perception lies within the inclusion-exclusion continuum, and employees get involved in both formal and informal decision-making.

In today's competitive business environment, firms focus more on the sustainable growth and look for different and creative ways to generate profit and stay competitive. Within these lines, gender diversity and inclusion has become a significant research area as women workforce is becoming a more critical human capital for firms to achieve sustainable growth. The firms that tap into this human capital can reap significant benefits in the long run. According to Boston Consultant Group's (BCG) study in 2017, innovation of a firm will jump from 15% to 25% if women managers' proportion increases by 20%. Bersin by Deloitte (2017) surveyed 245 global organizations and concluded that inclusive organizations are eight times more likely to achieve better business outcomes, six times more likely to be innovative and agile for change, three times more likely to be high performing, and twice as likely to meet or exceed financial targets. This study reinforces the fact that diversity, coupled with inclusion, leads to better and more sustainable business outcomes.

Diversity and inclusion require a change management and process in organizations' culture,

and it cannot be achieved overnight. The leaders in the organization should "lead by example" and encourage an open environment where employees can feel confident and inspired to express their respective opinions and ultimately contribute to both short-run and long-run decision-making in their organizations. With this culture change, organizations can build strong foundation to make sure that the business outcomes are sustainable and long-lasting.

Cross-References

- CSR and Women
- Diversity
- Diversity of Boards
- Employee Participation/Ownership
- Inclusive Leadership
- Organizational Culture
- Sustainable Growth

References

- Barak, M. E. M. (2022). *Managing diversity: Toward a globally inclusive workplace*. Sage.
- Bersin by Deloitte, Deloitte Consulting LLP. (2017). High impact diversity and inclusion: Maturity model and top findings.
- Boston Consulting Group. (2017). The mix that matters: Innovation through diversity. Retrieved from: <http://media-publications.bcg.com/22feb2017-mix-thatmatters.pdf>
- Deloitte. (2013). Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/human-capital/deloitte-au-hc-diversity-inclusion-soup-0513.pdf>
- Ferdman, B. M., Avigdor, A., Braun, D., Konkin, J., & Kuzmycz, D. (2010). Collective experience of inclusion, diversity, and performance in work groups. *RAM. Revista de Administração Mackenzie*, 11, 6–26.
- Hays-Thomas, R., & Bendick, M. (2013). Professionalizing diversity and inclusion practice: Should voluntary standards be the chicken or the egg? *Industrial and Organizational Psychology*, 6(3), 193–205.
- Hope Pelled, L., Ledford, G. E., Jr., & Albers Mohrman, S. (1999). Demographic dissimilarity and workplace inclusion. *Journal of Management Studies*, 36(7), 1013–1031.
- Nair, N., & Vohra, N. (2015). Diversity and inclusion at the workplace: A review of research and perspectives. IIMA Working Papers WP2015-03-34. Indian Institute of Management Ahmedabad, Research and Publication Department.

- Roberson, Q. M. (2006). Disentangling the meanings of diversity and inclusion in organizations. *Group & Organization Management*, 31(2), 212–236.
- Sabharwal, M. (2014). Is diversity management sufficient? Organizational inclusion to further performance. *Public Personnel Management*, 43(2), 197–217.
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and diversity in work groups: A review and model for future research. *Journal of Management*, 37(4), 1262–1289.

Inclusive Business

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Synonyms

BoP (bottom of the pyramid) partnerships; Community-based-enterprises; Corporate shared value; Inclusive business models

Definition

A holistic perspective and the joint efforts of a multitude of actors (institutions, public organizations, private companies, and the civil society) are necessary to tackle with the huge and complex phenomenon of poverty (Narayan-Parker 2000). A large portion of the world population, especially in developing countries, lives in poverty and is grappling to attain the most basic needs (food security, access to water, health, and education).

The concept of inclusive business (IB) dates back the early 2000s and was initially used in the context of the pro-poor growth agenda. It was coined by the World Business Council for Sustainable Development to refer to business models capable of incorporating the objective of human suffering alleviation, in pursuing their activities (Prahalad and Ramaswamy 2004). Both scholars and practitioners have provided several definitions of inclusive business. The former have defined inclusive business as accounting for

human dignity or human rights considerations in businesses (Ioannou and Serafeim 2012). Practitioners and institutions have emphasized inclusive business viability in providing a living wage for vulnerable groups while enabling buyers to profit and the poor to escape from poverty. The concept progressed with the world debate on the fight against social and economic inequalities within the sustainable development umbrella and the current global agenda whose Goal 1 “No Poverty” addresses the urgent need to “end poverty in all its forms everywhere” (UN 2015).

Introduction

Inclusive businesses contribute to benefit low-income inhabitants and their communities and, more generally, increase opportunities for the disadvantaged and indigent. Through the engagement of “people living at the bottom of the economy” (Gradl and Kenkins 2011, p. 5), inclusive businesses generate high development impact by improving access to goods and services and/or providing income and/or employment opportunities to low-income people – that represent the base-of-the pyramid population – as producers, suppliers, distributors, employers, or employees (ADB 2020).

In order to leverage their responsible and sustainable business model, companies are called to generate corporate shared value, the latter encompassing economic, environmental, and social value. A concrete way to create shared value rests on contributing to fight poverty, overcoming traditional approaches based on business philanthropy, or the involvement of public authorities. Several studies have pointed out the importance of the co-creation of value and suggested collaborative actions of the private and public sectors and non-governmental organizations (McDermott et al. 2009; Mair and Marti 2009) to promote activities at a micro-level (Tracey et al. 2011; Peredo 2003) aimed to eradicate poverty. In this vein an inclusive business underpins a sustainable business model “that seeks to productively engage income-constrained groups in the value chain by providing solutions to neglected problem, such as poverty”

(Schoneveld 2020, p. 8). Hence, it generates inclusive innovation and creates opportunities by overcoming economic, social, environmental, and geographical barriers (Likoko and Kini 2017; WBCSD 2008; Anderson and Billou 2007; Mair and Seelos 2007; UNDP 2008; Karamchandani et al. 2009; Jenkins et al. 2010). According to this perspective, inclusive businesses enable the inclusion of the base of the pyramid (Prahalad 2004) in the business's value chain through financing, adapting products, and distributing goods and services (see: IFC 2012, p. 3). This orientation can in fact be operationalized into several ways and areas, for instance, by integrating a company's supply/distribution chain with underprivileged producers, collaborating with the producers of natural raw materials and handcrafted products, stimulating community-based entrepreneurship, and by preserving their natural environments.

Key Issues

A useful guide encompassing several successful inclusive business experiences was provided by The Endeavor Report (Gradl and Knobloch 2010) that explains how companies can increase their competitiveness through generating new business ideas (Jenkins 2007; Berdegúe et al. 2008) that address huge and wicked problems. Drawing from these experiences, among the benefits are the coverage of essential needs, a growth in productivity and income, and the empowerment of poor people.

On the one hand, inclusive business models offer jobs, food, access to water, electric power, medical provisions, housing, and education to low-income people, as well as access to the Internet and financial resources (i.e., loans and insurance). In developing countries these provisions improve the living conditions of people and enable the creation of business opportunities for craftsmen, farmers, and micro-enterprises.

On the other hand, companies can strengthen their competitiveness in many ways: by setting up supply markets and growth-intensive sales that can benefit from population growth and increase

income; accessing alternative supply source of raw materials; creating innovative products/processes; increasing reputation and loyalty of suppliers, customers, investors, governments, and the community; leveraging on local skills and traditions. For instance, an inclusive business model can be founded on contract production systems that obtain resources from small-scale farmers. Moreover, the plentifulness and variety of unrefined raw materials makes it possible to improve the supply chain and satisfy the quality standards for "organic" or "fair."

Large globalized and multinational companies (MNCs) can actively participate in mitigating poverty (Basu 2001; OECD 2001). Their contribution has attracted the attention from the political and scientific community (Kolk and van Tulder 2006) due to their expected leading role in partnering with governmental and non-governmental institutions to transfer expertise and knowledge and improve socio-economic conditions, training, and equal opportunities in poor countries. The first guide of World Business Council for Sustainable Development resulting from the "Sustainable Livelihoods Project" (WBCSD 2007) pointed out that "doing business with the poor allows multinational companies benefit from potential new market, while contributing to improve their living conditions." Therefore, their approach could mirror opportunistic-led or authentic-driven orientations. Several multinational corporations started to implement inclusive business models under institutional pressures and/or solicited by stakeholders – including other competitors – thus following a mimetic process. In some cases, they moved to inclusive business model after prior irresponsible conducts, and are not candid about poverty alleviation, thus eliciting criticism (Stiglitz 2002). Moreover, their conduct has been criticized since only a few issues relative to poverty have been addressed. Creating value through solutions to neglected problems is effective when multinational companies overthrow the logic of "single approach." Effective solutions are based upon supplying the poor with "tools" (resources, know-how, and technology) useful to break them from poverty, creating an enabling environment that facilitates dialogue and actions

with local actors and actively including poor local communities (Kolk and van Tulder 2006).

Furthermore, beside large and multinational companies, also small and medium-sized enterprises (SMEs) can play a relevant role in poverty eradication, especially when they manifest a high level of embeddedness to their local area (Storper 2005). SMEs are a fundamental part of the local socio-economic fabric and are connoted by a high degree of social and relational capital. In many cases, they reduce poverty in their territories by offering jobs, training, and environmental requalification. In doing so, they contribute to avoid degradation or depopulation. A true dedication inspires values-driven SMEs, which takes place through networks with local actors and relationships that enable businesses to connect with the local and extra-local context, rich in tangible and intangible resources (Del Baldo 2010; Del Baldo and Demartini 2012).

Several authors have stressed on the imperative of acting at the local level, especially in underdeveloped countries, favoring the set-up of community-based enterprises (CBEs) to enhance the interaction among communities and families that are embedded in local social structures (Peredo 2001, 2003). Community-based resolutions are fundamental to safeguard the environment and generate income among poor communities (Tenenbaum 1996; Lyons 2002; Nelson 2000). “Community-based enterprises pursue the economic and social goals of a community in a manner that is meant to yield sustainable individual and group benefits over the short- and long-term” (Peredo and Chrisman 2006, p. 4). Leveraging on local skills and resources, community-based enterprises represent an encouraging solution and an alternative model to develop local areas in poor countries.

Moreover, benefit corporations (B-Corp) and certified B-Corp can be considered an emerging model of inclusive business. A Benefit Corporation is “legally a for-profit, socially obligated business, with all of the traditional corporate characteristics but with explicitly stated societal responsibilities” (Hiller 2013, p. 287). A B-Corp is an organization that meets specific socially responsible standards assessed by a certification entity named B Lab. The

B-Lab certifies organizations that voluntarily meet the highest social and environmental performance standards, transparency, and accountability through the benefit impact assessment (BIA), a score (ranging from 80 to 200 points) attributed to companies’ performance across five broad categories: environment, employees, customers, community, and governance (Hiller 2013; Nigri and Del Baldo 2018). An organization can obtain the B Lab’s certification without becoming a BC. In other words, the benefit corporations and certified B-Corp are for-profit companies that pursue general and specific public benefits and economic goals. Through their activity, not lucrative and lucrative purposes are in balance. Their diffusion, especially in the last decade, is attracting the interest of the scientific, political, and managerial world (Del Baldo 2019; Nigri et al. 2020). These hybrid organizations (Gamble et al. 2020) rest on regenerative and inclusive business models that entail a purpose-driven orientation in that they are aimed to pursue benefits to be shared with stakeholders, including people on the edge of society and poor communities.

Future Directions

Both the scientific and political community have stressed the urgency to act at the local level to reduce poverty and safeguard the natural environment. Every business can contribute to pursue this goal by adopting a variety of inclusive business practices useful to fight poverty and enhance sustainable local development. The so-called “shared value” (Porter and Kramer 2011) is the outcome of policies and operating practices that re-connect the company success with social and environmental progress. In this regard, inclusive business models increase the company’s competitiveness, while simultaneously promoting the economic and social conditions of communities in which a company operates, thereby extending the link between competitive advantages and social issues. “The societal benefits of providing appropriate products to lower-income and disadvantaged consumers can be profound, while the profit for companies can be substantial” (Porter and Kramer 2011, p. 68).

Summary

Companies can significantly contribute to human development, improving the quality of life of people, especially in developing countries. Fighting poverty through innovative business models provides opportunities for sustainable growth. Inclusive business models are driven by the need to promote dignified humane existence by using market approaches to tackle socioeconomic challenges in a sustainable way (Likoko and Kini 2017). They are characterized by a profitable core business activity that is advantageous to low-income communities and increases opportunities for poor and disadvantaged people. Inclusive businesses – that can be experienced by both MNCs, SMEs, CBEs, Benefit Corporation, and B-Corp – aim to include social responsibility and sustainability in their core business, rather than philanthropy (Gradl and Knobloch 2010). Accordingly, they underpin a stewardship-based approach that calls for enhancing the long-term well-being of a company and its stakeholders by eliminating value destruction through resource depletion and unequal distribution of income and revenues. This can involve transforming value missed into value opportunities (Schaltegger et al. 2016) by repurposing for society and environment.

Cross-References

- [Benefit Corporations](#)
- [Poverty](#)
- [Prahalad's "Bottom of the Pyramid"](#)
- [SDGs](#)
- [Shared Value](#)
- [SMEs \(and CSR\)](#)
- [Social Enterprise](#)

References

Anderson, J., & Billou, N. (2007). Serving the world's poor: Innovation at the base of the economic pyramid. *Journal of Business Strategy*, 28, 14–21.

- Asian Development Bank (ADB). (2020). Inclusive business. Available at: <https://www.adb.org/themes/social-development/inclusive-business>. Accessed 3 Sept 2022.
- Basu, K. (2001). On the goals of development. In G. M. Meier & J. E. Stiglitz (Eds.), *Frontiers of development economics. The future in perspective* (pp. 61–86). Washington: World Bank Oxford University Press.
- Berdegue, J. A., Biénabe, E., & Peppelenbos, L. (2008). Innovative practice in connecting small scale producers with dynamic markets -keys to inclusion of small-scale producer in dynamic markets. <http://www.regoverningmarkets.org>. Accessed 8 Aug 2018.
- Del Baldo, M. (2010). Corporate social responsibility and corporate governance in Italian SMEs: Toward a 'territorial' model based on small 'champions' of CSR. *International Journal of Sustainable Society*, 2(3), 215–247.
- Del Baldo, M. (2019). Acting as a benefit corporation and a B Corp to responsibly pursue private and public benefits. The case of Paradisi Srl (Italy). *International Journal of Corporate Social Responsibility*, 4(1), 1–18.
- Del Baldo, M., & Demartini, P. (2012). Small business social responsibility and the missing link: The local context, chapter 3. In W. D. Nelson (Ed.), *Advances in business management* (Vol. 4, pp. 69–94). New York: Nova Science Publishers.
- Gamble, E. N., Parker, S. C., & Moroz, P. W. (2020). Measuring the integration of social and environmental missions in hybrid organizations. *Journal of Business Ethics*, 167(2), 271–284.
- Gradl, C., & Jenkin, B. (2011). *Tackling barriers to scale: From inclusive business models to inclusive business ecosystems*. Cambridge, MA: The CSR initiative at the Harvard Kennedy School.
- Gradl, C., & Knobloch, C. (2010). *Endeva report, inclusive business guide, how to develop business and fight poverty*. Berlin: Endeva.
- Hiller, J. S. (2013). The benefit corporation and corporate social responsibility. *Journal of Business Ethics*, 118(2), 287–301.
- IFC (International Finance Corporation). (2012). *Policy note on the business environment for inclusive business models*. Washington, DC: World Bank Group.
- Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43, 834–864.
- Jenkins, B. (2007). *Expanding economic opportunity: The role of large firms* (CSR initiative report no. 17). Cambridge: Harvard Kennedy School.
- Jenkins, B., Ishikawa, E., Geaneotes, A., & Paul, J. (2010). *Inclusive business: Expanding opportunity and access at the base of the pyramid*. Washington, DC: IFC.
- Karamchandani, A., Kubzansky, M., & Frandano, P. (2009). Emerging markets, emerging models: Market-based solutions to the challenges of global poverty. http://www.mim.monitor.com/downloads/emergingmarkets_full.pdf. Accessed 11 July 2018.

- Kolk, A., & van Tulder, R. (2006). Poverty alleviation as business strategy? Evaluating commitments of frontrunner multinational corporations. *World Development*, 34, 789–801.
- Likoko, E., & Kini, J. (2017). Inclusive business – A business approach to development. *Current Opinion in Environmental Sustainability*, 24, 84–88.
- Lyons, T. (2002). Building social capital for rural enterprise development: Three case studies in the United States. *Journal of Developmental Entrepreneurship*, 7(2), 193–217.
- Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24(5), 419–435.
- Mair, J., & Seelos, C. (2007). Profitable business models and market creation in the context of extreme poverty: A strategic view. *Academy of Management Perspectives*, 21(4), 49–63.
- McDermott, G. A., Corredoira, R. A., & Kruse, G. (2009). Recombining to compete in global markets: How public policy can improve upgrading in emerging market societies. *Academy of Management Journal*, 52(6), 1270–1296.
- Narayan-Parker, D. (2000). *Voices of the poor: Can anyone hear us?* New York: Oxford University Press for the World Bank.
- Nelson, F. (2000). Sustainable development and wildlife conservation in Tanzanian Maasailand. *Environment, Development and Sustainability*, 2(2), 107–117.
- Nigri, G., & Del Baldo, M. (2018). Sustainability reporting and performance measurement systems: How do small- and medium-sized benefit corporations manage integration? *Sustainability*, 10(12), 4499.
- Nigri, G., Del Baldo, M., & Agulini, A. (2020). Governance and accountability models in Italian certified benefit corporations. *Corporate Social Responsibility and Environmental Management*, 27(5), 2368–2380.
- OECD. (2001). *The DAC guidelines. Poverty reduction*. Paris: Development Assistance Committee.
- Peredo, A. M. (2001). *Communal enterprises, sustainable development and the alleviation of poverty in rural Andean communities*. Unpublished Ph.D., University of Calgary, Calgary.
- Peredo, A. M. (2003). Emerging strategies against poverty: The road less travelled. *Journal of Management Inquiry*, 12(2), 155–166.
- Peredo, A. M., & Christman, J. J. (2006). Toward a theory of community-based enterprise. *Academy of Management Review*, 31(2), 309–328.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. How to reinvent capitalism – And unleash a wave of innovation and growth. *Harvard Business Review*, 89(1–2), 62–77.
- Prahalad, C. K. (2004). *The fortune at the bottom of the pyramid-eradicating poverty through profits*. Upper Saddle River: Wharton School Publishing.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experience: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5–14. <https://doi.org/10.1002/dir.20015>.
- Schaltegger, S., Hansen, E., & Lüdeke-Freund, F. (2016). Business models for sustainability: Origins, present research, and future avenues. *Organization & Environment*, 29(1), 3–10.
- Schoneveld, G. C. (2020). Sustainable business models for inclusive growth: Towards a conceptual foundation of inclusive business. *Journal of Cleaner Production*, 277(124062), 1–13. <https://doi.org/10.1016/j.jclepro.2020.124062>.
- Stiglitz, J. (2002). *Globalization and its discontents*. New York: Norton.
- Storper, M. (2005). Society, community, and economic development. *Comparative International Development*, 39(4), 30–57.
- Tenenbaum, D. (1996). Entrepreneurship with a social conscience. *Technology Review*, 99(4), 18–30.
- Tracey, P., Phillips, N., & Jarvis, O. (2011). Bridging institutional entrepreneurship and the creation of new organizational forms: A multilevel model. *Organization Science*, 22(1), 60–80.
- UN (United Nations). (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations. Available at: <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>. Accessed 7 Mar 2016.
- UNDP. (2008). *Creating value for all. Strategies for doing business with the poor*. Geneva: UNDP.
- WBCSD (World Business Council for Sustainable Development). (2007). Doing business with the world – The new role of corporate leadership in global development. <http://www.wbcd.org/>. Accessed 7 May 2011.
- WBCSD (World Business Council for Sustainable Development). (2008). Inclusive business: Profitable business for successful development. Brochure of the WBCSD-SNV inclusive business alliance. <http://www.wbcd.org/web/publications/inclbiz.pdf>. Accessed 13 Feb 2012.

Inclusive Business Models

► Inclusive Business

Inclusive Finance

► Inclusive/Selective/Compliant Banking

Finance/

Inclusive Innovation

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Synonyms

[Innovation](#); [Social innovation](#)

Definition

Innovation is a phenomenon that concerns the agenda of many disciplines when its developmental process is examined. In today's conditions where change is continuous, considering the changing needs of society, it has an important place not only in the business world but also in social practices, political, and economic fields.

The economic events in the world cause innovation to have an important place in national economies. Beyond just creating economic value, innovation has an important function for companies today. Social problems such as poverty, inequality, climate change, and hunger, which the world is increasingly facing, have become important on a global scale, and the elimination of these problems and the reduction of the effects that will strengthen these problems can be achieved with solutions for social issues. Inclusive innovation focuses on social problems and the innovative solutions that can be found. Inclusive innovation is defined as "the development of new ideas aimed at creating opportunities that enhance social and economic well-being for the disenfranchised members of society" (George et al., 2012). It contains welfare-enhancing efforts for the segment of society that are imprisoned or excluded from innovation and their rights.

What Does Innovation Refer To?

Today, as a result of changing and developing technology, innovation is a concept that constantly affects every aspect of human life and

continues to change and develop. When the development process of the concept of innovation is examined, it is seen that the first definition by Schumpeter (1954) emphasizes the outputs that create a new method, a new quality, a new market, and a new organizational structure. Later definitions of innovation were made based on Schumpeter's definition and different aspects of the concept were emphasized by different researchers. According to Drucker (1985), who emphasizes innovation as a tool of entrepreneurship, innovation is an action that creates a new capacity to provide welfare and provides resources. Porter (1990) emphasized the ability of innovation to create competitive advantage and stated that innovation includes both new technologies and new ways of doing business. Damanpour (1991) defines innovation as the adaptation, development, and generation of new ideas on the success of a firm. Trott (2008), on the other hand, considered innovation from a management process perspective and defined it as the management of all activities involved in the creation of ideas, technology development, the manufacturing process of a new or improved product, or the marketing process from this perspective. The concept of innovation is its basis; it is a concept that completely includes the formation of a new product, service, or process (Brentani, 2001). With this perspective, Hisrich and Peters (2002) defined innovation as the whole of developing a new product or process, creating a new organizational structure, or developing a method. Basically, innovation is the transformation of a new idea into a product that will be demanded in the market and have commercial value (Alpkan et al., 2011). Although there are many definitions of the concept of innovation in the literature, the most accepted definition is still the definition in the Oslo Manual published by the European Commission and the OECD. In the explanations in the Oslo manual, innovation is defined as the realization of a new or significantly improved product (good or service), process, new marketing method, or a new organizational method in internal implementation, workplace organization, or external relations (OSLO, 2005).

An innovative perspective enables companies to gain competitive advantage, increase their market share, and ensure efficiency in their processes. In addition, when viewed from a wider perspective, it has a holistic perspective with its social and economic results in terms of increasing social welfare, sustainable economic growth, increasing employment, and improving living standards, contributing to regional and national development. Therefore, it has an importance that will create a competitive advantage for companies not only economically but also socially. Today, with the increasing awareness of social problems, innovative ideas need to be emerged, implemented, and disseminated in order to solve social problems and meet social needs. Social innovation is a concept that expresses the development and improvement of new systems in solving social problems (Seçkin Halaç et al., 2014). For this reason, the primary goal of social innovation, whose starting point is social problems, is not economic. Therefore, as a result of social innovation, there is an effort to achieve social impact rather than a high profit expectation of organizations (Djellal & Gallouj, 2011). Innovation is about transforming the knowledge acquired or possessed by companies and their abilities in this field into a useful element for society with the help of technology. This transformation can create a social impact when it is about creating useful value in response to social problems beyond just creating economic value. Inclusive innovation, just like social innovation, aims to reveal the positive effects of innovation at the social level and to find solutions to social problems in order to improve the quality of life of societies.

Inclusive Innovation

Since the priority in developing countries is to create economic value, the majority of innovation policies implemented in both the public and private sectors appeal to high-income consumers both locally and globally, and the majority of low-income groups are generally excluded (Mytelka, 2000; KraemerMbula & Wamae, 2010; Fu et al., 2011; Foster & Heeks, 2013).

Albornoz (2013), who argues that the most important reason for this situation is innovation-based inequality, states that innovations with competitiveness-enhancing features result in social exclusion due to the neglect of the wishes and needs of the low-income group in the society (Levidow & Papaioannou, 2018; Patiño-Valencia et al., 2020).

Social structural problems such as inequality, corruption, and social exclusion that arise as technology develops and production and consumption increase are part of the dark side of the system. In recent years, the innovation literature has been trying to analyze, improve, and solve these problems, initially with social innovation and then with inclusive innovation. Since both concepts actually involve innovation, the conceptual similarities with each other are easily noticeable (Patiño-Valencia et al., 2020). The main point where they differ from each other is that inclusive innovation refers to innovations aimed at reducing the exclusion conditions of a certain population, while social innovation is a concept that expresses innovative solutions to a problem that covers the entire society. Although there is a difference between them, both innovations are innovations and improvements that are carried out to increase the welfare of the society. Rosenberg (2004), in his study explaining why technological innovation is the determining force in the economic growth of countries, discussed the most distinctive features of R&D and innovation in countries with developed industrial sectors. These features are remarkable in terms of having effects that increase the welfare level of countries. Considering that innovation practices have a competitive advantage-creating feature for companies, we can say that social inequality has begun to take shape in a different perspective as social inequality has been noticed and given importance.

Inclusive innovation refers to the fact that a group or individuals separated from the general society become a part of the innovation ecosystem by meeting their needs on a particular subject, benefiting from innovations or allowing them to be included in the design and implementation process (Edquist & Hommen, 1999; Müller, 2010; Foster & Heeks, 2013) With the increasing

importance given to inclusive innovation in the past decade, it can be said that the concept has led to the awareness of its effects on academic debates, public policies, and sustainable development. Foster and Heeks (2013) define inclusive innovation as the means by which new goods and services are developed by and/or the lowest-income population. In this context, it emphasizes the importance of the active inclusion of the low-income group, who are excluded from the society, in contrast to the economic value-oriented perspective of traditional innovation (Peerally et al., 2019).

When the inclusive innovation literature is examined, it is possible to list the common features specified in the definitions of inclusive innovation as follows: how important the issues to be addressed from an innovation perspective are for the excluded groups; the extent to which the excluded groups are involved in the development of innovative products; and that innovative products have a significant impact on the livelihoods of low-income consumers (Utz & Dahlman, 2007; Altenburg, 2009; Cozzens & Sutz, 2012; Foster & Heeks, 2013). The common point in the definitions emphasizes the importance of addressing existing social problems and creating social value, especially for communities separated from the general public (Foster & Heeks, 2013; Heeks et al., 2013; Santiago, 2014). Innovation, which is a supporter of technological and economic development, is also the driving force of social change. It also brings social welfare with it. Inclusive innovation, when viewed from this perspective, aims to make innovation studies a mechanism that can meet the needs of all segments of society and can be easily accessed, by giving priority to those who have less resources in accessing innovation, in order to combat global problems such as poverty and inequality, as reflected in the Sustainable Development Goals (Edwards-Schachter et al., 2012). It facilitates access to opportunities, contributes to equality, and aims to improve social and economic welfare (George et al., 2012).

Although studies on inclusive innovation are still in their infancy, it is one of the main topics of sustainable development. Barriers faced by disenfranchised individuals or communities need

to be addressed regularly and resolved through inclusive innovations. For this reason, it is important for academics, policy makers, and the private sector to give importance to ideas that provide inclusive innovation, to help design new ideas, and to help create solutions, in terms of shaping the future and increasing welfare conditions.

Summary

Innovation policies, carried out with the priority of creating economic value, primarily appeal to high-income groups and cause low-income groups to be ignored. Inclusive innovation refers to the fact that a group or individuals who are separated from the general society become a part of the innovation ecosystem by meeting their needs on a particular subject, making use of innovations or enabling them to be involved in the design and implementation process. Considering that innovation policies provide an important competitive advantage for companies, efforts to eliminate problems such as imbalance between income groups and social inequality are increasing day by day and force companies to change with social awareness. Innovation, which is a supporter of technological and economic development, brings social welfare. For these reasons, inclusive innovation aims to make innovation studies an easily accessible mechanism that can meet the needs of all segments of society for the global struggle.

Cross-References

- [Social Entrepreneurship](#)
- [Social Innovation](#)

References

- Albornoz, M. (2013). Innovación, equidad y desarrollo latinoamericano. *Isegoria, Revista de Filosofía Moral y Política*, 48, 111–126.
- Alpkan, L., Ergün, E., Bulut, Ç., & Yılmaz, C. (2011). Şirket girişimciliğinin şirket performansına etkileri. *Doğuş Üniversitesi Dergisi*, 6(2), 175–189.

- Altenburg, T. (2009). Building inclusive innovation systems in developing countries: Challenges for IS research. In B. A. Lundvall, K. J. Joseph, & C. Chaminade (Eds.), *Handbook on innovation systems and developing countries: Building domestic capabilities in a global context* (pp. 33–57). Cheltenham, UK: Edward Elgar.
- Brentani, U. (2001). Innovative versus incremental new business services: Different keys for achieving success. *Journal of Product Innovation Management*, 18(3), 169–187.
- Cozzens, S., & Sutz, J. (2012). *Innovation in informal settings: A research agenda*.
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555–590.
- Djellal, F., & Gallouj, F. (2011). *Social innovation and service innovation*. Paper presented at conference challenge social innovation, Sep 2011, Vienne, Austria.
- Drucker, P. (1985). *Innovation and entrepreneurship*. Routledge.
- Edquist, C., & Hommen, L. (1999). Systems of innovation: Theory and policy for the demand side. *Technology in Society*, 21(1), 63–79.
- Edwards-Schachter, M. E., Matti, C. E., & Alcántara, E. (2012). Fostering quality of life through social innovation: A living lab methodology study case. *Review of Policy Research*, 29(6), 672–692.
- Foster, C., & Heeks, R. (2013). Conceptualising inclusive innovation: Modifying systems of innovation frameworks to understand diffusion of new technology to lowincome consumers. *European Journal of Development Research*, 25(3), 333–355.
- Fu, X., Pietrobelli, C., & Soete, L. (2011). The role of foreign technology and indigenous innovation in the emerging economies: Technological change and catchingup. *World Development*, 39(7), 1204–1212.
- George, G., McGahan, A. M., & Prabhu, J. (2012). Innovation for inclusive growth: Towards a theoretical framework and research agenda. *Journal of Management Studies*, 49(4), 661–683.
- Heeks, R., Amalia, M., Kintu, R., & Shah, N. (2013). Inclusive innovation: Definition, conceptualisation and future research priorities. *Development informatics working paper*, (53).
- Hisrich, R. D., & Peters, M. P. (2002). *Entrepreneurship*. McGraw-Hill.
- KraemerMbula, E., & Wamae, W. (2010). Adapting the innovation systems framework to SubSaharan Africa. In E. KraemerMbula & W. Wamae (Eds.), *Innovation and the development agenda* (pp. 65–86). Paris: OECD/IDRC.
- Levidow, L., & Papaioannou, T. (2018). Which inclusive innovation? Competing normative assumptions around social justice. *Innovation and Development*, 8(2), 209–226.
- Müller, J. (2010). *Befit for change*. Paper presented at the FAU conference; 17–19 March, Djursland, Denmark.
- Mytelka, L. K. (2000). Local systems of innovation in a globalized world economy. *Industry and Innovation*, 7(1), 15–32.
- OSLO (2005). *Oslo manual. Guidelines for collecting and interpreting innovation data*. Online 10.06.2022. <https://www.oecd.org/about/34711139.pdf>
- Patiño-Valencia, B., Villalba-Morales, M. L., Acosta-Amaya, M., Villegas-Arboleda, C., & Calderón-Sanín, E. (2020). Towards the conceptual understanding of social innovation and inclusive innovation: A literature review. *Innovation and Development*, 1–22.
- Peerally, J. A., De Fuentes, C., & Figueiredo, P. N. (2019). Inclusive innovation and the role of technological capability-building: The social business Grameen Danone Foods Limited in Bangladesh. *Long Range Planning*, 52(6), 101843.
- Porter, M. E. (1990). *Competitive advantage of nations: Creating and sustaining superior performance*. Londra: MacMillan.
- Rosenberg, N. (2004). *Innovation and economic growth*. OECD.
- Santiago, F. (2014). Innovation for inclusive development. *Innovation Development*, 4(1), 1–4.
- Schumpeter, J. (1954). *History of economic analysis*. New York: Oxford University Press.
- Seçkin Halaç, D., Eren, H., & Bulut, Ç. (2014). Sosyal yenilikçilik: bir ölçek geliştirme çalışması. *H.Ü. İktisadi ve İdari Bilimler Fakültesi Dergisi*, 32(1), 165–190.
- Trott, P. (2008). *Innovation management and new product development*. Pearson Education.
- Utz, A., & Dahlman, C. (2007). Promoting inclusive innovation. In M. A. Dutz (Ed.), *Unleashing India's innovation: Toward sustainable and inclusive growth* (pp. 105–129). Washington, DC: World Bank.

Inclusive Leadership

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Synonyms

Collaborative leadership; Corporate social responsibility; Inclusive management; Sustainability governance; Sustainability management; Values-based leadership

Definition

Sustainability management includes an approach to governance and leadership which is consistent with the principles of social, economic, and environmental sustainability (Janakiraman 2019; Holliday et al. 2002). The task of a sustainability manager is to overcome competing trade-offs and create equitable situations without compromising one of the components of sustainability (Schaltegger 2012). In the broader leadership literature, the emphasis has been on the traditional model of individual heroic leaders (Crevani et al. 2007) whose character traits and skills (Kouzes and Posner 2017) are correlated with what counts as good leadership. The idea is of leadership as unitary command (Crevani et al. 2007) that is undertaken by an individual who directs the organization in a relatively homogeneous environment and societal context (Bourke and Dillon 2016).

This leadership approach is insufficient for addressing the wicked problems arising from the unsustainability of development based on ecological exploitation and destruction. The idea of inclusive leadership attempts to address the limitations of the heroic approach by identifying capacities and values that are based on distributive models (Gavan 2017; Janakiraman 2019; Tams 2018); collaborative approaches (Bourke and Dillon 2016); and partnering approaches of leadership (Holliday et al. 2002). A central focus of inclusive leadership is co-leadership with stakeholders where diverse opinions and ways of contributing are valued and fostered (Bortini et al. 2016). The key elements of inclusion are: fairness; respect for diversity; nonviolence; belonging; and empowerment (Bourke and Dillon 2016). These elements need to be afforded to all stakeholders, including groups who are challenging the social corporate responsibility credentials of a business.

Introduction

The net effect of the unsustainable business operations of mining and agribusiness entities has seen an increase in global issues of: abuses

of human and nonhuman species rights; environmental exploitation and degradation; and climate change that threatens the survival of island nations, cultures, and Indigenous population (O'Faircheallaigh 2013; Tester 2013). The need for sustainability management is therefore a central matter of concern for all nation states and business entities. Holliday et al. (2002, p. 22) explain that corporate social responsibility involves undertaking transparent governance practices and being open to dialogue with all interested stakeholders. Kouzes and Posner (2017) describe it succinctly when they claim that dialogue is not a monologue and is between equals without exploitation. An emphasis is required on listening, learning, and partnering with impacted stakeholders and managing issues co-operatively (Holliday et al. 2002).

Leadership models have focused on the individual character traits of the person with the implication being that with the right mix of qualities, sustainability managers will be able to implement the sustainability goals of their business entity. Governance is more than a matter of the personal capacities of a leader. Corporate social responsibility issues cannot be collapsed to issues of poor leadership alone. Irrespective of the leader's qualities, businesses that drive capitalist economic development have pursued business as usual and in most cases have avoided accountability for harm done (Butler 2015). For example, changing the local leader of a mining corporation in situations of community outrage (Brueckner and Ross 2010) leaves unexamined the way corporate governance structures are geared towards maximizing profit at the expense of minority group stakeholders (Higgins 2010; Mining, Minerals & Sustainable Development 2002). This power dynamic of business elites gaining at the expense of the public is not restricted to the mining sector. For example, according to Cockburn (2019), the Hayne royal commission (2018–2019) into banks in Australia exposed the blatant disregard for the rights of customers and for the industry regulator. Charges and fees were continued on bank accounts of customers who had died, loans were given to customers without due care to ensure their capacity to repay them, and banks foreclosed

on farmers and other small businesses for dubious and unfair reasons (Cockburn 2019). The Australian Banking Association has been called on to change the industry code to stop banks charging default interest on farmers in drought or in national emergencies (Smethurst 2019).

Inclusive leadership approaches can make a contribution to turning the tide of failures of corporate social and environmental responsibility. Higgins argues that leadership is needed to eradicate the fifth crime against peace, namely, ecocide. Ecocide is defined as:

The extensive destruction, damage to or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished. (Higgins 2010, p. 63)

Higgins suggests that if ecocide is not addressed, this century will be known as a century of resource wars because of the increasing competition and conflict for the limited resources of the planet. A radical shift is required in the governance structures and workplace cultures of business entities to move towards a new paradigm of sustainable progress (Holliday et al. 2002). It is also the case that inclusive leadership in other spheres of society is needed to enable a radical shift in the underpinning capitalist values of competition, the self regulating market, and extreme wealth as the measure of success and value.

The Sustainability Issue

To address ecocide and to achieve sustainable development, leadership in business and civil society needs to be inclusive and framed in terms of social and environmental justice principles. Such a framing rests on a critical awareness of unequal power dynamics and the ability to act fairly and with due awareness of the contextual factors in a given situation. Multinational mining corporations are highly skilled and resourced to protect their interests and at interpreting the legal and political context in which they operate. They know how to use power in their own self interest. A critical awareness of power

challenges how dominant groups exercise their power and at who's cost this might be occurring. Context-sensitive thinking challenges a manager to be inclusive of all stakeholder's interests and to undertake dialogue and negotiations with an all subjected understanding of social and environmental justice. The notion of all subjected justice (Fraser 2009) requires the inclusion of all people who have an interest in, or are being impacted by, the corporation's operations. Further, all parties are considered equal and thus are to have an equal voice in the negotiation of a solution.

One of the difficulties with leaving the task of being socially responsible to corporations is that there is no guarantee they will act in the interests of the public if it is perceived to not be in their interests to do so (Kinley et al. 2007). In Australia, the 2001 Corporation's Act does not require businesses to act in the public's interest and relies on their own interpretation of enlightened self interest (Broomhill 2007). Business managers are legally accountable to their shareholders. They have no legal responsibility to other stakeholders provided they are complying with the laws of the land and licensing requirements. A commitment to inclusive leadership in the resource extraction sector is very complex due to the range of issues related to use of natural, nonrenewable resources for private gain. The operations of mining corporations pose short- to long-term threats to: ecosystem diversity; human and nonhuman rights and well-being; involve issues of land rights (Cleary 2017); and contested claims to natural resources (White 2018). The trade-off for the host society in terms of jobs for its citizens and royalties for the government are often out of step with the extreme wealth that accumulates in the hands of a few elite business owners (Woodley 2020).

Inclusive leadership also ensures all parties are included in addressing matters affecting sustainability and the aim is to act in the public interest without trading the interests and rights of minority groups (Holliday et al. 2002). For this reason, an inclusive leadership approach challenges narrow interpretations of a corporation's legal obligations in their host society and calls for a moral regard for the impact of their business operations. An implication is that managers may often be acting

against their company's interest in the short term. This is a counter intuitive challenge involving the equal valuing of local communities, nonhuman animals, and ecosystems alongside business profits. The moral right to operate in a locality can rest in part on a social license to operate which involves local stakeholders giving their tacit consent and thus giving legitimacy to the business entity (Trebeck 2008). The loss of a social license to operate in ecological conflict situations (Martinez-Alier 2002) can seriously affect the reputation and profitability of a business.

A social license to operate is highly prized by business entities and is often the motivation behind being seen to exercise corporate social responsibility. Bice et al. (2017) describe a public interest model that brings a focus to putting a social license to operate on the map of sustainability leadership. It shows that the challenge of inclusive leadership involves grappling with the intersecting power and contextual factors which pose complex risk and licensing issues for stakeholders. Bice et al. (2017) suggest the idea of a social license to operate is not sufficiently understood and that it may be more complicated than is evident from a cursory glance. They identify the need to critically understand the intersections of social, legal, and political power dynamics and the related vested interests of stakeholders. The ability to think complexly and act fairly where this may not involve wins or pay offs for the dominant stakeholder groups are crucial capacities of inclusive leadership. Naïve thinking by sustainability managers in situations of contestation can reinforce dominant power interests at the expense of other stakeholders. The cost is typically paid by the environment and low-power social groups and localities. Sustainability leadership needs to show how to work this key repressive power dynamic to facilitate different outcomes based on social justice as an integral aspect of sustainability (Ross 2017).

Research shows that the exercise of corporate social responsibility tends to be short-term and philanthropic rather than integrated into the governance and operational systems of companies (Anderson and Landau 2006). In the absence of international code of conduct for business entities

and in contexts of a light touch by regulatory bodies, there is no external accountability for businesses to act in the public interest as well as their business interests. Traditional leadership approaches tend to underestimate the issue of structured inequality of vested power interests which are not immediately amenable to local protests or reasoned arguments. Inclusive leadership approaches, despite their strengths, are also susceptible to being naïve about power.

The shift towards sustainable development needs training in nonviolent and conflict resolution leadership for the public, government officials, politicians, and business managers. It will take a concerted effort of all subjected stakeholders to find ways of addressing the wicked problem. When a society is dependent on industries which are unsustainable and causing harm and injustice, it is an ethical dilemma of major proportions. Sustainability management is everyone's business with each stakeholder group having different orders of responsibility to contribute to just and sustainable outcomes. Ross (2017) argues that the regulatory authority has responsibility to ensure public health, safety, and well-being; the mining industry has responsibility to undertake substantial contributions as part of an expanded notion of corporate social responsibility; and the public have a responsibility to stand together with adversely impacted stakeholders to ensure social justice is achieved.

Summary: Where to Start and How to Proceed?

An inclusive leadership model incorporates the all subjected stakeholders as equals in addressing issues related to the ecological conflict. The underpinning idea of collaboration across differences of power and agendas holds promise for a just, sustainable, and nonviolent way forward. There is a rich tradition of material and a broad range of ways to undertake nonviolent activism in ecological conflict situations (Pickerill 2013; Shaw 2013). For example, Sharp (2005) provides a framework for liberation which draws on a resource of 198 methods of nonviolent action for

activists. The citizenry has had to become well versed in how to mount nonviolent campaigns and protests and international research shows the effectiveness of large-scale mass protests which are nonviolent (Chenoweth and Stephan 2011). The game changer for sustainable management will be when business managers, politicians, the mainstream media, and the elites of society step into a collaborative instead of a combative relationship with socio-environmental activists.

Gandhi believed that true civilization “would promote an expansive sense of trusteeship – or nurturing the world and remembering that as finite beings we never really ‘own’ anything but hold it temporarily as ‘trustees’” (Bakshi 2013, p. 243). The power of love as both a feeling and an action and the related capacity of empathy can make the difference. Gandhi recognized the power of empathy in his efforts to influence the British colonialists during India’s struggle for independence. He understood the change needed would not come from legislators or the “ideological vanguard” but from “an open, ongoing process of voluntary social-cultural transformation” (Bakshi 2013, p. 253).

Inclusive leadership is a context and power-aware approach where the values of justice, love, nonviolence, collaboration, different orders of responsibility, and trusteeship form a shared ethical sensibility for guiding efforts for sustainable progress.

Cross-References

- [Human Rights](#)
- [Leadership Ethics](#)
- [Sustainability as a Management Approach](#)

References

- Anderson, H., & Landau, I. (2006). *Corporate social responsibility in Australia: A review*. <http://www.buseco.monash.edu.au/blt/wclrg/working-paper%204.pdf>
- Bakshi, R. (2013). Empathy and transformation: The search for well-being and justice after Gandhi. In T. Sethia & A. Narayan (Eds.), *The living Gandhi: Lessons for our times* (pp. 241–255). New Delhi: Penguin Books.
- Bice, S., Brueckner, M., & Pforr, C. (2017). Putting social license to operate on the map: A social, actuarial and political risk and licensing model (SAP Model). *Resources Policy*, 53, 46–55.
- Bortini, P., Paci, A., Rise, A., & Rojnik, I. (2016). *Inclusive leadership: Theoretical framework*. https://www.academia.edu/36862490/INCLUSIVE_LEADERSHIP
- Bourke, J., & Dillon, B. (2016). *The six signature traits of inclusive leadership*. <https://www2.deloitte.com/insights/us/en/topics/talent/six-signature-traits-of-inclusive-leadership.html>
- Broomhill, R. (2007). *Corporate social responsibility: Key issues and debates*. Dunstan papers series in association with Flinders University. Adelaide: Flinders University.
- Brueckner, M., & Ross, D. (2010). *Under corporate skies: A struggle between people, place and profits*. Fremantle: Fremantle Press.
- Butler, P. (2015). *Colonial extractions: Place and Canadian mining in contemporary Africa*. Toronto: University of Toronto.
- Chenoweth, E., & Stephan, M. (2011). *Why civil resistance works: The strategic logic of nonviolent conflict*. New York: Columbia University Press.
- Cleary, P. (2017, September). Title fight: The great philanthropist vs the people of the Pilbara. *The Monthly*, pp. 24–32.
- Cockburn, G. (2019, February 22). Bank’s failures destroyed us: Couple sues Westpac in first class action. *Courier Mail*, p. 17.
- Crevani, L., Lindgren, M., & Packendorff, J. (2007). Shared leadership: A post-heroic perspective on leadership as a collective construction. *International Journal of Leadership Studies*, 3(1), 40–47.
- Fraser, N. (2009). Who counts? Dilemmas of justice in a post Westphalian world. *Antipode*, 41(1), 281–297.
- Gavan, V. (2017). *Five ways to be an inclusive leader and build an inclusive culture*. <https://www.maximus.com.au/inclusive-leader-5-ways/>
- Higgins, P. (2010). *Eradicating ecocide: Laws and governance to prevent the destruction of our planet*. London: Shephard-Walwyn Publishers Ltd.
- Holliday, C., Schmidheiny, S., & Watts, P. (2002). *Walking the talk: The business case for sustainable development*. Sheffield: Greenleaf Publishing Ltd.
- Janakiraman, M. (2019). *Inclusive leadership: Critical for competitive edge*. <https://mobilityexchange.mercer.com/Insights/article/Inclusive-Leadership-Critical-for-Competitive-Advantage>
- Kinley, D., Nolan, J., & Zerial, N. (2007). *The politics of corporate social responsibility: Reflections on the United Nations human rights norms of corporations* (pp. 30–42). Sydney: Sydney Centre for International Law.
- Kouzes, J., & Posner, B. (2017). *The leadership challenge: How to make extraordinary things happen in organisations*. Hoboken: Wiley.

- Martinez-Alier, J. (2002). *A study of eco-conflicts and valuation*. Cheltenham: Edward Elgar Publishers.
- Mining, Minerals & Sustainable Development (MMSD). (2002). *Breaking new ground*. London: Earthscan Publications.
- O’Faircheallaigh, C. (2013). Registered native title bodies corporate and mining agreements: Capacities and structures. In T. Bauman, L. Streiein, & J. Weir (Eds.), *Living with native title: The experiences of registered native title corporations*. Canberra: AIATSIS Research Publications.
- Pickerill, J. (2013). *Cyberprotest: Environmental activism online*. <https://www.manchesterhive.com/view/9781847793836/9781847793836.xml>
- Ross, D. (2017). A research-based model for corporate social responsibility: Towards accountability to impacted stakeholders. *Journal of Corporate Social Responsibility*, 2(8), 1–11.
- Schaltegger, S. (2012). Sustainability management. In S. Idowu, N. Capaldi, A. das Gupta, & L. Zu (Eds.), *Encyclopedia of corporate social responsibility*. Berlin: Springer.
- Sharp, G. (2005). *Waging nonviolence struggle: 20th century practice and 21st century potential*. Manchester: Extending Horizons Books.
- Shaw, R. (2013). *The activist’s handbook: Winning social change in the 21st century*. Berkeley: University of California Press.
- Smethurst, A. (2019, March 3). Shorten’s lifeline to evicted farmers. *Sunday Mail*, p. 5.
- Tams, C. (2018). *Bye bye heroic leadership. Here comes shared leadership*. <https://www.forbes.com/sites/carstentams/2018/03/09/bye-bye-heroic-leadership-here-comes-shared-leadership/#aca64622c67c>
- Tester, F. (2013). Climate change as a human rights issue. In M. Gray, J. Coates, & T. Hetherington (Eds.), *Environmental social work* (pp. 102–118). New York: Routledge.
- Trebeck, K. (2008). Exploring the responsiveness of companies: Corporate social responsibility to stakeholders. *Social Responsibility Journal*, 4(3), 349–365.
- White, R. (2018). Ecocentrism & criminal justice. *Theoretical Criminology*, 22(3), 342–362.
- Woodley, M. (2020). The wrong side of native title, the right side of mining. In D. Ross, M. Brueckner, M. Palmer, & W. Eaglehawk (Eds.), *Eco-activism and social work: New directions in leadership and group work* (pp. 61–73). London: Routledge.

Inclusive Management

- ▶ [Diversity Management](#)
- ▶ [Inclusive Leadership](#)

Inclusive Modernity

- ▶ [Sustainable Modernity](#)

Inclusive/Selective/Compliant Finance/Banking

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Synonyms

[Financial inclusion](#); [Inclusive finance](#); [Responsible banking](#)

Definition

Inclusive banking encapsulates the systematic approaches adopted to the provision of banking services which ensures that both the services and the processes through which they are developed and distributed are useful to people, communities, and society, do not have detrimental or exploitative impacts, and are nondiscriminatory. Inclusive banking is a more recent addition to the sustainability discourse that builds on but differs from financial inclusion and microfinance (Coetzee 2010). A focus on the practical design of services and the implementation of institutional measures that address the causes of financial exclusion and barriers to financial inclusion allow inclusive banking to combine development concerns with the business of banking. It is therefore a dynamic concept that melds social justice principles, organizational values, and economic considerations. Mainstream commercial banks as well as nonbank financial institutions, telecommunications and digital finance companies, non-governmental institutions, governments, and

regulators all have a role to play in the development of inclusive approaches to providing core banking services. This makes inclusive banking a multi-stakeholder activity that requires consultation, commitment at policy and resource levels, and cooperation. It is not the sole responsibility of banks.

Introduction

Finance has been found to have a pervasive influence on persistent inequality, and there are persuasive arguments for a more inclusive approach to supplying and accessing banking services to transition towards more sustainable financial systems and sustainable growth (Beck et al. 2007a, b; Demirgüç-Kunt and Levine 2009; Demirgüç-Kunt et al. 2017). The Sustainable Development Goals' pledge to leave no one behind emphasizes that issues of equality, inclusion, and non-discrimination are important to development and peace in societies. Banking services provide tools for executing transactions, managing money, accumulating savings and assets, and borrowing to smooth consumption over time. Access to these financial services is seen by policy makers as an enabler of several of the SDGs, because such access enables effective participation in economic activities and creates a pathway to poverty reduction, tackling inequality and promoting social cohesion of individuals (UN Global Compact and KPMG 2016; Klapper et al. 2016; Demirgüç-Kunt et al. 2017; Abor et al. 2018). With increased financialization, pressures for inclusive banking are growing. Financialization is evident in a decline in the number of transactions that are concluded using cash, the widespread use of credit to fund consumption and the importance of individuals' credit history (Martin 2002; French et al. 2011; Appleyard et al. 2016).

Inclusive banking is part of a wider developmental concern with financial inclusion. Indeed, the term inclusive banking has been used interchangeably with inclusive finance and financial inclusion (Ahamed et al. 2018). According to the

World Bank Financial Inclusion Database Index, in 2017, 1.7 billion adults were considered financially excluded worldwide because they do not have an account with a financial institution. Certain groups in society are overrepresented among the unbanked. These include those on low incomes or who face some other type of adverse financial situation or economic vulnerability, women, the disabled, youths, the aged, those who reside in certain localities and regions, and those who are unaware of or do not understand banking options that are available to them (Allen et al. 2016; Demirgüç-Kunt and Klapper 2012a; Atkinson and Messy 2013; Martinson and Martinson 2016).

Inclusive Banking and Financial Inclusion

As a concept, definitions of financial inclusion commonly focus on barriers to financial services, ease of access, the range of products that are available universally, and the cost to consumers of accessing and using these products. Mehrotra and Yetman (2015) simply define financial inclusion as access to financial services. In its widest sense, this would include access to finance for all purposes including transactions, credit, contingency planning, asset accumulation, and wealth creation. HM Treasury (2007) defined financial exclusion as being characterized by having no bank account, no savings, a lack of affordable credit, no assets, no access to money advice, and no insurance. This definition of financial exclusion demonstrates the importance of traditional banking products and of the institutions that supply these products to notions of inclusiveness in finance. Given that ownership of an account with a bank or formal financial institution is a key metric used by the World Bank to measure the degree of financial inclusion in countries, the role of financial institutions, as businesses in crafting and operationalizing solutions to the problems causing financial exclusion, cannot be ignored (Demirgüç-Kunt and Klapper 2012b).

Inclusive banking relates to the business operations and societal impact of all those institutions that undertake the business of banking. The focus on business operations highlights the institutional and practical implementation aspects of inclusive banking. By virtue of their position as the primary formal financial institutions in most countries, banks play an important role in achieving both social and economic inclusion. This can create a temptation to conceptualize inclusive banking quite narrowly as mainstream banking efforts that contribute to meeting the financial needs of the poor and to the goals of poverty reduction and social cohesion. However, as part of the wider efforts to promote the inclusion of all sectors of society into formal financial systems, the business of inclusive banking cannot be taken as exclusive to banks. The ability to provide transaction banking and credit are core retail banking activities, but they are not the sole preserve of banks as a range of nonbank financial institutions (NBFIs) also provide credit and other retail financial services to individuals and small businesses (Corredor et al. 2014; Mader 2018). The types of institutions operating in the inclusive banking space range from banks to NBFIs, nonfinancial firms such as mobile phone operators and digital technology providers, nongovernmental organizations (NGOs), and governments.

Inclusive Banking and Social Responsibility

Inclusive banking is part of socially responsible banking, and many arguments have been presented to provide a justification for institutions to engage with inclusive banking based on good business outcomes (Boyle et al. 2015; Ahamed et al. 2018). While the term inclusive banking, if interpreted loosely, may suggest that all in society should have access, this is a challenging goal because structural factors such as competitive conditions and regulations in different settings may impact on increasing access (Owen and Pereira 2018). The practical implementation of inclusive banking is complex, because the factors underpinning financial exclusion are multifaceted

and the country context is critical to what would constitute inclusive banking in different instances. For example, in developing countries with low levels of educational attainment among the population and poor human development, studies have shown a positive association between years spent in schooling and access to banks (Arora 2012). This suggests that efforts to make banking inclusive need to be complemented with measures for improving education levels, not just financial literacy, among the unbanked to combat demand side barriers to inclusive banking. On the supply side, institutions with a responsibility for and commitment to inclusive banking equally need to educate their staff on the causes and consequences of financial exclusion so that appropriate business policies could be developed.

One of the reasons cited for financial exclusion is information asymmetry. Information asymmetry is a market failure that makes it difficult for the risk of potential borrowers to be evaluated sufficiently by lenders. Consequently, some people have to pay more to borrow or encounter difficulties in accessing credit. Marginalization and exclusion can occur where the policies and practices of institutions that offer banking services do not create equal opportunities to all groups in society in the areas of credit, transaction banking and asset accumulation. It is therefore essential to address these market and banking failures that limit participation in banking for all. Other factors that can exclude certain groups in society and small businesses from credit disproportionately include the extensive use of credit scoring by banks and lack of the type of assets which are deemed acceptable for use as collateral. Microfinance initiatives, like Grameen Bank, emerged to address the need for collateral in conventional banking and to provide access to credit to individuals who would otherwise have no access to formal credit. Schmidt et al. (2016) suggest that microfinance is the antecedent of inclusive banking because like the German savings and cooperative institutions that emerged in the 1800s they served the needs of those excluded from mainstream banking. They see inclusive banking institutions as those which cater to broad segments of the population including those who may currently

have, or at least had, serious problems of access to the well-established institutions. Therefore, when microfinance maintains a focus on credit and on lending to the poorest, it is only a small component of an inclusive approach to banking. In particular, access to transaction banking services provides a means for all groups in a society to carry out day-to-day economic transactions without facing additional costs, removing the poverty premium (Ellison et al. 2010).

Recognizing the limitations of a disproportionate focus on credit, provision of a wider set of basic banking services is the goal of more recent inclusive banking initiatives. In many countries, inclusive banking has become a shared goal between governments and the banking industry usually expressed in terms of a reduction of the number of households or individuals that are unbanked. Initiatives by central banks and governments can support inclusive banking such as policies to make welfare payments direct into bank accounts. The Reserve Bank of India promoted the introduction of basic bank accounts for low-income households in 2005. This was followed in 2014 by the launch of the largest financial inclusion program in the world aimed at including as many unbanked people as possible in the formal financial system by providing them with access to basic banking services (Agarwal et al. 2017). In the UK, basic bank accounts were introduced in 2000 as part of a financial inclusion strategy. These simpler accounts were to be more suited to the needs of the unbanked. The initiative supported a new government policy that introduced electronic payment of benefits and the UK's approach at the time illustrated how the private sector and government could work together to implement inclusive banking (French et al. 2008; Ellison et al. 2010). An inclusive approach to banking that is compliant with social justice principles and economic considerations is important for advanced as well as emerging and developing economies. Societal concerns about banking products relate to how the products meet consumers' needs for quick and secure transactions, liquidity, profitable asset accumulation, access, and protection from any detrimental

consequences that may accrue as a result of using bank products. These products should cater for a range of lifestyles and the widest possible cross section of society. Apart from the design of products, Decker (2004) argues the process by which products are delivered should also demonstrate a socially responsible approach to banking. The use of cost-effective digital means of making banking services available, financial capability interventions, and ensuring that customer information systems support the sale of appropriate products are all important aspects of socially responsible delivery.

Simultaneity and intangibility are two distinguishing features of banking services that create unique challenges to providing access in an inclusive way. Since the production and consumption of services tend to be done simultaneously, the location of banking services was paramount before the advent of technological advances such as online banking (Neuberger 1997). In terms of the access dimension of inclusive banking, the availability of physical as well as nonphysical channels of delivery is an important factor. Delivering banking services through mobile phones, the internet, personal computers, and cards has contributed significantly to the inclusiveness aspect of banking. While the availability of digital channels to banking can make banking more inclusive especially for those in rural areas or those who cannot for other reasons travel to bank branches, this does not always provide convenient and appropriate access (Ozili 2018). There are also concerns that stricter and more comprehensive regulation may be needed to make to make the operations of mobile payments systems sustainable as they develop (Griffith-Jones et al. 2013).

The failure of conventional banking has been found to have exclusionary consequences. Banking failure affects people who had never banked and those who have been previously banked (Ellison et al. 2010). Banking failure refers to a situation where the banks' own strategies and processes result in excluding consumers or have some other detrimental impact on consumers. Steps taken to close branches in rural areas and a lack of the required transport and

telecommunications infrastructure may make it prohibitively expensive to set up a branch resulting in financial desertification (Thrift and Leyshon 1997; French et al. 2008). These have changed the geography of the way in which banking services are provided. Similarly, banks' own strategies of refocusing on more affluent consumers can exclude those without observable wealth. The high cost of some banking products, inappropriate conditions attached to products, and redlining practices are some other factors that exclude some people and businesses (Kempson and Whyley 1999). Begley and Purnanandam (2019) have found that misselling, fraud, and poor customer service have affected those in minority population groups in the USA more than other groups. Redlining, the discriminatory practice by which creditworthy and eligible individuals were denied credit because of the composition of their neighborhoods affected minority populations disproportionately in the USA and was addressed partly through legislation such as the Community Reinvestment Act and the Equal Credit Opportunity Act to make banking more inclusive. Studies suggest that some inclusive banking initiatives and products have hidden burdens, constraints, and other barriers which create negative experiences for consumers and impact adversely on sustainable use of the financial services introduced as part of inclusive banking initiatives (Mowl and Boudot 2014; Ellison et al. 2010; Dupas et al. 2018; Agarwal et al. 2017). Conditions attached to bank accounts such as penalty charges for unauthorized overdrafts or insufficient funds to honor payments could worsen a customer's credit file, making it difficult for them to access banking services at a later. Similarly, lending strategies aimed at the excluded of banks may lead to fast credit growth, result in defaults and then in exclusion, creating a group of those who are "previously banked."

Progress in inclusive banking is made problematic by the many geographical, social, and demographic disparities that exist within and across countries. Furthermore, with demographic and other changes in society, the causes of financial exclusion evolve and present new challenges

to those engaged in designing and implementing inclusive banking initiatives. Studies also indicate that an appropriately regulated environment which caters for protection of consumers and promotes effective competition between providers of banking services is also important for inclusive banking (Owen and Pereira 2018). The benefits of some inclusive banking efforts have been called to question. Microfinance initiatives have been criticized on several grounds, especially that they lead to an unbreakable cycle of indebtedness for users (Scully 2004; Mader 2018). Though economic growth can support inclusive banking by increasing the number of people who technically can become banked, it may not address inequality of opportunity or the poverty premium and other additional costs that some groups in society will face due to financial exclusion or inappropriate financial services. These criticisms contest the widely presented view that financial inclusion is an enabler of most of the SDGs, leading to calls for studies that would explore the causal relationships between financial inclusion, poverty alleviation, and inequality more robustly (Mader 2015, 2018). Furthermore, the evidence on the effects of inclusive banking initiatives is varied and inconclusive. More evidence is needed on the demonstrable impact of inclusive banking and its ability to meaningfully support sustainable development initiatives. Though the benefits of inclusive banking and its contribution are still being debated, a set of defining characteristics of inclusive banking could be outlined as follows.

Key Features of Inclusive Banking

Inclusive banking that is socially responsible and would support the sustainable development goals is:

Anticipatory – Inclusive banking explores and considers consumers' needs and requires those engaged in developing strategies and products to promote inclusiveness to acknowledge and have a good understanding of the problems underpinning financial inclusion.

Nondiscriminatory – Inclusive banking delivers products and processes in an equitable manner so that no group of people is treated in a less favorable way because of race, gender, age, disability, or other factors.

Nonexploitative – While being economically viable for providers, inclusive banking does not penalize or exploit any sector of society and seeks to address the constraints that may make serving certain sectors of the economy a non-viable option. Providers of banking services that adopt an inclusive approach need to ensure that their own practices do not cause harm to consumers and do not result in people becoming unbanked.

Cocreative – Inclusive banking is a process that uses partnership working between different types of financial services providers, governments, policy makers, and third sector organizations to create and deliver appropriate strategies, products and processes that improve access to finance and financial services. Given the complex set of barriers and factors that may cause people to be unbanked, inclusive banking is not the sole responsibility of banks.

Transparent and accountable – Institutions that are inclusive in their approach to banking would be explicit about the values and standards they engage with to deliver their services inclusively. Inclusive banking, by definition, values diversity in its customer base. Institutions should have mechanisms in place that inform on and make it possible to evaluate the range of customers that are served and the impact on customers served. Understanding the social impact of banking strategies and taking steps to minimize these costs as well as build on the benefits is essential to CSR efforts in the inclusive banking space.

Adaptive and corrective – Inclusive banking actively seeks to reduce the barriers to participation that conventional banking practices can have. In that way, it addresses both market failures and banking failures. Institutions are challenged to adopt, as much as possible, an approach that adapts products to meet the needs of those who are

excluded rather than create a separate suite of products exclusively for the unbanked and underserved.

Summary

As access to finance features implicitly in several of the SDGs, the place of inclusive banking in sustainable development should be understood to clarify how financial inclusion contributes to the SDGs. This requires a discussion about the meaning of inclusive banking and the role of different actors in the inclusive banking space. A fundamental pillar of inclusive banking is the recognition that the causes of exclusion are complex and multifaceted. This recognition then needs to be brought into practical inclusive banking initiatives through product governance processes and operations. While 100% inclusion may not be a reality, making banking open to the widest range of people in a viable way is a realistic aim of CSR in banking. As the SDGs pledge to leave no one behind, a significant challenge for institutions engaged in inclusive banking is to monitor, capture, report transparently, and demonstrate the impact of their activities on different dimensions of financial inclusion, different segments of society, and on equality and development.

Cross-References

- [Banks and the Sustainable Development Goals](#)
- [Mis-selling](#)
- [Sustainable Development](#)

References

- Abor, J. Y., Amidu, M., & Issahaku, H. (2018). Mobile telephony, financial inclusion and inclusive growth. *Journal of African Business*, 19(3), 430–453.
- Agarwal, S., Alok, S., Ghosh, P., Ghosh, K., Piskorski, T., & Seru, A. (2017). Banking the unbanked: What do 255 million new bank accounts reveal about financial access? *Columbia Business School Research Paper* (17–12).

- Ahamed, M. M., Hob, S. J., Mallick, S., & Matousek, R. (2018). *Inclusive banking, financial regulation and bank performance: Cross-country evidence*. Paper presented at the World Bank DECRG Kuala Lumpur Seminar Series. Friday November 9, 2018, from <https://drive.google.com/file/d/134PAkB8209qnRfPydIOkVBxUe-9edtXM/view>
- Allen, F., Demirgüç-Kunt, A., Klapper, L., & Peria, M. S. M. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of Financial Intermediation*, 27, 1–30.
- Appleyard, L., Rowlingson, K., & Gardner, J. (2016). The variegated financialization of sub-prime credit markets. *Competition & Change*, 20(5), 297–313.
- Arora, R. (2012). Financial inclusion and human capital in developing Asia: The Australian connection. *Third World Quarterly*, 33(1), 177–197.
- Atkinson, A., & Messy, F. A. (2013). *Promoting financial inclusion through financial education. OECD/INFE evidence, policies and practice* (OECD Working Papers on Finance, Insurance and Private Pensions, No. 34). OECD Publishing. <https://doi.org/10.1787/5k3xz6m88smp-en>.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007a). Finance, inequality, and the poor. *Journal of Economic Growth*, 12, 27–49.
- Beck, T., Demirgüç-Kunt, A., & Martínez Peria, M. S. (2007b). Reaching out: Access to and use of banking services across countries. *Journal of Financial Economics*, 85, 234–266.
- Begley, T. A., & Purnanandam, A. K. (2019). *Color and credit: Race, regulation, and the quality of financial services*. Available at SSRN: <https://ssrn.com/abstract=2939923> or <https://doi.org/10.2139/ssrn.2939923>.
- Boyle, G., Whitehouse, S., James, L., & Kolnes, F. (2015). *Within reach: How banks in emerging economies can grow profitably by being more inclusive*. CARE International and Accenture Report.
- Coetzee, G. (2010). Inclusive banking: A case study of ABSA (South Africa). In *9th Annual Darden access to capital conference*, The Darden Business School, University of Virginia, Charlottesville, USA.
- Corredor, P., Saleeb, M., Belazis, T., & Forcada-Gallardo, D. (2014). *Inclusive banking by women for all: An analysis of Bhagini Nivedita Sahakari Bank's corporate social responsibility in Pune, India*. BNS Final Report Columbia School of International and Public Affairs. Available at <https://www.sipa.columbia.edu/>
- Decker, O. S. (2004). Corporate social responsibility and structural change in financial services. *Managerial Auditing Journal*, 19(6), 712–728.
- Demirgüç-Kunt, A., & Klapper, L. (2012a). *Financial inclusion in Africa: An overview* (policy research working paper, WPS 6088). Washington, DC: The World Bank.
- Demirgüç-Kunt, A., & Klapper, L. (2012b). *Measuring financial inclusion: The global finindex database* (Policy research working paper, WPS 6025). Washington, DC: The World Bank.
- Demirgüç-Kunt, A., & Levine, R. (2009). Finance and inequality: Theory and evidence. *Annual Review of Financial Economics*, 1(1), 287–318.
- Demirgüç-Kunt, A., Klapper, L., & Singer, D. (2017). *Financial inclusion and inclusive growth: A review of recent empirical evidence* (Policy Research working paper; no. WPS 8040). Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/403611493134249446/Financial-inclusion-and-inclusive-growth-a-review-of-recent-empirical-evidence>
- Dupas, P., Karlan, D., Robinson, J., & Ubfal, D. (2018). Banking the unbanked? Evidence from three countries. *American Economic Journal: Applied Economics*, 10(2), 257–297.
- Ellison, A., Whyley, C., & Forster, R. (2010). Realising banking inclusion: The achievements and challenges. *Journal of Monetary Economics*, 58(29), 66–89.
- French, S., Leyshon, A., & Signoretta, P. (2008). “All gone now”: The material, discursive and political erasure of bank and building society branches in Britain. *Antipode*, 40(1), 79–101.
- French, S., Leyshon, A., & Wainwright, T. (2011). Financializing space, spacing financialization. *Progress in Human Geography*, 35(6), 798–819.
- Griffith-Jones, S., Karwowski, E., & Hlungwane, N. (2013, March). *Policy and research issues on finance and growth for Sub-Saharan Africa*. UNDESA.
- HM Treasury. (2007). *Financial inclusion: The way forward*. London: HM Treasury.
- Kempson, E., & Whyley, C. (1999). *Kept out or opted out?: Understanding and combating financial exclusion*. Cambridge: Joseph Rowntree Foundation, The Polity Press.
- Klapper, L., El-Zoghbi, M., & Hess, J. (2016). *Achieving the sustainable development goals. The role of financial inclusion*. Available online: https://www.microinsurancenetw.org/sites/default/files/CGAP_Working-Paper-Achieving-Sustainable-Development-Goals.pdf
- Mader, P. (2015). The financialization of poverty. In *The political economy of microfinance* (pp. 78–120). London: Palgrave Macmillan.
- Mader, P. (2018). Contesting financial inclusion. *Development and Change*, 49(2), 461–483.
- Martin, R. (2002). *Financialization of daily life*. Philadelphia: Temple University Press.
- Martinson, E., & Martinson, J. (2016). Barriers to banking – Towards an inclusive banking environment in South Africa. *Studies in Health Technology and Informatics*, 229, 517–527. Universal Design 2016, Learning from the past, designing for the future.
- Mehrotra, A. N., & Yetman, J. (2015, March). Financial inclusion-issues for central banks. *BIS Quarterly Review*.
- Mowl, A., & Boudot, C. (2014). Barriers to basic banking: Results from an audit study in South India. *NSE-IFMR Financial Inclusion Research Initiative*.

- Neuberger, D. (1997). Industrial organisation of banking: A review. *International Journal of the Economics of Business*, 5(1), 97–118.
- Owen, A. L., & Pereira, J. M. (2018). Bank concentration, competition, and financial inclusion. *Review of Development Finance*, 8(1), 1–17.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340.
- Schmidt, R. H., Seibel, H. D., & Thomes, P. (2016). *From microfinance to inclusive finance: Why local banking works*. Weinheim: Wiley.
- Scully, N. (2004). *Microcredit: No panacea for poor women*. Washington, DC: Global Development Research Centre. Retrieved June, 18, 2008.
- Thrift, N., & Leyshon, A. (1997). Financial desertification. In J. Rossiter (Ed.), *Financial exclusion: Can mutuality fill the gap?* London: New Policy Institute.
- UN Global Compact and KPMG. (2016). *SDG Industry matrix: Financial services*. Available at <https://home.kpmg/content/dam/kpmg/xx/pdf/2017/05/sdg-financial-services.pdf>

Inclusivity

- [Board Diversity and Inclusivity](#)

Incorporation

- [Inclusion](#)

Increasing Climate Change

- [Global Warming](#)

Independent Directors

- [Non-executive Director \(NED\)](#)

Independent Sector

- [Nongovernmental Organization](#)

Index of Sustainable Economic Welfare

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Synonyms

[Genuine Progress Indicator \(GPI\)](#); [Sustainable Net Benefit Index \(SNBI\)](#)

Definition

Until quite recently, the most important measures to judge the health of the markets and, therefore, the economy have been the Gross National Product (GNP), the Gross Domestic Product (GDP), and the Gross National Income (GNI). Despite the absence of real standardization in this sense, it can be said that these measurements are used by any economic actor to measure the success of economic development: International financial agencies, economists, politicians, financiers, and citizens commonly use these measurements and economic indicator.

Notwithstanding, the current economic literature unanimously believes that GNP, GDP, and GNI cannot represent a perfect measure of well-being. On the contrary, different limits are recognized, including the fact that they measure market activity without taking into account the numerous social costs. This has led several scholars to develop a series of indices to overcome the limits of these monetary measurements and to systematically measure the costs and benefits of growth.

One of the first and most relevant alternative measurements is the Index of Sustainable Economic Welfare (ISEW), which represents an alternative to GDP as it provides an integrated approach for measuring economic development through the simultaneous use of different macro-economic variables together with some social and environmental aspects. In other words, it is a sort

of integrated index of economic development composed of a list of variables that seek to integrate traditional macroeconomic performance measures with some information on social, institutional, and environmental aspects.

Introduction

“Well-being,” as never before, appears to be such a multifaceted, broad, and complex term that any attempt at its possible definition is really arduous, or impossible.

However, in a mere attempt at rationalization, it is possible to distinguish the concept based on two traditional points of observation, or interpretation.

The first, linked to the state of human health, refers to physical or moral strength or, in essence, the “*The state of being comfortable, healthy, or happy*” (Oxford 2019b).

The second, on the other hand, is typically considered part of the economic context, identifying more specifically the concept of “welfare” as the “*The health, happiness, and fortunes of a person or group*” or “*Statutory procedure or social effort designed to promote the basic physical and material well-being of people in need*” (Oxford 2019a).

In this perspective, the latter is responsible for the birth of the so-called “welfare economy,” whose scholars have tried to tackle the problem of how to influence the economic order to increase the well-being of all: hence, the terms “welfare,” “welfare economics,” or “welfare state.”

These two souls of well-being have always coexisted, and this is the central point, even though the economic dimension has always substantially prevailed over the psycho-physical dimension. This aspect is certainly not new and, in effect, is already the subject of some investigative scientific processes (Krippner 2005; Ferlie et al. 2005; Stiglitz et al. 2009; Davis and Kim 2015; Scherer et al. 2016; Ricci and Civitillo 2018; Maiocchi et al. 2019). From them, it appears evident that centralized or “hierarchical” performance evaluation processes (of any type) (Ricci and Civitillo 2018) which depend on the economic-financial dimension or, more generally,

by relying exclusively, or even only on a majority basis, on purely quantitative variables (e.g., money, profit, GDP, etc.), determine the inability to build multidimensional measurement systems. Instead, it is necessary to recognize that any type of performance is intrinsically made up of a plurality of dimensions. Consequently, any process of analysis that contemplates the predominance of a single dimension (or, in any case, of a few variables) with respect to the others should be avoided since the results that derive from them would be strongly conditioned and, therefore, devoid of effective utility. This is even more problematic when it is the financial dimension, based on accounting, which prevails over the other variables. In this sense, conversely, a multidimensional approach becomes necessary to allow an efficient and incisive achievement of integrated and systemic cognitive objectives (Ricci and Civitillo 2018).

On the other hand, it is not useful to renounce utility and relevance of quantitative measurements which, obviously, can only play a significant role in any evaluation system precisely because they are able to confer the necessary “precision,” useful for coming to any judgment. In this sense, the need to use money in the performance of economic measurements cannot be denied:

The one obvious instrument of measurement available in social life is money. Hence, the range of our inquiry becomes restricted to that part of social welfare that can be brought directly or indirectly into relation with the measuring-rod of money. (Pigou 1920, p. 11)

Indeed, it can be argued that it is precisely the instrumental role of money that has led economic science to firmly believe that market performance is the fundamental determinant for creating the well-being of the people who are part of economic systems.

Overcoming Traditional Measurement of Economic Systems: ISEW Index

Until quite recently, the most important measures to judge the health of the markets and, therefore,

the economy have become the Gross National Product (GNP), the Gross Domestic Product (GDP), and the Gross National Income (GNI). Despite the absence of real standardization in this sense, it can be said that these measurements are used by any economic actor to measure the success of economic development (Daly and Cobb 1989): International financial agencies (e.g., World Bank, International Monetary Fund), economists, politicians, financiers, and citizens use these measurements and economic indicator every day and systematically for economic, absolute, and comparative judgments.

Notwithstanding, while recognizing the importance of quantitative analyzes in economics and of the fundamental role played by the instrument of money, the current economic literature unanimously believes that GNP, GDP, and GNI cannot represent a perfect measure of well-being or of welfare. On the contrary, different limits are recognized, including the fact that they measure market activity without taking into account the numerous social costs. In this perspective, for example, some studies have shown that people's level of happiness does not depend solely on the average level of national income: in fact, it can also increase by reducing the range of income distribution (Hagerty 2000). Nevertheless, the real problem is that, very often, these same weaknesses are considered not particularly relevant or in any case not so serious as to undermine the informative power of such measurements which, therefore, are commonly used to express judgments about well-being in many contexts (Daly and Cobb 1989).

However, reflections on the inadequacy of GNP, GDP, and GNI have led several scholars to develop a series of indices to overcome the limits of these monetary measurements and to systematically measure the costs and benefits of growth.

One of the first and most relevant alternative measurements is the Index of Sustainable Economic Welfare (ISEW). Developed by Daly and Cobb (1989), ISEW represents an alternative to GDP as it provides an integrated approach for

measuring economic development through the simultaneous use of different macroeconomic variables together with some social and environmental aspects. In other words, it is a sort of integrated index of economic development composed of a list of variables that seek to integrate traditional macroeconomic performance measures with some information on social, institutional, and environmental aspects. Specifically, ISEW can be calculated according to the following formula:

$$ISEW = C + G + I + W - D - E - N$$

where:

C is the personal consumption expenditure adjusted to the Gini index of income distribution (for income inequality).

G is public nondefensive expenditure.

I is the capital formation (and includes consumer durables, net capital growth, and changes in the net international investment position).

W is the nonmarket contribution to the welfare (services from domestic labor).

D is the private defensive expenditure.

E is the cost of environmental degradation (associated with habitat loss, localized pollution, depletion of nonrenewable resources, and climate change).

N is depreciation of natural capital.

ISEW is not the only sustainability index devised by scholars of this topic. Among the innumerable indicators, it is useful to highlight:

- Human Development Index (HDI) (UNDP 2005);
- Environmental Sustainability Index (ESI) (Esty et al. 2005).
- Environmental Performance Index (EPI) (Esty et al. 2006).
- Environmental Vulnerability Index (EVI) (SOPAC 2005);
- Well-Being Index (WI) (Prescott-Allen 2001);
- Living Planet Index (LPI) (WWF 1998);
- City Development Index (CDI) (UNCHS 2001).

Furthermore, Daly and Cobb's ISEW was originally calculated for the United States. Subsequently, it was applied to the economic systems of other countries, such as the United Kingdom, several Western and Northern European countries, Canada, Australia, and Chile. The application of this index to contexts other than the United States was conducted in various revisions of the calculation methodology on which ISEW was built. This led to the construction of further indexes, with slightly different methodologies: the Genuine Progress Indicator (GPI) (Cobb et al. 1995; Hamilton 1999; Redefining Progress 1999) and the Sustainable Net Benefit Index (SNBI) (Lawn and Sanders 1999; Lawn 2003).

All these indexes, of course, are not exempt from limits and criticalities. Some studies (Atkinson 1995; Neumayer 1999, 2000) have highlighted the limitations connected to the scarce theoretical basis supporting these methodologies, in addition to the weaknesses in the identification of the single variables of which these indices are composed.

Nevertheless, it is necessary to emphasize that the presence of limits and weaknesses cannot lead to denying the merit of these methodologies. In fact, beyond these physiological criticalities, they currently represent a concrete and very useful reference point for the definition of alternative indexes to GNP, GDP, GNI, and in general, to all those approaches that would lead to the adoption of all-inclusive judgments on performance of the economic systems of the various countries, from purely financial analysis processes.

Cross-References

- [Human Development Index \(HDI\)](#)
- [Index of Sustainable Economic Welfare](#)
- [Sustainable Companies](#)
- [Sustainable Development](#)
- [Sustainable Performance](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References

- Atkinson, G. (1995). *Measuring sustainable economic welfare: A critique of the UK ISEW*. Norwich/London: Centre for Social and Economic Research on the Global Environment.
- Cobb, C., Halstead, T., & Rowe, J. (1995). The Genuine Progress Indicator. Summary of data and methodology. Redefining Progress, One Kearny Street, Fourth Floor, San Francisco.
- Daly, H. E., & Cobb, J. B. (1989). *For the common good: Redirecting the economy toward community, the environment, and a sustainable future*. Boston: Beacon Press.
- Davis, G. F., & Kim, S. (2015). Financialization of the economy. *Annual Review of Sociology*, 41, 203–221.
- Esty, D. C., Levy, M., Srebotnjak, T., & De Sherbinin, A. (2005). Environmental sustainability index: Benchmarking national environmental stewardship. *Yale Center for Environmental Law & Policy*, 2005, 47–60.
- Esty, D. C., Levy, M. A., Srebotnjak, T., de Sherbinin, A., Kim, C. H., & Anderson, B. (2006). Pilot 2006 environmental performance index. New Haven: Yale Center for Environmental Law & Policy.
- Ferlie, E., Lynn, L. E., Jr., Lynn, L. E., Pollitt, C., & Lynn, L. E. (Eds.). (2005). *The Oxford handbook of public management*. Oxford, UK: Oxford University Press.
- Hagerty, M. R. (2000). Social comparisons of income in one's community: Evidence from national surveys of income and happiness. *Journal of Personality and Social Psychology*, 78(4), 764.
- Hamilton, C. (1999). The genuine progress indicator methodological developments and results from Australia. *Ecological Economics*, 30(1), 13–28.
- Krippner, G. R. (2005). The financialization of the American economy. *Socio-Economic Review*, 3(2), 173–208.
- Lawn, P. A. (2003). A theoretical foundation to support the Index of Sustainable Economic Welfare (ISEW), Genuine Progress Indicator (GPI), and other related indexes. *Ecological Economics*, 44(1), 105–118.
- Lawn, P. A., & Sanders, R. D. (1999). Has Australia surpassed its optimal macroeconomic scale? Finding out with the aid of “benefit” and “cost” accounts and a sustainable net benefit index. *Ecological Economics*, 28(2), 213–229.
- Maiocchi, M., Ricci, P., & Turconi, G. (2019). *Bilancio in Valore. Come si misura un'ora di gioia?* Rimini: Maggioli Editore.
- Neumayer, E. (1999). The ISEW – Not an Index of Sustainable Economic Welfare. *Social Indicators Research*, 48(1), 77–101.
- Neumayer, E. (2000). On the methodology of ISEW, GPI and related measures: Some constructive suggestions and some doubt on the “threshold” hypothesis. *Ecological Economics*, 34(3), 347–361.
- Oxford Dictionary. (2019a). “Welfare” entry. Cambridge, UK: Cambridge University Press.
- Oxford Dictionary. (2019b). “Well-being” entry. Cambridge, UK: Cambridge University Press.

- Pigou, A. C. (1920). *The economic of welfare*. London: Macmillan.
- Prescott-Allen, R. (2001). *The wellbeing of nations*. Washington, DC: Island Press.
- Redefining Progress. (1999). *The 1998 US Genuine Progress Indicator: Methodology handbook*. San Francisco: Redefining Progress.
- Ricci, P., & Civitillo, R. (2018). Italian public administration reform: What are the limits of financial performance measures? In *Outcome-based performance management in the public sector* (pp. 121–140). Cham: Springer.
- Scherer, A. G., Rasche, A., Palazzo, G., & Spicer, A. (2016). Managing for political corporate social responsibility: New challenges and directions for PCSR 2.0. *Journal of Management Studies*, 53(3), 273–298.
- SOPAC (South Pacific Applied Geoscience Commission). (2005). Building resilience in SIDS. The Environmental Vulnerability Index (EVI) 2005. SOPAC technical report, Suva.
- Stiglitz, J., Sen, A. K., & Fitoussi, J. P. (2009). The measurement of economic performance and social progress revisited: Reflections and overview.
- UNCHS (United Nations Centre for Human Settlements). (2001). *The state of the worlds cities 2001*. Nairobi: UN.
- UNDP (United Nations Development Programme). (2005). *Human development report 2005*. Oxford, UK: Oxford University Press.
- WWF (World Wildlife Fund). (1998). *Living planet report 1998*. Gland: WWF.

Inexhaustible Energy

- ▶ [Energy-Renewable](#)

Influence Group Analysis

- ▶ [Stakeholder Theory](#)

Influencing Stakeholders

- ▶ [Sustainable Stakeholder Dialogue](#)

Informal CSR

- ▶ [Sunken CSR and SMEs](#)

Informal Sector

- ▶ [Shadow Trades](#)

Informant/Informer

- ▶ [Whistleblowing and CSR](#)

Information Misuse

- ▶ [Data Protection](#)

Information Protection

- ▶ [CSR and Data Protection](#)
- ▶ [Data Protection](#)

Information Reliability Filtering

- ▶ [Media Ethics](#)

Information Security

- ▶ [CSR and Data Protection](#)
- ▶ [Data Protection](#)

Information Values and Value Relations

- ▶ [Media Ethics](#)

Initial Selection

- ▶ [Prequalification Processes \(Clients Demanding of Potential Suppliers\)](#)

Inner Peace

- ▶ [Spirituality in Management](#)

Innovation

- ▶ [Degrowth](#)
- ▶ [Inclusive Innovation](#)
- ▶ [Innovation and Territorial Development](#)
- ▶ [New Markets](#)
- ▶ [Postgrowth](#)
- ▶ [Rebound Effects of Eco-efficiency](#)
- ▶ [Sufficiency](#)
- ▶ [Sustainable Business Model Innovation](#)
- ▶ [Triple Helix and Innovation](#)

Innovation Ability Process

- ▶ [Capacity of Innovation](#)

Innovation and CSR

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Description

The strategic implications of corporate social responsibility (CSR) have become an important area of studies in business and society literature (see ▶ [“Strategic Management and CSR”](#)). The relationship between innovation and CSR is

among problems often tackled in this stream of research. As argued by Macgregor and Fontrodona (2008), these two elements are mutually reinforcing in a way they generate a virtuous circle. On the one hand, CSR, especially strategic CSR, is believed to drive innovation, as companies seek more socially responsible products and services, more environmentally friendly production processes, and new business models (Porter and Kramer 2011; Visser and Kymal 2014). CSR programs can result in radical process innovation, leading to substantial efficiency savings (Porter and Van der Linde 1995) or serve as a source of ideas and a test field for commercial projects (Kanter 1999). On the other hand, some firms that seek to enhance their innovativeness may design those processes in a more socially responsible fashion by, for instance, building relationships and cooperation with customers and suppliers (Macgregor and Fontrodona 2008).

Definition of Innovation

Although the literature provides various definitions of innovation, there is strong consensus among researchers concerning its main definitional attributes. “Innovation is a process of turning opportunity into new ideas and of putting these into widely used practice” (Tidd and Bessant 2018, p. 16). The definition stresses the process nature of the phenomena, setting a clear distinction between innovation and invention. While invention is the creation of new knowledge, innovation is its full development and exploitation. In other words, invention is the first step in the innovation process. The latter consists of four main phases: (1) search phase – seeking new ideas and opportunities to innovate; (2) selection phase – strategic choice (dictated by the organizational capabilities and potential competitive benefits) of the idea that the organization is going to invest in and develop further; (3) implementation phase – converting ideas into reality; and (4) capturing value phase – obtaining value (business or social) from the innovation process, protecting gains from appropriation by others, and learning from innovation (Tidd and Bessant 2018). Although

traditionally innovation has been viewed as a “specific tool of entrepreneurs” (Drucker 1985, p. 19) to build new businesses and achieve competitive advantage (Porter 1990), the value created in the innovation process can be also of a social nature (Murray et al. 2010).

Researchers distinguish between four basic types of innovation: (1) product/service – changes in the organization’s offering; (2) process – changes in production and delivery; (3) position – changes in the way users perceive a particular product or process; and (4) paradigm or business model – changes in the mental models about the way the organization creates value (Tidd and Bessant 2018).

Additionally, innovation can be of an incremental or radical nature (Henderson and Clark 1990). The first, focused on improving existing solutions, especially with respect to organizational processes, represents the majority of innovation in the market and often strengthen the dominance of market leaders. The latter induces Schumpeterian’s creative destruction (Schumpeter 1934) – they disrupt markets or create completely new ones, challenging existing players to adapt to the new rules of the game. The capacity to manage the innovation process and innovate (incrementally and/or radically) on a continuing basis is seen as a crucial factor of organizational success and survival (Brown and Eisenhardt 1998).

Definition of CSR

CSR refers to “social obligations and impacts of corporations in society” (Crane et al. 2008, p. 6). More specifically, the term can be defined as “international private business self-regulation” focused on minimizing social harms and contributing to social welfare by companies (Sheehy 2015). As the literature concerning CSR is strongly siloed, definitions of the term vary depending on the discipline (see ► “Definitions of CSR”). In the political sciences, the understanding of CSR has been centered on the idea that the firm is a corporate citizen administering civil, political, and social right in areas neglected

by governments (Matten et al. 2003). From an institutional perspective, CSR is viewed as an emerging international business norm. Finally, in economics and management studies, which are the most important perspectives for examining the link between CSR and innovation, the understanding of the term ranges from altruistic to strategic in nature. Within the first view, CSR is a profit sacrificing activity aimed at furthering social good, beyond the interests of the firm and legal compliance (McWilliams et al. 2006). Within the strategic approach, the understanding of CSR shifts from value redistribution toward value generation. Strategic CSR is seen as a voluntary business strategy aimed at the creation of shared value (Porter and Kramer 2011), i.e., gaining competitive advantage and generating social change at the same time.

CSR-Innovation Virtuous Circle

Macgregor and Fontrodona (2008) were among the first authors to explicitly discuss CSR in conjunction with innovation. They propose a conceptual model showing a two-way system of **CSR-driven innovation** and **innovation-driven CSR**. Since innovation and CSR reinforce each other, they form a virtuous circle. While CSR-driven innovation is driven by values and refers to the development of products or services that deliver social benefit, innovation-driven CSR is driven by economic value and is aligned with the creation of social processes. The authors explain that the former is about “doing the *right* things” and the latter is about “doing things *right*.”

CSR-Driven Innovation

According to Porter and Kramer (2011), targeting sustainability problems allows companies to manage the related risks and costs, as well as supports the identification of business opportunities. Other authors argue that socially responsible firms need to adopt innovation in order to develop radically new processes, products, services, and business models that could effectively address sustainability challenges (Blowfield et al. 2007).

Kozubek (2015) identifies four types of CSR-driven innovation: (1) corporate social innovation (CSI), (2) “base of the pyramid” innovation, (3) **eco-innovation**, and (4) social entrepreneurship. The first type, CSI refers to product, process, or business model innovation that addresses social and environmental problems and simultaneously generates business value (Kanter 1999). Firms can create new markets by addressing unmet social needs and use social programs as a test field for commercial products and process innovation. CSR projects can be carried out as innovations that challenge and improve the firm’s learning capabilities (Hull and Rothenberg 2008). The main idea behind the second type of CSR-driven innovation, i.e., innovation at the base/bottom of the pyramid (BOP), is to target the world’s population that has the least amount of income (London and Hart 2011) and that, due to the growing global economic inequality, do not have access to the global market. BOP represents a market full of underserved social needs and untapped opportunities for innovation (Blowfield et al. 2007) (see ► [“Base of the Pyramid”](#)). The third type of CSR-driven innovation is eco-innovation, which focuses on opportunities linked to innovative products and services addressing key environmental problems. It has been argued that eco-innovation can be successfully driven not by the demand of current users but by development of virgin markets (Kozubek 2015). Finally, the last type, “social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner” (Zahra et al. 2009, p. 522).

Extensive theoretical research on CSR-driven innovation has been accompanied by few empirical investigations. Some studies show strong correlation between corporate social performance and research and development (R&D) intensity (used as a measure of innovativeness) (McWilliams and Siegel 2000; Lopez et al. 2008). This relationship is explained by the fact that firms with high level of CSR investment often pursue a differentiation strategy that requires complementary R&D investment (McWilliams

and Siegel 2000). Nonetheless, others provide empirical evidence that the association between CSR and innovation (again measured with the R&D intensity) is negative (Gallego-Alvarez et al. 2011) and argue that some CSR activities do not create value for companies and as such do not constitute a source of innovation.

It is strategic CSR (see ► [Strategic CSR](#)) that is believed to stimulate innovation in organizations (Kim and You 2013). Some authors argue that integration of sustainability-related goals with traditional business objectives requires radical innovation of processes, products, services, as well as business models (Visser and Kymal 2014). Continuous learning (Vilanova et al. 2008) and innovation (Osburg 2013) are seen as key to achieving strategic corporate responsibility. Companies with strategic approach to CSR innovate to build competitive advantage by reaching ethical and green consumers, enhancing supply chains, as well as expanding to BOP markets (Mirvis et al. 2016).

Innovation-Driven CSR

According to Macgregor and Fontrodona (2008) innovation-driven CSR is achieved through innovation processes where the end result may not necessarily have a social rationale, but the way the output is developed (e.g., through employee participation and collaboration with customers or suppliers) is more socially responsible. Additionally, empirical studies reveal positive association between R&D intensity and corporate social performance (Padgett and Galan 2010; Shen et al. 2016), which is explained by the fact that some R&D projects aimed at process efficiency might drive decrease in energy consumption and CO₂ emissions (Padgett and Galan 2010). Similarly, Husted and Allen (2007) in their study on corporate social strategy in multinational enterprises argue that firms can leverage their strong capabilities for innovation in other areas, including CSR. The authors show that there is significant relationship between firm’s innovativeness and its use of strategic social positioning. Another explanation for innovation-driven CSR, provided by Shen et al. (2016), is that CSR plays a significant role in reducing information asymmetry between innovative firms and stakeholders. To gain

legitimacy among stakeholders and secure their support for highly innovative and, in the same, highly risky venture, firms adopt CSR as a signal of their sustainability and goodwill. The relationship is stronger for firms with higher financial leverage and operating in markets with lower growth opportunities. Additionally, authors show that innovation serves as a moderator in a relationship between CSR and corporate financial performance.

Other studies present, however, contradictory findings. While Lopez et al. (2008) find no statistically significant relationship between CSR and R&D expenditure, Gallego-Alvarez et al. (2011) show that the relationship is negative. The latter is explained by the fact that companies that offer innovative products do not need CSR to attract customers (Hull and Rothenberg 2008).

Open Innovation and Strategic CSR (See ► Cooperation and Open Innovation)

Open innovation (OI) is defined “as a distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organization’s business models” (Chesbrough and Bogers 2014). It has been argued that “OI inherently corresponds with the strategic approach to CSR and that the concepts are mutually related” (Roszkowska-Menkes 2018, p. 959).

On the one hand, CSR-driven innovation addresses multifaceted social and environmental problems, as well as interests of various stakeholders. As such, it is more complex than traditional market-driven innovation and, thus, requires open approach to innovation processes (Blowfield et al. 2007; Osburg 2013). Such approach involves the use of nontraditional market information, close multistakeholder and intersectoral collaboration as well as complementary knowledge sharing. Chalmers (2011) argues that open paradigm can help companies in overcoming challenges for social innovation, including market protectionism, limited access to funding and to networks, risk aversion, and issue

complexity. OI processes support implementation of CSR strategies and integration of corporate social, environmental, and economic goals. Access to complementary resources and partnering with external stakeholders increase the chances for CSR-driven innovation to drive meaningful social change (Ayuso et al. 2011), and, simultaneously, boost firm’s competitive advantage.

On the other hand, as strategic CSR focuses on stakeholder engagement, it fosters creation of open, dialogue-, and trust-based organizational culture (Roszkowska-Menkes 2018). Such environment naturally promotes open approach to innovation. Strategic CSR stimulates stakeholder dialogue and collaboration (Greenwood 2007), fostering knowledge transfers (Luo and Du 2014). It also involves employee engagement (Bhattacharya et al. 2008) that has been proven to increase company’s absorptive capacity (Golightly et al. 2012), i.e., its ability to evaluate external knowledge, assimilate it, and utilize it (Cohen and Levinthal 1990).

Cross-References

- Communication and Innovation
- Corporate Sustainable Innovation
- Social Innovation
- Sustainable and Innovation process
- Sustainable Innovation

References

- Ayuso, S., et al. (2011). Does stakeholder engagement promote sustainable innovation orientation? *Industrial Management & Data Systems*, 111(9), 1399–1417. <https://doi.org/10.1108/02635571111182764>.
- Bhattacharya, C. B., Sen, S., & Korschun, D. (2008). Using corporate social responsibility to win the war for talent. *MIT Sloan Management Review*, January. Available at: <http://sloanreview.mit.edu/article/using-corporate-social-responsibility-to-win-the-war-for-talent/>. Accessed 17 Feb 2017.
- Blowfield, M., Visser, W., & Livesey, F. (2007). Sustainability innovation. *Mapping the Territory*, 2.
- Brown, S. L., & Eisenhardt, K. M. (1998). *Competing at the edge: Strategy as a structures chaos*. Boston: Harvard Business School Press.

- Chalmers, D. (2011). Why social innovators should embrace the 'Open' paradigm. In *EMES conferences selected papers series, ECSP-R11-07*. Roskilde.
- Chesbrough, H., & Bogers, M. (2014). Explicating open innovation : Clarifying an emerging paradigm for understanding innovation keywords. In H. Chesbrough, W. Vanhaverbeke, & J. West (Eds.), *New frontiers in open innovation* (pp. 1–37). Oxford: Oxford University Press.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152. <https://doi.org/10.2307/2393553>.
- Crane, A., et al. (2008). The Corporate Social Responsibility Agenda. In *The Oxford handbook of corporate social responsibility* (pp. 3–15). Oxford: Oxford University Press.
- Drucker, P. (1985). *Innovation and entrepreneurship. Practice and principles*. New York: Harper & Row.
- Gallego-Alvarez, I., Prado-Lorenzo, J.-M., & Garcia-Sánchez, I. M. (2011). Corporate social responsibility and innovation: A resource-based theory. *Management Decision*, 49(10), 1709–1727.
- Golightly, J., et al. (2012). *Realising the value of open innovation, Realising the value of open Innovation*. Big Innovation Centre.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74(4), 315–327. <https://doi.org/10.1007/s10551-007-9509-y>.
- Henderson, R. M., & Clark, K. B. (1990). Architectural innovation: The reconfiguration of existing product technology and the failure of established firms. *Administrative Science Quarterly*, 35, 9–30.
- Hull, I., & Rothenberg, S. (2008). Firm performance: The interactions of corporate social performance with innovation and industry differentiation. *Strategic Management Journal*, 29(7), 781–789. <https://doi.org/10.1002/smj>.
- Husted, B. W., & Allen, D. B. (2007). Corporate social strategy in multinational enterprises: Antecedents and value creation. *Journal of Business Ethics*, 74, 345–361. <https://doi.org/10.1007/s10551-007-9511-4>.
- Kanter, R. M. (1999). From spare change to real change: The social sector as Beta site for business innovation. *Harvard Business Review*, 77(3).
- Kim, P., & You, J. (2013). Strategic CSR through Innovation and Top Management Team Decision Making: Evidence from Eco-Friendly Automobile Industry Case Analyses. *Journal of Advanced Management Science*, 1(4), 383–388. <https://doi.org/10.12720/joams.1.4.383-388>.
- Kozubek, R. (2015). The link between innovation and CSR. Short Look on a Bi-directional System of Innovation-driven CSR and CSR-driven Innovation. *Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie*, z. 81(143–153).
- London, T., & Hart, S. L. (2011). Creating fortune with the base of the pyramid. In T. London & S. L. Hart (Eds.), *Next Generation Business Strategies for the Base of the Pyramid. New Approaches for Building Mutual Value* (pp. 1–16). Upper Saddle River: Pearson Education.
- Lopez, M. V., Perez, M. C., & Rodriguez, L. (2008). Strategy, corporate social responsibility and R&D expenditure: Empirical evidence of European convergence. In *31st annual congress of the European Accounting Association*, Rotterdam.
- Luo, X., & Du, S. (2014). Exploring the relationship between corporate social responsibility and firm innovation. *Marketing Letters*. <https://doi.org/10.1007/s11002-014-9302-5>.
- Macgregor, S. P., & Fontrodona, J. (2008). *Exploring the fit between CSR and innovation*. WP-759.
- Matten, D., Crane, A., & Chapple, W. (2003). Behind the mask : Revealing the true face of corporate citizenship. *Journal of Business Ethics*, 45, 109–120.
- McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal*, 21(5), 603–609.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1–18. <https://doi.org/10.1111/j.1467-6486.2006.00580.x>.
- Mirvis, P., et al. (2016). Corporate social innovation: How firms learn to innovate for the greater good. *Journal of Business Research*, 69, 5014–5021. <https://doi.org/10.1016/j.jbusres.2016.04.073>.
- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation*. NESTA, The Young Foundation.
- Osburg, T. (2013). Social innovation to drive corporate sustainability. In T. Osburg & R. Schmidpeter (Eds.), *Social innovation. Solutions for a sustainable future* (pp. 13–22). Berlin/Heidelberg. https://doi.org/10.1007/978-3-642-36540-9_2.
- Padgett, R. C., & Galan, J. I. (2010). The effect of R & D intensity on corporate social responsibility. *Journal of Business Ethics*, 93, 407–418. <https://doi.org/10.1007/s10551-009-0230-x>.
- Porter, M. E. (1990). The competitive advantage of nations. *Harvard Business Review*, M, March–April.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, Jan–Feb.
- Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *The Journal of Economic Perspectives*, 9(4), 97–118.
- Roszkowska-Menkes, M. (2018). Integrating strategic CSR and open innovation. Towards a conceptual framework. *Social Responsibility Journal*.
- Schumpeter, J. A. (1934). The theory of economic development. *Harvard Business University Press*.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131, 625–648.
- Shen, R., Tang, Y., & Zhang, Y. (2016). Does Firm innovation affect corporate social responsibility? *Harvard Business School Working Paper*, 16–096.

- Tidd, J., & Bessant, J. (2018). *Managing innovation. Integrating technological, market and organizational change* (6th ed.). Hoboken: Wiley.
- Vilanova, M., Lozano, J. M., & Arenas, D. (2008). Exploring the nature of the relationship between CSR and competitiveness. *Journal of Business Ethics*, 87(S1), 57–69. <https://doi.org/10.1007/s10551-008-9812-2>.
- Visser, W., & Kymal, C. (2014). Creating integrated value: Beyond CSR and CIV to CIV. *Kaleidoscope Futures Paper Series*, 3.
- Zahra, S. A., et al. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24, 519–532.

Innovation and Territorial Development

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Synonyms

Growth; Improvement; Innovation; Modification; Progress; Renewal

Definition

The concept of innovation is synonymous with novelty, change, or renewal, being considered an essential factor for the economic development of an organization and the territory in which it is inserted. This means that innovation will be everything that allows an organization to achieve efficiency and effectiveness, reducing or eliminating surplus. This efficiency and effectiveness can be reflected in the provision of services, in productive, administrative, or financial systems. The Oslo Handbook (OECD/Eurostat 2005) defines innovation as the implementation of a product, well or service, new or significantly improved,

or a process, or a new marketing process, or a new organizational method in business practices, in the workplace organization and also in external relations.

For Oslo Manual (OECD/Eurostat 2018: 20), “an innovation is a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process).”

The definition of innovation in last Oslo Manual (OECD/Eurostat 2018) condenses the four types of innovations (product, process, organizational, and marketing) to two main types, product innovations and business process innovation, and also reduces the ambiguity of the requirement for a “significant” change by comparing both new and improved innovations to the firm’s existing products or business processes.

Development is synonymous of progress and evolution, and innovation and territorial development can be understood as the inputs of the territorial innovation system, consisting of tangible and intangible assets, such as the human and intellectual capital, the social capital, the cultural capital, the natural and productive capital, and the institutional capital, that generate the productivity and development of the territory (Gallas et al. 2018).

Introduction

Increasingly, the concentrations of innovation foster success (Antunes 2011). In fact, the regions that are most endowed with innovative tangible and intangible assets are also those that occupy a better position in a hierarchy of territorial development, since they are able to capture more entrepreneurship and consequently generate greater synergies in knowledge and entrepreneurship (Oliveira and Natário 2009).

Innovation and territorial development studies seek to identify the role of different players (public authorities, research centers, universities, and companies, among others) and

analyze the articulations/networks that can be established among them in territorial development (Zambanini and Bresciani 2013). In fact, the combination of local or remote knowledge networks has profound implications for innovation and territorial development (Vale 2009). Other approaches are emphasized, such as the role of territorial assets and innovation in the development of creative cities, which are understood to be places that are capable of transforming themselves based on a deep understanding of their cultural identity (Gallas et al. 2018), or the role of social entrepreneurship, in particular the role of cooperatives, in territorial development (Oliveira and Natário 2009).

Key Issues

The particular focus on innovation as central factors behind economic growth and development is illustrated in national innovation systems of Lundvall (1992) and Edquist (1997). A system of innovation results from the interaction between the technological and scientific systems, since production results from creative knowledge and a process of feedback from the market and from technologies (Lundvall 1985; Antunes 2011).

The relationships between knowledge institutions and firms are also highlighted in triple helix approach where universities, government, and business are seen as the three important poles in a dynamic interaction (Etzkowitz and Leydesdorff 2000; Johnson et al. 2003). The focus is upon the systemic relationships between diverse actors territorially relevant with an important role in innovation process, generating dynamics of innovation (Natário 2005; Natário et al. 2006).

Edquist (1997) refers that innovation systems include all important economic, social, political, organizational, institutional, and other factors that influence the development, diffusion, and use of innovations. According to Johnson, Edquist and Lundvall (2003) innovation systems, competence building, and interactive learning are issues at the core of economic development.

When a company innovates, it seeks to obtain competitive advantages (preventive approach) in the sense that it seeks to impose higher standards for the service it provides or for the product it produces compared to its competitors. It can also innovate to not lose the position it already holds in the market in reaction to innovative competitors (reactive approach) (Antunes 2011).

In order to innovate, companies need to be able to transform knowledge into real innovation, but this transformation depends on the technological opportunities at their disposal (Antunes 2011).

According to the Lundvall (1992) and Edquist (1997), Innovation Systems approach and Higher Education Institutions (HEIs) have a determining role in the development of innovation and consequently in companies, in society, and in territorial development (Natário et al. 2013). In addition to teaching and knowledge transfer, HEIs also develop activities with a strong connection to the community in which they are inserted, as well as research activities in order to meet the needs of these communities. Etzkowitz et al. (2000) highlight a number of changes that have taken place over time, from a university centered on education to an entrepreneurial and research-centered university, thus contributing to the territorial development where they are inserted.

In addition to the HEIs, the interaction between the Government and the Companies, the so-called Triple Helix model, is also in line with the national systemic (Lundvall 1992; Edquist 1997) and regional innovation approaches (Cooke et al. 1997; Brackyk et al. 1998). The synchronization between these entities contributes unambiguously to the territorial development and sustainability of the regions, and once there is governmental support, companies and HEI manage to innovate and, on the other hand, to establish new audiences, thus generating an increase in income in the regions/places where they are inserted (Natário et al. 2013).

Future Directions

Future investigations may focus on the study of innovation and the development of creative

regions, i.e., how regions are able to transform themselves based on what they have of the most singular and creative, innovating and making known their potentialities to the people/regions that do not have or have little knowledge of their potential.

Summary

This chapter discusses the concepts of innovation and territorial development and the role of different players to promote innovation in a territorial context. The focus is on economic growth and development and is illustrated by territorial approaches to innovation, highlighting national innovation systems approaches and the triple helix model.

Cross-References

- Capacity of Innovation
- Competitive Advantage
- Competitiveness
- Corporate Sustainable Innovation
- Innovative Business Models
- Reverse Innovation
- Social Innovation
- Sustainable Business Model Innovation
- Triple Helix and Innovation

References

- Antunes, M. (2011). *Recursos territoriais inovação e desenvolvimento em territórios periféricos – o município de Tondela*. Tese de mestrado. Coimbra: Faculdade de letras da universidade de Coimbra.
- Brackyyk, H., Cooke, P., & Heidenrich, R. (1998). *Regional innovation systems*. London: UCL Press.
- Cooke, P., Uranga, M., & Etxebarria, G. (1997). Regional innovation systems: Institutional and organizational dimensions. *Research Policy*, 26(4–5), 475–491.
- Edquist, C. (1997). *Systems of innovation: Technologies, institutions and organizations*. London: Printer.
- Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From national systems and ‘mode 2’ to a triple helix of university-industry-government relations, introduction to the special ‘triple helix’ issue. *Research Policy*, 29(2), 109–123.
- Etzkowitz, H., Magnus, G., & Levitt, J. (2000). The future of the university and the university of future: Evolution of ivory tower to entrepreneurial paradigma. *Research Policy*, 29(2), 313–330.
- Gallas, J., Ghedine, T., Gonçalo, C., & Rossetto, A. (2018). O papel dos ativos territoriais e da inovação no desenvolvimento de cidades criativas. *Desenvolvimento em questão*, 43, 113–146. <https://doi.org/10.21527/2237-6453.2018.43>.
- Johnson, B., Edquist, E., & Lundvall, B.-Å. (2003). *Economic development and the national system of innovation approach*. First Globelics Conference, Rio de Janeiro, November 3–6, 2003.
- Lundvall, B.-A. (1985). *Product innovation and user-producer interaction*. Aalborg: Aalborg University Press.
- Lundvall, B.-A. (1992). *National systems of innovation: Towards a theory of innovation and interactive learning*. London: Pinter Publishers.
- Natário, M. M. S. (2005). *Inovação, Competitividade e Demografia Empresarial: o Caso da Raia Central Ibérica*. Tese de doutoramento. Évora: Universidade de Évora.
- Natário, M. M. S., Neto, P. A., & Reigado, F. M. (2006). Attitudes to territorial innovation processes in raia central ibérica. In T. N. Vaz, E. J. Morgan, & P. Nijkamp (Eds.), *The new European rurality: Strategies for small firms* (Cap. 13, Part IV, pp. 259–288). Ashgate.
- Natário, M., Daniel, A., Lopes, A., Braga, A., Rodrigues, E., Marques, F., et al. (2013). *Projeto de investigação: a influência do instituto politécnico da Guarda na região*. Guarda: Instituto Politécnico da Guarda.
- OECD/Eurostat. (2005). *Oslo manual: Guidelines for collecting and interpreting innovation data* (The measurement of scientific and technological activities) (3rd ed.). Paris: OECD Publishing. <https://doi.org/10.1787/9789264013100-en>.
- OECD/Eurostat. (2018). *Oslo manual 2018: Guidelines for collecting, reporting and using data on innovation* (The measurement of scientific, technological and innovation activities) (4th ed.). Paris: OECD Publishing. <https://doi.org/10.1787/9789264304604-en>.
- Oliveira, P., & Natário, M. (2009). Inovação e Desenvolvimento Territorial: O Papel do Empreendedorismo Social. *Working Paper*, 76, 3–37.
- Vale, M. (2009). Conhecimento, inovação e território. *Finis terra*, 88, 9–22.
- Zambanini, M., & Bresciani, L. (2013). *Inovação e desenvolvimento territorial: uma análise sobre a região de São José dos Campos*. VI Encontro de Estudos em Estratégia, Bento Gonçalves/RS – 19 a 21 de maio de 2013.

Innovation Dynamics

- Capacity of Innovation

Innovative Business Models

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Synonyms

Business model; Circular business model; New business model; Sustainable business model

Definition

Innovative Business Models (IBMs) can be interpreted as an advanced, comprehensive, and transformed approach explaining how firms create value (O’Riordan 2017, p. 399). IBMs comprise many of the characteristics of both Business Models (BMs) and New Business Models (NBMs). (For clarification, while IBMs undoubtedly signify many of the concepts inherent in the BM and NBM logic, the semantics associated with the term “new,” which undoubtedly ages over time, designates “innovation” the more suitable label to depict the future value creation era.) Please refer to the explication of related concepts below for further details. Business model innovation derives from corporate practice, strategic management, and industrial economics (Carayannis et al. 2015; Teece 2010). Ćwiklicki and O’Riordan (2018) defined an IBM as the specification of a process for realizing a sustainable supply of relevant offerings that create value for clients, customers, the community, and/or other stakeholders. IBMs thus signify a form of sustainable BM based on an innovative stakeholder value creation logic. Via IBMs, value is generated by corporations in an inclusive way focused on collectively improving the well-being with and for multiple stakeholders in society (O’Riordan 2017, pp. 377–474). This topic is addressed in a separate entry written by the author in this Encyclopedia (see ► [“Stakeholder Value Creation”](#)).

Explication of Related Concepts

Business Models (BMs) are typically understood as a way of doing business which captures and delivers value (Saebi and Foss 2014, p. 204; Taran et al. 2015, p. 303). A review of the academic literature and mainstream management knowledge of BMs over the last 15 years highlights several definitions. Detailed analysis of its meaning conducted by Zott et al. (2011) indicates that no one unambiguous interpretation exists. BMs can generally be interpreted as a construct comprising both the rationale and the route for organizing value creation. BMs thereby depict the interrelated activities of planning, leading, structuring, and controlling as organizational processes (Jonker et al. 2015, p. 234).

By describing the organizational logic and the resulting processes from which value creation and delivery ensue, BMs provide insight into how an organization impacts different parties (Jonker et al. 2015, p. 234). By depicting how the company does business with its customers, partners, and vendors, among other stakeholders, the BM thus portrays the value proposition (Amit and Zott 2012, p. 42). The BM illustrates both the network of parties, as well as the different capabilities involved in creating, marketing, and delivering value (Osterwalder and Pigneur 2010). Conventionally, BMs focused on generating value primarily from an exclusive shareholder (supply side economic) perspective. This isolated economic emphasis focused on a competitive profit maximization route to value creation (Ćwiklicki and O’Riordan 2018).

New Business Models (NBMs) emerged as a response to various signals that the conventional exclusively profit maximization-focused value creation logic no longer functions. New ways of organizing were emerging in which the notion of sustainability was becoming more central. Highlighting the inclusion of multiple stakeholder interests and broader principles of value creation, NBMs signified a new generation of BMs. They directed the management focus beyond exclusive profit maximization by recognizing the strategic role of business in generating social and ecological value (Jonker and O’Riordan 2016, p. 543).

This accentuated the capability of the organization to create value both in and between organizations as organizing entities (Jonker 2012, p. 16). The development of this “new” generation of BMs signified a shift in the underlying values toward a value creation logic delivering mutual benefits via new types of relationships based on the practice of sharing, trading, and creating (Jonker and O’Riordan 2016).

Conceptual Foundation and Historical Development

Awareness of BMs essentially began in the mid-1990s with the advent of the Internet. A review of the increasing body of literature, which has subsequently emerged, reveals that the extant scholarship is primarily based on generic aspects of BMs largely related to themes including e-commerce, strategy, and innovation (Chesbrough and Rosenbloom 2002; Osterwalder et al. 2005; Shafer et al. 2005; Teece 2010; Zott et al. 2011).

While a study of the academic literature and mainstream management knowledge of BMs since their original emergence highlights several definitions, detailed analysis undertaken by Zott et al. (2011) on their meaning indicates no clear consensus on how BMs are interpreted. According to Lindgren and Jørgensen (2012, p. 6), BMs enhance innovation by presenting “a business operational manifestation of the way BM innovation works and is carried out from ideation to market introduction.” Afuah (2014, p. 4) defines BM innovation as “a framework or recipe for creating and capturing value by doing things differently” and indicates “change” as a main characteristic.

Originally, BMs focused on generating value primarily from an exclusive shareholder perspective. This isolated economic emphasis primarily on a competitive profit maximization route to shareholder value creation (Ćwiklicki and O’Riordan 2018). Magretta highlighted that single bottom line value creation logic when she expressed what she termed “. . . the fundamental question every manager must ask: How do we

make money in this business?” (Magretta 2002, p. 82). This emphasis on profit maximization was still evident 4 years later in scholarship relating to what could arguably be interpreted as the “next generation” of BMs, i.e., NBMs. Still in 2006, when writing about the value creation logic of NBM, many continued to overlook the negative impact of narrowly focused internal economic objectives on external social and ecological interests. For instance, Markides (2006, p. 20), stated at the time: “To qualify as an innovation, the NBM must enlarge the existing economic pie, either by attracting new customers into the market or by encouraging existing customers to consume more”.

Triggered by growing concern in the 1970s about the impact of corporate decisions on stakeholder groups, the United Nations (UN) World Commission on Environment and Development (WCED) developed the principles of Sustainable Development (i.e., proposing the processes needed to achieve sustainability). This culminated in the Brundtland Report (Brundtland 1987) emphasizing the underlying premise that economic activities designed to meet the needs of current generations are architected in ways which do not compromise the ability of future generations to meet their own needs. This highlighted the long-term aspiration that business activities would foster (and not harm) a synchronized global, peaceful, healthy, well-being for society when undertaking its commercial activities.

Advocating a management decision-making logic grounded in stakeholder theory, these principles encourage the connection of economic with social and environmental aims. These values were originally termed the “Triple Bottom Line” (TBL) principles. The TBL advocates a decision-making approach broadens the BM value creation objective beyond a single economic bottom line by advocating the need to take not one, but a triad of interests into regard. They include in addition to profits (development of a solid economic structure, which facilitates industrialization and reduces unemployment and social issues), people (elimination of poverty, facilitation of human health and education), and the planet (protecting

the environment). The rationale for broadening and synergizing this triple value creation logic is based on the assumption that sustainable harmony will result (Elkington 1997, p. 2) (see ► [“Triple Bottom Line”](#)). More recently, the TTL concept put forward by McDonough and Braungart (2002) proposed architecting multiple stakeholder interests into products and services already at their conception and design stage. Hence the term “Triple Top Line” (TTL) can be interpreted to reflect stakeholder regard directly from the outset in the top line (sales), as well as the bottom line (profits) (see ► [“Triple Bottom Line”](#)). These principles are generally understood as the fundamental source for sustainable business practice (see, for example, Jonker et al. 2011, p. 9).

One of the important features of BM innovation is highlighted as: “finding the optimal combinations of internal and external knowledge in ways that create and capture value” (Denicolai et al. 2014, p. 259). Some authors, including Jonker and O’Riordan (2016) and Ćwiklicki and O’Riordan (2018), have employed the label “New” BM in previous scholarship to signify a form of BM innovation. According to Ćwiklicki and O’Riordan (2018) however, overall, the academic definitions exhibited a lack of consistency in sufficiently describing BM innovation due to the different perspectives applied by the researchers (Spieth et al. 2014, p. 238).

In line with the increasing awareness for the need to shift toward sustainable development, a “new” generation of BMs arose from a crucially needed shift in the underlying mindset about how value is created. While this change was triggered by the realization that a value creation logic based on a broader regard for stakeholders rather than an exclusive shareholder perspective was required, the role of the market and economic mechanisms as the means for creating value nevertheless clearly remain key. Not only the TBL/TTL principles, but the very word “business” in the NBM term, as well as Carroll’s (1979) corporate responsibility definition (which includes an economic, as well as legal and ethical responsibility of business), clearly highlight the essential role of profits in all forms of BM value creation. Despite these

definitions, as concepts of NBMs evolved over time, the role of economic outcomes as the essential consequence of business was initially diminished by some scholars. For instance, the scholarship presented by Dentchev et al. (2016) and Teece (2010), among others, could be interpreted to imply that profit generation stood in conflict with the NBM value creation logic.

Today, instead of criticizing business for causing social and environmental problems, protagonists, such as Harvard Business School Professor Michael Porter, renowned for his theories on economics and business strategy, reasons that precisely because business makes profits by solving problems, it can play a powerful role in solving the social and ecological challenges facing mankind. Moreover, Porter advocates that of all the possible stakeholders who could shape change, business can do this best simply because it has the greater resources (Porter 2013). Consequently, a prerequisite for distributing wealth is that it is first generated. Delivering economic value based on their strategic choices not only ensures the organization’s long-term survival. Harnessed fairly and aligned with social and ecological interests, business can help to concurrently address a broad range of multiple stakeholder interests. Profits remain, therefore, in addition to their other areas of accountability, an essential responsibility of every business decision-maker. Based on this rationale, sustainable NBMs do not contradict conventional BMs per se, but simply represent a broader scope of value creation logic. Profits thus remain key as long as they are not achieved at the expense of other stakeholder interests.

In contrast with the short-term, profit-maximizing wealth-generation focus of narrower shareholder value creation strategies, corporate decision-makers are increasingly beginning to embrace the rationale of stakeholder theory when making management choices. For clarification, the term IBM is employed by the author to avoid the semantic issues associated with the term “new” in NBMs. Based on the rationale that there is nothing as old as a new idea, the term “innovation” was purposefully chosen as a more appropriate label to depict the qualities of BMs in the

future value creation era. Clearly, however, IBMs undoubtedly signify many of the concepts inherent in the BM and NBM logic. Arising from the realization that an over-emphasis on shareholder dominance is harmful to society and the environment (Hampden-Turner et al. 2019, pp. 28–37), contemporary concepts of IBMs build on sustainable TBL/TTL principles by encouraging the organization of business activities to optimize the achievement of *mutual benefits* in stakeholder relationships. The inherent innovation in IBMs is generally defined by Casadesus-Masanell and Zhu (2013, p. 464) as the search for new logics of the firm, new ways to create and capture value for its stakeholders, and focusing, primarily, on finding new ways to generate revenues and to define value propositions for customers, suppliers, and other partners. Essentially, this new value creation logic is focused on reciprocal/circular benefit in relationships. For instance, the role of money as the primary rationale and “currency” in trade underwent reassessment. This reflection led beyond money as the sole basis for exchanges to a broader mix of additional (hybrid) values. Further possibilities such as nature, time, care, silence, attention, and energy, among others, became salient. In the evolving NBM logic, for example, attention on *access* to the means of production became more important than their ownership. Likewise, *using* became more salient than controlling the key factors and resources of production. Thus, the NBM notion paved the way for a cooperative value creation approach centered on long-term commitment between stakeholders (O’Riordan and Zmuda 2015, p. 234).

Resulting from these developments we can summarize that sustainable NBMs, which could be interpreted as an early form of IBM, do not stand in contrast with conventional BMs per se, but simply represent an ever-broadening and deepening scope and quality of value creation. Their inherent value creation logic, driven by sustainable, TBL/TTL, stakeholder-orientated values, signifies a shift in leadership awareness and mindset toward the voluntary integration of social and environmental interests into the business purpose. The strategic business activities of planning, investing, and organizing resources

along the entire value chain of the business thereby recognizes social and ecological needs as valuable business opportunities. This interpretation of sustainable IBMs assumes a broad enabling scope for business. It envisions companies, as well as other parties and intermediaries, as catalysts for facilitating market-mediated access for and between customers/users to business solutions. The goal of business success thereby becomes a motor for social and environmental solutions driven by economic exchange mechanisms. Ultimately, business becomes strategically connected with society.

This transformation signifies a quest for BM innovation beyond the earlier conventional profit maximization focus. The resulting IBM value proposition advocates a broader stakeholder value optimization approach. It can arguably be interpreted to include interrelated principles of value creation enabling collaborative business strategies serving to promote novelty, inclusivity, and general well-being for all stakeholder constituents. Its inherent broadened scope can be interpreted to derive from several premises based on the general aim to ground management decision-making on stakeholder theory and hence create value based on a stakeholder value creation logic. The emerging but compelling discussions, which challenge the way capitalism is currently organized, will continue to raise questions about how long-term stakeholder value is optimally created (Hampden-Turner et al. 2019).

Wealth Creation: Wicked Problems Call for Wicked Solutions

Abundant evidence suggests that great progress has been achieved over the past two centuries in improving worldwide prosperity. On many measures people today are wealthier, healthier, better educated, live in safer and cleaner environments, are better nourished, and entertained than in the past (Bregman 2016). One key catalyst for this progress has been the cumulative effect of individual corporations generating great wealth via their conventional BM logic. However, a

fundamental dilemma of our time is that this “progress” has come at a high price. While the linear model of an economy defined by three words “take, make, throw” in theory assumes access to infinite resources and energy, in practice, those resources are diminishing. Mankind continues to face many “wicked” problems, including among others: nutrition and access to water issues, deforestation, lack of food and skills, insecurity, insufficient health care, and pollution (O’Riordan and Hampden-Turner 2021). Addressing these problems requires improving the level of recovery and recyclability of waste (Braungart and McDonough 2009). Counteracting the cumulative negative effects of, for instance, an exponentially rising global population, increasing consumerism, and unsustainable market mechanisms, sparks the general need for innovative solutions to improve our capability to sustain mankind’s needs within the systems that we have constructed. The main issue, however, is that neither the politics nor the economic system needed to fix the existential wicked problems of our time exist today. They need to be created.

Addressing this issue is one of the key contemporary social challenges (Chomsky 2017). International experts in the field including the world-renowned leader in environmental stewardship, David Attenborough advise that the climate change crisis is “difficult to overstate” (Attenborough 2019). Environmental change is happening ever faster and threatens to destabilize society. If the world fails to act, researchers warn of significant and dangerous changes including disruptions arising as the consequences of rising sea levels and significant changes to ocean temperatures and acidity continue to amplify. For instance, the ability to grow crops such as rice, maize, and wheat, among others, would increase problems with food and water supplies. A report released by the leading international body evaluating climate change (IPPC 2018) warns that such effects could potentially trigger price spikes driving civil unrest, while increases in levels of migration would strain societies. Combined, these factors could overload political institutions and global networks of trade (O’Riordan and Hampden Turner 2021).

Many continue to believe that business is responsible for causing the above-noted problems. This accusation might well appear justified considering the ongoing business scandals continually gripping the media headlines. While business has undoubtedly earned a negative image due to the leadership choices of various decision-makers from numerous sectors, including oil, banking, pharmaceuticals, tobacco, and fast food industries, among others, crucially, the evidence suggests that only business wields the degree of power (via its resources) required to achieve positive impact.

The efforts undertaken to date to address the environmental and social challenges facing mankind have not been satisfactory. Although the still-evolving concepts of NBMS and IBMs as a construct comprising both the rationale and the route for organizing value creation have recently begun to gain traction, realizing their inclusive, sustainable, stakeholder-orientated value creation output via the interrelated activities of planning, leading, structuring, and controlling as organizational processes requires a crucial shift away from the traditional narrow shareholder-focused leadership mindset. Because an isolated economic emphasis on a competitive profit maximization route to value creation ignores the external impact of the organization on the various affected parties, a new and innovative organizational logic as a basis for redesigning business processes from which value creation and fair delivery ensue is urgently needed (Ćwiklicki and O’Riordan 2018). The inherent value-generating logic of IBMs suggests that they may potentially hold many of the characteristics required to address the above-noted issues.

Future Directions

The above-noted issues trigger the need for enormous change. The increasing support for Greta Thunberg’s Fridays for Future movement is one powerful indication of the increasing awareness in society that we cannot solve problems by using the same kind of thinking we used when we created them. Innovative solutions are needed. But novel routes require a “leap of faith.” Rather than

automatically repeating the same habits from the past, or replicating the actions of others, differentiation demands a route via the path less traveled. Unique opportunities arise on this path if ingenuity, resourcefulness, and insight are enabled to flow. But the first step is a willingness to change. The quote from the physicist Albert Einstein “Any fool can make things bigger, more complex, and more violent. It takes a touch of genius – and a lot of courage – to move in the opposite direction,” is still highly relevant in business world today.

As the business world grapples with the rising concerns of society, management decision-makers can rise to the challenge by investing their resources sustainably. When transforming resources, including land, labor, capital, and enterprise into outputs, the leaders of organizations make choices based on value judgments, which impact its stakeholders (see ► [“Stakeholder Relationship Management”](#)). Because BMs serve the purpose of describing the design or architecture of the value creation, delivery, and capture mechanisms employed by leaders to realize some chosen purpose, they serve as an important vehicle for change. The next generation of BMs could serve the people it impacts by creating first social and environmental, then, as a result, economic value.

By realizing profits as a consequence of the stakeholder relationships it enacts, business evolves as a means through which people serve (not exploit) other people. Leaders in organizations can make conscious choices to harness the resources they invest. Driven by the sustainable values inherent in a transformed stakeholder-orientated purpose, BMs evolve to transform organizations into catalysts for enhancing value creation in society. Innovative solutions via fruitful stakeholder relationships ensure sustainable business responses.

To achieve this human-centric business model, a transformation in the current management attitude and an advanced BM construct is required. A key prerequisite for sustainable development is the premise that the actors in the stakeholder network from both public and the private sector must in the first instance adopt a leadership mindset, which better serves society. This innovative

perspective generates intrinsic opportunities with broadened leverage for those organizations in which decision-makers choose to contribute not merely to the economic, but also to the social and environmental needs of society (e.g., Roddick 2000, p. 14).

Applied at the macro-level, this requires transitioning toward public sector frameworks in which political, social, and economic, as well as other pertinent systems better serve society (O’Riordan and Hampden-Turner 2021). However, precisely because Government, non-governmental organizations (NGOs) and other individuals or groups have not satisfactorily addressed the pressing problems of our time, solutions need to be initiated elsewhere. In the private sector, commerce must serve society and not the other way around! What is needed is a mindset reset among management decision-makers to trigger awareness of the potential to create long-term sustainable profits by investing internal and external resources to solve societal needs. Business makes profits by selling its offerings at a price, which generates sales revenue. Costs are subtracted and profits ensue. The stakeholder relationships in this process require reconsideration. While business typically contributes to society by paying taxes and income to employees, as well as via social subsidies and charitable donations, the external costs of its activities must be included in the overall assessment of its contribution to society. Systems for transparent accountability must improve and measurement instruments must be developed to capture the inclusive stakeholder value that is created. Those who argue that business *causes* problems must, based on the same rationale, recognize the enormous potential held by business to serve as a catalyst in unleashing the momentum needed to *solve* societal issues.

Realizing its full capabilities will require a fundamental change in the current value creation logic of organizations. From a management perspective, the overly prolonged belief that a short-term shareholder focus is a reasonable way to invest collective resources is misled. In the long-term, business *does not* logically profit in any essential way from causing pollution, resource depletion, social problems, or any of the other

negative (tragedy of the commons) impacts for which it is frequently held accountable. Instead, creating sustainable value (prosperity, wealth, and well-being) requires recognition of collective equity among stakeholder groups as well as generations, according to the UN Brundtland Report (Brundtland 1987). The single-minded emphasis on profits for the holders of equity overlooks those who do the actual work and must master the skills needed in the years to come. More money is extracted in the short-term than invested in the long-term (O’Riordan and Hampden-Turner 2021). Freeman (1984, 2018) shows that wealth is created by a broad alliance of stakeholders whose rewards must be commensurate to their contributions. A triple bottom line (TBL) and top line (TTL) approach is needed (Elkington 1997; McDonough and Braungart 2002). Profits are the consequence of shared efforts not the purpose of them (Grant 2006, p. 41).

Of all the possible alternative stakeholder groups, only business possesses the resources to affect the adequate large-scale impact required to address the wicked and increasingly intensifying problems facing mankind (e.g., Porter 2013). Mobilizing the means to address these issues will however require a fundamental shift in the management mindset regarding how business creates value. This will necessitate intensified reconsideration of the role of profits in creating value in society. In pursuit of the scale and scope of solutions required to address the issues facing society, a mindset reset is required by all stakeholders. New insights are needed for architecting novel value propositions of the way in which organizations engage in business with its customers, partners, and vendors, as well as other interest groups.

In line with the interpretation of the original Latin meaning of the word “competition” (i.e., “competere”), in a stakeholder value creation approach, competitors strive *together* in synergy to achieve connected objectives thereby realizing synergic value (O’Riordan 2017, pp. 3, 387–388 and 423–424). Based on Aristotle’s rationale, politics, economics, and ethics comprise the key pillars of engagement, and the overall value outcome is better than the sum of its parts (Aristotle’s 1993 and 2001). Converting to the values inherent in

this stakeholder-orientated sustainable development approach essentially requires the fundamental connection of allied interest groups collaboratively realizing progress together resulting in the effective harmonization of multiple goals (e.g., O’Riordan 2017, p. 393). In this way, co-ordinated TBL/TTL outcomes are achieved including: Profits via the development economic structures, which facilitate sustainable development and generate employment; People through improving health and education while eliminating poverty; and Planet via environmental protection.

In her book on conceptualizing stakeholder relationship management, O’Riordan’s stakeholder value creation framework proposes a corporate approach for measurable stakeholder relationship management (O’Riordan 2017, p. 380). The framework depicts four steps to value creation depicting the transition from a conventional BM to an IBM. It is founded on an empowerment mindset in which humanity is integrated into the organizational strategy. This innovative value creation logic shifts the organizational logic from a network of stakeholder relationships in which power is wielded *over* people, resulting in powerlessness, to one in which power is achieved *through* people, i.e., empowerment. Corporate Responsibility (CR) thus becomes the cornerstone of the company’s purpose for being and accordingly drives its strategy. From this perspective of corporate mission, effective CR strategies are realized via novel forms of leadership engagement (see ► “Corporate Responsibility”). This new awareness signifies a deepening and broadening of the concept of “business” in which people focus on doing things for people as the definition of “business rationale.” Sustainable profits thereby flow from commercial activities, which serve to improve the overall well-being of society.

IBMs offer an exciting framework for achieving the necessary value creation logic transition. However, effective strategies clearly require a new form of leadership awareness, connection, and realization of value creation in synergy and harmony with the natural and social environment. The rationale for this transition is driven by

stakeholder-orientated purpose (Freeman 2018; O’Riordan 2017) (see ► “Stakeholder Theory”).

These insights indicate that future developments will require fundamental change in the relationship between business and other stakeholders in society today. Based on the objective to seek to create mutual value by connecting all the entities that are impacted by the decisions of the organization, BMs must evolve to nurture stakeholder interests. To intrinsically enhance the capitalist system, new strategies, measurement methods, and criteria are required to achieve this shift. As a crucial prerequisite for this transition, a circular value creation flow must replace the current linear approach. This requires a transition to a Circular Business Model (CBM).

CBMs connect all levels of the business from the external macro- and micro-level influencing factors to the organization’s internal resources. They serve as a useful organizational construct for achieving sustainable solutions, which enable more optimally balanced TTL/TBL value for a broader range of constituents than “conventional” BMs. This implies that the classical stakeholder spoke-and-wheel thinking is replaced by a much wider networked scope of parties involved in creating value, such as citizens, NGOs, and others besides business or governments. CBMs could be construed as a natural outgrowth of conventional BMs and a logical development of NBMs and IBMs. They will however only flourish if the external conditions in the broader system are favorable. This includes the development of a circular economy, which is evolving from novel advancements, such as: Cradle to Cradle, Reverse Innovation, the Collaborative/Sharing/Access economy among others influences. Based on Schumpeter’s rationale, by “democratising wealth,” such solutions enable sustainable business with respect to the use and distribution of, as well as access to scarce resources for customers (Schumpeter 2008). As one example of an inclusive, multi-stakeholder, up-cycling economy, a Circular Economy operates on the underlying idea of constructing a system in which social and ecological value are sustainably designed based on biomimicry. This is achieved by developing an offering (product or service for top line sales)

within a system, which is restorative and regenerative by design. This intrinsically enables sustainable processes that are comprehensively conceived from conception, through sourcing, to manufacture, use, and discard (preferably into new raw materials).

Recognizing the decision-making process inherent in CBM transition relates to the wider theme of decision-making in multifaceted scenarios. CBMs offer the possibility to revise the current value creation approach by connecting the business logic with the well-being of society. However, because managerial decision-making in the complex conditions represented by this transition is to date under-researched (Ćwiklicki and O’Riordan 2018), further academic work on the transformation from a conventional to a CBM is required. Future research could focus on the circular “flow” inherent in CBMs. Circularity is a means for synchronizing value creation via the architecture of permeable, reciprocal “constructs” between the parties. In this future scenario, the management decision-maker can be equated with the role of a conductor directing (or shaping the output of) an orchestra. All the “instruments” (stakeholder parties) are aligned in tune (values) to resonate in harmony via a music script (purpose) from which the collective expression of “music” ensues. The “rebound” or “echo effect” ensures an optimal “melody” value creation by and for all parties in the “network” including the “audience.” **Thus the underlying business purpose evolves** from the aim to survive **to the ambition to create**. In this process, realizing the benefits of circularity facilitates a transition from a primal competitive focus on survival to collaborative value creation delivering reflected, respectful, purposeful stakeholder solutions.

Summary

IBMs comprise a shift in the design of the conventional wealth creating logic of how organizations transform resource inputs (land, labor, capital, enterprise) into outputs (products and services). They present a transition from the traditional linear approach by manifesting stakeholder

value creation values into tangible business processes. The entrepreneurial purpose of decision-makers architecting an IBM approach drives the conscious, inclusive, and sustainable creation of optimum positive impact for all those interest groups who can affect or be affected by the business process. The value generated by corporations (outputs) designing IBMs thereby inclusively creates collective well-being with and for multiple stakeholders in society. This approach shifts the business processes toward a circular economy value creation logic delivering mutual benefits via new types of relationships within and between the constituents of the entire operating environment. The inherent optimal creation of economic value as a consequence of effective stakeholder relationships thereby concurrently and inclusively ensures the fulfillment of commercially crucial shareholder interests. Ultimately, IBMs signify a novel mechanism for decision-makers to transition via their business processes toward implementing sustainable business strategies in society. This not only innovatively but also comprehensively (holistically) connects the interests of all stakeholders in the interest of collectively achieving optimal outcomes. Ultimately, via the innovatively architected circular system, societal well-being is consciously enhanced. The process is still evolving, and further research will help to explain the necessary enablers and barriers, as well as the practices and policies required to achieve IBM stakeholder value transition.

Cross-References

- [Circular Economy](#)
- [Corporate Responsibility](#)
- [Stakeholder Relationship Management](#)
- [Stakeholder Theory](#)
- [Stakeholder Value Creation](#)
- [Triple Bottom Line](#)

References

- Afuah, A. (2014). *Business model innovation. Concepts, analysis, and cases*. New York/London: Routlage.

- Amit, R., & Zott, C. (2012). Creating value through business innovation. *MIT Sloan Management Review*. Retrieved from <http://sloanreview.mit.edu/article/creating-value-through-business-model-innovation/>. Accessed 18 May 2019.
- Aristotle. (1993). *Schriften zur Staatstheorie [Writings on the theory of the state]*. Stuttgart.
- Aristotle. (2001). *Nikomachische Ethik [Nicomachean ethics]*. Stuttgart.
- Attenborough, D. (2019). We could wreck natural world, David Attenborough tells Prince William. Retrieved from <https://www.bbc.com/news/uk-46957085>. Accessed 20 Feb 2019.
- Braungart, M., & McDonough, W. (2009). *Cradle to cradle: Remaking the way we make things*. New York: North Point Press.
- Bregman, R. (2016). *Utopia for realists: How can we build the ideal world*. New York: Back Bay Books.
- Brundtland, G. H. (1987). *Our common future*. Oxford: Oxford University Press.
- Carayannis, E. G., Sindakis, S., & Walter, C. (2015). Business model innovation as lever of organizational sustainability. *The Journal of Technology Transfer*, 40 (1), 85–104. <https://doi.org/10.1007/s10961-013-9330-y>.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Casadesus-Masanell, R., & Zhu, F. (2013). Business model innovation and competitive imitation: The case of sponsor-based business models. *Strategic Management Journal*, 34(4), 464–482.
- Chesbrough, H., & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, 11 (3), 529–555.
- Chomsky, N. (2017). *Requiem for the American Dream: The 10 principles of concentration of wealth & power*. New York: Seven Stories Press Publications.
- Ćwiklicki M., & O'Riordan L. (2018). Creating value via sustainable business models and reverse innovation. In L. Moratis, F. Melissen, & S. Idowu (Eds), *Sustainable business models. CSR, sustainability, ethics & governance* (pp. 151–167). Springer, Cham. https://doi.org/10.1007/978-3-319-73503-0_8. Available at SSRN: <https://ssrn.com/abstract=3213869>
- Denicolai, S., Ramirez, M., & Tidd, J. (2014). Creating and capturing value from external knowledge: The moderating role of knowledge intensity. *R&D Management*, 44, 248–264. <https://doi.org/10.1111/radm.12065>.
- Dentchev, N., Baumgartner, R., Dieleman, H., Jóhannsdóttir, L., Jonker, J., Nyberg, T., & van Hoof, B. (2016). Embracing the variety of sustainable business models: Social entrepreneurship, corporate intrapreneurship, creativity, innovation, and other approaches to sustainability challenges. *Journal of Cleaner Production*, 113, 1–4. <https://doi.org/10.1016/j.jclepro.2015.10.130>.

- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing.
- Freeman, R. E. (2018). Businesses should be driven by purpose. <http://www.forbesindia.com/article/third-anniversary-special/edward-freeman-businesses-should-be-driven-by-purpose/32934/1>. Accessed 16 May 2018.
- Grant, R. M. (2006). *Contemporary strategy analysis*. Blackwell.
- Hampden-Turner, C., O'Riordan, L., & Trompenaars, F. (2019). *Capitalism in crisis: What's gone wrong and how can we fix it? A stirring vision of an egalitarian economy*. London: Filament Publishing. ISBN 978-1-912635-56-6.
- IPPC (Intergovernmental Panel of Climate Change). (2018). Global warming of 1.5°C: Summary for policy makers. https://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf. Accessed 16 May 2018.
- Jonker, J. (2012). *New business models*. Nijmegen: Radboud University Nijmegen.
- Jonker, J., & O'Riordan, L. (2016). New business models: Examining the role of principles relating to transactions and interactions. In H. G. Brauch, U. O. Spring, J. Grin, & J. Scheffran (Eds.), *Handbook on sustainability transition and sustainable peace* (Hexagon series on human and environmental security and peace) (pp. 543–557). Cham: Springer International Publishing.
- Jonker, J., Stark, W., & Tewes, S. (2011). *Corporate Social Responsibility und nachhaltige Entwicklung: Einführung, Strategie und Glossar*. Berlin/Heidelberg: Springer.
- Jonker, J., O'Riordan, L., & Marsh, N. (2015). The art of balancing: Enabling the realisation of multiple and shared values through a new generation of business models. In L. O'Riordan, P. Zmuda, & S. Heinemann (Eds.), *New perspectives on corporate social responsibility: Locating the missing link* (pp. 229–246). Wiesbaden: Springer.
- Lindgren, P., & Jørgensen, R. (2012). Towards a multi business model innovation model. *Journal of Multi Business Model Innovation and Technology*, 1(1), 1–22.
- Magretta, J. (2002, May). Why business models matter. *Harvard Business Review*. <https://hbr.org/2002/05/why-business-models-matter>. Accessed 20 May 2019.
- Markides, C. (2006). Disruptive innovation: In need of better theory. *Journal of Product Innovation Management*, 23(1), 19–25.
- McDonough, W., & Braungart, M. (2002). Design for the triple top line: New tools for sustainable commerce. *Corporate Environmental Strategy*, 9(3), 251–258. [https://doi.org/10.1016/S1066-7938\(02\)00069-6](https://doi.org/10.1016/S1066-7938(02)00069-6).
- O'Riordan, L. (2017). Managing sustainable stakeholder relationships: Corporate approaches to responsible management. In S. O. Idowu & R. Schmidpeter (Eds.), *Sustainability, ethics & governance series* (Monograph). Heidelberg: Springer Publishing.
- O'Riordan, L., & Hampden-Turner, C. (2021). Corporate social responsibility in Germany. In S. O. Idowu (Ed.), *Current global practices of corporate social responsibility: In the era of sustainable development goals*. Springer International Publishing.
- O'Riordan, L., & Zmuda, P. (2015). Conceptual framework for CR management: A critical review of sustainable business practice based on a case study of a leading transnational corporation. In L. O'Riordan, P. Zmuda, & S. Heinemann (Eds.), *New perspectives on corporate social responsibility: Locating the missing link* (pp. 473–504). Wiesbaden: Springer.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. Hoboken: Wiley.
- Osterwalder, A., Pigneur, Y., & Tucci, C. L. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems*, 16(1), 1–28. <https://doi.org/10.17705/1CAIS.01601>.
- Porter, M. (2013). Ted Talk: Why companies can solve social problems. <https://www.youtube.com/watch?v=0iIh5YYDR2o>. Accessed 14 June 2013.
- Roddick, A. (2000). *Business as unusual*. Thorsons Publishers.
- Saebi, T., & Foss, N. J. (2014). Business models for open innovation: Matching heterogeneous open innovation strategies with business model dimensions. *European Management Journal*, 33(3), 201–213. <https://doi.org/10.1016/j.emj.2014.11.002>.
- Schumpeter, J. A. (2008). *Capitalism, socialism, and democracy* (3rd ed.). Harper Perennial.
- Shafer, S., Smith, H., & Linder, J. (2005). The power of business models. *Business Horizons*, 48(3), 199–207.
- Speth, P., Schneckenberg, D., & Ricart, J. E. (2014). Business model innovation – State of the art and future challenges for the field. *R&D Management*, 44(3), 237–247. <https://doi.org/10.1111/radm.12071>.
- Taran, Y., Boer, H., & Lindgren, P. (2015). A business model innovation typology. *Decision Sciences*, 46(2), 301–331.
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2–3), 172–194. <https://doi.org/10.1016/j.lrp.2009.07.003>.
- Zott, C., Amit, R., & Massa, L. (2011). The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019–1042. <https://doi.org/10.1177/0149206311406265>.

Innovative Performance

► Capacity of Innovation

Insider

► Whistleblowing and CSR

Insider Dealing

► Insider Trading

Insider Trading

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Synonyms

Insider dealing; **Market rigging**; Conspiracy to defraud by using privately available information that is not yet in the public domain.

Definition

The term “inside” is derived from ynneside initially meaning in the late fourteenth century interior part of the body and from c. 1500 of anything. The adjective sense “being on the inside” is from 1610s, from the noun. It began to be used in slang c. 1900 to refer to the supposed real facts or situation that only an insider would know. The meaning of “one in possession of special information by virtue of being within some organisation” is said to date from 1848 and to have originated with particular reference to the stock markets. Trade in the sense of “buying and selling, exchange of commodities” dates from 1550s (see <https://www.etymonline.com/search?q=trade> on Online Etymology Dictionary, accessed August 9, 2020). Insider trading can be legal or illegal depending on whether the insider is trading using information that is available in the public domain.

Illegal insider trading and insider dealing refer to the unacceptable practice of trading in stocks to obtain an unfair advantage through gaining “inside” information that is not available to the “outside” public.

Introduction

Insiders who make use of their inside knowledge to profit from it are described as “opportunistic insiders” who seek to make “abnormal returns” from trades and market manipulation (Biggerstaff et al. (2020, 1); such insiders have been often found to report their transactions after close of business trading hours in order to preserve their informational advantages. “Insiders” could include CEOs, directors, major shareholders, and managers of companies as well as anyone who receives a tip off about a future event or development that may have an impact on prices of stocks and shares; television stars, entrepreneurs, agents, analysts journalists, professional golfers, spouses, relatives, and friends are reported as having been charged with and/or convicted of insider trading. As pointed out by Liu et al. (2020, 1), the “detrimental effects” of insider trading is well known and has been well researched and recorded. Insider trading provides an unfair advantage to “insiders” who are in the know and make use of their inside knowledge to generate profits for themselves at the expense of those who are outside and not in the know. The practice leads lack of transparency and opacity in financial markets and could result in discouraging ordinary investors from participating in what they might perceive to be “rigged” markets.

Insider trading is illegal in the UK from 1980 (Barnes 2011). However, the practice is viewed as being widely prevalent and is difficult to prove. While there have been some recent high-profile convictions, such convictions have been few in comparison with the perceived scale of its occurrence, and researchers are looking to see if other variables such as corporate social responsibility can mitigate its occurrence and impact.

Martineau and de Vanssay (2019, 1) distinguish between three different trading behaviors: (1) “Active insider trading behaviour” describes behavior resulting in the modification of a stock portfolio reallocation decision on account of inside information received about stock that is not in the public domain. (2) “Passive insider trading” describes behavior resulting in the cancellation of a stock portfolio reallocation decision on account of inside information received about stock that is not in the public domain. (3) “Pure ethical trading behaviour” describes behavior that does not result in any change to a stock portfolio reallocation decision despite non-public information received about the stock. The study concludes that pure ethical trading alone is not likely to effectively discourage the illegal practice of insider trading.

Insider Trading and Corporate Social Responsibility

Corporate social responsibility (CSR) builds a positive image of caring for social good for a firm, whereas insider trading is perceived as self-serving and builds a negative image. There is some research to show that executives of CSR-conscious firms are less likely to engage in insider trading (Klein and Leffler 1981; Gao et al. 2014). Other research finds that CSR may actually mitigate losses from insider trading, leading to a positive correlation between the two (Godfrey et al. 2009; Minor and Morgan 2012). However, in cases where executives’ personal interests are more aligned with the interests of the firm, the negative association between CSR and insider trading profits is more pronounced (Gao et al. 2014). Kim et al. (2014) similarly find that firms that actively engage in CSR also refrain from bad news hoarding behavior, thus reducing stock price crash risk.

A firm’s investment in corporate social responsibility (CSR) builds a positive image of caring for social good and is said to impose additional costs on executives’ informed trading, which is widely perceived self-serving. There is some research to show that executives of CSR-conscious firms are

more likely to refrain from informed trading and profit considerably less from insider trades and are less likely to trade prior to future news than executives of non-CSR-conscious firms. The negative association between CSR and insider trading profits is more pronounced when executives’ personal interests are more aligned with the interests of the firm. Thus, alignment of interests appears to be an effective approach to countering insider trading.

Insider Trading and Sustainability

Social sustainability has been found not only to play an important role in enabling other sustainability initiatives but also to facilitate business success. Unfair and unethical practices, such as insider trading, can negatively affect trading partners (Mani et al. 2016). Economic, environmental, and social aspects of sustainability have been found to extend beyond organizational boundaries, flagging up the importance of managing sustainability initiatives. The increasing emphases on sustainable business practices and corporate social responsibility in recent times are witness to the recognition of this importance.

Investor confidence plays a key role in the long-term survival of a company. Knowledge that insider trading is going on in a company is bound to deter investors, and conversely sustainability practices in certain areas have been found to be rewarded by investors (de Lange 2017).

Summary/Conclusion

Insider trading has implications for sustainability. It is crucial that dealings in the stock market and elsewhere are transparent and open not only on account of sustainability and ethical issues but also for preserving the long-term health of market-based systems. Firms would need to recognize that in the long term, profits and business success are linked to sustainability and ethical trading practices.

Cross-References

- [Corporate Social Responsibility](#)
- [Enlightened Self-Interest](#)
- [Ethical Theories II](#)
- [Moral Hazard](#)

References

- Barnes, P. (2011). Insider dealing and market abuse: The UK's record on enforcement. *International Journal of Law, Crime and Justice*, 39(3), 174–189.
- Biggerstaff, L., Cicero, D., & Wintoki, M. B. (2020). Insider trading patterns. *Journal of Corporate Finance*, 64 Pages 1-24 (October).
- de Lange, D. E. (2017). Start-up sustainability: An insurmountable cost or a life-giving investment? *Journal of Cleaner Production*, 156(10 July), 838–854.
- Gao, F., Lisic, L. L., & Zhang, I. X. (2014). Commitment to social good and insider trading. *Journal of Accounting and Economics*, 57(2–3), 149–175.
- Godfrey, P., Merrill, C., & Hansen, J. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30, 425–445.
- Kim, Y., Li, H., & Li, S. (2014). Corporate social responsibility and stock price crash risk. *Journal of Banking & Finance*, 43, 1–13.
- Klein, B., & Leffler, K. (1981). The role of market forces in assuring contractual performance. *Journal of Political Economy*, 89, 615–641.
- Liu, R., Mai, F., Shan, Z., & Wu, Y. (2020). Predicting shareholder litigation on insider trading from financial text: An interpretable deep learning approach. *Information & Management*, 57(8) Pages 1-17 (December).
- Mani, V., Gunasekaran, A., Papadopoulos, T., Hazen, B., & Dubey, R. (2016). Supply chain social sustainability for developing nations: Evidence from India resources. *Conservation and Recycling*, 111(August), 42–52.
- Martineau, N.-G., & de Vanssay, X. (2019). Sinning by omission: Insider trading and ethical behaviour. *Journal of Economics and Business*, 104(July–August), 105834.
- Minor, D., & Morgan, J. (2012). CSR as reputation insurance: Primum Non Nocere. *California Management Review*, 53, 40–59.
- Online Etymology Dictionary. Available at <https://www.etymonline.com/search?q=insider>. Accessed 9 Aug 2020.

Insolvency Regulation

- [Debt Relief Systems: Equitable Allocation](#)

Inspection

- [Audit](#)

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Synonyms

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Introduction

The Institute of Chartered Secretaries & Administrators also known as The Governance Institute was established in 1891 in Great Britain. It was granted the Royal Charter in 1902. The Institute is the premier global qualifying organization for individuals aspiring to become chartered secretaries and/or chartered governance professionals. Its members have roles in industry and commerce as company secretaries, governance advisers, risk managers, compliance managers, in academia, and many

more. Since 1891, the Institute has successfully transformed itself into a global body of professionals in senior management roles in both public and private sector organizations. Its members' broad skill set includes law, finance, governance, strategy development, risk management, and compliance. It has about 40,000 members with several thousands of students in more than 80 countries worldwide. It has country-based offices in nearly all the 80 countries. Its head office is based in London, UK. Many of the old UK colonies which are members of the Commonwealth of Nations have their largely autonomous affiliated ICSA offices, in countries such as Australia, Botswana, Canada, Hong Kong, India, Kenya, Malawi, Malaysia, Mauritius, New Zealand, Nigeria, Singapore, South Africa, Sri Lanka, Tanzania, Zambia, Zimbabwe, and many others.

The ICSA in the UK, states that "it promotes best practice in corporate governance, liaising with governments and regulatory bodies worldwide." The corporate secretary is a senior corporate officer who is expected to hold wide ranging responsibilities and is often the confidant and counsellor to the Chief Executive Officer and other members of senior management, especially on corporate governance affairs. The Institute of Chartered Secretaries and Administrators in both the UK and in some of the country's other former colonies mentioned earlier, for instance, Australia, Canada, New Zealand, and others consider that governance is one of the main duties of corporate secretaries.

In the UK, the Institute of Chartered Secretaries and Administrators (ICSA) is the professional body which assesses and certifies the competences of prospective chartered secretaries or chartered governance professionals with a series of examinations and post qualification (CPD) programs. The ICSA is the only body among the seven chartered bodies mentioned in the Companies Act 2006 and specified in section 273 subsection 3a – 3g CA 2006 which trains its members solely to become corporate secretaries and governance professionals. Having said this, it must be noted that qualified members of the ICSA do end up in other senior

executive positions in organizations which are not necessarily in company secretariat. The ICSA is one of the 11 professional bodies in the UK whose members are authorized by the Charities Act 2011 to conduct independent examination of charities whose gross income exceeds £250,000 but not subject to the statutory audit. There are three grades of membership of the Institute – GradICSA membership those who have successfully completed the required qualifying examinations of the Institute; Associate membership (a member becomes an Associate (having completed the Institute's examinations, goes on to gain the necessary practical experience, and deemed of appropriate upstanding character); and Fellow membership (an Associate becomes a Fellow after a period of time in a senior management position in their chosen industry). The Institute represents the chartered governance profession with all external bodies including governments and international organizations. It also embraces the needs of professionals in other sectors, such as health, sport, education, and charities that regularly face new regulation that requires them to keep up to date in their field.

Brief History

The Institute was established in 1891 to represent the interests of the then emerging profession of corporation secretaries. It was granted and became a Chartered professional body in 1902. The Institute's purpose of leading effective and efficient governance and administration of commerce, industry, and public affairs continues to guide its activities even well into the twenty-first century.

Mission/Guiding Values

The mission of the Institute is to champion good governance and develop the value, skills, and effectiveness of company secretaries and governance professionals.

The following are the Institute's stated guiding values:

Openness – It champions transparency and requires its members to be clear and open in their business and professional conduct.

Integrity – The Institute works in the public interest and consequently believes that being honest and having strong moral principles is at the heart of good governance. The Institute acts ethically and professionally and requires its members to be ethical, professional, impartial, independent, and informed.

Authority – The Institute being a leading authority in governance matters takes its role in the regard seriously and demands a high standard of professional competence from its employees and members throughout their working lives.

References

http://ogs.charitycommission.gov.uk/#_Toc226862727.

Accessed 21 Aug 2019.

<https://www.icsa.org.uk/about-us>. Accessed 8 Nov 2019.

Idowu, S. O. (2009). Practicing corporate social responsibility in the United Kingdom. In S. O. Idowu & W. L. Filho (Eds.), *Global practices of corporate social responsibility*. Berlin: Springer.

Institution

► [CSR and Role of Government as a Regulator](#)

Institutional Investors

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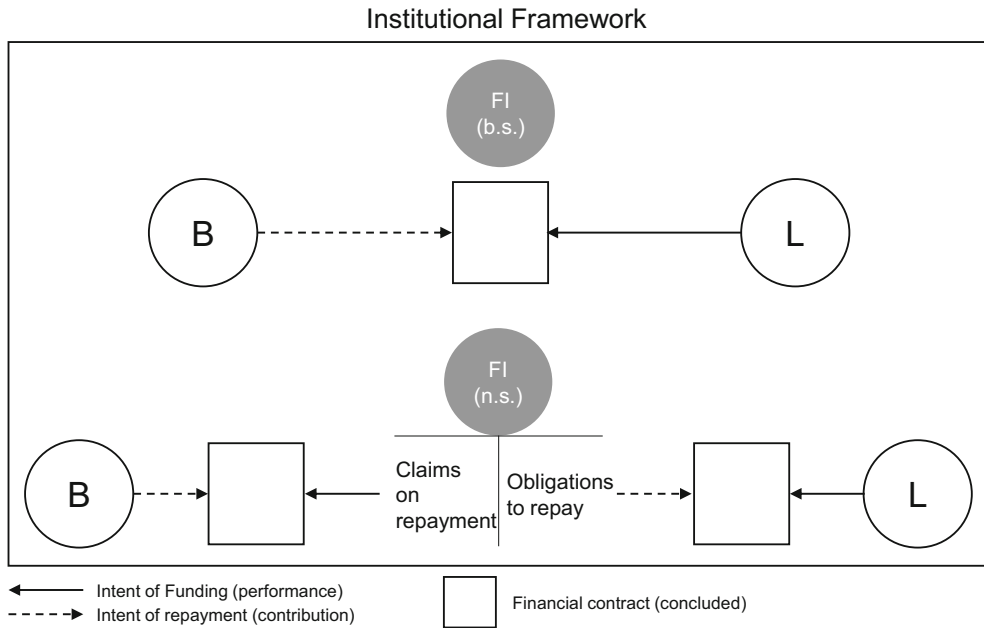
Synonyms

[Financial Institutions](#); [Financial Intermediaries](#)

Defining Institutional Investors in the Financial Market Ecosystem

In numerous publications, different definitions of institutional investors are used (e.g., Davis & Steil, 2001; De La Cruz et al., 2019; Matos, 2020). Some of them present a narrow view, while others offer a wider perspective. This entry will introduce a definition based on the functions performed on financial markets (see Fig. 1). Financial markets are basically defined by the exchange of funds between lenders (L) and borrowers (B) in a given institutional framework (Strumeyer & Swamy, 2017). The resulting financial contracts are characterized by a delay between the payment made by the financiers and the future return made by the borrowers. Accordingly, these contracts on financial markets differ seriously from other exchange contracts resulting from spot transactions and future contracts. In addition to the so-defined primary financial markets, unfulfilled financial contracts can be traded on secondary markets.

Financial contracts are typically concluded between the original partners (see Fig. 1, top). However, due to the signature gap between performance and consideration, financial intermediaries (FI) evolved on real financial markets over time dealing with frictions that occur on financial markets: information problems, term problems, denomination problems, and risk problems. There are two types of financial intermediaries: financial intermediaries in the narrow and in the broader sense. Financial intermediaries in the narrow sense (n.s.) become an additional contract partner between the two original partners. Accordingly, the original financial contract is split into two contrary contracts (see Fig. 1, bottom). For example, banks emerged originally as a financial intermediary to transform quantities and terms of funding. Rather than becoming a reverse contract partner between the original parties, the second type of financial intermediaries in the broader sense (b.s.) performs a service function to the conclusion of the original financial contract (see Fig. 1, top). For example, rating agencies support the conclusion of debt contracts, and



Institutional Investors, Fig. 1 Financial market ecosystem. (Source: own figure)

stock exchanges set the framework for secondary financial markets.

The existence of financial intermediaries on real financial markets is analyzed and explained in different theoretical frameworks (e.g., Boehmer & Kelley, 2009). For the explanation of functions performed by financial intermediaries, the broad literature refers to imperfections introduced in the basic neoclassical model of perfectly competitive financial markets: asymmetric information, transactions costs, and risks (e.g., Simpson, 2014). A taxonomy of financial intermediaries can refer to these typical functions performed on financial markets. Although grouped together in many research papers, institutional investors make up a diverse group (MSCI and OECD (ed.), 2018). Institutional investors in this entry are defined as financial intermediaries in the n.s. becoming the middleman between the original contract partner and other financial intermediaries by reducing market imperfections (see Fig. 2). Accordingly, institutional investors can become shareholders by investing in equity contracts, or they become creditors by investing in debt contracts.

When it comes to equity investments, institutional investors are supposed to be the more active

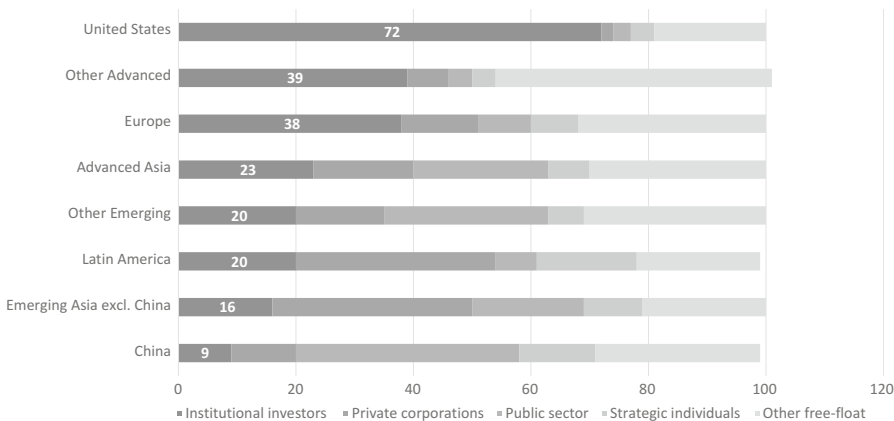
type of owners in comparison to private investors (Johnson et al., 2010). Accordingly, one part of literature focuses on the control functions performed by institutional investors (Jensen & Meckling, 1976; Shleifer & Vishny, 1986). On real financial markets, institutional investors are consistently monitored by policy makers, and over time, a vast set of regulations has been developed around the world. While bank and insurance regulation have a long history, rules for investment, pension, and government retirement funds developed over the last decades due to the increasing role of these intermediaries on financial markets in general and the supposed responsibility in (financial) crises (e.g., Shleifer & Vishny, 2011; Glossner et al., 2021). In many countries, institutional investors are regulated through different instruments, e.g., limiting the investment decision, the funding behavior, or the legal forms.

Institutional Investors, Ownership, and Sustainable Development

Currently, the ownership power of institutional investors is in the limelight of different political

Financial Intermediaries	Typical Examples		Main Functions
Financial Intermediaries (n.s.) = Institutional Investors	Banks	Universal Banks	Maturity transformation
		Specialist Banks	Risk transformation
	Insurance Companies	Life Insurance Companies	Risk transformation
		Re-Insurance Companies	
		Other Insurance Companies	
	Other Institutional Investors	Investment Funds	Different functions: Risk transformation Transfer of knowledge Reduction of transaction costs
		Private Equity Firms	
		Venture Capital Firms	
		Factoring Companies	
		Leasing Companies	
		Other	
Financial Intermediaries (b.s.)	e.g., Rating Agencies, Stock Exchanges, Insurance Broker, Credit Agencies		Service provider

Institutional Investors, Fig. 2 Taxonomy of financial intermediaries. (Source: own figure)



Institutional Investors, Fig. 3 Percentage of market capitalization by ownership category at the end 2017. (Source: own figure, data from De La Cruz et al., 2019)

initiatives, especially the United Nations (UN) “2030 Agenda for Sustainable Development” and the 17 Sustainable Development Goals (SDGs). There are merely two major reasons for focusing on institutional owners. First, these specialists are supposed to have major impact on the future sustainable development due to the high and increasing volume of managed funds (Matos, 2020). Institutional investors are the majority of shareholders of publicly traded companies in many regions around the world (see Fig. 3). The importance of institutional

investors is the highest in the United States (72%), followed by other advanced countries (39%) and Europe (38%), whereas institutional investors (9%) are clearly dominated by public sector investments in China. This tremendous rise of institutional investors has been driven by investor’s recognition of the value of low-cost diversification (risk transformation) and was encouraged by favorable regulatory and tax treatment.

Second, institutional investors are in the center of sustainable development since corporate

governance was basically improved by the increase in this type of investors. With equity contracts concentrated in the hands of specialists, corporate managers face powerful shareholders to engage with (McNulty & Nordberg, 2016; Dimson et al., 2015): In contrast to atomistic and powerless private investors, institutional investors frequently show a high engagement or even activism in equity markets. By turning institutional investors into societal stewards, the traditional performance-oriented perspective of financiers can be extended by societal aspects (Serafeim, 2018; Staub-Bisang, 2012). Competition on financial markets will guarantee that access to financial resources is only available to companies which transform their business models in line with the SDGs (Di Giuli & Kostovetsky, 2014; Cheng et al., 2011; Petersen & Vredenburg, 2009; Ferreira & Matos, 2008).

Following this function in corporate governance, the UN started a project with institutional investors to accelerate the development of a fitting sustainable global financial system. The discussions ended in the launch of the six Principles for Responsible Investment (PRI) in the year 2006. This voluntary set of investment principles offers guidance to possible actions for incorporating Environmental, Social, and Governance (ESG) factors into investment practice. The number of signatories on the PRI increased rapidly over the decades (PRI (ed.), 2021). Additionally, the more general goal of promoting shareholder engagement with their investee companies was pursued by many politicians (Klettner, 2021) and led to other initiatives, best practice guidelines (Boffo & Patalano, 2020), and some national codes (e.g., the UK stewardship code in 2010). After the financial crisis, the European Commission also looked into corporate governance, and the discussion ended with the Shareholder Rights Directive II in 2017.

In accordance with the public debate interest in sustainable development, the concept of corporate social responsibility (CSR) has become prominent again (Liang & Renneboog, 2017; Ioannou & Serafeim, 2012). This concept refers to a company's voluntary contribution to sustainable development that goes beyond any legal

requirements. During the 1990s, many companies were forced to react to criticism of corporate practices and bad publicity. Thus, they started programs in the economic, environmental, and social fields of sustainability to transform their business models (Graves & Waddock, 1994). CSR is similar to the acronym of ESG developed by financial institutions on behalf of the UN initiative on sustainable finance. By enlarging the content explicitly to governmental issues, ESG is the more expansive terminology. Hence, it became the standard term in financial accounting research (Gillan et al., 2021). If institutional equity investors are supposed to play an important role in reaching the SDGs by performing control functions, reliable information on these activities must be disclosed (Amel-Zadeh & Serafeim, 2018; García-Sánchez, 2020). Accordingly, an important landmark in fostering institutional investors' engagement in the field of long-term sustainable value creation is the emergence of CSR/ESG disclosure initiatives.

CSR/ESG Reporting to Institutional Investors: An Overview

According to the growing number of signatories to the PRI initiatives, many institutional investors are on their way to improve firms' economic, environmental, and social performance (David et al., 2007; Dimson et al., 2015; Clark & Crawford, 2012). However, disclosure on CSR/ESG activities varies broadly around the world. In the beginning, most of the reports provided to investors were published voluntarily and in a non-standardized form. The focus of information was on environmental aspects. Nowadays, the basic structure of sustainability reports using the ESG factors is broadly accepted. Furthermore, private reporting initiatives improved the quality of CSR/ESG disclosure. Among others, the most important initiators and their initiatives are given below:

- The Global Reporting Initiative (GRI) is an independent international organization that supports companies and governments in

sustainability reporting. The framework mainly consists of three elements: sustainability reporting guidelines, protocols, and sector supplements. Since 1997, when the GRI first developed, it has found a growing acceptance. According to recent studies, nearly 93% of the world's largest corporations use these standards (GRI (ed.), 2021; KMPG (ed.), 2020).

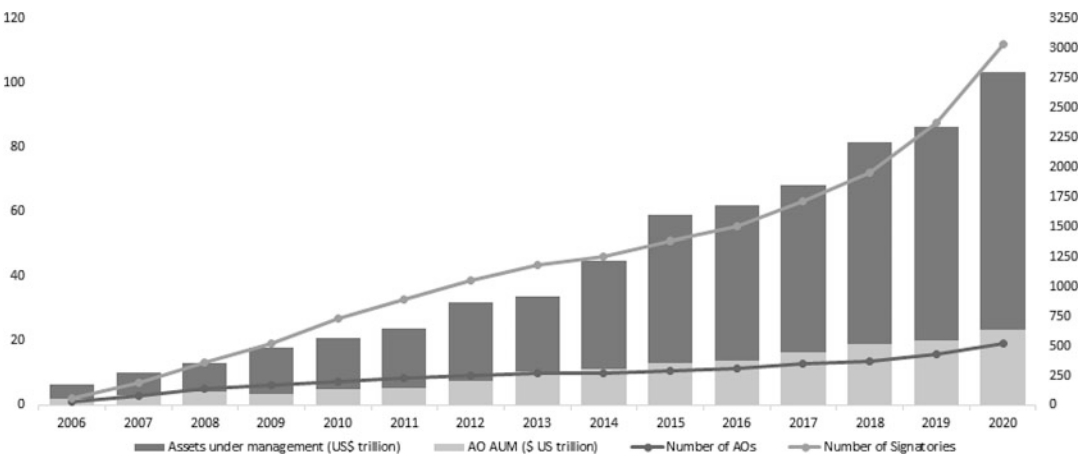
- The International Organization for Standardization (ISO) is an independent and non-governmental organization that develops and publishes international standards in various fields. Companies and individuals cannot become an ISO member. ISO 26000 is the standard for social responsibility. This standard was launched in 2010. It is not certifiable as it does not contain requirements. ISO 2600 consists of seven principles: accountability, transparencies, ethical behavior, respect for stakeholder interests, respect for the rule of law, respect for international norms of behavior, and respect for human rights (ISO (ed.), 2021).
- The United Nations Global Compact (UNGC) is a corporate sustainability initiative. The participants in the initiative involve over 9500 companies in 160 countries. The UNGC supports companies in taking strategic actions toward the SDGs with particular attention to

collaboration and innovation (UNGC (ed.), 2021).

- The Organisation for Economic Co-operation and Development (OECD) is a forum in which governments share experiences and work together on problems. This organization also analyzes data to understand what drives economic, environmental, and social changes. The OECD has published non-binding principles as a standard for responsible business practices and provides guidance on how to disclose information on the wide range of business ethics (OECD (ed.), 2011).

In contrast to these voluntary ESG disclosure initiatives, an increasing number of countries are opting for mandatory disclosure regulation on sustainability activities (Krueger et al., 2021). The map in Fig. 4 provides an overview on this development. Although institutional investors are dominating equity markets in the United States (see Fig. 3), ESG/CSR reporting on ESG by US companies is not mandatory. Hence, the content of sustainability reports is left to companies' discretion (for the analysis of market reactions see Serafeim & Yoon, 2021).

Currently, the European Union (EU) is performing a leading role in enhancing mandatory disclosure on CSR/ESG (Matos, 2020).



Institutional Investors, Fig. 4 World map for countries with mandatory ESG disclosure regulations up to 2016



agree on extending the definition of green bonds to all bonds whose funds are used to finance socially responsible activities (ESG factors). However, in some context, the term of GSS bonds (green, social, sustainability) is used (e.g., CBI (ed.), 2020).

Basically, green bonds differ from standard bonds by being labeled by the issuer: Funds generated by green bonds are earmarked to finance sustainable activities (Park, 2018). Since social responsibility is integrated in the terms of the financial instrument, the governance structure of green bonds is simpler in comparison to ESG equity investments. Institutional investors can monitor projects *ex ante*, have limited downside risks due to exit options on secondary bond markets, and rank *pari passu* to other bond investors in bankruptcy. The emergence of green bonds seems to be a great success story: At the end of 2020, the sustainable debt market had reached USD1.7tn, and almost 10,000 instruments had been issued under GSS labels since 2006 (CBI (ed.), 2021). However, investors in green bonds face the risk of greenwashing, since the issuer's promise to fund socially responsible activities is open to fraud (Bagnoli & Watts, 2020).

The success of green bonds was highly facilitated by the emergence of frameworks set by private governance regimes (Boffo & Patalano, 2020; Park, 2018): the Green Bond Principles, Climate Bonds Initiative (CBI), Sustainability Linked Loan Principles, and green bond indices. Since the long-term future of green bond markets clearly depends on the attractiveness for institutional investors, public standard-setters are considering the regulation of the green bond market. Again, a leading role is performed by the EU: In 2018, the action plan on sustainable finance was adopted by the European Commission. Based on this plan, an EU taxonomy to determine whether an economic activity is environmentally sustainable and meets minimum social safeguards is developed, and an EU Green Bond Standard is designed (Zetzsche & Anker-Sørensen, 2021; Schuetze & Stede, 2021). These political initiatives will support institutional investors' role in the sustainable finance revolution.

Cross-References

- ▶ [Activist Investor](#)
- ▶ [Climate Finance](#)
- ▶ [Corporate Governance](#)
- ▶ [Corporate Social Responsibility Disclosure](#)
- ▶ [Finance and CSR](#)
- ▶ [Shareholder and Stakeholder Activism](#)
- ▶ [Socially Responsible Investment](#)
- ▶ [Stakeholder Theory](#)
- ▶ [United Nations Global Compact](#)
- ▶ [United Nations Sustainable Development Goals 2030, The](#)

References

- Amel-Zadeh, R., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal*, 74, 87–103.
- Bagnoli, M., & Watts, S. (2020). On the corporate use of green bonds. *Journal of Economics and Management Strategy*, 29, 187–209.
- Boehmer, E., & Kelley, E. (2009). Institutional investors, and the informational efficiency of prices. *Review of Financial Studies*, 22, 3563–3594.
- Boffo, R., & Patalano, R. (2020). *ESG investing: Practices, progress and challenges*. Paris: OECD Publishing.
- CBI (Ed.). (2021). *Sustainable Debt: Global State of the Market 2020*. <https://www.climatebonds.net>.
- Cheng, B., Oannou, I., & Serafeim, G. (2011). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35, 1–23.
- Clark, C. E., & Crawford, E. P. (2012). Influencing climate change policy: The effect of shareholder pressure and firm environmental performance. *Business and Society*, 51, 148–175.
- David, P., Bloom, M., & Hillman, A. J. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28, 91–100.
- Davis, E., & Steil, B. (2001). *Institutional investors*. Cambridge: The MIT Press.
- De La Cruz, A., Medina, A., & Tang, Y. (2019). *Owners of the world's listed companies*. Paris: OECD Capital Market Series.
- Di Giuli, A., & Kostovetsky, L. (2014). Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Financial Economics*, 111, 158–180.
- Dimson, E., Karakas, O., & Li, X. (2015). Active ownership. *Review of Financial Studies*, 28, 3225–3268.
- Ferreira, M., & Matos, P. (2008). The colours of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88, 499–533.

- García-Sánchez, I.-M. (2020). Do institutional investors drive corporate transparency regarding business contribution to the sustainable development goals? *Business Strategy and the Environment*, 29, 2019–2036.
- Gillan, S. T., Koch, A., & Starks, L. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, forthcoming.
- GRI (Ed.). (2017). *Member State Implementation of Directive 2014/95/EU: A Comprehensive Overview of How Member States are Implementing the EU Directive on Non-financial and Diversity Information*. <https://www.globalreporting.org>
- GRI (Ed.). (2021). *About GRI*. <https://www.globalreporting.org/about-gri>
- Glossner, S. et al. (2021). Do institutional investors stabilize equity markets in crisis periods? Evidence from COVID-19. *ECGI Working Paper Series in Finance*. Working Paper N° 688/2020.
- Graves, S. B., & Waddock, S. A. (1994). Institutional owners and corporate social performance. *The Academy of Management Journal*, 37, 1034–1046.
- Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43, 834–864.
- ISO (Ed.). (2021). *ISO 26000*. <http://www.iso.org>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 303–360.
- Johnson, R. A., Schnatterly, K., Johnson, S. G., & Chiu, S.-C. (2010). Institutional investors and institutional environment: A comparative analysis and review. *Journal of Management Studies*, 47, 1590–1613.
- Klettner, A. (2021). Stewardship codes and the role of Institutional Investors in Corporate Governance: An international comparison and typology. *British Journal of Management*, 32, published online.
- KPMG (Ed.). (2020). *The Time has Come: The KPMG Survey of Sustainability Reporting 2020*. <https://home.kpmg>
- Krueger, P. et al. (2021). The Effects of Mandatory ESG Disclosure around the World. Swiss Finance Institute Research Paper. Working Paper N° 21–44.
- Liang, H., & Renneboog, L. (2017). On the foundations of corporate social responsibility. *The Journal of Finance*, 72, 853–910.
- Matos, P. (2020). *ESG and responsible institutional investing around the world: A critical review*. CFA Institute Research Foundation.
- Menulty, T., & Nordberg, D. (2016). Ownership, activism and engagement: Institutional investors as active owners. *Corporate Governance: An International Review*, 24, 346–358.
- MSCI & OECD (Ed.). (2018). *Institutional investing for the SDGs: A joint discussion paper from MSCI and the OECD*. Paris: OECD Publishing.
- OECD (Ed.). (2011). *OECD guidelines for multinational enterprises*. Paris: OECD Publishing.
- Park, T. (2018). Investors as regulators: Green bonds and the governance challenges of the sustainable finance revolution. *Stanford Journal of International Law*, 54, 1–47.
- Petersen, H. L., & Vredenburg, H. (2009). Morals or economics? Institutional investor preferences for corporate social responsibility. *Journal of Business Ethics*, 90, 1–14.
- PRI (Ed.). (2021). *Principles for responsible investment: growth from 2006–2020*. <https://www.unpri.org>
- Schuetze, F., & Stede, J. (2021). *EU sustainable finance taxonomy – What is its role on the road towards climate neutrality?* DIW Berlin Discussion Paper No. 1923.
- Serafeim, G., & Yoon, A. (2021). Which corporate ESG news does the market react to? *Harvard Business School Working Paper*, No. 21–115.
- Serafeim, G. (2018). Investors as stewards of the commons? *Journal of Applied Corporate Finance*, 30, 8–17.
- Shleifer, A., & Vishny, R. (2011). Fire sales in finance and macroeconomics. *Journal of Economic Perspectives*, 25, 29–48.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94, 461–488.
- Simpson, T. (2014). *Financial markets, banking, and monetary policy*. Hoboken: Wiley.
- Staub-Bisang, M. (Ed.). (2012). *Sustainable investing for institutional investors: Risks, regulations and strategies*. Singapore: Wiley.
- Strumeyer, G., & Swamy, S. (2017). *The capital markets: Evolution of the financial ecosystem*. Hoboken: Wiley.
- UNGC (Ed.). (2021). *The ten principles of the UN global compact*. <https://www.unglobalcompact.org>
- Zetzsche, D., & Anker-Sørensen, L. (2021). *Regulating sustainable finance in the dark*. University of Luxembourg Law Working Paper Series 2021–007.

Institutional Theory

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Synonyms

Institutionalism

Description

Within the broader area of organizational studies, institutional theory is a major theoretical perspective. It is used to understand organizational behavior as situated in and influenced by its environment. Organizations operate in a social environment that changes, as a result of new laws, the emergence of new standards, rules or norms, new patterns of behavior, and new participants. Institutional theory seeks to explain how elements such as structures, processes, and professions are created and diffused within and between organizations (Greve 2003, p. 172). It asserts that institutional environment has often more profound impact on the development of those elements than market pressures (Meyer and Rowan 1977), and, as such, it explains organizational behaviors that defy economic rationality (Suddaby 2013). The reason for the power of noneconomic drivers is that organizations are striving for legitimacy (see ► [“Legitimacy Theory”](#) and ► [“Social Legitimacy”](#)) with their constituencies. Legitimacy facilitates access to resources from the environment becoming crucial for organization survival (Deephouse 1996; Mizruchi and Fein 1999).

Institutions

Institutions can be understood as the “framework within which human interaction takes place” (North 1990, p. 4) and as systems “of rules, beliefs, norms and organizations that together generate a regularity of social behavior” (Greif 2006, p. 30). They comprise cultural-cognitive, normative, and regulative elements (Scott 2014, p. 56), taking form of formal rules and unwritten codes of conduct (North 1990, p. 4) and backed by a set of rewards and sanctions (Jepperson 1991, p. 145). Institutions define what is acceptable and unacceptable imposing constraints on organizational behavior. They also promote desired conduct providing guidelines and resources. Institutions are by definition durable (or sticky) (Colyvas and Jonsson 2011) and, by being transmitted across time, maintained and reproduced, provide solidity, and reduce uncertainty within social systems (Scott 2014, p. 57). They provide

replicability of social forms and norms and serve to save resources required in the organizing of human activity (Bondy 2009). In their own right, however, institutions themselves also undergo changes, both incremental and revolutionary (Greenwood and Hinings 1996).

The origins of institutional theory date back to the end of the nineteenth and beginning of the twentieth centuries and works of Marx, Weber, Cooley, Mead, Veblen, and Commons. However, only recently institutional theory experienced a remarkable renaissance (Scott 2004). The evolution of institutional theory can be divided into three main stages: (1) old institutionalism, (2) new institutionalism, and (3) reconciliation.

Old Institutionalism

The first stage in institutional theory is referred to as the “old” institutionalism – institutionalism that encompasses detailed qualitative case studies of organizations in the 1950s and 1960s (Suddaby 2013). In the old institutionalism, “issues of influence, coalitions, and competing values were central, along with power and informal structures” (Greenwood and Hinings 1996, p. 1022). The stage was demarcated by the publication of Selznick’s classic study of the Tennessee Valley Authority (TVA) in 1949. Agency leaders co-opted local officials into the decision-making process to gain local support. Co-optation is defined as “the process of absorbing new elements into the leadership or policy-determining structure of an organization as a means of averting threats to its stability or existence” (Selznick 1966, p. 561 as cited in Reed 2009, p. 13). In the case of TVA, the process had unintended consequences, as local officials changed organizational goals to serve their private interests (Rollag 2018).

While Selznick agrees that organizations can be rationally structured to attain certain goals, they also have natural, nonrational dimension. There are two sources of this nonrationality: (1) individuals who bring other commitment to the organization and do not act purely within their formal roles and (2) informal organizational structures that link participants with each other and

with external actors (Scott and Davis 2015). The author notes that organizational structures adapt based on actions of individuals and on pressures from external environment (Selznick 1996).

Institutionalization refers to this process of adaptation and happens over time to all organizations, though to different extents. As Scott and Davis observe: “Institutional commitments develop over time as the organization confronts external constraints and pressures from its environment as well as changes in the composition of its personnel, their interests, and their informal relations” (Scott and Davis 2015, p. 74).

There is no agreement, however, on the term or the issue. Selznick postulated a distinction between organizations that are tools designed to achieve certain goals and institutions, i.e., institutionalized organizations that take on a distinctive character (Selznick 1996) and become “valued, natural communities concerned with their own self-maintenance as ends in themselves” (Scott 1987, p. 494). The essence of the institutionalization process is “the infusion with value beyond the technical requirements of the task at hand” (Selznick 1996, p. 271). It is leadership’s task to choose and protect this distinctive values (Scott and Davis 2015).

New Institutionalism

The second stage – the new institutionalism (or neo-institutionalism) – is demarcated by the publication of two seminal papers: Meyer and Rowan’s “Institutionalized Organizations: Formal Structure as Myth and Ceremony” in 1977, followed by DiMaggio and Powell’s “The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields” in 1983 (Suddaby 2013). Both the old and the new approaches focus on the role of the environment in shaping organizational reality and are skeptical about the rationality of organizational behavior. They both view “institutionalization as a state-dependent process that makes organizations less instrumentally rational by limiting the options they can pursue” (DiMaggio and Powell 1991, p. 12). The new institutionalism in

organizational studies, however, has generated a series of changes of focus. These changes include a shift of focus from vested interest to legitimation, from informal structures to symbolic role of formal structures, from change to persistence, from organization to organizational fields, and from values, norms, and attitudes to scripts, schema, routines, and classifications (DiMaggio and Powell 1991). In the new institutionalism, institutions are viewed as “collective cognitions or shared assumptions that, over time, acquire a degree of social concreteness. That is, they become taken-for-granted and, as a result, constrain organizational behavior” (Suddaby 2013, p. 381).

Initially scholars of new institutionalism focused on the question of legitimacy and growing homogeneity among organizations. Meyer and Rowan (1977) find that in the pursuit to gain legitimacy, companies are “prone to construct stories about their actions that correspond to socially prescribed dictates about what organization should do” (Mizruchi and Fein 1999, p. 656). Thus, once again, it is not economic rationality that defines the rules of behavior but myths (taken-for-granted assumptions) about what constitutes economic rationality (Suddaby 2013). While legitimacy improves access to resources from the external environment, reduces turbulence, and maintains stability, it is not the whole story. The incorporation of institutional myths in organizational structures is useful as they enhance the organization’s prospects for survival (Meyer and Rowan 1977). The research has established, however, that organizations often conform to social expectations only ceremonially and not in terms of substance. Formal structures adopted as a result of institutional pressures are often decoupled from substantive matters – the core technical activities (Meyer and Rowan 1977).

In search of legitimacy (social fitness), organizations structure themselves according to the characteristics of the environment they operate in and particularly other organizations operating in the field. This facilitates organizational isomorphism – the growing similarity of organizations in a field. Organizational field is defined as “organizations that, in the aggregate, constitute a

recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organization that produce similar services and products” (DiMaggio and Powell 1983, p. 148). In the existing literature, two types of organizational isomorphism are identified – competitive and institutional (DiMaggio and Powell 1983; Deephouse 1996). The former results from firms’ actions in line with market competition, while the latter involves “organizational competition for political and institutional legitimacy as well as market position” (Mizruchi and Fein 1999, p. 657).

As organizations respond to the same institutional pressures and constantly interact with each other, their structures become increasingly homogeneous (DiMaggio and Powell 1983). Consequently, DiMaggio and Powell (1983) distinguished three further mechanisms at work, revealing how new behavior patterns diffuse among organizations resulting in increasing their similarity. These mechanisms are coercive, mimetic, and normative isomorphism. Coercive isomorphism constrains organization activities by way of formal and informal pressures. These pressures come from parties upon which the company is dependent, including regulators and shareholders, as well as from society at large. Mimetic isomorphism is a response to institutional uncertainty. It refers to organizational tendency to mimic practices of more legitimate or successful peers, either intentionally or unintentionally through influence of consultants and employees hired from other companies. Finally, normative isomorphism is a result of professionalization of the organizational field through similar managerial education and growth of professional networks. DiMaggio and Powell note that while the institutionalization process involves often the interplay of all three isomorphism mechanisms, they may lead to different outcomes.

Reconciliation

The most recent evolution of institutional theory can be described as a reconciliation between the

old and new institutionalism. The major criticism of neo-institutionalism focused on its initial assumptions of stability of structures, organizational passivity (Hirsch and Lounsbury 1997), and isomorphism among organizations. Little empirical evidence has been found to support this view (Kraatz and Zajac 1996). The reconciliation approach can be seen in Greenwood and Hinings (1996) where it is proposed that the old and the new institutionalism can be combined in order to develop “a model of change that links organizational context and intraorganizational dynamics” (p. 1024). Subsequently, the scope of the theory was expanded to account for the transformation and change of institutions, as well as the heterogeneity of actors and practices in fields.

As pointed by Eisenstadt (1964), institutionalization is a process in any social system and serves to create the possibilities for change. In the course of the conceptual development of institutionalization, reconciliation ideas, the issues of inertia, and path dependence emphasized by the conventional perspective started to be replaced by the attempts to identify “the determinants of organizational flexibility and change” (Chizema 2008, pp. 363–364).

Changes in the institutional environment require a series of adaptations at the microlevel (Aoki 2007). Greenwood and Hinings (1996) point out that interplay of contextual forces (both market and institutional) and intraorganizational dynamics facilitates radical organizational change. The pace and response to institutional change at the organizational level is determined by both the institutional environment of a region or country embedded in the model of economic system and the organizational context including interests and values of particular groups, power dependencies, and organizational capabilities (Greenwood and Hinings 1996).

Accepting a distinction between organizations and institutional environments, it is clear that not all organizations will move in lockstep with changes in the institutional environment. Oliver (1991) offers framework of organizational strategic responses to institutional processes that include:

1. Acquiescence strategy
 - a. Habit – unconscious adherence to taken-for-granted rules
 - b. Imitation – mimicking institutional models
 - c. Compliance – conscious obedience to institutional requirements in anticipation of specific self-serving benefit
2. Compromise strategy
 - a. Balance – balancing the pressures from of multiple stakeholders
 - b. Pacifying – partial conformity and placating institutional elements
 - c. Bargain – negotiating with constituents
3. Avoidance strategy
 - a. Concealment – disguising nonconformity
 - b. Buffering – loosening institutional attachments, for example, by decoupling internal work activities from formal structures and external assessment (Meyer and Rowan 1977)
 - c. Escape – modification of goals and activities, or domains
4. Defiance strategy
 - a. Dismissal – ignoring social expectations and norms
 - b. Challenge – contesting the rules
 - c. Attack – assaulting the sources of institutional pressure
5. Manipulation strategy
 - a. Co-option – importing influential stakeholders
 - b. Influence – shaping rules and requirements
 - c. Control – dominating the rules setting processes

Organization's response to institutional pressures depends on its willingness and ability to conform.

The former may be reduced by organizational skepticism about legitimacy of particular institutional demands, mismatch between organizational objectives and social expectations, and attempt to maintain control over internal processes. The latter is restrained by limited resources or capabilities to address institutional pressures, conflicting stakeholders' demands, and, finally, lack of awareness of rules and social expectations.

CSR from the Perspective of Institutional Theory (See ► **“Corporate Social Responsibility and Institutional Theory”**)

One area of institutional change and distinct organizational response can be seen in the field of corporate social responsibility (CSR). Differences in CSR adoption on the company level result from national differences in the understanding and perception what CSR means (Freeman and Hasnaoui 2011). Dahlsrud (2008) argues that CSR is a social construct which functions in a certain way in a given context and cannot be universally defined. CSR can be understood as the set of practice and policies adopted by a country but may also be viewed at the voluntary action, which starts “where the law ends” (Davis 1973, p. 313). Despite the common underlying assumption of the voluntariness of CSR, it is best understood as a type of “voluntary regulation” – i.e., a type of regulation that imposes itself on organizations (Sheehy 2014). At an operational level, CSR is well developed both with respect to institutional guidelines and requirements and managerial processes (Roszkowska-Menkes and Aluchna 2017). This institutionalization is an adoption of particular norms for different policies and procedures such as occupational health and safety, respect for human rights, antidiscrimination, anti-corruption, product safety, or environmental protection (Sheehy 2014). Additionally, institutionalization of CSR is supported internationally by a range of recognized disclosure standards and guidelines (CDP, GRI, IIRC, SASB) (Sheehy 2019).

The adoption of CSR principles illustrates the case of the diffusion and institutionalization of change in formal organization structures in response to pressures exerted by four actors: lawmakers, market makers, model makers, and governance actors (Aluchna and Roszkowska-Menkes 2017). This process is influenced by a set of institutional factors, as well as a number of organizational characteristics that impact the company's motivation and ability to conform to new requirements. These are as follows: first, the institutional context which impacts the adoption

of CSR refers to the shape of the political system and election regime, economic model (market liberal versus coordinated economy) (Jensen and Berg 2012; Kinderman 2009), and ownership structure including the role of families versus financial investors (Kang and Moon 2012), norms on mobility, employee rights and trade union activity (Deakin and Reberlioux 2009; Deeg and Jackson 2007; Gourevitch 2003), time orientation, and collective versus individual behavior (Doidge et al. 2007). The dynamics of organizational response to institutional context of CSR is revealed in research by Matten and Moon (2008) who distinguish European implicit CSR versus US-based explicit CSR. Second, the adoption of CSR may be stimulated or limited by organizational characteristics that determine the demand and supply for CSR (McWilliams and Siegel 2001). These include the stakeholder relations (Barnea and Rubin 2010) and their residual rights (Harjoto and Jo 2011), which influence the governance structure and determine the goal prioritization (Mackenzie 2007), attainment discrepancy, and, finally, organizational slack (Arora and Dharwadkar 2011).

Summary

Institutional theory, as one of the major theoretical frameworks in organizational studies, views organizations, their structures, practices, and standards of behavior as determined by rules and norms originating from their environment. As such it is often harnessed in the studies explaining diffusion patterns of CSR among organizations.

While the old institutionalism focused on institutionalization understood as “value infusion” and driven by individual actors within organizations and informal structures, the new institutionalism shifted toward formal, homogeneous, and often symbolic structures adopted across organizations in result of pressures from the environment. The most recent, reconciliation perspective in institutional theory acknowledges both internal and external sources of institutionalization. Organizations striving to attain legitimacy are strongly influenced by taken-for-granted social dictates.

Their responses to coercive, mimetic, and normative pressures however vary. The reconciliation approach rejects institutional determinism and proposes that strategies utilized by organizations to address social expectations depend on the interplay between institutional factors and organizational characteristics.

Cross-References

- Corporate Social Responsibility and Institutional Theory
- Legitimacy Theory

References

- Aluchna, M., & Roszkowska-Menkes, M. (2017). CSR and organizational responses to institutional pressures. The perspective of neo-institutional theory. Preliminary results. In *EURAM 2017. Making knowledge work*.
- Aoki, M. (2007). Endogenizing institutions and institutional changes. *Journal of Institutional Economics*, 3(1), 1–39. <https://doi.org/10.1017/S1744137406000531>.
- Arora, P., & Dharwadkar, R. (2011). Corporate governance and corporate social responsibility (CSR): The moderating roles of attainment discrepancy and organization slack. *Corporate Governance: An International Review*, 19(2), 136–152. <https://doi.org/10.1111/j.1467-8683.2010.00843.x>.
- Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics*, 97(1), 71–86. <https://doi.org/10.1007/s10551-010-0496-z>.
- Bondy, K. (2009). *Isomorphism in the practice of corporate social responsibility: Evidence of an institution and its decline* (University of Bath School of Management working paper series no. 2009.10). Bath: University of Bath School of Management. Retrieved from <http://138.38.0.49/management/research/pdf/2009-10.pdf>
- Chizema, A. (2008). Institutions and voluntary compliance: The disclosure of individual executive pay in Germany. *Corporate Governance: An International Review*, 16(4), 359–374. <https://doi.org/10.1111/j.1467-8683.2008.00689.x>.
- Colyvas, J. A., & Jonsson, S. (2011). Ubiquity and legitimacy: Disentangling diffusion and institutionalization. *Sociological Theory*, 29(1), 27–53. <https://doi.org/10.1111/j.1467-9558.2010.01386.x>.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1–13.

- Davis, K. (1973). The case for and against business assumption of social responsibilities. *Academy of Management Journal*, 16, 312–322.
- Deakin, S., & Reberiooux, A. (2009). Corporate governance, labour relations and human resource management in the UK and France: Convergence or divergence. In J.-P. Touffut (Ed.), *Does company ownership matter?* (pp. 126–150). Cheltenham: Edward Elgar Publishing.
- Deeg, R., & Jackson, G. (2007). Towards a more dynamic theory of capitalist variety. *Socio-Economic Review*, 5(1), 149–179. <https://doi.org/10.1093/ser/mwl021>.
- Deephouse, D. L. (1996). Does isomorphism legitimate? *Academy of Management Journal*, 39(4), 1024–1039. <https://doi.org/10.2307/256722>.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147. <https://doi.org/10.2307/2095101>.
- DiMaggio, P. J., & Powell, W. W. (1991). Introduction. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 1–38). Chicago: University of Chicago Press.
- Doidge, C., Andrew Karolyi, G., & Stulz, R. M. (2007). Why do countries matter so much for corporate governance? *Journal of Financial Economics*, 86(1), 1–39. <https://doi.org/10.1016/j.jfineco.2006.09.002>.
- Eisenstadt, S. N. (1964). Institutionalization and change. *American Sociological Review*, 29(2), 235. <https://doi.org/10.2307/2092126>.
- Freeman, I., & Hasnaoui, A. (2011). The meaning of corporate social responsibility: The vision of four nations. *Journal of Business Ethics*, 100(3), 419–443.
- Gourevitch, P. A. (2003). The politics of corporate governance regulation. *The Yale Law Journal*, 112(7), 1829–1880.
- Greenwood, R., & Hinings, C. R. (1996). Understanding radical organizational change: Bringing together the old and the new institutionalism. *The Academy of Management Review*, 21(4), 1022–1054. <https://doi.org/10.2307/259163>.
- Greif, A. (2006). *Institutions and the path to the modern economy*. Cambridge, UK: Cambridge University Press.
- Greve, H. R. (2003). *Organizational learning from performance feedback: A behavioral perspective on innovation and change*. Cambridge, UK: Cambridge University Press.
- Harjoto, M. A., & Jo, H. (2011). Corporate governance and CSR nexus. *Journal of Business Ethics*, 100(1), 45–67.
- Hirsch, P. M., & Lounsbury, M. (1997). Putting the organization back into organization theory: Action, change, and the “new” institutionalism. *Journal of Management Inquiry*, 6(1), 79–88. <https://doi.org/10.1177/105649269761015>.
- Jensen, J. C., & Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting. An institutionalist approach. *Business Strategy and the Environment*, 21(5), 299–316. <https://doi.org/10.1002/bse.740>.
- Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 143–163). Chicago: University of Chicago Press.
- Kang, N., & Moon, J. (2012). Institutional complementarity between corporate governance and corporate social responsibility: A comparative institutional analysis of three capitalisms. *Socio-Economic Review*, 10, 85–108. <https://doi.org/10.1093/ser/mwr025>.
- Kinderman, D. (2009). *The political economy of corporate responsibility in Germany, 1995–2008* (Governance series no. WP5). Ithaca: Cornell University.
- Kraatz, M. S., & Zajac, E. J. (1996). Exploring the limits of the new institutionalism: The causes and consequences of illegitimate organizational change. *American Sociological Review*, 61(5), 812. <https://doi.org/10.2307/2096455>.
- Mackenzie, C. (2007). Boards, incentives and corporate social responsibility: The case for a change of emphasis. *Corporate Governance: An International Review*, 15(5), 935–943. <https://doi.org/10.1111/j.1467-8683.2007.00623.x>.
- Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424. <https://doi.org/10.5465/amr.2008.31193458>.
- McWilliams, A., & Siegel, D. S. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Mizruchi, M. S., & Fein, L. C. (1999). The social construction of organizational knowledge: A study of the uses of coercive, mimetic, and normative isomorphism. *Administrative Science Quarterly*, 44(4), 653. <https://doi.org/10.2307/2667051>.
- North, D. (1990). *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge University Press.
- Oliver, C. (1991). Strategic responses to institutional processes. *The Academy of Management Review*, 16(1), 145. <https://doi.org/10.2307/258610>.
- Reed, M. (2009). Bureaucratic theory and intellectual renewal in contemporary organizational studies. In *The Oxford handbook of sociology and organization studies: Classical foundations* (pp. 559–584). New York: Oxford University Press.
- Rollag, K. (2018). Encyclopedia of organizational theory. Retrieved October 15, 2018, from http://faculty.babson.edu/krollag/org_site/encyclo/encyclo.html
- Roszkowska-Menkes, M., & Aluchna, M. (2017). Institutional isomorphism and corporate social responsibility: Towards a conceptual model. *Journal of Positive*

Management, 8(2), 3–16. <https://doi.org/10.12775/JPM.2017.007>.

Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493–511. <https://doi.org/10.2307/2392880>.

Scott, W. R. (2004). Institutional theory: Contributing to a theoretical research program. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management: The process of theory development*. Oxford, UK: Oxford University Press.

Scott, W. R. (2014). *Institutions and organizations. Ideas, interests, identities*. London: Sage Publications.

Scott, W. R., & Davis, G. F. (2015). *Organizations and organizing: Rational, natural and open systems perspectives*. London: Routledge.

Selznick, P. (1966). *Leadership in administration: A sociological interpretation*. New York: Harper and Row.

Selznick, P. (1996). Institutionalism “old” and “new”. *Administrative Science Quarterly*, 41(2), 270–277.

Sheehy, B. (2014). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131(3), 625–648.

Sheehy, B. (2019). TNC code of conduct or CSR? A regulatory systems perspective. In M. Rahim (Ed.), *Code of conduct on transnational corporations (CSR, sustainability, ethics & governance)*. Cham: Springer. https://doi.org/10.1007/978-3-030-10816-8_3.

Suddaby, R. (2013). Institutional theory. In *Encyclopedia of management theory* (pp. 379–384). Thousand Oaks: Sage.

Institutionalism

- [Corporate Social Responsibility and Institutional Theory](#)
- [Institutional Theory](#)

Institutionalized Environment

- [Corporate Social Responsibility and Institutional Theory](#)

Institutions

- [Corporate Social Responsibility and Institutional Theory](#)

Instrument of Market-Based Climate Change Mitigation and Development

- [Clean Development Mechanism \(CDM\)](#)

Integral Development

- [Holistic Development](#)
- [Sustainable Modernity](#)

Integral Ecology

- [Anthropological Sustainability](#)
- [Holistic Development](#)

Integrated Chain Management

- [Sustainable Chain Management](#)

Integrated CSR Communication

- [CSR and Media](#)

Integrated Management Systems

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Definition/Description

Integrated management system is a set of concurrently planned, implemented, and maintained

management systems with regard to multiple disciplines, such as quality, food safety, information security, environment, and occupational health and safety. This is an array of interacting elements that are interrelated and that form an organization's structure, policy, objectives, processes and way of the practice, as well as rules, roles, responsibilities to achieve objectives related to needs and expectations of different stakeholders, depending on disciplines included within a scope of the integrated management system. Integrated management system can be implemented in every organization, regardless its structure, age, industry, etc., and can encompass the organization as a whole, but also the specific parts of the organization.

By integrating multiple management systems, rather than implement and maintain them separately, an organization could have a significant benefits such as elimination of redundancy and reduction in bureaucracy, consistency in approach, optimization of processes and resources, reduction in maintenance of management systems, consolidation of assessments, facilitation of decision-making, etc. which enhance the organization's capacity to have a systematic process that is capable of absorbing any new or changed requirements.

Introduction

The environment in which companies now operate is less secure and more complex (Thomas et al. 2016), where the customers worldwide increasingly demand products that are sustainable (Kara et al. 2014). To compete successfully, companies have to find ways to ensure customers about the sustained quality of their outputs. Therefore, there are a growing number of standards for management systems that contribute to sustainable development (Nadae et al. 2019) and which promote the PDCA (Plan-Do-Check-Act) model of quality improvements. The challenge is to integrate them into one effective and efficient system.

Integrated Management Systems

Every organization goes toward accomplishing some objectives related to many interested and

affected parties' needs and expectations (ISO 2018). That is why organizations need strategies for continuously sustaining stakeholder support, based on making decisions and managing their recourses, which is often referred to as a management system (ISO 2018). The management system of an organization is an array of interacting elements that are interrelated and that form an organization's structure, policy, objectives, processes, and way of the practice, as well as rules, roles, responsibilities to achieve those objectives (ISO 9000:2015). As such, the management system can be related to a single discipline or various disciplines, for example:

- Quality management, as part of a management system with regard to quality aiming at increasing level of satisfying customer needs about organization's outputs (ISO 9001:2015)
- Environmental management, as part of a management system that seeks to provide organizations with an outline to protect the environment and respond to changing environmental conditions in coherence with socioeconomic needs (ISO 14001:2015)
- Occupational health and safety management, as part of a management system aiming to enable organizations to enable safe and healthy work environment by prevention from injuries and ill health, as well as by proactively upgrading occupational health and safety performance (ISO 45001:2018)
- Food safety management, as part of a management system with the aim to enhance organizations' ability to manage hazards related to food safety in order to ensure food safety (EN ISO 22000:2018)
- Information security management, as part of a management system that refers to continuous improvement of an information security management system (ISO/IEC 27001:2013)
- Many other disciplines that could be part of organization's overall management system

Each management system can be implemented in every organization, regardless its structure, age, industry, etc. The scope of each management system can encompass the organization as a whole, but also the specific parts of the organization, or

one or more functions across a group of organizations (ISO 9000:2015).

When organization goes toward sustainable improvements in more than one discipline at the same time, it could integrate the elements of different managements systems to manage them more efficiently. Many standards for different management systems issued by ISO (International Organization for Standardization) have the same core structure with similar elements that enable their integrated establishment, documentation, implementation, and maintenance. For example, when establishing the organization's structure, roles, and responsibilities, it is practically to be done for several disciplines at the same time, or when document processes it is more efficient to take into account all the relevant aspect concurrently. This could include, for example, defining all the possible risks during operation: those related to the quality of organization's outputs as well those that could affect environmental, or those that could lead to the unsafe and unhealthy workplaces, or those that could endanger information security, etc. Also, when establishing organizational performances, all the disciplines included in the overall management system could be considered together and in the mutual relationship. When auditing or reviewing the management system, the better overview could be achieved by considering all the relevant disciplines as one integrated system. And so on, each element of management system for different disciplines could be better managed if it was integrated with other elements within the same organization. ISO (2018) has developed the same high level structure (HLS) for the management systems standards to facilitate their mutual integration. It also covers identical text for management system standards and common core management system terms and definitions. This enables organizations to apply quality management standards as integrated units rather than separated parts.

Integration of multiple management systems, rather than implement and maintain them separately, could have significant benefits for an organization (ISO 2018):

- Development of the organization's capacity to have a systematic process that is capable of absorbing any new or changed requirement

- Elimination of redundancy, for example, in area of process documentation
- Consistency in approach to communication, decision-making, setting priorities, measurement and monitoring, etc.
- Reduction in bureaucracy
- Optimization of processes and resources
- Reduction in maintenance of management systems that need to be maintained concurrently
- Consolidation of assessments, since the inter-relationship among the processes are better understood and managed which can lead to more in-depth assessments
- Facilitation of decision-making, since the organization now has a more complete view of the needs and business performances

Integration of management systems depends on a various factors, including human and material resources and costs, which can cause some challenges or even difficulties in the implementation. Some of them could be related to the diversity of constituent management systems, employees' opposition, deficiency of resources, cultural aspects but also post-implementation difficulties (Asif et al. 2008).

Summary

In today's competitiveness environment, there is a growing number of standards for management systems that contribute to sustainable development (Nadae et al. 2019), where the challenge for organizations is to integrate them into one effective and efficient system. Management systems today cover many areas, such as quality, food safety, information security, environment, and occupational health and safety. By integrating multiple management systems, rather than implementing and maintaining them separately, an organization could have significant benefits such as elimination of redundancy and reduction in bureaucracy, consistency in approach, optimization of processes and resources, reduction in maintenance of management systems, consolidation of assessments, facilitation of decision-making, etc. ISO has put significant effort to develop the same high level structure (HLS) for the

management systems standards to facilitate their mutual integration. It also covers identical text for management system standards and common core management system terms and definitions. This enables organizations to apply quality management standards as integrated unit rather than separated parts.

Cross-References

- [Competitiveness](#)
- [Customer Service](#)
- [Shareholder Theory/Shareholder Value](#)
- [Total Quality Management and European Foundation of Quality Management](#)

References

- Asif, M., de Bruijn, E. J., Fisscher, O. A. M., & Searcy, D. C. (2008). Process embedded design of integrated management systems. In *POMS 19th annual conference*, La Jolla.
- EN ISO 22000:2018. (2018). *Food safety management systems – Requirements for any organization in the food chain*. Geneva: International Organization for Standardization.
- International Organization for Standardization. (2018). *The integrated use of management system standards (IUMSS)*. Geneva: International Organization for Standardization.
- ISO 14001:2015. (2015). *Environmental management systems – Requirements with guidance for use*. Geneva: International Organization for Standardization.
- ISO 45001:2018. (2018). *Occupational health and safety management systems – Requirements with guidance for use*. Geneva: International Organization for Standardization.
- ISO 9000:2015. (2015). *Quality management systems – Fundamentals and vocabulary*. Geneva: International Organization for Standardization.
- ISO 9001:2015. (2015). *Quality management systems – requirements*. Geneva: International Organization for Standardization.
- ISO/IEC 27001:2013. (2013). *Information technology – Security techniques – Information security management systems – Requirements*. Geneva: International Organization for Standardization.
- Kara, S., Ibbotson, S., & Kayis, B. (2014). Sustainable product development in practice: An international survey. *Journal of Manufacturing Technology Management*, 25(6), 848–872.
- Nadae, J., Carvalho, M., & Vieira, D. (2019). Exploring the influence of environmental and standards in integrated management systems on economic performance of firms. *Journal of Manufacturing Technology Management*, 30(5), 840–861.
- Thomas, A., Byard, P., Francis, M., Fisher, R., & White, G. R. T. (2016). Profiling the resiliency and sustainability of UK manufacturing companies. *Journal of Manufacturing Technology Management*, 27(1), 82–99.

Integrated Outbound Operations

- [Supply Chain Management](#)

Integrated Pollution Prevention

- [Pollution Prevention](#)

Integrated Quality and Environmental Management

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Synonyms

[Embedded quality management systems](#); [Environmental impact assessment](#); [Environmental management](#)

Definitions

Integrated quality and environmental management (IQEM) is a management approach that ensures quality in developing and utilizing natural resources while also considering political, economic, social, and governance factors. IQEM employs total quality management techniques to prevent environmental degradation (AENA 2023) and is an adaptive engagement with a collaborative assessment of issues, policies, and measures that include stakeholders' holistic perspectives (Antunes and Santos 1999). Quality management systems, such as ISO 9001, are put in place to attain high-quality products and procedures. IQEM also encompasses environmental management under ISO 14001 and promotes an inclusive approach that considers the environment's human and nonhuman components (von Ahsen 2013). The IQEM philosophy emphasizes profitability and sustainability, and it can lead to advantages like reduced audit costs, streamlined operations, sound decision-making, simple employee training, and effective resource management (Roy and Ghose 2016). IQEM seeks to involve all stakeholders in high-quality environmental practices by connecting all efforts to promote environmental resource management and stewardship, including the reuse of products generated from raw materials in an economically efficient manner (Vivancos Calvet et al. 2015).

Introduction

Global warming and the rising levels of environmental contaminants have an impact on environmental groups as sustainable development (SD) and globalization receive more attention (Zutshi and Sohal 2004). An integrated management system combines two or more systems to create a cohesive, effective system (Nunhes et al. 2016). Integrated MSs have been viewed as a helpful technique for addressing interdependencies across various management systems (Ahsen 2014). For instance, by utilizing energy-efficient technologies and minimizing the use of natural resources, environmental management (EM) practices improve

environmental performance (EP) (Tung et al. 2014). According to Djekic (2015), EM techniques enhance the EP of all environmental factors and aid in water utilization, which is excellent for wastewater management.

The integrated management system focuses mainly on the quality of environmental and work and health safety management systems (Asif et al. 2009). The level and choice of integration are influenced by the system norms about various aspects of quality, environment, the hierarchical arrangement of existing management systems, maturity regarding IMS constituents, and prevailing cultural aspects, such as willingness to improve continuously and management involvement (Abrahamsson et al. 2010).

To ensure a sustainable and environmentally friendly method of maintaining environmental quality, a highly integrated system of management structures should reflect the allocation of responsibilities to all levels for the development, implementation, and maintenance of plans that affect each specific area of management (Sanz-Calcedo et al. 2015).

Benefits of Integrating Quality and Environmental Systems

Integrated quality and environmental management (IQEM) is an approach that combines quality management principles with environmental management practices to promote sustainable and responsible business practices. Integrating ISO 9001 and ISO 14001 will highlight overlapping duties or unnecessary duplication by meeting all the standard requirements with one set of policies and procedures, resulting in reduced duplication in business operations that will be simpler to administer and maintain (Europe Direct 2007). It improved adherence to the law, diminished risk of civil and criminal liability, and generated savings by avoiding the cost of hazardous material cleanup. The benefits of IQEM can be significant for organizations that adopt this approach. IQEM improved efficiency which can lead to streamlined processes, reduced waste, and increased productivity, which can improve efficiency and reduce costs. IQEM adoption can show an organization's dedication to

sustainability and ethical environmental behavior, which can improve its reputation and brand image. IQEM can help organizations comply with environmental regulations and quality standards, reducing the risk of fines and legal penalties. IQEM can help organizations identify and manage risks related to environmental issues and quality control, improving their ability to respond to potential crises. The advantages of using an environmental management system include notably better business organization, lower pollutants, and lower expenses (Vadaştăreanu et al. 2015). In addition, it decreased the time and cost required to implement the project, made design changes that saved money, increased project acceptance, prevented negative effects and legal violations, improved project performance, and avoided treatment and cleanup expenses. By adopting IQEM, organizations can meet customer expectations for sustainable and responsible practices, which can enhance customer satisfaction and loyalty. IQEM can promote a culture of sustainability and responsibility, which can increase employee engagement and satisfaction (Ramdhan et al. 2022). By reducing waste and increasing efficiency, IQEM can lead to significant cost savings over time. Overall, IQEM can help organizations achieve sustainable growth while promoting responsible environmental practices and improving quality control.

Cost of Integrated Quality and Environmental Management

Integrated quality and environmental management (IQEM) can provide numerous benefits to organizations, but there may be some costs associated with implementing and maintaining this approach (EPA 2022). Some of the costs of IQEM may include training and education employees to understand the principles and practices involved in IQEM, which can incur costs. Organizations may need to invest in technology and tools to support IQEM, such as software for tracking environmental metrics and quality control data (Primavera et al. 2019). Organizations may need to engage external auditors to verify compliance with environmental regulations and quality standards, which can incur fees.

Organizations may need to establish processes for monitoring and reporting on environmental and quality metrics, which can require additional resources and staff time. Depending on the complexity of an organization's operations, the implementation of IQEM may require additional resources and staff time, which can incur costs. Despite these potential costs, IQEM can provide significant benefits in terms of improved efficiency, enhanced reputation, compliance with regulations, better risk management, increased customer satisfaction, improved employee engagement, and cost savings. From a company's social responsibility standpoint, it will create an integrated management structure that yields long-term economic rewards (Sanz-Calcedo et al. 2015). In the long run, the benefits of IQEM may outweigh the costs, making it a sound investment for organizations committed to sustainability and responsible business practices.

Ecosystem Integrity Relating with IQEM

Ecosystem integrity is the concept of maintaining the health and resilience of ecosystems, ensuring that they remain intact and functional over time. The integrity of an ecosystem can be quantified by the extent to which an ecosystem's component attributes, such as the composition, structure, and functions, remain in their historical ranges of variation and continue to perform as intended (Nicholson et al. 2021). Integrated quality and environmental management (IQEM) can play an important role in promoting ecosystem integrity by incorporating environmental sustainability principles into an organization's operations. IQEM involves the integration of quality management principles with environmental management practices, creating a comprehensive approach to sustainability that considers both environmental impact and quality control (Bridgewater et al. 2014). This approach can help organizations to identify and address potential environmental risks and reduce negative impacts on ecosystems. By adopting IQEM, organizations can take steps to reduce pollution, conserve natural resources, and protect biodiversity (Di Marco et al. 2019). For

instance, an organization that produces goods may implement an IQEM program to reduce waste by recycling materials and using more sustainable packaging. This can help to reduce the amount of waste generated, reduce the use of virgin resources, and minimize the negative impacts on ecosystems. IQEM can also help organizations to better understand the interconnectedness of environmental systems and the impact of their operations on those systems. The human footprint index (Williams et al. 2020), the Ecosystem Intactness Index, the Forest Landscape Integrity Index (Grantham et al. 2020), the Cumulative Human Pressure on Marine Ecosystem (Halpern et al. 2019), fish abundance and biomass, coral cover and composition, and other indicators of human pressure can all be used to measure the integrity of an ecosystem. By incorporating this understanding into their decision-making processes, organizations can identify ways to reduce their environmental impact and contribute to the preservation of ecosystems. Overall, ecosystem integrity is an important aspect of sustainability, and IQEM can play a critical role in achieving this goal. By promoting sustainable practices that reduce negative impacts on ecosystems, organizations can contribute to the preservation of natural resources and promote a healthier environment for future generations (FAO 2023).

Environmental Risk Management Relating to IQEM

Integrated quality and environmental management (IQEM) is a comprehensive approach to sustainability that incorporates quality management principles with environmental management practices. Environmental risk management is a key component of IQEM, as it helps organizations to identify, assess, and mitigate environmental risks associated with their operations. Various forms of environmental risk management include assessments of the risks from natural disasters, pollution, and safety (Sarfraz et al. 2018). Thus, an ideal ERA model should enable investigating, elucidating, and predicting environmental system reactions to changes caused by naturally

occurring and human-based stressors with imperfect knowledge (Whelan et al. 2014). IQEM and environmental risk management are closely related, as both approaches seek to promote sustainability by minimizing negative environmental impacts. By incorporating environmental risk management into IQEM, organizations can take a proactive approach to managing environmental risks and promoting sustainable practices. IQEM can help organizations to identify and prioritize environmental risks, develop mitigation strategies, and track progress toward sustainability goals. For instance, an organization that produces goods may implement an IQEM program that includes a risk assessment of the environmental impacts associated with their manufacturing processes. Based on the assessment, the organization can develop strategies to reduce emissions, conserve resources, and improve waste management practices. IQEM can also help organizations to integrate environmental risk management into their quality control processes (Shah et al. 2019). By incorporating environmental considerations into quality management, organizations can ensure that their products and services meet environmental standards while also improving customer satisfaction and brand reputation. Overall, IQEM and environmental risk management are complementary approaches that can help organizations to achieve sustainability goals while minimizing negative environmental impacts. By adopting an integrated approach to quality and environmental management, organizations can promote sustainable practices and enhance their overall performance.

Tools in Environmental Management

Techniques for evaluating human activities' environmental impact are urgently needed to lessen our influence on the environment (Loiseau et al. 2012). Choosing actions to lessen the total environmental impact might be challenging; thus, a methodical approach is required (Andersson et al. 2016). However, various environmental management tools have been created to influence organizational structures, processes, and practices.

These include life cleaner production, cycle assessment, environmental impact assessment, waste management, material flow analysis, substance flow analysis, physical input-output table, ecological footprint analysis, ecological network analysis, and environmental and landfill management (Loiseau et al. 2012).

Life cycle assessment (LCA) is a tool for environmental management that considers the use of resources and energy as well as the effects on the environment during an item's entire life cycle, including the collection of raw materials, production, conversion, distribution, usage, recovery, and disposal (Robertson 2014). EIA processes are undoubtedly a valuable proactive environmental management tool (Bruschi and Coratza 2018).

Bilateral, regional, or multilateral environmental agreements (MEAs) are a crucial international tool for addressing specific environmental challenges. They play an essential part in the overall structure of environmental regulations and are used to reinforce management techniques for integrated coastal zone management, National Adaptation Programs of Action, and Protected Areas Frameworks (Primavera et al. 2019).

Environmental impact assessment (EIA) is the methodical investigation of unintended consequences of a development project or program to reduce adverse consequences and optimize advantageous ones (Jay et al. 2007). Adopting cleaner production is a crucial component of EIA and EMS. Cleaner production emphasizes the use of more eco-friendly technology with fewer natural resources. This process aims to stop waste at its source and ensure that less waste is produced during manufacturing (El-Haggar 2007).

Sustainable waste management systems are used as cutting-edge management techniques influencing air quality to reduce environmental problems and save resources (Demirbas 2011). Waste management is a big issue in sub-Saharan Africa (Asase et al. 2009), mainly as a result of the absence of recycling infrastructure, skilled workforce, and other relevant issues resulting in over 4.4 million tons of solid waste being "mis-managed" across the continent of Africa (Jambeck et al. 2018).

These environmental management tools have great potential to support environmental policy-making to ensure a sustainable environment for all.

Stakeholder Involvement in Quality Environmental Management

Stakeholder involvement in quality environmental management aims to enhance communication among parties (including the proponent) to support sustainable development and improved decision-making (DEAT 2002). Stakeholder involvement is a cornerstone of sustainability. A company needs to be able to communicate with its external stakeholders if it wants to remain relevant and better serve its customers (Cort 2022). They carry out the study and ascertain the project's potential effects, scope, and methods for mitigating them. The government is requested to approve the final EIA report that they have compiled (Babu 2016). Stakeholders have the power to influence the resources and environmental decisions made by the company. Participants in the business process are known as stakeholders. Employees are an example of internal stakeholders, whereas community members and advocacy organizations are examples of external stakeholders (Rakowski 2020). Businesses and industry, kids and teens, farmers, indigenous peoples, their communities, local governments, nongovernmental organizations, the scientific and technological community, women, workers, and trade unions are the main groups involved in high-quality environmental management. By taking into account more thorough information inputs, stakeholder involvement can improve the quality of environmental decisions (Reed 2008).

Need for an Integrated Management System

Integrated environmental management is defined by Buhrs (1995) as the management of the environment that takes account the complex and interconnected nature of environmental

management. Integrating all aspects involves all multidisciplinary sectors and the public in practicing and educating the lawmakers, government, local communities, and the public on environmental problems, as well as noting the environmental impact assessment and mitigation to maintain sustainability. Without integrated management of the environment and with the climate impact on our environment today, most all natural resources will face further environmental problems now or later. Establishing an integrated environmental management (IEM) system can aid in advancing sustainability goals. Because the system becomes proactive rather than reactive, this approach will improve environmental performance, and stakeholder engagement is one of the keys to making the concept a reality.

Management Decision

The benefits of integrated environmental management (IEM), according to Margerum (1999), are that better-informed decisions are made when considerable specialist knowledge is integrated. The most crucial element of IEM's functioning structure is the interaction between stakeholders and the general public. As a result, a spectrum of increasing stakeholder involvement in the decision-making process can represent the stakeholder engagement level. For parties involved in the decision-making process, such as scientists, engineers, or other technical professionals, properly sharing knowledge plays a significant role in the process, and good communication is essential.

According to Harding (1998), multidisciplinary approaches are critical to share ideas and considering all possible outcomes or strategies. These possibilities are because decisions are often made in isolation from the larger context, limiting them to specific disciplines. Consequently, communication can influence the management decision-making process. With increased communication among all parties involved, coordination, evaluation criteria, and participant knowledge can be utilized to define goals; implement, monitor, and correct course if necessary; and take measures or make necessary

modifications. Because potential issues are addressed during the planning and decision-making process, environmental quality is improved, and implementation efficiency is raised.

Due to its complexity and dynamic nature, environmental management demands flexible, transparent decision-making considering various information and values. Stakeholder involvement in making environmental decisions is increasingly sought-after and incorporated into national and international policies (Stringer et al. 2008). However, the type of process leading to the decisions has an essential effect on the quality of decisions produced through stakeholder engagement (Reed 2008).

According to Richards et al. (2004), stakeholders' involvement, with public input, can put quality environmental management concepts into action by collaboratively developing and implementing new management strategies. Through initiative and education, stakeholders promote implementation. Stakeholder involvement and integrated environmental management elements, according to Margerum (1999), are not guarantees, but they will increase effective practice, support ongoing initiatives, and create a more detailed model for integrated environmental management. However, this approach will be critical in managing our environment or natural resources.

However, some believe that the claims about stakeholder involvement still need to be met (Reed 2008). Understanding the local area and science through research can be merged to give a more thorough knowledge of complicated and dynamic socioecological systems and processes. Finally, stakeholder engagement must be institutionalized to overcome many inherent restrictions, where relevant participation is considered, developing cultures inside organizations that can trigger systematic stakeholder processes where goals and outcomes are worth taking (Reed 2008).

Summary

An integrated system ensures that any organization can manage its operations and industrial processes environmentally friendly and sustainably

and maintain environmental quality. IQEM aims to help organizations increase their effectiveness and competitive advantage by concentrating on developing particular talents and critical competencies. According to the resource-based view's hypothesis, the management system fosters internal competency growth, organizational learning, and increased effectiveness. With the help of IQEM, organizations can enhance their environmental performance, and there is a definite need for a thorough environmental evaluation that takes into account all aspects of production processes, including difficulties with pollution, energy use, and waste management. Companies should apply ISO 9000 and ISO 14000 to gain a competitive advantage. Stakeholder involvement in the components of the proposed system is taken into account, resulting in sufficient participation and involvement for future progress.

Cross-References

- [Environmental Management System](#)
- [Integrated Management Systems](#)
- [Stakeholders](#)
- [Sustainability](#)

References

- Abrahamsson, S., Isaksson, R. & Hansson, J. (2010). Integrated Management Systems: Advantages, Problems and Possibilities. In *Proceedings of the 13th Toulon-Verona Conference, Coimbra, Portugal*, 2(4), 1–12.
- AENA. (2023). *Integrated quality and environmental management system (SGI)*. <https://www.aena.es/en/corporative/environment-sustainability/integrated-quality-and-environmental-management-system.html>
- Ahsen, A. (2014). The integration of quality, environmental and health and safety management by car manufacturers—A long-term empirical study. *Business Strategy and the Environment*, 23(6), 395–416.
- Andersson, K., Brynolf, S., Landquist, H., & Svensson, E. (2016). Methods and tools for environmental assessment. In K. Andersson, S. Brynolf, J. Lindgren, & M. Wilewska-Bien (Eds.), *Shipping, and the environment*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-49045-7_9.
- Antunes, P., & Santos, R. (1999). Integrated environmental management of the oceans. *Ecological Economics*, 31(2), 215–226.
- Asase, M., Yanful, E. K., Mensah, M., Stanford, J., & Amponsah, S. (2009). Comparison of municipal solid waste management systems in Canada and Ghana: A case study of the cities of London, Ontario, and Kumasi, Ghana. *Waste Management*, 29(10), 2779–2786.
- Asif, M., de Bruijn, E. J., Fisscher, O. A., Searcy, C., & Steenhuis, H. J. (2009). Process embedded design of integrated management systems. *International Journal of Quality & Reliability Management*, 26, 261.
- Babu, S. (2016). Environmental impact assessment – Stakeholders. ECO-INTELLIGENT™.
- Bridgewater, P., Kim, R. E., & Bosselmann, K. (2014). Ecological integrity: A relevant concept for international environmental law in the Anthropocene? *Yearbook of International Environmental Law*, 25(1), 61–78.
- Bruschi, V. M., & Coratza, P. (2018). Geoheritage and environmental impact assessment (EIA). In *Geoheritage* (pp. 251–264). Elsevier. <https://doi.org/10.1016/B978-0-12-809531-7.00014-9>.
- Buhrs, T. (1995). *Integrated environmental management: Towards a framework for application* (pp. 1–19). Christchurch: Lincoln University.
- Cort, T. (2022). *The importance of stakeholder engagement in sustainability*. <https://www.getsmarter.com/blog/career-advice/the-importance-of-stakeholder-engagement-in-sustainability>
- DEAT. (2002). *Stakeholder engagement, integrated environmental management, information series 3*. Pretoria: Department of Environmental Affairs and Tourism (DEAT).
- Demirbas, A. (2011). Waste management, waste resource facilities and waste conversion processes. *Energy Conversion and Management*, 52(2), 1280–1287.
- Di Marco, M., Ferrier, S., Harwood, T. D., Hoskins, A. J., & Watson, J. E. (2019). Wilderness areas halve the extinction risk of terrestrial biodiversity. *Nature*, 573(7775), 582–585.
- Djekic, I. (2015). Environmental impact of meat industry – Current status and future perspectives. *Procedia Food Science*, 5, 61–64.
- El-Haggag, S. M. (2007). Sustainability of industrial waste management. In *Sustainable industrial design and waste management* (pp. 307–369). Elsevier. <https://doi.org/10.1016/B978-01273623-9/50012-5>.
- EPA. (2022). *Learn about environmental management systems*. <https://www.epa.gov/ems/learn-about-environmental-management>
- Europe Direct. (2007). Integrated environmental management guidance in relation to the thematic strategy on the urban environment. Technical report – 2007-013 https://www.ccre.org/docs/guide_environment_mangement.pdf
- FAO. (2023). *Sustainable development goals*. <https://www.fao.org/sustainable-development-goals/overview/fao-and-the-2030-agenda-for-sustainable-development/sustainable-agriculture/en/>
- Grantham, H. S., Duncan, A., Evans, T. D., Jones, K. R., Beyer, H. L., Schuster, R., et al. (2020). Anthropogenic

- modification of forests means only 40% of remaining forests have high ecosystem integrity. *Nature Communications*, 11(1), 1–10.
- Halpern, B. S., Frazier, M., Afflerbach, J., Lowndes, J. S., Micheli, F., O'Hara, C., Scarborough, C. E., & Selkoe, K. A. (2019). Recent pace of change in human impact on the world's ocean. *Scientific Reports*, 9(1), 1–8.
- Harding, R. (1998). *Environmental decision-making: the roles of scientists, engineers, and the public*. Federation Press: Alexandria, Australia.
- Jambeck, J., Hardesty, B. D., Brooks, A. L., Friend, T., Teleki, K., Fabres, J., & Wilcox, C. (2018). Challenges and emerging solutions to the land-based plastic waste issue in Africa. *Marine Policy*, 96, 256–263.
- Jay, S., Jones, C., Slinn, P., & Wood, C. (2007). Environmental impact assessment: Retrospect and prospect. *Environmental Impact Assessment Review*, 27(4), 287–300.
- Loiseau, E., Junqua, G., Roux, P., & Bellon-Maurel, V. (2012). Environmental assessment of a territory: An overview of existing tools and methods. *Journal of Environmental Management*, 112, 213–225.
- Margerum, R. (1999). Integrated environmental management: The foundations for successful practice. *Environmental Management*, 24, 151–166.
- Nicholson, E., Watermeyer, K. E., Rowland, J. A., Sato, C. F., Stevenson, S. L., Andrade, A., Brooks, T. M., Burgess, N. D., Cheng, S.-T., Grantham, H. S., Hill, S. L., Keith, D. A., Maron, M., Metzke, D., Murray, N. J., Nelson, C. R., Obura, D., Plumptre, A., Skowno, A. L., & Watson, J. E. (2021). Scientific foundations for an ecosystem goal, milestones, and indicators for the post-2020 global biodiversity framework. *Nature Ecology & Evolution*, 5(10), 1338–1349.
- Nunhes, T. V., Motta, L. C. F., & Oliveira, O. J. D. (2016). Evolution of integrated management systems research on the journal of cleaner production: Identification of contributions and gaps in the literature. *Journal of Cleaner Production*, 139, 1234–1244.
- Primavera, J. H., Friess, D. A., van Lavieren, H., & Lee, S. Y. (2019). The mangrove ecosystem. In *World seas: An environmental evaluation* (pp. 1–34). Elsevier. <https://doi.org/10.1016/B978-0-12-805052-1.00001-2>.
- Rakowski, L. (2020). Identify and prioritize powerful environmental stakeholders, NBS, Ivey Business School, Western University, Canada N6G 0N1.
- Ramadhan, R. M., Kisahwan, D., Winarno, A., & Hermana, D. (2022). Internal corporate social responsibility as a microfoundation of employee well-being and job performance. *Sustainability*, 14, 9065. <https://doi.org/10.3390/su14159065>.
- Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation*, 141(2008), 2417–2431.
- Richards, C., Blackstock, K. L., & Carter, C. E. (2004). *Practical approaches to participation SERG policy brief no. 1*. Aberdeen: Macauley Land Use Research Institute.
- Robertson, G. L. (2014). Food packaging. In *Encyclopedia of agriculture and food systems* (pp. 232–249). Elsevier. <https://doi.org/10.1016/B978-0-444-52512-3.00063-2>.
- Roy, R., & Ghose, D. (2016). Quality management system (ISO 9001) and environmental quality management system (ISO 14001): Towards an integrated. *IOSR Journal of Business and Management (IOSR-JBM) Model*, 18(10), 9–20.
- Sanz-Calcedo, J. G., González, A. G., López, O., Salgado, D. R., Cambero, I., & Herrera, J. M. (2015). Analysis on integrated management of the quality, environment and safety on the industrial projects. *Procedia Engineering*, 132, 140–145.
- Sarfraz, M., Qun, W., Hui, L., & Abdullah, M. I. (2018). Environmental risk management strategies and the moderating role of corporate social responsibility in project financing decisions. *Sustainability*, 10(8), 2771.
- Shah, S., Jamaludin, K., Talib, H., & Yusof, S. (2019). Integrated quality environmental management implementation in food processing SMEs. *The TQM Journal*, 31, 740–757.
- Stringer, L. C., Twyman, C., & Gibbs, L. M. (2008). Learning from the south: Common challenges and solutions for small-scale farming. *Geographical Journal*, 174(3), 235–250.
- Tung, A., Baird, K., & Schoch, H. (2014). The association between the adoption of an environmental management system with organisational environmental performance. *Australasian Journal of Environmental Management*, 21(3), 281–296.
- Vadastreanu, A. M., Bot, A., Maier, D., & Maier, A. (2015). Quality, environment and health integrated management systems: A literature review. *Journal of Investment and Management*, 4(6), 348–356.
- Vivancos Calvet, J., Buj Corral, I., & Minguella Canela, J. (2015). The manufacturing engineering society international conference, MESIC 2015 Preface.
- von Ahnen, A. (2013). Integrated quality and environmental management. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_11.
- Whelan, G., Kim, K., Pelton, M. A., Soller, J. A., Castleton, K. J., Molina, M., Pachepsky, Y., & Zepp, R. (2014). An integrated environmental modeling framework for performing quantitative microbial risk assessments. *Environmental Modelling & Software*, 55, 77–91.
- Williams, B. A., et al. (2020). Change in terrestrial human footprint drives continued loss of intact ecosystems. *bioRxiv*, 05.04.077818.
- Zutshi, A., & Sohal, A. S. (2004). Adoption and maintenance of environmental management systems critical success factors. *Management of Environmental Quality: An International Journal*, 15(4), 399–419.

Integrated Reporting

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Synonyms

Comprehensive corporate reporting; One report;
Single report

Definition/Description

In the last decade, the achievement of integration of financial and nonfinancial reporting has been discussed at various levels, considering the concept “integrated” from the point of view of an integrating spirit in the approach rather than the release of a single report. Integrated reporting refers to a holistic representation of corporate performance regarding financial and nonfinancial information and thanks to the Integrated Reporting (IR) framework by the International Integrated Reporting Council (IIRC), a process that results in one report about value creation, including material information about several aspects of the organization.

Introduction

Corporate disclosure and reporting are the means by which stakeholders, internal and external, can recognize and evaluate organizational behavior. The evolution in the response to the stakeholders’ demands is reflected in corporate sustainability reporting, where the disconnection between the disclosure of financial information and the disclosure of non-financial information has begun to be overcome (Frias-Aceituno et al., 2013a). The difference between the characteristics of these types of information in terms of homogeneity and audience has led to their treatment and evolution being very

irregular. Proof of this is the appearance of a multitude of regulations, codes, guidelines, and requirements (Frias-Aceituno et al., 2013a), which tend to standardize corporate disclosure. This forces a company to be permanently reinforcing its disclosure channels, providing reports of greater length and complexity that make it difficult for the audience to understand them due to the fragmented and disconnected information. In fact, how many reports issued by a company do you read? Do you use skimming and scanning tools when reading all reports? Are you interested in all the information issued in a corporate report?

That is why a decade ago, many listed companies began to release their reports in a combined way, echoing stakeholder requests. Although the publication of an integrated report does not imply ceasing to publish other more specific reports, it can become the main corporate report (“an organization’s primary reporting vehicle”), as assumed in 2011 by the International Integrated Reporting Committee (IIRC). In fact, talking about integrated reporting is talking about Integrated Reporting and IIRC, the institution that has promoted the formalization of this type of integrated reporting. In addition, one cannot talk about integrated reporting without talking about integrated thinking, and this is precisely the long-term vision of the IIRC, which puts integrated thinking (“the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects” (The IIRC | Integrated Reporting, 2021)) at the center of business practice.

We will review in this entry the evolution and definition of the concept of integrated reporting and its different approaches, with an emphasis on the IIRC framework, promoter of the Integrated Reporting. Subsequently, reference is made to the type of publications in academic literature. Finally, we will talk about the comprehensive corporate reporting system announced in September 2020 by the five leading framework and standard-setting organizations: the CDP (formerly Carbon Disclosure Project), Climate

Disclosure Standards Board (CDSB), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), and Sustainability Accounting Standards Board (SASB). The idea of this initiative is “connect sustainability disclosure standards focused on enterprise value creation to Financial GAAP, with integrated reporting as the conceptual framework linking such sustainability disclosures and Financial GAAP” (Impact Management Project et al., 2021).

Evolution and Definition of Integrated Reporting

The so-called integrated reporting journey begins in the 1990s, when the King Report on Corporate Governance (King I Report), promoted by Mervyn E. King, was published in South Africa. The second edition of the report (King II Report), released in 2002, includes a recommendation on Integrated Sustainability Reporting that reads “a company shall report on its policies and procedures and systems and commitments to the following: social, ethical, safety, health, and environment” (5.1.1.), requiring “an integrated approach” (5.1.2.) (Institute of Directors in Southern Africa (IoDSA), 2002). It is true that the concept “integrated” seems to refer to the integrating spirit in the approach and not so much to the reference of a single report, something that is maintained in the third update of the South African Corporate Governance Code, the King III Report. In its Chap. 9, Integrated reporting and disclosure, it is detailed that integrated reporting means “a holistic and integrated representation of the company’s performance in terms of both its finances and its sustainability. This can take the form of a single report or dual reports” (Institute of Directors in Southern Africa, 2009). In the following decade, the achievement of integration of financial and nonfinancial reporting is discussed in many forums (Dumay et al., 2016). The publication in 2010 of the book entitled *One Report: Integrated Reporting for a Sustainable Strategy* is of special relevance, and it is constituted as another approach to

integrated reporting, in which, as in the King III Report, it is made explicit that “One Report does not mean Only One Report” (Eccles & Krzus, 2010). Eccles and Krzus (2010) defines that one report as “producing a single report that combines the financial and narrative information found in a company’s annual report with the nonfinancial (such as on environmental, social, and governance issues) and narrative information found in a company’s ‘Corporate Social Responsibility’ or ‘Sustainability’ report” (Eccles & Krzus, 2010). After the publication of this book, integrated reporting is considered “a new reporting paradigm that is holistic, strategic, responsive, material and relevant across multiple time frames” (Adams & Simnett, 2011). In this context of paradigm shift, the International Integrated Reporting Council (IIRC) arises, where integrated reporting (IR) is defined as “a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation” (The IIRC | Integrated Reporting, 2021). In this sense, an integrated report includes “material information about an organization’s strategy, governance, performance and prospects in a way that reflects the commercial, social and environmental context with which it operates” (IIRC, 2011).

Integrated Reporting Framework

The International Integrated Reporting Council (“the IIRC”) is a not-for-profit organization that “comprises global communities, including business and other reporting entities; providers of financial capital; policy makers, regulators and exchanges; the accounting profession; reporting framework developers and standard setters; civil society; and academia,” whose mission is “to establish integrated reporting and thinking within mainstream business practice as the norm in the public and private sectors” (The IIRC | Integrated Reporting, 2021). The Council is formed by 68 organizations, including the Global Accounting Alliance (GAA), Global Reporting Initiative (GRI), Sustainability Accounting Standards

Board, The Chartered Governance Institute, Transparency International, UN Global Compact, and World Business Council for Sustainable Development (WBCSD), among others, and Prof. Judge Mervyn E. King, promoter of the King Reports, is the Chair Emeritus. The <IR> Framework Panel revises and updates the International <IR> Framework. The IIRC published an updated version of the <IR> Framework, originally published in 2013, in January 2021. In this document, IIRC states that integrated reporting aims to improve quality of information, to promote cohesion in corporate reporting, to enhance accountability, and to support integrated thinking (IIRC, 2021).

The guiding principles to prepare and present and integrated report complying with the <IR> Framework are strategic focus and future orientation, connectivity of information, stakeholder relationships, materiality, conciseness, reliability and completeness, and consistency and comparability (IIRC, 2021, p. 7). When a company wants to follow the <IR> Framework in their integrated reports, they have to include eight content elements: Organizational overview and external environment; Governance; Business model; Risks and opportunities; Strategy and resource allocation; Performance; Outlook; and Basis of presentation. For each of the eight content elements, it is raised the question that the integrated report should answer, as well as the organizational and material aspects to be included, key quantitative information, significant factors, and, in some of them, inputs, outputs, and outcomes.

Unlike other reporting standards, such as the Global Reporting Initiative (GR), International <IR> Framework does not outline specifically what measures to report or how value creation is defined (Dumay et al., 2016). This leads to the use of a non-exhaustive variety of key performance indicators (KPIs), adding information about the how, especially through descriptions and processes. Finally, IIRC makes it clear that companies should avoid the use of its label integrated report on those reports that have not been prepared complying with the International <IR> Framework.

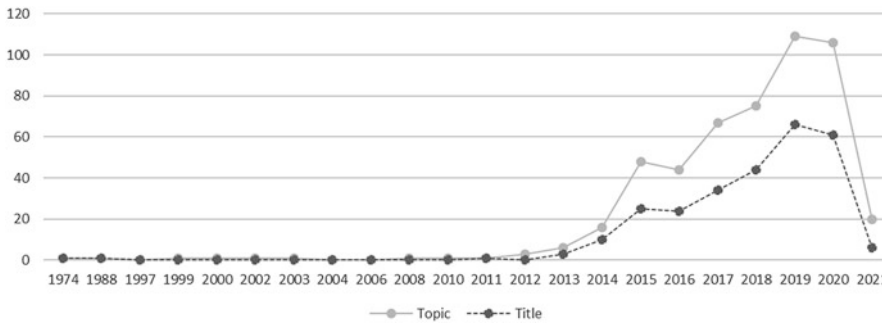
Integrated Reporting in Literature

The evolution of the study of integrated reporting in literature coincides, as expected, with the release of the framework by the IIRC in 2013. A search on the Web of Science Core Collection returns 672 results (503 articles) with the concept “integrated reporting” in the topic and 371 results (276 articles) with the concept in the title. Despite the fact that production practically begins in 2013, some papers before already talk about integrated reporting. The first article available, in the healthcare environment, introduces “joint, not marginal, reporting” to improve decision-making (Gore, 1988), but it is not until 2011 when integrated reporting begins to be considered as a new reporting paradigm (Adams & Simnett, 2011). Figure 1 shows the evolution of papers in Web of Science Core Collection with the following search criteria (June, 2021): “integrated reporting,” filtered by articles. The productive peak occurs in 2019, which may pose a change in the trend in the analysis of integrated reporting and justifies the need for alignment toward a comprehensive global system for corporate disclosure, which will be discussed later.

The journal *Meditari Accountancy Research* is focused on the social impacts of accounting, sustainability accounting, CSR, and integrated reporting and leads the ranking of journals followed by *Sustainability* (28 papers), *Journal of Intellectual Capital* (27), *Accounting Auditing Accountability Journal* (24), and *Business Strategy and the Environment* (24) (Table 1).

The top nine authors who have contributed more articles on IR are Warren Maroun, John Dumay, Nicola Raimo, Filippo Vitolla, Charl de Villiers, Michele Rubino, and Madalina Dumitru (Table 2). Not surprisingly, the most prolific authors come from a South African university, the origin of the King Reports, and from where their various case studies are applied (Atkins & Maroun, 2015; van Zijl et al., 2017).

The last systematic literature review by Soriya and Rastogi (2021) evaluates 110 articles and categorizes 5 focus areas: concept of integrated reporting (23% of articles); implementation of integrated reporting (30%); determinants of



Integrated Reporting, Fig. 1 Evolution of articles with the concept “integrated reporting” in the topic and in the title (Web of Science Core Collection). (Source: Authors)

Integrated Reporting, Table 1 Ten highest-ranked journals, ordered by number of articles on integrated reporting in the topic. (Source: Authors)

Journal	Number
<i>Meditari Accountancy Research</i>	40
<i>Sustainability</i>	28
<i>Journal of Intellectual Capital</i>	27
<i>Accounting Auditing Accountability Journal</i>	24
<i>Business Strategy and the Environment</i>	24
<i>Sustainability Accounting, Management and Policy Journal</i>	20
<i>Proceedings of the International Conference Accounting and Management Information Systems</i>	15
<i>Corporate Social Responsibility and Environmental Management</i>	14
<i>Journal of Management Governance</i>	14
<i>Journal of Cleaner Production</i>	12

integrated reporting (19%); value relevance of integrated reporting (14%); and sustainability and integrated reporting (15%). The area of concept of integrated reporting focuses on theories given by researchers (namely, signaling theory, stakeholder theory, legitimacy theory, and agency theory) to elucidate the framework of IR (Soriya & Rastogi, 2021). The area of implementation of integrated reporting focuses on the connection between business strategy and sustainability, as well as communication. In this area, comparative studies such as that of Tjahjadi et al. (2020) predominate. The area of the determinants of integrated reporting is the most productive and also the most practical when entering into the

Integrated Reporting, Table 2 Seven top authors, ordered by number of articles on IR. (Source: Authors)

Authors	University	Number
Maroun, W.	University of Witwatersrand (South Africa)	25
Dumay, J.	Macquarie University (Australia)	17
Raimo, N.	Lum Jean Monnet University (Italy)	14
Vitolla, F.	Lum Jean Monnet University (Italy)	14
De Villiers, C.	University of Auckland (New Zealand)	13
Rubino, M.	Lum Jean Monnet University (Italy)	12
Dumitru, M.	Bucharest University of Economic Studies (Romania)	11

relationship with quality (Barth et al., 2017; Cooray, Gunaratne, & Senaratne, 2020; Cortesi & Vena, 2019; Cosmulese et al., 2019; Demartini & Trucco, 2017; Gerwanski et al., 2019; Malola & Maroun, 2019; Mans-Kemp & van der Lugt, 2020; Pistoni et al., 2018; Vitolla et al., 2019b). In this sense, this line of research has two aspects: the first one analyzes the determinants of IR adoption, and the other one analyzes the determinants of IR quality. Vitolla et al. (2019b) reviewed the determinants of integrated reporting and summarizes tested hypotheses from 13 authors: mainly being classified in corporate governance variables, country-level variables, and corporate variables. A summary of their results (only for IR adoption and IR quality) can be found in Table 3.

Integrated Reporting, Table 3 Literature review summary. (Source: Vitolla et al. (2019a pp. 1594))

Dependent variable	Authors	Tested hypotheses	Main findings
IR adoption	Frias-Aceituno et al., (2013a, 2013b, 2014); Garcia-Sanchez et al., (2013); Lai et al., (2016); Sierra-Garcia et al., (2015)	Firm size (+), firm profitability (+), business sector (+), industry concentration (–), growth opportunities (+), ESG disclosure rating (+), financial leverage (+), environmental sensitive industry (+), CSR report assurance (+), IR assurance (+), board size (+), board independence (+), board activity (+), board national diversity (+), board gender diversity (+), board average age (+), civil law countries (+), strictly enforced regulation (+), power distance (–), individualism vs. collectivism (–), masculinity vs. femininity (–), uncertainty avoidance (+), long-term vs. short-term orientation (+)	Firm size (+), firm profitability (+), industry concentration (–), ESG disclosure rating (+), CSR report assurance (+), board size (+), board gender diversity (+), civil law countries (+), strictly enforced regulations (+), individualism vs. collectivism (–), masculinity vs. femininity (–)
IR quality	Gerwanski et al., (2019); Vitolla et al., (2019b)	Learning effects (+), readability (+), gender diversity (+), assurance (+), DJSI (+), earnings management (+), power distance (–), individualism vs. collectivism (–), masculinity vs. femininity (–), uncertainty avoidance (+), long-term vs. short-term orientation (+), indulgence vs. restraint (–)	Learning effects (+), gender diversity (+), assurance (+)

The area of value relevance of integrated reporting analyzes, on the contrary, the effects of practices IR in terms of asymmetry of information, firm valuation, or cost of capital. These effects, however, are usually related not so much to the integration of information but to the mere disclosure of reliable and quality information (Cooray, Senaratne, et al., 2020) Finally, the area of sustainability and integrated reporting reflects on how reporting systems secure trust and reduce opacity in organizations (Chaidali & Jones, 2017; Dumay et al., 2019).

Key Issues and Future Directions

Among the future challenges in relation to integrated reporting, Dumay et al. (2016) highlight

the disconnection between IR research and IR practice, detecting the need for a more interventionist research, helping organizations to land theoretical concepts proposed by the IR framework. This is related to the main risk that integrated reporting has considering the <IR> Framework, which is that it does not involve a substantial change in corporate culture and that it remains a formal tool (Higgins et al., 2019; Vitolla et al., 2019a). For this reason, the need for an increase in case studies, something also proposed by Soriya and Rastogi (2021), and the stakeholder pressure set up as vigilantes to enhance the quality of reports and seek that qualitative leap to true integrated thinking. However, the convenience of the exclusive use of the concept of integrated reporting should be considered, especially with regard to how it may affect stakeholders'

understanding and trust (Beck et al., 2017). Following this line, it is necessary to investigate not so much the determinants of integrated reporting but the perceptions of stakeholders from a broader perspective, in line with what is proposed by Stubbs et al. (2014).

Although del Baldo (2015) wondered whether it was time for integrated reporting in SME in 2015, the truth is that there is also a lack of case studies in non-listed companies, something from which they could benefit when planning and understanding their strategy and their risk management. The next steps in IR would have to go hand in hand with experimentation, so that they carry out comparative studies with other types of approaches, as well as propose industry-based guidelines in line with the experience of other initiatives.

Finally, Soriya and Rastogi (2021) also detected the need for harmonization of financial and non-financial standard. Precisely, this need for harmonization has been reflected in the shared vision announced in September 2020 by five of the leading framework and standard-setting organizations (CDP, CDSB, GRI, IIRC, and SASB). After establishing the different definitions of materiality proposed by the standards, they acknowledge that there is substantial work to consolidate the technical content and reflect the different bilateral efforts that have already been carried out (SASB and CDSB; GRI and IIRC; GRI and SASB). Knowing how to understand these formal collaborations, assuming their commitment in favor of a joint market guidance, will favor the implementation by all types of organizations of integrated reporting systems, which in turn benefit the ultimate recipients of information.

Summary

The evolution of the study of integrated reporting in literature explodes with the release of the framework by the IIRC in 2013, reflecting a formalization of processes to promote integrated thinking and consequently, integrated thinking. However, several authors

highlight the disconnection between IR research (whose main areas are concept, implementation, determinants, value relevance, and sustainability) and IR practice, detecting the need for a more interventionist research. The need for an increase in case studies, not only in listed companies but also in not-listed companies and SME, seeks the qualitative leap to true integrated thinking.

Cross-References

- [Stakeholder Dialogue](#)
- [Stakeholder Engagement](#)

References

- Adams, S., & Simnett, R. (2011). Integrated reporting: An opportunity for Australia's not-for-profit sector. *Australian Accounting Review*, 21(3), 292–301. <https://doi.org/10.1111/j.1835-2561.2011.00143.x>.
- Atkins, J., & Maroun, W. (2015). Integrated reporting in South Africa in 2012 Perspectives from South African institutional investors. *Meditari Accountancy Research*, 23(2), 197–221. <https://doi.org/10.1108/MEDAR-07-2014-0047>.
- Barth, M. E., Cahan, S. F., Chen, L., & Venter, E. R. (2017). The economic consequences associated with integrated report quality: Capital market and real effects. *Accounting Organizations and Society*, 62, 43–64. <https://doi.org/10.1016/j.aos.2017.08.005>.
- Beck, C., Dumay, J., & Frost, G. (2017). In pursuit of a 'single source of truth': From threatened legitimacy to integrated reporting. *Journal of Business Ethics*, 141(1), 191–205. <https://doi.org/10.1007/s10551-014-2423-1>.
- Chaidali, P., & Jones, M. J. (2017). It's a matter of trust: Exploring the perceptions of Integrated Reporting preparers. *Critical Perspectives on Accounting*, 48, 1–20. <https://doi.org/10.1016/j.cpa.2017.08.001>.
- Cooray, T., Gunaratne, A. D. N., & Senaratne, S. (2020). Does corporate governance affect the quality of integrated reporting? *Sustainability*, 12(10). <https://doi.org/10.3390/su12104262>.
- Cooray, T., Senaratne, S., Gunaratne, A. D. N., Herath, R., & Samudrage, D. (2020). Does integrated reporting enhance the value relevance of information? Evidence from Sri Lanka. *Sustainability*, 12(19). <https://doi.org/10.3390/su12198183>.
- Cortesi, A., & Vena, L. (2019). Disclosure quality under integrated reporting: A value relevance approach. *Journal of Cleaner Production*, 220, 745–755. <https://doi.org/10.1016/j.jclepro.2019.02.155>.

- Cosmulese, C. G., Socoliuc, M., Ciubotariu, M.-S., Mihaila, S., & Grosu, V. (2019). An empirical analysis of stakeholders? Expectations and integrated reporting quality. *Economic Research-Ekonomska Istrazivanja*, 32(1), 3963–3986. <https://doi.org/10.1080/1331677X.2019.1680303>.
- del Baldo, M. (2015). Is it time for integrated reporting in small and medium-sized enterprises? Reflections on an Italian experience. In S. O. Idowu, C. S. Frederiksen, A. Y. Mermod, & M. E. J. Nielsen (Eds.), *Corporate social responsibility and governance: theory and practice* (pp. 183–209). Springer. https://doi.org/10.1007/978-3-319-10909-1_9.
- Demartini, C., & Trucco, S. (2017). Integrated reporting and audit quality: An empirical analysis in the European setting. In *Integrated reporting and audit quality: An empirical analysis in the European setting* (pp. 1–129). Springer. <https://doi.org/10.1007/978-3-319-48826-4>.
- Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: A structured literature review. *Accounting Forum*, 40(3), 166–185. <https://doi.org/10.1016/j.accfor.2016.06.001>.
- Dumay, J., la Torre, M., & Farneti, F. (2019). Developing trust through stewardship Implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU. *Journal of Intellectual Capital*, 20(1, SI), 11–39. <https://doi.org/10.1108/JIC-06-2018-0097>.
- Eccles, R., & Krzus, M. (2010). *One report: Integrated reporting for a sustainable strategy*. https://books.google.com/books?hl=en&lr=&id=mEBE9MBOWn4C&oi=fnd&pg=PT9&dq=One+Report:+Integrated+Reporting+for+a+Sustainable+Strategy+&ots=KyfhRvNo9h&sig=6cVtQINvXUEymfDW_IJMAZi0InM
- Frias-Aceituno, J. V., Rodriguez-Ariza, L., & Garcia-Sanchez, I. M. (2013a). Is integrated reporting determined by a country's legal system? An exploratory study. *Journal of Cleaner Production*, 44, 45–55. <https://doi.org/10.1016/j.jclepro.2012.12.006>.
- Frias-Aceituno, J. V., Rodriguez-Ariza, L., & Garcia-Sanchez, I. M. (2013b). The role of the board in the dissemination of integrated corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 20(4), 219–233. <https://doi.org/10.1002/csr.1294>.
- Frias-Aceituno, J. V., Rodriguez-Ariza, L., & Garcia-Sanchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23(1), 56–72. <https://doi.org/10.1002/bse.1765>.
- Garcia-Sanchez, I.-M., Rodriguez-Ariza, L., & Frias-Aceituno, J.-V. (2013). The cultural system and integrated reporting. *International Business Review*, 22(5), 828–838. <https://doi.org/10.1016/j.ibusrev.2013.01.007>.
- Gervanski, J., Kordsachia, O., & Velte, P. (2019). Determinants of materiality disclosure quality in integrated reporting: Empirical evidence from an international setting. *Business Strategy and the Environment*, 28(5), 750–770. <https://doi.org/10.1002/bse.2278>.
- Gore, S. M. (1988). Integrated reporting of quality and length of life – A statisticians perspective. *European Heart Journal*, 9(2), 228–234. <https://doi.org/10.1093/oxfordjournals.eurheartj.a062488>.
- Higgins, C., Stubbs, W., Tweedie, D., & McCallum, G. (2019). Journey or toolbox? Integrated reporting and processes of organisational change. *Accounting Auditing & Accountability Journal*, 32(6), 1662–1689. <https://doi.org/10.1108/AAAJ-10-2018-3696>.
- IIRC. (2011). *Towards integrated reporting. Communicating Value in the 21st Century*. www.theiirc.org
- IIRC. (2021). *International <IR> Framework*. www.integratedreporting.org
- Impact Management Project, World Economic Forum, & Deloitte. (2021). *Statement of Intent to Work Together Towards Comprehensive Corporate Reporting*.
- Institute of Directors in Southern Africa. (2009). *King Report on Governance for South Africa 2009*.
- Institute of Directors in Southern Africa (IoDSA). (2002). *King Report on Corporate Governance for South Africa - 2002 (King II Report) | ECGI*. <https://ecgi.global/code/king-report-corporate-governance-south-africa-2002-king-ii-report>
- Lai, A., Melloni, G., & Stacchezzini, R. (2016). Corporate sustainable development: Is 'integrated reporting' a legitimization strategy? *Business Strategy and the Environment*, 25(3), 165–177. <https://doi.org/10.1002/bse.1863>.
- Malola, A., & Maroun, W. (2019). The measurement and potential drivers of integrated report quality: Evidence from a pioneer in integrated reporting. *South African Journal of Accounting Research*, 33(2), 114–144. <https://doi.org/10.1080/10291954.2019.1647937>.
- Mans-Kemp, N., & van der Lugt, C. T. (2020). Linking integrated reporting quality with sustainability performance and financial performance in South Africa. *South African Journal of Economic and Management Sciences*, 23(1). <https://doi.org/10.4102/sajems.v23i1.3572>.
- Pistoni, A., Songini, L., & Bavagnoli, F. (2018). Integrated reporting quality: An empirical analysis. *Corporate Social Responsibility and Environmental Management*, 25(4), 489–507. <https://doi.org/10.1002/csr.1474>.
- Sierra-Garcia, L., Zorio-Grima, A., & Garcia-Benau, M. A. (2015). Stakeholder engagement, corporate social responsibility and integrated reporting: An exploratory study. *Corporate Social Responsibility and Environmental Management*, 22(5), 286–304. <https://doi.org/10.1002/csr.1345>.
- Soriya, S., & Rastogi, P. (2021). A systematic literature review on integrated reporting from 2011 to 2020. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-09-2020-0266>.
- Stubbs, W., Higgins, C., Milne, M. J., & Hems, L. (2014). *Financial Capital Providers' Perceptions of Integrated Reporting*. <https://doi.org/10.2139/SSRN.2473426>.

- The IIRC | Integrated Reporting. (2021). <https://integratedreporting.org/the-iirc-2/>
- Tjahjadi, B., Harymawan, I., & Warsidi, N. S. (2020). Implementation of integrated reporting: A cross-countries' study. *Entrepreneurship and Sustainability Issues*, 7(4), 2832–2850. [https://doi.org/10.9770/jesi.2020.7.4\(17\)](https://doi.org/10.9770/jesi.2020.7.4(17)).
- van Zijl, W., Wostmann, C., & Maroun, W. (2017). Strategy disclosures by listed financial services companies: Signalling theory, legitimacy theory and South African integrated reporting practices. *South African Journal of Business Management*, 48(3), 73–85.
- Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2019a). How pressure from stakeholders affects integrated reporting quality. *Corporate Social Responsibility and Environmental Management*, 26(6), 1591–1606. <https://doi.org/10.1002/csr.1850>.
- Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2019b). The impact of national culture on integrated reporting quality. A stakeholder theory approach. *Business Strategy and the Environment*, 28(8), 1558–1571. <https://doi.org/10.1002/bse.2332>.

Integrated Reporting for Sustainability

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Synonyms

Business integrated reporting; Multidimensional company reporting; Non-financial reporting

Definition

Integrated reporting (IR) is “a process founded on integrated thinking that results in a periodic integrated report by an organisation about value creation over time and related communications regarding aspects of value creation” (IIRC 2013, p. 7). IR presents a clear and succinct representation of how an organization generates value over the short, medium, and long term. The integrated report corresponds to the outcome of a process that aims to describe how and why an organization has created and will continue creating value

(Girella et al. 2019). Therefore, this voluntary disclosure encompasses both financial and non-financial information that typically concerns environmental, social, and governance issues.

Introduction

IR indicates a significant step in the advancement of corporate reporting and financial accounting by incorporating social and environmental responsibility (Eccles and Serafeim 2011; De Villiers et al. 2020). The IR framework has been made available by the IIRC (International Integrated Reporting Council), an international coalition of companies, institutions, audit firms, investment funds, banks, NGOs, and academics that was set up in 2010 with the vision to align capital allocation and corporate behavior to broader goals of financial solidity and sustainable development through the cycle of integrated reporting and thinking.

IR depends on the voluntary integration of financial and sustainability information – increasingly regarded as value relevant – to better meet investors' expectations and, more generally, stakeholders' needs. It rests on the notion of business viability and sustainability and aims to drive organizational change toward more sustainable outcomes. IR points out the connections between inputs, outputs, and outcomes, as well as between an organization's strategy and its performance. It helps businesses to take more sustainable decisions and helps stakeholders understand how an organization is performing (Stubbs and Higgins 2014).

IR's fundamental concepts are the “six capitals” (financial, manufactured, natural, human, intellectual/organizational, social capital and relationship), the business model, value creation over time, and the principle of integrated thinking.

Capitals are designed as stores of value that can be decreased, increased, or transformed through the company's activities that enhance, modify, or destroy them.

The business model represents the particular system an organization opts for to transform inputs into outputs and outcomes through its

activities, which are carried out to fulfill its strategic plans.

Value creation is contingent on the organization's ability to serve the interests of, and work with, stakeholders (employees, suppliers, customers, partners, local communities, regulators, and policymakers) as well as the ability to manage an extensive range of activities, interactions, and relationships.

Integrated thinking represents an organization's active consideration of the interrelation between its various operating and functional components and the capitals that the organization implements or influences. "Understanding the consequences and implications of decisions across the organisation's important capitals can be described as integrated thinking" (IRCSA 2014, p. 3).

The IIRC argues that integrated reporting "brings together material information about an organisation's strategy, governance, performance and prospects in a way that reflects the commercial, social and environmental context within which it operates" (IIRC 2013, p. 3). Accordingly, an integrated report recounts the organization's complete story, disclosing what drives its value, thus permitting stakeholders to assess its ability to create value from a long-term perspective. It expedites the connection between the management of several types of resources (physical, financial, and intangible assets, such as social and intellectual capital) and joins environmental, social, and governance parameters and key quantitative and qualitative performance and risk indicators (KPIs and KRIs).

Key Issues

The academic, managerial, and institutional world advocate for a more holistic approach to corporate reporting that permits companies to disclose tangible and intangible factors supporting their ability to create value. Several studies have highlighted the inadequacy of traditional systems of financial reporting to illustrate the multidimensional performances of companies and manage stakeholders' needs and

demand for transparency. Moreover, many concrete examples worldwide have demonstrated the unsuccessful attempts of international accounting and financial standards to ensure the reliability of companies' reports. The need to assess and account for the effects produced by corporate management on non-financial performance has been increasingly underpinned by stakeholders' views. Financial reporting does not provide for a systemic vision of a company's value and yields a limited contribution in favoring judgment on resources that determine prospects of future performance, for example, intangible resources that are becoming progressively relevant to investors. Even if precise financial information continues to be of fundamental importance, many companies do not disclose their intangible assets in the balance sheet. Relative to such critical features, the IR approach assures that it is "holistic, strategic, responsive, material and relevant across multiple time frames" (Adams and Simnett 2011, p. 292).

IR principles are appurtenant no matter the size and the private, public, or not-for-profit nature of the companies. In recent years small-to medium-sized enterprises (SMEs) have also begun to implement this emerging model of corporate reporting (Del Baldo 2017). Correspondingly, an "ad hoc" guideline has recently been released, addressing their specific attributes (NIBR 2018). Both public policy and organizational practices in this area have grown posthaste, attracting considerable academic attention (Dumay et al. 2016).

On the one hand, among the research on the rationale of IR, the institutional and stakeholder theory have been put into practice to identify the external and internal factors that drive an organization's decision to implement IR. Stakeholder theory has been used to understand why organizations decide to divulge their value process in regard to stakeholders' expectations (Haller and van Staden 2014). Amid the internal factors, we can confirm that size and gender diversity positively correlate with IR adoption (Garcia-Sánchez et al. 2013).

Institutional theory has been used to investigate country-level determinants (i.e., political

systems cultural characteristics, and economic development) and company-level features (i.e., the economic sector or company size) that drive organizations to disclose the company's value by implementing the IR (Frias-Aceituno et al. 2014). Companies headquartered in market-based economies or Civil Law countries appear more likely to introduce IR because of more stakeholders' pressure and/or law enforcement mechanisms influencing disclosure (Vaz et al. 2016). At the organizational level (micro-level) various mechanisms influence whether organizations implement IR or not: normative mechanisms (based on non-imposed values), coercive norms, and mimetic pressure. The latter factor is due to the fact that companies are prone to imitate the behavior of best practices and/or competitors (Jensen and Berg 2012).

On the other hand, research on "how" IR users put this new approach into practice should be further refined to understand whether IR motivates innovative disclosure mechanisms and organizational changes regarding processes and structures, "forcing" companies toward sustainability by taking another look at their business model (De Villiers et al. 2014). However, there are conflicting interpretative positions. Some scholars highlight that sustainability reporting acts more productively as a catalyst for change while others affirm that IR is used to drive change because it is oriented toward the future and attempts to capture interconnections between the financial and non-financial drivers of performance, thus resulting in a fundamental shift in how managers consider strategy and value creation and communicate with stakeholders.

However, IR has been condemned for its prevailing focus on financial capital and investors. Moreover, it has been maintained that IR implementation insists that companies devote a great deal of resources with regard to time, human and financial resources. Ultimately, questions have been put forward on the assurance aspects of IR, calling for frameworks and for regulatory bodies to alter their auditing standards (Cheng et al. 2014).

Summary

IR has prompted a challenge that unfolds new frontiers for both academic research and business applications (Eccles and Krzus 2010; Adams 2015) and enhances the transition to new processes of communication and stakeholders' management. The necessity to assess, monitor, and communicate traditional (economic and financial) and ESG – governance, ethical, social, and environmental – performance underpins the expansion of new accounting and accountability tools and processes like integrated reporting that help companies better understand whether responsible and sustainability-oriented practices are contributing to the enhancement and disclosure of intangible resources. In this regard, the IIRC has devised a holistic approach that draws attention to the way a company creates value. Companies have demonstrated a growing interest in adopting IR to integrate the outcomes of intangible and tangible resource management within their reports, thus prompting IR developments both in theory and practice.

Cross-References

- [Integrated Reporting](#)
- [Non-financial Reporting](#)
- [Stakeholder Thinking](#)

References

- Adams, C. A. (2015). The international integrated reporting council: A call to action. *Critical Perspectives on Accounting*, 27(1), 23–28. <https://doi.org/10.1016/j.cpa.2014.07.001>
- Adams, S., & Simnett, R. (2011). Integrated reporting: An opportunity for Australia's not-for profit Sector. *Australian Accounting Review*, 21(3), 292–301.
- Cheng, M., Green, W., Conradie, P., Konishi, N., & Romi, A. (2014). The international integrated reporting framework: Key issues and future research opportunities. *Journal of International Financial Management & Accounting*, 25(1), 90–119.
- De Villiers, C., Rinaldi, L., & Unerman, J. (2014). Integrated reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal*, 27(7), 1042–1067.

- De Villiers, C., Hsiao, P.-C. K., & Warren Maroun, W. (Eds.). (2020). *The Routledge handbook of integrated reporting*. Routledge.
- Del Baldo, M. (2017). The Implementation of Integrating Reporting (IR) in SMEs. Insights from a pioneering experience in Italy. *Meditari Accountancy Research*, 25(4), 505–532.
- Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: a structured literature review. *Accounting Forum*, 40(3), 166–185.
- Eccles, R., & Krzus, M. (2010). Integrated reporting for a sustainable strategy. *Financial Executive*, March, 29–32.
- Eccles, R. G., & Serafeim, G. (2011). Market interest in nonfinancial information. *Journal of Applied Corporate Finance*, 23(4), 113–123.
- Frias-Aceituno, J. V., Rodriguez-Ariza, L., & Garcia-Sánchez, I. M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23(1), 56–72.
- García-Sánchez, I. M., Rodríguez-Ariza, L., & Frías-Aceituno, J. V. (2013). The cultural system and integrated reporting. *International Business Review*, 22(5), 828–838.
- Girella, L., Rossi, P., & Zambon, S. (2019). Exploring the firm and country determinants of the voluntary adoption of integrated reporting. *Business Strategy and the Environment*, 28(7), 1323–1340.
- Haller, A., & Van Staden, C. (2014). The value added statement – An appropriate instrument for integrated reporting. *Accounting, Auditing & Accountability Journal*, 27(7), 1190–1216.
- IIRC. (2013). *The International (IR) framework*. The International Integrated Reporting Council.
- IRCSA. (2014). Integrated Reporting Committee (IRC) of South Africa (2014). Starter's guide.
- Jensen, J. C., & Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting: An institutionalist approach. *Business Strategy and the Environment*, 21(5), 299–316.
- NIBR. (2018). Integrated reporting for SMEs: Implementation guidance, in collaboration with the World Intellectual/Assets Initiative – WICI Global Network. NIBR, Network Italiano, Business reporting. https://integratedreporting.org/wp-content/uploads/2019/05/NIBR_IR_for_SMEs_ENG_final.pdf. Accessed 20 Dec 2018.
- Stubbs, W., & Higgins, C. (2014). Integrated reporting and internal mechanisms of change. *Accounting, Auditing & Accountability Journal*, 27(7), 1068–1089.
- Vaz, N., Fernandez-Feijoo, B., & Ruiz, S. (2016). Integrated reporting: An international overview. *Business Ethics: A European Review*, 25(4), 577–591.

Integrated Sustainability

► Embedded Sustainability

Integrated Value

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Synonyms

Corporate social responsibility; Sustainable business; Values dividend

Definition

Integrated value is a conceptual systemic approach toward sustainable business developed by Wayne Visser. The concept builds on a myriad of seminal contributions in the field of sustainable business, notably multi-capital approaches. It rethinks how value in society is conceived of and measured and aims to serve as a model for understanding and guiding more comprehensive approaches toward sustainable business. A defining characteristic of the concept of integrated value is that it takes a systems approach, which is identified as the key missing ingredient compared to other conceptualizations of sustainable business and, in fact, as an explanation for the lack of impact of sustainable business in terms of addressing society's most pressing challenges in an effective way.

The Failure of Corporate Social Responsibility

One should only have a quick look at the Sustainable Development Goals to realize that our world is facing many severe problems in the ecological and social domain. Among these problems are those of climate change, biodiversity, eradicating poverty, and gender equality. In fact, many of these problems have worsened over the past decades, and research shows that this trend has so far not reversed (Wackernagel et al. 2019).

Against the background of the growth of business attention for sustainability, usually

under the guise of corporate social responsibility (CSR), perhaps one might have not have expected these problems to disappear, but at least to have become less grave in the course of the past two decades. Corporate practices, including adopting sustainability-oriented management standards, developing and implementing CSR strategies, establishing executive pay schemes to reward sustainability performance, and reporting on the results of these practices, have not led to the anticipated results. Since the opposite of these sustainability problems disappearing is the case, this suggests that there is a disconnect between companies' efforts and initiatives in the domain of CSR on the one hand and the impact of these efforts and initiatives on the other.

Visser (2011) provides three reasons for this disconnect. First, CSR is peripheral in nature, meaning that many of the CSR initiatives and projects of companies are not linked to their core business and that management responsibility for CSR oftentimes is located in the marketing and communications department. This means that CSR is usually not part of the core processes of value creation of companies and is at risk of becoming a bolt-on or a plug-in (Moratis et al. 2017). A second reason for the disconnect can be found in the fact that many academic studies of CSR, despite the popular rhetorics around the business value of investing in sustainability, do not show very positive or even a negative economic impact of CSR for companies. In practice, companies also see themselves confronted with markets and organizations that are oriented toward the short-term, encouraging companies to externalize costs to society instead of rewarding sustainability-related initiatives. Third, Visser argues that CSR has been encapsulated by the tyranny of incremental thinking, whereas more radical solutions (e.g., reinventing the business model) are required in order for companies to become a true force for positive societal change and be the driving force of sustainable transformation. In conclusion, approaches toward sustainable business as they have been taken by companies are misguided, and Visser consequently proposes a new conceptualization of CSR, which he labels CSR 2.0.

CSR 2.0 revolves around the idea of counter-ing the reasons behind the disconnect between business CSR efforts on the one hand and developing a more comprehensive and systemic approach toward sustainable business on the other. Five principles are at the core of Visser's idea of CSR 2.0: creativity (applying innovative ideas to societal problems), scalability (moving CSR beyond the boundaries of the firm), responsiveness (meaning adapting to change and practicing accountability), glocality (suggesting that CSR oftentimes manifests itself as (geographical) dilemmas), and circularity (recognizing the inherent limits of Earth's natural systems). Hence CSR 2.0 presents a more holistic approach to modeling business-society relations in which value creation, stakeholder orientation, and an ecosystems approach take central stage.

From CSR 2.0 to Integrated Value

As a next step in conceptualizing the relationship between business and society, Visser proposes the concept of integrated value (IV) (Visser 2017). The term "integrated value" was first coined in a paper by Visser and Kymal (2015) and takes a multi-capital perspective toward sustainability, integrating financial and nonfinancial capital into one framework. While the IV concept builds on CSR 2.0, it should not be seen as an incremental change in conceptualization nor an extension of Porter and Kramer's Creating Shared Value concept (Porter and Kramer 2011), but rather as an entirely new model that demonstrates an entirely new approach toward sustainable business. (Note that in more recent versions, Visser has been substituting the label of integrated value with that of values dividend, emphasizing the positive financial business outcomes of value-driven business.)

IV takes a far more systemic approach than CSR 2.0, building on a myriad of seminal contributions in the field of sustainable business on the hand, including Ekins (1992) and Hart and Milstein (2003), and systems thinking and complexity theory on the other, including Von Bertalanffy (1968) and Gleick (1987). This is a defining characteristic of the concept of IV that it takes a systems approach, which is identified as

the key missing ingredient compared to other conceptualizations of sustainable business and, in fact, as an explanation for the lack of impact of sustainable business in terms of addressing society's most pressing challenges in an effective way. Informed by these theoretical underpinnings, it sets out to conceptualize sustainable business through recognizing the interconnectedness of economic, technological, human, social, and ecological systems. In doing so, Visser's aim is to rethink how value in society is conceived of and measured, and IV serves as a model for understanding and guiding more comprehensive approaches toward sustainable business.

In order to weave together academic literature, society's most pressing challenges and the roles and responsibilities of business into the IV concept, Visser distinguishes between five forces of systemic breakdown or fragmentation that reflects global sustainability challenges and five forces for integration, reflecting innovative solutions to the global problems driven by companies. The five forces of fragmentation include disruption (any instability that threatens human life, safety, and security), disconnection (any form of isolation that prevents human communication and effective data sharing), disparity (any inequities that increase social friction or inefficient resource utilization), destruction (any production and consumption that leads to the decline of resources and disruption of ecosystems), and discontent (all unhealthy lifestyles and toxic environments that impair human well-being). The five forces of integration that counter the fragmentation include innovations that are secure (lowering risk, aiding recovery, and ensuring continuity), smart (connecting people and things, using big data, and artificial intelligence), shared (equity, inclusive design, and sharing platforms), sustainable (bioproducts (biological/organic, bio-based, biodegradable, and biomimicry-inspired), zero waste design and being climate positive through carbon productivity), and satisfying (promoting human health and improving meaning in work).

While many multi-capital perspectives are merely used as part of methodologies that measure the impact of business in the various sustainability domains, Visser notes that IV is

“focused on how value is being created from innovative solutions that are secure, smart, shared, sustainable, and satisfying. IV, hence, emphasizes the need to create synergies between the forces of integration. As Visser notes (2017, p. 13), sustainable transformation can only be achieved through the synergistic approach of integrated value.

Summary

This chapter deals with the concept of integrated value, as proposed by Wayne Visser. Taking a systems approach toward sustainability, this concept relies on a multi-capital perspective and can be seen as an explanation for the lack of impact of current approaches toward sustainability in general and sustainable business in particular.

Cross-References

- [Creating Shared Value](#)
- [Triple Bottom Line](#)
- [Value Creation](#)

References

- Ekins, P. (1992). A four-capital model of wealth creation. In P. Ekins & M. Max-Neef (Eds.), *Real-life economics: Understanding wealth creation* (pp. 147–155). London: Routledge.
- Gleick, J. (1987). *Chaos: Making new science*. New York: Penguin Books.
- Hart, S., & Milstein, M. (2003). Creating sustainable value. *Academy of Management Perspectives*, 17(2), 56–67.
- Moratis, L., Melissen, F., & Idowu, S. (2017). *Sustainable business models: Principles, promise, practice*. Heidelberg: Springer.
- Porter, M., & Kramer, M. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Visser, W. (2011). *The age of responsibility: CSR 2.0 and the new DNA of business*. London: Wiley.
- Visser, W. (2017). *Creating integrated value: From systems thinking to sustainable transformation in business and society*. Inauguration lecture of the Chair in Sustainable Transformation. Antwerp: Antwerp Management School.
- Visser, W., & Kymal, C. (2015). Integrated value creation: Beyond corporate social responsibility and creating

- shared value. *Journal for International Business Ethics*, 8(1), 1–14.
- Von Bertalanffy, L. (1968). *General system theory: Foundations, development, applications*. New York: G. Braziller.
- Wackernagel, M., Beyers, B., & Rout, K. (2019). *Ecological footprint: Managing our biocapacity budget*. Gabriola Island: New Society Publishers.

Integrity

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Synonyms

[Honesty](#); [Probity](#); [Uprightness](#)

Definition

The term integrity means soundness of moral principle and character. It includes but is not limited to probity, impartiality, fairness, honesty, and truthfulness.

Integrity is often associated with the qualifications of public officers and/or the fidelity and honesty in the discharge of official duties. The concept of integrity, together with transparency and accountability, has been identified by the United Nations countries as part of the founding principles of public administration (Armstrong 2005). Article 101 of the UN Charter specifically requires the “highest standards of efficiency, competence and integrity” in UN employment, a requirement that has been adopted by many Member States.

Introduction

The most recent instrument on the importance of integrity in public service is the 2017 Organization for Economic Cooperation and Development (OECD) Recommendation on Public Integrity. It defines public integrity as a consistent alignment

of, and adherence to, shared ethical values, principles, and norms for upholding and prioritizing the public interests over private interests in the public sector. As one of the key pillars of political, economic, and social structures, which is essential to the economic and social well-being and prosperity of individuals and societies as a whole, public integrity can be a strategic and sustainable response to corruption. OECD identifies corruption as the cause for inequality, exclusion, and disillusionment and highlights the importance of integrity in promoting prosperity.

Integrity as a tool against corruption is not a new concept. In fact, as early as 2008, OECD has already recommended 10 principles in enhancing integrity, more particularly in public procurement, (see for example, William, 2002 on the review of the OECD initiatives in fighting corruption from 1994 to 2006). Accordingly, integrity has been identified as one of the three pillars in public procurement; the two others are competition and transparency.

In the U.S. federal procurement, for example, the word “integrity” is often used to describe rules of conduct for procurement personnel in the government and private industry, “Government business shall be conducted in a manner above reproach and . . . with complete impartiality and with preferential treatment for none. Transactions relating to the expenditure of public funds require the highest degree of public trust and an impeccable standard of conduct. The general rule is to avoid strictly any conflict of interest or even the appearance of a conflict of interest in Government-contractor relationships. While many Federal laws and regulations place restrictions on the actions of Government personnel, their official conduct must, in addition, be such that they would have no reluctance to make a full public disclosure of their actions.” (cited in Schooner 2002).

Measures to Ensure Integrity in Public Procurement

Traditional approaches in enhancing integrity in public procurement include increasing competition,

promoting transparency, providing adequate oversight methods, and enforcing sanctions (Allen 2002). While the 10 OECD principles in public procurement overlap in the nature of their importance, they can be simplified according to the means by which they can be used as a measure to ensure integrity in public procurement, to wit:

- Increasing competition: Principle 2 on competitive tendering; Principle 5 on preventing risks to integrity in public procurement
- Promoting transparency: Principle 1 on the provision of transparency in the public procurement cycle; Principle 6 on cooperation between government and the public sector to maintain high standards of integrity, especially in contract management; Principle 10 on empowering civil society, the media, and the general public to scrutinize public procurement
- Providing adequate oversight methods: Principle 3 on ensuring that public funds are used in public procurement for their required purpose; Principle 4 on ensuring that procurement officials meet high standards of knowledge, skill, and integrity; Principle 7 on providing specific mechanism to monitor public procurement and detect misconduct and apply sanctions
- Enforcing sanctions: Principle 8 on establishing clear chain of responsibility with effective control mechanisms and Principle 9 on the provision of an effective remedies systems

Moving Forward

Traditional approaches in promoting integrity are, more often than, highly focused in preventing corruption; hence, most of the measures that have been implemented are dependent on stricter compliance and tougher enforcement.

Integrity, however, is more than fighting corruption. The people, both public and private, expect nothing less than service with fairness and efficient management of public resources. Integrity, therefore, has become a prerequisite to

public trust which is a keystone of good governance (Diaz 2017).

More than implementing executive, legislative, or even judicial acts in curbing corruption, there is a need for a collective action from the government, the private sectors, civil societies, and individuals across jurisdictional borders.

In public procurement, for instance, the principle of integrity should have a wider significance other than combating corruption. An ethical procurement is not limited to a procurement that is free of corruption but must also be free of fraud and unsolved conflicts of interests. Compliance, therefore, with code of public ethics should be the primordial measure in promoting integrity across sectors and regardless of jurisdiction.

Cross-References

- [Accountability](#)
- [Core Values](#)
- [Spirituality in Management](#)
- [Transparency](#)

References

- Allen, R. L. (2002). Integrity: Maintaining a level. *Public Procurement Law Review*, 2, 111–114. Accessed 5 Nov 2019. <https://www.insightsonindia.com/wp-content/uploads/2013/09/integrity-transparency-un.pdf>
- Armstrong, E. (2005). *Integrity, transparency and accountability in public administration: Recent trends, regional and international developments and emerging issues*. United Nations.
- Diaz, J. M. (2017). A taxonomy of corruption in EU public procurement. *European Procurement & Public Private Partnership Law Review*, 12, 383.
- Schooner, S. L. (2002). Desiderata: Objectives for a system of government contract law. *Public Procurement Law Journal*, 2, 103–110.

Integrity Culture

- [Integrity Management](#)

Integrity Management

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Synonyms

Company culture; Compliance management; Corporate integrity; Ethical behavior; Integrity culture; Moral behavior

Definition

Established compliance management systems are not sufficient to guarantee that employees act in a law-abiding and ethical manner. In fact, modern compliance management systems rather require complementary initiatives such as an integrity management which expands the focus which is often only limited to legal content, by considering business decisions also from a moral, social, societal, and ecological perspective. The goal of integrity management is not simply having employees strictly following the rules, but instead promoting moral conduct. Therefore, integrity management particularly pays attention to the ethical behavior of the individual employee, as well as the company and management culture. The company culture can be understood as the sum of the organization's collective values, convictions, attitudes, and mindsets. The authors point out possibilities and limitation on how companies can influence their culture by setting up targets, incentive and sanctions schemes, in addition to the already-existing control measures.

Introduction

Integrity management is an extension of classic (legal) compliance. It broadens the focus of compliance, often limited only to legal content, by

including questions that may be relevant to companies from a moral perspective. The risk of breaking laws and regulations is no longer only evaluated from a legal and financial point of view but is expanded by moral, social, societal, and ecological perspectives. At the same time, this requires the management to become more attentive and sensitive to these issues. The additional content and perspectives of integrity management lead to a conscious expansion of corporate responsibility beyond legal guidelines by including challenges and stakeholder groups, which have not been considered yet. The moral stipulation in integrity management states that a company's business activities must always take other stakeholders and their interests into account as well as not harming these in any way. This applies to both, the company's own value chain as well as to the upstream and downstream value chain. However, it must be feasible and within reason for companies to assume this responsibility. An organization's striving for integrity should therefore not be called into question if it is not possible for the company to comply with ethical obligations or only possible with an extraordinarily large investment in time and energy. On the other hand, making ethical demands of companies in terms of their business activity is legitimate, in so far as fulfilling these requirements is in principle possible and within reason.

In addition to being sensitive and attentive to compliance and ethical issues, establishing corporate integrity demands, above all else, the organization, management, and employees to *act* in a corresponding manner is needed. This requires that the company's personnel accepts and acknowledges the "correctness" of the values and principles. The personnel should be able (or be enabled) to analyze alternative courses of action autonomously and based on personal reflection. The challenge of getting personnel to act according to values and principles arises especially in situations in which these behavioral axioms come into conflict with a company's other goals (such as making profits). The corporate integrity and the moral fortitude of an organization become particularly visible in these dilemma situations and are characterized by the

fact that the outcome of the situation reflects the values and principles in the best possible manner. However, integrity does not mean that this outcome is automatically achieved simply by personnel obeying numerous company rules and guidelines without question. It is not possible to regulate every single action or decision situation. This means that rules and regulations have their limits, particularly in gray areas and dilemma situations. The major difference between classic compliance management and integrity management is that the latter is not solely based on a set of rules, but far more driven by the actors taking personal responsibility for their actions, as well as a value-based company and management culture (Wieland 2012, p. 36). In this sense, the employees and management need to be empowered to recognize the relevant moral questions in their work areas and, together with internal stakeholders, to evaluate and make decisions of integrity accessible (Wieland 2014, p. 15ff). The goal of integrity management is not simply having employees strictly following the rules, but instead promoting ethical conduct. The personal accountability of employees and management is one of the core elements of integrity management and should encourage and empower the actors to use and follow existing rules in dilemma situations, while at the same time not lose sight of business interests. How can companies reconcile running a successful and efficient business while simultaneously following ethical principles and legal regulations? This is the central question we must use as an orientation. The overriding principle, of course, cannot be to avoid all compliance risk by refraining from business activities. Nevertheless, in individual cases, it can be necessary to completely abandon a business deal. In this context, it is important to regularly question existing guidelines and policies and procedures in terms of their purpose, their necessity, and meaningfulness – especially as it is well-known that not all company rules are equally relevant, and some are even unnecessary. Last but not least, compliance often has a negative reputation in many companies because of the unnecessary or ineffective regulations and the resulting superfluous bureaucracy.

Integrity management confronts this challenge using an argumentative procedure: by reflecting the meaning and purpose of rules and laws as well as the values and norms embedded therein. This results in “good reasons” for complying with regulations. Regarding the effectiveness of rules and their compliance, there is certainly a difference between organizations that demand compliance “for compliance sake” and thus implement a “compliance to avoid liability” strategy and organizations where the purpose of compliance activities is legal compliance and the internalization of (moral) values. In the latter case, e.g., illegal payments to secure a deal are simply not tolerated by the company. Such an integrity management approach can thus also contribute to an increased effectiveness and credibility of existing rules and compliance as a whole.

Compliance and Integrity Culture

The Socialization of Employees

Compliance management, as it is normally practiced, places structural aspects such as rules, business processes, and internal controls in the foreground, whereas integrity management specifically focuses on factors related to the company culture. The culture of an organization and its influence on employees not only represent the primary driving force, but at the same time is also the biggest challenge in implementing corporate integrity.

Company culture can be understood as the sum of the organization’s collective values, convictions, attitudes, and mindsets (Janke 2015, p. 96; Schönborn 2014, p. 280) and is, in the end, a reflection of the truly accepted and practiced principles (Martin et al. 2014, p. 298). In an ideal case, these are identical to the principles listed in the code of conduct or the codified norms and values in the company’s guidelines. However, simply putting these principles down in written form does not create a company culture of integrity, nor does it ensure that they are internalized by employees.

The company structure and the company culture are equally important starting points for

effectively preventing unethical behavior because both elements affect employee behavior. Employees pick up information regarding appropriate and prohibited behavior from structural measures such as rules, controls as well as incentive and sanction schemes. Yet, behavioral expectations are communicated in a significantly more nuanced manner via the company culture or the general work environment (Treviño et al. 1998, p. 457f, 463f).

The influence of colleagues and management on individual behavior is considerable as employees spend a large part of their social lives in companies (Jones and Ryan 1998, p. 437). The social environment or rather the corresponding reference group (the company as a whole, particular departments, or actors) thus has a strong influence on the behavior of an individual (Jones and Ryan 1998, p. 435ff) and serves as model for learning socially accepted norms and behaviors (Bandura 1971). Adapting and assimilating (un)ethical behavior from the social environment is motivated by the human need for social acceptance (Cohen and Morse 2014, p. 48), so that individuals specifically tend to take on behaviors that are “socially acceptable,” regardless of whether these are considered “ethical” or “unethical” outside the reference group.

According to classic social-learning theory (Bandura 1971), there are two essential learning mechanisms, on the basis of which individuals learn socially accepted behavior. On the one hand, individuals receive positive and negative *feedback regarding their behavior* over time from their social environment. They thus learn to reproduce behaviors that receive positive reinforcement and avoid negative reinforcement. On the other hand, individuals make inferences about acceptable behavior by observing the *behavior of others*. People experience which behaviors have social incentives and which are sanctioned, without having displayed the specific behavior themselves (Bandura 1971, p. 3ff; Jones and Ryan 1998, p. 435ff). The following applies: The more people display a specific behavior, the more valid and convincing this behavior appears to be for the individual. The behavior of the social environment, whether active behavior or inaction, is

seen as the measure of “moral” behavior in the eyes of the actor (Moore and Gino 2013, p. 56f).

In a business context, this means that, as a rule, workers take their cues from the environment. According to the theory, management and colleagues are the most important orientation points for the individual employee (Mayer et al. 2013, p. 89. 92ff). The expected behaviors are derived from the “normal customs” in the company (Jones and Ryan 1998, p. 437). The company environment has a concrete influence on the way specific issues and situations are interpreted, the focus of employees, and the decisions and behaviors that seem to be appropriate (Umphress and Bingham 2011, p. 629).

The specific cultural or social setting determines which strategies and behaviors are classified as “correct” or “incorrect.” This, however, also means that employees – exposed to an unethical subculture within the company – will act according to the “group morals.” Subcultures in companies develop independently from the rest of the organization, e.g., based on spatial, functional, or communicative distance. They can establish their own value system as well as behavioral expectations that are characterized either by the active promotion of implicit assumptions or by the rewarding of immoral behaviors (Umphress and Bingham 2011, p. 629).

Due to the fact that employees tend to display behaviors that are rewarded or incentivized by the company or their reference group (Jones and Ryan 1998, p. 436), a “prefabricated” organizational framework with its own rules, incentive, and sanction schemes can motivate individuals to refrain from their own considerations when faced with moral dilemmas and challenges (Martin et al. 2014, p. 309f). This makes it even more important to have an integral organizational framework with credible principles that are reflected in structural measures. An integrity management system that motivates management and employees to take more personal responsibility can support the creation of these framework conditions.

In order to better understand the factors that influence the “socialization” of employees and the “pulse of the organization,” it can be helpful to conduct an “integrity survey” when developing an

integrity strategy (Grüniger and Schöttl 2017, p. 10ff). A survey facilitates the analysis of the personnel's actual perception and at the same time facilitates the implementation of the organization's norms and values and those aligned with the stakeholder's expectations. Moreover, integrity surveys allow to make inferences about what is good and effective in the existing compliance measures as well as gain insights into how the behavior of management and employees is perceived. As a result, targeted measures to adjust the existing (compliance) structures can be designed and implemented, which, at the same time, makes it easier to communicate the company's values and standards.

Company and Employee Identification

When employees strongly identify with their company, this can contribute to the adoption of norms and values and the prevention of unethical behavior (Moore and Gino 2013, p. 62). The prerequisite for employees identifying with the company is a shared understanding of norms and values. The concept of corporate identity, as a whole, is described as "an effective strategy to prevent criminal activity" (Bussmann 2004, p. 42), due to the fact that "a strong emotional and social attachment to the company [...] guarantees a certain protection against individuals negatively impacting their own company[.]" (Bussmann 2004, p. 42). This identification creates a connection between the organization and its personnel (Schönborn 2014, p. 278) which further triggers a personal feeling of obligation for the company's success or failure, so that the personnel feels responsible for preventing the organization from any harm (Eigenstetter und Löhr 2008, p. 21; Janke 2015, p. 274; Palazzo 2001, p. 53). Empirical studies confirm a negative correlation between employee commitment and behavior that negatively impacts the company (Martin and Cullen 2006, p. 185). A lack of identification with the company can additionally make it easier for the delinquent to justify white-collar crime and unethical activity (Brinkmann 2007, p. 158).

Nevertheless, it is important not only to focus on the favorable elements of strong employee identification. There is simultaneously the

potential that a double standard can develop in which negatively impacting third parties in favor of one's own company is accepted or even desired (Bussmann 2004, p. 43). Unethical activities are carried out in order to benefit the company, while simultaneously violating personal principles and values (Umpheers et al. 2010, p. 770).

In addition to the organization as a whole, individual groups and subcultures within the company can become reference points for moral conduct. As mentioned above, the human need for belonging plays a role in leading the individual actors to call up group and individual behavior patterns (Ashforth and Anand 2003, p. 10; Moore and Gino 2013, p. 62). The moral norms and values that normally apply to an individual may be suppressed in this context, in favor of affiliated persons and groups (Rorty 1997, p. 141). Strong employee identification can counteract the emergence by such subcultures and their criminal potential, while promoting the creation of a shared understanding of moral values and a sustainable corporate integrity.

Organizational Factors That Influence Company Culture

The natural socialization of employees in the context of the company environment has considerable influence upon their decisions and behaviors. A strong identification with the company can reinforce this effect even more. However, the question remains how the company can influence the culture and its employees' behavior. Based on the findings of "integrity surveys" (Grüniger and Schöttl 2017, p. 10ff; Kaptein 1998, p. 10ff) regarding the status quo in organizations, companies can influence company culture by setting up targets, incentive and sanctions schemes in addition to the already-existing monitoring measures. Moreover, human resource management and instruction, in the form of trainings and workshops, are essential when establishing corporate integrity and implementing integrity management.

Internal Controls

Controls communicate issues the organization considers the most relevant to deal with, in an adequate manner, and therefore are monitored

and/or inspected. In this respect, controls are important instruments used to uncover and prevent white-collar crime and unethical behavior and can, when designed correctly, not only restrict and prevent opportunities for carrying out delinquent behavior, but also act as a deterrent and in consequence as general prevention. Missing or only ineffective controls can on the other hand become an implicit invitation to conduct unethical or criminal activity (Lou and Wang 2009, p. 65; Schuchter 2012, p. 69). Excessive surveillance of employees can however create a negative atmosphere in the company. A culture in which the employees feel observed and where the measures set up by the company to prevent unethical behavior only create mistrust will be counterproductive (Bussmann and Salvenmoser 2006, p. 206; Palazzo 2001, p. 53). Exaggerated controls, which, under some circumstances, even hinder the daily work of employees, could lead individuals to bypass these controls or the bureaucracy that emerges out of these. In general, the use of controls should be limited to important issues and processes and should be well justified to the respective employees.

Goals

Goals and goal agreements fulfill important business functions. They are essential components of human resource management and are regularly monitored and evaluated in order to improve performance. The theory behind the use of goals in companies has been empirically verified and states that workers achieve greater performance when concrete goals are specified (Latham and Locke 1979, p. 70). Studies clearly confirm that setting challenging goals can contribute to achieving maximum performance (Latham and Locke 2006, p. 332f). However, there are also risks in defining goals, particularly in terms of a motivational effect on individuals to act in an unethical manner (Barsky 2008; Niven and Healy 2016, p. 115; Ordóñez et al. 2009; Schweitzer et al. 2004). Goals may therefore not only improve performance but may also increase the tendency to use unethical methods to reach those goals (Ordóñez et al. 2009, p. 7ff). One of the causes of unethical behavior in connection with agreed-

upon goals may be that the goals are often strictly profit-oriented, meaning revenues and profits are the only or most important parameters (Ashforth and Anand 2003, p. 5; Moore and Gino 2013, p. 59). Exclusively focusing on financial goals can divert attention from ethical considerations, because they may encourage actors to focus only on the target to be reached and thereby cause them to disregard potential ethical behavior (Barsky 2008, p. 72; Ordóñez et al. 2009, p. 7f; Moore and Gino 2013, p. 59). As a result, carelessly formulated company and employee goals can contribute to the violation of rules and codices, particularly when the goals do not align with the company's self-defined ideals and principles. Strictly, profit-oriented employee goals may convey the implicit message that reaching the goals is more important than the legal or legitimate means used to do so (Moore and Gino 2013, p. 59).

Setting unrealistic high goals can also have a long-lasting impact on the general level of compliance in a company by putting the affected actors in highly stressful situations and triggering them to use unethical "short cuts" (Ordóñez et al. 2009, p. 9ff; Schweitzer et al. 2004, p. 426ff; Zhang et al. 2014, p. 70). Very few employees would be willing to forego variable salary components or a promotion or, in the long term, even lose their jobs because they did not achieve their goals. The overall pressure to reach the goals set by the company can motivate employees to carry out unethical acts (Jones and Ryan 1998, p. 441).

Unethical behavior cannot of course only be explained by agreed-upon goals. Nevertheless, the potential risk of employees being motivated to reach their goals using dishonest tactics must always be taken into consideration when designing and formulating target schemes (Niven and Healy 2016, p. 125). In the end, the recommendation is to be skeptical of the general effectiveness of concrete goals on employees and not only to make goal agreements dependent on financial parameters. Instead, companies should take the means and measures used to reach those goals into consideration. Thus, realistic and attainable goals are commendable not only in the sense of employee motivation, but also in terms of preventing unethical behavior.

Incentives

The main purpose of using material and non-material incentives in companies is to coordinate and communicate the organization's targets and interests. Incentives are designed to align and focus the personal interests and goals of the employee with those of the company (Frey and Osterloh 1997, p. 308f). A company's incentive system should reward ethically "correct" behavior according to the (ethical) company targets and values, as defined in the code of conduct or code of ethics. In addition, a carelessly designed incentive system (just as goal agreements) poses the danger of implicitly communicating a double standard. If companies communicate norms and values, such as compliance and integrity, but at the same time measure the incentives using only financial parameters, this may give the impression that completing a business deal should be achieved at any price. In this way, "ethical explanations and standards of behavior [...] remain abstract in the day-to-day business at a company and will not be implemented." (Bannenberg 2012, p. 764). Incentives that are solely based on financial success may end up animating employees to only concentrate on the next business deal, which, in case of doubt, can be attained using dishonest business practices.

Such characteristics can quickly become part of the company culture so that unethical behavior becomes acceptable or even upgraded to (implicitly) required behavior, as long as it contributes to reaching the individual's or the company's goals. As long as the company legitimizes and rewards the use of "unethical" tactics to reach goals, no sense of guilt can evolve among the employees (Wieland 2014, p. 78ff). In such cases of double standards, employees are more likely to interpret the proclaimed norms and values as "anti-business measures" (Wieland 2008, p. 162), which are also in conflict with being able to fulfill their own financial interests. Behaving in an unethical manner or making a decision contrary to the company's values and rules, simultaneously supported by the incentive system, can easily be justified on an individual level. Finally, employees will also see the rewards colleagues receive for unethical behavior as evidence that

this is adequate behavior and will orient themselves thus in the future (Umphress et al. 2010, p. 777).

An incentive structure that gives unethical behavior the status of a "social custom" (Bannenberg 2012, p. 764) can lead to the repression of ethical insights and thus facilitate unethical behavior (Cohen and Morse 2014, p. 52). An incentive system based exclusively on key performance indicators increases the danger of overtaxing the moral fortitude of its employees and also fosters the repression of ethical considerations and objections in favor of pursuing personal financial interests.

Sanctions

In addition to incentives, another tool companies use to structurally influence behavior is to consistently impose sanctions for misconduct.

Regardless of whether unethical behavior benefits or harms the company, such behavior requires a clear response from upper management. In the spirit of the "tone from the top" and the "tone from the middle," the credible (and also communicated) commitment of management to integrity and compliance means that unethical behavior and white-collar crime in particular must result in consistent disciplinary action. Undesired behavior that does not lead to appropriate sanctions gives the impression that the company's values and rules are irrelevant and that violating them will be tolerated.

Thus, the effectiveness of measures put in place specifically to avoid unethical behavior depends on incentives and sanctions that promote the "correct" behavior (equivalent to the proclaimed norms and values). Only in this way, seriousness and credibility can be honestly communicated internally and externally and facilitate an effective prevention program (Grüniger 2016, p. 47ff).

Not only is the reputation of the company at stake when upper management reacts to unethical actions in an inconsistent manner and without repercussions, but the company culture can also suffer when management is too lenient or sanctions are used in an uneven manner. A company culture that is perceived as "fair" requires that

employees and management are all treated equally (Galley 2008, p. 116). Especially when management is dealing with a case of unethical behavior, any exaggerated discretion can raise suspicions that something is being hidden and that managers are receiving preferential treatment. This can lead to a feeling of mistrust and frustration among employees, both of which can become motivational factors for unethical behavior and potentially the basis for justifying their own misdeeds (Bussmann 2004, p. 46; Bussmann and Salvenmoser 2006, p. 209; Galley 2008, p. 116).

Certainly, unethical behavior must be punished independent of the perpetrator's position in the hierarchy; however, the focus here is not on establishing a culture of fear. Exaggerated threats, sanctions, and severe punishments can increase the pressure on "practicing" delinquents to such a degree that, from the perpetrator's perspective, "cover-up measures" become increasingly necessary and can lead to an even deeper involvement in criminal activity (Schuchter 2012, p. 211f). As a whole, sanctions, such as incentive systems and goal agreements, must be designed in a moderate and balanced, yet consistent and, most importantly, credible manner, based on the company's values and standards.

Human Resource Management and Training

An additional – and most likely the most important – element in terms of influencing company culture and corporate integrity is the company's management. Managers play a key role in achieving (ethically) adequate behavior (Ashforth and Anand 2003, p. 6; Brown et al. 2005, p. 119): They serve as role models for employees (Brown et al. 2005, p. 119). Both upper management and, particularly, an employee's direct supervisor can play a significant role (Kronawitter 2013, p. 81; Schuchter 2010, p. 83). Management acts as a representative of the company, determining and communicating rules and standards that apply to all personnel. In addition, management is responsible for rewarding exemplary behavior and initiating disciplinary procedures for misconduct. Based on their influence on employees, the management culture of a company is one of the most

essential factors in integrity management and for establishing values and principles in that company. Manager's actions can however also pose dangers to a company culture of integrity. For example, when management makes unclear or ambiguous remarks, fails to pursue, or even praises unethical behavior, this leaves employees leeway in terms of interpreting the priority the company places on values and rules (Thielemann 2005, p. 37). An important task for management in the framework of integrity management is therefore communicating and keeping the employees' focus on the values and principles of the company and the resulting implications for ethical business practices, very much in the sense of the "tone from the top" and the "tone from the middle." Management can contribute to an increase in integrity and compliance by displaying consistent behavior according to company guidelines as well as by clearly communicating targeted norms and values and making them "accessible." By agreeing on balanced goals and setting up a corresponding incentive system, based not only on financial success, but also on the manner in which these goals are reached, management can facilitate employees acting in a compliant way and support a company culture of integrity.

The rules, norms, and values of the company should be conveyed to the employees and managers via trainings and workshops and based on the "pulse of the organization" determined by the integrity surveys. High-quality training modules focusing specifically on management and employees' needs, and in which possible risks, conflicts, and compliance-related dilemmas are dealt with, can contribute to helping all personnel acquire the required integrity competence. The often-used web-based trainings, which employees normally just "click through," are not sufficient.

Department-specific challenges and stakeholder expectations (e.g., R&D, Sales, Purchase, Finance, etc.) can be discussed and dealt with in the framework of so-called "Integrity Conflict Circles." Each of these measures contributes to a high awareness for legal and ethical questions at an individual and organizational level.

Summary

The emissions scandal and the numerous examples of misconduct in the financial sector once again show that the established compliance measures and so-called “best practices” are not sufficient to guarantee that company employees act in a law-abiding and ethical manner. Compliance management systems rather require complementary initiatives such as integrity management, which particularly pays attention to the company culture and management and employee behavior. Moreover, compliance can provide a company with stability via standards, guidelines, and values, which is necessary in a constantly changing business environment and regularly transforming organizational structures (e.g., due to mergers and acquisitions). At the same time, it needs to be kept in mind that the foundation of effective compliance is a company culture of integrity. This recursive correlation between compliance and company culture is apparently still too often neglected. It might be an additional explanation for the numerous corporate scandals that have occurred over the past years, despite existing compliance systems. In addition to the typical structural compliance measures (rules, processes, and controls), the “soft aspects” of leadership and culture (which, in reality are significantly “harder”) need to be taken into consideration. Integrity requires the appropriate behavior on the part of management and a leadership continually demanding as well as facilitating ethical considerations in the day-to-day business. Companies have to enable their employees to recognize and evaluate ethical dilemma situations. This may mean that established behaviors and decision structures have to be questioned and changed. Integrity management can guide and support management and personnel in this process via, for example, tailor-made training modules. By using practical examples and ethical dilemma from everyday business, companies can facilitate a discourse about adequate and desired behaviors. This type of cultural change is, however, a long-term process. Companies, their management, and

employees all require patience as well as the ability and the will to collaboratively deal with conflicts and challenges in a constructive manner.

Integrity management challenges the typically-pursued approach of attaining compliance via strict and blind obedience as well as the use of monitoring and controls. In the face of increasing regulatory density and complexity, unquestioned compliance can quickly become an end in itself, which stifles managers and employees’ potential, creativity, and most of all their ability to think for themselves. In the framework of integrity management, it would appear to make more sense to use a procedure which promotes the actors’ sense of personal responsibility and ability to critically question existing regulations and thus be able to make a reflected decision between two possible courses of action. In this case, employees would follow laws and ethical standards not because of codified norms and the corresponding threat of sanctions, but instead based on a conscious, intrinsic insight into the correctness of the “ethical option.”

Cross-References

- ▶ [Bribery](#)
- ▶ [Corporate Compliance](#)
- ▶ [Good Governance](#)
- ▶ [Governance](#)
- ▶ [Integrity](#)
- ▶ [ISO19600 Compliance Management Systems](#)
- ▶ [ISO 19600](#)
- ▶ [ISO 37001](#)

References

- Ashforth, B. E., & Anand, V. (2003). The normalization of corruption in organizations. *Research in Organizational Behavior*, 25, 1–52.
- Bandura, A. (1971). *Social learning theory*. Morristown: General Learning Press.
- Bannenberg, B. (2012). Korruption und Wirtschaftskriminalität als soziales Problem. In G. Albrecht & A. Groenemeyer (Eds.), *Handbuch soziale Probleme* (pp. 752–771). Wiesbaden: Springer.

- Barsky, A. (2008). Understanding the ethical cost of organizational goal-setting: A review and theory development. *Journal of Business Ethics*, 81(1), 63–81.
- Brinkmann, M. (2007). Bilanzmanipulation: Erscheinungsformen, Warnsignale und Schutzmechanismen. In: ZRFG, Ausgabe 04/2007, pp. 156–161.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134.
- Burkatzki, E., & Löhr, A. (2008). Wirtschaftskriminalität und Ethik – einführende Anmerkungen. In A. Löhr & E. Burkatzki (Eds.), *Wirtschaftskriminalität und Ethik* (pp. 11–21). München/Mering: Rainer Hampp Verlag.
- Bussmann, K.-D. (2004). Kriminalprävention durch Business Ethics, Ursachen von Wirtschaftskriminalität und die besondere Bedeutung von Werten. *Z Wirtschaftsethik (zfwu)*, 5(1), 35–50.
- Bussmann, K.-D., & Salvenmoser, S. (2006). Internationale Studie zur Wirtschaftskriminalität. *NStZ*, 26(4), 203–209.
- Cohen, T. R., & Morse, L. (2014). Moral character: What it is and what it does. *Research in Organizational Behavior*, 34, 43–61.
- Eigenstetter, M., & Löhr, A. (2008). Ethikprogramme in Unternehmen: Unterstützung einer innovationsförderlichen Gestaltung von Unternehmenskultur? *Forum Wirtschaftsethik*, 16(3), 16–33.
- Ernst & Young (Hrsg.) (2017). EMEA Fraud Survey – Ergebnisse für Deutschland, April 2017. Online: [https://www.ey.com/Publication/vwLUAssets/EY_-_EMEA_Fraud_Survey_-_Ergebnisse_für_Deutschland_April_2017/\\$FILE/ey-emeia-fraud-survey-ergebnisse-fuer-deutschland-april-2017.pdf](https://www.ey.com/Publication/vwLUAssets/EY_-_EMEA_Fraud_Survey_-_Ergebnisse_für_Deutschland_April_2017/$FILE/ey-emeia-fraud-survey-ergebnisse-fuer-deutschland-april-2017.pdf). Last retrieved 08 Dec 2018.
- Frey, B. S., & Osterloh, M. (1997). Sanktionen oder Seelenmassage? Motivationale Grundlagen der Unternehmensführung. *Die Betriebswirtschaft*, 57(3), 307–321.
- Galley, B. (2008). Täterverständnis & Wertemanagement – So gestalten Sie ein wirksames Anti-Fraud-System. In R. Röhrich (Ed.), *Methoden der Korruptionsbekämpfung, Risiken erkennen – Schäden vermeiden* (pp. 109–122). Berlin: Erich Schmidt Verlag.
- Gross, E. (1978). Organizational crime: A theoretical perspective. *Studies in Symbolic Interaction*, 1, 55–85.
- Grüninger, S. (2001). *Vertrauensmanagement – Kooperation, moral und governance*. Marburg: Metropolis.
- Grüninger, S. (2016). So geht das nicht – Compliance muss neu gedacht werden: Sechs Thesen für mehr Ernsthaftigkeit und Glaubwürdigkeit im Compliance-Management. *Compliance Manager*, 1, 44–53.
- Grüninger, S. (2017). CSR in der Unternehmenspraxis – Management von Soft Law und Unternehmensintegrität. In R. P. Falta & C. Dueblin (Eds.), *Praxishandbuch legal operations management* (pp. 795–809). Berlin/Heidelberg: Springer.
- Grüninger, S., & Schöttl, L. (2017). Rethinking compliance – essential cornerstones for more effectiveness in compliance management. *Compliance Elliance Journal (CEJ)*, 3(2), 3–17.
- Grüninger, S., & Wanzek, M. (2017) Integrity management und unternehmensethik. In: Deutsches Netzwerk Wirtschaftsethik (DNWE) (Eds.), *Forum Wirtschaftsethik - Jahresschrift* (Vol. 25, pp. 33–43). Berlin: DNWE e.V.
- Grüninger, S., Schöttl, L., & Wieland, J. (2016). *Unternehmensintegrität & Compliance – Was wirklich wichtig ist. Eine Handreichung für Führungskräfte*. Berlin: Zentrum für Wirtschaftsethik gGmbH (Hrsg.).
- Janke, K. (2015). *Kommunikation von Unternehmenswerten, Modell, Konzept und Praxisbeispiel Bayer AG*. Wiesbaden: Springer VS, zugleich Dissertation der Universität Leipzig.
- Jones, T. M., & Ryan, L. V. (1998). The effect of organizational forces on individual morality: Judgment, moral approbation, and behavior. *Business Ethics Quarterly*, 8(3), 431–445.
- Kaptein, M. (1998). The ethics thermometer: An audit-tool for improving the corporate moral reputation. *Corporate Reputation Review*, 2(1), 10–15.
- Kronawitter, E. (2013). *Führen ohne Druck – Erfolgreiches Bankgeschäft ohne Zielvorgaben und vertriebsabhängige Vergütungen*. Wiesbaden: Springer Gabler.
- Latham, G. P., & Locke, E. A. (1979). Goal setting – A motivational technique that works. *Organizational Dynamics*, 8(2), 68–80.
- Latham, G. P., & Locke, E. A. (2006). Enhancing the benefits and overcoming the pitfalls of goal setting. *Organizational Dynamics*, 35(4), 332–340.
- Lou, Y.-I., & Wang, M.-L. (2009). Fraud risk factor of the fraud triangle assessing the likelihood of fraudulent financial reporting. *Journal of Business & Economics Research*, 7(2), 61–78.
- Martin, K. D., & Cullen, J. B. (2006). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics*, 69(2), 175–194.
- Martin, S. R., Kish-Gephart, J. J., & Detert, J. R. (2014). Blind forces: Ethical infrastructures and moral disengagement in organizations. *Organizational Psychology Review*, 4(4), 295–325.
- Mayer, D. M., Nurmohamed, S., Treviño, L. K., Shapiro, D. L., & Schminke, M. (2013). Encouraging employees to report unethical conduct internally: It takes a village. *Organizational Behavior and Human Decision Processes*, 121(1), 89–103.
- Moore, C., & Gino, F. (2013). Ethically adrift: How others pull our moral compass from true North, and how we can fix it. *Research in Organizational Behavior*, 33, 53–77.
- Niven, K., & Healy, C. (2016). Susceptibility to the ‘Dark Side’ of goal-setting: Does moral justification influence the effect of goals on unethical behavior? *Journal of Business Ethics*, 137(1), 115–127.

- Ordóñez, L. D., Schweitzer, M. E., Galinsky, A. D., & Bazerman, M. H. (2009). Goals gone wild: The systematic side effects of overprescribing goal setting. *Academy of Management Perspectives*, 23(1), 6–16.
- Palazzo, B. (2001). Unternehmensethik als Instrument der Prävention von Wirtschaftskriminalität und Korruption. *Die Kriminalprävention*, 2, 52–60.
- Rorty, R. (1997). Justice as a larger loyalty. *Ethical Perspectives*, 4(3), 139–151.
- Schönborn, G. (2014). *Unternehmenskultur als Erfolgsfaktor der Corporate Identity, Die Bedeutung der Unternehmenskultur für den ökonomischen Erfolg von Unternehmen*. Wiesbaden: Springer VS, zugleich Dissertation an der Universität Leipzig.
- Schuchter, A. (2010). Persönlichkeitsprofile von Wirtschaftsstraftätern, Bedeutung für die Prävention dieser Handlungen in Unternehmen. *ZRFC*, 2, 80–83.
- Schuchter, A. (2012). *Perspektiven verurteilter Wirtschaftsstraftäter, Gründe ihrer Handlungen und Prävention in Unternehmen*. Wiesbaden: Gabler, zugleich Dissertation an der Universität St. Gallen, 2011.
- Schweitzer, M. E., Ordóñez, L., & Douma, B. (2004). Goal setting as a motivator of unethical behavior. *Academy of Management Journal*, 47(3), 422–432.
- Sutherland, E. H. (1940). White-collar criminality. *American Sociological Review*, 5(1), 1–12.
- Thielemann, U. (2005). Compliance und Integrity – Zwei Seiten ethisch integrierter Unternehmenssteuerung, Lektionen aus dem Compliance-Management einer Großbank. *Z Wirtschafts Unternehmensethik (zfwu)*, 6 (1), 31–45.
- Treviño, L. K., Butterfield, K. D., & McCabe, D. L. (1998). The ethical context in organizations: Influences on employee attitudes and behaviors. *Business Ethics Quarterly*, 8(3), 447–476.
- Umphress, E. E., & Bingham, J. B. (2011). When employees do bad things for good reasons: Examining unethical pro-organizational behaviors. *Organization Science*, 22(3), 621–640.
- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of Applied Psychology*, 95(4), 769–780.
- Weber, J. M., Kopelman, S., & Messick, D. M. (2004). A conceptual review of decision making in social dilemmas: Applying a logic of appropriateness. *Personality and Social Psychology Review*, 8(3), 281–307.
- Wieland, J. (2008). Die Kunst der Compliance. In A. Löhr & E. Burkatzki (Eds.), *Wirtschaftskriminalität und Ethik* (pp. 155–169). München/Mering: Rainer Hampp Verlag.
- Wieland, J. (2012). Strategische normative Unternehmensführung und compliance management. *Audit Committee Quarterly*, 2, 34–37.
- Wieland, J. (2014). Die Psychologie der Compliance – Motivation, Wahrnehmung und Legitimation von Wirtschaftskriminalität. In J. Wieland, R. Steinmeyer, & S. Grüniger (Eds.), *Handbuch compliance-management* (Vol. 2, pp. 71–87). Berlin: Erich Schmidt Verlag.
- Zhang, T., Gino, F., & Bazerman, M. H. (2014). Morality rebooted: Exploring simple fixes to our moral bugs. *Research in Organizational Behavior*, 34, 63–79.

Integrity Warning

- [Whistleblowing](#)

Intelligent Cities

- [Smart Cities](#)

Intelligent Networks

- [Smart Grid](#)

Intended Obsolescence

- [Planned Obsolescence](#)

Intentional Community

- [Sustainable Communities](#)

Interaction

- [Cooperation and Open Innovation](#)
- [Triple Helix and Innovation](#)

Interconnectedness with the World

- ▶ [Spirituality in Management](#)

Intercultural Management

- ▶ [Cross-Cultural Management](#)

Internal Auditors

- ▶ [Auditors and Corporate Governance](#)

Internal Branding

- ▶ [Employer Branding](#)

Internal Marketing

- ▶ [Employer Branding](#)

International Law

- ▶ [Soft Law](#)

International Organization to Promote Sustainable Business Companies

- ▶ [World Business Council for Sustainable Development](#)

International Organization Towards Sustainable Development

- ▶ [World Business Council for Sustainable Development](#)

International Treaty Under the UNFCCC

- ▶ [Kyoto Protocol](#)

Intonation Impact

- ▶ [Media Ethics](#)

Intrapreneuring

- ▶ [Intrapreneurship](#)

Intrapreneurship

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Synonyms

[Corporate entrepreneurship](#); [Corporate venturing](#);
[Entrepreneurial orientation](#); [Intrapreneuring](#)

Definition

The ongoing intensification of competition in the present global market environment led the emergence of never-ending radical shifts in technology that induced the rise of ever-growing challenges

and uncertainties for firms' survival and growth (Baruah and Ward 2015). As a subfield of entrepreneurship, the concept of intrapreneurship was first coined by Gifford and Elizabeth Pinchot in the late 1970s (Baruah and Ward 2015; Cader and Badulescu 2015; Nielsen et al. 1985). Despite a plethora of research that addressed intrapreneurship, the close association between entrepreneurship and intrapreneurship led the absence of conceptual clarity and the emergence of not only confusions about the nature of intrapreneurship but also controversial definitions of the phenomenon (Menzel et al. 2007; Sharma and Chrisman 1999).

In the pertinent literature, intrapreneurship is investigated substantially through organizational and individual level of analysis. Terms including intrapreneuring (Pinchot 1985), corporate venturing (Vesper 1990), entrepreneurial orientation (Lumpkin and Dess 1996), internal corporate entrepreneurship (Jones and Butler 1992); corporate entrepreneurship (Guth and Ginsberg 1990) have been used to refer to intrapreneurship which reflects the intrapreneurial characteristics of an organization. While corporate entrepreneurship is widely used interchangeably with intrapreneurship (Neessen et al. 2019), some authors assert that they are related but different concepts (Åmo 2010). At organizational level, intrapreneurship reflects broadly "*the entrepreneurial spirit or entrepreneurship within an existing organization*" which reflects "*a process that goes on inside an existing firm, regardless of its size, and leads not only to new business ventures but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies, and competitive postures*" (Antoncic and Hisrich 2001, p. 498). Regarding the individual level of intrapreneurship, it is viewed as the employees with entrepreneurial features within an existing organization (Pinchot 1985). In this sense, scholars underlined the difference between an entrepreneur and intrapreneur by pointing out that intrapreneurs are the agents who realize new ideas by using the resources of an existing organization in which they work (Pinchot and Pellman 1999, Baruah and Ward 2015;

Camelo-Ordaz et al. 2012; Farrukh et al. 2017) while an entrepreneur fosters and realizes an idea by starting a new venture (Gartner et al. 1988). Blanka (2019, p. 551) proposes a definition for intrapreneurship by encompassing the multilevel nature of the construct which is "*intrapreneurship is a process whereby employee(s) recognize and exploit opportunities by being innovative, proactive and taking risks, in order for the organization to create new products, processes and services, initiate self-renewal or venture new businesses to enhance the competitiveness and performance of the organization.*"

Introduction

The accelerating speed of market globalization created an increasingly turbulent and competitive world markets where firms are seeking for ways to innovate to catch up with the revolutionary technological advancements and gain a sustainable competitive advantage (Kuratko and Audretsch 2013). As Schumpeter (1934) pointed out the role of entrepreneurship in innovation and economic developments of the countries, the concept has become the center of attention. In this vein, entrepreneurship has been an aspirational goal for firms to foster innovation and outperform their rivals. Correspondingly, entrepreneurship field has gained momentum through the interest of scholars and practitioners which promoted the comprehensive understanding of not only the role of corporate entrepreneurship and entrepreneurs but also the entrepreneurial spirit that resides in organizational members (Antoncic 2007; Antoncic and Hisrich 2001, 2003; Gawke et al. 2019; Parker 2011; Pinchot 1985). Despite the dispersed conceptualization of intrapreneurship in the existing literature, there are two main levels of analysis that a substantial amount of studies addressed including individual and organizational level intrapreneurship (Blanka 2019; Gawke et al. 2019; Neessen et al. 2019). Therefore, intrapreneurship has been investigated through a multilevel nature.

The concept of intrapreneurship has been under the spotlight of scholars since the late

1970s. Despite the burgeoning interest, there are still controversies on a universally accepted definition of the concept (Blanka 2019; Parker 2011). Besides, since research on this concept is founded on various theoretical grounds, the results are not consistent. For example, while some studies address intrapreneurship at individual level (Gawke et al. 2019; Neessen et al. 2019), others approach it through an organizational level lens (Antoncic and Hisrich 2001). After the inception of the concept, Miller (1983) pointed out an organizational level approach by underlying the extent that a firm's behavior is *innovative, proactive, and risk-taking*, which indicates the entrepreneurial dynamics of a firm, also refers to *entrepreneurial orientation* (Bouchard and Basso 2011; Covin and Lumpkin 2011; Covin and Slevin 1991; Lumpkin and Dess 1996; Miller 2011). This conceptualization of entrepreneurial orientation was expanded through addition of two dimensions including "*autonomy and competitive aggressiveness*" (Lumpkin and Dess 1996). Entrepreneurial orientation or posture as a strategic orientation reflects the collective actions and behaviors of an organization (Anderson and Covin 2014; Covin and Wales 2012; Knight 1997). An entrepreneurial firm prioritizes its innovative functions, undertaking risky actions, employing autonomy, engaging proactive actions, and compete aggressively towards its rivals in the market. In the literature, a complementary line of studies addressed the role entrepreneurial orientation on firm performance by asserting that firms that pursue entrepreneurial proclivity can achieve outstanding performance in their business environments (Boso et al. 2018; Kantur 2016; Lisboa et al. 2016). Although there is still a proliferating pattern in entrepreneurial orientation research, there are still ongoing discussions about its conceptualization. Despite this conflict, the most accepted and applied conceptualization of entrepreneurial orientation refers to "*the processes, practices, and decision-making activities that lead to new entry*" through being risk taker, innovative, autonomy, proactive, and taking aggressive actions (Wales 2016). An entrepreneurial organization is pervaded by these behavioral patterns at all levels within that organization

(Covin and Slevin 1991). Another organizational-level conceptualization of intrapreneurship is labeled as "*corporate entrepreneurship*" (Antoncic and Hisrich 2003; Guth and Ginsberg 1990; Hornsby et al. 1993; Ireland et al. 2009). Corporate entrepreneurship refers to "*the birth of new businesses within existing organizations and transformation of organizations through renewal of the new ideas on which they are built*" (Guth and Ginsberg 1990, p. 5). As a firm's strategy, corporate entrepreneurship echoes the strategic intention of continuous exploration and exploitation of opportunities in order to achieve sustainable growth (Kuratko and Audretsch 2013; Shane and Venkataraman 2000) by emphasizing the role of corporate venturing, and strategic renewal (Zahra 1991, 1993). While corporate venturing reflects creating of new businesses in an already existing organization, strategic renewal indicates the strategic change through entrepreneurial behaviors of organizational members (Blanka 2019; Guth and Ginsberg 1990). Although some studies use corporate entrepreneurship and entrepreneurial orientation interchangeably, the concept of corporate entrepreneurship is considered to encompass entrepreneurial orientation (Antoncic and Hisrich 2003; Ireland et al. 2009; Kuratko and Audretsch 2013; Wales 2016). Thus, entrepreneurial orientation is a part of corporate entrepreneurship manifested by organizations. In addition, Antoncic and Hisrich (2003) made an attempt to provide an integrative conceptualization of corporate entrepreneurship which is comprised of the eight dimensions including "*new ventures, new businesses, product/service innovativeness, process innovativeness, self-renewal, risk taking, proactiveness, and competitive aggressiveness*." All in all, the majority of the studies that address intrapreneurship at organizational level define intrapreneurship as "*entrepreneurship within existing organizations*" which reflects "*the internal entrepreneurial processes in existing firms and organizations*" (Antoncic and Hisrich 2003; Bager et al. 2010; Blanka 2019). In contrast to those who refer corporate entrepreneurship as intrapreneurship (Antoncic and Hisrich 2003), some scholars think that they are associated but different concepts (Åmo 2010).

According to some scholars, intrapreneurship indicates the role of entrepreneurial employees in an existing firm which reflects the construct's individual level nature (Guerrero and Peña-Legazkue 2013). As a bottom-up perspective of intrapreneurship, the entrepreneurial efforts of nonmanagerial or managerial employees are considered as the source of strategic renewal with their abilities to transform new ideas into valuable outcomes (Blanka 2019; Pinchot 1985). In this regard, the concept of intrapreneurship at individual level highlights the essence of employees with entrepreneurial behaviors and attitudes that contribute firm performance (Åmo and Kolvereid 2005; Guerrero and Peña-Legazkue 2013). The prominent characteristics of intrapreneurs that are pointed out by the majority of studies are proactiveness, innovativeness, creativity, ability to explore opportunities, risk taking, self-efficacy, and networking (Neessen et al. 2019).

Related Issues

The present volatile environment demands organizations to have the ability to cope with rapid changes through continuous innovation in order to achieve and maintain a competitive advantage. Accordingly, both individual and organizational level of intrapreneurship reflect the mechanisms necessary for not only for the organizational performance but also for economic and social development at national level. Therefore, firms are required to adopt an entrepreneurial posture to outperform their rivals in the marketplace and achieve a superior performance (Ireland et al. 2003; Kuratko and Audretsch 2013; Morris et al. 2011; Wales 2016; Zahra 1993). The role entrepreneurship has been scrutinized on innovation performance, firm performance in both domestic and international business context, firm capabilities including innovation, marketing and learning capabilities (Boso et al. 2018; Genc et al. 2019; Monteiro et al. 2019).

Regarding individual level perspective, the role of employees in firm capabilities to adopt to external environment is started to receive attention of the scholars. Intrapreneurship at individual

level is a part of these developments that address the contribution of employees with entrepreneurial characteristics to organizational level constructs (Gawke et al. 2019; Neessen et al. 2019). In conjunction with this perspective, the vital role of intrapreneurship was championed with the emphasis on the extent that entrepreneurial-thinking employees are the microlevel sources of firm competitive advantage and performance (Guerrero and Peña-Legazkue 2013). Intrapreneurial employees are able to cope with rapid changes and also ignite changes within an organization that can boost firms' strategic posture in the marketplace. In the pertinent literature, both the entrepreneurial characteristics of managerial and nonmanagerial employees have been tackled with their personalities, intentions, and factors that enable the appropriate climate for intrapreneurs to realize their ideas (Gawke et al. 2019; Neessen et al. 2019). For instance, intrapreneurs show proactive behaviors in their networks which provide them to be more open-minded and discover opportunities; thus, social embeddedness plays a crucial role for intrapreneurs. Furthermore, intrapreneurs need an environment with tolerance and support to enhance their entrepreneurial skills and utilize those skills. Especially, middle-level managers play a crucial role for aspiring entrepreneurial employees to exploit their skills and knowledge (Blanka 2019). In other words, an organizational culture and climate of trust with guiding and supportive managers and learning orientation enable intrapreneurs to foster their skills which in turn contribute firm level outcomes.

Summary

The role of entrepreneurship in countries' economic development is undeniable. As a subfield of entrepreneurship, intrapreneurship reflects the entrepreneurial spirit both in organizations and employees. As stated before, intrapreneurship as a multifacet construct is investigated at individual and organizational level of analysis. Besides, individual intrapreneurs that reside in an organization can conduce the promotion of

intrapreneurship at organizational level. Therefore, intrapreneurial employees can be the microlevel foundations of organizational level constructs. Intrapreneurial employees have sparked the crucial role human capital that contributes to organizational capabilities, resources, and firm performance and affect strategic direction of an organization. In this vein, firms need to provide necessary environment with appropriate organizational culture and climate that can foster intrapreneurial behaviors of employees, which in turn, can amplify the intrapreneurship at organizational level and the economic development level of a country. In terms of theoretical perspective, a holistic approach that integrates the dynamics between intrapreneurship at individual and organizational level with a bottom-up approach can be more insightful in order to comprehend the difference and association between the two levels of analysis of the construct, which can enable to clarify the conceptualization of the phenomenon.

Cross-References

- [Corporate Entrepreneurship](#)
- [Corporate Venturing](#)
- [Entrepreneurial Orientation](#)
- [Innovation](#)

References

- Åmo, B. W. (2010). Corporate entrepreneurship and intrapreneurship related to innovation behaviour among employees. *International Journal of Entrepreneurial Venturing*, 2(2), 144–158.
- Åmo, B. W., & Kolvereid, L. (2005). Organizational strategy, individual personality and innovation behavior. *Journal of Enterprising Culture*, 13(01), 7–19.
- Anderson, B. S., & Covin, J. G. (2014). Entrepreneurial orientation: Disposition and behavior. In *Handbook of research on entrepreneurship* (pp. 215–237). Cheltenham/Northampton: Edward Elgar Publishing. <https://doi.org/10.4337/9780857936929>.
- Antoncic, B. (2007). Intrapreneurship: A comparative structural equation modeling study. *Industrial Management & Data Systems*, 107(3), 309–325. <https://doi.org/10.1108/02635570710734244>.
- Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16(5), 495–527.
- Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7–24. <https://doi.org/10.1108/14626000310461187>.
- Bager, T., Ottosson, H., & Schott, T. (2010). Intrapreneurs, entrepreneurs and spin-off entrepreneurs: Similarities and differences. *International Journal of Entrepreneurship and Small Business*, 10(3), 339–358. <https://doi.org/10.1504/ijesb.2010.033572>.
- Baruah, B., & Ward, A. (2015). Metamorphosis of intrapreneurship as an effective organizational strategy. *International Entrepreneurship and Management Journal*, 11(4), 811–822. <https://doi.org/10.1007/s11365-014-0318-3>.
- Blanka, C. (2019). An individual-level perspective on intrapreneurship: A review and ways forward. *Review of Managerial Science*, 1–43. <https://doi.org/10.1007/s11846-018-0277-0>.
- Boso, N., Annan, J., Adeleye, I., Iheanachor, N., & Narteh, B. (2018). Examining the paths from export strategic orientations to export performance: The mediating role of export resource transformation capability. *Thunderbird International Business Review*, 60(2), 207–230. <https://doi.org/10.1002/tie.21878>.
- Bouchard, V., & Basso, O. (2011). Exploring the links between entrepreneurial orientation and intrapreneurship in SMEs. *Journal of Small Business and Enterprise Development*, 18(2), 219–231. <https://doi.org/10.1108/1462600111127043>.
- Cader, O., & Badulescu, D. (2015). Entrepreneur, entrepreneurship and intrapreneurship, a literature review. *Annals of the University of Oradea, Economic Science*, 2(XXIV), 658–664.
- Camelo-Ordaz, C., Fernández-Alles, M., Ruiz-Navarro, J., & Sousa-Ginel, E. (2012). The intrapreneur and innovation in creative firms. *International Small Business Journal*, 30(5), 513–535. <https://doi.org/10.1177/0266242610385396>.
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice*, 35(5), 855–872. <https://doi.org/10.1111/j.1540-6520.2011.00482>.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, 16(1), 7–26. <https://doi.org/10.1177/104225879101600102>.
- Covin, J. G., & Wales, W. J. (2012). The measurement of entrepreneurial orientation. *Entrepreneurship Theory and Practice*, 36(4), 677–702. <https://doi.org/10.1111/j.1540-6520.2010.00432.x>.
- Farrukh, M., Chong, W. Y., Mansori, S., & Ramzani, S. R. (2017). Intrapreneurial behavior: The role of organizational commitment. *World Journal of Entrepreneurship Management and Sustainable Development*, 13(3),

- 243–256. <https://doi.org/10.1108/WJEMSD-03-2017-0016>.
- Gartner, W. B. (1988). Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12(4), 11–32.
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2019). Measuring intrapreneurship at the individual level: Development and validation of the Employee Intrapreneurship Scale (EIS). *European Management Journal*, 37(6), 806–817. <https://doi.org/10.1016/j.emj.2019.03.001>.
- Genc, E., Dayan, M., & Genc, O. F. (2019). The impact of SME internationalization on innovation: The mediating role of market and entrepreneurial orientation. *Industrial Marketing Management*, 82, 253–264. <https://doi.org/10.1016/j.indmarman.2019.01.008>.
- Guerrero, M., & Peña-Legazkue, I. (2013). The effect of intrapreneurial experience on corporate venturing: Evidence from developed economies. *International Entrepreneurship and Management Journal*, 9(3), 397–416. <https://doi.org/10.1007/s11365-013-0260-9>.
- Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic Management Journal*, 11, 5–15.
- Hornsby, J. S., Naffziger, D. W., Kuratko, D. F., & Montagno, R. V. (1993). An interactive model of the corporate entrepreneurship process. *Entrepreneurship Theory and Practice*, 17(2), 29–37.
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963–989.
- Ireland, R. D., Covin, J. G., & Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, 33(1), 19–46. <https://doi.org/10.1111/j.1540-6520.2008.00279.x>.
- Jones, G. R., & Butler, J. E. (1992). Managing internal corporate entrepreneurship: An agency theory perspective. *Journal of Management*, 18(4), 733–749.
- Kantur, D. (2016). Strategic entrepreneurship: Mediating the entrepreneurial orientation-performance link. *Management Decision*, 54(1), 24–43. <https://doi.org/10.1108/MD-11-2014-066>.
- Knight, G. A. (1997). Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing*, 12(3), 213–225.
- Kuratko, D. F., & Audretsch, D. B. (2013). Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship and Management Journal*, 9(3), 323–335. <https://doi.org/10.1007/s11365-013-0257-4>.
- Lisboa, A., Skarameas, D., & Saridakis, C. (2016). Entrepreneurial orientation pathways to performance: A fuzzy-set analysis. *Journal of Business Research*, 69(4), 1319–1324. <https://doi.org/10.1016/j.jbusres.2015.10.099>.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172. <https://doi.org/10.5465/amr.1996.9602161568>.
- Menzel, H. C., Aaltio, I., & Ulijn, J. M. (2007). On the way to creativity: Engineers as intrapreneurs in organizations. *Technovation*, 27(12), 732–743. <https://doi.org/10.1016/j.technovation.2007.05.004>.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791. <https://doi.org/10.1287/mnsc.29.7.770>.
- Miller, D., & Le Breton-Miller, I. (2011). Governance, social identity, and entrepreneurial orientation in closely held public companies. *Entrepreneurship Theory and Practice*, 35(5), 1051–1076.
- Monteiro, A. P., Soares, A. M., & Rua, O. L. (2019). Linking intangible resources and entrepreneurial orientation to export performance: The mediating effect of dynamic capabilities. *Journal of Innovation & Knowledge*, 4(3), 179–187. <https://doi.org/10.1016/j.jik.2019.04.001>.
- Morris, M. H., Webb, J. W., & Franklin, R. J. (2011). Understanding the manifestation of entrepreneurial orientation in the nonprofit context. *Entrepreneurship Theory and Practice*, 35(5), 947–971. <https://doi.org/10.1111/j.1540-6520.2011.00453>.
- Neessen, P. C., Caniëls, M. C., Vos, B., & De Jong, J. P. (2019). The intrapreneurial employee: Toward an integrated model of intrapreneurship and research agenda. *International Entrepreneurship and Management Journal*, 15(2), 545–571. <https://doi.org/10.1007/s11365-018-0552-1>.
- Nielsen, R. P., Peters, M. P., & Hisrich, R. D. (1985). Intrapreneurship strategy for internal markets: corporate, non-profit and government institution cases. *Strategic Management Journal*, 6(2), 181–189.
- Parker, S. C. (2011). Intrapreneurship or entrepreneurship? *Journal of Business Venturing*, 26(1), 19–34. <https://doi.org/10.1016/j.jbusvent.2009.07.003>.
- Pinchot, G. (1985). *Intrapreneuring: Why you don't have to leave the corporation to become an entrepreneur*. New York: Harper & Row.
- Pinchot, G., & Pellman, R. (1999). *Intrapreneuring in action: A handbook for business innovation*. San Francisco: Berrett-Koehler Publishers.
- Schumpeter, J. A. (1934). *The theory of economic development* translated by Redvers Opie (Harvard economic studies, Vol. 46, 1600-0404). Cambridge, MA: Harvard University Press.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226. <https://doi.org/10.5465/amr.2000.2791611>.
- Sharma, P. C., & Chrisman, J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice*, 23(2), 11–27.
- Vesper, K. H. (1990). *New venture strategies*. Englewood Cliffs: Prentice-Hall.
- Wales, W. J. (2016). Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal*, 34(1), 3–15. <https://doi.org/10.1177/0266242615613840>.

Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6(4), 259–285. [https://doi.org/10.1016/0883-9026\(91\)90019-A](https://doi.org/10.1016/0883-9026(91)90019-A).

Zahra, S. A. (1993). A conceptual model of entrepreneurship as firm behavior: A critique and extension. *Entrepreneurship Theory and Practice*, 17(4), 5–21. <https://doi.org/10.1177/104225879301700401>.

Intrinsic CSR

- ▶ [Authentic CSR](#)

Intrinsic Value

- ▶ [Environment and Ethics in Sustainability](#)

Introspective Awareness

- ▶ [Mindfulness](#)

Inventory

- ▶ [Life Cycle Sustainability Assessment](#)

Investigation

- ▶ [Audit](#)

Investment Allowances

- ▶ [Tax Benefits in Brazil](#)
- ▶ [Tax Incentives from a Brazilian Perspective](#)

Investor Activism

- ▶ [Activist Investor](#)

Investor Relations

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Investor Sentiment

- ▶ [Behavioral Finance](#)

Invidious Consumption

- ▶ [Emulative Consumption and Bankruptcy](#)

Invisible Stakeholders

- ▶ [Unknown Stakeholders](#)

Involvement

- ▶ [Employee Engagement](#)
- ▶ [Inclusion](#)

IPAT Equation

- ▶ [Sufficiency](#)

IPCC

- ▶ [Climate Change and Role of IPCC](#)

ISAR

► [United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting](#)

Islamic Banking

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Synonyms

[Islamic finance](#)

Introduction

Conventional banking is based on the concept of interest which is widely acceptable in the western society. Conventional banks take full control of the ownership from the investors to manage their investments but forbid the investors to intervene in the management of their funds. The problem with the unchecked conventional banking system is compounded even further when it is able to loan money for mortgages at subprime rates, over evaluate it, and sell those loans as pseudo good investments to those who wish to purchase the debts as securities. The lack of regulations and integrity of conventional banks in the USA have left many westerners searching for a better option, especially after the collapse of the markets which led to the great depression in 1920s and the global recession in the 2007. As a result, awareness of the lack of overall integrity of conventional banks and the lending principles have grown over the past decade among citizens within western countries such as the USA, the UK, and emerging markets (McMillen and Issa 2010). It is also argued that greed and unfair distribution of resources by the conventional banks have been the underlying reasons for the failed markets in

the USA. Islamic banking may be an alternative to conventional banking as it has received a considerable attention worldwide and is found to be successful (Adebayo and Hassan 2013). In Islamic banking, the creation and charging of interest is considered an injustice and thus prohibited (Iqbal and Mirakhor 1987). To avoid interest, Islamic banks and their clients instead share a portion of the risk and profit in a joint venture. The aim of Islamic banking is to maximize social and economic returns to the whole society and to the concerned parties including stockholders and investors as depositors (Sabri 2008). Therefore, Islamic banking may be considered superior to conventional banking because its prudence in lending encourages financiers to invest directly in an entrepreneur's ventures (Venardos 2005). Further, Islamic banking is considered stable as it is not based on the credit expansion but on the benefits for both banks and consumers. As such, Islamic banks are more profitable, more responsive to downturn in economic conditions, and seen as more trustable than conventional banks. Islamic banking also provides good business opportunities as it adds diversity and innovation to an already mature financial sector. Therefore, it is not surprising that the UK is leading the race to become the world center of Islamic banking, as it has the most expert bankers, the most advanced regulations, and a government that remains committed to the sector's growth on both financial and social grounds. Islamic banking has also become the banking system of choice for both Muslims and non-Muslims who are concerned with ethical business practices, nonexploitation, and unfair labor practices, among others.

The purpose of this entry is to explain the principles of Islamic banking, the growth of the Islamic banking sector, the distinctions between the conventional and Islamic banking systems, and the challenges of the Islamic banking, followed by a conclusion.

Principles of Islamic Banking

Islamic ethical values consist of compassion, passion, and respect for others (Rahman 1976). One

of the propositions of Islamic banking is that individual welfare depends on the collective work and welfare of all individuals. Thus, people should care about other peoples' interests, and not just only about themselves. They cannot pursue only personal interests all the time (Al-Roubaie 2010). As a result, the ethical aspect of daily life is embedded in Islamic banking, lending and investing of money of shareholders (Li 2008). Interest is a wrong concept as it requires taking another person's wealth without consideration or reward. It destroys moral values; it breeds hatred and ill-will; it makes the rich grow richer while the poor poorer; and the creditor is disgraced (Rahman 1976). The basic principles of Islamic economic structure and financial system are based on the absenteeism of capitalist values and presence of communal non-individualistic values. Individual's lifestyle is influenced by one's religion – which has impact on consumption of goods and services. Over a period of time, the consumption process becomes associated with their religion (Choi et al. 2013) which is guided by religious beliefs and individual traits such as thrift, honesty, openness to complete strangers, and work ethic (Ferguson 2004). The financial downturn of 2007 and mortgage crises associated with it made customers. The option of implementing Islamic banking systems may also improve bank managers' accountability and thus achieve economic stability within the banking sector. Therefore the emergence of Islamic banks can be beneficial for the current financial markets. Indeed, one does not need to be a Muslim to use Islamic banking or Shari'ah-compliant financial products. These principles explain the growth in Islamic banking among both Muslim and non-Muslim communities worldwide.

The Growth of the Islamic Banking System

Islamic banks have over \$250 billion in assets (compared to \$6 billion in 1980s) and are expected to grow 10–15% annually (El-Hawary et al. 2007). In 2007, the United Arab Emirates alone issued over 50% of the global Islamic

bonds. The Arab financial sector is one of the most sophisticated and expanded sectors in the world economy as determined by the variety of institutions and financial products. This sector constitutes about 2% of the world, and about 12% of the emerging markets, making it an important player in the world of finances and banking sector (Sabri 2008). In the west, UK has become a major player in Islamic banking despite the hurdles that plague businesses operating in a non-Muslim financial environment. The potential global market of 1.5 billion Muslims – second largest religion in the world constituting 23% of the world's population – has drawn considerable attention to Islamic banking. Islamic banks operate in over 100 countries, out of which 20 are in Arab countries (Khan 2011). The largest Islamic Bank – the Faisal Islamic Bank (FIB) – enjoys a special status as a private Islamic institution which is guaranteed against nationalization and has tax and custom exemption status (Mallat 1998). The growth of the FIB and Islamic finance sector is attributed to several factors: increased demand for Shari'ah-compliant products from Islamic countries in emerging markets; the regulatory framework advancement relating to Islamic banking system; and increased demand from conventional investors for diversification. The banking operations and financing activities are based on Shari'ah principles that allow for fairer financial transactions, timely repayment of loans, and forgiveness of bad loans (Archer et al. 1998).

The Distinctions Between the Conventional and Islamic Banking Systems

The key feature that distinguishes Islamic banks from conventional banks is the repudiated use of interest financing. Islamic banking, based on the Shari'ah law, prohibits the payment or acceptance of interest charges. Rather than charging interests, Islamic banks typically share some of their borrowers' risks and profits. Under the law, the individual and the social good are regarded as complementary to each other rather than contradictory; a close relationship is fostered between

the two (Rahman 1976). Islamic banks primarily attract clients with religious beliefs and convince them through moral arguments for their business methods, much more than western banks do to engage their customers. In fact, Islamic banking is required to have superior relations with their clients. In the conventional banking system, lending on interest allows banks to sell money today with the intent of earning more money from interest in the future, regardless of the outcome of the loan. Risk falls predominantly on the loan taker while the bankers leverage against future earnings. It is unacceptable in Islamic banking. These distinctions may offer an insight as to how to stabilize the financial system of the west in the globalized world.

The Challenges of Islamic Banking

Islamic banking can be viewed as a risky option as it may be exposed to liquidity and operational and legal risks. Some argue that the growth in Islamic banking is due to revival of Islam and not necessarily due to the advantages of the Profit and Loss Sharing system based on Shari'ah law. A prospective Islamic banking institution may also need to deal with various local regulators such as Federal Reserve, State Banking Authorities, and Internal Revenue Service, among others. Although, for example, the US regulators have significant constitutional policies and economic reasons to accommodate the growth of Islamic banking, there is a limit to this accommodation in that the constitution prohibits the promotion of a particular religion over another by a public official or agency. Christians view Islamic banking as exploitive and unethical, and perceive it as a political, economic, and theological threat, and thus, paint Islam in a negative way. As a result, World Council of Churches and the Muslim Organization have opened dialogue at the national and international levels in an effort to develop an understanding based on the reciprocal willingness to listen and learn from each other. It is suggested that Islamic banking system needs greater standardization process and cooperation from institutions such as World Bank and IMF to regulate

operational framework and add more transparency and meaningfulness to their customers in order to be competitive with conventional banks and become service-oriented and responsive to innovation (Szczepanowicz 2011; Tahmina 2013).

Summary

Islamic banking is built on the fundamental principles of fairness and equity. It is forbidden to charge interest to customers. The bank managers can use the ethical principles of Islamic banking to their advantage in developing promotional strategies. For example, advertising campaigns can be more specific focusing on uniting people of different religions through Islamic banking. Currently, conventional and Islamic banks are seen as two rivals in the banking sector. Maintaining strong sustainability is vital to the existence of the both banking systems. However, the Muslim population being over 20% of the world's population, Islamic banks can contribute to significant economic stability. It can show to the skeptic people that Islamic banking, based on Shari'ah law, can contribute positively to solving modern finance needs. With its impressive estimated growth at US\$250 billion, western countries should look into the incentives to attract Islamic banks as foreign direct investments (FDI), particularly from emerging markets. Given the growth, Islamic banking has presence in several western countries. Since its initial growth in South Eastern Asian Countries in the 1990s, it has also seen a shift in growth toward the Gulf countries. The main reason for the shift came after the event of 9/11. In the past four decades, Islamic banking has successfully grown in number and size in countries such as Iran and Sudan, and has become popular in non-Muslim nations as well. The United Kingdom is leading in its efforts to remain a major player and committed to providing Islamic banking services to the growing population. More awareness and understanding of Islamic laws and laws from governing countries are needed to ensure the success of Islamic banking, as ethical standards need to be maintained at

all times. It can be demonstrated that Islamic financial products are Shari'ah compliant, that is, exhibit ethical and moral principles in addition to humanistic features designed to promote social justice, equity, and protect individual rights and freedom in the marketplace (Al-Roubaie 2010). The idea is that one does not need to be a Muslim to use Islamic banking services; anyone can use them. Indeed, Islamic banking sector can be used to bridge diverse cultures and yet co-exist in an economy with conventional banking and financial services.

Cross-References

- ▶ [Islamic Finance](#)
- ▶ [Islamic Governance](#)
- ▶ [Islamic Stakeholder Theory](#)
- ▶ [Islamic Sustainability](#)

References

- Adebayo, R. I., & Hassan, M. K. (2013). Ethical principles of Islamic financial institutions. *Journal of Economic Cooperation & Development*, 34(2), 63–89.
- Al-Roubaie, A. (2010). Islamic finance. A bulwark against contagion in the global banking system. *Islam and Civilizational Renewal*, 1(2), 303–332.
- Archer, S., Abdul Karim, R. A., & Al-Deehani, T. (1998). Financial contracting, governance, structures and the accounting regulation of Islamic banks: An analysis of agency theory and transaction cost economies. *Journal of Management and Governance*, 2, 149.
- Choi, Y., Paulraj, A., & Shin, J. (2013). Religion or religiosity: Which is the culprit for consumer switching behavior? *Journal of International Consumer Marketing*, 25(4), 262–280.
- El-Hawary, D., Grais, W., & Iqbal, Z. (2007). Diversity in the regulation of Islamic financial Institutions. *The Quarterly Review of Economics and Finance*, 46(5), 778–800.
- Ferguson, N. (2004). Economics, religion and the decline of Europe. *The Journal of Economic Affairs*, 24(4), 37–40.
- Iqbal, Z., & Mirakhor, A. (1987). *Islamic Banking*. Washington DC: International Monetary Fund.
- Khan, M. (2011). Islamic banking practices: Islamic law and prohibition of riba. *Islamic Studies*, 50(3), 413.
- Li, N. (2008). Religion, opportunism, and international market entry via non-equity alliances or joint ventures. *Journal of Business Ethics*, 80(4), 771–789.
- Mallat, C. (1998). *Islamic law and finance*. London: Graham and Trotman.
- McMillen, M., & Issa, N. (2010). Islamic finance. *The International Lawyer*, 44(1), 333–336.
- Rahman, A. U. (1976). *Economic doctrines of Islam*. Lahore: Islamic Publications Ltd.
- Sabri, N. R. (2008). *Financial markets and institutions in the Arab economy*. New York: Nova Science Publishers.
- Szczepanowicz, A. D. (2011). Unconventional banking in a conventional environment: Islamic banking and finance in the USA, Georgetown University.
- Tahmina, T. N. (2013). The barriers to, and incidence of, Islamic banking and finance in Canada. (Order No. MS25305, University of Ottawa, Canada).
- Venardos, A. M. (2005). *Islamic banking and finance in South-East Asia: Its development and future*. River Edge: World Scientific Publishing.

Islamic Business Ethics

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Synonyms

[Business conduct in Islam](#); [Business ethics in Islam](#); [Business morality in Islam](#); [Islamic ethics in business organizations](#); [Moral code of business in Islam](#)

Definition/Description

Islam is a comprehensive way of life. It offers a complete set of guidelines in various spheres of life be it material or spiritual. These guidelines are in the form of ethical principles such as honesty, sincerity, benevolence, adherence to social norms or paying due regard to societal interests. Islamic business ethics is a part of general ethical principles in the Islamic religion. These principles are derived from the revealed source in Islam that is the Quran. There are other sources of derived knowledge such as the sayings and actions of Prophet Mohammad. Islam shares many of its

ethical principles with the other two Abrahamic religions, Christianity and Judaism. There are significant diversions too. Business ethics in Islam is derived from the basic ethical principles of Islam that also have much in common with other world religions. Better known are the Islamic ethical principles of prohibition of usury or the forbidding of investment into undesirable businesses activities such as gambling. But there are a host of ethical principles in Islam that are relevant to the economy, trade and business. These include principles such as support to market economy, restricting the role of state in business, encouragement for healthy and fair competition, ethical selling, non-exploitative pricing or moderation in profit seeking.

Introduction

Ethics (also called moral philosophy) is a branch of philosophy that deals with the questions of what is right and wrong, moral and immoral or good and evil. It is a broad area of philosophy dealing with the study of which type of behavior is right and wrong. The rightness or wrongness of behavior is judged on the basis of moral standards. These standards are derived from multiple sources such as family, society, religion or philosophy. Business ethics (sometimes, also called corporate ethics) is a subset of ethics that deals with judging right or wrong behavior in the business setting.

Religion has a great impact on approaches to ethics that people adopt as it has widespread influence on how people lead their lives. This includes how people apply ethics to business dealings. It is generally accepted that economic sphere of life is also shaped by values derived from religion. Injunctions related to weights and measures, restrictions on investments into sinful activities, and directions for dealing with workers and employees are some of the examples of areas in which religious values impact businesses. All religions and denominations provide some guidelines to their adherents regarding the conduct of trade, commerce and business.

Islam, meaning submission, is one of the major religions of the world. It is an Abrahamic,

monotheistic religion believing in one God, Allah and Muhammad as the last prophet. It has nearly 2 billion followers called Muslims (those who submit to Allah) who make up one-fourth of the global population. Islam is a comprehensive way of life that provides to its followers, directions on various spheres of life including economic, material, philosophical, social, and spiritual. Among these spheres of life are the ethical principles to apply in the context of business.

Business Ethics

The term 'ethics' is derived from Greek *ethikos* that is itself derived from *ethos* which means custom, character or habit. It is a branch of philosophy - called moral philosophy - that deals with defining and developing the principles of right and wrong behavior. These principles are immutable such that they do not change and are not relative to situations or circumstances.

There are three categories of ethical theories: meta-ethics, normative ethics, and applied ethics. Meta-ethics deal with the nature of moral judgment whether it is absolute or derived. Normative ethics is concerned with the standards what defines rightness or wrongness. Applied ethics relates to morality and applications of concepts of ethics to various spheres of life and professions such as medical ethics or business ethics.

Business ethics deals with how personal moral norms apply to activities and goals of an organization. In doing so, business ethics tackles challenges posed by ethical dilemmas in the context of business. For example, a common issue is the primacy to be accorded to profitability versus social good that a business organization can do. Business ethics provides guidance to businesspeople on how they can deal with moral questions arising out of the day-to-day conduct of business activities. Business ethics is a system of values that helps to relate the goals and objectives of the organization and the techniques used to attain the goals to the ultimate ends. The ultimate ends are viewing needs and aspirations of individuals as a

part of society to which they belong and also to maintain their personal dignity.

Islamic Ethics

The understanding of Islamic ethics is derived from revealed as well as guided human-generated sources of knowledge derived from an active study of the *Quran*, *Ahadith*, *Sunnah*, *Fiqh* and *Tasawwuf*. *Quran* is the scripture revealed to the Prophet Muhammad by Allah, the Almighty and is the primary text of Islam. *Ahadith* (singular term is *Hadith*) are the statements of the Prophet and *Sunnah* the actions of the Prophet as narrated by his companions and passed on through a generation of authentic narrators. *Fiqh* is Islamic jurisprudence. *Tasawwuf* is the traditional Islamic science of self-improvement and spirituality. The sources of Islamic knowledge link ethics to faith and describe what is necessary for individuals as members of society and members of organizations.

There are three aspects that govern ethical conduct: character, intention, and the outcome. Character is built by virtues such as reason, knowledge, righteousness, and patience. Intention is the bedrock of ethical conduct and determines its rightness. Good intentions are necessary for achieving the right outcomes. The outcomes are to satisfy obligations to God, family and self. The concepts of *halaal* (desirable) and *haram* (forbidden) serve to distinguish between acts that are encouraged and forbidden as well as outcomes that are desirable and undesirable. Besides these, there are four other types of rules regarding the status of action. These are *mubah* (which is permissible), *wajib* (obligatory), *mandub* (recommended), and *makruh* (discouraged). Islam advocates a balance of outcomes in terms of satisfaction of different types of human needs such as physiological, economic or spiritual.

Islamic ethics is defined by Ali 2011 as “the specified rules that govern individuals and organizational conduct and seek to ensure generosity, transparency, and accountability in behavior and actions, while safeguarding societal interests.”

Beekun 1996 lists the axioms of Islamic ethical philosophy as: unity, equilibrium, free will, responsibility and benevolence. In Islam, ethics is viewed as the basis for achieving prosperity and well-being of individuals. It is also seen as necessary for achieving a sustainable economy and social goals. Reason is considered as the basis for distinguishing what is right and wrong and people may differ in their conduct based on their understanding. Three philosophical principles of *maslah aamah*, *wassatiyah*, and *ehsaan* guide the behavior in all spheres of life. *Maslah aamah* deals with the larger interest of people or society. *Wassatiyah* is moderation in all actions. *Ehsaan* is giving due regard to welfare of others and going beyond doing what is good. Ends do not justify the means in the Islamic perspective to ethics.

The evolution of human personality in Islam is seen in terms of different levels of existence that determine the conduct. The *Quran* describes these four levels of existence as: *sawala*, *ammara*, *lawama*, and *mutmainna*. *Sawala* is the stage of passion for temptation where self interest is predominant in human nature. *Ammara* is the prone to evil psyche, in which stage the person is aware that their soul pushes them to evil yet they put no resistance to that push. *Lawama* is stage where the person is aware of evil and the consequences of being evil. There is dilemma between good and evil indicating that the soul is striving towards good. *Mutmainna* is the stage that is the highest stage of human development. The person is away from evil and performs good deeds remaining satisfied and content. At each of these four stages the ethical implication is clear. Initially, a person is not concerned with ethics, and when aware he is still propelled towards evil. Later two stages indicate that ethical conduct is pursued and then attained.

Business Ethics in Islam

Business ethics in Islam, just like general ethics, derives its principles from the revealed and

guided human-generated sources of knowledge. It can be understood in the context of how ethics is defined. Islamic ethics, defined by Ali 2011, are “the specified rules that govern individuals and organizational conduct and seek to ensure generosity, transparency, and accountability in behavior and actions, while safeguarding societal interests” help to understand the concept and principles of business ethics in Islam. The ethical framework of public interest, moderation, and *ehsaan* determines the ethicality inherent in a given situation.

As an illustration, the concept of moderation in Islam applies to many business situations. Consumption, spending, saving, investment, risk taking and competition are common activities in which businesspeople are engaged. Overconsumption and conspicuous consumption is frowned upon in Islam. Spending is recommended in moderation. Neither miserliness nor extravagance is favored. Saving is encouraged so as to prevent harm from unforeseen risk and creating reserves for investing in future businesses. Investment is to be ensured in fair activities that are permissible. Investing in right avenues that yield good returns are preferable as they can be used for generosity and discharging social responsibilities. Risk taking is suggested in moderation so as to not harm the interests of the investors. Competition is encouraged provided it is fair, does not harm public interest, and is done observing *ehsaan* and moderation. Monopolies are not considered permissible as well as hoarding to affect prices unfairly. The role of the state in business is to be restricted to regulating business conduct to avoid abuse and fraud.

Ethics of profit in Islam has a broader reach and goes beyond the material concern of maximizing profitability and what is generally known as utilitarianism. Profitability is considered essential so long as it is fair and balanced, guided by spiritual concerns and faith, and keeps societal interests in view. Thus, Islam advocates profit moderation rather than profit maximization.

The ethics of selling requires the seller to not be exploitative. So long as moderate and fair

profit accrues from the transaction, it is permissible. Mutual goodwill is considered important for fair exchange of goods and services to take place. Transactions must be free of coercion and deception and take place in an environment of mutual trust and dependence. Pricing should be the outcome of the interplay of genuine supply and demand in the marketplace. The seller is enjoined to go beyond merely profit making and be kind and considerate to the needy and distressed by allowing them to buy on debt that may or may not be paid depending on circumstances.

There is a comprehensive set of ethical principles in Islam that can be applied to the area of management and human resource management. These include the application of the principles of public interest, moderation and *ehsaan* to management of day to day affairs in organizations. Employee-employer relationship in Islam is governed on the basis of fairness in dealings, adequate and timely compensation, and being considerate and kind in dealings. The employee is also expected to adhere to his commitment and serve his employer with loyalty and to the best of his ability.

There are certain taboos in Islamic ethics that are commonly known. These are charging of usury on financial transactions, indulging in business activities that are detrimental to individual and societal interest such as gambling, buying and selling of harmful drugs and alcohol, price manipulation, unfair dealings, weighing lesser than what is paid for, exhibiting greed and avarice in setting price and consumption, hoarding of goods to charge higher prices in times of distress, hoarding of wealth, counterfeiting among others. Avoidance of unethical actions is based on three factors as identified by Ali 2014. These factors are character, knowledge and spirituality. Character is the bedrock of good intentions and good actions. Knowledge is considered essential for discerning good from evil. Spirituality aids character and knowledge to be applied for the good of society.

Summary

Ethics is a branch of philosophy that deals with the questions of what is right and wrong. There are three categories of ethical theories: meta-ethics, normative ethics, and applied ethics. Business ethics is a subset of general ethics. It deals with how personal moral norms apply to activities and goals of an organization. Religion has a significant impact on how people lead their lives. It also influences the way how people manage the economy and commercial organizations.

The understanding of Islamic ethics is derived from revealed as well as guided human-generated sources of knowledge derived from an active study of the Quran, Ahadith, Sunnah, Fiqh and Tasawwuf. There are three aspects that govern ethical conduct: character, intention, and the outcome. The concepts of *halaal* (desirable) and *haram* (forbidden) serve to distinguish between acts that are encouraged and forbidden as well as outcomes that are desirable and undesirable.

Islamic ethics is defined by Ali (2011) as “the specified rules that govern individuals and organizational conduct and seek to ensure generosity, transparency, and accountability in behavior and actions, while safeguarding societal interests.” Business ethics in Islam is derived from the general ethical principles. Three philosophical principles of *maslah aamah*, *wassatiyah*, and *ehsaan* guide the behavior in all spheres of life. *Maslah aamah* deals with the larger interest of people or society. *Wassatiyah* is moderation in all actions. *Ehsaan* is giving due regard to welfare of others. The Quran describes these four levels of existence as: *sawala*, *ammara*, *lawama*, and *mutmainna* each level having implications for ethical actions.

The ethical framework of public interest, moderation, and *ehsaan* determines the ethicality inherent in a given situation. Ethics of profit in Islam has a broader reach and goes beyond the material concern of maximizing profitability. The ethics of selling requires the seller to not be exploitative and kind and considerate to those in distress. There are certain taboos in Islamic ethics that are commonly known such as avoidance of

usury and forbidding of trade and business in undesirable articles such as drugs and alcohol. A combination of character, knowledge and spirituality can serve to deal with unethical conduct and behavior.

Cross-References

- [Business Ethics](#)
- [Confucian Ethics](#)
- [Ethics](#)
- [Ethics and Ethical Theories](#)
- [Islamic Banking](#)

References

- Ali, A. (2011). *Marketing and ethics: What have Islamic ethics contributed and challenges ahead? Presented at global Islamic marketing conference* (pp. 20–22 March). Dubai.
- Ali, A. (2014). *Business ethics in Islam*. Cheltenham: Edward Elgar.
- Beekun, R. I. (1996). *Islamic business ethics*. Herdon: International Institute of Islamic Thought. An excerpt is available at: <https://www.emaanlibrary.com/wp-content/uploads/2015/04/ISLAMIC-BUSINESS-ETHICS-Majed-S.-Al-Rassi.pdf>.

Islamic Economics

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Islamic Ethics

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Islamic Ethics in Business Organizations

- [Islamic Business Ethics](#)

Islamic Finance

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Synonyms

Islamic Banking; Islamic Economics; Islamic ethics; Islamic social systems

Definition

Islamic finance is a financial system consistent with the ethics and values of Islam (Bashir 1999) that affect Islamic economics and the overall Islamic social system.

Five pillars constitute the basic norms of Islamic practice: the declaration of faith (*shahada*), prayer (*salah*), alms-giving (*zakat*), fasting (*sawm*), and pilgrimage (*hajj*). The ethical and moral tenets of the Islamic faith are accepted by Muslims – the world’s second-largest religious group that, in turn, includes several branches and doctrinal tendencies. The largest branches are Shia (*Shī‘as*) and Sunni (*Sunnīs*), while others are relatively small in size (*Ibadis*, *Zaydīs*, *Ismā‘īlīs*). Within Islamic groups, there may be differences in terms of orders (*tariqa*) within Sufism and Sunni Islam and schools of theology (*Aḥharī*, *Ash‘arī*, *Māturīdī*) and jurisprudence (*Ḥanafī*, *Mālikī*, *Shāfi‘ī*, *Ḥanbalī*).

Maulana Maududi (1903–1979) is considered the father of the idea of an Islamic economy and Islamic finance (Maududi 1999; Slomp 2007) that allows practitioners and customers to comply with God’s commandments, revealed in the *Sharia*. Indeed, Islamic financial relations are based on Islamic religious law, referred to as *Sharia’a* law. Islamic finance claims to follow the precepts that rule all aspects of a Muslim’s life. Such a foundation makes a substantial difference compared to Western finance and provides a viable alternative to conventional finance.

The Holy Koran (*Qur’an*) is the primary source of *Sharia’a* law. In addition, Islamic finance has been influenced by the Sunnah of the Prophet Mohammad, the *Ijma* (consensus opinions of learned men and jurist), and the *Qiyas* (analogies to existing laws).

These sources lead to many restrictions and complexities in the Islamic financial relationship based on the following pillars:

1. The payment of interest is proscribed: since money cannot make money, *riba* (the Western current forms of interest) is strictly prohibited as argued by the leading specialists in Islamic jurisprudence (*fuqaha* or *fiqh scholars*) (Visser 2009; Ahmad 2011).
2. Speculation is proscribed: speculative behavior is considered gambling (*maysir*). Gaming activity is clearly forbidden by both the injunction against “making money out of money” and the moral code embedded in *Sharia’a* law (Shaffai 2008). Speculation is also considered as creating prohibited uncertainty/risk (*gharar*). The latter takes on two forms: (1) uncertainty refers to asymmetric information among contracting parties where one set of agents has relatively superior information and (2) it relates to immeasurable risk and the lack of any reliable information with which to base business judgments. Accordingly, avoiding either situation leads to financial relations that are less risky than would occur in conventional banking relations. Namely, the prohibition of *gharar*, carrying the connotation of deception and illusion, is the essence of Islamic contract law.
3. In financial transactions, the bearing risk is proscribed. It is unacceptable to pay money in return for a reduction in uncertainty or risk. As a result, conventional insurance cannot be authorized and future contracts are considered inconsistent with the *Sharia*. The principles and the subsequent prohibitions against interest and speculation lead to lending relations that must be assessed (Chirinko et al. 2018).

Moreover, Muslims must avoid forbidden products and services, *haram*. The list includes

alcoholic drinks, pork-related products, adult entertainment, and gambling. Another important peculiarity is that there can only be one transaction per contract; for example, a sales transaction and a lease agreement must be two separate contracts. Furthermore, Muslim creditors are obliged to show clemency toward debtors who cannot make repayments (Visser 2012).

Introduction

The evolution and spread of Islamic financial institutions in the last two decades have generated a growing interest over time and triggered a worldwide discussion among policymakers, practitioners, and economists (Bashir 1999). In the United States the resurgence of their interest (Sivan 1990) dates back to the 1960s and the 1970s, after the earliest experimental Islamic banks instituted interest-free savings and loans for societies in Pakistan and the Indian subcontinent; then they established pioneering ventures in the 1960s in Egypt and Malaysia. Islamic finance became a trillion-dollar industry after enjoying sudden success in the private sector in Gulf states such as Dubai in the 1970s. By 1985 more than 50 conventional banks worldwide offered Islamic financial products, which progressively spread throughout Saudi Arabia, the Middle East, South and Southeast Asia, Africa, Europe, and the Americas, as investor interest in Islamic finance products continued growing.

The products, services, and contracts that *Sharia*-compliant finance offers differ from conventional banking and can be categorized into three broad groups (Table 1). Some of them encompass *Wadiah* (safe-keeping), *Mudharabah* (profit sharing), *Murabahah* (cost plus finance), *Musharakah* (joint venture), *Ijar* (leasing), *Hawala* (an international fund transfer system), *Takaful* (Islamic insurance), and *Sukuk* (Islamic bonds) (Jamaldeen 2012; Khan 2015; Rizvi et al. 2016).

It has been said that conventional banking and Islamic banking have the same purpose or basic goal, but the latter conforms to the rules of *Sharia* law; accordingly, several activities are forbidden:

Islamic Finance, Table 1 Islamic banking products

Profit and loss sharing modes (<i>musharakah</i> and <i>mudharabah</i>)	Profits and losses are grounded on partnership contracts
Asset-backed financing (trade-based financing or non-people-location-service financing)	These tools comprise mark-up (<i>murabahah</i>), leasing (<i>ijar</i>), cash advances adopted in the agricultural (<i>salam</i>) or manufacturing sectors (<i>istisna</i>) Among the typical debt financing tools in Islamic banking, <i>bai-bithaman ajil</i> and <i>murabahah</i> are mostly being used in the Malaysian banking sector
Modes based on safety and security contracts and agency contracts (<i>wakalah</i>).	They comprise safe-keeping contracts (<i>wadiah</i>) for current account deposits and agency contracts (<i>wakalah</i>)

- Charging or paying interest (*riba*); transactions (*Fiqh al-Muamalat*) that have been designed to impede charging interest
- Investing in organizations connected to prohibited activities (*haram*), that is, vending alcohol or producing media such as pornography
- Expecting additional revenues for late payments
- *Maisir*, typically conceived as gambling but more customarily extended to speculation (i.e., derivatives or futures)
- *Gharar*, considered uncertainty or ambiguity, to steer clear of excessive risk and fraudulent behavior that can support derivative tools
- Involvement in transactions devoid of material finality since all transactions must be directly connected to a real underlying economic transaction, thus omitting options and most other derivatives

Each Islamic bank transaction is supervised and advised by a board of *shariah* experts to guarantee that all activities are consistent with Islamic principles.

The body of research in Islamic banking and finance includes both descriptive studies

addressing conceptual issues underlining interest-free financing (Ahmed 1981; Karsen 1982) and neoclassical techniques adopted to analyze the theoretical framework of Islamic institutions (Khan 1986; Haque and Mirakhor 1986). Islamic finance has been conceived as an especially momentous phenomenon (Visser 2009).

Some authors claim that the global financial crisis can be considered an aftermath of conventional finance, given that it doesn't follow the ethical principles of Islam (Chirinko et al. 2018). Among these, the prohibition of *riba* inhibits the extractive source of earning money, while it helps in the circulation of capital in productive enterprise, leading to higher levels of capital formation and production in the real sector of the economy and higher levels of employment. Islamic financial institutions help drive savings into investments, converting money capital into productive capital. Islamic ethics limit the consumer choice from immoral activities, lavish consumption, and wastage of resources. Furthermore, Islamic ethics compels firms to avoid hoarding essential items, distorting price mechanisms, and engaging in unethical marketing and promotion of consumerism. Islamic redistribution institutions redistribute wealth from the rich to the poor. For instance, *Zakat* discourages hoarding of wealth and ensures circulation of capital, while *Waqf* ensures the decentralized provision of public goods and social safety nets in an Islamic economy. Lastly, the Islamic inheritance laws ensure wealth redistribution across generations in every family.

Islamic economics can welcome micro foundations as an illustration of human behavior in the economic sphere of life. However, the systems, institutions, and policymaking that Islamic economics offer cannot consider human behavior as a rule, only as a guide. Islam is a comprehensive doctrine that can provide the basis for a dependable social contract and institutions that attend to issues of welfare and equity. The ideals of Islamic finance and Islam economics are profit sharing and profit-and-loss sharing. People can earn and possess money, but they are called to manage it as God's steward or vice-regent, *khalifah* (El-Ashker and Wilson 2006). People

cannot be exploited or cheated by interest payments that increase income inequality.

In this regard, the Islamic Development Bank (Iqbal 1997; Iqbal et al. 1998; Khan 2010) describes the lending requirements by stating that the most influential feature of Islamic banking – its promotion of risk sharing between the provider of funds (investor) and both the financial intermediary (the bank) and the user of funds (the entrepreneur). In principle, in conventional banking, this risk is supported by the entrepreneur. This requirement is met by *Sharia*'a-compliant financial products (Visser 2012).

The injunctions derived from the aim to comply with the precepts of the *Sharia* allow some authors to argue that managers at Islamic banks are more attentive to avoiding unethical business than commercial banks. The *Shari'ah* supervisory boards in Islamic banks affect managerial behavior and mitigate agency problems (Lewis 2011). Correspondingly, a link between corporate ethics and management behavior through *Shari'ah* can be established (Quttainah 2012; Quttainah and Almutairi 2017).

Several authors have pointed out that pro-social behavior (i.e., altruism, philanthropy, volunteering, and social activism) does not arise purely from a personal and self-centric choice framework (Bruni and Uelmen 2006; Lubich 2007; Gold 2010; Zsolnai 2011). In religious societies, religious teachings provide the impetus to pro-social acts (Qutait 2018) and religious values drive preferences that affect both non-economic and economic choices (Rice 1999; Wilson 2002).

The practical nature of the Islamic faith gives followers a code of life that guides all aspects of their human existence (Mir 2010). Ethical principles find a primary source in the *Qur'an* and *Sunnah* (the prophetic tradition) that provide clear and rigid caveats for leading a virtuous Islamic life (Beekun and Badawi 2005).

The key axioms that rule the ethical philosophy of Islam comprise unity, equilibrium, free will, responsibility, and benevolence (Beekun 1997). Benevolence (*ehsan*) sets the standard for ethical conduct (Iqbal and Cam 2018) and influences both personal and commercial dealings in several ways that reflect goodwill, generosity, and a duty

to help others in need. Accordingly, authors have pointed out that the importance of Islamic ethics concerns responsible conduct and the creation of societal good and benefit for all, rather than pursuing personal self-interest, thus distinguishing it from free-market capitalism (Ali and Al-Aslie 2015).

Islamic ethics recommends a strong social responsibility in commerce and profit moderation, instead of profit maximization (Iqbal and Cam 2018). The emphasis on societal welfare reinforces the importance of corporate social responsibility (Solomon 2003) and has several common points with a sustainability-driven approach and the orientation toward creating long-term value.

Drawing from these lines of thought that emphasize the role of cultural factors, social norms, and spiritual stimuli on economic behavior, the Divine Economics framework considers religion or religious activities as an object of choice in a rational framework and studies it in the labor-leisure choice, as well as in the intertemporal consumption choice (Qutait 2018). Divine Economics – introduced as an attempt to endogenize the religious factors in the mainstream economic framework, starting with a seminal contribution published in a South Asia prominent academic journal (Hamdani et al. 2002) – has been defined as a framework for the study of economics and religion while considering both perspectives (Hamdani and Ahmad 2002). The motivation for developing such a framework comes from the view that most of the work done by Muslim economists is normative, legalistic, and idealistic (Hamdani 2002), while very few studies have addressed the positive aspects of economic behavior in religious and non-religious households. Divine Economics framework has some points of similarities with Islamic economics and can contribute to economics literature, which has yet to make effective interactions and cross-communication with most of the mainstream schools of economics (Azid 2010). The points of differences come from the fact that the Divine Economics framework wants to remain universal in its applicability, thus leading to less interest from the Muslim economists who want to build the Islamic economics literature by keeping

the Islamic normative values at the core of their analysis.

Key Issues

A core point within the aims and claims of Islamic finance is tied to its capability to yield a feasible and credible *Sharia*-compliant replacement for conventional finance.

Compared with conventional finance, both (potential) strong and weak points have been discussed (Visser 2009; Ahmmed et al. 2015; El-Gamal 2006). Among the former are lower risk of financial ruin due to the absence of interest rate risk, protection against financial crises, increase of participation in the official financial system, and a limitation of speculative activities (Visser 2012). Among the latter one can enumerate: a shift of risks from shareholders to depositors; higher transaction costs, because Islamic contract law requires a distinct contract for each transaction (Van Duyn 2010); principal-agent problems, because of the higher moral-hazard risk.

In addition, conventional insurance is considered unacceptable because it is closely linked to investments in interest-earning. On the other hand, the Islamic solution – *takaful*, a mutual fund based on the contribution of participants – rests on brotherhood. However, the ideals of brotherhood are not easy to apply and may take the form of *zakat* (Islamic charity) and *qard hasan* (beneficence) loans that play a marginal role among Islamic bank's activities.

Finally, legal uncertainties should be mentioned. First, Islamic finance agreements are often presided over by English law and if the underlying assets are situated in Middle Eastern countries, the enforceability of the contracts may be problematic. Second, Islamic contracts are affected by a *Sharia* risk in the absence of uniform standards to assess which financial tools are *Sharia*-compliant. Despite the efforts of standard-setting bodies, such as the Accounting and Auditing Organization for Islamic Financial Institutions. The standards have not been yet

universally accepted and are only obligatory in a few countries.

Summary

Islamic finance can be considered a beneficial addendum to conventional financial products. The ethical principles fundamental to Islamic finance (in particular, the ban on interest) can attract non-Muslims and affect conventional finance, even if for others they only offer a chance to vary their portfolios or profit.

However, a thriving Islamic finance sector may help to tackle the interconnectedness between financial institutions and their business models “vices” (i.e., the enormous scale of activities on derivative markets and their reliance on short-term borrowings). The conventional banking industry could learn from the Islamic financial sector and overcome the dependency on short-term borrowing (Chapra 2007). Moreover, the Divine Economics framework can contribute to creating a bridge between Islamic economics and mainstream economics by providing a factual analysis of “how religious households behave” without highlighting the Islamic normative teachings (Qutait 2018). In this regard, the discussion on what can encourage responsible economic and financial behaviors can benefit from empirical studies focused on how faithful economic agents use resources and public goods and how preferences are amenable in the light of different beliefs and worldviews.

Cross-References

- Finance
- Islamic Banking

References

- Ahmad, A. (2011). Islamic banking and prohibition of Riba/interest. *African Journal of Business Management*, 5(5), 1763–1767.
- Ahmed, K. (1981). *Studies in Islamic economics*. Leicester: Islamic Foundation.
- Ahmed, M., Rahman, M. M., Billah, M. A., & Md. Amzad Hossain, T. (2015). Superiority of Islamic banking in comparison with conventional banking in Bangladesh – A comparative study. *Global Journal of Human-Social Science: E Economics*, 15(3), 1–12.
- Ali, A., & Al-Aslie, A. (2015). Marketing and ethics: What Islamic ethics have contributed and the challenges ahead. *Journal of Business Ethics*, 129(4), 833–845. <https://doi.org/10.1007/s10551-014-2131-x>.
- Azid, T. (2010). Anthology of Islamic economics: Review of some based issues. *Review of Islamic Economics*, 13(2), 165–194.
- Bashir, A.-H. M. (1999). Risk and profitability measures in Islamic banks: The case of two Sudanese banks. *Islamic Economic Studies*, 6(2), 1–24.
- Beekun, R. I. (1997). *Islamic business ethics*. Herndon: International Institute of Islamic Thought.
- Beekun, R. I., & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of Business Ethics*, 60(2), 131–145. <https://doi.org/10.1007/s10551-004-8204-5>.
- Bruni, L., & Uelmen, A. J. (2006). Religious values and corporate decision making: The economy of communion project. *Fordham Journal of Corporate and Financial Law*, 11, 645–680.
- Chapra, M. U. (2007). Challenges facing the Islamic financial industry. In M. Kabir Hassan & M. K. Lewis (Eds.), *Handbook of Islamic banking* (pp. 325–357). Cheltenham: Edward Elgar.
- Chirinko, R., Arslan-Ayaydin, O., & Binici, M. (2018). Islamic banking and firm performance: Costs, benefits and lessons from the global financial crises. In: *International symposium on money, banking and finance, sciences Po Aix*, June 7–8, 2018.
- El-Ashker, A. A. F., & Wilson, R. (2006). *Islamic economics: A short history*. Leiden/Boston: Brill.
- El-Gamal, M. A. (2006). *Islamic finance: Law, economics, and practice*. New York: Cambridge University Press.
- Gold, L. (2010). *New financial horizons. The emergence of an economy of communion*. New York: New City Press.
- Hamdani, S. N. H., Ahmad, E., & Inayat, N. (2002). Towards divine economics: Some testable propositions (with comments). *Pakistan Development Review*, 41(4), 609–626.
- Haq, N., & Mirakhor, A. (1986). *Optimal profit-sharing contract and investment in an interest-free economy, Working paper*. Washington, DC: International Monetary Fund.
- Iqbal, Z. (1997). Islamic financial systems. *Finance and Development*, 34(2), 42–45.
- Iqbal, U., & Cam, C. (2018). Ethical principles of the Islamic faith – Insights for the modern world. *Business and Management Research*, 7(3), 27–35. <https://doi.org/10.5430/bmr.v7n3p27>.
- Iqbal, M., Ahmed, A., & Khan, T. (1998). Challenges facing Islamic banking. Islamic Research Training Institute. Occasional paper no. 1. King Fahad National Library.

- Jamaldeen, F. (2012). *Islamic finance for dummies*. Hoboken: Wiley.
- Karsen, I. (1982). Islam and financial intermediation. *IMF Staff Papers*, 29(1), 108–142.
- Khan, M. (1986). Islamic interest-free banking: A theoretical analysis. IMF staff paper.
- Khan, F. (2010). How ‘Islamic’ is Islamic banking? *Journal of Economic Behavior & Organization*, 76, 805–820.
- Khan, F. (2015). *Islamic banking in Pakistan*. London: Routledge.
- Lewis, M. K. (2011). Ethical principles in Islamic business and banking transactions. In M. Ariff & M. Iqbal (Eds.), *The foundations of Islamic banking: Theory, practice and education*. Cheltenham: Edward Elgar.
- Lubich, C. (2007). *Essential writings*. Hyde Park: New City Press.
- Maududi, S. A. (1999). *Economic system of Islam* (4th edn), edited by Khurshid Ahmad, translated by Riaz Husain. Lahore: Islamic Publications.
- Mir, A. M. (2010). Leadership in Islam. *Journal of Leadership Studies*, 4, 69–72. <https://doi.org/10.1002/jls.20180>.
- Qutait, M. A. (2018). Review of divine economics framework. *SSRN Electronic Journal*, 1–11. <https://doi.org/10.2139/ssrn.3162020>.
- Quttainah, M. A. (2012). The origins and emergence of Islamic financial institutions. Available at SSRN 2049379.
- Quttainah, M. A., & Almutairi, A. R. (2017). Corporate ethics: Evidence from Islamic banks. *Journal of Management and Governance*, 21, 815. <https://doi.org/10.1007/s10997-016-9360-6>.
- Rice, G. (1999). Islamic ethics and implications for business. *Journal of Business Ethics*, 18(4), 345–358.
- Rizvi, S. A. R., Bacha, O. I., & Mirakhor, A. (2016). *Public finance and Islamic capital markets: Theory and application*. London: Palgrave Mcmillan.
- Shaffaii, S. (2008). How Shariah governance empowers Islamic finance. *Islamic Finance News*, 5(36), 1–3.
- Sivan, E. (1990). The Islamic Resurgence: Civil society strikes Back. *Journal of Contemporary History*, 25(2/3), 353–364.
- Slomp, J. (2007). *De Soefi Beweging*. Kampen: Kok.
- Solomon, R. C. (2003). *Ethics and excellence: Cooperation and integrity in business*. New York: Oxford University Press.
- van Duyn, A. (2010). US: Presence and role of market remain marginal. Special report The Future of Islamic Finance, *Financial Times*, 14 December.
- Visser, H. (2009). *Islamic finance: Principles and practice*. Cheltenham: Edward Elgar.
- Visser, H. (2012). Islamic finance: Aims, claims and the realities of the market place. In A. Rexha & S. Badiani (Eds.), *Ethical investment study social responsibility for the Gulf investment Arab financial forum* (pp. 25–70). London: Granville House. <http://dare.uvu.nl/bitstream/handle/1871/39423/2012?sequen>.
- Wilson, R. (2002). Parallels between Islamic and ethical banking. *Review of Islamic Economics*, 11, 51–62.
- Zsolnai, L. (Ed.). (2011). *Spirituality and ethics in management* (2nd ed.). Dordrecht: Springer.

Islamic Governance

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Definition

Governance is relationship between government and governed people, and following the same principle corporate governance is relationship between the corporation and constituents. Islamic governance follows Islamic rules and modus operandi in the process of governance. Puts the stress on Islamic values, spiritual and tangible needs of the community, relationship between corporate goals and benefits of all stakeholders (customers, suppliers, employees, competitors). Islamic values are fuel for the company governed in Islamic way and should be the basis for creating corporate goals, codes of conduct, codes of ethics, etc. Islamic governance deals with property rights, contracting and finding the way to create and implement an adequate incentive system. Islamic law and morality are the framework in which Islamic corporation should be created. At the same time there is a challenge for the entrepreneurs living in non-Muslim countries with no Islamic law and financial system. But the award for striving to achieve virtue of deeds is higher.

Introduction

Islamic governance is mostly connected with Islamic banking, Islamic finance, and with performing business in Islamic states. But truly, Islamic governance is connected with running business all over the world, and it is even more important, not only in Islamic banking and

Islamic finance but in areas of management, marketing, business ethics, Human Resource Management (HRM), legal issues, etc.

The word governance comes from the Greek word “kubernaein” and the Latin verb “gubernare” which means “to steer.”

By definition, governance is the relationship between the governor and the governed. This applies to the state, but it can also apply to companies in terms of the power held by people in management and their relationship with subordinates. Conceptually, the leadership of the state and the company are similar, and both the company and the state choose the way of governance.

Islamic Governance

According to Lewis there are three types of governance:

1. Legal, which answers the question “by whom,” that is, how the company was created and who is responsible for the company’s activities. This concept can be problematic in the Islamic understanding of the company management.
2. Economic, which answers the question “for whom,” whereby the company was created either to maximize profits or take care of stakeholders.
3. Accounting, which answers the question “with what resources” the company is capacitated.

In line with these types, Lewis made the difference between three possible approaches to corporate governance (Lewis 2005).

1. Managed corporation model
2. Socially responsive corporation
3. Islamic governed corporation

The managed corporation model strives to maximize profits, and the value of shares. Decisions are made by the CEO and top management, while the finances are managed by shareholders and investors. In contrast, in socially responsive corporation processes are led by executive and supervisory boards, decisions are made for

stakeholders, which indicates that this approach is based on stakeholder theory. The resources used to perform the work are at the level of corporate responsibility toward society and the community, not only toward shareholders. This is called “the triple bottom line” agenda, which has an economic, social, and environmental dimension, and which takes care of sustainability and corporate social responsibility.

In an Islamic governed corporation, decisions (by whom) are made by the shura, a group whose mechanism of action is based on consultation and agreement. If it is a question of “for whom the corporation works” and “for whom it does the work,” the answer is the community, where the base of action is represented by hisba, the supervision that implements the agenda of “commanding right and forbidding wrong.” And ultimately the answer to the question with what resources goes through the shariah, the religious audit. This is especially related to the institution of zakat, a special type of mandatory tax on money or harvest (Azid et al. 2007).

Shura

The shura assumes expert consultation before making a decision. It can be similar to the stakeholder theory in which boards (executive and supervisory) or committees play an important role. Counseling has deep roots in Islam and remains a positive practice today.

Hisbah and Muhtasib (Supervision)

Ibn Teymiyye said that all services in Islam should command right and forbid wrong. *Hisbah* is the service that controls the correctness of business, and muhtasib is the person who performs this task. *Hisbah* originates from the Prophet Muhammad (peace be upon him), who personally controlled the quality of the grain in the market and when he found that the wet grain was hidden under the dry one, he said to the merchant: “Those who cheat us are not from us.” Many papers have been published on this topic, which indicates its

importance. Muhtasibs checked industry, professional services, product standardization, associations, bad practices, as well as supply and demand. In addition to this segment, social behavior, religious obligations, and civic activities of people are also controlled.

Shariah

As stated earlier the behavior of a company in Islam should not differ from that of an individual Muslim as a person. Considering that the company is not a living being, it is the actions of the manager that will give the direction and pattern of behavior. The sources of *shariah* are Quran, hadith, *ijma* – consensus of ulama and *kiyyas* – analogy. In business, it serves to prevent and react to all possible management anomalies.

Islamic governance has its deep roots in Quran and hadith. These sources regulate all aspects of life and business as well. Business must be inspired and guided by *tawhid* (oneness of God), *ihsan* (kindness), *tawakkul* (fear of Allah and awareness of Allah's constant presence), along with constant awareness of what is permitted and what is prohibited, that is, interest (*Riba*). The mode of action must be based on justice, kindness, honesty, patience, the desire to spend money for the benefit of the community. At the same time company should avoid prohibited acts and traits such as tyranny (*zulum*), greed, accumulation of wealth, and unnecessary extravagance.

Some countries allow the full application of Sharia law, while in most others this type of norm is not entirely possible. Regardless of the state regulation, an Islamic company must adhere to the above-mentioned principles, rules, and prohibitions. That means that the way a company operates in Islam should not be different from the way an individual, a believer, operates.

The Islamic system is based on rules that "lead to rewards if followed or punishment if not followed." Therefore, accepting the rules puts a person in a position to behave correctly and thereby contribute to community and society. In the legal sphere, all details are implemented

through Islamic law. This refers to contracts, the way the company is organized, the issue of ownership, payments, etc.

The company's organizational system must comply with applicable laws. If there are any deviations that affect the proper operation of the company, the system is obliged to remove them. The goal of this approach is to protect social justice. A direct relation to work is mentioned in many places in the Quran; the relations of the employees toward the company they work for, the trust shown to them *amanah* (legacy), and their acceptance of the institute of contract. It is stressed that the employee must not knowingly harm the company, but also that the company must do everything to protect the rights of its workers.

Property in Islam

Basis for the further talk is the property issue in Islam. Society in Islam exists for the benefit of the individuals in it. The company operates through state and other organizations.

Ownership in Islam can be absolute or real and delegated or restricted due to the time limit of ownership. The owner of everything in the heavens and on earth is Allah, which assumes that man cannot be the true owner, but only the one who manages what is entrusted to him as a trustee or custodian. However, an individual is formally the owner, and he is subject to numerous restrictions, whereby he must not cheat, exaggerate, skim the scale, or hide the goods until their value increases due to some accident. Individuals have obligations toward themselves, their neighbors, and society. Islamic economics insists that the purpose and goal of the market is cooperation, compassion, solidarity, and doing good. One of the Qur'anic obligations is the fulfillment of contracts. The ownership is determined by the contract, it can be inherited, can be transferred to another person, and in case of sale, the contract should contain an offer and acceptance of the offer. If the terms of the contract are inappropriate, the contract cannot be considered valid (Iqbal and Mirakhor 2004).

The Relationship Between the Company and Corporate Social Responsibility

Although Friedman emphasized that profit maximization is actually the company's social responsibility in an Islamic company, the company's goal is to serve society. If the company operates in this way, it fulfills its obligation to God. This can be observed at the micro and macro level, activities in the community and globally. Special importance in Islam is given to common property and within that to the institution of *waqf* or public good (Islahi 2015). The two basic axioms of Islamic economics, *Rububiya* and *Tazkiya*, insist that the company's operations are in harmony with society and its natural environment. *Rububiya* refers to strengthening, growing, and sustaining on the path of God's perfection, while the *tazkiya* is dedicated to the growth and purification of attitudes and relationships. This shows how important is the relationship between society and the company that operates in that society (Ahmad 1994).

Challenges of Islamic Governance

The main issue is the conductivity of Islamic law, if it even exists in the country where the company operates. This concept must be followed regardless of the existence of Islamic law. The concept of doing business according to Islamic principles can be implemented all over the world, if the owner or the board is determined to implement the goals of Islamic business.

Consultation is necessary, but a careful selection of the experts who will be consulted is necessary too. It is obligatory to include both internal and external influential members.

Many scholars have pointed out, applying Islamic principles requires deep insight of the social, cultural, and political environments.

Beekun makes the distinction between *shari* principles and *tabi* principles. *Shari* principles are derived from revelation. Their objectives are to distinguish between what is permissible and what is forbidden and to create a just economic system. The *tabi* principles are the natural principles that

determine efficiency, competence, and performance (Beekun and Badawi 2005).

Interest-based loans, a major concern with the way the economy is structured is that it is simply not sustainable. Sustainability has become a strategic imperative for many organizations.

Defensive routines is a polite way of saying that most people in the organization hide facts to avoid embarrassment. This means that inaccurate communication is the norm inside the organization, and this influences the strategic management process as facts, opinions, and analyzes are presented in such a way as to protect people from embarrassment and harassment.

Conflicts of interest arise whenever a reward system has been poorly designed. If there is a conflict of interest, we cannot have regular communication and relationship within the company. This can cause mistrust, disrespect, and additional problems (Fontaine and Ahmad 2013).

Summary

Islamic governance is a model of company management with respect for Islamic principles and values. It is closely and directly related to stakeholder theory, but it is not completely identical to it. In Islamic management, the focus is on the correct interpretation of ownership rights, compliance with signed contracts and agreements, creation of the best way to compensate employees, and, ultimately, on quality relations between the company and all stakeholders. There is a special focus on the benefits for the community and society, whereby voluntary participation in social processes is emphasized, apart from the mandatory payment to the state in the form of taxes or *zakat*. Islamic leadership starts with the consultation of experts in a certain field (*shura*), then a concept is created and the goals and action strategies are defined. The control is carried out in the *hisbah* process. The competent controllers – *muhtasib* – include all aspects of business and behavior within the framework of Islamic rules. Ultimately, the company's resources are allocated through the rules set by the *shariah* to the places that are permitted, in the manner that is permitted and

avoiding prohibitions. The entire business process is marked with Islamic ethics, kind attitude, fairness, and desire for the welfare of all people who have contact with the company, whether they are product buyers, service users, owners or co-owners, workers, managers, or residents in the area where the company operates. Islamic governance is easier to practice in the countries of the Islamic world where Islamic law rules, and business is also adapted to the rules required by Islamic teachings. This particularly applies to Islamic finance and banking. At the same time, it is necessary to find ways and make additional efforts to facilitate Islamic governance as a positive practice throughout the world.

Cross-References

- [Islamic Business Ethics](#)
- [Islamic Stakeholder Theory](#)
- [Stakeholder](#)

References

- Ahmad, K. (1994). *Islamic approach to development: Some policy implications*. Islamabad: Institute of Policy Studies.
- Azid, T., Asutay, M., & Burki, U. (2007). Theory of the firm, management and stakeholders: An Islamic perspective. *Islamic Economic Studies*, 15(1).
- Beekun, R. I., & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of Business Ethics*, 60, 131–145.
- Fontaine, R., & Ahmad, K. (2013). *Strategic management from an Islamic perspective*. John Wiley & Sons Singapore Pte. Ltd.
- Iqbal, Z., & Mirakhor, A. (2004). Stakeholders model of governance in Islamic economic system. *Islamic Economic Studies*, 11(2).
- Islahi, A. A. (2015). *Economic concepts of Ibn Taimiyah*. Kube Publishing Ltd.
- Lewis, M. K. (2005). Islamic corporate governance. *Review of Islamic Economics*, 9(1), 5–29.

Islamic Stakeholder Theory

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Definition

The importance of stakeholders in business was pointed out in the 1980s by the issuing of Freeman's Stakeholder Theory. It emphasizes all of those who are influenced and affected in any way by the company's activities. Over the years, a number of authors have contributed toward the improvement and advancement of this theory. At the same time, among Islamic business scholars and practitioners, the proximity of the Islamic way of doing business to this theory, and especially to the association toward the community and society as a whole was made clear again. This is how the Islamic stakeholder theory was created. It unified the practice of Islam, the obligations of Islamic business management, put stakeholders in their place, marked the absolute and relative right of ownership, and encouraged the importance of ethical behavior in business. Stakeholders (owners, management, and workers) in Islam have strict instructions on how to chart the direction, what they can and cannot do, what to produce, what to trade, what to invest in. Both the relation of the worker to the job and the company, and of the employer to the workers were explained. Their attitude toward the community, customers, and service users as well as their attitude toward the competition is clarified. Islamic rules are clear. They are easier to implement in Islamic countries where Islamic law prevails. Simultaneously, they provide the framework for doing business throughout the world.

Body of Text

Stakeholder theory is the concept which has been introduced in the mid-1980s by Freeman, and developed by various authors such as Donaldson,

Islamic Social Systems

- [Islamic Finance](#)

Cornell, Shapiro, Baum, Blair, Preston, Simmons, Kakabadse, and others (Kakabadse et al. 2005).

Stakeholder theory focuses on what an organization owes to the various constituencies that it is dependent on for its success. According to Freeman, stakeholder theory focuses on a core issue: on whose behalf and at whose expense is the business being run.

Stakeholder theory stands as an opposition to the traditional theory of profit maximization, which only cares about shareholders, and as such enters the sphere of the needs of all stakeholders, the sphere of business ethics, morality, corporate social responsibility, etc. In its foundation, the company chooses the governance model by which it will be run.

The traditional approach in economics and legal science is based on the agency relationship between investors and managers and focuses only on protecting the interests of investors and shareholders. According to this model, shareholders should have control, managers have a strict obligation to serve only the interests of investors, and that the business goal is profit maximization. This model is labeled as an agency model in contrast to the stewardship model, which focuses on stewards who work in the general interest, not only in the interest of shareholders.

The company is an integrated part of society and as such has certain moral and ethical obligations. In the creation and formulation of the company's goals, in addition to the business goals, these factors must also be included. The source of the ethics by which the corporation is guided is found in the basis of the corporate governance model, whereby the western, more precisely the Anglo-Saxon, model is predominantly secular and has no basis in religious values. Throughout history, the separation between the state and the church has been built, ever since the Roman era when the saying was created; Render to Caesar the things that are Caesar's, and to God the things that are God's (Mark 12:17 (KJV)). Due to this fact, from the beginning of the development of corporations, there was a separation from religious, moral and ethical principles, and rules created by man were accepted.

In contrast to this attitude toward religion in the Anglo-Saxon world, in the Islamic world the basis of all activity is the observance of religious rules. The rights of individuals, societies, states, the legal system, the question of ownership, the way of organization, and of running a corporation in Islam are viewed through the prism of Islamic belief, as well as the responsibilities and obligations that arise from it. Shariah (Islamic law) provides a broad framework for understanding, recognizing, protecting, and respecting every living being, and then also the community, society, and state. State governance in Islam is closely related to company governance. Violation of these rights is marked as *zulum* – tyranny – and is subject to severe punishment. It was even stated that a righteous non-Muslim ruler is more acceptable than a non-righteous Muslim ruler (one who does evil).

Understanding normative Islam's approach to business ethics may help the world at large grasp the mindset of Muslim businesspersons (Beekun and Badawi 2005).

From the above we can conclude that the stakeholder theory is much closer to the Islamic model and as such will be the subject of this chapter.

In Islam, a stakeholder is anyone whose property rights are at risk due to the willing or unwilling activities of the company.

It is important to emphasize that the Islamic concept of life is present on the entire planet, and it is not important in which state the principle is implemented, but how correctly it is implemented. The state is obliged to provide a framework for sustainable business according to the principles of Islam. According to the Islamicity index, this framework includes economic, legal and governance, human and political rights, and international relations components. The index shows that the best Islamic framework was achieved by New Zealand, Canada, and the countries of Northern Europe. The first Muslim country is Malaysia in the 39th place, followed by the UAE in the 43rd (Islicity index 2023), which confirms that the framework for the Islamic stakeholder theory must have a wider context, and not only the geographical determinant of the Islamic world.

The question of ownership in Islam starts from the fact that Allah (SWT) is the owner of everything in the heavens and the earth, and therefore man can only be his caliph, governor, administrator on earth. This is close to the concept of stewardship that we had the opportunity to see in stakeholder theory. According to some scholars, a person has the right to take only what is permitted to him and only as much as he needs from this property of Allah.

Islam recognizes two ways of acquiring wealth. Through work and through inheritance or a certain type of transfer, agreement, donation, etc. Gambling, bribing, forgery, cheating, stealing, coercion, etc., are not permitted. Artificial creation of scarcity and profiteering in difficult circumstances, such as various crisis situations, are also not allowed. Interest is strictly prohibited.

Conceptually, an Islamic company should focus on three things:

- That the production and distribution of something that is prohibited (haram) is equal to zero
- That the production and distribution of goods that meet people's ordinary needs is much higher than luxury goods
- That profit maximization is moderate, striving to make money, but avoiding greed

Islam adopts a stakeholder perspective that is somewhere between Freeman's approach and Goodpaster's. Whereas Freeman considers the claims of all stakeholders (defined as employees, management, owners/financiers, customers, suppliers, and the community) as equally valid, Islam recognizes the fact that the owners/financiers of a firm have the right to make a profit, but not at the expense of the claims of various other stakeholders. The firm does have a multi-fiduciary responsibility but in contrast to what Freeman (1984) proposes, Islam does not view all stakeholders as having equal claims (Beekun and Badawi 2005).

Attitude Toward Owners (Shareholders)

The issue of ownership has already been mentioned in the text, but it is important to clarify in

detail the Islamic concept of corporate ownership. So Allah is the absolute owner of everything in the heavens and on earth. People are caliphs (trustees, custodians), they have been entrusted with the management of a certain segment, be it the state or a corporation (Quran 57.7). Accordingly, we distinguish three types of relative ownership, individual, social, and state ownership. Individuals are obliged to fulfill obligations toward society and the state, and this especially applies to *zakat*, a tax that an individual is obliged to pay into the state treasury or a special treasury if the state is not in charge of collecting. If the person who is perceived as the owner complies with all Sharia rules and obligations toward society and the state, his property is protected and inviolable. If the general rules of the Islamic concept are not followed, ownership becomes questionable. However, in any case, the rights of shareholders or owners must go through legal procedures and must not be influenced by lump sum assessments.

The contract in Islam is present from the very roots. Allah made a contract with man by the very fact that man accepted to be the caliph on Earth. Just as important as a written contract is an oral one, and of particular importance is the intention – *niyyet* – to do a good or bad deed. In the Koran it is said "O you who believe, fulfill the contract" (Quran 5.1) (Iqbal and Mirakhor 2004).

Attitude Toward Workers

Islam values knowledge and skills, allows hierarchy and accepts differences in abilities, and therefore different valuation of workers. At the same time, hereditary and preferential rights in employment are not allowed in any form (Quran 46.19). Discrimination of any kind is not allowed. No preference was given to an Arab over a non-Arab or a non-Arab over an Arab. Special attention was given to the relationship between the boss (shareholder) and subordinates or servants. The hadiths of Prophet Muhammad indicate this issue. A special reward was promised to the worker who takes care of the employer's

property (Islahi 2015). Ibn Taymiyah suggests that an employer is under obligation to pay a fair remuneration to his employees. Therefore, the employer is required to take special care in relation to the employee. The worker should be paid for his work before his “sweat dries,” so there is no delay in payment or debt to the worker. The hadith says that all people are dependent on Allah, and the best among them are those who are benevolent toward the people who are in their possession (dependents) and those who distribute wealth justly.

This is in line with the opinions that the understanding and acceptance of the meaning and purpose of the business by employees, and thus creating a sense of belonging to the company, is essential for its good functioning. If the employee connects his identity with the company’s identity, work efficiency becomes higher than in the case of mere financial compensation (Ahmad 1979). Employers must take care of the working conditions, physical and health conditions of their employees, but also of other members of the community.

Work in Islam is perceived as *ibadah* (worshiping God) and as such must be mutually respected. Work is an obligation for a healthy Muslim and should be used to its full capacity.

Attitude Toward Users of Products and Services

The company’s activities directed toward users of products and services must be in accordance with Islamic postulates. This especially refers to an ethical, sincere, honest relationship with customers. The customer information segment is very important, in which the company is obliged to inform the customer in detail and accurately about the product or service, type, price, origin, distribution. Trade in which there is no benefit, trade in worthless goods, trade in illegal, *haram* products (alcohol, pork, etc.) is prohibited, and it is important to emphasize again the strict prohibition of interest, causing damage, unfavorable deadlines, harassment, and corruption (Azid et al. 2007).

Attitude Toward Stakeholders Participating in Production

Islam does not consider the maximum use of all the company’s resources a problem if it does not conflict with the interest of the community. One of the goals of the company must be the creation of a healthy working environment, along with the improvement of society and the community. If the company’s setting is aligned with these postulates, fewer strikes and dissatisfaction among employees can be expected.

Attitude Toward Society (Corporate Social Responsibility)

The goal of a company in Islam is not only the maximization of profit but also the maximization of social charity. The goal is profit, but also social well-being. In order to reach this goal, we must insist on moral and ethical business and values. This means that an entrepreneur must strive to satisfy both material and spiritual needs. The desire for profit must not lead an entrepreneur into the framework of illegal, prohibited activities.

When it comes to society, the desire to maximize profits can be achieved by raising prices, which negatively affects society, or by reducing costs, especially wages, which negatively affects workers and morale within the company. Maximizing profit at the expense of social welfare is not acceptable in Islam. The company should focus on achieving goals, but it is primarily a service to society and as such should be in harmony with the environment in terms of economic and ecological sustainability, while at the same time giving its share in charitable activities, mandatory or voluntary.

Ethics in Islam

Sources of ethics in Islam are the same as sources of *shariat* – Quran, Hadith (messenger Muhammed’s saying) as primary sources as well as *Ijma* (consensus of scholars) and analogy *Qiyas*.

According to Beekun, criteria of relevance for stakeholders are justice and balance, trust and benevolence (Beekun and Badawi 2005).

“The criterion of justice is described by two words in the Qur’an: ‘adl and qist;’ ‘*adl* means “equity, balance.” Muslims are encouraged to behave justly towards all. At the same time, the term ‘adl also applies to the concept of balance and equilibrium. It means doing things in a proportionate manner, avoiding extremes. Justice is also described in the Qur’an by another important word: Qist. It means “share, portion, measure, allotment, [or] amount.” The word qist means to give everyone and everything their proper due.

The second criterion of Islamic ethics relates to the concept of *amanah* or trust. Man is God’s trustee on earth and as such must bear responsibility for his actions. The wealth and other resources that mankind has access to are not his, but have been loaned to him by God as tools to fulfill the responsibilities of the trusteeship.

The third criterion of Islamic ethics is benevolence or excellence. Benevolence (*ihsaan*) or kindness to others is defined as “an act which benefits persons other than those from whom the act proceeds without any obligation.” At its core, the word *Ihsaan* is derived from the Arabic root h-s-n which means “suitable,” “beautiful,” “proper,” or “and this concept is the core of Islamic ethics because it focuses on behavior for the love of the God.”

Conclusion

Islam is a way of life, not just a religion. As a result, business in Islam cannot be separated from other aspects of life. Islamic stakeholder approach shows where is the place of specific stakeholders in proportion to their importance. The responsibility of each stakeholder is to follow the Islamic rules, shariah law, act as a trustee or guardian on the Earth, and at the same time think about community and society. This theory is useful in Islamic states, but indeed it is the framework which has a wider context, and not only the geographical determinant of the Islamic world.

Cross-References

- [Islamic Business Ethics](#)
- [Islamic Governance](#)
- [Stakeholder](#)
- [Stakeholder Theory](#)

References

- Ahmad, K. (1979). *Economic development in an Islamic framework*. Leicester: The Islamic Foundation.
- Azid, T., Asutay, M., & Burki, U. (2007). Theory of the firm, management and stakeholders: An Islamic perspective. *Islamic Economic Studies*, 15(1).
- Beekun, R. I., & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of Business Ethics*, 60, 131–145.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Iqbal, Z., & Mirakhor, A. (2004). Stakeholders model of governance in Islamic economic system. *Islamic Economic Studies*, 11(2).
- Islahi, A. A. (2015). *Economic concepts of Ibn Taimiyah*. Kube Publishing.
- Islamicity Indices. (2023). [Islamicity-index.org/wp/](https://islamicity-index.org/wp/). Accessed 15 Jan 2023.
- Kakabadse, N. K., Rozuel, C., & Lee-Davies, L. (2005). Corporate social responsibility and stakeholder approach: A conceptual review. *International Journal of Business Governance and Ethics*, 1(4), 277–302.

Islamic Sustainability

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Synonyms

[The sustainability concept in Islam](#)

Description of Islamic Sustainability

Economic inequality, unconscious abuse of natural resources, and unethical practices in business life have brought sustainability to the agenda. Sustainable development draws global attention

to the negative effects and deficiencies of the current economic system, environmental and social problems such as the climate crisis, pollution, overpopulation, and inequality. This awareness has led to concerns and conscious awareness among people from different cultures and societies. Considering sustainability from the perspective of the religion of Islam, it expresses a traditional, natural, and actually not a new approach. Islamic philosophy is derived from two main sources, namely, “Al-Quran” (the central religious text) and “Sunnah” (words and teachings of Prophet Muhammad). Based on these, “Allah” (the God) is the absolute owner and as a sign of his greatness, he is responsible for creating all creatures in the universe in harmony whereas mankind is a “trustee” of the world. The Earth is encompassed by several resources that are enough and sufficient for all human beings if they are managed and consumed wisely (Sarkawi, Abdullah, and Dali, 2016). Since both the religion of Islam and the concept of sustainability advocate the idea that the universe should be preserved to be able to pass on to future generations and its resources should be protected as well, the concept of Islamic sustainability, which examines these two concepts together in an integrated way instead of isolating them, has started to be discussed in the literature.

Sustainable Development from an Islamic Perspective

The concept of sustainability, which was coined by the Brundtland Commission in 1987, was defined as “*development that meets the needs of the present without compromising the ability of future generations to meet their needs*” (WCED, 1987, p. 43). Hasan (2006) expresses that the Brundtland Commission’s view on sustainable development is in parallel with the Islamic values and objectives. Initially, the definition of the concept and its development has a global character and is effective for all in the world. Similarly, Islam is also a universal religion that “addresses the entire mankind not the believers alone.” In addition, the ultimate aim of the Islam focuses

on the human well-being through “safeguarding faith, human self, intellect, posterity and wealth.” Thus, “wisdom, mercy, and justice” are required to achieve this objective (Hasan, 2006, p.8). Based on this, Islamic sustainability considers the Muslim belief and the behaviors brought by this belief as a rule and guide that can affect the social, environmental, and economic dimensions of sustainability. There are numerous principles and values related to the economic, social, and environmental dimensions of sustainability in Islam. Moreover, Ahmadi (2016, p.7) indicates that Islam provides new perspectives to the notion of sustainable development in regard to understanding and clarifying the antecedents of the existing environmental, economic, and social matters that arise from overpopulation, poverty, human security, human and labor rights, depletion of natural resources, environmental contamination, and climate change.

Sustainable development with an Islamic approach shows a perspective beyond the material benefits provided by the environment and natural resources. Human beings are a part of nature, but among all other creatures, they are superior with their mental capabilities, and their reliance will be questioned on the “Day of Resurrection” as a provision of the fundamental rules of Islam. All resources are blessings given by the “Creator” (the God, Allah) and require the awareness that these blessings are temporary. This necessity can be demonstrated with an approach that values nature by avoiding waste and gives importance to spiritual development as well as material development. The economic, social, and environmental problems created by the practices of the current system’s political, economic, and social institutions began to manifest themselves in all areas of life. As a result of economic development, the rights and natural resources of local and Indigenous people can be restricted in line with the needs determined by developed countries. Its structure covering a very wide range of sustainability necessitates its development as a model. Thus, Islamic view provides a new perspective to achieve a balance between economy, society, and environment and enables to protect spiritual or nonmaterial needs of people through promoting

spirituality, justice, and protection of the environment together with protecting material needs required for economic performance (Hasan, 2006).

The most basic teaching in Islamic culture is to realize consumption, which is seen as a necessity beyond wealth and luxury life, and therefore to protect resources. If these resources are not protected, from the Islamic point of view, “fasad” (ecological deterioration, moral corruption, and disturbance of peace) will bring social exclusion along with it. Concerns about the social dimension, equality, social justice, “shura” (public participation), and the living conditions of future generations, which are an important dimension of sustainability, constitute the most important building blocks of Islamic philosophy. Taking both the material and spiritual aspects of life together as a whole is an expression of devotion to Allah, and this can be achieved in the best way with the most correct use of the resources in the world (Ahmadi, 2016).

Environmental Dimension of Sustainability

From an Islamic point of view, the universe, the earth, sun, moon, all animals, and plants, in its simplest sense everything one can imagine in the environment, have been created by Allah with a particular purpose. Thus, all natural resources are recognized as the gift of Allah so that appreciation to the environment can be seen as a worship to Allah. In addition, it is believed that arbitrary and selfish use of natural resources should be prevented. To maximize benefitting from the resources for all, people must seek ways to protect the environment on the planet in accordance with the provisions of Al-Quran and Sunnah. Thus, the balance and harmony of the universe are significant necessities to maintain and preserve the earth and the environment (Ahmadi, 2016). According to Al-Quran “respecting the law of nature and all its components is an obligation of every Muslim” (Matali, 2012, p. 35). This view is in accordance with the environmental sustainability goals of meeting the needs of today without endangering the resources required by the future generations (Nouh, 2012). In line with the Brundtland Commission’s perspective, Al-Quran emphasizes the

concept of needs, instead of wants, and advises to avoid damaging renewable and nonrenewable resources including water, soil, forests, animals, etc. Accordingly, each individual in the world has the right to benefit equally from the resources offered by the environment and should consider the potential needs of future generations when exercising this right (Ahmadi, 2016).

Economic Dimension of Sustainability

Islamic economic perspective is related to social issues, and thus they are based on sharing and optimizing wealth distribution. Islam promotes development and growth socially and economically regarding socioeconomic improvement via “waqaf” (endowment) and “zakat” (alms) provisions (Sarkawi et al., 2016). As a rule of thumb, transactions are forbidden as the gain of somebody may result in a loss for another, so a transaction should be socially optimal, and mutual approval is not enough for a permissible transaction (Ahmadi, 2016). Economic activities can only be realized if there are sufficient resources. Thus, from the Islamic perspective, the economy is dependent on the environment which is believed as Allah’s creation and humankind should have the responsibility in managing the economic and environmental resources in regard to satisfy both economic (material) and spiritual (nonmaterial) needs of the people (Sarkawi et al., 2016).

Social Dimension of Sustainability

As a part of the role of humankind in the functioning of the universe, adding value to life with his spiritual values, helping others, and providing scientific development for future generations refer to the social lifestyle of humans from the Islamic point of view. It is one of the most important Islamic teachings to stay away from waste and overly focused consumption while maintaining this lifestyle.

Ethical practices in the social dimension of sustainability are also accepted as the most important feature that organizes social life in the religion of Islam. It is a concept that expresses the most efficient use of existing resources, the equitable and fair distribution of these resources, and the

support of groups in need through alms and emphasizes the issue of social justice. The religion of Islam, which accepts the differences between individuals, states that wealth may not be equally distributed in a society, but this situation can be balanced with help and benevolence. Through alms and philanthropy, social justice can be effectively achieved. The Islamic perspective, which emphasizes the importance of giving, has made Muslims a part of an effective social apparatus with various teachings that will ensure social justice (Ahmadi, 2016).

Spiritual Dimension of Sustainability

As Islam propagates the idea that human beings are responsive to manage the resources they need in the universe rationally with their mental capabilities and should not cause harm to any other creature while doing so, it provides an ethical code to people to live in harmony. Although Islam has the moral agenda necessary to ensure sustainable development, efforts and practices should be comprehensively addressed to mitigate the economic and environmental crises encountered, and this perspective should be included in Islamic sustainability (Ansari, 1994; Niaz, 2001). Odeh (2009), who argues that sustainable development cannot be realized by excluding the spiritual aspect of people from an Islamic perspective, emphasizes that the essence and mission of humanity should be preserved in this process. Shaharir (2012) argues that sustainability has been narrowly defined so far and remarks the need of the inclusion of the spiritual and cultural dimensions of the human being in the content of the sustainability definitions. Addressing sustainability with an Islamic perspective contributes to filling this gap and deficiency.

Summary

Islam deals with various aspects of sustainable development, and values of the Islamic perspective are compatible with the notion of sustainable development. Thus, the responsibility of human beings to the natural and social environment and using the resources in a sustainable manner are the

fundamental features recognized and widely accepted. From the Islamic perspective, sustainability can be defined by Shaharir (2012) as follows:

“...a state of being achieving a wusta (moderate, middle way, balanced and just) level of physical, social, political, economic, science-knowledge, cultural and religio-spiritual needs of the present man without sacrificing the all relevant resources and all beings created by the God so that future generations will be able to enjoy at least the same level of happiness in this world and hereafter as the present generation” (Shaharir, 2012, p.95).

Islamic sustainability presents significant features. First, social and economic sustainability are interrelated, and they are both part of the environment. Thus, the coordination, balance, and interaction between people and the environment is necessary for the maintenance of the system. Second, nature, which is recognized as a test for human beings, who are the members of nature, will perform their social and economic tasks, and will be questioned on the Day of Resurrection, has been created in its natural order, in perfect balance. Third, biodiversity which is promoted by sustainable development guidelines has intrinsic and environmental meanings and values for human beings not only material resources but also spiritual existence. Under these circumstances, it is clear that there is a close relationship between Islam and sustainability (Sarkawi et al. 2016). Although not everyone in the world believes in Islam, Islam is a “universal religion” and is for everyone, just as the concept of sustainability is a global concept developed for the whole world.

Cross-References

- Islamic Banking
- Sustainable Development

References

- Ahmadi, M. (2016). Sustainable development-Islamic perspectives. In 1st International Conference on Rethinking the Sustainable Development. Tabriz: Iran Earth Charter.

- Ansari, M. I. (1994). Islamic perspectives on sustainable development. *American Journal of Islam and Society*, 11(3), 394–402.
- Hasan, Z. (2006). Sustainable development from an Islamic perspective: Meaning, implications, and policy concerns. *Journal of King Abdulaziz University: Islamic Economics*, 19(1).
- Matali, Z. H. (2012). Sustainability in Islam. Faith Values and Education for Sustainable Development, 35.
- Niaz, A. K. (2001). Sustainable Development & Islamic Ethics: A primer on conceptual linkages. *Journal of Islamic Administration*, 4-5(1), 27–36.
- Nouh, M. (2012). Sustainable development in a Muslim context. Faith Values and Education for Sustainable Development, 39.
- Odeh, A. J. (2009). Islamic values and rural sustainable. *International Platform*, 39–41.
- Sarkawi, A. A., Abdullah, A., & Dali, N. (2016). The concept of sustainability from the Islamic perspectives. *International Journal of Business, Economics and Law*, 9(5), 112–116.
- Shaharir, B. M. Z. (2012). A new paradigm of sustainability. *Journal of Sustainable Development*, 5(1), 91.
- World Commission on Environment and Development (WCED). (1987). *Our Common Future*. Oxford: Oxford University.

ISO 14000 Series

► [ISO 14000 Standards Series](#)

ISO 14000 Standards Family

► [ISO 14000 Standards Series](#)

ISO 14000 Standards Series

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Synonyms

[ISO 14000 series](#); [ISO 14000 standards family](#);
[ISO standards on environmental management](#)

Definition

The ISO 14000 standards series has been introduced in 1996 by the ISO Technical Committee ISO/TC 207 “Environmental management.” The ISO 14000 refers to a series of international environmental management system standards that can be implemented by all organizations (regardless of their size, activity, or sector) that tend to manage environmental responsibilities (ISO 2019). The most popular standard from the ISO 14000 standards series is ISO 14001 – according to “the ISO Survey of Certifications to Management System Standards” – there are “about 300.000 organizations, in over 170 countries – certified to ISO 14001” (ISO 2019). ISO 14001 specifies the requirements for all organizations that want to establish an effective environmental management system (ISO 2019). According to ISO (2015b) – ISO 14001 requires that all environmental aspects related to environmental performance are considered, such as – “air pollution, water and sewage issues, waste management, soil contamination, climate change mitigation and adaptation, and resource use and efficiency.” ISO 14001:2015 has been revised to address several aspects of the environmental management system, such as – encouraging leadership and commitment to enhance environmental performance, and introducing different environmental management aspects into the organizational strategy (ISO 2015b).

History

In 1992, the British Standards Institute (BSI) developed the BS 7750, the first environmental management system standard, and in 1996, ISO/TC 207 introduced the ISO 14000. The most popular standard from this series is ISO 14001:2015, and it was created as a result of growing needs to address sustainable development. According to ISO (2015a) – in recent years, a variety of actions have been taken to allow easier integration of ISO 14001:2015 with other management system standards, especially ISO 9001:2015, as both standards have the same structure (ISO 2015a). One of the most successful

actions refers to the development of a certain common standard ISO 19011:2018 – “Guidelines for auditing management systems” (ISO 2015a). The other standards from ISO 14000 standards series address aspects, such as – environmental performance, life cycle assessment, eco-labeling, greenhouse gas emissions, etc. (ISO 2019).

Benefits of Adopting ISO 14001

There are several benefits of adopting ISO 14001 that have been repeatedly stressed out in the current state of research – “environmental performance,” “efficiency,” and “profitability” (Tari et al. 2012). Other benefits of adopting ISO 14001 refer to the enhanced satisfaction of customers and stakeholders, enhanced global competitiveness, quality of goods and services, and sales (Tari et al. 2012). Similarly, enhanced global competitiveness, efficiency, and environmental performance are found to be most considered in the current state of research (Heras-Saizarbitoria et al. 2011). Accordingly, there is a belief that special attention shall be paid to “the management attitude towards the environment” (Heras-Saizarbitoria et al. 2011).

According to ISO (2015b) – users of ISO 14001:2015 also reported the following benefits:

- Ensure “compliance with current and future statutory and regulatory requirements”.
- Encourage the engagement of the top management, managers, and employees.
- Strengthen the organization’s brand and image “through strategic communication”.
- Enable the achievement of strategic organizational goals, objectives, and targets.
- Enhance global competitiveness, “through enhanced efficiency and reduced costs”.
- Enhance the environmental performance of all the stakeholders and interested parties.

PDCA (Plan-Do-Check-Act) Cycle

In the context of the ISO 14000 – Planning stands for establishing goals of the environmental

management system, all the resources needed for its implementation as well as all of the risks and opportunities for improvement (ISO 2015c). Doing refers to the implementation of all the planned environmental actions (ISO 2015c). Checking means monitoring and measuring (if applicable) results of processes and activities and reporting about all achieved outcomes (ISO 2015c). Acting means performing such actions to enhance organizational performance (ISO 2015c). Figure showing the structure of ISO 14001:2015 in relation to the PDCA cycle can be found at the ISO platform (see ISO 2020).

The classification of the core standards of ISO 14000 series in relation to the PDCA cycle (adapted and updated from ISO (2009)) is given in Table 1.

Besides all of the aforementioned published standards on environmental management, several standards are currently under development, such as:

- **ISO/WD 14002–2** – “Environmental management systems – Guidelines for using ISO 14001 to address environmental aspects and conditions within an environmental topic area – Part 1: Water”.
- **ISO/DIS 14009** – “Environmental management systems – Guidelines for incorporating material circulation in design and development”.
- **ISO/AWI 14015** – “Environmental management – Environmental due diligence assessment”.
- **ISO/AWI 14017** – “Environmental management – Requirements with guidance for verification and validation of water statements”.
- **ISO/WD 14020** – “Environmental labels and declarations – General principles”.
- **ISO 14021:2016 / DAMD 1** – “Environmental labels and declarations – Self-declared environmental claims (Type II environmental labeling) – Amendment 1: Carbon footprint, carbon-neutral”.
- **ISO/WD TS 14029** – “Mutual recognition agreements between Type III environmental declaration (EPD) program operators – Principles and procedures”.

ISO 14000 Standards Series, Table 1 Core standards of ISO 14000 in relation to the PDCA cycle

PLAN	DO	CHECK	ACT
<i>Environmental management systems</i>	<i>Life cycle assessment</i>	<i>Environmental auditing and related environmental investigations</i>	<i>Environmental labeling</i>
ISO 14001:2015 “Environmental management systems – Requirements with guidance for use”	ISO 14040:2006 “Environmental management – Life cycle assessment – Principles and framework”	ISO 14015:2001 “Environmental management – Environmental assessment of sites and organizations (EASO)”	ISO 14020:2000 “Environmental labels and declarations – General principles”
ISO 14002-1:2019 “Environmental management systems – Guidelines for using ISO 14001 to address environmental aspects and conditions within an environmental topic area – Part 1: General”	ISO 14044:2006 “Environmental management – Life cycle assessment – Requirements and guidelines”	ISO 14016:2020 “Guidelines on the assurance of environmental reports”	ISO 14021:2016 “Environmental labels and declarations – Self-declared environmental claims (type II environmental labeling)”
		<i>Environmental performance evaluation</i>	
ISO 14004:2016 “Environmental management systems – General guidelines on implementation”	ISO 14044:2006 / AMD1: 2017 “Environmental management – Life cycle assessment – Requirements and guidelines – Amendment 1”	ISO 14031:2013 “Environmental management – Environmental performance evaluation – Guidelines”	ISO 14024:2018 “Environmental labels and declarations – Type I environmental labeling – Principles and procedures”
ISO 14005:2019 “Environmental management systems – Guidelines for a flexible approach to a phased implementation”	ISO 14045:2012 “Environmental management – Eco-efficiency assessment of product systems – Principles, requirements, and guidelines”	ISO 14033:2019 “Environmental Management – Quantitative Environmental Information – Guidelines and Examples”	ISO 14025:2006 “Environmental labels and declarations – Type III environmental declarations – Principles and procedures”
ISO 14006:2020 “Environmental management systems – Guidelines for incorporating ecodesign”	ISO 14046:2014 “Environmental management – Water footprint – Principles, requirements, and guidelines”	ISO 14034:2016 “Environmental Management – Environmental Technology Verification (ETV)”	ISO 14026:2017 “Environmental labels and declarations – Principles, requirements, and guidelines for communication of footprint information”
ISO 14007:2019 “Environmental management – Guidelines for determining environmental costs and benefits”	ISO/TR 14047:2012 “Environmental management – Life cycle assessment – Illustrative examples on how to apply ISO 14044 to impact assessment situations”	ISO 14063:2020 “Environmental management – Environmental communication – Guidelines and examples”	ISO/TS 14027:2017 “Environmental labels and declarations – Development of product category rules”
ISO 14008:2019 “Monetary valuation of environmental impacts and related environmental aspects”	ISO/TS 14048:2002 “Environmental management – Life cycle assessment – Data documentation format”		

(continued)

ISO 14000 Standards Series, Table 1 (continued)

PLAN	DO	CHECK	ACT
	ISO/TR 14049:2012 “Environmental management – Life cycle assessment – Illustrative examples on how to apply ISO 14044 to goal and scope definition and inventory analysis”		
	ISO/TS 14071:2014 “Environmental management – Life cycle assessment – Critical review process and reviewer competencies – Additional requirements and guidelines to ISO 14044:2006”		
	ISO/TS 14072:2014 “Environmental management – Life cycle assessment – Requirements and guidelines for organizational life cycle assessment”		
	ISO/TS 14073:2017 “Environmental management – Water footprint – Illustrative examples on how to apply ISO 14046”		
<i>Environmental management</i>	<i>Greenhouse gas management and related activities</i>	<i>Greenhouse gas evaluation and related activities</i>	
ISO Guide 64:2008 “Guide for addressing environmental issues in product standards”	ISO 14064-1:2018 “Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals”	ISO 14064-3:2019 “Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements”	
ISO 14050:2009 “Environmental Management – Vocabulary”	ISO 14064-2:2019 “Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring, and reporting of greenhouse gas emission reductions or removal enhancements”	ISO 14065:2013 “Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition”	

(continued)

ISO 14000 Standards Series, Table 1 (continued)

PLAN	DO	CHECK	ACT
ISO 14051:2011 “Material flow cost accounting – General framework”	ISO 14067:2018 “Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification”	ISO 14066:2011 “Greenhouse gases – Competence requirements for greenhouse gas validation teams and verification teams”	
ISO 14052:2017 “Material flow cost accounting – Guidance for practical implementation in a supply chain”	ISO/TR 14069:2013 “Greenhouse gases – Quantification and reporting of greenhouse gas emissions for organizations – Guidance for the application of ISO 14064-1”		
ISO 14055-1:2017 “Environmental management – Guidelines for establishing good practices for combating land degradation and desertification – Part 1: Good practices framework”	ISO 14080:2018 “Greenhouse gas management and related activities – Framework and principles for methodologies on climate actions”		
ISO/TR 14062:2002 “Environmental management – Integrating environmental aspects into product design and development”	ISO 14090:2019 “Adaption to climate change – Principles, requirements, and guidelines”		
IEC 62430:2019 “Environmentally conscious design (ECD) – Principles, requirements, and guidance”	ISO 14092:2020 “Adaption to climate change – Requirements and guidance on adaptation planning for local governments and communities”		

Source: Adapted and updated from ISO [2009](#)

- **ISO/DIS 14030–1** – “Environmental performance evaluation – Green debt instruments – Part 1: Process for green bonds”.
- **ISO/DIS 14030–2** – “Environmental performance evaluation – Green debt instruments – Part 2: Process for green loans”.
- **ISO/DIS 14030–3** – “Environmental performance evaluation – Green debt instruments – Part 3: Taxonomy”.
- **ISO/DIS 14030–4** – “Environmental performance evaluation – Green debt instruments – Part 4: Verification”.
- **ISO 14031** – “Environmental management – Environmental performance evaluation – Guidelines”.
- **ISO/CD TR 14035** – “Environmental technology verification – Guidance to implement ISO 14034”.
- **ISO 14040:2006 / FDAMD 1** – “Environmental management – Life cycle assessment – Principles and framework – Amendment 1”.
- **ISO 14044:2006 / FDAMD 2** – “Environmental management – Life cycle assessment – Requirements and guidelines – Amendment 2”.

- **ISO 14050** – “Environmental Management – Vocabulary”.
- **ISO/DIS 14053** – “Material flow cost accounting – Guidance for practical implementation in SMEs”.
- **ISO/AWI TR 14055-2** – “Environmental management – Guidelines for establishing good practices for combating land degradation and desertification – Part: Regional case studies”.
- **ISO/DIS 14065** – “Greenhouse gases – Environmental information – Requirements for bodies validating and verifying environmental information”.
- **ISO/WD 14068** – “Greenhouse gas management and related activities – Carbon neutrality”.
- **ISO/AWI TR 14069** – “Greenhouse gases – Quantification and reporting of greenhouse gas emissions for organizations – Guidance for the application of ISO 14064-1”.
- **ISO/AWI TS 14074** – “Environmental management – Life cycle assessment – Principles, requirements, and guidelines for normalization, weighting, and interpretation”.
- **ISO/AWI 14082** – “Radiative forcing management – Guidance for the quantification and reporting of radioactive forcing-based climate footprints and mitigation efforts”.
- **ISO/WD 14083** – “Greenhouse gases – Quantification and reporting of greenhouse gas emissions of transport operations”.
- **ISO/DIS 14091** – “Adaption to climate change – Guidelines on vulnerability, impacts, and risk assessment”.
- **ISO/DIS 14097** – “Framework including principles and requirements for assessing and reporting investments and financing activities related to climate change”.
- **ISO/AWI 14100** – “Green finance – Assessment of green financial projects”.
- **ISO/DIS 19694-1** – “Stationary source emissions – Determination of GHG emissions in energy-intensive industries – Part 1: General aspects”.

Sustainable Development Goals (SDGs)

According to ISO (2019), ISO 14001:2015 contributes to the following SDGs:

- SDGs [1] – No Poverty.
- SDGs [2] – Zero Hunger.
- SDGs [3] – Good Health and Well-Being.
- SDGs [4] – Quality Education.
- SDGs [6] – Clean Water and Sanitation.
- SDGs [7] – Affordable and Clean Energy.
- SDGs [8] – Decent Work and Economic Growth.
- SDGs [9] – Industry, Innovation, and Infrastructure.
- SDGs [12] – Responsible Consumption and Production.
- SDGs [13] – Climate Action.
- SDGs [14] – Life Below Water.
- SDGs [15] – Life on Land.

Given that “accredited certification to ISO 14001:2015 is not a requirement” – “organizations can reap benefits from using the standard without going through the accredited certification” (ISO 2015b). The successful implementation of the environmental management system shall drive SDGs, add value, and enhance the environmental performance of most organizations (ISO 2015c). By addressing different aspects of the environmental management system and by setting out environmental goals, objectives, and targets, contemporary organizations shall be able to address sustainability objectives, thus achieving sustained success (ISO 2015c).

Summary

ISO 14000 refers to a set of international environmental management system standards that can be implemented by all organizations that tend to manage environmental responsibilities. The most popular standard from the ISO 14000 series is ISO 14001:2015 – and it was created as a result of growing needs to address sustainable

development. ISO 14001:2015 specifies the requirements for all organizations that tend to establish an environmental management system, thus addressing all environmental aspects related to their environmental performance. Other standards from the ISO 14000 series address different environmental aspects, such as – environmental performance, life cycle assessment, eco-labeling, or greenhouse gas emissions. The successful implementation of the environmental management system shall drive SDGs, add value, and enhance overall environmental performance, thus achieving sustained success.

Cross-References

- ▶ [Integrated Management Systems](#)
- ▶ [Integrated Quality and Environmental Management](#)
- ▶ [Quality Management](#)

References

- Heras-Saizarbitoria, I., Landin, G. A., & Molina-Azorin, J. F. (2011). Do drivers matter for the benefits of ISO 14001? *International Journal of Operations and Production Management*, 31(2), 192–215. <https://doi.org/10.1108/01443571111104764>.
- ISO. (2009). *Environmental management – The ISO 14000 family of international standards*. https://www.iso.org/files/live/sites/isoorg/files/archive/pdf/en/theiso14000_family_2009.pdf. Accessed 14 July 2020.
- ISO. (2015a). *Introduction to ISO 14001*. <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100371.pdf>. Accessed 14 July 2020.
- ISO. (2015b). *ISO 14001: Key benefits*. <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100372.pdf>. Accessed 14 July 2020.
- ISO. (2015c). *ISO 14001:2015 Environmental management systems – Requirements with guidance for use*. <https://www.iso.org/standard/60857.html>. Accessed 22 September 2021.
- ISO. (2019). *ISO 14000 family – Environmental management*. <https://www.iso.org/iso-14001-environmental-management.html>. Accessed 14 July 2020.
- ISO. (2020). *ISO Platform*. <https://www.iso.org/obp/ui/#iso:std:iso:14001:ed-3:v1:en>. Accessed July 14, 2020.
- Tari, J. J., Molina-Azorin, J. F., & Heras, I. (2012). Benefits of the ISO 9001 and ISO 14001 standards: A literature review. *Journal of Industrial Engineering and Management* 5(2), 296–322. <https://doi.org/10.3926/jiem.488>.

ISO 14001 Standard

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Synonyms

[Environmental management system requirements](#); [Standard for environmental management system](#)

Definition

ISO 14001:2015 is an international standard for an environmental management system (EMS). It belongs to the group of management system standards published by the International Organization for Standardization (ISO). The ISO 14001 standard contains a set of requirements for establishing environmental policy, identifying and managing environmental aspects and impacts, planning measurable environmental goals, and implementing programs to achieve these goals. It includes guidelines for monitoring, preventive and corrective actions, as well as review by the top management. The standard promotes preventive approach to the protection of the environment and can contribute to sustainability of an organization. The standard can be a subject of certification by the external authorized institution. The certificate is usually issued for a specified period of time and confirmed by external audits carried out by this organization.

Management System Standards

The ISO 14001:2015 standard belongs to the family of management system standards. These include, for example, the ISO 9001:2015 quality management standard or ISO 45001:2018 the occupational health and safety management system standard.

Norms and standards are most often associated with the type of regulation that imposes specific requirements, for example, for measurable parameters that a standardized product must achieve or achievements that can be completed by the operating system. In addition, we associate such regulations with the obligation to comply with them. The standards that are management system standards do not match this picture. Not only that they are not mandatory, but they also regulate something that – it seems – to normalize is extremely difficult. This is true for the ISO 14001 standard and other management system standards. “In other words, they are not performance standards measuring the quality of a firm’s products or services or a firm’s environmental results; rather, they are standards setting out the need to systematize and formalize a large number of corporate processes within a set of procedures, and to document such implementation” (Tari et al. 2012, p. 298).

Namely, the standard sets out the requirements for an environmental management system. Organizations that want to implement, maintain, and improve an environmental management system and want to assure stakeholders that such a system has been successfully implemented and is functioning may or may not decide to meet the requirements proposed in these standards. Since they are voluntary, it should be assumed that there are motives other than legal coercion, which cause that a certain group of enterprises and other types of organizations want to follow the guidelines of these standards.

As there exist different management system standards for separate functional areas inside organizations (e.g., quality, health and safety, environment, etc.), implementation of these standards in one organization leads to creation of the integrated management system (see, e.g., Rebelo et al. 2016).

The ISO 14001 Standard: General Information

The ISO 14001 standard was based on the BS 7750 standard proposed in 1992 by the British

Standard Institution. It was first introduced in 1996 by the International Organization for Standardization (ISO) – current updated version comes from 2015. Typical way of referring to the standard is to present its name with the date of its publication, e.g., ISO 14001:2015.

The standard allows to build an environmental management system (EMS) based on the process approach. EMS is defined by the standard as part of the management system that is “used to manage environmental aspects, fulfil compliance obligations, and address risks and opportunities” (ISO 14001:2015).

One of the most important elements, as in ISO 9001 quality management system, is to imprint a process of continuous improvement in the functioning of an organization. The continuous improvement is carried out on the basis of the so-called Deming cycle consisted of four stages: plan, do, check, and act (PDCA cycle) (see, e.g., La Verde et al. 2019, p. 2).

Due to a periodical review practice maintained by ISO, management system standards are updated to ensure that they still meet the market needs. The last updating ISO introduced a significant change in the general management system structure, called the High-Level Structure, that helped to use the same structure and the same terms and definitions both by ISO 9001 and 14,001 standards as well as other ISO management system standards.

EMS standard according to ISO 14001 can help “organizations improve their environmental performance through more efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of stakeholders.” (ISO 2015, p. 2; for further discussion on potential benefits, see, e.g., Tari et al. 2012).

Organizations that already implemented the standard have reported that it helps:

- “Demonstrate compliance with current and future statutory and regulatory requirements.
- Increase leadership involvement and engagement of employees.
- Improve company reputation and the confidence of stakeholders through strategic communication.

- Achieve strategic business aims by incorporating environmental issues into business management.
- Provide a competitive and financial advantage through improved efficiencies and reduced costs.
- Encourage better environmental performance of suppliers by integrating them into the organization's business systems" (ISO 2015, p. 4).

The family of ISO 14000 standards is much larger; it contains a number of documents supporting the implementation of an environmental management system. However, only the requirements formulated in the ISO 14001 standard constitute guidelines for an organization that wants to implement an environmental management system. Thanks to the compliance with this standard organizations can obtain independent confirmation of the implementation and maintenance of EMS through a system of certification and audits carried out by authorized certification bodies.

The Requirements of ISO 14001:2015

The main goal of the standard is to enable the organization to formulate its environmental policy and environmental objectives, taking into account formal and legal requirements and data on its environmental impact. The requirements of the standard have been defined so that they can be used by any organization, regardless of its size and environmental impact. The idea is to continuously improve the system and this way gradually reduce the organization's environmental impact.

Requirements for the environmental management system are divided into the following sections (Chapters 4–10): context of the organization, leadership, planning, support, operation, performance evaluation, and improvement. Below is a brief description of selected key elements of the environmental management system (ISO 14001:2015 and Reichel and Wójcik 2005).

Environmental policy is a declaration by top management regarding the organization's strategy

for environmental protection. The standard requires top management to issue self-commitment to continuous improvement, prevention of the pollution, and compliance with applicable legal requirements. The policy is the basis for determining environmental objectives and tasks. All employees should be aware of the policy, and it should also be publicly available.

As part of the planning processes, the standard requires the establishment of a procedure to identify environmental aspects related to its activities, products, and services and to designate significant environmental aspects from among them. These should be aspects that the organization can control. Objectives and tasks should be set based on significant aspects. Information on aspects should constantly be updated.

In addition, the standard requires also the creation of an legal requirements identification procedure and provision of access to legal regulations that apply to an organization and its environmental aspects.

Knowing environmental aspects and legal requirements, an organization can start to set environmental objectives and tasks. They should be regularly reviewed and documented.

An environmental management program is the result of the planning stage. It includes assigning responsibilities, financial resources, and deadlines for achieving planned objective and tasks. "A significant element influencing EMS improvement is the involvement of employees, without who even the most efficient top management is not able to realize the determined targets" (Gawaikar et al. 2018, pp. 637–638).

The implementation of the system should help to identify and ensure, among others:

- Resources, roles, responsibilities, and powers
- Appropriate competences, training and awareness
- Appropriate communication procedures for both internal and external communication
- The documentation required and supervision of this documentation
- Appropriate operational control ensuring that activities related to significant environmental aspects are planned and carried out under

supervised conditions based on relevant operational criteria

- Emergency preparedness and emergency response

Checking stage of the Deming cycle should be carried out by regular monitoring and measurement in relation to those operations and activities of the organization that may have a significant impact on the environment, periodic assessment of compliance with legal regulations, handling of detected and potential nonconformities, and taking corrective and preventive actions and internal audit of the environmental management system. The scale of corrective and preventive actions should be appropriate to the given problem.

Internal audit of the environmental management system is a method of testing the compliance of the system with the requirements of the standard, legal regulation, and own environmental policy and program. When preparing the audit plan, the environmental relevance of the activities considered and the results of previous audits should be taken into account. Areas where the risk of pollution is higher will be studied more often and more carefully by the audit team.

The culmination of the system is a management review, which is carried out by top management. Management reviews should be carried out periodically to ensure consistent usefulness and effectiveness of the system. They are used to assess the implementation of the environmental policy. The output from the review should provide input for the planning process. In this way, the principle of continuous system improvement is implemented.

From the above description, it can be concluded that the permanent application of the presented system should in effect lead to an improvement in the overall environmental impact of the organization.

Environmental Effects

Since the ISO 14001 Environmental Management System does not formulate any absolute level of achievements for environmental

performance, the question arises to what extent the implementation of the system and its functioning translate into positive environmental effects (Reichel and Wójcik 2005). Such a correlation between implementation of the EMS and positive environmental effects could mean that the standard can be treated as a tool to achieve sustainable development (see, e.g., da Fonseca 2015; and Rebelo et al. 2016).

“ISO 14001:2015 sets out the criteria for an environmental management system and can be certified to. It maps out a framework that a company or organization can follow to set up an effective environmental management system.” (ISO 2019). In the family of ISO 14000 standards regarding the environmental management system, there is a group of standards relating to the assessment of the organization’s environmental effects (e.g., ISO 14031:2013 and other from the ISO 14030 standards family dedicated to environmental performance evaluation). These standards do not present requirements to follow but describe a set of good practices and guidelines for monitoring the environmental performance of the organization.

Having the ISO 14001 Environmental Management System certificate is not synonymous with achieving better environmental effects than in the case of a similar organization that does not have such a certificate. Having a certificate only means that the organization manages its activities, products, and services that can have a significant impact on the environment by using effective environmental management system. In the long run, we should certainly be able to see the positive effects of such good management. Of course, the organization is not forced to apply for certification to be able to use the good environmental management practices described in the standard. The organization can self-declare to stakeholders that have implemented and is maintaining the environmental management system. However, independent and objective verification by the external auditors of the certification body is generally more objective and credible than such own self-declaration. That is why many organizations try to obtain such external confirmation in the form of a certificate,

especially when it is relevant for interested parties, e.g., contractors or customers.

Summary

ISO 14001:2015 standard published by the International Organization for Standardization (ISO) presents requirements for establishing an environmental management system. This management system standard is well recognized by the international community as an effective way of management of organization that can contribute to sustainability. The standard enabled organization to establish its environmental policy, identify and manage environmental aspects, and implement its environmental programs using preventive approach to the protection of the environment. The standard can be a subject of certification.

Cross-References

- Cradle-to-Cradle
- Eco-efficiency
- EMAS: Eco-Management and Audit Scheme
- Environmental Management System
- Quality Management
- Sustainability

References

- da Fonseca, L. M. C. M. (2015). ISO 14001:2015: An improved tool for sustainability. *Journal of Industrial Engineering and Management*, 8(1), 37–50. <https://doi.org/10.3926/jiem.1298>.
- Gawaikar, V., Bhole, A. G., & Lakhe, R. R. (2018). Measuring the impact of ISO 14001 implementation. *Polish Journal of Environmental Studies*, 27(2), 637–646. <https://doi.org/10.15244/pjoes/76035>.
- International Organization for Standardization (ISO). (2015). ISO 14001 key benefits. ISBN 978-92-67-10647-2. <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100372.pdf>. Accessed 27 Dec 2019.
- ISO (International Organization for Standardization) website. (2019). <https://www.iso.org/iso-14001-environmental-management.html>. Accessed 27 Dec 2019.
- ISO 14001:2015. *Environmental management system. Requirements with guidance for use*. Geneva: International Organization for Standardization.
- ISO 14031:2013. *Environmental management – Environmental performance evaluation – Guidelines*. Geneva: International Organization for Standardization.
- La Verde, G., Roca, V., & Pugliese, M. (2019). Quality assurance in planning a radon measurement survey using PDCA cycle approach: What improvements? *International Journal of Metrology and Quality Engineering*, 10, 2. <https://doi.org/10.1051/ijmqe/2019004>.
- Rebelo, M. F., Santos, G., & Silva, R. (2016). Integration of management systems: Towards a sustained success and development of organizations. *Journal of Cleaner Production*, 127, 96–111. <https://doi.org/10.1016/j.jclepro.2016.04.011>.
- Reichel, J., & Wójcik, K. (2005). Uwagi na temat skuteczności potwierdzania efektów środowiskowych osiągniętych dzięki systemom zarządzania środowiskowego. In (w:) M. Czyż (red.), *Wybrane aspekty równoważenia rozwoju* (pp. 169–175). Białystok: Wydawnictwo Ekonomia i Środowisko.
- Tari, J. J., Molina-Azorin, J. F., & Heras, I. (2012). Benefits of the ISO 9001 and ISO 14001 standards: A literature review. *Journal of Industrial Engineering and Management*, 5(2), 297–322. <https://doi.org/10.3926/jiem.488>.

ISO 19600

- ISO19600 Compliance Management Systems

ISO 20121 Standard (Event Sustainability)

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Synonyms

ISO 20121:2012; Event sustainability management systems – Requirements with guidance for use

Web Link

<https://www.iso.org/iso-20121-sustainable-events.html>

Definition

ISO 20121 is a voluntary International Standard for sustainable event management created by the International Organization for Standardization (ISO) in 2012.

Introduction

ISO 20121 (full name ISO 20121:2012, *Event sustainability management systems – Requirements with guidance for use*) is a voluntary International Standard for sustainable event management created by the International Organization for Standardization (ISO) in 2012. ISO 20121 was first adopted by the London 2012 Olympics, which acted as a catalyst for the formation of the Standard. The creation of the Standard directed the event industry toward a proactive approach in search of innovative solutions on how to address sustainability issues through an internationally recognized framework.

The aim of the Standard is to help organizations better meet sustainability objectives throughout the entire event management cycle. The Standard is applicable to all events, regardless of size, location, and theme. The Standard integrates the typical management system (MS) adopted by other Standards, like ISO 9000 and ISO 14000: the PDCA (plan, do, check, act) model. This allows easy integration with other ISO certification schemes. ISO 20121 provides a useful framework to manage and reduce potentially negative social, economic, and environmental impacts of events, helping organizers to leave a sustainable legacy to the hosting community and improving relations with all stakeholders.

The International Organization for Standardization (ISO)

The International Organization for Standardization (ISO) is an independent nongovernmental organization (NGO) founded in 1947. The initialism ISO was set and chosen because “isos” in Greek means equal, given that the full name

would have been abridged using different initialisms in different languages, e.g., IOS in English (for “International Organization for Standardization”) or OIN in French (for “Organization Internationale de Normalisation”). Consequently, the short form ISO is now adopted in every country. The organization has its headquarters in Geneva, Switzerland. The ISO can truly be considered an international NGO having a membership of over 160 national standards bodies (ISO member bodies). The ISO also works in close partnership with an array of governmental and nongovernmental international organization.

The goal of the ISO is to bring together experts to share knowledge and to develop voluntary International Standards and facilitate their diffusion and adoption worldwide. The breath of the membership ensures a wide consensus while providing innovative solutions to global challenges. An International Standard is “a document containing practical information and best practices. It often describes an agreed way of doing something or a solution to a global problem” (<http://www.iso.org>). At the end of 2018, ISO had published over 22,500 International Standards, covering almost all aspects of technology and manufacturing. ISO 9000, *Quality Management*; ISO 22000, *Food Safety Management*; and ISO 14000, *Environmental Management* are among the most popular International Standards issued by ISO.

While its main aim is developing International Standards, the ISO itself does not perform conformity assessments and does not issue certifications of compliance with the Standards. The certifications are issued by external certification bodies. Even if not compulsory, it is strongly suggested that certification bodies should be accredited. Accreditation is the formal recognition by an independent accreditation body that a certification body operates according to International Standards.

History of ISO 20121

At the beginning of the new millennium, awareness of the importance of sustainability had

already spread in many industries. This awareness first became apparent in sectors with material outputs where sustainability impacts (mostly environmental) were more visible before spreading to service industries.

In the field of event organization, a key role was played by David Stubbs, the Head of Sustainability at the London 2012 Olympic and Paralympic Games. He was not only strongly committed to moving the organization of the Olympic Games toward sustainable management practices but also convinced of the importance of transparently showing and objectively measuring this commitment. Thus, shortly after London won the right to host the 2012 Olympics in July 2005, a partnership was established between the London Organising Committee and the British Standards Institution (BSI) in the UK to elaborate a Standard in the field of event sustainability. In 2006 the BSI began to work on the project, and in 2007 the Standard BS 8901:2007 *Specification for a sustainable event management system with guidance for use* was firstly issued. After a period of review, the second version of the Standard was published in 2009. The Standard received positive reactions from the practitioners' community, and in 2009 other important events in the UK, Europe more widely, and North America were BS 8901 certified, for example, the Microsoft Convergence event held in New Orleans in March 2009 and the United Nations Conference on Climate Change COP15 held in Copenhagen in December 2009.

Following the interest of the event industry, the BSI together with the Brazilian National Standards Organization (Associação Brasileira de Normas Técnicas – ABNT) submitted a proposal for an International Standard on sustainable event management to the International Organization for Standardization (ISO). The work of preparing International Standards is normally carried out through ISO technical committees. Here, the first draft was prepared by Project Committee ISO/PC 250, Sustainability in Event Management. A large group of stakeholders was included among the experts providing inputs for the Standard, including the delegations of the national standards institutions of 25 countries, NGOs

committed to sustainability, representatives from the event industry, and members of the sustainability team of the London 2012 Olympics. The Standard ISO 20121:2012 *Event sustainability management systems – Requirements with guidance for use* was first issued in June 2012.

Consistent with its highly influential role in the launch of the Standard, the London Organising Committee of the Olympic and Paralympic Games (LOGOC) and the Olympic Delivery Authority were among the first to be ISO 20121 certified, indeed this occurred in the same month that Standard was issued, June 2012.

Today, ISO 20121 is one of the main Standards in the field of sustainable event management, together with the Global Reporting Initiative's (GRI's) Sector Supplement for events (Buathong and Lai 2017; Musgrave and Henderson 2015) (see ► [“Global Reporting Initiative”](#)).

Content of the ISO 20121 Standard and the Certification Process

Every event has economic, social, and environmental impacts, even if the size of the event has a significant influence on the dimension of these impacts. Major and mega-events can put pressure on water and energy resources, generate significant amounts of waste and carbon emissions, provoke inconveniences for local communities, exacerbate urban traffic, and put a strain on the ordinary running of the economic activities of a territory (Andersson and Lundberg 2013). Meanwhile, some characteristics of the event industry can make it challenging to deal with sustainability issues, because a special event is by definition unique and temporary.

The ISO 20121 Standard provides a common framework for the event industry to manage its social, economic, and environmental impacts and is designed to be relevant for all types of event, from a small local music festival to the Olympic Games. The Standard is directed above all – but not exclusively – toward organizations having as their core business the organization of events (e.g., congress centers, communication agencies, trade fair areas, theatres, and local events

organizers). It has the purpose to individuate the potentially negative externalities of events, considering the whole management system from the project to the realization of the event. This way, it allows removal or reduction of these negative impacts through the adoption of adequate planning and processes consistent with key sustainability issues and in line with the goal of continuously improving management systems. The ISO 20121 Standard also includes practical guidance on stakeholder identification and engagement, supply chain management and procurement, and communication. The content of the Standard also includes elements of ISO 14000, *Environmental Management* and ISO 26000, *Social Responsibility*, exploiting the synergies among different International Standards (see ► “ISO 26000 Standard”).

The Standard is based on the plan-do-check-act (PDCA) model and can be easily integrated with other International Standards based on this typical management system, as per ISO 9000 (see ISO 9000). The PDCA management system model is combined with the event's life cycle as attention toward sustainability is raised in every stage of event management (Toniolo et al. 2017): projecting, planning, staging, closing and dismantling, controlling, and feedback. The widest possible number of stakeholders should be engaged in the process, to ensure the identification and addressing of all significant issues. This would allow meeting the expectations of the interested parties in terms of sustainable development. The PDCA management system model adopted by ISO 20121 is presented in Fig. 1.

Following this management system model, the organization will be able to identify the key issues and outline its commitment toward sustainability, developing specific objectives and targets. Consequently, staff can be appropriately trained, and suppliers can be made aware of and engaged with sustainability. It is also necessary to develop a sustainability communication plan to disclose the process to all interested stakeholders. Finally, the results have to be monitored and measured.

The Standard adopts an approach to sustainability based on the triple bottom line, as identified by Elkington (1997), and the content

considers a wide number of key issues related to sustainability, covering

- (a) Environmental aspects – emissions' reduction in air, water, and land; recycling and reusing; resource conservation; respect for the environment and biodiversity; materials' choice; energy consumption; waste reduction
- (b) Social aspects – civil rights; equal opportunities; respect for the local community; health and safety; labor rights; respect of all cultures and religions; discrimination and respect for minorities
- (c) Economic aspects – direct and indirect economic impacts; effects on the local economy; risks and profits; return on investment; fair trade; profit sharing

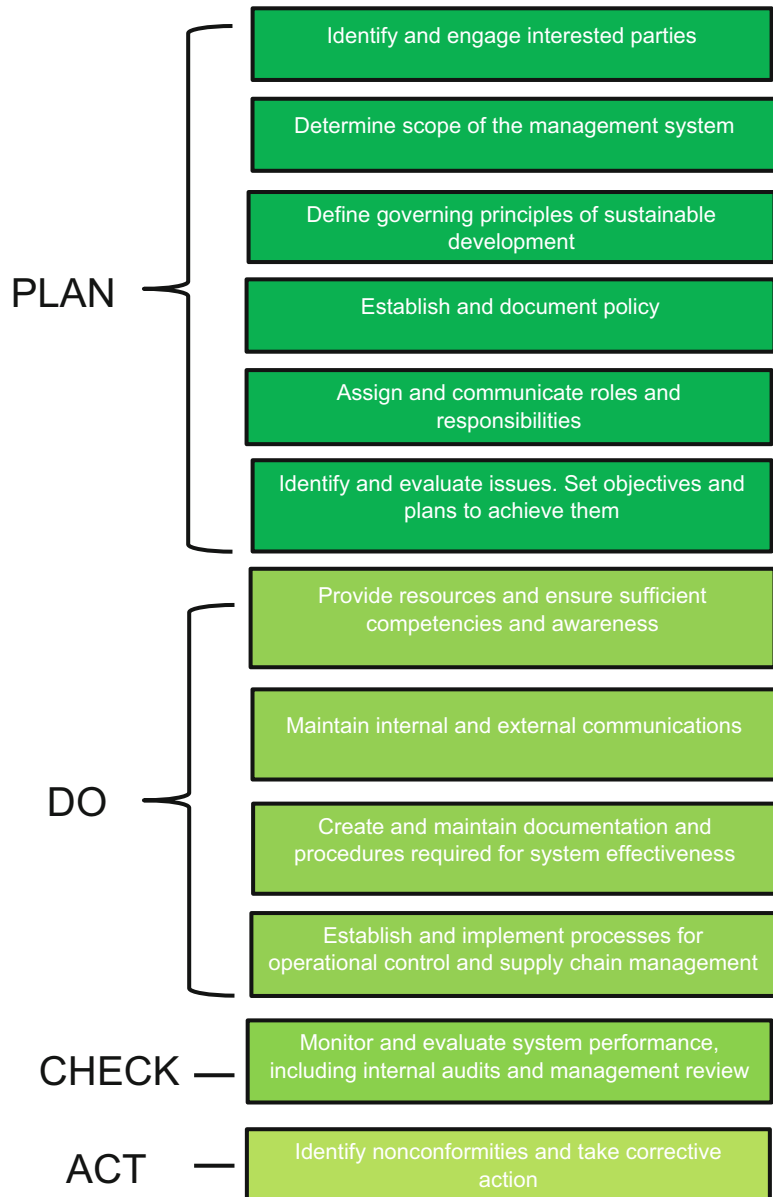
Appropriate management of these aspects should lead to enhanced event sustainability through appropriate venue selection, transport policy, logistics optimization, supply chain involvement, staff training, employee empowerment, and maximization of positive legacy (Chirieleison et al. 2019; Gregori et al. 2018).

To demonstrate conformity with ISO 20121, an organization can be certified by an independent certification body. However, besides third-party certification, the Standard also allows a first party self-declaration or a second party confirmation of conformance released by relevant stakeholders (e.g., clients). Opting for certification by an independent third party provides a wider assurance regarding the MS and is generally considered more reliable than self-evaluation or second party confirmation by stakeholders.

The certification process involves three steps. The first step is a pre-evaluation audit, which is optional as at this stage an organization can pursue a check of the Standard's requirements through internal auditing. The second step is the certification audit by an independent accredited certification body, providing both the first stage of the documental audit and the second stage of on-field audit. If the organization complies with the Standard, the certification body issues a certificate. The third step is the annual audit to maintain

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(Event Sustainability),**

Fig. 1 PDCA management
system model adopted by
ISO 20121



the certification. Once issued, a certificate is valid for 3 years and then expires, and organizations must once again be subjected to the full certification process to become recertified.

The temporary nature of events can create peculiarities in the certification process respect compared to that where organizations have continuous activity. In many cases, a large part of sustainability impacts can be evaluated only after the event's closing. But that would make the

certification practically useless if it is issued only after the conclusion of the event. Thus, even if the audit activities are related to three phases of the management system – planning, monitoring, and reporting – just the planning has to be mandatorily audited before certificate issuance, while the monitoring and reporting phases can be audited in a second step, when available. Peculiarities can also arise regarding the duration of the certificate; the 3-year validity

period can be shorter in case of events with limited duration and non-periodical events.

Certifiable Organizations

ISO 20121 provides a framework for all members of the event supply chain and is suitable for all sizes – from mega-events to small happenings – and types of events, including sport, culture, and business events, on a voluntary basis. An organization could implement the Standard for the management system of a single event (e.g., a single sport event or a convention), for a group of events (e.g., a periodical festival or all the events organized by the same communication agency), or just for its management system with no specific reference to the certificate to any event. In this latter case, certification is only intended for the organization responsible for the sustainable MS.

The Standard is directed to three types of organizations:

First, all organizations having event management as part of their core business (e.g., events' organizers businesses and communication agencies) and organizations wishing to improve the sustainability of their own events (e.g., corporations)

Second, suppliers to the event industry who provide products or services (e.g., catering, security, energy, temporary workers providers, stewards, and stand builders)

Third, structures for events (e.g., congress centers, hotels, trade fair areas, stadia, and sports complexes)

Given its nature and the significant costs necessary to obtain the certification, ISO 20121 is mainly adopted by large size events with an international public, having the need to demonstrate their commitment toward sustainability as part of their reputation and legitimacy (Andersson 2016). Recent examples of certified events are the Åre 2019 FIS Alpine World Ski Championships, the Expo 2015 World's Fair, and the PyeongChang 2018 Winter Olympics. However, dozens of smaller size events worldwide are ISO 20121

certified such as the Sydney Festival in Australia and the Tocati Festival in Italy.

Benefits and Criticalities of the ISO 20121 Standard

The Standard's adoption can benefit the image and reputation of the organization, contributing to demonstrate a high commitment toward sustainability in a credible and transparent way. It can also help to build strong relations with stakeholders, partners, suppliers, and local communities thus facilitating event organization. Achieving the certification can also be a part of a differentiation strategy, helping to stand out from competitors. Moreover, emphasis on continual improvement contributes to enhancing the effectiveness of managerial competencies and skills highlighting the importance of good business practices. Finally, ISO 20121 adoption can significantly contribute to cost savings, by virtue of reduced power consumption, better waste management, recycling, and risk reduction (Hall 2012).

Even if adoption of ISO 20121 can undoubtedly contribute to moving the event industry toward a management system conducive to sustainable development, it's not immune from criticism.

Considering the general approach of the framework, the Standard deals with a management system approach to running more sustainable events, but sustainability is mainly operationalized as the reduction of negative externalities, while the aspect of maximizing positive externalities and leaving a progressive legacy is largely neglected (Lienhard and Preuss 2014).

Moreover, regarding the contents of the Standard – as often happens when dealing with sustainability – the emphasis on the environmental dimension is much higher than that on the social and economic dimensions.

Finally, a certain ambiguity on the real object of the certification emerges. It's worth noting that it is not the event itself nor the organizer which will be declared in conformity with the Standard, but rather the management system. Thus,

certificate issuance does not guarantee that a certain event has low negative externalities nor that it is a green event.

Summary

ISO 20121 is a voluntary International Standard for sustainable event management. It has the purpose to promote a proactive approach in the event industry for addressing sustainability issues. ISO 20121 applies to all events, regardless of size, location, and theme. Adoption of the Standard can benefit the image and reputation of the certified organization.

Cross-References

- [Global Reporting Initiative](#)
- [ISO 14000 Standards Series](#)
- [ISO 26000 Standard](#)
- [ISO 9000](#)

References

- Andersson, G. (2016). Sustainability process and certification in the Swedish Event Tourism Industry. *Journal of Environmental and Tourism Analyses*, 4(1), 5–29.
- Andersson, T. D., & Lundberg, E. (2013). Commensurability and sustainability: Triple impact assessments of a tourism event. *Tourism Management*, 37, 99–109.
- Buathong, K., & Lai, P. C. (2017). Perceived attributes of event sustainability in the MICE industry in Thailand: A viewpoint from governmental, academic, venue and practitioner. *Sustainability*, 9(7), 1151.
- Chirieleison, C., Montrone, A., & Scrucca, L. (2019). Event sustainability and sustainable transportation: A positive reciprocal influence. *Journal of Sustainable Tourism*. <https://doi.org/10.1080/09669582.2019.1607361>.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Press.
- Gregori, G. L., Pencarelli, T., Temperini, V., Splendiani, S., & Forlani, F. (2018). Sustainable management of events in an experiential perspective. In *The experience logic as a new perspective for marketing management* (pp. 91–109). New York: Springer.
- Hall, C. M. (2012). Sustainable mega-events: Beyond the myth of balanced approaches to mega-event sustainability. *Event Management*, 16(2), 119–131.
- Lienhard, P., & Preuss, H. (2014). *Legacy, sustainability and CSR at mega sport events: An analysis of the UEFA EURO 2008 in Switzerland*. New York: Springer.
- Musgrave, J., & Henderson, S. (2015). Changing audience behaviour: A pathway to sustainable event management. In C. M. Hall, S. Gossling, & D. Scott (Eds.), *The Routledge handbook of tourism and sustainability* (pp. 384–396). New York: Routledge.
- Toniolo, S., Mazzi, A., Fedele, A., Aguiari, F., & Scipioni, A. (2017). Life cycle assessment to support the quantification of the environmental impacts of an event. *Environmental Impact Assessment Review*, 63, 12–22.

Website Citations

- <https://www.bsigroup.com>. Accessed 1 Mar 2019.
- <https://www.globalreporting.org>. Accessed 1 Mar 2019.
- <https://www.iso.org/home.html>. Accessed 1 Mar 2019.
- <https://www.iso.org/iso-20121-sustainable-events.html>. Accessed 1st Mar 2019.

ISO 20121:2012

- [ISO 20121 Standard \(Event Sustainability\)](#)

ISO 26000 Standard

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Synonyms

Corporate social responsibility (CSR) guidance,
Socially responsible management standard,
Socially responsible practices

Definition

ISO 26000 is a guidance released by the International Organization for Standardization aimed at supporting all types of organizations in implementing and assessing socially responsible (SR) practices. It has been conceived as a tool capable to drive companies toward a sustainability-oriented management. ISO 26000 is “useful to

all types of organisations in the private, public and non-profit sectors, whether large or small, and whether operating in developed or developing countries” (ISO 2010, iv).

Unlike many international guidelines (such as the Global Reporting Initiative – GRI, among others) and norms (i.e., the SA – social accountability – 8000 standard) that are aimed to provide a set of rules to release a reporting tool or a certification, ISO 26000 is directed to allow organizations address their attention on socially responsible principles and behaviors, operationalize and communicate responsible practices and policies, and communicate performance and other information related to social responsibility actions. Among the benefits deriving from ISO 26000 implementation, one can mention both internal and external benefits, as well as intangible and tangible ones, such as, among others: an increase in company reputation and internal climate; a growth in the capability to attract and retain employees and customers; a reduction in the cost of capital due to disclosure and transparency; and better relationships with stakeholders (ISO 2012).

Introduction

The first ISO 26000 guidance was released in 2010. In the subsequent years the UNI and the Sodalitas Foundation started a renewed journey to better frame the guidance and render it consistent with the concrete needs and expectations of companies interested in enhancing their responsibility-driven approach. Namely, a series of reflections and suggestions have been provided, thus contributing to release a renewed version of the guidance, the “UNI ISO26000: social responsibility in practice” in 2016. The latter can be considered the output of a shared (multilevel and multistakeholders) process based on the direct involvement of companies belonging to different sectors (i.e., mechanics, energy, and finance) whose experiences were presented on January 30, 2014 during a conference “Measuring to improve. UNI ISO 26000: comparing approaches and experiences,” held in collaboration with

Bureau Veritas and DNV-GL Business Assurance, among others (UNI and Sodalitas 2014). During the following months, a growing number of organizations demonstrated their interest in being involved in focus groups composed by selected stakeholders and company’s experts called to share and improve the fundamental themes of ISO 26000, including accountability, SR performance, and stakeholder engagement (Balzarova and Castka 2012). The feedback of this participatory process led to elaborate the current practical guidance conceived as a reference point for two type of companies and organizations. The first type includes entities characterized by an unstructured or a limited and initial approach to social responsibility that – however – feel motivated to strengthen their approach and in particular their methodological skills. The second one includes companies and organizations that have already performed a mature and structured approach to CSR. In these contexts, the guidance proves useful to effectively address specific aspects, overcome critical issues, and manage most complex situations.

Namely, the latest ISO 26000 version – released in April 2016 (UNI/PdR 2016), intends to concretely helps organizations to adopt a socially responsible approach through a step-by-step process, starting from the identification of company’s stakeholders to their active engagement in defining SR strategies and operationalizing SR objectives. The second step consists in evaluating the actual and potential impacts of the company’s decisions and actions on stakeholders and the society at large, while the third is focused on how SR can be integrated in the company’s strategy and culture and on the tools to be used to communicate and improve the socially responsible policies and actions.

Key Issues

ISO 26000 underpins the concept of corporate social responsibility (CSR) promoted by the European Commission since it is finalized to drive companies toward a sustainability-oriented management process by addressing their attention on

seven fundamental principles: accountability, transparency, ethical behavior, respect for the law and international norms of behavior, and respect for human rights and stakeholders' interests.

The guidance also points out seven areas of SR (the so-called "seven core subjects") that comprise a variety of issues: governance (company structure and decisional mechanisms); human rights (civil, political, economic, social, and cultural rights); labor practices (i.e., working conditions and relations, training, etc.); environment (i.e., environmental protection and pollution prevention); fair operating practices (fight against corruption, loyal competition, etc.); consumer issues (i.e., consumers' health safeguard, services and support for consumers, etc.); and community involvement and development (i.e., social investment in education culture, etc.) (ISO 2010). These themes must be treated holistically because they are interrelated and complementary in nature.

The ISO 26000 guidance illustrates how to approach the aforementioned pillars and themes and emphasizes those particularly critical relative to materiality, accountability, and stakeholder engagement. Moreover, a great attention is paid to the governance since it is fundamental that the top management triggers the adoption of a systematic approach to SR and spreads this orientation inside the organization by involving and raising the awareness of directors and heads of departments and, in turn, all the employees.

The top management involvement path unfolds through a motivational phase, supported by the method of storytelling, and a phase of SWOT analysis, which helps to carry out a context analysis. Drawing from the results derived from the telling and SWOT analysis, an action plan based on a socially responsible approach should be delivered, oriented towards the medium to long term. Starting from the strategic documents, such as the code of ethics and the organization's policies, the top management should be involved in operationalize each of the seven fundamental themes of UNI ISO 26000, in identifying specific objectives, to be implemented (action plan) and a set of indicators (KPIs) to measure the progress of

the action plan and the achievement of the targets (UNI/PdR 2016).

ISO26000 contributes to improve existing practices and strengthens the integration of SR into the organization and the business model. Therefore, a central issue is to solicit the company's transition from a sporadic and extemporaneous approach to a systematic and integrated approach that can be achieved through the creation of a governance system of SR (Hahn 2013). The guidance includes practical and friendly tools, such as a checklist for the governance assessment as well as useful examples to operationalize the materiality process (i.e., the questionnaire for the materiality analysis).

Several contributions have pointed out that ISO 26000 implementation can increase transparency and disclosure, improve governance, and engage stakeholders. In other words, it has the potential to allow organizations to reframe their strategic approach to CSR (Moratis and Cochius 2011; Moratis 2016a). However, some authors have highlighted that there are also critical issues, affecting both the process adopted to release the guidance and its implementation (Johnston 2011). The former are linked to the prevalence of industry representatives over other categories of stakeholders (Schwartz and Tilling 2009). The latter are relative to the growing diffusion among multinational companies that makes the guidance more suitable to large corporations rather than small- and medium-sized enterprises (Balzarova and Castka 2012). In such contexts the implementation of the guidance is instead slowed down or prevented by the lack of time and resources (Perera 2008). Finally, ISO 26000 has been considered too broad in scope to be consistent with specific industries and sectors (De Deus et al. 2014) and suffers from the lack of a formal certification suitable for contractual use (Moratis 2016b).

Future Directions

ISO 26000 does not overlap existing standards. Rather, it encourages companies' leaders to direct their attention to social responsibility core subjects (Zinenko et al. 2015) by complementing

existing tools that have different goals. Therefore, when a company already adopts other sustainability frameworks, standards, and tools (i.e., ethical codes, GRI, and integrated reporting framework) ISO 26000 can be useful to assess the possible gaps in their current practices (Hemphill 2013). In addition, the guidance is particularly suitable to integrate SR activities in the core business of companies that are new to social responsibility practices and strategies.

In addition, ISO 26000 proves to be adaptable to different contexts. In this regard the growing diffusion of ISO 26000 among companies that are different in size, sector, public and private ownership demonstrates. This key attribute, in addition to the positive image of ISO as a globally reputable and credible organization derived from a broad-based development process (Hahn and Weidtmann 2016), gives reason for its high international consensus and degree of legitimacy, thus rendering ISO 26000 an important guide for firms worldwide (Zompras and Siakas 2015).

Summary

ISO 26000 is considered a principle-based guidance that attempts to operationalize SR principles by providing suggestions for a concrete implementation. As a “practice of reference,” it is intended for use by all organization, thus including both the ones that are starting the CSR journey and those that are more experienced with its implementation. ISO 26000 represents a practical tool companies may use to assess if and how they are achieving sustainability goals. It thus concretely contributes to their strategic management and governance betterment.

Cross-References

- [Certification](#)
- [Corporate Sustainability](#)
- [Corporate Sustainability Management](#)
- [Guidance on Social Responsibility](#)
- [Social Responsibility](#)
- [Sustainability Standards and Standardization](#)

References

- Balzarova, M. A., & Castka, P. (2012). Stakeholders' influence and contribution to social standards development: The case of multiple stakeholder approach to ISO 26000 development. *Journal of Business Ethics*, 111 (2), 265–279.
- De Deus, R. M., Seles, B. M. R. P., & Vieira, K. R. O. (2014). Organizations and ISO 26000: Review of concepts, motivators, and barriers to implementation. *Gestao e Producao*, 21(4), 793–809.
- Hahn, R. (2013). ISO 26000 and the standardization of strategic management processes for sustainability and corporate social responsibility. *Business Strategy and Environment*, 22, 442–455.
- Hahn, R., & Weidtmann, C. (2016). Transnational governance, deliberative democracy, and the legitimacy of ISO 26000: Analyzing the case of a global multi-stakeholder process. *Business and Society*, 55(1), 90–129.
- Hemphill, T. (2013). The ISO 26000 guidance on social responsibility international standard: What are the business governance implications? *Corporate Governance: The International Journal of Business in Society*, 13(3), 305–317.
- ISO (International Standards Organization). (2010). *Guidance on social responsibility, ISO 26000: 2010* (1st ed., November 1, 2010). Final draft. Geneva: ISO.
- ISO (International Standards Organization). (2012). *ISO 26000 post-publication survey 2012*. Geneva: ISO.
- Johnston, A. (2011). *Constructing sustainability through CSR: A critical appraisal of ISO 26000*. University of Oslo Faculty of Law, Research paper No. 2011-33, August 29, 2011. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1928397. Accessed 4 June 2018.
- Moratis, L. (2016a). Out of the ordinary? Appraising ISO 26000's CSR definition. *International Journal of Law and Management*, 58(1), 26–47.
- Moratis, L. (2016b). Signalling strategies for ISO 26000: A firm-level approach. *International Journal of Operations and Production Management*, 36(5), 512–531.
- Moratis, L., & Cochius, T. (2011). *ISO 26000: The business guide to the new standard on social responsibility*. Sheffield: Greenleaf.
- Perera, O. (2008). *How material is ISO 26000 social responsibility to small and medium-sized enterprises?* Winnipeg: International Institute for Sustainable Development.
- Schwartz, B., & Tilling, K. (2009). 'ISO-lating' corporate social responsibility in the organizational context: A dissenting interpretation of ISO 26000. *Corporate Social Responsibility and Environmental Management*, 16, 289–299.
- UNI & Sodalitas. (2014). *UNI ISO 26000: La responsabilità sociale in concreto*. Milano: UNI.
- UNI/PdR (2016). UNI/PdR 18: 2016. Social responsibility in organizations – Guidance to the application of UNI ISO 26000. ICS 03.100.01. (2016, April 29). UNI-Ente Italiano di Normazione & Sodalitas. Milano: UNI.

[https://www.sodalitas.it/public/allegati/Prassi_UNI_ISO_26000-\(1\)_20165494228448.pdf](https://www.sodalitas.it/public/allegati/Prassi_UNI_ISO_26000-(1)_20165494228448.pdf). Accessed 5 July 2018.

- Zinenko, A., Rovira, M. R., & Montiel, I. (2015). The fit of the social responsibility standard ISO 26000 within other CSR instruments: Redundant or complementary? *Sustainability Accounting, Management and Policy Journal*, 6(4), 498–526.
- Zompras, A., & Siakas, K. (2015). An investigation of ISO 26000 and social responsibility practices applied in IT companies. *International Journal of Human Capital and Information Technology Professionals*, 6(2), 33–48.

ISO 31000: Risk Management Guidelines

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Synonyms

Crisis management; Hazard management; Uncertainty management

Definition/Description

The first standard concerning risk management was ISO 31010:2009 “Risk management – Principles and guidelines (ISO/IEC 2009b).” It was later revised and published as ISO 31000:2018 “Risk management – Guidelines.” The main reason of revision was the necessity to include the increased complexity in business caused primarily by the development of information technology. Standards related to ISO 31000 are: ISO/TR 31004:2013 “Risk management – Guidance for the implementation of ISO 31000,” ISO Guide 73:2009 “Risk management – Vocabulary (ISO/IEC 2009c),” IEC 31010:2019 “Risk management – Risk assessment techniques (ISO/IEC 2009a),” and NP IWA 31 “Using ISO 31000 guidance on risk management in management systems.” ISO/TR 31004 is a technical report that provides guidance for organizations to create

risk management system consistent with ISO 31000. ISO Guide 73 gives the definitions of terms that refers to the risk management. A new version ISO/AWI 31073 “Risk management – Vocabulary” is in the proposal stage (ISO/IEC 2019c). IEC 31010 is related to risk assessment techniques which goal is to identify and analyze risks in order to determine whether and what kind of treatment should be conducted (ISO/IEC 2009a). The Technical Committee ISO/TC 262–Risk management is preparing several new standards in the 31000 series: ISO/DIS 31022 “Risk management – Guidelines for the management of legal risk” is in the enquiry stage” (ISO/IEC 2019d); ISO/WD 31070 “Risk Management – Guidelines on core concepts” (ISO/IEC 2019f) and ISO/AWI 31030 “Risk management – Managing travel risks – Guidance for organizations” (ISO/IEC 2019b) are in the preparatory stage; and ISO/NP 31050 “Guidance for managing emerging risks to enhance resilience” (ISO/IEC 2019e) are in the proposal stage.

Introduction

According to ISO 31000:2018, risk is “effect of uncertainty on objectives.” This definition can be extended as follows: “the effect of uncertainty on an organization’s ability to meet its objectives.” Besides ISO, numerous authors have given the definitions of risk. In the literature on risk management, the oldest definitions that can be found are: “Risk is a measure of the likelihood and severity of unwanted events” (Lawrence 1976) and “Risk depends on three variables (si, pi, ci), where si represents the scenario, pi is the probability of the i-th scenario, and ci is the consequence of the i-th scenario, $i = 1, 2, \dots, n$ ” (Kaplan and Garrick 1981); while some of the most cited definitions are: “Risk is the probability that exposure to a hazard will lead to a negative consequence” (Ropeik and Gray 2002) and “Risk = probability x severity” (Ericson 2015). Although these definitions are formulated differently, a common feature of all is to consist of two components: the probability of some undesired event and its consequences. These two components are also included

into latest definitions such as: “Risk is a measure of the probability and consequence of uncertain future events” (Yoe 2019) and “Risk is relates to a specific event or scenario and to two of its components: probability/certainty/likelihood of the event and the severity of its (negative) effects” (Makajić-Nikolić 2020). Consequently, risk management defines and conducts a set of activities with aim to define measures that will affect these two components to reduce risk.

Risk Management

ISO 31000 International Standards Series observe risk management as an iterative process consisting of “coordinated activities to direct and control an organization with regard to risk” (ISO/IEC 2018). ISO 3100 defines risk management principles, framework, and process. Changes in the version ISO 31000: 2018 in relation to ISO 31000: 2009 primarily refer to the review of risk management principles and highlighting the importance of leadership by top management. The iterative nature of risk management is emphasized, which implies that revision is necessary with each acquisition of new experience and knowledge.

Risk management is based on eight principles. According to these principles, it should be: integrated in all organization activities; structured and comprehensive; customized to the external and internal contexts; inclusive, in terms that stakeholders should be involved; dynamic in the sense that it follows all internal and external changes; based on best available information; influenced by cultural and human factors; and constantly improved.

In order to help organizations in integrating risk management, a framework, based on leadership and commitment, has been proposed (ISO/IEC 2018). This framework guides the organization through six components towards the final result: integrated, effective, and efficient risk management. The component named integration is related to the activities that will enable further integration of risk management into all organization's parts. Thereafter, design component should provide conditions for assigning roles, responsibilities, and

authorities for the risk management process and allocation of required resources. A prerequisite for successful design is a thorough examination of external and internal risk management context. The implementation component of risk management framework involves developing detailed plans that include time and resources as well as the types of decisions to be made in particular segments of the organization. The role of evaluation components is to measure risk management performance and evaluates the effectiveness of decision concerning risk management. Once a risk management system is established, it must constantly be adjusted to external and internal changes (improvement component).

According to (ISO/IEC 2018) and (ISO/IEC 2019), risk management process consists of four main stages:

- Defining scope, context, and criteria of risk management. At this stage, the level of organization (strategic, operational, project, etc) to which the risk assessment will be applied must be defined and external/internal context should be examined. Finally, risk assessment criteria must be determined relating to: measures for probability and consequences, uncertainty influence, time-related factors, resources capacities, etc.
- Risk assessment can be considered crucial stage of the risk management process since the decisions and activities that should be implemented depend most on its results. Standard IEC 31010 offers a list of 41 risk assessment techniques, methods, and approaches grouped by the following purposes (ISO/IEC 2019): eliciting views; identifying risk; determining sources, causes, and drivers of risk; analyzing controls; analyzing dependencies; providing a measure of risk; evaluating the significance of risk; selecting between options; and recording and reporting. In addition, techniques are classified according to their applicability in the steps of the risk assessment process: risk identification, probability analysis, consequence analysis, analysis the level of risk, and risk evaluation. All these techniques differ according to: ability to solve complex

problem, possibility to deal with uncertainty, resources requirements, and type of outputs – qualitative or quantitative.

- Risk treatment. At this stage, risk treatment options as well as the plan of their implementation should be defined. Risk treatment option can be single action or combination of the following actions: removing the risky activities or their sources, reducing the probability of risk, mitigate the consequences, sharing the risk through insurance or contracts, retaining the risk.
- Recording and reporting all outcomes of risk management process.

The entire risk management process is conducted through communication and consultation with all relevant stakeholders and constantly monitored and reviewed.

Summary

Risk management is a part of all organization's activities and includes constant interaction with stakeholders with goal to improve entire management system. ISO 31000 International Standards Series for Risk Management clearly indicates that risk management is an iterative process and that once-established risk management is only a baseline that must be constantly monitored and reviewed. An additional reasons for the continuous review of risk management are accelerated and turbulent market changes driven by new business paradigms and information technologies development. The announcement of new standards in this series confirms the awareness of the relevant institutions of present and future challenges.

Cross-References

- Risk Management
- Risk Management (Environmental Risk and Social Risk) and CSR
- Risk Management and CSR

References

- Ericson, C. A. (2015). *Hazard analysis techniques for system safety*. Hoboken: Wiley.
- ISO/IEC. (2009a). *IEC 31010, Risk management–Risk assessment techniques*. Retrieved from ISO: <https://www.iso.org/standard/51073.html>
- ISO/IEC. (2009b). *ISO 31000, Risk management – Principles and guidelines*. Retrieved from ISO: <https://www.iso.org/standard/43170.html>
- ISO/IEC. (2009c). *ISO/IEC Guide 73:2009, Risk management – Vocabulary – Guidelines for use in standards*. Retrieved from ISO: <https://www.iso.org/standard/34998.html>
- ISO/IEC. (2013). *ISO/TR 31004, Risk management – Guidance for the implementation of ISO 31000*. Retrieved from ISO: <https://www.iso.org/standard/56610.html>
- ISO/IEC. (2018). *ISO 31000, Risk management – Guidelines*. Retrieved from ISO: <https://www.iso.org/standard/65694.html>
- ISO/IEC. (2019a). *IEC 31010, Risk management–Risk assessment techniques*. Retrieved from ISO: <https://www.iso.org/standard/72140.html>
- ISO/IEC. (2019b). *ISO/AWI 31030, Risk management – Managing travel risks – Guidance for organizations*. Retrieved from ISO: <https://www.iso.org/standard/54204.html>
- ISO/IEC. (2019c). *ISO/AWI 31073, Risk management – Vocabulary*. Retrieved from ISO: <https://www.iso.org/standard/79637.html>
- ISO/IEC. (2019d). *ISO/DIS 31022, Risk management – Guidelines for the management of legal risk*. Retrieved from ISO: <https://www.iso.org/standard/69295.html>
- ISO/IEC. (2019e). *ISO/NP 31050, Guidance for managing emerging risks to enhance resilience*. Retrieved from ISO: <https://www.iso.org/standard/54224.html>
- ISO/IEC. (2019f). *ISO/WD 31070, Risk Management – Guidelines on core concepts*. Retrieved from ISO: <https://www.iso.org/standard/54247.html>
- Kaplan, S., & Garrick, B. J. (1981). On the quantitative definition of risk. *Risk Analysis*, 1(1), 11–27.
- Lawrence, W. W. (1976). *Of acceptable risk*. Los Alto: William Kaufman.
- Makajić-Nikolić, D. (2020). Risk assessment and management. In A. A. Marisa; Leal Filho, W., *Climate action. Encyclopedia of the UN sustainable development goals* (pp. 774–783). Cham: Springer.
- Ropeik, D., & Gray, G. M. (2002). *Risk: A practical guide for deciding what's really safe and what's dangerous in the world around you*. Boston: Houghton Mifflin Harcourt.
- Yoe, C. (2019). *Principles of risk analysis: Decision making under uncertainty*. Boca Raton: Taylor and Francis/CRC Press.

ISO 37001

► ISO 37001 Anti-bribery Management Systems

ISO 37001 Anti-bribery Management Systems

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Synonyms

Anti-bribery and corruption (ABC) compliance programs; Anti-bribery management system standard; Anti-Corruption Management Systems; ISO 37001

Definition/Description

ISO 37001:2016 is an international management system standard against bribery, issued by the International Organization for Standardization (ISO). The aim of the standard is to support companies and organizations in combating bribery risks in their own operations and in their global value chains to prevent and detect bribery and to create international comparability in anti-corruption management.

ISO itself is the international association of more than 160 national standardization bodies that work together in ISO technical committees to develop international standards. ISO Standard 37001 was published for the first time on 15 October 2016 under the title “Anti-bribery management systems – Requirements with guidance for use”. ISO 37001 is based on the British standard 10500 and refers to international anti-

corruption principles and guidelines. The standard is open to all types of organizations, regardless of their size, legal form, or geographical location. ISO 37001 has the usual “high-level structure” of an ISO standard, which simplifies setting up and operating the system alongside other management systems in an organization. As a Type-A standard, ISO 37001 is approved for certification. Companies can ask to be certified by accredited third parties; thus proving that their anti-bribery management system meets the criteria of the ISO 37001 standard. However, neither appropriate certification nor basic conformity to ISO 37001 can guarantee that bribery does not occur. Instead, the certification of a management system indicates that the company has taken all appropriate and required measures to tackle the issue of bribery.

Introduction

In 2018, the United Nations estimated that one trillion dollars are paid in bribes annually. According to the UN, corruption is one of the biggest obstacles worldwide on the road to achieving the Sustainable Development Goals (SDGs) of the 2030 Agenda (Schuler 2018).

In the following text, the terms “bribery” and “corruption” are used synonymously. It is noted that ISO points out the semantic difference between corruption and bribery (ISO/TC 2017). However, the title of the German and French editions of the standard refers to anti-corruption.

Against this background, ISO 37001 (ISO 2016; hereafter cited with “37001” and indication of section and page) has two aims: first, to create a common understanding of bribery and second, to set standards for the establishment, regular revision, and improvement of an internal anti-bribery management system. ISO 37001 applies a broad definition of bribery acts (Makowicz 2018a, p. 20), as it includes, both, the public and private sectors, the nonprofit sector as well as active and passive corruption (Brescia 2017, p. 6; cf. Myrdal 1989, p. 405).

Bribery is

[...] *offering, promising, giving, accepting or soliciting of an undue advantage of any value (which could be financial or non-financial), directly or indirectly, and irrespective of location(s), in violation of applicable law, as an inducement or reward for a person acting or refraining from acting in relation to the performance of that person's duties.* (37001, 3.1, p. 2)

The authors of the standards note that their definition is a general, wide-encompassing definition. Applicable national law and the anti-corruption management system, individually developed by the company, define the further meaning of the term “bribery” (37001, Note 1).

The introductory text of the standard highlights that bribery is a global phenomenon and that laws alone are insufficient to combat these offences that cause damage in countries as well as organizations and harm individuals. The ISO calls on private and public companies to play an active role in the fight against corruption by proactively developing anti-bribery and anti-corruption programs and extending them to their business partners (Crescenzi 2018, p. 37).

ISO 37001 is published by the International Organization for Standardization (ISO), a non-governmental organization based in Geneva, Switzerland. Founded in 1947, ISO works with more than 700 international and regional organizations in 162 countries to promote global trade and improve the management of business processes by establishing international business standards (Crescenzi 2018, p. 36; ISO 2018, p. 8). By November 2020, 23,528 international standards and related documents were published; covering almost every industry, e.g., technology, food safety, agriculture, and healthcare (ISO 2020a). The ISO 9001 for quality management system (ISO 2015) is the world's most established ISO standard, currently being used by over one million organizations in 178 countries. The second most popular global standard is the environmental management system ISO 14001 (Stansbury 2016).

ISO 37001 was first published on October 15, 2016 under the title “Anti-bribery management systems – Requirements with guidance for use.” It contains the “requirements [that] are general

and are applicable to any organization (or part of the organization), regardless of the type, size, and nature of the activity” (Brescia 2017, p. 5). Each ISO standard must be globally applicable. The intention of ISO 37001 is to help organizations to minimize, detect, and respond to risks of corruption and to comply with anti-corruption laws and other voluntary commitments like the UN Global Compact (UNGC). The UNGC as a voluntary initiative was first presented by Kofi Annan in 1999 and “intended to increase and to diffuse the benefits of global economic development through voluntary corporate policies and actions” (Williams 2004, p. 755). Nine Principles were formulated, which companies commit themselves to meet by joining the pact. In June 2004, after the 2003 UN Convention Against Corruption was released, the UNGC added a tenth principle on combatting corruption (Williams 2004, pp. 755–56).

ISO 37001 addresses corruption by ignoring other fraud patterns and forms of company misconduct, e.g., fraud, cartels, and money laundering, as well as other anticompetitive practices. However, a company that complies with the standard may decide to extend the scope of its management system to include the prevention of such compliance violations (see also Grueninger and Kissmehl 2021).

In principle, the anti-bribery management system can be independent or integrated into an overall management system; it is also possible to operate as part of another management system, e.g., quality management, environmental protection, or information security (37001, A.2.1, p. 23). Many companies have already implemented a compliance management system with internal systems and processes to ensure the legal conformity of their business.

ISO 37001 defines a management system as a “set of interrelated or interacting elements of an organization to establish policies and objectives, and processes to achieve those objectives” (37001, 3.5, p. 2). The standard specifies the components of an anti-corruption compliance system that gears to continuous development and improvement in the sense of the “Deming Cycle,” “PDCA or PDSA Cycle” (Makowicz 2018a, p. 70 f.; Moen and Norman 2010).

ISO 37001 cannot prevent current or future cases of corruption. Nevertheless, the standards' advantage is its emphasis on a systematic approach to reduce the risk of corruption within companies. All organizational and procedural activities should be planned, coordinated, lived, documented, and monitored (Breit et al. 2018, p. 11). The effective implementation of an anti-corruption management system shows that a company has done everything that is reasonably possible proportionally to its size and risks to prevent the occurrence of corruption cases (37001, p. 23). However, this does not preclude individuals from working against an established system, infiltrating it for personal enrichment, or achieving business goals in an unfair manner by paying bribes (Breit et al. 2018, p. 11). The company's robust anti-corruption management enables these illegal activities to be detected quickly and further corruption crimes to be prevented.

The Development Process

Over the past 20 years, various international laws and procedures were developed to combat bribery. Illustrative examples are the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997) and the United Nations Convention against Corruption (United Nations 2004). To meet the objectives of these Treaties most countries have either amended or adopted new domestic legislation. Since 1977, the US Foreign Corrupt Practices Act (FCPA) has been in force, whom companies which are involved in corrupt activities fear. The UK Bribery Act (UKBA 2010) entered into force on 1 July 2011. The UKBA has a global scope and applies sanctions to both, individuals and companies who have committed a bribery offence at home or abroad and are connected with the UK. After the adoption of the British Bribery Act, investigations worldwide were conducted against companies and individuals accused of bribery (Eberhardt 2018). Subsequently, the National Standards Body of the UK published the British standard BS 10500 ("Specification for an anti-bribery management system (ABMS)") in 2011 (British Standards Institution

2011). This standard that can be used by companies of a different type, size and sector contains minimum requirements and formulates the possibility of an independent review of a company's anti-corruption management. Building on the British standard, ISO 2013 established a committee to develop a new ISO standard for anti-corruption management systems in a multi-stakeholder process. Neill Stansbury, a British construction lawyer previously responsible for the development of the British standard BS 10500, chaired the Project Committee (Crescenzi 2018, p. 37). In principle, every ISO member body has the right to participate in a technical committee set up for a specific topic. In addition, both governmental and nongovernmental international organizations take part in the corresponding consultation processes (Ehnert 2015, p. 9).

The ISO 37001 is based on different international publications, best practices guidelines and publications of government institutions (Crescenzi 2018, p. 38).

In March 2014, the first meeting of the ISO Committee 278 was held in Madrid. Countries that Transparency International classifies as susceptible to corruption also contributed to the norm's development process. This signals that the fight against corruption has gained importance even for those countries (Kayser and Grueninger 2015, p. 135). In accordance with the usual procedure, the national standards institutes and their working committees (Ehnert 2015, p. 9) were able to submit their comments on the draft committee standard in between the meetings of the project committee.

After a second meeting in Miami, the project committee agreed at the third meeting in Paris in March 2015 with 46 countries participating that ISO 37001 would be a certifiable requirements standard (Kayser 2015, p. 441). Following the fourth meeting in September 2015 in Kuala Lumpur, the Draft International Standard (DIS) was submitted to the ISO member organizations and the national committees for discussion. The experts had previously adopted the version by consensus. Draft ISO standards can be purchased by anyone. After the public deliberation stage, minor corrections were made and the standard was finally published in October 2016 (Kayser 2017, p. 1).

Structure and Content

ISO 37001:2016 is based on the following three core concepts (Makowicz 2018a, p. 67): risk management system, PDCA cycle (Makowicz 2018a, p. 70), and ISO High Level Structure (HLS). The HLS is a standardized basic structure for all ISO management standards (ISO/IEC 2020), regardless of their subject area. This uniform content structure with identical chapter heading and a shared basic vocabulary allows the standard to be implemented in the organization either alongside other ISO management systems or to be combined into an integrated management system.

All management standards, structured according to the HLS, consist of ten sections. ISO 37001 covers these sections on 22 pages. While the chapters 1–3 serve as an introduction and contain the scope of the standard, references, and definitions of terms, the remaining chapters follow the Plan-Do-Check-Act approach (PDCA) and the principles “Establish” (chapters 4–7), “Implement” (chapter 8), “Maintain” (chapter 9), and “Improve” (chapter 10) (Breit et al. 2018, p. 11). PDCA operates as a cycle of continuous improvement with risk-based thinking at each stage (ISO 9001:2015, p. 2).

High-level-structure: P-D-C-A	Meaning	Content of the 37001
1. Scope (p. 1)	This section describes the scope of the standard	The norm provides guidance for organizations – regardless of type, size, and nature of activity – “ <i>to prevent, detect and respond to bribery [. . .].</i> ” (37001, S.1)
2. Normative references (p. 1)	This section contains possible references to other standards	The ISO 37001 has no normative references
3. Terms and definitions (p. 1)	This section contains explanations of various terms	The ISO 37001 lists 30 definitions in non-alphabetical order ^a , starting

(continued)

High-level-structure: P-D-C-A	Meaning	Content of the 37001
		with “bribery” and ending with “due diligence”
4. Context of the organization (p. 6–8)	This section sets out the purpose of the organization’s activities and identifies the stakeholders, respectively, “interested parties” that are involved	The scope of the anti-bribery management system must be clarified, stakeholders and their needs identified and the organizational environment highlighted (e.g., the geographical location and global activities, the sector in which the company operates) Establishment and implementation of a systematic risk analysis focused on corruption (bribery risk assessment). Regular risk analysis and effectiveness assessment of measures and controls must be carried out
5. Leadership (p. 8–10)	This section addresses the top management and the distribution of responsibilities and powers	The support and commitment of the top management are of great importance for a functioning management system. This section deals with the requirements for the role of the governing body and top management, the requirements for the anti-bribery policy and the

(continued)

High-level-structure: P-D-C-A	Meaning	Content of the 37001
		organizational and personnel structure of this function. An independent compliance function must be appointed that is also responsible for the anti-corruption management system. The standard also provides for a possible delegation of this function to an external organization
6. Planning (p. 10–11)	The focus here is on the risk-based approach and thus the identification of opportunities and risks	Risks and opportunities, arising in relation to anti-corruption, should be identified and the objectives of the anti-corruption management system defined (“anti-bribery objectives and planning to achieve them”)
7. Support (p. 11–14)	This section focuses on the supporting processes that form the framework for the so-called core processes	Sufficient human, financial, and other resources for the implementation of the management system, e.g., training for all employees exposed to more than a low risk of corruption; staff declarations of compliance with the anti-corruption directive; documented information.

(continued)

High-level-structure: P-D-C-A	Meaning	Content of the 37001
		Performance remuneration and agreed performance targets should be designed in such a way that corruption is not encouraged
8. Operation (p. 15–18)	This section deals with the core processes	The chapter contains concrete instructions for the system: Transactions, projects, personnel, and business partners with more than a low risk of corruption require a standard due diligence process. Financial and nonfinancial controls are required (dual-control principle; transparent procurement; whistleblower system). Business associates with more than a low risk of corruption need to be monitored
9. Performance evaluation (p. 18–21)	The focus here is on monitoring and testing the effectiveness of the management system and analyzing the results	Monitoring, measurement, analysis, and evaluation of the anti-bribery management; internal audit; Review management system by anti-bribery compliance function. The results should be communicated and documented

(continued)



High-level-structure: P-D-C-A	Meaning	Content of the 37001
		to the management, which provides the resources for the effective anti-corruption management on the basis of that
10. Improvement (p. 21–23)	The final section describes the continuous improvement of the system. In addition to the correct handling of nonconformity, appropriate corrective measures are described	Systematic process to prevent noncompliance or to remedy noncompliance with management system requirements. Any nonconformity shall result in an adjustment. This ensures continuous improvement of the overall system

Source: Own depiction. (Structure of the 22-page standard (37001, p. 1–22))

^aCf. ISO https://www.iso.org/sites/directives/current/consolidated/index.xhtml#_idTextAnchor454 “The arrangement of terms and definitions should preferably be listed according to the hierarchy of the concepts (i.e., systematic order). Alphabetical order is the least preferred order.”

In the annex that is 23 pages long (“Guidance on the use of this document”), examples and recommendations of how the requirements that are set out in the main text can be implemented are given. Those recommendations that can be easily identified by the modal verb “shall” completes the standard. The information in the appendix is optional and irrelevant for certification.

ISO 37001 highlights corporate culture as crucial to the success of corruption prevention (37001, VI.). For a sustainable success, compliance must be anchored in an organization’s culture, behavior, and attitudes. The standard therefore particularly emphasizes the role of the management in establishing a compliance culture (37001, 5.1.8, p. 8; see also Grueninger and Kissmehl 2021). “ISO 37001 program framework – when distilled to its essence – is composed

of the following ten elements: (1) culture, (2) governance and oversight, (3) risk assessments and due diligence, (4) policies and procedures, (5) training and communications, (6) speaking up (whistleblowing), (7) investigations and case management, (8) auditing and monitoring, (9) third-party risk management, and (10) continuous improvement. Each element is composed of detailed guidance and requirements” (Crescenzi 2018, p. 37). In addition, ISO 37001 requires companies to document their programs comprehensively.

The Way to Certification

A company might show the agreement of its operations with the requirements of ISO 37001 through a certification process. Although ISO develops standards for this certification process, it is not directly involved in it (ISO 2020c). Instead, third parties, the so-called “external certification bodies” are responsible for it.

Accreditation Process of the Certification Bodies

Each country has its own accrediting body (E.g. Accreditation Body in Germany: DAkkS; in the USA: ANAB and ANSI; the United Kingdom: UKAS), which grants certification bodies permission to certify specific ISO standards (Cherepanova 2019). Since the publication of ISO 37001 it has been criticized that the examination qualities of certifiers might vary given that the accreditation of certifying bodies is handled differently between countries (Murphy 2019, p. 11; Fox 2018; Cherepanova 2019).

With the publication of ISO 37001 in October 2016, the ISO-“Committee on conformity assessment” (CASCO) adopted ISO/IEC TS 17021-9:2016-10 (ISO/IEC 2016), which specifies the requirement profile for certifiers of anti-bribery management systems, i.e., the necessary competencies of the team of auditors. Here it was essential to strike a balance between the general audit competence for assessing management systems and the additional, specific knowledge requirements to combat corruption (Kayser 2017).

Certification bodies can apply for accreditation by demonstrating that they comply with the relevant ISO certification standards, such as ISO 17021-9. This accreditation process is not mandatory, but only recommended (Crescenzi 2018, p. 39; Fox 2018; Grant-Hart 2018).

If a certification body already has ISO/IEC TS 17021:2015 (ISO/IEC 2015) accreditation, for example, because it has audited the ISO 9001 quality management standard or the ISO 14000 environmental management standard in the past, it can go through a simplified accreditation procedure or apply for an “extension of accreditation” to its national accreditation authority. Most of the certification bodies accredited according to ISO/IEC TS 17021-9:2016 have used this procedure up till now (status: April 2019; Cherepanova 2019).

Critics complain that the relevant verification process is not very extensive and too unspecific, as the auditors’ knowledge of anti-corruption measures, their experience in corporate compliance management, and their knowledge of uncovering white-collar crime in the context of bribery does not need to be adequately documented (Cherepanova 2019). The audit practice of compliance management systems in the past has already indicated that auditors – even in auditing companies – were often inadequately trained or lacked experience (Kayser and Grueninger 2015, p. 133). Furthermore, some national accreditation bodies are not members of the International Accreditation Forum (IAF) that provides universal processes and practices for the accreditation of certification bodies.

Since some national accreditation bodies are not members of the IAF, they do not comply with the IAF requirements, but nevertheless award accreditations to certification bodies that in turn may issue ISO certificates (Cherepanova 2019). Also quality controls and inspection measures after the accreditation of certification bodies are the sole responsibility of the respective national accreditation authority (Murphy 2019, p. 12).

Certification Process

Before the certification process begins, the organization or company must implement an anti-

bribery management system. Once this is to be certified, the company should carefully select the certifier (Grant-Hart 2018; ISO 2020c; Shah 2017). In general, the certification process is limited to the parent company or headquarters of the company unless otherwise agreed with the certifier on the subject matter. Usually, each organizational unit must apply for its own certification (Crescenzi 2018, p. 40) and pay the costs by itself. The costs and the scope of the certification vary and depend on, for example, the pricing of the certification company, the size, and location of the company going to be certified.

After the contract between X and Y is signed, the preparation for the audit that can include an optional pre-audit begins. The certification audit is divided into two stages. The first stage is the document examination stage in which the certifiability of the company to be audited, usually on the location of the company’s headquarters, is determined. If the certifiability exists, the auditors agree on daily audit plans based on the size and structure of the company. In their procedure, the auditors must orient themselves on the principles of ISO 19011:2018 (ISO/TMBG 2018; Schlegel 2018, p. 13 f). At the second stage of the audit, the auditor checks the existence of the required processes and evaluates the application and implementation of the Anti-Bribery Management System. This is the initial and comprehensive audit, in which the entire management system is checked.

The requirements of ISO37001 are formulated very broadly and in general terms and hence the standard users are required to translate the requirements into plausible and internally applicable anti-bribery specifications for their operations. During the audit, the auditors verify whether all requirements have been taken into account and whether demanded documents (anti-bribery policy, code of conduct, etc.) were developed. The implementation and application in the individual organizational areas are randomly vetted and evaluated (Schlegel 2018, p. 15). In their work, the auditors check against the standard requirements. The audit team focuses solely on the scope of the relevant standard and may not audit or review any aspect of the company that do not fall within the

scope of the relevant ISO standard (Crescenzi 2018, p. 39).

The control of the management system is based on a limited sample during the period covered by the review program. For this reason, certification cannot guarantee future compliance (Shah 2017).

For the company under review, the certification audit is associated with extensive, time-consuming documentation requirements and resource-intensive audits. If no nonconformities are found, the auditors recommend the certification to the certification company following the audit. If the auditor detects a major nonconformity, which is a massive violation of ISO 37001 requirements and which restricts or completely blocks the functionality of the entire anti-bribery management system, “the organization will have three months’ time to correct them and implement the appropriate corrective measures” (Trevley 2017). Finally, the auditor recommends the certification once he has verified evidence of the organization’s correction of the major nonconformity.

The audited company receives a written report and certification logos, also known as certification marks, together with the certificate. They may be used by audited companies for internal and external communication, for example, in annual reports, on the homepage, or in e-mails. However they may not be printed on the company’s products and goods (QMS 2017).

Certifications are generally valid for 3 years. Monitoring audits must be carried out in the second and third year after the successful certification, albeit, they are limited to the examination of parts of the management system and their effective implementation in the company. After 3 years, a recertification audit in which the complete management system will be again reviewed must occur (Breit et al. 2018, p. 13).

Discussion

Reasons for Certification

Certificates help to solve problems to which the principal-agent theory in the sense of the New Institutional Economics draws attention to (cf. Jensen and Meckling 1976; Rose-Ackerman

1978): as instruments of signaling. Certificates reduce information asymmetries as the agents send signals. Signals can be in the form of a certificate issued by an independent third party or a seal of quality that certified their performance.

These signals reduce the uncertainty of the principal and thereby reduce the risk of adverse selection, increase the principal’s trust, and ultimately persuade the principal to conclude a contract. The aim of signaling is thus to prevent adverse selection and to achieve a market result that is satisfactory for both sides, the principal and the agent (cf. King et al. 2005; Terlaak and King 2006).

Certifications such as ISO 37001, which is on its way to becoming internationally recognized, can be a distinguishing feature and a competitive advantage in day-to-day business, for example, in the communication with banks and investors, with customers, and within the framework of public tendering processes. A valid certification may demonstrate that a company is committed to the prevention of corruption, does not pay bribes, and thus sends signals up- and downstream into its own supply chain. Certifications for nonprofit organizations could strengthen the trust of their stakeholders which might increase their willingness to donate. At the same time, the audit process offers companies a benchmark for assessing their own management systems, might uncover grievances, and provide impetus for improvement. A certification process might have a performance-enhancing effect within an organization, due to the positive internal stress-test in the form of setting a deadline for eliminating nonconformities and recurring surveillance audits.

Systematic anti-corruption management should prevent corporate crimes and reputation damages resulting from corruption. However, the impact of certifications on investigative authorities is strongly disputed. While supporters of third-party audits claim that ISO 37001 certifications can show investigators that a company has adopted a systematic, transparent, and serious approach to the prevention of corruption, critics point out that neither should certification be misinterpreted as panacea nor its impact exaggerated. Companies face the uncertainty whether ISO

ISO 37001 certification could lead to an exculpation or a reduction of penalties. In Germany, a majority of legal experts (prosecutors, lawyers, etc.) doubt that certification would in fact be accompanied by a possibility of release from liability (Kayser and Grueninger 2015, p. 134). Even experts who were closely involved in the development of the ISO 37001 emphasize that certification alone will certainly not – according to whatever standard – result in a disclaimer of liability (Kayser and Grueninger 2015, p. 134). In publications and lectures, courts and public prosecutors all over the world continuously stress that exculpation does not arise singularly from documents, but rather from the exemplary function of the management, the “tone from the top” (see section “Foresight”). An instrumentalization of the norm by companies that do not live up to the anti-bribery management in day-to-day business life will quickly be exposed in court by thorough investigations (Kayser and Grueninger 2015, p. 134). Prosecutors will not be influenced by the existence of ISO 31007 when investigating illegal practices and assessing the appropriateness of measures taken by a company. However, companies that have an anti-corruption management system may submit the documentation prepared for the system’s certification to proof their efforts (Volintiru et al. 2018, p. 127). At the same time, critics note that the relevant audit documents could also be used in criminal proceedings against companies (Chen 2019) and that certification users should be aware of this. This danger exists when there is a lack of integrity in the company. In contrast, ISO 37001 stresses that “a culture of integrity, transparency, openness and compliance” (37001, VI.) is critical to the effectiveness of any anti-corruption management system.

An enormous strength of the standard is to stress the role of management for compliance programs (Murphy 2019, p. 31). ISO certification does not make companies bulletproof and a certificate does not protect against corporate misconduct. It is not possible to certify that no organizational member will be involved in a bribery offence (37001, 4.4, p. 7). Only serious compliance management and an active corporate culture can exclude or at least reduce a company’s

liability. ISO 37001 is a clear, systematic, and appropriate approach to fighting corruption and managing corruption risks. Its focus on the strategic pursuit and the implementation of anti-corruption objectives corresponds to strategic planning in companies (Zentes 2017, p. 155). The risk-based approach ensures that corruption risks are countered through targeted and efficient measures (Breit et al. 2018, p. 14). A corruption risk analysis is an essential component of the standard requirements. All departments and employees that are subject to a high risk of corruption are obliged to deal with the issue of corruption. The special role and treatment of third parties is also mentioned several times in the standard (e.g., 37001, 8.5; 8.6; i.e., 13.3.2 b). The emphasis on the systematic approach helps to bundle the individual activities of compliance, operational units, audit, legal department, etc., in such a way that a uniform, coordinated, and sustainable management system exists within the company (Breit et al. 2018, p. 14). Further motives for a company to obtain ISO 37001 could be positive experiences with the advantages of other ISO management system standards. Because of the *high-level structure* of ISO the implementation of further management systems is likely to be more efficient and the establishment of an integrated management system becomes conceivable (Markowicz 2018b, p. 560).

Irrespective of certification, the requirements of ISO 37001 provide a legitimate and recognized framework for the implementation of a compliance and ethics program based on best practices (Kayser and Grueninger 2015, p. 135). For companies that do not yet have a compliance management system or an insufficient anti-corruption program, the standard can provide valuable information.

Reasons Against Certification

Despite the aforementioned advantages, the ISO standard and its certification process have also been subject to severe criticism. Instead of promoting the development of a custom-fit compliance management system and the evolution of one’s own corporate culture, there is the danger of tying up resources through overly complex

documentation and audit preparations (Kayser and Grueninger 2015, p. 133). Therefore, the costs and benefits of certification should be thoroughly evaluated in advance.

Critics of ISO 37001 see no innovation in the new standard. They criticize a profitable business with content that has been publicly accessible for years (Crescenzi 2018, p. 38; Fox 2018; La Neve 2018), for example, in publications of the British Ministry of Justice and the OECD, to which the ISO 37001 itself refers. Moreover, the standard is not a law and the fight against international corruption requires political, legislative, and judicial efforts that go far beyond the powers of a non-governmental organization. On the contrary, supporters of the norm point to the strength of the framework that summarizes existing concepts in an international consensus and by broad, recognized, and, above all, practicable access to the topic (Kayser 2017, p. 2). In addition, the detailed references in the standard are said to go far beyond the specifications of other publications and would thus provide an illustration and design of already known requirements (Crescenzi 2018 p. 38).

ISO 37001 is the only anti-corruption guideline that can only be obtained for a fee via ISO or the respective national standards body (Murphy 2019, p. 24). It is questionable whether smaller companies will decide to purchase the ISO document. In addition, the strict ISO copyright has been criticized, as it restricts the use of individual extracts from the standard for scientific purposes and “this [...] may limit open debate and discussion” (Murphy 2019, p. 24).

Finally, critics exist with regard to ISO as such. In particular with regard to its transparency and reporting.

Each country has its own ISO organization, which provides information of existing certification companies. Yet, neither does a central, international database with information of certified companies nor who has carried out the companies' certification process exist.

Even the annual ISO survey contains only incomplete information on the sectors in which the 872 companies that received ISO 37001 certification in 2019 are active. This information is

only available for 377 of the 872 valid certificates (ISO 2020b).

Some criticism is also directed at the role of the auditors. For example, it is doubted that actors who make use of quality management methods and experiences can achieve an adequate level to judge the legal-sociological behavioral patterns of compliance in a company. Finally, in contrast to a technical and procedural approach, other evaluation methods are in demand (Schefold 2017, p. 34) and acts of bribery are very diverse and multilayered worldwide (La Neve 2018). Like every certification measure, the audit of the anti-corruption system is based on the professional judgment and integrity of a few auditors. Critics deprecate a lack of transparency in the certification process, since there is a danger of a “tick-the-box” approach and the evaluation of the anti-bribery management system is mostly based on a paper review. Much depends on the skills and experiences of the auditor (Shah 2017) and it is always questionable whether the company under investigation will give the auditor access to all necessary documents and employees working at different levels of a company (Murphy 2019, p. 14).

It might be worth to invest instead on internal audits and an expansion of the legal department in order to intensify the fight against corruption. This approach could build and cultivate robust and trustworthy relationships in all business areas (La Neve 2018). Certification, on the other hand, carries the risk that managers regard it evidence that enough has been done for compliance and that further efforts are unnecessary (Murphy 2019, p. 19). Although this risk may exist, the requirements of ISO 37001 for continuous improvement mitigate it. Other compliance experts have fundamentally questioned the effectiveness of management systems by criticizing the lack of sound, empirical research that testifies the prevention of misconduct by them (Chen 2017). The lack of empirical values must be countered by the fact that ISO 37001 was published only a few years ago and that this evaluation represents a major challenge in any case (Murphy 2019, p. 9).

If one focuses on the weaknesses of the content of the standard text, one encounters the hint that

ISO 37001 does not contain the term “compliance manager”; in contrast to the content of ISO 19600 (see also Grueninger and Kissmehl 2021). ISO 37001 also does not stipulate that the person responsible for anti-corruption management must be a senior or a top manager. Many compliance experts agree that the approach of “compliance as a staff task” has proved unsuccessful in practice and that the only promising concept is “compliance as a management task” (Grueninger 2019, p. 28; Murphy 2019, p. 3 f). “A mid-level lawyer is not going to satisfy an enforcer’s expectation of a true chief ethics and compliance officer (particularly in cases where the violation involves top level people, which is often the case)” (Murphy 2019, p. 35, cf. also Grueninger and Schoettl 2017). This clear position is lacking in ISO 37001. Instead, it even allows the organization to outsource its entire compliance program (5.3.2, p. 10). With regard to this key point, ISO 37001 even deviates from its predecessor, BS 10500: 2011, that does not provide for outsourcing the entire program.

Many promoters of ISO 37001 stress its general character and its broad applicability to various types of organizations. Weaknesses can also be identified here. Statements in the text of the standard are very general and may offer companies too much room for interpretation; creating potential misunderstandings (Murphy 2019, p. 12). In addition, the bulky form of the standard is criticized. Avoidable repetitions, nested sentences, word doublings, and superfluous text lengths would lead to comprehension difficulties. It has been criticized that the appendix is only illustrative. It is unclear to the recipient why recommendations introduced in the appendix with the verb “should” have not been included into the binding standard text (e.g., 37001, A.6.3. “direct communications relationship to the governing body,” Murphy 2019, p. 39).

Geographical Distributions

Since the introduction of ISO 37001 in 2016, several organizations and companies have received ISO 37001 certification. Between

01 January and 31 December 2019, 872 ISO 37001 certifications were issued worldwide by IAF-accredited certification bodies (ISO 2020b). In the same period of time, more than 880.000 companies received ISO 9001 certificates. Most of the 37001 certificates were given to Italian (330), Mexican (57), Malaysian (44), and Spanish (43) companies. In addition, the annual report shows that ISO 37001 is preferred by larger organizations with several sites (ISO 2020b).

Several countries have already dealt with ISO 37001 and have chosen different paths: Singapore has presented a country-specific version of ISO 37001, the Singapore Standard (Martin and Tan 2017). The City of Shenzhen in China published the “Shenzhen Standard,” an anti-bribery management standard in June 2017 (Fang 2017). In Malaysia, a number of government agencies have been ISO 37001 certified (Crescenzi 2018, p. 40), in addition to those companies whose decision to certify may have been influenced by the revision of the Malaysian Anti-Corruption Act of 2009, Section 17A, which came into force in June 2020. Public prosecutors in Brazil (Odebrecht 2018) and Denmark (Atea 2018) have already recognized ISO 37001 certification in investigative proceedings to settle allegations of bribery (MacMurray 2019).

Foresight

Whether the 37001 standard will become a success story in the fight against corruption depends on various factors. On the one hand, the global awareness of the standard must increase its relevance in day-to-day business. ISO 9001 has achieved its high status, since certification according to it is often the prerequisite for establishing business relationships worldwide. The environmental management system (ISO 14001) is subject to certification pressure in certain sectors, e.g., the automotive and electrical industries (Brauweiler et al. 2015, p. 7).

In addition, the way in which nation states and their respective judiciaries will deal with ISO 37001 certification will be important. In some countries, courts and state institutions are already taking

effective compliance solutions into account when determining sanctions in favor of companies (Makowicz 2018a, p. 34). Such possibilities can be found, for example, in Great Britain (MoJ UK 2010), France (Sapin II) and Spain (Art. 31 Código Penal 2015). In associated documents, however, it is pointed out that certifications “*may not necessarily mean that a commercial organization’s bribery prevention procedures are ‘adequate’ for all purposes [...]*” (MoJ UK 2010; see also FGE 2016). In the near future it will become clear whether governments, public prosecutors’ offices, and international organizations will recognize and adapt ISO 37001. Crucial for the further dissemination of the standard will also be the continuation of consistent prosecution of bribery, so that corruption prevention pays off for companies operating with integrity (cf. Rose-Ackerman 1978).

When selecting their certification company, companies are called upon to carry out their third-party assessment carefully to eliminate the weaknesses of the accreditation process that have already been pointed out (see section “[Accreditation Process of the Certification Bodies](#)”). The ISO, in turn, could standardize the accreditation of certification bodies internationally and implement credible control mechanisms globally for quality assurance in order to increase confidence in certifications. It would be a fatal signal if it would be worth to be tested by a compliant, inexpensive certifier in order to benefit from the competitive advantage of certification and still pay bribes (Murphy 2019, p. 21). In this context, it is also worth considering whether the free choice of the certifier on the part of the companies should be restricted in the future and whether instead a neutral authority could determine the auditor, as is already the case with supplier audits. The selection could also be made randomly from a selected group of certification companies. For contrary to the selection of an auditing company, which the company can also choose freely, the certification practice suffers from the problem that, no state regulatory authority is involved for monitoring as described above (Murphy 2019, p. 17/18, see also section “[The Way to Certification](#)”).

The debate on corporate social responsibility could also promote the importance of ISO 37001.

Today, companies on the world market that violate laws or international conventions are held accountable by civil society, the media, and NGOs. They grant or withdraw companies the “licence to operate” – regardless of the existing political or legal framework (Kleinfeld and Zubrod 2016, p. 135). When formal law is weak within countries and across borders, companies play the role of global “citizens” (Rose-Ackerman 2018, p. 21) who promote good corporate values and practices.

An internal ISO development could be a critical factor for the future of ISO 37001. Standards must be reviewed every 5 years by the responsible bodies. If the contents of the standards are still up to date and relevant, their validity will be extended by another 5 years (Lüttmann and Rey 2019).

In 2014, ISO 19600:2016–12 was published as a Type B standard with guidelines for compliance management systems (Grueninger and Kissmehl 2021). The two ISO standards 19600 and 37001 originated independently of each other, since a merger of both projects was not approved by ISO (Ehnert 2015, p. 9).

Since the publication of ISO 19600, companies have increasingly asked to be certified. In response, the relevant standards committees are currently revising the ISO 19600 standard. The change will lead to a Type A standard called ISO 37301, which allows direct certification. What can be already seen from the committee’s work is that the members of the Chinese standardization committee are in particular driving the transformation of the standard forward (Lüttmann and Rey 2019). ISO 37301 is expected to be published in English in 2021 (Wuerz 2020). It remains to be seen whether this step will have an impact on the reception of ISO 37001. Although ISO 37001 contains specific provisions for managing the risk of corruption (Makowicz 2018a, p. 14), standard 37301 could prove to be more global and thus more attractive for companies.

Summary

From the perspective of game theory, the act of corruption constitutes a prisoner dilemma (Rose-

Ackerman 2018, p. 15). While individual bribes can maximize profits, a complete elimination of corruption would be beneficial for all companies. Some scholars believe “that a prisoners’ dilemma can be converted into a coordination game through dialogue, public relations, and outside pressure” (Rose-Ackerman 2018, p. 15 f; cf. Pieth 2014). Certification could be one building block in a list of corresponding measures.

ISO 37001 certification alone will not eliminate the global phenomenon of corruption. However, the standard shows that companies cannot benefit from widely ramified supply chains, on the one hand, and ignore the illegal and illegitimate activities of their business partners with regard to bribery on the other hand. Instead, companies also have a responsibility to approach their business partners and the sales intermediaries in their value chain and to require them to implement anti-bribery controls (37001, 8.5; 8.6; A.13.3.2 b).

The standard has the potential to reduce business risks and costs associated with bribery by providing a clear framework for preventing, detecting, and combating bribery. No anti-corruption program however, irrespective of how robust it might be, can prevent bribery at all times and thus fully protect the company from prosecution. Admittedly, the standard does not make this promise.

ISO 37001 is a management standard that supports companies in the fight against corruption “[...] but it will be effective only when there is a real involvement of top management [...]”. To be truly effective it is necessary to change the mindset and culture of corruption in a whole organization” (Kafel 2016, p. 223). However, the influence of politics and society on bribery should be taken into account, too. It is quite exhausting and costly for a company operating in a corrupt environment to refrain from bribery and to be “[the] only honest firm in a sea of corruption” (Rose-Ackerman 2018, p. 15 f.). ISO 37001 can nevertheless offer support in this struggle and highlight the international backing in its development process, as it is an internationally agreed standard that can be applied throughout the world in contrast to many other guides and anti-

corruption laws that are limited to specific regions and jurisdictions.

Cross-References

- Bribery
- Codes of Good Governance
- Corporate Compliance
- Corporate Governance, Measurement of
- Corruption Perception Index
- Good Governance
- Governance
- Integrated Management Systems
- Integrity Management
- ISO 14001 Standard
- ISO19600 Compliance Management Systems
- ISO 20121 Standard (Event Sustainability)
- ISO 26000 Standard
- ISO 31000: Risk Management Guidelines
- Reports on Payments to Governments
- Risk Management and CSR

References

- Atea ASA. (2018). *Atea Denmark reaches settlement with public prosecutor*. Press Release. <https://news.cision.com/atea-asa/r/atea-denmark-reaches-settlement-with-public-prosecutor.c2574577>. Accessed 15 Nov 2020.
- Brauweiler, J., Will, M., & Zenker-Hoffmann, A. (2015). *Auditierung und Zertifizierung von Managementsystemen: Grundwissen für Praktiker*. Wiesbaden: Gabler Verlag.
- Breit, J., Huttenlocher, M., & Pyrczek, A. (2018). Anti-korruptionsmanagementsysteme nach ISO 37001 -Im Blickpunkt: Aufbau, Anforderungen, Umsetzung und Zertifizierung in Unternehmen. *Compliance Business*, 4(4), 10–14.
- Brescia, V. (2017). Corruption and ISO 37001: A new instrument to prevent it in international entrepreneurship. *World Journal of Accounting, Finance and Engineering*, 1(1), 1–14.
- British Standards Institution. (2011). *BS 10500:2011 – Specification for an anti-bribery management system (ABMS)*. London: British Standards Institute.
- Chen, H. (2017). *Toward evidence-based programs: Thoughts on ISO 37001 and certifications*. Hui Chen Ethics. <https://huichenethics.com/2017/10/21/toward-evidence-based-programs-thoughts-on-iso-37001-and-certifications/>. Accessed 15 Nov 2020.
- Chen, H. (2019). Insight: Don’t obsess over updated DOJ compliance guidance. *Bloomberg Law*. <https://news.bloomberglaw.com/white-collar-crime/insight-dont-obsess-over-updated-doj-compliance-guidance>.

- bloomberglaw.com/business-and-practice/insight-dont-obsess-over-updated-doj-compliance-guidance. Accessed 15 Nov 2020.
- Cherepanova, V. (2019). ISO 37001: Not all certifications are created equal. *The FCPA Blog*. www.fcablog.com/2019/4/3/iso-37001-not-all-certifications-are-created-equal. Accessed 15 Nov 2020.
- Código Penal. (2015). Art 31. <https://www.boe.es/buscar/doc.php?id=BOE-A-2015-3439>. Accessed 15 Nov 2020.
- Crescenzi, M. L. (2018). ISO 37001 certification: Understanding and navigating the process. *Compliance & Ethics Professional Magazine*, n.d. (8), 36–43.
- Eberhardt, A. (2018). How the foreign corrupt practices act came to be. *Corporate Compliance Insights*. <https://www.corporatecomplianceinsights.com/foreign-corrupt-practices-act-came/>. Accessed 15 Nov 2020.
- Ehnert, M. (2015). Standardisierung mit Variablen. – Compliance standards ISO 19600 und ISO 37001. *CCZ*, 8 (1), 6–9.
- Fang, J. (2017). Local Chinese regulator develops anti-bribery management system based on ISO 37001. *The FCPA Blog*. <https://fcablog.com/2017/7/31/jerry-fang-local-chinese-regulator-develops-anti-bribery-man/>. Accessed 15 Nov 2020.
- Fiscalia General del Estado (FGE). (2016). Circular 1/2016, Sobre la responsabilidad penal de las personas jurídicas conforme a la reforma del código penal efectuada por ley orgánica 1/2015. <https://www.boe.es/buscar/doc.php?id=FIS-C-2016-00001>. Accessed 15 Nov 2020.
- Foreign Corrupt Practices Act. (1977). 15 U.S.C. §§ 78dd-1, <https://www.justice.gov/criminal-fraud/foreign-corrupt-practices-act>. Accessed 15 Nov 2020.
- Fox, T. R. (2018). *Defects in the ISO 37001 certification*. FCPA Compliance & Ethics. www.fcacompliance.com/2018/02/defects-iso-37001-certification/. Accessed 15 Nov 2020.
- Grant-Hart, K. (2018). Accreditation hits the mainstream: ISO 37001. *SSCE. The Compliance & Ethics Blog*. <https://complianceandethics.org/accreditation-hits-the-mainstream-iso-37001/>. Accessed 15 Nov 2020.
- Grueninger, S. (2019). Die Führungskraft in der Verantwortung – Compliance im Mittelstand. *Comply*, 4(3), 26–29.
- Grueninger, S., & Kissmehl, Q. (2021). ISO 19600. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer.
- Grueninger, S., & Schoettl, L. (2017). Rethinking compliance – Essential cornerstones for more effectiveness in compliance management. *CEJ*, 3(2), 3–17.
- ISO - International Organization for Standardization (2015). *ISO 9001:2015 [EN] – Quality management systems — Requirements*. Vernier, Geneva: ISO.
- ISO/IEC - International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) (2015). *ISO/IEC TS 17021:2015 [EN] – Conformity assessment — Requirements for bodies providing audit and certification of management systems — Part 1: Requirements*. Vernier, Geneva: ISO.
- ISO - International Organization for Standardization (2016). *ISO 37001:2016 [EN] – Anti-bribery management systems — Requirements with guidance for use*. Vernier, Geneva: ISO.
- ISO/IEC - International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) (2016). *ISO/IEC TS 17021-9:2016-10 [EN] – Conformity assessment - Requirements for bodies providing audit and certification of management systems - Part 9: Competence requirements for auditing and certification of anti-bribery management systems*. Vernier, Geneva: ISO.
- ISO/TC - International Organization for Standardization, Technical Committee (TC) 309 (2017). <https://committee.iso.org/sites/tc309/home/projects/published/ongoing-2/faqs-on-iso-37001.html>. Accessed 5 April 2021.
- ISO/TMBG - International Organization for Standardization (ISO), Technical Management Board-groups (TMBG) (2018). *ISO 19011:2018 [EN] – Guidelines for auditing management systems*. Vernier, Geneva: ISO.
- ISO - International Organization for Standardization (2020a). About us. <https://www.iso.org/about-us.html>. Accessed 15 November 2020.
- ISO - International Organization for Standardization (2020b). ISO Survey 2019 results - Number of certificates and sites per country and the number of sector overall <https://isotc.iso.org/livelink/livelink?func=ll&objId=18808772&objAction=browse&viewType=1>. Accessed 15 November 2020.
- ISO - International Organization for Standardization (2020c). Certification & Conformity. <https://www.iso.org/certification.html>. Accessed 15 November 2020.
- ISO/IEC - International Organization for Standardization (ISO), International Electrotechnical Commission (IEC) (2020). *Directives, Part 1. Consolidated ISO Supplement – Procedures specific to ISO*. https://www.iso.org/sites/directives/current/consolidated/index.xhtml#_idTextAnchor535. Accessed 5 April 2021.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kafel, P. (2016). Anti-bribery management system as a tool to increase quality of live. 1st international conference on quality of life. *Kragujevac*, N.p., 221–224.
- Kayser, M. (2015). ISO 37001: Ein neuer Standard will mit Korruption aufräumen. *Compliance-Berater*, 3(12), 441–443.
- Kayser, M. (2017). ISO 37001: Der neue Standard gegen Korruption ist veröffentlicht. *Compliance-Berater*, 5 (1–2), 1–2.
- Kayser, M., & Grueninger, S. (2015). Dialoggespräch zum Thema ISO 19600. Im Gespräch: Prof. Dr. Stephan Grüninger und Michael Kayser. *Compliance-Berater*, 3(5), 133–135.

- King, A. A., Lenox, M. T., & Terlaak, A. (2005). The strategic use of decentralized institutions: Exploring certification with the ISO 14001 management standard. *Academy of Management Journal*, 48(6), 1091–1106.
- Kleinfeld, A., & Zubrod, A. (2016). Social Compliance. *Compliance-Berater*, 4(5), 133–137.
- La Neve, M. (2018). ISO 37001: A year on. *Ethical Boardroom*. <https://ethicalboardroom.com/iso-37001-a-year-on/>. Accessed 15 Nov 2020.
- Lüttmann, P., & Rey, A. (2019). *Compliance: ISO 19600 kommt im neuen Kleid daher*. <https://www.m-q.ch/compliance-iso%E2%80%8919600-kommt-im-neuen-kleid-daher/>. Accessed 15 Nov 2020.
- MacMurray, W. (2019). Three predictions for the future of ISO 37001. *The FCPA Blog*. <http://www.fcpablog.com/blog/2019/2/13/three-predictions-for-the-future-of-iso-37001.html>. Accessed 15 Nov 2020.
- Makowicz, B. (2018a). *Globale Compliance Management Standards. Werteorientierte Umsetzung von DIN ISO 19600 und ISO 37001*. München/Sinzheim: C.H. Beck oHG.
- Makowicz, B. (2018b). Integration neuer normativer, judikativer und administrativer Anforderungen in ein Compliance-Management-System. *Betriebs-Berater*, 73(10), 556–560.
- Martin, A., & Tan, W. (2017). Singapore adopts ISO 37001 standard on anti-bribery management. *Global Compliance News*. Baker McKenzie. <https://globalcompliancenews.com/singapore-iso-37001-cms-20170512/>. Accessed 15 Nov 2020.
- Ministry of Justice UK. (2010). *The Bribery Act 2010 Guidance*. <http://www.justice.gov.uk/downloads/legislation/bribery-act-2010-guidance.pdf>. Accessed 15 Nov 2020.
- Moen, R. D., & Norman, C. L. (2010). Circling back. Clearing up myths about the Deming cycle and seeing how it keeps evolving. *Quality Progress (QP)*, 44(11), 22–28.
- Murphy, J. E. (2019). The ISO 37001 anti-corruption compliance program standard: What's good, What's bad, and why it matters. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3315737>.
- Myrdal, G. (1968, 1989). Corruption as a hindrance to modernization in South Asia. In A. J. Heidenheimer, M. Johnston, V. T. LeVine (Eds.), *Political corruption: A handbook* (pp. 405–421). New Brunswick/London: Transaction Publishers.
- Odebrecht, S. A. (2018). *For Odebrecht, agreement with CGU and AGU strengthens legal certainty for business recovery*. Press Release. Public Now. <http://www.publicnow.com/view/F40A482B9E92DDB02E824064A66E9A0BF629A99C>. Accessed 15 Nov 2020.
- OECD. (1997). *Convention on combating bribery of foreign public officials in international business transactions*. <http://www.oecd.org/corruption/oecdantibriberyconvention.htm>. Accessed 15 Nov 2020.
- Pieth, M. (2014). Collective action and corruption. In S. Manacorda, F. Centonze, & G. Forti (Eds.), *Preventing corporate corruption: The anti-bribery compliance model* (pp. 93–108). Heidelberg: Springer.
- QMS International. (2017). *Certification representation policy*. Instructions for use of Certificate and Certification Marks. https://www.qmsuk.com/logo_usage. Accessed 15 Nov 2020.
- Rose-Ackerman, S. (1978). *Corruption: A study in political economy*. New York: Academic Press.
- Rose-Ackerman, S. (2018). Corruption in international business. The obligations of multinational firms. *Zfww*, 19(1), 6–24.
- Sapin II, Loi relative à la transparence, à la lutte contre la corruption et à la modernisation de la vie économique (2016), Loi no 2016–1691.
- Schefold, C. (2017). ISO 37001-Compliance. Anforderungskatalog und Guidance für das Unternehmens-CMS zur Bestechungsprävention. *ZRFC*, 12(1), 27–34.
- Schlegel, W. (2018). Der Weg zur Compliance-Managementsystem-Zertifizierung. ISO 19600 und ISO 37001 für Compliance und Anti-Korruption als Grundlage für eine Zertifizierung. *Comply*, 3(3), 12–15.
- Schuler, P. (2018). The costs of corruption: Values, economic development under assault, trillions lost, says Guterres. *UN News*. <https://news.un.org/en/story/2018/12/1027971>. Accessed 15 Nov 2020.
- Shah, S. (2017). ISO 37001: Coalition for Integrity's recommendations for companies considering certification. *The FCPA Blog*. <https://fcpablog.com/2017/8/21/iso-37001-coalition-for-integritys-recommendations-for-compa/>. Accessed 15 Nov 2020.
- Stansbury, N. (2016). International anti-bribery standard ISO 37001. *Transparency International UK*. <https://www.transparency.org.uk/international-anti-bribery-standard-iso-37001/#.WxkriO4vyUk>. Accessed 15 Nov 2020.
- Terlaak, A., & King, A. A. (2006). The effect of certification with the ISO 9000 quality management standard: A signaling approach. *Journal of Economic Behavior & Organization*, 60(4), 579–602.
- Trevley, D. (2017). Five tips for surviving an ISO 37001 Anti-Bribery Certification audit. *The FCPA Blog*. <https://fcpablog.com/2017/07/18/diana-trevley-five-tips-for-surviving-an-iso-37001-anti-brib/>. Accessed 10 March 2021.
- UK Bribery Act. (2010). c. 23. <http://www.legislation.gov.uk/ukpga/2010/23/contents>. Accessed 15 Nov 2020.
- United Nations Office on Drugs and Crime. (2004). *Convention against corruption*. https://www.unodc.org/documents/treaties/UNCAC/Publications/Convention/08-50026_E.pdf. Accessed 15 Nov 2020.
- Volintiru, C., Volintiru, M., & Muşetescu, R. (2018). Promoting ethical behaviour in the eastern partnership countries. *Europolity*, 12(2), 151–178.
- Williams, O. F. (2004). The UN global compact: The challenge and the promise, 14 bus. *Ethics Q*, 755–774. <https://doi.org/10.5840/beq200414432>.
- Wuerz, K. (2020). *ISO 37301 als Hilfe zur Zertifizierung von Compliance Management Systemen*. <https://www.haufe.de/compliance/management-praxis/iso-37301-als->

[compliance-standard_230130_513496.html](https://www.iso.org/standard/230130_513496.html). Accessed 15 Nov 2020.

Zentes, U. C. (2017). *Das Sieben-Säulen-Modell der Korruptionsprävention: Leitfaden zum Aufbau eines unternehmensinternen Anti-Korruptionsprogramms*. Wiesbaden: Springer Gabler.

ISO 9000

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Synonyms

[ISO 9000 group of standards](#); [ISO 9000 standards family](#); [ISO standards on quality management](#)

Definition

ISO 9000 has first been introduced in 1987, by the ISO Technical Committee ISO/TC 176 “Quality management and quality assurance” whose aim was to create the universal quality standard (Taormina 2019). ISO 9000 refers to the set of international quality management system standards that are meant to be implemented by organizations that tend to ensure that their goods and/or services continually meet the needs, requirements, and expectations of customers, as well as, applicable statutory and regulatory requirements (ISO 2019a). ISO 9000 standards series refers to three different quality management standards, that is – ISO 9000 – “Quality Management Systems – Fundamentals and Vocabulary” – that includes the “fundamentals and vocabulary” required for the successful implementation of an effective quality management system, ISO 9001 – “Quality Management Systems – Requirements” – which contains a set of requirements and is the only standard from the ISO 9000 series that can be certified to, and ISO 9004 “Quality Management Systems – Quality of an Organization – Guidance to Achieve Sustained Success” that consists of guidelines for the sustained success. ISO 9000

standards series can be implemented in different organizations, regardless of their size, industry, or sector (ISO 2015a). It aims at supporting the organization in achieving and maintaining the customers’ satisfaction, and gives organizations the capacity to meet new challenges and opportunities, drive sustainability objectives, and achieve sustained success (ISO 2015a).

Core Standards

ISO 9000:2015 – “Quality Management Systems – Fundamentals and Vocabulary” presents the foundation for all of the other quality management system standards, as it helps organizations of any size understand all of the “fundamentals and vocabulary” needed for the successful establishment of the effective quality management system in the organization (ISO 2015a).

ISO 9001:2015 – “Quality Management Systems – Requirements” contains the requirements for organizations that tend to ensure that their goods and services continually meet the needs, expectations, and requirements of customers, as well as, other applicable statutory and regulatory requirements (ISO 2019a). The first version of this standard – ISO 9001:2008 – was revised in 2015 to allow easier integration with other management system standards (for example, ISO 14001:2015). ISO 9001:2015 includes elements such as a stronger focus on customers and the context of the organization to fit the emerging needs of contemporary organizations (ISO 2015b). ISO 9001:2015 is the only standard from the ISO 9000 standards series that can be certified to (ISO 2019a). Accredited certification to ISO 9001:2015 provides objective evidence that an organization conforms to a set of requirements and can deliver goods and services that meet customers’ needs, requirements, and expectations (ISO 2016).

ISO 9004:2018 – “Quality Management Systems – Quality of an Organization – Guidance to Achieve Sustained Success” provides guidance for achieving sustained success (ISO 2018). ISO 9004:2018 is not a certification standard, but it provides a framework for organizations of any

size to assess their maturity level, and explore all the opportunities for improvement (Naden 2017).

Key Changes Between ISO 9001:2008 and ISO 9001:2015

Aiming to create consistency between all global management system standards, ISO created a new version of ISO 9001:2015 following the Annex L (formerly known as Annex SL). The focus of the new standard is on the organizational context and the need for the support of the top management for the development of an effective quality management system; much more attention is being paid to “processes and process approach, and less on documentation”; the risk-based thinking was introduced to “add some systematic evaluation” to the current and future, actual or potential risks, thus making the organizational processes “more robust”; special attention is being paid to “the change management and knowledge management,” and “the continual improvement” was replaced by “the concept of improvement,” thus addressing “the change to the way management thinks” (see Fonseca 2016, Fonseca and Domingues 2017).

Principles

The seven quality management principles were established by experts gathered around the ISO/TC 176, and they are listed as follows (ISO 2015b):

- QMP 1 – Customer Focus
- QMP 2 – Leadership
- QMP 3 – Engagement of People
- QMP 4 – Process Approach
- QMP 5 – Improvement
- QMP 6 – Evidence-Based Decision-Making
- QMP 7 – Relationship Management

These principles were not given in the priority order. According to ISO (2015b) – “for each quality management principle, there is a *statement* describing each principle, a *rationale* explaining

why the organization should address each principle, *key benefits* attributed to each principle, and set of *possible actions* that an organization can take in applying each principle” (ISO 2015b).

Concepts

Process Approach

Organizing its processes to function as a part of an integrated system allows organizations to plan, control, ensure, and improve their quality management system (ISO 2017b). The process approach helps organizations to manage their processes and activities to improve their organizational performance (ISO 2015b). The sequence of actions was developed to provide examples of how the organization may choose to implement this approach to the whole system, as well as, its processes and activities – and is available in “Guidance on the concept, content, and use of the process approach for management systems” (ISO 2017a). Figure showing “a schematic representation of any process and an interaction of its elements” can be found at the ISO platform (see ISO 2020).

Plan-Do-Check-Act (PDCA) Cycle

Planning, within **PDCA**, stands for setting goals, objectives, and targets for processes and its activities, determining all the resources necessary for achieving these goals, as well as all the potential risks, and opportunities for improvement that can occur during this process (ISO 2015b). **Doing** means actually applying what was planned (ISO 2015b). **Checking** refers to managing processes and activities and their results in order to compare them with planned goals (ISO 2015b). **Acting** (if applicable) stands for improving organizational performance (ISO 2015b). Figure showing the structure of ISO 9001:2015 in relation to the PDCA cycle can be found at the ISO platform (see ISO 2020).

Risk-Based Thinking

The latest version of ISO 9001:2015 addresses risk-based thinking as an essential component of the system which can help organizations to identify all the potential risks that can occur during the

process (ISO 2015b). As the system tends to prevent or reduce discovered nonconformities, risk-based thinking adds value and offers opportunities for improvement (ISO 2017b).

Sustainable Development Goals (SDGs)

In 2015, the United Nations (UN) set out 17 Sustainable Development Goals (SDGs), which were then accepted by all UN Member States, as a part of the 2030 Agenda (UN 2019). ISO 9000 standards series can be an essential component of the achievement of the SDGs. Given that standards are a key element of “a new, sustainable world” (ISO 2014) – there is a belief that all stakeholders and interested parties involved in or responsible for standardization in formal and informal organizations for standardization, professional or industrial associations, consortia, fora, governments and governmental organizations, and educational establishments shall make a significant contribution to the achievement of the sustained success (ISO 2014).

According to ISO (2019b), ISO 9001:2015 contributes to the following SDGs:

- SDGs [1] – No Poverty
- SDGs [9] – Industry, Innovation, and Infrastructure
- SDGs [12] – Responsible Consumption and Production
- SDGs [14] – Life Below Water

According to ISO (2019c), ISO 9004:2018 contributes to the following SDGs:

- SDGs [8] – Decent Work and Economic Growth
- SDGs [9] – Industry, Innovation, and Infrastructure
- SDGs [10] – Reduced Inequalities

The successful development of an effective quality management system can be beneficial for most organizations, as it gives them the opportunity to drive sustainability objectives and face new challenges all over the world.

Summary

ISO 9000 refers to the set of international quality management system standards that can be implemented by all organizations that tend to ensure that their goods and services continually meet the needs, requirements, and expectations of customers, as well as, applicable statutory and regulatory requirements. ISO 9000:2015 “Quality Management Systems – Fundamentals and Vocabulary” presents the foundation for all other quality management system standards. ISO 9001:2015 is the only standard from the ISO 9000 standards series that can be certified to – certification to ISO 9001:2015 “Quality Management Systems – Requirements” provides evidence that organizations conform to a set of requirements and deliver goods and services that meet customers’ needs, requirements, and expectations, as well as, applicable statutory and regulatory requirements. ISO 9004:2018 “Quality Management Systems – Quality of an Organization – Guidance to Achieve Sustained Success” is not a certification standard – rather, it provides a framework for organizations of any size to assess their maturity level, and explore all the opportunities for improvement. The successful development of the quality management system can be beneficial for most contemporary organizations, as it gives them the opportunity to drive sustainability objectives and face new challenges all over the world.

Cross-References

- [Integrated Management Systems](#)
- [Integrated Quality and Environmental Management](#)
- [ISO 14000 Standards Series](#)
- [Quality Management](#)

References

- Fonseca, L. M. (2016). From quality gurus and TQM to ISO 9001:2015: A review of several quality paths. *International Journal for Quality Research* 9(1):167–180.

- Fonseca, L., & Domingues, J. P. (2017). ISO 9001:2015 edition- management, quality, and value. *International Journal for Quality Research* 11(1):149–158. <https://doi.org/10.18421/IJQR11.01-09>.
- ISO. (2014). *Teaching standards: Good practices for collaboration between national standards bodies and universities*. 100. <https://www.iso.org/files/live/sites/iso.org/files/store/en/PUB100354.pdf>. Accessed 14 July 2020.
- ISO. (2015a). *ISO 9000:2015 Quality management systems – Fundamentals and vocabulary*. <https://www.iso.org/standard/45481.html>. Accessed 22 September 2021.
- ISO. (2015b). *ISO 9001:2015 Quality management systems – Requirements*. <https://www.iso.org/standard/62085.html>. Accessed 22 September 2021.
- ISO. (2016). *Selection and use of the ISO 9000 family of standards*. <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100208.pdf>. Accessed 22 September 2021.
- ISO. (2017a). *The process approach in ISO 9001:2015*. <https://www.iso.org/files/live/sites/isoorg/files/archive/pdf/en/iso9001-2015-process-appr.pdf>. Accessed 14 July 2020.
- ISO. (2017b). *RISK-based thinking in ISO 9001:2015*. https://committee.iso.org/files/live/sites/tc176sc2/files/documents/ISO%209001%202015%20-%20Implementation%20guidance%20docs/ISO9001_2015_and_Risk.docx. Accessed 22 September 2021.
- ISO. (2018). *ISO 9004:2018 Quality management – Quality of an organization – Guidance to achieve sustained success*. <https://www.iso.org/standard/70397.html>. Accessed 22 September 2021.
- ISO. (2019a). *ISO 9000 Family – Quality management*. <https://www.iso.org/iso-9001-quality-management.html>. Accessed 14 July 2020.
- ISO. (2019b). *ISO 9001:2015 Quality management systems – Requirements*. <https://www.iso.org/standard/62085.html>. Accessed 14 July 2020.
- ISO. (2019c). *ISO 9004:2018 Quality management – Quality of an organization – Guidance to achieve sustained success*. <https://www.iso.org/standard/70397.html>. Accessed 14 July 2020.
- ISO. (2020). *ISO platform*. <https://www.iso.org/obp/ui/#iso:std:iso:9001:ed-5:v1:en>. Accessed 14 July 2020.
- Naden, C. (2017). *The key to sustained business success with ISO 9004*. <https://www.iso.org/news/Ref2187.htm>. Accessed 22 September 2021.
- Taormina, T. (2019). *The history and future of the ISO 9000 series of standards*. <https://advisera.com/9001academy/blog/2019/04/15/history-of-the-iso-9000-series-of-standards-and-what-to-expect-next/>. Accessed 22 September 2021.
- United Nations. (2019). *Sustainable development goals*. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Accessed 14 July 2020.

ISO 9000 Group of Standards

- ISO 9000

ISO 9000 Standards Family

- ISO 9000

ISO Standards on Environmental Management

- ISO 14000 Standards Series

ISO Standards on Quality Management

- ISO 9000

ISO19600 Compliance Management Systems

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Synonyms

Compliance culture; Compliance management system; Good governance; Integrity management; ISO 19600

Definition

This article discusses the ISO 19600, an international cross-industry standard that contains

directives for the use of compliance management systems. The standard is designed as a guideline and is based on the principles of good governance, proportionality, transparency, and sustainability. It covers all forms of corporate and organizational structures and aims to support managers and employees in avoiding unethical conduct. The authors describe the principles of the ISO 19600 standard and in this context examine in more detail the three core elements that form a successful compliance management system: a high-level structure, a risk-based approach, and a plan-do-check-act model. In addition, compliance culture and the role of management are discussed.

Introduction

The ISO 19600 is an international set of rules that contains directives for the use of compliance management systems. The cross-industry standard can be regarded as a guideline for setting up, developing, implementing, evaluating, maintaining, and improving an adequate and effective compliance management system (CMS) within an organization.

This universal standard is based on the principles of good governance, proportionality, transparency, and sustainability (ISO 19600:2014, Number 1) and is flexible regarding the handling (Fissenewert 2015, p. 199). The directives developed cover all forms of corporate and organizational structures.

The scope of the application depends on the size, structure, type, and complexity of the organization. It can thus be used to target not only large companies, but also medium-sized businesses, as well as foundations, associations, federations, and governmental agencies – both in the private and public sectors.

The purpose of the standard is to support managers and employees in avoiding improper conduct. This is achieved by evaluating the effectiveness of compliance measures through internal and external communication, continuous process improvements, and establishing a sustainable compliance culture (Scheffold 2015, p. 10).

The ISO 19600 is published as a Type-B standard, whereas Type-A standards (i.e., ISO 37001) contain requirements against which an organization can claim conformance and therefore is approved for certification. ISO 19600 provides guidance and supporting information and intentionally consists of recommendations (shoulds) and not explicit mandatory requirements (musts).

The ISO 19600 thus provides an overview of measures of basic standards and recommendations that should be taken into consideration when introducing a CMS, such as:

- The assessment of the business environment and compliance risks
- Leadership with different roles and responsibilities within an organization
- Systematic management and control mechanisms
- Training and communication
- Monitoring, internal audits, and incident response

It is designed as a guideline and supplements other international and national standards. At the same time, however, it can also serve as a framework in countries which either do not yet have national standards or in which no international standards have yet been established.

History

International companies have been dealing with a number of different national and international requirements over the past years which can be derived from laws or voluntary standards (e.g., the UK Bribery Act of 2010, the US Sentencing Guidelines for Organizations, the German IDW PS 980, the ComplianceProgrammMonitor^{ZfW}, or the KICG CMS-Guidance 2014). This has led to the wish for a certain standardization of these requirements, as well as making it easier for these companies to set up and implement such management systems. This focus on standardization is understandable, in particular due to the sufficient level of awareness of basic CMS

elements. The International Organization for Standardization (ISO), in general a more technically oriented standards organization, most likely wanted to accommodate this desire. If one takes a closer look at the standards, the technical background of the organization is indeed noticeable. Typically for an ISO standard, ISO 19600 was developed and revised by committees consisting of different expert working groups.

In June 2012, ISO member Australia made a proposal to start developing an ISO standard for compliance programs based on its own national standard AS 8306 from 2006. This proposal was accepted by the ISO members, and a project committee including experts from 11 countries was set up to develop the standard. Three global meetings took place between April 2013 and July 2014 (in Sydney, Paris, and Vienna). The experts discussed more than 400 comments from over 20 countries with observation status according to the consensus principle, and a 33-page document containing 50 clauses based on these discussions was published in December, 2014.

Principles of the Standard

The standard is essentially based on three different models, which are combined to form one compliance management system. This system includes: (1) a risk management system using a risk-based approach (see ISO 31000), (2) a high-level structure (HLS) which is organized like other management systems, so that the recommendations arising from the standard can be directly integrated into existing management systems, and (3) the plan-do-check-act model which is oriented towards a continuous improvement process.

High-Level Structure

A typical feature of the ISO management standard is the high-level structure (HLS). This enables organizations that have already implemented other ISO standards to adopt the existing structures and add additional corresponding compliance functionalities. However, the standard explicitly states that the recommendations can

also be implemented in organizations that have not yet set up this type of management system.

The HLS includes the following elements:

Elements of HLS	Guidance on compliance in ISO 19600
Scope	• Guidance for establishing, developing, evaluating, maintaining, and improving an effective and responsive CMS • Applicability to all types of organizations – extent of application depends on the size, structure, nature, and complexity of the organization • Based on the principles of good governance, flexibility, proportionality, transparency, and sustainability
Normative references	None
Terms and definition	In the sense of a link to previous, above all technically understood management systems, ISO 19600 first gives an overview of the terms to be defined, for example: • Compliance: meeting all the organization's compliance obligations, which arise from mandatory requirements, such as applicable laws and regulations, or voluntary commitments such as organizational and industry standards, contractual relationships, principles of good governance, and community and ethical standards • Compliance culture: the values, ethics, and beliefs that exist throughout an organization and in the behavior and attitude of people working for it which interact with the organization's structures and control systems to produce behavioral norms that are conducive to compliance outcomes
Context of the organization	• Analysis of the environment in which the organization operates (context, issues, stakeholders, and their requirements, needs, and expectations) • Scope of the compliance management system • Identification of compliance obligations • Assessment of the compliance risks

(continued)

Elements of HLS	Guidance on compliance in ISO 19600
Leadership	• Policy, commitment, and leading by example • Roles, responsibilities, and authorities with respect to compliance for the board, top and line management, employees, and an independent compliance officer
Planning	• Planning of measures to control compliance risks • Establishing compliance objectives
Support	• Awareness, competence, and training compliance • Behavior and culture • Communication and documentation
Operation	• Implementation of controls for compliance (technical, procedural, directing the attitude and behavior of personnel)
Performance evaluation	• Monitoring of compliance, application of indicators • Analysis of information and reporting of results (internal and external) • Internal audit and management review
Improvement	• Actions on noncompliance with requirements and escalation to higher management levels when necessary • Corrective action • Improvement activities

Risk-Based Approach

For a long time, compliance has been in the shadow of risk management. The new ISO 19600, however, is based on a risk-based approach in the spirit of ISO 31000 (ISO standard for risk management) and thus serves to manage compliance risks. This is based on a systematic approach that provides organizations with valuable information about changing framework conditions. Risks are identified, analyzed, and evaluated in order to determine compliance requirements and establish controls. Organizations can then take measures to counteract the biggest compliance risks, weighted by their priority. According to this approach, companies first determine a responsible person (e.g., at the management level or an appointed employee), which

is followed by a three-step process consisting of (1) risk identification, (2) risk assessment, and (3) risk management. In order to concentrate management outlays and controls on the biggest compliance risks, the first step is to identify the specific risks, i.e., to identify them as comprehensively as possible, based on the most current information. An organization must decide which of its stakeholders' requirements, needs, and expectations are obligatory for the organization and must therefore be met. The term compliance has deliberately been expanded in this standard and goes beyond complying with relevant laws. In addition to obligatory compliance obligations, the ISO 19600 also includes obligations that an organization would like to fulfill, such as compliance with voluntary principles, industry standards, or agreements with nongovernmental organizations.

The starting point here is the question of the risk involved in not considering the specific needs of stakeholders as a compliance obligation. This is followed by a risk assessment, which is calculated by multiplying the probability of the occurrence of a risk by the potential loss. Concrete management efforts then focus on risk management, which includes measures to prevent, reduce, limit, and transfer risk, as well as procedures designed to monitor and evaluate the effectiveness of risk management. The risk-based approach involves bringing in experts with the sensitivity to be able to identify potential future sources of risk, as well as documenting the risks identified in the process and justifying the selection of a specific risk treatment.

Plan-Do-Check-Act Model

The idea behind the PDCA cycle is putting employees who work on site and have precise knowledge of the workplace situation at the center of planning. This then serves the system of continuous improvement. The cycle essentially consists of four management functions:

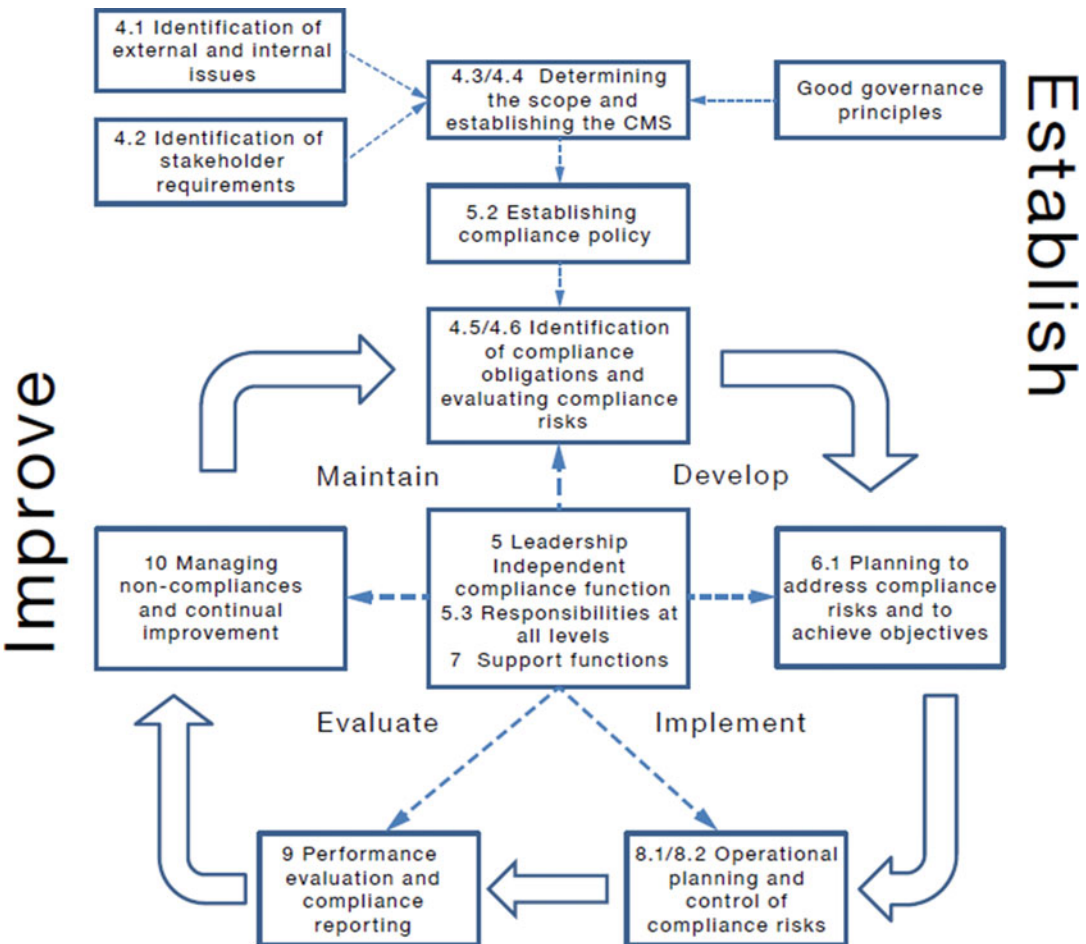
- **Plan (Develop):** The process is planned before the actual implementation and includes the identification of improvement potentials, the analysis of the actual situation, and the development of a new concept.

- Do (Implement): This is followed by an initial test phase as well as practically optimizing the concept using simple means that can quickly lead to a desired outcome.
- Check (Evaluate): This involves reviewing the processes and results initiated in the first tests and, if necessary, releasing for implementation and initiating as new standards on a broad front.
- Act (Maintain): In this phase, the new standard is introduced on a broad basis and regularly checked for compliance.

The model described above basically aligns with other management systems, is based on the

continual improvement principle (plan, do, check, and act), and consists of two phases:

1. The early phase (establish) involves setting up the system and is intended for defining goals and areas of application for the compliance management system. This can be used as a basis for defining the company's compliance policy.
2. The late phase (improve) is the risk-based operation of the system according to the PDCA cycle and includes assigning responsibilities and establishing the CMS management system (Fig. 1).



ISO19600 Compliance Management Systems, Fig. 1 Visualisation of the compliance management system (ISO 19600:2014, p. v.)

Proportionality, Flexibility, and Good Governance

An important principle of ISO 19600 is proportionality: A CMS should be proportionate, meaning that processes, structures, and measures should be comparable in scale to the defined objectives and not overly ambitious and outsized, especially in view of scarce resources.

Small- and medium-sized enterprises in particular would therefore not necessarily be forced to allocate additional personnel for this purpose. Instead of having its own compliance department or designating a compliance officer, companies can – depending on the type, size, and organization – utilize existing structures, such as an interdisciplinary committee of persons which could act as an interface to deal with and channel individual compliance issues (Makowicz and Stadelmaier 2015, p. 90). The standard can be applied to various corporate and organizational structures based on the principle of flexibility. The standard recommends an application according to the size, structure, nature, and complexity of the organization. The ISO 19600 defines good governance as having direct access to company management, being completely independent, and having the appropriate resources available. These should always be considered in terms of the principles of proportionality and flexibility.

Compliance Culture

The core of the guideline is a compliance culture, which decisively shapes how well compliance measures are accepted within companies, and is therefore integral for the success of a compliance management system. The ISO 19600 defines compliance culture as the values, ethical standards, and convictions that exist within organizations, interact with their structures and control systems, and generate behavioral norms that promote compliance outcomes. Compliance culture is often mentioned in the standard, described as the “tone from the top,” the goal of compliance training or sensitizing board members, and as the objective of compliance monitoring. The role of

management in establishing such a culture is particularly emphasized.

The concept of a compliance culture must be highlighted at this point. This culture should not only be understood as the mere willingness to behave in accordance with rules and the extent to which rule violations are violated, but is also intended to encompass areas in which no formalized rules or behavioral guidelines exist (Kleinfeld and Kettler 2017, p. 88). Company culture begins with the founding of the organization, and is characterized by a complex process of social integration involving the members of the organization – which per se makes each corporate culture unique (Fichtner 2008, p. 104).

There are three basic levels of culture:

1. Observable artifacts
2. Values and norms
3. Basic assumptions

Artifacts are the first obvious manifestations of company culture that one perceives and experiences when entering the premises of an organization – visible structures and processes of an organization that are easy to observe but difficult to decipher. These are visible and audible behavioral patterns, such as the office layout and interior design, attire, the way employees interact with one another, as well as physical manifestations such as documents or products, the organizational structure, and working hours (Schein 1990, p. 115). In the area of ethics, this level can include formal codes of conduct or public declarations on ethical values. However, the mere existence of an ethics program does not mean that it is being effectively implemented and anchored in the organization (see Kaptein and Schwartz 2008). As mentioned above, the level of artifacts is the easiest to grasp, because it consists merely of describing the environment and existing patterns of behavior. However, this level is very difficult to comprehend because, beyond this directly observable level, the underlying logic of a group's behavior remains unclear (Huhtala 2013, p. 12).

Values are part of the moral culture in all societies and help us analyze why the members of an organization behave the way they do. These

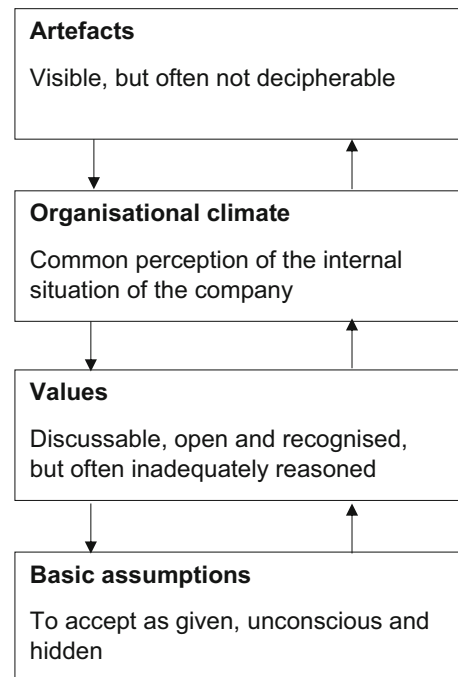
values are a benchmark for decisions and actions (Grüninger 2019, p. 52) and express what a society values (Wieland 2004, p. 13). In addition to the normative orientation function that guides behavior, values constitutively lend an organization its identity, shape the patterns of perception within the organization and its members, and also have an integrative, community-building function, provided that they can be anchored in the corporate culture. In addition to moral values, the value set of a company also includes performance, communication, and cooperation values that must be individually defined and described by the company. However, these values often represent only the expressed, “weakened” side of the culture, while the underlying reasons for typical behavior remain unconscious. The management of values can be seen as a significant tool to shape compliance culture within organizations (for a deeper understanding on the impact of value management see Wieland and Grüninger 2000, 2003).

In order to truly understand a culture and better grasp the values and visible behavior of the group, it is essential to address the underlying assumptions, which are typically unconscious, but which actually determine how group members perceive, think, and feel, and are therefore seen as self-evident by their members (Schein 1984, p. 4). These assumptions are answers that are learned, created, discovered, or developed by a particular group about how they learn to deal with their problems of external adaptation and internal integration, and thus serve as a starting point for values and behaviors. They have worked well enough to be considered valid, and are therefore taught to new members as the right way to perceive, think, and feel about certain problems (Schein 1990, p. 111). From an ethical point of view, the basic assumptions are deeper than the values mentioned and may even contradict the formal norms. For example, an organization may have a formal code of conduct and superficially implemented ethical values, while fundamental assumptions actually only value reaching business targets at any price without regard to ethical issues (Falkenberg and Herremans 1995, p. 135). These assumptions are therefore very powerful

because they are less debatable and less obviously conscious than the values they represent.

Schein’s (1984) three-stage model can be expanded to include an additional level – the organizational atmosphere (Glock 2018, p. 225), which is displayed in Fig. 2 below. It contains the typical way members of an organization perceive the internal situation and thus how they view structural aspects as well as organizational conditions. Here the subjective quality of working together – i.e., the “mood” in the company – is taken into consideration. This structural and emotional component on the one hand influences behavior in the organization, and is on the other hand influenced itself by the values of organizational characteristics (Rosenstiel and Nerdinger 2011, p. 61).

Compliance does not work without a supportive corporate culture, because the culture in an organization has a great influence on the degree of behavior based on moral of integrity within companies. This culture can motivate employees to behave ethically, and thus plays an important



ISO19600 Compliance Management Systems, Fig. 2 The levels of culture and their interaction (2). (Own figure based on Glock 2018, p. 225)

role in reducing human risks in compliance management. A truly functioning CMS can only be implemented by imparting values. Only introducing a static CMS might lead to misunderstandings and to employees' rejecting the CMS. Merely imposing prohibitions will logically lead to a low level of acceptance for compliance management (Fissenewert 2015, p. 203), because people need an attitude upon which they can and want to orient themselves. This attitude is reflected in a corporate culture that is oriented towards preventive measures, where the purpose is comprehensible and acceptable for employees, and to which people can – and want to – ultimately orient themselves. The goal is a company atmosphere that reaches the minds and hearts of all employees and does not allow unethical behavior in the first place. The behavior of managers is decisive here – compliance must therefore be understood as a “leadership task” (for a deeper understanding, see Grüninger and Schöttl 2017).

Compliance Management as a Matter of Leadership

The ISO 19600 attaches importance to the different roles, responsibilities, and responsibilities within the company and assigns a decisive role to the company management (executive board and supervisory bodies). First, management must make the decision to implement a compliance management system, then define the objectives and framework of the CMS and provide the appropriate resources. The effect of modeling within companies is very important. If management is committed to clean, legally compliant business practices and thus to preventing and punishing illegal practices, and if it lives up to this commitment, this then establishes an important prerequisite for a compliance management system to work.

The management style of top executives and the personnel management style of every manager in a company play an essential structural and cultural role in the emergence and prevention of unethical actions in companies. This is done by setting targets and in particular by manager's orientation towards moral principles and values

(Wieland 2008, p. 162). Above all, managers have a huge influence on their employees, because they trigger psychological adjustment processes through their role as models. Employees imitate the behavior of their superiors or role models via observational learning, imitation, and ultimately identification with the managers themselves (Brown et al. 2005, p. 119).

Managers' serious self-commitment and credible commitment to corporate values and rules as well as their communication play a very important role in this context. This is often referred to as “Tone of the Top” and “Tone of the Middle” in the literature. The fact that this commitment to ethical action must not only be reflected in verbal communication and written documents but must really be “lived” mirrors what we know from basic research on human communication. Modeling consistent behavior in accordance with company guidelines and, in particular, reaching employees in terms of internalizing desired norms and values can lead to an increase in integrity and compliance within the company (Kaptein and van Dalen 2010, p. 102). The same applies to agreeing on balanced goals, and taking the form and means of achieving targets into consideration when later evaluating achievements (Mayer et al. 2009, p. 7).

Rewarding exemplary behavior and introducing disciplinary measures for misconduct in a careless manner pose great dangers with regard to unethical employee behavior. When companies make unclear and ambiguous statements, avoid sanctioning, or even embellish unethical behavior by managers, this creates space for interpretation with regard to the priority of values and rules. An additional potential risk of promoting unethical behavior can be caused by the pressure perceived by an employee resulting from the superior/subordinate relationship with their manager. Overly optimistic target agreements and invitingly designed economic compensation models increase the risk of the impression that the given targets can only be achieved via unfair means. However, managers' behavior in itself also has the potential to systematically promote unethical behavior, for example, when employees feel unfairly treated. Another risk of unethical managerial behavior that is closely linked to the

organizational hierarchy structure is “management override.” This involves senior managers in a company deliberately overriding internal control and prevention mechanisms with their know-how, skills, and access.

Employees in organizations characterized by a weak ethical management culture, particularly with regard to a lack of sense of responsibility and an inappropriate role model function among managers, are 3.6 times more likely to engage in unethical behavior. This was the result of a study involving more than 5000 employees in the USA (Ethics and Compliance Initiative 2018, p. 9). Further findings confirm the theses listed above. The willingness of employees to engage in unethical behavior increases by a factor of four in organizations in which ethical behavior remains unrewarded and is not considered when performance goals are evaluated.

Further studies have shown that leadership behavior in organizations is the key factor in a company’s ethical culture (Pucic 2015, p. 655; Ethics & Compliance Initiative 2018, p. 13). For example, employees who agree that their supervisors regularly talk about the importance of ethical behavior are nearly 12 times more convinced that their organization encourages them to comment on observed problems and misconduct.

A study involving 553 German business executives from all company sizes, sectors, and hierarchical levels came to the conclusion that the most common reason for management culture changes in a company is personnel changes in top management (Cisik 2016, p. 9). Developing current managers through training and coaching is one of the most frequently used measures, followed by recruiting new middle managers (second place), formulating a management model (third place), and firing older managers (fourth place). Other measures mentioned include punishing or rewarding poor or strong leadership (11th and 12th place).

Summary

Especially for small- and medium-sized companies, ISO 19600 offers the opportunity to address the topic of compliance in a structural manner.

The existing high-level structure allows a straightforward implementation, especially if further management standards (such as, for example, ISO 9001 with regard to quality management and ISO 31000 with regard to risk management) already exist in the company.

Similar to ISO 26000 (see chapter ► [“ISO 26000 Standard”](#)), ISO 19600 has the characteristic of a guideline and is not designed as a mandatory requirement. The decision not to publish a Type-A guidance document similar to the ISO37001 (see chapter ► [“ISO 26000 Standard”](#)) was made to offer more flexibility when designing a CMS.

It should be noted, however, that implementing a CMS according to ISO 19600 is generally recommended as it shows that an organization takes active measures to ensure compliance, yet by no means provides complete and all-embracing protection against unethical behavior. A management system can only be as effective as the information fed into it. And in the final analysis, this information only provides a glimpse of the current situation.

If companies truly want to deal with the constantly emerging risks in a responsible manner, compliance must be viewed as a management task. This can only succeed if business leaders and executives become aware that both the culture and the leadership in companies influence people and are also influenced by people. Compliance as a management task means committing to the principle of integrity and consistently modeling ethical behavior.

Cross-References

- [Codes of Good Governance](#)
- [Corporate Compliance](#)
- [Corporate Governance, Measurement of](#)
- [Good Governance](#)
- [Governance](#)
- [Integrity Management](#)
- [ISO 14001 Standard](#)
- [ISO 20121 Standard \(Event Sustainability\)](#)
- [ISO 31000: Risk Management Guidelines](#)
- [ISO 37001 Anti-bribery Management Systems](#)

References

- Brown, M., Treviño, L., & Harrison, D. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117.
- Cisik, A. (2016). *Führungskultur in Deutschland. Eine empirische Analyse*. Krefeld/Mönchengladbach: Hochschule Niederrhein.
- Ethics & Compliance Initiative. (2018). *Building companies where values and ethical conduct matter*. Global Business Ethics Survey. Vienna (VA): ECI.
- Falkenberg, L., & Herremans, I. (1995). Ethical behaviours in organizations. Directed by the formal or informal systems? *Journal of Business Ethics*, 14(2), 133.
- Fichtner, H. (2008). *Unternehmenskultur im strategischen Kompetenzmanagement*. Wiesbaden: Springer Gabler.
- Fissenewert, P. (2015). ISO 19600. Der neue Standard zur Zertifizierung von Compliance-Management Systemen. *Zeitschrift für Risk, Fraud & Compliance (ZRFC)*, 5, 198.
- Glock, Y. (2018). Unternehmenskultur. In A. Kleinfeld & A. Martens (Eds.), *CSR und Compliance. Synergien nutzen durch ein integriertes Management* (p. 223). Wiesbaden: Springer Gabler.
- Grüninger, S. (2019). Werteorientiertes Compliance Management System. In J. Wieland, R. Steinmeyer, & S. Grüninger (Eds.), *Handbuch Compliance-Management. Konzeptionelle Grundlagen, praktische Erfolgsfaktoren, globale Herausforderungen* (3rd ed., p. 41). Berlin: Erich Schmidt Verlag.
- Grüninger, S., & Schöttl, L. (2017). Rethinking compliance – Essential cornerstones for more effectiveness in compliance management. *Compliance Elliance Journal*, 3(2), 3.
- Huhtala, M. (2013). Virtues at work. Ethical organizational culture as a context for occupational well-being and personal work goals. *JYVÄSKYLÄ Studies in Education, Psychology and Social Research*, 479, 3.
- ISO 19600:2014. (2014). *Compliance management systems – Guidelines*. Geneva: International Organization for Standardization (ISO).
- Kaptein, M., & Schwartz, M. S. (2008). The effectiveness of business codes: A critical examination of existing studies and the development of an integrated research model. *Journal of Business Ethics*, 77, 111.
- Kaptein, M., & van Dalen, J. (2010). The empirical assessment of corporate ethics: A case study. *Journal of Business Ethics*, 24(2), 95.
- KICG. (Ed.). (2014). CMS-Guidance. Grüninger, Stephan; Jantz, Maximilian; Schweikert, Christine; Steinmeyer Roland: Empfehlungen für die Ausgestaltung und Beurteilung von Compliance-Management-Systemen. KICG CMS-Guidance 2014 – zu den Leitlinien 1 bis 4 für das Management von Organisations- und Aufsichtspflichten
- Kleinfeld, A., & Kettler, A. (2017). Wertemanagement und interne (CSR-) Kommunikation. In R. Wagner, N. Roschker, & A. Moutchinik (Eds.), *CSR und Interne Kommunikation. Forschungsansätze und Praxisbeiträge* (p. 87). Wiesbaden: Springer Gabler.
- Makowicz, B., & Stadelmaier, M. (2015). Compliance im Mittelstand auf Basis des ISO 19600? *Compliance Berater*, 4, 89.
- Mayer, D., Kuenzi, M., Greenbaum, R., Bardes, M., & Rommel, S. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, 108(1), 1.
- Pucic, J. (2015). Do as I say (and Do). Ethical Leadership Through the Eyes of Lower Ranks. In *Journal of Business Ethics*, 129(3), 655–671.
- von Rosenstiel, L., & Nerdinger, F. (2011). *Grundlagen der Organisationspsychologie: Basiswissen und Anwendungshinweise*. Stuttgart: Schäffer-Poeschel.
- Schefold, C. (2015). ISO-Compliance. Ein internationaler Leitfadens für das Unternehmens CMS. *Zeitschrift für Risk Fraud & Compliance (ZRFC)*, 1, 1.
- Schein, E. (1984). Coming to a new awareness of organizational culture. *Sloan Management Review*, 25(2), 3.
- Schein, E. (1990). Organizational culture. *American Psychologist*, 45, 109.
- Wieland, J. (2004). Grundlagen des Wertemanagements. Wozu Wertemanagement? Ein Leitfaden für die Praxis. In J. Wieland (Ed.), *Handbuch Wertemanagement. Erfolgsstrategien einer modernen Governance* (1st ed.). Hamburg: Murmann.
- Wieland, J. (2008). Die Kunst der Compliance. In A. Löhr & E. Burkatzki (Eds.), *Wirtschaftskriminalität und Ethik* (p. 155). München/Mering: Rainer Hampp Verlag.
- Wieland, J., & Grüninger, S. (2000). EthikManagementsysteme und ihre Auditierung – Theoretische Einordnung und praktische Erfahrungen. In J. Wieland (Ed.), *Dezentralisierung und weltweite Kooperationen – Die moralische Herausforderung der Unternehmen* (p. 123). Marburg: Metropolis.
- Wieland, J., & Grüninger, S. (2003). Values management systems and their auditing: Concept, instruments and empirical experiences. In J. Wieland (Ed.), *Standards and audits for ethics management systems* (p. 119). Heidelberg: Springer.

Issue Management: A Typology of Approaches

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Definition

Issue management in business has developed over time from its origins in the 1960s and 1970s from

being primarily a reactive response to perceived environmental threats to business interests to a proactive process that is integrated into a business's strategic planning. This development can be explained as the emergence of three approaches to issue management distinguishable according to the archetype of governance upon which they are based – specifically hierarchical, market, and network-based approaches. Hierarchy is based on individual interests, specific knowledge, and planning, whereas market is based on multiple interests, nonspecific knowledge, and requirements for coordination, and network is based on collective interests, intangible knowledge, and the mode of coordination.

Introduction

Issue management – specifically the identification and management of social issues related to the planning and implementation of business – has a long history. As a concept, issue management lies at the heart of any debate regarding the social role, expectations, and value of business. Many theories and frameworks for identifying and managing issues have been developed. The development of these theories and frameworks of issue management has not been sequential, rather the growth of the field has seen the development of a number of different approaches each based upon a different concern.

This entry presents a typology of the representative theories and frameworks of issue management drawing on a number of disciplines including crisis management, strategic management, public relations, and corporate social responsibility wherein it is considered a key component. These theories and frameworks of issue management are grouped into three ideal types comprising of three approaches to issue management each aligning with one of the three models of governance: hierarchical, market, and network. The objective here is to understand and explore the meaning of theories and frameworks of issue management as forms of governance.

History of Concept

Theories and frameworks of issue management that were initially developed as part of the discipline of strategic planning in the mid-1900s continue to be applied today as an integral part of the practice of strategic management.

The term issue management in its current usage first appears in the 1960s and stems from the pre-existing fields of forecasting and future studies (Fahey and King 1977; Fahey et al. 1981). The concept received attention during this time, particularly in the USA, as business environments underwent rapid change and firms were faced with challenges including demands for environmental protection by banning the use of aerosols and the promotion of human rights for women (Wartick and Rude 1986, p. 125). Characterized as a time of turbulence by Heath, the 1960s and 1970s witnessed conflict between firms and public policy initiatives as the influence of activists became a significant factor for business (Heath 2002b, p. 206). In the face of activists calling for stricter governmental regulation of business, firms developed issue management in order to detect and respond to emerging threats (Heath 2002a, p. 209).

Accordingly, effective issue management came to be measured in terms of its efficacy in minimizing external threats and surprises (Wartick and Rude 1986, p. 126). These early formulations of issue management were therefore largely reactive, dealing with the effects rather than the causes of social issues (Buchholz 1982). Since these early beginnings social, political, and environmental changes have continued to influence firms and shape public perceptions of the role and responsibilities of corporations. The concept of issue management has subsequently been developed as a function of strategic management whereby firms practice issues management as a part of, and not simply in addition to, their strategic processes (Heath 2002b, p. 207). In the language of Wartick and Rude, issue management thereby changes from being a process for firefighting to one of fire prevention (Wartick and Rude 1986, p. 127).

Different approaches continue to be developed recently such as those aimed to facilitate analysis

and evaluation of the social performance of firms. A review of the theories and frameworks of issue management offers the opportunity to explore the development of social thought relating to business. More recently, growing awareness that firms as legal entities operate on the basis of a social license has led to the development of approaches to issue management that emphasize the need to work with social actors towards the common good rather than narrowly defined self-interest (Heath 2002b, p. 207).

Three Approaches to Management Based Upon Models of Governance

Issue management has been defined as a three-staged process whereby firms seek to identify, evaluate, and respond to environmental factors, which may influence their activities in order to avoid surprises and facilitate the effective utilization of their resources (Wartick and Rude 1986, p. 124). Issue management can be reactive, focusing on social and political issues that may impinge on its activities in the future (Johnson 1983, p. 22; Clark et al. 2017, p. 1140), or proactive and seek instead to contribute to the cocreation of desirable futures.

Issues management can be understood to be a process whereby actors seek to establish governance over matters, which need to be addressed. Governance is therefore integral to issue management. As such, issue management is shaped by the model of governance applied in the situation wherein issues are identified and managed. Different approaches to issue management can be defined according to the archetype of governance upon which it is based.

Various conceptualizations of the means by which organizations establish governance over their relationship with other organizations exist including “styles of governance” (Meuleman 2008, p. 12), “modes of governance” (Boutilier 2011), and “models of social order” (Streeck and Schmitter 1985, p. 119). All three of these conceptualizations identify three archetypes of governance: hierarchies, markets, and networks. These approaches can be identified and contrasted

Issue Management: A Typology of Approaches, Table 1 Characteristics of approaches to issues management by governance model

	Hierarchy	Market	Network
Identity and interests	Individual	Multiple	Collective
Knowledge	Specific knowledge	Nonspecific knowledge	Intangible
Emergence (“project or process”)	Application of fixed rules and procedures	Negotiation of rules	Ongoing rule making
Resource utilization	Control	Coordination	Integration
Expression of power	Control	Dispersed competition	Spontaneous solidarity
Issue management approach	Strategic	Transactional	Transformational

Source: Author

in terms of a number of characterizing factors including: interests, type of knowledge, planning, requirements for, and mode of coordination as indicated in Table 1.

Interests: Individual, Multiple, or Collective

Streeck and Schmitter characterize these three archetypes as constituting contrasting approaches to the management and expression of different identities and interests. Streeck and Schmitter contend that bureaucracy, markets, and communities are defined by the central institution that “embodies (and enforces) their respective and distinctive guiding principles” (Streeck and Schmitter 1985, p. 119).

Bureaucracies seek to maintain stability and predictability by promoting the imposition of “agreed upon procedures and regulations” based upon the public interest in order to protect “all actors from domination by external actors and in affording equitable and predictable treatment to all” (Streeck and Schmitter 1985, p. 121). Markets are explained as mechanisms to give voice to participants within a free and competitive communication forum and thereby create the accountability needed to legitimate the attainment of

economic prosperity (Streeck and Schmitter 1985, p. 121). Markets therefore legitimate relationships by facilitating the equal access to opportunities by the freedom to compete in the pursuit of interests. By contrast, communities (networks) are based on the award of recognition and esteem for leaders in exchange for the satisfaction of “mutual needs for a shared affective existence and a distinctive collective identity” of its members (Streeck and Schmitter 1985, p. 121). The mutual satisfaction of needs comes therefore by the coordinated participation in a collective identity of distinctive individual entities.

In each case, the objective of the central institution is to seek to minimize risk by maximizing predictability. For bureaucracies, issues therefore become potential threats to a planned order, for markets a point of competition over legitimacy, while within communities they can become opportunities to change and develop relationships within the collective.

Type of Knowledge Defining Relationships

Boutilier argues that the mode of governance implemented is influenced by the nature of knowledge being coordinated through relationships. For Boutilier, organizations with high dependence on specifiable knowledge tend to employ “prescribed processing routines” such as contracts to coordinate activity:

Hierarchies are typically used when transactions require more specific knowledge, equipment, and coordination. Hierarchies legitimize their governance through employment relationships and contracts. Communication among the actors takes place according to prescribed processing routines. (Boutilier 2011)

In contrast, interactions that involve little or no specific knowledge can be effectively coordinated as transactions managed as open, price-based exchanges. Boutilier further notes that:

Markets are used more when transactions do not require any specific knowledge, materials, or coordination. Property rights legitimize market governance, and the actors send signals via prices

(i.e., offers, bids, and settlements). Buying gasoline is a pure market transaction. No special knowledge or equipment is required to switch from one gas station to another. (Boutilier 2011)

Interactions involving the exchanges of intangible assets are best coordinated by networks due to the difficulty involved in defining and valuing them (Boutilier 2011).

Planning or Process Orientation

Meuleman has characterized hierarchical governance as emphasizing management in terms of carefully planned projects with contractually defined roles and clear allocations of authority (Meuleman 2008, p. 25). This contrasts with networks that are instances of process management defined by relationships sustained by mutual dependence, ongoing rule-making, complex policy, in addition to requiring active risk reduction and conflict management (Meuleman 2008, p. 33).

Resource Access and Utilization

Powell has explained the utility of hierarchical forms of organization in terms of their enabling the high levels of accountability and transparency necessary for the deployment of large volumes of resources for mass production in “high volume, high speed operations” within situations with relatively little change (Powell 1990, p. 303). However, where the prevailing need is for resources that are standardized, commoditized, and exchanged upon the basis of quality and price, there is little or no need to depend on others. Powell defines markets as a: “form of noncoercive organization, they have coordinating but not integrative effects” (Powell 1990, p. 302). Markets therefore flourish where “individually self-interested, noncooperative, unconstrained social interaction” best serves the purposes of the actors (Powell 1990, p. 302).

Networks, by contrast, consist of: “individuals engaged in reciprocal, preferential, mutually supportive actions” (Powell 1990, p. 303). Requiring

associations that are closer than the discreet transactions characterizing the market, yet more dynamic than those of hierarchies, networks enable an effective “pooling of resources” (Powell 1990, p. 303).

Power and Control

In essence, governance models are different forms of interactions between entities. Meuleman defines governance styles as the “process of decision making and implementation, including the manner in which the organizations involved relate to each other” (Meuleman 2008, p. 12). It is implicit therefore that power and control are fundamental dimensions to any consideration of governance styles.

Streeck and Schmitter have characterized these three forms of governance as relationships of power whereby communities and networks are understood as instances of “spontaneous solidarity,” markets as “dispersed competition,” and bureaucracies as embodiments of “hierarchical control” (Streeck and Schmitter 1985, p. 119).

Three Approaches to Issue Management

The mode of governance has shifted over time. Meuleman argues that public administration in Western nations has shifted from a primary focus on hierarchy since the Second World War until the 1980s, to subsequently include market mechanisms and more recently to include networks from the 1990s. Meuleman characterizes this shift as one which “enriched the range of possible steering, coordination and organisation interventions” available for public administration (Meuleman 2008, p. 1). Streeck and Schmitter contend that at present: “almost everyone would concede that modern societies, politics or economies can only be analysed in terms of some mix of [governance models]” (Streeck and Schmitter 1985, p. 119).

The outcome of this shift has been the development of three approaches to issue management: a

hierarchical approach based upon strategy, a transactional approach based upon markets, and a transformational approach based upon networks (see entries on ► [“Issue Management: The Strategic Approach,”](#) ► [“Issue Management: Market Approach,”](#) and ► [“Issue Management: The Network Approach”](#)). Issue management involves the identification and management of social issues related to the planning and implementation of business. Several theories and frameworks of issue management have been developed over time, each based on different concerns. These approaches can be ordered into three ideal types, each aligning with one of three models of governance: hierarchical, market, and network. These approaches are characterized by various factors, including interests, knowledge, planning, coordination, and more. By exploring the development of social thought relating to business, it is evident that issue management has evolved to become a function of strategic management, shifting from being a process for firefighting to one of fire prevention. The recent focus on social license has further led to the development of approaches to issue management that emphasize the need to work with social actors towards the common good.

Summary

Issue management involves the identification and management of social issues related to the planning and implementation of business. Several theories and frameworks of issue management have been developed over time, each based on different concerns. These approaches can be ordered into three ideal types, each aligning with one of three models of governance: hierarchical, market, and network. These approaches are characterized by various factors, including interests, knowledge, planning, coordination, and more. By exploring the development of social thought relating to business, it is evident that issue management has evolved to become a function of strategic management, shifting from being a process for firefighting to one of fire prevention. The recent

focus on social license has further led to the development of approaches to issue management that emphasize the need to work with social actors towards the common good.

Cross-References

- [Issue Management: Market Approach](#)
- [Issue Management: The Network Approach](#)
- [Issue Management: The Strategic Approach](#)

References

- Boutilier, R. (2011). *A stakeholder approach to issues management*. New York: Business Expert Press.
- Buchholz, R. A. (1982). *Business environment and public policy: Implications for management*. Englewood Cliffs: Prentice Hall.
- Clark, C. E., Bryant, A. P., & Griffin, J. J. (2017). Firm engagement and social issue salience, consensus, and contestation. *Business and Society*, 56(8), 1136–1168.
- Fahey, L., & King, W. R. (1977). Environmental scanning for corporate planning. *Business Horizons*, 20(4), 61–71.
- Fahey, L., King, W. R., & Narayanan, V. K. (1981). Environmental scanning and forecasting in strategic planning – The state of the art. *Long Range Planning*, 14(1), 32–39.
- Heath, R. L. (2002a). Comment: Issues management: Its past, present and future. *Journal of Public Affairs*, 2(4), 209–214.
- Heath, R. L. (2002b). Editorial. *Journal of Public Affairs*, 2(4), 206–208.
- Heath, R. L. (2018). Issues management. In R. L. Heath & W. Johansen (Eds.), *The international encyclopedia of strategic communication* (pp. 1–15). New York: Wiley.
- Johnson, J. (1983). Issues management: What are the issues? *Business Quarterly*, 48(3), 22–31.
- Meuleman, L. (2008). *Public management and the meta-governance of hierarchies, networks and markets: The feasibility of designing and managing governance style combinations*. New York: Springer.
- Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior*, 12, 295–336.
- Streeck, W., & Schmitter, P. C. (1985). Community, market, state-and associations? The prospective contribution of interest governance to social order. *European Sociological Review*, 1(2), 119–138.
- Wartick, S. L., & Rude, R. E. (1986). Issues management: Corporate fad or corporate function? *California Management Review*, 29(1), 124–140.

Issue Management: Market Approach

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Definition

A market-based approach to issues management is a method of identifying and managing issues that considers the public interest in addition to the strategic interests of companies. The goal of issue management within a market-based approach is to co-manage organizational and community resources to advance both private and public interests. This approach recognizes that non-market issues of broader societal concern are of strategic importance and emphasizes engagement in public policy debates to promote the development of public policies that would advance business interests. This market-based approach to issue management promotes a process of ongoing communication between companies and their stakeholders to achieve and maintain congruence, which leads to legitimacy. Legitimacy is gained by fostering stakeholder respect and understanding as an emergent process. Stakeholder salience is a critical factor in issue management within this approach, where issues are defined not only by the strategic salience of the firm, but also by the meaning attached to them by human agents. The emotional appeal and shared identity of issues can motivate stakeholders to work together toward a common goal. Although this approach recognizes the importance of actors outside the firm, stakeholders are primarily defined as external to the firm and their issues as externalities. This approach is characterized by several key concepts, including social issues, issue life cycles, legitimacy, and stakeholder salience.

Introduction

A market-based approach to issue management is characterized by a number of themes including:

1. Concern with the public interest in recognition of the shift in primacy of interests of the firm to the public
2. Social nature of issues or the “social dimension” of business
3. Dynamics of issues as issue lifecycles
4. Legitimation of the rights and freedoms of firms to conduct business

Wartick has observed that definitions of “issues” differ between the literature on business strategy, public policy, and the business and society (Wartick and Mahon 1994, p. 299). This difference is increasingly apparent when the focus of study is directed to the interactions between firms and social actors.

According to Heath, market approaches to issue management highlight the balance within the business community between the legitimate goals and rights of (1) society and (2) the free enterprise system (Robert L. Heath, p. 10). For Heath, this indicates a change in the objective of issues management from one concerned primarily with protecting the interests of the firm to one also considering interests mutual with society.

At the foundation of this approach is the recognition that non-market issues, which are of wider social concern, are of strategic importance. Heath highlights the importance for maintaining the operations of the firm by understanding the “knowledge and preferences of stakeholders” (Heath 2002, p. 211). Heath defines the goal of issue management within a market-based approach as being concerned with the engagement in public policy debates in order to promote the development of public policies that would in turn promote business interests (Heath 2002, p. 210). Accordingly Heath defines strategic issues management as the “co-management of organizational and community resources (both material and symbolic)” to promote both private and public interests (Robert L. Heath, p. 1).

This approach is defined by several key concepts, and among these social issues, issue life cycles, legitimacy, and stakeholder salience are of particular significance and will be discussed here.

Social Issues

As opposed to the firm centric approach to strategic issue management and its concern with the power to control, a market-based approach to issue management takes the market as its center and considers the ability of firms to influence and be influenced socially. Here issue salience is no longer based primarily on the interests, responses, and resources of the firm, but also by their “degree of social salience” (Clark et al. 2017, p. 1137). In terms of a theory of issue management, this means that there is a shift in the definition of issues as comprising “opportunities or threats” for the firm, to a deeper consideration of issues as being either consistent or contested in terms of their meaning for society (Clark et al. 2017, p. 1141).

Market-based approaches to issue management center on the concept of a social issue and the key question becomes therefore what constitutes a social issue and how can a social issue to be identified by a firm? In their seminal review of the corporate issue construct literature, Wartick and Mahon identified the three themes of: (1) impact, (2) controversy, and (3) expectational gaps, each with their own specific characteristics and weaknesses (Wartick and Mahon 1994, pp. 295–299).

The issue as impact construct is largely based on the work of Ansoff (as discussed in the previous section) and refers to external environmental issues that impinge on the firm. The weakness here is that social issues that are not seen to impact the firm are not recognized as corporate issues – without recognized firm impact; therefore, there is no social issue. Controversy, as the name suggests, identifies issues as the subject of a controversy – a dispute between actors with different interpretations of a particular situation or trend. This conceptualization also has limits as a guide for practice according to Wartick and Mahon in that it is difficult to predict. Expectation gaps have

been defined differently over time. Definitions of issues as gaps in expectations can be traced back to Jacoby who defines a social problem as a “gap between society’s expectations of social conditions and the present social realities” (Jacoby 1971, pp. 35–36). Post later defined social issues as gaps between firm performance and the public’s expectations of performance (Post 1978, p. 283).

Despite the apparent distinction between these three themes, Wartick and Mahon question the utility of this classification. Wartick and Mahon maintain that for a social issue to exist, there needs to be both controversy and a gap in expectation (Wartick and Mahon 1994, p. 300). Furthermore, they suggest that rather than focusing on the impact of issues themselves, the focus should be directed to the “impact of the possible resolution to the issue that is intended to close the gap” (Wartick and Mahon 1994, p. 302).

Based upon this, Wartick and Mahon proposed a reformulation of the issue construct where an issue is defined as:

“(a) a controversial inconsistency based on one or more expectational gaps (b) involving management perceptions of changing legitimacy and other stakeholder perceptions of change in cost/benefit positions (c) that occur within or between views of what is and/or what ought to be corporate performance or stakeholder perceptions of corporate performance and (d) imply an actual or anticipated resolution that creates significant, identifiable present or future impact on the organization.” (Wartick and Mahon 1994, p. 306)

Taking society as the starting point, Ryberg subsequently defined a social issue as a: “gap between social perceptions of business behavior or performance and social expectations about what that performance should be” (Ryberg 1982, p. 231). Galbreath later posed a broader definition of a social issue as comprising “anything that is found wrong with society” (Galbreath 2009, p. 112). Based upon the work of Ogburn and Duncan (1964) and Merton (1968), Galbreath identifies four aspects as constitutive of a social issue: (1) collective, not just individual awareness of wrong, (2) regional and temporal relativity as opposed to universality, (3) assumed existence of a solution or better way, and (4) desirability of its

resolution (see also: Galbreath 2010; Galbreath and Benjamin 2010).

Stressing the importance of solution and resolution, Lamertz has defined a social issue as:

“socially constructed disruptions of an institutional order that structures purposeful exchanges between actors. Under these conditions, issue evolution resembles an ongoing sense-giving battle in which actors seek to restore the order by imposing their unique solution preferences on the situation.” (Lamertz et al. 2003, p. 82)

Arguably this represents the breakdown of hierarchy-based issue management frameworks and the subsequent resort by the parties involved to the market in search of resolution. For Lamertz, issues can be:

“conceptualized as contests over the creation of meaning, arising as social actors disagree over the causes and consequences of events that precipitate structural failure of the negotiated order. In a symbolic interactionist framework, issues are therefore not seen as objective descriptions of events, but as reflections of a dynamic interaction between the participants in an enacted structure, who engage in a power struggle over the meaning constructed for the underlying objective conditions.” (Lamertz et al. 2003, p. 86)

Not all theorists assume that social issues are limited exclusively to contested issues or gaps in expectation. Clark, Bryant, and Griffin have also identified social consensus as a possible basis of issues and argue that the judgment of an issue as either contested or consensual will influence how the firm perceives the issue and the extent to which it will engage with it (Clark et al. 2017, p. 1138).

Social Issue Life Cycles

The dynamics of issue life cycles is a key theme within the market-based approach (Bonardi and Keim 2005; Clark et al. 2017, p. 1140). In contrast to the concern within the strategic approach with unmanaged issues that spin out of control to become crises, in the market-based approach, focus is given to the changes in the definition and significance attributed to issues over time as issue lifecycles. Social issues are widely seen as

cyclical in nature – as shaped by an inherent tendency to slowly emerge, wax, and then wane as interest in them diminishes or as a result of their resolution. Clark has observed that much of the literature on issues management is concerned with the “dynamic, transitory, or cumulative effect of issues over their life cycle” (Clark et al. 2017, p. 1140). Within this approach, the cumulative effects over time of single as opposed to multiple issues are given particular attention (Clark et al. 2017, p. 1140).

Stressing the social context (the inherently societal nature) of social issues, however, Lamertz, Martens, and Heugens have disputed the life-cycle model of social issues and sought to substitute it instead with a symbolic interactionist framework which: “avoids attributing independent ontological status to issues or events. Instead, the framework assumes that key social actors construct a social issue through interpretations of key events” (Lamertz et al. 2003, p. 84). For Lamertz, Martens, and Heugens, therefore, issues evolve not in cycles of public attention, but instead in the context of ongoing negotiation of meaning through relationships.

Working from Weick’s theory of sensemaking SEE {Weick, 1979 ¥6059;Daft, 1984, r00506;Daft, 1984, r00506;Weick, 1993, r01359;Weick, 1995, r00848;Weick, 2001, r01892}, Lamertz, Martens, and Heugens depict the process of issue evolution as being: “less a natural process of fluctuating public attention and more a social process of constructing and negotiating meaning in a context of ongoing social relations and transactions” (Lamertz et al. 2003, p. 84), thus recognizing the socially constructed nature of issues as relativities within the wider societal context. Seen sequentially then, the development of an issue therefore starts with an enacted structure, which receives public attention after failing due to the application of pressure, thus leading to the definition of an issue, an ensuing institutional redesign and lastly in a reenactment, which signals issue resolution (Lamertz et al. 2003, p. 84).

Issue Management as Competitive Advantage

Heath has argued that the ability to manage social issues constitutes an organizational capability from which firms may derive a competitive advantage.

Heath identifies four such abilities by which the firm enhances its ability to manage social issues by:

- Planning and managing strategic business processes – “thinking and acting smart”
- Knowing and achieving appropriate standards of corporate responsibility – “getting the house in order”
- Monitoring issues – “scouting the terrain”
- Engaging in strategic public policy dialogue – “engaging in tough defense and smart offence” (Heath 2002, p. 211)

While recognizing the performance benefits of social issue engagement for firms, however, Hillman and Keim argue that these capabilities are an easily copied level of a competitive advantage.

Hillman and Keim have observed that:

“investing in stakeholder management may be complementary to shareholder value creation and may indeed provide a basis for competitive advantage as important resources and capabilities may be created that differentiate a firm from competitors. On the other hand, participating in social issues may be seen at best as a transactional investment easily copied by competitors.” (Hillman and Keim 2001, p. 135)

In order to create a competitive advantage that results in economic value creation, firms must therefore engage in social issue involvement that goes beyond transactional actions. Hillman and Keim argue that social performance must be separated into two forms – (1) stakeholder management and (2) social issue participation – in order to measure the economic value created by social issue engagement (Hillman and Keim 2001, p. 126).

Legitimacy

The interpretation of issue management as an ongoing process of securing legitimation by identifying and addressing issues indicative of gaps between social perceptions and expectations of firm performance and behavior is another important theme in the market-based approach to issue management.

Heath, working from the discipline of public relations, has identified legitimacy gained through the promotion of respect and understanding from stakeholders as another benefit for firms for engaging in social issue management. For Heath “ultimately the objective – and advantage – of issues management is to make a smart, proactive and even more respected organization. This sort of organization is one that understands and responds to its stakeholders and stakeholders” (Heath 2002, p. 211).

In earlier work, Sethi refers to this state of understanding as congruence. For Sethi, this congruence between a firm’s goals with those of society forms the basis of legitimacy: “Corporations, like all other social institutions, are an integral part of a society and must depend on it for their existence, continuity, and growth. They therefore constantly strive to pattern their activities so that they are in congruence with the goals of the overall social system” (Sethi 1979, p. 64). A lack of congruence here results in a loss of legitimacy, which must be reduced in order for the firm to “maintain maximum discretionary control over its internal decision-making and external dealings” (Sethi 1979, p. 65).

Heath argues that legitimacy is not static, but the changing result of an ongoing and emergent process of communication between firms and their stakeholders and stakeholders in order to achieve and maintain congruence. For Heath, this means that “legitimate organizations cocreate and constitute themselves through communication” and that “harmony is cocreated as collective self-interests gain and reflect shared definitions of public interest” (Robert L. Heath, p. 1).

The inability to manage issues can result in a legitimacy gap developing between the social perception of either the performance or behavior of a firm in contrast with its expectations (Ackerman 1973). The opposite state of a legitimacy gap has been explored using the concept of a license to operate [*see entry on license to operate*].

Stakeholder Salience

In contrast to the strategic approach to issue management, wherein issues are defined by the firm in accordance with their strategic salience, the market approach also considers the role of stakeholders in the identification of issues.

This process is explained by Crable and Vibbert when they state that:

“Issues are not simply questions that exist. An issue is created when one or more human agents attaches significance to a situation or perceived ‘problem.’ These interested agents create or recreate arguments which they feel will be acceptable resolutions to questions about the status quo. Literally, then, people and groups of people ‘make’ issues out of matters in which they have an interest.” (Crable and Vibbert 1985, p. 5)

Within the market approach, understanding the significance of issues to stakeholders plays an important role in issue management. According to Bundy et al. (2013, p. 354), there are several factors beyond immediate material interests that can explain why stakeholders may identify and prioritize certain issues. One such factor is the emotional appeal of issues to stakeholders. Issues may evoke strong emotions in stakeholders and create an emotional connection that extends beyond the expected impact of the issue. This emotional connection can make the issue more important to the stakeholders than it would have been based on a purely rational consideration of its immediate impact (Bansal and Roth 2000, p. 729). In other instances, stakeholders may also pursue issues that relate to and reinforce their shared identity. This can help to promote solidarity among group members and strengthen the bond between them, even if the issue itself

may not directly align with their rational interests as a group. By pursuing issues that are meaningful to their collective identity, stakeholders may be motivated to work together towards a common goal (Rowley and Moldoveanu 2003, p. 211).

Summary

Market-based approaches to issue management go beyond the firm centricity characterizing strategic approaches (see entry on ► “Issue Management: The Strategic Approach”) by acknowledging the importance of issues identified by social actors and recognizing that stakeholders may both identify their own issues and attribute their own meaning to issues (Van Offenbeek and Vos 2016, pp. 54–55). While this approach may therefore acknowledge the role and importance of actors outside the firm, stakeholders continue to be defined as external to the firm and their issues as externalities from the firm’s perspective. Although this approach explores the social context within which firms and their activities are embedded, it does not go beyond the essential dichotomy dividing firms and stakeholders characteristic of the strategic approach.

Cross-References

- Issue Management: The Network Approach
- Issue Management: The Strategic Approach

References

- Ackerman, R. W. (1973). How companies respond to social demands. *Harvard Business Review*, 51(4), 88–98.
- Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43(4), 717–736. <https://doi.org/10.2307/1556363>.
- Bonardi, J.-P., & Keim, G. D. (2005). Corporate political strategies for widely salient issues. *Academy of Management Review*, 30(3), 555–576.
- Bundy, J., Shropshire, C., & Buchholtz, A. K. (2013). Strategic cognition and issue salience: Toward an explanation of firm responsiveness to stakeholder concerns. *Academy of Management Review*, 38(3), 352–376.
- Clark, C. E., Bryant, A. P., & Griffin, J. J. (2017). Firm engagement and social issue salience, consensus, and contestation. *Business & Society*, 56(8), 1136–1168.
- Crable, R. E., & Vebbert, S. L. (1985). Managing issues and influencing public policy. *Public Relations Review*, 11(2), 3–16.
- Galbreath, J. (2009). Building corporate social responsibility into strategy. *European Business Review*, 21(2), 109–127.
- Galbreath, J. (2010). Drivers of corporate social responsibility: The role of formal strategic planning and firm culture. *British Journal of Management*, 21(2), 511–525.
- Galbreath, J., & Benjamin, K. (2010). An action-based approach for linking CSR with strategy. In C. Louche, S. O. Idowu, & W. L. Filho (Eds.), *Innovative CSR: From risk management to value creation* (pp. 12–36). Sheffield: Greenleaf Publishing.
- Heath, R. L. (2002). Comment: Issues management: Its past, present and future. *Journal of Public Affairs*, 2(4), 209–214.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What’s the bottom line? *Strategic Management Journal*, 22(2), 125–139.
- Jacoby, N. H. (1971). What is a social problem? *Center magazine*, 4(4), 35–40.
- Lamertz, K., Martens, M. L., & Heugens, P. P. M. A. R. (2003). Issue evolution: A symbolic interactionist perspective. *Corporate Reputation Review*, 6(1), 82–93.
- Merton, R. K. (1968). *Social theory and social structure*. New York: Simon and Schuster.
- Ogburn, W. F., & Duncan, O. D. (1964). *On culture and social change: Selected papers*. Chicago: University of Chicago Press.
- Post, J. E. (1978). *Corporate behavior and social change*. Reston Publishing Company.
- Rowley, T. I., & Moldoveanu, M. (2003). When will stakeholder groups act? An interest- and identity-based model of stakeholder group mobilization. *Academy of Management Review*, 28(2), 204–219. <https://doi.org/10.5465/amr.2003.9416080>.
- Ryberg, R. (1982). Defining the social issue concept. In *1982 proceedings* (pp. 230–234). Dallas: Academy of Management.
- Sethi, S. P. (1979). A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. *Academy of Management Review*, 4(1), 63–74.
- Van Offenbeek, M. A. G., & Vos, J. F. (2016). An integrative framework for managing project issues across stakeholder groups. *International Journal of Project Management*, 34(1), 44–57.
- Wartick, S. L., & Mahon, J. F. (1994). Toward a substantive definition of the corporate issue construct: A review and synthesis of the literature. *Business & Society*, 33(3), 293–311.

Issue Management: The Network Approach

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Definition

The network approach to issue management is a framework that seeks to address the limitations of both the strategic and market approaches to issue management by recognizing that firms are only one participant among others in a broader network of stakeholders. The network approach to issue management has three main themes: a non-firm-centric definition of stakeholders and issues, the business environment as a multistakeholder network, and issue resolution in a network as a process of system (relationship) change. This approach defines issues as being the characteristics of networks of relationships as systems and seeks to manage them through mechanisms such as issue-focused stakeholder management, detached networks, issue evaluation, and the integrative framework of issue and stakeholder management. Overall, the network approach to issue management recognizes the importance of managing stakeholder relationships and promoting the legitimacy of the issue management process and its outcomes by incorporating stakeholder perspectives into the identification of issues and the formulation of plans for their resolution. The network approach to issue management therefore aims to realize an operational framework that enables stakeholders and issues to be managed through integrative efforts.

Introduction

Three themes characterize the network approach to issues management:

1. A non-firm-centric (not predicated on a firm's agenda) definition of stakeholders and issues

2. The business environment as a multi-stakeholder network. Integration of issue identification and stakeholder management
3. Issue resolution in a network as a process of changing systems (relationships)

This approach is defined by several key concepts, of which issue focused stakeholder management, detached networks, issue evaluation, the integrative framework of issue, and stakeholder management will be discussed here.

Addressing the Limits of the Market Approach to Issue Management

The network approach to issues management attempts to resolve shortcomings seen as limiting the utility of the market approach, which implicitly attributes centrality to firms. Roloff maintains that stakeholder theory as formulated by Freeman tends to locate the firm at the center of stakeholder networks (Roloff 2007, p. 234). Roloff argues that unlike Freeman's formulation of stakeholder theory, a network approach to issue management does not presume the centrality of the firm or its interests. Instead, a key characteristic of this approach is to understand that firms are just one participant among others comprising a wider network (Roloff 2007, p. 234). Following Mason and Mitroff (1981), Mahon, Heugens, and McGowan contend that issues can be "wicked problems" – too complex to be understood by any one actor alone or solved "in a piecemeal fashion" from a singular perspective (Mahon et al. 2018, p. 5).

The theory and practice of issues management changes when firms are seen to be one individual component among others comprising multi-stakeholder networks. Harrison and St. John (1996) describe these networks as "webs of interdependencies created among stakeholders in order to deal with increasingly uncertain and competitive environments" (Harrison, and St. John 1996, p. 48), the management of which can constitute a competitive advantage for firms.

According to Mahon, Heugens and McGowan issues are objectified as externalities within

market-based approaches to issue management as a result of an artificial division maintained between issues and stakeholders. For Mahon, Heugens, and McGowan:

“two separate frameworks have existed for the analysis of social predicaments in which businesses play a role: issues management and stakeholder management. . . we argue that the chasm dividing these two literatures is artificial, and potentially obstructive to the advancement of our knowledge of the position of business in contemporary societies.” (Mahon et al. 2018, p. 1)

A network-based approach seeks not to dismiss issues by objectifying them as externalities but instead define them as the characteristics of networks of relationships as systems.

The recognition and understanding of the non-centricity of firms in networks and the role of stakeholders, and of managing relationships with stakeholders, has been the starting point for the development of several frameworks taking a network-based approach. Within this literature, two themes are of particular interest: (1) how issues develop within networks and (2) how issue management and stakeholder management can be reintegrated within a network-based approach.

Issue Development Within Networks

Roloff has analyzed the dynamics of issue development within networks and has defined two forms of stakeholder management within networks: organizational and issue. In the organizational type, the firm itself features as the focus point while in the issue type the relationships with external social groups serves as the focus (Roloff 2007, p. 233). In comparison to stakeholder management that is centered on the organization, issue-focused stakeholder management aims to promote the legitimacy of the process and its results by incorporating the perspectives of stakeholders into the identification of issues and the formulation of plans for their resolution. See Roloff (2007, p. 233). Roloff defines the issue management process within stakeholder networks as comprising a life cycle of seven stages: “initiation, acquaintance, first agreement, second

agreement, implementation, consolidation and institutionalization or extinction” (Roloff 2007, p. 238).

Roloff’s seven stages are:

1. **Initiation:** Several entities identify an issue of common concern, which would not be best managed by independent action (Roloff 2007, p. 238).
2. **Acquaintance:** Network members share relative perspectives on issue and particular (often incompatible) opinions. Storytelling is a frequently used method to attain mutual understanding (Roloff 2007, p. 239).
3. **First agreement:** Based upon shared issue-related knowledge of networks, members construct descriptions of issue situations and a problem definition (Roloff 2007, p. 240). See Rauschmayer and Wittmer (2006).
4. **Second agreement:** Identify options for resolution, select optimal solution strategy (Roloff 2007, p. 241).
5. **Implementation:** “Shifts from communication to cooperation and action” (Roloff 2007, p. 241) and is often marked by the withdrawal of unsatisfied members.
6. **Consolidation:** Period characterized by the formalization of hitherto informal rules (Roloff 2007, p. 242).
7. **Institutionalization or extinction:** Some stakeholder networks become formalized as institutions or disband at the conclusion (or failure) of their action and subsequent transfer of responsibility to a government or other established actor.

Roloff hereby defines the development of issues as the development of the interaction between stakeholders as they seek to resolve issues best managed collectively.

Detached Networks as a Crisis Phase of Issue Management

Boutilier has argued that networks are an important factor for issue management because of their role as a form of governance. Boutilier maintains that:

“When both markets and hierarchies do not provide governance, the default provider is the network” (Boutilier 2011). By default, therefore, firms are not in control of issues when a network model of governance has been sought. Accordingly, Boutilier has identified another potential phase in the management of issues when seen from a network approach – a crisis phase wherein networks separated from firms have congealed around issues.

For Boutilier: “Where the rule of law is thin and governance defaults to whatever can be agreed upon by a network of stakeholders, the campaigning continues indefinitely until the alliances stabilize around a consensus that can be turned into a network norm. This is not an automatic or guaranteed outcome. Only particular kinds of network structures will permit this to happen. Shaping the stakeholder network into one of these structures requires knowledge of the social capital among all the stakeholders.” Boutilier Loc 895 (Boutilier 2011, p. 41).

Boutilier’s contention is thus that networks can be described in terms of connections (exchanges) of social capital and identifies social capital as the key to understanding stakeholder collaboration (Boutilier 2011). For Boutilier, understanding the meaning and function of social capital in networks is of importance because it is the basis of normative relationships within networks and therefore also the material by which they are shaped and can also be reshaped. According to Boutilier, “social capital in stakeholder networks tells us where the power, influence, and collaborative capacity are located” (Boutilier 2011, p. 59).

According to Boutilier, an issue can become a crisis for a firm when various networks emerge around different interpretations of the issue, which conflict with the firm’s preferred or assumed frame. When issues are perceived as a crisis by firms, it is often due to the existence of these separate networks, which Boutilier refers to as “detached networks.” A detached network has its own unique perspective (“frame”) on the issue, its own justifications for its members’ actions, and its own set of norms and values (“normative code”) that guide membership within the socio-political alliance.

According to Boutilier:

“the stakeholder network approach aims to prevent the formation of detached networks in the first place. Where they have already occurred, it aims to meld the networks. This entails creating a unified frame for the issue and a unified code of member behavior. Such a code creates the groundwork for network governance and therefore makes it possible to re-legitimize an organization’s resource access.”

When firms consider their ability to participate in webs of interdependencies as a potential strategic skill, the relevance of being able to quantify collaborative capacity in partnerships becomes evident.

Reintegrating Issue and Stakeholder Management: Mahon, Heugens, and McGowan “Issue Evaluation”

Mahon, Heugens, and McGowan identify a weakness in issue management wherein issue management is separated from the management of stakeholders.

For Mahon, Heugens, and McGowan:

“all social predicaments have an issues side as well as a stakeholder side and that a dual focus on both issues and stakeholders is therefore essential to understanding the evolution of these predicaments and crucial to managerial dealings with these issues. . . . If we want to understand social predicaments in their entirety, we need a framework that can accommodate issues and stakeholder considerations simultaneously. Or to put it in another way, we need to deal with the what (issue) and the who (stakeholders) simultaneously and continuously as the issue unfolds (with competing issue definitions) and as stakeholders enter and exit the situation over time. This is the problem facing managers in dealing with such situations—the issue (the substantive content) and the players involved (stakeholders) need to be addressed simultaneously.” (Mahon et al. 2018, pp. 1–2)

Mahon, Heugens, and McGowan aim to address the disconnection between issue management and shareholder management by developing a combined model that they term “issue evaluation” (Mahon et al. 2004, p. 175). Mahon, Heugens, and McGowan have formulated this model using network theory in an effort to reconcile the apparent separation between issue and shareholder management. The model is based on the premise

that the identification of issues is a cognitive process and incorporates an understanding of the organization of collective action within networks (Mahon et al. 2004, pp. 177–178). At the core of this model is Weick's theory of sensemaking whereby actors ascribe meaning to issues. According to Weick, actors attribute meaning to complex issues by an ongoing process of choosing from among multiple possible interpretations (Weick 1979). Actors are therefore constantly ascribing meaning to issues.

The assignment of varying interpretations, which then results in distinct actions and outcomes, is of great significance in this context (Thomas et al. 1994). The sensemaking process results in issues being comprehended and labeled on two levels: substantive and analytical. The substantive labeling precedes the analytical labeling, as it involves the attribution of meaning while analytical labeling categorizes the issue as either an opportunity or a threat (Mahon et al. 2004, p. 179). According to Mahon, Heugens, and McGowan, the process of attributing meaning within networks to issues is not arbitrary, but rather shaped by (1) the structural characteristics of the network and (2) the position of individual actors within the structure (Mahon et al. 2004, p. 177).

Network density and centrality have also been identified as key concepts for understanding network structure and firm position (Rowley 1997, pp. 876–900). Density is a defining characteristic of a network's structure, comprises of the number of ties linking actors in a network, and is characteristic of the network as a whole (Mahon et al. 2004, p. 178). The number of stakeholders involved in the network and the extent of relationships between them gives density to the network. Networks display different degrees of density. Centrality is an active position relative to all other actors in a network. Increasing centrality enables a greater ability to assert influence over other members (Mahon et al. 2004, p. 178). Network density influences issue management by shaping the classification of issues. The denser the network, the greater is the sharing of "substantive labeling" by means of intensive cross communication (Mahon et al. 2004, p. 179). Higher levels of network density result in lower variation

in substantive labels to categorize issues among actors in the network (Mahon et al. 2004, p. 179). Centrality also influences issue management. A firm's relative centrality within a network influences its ability to define and manage issues. Relative network centrality increases with access to the greatest number of other network members (Neville et al. 2011, pp. 359–361).

Network density and centrality also influence the collective responses of actors within a network. Actors sharing subjective labels, and therefore similar strategic positions on issues, tend to form coalitions to resolve issues. The formation of coalitions marks the transitional stage between the evaluation of individual issues by individuals and the collective resolution of these issues (Mahon et al. 2004, p. 181). Coalitions that are established to resolve issues are more likely to occur between actors that possess similar substantive characteristics (Mahon et al. 2004, p. 181). As the degree of network interconnectedness decreases, the quantity of fully competing coalitions for issue resolution increases. Increasing centrality within the network increases the likelihood of simultaneous membership in multiple issue resolution coalitions. An increase in the density of a network also has the effect of exposing firms to the attention of a larger number of stakeholders. Conversely, relative centrality within dense networks also enhances the capacity of firms to resist stakeholder demands (Rowley 1997, p. 887). Coalition membership is not exclusive – actors may simultaneously belong to multiple coalitions. Actors with multiple inclusion can act as gatekeepers and brokers within the network (Mahon et al. 2004, p. 182).

Based upon this framework, Mahon et al. have proposed that firms should monitor the network density where they operate and the substantive and analytical labels used for issues by other network members, especially those used by members with strong positions, and engage in issue management in consideration of their relative structural position in networks and seek a position of network centrality. Where centrality is low, especially in issues of importance, firms should seek to influence the most central actors (Mahon et al. 2004, p. 184).

Offenbeek and Vos's "Integrative Framework"

Subsequent to Mahon et al., Offenbeek and Vos have proposed an integrative framework for managing stakeholders and issues by reintegrating the separate, parallel streams of theory that have developed concerning stakeholder and issue management (Van Offenbeek and Vos 2016, p. 44). Underlying their framework is Weaver's classification of problems in communication (Weaver 1949) and Carlile's work on knowledge transfer over boundaries (Carlile 2004).

Weaver defines three levels of problems in the process of communication, which he defines as the "procedures by which one mind may affect another" (Weaver 1949, p. 3). These three levels are (1) technical – the degree of accuracy by which information is relayed, (2) semantic – the precision with which meaning is conveyed, and (3) effectiveness – the extent to which the meaning conveyed elicits recipient behavior as desired by the sender (Weaver 1949, pp. 3–4). These three problems can be expressed as attaining "accuracy of transference" on the first level, approximation of intended to interpreted meaning on the second, and the success of promoting desired behavior on the third (Weaver 1949, p. 5).

Carlile defines three levels of complexity that represent qualitatively distinct boundaries across which knowledge must be transmitted (Carlile 2004). Adopting Weaver's three problems as three levels of communicative complexity – syntactic, semantic, and pragmatic – Carlile explores the process by which knowledge is managed across boundaries of increasing complexity as defined by three properties of knowledge: difference, dependence, and novelty (Carlile 2004, pp. 555–556). Difference is the degree of variety among domain-specific knowledge between different actors. Knowledge is domain specific and therefore different between actors and requiring effort in order to assess and share (Carlile 2004, p. 556). Dependence is the condition wherein actors must consider the goals of others in order to attain their own goals. Carlile maintains that in the absence of dependence "difference is of no consequence" (Carlile 2004, p. 556) and that

difference gains complexity with increasing dependence in terms of both activities and resources. The creation of common knowledge becomes important here due to it being a necessary condition to manage dependence. Novelty is the degree of unfamiliarity with the knowledge common to a domain, and the lack of common knowledge required to assess and share this knowledge. For Carlile "when novelty is present both the *capacity* of the common knowledge to represent the differences and dependencies now of consequence and the *ability* of the actors involved to use it become important issues [*italics original*]" (Carlile 2004, p. 557).

Using these three knowledge boundaries, Carlile then explores the process whereby knowledge can be effectively communicated across domains by means of the three processes drawn from Weaver: transfer, translation, and transformation (Carlile 2004, p. 558). The transfer of knowledge is required to cross the "information processing boundary." Increasing novelty increases the difficulty of transferring knowledge due to the insufficiency of existing lexicons to represent the newly emergent differences and dependencies. Translating knowledge is therefore required to cross this "interpretive boundary." Increasing novelty makes the meaning of differences and dependency unclear or ambiguous. Therefore, requiring firms to (1) address interpretive differences across boundaries and (2) understanding different interests of actors and making trade-offs. Trade-offs for Carlile constitute "a political process of negotiating and defining common interests" (Carlile 2004, p. 559).

Transforming knowledge is seen as essential for overcoming "pragmatic/political boundaries," which are created by differences in interests between actors. These differences can make their dependencies problematic and lead to conflicts that require resolution. When these conflicts arise, they create pragmatic boundaries that need to be addressed. The resolution of these boundaries often incurs costs for the actors involved. This cost is dependent on the knowledge that has been invested in the particular practice, making it a significant stake for all stakeholders involved. Therefore, it is important to understand that

transforming knowledge can help to mitigate these pragmatic boundaries, reduce the costs incurred, and ensure that the interests of all stakeholders are aligned. By doing so, it can create a more effective and efficient system for all parties involved.

For Carlile, conflicts in interests can result in negative consequences in the form of costs, including those incurred in learning new knowledge and transferring existing knowledge (Carlile 2004, p. 559). Carlile states that the costs of crossing a pragmatic boundary are incurred in the development of three abilities: representing current and novel forms of knowledge, learning and understanding the consequences of change involved, and transforming one's own domain-specific knowledge to achieve change (Carlile 2004, p. 559).

Offenbeek and Vos aim to bring together stakeholder and issue management by using Carlile's knowledge integrative framework. They aim to develop a "multilayered stakeholder-issue framework" that enables the analysis of stakeholders and their issues as they change over time (Van Offenbeek and Vos 2016). To do this, they propose two bridges to link the management of stakeholders and issues, one linking stakeholders to issues and another linking issues back to stakeholders. Through this integration of stakeholder and issue management, they hope to enhance the understanding of the interplay between stakeholders and their issues and the impact that they have on each other over time (Van Offenbeek and Vos 2016, p. 45).

The stakeholders to issues bridge are based on an examination of the weaknesses of "hard complexity." A hard complexity approach to identifying stakeholders concentrates on actors supporting issues which relate to the interests of a firm and its goals. The result is a set of stakeholders defined upon criteria of fixed interests and power relations, which emphasizes influenced over influential stakeholders, ignores emerging issues by virtue of being based upon a fixed set of actors, and emphasizes stakeholders over their issues. Offenbeek and Vos instead contend that it is the significance of issues for stakeholders that should be emphasized (Van Offenbeek and Vos

2016, p. 45). The second bridge from issues to stakeholders emphasizes the nature of issues as an enactment of stakeholder interests without which issues would not exist. Within this Offenbeek and Vos's central contention is that issues are a form of knowledge because they are enacted by stakeholders within both a subjective and temporal context and are therefore bounded by a perception (awareness and interpretation), which may not be shared by other stakeholders (Van Offenbeek and Vos 2016, p. 46).

Drawing on the frameworks of both Weaver and Carlile, Offenbeek and Vos define three forms of boundaries characterizing issues as knowledge: *processing* where knowledge is treated as a thing to be stored and retrieved, *interpretation* where common meaning is required to share knowledge among others, and *political* where common interest is required to share knowledge among actors with differing interests. These three processing, interpretative, and political levels are accumulative and represent additional relational properties for issue management. Based upon this, they define three perspectives for examining "stakeholder-issue connections" – syntactic, semantic and pragmatic – to guide issue management by firms (Van Offenbeek and Vos 2016, p. 47).

Implementation of this issue management framework requires firms to approach stakeholders and issues from three perspectives: the commonality of issue identification between stakeholders, the meanings attributed to issues by stakeholders and the dependencies between them, and the nature of the tradeoffs involved in possible actions to address the issues of different stakeholders. The commonality of an issue is expressed by the number of stakeholders voicing an issue over time. Dependency among issues is expressed on three levels: pooled, sequential, and reciprocal (Van Offenbeek and Vos 2016, p. 47). Pooled dependency refers to issues that require the same resources be used in their resolution. Inadequate resources require issues be prioritized for allocation. Sequential dependency refers to a situation wherein the resolution of one issue is dependent upon the resolution of another. "Chains of issues" determine paths of action whereby the history of previous choices of issues for solution

shapes the scope of issues that can be selected to be addressed subsequently. Reciprocal dependencies are where issues are intercoupled in such a way as to incur tradeoffs when managing them. Stakeholders will act to promote tradeoffs favorable to their own interests. Here Offenbeek and Vos suggest that firms weigh the relative merit of possible tradeoffs based on the legitimacy of stakeholders and their future potential to influence. At the core of this integrative framework is the concept of “issue weight,” a measure calculated as the degree of issue commonality among stakeholders compared against the average legitimacy (perception of ability to be influenced or to influence) of stakeholders (Van Offenbeek and Vos 2016, p. 47).

Summary

The network approach to issue management seeks to address the complexity of issues is due to their subjective relativity and temporal dynamism thus avoiding the perceived limitations of approaches, which assume the centrality of the firm’s interests (see entry ► “[Issue Management: The Strategic Approach](#)”) and the disconnection between the management of stakeholders from that of issues inherent in market approached to issue management (see entry on ► “[Issue Management: Market Approach](#)”).

Cross-References

- [Issue Management: Market Approach](#)
- [Issue Management: The Strategic Approach](#)

References

- Boutillier, R. (2011). *A stakeholder approach to issues management*. Business Expert Press.
- Carlile, P. R. (2004). Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, 15(5), 555–568.
- Harrison, J. S., & St. John, C. H. (1996). Managing and partnering with external stakeholders. *Academy of Management Perspectives*, 10(2), 46–60.
- Mahon, J. F., Heugens, P. P. M. A. R., & Lamertz, K. (2004). Social networks and non-market strategy. *Journal of Public Affairs: An International Journal*, 4(2), 170–189.
- Mahon, J. F., Heugens, P. P. M. A. R., & McGowan, R. A. (2018). Blending issues and stakeholders: In pursuit of the elusive synergy. *Journal of Public Affairs*, 18(3). <https://doi.org/10.1002/pa.1635>.
- Mason, R. O., & Mitroff, I. I. (1981). *Challenging strategic planning assumptions*. New York: John Wiley and Sons.
- Neville, B. A., Bell, S. J., & Whitwell, G. J. (2011). Stakeholder salience revisited: Refining, redefining, and refueling an underdeveloped conceptual tool. *Journal of Business Ethics*, 102(3), 357–378.
- Rauschmayer, F., & Wittmer, H. (2006). Evaluating deliberative and analytical methods for the resolution of environmental conflicts. *Land Use Policy*, 23(1), 108–122.
- Roloff, J. (2007). Learning from multi-stakeholder networks: Issue-focussed stakeholder management. *Journal of Business Ethics*, 82(1), 233–250.
- Rowley, T. J. (1997). Moving beyond dyadic ties: A network theory of stakeholder influences. *Academy of Management Review*, 22(4), 887–910.
- Thomas, J. B., Shankster, L. J., & Mathieu, J. E. (1994). Antecedents to organizational issue interpretation: The roles of single-level, cross-level, and content cues. *Academy of Management Journal*, 37(5), 1252–1284.
- Van Offenbeek, M. A. G., & Vos, J. F. (2016). An integrative framework for managing project issues across stakeholder groups. *International Journal of Project Management*, 34(1), 44–57.
- Weaver, W. (1949). Recent contributions to the mathematical theory of communication. In C. E. Shannon & W. Weaver (Eds.), *The mathematical theory of communication* (pp. 1–28). Urbana: University of Illinois Press.
- Weick, K. E. (1979). *The social psychology of organizing*. New York: McGraw-Hill, Incorporated.

Issue Management: The Strategic Approach

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Definition

The strategic approach to issue management is informed by a hierarchical mode of governance that gives centrality to the firm and priority to the attainment of corporate goals. The strategic

approach to issue management is a managerial function focused on identifying and planning for the impact of external negative influences on a firm's strategy and its implementation. This strategic approach to issue management is an organizationally mediated and subjective process of identifying and interpreting issues that is informed by strategic cognition. It aims at promoting and protecting a firm's interests by identifying issues, evaluating their strategic implications, and analyzing the motivations and strengths of external entities promoting them as issues. This approach involves three major activities: issue identification, corporate proaction, and inclusion of public affairs issues in established decision-making processes and managerial functions. The implementation of strategic issue management involves procedures for scanning and situational analysis of the business environment. Key concepts of this approach include Strategic Issue, Publics, Trends, Strategic Cognition, and Issue Salience.

Introduction

The strategic approach to issue management is based on hierarchical modes of governance that are essentially corporate-centric; in that it gives centrality to the firm and priority to the attainment of corporate goals. Here, firms develop procedures for the rational and efficient management of activities and resource utilization in order to implement strategies and overcome problems. Issues seen as originating from the external environment beyond the corporation are evaluated as either opportunities or as potential obstructions to the pursuit of a firm's strategic interests, with the tendency being to emphasize issues as potential problems. Issue management here thus aims at promoting and protecting a firm's interests and is centered around the identification of issues, the evaluation of their strategic implications, and the analysis of the motivations and strengths of the external entities promoting them as issues.

This definition of issue management as a managerial function to identify and plan for the impact of external, usually negative, influences on a

firm's strategy and its implementation has a long history and remains of relevance to business today. Fleming has defined issue management as a managerial function. According to Fleming, the management of issues "consists of three major activities: issue identification, corporate proaction, and the inclusion of public affairs issues in established decision-making processes and managerial functions" (Fleming, 1980, p. 35). The implementation of strategic issue management was typified by procedures for the scanning and situational analysis of the business environment. This approach is defined by several key concepts, and among these, Strategic Issue, Publics, Trends, Strategic Cognition, and Issue Salience are of particular significance and will be discussed here.

Strategic Issues

Igor Ansoff was among the earliest and most significant contributors to the field of Strategic Issue Management, which emerged from the study of strategic planning. Although the concept of a strategic issue was also used in strategic planning, within Strategic Issue Management "strategic" was taken to mean important or significant. Strategic issue management was characterized by environmental scanning aimed to identify opportunities and advantages in the form of threats and opportunities without, and strengths and weaknesses within, using methods still in widespread use today such as SWOT analysis.

Ansoff provides an early definition of issues management which differentiates it from the function of strategic planning by defining a distinction between strategic planning and strategic issue analysis (Ansoff, 1975, p. 31).

For Ansoff, strategic planning is a periodically implemented process concerned with strategy and is organizationally focused, wherein "strategic information needs derived from decisions," in contrast to strategic issue analysis, which is defined as an ongoing process concerned with discontinuities and surprises from all sources and wherein "feasible decisions are determined by available information" (Ansoff, 1975, p. 31).

Ansoff defines Strategic planning as a system for “converting environmental information about strategic discontinuities into concrete action plans, programs, and budgets” (Ansoff, 1975, p. 22). To be effective, this requires that information must be timely and sufficient. Timely as in available at a time that enables its use in planning and sufficient to evaluate a trend’s impact on the firm and therefore to plan responses (Ansoff, 1975, p. 22). Ansoff’s critique of the weaknesses of strategic planning as a form of issue management is of its reliance on this timeliness and sufficiency of information – the weakness here for Ansoff is in the limitations of this to make use of “weak signals” that potentially give foresight to firms.

Ansoff seeks to address the question of how organizations should deal with emerging issues that present as “weak signals” in turbulent environments. Ansoff proposes (defines) a new concept of strategic issue management to facilitate better planning for managing subtle (incipient) changes in the business environment. Ansoff’s goal is to answer the question of how businesses should cope with growing challenges that appear as “weak signals” in chaotic times. He defines a new concept of strategic problem management to make it easier to plan for subtle changes in the business environment.

Ansoff proposes a definition of issue management for utilizing weak signals in turbulent environments based on four characteristics: flexible organization, real-time, strategic loops, and action-based.

1. “organizational flexibility” whereby “both the planning and implementation of strategic issues are determined not by the organizational structure but by the nature of the problem involved”
2. implemented in real time,
3. based upon a process defined by (a) operating (are budgets and plans being followed?) and (b) strategic (has the “the strategic issue has been well identified, whether it deserves the priority assigned to it, and whether the action strategy has been well chosen”) feedback loops. Issues resulting from vague trends are dealt with by the strategic loops.

4. “strategic issue management is an action, and not a purely planning, system” – “planning and implementation are not separated” (Ansoff, 1975, p. 31).

Ansoff later extended the concept of strategic issue management to include the resolution of, in addition to planning responses to, issues. For Ansoff, unless those separate roles are established, “strategic issue management may degenerate into paralysis by repeated analysis” (Ansoff, 1980, p. 134).

Taking a more nuanced approach Ansoff defines a strategic issue as a:

forthcoming development, either inside or outside of the organization, which is likely to have an important impact on the ability of the enterprise to meet its objectives. An issue may be a welcome issue, an opportunity to be grasped in the environment, or an internal strength which can be exploited to advantage. Or it can be an unwelcome external threat, or an internal weakness, which imperils continuing success, even the survival of the enterprise. Frequently, external threats, because they signal significant discontinuities in the environment, can be converted into opportunities by aggressive and entrepreneurial management. (Ansoff, 1980, p. 133)

Ansoff wrote extensively on the importance of issue identification and definition for effective decision-making and management (See: Ansoff, 1975, 1980, 1987). Ansoff has observed that an important part of issue management is to understand that not all issues are strategic and that in order to be relevant to a specific firm, an issue must pose an identifiable “potential future impact of the trends on the future performance of the enterprise” (Ansoff, 1980, p. 136). In short, a social issue becomes strategic for Ansoff to the extent that it impinges in some manner on a firm’s strategic intent and objectives.

Publics and Issue Management

A key concept in this approach to issue management is that of the “public,” and that firms face “publics” over issues. For Grunig and Repper, publics form around the common recognition of

a problem among stakeholders regarding firm plans or action: "Publics form when stakeholders recognize one or more of the consequences as a problem and organize to do something about it or them" (Grunig & Repper, 1992, p. 124). Issue management for Grunig is the anticipation of these issues and the development of a corresponding organizational response to them (Grunig & Repper, 1992, p. 124). Grunig and Repper also maintain that publics, unlike stakeholders, are reactive, not passive. For Grunig and Repper: "Many people in a category of stakeholders – such as employees or residents of a community – are passive. The stakeholders who are or become more aware and active can be described as publics" (Grunig & Repper, 1992, p. 125).

Grunig and Repper also maintain a distinction between publics and markets based upon the difference of choice. For Grunig and Repper the:

distinction between publics and markets is important for understanding the nature of publics and for clarifying the difference between public relations and marketing. Organizations can choose their markets, but publics arise on their own and choose the organization for attention. Publics, in contrast, organize around issues and seek out organizations that create those issues to gain information, seek redress of grievances, pressure the organizations, or ask governments to regulate them. As publics move from being latent to active, organizations have little choice other than to communicate with them. (Grunig & Repper, 1992, p. 128)

Grunig and Repper divide publics into four categories: "all-issue," "apathetic," "single issue," and "hot issue publics." As the terminology suggests, all issue publics are concerned and act on all issues; apathetic publics are the opposite and act on none. Between these two extremes are single issue publics which focus on specific issues which may or may not be widespread and hot issue publics which are actively engaged by issues that are widely accepted, widely covered in the media, and similarly motivate most of the community or population (Grunig & Repper, 1992, p. 139).

Crable and Vibbert have argued that issues become part of the public agenda because an agent has made a problem into an issue. For Crable and Vibbert:

issues are not simply questions that exist. An issue is created when one or more human agents attaches significance to a situation or perceived 'problem.' These interested agents create or recreate arguments which they feel will be acceptable resolutions to questions about the status quo. Literally, then, people and groups of people 'make' issues out of matters in which they have an interest. Moreover, issues – while derived from 'problems' – are not exactly problems. They are situations in which relief but not total solution is found. Said another way, issues may be 'resolved' – in the sense of a temporary 'answer' – but they are never 'solved' in the sense of a final answer. (Crable & Vibbert, 1985, p. 5)

This position that publics create issues out of their perceptions of a problem is shared by other key theorists in the communication and public relations discipline of the time, including Jones and Chase (1979), Chase (1984), and Hainsworth (1990).

Trends

An important part of the strategic approach to issue management is the early detection and interpretation of issues. If an issue is a problem that has been given significance by an actor, thus creating a public, then a mark of an effective issue management function would be the ability to detect developing issues early in this signification process. Developing issues are defined as trends. Chase defined issues as "an unsettled matter which is ready for decision. Trends, on the other hand, are detectable changes which precede issues" (Chase, 1984, p. 38). This ability of being able to identify and follow trends is a distinguishing feature of issue management frameworks and models within the strategic approach.

Representative among these models is a framework known as the Chase-Jones process model (Chase, 1984; Jones & Chase, 1979). Still considered to be influential today (Coombs & Holladay, 2013), this model consists of five stages commencing with: (1) issue identification wherein trends are examined, (2) issue analysis where issues are researched, (3) issue change strategy options where firms devise and choose either reactive (actively oppose change), adaptive

(attempt to satisfy the demands of external publics) or dynamic responses (“creates and directs policy rather than merely reacts to policy trends established by other forces”), (4) organization of an issue action program designed to achieve the firm’s action goals for the issue, and finally (5) a stage where results are evaluated and the process is repeated as a cyclical process if necessary (Jones & Chase, 1979, pp. 9–21). Jones and Chase’s model distinguishes clearly between external and firm interests and stresses the importance of maintaining control when describing their definition of a dynamic response as a strategy that “anticipates and attempts to shape the direction of public policy decisions by determining the theater of war, the weapons to be used, and the timing of the battle itself” (Jones & Chase, 1979, p. 17). As can be inferred from the confrontational language, this model assumes primacy of the interests of the firm.

Overall, this issue management model is essentially a systematization of the external part of strategic management aimed to maintain the firm’s control over the course of important events and avoid regulatory infringement on business freedoms and rights (Grunig & Repper, 1992, p. 146). This model has been criticized for being little more than a systematization of prevailing public relations management functions under a new name (Ehling & Hesse, 1983).

Strategic Cognition

As organizations, firms do not respond directly and objectively to developments in their environments as issues. The process of identifying and interpreting issues is instead organizationally mediated and therefore also subjective.

This process by which firms identify and interpret issues has been the subject of extensive research. Dutton, another early and influential contributor to the definition of issues in business, developed a model of strategic issue diagnosis (SID) which contrasts to that of Ansoff. Unlike Ansoff’s earlier, more pragmatic formulations, Dutton conceptualized strategic issue diagnosis as a process of sense making that went beyond

the immediate needs of “decision events” (Dutton & Duncan, 1987, p. 280) to the extent that it could take place independent of strategy in order to avoid “the boundedness of decision making” (Dutton et al., 1983, p. 321).

Specifically, Dutton rejected the assumption that issues were objectively strategic, arguing instead that: “an issue becomes strategic when top management believes that it has relevance for organizational performance” (Dutton & Ashford, 1993, p. 397) and that this strategic meaning exists on a symbolic as well as an instrumental dimension (Dutton & Ashford, 1993, p. 400).

Another of Dutton’s key contributions was the argument that a firm’s organizational environment influenced its perception and interpretation of issues. According to Dutton the: “meaning of an issue is not inherent in the issue itself, and that the organization’s internal environment has a major effect on the meanings that evolve” (Dutton & Jackson, 1987, p. 77). Dutton made a distinction between issues perceived to be either a “crisis” as opposed to a “non-crisis.” Dutton argued that firms allocated greater resources in the management of issues seen to be a crisis and that they also employed different frames to interpret crisis issues compared with those applied to issues seen as either non-crisis or opportunities (Dutton, 1986). The contention here is that a firm’s perception of issues is a function of cognition, and that this cognition itself assumes a strategic meaning where it informs decision-making.

Jackson and Dutton have analyzed the organizational implications of this for issue management. According to Jackson and Dutton:

for managers who use formal models of strategy formulation, identifying threats and opportunities is often a major objective of environmental scanning activities. Thus, managers who implement scanning systems ‘by the book’ institutionalize and legitimate these concepts for interpreting issues. (Jackson & Dutton, 1988, p. 370)

Within this, Jackson and Dutton have identified a bias among corporate managers towards the identification of threats over opportunities when assessing issues (Jackson & Dutton, 1988, p. 370), wherein “managers are more sensitive to

information that suggests the presence of a threat than they are to information that suggests the presence of an opportunity” (Jackson & Dutton, 1988, p. 384). Additionally, Jackson and Dutton proposed that the tendency of managers to identify more issues as threats than as opportunities is a learned trait which develops as a response to the fact that since it requires time for threat issues (especially novel threats) to impinge on a manager’s awareness, and that the negative impact of a threat tends to increase over time, it is in the interest of the manager to prioritize threat identification in order to enable a swifter response. As a result, ambiguous issues therefore tend to be identified more readily as threats (Jackson & Dutton, 1988, p. 385).

Porac and Thomas have subsequently identified the analysis of strategic cognition as a key stream in the research literature on cognition in management. Porac and Thomas define strategic cognition as being focused on the “linkages between ‘cognitive structures’ and decision processes in strategic management with respect to strategy formulation and implementation” (Porac & Thomas, 2002, p. 165). They define the objective of this research stream as the examination of the “blackbox” of cognitive models used by managers to interpret their business environments (Porac & Thomas, 2002, p. 165).

Issue Salience

Subsequent research has attempted to examine this blackbox in terms of a firm’s reaction to issues as the result of a process of cognition whereby the meaning of issues is perceived and interpreted. Following on Dutton’s work on strategic cognition, Bundy, Shropshire, and Buchholtz propose that a firm’s reaction to an issue is the result of a process of cognition. They maintain that: “reaction to an issue is not automated but, rather, driven by issue interpretation and perception” (Bundy et al., 2013, p. 356). This process of perception and interpretation is important because it mediates between the nature of the issue as an input and the action taken by the firm in response as an output (Bundy et al., 2013, p. 353). The result of this

mediating process determines the level of attention and priority which a firm will then assign to an issue (Bundy et al., 2013, p. 355).

This prioritization is based upon two criteria – the perception of issue salience with (1) firm identity and (2) strategic interests. Citing the importance of organizational identity for firms in order to express their uniqueness and differentiate themselves, Bundy, Shropshire, and Buchholtz argue that issues will be emphasized to the extent that they allow the firm an opportunity to express their identity (Bundy et al., 2013, p. 359). Similarly, issues which are seen to relate to the attainment of business goals are of obvious strategic interest to a firm (Bundy et al., 2013, p. 359).

For Bundy, Shropshire and Buchholtz:

organizational identity guides issue interpretation using an expressive logic, which is related to how the firm defines and displays conceptions of the self, while a firm’s strategic frame facilitates issue interpretation using an instrumental logic, which is predicated on the rational pursuit of organizational goals. (Bundy et al., 2013, p. 353)

Bundy, Shropshire, and Buchholtz have developed a classification and response schema for issues based on organizational logics and frames based upon these two distinct logics by which firms interpret issues: expressive (based upon organizational identity) and instrumental (based on organizational strategic objectives). Logical consistence with frames therefore shapes the perception of issue salience. An issue with expressive logic consistence: “is perceived as having bearing on or being material to the expression of an organization’s core values and beliefs” (Bundy et al., 2013, p. 355). By contrast, an issue with instrumental logic consistence: “is perceived as materially supporting or useful for the achievement of strategic goals” (Bundy et al., 2013, p. 355). The perception of an issue’s consistence may differ between the two logics, resulting in a conflict. Bundy, Shropshire, and Buchholtz categorize conflicts into two types: identity conflict and frame conflict. Identity conflict arises when a particular issue aligns with a company’s strategy, but is at odds with its identity. On the other hand, frame conflict takes place when an issue is inconsistent with a company’s strategy, but aligns with

its identity (Bundy et al., 2013, p. 365). Based on this distinction, Bundy, Shropshire, and Buchholtz propose a framework for a company's response to issues, which is influenced by three factors: the compatibility of the issue with the expressive and instrumental logics of the firm, the material significance of the response (either substantive or symbolic), and the form of the response (accommodative or defensive) (Bundy et al., 2013, p. 353).

Summary

A strategic approach to issue management emphasizes the detection and amelioration of external risks threatening to negatively impact the interests and plans of firms. This process is however not entirely objective. Although implemented in accordance with the objective procedures of strategic management, scholars have argued that, as an organizationally mediated process of cognition, it is important to recognize and understand how issue management is also shaped by subjectivity in assessing the salience of issues for firms. Consistent across this approach however is the centrality of the firm and the prioritization of its interests. This contrasts with the market and network approaches to issue management (see entries "Issue Management: Market Approach" and "Issue Management: Network Approach") which shifts the focus to issues within market and network relationships, respectively.

Cross-References

- [Issue Management: Market Approach](#)
- [Issue Management: The Network Approach](#)

References

- Ansoff, H. I. (1975). Managing strategic surprise by response to weak signals. *California Management Review*, 18(2), 21–33.
- Ansoff, H. I. (1980). Strategic issue management. *Strategic Management Journal*, 1(2), 131–148.
- Ansoff, H. I. (1987). The emerging paradigm of strategic behavior. *Strategic Management Journal*, 8(6), 501–515.
- Bundy, J., Shropshire, C., & Buchholtz, A. K. (2013). Strategic cognition and issue salience: Toward an explanation of firm responsiveness to stakeholder concerns. *Academy of Management Review*, 38(3), 352–376.
- Chase, W. H. (1984). *Issue management: Origins of the future*. Stamford, Connecticut: Issue Action Publications.
- Coombs, W. T., & Holladay, S. J. (2013). *It's not just PR: Public relations in society*. John Wiley & Sons.
- Crable, R. E., & Vibbert, S. L. (1985). Managing issues and influencing public policy. *Public Relations Review*, 11(2), 3–16.
- Dutton, J. E. (1986). The processing of crisis and non-crisis strategic issues. *Journal of Management Studies*, 23(5), 501–517.
- Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. *Academy of Management Review*, 18(3), 397–428.
- Dutton, J., & Duncan, R. B. (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8(3), 279–295.
- Dutton, J. E., & Jackson, S. E. (1987). Categorizing strategic issues: Links to organizational action. *Academy of Management Review*, 12(1), 76–90.
- Dutton, J. E., Fahey, L., & Narayanan, V. K. (1983). Toward understanding strategic issue diagnosis. *Strategic Management Journal*, 4, 307–323.
- Ehling, W. P., & Hesse, M. B. (1983). Use of 'issue management' in public relations. *Public Relations Review*, 9(2), 18–35.
- Fleming, J. E. (1980). Linking public affairs with corporate planning. *California Management Review*, 23(2), 35–43.
- Grunig, J. E., & Repper, F. C. (1992). Strategic management, publics, and issues. In J. E. Grunig (Ed.), *Excellence in public relations and communication management* (pp. 117–158). New Jersey: Lawrence Erlbaum Associates.
- Hainsworth, B. E. (1990). The distribution of advantages and disadvantages. *Public Relations Review*, 16(1), 33–39.
- Jackson, S. E., & Dutton, J. E. (1988). Discerning threats and opportunities. *Administrative Science Quarterly*, 33, 370–387.
- Jones, B. L., & Chase, W. H. (1979). Managing public policy issues. *Public Relations Review*, 5(2), 3–23.
- Porac, J. F., & Thomas, H. (2002). Managing cognition and strategy: Issues, trends and future directions. In A. M. Pettigrew, H. Thomas, & R. Whittington (Eds.), *Handbook of strategy and management* (pp. 165–181). SAGE Publications.

Jevons Paradoxon

► [Rebound Effects of Eco-efficiency](#)

Job Engagement

► [Employee Engagement](#)

Johannesburg Declaration

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Description

“The Johannesburg Declaration on sustainable development from our origins to the future” (Resolution A / CONF. 199/20, adopted on 4 September 2002) is the document drawn up and signed during the World Summit on Sustainable Development (WSSD) held in the capital of South Africa, Johannesburg, from August 26 to September 4, 2002.

The Declaration encompasses the will of the representatives of the population of the world to renew their commitment to sustainable development at all levels: local, national, and international. Conscious that the human being is facing

an important crossroads in its history, the 191 heads of state and government, with the participation of numerous representatives of local entities and more than 700 nongovernmental reviews, have announced that they want the burden of pursuing the objectives of sustainable development with responsibility towards one another, towards all living beings, and towards future generations.

In addition to the political declaration, the final document of the Johannesburg Summit is made up of an Action Plan, “Implementation Plan of the World Summit on Sustainable Development,” which has two main purposes: the first, to obtain the overcoming of the obstacles detected over the years by countries in the implementation of Agenda 21; the second, to underline the important role that the energy sector will have to play in the future and to relaunch the transformation phase to overcome the unsustainable production and consumption models adopted in the past.

The “Type II partnerships” were also presented during the Summit, new elements considered vital for the governance of sustainable development and for achieving the objectives of Agenda 21 (Doran 2002).

History of WSSD

The World Summit on Sustainable Development (WSSD) stems from the need to verify the results achieved, compared to the objectives set during

the Conference on Environment and Development held in Rio de Janeiro in 1992 and the progress of the eight objectives of the “Millennium Development Goals” of 2000.

Unfortunately, on this occasion, the few results achieved on a global scale had to be noted. Environmental degradation, in fact, continued its negative trend, with increasing CO₂ emissions from 1960 (316ppm) to 2001 (370ppm). The patterns of production and consumption, which had been proposed to change radically, but without results, and the data on poverty that continued to grow, also continued to remain unchanged.

Also for these reasons, world leaders seemed to want to relaunch their commitment, claiming to want to take care of the environment with greater responsibility. The Summit took place, however, amid the strong skepticism of observers, due to the evident difficulty of making the most industrialized states really active and interested in this cause. At the end of the agreement, in fact, it appeared immediately evident, although the intentions seemed to contain strong hope in terms of commitment to achieving the sustainable development objectives, that the signed Declaration would hardly have turned into concrete agreements.

The Johannesburg Summit had, however, in any case, the merit of creating an ever more important awareness and sharing of environmental problems between the world leaders and all the invited observers, in addition to having put this issue in greater light outside the purely scientific environment, giving it to the discussion of global civil society.

Content of the Political Declaration

The Johannesburg Declaration is divided into 37 points divided into 6 paragraphs: “From our origins to the Future,” “From Stockholm to Rio de Janeiro to Johannesburg,” “The challenges we face,” “Our commitment to sustainable development,” “Multilateralism is the future,” and “Making it happen!”.

Starting from the Stockholm Conference thirty years earlier, the importance of climate change is

recognized internally. In Rio de Janeiro in 1992 the United Nations Conference on Environment and Development had already reiterated the importance of protecting the environment in order to achieve environmental sustainability objectives and, on that occasion, the Agenda 21 was adopted, the Global Program and the Rio Declaration (Antich 2006). In Johannesburg, a broader consensus was achieved by connecting people with different visions of the path to be taken in the near future.

The Johannesburg Declaration recognizes the importance of overcoming poverty within the various societies that live on earth, as well as the need to reduce the gap between industrialized and developing countries. The proceeds of globalization, which leads faster to greater market integration, capital mobility, and investment flows, are not equally distributed and the populations living in the poorest countries are more vulnerable to climate change.

In the points of the Declaration, it is highlighted that the loss of biodiversity, increasingly put at risk by human activities of exploitation of the territories and by the growing global average temperatures, is a serious sign of environmental degradation, together with desertification to increasingly violent environmental disasters, unpredictable and frequent. Air, water, and sea pollution continues to endanger the lives of millions of people around the world.

The leaders present in Johannesburg, recognizing all this, therefore declared that they wanted to collaborate with each other by opening a constructive dialog between all the civilizations of the Planet, convinced of the indissolubility of human dignity, ready to act to overcome the difficulties of access to primary goods such as drinking water, a home, medical care, and food safety. To this end, in the Declaration, they seemed to agree in wanting to use the most modern technologies to bring, where there was not yet, development.

The leaders pledged to fight hunger, drugs, armed conflict, terrorism, intolerance, racism, and epidemics. They strive to achieve female emancipation and sexual equality.

It is recognized in the final part of the Declaration that humanity has the means to achieve the

objectives set and to this end, the developing countries are urged to maintain the commitments agreed at the international level. Indigenous people would also have played a very important role.

In the final points of the Declaration, large multinational companies are urged to maintain a responsible attitude towards the environment and social equity of the countries in which they legitimately operate. Commitments are promised about increasing job opportunities.

The leaders, in conclusion, declared that they wanted to proceed together, for human development and to achieve universal peace. They also declared that they need multilateral and international institutions that are democratic and accountable, recognizing a fundamental role of universal leadership at the United Nations to lead human civilization towards sustainable development goals.

Content of the “Plan of Implementation of the World Summit on Sustainable Development”

The Action Plan on Sustainable Development adopted in Johannesburg is annexed to the political declaration to try to define some priority objectives such as the fight against climate change as foreseen by the Rio Convention on climate change; ratification of the Kyoto Protocol (to countries that have not yet signed it); increase in the use of renewable energy sources; solidarity fund which provided for 0.7% of the GDP of rich countries to be allocated to projects in poor countries; halve by 2015 the number of people who do not have access to drinking water; and more integrated interaction between governments, citizens, and businesses to achieve sustainable development.

“Type II Partnerships”

Presented as elements of innovation at the Johannesburg Summit, the “Type II partnerships” are a democratic tool designed as useful for achieving the objectives of Agenda 21 (Hens and Nath

2003). The potential of the “Multi-stakeholder” partnerships is that of being able to overcome any states that they can find in intergovernmental diplomatic negotiation, thus increasing the possibility of achieving the objectives of sustainable development beyond mere bureaucracy. At the end of 2006, the United Nations registered 321 multi-stakeholder initiatives.

Key Issues

The solutions to the great climatic upheavals, which were already underway in 2002, did not succeed in unhinging a model of growth, production, and consumption, which was and is alive within contemporary society. In 2002 there was no real interest on the part of the industrialized countries to deal primarily with the environment and for this reason, the discussions that during the Summit on climate and environmental degradation seemed to stir again the spirits did not translate into concrete actions and commitments supported by binding agreements.

Future Directions

Climate summits after Johannesburg have increased in frequency even if, as of today, joint and concrete actions to combat global climate change have not yet been agreed. In fact, a binding agreement has not yet been reached for all the countries of the fundamental world to avoid the achievement of the nonreturn thresholds of CO₂eq concentration in the atmosphere to which the most validated scientific studies refer. In the near future, however, all world leaders will be called to take responsibility for acting for the good of all humanity and all forms of life on our Planet, through real commitments made during future mega-conferences (Seyfang 2003).

Summary

“The Johannesburg Declaration on Sustainable Development from our origins to the future”

(Resolution A / CONF. 199/20, adopted on 4 September 2002) is the document drawn up and signed during the World Summit on Sustainable Development (WSSD) held in the capital of South Africa, Johannesburg, from August 26 to September 4, 2002.

The Declaration stems from the desire to increasingly focus on the issue of sustainable development with a focus on every level of government, be it local, national, or international. Becoming aware that the human being is faced with an important crossroads in his history was certainly the reason that prompted the 191 heads of state and government (with the accession of numerous representatives of local authorities and more than 700 nongovernmental organizations) to announce that it intends to take on sustainable development goals, in collaboration and with renewed responsibility towards each other, with the critical awareness that it is necessary to preserve and protect ecosystems and all living beings, with an eye to future generations. Unfortunately, however, these objectives are still very far from being truly achieved and it will become increasingly important that these mega-conferences create concrete constraints to those who are committed to taking the path of change.

References

- Antich F. (2006). Origine ed evoluzione del diritto internazionale ambientale. Verso una governance globale dell'ambiente, in *ambientedititto.it*, ISSN1974-9562, p. 6.
- Doran, P. (2002). *For the international institute for sustainable development*. Briefing Paper October 3, 2002 World Summit on Sustainable Development (Johannesburg) – An assessment for IISD.
- Hens, L. & Nath, B. (2003). *Environment, Development and Sustainability* 5: 7. <https://doi.org/10.1023/A:1025303511864>
- Johannesburg Declaration. (2002). https://ec.europa.eu/environment/archives/wssd/documents/wssd_pol_declaration.pdf
- SDIN-Sustainable Development Issues Network: 2002, Paper No. 1, Taking Issue: Questioning Partnerships (<http://www.sdissues.net/SDIN/docs/Takingissue-No1.pdf>).
- Seyfang, G. (2003, October). Environmental mega-conferences—from Stockholm to Johannesburg and beyond. *Global Environmental Change*. 13(3): 223–228

Johannesburg Declaration (2002)

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Synonyms

Political declaration of the WSSD

Definition/Description

The Johannesburg Declaration is the main political document that was adopted at the United Nations World Summit for Sustainable Development (WSSD), also known as the Rio+10 Earth Summit, which was held at Johannesburg, South Africa, in 2002 (UN 2002). The document is a follow-up to the Rio Declaration on sustainable development. It reassures the political commitment taken by states in the Rio Declaration in the area of state responsibility to promote sustainable development. The Rio+10 conference did an accent on both the socio-economic and the environmental aspect of sustainable development (Hens and Nath 2005), and both accents were incorporated in the Johannesburg Declaration.

The Johannesburg Declaration recognizes the structure-shaping role of globalization and highlights the importance of cooperation between developed and less developed countries (LDCs) in order to overcome both regional and global inequalities, and social and environmental challenges countries face (UN 2003). In this relation, a chapter of the declaration is dedicated to promoting another idea that multilateralism is the best feasible way to addressing the problems of climate change and global sustainable development (UN 2003).

It stresses on the importance of the introduction of transparent corporate social responsibility (UN 2003, art. 29).

The Declaration is a political document, which has no formal legally binding power. The

Declaration consists of 37 articles, divided into 4 sections (UN 2003). The representatives of member states signed the Johannesburg Declaration at the 17th plenary meeting of the World Summit on Sustainable Development, on 4 September 2002 (UN 2004).

History

World conferences are international conferences which are held under the auspices of the United Nations, involving broad participation of the world's states, concerned with global problems. As a rule such conferences, based on consensus, adopt declarations and programs of action (Nuscheler 2010). Declarations constitute statements which the UN considers to be of outstanding importance and consist of principles of a political or legal nature that signatories agree to and/or affirm through the declaration (Nuscheler 2010).

The Johannesburg Declaration is a part of the outcomes of a series of world conferences. The first conference was the United Nations Conference on Environment and Development (UNCED), also known as "Earth Summit," which was held at Rio de Janeiro, Brazil, from 3 to 14 June 1992. A number of documents emerged from the conference, such as the Rio Declaration on Environment and Development, and Agenda 21 – a comprehensive action plan for the sustainable development of the planet into the twenty-first century.

The next summit that aimed to continue the work of UNCED was the World Summit on Sustainable Development (WSSD). It was conducted in 2002 in Johannesburg, and the Johannesburg Declaration was the main political statement that originated from the WSSD, alongside the Johannesburg Plan for Implementation (La Viña et al. 2003).

The preparation of the text of the Johannesburg Declaration started a year before the WSSD (Gray 2003). In the process of preparation of the declaration, there had been differences over the binding nature of the document and over the strength of the obligations to be adopted. While some

countries stood for the adoption of concrete measures and timetables, others had remained weary of taking on new commitments (Gray 2003). However, the commitment to sustainable development was reconfirmed with the Johannesburg Declaration, and an emphasis on the importance of multilateral solutions for achieving not only the environmental goals but the social ones as well (Gray 2003).

Main Issues in the Johannesburg Declaration

The Declaration reaffirms the challenges that were outlined in the Rio Declaration on Environment and Development. It recognizes that "poverty eradication, changing consumption and production patterns, and protecting and managing the natural resource base for economic and social development are overarching objectives of, and essential requirements for sustainable development" (UN 2003). Global inequality and global environmental issues are stressed as major international problems.

By using the Rio Declaration and the principles developed in it, the Johannesburg Declaration puts a stress on social and economic development, as well as emphasizing on environmental protection issues (Hens and Nath 2005).

Among the conditions the Johannesburg Declaration states that are to be combatted are: chronic hunger, malnutrition, armed conflicts, organized crime, corruption, natural disasters, terrorism, intolerance, and endemic, communicable, and chronic diseases (UN 2003). It highlights the importance of including developing countries and small and island countries and helping them get an even chance at perceiving sustainable development (UN 2003).

The Declaration states that the private sector – large companies as well as SMEs – has a duty to contribute to the evolution of sustainable communities and societies. A stress on corporate accountability is put (UN 2003).

The last section of the Declaration puts a stress on the role of multilateralism as an approach to achieving sustainable development globally.

Therefore, improving efficiency of multilateral institutions is considered an essential factor (UN 2003).

Significance and Criticism

The Johannesburg Declaration has been considered one of the important political statements for sustainable development. The most important impact of such documents originates not so much from their binding effect but from their place as a document that promotes the world polity rationale for matters of both global and local scales (Givens 2017). As a result from the signing of the Johannesburg Declaration, the Johannesburg Plan of Implementation was adopted. It is added to the other key documents that followed the Rio de Janeiro Summit from 1992 (Rio Declaration, Agenda 21) (Hens and Nath 2005).

The Johannesburg Declaration is an important political statement for the promotion of sustainable development as it stresses on the importance of social and developmental issues and emphasizes on the multistakeholder approach to governance. The two political documents of the WSSD were also considered important progress in terms of corporate social responsibility and accountability (La Viña et al. 2003).

Despite the WSSD and its outcomes were considered to be significant steps in the formation of world polity of the process of sustainable development, they still faced some criticism. They were considered by some NGOs a compromise as opposed to adoption of legally binding conventions (La Viña et al. 2003). The WSSD as a whole faced severe critique of making inadequate progress on time-bound targets (La Viña et al. 2003).

The Political Declaration of the WSSD is a part of the so-called “type 1 outcomes” (Mehta 2003). The Declaration is noted to not set international principles that could be invoked in legal or political contexts (Mehta 2003). With this feature being typical for political documents of that type, the Declaration’s more general

contextualization puts it as a document that is seen as a foundation to the more detailed Plan of Implementation (Mehta 2003). Hens and Nath point out that it is very likely that the Johannesburg Declaration will not have the enduring impact or the intellectual sophistication and authority that the Rio Declaration of 1992 has (Hens and Nath 2005).

Summary

The World Summit for Sustainable Development was a follow-up event that marked the tenth anniversary of the Rio Conference on Environment and Development. The conference was held at Johannesburg, and the most important political document that was adopted there was the Johannesburg Declaration.

The Declaration is a document that reaffirms the political will of states to promote sustainable development in the spirit of the first Rio Conference from 1992. It puts a stronger emphasis on social and economic development compared to the Rio Declaration from 1992. It is a political statement that despite not being legally binding is of considerable de facto importance for the affirmation of a world polity on global issues in the field of sustainable development.

Cross-References

- [Earth Summit](#)
- [Local Agenda 21](#)
- [Rio Declaration on Environment and Development](#)

References

- Givens, J. (2017). World society, world polity, and the carbon intensity of well-being, 1990–2011. *Sociology of Development*, 3(4), 403–435.
- Gray, K. R. (2003, January). World summit on sustainable development: Accomplishments and new directions? *The International and Comparative Law Quarterly*, 52(1), 256–268.

- Hens, L., & Nath, B. (2005). The Johannesburg conference. In L. Hens & B. Nath (Eds.), *The world summit on sustainable development: The Johannesburg conference* (pp. 2–34). Dordrecht: Springer.
- La Viña, A. G. M., Hoff, G., & DeRose, A. M. (2003). The outcomes of Johannesburg: Assessing the world summit on sustainable development. *SAIS Review*, 23, 53–70. <https://doi.org/10.1353/sais.2003.0022>.
- Mehta, S. (2003). The Johannesburg summit from the depths. *Journal of Environment & Development*, 12, 121–128.
- Nuscheler, F. (2010). World conferences. In H. Volker (Ed.), *Concise Encyclopedia of the United Nations* (2nd ed., pp. 893–899). Leiden/Boston: Martinus Nijhoff Publishers.
- United Nations (UN). (2002). *United Nation yearbook*. United Nations Department of Global Communications. New York: United Nations.
- United Nations (UN). (2003). *Johannesburg declaration on sustainable development and plan of implementation of the world summit on sustainable development*. New York: United Nations Department of Public Information.
- United Nations (UN). (2004). *Johannesburg declaration*. UN Department of Economic and Social Affairs, United Nations Division for Sustainable Development. https://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm. Accessed 29 May 2020.

Johannesburg Summit

► [Johannesburg Summit of 2002 on Sustainable Development](#)

Johannesburg Summit of 2002 on Sustainable Development

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Synonyms

[Earth Summit 2002](#); [Johannesburg Summit](#); [Rio+10](#); [WSSD](#)

Definition/Description

The World Summit on Sustainable Development (WSSD) was a global United Nations (UN) forum that took place in Johannesburg between 26 August and 4 September 2002 (UN 2002a). The WSSD is a follow-up forum of the United Nations Conference on Environment and Development (UNCED) which took place in Rio de Janeiro in 1992. The Johannesburg conference aimed to provide a comprehensive 10-year review of progress made in implementing Agenda 21, the action plan adopted by the 1992 UNCED.

The WSSD was attended by 104 heads of state or heads of government. Overall, the forum had more than 21,000 participants, representing 191 national governments, different intergovernmental and nongovernmental organizations, the media, the private sector, and civil society (UN 2002b).

The topics which were discussed at the WSSD included issues such as water and sanitation, energy, health, agriculture and biodiversity (also known as WEHAB), achievement of poverty eradication, etc. (UN 2002b).

The Summit culminated in the adoption of the Johannesburg Declaration on Sustainable Development and the Johannesburg Plan of Implementation (JPOI), through which governments recommitted to the implementation of Agenda 21.

In December, the General Assembly endorsed the results from the WSSD. As a result of the recommendations that were made in the end of the Summit, the General Assembly appointed the timing of the United Nations Decade of Education for Sustainable Development to begin in 2005.

The WSSD’s Place in the Rio Process on Sustainable Development

The World Summit on Sustainable Development (Johannesburg, 26 August–4 September) is part of the United Nations sustainable development framework for global cooperation between states, nonstate actors, NGOs, etc. It is a follow-up and 10-year review to the United Nations Conference

on Environment and Development, also known as the Rio Conference. For this reason in literature the WSSD in Johannesburg is often called the Rio+10 (Hens and Nath 2005).

Background and Objectives

The World Summit on Sustainable Development was an international summit that is essentially a part of the Rio Process on Sustainable Development. The background of the WSSD lies in 1992 when the World Conference on Environment and Development (also known as the Rio Conference) was held. For this reason the 2002 Johannesburg Summit is also called Rio+10 (Hens and Nath 2005).

The original Rio Conference marked a new phase of development of relations between states, companies, nongovernmental organizations, and global civic society in terms of environmental responsibility and environmental protection. It addressed key social and environmental issues, and led to the adoption of crucial documents such as the United Nations Framework Convention on Climate Change (UNFCCC) and Agenda 21 (UN 1993).

The Rio+10 Summit was planned and organized as a continuation of the Rio dialog that started in 1992. The main purpose of the WSSD was to provide a forum hosted by the UN that would focus on discussion and furthering of the policies and commitments taken in Rio de Janeiro in 1992 (Hens and Nath 2005; Von Frantzius 2004). The necessity to adapt to the changing sociopolitical and ecological reality was the driving force behind the organization of the WSSD, and it was set to be one of the major United Nations events of the new millennium.

The main objectives of the WSSD were to reaffirm the commitments taken in Rio in 1992 and Doha in 2001, adopt new measures of implementation, and develop plans for action. With an ambitious plan in mind, organizers started negotiating on the texts of the documents to be adopted at the Summit in early 2002. However, the results from the Summit and the actual outcomes were not unilaterally accepted as successful (Mehta 2003; Von Frantzius 2004).

Commitments

The WSSD was a forum that aimed to reaffirm the commitments of the 1992 Rio Conference. The forum was a success in this manner. The WSSD's most important commitments were those that stressed on the socioeconomic aspects of sustainable development, affirming that this aspect of sustainable development is as equally important as the environmental responsibility aspect. At this Summit the government representatives agreed to enhance encouragement of industries and business to improve sustainable performance through adopting company policies and introducing voluntary initiatives and cooperation with public authorities and local communities (Verchick 2003).

Outcomes of the Summit have been separated in two categories: Type 1 Outcomes and Type 2 Outcomes (Von Frantzius 2004). The official political outcomes were categorized as the Type 1 Outcomes, and the Type 2 Outcomes constituted the voluntary nonbinding partnership initiatives between separate governments, business, NGOs, and civil society which sprung out of the communication between actors (Von Frantzius 2004).

The two most important documents that were adopted at the Johannesburg Summit were (UN 2002b):

1. The Johannesburg Declaration

The Johannesburg Declaration was the main political document that was adopted at the conference. It recognizes the structure-shaping role of globalization, and that the benefits and costs of globalization are unevenly distributed. It highlights the importance of cooperation between developed and less developed countries (LDCs) in order to overcome the regional and global inequalities, and the social and environmental challenges countries face. A significant aspect of the declaration is the commitment to multilateralism as an intergovernmental approach to sustainable development. It also includes commitments to engagement of various social actors, such as business, in achieving the common goals of sustainability (UN 2002b).

2. Johannesburg Plan of Implementation (JPOI)

The Plan of Implementations acknowledges the documents adopted at the 1992 Rio de Janeiro Conference as the stepping stones of all further action. The JPOI calls for the promotion of sustainable consumption and production by all countries and societies. Sustainable use of resources, focusing on education and development, and multistakeholder approach were brought up as key areas of work (UN 2002b).

The Plan specifies the role of developed countries as leaders in the adoption of sustainable development, and reaffirms the commitments of states that all countries should benefit from the process.

The Johannesburg Summit issued commitments in special areas, the so-called WEHAB (water, education, health, agriculture, and biodiversity). In the field of water and sanitation the countries committed to halve the proportion of people without access to safe drinking water and basic sanitation by 2015. In relation to health countries committed to achieve by 2020 minimization of adverse effects by the use of chemicals and implement better classification measures. Countries committed to reduce the rate of species loss and promote sustainable practices in biodiversity conservation and management (UN 2003b). The approach to education presented in the JPOI comprises of complex measures that parties should implement. On the global level, the Plan includes clauses aiming at the achievement of global goals for supporting the development of national programs and strategies to promote education within the context of the millennium development goals (MDGs). There is a focus on developing countries and regions. The Plan also includes education as a tool for promotion of sustainable practices such as ecotourism, health education, etc. (United Nations 2003b). The Plan of Implementation includes clauses on agriculture as well, with sustainable use of water and other resources being in the center. The Plan emphasizes on sustainable use of fisheries, and pleads for urgent development of “regional plans of action,

to put into effect the international plans of action of the Food and Agriculture Organization of the United Nations, in particular the International Plan of Action for the Management of Fishing Capacity” (UN 2003b).

Actors

The Johannesburg Summit gathered a wide spectrum of delegates that represented a variety of social actors. Like all global conferences organized by the UN, the main actors were considered to be representatives of nation-states and intergovernmental organizations. Important political dialog was conducted in traditional UN fashion. States coordinated their interests and policies in the field of sustainable development; they were key players in the adoption of the Rio+10 commitments. Important political statements were made by individual nation-states (for example, Russia and China announced the ratification of the Kyoto Protocol), and on collective level as well. Altogether, more than 8000 individuals from more than 900 organizations were represented at the Summit (UN 2002a).

However, the Johannesburg Summit included representatives not only of national governments, but delegates representing local public authorities as well. As author Robert Verchick qualified it, the Johannesburg Summit was the first global summit in which local authorities were so well represented (Verchick 2003). Their participation has been deemed ever more crucial, as local governments have been recognized as the organizational structures that would be directly implementing sustainable development policies in local communities. Local authority participation was present in the 1992 Rio Conference, and further enhanced in Johannesburg.

Continuing the practice of the first Rio conference, the Johannesburg Summit had a large number of nongovernmental organizations (NGOs) participating in the events. The NGOs were active participants in discussions and panels. NGO stands and platforms were situated in both in the main venue site – Sandton Convention Centre, and in smaller venues that were set up for the conference. A wide spectrum of NGOs was

present at the WSSD – from environmental organizations such as Greenpeace and World Wildlife Fund (WWF), to various industrial and business associations (Mehta 2003). Despite the large representation of NGOs and civil society structures, there were diverse reactions on the execution of the Summit (Mehta 2003).

The participation of companies and representatives of local and international business had already started picking up before the Johannesburg Summit. The conference however was attended by representatives of both major international companies from different industries, and smaller business as well. The participation and active position of business was considered a sign of the rising tendency of business interested in implementing sustainable practices of production and consumption (Mehta 2003).

Political Significance

The role of the Johannesburg Summit in the advancement of sustainable development has been considered not as effective as planned. However, there were some important tendencies that were manifested in Johannesburg.

The first tendency considered the general understanding of sustainable development. While the 1992 Rio Conference put the initial stress of sustainability on the environmental protection, it was at the Johannesburg Summit where the social part of sustainable development was stressed.

The second tendency, which was advanced in Johannesburg, was related to the procedural actions of actors. The tendency towards specification of different priority areas, and local communities, was manifested in both the wide representation of local governments, and the special discussions on the WEHAB themes. The Type 2 Outcomes of the Summit added more authority to the partnership initiatives approach which focuses on action-oriented cooperations between smaller groups of actors (Von Frantzius 2004).

WEHAB was given a special place at the Johannesburg Summit, and to this day the priority areas of water, education, health, agriculture, and biodiversity are considered key issues.

The Rio+10 Summit was also crucial for the promotion of the “Think global, act local” strategy and the advancement of the so-called Local Agenda 21 (Hens and Nath 2005).

Corporate Responsibility and Accountability

In terms of corporate social responsibility (CSR) and accountability, the Johannesburg Summit played a role of importance in furthering the conceptual and practical aspects of business engagement in sustainable development. Despite that CSR was not a separate topic of discussion, dialog over the optimal ways for promoting and achieving results in this field was present. However, the actual effects of the WSSD in terms of advancing the CSR notion were not as fruitful because corporate behavior and decision-making issues were hard to be discussed in an intergovernmental negotiations and decision-making framework. As La Vina, Hoff, and DeRose categorize it, the texts on corporate responsibility that were adopted could be considered as important but controversial achievements of the Summit (La Vina et al. 2003).

The Johannesburg Declaration included a text which stated that governments should “promote corporate responsibility and accountability and the exchange of best practices in the context of sustainable development” (UN 2003a). Article 29 states that the private sector should commit to corporate accountability in a transparent manner (United Nations 2003a). The Johannesburg Plan of Implementation included paragraphs that emphasized the role of companies in terms of enhancement of corporate environmental and social responsibility and accountability (UN 2003b), with practices in all levels of cooperation being pointed out in section III, paragraph 18 of the Plan (UN 2003b). Actions that were prescribed in the Plan were divided into four categories:

- Encouraging business to engage in voluntary initiatives, including environmental management systems, codes of conduct, certification, and public reporting on environmental and social issues (UN 2003b, III, paragraph 18, a))

- Encouraging dialog between enterprises and local communities (UN 2003b, III, paragraph 18, b))
- Encouraging financial institutions to include sustainable development considerations in decision-making (UN 2003b, III, paragraph 18, c))
- Encouraging the development of workplace-based partnerships and programs, including training and education programs (UN 2003b, III, paragraph 18, d))

The World Summit process identified not only what had to be done, but also who would do it, with many governments, nongovernmental organizations (NGOs), intergovernmental organizations, and the private sector launching partnership initiatives aimed at achieving sustainable development goals. In a series of partnership plenary sessions, participants focused on five priority areas for action – water and sanitation, energy, health, agriculture, and biodiversity, known as the WEHAB themes – as well as cross-sectoral issues and regional implementation. Four high-level round-table discussions and a multistakeholder event were also convened (Hens and Nath 2005).

Summary

The World Summit for Sustainable Development was a follow-up event that marked the tenth anniversary of the Rio Conference on Environment and Development. The conference was held at Johannesburg and the most important political document that was adopted there was the Johannesburg Declaration.

The World Summit process identified not only what had to be done, but also who would do it, with many governments, nongovernmental organizations (NGOs), intergovernmental organizations, and the private sector launching partnership initiatives aimed at achieving sustainable development goals. In a series of partnership plenary sessions, participants focused on five priority areas for action – water and sanitation, energy, health, agriculture, and biodiversity, known as

the WEHAB themes – as well as cross-sectoral issues and regional implementation. Four high-level round-table discussions and a multi-stakeholder event were also convened.

Cross-References

- [Earth Summit](#)
- [Johannesburg Declaration](#)
- [Local Agenda 21](#)
- [Rio Declaration on Environment and Development](#)

References

- Hens, L., & Nath, B. (2005). The Johannesburg conference. In L. Hens & B. Nath (Eds.), *The world summit on sustainable development: The Johannesburg conference* (pp. 2–34). Dordrecht: Springer.
- La Vina, A. G., Hoff, G., & DeRose, A. M. (2003). The outcomes of Johannesburg: Assessing the world summit on sustainable development. *SAIS Review*, 23, 53–70. <https://doi.org/10.1353/sais.2003.0022>.
- Mehta, S. (2003). The Johannesburg summit from the depths. *Journal of Environment & Development*, 12, 121–128.
- United Nations (UN). (1993). United Nations conference on Environment & Development. Rio de Janeiro, Brazil, 3 to 14 June 1992 AGENDA 21. United Nations, A/CONF.151/26/Rev.1 (Vol. I). <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>. Accessed 25 Mar 2020.
- United Nations (UN). (2002a). *Yearbook of the United Nations, 2002*. United Nations Publications, 56. United Nations Department of Global Communications. New York: UN. <https://www.unmultimedia.org/searchers/yearbook/page.jsp?volume=2002&page=1>. Accessed 25 Mar 2020.
- United Nations (UN). (2002b). Report of the World Summit on Sustainable Development. Johannesburg, South Africa, 26 August–4 September 2002. A/CONF.199/20. United Nations publication. New York: UN. http://digitallibrary.un.org/record/478154/files/A_CONF-199_20-EN.pdf. Accessed 25 Mar 2020.
- United Nations (UN). (2003a). *Johannesburg declaration on sustainable development and plan of implementation of the world summit on sustainable development*. United Nations Department of Public Information. New York: UN. <http://digitallibrary.un.org/record/499757>. Accessed 25 Mar 2020.
- United Nations (UN). (2003b). *Plan of implementation of the world summit on sustainable development*. United

Nations Department of Public Information. New York: UN. https://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf. Accessed 25 Mar 2020.

Verchick, R. M. (2003). Why the global environment needs local government: Lessons from the Johannesburg summit. *The Urban Lawyer*, 35(3), 471–494.

Von Frantzius, I. (2004). World summit on sustainable development Johannesburg 2002: A critical analysis and assessment of the outcomes. *Environmental Politics*, 13(2), 467–473. <https://doi.org/10.1080/09644010410001689214>.

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Basic Biographical Information

John Elkington is a British entrepreneur and academic. His research fields are corporate social responsibility and sustainable development. Born in Padworth in Berkshire, England, on June 23, 1949, he studied observed at Bryanston School (1966) and then graduated from the University of Essex, obtaining a Bachelor of Art in sociology and social psychology (1970). He completed the Master of Philosophy in urban and regional planning in 1974 at the University College of London.

Founder:

- Environmental Data Services (ENDS, 1978)
- Sustainability (1987–2008)
- Co-founder of Volans Ventures (from 2008 to today)

Senior consultant at the Resource Center for Business and Human Rights, member of the WWF Council of Ambassadors, professor at Cranfield University School of Management, Imperial College, and University College London.

John Elkington is responsible for the biennial “Project Breakthrough” program created in collaboration with the United Nations Global

Compact, dedicated to the opportunities offered by the market in the sector of exponential sustainability.

Major Contributions

John Elkington has spoken at over 1000 conferences, from the smallest ones to the Skoll World Forum and the World Economic Forum. He is the author of numerous books and over one hundred articles and reports. He also coined the terms “environmental excellence,” “green growth,” “green consumer,” “triple bottom line,” and “people, planet, and profit.”

Business

In 1980, John Elkington published his book “*The Ecology of Tomorrow's World: Industry's Environment*” in which he began to focus his attention on environmental issues as a fundamental center of world economic analysis.

In 1987, he wrote “*The Green Capitalists*,” with an additional chapter by Tom Burke, environmentalist, director of Green Alliance, president, and founding director of E3G. In this book, the two authors try to overturn the generalized vision of an industry too often in open conflict with what concerns the natural world and try to show how, instead, the attention of international industries to the environment is increasing. They explain that precisely this attention can ensure that industry and technology can be promoters of greater protection of environmental fragility. The book contains 10 steps that companies must follow to get more profits from environmental problems.

In 1989, in collaboration with Julia Hailes, British naturalist and writer, and Tom Burke, he wrote “*Green Pages: The Business of Saving the World*,” in which he projected in detail towards the future role that environmental issues would have had on European companies but also in the development of new technologies, in design, and how all this would necessarily have produced important influences within the political choices.

In 1991, John, in collaboration with Julia and Peter Knight, focused attention on companies

that, on the requests of consumers and shareholders, increasingly directed towards a conscious and environmentally conscious purchase, develop green processes. The book *"The Green Business Guide,"* in fact, thanks to the great experience of its author, is full of case studies and examines problems that concern all parts of a company, dealing with topics such as operational finance, legal and personnel services, research, transport, and office supplies.

In 1997, he wrote, *"Cannibals with Forks: The Triple Bottom Line of 21st Century Business"* in which he explains carefully how companies can and should all aspire to achieve the interconnected objectives of prosperity, environmental respect, and social equity, knowing that these objectives will be the future of the companies themselves.

In 2001, he wrote *"The Chrysalis Economy: How Citizen CEOs and Corporation Can Fuse Values and Value."* In this text, John Elkington shows the *"metamorphosis"* of the companies that have decided to take the road to reach the Caterpillar Economy for the Butterfly and Honeybee economies. John described the leaders and boards that he got to follow directly. At the same time, in a global economy that is experiencing transformations at very high speeds, he described the way of doing business changes, with companies anchored to old models that are transformed with new styles of corporate citizenship. In this book, John outlined the cultural perspective that will be needed in the future to achieve sustainability goals.

In 1997, he wrote *"Cannibals with Forks: The Triple Bottom Line of 21st Century Business"* in which he explained carefully how companies can and should all aspire to achieve the interconnected objectives of prosperity, environmental respect, and social equity, knowing that these objectives will be the future of the companies themselves.

In 2008, he wrote, in collaboration with Pamela Hartigan, Director of the Skoll Center for Social Entrepreneurship at Said Business School, University of Oxford, and founding partner of Volans Ventures, *"The Power of Unreasonable People: How Social Entrepreneurs Create Markets That Change the World."* This text is the collection of stories of "unconventional"

entrepreneurs thanks to which it was possible to overcome stringent economic, social, and environmental problems. In this text, the authors tried to describe the road towards which the risks and opportunities of the market will be directed soon.

"The Zeronauts Breaking the Sustainability Barrier"(2012) is the book with which John Elkington wanted to present a new generation of entrepreneurs and innovators who, having to face our present in an increasingly crisis-ridden planet, will be able to "break the barrier of sustainability" by overcoming it. The book addressed five key challenges: population growth, pandemics, poverty, pollution, and proliferation. The book introduced a five-step "Pathways to Zero" model: from discovery to the moment when the action becomes endemic in the economy.

In *"The Breakthrough Challenge: 10 Ways to Connect Today's Profits With Tomorrow's Bottom Line"* written in 2014, John Elkington, in collaboration with Jochen Zeitz, co-founder of The B Team and founder of the Zeitz Foundation for Intercultural Ecosphere Safety, started from the idea that the first and fundamental transformation that must necessarily take place in the business world is that concerning commerce. Attention to the intertwining of profits, the environment and society will be fundamental to create lasting success. John drew companies' attention to redefining the bottom line to take into account all real long-term costs across the supply chain. To achieve this, leaders must rethink everything. This book guides the leaders to achieve a true transformation and repositions the definition of profitability on the lasting well-being of people and the network, without which the lasting success of their activities is not possible.

Consumer and Lifestyle

In 1988, John Elkington published in collaboration with Julia Hailes his book *"The Green Consumer Guide: From Shampoo to Champagne: High-Street Shopping for a Better Environment"* to sensitize readers about the difference between products. In this approach, the two authors, in 1989 wrote *"Green Consumer Guide."* This writing was conceived as a true guide in a conscious

daily purchase. The two authors examined a wide range of products, advising against some products that are harmful to the environment, and referred to valid and interesting ecological alternatives respectful of nature. The book focused on products such as detergents, batteries, bulbs, sprays, but at the same time, it also dealt with an important topic such as “ecological” tourism and “green” gifts.

Also in collaboration with Julia Hailes, in the following years, John Elkington wrote: “*The Green Consumer’s Supermarket Shopping Guide*” (1989) and “*The Young Green Consumer’s Guide*” (1990), continuing to deepen the theme of informed purchases.

In 1992, the two authors wrote “*Holidays That Don’t Cost the Earth*.” This text highlighted the issue of sustainable tourism and advised hikers’ places and holidays that do not harm the planet. In the book, there is also a survey between Tour Operators and Ecotourism Companies.

At the gates of the new millennium, John Elkington and Julia Hailes wrote: “*Manual 2000*” (1998), a book that, starting from the analysis of the speed with which science and technology were leading man at the gates of the new millennium, asked questions where this speed will lead us and if all that will be achieved will be positive for humanity. John then tried to indicate what is more right and what is not for him, explaining what the moral, social, and environmental issues that will have to be addressed will be. The book is also a guide for the consumer, listing the options available, to understand what is convenient to buy from food to the personal computer.

John Elkington wrote the true guide to food trends of contemporary man in 2001 when he published “*The New Foods Guide: Gene Food Consumer Guide*.” Accompanying the consumer among the products of the supermarket, this book is designed to indicate which products are impacting our health today, in the manifestation of certain diseases, new organic foods, reading the labels on products, GMOs, really knowing which brands we are buying. The book contains a real manifesto about what the food industry should do

and indicates which companies are already heading in the right direction.

Science and Technology

In 1984, Elkington wrote “*Sun Traps: The Renewable Energy Forecast*.” Starting from an analysis of solar, wind, and energy released by the movement of the waves, he analyzed the scenario of renewable energies by comparing them with nuclear energy and the energy produced from fossil sources.

On the impact that pollution has on the human being, he wrote in 1985 “*The Poisoned Womb: Human Reproduction in a Polluted World*” in which he dealt with the topic of reproduction, human fetal development in an increasingly polluted world and which therefore can affect diseases and malformations, and “*The Gene Factory: Inside the Genetic and Biotechnology Business Revolution*” in which, in addition to highlighting the discoveries that science has made in the medical field, it also illustrates what risks are faced if a “war of germs.”

Other

In 1990, Elkington wrote “*A Year in the Greenhouse: An Environmental Diary*.” In this book, he told what appeared to be an ecological awakening and an awareness by world leaders of environmental problems, the year 1989. In this year, the Greens in Great Britain have had their first success with the European elections. The industry at the same time recognized a growing role for the green consumer and all the mass media, from newspapers to televisions, raised green issues. This book is also a story of the author’s commitment to the environmental world.

In 2015, John Elkington collaborated on the book by Doug Miller, founder and president of the global research consultancy firm GlobeScan Inc., “*Can the World Be Wrong?: Where Global Public Opinion Says We’re Headed*.” The book, which collects 30 global opinion polls on various topics including economics, globalization, and geopolitics, through public opinion trends over the past decade in 20 countries seeks to trace a line of future global trends.

The Triple Bottom Line

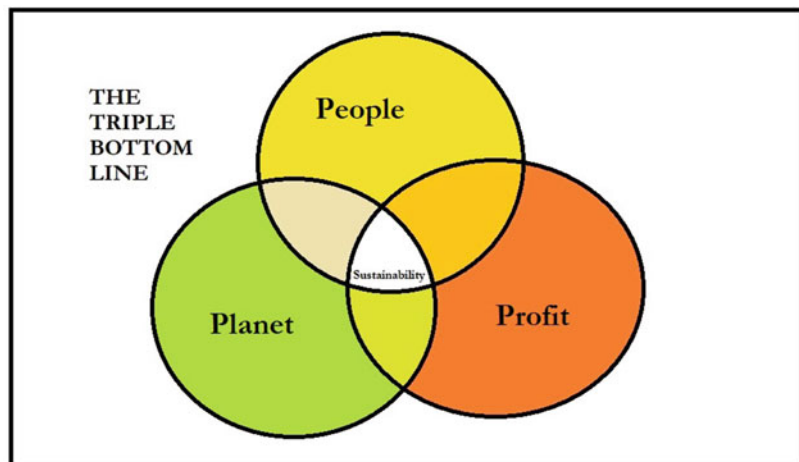
The environment, society, and finance (profit) are intertwined. To be able to create the conditions for sustainable development, the weight of each element must be put back in the right order. Represented in concentric circles, the first and largest circle is that of the environment which necessarily contains everything else since Planet Earth is the basis for building our society. The latter is the second circle and contains within itself the third circle, namely that of finance. The structure thus defined redesigns the right position of every single element and only by respecting this structure can true Elkington achieve truly sustainable development.

Revised 25 years later, the Triple Bottom Line (Fig. 1) is a sustainability framework that examines a company's social, environmental, and economic impact. As explained by "The Economist" magazine, only the company that takes into account the TBL considers the full cost of its business.

Honors and Awards

- 1973: University College London, travel fellowship to the USA
 - 1981: Winston Churchill Memorial Fellowship
 - 1989: United Nations Global 500 Roll of Honour, alongside Julia Hailes
 - 2006: 3-year, \$1 million grant from the Skoll Foundation for Social Entrepreneurship, which covered work both at SustainAbility and later at Volans
 - 2008: Fast Company Social Capitalist Award (on behalf of SustainAbility)
 - 2010: American Society for Quality Spencer Hutchens, Jr. Medal for champions of quality and social responsibility
 - 2011: Rockefeller Foundation Bellagio Fellowship, used to write part of *The Zeronauts*
 - 2013: Inducted into the Sustainability Hall of Fame by The International Society of Sustainability Professionals (ISSP) in honor of "extraordinary contribution" to the field through research, publication, teaching, and innovation
 - 2014: Honorary Doctorate, University of Essex
- Over time he has received many other awards:
- In 2004, BusinessWeek described him as "a dean of the corporate responsibility movement for three decades."
 - In 2008, The Evening Standard named him among the "1000 Most Influential People" in London, describing him as "a true green business guru," and as "an evangelist for corporate social and environmental responsibility long before it was fashionable."
 - In 2009, a CSR International survey of the Top 100 CSR leaders placed him

John Elkington,
Fig. 1 The triple
bottom line



fourth: after Al Gore, Barack Obama, and the late Anita Roddick of the Body Shop, and alongside Muhammad Yunus of the Grameen Bank.

- In 2011, he was named among the “100 Global Sustain Ability Leaders for 2011” by ABC Carbon and the SustainAbility (nothing to do with SustainAbility) Showcase Asia, based on nominations and recommendations received from around the world.

References

Business

- Elkington, J. (1980). *The ecology of Tomorrow's world: Industry's environment*. London: Associated Business Press.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone/John Wiley.
- Elkington, J. (2001). *The Chrysalis economy: How citizen CEO's and corporation can fuse values and value*. Capstone/John Wiley.
- Elkington, J. (2012). *The Zeronauts breaking the sustainability barrier*. Routledge/Taylor & Francis.
- Elkington, J., & Burke, T. (1987). *The green capitalists*. London: V. Gollancz.
- Elkington, J., & Hartigan, P. (2008). *The power of unreasonable people: How social entrepreneurs create markets that change the world*. Harvard Business School Press.
- Elkington, J., & Zeit, J. (2014). *The breakthrough challenge: 10 ways to connect Today's profits with Tomorrow's bottom line*. Jossey-Bass.
- Elkington, J., Hailes, J., & Burke, T. (1988). *Green pages: The business of saving the world*. Routledge.
- Elkington, J., Hailes, J., & Knight, P. (1991). *The green business guide*. V. Gollancz.

Consumer and Lifestyle

- Elkington, J., & Hailes, J. (1988). *The green consumer guide: From shampoo to champagne: High-street shopping for a better environment*. V. Gollancz.
- Elkington, J., & Hailes, J. (1989). *The green consumer guide*. Penguin Books.
- Elkington, J., & Hailes, J. (1991). *The green Consumer's supermarket shopping guide*. V. Gollancz.
- Elkington, J., & Hailes, J. (1992). *Holidays that don't cost the earth*. Orion Publishing Co.
- Elkington, J., & Hailes, J. (1998). *Manual 2000*. Hodder & Stoughton.
- Elkington, J., & Hailes, J. (2001). *The new foods guide: Gene food consumer guide*. W&N.
- Elkington, J., Hailes, J., Hill, D., & Ross, T. (1990). *The young green consumer's guide*. V. Gollancz.

Science and Technology

- Elkington, J. (1984). *Sun traps: The renewable energy forecast*. Penguin Books.
- Elkington, J. (1985a). *The poisoned womb: Human reproduction in a pulled world*. Viking.
- Elkington, J. (1985b). *The gene factory: Inside the genetic and biotechnology business revolution*. Carroll & Graf Pub.

Other

- Elkington, J. (1990). *A year in the greenhouse; An environmental diary*. V. Gollancz.
- Miller, D., & Elkington, J. (2015). *Can the world be wrong?: Where global public opinion says We're headed*. Routledge.

Sitography

- <https://johnelkington.com/>
- <https://www.economist.com/news/2009/11/17/triple-bottom-line>

John Gerard Ruggie and the UN Guiding Principles on Business and Human Rights

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Synonyms

Corporate responsibility (management); Corporate Social Responsibility (CSR); CSR management; Human rights; UN Guiding Principles of Business and Management

Definition

The UN Guiding Principles on Business and Human Rights were formalized and published in 2011 (United Nations 2021). Financially oriented UN Principles (first agreed in 1992) were revised and refined: the UN Principles for Responsible Investment, the UN Principles for

Sustainable Insurance, and the UN Principles for Sustainable Banking (United Nations 2022). The development of this group of principles is of note, as it represents a shift from a focus on national governments, to a shift toward business, especially international business, the impact that business activity can have on the environment and community development, and the role of government in safeguarding the latter. Ruggie, The UN and scholars in the field continue to develop Ruggie's principles, especially regarding how best to improve accountability for violations (Khoury and White 2015; Ruggie et al. 2021; Taylor 2021; United Nations 2021) given the demands of the Ruggie Principles and the economic and political power of corporations.

Introduction

John Ruggie (1944–2021) was a full professor in both School of Law and Kennedy School of Government at Harvard University. These posts are indicative of the interests held by Ruggie, but also the cognate disciplines that he was able to draw from. Ruggie's earlier work on territoriality, globalization, and accountability helped to lay the foundations for his work with the UN. It is of note the earliest work on human rights, the development of which was led by Eleanor Roosevelt. Roosevelt was the first Chairperson on the Commission for Human Rights, and she played a leading role in drafting the 1948 Universal Declaration of Human Rights (United Nations 1948, 2022). Of note also is Roosevelt's establishment of a subcommission, on the Status of Women which included colleagues from Lebanon, Poland, Denmark, Dominican Republic, and India (United Nations 2022). The importance of laying the foundations for women's development and women's equality was thus incorporated into the original draft of the Universal Declaration, and was followed later by the UN Gender Equality and Gender Inequality indices (Seth 2009; United Nations 2022); updates to the UN's position of rights meant that the original declaration was a living declaration that could evolve over time.

The Path Toward Business and Management CSR and Corporate Accountability

Ruggie's interests resonate with Article 30 of the Universal Declaration "*Nothing in this Declaration may be interpreted as implying for any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.*" (United Nations 2022). In 2011, the "*protect, respect, remedy*" rational that underpins the John Ruggie Framework on Business and Human Rights, which became the UN Guiding Principles on Business and Human Rights, adds to the original UN Human Rights declaration by highlighting the ethical responsibilities not only of nation states, but of business.

As early as the 1950s, Howard Bowen (2013) had developed ideas on corporate social responsibility, captured in his book "*The Social Responsibility of the Businessmen.*" Many well-known CSR frameworks exist, but the enduring challenge was to embed CSR into the formal governance of the corporation, not as a standalone, peripheral activity with limited corporate accountability. Increasing interest in the impact of business on the environment, climate change, and local communities in the latter part of the 1990s onward, reaching a peak with international climate change commitments by national governments (e.g., UN Climate Change national governments meeting, COP 11 Kyoto, (UNFCCC 1997), protocol agreed and ratified in 2005), created the ideal moment to focus again on corporations and the potentially negative impacts of their activities.

Ruggie's appointment by the United Nations as a Special Envoy afforded him the opportunity to draw on his expertise, consult widely, and then draft recommendations to present to the UN on how best to create a contemporary, global position on the duties and responsibilities of corporations (Ruggie 1983; 2008a, 2008b, 2009).

Ruggie developed 31 directives, framed in three main pillars: the state duty to protect against human rights abuses, the corporate responsibility to respect human rights, and the need to help

victims achieve remedy. These three pillars recommend that companies demonstrate and implement respect for human rights, take measures such as make a public commitment, and identify, prevent, mitigate, and account for damage. Ruggie continued to hone and refine the application of these pillars for many years and violations.

Summary

The development of greater business accountability with regard to human rights owes a great debt to the foresight and distinctive intellectual interests of John Ruggie. Earlier work had made clear the nature of human rights but less so the critical and central role of business. Ruggie's 31 directives highlighted not only the moral and legal responsibilities of business but also the role of the state in ensuring corporate accountability and legal compliance.

Cross-References

- [Social Justice](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [United Nations Human Rights Committee](#)

References

- Bowen, H. R. (2013). The social responsibility of the businessman. Online link to 1953 version. <https://muse.jhu.edu/book/29080>. Accessed 30 Jan 2023; Bowen, H.R., University of Iowa Reprint.
- Khoury, S. and Whyte, W. (2015). New mechanisms of accountability for corporate violations of human rights. The Arts and Humanities Research Council, The British Academy, the European Court of Human Rights and the University of Liverpool. <https://www.liverpool.ac.uk/media/livacuk/sociology-social-policy-and-criminology/2-research/NewMechanismsforAccountability.pdf>. Accessed 03 Jan 2023.
- Ruggie, J. (1983). Human rights and the future international community. *Daedalus*, 112(4), Human Rights fall(1983), 93–110.
- Ruggie, J. (2008a). Protect, respect remedy: A framework for business and human rights. *Innovations Technology Governance Globalization*. February.
- Ruggie, J. G. (2008b). Note on ISO 26,000 Guidance Draft Document. <https://media.business-humanrights.org/media/documents/files/media/documents/ruggie-note-re-iso-26000-nov-2009.pdf>. Accessed 03 Jan 2023.
- Ruggie, J. (2009). Business and human rights: Towards operationalizing the “protect, respect and remedy” framework. Report to the United Nations Human Rights Council, 22 April 2009, A/HRC/11/13.
- Ruggie, J. G. (2015). *Regulating multinationals: The UN guiding principles, civil society, and international legalization, regulatory policy program working paper RPP-2015-04*. Cambridge, MA: Mossavar-Rahmani Center for Business and Government, Harvard Kennedy School, Harvard University.
- Ruggie, J. G. (2018). Multinationals as global institution: Power, authority and relative autonomy. *Regulation & Governance*, 12, 317–333.
- Ruggie, J. G., & Sherman, J. F., III. (2017). The concept of ‘due diligence’ in the UN guiding principles on business and human rights: A reply to Jonathan Bonnitcha and Robert McCorquodale. *European Journal of International Law*, 28(3), 921–928.
- Ruggie, J. G., Rees, C., Davis, R., & Rachel, D. A. V. I. S. (2021). Ten years after: From UN guiding principles to multi-fiduciary obligations. *Business and Human Rights Journal*, 6, 179–197.
- Seth, S. (2009). Inequality, interactions, and human development. *Journal of Human Development and Capabilities*, 10(3), 375–396.
- Taylor, M. B. (2011). The Ruggie framework: Polycentric regulation and the implications for corporate social responsibility. *Nordic Journal of Applied Ethics*, 5(1), 9–30.
- UN COP 11 Kyoto Event: Main findings <https://unfccc.int/event/cop-11> Accessed 30 Jan 2023.
- UN Declaration of Human Rights. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>. Accessed 30 Jan 2023.
- UN General Assembly (Human Rights Council): Guiding Principles on Business and Human Rights at 10: Taking stock of the first decade. Report of the Working Group on the issue of human rights and transnational corporations and other business enterprises. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/093/82/PDF/G2109382.pdf?OpenElement>. Accessed 30 Jan 2023.
- UN Universal declaration of human rights: History of the Declaration. <https://www.un.org/en/about-us/udhr/history-of-the-declaration>. Accessed 30 Jan 2023.
- Universal declaration of human rights: drafters of the declaration: <https://www.un.org/en/about-us/udhr/drafters-of-the-declaration>. Accessed 30 Jan 2023.
- UN Declaration of Human Rights: Women who shaped the declaration. <https://www.un.org/en/observances/human-rights-day/women-who-shaped-the-universal-declaration>. Accessed 30 Jan 2023.
- UN Environment Programme Finance Initiative. <https://www.unepfi.org/>. Accessed 30 Jan 2023.
- UN and Gender Equality: The unfinished business of our time. <https://www.un.org/en/global-issues/gender-equality>. Accessed 30 Jan 2023.

UN Gender Inequality Index. <https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII>. Accessed 30 Jan 2023.

UN Guiding Principles on Business and Human Rights 10th anniversary, 16 June 2021. UN human rights standards for business reach 10-year milestone: time to gear up for new decade of action. <https://www.ohchr.org/en/press-releases/2021/06/un-guiding-principles-business-and-human-rights-10th-anniversary-16-june>. Accessed 30 Jan 2023.

UN Principles for Sustainable Insurance: A global sustainability framework and initiative of the United Nations Environment Programme Finance Initiative. <https://www.unepfi.org/psi/>. Accessed 03 Jan 2023.

UN Principles of Responsible Banking. <https://www.unepfi.org/banking/bankingprinciples/>. Accessed 03 Jan 2023.

UN Principles of Responsible Investment. <https://www.unpri.org/>. Accessed 03 Jan 2023.

John Ruggie

► [United Nations Human Rights Committee](#)

Justice

► [Social Justice](#)

Justice Ethics

► [Ethic of Love](#)

K

Kaizen

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Synonyms

[Continuous improvement](#)

Definition

Kaizen is a Japanese word (改善) for describing “continuous improvement.” This word comprises two themes: *kai* (改) meaning reform, change, modify, examine, inspect; and *zen* (善) meaning virtuous, good, and goodness (Macpherson et al. 2015). Together they mean a change for the better, or in other words: a process of incremental improvements (Liker 2004). Kaizen as a word in the English language was introduced into the Oxford Dictionary in 1993 (Sheridan 1997). There it is defined as the practice aimed at improving the company performance (operation way) done by continuously improving. In this meaning the business aspect is highlighted, while it can also concern daily life by contributing to greater self-reliance and self-control (Pinto et al. 2018). More broadly, the improvement refers to workplace, personal life, home life, and social life (Imai 1986).

The concept assumes continuous, ongoing, and gradual improvement. The change usually happens due to undertaking small steps producing small effects. Therefore, kaizen is opposed to the notion of types of innovation, which are understood as significant, breakthrough change, usually occurring only once in a given period.

The key features of kaizen are: continuous efforts toward better quality; incremental, but not radical change; requiring participation and involvement of all workers from different managerial levels (Brunet and New 2003). Kaizen characterizes the work of small groups aimed at problem solving, analyzing data, and thanks to open discussion, leading to new solutions.

History

Due to the Japanese origin, *kaizen* is perceived as an oriental invention. However, it has roots in Western scientific management. The origin of kaizen is located within the training program “*Training Within Industry*” (TWI). In this program, two topics were closely related to the current understanding of kaizen: *Job Methods* and *learn by doing*. Analysis of earlier works on the TWI program from 1943 point out its confusingly similar workshop topics, such as: “Job Methods will help supervisors to make many small improvements on the job they are closest to” (Huntzinger 2002). The links between TWI and kaizen demonstrates TWI materials found in

Toyota training documents (Huntzinger 2002). As Imai and Liker described kaizen, it became a key pillar for the Toyota Production System and TQM commonly used by international and national companies. This is how it came back to the USA and other Western countries.

Key Issues

Kaizen is one of the 14 principles of quality management (see ► [“Quality Management”](#)) coined by E. Deming (2000): “Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.” Deming points out that improvement requires to possess knowledge about a studied area linking it with the need to learn. Kaizen is also a part of Toyota Way’s Principles where it is related to learning: “become a learning organization through relentless reflection (hansei) and continuous improvement (kaizen)” (Liker 2004). It embraces an attitude of self-reflection and self-criticism, which are necessary according to Liker to make improvements.

Due to its nature, kaizen allows workers to achieve self-actualization. Searching for improvements requires employees’ involvement and intelligence. Therefore, the kaizen’s idea is referred to works of scholars representing Human Relations School, such as: E. Mayo, A. Maslow, D. McGregor, Ch. Argyris and F. Herzberg (Brunet and New 2003).

Kaizen is also an umbrella term. Imai literally describes it as a practice overarching many quality and lean management systems and methods, including: Total Productive Maintenance, Just-in-Time, Kanban, Quality Control Circles, 5-why, Total quality control (TQC)/total quality management (TQM), a just-in-time (JIT), Toyota Production System, Total productive maintenance (TPM), policy deployment, a suggestion system, and small-group activities (Imai 1986, 2012).

The main principles associated with kaizen are: program 5S; focusing on processes, operational standards, and quality; active participation; strategic planning; using problem solving techniques; and education (Suárez-Barraza et al. 2019).

According to the results of a study conducted among Japanese workers, because its main idea is to steadily introduce small changes, kaizen is more process-oriented than result-oriented. The organization can promote kaizen among workers through education and campaigns. Kaizen is not homogeneously perceived within one company. Kaizen practice depends on headquarter–subsidiary relationships and is affected by a business culture. It also means that kaizen is not a bottom-up activity, but also results from managerial orientation. Thanks to contrasting bottom-up perspective with top-down, it allows the development of a wider organizational view (Macpherson et al. 2015).

Kaizen requires conditions related to individual traits and organizational settings. The first group comprises attitude toward problem solving, knowledge about problem-solving tools, and readiness to change. The second group refers to supporting organization environment including control and monitoring mechanisms during introducing a change (Kiran 2017).

Kaizen is not only beneficial on a company level, but also on a personal one. Adapting kaizen step by step helps to improve quality, develop new products/services. From a personal perspective, as small changes do not require a lot of effort and do not trigger fear toward change, kaizen leads to morale increase and reduces healthcare expenses due to introducing a non-stressful way of improvement (Maurer and Hirschman 2013).

A version of kaizen aimed at providing quick improvement is called kaizen blitz. The features of this approach include to analyze a specific problem by a team comprising 6–12 members from different managerial functions and levels, who within 3–5 days, propose a new solution (Oakland 2014).

Future Directions

Kaizen’s popularity and potential popularized its use in other business sector than production. It can be found in improving teaching activities (Kregel 2019), education institutions (Suárez-Barraza et al. 2019), and healthcare (Grabán 2018;

Sommer and Blumenthal 2019). These examples demonstrate a spread of kaizen philosophy in services where creativity for improvement is required.

The next development represents merging kaizen with other quality or lean management techniques. Example include gemba-kaizen (Cherrafi et al. 2019). In the Japanese language, gemba literally means a place where something happens (Imai 2012); thus a joint phrase expresses the idea of improvement directly at the workplace.

The culture-dependent successful usage of kaizen evokes studies on its introduction in different national cultural settings. The reports of using kaizen in Asia and Western countries demonstrate successful application. In Africa, a late adopter, kaizen training leads to better enterprise performance (Sonobe 2018).

Kaizen is mainly interpreted as a practice and practical results are very often described, but the theoretical foundations are missing (Carnerud et al. 2018). The lack of a theoretical framework may cause problems with choosing kaizen as a research subject. Moreover, kaizen is very often treated very generally as a business philosophy (a never-ending journey toward excellence) or more specifically as a way of introducing improvements at the workplace.

Kaizen was proved to be successful for improvement in different business and functions. Also it can be linked with sustainability activities within the company (Glover et al. 2011).

Cross-References

► Quality Management

References

- Brunet, A. P., & New, S. (2003). Kaizen in Japan: An empirical study. *International Journal of Operations & Production Management*, 23(12), 1426–1446.
- Carnerud, D., Jäca, C., & Bäckström, I. (2018). Kaizen and continuous improvement – Trends and patterns over 30 years. *The TQM Journal*, 30(4), 371–390. <https://doi.org/10.1108/TQM-03-2018-0037>.
- Cherrafi, A., Elfezazi, S., Hurley, B., Garza-Reyes, J. A., Kumar, V., Anosike, A., & Batista, L. (2019). Green and lean: A Gemba–Kaizen model for sustainability enhancement. *Production Planning & Control*, 30(5–6), 385–399. <https://doi.org/10.1080/09537287.2018.1501808>.
- Deming, W. E. (2000). *Out of the crisis* (1st MIT Press ed.). Cambridge, MA: The MIT Press.
- Glover, W. J., Farris, J. A., Van Aken, E. M., & Doolen, T. L. (2011). Critical success factors for the sustainability of Kaizen event human resource outcomes: An empirical study. *International Journal of Production Economics*, 132(2), 197–213. <https://doi.org/10.1016/j.ijpe.2011.04.005>.
- Grabau, M. (2018). *Healthcare Kaizen: Engaging front-line staff in sustainable continuous improvements*. Retrieved from <http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781439872970>
- Huntzinger, J. (2002). The roots of lean. Training within industry: The origin of Kaizen. *Targets*, 18(1).
- Imai, M. (1986). *Kaizen (Ky'zen), the key to Japan's competitive success* (1st ed.). New York: Random House Business Division.
- Imai, M. (2012). *Gemba Kaizen: A commonsense approach to a continuous improvement strategy*. Retrieved from <http://www.myilibrary.com/?id=366251>
- Kiran, D. R. (2017). Kaizen and continuous improvement. In *Total quality management* (pp. 313–332). <https://doi.org/10.1016/B978-0-12-811035-5.00022-2>.
- Kregel, I. (2019). Kaizen in university teaching: Continuous course improvement. *International Journal of Lean Six Sigma*, 10(4), 975–991. <https://doi.org/10.1108/IJLSS-08-2018-0090>.
- Liker, J. K. (2004). *The Toyota way: 14 management principles from the world's greatest manufacturer*. New York: McGraw-Hill.
- Macpherson, W. G., Lockhart, J. C., Kavan, H., & Iaquinto, A. L. (2015). Kaizen: A Japanese philosophy and system for business excellence. *Journal of Business Strategy*, 36(5), 3–9. <https://doi.org/10.1108/JBS-07-2014-0083>.
- Maurer, R., & Hirschman, L. A. (2013). *The spirit of Kaizen: Creating lasting excellence one small step at a time*. New York: McGraw-Hill.
- Oakland, J. S. (2014). *Total quality management and operational excellence: Text with cases* (4th ed.). London/New York: Routledge.
- Pinto, J. L. Q., Matias, J. C. O., Pimentel, C., Azevedo, S. G., & Govindan, K. (2018). Lean manufacturing and Kaizen. In J. L. Q. Pinto, J. C. O. Matias, C. Pimentel, S. G. Azevedo, & K. Govindan (Eds.), *Just in time factory* (pp. 5–24). https://doi.org/10.1007/978-3-319-77016-1_2.
- Sheridan, J. D. (1997). Guru's view of the gemba. *Industry Week*, 246(16), 27–28.
- Sommer, A. C., & Blumenthal, E. Z. (2019). Implementation of Lean and Six Sigma principles in ophthalmology for improving quality of care and patient flow. *Survey of Ophthalmology*, 64(5), 720–728. <https://doi.org/10.1016/j.survophthal.2019.03.007>.

- Sonobe, T. (2018). How Kaizen brightens Africa's future. In K. Otsuka, K. Jin, & T. Sonobe (Eds.), *Applying the Kaizen in Africa* (pp. 1–30). https://doi.org/10.1007/978-3-319-91400-8_1.
- Suárez-Barraza, M. F., Rodríguez-González, F. G., & Stanley Hart, H. (2019). Finding Kaizen core values in AACSB standards accreditation: A conceptual study. *Total Quality Management & Business Excellence*, 30(Supp 1), S53–S73. <https://doi.org/10.1080/14783363.2019.1665793>.

Katowice Climate Change Conference

► Katowice Climate Negotiations

► Katowice Climate Negotiations
Katowice Climate Negotiations
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Synonyms

2018 United Nations Climate Change Conference; Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24); Katowice climate change conference

Definition

Katowice climate negotiations (COP24) were the first negotiations after the Climate Change Conference in Paris (COP21). Given the history of climate negotiations, the scope and roles of the parties have changed. COP24 was the first meeting under the presidency of a Small Island State. By the time of the Katowice conference, the international climate negotiations had shifted from a top-down approach towards a bottom-up approach. Instead of UNFCCC, countries set up their own targets and goals. The expectations

of the meeting were relatively high after the successful meeting in Paris. Developing countries did not receive a clear commitment of extra financial resources in addition to official development assistance. However, the “rulebook” for implementing the 2015 Paris agreement was further developed.

Introduction

In the history of climate negotiations, three issues shaped the discussions. First, climate change is a global problem that affects all economies around the world. Second, the parties have different historical responsibilities for greenhouse gas emissions. Third, the lack of hierarchy and sanctions in decentralized world politics makes enforcement of a global climate agreement difficult.

The expectations of the Katowice meeting were relatively high after the successful meeting in Paris. The Katowice negotiations were supposed to encourage commitments to the Paris agreement and stress the urgency of enhanced ambition towards mitigation actions with adequate financing, technology, and capacity-building support.

The Intergovernmental Panel on Climate Change (IPCC) highlights the significance of limiting the warming to 1.5 °C and the need to maintain a strong commitment to the Paris Agreement's aims. The Katowice Climate Conference (COP24) was the first negotiations after the Climate Change Conference in Paris (COP21), where the Paris Climate Agreement was accepted. In the conference hosted in Katowice, 12,810 parties were registered, including organizations such as United Nations Secretariat units and bodies, intergovernmental and non-governmental organizations, and specialized agencies and organizations. These participants formed groups according to their interests. All parties were expected to communicate and undertake ambitious efforts within the reports that are called the Nationally Determined Contributions (NDC) that are part of the global attempt towards climate change mitigation.

The Katowice conference was expected to continue the progress started in Paris, including clarifying the Intended Nationally Determined Contributions (INDC). However, the concern of developing countries is that a mitigation-centric (NDC) regime will push adaptation, finance, technology transfer, and capacity building for developing countries further and further into the background.

History

2015: Paris

Since the Kyoto Protocol, the global community has been trying to negotiate a mutual approach to mitigate climate change. The most comprehensive global climate change agreement was negotiated in 2015 at COP21 in Paris. It brought all nations into a shared struggle towards climate change. The Paris Agreement is based on a pledge and review scheme that requires all parties to enforce their most ambitious policies through NDCs and to extend these efforts in the future.

2016: Marrakesh

The COP22 in Marrakesh continued the progress started in Paris by establishing a rulebook for the implementation of the Agreement, based on transparency and accountability. The parties adopted 35 decisions, mostly related to the implementation of the Paris Agreement. The involvement of non-state actors was also discussed. Outside the formal negotiations, groups aiming to switch to 100% renewable energy and decarbonize the economies were formed.

2017: Bonn

The COP23 climate summit was the first to be presided by a small island, although the vulnerability of small islands to climate change has been known for a long time. The main objective of the Bonn COP23 was to outline a rulebook for implementing the practical issues of the Paris Agreement. A preference for the EU was to outline the details in the rulebook and assure that the deadline in 2018 is not missed.

One of the most significant accomplishments of the COP23 was the launch of the Talanoa Dialogue, which stands for open and inclusive exchange. This dialogue had its premiere in January 2018 with the aim of investigating the level of nationally determined contributions (NDCs). The financial commitments and transparency of financial flows under the Paris Agreement were debated again in Bonn (Dröge and Rattani 2018).

COP23 in Bonn focused more on specific methodological issues as countries proceeded to debate the technical details of the agreement. The major contribution was the display of the “Powering Past Coal Alliance,” led by the UK and Canada. This alliance gathered more than 20 countries in addition to subnational parties. However, two issues raised uncertainty. Developed countries had not yet received the expected amount of finance (100bn\$ per year by 2020) settled in 2009 in Copenhagen. Further, the Doha Amendment, a second commitment period of the Kyoto Protocol, was left without support and had not become widely ratified among the parties.

The UN met in December 2019 in Chile to assess the technical details of the Paris rulebook and settle future emission reduction obligations. New targets for 2030 and beyond were discussed.

Roles of the Parties in the Negotiations

The UN tradition is to group parties, each represented by national delegations, according to their regions and shared interests. Traditionally, the EU has played a leading role in climate negotiations (Dröge and Rattani 2018).

Alliance of Small Island States (AOSIS) members have been demanding a binding target and requesting developing countries to take responsibility. As the most vulnerable countries to climate change, they have raised specific issues of predominant concern to them (Dröge and Rattani 2019).

COP24 was the first meeting under the presidency of a small island state. A Least Developed Countries Work Program was established to focus on the distinct demands and requirements of the

Least Developed Countries, noting the particular support needs and promoting awareness. The program highlighted the implementation of the elements instead of merely supporting the planning process in least developed countries.

Least Developed Countries require support for implementing decisions. The Katowice decisions encourage parties of developed countries to continue finance adaptation activities along with transparent and reliable data on the provided climate finance. COP24 calls for balanced financing between mitigation and adaptation as well as developments in relevant organizations and institutions for mobilizing the finance. India and African countries, for example, have expressed concerns about the sufficiency of the funding promised to the Least Developed Countries for mitigation and adaptation. A platform for a dialogue between parties and non-party stakeholders was founded, called the Talanoa Dialogue.

After Paris Agreement

The Paris Agreement resulted in three different structural transformations in global climate politics. First, this global effort led to reduced disparity between developed and developing countries, exempting the poorest countries from requirements to mitigate climate change. Second, the Paris Agreement has shifted from the Kyoto Protocol's top-down "targets and timetables" to a bottom-up "pledge and review" process. This has shifted the focus towards national climate policy. Third, the Paris Agreement represents "hybrid multilateralism," which focuses not only on governmental actions but also on climate action by non-governmental actors and businesses (Andonova et al. 2017; Bäckstrand et al. 2017). The most significant actions for climate change mitigation are expected from national and local governments around the world with help from the private sector, scientists, and engineers.

After Paris, the interest has moved towards reporting emissions and the quality of the plans. The Paris Agreement was a positive surprise with high ambition. It aims to prevent warming over 1.5 °C. Parties released their NDCs. These

contributions are expected to guide the national climate policy and also form a base for the new climate regime (UNFCCC 2016). However, national pledges fall well below the actions needed to meet those ambitious targets. Many large emitters are not likely to fulfil their self-set obligations, according to Climate Action Tracker (2021).

However, one of the biggest emitters, China, pledged in Paris to peak greenhouse gas emissions by 2030. The country is likely to achieve the target due to policies already in place without placing any new measures. This has raised questions as to whether the country should set a more meaningful climate target. European leaders have been fervently debating the level of fair emission reductions of the EU since the Paris Agreement. Some nations demanded more ambitious targets. "It is plain we are way off course," said António Guterres, the secretary general of the United Nations, in Katowice. "We are still not doing enough, nor moving fast enough, to prevent irreversible and catastrophic climate disruption."

In June 2018, European officials set more ambitious targets for renewable power and energy efficiency (European Union 2019). Still, there are plenty of obstacles. For example, Poland is currently constructing more coal plants (WNN 2020). Many of the pledges lack information on the specific policies to meet the ambitious targets. Further, official mechanisms for quantifying progress do not exist. Making the pledges more transparent could lead to more pressure on the countries, but it is up to national and local governments to agree on firmer actions. Many countries have strengthened their pledges by 2020, including the EU. Critics of Paris are stating that the agreement reflects little more than what individual countries were likely to do anyway (Somerville 2020).

The Katowice climate negotiations were expected to blaze the trail towards 2020 and come up with clear guidelines for national pledges and policies for increased transparency. This would assist in the evaluation of the countries' improvement. Some developing countries stated the limited access to technology for measuring emissions and the need for wider flexibility in reporting and verifying their improvements (COP24 2020).

Mission of the COP24

COP24 was organized in Katowice 2018 with the ambitious intention of adopting the practical details of the guidelines of the Paris Climate Change Agreement. The focus areas included adaptation to climate change impacts, ambitious emission reductions, and support for developing countries. This support is to be provided in the form of technology, capacity building, and funding. One of the objectives was to create a platform for a Talanoa dialogue (COP24 2020).

Contributions in Terms of Emission Reductions

Katowice negotiations adopted a vigorous set of guidelines for carrying out the 2015 Paris Climate Change Agreement. The Katowice Rulebook was not able to address how global climate policy should be conducted and the actual climate measures implemented. The agreed Katowice Climate Package promotes international cooperation and encourages greater ambition towards climate change mitigation. The deadline for the countries' self-set targets was 2020. Thereafter, countries were expected to affirm new and much tougher targets.

During the Katowice negotiations, countries resolved most of the problematic aspects of the Paris Agreement "rulebook". This included measuring, reporting on, and verifying their emissions-cutting efforts. This makes all countries responsible for holding on to their commitments (CarbonBrief 2019).

Most importantly, COP24 raised the question of the information required by article 9.5 of the Paris Agreement, which concerns mobilization of climate finance to developing countries. The recognition of such required information was found at COP22, and the process was completed by COP24 (CarbonBrief 2019).

Carbon capture was also on the table and received long-term political support. The predictable and confident support for carbon capture storage as a mitigation option in addition to other low carbon emission technologies was

welcomed. This support is provided through international funding mechanisms and private-public partnerships. Further, a declaration on "Forest for climate" was founded. This declaration highlighted the important role of forests in reaching the Paris Agreement goals. However, the declaration was criticized for encouraging delaying actions to reduce emissions. Others were concerned about the lack of any concrete short-term targets (CarbonBrief 2019).

The COP24 in Katowice, Poland, introduced a comprehensive "rulebook" revealing the details of the implementation of the Paris Agreement. Nations agreed on uniform rules for measuring and reporting their own performance in cutting emissions. The negotiations on these details turned out to be more challenging than those leading to the Paris Agreement. Excluding the rulebook marks, the results from COP24 were less ambitious (CarbonBrief 2019).

Other Contributions

One of the main tasks for climate negotiations is to provide dialogue between different actors to raise the ambition towards more effective implementation of climate change mitigation goals and strategies. One of the most crucial questions is how the Paris Agreement can encourage countries to take more ambitious actions in the future.

A deciding phase in the rulebook negotiations was to clarify the differentiated responsibilities of the countries. This encompasses the differentiation of obligations along the common but differentiated principle, including the hazardous impacts derived from rising greenhouse gas levels. In particular, developing countries have called for differentiated rules for developed countries in terms of financial commitments. Notably, China also turned to support differentiation (CarbonBrief 2019).

COP24 revealed a Local Communities and Indigenous Peoples Platform that invites parties to empower the local communities. This platform aims to improve equality and not endanger the livelihood of unprivileged people. The impact of energy transition on workers and their

communities was also debated. Climate decisions require enough support in technology transfer and capacity building. This was recognized in a decision by COP24 on enhancing climate technology development and transfer through a technology mechanism (CarbonBrief 2019).

One of the focus areas debated was finance. Even though commitments on funding for developing countries are sufficient, the impacts of this funding on the sustainable development objectives of the country are not well understood. COP24 proposed a commitment of USD 100 billion per year by 2020 for developing countries.

Financing Issues

Developing countries did not receive a clear commitment to new financial resources in addition to official development assistance. The finances provided should be allocated to loss and damage. However, the definition of climate finance was narrowed to exclude commercial loans and non-financial efforts, such as capacity building or technology transfer. Reporting on the grant equivalent value of all finances provided has also become mandatory (CarbonBrief 2019).

Two challenges regarding finance were the coverage of sectors and double counting. Primary finance focusing only on a new climate activity is one option to avoid double counting. One of the issues discussed was accounting and reporting climate finance. Developed countries should report rigorously on climate finance provided to developing countries. United Nations agencies and financial institutions should describe how their development assistance and climate finance program are consistent with newly available scientific information.

COP24 resolved that “parties shall apply the accounting guidance to their second and subsequent NDCs and account for their NDCs in their biennial transparency reports under Article 13” and discussed the following issues related to climate finance:

- Long-term climate finance
- Issues with the Strategic Climate Fund (SCF)

- The Green Climate Fund (GCF)
- The Global Environment Facility (GEF)
- The commitment of the parties to Article 9, paragraph 5 of the Paris Agreement

In terms of long-term finance, the COP24 decided to mobilize USD 100 billion annually by 2020. However, a binding long-term financial goal was not agreed upon. COP24 did not address the issue of determining the key components of climate finance (Alexandraki 2019). Future climate negotiations will likely include a discussion on the effectiveness of climate finance, such as the outcome of the funding mobilized to developing countries.

Transparency and markets could not fully agree during COP24. The parties did not reach consensus on rules for Article 6 on market-based approaches and therefore decided to postpone this decision to COP25 (CarbonBrief 2019).

Summary

The Katowice conference was expected to continue the progress started in Paris. This 2018 COP24 was the first meeting presided by a small island state and was organized with the main purpose of adopting the implementation guidelines of the Paris Climate Change Agreement. The expectations after the historical meeting in Paris were relatively high. Katowice negotiations highlighted emission reductions, mobilizing finance, and sustainability. The main results of the meeting included the decisions on measuring, reporting, and verifying emissions-cutting efforts implemented by the parties. However, developing countries did not receive a binding long-term financial commitment. This raises concerns about whether those countries are willing to strengthen their INDCs in the future. Finance, the rate of deployment, and political uncertainty were among the topics of discussion. By 2020, the parties were expected to meet their emissions commitments and state new objectives for 2030 that would actualize the scientific advice provided after the final elements of the Paris rulebook were agreed upon in 2019.

Cross-References

- Carbon Offsets
- Carbon Trading Schemes
- Clean Development Mechanism (CDM)
- Climate Finance
- Kyoto Protocol

References

- Alexandraki, C. (2019). *COP24 and climate finance: A stepping stone or a blurred line?* Retrieved from <https://www.ejiltalk.org/cop-24-and-climate-finance-a-stepping-stone-or-a-blurred-line/>
- Andonova, L. B., Hale, T. N., & Roger, C. B. (2017). National policy and transnational governance of climate change: Substitutes or complements?. *International Studies Quarterly*, 61(2), 253–268.
- Bäckstrand, K., Kuyper, J. W., Linnér, B. O., & Lövbrand, E. (2017). Non-state actors in global climate governance: From Copenhagen to Paris and beyond.
- CarbonBrief. (2019). Retrieved from <https://www.carbonbrief.org/cop24-key-outcomes-agreed-at-the-un-climate-talks-in-katowice>
- Climate Action Tracker. (2021). Retrieved from <https://climateactiontracker.org/>
- COP24. (2020). Retrieved from <https://cop24.gov.pl/>
- Dröge, S., & Rattani, V. (2018). *International climate policy leadership after COP23: The EU must resume its leading role, but cannot do so alone*. Berlin: Stiftung Wissenschaft und Politik -SWP- Deutsches Institut für Internationale Politik und Sicherheit.
- Dröge, S., & Rattani, V. (2019). *After the Katowice climate summit: Building blocks for the EU climate agenda*. Berlin: Stiftung Wissenschaft und Politik -SWP- Deutsches Institut für Internationale Politik und Sicherheit.
- European Union. (2019). *European commission press release database*. Retrieved from https://europa.eu/rapid/press-release_STATEMENT-18-4155_en.htm
- Somerville, P. (2020). A critique of climate change mitigation policy. *Policy & Politics*, 48(2), 355–378.
- UNFCCC. (2016). The Paris Agreement | UNFCCC. Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- World Nuclear News. (2020). Retrieved from <https://www.world-nuclear-news.org/Articles/Poland-plans-USD40-bn-investment-in-new-nuclear-pl>

Key Actors Analysis

- Stakeholder Theory

King III Report and CSR

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Synonyms

Corporate Governance (CG); Corporate Social Responsibility (CSR); King Reports

Definition

The purpose of the chapter is to investigate the “state of the art” on sustainability reporting, in South Africa. Such country represents a worldwide *unicum* as a consequence of the publication and adoption of the King Reports that significantly improved corporate social responsibility (CSR) disclosure practices. The research stream was explored by a systematic literature review (Tranfield et al. 2003) and a bibliometric analysis (Zupic and Čater 2015). In particular, a specific focus is on the King III Report, as antecedent for refining the disclosure of CSR issues. In 1994, the first report (King I Report) was released by the “King Committee on Corporate Governance.” The main novelty resided in the relevance of both financial and nonfinancial views. In 2002, the first report was replaced with the King II Report. Specifically, the latter filled some earlier lacks, such as the need of adopting a robust risk management and reporting practices. In 2009, the King III Report defined the importance of financial and sustainability performance for stakeholders, in terms of assessing firm value. The King IV Report, published in 2016, is a further refinement of the South African reports, since the concept of “qualitative” corporate governance (CG) was integrated by including business ethics, good CG, and ethical culture.

An Overview of the King Reports

South Africa is not only at the forefront on CG issues but it is also the first country in the world to make Integrated Reporting (henceforth IR) mandatory (Ernst and Young 2012). As well known, IR represents “*a concise communication about how an organization’s strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term*” (IIRC 2013). The aim of the IR is to provide benefits to a wider range of stakeholders through information enabling to consciously choose, in terms of financial capital allocation or investment decisions (IIRC 2013). In South Africa, CG was institutionalized thanks to the King I Report published by the “King Committee on Corporate Governance,” in November 1994 (IoDSA 1994). Eight years after, the King II Report (IoDSA 2002) enriched the CG measures and it included both CSR view and good CG (Painter-Morland 2006). This integration process was still ongoing. Indeed, the King III Report was released, in 2009 (IoDSA 2009). Seven years after (in 2016), the King IV Report was acknowledged (IoDSA 2016).

The King I Report was focused on several issues, such as the duties and the responsibilities of executive and nonexecutive board members, the stakeholder communication and the compliance with ethical standards (Rossouw 1997, 4 green). A lively debate on stakeholders took place (Freeman and Reed 1983). Indeed, this report overcame the entrenched view for which the board members were exclusively responsible to the shareholders, and it established that stakeholder communication is required (IoDSA 1994).

In the King II Report, the good CG is a relevant novelty (IoDSA 2002). Therefore, a broad section was devoted to the following seven characteristics of good CG: discipline, transparency, independence, accountability, responsibility, fairness, and social responsibility.

The King III Report was required to face up the changes in the international governance trends (IoDSA 2009). In the IR, firm should highlight the positive and negative effects on the economic and social fabric. In other words, it should exhibit

appropriate measures, in case of negative impact, and more broadly describe the possible actions for putting in place further improvements.

Still, the King IV Report stems from the three previous reports with the aim to refine some specific goals (IoDSA 2016). In particular, it encourages CG outcomes, such as ethical culture, good performance, effective control and legitimacy. The CG guidelines are adapted across a heterogeneity of industries and organizational types by promoting corporate disclosure policies for the benefit of stakeholders.

Such reports are crucial to reconvert the trends on CG toward responsible and sustainable social practices, in South Africa. Nonetheless, CSR is embedded in business awareness, and in the developed countries, it might be deemed a maturing trend, in the South African context (Kloppers 2018). Several studies emphasized the crucial role of CSR, in firm’s survival (Doni et al. 2021; Freeman et al. 2010; Ortiz-de-Mandojana and Bansal 2016). Sustainability reporting therefore represents a relevant opportunity, as CSR might contribute to foster firm’s reputation (Bebbington et al. 2008; Morales-Raya et al. 2019). In this sense, top management team is affected by stakeholder pressure, and it should be able to accommodate the demand of several stakeholder groups by deploying part of the resources to CSR (McWilliams and Siegel 2001). As a consequence of the conflicting interests, due to customers, employees, suppliers, community groups, governments, CSR domain is constantly developing. Therefore, updated sustainability reports are needed.

The King Reports: A Systematic Literature Review and Bibliometric Analysis

Research Methodology

The empirical analysis was conducted by a mixed approach based on a literature review and a bibliometric analysis. The purpose is to explore the current body of knowledge. First of all, it is conducive to specify that the King Report is the research stream mostly investigated by this

methodological approach, given that a scant and statistically nonsignificant literature emerges from the association of the following terms: “King Report” and “CSR” (Shuro and Stainbank 2014, 3 purple; Steyn and Niemann 2010, 5 green).

The VOSviewer software was used to carry out the bibliometric analysis (van Eck et al. 2006; van Eck and Waltman 2010), while the systematic literature review followed the approach suggested by Tranfield et al. (2003). Basically, the bibliometric analysis allows to depict the current extensions and developments in any research stream, by way of publication and citation records, alongside with topic clusters and theoretical frameworks. (Zupic and Čater 2015). The Scopus Database enabled to identify the more relevant papers. Once the dataset has been identified, the VOS analysis was performed. In particular, the aggregation criterion, named bibliographic coupling, and the co-occurrence matrix, were applied (van Eck et al. 2006; van Eck and Waltman 2010). The bibliographic coupling emerges when two documents, A and B, quote a third one, C (Zupic and Čater 2015). If two or more documents are bibliographically coupled, it is reasonable to assume they have a comparable approach when exploring a particular research question (van Eck and Waltman 2010; Zupic and Čater 2015). The co-occurrence matrix is a tool that adopts keywords to form a knowledge structure. The latter eases the identification of the main themes in a research field. In VOSviewer, the output is a two-dimensional map of keywords sparked from the presence and frequency of co-occurrences, which are related to their spatial proximity (van Eck and Waltman 2010).

Twenty-two out of the 33 papers, included in our refined dataset, were bibliographically coupled. As a result, 11 manuscripts were not coupled, in terms of shared references, and they were therefore excluded from the similarity analysis (Andersen and King 1987; Crafford et al. 2012; de Beer 2020; Koutoupis 2012; Macdonald et al. 2007; Magalhães and Al-Saad 2013; Mähönen 2020; Sarah 2017; Sigauke et al. 2015; Thakhathi et al. 2021; Tseane-Gumbi 2018). The VOSviewer routines were calibrated by using the association strength, in the normalization process.

The resolution value amounts to 1.50, while the minimum cluster size is equal to 3 manuscripts. With the aim to weight the items, the normalized citations were considered to render a fitting portrayal, even for the most recent papers (van Eck and Waltman 2010).

Lastly, drawing upon the foregoing results, a systematic literature review was accomplished (Tranfield et al. 2003). In essence, all the papers classified into each cluster were systematically analyzed by highlighting the main topics and outcomes to achieve an extensive understanding of this research field.

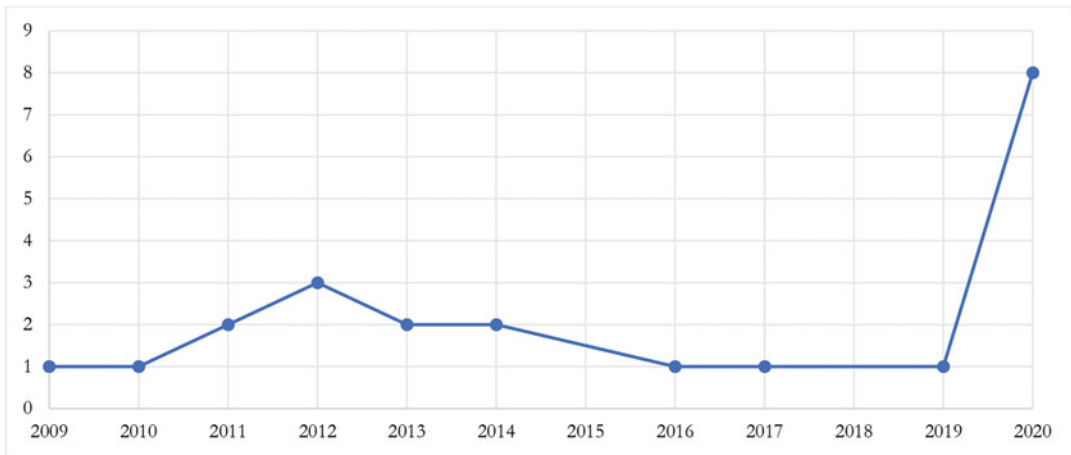
Results of the Bibliometric Activity Indicators

Figure 1 shows the distribution of the papers over time. In 2009, the academic interest started in this fascinating research domain. Indeed, such year corresponds with the publication of the King III Report (IoDSA 2009), when there was a high requirement for improving sustainability report, as a consequence of the changes, in the international governance trends. The number of the publications shows an increasing amount in 2020, due to the relevance of CSR practices, for both practitioner and academic audiences (Kraus et al. 2020; Rosati and Faria 2019; Xie et al. 2019).

Results of the VOS Analysis and the Systematic Literature Review

Building on the options provided by the VOSviewer software, the main results of the bibliometric analysis are summarized in Figs. 2 and 3. In detail, Fig. 2 highlights the most significant keywords.

On closer inspection, it is possible to plot the presence of five well-polarized clusters representing the research topics investigated with respect to the King Reports. Table 1 shows the descriptive statistics for each cluster. The red cluster, although collects more papers, records the lowest amount of citations. Vice versa, the blue, green and purple clusters fall in the first three ranks, in terms of citations. Four papers are the most positioned in such research field (Ntim et al. 2012a, b, 2013; Abeysekera 2013, green cluster). Overall, they gathered 530 citations.



King III Report and CSR, Fig. 1 Distribution of the papers over the years, 2009–2020

Figures 2 and 3 are strictly connected. The VOS keyword analysis (Fig. 2) displays the correlation between the arguments into each cluster, while the bibliographic coupling (Fig. 3) unveils the links among the papers mentioned in the reference lists. After having performed an in-depth examination of the earlier papers, first individually and then jointly, the research group identified specific subjects for every cluster, as detailed below.

Red Cluster: The Relevance of Stakeholder Engagement

In the red cluster, the stakeholder-inclusive approach represents the *fil rouge* across the four King Reports (Foster 2020; Natesan 2020; Ramalho 2020; van der Merwe 2020, red cluster).

Building on an in-depth analysis of the papers classified in this cluster, a stakeholder-inclusive approach is heavily recommended. Otherwise, a firm might have some difficulties in driving a long-term sustainable value creation (van der Merwe 2020). The King III Report thoroughly dealt with the concrete issues stemming from the relationships with stakeholders (Foster 2020).

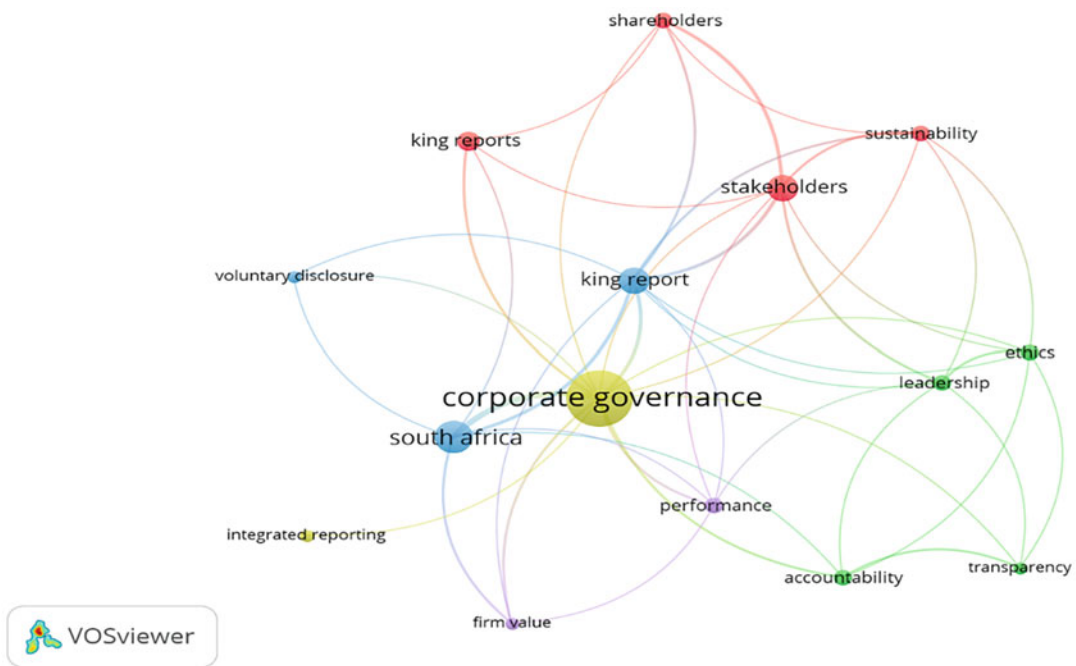
The second theme pertains the main features suggested for the preparation of an appropriate sustainability report, such as the development of the social CG by considering a responsible

leadership and a specific core value system (Ramalho 2020). Accordingly, CG should recognize and radiate ethical values in the relationships with stakeholders (Judin 2020, red cluster).

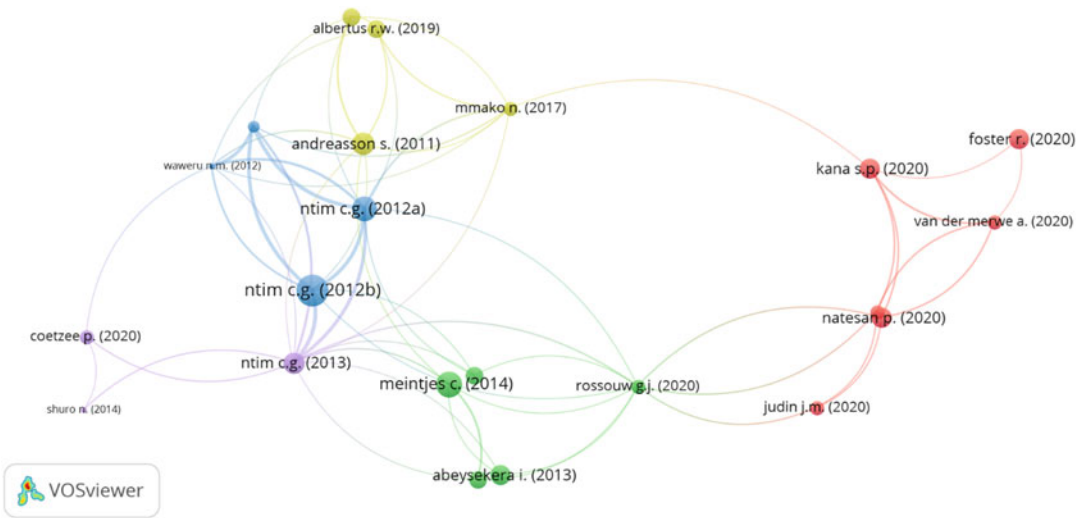
Corporate culture is another topic to be mentioned (Kana 2020, red cluster). Indeed, the rigor and diligence akin to other strategic assets are highly needed, in order to stimulate human capital awareness toward good CG.

Green Cluster: The Magnitude of the Corporate Strategy

Corporate strategy and ethics of the governance (Rossouw 2020, green cluster) are the subjects ensuing from the examination of the manuscripts categorized, in the green cluster. Indeed, business strategy should target to integrate societal and stakeholder expectations into the sources of the competitive advantage (Steyn and Niemann 2010, green cluster). In this sense, the IR should exhibit firm's vision, stemming from the human capital values (Abeysekera 2013, green cluster; Doni et al. 2019). In this perspective, the handling of the relationships with the stakeholders is required. Along such a line of reasoning, it is relevant to mention the King III principles on stakeholder relationships, namely implementing a corporate strategy, giving suggestions to the top management and supervising crisis communication (Meintjes and Grobler 2014, green cluster).



King III Report and CSR, Fig. 2 Diagram of the VOS keyword analysis results on the King Reports



King III Report and CSR, Fig. 3 Diagram of the VOS bibliographic coupling analysis results on the King Reports

Furthermore, the effects on firm performance exerted by CG, that in turn is conditioned by ownership structure, were analyzed in this cluster (Mugobo et al. 2016, green cluster). Firms

compliant with the shareholding structure recommended by the King Report perform above average. Therefore, CG might be a relevant antecedent for enhancing firm performance.

King III Report and CSR, Table 1 Descriptive statistics of the clusters

Classification of the clusters	Number of papers	Total citations	Total normalized Citations	Tot. cit./Num. of papers
Red	6	9	37.00	1.50
Green	5	184	6	36.80
Blue	4	220	48.57	55.00
Yellow	4	76	18.47	19.00
Purple	3	176	15.01	58.67
Total	22	665		

With reference to the ethics of the governance, there is a clear consistency across the four King Reports (Rossouw 2020). The King I Report (1994) featured for a stakeholder-inclusive approach, for which the board of directors (BoDs) should work toward the accomplishment of firm's well-being (IoDSA 1994). Indeed, firm should disclose to its stakeholder employment, social responsibility and environmental issues. The King II Report (2002) stated that the BoDs should balance the mutual interests of shareholders and stakeholders (IoDSA 2002). Still, in line with the prior issues, the King III Report (2009) underlined the need to communicate the pivotal firm sustainability issues, in order to nurture a climate of trust with stakeholders (IoDSA 2009), and integrate sustainability and financial reports. At last, the King IV Report (2016) is now endorsed as the most suitable framework for interplaying with stakeholders (IoDSA 2016).

Yellow Cluster: The Stakeholder Pressure in the South African Context

Stakeholder pressure represents the first topic ensuing from the analysis of the papers contained in the yellow cluster (Jansen van Rensburg and Mmako 2017; West 2009, yellow cluster; Khale and Worku 2015). Indeed, the need for a huger transparent conduct, because of several corporate scandals, has placed a high pressure on the South African firms much to reform their reporting policies and develop an ethical philosophy of good governance (Albertus 2019, yellow cluster).

The second theme pertains the debate on shareholder versus stakeholder within the Anglo-American model, that is increasingly crucial for

some countries, such as South Africa (Andreasson 2011, yellow cluster; West 2009). Indeed, South African CG path developed on the grounds of the Anglo-American approach, though with some exceptions. Such approach emphasizes firm's responsibilities toward different stakeholders and promotes their engagement into business strategy. As a matter of fact, there has not been any considerable inclusion of stakeholder interests into CG structures, such as into board structure and financial reporting (West 2009).

Blue Cluster: The Disclosure of Good CG Practices

The topics, amenable to the papers comprised in the blue cluster, regard the main determinants influencing voluntary CG disclosure behavior (Ntim et al. 2012a, b, blue cluster) and CG characteristics (Ntim 2011; Waweru 2012, blue cluster).

The earlier studies argued that CG standards have commonly improved since the publication of the King I and II reports. In particular, the presence of a specific CG committee (i.e., the compliance and enforcement committee) positively affects voluntary disclosure (Ntim et al. 2012a). Still, the disclosure of good CG practices exerts a positive influence on firm value (Ntim et al. 2012b). In the same vein, the presence of independent nonexecutive directors positively conditions firm value creation (Ntim 2011; Waweru 2012). By contrast, other features of CG (i.e., the board size, the kind of the ownership structure) might lead in the opposite way, namely to a firm value destruction. These findings suggest to improve CG practices and minimize corporate failure, by safeguarding the interests of the minority shareholders, in South Africa (Waweru 2012).

Purple Cluster: The Social Responsibility Role Played by the Independent Auditors

Corporate disclosure (Coetzee and Erasmus 2020; Ntim et al. 2013, purple cluster) appears a dominant subject, probably because of the proximity to the blue cluster (Fig. 3). A prior study (Shuro and Stainbank 2014, purple cluster) argued that some kinds of business activities (i.e., the mining sector) disclose more information in the sustainability reports than manufacturing industry. One of the reasons might take root in a prominent support provided by the independent auditors, during and after the preparation of the foregoing report. Therefore, it is reasonable to contend that the sustainability reporting support strengthens firm propensity to engage in nonfinancial disclosure.

The corporate risk disclosure was another topic addressed in the manuscripts included in the purple cluster (Ntim et al. 2013). In detail, the board diversity and size as well as the independent non-executive directors positively affect the extent of corporate risk disclosure. According to the agency theory, the board diversity, in terms of ethnic and gender scopes, might enhance board independence and ameliorate managerial supervision (Cabedo and Tirado 2004; Elzahar and Hussainey 2012). Conversely, for instance, a lower degree of shareholder dispersion might have a negative influence over the extent of corporate risk disclosure.

A Focus on the King III Report as Driver of CSR Disclosure Policies

In March 2010, the Johannesburg Securities Exchange (JSE) established that the King III Report on CG principles falls within its listing requirements, and it therefore envisaged the compliance with IR (IIRC 2013). Thanks to the publication of the King I Report on CG (IoDSA 1994), the standards of conduct for BoDs of the listed companies, banks and state-owned firms have taken place. The main feature was the adoption of the stakeholder-inclusive approach. After 8 years, the founder of the King Reports, Prof. Mervyn E. King,

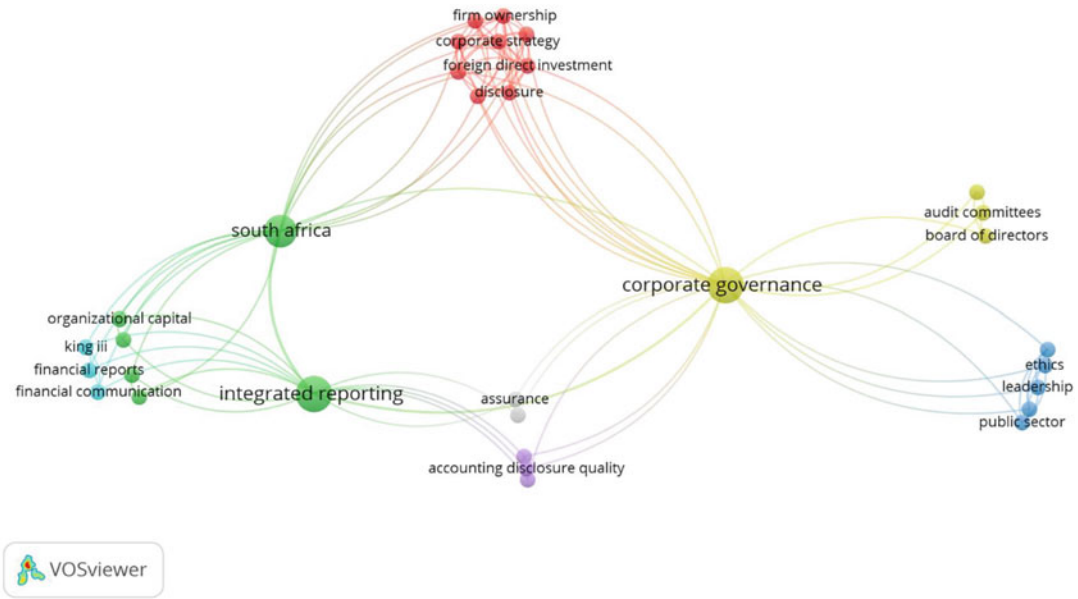
requested that the previous reports should be revised to include new sections on sustainability (IoDSA 2002).

The new Companies Act no. 71 of 2008 and the evolutions in the international governance trends stimulated the issue of the third report on CG. In 2009, the King III Report was released by the South African King Committee on CG, under the scientific coordination of the Prof. Mervyn E. King. Such report established the need of a holistic and an integrated depiction of firm's financial and sustainability performance (IoDSA 2009). In other words, firm should report on strategy, corporate governance path, and sustainability in an integrated manner, with the aim to fully describe their connectivity (Rensburg and Botha 2014; Corvino et al. 2020).

In the Commonwealth, 56 countries, including South Africa, adopted the “comply or explain” principle. There are several approaches of this principle, in particular, the King III report is on an “apply or explain” basis. Hence, the third report stated that *“it is the legal duty of directors to act in the best interests of the company. In following the ‘apply or explain’ approach, the board of directors, in its collective decision-making, could conclude that to follow a recommendation would not, in the particular circumstances, be in the best interests of the company”* (IoDSA 2009, p. 7). To this end, the BoDs might choose to apply the recommendation, in a different way, or apply an alternative practice, and, at the same time, target at the goals of CG principles concerning fairness, accountability, transparency and responsibility.

The purpose of the King III Report regards several governance issues, such as the responsibilities of the BoDs and the risk governance. The fundamental novelty resides in running corporate disclosure policies, in an integrated manner (Baboukardos and Rimmel 2016). Indeed, the King III Report recommended to prepare an IR rather than an annual and/or a separate sustainability statement (Wang et al. 2020).

In line with the prior research methodology, it is possible to identify the main keywords coming light from the literature review on the King III report (Fig. 4).



King III Report and CSR, Fig. 4 Diagram of the results deriving from VOS keyword analysis on the King III Report

In this research stream, Fig. 4 shows that CG and IR are fundamental subjects, by considering the Southern African context. The IIRC and the King III Report underlined the role of CG in attaining a high-quality sustainability reporting (Pavlopoulos et al. 2017; Wang et al. 2020). CG is therefore strictly related to the ethical leadership. Consistently with the King III Report, to get a flourishing democracy, the latter topic should be heavily deemed by the BoDs (Nevondwe et al. 2014). Lastly, the refinement of firm performance is probably due to a good CG. To this end, previous studies claimed that the underperformance might depend on the lack of adherence to the fundamental principles of good CG (Khale and Worku 2015).

In sum, during 20 years, from 1996 to 2016, the publication of the King Reports (from the first to the fourth version) spurred a continuous enrichment of CSR disclosure practices. First, in the South African and then in the global context, firms have been stimulated and/or induced to place more emphasis on the relevance regarding the core values system, the ethical culture, and a good CG.

Cross-References

- Corporate Governance
- Corporate Social Responsibility
- Corporate Social Responsibility Disclosure
- CSR: Evolution of Concept
- Definitions of CSR
- Environmental Disclosure
- Good Governance
- Integrated Reporting
- King III Report and CSR
- Nonfinancial Disclosure

References

- Abeysekera, I. (2013). A template for integrated reporting. *Journal of Intellectual Capital*, 14(2), 227–245. <https://doi.org/10.1108/14691931311323869>.
- Albertus, R. W. (2019). Diffusion of the ethical philosophy of good governance at the national oil company of South Africa. *Indian Journal of Corporate Governance*, 12(1), 59–70. <https://doi.org/10.1177/0974686219836543>.
- Andersen, D. G., & King, J. P. (1987). The dean of education. *Journal of Teacher Education*, 38(5), 9–12. <https://doi.org/10.1177/002248718703800503>.

- Andreasson, S. (2011). Understanding corporate governance reform in South Africa: Anglo-American divergence, the King reports, and hybridization. *Business & Society*, 50(4), 647–673. <https://doi.org/10.1177/0007650309332205>.
- Baboukardos, D., & Rimmel, G. (2016). Value relevance of accounting information under an integrated reporting approach: A research note. *Journal of Accounting and Public Policy*, 35(4), 437–452. <https://doi.org/10.1016/j.jaccpubpol.2016.04.004>.
- Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing & Accountability Journal*, 21(3), 337–361. <https://doi.org/10.1108/095135708108-63932>.
- Cabedo, J. D., & Tirado, J. M. (2004). The disclosure of risk in financial statements. *Accounting Forum*, 28(2), 181–200. <https://doi.org/10.1016/j.accfor.2003.10.002>.
- Coetzee, P., & Erasmus, L. J. (2020). Driving audit committee disclosure: Legislation versus best practice. *Business Perspectives and Research*, 8(1), 36–50. <https://doi.org/10.1177/2278533719860020>.
- Corvino, A., Doni, F., & Bianchi Martini, S. (2020). Corporate governance, integrated reporting and environmental disclosure: Evidence from the South African context. *Sustainability*, 12(12), 4820. <https://doi.org/10.3390/su12124820>.
- Crafford, W. L., Mostert, F. J., & Mostert, J. H. (2012). Liquidity management by South African banks. *Corporate Ownership and Control*, 9(3), 52–58. <https://doi.org/10.22495/cocv9i3art4>.
- de Beer, L. (2020). Corporate governance: The inputs to outcomes evolution. *Journal of Global Responsibility*, 11(2), 161–166. <https://doi.org/10.1108/JGR-10-2019-0092>.
- Doni, F., Larsen, M., Bianchi Martini, S., & Corvino, A. (2019). Exploring integrated reporting in the banking industry: The multiple capitals approach. *Journal of Intellectual Capital*, 20(1), 165–188. <https://doi.org/10.1108/JIC-11-2017-0146>.
- Doni, F., Corvino, A., & Bianchi Martini, S. (2021). Corporate governance model, stakeholder engagement and social issues evidence from European oil and gas industry. *Social Responsibility Journal*, 18(3), 636–662. <https://doi.org/10.1108/SRJ-08-2020-0336>.
- Elzahr, H., & Hussainey, K. (2012). Determinants of narrative risk disclosures in UK interim reports. *The Journal of Risk Finance*, 13(2), 133–147. <https://doi.org/10.1108/15265941211203189>.
- Ernst & Young. (2012). Excellence in Integrated Reporting Awards 2012. In Ernst & Young: Quality in everything we do. Retrieved from <http://www.ey.com/ZA/en/Services/Specialty-Services/Climate-Change-and-Sustainability-Services/2012—EIR—main-page>
- Foster, R. (2020). The evolution and alignment of institutional shareholder engagement through the King and CRISA reports. *Journal of Global Responsibility*, 11(2), 147–153. <https://doi.org/10.1108/JGR-10-2019-0097>.
- Freeman, R. E., & Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, 25(3), 88–106. <https://doi.org/10.2307/41165018>.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art*. New York: Cambridge University Press.
- IIRC (International Integrated Reporting Council). (2013). Integrated reporting. Retrieved from <https://www.integratedreporting.org/>
- IoDSA (Institute of Directors Southern Africa). (1994). King Report on Corporate Governance for South Africa 1994 (King I), Parktown, Johannesburg. Retrieved from https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/94445006-4F18-4335-B7FB-7F5A8B23FB3F/King_1_Report.pdf
- IoDSA (Institute of Directors Southern Africa). (2002). King Report on Corporate Governance for South Africa 2002 (King II), Parktown, Johannesburg. Retrieved from https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/94445006-4F18-4335-B7FB-7F5A8B23FB3F/IoDSA_King_II_web_version.pdf
- IoDSA (Institute of Directors Southern Africa). (2009). King Report on Corporate Governance for South Africa 2009 (King III), Parktown, Johannesburg. Retrieved from https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/94445006-4F18-4335-B7FB-7F5A8B23FB3F/King_III_Report.pdf
- IoDSA (Institute of Directors Southern Africa). (2016). King Report on Corporate Governance for South Africa 2016 (King IV), Parktown, Johannesburg. Retrieved from https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/684B68A7-B768-465C-8214-E3A007F15A5A/IoDSA_King_IV_Report_WebVersion.pdf
- Jansen van Rensburg, M., & Mmako, N. (2017). Towards integrated reporting: The inclusion of content elements of an integrated annual report in the chairmen's statements of JSE-listed companies. *South African Journal of Business Management*, 48(1), 45–54. <https://hdl.handle.net/10520/EJC-86a9b9c1a>
- Judin, J. M. (2020). The King reports and the common law in South Africa. *Journal of Global Responsibility*, 11(2), 167–172. <https://doi.org/10.1108/JGR-10-2019-0093>.
- Kana, S. P. (2020). Corporate governance practice in the context of the political situation in South Africa over the last 25 years. *Journal of Global Responsibility*, 11(2), 127–137. <https://doi.org/10.1108/JGR-10-2019-0100>.
- Khale, S., & Worku, Z. (2015). Benefits of good corporate governance principles: A study of the City of Tshwane, South Africa. *Journal of Corporate Governance and Control*, 13(1), 753–770.
- Kloppers, H. (2018). CSR, corporate governance, and the King reports. In *Sustainability and social*

- responsibility: *Regulation and reporting* (pp. 55–80). Singapore: Springer.
- Koutoupis, A. G. (2012). Importing international corporate governance codes in Greek publicly listed enterprises: A case study analysis. *International Journal of Organizational Analysis*, 20(4), 447–463. <https://doi.org/10.1108/19348831211268634>.
- Kraus, S., Rehman, S. U., & García, F. J. S. (2020). Corporate social responsibility and environmental performance: The mediating role of environmental strategy and green innovation. *Technological Forecasting and Social Change*, 160, 120262. <https://doi.org/10.1016/j.techfore.2020.120262>.
- Macdonald, S. E., Rabinowitz, G., & Listhaug, O. (2007). Simulating models of issue voting. *Political Analysis*, 15(4), 406–427. <https://doi.org/10.1093/pan/mpm016>.
- Magalhães, R., & Al-Saad, S. (2013). Corporate governance in Islamic financial institutions: The issues surrounding unrestricted investment account holders. *Corporate Governance*, 13(1), 39–57. <https://doi.org/10.1108/14720701311302404>.
- Mähönen, J. (2020). Integrated reporting and sustainable corporate governance from European perspective. *Accounting, Economics, and Law: A Convivium*, 10(2), 20180048. <https://doi.org/10.1515/acl-2018-0048>.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127. <https://doi.org/10.5465/amr.2001.4011987>.
- Meintjes, C., & Grobler, A. F. (2014). Do public relations professionals understand corporate governance issues well enough to advise companies on stakeholder relationship management? *Public Relations Review*, 40(2), 161–170. <https://doi.org/10.1016/j.pubrev.2013.10.003>.
- Morales-Raya, M., Martin-Tapia, I., & Ortiz de-Mandojana, N. (2019). To be or to seem: The role of environmental practices in corporate environmental reputation. *Organization & Environment*, 32(3), 309–330. <https://doi.org/10.1177/1086026617753154>.
- Mugobo, V. V., Mutize, M., & Aspelung, J. (2016). The ownership structure effect on firm performance in South Africa. *Corporate Ownership and Control*, 13(2), 461–464.
- Natesan, P. (2020). The evolution and significance of the “apply and explain” regime in King IV. *Journal of Global Responsibility*, 11(2), 155–160. <https://doi.org/10.1108/JGR-10-2019-0091>.
- Nevondwe, L., Odeku, K. O., & Raligilia, K. (2014). Ethics in the state-owned companies in the public sector: A thin line between corporate governance and ethical leadership. *Mediterranean Journal of Social Sciences*, 5(15), 661. <https://doi.org/10.5901/mjss.2014.v5n15p661>.
- Ntim, C. G. (2011). The King reports, independent non-executive directors and firm valuation on the Johannesburg stock exchange. *Corporate Ownership and Control*, 9(1), 428–440. <https://doi.org/10.22495/cocv9i1c4art2>.
- Ntim, C. G., Opong, K. K., Danbolt, J., & Thomas, D. A. (2012a). Voluntary corporate governance disclosures by post-Apartheid South African corporations. *Journal of Applied Accounting Research*, 13(2), 122–144. <https://doi.org/10.1108/09675421211254830>.
- Ntim, C. G., Opong, K. K., & Danbolt, J. (2012b). The relative value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa. *Corporate Governance: An International Review*, 20(1), 84–105. <https://doi.org/10.1111/j.1467-8683.2011.00891.x>.
- Ntim, C. G., Lindop, S., & Thomas, D. A. (2013). Corporate governance and risk reporting in South Africa: A study of corporate risk disclosures in the pre-and post-2007/2008 global financial crisis periods. *International Review of Financial Analysis*, 30, 363–383. <https://doi.org/10.1016/j.irfa.2013.07.001>.
- Ortiz-de-Mandojana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, 37(8), 1615–1631. <https://doi.org/10.1002/smj.2410>.
- Painter-Morland, M. (2006). Triple bottom-line reporting as social grammar: Integrating corporate social responsibility and corporate codes of conduct. *Business ethics: A European review*, 15(4), 352–364. <https://doi.org/10.1111/j.1467-8608.2006.00457.x>.
- Pavlopoulos, A., Magnis, C., & Iatridis, G. E. (2017). Integrated reporting: Is it the last piece of the accounting disclosure puzzle? *Journal of Multinational Financial Management*, 41, 23–46. <https://doi.org/10.1016/j.mulfm.2017.05.001>.
- Ramallo, A. (2020). The distinctive stance of the King reports on corporate governance from a global perspective. *Journal of Global Responsibility*, 11(2), 173–185. <https://doi.org/10.1108/JGR-10-2019-0094>.
- Rensburg, R., & Botha, E. (2014). Is integrated reporting the silver bullet of financial communication? A stakeholder perspective from South Africa. *Public Relations Review*, 40(2), 144–152. <https://doi.org/10.1016/j.pubrev.2013.11.016>.
- Rosati, F., & Faria, L. G. (2019). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production*, 215, 1312–1326. <https://doi.org/10.1016/j.jclepro.2018.12.107>.
- Rossouw, G. J. (1997). Business ethics in South Africa. *Journal of Business Ethics*, 16(14), 1539–1547. <https://doi.org/10.1023/A:1005858930223>.
- Rossouw, G. J. (2020). The ethics of governance and governance of ethics in the King reports. *Journal of Global Responsibility*, 11(2), 187–196. <https://doi.org/10.1108/JGR-10-2019-0088>.
- Sarah, R. M. (2017). The benefits of good corporate governance to small and medium enterprises (SMEs) in South Africa: A view on top 20 and bottom 20 JSE listed companies. *Problems and Perspectives in Management*, 15(4), 271–227. [https://doi.org/10.21511/ppm.15\(2\).2017.02](https://doi.org/10.21511/ppm.15(2).2017.02).

- Shuro, N., & Stainbank, L. (2014). Sustainability reporting in South Africa: A comparative study of the mining and manufacturing industries. *Mediterranean Journal of Social Sciences*, 5(25), 92–101. <https://doi.org/10.5901/mjss.2014.v5n25p92>.
- Sigauke, J., Collins, P., Mutambara, E., & Sibanda, R. (2015). The company secretary's role in CG: Private and public owned South African companies. *Corporate Ownership and Control*, 13(1), 343–414. <https://doi.org/10.22495/cocv13i1c3p8>.
- Steyn, B., & Niemann, L. (2010). Enterprise strategy: A concept that explicates corporate communication's strategic contribution at the macro- organisational level. *Journal of Communication Management*, 14(2), 106–126. <https://doi.org/10.1108/13632541011034574>.
- Thakhathi, A., De Jongh, D., & Langeni, P. (2021). What's in a King? Unveiling the pragmatic micro-perceived value attributes of a fulfilling corporate governance code for responsible sustainable development. *Journal of Global Responsibility*, 12(4), 469–490. <https://doi.org/10.1108/JGR-03-2021-0037>.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>.
- Tseane-Gumbi, L. A. (2018). Business social responsibility and functional areas of a tourism business. *African Journal of Hospitality, Tourism and Leisure*, 7(3), 1–9.
- van der Merwe, A. (2020). The evolution of the stakeholder-inclusive approach in the King reports. *Journal of Global Responsibility*, 11(2), 139–146. <https://doi.org/10.1108/JGR-10-2019-0098>.
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>.
- van Eck, N. J., Waltman, L., van Den Berg, J., & Kaymak, U. (2006). Visualizing the computational intelligence field. *IEEE Computational Intelligence Magazine*, 1(4), 6–10. <https://doi.org/10.1109/MCI.2006.329702>.
- Wang, R., Zhou, S., & Wang, T. (2020). Corporate governance, integrated reporting and the use of credibility-enhancing mechanisms on integrated reports. *The European Accounting Review*, 29(4), 631–663. <https://doi.org/10.1080/09638180.2019.1668281>.
- Waweru, N. M. (2012). Corporate governance and the value of the firm: An empirical analysis of companies listed in the JSE securities exchange of South Africa. *Corporate Ownership and Control*, 10(1), 125–136. <https://doi.org/10.22495/cocv10i1art11>.
- West, A. (2009). The ethics of corporate governance: A (South) African perspective. *International Journal of Law and Management*, 51(1), 10–16. <https://doi.org/10.1108/17542430910936637>.
- Xie, J., Nozawa, W., Yagi, M., Fujii, H., & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance? *Business Strategy and the Environment*, 28(2), 286–300. <https://doi.org/10.1002/bse.2224>.
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>.

King Reports

► King III Report and CSR

Knowledge

► Triple Helix and Innovation

Knowledge Management

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Definition

In understanding how to effectively manage knowledge, one needs to first recognize what constitutes “knowledge.” Blumentritt and Johnston (1999) explain that knowledge is sometimes used interchangeably with information, and in this case, the focus should be on information management as a proxy for knowledge management. However, several interpretations of what constitutes knowledge exist, suggesting that it is much more than information or data management (Carrillo et al. 2000). Grant (1996) also explained that knowledge must be transferable and have the capacity to be aggregated and appropriated.

One of the key concepts of knowledge was put forward by Nonaka and Takeuchi (1995), who defined knowledge as a dynamic human process of justifying personal belief toward the “truth” (i.e., a justified true belief). Later, Zack (1999) presented that for organizations to stay competitive, they must learn how to effectively and efficiently create, locate, capture, and share knowledge and expertise for problem-solving

and gaining advantage. Webb (1998) also defined knowledge management as the "...identification, optimisation and active management of intellectual assets to create value, increase productivity, and gain and sustain competitive advantage." Thus, the KM process involves the creation, dissemination, sharing, and storage of knowledge. Since the introduction of the European Union General Data Protection Regulation (GDPR) in 2018, a new aspect of knowledge management needs to be updated known as *data protection*.

Therefore, knowledge management can be defined as:

...the process through which knowledge is created, located, captured, shared, regularly updated, validated (-or fact-checked) and protected for creating efficiencies and gaining competitive advantage.

Introduction

Rennie (1999) outlined that knowledge is about knowing-why, knowing-how, and knowing- who and that it is a particular intangible economic resource from which future revenues can be derived. In understanding the concept of knowledge management, it is critical to examine what knowledge is, why it needs to be managed, how it can be managed, and who is responsible for its management. Von Kutzschenbach and Brønn (2010) postulated that the first phase in knowledge management is the acquisition of knowledge, with the later stages being the transfer, utilization, and storage of knowledge. Yang (2011) also asserted that KM is primarily concerned with identifying/creating, assimilating, and applying organizational knowledge to exploit new opportunities and enhance organizational performance.

Knowledge is considered a strategic asset to maintain competitiveness and create a niche for the firm within a sector of activity (Bergeron and Raymond 1992). It is not unusual to find firms lacking a structured approach to managing knowledge. How then do managers identify what knowledge to manage or exclude? How do they organize the firm structure to place responsibility on the individuals responsible for knowledge management for competitiveness? The purpose

of these questions is to understand what knowledge it is required for and what it contributes to, who needs it, how they will use it, and where they can find it when it is required (Carrillo et al. 2000).

Six critical considerations in the knowledge management process will now be explored in detail in this entry:

1. Know what
2. Know-why
3. Know who
4. Know-how
5. Know where
6. Know when

Know What (Identification)

The first step in knowledge management is "knowing what" kind of knowledge that the firm needs to acquire. Since knowledge has been formally recognized as a resource for attaining competitive advantage (Spender and Grant 1996), special attention needs to be paid to what type of knowledge a firm acquires for management. This process is known as knowledge identification. The identification of knowledge relevant to the achievement of organizational objectives is critical for knowledge management (Connaughton et al. 2015). When this identification process is complete, they can then be leveraged for competitiveness. Two broad types of knowledge are identified within KM literature – *tacit and explicit knowledge* (Bresnen et al. 2003).

Tacit knowledge is used in reference to knowledge gained via accumulated experience and learning of an individual (Debowski 2006), and it is usually developed via direct experience and action; is generally very logical and case-specific; is intuitively understood and applied; is challenging to articulate; and can only in most cases be frequently disseminated via interactive interaction and personalized experience (McAdam et al. 2007). Explicit knowledge, on the other hand, is usually transmittable in formal, systematic language and can be readily made available in a conceptualized format and stored in information systems (Takeuchi and Nonaka

2004). While explicit knowledge is easier to document and identify, tacit knowledge is linked to individuals engaged in *practices* and draws on the unconscious, intangible activities that have been gained over time and that are enacted collectively (Rasche and Chia 2009). In addition, tacit knowledge involves activities focus on the storage of knowledge in human minds and its subsequent sharing/transfer through direct social interactions, thus is often harder to manage due to its perceived stickiness and ambiguity in measurement.

The identification process for knowledge is the first, critical step in the management of knowledge, and Grant's (1996) knowledge-based view of the firm explains the crucial nature of knowledge for attaining long-term competitive advantage, mainly because its utilization can lead to value creation.

Know-Why

To promote knowledge capture and acquisition within knowledge management, individuals or firms need to know why a particular kind of knowledge needs to be acquired or captured (Chen and Hung 2010). Questions to be asked in this phase include the following:

- Of what operational or strategic importance is this knowledge?
- Is the knowledge critical to achieving the stated objectives of the firm? For instance, there is no point for a cloud software company to acquire logistics-related knowledge similar to fast-moving consumer goods (FCMG) firms.
- Why is this knowledge relevant?

The list of questions needed to be asked in the know-why phase is non-exhaustive but indicative of the typical issues that should arise in the knowledge management process. This will enable staff involved in the KM process to identify critical priorities and questions that should be asked concerning what the knowledge is required for and why it is being managed, thus providing clarity to those who will be involved in the management thereof.

Know Who

Within the KM process, managers must be able to identify with whom vital knowledge on projects are located and who has it (Yin 2003). It is also equally important to understand who will be utilizing knowledge and the key actors responsible for unlocking value from it. Under this heading, some of the questions to be asked include:

- Who has the knowledge (whether tacit or explicit), i.e., custodians of knowledge?
- Who will be using the knowledge, i.e., who needs to know what?
- Who is responsible for interpreting knowledge?
- Who is responsible for updating knowledge?
- Who authorizes access to knowledge?

The questions above will assist in identifying people-related aspects in the KM process, including critical actors in the network and whom to ask about specific problems and tasks.

Know-How (Procedures)

This step in the KM process includes identifying intra-firm organizational procedures/culture, much of which will be unwritten, informal, and tied into the culture of the organization. Prusak (1996) outlined that not only must a firm be conscious about what it knows but also how it uses knowledge is a critical determinant of its competitiveness. In the KM process, one must be able to clearly delineate the intra-firm procedures involved in knowledge management and the subsequent utility of the knowledge. This delineation will then guide how the firm will deploy organizational and technological resources and capabilities for explicating and leveraging the said knowledge (Hari et al. 2005). Also, this will assist in identifying the location of knowledge when it is needed.

Know Where (Location/Storage)

Within KM systems, users and managers alike must develop a capability that enhances all

employees to locate relevant knowledge/expertise quickly (Callahan 2002). Egbu et al. (2005) outlined that explicit knowledge is easy to be located but tacit knowledge is mainly in people's heads and therefore hard to organize into a system that can be searched. Kamara et al. (2003) also posit that locating knowledge repositories involves reliance on informal networks, as opposed to structured signposting to the required knowledge. KM processes should include structures that allow for accessible location of expertise, supported by either technology or easy-to-follow guidelines.

Know When (Timeline of Updating Knowledge and Timeliness)

When does knowledge become obsolete and required updating or outright discarding? These question needs to be incorporated into the KM process, to ensure that knowledge is regularly updated and those that are no more relevant are archived on demand. For instance, a company that used to have knowledge management systems for typewriting or sending faxes needs to consider archiving that knowledge and replacing them with modern typesetting using computers and email systems.

Offsey (1997) also espoused that timeliness is vital for KM systems, i.e., knowledge should be made available when(ever) it is needed. It is, therefore, critical for managers to know when a specific type of knowledge is required and the timing needed for making it available (Kim 2009). Due to the rate of changing dynamics in knowledge and depending on the industry, it is recommended that KM systems be updated within an agreed timeline.

Knowledge Protection

The introduction of the EU General Data Protection Regulation (GDPR) has necessitated the emphasis of a crucial component of knowledge management, known as knowledge protection. Allameh et al. (2011) outline that knowledge

protection involves activities for protecting knowledge against inappropriate use or being leaked inside or outside of the organization. Probst et al. (2000) also argue that knowledge must have limited access, especially that which is critical for competitiveness. Some of the restrictions that are used in practice include password technology, encryption, and more recently the use of blockchain technology.

Knowledge Validation (Fact-Checking)

How do we know that the knowledge held by an organization is valid or factual? Tchechmedjiev et al. (2019) outlined that knowledge management requires claims to be contextualized and labeled as accurate to facilitate supervision, validation, or reproducibility of such knowledge. Firms need to establish checking mechanisms to ensure knowledge is true and factual before it is replicated or shared. This component adds an additional step in the KM process, needed to ensure knowledge is accurate and true.

Summary

This entry has explored the concept of knowledge management, first outlining what constitutes "knowledge" and the process involved in its management. Six key components are described, with the additional, relatively underexplored area of fact-checking introduced. The definition presented in this entry covered vital areas such as the kind of knowledge involved, why and how it is managed, who is involved in the management process, where the knowledge is located, and when it needs to be updated. The definition also considers the protection of knowledge against inappropriate use or access.

Cross-References

- ▶ [Communication of CSR Information](#)
- ▶ [Integrated Reporting](#)

References

- Allameh, S. M., Zare, S. M., & Davoodi, S. M. R. (2011). Examining the impact of KM enablers on knowledge management processes. *Procedia Computer Science*, 3, 1211–1223. <https://doi.org/10.1016/j.procs.2010.12.196>.
- Bergeron, F., & Raymond, L. (1992). The advantages of electronic data interchange. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, 23(4), 19–31.
- Blumentritt, R., & Johnston, R. (1999). Towards a strategy for knowledge management. *Technology Analysis & Strategic Management*, 11(3), 287–300.
- Bresnen, M., Edelman, L., Newell, S., Scarbrough, H., & Swan, J. (2003). Social practices and the management of knowledge in project environments. *International Journal of Project Management*, 21(3), 157–166.
- Callahan, S. (2002). Crafting a knowledge strategy. In ACT Knowledge Management Forum (ActKM) Conference.
- Carrillo, P. M., Anumba, C. J., & Kamara, J. M. (2000). Knowledge management strategy for construction: key IT and contextual issues. Proceedings of CIT, 2000, 28–30.
- Chen, C. J., & Hung, S. W. (2010). To give or to receive? Factors influencing members' knowledge sharing and community promotion in professional virtual communities. *Information and Management*, 47(4), 226–236. <https://doi.org/10.1016/j.im.2010.03.001>.
- Connaughton, J., Meikle, J., & Teerikangas, S. (2015). Mergers, acquisitions and the evolution of construction professional services firms. *Construction Management and Economics*, 33(2), 146–159. <https://doi.org/10.1080/01446193.2015.1037325>.
- Debowski, S. (2006). *Knowledge management*. Sydney: Wiley.
- Egbu, C. O., Hari, S., & Renukappa, S. H. (2005). Knowledge management for sustainable competitiveness in small and medium surveying practices. *Structural Survey*, 23(1), 7–21. <https://doi.org/10.1108/02630800510586871>.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Hari, S., Egbu, C., & Kumar, B. (2005). A knowledge capture awareness tool: An empirical study on small and medium enterprises in the construction industry. *Engineering, Construction and Architectural Management*, 12(6), 533–567. <https://doi.org/10.1108/09699980510634128>.
- Kamara, J. M., Anumba, C. J., Carrillo, P. M., & Bouchlaghem, N. (2003). Conceptual framework for live capture and reuse of project knowledge. In *Proceedings of CIB W78's 20th international conference on information technology for construction*, CIB, Rotterdam, Netherlands, pp. 178–185.
- Kim, M. (2009). Paths to knowledge management in small and medium-sized hotels. Unpublished doctoral dissertation, RMIT University, Australia.
- McAdam, R., Mason, B., & McCrory, J. (2007). Exploring the dichotomies within the tacit knowledge literature: towards a process of tacit knowing in organizations. *Journal of knowledge management*.
- Nonaka, I., & Takeuchi, H. (1995). The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford university press.
- Offsey, S. (1997). Knowledge management: Linking people to knowledge for bottom line results, *Journal of Knowledge Management*, Vol. 1, No. 2, pp. 113–122, 148.
- Probst, G., Raub, S., & Romhardt, K. (2000). *Managing knowledge: Building blocks for success*. New York: Wiley.
- Prusak, L. (1996). The knowledge advantage. *Planning Review*, 24(2), 6–8.
- Rasche, A., & Chia, R. (2009). Researching strategy practices: A genealogical social theory perspective. *Organization Studies*, 30(7), 713–734.
- Rennie, M. (1999). Accounting for knowledge assets: do we need a new financial statement?. *International Journal of Technology Management*, 18(5-8), 648–659.
- Sponder, J. C., & Grant, R. M. (1996). Knowledge and the firm: Overview. *Strategic Management Journal*, 17(S2), 5–9.
- Takeuchi, H., & Nonaka, I. (2004). Hitotsubashi on knowledge management.
- Tchechmedjiev, A., Fafalos, P., Boland, K., Gasquet, M., Zloch, M., Zapiiko, B., ... Todorov, K. (2019). ClaimsKG: A knowledge graph of fact-checked claims. In C. Ghidini, O. Hartig, M. Maleshkova, V. Svátek, I. Cruz, A. Hogan, ... F. Gandon (Eds.), *The semantic web – ISWC 2019* (pp. 309–324). Cham: Springer International Publishing.
- von Kutzschenbach, M., & Brønn, C. (2010). You can't teach understanding, you construct it: Applying social network analysis to organizational learning. *Procedia-Social and Behavioral Sciences*, 4, 83–92.
- Webb, S. P. (1998). *Knowledge management: Linchpin of change*. London: The Association for Information Management (ASLIB).
- Yang, D. (2011). The effect of knowledge management on product innovation – evidence from the Chinese software outsourcing vendors. *iBusiness*, 3, 16–22.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Newbury Park: SAGE.
- Zack, M. H. (1999). Developing a knowledge strategy. *California Management Review*, 41(3), 125–145.

Kyoto Protocol

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Synonyms

International treaty under the UNFCCC

Definition

The Kyoto Protocol is an international agreement under the United Nations Framework Convention on Climate Change (UNFCCC) designed with the aim of reducing global greenhouse gas (GHG) emissions through binding commitments. The Kyoto Protocol was adopted in 1997, but it became enforceable in 2005. The Protocol is considered to be the first international step toward stabilizing global emissions of GHGs and the resultant climate change. Based on the principle of “common but differentiated responsibility and respective capabilities,” the Protocol assigned different binding targets for reducing the GHGs to the developed nations only (UNFCCC 2020a). Developing countries were asked to comply with the protocol voluntarily. The first commitment period for the Kyoto Protocol was from 2008 to 2012. “The target for the first commitment period was to reduce the combined emissions of GHGs by at least 5 percent below the 1990s levels” (United Nations 1998). In December 2012, the Doha Amendment to the Protocol was adopted with a second commitment period from 2013 to 2020. In order to further intensify the global efforts to deal with the threat of climate change, the Paris Agreement was reached in 2015.

Introduction

In the last few decades, growing scientific evidence and public awareness about the harmful impacts of escalating levels of GHG concentrations in the atmosphere on the ecosystem, climate change, and living organisms paved the way for concerted international efforts to deal with this situation. In 1992 at Rio Earth Summit, the UNFCCC agreed with the ultimate objective of “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (United Nations 1992). The convention provided a framework for combined international efforts to deal with climate change issues by restricting average rise in global temperatures. The parties that ratified the convention

meet every year at the Conference of Parties (COP). In 1997, the third session of the COP was held at Kyoto, Japan, where the Kyoto Protocol was adopted. Under the Kyoto Protocol, binding targets were fixed for the participating industrialized nations to reduce GHG emissions. The Protocol became enforceable in 2005 when 132 countries signed the Protocol. Currently “There are 197 Parties to the Convention and 192 Parties to the Kyoto Protocol” (UNFCCC 2020b). Since 2005, a conference of parties serving as the meeting of the parties (CMP) is held annually along with the COP to check the implementation of the Protocol.

Commitment Period

The first commitment period for the Kyoto Protocol was from 2008 to 2012. In 2012, the Doha Amendment to the Protocol was adopted for a second commitment period starting from 2013 and ending in 2020.

Objective

The UNFCCC was adopted with the aim of stabilizing GHG concentrations in the atmosphere at such a level which would allow the ecosystems to adapt naturally to climate change and would ensure sustainable economic development of the countries (United Nations 1992). In order to achieve this objective, the convention made a broad framework with suggested principles, institutional arrangements, and required policy actions to be undertaken over a period of time. The Kyoto Protocol aims to achieve the broad objectives of the Convention through binding emission reduction commitments by the developed countries. The objective of the Protocol as mentioned in Article 3 was to reduce “the overall emissions of GHGs by at least 5 percent below 1990 levels in the commitment period 2008 to 2012” (United Nations 1998). The first commitment period covered six main GHGs which are specified under Annex A of the protocol. These gases are “Carbon Dioxide (CO₂); Methane (CH₄); Nitrous Oxide

(N₂O); Hydro fluorocarbons (HFCs); Perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF₆)” (United Nations 1998).

Common But Differentiated Responsibilities

The Kyoto Protocol segregates participating countries into Annex I (Developed) countries and Non-Annex I (Developing) countries. It was acknowledged that owing to their industrial and development activities in the past, the developed countries were mainly responsible for the prevailing increased levels of GHGs in the atmosphere, and hence, they should primarily bear the burden of reducing GHG emissions. It was also recognized that various countries have different capabilities to deal with climate-related problems due to the difference in the level of their economic development. Hence, based on the principle of “common but differentiated responsibility and respective capabilities,” the protocol assigned different GHG reduction targets for the Annex I countries. The assigned amounts for Annex I countries are mentioned in Annex B of the Protocol. Article 3 of the Protocol specifies that the Annex I parties shall have joint as well as individual responsibility to ensure that their total emission of GHGs listed in Annex A is limited to their assigned amounts (United Nations 1998). Some developing countries signed the Protocol, but these were exempted from any binding commitments under the Protocol.

Compliance Mechanism

In order to ensure compliance under the Protocol and to hold parties accountable for non-compliance, the Kyoto Protocol provides for a comprehensive system of compliance. The compliance mechanism under the protocol has an effective monitoring, review, and verification system for facilitating and enforcing compliance with the commitments made under it (UNFCCC 2020a). The compliance committee has two branches: “a facilitative branch and an enforcement branch”

(UNFCCC 2008). The facilitative branch assists and guides Annex I parties in meeting their commitments. For this, it provides necessary technical, financial, and other assistance to the parties. The enforcement branch checks the compliance with the binding commitments and other requirements under the protocol and also determines the specific course of action to be undertaken for those who fail to meet their commitments.

Flexibility Mechanisms

Annex I countries are required to meet their targets mainly through the domestic actions within their national boundaries. In addition, in order to help developed countries to meet their reduction targets in a cost-effective manner, the Protocol provides for three market-based mechanisms. These are “Clean Development Mechanism (CDM), Joint Implementation (JI) and International Emission Trading (IET)” (UNFCCC 2010). The mechanisms are based on the principle that “it does not matter where emissions are reduced, as long as they are removed from the atmosphere” (UNFCCC eHandbook 2015). These mechanisms provide participating countries with lot of flexibility in the way they can meet their targets. Hence, these are also called flexibility mechanisms. The purpose is to help developed countries in meeting their emission reduction targets in a cost-effective manner and also to involve developing countries in the task of reducing global GHG emissions (UNFCCC 2010).

Clean Development Mechanism (CDM)

Under CDM, an Annex I party may start a GHG emission reduction or removal project (like reforestation or investment in clean technology or rural electrification by using solar panels) in a developing country. Usually the cost of establishing such projects in a developing country is relatively lower. The developed country gets the credit for emission reduction from these projects in the form of Certified Emission Reduction (CER) units. “Each unit is equal to 1 metric tonne of CO₂ equivalent and can be used by the developed

country for meeting its binding emission reduction targets” (UNFCCC 2010). The developing country where such projects are run gets the benefit of technology transfer and finance needed to implement such projects, besides getting the sustainable development advantage. This way, these countries can also contribute toward achievement of the ultimate goal of the UNFCCC.

Joint Implementation (JI)

Under JI, an Annex I country starts an emission reduction or removal project in another Annex I country to earn emission reduction units or carbon credits. These credits can be utilized for meeting binding targets of the country financing such projects.

International Emission Trading (IET)

The implementation of flexibility mechanisms led to creation of a new commodity in the form of emission reduction or removal units which is traded in the carbon markets (UNFCCC 2010). Under IET, countries with deficit of carbon credits can buy these in the carbon markets from parties having surplus of these credits. Trading is done in these markets through CERs and the process of buying and selling CERs is known as carbon trading. According to Article 17 of the Protocol, in order to supplement their national efforts to meet emission reduction commitments, the parties to Kyoto Protocol can also participate in emission trading to meet their targets given under Article 3 (United Nations 1998).

For participating in the flexibility mechanisms, the participating countries must meet the eligibility requirements specified under the Kyoto Protocol.

Amendments to Kyoto Protocol

Doha Amendment

In December 2012, Doha Amendment to Kyoto Protocol was agreed in the 18th Conference of Parties (COP 18) held at Doha, Qatar. The second commitment period was established from 2013 to 2020. The Doha Amendment included new commitments for the parties and revised the list of

GHGs. Nitrogen trifluoride (NF₃) was added to the earlier list of six GHGs (United Nations 2013). Several articles of the Kyoto Protocol were also updated in this amendment.

Paris Agreement

On 12 December, 2015, parties to the UNFCCC reached a landmark agreement known as the Paris Agreement at COP 21 in Paris. “The Agreement entered into force on 4 November 2016, thirty days after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55 % of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval or accession” (UNTC 2020). The central objective of the Paris Agreement is “to strengthen the global response to the threat of climate change by holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change” (United Nations 2015). In order to bring all the nations including developing countries together for making efforts to combat climate change, the agreement emphasized on the need for having an appropriate framework for transfer of technology, mobilization of financial resources, and capacity building (UNFCCC eHandbook 2015). All the parties are required to enhance their domestic efforts to achieve their binding commitments by preparing, communicating, and maintaining Nationally Determined Contributions (NDCs). The agreement requires regular reporting of the NDCs and the implementation efforts and provides for periodical “global Stocktake” to evaluate the collective progress toward achievement of the purpose of the agreement (United Nations 2015).

Summary

The UNFCCC (1992) provides the framework for combined international efforts to reduce the global emissions and to combat the climate change. At the third conference of parties to the

Convention in 1997, the Kyoto Protocol was adopted. The Kyoto Protocol is considered to be a milestone in the international climate policy. This is the first international step to reduce the global GHG emissions through binding emission limitation and reduction commitments for the developed countries. After end of its first commitment period (2008–2012), the Protocol was extended to 2020 during a conference at Doha, Qatar, in 2012. In 2015, the Paris Agreement was adopted at the 21st COP with the aim of bringing all the nations together for further strengthening the efforts to deal with the threat of climate change. The Paris Agreement came in force in 2016 for effectively replacing the Kyoto Protocol by 2020.

Cross-References

- [Carbon Trading Schemes](#)
- [Clean Development Mechanism \(CDM\)](#)
- [GHG Emissions](#)
- [Paris Agreement](#)

References

- UNFCCC. (2008). *Kyoto protocol reference manual*. Source: https://unfccc.int/resource/docs/publications/08_unfccc_kp_ref_manual.pdf. pp. 28–10.
- UNFCCC. (2010). *The Kyoto protocol mechanisms*. Source: https://cdm.unfccc.int/about/cdm_kpm.pdf. p. 3. Last accessed 10 June 2020.
- UNFCCC. (2020a). *What is Kyoto protocol*. Retrieved from https://unfccc.int/kyoto_protocol. Last accessed 29 June 2020.
- UNFCCC. (2020b). *History of convention- essential background*. Source: <https://unfccc.int/process/the-convention/history-of-the-convention#eq-1>. Last accessed 3 May 2020.
- UNFCCC eHandbook. (2015). *Climate-get the big picture, summary of the Kyoto protocol*. Source: <http://unfccc.int/resource/bigpicture>. Accessed 30 Apr 2019.
- United Nations. (1992). *United Nations framework convention on climate change*. Source: <https://unfccc.int/sites/default/files/conveng.pdf>. p. 4. Last accessed 4 July 2020.
- United Nations. (1998). *Kyoto protocol to the United Nations framework convention on climate change*. Source: <https://unfccc.int/resource/docs/convkp/kpeng.pdf>. Last accessed 30th June 2020.
- United Nations. (2013). *Report of the conference of the parties serving as the meeting of the parties to the Kyoto Protocol on its eighth session, held in Doha from 26 November to 8 December 2012*. Source: https://treaties.un.org/doc/source/docs/Doha_Decision1_CMP.8-E.pdf. p. 10. Last accessed 30 June 2020.
- United Nations. (2015). *Paris agreement*. Source: https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf. Last accessed 2 July 2020.
- UNTC. (2020). *United Nations Treaty Collections. Chapter XXVII. 7.d Paris agreement*. Source: https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&lang=en. Last accessed 2 July 2020.

LA21

- [Local Agenda 21](#)

Labor Force Reduction

- [Employee Downsizing](#)

Labor Rights

- [Rights of Employees](#)

Labor Rights and Freedoms

- [Rights of Employees](#)

Labor Social Responsibility

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Introduction

Since the 1950s, the inclusion of social responsibilities into companies, in addition to economic ones,

has been a constant concern, and in this sense, social pressures are increasing every time to satisfy the expectations that the different interest groups represent. Currently, United Nations (UN) is also a promoter of Corporate Social Responsibility (CSR hereafter) in all areas of society through Sustainable Development Goals (SDG). Both private companies and public institutions are working to improve their social, economic, and environmental indicators in order to contribute to the fulfilment of the SDGs for the year 2030.

However, the concept of CSR is broad, and due to the multiple dimensions that the concept encompasses, it is often not appropriate to use this extensive umbrella when dealing with actions aimed at specific interest groups or specific areas in business environment. The labor dimension plays a leading role within CSR, since it responds to the needs of the employees (primary stakeholders of the company), in addition to having the support of increasingly developed labor regulations that increase the need to legitimize the behavior of companies.

To refer to the labor dimension of CSR, the term “Labor Social Responsibility” (LSR from now on) is used. LSR “implies social responsibility practices developed by the company to improve working conditions.” Many times, companies are unaware of the huge number of labor practices that can be considered part of the company’s social responsibility, which slows its implementation. This contribution aims to clarify the role of labor practices in CSR as a whole,

improve the conceptualization and definition of the term LSR, identify the main areas of action to develop LSR, as well as standards for its disclosure. Finally, the work concludes describing some of the main outputs generated with a proper responsible labor management.

Labor Social Responsibility in the Multidimensional Construct of CSR

CSR is a multidimensional construct (Carroll 1979; Wood 1991; Schwartz and Carroll 2003). However, in the academic literature, we find discrepancies when determining the dimensions that compose it. There are authors classifying CSR actions according to the nature of the actions, social issues, or the attitude taken by the company in its development.

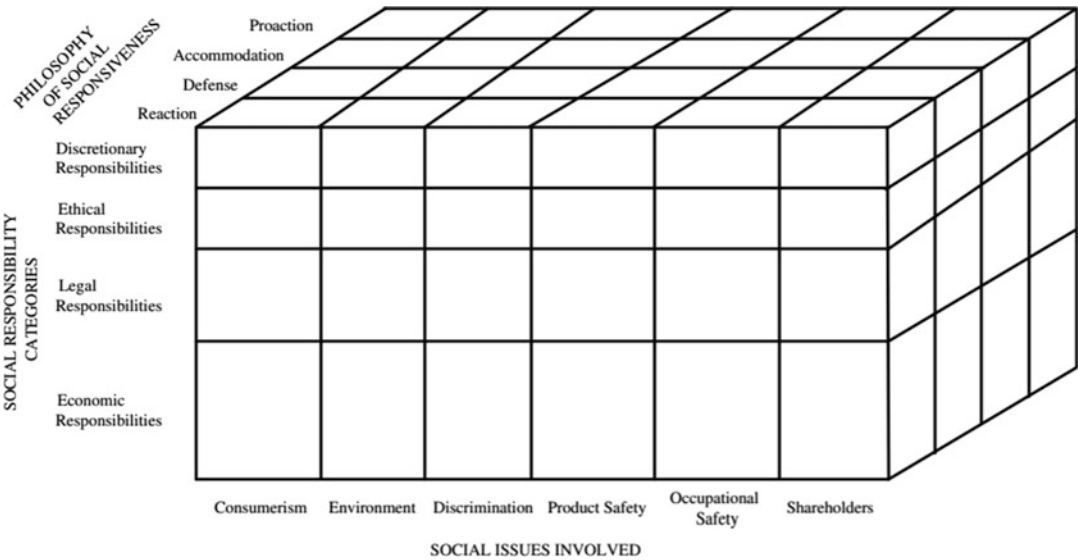
The classification of CSR actions in three concentric circles proposed by “The Committee for Economic Development” (CED) in 1971 was one of the first classifications for CSR practices. This classification defined an inner circle (with responsibilities inherent to economic activity, production of goods and services, employment, and economic growth), an intermediate circle (where awareness and sensitivity to social aspects take place, such as the environment, recruitment, and the relationship with employees), and an outer circle (social actions aimed at further improving the company’s social environment).

Sethi (1975) carried out an evolution of the three concentric circle classification, where he classifies the actions according to the degree of proactivity of the company’s actions. This classification distinguishes between denominating social obligation when the actions are in response to market forces or legal restrictions, social responsibility when they respond to prevailing social values, and social sensitivity when they are actions that anticipate social changes. Following this proposal, the classifications of Davis and Blomstrom (1975) and Wilson (1975) arose. All these classifications respond to the nature of the actions, whether they are economic or social and philanthropic, as well as the response capacity of the company in terms of proactivity.

However, these classifications did not show the main areas of action in which companies should work to be sustainable, so other classifications emerge to determine dimensions of CSR. One of the best-known models is the three-dimensional model of Carroll (1979), which uses three axes and classifies according to the response capacity of the company, the nature of the actions, and the social issues involved (Fig. 1).

Regarding the nature of CSR actions, Carroll (1991) also presents them in a pyramidal format, where he states that companies must achieve an economic objective, which is, work for profitability through the products or services offered. Subsequently, companies must respond to their legal obligations. The economic and legal nature of business actions makes them mandatory. Once the company has exceeded these previous thresholds, the ethical nature of the actions would be reached, where the companies respond to the needs of their stakeholders and thereby manage to legitimize their activity. Finally, at the top of the pyramid, philanthropic actions would be achieved when the company contributes and collaborates with the community to which it belongs. Subsequently, Schwartz and Carroll (2003) rethink the pyramid theory for being inaccurate and generating misunderstandings in the differentiation of ethical and philanthropic concepts, considering the latter as an expanded expression of ethical actions. Therefore, these authors establish three domains: economic, legal, and ethical.

Regarding the social issues involved in CSR, Carroll divides them according to the type of stakeholder to whom it concerns. That is why we find issues related to consumers, the environment, discrimination, product safety, workplace safety, and shareholders. This classification was not considered too clear either, and simplified classifications emerge, such as the one elaborated by the Green Paper of the Commission of the European Communities (CEC) (2001), where it is distinguished between the internal and external dimensions. The internal dimension responds to those aspects aimed at internal stakeholders over which the company has decision-making capacity and greater control, such as HR management, the use of resources, and their environmental impact. The



Labor Social Responsibility, Fig. 1 Three-dimensional model of CSR. (Source: Carroll (1979), p. 503)

external dimension responds to actions aimed at external stakeholders, and over which the company does not have absolute control, such as actions with the local community, partners, suppliers, or consumers.

These controversial models and the debates arising from them have given rise to simpler classifications such as that of Vilanova, Lozano and Arenas (2009), which distinguishes five dimensions: (1) the vision of CSR in the corporate sphere, (2) philanthropic relations with the community, (3) the workplace, (4) accountability and transparency, and (5) the commercial or business sphere.

It is necessary to bear in mind that the conceptualization of CSR has evolved over time, increasing social concerns. For example, the degree of environmental concern or equal opportunities in the labor market has increased considerably. That is why identifying and deepening in the dimensions of CSR, as well as the nature of the existing actions in each dimension, can favor the fulfilment of stakeholder expectations.

Specifically, in the workplace, actions aimed at improving the working conditions of employees could have a social or economic nature (since it also favors the results of companies) and legal or philanthropic (some will respond reactively to

labor legislation and others will be proactive actions voluntarily developed by the company). Regardless of the nature of the actions, knowing what type of actions each dimension involves is more useful to work on it. Authors such as Alvarado and Schlesinger (2008) consider it necessary to “deepen our understanding of the dimensions of CSR, as well as the possible influences on the image and reputation of the company.”

In this context, Labor Social Responsibility (LSR), which is the labor dimension of CSR, deserves to have prominence and be defined as labor practices that are identified in companies as those with the greatest impact on the organization; they are aimed at primary, internal stakeholders, with bargaining power and capable of legitimizing the company by generating reputation. Urcelay (2005) argue that “The first place where CSR manifests itself is in the policies that the company follows with its employees, who are the ones who make it possible for it to exist and to carry out its activity successfully.” Responsible management of a company’s employees not only has internal implications, as “human capital is one of the interest groups in which companies must support and promote their professional and personal development, since they are the basis of business growth and of the positioning in the

market; they are also the best publicists in the organization” (López et al. 2016).

Definition of Labor Social Responsibility

The labor dimension of CSR or LSR has been defined in the past as “those labour practices carried out voluntarily by the company in order to show its commitment to ethical behaviour in relations with its employees” (Odriozola et al. 2015). However, in recent years, growing labor regulations increasingly commit companies to improving working conditions. Regulatory changes in the business environment makes it necessary to rethink whether the LSR can be considered only when actions are implemented under the voluntary nature of the company, or if it can also be considered LSR in the face of a regulatory response.

Returning to the general construct of CSR (being LSR one of its dimensions), we find more recent definitions where business actions are taken into account in response to the needs of stakeholders, regardless of whether they are carried out voluntarily or in response to a normative text.

CSR was defined as “in addition to the strict compliance with current legal obligations, voluntary integration in its government and management, in its strategy, policies and procedures, of social, labour, environmental concerns and respect for human rights that arise from the transparent relationship and dialogue with its stakeholders, thus taking responsibility for the consequences and impacts derived from their actions” (Forum of experts on CSR 2007). It seems logical to think that, in many areas, voluntariness and legislative compliance can converge in the same action, and in fact, advances driven by public institutions together with the private initiative will lead to the achievement of more ambitious social objectives.

In the labor field, labor regulations have not ceased their growth and demand to guarantee the improvement of working conditions, as well as the information offered to the worker. For example, to favor to find the balance between work time

and personal time, the Directive (EU) 2019/1158 of the European Parliament and of the Council of June 20, 2019, on work–life balance for parents and carers and repealing Council Directive 2010/18/EU was implemented. To guarantee information on working conditions to the worker, the Directive (EU) 2019/1152 of the European Parliament and of the Council of June 20, 2019, on transparent and predictable working conditions in the European Union was approved. To guarantee equal treatment in employment and occupation, avoiding any type of discrimination, the Directive 2006/54/EC of the European Parliament and of the Council of July 5, 2006, on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation was approved. All these regulations include aspects on which companies focus the LSR.

In addition, not only does labor market legislation exert an impulse for companies to be more responsible with their workers and therefore favor a better working environment, but also United Nations (UN) has committed 193 states to the sustainable development agenda “Transforming our World: the 2030 Agenda For Sustainable Development.” In this agenda and their sustainable development goals (SGD hereafter), there are objectives that are closely related to the LSR. In the human resources departments, there are actions aimed at improving the health and well-being of workers (SDG 3); actions to improve collaborations with training centers to favor the preparation of future employees, as well as continuous training of the workforce (SDG 4); actions to consider equal work in all areas of the company (hiring, promotion, conciliation, remuneration, communication, etc.) (SDG 5); and actions to ensure that working conditions are decent and favor growth (SDG 8).

Taking all the above into account, it seems necessary to consider that companies will carry out LSR when they respond to the needs of their employees and improve their working conditions, without differentiating whether the company is obliged to carry out the action or not, since many times the obligation will depend on the size of the company. For example, if a company allows a

flexible working day to its workers, they enjoy this possibility regardless of the cause that originates it. Therefore, the updated definition of the LSR concept would be:

Labour social responsibility (LSR) is the labour dimension of the CSR construct, which is made up of those labour practices carried out by companies with the aim of improving the working conditions of current employees, as well as to collaborate with public or private training institutions, NGOs or other labour intermediation organizations to favour the integration of future job seekers. These labour actions may be voluntary or may have been designed to respond to current labour legislation, although in any case, companies assume an ethical commitment in the management of their workforce.

Practices of Labor Social Responsibility

Going from the most general concept to the most concrete, known as funnel-shaped development, we have seen that LSR is a relevant dimension in the CSR construct, although, to promote the implementation of LSR practices, it is necessary to specify the different fields of action in human resource management.

Practices of labor social responsibility proposed in the green paper of the Commission of the European Communities (CEC 2001) would be classified as:

1. Lifelong learning.
2. Employee training.
3. Transparency about company information.
4. Balance between work time and personal life.
5. Diversity in the workforce.
6. Non-discrimination.
7. Equity in salary policy.
8. Profit sharing and ownership.
9. Concern about employability.
10. Job security.

Independent institutions develop standards for the publication of CSR information, such as the Global Reporting Initiative (GRI). GRI classifies the social information of the company in packages of measures or differentiated standards according to the subject discussed, which could be used to generate sustainability reports and that the

information is easily comparable between companies that follow its guidelines. The GRI 200 series deals with economic actions, the GRI 300 series deals with environmental actions, and finally the GRI 400 series deals with social aspects. Each of these standards includes specific measures for specific topics (Table 1). Within the GRI 400, great attention is devoted to the type of practices by which the company should report in relation to the working conditions of its employees:

In addition, the International Organization for Standardization (IOS) in its ISO26000 standard guide on social responsibility identifies the following categories in the workplace:

In the subject of "Employment and Labour Practices," ISO 26000 provides guidance on five issues:

1. Issue 1: Employment and employment relationships;
2. Issue 2: Conditions of work and social protection;
3. Issue 3: Social dialogue;
4. Issue 4: Health and safety at work;
5. Issue 5: Human development and training in the workplace.

Therefore, following the main guidelines or standards for the dissemination of LSR practices at the international level, there is a certain coincidence when describing the fundamental areas in which practices should be developed to improve the working conditions of employees (see Table 2).

Despite the fact that the classification of LSR practices can be different according to the standard consulted, we find the main common areas of interest in all of them:

- 1) **Transparency in Labor management:** It is essential to respond to the expectations of the stakeholders and that they can legitimize the activity of the company based on the fulfilment of their expectations, have quantitative and qualitative information on the HR management of the companies (hiring, turnover rates, leave or benefits for employees, work time management, etc.).

Labor Social Responsibility, Table 1 GRI indicators of labor practices and workplace ethics**GRI 401: EMPLOYMENT**

The reporting organization shall report the following information:

401-1	New employee hires and employee turnover	Total number and rate of new employee hires during the reporting period, by age group, gender and region. Total number and rate of employee turnover during the report period, by age group, gender and region.
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits, which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum: i. life insurance; ii. Health care; iii. Disability and invalidity coverage; iv. Parental leave; v. retirement provision; vi. Stock ownership; vii. Others. The definition used for “significant locations of operation.”
401-3	Parental leave	Total number of employees that were entitled to parental leave, by gender. Total number of employees that took parental leave, by gender. Total number of employees that returned to work in the reporting period after parental leave ended, by gender. Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender. Return to work and retention rates of employees that took parental leave, by gender.

GRI 402: LABOR/MANAGEMENT RELATIONS

The reporting organization shall report the following information:

402-1	Minimum notice periods regarding operational changes	Minimum number of weeks’ notice typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them. For organizations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.
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GRI 403: OCCUPATIONAL HEALTH AND SAFETY

The reporting organization shall report the following information for employees and for workers who are not employees but whose work and/or workplace is controlled by the organization:

403-1	Occupational health and safety management system	A statement of whether an occupational health and safety management system has been implemented, including whether: the system has been implemented because of legal requirements and, if so, a list of the requirements; the system has been implemented based on recognized risk management and/or management system standards/guidelines and, if so, a list of the standards/guidelines. A description of the scope of workers, activities, and workplaces covered by the occupational health and safety management system, and an explanation of whether and, if so, why any workers, activities, or workplaces are not covered.
403-2	Hazard identification, risk assessment, and incident investigation	A description of the processes used to identify work-related hazards and assess risks on a routine and non-routine basis, and to apply the hierarchy of controls in order to eliminate hazards and minimize risks, including: How the organization ensures the quality of these processes, including the competency of persons who carry them out; How the results of these processes are used to evaluate and continually improve the occupational health and safety management system. A description of the processes for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals. A description of the policies and processes for workers to remove themselves from work situations that they believe could cause injury or ill health, and an explanation of how workers are protected against reprisals.

(continued)

Labor Social Responsibility, Table 1 (continued)

		A description of the processes used to investigate work-related incidents, including the processes to identify hazards and assess risks relating to the incidents, to determine corrective actions using the hierarchy of controls, and to determine improvements needed in the occupational health and safety management system.
403-3	Occupational health services	A description of the occupational health services' functions that contribute to the identification and elimination of hazards and minimization of risks, and an explanation of how the organization ensures the quality of these services and facilitates workers' access to them.
403-4	Worker participation, consultation, and communication on occupational health and safety	A description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system, and for providing access to and communicating relevant information on occupational health and safety to workers. Where formal joint management-worker health and safety committees exist, a description of their responsibilities, meeting frequency, decision-making authority, and whether and, if so, why any workers are not represented by these committees.
403-5	Worker training on occupational health and safety	A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.
403-6	Promotion of worker health	An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided. A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.
403-7	Prevention and mitigation of occupational health and safety impacts Directly linked by business relationships	A description of the organization's approach to preventing or mitigating significant negative occupational health and safety impacts that are directly linked to its operations, products or services by its business relationships, and the related hazards and risks.
403-8	Workers covered by an occupational health and safety management System	If the organization has implemented an occupational health and safety management system based on legal requirements and/or recognized standards/guidelines: The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system; The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited; The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.
403-9	Work-related injuries	For all employees: The number and rate of fatalities as a result of work-related injury; The number and rate of high-consequence work-related injuries (excluding fatalities);

(continued)

Labor Social Responsibility, Table 1 (continued)

		The number and rate of recordable work-related injuries; The main types of work-related injury; The number of hours worked. For all workers who are not employees but whose work and/or workplace is controlled by the organization: The number and rate of fatalities as a result of work-related injury; The number and rate of high-consequence work-related injuries (excluding fatalities); The number and rate of recordable work-related injuries; The main types of work-related injury; The number of hours worked. The work-related hazards that pose a risk of high-consequence injury, including: How these hazards have been determined; Which of these hazards have caused or contributed to high-consequence injuries during the reporting period; Actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls. Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.
430–10	Work-related ill health	The reporting organization shall report the following information: For all employees: The number of fatalities as a result of work-related ill health; The number of cases of recordable work-related ill health; The main types of work-related ill health. For all workers who are not employees but whose work and/or workplace is controlled by the organization: The number of fatalities as a result of work-related ill health; The number of cases of recordable work-related ill health; The main types of work-related ill health. The work-related hazards that pose a risk of ill health, including: How these hazards have been determined; Which of these hazards have caused or contributed to cases of ill health during the reporting period; Actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls. Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded. Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.

GRI 404: TRAINING AND EDUCATION

The reporting organization shall report the following information:

404–1	Average hours of training per year per employee	Average hours of training that the organization's employees have undertaken during the reporting period, by: (i) gender; (ii) employee category.
404–2	Programs for upgrading employee skills and transition assistance programs	Type and scope of programs implemented and assistance provided to upgrade employee skills. Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.

(continued)

Labor Social Responsibility, Table 1 (continued)

404-3	Percentage of employees receiving regular performance and career development reviews	Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY		
405-1	Diversity of governance bodies and employees	Percentage of individuals within the organization's governance bodies in each of the following diversity categories: Gender; Age group: under 30 years old, 30-50 years old, over 50 years old; Other indicators of diversity where relevant (such as minority or vulnerable groups). Percentage of employees per employee category in each of the following diversity categories: Gender; Age group: under 30 years old, 30-50 years old, over 50 years old; Other indicators of diversity where relevant (such as minority or vulnerable groups).
405-2	Ratio of basic salary and remuneration of women to men	Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation. The definition used for "significant locations of operation."
GRI 406: NON-DISCRIMINATION		
The reporting organization shall report the following information:		
406-1	Incidents of discrimination and corrective actions taken	Total number of incidents of discrimination during the reporting period. Status of the incidents and actions taken with reference to the following: Incident reviewed by the organization; Remediation plans being implemented; Remediation plans that have been implemented, with results reviewed through routine internal management review processes; Incident no longer subject to action.
GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk either in terms of: Type of operation (such as manufacturing plant) and supplier; Countries or geographic areas with operations and suppliers considered at risk. Measures taken by the organization in the reporting period intended to support rights to exercise freedom of association and collective bargaining.
GRI 408: CHILD LABOUR		
408-1	Operations and suppliers at significant risk for incidents of child labor	Operations and suppliers considered to have significant risk for incidents of: (i) child labor; (ii) young workers exposed to hazardous work. Operations and suppliers considered to have significant risk for incidents of child labor either in terms of: Type of operation (such as manufacturing plant) and supplier; Countries or geographic areas with operations and suppliers considered at risk. Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labor.
GRI 409: FORCED OR COMPULSORY LABOUR		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of: (i) type of operation (such as manufacturing plant) and supplier; (ii) Countries or geographic areas with operations and suppliers considered at risk. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.

(continued)

Labor Social Responsibility, Table 1 (continued)

GRI 410: SECURITY PRACTICES		
410-1	Security personnel trained in human rights policies or procedures	Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security. Whether training requirements also apply to third-party organizations providing security personnel.

Source: Global reporting Initiative (GRI 400–410)

- 2) **Occupational Health and Safety:** Those LSR practices that respond to the purpose of ensuring the health of employees and preventing accidents.
- 3) **Training and Professional Development:** Those RSL practices aimed at increasing the human capital of the company, favoring that employees can respond adequately to the requirements of their current job and to future needs, in a way that increases their degree of employability and allow them professional growth.
- 4) **Diversity and Equal Opportunities:** This subcategory is crucial to guarantee a more open labor market that increases employment opportunities without any type of discrimination based on gender, race, religion or ethnicity. Diversity in the labor market should also favor the inclusion of people with disabilities.
- 5) **Participation and Association:** Those RSL practices that guarantee employee participation in the company are included, both in decision-making processes and in the distribution of benefits.

Outputs of Labor Social Responsibility

There is a widely studied paradigm in the academic literature, which analyses the relationship between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP). Corporate social performance can be measured through the CSR actions carried out by the company or through its reputation. In the aforementioned paradigm, the impact of different CSP measurement

variables on economic performance have been studied through indicators of economic or financial profitability. Regarding these relationships, a majority of studies justifies a relationship of positive impact between social actions and financial performance in the company (Orlitzky et al. 2003). Although, there are also studies that conclude the existence of an inconclusive, neutral, or negative relationship.

In the specific case of LSR's actions, there are evidence that shows that the actions developed to improve the company's work environment improve its image. The image is an external assessment of the company based on the information available. However, reputation is another measurement that also includes the internal assessment of the company's stakeholders.

In the workplace, job reputation is "the result of the perceptions of the company's stakeholders on past actions and the reflection of their future perspectives on the company's job quality in relation to competitors and job providers" (Odriozola et al. 2015). Obviously, to generate this asset is necessary that companies communicate labor practices appropriately. In this sense, many companies publish information on LSR through their annual CSR reports, following standards such as the GRI. Additionally, it is also possible to find information disclosed directly by employees with storytelling techniques, sharing experiences, short corporate messages or specific LSR practices. This communication of labor practices has a double purpose; first favoring employee engagement, and second, increasing the credibility of the message, since the messages provided by employees are seen by external agents with the highest degree of trust.

Labor Social Responsibility, Table 2 Comparison of the subcategories of labor practices according to the main CSR disclosure guidelines

Green paper – CEC	GRI 400–410	ISO 26000
Lifelong learning	GRI 401: Employment	Issue 1: Employment and employment relationships;
Employee training	GRI 402: Labor/management relations	Issue 2: Conditions of work and social protection;
Transparency about company information	GRI 403: Occupational health and safety	Issue 3: Social dialogue;
Balance between work time and personal life	GRI 404: Training and education	Issue 4: Health and safety at work;
Diversity in the workforce	GRI 405: Diversity and equal opportunity	Issue 5: Human development and training in the workplace
Non-discrimination	GRI 406: Non-discrimination	
Equity in salary policy	GRI 407: Freedom of association and collective bargaining	
Profit sharing and ownership	GRI 408: Child labor	
Concern about employability	GRI 409: Forced or compulsory labor	
Job security	GRI 410: Security practices	

The labor information disclosed through various methods and channels about the company and the actions directed at employees builds a labor reputation that will provide competitive advantages to the company. The consolidation of the labor reputation in a sustainable way allows companies to generate an intangible, non-marketable asset of great value for it. For the labor dimension, we can find multiple rankings of labor reputation that identify the best companies to work for, sometimes for specific groups and others in a generalist way. The appearance in these rankings facilitates the attraction of talent as well as favors the retention of the talent hired. Some examples of these labor reputation rankings can be: “Working Mother,” “Great Place to Work,” “100 Best Companies to work for.” Finally, previous studies of the literature show that a higher labor reputation has a positive and significant impact on corporate financial performance (CFP) (Chauvin and Guthrie 1994; Hannon and Milkovich 1996; Lau and May 1998; Filbeck and Preece 2003; Fulmer et al. 2003; Odriozola et al. 2018).

Key Issues and Future Directions

- LSR disclosure
- Guidelines of LSR
- Coercive and legislative pressures
- End of voluntariness

Cross-References

- [Corporate Social Performance](#)
- [Corporate Social Responsibility](#)

References

- Alvarado Herrera, A., & Schlesinger Díaz, M. W. (2008). Dimensionalidad de la responsabilidad social empresarial percibida y sus efectos sobre la imagen y la reputación: una aproximación desde el modelo de Carroll. *Estudios Gerenciales*, 24(108), 37–59.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505. <https://doi.org/10.5465/amr.1979.4498296>.
- Carroll, A. B. (1991). *The pyramid of corporate social responsibility*. Business Horizons. Julio-Agosto 1991.
- Chauvin, K. W., & Guthrie, J. P. (1994). Labor market reputation and the value of the firm. *Managerial and Decision Economics*, 15(6), 543–552. <https://doi.org/10.1002/mde.4090150602>.
- Commission of the European Communities (CEC). (2001). *Promoting a European framework for corporate social responsibility – Green paper*. Luxembourg: Office for Official Publications of the European Communities. https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9.
- Commission of the European Communities (CEC) (2001). *Green Paper: Promoting a European framework for Corporate Social Responsibility*. Luxembourg: Office for Official Publications of the European Communities.
- Committee for Economic Development (CED). (1971). *Social responsibilities of business corporations*. New York: Author.

- Davis, K., & Blomstrom, R. L. (1975). *Business and society: Environment and responsibility* (3rd ed.). New York: McGraw-Hill.
- Filbeck, G., & Preece, D. (2003). Fortune's best 100 companies to work for in America: Do they work for shareholders? *Journal of Business Finance & Accounting*, 30(5/6), 771–797. <https://doi.org/10.1111/1468-5957.05362>.
- Forum of experts on CSR. (2007). *Expert forum report on social responsibility of business*. Madrid: Spanish Ministry of Labour and Social Affairs. https://observatoriorisc.org/wp-content/uploads/2013/07/foroexpertos_rse_informe.pdf.
- Fulmer, I. S., Gerhart, B., & Scott, K. S. (2003). Are the 100 best better? An empirical investigation of the relationship between being a 'great place to work' and firm performance. *Personnel Psychology*, 56(4), 965–993. <https://doi.org/10.1111/j.1744-6570.2003.tb00246.x>.
- Global Reporting Initiative (GRI). Standards. (Available on 30.06.2021) <https://www.globalreporting.org/>
- Hannon, J. M., & Milkovich, G. T. (1996). The effect of human resource reputation signals on share prices: An event study. *Human Resource Management*, 35(3), 405–424. [https://doi.org/10.1002/\(SICI\)1099-050X\(199623\)35:3<405::AID-HRM7>3.0.CO;2-0](https://doi.org/10.1002/(SICI)1099-050X(199623)35:3<405::AID-HRM7>3.0.CO;2-0).
- Lau, R., & May, B. E. (1998). A win-win paradigm for quality of work life and business performance. *Human Resource Development Quarterly*, 9(3), 211–226. <https://doi.org/10.1002/hrdq.3920090302>.
- López, A., Ojeda, J. K., & Ríos, M. (2016). La responsabilidad social empresarial desde la percepción del capital humano. Estudio de un caso. *Spanish Accounting Review*, 20(1), 36–46. <https://doi.org/10.1016/j.rcsar.2016.01.001>.
- Odrizola, M. D., Martín, A., & Luna, L. (2015). The relationship between labour social responsibility practices and reputation. *International Journal of Manpower*, 36(2), 236–251. <https://doi.org/10.1108/IJM-03-2013-0039>.
- Odrizola, M. D., Martin, A., & Luna, L. (2018). Labour reputation and financial performance: Is there a causal relationship? *Employee Relations*, 40(1), 43–57. <https://doi.org/10.1108/ER-04-2017-0093>.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24, 403–441. <https://doi.org/10.1177/0170840603024003910>.
- Schwartz, M. S., & Carroll, A. B. (2003). Corporate social responsibility: A three-domain approach. *Business Ethics Quarterly*, 13(4), 503–530. <https://doi.org/10.5840/beq200313435>.
- Sethi, S. P. (1975). Dimensions of corporate social performance: An analytical framework. *California Management Review*, 17(3), 58–64. <https://doi.org/10.2307/41162149>.
- Urcelay, J. (2005). Responsabilidad Social Corporativa: La dimensión interna como cuestión previa. Profesionales éticas. <http://profesionalesetica.org/wp-content/uploads/2012/09/J-URCELAY-Dimensión-interna-RSC-CH-Enero-05.pdf>
- Vilanova, M., Lozano, J., & Arenas, D. (2009). Exploring the nature of the relationship between CSR and competitiveness. *Journal of Business Ethics*, 87, 57. <https://doi.org/10.1007/s10551-008-9812-2>.
- Wilson, I. (1975). What one company is doing about today's demands on business. In *Changing business-society interrelationships*. Los Angeles: Graduate School of Management, UCLA.
- Wood, D. J. (1991). Corporate social performance revisited. *The Academy of Management Review*, 16(4), 691–718. <https://doi.org/10.5465/amr.1991.4279616>.

Labor Standards

► Business Compliance Initiatives

Lack of Rain

► Water Problems

Land Degradation

► Desertification

Landfilling

► Sustainability of Waste Management Systems: Final Disposal

Large Amounts of Data

► Big Data and Data Mining

Large Amounts of Information

► Big Data and Data Mining

Large Quantities of Data

- [Big Data and Data Mining](#)

Law

- [Soft Law](#)

Layers of CSR

- [CSR Pyramid](#)

Layoffs

- [Employee Downsizing](#)

LCA

- [Life Cycle Sustainability Assessment](#)
- [Social Life Cycle Assessment](#)

LCM

- [Life Cycle Management](#)

Leadership

- [Authority vs. Bureaucracy](#)
- [Sustainable Leadership](#)

Leadership and Responsibility

- [Board of Directors and Corporate Governance](#)

Leadership Communication

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Synonyms

[Administration](#); [Governance](#); [Management](#)

Description

Modern industrialization has been both the pinnacle of human innovation and the catalyst for our planet's deterioration. Because of this, leaders of organizations representing all sectors, sizes, markets, and influence are recognizing their organization's impact on our natural environment. They are refocusing their organizations' efforts on eco-efficiency and eco-friendly practices like renewable energy, sustainably-sourced materials, and carbon neutrality. But what does leadership for organizational sustainability look like? This essay defines leadership communication within the context of organizational sustainability initiatives, discusses transformational leadership and instrumental leadership communication behaviors, and considers cultural differences in follower expectations for leaders' management and communication behaviors. A communication-focused theory, the coordinated management of meaning approach, is discussed as an effective approach for leaders to use to create and instill meaning in their followers. Finally, the focus shifts to discussing how leaders can use communication strategically to promote support for their sustainability-related initiatives.

Defining Leadership

In order to understand leadership communication and its relationship with sustainability, it is important to first define leadership. The term "leadership" is associated with multiple words and

characteristics – management, charisma, innovation, creativity, and transformation, among others. People have struggled to reach just one definition of leadership. Some suggest it is the process of one individual influencing others to reach a common goal, many describe it as creating positive change for the common good, and others conclude it is simply making things better. For this essay, John Kotter's (1990) definition is most appropriate. Kotter defined it as "the fundamental purpose of leadership is to produce useful change, especially non-incremental change" (as cited in Summerfield 2014). Organizational changes related to sustainability often involve organizational goals, culture, processes, staffing, and relations with key external groups. Leaders must prepare their followers for and navigate them through such changes.

Leadership is not always discussed in terms of one person who directs a group of people. Sometimes leadership is discussed in relationship to an organization or group of organizations that create and innovate more effective, efficient, and economical practices of doing business. In this essay, however, we focus on leadership as the behavior of an individual (e.g., CEO). In governmental, nonprofit, and for-profit organizations, successful leadership is often associated with increasing an organization's success and creating positive change, but it also involves guiding an organization through challenges and crises. In this essay we focus on the communication a leader uses to encourage his or her employees to help their organization become more sustainable. Sustainable organizations seek to reduce their use of natural resources and minimize pollution and treat employees, community members, and society fairly, all while reaching the other organizational goals (e.g., maximizing growth, creating more resilient communities).

Leadership Theories

Early leadership efforts sought to identify the key traits that make someone a leader (e.g., outgoing, determined). But then the focus shifted to

transactional and transformational leadership styles (Bass 1985). Leaders often focus on five priorities: "using strategic vision to motivate and inspire, empowering employees at all levels, accumulating and sharing internal knowledge, gathering and integrating external information, and challenging the status quo and enabling creativity" (Dess and Picken 2000, p. 19). These priorities overlap with the idea of transformational leadership. Today, many people look at how leaders use communication to create a shared vision for their employees (e.g., the coordinated management of meaning approach). We begin by focusing on transactional and transformational leadership.

Positive organizational changes generally are influenced by the actions of transformational leaders as opposed to transactional leaders. Transactional leadership is rewards-based. Followers are motivated by their relationship of exchange with the leader to produce results. When an employee produces desirable work, his or her behavior is rewarded by the transactional leader. Transformational leadership centers on a leader's ability to articulate his or her vision of success and create a vision of the future for followers while recognizing what makes each follower unique. Such leaders create a sense of shared purpose among their followers. Although transformational leadership is often identified as more effective than transactional leadership during times of organizational change, both are important.

Bass (1985) described four behaviors of transformational leaders: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. Idealized influence evokes loyalty from followers because the leader has high moral and ethical standards and is held in high regard by his or her subordinates. A leader who embodies inspirational motivation has a clear and strong vision for the future that fosters enthusiasm and confidence within followers. Intellectual stimulation is brought on by a leader who encourages divergent thinking that challenges organizational norms, ultimately enabling followers to develop innovative strategies for

problem-solving and creative solutions. Lastly, a leader's individual consideration acknowledges that each follower is a unique individual and that these unique differences need to be nurtured differently to produce desired outcomes. All four of these behaviors involve a leader's strategic and skillful use of communication. In reviewing many studies of transformational and transactional leadership, Bono and Judge (2004) found that personality (e.g., outgoing, calm) has little to do with successful transformational leadership behaviors in comparison to communication abilities. Leaders who want to help their organizations become more sustainable can learn to become transformational leaders.

But leadership involves more than idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. Leaders must critically analyze external environments for opportunities and threats as well as identify and articulate goals and strategies to help their organizations become more sustainable. Instrumental leadership involves a leader's ability to influence adaptation to external environments while simultaneously motivating followers through vision-casting and mission-sharing during their organization's transformational process. Antonakis and House (2014) identify four aspects of instrumental leadership that are grouped under two headings, *strategic leadership* and *follower work facilitation*. In terms of *strategic leadership*, two abilities are key: environmental monitoring and strategy formulation and implementation. Environmental monitoring involves understanding an organization's strengths and weaknesses and then paying attention to information existing outside the organization (e.g., in the broader business environment, in terms of technological changes) in order to identify potential opportunities or threats. Strategy formulation and implementation involves those actions (e.g., the creation of objectives, goals, and policies) leaders take to support their organization's strategic vision and mission which the leader has a hand in crafting. The second heading, *follower work facilitation*, involves path-goal facilitation and outcome monitoring. Path-goal facilitation "addresses leader behaviors

targeted towards giving direction, support, and resources, removing obstacles for goal attainment and providing path-goal clarification" (Antonakis and House 2014, p. 750). Outcome monitoring "entails a leader's performance-enhancing feedback useful for goal attainment" (Antonakis and House 2014, p. 750). Having the capability to communicate the analysis and implementation of *strategic leadership* and *follower work facilitation*, the authors argue, is what creates an instrumental leader. This type of leadership can be even more effective than transformational leadership. An instrumental leader displays all the communication-focused aspects of a transformational leader with an added hyper-awareness to external environments that may have a significant impact on their organization and the people who comprise it. Increasing environmental threats, dwindling natural resources, changes in market preferences, technological and legal changes, and competitor pressures are among the sustainability-related changes such leaders must take into consideration.

Cultures and Leadership Norms

Globally, organizations are enacting creative new initiatives related to environmental and social sustainability. Therefore, leaders who plan to work in a country outside their own or researchers investigating leadership and sustainability topics outside their home countries need to be aware of cross-cultural differences in leadership behaviors and follower expectations. Two streams of cross-cultural leadership research exist (Arvey et al. 2015). Some people believe that many leader behaviors are universally accepted and effective because leaders face common problems that involve how to organize, motivate, and influence others to accomplish organizational goals. Some universally-endorsed leadership qualities include being trustworthy, just, and honest; having foresight and planning ahead; being positive, dynamic, encouraging, motivating, and building confidence; and being communicative, informed, a coordinator, and a team integrator (House et al. 2004).

The second stream argues that cultural forces affect which leader behaviors are usually accepted, enacted, and effective within a setting. The GLOBE (Global Leadership and Organizational Behavior Effectiveness) project provided the first large-scale empirical evidence that societies' cultural values influence leadership behaviors and follower expectations. The GLOBE research team surveyed more than 17,300 middle managers from 951 organizations across 62 business-oriented societies (House et al. 2004). They found a specific set of criteria followers use to evaluate their leaders which are called culturally endorsed implicit leadership theories (CELT) (Arvey et al. 2015). Even though transformative leadership appears generally valued, significant variability exists among countries. Generally, the greater overlap between a CEO's leadership behavior and a society's CELT, the more acceptable the behavior and the higher a firm's performance. Scholars investigating CELT behavioral expectations have generally not focused specifically on preferred leadership communication behaviors. However, to learn more about leadership communication similarities and differences in the GLOBE countries, see the work of Cherfan (2016).

Communication and Leadership

In our discussion of transformational and instrumental leadership theories, communication was mentioned, but it was not the focus of either theory. To take a communication approach to understanding leadership, communication must take center stage. "Communication not only constitutes one of the crucial aspects of leadership performance, but leadership can productively be viewed as a communication process" (Schyns et al. 2008, p. 1). In organizations undergoing transformational changes related to sustainability, transparent and empowering leadership communication is key. Transparency comes into play when a leader is honest about the current state of the organization, shares his or her vision for the future, and describes what is expected from followers. Transparent

communication helps build a clear and mutual understanding of an organization's mission and goals and describes the progress being made toward reaching those goals. It requires face-to-face dialogue with followers as well as addressing them as a whole group to create a shared sense of meaning.

Communication takes center stage with the coordinated management of meaning (CMM) perspective of leadership (Smircich and Morgan 1982). The CMM perspective suggests that people within a given communication context (e.g., a meeting to create or discuss proposed sustainability initiatives) simultaneously construct social realities for themselves. This is particularly helpful when exploring leadership because it views the basic nature of leadership as a phenomenon involving social processes. Leadership results from a social process of interactions that co-creates meaning which is shaped by the leader and interpreted by the follower. Leaders strategically use communication to frame and define reality for their followers. As leaders manage meaning, they highlight particular aspects of the overall flow of experience occurring in a particular context. That is, they pinpoint the parts of the ongoing and changing reality they want their followers to pay attention to and recommend actions to take in response. Those being led see the action being promoted as a sensible and viable action. Leaders make actions personally meaningful to those who must implement them. Successful leadership allows organizational members to positively internalize the same actions, rules and guidelines, and purpose and meanings. Together, leaders and followers discuss implementation choices, possible futures, and next steps.

Leadership, Communication, and Sustainability

Given the increasing severity of environmental threats, dwindling natural resources, and market, legal, and political changes, it is necessary that organizations reflect on their environmental impact. Leaders can use effective communication

strategies and framing to enact their vision and mission to enhance sustainability within their organizations. By becoming transformational or instrumental leaders, they can enable and empower followers to press forward toward creating more sustainable organizations. Such leaders can use communication to create an inspirational and energizing vision, demonstrate confidence in themselves and their mission, set challenging goals, and enlist others to support their vision and mission. They can stir emotions (e.g., trust, loyalty), evoke symbolic images and expectations, create a shared sense of identity, inspire desires, develop fresh approaches to long-standing problems, seek out risks where opportunities and rewards appear likely, and encourage followers to generate new options (Allen 2016).

One interesting model links environmentally-specific transformational leadership and leaders' workplace pro-environmental behaviors to employees' proenvironmental passion and behavior (see Robertson and Barling, 2013). Environmentally-specific transformational leadership involves leadership behaviors focused on encouraging pro-environmental initiatives like saving environmental resources and finding new ways to do business that are better for employees, communities, and the natural environment. When leaders display environmentally-specific transformational leadership behaviors, their employees are influenced to become more interested in and passionate about the environment which leads to more pro-environmental employee behaviors. To positively influence their employees' pro-environmental passion and behaviors, leaders should share their own environmental values, encourage employees to achieve at an aspirational level, help employees think about issues in new and innovative ways, and create a personal relationship with employees. Many leaders are already taking such actions, and researchers are investigating what they are doing. If you want to read some examples of leaders who are strategically using communication to create more sustainable organizations, see Allen (2016).

Conclusion

In this essay we define leadership within the context of organizational sustainability initiatives, discussed transformational leadership and instrumental leadership behaviors, examined cultural differences in follower expectations for leaders' behaviors, and focused on a key communication theory of leadership, CMM. By applying the concepts discussed in this essay, a leader can become more effective in their ability to inspire and guide followers toward a shared vision for the future of their organization, industry, and planet.

Further research should investigate culturally-endorsed leadership theories generally and communication expectations specifically as they relate to sustainability-related initiatives. Additionally, researchers should investigate the role of leadership communication at the interorganizational level in terms of innovation and sustainability initiatives involving information-sharing and collaboration. Finally, future research should examine how organizations use communication strategically to lead other organizations and their industries to become more sustainable.

Cross-References

- Change Management
- Chief Executive Officer (CEO Duality)
- Cross-Cultural Management
- Sustainable Leadership

References

- Allen, M. W. (2016). *Strategic communication for sustainable organizations: Theory and practice*. London: Springer.
- Antonakis, J., & House, R. J. (2014). Instrumental leadership: Measurement and extension of transformational-transactional leadership theory. *The Leadership Quarterly*, 25(4), 746–771. <https://doi.org/10.1016/j.leaqua.2014.04.005>.
- Arvey, R., Dhanaraj, C., Javidan, M., & Zhang, Z.-X. (2015). Are there unique leadership models in Asia? Exploring uncharted territory. *The Leadership*

- Quarterly*, 26, 1–6. <https://doi.org/10.1016/j.leaqua.2015.01.003>.
- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 89(5), 901–910. <https://doi.org/10.1037/0021-9010.89.5.901>.
- Cherfan, J. (2016). *Preferred leadership communication styles across cultures*. Unpublished master's thesis, University of Arkansas.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, 28(3), 18–34. [https://doi.org/10.1016/S0090-2616\(00\)88447-8](https://doi.org/10.1016/S0090-2616(00)88447-8).
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks: SAGE.
- Kotter, J. P. (1990). What leaders really do. *Harvard Business Review*, 68(3), 103–111.
- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34, 176–194. <https://doi.org/10.1002/job.1820>.
- Schyns, B., Kroon, B., & Moors, G. (2008). Follower characteristics and the perception of leader-member exchange. *Journal of Managerial Psychology*, 23(7), 772–788. <https://doi.org/10.1108/02683940810896330>.
- Smircich, L., & Morgan, G. (1982). Leadership: The management of meaning. *The Journal of Applied Behavioral Science*, 18, 257–273.
- Summerfield, M. R. (2014). Leadership: A simple definition. *American Journal of Health System Pharmacy*, 71(3), 251–253. <https://doi.org/10.2146/ajhp130435>.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.

Leadership Ethics

- [Confucian Ethics](#)

Leadership Models

- [Authority vs. Bureaucracy](#)

Lean Production

- [Lean Thinking](#)

Lean Thinking

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Synonyms

[Toyota production system](#); [Toyota way](#); [Lean production](#)

Definition

Lean Thinking is a managerial philosophy originally born on the shop floor of the Japanese automotive firm Toyota and gradually propagated all over the world. The Toyota Production System (TPS) is a system which enables a company to face its competition by focusing on providing its market with a better answer, increasing efficiency and Total Quality. The TPS moves production from a push approach to a pull approach, where the market drives the production flow and not vice versa. Consequently, inventory has to be reduced and all waste has to be eliminated. The principles and the tools of this system helped Toyota to be successful in its sector and led Western firms to study and imitate the approach. The model of Lean production rapidly evolved within Lean Thinking as a more comprehensive philosophy, going beyond the production area and being applicable to all organizational functions (Lean organization) and emphasizing the human factors. At the same time, Lean Thinking forced organizations to scrutinize their boundaries and to involve other actors, especially in supply chain management. More recently, the relationship between Lean Thinking and Sustainability appears to be a promising integration of Lean tools and Sustainability tools with the aim of developing new models.

Introduction

The search for efficiency has always challenged organizations. In the Japanese context, this issue

became more critical after the Second World War, when the country underwent a process of reconstruction and faced global competition. The automotive sector was primarily interested in entering the global market but had some weaknesses when competing with firms that had a consolidated position in the market. Therefore, the Japanese industry overhauled the production system from a push approach (typical in occidental mass production) to a pull approach, driven by customer demand. In addition, the system refers to different principles and uses many new tools in supporting the approach. As this new method of producing goods was born in Toyota, this new system was named the Toyota Production System (TPS) and evolved over the following decades. The unexpected success of the Japanese automotive sector forced firms all over the world to understand the system and its roots and to try to apply it in other sectors and geographical contexts. The TPS evolved to Lean Thinking and, in recent years, intersected the issue of Sustainability.

In its attempt to describe the evolution of TPS and point out relevant issues, this chapter is articulated as follows: first, it briefly describes the origin and evolution from TPS to Lean and Green Thinking. Second, it focuses on the central question of “waste” in Lean production; then it summarizes the principles and tool of Lean Thinking. Finally, it focuses on the interrelationships between Lean Thinking and Sustainability.

A Brief History

Even though production efficiency has been centralized since the beginning of the twentieth century, and even though it could be referred to in Ford’s methods of standardization, it became crucial when the Japanese automotive industry opened to global competition after Second World War, and especially in the 1970s. Toyota, taking into consideration the contribution of managerial systems established in the United States, built an original production system, called TPS. The TPS was described by Ohno (1988), who indicated that the origin of TPS was in the Jidoka, a tool implemented at the beginning of the twentieth

century by Toyota’s founder, Sakichi Toyoda. In particular, Jidoka, or autonomation, is a system that allows the company to detect problems and automatically stop production. The system evolves through its so-called “automation with human touch”, as the workforce has a fundamental role in analyzing and solving the problems that halt the process. The founder’s son introduced the relevance of acquiring raw materials and product at the same time and in the required quantities; this was the basis of just in time (JIT).

Starting from these roots, the TPS improves the system by considering the market as the driver of production, moving from a push system (mass production), based on forecasted demand and the production of the predicted quantity needed, to a pull system. In this system, the production is “pulled” by the customers, and the firm arranges its processes and the rhythm of production to the takt time (calculated by dividing the available production by the number of items to be produced).

The system challenges the organization to improve its efficiency by eliminating unproductive time and waste.

The Toyota system is globally recognized, thanks to Womack et al. (1990) in their book entitled *The Machine That Changed the World*. In this work, the authors report the result of 5 years of research within the Massachusetts Institute of Technology (MIT) regarding how the automotive sectors around the world faced the oil crisis in the 1970s: the research underlines how the TPS, named “Lean production” in the book, has been the driver of the enormous global success of the Japanese automotive industry.

After the publication of the book, many organizations considered adopting Lean production. Initially, implementation methods concerned the automotive industry, where the TPS was born, but the potential of the methodology gradually emerged in two directions. First, the approach could be expanded out of the shop floor and extended to other firm areas (i.e., product development) and lead to “Lean organization.” Second, Lean organization is not limited to the original automotive sector but could be successfully applied in other sectors.

This evolution was captured and described by Womack and Jones (1996) in their book *Lean Thinking. Banish Waste and Create Wealth in Your Corporation*, with the intent to generalize the basic concepts in order to apply them to any company in any industry.

Over the following years, many authors studied the topic of Lean Thinking, investigating cases of implementation in many areas (i.e., marketing and sales, accounting, etc.) and different sectors, especially in the services industry. Meanwhile, a number of authors discussed the difficulties in adapting the Japanese culture and the model to the occidental context and the impact on their human resources and the organization as a whole.

One of the emerging issues has been the increasing relationship between organizations in the supply chain. This is partially a consequence of the fact that if a firm is “Lean,” it needs to have strong collaborations with suppliers to keep processes fluid and to receive materials at the right time and in the right quantity. Similarly, a Lean organization has to be connected with customers and the market in order to implement the pull system. In other words, it could be difficult for an organization to be Lean without having partners who have adopted the same approach.

In more recent years, the growing concern about the environment and Sustainability challenges has led every organization to evaluate its impact on global Sustainability and to find the best way to conciliate organizational goals with the organization’s responsibility for future generations. The ongoing debate focuses on the

ability of Lean Thinking to support the path to Sustainability and on how the Lean Thinking and Green Thinking concepts and tools could be integrated. Milestones in Lean Thinking’s history are summarized in Fig. 1.

Lean Production and Waste

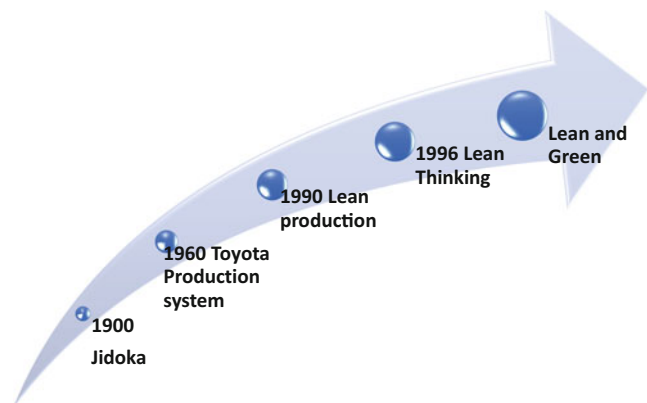
In the first interpretation, the meaning of Lean production was associated with “doing more with less,” emphasizing the goal of eliminating waste and improving productivity. Another characterization of Lean Thinking since its origins has been the orientation to both the customer and the market as drivers of production. The goals of Lean production can be summarized as (1) rapidly satisfying market demand, (2) minimizing inventory, and (3) reducing waste. Although these points are cornerstones of the methodology, Lean Thinking is a wider approach and involves the entirety of the organization.

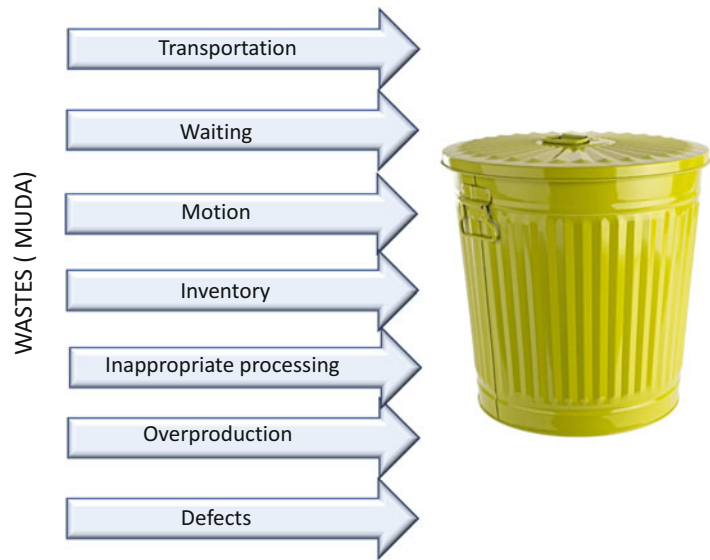
In particular, waste (*muda* in Japanese) is considered to be a critical factor when pursuing Lean Thinking goals. The Lean Thinking methodology notes seven potential areas for waste (Fig. 2):

- **Transportation:** raw materials and products must be moved from one physical area to another. This activity does not directly add value to the product but is necessary in every production process. When materials and products are transported and handled too many times, the risk of damage and the loss of time through delays may arise.

Lean Thinking,

Fig. 1 From Jidoka to “Lean and Green”



Lean Thinking,**Fig. 2** The seven wastes (muda) in Lean production

- **Waiting:** in every process, an operator can perform their job when other activities are complete. If the work cannot start, as the operator is waiting for the conclusion of other phases of the process, their time is wasted, and this will influence the following activities. This waste could have several reasons, i.e., lack of materials, delays in the previous activities, bottlenecks in the process, etc.
- **Motion:** people move materials from one point to another within a workstation. TPS creates a layout that is ergonomic and allows the avoidance of unnecessary movement, walking, and lifting and so reduces the loss of time and the risk of stress. Jobs with excessive motion have to be redesigned to make the work more fluid.
- **Inventory:** materials, works in progress, and finished products cause the presence of inventory in an organization. Usually, inventory is a means through which to manage the variability of the procurement markets, production process, and customer demand. Inventory in this sense acts as a buffer to balance the production process. However, inventory is a cost in terms of the value of the goods, the space absorbed, and the eventual obsolescence or deterioration of the working capital. Lean Thinking suggests reducing the inventory as much as possible and, through JIT, to aspire to obtain “zero inventory.”
- **Inappropriate processing:** this waste is often described as “using a sledgehammer to crack a nut.” The utilization of equipment too sophisticated in relation to their use is a waste of resources and causes unnecessary costs. Lean Thinking encourages orienteering the company to a lower level of automation and to choose equipment that is flexible enough to permit the beneficial combination of production steps.
- **Overproduction:** often firms produce a quantity of product higher than the actual market demand by attempting to meet unexpected opportunities and to exploit their production capacity. According to Lean Thinking, this approach generates waste and causes inefficiency in the system. In this sense, JIT contributes to reducing over-processing and inventory. An important action is to improve the versatility of machines and equipment and involving the workers to facilitate changing from one production phase to another.
- **Defects:** if the product does not adhere to the attributes and quality requested by the client, the organization fails in pursuing its primary goal: to be customer-oriented. Moreover, defects cause rework and new checks and inspections; moreover, they have a direct impact on the flow of the process, with interruptions, extended lead time, and problems for other products.

As a consequence of the extension of the Lean approach out of the shop floor, practitioners have considered more potential waste, such as inappropriate use of spaces, waste in communication and in the information flow, and the bad use of human resources and competencies.

The Principles and Tools of Lean Thinking

Lean Thinking is a broad approach and, as described by Womack and Jones (1996), rests on five principles (Fig. 3):

1. Identify the value
2. Map the value stream
3. Establish flow
4. Create pull
5. Seek perfection

Identify the Value

The concept of value could be associated with different meanings. Lean Thinking considers every organization as a group of different activities that generates processes, thus producing value. This is partly coherent with the concept of

a value chain, as introduced by Porter in 1985, as a fundamental analysis for creating competitive advantages. As enterprises are customer-oriented, the value has to be created for customers.

In general, an activity (or process) creates value if the customers detect the activity, appreciate it, and assign a value to it (e.g., in terms of price paid). This definition contributes to pointing out that there are usually three types of activities present in an organization: (i) activities that create value, (ii) activities that do not directly create value for the customer, and (iii) activities that do not create value and must be eliminated.

Activities that create value (i) have the three characteristics described above and are fundamental for the organization.

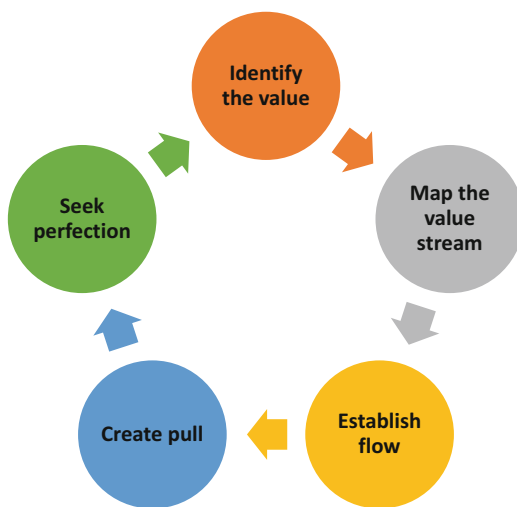
The second type of activities are not perceived as creating value for the customer but are necessary for the firm. For example, the activity of producing reports for the regulator of the sector (i.e., bank) is essential for the organization and probably for the stability of the markets but is not considered to be valuable by the customer, who often fails to notice this activity at all. Most support activities are part of this group of activities.

The third type of activities, those that don't create value either directly or indirectly for the customer, are worthless and have to be eliminated because they absorb resources without proving themselves to be useful for the customer.

Map the Value Stream

A Lean production system considers a single product or a family of products with similar characteristics and analyzes its value stream. It is composed by two flows: the physical flow that moves from the raw materials to the finished product and the information flow that moves backwards from the customer's order and pulls the production. The organization must correctly synchronize the flows. In Lean Thinking, the value stream doesn't take into consideration the production alone but also other areas that contribute to creating value for the customer. This is then extended to product development, marketing and administration, etc.

The map of the value stream considers the flows of value in every stream for every product



Lean Thinking, Fig. 3 Principles of Lean Thinking

(or family of products) and, through a visualization, produces relevant information. First, it evidences the different activities and their position in the value stream. Second, it makes clearer where waste is located and its causes. It supports the management in finding the activities that don't create value and considers whether to eliminate them. Finally, it shows the relationship between the physical flow and the information flow, producing a wider picture of how the organization is operating.

Establish Flow

The value stream mapping shows the obstacles to a continuous flow. This doesn't mean that the organization must work as fast as possible. Continuous flow means that in the organization's material, product, and information flows, there are no stops, waste, or delays, providing the customer the desired product at the requested quality, at the right time and in the right quantity. In pursuing this goal, the organization has to focus on processes instead of a single department and take into account the results of value stream mapping.

In establishing the flow, the analysis and elimination of waste play a key role. Waste is the use of any resource that doesn't create value for the customer. Although not all waste can be immediately eliminated, the organization must detect it and reduce it as much as possible.

Create Pull

According to the Lean Thinking approach, production must be pulled by the client, as opposed to mass production, where the production is pushed from the firm to the client. In the pull principle, activities are performed only if the client expresses a need for them. The client could be external to the firm or a part of it. In the first case, the customer demands finished products or services and in doing this drives the production. In cases of internal clients, an activity begins only when someone along the process needs that activity to begin his work. It means that in a production process, as well as in administrative after-sale services, every operator (part of the process) is at the same time a client and a supplier, as they

receive materials or unfinished work from upstream operators and relay the unfinished work or finished product to other operators downstream. In Lean Thinking, one tool supporting this approach is the Kanban. Kanban are cards in different colors that are used to indicate the pickup of material and, consequently, the need to provide new materials. They show information, for example, the code of the material, quantity to provide and time needed to refill, etc. This tool contributes to avoiding overproduction and is part of the JIT approach.

Seek Perfection

In Lean Thinking, every organization aspires to perfection in all its processes, pursuing Total Quality.

Total Quality management was born in the 1950s in General Motors and is related to the statistical control of product quality and to the studies of Deming (1951) regarding the so-called Deming Wheel. Toyota manager, Ohno, visited General Motors and assimilated these principles but adjusted and re-elaborated them within the Lean approach. In Lean Thinking, Kaizen (continuous improvement in Japanese) plays a key role in seeking perfection and Total Quality (Chiarini et al. 2018). In general, changes in an organization could be realized in two ways: by radical innovations that have a disruptive effect by introducing a completely new reality or by incremental innovation that slowly and gradually improves the organization. The second way is consistent with Lean Thinking and is the essence of Kaizen. The peculiarity of Kaizen is that it is based on the strong involvement of operators in uncovering potential improvements during the processes. Workers are fundamental in detecting waste and activities that don't create value and to find the best way to eliminate them.

These principles explain the core of Lean Thinking, which can be summarized through the goal of rationalizing processes and eliminating waste in pursuing continuous improvement. In this sense, efficiency means both flow efficiency and production efficiency. In the first meaning, a flow is efficient when the throughput time of the process is as close as possible to the cycle time

(sum of the time necessary to perform all the steps of production). Production is efficient when all waste is eliminated.

Even if originally Lean Thinking assumed that workers are one of the most important sources of improvement, this characteristic has gradually become increasingly relevant. The involvement of people is fundamental as on the shop floor as in the whole organization.

In addition to the tools already described (as value stream mapping, Kanban, kaizen, etc.), a useful tool at the operating level is the 5s methodology that indicates the steps needed to optimize the workstation. This tool refers to the following Japanese terms:

Seiri (Sort, Separate): in this step, what is necessary to the activity and what is useful are identified. Because what is redundant or unnecessary is wasteful, it has to be removed.

Seiton (Set, Organize): in this step, what is necessary to the process has to be organized in the best way to achieve flow and production efficiency; order is the key word in this step.

Seiso (Shine, Sweep): this step underlines that keeping the working area clean helps to easily identify problems and find solutions to them.

Seiketsu (Standardize): in this step, the attempt is to define routines and repeatable activities in order to be more efficient in flow and production.

Shitsuke (Sustain): this way of working has to be spread across the organization, eventually with a reward policy to pursue continuous improvement.

Lean Thinking and Sustainability

The topic regarding the relationship between Lean production (or Lean Thinking) and the environment is not new. In 1996, the seminal work of Florida considering previous research pointed out that the adoption of environmentally conscious manufacturing is related to the presence of advanced manufacturing systems (such as Lean production) in various ways. First, the orientation

to reduce the consumption of resources, to improve processes, and to banish waste promotes the goal of reducing emissions and the impact on the environment. Second, Lean product design could be interrelated to Green design. Third, customer orientation (of Lean Thinking) supports a company's increased emphasis on respecting the environment. Finally, the supply chain plays a fundamental role in Lean Thinking and could stimulate positive environmental outcomes (Das 2018).

In the following decades, researchers continued to discuss the argument, accelerating the debate in recent years. The core questions are as follows: (1) how operating within the confines of Lean Thinking could affect or stimulate Sustainability, (2) how being Green or sustainable could affect or stimulate the introduction of Lean Thinking tools, and (3) if and how companies integrate Lean Thinking and Sustainability.

Initially, these questions were focused on Sustainability as being "Green" (Garza-Reyes 2015), but now they are wholly regarding Sustainability in its social, economic, and environmental components (Piercy and Rich 2015; Martinez Leon and Calvo-Amodio 2017).

Since 2014, literature reviews concentrate on attempting to systematize the copious production of article and papers. The editorial of Dhingra et al. (2014) in the special issue of *Cleaner Production* posed the question "Does Lean mean Green?", arguing that Lean leads to Green but not necessarily vice versa and that often the two thinking methods have developed independently. It is relevant to remember that Lean Thinking acts at two levels: (1) the operating level (workplace) and (2) the strategic level (supply chain, organizational impacts). Integrating Lean and Green involves both levels and brings greater benefit to the firm in terms of its productivity and efficiency, as well as its impact on the environment (Strategic Direction 2015).

Recently, the work of Caiado et al. (2018) reported a wide range of literature supporting on the one side "Compatibility" between Sustainability and Lean, and on the other the "Divergences" between them. Compatibility regards, for example, the common goal of reducing waste

(including natural resources, pollution, energy, litter, etc.), people integration as a Lean feature that positively impacts workers and Lean as a catalyst for Green. However, some divergences emerge from the literature. For example, while Lean practices focus on maximizing performance and reducing costs, Green practices attempt to design products for environmental optimization in each stage of the lifecycle; Sustainability is oriented to present and future generations (efficacy, effectiveness, and ethics), while Lean focuses on meeting customer demand in the best way (efficiency, effectiveness); Sustainability considers all the stakeholders, while Lean focuses mainly on customers and the people inside the firm.

Therefore, some common goals and overlap foster a good relationship and interaction between Lean Thinking and Sustainability. However, some areas remain uncovered and could potentially cause trade-offs. For example, in pursuing a process flow and the reduction of stock, a “Lean” firm could have a supply chain with a small yet frequent supply more convenient than having excess stock. However, this choice likely means that there is more of an impact on the environment (fuel, pollution, CO₂) due to the elevated number of trips related to supply.

For this reason, in recent years different authors have proposed an evolution of many Lean Thinking tools in order to take account of the Sustainability dimension, for example, Sustainable value stream mapping, Water flow mapping, Green value stream mapping, etc. (Caldera et al. 2017). As Sustainability orientation is a strategic issue and influences the whole organization, this decision is a big challenge to firms. It requires the organization to shape their Lean Thinking approach at an operational level as well as at its strategic level. First, it means integrating the Lean and Green cultures from top management to all levels and areas. Second, alternatives regarding efficiency and productivity have to be evaluated for their social and environmental impacts. Third, the firm has to enforce the long-term approach, as is coherent with Lean Thinking, extending it to all stakeholders, including future generations. Briefly, it means to build new

business models, integrating Green (or Sustainable) dimensions and a Lean Thinking philosophy (Pampanelli et al. 2015; Cherrafi et al. 2016).

Summary

The path from the seminal principal of Lean to sustainable Lean Thinking has been a long one and illustrates how this managerial approach, born on the shop floor of Toyota, overcame the borders of production, involved the whole organization and expanded out of the automotive sector, and spread across sectors and services. Furthermore, the approach extended to interorganizational relationships, involving suppliers and customers in pursuing efficiency and efficacy. The current challenge to Lean Thinking is not considering the Sustainability dimension to be a complementary part of a Lean approach but rather as an integrated component of it.

Cross-References

- Life Cycle Analysis
- Life Cycle Assessment
- Life Cycle Management
- Life Cycle Sustainability Assessment
- Product Life Cycle
- Quality Management
- Supply Chain
- Supply Chain Management
- Sustainable Supply Chain Management
- Triple Bottom Line

References

- Anonymous. (2015). Lean links with sustainability. *Strategic Decision*, 31(5), 7–9. <https://doi.org/10.1108/SD-02-2015-0038>.
- Caiado, R., Nascimento, D., Quelhas, O., Tortorella, G., & Rangel, L. (2018). Towards sustainability through green, lean and six sigma integration at service industry: Review and framework. *Technological and Economic Development of Economy*, 24(4), 1659–1678. <https://doi.org/10.3846/tede.2018.3119>.
- Caldera, H. T. S., Desha, C., & Dawes, L. (2017). Exploring the role of lean thinking in sustainable

- business practice: A systematic literature review. *Journal of Cleaner Production*, 167, 1546–1565. <https://doi.org/10.1016/j.jclepro.2017.05.126>.
- Cherrafi, A., Elfezazi, S., Chiarini, A., Mokhlis, A., & Benhida, K. (2016). The integration of lean manufacturing, six sigma and sustainability: A literature review and future research directions for developing a specific model. *Journal of Cleaner Production*, 139, 828–846. <https://doi.org/10.1016/j.jclepro.2016.08.101>.
- Chiarini, A., Baccarani, C., & Mascherpa, V. (2018). Lean production, Toyota production system and kaizen philosophy: A conceptual analysis from the perspective of Zen Buddhism. *The TQM Journal*, 30(4), 425–438. <https://doi.org/10.1108/TQM-12-2017-0178>.
- Das, K. (2018). Integrating lean systems in the design of a sustainable supply chain model. *International Journal of Production Economics*, 198, 177–190. <https://doi.org/10.1016/j.ijpe.2018.01.003>.
- Deming, W. E. (1951). *Elementary Principles of the Statistical Control of Quality*. Tokyo, Nippon Kagaku Gijutsu Remmei.
- Dhingra, R., Kress, R., & Upreti, G. (2014). Does lean mean green? *Journal of Cleaner Production*, 85, 1–7. <https://doi.org/10.1016/j.jclepro.2014.10.032>.
- Florida, R. (1996). Lean and green: The move to environmentally conscious manufacturing. *California Management Review*, 39(1), 80–105.
- Garza-Reyes, J. A. (2015). Lean and green – A systematic review of the state of the art literature. *Journal of Cleaner Production*, 102, 18–29. <https://doi.org/10.1016/j.jclepro.2015.04.064>.
- Martinez Leon, H. C., & Calvo-Amodio, J. (2017). Towards lean for sustainability: Understanding the interrelationships between lean and sustainability from a systems thinking perspective. *Journal of Cleaner Production*, 142, 4384–4402. <https://doi.org/10.1016/j.jclepro.2016.11.132>.
- Ohno, T. (1988). *The Toyota production system: Beyond large-scale production*. Portland Oregon, Productivity Press.
- Pampanelli, A. B., Found, P., & Bernardes, A. M. (2015). Sustainable manufacturing: The lean and green business model. In A. Chiarini (Ed.), *Sustainable operations management advances in strategy and methodology* (pp. 131–161). Cham: Springer International Publishing.
- Piercy, N., & Rich, N. (2015). The relationship between lean operations and sustainable operations. *International Journal of Operations & Production Management*, 35(2), 282–315. <https://doi.org/10.1108/IJOPM-03-2014-0143>.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press (Simon & Schuster).
- Womack, J. P., & Jones, D. T. (1996). *Lean thinking, banish waste and create wealth in your corporation*. New York: Simon & Schuster.
- Womack, J. P., Jones, D. T., & Roos, D. (1990). *The machine that changes the world*. Riverside: Simon & Schuster.

Learning by Interaction

► Community of Practices

Legitimacy Judgments

► Legitimacy Theory II: Legitimacy Judgments

Legitimacy of Activities

► Legitimacy of Operations

Legitimacy of Operations

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Synonyms

Acceptability of operations; Legitimacy of activities; Legitimacy of processes; License to operate; Social acceptance

Definition

Legitimacy is a social value indicating that authorities' legitimate actions facilitate social regulation. Legitimacy is a basic condition of rule to avoid the collapse of a system due to inadequate trust toward it. Authorities and institutions' decision-making processes are commonly assessed by citizens. In this, Tyler's (2001) outcome showed the role of the fairness in the legitimate decision-process. Legitimacy has been considered a

political concept in the research tradition. Within the political legitimacy, Blatter (2021) found similarities between the concept of legitimacy and acceptance of a government. Here, the essential dimensions were political regime and system of governance.

The institutional organization theory (e.g., Powell and DiMaggio 1991) generated the theoretical framework to understand processes to interpret the institutionalization of organizational behavior influencing on organizational concordance with the environment (Oliver 1991), in other words the legitimacy of operations. The globalizing world, tightened legal obligations, and external stakeholder pressure, especially in the 1990s and onward, led to the increasing interest in the acceptability and responsibility of the operations among industries. Businesses aim at reaching more efficient organizational operations through institutional support in the diversifying operation environment. Social, economic, and political factors supporting specific types of activities of a firm create the foundation for an institutional structure of a particular operation environment. Institutionalization supports gaining legitimacy that is needed in strengthening flexible and efficient operations in various environments.

Theoretical and Empirical Research

The concept of legitimacy has been applied largely within various contexts and studied by a number of methodologies. The concept relates closely to the institutional theory. For example, Li et al. (2020) investigated the legitimacy of business contracts. They conclude that elements, such as regulative, normative, and cognitive ones, influence the effectiveness of the layout of a contract and its implementation.

A few recent works investigate legitimacy in the context of managers' moral behavior, multinational business, sustainability certification, and political risks-related business operations. Managers may have different moral principles in establishing the moral legitimacy of business operations. This influences on the environmental sustainability of a firm. Passetti and Rinaldi

(2020) findings suggested that a moral legitimacy is a continuum depending on managerial value basis. The legitimacy is no dichotomous factor, but it varies in time and place due to its value basis. The use of accounting can support the outlining of the legitimacy framework of a firm. The study showed that external disclosure and internal deliberations form together the concept of moral legitimacy in the investigated environment.

The legitimacy of multinational enterprises in host countries is exposed to substantial risks due to the various business, cultural, demographic, and geographical settings. Han (2020) studied mechanisms of risk minimizing in home countries and its influence in overseas operations by multinational enterprises. Furthermore, Wei et al. (2020) concluded that the challenge of the legitimacy of multinational operations lies in the utilization of subsidiaries, especially in emerging markets. They showed that the engagement of political corporate social responsibility (PCSR) activities may cause legitimacy pressure from host countries toward the multinational enterprise.

The relationship between sustainability certifications and legitimate actions was investigated by Feng et al. (2020). They concluded that enterprises have been growingly adopting management practices, such as sustainability certifications. The certification was used in upgrading the legitimacy of operations in order to meet the stakeholders' expectations for sustainable operations, and consequently, to lead a better market value. In environmental and social operations management was an essential part in this.

Policy makers have recognized largely the risk related to the lack of moral and cognitive legitimacy of political actors. Taarup-Esbensen (2019) investigated the political legitimacy and the related political risk, related to environmentally sensitive operations in Greenland. The work concluded that regardless of the relatively large pragmatic legitimacy, business actors did not consider moral and cognitive aspects comprehensively when interacting with Greenlandic politicians and administrative institutions. The outcome showed the benefit of managing political legitimacy in sensitive areas.

Conceptual Framework

The legitimacy of operations is a theoretical foundation related to two operationalized concepts: the acceptability of operations and the license to operate.

The empirical research and business operations have been involved in the concept of acceptability of operations largely since the 1990s. Especially, stakeholders' and other involved people's perceptions were studied largely in the 2000s when aiming to understand the importance of legitimate operations for successful business at the home region and globally. For example, Braam et al. (2016) emphasized the legitimacy in companies' choices, especially related to environmental management and operations. Mikkilä's (2006) findings support this in that the first responsibility initiatives among Finnish industries were based on ad hoc reactions to the case at hand rather than systemized responsibility strategies in international operations from the 1970s to the 1990s (Mikkilä 2006; Mikkilä et al. 2016). The acceptability discussion covered both social and environmental disclosure. The closing down of production units and its consequences to the employees and the society at large reflected the social element of acceptability. Within natural resource-based industries, the acceptable utilization of natural resources was discussed intensively emphasizing the environmental concern. The governmental, nongovernmental, and industrial sectors met a new type of operational challenges in the 2000s when the economic criteria for the acceptable operations expanded to the comprehensive responsibility covering social and environmental issues at large when globalizing industries aimed at reaching general legitimacy for their operations beyond the home country.

Legitimacy of operations at the practical level can be interpreted as a seeking for social license to operate. Social license to operate plays a key role in society in proceeding social norms and superseding legal rules. The concept of social license to operate (SLO) has similar characters with the acceptability of operations in that both concepts have emerged especially within natural resource-based sectors. Gehman et al. (2017) ended to an outcome that SLO was born among

mining, oil, and gas sectors. SLO is a control means to push firms to meet society's environmental expectations. This supports the management of the firm to avoid conflicts and other stakeholder debates that may slow down daily operations. SLO can go beyond the legal obligations (Lynch-Wood and Williamson 2007, p. 322). SLO integrates the working place-connected moral concepts, such as social justice and integrity, but it goes beyond the internal operation environment of a firm by promoting human rights into the business operations (Warhurst 2005). Social license to operate and acceptability of operations are the practical side of the more political and theoretical concept of legitimacy.

Summary

Legitimacy is a social value indicating that authorities' legitimate actions facilitate social regulation. The concept of legitimacy has been applied largely within various contexts and studied by a number of methodologies. The concept relates closely to the institutional theory. The legitimacy of operations is a theoretical foundation related to two operationalized concepts: the acceptability of operations and the license to operate. A few recent works have investigated legitimacy, for example, in the context of managers' moral behavior, multinational business, sustainability certification, and political risks related to business operations.

Cross-References

- Acceptability of Operations
- Institutional Theory
- Legitimacy Theory
- Stakeholder
- Stakeholder Theory
- Value

References

- Blatter, J. (2021). Legitimacy. Encyclopedia Britannica. <https://www.britannica.com/topic/legitimacy>. Accessed 25 Feb 2021.

- Braam, G. J. M., Uit de Weerd, L., Hauck, M., & Huijbregts, M. A. J. (2016). Determinants of corporate environmental reporting: the importance of environmental performance and assurance. *Journal of Cleaner Production*, 129, 724–734. <https://doi.org/10.1016/j.jclepro.2016.03.039>.
- Feng, Y., Lai, K., & Zhu, Q. (2020). Legitimacy in operations: How sustainability certification announcements by Chinese listed enterprises influence their market value? *International Journal of Production Economics*, 224, 107563. <https://doi.org/10.1016/j.ijpe.2019.107563>.
- Gehman, J., Lefsrud, L. M., & Fast, S. (2017). Social license to operate: Legitimacy by another name? *Canadian Public Administration*. <https://doi.org/10.1111/capa.12218>.
- Han, X. (2020). Risk management, legitimacy, and the overseas subsidiary performance of emerging market MNEs. *International Business Review*. <https://doi.org/10.1016/j.ibusrev.2020.101732>, In Press.
- Li, X., Ren, X., Qian, L., & Su, C. (2020). Toward a social fitness perspective on contract design: Contract legitimacy and influence strategy. *Industrial Marketing Management*, 85, 254–268. <https://doi.org/10.1016/j.indmarman.2019.09.006>.
- Lynch-Wood, G., & Williamson, D. (2007). The social licence as a form of regulation for small and medium enterprises. *Journal of Law and Society*, 34, 321–341.
- Mikkilä, M. (2006). The many faces of responsibility: Acceptability of the global pulp and paper industry in various societies. *Dissertationes Forestales* 25. <http://www.metla.fi/dissertationes/df25.pdf>
- Mikkilä, M., Panapaan, V., & Linnanen, L. (2016). The pursuit of responsible business: Corporate responsibility of Finnish companies in their global operations. In S. Idowu (Ed.), *Key initiatives in corporate social responsibility, CSR, sustainability, ethics & governance*. Springer. https://doi.org/10.1007/978-3-319-21641-6_8. Chapter 8.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145–179. Available at: <http://amr.aom.org/content/16/1/145>.
- Passetti, E., & Rinaldi, L. (2020). Micro-processes of justification and critique in a water sustainability controversy: Examining the establishment of moral legitimacy through accounting. *The British Accounting Review*, 52(3), 100907. <https://doi.org/10.1016/j.bar.2020.100907>.
- Powell, W. W., & DiMaggio, P. J. (1991). *The new institutionalism in organizational analysis*. Chicago/London: The University of Chicago Press. 478 p.
- Taarup-Esbensen, J. (2019). Managing political legitimacy: Multinational mining companies in the Greenlandic political landscape. *The Extractive Industries and Society*, 6(4), 1362–1372. <https://doi.org/10.1016/j.exis.2019.10.015>.
- Tyler, T. R. (2001). A psychological perspective on the legitimacy of institutions and authorities. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 416–436). Cambridge, UK: Cambridge University Press.
- Warhurst, A. (2005). Future roles of business in society: The expanding boundaries of corporate responsibility and a compelling case for partnership. *Futures*, 37, 151–168.
- Wei, J., Liu, T., Chavez, D. E., & Chen, H. A. (2020). Managing corporate-government relationships in a multi-cultural setting: How political corporate social responsibility (PCSR) as a response to legitimacy pressures affects firm reputation. *Industrial Marketing Management*, 89, 1–12. <https://doi.org/10.1016/j.indmarman.2020.06.008>.

Legitimacy of Processes

► Legitimacy of Operations

Legitimacy Theory

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Synonyms

Organizational legitimization

Definition

Legitimacy theory is one of the most cited theoretical frameworks within social, environmental, and sustainability accounting research. It is probably the most used theory to explain social, environmental, and sustainability disclosure (Campbell et al. 2003, p. 559).

The use of legitimacy theory in sustainability-related accounting research derives from the concept of *organizational legitimacy*. According to Suchman (1995, p. 574), “Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate

within some socially constructed system of norms, values, beliefs, and definitions.” According to Dowling and Pfeffer (1975, p. 122), this is “a condition or status which exists when an entity’s value system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity’s legitimacy.”

Legitimacy theory postulates that organizations “continually seek to ensure that they operate within the bounds and norms of their respective societies. In adopting a legitimacy theory perspective, a company would voluntarily report on activities if management perceived that those activities were expected by the communities in which it operates” (Guthrie and Ward 2007, p. 4).

Introduction

Legitimacy theory cannot be simply considered as a “theory” applied to sustainability-related accounting research since there are two main classes of legitimacy theory. According to Tilling (2004a, p. 2), it is possible to distinguish between:

1. A wider perspective, addressing the “macro-theory” of legitimation, also called “institutional legitimacy theory”
2. A narrowed perspective, operating at the organizational level, also called “strategic legitimacy theory”

The former approach examines how organizational structures considered as a whole (e.g., government or capitalism) have gained acceptance from the broad society. Within this approach, *legitimacy* and *institutionalization* can be considered as synonymous. Both of them enrich organizations since they look as natural and meaningful (Suchman 1995, p. 576). This approach examines legitimacy by the “institutional level,” focusing on the role of government, religion, society, and capitalism. In this approach, the business environment (which includes the democratic government and the capitalist structure) is considered as a static element within the examined context.

The latter approach examines legitimacy from the perspective of individual organizations. This is the approach most addressed by accounting research (Tilling 2004a, p. 4). Organizational legitimacy is here considered as an operational resource that organizations need to achieve their goals (Suchman 1995). Organizational legitimacy can be enhanced by some events, such as environmental-oriented organizational behavior or the disclosure of positive information about the organization. On the other hand, organizational legitimacy can be undermined by other events, such as financial scandals, major accidents, etc. According to this perspective, organizations “seek to establish congruence between the social values associated with or implied by their activities and the norms of acceptable behavior in the larger social system in which they are a part. In so far as these two value systems are congruent we can speak of organizational legitimacy. When an actual or potential disparity exists between the two value systems, there will exist a threat to organizational legitimacy” (Mathews 1993, p. 350).

In the narrowed perspective, legitimacy is considered as a resource necessary to operate, just like money. Organizations should act carefully since some actions and events can increase their legitimacy, while others can decrease it. This is a very relevant aspect to be considered, since a significant decrease in the organization’s legitimacy could ultimately determine the loss of its right to operate. In other words, the existence of a sufficient level of legitimacy is a necessary condition for the *durable survival of the organization*.

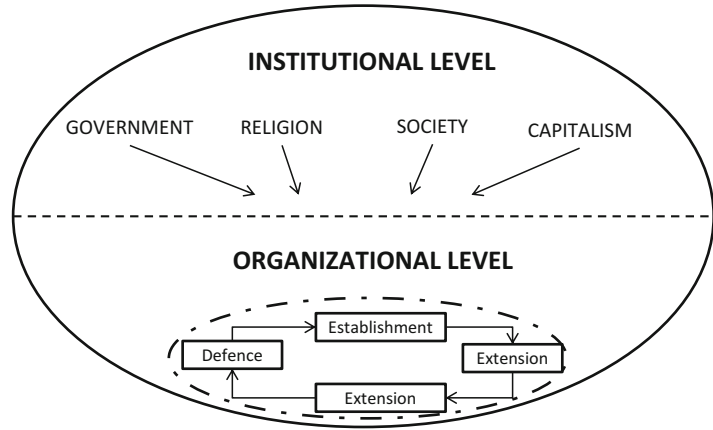
The two abovementioned perspectives of legitimacy theory are outlined in Fig. 1.

The theories used in corporate social responsibility (CSR) and sustainability literature can be categorized in the following categories:

- Economic theories, which focus only on the economic aspects of CSR and sustainability issues, with specific reference to financial stakeholders interests
- Social and political theories, which focus mainly on CSR practices

Legitimacy Theory,

Fig. 1 The two perspectives of legitimacy theory. (Source: Tilling 2004b, p. 3)



The former include decision usefulness theory, agency theory, and positive accounting theory, while the latter include legitimacy theory, stakeholder theory, and institutional theory.

Main Aspects of Legitimacy Theory

According to legitimacy theory, the legitimacy of an organization (e.g., a business entity) to operate within a society depends on an *implicit contract* between the organization and the society. If the organization does not respect the society's norms and expectations, it can lose its license to operate. In this perspective, organizations decide to voluntarily report on their activities if these activities are expected by the community of reference (Deegan 2002).

The concept of *social contract* is very relevant in legitimacy theory. It has been described in these terms (Shoker and Sethi 1973, p. 67): "Any social institution – and business is no exception – operates in society via a social contract, expressed or implied, whereby its survival and growth are based on:

1. The delivery of some socially desirable ends to society in general; and
2. The distribution of economic, social or political benefits to groups from which it derives its power."

The concept of social contract implies the existence of various expectations of the whole society

about the organization's conduct and operations (Deegan 2000; Mathews 1993). To survive over time, society should perceive that the organization has breached its social contract (Deegan 2002). If society is not satisfied about the organization's activities and operations, it will revoke the social contract, thus implying that the organization can no longer operate (Deegan and Rankin 1997). This could happen in various forms, e.g., customers may reduce the demand for the organization's products; the organization's suppliers may reduce or eliminate the supply of labor and financial capital; and laws could prohibit the actions which do not conform with the community's expectations (Deegan 2002).

Since social expectations change over time, also the terms of the social contract are not stable and permanent, changing over time. This means that the organizations' needs to disclose about their activities also change over time. In the case the community of reference deems the social contract has been breached, organizations should enact remedial actions necessary to guarantee their lasting survival over time. Among these remedial actions, legitimacy theory provides the notions of "legitimacy gap" and "legitimacy strategies." These concepts are described in the following:

- (a) According to Lindblom (1994), a "legitimacy gap" is the difference between the expectations of the community (and more in detail of the relevant stakeholders) about how an

organization should act and how the organization does act. A legitimacy gap creates a threat to the organization's legitimacy. "In the view of the Legitimacy Theory (Lindblom 1994), for listed companies, the increased pressures coming from the external environment also have to be considered, given their importance in terms of both positive and negative impacts, on the context considered as a whole. In this perspective, the purpose of sustainability reporting is to fill the legitimacy gap until the desired level is achieved (Lindblom 1994), pursuing the objective of increasing, maintaining and restoring the consensus by the stakeholders. Their consensus is a necessary condition to act effectively in the socio-economic context in which they operate. Communication is the most important element for the legitimation within the reference environment and for the approval of the stakeholder [...]. Being socially responsible is not enough to legitimize oneself, it is also required to communicate the objectives, the actions and the results obtained [...]. Accordingly, sustainability reporting is an aspect of particular importance for the legitimacy processes, contributing to improve the transparency in the relationships and to increase the credibility and the confidence between the community and the stakeholders" (Vitolla and Rubino 2017, p. 1915).

- (b) If managers perceive that the organization's operations are not in tune with the social contract, they activate remedial actions aimed at becoming legitimate (Dowling and Pfeffer 1975). Since legitimacy theory is based on stakeholders' perceptions, these remedial actions should be publicized through an appropriate disclosure (Cornier and Gordon 2001; Deegan 2002).

According to Hybels (1995, p. 243), "Legitimacy has often been conceptualized as simply one of many resources that organizations must obtain from their environments. But rather than viewing legitimacy as something that is exchanged among institutions, legitimacy is better conceived as both part of the context for exchange and a by-product

of exchange. Legitimacy itself has no material form. It exists only as a symbolic representation of the collective evaluation of an institution, as evidenced to both observers and participants perhaps most convincingly by the flow of resources."

According to Hybels, it is important to identify the relevant stakeholders in legitimacy theory since each of these stakeholders influences the resources necessary for the organization's establishment, growth, and survival. In his opinion, four main critical organizational stakeholders control different resources:

1. *The state*, which controls contracts, grants, legislation, regulation, and tax
2. *The public*, which controls patronage (as customer), support (as community interest), and labor
3. *The financial community*, which controls investments
4. *The media*, which controls some direct resources and can influence stakeholders' decisions

Focusing specifically on *organizational legitimacy theory*, there are four phases in which an organization (e.g., a firm) could be, i.e.:

1. *Establishing phase*: this is the first phase of the legitimacy's cycle. It is an early phase of the organization's development, in which it is important that the organization focuses on financial competence, quality, and desirability and that it operates under accepted standards of professionalism (Hearit 1995, p. 2).
2. *Maintaining phase*: this is the phase in which most organizations operate. In this phase, main organizations' activities include "(1) ongoing role performance and symbolic assurances that all is well, and (2) attempts to anticipate and prevent or forestall potential changes to legitimacy" (Ashford and Gibbs 1990, p. 183). The maintenance of legitimacy is almost complicated to achieve, as community expectations are non-static, but change frequently over time. Therefore, organizations should promptly react to the change of expectations in their environment of reference.

3. *Extending phase*: an organization could operate within a phase where it is necessary to extend its legitimacy, e.g., if it is entering in new markets. In this case, management should try to win the confidence and support of different potential constituents (Ashford and Gibbs 1990, p. 180).
 4. *Defending phase*: in this phase, the organization's legitimacy is threatened by an incident (internal or external) and requires specific defense activities. Most accounting research on organizational legitimacy focuses on this phase.
 2. Seek to change the perceptions of the relevant stakeholders without changing its actual activities and performances.
 3. Seek to manipulate the stakeholders' perception deflecting their attention from the problematic issue to other more appealing issues.
 4. Seek to change the stakeholders' expectations about the organization's performance.
- More in detail, these four strategies can be used under these conditions:

Key Issues

This entry examines legitimacy theory with specific reference to sustainability-related accounting research. Under this perspective, there is a strong relationship between legitimacy theory and voluntary disclosure. Campbell et al. (2003) focused on the role of voluntary disclosure in attempting to close a perceived legitimacy gap. According to their contribution, levels and patterns of voluntary disclosure may vary depending whether the organization's products:

- (a) Have negative connotations (e.g., tobacco companies, whose production is usually considered as illegitimate)
- (b) Have not negative connotations, but produce some undesirable by-products

In the first case, the organization probably cannot get legitimacy in the eyes of its stakeholders. In this case, disclosure will simply tend to limit the damages associated with the bad organization's image and convince stakeholders that the organization is "not all that bad."

In the second case, disclosure can be used to improve the organization's image.

According to Gray et al. (1995), if the organization's management believes the organization's legitimacy is threatened, it can adopt the following strategies:

1. Seek to educate and inform the relevant stakeholders about actual changes in the organization's activities and performances.

1. The first strategy is the answer to a "legitimacy gap" emerging from a failure of the organization's performance.
2. The second strategy is the answer to a legitimacy gap emerged as a consequence of a misperception of some relevant stakeholders.
3. The third strategy is the answer to a manipulation.
4. The fourth strategy is the answer to unrealistic or incorrect stakeholders' expectations about the organization's responsibilities.

Future Directions

Legitimacy and stakeholder theories assume that the disclosure of financial, social, and environmental information (such as corporate social responsibility or sustainability reports) is a relevant part of the dialogue between the organization and its stakeholders. This disclosure is very relevant since it helps legitimize the organization's behavior and influences perceptions and expectations of relevant stakeholders (Adams and Larrinaga-González 2007; Adams and McNicholas 2007). According to legitimacy theory, there is a strong relationship between sustainability-related disclosure and the organization's *reputation*. The latter can be understood under three main aspects (Michelon 2011):

1. Commitment to stakeholders (Ullmann 1985; Unerman and Bennett 2004)
2. Financial performance (Roberts and Dowling 2002; Deephouse and Carter 2005)
3. Media exposure (Erffle and McMillan 1990; Neu et al. 1998).

Sustainability-related disclosure could be used by organizations to manage their reputation risk (Bebbington et al. 2008), thus projecting a socially accountable image (Gray et al. 1995). As a consequence, the organization can increase its legitimacy and manage its reputational risks (Bebbington et al. 2008; Fombrun et al. 2000). According to Michelon (2011), *reputation* is a determinant of sustainability disclosure, and it has main points in common with the concept of legitimacy. According to Friedman and Miles (2001), reputation is a determinant of sustainability disclosure since organizations communicate to external stakeholders their engagement with social, environmental, and sustainability issues.

Also *signaling theory* is useful to explain the reasons why organizations engage in sustainability-related reporting. It assumes that organizations use this type of communication to signal their reputation to the relevant stakeholders.

Further research deserves attention to the differences and the relationships between *legitimacy* and *reputation*. The former can be defined as “the generalized perception or assumption that the action of an entity are desirable, proper and appropriate” (Suchman 1995, p. 573), while the latter is considered as a synonymous of image, prestige, and esteem (Shenkar and Yuchtman-Yaar 1997). According to Deephouse and Carter (2005, p. 331), reputation is associated with the relative position of an organization among its counterparts. Legitimacy theory could therefore be used in the future to explore also the concept of reputation.

Summary

The chapter structure is organized as follows: firstly, a definition of legitimacy theory in the context of sustainability-related accounting research is provided. The introduction explains the existence of two main classes of legitimacy theory (i.e., the “institutional legitimacy theory” and the “strategic legitimacy theory”). Thereafter, the main aspects of legitimacy theory are described. The subsequent two sections address the key issues and future directions. Cross-references and references close the chapter.

Cross-References

► Durable Survival of the Organization

References

- Adams, C. A., & Larrinaga-González, C. (2007). *Engaging with organisations in pursuit of improved sustainability accounting and performance*, accounting. *Auditing and Accountability Journal*, 20(3), 333–355.
- Adams, C. A., & McNicholas, P. (2007). Making a difference: Sustainability reporting. *Accounting, Auditing and Accountability Journal*, 20(3), 382–402.
- Ashford, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimization. *Organization Science*, 1(2), 177–194.
- Bebbington, J., Larrinaga-González, C., & Moneva, J. M. (2008). Corporate social responsibility and reputation risk management. *Accounting, Auditing and Accountability Journal*, 21(3), 337–362.
- Campbell, D., Craven, B., & Shrivies, P. (2003). Voluntary social reporting in three FTSE sectors: A comment on perception and legitimacy. *Accounting, Auditing and Accountability Journal*, 16(4), 558–581.
- Cornier, D., & Gordon, I. (2001). An examination of social environmental reporting strategies. *Accounting, Auditing and Accountability Journal*, 14(5), 587–616.
- Deegan, C. (2000). *Financial accounting theory*. Sydney: McGraw Hill Book Company.
- Deegan, C. (2002). The legitimizing effect of social and environmental disclosures – A theoretical foundation. *Accounting, Auditing and Accountability Journal*, 15(3), 282–311.
- Deegan, C., & Rankin, M. (1997). The materiality of environmental information to users of annual reports. *Accounting, Auditing and Accountability Journal*, 10(4), 562–583.
- Deephouse, D. L., & Carter, S. M. (2005). An examination of differences between organizational legitimacy and organizational reputation. *Journal of Management Studies*, 42(2), 329–360.
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*, 18(1), 122–136.
- Erfle, S., & McMillan, H. (1990). Media, political pressure and the firm: The case of petroleum pricing in the late 1970s. *Quarterly Journal of Economics*, 105(1), 115–134.
- Fombrun, C. J., Gardberg, N. A., & Barnett, M. L. (2000). Opportunity platforms and safety nets: Corporate citizenship and reputational risk. *Business and Society Review*, 105(1), 85–106.
- Friedman, A. L., & Miles, S. (2001). Socially responsible investment and corporate social and environmental reporting in the UK: An exploratory study. *British Accounting Review*, 33(4), 523–548.

- Gray, R., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies. *Accounting, Auditing and Accountability Journal*, 8(2), 78–101.
- Guthrie, J. & Ward, L. (2007). Legitimacy theory: A story of reporting social and environmental matters within the Australian food and beverage industry. Proceeding of the fifth Asia Pacific interdisciplinary research in accounting conference, Auckland, 8–10 July 2007.
- Hearit, K. M. (1995). Mistakes were made: Organizations, apologia, and crises of social legitimacy. *Communication Studies*, 46(1–2), 1–17.
- Hybels, R. C. (1995). On legitimacy, legitimation and organizations: A critical review and integrative theoretical model. *Academy of Management Journal*, Special Issue: Best Papers Proceedings, 241–245.
- Lindblom, C. K. (1994). The implications of organizational legitimacy for corporate social performance and disclosure, paper presented to the Critical Perspectives on Accounting Conference, New York
- Mathews, M. R. (1993). *Socially responsible accounting*. UK. London: Chapman & Hall.
- Michelon, G. (2011). Sustainability disclosure and reputation: A comparative study. *Corporate Reputation Review*, 12(2), 79–96.
- Neu, D., Warsame, H., & Pedwell, K. (1998). Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23(3), 265–282.
- Roberts, P. W., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*, 23(12), 1077–1093.
- Shenkar, O., & Yuchtman-Yaar, E. (1997). Reputation, image, prestige and goodwill: An interdisciplinary approach to organizational standing. *Human Relations*, 50(11), 1361–1381.
- Shoker, A. D., & Sethi, S. P. (1973). An approach to developing societal preferences in developing corporate action strategies. *California Management Review*, 97–105.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Journal*, 20(3), 571–610.
- Tilling, M. V. (2004a). Some thoughts on legitimacy theory in social and environmental accounting. *Social and Environmental Accountability Journal*, 24(2), 3–7.
- Tilling, M. V. (2004b). *Refinements in legitimacy theory in social and environmental accounting*. School of Commerce: Flinders University.
- Ullmann, A. (1985). Data in search of a theory: A critical examination of the relationship among social performance, social disclosure, and economic performance. *Academy of Management Review*, 10(3), 540–577.
- Unerman, J., & Bennett, M. (2004). Increased stakeholder dialogue and the Internet: Towards greater corporate accountability or reinforcing capitalist hegemony? *Accounting, Organizations and Society*, 29(7), 685–707.

- Vitolla, F., & Rubino, M. (2017). Legitimacy theory and sustainability reporting. Evidence from Italy. In D. Vrontis, Y. Weber, & T. Tsoukatos (Eds.), *10th Annual conference of the EuroMed Academy of business. Global and national business theories and practice: Bridging the past with the future*. EuroMed Press.

Legitimacy Theory II: Legitimacy Judgments

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Synonyms

Consumer judgments; Evaluative judgments; Legitimacy judgments

Definition

Legitimacy judgments address how actors individually or collectively are able to judge organizations and their legitimacy supportive or defensive actions, through their (written and/or spoken) evaluations. Through these evaluations, organizational legitimacy can be (dis)supported. Non-organizational actors who provide evaluative judgments can do this un(invited) and via various (media) channels. For example, media organizations such as newspapers or news websites can review a sustainable organization and put forward how “legit” an organization is on the basis of their evaluation of the organization, its products, services, and action. Additionally, an individual Facebook user can judge an organization by sharing his or her personal experience with family, friends, or colleagues. Moreover, a blogger can share and discuss his or her evaluation about an organization with like-minded individuals who are able to provide comments on this blog post. This can influence how sustainable organizations

and their products or services are judged and (dis) accepted by the general public. Consequently, legitimacy judgments are closely related with organizational legitimacy theory as they provide insights on how legitimacy management is evaluated by non-organizational actors.

Introduction

Organizational legitimacy (see entry ► [“Organizational Legitimacy”](#)) and/or by itself is how actors from the (in)direct environment perceive and approve an organization as a whole. Organizations construct or manage legitimacy in order to be accepted as “good” organizations by actors that “observe” the organization and its actions (Suchman 1995). Construction of legitimacy concerns the process of “legitimation” (actions or steps) through which an organization strives to be accepted by its environment. To illustrate an organization can manage legitimacy by sharing their sustainability reports or by responding to customer questions via their Twitter account in order to manage legitimacy.

Legitimacy is often discussed as an organizational asset or property; however, legitimacy can also be seen as a judgment about an organization and its products, services, and actions provided by individuals on the micro level as well as groups of actors on the macro level (Bitektine and Haack 2015). Individuals may (dis)approve of an organization by evaluating its current approach to sustainability, for example, by searching for information about this organization or by reading about it in a newspaper or online platform. This evaluation may lead to a judgment shared privately or in the public domain with other actors, which in turn may influence how other stakeholders perceive the organization being judged in the long run. As such legitimacy is also constructed by external stakeholders through their evaluative judgments. This evaluator perspective on legitimacy has been introduced and discussed in recent years in the management literature (Bitektine and Haack 2015; Deephouse et al. 2017; Tost 2011). With regard to sustainability, legitimacy judgments have been addressed in cases such as the

credibility of the Canadian oil sands industry (Finch et al. 2015) and the negative influence of online protest on organizations, their brand image, and the purchase intentions of consumers (van den Broek et al. 2017).

Key Issues

Evaluative judgments can be constructed through various channels and by various actors. More importantly individuals may validate their evaluation of an organization by comparing it with the judgment of other individuals or by consulting public judgment validation institutions. Bitektine and Haack (2015, p. 54) mentioned three essential judgment validation institutions:

- Media (e.g., journalists’ or experts’ judgments via online or offline media)
- Government (regulators’ judgments)
- Judicial system (jury and judges’ judgements)

These institutions are seen as critical sources of validity that are able to influence the judgments of others. For example, journalists can evaluate how much effort a food company puts into waste management in order to become more sustainable and can point to misleading practices, such as greenwashing. Experts can reflect in the public domain on the actions of a company in becoming more sustainable. Regulators can develop waste management monitoring or certifying systems that support their evaluation of an organization in that area, and judges can evaluate if the current approach of an organization adheres to the law.

In addition to these public judgment validation institutions, individuals can also validate their evaluations via online communities. Actors are able to share their thoughts through the exchange of written and audiovisual content with like-minded individuals (see entry ► [“Online Communities”](#)). Together with others, they produce online-mediated evaluative judgments which are “... written messages, images, or audiovisual material – that a group of citizens produces, shares, and mediates via online communities outside the direct influence of a company. Essentially,

online-mediated OL judgments made through online communities extend OL from a company or individually driven process into a multilevel system in which citizens construct OL collectively” (Schulz et al. 2018, p. 292).

For example, a customer can share his or her thoughts about an organization in a Facebook post or in a personal review on a blog or YouTube video. Individual actors with many “followers” on such social media platforms, so-called influencers, can become influential evaluators, due to the reach of their shared evaluative judgments which may influence their followers’ perception of an organization. Consequently, evaluative judgments produced by influential individuals, as (dis)approval of an organization may lead to a collective consensus about said organization within a group of actors and may influence the evaluation of each individual following and participating in such a community. These influential individuals can be seen as experts, by their followers, as they may attract and influence a large group of individuals who consult their media channel to validate their evaluation of an organization and its products, services, and actions. A topic introduced by such an influencer can trigger feedback from many other individuals interacting with each other and discussing such a topic or sharing the topic with others outside the community. Online communities therefore function as informal public judgment validation institutions.

Groups of actors, for example, activists’ groups can collectively respond to information shared by an organization in order to manage its legitimacy. These actors can share their thoughts and opinions through various media channels or in online communities. In addition, organizational issues can be brought to light or can be discussed within those online communities, for example, by fans of a certain brand or product category such as sustainable food or cosmetics. Actors in such communities can collectively judge organizations by providing feedback on questions from others about that particular organization or by introducing organizational information or their first-hand experience with its products or services.

Summary

Evaluative judgments rendered by individuals or groups can influence organizational legitimacy in a positive or negative way. Right now, social media platforms such as Twitter or YouTube are becoming increasingly important for organizations in constructing and defending legitimacy. Consumers are able to influence legitimacy through their evaluative judgments, for example, through ratings and comments on organizations via Google Maps. However, organizations are also able to approve or defend evaluative judgments coming from non-organizational actors through their own or public social media platforms, online communities, or other media channels such as the press. As a consequence, organizations have to become more proactive in dealing with and responding to evaluative judgments. Moreover, they have to accept that non-organizational actors are part of the legitimization process that can construct legitimacy through their evaluative judgments independently and uninvited.

Another important challenge regarding evaluative judgments in the future is the growing influence of technical developments such as artificial intelligence (AI). AI, for example, chat robots or avatars, will come into play via online (social media) platforms. These technologies will be able to evaluate organizations on the basis of automated replies via websites, e-mails, or social media channels, hosted by AI influencers “puppeteered” by technology companies. For example, through avatars such as Lil Miquela, an Instagram influencer with more than one million followers, who is not a real person but engineered by a US technology start-up (Petrarca 2018). Such developments are also closely related to issues around “fake news,” which concerns all misinformation that is publicly shared and re-shared by individuals, groups, and other organizations. Finally, these developments show that individuals may, next to the press, government, and law representatives, consult informal public judgment validation institutions such as online communities in order to validate their evaluation of an organization.

On that account organizations have to become more aware of whom, how, and where evaluative

judgments about their organization are shared. Analyzing and understanding individual as well as collective (human and artificial) legitimacy judgments is key here as these judgments will be shared via various channels and will echo online and offline by means of other individuals and groups re-sharing written and audiovisual content.

Cross-References

- [Online Communities](#)
- [Organizational Legitimacy](#)
- [Stakeholder Management](#)

References

- Bitektine, A., & Haack, P. (2015). The “macro” and the “micro” of legitimacy: Toward a multilevel theory of the legitimacy process. *Academy of Management Review*, 40(1), 49–75. <https://doi.org/10.5465/amr.2013.0318>.
- Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. (2017). Organizational legitimacy: Six key questions. In R. Greenwood, C. Oliver, T. Lawrence, & R. Meyer (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 27–52). <https://doi.org/10.4135/9781446280669.n2>.
- Finch, D., Deephouse, D., & Varella, P. (2015). Examining an Individual’s legitimacy judgment using the value–attitude system: The role of environmental and economic values and source credibility. *Journal of Business Ethics*, 127(2), 265–281. <https://doi.org/10.1007/s10551-013-2031-5>.
- Petrarca, E. (2018, mei 14). Body Con Job. Miquela Sousa has over 1 million followers on Instagram and was recently hacked by a Trump troll. But she isn’t real. Accessed 26 June 2019, from The Cut website: <https://www.thecut.com/2018/05/lil-miquela-digital-avatar-instagram-influencer.html>
- Schulz, D., Jonker, J., & Faber, N. (2018). Outside-in constructions of organizational legitimacy: Sensitizing the influence of evaluative judgments through mass self-communication in online communities. *International Journal of Communication*, 12, 290–312.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571. <https://doi.org/10.2307/258788>.
- Tost, L. P. (2011). An integrative model of legitimacy judgments. *Academy of Management Review*, 36(4), 686–710. <https://doi.org/10.5465/amr.2010.0227>.
- van den Broek, T., Langley, D., & Hornig, T. (2017). The effect of online protests and firm responses on shareholder and consumer evaluation. *Journal of Business Ethics*, 146(2), 279–294.

Liability

- [Responsibility](#)

Liability in Nonprofit Sector

- [Accountability in Nonprofit Sector](#)

License to Operate

- [Acceptability of Operations](#)
- [Legitimacy of Operations](#)

Life Cycle

- [Product Life Cycle](#)

Life Cycle Analysis

- [Life Cycle Assessment: Products and Services](#)

Life Cycle Application

- [Life Cycle Management II](#)

Life Cycle Assessment

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Description

Life cycle assessment (LCA) methodology is a standardized method for assessing the potential

environmental impact of a product or service throughout its lifetime (ISO 14040). As such, it represents a valuable tool by which researchers and organizations can identify, and avoid, unnecessary environmental burdens that have a negative impact on the ecological health of the globe. Environmental sustainability challenges mainly stem from humanity's current production and consumption habits. In this regard, there is a need to develop production practices and consumption behaviors that support sustainable development. It is imperative that we find solutions by which we can reduce environmental impacts and resource use within production chains. The first ISO standard for LCAs was published in 1996, and updated versions 14040 and 14044 were published in 2006. These LCA standards act as valuable guidelines and standards by which practitioners can reduce their (Klöppfer and Grahl 2014) carbon footprint and product environmental footprint. It also acts as a tool that can support decision-making pertaining to various questions related to the environmental impacts of products and systems.

Introduction

The LCA methodology was developed as a means of evaluating the impact that a product has on the environment throughout its life cycle. The method aims to define the environmental effects of the whole production and distribution system, the most significant environmental impacts, and the most significant life cycle phases related to the most significant environmental impacts.

The contemporary economies of the majority of industrial countries are predominantly based on a take-make-and-dispose system, even though recycling practices have recently been developed in many countries. This take-make-and-dispose system relies on humanity having access to ready forms of resources and energy, a sufficient number of sinks for waste, and enough money to cure the adverse environmental impacts (Webster 2016, p. 332). However, although our current way of living is established on these grounds, we cannot continue along this route.

Climate change, the diminishing quality of air in cities, and lack of arable land are examples of the sustainability challenges that humankind is facing. The magnitude of these sustainability challenges is continuing to expand due to the growing number of people in the world, the increasing number of middle-class people, and rising consumption.

The challenges mainly stem from the current production and consumption habits. Market liberalization has shifted production to regions in the world in which the cost of labor and commodities is significantly lower than that on offer in developed countries. In many cases, this mainly results from a lack of legislation that protects the environment, workers, and stakeholders in low-cost manufacturing economies. However, the sustainability challenges are not limited to less-developed nations. Global environmental challenges, like climate warming, are not dependent on where the impact is produced. Besides existing consumption habits, trends like urbanization and increasing standard of living have incurred unexpected environmental implications in developed countries.

Due to the length and scale of production chains and the ever-more complicated production processes involved, it is imperative that any evaluation of environmental impacts spans the end-to-end life of a product, from raw material through to disposal. The LCA was developed to utilize database information pertaining to the existing processes in which the event measurement data is not available or is considered too expensive to compile. LCAs also allow the use of calculated or estimated data if such information is determined to be in line with the use purposes of the results. Therefore, LCAs are recognized as one of the best methodologies for the evaluation of the environmental impacts of products (Cherubini et al. 2009).

A Brief History of the LCA

In the 1960s, people were mostly unconcerned about the sustainability of economic growth. However, gradually, as energy consumption

rapidly increased, waste disposal issues became more common, and evidence started to emerge that industrial manufacturing was causing air and water pollution; questions concerning resource use and energy consumption emerged throughout the product chain.

As a result, in cooperation with the scientific community and industry representatives, developed a methodology that could be employed to the assess resource and energy use, solid waste disposal, and pollutants associated with a manufactured product. This methodology was referred to as resource and environmental profile analysis (REPA), and it was inspired by material flow accounting (Klöpffer and Grahl 2014, p. 7). The first applications of the methodology were focused on chemical intermediates and beverage packages at the 1960s (Bjørn et al. 2018). The sufficiency of resources came under further public scrutiny following the Club of Rome's report titled *Limits of Growth* in 1972 (Klöpffer and Grahl 2014, p. 7). This report assessed the connection between economic growth and sufficiency of material and energy resources. At the same time, the oil crisis also turned the discussion toward the efficient use of resources.

Public and academic awareness of the environmental impacts of production increased as evidence about the depletion of the ozone layer, climate change, acidification, and eutrophication emerged. Consequently, it was necessary to develop the REPA methodology so that it could quantify resource use and emissions while also assessing the environmental impacts and ecological consequences associated with a product throughout its life cycle. This was somewhat challenging as, in most cases, the uncertainties related to environmental sustainability increase exponentially the further the point of evaluation is from the actual source of emission. Therefore, as a starting point to assist studies that incorporated environmental impact assessments, the so-called midpoint approach was developed. This approach was justified by the fact that, in many cases, it is more important to assess the potential for environmental impacts without increasing the uncertainty that is inherent in the results.

The first international ISO standards pertaining to LCA were published in 1996, and they also included the impact assessment phase. The assessment of environmental impacts continued to evolve alongside the emergence of new findings in the scientific context. For example, the environmental assessment of chemicals benefitted ecotoxicology (a science developed for assessing the effects of toxic chemicals derived from natural or synthetic sources on biological organisms). Even after the publication of the international LCA standards, the methodology was scarcely utilized among industry representatives primarily because the formative applications were still considered to be too resource intensive and, as such, the costs outweighed the benefits of any LCA assessments. The approach involved typically consisted of a bottom-up method that aimed to collect nearly all the input and output data from the production chain before identifying the main environmental impacts and the life cycle stages at which those impacts could be observed. However, the uncertainty regarding some impact category data and the inconsistency in data quality related to alternative product chains frequently led to the conclusion that the methodology was still in its infancy. After 10 years, the updated versions were released, and a top-down approach was recommended by which the focus of the study was firmly placed on reducing resources.

Throughout these developments, awareness of the sustainability challenges continued to grow, and the need to help customers to choose more sustainable products and services was increasingly recognized. As a result, the first instructions to calculate carbon footprint for products and services, called PAS 2008, were published in the United Kingdom in 2008. The guidelines were developed based on LCA standards, but as they were purely focused on climate change, they were precise.

The introduction of carbon footprint calculation standards clearly increased the demand for LCA-qualified professionals. It also encouraged the development of the widely accepted international standards, and, in 2012, the first international standard "Product Life Cycle Accounting and Reporting Standard" was published by the

GHG Protocol after businesses, governments, and other bodies convened at the World Resource Institute (WRI) and World Business Council for Sustainable Development (WBCSD). Two years later, the first carbon footprint ISO standard was published (ISO 14067:2013).

The popularity of the carbon footprint standards also instigated the development of other footprint methodologies by which the issues threatening sustainability could be addressed. The Water Footprint Standard ISO 14046 was released in 2014. It was based on the LCA ISO standards and the carbon footprint ISO standards. A nutrient footprint methodology has also since been developed, and some publications are already available in scientific forums (e.g., Grönman et al. 2016; Leach et al. 2012; Metson et al. 2012). Land footprint suggestions have also been presented, but scholars have yet to agree on a universal definition of land footprints. Generally speaking, during the last decade, land use-related impacts have been acknowledged as representing one of the main challenges in LCAs, as the methodology was initially developed to assess industrially manufactured products and services. In more recent times, researchers have turned their attention to developing LCA-based handprint indicators.

LCA Methodology

The LCA is a tool that can be used to assess the environmental impacts a product incurs during its life cycle (ISO 14040). The method is structured, comprehensive, and internationally standardized (Väisänen 2014). There is broad agreement in the scientific community that LCAs represent one of the best methodologies for the evaluation of environmental loading associated with product and services (Cherubini et al. 2009). An LCA is used as a basis for many other applications, like the carbon and water footprint and the product environmental footprint (PEF) guidelines, which provide more detailed information about the calculation principles associated with these specialized applications than the original LCA standards.

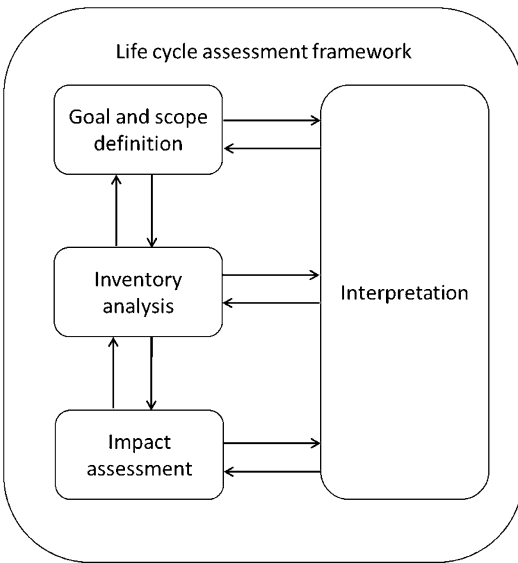
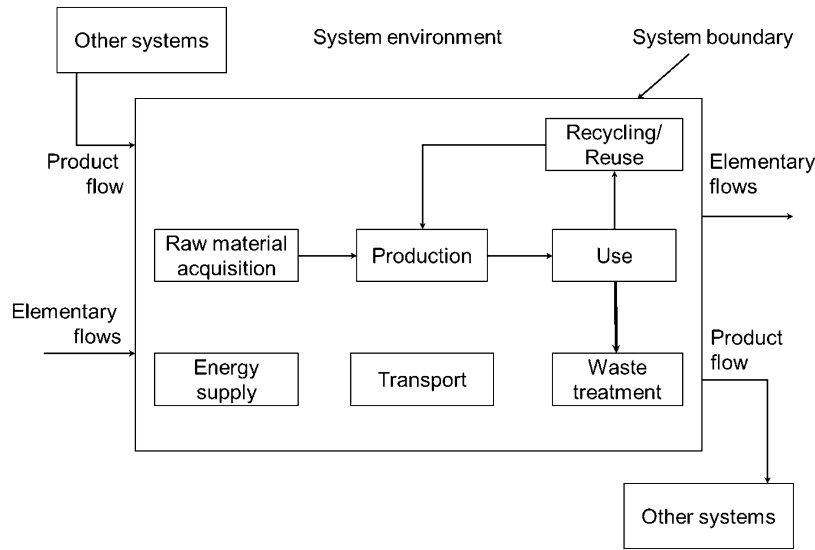
Both environmental aspects and potential environmental impacts across the full life cycle of the product are studied in the LCA. One of the main objectives of the LCA method is to employ a systematic overview and perspective to avoid shifting the environmental burdens from one life cycle stage to another or from one process to another. Typically, the LCA does not address economic or social aspects, although the life cycle approach and methodologies may also be applied to them (EN ISO 14044:2006). The LCA method is defined by the international standards ISO 14040 and ISO 14044, and these standards focus on environmental impacts. Therefore, the overview of the methodology provided in this entry relates to these standards.

In an LCA, the life cycle of a product is modeled as a product system that performs at least one defined function. The essential feature of a product system is demarcated by its function, and it contains the processes that are required during different life cycle phases. These processes are linked to each other by flows (intermediate products, waste, products, or elementary flows). An example of a product system is presented in Fig. 1 (Väisänen 2014).

Following the guidelines given in the ISO standards 14040 and 14044, an LCA involves four steps: goal and scope definition, life cycle inventory (LCI), life cycle impact assessment (LCIA), and life cycle interpretation (ISO 14040). These four steps are presented in Fig. 2.

The first step in the LCA is goal and scope definition (ISO 14040). During this phase, the purpose and nature of the study are defined together with the target group of the outputs. The goal definition outlines the basis for the research and the framework under which it is performed. It is also essential to describe how the results will be employed in comparative assertions that are intended to be disclosed to the public because this has implications in terms of the study requirements and how the findings will be critically reviewed during the results interpretation phase. Since LCA studies form a part of a more extensive decision-making process, it is crucial to clearly define what role the results are anticipated to play or how these results should be viewed. The LCA

Life Cycle Assessment, Fig. 1 Product system (ISO 14040:2006)



Life Cycle Assessment, Fig. 2 LCA framework (ISO 14040:2006)

is a scientific method by which potential environmental impacts can be assessed; however, it does have some inherent limitations that entail that the outputs can be considered to be representative of the whole situation. Therefore, it is vital to define the extent of the usability of the results. If the report is intended to inform a new policy or regulation, it will be underpinned by very different requirements to those that are designed to help a

company decide the environmental implications of one of its processes. The data requirements and sensitivity will also vary across these two instances, and, as such, the resources required to complete the LCA will also vary.

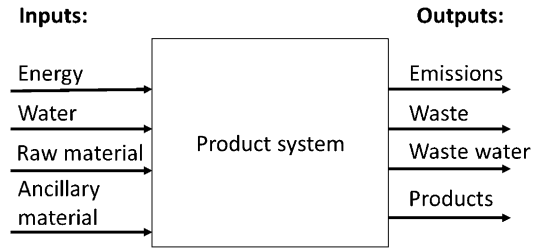
Determining the scope of the study involves setting the system boundaries in the form of a flow diagram. Dividing a product system into its components in the form of processes and flows facilitates the identification of the inputs and outputs of the product system (Väisänen 2014). The boundaries and the level of modeling are designed to ensure that the goal is achieved (ISO 14040:2006). LCA, as the name suggests, is the study of the entire life cycle of a product. When an LCA is carried out, usually all phases of the life cycle are considered, including material acquisition from environment, material processing and transportation, production of the product, distribution to users, use, reuse, maintenance, and disposal, at which point the materials have no use value (see Fig. 1). When the entire life cycle is considered, the approach can be referred to as a cradle-to-grave assessment. Sometimes the questions that an LCA aims to answer do not require modeling the entire life cycle; in such cases a partial LCA can be performed. In a partial LCA, the system under study is limited from the beginning or the end: cradle-to-gate, where the assessment ends after the production phase, or gate-to-

grave, where only use phase and recycling or disposal are considered. In fuel studies, well-to-wheels, well-to-tank, or tank-to-wheels are used to describe the system boundary settings.

LCA is a relative approach (ISO 14040:2006) that can be used to compare one system to another (Fava 2005). It is designed around the functional unit of a product or service, which originates from the function of the studied service or product. The functional unit describes the object of the study, and the second step in the LCA, inventory analysis, is carried out based on the functional unit and the corresponding reference flow, which indicates the amount of product required to fulfill the defined functional unit (ISO 14040; Fava 2005).

The goal and scope of an LCA should be consistent and defined based on the intended application of the study. The LCA has an iterative nature, and, thus, the scope may need to be refined during the study (ISO 14040, ISO 14044). Two different approaches to an LCA are presented in the ISO 14040 standard. The first assigns flows and potential environmental impacts to a specific product system, while the second studies the environmental consequences of possible (future) changes between alternative product systems (Väisänen 2014). The intended use of the first approach could be, for example, environmental footprints, and the second approach can be used, for example, when the interest is to examine the potential environmental impacts of decisions concerning large systems, such as switching from partly fossil-fueled electricity production forms to renewables on a system scale.

The goal and scope definition of an LCA forms a foundation for inventory analysis (LCI). In the LCI analysis, data for input and output flows from the processes that form the studied product system are collected (Fig. 3). LCI analysis gives the inventory of the input and output flows of the studied system, which transition across the system boundary. These results are described in the form of numerical values and cover the entire life cycle. In other words, the inventory flows that cross the system boundary line can be used as a basis for the impact assessment phase (LCIA). The results are presented, for example, in the form of kg/functional unit or MJ/functional unit depending on the

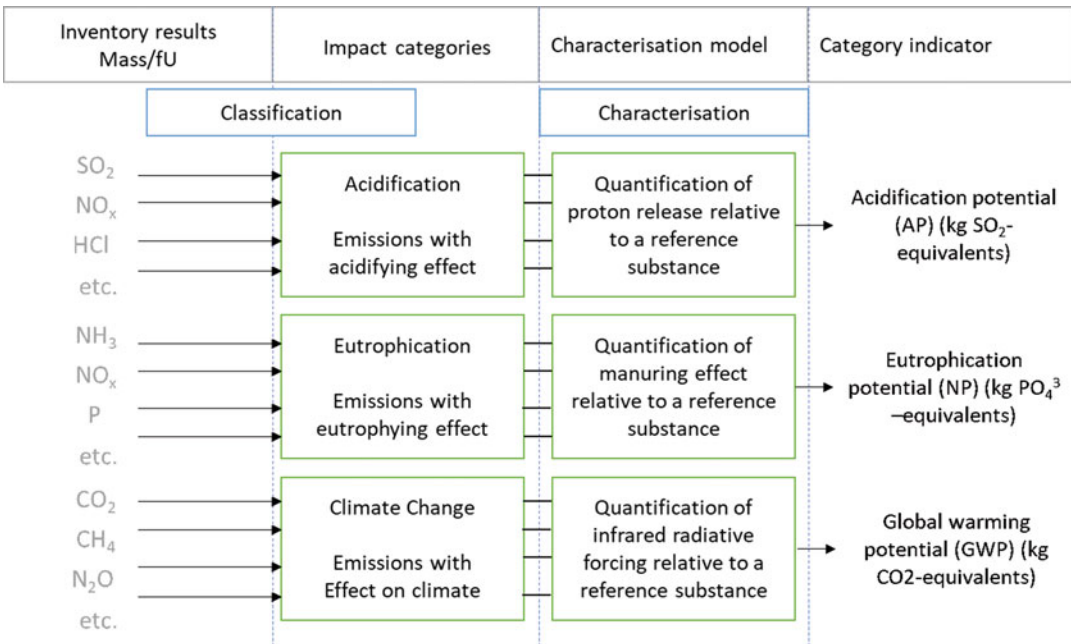


Life Cycle Assessment, Fig. 3 For LCA input and output flows of the system under study need to be defined (Klöpffer and Grahl 2014)

type of flow. During the data collection process, it is crucial to collect the data to such an extent that the study requirements defined in the goal and scope definition phase are met (Köppler and Grahl 2014). For example, if the study aims to assess global warming impact, it is important to collect all the flows that have an influence on this impact category. In this way, the goal and scope definition helps to ensure that the study remains focused on the relevant information and there is no unnecessary data collection.

The third step in the LCA is impact assessment, during which the data produced during the LCI are assigned to impact categories (e.g., climate change, eutrophication) (Klöpffer and Grahl 2014). The impact categories and characterization models will have been specified earlier within the scope definition. This process, during which the input and output flows are connected to relevant impact categories, is called classification (ISO 14044). The impact assessment phase includes three mandatory elements: (1) selection of impact categories, category indicators, and characterization models; (2) classification; and (3) calculation of category indicator result (characterization) (Fig. 4) (Klöpffer and Grahl 2014). After the characterization, the results are presented in the unit of characterization model category indicator, for example, with the values of kgCO₂-eq./functional unit when the IPCC model for the global warming is selected as a characterization model. The selections need to be justified and consistent with the goal and scope of the LCA.

In addition to these mandatory elements, the ISO 14044 standard presents four optional features: normalization, grouping, weighting, and data quality

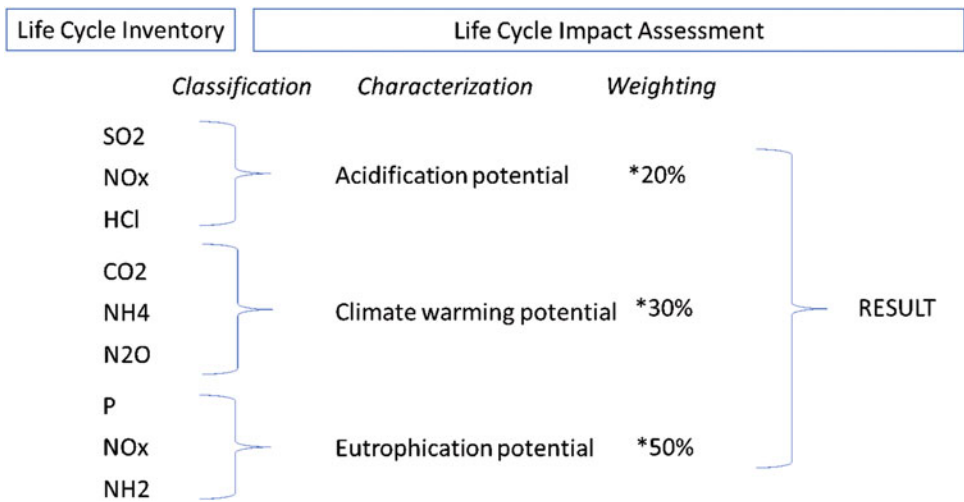


Life Cycle Assessment, Fig. 4 Phases of the life cycle impact assessment (Klöppfer and Grahl 2014)

analysis. During these phases, the results after the mandatory phases are further processed to facilitate the interpretation of the findings. During the normalization, the characterization results are compared to some reference information, and this phase can provide information about the relative importance of the LCIA result. For example, the reference information can be the emissions produced in a particular area. In this case, the results will be normalized in the form of % of emission of one area. In the grouping impact, categories are assigned either by sorting them on a nominal basis or ranking them according to a given hierarchy (e.g., high, medium, and low priority). In the weighting, numerical factors based on value choices are used to change the order of the impact assessment results in a way that some impact categories are weighted higher than others. During the weighting exercise, the results can be aggregated to one single value, such as in the guidelines of product environmental footprint guides (Fig. 5). Identifying a single value that will be used to measure all environmental impacts within a system makes it more straightforward to compare the systems because the weighting steps are based on value choices; the result is not

scientifically based. The last optional element, data quality analysis, studies the significance, uncertainty, and sensitivity of the LCIA results and can include Pareto analysis, uncertainty analysis, and sensitivity analysis (ISO 14044). When these methods are employed, reliability of the results and, impact of selection of data or assumptions to the LCIA results will be understood better.

The fourth and the last step in LCA is interpretation. During this phase, conclusions are drawn from the previous LCI and LCIA results, and recommendations are developed in line with the study objective. During the interpretation phase, all assumptions, including the boundary conditions, should be once again critically assessed (Köppler and Grahl 2014). In the interpretation phase, the quality of data and applied method sufficiency to support the results need to be examined and documented. The regulations are stronger if the LCA is to be used for comparative assertions that will be made publicly available. In such a case, there is a requirement for the outputs to undergo a critical review by internal or external experts or a panel of interested parties, as stated in ISO 14044. Additional requirements and



Life Cycle Assessment, Fig. 5 Results can be aggregated to a single aggregated value by using weighting factors for environmental impact category indicator results

guidance for third-party reports are provided in the ISO 14044 standard.

Different Applications: Footprints, Ecodesigning, and Ecolabelling

From the environmental sustainability point of view, it is necessary to identify the most reasonable solutions not only in terms of product development options but also when comparing alternative system solutions to cover energy needs, water supply needs, or waste treatment needs, among others. In applications of this nature, the LCA supports decision-making and aims to find answers to questions such as the following:

- Is the proposed system more environmentally sustainable than the original one?
- Is the proposed system more environmentally sustainable than its competitors?
- Could the environmental impact of the product chain be reduced if alternative raw materials are used?
- Could the environmental impact of the product chain be reduced if alternative manufacturing methods are used?

- Could the environmental impact of the product chain be reduced if a life cycle stage is located in a country that has abundant water resources?
- Could the environmental impact of the product chain be decreased if the processing phase delivers a more effective way of utilizing secondary flow?

In recent times, product packaging increasingly incorporates footprint labels that help consumers choose the most sustainable product. Footprint calculations consider the whole life cycle, and the calculation ISO standards (ISO 14067:2018 carbon footprint, ISO 14046:2014 water footprint) are based on the LCA ISO standards of LCA (ISO 14040:2006 and ISO 14044:2006). The carbon footprint standards provide more detailed instructions on how to calculate the greenhouse gas emissions of a product chain for communication purposes.

To support environmentally conscious decision-making at a consumer level in the European Union (EU), the EU has introduced new directives (Ecodesign Directive 2009/125/EC, Energy Labelling Directive 2010/30/EU). The aim of these directives has been to encourage manufacturers to direct their attention to the product design phase, which is estimated to determine more than

80% of the environmental impacts of a product (Wenzel et al. 1997). The Ecodesign Directive aims to improve the environmental performance of energy-related products throughout their life cycle. At present, the main focus is on energy efficiency during the use phase; however, based on estimations, in the future, more and more demands have to be set to other environmental aspects as energy consumption decreases and life span of electronics gets shorter (Dalhammar and Machacek 2013).

Significant effort has been invested in the development of LCAs that cover additional sustainability concerns, including social and economic dimensions. This would be especially important in cases that involve developing existing product chains to enable them to fulfill the sustainability expectations of a company's stakeholders.

Discussion

Business Motivation to Conduct a Life Cycle Analysis

The primary motivating factors that encourage companies to carry out LCA studies are cost savings and profitability. Besides considering environmental aspects, economic aspects are of significance because they influence the extent to which an investment is sustainable over a longer-term period (Ristimäki et al. 2013). In parallel to an LCA, life cycle costing (LCCA), environmental life cycle costing, or social life cycle costing (SLCC) can be carried out to provide more information about the risks that may arise in the near future or within a non-limited time frame (Hunkeler et al. 2008). Together, the methodologies support decision-making on a long-term basis and ensure the sustainability of investments from multiple perspectives.

Risk management is the third-leading reason why companies should utilize LCA studies. For example, legislation can change due to increasing awareness about the issues that threaten sustainability. Also, competitors may adopt aggressive sustainability strategies to utilize the growing interest from customers to support sustainable

development. To prepare oneself for environmental risks, the LCA results need to be examined in combination with the LCCA information.

The Role of Life Cycle Assessment in Fulfilling a Company's Sustainability Strategy

Nearly all companies are required to comply with some form of legal requirements related to sustainability. However, not all companies occupy a position within the product chain from which they have an opportunity to impact the decisions of other actors. In such a case, it may be sufficient to follow changes in legislation and emerging drivers.

Some companies need to meet stakeholders' expectations regarding environmental or sustainable responsibility. However, others are not under such pressure, even from their B2B customers. This could be because they have a relatively small footprint at that stage of the life cycle or because they operate in markets that have yet to emphasize these aspects. It is essential to bear in mind that the situation may change in the future when raising awareness and/or improvements achieved in other parts of the production chain may put smaller actors under the spotlight.

In the opposite case, in which a company is approached with inquiries about their responsibility, it should be in a position to provide data pertaining to activities, for example, its carbon or water footprint. Also, companies that are positioned closer to the final user within the life cycle may need data for environmental product declarations as part of certification processes.

A sustainability risk is an uncertain social or environmental event or condition that can cause a significant negative impact on the company (WBCSD 2017). By being prepared to provide responses and data in response to stakeholder inquiries, companies are protected against any risks that are derived from sustainability issues. However, companies may also pursue further advantages by assisting their suppliers and customers to meet their respective sustainability goals. Sometimes, this may entail entering into strategic partnerships with other companies to discover an ultimate solution. LCAs and LCCAs may be needed to identify the costs and benefits of

such undertakings from the perspectives of all parties.

However, in most cases, small steps toward sustainability are not enough; instead, radical changes to current practices are needed. Therefore, the real forerunners from the sustainability point of view are companies that have engaged in the development of products and services that can meet the sustainability demands of the future. LCAs and LCCAs represent useful tools in this process.

Summary

The LCA is a standardized method for assessing the potential environmental impacts of products, product systems, and services. As such, it can be used to facilitate various decision-making situations. Today, the LCA plays a significant role in helping organizations and researchers to recognize and implement methods of tackling sustainability challenges and ensure that any sustainability changes that are suggested make sense from the resource use point of view. The LCA methodology also forms the basis for the two internationally standardized LCA-based footprints (carbon footprint and water footprint). In addition, current ongoing product environmental footprint guidelines for development follow the principles of LCA. The purpose of the LCA is to search for the most beneficial environmental impact reduction points within the production chain, while the use of footprint measurements enables different production systems to be compared.

The approach aims to prevent environmental problems shifting from one life cycle stage to others. The methodology consists of four main steps: goal and scope definition, life cycle inventory, life cycle impact assessment, and interpretation. By following these phases, practitioners can ensure that the study is outlined, conducted, and verified in a way that produces reliable and valid scientific results. The guidelines for completing the different LCA phases are described in the ISO 14040 and ISO 14044 standards. If the LCA is used for comparative assertions and to be made

publicly available, the study will need to be performed according to stronger regulations and the results verified by a critical review before publication.

Cross-References

- [Carbon Footprint](#)
- [Carbon Handprint](#)
- [Environmental Impact Assessment](#)
- [Social Life Cycle Assessment](#)

References

- Björn, A., Owsianiak, M., Molin, C., & Hauschild, M. Z. (2018). LCA history. In M. Hauschild, R. Rosenbaum, & S. Olsen (Eds.), *Life cycle assessment*. Cham: Springer.
- Cherubini, F., Bird, N. D., Cowie, A., Jungmeier, G., Schlamadinger, B., & Woess-Gallasch, S. (2009). Energy- and greenhouse gas-based LCA of biofuel and bioenergy systems: Key issues, ranges and recommendations. *Resources, Conservation and Recycling*, 53(8), 434–447. <https://doi.org/10.1016/j.resconrec.2009.03.013>.
- Dalhammar, C., & Machacek, E. (2013). Addressing resource efficiency through the ecodesign directive: A review of opportunities and barriers. In: *The 6th international conference on life cycle management in Gothenburg 2013*. GHG Protocol.
- Fava, J. A. (2005). Can ISO life cycle assessment standards provide credibility for LCA? *Building Design & Construction*, pp. 17–20. www.bdcnetwork.com.
- Grönman, K., Ypyä, J., Virtanen, Y., Kurppa, S., Soukka, R., Seuri, P., Finér, A., & Linnanen, L. (2016). Nutrient footprint as a tool to evaluate the nutrient balance of a food chain. *Journal of Cleaner Production*, 112(Part 4), 2429–2440.
- Hunkeler, D., Lichtenvort, K., & Rebitzer, G. (2008). *Environmental life cycle costing* (1st ed.). Boca Raton: CRC Press. 232 p. ISBN 9781420054705.
- ISO 14040:2006. Environmental management, Life cycle assessment, Principles and framework. European Committee for Standardization, Brussels.
- ISO 14044:2006. Environmental management, Life cycle assessment, Requirements and guidelines. European Committee for Standardization, Brussels.
- ISO 14046:2014. Environmental management – Water footprint – Principles, requirements and guidelines.
- ISO 14067:2018. Greenhouse gases, Carbon footprint of products, Requirements and guidelines for quantification.
- Köppler, W., Grahl B. (2014). *Life cycle assessment (LCA): A guide to best practice*. Incorporated. ProQuest Ebook

- Central: John Wiley & Sons. <https://ebookcentral.proquest.com/lib/lut/detail.action?docID=1658826>.
- Leach, A. M., Galloway, J. N., Bleeker, A., Erisman, J. W., Kohn, R., & Kitzes, J. (2012). A nitrogen footprint model to help consumers understand their role in nitrogen losses to the environment. *Environmental Development*, 1(1), 40–66. <https://doi.org/10.1016/j.envdev.2011.12.005>.
- Metson, G. S., Bennet, E. M., & Elser, J. J. (2012). The role of diet in phosphorus demand. *Environmental Research Letters*, 7(4). <https://doi.org/10.1088/1748-9326/7/4/044043>.
- PAS 2050:2008. Publicly available specification (PAS) 2050 – Specification for the assessment of the life cycle greenhouse gas emissions of goods and services. British Standard Institution.
- Ristimäki, M., Säynäjoki, A., Heinonen, J., & Junnila, S. (2013). Combining life cycle costing and life cycle assessment for an analysis of a new residential district energy system design. *Energy*, 63, 168–179.
- Väisänen, S. (2014). Greenhouse gas emissions from peat and biomass-derived fuels, electricity and heat – Estimation of various production chains by using LCA methodology. *Acta Universitatis Lappeenrantaensis* 567. ISSN 1456-4491.
- WBCSD. (2017). *Sustainability and enterprise risk management: The first step towards integration*. Geneva, Switzerland: World Business Council for Sustainable Development. 49 p. ISBN: 978-2-940521-71-5.
- Webster, K. (2016). *The circular economy. A wealth of flows* (2nd edn). United Kingdom: Ellen MacArthur Foundation Publishing, Cowes. ISBN 978-0-9927784-5-3.
- Wenzel, H., Hauschild, M. Z., & Alting, L. (1997). *Environmental assessment of products: volume 1: Methodology, tools and case studies in product development*. Chapman & Hall, UK, Kluwer, Hingham: Springer.

Life Cycle Assessment: Products and Services

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Synonyms

[Life cycle analysis](#)

Description

Life cycle assessment (LCA) is a technique for assessing the sustainability of a product (either

goods or service) over its entire life cycle from cradle to grave (ISO 2006). A product's life cycle consists of consecutive and interlinked stages of a product system, including acquisition of raw materials, design, production, transportation/delivery, use, end-of-life treatment, and final disposal. Broadly, there are two complementary branches of LCA. Environmental life cycle assessment (ELCA) assesses the impacts on human and ecosystems (Heijungs et al. 1992), while social life cycle assessment (SLCA) evaluates the social impacts through a product's entire life cycle (Andrews 2009).

LCA applies life cycle thinking (LCT) that goes beyond the traditional scope of the production site and manufacturing processes by analyzing the environmental, social, and economic impacts of a product during its entire life cycle. LCA findings offer valuable information that could improve target audience's understanding of the broad impacts of production and consumption decisions and address the shared concerns about the state and sustainability of our society. For producers, LCA could identify opportunities to improve the environmental and social impacts of products at various points in their life cycle and avoid local improvements in design and production that merely shift impacts. For value chain actors (from suppliers, producers, traders, to consumers), LCA facilitates their choices by providing relevant indicators of sustainability performance to be used in marketing and communication, eco-labeling scheme, and environmental product declaration. For decision- and policy-makers, LCA supplies critical input for strategic planning, priority setting, and public policy toward the goal of responsible production and consumption.

Life Cycle Thinking as the Guiding Principle

Life cycle thinking (LCT) guides the development and implementation of life cycle assessment (LCA) methods. LCT is a new way of thinking that goes beyond a product's design and production stage but considers the economic,



Life Cycle Assessment: Products and Services, Fig. 1 Cradle to grave: five stages in the life cycle of a product (illustration developed according to the Life Cycle Initiative 2019)

environmental, and social consequences of a product or process over its entire life from “cradle” (i.e., extraction of raw materials) to “grave” (i.e., disposal), as illustrated in Fig. 1.

At the core of LCT is the respect for planetary limits and responsibility for system-wide impacts of our actions. The publication of *Limits to Growth* (Meadows et al. 1972) as well as the energy crisis in the 1970s focused global awareness on the challenges associated with industrial development on a planet with finite supply of resources. One of the first limitations that industrial development encountered is the environment’s ability in pollution absorption (Meadows et al. 1992). LCA constitutes a proactive approach to understanding and managing such damages to the socio- and ecosystems.

Life cycle thinking leads to a fundamental shift in the decision-making in many organizations. Traditionally, an organization is only concerned with activities within its own boundary. A manufacturing firm would monitor the design and production stage and work toward reducing material, water, and energy use of their products directly under its own control (indicated by the thick-outlined textbox in Fig. 1). This inward-looking reduction strategy however could result in worse sustainability performance over the entire life cycle of a product if the reduction at the production stage causes higher material and energy use in other stages. For example, changing to recycled glass bottle packaging at a brewing company requires higher use of water and energy to collect, transport, sort, clean, crush, heat, and reform the recycled glass. The total impact of all these activities must be considered to evaluate the packaging decision properly and reduce the risk of local optimization. According to Remmen (2007), an organization that has adopted LCT will need to:

- Establish controls as appropriate to ensure that its environmental requirements are addressed in the design and development process for the product as well as in each stage of its life cycle
- Collect data (stories and other qualitative data) on the social performance of production and consumption; analyze associated impacts on the workers, the local communities, the consumer, the society, and other value chain actors
- Determine its requirement(s) for the procurement of products and services as appropriate
- Communicate its relevant sustainability requirement(s) to external providers, including contractors
- Consider the need to provide information about potential significant impacts associated with the transportation or delivery, use, end-of-life treatment, and final disposal of its products

LCT also has far-reaching implications for interactions among organizations. A holistic, systematic, and rigorous assessment of the life cycle impacts requires all organizations involved to be open and cooperative. In addition to sharing information, organizations need to collaborate on developing and implementing reduction strategies that improve system-wide performance.

A Brief History of Life Cycle Assessment

After early environmental life cycle assessment (ELCA) reports appeared in the 1970s and 1980s, major efforts in the diffusion and standardization of ELCA occurred in the 1990s. The University of Leiden published the first comprehensive ELCA guide (Heijungs et al. 1992), partly as a response to the call for accelerated product policy measurement by the Netherlands National Environmental Policy Plan Plus (NEPP-plus).

The guide argued that a good product policy can be implemented through ELCA for the benefits of both the producers and the consumers by considering the entire life cycle of a product and assessing it in relation to all aspects of the environment. The editors of the guide shared their perspective on the relationship between ELCA and sustainable development in the Foreword: “the outcome of an environmental life cycle assessment can never legitimize our consumption. There are no environmentally-friendly products, some products however are more environmentally-friendly than others” (Heijungs et al. 1992, p.v).

In 1993, the Society of Environmental Toxicology and Chemistry (SETAC), the leading international organization for the coordination of the methodological development of LCA, held an expert workshop in Portugal and established a *Code of Practice* which included the definition of a technical framework for LCA consisting of components and a uniform terminology.

In 1996, the International Journal of Life Cycle Assessment was created. This is the first journal devoted entirely to life cycle assessment and closely related methods. The journal’s major contributors and audience include scientists developing LCA and life cycle management (LCM); LCA and LCM practitioners; managers concerned with environmental aspects of products; governmental environmental agencies responsible for product quality; scientific and industrial societies involved in LCA development; as well as ecological institutions and bodies (IJLCA n.d.).

From 1997 to 2006, the International Organization for Standardization (ISO) published a series of ISO 14000 standards on ELCA. The ISO continues to update and develop international standards related to ELCA and SLA (Finkbeiner et al. 2006).

Since 2002, the Life Cycle Initiative, a collaboration between the United Nations Environment Program (UNEP) and the Society of Environmental Toxicology and Chemistry (SETAC), has been a global driving force to develop a science-based, consensus-building process for supporting decisions and policies toward the shared vision of sustainability as a public good. The Life Cycle

Initiative delivers authoritative opinion on sound tools and approaches by engaging its multi-stakeholder partnership (including governments, businesses, scientific and civil society organizations). For example, the UNEP/SETAC Life Cycle Initiative Social LCA Project group started their work on methodological sheets in 2005. Detailed guidelines on how to collect, analyze, and distribute SLCA studies are being actively developed (Andrews 2009).

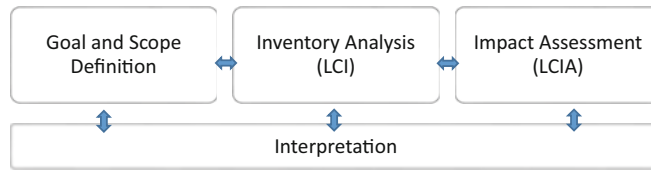
The Life Cycle Assessment (LCA) Method

Before starting an LCA, the practitioner must be aware of the significant amount of time needed to collect and prepare the data. There are also other practical limitations. The accuracy of LCA studies may be limited by the accessibility, availability, and quality of relevant data. Data acquired could have gaps, require aggregation, or are site-specific. The results of an LCA are susceptible to a number of subjective factors, such as system boundary setting, selection of data sources, impact assessment method, and social impact categories. Therefore it is essential to adopt a critical approach and carefully check the assumptions and choices as well as their implications throughout an LCA. These choices and assumptions should be explicitly stated for reasons of transparency. Generally, the information developed in an LCA study should be used as part of a much more comprehensive decision process or used to understand the broad trade-offs. Comparing results of different LCA studies is only possible if the assumptions and context of each study are the same.

An LCA study follows four interdependent phases: goal and scope definition, inventory analysis, impact assessment, and interpretation (ISO 2006) (see Fig. 2).

Environmental Life Cycle Assessment (ELCA) Method

ELCA is a technique that assesses the environmental impacts associated with a product by compiling an inventory of relevant inputs and outputs



Life Cycle Assessment: Products and Services, Fig. 2 Four major interconnected phases in the process of an LCA study (illustration developed according to ISO 14040)

of a product system throughout its life cycle, evaluating the potential environmental impacts associated with those inputs and outputs, and interpreting the results of the inventory analysis and impact assessment phases in relation to the objectives of the study.

Goal and Scope Definition

An ELCA study begins by explicitly identifying the context of the study and explaining the *how* and *to whom* the study should be communicated (ISO 2006). To this end, this phase provides technical details that ensure consistent performance and intended application of the ELCA study. One of the most fundamental technical details provided in the goal and scope definition phase of an ELCA is the definition of a **functional unit**, which is a quantitative description of the product system in terms of the function provided. For example, the functional unit of an LED bulb could be defined as “lighting 1 square meter with 3,000 lux for 10,000 hours with daylight spectrum at 5000K.” This precise definition of the product function not only sets up the **system boundary** for delineating which processes to be included in the analysis but also serves as a comparative unit between products. A poor definition of the functional unit can lead to comparison of alternatives that are not actually achieving the same function and thus jeopardize the validity and relevance of the study. This phase also specifies any **assumptions and limitations**, as well as **allocation methods** if multiple products or functions share the same processes (Finkbeiner et al. 2006).

Life Cycle Inventory (LCI) Analysis

In life cycle inventory (LCI) analysis, the practitioner examines all the data on **environmental inputs and outputs** associated with a product or

service and uses them to develop a flow model of the technical system. The data must be related to the functional unit defined in the goal and scope definition phase. Inventory flows include inputs of water, energy, and raw materials and releases to air, land, and water. In addition, it is important to address data quality requirements such as the precision and completeness of the data, consistency and reproducibility of the methods used throughout the process, sources of the data and their representativeness, uncertainty of the information, etc. LCI contributes to forming a complete picture of the matter, energy, and substance flows that cross the system boundary.

Life Cycle Impact Assessment (LCIA)

Life cycle impact assessment phase aims to connect the LCI results to their potential impacts. Major LCIA activities include (1) classification, assigning inventory data to impact categories by evaluating them based on the priorities of the target audience; (2) characterization, modeling the inventory data by translating them into mid-point impact categories; and (3) calculation – using appropriate indicators to show the amount of damages to **human health, natural environment, natural resources, and man-made environment** (Joliet et al. 2004). The most important choice the practitioner has to make is the desired level of integration of the results. This usually depends on how she would like to address the audience and the ability of the audience to understand detailed results. Figure 3 illustrates the LCIA process of an ELCA.

LCIA frameworks are being actively developed by the Life Cycle Initiative. Taking a worldwide perspective, the UNEP/SETAC Life Cycle Initiative aims to outline a more precise and broadly agreed description of main framework

elements, thus providing a common basis for the further development of mutually consistent impact assessment methods for both developing and developed countries. Ongoing development efforts include a global process that establishes consensus around the appropriate indicators and characterization factors for LCIA in various areas (Jolliet et al. 2014).

Interpretation

Throughout the LCA phases, the results should be regularly interpreted. This allows various assumptions and subjective choices at each stage to be checked and ensures that the conclusions about the impacts are well-substantiated. Regular interpretation also enhances decision-making because the stage that generates the greatest impacts is likely to have the greatest potential for impact reduction. The ISO 14044 standard describes a number of methodological and study limitation checks to test whether conclusions are adequately supported by the data and by the procedures used (Finkbeiner et al. 2006). By following the standard, the practitioner can share the results and improvement decisions with the world without suffering from common pitfalls.

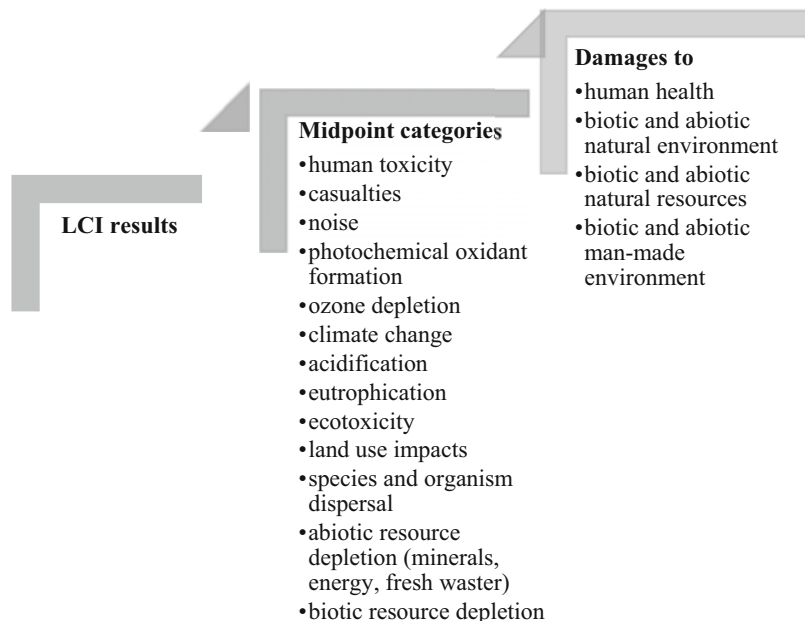
Social Life Cycle Assessment (SLCA) Method

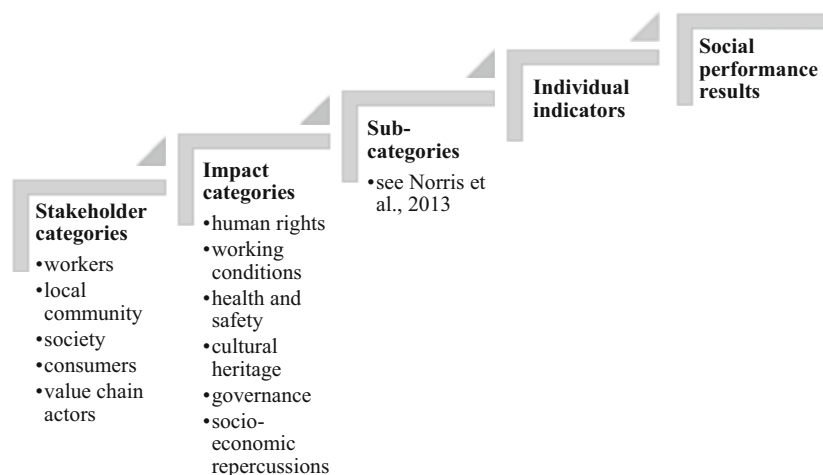
Social life cycle assessment studies follow similar phases but differ in some aspects due to their unique focus on the social and social-economic influences of the products in different phases on different stakeholder groups. There is a strong emphasis on business procedures through the life cycle of a particular product. This interest is associated with the idea that the product is considered accountable for a range of negative and positive impacts on different groups of stakeholders (Andrews 2009).

The mix of quantitative, qualitative, and semi-quantitative data is unique to SLCA (Andrews 2009). The activity variables such as the number of working hours for estimating the share of each unit process in the product system are more often collected and used in SLCA. The subjective data, such as stories and other qualitative data from the stakeholders, could sometimes be more appropriate information to use in SLCA. Bypassing subjective data in favor of more “objective” data could introduce greater uncertainty. In addition, SLCA will need to provide information on the level of engagement of stakeholders. Methodological transparency

Life Cycle Assessment: Products and Services,

Fig. 3 Life cycle impact assessment framework for ELCA (illustration developed according to Jolliet et al. 2004)





Life Cycle Assessment: Products and Services, Fig. 4 SLCA impact analysis framework (illustration based on Andrews 2009)

and frequent assumption and situation checks are particularly important in SLCA (Norris et al. 2013).

During the **goal and scope definition** phase, SLCA requires that practitioners consider the social impacts of the product use phase and function (UNEP 2009). SLCA encourages that external stakeholders be involved in providing input on impacts. During **inventory analysis**, a substantial task is to identify the most significant group of stakeholders that is affected by a product or a business. The key criterion to select stakeholder groups and place them into various stages is their relevance to the context of each stage. SLCA may require site-specific **LCIA** in some cases and may also need information about “political” attributes, such as country and its laws. There are 31 sub-categories in the methodological sheets published by the UNEP/SETAC Life Cycle Initiative (Norris et al. 2013). The subcategories are classified both by stakeholder categories and impact categories. Justification needs to be presented when a subcategory is not included. The impact analysis phase in SLCA follows the steps outlined in Fig. 4. It is important to note the stakeholder-based characterization process. The social performance results could be better or worse than the reference points, or thresholds, that the site is compared to. Aggregating the results in very specific cases is possible but only when meaningful.

Summary

Pressure on our environment and society as a result of the production and consumption by the human systems remains a primary challenge of our time. The LCA technique strives to maintain a balance between scientific rigor and practicality to provide a systematic approach that monitors, quantifies, and manages man-made impacts. In keeping their relevance and comparability, the LCA studies aid the achievement of the sustainable development goals at the global level, one product at a time.

Cross-References

- [Life Cycle Management](#)
- [Social Life Cycle Assessment](#)

References

- Andrews, E. S. (2009). *Guidelines for social life cycle assessment of products: Social and socio-economic LCA guidelines complementing environmental LCA and life cycle costing*, Contributing to the full assessment of goods and services within the context of sustainable development. UNEP/Earthprint.
- Finkbeiner, M., Inaba, A., Tan, R., Christiansen, K., & Klüppel, H.-J. (2006). The new international standards for life cycle assessment: ISO 14040 and ISO 14044.

International Journal of Life Cycle Assessment, 11(2), 80–85.

- Heijungs, R., Guinée, J. B., Huppes, G., Lankreijer, R. M., Udo de Haes, H. A., Wegener Sleeswijk, A., Ansems, A. M. M., Eggels, P. G., Van Duin, R., & de Goede, H. P. (1992). *Environmental life cycle assessment of products: Guide and backgrounds (part 1)*. Centre of Environmental Science. Leiden: Multicopy.
- IJLCA. (n.d.). *The International Journal of Life Cycle Assessment*. Springer. <https://www.springer.com/journal/11367>. Accessed 8 Apr 2021.
- ISO. (2006). ISO 14040:2006(En), Environmental Management — Life Cycle Assessment — Principles and Framework. <https://www.iso.org/obp/ui/#iso:std:iso:14040:ed-2:v1:en>. Accessed 8 Apr 2021.
- Jolliet, O., Müller-Wenk, R., Bare, J., Brent, A., Goedkoop, M., Heijungs, R., Itsubo, N., Peña, C., Pennington, D., & Potting, J. (2004). The life cycle impact assessment framework of the UNEP-SETAC life cycle initiative. *International Journal of Life Cycle Assessment*, 9(6), 394–404.
- Jolliet, O., Frischknecht, R., Bare, J., Boulay, A.-M., Bulle, C., Fantke, P., Gheewala, S., Hauschild, M., Itsubo, N., Margni, M., McKone, T. E., y Canals, M. L., Postuma, L., Prado-Lopez, V., Ridoutt, B., Sonnemann, G., Rosenbaum, R. K., Seager, T., Struijs, J., ... the other workshop participants. (2014). Global guidance on environmental life cycle impact assessment indicators: Findings of the scoping phase. *International Journal of Life Cycle Assessment*, 19(4), 962–967.
- Life Cycle Initiative. (2019). *What is life cycle thinking?* <https://www.lifecycleinitiative.org/starting-life-cycle-thinking/what-is-life-cycle-thinking/>. Accessed 7 Aug 2019.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W., III. (1972). *The limits to growth: A report to The Club of Rome*. New York: Universe Books.
- Meadows, D. H., Meadows, D. L., & Randers, J. (1992). *Beyond the limits: Global collapse or a sustainable future*. Earthscan Publications Ltd.
- Norris, B., Traverso, M., Valdivia, S., Vickery-Niederman, G., Franze, J., Azuero, L., Ciroth, A., Mazijn, B., & Aulisio, D. (2013). *The Methodological Sheets for Sub-categories in Social Life Cycle Assessment (S-LCA)*. Life Cycle Initiative. United Nations Environment Programme and SETAC. https://www.lifecycleinitiative.org/wp-content/uploads/2013/11/S-LCA_methodological_sheets_11.11.13.pdf. Accessed 8 Apr 2021.
- Remmen, A. (2007). *Life cycle management: A business guide to sustainability*. UNEP/Earthprint.
- UNEP, SETAC. (United Nations Environment Programme). (2009). Guidelines for Social Life Cycle Assessment of Products. Social and socio-economic LCA guidelines complementing environmental LCA and Life Cycle Costing, contributing to the full assessment of goods and services within the context of sustainable development. <https://wedocs.unep.org/bitstream/handle/20.500.11822/7912/-Guidelines%20for%20Social%20Life%20Cycle%20Assessment%20of%20Products-20094102.pdf?sequence=3&%3BisAllowed=>. Accessed 11 Aug 2021.

Life Cycle Management

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Synonyms

LCM; Value chain management

Description

Life cycle thinking is an idea, a mental approach, and a philosophy of behavior which means going beyond the traditional focus on production sites, and taking care of environmental, economic, and social impacts of products along their entire life cycle, with the aim of increasing sustainability. A life cycle approach can be used in different phases and by different actors, such as product designers, innovators, producers, governmental authorities, and consumers, to make better choices.

Life cycle management (LCM) is the organizational dimension of life cycle approach (Andrews et al. 2009). It means the use of life cycle approach for managing, taking decisions, and implementing strategies, in order to make production and consumption more sustainable. It can use numerous analytical (such as LCA, LCC, and carbon footprint), procedural, monitoring, communication, and reporting tools, which give a specific perspective regarding the products' life cycle impacts and help to identify the areas of intervention. LCM can be applicable to primary and secondary sectors as well as any types of organizations such as public administrations.

Introduction

The life cycle approach finds its origin back in the 1960s, since when some researchers started to analyze the problem of natural resources consumption and understood that the only possible and effective way to study complex systems was to take into account the whole flow of materials

from their extraction, through their transformation and consumption, to end into the waste phase: the so-called cradle to grave approach (Alting and Jorgensen 1993). A further improvement has been the rise of consciousness about the necessity to close the cycles, in order to decrease the pressure on natural resources and reduce also the environmental impact. So, from the cradle to grave approach, we now talk about the cradle to cradle (C2C) approach. Cradle to Cradle® is a design concept inspired by nature, in which products are created according to the principles of an ideal circular economy. It is about eco-effectiveness and goes beyond conventional sustainability tools and approaches, and its implementation creates equal economic, social, and ecological benefits (EPEA GmbH, 2019). Resource efficiency (see Ecoefficiency) is then the basis for decoupling economic growth from resource use and environmental degradation and also meeting, at the same time, human beings and well-being. The whole value chain needs to be considered to improve the management of resource stocks, reduce inputs, optimize production processes, improve logistics, change consumption patterns, and minimize waste. To reach this goal, new products and services also need to be developed (EU, 2019). Producers, designers, raw material and component suppliers, retailers, consumers, transporters, waste managers, recyclers, public authorities, regulators, and financial organizations are all involved in the change.

To move life cycle approach from theory to reality, numerous tools have been developed during the past two decades.

LCM and LC Tools

The majority of impacts (environmental, social) of products do not occur where they are produced, but rather upstream and downstream in the value chain (see Value Chain Management), out of the production sites and outside the companies' direct control. In order to put more light on the hidden or delayed impacts and to avoid burden shifting, a number of assessment instruments have been developed in recent years to provide more precise predictions of various noneconomic

consequences of decision-making, either at business level or at administration level (Balkau et al. 2017).

Among these instruments, LCA (see LCA) is the key methodology to assess the environmental impact along the whole life cycle of products (see product life cycle) and services and for improving resource efficiency (European Commission 2010). LCA also provides information about at which stages of the product's life cycle the environmental impacts are more relevant.

Starting from Environmental LCA methodology (E-LCA or just LCA) and based on LC thinking (see life cycle thinking), many other assessment tools have been developed, such as:

- MFA (Material Flow Analysis)
- SFA (Substance Flow Analysis)
- RA (Risk Assessment)
- IOA (Input-Output Analysis)
- EF (Ecological Footprint)
- CF (Carbon Footprint)
- WF (Water Footprint)
- LCC (Life Cycle Costing)
- S-LCA (Social LCA)
- O-LCA (Organizational LCA)

Among them, S-LCA and O-LCA are the latest ones which have been developed.

LCA methodology, until recently, has been used to assess the real and potential impacts that a product has just on the environment, in terms of pollution and resources depletion along its life cycle; but life cycles of products involve also economic flows and have effects on all the value chain actors (workers, local communities, consumers, the society...). For this reason, the new S-LCA tool gives information about social externalities and assesses social impacts (positive or negative) of products along the LC. S-LCA technique promotes improvement of social conditions throughout the life cycle of a product (Andrews et al. 2009). It complements LCA and can be applied alone or in combination with LCA.

The benefits and the usefulness of life cycle approach are not restricted to the assessment of single products and can easily be demonstrated also when applied to organizations, to assess their performance regarding the environment.

The environmental impact assessment of an organization is definitely more complex than that of a single product for many reasons: One organization can produce different products, be involved in different sectors, have different production sites, manage different activities, involve different business divisions and departments, work with many suppliers, and purchase many different raw materials (Blanco et al. 2015). So, in order to help organizations to understand the environmental impact of their product portfolio along the whole value chain, the O-LCA methodology has been developed.

O-LCA is a multi-impact approach, which can be used by organizations to support them in reaching analytical, managerial, and societal goals, through the identification of hotspots for decision-making.

The ultimate goal of sustainable development is in fact the well-being and the quality of life, considering environmental, economic, and social dimensions.

The output of LC methodologies consists usually of technical information and data, but in order to be useful to managers and decision makers, these need to be accompanied by applicable information on economic aspects and policy options, especially when alternatives have to be compared. Any systematic management approach needs good data and well-defined objectives.

While the application of life cycle approach to product design is increasing fast, its contribution to programmatic development is still small. In part, this is due to lack of understanding by non-technical actors, such as public administrators and project managers, of its potential utility. In other words, it is necessary to move from the assessment of impacts of goods and services, to a systematic management of reduction of those impacts. Life cycle management can be considered as the application of life cycle thinking in modern business practice, and LCA is just one possible tool useful to design a LC management strategy. LCM is not a single tool, but rather a framework to analyze and then manage the performance of goods and services in terms of sustainability and support more sustainable value chains.

A general current trend in companies and in governmental policies is toward Integrated Management Systems which can take into account at the same time the environmental, social, and economic dimensions of their activities and decisions. In this context, LCM is evolving through the development of numerous LC tools, useful to assess, analyze, integrate, communicate, and manage.

Conclusions

A big challenge for implementing LCM is first of all to identify, in the entire life cycle of products, the main actors who manage different stages along the life cycle and the stakeholders involved, who are usually multiple, independent part-players, and subsequently bring them together for adopting the most efficient models of management. This will build up connections between the supply chain and the value chain. In addition, defining a LCM strategy may affect most of the departments and functions of an organization.

Many organizations which have adopted LCM have seen several improvements in: their image, stakeholder relations, and shareholder value, as well as awareness of coming changes to their regulatory contexts (UNEP/SETAC 2009). In order to get these advantages, an important step in LCM is the communication of LC information outside the organization boundaries, and for this aim many tools have been created and adopted; many of them have also been standardized. Some of them include green reporting, sustainability reports, certification systems, environmental product declarations, ecolabels, product environmental performance indicators, green public procurement guidelines, company codes, or manuals of conduct. Each organization has to select the most appropriate and useful tools.

In conclusion, LCM is a strategic managerial approach which can be adapted to any specific situation and context by the choice of the most suitable LC tools to each organization, with the aim of increasing its environmental performances as well as the social ones, taking into account the entire value chain connected with their own

products and activities. Key drivers for implementing LCM are the corporate strategy, specific requirements from the finance sector or from the market and regulations.

Summary

Life cycle management can be defined in different ways, one of which is: “LCM is a life business management approach that can be used by all types of organizations to improve their products/services and thus the sustainability performance of the companies, with the aim of ensure more sustainable value chains” (UNEP/SETAC 2009). LCM is useful for targeting, organizing, analyzing, and managing information and activities for improving sustainability along the life cycle (Remmen et al. 2007). LCM is voluntary and can be adapted and gradually introduced in any organization, including SMEs, integrating it in the core operations of business. LCM is usually better implemented through a step-by-step process.

Cross-References

- Carbon Footprint
- Cradle to Cradle
- Ecological Footprint
- Life Cycle Assessment
- Product Life Cycle
- Sustainable Chain Management
- Sustainable Supply Chain Management
- Value Chain Management

References

- Alting, L. L., & Jorgensen, D. J. (1993). The life cycle concept as a basis for sustainable industrial production. *Annals of the CIRP*, 42(1), 163–167.
- Andrews, E.S. et al. (2009). Guidelines for social life cycle assessment of products. UNEP Publication. http://www.unep.fr/shared/publications/pdf/DTIx1164xPA-guidelines_sLCA.pdf. Accessed 21 August 2019.
- Balkau, F., Massari, S., & Sonnemann, G. (2017). Chapter 2: Sustainable regional development in a life cycle context in. In S. Massari, G. Sonnemann, & F. Balkau

- (Eds.), *Life cycle approaches to sustainable regional development* (pp. 9–14). New York: Routledge.
- Blanco, J.M., Finkbeiner, M., Inaba, A. (2015). Guidance on organizational life cycle assessment. UNEP Publication. https://www.lifecycleanitiative.org/wp-content/uploads/2015/04/o-lca_24.4.15-web.pdf. Accessed 4 September 2019.
- EPEA GmbH (2019). Cradle to Cradle® Innovation, quality and good design. <https://epea-hamburg.com/cradle-to-cradle>. Accessed 3 September 2019.
- EU(2019). Resource efficiency. https://ec.europa.eu/environment/resource_efficiency/about/index_en.htm. Accessed 7 August 2019.
- European Commission - Joint Research Centre - Institute for Environment and Sustainability: International Reference Life Cycle Data System (ILCD) Handbook. 2010. General guide for Life Cycle Assessment - Detailed guidance.
- Remmen, A., Jensen, A. A., & Frydendal, J. (2007). *Life cycle management: A business guide to sustainability*. UNEP/SETAC publication.
- UNEP/SETAC. (2009). Life cycle management: How business uses it to decrease footprint, create opportunities and make value chains more sustainable. <http://hdl.handle.net/20.500.11822/7921>. Accessed 5 September 2019.

Life Cycle Management II

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Synonyms

Life cycle application; Life cycle theory

Definition/Description

Life cycle management (LCM), as initially defined by Hammer (1981), is a tool focusing simultaneously on three major functional aspects: planning, monitoring, and control. The LCM tool is designed to supply a complete overview whether of some project or product or even a whole company. Thus, this deals with every aspect of organizations from their very launch to their final closure, involving all the real and virtual

costs arising from the project (Hammer 1981). These costs must include those related with planning (design), development, production (operation and maintenance), distribution and those associated with the demise of the product, service, or entity at the end of its anticipated useful life span. Hammer (1981) divides life cycle management into six stages: mission analysis and project initiation, concept development, definition and design, system development, development and operation, and, lastly, transition or termination.

Background

The life cycle of a company or business was first studied by Haire (1959), who made an analogy between business life and biological life as the development of the former aligned with the growth curve in biology. Gardner (1965) also argued that the life cycle of a company was comparable to that of humans or other living beings. Studies then began to emerge analyzing company stages and the causes of movement between them, including premises for survival. This life cycle approach was then applied to specific products and services and also to intangibles within a company. Thus, the LCM concept began emerging.

The typical life cycle categories generally consist of the birth, growth, mature, and decline stages. The main goal of LCM is to maximize the value of any tangible or intangible asset taking into consideration its expected market life. Costs need reducing and the environmental and socio-economic impacts on economy must be carefully addressed. Accordingly, LCM may be viewed as an “integrated framework of concepts and techniques to address the environmental, economic, technological and social aspects of products, services and organizations” (Hunkeler et al. 2004). The standard life cycle framework of phases for asset systems includes the conceptual design, the preliminary design, detailed design and development, production and/or construction, utilization and support, and the retirement and disposal stage coinciding with the demise of the asset (Labuschagne and Brent 2005). Life cycle management (LCM) provides an adequate framework

for analyzing and managing the sustainability of goods and services and improving the environmental, social, and economic performance and thus contributing to life cycle thinking (LCT) (Ortiz-R et al. 2014).

LCM foresees the application of life cycle thinking to businesses aiming to manage the total life cycle of an asset or service as a means to more sustainable consumption and production. Life cycle management encourages companies to integrate the cost of externalities into their products and services, that is, those impacts beyond the boundaries of financial transactions. Accordingly, companies have to shape and condition the material, energy, and financial flows across the full life cycle of their product offerings (Swarr 2006). However, not all externalities are included in pricing processes, which might be perceived as a potential market gap for green products and services (Swarr 2006). Companies will then follow demand by producing green and natural products with lesser environmental and health impacts. This ultimately leads to reduced government regulation for green products and services because companies are already anticipating trends and offering products with high environmental and health-related features and thereby offsetting the need for government intervention. Swarr (2006) puts forward the example of indoor environmental quality products that reach beyond energy savings to reduce respiratory-related diseases (allergy, asthma) and thus government costs on treating those illnesses also fell. Accordingly, two strengths emerge as launching a new product or green service can indirectly appear as mitigating for a past company illegality that might still cause liabilities and litigation. A company that defends the provision of a healthier version of its own product indirectly accepts that the earlier version was not as health compliant and thus potentially liable to litigation. On the other hand, governments tend to pass on the cost of externalities to industry rather than increasing general forms of taxation (Swarr 2006).

LCM thus allows companies to expand their horizons by enabling the identification of new areas for improving and promoting products and services (Kurczewski 2013). Consequently, life

cycle thinking (LCT) has emerged as an approach returning comprehensive analysis of the environmental impacts, economic costs, and social consequences experienced during the life cycle of products. Methods to address LCM have included life cycle assessment (LCA), life cycle costing (LCC), and social life cycle assessment (SLCA), well known both in academia and among large companies. The environmental impact of life cycle techniques (LCTs) (Kurczewski 2013), such as energy consumption, reducing the waste requiring disposal, cutting construction particulate emissions, noise and gas emissions whether in Industry, Construction, Trade, Finance and Services sectors are facets at the core of LCM. Life cycle thinking, life cycle assessment, life cycle management, and life cycle costing are interrelated concepts with all focused on sustainable product chains. Life cycle thinking (LCT) constitutes a term that pursues explanations and understanding of human and organizational factors whereas LCM focuses on the tools and factors vital for success. Life cycle assessment (LCA) tool serves to study sustainable products and their social, economic, and ecological impacts through measuring environmental performance; the consumption of natural inputs and the emissions returning to nature through production processes. LCA thus considers environmental impacts throughout the life cycle (Ortiz-R et al. 2014) with its methodology following the ISO/TS 14072:2014 standards (International Standardization Organization 2014) in order to deliver a valuation of the ecological performance of a product or service throughout its life cycle; from raw material, production or processing, utilization, and through its subsequent disposal. Therefore, LCA evolves over four steps: defining the goal and scope, inventory analysis, impact assessment, and interpretation (Ortiz-R et al. 2014). Gundes (2016) advocates the life cycle costing (LCC) methodology and its main goal of achieving investment efficiency by incorporating economic factors into the assessment of sustainability. LCC acts through interrelating alternative design strategies in keeping with their respective initial, maintenance, and operational costs calculated over specified periods of time.

Ristimäki and Junnila (2015) defend that sustainable value is created only when considering the development of the economic, ecological, and social concepts throughout the entire life cycle, which can be performed using LCM to continuously improve and boost the sustainability performance. Ristimäki and Junnila (2015) defend a holistic life cycle approach as capable of generating both more coherent urban development and potential positive impacts on sustainability. The framework above establishes the foundations of LCM.

LCM Tools

Various examples of commonly applied LCM tools and methods include life cycle sustainability assessment (LCSA), life cycle costing (LCC), environmental life cycle assessment (LCA), and social life cycle assessment (SLCA) as stated by Kloepffer (2008).

Among the methods and tools with LCM applications are: LCA, product flow analysis, life cycle costing (LCC), environmental management systems, ecolabeling and environmental product declarations, product policies, design for environment tools, footprint analysis, and key performance indicators as detailed by Balkau and Sonnemann (2010) and summarized by Nilsson-Lindén et al. (2018). LCM strives to deploy an integrated approach to sustainability in keeping with the respective product life cycle.

Labuschagne and Brent (2005) defend sustainable development with facets such as social equity, economic efficiency, and environmental performance needing to be incorporated into both real-time project management methodologies for appraisals and decision-making processes. Furthermore, achieving this inherently needs understanding and integrating LCM. Labuschagne and Brent (2005) propose a framework specifically for sustainability performance evaluation consisting of a corporate responsibility strategy split into operational and social initiatives. These then subdivide into economic sustainability, environmental sustainability, and social sustainability. In turn, economic sustainability includes economic performance, financial strength, and potential financial benefits.

Environmental sustainability spans the consumption of air, water, land, and mineral and energy resources. Social sustainability respectively comprises of internal human resources, external populations, stakeholder participation, and the macro social performance.

Environmental LCM provides a technique for applying a holistic perspective within the scope of which corporate environmental concerns span the entire product chain with the goal of reducing the total environmental impact. Corporate environmental management deploying a life cycle perspective throughout the value chain is commonly referred to as environmental life cycle management (ELCM) (Fava 1997; De Leeuw 2006; Nilsson-Lindén et al. 2018).

Life cycle analysis (LCA), similar to life cycle assessment (LCA), represents a decision-making support tool with the goal of evaluating environmental factors. LCA thus seeks to evaluate the potential environmental impacts of a product or a process across its entire life cycle (Gundes 2016).

The International Organization for Standardization (ISO) standard 14,040 is the international standard for LCA. This ISO describes life cycle assessment (LCA) as the “compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle” (ISO 14040 2006). The LCA methodology put forward in the ISO contains various steps such as defining goals and targets, inventory analysis, impact assessment, and interpretation (Gundes 2016). LCC and LCA both address life cycle thinking but are nevertheless dissimilar in purpose, scope and methodology. Combining or integrating the existing tools provides the first step towards more inclusive sustainability assessment: Life cycle sustainability analysis (LCSA) = LCC + LCA + SLCA (social life cycle analysis, or the impacts on stakeholders) (Gundes 2016).

Requirements for Applying LCM

Nilsson-Lindén et al. (2018) defend that the application of LCM proves problematic as its research fails to address the complexity of organizing LCM in practice. The authors reflect on the means of

implementing life cycle-based thinking in companies. The factors driving LCM success, according to the review by Nilsson-Lindén et al. (2018), are: (1) top management backing (avoiding resistance and disruption), (2) communication and collaboration (exchanging ideas across the organization) among all stakeholders and personnel, (3) integration across functions (the participation and collaboration of employees in the most organizational functions and levels are vital to LCM success), (4) applying LCM practices as daily routines, (5) LCM does not embody an additional strategy but instead aligns with the existing business strategy, (6) knowledge about LCM (time for education and training), (7) the holistic environmental approach, and (8) ensuring the collaboration of all players in the product chain.

LCM Applications

Life cycle management has been applied to pharmaceuticals (Modi 2017), agriculture (Ortiz-R et al. 2014; Ruviaro et al. 2012), real estate (Ristimäki and Junnila 2015), electronic systems (Hammer 1981), the health sector (Daidoji et al. 2013), corporate life cycles and their cyclical movements (Pai et al. 2014; Reis and Augusto 2015; Habib and Hasan 2018), knowledge management (Evans and Ali 2013), activity based costing (ABC) (Kallunki and Silvola 2008), the construction industry (Gundes 2016), in inventory management (Elsayed and Wahba 2016), the strategic planning methodology (Kniazieva et al. 2018), financial reporting Habib and Hasan (2018), and to SMEs (Kurczewski 2013).

In turn, organizational life cycle (OLC) theory has been applied to the organizational behavior literature with OLC stages deployed to foresee the performance of organizations (Kimberly et al. 1980; Miller and Friesen 1984). The authors found that company strategies, structures, and decision-making processes display distinct characteristics according to the respective life cycle stage. These life cycle stages span birth, growth, maturity, decline, and revival. Birth characterized by young and innovating companies seeking to strengthen their position in niche markets, growth featuring high turnover growth rates and several organizational departments, maturity displaying

stability and efficiency, decreases in innovation and with the appearance of a more bureaucratic structure, with revival in turn characterized by product variation with innovations recreating the product while the declining phase encapsulates stagnation and old fashion product lines.

Management science adopted the LCM concept in order to improve cost-effective choices about the installation and operation of electronic systems (Hammer 1981). Modi (2017) reinforces the role of LCM within the framework of maximizing asset values (pharmaceuticals) during their lifespans. In this case, implementing an LCM plan begins at product launch or subsequently when a drug demonstrates the potential for returns from additional investment while also encompassing efforts to market drugs following patent protection expiry and the corresponding market decline. Life cycle approaches may also involve new formulations, new routes of delivery, new indications or expansions in the population for prescription or the development of combination products. Life cycle management may also return opportunities to improve upon the current product through enhanced efficacy or reduced side effects, better tolerability or better prescriber, or patient acceptance and expanding the therapeutic market for the product (Modi 2017). Daidoji et al. (2013) defend that LCM maximizes the value of existing drugs (pharmaceuticals) and extends the product life indicating that the most common pharmaceutical LCM strategies include various techniques such as new indications, new formulations, new combinations, authorized generic, over-the-counter drug switches, and pricing strategies.

Pai et al. (2014), based on corporate life cycle theory and risk management, applied a pre-warning of risks to avoid financial stress during each life cycle stage and thus increasing the probability of corporate survival. Corporate life cycle theory divides company lifespans into several stages most commonly totaling four – birth, growth, maturity, and decline – in accordance with four measurements: rate of sales growth, capital expenditure, dividend pay-out ratio, and firm age (Black 1998; Pai et al. 2014).

Elsayed and Wahba (2016) analyze inventory management in keeping with the life cycle stages

and demonstrate how the inventory to sales ratio shapes company performance levels negatively in the initial growth stage and the maturity stage but drives a positive impact on performance in either the rapid growth stage or the revival stage.

The application of life cycle models to strategic planning allows for the forecasting of sales able to assist in planning production, determining the best strategies for different stages of development; calculating the sequence of stages in company development while also providing an equilibrium between organizational features and the external environment, which furthermore influences the process of organizational development (Kniazieva et al. 2018). For this purpose, Kniazieva et al. (2018) point to the need to observe the interconnections among life cycles across all levels: industry, technology, enterprise, and product. The tools of the life cycle theory strategic planning methodology include perceiving the need to consider factors of time and uncertainty in strategic planning; setting tasks within conditions of uncertainty; real-time adjustment; and evaluating the effectiveness of strategic decisions (Kniazieva et al. 2018).

Phan et al. (2014) study the appropriateness of deploying activity based management (management accounting practices) (ABC) practices across different organizational Life cycle stages given that they find that the maturity and revival businesses stages apply each level of activity based management more often than entities going through the birth, growth, and decline stages. ABC generated information improves the accuracy of product/service costs to a greater extent than the traditional cost approach. The association between the OLC stages and recourse to ABM cost procedures enables management awareness of their business unit's stage of development and its respective needs whenever minimizing costing systems Phan et al. (2014).

Regarding the application of LCM to knowledge management, Evans and Ali (2013) propose a holistic view incorporating three different perspectives: knowledge assets, life cycle stages, and enabling initiatives and technologies. Knowledge assets constitute the value-added intellectual

resource in the form of the stocks of knowledge, whether formalized or tacit, that employees tactically apply to problem solving through recourse only to memory.

Habib and Hasan (2018) state that managerial efficiencies, flexibility, and company resources determine the transitions through the corporate life cycle. The corporate life cycle furthermore influences the financial reporting of companies, the extent of their disclosures, the terms for corporate investment, financing and as well as decisions over payouts and dividends. Additionally, the life cycle frames corporate governance and socially responsible behavior (Habib and Hasan 2018). As regards financial reporting, the relevance of accounting information differs according to the stage in the firm life cycle. In early stages, there are fewer invested assets resulting in lower or negative operating cash flows. Mature firms hold larger investment portfolios, with greater access to financing thus requiring improvements to the quality of information and with corporate disclosures correspondingly increasing. Firms similarly engage in different levels of tax planning activities across their life cycle stages that also shape the choice of management control tools. The life cycle furthermore impacts on board structures, levels of management compensation, and corporate social responsibility (Habib and Hasan 2018). The determinants of firm life cycle dynamics interrelate with organizational capital, management practices, corporate structure, flexibility, and venture capital participation.

Summary

Considering the typical life cycle stages of a tangible or intangible asset, company process, system, LCM and its related tools provides a holistic approach for dealing with all of the externalities and cost efficiencies incurred over the life span of any asset. This approach thus necessarily includes environmental, economic, social, financial, strategic, and administrative issues that require holistic assessment and management. As this applies to human beings, LCM is suitable for adaptation to every branch of industry. Despite the already

extensive research, more practical examples are needed to reinforce its applications to other fields.

Cross-References

- [Life-Cycle Analysis](#)
- [Life Cycle Assessment](#)
- [Life Cycle Sustainability Assessment](#)

References

- Balkau, F., & Sonnemann, G. (2010). Managing sustainability performance through the value-chain. *Corporate Governance: The International Journal of Business in Society*, 10(1), 46–58.
- Black, E. L. (1998). Life-cycle impacts on the increment value-relevance of earnings and cash flow measure. *Journal of Financial Statements Analysis*, 4(1), 40–56.
- Daidoji, K., Yasukawa, S., & Kano, S. (2013). Effects of new formulation strategy on life cycle management in the US pharmaceutical industry. *Journal of Generic Medicines*, 10(3–4), 172–179.
- De Leeuw, B. (2006). Life cycle management in developing countries: State of the art and outlook. *The International Journal of Life Cycle Assessment*, 11(1), 123–126.
- Elsayed, K., & Wahba, H. (2016). Reexamining the relationship between inventory management and firm performance: An organizational life cycle perspective. *Future Business Journal*, 2(1), 65–80.
- Evans, M. M., & Ali, N. (2013). Bridging knowledge management life cycle theory and practice. In *International conference on intellectual capital, knowledge management and organisational learning ICICKM 2013-conference proceedings* (pp. 156–165).
- Fava, J. A. (1997). LCA: Concept, methodology, or strategy? *Journal of Industrial Ecology*, 1(2), 8–10.
- Gardner, J. W. (1965). How to prevent organizational dry rot. *Rice Thresher*, 53(5).
- Gundes, S. (2016). The use of life cycle techniques in the assessment of sustainability. *Procedia-Social and Behavioral Sciences*, 216, 916–922.
- Habib, A., & Hasan, M. M. (2018). Corporate life cycle research in accounting, finance and corporate governance: A survey, and directions for future research. *International Review of Financial Analysis*. In press.
- Haire, M. (1959). *Biological models and empirical histories in the growth of organizations: Model organization theory*. New York: John Wiley.
- Hammer, C. (1981). Life cycle management. *Information & Management*, 4(2), 71–80.
- Hunkeler, D., Saur, K., Rebitzer, G., Finkbeiner, M., Schmidth, W.-P., Jensen, A. A., Stranddorf, H., & Christiansen, K. (2004). *Life-cycle management*. Pensacola: SETAC Press. ISBN-10:1880611775.

- International Organization for Standardization. (2006). Environmental management: Life cycle assessment; Principles and Framework (No. 2006). ISO.
- International Organization for Standardization. (2014). Environmental management: Life cycle assessment; Principles and Framework (No. 2014). ISO.
- Kallunki, J. P., & Silvola, H. (2008). The effect of organizational life cycle stage on the use of activity-based costing. *Management Accounting Research*, 19, 62–79.
- Kimberly, J. R., Kimberly, J., & Miles, R. H. (1980). *The organizational life cycle: Issues in the creation, transformation, and decline of organizations*. Jossey-Bass Inc Pub.
- Kloepffer, W. (2008). Life cycle sustainability assessment of products. *International Journal of Life Cycle Assessment*, 13, 89–95.
- Kniazieva, T., Kolbushkin, Y., & Smerichevskiy, S. (2018). Method of strategic planning and management decision-making considering the life cycle theory. *Baltic Journal of Economic Studies*, 3(5), 175–182.
- Kurczewski, P. (2013). Life cycle thinking in small and medium enterprises: The results of research on the implementation of life cycle tools in polish SMEs – Part 1: Background and framework. *The International Journal of Life Cycle Assessment*, 19(3), 593–600. <https://doi.org/10.1007/s11367-013-0675-0>.
- Labuschagne, C., & Brent, A. C. (2005). Sustainable project life cycle management: The need to integrate life cycles in the manufacturing sector. *International Journal of Project Management*, 23(2), 159–168. <https://doi.org/10.1016/j.ijproman.2004.06.003>.
- Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. *Management Sciences*, 30(10), 1161–1183. <http://www.jstor.org/stable/2631384>.
- Modi, N. B. (2017). Application of pharmacokinetics and pharmacodynamics in product life cycle management. A case study with a carbidopa-levodopa extended-release formulation. *The AAPS Journal*, 19(3), 607–618.
- Nilsson-Lindén, H., Baumann, H., Rosén, M., & Diedrich, A. (2018). Organizing life cycle management in practice: Challenges of a multinational manufacturing corporation. *The International Journal of Life Cycle Assessment*, 23(7), 1368–1382.
- Ortiz-R, O. O., Villamizar Gallardo, R. A., & Rangel, J. M. (2014). Applying life cycle management of Colombian cocoa production. *Food Science and Technology*, 34(1), 62–68.
- Pai, P. F., Hsu, M. F., & Lin, L. (2014). Enhancing decisions with life cycle analysis for risk management. *Neural Computing and Applications*, 24(7–8), 1717–1724.
- Phan, T. N., Baird, K., & Blair, B. (2014). The use and success of activity-based management practices at different organisational life cycle stages. *International Journal of Production Research*, 52(3), 787–803.
- Reis, P. N., & Augusto, M. G. (2015). What is a Firm's life expectancy? Empirical evidence in the context of Portuguese companies. *Journal of Business Valuation and Economic Loss Analysis*, 10(1), 45–75.
- Ristimäki, M., & Junnila, S. (2015). Sustainable urban development calls for responsibility through life cycle management. *Sustainability*, 7(9), 12539–12563.
- Ruviaro, C. F., Gianezini, M., Brandão, F. S., Winck, C. A., & Dewes, H. (2012). Life cycle assessment in Brazilian agriculture facing worldwide trends. *Journal of Cleaner Production*, 28, 9–24.
- Swarr, T. (2006). Life cycle management and life cycle thinking: Putting a price on sustainability. *The International Journal of Life Cycle Assessment*, 11(4), 217–218.

Life Cycle of Buildings

► Energy Efficiency in Public Building Procurement

Life Cycle Sustainability Assessment

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Synonyms

Blue economy; Economic; Environmental; Inventory; LCA; Social; Sustainability

Definition

Life cycle sustainability assessment (LCSA) is a systematic and comprehensive evaluation approach that assesses the full range of environmental, social, and economic impacts of a product, system, or process throughout its entire life cycle, from raw material extraction to end-of-life disposal. The purpose of LCSA is to identify and understand the trade-offs and potential sustainability challenges associated with the product, system, or process and to inform decisions that can enhance its sustainability. LCSA considers multiple sustainability criteria, including environmental impacts, such as greenhouse gas emissions, resource depletion, pollution, and waste generation; social impacts, such as labor practices, human rights, health, and safety; and community engagement and economic impacts, such as resource use, energy efficiency, cost, and economic viability. LCSA can be used by companies, governments, and other organizations to assess the sustainability of existing products, systems, and processes; identify opportunities for improvement; develop more sustainable products, systems, and processes; demonstrate sustainability leadership and meet stakeholder expectations; comply with sustainability regulations and standards; enhance brand reputation and customer trust; and make informed decisions on sustainability investments and initiatives.

Introduction

LCAs have been in existence since the 1960s. The idea that led to the invention of LCAs was to create a tool whose primary assignment is to quantify and consequently facilitate appropriate management of waste and energy such that more general eco-efficiency measurement targets could be achieved (Thies et al., 2021). The ISO 14040/14044 standards provide the basis for LCSA's underlying process. The creation and evolution of industrial technologies has led to significant reconfiguration of the environment, causing alteration of nature and degradation of natural resources through pollution of air, water, and

land. Industries, particularly those involved in producing products that involve the utilization of chemicals and toxic metals and those involved in exploiting natural resources such as soil and clean water, fish stocks, and natural gas and oil indiscriminately, have come under fire for their unsustainable production processes that harm the ecosystem. However, these industries are now expected to adopt more environmentally friendly methods through the principles of "zero waste and minimal emissions and producer responsibility." Despite these efforts, the environmental effects of industrial activities are becoming increasingly difficult to control, as the negative impacts are not always immediately apparent and can take the form of cumulative and synergistic effects (Stokes & Horvath, 2006; Azapagic & Clift, 1999). For instance, local greenhouse gas emissions can contribute to the global greenhouse effect. Considering these challenges, the regulatory bodies responsible for protecting the environment must be proactive in their approach to assessing the environmental impact while taking into consideration financial, technical, and other criteria.

Life cycle sustainability assessment (LCSA) is an environmental management tool that evaluates regional and global environmental impacts associated with a product's entire life cycle, from raw material collection to production, use, and disposal (cradle to gate) (Azapagic & Clift, 1999; Curan, 2006; ISO, 2006a, b; EC, 2010). Curan (2006) highlighted the significance of LCSA in quantifying various adverse environmental impact categories, including climate change, photochemical oxidation potential, acidification, and eutrophication in aquatic environments. LCSA has gained widespread recognition in critical environmental assessments for sectors such as biofuels and agriculture, wastewater treatment systems, fish farming, and other important policies (Stokes & Horvath, 2006; De Vries & de Boer, 2010). To assess the impact of a product on the environment throughout its entire life cycle, from raw material collection to disposal, the concept of life cycle sustainability assessment (LCSA) was developed. LCSA can be differentiated from other environmental assessment metrics because it focuses on

identifying changes necessary to improve a product’s environmental performance and sustainability (ISO, 2006a, b; Guinée, 2016). Additionally, LCSA provides decision-makers with information on the environmental impacts of specific products, their performance, and alternative processing systems (ISO, 2006a, b; Thies et al., 2019, 2021). It quantifies the total inputs (energy and materials) and outputs (products, waste, and emissions) of a production system, known to impact the environment (ISO, 2006a, b; Yuan et al., 2012). The performance of an LCSA is divided into four main parts, as shown in Fig. 1.

Life cycle sustainability assessment is a comprehensive evaluation tool used to assess the environmental, social, and economic impacts of a product or system throughout its entire life cycle (ISO, 2017; Gundes, 2016). LCSA is used to identify areas for improvement and determine the sustainability of a product. The LCSA process is typically divided into several phases (Fig. 1), as follows.

Goal and Scope Definition In this phase, the purpose, scope, and objectives of the LCSA are defined, and stakeholders are identified (ISO, 2017). For instance, if the LCSA is being conducted for a new product, the goal could be to determine its environmental and social impact and identify ways to minimize it.

Inventory Analysis This phase involves collecting and analyzing data on the inputs and outputs of a product or system over its entire life cycle (ISO, 2017). These data from the inventory

are classified according to their potential environmental, economic, and social impacts in the following impact assessment (Thies et al., 2021). For instance, environmental data might include the amount of energy and materials used to produce a product and the amount of waste generated during its use and disposal (Jasch, 2000). These data can then be translated into emissions to and resource extractions from nature using databases such as ecoinvent.

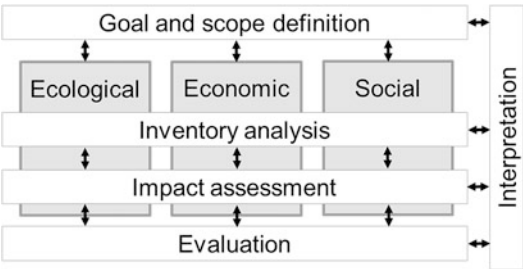
Impact Assessment In this phase, the data collected in the previous phase and their underlying emissions and resource consumptions are used to assess the environmental, social, and economic impacts of the product or system (ISO, 2017). Environmental assessment involves using life cycle impact assessment (LCIA) methods to determine the environmental impact of a product (Muñoz et al., 2008).

This assessment stage takes into consideration the decision-makers’ preferences and the underlying uncertainty by integrating the numerous indicators from all three sustainability aspects to enhance decision-making. Each stage is followed by explanation and may be carried out in a series of repeats.

Such a method assigns characterization factors to all emissions and resource extractions and translates them into impact categories such as global warming, acidification, and eutrophication. For instance, a product’s total global warming potential might be determined by summing all greenhouse gas emissions considering their respective global warming potential (Christensen et al., 2009).

Evaluation This phase involves evaluating the sustainability of a product or system based on the results of the previous phases (ISO, 2017). The sustainability of a product can be determined by considering environmental, economic, and social impacts.

Interpretation In this final phase, recommendations are made for improving the sustainability of the product or system (ISO, 2017). These recommendations can be based on the results of the



Life Cycle Sustainability Assessment, Fig. 1 Definition of the LCSA phases. (Source: Thies et al., 2021)

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previous phases and might include reducing the environmental impact, increasing resource efficiency, and improving social impact.

LCSA is conducted iteratively, and the phases should not be viewed as being linear and consecutive. To ensure accuracy, transparency, and relevance, a few things should be considered throughout the assessment. Those are the following.

Stakeholder engagement is a systematic process to gather their input and feedback on the LCSA process and results by influencing stakeholders. Stakeholders can include customers, suppliers, regulators, and other interested parties. For instance, a company might engage with customers to gather their opinions on the sustainability of its products and what improvements they would like to see.

Data quality assurance and verification ensure accuracy and completeness (ISO, 2017). This can involve validating the results of the LCSA to ensure that they are credible and reliable. For instance, a company might engage an independent third-party auditor to review its LCSA results and validate its findings.

Communication and Dissemination To make information and LCSA results widely available to stakeholders (ISO, 2017). This can be done through a variety of channels, including reports, presentations, and public meetings. For instance, a company might publish a sustainability report detailing the results of its LCSA and how it is working to improve the sustainability of its products.

Continual Improvement The LCSA process is not a one-time event but rather an ongoing process of continuous improvement. This involves regularly re-evaluating the sustainability of a product or system and making changes as needed to improve its sustainability over time. For instance, a company might conduct an LCSA every few years to assess the sustainability of its products and identify areas for improvement (Iribarren et al., 2016).

Software Tools and Database for LCSA

There are numerous software tools available for LCSA, each offering a different set of features and

capabilities. By choosing the right tool, organizations can streamline their LCSA process, improve the accuracy of their results, and communicate their environmental impact to stakeholders in a clear and concise manner. The following are some of the software tools commonly used in LCSA.

SimaPro SimaPro is a widely used life cycle sustainability assessment (LCSA) software tool that helps organizations assess the environmental impact of their products. The software features a database of life cycle inventory data, an impact assessment method, and a reporting tool, making it a comprehensive tool for conducting an LCSA.

GaBi GaBi is a software tool for LCSA that features a comprehensive database of life cycle inventory data, an impact assessment method, and a reporting tool. The software also provides users with a platform for conducting sensitivity analyses and Monte Carlo simulations, allowing them to understand the uncertainty and variability of their results. GaBi also analyzes economic as well as social impacts.

Building for Environmental and Economic Sustainability (BEES) BEES is a software tool for LCSA that integrates life cycle assessment with sustainability assessment (Whitehead et al., 2015). The software uses a database of life cycle inventory data and a comprehensive set of impact categories to assess the environmental impact of a product.

OpenLCA OpenLCA is an open-source software tool for LCSA that provides users with a database of life cycle inventory data and an impact assessment method (Wilson & Vasile, 2017). The software also features a reporting tool and allows for the integration of additional data sources and impact assessment methods.

EcoImpact EcoImpact is a software tool for LCSA that provides a comprehensive set of impact categories and a robust database of life cycle inventory data (Gava et al., 2018). The tool also features a reporting module that allows

users to communicate their results in a clear and concise manner.

BioScope BioScope is a software tool for LCSA specifically designed for the biobased industry. The tool provides a comprehensive set of impact categories and a database of life cycle inventory data, as well as a reporting module and the ability to integrate additional data sources and impact categories.

Many of these software tools offer a high degree of customization, allowing users to adapt the tool to meet their specific needs and requirements. For instance, a company might need to assess the sustainability of its products using a specific set of impact categories or data sources and software tools such as SimaPro or GaBi allow for this customization. Some software tools for LCSA can be integrated with other sustainability assessment tools, such as sustainability reporting software or environmental management systems. This integration allows for more streamlined and comprehensive approaches to sustainability assessment while also helping organizations to better understand the full picture of their sustainability impact. Software tools for LCSA have become increasingly user-friendly in recent years, making them accessible to a wider range of users. For instance, many software tools now feature intuitive interfaces and user-friendly data input methods, making the assessment process easier and more efficient. In addition, it is important to note that there is a growing interest in the development of cloud-based LCSA software tools, which allow for the collection, analysis, and communication of sustainability data in real time. These tools offer a more agile and efficient approach to LCSA, and they have the potential to revolutionize the way organizations access and communicate their sustainability impact.

Variant of LCSA

There are several variants of life cycle sustainability assessment (LCSA) that focus on different

aspects or stages of the life cycle of a product, service, or process. Here are a few examples.

Cradle-to-Grave LCSA Cradle-to-grave LCSA is a variant of LCSA that evaluates the sustainability impact of a product, service, or process from the time of its creation to its disposal or end of life (Hossaini et al., 2015). This variant focuses on the entire life cycle, including the extraction of raw materials, production, use, and disposal.

Cradle-to-Cradle LCSA Cradle-to-cradle LCSA is a variant of LCSA that evaluates the sustainability impact of a product, service, or process with the aim of creating a closed-loop system where materials are continuously recycled (Stillitano et al., 2022). This variant focuses on the entire life cycle, with a focus on material recovery and reuse and reducing waste and pollution.

Cradle-to-Gate LCSA Cradle-to-gate LCSA is a variant of LCSA that evaluates the sustainability impact of a product, service, or process up to the point of sale or delivery to the customer (Barni et al., 2018). This variant focuses on the production stage of the life cycle and does not consider the use and disposal stages.

Gate-to-Gate LCSA Gate-to-gate LCSA is a variant of LCSA that evaluates the sustainability impact of a product, service, or process from the point of production to the point of disposal or end of life. This variant focuses on the production and use stages of the life cycle and does not consider the extraction of raw materials and disposal stages.

End-of-Life LCSA End-of-life LCSA is a variant of LCSA that evaluates the sustainability impact of a product, service, or process only in the end-of-life stage, including disposal, recycling, and waste management (Hossaini et al., 2015). This variant focuses specifically on the environmental and social impacts of the disposal and waste management stages of the life cycle.

Applications of LCSA

LCSA is regarded as the application of system analysis on a product such that the interconnection between the life cycle chain of the product and the environmental impact that comes with it could be ascertained while providing conservation measures to ensure sustainable environments.

Life cycle sustainability assessment has a wide range of applications in different industries and sectors. Here are some of the key applications of LCSA.

Environmental Management LCSA can be used to evaluate the environmental impact of products, services, and processes and to identify areas for improvement. This can help organizations meet environmental regulations, reduce their carbon footprint, and improve their sustainability performance.

Supply Chain Management LCSA can be used to assess the sustainability impact of the supply chain, from raw material extraction to end-of-life disposal. This can help organizations identify areas for improvement and reduce the sustainability impact of their supply chain.

Product Design LCSA can be used during the product design phase to evaluate the sustainability impact of different design options and to optimize the design for sustainability. This can help organizations improve the sustainability performance of their products and reduce their environmental footprint.

Decision Making LCSA can be used to support decision-making in areas such as product development, supply chain management, and sustainability strategy. By providing a comprehensive view of the sustainability impact of different options, LCSA can help organizations make informed decisions that align with their sustainability goals.

Public Procurement LCSA can be used in public procurement processes to evaluate the

sustainability impact of products and services and to select suppliers and products that align with sustainability goals. This can help public organizations improve their sustainability performance and reduce their environmental footprint.

Investment Decision Making LCSA can be used in investment decision-making to evaluate the sustainability impact of potential investments and to select investments that align with sustainability goals. This can help investors improve their sustainability performance and reduce their environmental footprint.

Sustainability Reporting LCSA can be used in sustainability reporting to provide a comprehensive view of an organization's sustainability impact, including its environmental, social, and economic impact. This can help organizations communicate their sustainability performance to stakeholders and improve their reputation.

Environmental Impact Assessment LCSA can be used in environmental impact assessment to evaluate the sustainability impact of projects and to identify areas for improvement. This can help organizations reduce their environmental footprint and improve their sustainability performance.

Climate Change Mitigation and Adaptation LCSA can be used in climate change mitigation and adaptation to evaluate the sustainability impact of different mitigation and adaptation strategies and to optimize their sustainability performance.

Consumer Goods LCSA can be used to evaluate the sustainability impact of consumer goods, such as food, clothing, and electronics, and to identify areas for improvement.

Infrastructure and Construction LCSA can be used to evaluate the sustainability impact of infrastructure and construction projects, such as buildings, roads, and bridges, and to identify areas for improvement.

Energy and Utilities LCSA can be used to evaluate the sustainability impact of energy and utility systems, such as power plants, pipelines, and water treatment facilities, and to identify areas for improvement.

Agriculture and Land Use LCSA can be used to evaluate the sustainability impact of agriculture and land use practices, such as crop production, livestock production, and forest management, and to identify areas for improvement.

Waste Management LCSA can be used to evaluate the sustainability impact of waste management practices, such as recycling, composting, and landfill, and to identify areas for improvement.

Industrial Processes LCSA can be used to evaluate the sustainability impact of industrial processes, such as chemical manufacturing, oil refining, and metal processing, and to identify areas for improvement.

Health and Safety LCSA can be used to evaluate the sustainability impact of health and safety practices, such as workplace safety, product safety, and occupational health, and to identify areas for improvement.

Natural Resource Management LCSA can be used to evaluate the sustainability impact of natural resource management practices, such as fisheries, forestry, and mining, and to identify areas for improvement.

Challenges Involved with Life Cycle Sustainable Assessment

There are several challenges associated with life cycle sustainability assessment (LCSA), and some of them include the following.

Data Availability One of the biggest challenges of LCSA is the availability and quality of data. LCSA requires data on various aspects of a

product or system, including inputs, outputs, and environmental impact. These data may be difficult to obtain, incomplete, or unreliable.

Complexity LCSA is a complex process that requires expertise in many areas, including sustainability, life cycle assessment, and systems analysis. This can make it difficult for practitioners to understand and implement LCSA effectively.

Modeling LCSA requires the development of models to assess the sustainability impact of a product or system. These models can be complex and difficult to develop, especially for systems with multiple inputs, outputs, and pathways.

Integration LCSA must be integrated with other sustainability assessment methods and tools, such as life cycle assessment and sustainability impact assessment. This integration can be challenging, as each method and tool may use different data, assumptions, and methodologies.

Standardization There is currently a lack of standardization in LCSA, which can lead to inconsistent results and interpretations. This makes it difficult to compare LCSA results across products, systems, and sectors.

Cost LCSA can be a resource-intensive process, requiring significant investment in data collection, modeling, and analysis. This can be a challenge for organizations with limited resources.

Time LCSA is a time-consuming process that requires significant effort to gather data, develop models, and perform analyses. This can make it difficult for organizations to prioritize LCSA within their sustainability programs.

Relevance LCSA may not always provide relevant information for decision-making. For instance, LCSA also focus on environmental impacts but not address other sustainability dimensions, such as social and economic impacts.

Understanding There may be a lack of understanding among stakeholders, including customers, suppliers, regulators, and the public, of the purpose and results of LCSA. This can make it difficult to communicate the results and implications of LCSA effectively.

Accessibility LCSA can be a complex and technical process that is not accessible to many stakeholders. This can make it difficult to engage stakeholders in the LCSA process and to communicate the results and implications of LCSA effectively.

Interdisciplinary Approach LCSA requires an interdisciplinary approach involving experts from various fields, including sustainability, life cycle assessment, engineering, and business. This can be challenging for organizations to implement, as it requires coordination and collaboration across departments and functions.

Data Availability and Quality One of the biggest challenges in LCSA is obtaining accurate and relevant data on the environmental and social impacts of products and systems. This can be particularly difficult for new and emerging products, where data may not yet be available.

Modeling Complexity LCSA involves modeling complex systems and interactions between different components and processes. This can lead to uncertainty in the results and difficulty in capturing all relevant impacts and interactions.

Characteristics Specific to LCSA

- LCSA studies concentrate on the environmental, economic, and social impacts of a product or service. Factors responsible for adopting a particular LCSA approach include the combination of the cost involved, social implications, economic performance, and technical feasibility.

- LCSA connects these impacts to the system's function, which helps to simplify the comparison between available substitutes.
- LCSA helps to estimate balances over the entire life cycle of a product or service from the cradle to the grave, i.e., from the extraction of raw materials to disposal.
- LCSA quantifies all critical constraints (toxicity, global warming, eutrophication, etc.) associated with the environment.

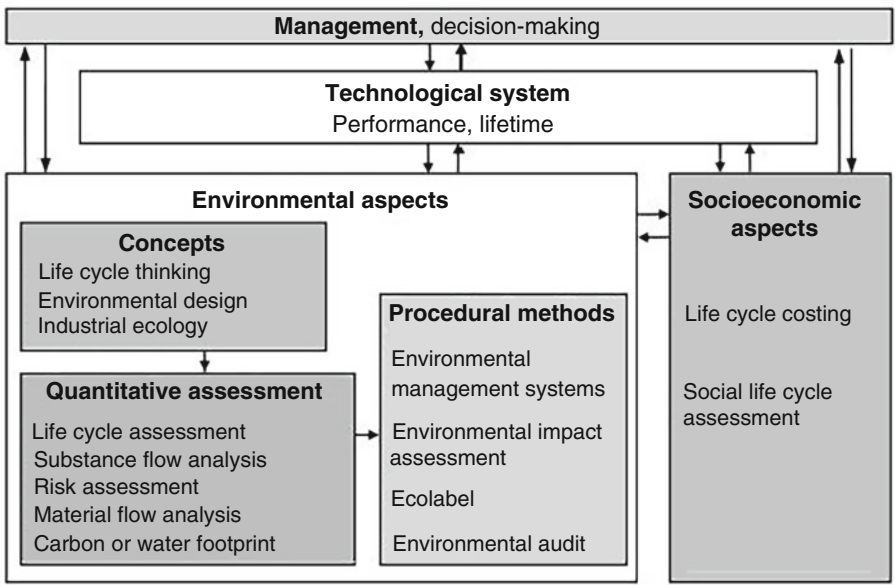
Comparison with Other Environmental Analysis Tools

Apart from LCSA, there are several other tools available that may support decision-making by government, businesses, and consumers with regard to the environmental implications of that decision. The available tools can be streamlined into providing (1) a conceptual understanding of the system under study, (2) quantitative data on the environmental impacts of the studies, and (3) procedural guidance on how to use and classify the results of (2) (Fig. 2).

LCSA are part of the second step, as they provide quantified environmental impacts. Ecolabeling tools are part of the third step, typically dealing with a set of like products within a concise functional class, and aim to verify the environmental friendliness of a product compared to more harmful products. Another procedural tool is environmental audits, which evaluate the environmental performance of a solitary business and provide follow-up opinions.

These procedural approaches are frequently based on comprehensive environmental assessment tools, which include those described below:

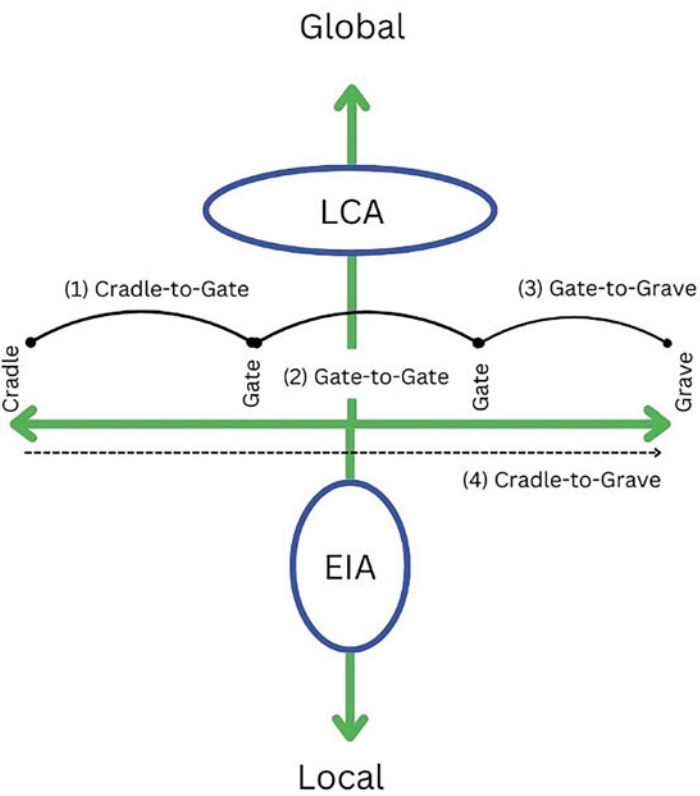
- (i) LCSA estimates the substantial integral of resource uses, substance flows, and environmental aggregations to quantify several environmental constraints linked with a given task.
- (ii) A substance flow analysis (SFA) estimates the flows and environmental aggregations of an individual element, such as mercury, or a



Life Cycle Sustainability Assessment, Fig. 2 Linkage between various tools to assess the sustainability of a good or service. (Source: Wrisberg et al., 2002)

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Life Cycle Sustainability Assessment, Fig. 3 Difference between environmental impact assessment and life cycle assessment. (Sources: DEISO, 2023)



group of substrates, such as inorganic nitrate compounds.

- (iii) A risk assessment (RA) investigates the associated risk or the probability of adverse impacts associated with installation (such as a nuclear power plant) or the risks involved with utilizing a chemical substance.
- (iv) Material flow analysis (MFA) systematically follows the flow of materials such as paper, glass, concrete, or plastics in the economy of a specific area.
- (v) A carbon footprint (CF) helps to ascertain total emissions of greenhouse gases either directly or indirectly associated with product, a human activity, or a business.
- (vi) A water footprint (WF) helps estimate the impacts of water usage and environmental exposures related to water physicochemistry.

The difference between LCA and EIA is illustrated in Fig. 3, indicating correlative temporal and spatial scales over which each tool is utilized. The LCA approach is primarily for estimating the life cycle of a product or service right, from the collection of raw materials (cradle) to the end of life or waste disposal (grave), either regional or on a global scale. In contrast, environmental impact assessment is limited to a specific site, such as the number of inhabitants close to the site, the distance between the site and residential neighborhoods, and the presence of ecosystems.

Summary

Globally, the LCA concept is essential for ascertaining the environmental performance of a product or service such that the impact generated will be easily measured and rectified. However, we recommend adopting ISO guidelines for LCA practice for accuracy or consistency and specific standardization toward an accepted LCA paradigm. Such a paradigm would help quantify several LCA flows, including boundary setting, impact categories and classification, normalization references, allocation policies, sensitivity analyses, and

aggregation of results when necessary. It is essential to comprehensively assess the environmental performance and impacts of products or services concerning whole supply chains (cradle to grave) and evaluate the tools, approaches, and methods to be used for global sustainability. The life cycle comprehensive sustainability assessment paradigm seems promising, and once it reaches maturity, the life cycle comprehensive sustainability assessment of product supply chains will be more feasible. Furthermore, incorporating a socioeconomic factor concerning LCA would make them more valuable for decision-makers, companies, consumers, and social and economic researchers.

Cross-References

- [Blue Economy](#)
- [Carbon Footprint](#)
- [Green Jobs Social Life Cycle Assessment](#)
- [LCA](#)
- [Life Cycle Analysis](#)
- [Life Cycle Assessment: Products and Services](#)
- [Life Cycle Management](#)
- [Social Life Cycle Assessment](#)
- [Sustainability](#)

References

- Azapagic, A., & Clift, R. (1999). The application of life cycle assessment to process optimization. *Computers and Chemical Engineering*, 23, 1509–1526.
- Barni, A., Fontana, A., Menato, S., Sorlini, M., & Canetta, L. (2018, September). Exploiting the digital twin in the assessment and optimization of sustainability performances. In *2018 international conference on intelligent systems (IS)* (pp. 706–713). IEEE.
- Christensen, T. H., Gentil, E., Boldrin, A., Larsen, A. W., Weidema, B. P., & Hauschild, M. (2009). C balance, carbon dioxide emissions and global warming potentials in LCA-modelling of waste management systems. *Waste Management & Research*, 27(8), 707–715.
- Curan, M. (2006). Life cycle assessment as a tool for waste management. *Waste Management*, 26(1), 5–16.
- De Vries, M., & de Boer, I. J. (2010). Comparing environmental impacts for livestock products: A review of life cycle assessments. *Livestock Science*, 128(1–3), 1–11.

- DEISO. (2023). *Life cycle assessment: A getting started guide*. <https://deiso.co.jp/life-cycle-assessment-a-getting-started-guide/>. Accessed 5 Mar 2023.
- Esteve-Llorens, X., Darriba, C., Moreira, M. T., Feijoo, G., & González-García, S. (2019). Towards an environmentally sustainable and healthy Atlantic dietary pattern: Life cycle carbon footprint and nutritional quality. *Science of the Total Environment*, 646, 704–715.
- European Commission. (2010). *International reference life cycle data system (ILCD) handbook – General guide for life cycle assessment*. Joint Research Centre. Institute for Environment and Sustainability.
- Gava, O., Bartolini, F., Venturi, F., Brunori, G., Zinnai, A., & Pardossi, A. (2018). A reflection of the use of the life cycle assessment tool for agri-food sustainability. In R. Ruben & J. Verhagen (Eds.), *Towards sustainable global food systems* (pp. 211–226). MDPI.
- Guinée, J. (2016). Life cycle sustainability assessment: What is it and what are its challenges? In R. Clift & A. Druckman (Eds.), *Taking stock of industrial ecology* (pp. 45–68). Cham: Springer. https://doi.org/10.1007/978-3-319-20571-7_3.
- Gundes, S. (2016). The use of life cycle techniques in the assessment of sustainability. *Procedia-Social and Behavioral Sciences*, 216, 916–922.
- Hossaini, N., Reza, B., Akhtar, S., Sadiq, R., & Hewage, K. (2015). AHP based life cycle sustainability assessment (LCSA) framework: A case study of six storey wood frame and concrete frame buildings in Vancouver. *Journal of Environmental Planning and Management*, 58(7), 1217–1241.
- Iribarren, D., Martín-Gamboa, M., O'Mahony, T., & Dufour, J. (2016). Screening of socioeconomic indicators for sustainability assessment: A combined life cycle assessment and data envelopment analysis approach. *The International Journal of Life Cycle Assessment*, 21, 202–214.
- ISO. (2006a). *ISO 14044:2006: Environmental management – Life cycle assessment – Requirements and guidelines*. Geneva: International Organization for Standardization.
- ISO. (2006b). *ISO 14040:2006: Environmental management – Life cycle assessment – Requirements and guidelines*. Geneva: International Organization for Standardization.
- ISO. (2017). *ISO 14044: Environmental management – Life cycle assessment – Requirements and guidelines*. Geneva: International Organization for Standardization.
- Jasch, C. (2000). Environmental performance evaluation and indicators. *Journal of Cleaner Production*, 8(1), 79–88.
- Jolliet, O., Saadé-Sbeih, M., Shaked, S., Jolliet, A., & Crettaz, P. (2015). *Environmental life cycle assessment*. CRC Press.
- Muñoz, I., Gómez, M. J., Molina-Díaz, A., Huijbregts, M. A., Fernández-Alba, A. R., & García-Calvo, E. (2008). Ranking potential impacts of priority and emerging pollutants in urban wastewater through life cycle impact assessment. *Chemosphere*, 74(1), 37–44.
- Stillitano, T., Falcone, G., Iofrida, N., Spada, E., Gulisano, G., & De Luca, A. I. (2022). A customized multicycle model for measuring the sustainability of circular pathways in agri-food supply chains. *Science of the Total Environment*, 844, 157229.
- Stokes, R., & Horvath, A. (2006). Sustainable waste management: A life cycle assessment (LCA) framework and its application. *Journal of Cleaner Production*, 14(6), 547–560.
- Thies, C., Kieckhäfer, K., Spengler, T. S., & Sodhi, M. S. (2019). Operations research for sustainability assessment of products: A review. *European Journal of Operational Research*, 274(1), 1–21.
- Thies, C., Kieckhäfer, K., & Spengler, T. S. (2021). Activity analysis-based modelling of global supply chains for sustainability assessment. *Journal of Business Economics*, 91(2), 215–252.
- Whitehead, B., Andrews, D., Shah, A., & Maidment, G. (2015). Assessing the environmental impact of data centres part 2: Building environmental assessment methods and life cycle assessment. *Building and Environment*, 93, 395–405.
- Wilson, A. R., & Vasile, M. (2017). *Integrating life cycle assessment of space systems into the concurrent design process*.
- Wrisberg, M. N., Udo de Haes, H. A., Triebswetter, U., Eder, P., & Clift, R. (2002). *Analytical tools for environmental design and management in a systems perspective: The combined use of analytical tools*. Dordrecht: Kluwer. Z.
- Yuan, C., Zhai, Q., & Dornfeld, D. (2012). A three-dimensional system approach for environmentally sustainable manufacturing. *CIRP Annals*, 61(1), 39–42.

Life Cycle Theory

► Life Cycle Management II

Life Domain Balance

► Work–Life Balance

Life Satisfaction

► Work–Life Balance

Life-Cycle Analysis

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Synonyms

[Cradle-to-grave analysis](#); [Life-cycle assessment](#)

Definition/Description

As society became more concerned with problems of natural resource scarcity and degradation of natural order, business organizations started to search for ways to reduce their negative environmental impact. One of the tools created for this exact purpose is the life-cycle analysis (LCA), sometimes referred to as life-cycle assessment. The phrase “life cycle” refers to the primary actions that take place over the span of a product’s lifetime, from its manufacture to its use and maintenance to its final disposal, including the extraction of raw materials. LCA is often a key technique for supporting sustainable development decision-making. It is a tool for assessing the potential environmental consequences of materials, products, processes, or activities. Importantly, LCA is a method for assessing the direct and indirect environmental impacts across the whole life cycle of a product system, from material acquisition to manufacturing, use, and disposal, that is, from cradle-to-grave. It considers all stages of a product’s life cycle from the standpoint of their interdependence, which means that one activity leads to the following one. LCA allows for the assessment of the total

environmental impacts from all stages of a product’s life cycle, including those that are typically overlooked in commercial analyses. This method provides a full view of the environmental elements of a product or process by considering impacts throughout the product life cycle, as well as a more accurate depiction of the true environmental trade-offs in product and process choices.

History of LCA (See Table 1)

The first study concerning the life-cycle analysis (LCA) was presented at the World Energy Conference back in 1963. Some other life-cycle-oriented methods were already developed through various cooperations between educational and industrial facilities in the 1960s. Resource and Environmental Profile Analysis (REPA) was one of those LCA precursors, while the term life-cycle assessment became a norm much later in the 1990s. In several years, the focus was on solid waste generation, which was seen as an issue, particularly in the United States, where landfilling was the predominant waste management strategy. Energy use was the focus of early investigations in earlier years when the price of oil was fluctuating or high. Emissions were also a source of public concern, which were judged to be sufficiently controlled by regulation and voluntary industry measures at times, but were later deemed to be quite problematic. Early methods of impact assessment tended to characterize emissions impacts as the amount of air or water required to dilute emissions to safe levels or below regulatory criteria.

Until the end of the 1990s, there were already dozens of functional methods for assessing impact. From this point, the only possible ambition became to lay the capstone by quantifying all relevant environmental impacts. The first methodology to achieve this to some degree was CML92, created by the Institute of Environmental Sciences from the Netherlands. In addition to this, the 1990s also saw the boom of a number of life-cycle inventory (LCI) databases. And with the release of the first ecoinvent database in 2003, covering all industrial sectors, the problem of

Life-Cycle Analysis, Table 1 Selected events in LCA history (Hauschild et al. 2018, 19)

Event	Year
The (perhaps) first LCA-oriented study was presented on energy requirements for the production of chemical intermediates and products	1963
Coca cola commissions its first study comparing beverage containers	1969
The methodological foundation for environmentally extended input/output analysis is made	1970
Publication of the first public and peer-reviewed LCA study “resource and environmental profile analysis of nine beverage container alternatives,” commissioned by the US EPA	1974
First impact assessment method based on critical volumes introduced	1984
The first widely used commercial LCA software, GaBi, was released in its first version	1989
SimaPro, another widely used commercial LCA software, was released in its first version	1990
The term “life cycle assessment” was coined	1990
Emergence of a number of life-cycle inventory (LCI) databases managed by different institutions	Early 1990s
First environmental theme-oriented impact assessment methodology, CML92	1992
SETAC code of practice published in effort to harmonize LCA framework, terminology, and methodology	1993
The academic journal fully dedicated to LCA, <i>the international journal of life cycle assessment</i> , was born	1996
ISO 14040 standard on LCA principles and framework released	1997
ISO 14041 standard on goal and scope definition released	1998
Damage-oriented methodology eco-indicator 99 emerges	1999
ISO 14042 standard on life cycle impact assessment released	2000
ISO 14043 standard on life cycle interpretation released	2000
UNEP/SETAC life cycle initiative launched	2002
The LCI database ecoinvent version 1.01 is released	2003
Establishing of a general methodological framework and guidelines for LCA through ISO 14040 and ISO 14044	2006
A framework for life cycle sustainability analysis was proposed	2008
International life cycle data system (ILCD) handbook published	2010
Product environmental footprint (PEF) and organization environmental footprint (OEF) guidelines published	2012 and later

(meta)data scarcity ceased to be an aggravating factor for the LCA (Hauschild et al. 2018).

Probably the most official recognition of this method began to happen in 1997 when the International Organization for Standardization (ISO) included LCA in the 14,000 series of environmental management standards.

Method

According to the US Environmental Protection Agency (EPA), “LCA is a technique to assess the environmental aspects and potential impacts associated with a product, process, or service, by:

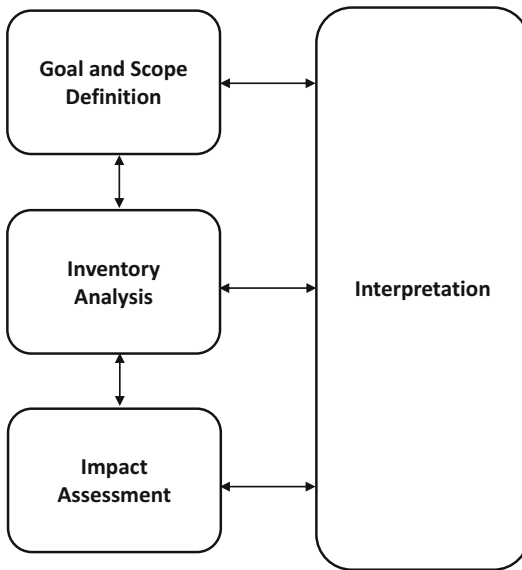
- Compiling an inventory of relevant energy and material inputs and environmental releases

- Evaluating the potential environmental impacts associated with identified inputs and releases
- Interpreting the results to help you make a more informed decision” (EPA 2006)

The process of LCA illustrated in the Fig. 1 is conducted systematically through its four phases (or components): (1) goal definition and scoping, (2) inventory analysis, (3) impact assessment, and (4) interpretation.

1. Goal and Scope definition

- The first phase consists in explicating goals, objectives, and a scope of investigation. Here it is important to determine which product systems are going to be assessed and how. There are many variants of limited LCAs that differ in their scope of investigation such as



Life-Cycle Analysis, Fig. 1 General phases of LCA (ISO 2006)

cradle-to-grave, cradle-to-gate, cradle-to-cradle, gate-to-gate, or well-to-wheel.

2. Inventory Analysis

- Life-cycle Inventory (LCI) analysis is the most time-consuming phase of the LCA. LCI analysis mostly consists in collecting the information on elementary flows from all the processes of a certain product system.

3. Impact Assessment

- After LCI analysis accumulates and systematizes a full inventory of elementary flows, it becomes the basis for Life-cycle Impact Assessment (LCIA). Although it is largely automated by software, LCIA aims to assess the environmental significance of each elementary flow.

4. Interpretation

- In the last phase of LCA, all preceding phases are subjected to the control and reported with feedback. Ultimately, guidance is provided on how to draw conclusions derived from the previous phases of the interpretation and make suggestions based on the study's findings (ILCD, 2011).

Uses and Benefits

LCA is primarily used for helping decision makers select those materials, products, activities, or processes, which will inflict the least impact on the environment. It is massively used to support business strategy or R&D decisions as well. The information acquired from the LCA is usually combined with other relevant factors such as cost or availability before the decision is made.

According to the EPA, LCA serves as a necessary tool for avoiding shifting environmental problems from one place to another.

An LCA allows a decision maker to study an entire product system hence avoiding the suboptimization that could result if only a single process were the focus of the study. For example, when selecting between two rival products, it may appear that Option 1 is better for the environment because it generates less solid waste than Option 2. However, after performing an LCA it might be determined that the first option actually creates larger cradle-to-grave environmental impacts when measured across all three media (air, water, land) (e.g., it may cause more chemical emissions during the manufacturing stage). Therefore, the second product (that produces solid waste) may be viewed as producing less cradle-to-grave environmental harm or impact than the first technology because of its lower chemical emissions (EPA 2006).

Summary

Life Cycle Assessment (LCA) is a methodology used to evaluate the environmental impacts of a product or process throughout its entire life cycle, from the extraction of raw materials to the disposal or recycling of the product at the end of its useful life. The goal of LCA is to identify the environmental burdens associated with a product or process and to provide insights into opportunities for reducing these burdens. LCA consists of four main stages: goal and scope definition, inventory analysis, impact assessment, and interpretation. LCA is a useful tool for decision-making and sustainability assessment in various industries, such as manufacturing, construction, and transportation. It can help companies identify opportunities

for reducing their environmental footprint and improve their sustainability performance.

References

- EPA. (2006). *Life cycle assessment: Principles and practice*. Report. U. S. Environmental Protection Agency. https://web.archive.org/web/20120916182225/http://www.epa.gov/nrmrl/std/lca/pdfs/chapter1_frontmatter_lca101.pdf. Accessed 10 Apr 2022.
- Hauschild, M. Z., Rosenbaum, R. K., & Olsen, S. I. (2018). *Life cycle assessment: Theory and practice*. Montpellier: Springer International Publishing.
- ILCD. (2011). *ILCD handbook - general guide for life cycle assessment: Detailed guidance*. Publications Office. <https://data.europa.eu/doi/10.2788/38479>. Accessed 9 Apr 2022.
- ISO. (2006). *ISO 14044:2006 Environmental management — Life cycle assessment — Requirements and guidelines*. <https://www.iso.org/obp/ui/#iso:std:iso:14044:ed-1:v1:en>. Accessed 8 Apr 2022.

Life-Cycle Assessment

► Life-Cycle Analysis

Lifecycle of Sustainable Development

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Synonyms

Growth cycle; Sustainable growth cycle; Territory lifecycle

Definition

The life cycle is a fundamental tool of analysis that can be seen as the basis of the strategic

planning. In fact, if an organization understands at what point in its life cycle it is, it can design the strategic choices to be undertaken.

Furthermore, the life cycle provides forecasts on the strategic plan that must be implemented, creating a continuity between what has happened (the final life cycle) and what will happen (the estimated life cycle) in the life of the company (Volpato, 1995).

The traditional life cycle model (Frey, 2009) describes changes in a company as a sequence of development phases. As a rule, development is not considered only as a quantitative phenomenon (higher turnover, other customers, more products), but also a qualitative one (constant turnover, satisfied customers, products known to the public).

To represent the life cycle of a company, we use the Cartesian axes, setting the time on the horizontal axis and the company value on the vertical axis. The life cycle curve of a company is then divided into four phases: (1) start-up or foundation of the enterprise, (2) growth, (3) maturity, and (4) change.

Key Issue

It is clear that a life cycle can be an important political tool in the development of a country. In fact, to establish a good strategic plan for a transforming country, it is very important to know its current level of development and the possible future development stages (Sciarelli and Rinaldi, 2017, 2018).

In the case of the development of a country, obviously the life cycle has different characteristics. On the horizontal axis, we find the time, which will probably be in years. On the vertical axis, instead there is the Human Development Index, divided into low (HDI from 0.0 to 0.549), medium (HDI from 0.550 to 0.699), high (HDI from 0.700 to 0.799), and very high (>0.800). The intersection point between time and HDI divides the development life cycle into three phases plus one: start up, hang on, and self-development (or welfare).

The life cycle of development at time zero does not obviously correspond to the birth of the country as it happens for the life cycle of a company, but to the birth of the willing to develop (Sciarelli and Rinaldi, 2015).

The initial phase of the strategic development process, which would normally include the transition from a low to medium HDI, is the most complex phase, in which the contribution of skills and foreign capital is crucial in the success of the strategic plan and in achieving the desired results.

The hang-on phase is very delicate, as it includes a constant growth with a progressive abandonment of both economic and human foreign capital. At this stage, the country could maintain its HDI, consolidating its growth, or it could continue to grow up to a high HDI, using fewer foreign resources.

The third phase can include one of the two scenarios: self-development or welfare. The first represents an evolution of development towards the maintenance or growth of HDI, obtained in complete independence. In this phase, in fact, the government and the NGAs become the main agents of their own development. In the second Welfare scenario, the country's profile is instead reduced both in development and in autonomy, since it becomes dependent on foreign assistance. The end of the second phase and the beginning of the third are decisive, since the country chooses between independence and dependence on foreign countries. A linear curve, as imagined in the Fig. 1, however, is not easily obtained. In fact, in the long run, there is a risk of intervening conflicting factors, such as natural disasters (especially in some countries), changes in government, economic crises. It is therefore right to imagine that every 15 years this curve may encounter some moments of revaluation.

The life cycle of sustainable development is based on three main components: economy, health, and education. So, if we consider only economic development, then altered cycles like the so-called "flash in the pad" are possible, a cycle in which there is rapid growth and therefore an equally rapid decline. More irregular or

particularly slow life cycles, such as those of Ethiopia and Benin, or unbalanced life cycles like the Indians and Filipinos, even if they have reached an average, HDI still have a net imbalance in the economic variables.

If the tools for choosing the strategy are to be the right ones, the life cycle of development must be divided into three distinct life cycles: the life cycle of economic development, the life cycle of health development, and the life cycle of educational development. On the horizontal axis, we set the time and on the vertical the GNI per capita, life expectancy at birth, and the average school years.

These life cycles of the development phases will help to orientate themselves in the definition of the strategic plan, in particular in dealing with the areas of weakness and the elements of the imbalance of the overall development.

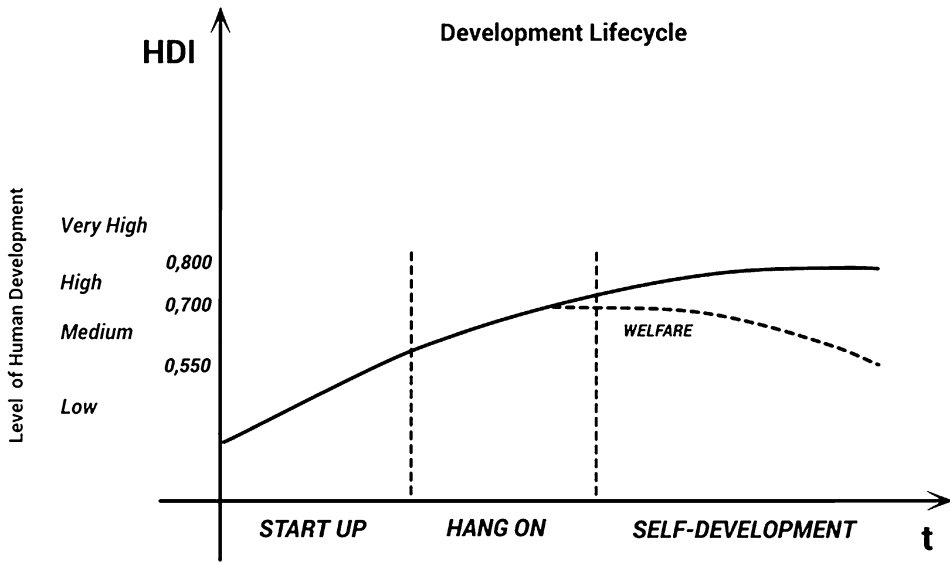
A limitation of the life cycle in comparing the development sectors is, however, the non-synchrony of the data. However, the analysis allows us to understand at what level of development the country was in the year preceding the formation of the strategy and, although this causes a slight delay in understanding events, it can be mitigated by data coming from an overall strategic analysis.

However, the development life cycle can also refer to a specific phase or a specific aspect of HDI. As a tool for strategic planning, it must also take into account the average human development influenced by the incidence of a predominant variable, indicative of a state of imbalance.

Summary

The lifecycle of sustainable development is the result of a hybridization of the management traditionally used for companies with the development of the territories. In fact, a simple management tool such as the life cycle of a company is used to define the life cycle of a country and the actions that can then make this sustainable.

The hybridization between traditional management, which we call micro, and territorial



Lifecycle of Sustainable Development, Fig. 1 Development lifecycle (Sciarelli and Rinaldi 2017)

management in fact creates strategic macro-management tools, such as the lifecycle of sustainable development, which can be fundamental for the best management of territories.

Lifestyle

- Sufficiency

Cross-References

- Actors of Development Management
- Development Management
- HRM of Sustainable Development Phases
- United Nations Development Programme

References

- Frey, U. (2009). Le fasi dello sviluppo aziendale. pi – Gestione delle piccole imprese, 3.
- Sciarelli, F., & Rinaldi, A. (2015). Economic and social causes for a lack of sustainable development: A comparison between India and Ethiopia. In *Sustainable Development Conference 2015*, July 5–7, 2015.
- Sciarelli, F., & Rinaldi, A. (2017). *Development management of transforming economies. Theories, approaches and models for overall development*. London: Palgrave Macmillan.
- Sciarelli, F., & Rinaldi, A. (2018). *Il Macro-Management per le Aree Deboli del Mondo*. Milano: Franco Angeli.
- Volpato, G. (1995). Concorrenza, impresa, strategie. Il Mulino.

Lifestyles of Health and Sustainability

- Lohas

Limits to Growth

- Degrowth
- Postgrowth

Linkages

- Cooperation and Open Innovation

Liquid

- Water

Livelihood

- [Sustainability \(World Commission on Environment and Development Definition\)](#)
-

Load Management

- [Energy Demand Management](#)
-

Local Agenda 21

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Synonyms

[Earth summit](#); [LA21](#); [Rio+20](#)

Definition/Description

Local Agenda 21 (LA21) is a program officially launched by the United Nations in 1992 to promote sustainable development at the local level. The program encourages local governments to create sustainable development plans and implement them through partnerships with local organizations and community groups. The goal of LA21 is to achieve sustainable development by integrating economic, social, and ecological factors into decision-making activities at the local community levels.

LA21 is based on the idea that local governments are in the best position to understand and address the specific sustainable development needs of their communities. LA21 encourages local governments to take a holistic approach to

sustainable development by addressing issues such as economic development, social inclusion, and environmental protection in an integrated way. One of the key elements of LA21 is the participation of local communities in the planning and implementation of sustainable development initiatives. This helps to ensure that the initiatives are responsive to the needs and priorities of the community and that they have the support from subsidiary levels of society. As LA21 is a voluntary program local governments are free to design and implement their own sustainable development initiatives based on the specific needs and priorities of their communities. The program provides guidance and support to local governments through training, networking, and information sharing.

Introduction

The Earth Summit was a major international conference that brought together representatives from governments, civil society, and the private sector to discuss global environmental and development issues. One of the main outcomes of the conference was the adoption of Agenda 21, a comprehensive action plan for sustainable development that addressed economic, social, and environmental issues.

The proclamation text of Agenda 21 published in June 1992 after the United Nations Conference on Environment & Development in Rio de Janeiro, states the following:

Agenda 21 addresses the pressing problems of today and also aims at preparing the world for the challenges of the next century. It reflects a global consensus and political commitment at the highest level on development and environmental cooperation. Its successful implementation is first and foremost the responsibility of Governments. National strategies, plans, policies, and processes are crucial in achieving this. International cooperation should support and supplement such national efforts. In this context, the United Nations system has a key role to play. Other international, regional, and subregional organizations are also called upon to contribute to this effort. The broadest public participation and the active involvement of the non-governmental organizations and other groups should also be encouraged. (Agenda 21, UN [1992](#), ch.1.3)

One of the key outcomes of the conference in Rio was the adoption of Agenda 21, which is a program that promotes sustainable development. A specific part of this program, called “Local Authorities’ initiatives in support of Agenda 21” (Chapter 28), played a significant role in inspiring the global Local Agenda 21 movement. According to the Secretary-General of the 1992 Earth Summit, Maurice Strong, Local Agenda 21 is one of the most promising and significant programs to have come out of the Earth Summit and is now being implemented by hundreds of local authorities worldwide. As Agenda 21 recognized that sustainable development was a global issue that required the participation and engagement of all sectors of society, including local governments, community organizations, and residents, LA21 was established as a way to promote the implementation of Agenda 21 at the local level.

The objectives of LA21 were stated in aforementioned Chapter 28:

- (a) By 1996, most local authorities in each country should have undertaken a consultative process with their populations and achieved a consensus on “a local Agenda 21” for the Community;
- (b) By 1993, the international community should have initiated a consultative process aimed at increasing cooperation between local authorities;
- (c) By 1994, representatives of associations of cities and other local authorities should have increased levels of cooperation and coordination with the goal of enhancing the exchange of information and experience among local authorities;
- (d) All local authorities in each country should be encouraged to implement and monitor programs which aim at ensuring that women and youth are represented in decisionmaking, planning and implementation processes. (Agenda 21, UN 1992, ch.28.2).

Overall, Local Agenda 21 is a program that helps the local government to create a plan and implement it in order to achieve sustainable development. It emphasizes the importance of

community engagement in the process and encourages the integration of economic, social, and environmental considerations in decision-making.

Achievements

Local Agenda 21 (LA21) has been implemented in many communities around the world and has had several notable achievements.

... in 1997 Local Agenda 21 activities were underway in more than 1800 local governments in 64 countries. Over 80% of the reported activities were taking place in 20 countries with established or nascent national Local Agenda 21 campaigns. A staggering 90% of initiatives were taking place in high-income countries. Those underway in middle- and low-income countries were less focused on environmental issues but aimed at a better integration of environmental, social, and economic issues, even if they included a shorter time perspective than those in high-income countries. (Rok and Kuhn 2012)

Some achievements include:

- Reducing greenhouse gas emissions: Many communities have implemented LA21 initiatives that have led to reductions in greenhouse gas emissions, such as energy-efficient building retrofits, the promotion of renewable energy, and transportation demand management.
- Improving air and water quality: LA21 initiatives have helped to improve air and water quality in many communities. For example, some communities have implemented rainwater harvesting systems to reduce the strain on local water resources, while others have developed green spaces and planted trees to help improve air quality.
- Promoting sustainable transportation: LA21 has helped to promote sustainable transportation options such as cycling and walking, through the creation of bike lanes and pedestrian-friendly streets, and through programs to encourage active transportation.
- Enhancing social inclusion: LA21 has helped to promote social inclusion by engaging marginalized groups in the planning and implementation of sustainable development initiatives.

- Advancing sustainable economic development: LA21 has helped to promote sustainable economic development by encouraging the growth of local economies and supporting the development of sustainable businesses and industries.
- Improving environmental quality: LA21 has helped to improve environmental quality by promoting conservation, reducing pollution, and protecting natural resources.

It is important to note that the achievements of Local Agenda 21 (LA21) vary depending on the specific community and the level of participation and engagement of the community members. Some local governments have implemented LA21 initiatives with great success, while others have struggled to gain traction.

Partnerships

Local Agenda 21 is a program that involves a wide range of participants. (LA21) is a program that involves a wide range of participants, including local governments, community organizations, residents, private sector, NGOs, civil society organizations, and international organizations. The program relies on the participation and engagement of all these groups to effectively promote sustainable development at the local level.

As stated in the official document:

Partnerships should be fostered among relevant organs and organizations such as UNDP, the United Nations Centre for Human Settlements (Habitat) and UNEP, the World Bank, regional banks, the International Union of Local Authorities, the World Association of the Major Metropolises, Summit of Great Cities of the World, the United Towns Organization and other relevant partners, with a view to mobilizing increased international support for local authority programs. (Agenda 21, UN 1992, ch.28.4)

Following this, partnerships are fostered to be found among:

- Local governments: Local governments are the primary participants in LA21. They are responsible for creating sustainable development

plans and implementing them through partnerships with other organizations and community groups.

- Community organizations: Community organizations, including non-profits, businesses, and grassroots groups, are important partners in LA21. They often provide valuable input on the specific needs and priorities of the community and help to engage residents in the planning and implementation of sustainable development initiatives.
- Residents: LA21 encourages development initiatives. This helps to ensure that the initiatives are responsive to get the participation of residents in the planning and implementation of sustainable needs and priorities of the community.
- Private sector: Private sector is also an important partner in LA21 as they can play a role in funding, implementing, and supporting sustainable development initiatives, and can also benefit from sustainable development goals.
- NGOs, Civil society organizations: NGOs and civil society organizations are also key partners in LA21, as they can provide expertise, support, and resources to the local government in implementing sustainable development plans.
- International organizations: International organizations, including the United Nations, can provide guidance and support to local governments through training, networking, and information sharing.

Partnerships between local governments and community organizations are a critical aspect of LA21. Local governments often provide the necessary resources and support for sustainable development initiatives, while community organizations provide the local knowledge and expertise needed to implement these initiatives.

Projects

The specific projects that are implemented under LA21 can vary widely depending on the needs and priorities of the community. Some examples

of major projects that have been implemented under LA21 include:

- **Green building retrofits:** Many local governments have implemented energy-efficient building retrofits as a way to reduce energy consumption and greenhouse gas emissions. These projects often involve the installation of energy-efficient lighting, heating, and cooling systems, as well as the use of sustainable building materials.
- **Renewable energy:** Many local governments have implemented renewable energy projects, such as the installation of solar panels, wind turbines, and geothermal systems, as a way to reduce their dependence on fossil fuels and promote sustainable energy use.
- **Sustainable transportation:** Many local governments have implemented sustainable transportation projects, such as the promotion of public transportation, bike-sharing programs, and the development of pedestrian-friendly streets, as a way to reduce traffic congestion and improve air quality.
- **Green spaces:** Many local governments have developed green spaces, such as parks, gardens, and community gardens, as a way to improve the quality of life for residents and promote biodiversity.
- **Water management:** Many local governments have implemented water management projects, such as rainwater harvesting, greywater recycling, and the construction of wetlands, as a way to conserve water and improve the quality of local water resources.
- **Community engagement:** Many local governments have implemented community engagement programs, such as public meetings, workshops, and education programs, as a way to engage residents in the planning and implementation of sustainable development initiatives.

These are just some examples of the major projects that have been implemented under the Local Agenda 21 (LA21) program; many other initiatives also have been taken to promote sustainable development in different communities (Coenen et. al. 1999).

LA21 in The Hague (HLA21) is one interesting example of public participation in local policy for sustainability. Public participation in The Hague was structured according to different themes, each to be developed by a working group. The project leader functioned as a representative of the municipal council but HLA21 has had little influence on municipal policy. The working groups mainly comprised individuals already active in other voluntary groups, while the health sector, lay citizens, and businesses were not reached. However, many ideas were generated “close to the ground” and some working groups managed to implement concrete projects. A network in which various citizens, politicians, organizations, and companies participate has recently been established (Andringa 1998).

Criticism and Effectiveness

Local Agenda 21 (LA21) is a voluntary program, and like any program, it has faced some criticism. Some of the main criticisms of LA21 include:

- **Lack of funding:** LA21 is a voluntary program, and many local governments have struggled to secure funding for sustainable development initiatives.
- **Limited participation:** Some critics have argued that LA21 has not been implemented effectively because of a lack of participation from local governments, community organizations, and residents.
- **Lack of specific guidelines:** LA21 is a flexible program, and some critics have argued that the lack of specific guidelines and targets has made it difficult for local governments to measure their progress and assess the effectiveness of their initiatives.
- **Lack of enforcement:** Some critics have argued that LA21 is not enforced, and that local governments are not held accountable for implementing sustainable development initiatives.
- **Limited Impact:** Some critics argue that LA21 has not been able to achieve significant impact in terms of sustainable development, as the

program is voluntary and not all local governments are participating or following it.

- Political concerns: LA21 has been criticized by some as a political agenda that is imposed on local governments by the United Nations, and that it is not flexible enough to accommodate local cultures, customs and traditions.

In his influential paper “Local Agenda 21: Substance or Spin?”, Selman (1998) concludes that although it is difficult to measure the effectiveness of Local Agenda 21 (LA 21), there is some evidence that it has been successful in certain areas. These areas include the development of strategies, promoting environmental awareness among citizens, involving various sectors, challenging traditional beliefs and practices, and supporting local government.

In the book *From the Earth Summit to Local Agenda 21: Working Towards Sustainable Development* Lafferty and Eckerberg (2013) conducted a research across nine countries and reported on the most outstanding aspects of implementing LA21 across local communities. They concluded that despite the disproportionate levels of implementation between countries, LA21 acquires more and more collaboration arrangements with governments and local authorities across Europe.

Despite criticisms, Local Agenda 21 (LA21) is still considered as a valuable tool for promoting sustainable development at the local level and many experts and organizations still support it as a way to achieve sustainable development goals. It is important to note that the effectiveness of LA21 varies depending on the specific community, the level of participation and engagement of the community members, and the resources available to implement sustainable development initiatives.

Summary

The program known as Local Agenda 21, or LA21, was first presented in 1992 at the United Nations Conference on Environment and Development. This program encourages community participation in decision-making processes regarding economic, social, and environmental issues with the goal of

promoting sustainable development at the local level. “Think globally, act locally” is a core principle of LA21, which aims to inspire local authorities, companies, and citizens to act locally to promote sustainable development. The program has been put into place in many nations around the world, and community members and stakeholders are essential to its success.

Cross-References

- [Earth Summit](#)
- [Local Agenda 21](#)
- [Sustainable Development](#)

References

- Andringa, J. (1998). The influence of local agenda 21 on local policy and the quality of decision-making: The Pioneer City of the Hague. In F. H. J. M. Coenen, D. Huitema, & L. J. O'Toole (Eds.), *Participation and the quality of environmental decision making. Environment & policy* (Vol. 14). Dordrecht: Springer. https://doi.org/10.1007/978-94-011-5330-0_9.
- Coenen, F. H. J. M., Eckerberg, K., & Lafferty, W. M. (1999). The status of LA21 in Europe: A comparative overview. In *Implementing LA21 in Europe: New initiatives for sustainable communities* (pp. 131–145). Oslo: PROSUS.
- Lafferty, W. M., & Eckerberg, K. (2013). *From the earth summit to local agenda 21: Working towards sustainable development*. London: Routledge.
- Selman, P. (1998). Local agenda 21: Substance or spin? *Journal of Environmental Planning and Management*, 41(5), 533–553. <https://doi.org/10.1080/09640569811443>.

Online Sources

- Rok, A., & Kuhn, S. (2012). *20 years of Local Agenda 21*. https://www.citego.org/bdf_fiche-document-1299_en.html
- UN, Agenda 21. (1992). *Agenda 21*. United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992. <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

Local Democracy

- [Hunger and Poverty](#)

Local Food

- [Locally Grown, Locally Raised](#)

Local Food Systems

- [Locally Grown, Locally Raised](#)

Local Governance

- [Shared Community-Based Governance](#)

Local Sustainability

- [Community Sustainability](#)

Locally Grown, Locally Raised

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Synonyms

[Local food](#); [Local food systems](#)

Definition/Description

Local food systems refer to the production and consumption of food that has been grown or raised in close physical proximity to the consumer (Martinez et al. 2010). Although this is the primary and most commonly accepted definition, local food can also refer to food sold in local farmers’ markets or has a specific characteristic which makes the food particularly typical for a geographical location (Coelho et al. 2018).

The tendency for promotion of the consumption of locally grown fruits and vegetables, and the products of locally raised animals has been on the rise in recent decades. There has been a significant rise in demand for fresh local produce and other farm products (Pinchot 2014). Research shows that price premiums increase as the geographical scale of food production shrinks (Burnett et al. 2011).

Local food systems are considered to have a positive impact on environmental protection, as opposed to large international supply chains of food. They are also believed to be beneficial for economic development, as they are labor intensive, and provide employment of local producers. This is especially relevant and of greater importance to rural and nonurban areas (FAO 2017).

Economics of Local Food Systems

Local food is usually produced by a larger number of small-scale producers and farms (Pinchot 2014). While bigger producers tend to cover a wider geographical range of customers, local small-scale producers rely on the opportunities presented by shorter supply chains. Localizing production and distribution in one place is noted to lead to the elimination of intermediaries, which in terms lowers the final price of local food (European Network for Rural Development 2012).

An important aspect of the local food systems production is the lowering of coordination costs between producers and consumers. With the opportunity to communicate directly with consumers, local producers could redistribute their scarce resources to the production of more strongly preferred goods (Pinchot 2014). For these, and other reasons, more and more have been small and medium-sized companies (SMEs) considered a key part of local food systems promotion for enhancing regional economic development (Donald 2008). Local food systems are also considered to contribute to economic development through enhancing local entrepreneurial environments, fostering economic clusters and regional branding opportunities, as well as

promoting the rise in social capital and local quality of life (Hughes and Boys 2015).

Local food systems are considered one of the crucial elements for achieving economic growth in rural areas. Keeping a food market local provides an opportunity to local producers to acquire a larger market share. Local food production is related to growth in local output.

At the same time, recent trends in consumer preferences show that more consumers are now interested in greater transparency regarding the means in which food is produced and also how their purchasing decisions could support their values and beliefs about sustainability and healthy lifestyle, as well as contribute to the local economy (Moraghan et al. 2017). Examining consumer willingness-to-pay, it has been established that price premiums increase as the geographical scale shrinks; however, at a specific range of local scales, consumers remain equally willing to pay for local food (Burnett et al. 2011).

The consumers' willingness-to-pay for local food is determined by various factors. It has been proven that personal convictions, habits, and cognitive biases, such as being part of an environmental group or being raised on a farm have a positive correlation with higher willingness-to-pay for locally grown/locally raised food (Brown 2003).

In line with the change of consumer incentives, an increase in interest by both the public and the private sector in terms of financing local food enterprises and schemes has been identified (Moraghan et al. 2017). However, financing local food systems is still considered to be underdeveloped, as investors are generally still feeling uneasy in relation to the risk-to-reward ratio of local food systems enterprises (Moraghan et al. 2017).

Environmental Impact of Local Food Systems

Local food systems have been considered to be of great importance for lowering greenhouse gas emissions, since the supply chain is much

shorter, and therefore the environmental impact from transportation – much lower (Shindelar 2015).

This notion is intuitive, and it has become an integral part of the local food systems narrative in both economic and environmental terms. However, there is more to the story of food miles than just measuring the length of food travel environmental costs. Despite measuring the overall environmental impact of local food in terms of travel distance and food travel costs, this indicator has been considered as not extensively reliable, and a richer combination of spatially explicit life cycle assessment with analysis of social issues is needed in order to incorporate the full scale of the impact of local food systems on the environment (Edwards-Jones et al. 2008).

Local Food Systems and Sustainable Development

A distinct characteristic of a significant portion of the local food systems producers is the strive to create positive externalities by promotion of measurable social or environmental goals, such as pesticide-free production, fair on-farm labor practices, and expanded nutrition access for low-income households (Moraghan et al. 2017, p. 45).

Local food markets are markets in which small-scale and family farmers are considered to have a competitive advantage because the production of such products is mostly labor-intensive, as opposed to capital-intensive goods which generally are more characteristic of large-scale production (FAO 2017).

Local food systems are believed to be a powerful tool for poverty alleviation and agricultural development. The link between farmers and cities is believed to have a great impact on rural poverty alleviation in smaller and more economically underdeveloped regions (FAO 2017).

Also, local food systems have a positive impact on advancing food equity and social inclusion of vulnerable groups such as local farmers and small-scale food producers (FAO 2017).

Criticism of Local Food Systems

Although local food systems are perceived to be a viable solution to both social and environmental problems, the definition of what constitutes a local food system is the main problem for measuring the actual effects. If framed within the globalization context, the local food systems notion has been perceived as a reaction against the adverse effects of the globalization process (Hinrichs 2003).

The problem of the concept of local food stems from a social constructivist point of view where desirable social and environmental outcomes may not always fit neatly on the spatial content of “local” concept. Alongside the economic politics of the local food production, the social aspect of differentiation has to be taken into account, and the emerging new spatial concepts pose an obstacle, as the “local” scale is in fact a different perception to different social groups and social entities (Hinrichs 2003).

Summary

Local food systems are a topic of consideration for both market agents and policy makers. As demand for locally produced food has been rising significantly in recent decades, there have been a number of benefits outlined in terms of economic development and environmental impact.

Local food systems imply shorter supply chains, which in terms lowers the final price of the goods, and is thus beneficial to consumers. At the same time, a concern regarding the market power of resellers and end-sellers such as supermarkets has been raised.

Local food systems are one of the examples of demand-driven tendency which has an overall positive effect on the environment, with local food being more sustainable in terms of carbon emissions involved in its reaching to consumers.

Cross-References

- [Green Jobs](#)
- [Sustainable Development](#)

References

- Brown, C. (2003). Consumers' preferences for locally produced food: A study in southeast Missouri. *American Journal of Alternative Agriculture*, 18(4), 213–224. <https://doi.org/10.1079/AJAA200353>.
- Burnett, P., Kuethe, T. H., & Price, C. (2011). Consumer preference for locally grown produce: An analysis of willingness-to-pay and geographic scale. *Journal of Agriculture, Food Systems, and Community Development*, 2(1), 269–278. <https://doi.org/10.5304/jafscd.2011.021.013>.
- Coelho, F. C., Coelho, E. M., & Egerer, M. (2018). Local food: Benefits and failings due to modern agriculture. *Scientia Agricola*, 75(1), 84–94. <https://doi.org/10.1590/1678-992x-2015-0439>.
- Donald, B. (2008). Food systems planning and sustainable cities and regions: The role of the firm in sustainable food capitalism. *Regional Studies*, 42(9), 1251–1262. <https://doi.org/10.1080/00343400802360469>.
- Edwards-Jones, G., Milà i Canals, L., Hounsome, N., Truninger, M., Koerber, G., Hounsome, B., et al. (2008). Testing the assertion that “local food is best”: The challenges of an evidence-based approach. *Trends in Food Science and Technology*, 19, 265–274.
- European Network for Rural Development. (2012). EU rural review no. 12. European Union. European Network for Rural Development. <https://enrd.ec.europa.eu/sites/default/files/E8F24E08-0A45-F272-33FB-A6309E3AD601.pdf>. Accessed 11 Sept 2021.
- FAO (Food and Agriculture Organization of the United Nations). (2017). *The future of food and agriculture. Trends and challenges*. Rome: Food and Agriculture Organization of the United Nations. <http://www.fao.org/3/i6583e/i6583e.pdf>. Accessed 22 Aug 2021.
- Hinrichs, C. C. (2003). The practice and politics of food system localization. *Journal of Rural Studies*, 19(1), 33–45. [https://doi.org/10.1016/S0743-0167\(02\)00040-2](https://doi.org/10.1016/S0743-0167(02)00040-2).
- Hughes, D. W., & Boys, K. A. (2015). What we know and don't know about the economic development benefits of local food systems. The magazine of food, farm, and resource issues. *Choices*, 30(1), 1–6. https://www.choicesmagazine.org/UserFiles/file/cmsarticle_413.pdf. Accessed 11 Sept 2021.
- Martinez, S., Hand, M., Pra, M. D., Pollack, S., Ralston, K., Smith, T., et al. (2010). *Local food systems concepts, impacts, and issues*. Washington, DC: USDA-Economic Research Service.
- Moraghan, M., Danaher, K., & Harris, G. (2017). The investment continuum: Risk, reward and impact in local and regional food systems. In A. Dumont, D. Davis, J. Wascalus, T. Cheeks, W. J. Barham, & D. Tropp (Eds.), *Harvesting opportunity: The power of regional food system investments to transform communities*. St. Louis: Federal Reserve Bank of St. Louis, Board of Governors of the Federal Reserve System.
- Pinchot, A. (2014). The economics of local food systems: A literature review on the production, distribution, and consumption of local food. <https://staging.community->

wealth.org/sites/clone.community-wealth.org/files/downloads/paper-pinchot.pdf. Accessed 30 Aug 2021.
 Shindelar, R. (2015). The ecological sustainability of local food systems. *RCC Perspectives*, 1, 19–24. <http://www.jstor.org/stable/26241302>. Accessed 1 Sept 2021.

Logistics Network Management

► Supply Chain Management

Lohas

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Synonyms

[Lifestyles of Health and Sustainability](#)

Description

The trade term **Lifestyles of Health and Sustainability (LOHAS)** was coined in the late 1990s by publisher Natural Business Communication to define the rapidly emerging market for healthy and sustainable products and services (Emerich 2000). This term allows marketers to think collectively about how to communicate to LOHAS consumers regarding products and services that are designed or perceived to be environmentally conscious, sustainable, socially responsible, and healthier – both for individual consumers and the planet (French and Rogers 2006). To this end, LOHAS describes the sizable and diverse consumer groups who (1) share values in caring for personal health, social justice, and/or planetary sustainability, (2) make consumption decisions based on these shared values, and seek social change through their purchases (Cortese 2003; Everage 2002).

Ray and Anderson (2000, p.329) linked the expanding LOHAS industry in the United States to the demands of “Cultural Creatives” who value activism and idealism, engaged action, whole process learning, gender equality, globalism and ecology, authenticity, and spirituality. LOHAS has seen wide adoption in the United States, Europe, Asia, and Australia, often accompanied by adaptation to local culture and consumer needs.

What Is LOHAS

The consumers pursuing Lifestyles of Health and Sustainability defy conventional market segment boundaries, such as age, gender, income, nationality, or social status. Instead, Lifestyles of Health and Sustainability (LOHAS) consumers share a set of values on individual health and sustainable planet and make deliberate purchase decisions based on their values and leverage their purchasing power to induce social changes (Ray and Anderson 2000). According to Conscious Media (www.consciousmedia.com), an independent and privately held multimedia company that purchased Natural Business Communication in 2002, the LOHAS market presents five major themes:

- **Healthy Living:** Highly conscious about their physical health, LOHAS consumers often enter the lifestyle by choosing organic foods and natural products. Goods and services that facilitate a healthy diet and other health-enhancing behaviors constitute a major LOHAS market category.
- **Alternative Healthcare:** The health pursuits of many LOHAS consumers also include integrative healthcare and holistic disease prevention. They actively seek out information and services on holistic health and alternative healthcare.
- **Personal Development:** Recognizing the connection between their physical and mental health, many LOHAS consumers show a strong interest in personal growth. They are attracted to goods and services that offer

learning and new experiences. For example, books and multimedia on mind-body-emotion-spirit connections and life balance topics are popular among LOHAS consumers. So are yoga and tai chi classes.

- **Ecological Lifestyles:** Many LOHAS consumers are keenly aware of the link between their own health and the health of the home planet. They embrace environmentally friendly products, adopt environmentally conscious behavior such as recycling, and keep informed on ecological topics.
- **Sustainable Economy:** Influenced by their holistic worldview, many LOHAS consumers value the “triple bottom line” approach to doing business sustainably in terms of financial, environmental, and social performance. LOHAS consumers prefer goods and services offered by companies that invest responsibly, use renewable energy sources, and adopt fair and ethical business practices.

The LOHAS Media Activities

Natural Business Communication launched the *LOHAS Journal* in March 2000 as a trade publication for the LOHAS industry. The publication of the *LOHAS Journal* was suspended in 2008 due to lack of advertiser support for the print journal (Soref 2008). The founder of Natural Marketing Communications and editor-in-chief of the *LOHAS Journal*, Frank Lampe, admitted that the term LOHAS might be too broad, with too many categories included in it (Cortese 2003).

The LOHAS forum was an annual trade conference (Emerich 2011) that ran from 1998 to 2013 in Boulder, Colorado. The forum brought together progressive-minded business leaders of start-up companies, multinational corporations, investors, media, and nonprofits. The participants created dialogues around creative solutions and compare notes on how to reach a value-driven segment of consumers – the LOHAS market – who seemed attracted to products and services that mirrored their interest in health, environmental stewardship, social justice, personal development, and sustainable living (Pícha and Navrátil 2019).

The Natural Marketing Institute (NMI), an international strategic consulting company, partnered with Natural Business Communications to produce a series of market research reports focusing on understanding the LOHAS Market. Since the early 2000s, NMI has been publishing annual report on the state of sustainability in America (NMI 2021).

Since its origin in the United States in the 1990s, the term LOHAS has become increasingly popular globally. The term LOHAS was introduced into China in the mid-2000s and translated to Le Huo (“live happily”), which is perceived in accordance with many age-old good living habits (Qiu 2009). Since 2012, LOHAS Expo (樂活博覽) is the leading trade expo for “Organic, Health, and Green Living products” with the aim to promote LOHAS in Asia. The event has attracted a diverse array of well-known global enterprises and brands from countries and regions around the world – China, Korea, Japan, Australia, the Philippines, France, the United States, etc. (LOHAS Expo 2019).

LOHAS and Sustainable Marketplace

At the time of its launch in March 2000, the *LOHAS Journal* read: “LOHAS Journal is dedicated to the promotion of sustainable business as a way to fundamentally alter the landscape for economic, social and environmental change. Our mission is to educate our readers about the growing LOHAS industry and to inspire innovation, creativity and dialogue between the companies and individuals that make up this diverse market, fostering a new paradigm of sustainable-business practices that can help create positive change” (cited in Emerich 2011, p.160). LOHAS proponents therefore envision a collective sustainable marketplace where conscious businesses could market more effectively to LOHAS consumers through partnerships (Emerich 2011).

A new worldwide LOHAS market has been developed, where existing business and new entrants compete to serve the LOHAS consumer segments. Around the world, a growing list of products, services, and companies cater to the

needs and wants of LOHAS consumers (Kotler 2011). For example, the LOHAS industries represented a \$355 billion market in the United States in 2016 and a \$546 billion market worldwide (Hoffman 2018). In 2019, the NMI annual report of State of Sustainability in America categorized 23% of US consumers as LOHAS. In Japan, one survey found that 29% Japanese consumers share LOHAS values (Fukushi and Schumacher 2005). A 2015 study estimated that about 30% Hungarian consumers resemble LOHAS (Szakály et al. 2017).

Summary

The emergence of the term LOHAS (Lifestyles of Health and Sustainability) highlights the cultural changes in consumer beliefs and behaviors in the society. LOHAS consumers are characterized by their values on personal health and sustainable planet. The LOHAS market comprises a wide range of industries now participating in a marketplace driven by demand for health and sustainability. LOHAS has made its mark in changing conventional social and cultural structures through the interaction and coevolution of LOHAS consumers, LOHAS markets, and media.

Cross-References

- [Green marketing](#)
- [Sustainable business](#)

References

- Cortese, A. (2003). They care about the world (and they shop, too). *The New York Times*, 20(4). <https://www.nytimes.com/2003/07/20/business/business-they-care-about-the-world-and-they-shop-too.html>. Accessed 15 July 2019.
- Emerich, M. (2000). LOHAS Means Business. *LOHAS Journal*. https://www.monicaemerich.com/downloads/lohas_means_business.pdf. Accessed 15 July 2019.
- Emerich, M. (2011). *The gospel of sustainability: Media, Market and LOHAS*. University of Illinois Press.
- Everage, L. (2002). Understanding the LOHAS Lifestyle. *Gourmet Retailer*, 23(10), 82–87.
- French, S., & Rogers, G. (2006). *Understanding the LOHAS consumer: The rise of ethical consumerism* (pp. 10–15). Harleysville: Natural Marketing Institute, USA.
- Fukushi, A., & Schumacher, P. (2005). *The Japanese LOHAS Market—Opportunities Revealed for Organic Businesses*. <http://organicnetwork.biz/the-japanese-lohas-market-opportunities-revealed-for-organic-businesses/>. Accessed 15 July 2019.
- Hoffman, A. J. (2018). The next phase of business sustainability. *Stanford Social Innovation Review*, 16(2), 34–39.
- Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. *Journal of Marketing*, 75(4), 132–135. <https://doi.org/10.1509/jmkg.75.4.132>.
- LOHAS Expo. (2019). *About the Show – LOHAS Expo*. <http://www.lohasexpohk.com/overview/>. Accessed 11 July 2019.
- NMI (Natural Marketing Institute). (2021). *News & Publications*. <https://nmisolutions.com/what-we-do/news-publications/>. Accessed 7 April 2021.
- Picha, K., & Navrátil, J. (2019). The factors of lifestyle of health and sustainability influencing pro-environmental buying behaviour. *Journal of Cleaner Production*, 234, 233–241.
- Qiu, Y. (2009). *Age-Old Wisdom*. http://www.chinadaily.com.cn/life/2009-12/15/content_9179395_2.htm. Accessed 16 July 2019.
- Ray, P. H., & Anderson, S. R. (2000). *The cultural creatives: How 50 million people are changing the world* (1st ed.). New York: Harmony Books.
- Soref, A. (2008). *LOHAS Journal Postpones Publication*. <https://www.newhope.com/managing-your-business/lohas-journal-postpones-publication>. Accessed 11 July 2019.
- Szakály, Z., Popp, J., Kontor, E., Kovács, S., Pető, K., & Jasák, H. (2017). Attitudes of the lifestyle of health and sustainability segment in Hungary. *Sustainability*, 9(10), 1763. <https://doi.org/10.3390/su9101763>. Accessed 16 July 2019.

Longevity

- [Sustainability \(World Commission on Environment and Development Definition\)](#)

Long-Lasting Survival

- [Durable Survival of the Organization](#)

Lots of Data

- ▶ [Big Data and Data Mining](#)

Low and Non-waste Technologies

- ▶ [Pollution Prevention](#)

Low Carbon Footprint Brands

- ▶ [Sustainable Brands](#)

Low Carbon or Decarbonised Economy

- ▶ [Green Economy II](#)

Low-Carbon Finance

- ▶ [Climate Finance](#)

Low-Waste Brands

- ▶ [Sustainable Brands](#)

M

M&A

- [Mergers and Acquisitions](#)

Maintenance

- [Sustainability \(World Commission on Environment and Development Definition\)](#)

Making a Disclosure

- [Whistleblowing and CSR](#)

Making Sense of CSR Reports: A Methodological Perspective from Semiotics

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Synonyms

[Artificial intelligence](#); [CSR reports](#); [Semiology](#); [Semiotics](#); [Sense making](#)

Definition

Semiotics is a linguistic analytical tool that relates to how users of communicated information can draw meanings through the signs perceived from the information (Chandler [2007](#)). Semiotics look further than the content of the writings through the interactions of codes and linguistic principles and the use of logical discourses to make sense of the narratives, thus enabling users to extract deep meaning from the information (Yekini [2017](#)).

Introduction

Substantial work has been done in corporate social responsibility (CSR) reporting and communications, and diverse methodologies have been adopted in measuring, researching, and determining CSR disclosure quality. The quality of disclosure can be described as how well the information provided meets or exceeds users' expectations and enables them to derive meaningful insights for making informed decisions (Price and Shanks [2005](#)). Viewing disclosure quality in this manner portrays it as the value and comprehension that users can obtain from the information conveyed. Assessing the quality of CSR reports is crucial as they aim to demonstrate the fundamental principles of the organisation to users of annual reports, including investors and creditors. These reports present a chance for companies to articulate their values and guide the audience's

perceptions towards particular goals, such as gaining investments or fostering customer loyalty. Therefore, comprehending CSR information presented is crucial in evaluating the reports' quality.

Key Issues

However, various methods for analyzing CSR reports exist in the literature, including a substantive multidisciplinary interest regarding the best way to evaluate the information quality in annual and stand-alone sustainability reports. Consequently, extant studies have produced differing results due to the narrative nature of the disclosures. None of these studies, however, attempted to explore the efficacy of a linguistic-based approach. Yekini et al. (2021) argue that making sense of CSR communications will be better accomplished when the texts of the narratives are subjected to linguistic analysis. They, therefore, developed a CSR reports quality evaluation model employing a linguistic-based theoretical, analytical tool – semiotics. Linguistic-based approach to evaluating CSR reports is vastly gaining ground.

According to Catellani and Ihlen (2022), the CSR quality model developed by Yekini et al. (2021) is a significant contribution to the field of CSR communication research, serving as a valuable tool. It can be utilized as a qualitative analytical tool to assess the authenticity and openness of the organizational values conveyed in the reports and as a quantitative measure of CSR quality. As a quantitative measure, the model can generate data for statistical analysis by producing a quality score for CSR activities. This model presents a theoretical framework for determining the essential criteria to ensure the credibility and quality of information. Utilizing a linguistic-based method, the quality model has the potential to improve the evaluation of corporate narrative disclosure by enabling a thorough and structured analysis of the fundamental organizational values conveyed in the reports.

Given that semiotics is a well-established linguistic theory with a history of over a century and has been successfully applied to analyze sign-

based communications, the model is founded on a robust theoretical basis. This is particularly important because it provides distinctive insights into evaluating the quality of CSR communication and an effective way to generate a trend analysis of the firm's performance in each CSR theme (e.g., educational sponsorship). This could be a valuable approach to track the company's advancements and offer a chance to enhance its performance in the specific CSR domain. Additionally, it could serve as a useful tool for investors to make informed economic and social decisions, such as investing in socially responsible investments. Nonetheless, the sustainability of the CSR quality model is uncertain, given the rapid development of machine language and artificial intelligence.

Future Directions

The application of Artificial Intelligence (AI) is rapidly gaining ground in text analysis and mining and has become a potent tool for investigating human cognition. This development has urgent implications for semiotic applications, theories, and practices. Semioticians, therefore, need to braise up and respond to the AI challenge by revisiting the application of semiotics tools through the lens of AI if semiotics will maintain its relevance in any meaningful analytical way.

Summary

To summarize, semiotics offers a critical prospect to appraise the quality of CSR and other narrative disclosures in annual reports. However, its utilization is progressively declining due to the emergence of artificial intelligence and natural language processing. Nonetheless, while AI aims to create artificial intelligence that can outperform human intellect, semiotics, as a study of signs, is more applicable to comprehending human reasoning rather than artificial modeling of the human mind. Thus, semiotics can enhance the application of AI by offering insights into human semiosis, which is otherwise challenging to simulate.

Cross-References

- [Corporate Community Involvement](#)
- [CSR Disclosure Quality: Role of NEDs](#)
- [CSR Disclosure, Quality Measurement of](#)

References

- Catellani, A., & Ihlen, O. (2022). *CSR communication from a rhetorical and semiotic perspective. The Routledge handbook of corporate social responsibility communication* (1st ed.). Routledge eBook. ISBN 9781003184911.
- Chandler, D. (2007). *Semiotics: The basics*. London: Routledge.
- Price, R., & Shanks, G. (2005). A semiotic information quality framework: Development and comparative analysis. *Journal of Information Technology*, 20(2), 88–102.
- Yekini, K. C. (2017). Insights regarding the applicability of semiotics to CSR communication research. In D. Crowther & L. Lauesen (Eds.), *Handbook of research methods in corporate social responsibility* (pp. 241–264). Cheltenham/Northampton: Edward Elgar Publishing.
- Yekini, K. C., Omoteso, K., & Adegbite, E. (2021). CSR communication research: A theoretical-cum methodological perspective from semiotics. *Business and Society*, 60(4), 876–908.

is a specific Sustainable Development Goal (SDG 2) and underpins the other Sustainable Development Goals in building on the broader Millennium Development Goals. As a basis for sustainable management, it involves an aspiration to ensure constant access to sufficient and nutritious food for all by 2030. That requires action by public and private actors regarding nutrition education, reduction of marketing that fosters harmful consumption in both the global South and North, strengthening of corporate responsibility, national and international measures to ensure the affordability of food in times of disasters or conflicts, and prioritization of food production over other commodities such as biofuels. Achievement of SDG 2 potentially addresses human rights concerns, builds the legitimacy of domestic and global frameworks, and fosters sustained development in the global South beyond the agricultural sector. It however necessitates engagement with international commodity markets, given that malnutrition is as much a matter of distribution as it is of food production and political relationships that privilege large landholders.

M

Malfeasance

- [Corruption](#)

Malnutrition and Sustainable Management

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Synonyms

[Health](#); [Hunger](#); [Nutrition](#); [Poverty](#)

Definition/Description

The elimination of hunger and malnutrition (which encompasses both deficiency and obesity)

Introduction

Malnutrition has been a recurrent feature of history in all parts of the world over several millennia. On occasion, it has resulted in civil disorder, even regime change, as a failure to effectively address famine through food storage, imports and restrictions on profiteering resulted in the loss of legitimacy for rulers or capacity to resist conquest. In the past century, it has been addressed through private and public “famine relief” measures, in part inspired by reports of population-scale starvation in locations such as the Ukraine, China, and Sub-Saharan Africa (Götz et al. 2020; Hall-Matthews 1998; Murchadha 2011; de Waal 2005).

There has been growing recognition that malnutrition is determinative of health and productivity, with people who are undernourished being particularly susceptible to endemic/pandemic diseases and less likely to perform effectively in resource extraction, manufacturing, infrastructure

development, and administrative activity. There has also been increasing recognition that malnutrition as a focus for sustainable management involving consumers, governments, civil society bodies and corporations potentially involves “wicked problems” that are resistant to nonsustainable solutions such as donation of food in a crisis.

Malnutrition has often been understood as the absence of food, in other words absent or inadequate supply of grain and other commodity during a prolonged drought or as a result of an epidemic affecting a staple, for example, the 1845–1849 potato famine in Ireland (Murchadha 2011), in an environment of ecological fragility. From the perspective of sustainable management, fragility is likely to be salient because of climate change (Fraser 2006; Gillan and Lambert 2016). Supply problems have often been exacerbated by hoarding and profiteering, with the poor for example being unable to afford supplies held by elites (Dowlah 2006). An understanding of malnutrition can however be more nuanced, with an emphasis on sufficient healthy food, in other words avoidance of “junk food” choices that foster obesity and systemic noncommunicable health conditions such as diabetes and heart disease that are not readily addressed through public/private health services (Gómez 2021; Lobstein 2015; Lobstein and Cooper 2020; Williams et al. 2018) and that for example affect two fifths of adults in the United States (Hedley et al. 2004). Such avoidance involves mechanisms such as public education alongside nutritional labeling of processed foods, “fat” and “sugar” taxes that nudge both production and consumption (Fox et al. 2017), and initiatives to reduce “food deserts” (Cummins and Macintyre 2002) rather than land reform or large-scale humanitarian gifting of supplies as “famine relief” during crises. It also requires engagement with disagreements about “food versus fuel” in building sustainable energy (Thompson 2012; Tomei and Helliwell 2016).

Malnutrition, Development, and Sustainability

It has been estimated by the United Nations Standing Committee on Nutrition that around one-third

of the global population has some form of malnutrition (UNCSCN 2018). Although much of the scholarly literature and most public attention centers on poverty, poor nutrition, and public disorder in parts of the global South, it is noteworthy that the United Nations Food & Agricultural Organization (FAO) estimated in 2018 that 43 million people in the European Union are unable to afford regular quality meals every second day (FAO 2018). Nutritional disorders include stunting, reported as affecting over 30% of young children in Africa (DI 2018). Malnutrition is often associated with poverty in a cycle (Siddiqui et al. 2020) where deficits in feeding are exacerbated by, and in turn intensify, deficiencies regarding clean air and water, public hygiene, work/residential locations free from carcinogens and substances such as mercury, and a wage justice that permits sleep and recreation as one basis of health.

Theorists since at least the time of Malthus have recognized links between malnutrition (in particular large-scale starvation, highlighted in pre-Modern imagery about famine as one of the Four Horsemen of the Apocalypse), poverty, epidemics and perceived over-population (Connelly 2010; Cunningham and Grell 2000; Hartmann 1987). Responses have encompassed the development of public/private infrastructure for storage and distribution on a regional or global scale of agricultural commodities (notably grain) and processed food, investment in public health infrastructure such as water and sewerage networks, alongside research into specific nutritional disorders such as beri beri and community education about “eating healthy” or fertility control. There is acknowledgment that at a global scale much famine is a function of maldistribution, i.e., parts of the world on an ongoing or sporadic basis have insufficient food while other parts have surpluses, evident in for example individual consumers and retailers recurrently disposing of wasted food.

Rieff encapsulates concerns about the injustice of that malnutrition by referring to “the reproach of hunger,” noting the salience of markets, action by corporate producers and multinational commodity traders, failures by international organisations, underperformance by philanthrocapitalism and power relationships within much of the global

South that favor traditional elites rather than landless workers in unstable regimes that disregard human rights (Rieff 2015). His critique from a human rights perspective is consistent with work by Piketty and others on the implications of inequality (Piketty 2014, 2015; Boushey et al. 2017) and cautions about paternalism (de Waal 1989) or self-interest (Kennedy 1993; Kissi 2005; Varnis 1990).

The SDGs and Malnutrition

In fostering sustainable management, one response has been articulation of the high-level global Sustainable Development Goals (SDGs), an extension of the Millennium Development Goals (MDGs) and the World Health Assembly's endorsement in 2012 of six Global Nutrition Targets (GNTs) for improvement of maternal, infant, and young child nutrition by 2025 (de Romaña et al. 2021). The eight MDGs aimed to end extreme poverty and hunger, combat diseases such as Malaria and HIV, and foster other sustainability by 2015 (Fehling et al. 2013; Sachs 2012; Grosso et al. 2020; Gaiha 2003).

As noted elsewhere in this encyclopedia, the SDGs were adopted by the United Nations in 2015 to provide a common framework for international cooperation to promote sustainable development. All countries (high, middle and low income) are encouraged to reach 17 goals by 2030 (Sachs et al. 2019). That target was ambitious and in practice its achievement will be substantially affected by developments such as the COVID-19 pandemic and the effects of conflict in Ukraine alongside global warming. In discussing the MDGs, Sachs characterized them as

a type of global report card for the fight against poverty for the 15 years from 2000 to 2015. As with most report cards, they generate incentives to improve performance, even if not quite enough incentives for both rich and poor countries to produce a global class of straight-A students (Sachs 2012, p. 2206).

The challenge regarding malnutrition with the SDGs will correspondingly be to ensure all countries are at least straight-B students on an ongoing basis.

The SDGs are interrelated. Importantly, the second Sustainable Development Goal (SDG 2) specifically addresses both malnutrition and sustainability. It aspires to end all forms of hunger and malnutrition by 2030, ensuring that all people have access to sufficient and nutritious food at all times. As with the MDGs and the other SDGs, it involves collaborative action, in this instance inviting stakeholders to develop and implement policy recommendations and initiatives to ensure both food security and full nutrition. It specifically seeks to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture.”

Nutrition directly affects SDGs 2 and 3 (health and well-being for all, at every stage of life) and indirectly influences five others. Almost all SDGs, for example SDG on reduction of inequality and 12 on responsible consumption and production, influence nutrition. Reducing nutritional deficits has the potential to improve learning performance among children (SDG 4), fostering gender equality (SDG 5) and escape from poverty (SDG 1), facilitating achievement of SDG 8 (“decent work and economic growth”) in a virtuous cycle (de Romaña et al. 2021). Achievement of SDG goals is also a prerequisite to achieving the 2012 Global Nutrition Targets.

As with the MDGs, SDG 2 does not refer specifically to the legal obligations of nations in relation to aims or targets. It does not specifically refer to a “right to food” and in practice a “right to health” has little traction in international law, particularly where there is state incapacity because of civil war or other conflict (Toben 2011).

Giving effect to SDG 2 experience with the MDGs suggests that sustainable management to address malnutrition is multifaceted, involving on-the-ground commitment by national governments alongside policy statements, funding by governments for nutritional support, law reform to address problems with practices such as sharecropping and hoarding or a focus on poppy rather than food production, investment in infrastructure for ongoing food supply, building human capacity, and strengthened transparency regarding the performance of international initiatives at the government and private (i.e., philanthropic) levels (Rieff 2015; Holsti 1986).

Summary

Malnutrition is a global rather than isolated problem that will necessarily solve itself through ongoing globalization within a neoliberal international order. It is more complex than notions of a one-off exceptional famine within a nation or region attributable to armed conflict or climatic events such as droughts and floods that impede production and distribution of food supplies from outside that location. As the SDGs recognize, malnutrition has implications for productivity, social equity and robustness in the face of epidemics. It more subtly raises questions about the capability and thus legitimacy of regimes, particularly in nations where elites eat well and eat securely while disadvantaged people experience food insecurity and insufficiency. Sustainable management to address malnutrition in both the global South and North requires national, international and private initiatives that involve collaborative activity (in contrast for example to traditional models of famine relief) evaluated using empirical data.

Cross-References

- [Corporate Social Responsibility](#)
- [Energy Biofuels](#)
- [Fair Trade](#)
- [Genetically Modified Organisms \(GMOs\)](#)
- [Greenwashing](#)
- [Slow Food Movement and Sustainability](#)
- [Social Justice](#)
- [Supply Chain](#)
- [Supply Chain Management](#)
- [Sustainable Reporting](#)
- [Sustainable Supply Chain Management](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References

- Boushey, H., DeLong, J. B., & Steinbaum, M. (2017). *After Piketty: The agenda for economics and inequality*. Cambridge: Harvard University Press.

- Connelly, M. (2010). *Fatal misconception: The struggle to control world population*. Cambridge: Harvard University Press.
- Cummins, S., & Macintyre, S. (2002). "Food deserts" – Evidence and assumption in health policy making. *British Medical Journal*, 325(7361), 436–438.
- Cunningham, A., & Grell, O. (2000). *The four horsemen of the Apocalypse: Religion, war, famine and death in reformation Europe*. Cambridge: Cambridge University Press.
- de Romaña, D., Greig, A., Thompson, A., & Mandana, A. (2021). Successful delivery of nutrition programs and the sustainable development goals. *Current Opinion in Biotechnology*, 70, 97–107.
- de Waal, A. (1989). Is famine relief irrelevant to rural people? *IDS Bulletin*, 20(2), 63–67.
- de Waal, A. (2005). *Famine that kills: Darfur, Sudan*. Oxford: Oxford University Press.
- DI. (2018). *Global nutrition report: Shining a light to spur action on nutrition*. Bristol: Development Initiatives.
- Dowlah, C. (2006). The politics and economics of food and famine in Bangladesh in the early 1970s—with special reference to Amartya Sen's interpretation of the 1974 famine. *International Journal of Social Welfare*, 15(4), 344–356.
- FAO. (2018). *The state of food security and nutrition in the world 2018*. Rome: Food and Agriculture Organization of the United Nations.
- Fehling, M., Nelson, B., & Venkatapuram, S. (2013). Limitations of the millennium development goals: A literature review. *Global Public Health*, 8(10), 1109–1122.
- Fox, M., Anderson, T., Anderson, S., & Black, A. (2017). Food taxes: Can you control behavior and health outcomes through taxation? *American Journal of Medical Research*, 4(1), 93–110.
- Fraser, E. (2006). Food system vulnerability: Using past famines to help understand how food systems may adapt to climate change. *Ecological Complexity*, 3(4), 328–335.
- Gaiha, R. (2003). Are millennium goals of poverty reduction useful? *Oxford Development Studies*, 31(1), 59–84.
- Gillan, M., & Lambert, R. (Eds.). (2016). *India and the age of crisis: The local politics of global economic and ecological fragility*. London: Routledge.
- Gómez, E. J. (2021). Getting to the root of the problem: The international and domestic politics of junk food industry regulation in Latin America. *Health Policy and Planning*, 36(10), 1521–1533.
- Götz, N., Brewis, G., & Werther, S. (2020). *Humanitarianism in the modern world: The moral economy of famine relief*. Cambridge: Cambridge University Press.
- Grosso, G., Mateo, A., Rangelov, N., Buzeti, T., & Birt, C. (2020). Nutrition in the context of the sustainable development goals. *European Journal of Public Health*, 30(Suppl 1), i19–i23.
- Hall-Matthews, D. (1998). The historical roots of famine relief paradigms. In H. B. O'Neill & J. Toye (Eds.), *A world without famine?: New approaches to aid and*

- development (pp. 107–127). New York: St. Martin's Press.
- Hartmann, B. (1987). *Reproductive rights and wrongs: The global politics of population control*. New York: Harper & Row.
- Hedley, A., Ogden, C., Johnson, C., Carroll, M., Curtin, L., & Flegal, K. (2004). Prevalence of overweight and obesity among US children, adolescents, and adults, 1999–2002. *Journal of the American Medical Association*, 291(23), 2847–2850.
- Holsti, K. (1986). The horsemen of the apocalypse: At the gate, detoured, or retreating? *International Studies Quarterly*, 30(4), 355–372.
- Kennedy, K. (1993). The international law and politics of agricultural trade. *Journal of International Law & Practice*, 2, 307–321.
- Kissi, E. (2005). Beneath international famine relief in Ethiopia: The United States, Ethiopia, and the debate over relief aid, development assistance, and human rights. *African Studies Review*, 48(2), 111–132.
- Lobstein, T. (2015). Post-2015 agenda: Sustainable and healthy food systems for preventing the crisis in child obesity. *SCN News*, 41, 19–26.
- Lobstein, T., & Cooper, K. (2020). Obesity: A ghost at the feast of the sustainable development goals. *Current Obesity Reports*, 9(4), 470–478.
- Murchadha, C. (2011). *The great famine: Ireland's agony 1845–1852*. London: A & C Black.
- Piketty, T. (2014). *Capital in the twenty-first century*. Cambridge: Harvard University Press.
- Piketty, T. (2015). *The economics of inequality*. Cambridge: Harvard University Press.
- Rieff, D. (2015). *The reproach of hunger: Food, justice, and money in the twenty-first century*. London: Verso.
- Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The Lancet*, 379, 2206–2211.
- Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the sustainable development goals. *Nature Sustainability*, 2(9), 805–814.
- Siddiqui, F., Salam, R., Lassi, Z., & Das, J. (2020). The intertwined relationship between malnutrition and poverty. *Frontiers in Public Health*, 8, 453–458.
- Thompson, P. B. (2012). The agricultural ethics of biofuels: The food vs. fuel debate. *Agriculture*, 2(4), 339–358.
- Toben, J. (2011). *The right to health in international law*. Oxford: Oxford University Press.
- Tomei, J., & Helliwell, R. (2016). Food versus fuel? Going beyond biofuels. *Land Use Policy*, 56, 320–326.
- UNCSCN. (2018). *Non-communicable diseases, diets and nutrition*. Rome: United Nations System Standing Committee on Nutrition. <https://www.unscn.org/en/unscn-publications?idnews=1831>
- Varnis, S. (1990). *Reluctant aid or aiding the reluctant?: US food aid policy and Ethiopian famine relief*. New Brunswick: Transaction.
- Williams, G., Robinson, C., Connell, S., Vella, G., Pope, D., & Verma, A. (2018). Junk food cafés' impact on public health, deprived communities and food waste in north west England. *European Journal of Public Health*, 28(Suppl 4), 213–299.

Management

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Synonyms

Administration; Board of Directors; Governance;
Strategy; Take of decisions; Top management

Definition

Management is the process of designing strategies that allow all the human, information, technological, and financial resources of the organizations to work together and harmoniously in the achievement of the proposed objectives (Ronda-Pupo and Guerra-Martins 2012). In a pragmatic way, management is in charge of the attention and resolution of the problems faced by the organizations in their path to achieve their goals (Blok 2020). Management exercises its function through the alignment of critical elements such as the mission, vision, values, strategies, and tactics of the organizations that allow the optimization of the diverse resources of the company.

Introduction

Management arises from the need to organize the activities of societies. This is reflected in the activities of planning, organization, leadership, and control of the organization's resources (Mintzberg 1973). In this context, management is one of the main human activities. Since man began to

organize as a society to achieve common goals, management has been of utmost importance to achieve social benefits. In history, basic management techniques have been identified since the year 3000 BC in what is now Iraq (Pindur et al. 1995). Since then various approaches have been presented for the study of this discipline. Management has been mainly associated with the business world; however all people in our daily lives carry out activities that require a greater or lesser degree of management processes.

Although management exists since humanity exists, Table 1 presents the historical evolution of management since it has historical records. It can be seen that this discipline has had important changes over 500 years, being its emergence as science from the beginning of the twentieth century with the work “The Principles of Scientific Management” (1911), whose author Taylor lays the foundations of Management As a Science.

The importance of management in organizations is vital; its existence ensures the proper functioning of organizations. Each organization needs direction, management provides this, in the absence of management resources remain static (will remain resources), and before an appropriate management these resources produce and contribute to achieve the objectives of the Organization (Ramasamy 2014).

The evolution of the discipline has presented nowadays its own and diverse complexity. This has made his study to be through the optics of various disciplines. For example, we are currently

talking about technology management (Nuscheler et al. 2019) or management of information technology (IT). Additionally, a dynamic and changing environment has played an important role in the new trends of management, which have not only changed their approaches but also how to manage resources.

In this order of ideas, we can say that for its study, management has had to be approached from a multidisciplinary and eclectic perspective. In this work we analyze the various schools that have approached management as science, so that they can have a better perspective on the usefulness of it. In addition, the main new trends in the science of management are also presented.

Key Issues

All the people in our daily lives do activities. These activities must follow an order mainly so that they can be achievable and beneficial for those who perform it; this is the most colloquial application of management. In relation to the modern management different schools have explained it.

The first of these is the school of “Scientific Management” based on the work of Frederick Taylor (1911), which focused on streamlining the resources of the organization in differentiating tasks to be able to produce more efficiently. The second school is the so-called “Classical Organization Theory School” where the contributions of

Management, Table 1 Management history

Era	Background to contemporary management	Classical	Human	Calculating	Values and beliefs	Future
Year	1530+	1910–30	1930–50	1950–70	1970–90	1990
Key ideas	Emphasis on materialism and individualism, industrial revolution, increasing prevalence and size of corporations	One best way, Scientific management, Time/Motion, Bureaucracy, Principles of Management	Interpersonal Aspects	Management Science	Social Construction, Institutionalization, Culture	CSR; stakeholder theory, well-being

Source: Dyck and Neubert (2008)

Henri Fayol (1916) and the sociologist Max Weber with his studies on Bureaucracy (1992) are mainly included. The third school is formed by the ideas of Elton Mayo (1933) and is called “School of Behaviour,” in addition to more recent ones such as the systems Approach (Bertalanffy 1938), Contingency theory (Lawrence and Lorsch 1967), and Chaos Theory (Nonaka 1988).

The first school is the classic vision of scientific management based on Taylor’s ideas, in his classic “The Principles of Scientific Management.” This school is considered as the formal start of management as a scientific discipline, mainly understood as management as a methodology, which sought through observation the systematization of various processes within organizations. It also enacted that work within the Organization should be divided among the best qualified people to carry it out. The second school is the “Classical Organization Theory” (1916) where the works of Max Weber and Henri Fayol are grouped mainly. This school focuses on the five main roles of management: predicting, planning, organizing, managing, coordinating, and controlling. This process is focused on each person having to perform specific tasks within the Organization to achieve the proposed objectives.

In addition, there is “the school of the behavior” “supported mainly in the contributions of Elton Mayo (1933). Their contributions are mainly focused on the primary groups in the industry context. In this order of ideas Mayo in

his studies discovered how the group they belong to affects its members. These schools are the main supporters of management today.

Previous administrative approaches present an important outline of what management is today. Basically they focus on three important factors, the control and efficiency of the resources as well as the management of contingencies that can be faced by the Organization and that affect the achievement of the objectives.

However, other key points are the terms administration and management; both terms are used as synonyms. Some authors consider that there is no difference between the terms. The main difference is that the administration is considered as an activity of the high management in the organizations, on the other hand the management is considered as an activity of the lower levels within the organization.

Table 2 illustrates the difference between management and administration from multiple points of view. It can be inferred that management applies to the lower levels of the organization, which are those that carry the weight of the implementation of strategies to achieve the objectives. On the contrary, management and administration are intimately linked because for management to work it must have a foundation in the administration. Therefore the relationship between the two is narrow and there is no marked difference in the functions and activities of each one. The administration’s theoretical livelihoods can also be for management.

Management, Table 2 Differences between administration and management

	Basis of distinction	Administration	Management
1	Policy and objectives	Determines policies to be followed and decide the objectives to be achieved	Implements the policy and achieve the objectives
2	Directing of human efforts	Not directly involved in the execution of plan and achievement objectives	Directly involves in the execution of plan and achieving objectives
3	Main functions	Planning, organizing, and staffing	Direction, motivation, and control
4	Level of executives	Top level executives	Acts as an agency
5	Position	Acts as a principal	Acts and agency
6	Knowledge	Requires administrative ability more than technical ability	Requires technical ability more than administrative ability

Source: Ramasamy (2014)

It is important to mention the hypothesis of the universality of the work of Management (Mintzberg 1973). This hypothesis supports that there are similarities in the activities and functions that managers perform, which serves to develop a general theory of administration. This hypothesis is based on the static balance that all institutions have to objective efficiency and this motivates managers to have similar practices regardless of the social and business contexts where they come from (Lubatkin et al. 1997).

What is stated in this section allows us to have a clearer picture of what management is. It is a complex discipline that has to work closely with others (Social Sciences, psychology, engineering, and so on), in addition to its close relationship with the administration. In this sense management, although it has a close relationship with the administration, is inserted within it. One of the best ways to understand management is through understanding discipline as universal and multidisciplinary, that is, it encompasses many areas of knowledge and is composed of diverse disciplines, approaches, and mixtures of areas of knowledge.

Future Directions

Management is made up of different disciplines and directly impacts the activities of others. That is why within future research it should focus on two main streams. First, to segment correctly the activities that it directs, for example: Management technology, strategic management, marketing management, public management, process management, supply chain management, talent management, among others, in order to be able to generate a greater impact in other disciplines that work in conjunction with management. Second, when proposing a research related to management, be clear about its roots. In other words, this refers to being able to understand the origin of the various social theories that have contributed to their training as discipline. This will provide the opportunity to give better results and contributions that improve the understanding of management.

It is also important to understand the role of managers in implementing strategies. It is unclear to what degree professionalization, age, academic degrees, and racial origins affect a person's ability to be a manager. Likewise is also relevant to carry out a cross-country study to understand the differences between management practices implemented by companies originating in emerging countries and companies originating in developed countries, since their contexts of origin to the companies to carry out particular practices. It is also important to understand how the management of a company that operates in different countries has to manage different strategies for each market where it operates.

Finally, we must consider that the environment is changing, coupled with the fact that management is not only applied to business and social sciences. It is important to investigate the adaptability of management to different scenarios and trends in different disciplines that can be presented. Understanding how the environment affects the advancement of management will strengthen it as a discipline.

Summary

The management nature is to solve problems that face the organizations in its broad spectrum of activities, operations and decisions. Also, management will be aligned to the tactics and strategies of the organizations, through the mission, vision, and values. Management is not only a business activity, it is a human activity that is present in our daily life, taking decisions, organizing, and planning. The roots of management as an academic discipline rely on the "Scientific Management" (Taylor 1911), "Classical Organization Theory School" (Fayol 1916), and the studies on Bureaucracy (Weber 1992). Nowadays management is focused on the control and efficiency of several assets in organizations and the way to face the uncertainty.

To understand the differences between administration and management are the central issues. The first is an activity in the high levels of the organizations, and the second is centered on

carrying out and executing the plans to achieve the proposed aims. To develop better strategies of management, it is important to understand the specific areas related to management (Marketing, technology, supply chain, government issues, etc.). Also, it is necessary to understand the roots of management, the environment where the organizations operate and the capability of managers to establish successful strategies for the growth and development in organizations.

Cross-References

- [Board of Directors](#)
- [Business Administration](#)
- [Chief Executive Officer \(CEO Duality\)](#)
- [Leadership Communication](#)
- [Top Management](#)

References

- Bertalanffy, L. V. (1938). A quantitative theory of organic growth (inquiries on growth laws. IT). *Human Biology*, 10, 181–213.
- Blok, V. (2020). What is (business) management? Laying the ground for a philosophy of management. *Philosophy of Management*, 19, 173–189.
- Dyck, B., & Neubert, M. (2008). Management: Current practices and new directions. *Academy of Management Learning & Education*, 9(2), 354–355.
- Fayol, H. (1916). *Administration industrielle et générale: prévoyance, organisation, commandement, coordination, controle*. Paris: H. Dunod et E. Pinat.
- Lawrence, P. R., & Lorsch, J. W. (1967). *Organization and environment*. Cambridge, MA: Harvard University Press.
- Lubatkin, M. H., Ndiaye, M., & Vengroff, R. (1997). The nature of managerial work in developing countries: A limited test of the universalist hypothesis. *Journal of International Business Studies*, 28, 711–733.
- Mayo, E. (1933). *The human problems of industrial civilization*. New York: Macmillan.
- Mintzberg, H. (1973). *The nature of managerial work*. New York: Harper & Row.
- Nonaka, I. (1988). Creating organizational, order of chaos: Self-renewal in Japanese firms. *California Management Review*, 57–73. <https://doi.org/10.2307/41166514>.
- Nuscheler, D., Engelen, A., & Zahra, S. A. (2019). The role of top management teams in transforming technology-based new venture's product introductions into growth. *Journal of Business Venturing*, 34(1), 122–140.
- Pindur, W., Rogers, S. E., & Suk Kim, P. (1995). The history of management: A global perspective. *Journal of Management History*, 1(1), 59–77.
- Ramasamy, T. (2014). *Principles of management*. Mumbai: Himalaya Publishing.
- Ronda-Pupo, G. A., & Guerra-Martins, L. A. (2012). Dynamics of the scientific community network within strategic management field through the Strategic Management Journal 1980–2009: The role of cooperation. *Scientometrics*, 85(3), 821–848.
- Taylor, F. W. (1911). *The principles of scientific management*. New York: Harper and Brothers.
- Weber, M. (1992). *La ética protestante y el espíritu del capitalismo*. Barcelona: Península.

Management Accounting and Sustainability

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Synonyms

[Business performance measurement](#); [Cost accounting](#); [Cost management](#); [Environmental management accounting](#); [Management control](#); [Managerial accounting](#); [Social management accounting](#); [Sustainability accounting](#); [Sustainability management accounting](#)

Definition

Management accounting provides financial and nonfinancial information for managers' planning, control, and decision-making, as well as for inventory valuation. The scope of management accounting has been recently increasing to include sustainability issues, involving various management accounting techniques, such as full-cost accounting, the sustainability assessment model, and material flow cost accounting. This increase in scope has created new opportunities and challenges for management accounting professionals, the management accountants, with regard to new potential organizational roles and challenges

involving the field of sustainability. These roles can range from leading the organizational efforts to measure and report sustainability performance, to interacting with other professionals specialized in sustainability and building bridges between the traditional area of management accounting and the field of sustainability. Another area under controversy concerns the skills required for the measurement and reporting of sustainability performance and whether management accountants or other professionals are better positioned to do so. Overall, in spite of the challenges and still unclear areas, the call is for management accounting, its practitioners and researchers, to continue to embrace the sustainable development agenda and concerns, in order to promote management decisions supporting a sustainable development of organizations and society.

Introduction

Management accounting is the organizational practice that provides information to assisting managers in their planning, control, and decision-making processes, in addition to providing information for the valuation of inventories and flows of goods, materials, and products. Management accounting is the field of accounting focused on organizations' internal users (as opposed to financial accounting, mainly concerned on reporting to external users). As part of an overall ► [management control system \(MCS\)](#), management accounting is a results control that monitors the performance of an organization and its sub-parts, across multiple dimensions.

It is now well accepted that management accounting deals with not only financial information and but also nonfinancial information, as nonfinancial information will sometimes be more suitable, relevant, or timely than financial information, when it comes to assisting managers in their efforts to run their organizations and generate value. Since sustainability has become prominent as a source of value for organizations and society, management accounting has been gradually encompassing information related to

this area as well, under labels such as sustainability management accounting or its specific sub-areas, environmental management accounting, and social management accounting (in addition to the traditional information of management accounting, mostly oriented towards an economic perspective of the organization). Indeed, this trend has opened up new potential roles for the management accounting professionals, the management accountants.

The ensuing text analyzes how the scope of management accounting has been expanding, with the most recent expansion being the sustainability area, a development which has promoted some convergence between external and internal accounting and reporting. A general description of environmental management accounting and social management accounting is followed by a description of several management accounting techniques that aim to promote sustainability-oriented decisions and outcomes within organizations: full-cost accounting; the sustainability assessment model; and material flow cost accounting. Then, a discussion of potential new sustainability-related roles of management accountants, and of opportunities and challenges for management accounting and its professionals, is presented. A brief summary closes the text.

Evolution and Enlargement of Management Accounting Towards Sustainability

Through embracing sustainability issues within management accounting, this field has arguably entered a new stage of development. To represent this change, Burns et al. (2013) proposed an extension of IFAC's (International Federation of Accountants) framework on the evolution of management accounting across the decades. From the management accounting traditional core area of cost determination and financial control, it started getting more involved in assisting planning and control, then later in waste reduction and then in value generation, examining drivers of customer and shareholder value. Burns et al. (2013)

suggested the emergence of a fifth stage, focused on sustainability, with a widened scope to include additional stakeholders and environmental and social impacts.

Accountants may support the design, implementation, running, and monitoring of sustainable business models by deploying various techniques, both in management accounting (for internal users) and financial accounting and reporting (for external users), in what can be broadly labeled as sustainability accounting. For external reporting purposes, important advances have been made, such as the development and the adoption of frameworks and guidelines for external sustainability reporting. Sustainability reports on organizations' ► [corporate social responsibility \(CSR\)](#) have been increasingly adopted, and the ► [Global Reporting Initiative \(GRI\)](#) has had a remarkable impact on developing sustainability reporting encompassing economic, environmental, and social performance and provides an extensive list of core indicators to be adopted. ► [Integrated reporting \(IR\)](#), promoted by the International Integrated Reporting Committee (IIRC), has also been increasingly adopted to replace separate reports on economic and on sustainability dimensions. Integrated reporting envisages communicating, in a single document and in an integrated way, how strategy, governance, performance, and prospects promote value creation, ranging from the short term to the long term. These developments make internal and external accounting and reporting less separated and, in particular, more interrelated than typically portrayed, as Contrafatto and Burns (2013, p. 362) commented on the specific case of sustainability: "sustainability is now a consideration that transcends both internal and external reporting processes which, in turn, possibly mirror each other more than ever before." While acknowledging this important convergence within sustainability accounting, this text particularly focuses on the production, analysis, and reporting of information to assist managers – i.e., specifically on management accounting – in planning, controlling, and taking decisions with a sustainability perspective. This is the realm of environmental and social management accounting, discussed next.

Environmental and Social Management Accounting

Environmental management accounting identifies, collects, and analyzes two types of information to inform managers' decisions. The first type concerns information on physical flows of energy, water and other materials, and has traditionally been dealt with by environmental managers; and the second type is financial information about costs and benefits of environmental impacts, therefore more closely related within the traditional financial focus of management accounting.

Environmental costs can be classified into four categories (similar to those often used to classify quality costs, as described by Burns et al. (2013)). The first two categories are related with efforts to improve the environmental performance of the organization by trying to avoid negative impacts: Prevention costs are related with the prevention of negative environmental impacts, and appraisal costs are related with assessing compliance with established policies. The third and fourth categories are related with organizational failures on environmental matters: internal failure costs, related with reducing environmental damages caused, but still within the boundaries of the organization, i.e., before they reach entities beyond the organization; and external failure costs, incurred due to environmental damage beyond the organization boundaries. For this classification to be possible, costing systems need to be structured in a way that enables the classification of the costs according to these categories. In as much as these are related with particular activities developed, an activity-based costing (ABC) system (Burns et al. 2013) may be useful for this purpose. However, the scope of which costs are to be considered can vary. While the above analysis typically refers to the economic costs incurred by the organization and captured by conventional costing systems, an alternative wider scope would include the environmental externalities of organizational activities, a scope which underlies the techniques discussed further below.

Social management accounting (SMA), as the label suggests, is focused on social costs. The measurement of social costs is substantially less

developed, both because they tend to be less translated into economic costs captured by conventional costing systems and also because the social externalities of organizational activities are challenging to capture. Bebbington and Thomson (2013) also point out that current management accounting research tends to place less attention on the social component of sustainability, when compared to the environmental component.

However, there has been a strong development towards an extended scope of accounting and reporting, both internally and externally, based on several management accounting techniques embracing a wider scope, including costs incurred both by the organization and beyond it, and including economic, environmental, and social perspectives. The techniques analyzed next (full-cost accounting, the sustainability assessment model, and material flow accounting and cost accounting) do not cover all existing techniques (for others, see, e.g., Gibassier and Alcouffe 2018 and Gond et al. 2012), but do provide a basis to understand how management accounting can contribute towards sustainability.

Full-Cost Accounting

Full-cost accounting (FCA) calculates the cost of production by including the use of environmental and social resources, going beyond the traditionally considered costs of economic resources, such as materials, labor, utilities, and machines. It therefore follows the notion of a ► [triple bottom line \(TBL\)](#) (Henriques and Richardson 2004). The aim is to account for externalities of an organization's activities, in particular negative environmental and social ones, such as pollution and unfair employment practices. As these externalities become included in the products (full) cost, and this cost is considered when determining profit margins and hence bonuses, managers have an additional (potentially economic) incentive to adopt practices with less environmental and social negative impacts. However, this technique requires the challenging task of monetizing the environmental and social costs.

Sustainability Assessment Model

The sustainability assessment model (SAM), originated at the oil company BP, aims at orienting project evaluation towards sustainability (Bebbington 2007). The SAM is based on FCA, therefore encompassing both economic costs and environmental and social costs, and it can be applied both at the investment stage and to ex-post evaluation.

Applying SAM requires four steps. The first is to define the cost objective, typically a particular project. The second step is to define the scope of analysis, encompassing the project full life cycle, i.e., all related upstream and downstream activities – for example, from prospection activities to batteries disposal, stretching “from cradle to grave.” The third step is to identify the impacts in terms of four dimensions: (a) economic, as traditionally estimated using historical or future economic flows; (b) resource use in excess of economic flows, in particular accounting for resource depletion and the negative externalities related to its unavailability for alternative uses; (c) environmental flows (e.g., emissions); and (d) social flows (e.g., jobs created and social impacts of products obtained through the project). The fourth and final step is required to enable direct comparisons and aggregation of the impacts in the four dimensions, by converting them into a common measure, typically money – i.e., by monetizing the impacts.

This last step, of monetizing the impacts, is highly complex due to the difficulty of ascribing a financial value to environmental and, in particular, social impacts, as already mentioned above. This acknowledged difficulty has prompted different approaches to manage sustainability. For example, one company developed the “product sustainability assessment tool” (PSAT), focused on new product development and adopting a product life cycle perspective (Riccaboni and Leone 2010). Importantly, PSAT does not monetize the different impacts and hence avoids the difficulties and criticisms associated with this last step. However, the lack of a single measure implies complex trade-offs across the perspectives and leads to ambiguity in decisions.

Material Flow Accounting and Cost Accounting

Material flow accounting, or input-output analysis, traces and analyzes the movement of all materials within an organization (Wagner and Enzler 2006). The underlying assumption is that all physical inputs sooner or later become outputs, leading to a balance between total inputs and total outputs. Inputs include all kinds of materials, as well as all sources of energy. Outputs can be products, waste, and emissions, with the former being labeled as “positive products” and the latter two labeled “negative products” and hence targeted for reduction.

Material flow cost accounting extends material flow accounting to trace and analyze the costs of the materials flows. It has a particular emphasis on a suitable assignment of costs to waste and emissions. The existence of this information, in particular if coupled with incentive systems, greatly promotes that managers take sustainability-enhancing decisions. However, Lang-Koetz et al. (2006) suggested that, when compared to the adoption of corporate input-output balances and environmental performance indicators (material and energy), flow cost accounting is mainly a supplement (rather than a substitute) opening up additional, purely economic impacts. However, they acknowledged that flow cost accounting could be suitable for companies having complex material flows and high material losses, in which this cost information may promote a considerable reduction in these losses. Overall, Lang-Koetz et al. (2006) considered that, alone, without other information such as specific environmental performance indicators, flow cost accounting is not sufficient to support environmental management. However, it is a specialized tool that may be a useful extension of existing costing systems and will provide information on some of the areas of a wider environmental performance indicator system. Clearly, this technique is highly demanding on organizational data. Therefore, it is crucial to embed it within, or at least tightly link it with, existing systems, in particular the adopted enterprise resource planning (ERP) systems and costing systems.

The Role of Management Accountants and Sustainability

As professionals traditionally involved in the production, analysis, and diffusion of information for managerial purposes, management accountants have seen their potential expanding, alongside the evolution of management accounting outlined at the start of this text. This text has discussed emerging techniques which are mostly developments or extensions of traditional management accounting techniques: full-cost accounting, as an extension to “conventional”/economic cost accounting; sustainability assessment model, as an extension to the investment appraisal in capital budgeting; and material flow cost accounting, as an extension of the tracking of materials and costs. Furthermore, the intervention of management accountants has been discussed in the context of their involvement in wider sustainability management issues, beyond the particular techniques discussed above.

Gibassier and Alcoufe (2018) recently summoned up the literature, knowledge, and calls about the roles of accountants (and management accountants) in this field. Professional accountancy bodies tend to suggest that accountants should take a leading and active role in implementing sustainability accounting, within a widened role to contribute to manage and report on all kinds of organizational resources and not only financial ones. Their knowledge about organizations’ business models and their involvement in risk management may also position them well to deal with increasingly relevant risks, such as climate risks, contributing to their organizations to better deal with those risks and capitalize on the opportunities these risks also create.

However, Gibassier and Alcouffe (2018) also state that surveys have continued to find low levels of involvement by accountants in sustainability issues (see also Accenture and CIMA 2011) and that accountants’ formal training in this area remains low. At the same time, they also point out to other research that portrait accountants as a change agent and a “euro-carbon translator”, both within and outside organizational boundaries. They can be proactive mediators,

actively engaging with other professionals and bridging their traditional accounting area and the sustainability area. However, just like in the widely discussed evolution of management accountants into a more “business partner” role (Burns et al. 2013), there are challenges in embracing new areas, not only related with the required skills but also due to the competition of other professional areas (e.g., engineers) (Gibassier and Alcouffe 2018).

An Overview of the Contribution of Management Accounting Towards Sustainability

Management accounting and its professionals have the potential to contribute towards a more sustainable organizational behavior, through the information and managerial incentives they provide (see, e.g., the various papers in the 2013 special issue of *Management Accounting Review*). Nevertheless, Bebbington and Thomson (2013) also consider that current efforts in accounting and management accounting (and research in this field) fall short of what is needed to improve and learn about sustainable development (see also Gibassier and Alcouffe (2018) and the similar comment above of Lang-Koetz et al. (2006)). At the same time, Bebbington and Thomson (2013, p. 282) also recognize that “[a]ccounting, however, is a crucial technology that might support sustainable development transitions as long as it infuses the rationales and concerns” of sustainable development thinking.

The challenge is therefore set for practitioners and academics to more deeply engage with sustainable development concerns and literature, in their efforts to further develop management accounting practices and research to contribute towards more sustainable organizations and societies.

Summary

Both internal and external accounting have increasingly widened their scope to embrace sustainability and contribute to orient their organizations into a path of sustainable development, for

themselves and to the wider society. Focusing on management accounting and its sub-areas of environmental management accounting and social management accounting, this text introduced some techniques in this area, such as full-cost accounting, the sustainability assessment model, and material flow cost accounting. The professionals in this field, the management accountants, are faced with a set of opportunities and challenges with regard to the type and to the depth of their involvement in the area of sustainability. However, overall, the call is for management accounting practitioners and researchers to increase their involvement with the sustainable development agenda and contribute towards more sustainable organizations and hence to a more sustainable world.

Cross-References

- Corporate Social Responsibility (CSR)
- Global Reporting Initiative
- Integrated Reporting
- Management Control Systems and Sustainability
- Triple Bottom Line (TBL)

References

- Accenture, & CIMA. (2011). Sustainability performance management: How CFOs can unlock value. CIMA. <http://www.cimaglobal.com/CFOsustainability>. Accessed 20 Aug 2019.
- Bebbington, J. (2007). *Accounting for sustainable development performance*. Oxford: CIMA Publishing.
- Bebbington, J., & Thomson, I. (2013). Editorial: Sustainable development, management and accounting: Boundary crossing. *Management Accounting Research*, 24(4), 277–283. <https://doi.org/10.1016/j.mar.2013.09.002>.
- Burns, J., Quinn, M., Warren, L., & Oliveira, J. (2013). *Management accounting*. Berkshire: McGraw-Hill.
- Contrafatto, M., & Burns, J. (2013). Social and environmental accounting, organisational change and management accounting: A processual view. *Management Accounting Research*, 24(4), 349–365. <https://doi.org/10.1016/j.mar.2013.10.004>
- Gibassier, D., & Alcouffe, S. (2018). Environmental management accounting: The missing link to sustainability? *Social and Environmental Accountability Journal*, 38(1), 1–18. <https://doi.org/10.1080/0969160X.2018.1437057>.
- Gond, J.-P., Grubnic, S., Herzig, C., & Moon, J. (2012). Configuring management control systems: Theorizing

the integration of strategy and sustainability. *Management Accounting Research*, 23(3), 205–223. <https://doi.org/10.1016/j.mar.2012.06.003>.

- Henriques, A., & Richardson, J. (2004). *The triple bottom line: Does it all add up?* London: Earthscan.
- Lang-Koetz, C., Loew, T., Beucker, S., Steinfeldt, M., Horstmann, U., & Sieghart, T. (2006). Environmental accounting instruments: Implementation & Continuous use — Concepts for the application of input-output balance, environmental performance indicators and flow cost accounting. In B. Wagner & S. Enzler (Eds.), *Material flow management: Improving cost efficiency and environmental performance* (pp. 131–157). Heidelberg: Physica.
- Riccaboni, A., & Leone, E. L. (2010). Implementing strategies through management control systems: The case of sustainability. *International Journal of Productivity and Performance Management*, 59(2), 130–144. <https://doi.org/10.1108/17410401011014221>.
- Wagner, B., & Enzler, S. (2006). Developments in material flow management: Outlook and perspectives. In B. Wagner & S. Enzler (Eds.), *Material flow management: Improving cost efficiency and environmental performance* (pp. 197–201). Heidelberg: Physica.

Management Control

- [Management Accounting and Sustainability](#)
- [Management Control Systems and Sustainability](#)

Management Control Packages

- [Management Control Systems and Sustainability](#)

Management Control Systems and Sustainability

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Synonyms

[Management control](#); [Management control packages](#)

Definition

Management control systems (MCS) are mechanisms aiming to influence managers' and employees' behaviors, in order to achieve the organization's objectives and strategies. With regard to the increasingly important sustainability dimension, there is the challenge to translate its broad objectives and strategies into daily practices across the organization. To fill this gap, MCS, or more specifically sustainability control systems (SCS), constitutes an array of diversified mechanisms aiming to promote alignment between sustainability-oriented objectives and behaviors in organizations.

Introduction

► [Management Control Systems](#) (MCS) are commonly defined as organizational mechanisms promoting that managers and employees work toward the organization's objectives and strategies. In short, MCS are ways to influence behaviors (Gond et al. 2012; Merchant and van der Stede 2018). To achieve this, the definition of MCS should be based on, and aligned with, pre-defined organizational objectives and strategies. Therefore, strategically aligned and well-designed and implemented MCS can contribute to the successful attainment of strategic objectives.

The overwhelming rise of sustainability concerns, from governments to individuals, has made organizations incorporate sustainability dimensions in their objectives and strategies. Organizations are increasingly realizing that by behaving in a sustainable way, they will benefit themselves, their stakeholders, and society as a whole. However, like with any other type of objectives and strategies, it is necessary to design effective ways to transpose those objectives and strategies, typically of a high-level nature, into lower-level mechanisms with an effective impact on managers' and employees' decisions and behaviors (Crutzen et al. 2017). This is the role that MCS aim to play. Moon et al. (2011, p. 2) call for “integrating sustainability within management control, rather than simply relying on discourse

to deliver a triple rather than a single bottom line.” In fact, embedding sustainability in everyday business practices is an important requirement to manage sustainability (e.g., Morioka and Carvalho 2016) but often missing, as evidenced by Bonini et al. (2010). Therefore, to successfully promote sustainability-oriented decisions and behaviors in organizations, it is important to consider what management controls are available and can be mobilized to achieve that aim.

Organizations have largely understood the need to adopt controls regarding sustainability (Battaglia et al. 2016; Bouten and Hoozée 2016; Crutzen et al. 2017; Gond et al. 2012; Morioka and Carvalho 2016). Some organizations have developed specific systems focused on environmental and social issues, typically labeled sustainability control systems (SCS) (Moon et al. 2011; Battaglia et al. 2016); others have addressed these issues within the overall MCS. Indeed, SCS may be separated or integrated with MCS, in various degrees. For simplicity, since the ensuing discussion will analyze classifications and issues largely applicable to both MCS and SCS, it will typically use the term “management controls” in a broader sense, including also sustainability controls, unless the discussion specifically addresses comparisons and relations between MCS and SCS.

To provide an overview of potential controls to draw upon, the various forms of management controls are discussed next, followed by the distinction between formal and informal controls. The following sections discuss the control mix, the issue of complementarity and substitution between controls, and the distinction between systems and packages of controls. The final sections discuss the degree of integration between MCS and SCS, how they are used and what consequences may arise for the development, and outcomes of sustainability strategies, closing with a summary of the text.

Forms of Management Controls

A well-established classification of forms of controls (Merchant and van der Stede 2018) identifies action controls, personnel controls, and results

controls. Action controls view performance in terms of a process or action and try to ensure that employees carry out certain actions considered and defined as desirable. This type of controls requires their designers to know the specific actions that are desirable for a given situation and purpose and be able to assess if those specific actions were indeed taken (Merchant and van der Stede 2018). Examples of action controls include structural configurations limiting how machines work, passwords to limit access to certain physical or virtual spaces, checklists to be reviewed and complied with when performing activities, and so on.

Numerous action controls aiming to promote sustainability-enhancing behaviors exist, regardless of whether they are included in the overall MCS or set out in specific SCS. As mere illustrations, some examples are provided. A machine may be parameterized in such a way as to limit its operation speed to a certain level in order to protect the workers’ safety or to prevent pollution emissions considered to be excessive. Employees or project teams may need to go through a number of checks when performing an operational activity or taking a decision (e.g., on waste handling), requiring them to analyze and record (e.g., in an information system) the sustainability impacts associated with that activity or decision; the possession of that information would then orient them towards the best outcome in terms of sustainability. Therefore, action controls can focus not only on the actions that have a direct impact upon the final result (the waste management activity or decision) but also on preceding actions (the production of information relevant for decisions).

Personnel controls are a second form of controls. Personnel control relies on self-monitoring or monitoring through emotional or social mechanisms. Personal motivation, either intrinsic or related types of motivation, and individuals’ commitment to a particular objective are powerful mechanisms to guide individuals to act in a certain way. The search for acceptance within a social context in which emotional ties and peer monitoring are important is another example of a personnel control mechanism. Overall, personnel controls are achieved through hiring decisions, training, and other human resource mechanisms.

Personnel controls may be an increasingly effective form of promoting sustainability within organizations, as sustainability concerns become more widespread within society and among organizations' employees. In this context, business decisions and actions are more likely to be influenced by forms of motivation that lie between purely internal and purely external motivation, namely, "introjection (motivation based on avoidance of guilt, shame or disapproval) and identification (motivation based on congruence with one's values or goals)" (Adler and Chen 2011, p. 64). The broad term of ► **"Organizational Culture"** has been used to encompass many of the components of personnel control, such as shared values, beliefs, symbols, rituals, and ceremonies, features that have been found to be relevant in promoting sustainability objectives (e.g., Bouten and Hoozée 2016).

Results controls are the third form of controls. Here, obtained results, not their causes or means, are the only object of analysis and control. Results controls are the most traditional form of management control. From an economic and financial perspective, there are well-established indicators, techniques, systems, and routines to monitor performance. In the sustainability area, this type of control has long been adopted as well, when sustainability-related KPIs ("Sustainability and Key Performance Indicators" and "Key Performance Indicators (KPIs), for CSR") are collected, within specific SCS or integrated within the overall MCS.

Formal and Informal Controls

Controls can be formal or informal. Formal controls are purposefully designed and include explicit organizational structures, techniques, routines, policies, processes, and procedures. Cybernetic systems, such as accounting and budgeting systems, and other systems of "counting" for any particular aspect of organizational performance (such as sustainability) are examples of formal systems. Informal controls may be purposefully developed or may simply emerge out of organizational dynamics, beyond an explicit direction set

by top management. They include unwritten policies, beliefs, and values making up organizational culture (Crutzen et al. 2017; Malmi and Brown 2008; Merchant and van der Stede 2018). Therefore, the existence of these two types of controls, which may or may not be aligned given their nature, origin, and development, must be considered when defining controls for sustainability. For example, Crutzen et al. (2017), while stating that the large companies they studied adopted both formal and informal controls to achieve sustainability goals, stressed that managers tended to privilege either one or the other; furthermore, most managers believed that informal controls could be more effective than formal controls in influencing sustainability-relevant behavior.

The Choice of a Mix of Controls

MCSs typically cannot guarantee that the desired outcomes will indeed be achieved – in fact, neither one individual MC in isolation nor a massive amount of MCs. Even those control devices that may seem not possible to circumvent (e.g., a password barring unauthorized individuals from accessing an IT system or a part of it) typically can indeed be circumvented (e.g., when passwords are shared between authorized and unauthorized individuals). Results controls, although they have the appeal to focus on the outcomes considered most important for the defined objectives, suffer from a number of well-documented shortcomings. One of these shortcomings is promoting an excessive managerial focus on the output indicators being monitored, while neglecting other (nonmeasured) areas – an effect known as myopia bias.

The sustainability area is clearly susceptible to this risk of myopia bias. The multiple areas involved in sustainability, requiring different indicators ("Sustainability and Key Performance Indicators" and "Key Performance Indicators (KPIs), for CSR") and even expressed in different measurement units, make an aggregation of overall performance extremely difficult or even impossible. Decisions and their consequences on the

multiple areas of sustainability are likely to be interdependent, since improvements in one area may potentially cause deterioration in other areas; therefore, trade-offs are difficult to make on an objective basis. And if results controls and the selected indicators focus on a limited area, there is the risk that employees neglect the areas where adverse (but unmonitored) consequences arise.

Given the unavoidable limitation of every particular indicator, control, or even form of control, there is a general agreement that organizations should not rely on one single mechanism. Instead, using a mix of indicators, controls, and forms of controls is typically recommended, both in MCS and SCS. However, this does not mean enacting all possible ways of control, since this would be both unpractical and even counterproductive. Therefore, there is the need to consider the overall control mechanisms available, those already in place, and hence the overall control mix. This implies understanding the potential and shortcomings of each one and, importantly, the way they may interact and may be complementary or substitutes.

Complementarity and Substitution Between Controls

Determining the control mix requires, among other things, to understand the relationship between the consequences (beneficial or detrimental) of each control, in terms of whether the various controls may be complementary or substitutes (Grabner and Moers 2013).

Two controls are complementary if the benefits of using one control increase the benefits of using another one. For example, the benefits of providing additional training on sustainability issues are likely to increase the benefits of providing employees with more information about key performance indicators to assist them in their decision making. On the contrary, two controls are substitutes if the benefits of using one control decrease due to the benefits of using another one. For example, let us suppose that effective results controls can be used, through measuring sustainability performance and tying it to

incentives actually effective in motivating employees' behavior – for example, rewards of financial or nonfinancial nature to reduce waste. In that case, the benefits (and hence of the need) of using action controls to directly lead employees to adopt certain desirable actions may be lower. Likewise, and inversely, the benefits of using effective action controls may reduce the benefits from results controls. Of course, whether the relationship between controls is one of complementarity or substitution can only be established upon the particular controls deployed in particular settings. Finally, the coexistence of substitute controls is not necessarily negative: While the benefits of one control reduce the benefits of the other, the total benefit obtained may increase when compared to having only one of them. Therefore, organizations wishing to reinforce the control of a particular area may be willing to have substitute controls in place, accepting, for example, some overlap and redundancy between those controls.

These effects of substitution and complementarity between particular controls within an overall control mix have been also found in the sustainability area. For example, Crutzen et al. (2017) found that organizations with pronounced formal controls tended to have less developed informal controls; those with pronounced cultural controls tended to have less developed formal controls; and they did not find organizations adopting both a complete package of formal and informal sustainability controls.

Systems Versus Packages of Controls

The term “management control *systems*” (or, if specific to the field of sustainability, SCS) can suggest that organizations deploy controls in a carefully planned way to make them work in a fully coordinated and consistent way, collectively constituting a “system.” In such a situation, organizations would tend to have ideal mixes of controls – assuming that the control designers did make the best choices. However, in practice, different controls and systems are often introduced in organizations by different actors and interest

groups throughout the years; therefore, in a given organization, existing controls in their entirety should not be considered to be a single system but instead as a *package* of systems (Malmi and Brown 2008, p. 291). In a real-world view, it should be recognized that “suboptimal” assemblages of controls may be in place within an organization, as packages resulting from ongoing cumulative processes of change. As sustainability is gradually entering the concerns, objectives, and practices of organizations, we can expect packages of controls to be present – that is, representing an assemblage of controls introduced and mobilized by multiple actors throughout the years.

Based on these insights, Malmi and Brown (2008) suggested a framework widely adopted in the control literature, including five main control mechanisms: planning; cybernetic controls; reward and compensation; administrative controls; and cultural controls. Malmi and Brown’s (2008) framework reflects the richness and complexity of control in organizations. Controls may address actions, personnel characteristics, or results obtained; they may be formal or informal; and there may be a mix of multiple controls, potentially with relationships of substitution or complementarity, in an assemblage which may possess characteristics more aligned with a system or a package. This framework has been recently applied to sustainability by Crutzen et al. (2017) (see Gond et al. 2012, for examples of sustainability control systems across the Planning, Cybernetic Controls and Reward and Compensation categories). Crutzen et al. (2017) concluded that the usage of multiple controls was beneficial given the existence of complementarity relationships, with controls reinforcing each other. However, as already mentioned above, their finding that companies tended to privilege either formal or informal controls means that some substitution effects are also present and taken into account by organizations when determining the control mix.

Different Uses of Management Controls

In addition to the choice of *which* management controls are adopted and available to be used,

another crucial variable are the managerial intentions behind their adoption and *how* these controls are actually used. Simons’ (1995) seminal framework classified controls themselves as being diagnostic or interactive. However, Tessier and Otley (2012) suggested not applying this label to controls themselves but instead applying it to describe how controls are used. As such, Tessier and Otley (2012) highlighted that all controls can be used diagnostically or interactively. A diagnostic use refers to controlling the implementation of a given strategy, while an interactive use aims at fostering learning and strategy renewal.

The next section draws upon key control concepts above and explores them within the context of sustainability strategy. In particular, it draws upon a particular study to highlight that success of sustainability strategies is dependent on the mobilization of multiple controls, suitably integrated and used, to promote the desired influence over employees and managers and hence achieve the desired sustainability objectives and strategies.

Different Integration and Uses of MCS and SCS: Consequences for Sustainability Strategies

Moon et al. (2011) analyzed and related the sustainability strategies of three UK companies and their various control systems. They studied these companies’ more “conventional” MCS, depicted as those oriented toward economic performance; their SCS, focusing on environmental and social issues; and the relation between the two. In particular, they studied the integration of MCS and SCS (defined as the degree of overlap between them) and whether MCS and SCS were used diagnostically or interactively. Relating these variables (the overall level of integration and diagnostic or interactive uses of MCS and SCS) enabled the authors to identify eight different configurations of sustainability strategic integration through management control (see also Gond et al. 2012, for a more in-depth analysis of these configurations) (Table 1).

This study shows that the eight possible configurations have different outcomes, with

Management Control Systems and Sustainability, Table 1 Configurations of sustainability strategic integration through management control. (Source: Moon et al. 2011, p. 3, adapted)

Overall level of control systems integration	Use of systems		Configuration
	Management control system	Sustainability control system	
Low	Diagnostic	Diagnostic	Dormant decoupled strategy
Low	Interactive	Diagnostic	Compliance-driven sustainability strategy
Low	Diagnostic	Interactive	Strategy emergence through sustainability
Low	Interactive	Interactive	Schizoid sustainability strategy
High	Diagnostic	Diagnostic	Dormant integrated strategy
High	Interactive	Diagnostic	Peripheral sustainability integration
High	Diagnostic	Interactive	Sustainability-driven organizational strategy
High	Interactive	Interactive	Integrated sustainability strategy

sustainable strategy making being more or less robust across the various alternatives. That is, the control mix, the extent to which the various controls are integrated, and the way they are used are important determinants of the types of sustainable strategy pursued, with very different contents and effectiveness attached to each type. Simply adding more controls, without considering the overall organizational control context, may lead to a package of controls which may be an inefficient mix. The key practical implication for organizations is that mobilizing an SCS may not be sufficient, because it may remain peripheral in practice, while the conventional, deeply rooted MCS remains the main influence over actors' decisions. Therefore, Moon et al. (2011) (see also Gond et al. 2012) stress the need to integrate sustainability and SCS within the overall control systems (see also, e.g., Morioka and Carvalho 2016) and in particular within the main MCS used interactively by managers.

Summary

This text has introduced key concepts of management control to assist in the design of effective ways to achieve sustainability strategies and objectives. As sustainability concerns become more prevalent in society and organizations,

there is the need to create mechanisms that promote that decisions and practices of organizations and their actors are aligned with, and lead to, such strategies and objectives.

Therefore, this text discussed fundamental concepts and distinctions in management control and related them with, and applied them to, the area of sustainability. The reviewed studies reveal substantial diversity, complexity, and richness in the array of available options. Organizations need to evaluate multiple forms of control, formal or informal, when determining their control mix, including those in sustainability-related matters. The various controls may be complementary or substitutes, and the overall control configuration may resemble more a deliberate, organized control "system" or an emerging assemblage of a control "package." Finally, the integration of the general MCS and the specific SCS, as well as the uses (diagnostic or interactive) given by managers to the various controls, are important to determine the types of sustainable strategy which are pursued, with very different contents and outcomes in terms of their sustainability strategies. All these are important aspects when achieving the main goal of management control in the field of sustainability: to influence the behavior of managers and employees to achieve defined sustainability-related strategies and objectives.

Cross-References

- [Management Control Systems and Sustainability](#)
- [Organizational Culture](#)

References

- Adler, P. S., & Chen, C. X. (2011). Combining creativity and control: Understanding individual motivation in large-scale collaborative creativity. *Accounting, Organizations and Society*, 36(2), 63–85. <https://doi.org/10.1016/j.aos.2011.02.002>.
- Battaglia, M., Passetti, E., Bianchi, L., & Frey, M. (2016). Managing for integration: A longitudinal analysis of management control for sustainability. *Journal of Cleaner Production*, 136(Part A), 213–225. <https://doi.org/10.1016/j.jclepro.2016.01.108>.
- Bonini, S., Goner, S., & Jones, A. (2010). How companies manage sustainability: McKinsey Global Survey results. <https://www.mckinsey.com/business-functions/sustainability/our-insights/how-companies-manage-sustainability-mckinsey-global-survey-results>. Accessed 28 Aug 2019.
- Bouten, L., & Hoozée, S. (2016). Let's do it safely: How Altrad Balliauw configured a package of control systems. *Journal of Cleaner Production*, 136(Part A), 172–180. <https://doi.org/10.1016/j.jclepro.2016.01.105>.
- Crutzen, N., Zvezdov, D., & Schaltegger, S. (2017). Sustainability and management control. Exploring and theorizing control patterns in large European firms. *Journal of Cleaner Production*, 143(1), 1291–1301. <https://doi.org/10.1016/j.jclepro.2016.11.135>.
- Gond, J.-P., Grubnic, S., Herzig, C., & Moon, J. (2012). Configuring management control systems: Theorizing the integration of strategy and sustainability. *Management Accounting Research*, 23(3), 205–223. <https://doi.org/10.1016/j.mar.2012.06.003>.
- Grabner, I., & Moers, F. (2013). Management control as a system or a package? Conceptual and empirical issues. *Accounting, Organizations and Society*, 38(6–7), 407–419. <https://doi.org/10.1016/j.aos.2013.09.002>.
- Malmi, T., & Brown, D. A. (2008). Management control as a package – Opportunities, challenges and research directions. *Management Accounting Research*, 19(4), 287–300. <https://doi.org/10.1016/j.mar.2008.09.003>.
- Merchant, K., & van der Stede, W. (2018). *Management control systems – Performance measurement, evaluation and incentives* (4th ed.). Harlow: Pearson.
- Moon, J., Gond, J.-P., Grubnic, S., & Herzig, C. (2011). *Management control for sustainability strategy*. London: CIMA.
- Morioka, S. N., & Carvalho, M. M. (2016). Measuring sustainability in practice: Exploring the inclusion of sustainability into corporate performance systems in Brazilian case studies. *Journal of Cleaner Production*, 136(Part A), 123–133. <https://doi.org/10.1016/j.jclepro.2016.01.103>.
- Simons, R. (1995). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Boston: Harvard Business School Press.
- Tessier, S., & Otley, D. (2012). A conceptual development of Simons' levers of control framework. *Management Accounting Research*, 23(3), 171–185. <https://doi.org/10.1016/j.mar.2012.04.003>.

Management Model

- [Business Model](#)

Management of Awareness

- [Awareness Management](#)

Management of Ethics

- [Ethics Management](#)

Management of Multiple Cultures

- [Cross-Cultural Management](#)

Management of NEETs

- [NEET Youngsters Management](#)

Management System

- [NP 4469: Portuguese Social Responsibility Standard](#)

Managerial Accounting

- [Management Accounting and Sustainability](#)

Managing Change for Sustainability

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Synonyms

[Sustainable change management](#)

Definition/Description

Over the last three decades, there has been an increased emphasis and drive for sustainability from firms both in the for-profit and nonprofit sectors across the globe. The transition to the sustainability-focused outlook for businesses was initially that of rejection; and more recently, moved to a more recently positive attitude, which considers sustainability as a key strategic organization goal (Sloan et al. 2013). This is due to the realization that sustainability focus is not only good for the organizations and the earth, but it holds additional benefits including economic prosperity, protection of the environment, and social equity (Soyka 2012).

Buchanan et al. (2007) defined sustainability as the process through which novel working methods, enhancements for performance and continuous improvements are kept in place for a time linked to a specific context. More recently, sustainability has been linked with the UN Sustainable Development Goals (UN SDG's); however, this entry will not limit itself to either of the two perspectives. Rather, a convergence of both, which involves the broader context of sustainability is adopted. Teece and Pisano (1994) proposed the theory of dynamic capabilities, which argues that organizations need to deal with a changing context by reviewing, adapting, editing, and continuously improving their routines. There remains a question of how firms can handle this transition to sustainability via routines and practices within their organizations.

Managing change for sustainability therefore involves:

...adapting firms' resources and associated stakeholders to the requirements for sustainability. This involves configuring and allocating resources to the planning (structural), people (staff-related) and process areas of sustainability targets, and ensuring that the change is dynamic (non-static) and clear to all stakeholders.

Introduction

The most challenging task in the transition of sustainability is moving from business as usual to sustainability-oriented goals (Parsons and Cornett 2011). A critical part of this difficulty lies with staff members, who may be motivated at the start of the sustainability drive but the motivation dissipates along the line. Maher et al. (2010) outlined three crucial aspects of managing change for sustainability, namely: structural factors (organizational), staff (people), and process factors. These three areas will be examined, with two additional criteria, identified from the literature for managing change for sustainability.

Structural Issues (Organization)

In managing the change for sustainability, firms need to endeavor to introduce internal structures, which are linked to the organization's vision, strategic goals, and culture (Franz-Balsen and Heinrichs 2007). Kilpatrick (2001) also outlined that institutional structures within a firm or community can facilitate or hinder the change towards sustainability. Thus, organizations are encouraged to provide the needed support structures for the incorporation of sustainability, which could be in the forms of equipment, policies and procedures, communication, and job descriptions. Doing this will allow the system to be easily monitored and improved over time. Sloan et al. (2013) argue that firms with a flatter decision-making structure and less compartmentalized communications make it easier to be proactive in the area of sustainability, especially when managing change.

The change for sustainability will also run smoother with a “sustainability champion,” who will build capacity within the firm (Kilpatrick 2001). In addition, the firm should endeavor to decentralize leadership drive for sustainability to meso-level middle managers, who will then be responsible for managing the change process.

Staffing Issues (Human Resources)

This theme concerns itself with the staff members involved in the transition to sustainability. In the change process to sustainability, organizations need to empower and train staff to be a part of the change process and believe in the change (Parsons and Cornett 2011). Sometimes, the firm may also need to engage external consultants to support the change for sustainability.

Process/Procedural Issues

Kemp et al. (2007) espoused that the process of change for sustainability is never-ending and progressive, as it involves multiple transitions or system innovations. The process in the change for sustainability involves iterations in culture, practices, and operations. The change process must also be measurable in tangible terms, i.e., linked to either sustainability targets, the UN SDGs or other alternative sustainability criteria set within the company or business environment. The process must also continuously improve and not remain static.

Versatility

Gugić (2009) outlined that in order to be able to manage the change to sustainability, firms must be able to adapt quickly within changing and unpredictable conditions in dynamic ecosystems. Thus, versatility is a critical part of managing the change to sustainability as firms need to be able to adapt to the change and be capable of doing in innovative ways, while questioning

the firms’ objectives drive towards sustainability and experiences.

Clarity

Vidović and Bjeliš (2006) outlined the need for clarity in the process of change to sustainability. Unclear goals, high level of uncertainty and insecurity, combined with the perceived lack of adequate support from key stakeholders (e.g., government bodies, expert services) will lead to a lack of clarity in the process. Firms must ensure a high level of clarity in the sustainability goals, targets, and objectives of the organization.

Summary

As firms continue in their drive towards sustainability, the definition presented in this entry outlines the adaptation requirements of firms for sustainability. The definition highlights five (5) critical issues of configuration/adaptation as firms’ transition to sustainability-focused themes, which includes structural issues, staff issues, process issues, versatility/dynamism, and clarity in the targets.

References

- Buchanan, D.A., Fitzgerald, L., Ketley, D., (2007). The sustainability and spread of organizational change. London: Routledge Taylor and Francis Group.
- Franz-Balsen, A., & Heinrichs, H. (2007). Managing sustainability communication on campus: Experiences from Lüneburg. *International Journal of Sustainability in Higher Education*, 8(4), 431–445.
- Gugić, G. (2009). Managing sustainability in conditions of change and unpredictability – The living landscape and floodplain ecosystem of the Central Sava River basin.
- Kemp, R., Loorbach, D., & Rotmans, J. (2007). Transition management as a model for managing processes of co-evolution towards sustainable development. *International Journal of Sustainable Development and World Ecology*, 14(1), 78–91.
- Kilpatrick, S. (2001). Community learning and sustainability: Practice and policy. *The Future of Australia's Country Towns*, 113–123.

- Maher, L., Gustafson, D., & Evans, A. (2010). *NHS sustainability model and guide* (p. 2010). Coventry: The NHS Institute for Innovation and Improvement.
- Parsons, M. L., & Cornett, P. A. (2011). Leading change for sustainability. *Nurse leader*, 9(4), 36–40.
- Vidović, V. V., & Bjeliš, A. (2006). Entrepreneurialism at the University of Zagreb: Managing the sustainability of change. *Higher Education in Europe*, 31.
- Sloan, K., Klingenberg, B., & Rider, C. (2013). Towards sustainability: Examining the drivers and change process within SMEs. *Journal of Management and Sustainability*, 3(2).
- Soyka, P. A. (2012). *Creating a sustainable organization – Approaches for enhancing corporate value through sustainability*. Upper Saddle River: Pearson Education.
- Teece, D., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction, 3(3), 537–555. Tidd,

Definition

Despite many academics have highlighted how CSR consists in a set of voluntary behaviors based on social norms and personal beliefs, the last few years have been characterized by the introduction of several forms of regulations in order to sustain the mandatory adoption of socially responsible practices by enterprises. Specifically, these new forms of regulations have regarded different fields such as nonfinancial reporting, GHG emissions, and corporate governance. According to these evidences, mandatory CSR could be defined as *the adoption of socially responsible practices in order to be compliant with the laws even in absence of a real orientation to these topics*.

Managing Ethics

► Ethics Management

Managing of Different Organization Communication Tools

► CSR Communication and Annual Reports

Managing the Ethics

► Ethics Management

Mandatory CSR

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Synonyms

Regulation

The Mandatory CSR

During the last few years, the worldwide market has been characterized by an increasing attention paid by stakeholders to socially responsible practices (KPMG, 2017). These new approaches sign a substantial passage from a shareholder orientation to a stakeholder orientation by the managers. However, a large part of these initiatives have been driven from the provisions of a new form of regulation proposed by governments in order to achieve the highest degree of sustainable development. Furthermore, these evolutions have regarded not only the themes related to the environment but also other items such as the diversity and the nonfinancial reporting practices.

Despite the evidences shown above, the scientific debate is characterized by a substantial skepticism about the possibility to adopt socially responsible practices on mandatory basis. In fact, a literature review performed by Dahlsrud (2008) has highlighted the existence of several definitions of CSR based on the voluntariness of these practices. Specifically, the authors denoted how the European Commission (2001) defined CSR as *“a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their*

stakeholders on a voluntary basis.” Furthermore, the WBCSD (1999) proposed a definition of CSR, *“the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.”* However, the recent past has been characterized by the introduction of explicit reference by policy makers and NGOs to a new form of mandatory-based CSR. An example is represented by the Agenda 2030 which required, within the SDGs 12.6, Member States to *“encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.”* According to this evidence, the debate about the voluntariness of the CSR is characterized by a high degree of conflict between academics.

The Debate About the Effectiveness of Mandatory-Based CSR

The effects related to the adoption of mandatory-based CSR's protocol have been widely explored by academics during the last few years. In particular, the aims of these studies have been related to the possibility to identify more effective paradigms in order to favor the identification of the more adequate rules. In this sense, recently, the debate has been characterized from an increasing contribution by accounting academics (Bebbington and Larrinaga 2014).

One of the main fields of studies about mandatory CSR is represented by the nonfinancial reporting's sector. These fields of studies have been widely analyzed by academics in the last 10 years due to the increasing number of legal provisions about the disclosure of nonfinancial information.

An increasing number of academics have started to analyze the effects related to the Directive 95/2014/EU due to the presence of several controversies about its real effectiveness (La Torre et al. 2018). In fact, contrary to the typical form of

regulation about nonfinancial reporting's regulation, it does not provide some typical requirements as a common reporting standard and a set of common indicators and information about firms' contribution to sustainable development. Furthermore, some preliminary studies performed within the European context have highlighted how firms with previous experience in voluntary nonfinancial reporting typically disclose more information than the late adopters (Leopizzi et al. 2019). Furthermore, other studies have analyzed the mandatory provisions of the integrated report within the South African context in order to be compliant with the King III Code. Specifically, these studies have highlighted how firms could be characterized from a tick box approach not followed by an effective orientation toward sustainability (Ackers and Eccles 2015).

However, mandatory CSR can limit the signaling effects related to the adoption of sustainable practices. An example is represented by nonfinancial reporting practices. As evidenced by Dumay et al. (2015), the proliferation of nonfinancial reports prepared on mandatory basis negatively impacted on stakeholders' ability to evaluate organizations' behaviors. A similar perspective was highlighted by Sheldon and Jenkins (2020) in their research about the marketization of assurance practices. The authors underlined that external assurance made by practitioners on nonfinancial reports is influenced by the lack of independency. Furthermore, a study by Michelon et al. (2019) showed that the probability to found a restatement in nonfinancial reports increases in the presence of assurers' change. In this sense, traditional paradigms developed by academics to analyze socially responsible activities on a voluntary basis require an in-depth revision in order to consider the effects caused by regulations.

Summary

The exigence to achieve the highest degree of SDGs has impacted on the worldwide policies implemented by States. This new exigence has signed the passage from a voluntary-based to a

mandatory-based approach to CSR by the firms. However, the academics have highlighted how the provisions of a rule does not impact on the firms' behaviors. In fact, the preliminary evidences collected about the implementation of new rules have suggested how the early adopters are typically more oriented to these practices. According to this evidence, an effective transition to new paradigms needs both the involvement of States through their internal regulation and the involvement of private sectors. Within this scenario, the academia's contribution will be determinant through the identification of a new form of education inspired by the most virtuous principles about CSR.

Cross-References

► Regulations

References

- Ackers, B., & Eccles, N. S. (2015). Mandatory corporate social responsibility assurance practices: The case of King III in South Africa. *Accounting, Auditing & Accountability Journal*, 28(4), 515–550.
- Bebbington, J., & Larrinaga, C. (2014). Accounting and sustainable development: An exploration. *Accounting, Organizations and Society*, 39(6), 395–413.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.
- Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy: Blending organisational and stakeholder concerns through non-financial information disclosures. *Journal of Accounting and Organizational Change*, 11(1), 2–23.
- European Commission. Directorate-General for Employment. (2001). *Promoting a European framework for corporate social responsibility: Green paper*. Office for Official Publications of the European Communities. Bruxelles, BE.
- La Torre, M., Sabelfeld, S., Blomkvist, M., Tarquinio, L., & Dumay, J. (2018). Harmonising non-financial reporting regulation in Europe: Practical forces and projections for future research. *Meditari Accountancy Research*, 26(4), 598–621.
- Leopizzi, R., Coronella, S., & Pizzi, S. (2019). IL D.Lgs. 254/2016 sull'informativa non finanziaria: prime evidenze in Italia sul "prima" e sul "dopo". In *Nuove frontiere del reporting aziendale. Tra comunicazione agli stakeholders tra vincoli normativi e attese informative*.
- Michelon, G., Patten, D. M., & Romi, A. M. (2019). Creating legitimacy for sustainability assurance practices: Evidence from sustainability restatements. *European Accounting Review*, 28(2), 395–422.
- Sheldon, M. D., & Jenkins, J. G. (2020). The influence of firm performance and (level of) assurance on the believability of management's environmental report. *Accounting, Auditing & Accountability Journal*. <https://doi.org/10.1108/AAAJ-11-2018-3726>. Emerald Publishing Limited, Vol. ahead-of-print No. ahead-of-print.
- World Business Council for Sustainable Development. (1999). *Corporate social responsibility: Meeting changing expectations*. World Business Council for Sustainable Development. Geneva. SW

Mandatory CSR an Indian Companies Act 2013

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Synonyms

[Companies Act of 2013, Section 135, Corporate Social Responsibility Voluntary Guidelines, Corporate Social Responsibility Policy Rules, 2014, Schedule VII](#)

Definition

The Companies Act 2013 is an act of the Parliament of India on Indian company law which regulates incorporation of a company, responsibilities of a company and directors, and dissolution of a company. The 2013 Act is divided into 29 chapters containing 470 sections and has 7 schedules. The Act has replaced The Companies Act 1956. The Act came into force on September 12, 2013. The newly incorporated Act provides more power to the shareholders, emphasizes more on corporate governance, and introduces for the first time Section 135 on CSR. The distinguishing feature of Section 135 is that

it not only makes the reporting of CSR activities mandatory but goes a step further to mandate CSR activities in the first place. India becomes the first country to include provisions of CSR in company law and make CSR expenditure mandatory for corporate based on pre-specified criteria.

History of the Companies Act of 2013 and of Section 135

Since the late 1990s, CSR activities have increasingly gained prominence both among the policy-makers and corporations' stakeholders due to stricter corporate governance and worldwide disclosure norms coming into the forefront. At the policy level, the formal focus on CSR started in India with the issuance of the Corporate Social Responsibility Voluntary Guidelines in 2009 by the Ministry of Corporate Affairs (MCA [2009](#)). These guidelines rolled out by the Ministry of Corporate Affairs in India were developed through an extensive consultative process with the objective of enabling Indian businesses to understand the nuances of responsible business. It was meant for both large and small businesses alike. These guidelines consisted of nine principles which related to ethics and transparency, product life cycle sustainability, employee well-being, stakeholder engagement, human rights, environmental stewardship, responsible policy advocacy, inclusive development, and consumer well-being. However these voluntary guidelines did not appear to have much effect on the Indian firms, and hence CSR activity was by no means common among Indian firms even after the 2009 guidelines. But one good aspect of the Corporate Social Responsibility Voluntary Guidelines issued by the Ministry of Corporate Affairs of India in 2009 was that it culminated in the enactment of Section 135 of the Companies Act 2013 (MCA [2013](#)).

The first time the market learned of a mandatory CSR requirement was on August 6, 2010. They learned about the fact that the government was planning to enact a new provision in the

company law that would require firms above certain thresholds to develop a CSR Policy to ensure that they contributed at least 2% of their annual net profits to CSR. The response of Indian business to this proposal was negative. The Confederation of Indian Industry (a very large trade group) went against such a rule, as did others. They were worried about the mandating behavior of CSR which was previously voluntary in nature. Despite the negative reaction, the draft of the proposed CSR requirement was put forward by the Standing Committee on Finance on September 8, 2010. The draft was silent with respect to penalty for non-compliance, preferring to rely on disclosure of non-compliance as the remedy. By February 10, 2011, MCA planned to accept the Standing Committee on Finance's recommendations on CSR but would rely on a "comply-or-explain" rule as its enforcement mechanism on the 2% spending requirement. The discussion of the mandatory or comply-or-explain rule was officially settled on July 11, 2011. The Companies Bill was placed before the lower house of the Parliament (the Lok Sabha) containing the provision that became Section 135. The Bill sat in the Lok Sabha for some time and was finally enacted by it on December 18, 2012. The Bill then went to the upper house of the Parliament (the Rajya Sabha) and was enacted by it on August 8, 2013. It received the assent of the President of India on August 29, 2013. The Ministry of Corporate Affairs issues rules on what counts as CSR for purposes of the Act on September 20, 2013. These rules were approved on February 27, 2014. The CSR requirement of Section 135 becomes effective for firms satisfying the size-related thresholds from April 1, 2014.

Provisions of Section 135 and Companies (Corporate Social Responsibility Policy) Rules, 2014

Definition of Corporate Social Responsibility
According to Rule 2(1)(c) of the Companies (Corporate Social Responsibility Policy) Rules, 2014,

“Corporate Social Responsibility (CSR)” means and includes but is not limited to:

- (i) Projects or programs relating to activities specified in Schedule VII to the Act; or
- (ii) Projects or programs relating to activities undertaken by the board of directors of a company (Board) according to the recommendations of the CSR Committee of the Board as per declared CSR Policy of the company subject to the condition that such policy will cover subjects specified in Schedule VII of the Act.

Companies to Which CSR Obligations Under Section 135 Apply

There are two aspects to this. According to Section 135(1) read along with Rule 3 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, applicability of CSR obligations can be divided into two parts which is as follows:

- Applicability to Indian companies, i.e., companies registered in India
- Applicability to foreign companies

Applicability of CSR Obligations to Indian Companies

According to Section 135(1), mandatory CSR obligations under Section 135 of the 2013 Act apply to every company having:

- A net worth of 500 crores or more
- A turnover of 1000 crores or more during any financial year
- A net profit of 5 crores or more during any financial year

CSR obligations shall apply to companies covered by Section 135(1) irrespective of their listing status and whether they are public or private. “Any financial year” referred under Sub-section (1) of Section 135 of the Act implies “any of the three preceding financial years.”

Section 2(57) of the 2013 Act defines “net worth” to mean:

The aggregate value of:

- The paid-up share capital
- All reserves created out of the profits
- Security premium account

From the aggregate, value the following shall be deducted:

- Accumulated losses
- Deferred expenditure
- Miscellaneous expenditure not written off

All the above figures taken to compute net worth should be as per the audited balance sheet. The following reserves should not be included for computation of net worth:

- Reserves created out of revaluation of assets
- Reserves created out of write-back of depreciation
- Reserves created out of amalgamation

According to Section 2(91) of the 2013 Act, “turnover” means the aggregate value of realization made by the company during a financial year from the sale, supply, or distribution of goods or services rendered or both.

“Net profit” as per Rule 2(1)(f) means the net profit of a company as per its financial statement prepared in accordance with the applicable provisions of the Act (Sec. 381(1)(a) and Sec. 198 of the Act) but shall not include the following, namely:

- Any profit arising from any overseas branch or branches of the company, whether operated as a separate company or otherwise; and
- Any dividend received from other companies in India, which are covered under and complying with the provisions of section 135 of the Act.

Applicability of CSR Obligations to Foreign Companies

“Foreign company” according to Section 2(42) refers to the following:

- It must be a company or body corporate;
- It must be incorporated outside India;
- It has a place of business in India whether by itself or through an agent physically or through electronic mode and conducts any business activity in India in any other manner.

According to Rule 3(1) of the CSR Rules, a foreign company defined under Section 2(42) having its branch office or project office in India shall comply with Section 135 and the CSR Rules if it fulfills the criteria in Section 135(1). Net worth, turnover, or net profit of a foreign company of the Act shall be computed in accordance with the balance sheet and profit and loss account of such company prepared in accordance with the provisions of Section 198 of the Act and Sec. 381(1) (a) read with Rule 4 of the Companies (Registration of Foreign Companies) Rules, 2014. Rule 4 of the Companies (Registration of Foreign Companies) Rules 2014 deals with accounts of foreign company relating to its Indian business operations prepared in accordance with Schedule III to the Companies Act of 2013.

Companies to Which CSR Obligation Is Not Required

Every company which ceases to be a company as per Sec. 135(1) of the Act for 3 consecutive financial years shall not be required to constitute a CSR committee and comply with the provisions of Sec. 135 till such time it meets the criteria specified in Sub-section (1) of Section 135.

Mandatory CSR Obligations to Be Undertaken by Companies Covered Under Section 135

Companies covered by Section 135(1) are required to comply with the following obligations laid down by Section 135:

- To form a CSR Committee of directors
- To formulate a CSR Policy based on CSR Committee's recommendations
- Duties of the directors
- To undertake activities included in CSR Policy
- To spend at least 2% of net profit on CSR.

- To disclose CSR Policy in board of director's report as well as on the website

CSR Committee

Composition

According to Section 135(1) read along with Rule 5 of the Companies (Corporate Social Responsibility Policy) Rules 2014, the following needs to be noted:

- The CSR Committee shall consist of three or more directors, out of which at least one director shall be an independent director.
- An unlisted public company or a private company covered under Sub-section (1) of Section 135 is not required to appoint an independent director.
- A private company having only two directors on its Board shall constitute its CSR Committee with two such directors.
- With respect to a foreign company covered under these rules, the CSR Committee shall comprise of at least two persons of which one person shall be as specified under clause (d) of Sub-section (1) of Section 380 of the Act and another person shall be nominated by the foreign company.

Role of the CSR Committee

The Section 135(3) of the 2013 Act read along with Rule 5(2) of the Companies (Corporate Social Responsibility Policy) Rules, 2014, provides that the main objective of the CSR Committee shall be to:

- Formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activity or activities to be undertaken by the company as specified in Schedule VII.
- Recommend the amount of expenditure to be incurred on the activities
- Monitor the Corporate Social Responsibility Policy of the company from time to time.
- Institute a transparent monitoring mechanism for implementation of the CSR projects or programs or activities undertaken by the company.

CSR Policy

Definition

According to Rule 2(1)(e) of the Companies (Corporate Social Responsibility Policy) Rules, 2014, “CSR Policy” relates to the activities as specified in Schedule VII to the Act and the expenditure thereon, excluding the activities undertaken in the normal course of business carried on by the company.

Contents of CSR Policy

Section 135(3)(a) of the 2013 Act provides that the CSR Committee shall formulate and recommend to the Board a Corporate Social Responsibility Policy which shall indicate the activity or activities to be undertaken by the company as specified in Schedule VII.

Rule 6(1) of the Companies (Corporate Social Responsibility Policy) Rules, 2014 provides that the CSR Policy of the company shall include the following:

- A list of CSR projects/programs which a company plans to undertake during the implementation year, specifying modalities of execution in the areas/sectors chosen and implementation schedules for the same. The activities shall be related to the activities included in Schedule VII to the 2013 Act.
- Monitoring process of such projects or programs.
- The CSR Policy of the company should provide that surplus arising out of the CSR activity will not be part of business profits of a company.

Duties of the Directors

Section 166(2) of the 2013 Act requires a director of a company to act in the best interests of the company, its employees, the shareholders, the community, and the protection of environment. If a director contravenes the provisions of Section 166, such director shall be punishable with fine which shall not be less than 100,000 rupees but which may extend to 500,000 rupees.

Section 135(4) of the 2013 Act provides that the Board of Directors of every company referred to in Section 135(1) shall:

- Approve the CSR Policy for the company after taking into account the recommendations of the CSR Committee
- Disclose contents of CSR Policy in its report (under section 134)
- Place the CSR Policy on its website, if any, in such manner as may be prescribed
- Ensure that the activities included in the CSR Policy of the company are undertaken by the company.
- The Board of every company shall ensure that the company spends, in every financial year, at least 2% of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy.
- If the company fails to spend such amount, the Board shall, in its report made under clause 134(3)(o) specify the reasons for not spending the amount.

CSR Activities

Rule 4 and CSR Activities

Rule 4 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, provides the following:

The CSR activities shall be undertaken by the company, as stated in the CSR Policy, as projects or programs or activities (either new or ongoing), excluding activities undertaken in its normal course of business.

- The Board of a company may decide to undertake its CSR activities approved by the CSR Committee, through a registered trust or a registered society or a company established by the company or its holding or subsidiary or associate company under section 8 of the Act or otherwise.
- Such trust, society or company which is not established by the company or its holding or subsidiary or associate company, shall have to

have an established track record of 3 years in undertaking similar programs or projects.

- The company has specified the project or programs to be undertaken through these entities, the modalities of utilization of funds on such projects and programs and the monitoring and reporting mechanism.
- A company may also collaborate with other companies for undertaking projects or programs or CSR activities in such a manner prescribed by the CSR Committees.
- Companies may build CSR capacities of their own personnel as well as those of their Implementing agencies through Institutions with established track records of at least three financial years but such expenditure shall not exceed 5% of total CSR expenditure of the company in one financial year.

Schedule VII

Activities specified in Schedule VII to the 2013 Act specifies activities which companies may include in their CSR Policies. These are activities relating to:

- Eradicating hunger, poverty, and malnutrition; promoting healthcare including preventive healthcare and sanitation including contribution to the Swatch Bharat Kosh set up by the government for promotion of sanitation and making available safe drinking water
- Promoting education, including special education, and employment enhancing vocation skills especially among children, women, elderly, and the differently abled and livelihood enhancement projects
- Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centers, and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups
- Ensuring environmental sustainability, ecological balance, protection of flora and

fauna, animal welfare, agroforestry, and conservation of natural resources and maintaining quality of soil, air, and water including contribution to the Clean Ganga Fund set up by the Central Government for rejuvenation of river Ganga.

- Protection of national heritage, art, and culture including restoration of buildings and sites of historical importance and works of art; setting up of public libraries; promotion and development of traditional arts and handicrafts
- Measures for the benefit of armed forces veterans, war widows, and their dependents
- Training to promote rural sports, nationally recognized sports, Paralympic sports, and Olympic sports
- Contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government for socioeconomic development and relief and welfare of SC/ST/OBC, minorities, and women
- Contributions or funds provided to technology incubators located within academic institutions which are approved by the Central Government.
- Rural development projects.
- Slum area development – the term slum area shall mean any area declared as such by the Central Government or any state government or any other competent authority under any law for the time being in force

Activities Not Included in CSR

- Activities undertaken in normal course of business.
- Activity undertaken outside India.
- CSR projects or programs or activities that benefit only the employees of the company and their families shall not be considered as CSR activities.
- Contribution of any amount directly or indirectly to any political party under section 182 of the Act shall not be considered as CSR activity.
- Activity not covered within schedule VII of the 2013 Act.

- One-off events such as marathons/awards/charitable contribution/advertisement/sponsorships of TV programs/etc. would not qualify as part of CSR expenditure.
- Expenses incurred by companies for the fulfillment of any Act/Statute of regulations (such as Labour Laws, Land Acquisition Act, etc.) would not count as CSR expenditure under the Companies Act.
- Contributions to National Defense Fund will not be counted as CSR spends.

CSR Expenditure

Section 135(5) of the 2013 Act read along with Rule 4 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, provides that the Board of every company to which CSR provisions apply shall ensure that at least 2% of average net profits of the company made during 3 immediately preceding financial years is spent in every financial year on such policy.

“Average net profit” shall be calculated as per Section 198 (refer to Annexure 1). The following gives us an idea about such calculation:

- In case of *companies registered in India*, average net profits will have to be calculated as under:
 - (a) Take net profit as per its financial statements prepared in accordance with the applicable provisions of the Act.
 - (b) Make adjustments required by section 198.
 - (c) Exclude the following from net profits:
 - (i) Any profit arising from any overseas branch or branches of the company, whether operated as a separate company or otherwise; and
 - (ii) Any dividend received from other companies in India, which are covered under and complying with provisions of section 135 of the Act.
 - (d) Calculate net profit for each of the preceding three financial years as per (a) to (c) above, aggregate them and divide by 3.
- In case of *foreign companies* covered by Rule 3, the average net profits will have to be calculated as under:

- (a) Take net profit of such company as per profit and loss account prepared in terms of clause (a) of sub-section (1) of section 381.
- (b) Make adjustments to net profit in (a) above as required by section 198.
- (c) Calculate net profits as per (a) and (b) above for each of the three preceding financial years, aggregate them and divide by 3.

The company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities.

Further if the company fails to spend such amount, the Board shall, in its report made under clause (o) of Sub-section (3) of Section 134, specify the reasons for not spending the amount. There is no specific punishment provided for defaulting on CSR spends obligations.

According to Rule 7, CSR expenditure shall include all expenditure including contribution to corpus for projects or programs relating to CSR activities approved by the Board on the recommendation of its CSR Committee but does not include any expenditure on an item not in conformity or not in line with activities which fall within the purview of Schedule VII of the Act (refer to segment 3.4.3). However expenditure incurred by foreign holding company for CSR activities in India will qualify as CSR spend of the Indian subsidiary if the CSR expenditures are routed through Indian subsidiaries and if the Indian subsidiary is required to do so as per Section 135 of the Act.

The surplus arising out of the CSR projects or programs or activities shall not form part of the business profit of a company.

In the case of companies covered under Section 135, amount of expenditure incurred on corporate social responsibility activities is required to be disclosed in notes to accounts. So disclosure shall be on accrual basis. The total expenditure incurred is what is required to be disclosed and not the total payments made. There is no requirement to disclose breakup of CSR expenditure incurred. There is no requirement to disclose the

computation of 2% of “average net profits” worked out in accordance with Section 198. There is no requirement to disclose the shortfall of CSR spends, if any, as against minimum 2% of average net profits and the reasons for such shortfall.

Also in the case of companies covered under Section 135, they are required to disclose the following regarding CSR in annual return in Form No. MGT.7:

- Amount spent by the company during the financial year in pursuance of its Corporate Social Responsibility policy.
- The amount spent as percentage of the average net profits of the company made during the three immediately preceding financial years.

CSR Reporting

Section 134(3)(o) requires that the report by the Board of Directors shall include the details of the policy developed and implemented by the company on corporate social responsibility initiatives taken during the year. If the company fails to spend 2% of average net profits during a financial year, the Board shall, in its report, specify the reasons for not spending the amount.

Rule 8 of the Companies (Corporate Social Responsibility Policy) Rules, 2014, provides the following:

1. The Board’s Report of a company covered under these rules pertaining to a financial year commencing on or after the 1st day of April, 2014 shall include an annual report on CSR containing particulars specified in Annexure.
2. In case of a foreign company, the balance sheet filed under section 381 (1)(b) shall contain an Annexure regarding report on CSR.

If company fails to comply with section 134 as regards CSR disclosures in Board, report:

- It shall be punishable with fine which shall not be less than ₹50,000 but which may extend to ₹25, 00,000; and
- Every officer who is in default shall be punishable with imprisonment for a term which may

extend to 3 years or with fine which shall not be less than ₹50,000 but which may extend to ₹5,00,000, or with both.

Display of CSR Activities on Its Website

Rule 9 of the of The Companies (Accounts) Rules, 2014, provides that the Board of Directors of the company shall, after taking into account the recommendations of CSR Committee, approve the CSR Policy for the company and disclose contents of such policy in its report and the same shall be displayed on the company’s website, if any, as per the particulars specified in the Companies (Corporate Social Responsibility Policy) Rules, 2014 annexure. (Refer to annexure 2).

Future Directions

The new CSR provisions should be looked at as an effort by the government to make the corporate sector play a complementary role in meeting the broader societal goals along with it. Under the new CSR Rules, the flexibility is given to the companies in choosing and monitoring the projects. The key challenge will be to see how the companies promote efficiency and effectiveness in project implementation without the CSR Rules coming into serious conflicts with the primary objective of shareholder value maximization of companies. It is also to be seen to what extent the corporate sector will willingly lend a helping hand to the government in contributing to the inclusive growth of the nation.

Cross-References

- [Compliance](#)
- [Finance and CSR](#)
- [Human Development Index \(HDI\)](#)
- [Mandatory CSR](#)
- [Market-Based Mechanism of Regulation](#)
- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

Annexures

Annexure 1

See Annexure. 1.

SECTION 198

Calculation of profits

(1) In computing the net profits of a company in any financial year -

(a) Credit shall be given for the sums specified in sub-section (2), and credit shall not be given for those specified in sub-section (3); and

(b) The sums specified in sub-section (4) shall be deducted, and those specified

in sub-section (5) shall not be deducted.

(2) In making the computation aforesaid, credit shall be given for the bounties and Subsidies received from any Government, or any public authority constituted or authorized in this behalf, by any Government, unless and except in so far as the Central Government otherwise directs.

(3) In making the computation aforesaid, credit shall not be given for the following sums, namely:—

(a) Profits, by way of premium on shares or debentures of the company, which are issued or sold by the company;

(b) Profits on sales by the company of forfeited shares;

(c) Profits of a capital nature including profits from the sale of the undertaking or any of the undertakings of the company or of any part thereof;

(d) Profits from the sale of any immovable property or fixed assets of a capital nature comprised in the undertaking or any of the undertakings of the company, unless the business of the company consists, whether wholly or partly, of buying and selling any such property or assets: provided that where the amount for which any fixed asset is sold exceeds the written-down value thereof, credit shall be given for so much of the excess as is not higher than the difference between the original cost of that fixed asset and its written down value;

(e) Any change in carrying amount of an asset or of a liability recognized in equity reserves including surplus in profit and loss account on measurement of the asset or the liability at fair value.

(4) In making the computation aforesaid, the following sums shall be deducted, namely:—

- (a) All the usual working charges;
- (b) Directors' remuneration;
- (c) bonus or commission paid or payable to any member of the company's staff, or to any engineer, technician or person employed or engaged by the company, whether on a whole-time or on a part-time basis;
- (d) Any tax notified by the Central Government as being in the nature of a tax on excess or abnormal profits;
- (e) Any tax on business profits imposed for special reasons or in special circumstances and notified by the Central Government in this behalf;
- (f) Interest on debentures issued by the company;
- (g) Interest on mortgages executed by the company and on loans and advances secured by a charge on its fixed or floating assets;
- (h) Interest on unsecured loans and advances;
- (i) Expenses on repairs, whether to immovable or to movable property, provided the repairs are not of a capital nature;
- (j) Outgoings inclusive of contributions made under section 181;
- (k) Depreciation to the extent specified in section 123;
- (l) The excess of expenditure over income, which had arisen in computing the net profits in accordance with this section in any year which begins at or after the commencement of this Act, in so far as such excess has not been deducted in any subsequent year preceding the year in respect of which the net profits have to be ascertained;
- (m) Any compensation or damages to be paid in virtue of any legal liability including a liability arising from a breach of contract;
- (n) Any sum paid by way of insurance against the risk of meeting any liability such as is referred to in clause (m);
- (o) Debts considered bad and written off or adjusted during the year of account.

(5) In making the computation aforesaid, the following sums shall not be deducted, namely:—

- (a) income-tax and super-tax payable by the company under the Income-tax Act, 1961, or any other tax on the income of the company not falling under clauses (d) and (e) of sub-section (4);

(b) Any compensation, damages or payments made voluntarily, that is to say, otherwise than in virtue of a liability such as is referred to in clause (m) of sub-section (4);

(c) Loss of a capital nature including loss on sale of the undertaking or any of the undertakings of the company or of any part thereof not including any excess of the written-down value of any asset which is sold, discarded, demolished or destroyed over its sale proceeds or its scrap value;

(d) Any change in carrying amount of an asset or of a liability recognized in equity reserves including surplus in profit and loss account on measurement of the asset or the liability at fair value.

Mandatory CSR an Indian Companies Act 2013, Annexure. 1 (continued)

Annexure 2

See Annexure. 2.

FORMAT FOR THE ANNUAL REPORT ON CSR ACTIVITIES TO BE INCLUDED IN THE BOARD'S REPORT

1. A brief outline of the company's CSR policy, including overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programs.

2. The Composition of the CSR Committee.

3. Average net profit of the company for last three financial years.

4. Prescribed CSR Expenditure.

5. Details of CSR spent during the financial year:

(a) Total amount to be spent for the financial year;

(b) Amount unspent, if any;

(c) Manner in which the amount spent during the financial year is detailed below:

1	2	3	4	5	6	7	8
Serial No	CSR Project or activity identified	Sector in which the activity is covered	Projects or programmes Local area or specify the state or district where project or programme was undertaken	Amount Outlay	Amount spent on the project or programme	Cumulative Expenditure up to the reporting period	Amount spent direct or through implementing agency
1							
2							
3							
	TOTAL						

*Give details of implementing agency

6. In case the company has failed to spend the two per cent of the average net profit of the last three financial years or any part thereof, the company shall provide the reasons for not spending the amount in its Board report.

7. A responsibility statement of the CSR Committee that the implementation and monitoring of CSR Policy, is in compliance with CSR objectives and Policy of the company.

References

- Companies (Registration of Foreign Companies) Rules, 2014.
- MCA. (2009). *Corporate social responsibility voluntary guidelines in 2009*. New Delhi: Ministry of Corporate Affairs, Government of India.
- MCA. (2013). *Companies Act, 2013*. New Delhi: Ministry of Corporate Affairs, Government of India. <http://www.mca.gov.in/Ministry/pdf/CompaniesAct2013.pdf>
- MCA. (2014). *CSR rules, 2014*. New Delhi: Ministry of Corporate Affairs, Government of India. http://www.mca.gov.in/Ministry/pdf/CompaniesActNotification2_2014.pdf
- SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015.

Manifoldness

- [Diversity](#)

Man-Made Disaster

- [Environmental Disaster](#)

Mapping of a Company's Stakeholders

- [Stakeholder Mapping](#)

Mariculture

- [Aquaculture and Blue Farming](#)

Marine and Coastal Resources

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Synonyms

[Environmental resources](#); [Fish resources](#); [Ocean resources](#)

Definition

Legal and institutional borders, topographical classifications, and resource kinds are used to define marine coastal resources (Athanasiou et al., 2017). The land-and-seawater interface, also known as the land-and-seawater interface, is where these resources may be found. Between the tidal effect of terrestrial landscape and the coastal

ecosystem, they are situated in the ocean and on the seabed. Some resources, on the other hand, can tolerate and flourish in semiterrestrial environments (Castro & Huber, 2007). Abiotic and biotic components coexist in marine and coastal ecosystems (Castro & Huber, 2007). Abiotic characteristics include all nonliving resources, while biotic features include a wide range of live resources that are important to people, such as finfish and shellfish. Fish, shrimp, crabs, lobsters, mollusks, reptiles, aquatic animals, and higher aquatic plants are examples of these. The majority of live marine species are helpful and necessary for human use or consumption.

Introduction

Bioactive chemicals from sponges Varijakzhan et al. (2021) and cosmeceuticals from marine algae are among the goods obtained from marine species (Beetul et al., 2016). Two-thirds of all critical services are produced in the marine and coastal environment. Mangrove trees, for example, operate as a storm buffer, while the ocean helps to regulate climate. Marine resources have traditionally supported people's lives, particularly those in coastal regions, via subsistence fishing, farming, and commerce. However, owing to the cumulative impacts of human pressures and natural calamities, global marine resources are quickly depleting. The over-exploitation of fishing resources and nonliving raw materials is mostly to blame for the observed decrease. Oil pollution, plastic pollution, marine litter, and habitat degradation are all kinds of marine pollution that have a negative influence on many marine species' breeding grounds and nurseries. Climate change, insufficient legal instruments, and coastal erosion all pose dangers to marine and coastal ecosystems. To address these issues, a number of programs and organizations throughout the globe have developed particular strategic approaches. Marine species conservation, geographical safeguarding (where major marine issues are significant), marine and coastland protection, International Union for Conservation of Nature (IUCN)'s marine orientation programs, capacity-building in coastal areas, proper maintenance and conservation of marine resources, and sustainable use of marine biodiversity are some examples.

The marine ecosystem's living components include a wide range of critical living resources for people and other living things. From microscopic microbes to massive fish and animals like whales and sharks, these resources are plentiful. For direct human ingestion, most live species are necessary. Sponge, cosmetics, and other items are made using other marine materials or products. Humans use a large portion of the ocean's resources, either directly or indirectly. To guarantee that the population of these key stocks stays viable at harvestable levels, it is necessary to regulate the pace of exploitation and use of these resources. Despite the great nutritional content of fish, worldwide seafood intake is considered to be low when compared to other meals eaten. Sport fishing, recreational diving, and home aquariums all make use of marine resources, particularly live resources. Marine life resources have been exploited by agricultural enterprises to make fertilizer and animal feed, among other things. Without a doubt, marine resources are necessary for human survival. We examine how marine resources and ecosystems are changing across the globe, as well as the potential and restrictions for managing the marine environment and its resources, safeguarding the coast, and supporting coastal communities. We also consider how to convey the discovered opportunities or obstacles.

Marine and Coastal Resource Types

Coastal resources are classified into renewable (living resources) and nonrenewable (nonliving resources):

Living Resources

Various marine resources (physical and biological entitlements) that are helpful to man are gathered and used straight from the sea. Finfish and shellfish, such as shrimp, crabs, lobsters, mollusks, reptiles, aquatic animals, and higher aquatic plants, are among the many resources now available. Despite the hundreds of different seafood species, just a few marine species are important to fisheries. The principal living resources are over 200 types of fish. Anchovies, sardines,

herrings, and shads are among the world's most abundant plankton-feeding clupeoid fish. After fish, mollusks are the most lucrative group of exploited marine resources. The mollusk harvest is incomplete without cephalopods such as octopuses and squids. Shellfish like lobster, shrimp, and crab are examples of crustaceans. In addition, the coastal regions are home to over 160 species. Mammals play an important role in maintaining a healthy and diversified marine ecology. Seagrass and algal forests, for example, cover a large area (Vale et al., 2018).

Nonliving Resources

Water, fuels, minerals (salts, sand, gravel, oxygen, dissolved nutrients, magnesium, and phosphorus), waves, currents, light (which influences the development and dispersion of life), fuel, and oil are nonliving elements that impact sand activity. Some have never been used, while others are now being fully used. On the shallow continental shelf, gravel and sand may be found up to 40 meters deep. This pure sediment deposit may be employed in the glass, iron, and steel industries. Garnet, Zircon, Rufite, Tourmaline, Illenite, and Sillimanite are among the valuable solid minerals found along the shoreline and in submerged places. The presence of crude oil and gas in the marine environment has been detected. This occurs in the shallow continental platform's thick layer of sedimentary layers, which is close to the surface.

Benefits and Challenges Affecting Coastal Marine Resources

The hard issue of establishing a realistic, systematic method necessary for balancing the costs and benefits of varied human uses of ecosystems is the main problem confronting natural resource management (Lester et al., 2013). Two-thirds of all critical services are produced in the marine and coastal environment. Subsistence fishing, farming, and commerce have all historically relied on marine resources to sustain people's livelihoods. The following are some of the possible advantages for local regions: A significant percentage of the money created will be returned to the

government and the people in the form of royalties and tax refunds; direct or indirect employment creation; revenue created will help the government restore other economic sectors; indirectly supports Indigenous economic activity; and contributes to a well-structured educated labor force. Apart from the advantages listed above, tourism adds to these resources by accounting for a major amount of the Gross domestic product (GDP)s of coastal countries. These resources are also beneficial to the shipping industry, which harvests nonliving raw materials such as gravel, sand, and corals and drills offshore to get sufficient oil and natural gas throughout the globe (Lester et al., 2013).

The world's marine resources are dwindling. Overexploitation, pollution, and habitat damage are all contributing to the decline (Awange & Kiema, 2019; Newton et al., 2012). By-catch of huge fish with low nutritional value leads to the fast decline of marine populations. Approximately two-thirds of commercial marine fisheries are overfished, and many species have been depleted. The degradation of marine environment remains a serious danger to the fishing industry. Coastal waterways such as estuaries and associated conservative regions such as mangroves and seagrass meadows are crucial breeding sites for many marine creatures. Oil spills, sewage in effluents, and toxic chemicals all contribute to the fast loss of marine habitats. Inadequate investment in alternative coastal regions; absence of livelihood initiatives; institutional coordination; monitoring, control, and surveillance (MCS); and illegal, unreported, and unregulated fishing (IUU) catches (Barbier, 2012).

Finally, owing to the negative environmental deterioration of these resources, vital ecosystem services are especially inaccessible and difficult for individuals to investigate. For example, uncontrolled and irresponsible fishing activities reduce fish populations and ruin coral reefs (Awange & Kiema, 2019). Mangrove destruction for household and industrial needs, as well as land reclamation, is unmanageable. Cyclones and other severe natural phenomena, as well as rising sea levels, wave action, and coastal erosion, all have an effect on this deterioration. Toxic compounds are used inappropriately on land to

fertilize crops, resulting in chemical runoff into the marine environment. As a result, inadequate land-based farming techniques limit people's ability to diversify their livelihoods while also protecting marine resources. This circumstance leads to increased food insecurity and precarious livelihoods for small-scale farmers.

Solutions to Issues Affecting the Resources

The 2030 Agenda for Sustainable Development Goal (SDG) 14 aspires to safeguard and sustainably utilize oceans, seas, and marine resources (Neumann et al., 2017). The SDG 2030 Agenda's objective 14 (target 14.1) addresses marine debris and pollution, with a focus on sources from land-based activities. Untreated wastewater (6.3), municipal and other waste management (11.6), environmentally sound management of chemicals and wastes throughout their life cycles (12.4), and overall waste reduction are all addressed in Goals 6, 11, and 12. (12.5). SDG 15 (target 15.1) also involves identifying and managing terrestrial waste sinks, as well as preventing land degradation and biodiversity loss via the conservation and restoration of terrestrial and inland freshwater ecosystems. For example, preserve ecological functioning, species and habitat conservation, or the continuing supply of ecosystem services, as stated in goal 14.2. The relationship between this and conservation status is being contested, as is whether total protection, such as the designation of no-take and no-use zones, offers higher biodiversity returns than managed reserves (Costello & Ballantine, 2015; Edgar et al., 2014).

Some of the international attempts to address these challenges include community livelihoods in coastal areas, coastal planning, coastal erosion, coastal/marine pollution, solid waste management, climate change consequences, and the interaction of freshwater and seaside/marine pollutants (IUCN, 2009). Six types of protected areas are recognized by the International Union for Conservation of Nature (IUCN), and the issue must be handled from both a scientific and policy standpoint. In addition, the critical scale of individual protected areas, the need for site networking, and the unique

biogeophysical characteristics of coastal systems must all be addressed in this argument. All African coastal nations (excluding Eritrea and Libya) are signatories to the United Nations Convention on the Law of the Sea in terms of international regulatory processes (UNCLOS). This legally binding international agreement regulates ocean activities and requires nations to prevent, reduce, and manage pollution in the ocean. The International Convention for the Prevention of Pollution from Ships (MARPOL 73/78); the London Convention and Protocol on Waste Dumping at Sea; and the Conventions on Migratory Species and Biological Diversity are all multilateral environmental treaties with international reach that include provisions to prevent the harmful impact of marine plastic debris and microplastics. PERSGA (the Red Sea and the Gulf of Aden) and the Guinea Current Large Marine Ecosystem (GCLME) are all significant in boosting regional collaboration and coordination among nations that share similar resources along their coasts.

The Guinea Current Major Marine Ecosystem (GCLME), which spans Western Africa from Guinea Bissau to Angola, is rated 28th out of 64 large marine ecosystems worldwide (LMEs). The GCLME is a key hub of marine biodiversity and food production, including some of the most important coastal upwelling subecosystems in the world. Bans or levies on plastic bags are the most frequent governmental policy in Africa right now. Mauritania, an African country, was the first to implement such a plan. After 70 percent of animals perished as a result of plastic intake, this limitation was enacted (Larsen & Venkova, 2017). Senegal, Côte d'Ivoire, Mali, Ghana, Kenya, Ethiopia, Malawi, Mauritius, Zanzibar (Tanzania), and Uganda are among the African countries that have enacted such bans. Both Cameroon and South Africa have imposed taxation. Conserving sea plants, animals, and ecosystems may help to conserve marine biodiversity. Some countries have taken steps in this direction already, and others should do so as well. Overfishing must also be avoided by creating marine reserves or protected zones inside each state's territorial waters, where fishing is prohibited (Druon, 2010). For example, Australia has established the world's biggest reef and marine

reserve network, the Marine Reserve Network (McGuirk, 2012). Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, Northern Ireland, and the European Union have all signed the North-East Atlantic Marine Environment Convention (Ardron, 2008). Since June 1, 1999, China has stopped fishing in several areas of the Bohai Sea, Yellow Sea, and East China Sea, with the prohibition lasting three and a half months (Cheng et al., 2004). The GCLME demonstration projects are intended to demonstrate how certain activities might result in major changes in the coastal and marine environment, and they include the following: a system for evaluating and managing the ecosystem's fish and fisheries in order to aid recovery and long-term viability; and a data and information management and decision-making system for the area. In Guinea, a new and growing production pattern has emerged. The current LME refers to the amount of life resources it can retain. The mangrove ecology in Nigeria is being restored and preserved.

Summary

Despite various laws, accords, and initiatives aimed at limiting the depletion of marine resources, the rate of depletion is frighteningly fast across the world. Compared to anthropogenic activity, natural disaster depletion must be seen as small. Official activities in coastal and marine areas did not prioritize biodiversity conservation. People and companies might profit from depletion, particularly if they built upstream of the rivers and tributaries.

Cross-References

- [Algae Bioenergy](#)
- [Blue Circular Economy](#)
- [Blue Economy](#)
- [Fisheries](#)
- [Marine and Coastal Resources](#)
- [Ocean Sustainability](#)

References

- Ardron, J. A. (2008). The challenge of assessing whether the OSPAR network of marine protected areas is ecologically coherent. *Hydrobiologia*, 606, 45–53.
- Athanasίου, K., Sutherland, M., Kastrisios, C., Tsoulos, L., Griffith-Charles, C., Davis, D., & Dimopoulou, E. (2017). Toward the development of a marine administration system based on international standards. *ISPRS International Journal of Geo-Information*, 6(7), 194.
- Awange, J., & Kiema, J. (2019). Marine and coastal resources. In *Environmental Geoinformatics* (pp. 487–507). Cham: Springer.
- Barbier, E. (2012). Progress and challenges in valuing coastal and marine ecosystem services. *Review of Environmental Economic and Policy*, 6(1), 1–19.
- Beetul, K., Gopeechund, A., Kaullysing, D., Mattan-Moorgawa, S., Puchooa, D., & Bhagooli, R. (2016). Challenges and opportunities in the present era of marine algal applications. In N. Thajuddin & D. Dhanasekaran (Eds.), *Algae – Organisms for imminent biotechnology*. InTech, open access. <https://doi.org/10.5772/63272>.
- Castro, P., & Huber, M. (2007). *Marine biology*. New York: McGraw-Hill DAR. Fisheries statistics.
- Cheng, J. H., Lin, L. S., & Ling, J. Z. (2004). Effects of summer close season and rational utilization on red lip croaker (*Larimichthys polyactis* Bleeker) resource in the East China Sea region. *Journal of Fisheries Sciences of China*, 16, 554–560.
- Costello, M. J., & Ballantine, B. (2015). Biodiversity conservation should focus on no-take marine reserves: 94% of marine protected areas allow fishing. *Trends in Ecology & Evolution*, 30(9), 507–509.
- Druon, J. (2010). Habitat mapping of the Atlantic bluefin tuna derived from satellite data, its potential as a tool for the sustainable management of pelagic fisheries. *Marine Policy*, 34, 293–297.
- Edgar, G. J., Stuart-Smith, R. D., Willis, T. J., Kininmonth, S., Baker, S. C., Banks, S., Barrett, N. S., Becerro, M. A., Bernard, A. T. F., Berkhout, J., Buxton, C. D., Campbell, S. J., Cooper, A. T., Davey, M., Edgar, S. C., Forsterra, G., Galvan, D. E., Irigoyen, A. J., Kushner, D. J., Moura, R., Parnell, P. E., Shears, N. T., Soler, G., Strain, E. M. A., & Thomson, R. J. (2014). Global conservation outcomes depend on marine protected areas with five key features. *Nature*, 506(7487), 216–220.
- IUCN. (2009). *The workshop on dialogue on the forests in West Africa*. Central and West Africa Program (PACO).
- Larsen, J., Venkova, S. (2017). *Earth policy institute, The downfall of the plastic bag: a global picture*. <https://earthpolicyinstitute.wordpress.com/page/2/>
- Lester, S., Costello, C., Halpern, B., Gaines, S., White, C., & Barth, J. (2013). Evaluating tradeoffs among ecosystem services to inform marine spatial planning. *Marine Policy*, 38, 80–89.
- McGuirk, R. (2012). *Australia creates world's largest marine reserve network, limits fishing, oil, gas exploration*. The Associated Press.

- Neumann, B., Ott, K., & Kenchington, R. (2017). Strong sustainability in coastal areas: A conceptual interpretation of SDG 14. *Sustainability Science*, 12(6), 1019–1035.
- Newton, A., Carruthers, T. J. B., & Icely, J. (2012). The coastal syndromes and hotspots on the coast. *Estuarine, Coastal and Shelf Science*, 96, 39–47.
- Vale, M. M., Tourinho, L., Lorini, M. L., Rajão, H., & Figueiredo, M. S. (2018). Endemic birds of the Atlantic Forest: Traits, conservation status, and patterns of biodiversity. *Journal of Field Ornithology*, 89(3), 193–206.
- Varijakzhan, D., Loh, J.-Y., Yap, W.-S., Yusoff, K., Seboussi, R., Lim, S.-H. E., Lai, K.-S., & Chong, C.-M. (2021). Bioactive compounds from marine sponges: Fundamentals and applications. *Marine Drugs*, 19, 246. <https://doi.org/10.3390/md19050246>.

Marine Governance

- [Ocean Sustainability](#)

Market Externalities

- [Externalities \(Economics\)](#)

Market Failure

- [Externalities](#)

Market for Corporate Control and CSR

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Synonyms

[Strategic CSR](#)

Definition

The relationship between Market for corporate control and CSR is an ethical concept. In fact, the traditional definition about “market for corporate control” analyzes the concept only through a financial lens while the current scenario is characterized by an increasing exigence to include within the M&A strategies the analysis of the social and environmental effects related to the operations. In this sense, an increasing number of managers have started to consider within their investment the possible externalities related to the adoption of socially responsible business models.

The Relationship Between Competitive Advantage and CSR

According to the preliminary definition of Manne (1965), investors could be interested to buy shares of firms with low stock price in order to increase the overall market value through their competencies. However, this paradigm could not be adequate to the current scenario. In fact, during the last years, several authors have highlighted the existence of several intangible assets that impact on firms' market value.

The exigence to analyze this relationship is related to the large number of studies that have shown how the adoption of socially responsible practices impact positively on firms' value. In this sense, the adoption of these practices allows managers to increase the overall value of the firms due to the positive market effects. In this sense, these effects could be related to the original definition proposed by Manne (1965) who describes these kinds of operations in terms of value variations caused by the managers' knowledge. Furthermore, the positive effects related to the adoption of CSR practices represent an effective driver for the institutional investors interested to achieve gain during a short time period.

Regarding this relationship, several authors tried to develop theories useful for the comprehension of the phenomenon. In particular, a theoretical study conducted by Gray et al. (2009) underlined the existence of five different theories

useful to investigate socially responsible behaviors through an accounting lens. However, despite the coexistence of many theories, one of the main paradigms used to assess the relationship between CSR and market for corporate control is represented by Legitimacy theory (Deegan 2002; Guthrie and Parker 1989). According to the Legitimacy theory, the adoption of socially responsible behaviors favors the achievement of reputational benefits useful to gain, repair, and maintain firms' social capital. Thus, it represents a relevant theory within the field of studies about market for corporate control and CSR due to the direct relationship between investors' trust and reputation. Furthermore, the theoretical evidences collected during the last years were confirmed by the effects caused by social and environmental scandals on financial markets (Seele 2017).

Furthermore, the nexus between M&A and CSR could be analyzed from two different perspectives. Specifically, the existence of two different perspectives is related to the several strategic implications related to M&A. In this sense, the adoption of CSR practices could be influenced by external pressures such as the nonfinancial regulation and the voluntary behaviors of the investors. On the one hand, the existence of external pressure about CSR represents a relevant item during the processes of M&A due to the possible compliance risks related to the absence of the law requirement. In this sense, investors could perceive this scenario both as an opportunity and as a limit for the investment. On the other hand, the voluntary adoption of socially responsible practices after an M&A operation could be related to several factors. Specifically, according to prior studies, the adoption of socially responsible practices after an M&A operation is typically related to the exigence to increase the reputation of the companies. Furthermore, the adoption of socially responsible paradigms could favor the achievement of a social license to operate by foreign investors.

The Unethical Behaviors Related to the Competitive Advantage

As highlighted in the previous section, firms are interested to increase their competitive advantage.

The increase of the competitive advantage through the diffusion of CSR's information represents one of the main strategies adopted by the firms during the last years. In fact, the increasing attention paid by stakeholders to the sustainable development has impacted on financial markets.

Specifically, the last years have been characterized by the birth of new consumer categories inspired by the exigence to act ethically. This market phenomenon has regarded several sectors such as tourism, food and beverage, and automotive. Furthermore, the financial sector has been influenced by this market evolution as evidenced by the proliferation of new financial instruments such as the green bonds and the socially responsible investment (SRI).

As evidenced in prior studies, the exigence to appear "green" has favored the adoption of unethical strategies in order to engage with stakeholders. Specifically, several studies have highlighted the negative implications related to the adoption of unethical practices such as the greenwashing, the impression management, and more recently, the SDG-washing.

The aim of these practices consists in the development of false information in order to avoid the risks related to the stakeholders' negative perception about the products or the services provided on the market. However, the achievement of this goal through these methods is characterized by different behaviors. Specifically, the greenwashing consists in the disclosure of false information while the impression management consists in the adoption of narrative strategies such as graphs, images, and percentage to confuse the stakeholders. Finally, the SDG-washing represents a subfield of the greenwashing, and it consists in the disclosure of false information about the contribution to SDGs.

Summary

The achievement of an adequate degree of investments' remuneration still remains one of the main targets for firms' owners. In fact, despite the multidimensional targets that characterize the life cycle of an enterprise, the ownership is typically interested to achieve the highest degree of remuneration. Furthermore, although the recent years

have been characterized by several changes, this phenomenon regards both stockholders and the speculative investors interested to a short run gain. According to this evidence, an increasing number of firms have started to adopt socially responsible practices to increase their competitive advantage. However, the nexus between profit and sustainable development represents a controversial perspective due to the different implication connected to these two practices. In this sense, policy makers and regulators could implement a new form of control in order to evaluate the possible market fraud caused by the adoption of an untruly form of CSR practices to increase firms' market value.

Cross-References

► [Finance and CSR](#)

References

- Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures – a theoretical foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311. <https://doi.org/10.1108/09513570210435852>
- Gray, R., Owen, D. and Adams, C. (2009). Some theories for social accounting?: A review essay and a tentative pedagogic categorisation of theorisations around social accounting. In M. Freedman & B. Jaggi (Eds.), *Sustainability, Environmental Performance and Disclosures* (Advances in Environmental Accounting & Management, Vol. 4) (pp. 1–54), Emerald Group Publishing Limited, Bingley.
- Guthrie, J., & Parker, L. D. (1989). Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research*, 19(76), 343–352.
- Manne, H. G. (1965). Mergers and the market for corporate control. *Journal of Political Economy*, 73(2), 110–120.
- Seele, P. (2017). Predictive sustainability control: A review assessing the potential to transfer big data driven 'predictive policing' to corporate sustainability management. *Journal of Cleaner Production*, 153, 673–686, Elsevier Ltd.

Market Rigging

► [Insider Trading](#)

Market Risk

► [Sustainability Management and Market Risk](#)

Market-Based Mechanism

► [Clean Development Mechanism \(CDM\): Benefits and Project Cycle](#)

Market-Based Mechanism of Regulation

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Synonyms

[Regulation](#)

Definition

The market-based mechanisms of regulation consist of a set of incentives to sustain the adoption of more sustainable practices by the organizations. In this sense, they represent an alternative form of regulation. The European Union Trading Emissions Scheme represents a typical example of these tools introduced to mitigate the adoption of practices characterized by a high degree of pollution. Furthermore, according to prior studies, an increasing number of Governments have started introducing these forms of regulation to achieve the highest degree of sustainable development.

The Market-Based Mechanism of Regulation

The need to develop a market-based regulation mechanism is based on the criticisms of the

traditional economic model. Private firms act “imperfectly,” and the policymakers need to identify new strategies to reconstitute the market (Stewart, 1991). These phenomena have regarded the firms that operate in controversial sectors characterized by a high degree of pollution or carbon emissions (Fowlie et al., 2016). Moreover, some States have started introducing this form of regulation to encourage firms that operate with the public sector to adopt more ethical and legal practices within their internal organizations (Caputo & Pizzi, 2019).

The adoption of these practices by the States represents a compelling driver to an effective change for firms. As evidenced by academics, the effects related to the provisions of mandatory rules about corporate social responsibility are limited. Specifically, a large part of these studies has highlighted how an effective organizational change does not even follow the provisions of a set of rules about CSR due to personal attitude regarding these practices. Moreover, these studies have shown how firms interested in CSR regulation are typically characterized by a short-term standardization in terms of practices adopted. On the other hand, market incentives like tax reduction, favorable interest rates, advantages in negotiations with public administration will represent more effective driver for firms.

One of the main theoretical reflections about the criticisms related to regulation was Dumay et al. (2015). Building on the recent debate about social and environmental accounting, the authors highlighted that the proliferation of new forms of regulations about corporate social responsibility limited the signaling effects related to the adoption of sustainable behaviors. In this sense, firms interested to signal their orientation toward sustainable development need to integrate within their nonfinancial reports additional information not required by the law. An example of this phenomenon is represented by SDG Reporting, which represents the new frontier of nonfinancial reporting practices (Bebbington & Unerman, 2020). As evidenced by standard setters, organizations voluntarily integrated the SDGs within

their reports (PwC, 2017). In this sense, organizations that operate in context with specific requirements about nonfinancial reporting practices can signal their contribution to the 2030 Agenda. However, the isomorphic approach used by the late adopters suggests that the integration of the SDGs will not be an effective signal (Pizzi et al., 2020).

Regarding the specific cases that have suggested the existence of market-based mechanism of regulation, an increasing number of academics started to discuss this phenomenon through the analysis of specific jurisdictions. An example of the ineffectiveness that characterizes the traditional form of regulation is represented by the King Code III in South Africa, where some firms have adopted a “tick-box” approach to be compliant with the law (Ackers & Eccles, 2015). Furthermore, another example is represented by Directive 95/2014 in Europe who required large firms to disclose their nonfinancial information on a mandatory basis (Venturelli et al., 2019). On this point, prior studies have denoted the existence of a different degree of transparency within the reports and the highest attitude for early adopters to disclose high-quality reports (Leopizzi et al., 2019).

On the other hand, the preliminary results about the introduction of market-based mechanisms of regulation are positive. Specifically, as evidenced before, these studies have typically analyzed the GHG emissions and the interactions with the public sector. The analysis performed on the environmental impacts has highlighted how firms typically reduced their environmental impacts after adopting licenses (Hajjar et al., 2019). Furthermore, other studies have highlighted how firms that have adopted ethical tools to certify their orientation to sustainable paradigms are typically more profitable than others (Ginesti, 2019). In this sense, the effects related to the adoption of these practices are two-fold. The first perspective is related to the highest financial performance connected to market incentives provided by the Governments (e.g., tax reduction, interest rates). The second perspective is related to the increase of competitive advantage caused by the reputational benefit connected to adopting these practices.

Summary

The increasing exigence to reduce the negative externalities related to the unsustainability of the current economic scenario imposed the identification of new strategies for States. During the last years, it was possible to observe the proliferation of new forms of regulation to sustain the mandatory adoption of socially responsible practices. However, prior studies have highlighted the failure of this approach. The preliminary evidence collected by academics regarding these policies has revealed several differences between CSR's activities developed and the overall quality of these practices. According to this evidence, the market-based regulation mechanism represents a strategic driver for an effective transition to a more sustainable business model. In this sense, regulators should consider the introduction of these new forms of soft regulation within their strategies. Thus, the development of quantitative studies by academics will provide policy makers new insights to identify new policies.

Cross-References

► Institutional Theory

References

- Ackers, B., & Eccles, N. S. (2015). Mandatory corporate social responsibility assurance practices: The case of King III in South Africa. *Accounting, Auditing & Accountability Journal*, 28(4), 515–550.
- Bebbington, J., & Unerman, J. (2020). Advancing research into accounting and the UN Sustainable Development Goals. *Accounting, Auditing and Accountability Journal*, 33(7), 1657–1670.
- Caputo, F., & Pizzi, S. (2019). Ethical firms and web reporting: Empirical evidence about the voluntary adoption of the Italian “legality rating”. *International Journal of Business and Management*, 14, 36–45.
- Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy: Blending organisational and stakeholder concerns through non-financial information disclosures. *Journal of Accounting and Organizational Change*, Emerald Group Publishing Ltd., 11(1), 2–23.
- Fowle, M., Reguant, M., & Ryan, S. P. (2016). Market-based emissions regulation and industry dynamics. *Journal of Political Economy*, 124(1), 249–302.
- Ginesti, G. (2019). *Top management characteristics and intellectual capital performance in small Italian companies* (Vol. 19, p. 1153). Corporate Governance: The International Journal of Business in Society.
- Hajjar, R., Newton, P., Adshead, D., Bogaerts, M., Maguire-Rajpaul, V. A., Pinto, L. F., et al. (2019). Scaling up sustainability in commodity agriculture: Transferability of governance mechanisms across the coffee and cattle sectors in Brazil. *Journal of Cleaner Production*, 206, 124–132.
- Leopizzi, R., Coronella, S., & Pizzi, S. (2019). IL D.Lgs. 254/2016 sull'informativa non finanziaria: prime evidenze in Italia sul “prima” e sul “dopo”.
- Pizzi, S., Rosati, F., & Venturelli, A. (2020). Investigating the determinants of SDG reporting: An exploratory study based on the SDG reporting score. *Business Strategy and the Environment*, Vol. Forthcoming.
- PwC. (2017). SDG Reporting Challenge 2017: Exploring business communication on the global goals, *Annual Report*, p. 40.
- Stewart, R. B. (1991). Models for environmental regulation: Central planning versus market-based approaches. *The Boston College Environmental Affairs Law Review*, 19, 547.
- Venturelli, A., Caputo, F., Leopizzi, R., & Pizzi, S. (2019). The state of art of corporate social disclosure before the introduction of non-financial reporting directive: A cross country analysis. *Social Responsibility Journal*, 15, 409.

Marketing (Ethics of)

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Synonyms

Code of conduct in marketing; Decisions about what are right or wrong; Ethical behavior; Marketing morality; Norms and principles of marketing

Definition

Ethics of marketing are the general set of guidelines comprising moral principles and values that need to be followed with respect to operation and regulation of marketing and also during any kind of marketing communication. It focuses on principles and standards that define acceptable marketing

conduct. Ethics of marketing emphasizes on transparent, trustworthy, and responsible personal and organizational marketing policies and actions and exhibits integrity and fairness to consumers and other stakeholders. It can be regarded as a process whereby the grounds of moral judgments and rules of conduct governing marketing decisions and marketing situations are inquired into. Ethics of marketing should be considered from two perspectives – an individual and an organizational perspective. From the individual perspective, values like honesty, fairness, responsibility, and being responsive towards social and environmental issues can guide complex marketing decisions in the context of an organization. From an organizational perspective, organizational value, codes, and training are necessary to make ethical decisions. Ethics of marketing promotes fairness and honesty in all kinds of marketing communication engaged by the companies with all their stakeholders. By following the moral principles and values of marketing, companies can enhance customer interest in products/services, create value for stakeholders, and build strong customer relationships. It helps companies to decide on their new marketing strategies too.

Introduction

In today's business world, the managers must follow moral principles and values in their judgments and daily decision-making processes. The task is not easy since marketing is the visible interface with not only customers but with all other stakeholders. The functional area most closely related to ethical abuse in firms is marketing. Since marketing is a key functional area in the business organization that is responsible for communicating and satisfying customers, it is closest to the public view and, consequently, is subject to considerable societal analysis and scrutiny (Volle 2013; Murphy and Lacznia 1981). Therefore, ethics of marketing becomes absolutely crucial if an organization wants to build strong customer relationships and enhance customer loyalty which in turn will help in building positive reputation and entering new markets.

The Ethics of Marketing

Development of Ethics of Marketing

The historical development of marketing ethics started in the early twentieth century with the antitrust and consumer protection concerns especially with adulterated food products. Frank Chapman Sharp started teaching a course in business ethics at the University of Wisconsin in 1913, and Sharp and Fox (1937) published a textbook on business ethics which was based on the concept of "fair service" and had chapters on commercial coercion, doctrine of caveat emptor, fair pricing, and the ethics of bargaining. One of the first articles that appeared in the *Journal of Marketing* was an article by Charles F. Phillips (1939) entitled "Some Theoretical Considerations Regarding Fair Trade Laws" where ethics was not directly addressed but the impact of resale price maintenance on competition was specified. The era of the 1950s focused on issues such as fair trade, antitrust, advertising, and pricing.

The 1960s saw the growth of ecological problems, such as pollution and the disposal of toxic and nuclear wastes, and witnessed the rise of consumerism. In 1962 President John F. Kennedy delivered a "Special Message on Protecting the Consumer Interest," in which he outlined four basic consumer rights: the right to safety, the right to be informed, the right to choose, and the right to be heard. These came to be known as the Consumer Bill of Rights (Ferrell et al. 2005). During this period of time, the first comprehensive model for ethics in marketing was developed by Robert Bartels (1967). The model showcased the various variables that influenced ethical decision-making, including participants, cultural influencers, role expectations, and the complexity of ethical decision-making. The 1967 Bartels article provided a foundation for empirical research on ethics of marketing that followed in the 1970s. In the 1970s significant research was conducted by Carroll (1975), Bowman (1976), and Ferrell and Mark Weaver (1978) to name a few on ethical decision-making within the context of a marketing organization. Business academics and practitioners acknowledged business ethics as an important field of study. We had researchers emphasizing on

organization culture, co-workers, and ethical decision-making concerning marketing (Ferrell and Gresham 1985; Hunt and Vitell 1986; Hunt et al. 1989). We also had researchers developing normative framework for marketing ethics which emphasizes on the exchange relationship between the firm and its stakeholders, including the right to exist and even prosper in society (Gundlach and Murphy 1993; Dunfee et al. 1999).

In the 2000s, ethics in the world of business became a major issue with mammoth scandals taking the forefront like Enron, WorldCom, Tyco, Sunbeam, and Arthur Andersen. After these scandals, the significance of the ethical issues and the importance of having a relationship based on trust with stakeholders started getting more and more emphasized by many researchers (Murphy et al. 2005). During 2000–2006 the *Journal of Marketing* published no articles with the word ethics in the title, but articles did appear dealing with ethical issues (Klein et al. 2004). There is still a need to continue theoretical development and its empirical testing of ethical decision-making in marketing.

The Importance of Ethics of Marketing

The ethics of marketing has the following advantages to be looked into:

- Customer loyalty – It helps the company to win the trust and loyalty of its customers on the long-term basis as it is the basic human nature to go for those products that are genuine and authentic in nature.
- Long-term gains – There are various long-term gains attached to following moral principles and values in marketing like customer loyalty, high credibility in the market, increased market share, enhanced brand value, higher sales, and elevated revenues.
- Builds credibility – When the company follows the ethics of marketing, it slowly and gradually builds its distinctive niche in the market as a genuine and authentic brand that also results in the factor of credibility building for the company within the industry among its peers, contemporaries, investors, and other stakeholders and also in the minds of the customers as well.

- Displays rich culture – When the company follows the ethics of marketing, the internal environment comprising of the staff and employees is highly motivated and continuously strives to help the management attain the overall business objectives. They take immense pride in working for such a company. This enhances the rich and genuine culture of the firm in the market.
- Attracts talent – It helps the company to attract the talented professionals who wish to get associated with the company.
- Attains financial goals – By following the ethics of marketing, a firm is in a position to attract financial support from the market which in turn will help in launching the new line of products in the market, tap new market locations, and try out innovative marketing and promotion techniques.
- Enhanced brand value – Following the following moral principles and values in marketing results in the enhanced brand value of the firm, making it the most trustworthy and reliable brand in the market.

Factors Affecting Ethical Decision-Making in Marketing

The factors affecting the moral principles and values that need to be followed with respect to operation and regulation of marketing can be divided into the following three components:

- Individual factors – individual factors that affect the ethical decision-making process include personal moral philosophy, stage of moral development, motivation, and other personal factors such as gender, age, and experience. Moral philosophies are the principles or rules that individuals apply in deciding what is right or wrong. Most moral philosophies can be classified as consequentialism, ethical formalism, or justice.
- Organizational relationships – set of values, beliefs, goals, norms, and rituals shared by members or employees of an organization. Ethical climate of an organization focuses specifically on issues of right and wrong.
- Opportunity – set of conditions that limit barriers or provide rewards.

Key Issues and Future Directions

There is an overlap between marketing ethics and business ethics because the basic frameworks that describe ethical decision-making in an organization include decisions that encompass marketing. In every organization, there is an ethical component to business decisions, regardless of whether it is marketing or some other functional area component. Rising customer expectations, changing employee expectations, government legislation, the inclusion of social criteria by investors, and changing business procurement practices are some of the factors that companies need to evaluate to judge whether they are truly practicing ethical and socially responsible marketing. Ethics of marketing remains a complex area to understand, and hence both normative and descriptive understanding will be required to improve upon it globally. The academic community can contribute to the advancement of knowledge in this important area of marketing and help in building an effective ethics program. Businesses need to remain open to learning more and understanding the importance of managing the internal organizational culture with utmost integrity and transparency.

Cross-References

- [Ethical Theories II](#)
- [Ethics and Ethical Theories](#)
- [Marketing to Children Responsibly: Sustainable Marketing](#)
- [Societal Marketing](#)
- [Sustainable Marketing](#)

References

- Bartels, R. (1967). A model for ethics in marketing. *Journal of Marketing*, 31, 20–26.
- Bowman, J. S. (1976). Managerial ethics in business and Government, *Business Horizons*, October, 50.
- Carroll, A. B. (1975). Managerial ethics: A post-watergate view, *Business Horizons*, April, 79.
- Dunfee, T. W., Smith, N. C., & Ross, W. T., Jr. (1999). Social contracts and marketing ethics. *Journal of Marketing*, 63(3), 14–33.
- Ferrell, O. C., & Gresham, L. G. (1985). A contingency framework for understanding ethical decision making in marketing. *Journal of Marketing*, 49(3).
- Ferrell, O. C., & Mark Weaver, K. (1978). Ethical beliefs of marketing managers. *Journal of Marketing*, 42(3), 69–73.
- Ferrell, O. C., Fraedrich, J., & Ferrell, L. (2005). *Business ethics: Ethical decision making and cases*. Boston: Houghton Mifflin.
- Gundlach, G. T., & Murphy, P. E. (1993). Ethical and legal foundations of relational marketing exchanges. *Journal of Marketing*, 57(4), 35–47.
- Hunt, S. D., & Vitell, S. (1986). A general theory of marketing ethics. *Journal of Macro Marketing*, 6 (Spring), 5–15.
- Hunt, S. D., Wood, V. R., & Chonko, L. B. (1989). Corporate ethical values and organizational commitment in marketing. *Journal of Marketing*, 53(3).
- Klein, J. G., Smith, N. C., & John, A. (2004). Why we boycott: Consumer motivations for boycott participation. *Journal of Marketing*, 68(3), 92–110.
- Murphy, P. E., & Laczniak, G. R.. (1981). Marketing ethics: A review with implications for marketers, educators and researchers, *Review of Marketing*, 251–266.
- Murphy, P. E., Laczniak, G. R., Bowie, N. E., & Klein, T. A. (2005). *Ethical marketing*. Upper Saddle River: Pearson Prentice-Hall.
- Phillips, C. F. (1939). Some theoretical considerations regarding fair trade Laws. *Journal of Marketing*, 3, 242–250.
- Sharp, F. C., & Fox, P. G. (1937). *Business ethics*. New York: D. Appleton-Century Company.
- Volle, P. (2013). Le marketing peut-il être responsable ? *Après-Demain*, 25(1er trimestre), 10–12.

Marketing and CSR

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Synonyms

[Sustainable marketing](#)

Definition

The change in our society's thinking towards sustainability also means that companies must address the issue if they want to be competitive in the market on a long-term basis. In this context,

measures in CSR and in sustainable marketing are becoming increasingly relevant. The strategic management of companies is responsible for long-term, anticipatory orientation. Due to the relevance of CSR transformation, it has become all the more important to include sustainability in marketing planning and strategy. Therefore, sustainable marketing is defined as follows: It can be assumed that sustainable marketing, as part of the comprehensive environmental management of market-oriented companies, fulfils the task in all phases of the product or value-added life cycle under economic conditions for a lasting reduction or avoidance of harmful environmental impacts beyond legal and social standards (Balderjahn 2013, pp. 39–40). As a result of the impairment of ecosystems by the industrial mass production of products, a rethinking in society has developed and the issue of sustainability in the marketing mix has become increasingly relevant. In order to remain attractive to consumers, companies want to go through a change process to position themselves sustainably. Overall, sustainable marketing should provide an answer to the following question: How can companies make a relevant contribution to solving the socio-ecological problems associated with their products and thus generate added value for customers?

Introduction

Society has changed in the past years and with it the attitude towards the topic of sustainability. Organizations have also undergone a change in recent years, as they have become an important stakeholder in the sustainability debate. Companies want to make the highest possible profit, but in the meantime, they have to answer more and more questions about sustainability issues related to their products, services, or the value chain, from individual citizens, NGOs, or politicians (Brugger 2010, p. 25). Corporate Social Responsibility is a concept that stems from the publication “Social Responsibilities of the Businessman” by Howard Bowen from 1953 (Agudelo et al. 2019, pp. 3–4). Since then, the term has developed further, but until today, there is still no uniform definition of

CSR. The concept describes the interlocking of economic value creation with social/societal and ecological value creation. It therefore offers companies the opportunity to integrate responsibility for society and the environment into their strategic orientation and core business, thereby expanding their potential at all three levels. This way, a company can make its business model sustainable. It is of high relevance to take the trade-off between profit and sustainability towards understanding their synergy effects. Since its origin, the concept of CSR has been reviewed over the years from different perspectives and with different focuses (Agudelo et al. 2019, p. 17).

Consequently, companies must be able, for example, to manufacture their products with the desired quality while earning an appropriate profit and giving sustainability the adequate attention. It is no longer enough for companies to claim that they are committed to sustainability – they must be able to interact with society (Brugger 2010, p. 25). If companies do not pay attention to the issue of sustainability and do not integrate it into their corporate strategy and communicate it clearly, this may lead to a reduction in profits (Brugger 2010, p. 52). The power of companies is also constantly growing, which ultimately increases their responsibility towards society and the environment. This means that multinational companies not only have an impact on the environment through their production activities and the associated externalities, but they can also influence the lifestyles and consumption patterns of society (Brugger 2010, p. 25).

CSR and Its Integration Within Marketing

In order to be able to understand the multitude of implications of Marketing and CSR, an understanding of current sustainability problems in society on the one hand and the needs of consumers on the other hand is required. Sustainable marketing can have a normative, strategic, operative, and transformative phase. The normative aspect includes the corporate culture, which is important for all stakeholders. Both the

stakeholders who operate within the company and those who operate outside are thus shaped by factors such as corporate guidelines, CSR mission statements, and principles (Belz 2006, p. 141). It should be emphasized that the above aspects must be consistent with the definition of the objectives of a company. In addition, the relationship between ecological, social, and economic objectives should be balanced in order to prevent conflicts (Belz 2006, p. 141). The strategic and operational method implies how companies communicate with consumers and which positioning strategies they pursue in the market. The latter comprises three alignment options. First, with regard to the integration of sustainable products in the market, one option may be that social and environmental aspects are of particular importance. For customers, the price and quality of the products are not as relevant as the sustainable factor with which they want to stand out in society. This is particularly interesting for companies that want to address a specific customer group. Option two combines the aspects of the first option of the positioning strategies. Price and quality of the products are just as important as social and environmental factors. This is particularly relevant for larger companies. The final option is essentially that price and quality of the products are more important than social and environmental sustainability factors, which account for only a small proportion of the overall product value. This is of interest to large companies that want to reach a large number of people with their product (Belz 2006, p. 141). The transformative model is used to describe organizations that actively participate in discussions on sustainability issues. This includes discussions with politics and society. This can support a change towards a sustainable market economy. In addition, it is easier for the economy to sell products and services on a sustainable basis if there is support from political and social institutions. Consequently, CSR is important as a link between business, politics, and society, as it enjoys popularity in all three areas. The benefits of sustainable marketing for companies can be illustrated on different levels. Primarily, sales, turnover, and a corresponding profit should be generated.

However, companies operating in the long term also have to deal with the concept of sustainability and CSR. These activities should be communicated to the target groups by making sustainability efforts transparent. In addition to image building, misunderstandings are prevented and accusations such as greenwashing can be avoided. In this context, there is the possibility to exert influence through sustainable communication concepts (Jonker et al. 2010, pp. 195–196). Companies should always prove to be responsible, reliable, trustworthy, and credible in order to create a positive image. If companies act with a sustainable orientation, a combination of CSR, sustainable marketing and transparency should lead to an even better reputation. Accordingly, more sales, turnover and ultimately more profit can be generated. In the context of the opportunities that come with the integration of sustainable products, the idea of CSR makes the economy responsible for maximizing the positive effects of its own value-added processes and minimizing the negative effects. In this way, companies assume the role of being part of society by contributing to the positive development of sustainability.

CSR and Consumption

According to Balderjahn (2013), sustainable consumption awareness describes the “intention of a consumer to consume in a way that takes into account environmental, social and economic aspects of the quality of life” (p. 182). Mirroring the three-pillar model, sustainable consumption awareness has three main categories: the ecological dimension, the economic dimension, and the social dimension. The ecological dimension comprises the components recycling, disposal, packaging, environmental protection/resources, and climate. It describes a consumption that is designed to protect the environment. The economic dimension includes the components of a simple lifestyle and debt-free and collaborative consumption. This dimension refers to an awareness for the long-term economic and personal well-being of the consumer (Sheth et al. 2011, p. 25). The third dimension deals with social

consumption and includes the components of respect for human rights, fair pay and the renunciation of child or forced labor, discrimination, and maltreatment.

Sustainable Marketing and Corporate Performance

So far, there is still no common understanding of how CSR and sustainability measures affect the financial performance of a company. Especially when CSR is equated with philanthropic activities, there is still widespread belief that such measures cost money and can only be implemented as long as the company is in financial health. This attitude often prevents a factual and fact-based examination of the topic, which means that not all economic opportunities are exploited and risks are taken that could have been avoided in the first place. CSR and sustainability measures can thus make a significant contribution to the company's success if implemented. This can be done at different levels: Through risk reduction, cost reduction, better use of opportunities, increase of innovative strength and company reputation as well as by creating new markets and business models (Hockerts 2007).

Historical Development of CSR and Market-Oriented Measures

The development of CSR in companies goes far back in history. It is interesting to highlight which elementary achievements have shaped the definition and progress of CSR (Carroll 1999, p. 269). The industrial revolution in the eighteenth and nineteenth century and the mass industrialization in the early twentieth century were fundamentally important for the development of CSR. Environmental, social, and economic factors were increasingly influenced by the incipient activities of large companies. In the 1950s, CSR, then known as Social Responsibility (SR) (Carroll 1999, p. 270), was regarded as a social obligation of companies. Companies were expected to pursue the SR in the interest of social values and to align

all corporate processes and decisions accordingly. The awareness of managers and entrepreneurs of their commitment to society emerged during this phase and formed the foundation for the following era of CSR.

In the 1960s there was a growing perception that the meaning of CSR had to be defined (Carroll 1999, p. 270). Companies understood during this time that the SR orientation of business decisions could be justified by the fact that in the long term, more profit could be generated and the company was thus compensated for its social orientation (Carroll 1999, p. 271). In the 1970s, the focus of business was on the further development of CSR. There was a strong emphasis on the relationship between economic actors and society and companies aimed to integrate philanthropic approaches. It was at this time that some definitions of CSR emerged, which served to take into account the needs of the public for the benefit of society. Four factors of social performance were in the focus. These included "social responsibility," "social accounting," "social indicators," and "social audit." The 1980s were the decade in which many new and alternative CSR concepts were established and definitions revised. The following are examples. "Business ethics," "public policy," and "stakeholder theory." There was also a new development of ways of assessing CSR in the 1980s. This was done through a revision of the 1954 hierarchy of needs established by Maslow, where the framework of the hierarchy was redefined and adapted. In addition, CSR was linked to financial aspects and the question arose as to whether the companies implementing CSR could also be profitable at the same time. If companies that integrated CSR into their business structures could operate profitably at the same time, this would have been a clear advantage for CSR development (Carroll 1999, pp. 284–286). Other definitions and concepts emerged in the 1990s and culminated to a new CSR paradigm. Corporate citizenship, business ethics, and stakeholder theory were increasingly present in the 1990s. During this period, however, the concept of "corporate social performance" (CSP) proved to be particularly

fundamental to the development of CSR. This model focused on principles, guidelines, and processes (Carroll 1999, pp. 288–289).

The pyramid of CSR was also one of the important bricks in the development of CSR in the 1990s. The pyramid of CSR was based on the economy and, building on this, the legal, ethical, and philanthropic sectors (Carroll 1991, p. 42). Economic responsibility is the fundamental duty of companies to act on the market in order to create value. Ethical responsibility includes the need for a company's moral standards and activities to adapt to the cultural environment. The legal responsibility stands for the obligation that the existence of a company must also be legal and legit (Carroll 1991, pp. 40–43). The purpose of this pyramid was to provide guidance on all issues related to CSR. Companies were required to combine all four categories of CSR in a suitable relationship to each other and integrate them into their business processes. The twenty-first century finally saw the emergence of CSR as it is known today. CSR has changed the way companies think in the twenty-first century. Global problems that used to be irrelevant to business are now being addressed and integrated into business processes. The management and executive levels are aware that they are no longer measured solely by financial and sales performance. Many aspects influence the development of CSR. Some stakeholders, governments, and NGOs believe that the responsibility for future generations with regard to CSR lies in the hands of current leaders and managers. In addition, it would be difficult for companies to achieve long-term positive development without considering CSR. Moreover, studies show that companies achieve worse results if they simply ignore CSR.

CSR and Product Management

When the management of organizations embarks on a reorientation towards sustainable product concepts, this refers first to a sustainable design (El-Halwagi 2017, p. 4). These are competitive products and services with a sustainable basis in processes such as production, logistics, use, and

waste disposal. Products and services are competitive if they contribute to satisfying consumer needs. This enables companies to operate and to assert themselves in the market. If the above-mentioned phases of the product life cycle are not sustainable, using the example of the fashion industry, the following consequences can occur. In the main production process, the production of fibers leads to the pollution of sustainable raw materials. This includes the negative impact on air and water quality. The world trade resulting from globalization is also putting further strains on ecosystems. Global transport routes and worldwide logistics cause air pollution. The implementation of sustainable products and services aims not only at increasing consumer benefits. It should also have a positive impact on ecosystems and society, with a consequent increase in the quality of life of the general public. The levels of sustainable product concepts can also be defined by the following terms: social-ecological product quality, sustainable innovations, sustainability brands, and sustainability-oriented packaging methods (Balderjahn 2013, pp. 173–178).

Sustainable product quality consists of various components. A durable and long-lasting product can be used several times (Balderjahn 2013, p. 179). As few materials as possible should be used, and the number of different materials minimized. This would also make it possible to reduce the general energy consumption. Furthermore, the materials used should be ecological and not lead to any health restrictions and the use of the product should be environmentally friendly and release few emissions. In connection with sustainable products, it is essential that eco-labeling is used. This makes it easy for consumers to differentiate between substitutes (Balderjahn 2013, pp. 179–180). Socially sustainable products include, for example, those that respect human rights in the work process, do not raise health concerns, and implement the rules of fair trade. Through sustainable innovations, there is the possibility to change fundamentally existing products in a way that they have a lasting basis. Alternatively, new products can be designed with a sustainable product core. When goods become more environmentally friendly or socially compatible,

the result will be a sustainable product innovation (Balderjahn 2013, p. 181). This sustainable product innovation can increase the duration of the product life cycle, while old products can be recycled and reused. Production processes can be built following ecological guidelines. This includes the efficient use of energy and input materials. In the process of energy transformation, the use of regenerative energies is also becoming possible (Balderjahn 2013, pp. 182–183). Finally, packaging options for wrapping the core product should follow sustainability-oriented methods. On the one hand, the core function of the packaging, the protection of goods during the transport process, must still be ensured. On the other hand, sustainable alternative packaging should protect the environment by saving resources and recycling. Companies orientate themselves to the requirements of politics and the economy. The business community is particularly interested in minimizing packaging waste due to resource savings and image building. Recycling and reuse are goals that can be achieved through reusable packaging and packaging with a second use (Balderjahn 2013, pp. 184–185).

CSR and Brands

Sustainable brands refer to goods that support the customer in making sustainable purchases through authentic brand promises. Consumers can identify with the brand and differentiate themselves by buying the products. The brand design is accompanied by the use of sustainable certificates, such as eco-labeling. Since not all brands that promise sustainability communicate it transparently, the customer must grant the company a high degree of trust. The use of eco-certificates and eco-labels by the companies is helpful. In this way, the consumer is relieved of uncertainty and the purchasing risk is reduced, thus increasing the demand for the product. Sustainability labels serve the purpose of “signaling” by communicating information to the customer in order to simplify the purchase decision. By integrating sustainability in all the relevant business operations, companies are able to protect their own

brand from scandals. These include, for example, child labor, inhumane working conditions, or causing environmental pollution. Negative reports can quickly destroy the laboriously and cost-intensively built reputation of a brand (Balderjahn 2013, pp. 183–184).

CSR and Pricing

Pricing is the most important profit driver and can be considered as one of the most important toolsets for a successful and profitable company (Simon and Fassnacht 2009, p. 1; Diller 2008, p. 21). A goal-oriented and value-oriented pricing strategy can improve profitability for companies and generate substantial competitive advantages for organizations. A good pricing strategy will extract the individual willingness to pay of customers in an optimal way, e.g., via smart price differentiation techniques. On the other hand, companies that engage in socially responsible and sustainable products and services might have disadvantages regarding their cost position compared to competitors offering products and services without a CSR approach (Simon and von der Gathen 2014, p. 253). However, as indicated by Matute-Vallejo, Bravo, and Pina (2011, pp. 325–326), CSR has a direct effect on price fairness. Companies regarded as socially responsible are perceived to also set fair prices. In addition to that, a low price strategy may not be regarded as attractive by customers if the respective company has acted in an unfriendly environmental way (Choi and Ng 2011, p. 269). It therefore is important that companies that try to incorporate CSR elements in their business are able to extract a higher willingness to pay from their customers – this willingness to pay needs to support a higher price in order to generate profits. Because of this, pricing strategies need to be considered carefully if companies want to take over their responsibilities in a CSR context, balancing at the same time the needs for profitability, shareholder value, and stakeholder orientation. A responsible and sustainable pricing policy aims at supporting and increasing economic welfare in a society. At the

same time, a sustainable and CSR-oriented pricing policy strives to embody the three pillars of sustainability regarding economy, society, and environment (“Triple-Bottom-Line”) beyond legislative commitments and obligations. Aiming just for profitability can become too short sighted in a business world where the need to deliver sustainable, responsible, and fair management decisions becomes ever more important. Because of those powerful effects that pricing can generate, there must be a well-balanced trade-off between the focus on profit, the responsibility for society as well as the environment, and the need for a fair pricing towards customers. These three categories might seem to contrast each other, as the pursuit of the profit goal can contrast efforts in a CSR context. Up to now, the effects of prices and of the pricing process have largely been examined either from the perspective of a company’s view of the customer and his or her contribution regarding profit maximization or cost recovery from the perspective of the customer, comparing the price and the pricing process and putting it into a greater either financial or behavioral context (Wallendorf 2017, p. 59). Price however expands beyond the customer or the company perspective, and is not detached from a context of moral, cultural, and environmental relationships connecting many stakeholders together. In fact, price can be considered as a “moral assessment grounded in social order” that structures the way transactions between market players are handled (Wallendorf 2017, p. 59). According to modern standards, a sustainable pricing can be consistent with the responsibility of corporations towards society and the environment, and does not necessarily contrast the economic interests of the company (Vachani and Smith 2004, p. 118). Fairness specifically in pricing situations and in economic transactions in general is widely perceived as a central element that constitutes the relationship between companies and consumers (Nguyen and Meng 2013, p. 529). Especially the price setting procedure and the pricing mechanism are regarded as important, as consumers will try to determine whether the outcome is consistent, without self-interest and reflects the

interests of all parties involved (Ferguson et al. 2014, p. 219).

CSR and Communication

In order to differentiate themselves from their competitors and satisfy the needs of the market, many companies use advertising that draws attention to sustainable aspects of their products (Delmas and Burbano 2011, p. 64). Sustainability is often promoted by using key words such as “environmentally friendly” or “100% natural,” although these terms are usually ambiguous or even misleading for the consumer. In addition, unsustainable products such as plastic bottles or flights are often advertised with ostensibly sustainable advertising content (Schmuck et al. 2018, p. 127). These are often so-called greenwashing measures. Companies communicate positive sustainable performance even though it is not actually present or even negative in the sustainability rating. The services presented in advertising can concern both the highlighting of a general corporate commitment and the emphasis on the sustainability of products or services (Delmas and Burbano 2011, p. 66).

TerraChoice (2008/2009, quoted after Delmas and Burbano 2011, p. 64) has found that over 95% of the advertising measures they investigated contain at least one of the “Seven Sins of Greenwashing.” These are the sin of hidden compromise, the sin of the lesser of two evils, the sin of lack of proof, the sin of irrelevance, the sin of deception, the sin of inaccuracy, and the sin of false label. TerraChoice defines them as follows (Delmas and Burbano 2011, p. 64): The sin of hidden compromise lies in emphasizing supposedly sustainable aspects of a product without considering that these aspects cannot be considered sustainable from every point of view. It is complemented by the sin of the lesser of two evils. Here, sustainable aspects of the overall product are highlighted without the company addressing or even concealing less sustainable or even highly environmentally harmful aspects. In the sin of lack of evidence, unverifiable claims about sustainability are presented as facts. The sin of irrelevance arises

when positive sustainable aspects of a product are emphasized even though its properties do not stand out positively from those of other products of the same type. This includes, for example, an explicitly stated renunciation of the use of ingredients that are prohibited anyway. The sin of deception refers to false statements about the sustainability of the product. It is closely related to the sin of inaccuracy, where the statements are formulated in a way that is not false but misleading. An example of this are the key words already mentioned, such as “green,” “eco,” and “environmentally friendly.” The incorrect use of labels can also be classified as wrong and fuzzy, which is also called the sin of the wrong label: Companies sometimes use sustainable certificates without actually having acquired them or create their own label that is not generally certified and thus does not provide valid proof of the product’s sustainability.

Greenwashing describes a green corporate image that is communicated to the outside world for purely marketing purposes in order to be perceived positively in the eyes of the consumer in times of increasing awareness of social grievances and environmental problems and to remain competitive. Greenwashing can mean that companies present incomplete or simply false information to the outside world, or subtly green their marketing activities in order to achieve a link between sustainability and their company among consumers (Furlow 2010). It is also important to distinguish between CSR and philanthropy. In contrast to CSR, philanthropy is a purely social value creation without a return on investment or business relevance (Lin-Hi and Blumberg 2018). The key point here is that CSR is characterized by its proximity to the core business and that philanthropic activities have nothing to do with what the company makes money from. A classic example of this is donations to charity. Of course, such activities can also be used as a marketing tool (Lin-Hi and Blumberg 2018). If a company tries to market a social image that does not correspond to reality, this is referred to as “social washing.”

Overall, the risks are limited to the following factors. Customers may perceive the CSR measures as not very authentic by believing that

companies only communicate the application of CSR but do not actually implement it. There is also a risk that the measures for CSR processes will be assessed as not relevant to sustainability. This could result in negative headlines that damage the reputation, customer loyalty and ultimately sales. In addition, the investments of companies in CSR measures would not bring any benefit. On the contrary, in this case the investments would damage value creation and result in lost revenue. It can thus be stated that CSR measures implemented by companies can lead to a high level of interest among the target groups. If companies develop an understanding that they carry a part of the social responsibility, it is likely that this has a positive effect on their image, reputation, and authenticity. This attitude can increase the number of new customers, strengthen the retention of existing customers, and improve the result of word-of-mouth advertising. In this way, a sustainable process implementation can develop a Unique Selling Proposition (USP) for the company that helps to differentiate itself from the competition in the market. The risks arising from the integration of sustainable products can be explained as follows. Companies that practice CSR are accused of hypocrisy and incredibility in the greenwashing discussion. Critics claim that companies act only in their own interest, neglecting the problems that arise for the environment and society. In addition, companies are repeatedly involved in various scandals, both in the economy and in politics. Examples include corruption scandals, cases of bribery of public officials, or evasion of tax payments due.

Cross-References

- [Brand Management](#)
- [Cause-Related Marketing](#)
- [CSR](#)
- [Green Marketing](#)
- [Marketing \(Ethics of\)](#)
- [Societal Marketing](#)
- [Sustainable Marketing](#)
- [Value](#)

References

- Agudelo, M. A., Jóhannsdóttir, L., & Davidsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*, 4, 1–23.
- Balderjahn, I. (2013). *Nachhaltiges Management und Konsumentenverhalten [Sustainable management and consumer behaviour]*. Konstanz: UVK.
- Belz, F.-M. (2006). Marketing in the 21st century. *Business Strategy and the Environment*, 15(3), 139–144.
- Brugger, F. (2010). *Nachhaltigkeit in der Unternehmenskommunikation. Bedeutung, Charakteristika und Herausforderungen [Sustainability within corporate communication. Importance, characteristics and challenges]*. Wiesbaden: Gabler.
- Carroll, A. B. (1991). The pyramide of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, 38, 268–295.
- Choi, S., & Ng, A. (2011). Environmental and economic dimensions of sustainability and price effects on consumer responses. *Journal of Business Ethics*, 104(2), 269–282.
- Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64–87.
- Diller, H. (2008). *Preispolitik [Pricing]* (4th ed.). Stuttgart: UTB.
- El-Halwagi, M. (2017). *Sustainable design through process integration: Fundamentals and applications to industrial pollution prevention, resource conservation, and profitability enhancement* (2nd ed.). Amsterdam: Butterworth-Heinemann.
- Ferguson, J. L., Ellen, P. S., & Bearden, W. O. (2014). Procedural and distributive fairness: Determinants of overall price fairness. *Journal of Business Ethics*, 121(2), 217–231.
- Furlow, N. E. (2010). Greenwashing in the new millennium. *Journal of Applied Business and Economics*, 10(6), 22–25.
- Hockerts, K. (2007). Social entrepreneurship. In W. Visser, D. Matten, M. Pohl, & N. Tolhurst (Eds.), *The A–Z of corporate social responsibility*. Hoboken: Wiley.
- Jonker, J., Stark, W., & Tewes, S. (2010). *Corporate social responsibility und nachhaltige Entwicklung: Einführung, Strategie und Glossar [Corporate social responsibility and sustainable development: Introduction, strategy and glossary]*. Berlin: Springer.
- Lin-Hi, N., & Blumberg, I. (2018). The link between (not) practicing CSR and corporate reputation: Psychological foundations and managerial implications. *Journal of Business Ethics*, 150(1), 185–198.
- Matute-Vallejo, J., Bravo, R., & Pina, J. M. (2011). The influence of corporate social responsibility and price fairness on customer behaviour: Evidence from the financial sector. *Corporate Social Responsibility and Environmental Management*, 18(6), 317–331.
- Nguyen, A., & Meng, J. (2013). Whether and to what extent consumers demand fair pricing behaviour for its own sake. *Journal of Business Ethics*, 114(3), 529–547.
- Schmuck, D., Matthes, J., & Naderer, B. (2018). Misleading consumers with green advertising? An affect–reason–involvement account of greenwashing effects in environmental advertising. *Journal of Advertising*, 47(2), 127–145.
- Sheth, J., Sethia, N., & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39, 21–39.
- Simon, H., & Fassnacht, M. (2009). *Preismanagement [Price management]*. Berlin: Gabler.
- Simon, H., & von der Gathen, A. (2014). Nachhaltigkeit in der Preis- und Konditionenpolitik [Sustainability in pricing and discount policies]. In H. Meffert, P. Kenning, & M. Kirchgeorg (Eds.), *Sustainable marketing management – Grundlagen und cases [Sustainable marketing management – Basics and cases]* (pp. 251–270). Berlin: Springer.
- Vachani, S., & Smith, C. (2004). Socially responsible pricing: Lessons from the pricing of AIDS drugs in developing countries. *California Management Review*, 47(1), 117–144.
- Wallendorf, M. (2017). Is the price right? Moral and cultural frames for understanding pricing. In J. F. Sherry & E. M. Fisher (Eds.), *Contemporary consumer culture theory* (pp. 59–83). New York: Routledge.

Marketing for the Reaching of Common Good

► Social Marketing

Marketing Morality

► Marketing (Ethics of)

Marketing of Cultural Objectives

► Social Marketing

Marketing of the Social Good

► Social Marketing

Marketing to Children Responsibly: Sustainable Marketing

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Synonyms

Social marketing

This topic may be seen through the lenses of three concentric circles covering overlapping dimensions that impact on the social and environmental dimensions that are the subject of this encyclopaedia: first the marketing dimensions, then the social marketing dimensions which include many social issues including the marketing to children issue which constitutes the third dimension. However, this representation may be seen as inaccurate given that some social marketers argue that their field, although significantly influenced by marketing, does also include other influences. Nevertheless, given the significance of the overlaps between the three areas, and as a preliminary to further elaboration on the topic, we will take in turn each of these levels to highlight the similarities and differences.

To start with, let's look at marketing. This is a developing field that has many definitions. If we refer to two well-known definitions, we would have the following:

The three-decade, simple Chartered Institute of Marketing (CIM) definition defined marketing as "The management process of anticipating, identifying and satisfying customer requirements profitably".

Another "definition" focused on the Key Purpose of marketing (Fourali 2008):

To advance the aims of organisations (whether private, public or voluntary) by providing direction, gaining commitment and achieving sustainable results and value through identifying, anticipating and satisfying stakeholder requirements.

Both definitions highlighted the purpose to satisfying requirements, although the second definition had a broader perspective about what constitutes "customers." Whether applied to a general marketing definition or a definition that focuses on the more specialist field of "marketing to children," the above two definitions may be classified as commercial definitions of marketing. This is because they tend to refer to strategies by marketers to ensure an ongoing market and sustainable profit for their products and services. As an example, consider Red Bull strategies for continuously "recruiting" new young audiences to ensure on-going demand despite the fact that the older generation eventually grows out of red bull (e.g., Jobber and Ellis-Chadwick 2013...). Consequently, the field of marketing to children aims to reflect more the concerns of social marketers about the subtle and insidious marketing means used to targeting children to develop habits that may be, on the one hand, self-destructive (e.g., attraction to sugary, tobacco, or alcoholic products) and, on the other, the destructive effects of such businesses on the environment. In terms of effect on the environment, consider the effect of Coke businesses on the issue of availability of water. By Coca Cola's own evaluation, it has been estimated that it took about 70 liters of water to make 1 liter of Coke (MacDonald 2018). Hence, our treatment of this marketing to children topic adopts this two-pronged perspective that focuses on the adverse effect on this group and the environment. Some readers may also find it useful to refer to the entry on social marketing within this Encyclopaedia.

Both commercial and social marketing require a strategic plan to help achieve their results. This is particularly true for social marketing for children to ensure learning and accountability for the investment activities of social marketers. Fourali (2018—development education) argued that not all social initiatives

Marketing to Children Responsibly: Sustainable Marketing, Table 1 Steps of the social marketing process

SM planning steps	Clarification
1. Problem identification	What is the problem and who is raising it (e.g., NGOs, government)?
2. Planning	Gathering info on context, stakeholders, and theory
3. Purpose/mission	Purpose of program (awareness/changing attitudes? Changing lifestyles?)
4. Situation analysis/ market research	Challenges/opportunities (ending with a SWOT)
5. Objectives	Strategic objectives (how do we compete/address challenges/obstacles, etc.)
6. Target groups/ obstacles	Determining the (primary) target group (most vulnerable?) and SMART objectives (what, who, when, and how much)
7. The customer proposition	Clarifying the proposition (benefit of changes vs no changes)
8. Selecting a marketing mix (new or traditional)*	Details of the marketing mix
9. Implementation of the campaign	Implementation of integrated campaign (recruit, test & manage)
10. Resources/partners	Including all available resources/stakeholders (e.g., academics, Gov., NGOs, businesses)
11. Monitoring/ evaluation (process and outcomes)	Identifying a procedure for monitoring results

Adjusted from Fourali (2016a, b)

are equal in demonstrating their effects. One way to ensure effectiveness of SM projects is to adopt a social marketing plan. One of the most detailed SM plans is the one proposed by Fourali (2016) as shown in Table 1 below.

Definition

As argued above, the topic of “marketing responsibly to children” is one of the areas of interests of social marketing. Hence, the

definitions here revisit the differentiation of social marketing from commercial marketing and then focus on the specific areas of marketing to children.

Social marketing purpose, which differentiates it from general, commercial marketing, is primarily to serve society (hence the word “social”) as well as support any initiative that does so (such as looking after the environment). This was reflected in the MSSSB “key purpose definition” over a decade ago:

To apply marketing alongside other concepts and techniques in order to influence individuals, organizations, policy makers, and decision makers to adopt and sustain behavior which improves people’s lives.

More recently,

A “consensus definition” (Lefebvre 2013) has been drawn by several social marketing organizations around the world. The purpose was to have a common basis to help consistency of interpretation and practice. Here is the definition:

Social Marketing seeks to develop and integrate marketing concepts with other approaches to influence behaviours that benefit individuals and communities for the greater social good.

Social Marketing practice is guided by ethical principles. It seeks to integrate research, best practice, theory, audience and partnership insight, to inform the delivery of competition sensitive and segmented social change programmes that are effective, efficient, equitable and sustainable.

(Lefebvre 2013)

SM should also be differentiated from “social media marketing.” Indeed, a simple search on Google about social marketing throws up many entries addressing “social media marketing” (use of digital media for communication purposes). It should also be differentiated from other concepts such as cause-related marketing or social entrepreneurship (Fourali 2016a).

Social marketing is a quickly developing field of study and application. So much so that a new encyclopedia is being designed to meet the needs of social marketers (Fourali and French 2019).

Social marketing to children is about applying the techniques of social marketing to protect

children from irresponsible marketing and help promote and change their behavior to support a healthier lifestyle.

Introduction

For the purpose of clarity, we would refer to the UN definition of a child. According to the UN Convention on the Rights of the Child, a child is everyone under 18 unless, “under the law applicable to the child, majority is attained earlier”. There have been many concerns about unhealthy habits within the young population that allegedly have been induced by irresponsible marketing. Consider obesity, sexually transmitted diseases, and teenage violence to mention just a few. Focusing on just obesity, Professor Anne Johnson linked early learning that influences the future health of the child to their subsequent health:

...we know, from research done by population scientists and epidemiologists that the kids today in our schools who are obese - and a significant fraction of children are leaving school overweight or obese - are already stacking their risks going into the future, in terms of diabetes, heart disease, cancer and so on. Those kids now, they may be 15, 16 but they're going to start getting really sick within 25 years. If you want to think about that long term trajectory, we have to intervene now. (reported by Riddaway 2016. Page: 35).

Such views have been replicated by others (Fourali, children SM), but what makes these findings more significant is that such insidious effects can be avoided. Already in 2005, the RAND research demonstrated that early intervention programs help mitigate the factors that place children at risks of adverse effects of factors in their environment. In particular they demonstrated that 19 out of 21 reviewed initiatives that supported child development between prenatal to kindergarten period had significant positive effects on children (Karoly et al. 2005). Among the areas targeted were academic achievement, behavior, educational progression and attainment, delinquency and crime, and labor market success, among other domains. The authors argued that the key factors that helped the positive results were

better training of care-givers and smaller child-to-staff ratios.

Irrespective of the social and individual benefits, the estimated economic benefits of the interventions generated a return to society ranging from \$1.80 to \$17.07 for each dollar spent on the program. Consequently, such initiatives represent a high yield return investment.

As well as the above-listed benefits that accrued from initiatives undertaken with the young populations, perhaps the health dimension is one of the most popular ones as it tends to attract a lot of media interests. We will review some of the health benefits of social marketing to children.

Diet and Nutrition

Research showed that food promotion affects children's food preferences. Children exposed to unhealthy food promotion tended to lead to poor diets. This was particularly reflected in promotional activities by established global companies such as McDonald or Coke (Cairns 2012). Such effects particularly affect lower income families as they tend to be more loyal to such brands.

Substance Misuse Including Smoking and Alcohol

Although cultural and legal environment may affect differently different groups of people when it comes to substance misuse, it is clear that most users regret having taken up the habit at an early age. Taking smoking as an example, up to 88% of smokers started smoking before the age of 18 (Surgeon General 2012; Hastings and Domegan 2014). However, by the time the smoker reach adulthood, it is very hard to give up the habit because of the nicotine addiction. Of course, such argument can also apply to other substances. Preventative initiatives have repeatedly showed their effectiveness in various types of substance misuses groups. For instance, in smoking, 14 out 21 studies showed significant effects and 7 showed maintained the benefit (Stead et al. 2006). These are very healthy results. However, even if the outcomes showed that a minority group benefited, the overall investment is still worth it because of the economies of scale of such initiatives that may have a significant degree

of reach. Significant effects of preventative measures were also reflected in problem drinkers. However, perhaps one of the most challenging prevention results can be found in drug misuse, where outcomes seemed to lack continuity of effect. Hence, although some benefits were shown in the short term, there was lack of long-term impact. This shows the need for closer analysis of the causes and support of vulnerable groups.

Obesity

Obesity prevention initiatives appear to show a lot of promises. A study reviewed the effect of preventative programs targeting children and adolescents. Determined that between 1999 and 2009, 25 out of 27 initiatives were effective in inducing behavioral change. The studies showed particular benefits from initiatives that adopted benchmark criteria informed by a social marketing plan.

Other Worthwhile Initiatives

A review of initiatives undertaken by the Social Marketing Gateway, where children as well as various significant others were involved, showed several important initiatives with great promise (SMG 2016). The reviewed initiatives included working with mothers to develop healthy family goals, sleeping safely, addressing domestic abuse, and encouraging dental health.

Key Issues

The above highlighted two particular lines of concerns. One is the need for being alert to the adverse effect of commercial initiatives on the younger populations. This group is particularly vulnerable given its lack of awareness about the long-term destructive effect of developing unhealthy habits and their lack of equipment with the write protective skills and attitude to help face the dangers of unbridled commercial marketing communications.

The other “concern” is induced by promising results offered by the social marketing initiatives with children. Such concern is due to the need to act quickly and make use of the learning garnered through the developing social marketing

armamentarium to help minimize deleterious effects of unhealthy environments, in as broad a meaning as possible.

Future Directions

CSR and social marketing have intertwined roles. SM may be seen as one of the tools available to CSR to help achieve its goals but also ensure sustainability of the results since it looks beyond corporate level actors and addresses the various levels of influences to maximize impact. While SM has demonstrated its effectiveness in addressing many social issues (Fourali 2016a), SM for children is a developing field that is also showing its potential in helping vulnerable children in our societies thereby improving social justice.

Social marketing for children is a particularly complex field as it requires taking into account not only the variety of “actors” that affect the behavioral outcomes of children but also requires capitalizing on the latest findings about children’s development and the best conditions that maximize a healthy childhood that should lead to a long and happy life.

This means that social marketers facing the prospect of helping children need to not only develop as much understanding as possible of the internal and external factors that affect them but find ways to work with the various stakeholders that can help address the “competing self-destructive behaviors” that may be offered by primarily commercial initiatives. This also means that social marketers need to be as eclectic as possible in learning about and adopting affective approaches given the meager resources they have to contend with. In this respect, the new initiative for developing the learning from other social marketing initiatives has been recently given a huge boost in the form of a new initiative for developing the very first international encyclopedia for social marketing (Fourali and French 2019). Such an initiative has a huge promise in enabling exchange of effective and efficient method for helping the children of the world be healthier and develop into healthier adults that in turn help create a better world.

Cross-References

- CSR
- Marketing (Ethics of)
- Social Marketing

References

- Cairns, G. (2012). *Evolutions in food marketing, quantifying the impact and policy implications*. Appetite. Online (<https://doi.org/10.1016/j.appet.2012.07.016> 20). Accessed on 06/01/2017.
- Fourali, C. (2008). Developing world-class social marketing standards: A step in the right direction for a more socially responsible marketing profession. *Social Marketing Quarterly*, 15(2), 14–24.
- Fourali, C. (2016a). *The promise of social marketing*. London: Routledge.
- Fourali, C. (2016b). *Social marketing strategy: Lecture material*. London Metropolitan University.
- Fourali, C., & French, J. (2019). *The Palgrave Encyclopedia of marketing*. London: Palgrave. <https://www.sack.de/the-palgrave-encyclopedia-of-social-marketing/9783030210427>. Accessed on 19 Oct 2019.
- Hastings, G., & Domegan, C. (2014). *Social marketing: From tunes to symphonies*. Abingdon: Butterworth Heinemann/Elsevier.
- Jobber, D., & Ellis-Chadwick, F. (2013). *Principles and practice of marketing* (8th ed.). London: McGraw-Hill.
- Karoly, L. A., Rebecca, K. M., & Cannon Jill, S. (2005). *Proven benefits of early childhood interventions*. Santa Monica: RAND Corporation. https://www.rand.org/pubs/research_briefs/RB9145.html. Accessed on 15 Oct 2019.
- Lefebvre, R. C. (2013). *A consensus definition of social marketing*. http://socialmarketing.blogs.com/r_craig_lefebvre_social/2013/10/a-consensus-definition-of-social-marketing.html#sthash.uKI6J9k.dpuf. Accessed 9 July 2015.
- MacDonald, C. (2018). *Coke claims to give back as much water as it uses. An investigation shows it ISN'T even close*. The Verge. <https://www.theverge.com/2018/5/31/17377964/coca-cola-water-sustainability-recycling-controversy-investigation>. Accessed on 25 Aug 2019.
- SMG. (2016). *Case studies. The social marketing gateway: The behaviour change people*. <http://www.socialmarketinggateway.co.uk/case-studies/?cs-name=let-me-sleep-safe>. Accessed on 04/01/2017.
- Stead, M., McDermott, L., Angus, K., & Hastings, G. (2006). *Marketing review final report. Prepared for the National Institute for Health and Clinical Excellence (NICE)*. Institute for Social Marketing. University of Stirling & The Open University. <https://www.nice.org.uk/guidance/ph6/evidence/behaviour-change-review-6-social-marketing-369664530>. Accessed on 04/12/2017.

Surgeon General. (2012). *Preventing tobacco use among youth and young adults: A report of the surgeon general*. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Market-Oriented Sustainability

- Sustainable Marketing

Massive Data

- Big Data and Data Mining

Material Intensity

- Resource Intensity

Materiality

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Synonyms

There are no synonyms of the concept because Materiality is always used with a precise and unique meaning. However, there are many expressions that include the term, such as Materiality analysis (see chapter “Sustainability and Materiality Analysis”), Materiality assessment, Materiality matrix, and Materiality thresholds.

Description

Despite its legal origin, since the beginning of the twentieth century, Materiality has become increasingly prominent in Accounting. Since the concept has many facets (Edgley 2014), several definitions of it were coined over time by academics and boards (see the reviews of Bellandi (2017), Chong (2015), and CRD (2016)). Some of these definitions, referenced both in financial and nonfinancial reporting, are presented in this entry. The minimum common denominator is that Materiality defines the information that is useful for users of corporate reports. Indeed, Materiality gives a measure of the estimated effect that an item of information (or its absence) may have on the accuracy or validity of a report. In other words, Materiality identifies what counts in a report for its readers. Less technically, Materiality is a concept related to common sense, as some remind us that “there is no need to be concerned with what is not important or with what does not matter” (Bernstein 1967, p. 87), and if an issue “doesn’t really matter, don’t bother with it. [...] Without such a rule, unwarranted amounts of time would almost certainly be spent on insignificant matters [...]” (Hicks 1964, p. 158). After discussing the evolution of Materiality, this chapter closes with an introduction to the practical application of Materiality carried out through processes and tools dedicated to the definition of companies’ reporting content.

Introduction

Defining Materiality is important because, although the concept is simple to understand when generically expressed, its application becomes highly problematic in absence of a clear definition (Bernstein 1967, p. 88). From a historical perspective, while interest in Materiality first arose in financial reporting (FR) contexts, definitions used in nonfinancial reporting (NFR – see chapter ► “Nonfinancial Disclosure”) contexts – e.g., social responsibility (see chapter

► “Corporate Social Responsibility Reporting”), sustainability (see chapters ► “Sustainable Reporting”, ► “Sustainability Management and Reporting”, and ► “Sustainability Reporting”), and integrated reporting (see chapter ► “Integrated Reporting for Sustainability”) – have gradually spread with the advent of the twenty-first century. Despite the existing definitions of Materiality sharing a focus on the information’s usefulness for decision-making, different reporting contexts (see chapter ► “Reporting”) assign a different scope to the concept.

Within FR contexts, while users need to avoid misleading information, auditors (see chapter ► “Audit”) need to spend the limited time they can spend on each assurance process on matters of importance and substance (Ibidem).

Within NFR contexts, where Materiality has become a staple during the 2000s, the importance of the concept is linked to the following elements: (a) existence of detailed mandatory rules (which is challenging in either case for different reasons, as mandatory reporting can turn Materiality into a checklist of minimum requirements to be met, removing the need to exercise critical thinking in defining what is material, and the absence of mandatory items has the potential to weaken practice precisely due to the voluntary basis of reporting); (b) the level of detail of existing guidance (because principle-based frameworks allow more discretion than rule-based frameworks); and (c) the growing number of potentially material topics and stakeholders’ expectations on access into what is behind the corporate sustainability focus.

As for the literature, since the end of the twentieth century, Accounting scholars have increasingly proposed both research papers on Materiality (see references for a selection) and dedicated literature reviews (e.g., Iskandar and Iselin 1999; Brennan and Gray 2005; Messier et al. 2005; Chong 2015). Most of the studies in NFR contexts deal with Materiality in one or more settings (such as sustainability and integrated reporting). Furthermore, a special attention to the auditing field is also observable (see chapter ► “Auditing and sustainability”), while some isolated – or

almost isolated – foci also emerge, such as environmental events, sector-specific Materiality, stakeholder engagement (see chapter ► “[Stakeholder Engagement](#)”), and small and medium enterprises.

Materiality in Financial Reporting (FR)

Contexts

According to Holmes (1972, p. 46), the concept of Materiality in the American Accounting community was so influenced by its English legal roots that, despite the term being widely used in the American Accounting literature since the beginning of the twentieth century, the need for its definition only arose in the 1930s. Later, interest in the importance of information disclosure (see chapter ► “[Disclosure](#)”) gradually grew so much that, during the second half of the century, both scholars (e.g., Bernstein 1967; Frishkoff 1970; Hicks 1964; Holmes 1972) and professional bodies – e.g., American Accounting Association (AAA 1957); Financial Accounting Standards Board (FASB 1975) – began to publish on the theme, issuing Accounting standards and memoranda dealing with Materiality. Through the latter guidelines, Materiality required preparers to determine whether reporting misstatements or omissions *could* influence economic judgments and decisions of financial reporting users. Somewhat differently, the US Supreme Court spoke “of what *would* influence investors” (<https://supreme.justia.com/cases/federal/us/426/438/>), and the 1999 SEC Bulletin no. 99 stated that “[a] matter is ‘material’ if there is a substantial likelihood that a reasonable person would consider it important” (<http://www.sec.gov/interp/account/sab99.htm>). Regardless of the detail in different wordings, this approach – in accordance with the user theory – implies a Materiality assessment based on magnitude, nature (i.e., context and qualitative aspects), and quantity of the inaccuracies (Gelmini et al. 2015, p. 137; Lai et al. 2017, p. 535).

Over time, guidelines containing definitions of Materiality in FR settings continued to be issued by national (e.g., for the USA, FASB (2010, 2018) and PCAOB 2010) and international (e.g., *International Accounting Standards Board*,

IASB (2010, 2017); *International Auditing and Assurance Standards Board* – IAASB (2009a, b)) standard setters and boards.

Most guidelines on Materiality do not propose numerical thresholds in order to detect if an item is material or not. Over the years, this “principle-based” approach generated a disclosure problem, because financial statements’ preparers faced difficulties in making Materiality judgments aiming to select the information provided, especially when disclosure standards were set to be applied as some sort of checklist. As a result, companies provided both too much irrelevant information and not enough relevant information.

To overcome this problem, IASB has tried to fill the lack of effective guidance on Materiality in IFRS by operating on three different levels.

First, the nonmandatory 2017 Practice Statement entitled *Making Materiality Judgements* (IASB 2017) clarified that requirements in IFRS need only to be applied if their effects are material.

Second, the 2018 Conceptual Framework for Financial Reporting (IASB 2018a) slightly tuned the definition of Materiality (§ 2.11): “Information is material if omitting it or misstating it could influence decisions that the primary users of general purpose financial reports [...] make on the basis of those reports, which provide financial information about a specific reporting entity.”

Third, the 2018 amendments to IAS 1 and IAS 8 (IASB 2018b) clarified the definition of “Material” aligning the existing standards with the Framework. A few changes can be identified by comparing the 2010 and 2018 versions of the description of Materiality: the term “item” becomes “information”, “users” becomes “primary users”, “economic decisions” becomes “decisions”, and the expression “could [...] influence” becomes “could reasonably be expected to influence”.

Materiality in Nonfinancial Reporting (NFR)

Contexts

Regulation of NFR started at the beginning of the twenty-first century. In this period, the increased focus on NFR forced both standard-setting bodies and legal regulators to review and amend both

Materiality as defined in FR contexts and its application. During this evolution, different perspectives emerged because many Materiality definitions and guidelines were provided (see chapter ► “Sustainability Reporting Guidelines”), as the examples in Table 1 show.

When the various perspectives are compared, both commonalities and differences emerge.

As for commonalities, the NFR frameworks share (among them and with the FR frameworks) the notion that matters are material if they are of such relevance and importance that they could substantively influence the assessment of a report’s intended users.

As for differences, the following can be highlighted:

(a) The various Materiality definitions differ in terms of the matters considered to be relevant, i.e.:

- For FR purposes, the nature or extent of an omission or misstatement.
 - For IR purposes, matters that affect or have the potential to affect the organization’s ability to create value over time (see chapter ► “Value Creation”).
 - For sustainability reporting purposes, an organization’s economic, environmental, and social effects and the effect of the legal, commercial, social, environmental, and political context.
- (b) The role of Materiality depends on the type (principle-based or rule-based) and on the focus (narrow or wide range of stakeholders) of the framework considered. To a closer examination, substantially, differences among these frameworks tend just to pivot on the focus on the Materiality principle, as highlighted by La Torre et al. (2018, pp. 606–607). For example:

Materiality, Table 1 Definitions of Materiality in some NFR frameworks

Source	Salient excerpts
AccountAbility: Exposure draft on AA1000 Framework (AccountAbility 1999) AA1000 Guidance note (AccountAbility 2006) AA1000 Accountability Principles Standard (APS) (AccountAbility 2008) AA1000 Accountability Principles (AccountAbility 2018) Reports (see chapter ► “AA1000 Series of Standards, The”): Evans et al. 2006 Murningham 2013 Zadek and Merme 2003	Materiality concerns “the need to include significant information that is likely to affect one or more stakeholder groups and their assessment of the organisation’s social and ethical performance” (AccountAbility 1999, § 2.2.5) “Material issues are those things that could make a major difference to an organisation’s performance. Material information provides the basis for stakeholders and management to make sound judgements about the things that matter to them, and take actions that influence the organisation’s performance” (AccountAbility 2006, p. 7) “Materiality is determining the relevance and significance of an issue to an organisation and its stakeholders. A material issue is an issue that will influence the decisions, actions and performance of an organisation or its stakeholders” (AccountAbility 2008, p. 12) “Materiality relates to identifying and prioritising the most relevant sustainability topics, taking into account the effect each topic has on an organisation and its stakeholders” (AccountAbility 2018, p. 20)
United Nations Conference on Trade and Development – UNCTD: Guidance on Corporate Responsibility Indicators in Annual Reports (UNCTD 2008)	Materiality is among the quality criteria that “should be taken into account in selecting indicators that meet the common needs of a wide range of users of corporate responsibility reporting” (UNCTD 2008, p. 11) “Information is material if its omission or misstatement could influence users’ decisions. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement. Thus, it provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have if it is to be useful” (UNCTD 2008, p. 12)

(continued)

Materiality, Table 1 (continued)

Source	Salient excerpts
International Organization for Standardization – ISO: ISO 26000 (ISO 2010) (see chapter ► “ISO 26000 Standard”)	No definition of Materiality. A list of core subjects/issues is provided “[. . .], and it is an individual organization’s responsibility to identify which issues are relevant and significant for the organization to address, through its own considerations and through dialogue with stakeholders” (ISO 2010, p. vi)
Global Reporting Initiative – GRI: Sustainability reporting guidelines (GRI 2006, 2011, 2013a, b, 2016b) (see chapters ► “Global Reporting Initiative” and ► “Global Reporting Initiative”)	Materiality is among the principles to be used in combination with standard disclosures to define the content of reports “At the core of preparing a sustainability report is a focus on the process of identifying material aspects – based, among other factors, on the Materiality Principle. Material aspects are those that reflect the organization’s significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders” (GRI 2013a, p. 7) “Materiality is the threshold at which aspects become sufficiently important that they should be reported” (GRI 2013b, p. 17)
<i>International Integrated Reporting Council</i> – IIRC: Materiality. Background paper for <IR> (IIRC 2013a) <IR> Framework (IIRC 2013c)	Materiality is one of IR’s guiding principles “[. . .] relevant matters are those which affect or have the potential to affect the organization’s ability to create value over time” (IIRC 2013a, p.1) “A matter is material if it could substantively affect the organization’s ability to create value in the short, medium or long term” (IIRC 2013c, p. 33)
Sustainability Accounting Standards Board – SASB: Conceptual framework (SASB 2013) Implementation guide (SASB 2016)	“In identifying sustainability topics that are likely to be material for companies in a specific industry”, the 2013 SASB’s Conceptual framework follows the definition of materiality adopted by U.S. Securities laws and case law. “According to the U.S. Supreme Court, information is material if there is “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of the information made available”” (SASB 2013, p. 9) “SASB standards are a cost-effective way for issuers to communicate their material sustainability impacts to investors in a decision-useful format that satisfies the requirements of Regulation S-K” (SASB 2016, p. 2)

- Even though the 2013 GRI G4 version increased the focus on Materiality, the general GRI approach substantially reshapes downward the Materiality principle at the operative level. Indeed, if the guidelines propose a list of indicators and issues to be reported, “the more of these indicators a company manages to cover, the higher the (perceived) report’s robustness and completeness will be. The problem with this approach is that the indicators may be considered a fixed list to be complied with, with only few adjustments done according to the Materiality principle [. . .]. Inevitably, in following this approach the issue of

- Materiality loses some relevance [. . .]” (Mio 2013, p. 84).
- The IIRC framework is principle-based and “confers a central role to Materiality. The IR “conciseness” is one of the key features stressed by the framework, and to gather a clear and accepted definition of Materiality is, in the IR context, fundamental and much more important than it was for previous standards” (Ibidem).
- (c) Both GRI and SASB (SASB 2013, 2016) adopt an approach to Materiality applied to specific sectors. In this regard, GRI issued dedicated guidelines and publications (GRI 2016a; RobecoSAM & GRI 2015). Such an approach

was strongly suggested by the literature (Eccles et al. 2012) because, as IFAC recalls (2015, p. 4), the process of determining Materiality is directed by several factors including the industry an organization belongs to.

This increased attention paid to NFR, after years of mandatory rules regulating only FR, stimulated the gradual spread of different mandatory forms of NFR all over the world, although with a variety of orientations.

In Europe, a series of EU directives attempted to bridge the gap between financial and nonfinancial information (NFI). At first, Directive 2013/34/EU required nonfinancial key performance indicators among the contents of the management report. It regulated Materiality as a principle. From its perspective, “‘material’ means the status of information where its omission or misstatement could reasonably be expected to influence decisions that users make on the basis of the financial statements of the undertaking” (Directive 2013/34/EU, art. 2.16). However, “the principle of materiality should not affect any national obligation to keep complete records showing business transactions and financial position” (*ivi*, Whereas no. 17).

Subsequently, Directive 2014/95/EU modified Directive 2013/34/EU and introduced additional NFI disclosure requirements for large public interest entities with more than 500 employees, to be included in their management report (Directive 2014/95/EU, Art. 1). Such requirements are closer to IR than to sustainability reporting (Baumüller and Schaffhauser-Linzatti 2018, p. 101). Materiality underpins the whole Directive although the directive does not mention the concept explicitly. Moreover, when companies provide the required NFI, they “[...] may rely on national frameworks, Union-based frameworks such as the Eco-Management and Audit Scheme (EMAS), or international frameworks” (see chapter ► “EMAS: Eco-Management and Audit Scheme”) that are there listed (e.g., ISO 26000, GRI, etc.) “or other recognized international frameworks” (Directive 2014/95/EU, see Whereas no. 9). The list of potential frameworks grew larger as a result

of a Federation of European Accountants’ position paper (FEE 2016) and a European Commission’s Communication (EC 2017).

As a consequence, the European Materiality framework is quite multifaceted and its concrete manifestation depends both on the reporting framework (see chapter ► “Reporting Framework”) selected and the way it is implemented.

From this perspective, a continuous revision of Materiality is deemed among the “necessary ingredients for businesses to generate more positive impact and enhance their societal value” (CRS Europe & GRI 2017, p. 6).

Implementing Materiality

In NFR contexts, Materiality becomes more difficult to apply than in FR contexts. While in FR contexts the application of Materiality often revolves around thresholds of misstatements and omissions, in NFR contexts quantitative thresholds are not easily applicable for many reasons, depending on the specific reporting setting considered (see Lai et al. 2017, p. 535; Mio 2013, p. 81).

For example, in sustainability reporting settings, the definition of Materiality does not always represent a primary problem because the most widespread standards focus on completeness (i.e., they are based on fixed lists of indicators to be complied with in the complex scenario of a wide range of potential consequences and stakeholders) rather than conciseness. On the contrary, in integrated reporting settings, Materiality gains importance because conciseness plays a key role and, as Lai et al. highlight (2017, p. 536), “value-creation” is a vaguer concept than “sustainability impact”.

At the operative level, the most widespread (FR and NFR) guidelines propose different process-based solutions in order to determine what is material for report content purposes (see Table 2).

Moreover, NFR frameworks propose operative tools. The main tools are listed in Table 3.

Furthermore, since the Materiality determination process can also be disclosed as a material issue itself, sometimes the guidelines require

Materiality, Table 2 The process to define report contents according to some FR and NFR guidelines

Guidelines and references	Process phases	Excerpts
IFRS Practice Statement 2 Making Materiality Judgements: §§ 33–65 (IASB 2017)	1. Identify 2. Assess 3. Organise 4. Review	The Materiality process “illustrates one possible way to make materiality judgements, but it incorporates the materiality requirements an entity must apply to state compliance with IFRS Standards” (IASB 2017, § 30)
AA1000APS: § 2.2 (AccountAbility 2008)	1. Identification 2. Relevance 3. Significance 4. Context and maturity of issues 5. Addressing conflicts	The Materiality determination process “is designed to ensure that comprehensive and balanced information is input and then analysed” (AccountAbility 2008, p. 12)
GRI G4 Sustainability Reporting Guidelines: § G4-18 (GRI 2013a) GRI G4 Implementation Manual: § G4-18 (GRI 2013b)	1. Identification 2. Prioritization 3. Validation 4. Review	“At the core of preparing a sustainability report is a focus on the process of identifying material Aspects – based, among other factors, on the materiality Principle” (GRI 2013b, p. 7) “Although following the steps is not a requirement to be ‘in accordance’ with the Guidelines, the implementation of the Reporting Principles is a requirement” (GRI 2013a, p. 31) “Prioritization should be based on the Principles of Materiality and Stakeholder Inclusiveness” (GRI 2013a, p. 32)
Background paper for IR. Materiality (IIRC 2013a) IR Framework: §§ 3.17–3.32 (IIRC 2013c)	1. Identification 2. Assessment 3. Prioritization 4. Determination of disclosure	“To be most effective, the materiality determination process is integrated into the organization’s management processes and includes regular engagement with providers of financial capital and others to ensure the integrated report meets its primary purpose [...]” (IIRC 2013c, § 3.18)

dedicated disclosures (for GRI and IIRC cases, see Bellandi 2017, pp. 316–317).

Summary

Despite its legal origin, Materiality has become increasingly prominent in Accounting during the twentieth century. While interest in Materiality first arose in financial reporting (FR) contexts since the beginning of that century, Materiality in nonfinancial reporting (NFR) contexts (e.g., sustainability and integrated reporting) has gradually spread only with the advent of the twenty-first century. The several boards and associations that issued NFR guidelines proposed different definitions and approaches to Materiality. Materiality is often a guiding principle (AccountAbility, GRI, IIRC), a criterion (UNCTD), or a guiding objective (SASB). Sometimes, a set of expected disclosures (e.g., GRI) or material issues is provided (e.g., ISO),

also with a focus on a specific industry (GRI and SASB). However, although such existing FR and NFR approaches to Materiality share a focus on the information’s usefulness for decision-making, the different reporting contexts each framework belongs to assign a different scope to the concept. Moreover, in NFR contexts, Materiality becomes more difficult to apply than in FR contexts. While in FR contexts the application of Materiality often revolves around thresholds of misstatements and omissions, in NFR contexts quantitative thresholds are not easily applicable for many reasons depending on the specific reporting setting considered. At the operative level, the most widespread FR (e.g., IFRS) and NFR (e.g., AccountAbility, GRI, IIRC) guidelines propose different process-based solutions in order to determine what is material for report content purposes. More in detail, both NFR guidelines and scholarly frameworks generated operative tools such as matrices and maps to be used during the Materiality determination process.

Materiality, Table 3 Materiality-oriented operative tools in some NFR frameworks

Tool name	Source	Type	Description	Purpose
Materiality matrix	GRI sustainability reporting guidelines, Standards and Manual (GRI 2006, 2011, 2013a, b, 2016b)	Cartesian system	X-axis: significance on economic, environmental, and social consequences Y-axis: influence on stakeholder assessments and decisions	To provide a visual representation of issues and their relative priority
Sustainable value matrix	Eccles et al. (2015)	Cartesian system	X-axis: firm's Materiality issue Y-axis: issue's significance for society	To upgrade the materiality matrix because "materiality only has meaning from the perspective of the entity that determines it" (p. 158)
Significance/influence matrix	IIRC's Consultation Draft (IIRC 2013b)	Cartesian system	X-axis: magnitude of a matter's impact on the organization's ability to create value Y-axis: likelihood of occurrence of a matter	To assess the importance of issues
Materiality map	SASB's website: https://materiality.sasb.org/	Double-entry table	Rows: issues, grouped by general categories and five dimensions Columns: industries, grouped by sectors Cells: level of Materiality of an issue	To identify sustainability issues that are likely to affect the financial condition or operating performance of companies within an industry
Five-factor test	SASB 2016 Implementation guide (SASB 2016)	Double-entry table	Rows: issues, grouped by general categories and five dimensions Columns: industries, grouped by sectors Cells: scores (potential risk/opportunity related to a topic)	To assess whether a company's activities related to a SASB topic might reasonably be likely to have a material impact on the financial condition or results of operations, i.e., to select sustainability topics appropriate to the specific operating context

Cross-References

- AA1000 Series of Standards, The
- Audit
- Auditing and sustainability
- Corporate Social Responsibility Reporting
- Disclosure
- EMAS: Eco-Management and Audit Scheme
- Global Reporting Initiative
- Integrated Reporting for Sustainability
- ISO 26000 Standard
- Nonfinancial Disclosure
- Reporting
- Reporting Framework
- Stakeholder Engagement
- Sustainability Management and Reporting
- Sustainability Reporting
- Sustainability Reporting Guidelines
- Value Creation

References

- AAA. (1957). *Accounting & reporting standards for corporate financial statements & preceding statements & supplements*. Sarasota: American Accounting Association.

- AccountAbility. (1999). AccountAbility 1000 (AA1000) framework. <http://www.dea.univr.it/documenti/OccorrenzaIns/matdid/matdid728652.pdf>. Accessed 16 Feb 2019.
- AccountAbility. (2006). AA1000 Guidance note on the principles of materiality, completeness and responsiveness as they relate to the AA1000 assurance standard. <http://www.envirotrain.co.uk/wp-content/uploads/2013/05/C3.4.7-AA1000-Guidance-Note.pdf>. Accessed 30 Jan 2019.
- AccountAbility. (2008). AA1000 Accountability principles standard 2008. https://drive.google.com/file/d/0BwU82A_-zhEFMjdmLUIddFo0dHc/view. Accessed 30 Jan 2019.
- AccountAbility. (2018). AA1000 Accountability principles. https://www.accountability.org/wp-content/uploads/2018/05/AA1000_ACCOUNTABILITY_PRINCIPLES_2018_Single_Pages.pdf. Accessed 30 Jan 2019.
- Baumüller, J., & Schaffhauser-Linzatti, M. M. (2018). In search of materiality for nonfinancial information – Reporting requirements of the directive 2014/95/EU. *Nachhaltigkeits Management Forum/Sustainability Management Forum*, 26(1–4), 101–111. Springer, Berlin/Heidelberg.
- Bellandi, F. (2017). *Materiality in financial reporting: An integrative perspective*. Bingley: Emerald Publishing.
- Bernstein, L. A. (1967). The concept of materiality. *The Accounting Review*, 42(1), 86–95.
- Brennan, N. M., & Gray, S. J. (2005). The impact of materiality: accounting's best kept secret. *Asian Academy of Management Journal of Accounting and Finance*, 1, 1–31.
- Chong, H. G. (2015). A review on the evolution of the definitions of materiality. *International Journal of Economics and Accounting*, 6(1), 15–32.
- CRD – Corporate Reporting Dialogue (2016). Statement of common principles of materiality of the corporate reporting dialogue. <http://corporatereportingdialogue.com/wp-content/uploads/2016/03/Statement-of-Common-Principles-of-Materiality1.pdf>. Accessed 30 Jan 2019.
- CSR Europe & GRI. (2017). Member state implementation of directive 2014/95/EU. <https://www.accountancyeurope.eu/wp-content/uploads/NFR-Publication-3-May-revision.pdf>. Accessed 20 Feb 2019.
- EC – European Commission. (2017). Communication from the commission. Guidelines on non-financial reporting (Methodology for reporting non-financial information) 215/01 of 26 June 2017. https://ec.europa.eu/info/publications/170626-non-financial-reporting-guide-lines_en. Accessed 18 Feb 2019.
- Eccles, R. G., Krzus, M. P., Rogers, J., & Serafeim, G. (2012). The need for sector-specific materiality and sustainability reporting standards. *Journal of Applied Corporate Finance*, 24(2), 65–71.
- Eccles, R. G., Krzus, M. P., with Ribot, S. (2015). *The integrated reporting movement. Meaning, momentum, motives, and materiality*. Hoboken: Wiley.
- Edgley, C. (2014). A genealogy of accounting materiality. *Critical Perspectives on Accounting*, 25(3), 255–271.
- Evans, D., Forstater, M., Knight, A., Sillanpää, M., Tuppen, C., Warris, A. M., & Zadek, S. (2006). *The materiality report. Aligning strategy, performance and reporting*. London: AccountAbility, BT Group and Lloyds Register Quality Assurance (LRQA).
- FASB – Financial Accounting Standards Board. (1975). *Discussion memorandum: An analysis of issues related to criteria for determining materiality*. Stamford: FASB.
- FASB – Financial accounting standards board. (2010). Statement of financial accounting concepts no. 8. Conceptual framework for financial reporting. <https://www.fasb.org/resources/ccurl/515/412/Concepts%20Statement%20No%208.pdf>. Accessed 13 Feb 2019.
- FASB – Financial Accounting Standards Board. (2018). Statement of financial accounting concepts no. 8 (As Amended August 2018). Conceptual framework for financial reporting. https://www.fasb.org/jsp/FASB/Document_C/DocumentPage?cid=117617111398&acceptedDisclaimer=true. Accessed 30 Jan 2019.
- FEE. (2016). EU directive on disclosure of non-financial and diversity information: Achieving good quality and consistent reporting. Brussels: FEE. https://www.accountancyeurope.eu/wp-content/uploads/1512_EU_Directive_on_NFI.pdf. Accessed 7 Feb 2019.
- Frishkoff, P. (1970). An empirical investigation of the concept of materiality in accounting. *Journal of Accounting Research*, 8, 116–129.
- Gelmini, L., Bavagnoli, F., Comoli, M., & Riva, P. (2015). Waiting for materiality in the context of integrated reporting: Theoretical challenges and preliminary empirical findings. In L. Songini & A. Pistoni (Eds.), *Sustainability disclosure: State of the art and new directions* (pp. 135–163). Bingley: Emerald Group Publishing.
- GRI. (2006). G3.0 Sustainability reporting guidelines. <http://www.chinacsrmap.org/Uploads/file/G3%2D%2DSustainability%20Reporting%20Guidelines.pdf>. Accessed 30 Jan 2019.
- GRI. (2011). G3.1 Sustainability reporting guidelines. <http://crnavigator.com/materialy/bazadok/149.pdf>. Accessed 30 Jan 2019.
- GRI. (2013a). G4 Sustainability reporting guidelines – Reporting principles and standard disclosures. <https://www.globalreporting.org/resource/library/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>. Accessed 30 Jan 2019.
- GRI. (2013b). G4 Sustainability reporting guidelines – Implementation manual. <https://www.globalreporting.org/resource/library/grig4-part2-implementation-manual.pdf>. Accessed 30 Jan 2019.
- GRI. (2016a). Defining what matters. Do companies and investors agree on what is material? <https://www.globalreporting.org/resource/library/Defining-Materiality-What-Matters-to-Reporters-and-Investors.pdf>. Accessed 30 Jan 2019.
- GRI. (2016b). Consolidated set of GRI sustainability reporting standards 2016. <http://www.ekvilib.org/wp-content/uploads/2018/03/GRI-standardi-2016.pdf>. Accessed 30 Jan 2019.

- Hicks, E. L. (1964). Materiality. *Journal of Accounting Research*, 2(2), 158–171.
- Holmes, W. (1972). Materiality – Through the looking glass. *Journal of Accountancy*, 133(2), 44–49.
- IAASB. (2009a). International Standard on Auditing (ISA) 320, Materiality in planning and performing an audit. <http://www.ifac.org/system/files/downloads/a018-2010-iaasb-handbook-isa-320.pdf>. Accessed 2 Feb 2019.
- IAASB. (2009b). International Standard on Auditing (ISA) 450, Evaluation of misstatements identified during the audit. <http://www.ifac.org/system/files/downloads/a021-2010-iaasb-handbook-isa-450.pdf>. Accessed 2 Feb 2019.
- IASB. (2010). *Conceptual framework for financial reporting* 2010. London: IFRS Foundation.
- IASB. (2017). *Making materiality judgements* Practice Statement 2. <https://www.ifrs.org/-/media/project/disclosure-initiative/disclosure-initiative-materiality-practice-statement/mps-project-summary-and-practice-statement.pdf>. Accessed 2 Feb 2019.
- IASB. (2018a). *Conceptual framework for financial reporting*. London: IFRS Foundation.
- IASB. (2018b) *Definition of material* (Amendments to IAS 1 and IAS 8). <http://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F1709060818526684%2F04-05%20Definition%20of%20Material%20-%20Published%20Amendments%20-%20EFRAG%20TEG%2018-11-29.pdf>. Accessed 20 Feb 2019.
- IFAC. (2015). Materiality in <IR>. Guidance for the preparation of integrated reports. New York: IIRC. https://integratedreporting.org/wp-content/uploads/2015/11/1315_MaterialityinIR_Doc_4a_Interactive.pdf. Accessed 30 Jan 2019.
- IIRC. (2013a). Materiality. Background paper for <IR>. New York: IIRC. <https://integratedreporting.org/wp-content/uploads/2013/03/IR-Background-Paper-Materiality.pdf>. Accessed 20 Feb 2019.
- IIRC. (2013b). Consultation draft of the international <IR> framework. New York: IIRC. <http://integratedreporting.org/wp-content/uploads/2013/03/Consultation-Draft-of-the-InternationalIRFramework.pdf>. Accessed 20 Feb 2019.
- IIRC. (2013c). The international <IR> framework. New York: IIRC. <https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>. Accessed 20 Feb 2019.
- Iskandar, T. M., & Iselin, E. R. (1999). A review of materiality research. *Accounting Forum*, 23(3), 209–239. Elsevier Science Publishing Company, Inc.
- ISO – International Organisation for Standardization. (2010). ISO 26000. *Guidance on social responsibility*. https://iso26000.info/wp-content/uploads/2017/06/ISO-26000_2010_E_OBPpages.pdf. Accessed 20 Feb 2019.
- La Torre, M., Sabelfeld, S., Blomkvist, M., Tarquinio, L., & Dumay, J. (2018). Harmonising non-financial reporting regulation in Europe: Practical forces and projections for future research. *Meditari Accountancy Research*, 26(4), 598–621.
- Lai, A., Melloni, G., & Stacchezzini, R. (2017). What does materiality mean to integrated reporting preparers? An empirical exploration. *Meditari Accountancy Research*, 25(4), 533–552.
- Messier, W. F., Jr., Martinov-Bennie, N., & Eilifsen, A. (2005). A review and integration of empirical research on materiality: Two decades later. *Auditing: A Journal of Practice & Theory*, 24(2), 153–187.
- Mio, C. (2013). Materiality and assurance: Building the link. In C. Busco, M. L. Frigo, A. Riccaboni, & P. Quattrone (Eds.), *Integrated reporting: Concepts and cases that redefine corporate accountability* (pp. 79–94). Cham: Springer International Publishing.
- Murningham, M. (T. Grant Ed.). (2013). *Redefining materiality II: Why it matters, Who's involved, and what it means for corporate leaders and boards*. London: AccountAbility. <https://www.accountability.org/wp-content/uploads/2017/02/Redefining-Materiality-2.pdf>. Accessed 4 Feb 2019.
- PCAOB – Public Company Accounting Oversight Board. (2010). Auditing standard no. 11, Consideration of Materiality in Planning and Performing an Audit. https://pcaobus.org/Rulemaking/Docket%20026/Release_2010-004_Risk_Assessment.pdf. Accessed 13 Feb 2019.
- RobecoSAM & Global Reporting Initiative. (2015). Defining materiality: What matters to reporters and investors. Do investors and reporters agree on what's material in the Technology Hardware & Equipment and Banks & Diverse Financials sectors? <https://www.globalreporting.org/resourcelibrary/Defining-Materiality-What-Matters-to-Reporters-and-Investors.pdf>. Accessed 20 Feb 2019.
- SASB – Sustainability Accounting Standards Board. (2013). Conceptual framework. <https://www.sasb.org>
- SASB – Sustainability Accounting Standards Board. (2016). Implementation guide. http://library.sasb.org/wp-content/uploads/2017/06/SASB_ImplementationGuide-061317-EXCERPT.pdf?hsCtaTracking=731dfd39-85d4-4337-bef1-508d58cfd96%7C6275688b-3fbc-4405-a0a3-abc731a122a9. Accessed 25 Feb 2019.
- UNCTD – United Nations Conference on Trade and Development. (2008). Guidance on corporate responsibility indicators in annual reports. https://unctad.org/en/docs/iteteb20076_en.pdf?user=46. Accessed 23 Feb 2019.
- Zadek, S., & Merme, M. (2003). *Redefining materiality. Practice and public policy for effective corporate reporting*. London: AccountAbility & UKSIF. <http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan044367.pdf>. Accessed 30 Jan 2019.

Maximum Level of Crude Oil Production

► Sustainability, Peak Oil

MDGs

- [Millennium Development Goals \(2000\)](#)
-

Meaning of Life

- [Spirituality in Management](#)
-

Meaning-Making

- [Sense Making, Organizational](#)
-

Measurable Objectification of Business Ethics

- [Quantification of Business Ethics](#)
-

Measurement of Business Ethics

- [Quantification of Business Ethics](#)
-

Mechanical Treatment

- [Sustainability of Waste Management System: Treatment and Separation for Material Recovery](#)
-

Mechanisms of Separation Between Ownership and Control

- [Control-Enhancing Mechanisms \(CEMs\)](#)
-

Media Accountability

- [Media Ethics](#)
-

Media CSR Forum

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Synonyms

[CSR Media](#)

Definition

The increasing awareness about the need to evolve from traditional to sustainable paradigms highlighted the central role covered by Media. The concept “Media CSR Forum” consists of the combination between the words Media, CSR, and Forum. Despite the three words appear independent, their combination underlines one of the main themes of the current scenario. In fact, during the last years, traditional and digital media (e.g., social network, blog) paid specific attention to organizations’ nonfinancial performance. Thus, Media CSR Forum can be defined as the industries and organizations’ media coverage about socially responsible behaviors.

CSR and Media

Reputation is one of the main intangible assets of an organization. Since the nineteenth century, academics paid specific attention about the effects caused by adverse events on financial performance. On the point, the academics agreed about the existence of a negative relationship between market value and corporate scandals (Plec and Pettenger 2012). This relationship was confirmed by several corporate scandals that have characterized the last decade. However, during the last years, academics started to reflect about the positive relationship between the adoption of socially responsible practices and market value, which represents an alternative perspective of analysis (Mittelbach-Hörmanseder et al. 2020; Veltri et al.

2020). On the point, academics agreed about the existence of a positive relationship between the two dynamics. However, contrarily to corporate scandals, communicate positive performance to stakeholders represents an activity characterized by a high degree of complexity. In this sense, a wide number of organizations started to engage with their stakeholders through nonfinancial reports.

Engaging with stakeholders through traditional nonfinancial reports represents an activity characterized by a high degree of complexity caused by the lack of technical knowledge about nonfinancial indicators (Boiral 2013). Similarly to financial reporting practices, several studies underlined stakeholders' difficulty to evaluate the reliability of nonfinancial reports (Muslu et al. 2019). Furthermore, other studies showed that an increasing number of organizations disclose their nonfinancial information through synthetic indicators characterized by a low degree of transparency for nonexpert users. In this sense, mass media cover a central role due to their capability to engage with nonexpert users through a more narrative and informal approach (Lai et al. 2019; Neu et al. 2020).

During the last years, an increasing number of media started to discuss about CSR. In particular, the positive trend was favored both by the quick development of new media and by the integration of CSR within the agenda of media that operate in another sector. In this sense, CSR is considered both by financial media and by generalist media. Furthermore, the CSR's media coverage was favored by the rapid growth that has characterized new digital platforms such as LinkedIn, Twitter, and Facebook (Lodhia et al. 2020; Lovejoy et al. 2012). Thus, contrary to the past, engaging with stakeholders represents an activity characterized by less barriers. An example of this evolutionary pathway is represented by the increasing number of sustainable start-ups founded through crowdfunding campaigns that have benefit from the mediatic attention paid by traditional and digital media (Pizzi et al. 2021). Furthermore, an increasing number of media started to assign on yearly basis awards to certify socially responsible organizations (Cosma et al. 2018).

Summary

The increasing attention paid by stakeholders on sustainable development radically changed corporate communication. The disclosure of nonfinancial information through annual reports does not represent a signal of orientation toward these practices due to their wide adoption on mandatory basis. Building on this preliminary consideration, media represent a strategic driver to communicate nonfinancial performance to stakeholders. In particular, their adoption favors the development of a dialogic communication between organizations and stakeholders. Furthermore, the attention paid by media to sustainable practices could represent a way to achieve reputational benefits. According to this evidence, the relevance of the media on CSR is greater than the past. In this sense, the implementation of communication strategies based on their involvement represents a strategic driver to engage with stakeholders.

Cross-References

► Media Ethics

References

- Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A+ GRI reports. *Accounting, Auditing & Accountability Journal*, 26(7), 1036–1071. Emerald Group Publishing Limited.
- Cosma, S., Soana, M. G., & Venturelli, A. (2018). Does the market reward integrated report quality? *African Journal of Business Management*, 12(4), 78–91.
- Lai, A., Panfilo, S., & Stacchezzini, R. (2019). The governmentality of corporate (un)sustainability: The case of the ILVA steel plant in Taranto (Italy). *Journal of Management and Governance*, 23(1), 67–109. Springer, New York LLC.
- Lodhia, S., Kaur, A., & Stone, G. (2020). The use of social media as a legitimization tool for sustainability reporting: A study of the top 50 Australian Stock Exchange (ASX) listed companies. *Meditari Accountancy Research*. <https://doi.org/10.1108/MEDAR-09-2019-0566>, Emerald Group Publishing Ltd.
- Lovejoy, K., Waters, R. D., & Saxton, G. D. (2012). Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review*, 38(2), 313–318.

- Mittelbach-Hörmanseder, S., Hummel, K., & Rammerstorfer, M. (2020). The information content of corporate social responsibility disclosure in Europe: An institutional perspective. *European Accounting Review*, 8180. <https://doi.org/10.1080/09638180.2020.1763818>.
- Muslu, V., Mutlu, S., Radhakrishnan, S., & Tsang, A. (2019). Corporate social responsibility report narratives and analyst forecast accuracy. *Journal of Business Ethics*, 154(4), 1119–1142. Springer, Netherlands.
- Neu, D., Saxton, G., Everett, J., & Shiraz, A. R. (2020). Speaking truth to power: Twitter reactions to the Panama papers. *Journal of Business Ethics*, 162, 473–485.
- Pizzi, S., Corbo, L., & Caputo, A. (2021). Fintech and SMEs sustainable business models: Reflections and considerations for a circular economy. *Journal of Cleaner Production*, 281, 125217, Elsevier.
- Plec, E., & Pettenger, M. (2012). Greenwashing consumption: The didactic framing of ExxonMobil's energy solutions. *Environmental Communication*, 6(4), 459–476.
- Veltri, S., De Luca, F., & Phan, H. T. P. (2020). Do investors value companies' mandatory nonfinancial risk disclosure? An empirical analysis of the Italian context after the EU Directive. *Business Strategy and the Environment*, 2019, 1–12.

Media Ethics

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Synonyms

Channel and network control regulation; Citizen journalism; Communication impartiality; Communications privacy principles; Fake news control; Information reliability filtering; Information values and value relations; Intonation impact; Media accountability; Open information discourse; Transparent reporting; Trust and information

Definition

Media ethics is an immensely important notion affecting the breadth and depth of contemporary philosophy, communications, social sciences,

culture, management practice and strategy, public policy, and law. This applies to practitioners, analysts, consultants, and scholars in all those areas of practice, theory, and method. This elaboration shall expand on and conclude with matters shaping the future as a continual present: An extensive commentary on digital media – though more established, *traditional* media will indeed receive due attention first.

It will be seen that it is near impossible to arrive at a single, all-encompassing definition of media ethics. It is however essential to state that its roots and origins are in the ethics of journalism. (They may be traced to the 1920s (Christians 1977) and appear deeply susceptible to societal norms and political economy; in the context of development since the late 1970s, these are defined by neoliberalism.)

At the risk of reducing its inherent intricacy and thus omitting some components, media ethics may be defined by a long sequence of terms as *the ethics and principles of reporting, communicating and otherwise representing facts, truth/s, artefacts, multiple viewpoints, values, experiences and cultures; within the context of human (and beyond) communication, knowledge, memory and insight; by, and through the means ranging from spoken to written word, recorded and stored fixed material documents, procedures and systems; through any decodable channels, forms, formats, styles, languages; networks and devices; public, private and community based; locally, regionally, nationally, internationally, and globally*. (And, as media and entertainment contracts had stipulated since the advent of satellite television: “throughout the solar system and the known Universe, in perpetuity”.)

It needs to be added that regulatory contexts are intrinsically related to media ethics. The impact of this relationship on professional practice, codes of conduct, and sociocultural effects is considerable.

Wilkins and Christians (2009, 2020) have arguably edited the most comprehensive guide to date on the subject of (mass-)media ethics. Rooted in American media ethics, but also providing a cross-cultural, international, global perspective, this near-encyclopedic tome is consulted here.

(Some other texts hereby gain deserved attention: Bertrand (2018) and Christians et al. (2017), selected among a considerable output on this essential subject.) Wilkins and Christians explore the full breadth of the subject through the work of numerous authorities in the field. The structure of the text is systematic and represents the full spectrum of matters to be examined in “traditional” (Emphasis added: the field itself is of relatively recent date; as the “new” [already outdated term] – digital, interactive media comes to dominate life, so the theory transforms and a prefix is required for mass media) mass-media ethics.

As such, it is of considerable use to anyone first exploring this complex and comprehensive matter:

1. *Philosophical [also historical, social, and psychological] foundations*
2. *Practice – ranging from impartiality as a key precursor of [all] media ethics; photojournalism (Most pertinent in the age of deepfakes, addressed below); diversity; advocacy; propaganda and PR; pornography (A taboo subject for many and exceptionally problematic, especially in interactive contexts and the flood of content in digital media; worthy of separate analysis beyond the scope of this entry); violence; infotainment (Author’s reformulation and emphasis added: The actual section deals with inherent tensions between news reporting and entertainment often forming a hybrid and unwieldy blend with considerable ethical concerns arising from its inconsistent character.); neoliberal contexts of art and entertainment*
3. *Justice, transparency, and conflict of interest in contemporary journalism; digital autonomous systems; peace journalism; privacy and the press*
4. *Institutional: Buddhism (Intend no harm, intend to be of benefit: a subtitle of the chapter may offer insight into such selectiveness.); communitarianism; liberal democratic as free expression; corporate media ownership; media in evil circumstances; commonalities and tensions of journalism and other professions; feminist media ethics; [lack of] global media standard, “ecology”*

Though clearly authorial in its aspects, the volume explores all facets logically presented to a reader.

Bertrand’s edited tome takes a somewhat different angle. (“Within that definition, media are so different that ethics cannot be exactly the same for each. The distinction is clear between the printed press and audiovisual media; or between ‘public’ media (under State control) and commercial media and noncommercial private media” (2018: 6).) A quote for some added insight (2018: 7):

Media ethics is a misty zone. And the guides to the area often are philosophers using obscure language and having no experience as practitioners. Or, conversely, they are practitioners with little knowledge of what the thinking has been in the field. (Bertrand’s (2018) classification of subject matter addresses Press Regimes; The Functions of Media; Types of Media; News and Entertainment; The Participants; Market, Law and Ethics; and Morality, Media Ethics and Quality Control)

In the context of the *[lack of] global media standard, ecology* (Returning to Wilkins and Christians (2009)) – it is worth mentioning that (1) there are some noteworthy attempts to address the matter and (2) the ongoing chaotic fluxes of media through digital transformation command a need for international harmonization of regulation. The latter is explored in the final section of this document. The United Nations aims to provide *self-regulation* (See *Net Neutrality* for the nexus of (self-)regulation, freedom of expression, and the global internet) advice on media ethics in practice. Recent examples noted are Haraszti’s, Puddephatt’s, and Ristow’s treatises for UNESCO (In a UNESCO paper, Chiyamwaka (2008) traces the press/media regulation, “fourth estate” to Burke (in his 1774 speech)) (Haraszti 2008; Puddephatt 2011; Ristow 2009). Critics of media self-regulation in the context of the blurring of boundaries between public interest and corporate control – and especially in the context of the unruly actions on digital media frontiers – tend to suggest that self-regulation may not be an effective way of policing the media. Normative approaches, others suggest, are dated in digital contexts (e.g. Osatuyi and Turel 2018). (The sections below will contrast such approaches, e.g., Fourie (2017), with others.) The futurist and

posthuman discourses are at the forefront of such arguments, notably ranging between radical utilitarian and post-neoliberal contexts (e.g., Mauthner 2019; Tusinski Berg 2018), while others remain more critically reserved (e.g., Mai 2016).

Into the Future: The Ethics of Digital Media and Interactive Communications

As interactive technologies continue to evolve at – metaphorically – exponential rates, the onus of proof is increasingly in the court of technology firms, developers, software engineers, and both corporate and public communications in terms of policy, practice, and (self)-regulation. The internet and gaming are the fields which both know no corporate or physical boundaries of geography (aside from rare systems of censorship) nor those of culture making this matter a global task surpassing the jurisdiction of a single UN member state. Transnational agreements, trade blocks and areas, multidisciplinary fields of theory, method, and practice are all called to the task to regulate, implement, and rethink the field of media ethics. The ongoing debates on net neutrality and open internet are pertinent to more current matters such as deepfakes, fake news, dark PR, propaganda, and disinformation and also cyber-bullying and internet-gaming, and/or pornography addiction. Adding to that are “internet crazes” and “dares” such as “the ice bucket challenge” and a more sinister set of precarious or dangerous networked, user-driven entertainment goads starting from “happy slapping” in the early 2000s. Also, the more recent COVID-related internet “challenges” (e.g. Kamil 2020), dark memes, and panic spreading through social networks and federated applications and flash-mobbing and incitement to violence (sexual or otherwise) and to suicide, harm, and self-harm – in convoluted communities of extremists of different and varied persuasions – all of these listed are active through multifarious mobile networks and increasingly personalized devices integrated with everyday life.

Moreover, with no effective means of protecting the minors and other vulnerable

individuals or groups from any such content and communication to date, all of this calls for a clear, focused, enforceable, and enlightened set of strategically defined and implemented policies on local, national, transnational, and global levels involving all stakeholders in the multitude of media, from traditional print/text news and “infotainment” media to the leaders in internet, communications, and gaming technologies. Such policies must be based on consensus in order to operate effectively; protect lives, jobs and livelihoods, and communities, individuals, and vulnerable groups; and enhance not diminish a sense of humane human interaction among the many who participate or are exposed to the multitude of media contents, networks, and devices. For that to happen, a truly comprehensive analysis, formulation, and implementation of such far-reaching policy needs to be based on enlightened and foresightful debates on media ethics. Understanding the impact of media and its fundamental ethics thus requires delving deeper into the core concepts, development, and history of human communication in order to make sense of the full complexity of its intricate, networked, and convoluted nature at the beginning of the third millennium.

Fake news is a reportedly new phenomenon, a novel form of disinformation. Disinformation is an inherent part of human communication: from the spontaneous oral spread of rumors to highly sophisticated propaganda and PR campaigns. However, the scale and scope, richness, and reach of the internet and its constituent interactive digital media have brought a qualitative (and quantitative) change unusually hard to predict or address by existing means. Namely: qualitative, as the internet relates to the transformative character of increasingly multifaceted human-to-human, human-to-machine, and machine-to-machine interaction (qualitative is also the nature of the nuanced variety of platforms and media tools, devices, and channels in use) and quantitative, as the growing numbers and probable combinations, variations, and permutations of such interactions further convolute the already complicated matter of such communications, content formats, and appearances of authenticity. With the 2017 increase of fake news

being reported and identified, especially in relation to the world's most dominant social networking corporation, Newman (2017: 7; Niklewicz 2017) cautions against exaggeration. (Reportedly, only 1% of Facebook users relied on fake news within their newsfeed though the considered impact of such phenomena on the election of 2016 was much reported since.) Nonetheless, the same section of Reuters Institute for the Study of Journalism 2017 report warns of an insightful possible trend: 12% surveyed used social media as their main source of news and around 28% of under 25 s did so, with a particular reliance on television too; 24% in that demographic across 26 countries surveyed (Newman 2017 citing Newman et al. 2016). Should this prove a trend, it would show a qualitative demographic change in the use of social media for news content.

What exacerbates the problem is the exceedingly refined ability of computer software, hardware, and network tools to enable the creation of unexpectedly convincing forgeries. Known as *deepfakes*, such interferences with the original – or still rarer contrivances designed from the outset – members of the public cannot distinguish from genuine audio-visual recordings of humans, animals, objects, and physical events. This has a considerable potential to create further erosive impact on journalism, the believability of news, authenticity of sources and facts, as well as the very reliability of reporting. Among other authors, Ward (n.d./2020) warns of such phenomena (*"Ethics of Images"*). Moreover, and in a broader context, he addresses the fine nuancing of the argument for a new school of thought to match the needs of multiple stakeholders through the means of new, redefined media ethics fit for the ever-emerging interactive communications.

He highlights the fact that such new cognitive analytical models which need to be utilized for media contexts are dictated by ethical problems, practice, and normative issues of news in a set of new media environments: *The immediacy of interactive reporting by citizens able to publish news is irreversibly transforming the sphere of media*. In such a chaotic, revolutionizing media environment, "Professional journalists share the journalistic sphere with tweeters, bloggers, citizen journalists,

and social media users," threatening the survival of journalism yet also creating new means by which journalism may transform such as "non-profit centers of investigative journalism." Identifying new mixed-media landscapes as the blends of blogging, tweeting (This specific brand of narrowcasting may become obsolete as the landscape transforms, but the nature of snappy, immediate, and link/content-rich text is likely to evolve), broadcasting, and writing of articles – by both amateurs and professionals – Ward distinguishes challenges on two principal levels: (1) trustworthiness, accuracy, and their editorialist grounds as contrasted with online news and (2) reporting from nano (Ward refers to "parochial" reporting)- to global levels. *The transformed newsroom*, he continues, would transform vertically and horizontally: vertically, with new layers and types of editors and editorial processes, with varying levels, profiles of news inputters (Not inconceivable to assume that increasingly some journalists – or even many – would no longer be human, i.e., journo-bots: Quach (2017) already reports journalists losing jobs to robots (i.e., AI software/hardware tools)), and types of input, and horizontally, a variety of media, platforms, channels, forms, and formats. (The future model Ward identified in this instance appears to be materializing steadily – see commentary by Quach (2017) and others.)

Beyond Benevolently Commercial: Influence Beyond PR to Online Goading

Social media and the emerging phenomenon of *influencers* deserve increased attention (e.g. Quinn 2016). This is chiefly towards aim of resolving the considerable riddle of arriving at suitably refined all-encompassing regulatory frameworks and addressing the large-scale, far-reaching influence of social media (corporate, technology matters) and influencers (individual agency within the said context).

There are two aspects to this:

One is the sociocultural and economic PR impact of *influencers* – the growing industry, profession, and lucrative sectors/subsectors of interactive networks, social media, and streaming

platforms. Two is the extent of interference of social media with everyday lives of the vulnerable members of the public.

For example, Wellman et al. (2020) formulate *influencers'* ethics of *authenticity to one's true self* and ethics of *authenticity of the brand and destination* (in cases of travel and tourism that they had analyzed), which helps influencers justify their own pecuniary drive. This area though in need of further analysis remains fairly unproblematic.

Those standards would require far greater scrutiny when exploring the borderline cases of influencer behavior such as the notorious YouTuber Logan Paul's (e.g., Rohde 2019) distasteful visit to the Suicide Forest (Also, his entire visit to Japan which was reminiscent of dismissive near-racist attitudes long gone from mainstream media in the West. Arguably, YouTube celebrity *rank is equivalent* to a new mainstream status; this is despite the ubiquitous channel's fragmented form) or the objectionable, safety-threatening TikTok COVID-related public lavatory "challenge" (e.g., Marr 2020; OpIndia 2020; Wray 2020; Ibbetson 2020). Indeed, these may well represent such extremes of online social media *influencer* behavior (An interesting and rather challenging case of PewDiePie aka Felix Kjellberg – a leading influencer in the gaming world and one of YouTube's greatest successes. Despite being consistently accused of racist and antisemitic rhetoric (Romano 2018), the gamer celebrity renewed a high-grossing contract with the Google subsidy in May 2020 (Thier 2020)) which tend to backfire at those emanating such content. (It does appear that common sense prevailed at a time of crisis; no reports of widespread adoption of the TikTok "challenge" had surfaced.) However, subtler and far more pervasive and formidable influence is also recorded and referred to in other cases. There is growing evidence that underregulated activities of marketing and PR efforts of social media influencers may be affecting the most susceptible (More on the subject of vulnerable recipients of social media outlined below) among the population: children (e.g., Craig and Cunningham 2017; Jaakkola 2020).

Further in the context of digital media, some critics (e.g., Fourie 2017) reject the normative

media ethics for the loss of its heuristic value in an environment he sees as very different and far more varied than that of established media. The established normative theory of media ethics he argues was built around journalism. Citing the pervasive nature of new/emerging media landscapes affecting all aspects of human communication, he posits a normative theory of ethical communication not media per se. Drawing on interactivity and network nature of non-"traditional" media (Fourie's emphasis), Fourie places the weight on a remarked shift of the communication *paradigm* from the media user to a media producer. This, presumably as new media, acts as enablers not mediator/editor in a traditional sense of the term. Fourie is not alone in such thinking. For example, in relation to the behavioral impact of social media, Bhatt (2017: 133) states that "the trajectory from cause to effect is ambiguous – *there is no individual directing the show, only computer code.*" Nonetheless, Grimmelmann (2015) does not perceive "code" as a mere inanimate bit of electronic processing tool. Using the examples of Facebook and OkCupid as the insightful opening of his article, he examines the two algorithms' goal-directed ability to influence users' emotions. The following example does not place responsibility on social media as such. Indeed, it may further emphasize the shift toward individual responsibility of users as actors, agents, and (new-)media producers identified by Fourie (and other critics of "traditional" media regulation).

It does, however, indicate how complex and urgent the matter is. This, not least as – as many had pointed out – there are inherent challenges to regulating and policing the online behavior of the many millions of users of the internet and digital media, including social networks. (Reports appear in the mainstream press concerning the challenging role and PTSD impact of the work pressures affecting social media moderators exposed daily to the full spectrum of extreme content.) Excepting dictatorial bans on content and networks, it is exceptionally difficult to pre-empt the impact of such phenomena as described below within a social framework promoting democratic values and freedom of expression (e.g. in Woodhouse 2019).

An overpowering cause for critical change and the adoption of novel thinking and a profoundly transformative approach to digital media regulation may be found in the truly sinister “blue whale challenge.” An online “game” impelling vulnerable children and young adults toward progressive self-harm and suicide had affected victims across the globe, with fatalities reported (Even typing the search engine term “blue whale challenge” leads the user to a paid advertisement for mental health assistance to tackle depression and suicidal thoughts. This may serve as evidence of a socially conscious response on the part of both public and private mental health and online safety-focused stakeholders) (e.g., Narayan et al. 2019; Adeane 2018; Egypt Today 2018; Rossow 2018). In the UK, for example, the duty of care organization Educare published a comprehensive guide aimed for the protection of children and young adults from the menacing online phenomenon mentioned above (Taylor 2018).

It does appear that a systemic solution is required. With the myriad companies and stakeholders involved across the globe, ever-accelerating pace of technological development, and innovation in convoluted communications, the task is evidently requiring cohesive and coordinated approaches. It remains unclear to what extent regulating online environments can be attained globally. It does seem clear that the means of non-interactive media regulation and the logic of traditional media ethics do not appear fit for purpose any longer, as stated by multiple authors, practitioners, and critics. The organizational challenge remains, and addressing it would involve resolving the contradictions across the stakeholder spectrum. Such contradictions consist of those of political, ideological, economic, strategic, and – not least – moral description across the world’s countries, territories, business organizations, social advocacies, and civil society organizations.

Summary

Media ethics is a complex subject that is set to rise in complexity as the media, technologies that support them, and channels of communication,

representation, content distribution, and dissemination evolve in terms of both number and enhanced convolution. The ultimate problematic aspect of contemporary media ethics in practice is policing the internet and its myriad forms. The sole possibility of enforcing a sense of control in such environments is the utilization of information and communications technologies (ICT) and their tracking capabilities to assert total control. This of course is tantamount to censorship and is therefore incompatible with notions of democracy and free speech upheld by many policy-making and governance bodies the world over. On the other hand, many successfully argue for the greater enforcement of accountability on the part of both the disseminator/producer and consumer/user of media content – in social media, often those roles are interchangeable. Therefore, businesses, governments, various stakeholders, and supra-governmental bodies formulating media policies are left with a continuous paradox of balancing freedoms of speech and expression against the liability and responsibility of actors big and small, state-owned or governed, and corporate, entrepreneurial, and individual alike. It appears that the matter can only progress forward with costly and effort-intensive attention to detail not dissimilar from the role of human moderators of social media. From the outset of automated content creation and dissemination, and we may look back at Gutenberg’s press for inspiration, the notions of control and accountability hanged in fine balance. It is arguably the role of civil society with its multiple media stakeholders to keep watch over technological innovation to pre-empt the problematic notions such as deepfakes and viral propaganda campaigns while allowing users and creators, journalists of all description and audiences of any type, their rightful access to information, content, and distribution of it. Therefore, the notion of media ethics strikes at the very heart of early twenty-first-century society.

Cross-References

- [Media Ethics](#)
- [Online Communities](#)

References

- Adeane, A. (2018). Blue Whale: What is the truth behind an online 'suicide challenge'? [online] *BBC Trending*. 13 January 2019. Available at: <https://www.bbc.com/news/amp/blogs-trending-46505722>. Accessed 22 May 2020.
- Bertrand, C. J. (Ed.). (2018). *Media ethics and accountability systems*. London/New York: Routledge.
- Bhatt, S. (2017). The internet and regulation. In *How digital communication technology shapes markets* (pp. 133–142). Cham: Palgrave Macmillan.
- Chiyamwaka, B. (2008). *Media ethics: A call to responsible journalism* [online]. UNESCO Database.
- Christians, C. G. (1977). Fifty years of scholarship in media ethics. *Journal of Communication*, 27, 19–29.
- Christians, C. G., Fackler, M., Richardson, K. B., Kreshel, P. J., & Woods, R. H., Jr. (2017). *Media ethics* (10th ed.). New York: Routledge.
- Craig, D., & Cunningham, S. (2017). Toy unboxing: Living in a (n unregulated) material world. *Media International Australia*, 163(1), 77–86.
- Egypt Today. (2018). 'Blue Whale' survivor tells the game suicide instructions. [online] 12 April 2018. Available at: <https://www.egypttoday.com/Article/2/48319/Blue-Whale-survivor-tells-the-game-suicide-instructions>. Accessed 22 May 2020.
- Fourie, P. J. (2017). Normative media theory in the digital media landscape: From media ethics to ethical communication. *Communicatio*, 43(2), 109–127.
- Grimmelmann, J. (2015). The law and ethics of experiments on social media users. *Colorado Technology Law Journal*, 13, 219.
- Haraszi, M. (2008). *The media self-regulation guidebook*. Vienna: The OSCE Representative.
- Ibbetson, R. (2020). California 'influencer' says he is in hospital with coronavirus just days after posting a video of himself licking a toilet bowl for a revolting TikTok challenge. [online] *Daily Mail*. 26 March 2020. Available at: <https://www.dailymail.co.uk/news/article-8150945/amp/Influencer-hospital-coronavirus-just-days-posting-video-licking-toilet.html>. Accessed 22 May 2020.
- Jaakkola, M. (2020). From vernacularized commercialism to kidbait: Toy review videos on YouTube and the problematics of the mash-up genre. *Journal of Children and Media*, 14(2), 237–254.
- Kamil, A. (2020). TikTok user licks toilet bowl, starts 'coronavirus challenge'. [online] *Today*. 16 March 2020. Available at: <https://www.todayonline.com/singapore/tik-tok-user-licks-toilet-bowl-starts-coronavirus-challenge>. Accessed 22 May 2020.
- Mai, J. E. (2016). Big data privacy: The datafication of personal information. *The Information Society*, 32(3), 192–199.
- Marr, M. (2020). Model who licked toilet seat in coronavirus challenge is 'unbothered' by outrage. [online] *Miami Herald*. 17 March 2020. Available at: <https://amp.miamiherald.com/miami-com/miami-com-news/article241270296.html>. Accessed 22 May 2020.
- Mauthner, N. S. (2019). Toward a posthumanist ethics of qualitative research in a big data era. *American Behavioral Scientist*, 63(6), 669–698.
- Narayan, R., Das, B., Das, S., & Bhandari, S. (2019). The depressed boy who accepted "Blue Whale Challenge". *Indian Journal of Psychiatry*, 61(1), 105–106. [online] Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6341922/>. Accessed 22 May 2020.
- Newman, N. (2017). *Journalism, media, and technology trends and predictions 2017. Digital news project*. Reuters Institute for the Study of Journalism, University of Oxford.
- Niklewicz, K. (2017). Weeding out fake news: An approach to social media regulation. *European View*, 16(2), 335–335.
- OpIndia. (2020). Covidiot who had licked toilet as part of 'Coronavirus Challenge' tests positive for Covid-19. [online] *OpIndia*. 26 March 2020. Available at: <https://www.opindia.com/2020/03/covidiot-lick-toilet-coronavirus-challenge-test-positive-covid-19/>. Accessed 22 May 2020.
- Osatuyi, B., & Turel, O. (2018). Tug of war between social self-regulation and habit: Explaining the experience of momentary social media addiction symptoms. *Computers in Human Behavior*, 85, 95–105.
- Puddephatt, A. (2011). The importance of self-regulation of the media in upholding freedom of expression. *Communication and Information. Debates Series*, 9.
- Quach, K. (2017). Stop the press: Jourmos not happy losing jobs to journo bots, say jourmos. [online] *The Register*. 6 March 2017. Available at: https://www.theregister.co.uk/2017/03/06/human_hacks_will_be_replaced/. Accessed 1 May 2020.
- Quinn, K. (2016). Why we share: A uses and gratifications approach to privacy regulation in social media use. *Journal of Broadcasting & Electronic Media*, 60(1), 61–86.
- Ristow, B. (2009). *Sword and shield: Self-regulation and international media*. Center for International Media Assistance (CIMA).
- Rohde, P. (2019). Value of soft news and celebrity news—'it is [not] all the same': What celebrity journalism can learn from the 'Logan Paul Suicide Forest Scandal'. Available at SSRN 3465051.
- Romano, A. (2018). *YouTube's most popular user amplified anti-Semitic rhetoric*. Again. [online] *Vox*. 13 December 2018. Available at: <https://www.vox.com/2018/12/13/18136253/pewdiepie-vs-tseries-links-to-white-supremacist-alt-right-redpill>. Accessed 20 May 2020.
- Rossow, A. (2018). Cyberbullying taken to a whole new level: Enter the 'Blue Whale Challenge'. [online] *Forbes*. 28 February 2018. Available at: <https://www.forbes.com/sites/andrewrossow/2018/02/28/cyberbullying-taken-to-a-whole-new-level-enter-the-blue-whale-challenge/#5c9bcb92673e>. Accessed 21 May 2020.
- Taylor, J. (2018). What is the Blue Whale Challenge? [online] *Educare*. Available at: https://www.educare.co.uk/files_cms/resources/What_is_the_blue_whale_challenge.pdf. Accessed 22 May 2020.

- Thier, D. (2020). PewDiePie signs deal with YouTube despite history of racist, anti-semitic comments. [online] *Forbes*. Available at: <https://www.forbes.com/sites/davidthier/2020/05/05/pewdiepie-signs-deal-with-youtube-despite-history-of-racist-anti-semitic-comments/#117c8dfa490a>. Accessed 20 May 2020.
- Tusinski Berg, K. (2018). Big data, equality, privacy, and digital ethics. *Journal of Media Ethics*, 33(1), 44–46.
- Ward, S. J. A. (n.d.). *Digital media ethics*. [online] University of Wisconsin-Madison. Center for Journalism Ethics. Available at: <https://ethics.journalism.wisc.edu/resources/digital-media-ethics/>. Accessed 22 May 2020.
- Wellman, M. L., Stoldt, R., Tully, M., & Ekdale, B. (2020). Ethics of authenticity: Social media influencers and the production of sponsored content. *Journal of Media Ethics*, 1–15.
- Wilkins, L., & Christians, C. G. (Eds.). (2009). *The handbook of mass media ethics*. New York: Routledge.
- Wilkins, L., & Christians, C. G. (Eds.). (2020). *The Routledge handbook of mass media ethics*. New York: Routledge.
- Woodhouse, J. (2019). House of commons library: Briefing paper number 8743: 19 December 2019: Social media: How much regulation is needed?
- Wray, M. (2020). ‘Corona challenge’: TikTok star films herself licking airplane toilet seat. [online] *Global News*. 23 March 2020. Available at: <https://globalnews.ca/news/6718358/tiktok-toilet-seat-lick-coronavirus/amp/>. Accessed 22 May 2020.

Medicine and CSR

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Abbreviations

CSR	Corporate Social Responsibility
CSV	Creating Shared Value
ISO	International Organization for Standardization
LMIC	Lower Middle-Income Country
PQ	Patient-Perceived Quality of Care
SDGs	Sustainable Development Goals
UHC	Universal Health Coverage
UN	United Nations
WHO	World Health Organization

Synonyms

CSR; CSR in healthcare sector; Health system; Healthcare; Pandemic; Quality of services

Introduction

The literature in corporate social responsibility (CSR) in several specific sectors is pretty much developed. The literature on medicine and CSR is scarce. The joined term medicine and CSR is vague since it could include:

- CSR programs of health-care organizations related to medicine
- CSR programs of health-care organizations not exclusively related to medicine like environmental programs
- CSR programs of any organization, that are related to health of employees and citizens in general

Thus, it is important to underline that by the term medicine and CSR, the first concept is described, in other words it is about the CSR policies of health-care organizations that are closely related with medicine, and possibly with their core activities.

The dipole of medicine and CSR refers to any healthcare organization that provides either health-related services or products indicatively but not exclusively, public, and private hospitals, pharmaceutical companies, clinics, paramedic firms, industries that manufacture high tech medical equipment, rehabilitation centers, biotechnology firms, etc. The healthcare sector involves several professions like doctors, professional nurses, several health allied professions, medical engineers, chemists, biologists, managers of the healthcare organizations, etc.

CSR is described by International Organization for Standardization (ISO) as the concept that calls corporations to handle social, environmental, and economic issues for the benefit of their employees and local communities (Dănescu and Popa 2020). Generally, CSR policies of health-care organizations could include medicine supply facilities, nursing facilities, food supply facilities, ambulance service, medical assistance and diagnostic medical exams, distribution of medicines, etc. (Rahman et al. 2010).

Thus, it is interesting to see the penetration of the concept of CSR in health sector and whether these organizations follow the modern trends in

CSR as other corporations do in various fields or there are lacunae in the design and application of CSR healthcare activities.

The United Nations for Sustainability in Health

The United Nations (UN) offers vague suggestions for different levels of CSR standards ranging from a minimum where “businesses fulfill their legal obligations or, if laws or enforcement are lacking, that they ‘do no harm;’” to a maximum, which is “the active alignment of internal business goals with externally set societal goals (those that support sustainable development)” (United Nations 2015).

In 2015, all the countries in the UN signed the 2030 Agenda for Sustainable Development. It sets out 17 Goals (SDGs), which include 169 targets. These wide-ranging and ambitious goals interconnect. Goal 3 of UN Agenda for 2030 Sustainable Development is about global health. Specifically, goal 3 is to ensure healthy lives and promote well-being for all at all ages. The individual targets are (United Nations 2015):

- *By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.*
- *By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births.*
- *By 2030, end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases.*
- *By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.*
- *Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.*
- *By 2020, halve the number of global deaths and injuries from road traffic accidents.*
- *By 2030, ensure universal access to sexual and reproductive health-care services, including*

for family planning, information and education, and the integration of reproductive health into national strategies and programs.

- *Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality, and affordable essential medicines and vaccines for all.*
- *By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.*
- *Strengthen the implementation of the World Health Organization (WHO) Framework Convention on Tobacco Control in all countries as appropriate.*
- *Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full provisions in the Agreement of Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.*
- *Substantially increase health financing and the recruitment, development, training, and retention of the health workforce in developing countries, especially in least developed countries and small island developing states.*
- *Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction, and management of national and global health risks.*

Corporate Governance in Health System

The major actors in the healthcare sector are public and private hospitals and pharmaceutical firms. Especially pharmaceutical companies have big turnovers and some of them belong in the most successful companies financial wise all over the world. Health-care companies must compete inside a complicated frame with strict regulation,

needs for employees of high expertise, high cost of machinery and technological medical equipment, increased quality demands, and a hefty relation with the community (Hossain et al. 2019).

Health systems' task is the provision of health-care services meaning services that upgrade, retain, or restore the health of people. This task includes the usual care provided by public and private hospitals and clinics, family doctors, other activities like the prevention and control of communicable diseases, health promotion, health workforce planning, improving the social, economic, or environmental conditions in which people live. Health systems should take care the equal approach to these services by all citizens, that these services are responsive to individual needs and vulnerabilities and that they do not impact a high cost on citizens and their families (World Health Organization Europe n.d.-b).

Effective Health System Governance for Universal Health Coverage (UHC)

Leadership and governance should aim to secure effective oversight, coalition-building, regulation, attention to system-design, and accountability. Three main types of stakeholders who interact with each other determine the health system and its governance:

- The state (government organizations and agencies at central and sub-national level)
- The health service providers (different public and private for and not for profit clinical, para-medical, and non-clinical health service providers; unions and other professional associations; networks of care or of services)
- Societies (population representatives, patients' associations, CSOs/NGOs, citizens associations protecting the poor, etc.) who become service users when they interact with health service providers.

In the framework of the Sustainable Development Goals agenda, WHO works to support countries to exercise effective health systems governance, aiming on strengthening the capacity of states to design and apply policies toward the successful completion of the plan UHC by 2030.

This plan in brief targets to make quality health services available and affordable to all citizens of the planet. It includes the full range of necessary, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care across the life course (World Health Organization Europe n.d.).

CSR in Healthcare Sector

CSR is described as the final contribution of business to sustainable development which respects the ability of future generations to cover their own needs (Brundtland 1987). CSR policy could be expressed in a wide spectrum of activities which ranges from donations and philanthropy because it is the "right thing to do," to risk management, all the way to creating shared value (CSV) which incorporates CSR in the core of all corporate functions attempting to simultaneously create benefits for the company and society (Droppert and Bennett 2015). This range regarding the conception and execution of CSR policies is well portrayed by the three types of CSR: (a) ethical, when a firm avoids any detrimental action against society, (b) altruistic, when a firm proceeds one step further than ethical CSR by giving resources for environmental and social issues even with a negative financial impact for it, and (c) strategic, when a firm designs a detailed policy that recognizes the importance of stakeholders' satisfaction and finds a way in order CSR to reward all, including the firm itself (Carroll 1991; Jones 1995; Lantos 2011).

Healthcare companies design CSR activities for their employees, local communities, and citizens in the countries where they are active. They fund and consult social projects, target entrepreneurial and social environments, implement awareness campaigns on population health, and invest in health projects. They also design policies for the preservation of environment, the reduction of pollutant emissions, and waste management, which support public health in the long term as SDGs acknowledge (Dănescu and Popa 2020).

Pharmaceutical companies are special cases because their business decisions directly impact

human health, making CSR efforts particularly important. These firms have been criticized for specific behaviors such as setting prohibitively high prices and sluggishness in responding to demands to provide access to life-saving drugs for poor populations (Droppert and Bennett 2015). Recent epidemiological and demographic shifts, notably the HIV/AIDS pandemic, have magnified pressures to actively work to promote societal well-being. Pharmaceutical companies have been critiqued for using CSR to repair compromised reputations or to reverse public beliefs about their commercial endeavors being unethical (Droppert and Bennett 2015).

A list with the main CSR activities of healthcare companies categorized in three main groups is presented below (Droppert and Bennett 2015; Hossain et al. 2019). The groups concern donations, actions for the enhancement of health systems, and several other programs with various content (Table 1).

The motivations behind these CSR programs from healthcare firms are listed in the next table (Coțiu et al. 2014; Droppert and Bennett 2015; Hossain et al. 2019). They are divided in three main categories: (a) motivations that enhance the reputation of the firm, (b) motivations that distinguished the firm among the competitors, and (c) motivations that are relevant to business ethics (Table 2).

Patient satisfaction is tightly connected with various advantages like greater patient involvement and compliance with therapeutical process, high staff morale, positive word of mouth, or a minimization in patients' litigation intent. Participants highly appreciate positive interactions with the medical staff, expect a correct diagnosis and treatment, and seem to be less affected by administrative procedures or accommodation facilities (Coțiu et al. 2014). Thus, there is a statistically significant link between satisfaction and loyalty (Kessler and Mylod 2011).

Medicine and CSR in Coronavirus Era

Several urgent CSR actions have been implemented by corporations worldwide that are beyond the laws

Medicine and CSR, Table 1 CSR types and relevant specific activities by healthcare organizations

Type	Activity
Donation	Differential pricing sales for medicines for resource poor countries Special licensing agreements for medicines for resource poor countries Free medicine supply Paid medical expenses for various rare diseases and very poor families Free nursing for people of very low income and other vulnerable groups Food supply for people of very low income and other vulnerable groups Medical assistance and programs of diagnostic exams for people of very low income, other vulnerable groups, citizens in remote rural areas and remote islands Provision of ambulance
Health systems strengthening	Training of health care workers Improved local manufacturing Increased product distribution capacity Infrastructure investment Supply-chain support Private or informal provider engagement Promoting uptake of health insurance
Miscellaneous	Loan and microfinance programs mHealth ^a initiatives Social marketing Health issue awareness campaigns Advocacy and policy Targeted research and development, specifically to meet developing country health needs or products with no commercial potential International employee placement program Patients' satisfaction survey

^aThe global observatory for eHealth of the World Health Organization defines mHealth as "medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants, and other wireless devices" (WHO n.d.)

for the confrontation of the pandemic aiming to protect their employees and society in general. Healthcare organizations and especially hospitals and pharmaceutical companies have participated in

Medicine and CSR, Table 2 Groups of motivations behind CSR activities of healthcare organizations

Type	Motivations
Reputational benefit	Perception of firm by consumers Perception of firm by potential funders Relationship and trust building with potential partners and stakeholders Employee recruitment, satisfaction, engagement, and innovation Patients' satisfaction Ranking on stock market indices
Competitive advantage	Entering new markets Expanding consumer base Intelligence gathering on new markets Anticipated long-term financial gain Increased cost-effectiveness of interventions and programs in developing countries Improved efficiencies Opportunity for innovations Special access to local government officials and decision making Customer and employee loyalty
Philanthropy and health impact	Obligation as a health care company Improved population health impact Increasing patient access to necessary medications/health services Greater patient involvement and compliance with therapeutical process

these efforts and how it could be different since the protection of individual and public health is their specialization. During the pandemic healthcare companies have implemented CSR programs like the abovementioned with even more intense pace. Additionally, they have proceeded with the swift design and implementation of new CSR programs especially adjusted to the pandemic conditions. As this pandemic has dual nature, both medical and financial due to the vast consequences of the pandemic and the aftermath measures of social distancing to every country of the world, healthcare organizations must support all population against COVID-19, and especially vulnerable groups of

people like unemployed citizens and people in lower middle-income countries (LMIC), which may have not access to COVID-19 vaccines and other personal protection material. Critical CSR is the specific kind of CSR that has been developed under these unprecedented conditions that threat public health and global economy. Critical CSR is a hybrid newly formed type of CSR that consists of a combination of strategic CSR and tactical CSR since in brief it combines the strategic characteristics of the first and the swift response that characterizes the second type (Panagiotopoulos 2021).

The pandemic has severely negatively affected the health care quality as perceived by inpatients, both in COVID and in non-COVID ones, but more intensely in the former. For a health care organization, this knowledge implies a chance for improvement to be better qualified to face the pandemic (Lopez-Picazo et al. 2021). Some researchers have noticed an improvement in the PQ during the pandemic because of the status of high readiness and its declaration, which may be the most influential factor (López-Picazo Ferrer et al. 2021). Other researchers support that notwithstanding the sudden expansion capacity in healthcare services during the COVID-19 pandemic (Panagiotopoulos 2021), this does not implicate that necessarily the PQ has been increased too. The pandemic may has put aside the quality of care under increasing patient loads. A recent study that examined in-hospital mortality of intubated COVID-19 patients in Greece, in relation to total intubated patient load, intensive care unit (ICU) availability, and hospital region indicates that in-hospital mortality of severely ill COVID-19 patients is adversely affected by high patient load even without exceeding capacity, as well as by regional inequalities. This underlines the need for more substantial strengthening of healthcare services, focusing on equity and quality of care besides just expanding capacity (Lytras and Tsiodras 2021).

As healthcare companies have the general know-how to support public health and health systems and at the same time the sector has accumulated big earnings due to the pandemic, these companies as modern corporate citizens must apply critical CSR strategies to protagonists in the global endeavors to tackle the pandemic. A main

target of these critical CSR policies should be equal access to COVID-19 medicines and vaccines for all people worldwide independently of their personal income, and the stabilization of the health system in every country to keep high quality of healthcare for COVID and non-COVID incidents across all regions in every country.

Conclusion

As modern corporations do, companies in the wide range of medicine sector realize a demanding call from civil society to consider themselves as corporate citizens in a changing globalized world, by designing CSR policies that would certify that they do business with a sense of responsibility and duty to society. Thus, healthcare organizations are expanding and/or reforming their CSR policies in their organizations. CSR may vary among companies of different type inside the wide healthcare field. Such differences are relevant to internal conditions concerning the organization like CSR comprehension, corporate structures for supporting CSR, on-going CSR programs, motivations for CSR, assessment of CSR, recording of benefits to stakeholders and the company itself (Droppert and Bennett 2015), and external conditions like local standard of living, legal frame, corporate tax regulations, etc.

CSR is a modern issue that occupies corporations, and thus there is an evolving comprehension of CSR within organizations. A lot of them concerning their internal and external position regarding CSR could characterize themselves in a transition phase. Sometimes, competition provides good examples of CSR practices and a real way for a company to examine and verify possible benefits from CSR policies back to the organization (Droppert and Bennett 2015).

Some companies consider that philanthropy should be wholly benevolent whereas CSR aims to shape financially sustainable models that can be mutually beneficial to the firms and the stakeholders (Droppert and Bennett 2015). In terms of CSR strategy, firms are at different points on a spectrum ranging from philanthropic donations to integrated systemic shared value business (CSV)

models where firms produce societal value and economic value for them or in other words they are crossing from philanthropic to commercial and what lies between (Droppert and Bennett 2015). Patient satisfaction may be one of the desired outcomes of healthcare information sourced from specialized CSR surveys and patient satisfaction should be as indispensable to assessments of quality and already applied CSR programs as to the improvement of existing programs and the planning and implementation of future CSR activities.

Summary

The experience of pandemic has underpinned the value of healthcare organizations and CSR. Especially, the combination of the two has contributed a lot to humanity to tackle the pandemic and its consequences in social, physical, mental, emotional, organizational, and financial level. Healthcare organizations apply a variety of CSR programs that are categorized into three main types: a) donations, b) actions for the enhancement of health systems, and c) several other programs with various content. Proportionally, there are detected several incentives for these CSR policies which could be listed in three main categories: a) motivations that enhance the reputation of the firm, b) motivations that distinguished the firm among the competitors, and c) motivations that are relevant to business ethics. It is important for healthcare organizations to deepen their understanding of CSR and sustainability in general in order to transform themselves in modern organization of twenty-first century which can take care of humans and support them multidimensionally even during future pandemics.

Cross-References

- [Critical CSR](#)
- [CSR](#)

References

- Brundtland, G. H. (1987). *Report of the world commission on environment and development: "Our common future"*. United Nations.

- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Cotiu, M. A., Crișan, I. M., & Catană, G. A. (2014). Patient satisfaction with healthcare – A focus group exploratory study. In S. Vlad & R. V. Ciupa (Eds.), *International conference on advancements of medicine and health care through technology; 5th–7th June 2014, Cluj-Napoca, Romania* (Vol. 44, pp. 119–124). Springer International Publishing. https://doi.org/10.1007/978-3-319-07653-9_24.
- Dănescu, T., & Popa, M.-A. (2020). Public health and corporate social responsibility: Exploratory study on pharmaceutical companies in an emerging market. *Globalization and Health*, 16(1), 117. <https://doi.org/10.1186/s12992-020-00646-4>.
- Droppert, H., & Bennett, S. (2015). Corporate social responsibility in global health: An exploratory study of multinational pharmaceutical firms. *Globalization and Health*, 11(1), 15. <https://doi.org/10.1186/s12992-015-0100-5>.
- Hossain, M. S., Yahya, S. B., & Khan, M. J. (2019). The effect of corporate social responsibility (CSR) healthcare services on patients' satisfaction and loyalty – A case of Bangladesh. *Social Responsibility Journal*, 16(2), 145–158. <https://doi.org/10.1108/SRJ-01-2018-0016>.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20(2), 404–437.
- Kessler, D. P., & Mylod, D. (2011). Does patient satisfaction affect patient loyalty? *International Journal of Health Care Quality Assurance*, 24(4), 266–273. <https://doi.org/10.1108/09526861111125570>.
- Lantos, G. P. (2011). *The ethicality of Altruistic corporate social responsibility*. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.664.6645&rep=rep1&type=pdf>
- Lopez-Picazo, J. J., Vidal-Abarca, I., Beteta, D., López-Ibáñez, M., & García-Vázquez, E. (2021). Impact of the COVID-19 Pandemic on the Hospital: Inpatient's Perceived Quality in Spain. *Journal of Patient Experience*, 8, 237437352199862. <https://doi.org/10.1177/2374373521998625>
- Lytras, T., & Tsiodras, S. (2021). Total patient load, regional disparities and in-hospital mortality of intubated COVID-19 patients in Greece, from September 2020 to May 2021. *Scandinavian Journal of Public Health*, 140349482110599. <https://doi.org/10.1177/14034948211059968>
- Panagiotopoulos, I. (2021). Novel CSR & novel coronavirus: Corporate social responsibility inside the frame of coronavirus pandemic in Greece. *International Journal of Corporate Social Responsibility*, 6(1), 10. <https://doi.org/10.1186/s40991-021-00065-7>.
- Rahman, S., Jahan, S., & McDonald, N. (2010). CSR by Islami Bank in healthcare & stakeholders' perception. *Bangladesh Journal of Medical Science*, 9(4), 208–215.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. UN; A/RES/70/1. <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- World Health Organization Europe. (n.d.). *Health System Governance* [WHO]. https://www.who.int/health-topics/health-systems-governance#tab=tab_1
- World Health Organization Europe. (n.d.)-b. *Health System Governance* [WHO]. https://www.who.int/health-topics/health-systems-governance#tab=tab_1

Membership of Social Groups

► Social Capital, Interpretation of

Mergers and Acquisitions

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Synonyms

M&A

Description

Mergers and acquisitions (abbreviation: M&A) are company transactions in which the ownership of companies, specific operating units, or other business organizations is transferred to or combined with other entities. M&A transactions are among the most visible manifestations of strategy at the corporate level. With a single transaction, the strategic course of the organizations involved can be altered permanently, and its size changed dramatically (Schweizer 2002).

As part of the strategic management of companies and other organizations, M&A transactions can allow organizations to grow, to improve their competitive position, or to transform the nature of their business by giving organizations immediate

access to technologies, products, distribution channels, or personnel (Schweizer 2002). M&A transactions are not a rare phenomenon. Since 2000, more than 790,000 M&A transactions have been announced worldwide, cumulating to a known value of over 57 trillion USD (Institute for Mergers, Acquisitions and Alliances 2021). Economic, regulatory, or technological shocks, as well as high stock market evaluations, can lead to so-called merger waves, a clustering of M&A transactions at the aggregate level (Harford 2005).

Introduction

Although the terms “merger” and “acquisition” do not describe the same thing, the growing literature in this field suggests that they are comparable in nature and typically have the same or very similar impacts on companies (Schweiger et al. 1987). Therefore, the terms “merger” and “acquisition” are often used interchangeably.

In a more technical sense, “acquisition” refers to any transfer of ownership. In contrast, a “merger” refers to a transfer of ownership in which one entity legally dissolves into another or both entities merge into a third entity created especially for this purpose (Lajoux 1998). Often, the term “merger” is also used to mean the combination of two companies of substantially equal size, while the term “acquisition” is used to indicate the combination of a large company with a smaller one (Schweizer 2002).

Types of M&a

Even though the terms “merger” and “acquisition” are often used interchangeably, there exist significant differences between these two types of company transactions (Schweizer 2002). Mace and Montgomery Jr. (1962) described and analyzed an interesting phenomenon in this context: When talking with executives of the target company, management representatives of the acquiring company often refer to a “merger” of the two companies, even though it is implied and apparent

that their own company plans to acquire the other. But when discussing the transaction with their board of directors, the acquiring company’s management representatives usually talk about an “acquisition.” This phenomenon has also been observed in the case of the DaimlerChrysler merger, one of the most famous M&A transactions ever. In the words of Mace and Montgomery Jr. (1962):

There seemed to be an inoffensive quality in the word ‘merge’ not found in the word acquire. As one executive stated, ‘The reasons for the difference are unclear, but management find comfort in the merging of mutual interests. Being acquired connotes being had!’ (Mace and Montgomery Jr. 1962, pp. 3–4)

For analytical purposes, it is common practice to distinguish M&A transactions with regard to the extent to which the activities of the acquired organizations are related to those of the acquirer (Cartwright and Cooper 2013). This kind of classification distinguishes four different categories of M&A transactions (Hovers 1973; Kitching 1967; Walter 1985).

- **Vertical M&A** is the combination of two companies from successive processes within the same industry with an actual or potential buyer-seller relationship (Cartwright and Cooper 2013). A company might, for example, choose to acquire a supplier (backward integration) or a firm that could distribute its products (forward integration) (Schweizer 2002).
- **Horizontal M&A** comprises the combination of two similar companies in the same industry and often occurs when the companies involved produce one or more of the same or closely related products or services in the same geographic area (Cartwright and Cooper 2013).
- **Conglomerate M&A** occurs when the acquired company is in a completely unrelated field of business activity (Cartwright and Cooper 2013). The rationale usually given for such M&A transactions is that the combination of the firms enables entry into an attractive business or industry and spreads the company’s risk (Schweizer 2002).

- **Concentric M&A** means a transaction where the acquired company is part of a new but related field into which the acquiring company wants to expand (Cartwright and Cooper 2013). This kind of M&A transaction is often referred to as product extension. It occurs when the acquiring and acquired companies are functionally related in a field but sell products or services that compete directly with one another.

Napier (1989) suggests a different categorization and outlines that M&A transactions can also be distinguished depending on the degree of integration that is needed to achieve the transaction objectives. Based on the integration approach, the following three types can be defined:

- In **extension mergers**, the acquiring company does not plan to change, other than perhaps marginally, the way in which the acquired company conducts its business (Napier 1989). This approach is also referred to as the “hands-off approach” (Schweizer 2002).
- In **collaborative mergers**, the success of the transaction depends upon the successful integration of operations (“synergy mergers”) or the exchange of know-how or other expertise (“exchange mergers”) (Napier 1989).
- In **redesign mergers**, the acquiring company plans to implement wide-scale changes, whereby the acquired company adopts the practices and procedures of the acquiring company (Napier 1989).

Post-merger Integration

The terms “post-merger integration” and “post-acquisition” refer primarily to the art of combining two or more companies after they came under common ownership – not just on paper but in reality. Integration occurs at several levels, e.g., by combining the IT, HR, or accounting systems of the previously independent companies or by creating a single legal entity. Other essential post-merger steps might be the integration of product lines, production systems, technologies, or other physical assets. Cultural integration

might be necessary as well. It is crucial to keep in mind that not all of these integration levels are always needed or planned. The degree of integration required and the fields of integration are determined by various contingencies (e.g., company culture, underlying strategy) and need to be planned carefully (Schweizer 2002).

During post-merger integration, it quite often comes to downsizing and restructuring: It is usually a stressful and demanding time for the companies and all people involved and needs to be executed skillfully and wholeheartedly. Researchers and practitioners have shown a keen interest in exploring the value-creating or destroying effects of M& transactions and found that a large number (around 50%) of M&As are not creating but destroying company value (Child et al. 2001).

Summary

M&A transactions are undeniable among the most intense and evident manifestations of strategy at the corporate level. With a single M&A transaction, the strategic course of the companies involved can be altered permanently (Schweizer 2002). With the help of such transactions, companies can gain fast access to technologies, products, distribution channels, personnel, or desirable cost and market positions. Therefore, one of the key challenges in managing M&A transactions is to make sure that these transactions support the firm’s overall strategy (Haspeslagh and Jemison 1991).

Cross-References

► [Downsizing](#)

References and Readings

- Cartwright, S., & Cooper, C. L. (2013). The impact of mergers and acquisitions on people at work: Existing research and issues. In C. L. Cooper (Ed.), *From stress to wellbeing volume 2*. London: Palgrave Macmillan.

- Child, J., Faulkner, D., & Pitkethly, R. (2001). *The Management of International Acquisitions*. Oxford University Press.
- Harford, J. (2005). What drives merger waves? *Journal of Financial Economics*, 77(3), 529–560.
- Haspeslagh, P. C., & Jemison, D. B. (1991). *Managing acquisitions. Creating value through corporate renewal*. New York: The Free Press.
- Hovers, J. (1973). *Expansion through acquisition*. London: Business Book Ltd..
- Institute for Mergers, Acquisitions and Alliances. (2021). M&A Statistics. <https://imaa-institute.org/mergers-and-acquisitions-statistics/>. Accessed: 5 August 2021.
- Kitching, J. (1967). Why do mergers miscarry? *Harvard Business Review*, 45(6), 84–101.
- Lajoux, A. R. (1998). *The art of M&A integration. A guide to merging resources, processes, and responsibilities*. New York: McGraw-Hill.
- Mace, M. L., & Montgomery, G. C., Jr. (1962). *Management of corporate acquisitions*. Boston, MA: Division of research, Harvard Business School.
- Napier, N. K. (1989). Mergers and acquisitions: Human resource issues and outcomes. A review and suggested typology. *Journal of Management Studies*, 26(3), 271–289.
- Schweiger, D. M., Ivancevich, J. M., & Power, F. R. (1987). Executive actions for managing human resources before and after acquisition. *Academy of Management Perspectives*, 1(2), 127–138.
- Schweizer, L. (2002). *Post-acquisition integration of small biotechnology firms in the structure of large pharmaceutical companies*. Bamberg: University of Bamberg.
- Walter, G. A. (1985). Culture collisions in mergers and acquisitions. In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, & J. Martin (Eds.), *Organizational culture* (pp. 301–314). Beverly Hills, CA: Sage.

Metal-Contaminated Soils and Waters

► Phytoremediation

Metamorphosis

► Communication and Innovation

Mezirow's Transformative Learning Theory

► Transformative Learning

Mezzanine Finance

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Synonyms

Alternative finance; Financial innovation; Hybrid finance

Definitions of Corporate Finance and Stylized Types of Financing

In economics, companies can be analyzed in various ways. Among other approaches, researchers try to model the “value created” by a company. From the perspective of the value chain concept, value creation is thought of as a series of activities performed by the firm. In contrast for corporate finance, companies are modeled as a system of cash flows (Berk et al. 2020; Brealy, Myers and Allen 2013). These cash flows are related to the value chain activities of a company (measured in quantities) and exactly flow in the opposite direction. Inflows and outflows are increasing or decreasing the company’s inventory of cash. For the operational activities of running its business, a company must maintain its financial equilibrium and avoid financial distress. Consequently, corporate finance can be defined activity-based: Financing covers all direct activities in each period to make the necessary amount of funds available. However, a second quantitative definition for financing is used to measure the development of the stock of cash in a company over time (the financing volume). This second perspective allows to distinguish between different types of financing (Nijs 2014).

Internal financing is defined as the negative or positive surplus between permanent inflows and permanent outflows which are necessary to operate the core business of a company (see Fig. 1). Accordingly, as a residual measure, internal financing might be a financial source or a financial

deficit. In contrast, external financing is a gross measure and is defined as positive inflows from different types of financial contracts closed on the financial market (see Fig. 1). Financial markets are basically defined by the exchange of funds between lenders and borrowers in a given institutional framework (Strumeyer and Swammy 2017). The resulting financial contracts are characterized by a temporary divergence between inflows and outflows in return. The financier will provide the promised amount of means of payment first. The company will pay the consideration (e.g., interest, redemption) in the future. Thereby, financiers are always exposed to negative developments during the contract period. This danger is referred to as financial risks (e.g., Reynolds and Hepinstall 2017). Hence, contracts on financial markets differ seriously from other exchange contracts resulting from spot transactions. In addition to the so-defined primary financial markets, unfulfilled financial contracts can be traded on secondary markets.

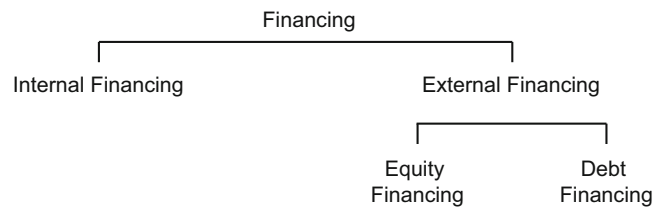
Financial contracts closed on perfectly competitive and complete financial markets are classified into stylized debt and equity contracts. This distinction results from the capital structure decision which must be made by financial managers (for

theories discussed, see Myers 2003). These perfect financial contracts can be compared to each other by their economic risks and chances. In literature four contract criteria are broadly accepted to model the risk profile of ideal financial contracts (e.g., Bernthal 2018): the claim on income, the claim on repayment, the rights of control, and the preference in insolvency (see Fig. 2).

Stylized debt contracts are characterized by fixed interest payments without any relation to the performance of the company (see Fig. 2). Also, the final redemption at the end of the term of the contract is fixed in advance. However, creditors are not having any rights of control. In case of financial distress, creditors are paid in preference to shareholders according to the insolvency regimes. Bank loans are close to this stylized debt contract.

Unlike stylized debt stylized equity contracts are characterized by a performance-related claim on income (see Fig. 2). Shareholders are not promised to receive a fixed amount of redemption after an initially determined term, but usually hand over their funds for the infinite lifetime of the company. In return, shareholders receive all rights of control (e.g., rights of information and rights of decision-making). In financial distress

Mezzanine Finance,
Fig. 1 Types of financing
(source: own figure)



Mezzanine Finance,
Fig. 2 Stylized debt and equity contracts (source: own figure)

Criteria	Stylized Debt	Stylized Equity
No Financial Distress		
Claim on Income	Fixed Interest Payments	Performance-related
Claim on Repayment	Fixed Amount and Term	Performance-related/ Infinite
Rights of Control	No Rights	All Rights
Financial Distress		
Preference in Insolvency	Yes	No (Residual Claim)
<i>Example</i>	<i>Bank Loan</i>	<i>Common Shares</i>

ideal shareholders will not be paid in preference. Common shares are close to this stylized equity contract. However, the detailed legal position of a shareholder depends on the legal form of the company and the special regulations in the statutes of a company.

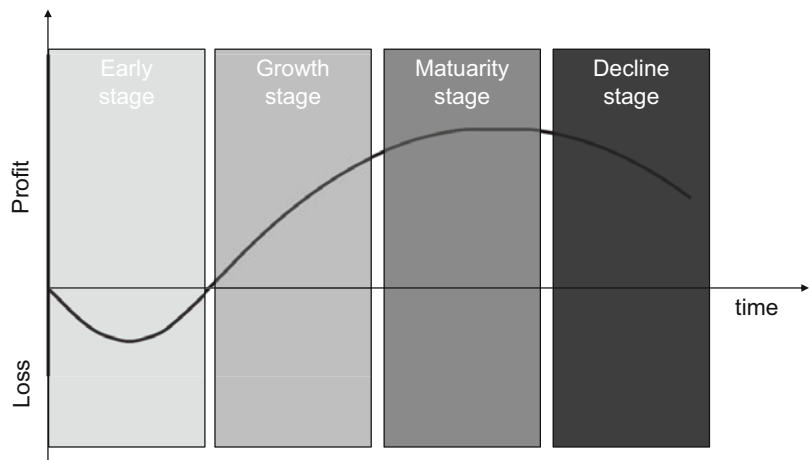
Mezzanine Financial Contracts

There is a broad spectrum of financial contracts between the stylized equity and debt contract. The stipulations of these contracts are referring to criteria from debt *and* equity contracts. As showing characteristics of both types of contracts, they are defined as mezzanine or hybrid instruments (Nijs 2014). The process of creating mezzanine financial contracts is a moving target and is a response to imperfections on financial markets and their incompleteness. Hence, in research they are labeled as financial product innovations (Nejad 2021; OECD 2018; Nejad 2016; Tufano 2003). In line with *Schumpeter's* concept of competition and innovation, financial innovation can be defined as a permanent process of experimentation leading to new institutions, instruments, techniques, and markets (Awrey 2011). Basically, changes in the financial environment will stimulate the search for new financial products. These changes can be classified into four types: response to changes in the demand conditions, response to changes in supply conditions, avoidance of financial market regulation, and

response to advances in technology (Mishkin and Eakins 2018). Consequently, the creation of new mezzanine financial contracts is in constant flux (OECD 2015). However, a basic taxonomy of mezzanine finance can refer to the life-cycle model of companies (see Fig. 3) and the degree of standardization of the financial contract. While private mezzanine financial contracts can be negotiated individually, public mezzanine financial contracts are characterized by the full standardization of the elements of the contract by the issuer. Hence, public mezzanine financial contracts are usually exchange traded.

The financing landscape for start-ups (see early stage, Fig. 3) is characterized by a lack of information to investors for two reasons. First, private companies not listed on stock markets are not legally obliged to disclose financial accounting information. Second, providing information on business activities and financials is costly for a small or medium-sized company. Due to the corresponding informational risks, companies in the early stage of the company's life cycle have limited access to the financial market. Accordingly, mezzanine financial contracts emerged and help to bridge the gap between entrepreneurs and financiers. In the early stage private mezzanine financial contracts are in the limelight of financiers. Currently, mezzanine financial contracts are quite popular on crowdfunding platforms (OECD 2015). Some examples of private mezzanine equity contracts are given below:

Mezzanine Finance,
Fig. 3 Life-cycle model of companies (source: own figure)



- *Silent participation:* Although some basic regulation might be found in national company law, silent participation is an individually contracted financial instrument (e.g., Demaria 2020). Financiers typically get asymmetric claims on income. Silent partners participate in positive company's income but do not participate in company's losses. Accordingly, this element is close to a stylized debt contract. Typically, rights of control are not limited and remain close to a stylized equity contract. In case of bankruptcy, silent participation has no preference. Silent participation is an internal agreement and is not communicated to the public.
- *Profit participating rights:* Since the holder of this type of financial contracts is entitled to participate in performance-related claims on income and repayment, they meet the criteria of a stylized equity contract. However, they do not have any rights of control and are not consulted on business decisions. Typically, these rights have subordinated preferences in insolvency. In a nutshell, owners of profit participating rights simply hold a right to a specific monetary claim (Nijs 2014).

Besides, start-up companies might not qualify for stylized debt contracts (represented by a bank loan) since the business model does not fit the criteria of the applied scoring system or past projects were not successful. Hence, in addition to private mezzanine equity, private debt mezzanine financial contracts are important in the early stage as well and some examples are given below:

- *Subordinated loans:* Subordination of debt contracts can be fixed contractually to three of the criteria introduced above: the claims on income and repayment and the preference in insolvency. Accordingly, a broad variety of subordinated loans evolved on financial markets (Demaria 2020).
- *Profit participating loan:* Another possible mechanism to compensate creditors for the high financial risks in the early stage is some sort of profit participation. Accordingly, the claim on income is now performance-related or provides conversion rights and fits the criterion of a stylized equity contract. However, rights of control usually are not given to the financiers (Nijs 2014).

In the growth and maturity stage of a corporation (see Fig. 3), the mitigation of financial risks by mezzanine financial contracts is at the center of interest as well. In contrast to the early-stage, grown-up companies have access to regulated financial markets (e.g., the stock exchange and the bond market). Therefore, public mezzanine financial instruments are often used in this stage. Two examples are given below:

- *Preferred shares:* Unlike common shares, this class of shares includes specific rights (Liberadzki and Liberadzki 2019; Nijs 2014). These rights are negotiated between market participants depending on their perception of the risk-chance profile of the company. For example, a preferred claim on income or a preferred redemption with a guaranteed minimal multiple of the contribution is negotiated. Besides, some preferred shares are designed with a limitation of the rights of control.
- *Convertible bonds:* Convertibles are debt contracts that include the option to be converted into common shares of the issuing company (Brigham 1966). The basic features of convertibles are the pre-determined conversion market price and the conversion time or period. However, many special features may be negotiated in addition (Dutordoira et al. 2014; De Spiegeleer et al. 2014). Before the conversion, the convertible bond has the rights of a stylized debt contract.

Finally, mezzanine financial contracts occur in the decline stage of a company (see Fig. 3). Different types of buyouts (e.g., management buyout or leveraged buyout) are used to take a company with publicly traded shares private, and mezzanine debt contracts are used to finance these kinds of transactions (Anson et al. 2011). Another function of mezzanine contracts in this stage is to support company in financial distress (Anson

et al. 2011) and provide plans for the restructuring of the business (e.g., debt-equity swaps).

In conclusion, the preference of companies for mezzanine financing is attributed to financial market imperfections and incompleteness (Myers 2003). For the specific decision companies will rely on a set of criteria (Nijs 2014). Two of them are explained below:

- (1) Classification of the mezzanine instrument in financial accounting: Basically, this criterion refers to the mitigation of informational risks. Financiers want to receive reliable information on the development of future cash flows and perform a financial statements analysis to predict the ability to pay back loans. Among other ratios, the leverage of a company is in the limelight of the analysis. Hence, the recognition of a mezzanine financial instrument as equity on the balance sheet is important and the preference in insolvency must be considered.
- (2) Financing costs: Since mezzanine financial instruments are usually contracted when the traditional financial market for debt contracts is not accessible for a company (Nijs 2014), they are more expensive than a traditional bank loan. Financiers will ask for a premium due to the mitigation of financial risks, for example, subordination in bankruptcy. Contrarily, the financing cost is typically lower than the cost of equity because some equity owner rights (e.g., decision-making rights) are not given to the mezzanine financier. However, due to the broad range for the design of the compensation, mezzanine financials are very flexible and can be tailored to special financial needs of the company.

Providers of mezzanine financial contracts can be categorized into non-sponsored and sponsored financiers (Nijs 2014). Whereas non-sponsored financiers are typically financial intermediaries (banks, funds, etc.), the sponsored financiers are often private equity firms (Demaria 2020). Since mezzanine financing is used for sustainable development initiatives, development banks are a major player on the market as well, and alternative financial instruments are the

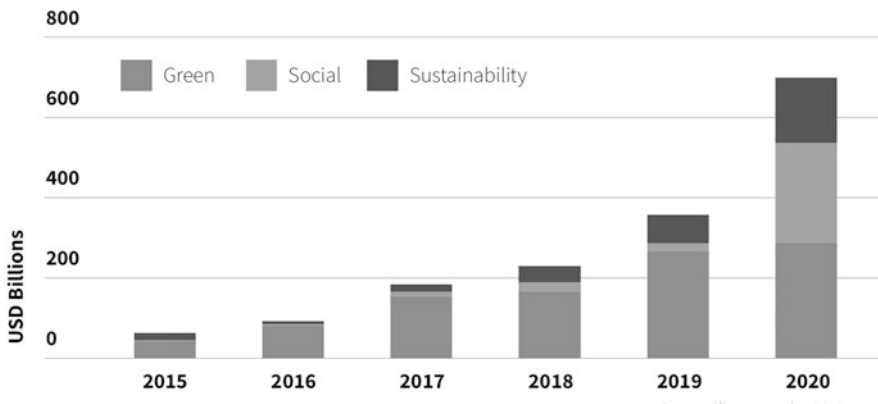
focus of political initiatives (OECD 2015, 2018). One important field of application is the transformation of the financial system to sustainable finance (Juan et al. 2019). According to their features, “Green Bonds” are an example of mezzanine financial contracts.

Example for Mezzanine Financial Contracts: Green Bonds

The growing interest in sustainable finance innovations by investors and advantages from the issuers’ perspective, for example, reputation in the maturity stage, led to the emergence of the “Green Bond” markets. Initially, this term was used exclusively for bonds issued to finance environmentally friendly activities (Bagnoli and Watts 2020). The first corporate green bond was issued by Toyota in 2013 to finance cars with hybrid engines. Although to date a legal definition of green bonds is missing, many market participants agree on extending the definition of green bonds to all bonds whose funds are used to finance socially responsible activities (economic-social-governance factors). However, in some context the term of GSS bonds (green, social, sustainability) is used (e.g., Climate Bond Initiative (CBI) 2020).

Since the funds generated by green bonds are earmarked to finance sustainable activities, some features of these bonds differ from those of stylized bonds and support the corporate governance function. First, the claim on income and repayment can be related to the success of the sustainable project financed exceptionally. Second, rights of control are given to investors typically to monitor the success of the projects ex-ante and ex-interim (Park 2018). These rights are a special type of non-financial covenants which are developed to mitigate the risk of insolvency (Berk et al. 2020). Finally, the green bonds are ranked *pari passu* to other bond investors in bankruptcy. Due to this special contract design, the financing costs of some green bonds sometimes are below the costs of traditional bond. This negative premium is called the “greenium” (Agliardi and Agliardi 2021).

Green, social, and sustainability bond issuance doubled in 2020



Mezzanine Finance, Fig. 4 The growing market for GSS bonds (source: CBI 2020)

The emergence of green bonds seems to be a great success story: At the end of 2020, the sustainable debt market had reached USD1.7tn, and almost 10,000 instruments had been issued under GSS labels since 2006 (see Fig. 4). However, investors in green bonds face the risk of greenwashing, since the issuer's promise to fund socially responsible activities is open to fraud (Bagnoli and Watts 2020).

To enhance the role of hybrid financial instruments in the transformation of the financial system, the European Union is in a leading role: In 2018 the action plan on sustainable finance was adopted by the European Commission. Based on this plan, an EU Taxonomy to determine whether an economic activity is environmentally sustainable and meets minimum social safeguards is developed, and an EU Green Bond Standard is designed (Zetzsche and Anker-Sørensen 2021; Schütze and Stede 2021).

Cross-References

- [Corporate Governance](#)
- [CSR: Evolution of Concept](#)
- [Environment, Social, and Governance \(ESG\)](#)
- [Finance and CSR](#)
- [Life Cycle Management](#)
- [Resource-Based View](#)
- [Risk Management](#)

References

- Agliardi, E., & Agliardi, R. (2021). Corporate green bonds: Understanding the Greenium in a two-factor structural model. *Environmental and Resource Economics*. <https://doi.org/10.1007/s10640-021-00585-7>.
- Anson, M., Fabozzi, F., & Jones, F. (2011). *The handbook of traditional and alternative investment vehicles*. Hoboken: Wiley.
- Awrey, D. (2011). Complexity, innovation, and the regulation of modern financial markets. *Harvard Business Law Review*, 2, 235–294.
- Bagnoli, M., & Watts, S. (2020). On the corporate use of green bonds. *Journal of Economics and Management Strategy*, 29, 187–209.
- Berk, J., Demarzo, P., & Harford, J. (2020). *Fundamentals of corporate finance* (5th ed.). Hoboken: Wiley.
- Berman, A. (2008). *Risks and realities of Mezzanine loans*. New York Law School Legal Studies, Research paper series 07/08 #32.
- Bernthal, J. (2018). The evolution of entrepreneurial finance: A new typology. *Brigham Young University Law Review*, 43, 773–858.
- Brealy, R., Myers, S., & Allen, F. (2013). *Principles of corporate finance* (11th ed.). New York: McGraw-Hill.
- Brigham, E. (1966). An analysis of convertible debentures: Theory and some empirical evidence. *The Journal of Finance*, 21, 35–54.
- CBI (Ed.). (2020). *Sustainable debt: Global state of the market 2020*.
- Constantinides, G., Harris, M., & Stulz, R. (Eds.). (2003). *Handbook of the economics of finance*. Amsterdam: Elsevier.
- De Spiegeleer, J., et al. (2014). *The handbook of hybrid securities: Convertible bonds, coco bonds, and bail-in*. Hoboken: Wiley.
- Demaria, C. (2020). *Introduction to private equity, debt, and real assets: From venture capital to LBO senior to*

- distressed debt, immaterial to fixed assets* (3rd ed.). Hoboken: Wiley.
- Dutordoir, M., et al. (2014). What we do and do not know about convertible bond financing. *Journal of Corporate Finance*, 24, 3–20.
- Huerga, A., & Rodríguez-Monroy, C. (2019). Mandatory convertible bonds and the agency problem. *Sustainability*, 11, 1–21.
- Juan, D., et al. (2019). Investment valuation model for sustainable infrastructure systems: Mezzanine debt for water projects. *Engineering, Construction and Architectural Management*. <https://doi.org/10.1108/ECAM-03-2018-0095>.
- Liberadzki, M., & Liberadzki, K. (2019). *Contingent convertible bonds, corporate hybrid securities and preferred shares*. Cham: Springer.
- Martin, M. (2015). Building impact businesses through hybrid financing. *Entrepreneurship Research Journal*, 5, 109–126.
- Mishkin, F., & Eakins, S. T. (2018). *Financial markets and institutions* (9th ed.). London: Pearson.
- Myers, S. T. (2003). Financing corporations. In G. Constantinides, M. Harris, & R. Stulz (Eds.), *Handbook of the economics of finance* (pp. 216–253). Amsterdam: Elsevier.
- Nejad, M. (2016). Research on financial services innovations: A quantitative review and future research directions. *International Journal of Bank Marketing*, 34, 1042–1067.
- Nejad, M. (2021). *Research on financial innovations: An interdisciplinary review*. <https://ssrn.com/abstract=3895792>.
- Nijs, L. (2014). *Mezzanine financing-tools, applications and total performance*. Chichester: Wiley.
- OECD (Ed.). (2015). *New approaches to SME and entrepreneurship financing: Broadening the range of instruments*. Paris: OECD Publishing.
- OECD (Ed.). (2018). *Alternative financing instruments for SMEs and entrepreneurs: The case of mezzanine finance*. Paris: OECD Publishing.
- Park, T. 2018. Investors as regulators: Green bonds and the governance challenges of the sustainable finance revolution. *Stanford Journal of International Law*, 54, 1–47.
- Reynolds, P., & Hepinstall, P. (2017). Risk in capital markets. In G. Strumeyer & S. Swamy (Eds.), *The capital markets – Evolution of the financial ecosystem* (pp. 89–109). Hoboken: Wiley.
- Schütze, F., & Stede, J. (2021). *EU sustainable finance taxonomy – What is its role on the road towards climate neutrality?* DIW Berlin discussion paper no. 1923.
- Strumeyer, G., & Swamy, S. (Eds.). (2017). *The capital markets – Evolution of the financial ecosystem*. Hoboken: Wiley.
- Tetrevova, L., & Svedik, J. (2018). Mezzanine financing instruments in comparison to the classic financing instruments. *Business, Management and Education*, 16, 133–146.
- Tufano, P. (2003). Financial innovation. In G. Constantinides, M. Harris, & R. Stulz (Eds.), *Handbook of the economics of finance* (pp. 216–253). Amsterdam: Elsevier.
- Zetzsche, D., & Anker-Sørensen, L. (2021). *Regulating sustainable finance in the dark*. University of Luxembourg Law working paper series 2021-007.

Millennium Development Goals

► Millennium Development Goals (2000)

Millennium Development Goals (2000)

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Synonyms

MDGs; Millennium Development Goals

Definition

The Millennium Development Goals (MDGs) were a United Nations (UN) initiative, describing eight goals for international development with the overall objective to improve global living standards.¹ The MDGs were defined in the year 2000 by a large intergovernmental conference at the United Nations in New York (the “Millennium Summit”), in which representatives from 189 governments committed themselves to achieve these goals within 15 years. The eight goals are related to poverty reduction, education, gender equality, the reduction of child mortality, maternal health, the combat of diseases like HIV/AIDS or malaria, environmental sustainability, and a global partnership for development. Most goals included the

¹ A comprehensive overview can be found in Briggs, 2018; Gauri, 2012; Sultana, 2020.

target year of 2015 – mostly with reference to the status quo in 1990. The eight MDGs represented a widely “shared vision on development” (Herfkens, [n.d.](#)). Within the framework of the MDGs, it was acknowledged that developing countries would not be able to reach these goals without support from the developed world. The MDGs were partly achieved by 2015 and succeeded by a set of 17 Sustainable Development Goals (SDGs), established in the Post-2015 Development Agenda, and intended to be accomplished by 2030.²

The Pathway to the Millennium Development Goals (MDGs)

As early as the 1990s, a number of the topics that were finally summarized in the MDGs were discussed in several international conferences, for example, during the World Summit on Social Development in Copenhagen in 1995. In May 1996, the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) published a report entitled “Shaping the 21st Century,” which proposed a global development partnership to achieve six development goals in the areas of “economic well-being,” “social development,” and “environmental sustainability and regeneration” – with a clear time frame until 2015. The report also reemphasized the target that developed countries should spend 0.7% of their Gross National Income (GNI) on Official Development Assistance (ODA) – a goal established by the United Nations in 1970 as an appropriate level for foreign aid. Building on these developments, the UN General Assembly resolved in 1998 to hold a Millennium Summit, prepared by the UN General Secretariat. In this context, the UN Secretary-General, Kofi Annan, published a report in early 2000 (“We the Peoples: The Role of the United Nations in the 21st

Century”), in which he recommended that the planned Millennium Summit should adopt specific goals on the issues discussed during the Copenhagen Summit in 1995.

The Millennium Declaration

The “Millennium Summit,” held from September 6 to September 8, 2000, in New York, brought together representatives from 189 countries, among them 100 heads of state, 47 heads of government, and approximately 8,000 further delegates – by then the largest meeting of world leaders. It aimed at discussing and defining a vision for the role of the UN in the twenty-first century as well as defining goals to improve living standards, particularly in developing countries. The Millennium Summit was cochaired by the Finnish president Tarja Halonen and the president of Namibia, Sam Nujoma. Finland and Namibia had chaired the 54th and 55th UN General Assembly sessions. The summit was opened by UN Secretary-General, Kofi Annan, followed by speeches of world leaders – among others Bill Clinton, Vladimir Putin, Jiang Zemin, Thabo Mbeki, Zine el Abidine Ben Ali, Yoshiro Mori, and Robert Mugabe. The results of the discussions were finally adopted as the “United Nations Millennium Declaration” by the 55th session of the UN General Assembly on September 18, 2000, in New York (UN, [2000](#)). In this declaration, the signatory parties

- addressed the core values and principles of the UN and its member states, particularly the values of freedom, equality, solidarity, tolerance, respect for nature, and shared responsibility,
- expressed the willingness to support the UN in its attempt to work for peace and security,
- promised to eradicate poverty, to work for development, and to fight the destruction of the natural resources on earth,
- resolved to promote democracy and human rights and to protect vulnerable groups,
- supported the consolidation of democracy specifically in Africa, and

²For an interdisciplinary literature review on the limitations of the MDGs, see: Fehling et al., [2013](#).

- claimed to strengthen the UN as an organization.

Although the eight MDGs were not explicitly mentioned in the Millennium Declaration, it did contain their key substance already. In a process of specification and concretization, the eight MDGs were finally elaborated from the text of the Millennium Declaration. The guiding idea was to define an “overarching development framework for the world” (UN, 2015) for the period until 2015 (for most of the targets). The Millennium Development Goals were explicitly mentioned for the first time in September 2001 in a “Road Map towards the Implementation of the United Nations Millennium Declaration,” which was presented to the General Assembly by UN Secretary-General Kofi Annan. However, some aspects mentioned in the declaration did not find their way into the MDGs, mainly those statements that circled around questions of governance, transparency, and human rights. Overall, the process of defining and elaborating the MDGs can be described as rather ad hoc and not very systematic.

The Millennium Development Goals (MDGs)

The following MDGs were made concrete with the help of 21 targets:

Goal 1: Eradicate extreme poverty and hunger

- 1A: Halve the proportion of people living on less than 1.25 US\$ a day.
- 1B: Achieve decent employment for women, men, and young people.
- 1C: Halve the proportion of people who suffer from hunger.

Goal 2: Achieve universal primary education

- 2A: All children can complete a full course of primary education.

Goal 3: Promote gender equality and empower women

- 3A: Eliminate gender disparity in primary and secondary education.

Goal 4: Reduce child mortality

- 4A: Reduce by two-thirds, the under-five mortality rate.

Goal 5: Improve maternal health

- 5A: Reduce by three-quarters, the maternal mortality rate.
- 5B: Achieve universal access to reproductive health.

Goal 6: Combat HIV/AIDS, malaria, and other diseases

- 6A: Have begun to reverse the spread of HIV/AIDS.
- 6B: Achieve universal access to treatment for HIV/AIDS for all who need it (by 2010).
- 6C: Have begun to reverse the incidence of malaria and other major diseases.

Goal 7: Ensure environmental sustainability

- 7A: Integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources.
- 7B: Reduce biodiversity loss significantly (by 2010).
- 7C: Halve the proportion of the population without sustainable access to safe drinking water and basic sanitation.
- 7D: Achieve significant improvement in the lives of at least 100 million slum-dwellers (by 2020).

Goal 8: Global partnership for development

- 8A: Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system.
- 8B: Address the special needs of the Least Developed Countries (LDCs).

- 8C: Address the special needs of landlocked developing countries and small island developing states.
- 8D: Deal with the debt problem of development countries.
- 8E: Provide access to affordable, essential drugs in development countries.
- 8F: Make available the benefits of new technologies, especially information and communications.

Most targets were backed by very concrete and measurable indicators. For instance, target 8D (“Deal with the debt problems of development countries”) would be measured by net ODA, total and to the Least Developed Countries (LDCs), as a percentage of OECD/DAC donor’s GNI, by ODA received in landlocked countries as proportion of their GNIs, by average tariffs imposed by developed countries on agricultural products and textiles from developing countries, or by the debt service as a percentage of exports of goods and services. It is interesting to note that some of the targets include commitments not only for the developing world, but also for developed countries. This is particularly true for goal 8 that primarily addressed developed countries and called for a reform of trade policies, ODA, subsidies in agricultural policies, and debt relief.

Implementation and the Path to “Sustainable Development Goals” (SDGs)

It soon became clear that in order to achieve the MDG targets, it was necessary to link activities on the global level with activities on the regional, the national, and even the local level. On all of these different levels, activities of not only governments were needed, but also of non-governmental organizations (NGOs), transnational corporations (TNCs), and even by individuals. In order to bring together these different types of stakeholders and to mobilize support for the MDGs, the “Millennium Campaign” was initiated by Secretary-General Kofi Annan

in 2002.³ However, the creation and implementation of action plans at the national level remained the decisive and critical success factor for the implementation of the MDGs. The United Nations Development Group (UNDG) was primarily responsible for the global and country-specific monitoring of progress in achieving the goals. On the basis of the World Bank’s Development Indicator, the UN Department for Economic and Social Affairs (DESA) Statistics and Population Divisions, and the UN Development Programme’s (UNDP) annual Human Development Reports, evaluations of the achievement of the MDGs were continuously published in several global and regional reports. Additional initiatives, like the privately funded “MDG Monitor,”⁴ also tracked progress on the national and global level. Some of the goals were also developed further – such as in the Johannesburg Plan of Action, which provided for more detailed target dimensions and timetables, for example, in wastewater disposal, the sustainable use of the oceans, or the regeneration of fish stocks.

A comprehensive intermediate evaluation of the progress was carried out at a large UN conference in September 2010 (“Review Summit 2010”). The MDG Report 2010, prepared by UN Secretary-General Ban Ki Moon in preparation of the summit, stated that “many countries are moving forward, including some of the poorest, demonstrating that setting bold, collective goals in the fight against poverty yields results. For every life that has benefited from the establishment of a quantitative, time-bound framework of accountability, the MDGs have made a real difference. But unmet commitments, inadequate resources, lack of focus and accountability, and insufficient dedication to sustainable development have created shortfalls in many areas” (UN, 2010). The review summit therefore proposed to accelerate the process to meet the targets by 2015.

The final MDG report from 2015 was then put together by a group of experts from various UN agencies and International Organizations under

³Cf. Herfkens [n.d.](#)

⁴Cf. www.mdgmonitor.org

the leadership of the UN Department of Economic and Social Affairs (UN DESA). The progress chart from 2015 shows good progress or “target met” status for most MDGs in most world regions. However, it also identifies poor progress or even deterioration in some cases, particularly in Oceania, Western Asia, or Northern Africa. The report mentions the following achievements of the MDG process (UN, 2015, 4–7):

Goal 1: Eradicate extreme poverty and hunger

- Extreme poverty rate⁵ in developing countries dropped from 47% (1990) to 14% (2015).
- The absolute number of people living in extreme poverty has declined from 1926 million (1990) to 836 million (2015).

Goal 2: Achieve universal primary education

- The number of out-of-school children of primary school age has fallen from 100 million (2000) to 57 million (2015).
- Literacy rate among 15–24 year-olds has increased from 83% (1990) to 91% (2015).

Goal 3: Promote gender equality and empower women

- The developing regions have achieved the target to eliminate gender disparity in primary, secondary, and tertiary education.
- The average proportion of women in parliaments has nearly doubled between 1995 and 2015 (however, still only 20% MPs are female).

Goal 4: Reduce child mortality

- Child (under five) mortality rate has dropped from 90 deaths per 1000 live births (1990) to 43 (2015). Also, the absolute number of deaths of children under five has decreased despite population growth.

Goal 5: Improve maternal health

- Global maternal mortality ratio per 100,000 live births has declined from 380 (1990) to 210 (2015).
- Global births attended by skilled personnel have increased from 59% (1990) to 71% (2014).

Goal 6: Combat HIV/AIDS, malaria, and other diseases

- New HIV infections fell from an estimated 3.5 million (2000) to 2.1 million (2013).

Goal 7: Ensure environmental sustainability

- Access to piped drinking water has increased from 2.3 billion (1990) to 4.2 billion (2015).
- Ozone-depleting substances have been eliminated between 1990 and 2015.

Goal 8: Global partnership for development

- ODA from developed countries has increased by 66% from 81 billion US\$ to 135 billion US\$.
- The proportion of external debt service to export revenue in developing countries fell from 12% (2000) to 3% (2013).

Already in 2012 – still during the MDG-period – the UN Secretary-General started to work on a “Post-2015 Development Agenda,” a process that involved many UN agencies, international organizations, civil society organizations, and research institutions. The objective of the Post-2015 Agenda was to build on the success of the MDG process, but it also takes into account its weaknesses. It establishes a broader framework of “Sustainable Development Goals” (SDGs) for the time when the MDGs expired in 2015.⁶ The Post-2015 Agenda also called for a greater participation of people living in poverty, civil society

⁵Defined by less than 1.25\$ per day.

⁶The transition from “MDGs” to “SDGs” – partially also in a comparative approach – is covered by Chivanga & Monyai, 2021; de Jong & Vijge, 2021; Rosenbaum, 2015; Sachs, 2012; Solberg, 2015; Vandemoortele, 2017 and Vandemoortele, 2018.

actors, and developing countries in the process of defining the next generation of goals (see Manning et al. 2013).

Critical Assessment

The 2015 UN MDG report speaks of “profound achievements” and concludes with a positive overall assessment: “The world community has reason to celebrate. Thanks to concerted global, regional, national and local efforts, the MDGs have saved the lives of millions” (UN 2015). Most scientific analyses⁷ come to a more mixed picture. Overall, significant progress was made between 1990 and 2015 in the field of human development; however, the impact of the MDGs on this progress is difficult to assess. Although a causal link between the MDGs and progress in human development cannot be made – due to the lack of a counterfactual scenario – some researchers have stressed the importance of the MDG-process in increasing awareness and combining forces of the international community.⁸ Yet, success of the MDGs stems to a large degree from strong economic development in China, while in other world regions there has been a deterioration in some of the targets. Even the UN MDG Report 2015 itself admits that only one target was actually met in Sub-Saharan Africa (namely, the reverse of the spread of HIV/AIDS). And “whilst the world has made significant progress during the MDG-era, none of the global targets were met” (Vandemoortele, 2018, 84). Vandemoortele (2018) – using a traffic-light scheme – still assigns “green” to areas like poverty, hunger, child mortality, maternal health, drinking water, and infectious diseases; “orange” to areas like basic education and gender equality;

and “red” to goal 8 on the global partnership for development. He bases this assessment specifically on the observed failure of developed countries to increase their foreign aid to the agreed target of 0.7% of GNI. Furthermore, he assesses the efforts in the MDG process in the field of environmental policy as a failure. In summary, Vandemoortele (2018, 84) judges: “Progress for people, regress for the planet” – an assessment that also justifies the increased efforts in the post-2015 phase to pay more attention to sustainability as a critical aspect of human development. Another aspect that has to be taken into account is that for certain groups, particularly stigmatized or “devalued identities” (Kabeer, 2006), success levels have been lower than for other people.⁹

Despite all these difficulties and problems, the MDG process remains a good – and at least partly successful – example of setting a normative frame of reference that has had a guiding effect on many governmental and nongovernmental actors. The discussion on the MDGs and their implementation inspired the debate on a broader concept of poverty, as discussed by Amartya Sen and others. A central shortcoming of the MDGs has turned out to be the rather subordinate role of the thematic field of climate change, which was formulated in MDG 7 but remained underexposed in its importance also for the interaction between poverty and environmental issues.

Cross-References

- [Sustainable Development Goals \(SDGs\)](#)
- [United Nations Development Programme](#)

References

Ahimbisibwe, I., & Ram, R. (2019). The contribution of millennium development goals towards improvement

⁷ Several researchers invested in in-depth research of the contribution of the MDGs to poverty reduction (e.g., Asadullah & Savoia, 2018; Bresson, 2021) or other major development indicators (e.g., Ahimbisibwe & Ram, 2019). A critical assessment of the MDG process including a detailed analysis of their limitations is provided by Fehling et al., 2013; Friedman, 2013; Larionova, 2020.

⁸ e.g., McArthur & Rasmussen, 2017.

⁹ For a critical assessment of the implementation of the MDGs see among others: Ahimbisibwe & Ram, 2019; Bresson, 2021; Friedman, 2013; Fuller & Dwivedi, 2019; Larionova, 2020; McArthur & Rasmussen, 2017; Rippin, 2014.

- in major development indicators, 1990–2015. *Applied Economics*, 51(2), 170–180.
- Asadullah, M. N., & Savoia, A. (2018). Poverty reduction during 1990–2013: Did millennium development goals adoption and state capacity matter? *World Development*, 105, 70–82.
- Bresson, F. (2021). Comparing Poverty variations: A robustness assessment of the MDGs' achievements with respect to poverty alleviation. *Review of Income and Wealth* 2021.
- Briggs, J. (2018). The millennium development goals. In T. Binns, K. Lynch, & E. Nel (Eds.), *The Routledge handbook of African development* (pp. 300–312). London: Routledge.
- Chivanga, S. Y., & Monyai, P. B. (2021). From millennium development goals (MDGs) to sustainable development goals (SDGs): Towards overcoming development challenges. *Transylvanian Review*, 29(3), 12810–12816.
- de Jong, E., & Vijge, M. J. (2021). From millennium to sustainable development goals: Evolving discourses and their reflection in policy coherence for development. *Earth system. Governance*, 7.
- Fehling, M., Nelson, B. D., & Venkatapuram, S. (2013). Limitations of the millennium development goals: A literature review. *Global Public Health*, 8(10), 1109–1122.
- Friedman, H. S. (2013). Causal inference and the millennium development goals (MDGs): Assessing whether there was an acceleration in MDG development indicators following the MDG declaration. MPRA paper 48793. https://mpra.ub.uni-muenchen.de/48793/1/MPRA_paper_48793.pdf
- Fuller, M., & Dwivedi, P. (2019). Assessing changes in inequality for millennium development goals among countries: Lessons for the sustainable development goals. *Social Sciences*, 8(7).
- Gauri, V. (2012). MDGs that nudge: The millennium development goals, popular mobilization, and the Post-2015 development framework. *World Bank Policy Research Working Paper*, 6282.
- Herfkens, E. (n.d.). The Millennium campaign: Successes and challenges in mobilizing support for the MDGs. UN Chronicle. <https://www.un.org/en/chronicle/article/millennium-campaign-successes-and-challenges-mobilizing-support-mdgs>
- Kabeer, N. (2006). Poverty, social exclusion and the MDGs. *IDS Bulletin*, 37(3), 64–78.
- Larionova, M. (2020). The challenges of attaining the millennium development goals (MDGs). *International Organisations Research Journal*, 15(1), 155–176.
- McArthur, J. W., & Rasmussen, K. (2017). *Change of pace – Accelerations and advances during the millennium development goal era*. Washington, DC: Brookings.
- Rippin, N. (2014). Progress, prospects and lessons from the millennium development goals (MDGs). In T. Fues & J. Ye (Eds.), *The United Nations Post-2015 agenda for global development: Perspectives from China and Europe* (pp. 231–252). Bonn: Deutsches Institut für Entwicklungspolitik. http://www.die-gdi.de/uploads/media/Studies_08.pdf.
- Rosenbaum, B. (2015). Making the millennium development goals (MDGs) sustainable: The transition from MDGs to the SDGs. *Harvard International Review*, 37(1), 62–64.
- Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The Lancet*, 379, 2206–2211.
- Solberg, E. (2015). From MDGs to SDGs: The political value of common global goals. *Harvard International Review*, 37(1), 58–61.
- Sultana, M. (2020). Analysis, remedial action and future aspects of millennium development goals. *Journal of Critical Reviews*, 7(4), 4252–4258.
- United Nations. (2000). The United Nations Millennium Declaration. <https://www.ohchr.org/en/instruments-mechanisms/instruments/united-nations-millennium-declaration>
- United Nations. (2010). The Millennium Development Goals Report 2010. <https://www.un.org/millenniumgoals/pdf/MDG%20Report%202010%20En%20r15%20-low%20res%2020100615%20-pdf>
- United Nations. (2015). The Millennium Development Goals Report 2015. [https://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20\(July%201\).pdf](https://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf)
- Vandemoortele, J. (2017). From MDGs to SDGs: Critical reflections on global targets and their measurement. In P. van Bergeijk & R. van der Hoeven (Eds.), *Sustainable development goals and income inequality* (pp. 32–50). Cheltenham: Edward Elgar Publishing.
- Vandemoortele, J. (2018). From simple-minded MDGs to muddle-headed SDGs. *Development Studies Research* 5(1), 83–89.

Milton Friedman

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Definition

Milton Friedman was an US-American economist, born July 31, 1912, in New York, and died November 16, 2006, in San Francisco. He is considered one of the most influential economists of the twentieth century. In 1976, Friedman received the Alfred Nobel Memorial Prize in Economic Sciences. He was honored for his research into

consumption analysis and his contributions to monetary history and monetary theory and to the complexity of stabilization policy. Friedman is considered a pioneer of modern monetarism. He also made important contributions to discussions on topics such as corporate responsibility (bpb 2022; Woll 2018).

Basic Biographical Information

Milton Friedman was born on July 31, 1912, in New York. He died on November 16, 2006, in San Francisco. He began his academic teaching career in 1946 at the University of Chicago and completed it there in 1977. This was followed by positions at the Federal Reserve Bank of San Francisco and a collaboration with the Hoover Institute at Stanford University. Friedman is one of the most influential economists of the twentieth century (bpb 2022; Woll 2018).

Friedman was one of the scholar and initiators of the so-called Chicago School of Economics, a group of economists from the University of Chicago and a school of thought of the same name, which, among other things, vehemently advocated the dogma of free markets. The free market was seen as the best way of allocating resources efficiently (Ebeling 2006).

His life's work includes an enormous number of different topics from monetary policy, business ethics, and trade policy to questions of educational policy. So, Friedman's economic legacy includes a variety of books, academic papers, publications, and television series. Perhaps, his best-known works include "The Methodology of Positive Economics" (Friedman 1953), "The Quantity of Theory of Money: A Restatement" (Friedman 1956), "A Monetary History of the United States, 1867–1960" (Friedman 1963), and "The Social Responsibility of Business Is To Increase Its Profits" (Friedman 1970).

Major Contributions

Milton Friedman dealt, among other things, with the importance of monetary policy and the status

of the state and the market, as well as with questions of corporate responsibility and their impact. Here, we focus on so-called monetarism and the discussion on the role of corporations in the economy. On the one hand, this is about the importance of the state and monetary policy in shaping economic growth (see a. Monetarism and the Role of the State). On the other hand, the objective of a company, the generation of profits, comes into focus (see b. Responsibility and Corporate Profits).

Monetarism and the Role of the State

Milton Friedman's legacy is closely linked to the concept of so-called monetarism. This monetarism is closely linked to the idea of a so-called supply-oriented macroeconomics and corresponding economic policy, in which the task of the state is to define general economic conditions instead of directly intervening in market mechanisms (bpb 2022; Conway 2011; Leschke 2012; Woltmann 2018).

Significantly influenced by the work of Friedman (1956), monetarism focuses (without going into detail) on a monetary policy that is closely related to the available money supply (put simply: the amount of money in an economy) and their relationship to the existing price level and prevailing price increases (inflation). At the same time, Friedman sees the money supply as the most important lever of economic policy and for controlling economic growth: According to Friedman, an ideal level of economic growth can best be achieved with a certain growth rate of the money supply. If monetary policy succeeds in ensuring constant money supply growth and aligning this with the growth in economic power, economic momentum will stabilize in a positive sense. Inflation (monetary instability), on the other hand, exists when there is too much money "in circulation" in an economy. More money in the economic cycle promotes willingness to consume and invest, which in turn leads to rising prices. On the other hand, if there is not enough money in circulation, the willingness to consume and invest falls and prices fall (deflation). In order to achieve price stability (monetary stability), it is also the task of monetary policy to

get these inflationary/deflationary tendencies under control by controlling the money supply (bpb 2022; Conway 2011; Leschke 2012; Woltmann 2018).

Except for monetary policy, Friedman relies on “market forces.” He rejects state measures, for example to combat unemployment or other concepts of economic policy. This applies regardless of whether the economy is in a phase of economic upturn or downturn: Measures to promote investment in times of crisis or raising taxes in boom phases amplify economic fluctuations and have a destabilizing effect. Friedman is clearly in favor of strengthening market forces. Ideally, this would be flanked by the monetary policy of the central banks, which Friedman believes is much more effective than state tax and fiscal policy. He relies on privatization and deregulation as well as a policy of *laissez-faire* as the core of his considerations. State economic policy activities should be largely reduced. This is the only way to achieve a steady upward trend in an economy (bpb 2022; Conway 2011; Leschke 2012; Woltmann 2018).

In conclusion, the logic of monetarism and thus Friedman’s perspective leads to a rejection of an anticyclical economic policy in the sense of Keynes. This in turn means that an anticyclical economic policy is unsuitable. The US-American John Maynard Keynes (1883 to 1946), perhaps the best-known economist of the twentieth century before Friedman, who advocated the Keynesian approach, based his economic policy on a demand orientation instead of the supply-oriented perspective. Accordingly, aggregated demand determines the performance of an economy. Ergo, in addition to monetary policy, is also the task of the state to influence the economic situation through fiscal policy measures. In times of crisis, for example, tax cuts and government investment and public debt could improve the situation. Friedman, on the other hand, argues against the possibility that the state can use revenue and expenditure policies to stabilize an economic cycle in the long term. His policy of *laissez-faire* is contrary to this view of Keynes (bpb 2022; Conway 2011; Leschke 2012; Woltmann 2018).

Responsibility and Corporate Profits

An article by Milton Friedman published in the New York Times in 1970 (NY Times, 1970) deserves special attention regarding the topic of corporate social responsibility and the task of companies. The title “The Social Responsibility of Business Is to Increase its Profit” makes it clear how Friedman defines the (social) responsibility of entrepreneurs: in increasing the company’s profits.

According to Friedman, the task of the manager of a company is exclusively to increase the profit of the company. Friedman argues that the focus on profits must always take place within the framework of existing regulations, laws, morals, and ethics. The shareholder value concept developed from this approach (Heldt 2018; Leschke 2012). In relation to the purpose of a company, this strategic goal is about increasing the value of the shareholders – for example, the shareholders of a listed stock corporation. In order to take up the goal of profit maximization, there are many approaches that argue that it is ultimately crucial how profits are generated and that their use is also important for assessing how companies are perceived; in other words, the mere intention to generate profits is not negative (Genders 2021). The critics of this point of view argue that it is precisely this point of view and behavior of companies (maximize their own profit) that contributes to promoting social inequalities, poverty and hunger, climate damage and environmental pollution, or the exploitation of people (Buchter 2020).

The shareholder value approach is opposed to the so-called stakeholder value approach, according to which the company management not only considers the interests of the shareholders, but all stakeholder groups. A company and in particular the management aims to consider the various stakeholder groups – owner, employee, customer, supplier, or state – in a cooperative sense and to place their interests at the center of the corporate strategy (Breuer 2018; Leschke 2012).

Honors and Miscellaneous

Friedman received a variety of awards throughout his life. Particularly noteworthy is the Alfred

Nobel Memorial Prize in Economic Sciences, which he received in 1976 for his work on monetary history and monetary theory and for his studies on consumption analysis and on the complex of stabilization policy (bpb 2022; Woll 2018).

Friedman's work had a significant influence on the politics of his time: He was an advisor to US Presidents Richard Nixon (President from 1969 to 1974) and Ronald Reagan (President from 1981 to 1989) and shaped the phase of the so-called "Reaganomics" for the latter (Reagan-Economics jargon), a period of US economic policy characterized by diminishing government influence and spending cuts, deregulation, or reductions in tax rates to encourage economic dynamism. He also helped shape the former Prime Minister of the United Kingdom Margaret Thatcher (Prime Minister from 1979 to 1990) and her "Thatcherism," which was the same in terms of content (bpb 2022; Woll 2018).

With a view to the later years of his life, Friedman also distinguished himself as a source of economic policy ideas and impulses for a broader audience. His work "Free to Choose" (Friedman and Friedman 1980), published in 1980, was one of the first nonfiction books that took up economic topics far away from a specialist audience. The book was accompanied by its own television documentary.

Summary

Friedman is one of the most influential economists of recent times and has shaped many issues. Two important areas of activity were the monetarism and the debate about the importance of monetary policy and the role of the state in controlling economic growth. Friedman himself had great faith in market forces. It was the task of the state to define general economic framework conditions, but not to intervene in the market itself. He rejected an anticyclical economic policy. In addition to monetarism, Friedman has also made an important contribution to the debate on the role of corporations in society. In his view, it is the task of companies to generate profits.

Cross-References

- [Shareholder Theory/Shareholder Value](#)
- [Stakeholder Management](#)
- [Stakeholder Value Creation](#)

References

- bpb. (2022). *Monetarismus*. Milton Friedman. <https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/20136/monetarismus/>. Accessed 17 June 2022.
- Breuer, C. (2018). *Stakeholder-Ansatz*. <https://wirtschaft.slexikon.gabler.de/definition/stakeholder-ansatz-46282/version-269567>. Accessed 5 Apr 2022.
- Buchter, H. (2020). *Vom reinen Gewinnstreben zu gesellschaftlicher Verantwortung*. Zeit online. <https://www.zeit.de/wirtschaft/2020-12/milton-friedman-us-ökonom-shareholder-doktrin-stakeholder/komplettansicht>. Accessed 5 Apr 2022.
- Conway, E. (2011). *Monetarismus*. In *50 Schlüsselideen Wirtschaftswissenschaft*. Heidelberg: Spektrum Akademischer Verlag. https://doi.org/10.1007/978-3-8274-2635-2_11.
- Ebeling, R. (2006). *Milton Friedman and the Chicago School of Economics*. <https://fee.org/articles/milton-friedman-and-the-chicago-school-of-economics/>. Accessed 17 June 2022.
- Friedman, M. (1953). The methodology of positive economics. In M. Friedman (Ed.), *Essays in positive economics* (pp. 3–43). Chicago/London: Phoenix books/The University of Chicago Press.
- Friedman, M. (1956). The quantity theory of money: A restatement. In M. Friedman (Ed.), *Studies in the quantity theory of money* (pp. 3–21). Chicago: Phoenix books/The University of Chicago Press.
- Friedman, M. (1963). *A monetary history of the United States, 1867–1960*. Princeton: Princeton University Press.
- Friedman, M. (1970). *A Friedman doctrine—The social responsibility of business is to increase its profits*. NY Times (1970). <https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html>. Accessed 5 Apr 2022.
- Friedman, M., & Friedman, R. (1980). *Free to choose. A personal statement* (M. Friedman & R. D. Friedman, Eds.). New York/London: HBJ.
- Genders, S. (2021). *Wie Gier uns retten kann. Nachhaltigkeit, Unternehmertum und das Streben nach Gewinn*. Berlin: Springer.
- Heldt, C. (2018). *Shareholder value*. <https://wirtschaft.slexikon.gabler.de/definition/shareholder-value-43433/version-266763>. Accessed 17 June 2022.
- Leschke, M. (2012). *Milton Friedman: Nicht nur ein "Monetarist"*. <https://www.wirtschaftsdienst.eu/inhalt/jahr/2012/heft/8/beitrag/milton-friedman-nicht-nur-ein-monetarist.html>. Accessed 4 Apr 2022.

- Woll, A. (2018). *Friedman*. <https://wirtschaftslexikon.gabler.de/definition/friedman-32300/version-255843>. Accessed 17 June 2022.
- Woltmann, H-W. (2018). *Monetarismus*. <https://wirtschaftslexikon.gabler.de/definition/monetarismus-41881/version-265237>. Accessed 17 June 2022.

Mindful Consumption

► Consumer Social Responsibility (CnSR)

Mindfulness

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Synonyms

Being present in the present; Heedfulness; Introspective awareness

Definitions and Description

Mindfulness is etymologically derived from Pali *सति* (sati) and Sanskrit *स्मृति* (smṛti) and refers to awareness/attention/heedfulness, a spiritual or psychological quality that forms an essential part of Buddhist practice. Correct/right mindfulness (Pali: *sammā-sati*, Sanskrit *samyak-smṛti*) is the seventh element of the Eightfold Path propounded as “Noble” by the Buddha. The Buddhist concept has acquired wide currency in recent times as a psychological process of bringing one’s attention to experiences in the present moment through mental strategies such as meditation: This could involve focusing on one’s current physical and psychological state. For example, the focus could be on the depth, timing, and type of one’s breath and awareness of surrounding noises and smells. The concept has been applied in a number of areas including healthcare, workplace practices, and sustainability. In the Satipatthana Sutta, the Discourse on the

Foundations of Mindfulness, the Discourse on the Foundations of Mindfulness, attributed to Buddha (circa sixth to fourth century BC) and translated by Thera (1998), mindfulness is to be meticulously and carefully aware and attentive in relation to the following four forms of mental culture or meditation: (1) the activities of the body (kaya), (2) sensations or feelings (vedana), (3) the thoughts going on in the mind (citta), and (4) reflections, imagination, and related matters (dhamma). Phronesis is essentially a Greek concept from the west that has a parallel of the Buddhist concept of mindfulness from the east (McEvilley 2002).

Grossman (2019:102) points out that mindfulness is “predicated upon long-term cultivation of introspective awareness of lived experience”; he is of the view that the definition of mindfulness is multifaceted and it requires large amounts of individual experiential learning to acquire expertise. While many scholars examining the concept of mindfulness may not have achieved the high level of expertise required by Grossman as set out in his argument, mindfulness is now considered to contribute to effective decision-making on all matters that affect humanity including sustainability-related matters.

Mindfulness and Policy-Making

Mindfulness has implications for political processes and policy-making (Luberto et al. 2018), and this in turn has implications for effective political and policy interventions in regard to sustainability issues which require be addressed by the evaluation of metrics and data as well as by human qualities and values. Bristow (2019) outlines the growing influence of mindfulness on politics and policy-making.

In April 2014, the UK politicians formed an All-Party Parliamentary Group on Mindfulness (MAPPG); this group was a non-artisan organization drawn from members of the House of Commons and the House of Lords formed with the purpose of developing ideas and proposal that could translate into policy. The group that conducted a one-year investigation into the existing practice and future potential for mindfulness in

public life involved the use of meditation in political thinking (Cook 2016:141). Conclusions and recommendations further action were published in what was the very first policy review of mindfulness titled “Mindful Nation UK” (2015).

Mindfulness and Sustainability

Attempts have been made to demonstrate a possible relation between mindfulness, sustainable consumption patterns, unsustainable consumption patterns, and life satisfaction. Dhandra (2019) observes that mindfulness is positively correlated with green credentials and frugality, while being negatively correlated with materialism. He argues that individuals with greater mindfulness are less likely to engage in unsustainable consumption patterns and more likely to be associated with satisfaction with life. There is scope for utilizing mindfulness in order to successfully implement sustainable strategies and enhance satisfaction with life. Mindfulness plays a significant role in motivating individuals for a shift in behavior towards sustainability (Ericson et al. 2014; Fischer et al. 2017; Dhandra 2019).

Geiger et al. (2019) review twelve empirically researched papers during the period commencing 2005 and concluding 2013, on five diverse pathways in which mindfulness has been considered as impacting on sustainable behaviors; the potential areas for promoting sustainable consumption behaviors through mindfulness are identified as under:

1. *Disturbance in relation to routines*
2. *Consistency in respect of attitude and behavior*
3. *Altruism, cooperation, and sharing*
4. *Values and Meaning in life*
5. *Health and wellbeing*

The concept of disruption of routines referred to the process whereby mindful awareness could interrupt the automated thought processing, or “autopilot” being; the disruption could enable people to become aware of unconscious consumption that could be unsustainable. Secondly, mindfulness could lead to the translation of intentions

and attitudes into more sustainable behaviors. Thirdly, mindfulness practice could increase compassion and strengthen socially responsible consumption behavior such as consumption of fairly produced garments. Fourthly, mindfulness could be related to a positive construction of meaning and values in life, as opposed to materialistic or hedonist values. Finally, evidence of the positive impact of mindfulness on different health dimensions, such as sleep, feeling of well-being, and health indicators, was noted.

Recent Research on the Impact of Mindfulness on Gut Microbiome

Recent research has revealed strong linkages between mindfulness and good health. Good gut bacteria such as *Prevotella*, reported to be low in autistic as well as depressed children and adults, were seen to have multiplied several fold in Tibetan monks who practiced mindfulness leading to deep meditation. It has been suggested that the ways of practicing mindfulness include the repetition of the words *Who cares. So what. No big deal.* Kirtan Kriya that involves the repetition of the words *Saa (Beginning) Taa (Existence) Naa (Transformation) Maa (Rebirth)* has also been referred to as promoting mindfulness. Good results included mental calm as well as physical benefits of improved gut health. See, for example, Kamiya (2022) and Burgess (2023).

Concluding Comments

The term mindfulness flags up the need for thought in action in all areas, and this includes the areas relating to sustainability. It is crucial that what is done is informed by mindfulness. Mindfulness is an intellectual state that must be acquired through practice of awareness. Like the concept of *phronesis* envisaged by Socrates, Plato, and Aristotle, mindfulness as envisaged by Buddha enables a person to identify “the right way to do the right thing in a particular circumstance, with a particular person, at a particular time” (Schwartz and Sharpe 2010:5–6).

Sustainability is concerned with initiatives that include preventing the world from being environmentally degraded and depleted and the reduction of all kinds of pollution. The aim is to preserve the long-term health of eco systems. Mindfulness is crucial in a world filled with tradeoffs and riddled with uncertainties; what Eisner (2002:375) observes in relation to phronesis applies equally to mindfulness: “it deals with contingencies, is iterative and shifts aims in process when necessary. . . Its aim is to arrive at good but imperfect decisions with respect to particular circumstances.” To sum up, what is needed is mindfulness, not just scientific data, for addressing pressing sustainability issues.

Cross-References

► [Phronesis](#)

References

- Bristow, J. (2019). Mindfulness in politics and public policy. *Current Opinion in Psychology*, 28, 87–91.
- Burgess, K. (2023). Monks practising deep Tibetan meditation make healthier bacteria in gut, *the Times*.
- Cook, J. (2016). Mindful in Westminster: The politics of meditation and the limits of neoliberal critique. *Hau: Journal of Ethnographic Theory*, 2016(6), 141–161.
- Dhanda, T. K. (2019). Achieving triple dividend through mindfulness: More sustainable consumption, less unsustainable consumption and more life satisfaction. *Ecological Economics*, 161, 83–90.
- Eisner, E. W. (2002). From episteme to phronesis to artistry in the study and improvement of teaching. *Current Opinion in Psychology*, 18(4), 375–385.
- Ericson, T., Kjønstad, B. G., & Barstad, A. (2014). Mindfulness and sustainability. *Ecological Economics*, 104, 73–79.
- Fischer, D., Stanszus, L., Geiger, S., Grossman, P., & Schrader, U. (2017). Mindfulness and sustainable consumption: A systematic literature review of research approaches and findings. *Journal of Cleaner Production*, 162, 544–558.
- Geiger, S. M., Grossman, P., & Schrader, U. (2019). Mindfulness and sustainability: Correlation or causation? *Current Opinion in Psychology*, 28, 23–27.
- Grossman, P. (2019). On the porosity of subject and object in ‘mindfulness’ scientific study: Challenges to ‘scientific’ construction, operationalization and measurement of mindfulness. *Current Opinion in Psychology*, 28, 102–107.

- Kamiya, M. (2022). *Rumination and the gut microbiome: Effects of a brief mindfulness intervention*. Lawrence University Honors Projects, p. 168.
- Luberto, C. M., Shinday, N., Song, R., Philpotts, L. L., Park, E. R., Fricchione, G. L., & Yeh, G. Y. (2018). A systematic review and meta-analysis of the effects of meditation on empathy, compassion, and prosocial behaviors. *Mindfulness*, 9(3), 708–724.
- Mc Evilly, T. C. (2002). *The shape of ancient thought: Comparative studies in Greek and Indian philosophies*. Allworth Press.
- Mindful Nation UK. (2015). *Report by the Mindfulness All-Party Parliamentary Group (MAPPG)*. The Mindfulness Initiative; <http://themindfulnessinitiative.org.uk/publications/mindful-nation-uk-report>
- Schwartz, B., & Sharpe, K. (2010). *Practical wisdom: The right way to do the right thing*. New York: Riverhead Books.
- Thera, S. (1998). *The way of mindfulness: The Satipatthana Sutta and its commentary*. <https://www.accesstoinsight.org/lib/authors/soma/wayof.html>. Accessed 28 Aug 2019.

Mineral Water

► [Water](#)

Mining Slags

► [Waste Dumping](#)

Miscellaneousness

► [Diversity](#)

Misconduct

► [Corruption](#)

Misleading Sales

► [Mis-selling](#)

Mis-selling

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Synonyms

Financial mis-selling; Misleading sales; Unethical sales

Definition

Mis-selling is an unethical sales practice in which either a salesperson deliberately misrepresents a product or service to a customer or the particular offer is not suitable for the customer. The UK's former Financial Services Authority (FSA) describes mis-selling as "a failure to deliver fair outcomes for consumers" (Financial Services Authority 2006). Mis-selling may occur in case of flaws of product construction or as a result of the way the product/service is offered to the customer. From the CSR and corporate sustainability perspective, the attention should be given to possible adverse impact that businesses may cause for their stakeholders through mis-selling. This problem appears particularly often in products characterized by a high level of complexity that are sold by agents, rather than directly to the customer. The financial sector (including pensions, insurance policies, and mortgages) is reported as the one most often affected by mis-selling. Other sectors, where mis-selling may occur, include consumer electronics, auto repairs, and medical care.

Introduction

Since the financial crisis of 2008–2009, the debate on the proper sale of financial instruments has continued, with numerous studies demonstrating that, instead of operating efficiently, the financial sector has been imposing huge costs on the

economy (Wray 2011). Indeed, serious consequences of the improper sale of financial instruments can be observed as far back as the incident of mis-selling of personal pensions during 1988 and 1994 in the UK. These personal pension plans were introduced as part of a government campaign aimed at extending individual pension choice. The product, launched as a portable and flexible solution, relied upon the investment performance of its underlying funds. While considerable publicity was given to the advantages of this product, little attention was paid to the real comparison between personal pensions and existing final salaries in occupational pension plans (Ryley and Virgo 1999).

In a nutshell, approximately 2 million people (eligible for pensionable employment) may have been wrongly advised by life [insurance] companies and financial advisers to opt out, not join, or transfer benefits from existing occupational pension schemes in favour of personal pension plans. Most advisers involved in these transactions failed to give investors the investment business advice which was compliant with their obligations under the Financial Services Act 1986. As a result, the investors lost favorably defined benefits available in occupational pension schemes and ended up investing in an investment performance-related product which provided little security and no guaranteed benefits. (Ryley and Virgo 1999)

The second big mis-selling incident in the UK resulted from combining the sale of regular financial instruments, such as loans, credit cards, or mortgages with payment protection insurance (PPI). PPI was designed to cover repayments when people couldn't meet their obligations due to accident, illness, disability, or death. During the financial crisis of 2008–2009, it turned out that this insurance did not perform properly and, for many customers, turned out to be unnecessary. According to the Financial Conduct Authority (FCA), approximately 64 million PPI policies have been sold in the UK, mostly between 1990 and 2010. It is not clear how many of these policies were mis-sold. The FCA initially estimated that three million people could have been affected, and recent calculations show that more than £29 billion has already been paid back to people who complained about the sale of PPIs (Financial Conduct Authority 2017).

Inderst and Ottaviani (2009) cite a typical example of mis-selling as described in the code of conduct for the employees of a major bank in *Group Code of Conduct: Leading by Example*, Standard Chartered Bank, 2005:

Typically, mis-selling is associated with investment products when there may have been a failure to disclose all the associated risks or where an investment product is inappropriate to a customer’s needs. For example, a product with a long tenor [sic] (e.g., ten years) may have a guaranteed repayment of principal only on maturity date, but if prematurely liquidated it may not repay the full principal. This may result in mis-selling if it is sold to a customer who may have had a short term need for cash or to a customer who is 70 years old. (Inderst and Ottaviani 2009, p. 883)

The authors suggest that the cost of prospecting for customers (as perceived by the agent), the organization of the sales process, and the transparency of the commission structure influence the firm’s tolerance toward mis-selling. These examples show that misleading customers with incorrect information or the sale of improper products may impact not only one company but entire industries. From the perspective of corporate social responsibility and corporate sustainability, mis-selling is a result of an inappropriate policy adopted toward the most important stakeholder groups: employees and customers. Although mis-selling scandals are mostly discussed as incidents occurring in the financial sector, it is worthwhile analyzing the causes and consequences of mis-selling in broader terms and uncovering other critical incidents of misleading customers in diverse industries and organizations.

Forms of Mis-selling

Mis-selling occurs within the context of regulated markets (Benston 1998). While legal regulations set a framework for customer protection, specific organizational and cultural factors may lead to abuse and result in mis-selling.

Different types of mis-selling can be identified. Mis-selling may occur when the product is poorly designed or its core characteristics change after the sale, but the customer has either little or no possibility of cancelling the sale, or the cancellation is linked to a high liquidation fee. Mis-selling may also occur when a product is free from defects but is offered to a customer who doesn’t need it or who won’t properly benefit from the purchase. Different examples of mis-selling are shown in Table 1.

Mis-selling may be caused by several factors:

- 1. Misleading behavior of an employee. An employee deliberately misrepresents information, fails to describe key information about the product, provides misleading advice, or offers unsuitable products relative to expressed needs and preferences of customer. This may occur especially when employees are incentivized to sell particular products and control mechanisms are weak or there is silent acceptance of such practices.
- 2. Sales procedures providing non-customized advice. Conducting a need analysis, including assessment of the customer’s financial and personal risk preferences, is costly for banks; consequently, product or service advice is seldom

Mis-selling, Table 1 Examples of different types of mis-selling

The source of <i>mis-selling</i>	<i>Mis-selling</i> at the moment of sale	<i>Derivative mis-selling</i> (when the conditions of the agreement change)
Product characteristics	Product contains abuse clause	Some key characteristics of the product change and client has no possibility of negotiating a new agreement; cancellation is linked to a high liquidation fee
Service (the way of offering the product)	Cross-selling, bundled sale – customer needs to buy product B while buying product A Providing misleading information Concealing information	Information about the product doesn’t correspond to that provided in the agreement, delay in making decisions, lack of or slow reaction to consumer complaints, inconsistent communication

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tailored to the needs of individual customers. Agents are incentivized to recommend products, although these products may not always be suited to the customer (Inderst and Ottaviani 2009). Often mis-selling cases result from a salesperson's unauthorized undertaking of an advisory role, when the agent is only qualified to provide product information. Other examples here might be cross-selling or a bundled-sell situation, when a particular product is sold only under the condition that the customer buys another, often less attractive one. For example, the condition for the customer to get credit is to buy dedicated payment protection insurance.

3. Misleading marketing activities. In this case of mis-selling, clients are attracted by some particular feature of the product; however, the nature of the product is different from its advertised features. For example, an advertisement for financial investing may be described as safe, when, in fact, the product should only be offered to customers interested in hazardous or risky investments. Misleading marketing activities also often include confusing or misleading information provided by sales agents determined to show the product or service in a positive light.
4. Single-track trainings. Organizations often provide trainings for employees on the features of new products. In the case of highly complex products, however, trainings may concentrate on the positive aspects of the product while neglecting or minimizing less favorable characteristics. Salespeople are led to believe that they possess all the necessary information to assist customers, when they actually only have partial knowledge of the product.
5. Complex product design or illegal selling practices. Some products are too complex to be understood by the average client. In this case, clients cannot identify the inherent risk factors that can lead to either no benefit or a loss to them (Franke et al. 2016). Additionally, there are also a number of documented cases of products offered for sale that included unlawful features, such as limited accountability of the provider, unjustified fees associated with

cancellation of the contract, and limitation of consumer rights. Regulatory agencies monitor the markets in order to identify these types of illegal practices, but the process of redressing these violations can take years. For some customers, staying in an unjust contract may result in serious emotional, health, and financial losses.

Mis-selling in the Banking and Insurance Sectors

Mis-selling is mostly discussed in the context of financial markets, particularly in the banking and insurance sectors (Ferran 2012). When the regulatory framework is poorly suited to the specific market conditions, embedding regulations within the organizational context may not be effective and won't protect customers from mis-selling practices. Selling and buying financial products takes place within the context of changing markets and consumer behavior (Harrison and Estelami 2015). The individualization of the decision-making process makes consumers take the responsibility for their own financial choices. Information asymmetry resulting from the highly **complex nature of products offered** in the financial services sector encourages customers who don't possess this specialized knowledge to use advisory services. According to a range of authors, product complexity is one of the factors that led to the mis-selling scandal in the UK (Black and Nobles 1998; Moore-Bick 2001; Ward 2000).

Black and Nobles (1998) describe additional factors that led to this situation, including regulatory novelty, political ideology, and industry dynamics. In the opinion of the authors, the case of pension mis-selling cannot be regarded as an unrepeatable episode, as it was a result of **regulatory blindness**. The authors note that the quality of training aimed at increasing the competence of the advisors could not be effective, due to high levels of employee turnover in the life insurance industry and the specific remuneration structure. In fact, the training was costly for firms and advisors didn't spend much time on it. Sales agents were mostly self-employed and paid on a commission basis only.

In this case, the role of financial advisors may be likened to that of a regular salesforce who are incentivized to provide information to customers based on a sale's metrics. A visible agency conflict appears, then, when advisors are well paid by the organization (e.g., receive large bonuses) to sell low-quality products. In this case, the individual interests of the advisor may be aligned with the company's interests; however, this will be contrary to the best interests of the customer.

In the UK pension scandal, customers chose to give up their rights to belong to occupational pension plans in exchange for personal pension plans, because this offer was presented as a favorable option. In reality, this decision was unprofitable for them. They trusted that the advice they had been given was impartial and in line with their interests. This demonstrates the crucial role of **professional advisors** in the financial investment process (Aldridge 1998). In summary, agents who are encouraged to sell products, regardless of their fit with customer expectations and needs, misuse their authority and expertise, a practice that leads often to mis-selling.

Mis-selling and Corporate Culture

Through performance of everyday duties, sales agents contribute to and reflect the corporate culture (Brannan 2017). A number of reports stress the controversial role of a sales-based culture that exerts pressure on employees, which may lead to counterproductive employee behaviors (Lindley 2014; Sedgwick 2017). For example, Seal and Ye (2014) describe an example of a major bank where the Balanced Score Card (BSC) changed actor perceptions and actions and led to mis-selling. According to the authors, "The BSC may have improved organizational coordination but long-standing values based on a bonus culture contributed to long-term commercial problems. Introducing BSC's impact on organizational success/failure was ambiguous" (Seal and Ye 2014, p. 466).

The culture of an organization is spread through both written and unwritten rules and

practices. When new employees are taught how to circumvent the rules for short-term profits and observe more experienced colleagues also acting in this fashion, they learn that this kind of misleading behavior is informally accepted. If this is reflected in, for example, human resource policies, training, and remuneration, it shows that fair treatment of customers is not embedded in the organizational culture (Financial Services Authority 2006). Based on regulatory work and assessment, FSA identifies the central causes of unfair treatment of consumers:

- Low significance of "fair treatment of customers" in the corporate culture.
- Shortcomings in product design.
- Products/services targeted to customers contrary to their actual needs or possible investment horizons.
- Unclear or improper information provided before, during, or after the point of sale.
- Products perform differently from what the organization led customers to expect.
- Customers are advised inappropriately regarding the nature and performance of products.
- Post-sale barriers exist for changing the product, switching providers, submitting a claim, or making a complaint (Financial Services Authority 2006).

Both practitioners and researchers suggest that firms that sell through agents need to comply with internal standards and assure that these standards don't cause bias (Inderst 2010). It is suggested that organizations work at developing a so-called service culture that aims at serving the client instead of the organization itself (Sedgwick 2017). This should help sustain the employee, client, and organizational relationship. Stephen Sedgwick (2017) formulates 21 recommendations for banks. These recommendations are basically oriented toward rethinking and reconstructing variable reward payments and eliminating incentives directly linked to sales or the achievement of sales targets. Additionally, according to the author, the bank should "formally examine its workplace culture and institute formal processes to redress any conscious or unconscious bias towards sales in

reference to ethical behavior and customer service” (Sedgwick 2017, p. 9).

Costs of Mis-selling

Numerous studies show the highly negative impact that mis-selling creates among branches and their stakeholders. Mis-selling is not limited to the financial sector; therefore, its incidence should be monitored and given careful attention in all sectors. CSR and corporate sustainability researchers should give more attention to possible adverse impacts that businesses may cause for their stakeholders through mis-selling. These practices pose serious implications for firms, as misleading consumers may be fined by regulatory agencies in addition to organizations losing credibility in the marketplace (Armour et al. 2017; Karpoff et al. 2005). As reported by the Boston Consulting Group (2017), between 2009 and 2016, US regulators collected USD 179 billion in penalties from banks, while European regulators collected only USD 20 billion for the same period (Grasshoff et al. 2017). Following Carletti (2017), “the Consumer Financial Protection Bureau (CFPB) was created in the aftermath of the financial crisis and authorized under the Dodd Frank Act of 2011. In 2016, CFPB’s supervisory and enforcement actions resulted in financial institutions providing more than USD 58 million in redress to over 516,000 consumers and orders through enforcement efforts for approximately USD 247 million in total relief for consumers who fell victim to various violations of consumer financial protection laws, along with over USD 83.7 million in civil money penalties, used to compensate the consumers” (Carletti 2017, p. 12). The costs of mis-selling fall not only as penalties on customers or firms. There are also regulatory costs (and charges on financial service firms) and other unintended consequences. According to the FCA, while providing regulatory interventions (aimed at preventing development or sales of unsuitable products, risk may occur that will discourage consumer-oriented innovations, as firms might be reluctant to introduce new products or (be) unwilling or unable

to enter a market (Financial Conduct Authority & Financial Ombudsman Service 2016).

Mis-selling Regulation and Prevention

Since the UK pension mis-selling scandal and subsequent incidents, regulators have worked to find ways to limit the occurrence of such practices. As stated in the study on mis-selling of financial products, *Marketing, Sale and Distribution*, requested by the ECON committee, before the financial crisis of 2007–2008, regulators of financial markets had no constraints regarding selling processes or on the design and distribution of financial products. Additionally, institutional investors failed to understand and properly assess the risks associated with complex financial products. In some cases, the recommendation was very general: all marketing communication should be fair, clear, and not misleading. In 2011, the European Commission concluded that “systematic mis-selling of financial products by financial institutions and the massive losses of institutional and retail investors could be attributed to inadequate disclosure of the underlying costs, charges and risks of products and the incentives of firms to design unsuitable products for their customers, and customers’ behavioral biases and financial illiteracy” (Alexander 2018, p. 5). A recent study by Stolper (2018) suggests that increasing “financial literacy leads to a higher confidence in one’s own judgment and prompts individuals to use financial advice as just another source of information they process when making their financial decisions” (Stolper 2018, p. 295).

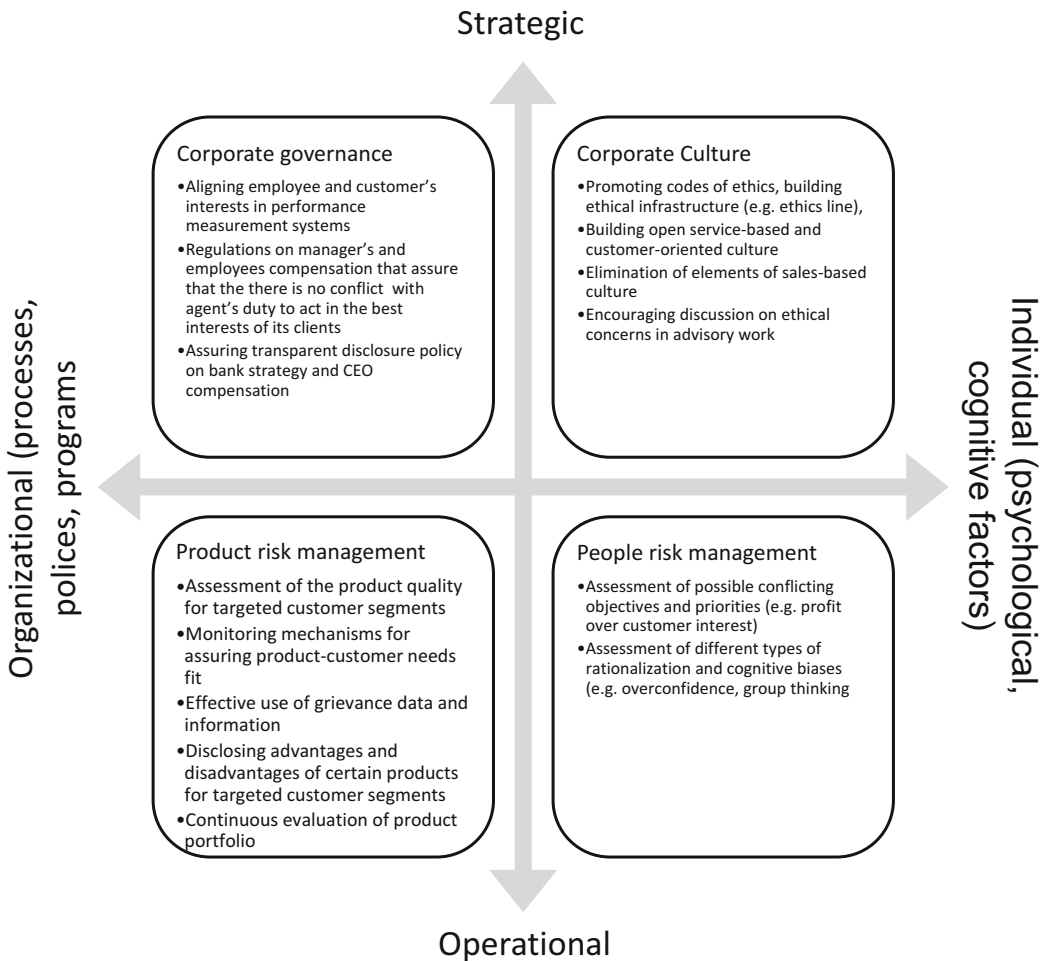
Before the financial crisis of 2008–2009, the dominating paradigm of the EU Regulatory Framework was based on disclosure – policymakers assumed that disclosing relevant information to investors and customers would assure efficient and socially optimal decisions on the financial market. In fact, the financial collapse has shown that the regulatory disclosures were inadequate instruments that didn’t eliminate conflicts of interest arising from

information asymmetry and complexity. Consequently, the Market in Financial Instruments Directive II – Directive 2014/65/EU (European Commission 2014) – was introduced, the most significant EU legislation regarding the reform of marketing, sale, and distribution of financial products. MiFID II is aimed at establishing rules concerning conflict of interests and disclosure of costs that may fall on the consumer.

MiFID II indicates a set of requirements that financial institutions should introduce in order to strengthen customer protection, by reducing the effects of information asymmetry arising from financial literacy, market expertise, and

bargaining power. To mitigate these risks, financial institutions should provide continuous assessment of their policies, procedures, and practices, as well as the quality and effects of the advice provided by employees. Based on the MiFID II (Directive 2014/65/EU) directives, four main areas of regulations and assessment should be monitored and improved (Fig. 1).

- Corporate governance provides rules and structures for insuring that decisions made by directors, managers, and employees will be aligned with the customer's best interests (European Commission 2014).



Mis-selling, Fig. 1 Overview of mis-selling regulations

- Corporate culture should be oriented toward customer's best interests. Agents should be encouraged to increase their efforts while serving customers. This includes possessing necessary knowledge and competence, obtaining information about client's preferences, informing customers about potential risks, and reporting to clients about suitability and appropriateness of products and services (Lindley 2014; Sedgwick 2017).
- Product risk management. According to MiFID II, financial institutions are obliged to constantly monitor the approval process for each financial product. This process should include targeting specific groups of customers and assessing relevant risks. The reporting rules on the appropriateness of the products give the regulator more power to intervene at the stage of product design. Disclosure rules require financial firms to disclose possible conflicts of interest and provide more transparent information about products, such as requirements on products and costs, fees and commissions, and costs and risks in selling bundles of financial products (European Commission 2014; Franke et al. 2016).
- People risk management is aimed at continuous assessment of remuneration and performance measurement systems in order to identify and eliminate possible cognitive biases and different types of rationalizations which may encourage agents to misleading behavior (Blacker and McConnell 2015).

MiFID II is directed toward improving the mechanisms of consumer protection; however, it has also encountered criticism. Alexander (2018) points out that MiFID II raises concerns about segmentation and regulatory arbitrage, as it doesn't apply to financial instruments regulated by insurance supervisors or covered by other EU legislation (Alexander 2018). Other unintended effects of MiFID II may occur as banks may be discouraged from providing services to certain groups of customers, as the protection mechanisms will increase costs and serving these customers will become unprofitable for the bank (Franke et al. 2016).

Summary

Mis-selling is an unethical sales practice in which either a salesperson deliberately misrepresents a product or service to a customer or the particular offer is not suitable for the customer. Mis-selling is not simply a case of providing misleading information. It happens that customers are tempted, misunderstand the information provided by advisors, or rely too much on the positive aspects of a product while neglecting the risks. The financial sector is reported as the one most often affected by mis-selling. An adequate level of financial literacy is crucial for profiting from financial advice; therefore, all parties as customers, regulators, and firms should be interested in increasing financial literacy, so that customers can make independent decisions aligned with their interests.

Cross-References

- [Agency Theory](#)
- [Basel Recommendations on Corporate Governance Principles for Banks](#)

References

- Aldridge, A. (1998). Reproducing the value of professional expertise in post-traditional culture: Financial advice and the creation of the client. *Cultural Values*, 2(4), 445–462. <https://doi.org/10.1080/14797589809359309>.
- Alexander, K. (2018). *Mis-selling of financial products: Marketing, sale and distribution* (Directorate General for Internal Policies no. IP/A/ECON/2016-17 PE 618.996). Brussels. Retrieved from policy Department for Economic, Scientific and Quality of Life Policies website: [http://www.europarl.europa.eu/RegData/etudes/STUD/2018/618996/IPOL_STU\(2018\)618996_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/618996/IPOL_STU(2018)618996_EN.pdf). Accessed 2 June 2019.
- Armour, J., Mayer, C., & Polo, A. (2017). Regulatory sanctions and reputational damage in financial markets. *Journal of Financial and Quantitative Analysis*, 52(4), 1429–1448. <https://doi.org/10.1017/S0022109017000461>.
- Benston, G. J. (1998). *Regulating financial markets: A critique and some proposals* (Hobart paper) (Vol. 135). London: Institute of Economic Affairs.
- Black, J., & Nobles, R. (1998). Personal pensions Mis-selling: The causes and lessons of regulatory failure. *The Modern Law Review*, 61(6), 789–820.

- Blacker, K., & McConnell, P. (2015). *People risk management: A practical approach to managing the human factors that could harm your business*. London: Kogan Page.
- Brannan, M. J. (2017). Power, corruption and lies: Mis-selling and the production of culture in financial services. *Human Relations*, 70(6), 641–667. <https://doi.org/10.1177/0018726716673441>.
- Carletti, E. (2017). *Fines for misconduct in the banking sector – What is the situation in the EU?* (No. PE 587.402). Retrieved from economic governance support unit website: [http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/587402/IPOL_IDA\(2017\)587402_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/587402/IPOL_IDA(2017)587402_EN.pdf). Accessed 2 June 2019.
- European Commission. (2014). *Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU*. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014L0065&from=PL>. Accessed 2 June 2019.
- Ferran, E. (2012). Regulatory lessons from the payment protection insurance Mis-selling scandal in the UK. *European Business Organization Law Review*, 13(2), 247–270. <https://doi.org/10.1017/S1566752912000171>.
- Financial Conduct Authority. (2017). Payment protection insurance explained. Retrieved from <https://www.fca.org.uk/ppi/ppi-explained>. Accessed 2 June 2019.
- Financial Conduct Authority, & Financial Ombudsman Service. (2016). *Financial services mis-selling: regulation and redress* (No. Report CH 851). London. Retrieved from National Audit Office website: <https://www.nao.org.uk/wp-content/uploads/2016/02/Financial-services-mis-selling-regulation-and-redress.a.pdf>. Accessed 4 June 2019.
- Financial Services Authority. (2006). *Treating customers fairly – Towards treating customers fairly – Towards fair outcomes for consumers* (No. pub ref: 2624). London. Retrieved from FSA website: <https://www.fca.org.uk/publication/archive/fsa-tcf-towards.pdf>. Accessed 4 June 2019.
- Franke, G., Mosk, T., & Schnebel E. (2016). *Fair retail banking: How to Prevent Mis-selling by banks* (No. white paper no. 39). Retrieved from SAFE | sustainable architecture for finance in Europe website: https://safe-frankfurt.de/fileadmin/user_upload/editor_common/Policy_Center/Franke-Mosk-Schnebel-Fair_Retail_Banking.pdf <https://doi.org/10.13140/RG.2.1.1786.2643>. Accessed 31 May 2019.
- Grasshoff, G., Mogul, Z., Pfuhler, T., Gittfried, N., Wiegand, C., Bohn, A., & Vonhoff, V. (2017). *Global risk 2017: Staying the course in banking report*. Retrieved from Boston Consulting Group website: http://image-src.bcg.com/BCG_COM/BCG-Staying-the-Course-in-Banking-Mar-2017_tcm9-146794.pdf. Accessed 31 May 2019.
- Harrison, T., & Estelami, H. (Eds.). (2015). *Routledge companions in business, management and accounting. The Routledge companion to financial services marketing*. London/New York: Routledge.
- Inderst, R. (2010). Misselling (financial) products: The limits for internal compliance. *Economics Letters*, 106(1), 35–37. <https://doi.org/10.1016/j.econlet.2009.09.018>.
- Inderst, R., & Ottaviani, M. (2009). Misselling through agents. *American Economic Review*, 99(3), 883–908. <https://doi.org/10.1257/aer.99.3.883>.
- Karpoff, J. M., Lee, D. S. S., & Martin, G. (2005). The cost to firms of cooking the books. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.652121>. Advance online publication.
- Lindley, D. (2014). Risky business: The case for reform of sales incentives schemes in banks. Retrieved from Consumers International website: http://es.consumersinternational.org/media/1269/sales-incentive-report_risky_business_final2_151014.pdf. Accessed 31 May 2019.
- Moore-Bick, J. (2001). Lloyds TSB General Insurance Holdings Ltd and others v Lloyds Bank Group Insurance Co Ltd; Abbey National plc v Lee and others. *Journal of Financial Regulation and Compliance*, 9(4), 381–384. <https://doi.org/10.1108/eb025091>.
- Ryley, P., & Virgo, J. (1999). Mis-selling of personal pension plans: A legal perspective. *Pensions: An International Journal*, 5(1), 18–36. <https://doi.org/10.1057/palgrave.pm.5940103>.
- Seal, W., & Ye, L. (2014). The balanced scorecard and the construction of a management control discourse. *Journal of Accounting & Organizational Change*, 10(4), 466–485. <https://doi.org/10.1108/JAOC-10-2012-0098>.
- Sedgwick, S. (2017). *Retail banking remuneration review*. Retrieved from Australian Banking Association website: https://www.betterbanking.net.au/wp-content/uploads/2018/01/FINAL_Rem-Review-Report.pdf. Accessed 2 June 2019.
- Stolper, O. (2018). It takes two to tango: Households' response to financial advice and the role of financial literacy. *Journal of Banking & Finance*, 92, 295–310. <https://doi.org/10.1016/j.jbankfin.2017.04.014>.
- Ward, S. (2000). Personal pensions in the UK, the Mis-selling scandal and the lessons to be learnt. In G. Hughes & J. Stewart (Eds.), *Pensions in the European Union: Adapting to economic and social change* (pp. 139–146). Boston: Springer US. https://doi.org/10.1007/978-1-4615-4527-9_10.
- Wray, L. R. (2011). The financial crisis viewed from the perspective of the 'Social Costs' theory. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1800226>. Advance online publication.

Mitigation Measures and Mechanisms

► Carbon Management

Modeling in Sustainability

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Definition

Modeling sustainability involves using mathematical and computational methods to simulate and analyze various aspects of sustainability. This includes resource use, environmental impacts, social and economic systems, and their interactions and interdependencies. The purpose of sustainability modeling is to help decision-makers understand and evaluate the potential consequences of different actions and policies and to support the development of sustainable solutions.

Examples of sustainability modeling include life cycle assessment (LCA) models, which are used to assess the environmental impact of a product, process, or system over its entire life cycle. Energy systems models are used to analyze a region's energy demand and supply, taking into account factors such as energy efficiency, renewable energy sources, and emissions. Social-ecological models are used to analyze the interplay between social and ecological systems and to assess the impact of human activities on the environment.

Climate change models are used to simulate the Earth's climate system and assess the impact of human activities on the climate. These models also evaluate the potential consequences of different mitigation and adaptation strategies. Finally, water resource management models are used to optimize the allocation of water resources for different uses. This involves considering factors such as water availability, quality, and demand.

Introduction

In recent years, there has been an increased focus on the concept of sustainability, which is

multifaceted and intricate. Sustainability involves striking a balance between economic growth, social development, and environmental protection, all with the overarching goal of fulfilling the needs of the present generation while ensuring that future generations can meet their needs without difficulty. Successfully tackling sustainability challenges necessitates a comprehensive and interdisciplinary approach, with modeling playing a significant role in this process.

In the context of sustainability, modeling is a valuable tool that can be employed to scrutinize, comprehend, and anticipate the behavior of complex systems. These models can be used to analyze the various interactions between the environment, economy, and society while also predicting the effects of different policies and actions on these systems. Application of modeling in the sustainability realm can yield valuable insights, such as recognizing the primary drivers behind environmental deterioration, evaluating the effects of different policy alternatives, and determining the trade-offs and synergies between various sustainability objectives.

One of the leading sustainability challenges that models can help to address is climate change. The Intergovernmental Panel on Climate Change (IPCC) has provided clear evidence that human activities are causing unprecedented warming of the Earth's surface, with potentially severe consequences for ecosystems and human societies (IPCC 2018). Models can be used to predict climate change's future impacts and assess the effectiveness of different mitigation and adaptation strategies. For instance, integrated assessment models (IAMs) have been widely used to assess the impact of different policy scenarios on future emissions and to evaluate the potential costs and benefits of different mitigation options (Nordhaus 2017).

The depletion of natural resources is a significant sustainability challenge that can be analyzed using models. Models can examine the interactions between resource extraction, economic growth, and environmental degradation and evaluate the impact of various resource management policies (Feng et al. 2019). Bioeconomic models have been developed to analyze the trade-offs between economic growth, resource depletion, and environmental impacts. Similarly, social dimensions such

as poverty and inequality are also a part of sustainability. Models can be employed to assess the interactions between economic growth, poverty, and inequality and to evaluate the impacts of different social policies. For instance, microsimulation models have been developed to analyze the impact of social policies on poverty and inequality (Erreygers and Vanhuysse 2017).

Integrated assessment models (IAMs) are commonly used in sustainability research. IAMs are designed to integrate multiple sustainability dimensions and to examine the interactions between different components of the environment, economy, and society. They can evaluate the impacts of various policy options and identify trade-offs and synergies between different sustainability goals. The Integrated Assessment Model (IAM) developed by the Intergovernmental Panel on Climate Change (IPCC) is widely used to evaluate the potential costs and benefits of different policy scenarios (IPCC 2014).

Models play a crucial role in understanding and addressing sustainability challenges by providing valuable insights such as identifying the key drivers of environmental degradation, assessing the impacts of different policy options, and identifying trade-offs and synergies between different sustainability goals (Keppo et al. 2021; Workman et al. 2021).

Types of Sustainability Models

Sustainability research encompasses a wide range of disciplines and perspectives, and as such, various models are used to study different aspects of

sustainability. These models can be broadly categorized into three main types: ecological, economic, and social (Table 1).

Ecological models are used to analyze the interactions between human activities and the natural environment. These models can be used to study issues such as biodiversity loss, habitat destruction, and climate change. Examples of ecological models include biogeochemical models, ecosystem models, and climate models. For instance, the dynamic global vegetation model (DGVM) is a biogeochemical model that simulates the interactions between vegetation, soil, and climate to understand how land use and climate changes affect the carbon cycle and biodiversity (Jose et al. 2023; Bonan 2019; Martens et al. 2021).

Economic models analyze the interactions between economic activities and the natural environment. These models can be used to study issues such as resource depletion, economic growth, and environmental degradation. Examples of economic models include integrated assessment models, bioeconomic models, and microsimulation models. For instance, the integrated assessment model (IAM) is a type of economic model that integrates different models, such as climate models, economic models, and land-use models, to comprehensively analyze the different factors that shape sustainability outcomes (Nordhaus 2017).

Social models are used to analyze the social interactions that shape sustainability outcomes. These models can be used to study issues such as social inequality, poverty, and social network dynamics. Examples of social models include

Modeling in Sustainability, Table 1 Different types of models used in sustainability research

Model type	Examples	Applications	Model name
Ecological models	Ecosystem models, biogeochemical models	Analyzing the impacts of different management options on ecosystems	Dynamic global vegetation model (DGVM)
Economic models	Integrated assessment models, bioeconomic models, microsimulation models	Analyzing the interactions between resource extraction, economic growth, and environmental degradation, assessing the impacts of different policy options on poverty and inequality	Integrated assessment model (IAM)
Social models	Social network analysis, agent-based models	Analyzing the impacts of social interactions on sustainability outcomes	Agent-based model (ABM)

social network analysis and agent-based models. For instance, the agent-based model (ABM) is a type of social model that simulates the interactions between agents (e.g., individuals, households, and firms) to understand how social interactions shape sustainability outcomes (Axelrod 1997; Kozitsin 2022).

Apart from the abovementioned categories, models can also be classified as quantitative or qualitative (Table 2). Quantitative models are numerical models that use mathematical equations to represent relationships and make predictions. Qualitative models, on the other hand, use verbal or graphical representations to describe relationships and make predictions (Chi 1997). The choice of model will depend on the specific research question and the type of data available, and each type of model has its strengths and limitations.

One example of a quantitative model in sustainability research is the dynamic integrated model of climate and the economy (DICE) model developed by William Nordhaus (2017). The DICE model is an integrated assessment model (IAM) that integrates ecological and economic models to comprehensively analyze sustainability outcomes. The model is used to study policy interventions' impacts and assess the trade-offs between different sustainability objectives.

On the other hand, qualitative models are more suitable for capturing complex social interactions and subjective experiences. An example of a qualitative model in sustainability research is the integrated model to assess the global environment (IMAGE) model developed by the PBL

Netherlands Environmental Assessment Agency (De Vries and Petersen 2009; Stehfest et al. 2014). The IMAGES model comprehensively analyzes the different factors that shape sustainability outcomes, including climate, economy, and land-use.

IAMs, such as the DICE and IMAGE models, combine quantitative and qualitative elements. These models comprehensively analyze sustainability outcomes by integrating ecological, economic, and social models (Stehfest et al. 2014).

Approaches and Methodologies in Sustainability Modeling

Sustainability modeling is an interdisciplinary field that integrates various approaches and methodologies to analyze complex sustainability issues. The most common approaches used in sustainability modelling include systems thinking, life cycle assessment, and input–output analysis (Table 3). This section will provide an overview of these approaches and their applications in sustainability modeling.

Systems Thinking

Systems thinking is a holistic approach that considers the interconnectedness of different components in a system and how they interact with each other to produce a specific outcome. This approach is commonly used in sustainability modeling to understand the interplay between sustainability's ecological, economic, and social dimensions (Marten 2012). For instance, systems thinking can help identify the interdependence

Modeling in Sustainability, Table 2 Comparison of quantitative and qualitative models in sustainability research

Type of model	Strengths	Limitations
Quantitative models	Make precise predictions suitable for testing hypotheses based on quantifiable data	Limited in application if data is inadequate or unreliable. May not be understandable for nontechnical audiences
Qualitative models	It can capture complex social interactions and subjective experiences and be easily understood by nontechnical audiences	They may not be useful in making precise predictions, may not be as scientifically rigorous as quantitative models, and may not be suitable for testing hypotheses

(Axelrod 1997; Kozitsin 2022; Hulme 2007).

Modeling in Sustainability, Table 3 Overview of different approaches and methodologies used in sustainability modeling

Approach/ methodology	Description	Applications in sustainability modeling	Advantages	Limitations	Examples
Systems thinking	An interdisciplinary approach that views the world as a complex system of interconnected elements and seeks to understand the interactions between these elements in order to have a better and clearer perspective of the system as a whole better	Assessment of the interplay between sustainability's ecological, economic, and social dimensions	Offers a comprehensive view of sustainability, considering multiple perspectives and factors	It can be complex and challenging to understand, especially for nonexperts	STELLA (Systems Thinking, Experimental Learning Laboratory with Animation), Vensim, System Dynamics
Life cycle assessment (LCA)	A method used to assess the environmental impact of a product, process, or activity from the cradle to the grave. LCA considers the entire life cycle of a product, from raw material extraction to disposal	Evaluates the environmental impacts of a product or system	Provides a comprehensive view of the environmental impacts of a product or service	It can be time-consuming and resource-intensive to implement	GaBi, SimaPro, OpenLCA
Input–output analysis	A method used to analyze the interdependencies between different economic sectors in order to understand the flow of goods and services between them		Offers a comprehensive view of the economic impacts of sustainability issues	Limited in its ability to consider social impacts	MRIO (multiregional input–output) models, WIOD (World Input–Output Database)
Integrated assessment models (IAMs)	Models that combine various approaches and methodologies to provide a comprehensive understanding of sustainability issues. IAMs typically include ecological, economic, and social models and seek to understand these dimensions' interactions.	A modeling approach that integrates data from multiple sources to provide a comprehensive view of sustainability issues. IAMs combine economic, ecological, and social data to analyze complex sustainability challenges like climate change and energy systems			DICE (dynamic integrated climate-economy), PAGE (Policy Analysis of the greenhouse effect), IMAGE (integrated assessment model)

between the economy and the environment and how changes in one system can impact the other.

Systems thinking provides a valuable framework for analyzing sustainability problems, as it helps identify interdependencies between different system components (Senge 1990). For instance, in the context of climate change, systems thinking can help to understand the interrelationships between the emission of greenhouse gases, the impacts of climate change on ecosystems, and the socio-economic impacts of these changes.

Life Cycle Assessment

Life cycle assessment (LCA) is a methodology that assesses the environmental impacts of a product, service, or system throughout its entire life cycle. This includes the extraction of raw materials, production, transportation, use, and disposal of the product (ISO 2006a, 2006b). LCA provides a comprehensive understanding of the environmental impacts of a product or system and can be used to identify areas for improvement in terms of sustainability.

For instance, an LCA of a vehicle might consider the environmental impact of the vehicle's production, use, and disposal at the end of its life cycle. The results of an LCA can inform decision-making related to sustainability, for example, by identifying areas where improvements can be made to reduce the environmental impact of a product or service (Buxel et al. 2015).

Input–Output Analysis

Input–output analysis is an economic methodology that analyzes the interdependence between different sectors of an economy. This approach is commonly used to assess the impact of changes in one sector on the rest of the economy and to understand the flow of goods and services between different sectors. For instance, input–output analysis can be used to assess the impact of changes in the energy sector on the rest of the economy, and to identify opportunities for reducing greenhouse gas emissions (Igos et al. 2015; Minx et al. 2009).

Integrated Assessment Models

Integrated assessment models (IAMs) integrate multiple dimensions of sustainability, including the ecological, economic, and social perspectives. IAMs are used to analyze complex sustainability issues, such as climate change, and to provide policy recommendations for addressing these issues. IAMs are commonly used to analyze the trade-offs between economic growth and environmental protection and identify sustainable development opportunities (van Soest et al. 2019).

The Importance of Combining Quantitative and Qualitative Models

While quantitative models provide valuable insights into the underlying mechanisms of sustainability issues, they cannot often capture the complexity and uncertainties inherent in sustainability issues (Ascough Ii et al. 2008). On the other hand, qualitative models provide a more comprehensive understanding of the social and cultural factors that influence sustainability issues, but they need more precision than quantitative models (Di Vaio et al. 2020). Thus, it is essential to use a combination of quantitative and qualitative models to provide a comprehensive understanding of sustainability issues. This can be achieved by incorporating qualitative models into quantitative models or using a multicriteria decision analysis approach that combines quantitative and qualitative data.

Applications in Practice

Sustainability models are applied in various sectors, scales, and issues. This section focuses on the practical use of sustainability models in different application areas, including energy systems modeling, urban sustainability planning, and climate change impact assessment.

Energy System Modeling

Energy system modeling is widely used to analyze and optimize energy systems. Energy system

modeling aims to assess the feasibility, sustainability, and environmental impact of different energy systems, such as renewable energy systems and fossil fuel systems. Energy system models evaluate the technical, economic, and environmental performance of different energy systems and determine the optimal combination of energy sources and technologies that sustainably meet the energy demand.

Examples of energy system models include the market and allocation (MARKAL) model, the integrated MARKAL-EFOM system (TIMES) model, and the long-range energy alternatives planning (LEAP) model (Bhattacharyya and Timilsina 2010; Perwez et al. 2015; Perissi et al. 2021). The MARKAL model is widely used to evaluate the long-term energy and environmental implications of different energy policies and scenarios. The TIMES model is a linear programming model that optimizes the energy supply and demand for different energy systems (Lopion et al. 2019). The LEAP model is a comprehensive energy and emissions planning tool that helps policymakers, planners, and researchers analyze energy systems and their environmental impact (Perwez et al. 2015).

Urban Sustainability Planning

Urban sustainability planning is an essential application of sustainability models in urban planning and development. Urban sustainability models evaluate the sustainability of different urban development scenarios and determine the optimal combination of land use, transportation, and energy systems that support sustainable urban development (Liu 2008).

Climate Change Impact Assessment

Climate change impact assessment is another important application of sustainability models. Climate change impact models are used to assess the potential impacts of climate change on various systems and sectors, such as agriculture, water resources, health, and coastal zones. These models are used to develop adaptation and mitigation strategies to reduce climate change's impacts and support sustainable development (IPCC 2014).

Benefits of Using a Combination of Models

Using quantitative and qualitative models provides a comprehensive understanding of sustainability issues. Quantitative models provide numerical results and rigorous analysis, while qualitative models provide insights into sustainability's subjective and social aspects. Using both models allows a more comprehensive and integrated analysis of sustainability issues, providing a more comprehensive picture of the complexities and interrelationships of sustainability problems (IPCC 2014).

Energy system modelling: This type of model is used to analyze energy systems and their interactions with the environment and society, including the assessment of energy supply, demand, and sustainability. Examples of energy systems models include the EnergyPLAN model, which is used to evaluate the impact of renewable energy policies on energy systems, and the MARKAL model, which is used to optimize energy systems based on cost-effectiveness (Ma et al. 2018; Lund et al. 2017).

Urban sustainability planning models: They are used to analyze urban sustainability, including land use, transportation, and energy systems, to support decision-making in urban planning. For instance, the system for urban stormwater treatment and analysis integration (SUSTAIN) model evaluates the sustainability of different city land use and transportation scenarios (Lovell 2010).

Climate change impact assessment models are used to assess the impacts of climate change on various sectors, including agriculture, water resources, and coastal zones (Erda et al. 2007). Examples of climate change impact models include the DIVA model, which is used to assess the impacts of sea level rise on coastal zones, and the Impacts 08 model, which is used to assess the impacts of climate change on agriculture.

These are just a few examples of the different types of models used in sustainability research. It is important to note that the use of multiple models, both quantitative and qualitative, can provide a more comprehensive understanding of sustainability issues in different application areas.

Limitations and Challenges

Sustainability modeling also faces several limitations and challenges that must be addressed for the models to be effective and reliable. This includes the following as shown in Table 4.

Data Availability

Data are the foundation of any model and are essential for the accuracy and reliability of the results. However, data availability and quality can be significant challenges in sustainability modeling. In some cases, data may not be available, while in others, the data may need better quality. For instance, emissions and energy consumption data are only sometimes readily available or accurate, especially in developing countries (Ma et al. 2019). This can result in the need for more information to support decision-making, making it difficult to assess the sustainability of a particular system.

Model Complexity

Sustainability models are often complex and interdisciplinary, making them challenging to develop, understand, and use. Model complexity can result from the number of variables, the interactions between these variables, and the methods used to

represent these variables and interactions. For instance, some models may include many components, such as energy, economic, and environmental systems. It can be challenging to accurately represent the interactions between these components (Baartman et al. 2020).

Uncertainty

Uncertainty is a natural aspect of sustainability modeling, given that the data used in models are often uncertain, and the models themselves may have inherent limitations. For instance, the assumptions made in models about future trends and developments, such as future energy demand, can be uncertain (Blair et al. 2019). This uncertainty can affect the accuracy and reliability of the model results and can also impact the decision-making process.

Model Evaluation and Validation

Model evaluation and validation are essential steps in the modeling process, as they ensure that the models are reliable and accurate. However, evaluating and validating sustainability models can be challenging, as the models may include complex interrelationships and multiple components, making it difficult to determine their validity and accuracy (IPCC 2014).

Model Integration

Model integration is the process of combining multiple models to create a comprehensive understanding of sustainability issues. However, integrating different models can be challenging, as the models may use different methods and assumptions, leading to inconsistencies in the results (Wang et al. 2019).

Communication of Model Results

Finally, communicating the results of sustainability models to stakeholders can also be challenging, as the results may be complex and technical, making it difficult for stakeholders to understand and use them effectively. This is particularly true for stakeholders who need to become more familiar with the technical aspects of sustainability modeling (Elsawah et al. 2019).

Modeling in Sustainability, Table 4 Summary of limitations and challenges in sustainability modeling

Limitation/ challenge	Description
Data availability	Lack of data or poor-quality data affects the accuracy and reliability of the results
Model complexity	Complex interdisciplinary models can be challenging to develop, understand, and use
Uncertainty	Uncertainty affects the accuracy and reliability of the results and can impact the decision-making process
Model evaluation and validation	Evaluating and validating complex models can be challenging
Model integration	Integrating different models can be demanding due to inconsistent methods and assumptions

Case Studies of Sustainability Modeling in Practice

1. **Environmental management:** In environmental management, sustainability models have been used to predict the impacts of land use change on biodiversity and ecosystem services. For instance, the integrated assessment model (IAM) has been used to assess the impacts of climate change on biodiversity and the provision of ecosystem services (Van Soest et al. 2019; Daioglou et al. 2019).
2. **Urban planning:** In urban planning, sustainability models have been used to assess the potential impacts of proposed urban development projects on the environment, including air and water quality, land use, and energy use (Bibri et al. 2020).
3. **Resource management:** In resource management, sustainability models have been used to assess the sustainability of various resources, including water, energy, and food (Namany et al. 2019). For instance, the water evaluation and planning (WEAP) system has been used to assess water sustainability in various regions and to support decision-making related to water management (Pallavi et al. 2021).

Future Directions and Advancements

Sustainability modeling has come a long way since its inception, and several avenues for future research have the potential to advance the field significantly. This section will discuss some of the most promising future directions for sustainability modeling research.

Advancements in Computational Methods

One of the biggest challenges in sustainability modelling is the sheer complexity of the systems being studied. As sustainability modeling evolves, computational methods will likely play a significant role in advancing the field. Advances in high-performance computing, such as the development of cloud computing and supercomputing platforms, will allow for more

complex and sophisticated models to be developed and run. Additionally, developing new algorithms and optimization techniques, such as machine learning and artificial intelligence methods, will help improve the accuracy and robustness of sustainability models.

Data Availability and Integration

Another critical aspect of sustainability modeling is the availability and quality of data. To be applicable, sustainability models must be based on accurate and comprehensive data, including historical and real-time data. Data availability and quality are expected to improve in the coming years as more sensors and monitoring systems are deployed, and data sharing and integration become more common. Integrating remote sensing data, such as satellite imagery and atmospheric measurements, will significantly advance sustainability modeling.

Interdisciplinary Collaborations

Sustainability is a complex and multidisciplinary field, and sustainable development requires collaboration between various sectors and stakeholders. Therefore, future research in sustainability modelling must be interdisciplinary, bringing together experts from various fields, including computer science, engineering, ecology, economics, and social sciences. Interdisciplinary collaborations will be essential for developing integrated models that consider the complex interactions between different system components and provide a more comprehensive picture of sustainability.

Integration of Artificial Intelligence and Machine Learning Techniques

Artificial intelligence and machine learning techniques have the potential to revolutionize sustainability modeling. These techniques can be used to automate the model development process, making it faster, more accurate, and less expensive. For instance, machine learning algorithms can automatically identify the most critical parameters and variables in a system, optimize model parameters, or predict future trends and patterns. In the coming years, artificial intelligence and machine learning

techniques will likely play an increasingly important role in sustainability modeling.

Integration of Participatory and Stakeholder-Engaged Approaches

Finally, future research in sustainability modeling must be participatory and stakeholder-engaged, considering the perspectives and needs of different groups and individuals. This requires the development of models that are transparent, accessible, and easy to use and that provide stakeholders with the information they need to make informed decisions. In addition, integrating participatory and stakeholder-engaged approaches into sustainability modeling will help ensure that models are relevant, trustworthy, and useful for decision-making.

Sustainability modeling is an evolving field with numerous future research and advancement opportunities. By addressing the limitations and challenges of the field and continuing to develop and integrate new methods and techniques, sustainability modeling can significantly contribute to sustainable development in the coming years.

Summary

Sustainability modeling is a critical tool for addressing complex sustainability challenges today. Integrating quantitative and qualitative models provides a comprehensive and holistic approach to modeling sustainability, considering various aspects of environmental, social, and economic sustainability.

Throughout this paper, the importance of sustainability modeling has been emphasized, including advances in computational methods, data availability and integration, interdisciplinary collaborations, integration of artificial intelligence and machine learning techniques, and the integration of participatory and stakeholder-engaged approaches. These developments have led to a growing awareness of the need for an integrated and holistic approach to sustainability modeling, focusing on data-driven decision-making and model evaluation and validation.

It is important to note that despite advances in sustainability modeling, many limitations and challenges still need to be addressed. However, with continued research and advancements in the field, sustainability modeling will continue to play a crucial role in addressing current and future sustainability challenges.

In conclusion, sustainability modeling has the potential to have a significant impact on the way we understand and address sustainability challenges. We must continue to invest in its development and improvement.

References

- Ascough II, J. C., Maier, H. R., Ravalico, J. K., & Strudley, M. W. (2008). Future research challenges for incorporation of uncertainty in environmental and ecological decision-making. *Ecological modelling*, 219(3-4), 383–399.
- Axelrod, R. (1997). The dissemination of culture: A model with local convergence and global polarization. *Journal of Conflict Resolution*, 41(2), 203–226.
- Baartman, J. E., Melsen, L. A., Moore, D., & van der Ploeg, M. J. (2020). On the complexity of model complexity: Viewpoints across the geosciences. *Catena*, 186, 104261.
- Bhattacharyya, S. C., & Timilsina, G. R. (2010). A review of energy system models. *International Journal of Energy Sector Management*, 4(4), 494–518.
- Bibri, S. E., Krogstie, J., & Kärrholm, M. (2020). Compact city planning and development: Emerging practices and strategies for achieving the goals of sustainability. *Developments in the Built Environment*, 4, 100021.
- Blair, G. S., Henrys, P., Leeson, A., Watkins, J., Eastoe, E., Jarvis, S., & Young, P. J. (2019). Data science of the natural environment: a research roadmap. *Frontiers in Environmental Science*, 7, 121.
- Bonan, G. (2019). *Climate change and terrestrial ecosystem modeling*. Cambridge University Press.
- Buxel, H., Esenduran, G., & Griffin, S. (2015). Strategic sustainability: Creating business value with life cycle analysis. *Business Horizons*, 58(1), 109–122.
- Chi, M. T. (1997). Quantifying qualitative analyses of verbal data: A practical guide. *The Journal of the Learning Sciences*, 6(3), 271–315.
- Daioğlu, V., Doelman, J. C., Wicke, B., Faaij, A., & van Vuuren, D. P. (2019). Integrated assessment of biomass supply and demand in climate change mitigation scenarios. *Global Environmental Change*, 54, 88–101.
- De Vries, B. J., & Petersen, A. C. (2009). Conceptualizing sustainable development: An assessment methodology connecting values, knowledge, worldviews and scenarios. *Ecological Economics*, 68(4), 1006–1019.

- Di Vaio, A., Palladino, R., Hassan, R., & Escobar, O. (2020). Artificial intelligence and business models in the sustainable development goals perspective: A systematic literature review. *Journal of Business Research*, 121, 283–314.
- Elsawah, S., Filatova, T., Jakeman, A. J., Kettner, A. J., Zellner, M. L., Athanasiadis, I. N., ... & Lade, S. J. (2019). Eight grand challenges in socio-environmental systems modeling. *Socio-Environmental Systems Modelling*, 2.
- Erda, L., Yinlong, X., & Shaohong, W. (2007). China's national assessment report on climate change (II): climate change impacts and adaptation. *气候变化研究进展*, 3(00), 6.
- Erreygers, G., & Vanhuysse, P. (2017). Microsimulation of social policies in the European Union. *Journal of Economic Inequality*, 15(4), 589–614.
- Feng, K., Li, Y., & Li, H. (2019). Bioeconomic modelling of land use change in China. *Land Use Policy*, 85, 121–129.
- Hulme, D. (2007). Integrating quantitative and qualitative research for country case studies of development. Economic and Social Research Council (ESRC) is gratefully acknowledged. Global Poverty Research Group.
- Igos, E., Rugani, B., Rege, S., Benetto, E., Drouet, L., & Zachary, D. S. (2015). Combination of equilibrium models and hybrid life cycle-input-output analysis to predict the environmental impacts of energy policy scenarios. *Applied Energy*, 145, 234–245.
- Intergovernmental Panel on Climate Change (IPCC). (2014). Climate change 2014: synthesis report. Contribution of working groups I, II and III to the fifth assessment report of the Intergovernmental Panel on Climate Change.
- Intergovernmental Panel on Climate Change (IPCC). (2018). Global warming of 1.5 °C. An IPCC Special Report on the impacts of global warming of 1.5°C above preindustrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.
- ISO 14040. (2006a). *Environmental management - Life cycle assessment - Principles and framework*. International Organization for Standardization.
- ISO 14040. (2006b). *Environmental management - Life cycle assessment - Requirements and guidelines*. International Organization for Standardization.
- Jose, K., Bandopadhyay, A., Arya, A., & Chaturvedi, R. K. (2023). Forest ecosystem modeling for policy planning: A review. *Ecosystem and Species Habitat Modeling for Conservation and Restoration*, 439–457.
- Keppo, I., Butnar, I., Bauer, N., Caspani, M., Edelenbosch, O., Emmerling, J., et al. (2021). Exploring the possibility space: Taking stock of the diverse capabilities and gaps in integrated assessment models. *Environmental Research Letters*, 16(5), 053006.
- Kozitsin, I. V. (2022). A general framework to link theory and empirics in opinion formation models. *Scientific Reports*, 12(1), 1–18.
- Liu, Y. (2008). Modelling urban development with geographical information systems and cellular automata. Crc Press.
- Lopion, P., Markewitz, P., Stolten, D., & Robinius, M. (2019). Cost uncertainties in energy system optimization models: a quadratic programming approach for avoiding penny switching effects. *Energies*, 12(20), 4006.
- Lovell, S. T. (2010). Multifunctional urban agriculture for sustainable land use planning in the United States. *Sustainability*, 2(8), 2499–2522.
- Lund, H., Arler, F., Østergaard, P. A., Hvelplund, F., Connolly, D., Mathiesen, B. V., & Karnøe, P. (2017). Simulation versus optimization: Theoretical positions in energy system modelling. *Energies*, 10(7), 840.
- Ma, W., Xue, X., & Liu, G. (2018). Techno-economic evaluation for hybrid renewable energy system: Application and merits. *Energy*, 159, 385–409.
- Ma, X., Wang, C., Dong, B., Gu, G., Chen, R., Li, Y., ... & Li, Q. (2019). Carbon emissions from energy consumption in China: its measurement and driving factors. *Science of the Total Environment*, 648, 1411–1420.
- Marten, G. G. (2012). *Systems thinking: An introductory approach*. John Wiley & Sons.
- Martens, C., Hickler, T., Davis-Reddy, C., Engelbrecht, F., Higgins, S. I., von Maltitz, G. P., ... & Scheiter, S. (2021). Large uncertainties in future biome changes in Africa call for flexible climate adaptation strategies. *Global Change Biology*, 27(2), 340–358.
- Minx, J. C., Wiedmann, T., Wood, R., Peters, G. P., Lenzen, M., Owen, A., et al. (2009). Input-output analysis and carbon footprinting: an overview of applications. *Economic Systems Research*, 21(3), 187–216.
- Namany, S., Al-Ansari, T., & Govindan, R. (2019). Sustainable energy, water and food nexus systems: A focused review of decision-making tools for efficient resource management and governance. *Journal of Cleaner Production*, 225, 610–626.
- Nordhaus, W. D. (2017). *The climate casino: Risk, uncertainty, and economics for a warming world*. Yale University Press.
- Pallavi, S., Yashas, S. R., Anilkumar, K. M., Shahmoradi, B., & Shivaraju, H. P. (2021). Comprehensive understanding of urban water supply management: towards sustainable water-socio-economic-health-environment nexus. *Water Resources Management*, 35, 315–336.
- Perissi, I., Martelloni, G., Bardi, U., Natalini, D., Jones, A., Nikolaev, A., et al. (2021). Cross-validation of the MEDEAS energy-economy-environment model with the Integrated MARKAL-EFOM System (TIMES) and the Long-range Energy Alternatives Planning system (LEAP). *Sustainability*, 13(4), 1967.
- Perwez, U., Sohail, A., Hassan, S. F., & Zia, U. (2015). The long-term forecast of Pakistan's electricity supply and demand: An application of long range energy alternatives planning. *Energy*, 93, 2423–2435.

- Senge, P. M. (1990). *The fifth discipline: The art & practice of the learning organization*. Currency Doubleday.
- Stehfest, E., van Vuuren, D., Bouwman, L., & Kram, T. (2014). *Integrated assessment of global environmental change with IMAGE 3.0: Model description and policy applications*. Netherlands Environmental Assessment Agency (PBL).
- van Soest, H. L., van Vuuren, D. P., Hilaire, J., Minx, J. C., Harmsen, M. J. H. M., Krey, V., Popp, A., Riahi, K., & Luderer, G. (2019). Analysing interactions among sustainable development goals with integrated assessment models. *Global Transitions*, 1, 210–225.
- Wang, H., Pan, Y., & Luo, X. (2019). Integration of BIM and GIS in sustainable built environment: A review and bibliometric analysis. *Automation in Construction*, 103, 41–52.
- Workman, M., Darch, G., Dooley, K., Lomax, G., Maltby, J., & Pollitt, H. (2021). Climate policy decision making in contexts of deep uncertainty—from optimization to robustness. *Environmental Science & Policy*, 120, 127–137.

Models of Innovation

► Sustainable and Innovation Process

Modern Corporation and Private Property, The

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Introduction

The Modern Corporation and Private Property is one of the most influential books in the business history of the United States. It is written by Adolf A. Berle and Gardiner C. Means in the 1930s and remains of central value to those studying or researching corporate evolution. It is a foundational text in company law and corporate governance, and many of today's theoretical debates about corporate governance structure are directed, or at least substantially affected, by the core theses of Berle and Means's monumental work.

The book presents a substantial, revolutionary view of the modern corporate system and the related economic concepts. However, the authors' anti-neoclassical economic stance was largely influenced by the institutional economists such as William Ripley (1867–1941), Thorstein Veblen (1857–1929), Wesley Mitchell (1874–1948), and Rexford Tugwell (1891–1979), who focus on the important role of institutions in affecting economic behaviour. On top of that, the authors were indebted to Professor Edwin F. Gay, the founding Dean of Harvard Business School, who acted on the recommendation that research should be done on contemporary corporate development.

Traditionally, companies or corporations were merely a legal device for carrying on the business owned by an individual or a small group of people, and these private enterprises were usually under the direct management of their owner. As a consequence, the self-interest of the property owner was regarded as the best assurance of economic efficiency, as it was in the owner's best interests to run his business effectively in order to maximize profits. The dominant views about private property, profit motive, and wealth, among other foundational economic concepts at that time, were all established on the combination of ownership and control of private property advocated by Adam Smith (1982) and his followers.

Berle and Means, however, argued that the power of control over wealth could be decoupled from ownership by distinguishing “passive property” and “active property.” In other words, the control of physical assets is transferred to others, usually managers of directed companies, from the individual owners, who still retain the proprietary interests in it. The theory put forward by this book challenges the orthodoxy of the nineteenth and early twentieth centuries. The new developments relating to the concentration of economic power, the dispersal of stock ownership, and the separation of ownership and control, as identified by the authors, all served to undermine the conventional viewpoint.

When ownership is separated from control, the divergence of interests between the shareholders and the management becomes inevitable. Managers and directors who make profits by

operating the company successfully cannot be entitled to the fruits since they are just employed by the owner/shareholders and thereby have no proprietary right over the assets. Even if they are able to share in its profits by possessing some stocks in the company, the motive of self-interest – which operated smoothly in the context of traditional private enterprises – is not enough to stimulate the managers to contribute their whole effort. This is because they will not receive a proportionate benefit from the company's success as 'proprietary owner'. Also, the diffused ownership makes it more difficult to supervise and monitor those in control. All these changes were identified by the authors and constitute the subject of their book.

Intellectual Framework

The Modern Corporation and Private Property is uniquely a collaboration of a lawyer and an economist. The key concept of concentration of economic power in the hands of a few large companies, in particular a few hundred active managers of these companies, is obtained through Gardiner Means's statistical analysis of the 200 largest non-financial companies. This economic part of the book also indicates a continuing increase in the aggregation of wealth by these companies and the dispersion of the stock ownership. Another key concept, the separation of ownership and control, is arrived at by the legal analysis of Adolf Berle, who tracks the evolution of the American company from traditional private enterprise to the modern corporate form. Specifically, he examines the ever-growing discretionary power of managers. Managers who are in executive control, including directors of the board as well as corporate executives and officers, could obtain increasing power by creating or altering the participating rights of various classes of shares, utilizing paid-in surplus and stock purchase warrants, changing the original contract rights, and manipulating the earnings of others to accelerate the separation between ownership and control.

The ideas elaborated by Berle and Means can be traced back to the work of Thorstein Veblen (1899, 1914, 1919, 1921, 1923). Thomas Carver's *The Present Economic Revolution in the United States* (1925) and William Ripley's *Main Street and Wall Street* (1927) could also be seen as embryonic, as the trends of increased distribution of corporate securities and some disenfranchisement of shareholders are raised respectively by each book. In effect, *The Modern Corporation and Private Property* also develops Means's own early statistical studies (Berle and Means 1930; Means 1930, 1931a, b, c) and Berle's contemporary contribution on the devices for diluting stock participation rights and the doctrine of corporate powers in trust (Berle 1930, 1931).

The mainstream economic theories at that time were established on the basic assumption that rational entrepreneurs would maximize profits. Nevertheless, the increasing discrepancy between the legal-economic theory and economic fact (actual business practice) attracted the attention of many scholars, who then sought to address it. The study of the separation of ownership and control in the modern company can be regarded as the climax to the research that preceded it (Isaacs 1933). Berle and Means question the traditional logic of private property and profits; trace and discuss the changes the modern corporations have brought in; and finally convince us that the separation of control and ownership is an inevitable trend caused by the growth of modern companies, and an enormous advantage; but that at the same time, many of the previous checks for management have become ineffective due to those changes. The authors present a new economic epoch for us and set the theoretical basis for later research in the field.

Core Concept

Corporate changes, including the concentration of economic power in a few large modern companies and the divorce of control from ownership, mean that the traditional theories regarding property and other classical economic concepts are no longer applicable. After resolving whether or not such

a phenomenon is irreversible and enduring, the principal subject of *The Modern Corporation and Private Property* is the impact of separation between ownership and control. For example, can shareholders who surrender control to managers protect themselves to the same extent as the owner who exercises control over his/her wealth, and what does the new property right imply?

The rapid and extensive concentration of economic power within the modern corporate form, particularly the few largest companies, and the separation of the two classical characteristics of ownership – risking collective wealth in profit-seeking enterprise and management of responsibility for that enterprise – indicate that the time is ripe to reappraise the applicability of the conventional economic concepts. If the traditional logic of private property and profits does not fit the new situation any longer, certain concepts in the realm of classic capitalism need to be modified or even discarded. The new picture of economic life as well as the emerging problems can only be clearly recognized by solving these questions.

The mainstream at that time was still dominated by Adam Smith's classical economics and his successors' neoclassical economics. Government interference was thought to be unnecessary. However, the early twentieth century saw the emergence of a new tradition, namely, institutional economics, led by Thorstein Veblen, William Ripley, Wesley Mitchell, and others who rejected the neoclassical movement. The continuing concentration of industrial wealth and economic power and the changing nature of the modern corporate form are the rational starting points for the authors' enquiry. The concentration of economic power and dispersion of shareholdings in the largest modern companies is rapid and irreversible, which in turn facilitates the concentration of power. It also means that the market cannot effectively discipline corporations and management, contrary to the viewpoint held by conventional economists.

The core question of the impact of the separation between share ownership and control is addressed very narrowly in *The Modern Corporation and Private Property*. The impact upon the relationship between company and

employee, and between company and customers, as well as the effect on internal corporate structure, is not dealt with. Instead the authors focus on the legal aspect of corporate changes, such as the motivation mechanism and managerial unaccountability, and on the functions of the security market.

Corporate Purpose

The neglected area of the book is whose interest those in control should serve, namely, the corporate purpose. For example, if the corporate purpose is for shareholder value, then directors of the company should run the company primarily for shareholder interests. Alternatively, if the corporate purpose is for improving all stakeholder interests, then the company should not be run in a way solely for shareholder interests. Although E. Merrick Dodd (1932) questioned Berle's doctrine of corporate power in trust by asking "for whom are corporate managers trustees" before the publication of *The Modern Corporation and Private Property* in 1932, until the 1980s there was no serious academic review in this area.

It is plain to understand that the corporation used to be seen as private property, belonging to its owners, and therefore proprietors' interests should always be given priority. This conventional viewpoint of shareholder primacy received few challenges. Following the separation of ownership and control, the shareholders *de facto* surrender the power of control to managers and directors. If shareholders are no longer required to be the sole focus of the management who inherit the control, this could lead to disaster for the current and future investors.

The Modern Corporation and Private Property seems to create a little confusion with regard to the corporation's objective – that is, for whose interests it should be run. On the one hand, according to the trustee doctrine, shareholder interests are undoubtedly to be given priority, or at least not subordinated to the benefit of the corporation as a whole. On the other hand, if the corporation is seen as a social institution, as is

suggested at the end of book, then it would be expected to serve the wider interests of society as a whole.

With the development of technology, risks of externalizing costs into the wider community are increased, and therefore the importance of the corporate purpose becomes more and more vital. An obvious example is pollution emissions. If the company, or say the managers, should serve the interest of shareholders, then as long as the cost of pollution including fines and reputation loss is less than the profits brought to the shareholders, such conduct, even if it is morally unjustifiable, could be accepted according to the shareholder primacy approach. However, if we could be convinced that other groups should be taken into consideration, and that no single group's interest should be ignored, then to benefit shareholders at the expense of other groups' interests would then be unacceptable.

Nowadays, the opinion that the company should be run solely for shareholder interest attracts increasing criticism. The changing nature of private property, along with the separation of control from ownership, becomes an ideal starting point from which to reconsider the objective of the modern corporation. It also presents the possibility of the company being something of a social institution, an idea proffered by the authors at the end of the book, and whether the establishment of a "neutral technocracy" is feasible in terms of serving the broader community and balancing divergent interests.

Summary

Berle and Means's *The Modern Corporation and Private Property* is a foundational text in company law and corporate governance; many of the theoretical bases for current corporate governance structure – such as agency theory, the non-conflict rule, the insider-dealing rule, and other directors' duties – are directed, or at least largely affected, by its core theses. In other words, the "Berle-Means corporation" – a joint stock company in which ownership, in the form of numerous small shareholders, and control, in

the form of entrenched managers, are separate – is a precondition of most discussions of UK and US corporate issues.

Although some ideas in the text could be seen to draw from Veblen, Ripley, and Carver, the book presents new in-depth research and assembles all these previous notions in one volume with mathematical demonstrability. Indeed, it goes further than previous works by examining the precise nature of these changes and demonstrating that "control" could be, and indeed had been, separated from ownership of quasi-public corporations in contemporary America, rather than that such separation reflected simply the practical effect of disenfranchisement or absenteeism of shareholders. Accordingly, this collaborative work by a lawyer and an economist successfully presents a new economic epoch and brings revolutionary change to the existing economic theories.

The influence of this book is not limited to the time in which it was written. Even 80 years after its first publication, *The Modern Corporation and Private Property* is still substantially quoted by scholars expounding arguments on internal governance structure, unaccountable managerial power, and other similar issues. Besides the directors' fiduciary and non-fiduciary duties, the text created a controversy about the corporate objective, which is essential for determining the evaluation criteria of corporate governance, among other things. For business and law students, this book is still a starting point for understanding the modern corporation. In addition, the core ideas and the enduring theme of separation of ownership and control are most likely to continue to be important in future academic discussions and institutional design. At the same time, other issues raised by Berle and Means, such as the divergence of interests, corporate control transaction, and directors' accountability, continue to be principal concerns for many in the field of corporate governance.

Cross-References

► [Corporate Objectives](#)

References

- Berle, A. A. (1930). Corporate powers as powers in trust. *Harvard Law Review*, 44, 1049–1074.
- Berle, A. A. (1931). Corporate devices for diluting stock participations. *Columbia Law Review*, 31, 1239–1285.
- Berle, A. A., & Means, G. C. (1930). Corporations and the public investor. *American Economic Review*, 20, 54–71.
- Berle, A. A., & Means, G. C. (1991). *The modern corporation and private property*. New Brunswick: Transaction Publishers. (Originally published 1932).
- Carver, T. N. (1925). *The Present Economic Revolution in the United States*. Boston: Little Brown Co.
- Dodd, E. M. (1932). For whom are corporate managers trustees? *Harvard Law Review*, 45, 1145–1163.
- Isaacs, N. (1933). Review of the modern corporation and private property. *Yale Law Journal*, 42, 463–465.
- Means, G. C. (1930). The diffusion of stock ownership in the United States. *Quarterly Journal of Economics*, 44, 561–600.
- Means, G. C. (1931a). The growth in the relative importance of the large corporation in American economic life. *American Economic Review*, 21, 10–42.
- Means, G. C. (1931b). Stock dividends, large scale business, and corporate savings – A criticism. *Quarterly Journal of Economics*, 45, 536–540.
- Means, G. C. (1931c). The separation of ownership and control in American industry. *Quarterly Journal of Economics*, 46, 68–100.
- Ripley, W. Z. (1927). *Main Street and Wall Street*. Boston: Little Brown Co.
- Smith, A. (1982). *The wealth of nations*. London: Penguin Group. (Originally published 1776).
- Veblen, T. (1899). *The theory of the leisure class*. New York: Macmillan.
- Veblen, T. (1914). *The instinct of workmanship and the state of the industrial art*. New York: Macmillan.
- Veblen, T. (1919). *The vested interests and the common man*. New York: B.W. Huebsch.
- Veblen, T. (1921). *The engineers and the price system*. New York: B.W. Huebsch.
- Veblen, T. (1923). *Absentee ownership and business enterprise in recent times: The case of America*. New York: B.W. Huebsch.

Modification

- [Innovation and Territorial Development](#)

Moral Behavior

- [Integrity Management](#)

Moral Code of Business in Islam

- [Islamic Business Ethics](#)

Moral Conflict

- [Ethical Dilemmas](#)

Moral Dilemmas

- [Ethical Dilemmas](#)

Moral Economy

- [Civil Economy](#)

Moral Hazard

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Synonyms

Risk; Jeopardy; Peril that is increased through morally questionable behavior

Definition and Description

Put together, the term moral hazard refers to the risk that the presence of a contract will affect the behavior of one or more parties. Information asymmetries whereby one party has more information than the other could lead to moral hazard and consequent losses for the other party. Moral hazard is the lack of incentive to guard against risk

where one is protected from its consequences such as by insurance. Indeed, a company could actually take on a higher level risk if risk insurance removes the costs of the risk from the books of the company. Pilbeam (2010, p. 497) defines moral hazard as “the problem that the existence of insurance against the event occurring will make the insured event more likely to occur than if the event was not insured against.” For example, an oil company that has insured itself against oil spills and environmental damage may act more negligently in relation to oil spills and environmental damage as it will not have to suffer the consequences of its actions.

Mitigation of Moral Hazard by Prosocial Preferences

The term “moral,” used as an adjective, dates back to the mid-fourteenth century and denotes “associated with or characterised by right behaviour”; the term is also “associated with or concerning conduct or moral principles” (good or bad), from Old French *moral* (14c.) and directly from Latin *moralis* “proper behaviour of a person in society,” literally “pertaining to manners” (Online Etymology Dictionary 2019). The term was coined by Cicero, the Roman statesman, scholar, and philosopher (“De Fato,” II.i) to translate Greek *ethikos* (ethics) from Latin *mos* “one’s disposition,” in plural, “mores, customs, manners, morals.” The term applied to indirect effect in moral support (1823), moral victory (1888), where the notion is “pertaining to or affecting the character or conduct”. Hazard (n.), c. 1300, was the name of a game at dice, from Old French *hazard* or *hasart* meaning “game of chance played with dice,” also “a throw of six in dice” (12c.), of uncertain origin. To hazard (v.) is to “put something at stake in a game of chance,” originating later in the 1520s, from Middle French *hasarder* “to play at gambling, throw dice” (15c.), from *hasard* (n.). In English, the sense of “chance of loss or harm, risk” was first recorded in the 1540s (Online Etymology Dictionary 2019).

Arnott and Stiglitz (1991) describe what they consider to be two different and competing

approaches to the problem of moral hazard: individual insurance (i.e., market insurance) and risk sharing in social groups (i.e., nonmarket insurance). Biener et al. (2018) combine market and nonmarket insurance under a group insurance scheme, which includes a contractually agreed-upon mutual sharing of losses and the assumption of joint liability to design incentive-compatible contracts when moral hazard is present. In a group scheme with joint liability, parties were found to be additionally motivated by prosocial concerns, such that the self-protection efforts become a public good that benefits all agents having joint liability. Thus, prosocial preferences that might exist between agents or the insured can be exploited by a principal or the insurer to alleviate moral hazard in a joint liability group contract. This confirms previous research that prosocial preferences might arise from the need for strategic behavior to promote cooperation in mitigating moral hazard (Casadesus-Masanell 2004; Englmaier and Leider 2012; Englmaier and Wambach 2010).

Moral Hazard and Environmental Protection

Moral hazard needs to be prevented if insurance is to enhance the sustainability of economic activities. Feichtner (2019) examines this, in the context of deep seabed diving, and agrees that, generally, insurance may enhance environmental protection, e.g., when insurers make coverage conditional on additional damage prevention measures or refuse insurance of enterprises with bad environmental track records. However, she adds the caveat that whether insurance indeed enhances the sustainability of economic activities very much depends on institutional design and safeguards to prevent moral hazard.

Research has found that firms may wish to extend insurance cover for environmental risk by resorting to increased borrowing from banks; under moral hazard, the firm may invest more by way of prevention of environmental risk than what is considered to be the optimal social level; such extended liability could lead to an increased

probability of bankruptcy for the firm as the debt component in the firm's capital structure increases and "becomes more expensive" (Dionne and Spaeter 2003, p. 1051).

Laffont (1995) points out that a large class of major environmental risks are subject to severe moral hazard problems. He examines the potential conflicts between cost minimization and safety care and considers the issue of moral hazard in environmental risk in the context of adverse selection, limited liability, risk aversion, and other factors, concluding that these contextual problems induce significant hazards for the public. Discussing the role of forest companies, Wang (2019) finds that forests are expected to play an increasing role in satisfying human needs for ecosystem services and that managing forests for the greater good is a goal, which serves as foresters' North Star on their journey toward sustainable forest management. However, on many occasions, forest companies' operations were found to give rise to negative externalities, and although governments have the power to force internalization of the externalities by levying fees or imposing regulations, these regulatory and punitive measures were found to fail frequently, due to problems of moral hazard.

Summary

Sustainability issues involve practical matters such as protecting the planet from environmental degradation and depletion of natural resources, preventing/reducing air, water, and soil pollution, and preserving the long-term health of eco systems. It is important to recognize the concept of moral hazard as highlighting the need and importance of alignment of social incentives in relation to all matters including those relating to sustainability and the environment. It is crucial that firms are incentivized to behave in a way that avoids the potential pitfalls of moral hazard and is informed by considerations of environmental sustainability.

Cross-References

- Corporate Social Responsibility
- Enlightened Self-Interest

- Environmental Management System
- Ethical Theories II
- Phronesis

References

- Arnett, R., & Stiglitz, J. E. (1991). Moral hazard and nonmarket institutions: Dysfunctional crowding out of peer monitoring. *American Economic Review*, 81(1), 179–190.
- Biener, C., Eling, M., Landmann, A., & Pradhan, S. (2018). Can group incentives alleviate moral hazard? The role of pro-social preferences. *European Economic Review*, 101, 230–249.
- Casadesus-Masanell, R. (2004). Trust in agency. *Journal of Economics & Management Strategy*, 13(3), 375–404.
- Dionne, G., & Spaeter, S. (2003). Environmental risk and extended liability: The case of green technologies. *Journal of Public Economics*, 87(5–6), 1025–1060.
- Englmaier, F., & Leider, S. (2012). Contractual and organizational structure with reciprocal agents. *American Economic Journal: Microeconomics*, 4(2), 146–183.
- Englmaier, F., & Wambach, A. (2010). Optimal incentive contracts under inequity aversion. *Games and Economic Behavior*, 69(2), 312–328.
- Feichtner, I. (2019). Contractor liability for environmental damage resulting from deep seabed mining activities in the area. *Marine Policy*. <https://doi.org/10.1016/j.marpol.2019.04.006>.
- Laffont, J.-J. (1995). Regulation, moral hazard and insurance of environmental risks. *Journal of Public Economics*, 58(3), 319–336.
- Online Etymology Dictionary. (2019). <https://www.etymonline.com/>. Accessed 31 August 2019.
- Pilbeam, K. (2010). *Finance and financial markets* (3rd ed.). Palgrave Macmillan.
- Wang, S. (2019). Managing forests for the greater good: The role of the social license to operate. *Forest Policy and Economics*, 107, 1–6.

Moral Legitimacy

- Social Legitimacy

Moral Philosophy

- Ethics

Moral Principles

- ▶ [Environment and Ethics in Sustainability](#)
- ▶ [Ethical Theories II](#)

Moral Problems

- ▶ [Ethical Dilemmas](#)

Moral Purchasing

- ▶ [Consumer Social Responsibility \(CnSR\)](#)

Morality

- ▶ [Ethics](#)

Morals

- ▶ [Core Values](#)

Morals Theories

- ▶ [Ethical Theories II](#)

Mores

- ▶ [Core Values](#)

MSCI KLD 400 Social Index

- ▶ [Domini Social Index](#)

Multi-actors and Multilevel Policies

- ▶ [Shared Community-Based Governance](#)

Multidimensional Company Reporting

- ▶ [Integrated Reporting for Sustainability](#)

Multifariousness

- ▶ [Diversity](#)

Multilevel Governance

- ▶ [Shared Community-Based Governance](#)

Multiplicity

- ▶ [Diversity](#)

Municipal Waste Disposal

- ▶ [Waste Dumping](#)

Natural Capital

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Synonyms

[Environmental capital](#); [Natural resources](#)

Definition

Natural Capital refers to the total stock of the Earth's resources. Typical examples of natural capital include water, oxygen, minerals, and soil. Natural capital has financial value as its use drives or sustains every business operation in one way or another. From the stock of natural capital comes a flow of ecological services including processes such as waste assimilation, carbon dioxide absorption, arable land, fossil fuels consumption, erosion control, biodiversity, and temperature regulation. Natural capital may or may not be renewable and is often difficult to accurately value (United Nations Environment Programme 2012).

Introduction

Natural Capital refers to the total stock of the Earth's resources at a point in time. The available stock of natural capital can change. Some natural capital is renewable; it can be replenished (e.g., trees can be replanted). However, some natural capital is nonrenewable; it cannot be replenished or renewed at such a slow rate to effectively be nonrenewable (e.g., fossil fuels, once used, can take millions of years to renew). Thus the stock of natural capital can be depleted from the use of ecological services of nonrenewables or use of renewables at a faster than replenishable rate. Further if natural capital is degraded in some way there can be permanent depletion even if it is renewable. For example, pollution of water sources or soil erosion from climate change could cause natural capital and any natural capital associated with it to be forever lost. It is possible that the stock of renewables can be sustained, that is, its level maintained or even increased. However, at best the stock of nonrenewable natural capital can be sustained and its more normal dynamic is to be depleted over time. The rate of depletion then is a critical factor for natural capital and much effort is expended in trying to slow down the rate of depletion through technology or governmental action.

Valuing natural capital is difficult and may be truly incalculable in that without natural capital, there is no human life on the planet; thus its value may be truly infinite. While not without controversy and substantial uncertainty, valuing ecological services from natural capital may be relatively more feasible. A recent estimate placed that value at \$125 trillion per year, which is larger than current world gross domestic product (GDP) (Costanza et al. 2014). Some object to even attempting to place a monetary value on natural capital or the services it provides. As a rhetorical issue, placing monetary value on nature implies it can be consumed in the same manner as any good or service. That diminishes the true societal value of the natural capital stock and contributes to its commodification (Wackernagel and Rees 1997). Some then would prefer a physical measurement of the natural capital stock. An additional reason is that monetary values are fundamentally dependent on markets and human perception of value. For example it is possible that as the supply of one type of natural capital decreases its price will increase sufficiently such that the total monetary value remaining increases rather than decreases (Wackernagel and Rees 1997). In an aggregate measure of natural capital, this effect could make it appear that the natural capital stock has remained the same or even increased, which is misleading. While that can be controlled for, it is also still the case that those monetary values will likely not control for all of the nonmarket values that ecological services provide or the complex interactions between elements of natural capital and other aspects of human life (Costanza et al. 2014). Monetary valuation is still commonplace though as it is the most straightforward method for combining together vastly different environmental elements into one measure of natural capital or one measure of ecological services.

Current business practices involve patterns of use and development, environmental modifications, exploitation of resources, and governmental policies that support the depletion or care of the Earth's stores of natural capital. This not only has financial implications such as increased market prices due to resource depletion, but also environmental implications as the services provided by ecosystems are damaged and become less

functional (or in some cases destroyed) (Costanza et al. 1997). This use can, in turn, cause a detrimental impact to all living things, which may or may not be realized, recognized, or tracked. For example, as greenhouse gas emissions increase and areas responsible for carbon sequencing decrease, global temperatures rise, weather patterns change, sea levels increase, terrestrial and aquatic ecosystems readjust, and land and sea usability patterns change.

One of the first references of natural capital was by Schumacher (1974), described in his book *Small is Beautiful*. Work on the Biosphere 2 project brought the topic mainstream, coupled by political discourse prompted by Ralph Nader, Paul Martin Jr., and government agencies, including the Environmental Protection Agency (USA) and Natural Capital Committee, and the London Health Observatory (UK). Indicators adopted by United Nations Environment Program's World Conservation Monitoring Centre and the Organization for Economic Co-operation and Development (OECD) to measure natural biodiversity began to use the term in a more specific way. Natural capital references the natural assets in their role to provide resource inputs and environmental services for economic production, made up of three principal categories: natural resources stocks, land, and ecosystems.

Business and the Economy

As we look to industry, businesses around the globe work continuously to produce goods and services for their customers. Being sustainable in this effort refers to a firm's ability to achieve its performance goals in a way that imposes little or no harm to the environment. To be considered sustainable, when a firm uses, alters, and/or harms nature's capital, reparations, restitution, and/or restoration must be made. For those operations that genuinely care about environmental sustainability, they are accountable for their activities and use, striving to value, understand, and measure how their operations and products impact the natural environment. As human capital refers to workers, the employees of a firm's operations,

physical capital to the production implements such as buildings, machines, and tools, social capital to the communities, institutions, and society created, natural capital refers to soil, air, water, flora, fauna, and all other natural resources. These assets are all used to manufacture a wide range of goods and services, making life in the modern world possible. Our ecosystem provides resources that underpin productivity and the entire global economy. The services from natural capital flow through human capital as well as physical capital and social capital. Thus thinking about natural capital requires holistic perspective about how its value affects other capital types and their impacts on humanity's well-being. This is almost wholly absent from business decision-making (Guerry et al. 2015).

Natural capital is also a way to frame ecosystem valuation, which (in contrast to traditional economics), revolves around the idea that nonhuman life offers essential resources (e.g., oil and gas). In that sense, some view natural capital as a useful way to emphasize the need for environmental sustainability rather than an explicit need to measure and value it. Therefore, the ecological health of the planet and its sustainability is correlated with the health of the economy even though unmeasured accurately or at all. The reality is that global economy resides upon the broader economy of natural resources and the ecosystem services that sustain it. If we continue to reap the benefits of our natural environment, we must recognize the importance of natural capital within the broader economy and society writ large. Scholars concur that our ability to effectively coexist is dependent upon the conservation, reuse, and preservation of nature's capital, focusing on the valuing of quality, investing and reinvesting in the Earth's resources, as well as ensuring the proper restoration of resource depletion.

An ongoing economic issue is the extent that physical capital and natural capital is substitutable for each other as opposed to complementary with each other. From the view of classical economics, land as a proxy for natural capital is deemed separate from physical capital. The historical distinction between land and capital is that the former is naturally occurring with a fixed supply, whereas the latter refers to the implements used to produce

man-made goods and services (Wackernagel and Rees 1997). This renders physical capital and natural capital not substitutable for each other. It also gives rise to the notion that there are diminishing returns for land that, in effect, natural capital is a constraint on economic growth. It is, however, misleading to view land as if its productive capacity is fixed. Natural capital can be improved upon or degraded by the actions of human activity. Additionally, natural capital yields benefits and goods, such as timber or grain that can be harvested. Such benefits are kindred to those realized by owners of infrastructural capital, which yield more goods, such as a factory that produces automobiles (just as a maple tree produces syrup).

As economic thought evolved, it came to view physical capital and natural capital as more substitutable. Particularly it was often assumed that physical capital could be used to replace natural capital in the production of goods and services. The developments of subfields in environmental economics and ecological economics have further evolved the arguments with the former relying more on substitutability between natural capital and physical capital and the latter more on complementarity and returning to the notion of lack of substitutability between them (Wackernagel and Rees 1997). It is fair to say the dynamic between physical capital and natural capital is complex and the question about substitutability versus complementary may often be context-specific to the type of natural capital being considered.

While the general description of natural capital is not controversial, how it is valued and accounted for (e.g., aspects of ecological health, natural capital, and ecosystem services) is often contested. Various forms of accounting (e.g., cost, triple bottom line, B Corp, and other measures) may or may not include an accurate measurement of an ecological or natural deficit, along with social and financial deficits. Without a common set of agreed upon standards and measurement practices, it is difficult (if not impossible) to evaluate, value, and audit how nature impacts global performance and how firms impact the natural environment. With no common path to determine/calculate the impact to natural capital, it is

difficult to compare and contrast firms' operational influences on nature's asset bank. As ecologists work with economists to measure and express values of the wealth of ecosystems, many worry that a collapse of our planet's balanced and interdependent biodiversity will be ruined, as our ecosystem continues to be plundered by large corporations (e.g., Monsanto). The economic value of our ecosystem is rarely accounted for in manufacturing costs, and resources are simply commandeered by people, typically by the most powerful and affluent (e.g., Shell Oil). As losses accelerate and go undetected and/or are ignored by mainstream monetary analysis, authentic accountability and transparency remains absent from the picture. In effect, the spillover effects of commerce on the stock of natural capital are more often negative than positive. These effects go largely unrecorded in the unfettered marketplace. The issue can be exacerbated when standard valuation tools such as cost-benefit analysis tend to emphasize the short-term over the long-term by discounting the future in favor of the present.

Financial, Government, and Public Leadership

Financial institutions are an integral part of the economy and society. As the engine of global economic growth, the financial sector offers tools to help firms transition to sustainable development. Since virtually every economic activity can have an impact on natural capital either directly or indirectly (via the supply chain), financial institutions have considerable responsibility to the ecological footprint (United Nations Environment Programme 2012). These impacts can lead to not only material financial risks, but also to relevant business opportunities. At present, financial institutions make little or no attempts to account for and therefore value the risks and opportunities related to natural capital in their financial products and services (loans, investments, and insurance products). Building appropriate valuation and risk management tools means

taking natural capital into account within financial and investment decision-making. Stakeholders must also learn to use their voice to require the valuing and protection of natural capital, recognizing that they have a key role in demanding reforms that account for the use, maintenance, and restoration of natural capital in the global economy.

Given the Earth's resources are often deemed as a free "goods," governments must provide a framework for regulating and incentivizing all sectors of business and their stakeholders to operate responsibly regarding natural capital's sustainable use. Much natural capital can be categorized by economists either as public goods (e.g., air) or common resources (e.g., coal). In either case, they are non-excludable; that is, it is difficult to prevent others from consuming them. The issue is particularly acute for common resources where they are also rivals such that one person consuming them leaves less for everyone else. Even public goods if they become sufficiently polluted or the human population grows too large, could become rival as well. The net effect is a higher than optimal for society depletion rate, especially for common resources. This puts the natural capital stock at risk. This suggests governments need to develop clear, credible, and long-term policy frameworks that support and incentivize organizations to value and report their use of natural capital and work to internalize environmental costs. This forces private entities to explicitly consider the negative spillover effects of their actions on the natural capital stock and the ecological services that flow from it to others. The natural capital declaration commits signatory organizations to these goals with the following measures (United Nations Environment Programme 2012):

1. Requiring companies to disclose the nature of their dependence and impact on natural capital through transparent qualitative and quantitative reporting
2. Using enforceable fiscal measures to discourage business from eroding natural capital, while simultaneously offering incentives to companies that integrate, value, and account for natural capital in their business model

3. Endorsing and implementing international agreements, including, but not limited to, those agreed through the Convention on Biological Diversity and
4. Leading by example, requiring public expenditures and procurement to report and account for its use of natural capital.

Given the fact that there is no methodology in place that adequately reports and accounts for natural capital in the global financial system, business leadership is needed to undertake this concern and to elevate a sense of urgency to address this issue. Business leaders must prompt, guide, and develop interest, prompting motivated engagement and activism among their customers, suppliers, civil society, and other stakeholder groups, working to (United Nations Environment Programme 2012):

1. Cultivate increased understanding of the impacts and dependencies of natural capital relevant to firms' operations, risk profiles, customer portfolios, supply chains, and business opportunities
2. Support the development of methodologies that integrate natural capital considerations into all decision making processes
3. Build global consensus for the integration of natural capital into private sector accounting and strategic decision-making processes, while also supporting related project work that endorses natural capital coalition-building, alliances, and stakeholder group activism, and
4. Collaborate with other firms, organizations, alliances, and other stakeholders to build a global consensus around the development of a more integrated form of reporting, including natural capital as part of the wider definition of resources and relationships key to an organization's success.

A Way Forward

Environmental-economic accounting offers a conceptual framework for integrating statistics on the environment and its relationship to the economy (Winstanley and Brownlee 2014). This includes the impacts of the economy on the environment and the contribution of the environment on the economy. A coherent set of indicators and descriptive statistics can be derived that can be used to

inform a wide range of tracking, metrics that can prompt more effective policy-making activities. This includes, but is not limited to, favorable developments among the broad categories of green economy/green growth, natural resource management, and sustainable development.

The services of ecological systems and the natural capital stocks that produce them are critical to the functioning of the Earth's life-support system. They contribute to human welfare, both directly and indirectly, and therefore represent part of the total economic value of the planet. This is through both their "use value," the value entities or individuals give to the natural capital stock or ecological services that they directly use as well as their "non-use value," the value they give to the natural capital stock and ecological services even if they never use them.

Adaptive governance has been suggested as a suitable approach for ecosystem management in changing environments (Guerry et al. 2015). It rests on the assumption that landscapes and seascapes need to be understood and governed as complex social-ecological systems rather than as ecosystems alone. Scholars have compared three AG initiatives and their effects on natural capital and ecosystem services (Guerry et al. 2015). In comparison with other efforts aimed at conservation and sustainable use of natural capital, adaptive governance develops our capacity to manage multiple ecosystem services and to respond to ecosystem-wide changes. Moreover, it enables collaboration across diverse interests, sectors, and institutional operations. But the challenges to such efforts are dramatic and persistent. There are both internal and external pressures present that continuously challenge the adaptive capacity of such initiatives.

Summary

In summary, government, business, and the public must learn to have a desire to value our shared natural capital. From that point, we can work together to better understand and account for the use of natural capital and recognize its true value

in maintaining economic growth and sustaining human well-being and prosperity. If we hope to have a healthy and productive future, education is needed to foster a shift in our thinking. Caring about and accounting for the health of our planet's resources and the ecosystem that sustains life is critical toward our eventual survival.

Cross-References

- [Economic Sustainability](#)
- [Green Economy II](#)
- [Social Capital, Interpretation of](#)
- [Strong Sustainability](#)
- [Weak Sustainability](#)

References

- Costanza, R., d'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., & Raskin, R. G. (1997). The value of the world's ecosystem services and natural capital. *Nature*, 387(6630), 253–260.
- Costanza, R., De Groot, R., Sutton, P., Van Der Ploeg, S., Anderson, S. J., Kubiszewski, I., Farber, S., & Turner, R. K. (2014). Changes in the global value of ecosystem services. *Global Environmental Change*, 26, 152–158.
- Guerry, A. D., Polasky, S., Lubchenco, J., Chaplin-Kramer, R., Daily, G. C., Griffin, R., & Feldman, M. W. (2015). Natural capital and ecosystem services informing decisions: From promise to practice. *Proceedings of the National Academy of Sciences*, 112(24), 7348–7355.
- Schumacher, E. F. (1974). *Small is beautiful*. London: Abacus.
- United Nations Environment Programme. (2012). The natural capital declaration. https://www.unepfi.org/fileadmin/documents/ncd_booklet.pdf. Accessed 23 Mar 2021.
- Wackernagel, M., & Rees, W. E. (1997). Perceptual and structural barriers to investing in natural capital: Economics from an ecological footprint perspective. *Ecological Economics*, 20(1), 3–24.
- Winstanley, M., & Brownlee, M. (2014, November). Nature, it's in our business: Select case studies in natural capital accounting. *Sustainable Prosperity: Environmental Markets*. <https://books1.scholarsportal.info/viewdoc.html?id=689066>. Accessed 23 Mar 2021.

Natural Diversity

- [Biodiversity: Sustainability](#)

Natural Resource Economics

- [Environmental Economics](#)

Natural Resources

- [Natural Capital](#)

Natural Rights

- [Human Rights](#)

Needs and Barriers for Local Energy Market Solutions

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Definitions

Distributed energy resources (DER) are “behind-the-meter” energy generation and/or storage technologies typically located at the end user premises and operated for the purpose of supplying all or a portion of the customer's electric load. The portfolio of DER technologies is wide, including electric or thermal renewable energy generation, combined heat and power (CHP) or combined cooling, heat, and power (CCHP) units, and different kinds of energy storage. The term “behind-the-meter” is meant to represent resources that are generally not connected on the bulk or wholesale electric power system, but are connected behind a customer's retail access point (the meter). These resources may be operating to serve the customer's internal electric loads or may be operating for the purpose of providing services to the bulk electric power system.

Distributed Generation (DG) refers to the portion of DER technologies that generate energy.

Microgrids are electricity distribution systems containing loads and DER, (such as distributed generators – DG, storage devices, or controllable loads) that can be operated in a controlled, coordinated way either while connected to the main power network or while islanded.

Demand response is designed to change on-site demand for energy in intervals from minutes to hours and associated timing of electric demand/energy use (i.e., lowering during peak periods) by transmitting changes in prices, load control signals, or other incentives to end users to reflect existing production and delivery costs.

Point of common coupling (PCC) of a microgrid is the single point in the electric circuit where the microgrid connects to the distribution network. Because of its internal control and coordination capabilities, the microgrid is perceived by the grid as one single electrical entity.

Static switch is a sophisticated technology device, placed at the level of the PCC, which allows maintaining high levels of PQR in particularly demanding microgrid systems, where both the power quality and the reliability of the electricity delivery are very important. Such customers can be varied, and typically of the industrial, healthcare, and services sectors.

Installed cost (of DER) is a frequently utilized cost figure in techno-economic analysis of microgrid systems whose goal is to reproduce a turnkey cost as close to real-world conditions as possible. It includes a sum of the basic and added capital costs of the generation set (which are very specific and can include several parts, such as interconnectors, exhaust sets, heat recovery, reformer, etc...), added to labor and materials, engineering, project management, and financial carrying costs during the installation period. The installed cost of DER is given as a function of the power capacity of the equipment.

Combined heat and power (CHP) or “cogeneration” is the combined generation of electricity and heat. Typically, nearly two-thirds of the energy used to generate electricity is wasted in the form of heat discharged to the atmosphere. Additional energy is wasted during the

distribution of electricity to end users. CHP is onsite electricity generation that captures the heat that would otherwise be wasted to provide useful thermal energy – such as steam or hot water – that can be used for space heating, cooling, domestic hot water and industrial processes.

Combined cooling, heat, and power (CCHP) or “trigeneration” refers to the process of simultaneous generation of electricity and useful heating and cooling using as sources the waste heat from the combustion of a fuel or the heat from solar collectors.

Primary air pollutants are pollutants directly released into the atmosphere by their generating sources. Some examples of primary pollutants are VOC, CO, SO_x, PM, and CO₂.

Secondary air pollutants are formed as a result of the interactions between primary pollutants and other elements in the atmosphere. Examples of secondary pollutants include ozone (O₃), which is formed when hydrocarbons and NO_x combine in the presence of sunlight, NO₂, which is formed through the mixture of NO with oxygen in the air, and acid rain, which is formed when SO₂ or NO_x react with water.

Description

As more energy is produced near consumption, and by customers, there is a need for a solution to trade energy locally, which is local energy market (LEM). Local energy markets provide benefits for different stakeholders. They empower prosumers' role in energy market, they promote renewable energy, and by that way climate objectives, they provide grid operators tools for procuring flexibility from demand side for congestion and balance management, and they provide new business opportunities for energy sector companies.

However, despite the benefits, there are certain barriers for implementing local energy market solutions. These barriers are typically multi-dimensional, but they can be categorized to technical, regulatory and legal, economic, and stakeholder-related barriers. Immature technology is causing high up-front costs. There exist

challenges with system integration and fault protection in microgrids. Additionally, legislative frameworks vary significantly across the EU and globally, and will affect LEM developments at a case-by-case basis. In addition to these, there might also be resistance from different stakeholders against new technology and market. These barriers are described in detail later in this entry.

Introduction

There is a paradigm shift ongoing in power systems and electricity markets. Decentralization of the power system is a trend, which is driven by a change from fossil fuels to renewables, since most of the renewable generation forms, such as wind and solar, are distributed and small-scale by nature. Hence, they are typically connected to distribution grid, as a contrary to large generation power plants, of which size are typically hundreds of megawatts and they are connected to high voltage transmission grid. In fact, solar generation is typically installed roof-top, and connected to customer-end, behind the meter. This trend is changing some of the key fundamentals of the power system and electricity markets. Power delivery, both in technological and market viewpoint, is changing from one-way delivery from centralized plant to customers, to two-direction electricity supply, where a consumer can be also a producer (which leads to a newish term prosumer, i.e., a consumer that also produces energy). As more energy is produced near consumption, and by customers, there is need for solution to trade energy locally, which is local energy market (LEM).

In addition to decentralization, renewables are also intermittent by nature, as wind and solar generation is varying based on weather. However, constant balance between supply and demand must be maintained in power system, and there are technical limits, how much generated power distribution grid can absorb, or how big loads it can serve. Hence, there is a growing need for flexibility, which typically comes in the form of demand response, or energy storages such as batteries, which both are typically in customer end.

Therefore, there is a need to trade flexibility, also locally, and empower customers to improve the flexibility of their energy use. This can be also promoted by local energy markets, and value of flexibility can be stacked by integrating local markets to open energy markets.

Needs for Local Energy Market

Local energy markets have the potential to benefit several stakeholders in the energy sector but especially the local prosumers and consumers. The benefits for different stakeholders are discussed in the following subsections.

Prosumers and Local Communities

Bid size requirements prevent prosumers from offering their generation to the centralized energy markets, but in local energy markets they can trade energy within their local community, for example, through peer to peer arrangements. Thus, local markets give consumers control over their energy affairs and allow them to be more independent (Ofgem 2017) and democratize energy supply (Koirala et al. 2016). They promote end-users' active role in the energy system by allowing them to signal their preferences, for example, for local generation and local expansion of renewables (Mengelkamp et al. 2019). Integrating different energy sectors (electricity, heating, cooling, transportation) at the local level can bring energy generation closer to consumers and reduce the complexity and inefficiency related to a purely centralized system (Koirala et al. 2016).

Local trading means that local money and profits remain within the local economy, which encourages further investments in renewable local generation (Koirala et al. 2016; Mengelkamp et al. 2018). Local energy projects encouraged by active local market may also increase local employment through employment opportunities related to building and maintaining the local generation (Koirala et al. 2016; Mengelkamp et al. 2018). Generation from local community may also be more easily accepted by the public than private or utility-based generation, as citizen engagement is a key enabler of acceptance for

energy systems (Koirala et al. 2016). Local generation can provide energy to the local community during outages of the main grid, if the local micro-grid can operate in an island mode (Mengelkamp et al. 2018).

Lower costs through self-sufficiency, lower local price level, and reduction of transmission losses are commonly mentioned as potential benefits of local energy markets (Ampatzis et al. 2014; Mengelkamp et al. 2018; Soshinskaya et al. 2014). However, although distinct price difference between local and centralized market is among the key motives for taking part in a local market, combining several different benefits/values can lead to attractive, local energy offers (Bremdal et al. 2017). Other “high value boosters” include add-on services and products, and smart capitalization on flexibility (Bremdal et al. 2017). Aggregation of local prosumers can also help meeting the minimum bid sizes in the balancing and ancillary markets and thus, local prosumers providing flexibility could receive incentives such as cheaper tariffs or direct payments for their actions (Bray et al. 2018; Koirala et al. 2016).

Furthermore, due to socioeconomic factors, such as supporting local renewable energy, local markets can be favored even if the local energy price would be higher than the external grid price (Mengelkamp et al. 2018). However, the impact of such motives may be weaker (Bremdal et al. 2017). On the other hand, the emergence of local markets and new local providers can enhance consumer choice, increase competition, and also force incumbents to improve their response to their customers’ needs (Ofgem 2017).

Society

In developed countries, local energy markets are often motivated by climate awareness, and thus carbon-neutrality in energy may be among the goals of local communities, despite the economical attractiveness of centralized systems (Koirala et al. 2016). Local markets can thus contribute to achieving the overall energy and climate objectives. Furthermore, local trading can offer a new market-based approach to promoting renewable local generation as feed-in tariffs and other subsidies are reduced (Bray et al. 2018; Ilic et al. 2012).

DSOs and TSOs

Local markets can offer a market-based solution for managing the increasingly volatile generation (e.g., solar, wind) and consumption (e.g., electric vehicles) (Ilic et al. 2012; Koirala et al. 2016). They enable network operators to introduce local price signals incentivizing flexibility for congestion management (Mengelkamp et al. 2018). Local market, where DSO procures flexibility, can be operated by the DSO or by another operator acting as an aggregator (Ampatzis et al. 2014).

Local markets can increase the renewable energy hosting capacity of distribution grids and alleviate problems related to intermittency when increasing amount of energy is consumed locally (Horta et al. 2018; Koirala et al. 2016). For example, the Cornwall Local Energy Market aims to release network capacity through intelligent management of demand, generation, and storage (Bray et al. 2018). Participants are incentivized to behave in real time according to local renewable generation. The local marketplace platform is also expected to help in coordination of distribution and transmission networks.

In addition, network losses can be reduced especially when generation and demand are matched locally during times of high energy flows (Ofgem 2017; Soshinskaya et al. 2014). In a longer term, this can help avoid network constraints and costly investments (Mengelkamp et al. 2018; Ofgem 2017).

Local markets can also help aggregate flexibility from multiple consumers, which facilitate efficient balancing of grid’s supply, and demand helps meet the minimum bid sizes in the balancing and ancillary markets (Koirala et al. 2016).

Companies in the Competitive Markets

As the energy transition is distorting the business case of incumbent energy utilities with conventional power plants, many of them have shifted their focus toward energy services and customer solutions (Koirala et al. 2016), and also new types of suppliers focusing on local benefits are entering markets (Ofgem 2017).

Managing and facilitating a local market can be handled by a smart energy service provider, which may be owned and operated by the community/

market members or by a third party (Bremdal et al. 2017). This role can also entail aggregator and retail roles and facilitating the link between the local and centralized market (Bremdal et al. 2017).

Barriers Faced by Local Energy Markets

Barriers to LEMs are abundant and multi-dimensional. Their combined effect has the potential to significantly delay the dissemination and mainstream adoption of LEMs. Due to their complex, entangled nature, these barriers have been categorized differently in different literature. In this contribution, four categories are advanced to describe “Technical”, “Regulatory and legal”, “Economic” and “Stakeholder-related” barriers.

Technical Barriers

Distributed energy resources (DER) technologies – a crucial element of LEMs – have traditionally and extensively faced barriers of a technical nature, particularly when organized into microgrids. The technical barriers faced by DER and microgrids are thus generally applicable to LEMs. Other components of LEMs, such as demand response and peer-to-peer interactions, may also encounter technical barriers.

Maturity

Most conventional DG have been widely researched and developed globally (EPA 2017; DNV 2014). Internal combustion engines and steam turbines are considered technically mature, offering a wide array of designs and complexity. Microturbines are an example of a semi-mature DER technology, whose capacity sizes and electrical efficiencies must continue to develop (EPA 2017). CO₂ emissions of microturbines are also problematic (Mendes 2017). Fuel cells for stationary applications (PAFC, MCFC, SOFC...) still face myriad technical challenges. For instance, they use hydrogen as input, which must be derived (typically) from a fossil fuel, imposing further technology and moving part additions to the system. Furthermore, while fuel cells have been marketed as a good fit for premium power

and grid-support applications, recent projects have documented low levels of reliability and availability, which call for further technology research and development (Marnay et al. 2012; EPA 2017).

The majority of renewable DER underwent major technical improvements during the last decade, today facing little to no technical barriers. For instance, the efficiency of standard crystalline silicon solar Photovoltaic (PV) modules improved from under 14% in 2005 to over 16% in 2015 (Mendes 2017). By 2019, solar manufacturers had advanced crystalline silicon panels ranging between 19% and 23% efficiency. The compactness and simplicity of PV is an asset and even operation and maintenance (O&M) problems, which were entirely human-handled a few years ago, have now been addressed via distributed monitoring and yield assurance in Information and communication technologies (ICT) platforms. On the other hand, while active solar thermal systems have been a mature and established technology since the 1970s, its multiple moving parts continue to cause problems in both residential and commercial applications. Onshore and offshore wind turbines keep increasing in size/capacity, so to be able to provide more cost-efficient energy. However, its smaller-scale applications (micro wind) have lost popularity in recent years due to various performance problems, including inappropriate blade and axis design due to the random nature of the wind in urban environments.

Systems' Integration

In some cases, the DG mix combines the production of heat or of cooling (or of both) with the production of electricity, which increases internal energy exchanges and correspondingly the technical complexity and requirements of the local energy system. For example, the exhaust heat of a gas-fueled turbine, which produces electricity, can be recovered for space heating applications. This heat can be partially used up by an absorption chiller to produce ambient cooling. This cooling needs to be transported to the end users via an energy vector (which could be water). In other cases, a fuel needs to be processed by a separate

technology before being used by the DG (ex: the need for “reforming” in fuel cell applications). Such sophisticated level of integration (more moving parts, more integrating technologies...) can impose specific types of technical barriers (depending on the employed technologies) and is usually accompanied by higher installed and O&M costs.

An additional component of integrated energy systems and microgrids is energy storage systems – ESS, whose developments and state-of-the-art have been systematically reviewed by various authors (Parra et al. 2017; Yao et al. 2016). Faisal et al. (2018) compiled major ESS issues and challenges identified in those review studies, only to conclude that the most prominent ESS barriers are system-oriented, rather than specific technology-oriented. Acknowledging that each ESS technology has its advantages and disadvantages, the study advances that new microgrid-level ESS developments should be geared toward hybrid energy storage systems (HESS), which will further enhance already existing integration and multi-operational optimization challenges. Examples are power electronics interfaces and energy management systems, which need further research and development, in order to ensure improved power quality, reliability, and efficiency of ESS operations. Safety is another issue, which calls for enhanced active system monitoring and control (e.g., of ohmic losses, temperature, etc.).

A current major trend in Europe is the promotion of Power-to-X, which may indicate that systems’ integration-related barriers will receive renewed attention in the near future.

Various microgrid projects, such as the Kythnos island and Huatacondo projects, have also reported problems with their multi-agent control, communication, and monitoring systems. These problems can influence optimal technoeconomic decisions for the system and influence the efficacy of the interactions between agents, as noted by Soshinskaya et al. (2014). Today, there is a growing variety of management and control software options. Typically, vendors offer them custom-made and using specific protocols. However, these options should be compatible with other components of microgrids so as to enable

appropriate connectivity, modularity, and efficient operations.

Grid Interconnection

The optimal interaction with the main grid enables new opportunities and value streams for LEMs, reason why it is among its key defining elements. However, there are various technical challenges linked to this interaction.

Switching from grid-connected to island mode (decoupling) – and the ability to seamlessly and quickly reconnect (recoupling) – is at the core of the microgrid concept, but represents a challenging sequence of technical steps requiring highly sophisticated voltage and frequency control, due to resulting imbalances between generation and loads (Hirsch et al. 2018; Fathima et al. 2018). Managing the instantaneous active and reactive power balances between the micro and “macro” grid is difficult under various network voltage profiles. The dual-mode operation also requires pristine DER synchronization in the presence of frequent load switching, whether in an electrical island or reconnected to the grid (Fathima et al. 2018; Hirsch et al. 2018; Hatziaargyriou 2014). This becomes more challenging if the number DER units, each with its specific power quality requirements, increases. In addition, most microgrids possess a significant share of intermittent RES generation, which may aggravate the above concern, and demand even more stringent power and frequency control requirements. Very few microgrids have been able to operate in a fully automated and grid-responsive dual-mode manner, being much more common to perform “planned islanding,” as a preventive measure to face severe weather or planned grid outages. Continued research and development of static switch technologies will be key to further unlock this type of barriers.

Electrical Fault Protection

Protection schemes and strategies against internal and external faults, which can harm system and consumer equipment (as well as operating personnel), has been a main area of microgrids’ technical research in recent years. As noted by Soshinskaya et al. (2014), while external faults could be

approached using conventional protective relaying and switching paraphernalia, overcurrent protection techniques may not be appropriate for handling internal faults in inverter-based systems. This hasn't emerged as a major shortcoming, since most microgrids operate mostly in grid-connect mode, but will likely receive more attention as the ability to island becomes more relevant.

Advanced Metering Infrastructure

The transition of the energy paradigm has digitalization as one of its enabling pillars. Correspondingly, AMI and specifically smart metering is a key component to LEM operations. Unfortunately, smart meter rollout is at different stages in various EU-countries and there is a lack of related standards and metering schemes, which means that the technical potential for more sophisticated grid/market flexibility management is not yet fully reached (Annala et al. 2018). For example, Finnish legislation (Decree 66/2009) required DSOs to implement a wide-scale smart meter rollout by the end of 2013 and currently, in Finland, close to 100% of the consumption points are equipped with a smart meter (Annala et al. 2018). This allows retailers and DSOs to offer more robust tariffs, which are inclusive of demand response incentives that better align with the system's resource efficiency (such as based on the Nordic power exchange's spot hourly price). In various countries, such as Poland, Portugal, and Belgium, smart meter implementation is still at an early stage.

Cybersecurity and Privacy

It remains unclear what technologies could be able to provide the secure and transparent environment that would be necessary for performing local energy trading. Mengelkamp et al. (2018), for example, suggests using blockchain as an enabler for high numbers of distributed continuously traced transactions. However, further research is still needed on various aspects of blockchain, such as scalability issues, complexity of the technical protocols, and actual implementation using state-of-the-art ICT components. Additionally, LEMs will incorporate the active collection and exchange of significant amounts

of different types of data, much of which is of a sensitive or confidential nature. In this context, the secure data handling and protection from various cyber security threats may become an immediate priority as an enabler of the development of LEMs. However, the technical structures, i.e., the fundamental security and privacy requirements under which these operations could take place, are not yet established (Mustafa et al. 2016), which constitutes a significant barrier.

Regulatory and Legal Barriers

The uncertainty arising from prohibitive or unclear legislative and regulatory frameworks in many countries in Europe and around the world draws concerns over the future development of LEMs, as well as of DER and microgrids.

Legal Obstacles and Uncertainty

Country-specific legislation inherited from the legacy energy paradigm can be particularly prohibitive of microgrid architectures that incorporate multiple DER. As noted by Ali et al. (2017), in spite of growing interest in DG, there aren't as of yet in Europe clear policies, standards, or regulatory instruments geared toward the repercussions of DG integration into electric power systems.

RES penetration regulation is a major bottleneck. For example, in Spain, the RD 1699/2011 prevents the combination, in the same metered electrical circuit, of PV generation and loads, as well as the behind-the-meter deployment of ESS together with PV. Other regulations prevent promotion of RES generally, as well as different tariff innovations. (Sanz et al. 2014) Taxation issues also persist. For instance, in Finland, owners of electric storage assets are taxed on both the electricity used for charging and the discharged electricity – double taxation (TEM 2017). Such legislative frameworks vary significantly across the EU and globally, which poses further normalization challenges.

Some barriers are related to the absent legal definition of key concepts such as LEMs, or "microgrids." This delays progress, due to lack of standardization both at the technical and policy levels. To the best of knowledge, only in the US

legal microgrid definitions have been introduced, namely, in the state law of New York, New Jersey, California, Connecticut, and few others. Furthermore, in Europe, directives from the Clean Energy package opened the precedent for regulating the concept of “citizens energy communities” with the ability to autonomously manage several energy initiatives of their own, which is now being transposed by many member states (for instance, Greece and Finland). However, practice from regulation is yet to be seen and numerous inconsistencies still exist that will create legal uncertainty (RESCoop 2018).

Community energy systems also require distribution infrastructure, which will inevitably cross privately or publicly owned land (Wouters 2015). This will raise legal issues and conflicts of interest, especially in cases where the network intersects local distribution network rights-of-way, which DSOs hold under long-term franchises and pay for, typically at the city level.

Lastly, DER ownership is difficult to define legally, for which further regulatory clarifications are generally required (Valta et al. 2018). In the USA, public utilities from various deregulated market states, such as Pennsylvania, Maryland, and Illinois, have approached regulators in order to be able to own microgrid assets, which has so far been declined. Another rather contentious point has been the microgrid asset cost recovery model, which has been often extended to the entire utility’s customer base, rather than limited to the communities directly involved with the project (Wood 2018).

Grid Interconnection and Trading Rules

Grid interconnection policies have been historically geared toward managing impacts from increasing DER penetration. This fits a paradigm that perceives DER as sources of grid disturbances (Soshinskaya et al. 2014). Contrarily, LEMs contemplate DER as sources of active cooperation with the grid and as enablers of new revenue streams and business models with the ability to enhance the local economy.

In many countries of Europe, such as Portugal, Spain, and widely in the USA, anti-islanding regulations establishing disproportionate grid

protection schemes still threaten the development of microgrids. Such schemes prevent the seamless decoupling and self-sufficient operations that are innate to microgrids (Wouters 2015; Soshinskaya et al. 2014). From a grid perspective, taking in variable and unpredictable DER capacity requires infrastructure and equipment upgrades, which not always operators are willing or able to sustain. As a result, it remains unclear which parties should be financially responsible for these added costs (Ali et al. 2017). The uncertainty in interconnection policies will continue to drive long and fastidious administrative procedures and delays in getting project approvals and permissions (Valta et al. 2018) – a risk that will inevitably keep potential investors away.

A second branch of obstructive grid connection regulation pertains to bi-directionality. A fundamental ability of LEMs and microgrids is not only to buy but also to trade energy and power within different marketplaces and with a multitude of customers. However, the prevailing market frameworks are either inadequate or entirely impeditive of such activities, barring these systems from potentially key revenue streams. Globally, various countries still prohibit feeding self-generated electricity into the grid (REN21 2019). In Europe, many states, including Denmark, Greece, and Switzerland, rolled out net metering or similar schemes. However, in many cases, such as Spain and Portugal, these regulations are fully geared toward self-consumption, thus discouraging sales of surplus production and other types of active market participation (Government of Portugal 2014; Sanz et al. 2014). Behind this context are institutionalized trading rules that remain unclear as to who should acquire surplus production from DER. Additionally, well-structured compensation mechanisms to regulate the participation of prosumers in flexibility or ancillary markets are largely unavailable. For example, the economic regulation of the DSOs often incentivizes infrastructure investments over the use of demand response (Vallés et al. 2016). Mechanisms for valuation of externalities, such as added reliability and curbed environmental emissions, are equally unavailable, which further aggravates the value proposition for LEMs.

Another side aspect of this discussion is the reallocation of distribution grid O&M costs, which DSOs usually recover via electricity tariffs. It is unlikely that DSOs will get on board with prosumer export trends before clear distribution cost recovery mechanisms – for instance, via capacity-based charges in sales revenues – are established.

New Actors and Redefinition of Roles

The decentralized energy paradigm from which the LEMs concept was born involves myriad structural transformations, including the redefinition and creation of certain market activities and roles. This is unavoidable in innovative environments and constitutes more an opportunity, particularly for new third-party players or prosumers to enter the energy market than a barrier of substantial importance. For example, a new breed of competitive players is likely to emerge with the technical skills and capacity to operate, maintain, and manage local energy systems such as microgrids, as well as to validate and securely coordinate intrinsic LEM transactions. On the other hand, at least in the USA, various public utilities have filed requests with local utility commissions to be able to own and operate DER assets themselves, by which they would further delve into competitive market environments (Wood 2017). This balance of powers, through which the new decentralized energy market frameworks are taking shape, is still underway, and can be considered itself the real barrier to more swift market developments. Meanwhile, a significant new area of research in LEMs pursues the development of novel business models that drive the creation of financial value for its intervening actors, such as prosumers engaged in local peer-to-peer trading, or in demand response and ancillary service markets.

Economic Barriers

Some challenges faced by LEMs have an economic nature and affect different types of stakeholders.

Installed Costs

Local energy projects still bear high upfront costs, which affect their financial performance (Ali et al.

2017; Mendes 2017; Koirala et al. 2016) and their attractiveness to investors. This is mostly (but not exclusively) a result from high installed costs of less market-mature DER, such as microturbines and fuel cells. Capital costs for the latter, for example, are currently aggravated by the need for a reformer system, as addressed earlier. The techno-economic maturity of DER is often discussed in the literature (EPA 2017; Parra et al. 2017; Yao et al. 2016; DNV 2014). Essentially, solar PV reached such levels of maturity through the last decade (approx. 70% installed cost reduction) that its cost-efficiency against the BAU has been enabled in most scenarios. Stationary energy storage solutions are generally still lagging behind in terms of techno-economics, even though cost reductions are soon expected for technologies such as Li-ion or flow batteries (Faisal et al. 2018). The integration of energy systems may also pose financial challenges to LEMs. System capital and O&M costs increase proportionally with the number of energy conversions involved (for example, hot or chilled water distribution networks may become necessary). DER management systems – DERMS, which centralize control and coordination of the various assets, as well as interconnection equipment at the grid point of common coupling (PCC), such as static switches, can also increase costs substantially.

Distribution of Value

Other economic barriers to LEMs have a socio-economic dimension and are generally tied to inappropriate or absent regulation. For example, split-incentive problems, as reported by Koirala et al. (2016), can occur in local energy system developments if investment costs and reaped benefits are not equitably balanced among project stakeholders, i.e., investors and beneficiaries. This is particularly aggravated by the lack of asset ownership and revenue generation models suitable to this type of projects. To avoid split-incentives, it is critical that stakeholder interests are properly mapped and a fair distribution of value is assured already at a pre-project stage (Koirala et al. 2016). Various authors address, as well, the customer impacts of grid defection (Valta et al. 2018; Winkler and Ragawitz 2016).

Electricity prices may increase (including for non-prosumer customers) as a DSO response to higher self-consumption shares. Faced with decreasing revenue from grid fees, the DSO, on the other hand, may see its ability to invest in grid development and maintenance financially compromised. Grid defection also disrupts the traditional public electricity service tax collection model in place in many countries (Faure et al. 2017). Even though much research has been done in this area (Hanna et al. 2017; Mendes 2017) and some utilities are experimenting (LADWP 2019), no established prosumer tariffs exist that successfully balance local generation benefits with traditional electric rate cost components, thus avoiding cross-subsidization between customers (Valta et al. 2018).

Stakeholder-Related Barriers

This group of barriers says respect to the sensitive interactions between the involved market actors.

Customer Engagement

Effective customer engagement is a vital step for the development of functional LEMs (Soshinskaya et al. 2014). Local and community energy project developers can face resistance from customers lacking concrete project details or understanding of the technologically innovative concepts at play, or simply unwilling or unable to engage (Lopes et al. 2016). This type of resistance to change may become more acute and sensitive to handle when projects take place in socially fragile areas. There are complex socioeconomic layers behind this behavior, reason why it is critical that such projects adopt sophisticated social innovation techniques that are fully inclusive and embracing of the cultural diversity and richness of their customer base (Klein et al. 2019). Another difficulty lies in the intangible nature of many LEM benefits, such as the lowering of global impact emissions (such as GHG emissions) and the promotion of local growth, which are not easily perceived by the majority of customers. Generally, customers identify more easily with benefits immediately perceived as attainable or quantifiable (Timmerman 2017).

Privacy and Value Sharing

The direct control of customer loads can raise not only privacy issues, but also conflicts of interest. In a centralized control scenario, customer energy flexibility can be commercially leveraged by a variety of actors, for example, in the balancing power market, ancillary services market, or simply to maximize local generation. Due to this, it becomes crucial that proper value sharing models are set and that clear rights and obligations applicable to balance responsible parties are established.

Market Pressures

Under most current regulatory and market frameworks, grid-connected local energy systems under the “good citizen” policy, i.e., those perceived by the network as one-directional consumer loads rather than as prosumers, are generally preferred (Soshinskaya et al. 2014). Distribution companies will naturally exert pressure against prosumer exports until, as previously discussed, clear electricity buy-back regulations and proper service models that incorporate their network upgrade requirements are in place. Likewise, self-consumption and local trading take market revenue away from traditional energy suppliers and reduce customer contribution to covering grid O&M costs. Concerns with loss of market share and positioning are likely to drive further resistance from traditional market actors (such as larger generator and operator companies), even though renewed opportunities to provide new types of services are expected to emerge for these players, as a result from their legacy market position, experience, and skills.

Environment Impacts

Local energy system projects are generally seen as environmentally positive. However, concerns have been raised as to the potential local air pollution impacts of a scenario where distributed energy adoption becomes mainstream, particularly in urban pockets (Mancarella and Chicco 2010; Strachan and Farrell 2006). While renewable energy-based DER do not incite such a concern, fossil-fueled DG, such as CHP or CCHP microturbine or engine units, have emission levels

that justify further research (Mendes 2017). It is often assumed that distributed energy emission impacts are limited to CO₂. However, this is not the case. Burning fuels for local generation raises the local concentration of primary pollutants such as NO_x, SO_x, VOC, CO, or CH₄, which are, in many cases, already high in urban areas, due to human activities such as transportation. Chemical reactions involving these pollutants and a series of climatic factors (such as sunlight) give rise to secondary air pollutants, such as ground ozone and particulate matter, which have many adverse human health effects, typically linked to cardiac and respiratory diseases, among others. A deeper consideration of these phenomena may result in stringent siting regulations with potential to further delay the implementation of LEM projects.

Summary

Local energy markets have the potential to benefit several stakeholders in the energy sector, especially the local prosumers and consumers, as they promote end users' active role in the energy system. Benefits for society are related to climate objectives, as local energy market solutions promote renewable energy. Furthermore, grid operators benefit from the increased local flexibility, which can be used for maintaining the power balance and for congestion management. In addition to these, novel market solutions provide new business opportunities for aggregators and other service providers.

However, despite the benefits, there are certain barriers for implementing local energy market solutions. These barriers can be categorized as technical, regulatory and legal, economic, and stakeholder-related to barriers. Nevertheless, these barriers are typically multidimensional.

Cross-References

- [Controlling the Building Energy Footprint](#)
- [Energy Efficiency in Public Building Procurement](#)

- [Energy Pricing for Households for Promoting Energy Efficiency](#)
- [Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators](#)

Acronyms

AMI	Advanced metering infrastructure
BAU	Business-as-usual
CCHP	Combined cooling, heat, and power
CHP	Combined heat and power
CO	Carbon monoxide
DER	Distributed energy resource(s)
DERMS	Distributed energy resource management system(s)
DG	Distributed generation/generator(s)
DSO	Distribution system operator(s)
ESS	Energy storage system(s)
EU	European Union
GHG	Greenhouse gas(es)
HESS	hybrid energy storage system(s)
ICT	Information and communication technologies
LEM(s)	Local energy market(s)
MCFC	Molten-carbonate fuel cell(s)
NO _x	Nitrogen oxides
PAFC	Phosphoric acid fuel cell(s)
PCC	Point of common coupling
PV	Photovoltaic(s)
RD	Real Decreto-ley (Royal Decree-Law)
RES	Renewable energy source(s)
SOFC	Solid oxide fuel cell(s)
SO _x	Sulfur oxides
US	United States (of America)
VOC	Volatile organic compounds

References

- Ali, A., Li, W., Hussain, R., He, X., Williams, B. W., & Memon, H. M. (2017). Overview of current microgrid policies, incentives and barriers in the European Union, United States and China. *Sustainability*, 9(7).
- Ampatzis, M., Nguyen, P. H., & Kling, W. (2014). *Local electricity market design for the coordination of distributed energy resources at district level*. Paper presented at 5th IEEE PES Innovative Smart Grid Technologies Europe (ISGT Europe), Istanbul, Turkey. <https://doi.org/10.1109/ISGTEurope.2014.7028888>.
- Annala, S., Mendes, G., Honkapuro, S., Matos, L., & Klein, L. (2018). *Comparison of opportunities and*

- challenges in demand response pilots in Finland and Portugal. Presented at the European Energy Market, Lodz, Poland.
- Bray, R., Woodman, B., & Connor, P. (2018). *Policy and regulatory barriers to local energy markets in Great Britain* (Working paper). University of Exeter, Energy Policy Group. https://geography.exeter.ac.uk/media/universityofexeter/schoolofgeography/images/researchgroups/epg/09.05.18_Policy_and_Regulatory_Barriers_to_LEMs_in_GB_BRAY_.pdf. Accessed 19 June 2019.
- Bremdal, B. A., Olivella-Rosell, P., Rajasekharan, J., & Ilieva, I. (2017). *Creating a local energy market*. Paper presented at 24th International Conference & Exhibition on Electricity Distribution (CIRED), Glasgow, UK. <https://doi.org/10.1049/oap-cired.2017.0730>.
- DNV GL Energy (DNV). (2014). *A review of distributed energy resources* (Technical report). New York Independent System Operator – NYISO.
- EPA (U.S. Environmental Protection Agency). (2017). *Catalog of CHP technologies*. Combined Heat and Power Partnership, Washington, DC. Available online at: <http://www.epa.gov/chp/>
- Faisal, M., Hannan, M., Jern Ker, P., Hussain, A., Bin Mansor, M., & Blaabjerg, F. (2018). *Review of energy storage system technologies in microgrid applications: Issues and challenges*. IEEE Access, Special Section on Advanced Energy Storage Technologies and Their Applications. <https://doi.org/10.1109/ACCESS.2018.2841407>.
- Fathima, A., Prabakaran, N., Palanisamy, K., Kalam, A., Mekhilef, S., & Justo, J. (2018). *Hybrid-renewable energy systems in microgrids: 1st edition – integration, developments and control*. Springer. ISBN 978-0-08-102493-5.
- Faure, M., Salmon, M., El Fadili, S., & Payen, L. (2017). *Urban microgrids – Overview, challenges and opportunities* (Technical Report). Paris: ENEA Consulting.
- Government of Portugal. (2014). Ministério do Ambiente, Ordenamento do Território e Energia “Decreto-Lei n.º 153/2014 de 20 de outubro”.
- Hanna, R., Ghonima, M., Kleissl, J., Tynan, G., & Victor, D. (2017). Evaluating business models for microgrids: Interactions of technology and policy. *Energy Policy*, 103, 47–61.
- Hatziaargyriou, N. (2014). *Microgrids: Architectures and control*. Wiley. ISBN 978-1-118-72068-4.
- Hirsch, A., Parag, Y., & Guerrero, J. (2018). Microgrids: A review of technologies, key drivers, and outstanding issues. *Renewable and Sustainable Energy Reviews*, 90, 402–411.
- Horta, J., Altman, E., Caujolle, M., Kofman, D., & Menga, D. (2018). *Real-time enforcement of local energy market transactions respecting distribution grid constraints*. Paper presented at 2018 IEEE International Conference on Communications, Control, and Computing Technologies for Smart Grids (SmartGridComm), Aalborg, Denmark. <https://doi.org/10.1109/SmartGridComm.2018.8587495>.
- Ilic, D., Goncalves Da Silva, P., Kamouskos, S., & Griesemer, M. (2012). *An energy market for trading electricity in smart grid neighbourhoods*. Paper presented at 6th IEEE International Conference on Digital Ecosystems and Technologies (DEST), Campione d'Italia, Italy. <https://doi.org/10.1109/DEST.2012.6227918>.
- Klein, L., Matos, L., & Allegratti, G. (2019). *The impact of a tailored end user engagement framework on a peer-to-peer energy sharing initiative: An empirical study*. Presented at the 4th International Conference on Energy and Environment: Bringing Together Engineering and Economics, Portugal.
- Koirala, B., Koliou, E., Friege, J., Hakvoort, R., & Herder, P. (2016). Energetic communities for community energy: A review of key issues and trends shaping integrated community energy systems. *Renewable and Sustainable Energy Reviews*, 56, 722–744.
- LADWP (Los Angeles Department of Water & Power). Electric rates, special commercial/industrial rates, “Customer generation”, website, Consulted online in August 2019.
- Lopes, M., Henggeler Antunes, C., Janda, K., Peixoto, P., & Martins, N. (2016). The potential of energy behaviours in a smart(er) grid: Policy implications from a Portuguese exploratory study. *Energy Policy*, 90, 233–245.
- Mancarella, P., & Chicco, G. (2010). *Distributed cogeneration: Modelling of environmental benefits and impact, distributed generation*. InTech. ISBN 978-953-307-046-9.
- Marnay, C., DeForest, N., Stadler, M., Donadee, J., Dierckxsens, C., Mendes, G., Lai, J., & Cardoso, G. (2012). *A green prison: Santa Rita Jail creeps towards zero net energy (ZNE)* (Technical report). Berkeley: Lawrence Berkeley National Laboratory.
- Mendes, G. (2017). *Microgrids as key for energy efficiency*. Ph.D. thesis, Instituto Superior Técnico from Universidade de Lisboa.
- Mengelkamp, E., Gärtner, J., Rock, K., Kessler, S., Orsini, L., & Weinhardt, C. (2018). Designing microgrid energy markets a case study: The Brooklyn Microgrid. *Applied Energy*, 210, 870–880.
- Mengelkamp, E., Schönland, T., Huber, J., & Weinhardt, C. (2019). The value of local electricity – A choice experiment among German residential customers. *Energy Policy*, 130, 294–303.
- Mustafa, A., Cleemput, S., & Abidin, A. (2016). *A local electricity trading market: Security analysis*. Presented at the IEEE PES Innovative Smart Grid Technologies Conference – ISGT Europe.
- Ofgem. (2017). Ofgem’s future insights series: Local energy in a transforming energy system. https://www.ofgem.gov.uk/system/files/docs/2017/01/ofgem_future_insights_series_3_local_enen_final_300117.pdf. Accessed 12 June 2019.
- Parra, D., Swierczynski, M., Stroe, D., Norman, S., Abdon, A., Worlitschek, J., O’Doherty, T., Rodrigues, L., Gillott, M., Zhang, X., Bauer, C., & Patel, M. (2017).

- An interdisciplinary review of energy storage for communities: Challenges and perspectives. *Renewable and Sustainable Energy Reviews*, 79, 730–749.
- REN21. (2019). *Renewables 2019 global status report* (Technical report). Paris. ISBN 978-3-9818911-7-1.
- RESCoop – European federation of renewable energy cooperatives. (2018). *Strong support for 'citizens energy communities' in Europe's new electricity market design, but holes remain*. Brussels.
- Sanz, J., Matute, G., Fernández, G., Alonso, M., & Sanz, M. (2014). *Analysis of European policies and incentives for microgrids*. Presented at the International Conference on Renewable Energies and Power Quality, Spain.
- Soshinskaya, M., Crijns-Graus, M., Guerrero, J., & Vasquez, J. (2014). Microgrids: Experiences, barriers and success factors. *Renewable and Sustainable Energy Reviews*, 40, 659–672.
- Strachan, N., & Farrell, A. (2006). Emissions from distributed vs. centralized generation: The importance of system performance. *Energy Policy*, 34(17), 2677–2689.
- TEM (Finnish Ministry of Employment and Economy). (2017). *Matkalla kohti joustavaa ja asiakaskekeistää sähköjärjestelmää* (Smart Grid Workgroup's progress report).
- Timmerman, W. (2017). *Facilitating the growth of local energy communities*. Ph.D. thesis, University of Groningen.
- Vallés, M., Reneses, J., Cossent, R., & Frías, P. (2016). Regulatory and market barriers to the realization of demand response in electricity distribution networks: A European perspective. *Electric Power Systems Research*, 140, 689–698.
- Valta, J., Mäkinen, S., Kotilainen, K., Järventausta, P., & Mendes, G. (2018). *Comparison of regulatory challenges faced by different microgrid ownership models*. Presented at the International Smart Grid Technologies Conference – ISGT Europe, Slovenia.
- Winkler, J., & Ragawitz, M. (2016). *Solar energy policy in the EU and the member states, from the perspective of the petitions received*. European Parliament: Policy Department C: Citizens' Rights and Constitutional Affairs.
- Wood, E. (2017). *Maryland utility proposes \$44.2M pilot for public purpose microgrids*. Article, Microgrid Knowledge. Available online at <https://microgridknowledge.com/public-purpose-microgrids-pepco/>
- Wood, E. (2018). *ComEd's much-watched bronzeville microgrid wins key backing*. Article, Microgrid Knowledge. Available online at <https://microgridknowledge.com/bronzeville-microgrid-chicago/>
- Wouters, C. (2015). Towards a regulatory framework for microgrids – The Singapore experience. *Sustainable Cities and Society*, 15, 22–32.
- Yao, L., Yang, B., Cui, H., Zhuang, J., Ye, J., & Xue, J. (2016). Challenges and progresses of energy storage technology and its application in power systems. *Journal of Modern Power Systems and Clean Energy*, 4(4), 519–528.

NEET Youngsters

► NEET Youngsters Management

NEET Youngsters Management

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Synonyms

Employment or training; Management of NEETs;
NEET youngsters; NEETs; Not in education

Definition

NEET Youngsters Management is not a science derived from management. It is about using principles of management at various levels (micro or macro, public, or private level) in order to solve the problem of NEETs (not in education, employment, or training) that are usually youngsters between 15 and 34 years old (Eurostat 2019). The problem with NEET youngsters is that they are invisible and becoming older; thus, they are not included in these statistics, because they will be more than 34 years old. So, NEET youngsters become adults, and sometimes there are families formed by NEETs, thus increasing the risk for having children that will also become NEETs. According to OECD (2018), the analysis on NEETs refers to youngsters between 15 and 29 years old that are not in education, employment, or training. The International Labour Organization (www.ilo.org/global/about-the-ilo/multimedia/maps-and-charts/enhanced/WCMS_598674/lang%2D%2Den/index.htm) appreciates that NEETs refer to youngsters between 15 and 24 years old and that this indicator is widely influenced by gender and location. Eurofound

(2018) mentions that the age group of NEETs was previously 15 to 24 years old, being later extended to 15 to 29 years old. The origin of the term can be found in a report of Social Exclusion Unit (1999) when the term was first used in order to change the previous term that was considered as not being inclusive and fair to youngsters (status zero). At first, the acronym included only youngsters between 16 and 18 years old. Since then, the term has been extensively used in global statistics from Europe, the United States, South Korea, and Japan, each country adding its specific. There is also an indicator, NEET rate, determined as the share of the youngsters in a specific age group not in education, employment, or training in the total number of youngsters in that age group.

Introduction

There are differences in the NEETs' situation in Europe, the United States, Japan, or South Korea. As in the UK case where there was the term "status zero" that was changed with a more neutral one (an acronym for an objective reality), in Japan there are also two terms: freeters and NEETs. The terms used in Japan might seem similar, but the difference is that freeters have a part-time, temporary job, while NEETs do not have one. The other features (the age group of 15 to 34 years old and not being in education) are the same (Inui 2005). So-youn (2015) analyzed the causes for the high number of NEETs in South Korea. If in some countries, one of the causes for becoming a NEET youngster is represented by not having an education, the author highlights that "eight out of ten South Koreans graduate from a university," this making youngsters "pickier" when having to find a job. Schmid (2013, p. 1) also mentions that the number of NEETs in Korea is one of the highest in OECD countries, "especially for youth with tertiary education." DeSilver (2015) analyzed the situation of US NEETs between 16 and 29 years old and concluded that there are more NEETs among black and Hispanic people and those who have only high school education or even less. Another report of Pew Research Center (2019) shows that there are less NEETs in the

United States as "economy recovers." The report presents the NEET figures between 2013 and 2018 for the age group 16 to 29 years old. These differences in age group make statistics regarding NEETs in the world more difficult to compare.

Risk Factors for Becoming NEET

In order to properly manage the problem of NEET youngsters, it is important to know the term, the differences between countries, and the main causes and risk factors that determine a youngster to become NEET. Among the main risk factors, we can mention the following: the lack of education or over-qualification correlated with the difficulty to find a job for that qualification, the low income of the family, the region where youngsters live (rural areas or poor regions), and gender (women are more prone to becoming NEET because of early pregnancy). The latest report of Eurostat (2019) regarding the number of NEETs in EU countries reveals the risk factors. The analysis by sex and age shows that there are more NEET women between 20 and 34 years old than men, some of the causes being "social pressures" (women are expected to stay home and take care of the household), "gender segregation," and discrimination from potential employers. The analysis by the educational status reveals that those with low-level education are more prone to becoming NEETs than those with intermediate- or high-level education. There can appear some situations in which youngsters overqualified prefer to not work if they do not find a job appropriate to their level of education. The analysis by the geographic position shows that youngsters in rural areas face a higher risk of becoming NEETs than those in urban area.

Depending on the causes that make a person staying under this category of NEETs, we can have various forms of NEETs: voluntary or involuntary if the youngsters have or do not have control of this status (sometimes, they do not want to work or continue education but prefer to write, travel, or express their artistic side); elite NEETs (youngsters in rich families that decide not to work); shut-in or the Japanese term hikikomori

(Uchida and Norasakkunkit 2015) when youngsters remain inside their houses, becoming socially isolated (without a medical reason, at least not physical); and short-, medium-, or long-term NEETs, depending on the time of being under this category.

Disadvantages of Having a High Number of NEETs and Their Potential for a Country's Development

The NEET status has numerous disadvantages and long-term risks for those youngsters: their economic and social status will be affected, their income will dramatically decrease, their health will also suffer, their psychological health will deteriorate, and they will face a lack of hope and perspective and have difficulties to start a family. These disadvantages gain higher proportions at a national level because NEETs are an important human capital with a great potential for the development of the country. Each NEET youngster is an unused human resource and costs the economy money and productivity. Integrating NEETs will bring many advantages for macroeconomic indicators and lead to a more developed country.

NEET Youngsters Management

The problem of NEETs can be managed at different levels: individual, national, or even global. The NEET individual can learn to apply some life strategies that could help him or her get rid of this label. OECD (2016) considers NEETs "disengaged youth." So, how can a disengaged youngster be transformed into a motivated one, eager to continue his or her studies or find a job? The answer is that it is very difficult for someone being NEET to awaken himself or herself without the help of government or NGOs. At a national level, there should be more investments in education, thus preventing school abandonment and diminishing the risks for becoming NEET. Other measures that can be implemented at a national level are offering after-school programs for disadvantaged youngsters (minorities, children from

rural areas, or children from families with low income, with parents who left abroad to work); combining formal education with nonformal education and creating partnerships with NGOs to adjust the educational activities to the needs of NEETs or those in risk of becoming NEET; creating special programs for the integration of NEETs in the labor market and offering them an incentive to enroll in the programs; monitoring youngsters with a risk of becoming NEETs; monitoring NEETs to prevent them being invisible in the society; offering temporary support (financial or nonfinancial); offering career counseling in order to help youngsters choose a career after they graduate; creating partnerships with private companies in order to offer internships to students, thus preventing the NEET phenomenon and also to NEETs; and using Youth Guarantee schemes (since 2013, EU member states had to implement them). Investments in education are a key to the NEET problem. At a global level, the United Nations adopted the 2030 Agenda for Sustainable Development establishing 17 sustainable development goals (www.un.org/sustainable-development/sustainable-development-goals/). From these goals, at least two can be related with the problem of NEETs or the risk factors for becoming one: goal 4, quality education, and goal 8, decent work and economic growth.

NEETs are a concern for all of us and represent a mirror for how a community knows how to tackle this problem. Each of us can contribute in our own way to the achievement of the goals in the 2030 Agenda.

Summary

The term NEET should be reconsidered. NEETs should not be seen as a burden but as a potential that is not yet well valorized in the society. The country that succeeds to do that better and faster than other countries has much to gain. And a question that should stick with us in order to motivate us to do more for these youngsters at a national or global level is: *What happens with NEETs after the maximum age that classifies someone as being NEET (34 years old)?*

Cross-References

- [Agenda 2030](#)
- [Education for Sustainable Development](#)
- [United Nations Agenda 2030 on Sustainable Development Goals, The](#)

References

- DeSilver, D. (2015). *Millions of young people in U.S. and EU are neither working nor learning*. Pew Research Center. January 28, 2016. Retrieved from www.pewresearch.org/fact-tank/2016/01/28/us-eu-neet-population/
- Eurofound. (2018). NEETs. July 2018. Retrieved from www.eurofound.europa.eu/topic/neets
- Eurostat. (2019). Statistics on young people neither in employment nor in education or training. Data extracted in April 2019. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_young_people_neither_in_employment_nor_in_education_or_training
- Inui, A. (2005). Why FREETER and NEET are misunderstood: Recognizing the new precarious conditions of Japanese youth. *Social Work and Society*, 3(2). Retrieved from www.socwork.net/sws/article/view/200/485
- OECD. (2016). *The NEET challenge: What can be done for jobless and disengaged youth?* Retrieved from www.oecd-ilibrary.org/docserver/soc_glance-2016-4-en.pdf?expires=1567519202&id=id&accname=guest&checksum=70149DEDB37C10C839267B9322846BD3
- OECD. (2018). *Education at a glance 2018: OECD indicators*. Paris: OECD Publishing. Retrieved from www.oecd-ilibrary.org/education/education-at-a-glance-2018_eag-2018-en
- Pew Research Center. (2019). Fewer NEET youth in U.S. as economy recovers. August 28, 2019. Retrieved from www.pewresearch.org/fact-tank/2019/08/29/facts-about-american-workers/ft_19-09-02_american-workerupdate_2/
- Schmid, G. (2013). *Youth unemployment in Korea*. IZA policy paper no. 63, May 2013. Retrieved from <http://ftp.iza.org/pp63.pdf>
- Social Exclusion Unit. (1999). Bridging the gap: New opportunities for 16–18 years olds not in education. *Employment or training*. Retrieved from <https://dera.ioe.ac.uk/15119/2/bridging-the-gap.pdf>
- So-youn, K. (2015). *South Korea has third most NEETs among developed countries*. Retrieved from http://english.hani.co.kr/arti/english_edition/e_business/703236.html
- Uchida, Y., & Norasakkunkit, V. (2015). The NEET and hikikomori spectrum: Assessing the risks and consequences of becoming culturally marginalized.

Frontiers in Psychology, 6, 1117. <https://doi.org/10.3389/fpsyg.2015.01117>.

Websites

- www.ilo.org/global/about-the-ilo/multimedia/maps-and-charts/enhanced/WCMS_598674/lang%2D%2Den/index.htm
- www.un.org/sustainabledevelopment/sustainable-development-goals/

NEETs

- [NEET Youngsters Management](#)

Net Neutrality

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Synonyms

Non-discriminatory Access [also Non-discriminatory Broadband/Bandwidth and/or Traffic Management]; Open Internet

Definition

An uncomplicated definition of the term is *Equal treatment of all online data and content traffic*. Still, a careful reader may recognize the considerable complexity of the matter at hand.

A “reductionist” approach may place Net [work] Neutrality within the technical contexts of “inter-network” access through constituent physical means of reaching the internet and its many digital media/software components. At first glance, it is an obscure intersection of law and technology.

Initially, the question defining the matter is: Should internet service providers (ISPs) supply equal (quality and speed of) access to legal content of all types, methods of delivery, and

application(s) to all users of the internet and if so, under what classes of circumstances?

However, thus defined right of equal access to legal content online captures a number of other important fundamentals of the internet and its constituent media. These specify the context and impact of many if not all aspects of internet communications. Such terms include relative positions of power of major players, users, consumers, and citizens online; internet economics; the nature, reach, scope, scale, and impact of internet marketing; business models; free competition; fostering or obstructing innovation; and, moreover, the weighty concepts of public interest, freedom of speech, fake news, human rights, democracy, government dependability, and corporate social responsibility (e.g., FCC.; Free Press, [n.d.](#); Vesteinsson, [2019](#)).

Introduction

The specific use of the term can be traced back to a 2003 paper (Wu, [2003](#)), though matters known as Net Neutrality and Open Internet have characterized information and communications technology (ICT)-driven networks since the late 1990s. Specifically, those notions arose during the early commercialization of the internet¹ (Reardon, [2015](#)).

The term Net Neutrality, thus worded, was initially specific to the USA and its regulators and unique market structures. The 2003 paper, articulating key “network neutrality” principles, subsequently influenced US policy the Federal Communications Commission’s (FCC) policies on vertical integration of broadband, ISPs, and content suppliers (FCC, [2013](#), pp. 5691–4).

Largely interchangeable with Net Neutrality is the notion of Open Internet Regulation, as it is known in corresponding documents (e.g., EU/EEA). Despite varying views and terminologies, Net Neutrality remains a term in broad global use and appears in many known international and national debates. Those favoring free-market

deregulation argue that EU/EEA open internet rules considerably impair the pace of innovation compared to the USA (Swanson, [2015](#)).

As commercial broadband emerged, Wu ([2003](#)) presented a case for ISP self-regulation rather than rigorous legislation, which he considered counterproductive. Instead, official bodies would impose light-touch regulation of all broadband suppliers, espousing the need for non-discrimination of access to legal content and latency-sensitive applications. (The latter includes existing software transmitting voice or video via the “*inter-network* of networks.”)

Technology arguments of the day were soon surpassed, and Net Neutrality debates moved to new ground. This, especially as the vertical integration of those controlling content and access, had occurred on a large scale soon after the paper made its considerable impact. Nonetheless, the survey/fieldwork cited in Wu’s seminal paper does cite a less neutral approach on the part of cable firms, i.e., content suppliers, which soon became vertically integrated within broadband markets.

The Open Internet/Net Neutrality faced its greatest test to date with the adoption of new FCC rules in December 2017, actioned in 2018 (Kaye et al., [2018](#)). Some, especially advocacy groups, denounced this as the end of Net Neutrality and internet freedoms as such (McSherry, [2017](#)).

The debate remains an impassioned one.

Complexities, Activism, Litigation, and Implications

The most basic way of defining Net Neutrality relates to equal right of access to legal content through established networks, with specific focus on tech firms, ISPs, and ICT networks in disseminating legal content and applications. However, the technical core of Net Neutrality obscures more complex and nuanced assertions, which may be classed under political economy, power relations, open culture, and rights of groups and individuals in media and communications.

¹ (An important VoIP/Voice over Internet Protocol test case helped define “non-discrimination” in 2005.)

Historically and to date, terms of Net Neutrality and Open Internet primarily relate to the “physical” networks owned and/or controlled by service suppliers. Technology aspects of Net Neutrality are undeniably important. However, this may disguise matters of competition, regulation, legislation, and, especially, freedom of expression. The matter is stridently upheld by liberal/leftist proponents of free speech and sustainable development on one and free-market advocates on the other side.

Thus, opposing concepts of “free” are espoused: While the notions of openness, collaboration, and curbs on corporate power prevail on the “liberal/left,” their critics label such thought naïve, lacking in rigor, and idealistic/ideological in nature while asserting in favor of market-oriented competition (Campbell, 2017). Considered views acknowledge nuances and complexities, citing concerns over the convergence of content provision and technical delivery which may lead to the significant marginalization of economically disadvantaged, individualist, or minority views in [online] media. Implicitly, it is reasoned this may amount to distortion and suppression of information.

Advantages of low cost and free basic access include benefitting the hard-up, as stated or pondered by major decision-makers (Finley, 2017; Kaye et al., 2018). The UN rapporteur on the rights of freedom of opinion and expression reflected that state actors may owe the ultimate remit of facilitating open internet access (Kaye et al., 2018; Miles, 2017). Involving ICT corporations where required – as means of access develop over time – he emphasized that universal access to quality information is the key criterion.² Other expert opinions firmly advocate the benefits of free-market approaches; further decrying COVID-triggered reformist calls to make internet a public utility (Swanson, 2015, 2020).

Themes debated further (e.g., Harris & McCabe, 2017) extend toward the function and privacy of user data; commercializing the labor of

internet users both paid and unpaid; stretching to the very notion of human cognition; and how it may change under the pressure of market forces that disseminate information, facilitate processing, and enable content access.

The Net Neutrality argument had triggered considerable policy and political deductions in the late 2010s, embodied in a number of high-profile regulatory contexts within respective legislatures of the USA and EU (e.g., BEREC, 2016). These repeatedly raised key matters concerning democracy, market competition, and the rule of law. Such themes are reflected in decisions involving at times the highest legal instances (Keating & Davidson, 2019; Liptak, 2018).

Tracing the issue back to its 1990s origins shows that technology acts as substructure, thus merely shaping the means that lead to more significant ends. Despite constant technological change, the crux of the argument had shifted little since the time of dial-up connections when the notion of the *Internet as public utility* first reappeared in the public eye. (Failing to invoke The Communications Act of 1934 [US].) Early internet service providers appeared on the market in the 1990s; by the end of the decade, they requested access to fiber-optic cables already in use for cable television in the USA.

Thereby internet-related corporate interests had first clashed vis-à-vis the network itself: tackling the contrasting *physicality* of a dated [copper-]wire telephone network technology used for dial-up connections and a far superior cable infrastructure offered by entertainment services. The latter indeed were able to offer broadband due to sunk costs of investment into their existing TV infrastructure network. Thus, early ISP-focused businesses argued being at a disadvantage.

The attempt to treat the broadband network as a public utility similar to that of the telephone service had failed on such occasions³ (Roosevelt Institute, 2011). What can be derived from such

²On the other hand, at the peak of COVID-19 crisis, an unprecedented alliance of Apple and Google was reported, not without critique in privacy groups.

³As stated, there are opinions being voiced which suggest that the COVID-19 pandemic may change that, as nearly the entire world moved into lockdown, adopting remote working, and social life (Livni, 2020).

examples is that regardless of technology, the access to – and use of networks, information, data, content, and applications – is a matter both preceding and surpassing a given technological context.

From the mid-to-late 2010s, and especially since 2017, the Net Neutrality debate had once more become a heated one. As the technology had improved significantly and the vertical integration created new giants capable of investing in *new and novel* infrastructures, so has the argument moved to more sophisticated aspects of network usage and purpose.

Potential Future Developments

Policy, Innovation, and Global Leadership

Since its inception, internet [and related regulation] in America led the way: In terms of networks, businesses, diverse applications, platforms, and innovation. Many national (Ofcom, 2019) and supranational (BEREC, 2016) treaties and regulations including those concerning the Open Internet in democracies and other (supra)state actors tend to follow, reflect, or at times contest some of its features. The world largely conforms with developments determined by the internet in the USA. In that light, Net Neutrality matters debated in the USA continue to reverberate worldwide.⁴

The Science and Technology Aspects

“Physicality” is a term best determined by traditional scientific definitions: those of Physics. Namely, that both tangible and intangible methods are physical in nature, allowing for interchangeable use wherever possible or required: The tangible nature of internet wiring is as physical as the wireless methods of data transmission. The latter are yet to fully develop and are inherently constrained by the limitations of Earth’s electromagnetic spectrum despite the fact that digital compression allows for data packets of greater efficiency. Though this is the

case, future data connections and networks are likely to move to a more *intangible physicality* with new imperatives, technologies, and policies emerging to serve them.⁵

The internet of the future is also likely to evolve further into a hybrid medium, a blend of intangible – *electronic and data* – physicality and its tangible emanations such as the actual, perceptible tangibility of IoT (Internet of Things, smart homes, and 3D/4D printing). Therefore, the full span of possibilities would extend beyond present information/data/entertainment networks and create ones that cover matters ranging from those as abstract as *new storage media for ideas (human cognitive processes thus far unprotected in material form)* to matters as concrete as roboticization of everyday life. This would lead to exceptionally complex power relations, ethical and legal considerations, and such like.

Summary

Net Neutrality is a hotly debated matter that is hard to pin down by means of a single definition. The seminal paper that articulated the notion of “Net Neutrality” at the outset of these debates dealt with a technological issue now long surpassed; however, the notion remains challenging despite, and indeed because of, constantly evolving technologies that support the internet and its numerous facets. To simplify without circumventing the matter at the heart of it: Net Neutrality is equally about technology as it is about the ownership of it; it is about the control and ownership of networks and device- and software-centered patents as much as it is about the principles of human rights, freedom of speech and expression, and freedom from control or censorship all at once. It is also about the balance of power between the individual, the state, and the supranational bodies – corporate and regulatory

⁴For example, the EU’s BEREC Guidelines appear to contrast the US regulation unfolding since 2016.

⁵A separate matter surpassing this entry is “how ‘green’ is the internet”: the more latency-driven data exchange is, the *less green* it may be; streaming and blockchain are some of the better-known examples of the internet’s innate sustainability flaws.

alike – just as it is about elaborate and drawn-out legal definitions that tend to evolve with and in cases preceding technological change that facilitates or prevents freedoms of access or dissemination. It remains about market competition as much as it is intrinsically political. It is both discursive and pragmatic in nature. It is not without irony that some of the loudest advocates of its abolishment are reportedly affected by the very notion of empowering the tech that supports it.

References

- BEREC. (2016). *BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules* [online]. Riga: BEREC. Available at: https://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/6160-berec-guidelines-on-the-implementation-by-national-regulators-of-european-net-neutrality-rules. Accessed 8 January 2020.
- Campbell, F. (2017). The truth about ‘net neutrality’, the left, and Google. [online] *Forbes*. 3 May 2017. Available at: <https://www.forbes.com/sites/fredcampbell/2017/05/03/the-truth-about-net-neutrality-the-left-and-google/#1a10ff603745>
- FCC. (2013). *FCC Record: A Comprehensive Compilation of Decisions, Reports, Public Notices, and Other Documents of the Federal Communications Commission of the United States, volume 28, Issue 20*. [ebook] Washington, DC: FCC. Available at: <https://play.google.com/store/books/details?id=qaC3DMWGE5sC&rdid=book-qaC3DMWGE5sC&rdot=1>. Accessed 8 January 2020.
- FCC. (n.d.). *Net Neutrality: A Cornerstone of Freedom of Speech* [anon. public comment] [online] ECFS Public API Documentation, Washington, DC: FCC. Available at: <https://ecfsapi.fcc.gov/file/6519540265.pdf>. Accessed 28 January 2020.
- Finley, K. (2017). *The FCC OKs streaming for free—But net neutrality will pay*. [online] *Wired*. 3 February 2017. Available at: <https://www.freepress.net/issues/free-open-internet/net-neutrality>. Accessed 8 January 2020.
- Free Press. (n.d.). *Save the Internet*. [online] Available at: <https://www.freepress.net/issues/free-open-internet/net-neutrality>. Accessed 8 January 2020.
- Harris, T., & McCabe, D. (2017). *The making of a Big Tech reckoning*. [online] *AXIOS*. Available at: <https://www.axios.com/the-making-of-a-big-tech-reckoning-1515110746-de2d2b2e-4088-422d-adf4-e399f12a317f.html>. Accessed 27 April 2019.
- Kaye, D., Hudson, O., & Oliva, T. (2018). Net neutrality is part of the overall struggle for human rights in a digital age: Interview with the UN Special Rapporteur on freedom of opinion and expression. *Sur International Journal on Human Rights*. Issue 27. July 2018. [online] Available at: <https://sur.conectas.org/en/net-neutrality-is-part-of-the-overall-struggle-for-human-rights-in-a-digital-age/>. Accessed 8 January 2020.
- Keating, A., & Davidson, A. (2019). Breaking down this week’s net neutrality court decision. [Blog] *Mozilla Blog*. 4 October 2019. Available at: <https://blog.mozilla.org/blog/2019/10/04/breaking-down-this-weeks-net-neutrality-court-decision/>. Accessed 28 January 2020.
- Liptak, A. (2018). Supreme court Won’t hear net neutrality challenges. [online] *New York Times*. 5 November 2017. Available at: <https://www.nytimes.com/2018/11/05/us/politics/net-neutrality-supreme-court.html>. Accessed 4 April 2020.
- Livni, E. (2020). The coronavirus crisis proves the internet should be a public utility. [online] *Quartz*. 26 March 2020. Available at: qz.com/1826043/the-coronavirus-crisis-proves-internet-should-be-a-public-utility/. Accessed 26 March 2020.
- McSherry, C. (2017). *An attack on net neutrality is an attack on free speech*. [online] San Francisco: EFF. 22 June 2017. Available at: <https://www.eff.org/deeplinks/2017/06/attack-net-neutrality-attack-free-speech>. Accessed 8 January 2020.
- Miles, T. (2017). U.N. freedom of speech expert concerned about net neutrality. [online] *Reuters*. 20 December 2017. Available at: <https://www.reuters.com/article/us-usa-internet-un/u-n-freedom-of-speech-expert-concerned-about-net-neutrality-idUSKBN1EE2DA>. Accessed 8 January 2020.
- Ofcom. (2019). *Monitoring compliance with the net neutrality rules* [online]. London: Ofcom. Available at: <https://www.ofcom.org.uk/research-and-data/internet-and-on-demand-research/net-neutrality>. Accessed 26 March 2020.
- Reardon, M. (2015). *Net neutrality: How we got from there to here*. C|Net. 24 February 2015. Available at: <https://www.cnet.com/news/net-neutrality-from-there-to-here/>. Accessed 8 January 2020.
- Roosevelt Institute. (2011). *Communications Act of 1934*. [Blog] The Blog of the Roosevelt Institute. Available at: <https://rooseveltinstitute.org/communications-act-1934/>. Accessed 28 January 2020.
- Swanson, B. (2015). More evidence against internet regulation: The huge U.S.-European broadband gap. [Blog] *Maximum Entropy*. Available at: <http://www.bretswanson.com/index.php/tag/net-neutrality/>. Accessed 8 January 2020.
- Swanson, B. (2020). The internet vs. COVID-19. [Blog] AEIdeas. Available at: <https://www.aei.org/technology-and-innovation/the-internet-vs-covid-19/>. Accessed 27 April 2019.
- Vesteinsson, K. (2019). *US Court Sends Mixed Signals on Net Neutrality: States Can Protect Open Internet, but Federal Rollback Upheld*. [online] Human Rights Watch. 3 October 2019. Available at: <https://www.hrw.org/news/2019/10/03/us-court-sends-mixed-signals-net-neutrality>. Accessed 8 January 2020.

Wu, T. (2003). Network neutrality, broadband discrimination. *Journal on Telecommunications & High Technology Law*, Vol. 2, pp. 141–179. Available from: http://www.jthtl.org/content/articles/V2i1/JTHTLv2i1_Wu.PDF. Accessed 8 January 2020

Net Zero Carbon Footprint

► Net Zero Emission

Net Zero Emission

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Synonyms

Carbon neutrality; Climate neutrality; Decarbonization; Net zero carbon footprint; Net zero greenhouse gas (GHG) emission

Definition

Net zero emission is a concept which is similar in theory to that of climate neutrality. The concept was borne out of the need to avert the worst climate impact. It refers to the system of reaching a net zero emission of carbon dioxide (CO₂), methane, and other greenhouse gases in the atmosphere by removing all man-made greenhouse gas emissions from the atmosphere through reduction measures (natural and artificial sink), making-up for emission with removal of carbon from the atmosphere (carbon-offsetting) or by simply not emitting to reach net zero. This is possible where public and private concerns as well as individuals

act to remove as much CO₂ as they put into the atmosphere. The goal here is to reach overall carbon neutrality which leads to a zero-carbon footprint (IPCC 2018; Oshiro et al. 2018). For example, an industrial entity may embark on an afforestation program and funding other projects for an equivalent amount of carbon saving in a different location in the world to compensate for its greenhouse gases emission. There are also a growing number of energy efficient buildings that generate their energy needs on and/or off-site from renewable sources. Net zero emission hypothetically describes a solution where the amount of CO₂ and other GHGs emitted into the atmosphere is equal to the amount removed (IPCC 2018).

$$\text{CO}_2 \text{ emitted} = \text{CO}_2 \text{ removed}$$

Net zero emission is also sometimes used interchangeably with carbon neutrality and net zero carbon footprint which both refer to achieving net zero emissions by balancing carbon emissions including other greenhouse gases (GHGs) measured in terms of their carbon dioxide equivalence. The term “zero emission” is the root phrase from which “net zero emission” is derived. Even though the two terms are ultimately geared toward addressing the goal of balancing the global climate, they are conceptually different (Hope and Kuhn 2018). Zero emission was first conceptualized in 1991 by Gunter Pauli when he found that the growing demand for the derivatives and by-products of palm oil has aggravated the destruction of the rainforest in the South-East Asia. Overall, net zero emission refers to technologies, processes, and other energy generating facilities which do not emit greenhouse gases or other waste that can deteriorate the quality of the environment. Thus, common zero emission technologies include zero emission mobility such as bicycles, electric cars, hydrogen cars, and electric trains. There is also zero emission power generation such as hydroelectricity, solar power, wind power, and nuclear power. In order to reach the global warming target in the Paris Agreement, global emissions should reach net zero around mid-century (Friends of the Earth 2018).

Introduction

The use of energy has been a major driver of economic and social development. This has enabled the human race to lead some form of comfortable and enjoyable life. The growth in technological development is a result of the abundance and use of fossil fuels; that indeed fostered the era of industrial revolution. Nonetheless, the widespread consumption of fossil fuels has led to the release of excess greenhouse gases (GHGs) and other toxic elements into the environment (Eyre and Killip 2019). These GHGs are capable of trapping more heat in the atmosphere with a consequential negative impact on the climate, such as global temperature rise. This occurrence is known as climate change. The higher the production of GHGs, the higher the degree of earth warming, increasing the incidence of such adverse impacts as bushfires, storms, heatwaves, flood, etc. Cumulative emission of anthropogenic CO₂ has been identified as the major contributor to postindustrial anthropogenic temperature increase (Friends of the Earth 2018).

Globally, the demand for energy is projected to increase significantly over this century. However, to stabilize the global mean temperature, the net emissions of carbon dioxide (CO₂) from human activities – including not only energy and industrial production, but also land use and agriculture – must approach zero (Abraham 2019). The necessity to limit the emission of CO₂ and other GHGs has become more pressing than ever as reliance on fossil fuels to meet the growing global demand for energy continues. While the energy demand in industrialized countries will remain high to sustain their development, demand is growing fast in countries in transition due to their growing population and an increasing standard of living (Glynn et al. 2019; Abraham 2019). It is imperative to address associated ecological and climate issues. In its report of 2018, the IPCC has shown that the net global carbon emission must be reduced to zero to reverse the trend in warming of the earth. The report stressed that any scenario that does not entail the global reduction of emission to zero is

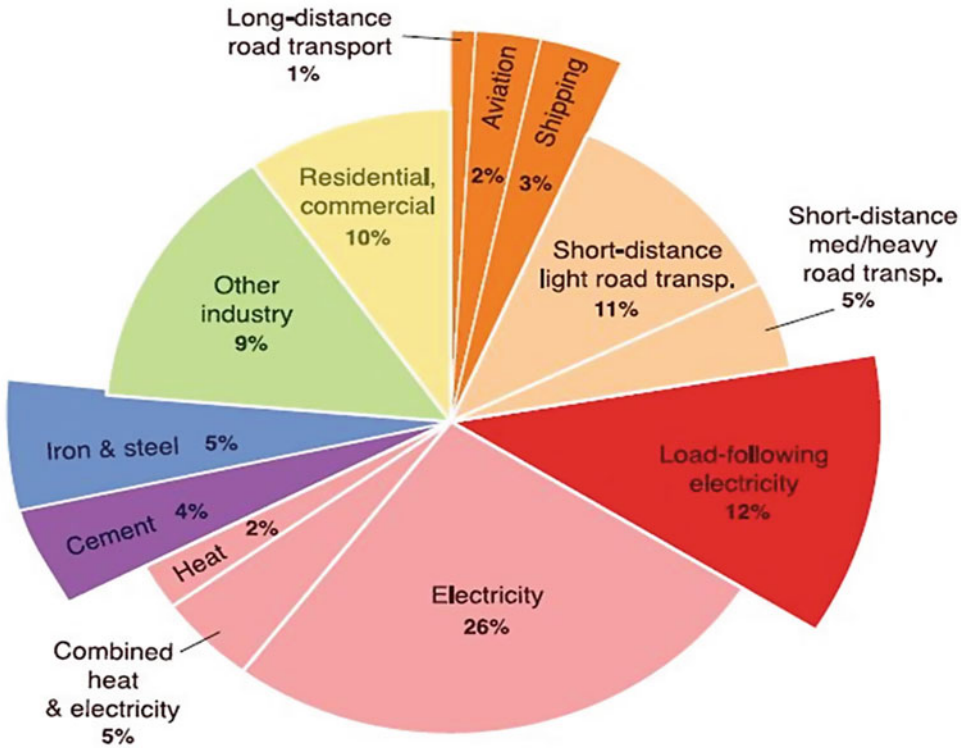
not capable of addressing the challenge of a changing climate. Figure 1 depicts the sectoral distribution of CO₂ emission on a global scale. It has been projected that the increase of global average temperature beyond 2 °C from pre-industrial level will cause tropical regions like West Africa, South-East Asia, Central and northern South America to face substantial decrease in local yields, particularly for wheat and maize. A mean temperature of 2 °C would also cause sea level rise by 10 cm, relative to 1.5 °C and a 30% higher rate of increase by 2100 (Roberts 2018; Davis et al. 2018).

In an agreement reached by 196 countries in Paris, a target was set to hold the global average temperature increase well below 2 °C above pre-industrial levels and also to strive to limit the temperature increase to 1.5 °C above preindustrial levels. Meeting the Paris Agreement goals will require reaching net-zero CO₂ emissions globally by 2050 through the provision of policies to address climate change and high carbon development (Eyre and Killip 2019).

Achieving Net Zero Emission

Reaching net zero emission by 2050 requires actions in adopting low carbon emission pathways that enhance the widespread deployment of clean energy sources to replace fossil fuels, as well as the reduction of total energy demand through higher energy efficiency and changes in consumer behavior. Massive production of carbon-neutral and energy-dense liquid fuels may be critical towards the provision of energy that is needed to drive the stationary and transportation energy production sectors, such fuels include hydrogen and ammonia, biofuels, synthetic hydrocarbons, and direct solar fuels (Glynn et al. 2019).

To achieve the goal of net zero emission, there has to be a shift in policy orientation at all levels, technological development must be tailored to international climate goals, and corporate and individual behavior has to change to protect the environment (Levin and Davis 2019). However, net zero emission can be achieved mainly in three ways:



Net Zero Emission, Fig. 1 Global fossil fuels and industrial emissions, 2014. (Source: Davis et al. 2018)

- (I) Emission offsetting: this refers to the reduction or avoidance of emission of CO₂ or other GHGs in one sector to compensate for emission made somewhere else. This can be achieved by investment in energy efficiency, renewable energy or other low-emission technology. The emission trading system (ETS) of the European Union is a good example of emission offsetting system. Emission offsets are measured in tons of carbon dioxide equivalent (CO₂e). Emission offsetting operates in two markets levels. In the higher compliance market, governments, companies, and other entities can purchase emission offsets to enable them to comply with their emission limits. In the lower voluntary compliance market, governments, companies, and individuals can buy emission offsets to compensate for their emission from transportation, electricity, and other emission contributions (Revkin 2007).
- (II) Carbon removal/sequestration: this refers to the removal and long-term storage of atmospheric CO₂ to mitigate the effect of global warming. Carbon sequestration occurs both naturally and through artificial processes (Selin 2020). CO₂ is removed from the atmosphere naturally through biological, chemical, and physical processes and stored primarily in green plants and trees, in soils as organic debris, in geologic formations that are inactive for indefinite period, and the oceans. This is the process with which nature has achieved balance in atmospheric CO₂ in a way that optimally supports life. However, several artificial processes have been developed to achieve similar purpose such as large-scale artificial sequestration of industrially CO₂ emissions through subsurface saline aquifers, reservoirs, or direct air capture (Sedjo and Sohngen 2012). It has been projected that through improved land-

use practices, about 600 mega-tons of CO₂ equivalent (MtCO₂e) per year of GHG can be captured and removed from the atmosphere, which amounts to about 10% of 1990 emissions (Selin 2020).

- (III) Emission reduction: this refers to the minimization of the amount of CO₂ and other GHGs emissions through adjusting industrial, agricultural, and other processes, for example, the use of renewable energy sources (e.g., solar and wind energy) and energy efficient processes to reduce emissions. Though both fossil fuel and non-fossil fuel-based energy sources produce emissions, nonfossil fuel-based energy sources produce significantly low emissions (Sedjo and Sohngen 2012).

Challenges

The major factors hindering the attainment of net zero emission include the high capital of the existing technologies, poor energy efficiencies, and people's attitude to the use of energy. To therefore achieve the full decarbonization of the environment, there is a need to enhance technological cost reductions via research and innovation. Other factors, among other, are:

- (a) Most carbon neutral fuels have a considerably lower gravimetric and volumetric energy densities than the conventional fossil fuels: this implies that most carbon neutral or synthetic fuels such as hydrogen fuel and biofuels cannot store as much energy per unit volume or mass as the conventional fossil fuels. Thus, while they are likely to be more expensive, most synthetic fuels produced from renewable sources have lower energy content than fossil fuels (Pearson et al. 2012). Therefore, carbon neutral fuels have limited utilization efficiency and their suitability is dependent on the energy demands of an infrastructure or a journey.
- (b) Stiff competition between food security and bioenergy production: though the development of bioenergy has received tremendous

acceptance globally in the quest for greener environment, the rate of bioenergy development has also begun to brew concerns for its nexus with food security. This is because most of the food crops such as cassava, soybean, groundnut, and sugarcane among other energy-rich crop which form the basic food crops especially in most countries also constitute feedstocks for biofuel production (Matemilola et al. 2019).

- (c) Lack of policies that target long-term systemic changes in the energy sector: energy consumption across the industrial, transport, residential, and commercial sectors are responsible for the greater share of global emissions. Emission of GHG imposes costs on society; thus, an emission pricing system could be an important tool in the bid to decarbonize the energy sector. However, carbon pricing policies have so far seemed very difficult to enact and implement in many developed and developing countries. Certification and performance measurement policies are other essential tools for decarbonization but implementation in the energy sector have been torrid (Zogopoulos 2019).
- (d) Large scale deforestation and ineffective land use: deforestation accounts for about 15% of global carbon emissions, making it a key driver of climate change. The need to eliminate deforestation can therefore not be over-emphasized. In their pursuit of carbon neutrality at the Bonn climate summit, 2017, 27 countries including Brazil and Indonesia committed to increase the use of wood products for energy generation with the plan to plant new saplings that could reabsorb the CO₂ emitted by fully grown burned trees within years to decades. Scholars have however argued that this effort will create huge demand for wood and increase deforestation that could pose unimageable grave threat to the world's carbon sink (Neslen 2018).

Summary

To avert a dangerous level of global warming, it has become inevitable to reverse the global GHG

emission trend and ensure it reaches net zero by mid-century. Though energy is the primary driver of economic growth, most of the global emissions arise from energy use. It is therefore imperative that the global energy system is decarbonized. In the light of the growing global emission pattern, world leaders agreed in Paris, to pursue efforts to keep the global average temperature increase well below 2 °C above preindustrial levels and to further strive to limit the temperature increase to 1.5 °C above pre-industrial levels. To reach this target, governments, corporate organizations, and individuals have a key role to play. Key approach to achieve net zero emission include removal of carbon from the atmosphere via afforestation/ reforestation, enhanced mineral weathering, or direct capture of CO₂ from the air. Emission trading as well as emission reduction through energy efficiency and use of renewable energy sources represent some of the core approaches.

Cross-References

► Net Zero Emission

References

- Abraham, R. (2019, November 16). *The risk is real: Global energy consumption up by 2.3%, experts blame it on tech & population*. Retrieved March 28, 2020 from The Economic Times: <https://economictimes.indiatimes.com/magazines/panache/the-risk-is-real-global-energy-consumption-up-by-2-3-experts-blame-it-on-tech-population/articleshow/72082671.cms?from=mdr>
- Davis, S. J., Lewis, N. S., Shaner, M., Aggarwal, S., Arent, D., Azevedo, I. L., et al. (2018). Net-zero emissions energy systems. *Science*, 360(6396), eaas9793. <https://doi.org/10.1126/science.aas9793>.
- Eyre, N., & Killip, G. (2019). *Shifting the focus: Energy demand in a net-zero carbon UK*. Oxford, UK: CREDS. Retrieved September 12, 2020 from <https://www.creds.ac.uk/wp-content/pdfs/CREDS-Shifting-the-focus-July2019.pdf>.
- Friends of the Earth. (2018). *Briefing: A pathway to 'net zero' greenhouse gas emissions*. 1st Floor, The Printworks, 139 Clapham Road, SW9 0HP: Friends of the Earth Limited. From <https://cdn.friendsoftheearth.uk/sites/default/files/downloads/Pathway-net-zero-greenhouse-gas-emissions-UK.pdf>
- Glynn, J., Gargiulo, M., Chiodi, A., Deane, P., Rogan, F., & Gallachóir, B. Ó. (2019). Zero carbon energy system pathways for Ireland consistent with the Paris Agreement. *Climate Policy*, 19(1), 30–42. <https://doi.org/10.1080/14693062.2018.1464893>.
- Hope, E., & Kuhn, A. (2018). *Net zero by 2050: From whether to how – Zero emission pathways to the europe we want*. Climact. Retrieved December 5, 2019 from <https://europeanclimate.org/content/uploads/2019/12/09-19-net-zero-by-2050-from-whether-to-how-executive-summary.pdf>
- IPCC. (2018). In V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. Shukla, ... T. Waterfield (Eds.), *Global warming of 1.5°C. An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change*. Geneva: Intergovernmental Panel on Climate Change.
- Levin, K., & Davis, C. (2019, September 17). *What does "Net-Zero Emissions" mean? 6 Common Questions, Answered*. Retrieved March 28, 2020 from World Resources Institute: <https://www.wri.org/blog/2019/09/what-does-net-zero-emissions-mean-6-common-questions-answered>
- Matemilola, S., Elegbede, I. O., Kies, F., Yusuf, G. A., Yangni, G. N., & Garba, I. (2019). An analysis of the impacts of bioenergy development on food security in Nigeria: Challenges and prospects. *Environmental and Climate Technologies*, 23(1), 64–84. <https://doi.org/10.2478/rtuect-2019-0005>.
- Neslen, A. (2018, September 12). *EU climate law could cause 'catastrophic' deforestation*. Retrieved March 29, 2020 from The Guardian: <https://www.theguardian.com/environment/2018/sep/12/eu-climate-law-could-cause-catastrophic-deforestation>
- Oshiro, K., Masui, T., & Kainuma, M. (2018). Transformation of Japan's energy system to attain net-zero emission by 2050. *Carbon Management*, 9(5), 493–501. <https://doi.org/10.1080/17583004.2017.1396842>.
- Pearson, R. J., Eisaman, M. D., Turner, J. W., Edwards, P., Jiang, Z., Kuznetsov, V. L., et al. (2012). Energy storage via carbon-neutral fuels made from CO₂, water, and renewable energy. *Proceedings of the IEEE*, 100, 440–460. <https://doi.org/10.1109/JPROC.2011.2168369>.
- Revkin, A. C. (2007, April 29). *Global coolness: Carbon-Neutral Is Hip, but Is It Green?* Retrieved March 28, 2020 from The New York Times: <https://www.nytimes.com/2007/04/29/weekinreview/29revkin.html?ex=1335499200&en=d9e2407e4f1a20f0&ei=5124>
- Roberts, D. (2018, October 7). *This graphic explains why 2 degrees of global warming will be way worse than 1.5: Your terrifying climate graphic of the day*. Retrieved March 28, 2020 from Vox: <https://www.vox.com/energy-and-environment/2018/1/19/16908402/global-warming-2-degrees-climate-change>
- Sedjo, R., & Sohngen, B. (2012). Carbon sequestration in forests and soils. *Annual Review of Resource Economics*,

4, 127–144. <https://doi.org/10.1146/annurev-resource-083110-115941>.

Selin, N. E. (2020). *Carbon sequestration*. Retrieved March 28, 2020 from Encyclopædia Britannica, Inc: <https://www.britannica.com/technology/public-utility>

Zogopoulos, E. (2019, August 19). *Decarbonisation: The challenges of the great transition*. Retrieved March 29, 2020 from Rnergy industry review: <https://energyindustryreview.com/environment/decarbonisation-the-challenges-of-the-great-transition/>

Net Zero Greenhouse Gas (GHG) Emission

► [Net Zero Emission](#)

Network

► [Cooperation and Open Innovation](#)

Networks

► [Social Capital, Interpretation of](#)

New Business Frontiers

► [New Markets](#)

New Business Model

► [Innovative Business Models](#)

New Food Production Methods

► [Traditional and New Sustainable Production Methods in Food Industry](#)

New Generation of Academics Programme

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Synonyms

[nGAP; Staffing South Africa University Framework \(SSUF\)](#)

Definition

The New Generation of Academics Programme is a policy by South Africa's Department of Higher Education to address staffing ratios, funding for new academics and institutional transformation. The program also focusses on mentoring of new academics. The Department of Higher Education requires annual progress reports to monitor the implementation of the program.

Introduction

The Staffing South Africa University Framework (SSUF) established the New Generation of Academics Programme (nGAP). The framework was a response to the challenges in universities in the size, composition, and the capacity of academic staff (Department of Higher Education and Training of South Africa [2015](#)). The challenges faced by South African universities are mainly attributed to the colonial and apartheid-era policies. The policies also filtered into institutions of higher learning, and the impact thereof continues to be a conundrum for policymakers. Race and ethnicity shaped South African universities (Weber and Vandeyar [2004](#)). In addition to race and ethnicity, the staff mainly consisted of white males (Badat [2010](#)). During the colonial era, English universities (University of Cape Town, University of Witwatersrand, University of Rhodes, University of Pretoria, and University of Natal) were

established to cater for white population, and the faculties consisted of members from Britain and European countries. After the establishment of the University of Cape Town, Stellenbosch University was established and catered for Afrikaans white persons. During the apartheid era, the government established four Afrikaans universities, and they excluded blacks. English universities admitted very few blacks. Legislation in the 1950s allowed for the creation of exclusive black universities (Weber and Vandeyar 2004). According to Heleta (2016), exclusive black universities were established to train black people to serve the colony and later the apartheid state. In 1983 the apartheid government enacted a policy to allow admission of black students into white institutions. The policies also transcended to the funding of the universities, and adequate funding was provided to white institutions, while the black universities were underfunded and located in impoverished rural areas (Jansen 2003).

South African Universities Post-democracy

Given the history of South Africa, it is evident that the universities had to undergo an institutional transformation. Fourie (1999) defined institutional transformation as a broader societal transition, which refers to the changes in the political, social-economic, and cultural-educational structures of society. Transition in higher education refers to the significant structural conversion of a national system of higher education that takes place over an extended period. Further mentioned that transformation of South African Higher Education takes place on different levels, namely, organizational culture and acceptance of new culture. In 1995 the Ministry of Higher Education embarked on efforts to transform universities (Fourie 1999).

It appears that the government efforts soon after democracy were not sufficient to achieve the transformation goals. Weber and Vandeyar (2004) conducted a qualitative research that showed there was a lack of transformation and

elitism, thus leading to the academics assimilating conservative pedagogical practices from their white colleagues. They concluded that historically, white universities were a site of struggle for change in critical areas such as black representation, institutionalized racism, university governance, and the curriculum. Badat (2010) in a report commissioned by the Development Bank of Southern Africa recommended a new generation of academics that is increasingly constituted by blacks and female South Africans who are suitably qualified. Badat further argued that while the employment of “suitably qualified” black women must be improvised, it might also lead to exclusion of other highly qualified Africans from other countries (Badat 2010). Another incident that showed that policy implementation is not always sufficient was the highly publicized incident at the University of Free State. Suransky and van der Merwe (2016) described the incident as the “Reitz Incident” where white male Afrikaner students recruited five black middle-aged cleaners to reenact humiliating initiation activities and throughout the video sarcastic references were made about the university transformation activities.

Staffing South Africa University Framework

Given research that had been conducted post-democracy and the outcry of lack of transformation, there was a need to implement programs to address the concerns. Therefore, a framework was established which seeks to address transformation and staff-student ratios, enhancing the qualifications and effectiveness of existing staff. The SSAUF showed that in 2012, the overall academic workforce remained predominantly white, making up to 53.2%. In terms of gender, the report showed that women constitute 44.6% and are underrepresented in senior academic ranks constituting 29.5%. The best student-staff ratios are represented in the previously advantaged universities. Also showed that just over one-third of the academic staff in permanent positions held a doctorate because a doctorate was recognized as a

necessary but not sufficient factor to improve the overall quality of educational processes in South Africa (Department of Higher Education and Training of South Africa 2015).

The framework envisaged allocating posts for 6 years by recruiting highly capable scholars as new academics. The program covers 6 years for each cohort, which is a 3-year development program and 3-year induction. Further, the cohorts are assigned a mentor, and the universities are required to provide annual reports to the Department of Higher Education (Department of Higher Education and Training of South Africa 2015). Universities have responded positively to the nGAP program; several candidates were appointed as nGAP scholars.

To further support the new academics, the National Research Foundation (NRF) established a research grant for nGAP scholars. The NRF of South Africa was established in terms of the National Research Foundation Act 23 of 1998. The Act provides that the foundation was established to promote research and transfer of knowledge. The funds of the foundation consist of money appropriated by parliament, income accumulated by the fund, donations, contributions, etc. nGAP research fund was established to provide research grants to young academics in the first and second year of appointment from 2016 and a maximum of 250 academics in a year. The objectives of the nGAP research grant are to accelerate doctoral-level training (Funding Instrument: DST-NRF Research Development Grants for New Generation of Academics Programme (nGAP) Scholars 2019).

There are mixed reviews on whether the goals of transformation are being achieved. Fomunyan (2017) argued that the current state of South African Higher Education is a debatable one and is characterized by discordant values and a variety of opinions. Further, the former white universities claim that they are working toward transformation student, whereas there is little evidence to support the claim (Fomunyan 2017). The long-term feasibility of the program is yet to be assessed because the program is still operational.

Summary

This entry gives a general understanding of a policy by South Africa's Department of Higher Education, New Generation of Academics Programme. The policy is a response to problems of higher education which were inherited by the democratic government. The policy aims to address staffing ratios, funding for new academics and institutional transformation.

References

- Badat S. (2010). The challenges of transformation in higher education and training institutions in South Africa. <https://www.dbsa.org/EN/About-Us/Publications/Documents/The%20challenges%20of%20transformation%20in%20higher%20education%20and%20training%20institutions%20in%20South%20Africa%20by%20Saleem%20Badat.pdf>. Accessed 1 Aug 2019.
- Department of Higher Education and Training of South Africa. (2015). Staffing South Africa's universities framework: A comprehensive transformative approach to developing future generation of academics and building staff capacity. <http://www.justice.gov.za/commissions/FeesHET/docs/2015-Staffing-SAUniversitiesFramework.pdf>. Accessed 30 May 2019.
- Fomunyan, G. K. (2017). Decolonising the future in the untransformed present in south African higher education. *Perspective in Education*, 35(2), 168–180. <https://doi.org/10.18820/2519593X/pie.v35i2.13>.
- Fourie, M. (1999). Institutional transformation at south African universities: Implications for academic staff. *Higher Education*, 38, 275–290.
- Funding Instrument: DST-NRF Research Development Grants for New Generation of Academics Programme (nGAP) Scholars. (2019). <https://www.nrf.ac.za/content/dst-nrf-research-development-grants-next-generation-academics-programme-ngap>. Accessed 1 Aug 2019.
- Heleta, S. (2016). Decolonisation of higher education: Dismantling epistemic violence and Eurocentrism in South Africa. *Transformation in Higher Education*, 1(1), e1–e8. <https://doi.org/10.4102/the.v1i1.9>. Accessed 1 Aug 2019.
- Jansen, J. (2003). Mergers in South African higher education: Theorising change in transitional contexts. *Politikon*, 30(1), 27–50.
- National Research Foundation Act. (1998). <https://www.nrf.ac.za/sites/default/files/documents/NTFAct.pdf>. Accessed 1 Aug 2019.
- Suransky, C., & van der Merwe, J. C. (2016). Transcending apartheid in higher education: Transforming an institutional culture. *Race, Ethnicity and Education*, 19(3), 577–597. <https://doi.org/10.1080/13613324.2014.946487>. Accessed 1 Aug 2019.

Weber, E., & Vandeyar, S. (2004). A site of struggle: Black academics at historically white universities in South Africa. *Africa Education Review*, 1(2), 175–192. <https://doi.org/10.1080/18146620408566278>.

New Group of Twenty

► [G20](#)

New Markets

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Synonyms

[Business expansion](#); [Innovation](#); [New business frontiers](#)

Definition

Anderson and Gatignon (2008) espoused that new markets do not emerge nor do they appear but are created via deliberate activities of firms. The creation of these new markets can be either on purpose or by accident, and this usually occurs when firms sense a need in the market and communicate their solution to fill that need.

New markets are created as a consequence of firms seeking to become more competitive and develop their markets, and this can be achieved either via the introduction of new products/processes or when economic factors shift resources to a new market segment/location that support a firm's innovative solutions.

In essence, new markets do not simply appear but are created as a result of either intraorganizational or extraorganizational processes such as institutional entrepreneurship or internationalization (Davis et al. 2008). New markets also emerge via a culture of innovation and changes in contemporary society (Weber et al.

2008). Thompson and MacMillan (2010) posit that visionary businesses play a critical role in creating new business models that open up new markets. Some companies do so by introducing new innovation-driven products, targeted at increasing buyers' utility (Bresnahan and Gordon 1996), while others create new markets by leveraging existing products (Anderson and Gatignon 2008).

Defining new markets is an interesting as well as challenging task, and this chapter will explore critical issues within the definition of new markets such as business expansion, innovation, culture, and knowledge transfer incentives for exploring new markets among other matters.

New Markets: Why Create Them

The creation of new markets is due to varied reasons: market development, innovation, need to diversify current offerings, emerging technologies, and among other reasons. The need to explore new markets may be due to various reasons within firms such as the convergence of ICT, turbulence in retail channels caused by the internet, new product development, the increasing concentration/interdependence of industries, and globalization (Roberts 2000). Some theorists within the Schumpeterian school of thought opine that the entrepreneur delivers new markets, i.e., most new markets are supply-driven (Metcalf 2004). Other authors posit that new markets can be created by developing submarkets in rapidly developing economies or industries such as customers in emerging markets (Thompson and MacMillan 2010). Another means of creating new markets, known as the “supply-push approach,” highlight that these markets are consumer-driven and are created in areas where there are no more guesses about what might appeal to consumers (Geroski 2002).

New markets are also created due to saturated domestic markets, firms seeking to expand/grow their business, or to gain economies of scale (Seelos and Mair 2005). Organizational politics and the pursuit of private firm subgoals may also be responsible for the search for new markets or

the desire to spread risks over different market segments (Anderson and Gatignon 2008).

These market creation activities do not come without their unique challenges, which are detailed in the next section.

Challenges to New Market Creation

Lord and Ranft (2011) posit that when firms move outside their home or current markets, several obstacles to success within these markets present themselves. These challenges were called “liabilities of foreignness” by Zaheer (1995), some of which include barriers to effective decision-making (caused by high levels of uncertainty), local governments and partners bottlenecks, and the numerous challenges of customizing processes/products to different cultural and national requirements.

Seelos and Mair (2005) also espouse that economics or logistics challenges are key issues that present barriers to new market creation, particularly in developing or third world countries. Other problems may include securing markets for radically new technologies or securing early profit footholds in rapidly growing social, economic, or demographic change (MacMillan and van Putten 2008).

How can firms creating or moving into new markets mitigate risks and overcome these barriers? Four suggestions for overcoming obstacles in new markets are outlined:

- Having a set of deliberate experimentation processes in place that will lead to the design and development of an emergent business model with limited exposure
- First exporting to overseas buyers before setting up fully in the country
- Using an agent, setting up local distributorship or joint venture agreements
- Partial set up to “test the waters” before moving to full production

The risks mitigation factors outlined above are nonprescriptive but only provide a guide for firms or individuals looking to provide goods or services in new markets.

Summary

This chapter explored the critical issues in the creation of new markets, particularly what a new market is, and the characteristics of new markets and barriers to their creation. The reasons why firms choose to venture into new markets and the possible problems that they might face are discussed, in addition to risk-mitigating strategies. Overall, the concept of new markets is for the development of new growth stimuli, measures and business expansion models. Firms can explore new markets not only for gaining business advantage but also for reputation and maximizing the loyalty of their existing client base.

Cross-References

- [Creating Shared Value](#)
- [Emerging Markets](#)
- [Sustainable Marketing](#)

References

- Anderson, E., & Gatignon, H. (2008). Firms and the creation of new markets. In *Handbook of new institutional economics* (pp. 401–431). Berlin: Springer.
- Bresnahan, T., & Gordon, R. (1996). *The economics of new goods*. Cambridge, MA, United States: National Bureau of Economic Research, Inc.
- Davis, G. F., Morrill, C., Rao, H., & Soule, S. A. (2008). Introduction: Social movements in organizations and markets. *Administrative Science Quarterly*, 53(3), 389–394.
- Geroski, P. A. (2002). *The evolution of new markets*. Oxford: Oxford University Press.
- Lord, M. D., & Ranft, A. L. (2011). Organizational learning international internal markets: About exploring new the market transfer of local knowledge. *International Business*, 31(4), 573–589.
- MacMillan, I. C., & van Putten, A. B. (2008). *Unlocking opportunities for growth: how to profit from uncertainty while limiting your risk*. Pearson Prentice Hall.
- Metcalfe, J. S. (2004). The entrepreneur and the style of modern economics. *Journal of Evolutionary Economics*, 14, 157–175.
- Roberts, J. H. (2000). Developing new rules for new markets. *Journal of the Academy of Marketing Science*, 28(1), 31–44.
- Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business Horizons*, 48(3), 241–246.

- Thompson, J. D., & MacMillan, I. C. (2010). Business models: Creating new markets and societal wealth. *Long Range Planning*, 43(2–3), 291–307.
- Weber, K., Heinze, K. L., & DeSoucey, M. (2008). Forage for thought: Mobilizing codes in the movement for grass-fed meat and dairy products. *Administrative Science Quarterly*, 53(3), 529–567.
- Zaheer, S. (1995). Overcoming the liabilities of foreignness. *Academy of Management Journal*, 38(2), 341–363.

New-Generation CSR

► Embedded CSR

nGAP

► New Generation of Academics Programme

NGO Behind SA8000

► Social Accountability International (SAI)

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Professor Capaldi received his B.A. from the University of Pennsylvania and his Ph.D. from Columbia University. His principal research and teaching interest is in public policy and its intersection with political science, philosophy, law, religion, and economics. He is the author of 10 books, over 100 articles, and editor of 7 anthologies. He is a member of the editorial board of ten journals and has served most recently as editor of *Public Affairs Quarterly*.

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Nicholas Capaldi is Legendre-Soulé Distinguished Chair in Business Ethics at Loyola University, New Orleans, Louisiana, USA. He is the founder, Chief Executive Office, and President of the Global Corporate Governance Institute (GCGI) a research network of CSR, Sustainability, Ethics, and Governance from around the globe. He also serves as the Director of the Center for Spiritual Capital. He taught previously at the University of Tulsa where he was McFarlin Research Professor of Law; Columbia University; Queens College, City University of New York; The United States Military Academy at West Point; and the National University of Singapore.

Intellectual Portrait

Nicholas Capaldi's fundamental interest has always been on the meaning and sources of morality (moral philosophy). When he entered the discipline of philosophy, the reigning doctrine was the positivist view that there was no rational basis for morality and that David Hume's distinction between "is" and "ought" was the definitive proof of that position. Capaldi's dissertation, as well as in numerous later published articles and books (*Hume's Place in Moral Philosophy*), established that this was a serious misrepresentation of Hume. Hume's position was just the opposite. He, along with Donald Livingston, revolutionized Hume scholarship.

When it once again became fashionable (1970s) to employ philosophy in the service of morality (as well as politics, economics, etc.), a newer and later version of positivist thought known as analytic philosophy employed a form of normative discourse (he called it *exploration* as seen in the prominent works of Rawls, Nozick,

and Dworkin) that led, Capaldi argued, not only to the collapse of all civility in debate/discussion and an end to rational discussion, but also served primarily to aid hidden political agendas and the total politicization of civilization. Capaldi then became a leading critic of analytic philosophy (*The Enlightenment Project in the Analytic Conversation*), an opponent of politicized social science, and a prominent spokesperson for pluralism in the American Philosophical Association. His textbook *The Art of Deception* introduced an innovative method for helping students to engage in critical and self-critical thinking.

In an attempt to provide an alternative understanding of normative issues, Capaldi turned to the works of Wittgenstein, Hayek, and Oakeshott. He developed the concept that norms were the product of the ongoing explication of cultural inheritances, hence the inevitability of moral pluralism. In this context, theologies and philosophies were often no more than the veiled advocacy and rationalizations for premeditated positions with private agendas. Subsequently, he articulated his own cultural inheritance, its history, development (see his award winning book *John Stuart Mill* published by Cambridge University Press), its inner tensions, and its capacity to deal with or manage internal and external conflicts. His most recent three books (*America's Spiritual Capital*; *Liberty vs. Equality in Political Economy*), all coauthored, are examples of this approach (see most recently *The Anglo-American Conception of the Rule of Law*).

Capaldi approached business ethics from this same perspective. He began by criticizing the dominant paradigms in the research done on business ethics and corporate social responsibility ("Theory and Method in Business Ethics"). He was the first to elaborate a comprehensive account of the norms of modernity as reflected in Anglo-American culture ("Ethical Foundations of Free-Market Societies"): the Technological Project (TP for short, the transformation of nature for human benefit), that the TP was best carried out in a pro-growth market economy, how such an economy required limited government, how limited government required the rule of law, and the latter existed most clearly in a culture that

promoted individual autonomy. He also identified the tensions and conflicts within that paradigm. He continues to address the commercial norms most consistent with that paradigm. He has also established the *Center for Spiritual Capital* at Loyola University New Orleans to study the relation between those norms and a Catholic religious commitment. He has specifically highlighted the different perspectives of Pope John Paul II and Pope Francis.

Major Contributions

Professor Nicholas Capaldi, an Ivy-educated philosopher, has distinguished himself as an academic writer, editor, and researcher. In a career spanning six decades, he has produced 10 books, 7 anthologies, 3 textbooks, and over 80 academic journal articles. The excellence and prominence of his contributions to the world of academia stands clearly for all scholars regardless of their fields to see. For example, Professor Capaldi's 2004 book – *John Stuart Mills*, published by Cambridge University Press – has been a subject of *laudatory* reviews in prestigious outlets like the *Washington Post* and the *New York Review of Books* as well as extended Television treatment on C-SPAN's BookNotes.

Capaldi has provided an unrivalled and distinguished service to academic journals, for example, as the Editor of the highly regarded *Public Affairs Quarterly*. With all these outstanding achievements in academia, it became apparent why Capaldi earned tenure, earned promotion to full professorship, and currently occupies the *second* endowed chair of his highly productive career.

Capaldi has been referred to by his colleagues and those who know him as the *rare* academic business ethicist who can speak compellingly the language of business in the classroom because he has spoken it where it counts – on the trading floor, in the market with real money at stake because Professor Capaldi worked on Wall Street at Bache Securities (since absorbed by Prudential Financial) in their trading department. Conversationally and directly, he gains almost

immediate credibility with his students – a rare gift which only few business professors (whether or not business ethicists) can boast. Marcoux (2006) comments “there may be bigger names in business ethics, but there is none more credible than Nicholas Capaldi.”

Publications in business ethics are as follows:

1. “Foundations for a Global Management Ethos,” in *Corporate Governance: The International Journal of Business in Society*, vol. 3, No. 3 (2003), pp. 101–113.
2. “The Ethical Foundations of Free Market Societies” *The Journal of Private Enterprise*, vol. XX No. 1 Fall 2004, pp. 30–54.
3. “The Prioritization of Stakeholder Social Responsibility,” in Crowther, D. and Caliyut, K. T. (eds.), *Stakeholders and Social Responsibility* (Malaysia: Ansted University, 2005), pp. 47–56.
4. Edited, *Business and Religion: A Clash of Civilizations* (Boston: Scrivener Press, 2005).
5. *Ashgate’s Companion to Corporate Social Responsibility* (London: Ashgate, 2008), co-edited with David Crowther.
6. “Manifesto: Moral Diversity in HealthCare Ethics,” in H.T. Engelhardt (ed.), *Global Bioethics* (Salem: M&M Scrivener Press, 2006).
7. “Corporate Social Responsibility and the Bottom Line,” *International Journal of Social Economics* (volume 32, Number 5, 2005), pp. 308–323.
8. “Reflections on Ethical Concerns in Technology Transfer and Macromarketing,” *Journal of Nonprofit & Public Sector Marketing* (volume 13, Numbers 1/2 2005), pp. 293–311. Reprinted in Marshall, K., Piper, W, and Wymer, W (eds.), *Government Policy and Program Impacts on Technology Development, Transfer, and Commercialization* (Binghamton, N.Y.: Best business Books, 2005).
9. “The Role of the Business Ethicist,” *Ethical Perspectives, Journal of the European Ethics Network*, vol. XII, No. 3 (September, 2005), pp. 371–384.
10. “Distributive Justice or Social Justice,” in D. Anderson (ed.), *Decadence* (London: Social Affairs Unit, 2005), pp. 133–150.
11. Edited special issue of *The Journal of Private Enterprise*, vol. XXII, No. 2 (Spring, 2006) on the current state of business ethics. Articles by Machan, Ryan, Marcoux, Capaldi, Hasnas, Boatright, Ian Maitland and Mitsuhiro Umezū.
12. “What Philosophy Can and Cannot Contribute to Business Ethics,” *The Journal of Private Enterprise*, vol. XXII, No. 2 (Spring, 2006), pp. 68–86.
13. “Classical Liberal,” *Claremont Review of Books*, volume VII, Number 1 (Winter 2006/07), pp. 47–48.
14. Saliba, Michael, Nick Capaldi and Walter Block. 2007. “Justice: Plain Old, and Distributive; Rejoinder to Charles Taylor.” *Human Rights Review*, Vol. 8, No. 3, pp. 229–247, April.
15. “The Technological Project as the Spiritual Quest of Modernity,” in David Bubna-Litic (ed.), *Spirituality and Corporate Social Responsibility: Interpenetrating Worlds* (Aldershot, U.K.: Gower Publishing, 2008).
16. “CSR in Developing Countries in a Global Market Economy,” in *International Corporate Social Responsibility, 2006 Proceedings*, Philosophy Documentation Center, 2008.
17. “Ethics Expertise” in *At the Roots of Christian Bioethics* (eds: Iltis and Cherry), Scrivener 2009).
18. “Rival Paradigms in Business Ethics,” *Reason Papers*, vol. 31 (Fall 2009), pp. 7–32.
19. “Spiritual Capitalism,” *The American Conservative* (June 2010), pp. 13–14.
20. Associate Editor of the *Encyclopedia of Corporate Social Responsibility* (2013).
21. “Caritas in Veritate: A Rielian Metaphysical Vision of Economic Development,” invited main speaker at the Plenary Session of Metaphysics 2009, Fourth World Conference, Rome, November 7–9, 2009. Proceedings published 2011. 6 pages.

22. “Pro- vs. Anti-market Approaches in Business Ethics” in *Handbook of the Philosophical Foundations of Business Ethics*, ed. Tibor Machan (Springer, 2012)
23. “Mill and Socialism,” (2012) *La Revue Tocqueville*, XXXIII, No. 1, pp. 125–144.
24. “The Technological Project as the Spiritual Quest of Modernity,” *Proceedings of the 18th Annual Conference of the International Association of Jesuit Business Schools*. (2012)
25. “How American Spiritual Capital Informs Business and Effects the Common Good” in *Uncertainty, Diversity, and Social Responsibility*, edited by Stefan Gröschl (London: Gower, 2013)
26. 2014, “Misuse of ‘Democracy’ as a Management Concept,” *E-Leader International Journal*, volume 9, Number 2, ISSN 1935-4819,
27. Co-Editor of *The Dictionary of Corporate Social Responsibility: CSR, Sustainability, Ethics and Governance* (Springer, Hardcover– January 14, 2015).
28. *Proceedings Fifth World Conference on Metaphysics* (Rome: Idente, 2015), “The Poverty of Catholic Social Thought on Economics,” pp. 115–130.
29. *Dimensional Corporate Governance: An Inclusive Approach*, Edited by Nicholas Capaldi, Samuel O Idowu, & René Schmidpeter (Springer 2016).
30. “John Stuart Mill and Business Ethics” in Heath (ed.) *Wealth, Commerce, and Philosophy: Foundational Thinkers* (University of Chicago Press, 2017) pp. 303–320.
31. “Philosophical Prolegomena to All Future Research in CSR” in Crowther and Ashley (eds.) *Territories of Social Responsibility: Opening the Research and Policy Agenda* (Corporate Social Responsibility) Routledge, 2017.
32. “A Critique of Pope Francis’s *Laudato si*” in *Seattle Law Review*. volume 4. Summer 2017. Number 4. pp. 1261–1282.
33. (2018) “Theory and Method in Business Ethics” (pp. 38–59) in Heath (ed.), *Routledge Companion to Business Ethics* ’
34. (2019) Co-Editor (Springer) – *Building new Bridges Between Society and Business: Recent Research and New Cases in CSR, Sustainability, Ethics and Governance* (CSR, Sustainability, Ethics & Governance) 251 pp.

References

- <http://www.business.loyno.edu/faculty-staff/nicholas-capaldi>. Accessed 26 Aug 2019.
- Marcoux, A. M. (2006). *Considine recommendation*. Chicago: Loyola University.

Nomination Committee

- [Board Committees and Corporate Governance](#)

Noncandescent

- [Asbestos](#)

Noncombustible

- [Asbestos](#)

Nondiscrimination

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Synonyms

[Antidiscrimination](#)

Definition

Broadly speaking, nondiscrimination requires that all people should be treated in the same way (or equally), based on the generally accepted principle that all human beings are equal in dignity and rights (UN 1948). Hence, discrimination occurs when people are treated differently in a way that impacts negatively on their human dignity (Ackermann 2006) or for arbitrary reasons lying on individual features, such as race and ethnicity, skin color, sex, sexual orientation, religious belief, class, etc.

However, several legislations worldwide distinguish between formal and substantial equity, which justifies differential treatment to ensure substantial equity among citizens. The primordial objective is to remove political, economic, and social obstacles that limit the development of person and his/her political, economic, and social participation. Indeed, positive discrimination (also called affirmative actions) may be justified in cases, for example, of advancing differential treatments toward underrepresented groups to compensate for past discrimination. Such actions do not represent discriminations if they do not establish separate rights for different groups and are not continued after achieving their goals. Nondiscrimination, therefore, intersects both with equality in opportunity (i.e., everyone competes under equal conditions based on his/her capabilities) and equality of achievement (i.e., equality in results) (Deskoska 2010).

Moreover, nondiscrimination relates to the novel term “intersectionality,” indicating that multiple forms of discrimination (such as racism, sexism, and classism) often overlap. Instead of considering any discriminatory act as a distinct and isolated case, it should be analyzed in a whole, particularly on how it intertwines in the experience of the people involved.

Introduction

Several forms of discrimination have been in practice for a long time worldwide, such as those based on race or ethnicity, sex, sexual orientation,

religious belief, disability, family status and class, age, name, culture, language, etc., and some still exist.

Discrimination can either be direct or indirect: the former implies treating different groups in a different manner, involving less favorable treatment; the latter (also called disguised discrimination) is represented by an apparently neutral disposition or behavior that puts people holding specific characteristics or belonging to a certain group at a particular disadvantage compared to others.

Some prominent past direct discriminations were regulated by laws and denied certain groups the right to ownership over themselves or other rights. It is the case of slavery and slave trade; racial segregation policies such as apartheid; the discrimination against Gypsies, Slavs, etc.; and the anti-Jewish laws enacted during the Fascist and Nazist regimes. Moreover, transversal to the whole world and historical periods, some laws prohibit voting and property rights for women and discriminate for sexual orientation (homophobia) and divergent political opinions. Some of these discriminations have ceased, albeit recently. For example, despite slavery mostly ended at the end of the nineteenth century, the formal end of slavery in Ethiopia is dated only in 1942 (Bonacci and Meckelburg 2017), while South Africa established apartheid in 1948 which ended only in 1994 (Pons-Vignon and Anseeuw 2009).

Despite modern democratic societies have surpassed most cases of discriminations by formally adopting the principle of equality of rights to all people, with specific features allowing some positive discrimination to guarantee substantial equality (e.g., Galizzi and Siboni 2016), discriminations still exist in some countries, mostly in less developed ones.

Most Muslim countries still maintain a formal and informal severe form of discrimination toward people belonging to religious minorities (especially toward Christians), which sometimes results in persecutions (Bandow 2020). In India, although the caste system was officially abolished in 1950, it still has a strong impact not only on the general balance of power among various groups

of the society but also on specific cases such job distribution, transactional activities on mere transfer of goods, and the act of choosing who to marry (e.g., Mosse 2018).

In many Arabic countries, women do not have the same right as men, and they must have a male guardian and are often under his power (usually the father or the brother and, after the marriage, the husband). In some cases, their right to vote is still restricted (e.g., Saudi Arabia), or they do not have access to education after 12 years old nor are allowed to ordinary activities such as playing sports or even choosing their dress (e.g., Afghanistan). They cannot work even if they are widows, nor leave the house without being accompanied by a man, except in a few limited cases, under penalty of punishment (Albrecht et al. 2022; Nehan 2022). Several countries criminalize homosexuality (Human Dignity Trust 2022), and in some parts of Africa and Asia, it is still punishable by death penalty (in most cases the punishment concerns only male homosexuality).

Even in modern developed democracies, despite women voting and participating in public and political life since the mid-1900s, informal discrimination at the workplace still exists due to several factors, such as widespread male chauvinism and the tasks of social reproduction. This discrimination reduces the female employment rate; hinders their career progression, especially in qualified occupations; and causes a higher gender pay gap (e.g., Bishu and Alkadry 2017; EC 2021, 2019). This is an example of indirect discrimination: what appears to have general application to all (e.g., equal employment opportunities to women and men) sometimes results to indirect discrimination (i.e., gender pay gap) or to a situation arising from a practice, rule, requirement, or condition that is neutral on its face but hits disproportionately at particular groups (Lord Lester of Herne Hill 1992) or has different influence on different groups (Deskoska 2010).

Another recent example of indirect discrimination is the equal access of all to the modern technology on genetic information for purpose of determining early detection and prevention of possible genetic disorder that has resulted to indirect discrimination against people with genetic

predisposition: people lost not only their jobs but also some health insurance including economic well-being due to unfair use of genetic information (e.g., an increased chance a person will develop a certain disease based on his/her genetic makeup). As a consequence, in 2008, the Genetic Information Nondiscrimination Act was approved in the United States, to prevent indirect discrimination against people with genetic predisposition. Accordingly, it is forbidden to employers for requiring genetic information from their employees and applicants (Ackermann 2006).

Additional examples of indirect discrimination occur in case tax where foreign persons or objects are taxed unfavorably, by imposing higher taxation against imported products from certain countries resulting in negative economic effects on competitors from other countries (Diebold 2011). To address this type of discrimination, international tax treaties such as the 1977 OECD Model Double Taxation Convention on Income and Capital have provisions prohibiting differential tax treatments resulting in possible double taxation (van Raad 1981). In fact, international economic treaties such as the World Trade Organization General Agreement on Tariff and Trade have already enjoined countries from treating domestic market actors more favorably than foreign market actors (known as “national treatment”) or providing different treatments to foreign market actors from different origins (known as “most favored nation treatment”) (Diebold 2011; De Boynes et al. 2009).

Instances of Declarations and Conventions Against Discrimination

International regulatory frameworks establish the nondiscrimination principle. Most of them are based on the United Nations (UN) Universal Declaration of Human Rights (UN 1948). It states that all people are born free and equal in dignity and rights. Hence, the Declaration bans any kind of distinctions related to individual features, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth, or other status. Furthermore, the Declaration

prohibits distinctions on the basis of the political, jurisdictional, or international status of the country or territory to which a person belongs.

The Declaration was born to address racial discrimination perpetrated by Nazi Germany. According to the Declaration, the dignity and the equal and inalienable rights of all people worldwide are the bases of freedom, justice, and peace. It was proclaimed as a common standard that the UN member states adopt to promote universal respect for human rights and fundamental freedoms. Moreover, it adopts progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of the states themselves and among the territories under their jurisdiction.

Notably, the Declaration states the right of anyone to be equal before the law and the right to equal treatment before the tribunals and includes the fundamental right to have recourse to legal means against any discriminatory behavior.

On the bases of this Declaration, the UN promoted a series of conventions:

1. The Convention against discrimination in education (UNESCO 1960) adopted by the UN Educational, Scientific and Cultural Organization entered into force in 1962. The Convention addresses both formal discriminations stated by laws and not deliberated discrimination derived, for instance, from administrative practices and social, geographical, economic, and historical circumstances. Such discrimination affects some minority groups that do not have access to quality education. The Convention obliges states parties to adopt a national policy to promote equal treatment in education.
2. The International Convention on the Elimination of All Forms of Racial Discrimination (UN 1965) entered into force in 1969. It requires states parties to engage in a policy aimed at avoiding and contrasting any discrimination based on race and punish any discriminatory behavior based on race, color, or ethnicity. The Convention defines racial discrimination as “any distinction, exclusion, restriction or preference based on race, colour,

descent, or national or ethnic origin which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life” (art. 1, par. 1). Further, the Convention lists several political, civil, economic, social, and cultural rights that must be guaranteed regardless of racial differences. It also provides for affirmative actions as special measures to ensure adequate advancement of certain racial or ethnic groups or individuals requiring such protection to equal enjoyment or exercise of human rights and fundamental freedoms.

3. The International Covenant on Civil and Political Rights (UN 1966) entered into force in 1976. It recognizes that the effective enjoyment of human rights, as stated in the Universal Declaration, is achievable only under the realization of everyone’s civil and political rights, as well as economic, social, and cultural rights. In particular, the Covenant affirms the right of self-determination of all peoples to freely choose their political status and pursue their own economic, social, and cultural development. The states parties undertake to promote the realization of the right to self-determination and respect it, without distinction. Moreover, it states the individual, having duties to other individuals and to the community to which he belongs, is under a responsibility to strive for the promotion and observance of the rights recognized by the Covenant.

The Covenant follows by listing, among others, the prohibition of torture and inhuman or degrading treatment or punishment, the prohibition of slavery and any form of compulsory and forced labor, prohibiting arbitrary arrest or detention, the right to be equal before the courts and tribunals, the right of defense and due process and presumption of innocence, and the right to hold an opinion and freely express it.

Notably, as stated by the UN Human Rights Committee in the General Comment No. 18 of the former Convention, entitled to

Nondiscrimination (UN HRC 1989), it obliges states parties to develop nondiscriminatory laws and regulatory frameworks concerning equity and equal protection, conceived at basic principle relating to the protection of human rights. Laws must be enacted to entitle all persons to equality and equal protection, prohibit any discrimination, and guarantee equal protection against discrimination. In addition, states must ensure equal rights between men and women. Further, promoting national, racial, or religious hatred that constitutes incitement to discrimination should be banned. Specifications are made regarding spouses' equal rights and responsibilities as to marriage, during the marriage, and at its dissolution.

Moreover, the Committee suggests widening the definition of discrimination, including any distinction, exclusion, restriction, or preference based on features "such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, and which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise by all persons, on an equal footing, of all rights and freedoms" (par. 7).

Notably, the enjoyment of rights and freedoms on an equal footing may involve non-identical treatments. For example, in countries which have not abolished the death penalty, the Convention prevents people under 18 from being sentenced to death. Also, the Committee stresses the role of affirmative actions as a legitimate differentiation to diminish or eliminate the conditions that cause or contribute to perpetuating discrimination. However, treatment differentiations do not constitute discrimination if the criteria on which they are based on are reasonable and objective and aimed at achieving a legitimate purpose under the Covenant.

4. The Convention on the Elimination of All Forms of Discrimination Against Women (UN 1979), entered into force in 1981, defines discrimination against women as: "any distinction, exclusion or restriction made on the basis

of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field" (art. 1).

It recognizes that extensive discrimination against women continues to exist and violates the principles of equality of rights and respect for human dignity. Discrimination against women hinders the participation of women in the political, social, economic, and cultural life of their countries on an equal footing with their male counterparts. Furthermore, it makes it more difficult for women to fully develop their potential, which is reflected in that of their countries and humanity because men and women cannot contribute to it in a free and equal way. The Convention is rooted in the fact that, usually, women have less access to food, health, education, training, employment opportunities, and the satisfaction of other needs in situations of poverty. Hence, discrimination against women hinders the growth of the well-being of society and the family. In this regard, the Convention emphasizes that the role of women in procreation should not be a basis for discrimination but that the education of children requires a sharing of responsibility between men and women and society as a whole. Therefore, a change in the role of men and women in society and the family is required to achieve full equality between men and women.

Accordingly, states parties of this Convention are required to adopt all appropriate means for the practical elimination of discrimination against women by person, organization, or enterprise, including all appropriate measures aimed at modifying the patterns of social and cultural behavior of men and women to eliminate prejudices, customs, and all practices based on the idea of inferiority or superiority or stereotyped roles for men and women.

Also, states parties must adopt measures to ensure the full development and advancement of women in all fields, in particular in the

political, social, economic, and cultural areas. In doing so, the adoption of temporary special measures (i.e., affirmative actions) is mentioned.

Specific dispositions have been made to ensure no discrimination against women and their public and political life participation as well as on the equality of rights and obligations of spouses, the free choice of marriage, and the choice of the spouse and concerning children.

5. The Convention on the Rights of Persons with Disabilities and Its Optional Protocol (UN 2006), which entered into force in 2008, raises consideration for people with disabilities from being mere “objects” of charity, medical care, and social protection to “individuals” with rights and capable of making life decisions based on their free and informed consent, as well as being active members of the society. Indeed, according to art. 1, the Convention’s wish is “(. . .) to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities and promote respect for their inherent dignity.”

Furthermore, it requires removing the obstacles that hinder their full and effective participation in society, ensuring equality for others. In doing so, the Convention lists forms of discrimination that disabled people experience includes allowing reasonable accommodation that corresponds to necessary and appropriate adjustments “(...) to ensure that persons with disabilities enjoy or exercise on an equal basis with others all human rights and fundamental freedoms” (art. 2).

The discrimination against disabilities, according to the Convention, should be fought according to some general principles, including respect for dignity, the autonomy of individual choice, accessibility, and equality of opportunity.

6. Lastly, with regard to employment, the UN tripartite agency bringing together governments, employers, and workers, the International Labour Organization (ILO), issued two documents devoted to discrimination, which

are the ILO Convention on Discrimination (Employment and Occupation) Convention 1958 (No. 111) and the related recommendation (R111). They require states to engage in national policies designed to assure equality of opportunity and treatment in respect of employment and occupation (including vocational training) to eliminate any discrimination.

Discrimination at work is defined by the Convention (art. 1) as any distinction, exclusion, or preference based on race, color, sex, religion, political opinion, national origin, or social origin. The result of the discrimination compromises equal opportunities or treatment in employment. Discrimination issues in employment may be determined by the member states concerned after consultation with representative employers, workers’ organizations, and other appropriate bodies.

In addition, the Convention refers to affirmative action. This should not be considered discrimination when, in agreement with the representative organizations of employers and workers, they represent special measures aimed at satisfying the particular needs of those in need, for reasons such as gender, age, disability, family responsibilities, social or cultural status, and of special protection or assistance.

Insights into the European Commitment to Nondiscrimination

European Union (EU) profoundly engages in eliminating all forms of discrimination within the territory of Europe. Accordingly, any discrimination based on nationality is prohibited by the Treaty of Rome (EU 1957), which entered into force in 1958 to establish the European Community, and the Treaty on the EU.

In addition, the Charter of Fundamental Rights of the European Union (EU 2000), declared in 2000 and which entered into force in 2009 along with the Treaty of Lisbon, devoted Chapter no. 3 to the principle of equality, listing the following rights: equality before the law; nondiscrimination; cultural, religious, and linguistic diversity;

equality between women and men; the rights of the child; the rights of the elderly; and integration of persons with disabilities. The right of non-discrimination (art. 21) is defined as “(…) forbids discrimination on grounds of sex, race, colour, ethnic or social origin, genetic features, language, religion or other belief, political opinion, membership of a national minority, property, birth, disability, age or sexual orientation.”

The European Commission (EC) further protects the principle of nondiscrimination through various directives, such as:

- Directive 2000/43/EC against discrimination on race and ethnic origin.
- Directive 2000/78/EC against discrimination at work based on religion or belief, disability, age, or sexual orientation.
- Directive 2006/54/EC equal treatment for men and women in matters of employment and occupation.
- Directive 2004/113/EC equal treatment for men and women in accessing and supplying goods and services.
- Directive Proposal (COM(2008)462) against discrimination based on age, disability, sexual orientation, and religion or belief beyond the workplace.
- L.N. 85 of 2007 European Union Act (CAP. 460) Equal Treatment of Persons Order, 2007.
- L.N. 461 of 2004 Employment and Industrial Relations Act, 2002 (ACT NO. XXII OF 2002), Equal Treatment in Employment Regulations, 2004
- L.N. 86 of 2007 European Union Act (CAP. 460) Equal Treatment in Self-Employment and Occupation Order, 2007.
- United Kingdom
 - Gender Goods Facilities and Services (GFS) Directive (2004/113/EC) – the Sex Discrimination Order 1976 (Amendment) Regulations (Northern Ireland) 2015.
 - Employment Equality (Sex Discrimination) Regulations (Northern Ireland) 2005.
 - The Employment Equality (Sex Discrimination) Regulations 2005.
 - Article 8 of Directive 2010/41/EU of the European Parliament and of the Council of 7 July 2010 on the application of the principle of equal treatment between men and women engaged in an activity in a self-employed capacity and repealing Council Directive 86/613/EEC.
 - The Employment Equality (Religion or Belief) (Amendment) Regulations 2003 SI n° 2828 of 06/11/2003.

National Transposition of EU Acts against Discrimination

To ensure full compliance with EU law, member states are required to align their national legislation with the requirement of the EU directives. According to the official website of the European Union Law (EUR-Lex 2022), most of national transposition measures on equal treatment and against discrimination have been recorded by Malta and the United Kingdom (before Brexit):

- Malta
 - L.N. 181 of 2008 Equality for Men and Women Act (CAP.456) Access to Goods and Services and Their Supply (Equal Treatment) Regulations, 2008.

Summary

Since the twenty century, the UN has issued several nondiscrimination conventions followed by several EU directives. The aim is to eliminate severe past discrimination usually suffered by minority groups, such as black people, women, homosexuals, less affluent classes, and disabled people, at the hands of the dominant groups.

While sovereign authorities (i.e., international organizations and their Member States) provide slightly different definitions and focus, the general consensus is that states must be firm in their statement of equality of rights of all people within their sovereign territory and must use all suitable means to protect the people against all forms of discrimination. To foster the achievement of

substantial equity among citizens, states are allowed not only to adopt laws providing positive discrimination in some cases but also temporary affirmative actions as remedy from severe past discriminations.

This contribution outlines the definition of nondiscrimination and related concepts including the main content of the declarations and conventions adopted by the UN and EU devoted to this topic.

Cross-References

- ▶ [Affirmative Action](#)
- ▶ [Board Diversity and Gender Quotas](#)
- ▶ [Discrimination](#)
- ▶ [Equality](#)
- ▶ [Equality of Opportunity](#)
- ▶ [Human Rights](#)
- ▶ [Sexual Harassment](#)
- ▶ [United Nations Human Rights Committee](#)

References

- Ackermann, L. W. (2006). Equality and non-discrimination: Some analytical thoughts. *South African Journal on Human Rights*, 22(4), 597–612.
- Albrecht, C., Rude, B., & Stitteneder, T. (2022). Women in Afghanistan: Developments over the last 20 years and the return of the Taliban. *CESifo Forum*, 23(1), 57–62. <https://www.cesifo.org/DocDL/CESifo-Forum-2022-1-albrecht-et-al-afghan-women-january.pdf>. Accessed 25 May 2022.
- Bandow, D. (2020). *Religious persecution around the globe: A guide*. CATO Institute. <https://www.cato.org/commentary/religious-persecution-around-globe-guide>. Accessed 24 May 2022.
- Bishu, S. G., & Alkadry, M. G. (2017). A systematic review of the gender pay gap and factors that predict it. *Administration & Society*, 49(1), 65–104. <https://doi.org/10.1177/0095399716636928>.
- Bonacci, G., & Meckelburg, A. (2017). Revisiting slavery and the slave trade in Ethiopia. *Northeast African Studies*, 17(2), 5–30.
- De Boynes, N., Message, N., & Bachelier, P. (2009). Non-discrimination clauses: Another French exception. *International Business Law Journal*, 6, 757–766.
- Deskoska, R. (2010). The right of non-discrimination and affirmative action. *Iustinianus Primus Law Review*, 1, 1–10.
- Diebold, N. F. (2011). Standards of non-discrimination in international economic law. *International and Comparative Law Quarterly*, 60(4), 831–866.
- EC – European Commission. (2008). *Proposal for a COUNCIL DIRECTIVE on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation*. <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52008PC0426>. Accessed 11 May 2022.
- EC – European Commission. (2019). *The gender pay gap situation in the EU*. https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/equal-pay/gender-pay-gap-situation-eu_en. Accessed 11 May 2022.
- EC Eurostat – Statistic Explained. (2021). Gender pay gap statistics. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Gender_pay_gap_statistics#Gender_pay_gap_levels_vary_significantly_across_EU. Accessed 11 May 2022.
- EU – European Union. (1957). *Treaty establishing the European Economic Community*. <https://www.europarl.europa.eu/about-parliament/it/in-the-past/the-parliament-and-the-treaties/treaty-of-rome>. Accessed 12 May 2022.
- EU – European Union. (2000). Charter of fundamental rights of the European Union (2000/C 364/01). *Official Journal of the European Union* C 364/1, 18.12.2000. https://www.europarl.europa.eu/charter/pdf/text_en.pdf. Accessed 25 May 2022.
- EUR-Lex. (2022). *European Union law*. <https://eur-lex.europa.eu/homepage.html?locale=en>. Accessed 24 May 2022.
- Galizzi, G., & Siboni, B. (2016). Positive action plans in Italian universities: Does gender really matter? *Meditari Accountancy Research*, 24(2), 246–268.
- Human Dignity Trust. (2022). Map of countries that criminalize LGBT people. Human Dignity Trust. <https://www.humandignitytrust.org/lgbt-the-law/map-of-criminalisation/>. Accessed 10 January 2023.
- ILO – International Labour Organisation. (1958). *Discrimination (employment and occupation) convention*, 1958 (No. 111). https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C111. Accessed 6 May 2022.
- Lord Lester of Herne Hill. (1992). Governing rule – Principle of non-discrimination. *Studies in Transnational Legal Policy*, 23, 17–22.
- Mosse, D. (2018). Caste and development: Contemporary perspectives on a structure of discrimination and advantage. *World Development*, 110, 422–436.
- Nehan, N. (2022). The rise and fall of women rights in Afghanistan. *LSE Public Policy Review*, 2(3), 6. <https://doi.org/10.31389/lseppr.59>.
- Pons-Vignon, N., & Anseeuw, W. (2009). Great expectations: Working conditions in South Africa since the end of apartheid. *Journal of Southern African Studies*, 35(4), 883–899. <https://doi.org/10.1080/03057070903313236>.
- UN – United Nation. (1948). *Universal declaration of human rights*. <https://www.un.org/sites/un2.un.org/files/udhr.pdf>. Accessed 6 May 2022.
- UN – United Nation. (1965). *International convention on the elimination of all forms of racial discrimination*. <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-convention-elimination-all-forms-racial>. Accessed 6 May 2022.

- UN – United Nation. (1966). *International covenant on civil and political rights*. <https://www.ohchr.org/sites/default/files/Documents/ProfessionalInterest/ccpr.pdf>. Accessed 12 May 2022.
- UN – United Nation. (1979). *Convention on the elimination of all forms of discrimination against women*. <https://www.ohchr.org/sites/default/files/Documents/ProfessionalInterest/cedaw.pdf>. Accessed 6 May 2022.
- UN – United Nation. (2006). *Convention on the rights of persons with disabilities*. <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>. Accessed 6 May 2022.
- UN HRC – UN Human Rights Committee. (1989). *CCPR general comment No. 18: Non-discrimination*, 10 November 1989. <https://www.refworld.org/docid/453883fa8.html>. Accessed 6 May 2022.
- UNESCO – United Nations Educational, Scientific and Cultural Organization. (1960). *Convention against discrimination in education*. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-against-discrimination-education>. Accessed 11 May 2022.
- van Raad, C. C. (1981). Non-discrimination. *British Tax Review*, (1), 43–48.

Non-discriminatory Access [also Non-discriminatory Broadband/Bandwidth and/or Traffic Management]

► Net Neutrality

Non-employee Directors

► Non-executive Director (NED)

Non-executive Director (NED)

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Synonyms

External directors; Independent directors; Non-employee directors; Outsiders; Part-time directors

Definition

Non-executive directors appear in the academic literature under different names, such as external, non-employees, or part-time directors (Li et al. 2020; Mace 1979). They are not employees of the company and, therefore, are not involved in the daily management of the company. Although the concept of executive or internal directors is homogenous throughout the different world economies, the same is not true for external or non-executive directors (outsiders in Anglo-Saxon terminology), in which case the academic literature offers different definitions. This heterogeneity is closely related to the independent status of the directors with respect to the rest of the company's board members and its management team. Thus, it is possible to find different terminologies such as independent directors and external directors, both of them included in the generic category of external or non-executive directors. This matter is due to the fact that in Anglo-Saxon countries, where ownership structure is dispersed, large shareholders are not common and, therefore, the distinction between independent and outsiders is not necessary. However, countries framed within the civil law legal tradition (countries from Continental Europe and Latin America mainly) have concentrated ownership structures, and the presence of large controlling shareholders is commonplace (La Porta et al. 1999). In this context, the distinction between independent and external directors becomes of special relevance. For instance, a shareholder with a controlling interest in the firm can be an external director, but they could not be an independent director.

Those who have received the most attention, in the academic world as well as in the business and regulatory sectors, are independent directors – those who have no substantive relationship with the firm as employees or in any other capacity beyond their role on the board (Neville et al. 2018), that is, those without any connection to the company, its shareholders, or the rest of the groups with interests in the company (stakeholders).

Another type of external director is affiliate directors. In spite of not being part of the

management of the company, they have ties to the company or its members that prevent them from being considered independent. Thus, they can be representatives of workers or significant shareholders, who maintain contractual relations with the company (consultants, lawyers, etc.) (Samara and Berbegal-Mirabent 2018).

Key Issues

Most of the codes of good governance emphasize that boards must have a majority of external directors, giving special importance to the figure of the independent director (Cuomo et al. 2016; Garner et al. 2017). Probably owing to this widespread recommendation, the empirical evidence has found that companies in many countries have a lower proportion of executive directors than of external directors (Reguera-Alvarado and Bravo 2017; Terjesen et al. 2016).

From the perspective of the agency theory, external directors contribute efficiently to the good governance of the company, exercising effective control over the management team and its decision-making process (Fama and Jensen 1983). A greater proportion of external directors, especially independent directors, can reduce the likelihood that senior management will obtain private benefits at the expense of expropriating the wealth of the company's owners (Garner et al. 2017). External directors, as they are not an active part of the business management, have a greater degree of independence that makes them ideal candidates to exercise the supervisory function of the board of directors (Masulis and Zhang 2019). Based on these arguments, the most common proposal of the codes of good governance is to incorporate external directors, essentially independent, to be able to supervise the conduct of managers without a conflict of interest (Cuomo et al. 2016). These directors could be the voice of minority shareholders not present on the board, defend the feelings of other agents with interests in the company, or act as a barrier that limits managerial discretion. Although the logic of this proposal seems clear, as will be seen later, its empirical contrast is not so much (Stein and Zhao 2019).

From the perspective of the Theory of Resources and Capacities, external directors are also important, as they are a source of specialized knowledge and links with the outside for the company (Chen et al. 2016; Hillman and Dalziel 2003; Li et al. 2020), which validates them as good candidates to fulfil the advisory function of the board of directors (Dalton and Dalton 2005). In this sense, the directors who belong to multiple boards of directors are particularly relevant (Pfeffer and Salancik 1978). Likewise, the knowledge that these directors provide can be used by the management team in the formulation of their strategic decisions (Chen et al. 2016). External directors, thanks to their impartiality and independence from the management team, can have a positive impact on the board's decision-making (Dahya and McConnell 2005; Jenwittayaroje and Jiraporn 2019).

However, a board formed entirely by external directors could not efficiently develop the advisory function, given their lack of experience and knowledge about fundamental aspects of the company and its environment (Garner et al. 2017), not to mention the difficulty in acquiring it (Ford 1992). In this sense, Pettigrew (1992) argues that outsiders could have a negative impact on company performance if, due to their lack of information, they are not in a position to ratify decisions made by the most powerful members of the board. Moreover, the involvement of outsiders in business is often part-time (Siladi 2006; Stein and Zhao 2019), which implies, in words of Yusoff (2010), "that it is difficult for them to develop much more than a mere rudimentary understanding of the work of the company (Conger and Lawler 2009)". With these limitations, as Yusoff (2010) summarizes, they highly depend on the good will of management, especially the CEO, to obtain relevant and timely information about the company (Levräu and Van den Bergh 2007). In this same vein, Carter et al. (2010) argue that, since understanding the company's business is crucial for effective decision-making within the board of directors, the lack of this knowledge is of particular concern. Markarian and Parbonetti (2007) point out that the lack of information on the part of the independent directors could impede

an adequate decision-making (Yusoff 2010). Based on these arguments, a relatively new research current has postulated that having more non-executive directors does not necessarily mean improving the effectiveness of the board if they are not able to contribute anything (Garner et al. 2017; Masulis and Zhang 2019; Samara and Berbegal-Mirabent 2018; Stein and Zhao 2019).

When a board is supposed to be substantially independent, it is best to limit the CEO's participation in the committee that is responsible for nominating directors, so as to ensure that the latter's preferences are not closely aligned with those of the CEO, but rather with those of the shareholders (Garner et al. 2017). According to Raheja (2005), when the incentives of external directors are relatively better aligned with those of shareholders, a greater proportion of external directors is required. This result helps to explain why some studies have found that a higher proportion of external directors is associated with better business performance (Baysinger and Butler 1985; Jenwittayaroje and Jiraporn 2019). However, if outsiders are not truly independent and their incentives are aligned with those of executives inclined toward lower projects, boards with a higher proportion of external directors will be less efficient (Garner et al. 2017). This is consistent with Yermack (1996), Agrawal and Knoeber (1996), and Bhagat and Bolton (2013), among others, who report a negative relationship between the proportion of external directors and the company's performance. The joint interpretation of these arguments would help explain why the analyses that have not considered the characteristics of the companies studied have not found robust relationships between the proportion of external directors and corporate results (Li et al. 2020; Raheja 2005; Reguera-Alvarado and Bravo 2017).

Despite the advantages and disadvantages indicated, the existing empirical literature has documented mixed and inconclusive results about the relationship between external directors and company performance (Andrés and Santamaría 2018; Krause et al. 2017; Jenwittayaroje and Jiraporn 2019; Masulis and Zhang 2019; Uribe-Bohorquez et al. 2018). Therefore, the controversial relationship between the composition of the board and the performance of the company has

not provided conclusive evidence about the benefits of external directors over executives or vice versa, nor about the widespread good governance recommendations in favor of independents (Andrés and Santamaría 2018). While some studies observe a positive relationship between independence and results, others find them negative, not robust and even insignificant. Studies that have carried out a meta-analytical review of the previous literature have not shed light on this question either.

Future Directions

For years, regulators and academics believed that an effective board was a board with a majority of independent directors (Adams 2017). However, empirical evidence shows that it is hard to conclusively identify which board characteristics lead boards to be more effective (Adams 2017; Li et al. 2020). Nowadays, the extent to which any given director is truly independent and the conditions that they must meet to ensure their independence (Neville et al. 2018) is an open question that remains unanswered. Recent research points out that "the effectiveness of board independence is overstated because barriers, such as outside job demands and norms of deference, prevent independent directors from being effective monitors (Boivie et al. 2016). Similarly, Hambrick et al. (2015, p. 331) note that there is little evidence that director independence—in and of itself—accomplishes much" (Neville et al. 2018, p. 2541). Further research is needed to deepen our understanding of the effect of independent directors on the governance of organizations and to discover what are the most suitable characteristics that make independent directors effective enough to improve corporate governance (Reguera-Alvarado and Bravo 2017).

Cross-References

- [Codes of Good Governance](#)
- [Corporate Governance](#)
- [Theoretical Paradigms of the Board of Directors](#)

References

- Adams, R. B. (2017). Boards, and the directors who sit on them. In *The handbook of the economics of corporate governance* (Vol. 1, pp. 291–382). North-Holland.
- Agrawal, A., & Knoeber, R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 13(3), 377–397.
- Andrés, P., & Santamaría, M. (2018). Del consejo de administración a los códigos de buen gobierno: un paseo por la literatura académica. *Economistas*, 158, 106–125.
- Baysinger, B. D., & Butler, H. N. (1985). Corporate governance and the board of directors: performance effects of changes in board composition. *Journal of Law, Economics, and Organization*, 1, 101–124.
- Bhagat, S., & Bolton, B. (2013). Director ownership, governance, and performance. *Journal of Financial and Quantitative Analysis*, 48(1), 105–135.
- Boivie, S., Bednar, M. K., Aguilera, R. V., & Andrus, J. L. (2016). Are boards designed to fail? The implausibility of effective board monitoring. *The Academy of Management Annals*, 10(1), 319–407.
- Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, 18(5), 396–414.
- Chen, H. L., Hsu, W. T., & Chang, C. Y. (2016). Independent directors' human and social capital, firm internationalization and performance implications: An integrated agency-resource dependence view. *International Business Review*, 25(4), 859–871.
- Conger, J., & Lawler, E. E. (2009). Why your board needs a non-executive chair. In *Boardroom realities* (pp. 51–67). San Francisco: Jossey Bass.
- Cuomo, F., Mallin, C., & Zattoni, A. (2016). Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 24(3), 222–241.
- Dahya, J., & McConnell, J. J. (2005). Outside directors and corporate board decisions. *Journal of Corporate Finance*, 11(1), 37–60.
- Dalton, C. M., & Dalton, D. R. (2005). Boards of directors: Utilizing empirical evidence in developing practical prescriptions. *British Journal of Management*, 16(s1), 91–97.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325.
- Ford, R. H. (1992). *Boards of directors and the privately owned firm*. New York: Quorum Books.
- Garner, J., Kim, T. Y., & Kim, W. Y. (2017). Boards of directors: A literature review. *Managerial Finance*, 43(10), 1189–1998.
- Hambrick, D. C., Misangyi, V. F., & Park, C. A. (2015). The quad model for identifying a corporate director's potential for effective monitoring: Toward a new theory of board sufficiency. *Academy of Management Review*, 40, 323–344.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Jenwittayaroje, N., & Jiraporn, P. (2019). Do independent directors improve firm value? Evidence from the great recession. *International Review of Finance*, 19(1), 207–222.
- Krause, R., Withers, M. C., & Semadeni, M. (2017). Compromise on the board: Investigating the antecedents and consequences of lead independent director appointment. *Academy of Management Journal*, 60(6), 2239–2265.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance*, 54(2), 471–517.
- Levrau, A., & Van den Berghe, L. A. (2007). Corporate governance and board effectiveness: Beyond formalism. *ICFAI Journal of Corporate Governance*, 6(4), 58–85.
- Li, H., Terjesen, S., & Umans, T. (2020). Corporate governance in entrepreneurial firms: A systematic review and research agenda. *Small Business Economics*, 54, 43–74.
- Mace, M. L. (1979). Directors: Myth and reality—ten years later. *Rutgers Law Review*, 32, 293.
- Markarian, G., & Parbonetti, A. (2007). Firm complexity and board of director composition. *Corporate Governance: An International Review*, 15(6), 1224–1243.
- Masulis, R. W., & Zhang, E. J. (2019). How valuable are independent directors? Evidence from external distractions. *Journal of Financial Economics*, 132(3), 226–256.
- Neville, F., Byron, K., Post, C., & Ward, A. (2018). Board independence and corporate misconduct: A cross-national meta-analysis. *Journal of Management*. <https://doi.org/10.1177/0149206318801999>.
- Pettigrew, M. A. (1992). On studying managerial elites. *Strategic Management Journal*, 13(S2), 163–182.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organisations: A resource dependence perspective*. New York: Harper & Row.
- Raheja, C. G. (2005). Determinants of board size and composition: A theory of corporate boards. *Journal of Financial and Quantitative Analysis*, 40, 283–206.
- Reguera-Alvarado, N., & Bravo, F. (2017). The effect of independent directors' characteristics on firm performance: Tenure and multiple directorships. *Research in International Business and Finance*, 41, 590–599.
- Samara, G., & Berbegal-Mirabent, J. (2018). Independent directors and family firm performance: Does one size fit all? *International Entrepreneurship and Management Journal*, 14(1), 149–172.
- Siladi, B. (2006). *The role of non-executive directors in corporate governance: An evaluation*. Faculty of

- Business and Enterprise, Swinburne University of Technology. researchbank.swinburne.edu.au
- Stein, L. C., & Zhao, H. (2019). Independent executive directors: How distraction affects their advisory and monitoring roles. *Journal of Corporate Finance*, 56, 199–223.
- Terjesen, S., Couto, E. B., & Francisco, P. M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management & Governance*, 20(3), 447–483.
- Uribe-Bohorquez, M. V., Martínez-Ferrero, J., & García-Sánchez, I. M. (2018). Board independence and firm performance: The moderating effect of institutional context. *Journal of Business Research*, 88, 28–43.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185–211.
- Yusoff, W. F. W. (2010). Characteristics of boards of directors and board effectiveness: a study of Malaysian public listed companies (Doctoral dissertation, Victoria University).

Nonexecutive Directors

► CSR Disclosure Quality: Role of NEDs

Nonexploitative Power

► Power Equalizing

Nonfinancial Disclosure

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Synonyms

Nonfinancial information

Definition

The concept of “disclosure” can be defined as the process of information-sharing between

companies and stakeholders. Companies choose to “disclose” information as both an opportunity to engage in an effective way with stakeholders and as a necessity to comply with mandatory provisions (Pizzi et al. 2020). In recent years, companies worldwide have provided an increasing number of mandatory or voluntary disclosures. Specifically, the main innovation has been the quick growth of nonfinancial disclosure (Dumay et al. 2015). The quick growth of the average number of nonfinancial reports firms provide has been encouraged by both the increasing attention paid by stakeholders to nonfinancial themes and the introduction of new forms of regulation. Furthermore, many firms have started to disclose nonfinancial information through more sophisticated tools like Integrated Reports and social media (Lodhia and Stone 2017). Finally, the explicit requirement in SDG 12.6 of more disclosure in order to achieve sustainable development has attracted further attention to disclosures from academics and practitioners.

Introduction

Despite the existence of several factors that impact firms’ orientation toward sustainability, the disclosure of nonfinancial information is typically related to the desire to increase stakeholders’ trust (Dumay 2018; Venturelli and Caputo 2017). In fact, several studies have revealed how stakeholders are typically skeptical about firms’ behaviors (Hill et al. 2009) due to the existence of unethical behaviors behind the adoption of sustainable practices in cases such as “greenwashing.” Prior evidence has shown that managers typically share only favorable information with stakeholders (Bertomeu and Magee 2015). Furthermore, managers could overestimate their sustainability achievements due what benefits them personally in terms of reputation and rewards.

Nonfinancial disclosure represents a tool to mitigate these risks. Nowadays, an increasing number of firms have started to disclose nonfinancial information through nonfinancial reports (KPMG 2017). Furthermore, some contexts like

the European Union Member States have started to introduce new forms of regulation in their legal systems to increase the overall degree of transparency about firms' contribution to sustainable development (La Torre et al. 2018). However, scholars have observed how the introduction of mandatory provisions about nonfinancial disclosure needs a cultural change in order to produce positive externalities (Ackers and Eccles 2015). Specifically, these studies reveal how the concepts of "quality" and "quantity" in nonfinancial disclosure are different.

Antecedents and Consequences of Nonfinancial Disclosure

Academics have looked for ways to increase the value and relevance of nonfinancial disclosure for stakeholders and policymakers. Specifically, these studies have been identified the determinants that impact the quality of non-financial reporting. Additional studies have analyzed the impact of nonfinancial disclosure on financial performance.

As observed, the concepts of "quality" and "quantity" in nonfinancial disclosure are different (Huang and Watson 2015; Beretta and Bozzolan 2008). However, academics' opinions about the relationship between these two different factors diverge. Specifically, some authors have proposed that the quantity of information provided could be a proxy of nonfinancial disclosure quality (Venturelli and Caputo 2017). However, other academics highlight how comprehending a non-financial disclosure's quality requires a contextual analysis of items not related to quantitative indicators (Beretta and Bozzolan 2008). Furthermore, many empirical studies have shown how non-financial disclosure quality could be influenced positively by items not related to the number of indexes disclosed. Specifically, items like third party assurance, the adoption of international standard setters, prior experience in nonfinancial reporting, and board characteristics are likely to increase the quality of a business's nonfinancial disclosure (Daub 2007; Dilling 2010; Venturelli et al. 2019).

The relationship between nonfinancial disclosure and corporate financial performance has been widely explored by academics (Ameer and Othman 2012; Omran et al. 2019). These studies have incorporated different perspectives in order to evaluate the "value relevance" of non-financial disclosure. However, prior studies have shown that the link between the two factors is influenced by endogenous and exogenous variables including the characteristics of the company and the geographical context.

The Role of Disclosure on Sustainable Development Goals

In order to achieve a high degree of worldwide sustainable development, the United Nations (UN) has signed the Agenda 2030, which establishes an agreement between UN Member States to define a set of Sustainable Development Goals (SDGs) to achieve before 2030. Specifically, the SDGs consist of 17 goals and 169 targets about different themes related to the macroconcept of sustainable development. Unlike the previous Millennium Development Goals (MDGs), the SDGs require an active contribution from the private sector.

The achievement of SDGs is strongly related to the concept of nonfinancial disclosure. Specifically, disclosure plays a central role due to the need to identify evaluation tools able to describe the private sectors' impact on the SDGs. The UN recognizes this need through an explicit reference to the topics in SDG 12. SDG 12.6 requires Member States to "encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle." Furthermore, the UN identifies the "number of companies publishing sustainability reports" as an evaluation indicator. However, despite their explicit requirement of more disclosure from the private sector, the preliminary studies about the integration of SDGs in nonfinancial disclosures reveal that only a few firms voluntarily adopt this type of information in their reports (Rosati and Faria 2019).

Summary

During the last few years, firms have started to introduce new items in their strategic planning in order to favor these beneficial processes. However, nonfinancial scandals and the existence of unethical behaviors behind the introduction of these practices have had a negative impact on stakeholders' trust. According to the evidence, the disclosure of nonfinancial information represents an effective tool to repair, maintain, and regain trust from stakeholders. Furthermore, the necessity to contribute effectively to the SDGs has imposed on managers the need to adopt new forms of reporting in order to disclose their nonfinancial information.

Cross-References

► Reporting Framework

References

- Ackers, B., & Eccles, N. S. (2015). Mandatory corporate social responsibility assurance practices: The case of King III in South Africa. *Accounting, Auditing & Accountability Journal*, 28(4), 515–550.
- Ameer, R., & Othman, R. (2012). Sustainability practices and corporate financial performance: A study based on the top global corporations. *Journal of Business Ethics*, 108(1), 61–79.
- Beretta, S., & Bozzolan, S. (2008). Quality versus quantity: The case of forward-looking disclosure. *Journal of Accounting, Auditing & Finance*, 23(3), 333–376.
- Bertomeu, J., & Magee, R. P. (2015). Mandatory disclosure and asymmetry in financial reporting. *Journal of Accounting and Economics*, 59(2–3), 284–299.
- Daub, C. H. (2007). Assessing the quality of sustainability reporting: An alternative methodological approach. *Journal of Cleaner Production*, 15(1), 75–85.
- Dilling, P. F. (2010). Sustainability reporting in a global context: What are the characteristics of corporations that provide high quality sustainability reports—an empirical analysis. *International Business & Economics Research Journal*, 9(1), 19–30.
- Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy. *Journal of Accounting & Organizational Change*, 11(1), 2–23.
- Dumay, J. (2018). Trust and corporate reporting. *Electronic Journal of Knowledge Management*, 16(1), 56–58.
- Hill, J. A., Eckerd, S., Wilson, D., & Greer, B. (2009). The effect of unethical behavior on trust in a buyer–supplier relationship: The mediating role of psychological contract violation. *Journal of Operations Management*, 27(4), 281–293.
- Huang, X. B., & Watson, L. (2015). Corporate social responsibility research in accounting. *Journal of Accounting Literature*, 34, 1), 1–1), 16.
- KPMG. (2017). The KPMG Survey of Corporate Responsibility Reporting 2017. Retrieved from www.kpmg.com/crreporting.
- La Torre, M., Sabelfeld, S., Blomkvist, M., Tarquinio, L., & Dumay, J. (2018). Harmonising non-financial reporting regulation in Europe: Practical forces and projections for future research. *Meditari Accountancy Research*, 26(4), 598–621.
- Lodhia, S., & Stone, G. (2017). Integrated reporting in an internet and social media communication environment: Conceptual insights. *Australian Accounting Review*, 27(1), 17–33.
- Omran, M., Khallaf, A., Gleason, K., & Tahat, Y. (2019). Non-financial performance measures disclosure, quality strategy, and organizational financial performance: A mediating model. *Total Quality Management & Business Excellence*, 1–24.
- Pizzi, S., Caputo, F., & Venturelli, A. (2020). *Accounting to ensure healthy lives: Critical perspective from the Italian National Healthcare System*. Corporate Governance: The International Journal of Business in Society.
- Rosati, F., & Faria, L. G. (2019). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production*, 215, 1312–1326.
- Venturelli, A., & Caputo, F. (2017). *Informativa non finanziaria e regulation. Tendenze evolutive e relative implicazioni alla luce dell'emanazione del D. Lgs 254/16* (pp. 1–249). Milano: McGraw-Hill.
- Venturelli, A., Caputo, F., Leopizzi, R., & Pizzi, S. (2019). The state of art of corporate social disclosure before the introduction of non-financial reporting directive: A cross country analysis. *Social Responsibility Journal*. <https://doi.org/10.1108/SRJ-12-2017-0275>.

Nonfinancial Information

► Nonfinancial Disclosure

Nonfinancial Performance

► Value Creation

Nonfinancial Reporting

- [Sustainability Accounting](#)
-

Non-financial Reporting

- [Integrated Reporting for Sustainability](#)
 - [Sustainability Management and Reporting](#)
-

Non-financial Risk

- [Social Risk](#)
-

Nonflammable

- [Asbestos](#)
-

Nongovernmental Organization

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Synonyms

[Independent sector](#); [Nonprofit organization](#); [Public benefit organization](#); [The third sector](#); [Voluntary organization](#)

Definition

The term “non-governmental organizations” (NGOs) covers a variety of organizations, depending on the legal forms, sources of funding, and type of activities, that operate beyond the boundaries of the market and the state. The term

“the third sector” highlights their distinctiveness and difference from the public and commercial sectors and refers to the voluntary engagement of individuals based on differentiated values (Salamon and Anheier 1992; Vakil 1997).

NGOs are social organizations being active in the private, public, and civil society (Mercer 2002). NGOs undertake activities that benefit the society, or a significant part of it, and act toward a mutual benefit while satisfying specific needs of the members of the organization.

According to the structurally operational approach, the following attributes describe the role of NGOs (Salamon and Anheier 1992; Salamon et al. 1999): (1) formal character (in institutional dimension and in structure – procedures, rules and sustainability, and internal organization); (2) private (independent, institutionally separate from the state, and free and unrestricted in its decisions and elections); (3) nonprofit distributing; (4) self-governing (own internal management and control systems); and (5) voluntary (membership not obligatory; voluntary activities that do not exclude the possibility of using paid staff).

The term NGO describes a range of organizations from watchdogs and aid agencies for development and policy organizations (Young and Dhanda 2012).

NGOs are becoming important players on national and international level (Anheier and Kendall 2001). Their activities contribute to social, economic, and political developments.

The Emergence and Role of NGOs

Increased interest in nongovernmental organizations (NGOs) and the development of the theoretical background took place in the second half of the twentieth century. The term NGOs appeared in international literature in 1945 through the United Nations (Martens 2002; Vakil 1997). In the following years, the role of NGOs has gained importance worldwide. It was caused by several complementary factors. First, there were democratization, decentralization, and the emergence of civil society. Second,

attention should be paid to the growing demand for information in the society as well as to the development of information society tools. Third, there has been an increase in the number and types of organizations with different functions and powers in nation-states and internationally. These processes have been accompanied by the transformation of the public sector and a decline in public confidence in decision-makers (McGann and Johnston 2005).

The NGOs are recognized as important actors on the local, national, and international level. The NGOs play several important operational roles in the social, economic, and political dimensions (Anheier and Seibel 1990).

The key NGOs functions are service delivery, educational provision, and public policy advocacy (Stromquist 2002). NGOs' activities can also be considered as: (1) vanguard (introducing innovative solutions, experimenting in the areas in which they operate), (2) advocate (representing and publicizing the interests of discriminated groups), (3) guardian of values (promoting and protecting values that contribute to pluralism and democracy), and (4) provider of public goods and services (Kramer 1981). The main activities and roles of NGOs cover the following: (1) implementers (the mobilization of resources to provide goods and services to people), (2) catalysts (inspire, facilitate, or contribute toward developmental change among the other actors at the organizational or the individual level), and (3) partners (build meaningful partnership relationships with other sectors) (Lewis 2007, pp. 68–76). The third sector organizations are an important mechanism for meeting individual and collective needs as well as promoting empowerment for sustainable community development (Nikkhah and Redzuan 2010). The NGOs contribute to social development by facilitating social development achievements (measured by the Human Development Index). They also promote sustainable development (focusing on the social and environmental impacts of economic activity including relations with stakeholders) and sustainable consumption (educating households to change their consumption attitudes and behavior) (Young and Dhanda 2012) (► [Sustainability](#)).

However, the activities of nongovernmental organizations are characterized by specific problems. The nonprofit sector has inherent limitations: philanthropic insufficiency, philanthropic particularism, philanthropic amateurism, lack of finance (Salamon 1987), or other governance problem concerning accounting and accountability (Cordery et al. 2019; Hind 2017).

Issues

The academic discourse on NGOs in the 1990s focused on the conceptual and theoretical foundations to explain and describe their activity and was targeted to academics, practitioners, and public decision-makers. The scope of the analysis included background, history, concepts, theory, statistics, behavior, management, and policy (Anheier 2005). At the same time, issues such as the legal framework, management (leadership, planning, and management), income generation, government contract, accountability, and evaluation were further research directions (Herman et al. 2011; Ott 2001; Powell and Clemens 1998). In other words, the research of third sector organizations focused on institutional emergence, NGOs operation (internal governance and organizational structures and strategies, including their relations with stakeholders), and the results obtained (Johnson and Prakash 2007).

The following questions were of interest to NGO researchers (Halfpenny and Reid 2002): Which organizations make up the third sector? How is the third sector resourced? Why do NGOs exist? How do they differ from other organizations? What are the relationships of NGOs with other sectors (stakeholders)? (► [Stakeholders](#)).

The theoretical analysis refers to a range of disciplines – including law, economics, political science, public administration, and various topics.

Future Directions of Research

There are many reasons to continue the research on NGOs. On the one hand, it is necessary to point out the process of transformation that concerns the

modern democratic state. On the other hand, there is an increase in the number and types of nonprofit organizations, as well as their greater dependence on public income. In addition, there has been a significant increase in privatization and commercialization of public services. This has led to convergence and the blurring of sectoral boundaries (Kramer 2000).

Future research of NGOs should address the following: (1) accountability and evaluation of activity and results of NGOs (forms, processes, and mechanisms of NGOs accountability by placing variety groups of stakeholders at the center of the analysis (McDonnell and Rutherford 2019); (2) new ways of inter-sectoral cooperation in solving domestic and international problems (analysis of models linking the public and NGOs in the context of diverse state policies, increase in demand for social services, and emergence of new models of public governance) (Pollitt and Bouchaert 2011), as well as the analysis of NGOs' interactions with commercial organizations (especially multinational corporations) in the era of globalization; and (3) hybridization and economization of NGOs' activities (analysis of strategies of mobilizing resources by NGOs, including the creation of social enterprises as a form of gaining financial resources, independence from the public sector, and inclusion of beneficiaries and stakeholders in the activities of organizations) (Dees 1998; Eikenberry and Kluver 2004) (► [Social Entrepreneurship](#)).

Summary

In recent years, the importance of NGOs has increased at the local, national, and international levels (Teegen et al. 2004). They perform diverse functions in the state and society (Salamon 2001). They offer innovative ways of solving social problems (social innovations) as well as they anticipate and prevent the appearance of new problems. At the same time, they are involved in the implementation of public services, supporting and complementing the activities of public decision-makers. NGOs are subject to quantitative, but above all qualitative changes in the world

(Kramer 2000). Issues concerning the efficiency and effectiveness of organizations' management, as well as their entrepreneurial and innovative behavior, are growing in importance (Andersson and Self 2015).

Cross-References

- [Social Entrepreneurship](#)
- [Stakeholders](#)
- [Sustainability](#)

References

- Andersson, F. O., & Self, W. (2015). The social-entrepreneurship advantage: An experimental study of social entrepreneurship and perceptions of nonprofit effectiveness. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 26(6), 2718–2732. www.jstor.org/stable/43654855.
- Anheier, H. (2005). *Nonprofit organizations. Theory, management, policy*. New York/London: Routledge.
- Anheier, H. K., & Kendall, J. (Eds.). (2001). *Third sector policy at the crossroads: An international non-profit analysis* (1st ed.). London/New York: Routledge.
- Anheier, H. K., & Seibel, W. (Eds.). (1990). *The third sector. Comparative studies of nonprofit organizations*. Berlin/New York: Walter de Gruyter.
- Cordery, C., Belal, A. R., & Thomson, I. (2019). NGO accounting and accountability: Past, present and future. *Accounting Forum*, 43(1), 1–15. <https://doi.org/10.1080/01559982.2019.1593577>.
- Dees, J. G. (1998). Enterprising nonprofits. *Harvard Business Review*, 76, 54–69.
- Eikenberry, A. M., & Kluver, J. D. (2004). The marketization of the nonprofit sector: Civil society at risk? *Public Administration Review*, 64(2), 132–140.
- Halfpenny, P., & Reid, M. (2002). Research on the voluntary sector: An overview. *Policy & Politics*, 30(4), 533–550. <https://doi.org/10.1332/030557302760590369>.
- Herman, R. D., & Associates. (2011). *The Jossey-bass handbook of nonprofit leadership and management* (2nd ed.). John Wiley & Sons. <https://books.google.pl/books?id=pGlbTeI4XkC>.
- Hind, A. (2017). New development: Fundraising in UK charities – Stepping back from the abyss. *Public Money & Management*, 37(3), 205–210. <https://doi.org/10.1080/09540962.2017.1282238>.
- Johnson, E., & Prakash, A. (2007). NGO research program: A collective action perspective. *Policy Sciences*, 40(3), 221–240. <https://doi.org/10.1007/s11077-007-9043-x>.

- Kramer, R. M. (1981). *Voluntary agencies in the welfare state*. Berkeley: University of California Press.
- Kramer, R. M. (2000). A third sector in the third millennium? *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 11(1), 1–23. <https://doi.org/10.1023/A:1008914531485>.
- Lewis, D. (2007). *The management of non-governmental development organizations*. London: Routledge.
- Martens, K. (2002). Mission impossible? Defining non-governmental organizations. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 13(3), 271–285.
- McDonnell, D., & Rutherford, A. C. (2019). Promoting charity accountability: Understanding disclosure of serious incidents. *Accounting Forum*, 43(1), 42–61. <https://doi.org/10.1080/01559982.2019.1589903>.
- McGann, J., & Johnstone, M. (2005). The power shift and the NGO credibility crisis. *The International Journal of Not-for-Profit Law*, 8(2). <https://www.icnl.org/resources/research/ijnl/the-power-shift-and-the-ngo-credibility-crisis>.
- Mercer, C. (2002). NGOs, civil society and democratization: A critical review of the literature. *Progress in Development Studies*, 2(1), 5–22. <https://doi.org/10.1191/1464993402ps027ra>.
- Nikkhah, H. A., & Redzuan, M. B. (2010). The role of NGOs in promoting empowerment for sustainable community development. *Journal of Human Ecology*, 30(2), 85–92. <https://doi.org/10.1080/09709274.2010.11906276>.
- Ott, J. S. (Ed.). (2001). *Understanding nonprofit organizations: Governance, leadership, and management*. 3rd edition. Oxford: Westview Press.
- Pollitt, C., & Bouchaert, G. (2011). *Public management reform. A comparative analysis-new public management, governance, and the neo-Weberian state*. Oxford: Oxford University Press.
- Powell, W., & Clemens, E. S. (1998). *Private action and the public good*. New Haven/London: Yale University Press.
- Salamon, L. M. (1987). Of market failure, voluntary failure, and third-party government: Toward a theory of government-nonprofit relations in the modern welfare state. *Journal of Voluntary Action Research*, 16(1–2), 29–49. <https://doi.org/10.1177/089976408701600104>.
- Salamon, L. M. (2001). The nonprofit sector at a crossroad: The case of America. In H. K. Anheier & J. Kendall (Eds.), *Third sector policy at the crossroads: An international non-profit analysis* (1st ed., pp. 17–35). London/New York: Routledge.
- Salamon, L. M., & Anheier, H. K. (1992). In search of the non-profit sector. I: The question of definitions. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 3(2), 125–151. <https://doi.org/10.1007/BF01397770>.
- Salamon, L. M., Anheier, H. K., & Associates. (1999). Civil Society in comparative perspective. In L. M. Salamon, H. K. Anheier, R. List, S. Toepler, S. W. Sokolowski, & Associates, *Global Civil Society* (Eds.), *Dimension of the nonprofit sector* (pp. 3–39). Baltimore: The John Hopkins Center for Civil Society Studies.
- Stromquist, N. P. (2002). NGOs in a new paradigm of civil society. *Current Issues in Comparative Education*, 1(1), 62–67.
- Teegen, H., Doh, J. P., & Vachani, S. (2004). The importance of nongovernmental organizations (Ngos) in global governance and value creation: An international business research agenda. *Journal of International Business Studies*, 35(6), 463–483. <https://doi.org/10.1057/palgrave.jibs.8400112>.
- Vakil, A. C. (1997). Confronting the classification problem: Toward a taxonomy of NGOs. *World Development*, 25(12), 2057–2070. [https://doi.org/10.1016/S0305-750X\(97\)00098-3](https://doi.org/10.1016/S0305-750X(97)00098-3).
- Young, S. T., & Dhanda, K. K. (2012). *Sustainability: Essentials for business*. SAGE. <https://books.google.pl/books?id=p0p2AwAAQBAJ>.

Non-opportunistic CSR

- [Authentic CSR](#)

Nonprofit Organization

- [CERES Principles](#)
- [Nongovernmental Organization](#)

Nonviolence

- [Spirituality in Management](#)

Norm Enforcement

- [Sanctions of Social Capital](#)

Norms and Principles of Marketing

- [Marketing \(Ethics of\)](#)

Not in Education

► [NEET Youngsters Management](#)

Not-for-Profit Organization

► [Endowment Fund](#)

NP 4469: Portuguese Social Responsibility Standard

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Synonyms

[Management system](#); [Requirements](#); [Social responsibility](#); [Standard](#); [Sustainable development](#)

Definition/Description

Portuguese standard for the development and implementation of the social responsibility management system (SRMS). This is a standard detail requirement that aims to facilitate the organization with the commitment of the social responsibility, based on sustainability issues and actions in the context of the sustainable development challenges.

Introduction

The Brundtland Report (1987, p. 20) argues that the “sustainable development is not a fixed state of harmony, but rather a process of change,” in which “exploitation of resources, direction of investments, orientation of technological development,

and institutional change are made consistent with future as well as present needs.” This argument allows to understand the relevance of the planning, doing, checking, and acting on the SRSM system using the Shewhart cycle (1939), or Deming cycle (1982), renamed in 1950, as the methodology to implement and to assess the system and subsequent certification process.

At Portuguese level, the NP 4469 is the national standard published by the *Instituto Português de Qualidade* in 2008 (IPQ 2008b) and the updated version in 2019 (IPQ 2019). The acronym “NP” means *Norma Portuguesa* (in English: Portuguese standard). The *Instituto Português de Qualidade* (in English: Portuguese Quality Institute) is the Portuguese public body that approves technical regulations.

At the international level, following the achievement of the implementation of standards promoted by the International Organization for Standardization (ISO), organizations, all over the world, started looking for guidance to develop certifications on social responsibility strategies on the organization. At the same time, researchers, as Castka and Balzarova (2008), provide insights on the Working Report on Social Responsibility from the first version of ISO’s Advisory Group on Social Responsibility published in 2004. In Portugal, David Crowther consolidates a research team with R. Abreu and F. David who start to research about empirical evidence of corporate social responsibility in Portugal (Abreu et al. 2005).

Indeed, in Portugal, the first steps of a Portuguese standard were taken in June 2004, when the Portuguese Quality Institute nominated the Portuguese of Business Ethics Association as a sectorial standardization body of the Portuguese Quality System in fields of business ethics and social responsibility.

In March 2005, the Sectorial Standardization Body of the Portuguese Business Ethics Association formed a Technical Committee on Social Responsibility – CT 164 – with the objective to create a Portuguese standard for social responsibility for organizations.

This CT 164 was constituted by a set of entities, recognized by the ISO like unions (in Portuguese

União Geral de Trabalhadores or Workers General Union), consumers, government (i.e., INETI, DGE, IEFP), services, nongovernmental organizations (NGOs) (in Portuguese *Associação Portuguesa de Ética Empresarial* or Portuguese Business Ethics Association), and industry. In 2021, the representation for each group is as follows: industry and commerce (A) with 27.03% and SME (A1) with 5.41%, administration (B) with 21.62%, work (D) with 8.11%, universities and technological centers (E) with 8.11%, application of standards (F) with 21.62%, and NGOs with 8.11%. Those without representation on the CT 164 are as follows: consumers (C), social groups of consumers (C1), and environmental organizations (IPQ 2021).

In this sense, the NP 4469 standard is an international alignment with the ISO 26000: 2010 standard: guidance on social responsibility that aims to provide guidance (ISO 2010, p. vi) and maximize an organization contribution (ISO 2010, p. ix).

The methodology used to build the standard was technical teams and plenary sessions, based on the research promoted by the consultation process subdivided by five forums about ethics and social responsibility between 2005 and 2007, online survey made by Portuguese Business Ethics Association between April and July of 2006, and public survey between September and October of 2007.

The NP 4469-1: 2008 (IPQ 2008b, p. 11) was the Portuguese answer to organization's needs about the SRMS that has been defined as the system that enables an organization to develop and implement policies, objectives, and coherent actions, considering the legal, regulatory, and others which the organization subscribes. It applies to aspects of social responsibility that the organization identifies as those who can control and those it can influence.

In this context, this standard is applicable to all types of organizations, dimensions and geographical location, and cultural and social conditions. Its main goal is to support organizations that implement a SRMS to promote the connection to all the stakeholders through a relationship of mutual partnership, achieving mutually satisfactory results (Ramalho et al. 2009).

According to NP4469, the aspects that need to be considered for the implementation of social responsibility (SR) system are as follows: get the commitment of top management to the importance of SR; involve all employees in participation and collaboration in a new culture; integrate the (SR) management system into the organization's strategy; obtain commitment from the entire organization; analyze the current situation of the socio-environmental practices; develop an action plan, including indicators appropriate to the organization; evaluate the action plan; implement the continuous improvement of the SR Policy; and promote communication stakeholders.

In 2010, IPQ published the Portuguese standard NP 4469-2: 2010 SRMS – Part 2: Guidance for Implementation (IPQ 2010).

This standard supports the application of NP 4469-1: 2008 and allows any organization to develop and to implement the social responsibility policy, principles, objectives, activities, and actions, considering the legal requirements and others that the organization subscribes.

The NP 4469-2: 2010 interprets each requirement of the NP 4469-1: 2008, serving as a guide for its implementation through the presentation of real examples and a self-diagnosis in each requirement.

The updated version was published on January 15th of 2019 of the Portuguese standard NP 4469: 2019 – “Social Responsibility Management System: Requirements and guidelines for its usage” which aims to establish organizations' commitment to sustainability issues.

This standard is IPQ (2019) and it is a contribution to the organizations' response to the 2030 Sustainable Development Agenda, preparing them for new challenges and trends in the global economy and the use of innovative opportunities and solutions, responding to the increased demand, and consequently improving competitiveness. It, also, improves relations with stakeholders, increasing credibility and confidence in value chains and continued presence in demanding environmental, social, and governance markets (APCER 2019).

The requirements of the standard (IPQ, 2019) are organized into ten sections develop and

implement of the SMRM. The starting section is the summary of this standard entitled the “Preamble,” where is explanations about the evolution on time of this standard.

Section 0 “Introduction” has been divided in two complementary subsections: framework of the social responsibility on organizations and the social responsibility management model.

Section 1 “Objective and field of application” defines the requirements for all public and private organizations, several types, dimensions and even the juridic personality to establish, to implement, to maintain, and to improve the SRMS.

Section 2 “Normative reference” is fully aligned with the NP ISO 9001: 2015 (IPQ 2015a), NP ISO 14001: 2015 (IPQ 2015b), NP 4397: 2008 (IPQ 2008a), ISO 26000: 2010 (ISO 2010), and ISO 45001: 2018 (IPQ 2018).

Section 3 “Terms and definitions” defines 55 key terms and details each one, and some of them have specific notes to justify it with source.

Section 4 “Organizational context” defines requirements related with the definition of the organization’s values and principles, identification of stakeholders, and determination of organization’s scope. Indeed, this section is subdivided into four subsections: understand the organization and its distinctive context, understand the needs and clarify expectations of stakeholders (values and principles), define the scope of the SRMS, and develop the SRMS and verify appropriate documented information.

Section 5 “Leadership” establishes requirements related with SR commitment at the top management, the definition of the social responsibility policy, and roles, responsibilities, and authorities.

Section 6 “Planning” determines requirements related to actions to manage risk-based and opportunity-based approach, set the social responsibility objectives, and develop plans to achieve them.

Section 7 “Support” defines requirements associated with resources for performance of the SRSM system, encourage skills and the promotion of the awareness, manage SR communications, and control the SR documented information to establish, implement, and maintain the liability of the management system.

Section 8 “Operations” describes, on the organizational context, the operational planning and control and prepare the emergency response to social responsibility needs.

Section 9 “Performance assessment” defines actions to monitor, measure, analyze, and assess the SRMS, as well as requirements to internal audit and management review of the SRMS.

Section 10 “Improvement” specifies requirements related to nonconformities, corrective actions that must be taken, and improvement opportunities of the performance assessment in the social responsibility management system.

A comparative analysis of the NP 4469: 2008 with the new version of NP 4469: 2019 is reorganized, specifically in section 4 related with the internal and external organization context. The terms of the context include technological options, business operational resources, and social and environmental issues, among other aspects. There are no significant changes with the definition of values and principles of social responsibility. However, ethical principles must be part of ethical conduct in activity development and transparency in the relationship with stakeholders.

In section 4.1.1.2 “Principles” of the NP 4469 (IPQ 2019) that is related with section 3.2.2 “Principles” of the NP 4469 (IPQ 2008b), there is reorganization of this requirement, based on the following 11 principles: first principle, compliance with the law, collective regulation instruments, and applicable regulations; second principle, respect for internationally recognized conventions and declarations; third principle (new in the updated version), ethical conduct in the development of the activity in accordance with accepted principles of correct or good conduct; fourth principle (increase three levels in the updated version), transparent action, information sharing, and open behavior within the relation of stakeholders; fifth principle (decrease one level in the updated version), recognition of the right of interested parties to be heard and the duty of the organization to react; sixth principle (decrease one level in the updated version), recognition of the direct and indirect aspects of social responsibility of the organization, taking into account the entire

life cycle of its products; seventh principle (decrease four levels in the updated version), adoption of the precautionary principle; eighth principle (decrease two levels in the updated version), privilege to prevent pollution at source; ninth principle (decrease one level in the updated version), accountability for the organization’s actions and omissions and accountability for its conduct in the face of the legitimate concerns of interested parties; tenth principle (decrease one level in the updated version), integration of aspects of social responsibility in the organization’s management systems and in its decision-making process; and 11th principle (decrease one level in the updated version), non-regression, that is, not using the provisions of this standard as a basis for reducing the levels of performance in social responsibility already achieved by the organization.

Another important change has been the loss of several concepts that help the organization to identify stakeholders advising to consider the scale, nature, and geographic location of the organization’s products and activities. In addition, Fig. 1 that allows to identify stakeholders is subdivided based on five criteria, such as:

Figure 1 shows the stakeholder identification based on the following:

- 1. Relation – stakeholders with whom the organization has, or may have in the future, legal, financial, or operational obligations in the form of regulations, contracts, policies, or codes of

conduct (i.e., employees, local authorities, unions) (IPQ 2008b, p. 16).

- 2. Influence – stakeholders that influence or may influence the organization’s ability to achieve its objectives, regardless of whether its actions are aimed at facilitating or hindering its performance (i.e., local authorities, shareholders, and pressure groups) (IPQ 2008b, p. 16).
- 3. Proximity – stakeholders with whom the organization interacts most, including internal stakeholders (i.e., employees and shareholders), stakeholders with long-standing relationships (i.e., business partners), stakeholders from whom the organization it depends on day-to-day operations (i.e., local authorities, local suppliers, or temporary work companies), and stakeholders who live in the neighbor of the organization’s plant (permanent or temporary) (IPQ 2008b, p. 16).
- 4. Dependency – stakeholders who are directly or indirectly dependent on an organization’s activities and products in economic or financial terms (i.e., single employer in the locality or single supplier of goods or services) or in terms of regional or local infrastructure (i.e., schools, hospitals) and to satisfy basic needs (i.e., supply of medicines, water, or electricity). Account should be taken of the degree of dependence on stakeholders, considering the stakeholders who are most dependent on the organization (i.e., employees and their families, customers who depend on the organization’s products for their health, safety, or survival of suppliers for whom the organization is the dominant customer) (IPQ 2008b, p. 16).
- 5. Representation – stakeholders who, through legal rules, statutes, customs, or culture, can legitimately claim and represent other individuals (i.e., representatives of the local community and consumers, union associations, NGOs). This includes representatives of stakeholders without a voice (i.e., environment and future generations) (IPQ 2008b, p. 17).

Stakeholders	Internal	External	Relation	Proximity	Influence	Dependency	Representation
S1		X	X	x		x	X
S2	X		x	x	x	x	x
..							

Legend: S1 – Suppliers; S2-employees

NP 4469: Portuguese Social Responsibility Standard,
Fig. 1 Stakeholder identification. S1, suppliers; S2, employees

Section 4.3 “The scope of the social responsibility management system” identifies limits and their applicability and includes all activities

promoted directly by the organization and all places where its activities are developed.

In Section 5 “Leadership,” changes are identified in relation to the previous version, namely, in requirements for the demonstration, by the top management, of the leadership and commitment in relation to the management system (5.1). In the current version, there is a reinforcement of the need for compatibility of the policy and objectives with the strategic orientation and the context and in the orientation toward the results and effectiveness of the social responsibility management system. This section also includes the addition of requirements for top management to demonstrate leadership and commitment.

In Section 5.3 “Organizational roles, responsibilities, and authorities,” corresponding to point 3.6.1.2 “Responsibility and authority” of the previous edition, in addition to the existing requirements, top management should assign responsibility and authority to ensure that the integrity of the social responsibility management is maintained when changes are planned and implemented in the respective system. Like other management system standards, NP 4469 also no longer must appoint a management representative for this system.

The organization must determine the actions to address risks and opportunities, related to aspects of social responsibility (6.1.2) and compliance obligations (6.1.3). In determining the significance of aspects of social responsibility (6.1.2), the following should be considered: the views of significant stakeholders, new or planned developments, new or modified activities or products, and irregular conditions and potential emergency situations.

Section 7 “Support” separates requirements relating to competence and awareness, treating them in different subsections. Section 7.5.3 “Information Control” addresses the issue of managing access to documentation information, and the organization must decide on the authorization levels to consult or change the documented information.

Section 8 “Operational” details the need of the organization to establish, to implement, and to maintain one or more procedures to identify

emergency situations and potential accidents and, also, to give information and to promote education to relevant stakeholders and employees that work under its control.

Section 9.2 “Internal audit” provides guidance to the organization that must consider the importance in social responsibility of the processes of the audit program or any change required due to risk-based and opportunity-based approach determined in terms of social responsibility and previous audits.

As common best practice of the ISO, this management system is possible to be certified and, in this sense, the organization publicized its certificate the implementation and certification through the NP 4469 SRMS bring several benefits to organizations, as the following examples: contribution to sustainable development and easy access to new markets, by increasing demand for socially and environmentally responsible products; greater credibility and reputation in the market; greater confidence in the value chain and the final consumer; competitive advantages and better relationship with all stakeholders; attracting and retaining talent, increasing productivity, reducing absenteeism, and reducing costs related to accidents and illnesses; better management of natural resources, with the respective reduction of associated costs; and integration with other management systems (APCER 2019).

Appendix A of the NP 4460-1 (IPQ, 2007) lists several standards and relations between them which allow the organization to implement the four management systems in a global strategy. This standard is characterized by being a management system based on the Plan-Do-Check-Act (PDCA) cycle, and the structure is fully aligned with the ISO 9001: 2015 (IPQ 2015a), ISO 14001: 2015 (IPQ 2015b), and ISO 45001: 2018 (IPQ 2018). Indeed, the justification of this alignment is presented on this appendix.

Appendix B of the NP 4460 lists the aspects of social responsibility to be considered as guidelines for the implementation, and the organization is responsible for identifying the requirements applied to this activity, identifying their significance, and involving its significant stakeholders in the process. These guidelines go from corporate

governance, human rights, labor practices, environment, operational practices, consumers, and society development.

All standards are based on the International Standards Catalogue (ICS) from ISO (2021). This standard is related with other standards on the classification “03. Services. Company organization, management, and quality. Administration. Transport. Sociology,” and the field is “100. Company organization and management. Management systems” and “99. Other standards related to company organization and management.” Also, “13. Environment. Health protection. Safety,” on the field “020. Environmental protection” and “10-Environmental management, including certification and audit, and management systems (EMS).”

For all the reasons, the NP 4469 differs from other social responsibility standards by developing an orientation for stakeholders, for awarding a set of social responsibility principles coherent to main interests and expectations of stakeholders, as it allows the implementation of a management system to provide a single model for the pillars of sustainable development (Ramalho et al., 2009).

Summary

The NP 4469 standard defines the requirements for the social responsibility management system, aims to guide the organization to be more socially responsible, and encourages distinctive practices that enable differentiation and added value for it. These requirements develop and implement the social responsibility policy, objectives, and coherent actions, considering the legal, regulatory, and other requirements that the organization must follow to develop its economic activity.

Additionally, the concept of social responsibility shows a high potential driver of sustainable development (IPQ 2008b, 7). Thus, SRMS assumes itself as a strong risk-based management tool and instrument to distinguish organizations in the strong dynamic market that carried a social, environmental, and economic challenges, to contribute to the sustainable development. In this sense, an SGRS implemented in accordance with

NP 4469 aims to encourage and guide organization’s responsible action in the context of sustainable development challenges (IPQ 2008b, 8).

For the implementation of the NP 4469, social responsibility is understood as the voluntary actions of the organization with a view to creating and to maximizing their positive impacts, as well as reducing or eliminating their negative impacts.

Furthermore, when an organization implements and promotes the certification of the SRMS assumes the objective of continuously improving its performance in this area and, consequently, developing and consolidating relationships of trust and credibility between stakeholders.

This standard is applicable to any type of organization that plans, implements, controls, and improves the social responsibility management system, regardless of its size, sector of activity, and organic structure, among other differences.

Cross-References

- ▶ [AA1000 Series of Standards, The](#)
- ▶ [Corporate Social Responsibility Reporting](#)
- ▶ [Corporate Social Responsibility Strategy](#)
- ▶ [Environmental Report Following GBS Standard](#)
- ▶ [ISO 14001 Standard](#)
- ▶ [Social Responsibility](#)

References

- Castka, P., & Balzarova, M. (2008). ISO 26000 and supply chains – On the diffusion of the social responsibility standard. *International Journal of Production Economics*, 111(2), 274–286.
- Deming, W. E. (1982). *Out of the crisis, center for advanced engineering study*. Cambridge: Massachusetts Institute of Technology.
- Instituto Português de Qualidade (IPQ). (2007). *NP 4460-1: 2007 – Business ethics. Part 1: Requirements and guidelines for preparation and implementation of code of ethics on organizations*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2008a). *NP 4397: 2008 – Occupational health and safety management systems*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2008b). *NP 4469-1: 2008 – Social responsibility management system part 1: Requirements and guidelines for its use*. Caparica: IPQ.

- Instituto Português de Qualidade (IPQ). (2010). *NP 4469-2: 2010 – Management system for social responsibility. Part 2: guidance for implementation*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2015a). *NP ISO 9001: 2015 – Quality management system: Requirements*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2015b). *NP ISO 14001: 2015 environment management system: Requirements with guidance for use*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2018). *NP ISO 45001: 2018 occupational health and safety management systems: Requirements with guidance for use*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2019). *NP 4469: 2019 – Social Responsibility Management System: Requirements and guidelines for its usage*. Caparica: IPQ.
- Instituto Português de Qualidade (IPQ). (2021). *Institutional site*. Caparica: IPQ.
- International Organization for Standardization (ISO). (2010). *ISO 26000:2010, Guidance on social responsibility*. Geneva: ISO.
- International Organization for Standardization (ISO). (2021). *International Standards Catalogue (ICS)*. Geneva: ISO.
- Ramalho, J., Patraquim, P., & Pinto, V. B. (2009). Standardization in organizational social responsibility – International perspective and the Portuguese Case. In *Cadernos Sociedade e Trabalho – Corporate social responsibility organizations*. Lisbon: GEP / Ministry of Labour and Social Solidarity.
- Shewhart, W. A. (1939). *Statistical method from the viewpoint of quality control*. Washington: Graduate School, Department of Agriculture.

Further Readings

- Abreu, R., David, F., & Crowther, D. (2005). Corporate social responsibility in Portugal: empirical evidence of corporate behaviour. *Corporate Governance: The International Journal of Business in Society*, 5(5), 3–18.

Social Accountability International (SAI). (2003). *Norma AA1000 – Assurance standard*. New York: Social Accountability International.

Social Accountability International (SAI). (2014). *SA8000 (2014): International standard for social responsibility 8000*. New York: Social Accountability International.

Nuclear Crisis

- [Chernobyl Disaster, The](#)

Nuclear Energy for Civilian Purposes

- [Chernobyl Disaster, The](#)

Nutrition

- [Hunger and Poverty](#)
- [Malnutrition and Sustainable Management](#)

Nutrition Security

- [Food Security](#)

O

Objectifying of Species

- [Speciesism](#)

Observance

- [Compliance](#)

Obsolescence

- [Sufficiency](#)

Occupational Health and Safety

- [Health and Safety](#)

Occupational Hygiene

- [Health and Safety](#)

Occupational Safety and Health Administration

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Synonyms

[OSHA](#)

Introduction

The Occupational Safety and Health Administration (OSHA) is a US public agency. As part of the Department of Labor, OSHA is responsible for issuing and enforcing occupational safety and health standards.

Since OSHA's establishment in 1970, the number of workers who have suffered an accident, contracted a disease, or even died at work in the United States has decreased by more than 65%, although the employment has almost doubled (OSHA 2018). Undoubtedly, OSHA has significantly contributed to the reduction of work-related injury, illness, and deaths in the United States, by performing different types of activities.

OSHA prepares and issues standards to help employers prevent hazards in the workplace. It also conducts on-site inspections to verify

compliance with such standards and issues penalties for those who breach the imposed rules.

In addition, OSHA promotes cooperative programs through which it increases employer and employee awareness and understanding of occupational hazards, so that they can improve how they manage such risks.

OSHA systematically interacts with employers, workers, business associations, unions, safety and health professionals, and public organizations, including the National Institute for Occupational Safety and Health.

The History

OSHA was founded at the beginning of the 1970s to deal with the serious problem of dangerous working conditions to which workers were subjected across the United States. Given the complexity and sensitivity of the matter, the creation of OSHA received the bipartisan support of the Congress and represented the culmination of decades of reforms. OSHA was created by the Williams-Steiger Occupational Safety and Health Act of 1970 (OSH Act), which was signed into law by President Richard N. Nixon on 29 December. Four months later, on 28 April 1971, OSHA was officially established and George Guenther was appointed as Assistant Secretary, OSHA's highest officer (OSHA 2010).

During the first 2 years of activity, OSHA adopted interim standards of safety and health in the workplace, known as "consensus standards": in other words, it implemented existing recommendations from professional organizations and it recognized rules adopted under old laws, which were already used in the private sector in the United States.

In January 1972, the OSHA Training Institute was established to train OSHA compliance officers (i.e., inspectors) and safety personnel of both private sector and federal governments.

In the meantime, OSHA began to draft its own standards. The first OSHA standard was issued in June 1972 and focused on the protection of workplaces from asbestos. Following this, OSHA issued and updated many other standards for the

prevention of occupational injuries and illnesses in different sectors and in relation to a number of hazards. Table 1 presents a non-exhaustive list of OSHA standards, which pertain to four industries: Construction, Maritime, Agriculture, and General Industry (this latter referring to all industries not included in the previous three).

In 1972, OSHA also approved the South Carolina and Oregon State plans: for the first time, OSHA's protection was extended to cover state and local government workers.

Occupational Safety and Health Administration, Table 1 Main OSHA standards and regulations

Asbestos (June 1972)	Chemical processes (February 1992)
Construction safety (November 1972)	Working in confined spaces (January 1993)
Carcinogens (January 1974)	Fatal falls in construction (August 1994)
Vinyl chloride (October 1974)	Asbestos (August 1994 – update)
Coke oven emissions (October 1976)	Logging operations (October 1994)
Commercial diving operations (July 1977)	Construction scaffold safety (August 1996)
Cotton dust (June 1978)	Methylene chloride (January 1997)
Hearing conservation (January 1981)	Marine terminals (July 1997)
Hazard communication on chemicals (November 1983)	Healthcare (January 2001)
Ethylene oxide (June 1984)	Fire protection in shipyard employment (September 2004)
Ground-fault circuit interrupters (July 1986)	Hexavalent chromium (February 2006)
Field sanitation in agricultural establishments (May 1987)	Walking/working surface safety (May 2010)
Benzene (September 1987)	Cranes and derricks (August 2010)
Grain handling (December 1987)	Hazard communication on chemicals (March 2012 – update)
Laboratory safety (January 1990)	Construction safety (April 2014 – update)
Bloodborne pathogens (December 1991)	Walking/working surface safety (November 2016 – update)

Created by this Author

The year 1975 saw the launch of OSHA's On-site Consultation Program to assist small businesses exposed to a high level of occupational hazards. The program, which is still running, helps small employers understand, identify, and manage safety and health risks in their workplace; it also ensures training of workers and supervisors. The success of this program is attested by the huge number of firms involved, with over one million site visits since the 1970s.

In 1978, OSHA inaugurated the New Directions Program (now Susan Harwood Grants), through which it has supported the training and education of over one million employers and workers to date.

The year 1980 was a milestone in OSHA's history: an executive order by US President Jimmy Carter imposed OSHA coverage for millions of federal workers, in addition to the private sector employees who were already protected by the Agency's regulations and standards.

To encourage employers to rethink and strengthen the mechanisms for the prevention of workplace accidents and occupational diseases, OSHA introduced certain Voluntary Protection Programs in 1982. Thanks to these programs, the businesses with the most advanced occupational risk management systems have been flagged as positive examples to be emulated by other employers.

OSHA took a further step in the improvement of safety and health at the workplace in 1989, when it published voluntary guidelines to stimulate the adoption of more effective programs in US businesses and public agencies.

In its almost 50 years of life, OSHA has often intervened to supervise and ensure employee health and safety in exceptionally dangerous circumstances. One might as well say that OSHA's history has sadly been caught up in industrial disasters since 1975, when Americans realized the toxic nature of kepone, a chemical substance produced by a small firm in Virginia and then dumped into a river. The kepone case highlighted the terrible impact of chemical products on workers (57 in this case were permanently affected), other individuals, and the environment.

Faced with this situation, OSHA became even more aware of the importance of its role in the protection of human health and wildlife; it thus renewed its efforts to develop further and broaden its expertise.

Ten years later, OSHA ordered more detailed inspections in all US chemical plants manufacturing or processing methyl isocyanate, the substance that had recently caused thousands of deaths in the Bhopal disaster in India. This serious episode also prompted OSHA to intensify inspections in all chemical factories.

Similarly, in 1987, the L'Ambiance Plaza disaster in Connecticut, where a 16-storey building under construction completely collapsed killing 28 workers, drove OSHA to adopt stronger regulations for the construction industry.

In 1989, after the notorious Exxon Valdez oil spill into the Gulf of Alaska, OSHA sent inspectors to monitor worker protection and imposed health and safety training. In the same year, a series of explosions at the Phillips petrochemical plant in Pasadena, Texas, provoked the death of 23 workers. This tragedy highlighted the need for new regulations, which were introduced through the publication of the Process Safety Management standard in 1992.

Following the Imperial Foods fire in North Carolina, which killed 25 poultry workers who had been trapped in the building, OSHA ran investigations and ordered the adoption of more stringent rules. This led North Carolina to approve a new State Plan for occupational health and safety in 1992.

In 2001, OSHA officers supported and monitored the workers engaged in the clean-up and recovery operations following the September 11 terroristic attacks.

A few years later, OSHA imposed the largest fine in its history: the sanction was applied to BP after an explosion in a Texan oil refinery in 2005 that killed 15 workers and injured 160. This tragic event also led to an increase in inspections in all American refineries.

In 2008, OSHA started to focus on the hazards in processing industrial combustible dust. In particular, OSHA's concern had been raised by several explosions, including in the Imperial Sugar

Refinery in Georgia, which caused the death of 14 workers and injuries to another 30.

Finally, OSHA had a key role in the protection of workers employed in the clean-up following the catastrophic BP Deepwater Horizon oil spill in the Gulf of Mexico. The accident, caused by an explosion, occurred in April 2010, leading to the death of 11 workers and creating one of the worst environmental disasters ever. At the time, OSHA operated as part of the coordinated federal response to support workers: it conducted 4200 on-site visits and analyzed over 7000 air samples collected at clean-up areas, both on- and off-shore. Moreover, it reviewed 90,000 air samples taken by other federal agencies and by BP.

Mission/Objectives/Focus Areas

OSHA aims to “ensure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance” (OSHA 2018).

Obviously, worker protection requires the employer’s strong awareness of work-related hazards and serious commitment to their effective and continuous prevention and management. For this reason, OSHA promotes the circulation of information on occupational injuries and illnesses, supports education and training of both employers and workers, provides occupational safety and health standards, and runs on-site inspections to verify the implementation of such standards.

OSHA’s regulations protect most private sector workers and some public sector workers in the 50 States, but also in some territories under federal authority, including the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, Northern Mariana Islands, Wake Island, Johnston Islands, and the Outer Continental Shelf Lands. More specifically:

a) OSHA covers private sector employers and workers either directly or indirectly. In the first case, OSHA coverage operates under the rules released by Federal OSHA itself, while in

the second case OSHA checks, approves, and monitors the application of State plans, which have been prepared and adopted by individual states.

- b) Workers employed in state and local government agencies benefit from the OSH Act if they work in a state where an OSHA-approved specific state plan is in force.
- c) Federal agency workers are protected by OSHA, which is entitled to inspect workplaces but not to fine the agencies in the event of discovering any irregularities.
- d) Self-employed workers, immediate family members of farm employers, and workers operating in sectors subject to control of other federal agencies (e.g., the Coast Guard and the Department of Energy) are excluded from OSHA coverage.

There are currently 22 state plans covering both private sector and state and local government workers; in addition, there are 6 state plans covering only state and local government workers. State plans must provide at least the same protection for workers as the Federal OSHA programs. Furthermore, state plans receive financial contributions from OSHA for up to 50% of their costs.

Structure of Governance

OSHA is a regulatory agency of the US Department of Labor and it is administered by the Assistant Secretary of Labor for Occupational Safety and Health. The Assistant Secretary answers to the Secretary of Labor, who is a member of the cabinet of the President of the United States. The Assistant Secretary is the OSHA’s executive officer and performs his or her duties with the support of the Principal Deputy Assistant Secretary and another Deputy Assistant Secretary. The Deputies coordinate and supervise OSHA’s eight Directorates and ten Regional Offices; these offices are located in Boston, New York, Philadelphia, Atlanta, Chicago, Dallas, Kansas City, Denver, San Francisco, and Seattle.

According to the OSH Act of 1970, further bodies are entrusted with advisory functions.

The National Advisory Committee on Occupational Safety and Health advises, consults with, and makes recommendations to the Secretary of Labor (and the Secretary of Health and Human Services) with reference to programs and policies for the prevention of accidents in the workplace and work-related diseases. The National Advisory Committee is appointed by the Secretary of Labor and comprises 12 members, who must possess experience and expertise on occupational safety and health and represent different stakeholders: employers, workers, occupational safety and health professionals, and the public. The members serve 2-year terms.

The Secretary of Labor may also appoint short-term advisory committees to assist him or her in setting the standards. Such committees have a maximum of 15 members, including one member recommended by the Secretary of Health and Human Services. The other members represent employers and workers, in equal number, and other health and safety agencies. All the members must be highly qualified in the areas the standards cover and must not have any direct economic interest in the proposed standards.

Activities/Major Accomplishments/Contributions

Setting standards for the prevention of workplace injuries and work-related illnesses is OSHA's core activity. In addition, OSHA has the duty of conducting inspections to verify corporate compliance with the regulations in force. In order to ensure that workplaces are free of severe hazards, OSHA also provides training, outreach, education, and assistance to employers, workers, and professionals in occupational safety and health. All these activities are described below.

Standard-Setting

The OSH Act of 1970 gave OSHA broad authority in issuing workplace safety and health standards (Robinson et al. 2010). In the first 2 years

after the creation of OSHA, the Secretary of Labor had the power to adopt "interim standards," usually through the implementation of preexisting consensus standards. On 29 April 1973, this option ceased to exist: since then, OSHA has exercised its regulatory function by establishing "permanent standards" and "emergency standards."

A "permanent standard" can be either a newly proposed standard or an amended one. In both cases, OSHA may receive recommendations from the National Institute for Occupational Safety and Health (NIOSH), established by the OSH Act of 1970 within the Department of Health and Human Services. NIOSH performs research and experimental programs for the prevention of work-related injuries, illnesses, disability, and death. Based on the results of such activities, NIOSH is entitled to make scientifically based recommendations to OSHA for the preparation and issue of a new standard or the improvement of an existing one (Levy et al. 2018). However, the standard-setting process also involves other interested parties, such as state and local governments, associations representing employers and workers as well as other nationally recognized standard-setters. In particular, the law gives small businesses the right to express their views during the standard-setting process.

The process starts with preliminary rulemaking activities, which enable OSHA to understand the need for a new or revised standard, conduct research, and develop feasibility analyses. If OSHA decides to proceed, it draws up a draft rule following the recommendations and opinions of its advisory committees: the National Advisory Committee on Occupational Safety and Health, the Advisory Committee on Construction Safety and Health, the Maritime Advisory Committee for Occupational Safety and Health, and other short-term committees specifically appointed by the Secretary of Labor. Then, OSHA publishes the draft standard, which is subject to a public consultation for a minimum period of 2 months. Moreover, OSHA holds public hearings to discuss the content of the draft standard with qualified

counterparts and other interested stakeholders. When the revision of the draft rule has been completed, the final standard is officially issued and becomes effective. However, the entire standard-setting process is so complex that it can require several years.

The procedure can be significantly shortened and simplified when there is the urgent need to protect workers from grave and imminent dangers. In such circumstances, the Secretary of Labor has the authority to adopt an “emergency standard.” This is a temporary standard, whose creation bypasses the formalities designed for permanent standards. After issuing an emergency standard, the Secretary of Labor must immediately activate the procedure to transform it into a permanent standard; the transition must be concluded within 6 months. Throughout its history, OSHA has adopted only nine emergency standards, but five of them were rescinded.

OSHA’s standards must be implemented by private and public sector employers, according to OSHA’s coverage, and respected by all workers. In particular, OSHA’s standards identify and require employers to adopt procedures and tools through which hazards to safety and health in the workplace can be reduced or even eliminated. According to OSHA’s standards, the first step in occupational safety and health risk management must be the adoption of collective measures (such as establishment of fall protection and ventilation systems). Where necessary, these must be integrated (or replaced) by the distribution of personal protective equipment (such as safety footwear, helmets, masks, and respirators) to all the workers exposed to the risk. The law also states that the cost of the equipment must be borne entirely by the employer.

Many processes developed in construction, maritime, agriculture, and general industry are subject to specific standards. Evidently, measures vary according to the industry.

Where a standard does not exist, employers are still obliged by the OSH Act to respect a “General Duty Clause,” which requires the provision of a

workplace free from recognized hazards that could cause death or serious physical harm to workers. As the normal procedure to release a permanent standard is very slow, the General Duty Clause has special significance.

Inspections, Citations, and Fines

OSHA is also responsible for the enforcement of occupational safety and health regulations and standards. In this regard, OSHA has the power and duty to conduct scheduled and spot inspections (Ko et al. 2010; Jung and Makowsky 2014).

If OSHA suspects that an employer is breaching the law and has failed to implement standards, it has the authority to perform an investigation without advance notice. Inspections are performed in the case of imminent danger, fatalities, and hospitalizations. Inspections can also be requested by workers who are seriously concerned about the existence of hazards in their workplace: in such an event, they have the right to file a complaint with the nearest OSHA office. In this regard, it is important to underline that OSHA’s Whistleblower Program protects any worker who has filed a complaint and requested an inspection, prohibiting any type of retaliation (such as dismissal, demotion, or denying benefits or promotion) by the employer.

When OSHA decides or accepts to conduct on-site inspections, it sends trained compliance officers from its regional offices to visit the premises and interview both the employer and the employees. If the compliance officers find violations of occupational safety and health legislation and standards, OSHA can sanction the employer by issuing citations and fines. Citations may specify corrective actions to be made and a reasonable time in which to resolve the problem. OSHA can also order follow-up inspections to check on progress made.

However, both employers and workers can appeal to the Occupational Safety and Health Review Commission (OSHRC) to contest OSHA’s decisions. OSHRC is an independent federal agency, separate from OSHA and the Department of Labor. It is appointed by the

President of the United States and it is composed of three qualified members with a 6-year mandate. OSHRC acts as an administrative court: it receives evidence, holds hearings, and decides about citations and fines issued by OSHA and contested by an interested party. An employer may challenge any alleged violation discovered by OSHA inspectors; in addition, he or she may contest the corrective measures imposed by the citation and the date by which they must be implemented. Finally, the employer may also contest the amount of the fine to be paid. By contrast, workers (or their representatives) may only challenge the time allowed to the employer to undertake the corrective actions.

Cooperative Programs

Several programs encourage cooperation between OSHA and its stakeholders, including employers, employees, trade associations, unions, government agencies, and occupational safety and health professionals. These initiatives help employers build a safer and more healthful workplace, in the interest of workers. There are also obvious advantages for the employers themselves, because effective processes of risk prevention result in fewer accidents, lower worker compensation insurance premiums, lower rates of worker absence and turnover, and better reputation. Furthermore, companies that complete certain programs (Leeth 2012) appropriately may be temporally exempted from OSHA's periodic inspections.

The *Alliance Program* allows OSHA and its stakeholders to share information and work together in order to develop new practices and tools for the effective management of occupational hazards.

The *OSHA Challenge* program promotes cooperation between employer and employees, on the one hand, and OSHA-approved volunteer Challenge Administrators, on the other. Challenge Administrators support business operators across a three-stage program, which should lead to the implementation of a safety and health management system in line with the OSHA voluntary

Guidelines of 1989. After the successful completion of each stage, OSHA Challenge participants are awarded a letter of recognition from OSHA, which can boost their reputation.

Another remarkable initiative is the *Safety and Health Achievement Recognition Program* (SHARP), which focuses on small businesses. SHARP status is awarded to small employers who adopt exemplary procedures to manage occupational risks: this not only improves the firm's reputation, but also ensures exemption from OSHA programmed inspections for up to 2 years.

Major corporations, firms involved in large construction projects, and government agencies can participate in the *OSHA Strategic Partnership Program* (OSPP), which encourages cooperation at multiregional and national level as well as at local level.

Firms and federal agencies that have maintained injury and illness rates below the national averages of their industry can apply for OSHA's *Voluntary Protection Programs* (VPP). To enter a VPP, firms and federal agencies must pass rigorous on-site assessment. VPP participants are then reevaluated every 3 to 5 years to maintain their status, which foresees exemption from OSHA's programmed inspections.

Cross-References

- [Health and Safety](#)
- [Rights of Employees](#)
- [Workplace Health Promotion](#)

References

- Jung, J., & Makowsky, M. D. (2014). The determinants of federal and state enforcement of workplace safety regulations: OSHA inspections 1990–2010. *Journal of Regulatory Economics*, 45(1), 1–33.
- Ko, K., Mendeloff, J., & Gray, W. (2010). The role of inspection sequence in compliance with the US Occupational Safety and Health Administration's (OSHA) standards: Interpretations and implications. *Regulation and Governance*, 4(1), 48–70.

- Leeth, J. D. (2012). OSHA's role in promoting occupational safety and health. *Foundations and Trends in Microeconomics*, 7(4). <https://doi.org/10.1561/07000000055>.
- Levy, B. S., Wegman, D. H., Baron, S. R., & Sokas, R. K. (Eds.). (2018). *Occupational and environmental health*. New York: Oxford University Press.
- OSHA. (2010). *OSHA celebrates 40 years of accomplishments in the workplace*. Retrieved 5 August 2019, from <https://www.osha.gov/osha40/timeline.html>
- OSHA. (2018). *All about OSHA*. Available at https://www.osha.gov/Publications/all_about_OSHA.pdf
- Robinson, R. K., McClure Franklin, G., & Wayland, R. F. (2010). *Employment regulation in the workplace: Basic compliance for managers*. Armonk: M.E. Sharp. www.osha.gov. Accessed 5 Aug 2019.

Ocean Economy

- [Blue Economy \(Sustainability\)](#)

Ocean Management

- [Ocean Sustainability](#)

Ocean Pollution

- [Exxon Valdez](#)

Ocean Resource Conservation

- [Ocean Sustainability](#)

Ocean Resources

- [Marine and Coastal Resources](#)

Ocean Sustainability

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Synonyms

[Aquatic sustainability](#); [Blue economy](#); [Marine governance](#); [Ocean management](#); [Ocean resource conservation](#)

Introduction/Definition

The importance of our oceans to the proper functioning of our planet and the well-being of all

species, including humans, is immense. The ocean covers more than 70% of the earth's surface, playing a key role in the regulation of global climate. It is the largest carbon sink, contributing as much as 83% to the global carbon cycle, and taking up around 23% of the total anthropogenic CO₂ emissions (Hauck et al., 2020; Heinze et al., 2015). The ocean absorbs and distributes solar heat and precipitation through its currents and evaporation processes, supporting the earth's temperature and weather patterns (Manabe, 1969). In addition, the ocean provides habitat for a large abundance and biodiversity of species, forming roughly 12 different types of ecosystems, such as coral reefs, mangroves, and seagrasses that sustain key ecosystem services (Cisneros 2016; Barbier, 2017). For example, more than half of the world's oxygen originates from the ocean through the photosynthetic activity of marine plants and bacteria. Ecosystems such as mangroves largely contribute to carbon sequestration, and shoreline stabilization and erosion control (Barbier, 2017). That is, the dense roots of mangrove forests slow down water flows and encourage the deposition of sediments which reduces erosion of coastlines. Besides these, oceans provide several other ecosystem services that support human livelihoods, in terms of subsistence, economic, and cultural values. More than 3 billion people depend on marine resources for subsistence. Artisanal and small-scale commercial fisheries are especially important in developing countries, mainly contributing to food security, economic growth, and job creation (Barbier, 2017; Cisneros-Montemayor et al., 2016). Recreation and tourism, transportation and spiritual/cultural well-being are other services provided by marine ecosystems. Many coastal communities, especially indigenous peoples and small rural communities have expressed the ensemble of their identity to be intrinsically connected to the ocean (Cisneros-Montemayor et al., 2016).

Yet, overexploitation, habitat deterioration, and poor management of marine resources originating from human activities are considerably impacting marine ecosystems. Climate change and related increases in carbon dioxide into the atmosphere are challenging the ocean's capacity

to absorb carbon, leading to ocean acidification (Doney et al., 2020; Fabry et al., 2006). Climate change, as well as overfishing and pollution (e.g., industrial activity byproducts, agricultural run-off, sewage) are also responsible for losses in species abundances and biodiversity and changes in species distribution throughout the globe (Coll et al., 2008; Hatje et al., 2018; Noyes et al., 2009; Pecl et al., 2017). Ocean noise originating from activities such as shipping, drilling and tourism is also known to affect sensitive species like cetaceans (Weilgart, 2007). These anthropogenic impacts influence long-term development and sustainability. As a result, to reap long-term benefits, it is critical to find a solid and comprehensive solution for ocean sustainability (Lubchenco et al., 2016). Here we discuss long-term ocean sustainability.

The Sea and the Sustainable Development Goals of the United Nations

Since the United Nations Member States approved the Agenda for Sustainable Development in September 2015, there has been a need to better understand the interconnections and relationships among the 17 sustainable development goals defined in the agenda (SDGs) (Le Blanc et al., 2017). The SDGs are the blueprint to achieve a better and more sustainable future for all, they are:

- Goal 1: "No Poverty".
- Goal 2: "Zero Hunger".
- Goal 3: "Good Health and Well-Being".
- Goal 4: "Quality Education".
- Goal 5: "Gender Equality".
- Goal 6: "Clean Water and Sanitation".
- Goal 7: "Affordable and Clean Energy".
- Goal 8: "Decent Work and Economic Growth".
- Goal 9: "Industry, Innovation, and Infrastructure".
- Goal 10: "Reduced Inequalities".
- Goal 11: "Sustainable Cities and Communities".
- Goal 12: "Responsible Consumption and Production".

- Goal 13: “Climate Action”.
- Goal 14: “Life Below Water”.
- Goal 15: “Life on Land”.
- Goal 16: “Peace, Justice and Strong Institutions”.
- Goal 17: “Partnerships”.

The health of the ocean, particularly regarding its associated resources and human well-being, is being more recognized as inextricably interwoven. The ocean is crucial for long-term development since it covers more than two-thirds of the globe’s surface. Daily, more than 3.3 billion people depend on the ocean. Wild-caught and farmed seafood provide nearly 20% of the average per capita animal protein intake in countries such as Bangladesh, Cambodia, the Gambia, Ghana, Indonesia, Sierra Leone, Sri Lanka, and several small island developing states. Ocean foods also provide essential nutrients such as omega-3 fatty acids, vitamins, and other micronutrients such as calcium, iron, and zinc. In 2018, mariculture and coastal aquaculture produced 30.8 million tonnes of aquatic organisms, most of which were mollusks (FAO, 2020). By providing resilience, sustaining, and improving livelihoods, and promoting food security and poverty reduction and eradication, these contribute to SDGs 1 (No Poverty), 2 (Zero Hunger), 3 (Good Health and Well-Being), 8 (Decent Work and Economic Growth), and 14 (Life below water).

Furthermore, the oceans are the primary driver of global temperature, a significant sink for greenhouse gases, and a source of oxygen while supporting huge and diverse biodiversity. This activity contributes to the achievement of SDG 13 in part (Climate action). The accessibility to the ocean and the associated nearshore resources are vital components of ocean literacy. Ocean literacy is defined as an understanding of the ocean and our relationship with it (Santoro et al., 2017). Understanding the fundamental concepts necessary for sound decision-making in ocean sustainability and human health is vital. This factor will impact the human populations’ preparedness and resilience. To reach SDG 4 (Quality education), a sustainable blue economy that supports and promotes ocean literacy might be implemented (von Schuckmann et al., 2020). A sustainable blue

economy is the use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean and the ecosystem (Phelan et al., 2020).

Frameworks for Ocean-Based Sustainability

Ocean sustainability embodies the approach employed to manage our oceans and the benefits they provide. A sustainability driver is any natural or manufactured force that causes a change in an ecosystem, either directly or indirectly. Negative environmental and social consequences must be minimized, while positive social and environmental advantages must be encouraged, all while ensuring profits for industries and governments. Sustainability management evaluates production processes and supports activities like planning and control, human resources, finance, and organization to achieve this motive. Ocean sustainability incorporates the approach required to manage our ocean and the services it provides. To realize the full potential of the ocean economy, it is relevant to effectively manage the ocean, use its resources sensibly, and reduce detrimental environmental impacts. Human pressure on marine ecosystems will only increase unless governments take sustainable measures to protect the ocean.

Due to the diverse uses of marine ecosystem resources, sustainable ocean development requires a comprehensive plan that considers social, cultural, economic, and governance elements, as well as environmental ones (Neumann et al., 2017; Visbeck et al., 2014). The Circles of Coastal Sustainability (CCS) framework incorporates and expands on Circles of Sustainability (James, 2014), a method for assessing ecological, economic, political, and cultural domains to understand complexity across multiple dimensions with social and environmentally sustainable outcomes in mind. Some frameworks go beyond checking environmental quality to identify the causes and consequences of environmental degradation linked to socioeconomic factors, thus connecting scientific findings with “real-world” issues and providing a more valuable and informed scientific base for resource management decisions. The Drivers

Pressures State Impact Response (DPSIR) and the Systems Approach Framework (SAF) (Elliott et al., 2017; Gari et al., 2014; Newton & Elliott, 2016) are two examples of frameworks that encompass a wide variety of sizes, methodologies, and timeframes. Despite using comparable frameworks in assessment methods such as the World Ocean Assessment to include both natural and social components of ecosystems, finding a balance between the two still is difficult; social variables are often disregarded in the assessment process.

A comprehensive coastal sustainability framework should encompass international policy goals such as the SDGs. It should improve coastal ecosystem sustainability and management by promoting the development of a framework that is able to assess the success of large-scale interventions and responses. Besides the SDGs, the Sendai Framework for Disaster Risk Reduction, Paris Agreement, and Aichi biodiversity goals are other international policies tackling societal challenges such as climate change, severe events, poverty, and marine systems. Another example is the Ocean Health Index (OHI) that classifies ocean health based on ten widely agreed-upon societal goals (Alcamo & Bennett, 2003). Its goal is to serve as a critical reference point for future progress and inspire a comprehensive ocean strategy, considering both detrimental and beneficial effects. Consequently, data input quality has a considerable influence on OHI outcomes. The OHI provides helpful visual assistance, but the underlying statistics are complex and based on assumptions that are easily changed by data quality. The framework addresses how the degradation of coastal ecosystem services may affect human well-being and how power relations, overlaps, and conflicts may influence management and contribute (or not) to the long-term sustainability of ecosystems and human well-being.

Innovation and Solutions Based on the Ocean

Developing a sustainable ocean economy may be difficult because of the ocean's immensity and importance to the global economy and people's lives. The ocean is more than just a source of

revenue for billions of people. Humans are intrinsically connected to the ocean spiritually, culturally, and recreationally. Small-scale solutions and high-level initiatives may contribute to developing a long-term ocean economy based on the three Ps of adequate protection, long-term production, and fair prosperity. Human activities must be controlled wisely to conserve biodiversity, vital ecosystems, and the cultural and spiritual importance of the ocean.

Some preventive measures include improving water conservation by reducing our water usage in homes, farms, and businesses, reducing the incorporation of polluting substances (trash) into the seas, and preventing plastics from seeping into the ocean.

Proper disposal of plastic waste, recycling techniques, and eliminating unnecessary plastics is a solution. Making companies responsible for their plastic usage by applying the Extended Producer Responsibility (EPR) principle is an excellent strategy to prevent ocean plastic pollution. The EPR is a policy approach under which producers are given a significant financial or physical responsibility for the treatment or disposal of post-consumer products. Among the advancements in emerging countries are investments in recycling technology, infrastructure, and garbage collection systems. Another solution is the use of precision farming, this is referred to as an approach to farm management that uses information technology (IT) to ensure that crops and soil receive exactly what they need for optimum productivity. This is to ensure the protection and sustainability of the environment and also help to reduce nutrient and sediment runoff into the ocean.

Management of Ocean Cost and Finance

In running ocean-related activities, there are various costs to be incurred. The current financial cost of protecting our ocean is vast. Thus, a huge financial resource is needed for general biodiversity conservation. Apart from the fact that there is a funding gap, investing in ocean sustainability requires about half of the cost of the expenses needed for general biodiversity conservation (Johansen & Vestive, 2020; Sumaila et al., 2020).

The demand for and supply of financial resources for investment in ocean-related economic activities and governance is the subject of ocean finance. Ocean finance must be appropriate and directed toward sustainable use and control of the ocean and its resources to sustain the ocean economy. Generating, investing, aligning, and accounting for financial resources are important aspects of funding. Individuals, public and private organizations, governments, and other non-governmental/inter-governmental institutions can access and use financial instruments locally, nationally, and internationally (Sumaila et al., 2020).

Sensible and stable regulatory policies should be established to generate funding, and investment is required to manage the cost and finance. This issue may be accomplished by revising laws and enacting rules that enhance natural capital management and encourage and reward social business and new forms of capital (Morgan & Network, 2014; PEMSEA, 2015), therefore, leading to the creation of regulatory frameworks in the fishing industry that protect tenure and provide rigorous enforcement mechanisms (Holmes et al., 2014; Thiele & Gerber, 2017) or policies that encourage technology transfer and incentivize renewable energy (Hemer et al., 2018).

Governments should also establish conditions that allow people to access credit, savings, micro insurance, and other services (Sumaila et al., 2020). Further, market-based benefits, like certification, can boost project investment opportunities by ensuring sustainability across the supply chain and introducing more transparent monitoring methods (Lubchenco et al., 2016). Increased openness and adequate national, regional, and global fishing data infrastructure should be established to improve knowledge sharing and facilitate both management and remediation. More thorough and consistent monitoring and reporting on finances for a sustainable ocean economy, particularly biodiversity financial flows, are required in both the public and private sectors (OECD, 2019). This provides expenditure that contributes to the conservation, sustainability, and restoration of biodiversity.

Individually and regionally, countries should invest in terms of data and analysis, while national and state organizations must be able to track

expenditures (Sumaila et al., 2020). There is a need to enhance human capacity for gathering, investing, and coordinating ocean financing in many developing maritime nations to produce the knowledge needed to attract investors into the ocean economy. Practical capacity training in ocean finance, insurance, and fiscal mechanisms is needed to promote investment in a sustainable ocean economy, particularly from multilateral organizations or bilateral aid (Sumaila et al., 2020).

Summary

The term “ocean sustainability” could be referred to as a term to manage the seas and the associated resources. The Sustainable Development Goals (SDGs) are a framework for achieving a better and more sustainable future for all people by increasing resilience, supporting, and strengthening livelihoods, fostering food security, and eradicating poverty. SDG 14 is to conserve and use oceans, seas, and marine resources for sustainable development while also guaranteeing human well-being and adequate ecological function. Developing a sustainable ocean economy may be challenging because of the ocean’s vastness and significance to the global economy and people’s lives. Small-scale solutions and high-level efforts might help build a long-term ocean economy based on proper conservation, long-term production, and equal wealth. Human activities should be managed carefully to protect biodiversity, critical ecosystems, and the ocean’s cultural and spiritual significance. The ocean affects all living creatures, which supports the earth’s temperature and weather patterns by transporting heat from the equator to the poles. Similarly, it plays an essential role in controlling CO₂ levels in the atmosphere by absorbing a part of anthropogenic carbon emissions. On the other hand, humans are having a detrimental influence on the ocean waters. The ocean environment is influenced by acidification, pollution, overfishing, irregular, unreported, unregulated fishing, drilling, ocean warming, and deterioration of ocean-sensitive habitats and ecosystems. These human influences affect long-term development. Consequently, it is essential to investigate a robust and

complete ocean sustainability solution to gain long-term advantages. To guarantee the long-term existence of future generations, the global ocean must be protected and managed. We must take intelligent actions to end hazardous pollutants and support the ocean's treasures to guarantee its long-term viability.

Cross-References

► Blue Economy (Sustainability)

References

- Alcamo, J. N., & Bennett, E. M. (2003). *Ecosystem services and human Well-being. A framework for assessment*. World resources institute. Washington DC, USA: Island Press.
- Barbier, E. B. (2017). Marine ecosystem services. *Current Biology*, 27(11), R507–R510. <https://doi.org/10.1016/j.cub.2017.03.020>.
- Cisneros-Montemayor, A. M., Pauly, D., Weatherdon, L. V., & Ota, Y. (2016). A global estimate of seafood consumption by coastal indigenous peoples. *PLoS One*, 11(12), e0166681. <https://doi.org/10.1371/journal.pone.0166681>.
- Coll, M., Libralato, S., Tudela, S., Palomera, I., & Pranovi, F. (2008). Ecosystem overfishing in the ocean. *PLoS One*, 3(12), 3881. <https://doi.org/10.1371/journal.pone.0003881>.
- Doney, S. C., Shalhin Busch, D., Cooley, S. R., & Kroeker, K. J. (2020). The impacts of ocean acidification on marine ecosystems and reliant human communities. *Annual Review of Environment and Resources*, 45, 83–112. <https://doi.org/10.1146/annurev-environ-012320>.
- Elliott, M., Burdon, D., Atkins, J. P., Borja, A., Cormier, R., De Jonge, V. N., & Turner, R. K. (2017). DPSIR begat DAPSI (W) R (M)! -a unifying framework for marine environmental management. *Marine Pollution Bulletin*, 118(1–2), 27–40.
- Fabry, V. J., Seibel, B. A., Feely, R. A., & Orr, J. C. (2006). Impacts of ocean acidification on marine fauna and ecosystem processes. *ICES Journal of Marine Science*, 65, 414–432. Available at <https://academic.oup.com/icesjms/article/65/3/414/789605>. Accessed June 1, 2022.
- FAO. (2020). *The state of world fisheries and aquaculture 2020*. Rome: Sustainability in action. <https://doi.org/10.4060/ca9229en>.
- Gari, S. R., Newton, A., Icely, J., & Lowe, C. D. (2014). Testing the application of the systems approach framework (SAF) for the management of eutrophication in the ria Formosa. *Marine Policy*, 43, 40–45.
- Hatje, V., Lamborg, C. H., & Boyle, E. A. (2018). Trace-metal contaminants: Human footprint on the ocean. *Elements*, 14, 403–408. <https://doi.org/10.2138/gselements.14.6.403>.
- Hauck, J., Zeising, M., Le Quéré, C., Gruber, N., Bakker, D. C. E., Bopp, L., Chau, T. T. T., Gürses, Ö., Ilyina, T., Landschützer, P., et al. (2020). Consistency and challenges in the ocean carbon sink estimate for the global carbon budget. *Frontiers in Marine Science*, 7, 1–22. <https://doi.org/10.3389/fmars.2020.571720>.
- Heinze, C., Meyer, S., Goris, N., Anderson, L., Steinfeldt, R., Chang, N., Le Quere, C., & Bakker, D. C. (2015). The ocean carbon sink—impacts, vulnerabilities, and challenges. *Earth System Dynamics*, 6(1), 327–358.
- Hemer, M. A., Manasseh, R., McInnes, K. L., Penesis, I., & Pitman, T. (2018). Perspectives on the way forward for ocean renewable energy in Australia. *Renewable Energy*, 127, 733–745.
- Holmes, L., Strauss, K., de Vos, K., & Bonzon, K. (2014). Towards Investment in Sustainable Fisheries: A framework for financing the transition. Environmental Defense fund and the prince of Wales's international sustainability unit. Retrieved from: <https://www.edf.org/oceans/towards-investment-sustainable-fisheries>.
- James, P. (2014). *Urban sustainability in theory and practice: Circles of sustainability*. Routledge.
- Le Blanc D, Freire C, Vierros M. (2017). Mapping the linkages between oceans and other sustainable development goals: A preliminary exploration. Department of Economic & Social Affairs Working Paper No. 149.
- Lubchenco, J., Cerny-Chipman, E. B., Reimer, J. N., & Levin, S. A. (2016). The right incentives enable ocean sustainability successes and provide hope for the future. *Proceedings of the National Academy of Sciences*, 113(51), 14507–14514. <https://doi.org/10.1073/pnas.1604982113>.
- Manabe, S. (1969). Climate and the ocean circulation II. The atmospheric circulation and the effect of heat transfer by ocean currents. *Monthly Weather Review*, 97(11), 775–805.
- Morgan, J. P., & Network, G. I. I. (2014). Spotlight on the market: The impact investor survey. Retrieved August 8, 2014.
- Neumann, B., Ott, K., & Kenchington, R. (2017). Strong sustainability in coastal areas: A conceptual interpretation of SDG 14. *Sustainability Science*, 12(6), 1019–1035.
- Newton, A., & Elliott, M. (2016). A typology of stakeholders and guidelines for engagement in transdisciplinary, participatory processes. *Frontiers in Marine Science*, 3, 230.
- Noyes, P. D., McElwee, M. K., Miller, H. D., Clark, B. W., Van Tiem, L. A., Walcott, K. C., Erwin, K. N., & Levin, E. D. (2009). The toxicology of climate change: Environmental contaminants in a warming world. *Environment International*, 35(6), 971–986. <https://doi.org/10.1016/j.envint.2009.02.006>.
- OECD. (2019). Biodiversity: Finance and the economic and business case for action, report prepared for the G7 environment ministers' Meeting 5–6 May 2019.
- Pecl, G. T., Araújo, M. B., Bell, J. D., Blanchard, J., Bonebrake, T. C., Chen, I.-C., Clark, T. D., Colwell,

- R. K., Danielsen, F., Evengård, B., et al. (2017). Biodiversity redistribution under climate change: Impacts on ecosystems and human Well-being. *Science* (80-), 355(6332), 1–9. <https://doi.org/10.1126/science.aai9214>.
- Phelan, A., Ruhanen, L., & Mair, J. (2020). Ecosystem services approach for community-based ecotourism: Towards an equitable and sustainable blue economy. *Journal of Sustainable Tourism*, 28(10), 1665–1685.
- Sumaila, U. R., Walsh, M., Hoareau, K., Cox, A., Abdallah, P., Akpalu, W., Anna, Z., Benzaken, D., Crona, B., Fitzgerald, T., & Heaps, L. (2020). *Ocean finance: Financing the transition to a sustainable ocean economy*. World Resources Institute.
- Thiele, T., & Gerber, L. R. (2017). Innovative financing for the high seas. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 27, 89–99.
- Visbeck, M., Kronfeld-Goharani, U., Neumann, B., Rickels, W., Schmidt, J., van Doorn, E., Matz-Lück, N., & Proelss, A. (2014). A sustainable development goal for the ocean and coasts: Global ocean challenges benefit from regional initiatives supporting globally coordinated solutions. *Marine Policy*, 49, 87–89.
- Von Schuckmann, K., Holland, E., Haugan, P., & Thomson, P. (2020). Ocean science, data, and services for the UN 2030 sustainable development goals. *Marine Policy*, 121, 104154. <https://doi.org/10.1016/j.marpol.2020.104154>.
- Weilgart, L. S. (2007). The impacts of anthropogenic ocean noise on cetaceans and implications for management. *Canadian Journal of Zoology*, 85(11), 1091–1116. <https://doi.org/10.1139/Z07-101>.

OECD Guidelines for Multinational Enterprises

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Synonyms

Corporate Governance Codes

Description

The Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises are widely disseminated, highly influential guidelines for the operation and regulation of these major global actors. To understand the nature and goals of the Guidelines, it is helpful to understand the origins of the OECD itself. As a post-World War II institution, the OECD emerged from the Marshall Plan, initially in the form of the European Recovery Program which in turn evolved into the Organization for European Economic Co-operation. After addressing its initial mandate, the OECD turned to social and economic goals.

Through its social and economic goals, the OECD turned its attention to the increase in multinational enterprises (MNE). Recognizing the increasingly important role these MNEs played in the economic and political spheres led the OECD to develop the OECD Guidelines for Multinational Enterprises (Guidelines). The Guidelines are composed of 11 principles which deal with sustainability issues (Sheehy and Farneti 2021) such as human rights and the environment among other matters.

The Guidelines are recognized as soft law – that is, law that voluntarily adopted. While some parties believe that such laws are not meaningful because they lack enforceability, others believe that they provide guidance on behavior which over time become the accepted behavioral norms. As the Guidelines become more widely accepted and endorsed, there is potential for them to come to be recognized as hard law enforceable by courts.

Background and Early Development of the OECD

The OECD, like the United Nations, was a post-World War II institution. In 1947, the then US Secretary of State, George Marshall, stated that the international relations policy of the USA should focus on building a world order that will facilitate the growth of “free institutions” (Wolfe 2008). Focusing on the role of America in the war

reconstruction efforts, the Marshall Plan was created – a plan subsequently hailed as “history’s most successful structural adjustment program” (DeLong and Eichengreen 1993) – saving European countries from financial collapse by providing USD \$13 billion. The plan provided for the period of 1948–1951, allowing recovery by raising growth in participating countries’ industrial output at varying degrees from Turkey’s 75% to Austria’s 269% (Eichengreen and Uzan 1992).

There was a realization among state actors that “economic cooperation can serve political purposes” (Wolfe 2008) and this was realized through the Marshall Plan. By 1948, the Committee of European Economic Cooperation was created to manage the recovery plans of Europe as spearheaded by Britain and France and present a European Recovery Program to justify the expenses of the USA (OECD n.d.-c “Historical”). The Organization for European Economic Co-operation (OEEC) (OECD 2009) was then established in Paris, France, with 18 initial state actor participants, namely, Austria, Belgium, Denmark, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Sweden, Switzerland, Turkey, the UK, and Western Germany.

By 1950, the OEEC was focused on creating a single European Market, giving rise to the current situation today of the European Union. By 1960, a more permanent convention than the OEEC primarily focused on the Marshall Plan, to address the interests of the initial 20 founder countries (OECD n.d.-a “About”) (by then 38) to promote the following OECD (n.d.-b) “Convention”:

- (a) To achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability
- (b) To contribute to sound economic expansion in member as well as nonmember countries in the process of economic development
- (c) To contribute to the expansion of world trade on a multilateral, nondiscriminatory basis in accordance with international obligations

The OEEC was reorganized as the OECD and expanded its focus beyond economic development to include social welfare and environmental sustainability. Founded in 1961 with its headquarters in Paris, France, a situation which prevails up to the present day, the OECD’s purpose has been woven into the network of member states, making it a key, if often unnoticed, player in transnational governance (Mahon and McBride 2009). It was credited for Europe’s rejection of communism – without any significant publicity. The OECD was a promoter of Keynesian Economics as implemented through the Marshall Plan, and it was the success of the later in stimulating the economies of member countries during the Cold War (Lingard and Sellar 2016) that kept Western Europe free.

The OECD does not directly shape policy like other multinational and international organizations like the United Nations by providing conventions, model laws, grants nor state support, or loans like the International Monetary Fund or the World Bank. Rather, the OECD acts more like a policy research and resource center which promotes, monitors, and tests the policies of its member states through various country desks, ultimately reaching the OECD’s Secretariat and Subject Matter Departments. While published research provides recommendations rather than mandates, they may present a call to action, such as in establishing tax norms through the OECD Model Convention (Ault 2008).

OECD and Sustainability

In the period between 1968 and 1974, the research on the drivers of growth was a topic of debate in the OECD between the secretariat team and the committee on science and technology policy. The debate led to the consideration of the natural environment (Schmelzer 2012). Governments, they urged, are faced with the realization of competing interests in their pursuit of the path to development. On one hand, while conservation of natural resources is most desirable, they argued on the other that it should not come at the expense of hungry mouths to feed or rather foregoing

economic progress (Tracey and Anne 2008; Sheehy 2019). This realization led to the creation of the OECD Environment Committee – a major forum for member states to address dialogue environmental issues (OECD n.d.-d “Celebrating”).

This forum provided the opportunity for the 1971 creation of the “Polluter Pay Principle” – a principle which requires the creator of the pollution to bear the cost of any measure determined by the government regulator as a deterrent from inflicting more damage to the environment (Tracey and Anne 2008; Sheehy 2019). In the absence of this principle, the government is tasked with paying for cleanup of pollution created by business, as, for example, in instances of oil spills.

In 1987, the OECD was also part of the Brundtland Commission which defined sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987). It encouraged the use of the legal framework through the passage of environmental laws, with consequences ranging from imposition of penalties to requirement of categorization of activities and collecting fees (OECD 2008).

Guidelines for Multinational Enterprises

The Guidelines contain 11 principles. After a general introductory principle, the first principle provides guidance on their interpretation, the remaining ten deal with distinct areas of MNE activity. The following quotes the basic exposition of each directly from the principles:

- I. General Policies Enterprises “should take fully into account established policies in the countries in which they operate, and consider the views of other stakeholders.”
- II. Disclosure Enterprises “should ensure that timely and accurate information is disclosed on all material matters regarding their activities, structure, financial situation, performance, ownership, and governance. This information should be disclosed for the enterprise as a whole, and, where appropriate, along business lines or geographic areas. Disclosure policies of enterprises should be tailored to the nature, size, and location of the enterprise, with due regard taken of costs, business confidentiality, and other competitive concerns.”
- III. Human Rights “States have the duty to protect human rights. Enterprises should, within the framework of internationally recognized human rights, the international human rights obligations of the countries in which they operate as well as relevant domestic laws and regulations.”
- IV. Employment and Industrial Relations “Enterprises should, within the framework of applicable law, regulations and prevailing labour relations and employment practices and applicable international labour standards.”
- V. Environment “Enterprises should, within the framework of laws, regulations, and administrative practices in the countries in which they operate, and in consideration of relevant international agreements, principles, objectives, and standards, take due account of the need to protect the environment, public health, and safety, and generally to conduct their activities in a manner contributing to the wider goal of sustainable development.”
- VI. Combating Bribery, Bribe Solicitation, and Extortion “Enterprises should not, directly or indirectly, offer, promise, give, or demand a bribe or other undue advantage to obtain or retain business or other improper advantage. Enterprises should also resist the solicitation of bribes and extortion.”
- VII. Consumer Interests “When dealing with consumers, enterprises should act in accordance with fair business, marketing, and advertising practices and should take all reasonable steps to ensure the quality and reliability of the goods and services that they provide.”
- VIII. Science and Technology “Enterprises should endeavor to ensure that their

activities are compatible with the science and technology (S&T) policies and plans of the countries in which they operate and as appropriate contribute to the development of local and national innovative capacity.”

- IX. Competition “Enterprises should carry out their activities in a manner consistent with all applicable
- X. Taxation “It is important that enterprises contribute to the public finances of host countries by making timely payment of their tax liabilities. In particular, enterprises should comply with both the letter and spirit of the tax laws and regulations of the countries in which they operate.”

Analysis

The Guidelines offer significant support for sustainability. As the leading policy statement globally for MNE behavior, they command attention and respect by all actors. Further, by containing principles on issues identified in the Sustainable Development Goals, they contribute to coherent global norms on certain sustainability issues. They provide principles for compliance with national laws and so promote rule of law. They provide principles for human rights and by doing so promote human rights. Finally, they provide principles for environment through which they promote environmental protection.

Other scholars have contributed to the analysis. For example, Chatterjee emphasized the need to have special provisions addressing the needs of developing countries and to help them develop their infrastructures, as the current Guidelines assume that they may be applied to both developed and developing countries. Given their global reach, they do; however, adding nuance would benefit both the Guidelines as well as the countries beyond the OECD.

A significant concern among scholars and stakeholders is the soft law nature of the Guidelines. For example, Davarnejad notes the considerable variations of interpretations and

applications of the Guidelines, their implementation, and their compliance, which he argues is the result of their unenforceability. Being a soft law, however, does not mean that the Guidelines would not achieve their purpose: Davarnejad admits that while the flexibility of the Guidelines tends to diminish their impact, the soft law character allows the participants to try their own approaches which could well eventually achieve the Guidelines’ purpose.

Taking the argument further, Plaine provided three reasons why the Guidelines, despite their voluntary nature, must not be ignored: (1) for good public and governmental relations; (2) they are indicative of the future of international law; and (3) the advantage to business of using a recognized standard of conduct for both MNEs and governments. Given the history and development of the Guidelines and the efforts and participation of various stakeholders including members of the business community, the consensus built around what constitutes good corporate behavior would be hard to violate. Similarly, this consensus may well translate into actual compliance which in turn could become a business norm, a law merchant, simply awaiting recognition through the courts.

Finally, having a standard of conduct enhances the obligation of states to accord fair treatment to MNEs. Thus, the practice of preferencing local businesses that may be inefficient or corruptly supporting local governments is put to the test by the recognition of MNEs and fairness in treatment as a principle.

Further, there has been exploration of the potential impact of the Guidelines in promoting and protecting human rights and related proposals for reform. For example, Černič argued that considering the evidence of human rights violations by or involving corporations, the Guidelines must be tested not only against their primary objective related to investments, rather they need to be evaluated in terms of their potential as mechanisms to ensure that MNEs respect human rights. Černič offered four proposals to strengthen the Guidelines in addressing human rights violations committed by MNEs: (1) translate complaints mechanism under the Guidelines into quasi-legal

employment tribunal to deal with complaints; (2) ensure MNEs to actively participate in the complaint process; (3) give national contact points a better role in promoting the content of the Guidelines, and finally ensuring transparency and accessibility; and (4) make national contact points informed, authoritative, and command confidence of all participants. These proposals, however, would necessitate reform of the Guidelines.

As MNEs continue to increase their influence over government institutions in the domestic level, it is believed to be no more than a matter of time before they have significant influence on the international level as well. Revising the Guidelines in the future must take this likelihood into consideration to ensure they do not impede states from fulfilling their domestic and international obligations. One way for this to occur would be if Principle II were made binding on all MNEs.

Summary

The OECD Guidelines for Multinational Enterprises represent the outcome of over half a century of development and experience with these entities. Although originating in post-World War II Europe, they have become de facto global soft law. The Guidelines are important to sustainability in part because of their promotion of collaboration with governments and so upholding the rule of law, human rights, and environment.

Cross-References

- [OECD Principles of Corporate Governance](#)
- [United Nations Global Compact](#)

References

- Ault, H. J. (2008). Reflections on the role of the OECD in developing international tax norms. *Brooklyn Journal of International Law*, 34, 757.
- Bruntland, G. H. (1987). Our common future. In *The world commission on environment I and development*.
- DeLong, J. B., & Eichengreen, B. (1993). The marshall plan: History's most successful structural adjustment program. In *Postwar Economic Reconstruction and Lessons for the East Today*. Dornbusch, Nolling and Layard, Eds. MIT Press, MA.
- Eichengreen, B., & Uzan, M. (1992). The Marshall plan: Economic effects and implications for Eastern Europe and the former USSR. *Economic Policy*, 7(14), 13–75.
- G20/OECD. (2020). Principles of Corporate Governance <https://www.oecd.org/corporate/principles-corporate-governance/>
- Lingard, B., & Sellar, S. (2016). The changing organizational and global significance of the OECD's education work. In *The handbook of global education policy* (pp. 357–373).
- Mahon, R., & McBride, S. (2009). Standardizing and disseminating knowledge: The role of the OECD in global governance. *European Political Science Review*, 1(1), 83–101.
- OECD. (2008). *An OECD framework for effective and efficient environmental policies*. www.oecd.org/dataoecd/39/19/41644480.pdf
- OECD. (2009) *Explorations in OEEC history*. Paris: OECD Publishing. Retrieved from <https://doi.org/10.1787/9789264067974-en>
- OECD. (n.d.-a) "About" list of OECD member countries – Ratification of convention on the OECD. Retrieved from <https://www.oecd.org/about/document/ratification-oecd-convention.htm>. On 5 Apr 2023.
- OECD. (n.d.-b). "Convention" convention on the OEC. Retrieved from <https://www.oecd.org/about/document/oecd-convention.htm#Text>. On 4 Apr 2023.
- OECD. (n.d.-c). The historical archives of the European Communities European University Institute. *Organisation for European Economic Co-operation*. Retrieved from <https://www.oecd.org/general/organisationforeuropeaneconomicco-operation.htm>. On 4 Apr 2023.
- OECD. (n.d.-d) "Celebrating" celebrating 40 years of the OECD environment policy committee 1971 to 2011. Retrieved from <https://www.oecd.org/env/48943696.pdf>. On 5 Apr 2023.
- Schmelzer, M. (2012). The crisis before the crisis: The 'problems of modern society' and the OECD, 1968–74. *European Review of History: Revue europeenne d'histoire*, 19(6), 999–1020.
- Sheehy, B. (2019). CSR and environmental law. In McWilliams et al. (Eds.), *The Oxford handbook of corporate social responsibility*.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 5965.
- Tracey, S., & Anne, B. (2008). *OECD insights sustainable development linking economy, society, environment: Linking economy, society, environment*. OECD Publishing.
- Wolfe, R. (2008). From reconstructing Europe to constructing globalization: The OECD in historical perspective. In *The OECD and transnational governance* (pp. 25–42).

OECD Guidelines for SMEs

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Synonyms

[Entrepreneurship Outlook](#); [OECD Recommendation](#); [SMEs growth](#); [SMEs innovation](#)

Definition

The Organisation for Economic Co-operation and Development (OECD) represents a forum where governments address social, economic, and environmental challenges at a global level. Acting as a macro institutional setting, this *milieu* allows governments to compare policy experiences, share best practices, and find global solutions to tackle critical changes through the coordination of national and international political agendas. In this context, since the early 1940s SMEs have been considered by the OECD as a driver to advance trade and industrialization in developed nations (OECD 1997 and 2004). A specific center has been set up to help local, regional, and national governments to enhance entrepreneurs' and SMEs' potential as well as inclusive and sustainable growth. The work of the OECD and other international institutions is fundamental to strengthen SMEs' contribution to economic and social cohesion, as well as through the role played by women and young entrepreneurs.

OECD guidelines yield a comparative analysis of regulative frameworks and policies to improve SMEs' contributions and provide insights on the challenges and opportunities of entrepreneurs and SMEs, as well as an updated overview of each country profile relative to SMEs' performance.

Within the broader OECD strategy on SMEs, the *Recommendation on SME and Entrepreneurship Policy* was adopted in June 2022 – and launched on the occasion of a special event, the “UN Micro-, Small and Medium-sized

Enterprises Day” that took place on June 27 – on the proposal of the Committee on SMEs and Entrepreneurship with the aim to provide a holistic framework to develop effective SME and entrepreneurship policies and foster their contribution to inclusive and sustainable growth.

Introduction

The “micro, small and medium-sized enterprises” have been defined as enterprises that hire fewer than 250 employees and have an annual turnover not exceeding 50 million euro and/or a total on the annual balance sheet of 43 million euro (Extract of Article 2 of the Annex of Recommendation 2003/361/EC – European Commission: Enterprise and Industry, Small Medium Sized Enterprises 2005). Beyond the general agreement on this definition within the European countries, SMEs are still defined differently throughout the world depending on the policy-maker focus. SMEs can be identified both through specific quantitative-based criteria (i.e., turnover, asset value, total employees, profit, balance sheet capital, financial provisions, and market share) and qualitative variables, such as the type of governance, ownership, the presence of managers, or the adoption of managerial systems (Etuk et al. 2014). However, although different definitions exist, there is a consensus on their fundamental role and contribution to economic growth, innovation, and job creation, as well as to social cohesion in both developed and emergent countries.

Moreover, both scholars and policy-makers agree on SMEs' contribution in boosting innovation, supporting more inclusive growth, and facing the major challenges of normal and exceptional times. This contribution has become urgent particularly in the aftermath of the Covid-19 pandemic crisis that called on governments to support SMEs' resilience and revitalization focusing on digital and green evolution.

Indeed, within the OECD countries, SMEs represent a large portion of total employment growth, as well as the Gross Domestic Product. Despite the crises, SMEs are among the main drivers of development and largely contribute to

preserving the identity and social cohesion of local communities in urban and rural areas (Jenkins 2006; Morsing and Perrini 2009).

However, as mentioned, SMEs represent a “universe” that encompasses a variety of types whose performance differs greatly across sectors and regional areas (IFC 2006). Due to the reduced endowment of resources (financial and human resources), they operate in sectors characterized by low entry barriers (i.e., in terms of capital and assets for funding, patents, etc.), such as the service sector, while there are comparatively fewer SMEs in manufacturing service that require a larger scale of production. Their reduced size and simplified structure give SMEs a high level of flexibility – their flat management structures call for the entrepreneurs and employees to fulfill multiple roles – which makes them capable of rapidly responding to changes and adapting to market needs promptly, unlike large businesses. Moreover, among the features that mirror the specific nature of SMEs are the governance system, characterized by the overlapping of ownership and control (due to the family-business nature) and the direct involvement of the founder and his/her family in managing the business, the ease of the organizational structure, which favors personal relationships with the stakeholders, and the embeddedness in the community and the local area (Del Baldo 2012; Looser and Wehrmeyer 2015). Notably, this last factor assumes particular importance in driving SMEs to actively contribute to the social capital and development of the local context in which they are embedded (Ringov and Zollo 2007).

Accordingly, SMEs play a key role in achieving the goals set by the 2030 Agenda (UN 2015; SNV/WBCSD 2007), the holistic proposal for action on social, economic, and environmental issues. The OECD pays close attention to entrepreneurship and SMEs and contributes to the operationalization of the Agenda by: (1) refining policies and how they work together; (2) generating resources for sustainable development; (3) fighting for everyone’s well-being; (4) guaranteeing the planet’s sustainability; (5) capitalizing on the power of partnerships;

(6) fortifying data availability and capacity; and (7) enabling follow-up and review.

Key Issues

The OECD constantly monitors business dynamism, wage gaps, productivity growth, and export trends of business from all countries (OECD 2019a; UNCTAD 2001). Legal instruments of the OECD encompass: the OECD Bologna Charter on SME Policies (adopted as a Declaration *Enhancing the Competitiveness of SMEs in the Global Economy: Strategies and Policies* on June 15 2000); the OECD Istanbul Ministerial Declaration on Fostering the Growth of Innovative and Internationally Competitive SMEs; the OECD Declaration on Strengthening SMEs and Entrepreneurs for Productivity and Inclusive Growth; and the G20/OECD High-Level Principles on SME Financing. Moreover, The OECD’s SMEs and Entrepreneurship Outlook provides an exhaustive overview of business conditions and policy frameworks for entrepreneurs and SMEs (OECD 2019d). The series is useful to assess and improve the performance, design, and implementation of entrepreneurship policies and share knowledge among OECD partner economies and member countries. The guidelines are founded on a typical methodology, including a diagnostic questionnaire completed by national authorities, and are reviewed by the OECD Working Party on SMEs and Entrepreneurship (OECD 2008). For instance, the annual publication on SMEs’ finance trends and conditions (OECD 2019b, c and d) provides information on debt, equity, and asset-based finance for SMEs and entrepreneurship finance. In this vein, the report “Data Analytics in SMEs Trends and Policies” devotes specific attention on digital technologies as a lever of SMEs’ performance, productivity, and innovation, and provides in-depth analysis of the policy approaches to foster data-driven decision-making in SMEs.

Favorable institutional frameworks are required if SMEs want to succeed. Governments should assist SMEs by implementing inclusive reforms, creating empowering frameworks, and

relaxing the weight of regulatory measures. Currently, there are several open areas of work aimed at strengthening their role within the local socio-economic fabric (Whermyer et al. 2019) and offering best practices on how to generate more and better-quality jobs through successful policy implementation and local initiatives, as well as supporting inclusive entrepreneurship and entrepreneurship in higher education. In this vein, the OECD Recommendation (2022) provides a response to a long-standing demand by countries for frameworks and tools to improve the effectiveness of SME and entrepreneurship policies, ensuring coherence and synergy across varied policy areas and actors, and accounting for the diversity of the SME and entrepreneurship population. OECD goals include fostering SMEs' productivity and growth; enhancing SMEs' access to finance; improving SMEs' digitalization; and enhancing entrepreneurship.

The Recommendation encompasses a mix of targeted and horizontal policy dimensions that emphasize the SMEs' governance mechanisms and take into account the contingent factors affecting the institutional contexts in different countries (i.e., the juridical settings and stages of development). The three pillars covered by the recommendation are: (1) policy coordination and governance; (2) transition and resilience; and (3) accessing resources.

The first pillar aims to put in place cross-cutting and coherent approaches to SME and entrepreneurship policy design and implementation by: coordinating and aligning SME and entrepreneurship policy across government; ensuring that implications for SMEs and entrepreneurs are considered across the diverse policy areas; taking account of the diversity of SMEs and entrepreneurs throughout policy-making; and setting up mechanisms to assess the impacts of policies addressed to SME and entrepreneurship.

The second pillar aims to facilitate the transition and resilience of SMEs and entrepreneurs by: supporting the adoption of digital technologies and services; enabling SMEs' transition toward sustainable business models, green innovations, and circular economy strategies; fostering SMEs'

access to resources and sustainable finance; enhancing SMEs' participation in global value chains, trade facilitations, and finance; strengthening their access to services and networks; reducing entry/exit barriers and business succession and re-start; ensuring supportive regulatory environments for innovative scale-up ventures; encouraging under-represented groups to participate in entrepreneurship and facilitating the transition from informal to formal entrepreneurship; and promoting SMEs' responsible business conduct and embeddedness in their local communities.

The third pillar aims to enhance SMEs' access to resources by: providing adequate incentives for SMEs and entrepreneurs to innovate (i.e., robust inclusive innovation ecosystems, local networks and infrastructures); enhancing their access to a range of financing instruments and strengthening financial skills; encouraging entrepreneurship education throughout society, and incentivizing SMEs to invest in skills (i.e., managerial skills, problem-solving, and digital skills); and strengthening entrepreneurial ecosystems at a local and regional level through networks between SMEs and large counterparts and linkages along supply chains.

Summary

As mentioned above, SMEs are regarded as the bedrock of industrialization in both the OECD and developing economies, where they generate the highest share of new employment. On the one hand, they are regarded as the chief suppliers of input to larger businesses as they provide customer-tailored services and products. On the other hand, they contribute to economic development through the creation of primary and intermediate products ranging from food, clothing, and healthcare to education, often grounded in innovations capable of triggering and dominating specialized markets (the so-called niches). SMEs are often led by entrepreneurs who are innovators and change agents and represent a vital factor in both economic development and social change. SMEs are often strongly embedded to their local areas and

depend on the community for a set of socio-economic resources, including intangible resources such as social capital, which, in turn, SMEs contribute to nurturing (OECD 2019). Accordingly, entrepreneurial success is measured by the enterprise's results, but even more so by the respect it gains from its community (Whermyer et al. 2019).

However, policy-makers and legislators, who usually target larger corporations, often overlook the needs of SMEs. SMEs usually do not benefit from tax incentives or business subsidies, and endure the large burden and cost of bureaucracy more than big enterprises, and most lack financial or human resources. Therefore, navigating from one crisis to another, many currently suffer from low productivity, curbing their role in boosting the socio-economic environment. "We need a fundamental rethinking of SME and entrepreneurship policies to improve business conditions and access to resources [...] and we need a renewed measurement agenda to understand how countries, regions and cities can capitalise on their many diverse small businesses as drivers for inclusive and sustainable growth" (A. Gurria, OECD General Secretary). Accordingly, behind the OECD Recommendation there is the assumption of the SMEs' heterogeneity and the need to strengthen policies and collective actions (OECD 2012). In this vein, the OECD's work is particularly relevant in that it drives government and other institutions' attention toward SMEs and their key role in promoting sustainable economies. In addition, it emphasizes the directions for policies that are necessary for the future of SMEs by leveraging on regulatory environments (including good governance and accountability in public administration and transparent tax regimes) conducive to entrepreneurship; promoting educational policies aimed at fostering an innovative entrepreneurial culture; and strengthening public-private partnership and social dialogue among institutional actors.

Cross-References

- [Entrepreneurship Outlook](#)
- [SMEs Growth](#)

- [SMEs Innovation](#)
- [SMEs \(and CSR\)](#)

References

- Del Baldo, M. (2012). Corporate social responsibility and corporate governance in Italian Smes: The experience of some "spirited businesses". *Journal of Management and Governance*, 16(1), 1–36.
- EC. (2005). *European Commission. Enterprise and industry, small medium sized enterprises. The new SME definition: user guide and model declaration*. European Commission: Enterprise and Industry Publication, Brussels.
- Etuk, R. U., Etuk, G. R., & Baghebo, M. (2014). Small and medium scale enterprises (SMEs) and Nigeria's economic development. *Mediterranean Journal of Social Sciences*, 5(7) MCSER Publishing. <https://doi.org/10.5901/mjss.2014.v5n7p656pp656-662>.
- IFC. (2006). Micro, small and medium enterprise: A collection of published data. In D. Newbery (Ed.), *The role of small- and medium-sized enterprise in the future of emerging economies. Earth trends 2006*. Washington, DC: World Resources Institute.
- Jenkins, H. (2006). Small business champions for corporate social responsibility. *Journal of Business Ethics*, 6(3), 241–256.
- Looser, S., & Wehrmeyer, W. (2015). Varieties of capitalism and small business CSR: A comparative overview. *International Journal of Social, Behavioral, Educational, Economic and Management Engineering*, 9(7), 1953–1962.
- Morsing, M., & Perrini, F. (2009). CSR in SMEs: Do SMEs matter for the CSR agenda. *Business Ethics: A European Review*, 18(1), 1–6.
- OECD. (1997). *Globalisation and small and medium enterprises (SMEs)*. Paris: OECD.
- OECD. (2004). *Promoting entrepreneurship and innovative SMEs in a global economy: Towards a more responsible and inclusive globalization. A report of 2nd OECD conference of ministers responsible for small and medium sized Enterprise (SMEs) in Istanbul, Turkey 3–5 June, 2004*.
- OECD. (2008). *Working party on SMEs and entrepreneurship (WPSMEE) review of HGSMs, innovation and intellectual property*. Paris: OECD Publishing.
- OECD. (2012). *An International Benchmark analysis of public programmes for high growth firms*. Available at: <http://www.oecd.org/industry/high-growthreport.htm>
- OECD. (2019). *OECD SME and entrepreneurship outlook 2019*. Paris: OECD Publishing. <https://doi.org/10.1787/34907e9c-en>.
- OECD. (2019a). *OECD strengthening SMEs and entrepreneurship for productivity and inclusive growth* (OECD papers. OECD Working Party on SMEs and Entrepreneurship). <https://doi.org/10.1787/20780990>.

- OECD. (2019b). Financing SMEs and Entrepreneurs 2019: An OECD Scoreboard contributes to filling the knowledge gap in SME finance trends and conditions. <http://www.oecd.org/cfe/sme>
- OECD. (2019c). Policy brief on incubators and accelerators that support inclusive entrepreneurship OECD and European Commission no. 13, May 2, 2019.
- OECD. (2019d). Fostering the use of intangibles to strengthen SME access to finance Martin Brassell and Kris Boschmans no. 12; Jan 8, 2019.
- OECD. (2022). *OECD recommendation on SME and entrepreneurship policy*. Paris: OECD. <https://www.oecd.org/cfe/smes/oecdrecommendationsmeandentrepreneurshippolicy/>
- Ringov, D., & Zollo, M. (2007). Corporate responsibility from a socio-institutional perspective. The impact of national culture on corporate social performance. *Corporate Governance*, 7(4), 476–485.
- SNV/WBCSD. (2007). *Promoting small and medium enterprises for sustainable development* (Development focus; Issue brief). Switzerland: World Business Council for Sustainable Development, <http://www.wbcsd.org/web/development.htm>.
- UNCTAD. (2001). *Reports on the expert meetings on improving competitiveness of SMEs in developing countries: The role of finance, including E-finance, to enhance enterprise development*. United Nations Council on Trade and Development. Geneva, Switzerland.
- United Nations (UN). (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations. Available at: <https://www.sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>.
- Wehrmeyer, W., Looser, S., & Del Baldo, M. (Eds.). (2019). *Intrinsic CSR and competition. Doing well amongst European SMEs*. Heidelberg Germany: Palgrave MacMillan, Springer Nature.

Definition

The Organization for Economic Co-operation and Development (**OECD**) Principles of Corporate Governance are the global standard of corporate governance (OECD n.d.). They build upon and consolidate prior research and development. Farrah (2003) defined corporate governance as the system by which companies are controlled and accountability structures and processes are imposed on those in control of companies. Sheehy and Diaz-Granados (2022) categorized two definitions of corporate governance, from narrow and broad scopes. A narrow scope is limited to the decision-making bodies of a company (Coffee 1986; La Porta et al. 2000; Shleifer and Vishny 1997) while a broad scope includes external stakeholders, such as policymakers, employees, and creditors (Hopt and Teubner 1984).

In their article, Sheehy et al. (2022) first described the history of corporate governance before turning into the history of the principles. Founded in the 1976 *Taming the Giant Corporation* (Nader et al. 2005), the concept of corporate governance subsequently developed in the 1990s in response to a series of business scandals and financial crises (Sheehy 2004). Having learned from these bitter experiences, in 1999 the OECD issued the first version of the OECD Principles of Corporate Governance (OECD 1999). It set the international benchmark for best practices for corporate governance internationally, irrespective of their membership in the OECD. The principles are, however, soft law and hence not legally binding (Bouchez 2007).

OECD Principles of Corporate Governance

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Synonyms

Climate change; Corporate governance; Disclosure; Family-owned companies; Green swan

Introduction

Since its issuance, the OECD has revised the principles twice, in 2004 and 2015. The next review and revision is ongoing, with an expected time completion of 2023. As of this date, the 2015 edition is the most recent version. Sheehy et al. (2022) summarized the six principles as follows:

- I. “Ensuring the Basis for an Effective Corporate Governance Framework” by requiring

the branches and institutions of government have clear roles in lawmaking, administration, and adjudication and a legal duty to follow the rule of law.

- II. “The Rights and Equitable Treatment of Shareholders and Key Ownership Functions.” This principle is focused on protecting independent and minority shareholders from exploitation by controlling shareholders.
- III. “Institutional Investors, Stock Markets, and Other Intermediaries.” This principle requires institutional investors, brokers, and other agents to act in the best interest of their beneficiaries.
- IV. “The Role of Stakeholders in Corporate Governance.” This principle requires protection for the interest of stakeholders on matters such as timely disclosure, minimum wage, and bankruptcy claim.
- V. “Disclosure and Transparency.” This principle requires companies to disclose material information to the public and providing equitable treatment to all shareholders.
- VI. “The Responsibilities of the Board of the Directors.” Finally, in its dealings with the directors, the principles require executive and nonexecutive directors and be accountable to shareholders and other interested stakeholders.

The OECD Principles of Corporate Governance is an answer to a global search for optimal corporate governance standards. Bebchuk and Hamdani (2009) counted over 100 studies documenting the search for optimal standards. Governments value good corporate governance, because it contributes to the attractiveness of local companies for foreign investment. Companies value optimal corporate governance, because it drives positive stock performance (Sheehy et al. 2022). While the principles are a widely accepted global model, they are not necessarily what determine successful corporate governance. As Subramanian (2015) explained in his article “Corporate Governance 2.0,” there is a lack of an accepted metric on what constitutes such success.

The principles are imperfect as one would expect with a broad standard in a dynamic environment, and this is a reason that the OECD continues to revise through each edition. This entry explains two aspects of the review and revision, namely family businesses and climate change governance.

Family Firms

While the principles need to be general to cover all OECD countries and broadly affected regions – all of which have their own corporate structure and ownership, it is crucial for the principles to particularly include guidelines for family businesses. Family businesses represent a majority of dominant industries in Asia (Fang et al. 2022), and Asia contributed 60% of global growth (IMF 2016; ADB 2017). Outside the USA, PwC (2017) projected that the largest markets in 2050 will be Asian – namely China, India, and Indonesia. This prediction remains unchanged despite the effects of COVID-19 (Galloway 2020). The Economist (2023a) recently observed that India and Indonesia are the world’s two fastest growing economies. Any corporate governance failures particularly in family businesses will thus have significant ripple effects in these markets.

Many family-owned companies are closely held and hence not subject to disclosure requirements. Asian family-owned companies in particular have highly concentrated ownership structure. This means boardroom decision-making is confined to family members and relatives. While these companies have the right to be self-regulating like any other type of closely held companies and have the incentive to perform better for their own financial self-interest, some of them might be less well-informed in decision-making. They may rely excessively on information of interest or drawn from preferred family sources, or they may prioritize family interests ahead of corporate interests. These are some of the many reasons that family businesses seldom survive the third generation (The Economist 2015; Fernández-Aráoz et al. 2015). Interestingly, family businesses last on average longer than

typical public companies (Baron and Lachenauer 2021). Further, given traditional institutional preferences, they will likely remain a significant feature of many large markets including Asia (The Economist 2015, 2023b).

Accordingly, the OECD may continue to reform its principles to include addressing the peculiarities of the corporate structure and ownership of family firms. The OECD Principles as soft law are particularly attractive to family firms as they do not impose changes to family firm structures and processes. It is left to the companies to choose whether and what to follow.

Climate Change

Over the last decade, there has been a greater advocacy for companies to contribute to climate change mitigation and to provide disclosure. They are expected to plan and disclose their climate change strategy. The draft revisions to the OECD Principles of Corporate Governance address what companies can do on this end; the draft considers climate change as a financially material risk, otherwise known as the “green swan” (Bolton et al. 2020).

Climate change poses a serious threat to the survival of humanity. It is also anticipated to be implicated in the next systemic financial crisis (Bolton et al. 2020). Addressing it through guidelines or soft law such as the OECD Principles of Corporate Governance obviously does not resolve the issue. The principles rely on corporate leaders’ discretion. Bebchuk and Tallarita (2020) argued that it is inadequate and substantially counterproductive to rely on such discretion to serve the broader interests of stakeholders. Corporate leaders, they argue, have not focused on addressing stakeholder interests and that it is unrealistic to expect such.

In the USA, a group of 22 law and finance professors questioned the value of the Securities and Exchange Commission’s climate disclosure rule proposal that was aimed at investor protection and public interest (Cunningham et al. 2022). Green disclosure alone is insufficient to increase firm value (Khan et al. 2021).

Coverage of climate change in the principles may pacify certain parties to the broader discussion on sustainability; it overemphasizes climate change as an issue of poor corporate governance when there are many competing agendas on the one hand (Sheehy and Farneti 2021), and many companies have little or no interest in environmental protection and mitigation aims on the other.

References

- Asian Development Bank. (2017). *Expanding economies in Asia deliver 60% of global growth – ADB*. <https://www.adb.org/news/expanding-economies-asia-deliver-60-global-growth-adb>.
- Baron, J., & Lachenauer, R. (2021). *Do most family businesses really fail by the third generation?* <https://hbr.org/2021/07/do-most-family-businesses-really-fail-by-the-third-generation#:~:text=Only%20a%20third%20of%20family,made%20it%20through%20the%20third>
- Bebchuk, L. A., & Hamdani, A. (2009). The elusive quest for global governance standards. 157 *University of Pennsylvania Law Review*, 1263–317. *JSTOR*. <http://www.jstor.org/stable/40380267>. Accessed 4 Apr 2023.
- Bebchuk, L. A., & Tallarita, R. (2020). The illusory promise of stakeholder governance. 106 *Cornell Law Review*, 91–178. Available at SSRN: <https://ssrn.com/abstract=3544978>
- Bolton, P., et al. (2020). *The Green Swan*. <https://www.bis.org/publ/othp31.htm>
- Bouchez, L. (2007). Principles of corporate governance: The OECD perspective. 4 *European Company Law*.
- Coffee, J. C. (1986). Shareholders versus managers: The strain in the corporate web. *Michigan Law Review*, 85, 1–109.
- Cunningham, L. A., et al. (2022). The SEC’s misguided climate disclosure rule proposal, 41 *Banking & Financial Services Policy Report*, 1.
- Fang, H., et al. (2022). Family business research in Asia: Review and future directions. *Asia Pacific Journal of Management*, 39, 1215–1256. <https://doi.org/10.1007/s10490-021-09760-2>.
- Farrar, J. H. (2003). Corporate governance and the judges. *Bond Law Review*, 15, 65–101.
- Fernández-Aráoz, C., Iqbal, S., & Ritter, J. (2015). *Why family firms in East Asia struggle with succession*. <https://hbr.org/2015/03/why-family-firms-in-east-asia-struggle-with-succession>
- Galloway, L. (2020). *Five superpowers ruling the world in 2050*. <https://www.bbc.com/travel/article/20200322-five-superpowers-ruling-the-world-in-2050>
- Hopt, K., & Teubner, G. (1984). *Corporate governance and directors’ liabilities: Legal, economic and sociological analysis on corporate social responsibility*. Berlin/New York: de Gruyter.

- International Monetary Fund. (2016). *Asia still growth champion, but must watch its step*. <https://www.imf.org/en/News/Articles/2016/10/06/AM16-NA100616AsiaStillGrowthChampion>
- Khan, H., et al. (2021). Green banking disclosure, firm value, and the moderating role of a contextual factor: Evidence from a distinctive regulatory setting. *Business Strategy and the Environment*. Available at SSRN: <https://ssrn.com/abstract=3848482>
- La Porta, R. et al. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58, 3–27.
- Nader, R., Green, M., & Seligman, J. (2005). Taming the Giant Corporation. In B. R. Cheffins (Ed.), *The rise of corporate governance in the UK: When and why*.
- OECD. (1999). *OECD principles of corporate governance*. Paris: OECD Publishing.
- OECD. *Executive summary*. <https://www.oecd-ilibrary.org/sites/272d85c3-en/index.html?itemId=/content/publication/272d85c3-en>.
- PwC. (2017). *The world in 2050*. <https://www.pwc.com/world2050>
- Sheehy, B. (2004). The importance of corporate models: Economic and jurisprudential values and the future of corporate law, 2 *DePaul Business & Commercial Law Journal*, 463. Available at: <https://via.library.depaul.edu/bclj/vol2/iss3/4>
- Sheehy, B., & Diaz-Granados, J. (2022). Corporate governance: Encyclopedia of sustainable management. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management* (pp. 1–5). Springer. https://doi.org/10.1007/978-3-030-02006-4_405-1.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? 13 *Sustainability*, 5965.
- Sheehy, B., Yu, S., & Lie, L. (2022). Does law matter in Asia? Comparing corporate governance regimes in Indonesia and Malaysia. 38 *Law in Context*. Available from: <https://journals.latrobe.edu.au/index.php/law-in-context/article/view/194>
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52, 737–783.
- Subramanian, G. (2015). Corporate governance 2.0. *Harvard Business Review*. <https://hbr.org/2015/03/corporate-governance-2-0>
- The Economist. (2015). To have and to hold. https://www.economist.com/sites/default/files/20150418_family.pdf
- The Economist. (2023a). Which will grow faster: India or Indonesia? <https://www.economist.com/international/2023/03/29/which-will-grow-faster-india-or-indonesia>
- The Economist. (2023b). Meet Asia's millennial plutocrats. <https://www.economist.com/business/2023/04/03/meet-asias-millennial-plutocrats>

OECD Recommendation

- [OECD Guidelines for SMEs](#)

OED

- [Operational Ethical Dilemma](#)

Oil Mountain

- [Peak Oil](#)

Oil Spill

- [Exxon Valdez](#)

One Report

- [Integrated Reporting](#)

Oneness

- [CSR Butterfly Effect](#)

One-Tier Board

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Synonyms

[Board of directors](#); [Unitary board](#)

Definition

One-tier board, also known as the board of directors, the unitary board or the mono-system board, is the most important body in a corporation. It is

defined as a collectively working group of directors with the main function to provide oversight and control over the company as well as bring counsel and advise to its executives (Ruigrok et al., 2006; Larcker & Tayan, 2011). Members of the board (directors) are recruited from individuals with a particular knowledge, experience, and ethical stance in order to monitor the functioning of the company. The board is the strategic decision-making group and bears the ultimate responsibility for corporate performance and the control over executives (McNulty, 2014). The passive board characterized with inappropriate structure and insufficient level of independence and engagement is a significant drawback to efficient corporate governance (Gillespie & Zweig, 2010).

One-tier board is usually compared to the alternative model known as supervisory board or two-tier board which is also discussed in the Encyclopedia. The one-tier board functions in numerous countries worldwide including the USA, the UK, Australia, Canada, New Zealand, India, and Russia (Mallin, 2004). In several countries such as Italy, Spain and France the law allows the company to choose the board model between one-tier and two-tier model.

Functions and Duties

One-tier board is formed in the company to represent, formulate, and realize the interests of shareholders who provide funds necessary for the company's development. The role of the board is embedded in the ownership and organizational characteristics of the joint stock company. Specifically, the role of the board is conceptually placed in the principal-agent theory and the separation between decision management from decision control which takes place in large listed companies. This separation means that residual risk bearing is detached from decision management (Fama & Jensen, 1983a, b). In the language of the principal-agent theory such separation broadens the group of residual claimants and allows for risk sharing.

Conflicts between managers and shareholders impact the nature of managerial discretion in the

decision making and the managerial influence over the redistribution of profits. The board role is to address these challenges and mitigate conflicts. Specifically, board task is to protect the interests of shareholders, provide oversight over the top executives, and assure for long-term sustainable firm growth (Monks & Minow, 2004; Shleifer & Vishny, 1997). In public listed corporations directors who possess special knowledge, skills, and experience assure that the functioning of the company is targeted to increase the shareholder wealth. Hence, the task of board directors is to align the goals of managers with the interest of shareholders (Hambrick & Jackson, 2000). However, fulfilling the interests and expectations of shareholders, the board has to take into account the interests of the company as a whole. Directors are not only accountable to the company and its shareholders but have also responsibilities and duties to deal fairly with other constituencies including employees, creditors, customers, suppliers, and local communities.

Using the legal perspective board directors have a special relationship with shareholders and need to fulfill five main duties (Colley et al., 2003; Fisch, 2006; Monks & Minow, 2004; OECD/G20, 2015):

- The fiduciary duty which obliges directors to act to increase shareholder value in the long term while balancing shareholders expectations with the interest of the overall company and its stakeholders.
- The duty of loyalty and duty of fair dealing which refer to the supremacy of shareholder interests and put the interests of shareholders first over individual director's benefits. This requires to disclose any conflict of interest to refrain from taking advantage of the director position for the purpose of personal benefits.
- The duty of care which assumes that directors act carefully and are fully prepared once they participate in making decisions. Directors are expected to use their best knowledge and experience, perform during board meetings, and provide the best quality of monitoring, control, and counseling.

- The duty not to entrench is understood as the objective assessment of the company situation, openness, and readiness to undertake crucial decisions, particularly in the case of poor performance.
- The duty of supervision constitutes an integral part with the duty of fair dealing and refers to the effectiveness of directors when exercising oversight responsibilities. It requires the director to act in accordance with moral and ethical standards, fulfill the monitoring functions in a responsible way, and deliver the high quality of oversight. Directors are expected to be prepared before the board meetings, collect all necessary information, and be engaged and committed to the board work.

Bob Tricker identifies four main board functions including supervision, policy making, accountability, and strategy formulation (Tricker, 2012). On the practical level board directors (Adams et al., 2010; Larcker & Tayan, 2011; McNulty, 2014) review corporate strategy and major plans of action, engage in risk management, set performance objectives, monitor their implementation, and assess corporate performance. The board is responsible for recruiting and compensating executives and gets involved in the succession planning. The board should also oversee the process of corporate disclosure and communication.

The board which is composed of educated, competent, and experienced directors is viewed as an important corporate governance mechanism that can significantly contribute to the company development and increase shareholder and stakeholder values.

Composition and Structure

Directors Types

The composition of the board is viewed as its essential characteristics which determine the quality of its work (Tonello, 2010). From the perspective of the resource dependence theory (Pfeffer & Salancik, 1978; Davis and Cobb, 2010), the decision about who is appointed to the board is the crucial designation. Human capital represents an

important resource which can enhance the development of skills and competences and improve the quality of management and supervision. The board capital adds to the advisory capacity and oversight capacity (Larcker & Tayan, 2011) and is the source of competitive advantage (Sirmon & Hitt, 2003). Specifically, the director contribution refers to (Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978): (1) advice and counsel, (2) legitimacy, (3) channels for communicating information between external organizations and the firm, and (4) preferential to commitments or support from outside the firm.

One-tier board is a collective group of different directors. Among board directors the following types are identified:

- Executives are managers appointed at the executive positions of the company. Although formally they are to be monitored by the nonexecutive directors of the board, in one-tier model they are also members of the board taking part in its work and discussion.
- Nonexecutives are the members of the board who do not have the executive positions in the company. In practice nonexecutive directors are recruited from independent directors, employees, outside, and constituency directors as well as affiliated or shadow directors.
- Independent directors are defined as directors who have no material relationship with the listed company (either directly or as a partner, shareholder, or officer of an organization that has a relationship with the company). In addition, according to the NYSE standards independent directors cannot have any present or past relations with the company (e.g., advisor, lawyer, former executives, or former employees), work as an employee or a manager, and receive compensation from the company of a given size. The necessary condition to be an independent director in a one-tier board is to be the nonexecutive and outside director. Yet, not all outside and nonexecutive directors have the status of the independent member of the board.
- Affiliated directors are nonexecutives who do not have the status of the independent member

of the board meaning that they do have some material relationships with the company. Affiliated directors are usually recruited from shareholders, suppliers, creditors, employees, or family relatives of the executives.

- Constituency directors are the members of the board who represent stakeholders such as NGOs or communities. Constituency directors are not often found on boards.
- Inside directors are directors who work in the company such as employees or executives.
- Outside directors are directors recruited from outside of the company.

In addition, the literature distinguishes the difference between the so-called *de jure* directors, *de facto* directors, and shadow directors. The *de jure* director is the director who is formally appointed to serve as the member of the board. The *de facto* director is defined as the person who fulfills the responsibilities of the director but is not revealed as a formal member of the board. In contrast the shadow director is a person who is not formally a member of the board but who provides instructions and guidance to the *de jure* director. The shadow directors are usually found amongst large shareholders who do not sit personally on the board but appoint the representatives who would execute their instructions. The shadow director may also be a politician or a member of the government who appoints another person to be the *de jure* director.

Board Committees

The board work encompasses a wide range of functions and tasks. Although the board acts as a team and is collectively accountable for its actions, the board work tends to be divided into topics and delegated to specialized board committees (Rezaee, 2010; Stiles, 2014). The trends to form committees is currently a well-recognized and recommended practice as it increases the engagement of directors with certain expertise (e.g., audit, remuneration), simplifies coordination of the board work, and assures a given degree of independence (when the committee included only nonexecutive or independent directors).

Formally, the committees are usually composed of 3–6 board directors focusing on specialized tasks. The number and types of committees functioning within the board differ depending on the company's practice and bylaws, its industry, and governance challenges (risk, succession, anti-trust regulations).

The most popular committees which function within the board include (Larcker & Tayan, 2011; Stiles, 2014; Tricker, 2012): audit committee, remuneration committee, nomination committee, strategy committee, and risk management committee. The tasks of the committees are precisely defined with the description of the procedures and policies of their work known as committee charters. The detailed description of selected committees' work is provided in the section of the Encyclopedia on two-tier board.

Interlocking Directorates

Board directors are experienced and well-educated individuals. Since they possess scarce resources (knowledge, competences, and professional contacts), they serve on many boards. The existence of multiple board mandates is a worldwide phenomenon. According to the resource dependency theory, in order to ensure the company survival managers build complex structural links among corporations (Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978) such as interlocking directorates. These relationships enable efficient information flow and allow for cooperation and resources exchange.

Directors with numerous board seats are often former or current CEOs who understand the business and executive work as well as have the industry expertise (Lester & Cannella, 2006). Their appointment may add to the quality of the board work. It can also serve as a signal to investors that competent and well-experienced directors known for their good reputation protect their interests.

Interlocking directorates are believed to contribute to the socialization of new directors, increase the information flow, and help the exchange of experience. Yet, they are a subject of criticism due to the risk of the conflict of interests deriving from the participation in many

boards (e.g., competing companies), the inadequate time for preparation before the board meetings, or the consolidation of decision, power, and control in the hands of a relatively small group of people (Yiu et al., 2014).

Structural Shortcomings

The unitary board assumes that directors who play different functions in the company collectively participate in the board. This means that executive and nonexecutive, outside and inside directors work together to provide monitoring and counsel to the company. The board directors may serve as chairman and vice-chairman of the board, secretary, chairmen of board committees, and regular members of the board and board committees.

The effectiveness and the quality of the board work depend critically on the attitude and commitment of its chairman (Dalton et al., 1998; Larcker & Tayan, 2011). The role of the chairman is to assure for effective leadership, organization of the agenda and functioning of the board, setting high standards of work (directors are prepared, supplied with necessary data and information, and are active during meetings and executive sessions). The role of the board chairman is particularly important in the case of the one-tier board since majority of directors are recruited from outside of the company and may not have adequate information, particularly as confronted with executive on the board (Tricker, 2012). This may limit the monitoring role of the outside directors and deteriorate their contribution to the oversight over executives and the company.

The best practice for corporate governance calls for the independent chairman or lead director and suggests that the functions of the chairman and the CEO should be separated. Yet, in majority of US companies these two functions are combined, while the UK companies predominantly separate these positions. The criticism of the American boards refers to the dominance of the CEO-Chairman who possesses significant control over the agenda and may have excessive influence on the board work, also in areas of performance

evaluation, review of strategic goals, and monitoring.

In addition, the participation of executives and nonexecutives in one-tier board may add to the quality of communication and increase the flow of information (Tricker, 2012). However, one of the main weaknesses refers to the reluctance of the outside directors to openly criticize management or question some of companies activities. Such an open discussion is usually facilitated when executives and nonexecutives work separately as it is offered by two models. Hence, since the presence of executive directors in one-tier board may cause some distortions in the discussion about audit or executive compensation issues, the board committees are formed. The recommendation to have majority of independent directors in audit and remuneration committees is believed to address the problems of possible excessive impact of executives in the boardroom.

Another aspect discussed with the reference to structural shortcomings of the one-tier board points at the form of so-called staggered or classified board. Such board reveals a specific characteristic that distinguishes and divides the directors into groups (classes) with each class serving for a different term longer than the other. During the elections not all directors are appointed but shareholders vote for board seat which is vacant. Staggered (classified) board has become a popular practice in the US corporations. It is however criticized for being counterproductive for empowering shareholders and limiting investor influence over corporate governance.

National Versions

One-tier board is adopted in many companies. Although the general construct is similar and is based on the work of executive and nonexecutive directors in the same collegial body, the comparative analysis reveals significant national differences with respect to the board characteristics, structure, and practice. Below a brief characteristic of board in selected countries is presented (Mallin, 2004; Monks & Minow, 2004; Tricker, 2012):

- The American board of directors consists of on average 12–14 members among whom 1–3 directors are executives, 23% of directors are affiliated directors, and over 50% are independent directors. Female members make ca. 25% of members of the board. All listed companies form audit and compensation committees, while the functions of the Chairman of the board and the CEO are often combined. The board needs to comply with strong transparency standards as stipulated by the US regulations.
- The British board of directors consists of on average 10–14 members with the significant role of independent outside directors, participation of constituency directors (ca. 7%), and the female directors (approximately 20–30%). Unlike their American peers 90% of British companies keep the CEO and board chairman positions separate. All listed companies form audit and compensation committees. The board needs to comply with strong transparency standards provided by law and codes of best practice.
- The Japanese board of directors reveals far different characteristics as compared to its Anglo-Saxon counterparts. Japanese boards are composed of the vast majority (90%) of insiders, with participation of bank representatives and marginal presence of independent and female directors. The board work is determined by its distinct culture and strong hierarchy.
- The Indian board of directors functions in the context of the emerging economy characterized by the insufficient investor protection and weaker institutional order. Indian companies reveal ownership concentration which naturally impacts the practice of the board. Yet, according to the Securities and Exchanges Board of India (SEBI) the presence of independent directors should account for one-third of the directors on boards. The majority of boards form audit and compensation committees.
- The Russian board of directors operates in a different context than the US and British companies characterized by ownership concentration, lower transparency standards, and in selected companies also influence of the government. The board composition reveals strong position of the CEO and lower presence of

independent directors – ca. one-third of companies do not have any independent directors on boards. Yet, a vast majority (70–80%) of the boards form audit and remuneration committees, respectively (Kostyleva & Lehuedé, 2012).

- The Chinese board reveals a slightly different characteristic which appears to resemble more one-tier than two-tier model. Yet, the board has a hybrid structure aligned to the Japanese model. Structurally, the Chinese board encompasses the board of supervisors, the board of directors, and the group of CEO with general managers. The board of supervisors oversees finances and strategic development, nominates external auditor, and evaluates the performance of executives.

Trends and Best Practice

The board work is a complex task that covers numerous company issues of strategic, legal, investment, and financial character. The board is responsible for a number of decisions and actions, needs to coordinate its work, and comply with a number of requirements and guidelines.

Studies on composition, structure, and processes of the board remain an important stream of research in corporate governance, strategy, and finance. Numerous studies (Bear et al., 2010; Hafsi & Turgut, 2013; McGuinness et al., 2015; Nielsen & Huse, 2010; Terjesen et al., 2009; Terjesen & Singh, 2008; van Knippenberg et al., 2007) aim to understand the role and importance of selected board attributes such its size, structure, demographics, turnover, independent/affiliated directors, specialized committees for company performance measured by financial results, market position, and CSR/environmental performance.

In recent years the board of directors experienced structural and procedural changes. The most important aspects refer to the growing role of independent directors, board diversity, the impact of stakeholders on the board's focus and tasks, and the growing need for continuous training and development of directors. Firstly, studies report the growing presence of independent directors. This trend is growing despite several shortcomings

of independent directors. Independent directors are found not to have sufficient understanding of the industry specificity, and to lack experience and personal engagement. However, their participation on board is believed to assure objective and effective monitoring of executives (Pye, 2014). Secondly, the recent years note a significant increase in the board diversity. This trend results from the growing understanding of stakeholder expectations as well as new guidelines on increased women participation. Following the research which indicates a positive effect of board diversity on the quality of its work, companies include women and directors on greater international exposure to serve as board members (PWC, 2017). Thirdly, the board agenda evolves in response to growing stakeholder roles and incorporates the wider perspective on the company reporting and performance (Tricker, 2012). Topics on environmental protection, climate change, income inequality, and cyber security are added to the board agenda. Fourthly, numerous guidelines to increase the quality of the board performance are in place. The understanding on the board processes and dynamics adds to the implementation of the productive procedures to increase the efficiency of the board (McNulty, 2014). A more detailed discussion on these trends is provided in the Encyclopedia in the section on two-tier board.

Comparative analysis delivers a number of observations on the performance and dynamics of the board. A recent report by PWC (2017) enumerates the key trends and challenges for the board of directors:

- Need for changes among board directors – the report reveals the disconnectivity between board directors based on the differences in the quality of their monitoring and engagement in the board work. As noted “46% of directors believe that one or more of their fellow board members should be replaced. One-fifth of directors say that two or more directors on their board should be replaced” (PWC, 2017:2).
- Increased action to impose performance assessments in response to investor

expectations. In result, as the report shows, 68% of boards declare taking some action in response to their last assessment and reacting to the results achieved.

- Despite investor expectations only 60% of board directors challenge management assumptions on strategy.
- The presence of the independent chair makes a difference in the board monitoring and challenging board decision. According to the report boards with nonexecutive chairs are twice more likely not to re-nominate a director or to provide counsel to a director.
- Many boards still lag behind with respect to the process of prioritizing their goals. Particularly, still environmental and social issues remain neglected even with the growing awareness and interests expressed by investors. The report shows that many directors do not consider issues such as income inequality (51%), immigration (49%), and climate change (40%) important enough to be included in the board agenda and company strategy.
- Board diversity may deliver a more complex view of the company actions – as the report documents female directors pay more attention to social and environmental issues the in company strategy formation.
- Male and female directors differ also in the opinions of the effect of board diversity on performance – the positive impact is identified by 82% of women and 54% of men.
- While directors find long-term incentive plans to be efficient in promoting shareholder value, 70% of them believe that executives in general are overpaid. According to 66% of directors executive compensation strengthens income inequality.
- Shareholder engagement has a positive effect on corporate governance with the reference to proxy voting, investment presence, and preparation at the shareholder meetings.

One Tier and Sustainability

In line with the growing importance of the sustainability viewed as the essential component of a

company strategy and the need to improve ESG performance, the board adjusts accordingly. Recent studies indicate that the board structure and composition may serve as important drivers to increase ESG performance. In particular, the presence of independent directors as well as the representation of female directors on the board is found to add to ESG performance and disclosure. In addition, studies indicate the crucial role of the operation of CSR or sustainability committee within the board as well as the orientation of the board chair. Sector reports reveal that taking into account the nature of the board work, its directors need training in the area of ESG disclosure and sustainability.

Cross-References

- [Board of Directors and Corporate Governance](#)
- [Board Diversity and Inclusivity](#)
- [Board Diversity and Gender Quotas](#)
- [Board Committees and Corporate Governance](#)
- [Diversity of Boards](#)
- [Two-Tier Board](#)

References

- Adams, R., Hermalin, B., & Weisbach, M. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *American Economic Literature*, 48(1), 58–107.
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics*, 97, 207–221.
- Colley, J., Doyle, J., Logan, G., & Stettinius, W. (2003). *Corporate governance*. McGraw-Hill.
- Dalton, D., Daily, C., Ellstrand, A., & Johnson, J. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19, 269–290.
- Fama, E., & Jensen, M. (1983a). Separation of ownership and control. *Journal of Law and Economics*, 26, 301–325.
- Fama, E., & Jensen, M. C. (1983b). Agency problems and residual claims. *Journal of Law and Economics*, 26, 327–349.
- Fisch, J. (2006). Taking board seriously. In T. Jo (Ed.), *Corporate governance. Law, theory and policy* (pp. 329–338). Durham: California Academic Press.
- Gillespie, J., & Zweig, D. (2010). *Money for nothing. How the failure of corporate boards is ruining American business and costing us trillions*. New York: Free Press.
- Hafsi, T., & Turgut, G. (2013). Boardroom diversity and its effect on social performance: Conceptualization and empirical evidence. *Journal of Business Ethics*, 112, 463–479.
- Hambrick, D., & Jackson, E. (2000). Outside directors with a stake: The linchpin in improving governance. *California Management Review*, 42(4), 108–127.
- Hillman, A., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Kostyleva, V., & Lehuedé, H. (2012). Board formation: Nomination and election in OECD countries and Russia, OECD, <https://www.oecd.org/daf/ca/Board%20ENG.pdf>
- Larcker, D., & Tayan, B. (2011). *Corporate governance matters*. Pearson Education, New Jersey: A closer look at organizational choices and their consequences.
- Lester, R., & Cannella, A. (2006). Interorganizational familiness: How family firms use interlocking directorates to build community-level social capital. *Entrepreneurship Theory and Practice*, 30(6), 755–775.
- Mallin, C. A. (2004). *Corporate governance*. Oxford University Press.
- McGuinness, P., Lam, K., & Vieito, J. (2015). Gender and other major board characteristics in China: Explaining corporate dividend policy and governance. *Asia Pacific Journal of Management*, 32, 989–1038.
- McNulty, T. (2014). Process matters. Understanding board behavior and effectiveness. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance*, Oxford university press (pp. 163–176). Oxford.
- Monks, R. A., & Minow, N. (2004). *Corporate governance*. Blackwell Publishing.
- Nielsen, S., & Huse, M. (2010). The contribution of women on boards of directors: Going beyond the surface. *Corporate Governance: An International Review*, 18(2), 136–148.
- OECD/G20. (2015). Principles of corporate governance, OECD, <https://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>
- Pfeffer, J., & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper and Row Publishers.
- PWC. (2017). The governance divide boards and investors in a shifting world, <https://www.pwc.es/es/publicaciones/consejos-y-buen-gobierno/pwc-2017-annual-corporate-directors-survey.pdf>
- Pye, A. (2014). Boards and governance. 25 years of qualitative research with directors of FTSE companies. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance*, Oxford university press (pp. 135–162). Oxford.
- Rezaee, Z. (2010). Board subcommittees for corporate governance. In H. Baker & R. Anderson (Eds.),

Corporate governance. A synthesis of theory, research and practice (pp. 243–262). Hoboken: John Wiley & Sons.

- Ruigrok, W., Peck, S., & Keller, P. (2006). Board characteristics and involvement in the strategic decision-making: Evidence from Swiss companies. *Journal of Management Studies*, 43, 1201–1226.
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783.
- Sirmon, D., & Hitt, M. (2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. *Entrepreneurship Theory and Practice*, 27(4), 339–358.
- Stiles, P. (2014). Board committees. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance* (pp. 177–199). Oxford: Oxford University Press.
- Terjesen, S., & Singh, V. (2008). Female presence on corporate boards: A multi-country study of environmental context. *Journal of Business Ethics*, 83(1), 55–63.
- Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Review*, 17, 320–337.
- Tonello, M. (2010). Board composition and organization issues. In H. Baker & R. Anderson (Eds.), *Corporate governance. A synthesis of theory, research and practice* (pp. 195–223). Hoboken: John Wiley & Sons.
- Tricker, B. (2012). *Corporate governance. Principles, policies and practices*. Oxford: Oxford University Press.
- van Knippenberg, D., Haslam, S., & Platow, M. (2007). Unity through diversity: Value-in-diversity beliefs, work group diversity, and group identification. *Group Dynamics: Theory, Research, and Practice*, 11(3), 207–222.
- Yiu, D., Chen, X., & Xu, Y. (2014). Corporate governance in business groups. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance* (pp. 465–488). Oxford: Oxford University Press.

One-Tier Board Model Versus Two-Tier Board Model

- [Anglo-American Board Model \(One-Tier\) Versus European Model \(Two-Tier\)](#)

Oniomania

- [Compulsive Buying](#)

Online Communities

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Synonyms

[Brand communities](#); [Communities of practice](#);
[Peer-to-peer communities](#)

Definition

Online communities are computer-mediated online forums where people gather to exchange text or audiovisual content in order to discuss, exchange information, or learn about topics that interest and concern them (Kozinets 2010; Schulz et al. 2018). These forums tend to develop through the initiative of citizens who like to engage with each other on a specific topic or (societal or personal) issues. Organizations build online communities to engage with their stakeholders. For example, a sustainable public or private organization can build a community via a Facebook group and a YouTube channel or through a corporate blog. Thus, online communities can be hosted or set up via various online platforms, internally and externally. An essential characteristic of online communities is that the participating actors share their thoughts, ideas, and information with like-minded others through public and private communication. Examples are citizens who may share and discuss their personal views and experiences on sustainable consumption, inspire each other, or evaluate sustainable organizations and their products and services. Organizations may employ online communities to legitimize their products, services, and actions and provide a shared space for their stakeholders to answer general and specific

questions concerning the organization. Organizations and citizens may gather jointly to promote ideas, get answers, criticize, or provide tips for improvements. It also means that organizations can take part in discussions within their online communities and those built by others relating to their organization or their area of interest.

Key Issues

Important elements of online communities are that users of such online platforms are able to exchange their thoughts and ideas with like-minded others. Therefore, they have become essential for all kinds of sustainability initiatives in the past decade, for example, to stimulate ethical or fair consumption (Gummerus et al. 2015). Online communities can be distinguished in different forms, organizational-, individual-, or group-driven:

Organizational or brand community: established by an organization to invite employees and/or stakeholders (e.g., consumers) to provide feedback on products and services. These communities can be public (accessible for everyone, for instance, a group page on Facebook or corporate blog that allows visitors to engage via commenting) or private (upon invitation only as part of a closed network such as corporate intranet or website). Organizations can also use these communities to legitimize their products, services, and actions (see ► “[Legitimacy Theory](#)”). At the same time, a corporate blog or Facebook page can also be a “frontstage” where critical stakeholders can share their concerns about an organization, its products, or actions and may influence other visitors and participants (Lillqvist and Louhiala-Salminen 2014). However, a brand community can also be established by “fans” of a certain brand who share personal information and experiences about the brand with others online, for

example, via a brand-dedicated Facebook group.

Special interest community: these online communities (also highlighted as communities of practice) are usually established by a group of individuals with the same interests in order to “. . . share and discuss written and audiovisual content based on special interest topics: for example, blogs or Facebook groups related to health, beauty, or politics.” [. . .] “Like other social media, these online communities provide (1) the possibility to post and reply to messages and (2) moderation by administrators. However, they distinguish themselves from other social media because they enable authors and participants to (3) share and discuss in-depth information and (4) ask and answer in-depth questions about special-interest topics” (Schulz et al. 2018, p. 291). Often these communities are publicly available. This means the shared content is visible for both visitors and participants. Visitors are actors who visit the community and go through the content (text such as blog post and comments or visuals of products) without interacting with other group members. Participants are visitors who join the group discussion or share their questions or information with others via the community. Visitors and participants seek information about a specific topic, for example, how to install solar panels or how to establish a sustainable lifestyle. They are able to join the conversation with others in order to share their questions, knowledge, or opinion about a specific topic. However, some groups have group administrators who “grant” access to others in order to be able to contribute to the group conversation. Examples are online forums where participants ask questions or share their opinions about certain sustainable products, such as natural cosmetics or organic food. Participants of these groups can choose an anonymous username (nickname) or use their own name to participate in these online communities.

Influencer community: individuals who share their thoughts and opinions on a (sustainable) subject are often the initiators and drivers of influencer communities. People gain an influencer status when their channel has many followers and/or page views. There are various platforms that influencers use to share content with visitors and participants. Popular platforms are Instagram, YouTube, and blogs where influencers share visuals, text, and video with a large audience. On YouTube influencers can be categorized into “vloggers” and “YouTubers.” While vloggers mostly share personal information and their daily thoughts and experiences, YouTubers share their opinions, experiences, and thoughts about specific topics such as food or cosmetics. As a result, these influencers are often perceived as experts by their followers, for example, by providing tips on how to live more sustainably (Schulz et al. 2019). While vloggers are more focused on sharing their daily life routines, YouTubers aim to share their ideas on a hobby or a way of life. However, influencer communities may have close relations with special interest communities as the influencer and his or her participants may share in-depth information and questions with each other.

Peer-to-peer or sharing community: participants of peer-to-peer communities aim to share goods and services through practices such as renting, swapping, lending, or borrowing (Vaskelainen and Piscicelli 2018). Examples are a car sharing system or communal sharing services for secondhand goods. These groups can have commercial interests or may support others by sharing their goods or services for free. Examples are specific apps to share transportation, food, or secondhand clothing. Individuals (e.g., via a website), groups of individuals (e.g., via a Facebook group), or organizations (e.g., via mobile telephone apps) can operate these peer-to-peer platforms. These communities often include rating and comment systems providing the participants with the opportunity to give feedback on other participants with whom they have shared an activity or

from whom they have received goods or services.

Third party review and rating community: these communities are often established by commercial organizations in order to provide a platform through which actors with the same interest can share their reviews of an organization, a product, or services. For example, users of Google Maps are able to provide a review of a specific “spot” such as a hotel or restaurant and add a star rating. Other users of these apps can then consult these reviews while seeking information about specific accommodation or a restaurant. Organizations are also able to reply to reviews from others.

Table 1 Provides an overview of the different characteristics of these different types of online communities.

Summary

Trust and credibility are essential elements in all of these community types. Organizations, individuals, and groups have to trust each other while sharing information with one another. Consequently, online communities often make use of user ratings and reviews. However, in smaller communities, such as special interest communities, participants may build trust through the exchange of in-depth contributions and a sense of friendship and connection which emerges with other participants. Influencers, however, build trust by sharing personal information with their followers. Moreover, credibility develops through transparency, for instance, when an influencer admits that he or she was sponsored by a certain company to produce a product review. Recently Fisher (2019) pointed to the opportunity for organizations gain a competitive advantage through their participation (e.g., by sharing information) as key stakeholders in their own or external online communities.

The question remains where and how organizations are able to cope with critical responses from their stakeholders. Online social media

Online Communities, Table 1 Characteristics and types of online communities

Community type	Initiator: Individual or group	Aim	Characteristics	Example of platforms
Organizational or brand community	1. Organization 2. Brand community: (a) Subdivision of an organization (b) A group of users (fans of a specific brand)	Organizations (1, 2a): to inform, interact, and engage with stakeholders To answer questions or provide webcare Construct and defend legitimacy Fan group of users (2b): who share their experiences with or artefacts from a brand	Organizational (1, 2a) Commercial (1, 2a) Noncommercial (2b) Non-organizational (2b)	Twitter Facebook group Instagram Corporate blog LinkedIn Corporate app Website Online forum
Special interest community	Group of individuals with the same interest or practice	To share ideas and discuss a joint topic or practice such as a hobby, a way of life or common interest	Non-organizational Noncommercial	Facebook group YouTube channel LinkedIn Online forum Group blog Reddit
Influencer community	Individual who shares his/her opinions and experiences on a specific topic and/or practice	Influencer shares his/her thoughts and stories about a specific topic. Community develops through interaction with followers (participants who provide comments engage with each other and feel committed)	Commercial Noncommercial Organizational Non-organizational	Personal blog Instagram Facebook Twitter YouTube channel
Peer-to-peer community	1. Group of individuals who aim to share in order to support others 2. Organizations that provide a service as part of business model	These noncommercial communities aim to share goods and services though sharing economy practices (e.g., food sharing to fight food waste) Other communities have (minor) commercial and use a sustainable business model (e.g., car sharing)	Noncommercial (1) (Minor) commercial (2)	Facebook group Website Online forum Mobile app
3rd party review and rating experience communities	Third party app developer/providers	An organization builds an online community to provide a platform to share firsthand experiences with another organization. For example, by rating hotel accommodations and by providing personal observations and experiences about an organization or service	Commercial Noncommercial	Apps that provide the possibility to rate or review other organizations and their products and/or public or commercial services

monitoring systems are already able to support organizations to identify where stakeholders discuss organizational issues in online communities. At the same time, organizations have to decide how they want to engage with others in their own and external communities,

for example, by answering questions, providing (customer) support, sharing expert information about their products and services, or discussing critical comments from customers. As there are many and various forms of online communities available, organizations have to make a wise selection of those in need of their support and willing to accept the engagement of an organization. Legitimacy (see ► [“Legitimacy Theory”](#)) may be at stake if an organization just steps into a discussion, and it may be costly to maintain active engagement with many different communities. In the future artificial intelligence technologies may be a solution to monitor and address consumer questions on a broader scale, for example, through automated replies. Nonetheless, many online communities are driven through the direct and personal contact among (human) participants.

Cross-References

- [Community of Practices](#)
- [Consumerism](#)
- [CSR and Social Media](#)
- [Dialogue](#)
- [Legitimacy Theory](#)
- [Marketing \(Ethics of\)](#)
- [Stakeholder Dialogue](#)
- [Stakeholder Engagement](#)

References

- Fisher, G. (2019). Online communities and firm advantages. *Academy of Management Review*, 44(2), 279–298. <https://doi.org/10.5465/amr.2015.0290>.
- Gummerus, J., Liljander, V., & Sihlman, R. (2015). Do ethical social media communities pay off? An exploratory study of the ability of Facebook ethical communities to strengthen consumers' ethical consumption behavior. *Journal of Business Ethics*, 144(3), 449–465. <https://doi.org/10.1007/s10551-015-2830-y>.
- Kozinets, R. V. (2010). Netnography: Doing ethnographic research online. <https://doi.org/10.1002/9781444390964.ch15>.
- Lillqvist, E., & Louhiala-Salminen, L. (2014). Facing Facebook: Impression management strategies in company–consumer interactions. *Journal of Business*

and Technical Communication, 28(1), 3–30. <https://doi.org/10.1177/1050651913502359>.

- Schulz, D., Jonker, J., & Faber, N. (2018). Outside-in constructions of organizational legitimacy: Sensitizing the influence of evaluative judgments through mass self-communication in online communities. *International Journal of Communication*, 12, 290–312. Retrieved from: <http://ijoc.org/index.php/ijoc/article/view/6072/2236>.
- Schulz, D., van der Woud, A., & Westhof, J. (2019). The Best Indycaster project: Analysing and understanding meaningful YouTube content, dialogue and commitment as part of responsible management education. *International Journal of Management Education*, 18(1), 100335. Forthcoming.
- Vaskelainen, T., & Piscicelli, L. (2018). Online and offline communities in the sharing economy. *Sustainability (Switzerland)*, 10(8). <https://doi.org/10.3390/su10082927>.

Open Access Economy

- [Access Economy \(Ethics\)](#)

Open Communication

- [CSR Communication and Annual Reports](#)

Open Information Discourse

- [Media Ethics](#)

Open Internet

- [Net Neutrality](#)

Operating Model

- [Business Model](#)

Operational Ethical Dilemma

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Synonyms

OED

Definition

Operational Ethical Dilemma (OED) is a term introduced by Panagiotopoulos (2020) that delineates the situation amid the top management team of an organization must run a multiple criteria decision-making process whether a Corporate Social Responsibility (CSR) strategy will be implemented. This is a very crucial question that precedes any other decision for the details of the design and pursuance of any specific CSR activity. The answer to Operational Ethical Dilemma will define the implementation/continuation or not of such a strategy. The Operational Ethical Dilemma represents not only a question but highlights a situation where multiple parameters intervenes. Furthermore, OED marks the necessity of a process for the assessment of a CSR strategy and the investigation of the correlation between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP). Especially strategic type of CSR considers CSR as a complicated system which demands notable inputs, and it is expected to produce significant outputs in favor of both stakeholders and the firm itself. Thus, it would be hypocritical or naïve CSR not to be considered by using scientific and business terms within a multiple criteria decision-making process.

Introduction

The transformation of companies from their preliminary forms they were used to have during nineteenth and the first half of twentieth century

into organizations with economic, social, and environmental action has started during the second half of twentieth century and it is ongoing so far. Basic element for this developing process is the concept of sustainable development which is spreading in every aspect of global economy. The need for turn to sustainable development has produced the idea of Corporate Social Responsibility (CSR) as a call to every company to reconsider its multiple roles inside the modern economic, social, and environmental framework. However, the involvement of a company into CSR activities is not that simple and especially in the case of strategic CSR, the development, implementation, assessment, reconsideration, and improvement of a CSR policy demands closed follow-up and continuous communication with stakeholders because it should not be taken for granted that every CSR program is good and proper for every company at every point of time. Moreover, the fact that there is dispute concerning the impact of CSR policies on the profitability of an organizations intensifies the criticality of asking the proper questions prior of looking for the correct answers.

Description

Elements like the Corporate Social Performance (CSP) and its consequences on the Corporate Financial Performance (CFP) will affect the decision for the launch or continuation of a CSR strategy. Managerial discretion is another parameter that will keep a determinant role in the final decision. A couple of tough versions of Operational Ethical Dilemma are: a) when CSP is promoted and enhanced with valuable resources even without strong data that a positive effect on CFP will follow, and b) when CSR policy is abandoned in favor of short-term profitability of a firm.

Operational Ethical Dilemma as situation has the inherent characteristic to reappear even if it has been answered to the past. The expressed intention of an organization to fund, design, and implement CSR programs could be reexamined in a certain time concerning its intentions, the benefits to stakeholders and its financial return to the organization. At that certain point, several

questions will arise regarding CSP, CFP, and their interaction. The answer to such a critical question cannot be considered as given because CSR is initially and in a principal level a positive thing for public society. The suggested answer should be “it depends on the available data that are related with CSP and CFP” (Panagiotopoulos 2020).

Therefore, it is vital a CSR strategy to be accompanied by measurements that will describe the resources used for it, the results in favor of stakeholders in comparison with the expected results, the possible improvement in any corporate sector like brand enhancement, green corporate profile, customers’ loyalty, employees’ satisfaction, avoidance of fines or taxation, etc. It should be underlined that a CSR strategy is critical for an organization and demands precise measurements and reliable feedback. CSR is deemed an investment with various tangible and intangible potential benefits and corporations should not underestimate the feedback and the assessment of their efforts because valuable conclusions could accrue from them.

A measurement system for the assessment of CSR activities should be designed that fits to the special characteristics of the market where a company is activated and to the nature of the CSR policy. Very generic assessment tools are very difficult to be adjusted in the particularities of discrete markets or different programs. A proper CSR assessment tool should measure CSP and corporate social financial return providing to CSR team and top management a clear picture for the position of an organization concerning CSR and the impact of that policy to its financial status at least in short and medium term. Such a holistic tool could provide useful conclusions prior of a decision-making process for Operational Ethical Dilemma.

The human factor could significantly affect the outcome of Operational Ethical Dilemma since managers are moral actors. They must exploit such discretion as is available to them toward socially responsible results in every field of CSR (Wood 1991). They have personal responsibility as leaders of their organizations to inspire their teams and guide them towards sustainability. They are responsible to closely follow up CSR

programs and examine the feedback received from these activities. Their suggestions concerning CSR strategy should be well reasoned and supported with evidence about the interaction between CSP and CFP, along with moral reasoning. The process of implementation of a CSR program is not as simple as a philanthropic donation especially when it is embodied into a total corporate strategy. A detailed design should be made that includes analytically available resources, expected results and potential goals to be achieved and moreover suggested measurements of efficiency, recording of results, feedback from stakeholders, assessment of CSR policy, and methods for the detection of any financial impact to the company. There are two possible threats for a firm. The first is based on the intangible nature of possible effects of CSP either positive or negative, a characteristic that creates obstacles in measurement and assessment process. Secondly, there is a possibility CSP to be dissociated from the total performance of the company because in this case CSR will be disconnected from sustainability (Wood 1991, p. 708).

Corporate Social Responsibility Background

A critical element in the theory of CSR is the voluntary nature of relevant programs. CSR is mainly about the policies that are beyond the level that laws and regulations define. Legislation as a codification of acceptable and non-acceptable behaviors can guide the corporate activity and companies should align with the increased state control which aims to cause socially responsible corporate behavior and deterrence of irresponsible corporate behavior (Carroll and Hoy 2004). A company is socially responsible when it operates in accordance with the existed legal frame keeping a proper historic record of compliance and low score of fines, and moreover when it functions in addition with the minimum legal requirements and acts voluntarily to secure a high quality in its relations with stakeholders. CSR comprises all these ways that incorporate social and

environmental problems into the corporate strategy (Carroll 1998).

The theory of legitimacy is defined as a general consideration and belief that the actions of a corporate entity are proper and welcome inside a social system when they follow the norms, the rules, and the values of that. Communication is a critical factor for managing legitimacy. A corporation should pay attention to its communications with stakeholders and should develop skills to understand and comprehend their interests, fears, and concerns (Suchman 1995).

Strategic CSR or Strategy of Social Intervention is the combination of strategic targets of a firm with social benefits. Thus, companies try to align the production of profits with socially responsible actions that take care of their stakeholders. This socially responsible strategy recognizes corporate profit as motive and stakeholders are treated as means for the maximization of shareholders' wealth (McWilliams and Siegel 2011). Ethical corporate behavior often implies short-term financial cost, but it contributes with long-term benefits. These long-term benefits could have both tangible and intangible nature. Corporate reputation and customers' loyalty consist elements that cannot be registered in an annual financial statement, but they could generate money for a company and they could be cultivated through a successful CSR strategy (Jones 1995). It is common in modern markets that customers make their choices for products or services taking into consideration the environmental or social profile of the companies. However, the application of strategic CSR causes inquiries concerning the problems that may come up due to the satisfaction of stakeholders' interests taking into consideration that sometimes there is a conflict among them or even between them and the direct interests of the firm. Moreover, there is a difficulty for the quantitative estimation of the efficiency of CSR programs. Many researchers conclude that the short-term profitability of companies that have incorporated into their strategy social goals could be either increased or decreased. Many researchers believe that CSR investments imply profits backward to the firms only in long-term

(Jones 1995). It is anticipated that companies may invest in these CSR policies that seem to yield positive financial return rather than negative or neutral, and in shorter period as possible (Panagiotopoulos 2020).

Approaching Corporate Social Performance

Researchers in the field of CSR like Waddock, Cochran, Clarkson, Wood, and Carrol have enriched the theoretical background of CSR by developing the concept of Corporate Social Performance (CSP) the last decades of twentieth century bringing into the spotlight the intense of CSR endeavors of a firm and the effectiveness of them. CSP has been defined as the interaction among the principles of social responsibility, the process of social responsiveness and the policies that have been developed for managing societal issues (Wartick and Cochran 1985). Wood examining this definition has recognized the absence of the element of action that should be present since it is highlighted by the word "performance" of the term. Furthermore, she emphasized the lack of recognition of a system of processes rather than a single process. Moreover, she disagreed with the word "policy" since a corporation could develop CSP even without having a relevant CSR policy. Another misunderstanding that was highlighted by Wood was the dual interpretation of CSP. A company that has CSP has a positive impact on society and positive score and the reverse (Wood 1991). In real, a company with CSP should pass through an assessment process and this is the only way to receive feedback for its CSR activity and improve it. Consequently, Wood incorporated these notices in the previous definition of CSP and has suggested that CSP is an arrangement of principles, processes, and possible outputs. A commercial organization focuses on the principles of social duty: a) in institutional (legitimacy), b) in organizational (public responsibility) and c) in individual (managerial discretion) level. The processes of responsiveness are: a) environmental assessment, b) stakeholders management, and c) issues management. The outcomes are defined as

a) social impacts, b) social programs, and c) social policies (Wood 1991, pp. 694–698).

CSP could offer a competitive advantage for a firm and added value to its products and services. These earnings for an organization depend on the expectations of their stakeholders although may have fluctuations. Companies hope to achieve better results in sectors like corporate fame and social image through the execution of CSR programs. The development of indices and the finding of proper variables for the measurement of CSP is a great challenge for a firm (Carroll 2000). Rowley and Berman (2000) support that most measurements of CSP are not valid because they are one dimensional. The variety itself of tools and guides have been developed for the measurement of CSP indicates that there are issues with the measurability of this element (Orlitzky et al. 2003). There are measurements that are based on the categorization of public society because there are several social groups with discrete opinions, values, and concerns. In a proportional way, there is a segmentation in CSP: a) the quality and safety of products, b) the quality of management, c) environmental responsibility and d) social responsibility.

Corporate Social Performance Versus Corporate Financial Performance

A company should invest an important part of its budget for the design and implementation of a CSR strategy enhancing its social profile. This initially negative relation between CSP and the CFP due to the cost of implementation of respective programs challenges researchers to examine the validity of concerns about CSR initiatives and provide reasoning regarding a compromise between an investment in CSR and corporate profitability (McWilliams and Siegel 2011).

The people who are against the idea of CSR support that such investments are an extra burden for corporations which could comply with stringent standards than those that the current legislation defines. Furthermore, CSR actions like budget for the promotion of green corporate

profile and the communication with stakeholders, maintaining premises in non-thriving areas, extensive donations for philanthropies are considered reasons that corroborate the negative relation between CSP and CFP (McGuire et al. 1988). This may imply that firms that apply CSR policies accept a competitive disadvantage by adding an extra source of spending in their budget. This burden is considered heavier for medium and small size firms with limited resources, and therefore an important number of them regards CSR as a luxury. Big size firms and international corporations can more easily design CSR programs and take advantage from economies of scale, investing in CSR programs without increase of their exposure in risk (McWilliams and Siegel 2011).

Another group of researchers regards that CSR has positive effect in the financial robustness of a firm. CSR strategy creates a potential for enhanced profitability through the improvement of corporate reputation because modern customers appreciate an ecological and socially oriented product (Duchin et al. 2010). Moreover, CSR should be treated as a long-term investment which empowers the more rational use of resources and means which harms less the environment, reduces accidents, and lowers the possibilities for fines (Panagiotopoulos 2020). Furthermore, the socially responsible companies perform better in depression periods because customers support them (Ducassy 2013).

An alternative opinion (Aupperle et al. 1985; Soana 2011) suggests that there are so many variables that affect the balance between CSP and CFP that it is difficult to extract a stable and absolute correlation either positive or negative. This may be the case in specific markets where specific variables that measure CSP could be considered as useful indices of CFP. The research has not managed so far to corroborate a totally positive relation between CSR and corporate profitability because there is high complexity and conflicting results from different studies. The creation of a complex measurement which could offer reliability to comparability, the subjective nature of self-reported indicators, the discriminatory questionnaires, and the self-assessment

responses as indicators of Corporate Social Performance, the multiple dimensions used to measure Corporate Social Performance and finally the incompatibility of comparative studies between different disciplines do not favor a general consent. In addition, the heterogeneity of variables and the characteristics of the business environment of each company and each industry are areas for the development of disagreements and conflicting views regarding the relationship between Corporate Social Performance and Corporate Financial Performance (Aupperle et al. 1985; Cochran and Wood 1984).

The mixed and conflicted results of relevant studies which tried to conclude on a positive, negative, or neutral sign for the interaction between CSP and CFP have left top managers without a clear gnostic base that could guide them to a specific direction. In any case, the contradiction of data possibly negatively affects CSR initiatives and prejudices a negative answer to operational ethical dilemma because uncertainty is not a covetable element in business world. Many researches have chosen to focus either on CSP or CFP and there are a few of them that have managed to study both in a balanced manner. However, most of the researches published between 1972 and 2000 in a level of 68% reveal a positive correlation between CSP and CFP (McWilliams and Siegel 2001). Moreover, it seems that a robust CSR policy that resists even in times of recession acts as an insurance for firms since there are evidences that companies with developed CSR strategy performed better during the global financial crisis of 2007–2008 (Ducassy 2013).

Conclusions

Rowley and Berman (2000) support that the relevant research about the interaction between CSP and CFP is encouraged by the wish of the provision of convincing reasoning that could be used by top managers to resist to corporate decision that are opposite to stakeholders' interests. Such gnostic background could offer them the wide

possibility to support the development of CSR strategy and the design of CSR programs that could facilitate societal and environmental issues even against the short-term profitability of the firm. Griffin and Mahon propose that the aforementioned factors could create a cognitive base that could guide from a deontology perspective top manager to orient their firms to sustainability (McWilliams and Siegel 2011). This cognitive background can extend our knowledge of the effects of the business environment on Corporate Social Performance and vice versa and increase our understanding of CSR activities under a variety of Corporate Financial Performance conditions.

Corporate hidden target for yielding financial profit through CSR policies may not be pure ethical. The pursuit of profit when it happens within the legal frame may not be ethical when is organized with the coverage of CSR policies. However, the implementation of CSR programs could produce positive environmental and social impact independently from the real motivation of a firm. In any case, the verification of real motives of CSR activities is difficult alike the measurement of CSP and could be any possible combination from philanthropic sensitivity of top management and/or shareholders, and the wish of a company to restore its relations with stakeholders after a scandal, up to green marketing and avoidance of tough taxation (Panagiotopoulos 2020).

Corporate Social Performance and the consequent Corporate Financial Performance in combination with the managerial discretion provide the outline of a situation where top management of an organization faces the challenge to make decisions for the design, implementation, funding, assessment, and improvement of CSR strategy. Thus, a new concept is defined, Operational Ethical Dilemma that describes the challenge and the question that every top management team must deal with.

Summary

Corporate Social Responsibility (CSR) has been developed significantly the last decades and

occupies important resources of a company. Moreover, firms expect benefits from Corporate Social Performance (CSP) and correlate CSR programs with several goals like green marketing, customers' loyalty, brand recognition, etc. that finally entail a positive addendum in their Corporate Financial Performance (CFP). The realization of CSR as a system with considerable inputs and outputs creates demands for a careful consideration of decisions related with the CSR strategy of an organization. Operational Ethical Dilemma (OED) comprises the situation amid top management of an organization should proceed with a decision-making process for the implementation of a CSR strategy. The weighting of demanded inputs and expected outputs, the assessment of previous CSR policies, the feedback from stakeholders, and the interconnection between CSP and CFP synthesizes a multiple criteria decision-making process. Finally, OED comprises the dilemma whether a CSR strategy should be implemented and the necessary steps that should be followed for a well-reasoned decision that drives a modern company toward sustainability and a fruitful relation with its stakeholders.

Cross-References

- Corporate Social Responsibility
- Stakeholders
- Strategic Corporate Social Responsibility

References

- Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal*, 28(2), 446–463. <https://doi.org/10.2307/256210>.
- Carroll, A. B. (1998). The four faces of corporate citizenship. *Business and Society Review*, 100–101(1), 1–7. <https://doi.org/10.1111/0045-3609.00008>.
- Carroll, A. B. (2000). A commentary and an overview of key questions on corporate social performance measurement. *Business & Society*, 39(4), 466–478. <https://doi.org/10.1177/000765030003900406>.
- Carroll, A. B., & Hoy, F. (2004). Interacting social policy into strategic management. *The Journal of Business Strategy*, 12, 48–56.
- Cochran, P. L., & Wood, R. A. (1984). Corporate social responsibility and financial performance. *Academy of Management Journal*, 27(1), 42–56. <https://doi.org/10.2307/255956>.
- Ducassy, I. (2013). Does corporate social responsibility pay off in times of crisis? An alternate perspective on the relationship between financial and corporate social performance: Does CSR pay off? *Corporate Social Responsibility and Environmental Management*, 20(3), 157–167. <https://doi.org/10.1002/csr.1282>.
- Duchin, R., Ozbas, O., & Sensoy, B. A. (2010). Costly external finance, corporate investment, and the subprime mortgage credit crisis. *Journal of Financial Economics*, 97(3), 418–435. <https://doi.org/10.1016/j.jfineco.2009.12.008>.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20(2), 404–437.
- McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of Management Journal*, 31(4), 854–872. <https://doi.org/10.5465/256342>.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127. <https://doi.org/10.5465/amr.2001.4011987>.
- McWilliams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441. <https://doi.org/10.1177/0170840603024003910>.
- Panagiotopoulos, F. I. (2020). *Energy management and corporate social responsibility: The case of air-transportation*. Chios: University of the Aegean, Greece.
- Rowley, T., & Berman, S. (2000). A brand new brand of corporate social performance. *Business & Society*, 39(4), 397–418. <https://doi.org/10.1177/000765030003900404>.
- Soana, M.-G. (2011). The relationship between corporate social performance and corporate financial performance in the banking sector. *Journal of Business Ethics*, 104(1), 133–148. <https://doi.org/10.1007/s10551-011-0894-x>.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review*, 20(3), 571. <https://doi.org/10.2307/258788>.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *The Academy of Management Review*, 10(4), 758. <https://doi.org/10.2307/258044>.
- Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review*, 16(4), 691–718. <https://doi.org/10.5465/amr.1991.4279616>.

Opportunistic CSR

- [Sunken CSR and SMEs](#)

Opportunity Ethics

- [Utilitarianism](#)

Opulence

- [Abundance \(CSR\)](#)

Organisational Responsibility

- [Social Responsibility According to ISO 26000](#)

Organization for Social Auditing

- [Social Accountability International \(SAI\)](#)

Organization of Ethics

- [Ethics Management](#)

Organization's Awareness Management

- [Awareness Management](#)

Organization's Reason for Existence

- [Corporate Mission, Vision, and Values](#)

Organizational Change

- [Change Management](#)

Organizational Communication

- [CSR Communication and Perspective](#)

Organizational Culture

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Synonyms

[Corporate culture](#); [Organizational development](#)

Introduction

In simple terms, the organizational culture refers to the set of values, beliefs, customs, and behaviors specific to the people working in an organization. Organizational or corporate culture represents an important area of management because of the role played in the organization's performance. Understanding the organizational culture helps someone from outside a company to understand the reasons behind some behaviors or decisions. Cameron and Quinn (2011) consider that people are not always aware of their culture, at least not until they are somehow challenged. The authors appreciate that there are observable (explicit behaviors, norms) and unobservable elements (assumptions). Keyton (2005, p. 53) defines organizational culture as the "congruence of artifacts, values and assumptions jointly held or shared" by the company's employees and managers. This unity is the essence of an organizational culture; it is what makes the people in an

organization stick together. At least this is the case with strong cultures, because there are different levels of organizational culture. In weak cultures, people are not so united and do not share the same values or are not so interested in those values. Morcos (2018) considers that organizational culture is tangible, makes the difference between successful and unsuccessful companies, and influences the spirit of the employees at work. O'Donnell and Boyle (2008) emphasize that the identity of an organization is given by its culture.

Dimensions of Organizational Culture

Hofstede (2011) identifies six dimensions of organizational culture: power distance, uncertainty avoidance, individualism vs collectivism, masculinity vs femininity, long-term vs short-term orientation, and indulgence vs restraint. The first four were already established since 1980 when Hofstede published the results of the research conducted between 1967 and 1973 within the world subsidiaries of IBM. The latter were added afterward after extending the research. Power distance refers to the way members of a structure (family, organization, society) accept hierarchy and inequality between different individuals. Uncertainty avoidance is about control and how people react in front of uncertainty and risks. Individualism reflects the interest of the individual and of his/her immediate family, while collectivism reflects people who are more prone to take care of others and follow the interests of all. Masculinity vs feminism refers to the prevalence of the traits considered more masculine or more feminine. Long-term vs short-term dimension refers to the importance of the past or the future for the present (some entities value more the past, so they have a more traditional approach, while those more oriented on the future and the changes that it brings have a modern approach, incorporating technology). Indulgence vs restraint refers to the way society encourages or discourages gratification of someone's needs and desires.

Jones (2007) emphasizes some arguments against Hofstede's classification: relevancy of surveys for such a sensitive subject like culture;

assumed cultural homogeneity (but a country has different ethnic subgroups); national division (culture exceeds borders); political influences (at the time of the study, the political context might have influenced the masculinity vs femininity dimension); approach limited only to the IBM situation; and outdated (the rapid changes nowadays might influence aspects of these dimensions. For example, masculinity vs femininity might not be considered politically correct today). Even if there were many critics of Hofstede's work, the dimensions of culture established by him helped us better understand the cultural differences between individuals, companies, and countries and created a starting point for other researchers.

Types of Organizational Culture

Cameron and Quinn (2011) identified four types of organizational culture, creating the model of the Competing Values Framework. This model helped them in developing the Organizational Culture Assessment Instrument (OCAI) which can be used by companies to establish the status of their culture. The four types are clan culture, adhocracy culture, market culture, and hierarchy culture.

Clan culture is characterized by loyalty, friendliness between the employees and managers, teamwork, and caring for clients and employees. There is a strong connection between those who work in such an environment. A disadvantage would be the lack of competitiveness between the employees that would bring progress and novelty in some areas. *Adhocracy culture* refers to those companies that embrace innovation and love to take risks; thus, the employees are encouraged to take initiative and be creative. They feel free to experiment with different ideas. The disadvantage might be that these environments might feel overwhelming and that they have to keep up with the others and always find innovative ideas to put into practice. *Market culture* is focused on results, competitiveness, and market penetration. The environment is very competitive, and the employees might feel pressured because they are goal-oriented and are expected to reach them

better and faster than their coworkers. *Hierarchy culture* is specific to companies that are “formalized and structured” (www.ocai-online.com/about-the-Organizational-Culture-Assessment-Instrument-OCAI/Organizational-Culture-Types). Rules, procedures, and policies determine what happens within the organization. The aim is to predict all outcomes and better control them. The disadvantage would be the lack of freedom and the limits put to the creativity of employees; innovation may suffer.

Levels of Organizational Culture

Schein (2010) created a model with three levels of organizational culture: artifacts, espoused beliefs and values, and basic underlying assumptions. *Artifacts* and symbols are what we can see at the surface of an organizational culture (clothes, logo, style, language, legends, rituals, and other elements that can be observed). *Espoused beliefs and values* refer to ideologies, values, goals, and philosophies. Ideally, these should be in accordance with artifacts and basic assumptions, but it is not always the case. Sometimes, they are “abstract ... and mutually contradictory” (Schein 2010, p. 27). *Basic underlying assumptions* explain behaviors and are unconscious and being hard to change. They became so ingrained in the culture after repetitive behaviors that proved to be successful. These types of assumptions are like patterns and usually they are not put under discussion; they are taken for granted. These levels influence the capacity to change the organizational culture within a company. Artifacts and symbols are the easiest to change, while assumptions are the most difficult to change. The stronger a culture is, the more difficult is to change it.

Steps in Changing the Organizational Culture

Organizational culture is not easy to change, and the decision to accomplish this should be thoroughly analyzed by the manager and planned accordingly in a process with multiple steps in

order to diminish the resistance to change from the employees. If the employees are reluctant to changes, the process will be difficult and will create problems. Alvesson and Sveningsson (2008, p. 44) present the six steps needed for a change of the organizational culture: evaluating the situation and establishing the goals to be accomplished; analyzing the present culture and establishing the desired one; analyzing the gap between these two; developing a plan for reaching the desired outcomes; implementing the plan; and evaluating the results and adjusting the strategy accordingly. Because culture gives an identity to the organization (O'Donnell and Boyle 2008; Martin 2013), any attempt to make changes will be perceived as a threat to the employees' safety. The manager should make his or her decisions considering this factor. Some of the measures that could be implemented in order to make the employees gradually accept the change are as follows: explain all the changes and the necessity to operate them; make the changes gradually not quick in order to give the employees time to adjust and accept them; really consider the feelings of the employees (people identifying with the company's culture might feel as they would have lost their own identity when leadership tries to change the culture); encourage feedback from the employees; and make a research to analyze the impact of the change on performance and productivity. Smollan and Sayers (2009) conducted a qualitative study to analyze the connection between the organizational change and the impact on the employees' emotions. Even if the study is not exhaustive, the emotional aspect should be considered by a leader that understands the importance of emotional intelligence.

Summary

Organizational culture brings numerous benefits to a company: identity for the employees (O'Donnell and Boyle 2008; Martin 2013; Kumar 2016); can attract potential employees (someone might want to work at a company driven by its culture); strong cultures motivate people to be more productive and create

competitiveness between the employees that might be beneficial for the overall performance; stimulates “creativity and innovation” (Szczepanska-Woszczyna 2014, p. 33); leads to a better image in the community, and attracts loyal customers and partners. Nukic and Matotec (2014, p. 26) consider that organizational culture is “one of the most significant determinants of the strategic development of an organization,” so the management of a company should try to create a strong culture as part of the company’s long-term strategy. It is a lot of work, and history behind the organizational culture and any decision to change it should be carefully revised in order to not create more damage than benefits.

Cross-References

► [Communication Climate and Culture](#)

References

- Alvesson, M., & Sveningsson, S. (2008). *Changing organizational culture: Cultural change work in progress*. Routledge. Taylor & Francis Group, New York, USA.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. Wiley, San Francisco, USA.
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1). Retrieved from <https://scholarworks.gvsu.edu/orpc/vol2/iss1/8/>.
- Jones, M. (2007). *Hofstede – Culturally questionable?* Oxford, UK: Oxford Business & Economics Conference.
- Keyton, J. (2005). *Communication and organizational culture: A key to understanding work experiences*. Sage, California, USA.
- Kumar, A. (2016). Redefined and importance of organizational culture. *Global Journal of Management and Business Research: Administration and Management*, 6(4), 14–18. Global Journals Inc.
- Martin, J. (2013). *Organizational culture and organizational change: How shared values, rituals and sagas can facilitate change in an academic library*. Retrieved from www.ala.org/acrl/sites/ala.org/acrl/files/content/conferences/confsandpreconfs/2013/papers/Martin_Org%20Culture.pdf
- Morcos, M. (2018). *Organisational culture: Definitions and trends*. Project: Creating structure and culture for innovation. Retrieved from www.researchgate.net/publication/329140215_ORGANISATIONAL_CULTURE_DEFINITIONS_AND_TRENDS
- Nukic, I. S., & Matotec, J. (2014). Importance and trends of organizational culture in construction is Eastern Croatia. *Econviews*, God. XXVII, BR. 1/2014.
- O'Donnell, O., & Boyle, R. (2008). *Understanding and managing organisational culture*. Institute of Public Administration. Retrieved from www.ipa.ie/fileUpload/Documents/CPMR_DP_40_Understanding_Managing_Org_Culture.pdf
- Schein, E. H. (2010). *Organizational culture and leadership*. Wiley, San Francisco, USA.
- Smollan, R. K., & Sayers, J. G. (2009). Organizational culture, organizational change and emotions: A qualitative study. *Journal of Change Management*, 9(4), 435–457.
- Szczepanska-Woszczyna, K. (2014). The importance of organizational culture for innovation in the company. *Forum Scientiae Oeconomia*, 2(3), 27–39.

Organizational Development

► [Organizational Culture](#)

Organizational Goals

► [Corporate Mission, Vision, and Values](#)

Organizational History and Evolution of Principles for Responsible Investment (PRI)

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Description

In 2002, the United Nations Environment Programme Finance Initiative (UNEP FI) set up the Asset Management Working Group to work with a group of investment management firms on the topic of integrating environmental, social, and governance (ESG) factors into mainstream

investment. In April 2005, United Nations (UN) Secretary General Kofi Annan invited a group of institutional investors to draft a set of principles that would provide a framework for a responsible investment initiative. Following a drafting process, coordinated by the UNEP FI and Mercer, that lasted 11 months and included two meetings of 60 experts and three investor group meetings, a final list of ten principles of responsible investment was produced. The Principles for Responsible Investment (PRI) secretariat was set up in London with one employee (van der Lugt and Dingwerth 2015). This chapter describes key milestones in the organization's development and factors that enabled its success, PRI's relationship with the UN is clarified, and three ongoing challenges of PRI – signatory reporting, regional expansion, and policy work – are unpacked.

Genesis and Development of the Principles

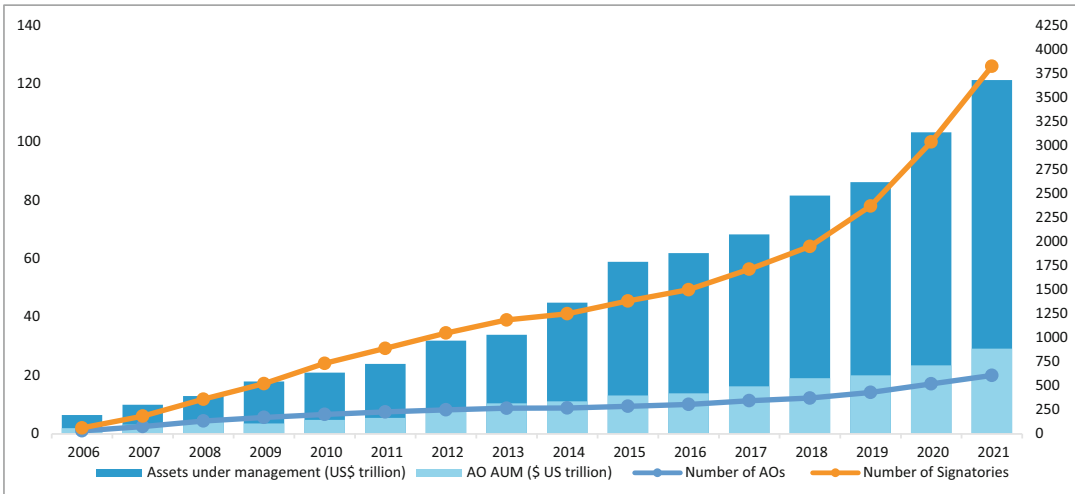
The United Nations Environment Programme (UNEP) was set up in the 1970s to promote and help cooperation among United Nations (UN) member states on environmental issues (UNEP 2022). It was only from the early 1990s that the UN started to engage the private sector in its mission of sustainable economic growth. In preparation for the Rio Earth Summit in 1992, a small group of banks drew up the “UNEP Statement by Banks on the Environment and Sustainable Development” and launched the “Banking Initiative,” which a few years later was renamed the UNEP Finance Initiative (UNEP FI) and engaged the financial sector to integrate environmental considerations in their practices (UNEP FI 2022). This was followed by the launch of the UN Global Compact (UNGC) in 2000 to, in the same vein, engage the wider corporate sector in sustainable development (UNGC 2020).

In 2002, the UNEP FI set up the Asset Management Working Group to work with a group of investment management firms on the topic of integrating environmental, social, and governance (ESG) factors into mainstream investment. One

outcome of this working group was a report on the materiality of ESG issues in equity pricing (UNEP FI 2004) that was launched in 2004 at the first UN Global Compact Leaders' Summit in New York along with UNGC's own “Who Cares Wins” report (UNGC 2004). These reports established the relevance of ESG issues for mainstream investment and stressed the importance of engaging institutional investors (asset owners) to achieve systemic change. Institutional investors' significance stems from their power to exert influence on the finance value chain due to being majority shareholders in publicly traded companies and from the substantial growth of their managed funds over the years (Ryan and Schneider 2003). To act on the reports' recommendations, the executive director of UNEP announced the intention to launch a responsible investment initiative and published a project proposal within one month of the conference.

In April 2005, UN Secretary General Kofi Annan invited a group of institutional investors to draft a set of principles that would provide a framework for the initiative (PRI 2022b). UNEP FI engaged consulting firm, Mercer, to facilitate the drafting process that lasted 11 months and included two meetings of 60 experts and three investor group meetings that produced a final list of ten principles of responsible investment. The process was supported by the publication of the Freshfields report titled “A legal framework for the integration of ESG issues into institutional investment” that was commissioned by the UNEP FI Asset Management Working Group (UNEP FI 2005). Financial support for the process came from the private sector. The Principles for Responsible Investment (PRI), a principle-based membership organization, was launched by UN Secretary General Kofi Annan at the New York Stock Exchange on the 27th of April 2006 followed by a European launch at the Paris stock exchange. One of UNEP FI's team members, James Gifford, became the first executive to head the PRI secretariat in London (PRI 2022b).

The success of the process and the launch depended on the commitment and strategic insight of a handful of committed individuals at UNEP FI, UNGC, and investment institutions. The



Organizational History and Evolution of Principles for Responsible Investment (PRI), Fig. 1 PRI signatory growth: assets under management (US \$ trillion). (Source: PRI 2022b)

flexibility of UNEP FI to maneuver outside the UN bureaucracy, the increasing ESG expertise in the finance sector, and the legitimacy provided by the figure of Kofi Annan to convene business executives also played a key role (van der Lugt and Dingwerth 2015).

The number of members signing up to PRI's ten principles has increased substantially since the launch in 2006, from 63 to 3826 in 2021 accounting for a total of \$121.3 trillion assets under management (Fig. 1). The aftermath of the financial crisis (PRI 2009), the increased emphasis on the financial sector to deliver the Sustainable Development Goals (SDGs) in terms of capital required (Reynolds et al. 2021), and the voluntary nature of the principles (Bondy et al., 2012) all contributed to this growth. While pension funds used to dominate PRI's asset owner base, this has since diversified with insurance companies representing 60% of asset owner assets under management with increasing number of endowments, foundations, and corporate pensions (PRI 2021a).

PRI's Relationship with the UN

PRI "is supported by, but not part of, the United Nations" (PRI 2022a). The official label used is "UN-supported PRI." While the initiative was

spearheaded by the UNEP FI team and supported by the UNGC leadership, it has never gone through formal rigid intergovernmental endorsement (as the UNGC did) and always has had a low state-level oversight (van der Lugt and Dingwerth 2015). As such, PRI is less UN-driven and more consensus seeking among its membership. After its launch, the organization had a voluntary fee structure that was channeled through the UNGC foundation based in New York. This has changed after the incorporation of PRI in the UK in 2010 and the move to a mandatory fee model.

Coordination between PRI, UNEP FI, and UNGC has been strengthened by PRI's governance structure. Executive directors of UNEP FI and UNGC were offered a permanent seat on PRI Advisory Council from the start (van der Lugt and Dingwerth 2015). While the governance of PRI has changed substantially in the past 10 years, these positions remained steady.

PRI has stimulated corporate uptake of the UNGC principles through its own membership by either asking their investee companies to join the initiative or encourage leaders and challenge laggards in the UNGC space. UNGC and PRI had many joint programs during the years and even had a dedicated person in New York overseeing these. PRI and UNGC signatories has been working together in many collaborative engagements

between companies and their shareholders (Gond and Piani 2013).

Changing Governance Structure

Following its launch in 2006, the task was to develop an organization that can grow, manage, and cater for the needs of the signatory base. The organization initially grew slowly from one employee in 2006 to eight employees in 2009 but started to expand more rapidly to 53 in 2012 and 161 employees in 2021 (PRI 2022a). PRI faced two governance challenges in this process: how to govern a fledgling organization internally and how to set out a governance structure that provides appropriate representation of its signatories (asset owners, asset managers, and service providers).

First, the internal governance structure was made up of a small secretariat based in London and an advisory board of 11 asset owners and two UN representatives (PRI 2007). The move from voluntary to mandatory fee structure brought with it the need to provide representation to other types of signatories including asset managers and service providers. As a result, since 2011 the Advisory Council has included members representing different signatories (seven asset owners, two asset managers, one service providers) and different geographies (e.g., Brazil, USA, France, South Africa, Thailand), who were elected for a 3-year period. Candidates need to campaign to secure votes from their own signatory base to be elected (PRI 2022c).

The changing fee structure also meant that the organization could become independent from the UNGC foundation in New York and go ahead with its incorporation in the UK in 2010 as two separate entities (PRI Association and PRI Foundation). As a result of an expanding council and the incorporation, from 2010 to 2015, a smaller board of asset owners (4–5 members) took over the operational management of the organization, while the larger council (15 members) remained responsible for strategic directions. Signatories grew discontent with the lack of transparency around the changes and lack of representation in

the operational matters and voiced their concerns in the 2012 annual meeting in Rio de Janeiro. PRI announced a formal governance review a year after; however, seven signatories have delisted to show discontent. The organization initiated an extensive consultation process with signatories that culminated in a revised governance structure, terms, and policies. PRI returned to a single board structure of 12 members. Partly from this experience and from the extensive consultation on the PRI reporting framework, the organization has developed a strong culture of transparency and signatory engagement across various operational and strategy issues through intensive consultations and working committees (Gond and Piani 2013; Majoch et al. 2017).

Encouraging Signatories' Reporting on ESG: The PRI Reporting Framework

Signatories of PRI have an annual public reporting obligation toward the organization on how they implement the principles. They submit their responses to an extensive list of predetermined mostly qualitative questions, and PRI then publishes a summary analysis of these reports. The reporting framework has gone through various iterations since its launch in 2006 and has recently gone through an extensive review and consultation as part of PRI's 10-year strategy (Arjaliès et al. 2022). Sections of the questionnaire became mandatory in 2013 reporting on policies, resources, and processes (Sullivan and Fiestas 2012). There is now an increasing focus on reporting on performance outcomes and impact signatories have through integrating the principles. However, the organization does not have capacity to monitor compliance and hold signatories to account that has resulted in greenwashing criticism over the years. PRI started to assess the reports in 2014 and score the sections of submissions. Scores are confidential, but PRI showcases high-scoring signatories as part of its Leaders' Group based on changing themes every year (e.g., leaders in climate reporting in 2020). From 2020, PRI started to delist signatories, who fail to meet

minimum reporting requirements over a 2-year support period (Gibson et al. 2021).

The reporting framework has multiple functions. It drives accountability of PRI and its signatories. Investment managers increasingly provide these PRI reports voluntarily in competing for investment mandates from institutional asset owners (Gibson et al. 2021). The reports provide transparency over investor actions around responsible investment. Signatories' responses are evaluated, and they receive detailed feedback that helps their development in improving internal processes, in particular new signatories. Responses have been benchmarked against peers that also provide useful information for signatories. In the first year, new signatories do not have the obligation to report, but if they do, they can ask for their report to remain confidential.

Maintaining Global Relevance Through Regional Expansion

Throughout its development, PRI faced the challenge of achieving global relevance. The responsible investment market has a different history and culture geographically; as such, the organization needs to ensure that it is sensitive to local context. This was evident when the founding signatories from Australia, USA, Canada, France, Sweden, Germany, Norway, UK, and the Netherlands came together to draft the principles and remained so when the organization looked to recruit new members, raise awareness, and enable implementation across the globe.

This challenge influenced PRI's governance and organizational structure. Geographical diversity has always been a key component in the composition of its board, with the present board having representatives from Europe (4), USA (2), Japan (1), South Africa (1), Australia (1), and Canada (2) (PRI 2022c). When PRI was launched, European signatories comprised half of its members (80), followed by signatories from North America (24%). The proportion of these two regions has remained the same since; however, the share of signatories in Asia and South America

increased (10% and 5%, respectively), as PRI opened its regional offices over the years (PRI 2022e).

PRI's global presence has increased massively with staff present in 16 markets in 2021 and further aiming to add operations in Italy, South Korea, and India (PRI 2021b). The first three networks launched in South Korea, Brazil, and South Africa driven by local signatory demand and heavily supported by the largest local pension funds (e.g., PREVI in Brazil in 2008 and GEPI in South Africa in 2009). Local presence ensures faster expansion in the region by increasing awareness, sharing global best practice, offering techniques for ESG integration within the signatory organizations, and providing a local engagement platform (Giamporcaro and Pretorius 2012; Yamahaki 2019).

Supporting Systemic Change Through Policy Work

With the publication of its 10-year strategy (the "Blueprint") in 2016, PRI expanded its core mission of supporting, empowering, educating, and bringing together the investment community to work toward a sustainable global financial system. A new value-based approach adopted the UN SDGs and started to actively advocate for an enabling environment supporting investors to achieve their sustainable market goals (PRI 2016a, b). This approach is grounded in the knowledge that governmental interventions shape financial markets and mobilize them to promote responsible investment through regulating and forming standards (Giamporcaro et al. 2020). Of the 50 largest economies, 48 have a policy in place prompting investors to consider sustainability risks and opportunities (PRI 2019) with over 868 hard and soft law policy tools and guidance in existence (PRI 2022d). PRI published a regulation database of global sustainable finance policy in 2016 on its website and has been updating it periodically.

PRI is taking an active role in influencing governmental interventions in local and global

contexts. In 2021, the organization responded to 52 consultations and published 18 policy briefings in 15 markets (PRI 2021a). These included supporting the development of the European Union's sustainable finance taxonomy and sustainable corporate governance initiative, publishing "US Policy Priorities for 2021," and responding to consultations and organizing roundtables around the Task Force on Climate-Related Financial Disclosures (TCFD) for pension funds and listed issuers. In line with its culture of transparency, PRI publishes the content of all consultations and policy reports on their website. In addition to these activities, PRI – together with the World Bank – developed a tool kit for policy makers and regulators providing them support to implement reforms to build a sustainable financial system.

The organization also continues its reporting, research, and policy engagement on clarifying investor obligations and duties (fiduciary duties) in relation to the integration of ESG issues in investment practice and decision making. Following the 2005 Freshfields report (UNEP FI 2005), PRI published reports on "Fiduciary Duty in the 21st Century" in 2015 and 2021 (PRI 2020). In 2019, PRI along with UNEP FI and the Generation Foundation launched the "Legal Framework for Impact" work program and commissioned legal analysis from Freshfields Bruckhaus Deringer to determine the extent to which legal frameworks enable investors to consider impact in their activities across 11 jurisdictions (PRI 2021a).

Summary

The UN-supported PRI has developed from a list of asset owner principles in 2006 to a central player in changing investment practice in the investment industry (Reynolds et al. 2021). In its 16-year history, the organization moved from an informal start-up structure to a professionally governed multi-stakeholder membership association. Its signatories of asset owners, investment managers, and service providers are represented

on its board and jointly work towards their common goal of a more sustainable global financial system.

Cross-References

- [Institutional Investors](#)
- [Socially Responsible Investment \(SRI\)](#)
- [Sustainable Investment](#)
- [United Nations Agenda 2030 on Sustainable Development Goals, The](#)
- [United Nations Environment Program \(UNEP\)](#)
- [United Nations Environment Programme Finance Initiative](#)
- [United Nations Global Compact](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References and Further Readings

- Arjaliès, D. L., Laurel-Fois, D., & Mottis, N. (2022). Prison break from financialization: The case of the PRI reporting and assessment framework. *Accounting, Auditing and Accountability Journal*. Online First. <https://doi.org/10.1108/AAAJ-02-2020-4439>.
- Bondy, K., Moon, J., & Matten, D. (2012). An institution of corporate social responsibility (CSR) in multi-national corporations (MNCs): Form and implications. *Journal of Business Ethics*, 111(2), 281–299.
- Giamporcaro, S., & Pretorius, L. (2012). Sustainable and responsible investment (SRI) in South Africa: A limited adoption of environmental criteria. *Investment Analysts Journal*, 41(75), 1–19.
- Giamporcaro, S., Gond, J.-P., & O'Sullivan, N. (2020). Orchestrating governmental corporate social responsibility interventions through financial markets: The case of French socially responsible investment. *Business Ethics Quarterly*, 30(3), 288–334.
- Gibson, R., Glossner, S., Krueger, P., Matos, P., & Steffen, T. (2021). *Do responsible investors invest responsibly?* (Swiss Finance Institute Research Paper Series N20-13). <https://doi.org/10.2139/ssrn.3525530>. Accessed 11 August 2022.
- Gond, J. P., & Piani, V. (2013). Enabling institutional investors' collective action: The role of the Principles for Responsible Investment initiative. *Business and Society*, 52(1), 64–104.
- Majoch, A. A. A., Hoepner, A. G. F., & Hebb, T. (2017). Sources of stakeholder salience in the responsible investment movement: Why do investors sign the

- Principles for Responsible Investment? *Journal of Business Ethics*, 140(4), 723–741.
- PRI (Principles for Responsible Investment). (2007). *Constitution of the Principles for Responsible Investment initiative*. <https://www.pka.dk/globalassets/aktuelt/nyheder/dokumenter/original-pri-constitution.pdf>. Accessed 12 September 2022.
- PRI (Principles for Responsible Investment). (2009). *Annual report of the PRI initiative*. <https://www.unpri.org/download?ac=3949>. Accessed 12 August 2022.
- PRI (Principles for Responsible Investment). (2016a). *A blueprint for responsible investment*. <https://www.unpri.org/download?ac=5330>. Accessed 12 August 2022.
- PRI (Principles for Responsible Investment). (2016b). *A blueprint for responsible investment: Genesis, assumptions, and process*. <https://www.unpri.org/download?ac=1919>. Accessed 12 August 2022.
- PRI (Principles for Responsible Investment). (2019). *Taking stock: Sustainable finance policy engagement and policy influence*. https://d8g8t13e9vf2o.cloudfront.net/Uploads/c/j/u/pripolicywhitepapertakingstockfinal_335442.pdf. Accessed 12 August 2022.
- PRI (Principles for Responsible Investment). (2020). *About the fiduciary duty in the 21st century programme*. <https://www.unpri.org/fiduciary-duty/about-the-fiduciary-duty-in-the-21st-century-programme/6539.article>. Accessed 12 August 2022.
- PRI (Principles for Responsible Investment). (2021a). *PRI annual report 2021*. https://dwtzyx6upklss.cloudfront.net/Uploads/s/u/b/pri_annualreport_2021_15698.pdf. Accessed 12 August 2022.
- PRI (Principles for Responsible Investment). (2021b). *PRI strategic plan 2021–24*. <https://www.unpri.org/download?ac=13269>. Accessed 11 August 2022.
- PRI (Principles for Responsible Investment). (2022a). *Annual report 2021: Develop our staff*. <https://www.unpri.org/annual-report-2021/how-we-work/building-our-effectiveness/develop-our-staff>. Accessed 10 August 2022.
- PRI (Principles for Responsible Investment). (2022b). *About the PRI*. <https://www.unpri.org/about-us/about-the-pri>. Accessed 10 August 2022.
- PRI (Principles for Responsible Investment). (2022c). *Board members*. <https://www.unpri.org/about-us/governance/board-members>. Accessed 10 August 2022.
- PRI (Principles for Responsible Investment). (2022d). *Our policy approach*. <https://www.unpri.org/policy/our-policy-approach>. Accessed 10 August 2022.
- PRI (Principles for Responsible Investment). (2022e). *Signatory directory*. <https://www.unpri.org/signatories/signatory-resources/signatory-directory>. Accessed 10 August 2022.
- Reynolds, F., Fabian, N., & Sullivan, R. (2021). The end of the beginning: Next-generation responsible investment. In H. Bril, G. Kell, & A. Rasche (Eds.), *Sustainable investing sustainable investing a path to a new horizon* (pp. 89–107). London: Routledge.
- Ryan, L. V., & Schneider, M. (2003). Institutional investor power and heterogeneity: Implications for agency and stakeholder theories. *Business & Society*, 42(4), 398–429.
- Sullivan, R., & Fiestas, H. V. (2012). Responsible investment, poverty reduction and development: Better returns. *The Journal of Corporate Citizenship*, 48, 39–58.
- UNEP (United Nations Environment Programme). (2022). *About UN Environment Programme*. <https://www.unep.org/about-un-environment>. Accessed 15 August 2022.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2004). *The materiality of social, environmental, and corporate governance issues to equity pricing*. <https://www.unepfi.org/publications/investment-publications/the-materiality-of-social-environmental-and-corporate-governance-issues-to-equity-pricing/>. Accessed 15 August 2022.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2005). *A legal framework for the integration of environmental, social and governance issues into institutional investment*. <https://www.unepfi.org/publications/investment-publications/a-legal-framework-for-the-integration-of-environmental-social-and-governance-issues-into-institutional-investment/>. Accessed 15 August 2022.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2022). *History*. <https://www.unepfi.org/about/background/>. Accessed 15 August 2022.
- UNGC (United Nations Global Compact). (2004). *Who cares wins*. https://www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf. Accessed 15 August 2022.
- UNGC (United Nations Global Compact). (2020). *Uniting business for a better world*. <https://www.unglobalcompact.org/take-action/20th-anniversary-campaign>. Accessed 15 August 2022.
- van der Lugt, C., & Dingwerth, K. (2015). Governing where focality is low: UNEP and the Principles for Responsible Investment. In K. Abbott, P. Genschel, D. Snidal, & B. Zangl (Eds.), *International organizations as orchestrators* (pp. 237–261). Cambridge: Cambridge University Press.
- Yamahaki, C. (2019). Responsible investment and the institutional works of investor associations. *Journal of Sustainable Finance and Investment*, 9(2), 162–181.

Organizational Legitimacy

► Social Legitimacy

Organizational Legitimation

► Legitimacy Theory

Organizational Model for Development

- ▶ [HRM of Sustainable Development Phases](#)

Organizational Objectives

- ▶ [Corporate Mission, Vision, and Values](#)

Organizing Ethics

- ▶ [Ethics Management](#)

OSHA

- ▶ [Occupational Safety and Health Administration](#)

Our Common Future

- ▶ [Brundtland Report](#)

Outcomes-Focused Practice

- ▶ [Utilitarianism](#)

Output-Focused Economies

- ▶ [Consumerism](#)

Outsider System Versus Insider System

- ▶ [Anglo-American Board Model \(One-Tier\) Versus European Model \(Two-Tier\)](#)

Outsiders

- ▶ [Non-executive Director \(NED\)](#)

Overcoming Trade-Offs

- ▶ [Sustainability and Profitability](#)

Overexploitation of Natural Resources

- ▶ [Aral Sea Disaster, The](#)

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- ▶ [Debt Relief Systems: Equitable Allocation](#)

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Ownership Structures

- ▶ [Control-Enhancing Mechanisms \(CEMs\)](#)

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Pandemic

► [Medicine and CSR](#)

**Paradoxical Lens
in Sustainability Tensions:
Chinese and New Zealand
Partnerships**

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Description

Recently more and more Chinese and New Zealand companies have established business partnerships; however, while these companies joined to achieve financial success, they are also faced with difficulties in addressing sustainability issues. Hence, this entry empirically examines tensions in addressing sustainability activities and the reasons causing them between Chinese

and New Zealand firms in business partnerships. In doing so, in-depth semistructured interviews were conducted at 16 relatively large Chinese and New Zealand firms in business partnerships. We find that these companies are faced with multiple sustainabilities which partially overlap across individual, organizational, and societal levels in a knotted and nested relationship. Theoretically, we contribute to paradox theory by identifying the complex relationships among multiple tensions. We suggest to the practitioners that it is difficult to manage the sustainability tensions simultaneously, because moving one competing demand may affect another one.

Synonyms

Recently more and more Chinese and New Zealand companies have established business partnerships; however, while these companies joined to achieve financial success, they are also faced with difficulties in addressing sustainability issues. Hence, this entry empirically examines tensions in addressing sustainability activities and the reasons causing them. In doing so, in-depth semi-structured interviews were conducted at 16 relatively large firms and found that these companies are faced with multiple issues which partially overlap across individual, organizational, and societal levels in a knotted and nested relationship. Theoretically, we contribute to paradox theory by identifying the complex

relationships among multiple tensions. We suggest to practitioners that it is difficult to manage the sustainability tensions simultaneously, because moving one competing demand may affect another.

Introduction

This entry empirically examines tensions in sustainability and the reasons causing them between Chinese and New Zealand firms in business partnerships. As Chinese and New Zealand firms continue to develop partnerships, major challenges are anticipated around tensions in addressing sustainability issues. Accordingly, with the rise of organizations operating in global markets that explicitly address social and environmental problems (Govindan et al., 2021; Peters & Buijs, 2021), they may have contradictory sustainability practices (Rodriguez et al., 2021).

Tension in sustainability is a relatively new area and is largely unexplored empirically in business contexts (Govindan et al., 2021; Hahn et al., 2018; Hahn et al., 2016; Van der Byl & Slawinski, 2016). Joseph et al. (2018) asserted that empirical research on sustainability tensions is limited and thus requires future researchers to conduct more empirical studies in different industries and various contexts. Hence, the first research question is: *What are the pressing tensions related to sustainability that arise between, or within, Chinese and New Zealand business partnerships?*

Further, in the many existing studies exploring tensions in addressing sustainability issues between China and Western countries which focused on national-level investigations (Espa, 2018; Raine, 2009), most focused on the factor of cultural diversity (Vangen, 2017), as being influenced by different cultural roots, Westerners and Chinese decision-makers may have contradictory understandings of competing dimensions. While Chinese managers may tend to adopt “both/and” logic by seeing the connections between or among opposing aspects, Western managers may use “either/or” logic by prioritizing one perspective over the other (Keller & Loewenstein, 2011; Keller et al., 2017). However, it is difficult to find

any empirical study investigating this perspective in the sustainability research field (Waldman, Putnam, Miron-Spektor, & Siegel, In press). Therefore, the second research question is: *If tensions exist in sustainability between Chinese and NZ firms in business partnerships, then what reasons might be causing the tensions?*

Against the above background, it is timely and necessary to investigate tensions in addressing sustainability issues in the context of Chinese and New Zealand firms in business partnerships and the reasons causing them. This chapter contributes to scholarly understanding of identification of the tensions and their complex relationships. In addition, based on practitioners’ interpretations and theoretically supported by literature, it is expected that this chapter can provide practitioners in better managing tensions by addressing divergent sustainability issues simultaneously.

The rest of this entry is structured as follows: The theoretical background conceptualizing holistic sustainability is explored through literature that investigates tensions in sustainability in business contexts. Thereafter, this entry reviews the reasons causing them. Then, the empirical study’s research design is described, and the results of this study are provided. The discussion section interprets our novel insights on tensions in sustainability and the reasons causing them. The entry concludes with limitations and suggests opportunities for future scholarly exploration of tensions in addressing sustainability issues in business contexts.

Literature Review

Apply Paradox Theory into Tensions in Sustainability

In recent years, there has been an increasing amount of literature on tensions in sustainability in business contexts (Chen & Eweje, 2022), which can be illustrated from the following three sustainability areas: strategic, intertemporal, and instrumental and moral tensions.

First, Smith (2014) defined strategic tensions “as contradictory, yet interrelated, demands

embedded in an organization's goals" (p. 1592). According to Edwards (2021), most firms have experienced strategic tensions within their organizations, because decision-makers often have contradictory strategies in addressing environmental, social, and economic performance. Hahn et al. (2018) further asserted that these kinds of tensions touch the very heart of sustainability, because they involve a diverse set of potentially competing sustainability issues, such as climate change, biodiversity conservation, poverty alleviation, public health, and education.

Second, as required by WCED (p. 43), firms should address short-term business targets and long-term societal goals at the same time. This indicates that the long-term nature of the benefits that a business provides to the society may be in conflict with short-term business benefits for organizations (Carollo & Guerici, 2017; Slawinski & Bansal, 2012, 2015). The short-term versus long-term tensions were named by Slawinski and Bansal (2015) as "intertemporal tensions" (p. 531): when "the demands of today differ from the needs for tomorrow" (Smith & Lewis, 2011, p. 389).

Third, citing Margolis and Walsh (2003), Hahn et al. (2016) proposed that firms are faced with tensions in addressing instrumental and moral initiatives. They argued that firms focused on instrumental initiatives are essentially driven by organizational benefits, so social issues are only considered if they can bring organizations some economic benefits (McWilliams & Siegel, 2011). In contrast, firms which are driven by moral initiatives ensure that their organizational activities are based on the moral aim to "do the right thing." Firms thus "rest upon fundamentally different and contradicting foundations – i.e. the business case and the moral case, respectively – which gives rise to considerable tensions" (Hahn et al., 2016, p. 214). Similarly, Ashforth and Reingen (2014) investigated the ideal and pragmatic tensions in a natural food corporation. They found tensions between two major informal groups whom they labeled "idealists" and "pragmatists" (p. 479). They found that "idealists endorsed social idealism such as cooperative and environmental values more strongly than did pragmatists, whereas

pragmatists endorsed financial viability more strongly than did idealists" (p. 479).

To better understand the tensions in sustainability, scholars have applied paradox theory. According to Schad et al. (2016), paradox theory is rooted in both Western and Eastern philosophy. In fact, they defined paradox in management as "persistent contradiction between interdependent elements" (p. 10). This definition clarifies two core characteristics of paradox: contradiction and interdependence, as illustrated below.

Early scholars have attempted to argue that paradox denotes a contradictory perspective of diverse competing demands (Niesten & Stefan, 2019; Prashantham et al., 2018). Poole and Van de Ven (1989) described paradox as "interesting tensions, oppositions, and contradictions between theories which create conceptual difficulties" (p. 564).

However, other scholars asserted that paradoxes depict the complicated connections among opposing elements, highlighting their interdependent nature (Periac et al., 2017). Early scholars suggested these inextricable links between opposing elements. Cameron (1986) discovered that contradictory elements are able to operate at the same time, because there is no complete separation among the opposing elements. Similarly, Smith and Berg (1987) explained that "the contradictions are bound together, the more that members seek to pull the contradictions apart, to separate them so that they will not be experienced as contradictory, the more enmeshed they become in the self-referential binds of paradox" (p. 14). In fact, these definitions express the coexistence of divergent competitive demands which emphasizes their synergistic relationships (Efrat et al., 2022; Kourti, 2021).

When it comes to its application in tensions in sustainability, paradox theory provides a better understanding of tensions in sustainability and their complex relationships at Chinese and NZ firms in business partnerships. A paradoxical perspective on sustainability embraces "tensions to simultaneously accommodate competing yet interrelated economic, environmental, and social concerns that reside at different levels and operate in different logics and time frames and in different

spatial scales” (p. 236). On the one hand, the competing environmental, economic, and social dimensions are contradictory to each other; however, at the same time, they are also interdependent elements which emphasize their interplay as one can transform into the another.

Reasons Causing the Tensions in Sustainability

Prior research suggested that when members have different opinions on what is central, enduring, and distinct about their organizations, conflict and tension proliferate (Sheep et al., 2017). In other words, tensions in organizations may surface when members disagree about which attributes characterize their organizations (Glynn, 2000; Pratt & Rafaeli, 1997). Drawing from this view, an increasing number of studies have pinpointed that tensions in sustainability may appear in firms when their decision-makers have divergent values and views regarding sustainability (Van der Byl & Slawinski, 2016). For example, Qiu (2005) argued that tensions between Chinese and foreign firms in joint venture business partnerships in Shanxi province such as staff recruitment and training, dismissal, energy supply, and a development agenda resulted from differences between foreign and Chinese top executives. Similarly, Ashforth and Reingen (2014) found that tensions exist in a natural food corporation between two major informal groups whom they labeled “idealists” and “pragmatists” (p. 479). The reason causing this tension is that these two groups of managers have contradictory values around sustainability.

Hahn et al. (2015) conceptually asserted that tensions between individuals within and across organizations can be caused by divergent opinions and values toward sustainability. In particular, Smith and Lewis (2011) identified belonging tensions which occur when individuals’ values and identities belong to their referent groups. Similarly, Sharma and Bansal (2017) observed that “actors’ ontological positions, therefore, invoked actions that reinforced their position to tensions” (p. 361). In particular, Peng and Nisbett (1999) believed that fundamental cultural differences in ontology and epistemology at a philosophical

level lead to substantial cognitive differences in approaching opposing elements. In their study of divergent cultural approaches to contradictions, they found that the Chinese tended to take a dialectical, or compromise, approach that retains basic elements of opposing perspectives through a “middle way.” In contrast, the Westerners tended to view tensions more as contradictions. Here “the Chinese” refers to East Asians who are traditionally influenced by the ancient Chinese civilization (Li, 2012, p. 850), while the Westerners are from the western world, where countries such as the United States, Canada, those in the European Union (and the European Free Trade Association countries), Australia, and New Zealand are traditionally influenced by ancient Greek civilization (Hayford, 2009, p. 893).

Likewise, Chen (2002) suggested that “in many respects, Chinese and Western worldviews are philosophically opposed” (p. 183). To explain, there are two core epistemological systems in the West, namely, Aristotle’s “either/or” formal logic and Hegel’s dialectical logic of the “both/or” system (Li et al., 2012, p. 854). Characterized by this analytical view, Westerners tend to regard tensions as independent objects, thus denoting a “loosening” or “breaking apart” by polarizing contradictory perspectives to determine which fact or position is deemed to be correct (Chen, 2002, p. 183).

In contrast, “Chinese philosophical origins are deeply rooted in the ‘middle way’ teachings of such influential philosophers as Confucius and Lao Tzu (the founder of Taoism)” (Chen, 2002, p. 183). Confucian philosophy recommends *zhong he*, a concept based on middleway thinking. Literally, “harmony is the key in achieving prosperity”. “If *zhong he* is reached, writes Confucius in *The Book of Means*, heaven and earth will be in place, and all things will grow” (Chen, 2002, p. 183). Even today, Chinese culture continues to place a high value on the middle way. At the deepest level, the “middle way” is a “both/and” dialectical epistemology, which is distinct from the formal logic paradigm dominating Western traditions (Liu, 1974; Lloyd, 1990).

Based on the above rationale, it can be proposed that due to being influenced by different

cultural roots, Western and Chinese decision-makers may have contradictory understanding of competing dimensions.

Methodology

Research Philosophy and Methods

This entry was guided by an interpretivist philosophy and adopted a qualitative and abductive approach as the preferred research method as the results are based on managers' subjective experience, and their own interpretations and perceptions as representatives of their firms (Bryman & Bell, 2003; Creswell, 2013).

In order to develop novel insights into tensions, this study followed an abductive reasoning approach. Throughout constant movements back and forth between theory and empirical data (Wodak 2004), the abduction approach develops continuous dialogue between observation and the interpreter's preexisting understanding (Hatch and Yanow 2003) and, thus, is more likely to create a dynamic relationship between the existing theory of tensions and empirical data, ultimately providing more enriched perceptions of tensions in the sustainability research field.

Drawing from the traditions of qualitative research, this study utilizes semistructured in-depth interviews. For the present study, we employed semistructured in-depth interviews because, first, they offer freedom and flexibility to examine exploratory inquiries about tensions in sustainability in Chinese and NZ firms in business partnerships. As Yin (2010) claimed, semistructured interviews allow participants the freedom to express their views and perceptions in their own terms and provide the rigor and direction of questions especially developed for the research. In the present study, the researcher had a list of relevant questions known as an interview guide.

Research Context and Selection of Participants

This entry focuses on what tensions occur in sustainability between relatively large Chinese and New Zealand companies across various industries

and how these companies manage the tensions. Hence, we used purposeful sampling and snowballing techniques for identifying companies and potential participants (Mason, 2002; Miles & Huberman, 1994). This was also guided by some recent studies which explore tensions in sustainability within organizations. For example, Ozanne et al. (2016) applied purposeful sampling to select case organizations that were attempting to manage social, economic, and environmental dimensions of sustainability.

Based on the information provided by the New Zealand China Council (2015) and Statistics New Zealand via the Ministry of Business Innovation and Employment (2016), we found that the majority of Chinese and New Zealand firms in business partnerships are of a relatively large size. The next step was to ensure that selected companies have relatively mature sustainability strategies and implementations so that participating managers would be knowledgeable in the practice of sustainability. In doing so, we read relevant documents and archival records to find out if the selected firms have annual sustainability reports, and whether they provided information on sustainability activities on their websites and through social media. Then firms were approached by personal contacts through emails, LinkedIn, and Wechat.

In terms of selection of participants, three criteria needed to be met for this study. First, all the interviews were conducted with participants whose main responsibilities lie in management, senior management, and executive positions. The decision to interview people who are in management positions was also guided by the practice of the research area: In recent empirical studies of tensions in sustainability among organizations, the majority of data was collected through interviewing managers, senior managers, and CEOs (Carollo & Guerici, 2017; Ferns et al., 2017; Iivonen, 2018). Second, we also made sure that the selected participants are directly involved in managing the business partnerships between their firms and their related partner firms and thus able to provide richer and deeper information on tensions. Third, in order to increase the credibility of findings in this qualitative research, we also ensured that the informants come from a diverse

range of industries such as health and safety, aviation, dairy, IT and technology, and other areas. The informants also vary in years of experience in management, ranging from novices to those with more than 29 years of professional experience (Bryman & Bell, 2003; Sandelowski, 1995).

To further ensure that our sample included the most knowledgeable informants, we used a snowballing technique by asking the initial informants to recommend others within their firm or in their partner companies who could offer further insight regarding the research topic. Overall, Table 1 below shows the empirical material was based on interviews with 34 respondents from 11 Chinese and New Zealand firms.

Data Analysis

This study followed the thematic analysis process in the four steps suggested by Miles and Huberman (1994) and Braun and Clarke (2006). In particular, we used the Grounded Theory coding technique advised by Corbin and Strauss (1990) to generate all the themes and subthemes. As suggested by Waldman et al. (2019), qualitative research coding processes such as grounded theory and organizational discourse analysis provided a better way for us to explore tensions and how to manage them.

As a first step, we undertook data familiarization, whereby all the interviews were transcribed word for word. Transcripts were read and reread and notes taken to ensure data familiarization, and parts that seemed to be important through line-by-line reading were highlighted. Then, we went through data reduction, that is, coding and categorizing in order to make sense of the data through the constant comparative method to find similarities and differences. For coding, we followed the three stages suggested by Corbin and Strauss (1998): open coding, axial coding, and selective coding.

In the open coding, we went through the data, examining it, comparing one part with another, and beginning to make categorizations. As described by Corbin and Strauss (1990), open codes are a group of incidents with conceptual labels, which are assigned to each phrase, sentence, or paragraph. At this stage, we kept asking

what was happening in the data and focused on the events, actions, and interactions. For example, in order to identify the tensions, we were looking for indicator terms described by informants such as “problems,” “difficulty,” “challenging,” “tensions,” and “opposed/opposing” suggested by related empirical studies (Ferns et al., 2017; Slawinski & Bansal, 2015; Smith, 2014).

Once the conceptual codes began to accumulate, we started to categorize them by grouping them under more abstract explanatory terms as conceptual categories (Corbin & Strauss, 1998). In further analysis of the first-order codes, axial coding identified more theoretically informed second-order themes (Corbin & Strauss, 1990). In axial coding, the data was supposed to “determine the conditions that gave rise to the work, the context in which it was carried out, the action/interactions through which it occurred, and its consequences” (p. 13). Accordingly, we identified a set of codes that were developed more fully as we moved through each additional interview and company.

The third coding step is selective coding which is the final part where the main themes are drawn; it is “the process by which all categories are unified around a core category” (Corbin & Strauss, 1990, p. 14). In this process, coding was delimited to subcore categories which are related to the core category. The core category represents the central phenomenon of the study, and the subcore categories need to stand in relationship to the core category as conditions, action/interactional strategies, and/or consequences, where open, axial, and selective coding overlap (Corbin & Strauss, 1998). As a result of selective coding, categories and their subcore categories became more integrated and elaborate to build up the core category for this study; for details, see Appendix A.

Findings

In this section, the main tensions experienced, and the strategies used in managing the tensions, are discussed. Table 2 illustrates the findings that multiple tensions in four sustainability areas – triple bottom line, temporal, commercial, and

Paradoxical Lens in Sustainability Tensions: Chinese and New Zealand Partnerships, Table 1 Companies and participant profiles

Number of business partnerships	Labeled selected companies	Type of business partnerships	Time of partnership	Industry	Number of interviewed participants	Type of interviewing	Labeled interviewed participants	Nationality	Titles of interviewed participant	Years of working experience of participant
Partnership 1	A: New Zealand	Joint venture business partnership	2 years	Farming	3	Telephone	A1	New Zealand	Director	Over 15 Years
	Telephone					A2	China	Senior manager	Less than a year	
	Telephone					A3	New Zealand	Director	6 months	
	Telephone					B1	New Zealand	Nonexecutive director	1 and 1/2 years	
Partnership 2	C: New Zealand	Acquisition business partnership	6 years	Appliance manufacturing	2	Face-to-face	B2	New Zealand	Director	10 months
	Telephone					C1	New Zealand	Chief executive officer	29 years	
	Telephone					C2	New Zealand	Director	3.5 years	
	Telephone					D1	China	Director	19 years	
Partnership 3	E: New Zealand	Strategic business partnership	5 years	Telecommunications	8	Telephone	D2	China	Manager	11 years
	Face-to-face					E1	New Zealand	Manager	12 years	
	Face-to-face					E2	New Zealand	Manager	12 years	
	Telephone					E3	New Zealand	Senior manager	About 12 years	
	Face-to-face					E4	New Zealand	Senior manager	5.5 years	
	Face-to-face					E5	New Zealand	General manager	Nearly 23 years	
	Face-to-face					E6	New Zealand	Senior manager	15 years	
	Face-to-face					E7	New Zealand	Manager	7.5 years	
	Telephone					E8	New Zealand	Manager	9 years	
	F: Chinese					Face-to-face	F1	New Zealand	Director	77 years
	Face-to-face	F2	China	Director	11 years					
	Face-to-face	F3	New Zealand	Manager	5 years					

(continued)

Paradoxical Lens in Sustainability Tensions: Chinese and New Zealand Partnerships, Table 1 (continued)

Number of business partnerships	Labeled selected companies	Type of business partnerships	Time of partnership	Industry	Number of interviewed participants	Type of interviewing	Labeled interviewed participants	Nationality	Titles of interviewed participant	Years of working experience of participant
Partnership 4	G: New Zealand	Joint venture business partnerships	15 years	Health and safety	2	Telephone	G1	New Zealand	Director	Over 10 years
	H: Chinese					Telephone	G2	New Zealand	Independent director	1.5 years
Partnership 5	I: New Zealand	Joint venture business partnerships	2 years	Aviation	5	Face-to-face	I1	China	Manager	3 years
						Face-to-face	I2	New Zealand	Senior manager	4 years
						Telephone	I3	New Zealand	Senior manager	5 years
						Face-to-face	I4	New Zealand	Manager	10 years
						Telephone	I5	New Zealand	Manager	2.5 years
Partnership 6	J: Chinese	Joint venture business partnership	4 years	Dairy	5	Face-to-face	K1	New Zealand	Director	9 years
						Face-to-face	K2	New Zealand	Manager	6.5 years
						Face-to-face	K3	New Zealand	Senior manager	7 years
						Telephone	K4	New Zealand	Senior manager	6 years
						Face-to-face	K5	New Zealand	Director	15 years
Partnership 7	L: Chinese	Acquisition business partnership	4 years	Disposal	1	Telephone	M1	New Zealand	Chief executive officer	10 years
	M: New Zealand									
	N: Chinese									
Partnership 8	O: New Zealand	Acquisition business partnership	1 year	Health and safety	1	Face-to-face	O1	New Zealand	Senior manager	Over 20 years
	P: Chinese									

Paradoxical Lens in Sustainability Tensions: Chinese and New Zealand Partnerships, Table 2 Identification of tensions and their causes

Companies	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Participants	Total participants/ companies
Identification of Multiple Tensions (IMT)																		
Financial dominance of Triple Bottom Line Tensions																		
Chinese firm: economic performance versus NZ partner firms: economic and environmental/social performance	✓	✓			✓		✓		✓		✓				✓		A1, B1, E1, E2, E6, G1, I1, K3, K4, K5, O1	11/7
NZ firms: economic performance versus Chinese partner firms: economic and environmental/social performance			✓														C1, C2, D1, D2	4/2
Financial tensions, dominant, addressing sustainability issues becomes secondary	✓	✓			✓	✓	✓		✓	✓	✓		✓		✓		A1, A2, A3, B1, B2, E3, E4, E6, E7, E8, F3, G1, G2, I1, I2, I3, K1, K2, M1, O1	20/9
Temporal tensions																		
Chinese firms: today's business success versus NZ partner firms: tomorrow's business development and public welfare		✓			✓	✓	✓	✓	✓	✓	✓		✓		✓		B1, E1, E2, E3, E4, E5, E6, F2, G1, G2, I1, I4, K3, K4, K5, M1, O1	17/8
NZ firms: today's business success versus Chinese partner firms: tomorrow's business development and public welfare			✓	✓													C1, C2, D1, D2	4/2
Insignificant commercial and moral tensions																		
Commercial imperatives versus moral imperatives			✓								✓						C1, K1, K3, K4, K5	5/2

(continued)

Paradoxical Lens in Sustainability Tensions: Chinese and New Zealand Partnerships, Table 2 (continued)

Companies	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Participants	Total participants/ companies
Hardly any commercial and moral tensions as both parties behave ethically according to the law	✓		✓	✓	✓	✓			✓		✓		✓				A1, C1, D1, D2, E1, E2, E3, E4, E6, E7, E8, F1, F2, F3, I1, I2, I3, K5, M1	19/8
Minor spatial tensions																		
Adopting Chinese law in regulating social and environmental issues versus utilizing NZ's law in regulating social and environmental issues	✓✓				✓		✓		✓							✓	A1, E3, E6, E8, G1, G2, I2, I3, I4, O1	10/5
No statement of spatial tensions as both parties just need to make sure their business activities obey the local regulations	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓				A2, A3, B1, B2, C1, D1, E2, E4, E5, E7, F1, F2, K1, K3, K4, K5, M1	20/9

moral tensions, and spatial tensions – create more difficulty and challenges for these companies to manage simultaneously.

Identification of Multiple Tensions (IMT)

Financial Dominance of Triple Bottom-Line Tensions

First, with comments from 15 participants, we identified Triple Bottom Line (TBL) tensions between Chinese and New Zealand firms in business partnerships. As TBL requires firms to contribute to environmental, economic, and social performance (Elkington, 1997), the TBL tensions between Chinese and New Zealand firms in business partnerships thus can be understood as these firms having contradictory strategies in addressing environmental protection, economic prosperity, and social justice in their daily business activities. This finding reflects the strategic tensions which were mainly identified in recent studies from a conceptual perspective within firms (Hahn et al., 2018; Hahn et al., 2015). With comments from 11 participants at seven firms, the findings showed that Chinese firms tended to pursue financial growth, while their New Zealand partner firms tended to achieve financial returns and environmental or social objectives. For example, director A1 clearly reported such tensions:

What I would say is that our Chinese partner firm has a big focus on the financial performance. I think their main driver is to return a dividend for their shareholders whereas we are focusing on returning a dividend for our shareholders and also maintaining sustainable farming such as setting goals around animal treatment and wastewater management. (Director A1)

Similarly, one nonexecutive director B1 asserted:

Honestly, we do not worry about sustainability issues. To us it is just about looking at whether business activities can meet financial goals or not. Our Chinese directors do not understand the business; they only can look at budgets and if the New Zealand partner firm does not meet the monthly budget, then there is something wrong. We believe that our New Zealand partner will look after the environment such as protecting waterways and animal welfare. (Non-Executive Director B1)

Interestingly, the findings also indicated that, although some participants reflected that Chinese and New Zealand firms in business partnerships had tensions in addressing these environmental, financial, and social issues, the majority of tensions in their business partnerships are around commercial activities while how to deal with sustainability issues had not yet come up or had been relegated to an unimportant position. As evidence, one director at firm A stated:

I think it is quite early days for us and our Chinese partner to have some tensions in addressing environmental or social issues. As this partnership has lasted only about 2 years, the only tension we have come across was about economic goals. (Director A3)

Then this informant described the rationale for this, i.e., the main reason this partnership was established was because it is a win-win joint venture partnership for both firms. As he continued:

We could see the benefits of this joint venture partnership. The reality was our company was carrying a lot of debts. At this time, forming this partnership helped us out of financial difficulty and also realised our ambition to grow exports into the Chinese market. While on the other side, it is also beneficial for our Chinese partner firm, because they can get sustainable food from us. (Director A3)

Temporal Tensions

The second tension is temporal as Chinese and New Zealand firms in business partnerships confront strategies for addressing today's business success and tomorrow's business development and public welfare, based on 21 participants' sentiments.

Interestingly, the findings also showed the differences between Chinese and New Zealand firms in addressing sustainability issues from a temporal perspective. With comments from 17 participants at eight firms, the empirical analysis demonstrated that most New Zealand firms tended to have a sustainable business as well as being socially responsible, while their Chinese partner firms just wanted to achieve short-term business profits without thinking of long-term plans. For example, one senior manager at firm E clearly demonstrated this tension:

There are many short-term and long-term tensions in our business partnership. Our Chinese partner firm is like any company, which is driven by short-term profits and financial positions. They have targets and they have things to achieve for the financial year, so that drives them very heavily and it skews their decision-making. They will recommend to us and try to push us towards things that are commercially favourable for them. However, our firm on the other side probably will be more focusing on the long-term development. (Senior Manager E3)

This argument was also confirmed by another participant at firm E. According to this participant:

From my perspective, our Chinese partner firm does not play a long game. They play a short to medium-term game, because they do not think about what they are going to do next. However, we are looking at, for example, 25% to 30% less power consumption for the same output in our products. This has a big impact not only on business development but also for environmental protection, which means we can run some devices in cold temperatures with less carbon emissions. (Senior Manager E2)

The above two managers' comments indicated that, in comparison to the Chinese firm F, its New Zealand partner at firm E tended to contribute to developing business and managing public goods that are "nonexcludable and nonrivalrous such as water and air" (Slawinski & Bansal, 2015, p. 533).

Insignificant Commercial and Moral Tensions

Third, the empirical analysis showed that only five participants reported commercial and moral tensions in their business partnerships. For instance, the CEO of company C reported the tensions with their Chinese partner company D in shutting down one important factory:

We shut an important factory only late last year. In fact, the decision was made locally and it did have a bad impact as a large number of people lost jobs. Before the final decision was made, there were some debates between our leadership team and our partner company. The Chinese team wanted to keep it open for longer because they did not want to see many people lose jobs, but we wanted to shut it down, as it was no longer financially profitable. (Chief Executive Officer C1)

From this perspective, it can be seen that tensions arose between New Zealand company C and its

Chinese partner company D. While company C's action tended to be driven by commercial imperatives, company D cared more about moral responsibility by considering employee interests, and its potential impact on the local community. This finding is consistent with Hahn et al. (2016) who proposed that firms are faced with tensions in addressing instrumental and moral initiatives, thus highlighting firms confronting tensions "resting upon [a] different, contradicting foundation, the business case and the moral case, respectively" (p. 215).

Minor Spatial Tensions

With comments from ten participants at five firms, the empirical analysis also identified spatial tensions between Chinese and NZ companies in business partnerships. Based on participants' sentiments, spatial tension can be defined as "when Chinese and NZ firms do business with each other, they are faced with the challenge of either obeying China or NZ sustainability standards in addressing social and environmental issues." For example, the senior manager at firm O asserted:

Every country has different regulations. So New Zealand regulations are our backbone because that's where we make all the products. So every product in the factory needs to meet the New Zealand regulations. However, China has different standards to regulate healthy products, for example, it is legal in China to put 90% flour outside capsules with only 10% healthy ingredients. Therefore, our Chinese partner firm asked us to provide such products to Chinese customers, which causes tensions in our partnership. (Senior Manager O1)

The above manager's comment revealed spatial tensions in their business partnership, as China and NZ have different laws in regulating healthy products, raising tensions in addressing social responsibility. Similar tension was also identified in the partnership between company E and F.

Discovering Multiple Reasons Causing the Tensions (MRCT)

The empirical results indicated that reasons causing the tensions derive from individual,

organizational, and national levels. Accordingly, this study generated the subcore category of “multiple reasons causing the tensions” representing three conceptual categories of “individual-level reasoning: decision-makers confronting attitudes towards sustainability, ‘organisational-level reasoning’, and ‘national-level reasoning.’” The frequencies of the multiple reasons causing the tensions (MRCT) are illustrated in Table 3. Each category is explained in detail in the following three subsections with comments from informants and related literature.

Individual-Level Reasoning: Decision-makers Confronting Attitudes Toward Sustainability

On the individual level, the empirical analysis showed that managers at Chinese and NZ firms tended to have different values and norms regarding sustainability, which caused tensions in their business partnerships. This endorses the view mentioned in the literature that tensions in sustainability might arise for organizations when their decision-makers have divergent values and opinions regarding sustainability (Ashforth & Reingen, 2014; Besharov, 2014; Hahn et al., 2015; Maon et al., 2008). However, these studies only mentioned managers who either value one side of sustainability dimensions or the other, for example, managers who either value social or commercial sides instead of both (Smith & Besharov, 2019). Rather, the empirical analysis of this study illustrates managers’ “either/or” and “both/and” values toward the competing demands in sustainability. As one informant at company B commented:

Paradoxically, my experience is that tensions occurred in our business partnership because the Chinese directors do not understand the NZ... industry. They just do not talk about how to address sustainability issues, it is something that occurs at a lower level. What they only understand or the first thing in their mind is finance. I remembered once one of the key shareholders came out and said that the budget of our NZ partner firm is not good enough: this is the number that he wants. (Nonexecutive Director B1)

The above manager’s comment indicated that the Chinese decision-makers at their partner firm

represent what Ashforth and Reingen (2014) called “pragmatists” who endorsed financial viability much more strongly compared to “idealists.” This statement was also affirmed by another informant at firm A, director A1: “It took a while for the Chinese new management team to understand the complexities between business and environmental practice such as how grass grows and how animals grow.”

In comparison, the decision-makers at their NZ partner firm A tended to have a better understanding of the competing demands in sustainability. As he continued:

My view is that managers at our NZ partner firm can see their business returns are dependent upon nature and if it rains and the grass grows the stock won’t come, but if it’s sunny and the grass dries, the stock will come. They know that their business is at the mercy of the weather. In addition, they cared a lot about farmers’ interests, because they know if farmers are not happy, then they will not get enough stock. If there is no stock, then there are no profits. (Nonexecutive Director B1)

The above comments of participants demonstrated that tensions existed between companies A and B because Chinese decision-makers at firm A had a strong business mindset prioritizing financial performance over other sustainability performance without seeing their connections. In contrast, NZ decision-makers at firm B knew that it is important to implement sustainability, because addressing environmental or social aspects can help them generate financial returns.

Organizational-Level Reasoning

The findings of the empirical analysis revealed that two factors at the organizational level may trigger tensions related to sustainability in Chinese and NZ business partnerships. They involve contradictory organizational sustainability standards and regulations and opposed organizational economic goals, which are discussed accordingly in the following two subsections.

Contradictory Organizational Sustainability Standards and Regulations

Comments from 24 participants at nine companies suggested that different organizational sustainability standards

Paradoxical Lens in Sustainability Tensions: Chinese and New Zealand Partnerships, Table 3 Frequency of Multiple Reasons Causing the Tensions (MRCT)

Companies	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Participants	Total participants/ companies
Multi-Reasons in Causing the Tensions (MRCT)																		
Individual-level reasoning																		
Decision-makers confronting attitudes toward sustainability																		
Chinese decision-makers' "either/or" attitudes toward sustainability	✓	✓			✓						✓		✓		✓		A1, B1, E1, E3, K3, K4, M1, and O1	8/6
versus NZ decision-makers' "both/and" attitudes toward sustainability	✓	✓			✓	✓			✓	✓			✓	✓			A3, B1, E3, E4, E5, E6, E7, F1, G1, G2, I2, I3, I5, K1, K3, M1, and O1	17/9
Chinese decision-makers' "both/and" attitudes toward sustainability																	C1, C2, D1, D2, F2, and I1	6/4
Chinese decision-makers' "both/and" attitudes toward sustainability			✓	✓		✓			✓								C1, C2, D1, D2, and F1	5/3
NZ decision-makers' "either/or" attitudes toward sustainability																		
Organizational-level reasoning																		
Contradictory organizational sustainability standards and regulations																		
NZ companies' solid sustainability policies and regulations	✓	✓			✓		✓		✓		✓		✓		✓		A1, A2, A3, B1, E2, E3, E4, E5, G1, G2, I1, I2, I3, I4, I5, K1, K2, K3, K4, M1, and O1	21/8
Chinese partner companies' financial performance dominant organizational policies and regulations	✓	✓			✓	✓		✓			✓				✓		A1, A3, B1, B2, E2, E3, E4, E6, F3, I4, K1, and O1	12/7

[illegible]

and regulations lead to tensions in their business partnerships. This finding is supported by prior studies which argued that tensions may occur when organizations have multiple and potentially contradictory values in sustainability practice (Bansal, 2003; Besharov, 2014). However, the empirical analysis also showed that Chinese companies do not seem to have rigid sustainability policies and regulations which are dominated by financial performance. In comparison, their NZ partner companies tended to have stricter sustainability policies. This caused the tensions in their business partnerships.

Evidently, some companies' A and B participants' comments suggested that their companies' sustainability policies and strategies are in opposition to each other, which triggered TBL tensions and temporal tensions in this business partnership. Four key informants reported that Chinese company B's policy has a strong focus on financial performance, which neglects other sustainability performance such as social and environmental policies. As announced by one informant:

What I would say is that our Chinese partner firm has a big focus on the financial performance of the company. I do not know whether they are particularly interested in the sustainability policies, and I do not think that really interests them. I think they are more interested in what directly affects their business. (Director A1)

The above statement was also echoed by another informant at Chinese partner company B, Director B2: "Our company policy involves strict rules to regulate financial performance which requires us to look at financial returns and assess them every single month." This strategy is in contrast to the policy of its NZ partner company.

Opposed Organizational Economic Goals Although TBL tensions were identified between Chinese and NZ companies in business partnerships, this kind of tension was dominated by financial tensions. Specifically, the empirical analysis showed that, being pressed to achieve certain financial goals, the Chinese and NZ firms in business partnerships may confront different

business strategies, which causes financial tensions in their business partnerships. This was most evident in the partnership between companies E and F. As senior manager E3 explained, "A lot of financial tensions in our business partnerships are driven through financial gains for both parties. The financial returns should not be the key pressure but they become the key pressure." Echoing this comment, another participant at company E stressed, due to the different size of the two markets, his company and their Chinese partner company applied different governance structures to obtain business profits that are beneficial for their companies, respectively, which gave rise to financial tensions in their business partnership. As this participant remarked:

I think tensions in our business partnerships are largely business driven, instead of culturally or nationalistically driven. If you think of the size of our organisation, hundreds of sites across NZ with a population of four million people. Our Chinese partner company is dealing with networks that have thousands of sites across a population of 1.5 billion people. So they have set up their business practices to manage that massive scale applied in China. (Senior Manager E4)

However, their Chinese partner company wanted to apply the same business strategies in their company, which caused tensions in this business partnership. As this manager continued:

And then they brought those business practices outside of China and wanted to apply them in other European countries such as NZ. But from our perspective, we do not need these big governance structures for such a small organisation. But when you take a step back you realise that it is difficult for our Chinese partner company to drop that business strategy and change it for us. Sometimes it can be a bit frustrating that it caused many tensions between the two parties. (Senior Manager E4)

National-Level Reasoning

Considering the findings are based on participants' perceptions, the present study found that spatial tensions were caused by two factors: different national sustainability regulations and national government interference. This is

explained along with the evidence of comments from respondents in the following two subsections.

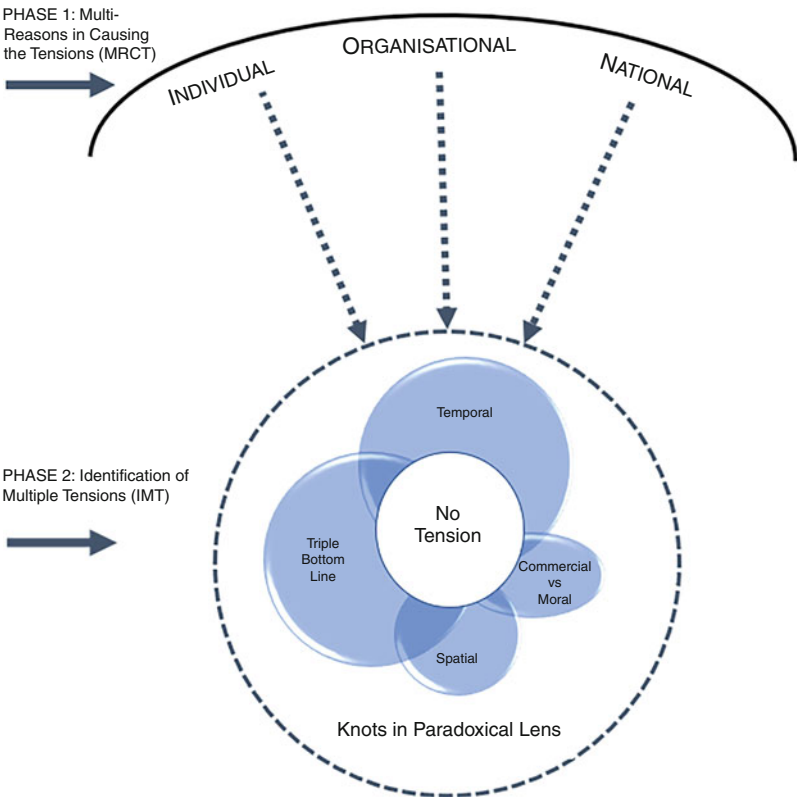
Contradictory National Sustainability Regulations Comments of six participants from four companies suggested that different national standards in sustainability regulations resulted in spatial tensions in Chinese and NZ companies’ business partnerships such as different Chinese and NZ requirements in regulating health and safety issues, taxation, biosecurity rules, and product testing. This was most evident in the partnership between NZ company G and Chinese partner company H. A good example was provided in relation to regulating collagen products. According to one director at company G, Chinese law requires toxic ingredients to be evaluated through an animal testing regime first, which is contradictory to NZ’s rules:

This is an interesting example. All of our products can be sold in China once they are approved by Chinese authorities. I remembered there were some certain products that have to go through animal testing to check the level of toxicity by Chinese authorities. However, we do not endorse animal testing of our products like China. Our products are tested on ourselves first and then on humans in NZ. This is contradictory to the regulations of NZ and our company values. (Director G1)

This resulted in tensions in this business partnership that both parties needed to deal with. As this participant continued:

We said to our Chinese partner company that our company is not going to go through this testing process. Eventually, we had to come to some agreement with our Chinese partner company regarding this issue. Also, we had many discussions with the Chinese government; you can see that there was a contradiction between Chinese and NZ regulations that our company couldn’t accept, because it would be too damaging to our brand if we had to submit to animal testing. (Director G1)

Paradoxical Lens in Sustainability Tensions: Chinese and New Zealand Partnerships, Fig. 1 A holistic framework of knots of tensions in sustainability



Discussion

Based on the results of interview with 34 respondents, we sought to contribute framework for better illustrating the relationships in tensions in sustainability (see Fig. 1 for illustration).

In Phase 1, the framework suggests that an integration of multiple reasons from individual, organizational, and the national level raise sustainability tensions between Chinese and NZ firms in business partnerships. At the individual level, this framework indicates that TBL, temporal, commercial, and moral tensions can be caused by decision-makers' different attitudes and norms toward the competing sustainability demands (Ashforth & Reingen, 2014; Besharov, 2014; Hahn et al., 2015; Maon et al., 2008). In terms of organizational factors, this framework indicates that TBL, temporal, commercial, and moral tensions can be caused by different Chinese and NZ organizational sustainability regulations and standards (Besharov, 2014; Howard & Jaffee, 2013; Li, 2016; Slawinski & Bansal, 2012; Smith & Lewis, 2011). With regard to national factors, the framework illustrates the existence of spatial tensions which can be caused by two factors. First, spatial tensions can be caused by different Chinese and NZ national sustainability regulations (Hahn et al., 2015). Due to these multiple reasons, sustainability tensions between Chinese and NZ firms in business partnerships thus arise, as shown in Phase 2. Drawing from paradox theory (Schad et al., 2016), Phase 2 indicates that multiple sustainability tensions exist between Chinese and NZ companies in business partnerships, which are difficult and challenging for them to manage at the same time. According to the findings of this study, tensions in four sustainability areas were identified: TBL, temporal, commercial versus moral, and spatial tensions. This affirms the conceptual view that tensions exist in addressing divergent sustainability issues for companies (Hahn et al., 2015; Hahn et al., 2016). However, based on empirical findings, despite identification of multiple sustainability tensions, the framework (see white cycle in the middle of phase 2)

illustrates that these tensions have been put into unimportant positions or neglected by these companies as shown by "financial dominance of triple bottom line tensions," "no commercial and moral tensions," and "no spatial tensions," thus highlighting these companies' lack of awareness of the importance of these tensions. Moreover, this framework also illustrates the tied and nested relationships (signified by overlapping blue shadow) among multiple sustainability tensions, i.e., they partially overlap with each other across individual, organizational, and societal levels in an interwoven system. This reflects the holistic tenet from paradox theory, which accentuates the interrelatedness of multiple organizational tensions (Jarzabkowski et al., 2013) in that moving one competing demand will affect the whole system (Hampden-Turner, 1981), thus confirming their complexity (Smith & Lewis, 2011).

On the individual level, the results demonstrated that managers at Chinese and NZ firms tended to have different values and norms toward different sustainability dimensions, which may lead to TBL tensions, temporal tensions, and commercial and moral tensions in their business partnerships. This reflects the view mentioned in the literature that tensions in sustainability might arise for organizations when their decision-makers have divergent values and opinions regarding sustainability (Ashforth & Reingen, 2014; Besharov, 2014; Hahn et al., 2015; Maon et al., 2008). However, the empirical analysis showed the differences between Chinese and NZ managers' values and norms toward divergent sustainability dimensions. For example, the findings indicated that, despite being deeply influenced by the Chinese "middle way" in "both/and" dialectical epistemology, Chinese managers tend to hold "either/or" views by prioritizing economic performance over other sustainability demands without seeing their connections. Despite being influenced by Western "either/or" and "both/or" formal logic, NZ managers tend to see the necessity of practicing sustainability as they regard sustainability elements as complementary so that managing one dimension well will transform the others. This

finding does not support the view that, traditionally being influenced by Chinese and Western culture, Chinese managers tend to adopt “both/and” logic by seeing the connections between or among opposing aspects, while Western managers may use “either/or” logic by prioritizing one perspective over the other (Keller et al., 2018; Keller & Loewenstein, 2011; Keller et al., 2017). Based on this illustration, the following proposition thus can be made:

Proposition 1 Sustainability tensions between Chinese and NZ companies in business partnerships can be caused by decision-makers’ different attitudes and norms toward the competing sustainability demands. However, these differences may not be influenced by traditional Chinese and Western cultural roots.

With regard to organizational factors, while a growing amount of studies pointed out that organizations operating in global markets may have multiple and potentially contradictory values in sustainability practice (Besharov, 2014; Howard & Jaffee, 2013; Li, 2016; Slawinski & Bansal, 2012; Smith & Lewis, 2011), these studies did not elaborate that different organizational sustainability regulations may cause tensions between firms. Rather, in this study, the researchers found that different organizational sustainability standards and regulations result in tensions between Chinese and NZ firms in business partnerships. In terms of organizational factors, the findings of the empirical analysis elaborated two related factors that may trigger sustainability tensions between Chinese and NZ companies. First, different organizational sustainability standards and regulations give rise to tensions such as TBL tensions, temporal tensions, and commercial and moral tensions in their business partnerships. This finding endorsed the argument that tensions may occur when organizations have multiple and potentially contradictory values in sustainability practice (Bansal, 2003; Besharov, 2014). However, the present study also pointed out the differences

between Chinese and NZ companies’ sustainability regulations and standards.

Proposition 2 Sustainability tensions between Chinese and NZ companies in business partnerships can be caused by different organizational sustainability regulations and standards. However, instead of just focusing on developing organizational financial regulations and policies, it is imperative for Chinese companies to improve their organizational sustainability regulations and standards through learning from their NZ partner companies.

Further, while the multiple tensions identified in this research are not completely new to sustainability research, the empirical categorizations of four areas of tension overlap into an interwoven system. This is mainly because these tensions go across individual, organizational, and societal levels. This reflects the holistic tenet from paradox theory, which accentuates the interrelatedness of multiple organizational tensions (Jarzabkowski et al., 2013) in that moving one competing demand will affect the whole system (Hampden-Turner, 1981), thus confirming their complexity (Smith & Lewis, 2011). For instance, the TBL tensions identified in addressing economic performance and environmental/social performance validate the view that some companies seemed to concentrate more or just on how to achieve financial returns that are beneficial for shareholders and the company itself, while their partner companies tended to achieve financial and environmental/social initiatives simultaneously that benefit their companies and society, which emphasizes that the tensions are connected across organizational and societal levels. In addition, the temporal tensions were identified in that the Chinese and NZ firms in business partnerships confront strategies in addressing today’s business success for companies’ interests and tomorrow’s business development and public welfare for both companies’ and societal benefits, which highlights that the tensions are intertwined across organizational and societal levels. Moreover, the commercial and

moral tensions identified in this study mean that some firms tended to be driven by commercial imperatives by pursuing financial returns that are beneficial for their organizations and shareholders, but their related partner companies were more likely to behave from a moral perspective, to ensure they are doing the right things for the related stakeholders such as staff, and consumers, which highlights that the tensions reach across individual, organizational, and societal levels. Furthermore, spatial tensions emphasize that Chinese and NZ companies confront different opinions on whether to obey China or NZ's sustainability regulations and standards, for example, in addressing environmental and social issues, which highlights the tensions between organizational and societal levels. Through these illustrations, it thus can be argued that these firms are faced with multiple and complex tensions in addressing sustainability issues. This research thus generates the following proposition:

Proposition 3 The Chinese and NZ companies in business partnerships are faced with multiple sustainability tensions which partially overlap with each other and connect across individual, organizational, and societal levels in an interwoven system, which endorses their tangled and nested relationships through a paradoxical lens.

Theoretical and Managerial Implications

Theoretical Contribution

First, this study contributes to the methodological implications of tensions in sustainability research. As Fairhurst and Putnam (2018) stated, new developments in qualitative research methods in relation to data analysis methods such as using coding processes in grounded theory and organizational discourse analysis offer a novel way for researchers to better examine tensions in organizations. Alternatively, this research heeds this call by using the coding process of grounded theory suggested by Corbin and Strauss (1998), which helped to identify tensions by situating them in a

specific context of Chinese and NZ business partnerships through developing sets of categories. In addition, this coding process helps the researcher to explore the complex relationships among multiple sustainability tensions that link directly to the development of knots through how tensions become intertwined and nested in one another (Sheep et al., 2017). Further, this coding process also helped the researcher to explore the strategies these companies use in managing the tensions and their potential outcomes (Putnam et al., 2016).

Second, the present study adds value to the existing literature exploring the reasons for the tensions in sustainability in a detailed analysis. Most sustainability scholars tended to identify reasons causing tensions within firms by mainly focusing on the individual level (Ashforth & Reingen, 2014; Besharov, 2014; Hahn et al., 2015; Maon et al., 2008) and organizational level (Besharov, 2014; Li, 2016; Smith & Lewis, 2011). However, this research extended these works by showing multiple reasons causing sustainability tensions from individual, organizational, and national levels. At individual level, some prior studies suggested that, as being deeply influenced by different cultural roots, belonging tensions can be caused where Chinese managers tend to adopt "both/and" logic by seeing the connections between or among opposing aspects, while Western managers may use "either/or" logic by prioritizing one perspective over the other (Keller & Loewenstein, 2011; Keller et al., 2017). However, such stereotypical descriptions might be oversimplified (Schad et al., 2016) and lack any empirical study to investigate this perspective in other fields such as sustainability (Waldman et al., 2019). This research questions this idea by revealing that the Chinese and NZ managers tend to have contradictory values and norms toward the opposing sustainability demands which can cause TBL, temporal, commercial, and moral tensions. However, their opposing values in sustainability may not be influenced by Chinese and NZ cultural roots of "both/and" and "either/or" logic, respectively.

In terms of organizational factors, prior research generally suggested that tensions can be caused by different organizations having contradictory identities regarding sustainability and its practice (Besharov, 2014; Howard & Jaffee, 2013; Li, 2016; Slawinski & Bansal, 2012; Smith & Lewis, 2011). However, this research found that TBL, temporal, commercial, and moral tensions can be caused by different Chinese and NZ organizational sustainability regulations and standards where most Chinese companies do not have rigid sustainability policies and regulations compared to their NZ partner companies. With regard to national factors, the present study demonstrated that spatial tensions can be caused by different Chinese and NZ national sustainability regulations and government interference, which may prevent these companies from operating sustainability initiatives, thus negatively affecting the achievement of holistic sustainability.

Managerial Implications

First, this research can help the practitioners to recognize that they face multiple sustainability tensions to manage at the same time which partially overlap across individual, organizational, and societal levels in a knotted and nested relationship. This reminds the practitioners that it is difficult and challenging for them to manage the sustainability tensions simultaneously, because moving one competing demand may affect another one. Further, based on the empirical analysis of the present study, compared to NZ companies, Chinese partner companies do not have rigid sustainability policies and regulations which are dominated by financial performance, thus causing tensions in their business partnerships. From this perspective, this research thus argues that, although Chinese companies have started to be aware of the importance of sustainability implementation, they need to learn from NZ companies how to achieve financial and nonfinancial sustainability through improving their organizational sustainability regulations and standards.

Second, this study informs practitioners that the tensions between Chinese and NZ firms in

business partnerships are caused by an integration of multiple reasons from individual, organizational, and national levels. In particular, the results highlighted that Chinese and NZ managers' different values and norms can give rise to sustainability tensions which may not be influenced by their traditional cultural roots. Perhaps Chinese practitioners should be trained in and educated about the traditional Chinese philosophy of the "middle way" thinking, which might help them to generate "both/and" logic that is beneficial for managing opposing sustainability demands at the same time. Moreover, this research advises practitioners that sometimes the powerful national level factors may prevent these companies from practicing sustainability initiatives, which may have a negative impact on achieving holistic sustainability. Practitioners could work with national governments in order to develop better relationships with them through enhancing communication to make it easier for them to practice more sustainability initiatives.

Summary

In conclusion, this chapter empirically investigated tensions in sustainability between Chinese and New Zealand firms in business partnerships through showing how tensions arise and are managed. In doing so, 33 in-depth individual interviews alongside one informal group discussion were carried out at 16 relatively large Chinese and New Zealand firms in business partnerships, with staff who are in management, senior management, and executive positions, and directly managing their business partnerships. This research manifests that Chinese and New Zealand firms in business partnership are faced with complex and multiple sustainability tensions which are partially overlapped across individual, organizational, and societal levels. These tensions are caused by an integration of multiple reasons from individual, organizational, and national levels.

Appendix A1: Conceptual Codes and Categories

Open coding	Axial coding	Selective coding	
Conceptual codes	Conceptual categories	Subcore categories	Core category
Chinese firms: economic performance versus NZ partner firms: economic and environmental/social performance	Financial Dominance of Triple Bottom Line Tensions	Identification of Multiple Tensions (IMT)	Mastery of Tensions in Sustainability (MTS)
NZ firms: economic performance versus Chinese partner firms: economic and environmental/social performance			
Financial tensions dominant, addressing sustainability issues becomes secondary			
Chinese firms: today’s business success versus NZ partner firms: tomorrow’s business development and public welfare	Temporal tensions		
NZ firms: today’s business success versus Chinese partner firms: tomorrow’s business development and public welfare			
Commercial imperatives versus moral imperatives			
Hardly any commercial and moral tensions as both parties behave ethically according to the law			
Adopting Chinese law in regulating social and environmental issues versus utilizing NZ’s law in regulating social and environmental issues	Minor spatial tensions		
No statement of spatial tensions as both parties just need to make sure their business activities obey the local regulations			
Chinese decision-makers’ “either/or” attitudes toward sustainability versus NZ decision-makers’ “both/and” attitudes toward sustainability	Individual-level reasoning: decision-makers confronting attitudes toward sustainability	Multiple Reasons Causing the Tensions (MRCT)	
NZ decision-makers’ “either/or” attitudes toward sustainability versus Chinese decision-makers’ “both/and” attitudes toward sustainability			
Contradictory organizational sustainability standards and regulations			
Opposed organizational economic goals			
Contradictory national sustainability standards	National-level reasoning		
National government interference			

References

- Ashforth, B. E., & Reingen, P. H. (2014). Functions of dysfunction: Managing the dynamics of an organizational duality in a natural food cooperative. *Administrative Science Quarterly*, 59(3), 474–516. <https://doi.org/10.1177/0001839214537811>.
- Bansal, P. (2003). From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. *Organization Science*, 14(5), 510–527. <https://doi.org/10.1287/orsc.14.5.510.16765>.
- Besharov, M. L. (2014). The relational ecology of identification: How organizational identification emerges when individuals hold divergent values. *Academy of Management Journal*, 57(5), 1485–1512. <https://doi.org/10.5465/amj.2011.0761>.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>.
- Brix-Asala, C., Seuring, S., Sauer, P. C., Zehendner, A., & Schilling, L. (2021). Resolving the base of the pyramid inclusion paradox through supplier development. *Business Strategy and the Environment*, 30(7), 3208–3227. <https://doi.org/10.1002/bse.2798>.
- Bryman, A., & Bell, E. (2003). *Business research methods* (4th ed.). Oxford University Press.
- Cameron, K. S. (1986). Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. *Management Science*, 32(5), 539–553. <https://doi.org/10.1287/mnsc.32.5.539>.
- Carollo, L., & Guerci, M. (2017). ‘Activists in a suit’: Paradoxes and metaphors in sustainability managers’ identity work. *Journal of Business Ethics*, 148(2), 249–268. <https://doi.org/10.1007/s10551-017-3582-7>.
- Chen, M.-J. (2002). Transcending paradox: The Chinese ‘middle way’ perspective. *Asia Pacific Journal of Management*, 19(2/3), 179–199. <https://doi.org/10.1023/A:1016235517735>.
- Chen, M. S., & Eweje, G. (2022). Managing tensions in sustainable development in Chinese and New Zealand business partnerships: Integrative approaches. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.3044>.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21. <https://doi.org/10.1007/BF00988593>.
- Corbin, J. M., & Strauss, A. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (second ed.). Sage.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (third ed.). Sage.
- Edwards, M. G. (2021). The growth paradox, sustainable development, and business strategy. *Business Strategy and the Environment*, 30(7), 3079–3094. <https://doi.org/10.1002/bse.2790>.
- Efrat, K., Souchon, A. L., Wald, A., Hughes, P., & Cai, J. (2022). Mitigating coopetition tensions: The forgotten formation stage. *European Management Review*, 1–22. <https://doi.org/10.1111/emre.12498>.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of twenty-first century business*. New Society.
- Espa, I. (2018). Climate, energy and trade in EU–China relations: Synergy or conflict? *China-EU Law Journal*, 6(1/2), 57–80. <https://doi.org/10.1007/s12689-017-0076-0>.
- Fairhurst, G. T., & Putnam, L. L. (2018). An integrative methodology for organizational oppositions: Aligning grounded theory and discourse analysis. *Organizational Research Methods*, 1–24. <https://doi.org/10.1177/1094428118776771>.
- Ferns, G., Amaeshi, K., & Lambert, A. (2017). Drilling their own graves: How the European oil and gas supermajors avoid sustainability tensions through mythmaking. *Journal of Business Ethics*, 1–31. <https://doi.org/10.1007/s10551-017-3733-x>.
- Glynn, M. A. (2000). When cymbals become symbols: Conflict over organizational identity within a symphony orchestra. *Organization Science*, 11(3), 285–298. <https://doi.org/10.1287/orsc.11.3.285.12496>.
- Govindan, K., Shaw, M., & Majumdar, A. (2021). Social sustainability tensions in multi-tier supply chain: A systematic literature review towards conceptual framework development. *Journal of Cleaner Production*, 279. <https://doi.org/10.1016/j.jclepro.2020.123075>.
- Hahn, T., Pinkse, J., & Preuss, L. (2015). Tensions in corporate sustainability: Towards an integrative framework. *Journal of Business Ethics*, 127(2), 297–316. <https://doi.org/10.1007/s10551-014-2047-5>.
- Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2016). Ambidexterity for corporate social performance. *Organization Studies*, 37(2), 213–235. <https://doi.org/10.1177/0170840615604506>.
- Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2018). A paradox perspective on corporate sustainability: Descriptive, instrumental, and normative aspects. *Journal of Business Ethics*, 148(2), 235–248. <https://doi.org/10.1007/s10551-017-3587-2>.
- Hampden-Turner, C. (1981). *Maps of the mind*. Macmillan.
- Hatch, M. J., & Yanow, D. (2003). Organization theory as an interpretive science. In C. Knudsen & H. Tsoukas (Eds.), *The Oxford handbook of organization theory* (pp. 63–87). Oxford University Press.
- Hayford, C. W. (2009). Westernization. In D. P. Pong (Ed.), *Encyclopedia of modern China* (pp. 893–918). Charles Scribner’s Sons.
- Howard, P. H., & Jaffee, D. (2013). Tensions between firm size and sustainability goals: Fair trade coffee in the United States. *Sustainability*, 5(1), 72–89. <https://doi.org/10.3390/su5010072>.
- Iivonen, K. (2018). Defensive responses to strategic sustainability paradoxes: Have your coke and drink it too! *Journal of Business Ethics*, 148(2), 309–327. <https://doi.org/10.1007/s10551-017-3580-9>.

- Jarzabkowski, P. J., Lê, J. K., & Van de Ven, A. H. (2013). Responding to competing strategic demands: How organizing, belonging, and performing paradoxes coevolve. *Strategic Organization*, 11(3), 245–280. <https://doi.org/10.1177/1476127013481016>.
- Joseph, J., Borland, H., Orlitzky, M., & Lindgreen, A. (2018). Seeing versus doing: How businesses manage tensions in pursuit of sustainability. *Journal of Business Ethics*, First online, 1–22. <https://doi.org/10.1007/s10551-018-4065-1>.
- Keller, J., Chen, E. W., & Leung, A. K.-Y. (2018). How national culture influences individuals' subjective experience with paradoxical tensions. *Cross Cultural & Strategic Management*, 25(3), 443–467.
- Keller, J., & Loewenstein, J. (2011). The cultural category of cooperation: A cultural consensus model analysis for China and the United States. *Organization Science*, 22(2), 299–319. <https://doi.org/10.1287/orsc.1100.0530>.
- Keller, J., Loewenstein, J., & Yan, J. (2017). Culture, conditions and paradoxical frames. *Organization Studies*, 38(3/4), 539–560. <https://doi.org/10.1177/0170840616685590>.
- Kourti, I. (2021). Managing the identity paradox in inter-organisational collaborations. *European Management Review*, 18(4), 445–459. <https://doi.org/10.1111/emre.12485>.
- Li, P. P. (2012). Toward an integrative framework of indigenous research: The geocentric implications of Yin-Yang balance. *Asia Pacific Journal of Management*, 29(4), 849–872. <https://doi.org/10.1007/s10490-011-9250-z>.
- Li, P. P., Leung, K., Chen, C. C., & Luo, J.-D. (2012). Indigenous research on Chinese management: What and how. *Management and Organization Review*, 8(1), 7–24. <https://doi.org/10.1111/j.1740-8784.2012.00292.x>.
- Li, P. P. (2016). Global implications of the indigenous epistemological system from the East: How to apply Yin-Yang balancing to paradox management. *Cross Cultural & Strategic Management*, 23(1), 42–77. <https://doi.org/10.1108/CCSM-10-2015-0137>.
- Liu, S.-H. (1974). The use of analogy and symbolism in traditional Chinese philosophy. *Journal of Chinese Philosophy*, 1(3), 313–338. <https://doi.org/10.1111/j.1540-6253.1974.tb00654.x>.
- Lloyd, G. E. R. (1990). *Demystifying mentalities*. Cambridge University Press.
- Maon, F., Lindgreen, A., & Swaen, V. (2008). Thinking of the organization as a system: The role of managerial perceptions in developing a corporate social responsibility strategic agenda. *Systems Research and Behavioral Science*, 25(3), 413–426. <https://doi.org/10.1002/sres.900>.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves company: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268–305. <https://doi.org/10.2307/3556659>.
- Mason, J. (2002). *Qualitative researching* (second ed.). Sage.
- McWilliams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495. <https://doi.org/10.1177/0149206310385696>.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (second ed.). Sage.
- Ministry of Business Innovation and Employment. (2016). *New Zealand companies*. <https://www.companiesoffice.govt.nz/companies/learn-about/updating-company-details/financial-reporting/new-zealand-companies>
- New Zealand China Council. (2015). *New Zealand China Council investment report: Fostering growth*. <https://www.nzchinacouncil.com/partnership-forum-2015>
- Nielsen, E., & Stefan, I. (2019). Embracing the paradox of interorganizational value co-creation–value capture: A literature review towards paradox resolution. *International Journal of Management Reviews*, 21(2), 231–255. <https://doi.org/10.1111/ijmr.12196>.
- Ozanne, L. K., Phipps, M., Weaver, T., Carrington, M., Luchs, M., Catlin, J., Gupta, S., Santos, N., Scott, K., & Williams, J. (2016). Managing the tensions at the intersection of the triple bottom line: A paradox theory approach to sustainability management. *Journal of Public Policy and Marketing*, 35(2), 249–261. <https://doi.org/10.1509/jppm.15.143>.
- Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist*, 54(9), 741–754. <https://doi.org/10.1037/0003-066X.54.9.741>.
- Periac, F., David, A., & Roberson, Q. (2017). Clarifying the interplay between social innovation and sustainable development: A conceptual framework rooted in paradox management. *European Management Review*, 15(1), 19–35. <https://doi.org/10.1111/emre.12121>.
- Peters, K., & Buijs, P. (2021). Strategic ambidexterity in green product innovation: Obstacles and implications. *Business Strategy and the Environment*, 31(1), 173–193. <https://doi.org/10.1002/bse.2881>.
- Prashantham, S., Eranova, M., & Couper, C. (2018). Globalization, entrepreneurship and paradox thinking. *Asia Pacific Journal of Management*, 35(35), 1–9. <https://doi.org/10.1007/s10490-017-9537-9>.
- Pratt, M. G., & Rafaeli, A. (1997). Organizational dress as a symbol of multilayered social identities. *Academy of Management Journal*, 40(4), 862–898. <https://doi.org/10.5465/256951>.
- Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals*, 10(1), 65–171. <https://doi.org/10.1080/19416520.2016.1162421>.
- Qiu, Y. (2005). Problems of managing joint ventures in China's interior: Evidence from Shaanxi. *SAM Advanced Management Journal*, 70(3), 46–57.

- Raine, R. (2009). *China's African challenges*. Routledge. <https://doi.org/10.4324/9781315888620>.
- Rodriguez, E., Lefvert, A., Fridahl, M., Gronkvist, S., Haikola, S., & Hansson, A. (2021). Tensions in the energy transition: Swedish and Finnish company perspectives on bioenergy with carbon capture and storage. *Journal of Cleaner Production*, 280. <https://doi.org/10.1016/j.jclepro.2020.124527>.
- Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health*, 18(2), 179–183. <https://doi.org/10.1002/nur.4770180211>.
- Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. (2016). Paradox research in management science: Looking back to move forward. *The Academy of Management Annals*, 10(1), 5–64. <https://doi.org/10.1080/19416520.2016.1162422>.
- Sharma, G., & Bansal, P. (2017). Partners for good: How business and NGOs engage the commercial–social paradox. *Organization Studies*, 38(3/4), 341–364. <https://doi.org/10.1177/0170840616683739>.
- Sheep, M. L., Fairhurst, G. T., & Khazanchi, S. (2017). Knots in the discourses of innovation: Investigating multiple tensions in a reacquired spin-off. *Organization Studies*, 38(3/4), 463–488. <https://doi.org/10.1177/0170840616640845>.
- Slawinski, N., & Bansal, P. (2012). A matter of time: The temporal perspectives of organizational responses to climate change. *Organization Studies*, 33(11), 1537–1563. <https://doi.org/10.1177/0170840612463319>.
- Slawinski, N., & Bansal, P. (2015). Short on time: Intertemporal tensions in business sustainability. *Organization Science*, 26(2), 531–549. <https://doi.org/10.1287/orsc.2014.0960>.
- Smith, K. K., & Berg, D. N. (1987). *Paradoxes of group life: Understanding conflict, paralysis, and movement in group dynamics*. Jossey-Bass.
- Smith, W. K. (2014). Dynamic decision making: A model of senior leaders managing strategic paradoxes. *Academic Management Review*, 57(6), 1592–1623. <https://doi.org/10.5465/amj.2011.0932>.
- Smith, W. K., & Besharov, M. L. (2019). Bowing before dual Gods: How structured flexibility sustains organizational hybridity. *Administrative Science Quarterly*, 64(1), 1–44. <https://doi.org/10.1177/0001839217750826>.
- Smith, W. K., & Lewis, M. W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2), 381–403. <https://doi.org/10.5465/amr.2009.0223>.
- Somlai, R. (2022). Integrating decision support tools into businesses for sustainable development: A paradoxical approach to address the food waste challenge. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.2972>.
- Van der Byl, C. A., & Slawinski, N. (2016). Embracing tensions in Corporate Sustainability: A review of research from win-wins and trade-offs to paradoxes and beyond. *Organization & Environment*, 28(1), 54–79. <https://doi.org/10.1177/1086026615575047>.
- Vangen, S. (2017). Culturally diverse collaborations: A focus on communication and shared understanding. *Public Management Review*, 19(3), 305–325. <https://doi.org/10.1080/14719037.2016.1209234>.
- Waldman, D. A., Putnam, L. L., Miron-Spektor, E., & Siegel, D. (2019). The role of paradox theory in decision making and management research. *Organizational Behavior and Human Decision Processes*, 155, 1–6. <https://doi.org/10.1016/j.obhdp.2019.04.006>.
- Wodak, R. (2004). Critical discourse analysis. In C. Seale, G. Gobo, J. F. Gubrium, & D. Silverman (Eds.), *Qualitative research practice* (pp. 186–201). Sage.
- Yin, R. K. (2010). *Qualitative research from start to finish*. Guilford Press.

Parchedness

► Water Problems

Paris Agreement

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Synonyms

Accord de Paris; COP21; Paris Agreement Under the United Nations Framework Convention on Climate Change; Paris Climate Conference

Introduction

Climate change is one of the defining problems of the twenty-first century. Indeed, this generation

has witnessed the defining episodes with unprecedented scale of catastrophic events that range from unpredictable weather patterns threatening food production to sea level rise that aggravates the risk of flood disasters (Tikkanen 2019). Though the human species is highly adaptive in nature as shown in the earlier phase of global warming in the twentieth century, the recent pace and extent of global warming is outdoing our coping capacity. Thus, if immediate actions are not taken to mitigate the trend, future adaptation plan to the impacts may become unrealistic and very costly (Streck et al. 2016; Tikkanen 2019).

Governments across the world, for the first time showed concern and set the tune for the stabilization of the concentration of greenhouse gases (GHG) with the adoption of an international treaty, the United Nations Framework Convention on Climate Change (UNFCCC) in May 1992. Efforts to ensure that the purpose of UNFCCC is achieved had delivered major milestones that include the adoption of the Bali Action Plan (2007), the Copenhagen Accord (2009), the Cancún agreements (2010), and the Durban Platform for Enhanced Action (2012) (UNFCCC 2015). However, the urgency of the need for an action was acknowledged by the historic 21st Conference of the Parties (COP21) of the annual UNFCCC held in Paris, France, in December 2015. The adoption and swift entry into force of the Paris agreement was indeed unprecedented (Denchak 2018; UNFCCC 2015). At the conference, which is also known as the climate change conference, 195 negotiating Parties expressed their commitment to take action to limit the global temperature increase to well below 2 °C while pursuing efforts to keep it within 1.5 °C above preindustrial level. The adoption of the Paris agreement signals the shift of the global economy away from fossil fuel and the beginning of a global transition to a net zero carbon economy. The international treaty, which was named after the host city, Paris, is primarily set out to improve on the lapses in the Kyoto protocol and other previous international agreements that are founded on limiting the emission of GHG (UNFCCC 2018).

History

The Paris Climate Agreement is the brainchild of over two decades of international climate dialog brought about through the launching of the UNFCCC at the United Nations Conference on Environment and Development (UNCED), also known as the Rio de Janeiro Earth Summit in 1992 in Brazil. Being only one of several international environmental treaties adopted at the Earth Summit, UNFCCC has a long-term objective of preventing anthropogenic interference with the climate system. Thus, since the launching, the UNFCCC, through its annual Conference of Parties, has become the heart of evolving global climate actions (UNFCCC 2015).

Having identified the urgent need to strengthen efforts on emission reduction in line with the UNFCCC goal, Parties convened at COP3 in Kyoto, Japan, on December 11, 1997, to commit to the Kyoto Protocol which became effective on February 16, 2005, with the first commitment period lasting from 2008 to 2012. The protocol acknowledges the different capabilities of individual countries to address the climate change challenges and thus is built on the “principle of common but differentiated responsibilities” which puts the responsibility of global emissions reduction on the developed nation based on their economic power and the fact that they are historically responsible for the present level of global emissions (Espinosa 2018; Clemenccon 2016). This treaty was however, generally regarded ineffective since two most important carbon dioxide emitters, China and USA, were not Parties while Canada withdrew from the protocol in 2012. Also, even though all 36 developed countries that participated in the Kyoto protocol reduced their GHG emission during the commitment period, the overall global emission grew by 32% from 1990 to 2010 (UNFCCC 2015; Stavins and Stowe 2016).

As it had become obvious that the Kyoto protocol is hardly achieving the anticipated progress, at the 13th Conference of the Parties held in Bali, Indonesia, in December 2007, parties to the UNFCCC agreed to combine efforts to address global climate change challenges and to come up

with a robust international treaty that will operate sequel to the 2012 Kyoto protocol regime. The COP13 session led to the adoption of the Bali Road map that set a two-year negotiation process in progress to be concluded in 2009 at the 15th Conference of the Parties in Copenhagen (UNFCCC 2015; Tikkanen 2019). However, when over 100 world leaders gathered in Copenhagen, agreement could not be reached, but the Copenhagen Accord successfully set a goal on keeping global temperature increase within 2 °C and developed plans to mobilize \$100 billion annually by 2020 to support the developing countries and call for a new Green Climate Fund (GCF) to be established. At the COP16 held in Cancun in 2010, Parties established the Green Climate Fund administered by the GCF Board as a mechanism to finance projects, programs, policies, and other activities in party states that are less developed (UNFCCC 2015).

However, because of the inadequacies evident in the first commitment period of the Kyoto protocol, parties reconvened at the 18th Conference of the Parties (COP18) in Doha, Qatar, in 2012 and agreed on a second commitment period of 2012–2020 to the Kyoto protocol. Delegates also reaffirmed their commitment to the agreement of COP17 held in Durban, South Africa, in 2011 to come up with a new, comprehensive universal climate treaty by the year 2015 that will be legally binding and require action from all countries whether major or minor GHG emitter (Clemencon 2016; Tikkanen 2019).

On the path leading up to the landmark Paris Agreement, the United Nations had mandated that each country should develop and submit a plan termed “Intended Nationally Determined Contributions (INDCs)” detailing measures and effort they intend to implement to reduce GHG emission locally. Interestingly by 10 December 2015, 185 countries had already submitted their INDcs indicating their commitment to reduce their GHG emissions by either 2025 or 2030. Thus, on 12 December 2015, parties convened again at the 21st Conference of Parties to adopt the Paris Agreement (Denchak 2018; Rei et al. 2017). This landmark international treaty employs a

hybridization of the “top-down” approach of the Kyoto protocol and the “bottom-up” Copenhagen and Cancun approach. The hybrid legal nature of the Paris agreement made it quite easy for State parties to ratify, and by 4 November 2016, it had entered into force much earlier than anticipated. As of 2017, Nicaragua and Syria were the only sovereign nations that had not signed the Paris Agreement; those were also signals that the USA could pull out of the treaty by the end of 2020. By January 2020, of the 197 Parties to the Convention, 195 have signed while 187 have ratified the Paris Climate Agreement (UNFCCC 2015).

Objectives and Essential Elements of the Agreement

The overarching long-term goal of the Paris Climate Agreement as delineated in Article 2 according to UNFCCC (2018) and Espinosa (2018) is to reduce global warming and facilitate the implementation of the UNFCC through:

- (a) Limiting the global average temperature to well below 2 °C above preindustrial level while making effort to limit the increase to 1.5 °C.
- (b) The treaty also seeks to increase the adaptive capacity of State parties to adverse climate change impacts and stimulate climate resilience and low emission technology such that food security is not put at risk.
- (c) It further intends to secure a consistent flow of funds to facilitate low GHG emission and climate resilience.

These global goals provide a clear long-term path of travel to both governmental and corporate actors in finding a harmony between the climate systems, economic activities, and greenhouse gas emissions. This goal is intended to be achieved by peaking global GHG emission at the earliest possible time by 2020 and subsequently diminishing it along the years to reach a stability between anthropogenic GHG emissions by sources and removal by sinks towards the latter half of the

twenty-first century. Based on recent science, limiting the increase in global temperature to 1.5 °C above preindustrial level requires that net zero emission must be achieved by the year 2050 (UNFCCC 2018).

The Paris agreement is a vehicle for transition to climate neutrality, thus to drive action toward the realization of the goals of the Paris Agreement and the general outcome of the COP21; certain crucial elements are identified as being essential. These elements are highlighted in UNFCCC (2018):

- (a) Mitigation: To facilitate the realization of the objectives of the Paris agreement through reducing emissions fast enough to achieve the target temperature, Parties handed in detailed national plans for carbon emissions reductions, the Nationally Determined Contributions (NDCs). Article 6 generally profiles cooperative approaches for achieving NDCs. For example, paragraphs 6.2 and 6.3 outline a framework for International Transfer of Mitigation Outcomes (ITMOs) and linkage of emission trading system while paragraphs 6.4 and 6.7 provide a framework for Parties to contribute to emission reduction and promote sustainable development which is now informally termed “Sustainable Development Mechanism” (SDM) among Parties.
- (b) A transparency system and global stock-take: To ensure accountability for climate action and as established in Article 14, Parties committed to convening every 5 years starting from 2023 to review and evaluate their individual and mutual NDCs. This is to determine whether the NDCs are measuring up against the short-term goal of peaking global GHG emissions and plans to update their NDCs on the path to achieving the long-term goal of net zero emission. Article 13 of the Agreement describes an “enhanced transparency framework for action and support” which requires coordinated monitoring, reporting, and verification (MRV). Thus, even though parties are not legally bound by the NDCs, they are legally required to allow their climate action plans to be tracked by experts to evaluate progress toward individual Party’s NDCs and determine how best to bolster their ambition.
- (c) Adaptation: Parties are also committed to cooperate to strengthen countries’ ability to deal with climate impacts and provide support to the least developed countries to facilitate adaptation. Thus, Article 7 of the Paris Agreement includes, along with mitigation, parallel collective long-term adaptation goals which are built on improving adaptive capacity, strengthening resilience, and minimizing vulnerability.
- (d) Loss and damage: In order to strengthen regional ability to recover from adverse climate impacts, parties acknowledged the important need for addressing loss and damages resulting from climate change. Therefore, parties commit to collaborate to facilitate understanding and action to provide support in the form of early warning systems, emergency preparedness, and risk insurance as provided in Article 8 of the Agreement. This is pertinent, because much of the most deleterious effects of climate change may occur sooner than anticipated or may be more severe in impact and difficult to cope with.
- (e) Support: Articles 9, 10, and 11 of the Agreement reiterate the need for the developed nations to support developing ones in their effort to build a climate resilient future. The European Union and other parties from the global north also committed to provide continuous supports including finance to their global south counterparts to foster climate action that will minimize emissions and strengthen climate resilience.

Summary

The landmark Paris agreement is built on the foundation of the United Nations Framework Convention on Climate Change (UNFCCC) and the Copenhagen and Cancun Agreements to

combat climate change and reinforce global actions and investments for a low carbon future. This is intended to be achieved by limiting global temperature increase to well below 2 °C pre-industrial levels and to pursue efforts to keep the temperature increase to within 1.5 °C. An important strength of the Agreement is in its requirement for Parties to develop individual “Nationally Determined contributions” (NDCs) and submit regular reports on emissions that form basis for a global stock-take every 5 years to evaluate collective progress toward reaching the goal of the Agreement.

References

- Clemencon, R. (2016). The two sides of the Paris climate agreement: Dismal failure or historic breakthrough? *The Journal of Environment & Development*, 25(1), 3–24. <https://doi.org/10.1177/1070496516631362>.
- Denchak, M. (2018, December 12). *Paris climate agreement: Everything you need to know*. Retrieved January 29, 2020 from Natural Resources Defense Council. <https://www.nrdc.org/stories/paris-climate-agreement-everything-you-need-know>
- Espinosa, P. (2018). *Expert perspectives: The Paris agreement, a strategy for the longer term*. Retrieved January 10, 2020 from World Resources Institute: <https://www.wri.org/climate/expert-perspective/paris-agreement-strategy-longer-term>
- Rei, F. C., Gonçalves, A. F., & de Souza, L. P. (2017). Paris agreement: Reflection and challenges for the international climate change regime. *14*(29), 81–99. <https://doi.org/10.18623/rvd.v14i29.996>.
- Stavins, R. N., & Stowe, R. C. (2016). *The Paris agreement and beyond: International climate change policy Post-2020*. Cambridge, MA: Harvard Project on Climate Agreements.
- Streck, C., Keenlyside, P., & von Unger, M. (2016). The Paris agreement: A new beginning. *Journal for European Environmental and Planning Law*, 13, 3–29.
- Tikkanen, A. (2019). *Paris agreement: International treaty [2015]*. Retrieved 29 Jan 2020 from Encyclopædia Britannica: <https://www.britannica.com/topic/Paris-Agreement-2015>
- UNFCCC. (2015). *Historic Paris Agreement on Climate Change: 195 Nations Set Path to Keep Temperature Rise Well Below 2 Degrees Celsius*. Retrieved 25 Dec 2019 from United Nations Climate Change: <https://unfccc.int/news/finale-cop21>
- UNFCCC. (2018). *What is the Paris agreement?* Retrieved 12 Jan 2019 from United Nations Climate Change: <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>

Paris Agreement Under the United Nations Framework Convention on Climate Change

► [Paris Agreement](#)

Paris Climate Conference

► [Paris Agreement](#)

Participatory Development

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Synonyms

[Community development](#); [Community participation](#); [Community-based action](#); [Community-driven development](#)

Definition

The term Participatory Development originates from international development practice and was established to give greater opportunities to have a voice for those who were intended to benefit from development projects. In the context of Participatory Development, the World Bank defines participation as “a process by which people—especially disadvantaged people—can exercise influence over policy formulation, design alternatives, investment choices, management, and monitoring of development interventions in their communities” (Bhatnagar and Williams 1992, p. 7). The Development Assistance Committee of the Organisation for

Economic Co-operation and Development (OECD) defines Participatory Development as “a process by which people take an active and influential hand in shaping decisions that affect their lives” (OECD 1997, p. 22). This means that Participatory Development refers to inclusion of those benefitting from a development project or process to initiate change. The term is now used in a broader sense for projects or processes of sustainable development involving local communities in both the Global North and South (Bell and Morse 2018).

Introduction

For several decades sustainability and sustainable development has been a key issue in the discourse on development (Campbell and Vainio-Mattila 2003; World Commission on Environment and Development, WCED 1987). In view of current societal challenges such as climate change, it is increasingly important to involve individuals and organizations in decision-making, for example regarding sustainable development, resource use, or climate adaptation measures. Participation is a way to achieve this. The concept of Participatory Development is not strictly defined and is not uncontested. The terms participation and Participatory Development are often used interchangeably. As the latter term is open to interpretation, it is useful to give a more clear-cut description of its meaning (Cornwall 2008; Mansuri and Rao 2013). Participatory Development refers to a process in which local actors or stakeholders have a say in development projects and are able to influence processes or projects which affect them (Sabbi 2017).

Origins of Participatory Development

Participatory Development originated as “popular participation” in international rural development projects in the 1970s (Vengroff 1974) and 1980s, for example with Robert Chambers’ initiative of “putting the last first,” which aimed at involving

the beneficiaries of rural development projects in decision-making about their own future (Chambers 1983). Chambers (1983) developed influential approaches such as Rapid Rural Appraisal. Later, Participatory Rural Appraisal (Chambers 1994) and Participatory Learning and Action (PLA; Chambers 2008) were set up, practical research strategies that placed increasing emphasis on co-operative learning. These approaches formed the foundation for subsequent participation work (Chambers 1983; Cornwall and Scoones 2022). In the 1990s, institutions and development agencies picked up the idea of Participatory Development, for example the World Bank (World Bank 1996; Mansouri and Rao 2013), the United Nations Food and Agriculture Organization (Ramirez and Fernandez 2007), the United Nations Development Programme (Telleria 2021), and the OECD (OECD 1995). As Participatory Development entered the mainstream, the term evolved into a popular catchall phrase and buzzword (Schnable et al. 2021), and it became more and more imperative to incorporate participatory approaches into projects and activities (Kanji and Greenwood 2001).

However, critical evaluations of participatory approaches on a project basis show that there is a gap between theory and practice of Participatory Development (Cornwall 2008). This is because implementation often falls short of the original transformative goals of Participatory Development (e.g., Hickey and Mohan 2004; Ika and Hodgson 2014; Telleria 2021).

The overuse of the term resulted in participation being reduced to an administrative ticking-off routine, where counting participants received more attention than inviting people to have an influence (Bell and Morse 2018; Cornwall 2022). Criticism also addressed the ongoing dominance of the position of external experts in development activities in the Global South, especially because Participatory Development did not result in expected impacts regarding governance and poverty reduction in many projects (Sabbi 2021). Some of the difficulties in achieving the expected impacts might be related to project management issues, as development projects are complex and



Participatory Development, Fig. 1 Summary of trends, origin, and evolution of the concept of Participatory Development. (Based on Bell and Morse 2018; Cornwall 2008; Howard and Wheeler 2015; Kanji and Greenwood 2001)

project teams often need to collaborate at a distance (Ika and Hodgson 2014; Zaher et al. 2021). Nevertheless, in addition to critical assessments there is also evidence for the benefits of Participatory Development outweighing the downsides (Bell and Morse 2018; Uphoff 2002). An overview of the origins and development of the concept of Participatory Development is given in Fig. 1.

Participants and Concepts

Participatory Development can be explained by looking at actors and concepts of participation (Campbell and Vainio-Mattila 2003). Actors and institutions are key elements of Participatory Development (Sabbi 2017). Therefore, it is useful to specify what this frequently used term actually means to different actors (Cornwall 2008). First,

the actors of Participatory Development are described and then an overview of selected relevant concepts of Participatory Development is provided.

A participant can be defined as “someone who participates” (Merriam-Webster Dictionary 2022a), that is, someone who takes part in a project. Often the term participant implies an active form of involvement; participants actively create and have ownership of their projects (Campbell and Vainio-Mattila 2003; Cornwall 2000). A stakeholder is “one that has a stake” and “who is involved or affected by. . .” a project (Merriam-Webster Dictionary 2022b). Over the years, authors in the field of Participatory Development have referred to participants as recipients, beneficiaries, stakeholders, and actors or partners (Campbell and Vainio-Mattila 2003; Cornwall 2000). These terms have different connotations and reflect the changing roles of participants,

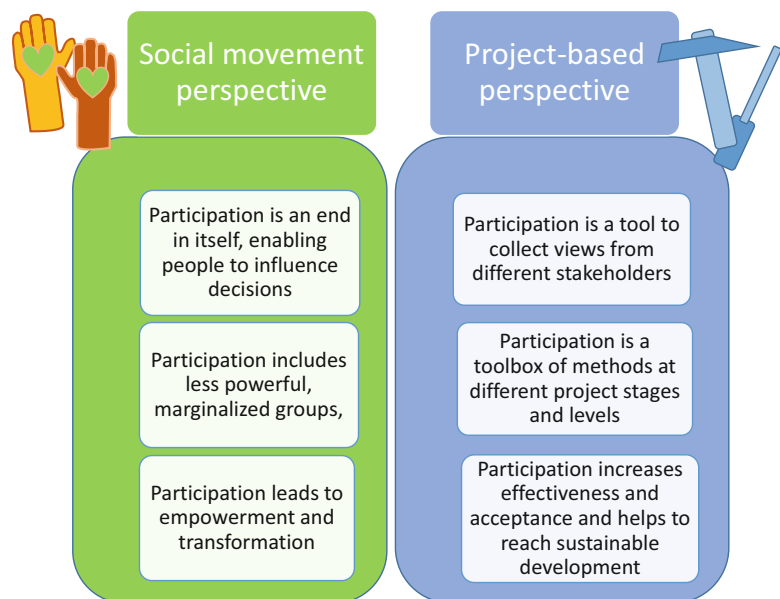
depending on the extent to which involvement turns into influence of participants. Groups are usually heterogeneous and therefore participants have different perspectives. Already in the early days of Participatory Development, Cohen and Uphoff (1980) pointed out that “the rural poor” are not a homogeneous group, as they differ regarding, for example, occupation, land-ownership status, gender, and religion, and that these factors influence poverty for these people.

Heterogeneity of different views and perspectives is also reflected in different typologies of participation. Tufte and Mefalopulos (2009) state that there are two important perspectives to participation, (1) the institutional perspective, where participation supports the process to reach a pre-defined goal for the community addressed with the intervention, and (2) the social movement perspective, where participation is seen as a process to empower people offering possibilities for sustainable development (see Fig. 2). It is not a question of adhering to either of the two perspectives; both perspectives are relevant. Depending on perspective and typology of participation, the extent to which participants can influence processes may vary (Cornwall 2008).

Cornwall (2008) reviews different concepts of participation with respect to their applicability in

development practice. An early concept among the reviewed concepts is Arnstein’s ladder of participation (Arnstein 1969). This early concept contains two non-participatory categories (referred to as “therapy” and “manipulation”), where participants have no power, and six increasingly participatory categories. The latter start with three categories, which attribute some influence to the participants (placation, information, and consultation of citizens), and are followed by three further categories, in which power is increasingly taken over by participants (partnership, delegated power, and citizen control). Another reviewed concept is White’s typology of interests elucidating different interests of the stakeholders in different forms of participation (White 1996). Both concepts are normative, that is, describing “good” and “bad” forms of participation. The International Association for Public Participation provides a spectrum of five forms of participation with one passive and four active levels of participation (IAPP 2018). The IAPP spectrum represents a more gradual sequence of approaches comprising a passive level of participation (information of participants) and four active levels of participation with increasing empowerment of citizens (consultation, involvement, collaboration, and empowerment). Some authors prefer to

Participatory Development,
Fig. 2 Two perspectives on Participatory Development. (Based on Kanji and Greenwood 2001 and Tufte and Mefalopulos 2009)



use the IAPP five-stage system, as it is more inclusive and less normative (Akerboom and Craig 2022; Cornwall 2008).

Challenges and Trends

Participatory Development is a contested term and there is an ongoing need to specify clearly which concept of participation is applied, and which participants are involved and how (Kanji and Greenwood 2001). Challenges and trends in the field of Participatory Development can be attributed to three key discourses: (1) on the relationship between theory and practice, (2) on the co-creation of knowledge, and (3) on the role of external experts in Participatory Development (Campbell and Vainio-Mattila 2003).

In debates related to discourse (1) about the role of participants' experiences as a basis for the analysis, authors emphasize the importance of practical experiences, stating that theory and practice are integrated and cannot be separated (Campbell and Vainio-Mattila 2003). Discourse (2) is linked to the fact that in Participatory Development processes, different participants produce knowledge in social interaction. The knowledge involved belongs to two categories: expert knowledge (e.g., academic knowledge of advisors or external experts) and local or traditional knowledge of citizens or communities (Fouksman et al. 2022). Power imbalances influence the use and integration of different types of knowledge (external or expert knowledge versus local, practical, or traditional knowledge). Local knowledge provides valuable links to local context and is an indispensable complement to expert knowledge. It represents a vital resource for the implementation of development projects in the actual local contexts with different values (Uphoff 2002). To better integrate local knowledge, facilitators should aim at creating a co-learning environment valuing local knowledge (Kanji and Greenwood 2001). The third discourse (3) on unbalanced power refers to the role of external experts and reflects the relationship of participants and experts. Even though a mind-shift has taken place and relationships that are more equal are

replacing the old donor-to-passive-recipient approach, roles of experts and participants require ongoing attention to make sure that participants are able to influence processes (Campbell and Vainio-Mattila 2003).

In all three key discourses, the identification of stakeholders and their representativeness plays a central role (Bell and Morse 2018; Cornwall 2008). It is not possible to involve everybody, as groups are heterogeneous and dynamic. In addition, exclusion of certain groups through organizational settings is an issue requiring attention (e.g., difficulties for women in participating if meeting times coincide with family tasks; Cornwall 2000) and self-exclusion (if certain groups decide not to respond; Cornwall 2008). Exclusion of groups can lead to participation-fatigue, that is, if participants have been invited too often and are tired of participating, but this can be counteracted by making sure that participants can influence choices that matter. Not only do development projects navigate in a context of power imbalances but also participation itself is a field of power imbalances. As stated earlier, participants in development projects might not be representative and rather form part of privileged rather than marginalized groups. Often it is observed that participants in Participatory Development projects are not a representative subgroup of society, but have a higher degree of education and a higher social status and are more likely to be male than female (Ransom et al. 2021). This means that it is important to be mindful of these imbalances and of the political dimension of participation.

A key trend is the ongoing "re-export" of the concept of Participatory Development from the Global South to the Global North (Bell and Morse 2018), with funding institutions from the Global South entering the scene (Ika et al. 2020). Another important trend is the growing accessibility of information and the increasing use of the Internet and information and communication technologies. Access to information is a prerequisite to positive learning environments. The increased availability of electronic communication technologies can support learning in Participatory Development projects (Uphoff

2002). It is expected that these new technologies have the potential to enable more participation (Schwittay and Braund 2019). However, it is important to make use of these technologies in an inclusive and truly participatory way.

Participatory Development and Global Sustainable Development

Sustainability entered the development discourse in the 1980s (WCED 1987; Campbell and Vainio-Mattila 2003). To some extent, in the period from 2000 to 2015, the Millennium Development Goal (MDG) processes already increased the need for participatory approaches; however, often it turned out that marginalized groups were difficult to reach (Howard and Wheeler 2015). Since 2015, when the Sustainable Development Goals (SDGs) replaced the MDGs, there has been an even stronger emphasis on the need for Participatory Development approaches (Howard and Wheeler 2015). Participation is of key importance in the context of global sustainable development and the Sustainable Development Goals (SDGs). The link is especially significant to the so-called systemic SDGs, that is, those contributing to creating a system, an environment in which sustainable development is implemented. SDG 16 (Peace, justice, and strong institutions) focuses on facilitating peaceful inclusive societies free of insecurities and conflict (Leal Filho et al. 2021a). SDG 17 (Revitalize the global partnership for sustainable development) addresses the relationships between people, as people need to initiate the change to sustainable development (Leal Filho et al. 2021b). This development goal implies a different strategy of development fostering a more equitable partnership between the Global South and North. The two systemic SDGs focus on supporting the implementation of SDG 1 to 15 through inclusive decision-making at all levels and by strengthening partnerships between different groups and actors (bridging, e.g., North–South, and national, sectoral, and cultural differences). The SDG process is meant to be inclusive (Howard and Wheeler 2015). The representation

of participants remains a challenge for Participatory Development in the context of global sustainable development. Likewise, situating global goals in local contexts is a challenge.

Summary

Participatory Development means including those who benefit from projects in decision-making. The concept originated from dissatisfaction with the former top-down approach to development. Key challenges in Participatory Development processes include the involvement of representative participants, the interactive co-creation of knowledge, and valuating of knowledge from both local actors and experts. Another challenge is the roles of actors and power imbalances between them.

Cross-References

- [Public Participation](#)
- [Stakeholder](#)
- [Stakeholder Engagement](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References

- Akerboom, S., & Craig, R. K. (2022). How law structures public participation in environmental decision making: A comparative law approach. *Environmental Policy and Governance*. <https://doi.org/10.1002/eet.1986>.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Planning Association*, 35(4), 216–224.
- Bell, S., & Morse, S. (2018). Participatory approaches for the development and evaluation of sustainability indicators. In S. Bell & S. Morse (Eds.), *Routledge handbook of sustainability indicators and indices* (pp. 188–203). London: Routledge.
- Bhatnagar, B., & Williams, A. C. (1992). *Participatory development and the World Bank: Potential directions for change*. World Bank. <http://elibrary.worldbank.org/content/book/9780821322499>. Accessed 17 June 2022.
- Campbell, L. M., & Vainio-Mattila, A. (2003). Participatory development and community-based conservation: Opportunities missed for lessons learned? *Human Ecology*, 31, 417–437.

- Chambers, R. (1983). *Rural development: Putting the last first. World development series*. Upper Saddle River: Prentice Hall.
- Chambers, R. (1994). The origins and practice of participatory rural appraisal. *World Development*, 22(8), 953–969.
- Chambers, R. (2008). PRA, PLA and pluralism: Practice and theory. In P. Reason & H. Bradbury (Eds.), *The sage handbook of action research: Participative inquiry and practice* (2nd ed., pp. 297–318). Los Angeles: Sage.
- Cohen, J., & Uphoff, N. (1980). Participation's place in rural development: Seeking clarity through specificity. *World Development*, 8(3), 213–235.
- Cornwall, A. (2000). *Beneficiary, consumer, citizen: Perspectives on participation for poverty reduction. Sida Studies 2*. Stockholm: Sida.
- Cornwall, A. (2008). Unpacking 'participation': Models, meanings and practices. *Community Development Journal*, 43(3), 269–283.
- Cornwall, A. (2022). Reframing development. In A. Cornwall & I. Scoones (Eds.), *Revolutionizing development: Reflections on the work of Robert Chambers* (pp. 75–81). London: Routledge.
- Cornwall, A., & Scoones, I. (2022). Putting the last first: Reflections on the work of Robert Chambers. In A. Cornwall & I. Scoones (Eds.), *Revolutionizing development: Reflections on the work of Robert Chambers* (pp. 1–19). London: Routledge.
- Fouksman, E., Glückler, J., Meyer, H.-D., Suarsana, L. (2022). Global authenticity, local authority: Epistemic power, discursive geographies, and the creation of civil society knowledge networks. In *Knowledge and civil society* (Vol. 17, pp. 209–232). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-71147-4_10
- Hickey, S., & Mohan, G. (Eds.). (2004). *Participation: From tyranny to transformation: Exploring new approaches to participation in development*. London: Zed Books.
- Howard, J., & Wheeler, J. (2015). What community development and citizen participation should contribute to the new global framework for sustainable development. *Community Development Journal*, 50(4), 552–570.
- Ika, L. A., & Hodgson, D. (2014). Learning from international development projects: Blending critical project studies and critical development studies. *International Journal of Project Management*, 32(7), 1182–1196. <https://doi.org/10.1016/j.ijproman.2014.01.004>.
- Ika, L. A., Söderlund, J., Munro, L. T., & Landoni, P. (2020). Cross-learning between project management and international development: Analysis and research agenda. *International Journal of Project Management*, 38(8), 548–558.
- International Association for Public Participation (IAPP). (2018). IAP2 spectrum. https://cdn.ymaws.com/www.iap2.org/resource/resmgr/communications/11x17_p2_pillars_brochure_20.pdf. Accessed 17 June 2022.
- Kanji, N., & Greenwood, L. (2001). *Participatory approaches to research and development in IIED: Learning from experience*. London: IIED.
- Leal Filho, W., Azul, A. M., Brandli, L., Lange Salvia, A., Gökcin Özuyar, P., & Wall, T. (2021a). *Peace, justice and strong institutions*. Cham: Springer.
- Leal Filho, W., Azul, A. M., Brandli, L., Lange Salvia, A., Gökcin Özuyar, P., & Wall, T. (2021b). *Partnerships for the goals*. Cham: Springer.
- Mansuri, G., & Rao, V. (2013). *Localizing development: Does participation work?* Herndon: World Bank Publications.
- Merriam-Webster Dictionary. (2022a). Participant. <https://www.merriam-webster.com/dictionary/participant>. Accessed 24 Nov 2022.
- Merriam-Webster Dictionary. (2022b). Stakeholder. <https://www.merriam-webster.com/dictionary/stakeholder>. Accessed 24 Nov 2022.
- OECD. (1997). *Evaluation of programs promoting participatory development and good governance. Synthesis report*. Paris: OECD.
- Organisation for Economic Co-operation and Development, OECD. (1995). *Participatory development and good governance*. Paris: OECD. <https://www.oecd.org/dac/accountable-effective-institutions/31857685.pdf>. Accessed 17 June 2022.
- Ramirez, R., & Fernandez, M. (2007). *Local participation in policy: Perspectives from FAO experience* (FAO livelihood support programme, LSP working paper no. 42). <https://www.fao.org/3/ai051e/ai051e.pdf>. Accessed 17 June 2022.
- Ransom, E., Grady, C., Trepanier, L., & Bain, C. (2021). Situated ethics in development: STS insights for a pragmatic approach to development policy and practice. *Science, Technology & Human Values*. <https://doi.org/10.1177/01622439211052685>.
- Sabbi, M. (2017). *Local state institutional reforms in Ghana: Actors, legitimacy and the unfulfilled promise of participatory development*. Baden-Baden: Nomos Verlagsgesellschaft.
- Schnable, A., DeMattee, A., Sullivan Robinson, R., & Brass, J. N. (2021). International development buzzwords: Understanding their use among donors, NGOs, and academics. *The Journal of Development Studies*, 57(1), 26–44.
- Schwittay, A., & Braund, P. (2019). Participation 2.0? Crowdsourcing participatory development @ DFID. *Information Technologies and International Development*, 15, 1–15.
- Telleria, J. (2021). Development and participation: Whose participation? A critical analysis of the UNDP's participatory research methods. *The European Journal of Development Research*, 33(3), 459–481. <https://doi.org/10.1057/s41287-020-00287-8>.
- Tufte, T., & Mefalopulos, P. (2009). *Participatory communication: A practical guide* (World Bank working paper no. 170). Herndon: World Bank Publications.

- Uphoff, N. (2002). *Agroecological innovations: Increasing food production with participatory development*. London: Earthscan, Taylor & Francis Group.
- Vengroff, R. (1974). Popular participation and the administration of rural development: The case of Botswana. *Human Organization*, 33, 303–309.
- White, S. (1996). Depoliticising development: The uses and abuses of participation. *Development in Practice*, 6, 6–15.
- World Bank. (1996). The World Bank participation sourcebook. <http://elibrary.worldbank.org/doi/pdf/10.1596/0-8213-3558-8>. Accessed 17 June 2022.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.
- Zaher, N., Sykes, C., & Keevers, L. A. (2021). Process study of negotiating challenges of managing international development projects. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*. <https://doi.org/10.1007/s11266-021-00371-5>.

Participatory Governance

- [Shared Community-Based Governance](#)

Participatory Management

- [Quality Empowerment](#)

Partnerships

- [Cooperation and Open Innovation](#)

Part-Time Directors

- [Non-executive Director \(NED\)](#)

Passion Branding

- [Cause-Related Marketing](#)

Pathological Buying

- [Compulsive Buying](#)

Pay Incentive Plans

- [Bonus](#)

Pay Packages

- [Executive Remuneration and CSR](#)

Peak Oil

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Synonyms

[Bell-shaped curve](#); [Hubbert curve](#); [Hubbert peak model](#); [Oil mountain](#)

Definition/Description

The Peak Oil is the maximum of oil production either globally, nationally, or of an oil reservoir. The model for predicting the time, at which the maximum of oil production will occur, was developed by M. K. Hubbert in the 1950s (Hubbert 1956). Base idea is that the ultimately recoverable resources of oil are known and that production rate follows a bell-shaped curve in which the area under the curve is the total amount of the exploitable resource.

Introduction

While renewable resources are either indefinite or can be recovered in human time scale (see ► “Energy-Renewable”), the supply of mineral resources and resources of fossil fuels are limited (BGR 2017). Increasing population and growing standard of living have led to a continuous rise of energy consumption (IEA 2019), mostly supplied by fossil fuels. Since exploitation rate of limited resources cannot be increased indefinitely, a maximum of production will be achieved, after which exploitation rate will decline, since further enhancement is not feasible due to depletion of the resource.

When the maximum of oil production is achieved globally and demand is further increasing, a sudden rise of oil price is expected (Campbell and Laherrère 1998). Sudden boosts of oil prices in the past, as for example, during the first oil crisis 1973–1974 and the second oil crisis 1978–1979, led to severe economic shocks worldwide (Baumeister and Kilian 2016). A global economic crisis is also discussed (Tverberg 2012), when global oil production cannot be enhanced further and no alternative energy is available (Campbell and Laherrère 1998).

Hubbert’s Prediction of the Peaking of Oil Production in the USA and Globally

Hubbert showed that the production rates of oil, natural gas, and coal increased exponentially between 1890 and 1950 in the USA (Hubbert 1956). He concluded that this growth rates cannot persist for long time since fossil resources are finite and physical limits would prevent indefinite growth (Hubbert 1956, p. 8). Basing on the following assumptions, he developed his model:

- The production of fossil fuels is controlled by availability of the resource.
- Resources are limited and the ultimately recoverable amount is a given quantity.
- The production of fossil fuels follows a bell-shaped curve, in which the area under the curve

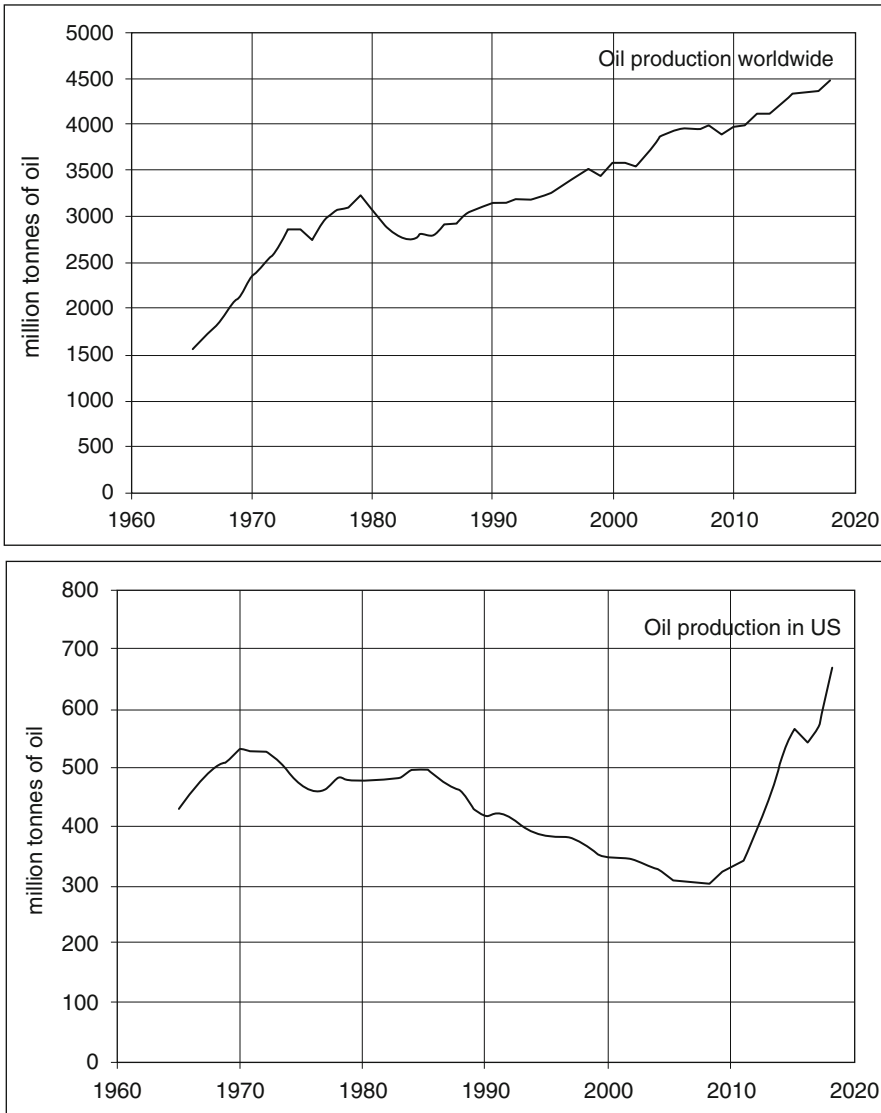
is equal to the total amount of exploitable resource (Hubbert 1956; Tilton 2018).

For validation of his model, he analyzed production curves of the US states Ohio and Illinois. In Ohio a step increase of oil production was observed starting 1884. Three maxima were observed in the period 1890–1900, with the global maximum around 1896 (Hubbert 1956, p. 11). Afterwards a steady decline was stated but oil production continued on small level ongoing in the mid of the 1950s.

In Illinois the first peak was observed around 1910, a second peak, which was three times higher, occurred 1940. Hubbert explained the two peaks here with different technologies for detection of oil reservoirs: While at the beginning of the twentieth century “surface geology with meager outcrop data” was used for finding oil reservoirs, the later findings of oil reservoirs were achieved by using seismographic measurements (Hubbert 1956, pp. 11–12), which was a superior method. Further increase of oil production in Illinois was predicted due to use of water flooding in already known reservoirs and by exploitation of other geological formations in this state. Hubbert estimated a reserve of four billion barrel crude oil (1 barrel = 159 liter in case of oil trade).

Hubbert predicted also that the maximum of oil production in the USA would be achieved between 1965 and 1970 (Hubbert 1956, p. 23). The maximum of oil production in the USA was indeed observed in 1970 (EIA n.d.; BP 2019), which supported Hubbert’s theory. But in 2008 oil production in the USA started to increase again (BP n.d.) due to development of horizontal drilling and fracturing technology, which enabled the production of oil and gas from shales (US Department of Energy 2009) as can be seen in Fig. 1. Around 2016 the USA became the biggest oil producer, in 2018 the USA produced 669.4 million tons (Mt), more than Saudi Arabia (578.3 Mt) and the Russian Federation (563.3 Mt) (BP 2019).

A peak of global oil production was predicted by Hubbert for the time around 2000 (Hubbert 1956, Fig. 20). As can be seen in Fig. 1



Peak Oil, Fig. 1 Global oil production (upper figure) and oil production in the USA (lower figure) (Data taken from BP [n.d.](#), own work)

(left side) 1979 global oil production peaked and declined at begin of the 1980s, much earlier than predicted by Hubbert. One reason was the second oil crisis caused by the Iranian revolution which led with some delay to an increase of oil price (Baumeister and Kilian [2016](#)). Since 1986 oil production increased again, a small decline in 2009 was caused by decreasing oil consumption due to the economic crisis (Baumeister and Kilian [2016](#)). A global peaking of global oil production

has not yet been observed (BP [n.d.](#)). Since 2009 oil production has been increased continuously, in 2018 the global oil production was 94.7 million barrels per day, 4474.3 Mt in total.

Review of the Concept of Peak Oil

In the 1990s Campbell and Laherrère picked up the ideas of Hubbard using the bell-shaped model

and updated estimates for global oil reserves. Using data of global cumulative oil production and conservative estimations of global extractable reserves, they estimated that the maximum of oil production would occur within the first decade of the twenty-first century (Campbell and Laherrère 1998). That was in accordance with Barnes, who discussed 1993 the “Oil Mountain.” Assuming a peak production of 90 million barrels per day and ultimately recoverable resources of 2200 billion barrels, he also predicted the maximum oil production in the first decade of the twenty-first century (Barnes 1993). But Barnes also pointed out that, if unconventional oil would contribute another 2000 billion of barrels, with the given production rate of 90 million barrel per day reserves would last well into the twenty-second century (Barnes 1993). But the mobilization of unconventional oil would require a certain oil price, since its production is more expensive than of conventional oil. While the interest in Peak Oil discussion was high in the 1990s and in the first decade of the twenty-first century, interest declined in the last years (Bardi 2019).

The first question is if availability of a resource governs its production. In France and Germany, decreasing demand was identified as reason for the stop coal production, not the depletion of coal reservoirs (Wellmer and Scholz 2017).

The second question is if the determination of ultimately recoverable resources is possible. For some regions and countries, the determination of recoverable resources was achieved. The oil production in Norway for example can be described with a bell-shaped curve (Sinding-Larsen and Wellmer 2012). But prediction of global resources of oil is controversial (Campbell and Laherrère 1998). In 2019, for example, BP estimated 1729.7 billion barrels (244.1 billion tons) of oil as proven reserves (BP 2019) while the estimation of the IEA in 2018 was 1694 billion barrels (IEA 2018).

The third question is how the amount of ultimately recoverable resources depends on price of the commodity. If prices for a commodity increase, exploitation of resources, which are more difficult to exploit, will become economic (Holland 2013). “A higher price will produce a higher and more distant production peak” (Tilton 2018).

Also technical developments can lead to higher exploitation of known reservoirs (Barnes 1993), and production of “unconventional oil” will increase the amount of ultimately recoverable oil (Barnes 1993). According to IEA, “Unconventional oil includes extra-heavy oil, natural bitumen (oil sands), kerogen oil, gas-to-liquids (GTL), coal-to-liquids (CTL)” (IEA 2011).

Recent Developments Affecting Oil Production

The development of technologies in the USA for shale gas and oil production increased the amount of recoverable resources significantly (Nunez 2013). The U.S. Department of Energy identified three factors, which made unconventional fracking feasible and economic: “(1) advances in horizontal drilling, (2) advances in hydraulic fracturing, and, perhaps most importantly, (3) rapid increases in natural gas prices in the last several years as a result of significant supply and demand pressures” (U.S. Department of Energy 2009).

The combination of technical developments combined with high prices enabled the new oil and gas boom in the USA. In 2014 Saudi Arabia convinced the OPEC to flood the market with oil in order to make oil production by fracking too expensive and therefore uneconomic (Rapier 2018). In spite of a 70% decrease of oil price, US shale gas and oil remained in the market and became even more competitive by further developing the technology.

2015 in Paris a worldwide agreement was achieved, that temperature change should be kept below 2 °C and measures for keeping temperature decrease below 1.5 °C should be taken (UNFCCC 2015) (see also ► “Climate Change”). In order to achieve this target, greenhouse gas emissions have to be reduced significantly within the next years (see ► “Greenhouse Gas Emissions”). Since combustion of fossil fuels as coal, gas, and oil leads to emission of CO₂, the most important greenhouse gas (IEA 2016) (see ► “Carbon Emissions”), use of fossil fuels has to be reduced (UNFCCC 2015). In order to achieve

the climate target of the Paris agreement, it is estimated that around 35% of the known oil reserves have not to be burnt (McGlade and Ekins 2015). This means that not scarcity of oil but the prevention of climate change is now the most pressing issue.

Summary

The model of peak oil was derived by Hubbert in the mid of 1950s and describes the increase and decline of production of oil under the assumption that production of oil is controlled by availability of resources, the ultimately recoverable resources of oil are known, and that production rate follows a bell-shaped curve. The oil production of some countries could be described successfully by this model, which nevertheless has some limitations as ultimately recoverable resources are depending on price of the resource and technical developments can lead to higher amounts of recoverable resources. Within the last 20 years development of unconventional fracking made production of shale oil feasible and have led to a new boom of oil production in the USA. Nevertheless greenhouse gas emissions, most important CO₂ emissions caused by burning of fossil fuels as oil, have to be reduced drastically, in order to reduce temperature increase to below 2 °C. Therefore, it is estimated that around 35% of the known oil reserves shall not be burnt and alternatives for oil have to be found independent of the timeline of peak oil.

Cross-References

- Carbon Emissions
- Climate Change
- Energy-Renewable
- Greenhouse Gas Emissions

References

- Bardi, U. (2019). Peak oil, 20 years later: Failed prediction or useful insight? *Energy Research & Social Science*, 48, 257–261. <https://doi.org/10.1016/j.erss.2018.09.022>.
- Barnes, P. (1993). *The oil supply mountain, is the summit in sight*. Oxford: Oxford Institute for Energy Studies. https://ora.ox.ac.uk/objects/uuid:fd5ab8a3-5968-425e-9774-ee812dec077f/download_file?safe_filename=The%2Boil%2Bsupply%2Bmountain%252C%2Bis%2Bthe%2Bsummit%2Bin%2Bsight.pdf&file_format=application%2Fpdf&type_of_work=Working+paper. Accessed 20 Aug 2019.
- Baumeister, C., & Kilian, L. (2016). Forty years of oil price fluctuations: Why the price of oil may still surprise us. *The Journal of Economic Perspectives*, 30, 139–160. <https://doi.org/10.1257/jep.30.1.139>.
- British Petrol (BP). (2019). BP Statistical Review of World Energy 2019. <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>. Accessed 20 Aug 2019.
- British Petrol (BP). (n.d.). Statistical Review of World Energy all data 1965–2018. <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>. Accessed 20 Aug 2019.
- Bundesanstalt für Geowissenschaften und Rohstoffe (BGR). (2017). BGR Energiestudie 2017 – Daten und Entwicklungen der deutschen und globalen Energieversorgung, Hannover, 21, 184–188.
- Campbell, C. J., & Laherrère, J. H. (1998). The end of cheap oil. *Scientific American*, 278, 78–83. <https://www.jstor.org/stable/26057708>. Accessed 20 Aug 2019.
- Holland, S. P. (2013). Economics of peak oil. In J. F. Shogren (Ed.), *Encyclopedia of energy, natural resource and environmental economics* (Vol. 1, pp. 146–150). Amsterdam, Netherlands: Elsevier Science. <https://doi.org/10.1016/B978-0-12-375067-9.00124-8>.
- Hubbert, M. K. (1956). *Nuclear energy and fossil fuels* (Vol. 95). Houston: Shell Development Company Publication.
- International Energy Agency (IEA). (2011). World Energy Outlook 2011. <https://www.iea.org/reports/world-energy-outlook-2011>. Accessed 21 Aug 2019.
- International Energy Agency (IEA). (2016). CO₂ emissions from fuel combustion highlights. https://emis.vito.be/sites/emis.vito.be/files/articles/3331/2016/CO2EmissionsfromFuelCombustion_Highlights_2016.pdf. Accessed 21 June 2019.
- International Energy Agency (IEA). (2018). World energy outlook 2018. <https://ethz.ch/content/dam/ethz/special-interest/mavt/process-engineering/separation-processes-laboratory-dam/documents/education/ccs%20notes/World%20Energy%20Outlook%202018.pdf>. Accessed 21 Aug 2019.
- International Energy Agency (IEA). (2019). Total primary energy supply (TPES) by source* world 1990–2016 on statistics, global energy data at your fingertips. <https://www.iea.org/statistics/?country=WORLD&year=2016&category=Energy%20supply&indicator=TPESbySource&mode=chart&dataTable=BALANCES>. Accessed 20 Feb 2019.
- McGlade, C., & Ekins, P. (2015). The geographical distribution of fossil fuels unused when limiting global warming to 2 °C. *Nature*, 517, 187–190. <https://doi.org/10.1038/nature14016>.

- Nunez, C. (2013). How has fracking changed our future? National Geographic. <https://www.nationalgeographic.com/environment/energy/great-energy-challenge/big-energy-question/how-has-fracking-changed-our-future/>. Accessed 28 Aug 2019.
- Rapier, R. (2018). Saudi Arabia proves that oil is power. *Forbes*. <https://www.forbes.com/sites/rpapier/2018/10/24/saudi-arabia-proves-that-oil-is-power/#1188666242e8>. Accessed 21 Aug 2019.
- Sinding-Larsen, R., & Wellmer, F.-W. (2012). Non-renewable resource issues: Geoscientific and societal challenges: An introduction. In R. Sinding-Larsen & F. W. Wellmer (Eds.), *Non-renewable resource issues. International Year of Planet Earth*. Dordrecht: Springer.
- Tilton, J. E. (2018). The Hubbert peak model and assessing the threat of mineral depletion. *Resources, Conservation and Recycling*, 139, 280–286.
- Tverberg, G. (2012). Oil supply limits and the continuing financial crisis. *Energy*, 37, 27–34. <https://doi.org/10.1016/j.energy.2011.05.049>.
- U.S. Department of Energy. (2009). Modern shale gas development in the United States: A primer. https://www.energy.gov/sites/prod/files/2013/03/f0/ShaleGasPrimer_Online_4-2009.pdf. Accessed 21 Aug 2019.
- United Nations Framework Convention on Climate Change (UNFCCC). (2015). Adoption of the Paris Agreement – Proposal by the President – Draft decision – CP.21. <https://unfccc.int/resource/docs/2015/cop21/eng/l09.pdf>. Accessed 15 Aug 2019.
- US Energy Information Administration (EIA). (n.d.). Petroleum & other liquids. <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPUS2&f=A>. Accessed 26 Feb 2019.
- Wellmer, F., & Scholz, R. W. (2017). Peak minerals: What can we learn from the history of mineral economics and the cases of gold and phosphorus? *Mineral Economics*, 30, 73–93. <https://doi.org/10.1007/s13563-016-0094-3>.

Peer Economy

- Carpooling

Peer-to-Peer Communities

- Online Communities

Peer-to-Peer Economy

- Collaborative Consumption
- Sharing Economy

Peer-to-Peer-Based Sharing

- Collaborative Economy

People, Planet, Profit

- Triple Bottom Line

Performance

- SWOR Analysis

Performance-Based Compensation

- Bonuses (Employee for Performance)

Personal Bankruptcy

- Debt Relief Systems: Equitable Allocation

P

Personality

- Personhood and Sustainable Management

Personhood and Sustainable Management

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University of Canberra, Canberra, ACT, Australia

Synonyms

Corporation; Personality

Definition/Description

Legal personhood – recognition as having legally enforceable rights and responsibilities – is a building block of sustainable management. It is a status enjoyed by individuals, corporations, and polities (nation states and their constituent provinces): entities that can hold, acquire/dispose of assets, engage in litigation, and act in ways that transcend an individual's life. Environmentalists and other activists are seeking to strengthen environmental sustainability and acknowledge First Nations peoples by recognizing rivers, forests, and other natural domains as legal persons under the stewardship of First Nations communities. Such a status might foster sustainable management of natural environments and strengthen the agency of communities that wish to minimize exploitation of resources by corporations and governments that prioritize immediate commercial benefit over sustainability for long-term community good. The personhood is sometimes associated with, or presented as an alternative to, a broader “rights of nature” that is not specific to a particular culture, community, or location. New understandings of personhood for sustainability are contested at a conceptual and practical level, with arguments that they are either imperative or unnecessary and that many claims regarding personhood for specific domains in the Americas, Asia, and the Pacific either lack substance or represent a “soft colonialism” contrary to the desires of First Nations.

Introduction

Sustainable management is a matter of agency: acting (or not acting) in ways that affect natural and built environments, public and private sector resource allocation and administration, and the lives of individuals (e.g., as employees, consumers, or investors) and societies (Sheehy and Farneti 2021). Agency in many pre-modern cultures encompassed both humans and cosmological entities such as gods, ghosts, demons, and spirits that might be specific to a particular such as a river, forest or mountain, governments, and

societies (Tănăsescu 2020). Managing an environment historically thus involved practices such as beseeching a deity for a bountiful harvest or placating a spirit whose anger might be expressed through a plague, storm, wildfire, or flood.

Hegemonic contemporary legal systems are founded on a different understanding of the environment and human capability. Those systems are manifestations of the Global North. They are secular, disregarding traditional cosmologies. They ascribe agency as a personhood – legally enforceable rights and responsibilities – that is enjoyed by human animals (i.e., live people), corporations (which have a legal existence independent of shareholders and unlike humans may exist in perpetuity), and polities (nation states and subsidiary entities such as provinces) (Naffine 2003; Arnold 2022).

Personhood is not enjoyed by nonhuman animals, whether domestic or wild, irrespective of sentience and sociability or by environments such as rivers and forests or by nature generally (Wise 2013; Stone 1972). Those entities might be regarded as a tradeable commodity, with, for example, cows and sheep having a legal status akin to bags of wheat: property rather entities with autonomy, liability if there is an injury, and scope for asserting rights if their interests are disregarded (Naffine 2012; Radin 1982). Environments might similarly be considered in law to be worthy of our care because of aesthetic, historical, or other value but are not recognized as persons and cannot independently appear in court if harmed through oil pollution, acid rain, manmade species loss through deforestation, or anthropogenic global warming. They are in essence acted upon rather than acting, typically subordinate to interests that may be biased toward benefits for particular stakeholders and contrary to values regarding sustainable management.

This entry identifies the salience of legal personhood for sustainable management, in particular the public/private management of natural environments. It initially outlines the nature of the personhoods which all readers have encountered, highlighting the implications for sustainable management and the emergence of law that

potentially allows corporations greater scope for resisting regulation meant to foster sustainability and social responsiveness. The entry then outlines unprecedented proposals, which are often misreported and misunderstood, for granting some form of personhood to specific domains (particular locations, especially those closely associated with First Nations). The entry deepens that outline by noting proposals regarding general “rights of nature” and duties of care on the part of public/private entities to actively address climate change on behalf of future generations.

Individuals as Legal Person

Personhood for people, more abstractly characterized as human animals, involve rights and responsibilities. Those rights involve the capability to hold property, travel, engage in employment, vote, enter intimate relationships, and enjoy considerable autonomy regarding life choices. The rights were recognized in law prior to the emergence of global human rights frameworks such as the Universal Declaration of Human Rights in the 1940s (Kateb 2014) that do not obligate all polities to ensure environmental sustainability at the national or global levels. Governments have proved reluctant to interpret human rights as requiring them to actively prevent or mitigate global warming (Bonython 2021).

The rights are correlates of responsibilities, often obfuscated by contemporary “rights talk.” As a legal person an individual might, for example, own land but be restricted by law about the use of that land, a restriction that might reflect community values regarding sustainability. Responsibilities might also involve a legally enforceable obligation not to cause injury to another person and to provide compensation if injury occurs.

Corporations as Legal Persons

Corporations are discrete legal persons with a formal status analogous to humans, that is, natural persons. As artificial persons, their personhood

involves rights and responsibilities that are articulated in a wide range of law, for example, obligations to prevent foreseeable injury in the workplace, to comply with licensing requirements, to avoid oppressive behavior that distorts markets, and to adhere to law, in particular jurisdictions regarding sustainability (Johnson 2012). They may operate on a global scale with wealth far greater than that of individual shareholders (and of many governments), useful in shaping national and global policymaking (Sheehy 2022). Corporations at law are neutral vehicles in that they have no innate norm for or against sustainability. Nevertheless, once adopting commercial norms, they become major sources of social costs (Sheehy 2004).

As artificial persons, they potentially exist in perpetuity (Stout 2014) and as a matter of self-interest or legal requirements might be persuaded to embrace a long-term perspective that fosters both sustainable management and perception of corporate legitimacy. It is important to recognize that the rights of corporations, in contrast to the rights of humans, are not inalienable. A theme running through the scholarly literature on corporate personhood is whether legislators and courts should embrace calls for giving greater rights to corporations (e.g., debate in the United States about whether corporations should have more cope for discrimination in employment and other activity on a religious basis) or whether corporations should be required by law to act in ways that benefit society at large rather than their shareholders, managers, and employees (Gear 2007; Abrams 2010). Such a requirement is pertinent given that law in many jurisdictions obliges managers to place the financial interests of shareholders ahead of employees or measures to alleviate anthropogenic heating. It may require particular corporations to abide by regulatory requirements for prudent management (e.g., bank and insurers) but broadly does not obligate directors to invest and otherwise manage for the long term, in other words emphasize sustainability rather than short-term appreciation of capital amid the innovation or risk taking valorized as creative destruction (Sheehy 2004).

Polities as Legal Persons

The personhood of polities is relevant to building sustainable management for three reasons. The first is that government agencies use natural and human resources. Their operation for example has a carbon footprint, they purchase green or other energy and consumables such as paper, and they often adhere to anti-slavery protocols. They provide benchmarks for performance in the private sector and might be regarded as exemplars of best practice in meeting targets for ethical practice, accountability (including a higher level of accountability than is required of corporations), and environmental sustainability. The second reason is that polities, through legislatures and courts, make and enforce rules about sustainable management in the private sector.

The third reason is that polities make rules about personhood. The corporation, for example, is a legal mechanism established by law in the Global North. That law is reinforced through North-centric agreements such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and bilateral Free Trade Agreements that enshrine Investor-State Dispute Settlement (ISDS) mechanisms that are potentially at odds with public health and environmental protection in much of the world (Deere 2009). Law's recognition or nonrecognition of nonhuman animals, specific domains, and "nature" or "the environment" affects social expectations and corporate behavior regarding both management and sustainability. That has resulted in proposals for granting personhood to hitherto unrecognized entities such as specific geographical domains or to nature generally, alongside speculation about future recognition of artificial intelligence as legal persons (Arnold 2017; Arnold 2022; Chesterman 2020).

Personhood for Domains?

Colonization (a practice in the Americas, Africa, Asia, and other parts of the world) typically superimposed the colonizer's law on their colonial subjects or simply erased pre-colonial ontologies

regarding authority, communal property, and the place of people in a world where there was an intimate relationship between those people and domains such as forests, river systems, lakes, and mountains. In that world the particular domain was often central to the identity and lived existence of what we now characterize as First Peoples or First Nations.

Settler states such as New Zealand have recently and very inconsistently moved to recognize specific domains as what are often conceptualized as legal personhoods (Arnold 2022). The conceptualization is tied to both the domain's importance for a First Nation currently/formerly resident at that location and the minimal disruption of the particular environment through, for example, large-scale urban development, commercial afforestation, or mining. It typically involves land that it publicly owned, for example, a national park or eco preserve, rather than expropriation of private property.

The expectation is that the new person will be protected from harm, construed as development, through stewardship by First Nations stakeholders who will act on its behalf in exercising rights not to be injured or otherwise harmed. Personhood does not mean the river or other domain is responsible for injuries, for example, obliged through litigation to provide compensation to a tourist who is killed in a flood, forest fire, or landslide (Arnold 2022; Gordon 2018).

Unsurprisingly pronouncements by lower courts in India and South America about personhood for rivers and glaciers or New Zealand's establishment through legislation of particular mountains, rivers, and other domains as legal persons has attracted scholarly and popular attention (Hutchison 2014; Magallanes 2019; Ruru 2014). They have been claimed as overdue respect for First Nations as a meaningful expression of decolonization (Coombes 2020). They have also been claimed as moves toward environmental sustainability (Studley and Bleisch 2018), offsetting the weakness of existing laws in countries such as Australia and New Zealand (Bonython 2021).

As other chapters note, many of the claims misunderstand the law and what happened in

practice, with decisions in Asia and the Americas being overturned on appeal or in practice ignored by governments and businesses (Kinkaid 2019; Colón-Ríos 2015). That misunderstanding is analogous to common misrepresentation about supposed recognition in several jurisdictions of apes and other nonhuman animals as legal persons.

A more subtle concern regarding justice and sustainable management is that granting personhood for natural domains appears predicated on preservation of or return of the particular domain to a pristine state, something that is potentially at odds with the desire of First Nations and other inhabitants for development that expresses their autonomy and raises their standard of living. That conundrum may be significant in instance where people are wary of official paternalism, conscious of objectification as embodiments of pre-modern values, and seeking to raise their standard of living without having to leave a homeland. One conclusion might be that sustainability and respect for First Nations is better achieved through mechanisms other than granting personhood to trees, rocks, and water (Arnold 2022).

Personhood for Nature?

Although it is common to refer to “Mother Nature,” neither global law nor the law of individual politics regards “nature,” “Mother Earth,” or the “environment” as discrete legal persons whose status must be respected in courts and whose personhood can be defended by stewards against government and corporate abuse.

References in some recent South American constitutions to “right of nature” have been rhetorical, at best aspirational and without tangible effect in dealing with governments that are focused on economic development or movement of impoverished urban residents to locations traditionally occupied by indigenous people (Boyd 2017; Colón-Ríos 2015). Recognition of rivers in Bangladesh and elsewhere as “living entities” does not give those domains legal agency (Islam and O’Donnell 2020; Jolly and Menon 2021). In

terms of a politics of sustainable management is akin to statements by governments in the Global South about their commitment to human rights, either disingenuous or a manifestation of state incapacity (Wesche 2021).

Summary

Personhood underpins notions of sustainable management of human, natural, and other resources. It is a legal mechanism that for many people is so prevalent as to be unremarkable, even unrecognized. As a legal mechanism, it is protean: it can be expanded, restricted, and reshaped according to social needs and the persuasiveness of particular stakeholders (e.g., oil, gas, and coal corporations) whose perceptions of sustainability may be founded on special interests. Disagreements among theorists exacerbate popular misunderstandings about new personhoods (e.g., for specific rivers and mountains) and assertions that “nature” has legal rights that should determine decision-making by legislatures, courts, regulatory agencies, and businesses.

Cross-References

- [Conservation: Sustainability](#)
- [Ecology and Ecosystem](#)
- [Environmental Governance](#)
- [Rio Declaration on Environment and Development](#)
- [Sustainable Communities](#)

References

- Abrams, F. (2010). Citizens united and its critics. *Yale Law Journal Online*, 120, 77–88.
- Arnold, B. B. (2017). Is the Zombie my neighbour? The Zombie apocalypse as a lens for understanding legal personhood. *Canberra Law Review*, 14(1), 25–46.
- Arnold, B. B. (2022). Signs of invisibility: Nonrecognition of natural environments as persons in international and domestic law. *International Journal for the Semiotics of Law*, 35(4), 1–19.
- Bonython, W. (2021). Tort law and climate change. *University of Queensland Law Journal*, 40(3), 421–457.

- Boyd, D. (2017). Recognizing the rights of nature: Lofty rhetoric or legal revolution? *Natural Resources & Environment*, 32(4), 13–17.
- Chesterman, S. (2020). Artificial intelligence and the limits of legal personality. *International & Comparative Law Quarterly*, 69(4), 819–844.
- Colón-Ríos, J. (2015). Notes on the theory and practice of the rights of nature: The case of the Vilcabamba River. In P. Martin & Z. Bigdeli (Eds.), *In search of environmental justice* (pp. 120–134). Cheltenham: Edward Elgar.
- Coombes, B. (2020). Nature's rights as indigenous rights? Mis/recognition through personhood for Te Urewera. *Espace populations sociétés – Space populations societies*, 1–2, 1–14.
- Deere, C. (2009). *The implementation game: The TRIPS agreement and the global politics of intellectual property reform in developing countries*. Oxford: Oxford University Press.
- Eckstein, G., D'Andrea, A., Marshall, V., O'Donnell, E., Talbot-Jones, J., Curran, D., & O'Bryan, K. (2019). Conferring legal personality on the world's rivers: A brief intellectual assessment. *Water International*, 44(6–7), 804–829.
- Gordon, G. J. (2018). Environmental personhood. *Columbia Journal of Environmental Law*, 43(1), 50–91.
- Grear, A. (2007). Challenging corporate 'humanity': Legal disembodiment, embodiment and human rights. *Human Rights Law Review*, 7(3), 511–543.
- Hutchison, A. (2014). The Whanganui river as a legal person. *Alternative Law Journal*, 39(3), 179–182.
- Islam, M. S., & O'Donnell, E. (2020). Legal rights for the Turag: Rivers as living entities in Bangladesh. *Asia Pacific Journal of Environmental Law*, 23(2), 160–177.
- Johnson, L. (2012). Law and legal theory in the history of corporate responsibility: Corporate personhood. *Seattle University Law Review*, 35, 1121–1550.
- Jolly, S., & Roshan Menon, K. S. (2021). Of Ebbs and Flows: Understanding the legal consequences of granting personhood to natural entities in India. *Transnational Environmental Law*, 10(3), 1–26.
- Kateb, G. (2014). *Human dignity*. Cambridge: Harvard University Press.
- Kinkaid, E. (2019). 'Rights of nature' in translation: Assemblage geographies, boundary objects, and trans-local social movements. *Transactions of the Institute of British Geographers*, 44(3), 555–570.
- Magallanes, C. I. (2019). From rights to responsibilities using legal personhood and guardianship for Rivers. In B. Martin, L. Te Aho, & M. Humphries-Kil (Eds.), *ResponsAbility: Law and governance for living well with the earth* (pp. 216–239). London: Routledge.
- Naffine, N. (2003). Who are law's persons? From Cheshire cats to responsible subjects. *Modern Law Review*, 66(3), 346–367.
- Naffine, N. (2012). Legal personality and the natural world: On the persistence of the human measure of value. *Journal of Human Rights and the Environment*, 3, 68–83.
- Radin, M. (1982). Property and personhood. *Stanford Law Review*, 34(5), 957–1016.
- Ruru, J. (2014). Tūhoe-crown settlement – Te Urewera act 2014. *Maori Law Review*, 16, 24–36.
- Sheehy, B. (2004). Corporations and social costs: The Wal-Mart case study. *Journal of Law & Commerce*, 24(1), 1–55.
- Sheehy, B. (2022). Sustainability, justice and corporate law: Redistributing corporate rights and duties to meet the challenge of sustainability. *European Business Organisation Law Review*, 23, 273–312.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 5965. <https://doi.org/10.3390/su13115965>.
- Stone, C. D. (1972). Should trees have standing? Toward legal rights for natural objects. *Southern California Law Review*, 45(20), 450–501.
- Stout, L. A. (2014). The corporation as a time machine: Intergenerational equity, intergenerational efficiency, and the corporate form. *Seattle University Law Review*, 38, 685–723.
- Studley, J., & Bleisch, W. (2018). Juristic personhood for sacred natural sites: A potential means for protecting nature. *Parks*, 24(1), 81–96.
- Tănăsescu, M. (2020). Rights of nature, legal personality, and indigenous philosophies. *Transnational Environmental Law*, 9(3), 429–453.
- Wesche, P. (2021). Rights of nature in practice: A case study on the impacts of the Colombian Atrato River decision. *Journal of Environmental Law*, 33(3), 531–555.
- Wise, S. (2013). Nonhuman rights to personhood. *Pace Environmental Law Review*, 30(3), 1270–1280.

Personnel Capital

► Social Capital, Interpretation of

Pesticides

► Aral Sea Disaster, The

PFI

► Private Finance Initiative

PhBL

► [Phenomenon-Based Learning](#)

PhenoBL

► [Phenomenon-Based Learning](#)

Phenomenon Education

► [Phenomenon-Based Learning](#)

Phenomenon Learning

► [Phenomenon-Based Learning](#)

Phenomenon-Based Learning

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Synonyms

[PhBL](#); [PhenoBL](#); [Phenomenon education](#); [Phenomenon learning](#)

Definition

Phenomenon-based learning (PhBL) is an indistinct concept with many roots. Its unclear principles are interpreted and implemented in many ways. It is neither a theory nor a method, but it is called an approach. PhBL relates to a pedagogical way of viewing learners, teachers, and knowledge of the world both distinctly and in their context.

PhBL has been shallowly investigated from a theoretical perspective, and the methods by which it is implemented vary. Theoretically the concept is based on constructivism, pragmatism, and phenomenology. Politically the concept connects to transversal knowledge and twenty-first century skills. Methodically it relates to problem-based learning (PBL), inquiry-based learning (IBL), phenomenological learning, hermeneutic learning, et cetera. Among the core features of PhBL are that it is interdisciplinary (see ► [“Transdisciplinary Learning”](#)), student-centered, collaborative, and build on authentic problems. In psychological perspectives, learning is linked to the students’ interests and emotions (Lonka 2018). Philosophical perspectives emphasize comprehensive learning situations and seeking answers on ethical and existential questions (Küpers 2012). PhBL takes place in early childhood settings, schools, and in higher education. It relates to phenomenon-based research used in management and organization science (von Krogh et al. 2012), and has been proposed as one answer, even if not the only one, on how to meet the educational challenges of sustainability (see ► [“Sustainable Development,”](#) and ► [“Sustainable Education”](#)) (Vlieghe and Zamojski 2020; Wolff et al. 2019). PhBL is thus future oriented, and at its best, it is a transformative prospect (see ► [“Transformative Learning”](#)).

Introduction

Phenomenon-based learning (PhBL) is a learning approach rejecting a subject-based and information-driven view of education. In PhBL, the emphasis is on entreties that are unified from several angles. The starting point is an apparent phenomenon, even if intangible (Lonka et al. 2015), and the learners are viewed as curious and dynamic participants in their own learning. Therefore, the focus is more on experiences and actions than on obtaining information. Yet, the phenomenon-based learning process includes theoretical knowledge, and is a continuous shift between theoretical studies and hands-on activities (see Dewey 1930; Wolff et al. 2019). The student is recognized as a social being who

receives a broader view of the topic of study in a social learning process than alone (see Bruner 1997; Dewey 2009). Finland, a successful country in international educational assessments (e.g., PISA, Programme for International Student Assessment), has been noted as the country that initiated the PhBL approach. However, this is a simplified picture. To explain the background, some basic concepts are crucial.

The “phenomenon-based learning” concept includes two intricate notions or separate concepts: “phenomenon” and “learning.” Like many other words, phenomenon occurs both in everyday language and as a scholarly concept. According to the Cambridge Dictionary (2021), a phenomenon is “something that exists and can be seen, felt, tasted, etc., especially something unusual or interesting.” The Oxford English Dictionary (2021) describes phenomenon as “[a] thing which appears, or which is perceived or observed; a particular (kind of) fact, occurrence, or change as perceived through the senses or known intellectually; esp. a fact or occurrence, the cause or explanation of which is in question.” The second of these interpretations comes closer to a philosophical explanation that perceives phenomena as more than tangible objects.

As a scholarly concept, phenomenon has a fundamental position in phenomenology. The main initiators of phenomenology are Edmund Husserl, Martin Heidegger, Jean-Paul Sartre, and Maurice Merleau-Ponty (e.g., Smith 2013; Østergaard et al. 2008). Phenomenology was central in the continental European philosophy throughout the twentieth century and it has developed in many directions. Even if Husserl is often called the father of phenomenology, Kant’s philosophy and his call for a return to “the thing in itself” (*das Ding an sich*) is a foundation of phenomenology. With the things in themselves, Kant meant the forms of ideas and contents of lived experiences (see Carman 2014).

Phenomenology addresses the meaning things have in human experiences, in their “life-world.” Such things may be objects like tools, events, the flow of time, or oneself and other persons (Smith 2013). Meaning thus entails the intuitive

soundness things (phenomena) have when somebody confronts them in practical situations. However, phenomenology is not only subjective, limited to one single personal perspective. It is a joining of a person’s own previous experiences with other persons’ experiences (intersubjective) that pays the way to both individual and interpersonal reflection and judgments. An aim is to understand the world from many perspectives, like politics, religion, and economy, and realize how these positions have changed and influenced society historically (Merleau-Ponty 2014). Accordingly, learning occurs in many ways and through diverse forms of media (Küpers 2012).

The other main concept in PhBL, “learning,” relates to education, and takes place during human life in most contexts (Jeronen 2012; Wolff 2011). It has been the topic of discussion and development since the earliest times. Even if learning is the aim in various educational circumstances and environments (see Sewell and Newman 2014), learning does not always come about (Biesta 2020; Wolff 2011). For learning to be successful, many fundamentals must coincide. In phenomenology, learning is about going back to learning itself, and the living process of learning, in which the embodies learners meet, co-create, and mediate what they have bodily learnt (Küpers 2012; Merleau-Ponty 2014). When education is at its best, it can even advance towards “transformation” of the learners’ thinking or practice (see ► “Transformative Learning”). In the contemporary world with its huge and complex dilemmas of unsustainability, climate change (see ► “Climate Change”), biodiversity loss (see ► “Biodiversity” and ► “Biodiversity Education”), and a challenging pandemic, the voices arguing about what future education and learning might be, has become louder (see ► “Decade of Education for Sustainable Development”, ► “Sustainable Education”, and ► “Education for Sustainable Environment”). Therefore, successful sustainability learning is more than being present in a learning situation or remembering content; it is about reflecting on various perspectives and being willing to participate in the joint shaping of a better future.

Two Concepts: Bildung and Constructivism

A brief explanation of two additional concepts, “Bildung” and “constructivism,” is necessary to make the PhBL approach intelligible. The “Bildung” concept emerged among German speaking philosophers at the end of the eighteenth century (Horlacher 2015). It originates in the Greek concept “paideia” (or paideia) that describes an ideal education. The Bildung concept is complex and difficult to interpret, and it has no straight translation in English. It describes a transformation (often metaphorically compared with a journey) that engages the individuals at a personal level as well as in their social interactions with others (see Wolff 2007). Bildung is not only an educational idea that concerns individuals; it is strongly connected to social and political matters like values. Moreover, Bildung is distinct from an education, which only involves adaption to given conditions and learning in the sense of gaining factual knowledge (Horlacher 2015). Conversely, it entails that somebody has a broad view of knowledge, understands complexities and connections, and is able to reflect on one’s own learning in a meta-perspective (Burman 2009). Accordingly, the aim of Bildung is more than a personal transformation; its aim is to prepare the individuals so they can change the entire society (Horlacher 2015). In a neoliberal educational context, an ideal education with an open-end like Bildung has been sidestepped by competence thinking focused on quality-control and measurable outcomes (Schaffar 2021). (Concepts similar to Bildung are the African “Ubuntu,” see ► “Ubuntu,” and “the American Liberal Education,” see Nussbaum 1998.)

“Constructivism” is both a theory on the nature of reality (ontology) and a theory of knowledge (epistemology). According to constructivism, human knowledge is based on experiences, mental structures, and beliefs, which with new information construct meaning and understanding (Göğüş 2012). Consequently, learning means constructing understanding by reflection on earlier experiences. Among the constructivist

approaches are cognitive/personal constructivism, social constructivism, radical constructivism, critical constructivism, and cultural constructivism. Significant theorists who have influenced the constructivism approaches are Jean Piaget, Lev Vygotsky, and John Dewey. Compared to phenomenology, which emphasizes a precognitive and sensitive phase, constructivism focuses more strongly on cognition and constructing knowledge (Østergaard et al. 2008). In opposition to Piaget and the constructivist view, Merleau-Ponty (2014, see also sections “[Introduction](#)” above and “[Phenomenology and Phenomenon-Based Learning in Science Education](#)” below) regards the bodily perception of the world as prior to the intellectual awareness. Thus, persons see, hear, and smell before they can think about a phenomenon.

Phenomenon-Based Learning in the Finnish Curricula

The PhBL concept is strongly related to the Finnish educational context. Many times, especially on contemporary social media, PhBL is regarded as something typically Finnish. Undeniably, the Finnish core curricula from the 2010s have a focus on phenomena and emphasize holistic approaches. Numerous experts from various educational fields, politics, and business have been involved in the compilation of the Finnish curricula. Therefore, the comprehensive and phenomenon focuses are based on many divergent roots. One is Bildung, another is constructivism, and a third is the idea of core competencies, which relates to the “twenty-first century skills” political concept. In addition, there is an obvious future orientation.

The Finnish *National Core Curriculum for Basic Education* (students aged 7–15) (Finnish National Board of Education 2014), as well as the *National Core Curriculum for General Upper Secondary Education* (students aged 16–19) (Finnish National Agency for Education 2019) have a strong focus on comprehensive approaches. The documents ambiguously express a cross-curricular attempt in many ways, for

example, by using the concepts “transversal competence,” “crosscutting competence,” “integrative instruction,” “holistic approach,” and “multi-disciplinary learning.” Yet, a comprehensive approach is nothing novel in the Finnish educational history; an integrated curriculum has been the issue many times. The first wave came at the beginning of the twentieth century, the second in the 1930s, the third in the 1970s, and the fourth in the 1980s (Niemelä 2019). In the 1990s, Maijaliisa Rauste-von Wright and von Wright (1996) were among those who wrote about the problem with curricula that split the learning contents.

The word phenomenon is used frequently in the Finnish curricula, even if the entire concept of phenomenon-based learning is rare. The word phenomenon mostly occurs as an ordinary word (see section “[Introduction](#)”). The English version of the curriculum for basic education uses the “phenomenon-based approach” and “phenomenon-based method” formulations (Finnish National Board of Education 2016). However, the PhBL approach is nothing new either. Rauste-von Wright started the development of phenomenon-based learning in a Finnish teacher education context by implementing the philosophy of Dewey and of Georg Herbert Mead, unifying their theories into a pragmatic form of constructivism. She saw the development of the human mind as a result of humans’ interaction with the natural and social environments (Lonka 2018). Particularly Kirsti Lonka, Lasse Lipponen, and Kai Hakkarainen continued Rauste-von Wright’s PhBL development and included ideas from inquiry-based learning (IBL) in the PhBL approach (Lonka 2018). (Read more about IBL in Caliskan 2012.)

Following the constructivist psychology ideas, Rauste-von Wright et al. (2003) saw students as being active learners who reflect and construct knowledge when they confront new experiences. Consequently, Lonka et al. (2015) recommend that the PhBL process starts from a mapping of the students’ pre-understanding. Based on Vygotsky’s and Jerome Bruner’s theories, the learning process takes place in collaborative learning situations. The approach is interdisciplinary and may include experts from various fields.

According to Symeonidis and Schwarz (2016), the focus on phenomenon in the Finnish curricula is based on reform pedagogical approaches to teaching and learning neglecting more complex educational situations. In addition, it relates to politics and economy. The Finnish curricula work situated the PhBL idea in the OECD political context (Niemelä 2019). In the curricula, PhBL clearly is connected with transversal knowledge, which relates to EU politics (see also Halinen and Jääskeläinen 2015). In the EU view, “transversal knowledge, skills and competences (sic) are relevant to a broad range of occupations and economic sectors” (EC 2000). These skills are often referred to as core skills, basic skills, or soft skills, the cornerstone in a person’s development. Transversal knowledge, skills, and competencies are the building blocks for the development of the “hard” skills and competence required to succeed on the labor market. The transversal knowledge, skills, and competencies are organized hierarchically: Thinking, language, application of knowledge, social interaction, and attitudes and values (EC 2020). Correspondingly to the EU politics, the Finnish National Core Curriculum for Basic Education includes seven transversal competence areas. They are (1) thinking and learning to learn, (2) cultural competence, interaction, and self-expression, (3) taking care of oneself and managing daily life, (4) multiliteracy, (5) ICT competence, (6) working life competence [employee competence] and entrepreneurship, and (7) participation, involvement, and building a sustainable future (Finnish National Board of Education 2016, pp. 47–58).

Likewise, PhBL has connections to the twenty-first century skills (Lonka 2018), and they are also of strong political interest. The World Economic Forum (WEF 2016) regards collaboration, communication, and problem-solving as the most important future skills beside traditional academic learning. However, the WEF’s instrumental aims are not in line with an open-ended Bildung process with a long tradition in Finnish education (see Wolff 2007). In the curricula, Bildung has lost many of its basic ideas and is blended with contrasting aims. However, it is common that national curricula are syntheses of different

imaginaries and connect to global economy and labor market interests (Zilliacus and Wolff 2021).

The Phenomenology of Learning

There are also educational views associated with collaborative learning and phenomena in education other than the Finnish described in the previous section. According to phenomenology, the learning from phenomena is considered from an angle other than through constructivism. In phenomenology, education is an existential human project with an interest in human life and meaning making. It is a dialogue that never ends, and “an ongoing commitment and responsible attention to human life and its concerns” (Biesta 2020, p. 12). Wendelin Küpers (2012) uses the concept of “phenomenology of learning” as a synonym to a “phenomenological approach to learning,” “embodied learning” and “experiential learning.” He is critical to education endeavors that quantify, itemize, and control. Instead, he defines learning according to phenomenology as an “embodied, emotional, cognitive and responsive, individual and/or collective accomplishment, and dynamic process” (p. 2611). Besides acquiring knowledge, learning is a way to make sense of oneself, others, and the world in a transformational process:

[L]earning creates, captures, transfers, and mobilizes as well as modifies not only knowledge of and between individuals and on a collective level, but also transforms the learner... (Küpers 2012, p. 2611)

In this process of being and becoming, learning has a sensual and embodied dimension, as well as a linguistic dimension. The learners are encouraged to become ethically reflective (see ► “Ethics”, ► “Ethics and Ethical Theories”, ► “Ethics of Sustainability Education”, and ► “Phronesis”) and restructure their earlier assumptions about humanity, democracy, and political agency (see ► “Agency Theory”) (Küpers 2012). Küpers (2008) has also developed thoughts on how to implement the phenomenology of learning at an organizational level to overcome a reductionist orientation, and promote a multidimensional and inclusive approach of the lived experience.

Phenomenology and Phenomenon-Based Learning in Science Education

Since the 1970s, science education has endorsed phenomenology. The phenomenological endeavor is a critique of science lessons that are too abstract, laboratorial, technical, and mathematical. Instead of learning, which separates the students from their own experiences, the effort is on inclusion of the students in the learning process (Østergaard et al. 2008). Francis et al. (2013) describe a Norwegian PhBL university course included in a phenomenology-based program in agro-ecology. In 2000, the developers of this course started to use a PhBL approach. They tried to shape a whole picture of a complex issue through a combination of biophysical, economic, and social methods training the students in transdisciplinary and responsible actions.

Just as farming and food systems need to be resilient and sustainable in the long term, the learners themselves as well as their instructors need a capacity for continuous renewal and growth. (Francis et al. 2013, p. 64)

In agreement with a traditional *Bildung* idea, the course uses an “open-ended case strategy,” which means that the teachers do not have a fixed answer on the question the students explore. Instead, students, teachers and other stakeholders collaborate and search to develop several future scenarios towards “action-based knowledge,” that is, knowledge that emerges in a process including both theories and practice. Consequently, along with the phenomenological thoughts of Merleau-Ponty (2014), experiences precede the theoretical knowledge. Yet, both theories and practice are important for learning.

Following Merleau-Ponty (2014), the human relation to nature is not knowing, but doing (Østergaard et al. 2008), since perception is both bodily and intentional. Perception comes first, which is a critique against the Cartesian expression “*Cogito ergo sum*” (I think, therefore I am).

I cannot enclose myself within the universe of science. Everything that I know about the world, even through science, I know from a perspective that is my own or from an experience of the world within

which scientific symbols would be meaningless. (Merleau-Ponty 2014, p. lxxii)

Not all attempts to use phenomenology in science education are PhBL, but there are similar didactic elements. Like Edvin Østergaard, Wolff-Michael Roth (e.g., 2016) has applied Merleau-Ponty's embodiment ideas, but also the ideas of others, like Baruch Spinoza and Dewey, in his science education research. Roth has studied the importance of emotions in learning situations. He asks for mathematics education that nurtures astonishment and passion (Roth 2017). This implies a negative risk of vulnerability, but also a positive sense of wonder, gratitude, and excitement. In a perspective that is broader than a single subject, it is about nourishing "a culture of astonishment" (Roth 2017, p. 98). Astonishment can thus become a boundary transgression releasing a new intellectual horizon and open the students' eyes for the beauty of the subject or phenomena (cf. Vygotsky 1978). Sungwon Hwang and Roth (2008) have problematized how a student can learn about an issue or content that initially is foreign or strange. In addition, they examined what emotions confrontations with the strange may initiate. Their study shows that the living body is central in a learning situation including something strange, and that empathy is fundamental to learning science. However, even if emotions are important in sustainability education in a situation when climate change threats are steadily increasing (Pihkala 2020), education also must build the grounds for how to confront the future from an ethical viewpoint.

Phenomenon-Based Learning Towards Sustainability

Since 2017, a Finnish interventional research project has focused on the development of sustainability education for student teachers in a World Heritage center through a PhBL approach (Wolff et al. 2019). In this project, the researchers employ various phenomenology-based approaches, especially the phenomenology of Merleau-Ponty, but they are also influenced by Vygotsky, Dewey, Mezirow, and others. Another phenomenology-

related foundation is Bildung theories. As a third base of this project is various sustainability education approaches. Embodiment and arts are important elements, likewise the encouragement of the student to self-reflection (Taylor 2009). Learning takes place outdoors in an authentic world heritage environment. Authentic learning grounded on situated approaches in real-world contexts is beneficial for learning (Herrington and Herrington 2006). In this project, a combination of local (urban) and global matters challenges the learners from historical, present day, and future perspectives (see Wolff 2011). Even if it is delicate, the project tries to face sustainability in all its challenging complexity, jointly comprising ecological, social, cultural, and economic dimensions.

The aim of the project is both transdisciplinary and transformative learning processes, and the role of language and multilingual expressions are important (Wolff et al. 2019). The first pilot course experimented with phenomena in the form of word pairs like "children and peace," "we and they," "light and shadow," "words and power." The students' reflections advanced from tangible ideas to more and more abstract and symbolic spheres and the students managed to exceed the subject limits. The PhBL process led to reflections on social sustainability topics like identities, ideologies, discrimination, and inequality (Wolff et al. 2019).

The project consists of nine researchers/lecturers from a range of teaching subjects, in addition to several student researchers. They all contribute with their specific knowledge background in a co-teaching experiment. During the Covid-19 in 2021, trials with inclusion of many experts from outside the learning context as lecturers and improvisators, like dancers were carried out as part of this project. They also used digital storytelling as a method to implement the phenomenon-based learning process (see Blomberg 2021). The outcome of this last course experiment is still under scrutiny.

Summary

Many foreign websites describing phenomenon-based learning in Finland maintain that the

Finnish schools have given up the subject orientation (see Lonka 2018), but this is not the case. PhBL is no replacement for subject learning, and it is not even suitable for all learning topics (Lonka et al. 2015). When learning about a phenomenon profoundly, subject knowledge is the basis (Wolff et al. 2019). Finnish schools must offer the students at least one week of multi-disciplinary studies every year (Finnish National Board of Education 2014), and PhBL is an innovative way to teach about complex issues like climate change (Yli-Panula et al. 2020). Yet, the basis of such a multifaceted topic is deep subject knowledge, and it demands much more than one week of study.

PhBL has also been criticized for leaving the students without guidance. However, the teacher is responsible for the planning, implementation, and evaluation of the learning process (Lonka et al. 2015). Likewise, a PhBL approach requires a teacher willing to promote the students' cognitive, collaborative, and creative learning (Lonka 2018; Wolff and Ehrström 2020), and help the students deal with emotions (Lonka et al. 2015). Educational reforms and policy emphasizing alternative teaching strategies may gradually try to shift the responsibility from teachers to students. However,

[n]either teachers nor students alone contribute to successful learning outcomes, but within their responsive relation occurs a transformation that is the work of both. Approaches that neglect the responsivity of this relation risk turning teaching and learning into neoliberal practices in which the students not only receive all the blame if their endeavors fail but also, reflectively, ascribe this failure to themselves. (Symeonidis and Schwarz 2016, p. 42)

To meet the needs of the present time with complex crises affecting both humanity and nature, it is crucial to search for alternative, even unconventional, ways of teaching and learning that empower the learners and bring hope for the future. In the PhBL process, the students' own keen interest, responsibility, and activity are central (Lonka et al. 2015), but also ethical and existential elements. The teacher's role is to encourage genuine philosophical Bildung problems like who am I/are we, what am I/are we doing, why am I/are

we doing this, who do I/we want to be, and reflections on if the personal or joint chosen course is accurate (see Friesen 2017; Mollenhauer 2014; Wolff et al. 2019). Consequently, PhBL is one way, but not the only purposeful way to help the students to learn to see the world from both deep and wide critical perspectives, and to be willing to vision and plan alternative directions with many kinds of collaborators.

Cross-References

- Agency Theory
- Biodiversity
- Biodiversity Education
- Climate Change
- Decade of Education for Sustainable Development
- Education for Sustainable Environment
- Ethics
- Ethics and Ethical Theories
- Ethics of Sustainability Education
- Phronesis
- Responsibility
- Sustainable Development
- Sustainable Education
- Transdisciplinary learning
- Transformative Learning

References

- Biesta, G. (2020). Introduction to book. In P. Howard, T. Saevi, A. Foran, & G. Biesta (Eds.), *Phenomenology and educational theory in conversation: Back to education itself* (pp. 1–4). New York: Routledge.
- Blomberg, W. (2021). Learning about sustainability and world-heritage through a phenomenon-based approach during Covid-19. https://blogs.helsinki.fi/sveasusproject/2021/07/16/learning-about-sustainability-and-world-heritage-through-a-phenomenon-based-approach-during-covid-19/?fbclid=IwAR3jgJZfjPnPAstLSFwbb9BZ8MakNUBzdHuoDzhAQvEMSe8M4Tyvq_dGy74. Accessed 10 ;Aug 2021.
- Bruner, J. (1997). *The culture of education*. Cambridge, MA: Harvard University Press.
- Burman, A. (2009). Erfarenhet, reflexion, bildning: Utkast till ett pragmatistiskt bildningsbegrepp [Experience, reflection, Bildung: A draft to a pragmatic Bildung concept]. In J. Bornemark & F. Svenaeus (Eds.), *Vad*

- är praktisk kunskap? (pp. 108–128). Huddinge: Södertörn högskola.
- Caliskan, H. (2012). Inquiry learning. In N. M. Seel (Ed.), *The encyclopedia of the sciences of learning* (pp. 1571–1573). New York: Springer.
- Cambridge Dictionary. (2021). *Phenomenon*. Cambridge, UK: Cambridge University Press. <https://dictionary.cambridge.org/dictionary/english/phenomenon>. Accessed 16 Aug 2021.
- Carman, T. (2014). Forward. In M. Merleau-Ponty (Ed.), *Phenomenology of perception*. New York: Routledge.
- Dewey, J. (1930). The quest for certainty: A study of the relation of knowledge and action. *Journal of Philosophy*, 27(1), 14–25. <https://doi.org/10.2307/2014669>.
- Dewey, J. (2009). *Democracy and education: An introduction to the philosophy of education*. New York: Cosimo Classics.
- EC (European Commission). (2020). Transversal knowledge, skills and competences. https://ec.europa.eu/esco/portal/escopedia/Transversal_knowledge_44_skills_and_competences. Accessed 9 Aug 2021.
- Finnish National Agency for Education. (2019). *National core curriculum for general upper secondary education*. Helsinki: Opetushallitus. (In Finnish).
- Finnish National Board of Education. (2014). *National core curriculum for basic education*. Helsinki: Opetushallitus. (In Finnish).
- Finnish National Board of Education. (2016). *National core curriculum for basic education (electronic version)*. Helsinki: National Board of Education.
- Francis, C., Breland, T. A., Østergaard, E., Lieblein, G., & Morse, S. (2013). Phenomenon-based learning in agroecology: A prerequisite for transdisciplinarity and responsible action. *Agroecology and Sustainable Food Systems*, 37(1), 60–75. <https://doi.org/10.1080/10440046.2012.717905>.
- Friesen, M. (2017). Bildung and six questions for education: Klaus Mollenhauer. *Culture, Biography and Lifelong Learning*, 3(2), 15–25. <https://doi.org/10.1177/14749041211009367>.
- Göğüş, A. (2012). Constructivist learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 783–786). New York: Springer.
- Halinen, I., & Jääskeläinen, L. (2015). Opetussuunnitelmaudistus 2016. Sivistys näkemys ja opetuksen eheyttäminen [The curriculum reform 2016: Bildung perspective and the integration of education]. In H. Cantell (Ed.), *Näin rakennat monialaisia oppimiskokonaisuuksia* (pp. 19–36). Jyväskylä: PS-kustannus.
- Herrington, A., & Herrington, J. (2006). What is an authentic learning environment? In T. Herrington & J. Herrington (Eds.), *Authentic learning environments in higher education* (pp. 1–14). Hershey: IGI Global.
- Horlacher, R. (2015). *The educated subject and the German concept of Bildung: A comparative cultural history*. New York: Routledge.
- Hwang, S., & Roth, W. M. (2008). Learning science in an era of globalization: A phenomenology of the foreign/strange. *Cultural Studies of Science Education*, 3(4), 937–958. <https://doi.org/10.1007/s11422-008-9115-z>.
- Jeronen, E. (2012). Education. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Cham: Springer. https://doi.org/10.1007/978-3-319-32318-3_7.
- Kupers, W. (2008). Embodied “inter-learning”: An integral phenomenology of learning in and by organizations. *Learning Organization*, 15(5), 388–408. <https://doi.org/10.1108/09696470810898375>.
- Küpers, W. (2012). Phenomenology of learning. In N. B. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 2611–2615). Dordrecht: Springer.
- Lonka, K. (2018). *Phenomenal learning from Finland*. Helsinki: Edita.
- Lonka, K., Hietajärvi, L., Hohti, R., Nuorteva, M., Raunio, A. P., Sandström, N., Vaara, L., & Estling, S. K. (2015). Ilmiölähtöisesti kohti innostavaa oppimista [Phenomenon-based towards inspirational learning]. In H. Cantell (Ed.), *Näin rakennat monialaisia oppimiskokonaisuuksia* (pp. 46–76). Jyväskylä: PS-kustannus.
- Merleau-Ponty, M. (2014). *Phenomenology of perception*. New York: Routledge.
- Mollenhauer, K. (2014). *Forgotten connections: On culture and upbringing* (trans. and Ed. Friesen, K.). New York: Routledge.
- Niemelä, M. A. (2019). Eheyttäminen koulutyössä: Katsaus käsitteeseen [Holistic school education: A view on a concept]. In M. Rautiainen, & M. Tarnanen (Eds.), *Tutkimuksesta luokkahuoneisiin. Ainedidaktisia tutkimuksia 15* (pp. 465–481). Jyväskylä: Suomen Ainedidaktinen Tutkimusseura.
- Nussbaum, M. C. (1998). *Cultivating humanity*. Cambridge, MA: Harvard University Press.
- Østergaard, E., Dahlin, B., & Hugo, A. (2008). Doing phenomenology in science education: A research review. *Studies in Science Education*, 44(2), 93–121. <https://doi.org/10.1080/03057260802264081>.
- Oxford English Dictionary. (2021). *Phenomenon*. Oxford, UK: Oxford University Press. <https://www.oed.com/view/Entry/142352?redirectedFrom=phenomenon#eid>. Accessed 16 Aug 2021.
- Pihkala, P. (2020). Eco-anxiety and environmental education. *Sustainability*, 12(23), 10149. <https://doi.org/10.1080/23269995.2017.1300412>.
- Rauste-von Wright, M., & von Wright, J. (1996). Oppiminen ja koulutus: Huomautuksia ja keskustelun aiheita [Learning and education: Remarks and discussion topics]. *Aikuiskasvatus*, 16(1), 50–52. <https://doi.org/10.33336/aik.92371>.
- Rauste-von Wright, M., Von Wright, J., & Soini, T. (2003). *Oppiminen ja koulutus [Learning and education]*. Helsinki: WSOY.
- Roth, W. M. (2017). Astonishment: A post-constructivist investigation into mathematics as passion. *Educational Studies in Mathematics*, 95(1), 97–111. <https://doi.org/10.1007/s10649-016-9733-4>.
- Schaffar, B. (2021). Competent uses of competence: On the difference between a value-judgment and empirical

- assessability. *Nordic Journal of Studies in Educational Policy*, 2021, 1–10. <https://doi.org/10.1080/20020317.2021.1958993>.
- Sewell, K., & Newman, S. (2014). What is education. In W. Curtis, S. Ward, J. Sharp, & L. Hankin (Eds.), *Education studies: An issue based approach* (3d ed.) (pp. 3–11). Thousand Oaks, CA: SAGE.
- Smith, W. D. (2013). Phenomenology. In *Stanford encyclopedia of philosophy*. <https://plato.stanford.edu/entries/phenomenology/>. Accessed 10 Aug 2021.
- Symeonidis, V., & Schwarz, J. F. (2016). Phenomenon-based teaching and learning through the pedagogical lenses of phenomenology: The recent curriculum reform in Finland. *Forum Oświatowe*, 2(56), 31–47. <https://doi.org/10.34862/fo.2016.2.3>.
- Taylor, E. W. (2009). Fostering transformative learning. In J. Mezirow & E. W. Taylor (Eds.), *Transformative learning in practice: Insights from community, workplace and higher education* (pp. 3–17). San Francisco: Jossey Bass.
- Vlieghe, J., & Zamojski, P. (2020). Approaching education on its own terms. In P. Howard, T. Saevi, A. Foran, & G. Biesta (Eds.), *Phenomenology and educational theory in conversation: Back to education itself* (pp. 34–44). New York: Routledge.
- Von Krogh, G., Rossi-Lamastra, C., & Haefliger, S. (2012). Phenomenon-based research in management and organisation science: When is it rigorous and does it matter? *Long Range Planning*, 45(4), 277–298. <https://doi.org/10.1016/j.lrp.2012.05.001>.
- Vygotsky, L. S. (1978). Socio-cultural theory. *Mind in Society*, 6, 52–58.
- WEF (World Economic Forum). (2016). New vision for education: Fostering social and emotional learning. http://www3.weforum.org/docs/WEF_New_Vision_for_Education.pdf. Accessed 9 Aug 2021.
- Wolff, L. A. (2007). The quest for a route to sustainable development in higher education. In T. Kaivola & L. Rohweder (Eds.), *Towards sustainable development in higher education: Reflections* (pp. 58–62). Helsinki: Finnish Ministry of Education. <https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/79511/opm06.pdf?sequence=1>. Accessed 7 Aug 2021.
- Wolff, L.-A. (2011). *Nature and sustainability: An educational study with Rousseau and Foucault*. Saarbrücken: Lambert.
- Wolff, L.-A., & Ehrström, P. (2020). Social sustainability and transformation in higher educational settings. *Sustainability*, 12(10), 4176. <https://doi.org/10.3390/su12104176>.
- Wolff, L.-A., Savijärvi, M., Wallinheimo, K., Schaffar, B., Slotte, A., Mikander, P., & Kaihovirta, H. (2019). Yhdessä oppimista ja arvopohdintaa opettajankoulutuksessa [Learning together and value reflection in teacher education]. *Ainedidaktisia Tutkimuksia*, 16, 116–143.
- Yli-Panula, E., Jeronen, E., Koskinen, S., & Vesterkvist, S. (2020). Biologian ja maantieteen opetuksessa käytettävät ilmastomuutoksen opetusmenetelmät [Teaching methods used in biology and geography concerning climate change education]. *Ainedidaktikka*, 4(3), 102–124. <https://doi.org/10.23988/ad.98284>.
- Zilliacus, H., & Wolff, L.-A. (2021, in press). Climate change and worldview transformation in Finnish education policy. In P. William (Ed.), *Oxford research encyclopedia of education*. New York: Oxford University Press. <https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-1676>.

Philanthrocapitalism

► Venture Philanthropy

Philanthropic CSR

► Altruistic CSR

Philanthropy

► Corporate Philanthropy

Phronesis

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Synonyms

Deliberation; Praxis; Prudence; Wisdom in action; Wisdom in practice

Definitions and Description

Phronesis is etymologically derived from the Greek φρόνησις, which means wisdom that has been acquired from learning and experience of

practical matters. Socrates is said to have equated phronesis with virtue in his dialogues (see Plato's *Meno*, circa 429–347 BC). Phronesis is known as an Aristotelian concept meaning “practical wisdom,” which is concerned with how to act wisely in particular situations. Aristotle considered phronesis to be an ethical virtue closely connected to the ultimate end of human well-being that is described as “eudaimonia” from both individual and societal perspectives. In *Nicomachean Ethics* (circa 240 BC), phronesis is distinguished from other terms for wisdom and intellectual virtues such as *episteme* and *techne* which translate as knowledge and art, respectively.

Phronesis introduces values into judgment and the decision-making process. The distinguishing quality of phronesis is the requirement to arrive at reasoned decision about action with regard to whether the outcome is thought to be advantageous (Martin 2015). Through “phronesis,” an “insider-researcher” can “make good practical judgements about their research practice” (Gibbs et al. 2007, p. 367). Phronesis is vital in relation to all matters that affect humanity including sustainability-related matters. While the Aristotelian concept of “*sophia*” means wisdom, the term implies theoretical wisdom which is not necessarily wisdom in practice. “*Praxis*” is closer in meaning to phronesis and refers to thoughtful doing and reflective practice, while phronesis refers to wisdom expressed in the domain of practice. Phronesis and *praxis* emphasize wisdom in action, not just wisdom in theory. The western Greek concept of phronesis has been equated with the eastern Buddhist concept of mindfulness (McEvilley 2002).

Phronesis and Ecological Wisdom

Two millennia after Aristotle, a jazz band formed in 2005 by Danish bass player Jasper Høiby took the name of “Phronesis.” The album cover to their 2018 release *We Are All* is a reference to the environmentalist John Muir. Muir was noted for being an ecological thinker and known as “John of the Mountains” and “Father of the National Parks,” being an early advocate for the preservation of wilderness in the USA.

Oliver and Dennison (2013) believe that the two terms phronesis and *praxis* describe what needs to happen in environmental science and that these two terms are at the core of developing a practical philosophy for environmental science: it is not adequate to have a knowledge of what needs to be done or recommend what should be done; action is also required, and this “doing” in terms of environmental science can take the form of protection or restoration activities. As a Professor of Marine Science and Vice President for Science Applications at the University of Maryland Center for Environmental Science (UMCES) in the USA, Dennison recognizes the importance of action in relation to environmental science and sustainability issues.

Competent project managers are required to take forward sustainability and environmental matters effectively, and phronesis and *praxis* are considered as key components of mapping standards and competence assessment approaches. The mediating role of *praxis* and *phrônêsis* between theory and practice is advocated by Bredillet et al. (2015) to resolve the tension between performance and attribute-based approaches to competence assessment.

The construct of *ecophronesis* (ecological phronesis) is posited by Xiang (2016) as the ecological practical wisdom that one might acquire in relation to the use of ecological practice; *ecophronesis* acknowledges the capabilities of ecological practice demonstrated by human beings or the *ecophronimos*, who, over thousands of years of human coevolution with nature, developed the master skill of ecological practical wisdom that enabled them to make, and act well upon, the right choices in challenging circumstances of ecological practice. Such ecological practical wisdom manifests itself in a myriad of ecological projects serving human beings’ enlightened self-interest and continues to evolve, as Xiang (2016) puts it, in a contemporary society of unprecedented socio-ecological transformations.

Summary/Conclusion

The concept of phronesis highlights the importance of practical wisdom and thoughtful action

in relation to all matters including those relating to sustainability and the environment. It is not adequate to know what needs to be done and even advocate what needs to be done. It is crucial that something is done and what is done is informed by practical wisdom. Phronesis is both an ethical virtue and an intellectual virtue (Eikeland 2008, p. 53) that must be acquired through practice rather than through the learning of theoretical knowledge. Phronesis enables its possessor to figure out “the right way to do the right thing in a particular circumstance, with a particular person, at a particular time” (Schwartz and Sharpe 2010, pp. 5–6).

Sustainability issues involve practical matters such as protecting the planet from environmental degradation and depletion of natural resources; preventing/reducing air, water, and soil pollution; and preserving the long-term health of ecosystems. Practical matters require practical reasoning. “Practical reasoning is deliberative, it takes into account local circumstances, it weighs trade-offs, it is riddled with uncertainties, it depends upon judgment, profits from wisdom, addresses particulars, it deals with contingencies, is iterative and shifts aims in process when necessary. Practical reasoning is the stuff of practical life. It is not the stuff of theoretical science. Its aim is to arrive at good but imperfect decisions with respect to particular circumstances” (Eisner 2002, p. 375). To sum up, what is needed is phronesis. As Dieppe (2011) has argued, it takes wisdom and experience, in addition to scientific data, to make the right decisions.

Cross-References

- [Ecology and Ecosystem](#)
- [Enlightened Self-Interest](#)
- [Environmental Management System](#)
- [Ethical Theories II](#)
- [Mindfulness](#)

References

- Aristotle (circa 340 BC) translated by Ross, W. D. (1999). *Nicomachean ethics*. Kitchener: Batoche Books.
- Bredillet, C., Tywoniak, S., & Dwivedula, R. (2015). What is a good project manager? An Aristotelian perspective. *International Journal of Project Management*, 33(2), 254–266.
- Dieppe, P. (2011). Who should have a joint replacement? A plea for more ‘phronesis’. *Osteoarthritis and Cartilage*, 19(2), 145–146.
- Eikeland, O. (2008). *The ways of Aristotle: Aristotelian Phronêsis, Aristotelian philosophy of dialogue, and action research. Studies in vocational and continuing education* (Vol. 5). Bern: Peter Lang.
- Eisner, E. W. (2002). From episteme to phronesis to artistry in the study and improvement of teaching. *Teaching and Teacher Education*, 18(4), 375–385.
- Gibbs, P., Costley, C., Armsby, P., & Trakakis, A. (2007). Developing the ethics of worker-researchers through phronesis. *Teaching in Higher Education*, 12(3), 365–375.
- Martin, L. (2015). Incorporating values into sustainability decision-making. *Journal of Cleaner Production*, 105, 146–156.
- McEvilley, T. C. (2002). *The shape of ancient thought, comparative studies in Greek and Indian philosophies*. New York: Allworth Press.
- Oliver, P. E., & Dennison, W. C. (2013). Dancing with dugongs: Having fun and developing a practical philosophy for environmental teaching and research. River symposium in Brisbane.
- Plato (circa 429–347 BC) translated by Woods, C. (2011–12). *Meno* Creative Commons, San Francisco.
- Schwartz, B., & Sharpe, K. (2010). *Practical wisdom: The right way to do the right thing*. New York: Riverhead Books.
- Xiang, W.-N. (2016). Ecophronesis: The ecological practical wisdom for and from ecological practice. *Landscape and Urban Planning*, 155, 53–60.

Phytoremediation

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Synonyms

[Bioenergy](#); [Biomass](#); [Bioremediation](#); [Green sustainable technology](#); [Metal-contaminated soils and waters](#); [Sustainable management](#)

Definition

Currently, a common denominator of practically all nations, developed and underdeveloped, is the presence of a huge surface of soils and aquatic basins highly contaminated by the presence of elevated concentrations of multiple pollutants such as heavy metals, pesticides, dioxins, or surfactants. Because of this situation, it is necessary to consider nonaggressive, low-cost, and relatively efficient processes that can regenerate and purify polluted areas. It is at this point on which the Phytoremediation arose, namely a series of natural processes in which three natural sciences, botany, biology, and chemistry, cooperate toward the plausible restitution of soils and waters to their original state of healthfulness.

Introduction

Throughout the ages, techniques and procedures close to the modern Phytoremediation can be observed in the classical Greece or since the sixteenth century in the botanical works and biological treatises of A. Cesalpino, J. B. van Helmont, R. Hooke, M. Malpighi, or S. Hale (Landmeyer 2011). Many ancient civilizations realized that if nature was left to act freely, without restraint, the growth of certain plant species could contribute to the regeneration of contaminated sites, hence in the wars of conquest some cities such as Carthage were punished in perpetuity with the “punishment of salt” (Visonà 1988), that is, by pouring salt on the soil to ensure that the conquered area would no longer be able to regenerate and would never again be able to host human beings. The etymological roots of the term “Phytoremediation” derive from the combination of the Greek prefix “Phyto” – plant – and the Latin suffix “remedium” – healing – (Chakravarty et al. 2017; Cunningham et al. 1997), being a fairly modern word that was coined in the 1990s of the last century (Rai 2018) although it actually encompasses a series of practices that have been carried out since immemorial times. The modern origin of the term has contributed to the

fact that, in purity, it is an intuitive concept for which there is no unanimously accepted academic definition; in fact, Chakravarty et al. (2017) list up to five different definitions present throughout the scientific literature.

In general terms, Phytoremediation can be defined as a set of procedures in which plants and their associated microbes are utilized to depollute contaminated soils and water surfaces. The basic operating sequence can be observed in the Phytoextraction, one of the most widespread modalities or techniques of Phytoremediation, resulting in essence in a quite simple and ambitious mechanism given the enormous environmental degradation suffered by the planet: Plants act as environmental green livers, absorbing the different polluting elements that are found in the soil and water from their roots. Subsequently, these harmful elements are dispersed by the plant itself to its aerial parts which, after the whole process, can be combusted to obtain clean energy, while the metals can also be recycled from the subsequent treatment of their ashes (Chakravarty et al. 2017).

Characteristics of Phytoremediation

The gradual arrival of the Industrial Revolution to the four corners of the planet (Kumar et al. 2017) as well as mining, military, and agricultural activities led to the continuous impoverishment and intoxication of soil and water (Kumar et al. 2017), since an effective detoxification in the short-medium term would mean a substantial application of economic and technological resources that not all the world's economies can afford. Peuke and Rennenberg (2005) estimated that more than 16% of the European Union suffers from some type of soil pollution, hence it is calculated that only in this area there are between 300,000 and 1.5 million of contaminated sites, considering an economic impact of 59,000 to 109,000 million Euros. Phytoremediation solves these shortcomings at a relatively affordable cost for the public finances (Greipsson 2011) since it has proven to be a valuable alternative instrument. As Watanabe (1997, p. 1) stated: “Plants ranging

from pennycress to poplar trees are proving their worth as cleanup tools.” For these compelling reasons, European and North American environmental authorities have initiated significant programs aimed at promoting the public recognition of the advantages derived from Phytoremediation (E. P. A. 2012; Sharma 2018).

In comparative terms, Phytoremediation will be more effective in large areas with pollution levels that normally range from medium to low, in the same way that not all plants are equally suitable to be successful in this type of process by depending, essentially, on the following factors: the level of tolerance to a given pollutant component, the ability of plants to locate and isolate the pollutant elements in their aerial zones (“translocation”), as well as other aspects such as their resistance to insects, the type of soils, the pH levels, etc. (Chakravarty et al. 2017).

It is also fundamental that plants behave as “hyperaccumulators,” i.e., a peculiarity owned by certain kinds of plants to absorb metals from the soils and accumulate them above a threshold considered efficient (Fernández et al. 2010). In this discipline, the level of efficiency is given by three elementary coefficients (Chakravarty et al. 2017): Enrichment Coefficient (EC ratio or level of heavy metal concentration in those plants grown in contaminated sites), Translocation Factor (TF index, which determines the path of metals from the roots to the shoots of a given plant), and the tolerance index (TI, which determines the appropriateness of any plant for application in a Phytoremediation process). These measures are trivially calculated by using the respective formulas:

$$EC = \frac{\text{Metal concentration in roots or shoots}}{\text{Metal concentration at the site}},$$

$$TF = \frac{\text{Metal concentration in plant shoots}}{\text{Metal concentration in plant roots}},$$

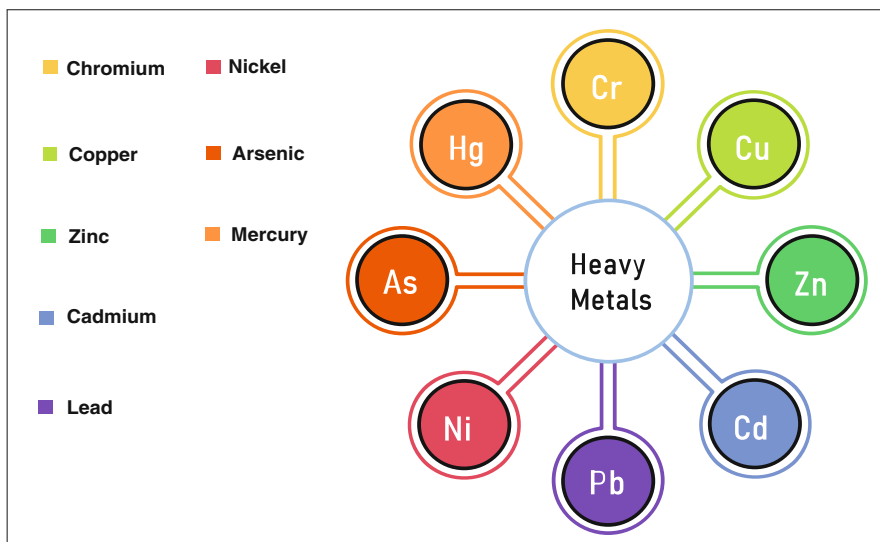
$$TI = \frac{\text{Biomass of plants cultivated in contaminated soil}}{\text{Biomass of plants cultivated in control conditions}}.$$

According to Kvesitadze, Khatisashvili, Sadunishvili, and Ramsden (2006), the environmental contaminants combated by Phytoremediation cover the following spectrum of pollutants: benzenes, chlorinated alkanes and alkenes, dioxins, gaseous contaminants, pesticides, phthalates, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), surfactants, and trinitrotoluene (TNT) in addition to, naturally, heavy metals. The latter are usually the main target of these procedures hence their wide profusion in the scientific literature (Kadukova and Kavuličova 2010; Nedjimi 2021; Shah et al. 2010; Tangahu et al. 2011; Yan et al. 2020), not to mention the transcendental advances in nuclear cleanup by removing radionuclides from contaminated soils due to hypothetical nuclear accidents (Willey 2007). Figure 1 summarizes the heavy metals whose effects are

usually counteracted by techniques based on Phytoremediation.

For their part, Surriya, Saleem, Waqar, and Kazi (2015) pointed out that more than 400 different plant species have sufficient potential to assist in the cleanup of polluted sites. In this regard, Table 1 lists more than 100 botanical specimens that have been used to remove the waste produced by five highly polluting industries.

Phytoremediation has been evolving in several differentiated techniques or branches coming from the same common core, taking advantage of plant versatility as well as their associated microbes. In Fig. 2, the main approaches linked to this discipline are outlined, taking into account that there are also other auxiliary procedures rather less widespread such as the Dendroremediation (Komives and Gullner 2006)



Phytoremediation, Fig. 1 Main heavy metals eradicated from the environment as a result of the Phytoremediation. (Source: Author's own elaboration)

or the Hydraulic control (Kadukova and Kavuličova 2010).

In line with Bose, Rai, Bhattacharya, Chaudhuri, and Bhattacharyya (2010), Chandra and Kumar (2017), Chakravarty et al. (2017), Kumar et al. (2017), Ssenku et al. (2017), and Tiwari, Kumar, and Kumar (2017), each of the procedures indicated in Fig. 2 is briefly outlined below. It should be noted that, in the same way that there is no univocal definition of the term Phytoremediation, neither is there a uniform definition of its associated techniques and procedures.

- **Phytoextraction.** It can be considered as the type-procedure of Phytoremediation, consisting in the absorption, translocation, and accumulation of pollutants in the aerial biomass of plants. In this way, it is possible to purify soils of pollutants, especially by eliminating metals of a toxic nature. This approach is the most widely implemented and the one that has resulted in the greatest economic benefits.
- **Phytofiltration.** It filters pollutants out of water environments from groundwater, soil humidity, or the water used for agricultural irrigation. It can be of two different types, one via the roots which is known as rhizofiltration and the other through seedlings which is commonly known as blastofiltration.
- **Phytostabilization.** It is also known as Phytorestitution and entails the immobilization and/or accumulation of toxic compounds in the soil or groundwater, or the stabilization of the soil itself to prevent erosion.
- **Phytovolatilization.** This method involves the release into the atmosphere of pollutants deposited in the soil through the plants' foliage. In short, the toxic compounds are taken up from the soil by the roots through the absorption of the water in which the pollutants are deposited, which are then released directly into the air through the transpiration, converted into volatile substances (in the form of gases).
- **Phytodegradation.** It refers to the application of plants and their attached microorganisms to decompose organic pollutants by the enzymatic degradation of harmful substances to less toxic elements by means of the root exudates and cell enzymes. It can occur either within the plant or within the rhizosphere of the plant.
- **Rhizodegradation.** The natural action of plants leads to the stimulation of rhizosphere

Phytoremediation, Table 1 Plants commonly used in Phytoremediation processes. (Source: Author's own elaboration based on Chandra and Kumar (2017))

Wastes	Industries	Plants
	Distilleries	<i>Achyranthes aspera</i> (chaff flower), <i>Amaranthus spinosus</i> (amarant), <i>Basella alba</i> (pui), <i>Blumea lacera</i> (janglimuli), <i>Cannabis sativa</i> (Bhang), <i>Chenopodium album</i> (goosefoots), <i>Croton bonplandianum</i> (Ban tulsi), <i>Dhatura stramonium</i> (dhatura), <i>Kalanchoe pinnata</i> (life plant), <i>Parthenium hysterophorous</i> (Congress grass), <i>Ricinus communis</i> (castor oil plant), <i>Sacchrum munja</i> (munja), <i>Setaria viridis</i> (green foxtail), <i>Solanum nigrum</i> (kali makoy), and <i>Trichosanthes dioica</i> (parval)
	Pulp and paper mill	<i>Alternanthera sessilis</i> , <i>Amaranthus cruentus</i> , <i>Amaranthus spinosus</i> , <i>Cannabis sativa</i> , <i>Centella asiatica</i> , <i>Chenopodium album</i> , <i>Colocasia esculenta</i> , <i>Commelina benghalensis</i> , <i>Cyanthillium cinereum</i> , <i>Cynodon dactylon</i> , <i>Diplazium esculentum</i> , <i>Eclipta prostrate</i> , <i>Eichhornia crassipes</i> , <i>Eleusine indica</i> , <i>Eragrostis atrovirens</i> , <i>Fimbristylis bisumbellata</i> , <i>Fimbristylis dichotoma</i> , <i>Hydrilla verticillata</i> , <i>Ipomoea aquatic</i> , <i>Jussiaea repens</i> , <i>Lemna minor</i> , <i>Leucas lavandulifolia</i> , <i>Ludwigia hyssopifolia</i> , <i>Mikania micrantha</i> , <i>Nicotiana plumbaginifolia</i> , <i>Parthenium hysterophorus</i> , <i>Phaseolus vulgaris</i> , <i>Phragmites communis</i> , <i>Pista stratiotes</i> , <i>Ricinus communis</i> , <i>Solanum americanum</i> , <i>Sonchus arvensis</i> , <i>Trapa natans</i> , and <i>Triticum aestivum</i>
	Tannery	<i>Abelmoschus esculentus</i> (Okra), <i>Allium sativum</i> (Garlic), <i>Amaranthus blitum</i> (Amaranth), <i>Artocarpus heterophyllus</i> (Jack tree), <i>Brassica campestris</i> (Yellow mustard), <i>Brassica juncea</i> , <i>Brassica nigra</i> (Black mustard), <i>Brassica oleracia</i> (Cauliflower), <i>Calotropis procera</i> (Calotropis procera), <i>Cannabis sativa</i> (Hemp), <i>Capsicum annuum</i> (Chilis), <i>Cassia fistula</i> , <i>Chenopodium album</i> (Pig weed), <i>Coriandrum sativum</i> (Coriander), <i>Cucumis sativus</i> (Cucumber), <i>Curcuma domestica</i> (Turmeric), <i>Lagernaria siceraria</i> Molina Standley (Bottle gourd), <i>Luffa aegyptiaca</i> Mill. (Vegetable sponge), <i>Momordica charantia</i> (Bitter gourd), <i>Phaseolus vulgaris</i> (Kidney bean), <i>Ricinus communis</i> (Ricinus communis), <i>Saccharum officinarum</i> (Sugarcane), <i>Sida acuta</i> , <i>Solanum melongena</i> (Eggplant), <i>Solanum tuberosum</i> (Potato), <i>Sorghum tuberosum</i> (Sudan grass), <i>Spinacia oleracia</i> (Spinach), <i>Trigonella foenum-graecum</i> (Fenugreek), <i>Triticum aestivum</i> (Wheat), and <i>Zea mays</i> (Maize)
	Textile	<i>Alternanthera philoxeroides</i> , <i>Aster amellus</i> , <i>Blumea malcolmii</i> , <i>Brassica juncea</i> , <i>Glandularia pulchella</i> , <i>Hydrilla verticillata</i> , <i>Ipomoea hederifolia</i> , <i>Nasturtium officinale</i> , <i>Petunia grandiflora</i> , <i>Phragmites australis</i> , <i>Portulaca grandiflora</i> , <i>Rheum rhabarbarum</i> , <i>Rosmarinus officinalis</i> , <i>Tagetes patula</i> , <i>Thymus vulgaris</i> , <i>Typha angustifolia</i> , <i>Typha domingensis</i> , <i>Typhonium flagelliforme</i> , and <i>Zinnia angustifolia</i>
	Petroleum	Alfalfa (<i>Brassica campestris</i>), Alfalfa (<i>Medicago sativa</i>), Bermuda grass (<i>Cynodon dactylon</i>), Broad bean (<i>Vicia faba</i>), Crabgrass (<i>Digitaria sanguinalis</i>), Ryegrass (<i>Lolium perenne</i>), Smooth meadowgrass (poapretensis), Switchgrass (<i>Panicum virgatum</i>), Tall fescue (<i>Festuca arundinacea</i>), and Water hyacinths (<i>Eichhornia crassipes</i>)

microorganisms to induce the enzymatic decomposition of pollutants.

- **Phytodesalination.** It consists in the use of halophilic plants to reduce the alkalinity of saline soils in order to facilitate the common growth of any other type of plant. Halophilic plants, coming from saline environments (e.g., salt marshes or marine dunes), are generally employed as they are also better adapted to counteract the heavy metals than glycophytic plants. The latter represent the majority of cultivable plants and are characterized by retaining the sodium in the root as a

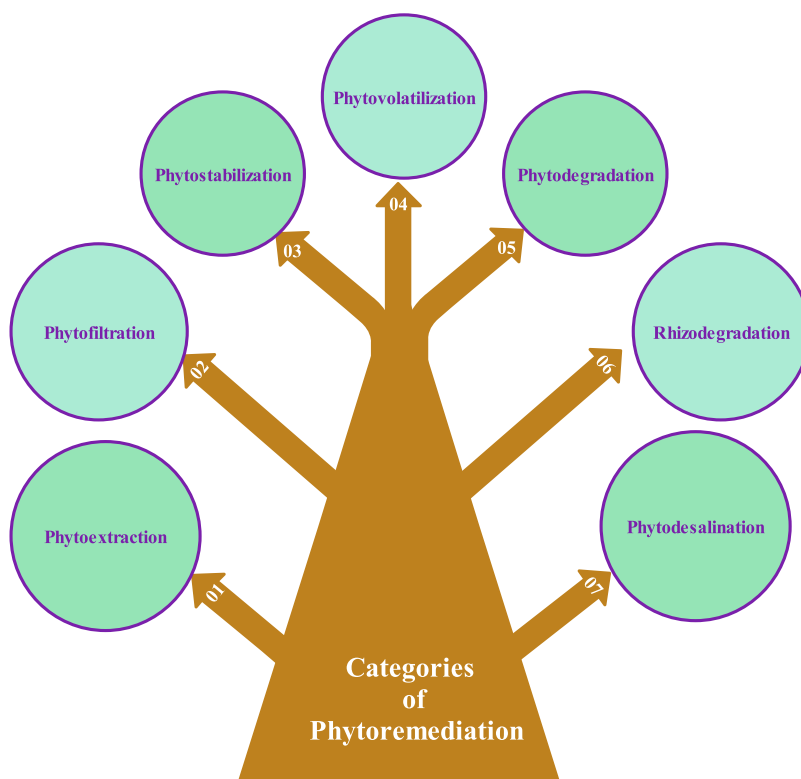
self-defense mechanism, so they cannot tolerate environments with an extremely high salinity.

Summary

The contributions of Phytoremediation to environmental sustainability are undeniable. According to Chakravarty et al. (2017), its achievements are manifold: the elimination of pollutants, the creation of employment, the social development, the “carbon sequestration,” or the generation and saving of alternative energies.

Phytoremediation,

Fig. 2 Overview of the key techniques on which the Phytoremediation is grounded. (Source: Author's own elaboration based on Chakravarty, Bauddh, and Kumera (2017))



Nevertheless, it also has a series of obvious limitations as it is a nonimmediate process which depends on the climate, age, and plant type, as well as on several edaphic factors (Chakravarty et al. 2017). Precisely, this last constraint justifies the research on genetically modified plants focused directly on its application in techniques related to Phytoremediation (Macek et al. 2006) which make them resilient to the soil pH, alkalinity, dryness, or the threat of plagues in the same way that the transgenization has to enhance their qualities as hyperaccumulators of heavy metals (Jha et al. 2017).

Basically, the main lines of research in this wide field have been directed to expand the functions of aquatic plants in environmental regeneration (Dhir 2013), to analyze Phytoremediation as an essential element in the production of Green Energy (Jha et al. 2017; Kumar et al. 2017; Surriya et al. 2014; Tiwari et al. 2017) or to channel the existing links between Phytoremediation and Biofortification, since both disciplines can

cooperate in unison in the environmental remediation and in the supply of micronutrients for human beings (Yin et al. 2012). Although Phytoremediation is not a Panacea, it opens a gateway to environmental regeneration, in an effective way and at costs that can be assumed by the community while creating a dense synergistic network that generates important economic and social benefits. However, it is not yet globally regulated, and it seems rather unlikely that these techniques will be accepted by all sectors of the society (Cunningham and Berti 2020), probably because of the scarce information that still exists about these procedures.

Cross-References

- [Bioremediation](#)
- [Community Sustainability](#)
- [Energy Biofuels](#)
- [Environmental Impact](#)

- ▶ Externalities (Economics)
- ▶ Green Rewards
- ▶ Pollution
- ▶ Sustainable Development Planning
- ▶ Sustainable Growth
- ▶ Sustainable Remediation

References

- Bose, S., Rai, V., Bhattacharya, S., Chaudhuri, P., & Bhattacharyya, A. K. (2010). Phytoremediation: A promising technology of bioremediation for the removal of heavy metal and organic pollutants from the soil. In I. A. Golubev (Ed.), *Handbook of phytoremediation* (pp. 263–295). New York: Nova Science Publishers.
- Chakravarty, P., Baudh, K., & Kumera, M. (2017). Phytoremediation: A multidimensional and ecologically viable practice for the cleanup of environmental contaminants. In K. Baudh, B. Singh, & J. Korstad (Eds.), *Phytoremediation potential of bioenergy plants* (pp. 1–46). https://doi.org/10.1007/978-981-10-3084-0_1.
- Chandra, R., & Kumar, V. (2017). Phytoremediation: A green sustainable technology for industrial waste management. In R. Chandra, N. K. Dubey, & V. Kumar (Eds.), *Phytoremediation of environmental pollutants* (pp. 1–42). Boca Raton: CRC Press.
- Cunningham, S. D., & Berti, W. R. (2020). Phytoextraction and phytostabilization: technical, economic, and regulatory considerations of the soil–lead issue. In N. Terry & G. S. Bañuelos (Eds.), *Phytoremediation of contaminated soil and water*. Boca Raton: CRC Press.
- Cunningham, S. D., Shann, J. R., Crowley, D. E., & Anderson, T. A. (1997). Phytoremediation of contaminated water and soil. In E. L. Kruger, T. A. Anderson, J. R. Coats, & J. R. Coats (Eds.), *Phytoremediation of soil and water contaminants* (Vol. 664, pp. 2–17). <https://doi.org/10.1021/bk-1997-0664.ch001>.
- Dhir, B. (2013). Phytoremediation: Role of aquatic plants in environmental clean-up. <https://doi.org/10.1007/978-81-322-1307-9>.
- E. P. A. (2012). *A Citizen's guide to phytoremediation*. Fact sheet EPA 542-F-12-016. United States Environmental Protection Agency. Office of Solid Waste and Emergency Response (5102G). <https://semsub.epa.gov/work/HQ/189975.pdf>. Accessed 29 Sept 2020.
- Fernández, R., Carballo, I., Nava, H., Sánchez-Tamés, R., Bertrand, A., & González, A. (2010). Looking for native hyperaccumulator species useful in phytoremediation. In I. A. Golubev (Ed.), *Handbook of phytoremediation* (pp. 297–330). New York: Nova Science Publishers.
- Greibsson, S. (2011). Phytoremediation. *Nature Education Knowledge*, 3(10), 7.
- Jha, A. B., Misra, A. N., & Sharma, P. (2017). Phytoremediation of heavy metal-contaminated soil using bioenergy crops. In K. Baudh, B. Singh, & J. Korstad (Eds.), *Phytoremediation potential of bioenergy plants* (pp. 63–96). https://doi.org/10.1007/978-981-10-3084-0_3.
- Kadukova, J., & Kavuličova, J. (2010). Phytoremediation of heavy metal contaminated soils – Plant stress assessment. In I. A. Golubev (Ed.), *Handbook of phytoremediation* (pp. 185–222). New York: Nova Science Publishers.
- Komives, T., & Gullner, G. (2006). Dendroremediation: The use of trees in cleaning up polluted soils. In M. Mackova, D. Dowling, & T. Macek (Eds.), *Phytoremediation and Rhizoremediation* (pp. 23–32). https://doi.org/10.1007/978-1-4020-4999-4_3.
- Kumar, D., Singh, B., & Sharma, Y. C. (2017). Bioenergy and phytoremediation potential of *Milletia pinnata*. In K. Baudh, B. Singh, & J. Korstad (Eds.), *Phytoremediation potential of bioenergy plants* (pp. 169–188). https://doi.org/10.1007/978-981-10-3084-0_6.
- Kvesitadze, G., Khatishashvili, G., Sadunishvili, T., & Ramsden, J. J. (2006). Contaminants in the environment. In G. Kvesitadze, G. Khatishashvili, T. Sadunishvili, & J. J. Ramsden (Eds.), *Biochemical mechanisms of detoxification in higher plants: Basis of phytoremediation* (pp. 1–54). Berlin/Heidelberg: Springer.
- Landmeyer, J. E. (2011). Introduction to phytoremediation of contaminated groundwater: Historical foundation. *Hydrologic Control, and Contaminant Remediation*. <https://doi.org/10.1007/978-94-007-1957-6>.
- Macek, T., Francova, K., Sura, M., & Mackova, M. (2006). Genetically modified plants with improved properties for phytoremediation purposes. In J. L. Morel, G. Echevarria, & N. Goncharova (Eds.), *Phytoremediation of metal-contaminated soils* (Vol. 4, pp. 85–108). https://doi.org/10.1007/1-4020-4688-X_4.
- Nedjimi, B. (2021). Phytoremediation: A sustainable environmental technology for heavy metals decontamination. *SN Applied Sciences*, 3(286), 7. <https://doi.org/10.1007/s42452-021-04301-4>.
- Peuke, A. D., & Rennenberg, H. (2005). Phytoremediation. *EMBO Reports*, 6(6), 497–501. <https://doi.org/10.1038/sj.embor.7400445>.
- Rai, P. K. (2018). *Phytoremediation of emerging contaminants in wetlands*. Boca Raton: CRC Press.
- Shah, F. U. R., Ahmad, N., Masood, K. R., Peralta-Videa, J. R., & Ahmad, F. U. D. (2010). *Heavy metal toxicity in plants* (M. Ashraf, M. Öztürk, & M. S. A. Ahmad, Eds.). https://doi.org/10.1007/978-90-481-9370-7_4.
- Sharma, J. (2018). *Introduction to phytoremediation – A green clean technology*. <https://ssrn.com/abstract=3177321>. Accessed 29 Sept 2020.
- Ssenku, J. E., Ntale, M., Backeus, I., & Oryem-Origa, H. (2017). Phytoremediation potential of *Leucaena leucocephala* (Lam.) de Wit. for heavy metal-polluted

- and heavy metal-degraded environments. In K. Baudh, B. Singh, & J. Korstad (Eds.), *Phytoremediation potential of bioenergy plants* (pp. 189–209). https://doi.org/10.1007/978-981-10-3084-0_7.
- Surriya, O., Saleem, S. S., Waqar, K., Kazi, A. G., & Öztürk, M. (2014). Bio-fuels: A blessing in disguise. In M. Öztürk, M. Ashraf, A. Aksoy, & M. S. A. Ahmad (Eds.), *Phytoremediation for green energy* (pp. 11–54). https://doi.org/10.1007/978-94-007-7887-0_2.
- Surriya, O., Saleem, S. S., Waqar, K., & Kazi, A. G. (2015). Phytoremediation of soils: Prospects and challenges. In K. Hakeem, M. Sabir, M. Öztürk, & A. Mermut (Eds.), *Soil remediation and plants: Prospects and challenges* (pp. 1–36). <https://doi.org/10.1016/B978-0-12-799937-1.00001-2>.
- Tangahu, B. V., Sheikh Abdullah, S. R., Basri, H., Idris, M., Anuar, N., & Mukhlisin, M. (2011). A review on heavy metals (As, Pb, and Hg) uptake by plants through phytoremediation. *International Journal of Chemical Engineering*, 939161, 31. <https://doi.org/10.1002/047147844X.gw851>.
- Tiwari, J., Kumar, A., & Kumar, N. (2017). Phytoremediation potential of industrially important and biofuel plants: *Azadirachta indica* and *Acacia nilotica*. In K. Baudh, B. Singh, & J. Korstad (Eds.), *Phytoremediation potential of bioenergy plants* (pp. 211–254). https://doi.org/10.1007/978-981-10-3084-0_8.
- Visonà, P. (1988). Passing the salt: On the destruction of Carthage again. *Classical Philology*, 83(1), 41–42.
- Watanabe, M. E. (1997). Phytoremediation on the brink of commercialization. *Environmental Science & Technology*, 31(4), 182A–186A. <https://doi.org/10.1021/es972219s>.
- Willey, N. (2007). Soils contaminated with radionuclides. In N. Willey (Ed.), *Phytoremediation: Methods and reviews* (pp. 305–318). Humana Press. https://doi.org/10.1007/978-1-59745-098-0_23.
- Yan, A., Wang, Y., Tan, S. N., Mohd Yusof, M. L., Ghosh, S., & Chen, Z. (2020). Phytoremediation: A promising approach for revegetation of heavy metal-polluted land. *Frontiers in Plant Science*, 11, 359. <https://doi.org/10.3389/fpls.2020.00359>.
- Yin, X., Yuan, L., Liu, Y., & Lin, Z. (2012). Phytoremediation and biofortification: Two sides of one coin. In X. Yin & L. Yuan (Eds.), *Phytoremediation and biofortification: Two sides of one coin* (pp. 1–6). Springer Netherlands. https://doi.org/10.1007/978-94-007-1439-7_1.

Pigou's Tax

► Pigouvian Taxation

Pigouvian Taxation

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Synonyms

Pigou's Tax

Definition

Compensatory (corrective) tax. The Pigouvian taxation aims to optimize the use of resources by creating conditions for economic choice and counteracting market failure. This is a tax that is levied on each unit of pollution created by an organization—pollutant equal to the marginal pollution damage at an effective production volume. This tax is levied on the creator of “negative externalities.” The tax is intended to include the public cost in the private cost of the polluter. Its monetary value must be equal to the amount necessary to increase the private cost of polluters to the marginal social costs.

Introduction

Pigouvian Taxation or “Pigou's Tax” is a concept that bears the name of the creator of the idea of introducing offsetting fees, the English economist Arthur Cecil Pigou (1877–1959) an affiliate to the Cambridge School of Economics, neoclassical economist, president of the Royal Economic Society, founder of the microeconomic market failure school (Leeson 2014, p. xi).

Pigou presents the philosophy of the “compensatory tax” in his work “*The Economics of Welfare*”, first exposed in the following text: “Corresponding to the above investments in which marginal trade net product falls short of marginal social net product, there are a number of others in which, owing to the technical difficulty

of enforcing compensation for incidental disservices, marginal trade net product is greater than marginal social net product. Thus, incidental uncharged disservices are rendered to third parties when the game-preserving activities of one occupier involve the overrunning of a neighbouring occupier's land by rabbits—unless, indeed, the two occupiers stand in the relation of landlord and tenant, so that compensation is given in an adjustment of the rent. They are rendered, again, when the owner of a site in a residential quarter of a city builds a factory there and so destroys a great part of the amenities of the neighbouring sites; or, in a less degree, when he uses his site in such a way as to spoil the lighting of the houses opposite: or when he invests resources in erecting buildings in a crowded centre, which, by contracting the air space and the playing-room of the neighbourhood, tend to injure the health and efficiency of the families living there. Yet again, third parties—this time the public in general—suffer incidental uncharged disservices from resources invested in the running of motor cars that wear out the surface of the roads. The case is similar—the conditions of public taste being assumed—with resources devoted to the production and sale of intoxicants. [. . .] (Pigou 1920, pp. 161–162).

Development of the Concept

Pigou's tax is imposed on producers of negative external effects called "*negative externalities*." For the first time, Karl William Kapp explored the externalities (Kapp 1950, p. 14). Negative externalities are not included in the manufacturer's costs. In this way, the price of the goods on the market is inconsistent with their full cost and the manufacturer's commercial profits are unrealistic. These costs are not included in the cost of the producer. The producer transfers them onto society. The community is burdened with these private costs while the one who creates them receives non-market-based unwarranted profit. This situation is called "market failure" as

the producer of negative externalities transfers part of its costs onto society but only assigns revenue and receives price advantages over its competitors.

External effects influence the efficient allocation of resources through the market price mechanism (Baumol 1972, pp. 307–322).

In a situation of "market failure" where the market mechanism does not automatically and fairly take into account the price of the goods, a "third person" must intervene to correct the "failure." This third person is the state. Therefore, the Pigouvian Tax is also called a "corrective tax," a tax that corrects "market failures" or "market imperfection" (Lee 1975, p. 70). The correction of a market failure is to compensate society for damages and costs it has incurred due to the business of companies. These companies are in debt to society as it has covered the damages and costs of the companies' activities and the companies have appropriated profits without having made the full costs of acquiring these profits (Fig. 1).

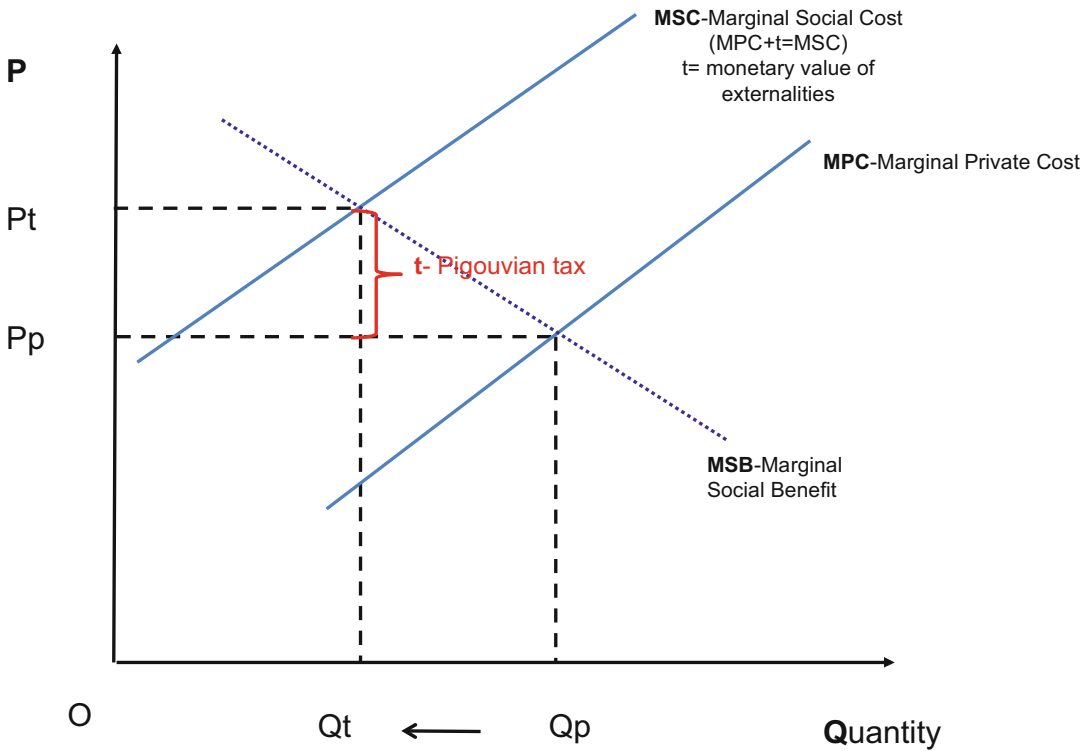
Private creators of negative external costs transfer their costs to the public or third parties and monetize revenue. This distorts the effect of mechanism and competition.

By imposing Pigouvian Tax, the marginal costs of private producers of goods and services are raised to the level of the maximum public allowance (Lee 1975, p. 70). This is called "internalization of the externalities."

Pigou is the first economist to raise the issue of economic analysis of environmental protection, which is part of the concept of sustainable development today.

He also describes the instability of an economy as "*. . . this 'natural' tendency of people to devote too much of their resources to present service and too little to future service. . .*" (Kula 2006, p. 84).

Pigou's tax is used as a tool to reduce the pollution from a company's activities. Pigou examines the impact of taxes on pollution in production. According to Pigou, this pollution tax is an incentive for the polluter to reduce pollution and thereby reduce its negative impact on the environment. It is accepted, as Pigou accepts, that the strife of companies to pay less tax will



Pigouvian Taxation, Fig. 1 Graphic representation of the Pigouvian Tax. *MSP* Marginal Private Cost, *MSC* $MPC + \text{externalities}$, *MSB* Marginal Social Benefit ~

demand of good, *MSB* $MSC + \text{Pigouvian tax}$ -internalization of externalities

force them to change the technology that is polluting the environment with an ecological one.

Negative external effects can also be created by consumption. For example, when green areas, children’s playgrounds, and cultural monuments are taken away from the community for the construction of private buildings.

External negative effects can be grouped in the following direction: production–production; production–consumption; consumption–production; consumption–consumption.

The application of the Pigouvian tax on reducing environmental impacts is a contemporary method of reducing the harmful impact on the environment and that of private interests on the deterioration of the quality of life of society as a whole. Pigou’s tax is used to regulate negative environmental effects, along with other tools such as cap-and-trade and carbon allowance. It is a means of “internalizing negative externalities.”

Pigouvian taxes should not be confused with taxes on production. Pigouvian taxes are taxes on pollution. Pigouvian taxes are not environmental charges (Perelet et al. 2014, p. 158). The logic of the Pigouvian corrections is also the granting of subsidies to market agents that have reduced pollution.

Internalization of Negative Externalities by Levied Pigouvian Tax

W. Kapp was the first scientist to seriously explore the outsiders and believes that if their price is determined, they can be “internalized.”

Example of internalization of negative externalities of the “production-type” type:

Let’s take two companies: A—a coal-fired power plant (TPP) emitting harmful gases into the atmosphere, and B—a bio-vegetable

production plant. Company A creates negative outlets for company B.

Business expenses can be described with Cost A (A, x) and Cost B (B, x).

The government introduces a Pigouvian Tax for each ton of pollution generated by Company A. The condition that each unit of pollution reduction of the TPP in company A should lead to an increase of a unit of bio-vegetable production at company B, to balance the system, should be taken into account.

The task of the polluter company A when imposing the Pigouvian tax is as follows: the maximum production capacity minus production costs minus Pigouvian tax on production:

$$\max_{a,x} PAA - CA(A, x) - tx$$

The meaning of the Pigouvian tax concerning negative externalities is to internalize environmental pollution, that is, to include the price of the polluting company's output the non-included costs for its production that it has transferred to the public (Full Cost). Internalization can be described as follows (Fig. 2):

$$FCA = FP + \sum En \tag{1}$$

Where:

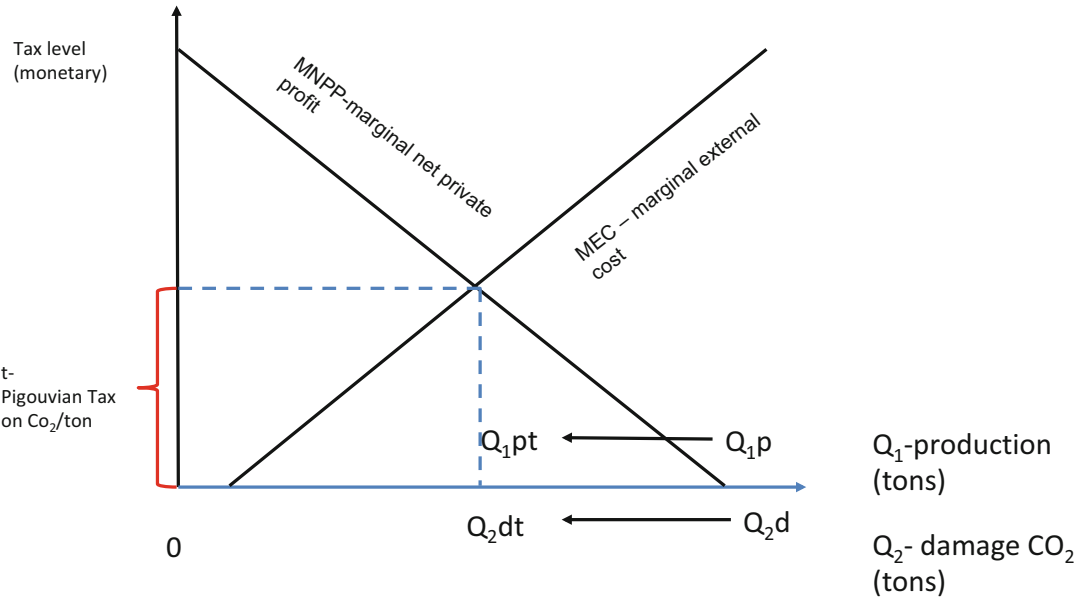
- F_A —full cost of production
- E —negative externalities
- Σn —Pigouvian tax

The analysis shows that the amount of the Pigouvian tax, which internalizes the outsiders, leads to a reduction of the production that pollutes thus reducing the pollution. If a company wants to remain on the market, it must reduce negative externalities (pollution to increase production).

Conclusions

The Pigouvian tax is imposed on entities and individuals that create negative externalities by their activities. An external effect is an impact that is not mediated by the market. The Pigouvian tax is currently applied to discharges of pollutants

P



Pigouvian Taxation, Fig. 2 Graphic representation of the Pigouvian Tax on creators of pollutions (Negative externalities). *MNPP* marginal net private profit, *MEC*

marginal external cost, *t* Pigouvian tax, *Q1* production (tons), *Q2* damage with CO2 (tons)

into the environment, excise duties on harmful goods, entry fees to the city center or to the territory of natural and cultural parks, etc. In practice, in our days these are taxes on environmental pollutants such as petroleum products, dangerous substances, cigarettes, and the like. The Pigouvian tax can also be used to redistribute resources for the benefit of society.

Cross-References

- Externalities
- Pollution

References

- Baumol, W. J. (1972). On taxation and the control of externalities source. *The American Economic Review*, 62(3), 307–322. <http://www.jstor.org/stable/1803378>.
- Gayer, T., & Horowitz, J. K. (2006). Market-based approaches to environmental regulation. *Foundations and Trends in Macroeconomics*, 1(4), 201–326. <https://doi.org/10.1561/07000000013>.
- Kapp, K. W. (1950). *The social cost of private enterprise*. Cambridge: Cambridge University Press.
- Kula, E. (2006). *History of environmental economic thought*. London: Psychology Press.
- Lee, D. R. (1975). Efficiency of pollution taxation and market structure. *Journal of Environmental Economics and Management*, 2(1), 69–72.
- Leeson, R. (2014). *Hayek: A collaborative biography, part III fraud, fascism and free market religion* (p. XI). London: Palgrave Macmillan.
- Perelet, R., Mason, P., Markandya, A., & Taylor, T. (2014). *Dictionary of environmental economics* (1st ed., p. 158). London: Earthscan Publications Ltd. <https://doi.org/10.4324/9781849774253>.
- Pigou, A. C. (1920). *Economics of welfare* (4th ed.). London: Macmillan.

Pigouvian Taxes

- Green Taxation

Pisciculture

- Aquaculture and Blue Farming

Planetary Boundaries

- Degrowth

Planned Obsolescence

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Synonyms

Built-in obsolescence; Intended obsolescence; Product obsolescence; Programmed obsolescence

Definition

Planned obsolescence (PO) is the deliberate shortening of the usable lifespan of a product to accelerate the pace of consumption. It can be defined from either the company's or consumer's perspective. From the former perspective, PO can be considered as part of the product replacement strategy whereas it is part of marketing strategy from the latter perspective.

As an economic strategy, PO originated in 1932 during the Great Depression in the USA. Bernard London suggested it as a means to end the recession by stimulating turnover, reviving the consumption cycle and boosting the economy. Through various PO mechanisms, companies would motivate consumers to repeat purchases more quickly.

These mechanisms are scattered across many product-related factors based on purposefully reducing a product's lifespan. There are three types of obsolescence: *obsolescence of desirability*, *obsolescence of quality*, and *obsolescence of function*. Each emphasizes different ways to encourage repetitive purchasing by manipulating product features like durability, reparability, and design.

Today's so-called "throwaway society" culture vividly reflects this fast consumerism and

production pattern. However, the excessive post-consumption waste caused by PO presents a major challenge for sustainability. Yet no matter how heavily PO is criticized as a negative business strategy, some argue that it has some benefits. Gaining a sustainable point of view and then creating a strong sustainability culture requires deeper understanding across all layers of society as well as creating new paths for doing business.

Planned Obsolescence: An Explanation and Brief History

The concept of PO originated with the competition between General Motors and Ford in the early 1900s' automotive industry (Keeble, 2013). Another early sign of this trend was the Phoebus cartel, formed in 1924 by light bulb manufacturers like Phillips, Osram and General Electric, to artificially reduce bulbs' lifetimes (Hadhazy, 2016).

The strategy of limiting the normal usable life of products is called PO (Rivera & Lallmahomed, 2016). The term PO was first officially used in 1932 by Bernard London from the University of Wisconsin – London in a brochure entitled “*Ending the Depression through Planned Obsolescence*” (Satyro et al., 2018). It was offered to government as a planning strategy to end the recession (Çetiner & Gündoğan, 2014) and as a means of creating consumption need through shortening product lifecycles (Rivera & Lallmahomed, 2016). The idea was then popularized by journalist and social critic Vance Packard in “*The Waste Makers*” (Packard, 1960). He criticized PO and its broader consequences for society (Park, 2016; Cooper, 2017).

Types of Planned Obsolescence

PO exists in multiple forms at all stages of the product life cycle (Longmuss & Poppe, 2017). According to some, this versatility is expressed through different strategies, including advertising and product design, to offer multiple paths to reaching goals (Wieser, 2016). It is particularly common in several business sectors, like fashion

and technology, that provide a diverse range of products, such as accessories, furniture, personal hygiene goods, laptops, mobile phones, apparel, and cars (Rivera & Lallmahomed, 2016; Wieser, 2016).

There are different types of PO mentioned in the literature used with different names. However, the main ones are *obsolescence of desirability*, *obsolescence of quality* and *obsolescence of function*, which in turn has two subtypes: *systemic obsolescence* and *postponed obsolescence* (Longmuss & Poppe, 2017).

The first type, which is also known as *psychological or style/stylistic obsolescence*, is mainly based on consumers' psychological states rather than products themselves (Maitre-Ekern & Dalhammar, 2016). This type of obsolescence is actually about the subjective aging of a product in terms of its appearance or design as a result of changing consumption patterns or technological and fashion trends (Proske et al., 2016). Consumers and product designers are seen as key drivers of such obsolescence (Proske et al., 2016; Spinney et al., 2012). The clothing industry in particular proceeds by appealing to this basic human desire (Whiteley, 1987), which can cause addiction to newness, or “neophilia” (Hellmann & Luedicke, 2018).

Obsolescence of quality, also known as *technical obsolescence*, is more concerned with products that are designed to wear out after a given period (Sheehan, 2014; Rivera & Lallmahomed, 2016). That is the durability of the product and its components are artificially reduced (e.g., disposable cameras) (Longmuss & Poppe, 2017).

Obsolescence of function refers to situations where a product becomes old-fashioned in the eyes of consumers when technological advances enable technically superior products to be manufactured (Rivera & Lallmahomed, 2016; Cooper, 2017), such as with smartphones or computers. For instance, Apple's iPhone 5, released in 2012, sold with a new immovable adapter alongside other novel features (e.g., a unique Apple chip), which led to extra purchases (Maitre-Ekern & Dalhammar, 2016). Finally, within this category, systemic obsolescence involves modifying the current product's system to make it more

difficult to use (e.g., software updates and upgrades) (Amankwah-Amoah, 2017), while postponed obsolescence involves introducing a new product into the market despite even through the current product's technology is still performing better (e.g., Sony PS2 games console) (Cresswell, 2002).

The Impact and Criticisms of Planned Obsolescence

While PO is still a popular business strategy (The Washington Post 2012), it also continues to be harshly criticized for its negative social and environmental consequences (Pangburn & Stavoulaki, 2014). These criticisms began around the time of Packard's (1960) relatively well-known critique. According to Packard, PO is strictly based on consumer exploitation and wasting resources (Aladeojebi, 2013). Conversely, critics like Philip Kotler, a marketing guru, claim that PO is a driving force for technological advances or improvements, and a method of doing business for free societies in competitive industries (The Economist, 2009). Others argue that it provides employment and improves products and services (Aladeojebi, 2013). Defenders of PO also claim that new products are more eco-friendly, such as using less water or energy, than old ones (Satyro et al., 2018).

Regardless of the criticisms, PO certainly has massive drawbacks for both society and environment (Michel, 2017). Today's competitive business conditions push consumers and producers to use more materials and energy, which causes overproduction and overconsumption of non-durable items (Michel, 2017).

Even as many more are produced, huge amounts of goods like cell phones and personal computers are discarded each year (Guiltinan, 2009). This results in tremendous damage through increased waste, resource consumption, depletion of scarce natural resources, greenhouse gas emissions and other pollution (including chemical leakages from unrecycled waste) (Wieser, 2016). Nevertheless, society seems to have been conditioned to desire and demand this kind of change, despite the high risk of corrupting society.

Unfortunately, therefore, PO is an unsustainable practice in terms of production, consumption and waste generation.

Sustainable Approaches to Planned Obsolescence

Given the criticisms of PO, it is clear that progress away from a throwaway culture is needed across all layers of society, not just consumers or producers. Although some PO practices are still omnipresent in today's business world, some awareness of problems deriving from unsustainable practices has grown, especially recently (Satyro et al., 2018).

For instance, various efforts are being made by the European Union (EU) and its member states for a more sustainable future through legal mechanisms (e.g., European Economic and Social Committee and European Consumers Confederation). Moreover, EU rules, such as the Unfair Commercial Practices Directive or EU labeling rules, incentivize producers and consumers toward more durable and sustainable products (Michel, 2017). Similarly, the World Business Council on Sustainable Development encourages consumers to choose more sustainable products and services (Guiltinan, 2009).

However, it should also be acknowledged that high levels of competition, complexity, costs and increasing speed of production, consumption and innovation cycles leave virtually no space to companies for sustainable development (Longmuss & Poppe, 2017). Consumers are also seen as key actors, with the power to reverse this fast consumption trend (Cooper, 2017) through their interests, expectations, and demands for sustainability (Longmuss & Poppe, 2017). They can thus pave the way for improving goods and services, or even new business models for producers and commerce. A few studies already take a positive approach to PO by suggesting how it can be used within the frame of the circular economy (e.g., Van der Laan & Aurisicchio, 2017; Longmuss & Poppe, 2017). This is believed to be particularly useful when used in hybrid combinations of intercompatible business models.

Summary

Given its contradictory qualities, PO is a controversial debate topic. However, the idea that PO has some benefits seems quite dangerous unless it is carefully incorporated within today's contemporary business world. The implementation of PO requires deeper understanding relating to sustainable production and consumption. Although there is already greater understanding in society, more meaningful and greener choices and comprehensive information are needed about these choices. In conclusion, all actors alone have limited choices for making such changes, so a holistic approach is needed to achieve sustainable development (Longmuss & Poppe, 2017).

Cross-References

- Cause-Related Marketing
- Consumerism
- Marketing (Ethics of)
- Product Life Cycle
- Social Marketing
- Social Sustainability
- Sustainability and Profitability
- Sustainable Consumption

References

- Aladeojebi, T. K. (2013). Planned obsolescence. *International Journal of Scientific & Engineering Research*, 4(6), 1504–1508.
- Amankwah-Amoah, J. (2017). Integrated vs. add-on: A multidimensional conceptualisation of technology obsolescence. *Technological Forecasting and Social Change*, 116, 299–307.
- Çetiner, B. G., & Gündoğan, M. (2014). Defying planned obsolescence: Paradigm change for macro level sustainability of supply chain management systems. In *CIE 2014-44th international conference on computers and industrial engineering and IMSS 2014-9th international symposium on intelligent manufacturing and service systems, joint international symposium on "The Social Impacts of Developments in Information, Manufacturing and Service Systems"*, Istanbul, Turkey, -proceedings (pp. 809–814).
- Cooper, T. (2017). Product longevity and business dilemmas in the circular economy. *Routledge Handbook of Sustainable Product Design*, 405.
- Cresswell, L. (2002). *Product design graphics with materials technology*. Heinemann.
- Guiltnan, J. (2009). Creative destruction and destructive creations: Environmental ethics and planned obsolescence. *Journal of Business Ethics*, 89(1), 19–28.
- Hadhazy, A. (2016). Heres' the truth about the planned obsolescence of tech. Resource document. *BBC*. <http://www.bbc.com/future/story/20160612-heres-the-truth-about-the-planned-obsolescence-of-tech>. Accessed 30 August 2019.
- Hellmann, K. U., & Luedicke, M. K. (2018). The throw-away society: A look in the Back Mirror. *Journal of Consumer Policy*, 41(1), 83–87.
- Keeble, D. (2013). *The culture of planned obsolescence in technology companies*. Bachelor's thesis, Oulu University of Applied Sciences, Business Information Technology, Oulu.
- Longmuss, J., & Poppe, E. (2017). Planned obsolescence: Who are those planners. *Product Lifetimes and the Environment*, 217–221.
- Maitre-Ekern, E., & Dalhammar, C. (2016). Regulating planned obsolescence: A review of legal approaches to increase product durability and reparability in Europe. *Review of European, Comparative & International Environmental Law*, 25(3), 378–394.
- Michel, A. (2017). Product lifetimes through the various legal approaches within the EU context: Recent initiatives against planned obsolescence - Plate conference paper. *At TU Delft*, 9, 266–270.
- Packard, V. (1960). *The waste makers*. Harmondsworth: Pelican.
- Pangburn, M. S., & Stavroulakis, E. (2014). Take back costs and product durability. *European Journal of Operational Research*, 238(1), 175–184.
- Park, M. (2016). *Defying obsolescence*. In *longer lasting products* (pp. 103–132). Routledge.
- Proske, M., Winzer, J., Marwede, M., Nissen, N. F., & Lang, K. D. (2016). Obsolescence of electronics-the example of smartphones. In *2016 electronics goes green 2016+ (EGG)* (pp. 1–8). IEEE.
- Rivera, J. L., & Lallmahomed, A. (2016). Environmental implications of planned obsolescence and product lifetime: A literature review. *International Journal of Sustainable Engineering*, 9(2), 119–129.
- Satyro, W. C., Sacomano, J. B., Contador, J. C., & Telles, R. (2018). Planned obsolescence or planned resource depletion? A sustainable approach. *Journal of Cleaner Production*, 195, 744–752.
- Sheehan, B. (2014). *Introducing corporate-guided markets using diet coke as an exemplar*. Resource document. <https://independent.academia.edu/BrendanSheehan5>. Accessed 30 Aug 2019.
- Spinney, J., Burningham, K., Cooper, G., Green, N., & Uzzell, D. (2012). 'What I've found is that your related experiences tend to make you dissatisfied': Psychological obsolescence, consumer demand and the dynamics and environmental implications of de-stabilization in the laptop sector. *Journal of Consumer Culture*, 12(3), 347–370.

- The Economist. (2009). *The idea planned obsolescence*. Resource document. <https://www.economist.com/news/2009/03/23/planned-obsolescence>. Accessed 31 August 2019.
- Van der Laan, A. Z., & Aurisicchio, M. (2017). *Planned obsolescence in the circular economy*, 9, 446–452. Plate conference paper, At TU Delft.
- Whiteley, N. (1987). Toward a throw-away culture. Consumerism, 'style obsolescence' and cultural theory in the 1950s and 1960s. *Oxford Art Journal*, 10(2), 3–27.
- Wieser, H. (2016). Beyond planned obsolescence: Product lifespans and the challenges to a circular economy. *GALA-Ecological Perspectives for Science and Society*, 25(3), 156–160.

Planning

- [Corporate Strategy](#)

Plenty

- [Abundance \(CSR\)](#)

Poff-Michalos Procedure

- [Poff-Michalos Procedure, The](#)

Poff-Michalos Procedure, The

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Synonyms

[Feminism](#); [Gender Differences](#); [Poff-Michalos Procedure](#); [Quality of Life](#)

Introduction

The wishes of building a more just, supportive, and fully sustainable world economy are inconceivable without first achieving the effective integration of women in all sectors and levels of the labor market. In fact, the systematic reduction of gender differences is one of the objectives set by the Rio de Janeiro Conference, so that in Agenda 21 (UN) the disparity between the sexes is expressly denounced: “(. . .) women are a particularly disadvantaged group.” These gender differences have not yet been completely eradicated; on the contrary, in some cases, they have been accentuated by the difficult access of women to education in various areas of the world (Barroso et al. 2017) among many other obstacles to be taken into account, such as sexist stereotypes, the psychological differences between women and men, or social roles atavistically associated with women like housework, childcare, etc. (Bertrand 2017). All of these impediments form an insurmountable and invisible wall that leads to significant gender differences, usually summarized by an iconic phrase coined by M. Loden during a panel discussion about women’s aspirations: “The Glass Ceiling” (BBC 2017). Of course, the differences between men and women are part of the United Nations Sustainable Development Goals 2030 Agenda (Bidegain Ponte and Rodríguez Enríquez 2016), so what is the point of betting on a fully sustainable world if women, one of its protagonists, continue to be discriminated in the twenty-first century?

Regardless of the fact that this discrimination is *per se* fallacious, illogical, and unfair, it is also seriously detrimental to the normal functioning of the companies where women carry out their work activities since, according to McNerney-Lacombe et al. (2008), the female collective, when compared to the male counterpart, provides greater efficiency in teamwork, resistance, resilience, and credibility (among many other aspects). Despite the fact that in existing literature there is an abundance of lines of investigation concerning the integration of women in the labor-business environments, very few have taken into account

two primordial elements: what do women think of themselves, in other words, how they conceive about themselves and, above all, if they feel “happy.” In this sense, at the end of the 1980s, two Canadian professors, D. C. Poff and A. C. Michalos (see 1998), designed a statistical methodology specifically aimed at measuring both considerations. Although this methodology was framed within *Feminism*, its applicability can be taken to any other sphere in order to determine the degree of satisfaction, i.e., happiness, of women within the human collective in which they are integrated, for example, in relation to the tasks that they commonly carry out in their employment. In this sense, this entry synthesizes the bases of the Poff-Michalos Feminism scale, reoriented toward the analysis of the level of happiness and satisfaction of women at work. The use of the Poff-Michalos procedure as a tool to evaluate the sustainability is based on a simple premise: the most adequate interlocutor to define the woman is herself and, obviously, an optimal development at work must always be linked to the fact of “feeling happy.”

The Parameterization of Women Versus Quality of Life

The conceptualization of the Poff-Michalos Procedure has its origins in a great number of works that focused on Women’s liberation movements around the world during the 1960s and 1970s. In the case of Europe, the French movement “May 68” had a special repercussion, contributing to the fact that women in this continent began to break the ties that, atavistically, discriminated against men. For its part, Canada was one of the countries in which the Women’s liberation movements made their presence felt most strongly, to such an extent that Poff (1985) set out how to carry out an epistemologization of this social positioning. Inevitably, as it became more prominent, Women’s liberation began to be measured in quantitative terms. For example, Alspach (1982) used an *ad hoc* three-item index of “non-traditional sex-role attitudes” while Beere et al.

(1984) elaborated an explicit measure to evaluate the attitude toward the perception of the degree of equality between sexes. On this theoretical-conceptual framework, the Poff-Michalos Procedure presents a series of evident improvements: it expressly introduces the component “quality of life,” relates it to “happiness” and, the one that prevails above all is the consideration that women have of themselves.

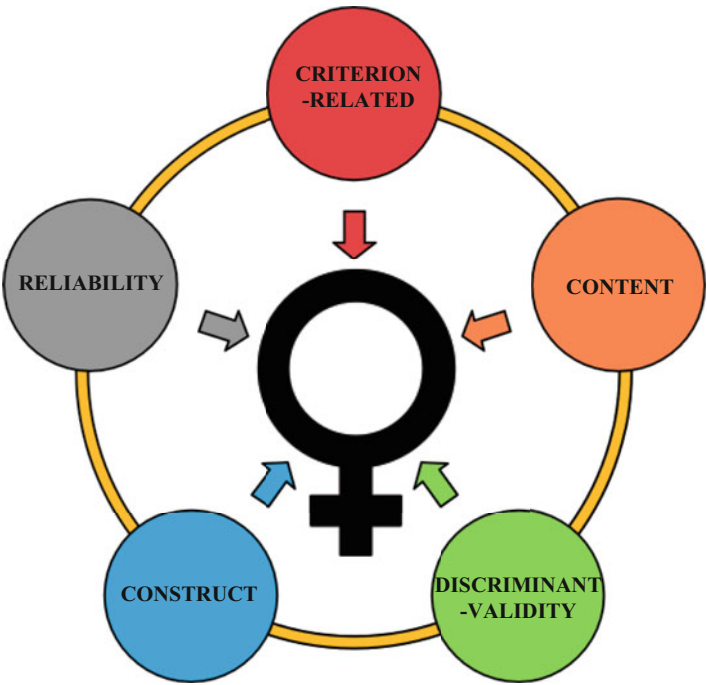
Descriptive Synthesis of the Bases and Applicability of the Poff-Michalos Procedure

The Poff-Michalos Procedure, as outlined in Fig. 1, is based on five levels of acceptability. Since it is a statistical procedure, it must be considered as an objective measure, free of interpretative bias as long as the population sample analyzed had been conveniently designed. The original implementation of this procedure used a sample of 413 undergraduate women at the University of Guelph, Canada, linking the *Feminism* phenomenon with several features of the quality of life as “happiness” and with the fact of “being a good person.”

Specifically, the application of the Poff-Michalos Procedure to measure the happiness/satisfaction of the female component in the work, as well as in the original formulation (Poff and Michalos 1998), starts from a series of basic hypotheses, outlined in Table 1, in addition to the structuring of the target sample to be analyzed according to three key parameters as indicated in Table 2: personal status (marital, employment, and country), age, level of education, and nearest family income. Note that, in any case, the segmentation of the target population has to be readjusted to the particular conditions of each company or country; hence the Poff-Michalos Procedure is not closed, but open to the evolution of the most important social variables, more particularly those that may be closer to the concepts “quality of life” or “happiness.”

Since the constructed scale is built on the basis of obtaining diverse subsets of representative

Poff-Michalos Procedure, The,
Fig. 1 Defining elements of the Poff-Michalos Procedure. (Source: Own elaboration from Poff and Michalos 1998)



Poff-Michalos Procedure, The, Table 1 Baseline hypothesis of the Poff-Michalos Procedure. (Source: Own elaboration from Poff and Michalos 1998)

<i>H1.</i> Being a female worker as measured on the PMF scale is (statistically significantly) positively correlated with:	I. Considering oneself to be a feminist
	II. Describing oneself as happy
	III. Describing oneself as independent
	IV. Describing oneself as truthful
	V. Describing oneself as compassionate
	VI. Describing oneself as friendly
	VII. Considering one’s family and career as equally important
	VIII. Having high self-esteem
<i>H2.</i> Being a female worker is negatively correlated with describing oneself as competitive	
<i>H3.</i> Being a female worker is not correlated with describing oneself as being yielding, gullible, childlike, conventional, aggressive, conscientious, assertive, loyal, understanding, warm, willing to take a stand, individualistic, having leadership abilities, or loving children.	

items that are conceptually interrelated, those higher values of the Cronbach’s α (see Cronbach 1951) are employed in order to definitively configure the measure of happiness-quality of life for the female personnel of each company, which allows to know at first hand which are the feelings and motivations of the feminine collective in a given company, as well as whether the policies of feminine integration are being carried out

adequately, in order to fulfill the established sustainability objectives.

Conclusions

Much has been said about the existence of a “glass ceiling” among working women, that is, a metaphor usually adopted to identify how the

Poff-Michalos Procedure, The, Table 2 Sample composition of the Poff-Michalos Procedure. (Source: Own elaboration from Poff and Michalos 1998)

<i>Age</i>	<i>N</i>	<i>%</i>	<i>Nearest family income</i>	<i>N</i>	<i>%</i>
21–30	<i>n</i> ₁	<i>%</i> ₁	Up to \$9999	<i>n</i> ₁	<i>%</i> ₁
31–40	<i>n</i> ₂	<i>%</i> ₂	\$10,000–\$14,999	<i>n</i> ₂	<i>%</i> ₂
41–50	<i>n</i> ₃	<i>%</i> ₃	\$15,000–\$19,999	<i>n</i> ₃	<i>%</i> ₃
51–60	<i>n</i> ₄	<i>%</i> ₄	\$20,000–\$24,999	<i>n</i> ₄	<i>%</i> ₄
61–70	<i>n</i> ₅	<i>%</i> ₅	\$25,000–\$29,999	<i>n</i> ₅	<i>%</i> ₅
70–77	<i>n</i> ₆	<i>%</i> ₆	\$30,000–\$34,999	<i>n</i> ₆	<i>%</i> ₆
Total	<i>N</i>	100%	\$35,000–\$39,999	<i>n</i> ₇	<i>%</i> ₇
<i>Marital status</i>	<i>N</i>	<i>%</i>	\$40,000–\$49,999	<i>n</i> ₇	<i>%</i> ₈
Single	<i>n</i> ₁	<i>%</i> ₁	\$50,000 or above	<i>n</i> ₈	<i>%</i> ₉
Married/partner	<i>n</i> ₂	<i>%</i> ₂	Total	<i>N</i>	100%
Widowed	<i>n</i> ₃	<i>%</i> ₃	<i>Country status</i>	<i>N</i>	<i>%</i>
Separated	<i>n</i> ₄	<i>%</i> ₄	Country (i) citizen	<i>n</i> ₁	<i>%</i> ₁
Divorced	<i>n</i> ₅	<i>%</i> ₅	Landed immigrant	<i>n</i> ₂	<i>%</i> ₂
Total	<i>N</i>	1	Visa	<i>n</i> ₃	<i>%</i> ₃
<i>Employment status</i>	<i>N</i>	<i>%</i>	Total	<i>N</i>	100%
Unemployed*	<i>n</i> ₁	<i>%</i> ₁	<i>Highest level of education</i>	<i>N</i>	<i>%</i>
Employed full-time	<i>n</i> ₂	<i>%</i> ₂	Grade 12 or 13	<i>n</i> ₁	<i>%</i> ₁
Employed part-time	<i>n</i> ₃	<i>%</i> ₃	2 year college degree	<i>n</i> ₂	<i>%</i> ₂
Retired*	<i>n</i> ₄	<i>%</i> ₄	3 year college degree	<i>n</i> ₃	<i>%</i> ₃
Student	<i>n</i> ₅	<i>%</i> ₅	4 year college degree	<i>n</i> ₄	<i>%</i> ₄
Other	<i>n</i> ₆	<i>%</i> ₆	Master's degree	<i>n</i> ₅	<i>%</i> ₅
Total	<i>N</i>	100%	Professional degree	<i>n</i> ₆	<i>%</i> ₆
			Doctorate	<i>n</i> ₇	<i>%</i> ₇
			Other	<i>n</i> ₈	<i>%</i> ₈
			Total	<i>N</i>	100%

difficulties that the female collective encounters at the highest business levels are much greater than at the lower echelons (Cotter et al. 2001), which may also be related to a certain invisible barrier that represents the fear of failure or, simply, that women may feel self-conscious representing a clear minority compared to men. This gap, which is not completely overcome at present (Valls Martínez et al. 2021a), continues to be not only a sustainable objective but also one of the great challenges of contemporary Corporate Social Responsibility (Valls Martínez et al. 2021b).

However, despite the predominance of quantitative investigations focused on justifying the gender difference based on socioeconomic variables, it is rarely justified in the light of whether women, within a context of supposed equality with men, are fully happy and enjoy a relative quality of life. The

analysis of this reflection is even more important if it is conducted by the women themselves, which is why this entry has promoted the use of the Poff-Michalos Procedure (Poff and Michalos 1998), not only from an exclusively *Feminist* perspective but because it represents an objective measure of the performance of women in their workplaces when it comes to considering themselves happy.

Cross-References

- ▶ [Agenda21 \(UN\)](#)
- ▶ [Codes of Good Governance](#)
- ▶ [Corporate Sustainability Performance](#)
- ▶ [Cross-Cultural Attitudes to CSR](#)
- ▶ [Directors and CSR](#)
- ▶ [Diversity of Boards](#)
- ▶ [Employment Engagement](#)

- Human Capital Management
- Sustainability of Boards

References

- Alspach, S. (1982). Women's sex role attitudes and life satisfaction. *Sociological Focus*, 15, 279–287.
- Barroso, C., Gautam, K. C., Pkhakadze, G., Killen, B., Lehohla, P., Lichuma, W. O., Mason, E., Paul, V. K., Wickremarathne, D., & Yamin, A. E. (2017). *Transformative accountability for adolescents: Accountability for the health and human rights of women, children and adolescents in the 2030 agenda*. Geneva: World Health Organization.
- BBC. (2017). 100 Women: "Why I invented the glass ceiling phrase". <https://www.bbc.com/news/world-42026266>. Accessed 17 Sept 2020.
- Beere, C. A., King, D. W., Beere, D. B., & King, L. A. (1984). The sex-role equalitarianism scale: A measure of attitudes toward equality between the sexes. *Sex Roles*, 10, 563–575.
- Bertrand, M. (2017). *The glass ceiling: Three reasons why it still exists and is hurting the economy*. Becker Friedman Institute for Research in Economics Working Paper (2018–38).
- Bidegain Ponte, N., & Rodríguez Enríquez, C. (2016). Agenda 2030: A bold enough framework towards sustainable, gender-just development? *Gender and Development*, 24(1), 83–98.
- Cotter, D. A., Hermesen, J. M., Ovadia, S., & Vanneman, R. (2001). The glass ceiling effect. *Social Forces*, 80(2), 655–681.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Sociological Focus*, 16, 297–334.
- McInerney-Lacombe, N., Bilimoria, D., & Salipante, P. F. (2008). Championing the discussion of tough issues: How women corporate directors contribute to board deliberations. In S. Vinnicombe, V. Singh, R. J. Burke, D. Bilimoria, & M. Huse (Eds.), *Women on corporate boards of directors: International research and practice* (New Horizons in Management series) (pp. 123–139). Cheltenham, chapter 11: Edward Elgar.
- Poff, D. C. (1985). Feminism flies too. *Resources for Feminist Research*.
- Poff, D. C., & Michalos, A. C. (1998). Feminism and the quality of life. *Social Indicators Research*, 20(5), 445–472.
- Valls Martínez, M. d. C., Martín Cervantes, P. A., & Ramírez Orellana, A. (2021a). Gender policies on the board of directors and firms financial performance. In D. Poff & A. Michalos (Eds.), *Encyclopedia of business and professional ethics*. Cham: Springer.
- Valls Martínez, M. d. C., Martín Cervantes, P. A., & Ramírez Orellana, A. (2021b). Women on corporate boards and sustainable development. In D. Poff & A. Michalos (Eds.), *Encyclopedia of business and professional ethics*. Cham: Springer.

Policy and Military Force Sustainability

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Synonyms

Cooperation; Defense; Security; Social responsibility

Definition/Description

Policy and Military Force Sustainability is committed on a model that develop financial, social, and economic perspectives which undertake actions on the society to answer to crisis, to prevent conflicts, and to build each day peace to the citizen.

Introduction

All over the world, security is recognized as fundamental to live in a society (EU 2014b). Inevitable threats, such as international terrorism, proliferation of weapons of mass destruction, resource and energy shortage and blackmail, regional and local conflicts, national domestic destabilizations and collapse of states, growth of organized crime, and rise in xenophobia and social unrest over national, religious, and cultural differences (Everts 2004) demand cause analysis that bring to the public knowledge the most effective responses (WWF 2017). Indeed, ignoring political, ethnic, religious, social, and economic sources of conflicts, that some Governments already do, it is not dedicated to a world in which humanity and nature are promoted in total harmony (WWF 2017).

This tendency has been strengthened by the European Union publication about the Global Strategy for the European Union's Foreign and Security Policy (EU 2016). This strategy aims to

promote peace and guarantee the security of the citizen and their territory as shared interest and principles. More than a vision, it proposes prosperity of the citizen, resilience of democracy, rules-based global order that bring the positive change and answer to the society through actions of the policy and military force sustainability (Juncos 2017).

According to European Parliament (EP 2019), each Member State of the European Union agrees on the need to promote, to develop, and to maintain a competent and competitive European defense based on their capabilities. In order to achieve this objective, each Member State use several instruments, as far as, the Community Law is concerned, aiming to achieve a truly European defense and equal competition on European global markets. Also, the Member States contribute to the in-depth development of the diversity of the European base of defense-related suppliers, in particular, by supporting the participation of small- and medium-sized enterprises and nontraditional suppliers in the European defense industrial and technological base, as well as fostering industrial cooperation and promoting efficient and apt lower level suppliers.

The emphasis on the rapid and extensive transformations due to the Government Policies (i.e., International Monetary Fund with Debt crises in Greece) and Other Institutions' decisions (i.e., International Labour Organization indicates that 168 million children aged 5–17 are engaged in child labor (UNICEF 2014)) has greatest impact on the world due to the application of different types of policies (Kassow 2018).

Other example is the environmental policy with waste management (i.e., nuclear waste with Spain and Portugal Border (Agência Reuters 2017)), as well as the social security policy with social benefits (i.e., types of pensions and retirement income in France with Yellow vest movement (Viscusi 2019)). Certainly, Han and Demircioglu (2018) states that the sustainability policies associated with the Government of a Member State of European Union or other country all over the world are specially inserted on the debate of the conflict between individuals and groups of the society that achieve or wish to achieve the power and control of the same of these new tendencies.

Truly, as Bailes (2009) argues, the EU's deepest interest lies in making others – and eventually the world – more like itself. Hence, the accountability is important for the democratic control imposed on public administration systems. For example, in Portugal and according to AR (2013a), the restoration of the financial stability and the economic growth are sustainable with respect to the employment generation system and it is indispensable for strengthening national security. Consequently, the support for this sustainable development demands new challenges of the policy and military forces which has been assigned to missions of public interest and constitutionally mandatory in order to increase of the quality of life of the citizen.

Undeniably, the crisis of politics' impacts on the sustainability of the policy and military force led to social protests not only against social and economic policies but also against the integrity and the responsibility of the political elite. This integrity is a serious problem in many countries (Benito 2018), due to corruption that diminish truth, honest dealing, and skepticism (Moses 2011). Alongside, the responsibility encompasses protection depending on their scale against hazards in all economic activity through four principles: social contract, transparency, accountability, and sustainability (Crowther and Rayman-Bacchus 2004).

Sustainability is much more than a model of development created for the future generations and addresses decisively the citizenship throughout their country. So, this model cannot be realized without peace and security and self-determination of Policies and Military forces removing obstacles which adversely affect the expenditure ratios based on the best international practices. So, sustainable impacts on violence, insecurity, and injustice within the framework of social, environmental, and economic perspectives are aimed to improve the effectiveness and the efficiency in vulnerable situations.

The need of financial sustainability of the national defense strategy is viewed with continuous improvement bringing together governments, the private sector, civil society, and the European Union. Thus, the Article 2 of the Regulation (EU) n° 233/2014 of the European Parliament and of the Council establishes the financing instrument

for development cooperation for the period 2014–2020 (EU 2014a) defining objectives of the Union’s external action and of the European Consensus and agreed modifications therefore with the primary objective of cooperation under this Regulation shall be the reduction and, in the long term, the eradication of poverty and consistently with the primary objective referred to cooperation under this Regulation shall contribute to fostering sustainable economic, social, environmental development and consolidating and supporting democracy, the rule of law, good governance, human rights, and the relevant principles of international law.

In this context, the concept of Policy and Military Force Sustainability is based on the model which provides their stakeholders to prevent and to manage crisis and ensures the reduction of threats that affect the active promotion of peace, stability, human rights, democracy, in general, and the security of the citizen of one country or State, in particular (EP 2019).

In the security and military policy and strategy acts with blindness will cause more threats to their sustainability. In recent decades, Policy and Military Force Sustainability must fight, for example, uncertainty and unpredictability of the European Union’s borders, and this may cause immediate neighborhood problems (i.e., North Africa, Middle East, Caucasus, Balkans, Eastern Mediterranean, Russian, Ukraine, and Georgia) as well as the extended neighborhood problems to other parts of the world (i.e., Sahel and Horn of Africa). Controversy at internal- and external-level security of each Member State of the European Union is known for Policy and Military Forces (EP 2019), but these require fighting abuses of power in all institutions and by each citizen.

The public policy analysis has undergoing major changes and theory developments that affect practitioners (Sabatier 2006). According to Baldwin (1997), several policies made by Governments take proposals to prioritize threats, such as human rights, economic crises, environment damage, drug trafficking, epidemics, crime or social injustice, as well as the traditional concern for the security of external military fights.

On the one hand, the strategic policies of the policy and military forces must be made on the

sustainable model in which they are applied in existing areas of conflict. According to AR (2013a, b), it is important to identify the lines of action to ensure the macroeconomic stability and the financial balances of the economy, guaranteeing the sustainability of the public accounts and the implementation of measures that reflect the indispensable connection between environment, food, public health, and land use, in order to increase the security of the territory, communities, and citizen, both from a perspective of prevention and adaptive risk management and from a proactive perspective with prospect of strengthening resilience.

On the other hand, it is important to define the effort for the acquisition and for maintenance of strategic reserves of medicines that can be used in case of emergency or in public health disaster, as well as to ensure, in a sustainable manner, the preservation of essential infrastructures, integrating the care system and both in the field of supply of essential goods such as water, food, and energy (WWF 2017).

These environmental issues have become unavoidable, taking prominent positions on all political agendas of States and Other Organizations (Kettunen et al. 2018). The principles of sustainability in the policy and military forces are the current awareness that survival depends on the conservation and rational use of resources. Thus, the Ministry of Defence will solve conflicts in the society through the expansion of the preservation of biodiversity and natural ecosystems, and it will encourage to reduce harmful conflict of interest and misconduct activities (MND 2011), as well as it will ensure safe and security education to promote the strengthening of the quality of Human Life, and it will focus on sustainability, through appropriate awareness programs.

Agreeing with WWF (2017), the promotion of the “sustainability-stability-security” doctrine aims to “transform analyses and initiatives” of Policy and Military Forces “into concrete action for local population” to mitigate several harm consequences or exogeneous problems out of any individual’s control, for example, to divert attention from education on climate change, to prevent harm effects of rising sea levels, to protect from extreme weather events and water stress, to

avoid land degradation and desertification, to decrease the competition for natural resources, to reduce health hazards, and to help migrations demands. The Policy and Military Forces may be able to act on the defence of law and effective enforcement on the regulation that fight opaque order of the society and increase their reputation. It is imperative to promote vocational training within Policy and Military Forces, constituting one of the main pillars of sustainability. Beyond inequalities and inadequacies, the Military Service professionalization model may guarantee the transferability from the labor market of qualifications and skills acquired to the public service (MND 2018) to apply the same rules for all.

Following EU (2014a), the effective modalities and instruments of cooperation, in line with OECD best practice, include the use of innovative instruments, such as mechanisms for combining grants and loans. Participation of the private sector takes consideration of the debt sustainability, as the number of mechanisms and requirements for systematic impact assessment is, especially, in line with the goal of reducing the poverty level.

In this sense, another relevant activity of the policy and military forces sustainability is peace-building process. This process is dependent over the issue of local ownership between problem-solvers who believe that local ownership can “save liberal peace-building” and critical voices claiming that local ownership is purely a rhetorical device to hide the same dynamics of intervention used in more “assertive” interventions (Lemay-Hébert and Kappler 2016). The awareness of these processes is essential to the policy and military forces sustainability in terms of the emergence of new ideas, best strategies to live in society, and to enforce that the law is compiled by the Government.

Summary

Policy and military forces sustainability play an important role to prevent and to combat all forms of crime, because policies and military forces, created and management by the State, act on the public interest to reinforce the security of the

citizen and its goods. Therefore, sustainability can be seen as the model that each country and the State will enforce the citizen and the society to collaborate closely with all the stakeholders of the policy and military forces to ensure the most efficient and effective use of its security and military resources, creating a link to focus on the social, environmental, and economic perspectives. As public entities, the aim of integrating activities developed according to the internal security national policy of each country, in all dimensions in the force’s military and, in exceptional situations, in the field of national defense, emergency state, and defense of democratic legality, will demand and guaranty the citizens’ well-being.

Sustainability is implied in the policy as well as in the military forces around the world in order to ensure their financial stability with new solutions to fight against serious and organized crimes, democratic control, increased data protection, fight terrorism, and “including training, mentoring and advice on, for example, human rights, governance and the rule of law, the protection of women and children, civilian crisis response, human resources management and technical cooperation” (EU 2017).

The importance of these cooperation is indorsed by the Sustainable Development Goal (SDG) 16 that details “strengthen relevant national institutions, including through international cooperation, for building capacities at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime” (EU 2017). Indeed, the promoting of peaceful strategies on the society through interact and reinforce SGD 16 as well as lead strong regulation and laws to achieve other development policy outcomes was underlined to fight economic, social, and financial crises, governance and policy failures, scandals, and excessively fragile environment sustainability, without undue delay, will provide guaranty to fulfil the European Agenda of the European Green Deal or in the 2030 Agenda for Sustainable Development, adopting the Resolution of the United Nations General Assembly (UN 2015).

Policy and military forces provide, also, the economic sustainability in terms of interoperability of activities, trust of the exchange information

from the digital information systems, and effectiveness and efficiency strategies which are essential to enhance the security and the development of the country. In this way, it is possible to conclude that Policy and Military Forces Sustainability is supported on the law enforcement of security and citizen well-being.

Cross-References

- [Accountability](#)
- [Management](#)
- [Responsibility](#)
- [Sustainable Development Planning](#)

References

- Agência Reuters. (2017). Portugal to complain to EU over Spain's planned nuclear dump site. Available at <https://www.reuters.com/article/portugal-nuclearpower-spain/portugal-to-complain-to-eu-over-spains-planned-nuclear-dump-site-idUSL5N1F24MN>
- Assembleia da República (AR). (2013a). Resolution of the Council of Ministers n° 19/2013 approves the strategic concept of national defense. *Diário da República*, 67, I Serie.
- Assembleia da República (AR). (2013b). Resolution of the Council of Ministers n° 26/2013 approves the guidelines for the execution of the structural reform of the national defense and of the Military Forces, denominated by Reformation Defense 2020. *Diário da República*, 77, I Serie.
- Bailes, A. (2009). External security policies and the European model. In L. Tsoukalis (Ed.), *The EU in a world in transition: Fit for what purpose?, policy network*. <https://www.europarl.europa.eu/100books/en/detail/95/the-eu-in-a-world-in-transition-fit-for-what-purpose>
- Baldwin, D. A. (1997). The concept of security. *British International Studies Association*, 23, 5–26.
- Benito, B. (2018). Accountability and corruption, Europe. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance*. Cham: Springer.
- Crowther, D., & Rayman-Bacchus, L. (2004). The future of corporate social responsibility. In D. Crowther & L. Rayman-Bacchus (Eds.), *Perspectives on corporate social responsibility* (pp. 229–249). Aldershot: Ashgate.
- European Parliament (EP). (2019). Report on the implementation of the common foreign and security policy – annual report (2019/20136 (INI)). Committee on Foreign Affairs.
- European Union (EU). (2014a). Regulation (EU) n° 233/2014 of the European Parliament and of the Council establishing a financing instrument for development cooperation for the period 2014–2020. *Official Journal of the European Union*, L 77/44.
- European Union (EU). (2014b). Regulation (EU) n° 230/2014 of the European Parliament and of the council establishing an instrument contributing to stability and peace. *Official Journal of the European Union*, L 77/1.
- European Union (EU). (2016). *Shared vision, common action: A stronger Europe. A global strategy for the European Union's foreign and security policy*. Brussels: European Union Global Strategy.
- European Union (EU). (2017). Regulation (EU) n° 2036/2017 of the European Parliament and of the council amending Regulation (EU) n° 230/2014, establishing an Instrument contributing to stability and peace. *Official Journal of the European Union*, L 335/6.
- Everts, S. 2004. The EU's new security strategy is an important step forward. *European Affairs*. Vol 5.
- Han, Y., & Demircioglu, M. A. (2018). Accountability, politics, and power. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance*. Cham: Springer.
- Juncos, A. (2017). Resilience as the new EU foreign policy paradigm: A pragmatist turn? *European Security*, 26 (1), 1–18.
- Kassow, B. (2018). Administrative law judges and politics. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance*. Cham: Springer.
- Kettunen, M., Noome, D. A., & Nyman, J. (2018). Reinforcing environmental dimensions of European foreign and security policy, Think2030 discussion paper www.think2030.eu. IEEP, Brussels.
- Lemay-Hébert, N., & Kappler, S. (2016). What attachment to peace? Exploring the normative and material dimensions of local ownership in peacebuilding. *Review of International Studies*, 42(5), 895–914.
- Ministry of National Defense (MND). (2011). Order of the Ministry of National Defense n° 6484/2011 environmental directive for national defense. *Diário da República*, 77, II Serie.
- Ministry of National Defense (MND). (2018). Decree-Law n° 75/2018. *Diário da República*, 196, I Serie.
- Moses, J. E. (2011). Approaches to European integration. In F. Bindi & K. Eliassen (Eds.), *Analysing European Union politics*. Bologna: Societa Editrice Il Mulino.
- Sabatier, P. A. (2006). Policy change and learning: An advocacy coalition approach (Theoretical lenses on public policy). Boulder, CO: Westview Press.
- UNICEF. (2014). *Child labour and UNICEF in action: Children at the Centre*. New York: UNICEF.
- United Nations (UN). (2015). Resolution adopted by the General Assembly on 25 September: Transforming our world: The 2030 agenda for sustainable development. A/RES/70/1.
- Viscusi, G. (2019). France to use military forces during next yellow vest episode. Available <https://www.>

[bloomberg.com/news/articles/2019-03-20/france-to-use-military-forces-during-next-yellow-vest-episode](https://www.bloomberg.com/news/articles/2019-03-20/france-to-use-military-forces-during-next-yellow-vest-episode)

WWF. (2017). *Sustainability-stability-security doctrine*. Le Pré Saint-Gervais: WWF.

Further Readings

Buzan, B. (1991). *People, states and fear. An agenda for international security studies in the post-cold war era*. London.

European Union (EU). (2004). Regulation (EC) n° 549/2004 of the European Parliament and of the council 4 laying down the framework for the creation of the single European sky (the framework regulation) (text with EEA relevance) – statement by the member states on military issues related to the single European sky. *Official Journal of the European Union*, L96.

Tocci, N. (2016). The making of the EU Global Strategy. *Contemporary Security Policy*, 37(3), 461–472.

Political Declaration of the WSSD

► [Johannesburg Declaration \(2002\)](#)

Politics (Role of Politics in Sustainable Development)

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Synonyms

[Sustainable development politics](#)

Definition/Description

Achieving sustainable development is a long-term goal, where different stakeholders are engaged with the practical application and commitment to achieving the global sustainable development goals (SDGs), which were adopted by the United Nations (UN) in 2015 (Sachs et al. 2019).

Formally introduced on the 1992 Rio Earth Summit, the concept of sustainable development

has become a corner stone for political decision-making on both the global and local scale. However, despite having achieved advances from theory to practice, public sectors in countries around the world still struggle to find the optimal political solutions for adopting efficient sustainable development policies.

In taking the decision on adopting one or another policy, the decision maker often becomes entangled in the classic trade-off between adopting an immediate-return short-term solution and adopting a higher-return long-term solution. By applying tools tailored for serving the sustainable development transition, the political decision makers address the four components of sustainable development, namely, securing wealth creation, ensuring stewardship, empowerment, and realization of stakeholders on the sharing of a common future (O’Riordan and Voisey 1997).

Political decision makers have to figure out the optimal solutions for policies – how to balance the interests of different stakeholders, how to develop well-tailored regulations for specific markets, and whether to rely on society or impose rules in terms of adoption of sustainable practices (Hörisch et al. 2014).

The Sustainable Economy, the Social Development, and the Stakeholders

The politics of sustainable development requires balancing of the needs and preferences of a wide spectrum of stakeholders. Decision-making processes that require more intensive cooperation between stakeholders are more likely to result in higher-quality decisions (Beierle 2002).

Despite being a more intensive approach to making decisions about sustainable development policies, the stakeholder approach has been considered pivotal to political decisions in the sphere. The preference of this approach derives from the general tendency to involve a wider set of stakeholders in recent decades, as well as from the nature of sustainable development, which seeks the optimal solutions for achieving both the interests of business and that of society.

Hörisch et al. (2014) identify three main challenges of managing stakeholder relationships for sustainability, namely:

- Strengthening the particular sustainability interests of stakeholders
- Creating mutual sustainability interests based on these particular interests
- Empowering stakeholders to act as intermediaries for nature and sustainable development

To address these challenges, they suggest the application of a mechanism that features education, regulation, and sustainability-based value creation (Hörisch et al. 2014).

The stakeholder engagement approach to adopting policies for sustainable development led to the emergence of the so-called collaborative environmental governance (CEG) practices, where different stakeholders such as producers from various points of the supply chain, public authorities, researchers, and in some aspects consumers are engaged in a process of shared governance of ecological and social conditions. Recent research suggests that the stakeholders perceive a strong relationship between the established governance process and the effectiveness of governance in terms of outcomes (Lindgren et al. 2021).

A considerable amount of political discussion has been raised in terms of the relation of business with sustainability. Recent years have witnessed a rise in political incentives for the adoption of mechanisms that enhance the accountability and transparency of companies in the context of sustainable development. One such way has been perceived to be business reporting. In the EU, the political debate about the ability of non-financial reporting and providing stakeholders with useful and value relevant information about company behaviors resulted in the EU Directive 95/2014/EU (Phan et al. 2020). Recent research by Phan et al. (2020) shows that disclosing non-financial information by companies is still developing as a process and that it would take some more time before its advantages are fully appreciated. Research shows that this process is so far

best adopted by larger companies and/or companies with higher-risk profiles (Phan et al. 2020).

Political divestiture of sustainable development funding has been considered as an alternative means aiming at an innovative investment allocation to maximize positive development impacts of investment while achieving minimization of associated risks from politically insecure markets. Removing funds from politically incorrect regimes and channeling them toward socially responsible finance solutions need further analysis and development of the respective domestic and local institutional frameworks (Puaschunder 2016).

The politics of sustainable development have become an arena where emerging political actors have gained more political power in decision-making. The traditional political interactions between national interest groups have been contested by such emerging actors like global civil society and environmental nongovernmental organizations (NGOs) (Lafferty 2007).

Another tendency that has been recognized in the political process of sustainable development is the extinction of the firm boundaries between strictly national politics and international relations. More particularly, domestic issues concerning sustainable development and environmental protection have been internationalized through multinational nongovernmental organizations, international organizations (such as the agencies from the United Nations system), and various international cooperation forums such as the G8 and G20.

Despite political pressure to adopt sustainable development policies witnessing a significant rise, the adoption of such policies and practices on the national level has not been an easy task for policy makers. According to authors Tim O’Riordan and Heather Voisey (1997), the transition toward sustainable economies has to be assisted by a series of institutional changes which are not part of the UN sustainable development agenda. However, they confirm that there are distinctive features of sustainable development that clearly create important and continuing institutional change (O’Riordan and Voisey 1997).

Toward a Knowledge-Driven Policy-Making Process

Another trend in political interaction on the topic of sustainability has been the significant rise of the science-based decision-making approach. Environmental degradation due to human activity and climate change have both been topics of wide discussion among scientists in the last decades.

As it concerns topics where environmental impact is calculated based on scientific research, communicating scientific results to policy makers has become an important part of science in the context of sustainable development stewardship (O’Riordan and Voisey 1997). In this way, both scientists and politicians benefit, as the first get to promote their research in an efficient way and the second get to be provide with valuable information for knowledge-based decision-making (Safford and Brown 2019).

In the EU, closing the gap between science and other stakeholders such as citizens and civil society has been another important process that aims to drive European society to a knowledge-based social order and decision-making (EC 2020).

SDG Policies in Different Countries

The SDGs are 17 goals that have a total of 169 underlying targets that each country has to achieve by 2030 (OECD 2016). It is the precise targeting of different actions that makes it possible for organizations of both the public and private sectors to follow and implement certain actions and policies. With the development of the targets, measuring country advances toward achieving the SDGs was made possible. The SDG Index became a powerful instrument to observe policies and actions taken upon in each country (Sachs et al. 2019).

Developed countries that are members of the OECD and some Central and Eastern European countries lead the way into implementing sustainable development policies. According to the SDG Index Country Ranking, the country that

is performing best in achieving sustainable development and implementing SDG policies is Denmark (Sachs et al. 2019).

The commitment of countries to achieving the SDGs is split by the SDG Index analysts in three layers: high-level public statements by governments in support of sustainable development; strategic use of public practices and procedures for the goals (coordination mechanisms, budget, procurement, human resource management, data, and audits); and content of government strategies and policy actions (Sachs et al. 2019).

Looking upon sustainable development policies, it becomes clear that two trends in policy-making are established. The first trend is the focusing on the developmental goals (such as eradicating poverty and providing education) which is characteristic for developing countries and is associated with welfare economic policies. The second trend of policy-making is the sustainability focus, which is now more than ever associated with the concepts of green economy and green economic growth. This trend is followed mostly by more developed countries, and it has now become a part of the race for creating cutting-edge innovations and endogenous economic growth.

It is still very challenging for governments to implement policies that are more far-reaching and long run. Therefore, it is only logical that the SDG Index has that ranking, as there is definitely a path dependence in sustainable development policies, and countries that have a longer history of policy-making in this direction are certain to be natural leaders in the field.

However, as a recent report on sustainable development notices, even the most developed nations still have to pursuit the achievement of the SDGs, emphasizing on the importance of action and commitment from G20 countries, the lack of which would deprive large shares of the world population from sustainable development (Bertelsmann Stiftung and Sustainable Development Solutions Network 2019). Political decisions that are far-sighted and oriented toward the long-run are therefore proclaimed as more than necessary.

Summary

Implementation of sustainable development practices in both the public and private sectors requires a long-run strategic behavior by decision makers. More and more emerging stakeholders gain political power to ensure better decision-making in terms of adopting sustainable development policies. Key factor in the politics of sustainable development has become the scientific expertise provided by various disciplines as a foundation for a science-based policy approach.

With the SDGs as powerful tools for policy prescription, governments have now started to adhere to the needs of implementing policies that would ensure the reaching of the goals by 2030. The role of politics in achieving the SDGs is of highest importance, and it is considered that the SDGs cannot be achieved unless political will is present and expressed in relevant policies.

Cross-References

- [Rio Declaration on Environment and Development](#)
- [Sustainable Development Goals](#)

References

- Beierle, T. C. (2002). The quality of stakeholder-based decisions. *Risk Analysis*, 22, 739–749. <https://doi.org/10.1111/0272-4332.00065>.
- Bertelsmann Stiftung and Sustainable Development Solutions Network. (2019). *Sustainable development report 2019*. Transformations to achieve the sustainable development goals. <https://www.sdgindex.org/reports/sustainable-development-report-2019/>. Accessed 12 Aug 2021.
- EC (European Commission). (2020). Science Communication – Achievements in Horizon 2020 and recommendations on the way forward. <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/4b1386ba-cbc8-11ea-adf7-01aa75ed71a1>. Accessed 11 Aug 2021.
- Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework. *Organization & Environment*, 27(4), 328–346. <https://doi.org/10.1177/1086026614535786>.
- Lafferty, W. M. (2007). The politics of sustainable development: Global norms for national implementation. *Environmental Politics*, 5(2), 185–208. <https://doi.org/10.1080/09644019608414261>.
- Lindgren, A. Y., Reed, M. G., & Robson, J. P. (2021). Process makes perfect: Perceptions of effectiveness in collaborative environmental governance. *Environmental Management*, 67, 228–241. <https://doi.org/10.1007/s00267-020-01402-5>.
- O’Riordan, T., & Voisey, H. (1997). The political economy of sustainable development. *Environmental Politics*, 6(1), 1–23. <https://doi.org/10.1080/09644019708414309>. Accessed 7 Aug 2021.
- OECD (The Organisation for Economic Co-operation and Development). (2016). Better policies for 2030. An OECD action plan on the sustainable development goals. <https://www.oecd.org/dac/Better%20Policies%20for%202030.pdf>. Accessed 9 Sept 2019.
- Phan, H.-T.-P., De Luca, F., & Iaia, L. (2020). The “walk” towards the UN sustainable development goals: Does mandated “talk” through nonfinancial disclosure affect companies’ financial performance? *Sustainability*, 12(6), 2324. <https://doi.org/10.3390/su12062324>.
- Puaschunder, J. M. (2016). The role of political divestiture for sustainable development. *Journal of Management and Sustainability*, 6(1), 76–91. <https://doi.org/10.2139/ssrn.2691786>.
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G. (2019). *Sustainable development report 2019*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN). https://s3.amazonaws.com/sustainabledevelopment.report/2019/2019_sustainable_development_report.pdf. Accessed 9 Sept 2019.
- Safford, H., & Brown, A. (2019). Communicating science to policymakers: Six strategies for success. *Nature*, 572, 681–682. <https://doi.org/10.1038/d41586-019-02372-3>.

Further Reference

- Schelly, C., & Banerjee, A. (Eds.). (2018). *Environmental policy and pursuit of sustainability*. Routledge studies in environmental policy. Routledge: Taylor & Francis Group.

Pollution

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Synonyms

[Contamination](#); [Degradation](#); [Deterioration](#)

Definition

Pollution is an alteration of the environment by polluting elements, due to nature and anthropic activities. It produces temporary discomforts, pathologies, or permanent damage to living organism in a given area and can generate imbalance in the existing natural cycles. The alteration can be of various origins, chemical or physical.

Although some factors can be unequivocally considered pollutants, and their infinitesimal presence can be considered pollution, there is no substance or factor due to physical, chemical, and biological agents that is *a priori* polluting or non-polluting. It is the specificity and size of a circumstance that can be polluting.

Therefore, pollution includes everything that is harmful for life or significantly alters the physical–chemical characteristics of water, soil, and/or air, such as to change the health, the structure, and the abundance of living beings and/or energy flows, especially when it is not compensated by an adequate natural or anthropogenic reaction that delete the total negative effects.

Although there may be natural causes that cause unfavorable environmental alterations to life, e.g., fumes of a natural fire, or sulfurous exhalations of geological origin, the “pollution” concept generally refers to human activities.

Introduction

In theory all the anthropic activities and the built environment constitute pollution, as they interact with the natural environment, changing its original conformation. However, in some cases, the built structures can coexist harmoniously with the ecosystem, not altering the preexisting equilibriums in the natural environment or even contributing to preserve them.

In conclusion, the definition of pollution depends on the context, i.e., on the natural system taken into consideration and on the type of alterations introduced.

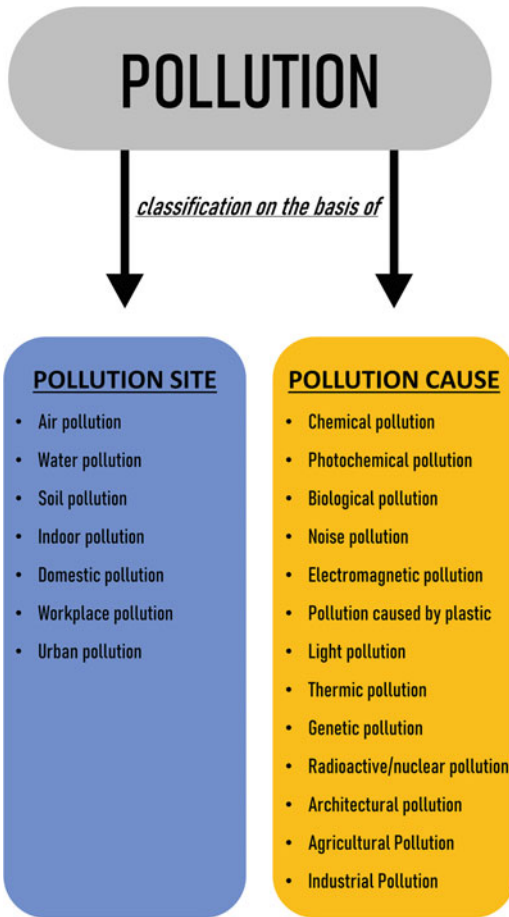
The increase in the anthropic activities has implied numerous transformations of the earth system. For example, the increase in the carbon

dioxide (CO₂) emissions has altered the natural carbon reserve cycle, which operates as an interchange between the various earth layers and the atmosphere. The exchange of carbon between the oceans and the atmosphere is already compromised, so that the increase in CO₂ that dissolves in the oceans makes the waters more acidic with negative implications for marine life. The balance of carbon exchanges between the atmosphere and terrestrial vegetation is still in equilibrium, but the indiscriminate deforestation also threatens this interchange. Meanwhile, the greenhouse gases (GHG) emission(see) into the atmosphere increases the natural greenhouse effect by increasing the global average temperatures causing the glacier melting, the thermal expansion of the oceans, the climatic alteration, and the increase of extreme climatological and meteorological phenomena with consequent hydrogeological instability (Vitousek 1994). The global effects of pollution require urgent ex-post interventions, but policy-makers are also addressing their efforts towards the pollution prevention (see).

Classifications

There are many types of pollution, divided according to the pollutant or the polluted element, with frequent mingling due to their contiguity or close correlation. Pollution classifications are therefore varied, but the two traditional categories include different types of pollution based on the polluted site and on the pollutant cause (Fig. 1).

Air pollution (see) refers to the presence of all the physical, chemical, and biological agents that modify the atmospheric natural characteristics and can cause a damaging effect on living beings and the environment. These agents are usually not present in the normal composition of the air or are present at a lower concentration level. They can refer to: nitrogen (NO_x), sulfur (SO_x), and carbon (CO_x) oxides; volatile organic compounds, in particular, mono- and polycyclic aromatic hydrocarbons, organic halides such as freons, ozone, free radicals, lead, and other so-called heavy metals, and particulates. The main sources of the release



Pollution, Fig. 1 Pollution classifications based on the polluted site and the pollutant cause. (Source: Personal Elaboration)

of pollutants into the atmosphere include industrial chemical plants, incinerators, motor vehicle combustion engines, and combustion in general (Daly and Zannetti 2007).

Water pollution consists of the contamination of water, rivers, lakes, and seas resulting from sewage or domestic, urban, chemical industrial, or nuclear waste spilled into the environment (Goel 2006).

Soil pollution consists, as for water pollution, of the contamination of soils deriving from sewage or domestic, urban, chemical industrial, or nuclear waste spilled into the environment (Mirsal 2008).

Indoor pollution is a type of pollution which develops in confined environments in the

presence of all the physical, chemical, and biological agents modifying the basic characteristics of the confined environment itself (Hänninen and Goodman 2019).

Domestic pollution refers to stale air, vapors, cigarette smoke, and chemical fumes inside homes. Even building and cleaning materials can be pollutant, causing harmful effects on the inhabitants, as well as poorly functioning air conditioning systems, electromagnetic fields, and radon infiltration (Hänninen and Goodman 2019).

Workplace pollution concerns occupational exposure to agents treated during work and represents the cause of occupational diseases.

Urban pollution is due to the concentration of pollutants in the air and to the urban characteristics, generally counteracted by the planting of tree species, which through photosynthesis can fix the CO₂ and store the excess as biomass (carbon sequestration), also helping to mitigate the air temperature (Tarr 1996).

Chemical pollution derives from chemical substances and/or mixtures spilled into the environment, often due to human, industrial, and agricultural activities, a potential danger to human health and the environment. Traces of heavy metals, for example, are normally present in the environment, but mercury, cadmium, and lead become potentially dangerous if they reach higher concentrations. Among the polluting chemicals, dioxins, used for the herbicide production, are the most toxic (Travis and Hester 1991).

Photochemical pollution is a form of pollution from chemical compounds whose formation is catalyzed by light (Altshuller and Bufalini 1971).

Noise pollution represents the set of negative effects produced by the noise present in the environments. Noise causes disturbing effects on man not only for the physical but also for the psyche, conditioning study, work, leisure, and sleep, and can cause ear injuries and partial or total hearing loss. Usually it creates a sense of tiredness, nausea, hypertension, nervousness, gastric disorders, headaches, difficulty concentrating and sleeping, and vertigo (Goines and Hagler 2007).

Electromagnetic pollution includes a multitude of polluting physical agents. It is linked to the presence of artificial electromagnetic fields that

is not attributable to natural events but to electric fields produced to transmit information through the propagation of electromagnetic waves from power lines, and from all devices operating through the electrical network (Rosen and Rinaldi 2000).

The pollution caused by plastic includes instead the dispersion and accumulation of plastic products in the environment. This type of pollution affects the air, the soil, the rivers, the lakes, and the oceans. The importance and relevance of this type of pollution derive from the cheapness of the plastic and its high durability over time and the enormous quantities used for the most varied uses.

Light pollution derives from light waves which disturb the perception of the environment or the natural physiological processes correlated with light (Hölker et al. 2010).

Thermal pollution refers to the increase of temperature in the environment; it can be caused either directly by anthropic activities which imply the release of heat into the environment or indirectly by the natural release of climate-altering gases.

Genetic pollution is attributable to the introduction of foreign living species, natural or not, including those created through genetic engineering processes, which often compete with natural ones and change the delicate interactions of the biodiversity (see ecosystems) (Hoyle 1999).

Radioactive/nuclear pollution derives from radioactive substances, radionuclides, or directly ionizing radiation (Busby 1995).

Architectural pollution refers to the alteration of the aesthetics and functionality of ecosystems and natural and urban landscapes. Constructions that do not meet the standards and the parameters established by the regulatory landscape plans are considered building abuses. The wrong placement of some buildings disturbs the habitat of the species, and alters the climate and the hydrogeological regime. It is considered an architectural pollution factor, even an architectural intervention that significantly changes the historical characteristics of a monument (Widanagamage 2011).

Agricultural pollution is caused by the incorrect and excessive use of fertilizers and pesticides. The latter, being water soluble, reach the aquifers, causing the water supply pollution; furthermore, not being completely biodegradable, they are deposited in water courses favoring the eutrophication process, which leads to the destruction of the present living forms (Merrington et al. 2002).

Industrial pollution is caused by the discharge into the ground, into the air, into the rivers, and into the seas of toxic substances, often non-biodegradable, which come from different processes and that can cause irreversible damage (Shen 1995). Some of these industrial substances are: cyanide, cadmium, mercury, and chromium. In industrialized cities, the sulfur dioxide (SO_2) is transformed into sulfur trioxide (SO_3) by activation of solar rays and subsequent oxidation, thus causing the precipitation of acid rain (see). As mentioned, the polluting substances of the industries also reach the waters of the rivers and seas, causing, for example, eutrophication, i.e., an excessive development of algae and the consequent death of the aquatic fauna due to anoxia caused by the rotting of death algae.

Summary

Pollution is an alteration of the environment by polluting elements, due to nature and anthropic activities. It produces temporary discomforts, pathologies, or permanent damage to living organism in a given area and can generate imbalance in the existing natural cycles. The alteration can be of various origins, chemical or physical. It produces temporary discomforts, pathologies, or permanent damage to living organism in a given area and can generate imbalance in the existing natural cycles, ecosystem equilibrium, and biodiversity. There are many types of pollution, divided according to the pollutant or the polluted element, with frequent mingling due to their contiguity or close correlation. Pollution classifications are therefore varied, but the two traditional categories include different types of pollution based on the polluted site and on the pollutant cause.

Cross-References

- [Acid Rain](#)
- [Air Pollution](#)
- [Biodiversity](#)
- [Pollution Prevention](#)

References

- Altshuller, A. P., & Bufalini, J. J. (1971). Photochemical aspects of air pollution. Review. *Environmental Science & Technology*, 5(1), 39–64.
- Busby, C. (1995). *The wings of death: Nuclear pollution and human health*. Aberystwyth: Green Audit Books.
- Daly, A., & Zannetti, P. (2007). An introduction to air pollution—definitions, classifications, and history. In P. Zannetti, D. Al-Ajmi, & S. Al-Rashied (Eds.), *Ambient air pollution* (pp. 1–14). Half Moon Bay (USA): The EnviroComp Institute.
- Goel, P. K. (2006). *Water pollution: Causes, effects and control*. New Delhi: New Age International.
- Goines, L., & Hagler, L. (2007). Noise pollution: A modern plague. *Southern Medical Journal-Birmingham Alabama*, 100(3), 287.
- Hänninen, O., & Goodman, P. (2019). Outdoor air as a source of indoor pollution. *Indoor Air Pollution*, 48, 35.
- Hölker, F., Wolter, C., Perkin, E. K., & Tockner, K. (2010). Light pollution as a biodiversity threat. *Trends in Ecology & Evolution*, 25(12), 681–682.
- Hoyle, B. (1999). Canadian farmers seek compensation for “genetic pollution”. *Nature Biotechnology*, 17(8), 747.
- Merrington, G., Nfa, L. W., Parkinson, R., Redman, M., & Winder, L. (2002). *Agricultural pollution: Environmental problems and practical solutions*. London: CRC Press.
- Mirsal, I. A. (2008). *Soil pollution*. Springer. <https://link.springer.com/content/pdf/bfm%3A978-3-540-70777-6%2F1.pdf>. Accessed 12 Sept 2019.
- Rosen, R. A., & Rinaldi, A. (2000). Italy takes a stand on electromagnetic emissions. *Environmental Claims Journal*, 13(3), 121.
- Shen, T. T. (1995). *Industrial pollution prevention*. In *Industrial pollution prevention*. Berlin/Heidelberg: Springer.
- Tarr, J. A. (1996). *The search for the ultimate sink: Urban pollution in historical perspective*. Akron: The University of Akron Press.
- Travis, C. C., & Hester, S. T. (1991). Global chemical pollution. *Environmental Science & Technology*, 25(5), 814–819.
- Vitousek, P. M. (1994). Beyond global warming: Ecology and global change. *Ecology*, 75(7), 1861–1876.
- Widanagamage, B. A. (2011). Architectural pollution and its impact on city character. <http://dl.lib.mrt.ac.lk/handle/123/1427>. Accessed 15 Sept 2019.

Pollution Prevention

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Synonyms

Cleaner production; Cleaner technologies; Integrated pollution prevention; Low and non-waste technologies; P2; Preventive environmental strategy; Reduction at source; Source reduction; Waste avoidance; Waste minimization

Definition

Pollution prevention (P2) is any practice that reduces, eliminates, or prevents pollution at its source. This covers the reduction of the amount of a hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment. Pollution prevention is on the top of the environmental protection hierarchy prior to recycling, treatment, or disposal. The preventive approach to environmental issues is associated with developing the concept and practice of cleaner production in the early 1970s. The pollution prevention, cleaner production, waste minimization, and reduction at source are usually treated as synonyms. Pollution prevention uses many techniques that allow to eliminate waste at the source by modification of production processes, introducing nontoxic or less toxic substances or reusing materials rather than putting them into the waste stream.

Introduction

When pollution results in the production process, it means that the process is inefficient or is carried out carelessly. Pollution is really a loss for the company: valuable substances migrate to the sewage or escape into the atmosphere. Added to this

are fees for using the environment and often even penalties. The direct cause of environmental pollution is man-made production. The sources of waste are (Doniec 1998, p. 9) the production process itself (pollution is embedded into the way the manufacturing process is planned and organized), accidental situations during the process (accidents), careless leading of the production process, and the product itself after the period of use.

The first, in the historical sense, approach to the waste problem was do nothing (ignoring the problem). The creation of industry was not accompanied by the idea of the possibility of pollution and contamination of the human life environment. It appeared only when the negative phenomena began to be visible and troublesome.

When the substances escaping from industrial plants started to have too high concentrations on particular areas, a man came up with a very simple idea to spread the stream of these substances. According to this philosophy, water was added to excessively concentrated wastewater; higher chimneys were built, which resulted in the same effect: fewer pollutants per unit area. The symbol of this period was the high chimneys that surrounded human settlements (in artistic works they were praised as an example of a new beauty, even more perfect than the beauty of nature). The spreading policy of the waste stream did not change the size of the waste stream, and after some time, the problems returned on an increased scale.

There was no other choice than to begin to think what to do with the emerging pollution, because the previous solutions were insufficient. The focus was put finally to the waste stream – would it be possible to clean it up? This way, a whole new branch of industry was created associated with purification, producing sewage treatment plants, filters, and other devices installed in industrial plants. Due to the place of installation of these devices, solutions based on purifying the stream of pollutants were called end-of-pipe solutions. In the organizational sense, they have one undoubted advantage: they require only to purchase of a ready device. However, their disadvantage is the cost – both of the purchase and operational cost too. Many people still equate

environmental protection with cleaning approach and, consequently, with the costs of such kind of environmental protection policy.

Instead of wondering what to do with waste that has already been created, it is better to try to prevent it from creation and thus concentrate on the causes of problem. This preventive approach works, and even due to its effectiveness, it is being promoted and required by counties' legislations. Its ideal purpose is a completely waste-free production process. In practice, of course, any effective reduction of the pollutant stream or limiting its toxicity is sensible and desirable. Techniques for preventing environmental pollution are becoming more and more popular as a long-term strategy for environmental protection, because their use is profitable (as opposed to expensive cleaning techniques). Every reduction in the amount of waste generated translates into savings in the consumption of raw materials and energy.

Pollution Prevention Approach

“Pollution prevention (P2) is any practice that reduces, eliminates, or prevents pollution at its source” (U.S. EPA 2019). That is why it is also known as “source reduction” and is the essence of a preventive approach to waste management. This covers the reduction of the amount of a hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment.

Pollution prevention (P2) and thus the preventive approach to environmental issues is associated with developing the concept and practice of cleaner production in the early 1970s (Rodhe 2000, p. 18). The main idea behind the preventive approach is that all actors (industry, government, and consumers) should take the increased responsibility for the process of reducing environmental impact.

The preventive strategy integrates the environment in the global management of the organization. “Its application requires responsible environmental management, a change of attitude

and the evaluation and application of technological knowledge and options” (SCP/RAC 2019). “The preventive approach has many parallels with quality management, including the idea of doing things right from the start, the need for employee participation, the need for integration in company-internal processes, and continuous improvement using the plan-do-check-act cycle” (Rodhe 2000, p. 20).

The preventive approach demonstrated by organizations is usually organized in the form of continuous internal integrated programs or even applied as an element of the management system (e.g., Environmental Management System ISO 14001 or Eco-Management and Audit Scheme – EMAS). Such an approach (program or procedure) usually consists of the following phases (Rodhe 2000, p. 24):

1. Planning and organization
2. Assessment
3. Feasibility analysis
4. Implementation

The whole process should be repeated continuously.

When different actions toward the cleaner environment are considered, the pollution prevention is on the top of the environmental protection hierarchy.

Exemplary environmental protection hierarchy (U.S. EPA 2019):

1. Pollution prevention (source reduction)
2. Reuse
3. Recycling
4. Treatment
5. Disposal, release

The higher on the list, the more preferable particular practice is. P2 is very often contrasted with the end-of-pipe treatment.

Pollution Prevention Techniques

Pollution prevention uses many techniques that allow to eliminate waste at the source by

modification of production processes, introducing nontoxic or less toxic substances or reusing materials rather than putting them into the waste stream. It means less waste to control, treat, or dispose.

The four categories of techniques are available to organizations when implementing P2 approach (IISD 2019):

1. Good housekeeping – including efficient operation of machinery, monitoring of raw material flows, segregating waste, and training staff
2. Materials substitution – such as phasing out CFCs and switching from solvent-based paints to water-based alternatives
3. Manufacturing modifications – including cutting the number of processes or switching from chemical to mechanical and introducing closed-loop processing
4. Resource recovery – for example, reusing pollutants in the same process and selling waste by-product as raw materials in other industries

Pollution prevention is not just only about reduction of the use of hazardous materials but energy, land, and water too. When choosing the pollution prevention options, one should care about the elimination or reducing waste released rather than just transferring or distributing pollutants among the land, air, and water (NOAA 2019).

Pollution Prevention Benefits

Unlike most pollution control strategies, an effective, ongoing P2 program offers important economic, regulatory, environmental, and social benefits that can often result in a more competitive business (IN.gov 2019). By increasing the efficiency, companies achieve not only significant environmental effects but also economic effects. Increasing the efficiency of production processes, savings on the costs of using the environment, savings on raw materials and waste flow management, and treatment mean money that will remain in the enterprise. In addition, enterprises can gain market recognition and attract new partners and customers, especially when they can demonstrate

a cleaner production leader certificate or certificate of the Environmental Management System. The list of potential benefits from the pollution prevention can be very long and include also (U.S. EPA 2019; NOAA 2019; SCP/RAC 2019):

- Safer working conditions
- Better quality of the product, fewer products which do not conform to specifications
- Less hazards posed to public health and the environment
- Less need for households, businesses, and communities to handle waste
- Reduction of risk of industrial accidents and spills
- Improvement of corporate image
- Fulfilment of the company's environmental requirements and a commitment to its sustainable development

Due to its benefits and effectiveness, the preventive approach was introduced to legal regulation in many countries (e.g., in the USA, Congress passed the Pollution Prevention Act in 1990). The national agencies were required to implement the pollution prevention program, to promote this approach both in terms of dissemination of information and financial support for individual projects of cleaner production (U.S. EPA 2019). The pollution prevention was a subject to many promotional activities on the international arena (e.g., by USAID, UNEP, or Government of Norway).

Summary

Pollution prevention is the approach to waste management that concentrates on the elimination or the reduction of the waste stream. This means both reducing the amount of wastes but also the toxicity of the waste stream. Many countries introduced the pollution prevention to their legislation and environmental policy promoting its benefits among companies. The typical pollution prevention techniques can help organization to solve its environmental problems and bring savings at the same time.

Cross-References

- Cradle-to-Cradle
- Eco-efficiency
- EMAS: Eco-Management and Audit Scheme
- ISO 14001 Standard
- Quality Management
- Sustainability of Waste Management System: Waste Generation and Collection

References

- Doniec, A. (1998). *Koncepcja rozwoju zrównoważonego wyzwaniem dla techniki* (in:) Doniec, A. (red.) *Technika przyjazna środowisku*. Łódź: OZZŚ.
- IISD (The International Institute for Sustainable Development) website, Pollution prevention. https://www.iisd.org/business/tools/bt_pp.aspx. Accessed 28 Feb 2019.
- IN.gov, the official website for the State of Indiana, The Indiana Small Business Guide to Environmental, Safety and Health Regulations, 2014, Indiana Department of Environmental Management, https://www.in.gov/idem/ctap/files/small_bus_chap09.pdf. Accessed 1 Mar 2019.
- NOAA (National Oceanic and Atmospheric Administration) website, Pollution Prevention Defined (in:) Federal Facility Pollution Prevention Planning Guide. https://www.labtrain.noaa.gov/ppguide/ffpp_6.htm. Accessed 28 Feb 2019.
- Rodhe H. (2000) Preventive environmental strategies in Eastern European industry. An analysis of donor support for cleaner production (Doctoral Dissertation). The International Institute for Industrial Environmental Economics, Lund University, Sweden.
- SCP/RAC (The Regional Activity Centre for Sustainable Consumption and Production) website, Cleaner production: What is it? <http://www.cprac.org/en/sustainable/production/cleaner>. Accessed 28 Feb 2019.
- U.S. EPA. (United States Environmental Protection Agency) website. <https://www.epa.gov>. Accessed 1 Mar 2019.

Porter and Kramer's (2006) "Shared Value"

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Synonyms

Strategic CSR

Definition

The Creating Shared Value (CSV) concept focuses on "policies and operating practices that enhance the competitiveness of a company while simultaneously advancing social and economic conditions in the communities in which it operates" (Porter and Kramer 2011, p. 6). Its authors, Porter and Kramer, suggest that social needs, similar to more traditional market needs, define markets and create business opportunities, while social harms are not always externalized by the company, but often create internal costs, e.g., wasted energy, raw materials, costs related to on-the-job accidents or high employee turnover. Thus, it is not only desirable but, more importantly, possible to form business strategies that lead to the creation of social and economic values at the same time. By value, the authors mean not just benefits, but benefits relative to costs. Although the idea of value creation has long been recognized by business, social progress was rarely approached from this perspective. The notion of value was based rather on short-term financial gains with social issues treated as peripheral to core business. With their conceptual framework, Porter and Kramer hope to "redefine the purpose of the corporation" and "reshape capitalism and its relationship to society" (Porter and Kramer 2011, p. 4). The authors assume that the new purpose of a business constructed around shared value and not just profit has the best chance to rebuild trust and the legitimacy of the business.

CSV has emerged on the wave of increasing criticism of corporate social responsibility (CSR), which is more widely viewed as an empty promise, a mere response to anti-corporate movements, an egoistic exercise, and even a passing fad (Mullerat 2010, pp. 443–452). As an alternative concept, CSV has received attention and positive feedback in the business community, which finds it very appealing, as well as among some management scholars and teachers (Crane et al. 2014). The shared-value approach to business and society relations also has been recognized by the European Commission and incorporated in the new CSR definition as a concept through which companies voluntarily integrate social, ethical,

and environmental concerns into their business operations and core strategy in close cooperation with their stakeholders with the aim of, one, identifying, preventing, and mitigating possible adverse impacts in these areas, and two, maximizing the creation of shared value for their owners/shareholders and for their other stakeholders and society at large (COM 2011).

Porter and Kramer's Criticism of CSR

Porter and Kramer (2011) argue that the more companies have become engaged in CSR, the more its legitimacy has fallen. The authors' criticism relates to the way CSR is understood and implemented in business practice. Companies have remained trapped in an outdated and narrow approach to value creation focused on optimizing short-term financial performance and ignoring environmental and social drivers of the firms' long-term success. Further, the authors point out that the dichotomy between social and business interests has been strongly institutionalized in the CSR concept itself. The classical approach to CSR has been based on a deontological perspective focusing on profit-sacrificing activities motivated by social altruism (Horrigan 2010, pp. 34–35). Within this approach, CSR has been defined as "situations where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law" (McWilliams et al. 2006) (see ► ["Altruistic CSR"](#)). The separation of business goals and societal needs, as argued by Freeman and McVea (2001), led to the marginalization of CSR in the eyes of many managers and scholars. As a result, "most companies remain stuck in a "social responsibility" mindset in which societal issues are at the periphery, not the core" (Porter and Kramer 2011, p. 4). Some critics assert that although the CSR concept is built on good intentions, corporate leaders often misuse it to produce benefits only for their firms (Yunus 2007). Business has co-opted the language of social responsibility to allow it to continue to focus almost single-mindedly on profit maximization

(Horrigan 2010, p. 35). Fleming and Jones (2013) argue that what has come to be called "corporate social responsibility" has become a key marketing and branding tool for most large and medium-sized companies. Many activities in the area of CSR are accompanied by hypocrisy on the part of the companies and are mere attempts to contain civil pressure. Porter and Kramer (2006) note that in many companies, CSR is limited to cosmetic actions, centered on glossy reports of questionable credibility (Broomhill 2007). CSR has been widely used as a PR or even whitewashing tool (Faust 2006), or as a strategy for avoiding regulation (Mullerat 2010, pp. 448–449), leading to a substantial decrease of trust among stakeholders.

Porter and Kramer (2011) argue that CSV as an approach integral to a company's competitive position should supersede reputation-driven CSR in guiding corporate social and environmental investment. The proposed concept is hoped to open up new opportunities for innovation and growth in global economies, become the next evolution of capitalism, and help companies regain legitimacy.

The Emergence and Evolution of the CSV Concept

The concept emerged from a series of articles by Porter and Kramer for the *Harvard Business Review*. The first of the papers, published in 2002 (Porter and Kramer 2002), focused on **strategic corporate philanthropy** as an answer to the dilemma faced by many executives caught between critics demanding ever higher levels of donations and investors' expectations to maximize short-term profits. Corporate charitable efforts limited to small donations generating no social value and ad hoc actions or cause-related marketing and sponsorship campaigns used as a popular branding tool have become the subject of broad criticism from both civil society and shareholders. The authors argue that corporations can use philanthropy in a strategic way, as an investment to improve their competitive context, understood as the quality of the business environment. In this way, companies are able to integrate social

and economic goals and drive their long-term competitiveness, and by leveraging their core competences, generate virtual social change.

In the second article in the series (Porter and Kramer 2006), where the term "shared value" was coined, the new approach to corporate philanthropy was extended to the integration of other CSR activities into the core business strategy. Although companies recognized the growing stakeholder pressure for more responsible business conduct, their response has been limited to cosmetic actions focusing largely on public relations and media campaigns. In a world of open, knowledge-based competition, social and business goals form a symbiotic relation (Porter and Kramer 2006); "CSR and competitiveness are not opposed but rather link in a synergic relationship" (Perrini et al. 2006, p. 6). Thus, the distinction between these elements is a false dichotomy (Porter and Kramer 2002). This mutual dependence in business-society relations implies that both business decisions and social policies must follow the principle of shared value and engage in strategic CSR activities. The latter focus on value-chain social impacts and social issues influencing a company's competitive context.

Finally, in 2011, Porter and Kramer (2011) published their seminal article offering a more substantial conceptualization of CSV. First, the authors proposed the definition of shared value as "policies and operating practices that enhance the competitiveness of a company while simultaneously advancing social and economic conditions in the communities in which it operates" (Porter and Kramer 2011, p. 6). In other words, not only must the shared-value strategies support core business objectives – a postulate often raised in previous publications on strategic CSR (Lantos 2002; Husted and Allen 2007) (see ► "Strategic CSR") – but also meaningfully contribute to social progress. What is more, as shared value is defined as benefits relative to costs, the concept focuses on maximizing social impact per dollar spent (Spitzeck and Chapman 2012). Second, the paper outlined mechanisms of shared-value creation (explained below). Each requires concrete and company-specific metrics. Successful CSV strategy is "data-driven, clearly linked to defined

outcomes, well connected to the goals of all stakeholders, and tracked with clear metrics."

An additional contribution to shared-value research has been made by Pfitzer et al. (2013), who identified five reinforcing elements that companies creating shared value rely on: (1) embedding a social purpose, i.e., setting and communicating a clear social mission that is integrated with the corporate culture of the firm, (2) defining a social need the firm can address by gaining a deeper understanding of the underlying social conditions, (3) measuring shared value, for example, through integrated reporting (Adams 2015), (4) creating the optimal innovation structure, for example, by integrating with current firm units, creating semiautonomous units, getting support from governments, or funding external businesses (5) cocreating with external stakeholders, such as other companies (including major competitors), universities, foundations, NGOs, and governments.

Creating shared value requires a close link between CSR activities and core business strategy (Husted and Allen 2007). On the one hand, it allows a firm to use its unique resources and competences, which increases the efficiency and effectiveness of social programs. On the other hand, it stimulates the development of new resources that may become part of the organization's competitive advantage.

CSV Mechanisms

There are three mutually reinforcing mechanisms of shared-value creation: (1) reconceiving products and markets, (2) redefining productivity in the value chain, and (3) enabling local cluster development (Porter and Kramer 2011). The first one is based on enabling local cluster development aimed at improving the company's competitive context. CSR is seen here as a social investment or strategic philanthropy (Porter and Kramer 2002) that improves: (1) access to high-quality business inputs (e.g., highly qualified employees, efficient infrastructure, access to research institutions, relevant technology, and capital); (2) demand conditions (e.g., by

increasing the size of the market or sophistication of demand); (3) strategy and rivalry context or, in other words, rules and incentives that govern competition (e.g., transparency, intellectual property protection, fair and open local competition, rule of law); (4) availability of supporting industries (e.g., reliable local suppliers, service providers, presence of clusters) (Porter and Kramer 2006). One example of CSV programs that aim at developing local clusters are corporate initiatives focused on education. Providing support to universities to build a strong base of highly qualified staff is less expensive than investment in in-house training. Success in tackling social and environmental issues involving cluster development often requires collaboration with third parties, including other companies (Porter and Kramer 2011).

The second mechanism of shared-value creation focuses on the redefinition of productivity in the value chain to depict all activities that a company engages in while doing business. The value chain can be used as a holistic framework to identify positive and negative social impacts in terms of energy use, logistics, resource use, procurement, distribution, location, and employee productivity (Porter and Kramer 2006). Opportunities for CSV may occur from process innovation that helps to reduce internal costs inflicted by externalities connected with poor management of natural and human resources. Reduction in GHG emissions, use of renewable raw materials, reduction of product packaging, cooperation with local suppliers, investment in the health and safety of workers, or diversity in the workplace serve as examples of initiatives leading to the simultaneous reduction of social and business costs. Major improvements in social and environmental performance not only can often be achieved with better technology at a nominal incremental cost but also can yield net cost savings through enhanced resource utilization, process efficiency, and quality (Porter and Kramer 2011).

The last mechanism enables reconceiving products and markets. CSV broadens the firm's perspective and helps to identify unmet social needs. In this sense, it creates opportunities for differentiation (Spitzeck and Chapman 2012), product and business model innovation, and

growth (Porter and Kramer 2011). What is more, the shared-value approach offers greater gains for society, as companies have the potential to be more effective than governments and nonprofit organizations in marketing solutions to social problems. As companies look for opportunities for innovation, Porter and Kramer (2011) suggest thinking in terms of societal needs instead of "products" and "services." Social and environmental issues increasingly define markets in developed economies, where conscious consumers make decisions based not only on price but also on sustainability-related attributes of products and services. Additionally, societal needs create business opportunities in emerging markets, where the greatest global growth potential is concentrated (Tidd and Bessant 2011). The majority of consumers in these markets form the so-called "base of the pyramid" (see ► "Base of the Pyramid" and ► "Prahalad's 'Bottom of the Pyramid'"), i.e., "the low-income socioeconomic segment" (London and Hart 2011, p. 8) that, due to the growing income gap between rich and poor, is not well integrated with the global market economy. The base of the pyramid is believed to represent a multitrillion-dollar market full of underserved social needs (Prahalad 2006).

Criticism

Although the CSV concept has gained much of the attention from both practitioners and academic community, it has also become a subject of criticism. Crane et al. (2014) identify four major weakness and shortcomings of CSV. First, the authors argue that the concept is based on unjust criticism of CSR. Porter and Kramer contrast CSV with an outdated understanding of CSR and do not acknowledge there is broad consensus in the existing literature that CSR is not a supplement to core business strategy but rather an integral element (Beschoner and Hajduk 2017). Second, CSV is based on a win-win assumption about business-society relations and as such does not provide any guidance for situations in which a win-win solution cannot be reached and moving beyond trade-offs

between social and economic value creation is impossible. Porter and Kramer are criticized for grounding their arguments in purely economic logic and arguing that the primacy of profit maximization is not only necessary due to market forces but also morally good (Beschoner 2013). Some authors argue that given the complexity of social issues, which usually involve a number of different stakeholder groups with conflicting interests, strategic CSR concepts, including CSV, will only reinforce neoliberal logic (Brown and Dillard 2014; Thomson 2015). Third, CSV is built on the controversial assumption that business compliance with legal and moral standards is given. The concept neglects the fact that the absence of compliance is one of the key problems of multinational corporations operating in various countries often with extremely poor regulation and in complex supply chains that are hardly possible to be fully controlled. Fourth, the CSV concept is strategically incoherent. CSV aims at creating additional profit opportunities and differentiating the company from its competitors. However, generating virtual social change requires multi-stakeholder cooperation and the creation of standardized solutions that could be scaled up across organizations, sectors, and countries and, as such, cannot be a source of competitive advantage for a single company.

Cross-References

- Strategic CSR
- Strategic Management and CSR

References

- Adams, C. A. (2015). The international integrated reporting council: A call to action. *Critical Perspectives on Accounting*, 27, 23–28. <https://doi.org/10.1016/j.cpa.2014.07.001>. Elsevier Ltd.
- Beschoner, T. (2013). Creating shared value: The one-trick pony approach—A comment on Michael Porter and Mark Kramer. *Business Ethics Journal Review*, 1(17), 106–112.
- Beschoner, T., & Hajduk, T. (2017). Creating shared value. A fundamental critique. In J. Wieland (Ed.), *Creating shared value—Concepts, experience, criticism* (pp. 27–37). Springer.

- Broomhill, R. (2007). *Corporate social responsibility: Key issues and debates*. 1/2007.
- Brown, J., & Dillard, J. (2014). Integrated reporting: On the need for broadening out and opening up. *Accounting, Auditing & Accountability Journal*, 27(7), 1120–1156. <https://doi.org/10.1108/AAAJ-04-2013-1313>.
- COM(2011) 681, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A renewed EU strategy 2011–14 for Corporate Social Responsibility* (2011). Brussels.
- Crane, A., et al. (2014). Contesting the value of “creating shared value”. *California Management Review*, 56(2), 130–153.
- Faust, C. (2006). *What's wrong with corporate social responsibility?* Oxford: Corporate Watch.
- Fleming, P., & Jones, M. T. (2013). *The end of corporate social responsibility. Crisis and critique*. Sage Publications.
- Freeman, R. E., & McVea, J. (2001). *A stakeholder approach to strategic management*. Available at: <http://bit.ly/1pr95x3>. Accessed: 25 June 2015.
- Horrigan, B. (2010). *Corporate social responsibility in the 21st century: Debates, models and practices across government, law and business*. Cheltenham: Edward Elgar Publishing.
- Husted, B. W., & Allen, D. B. (2007). Strategic corporate social responsibility and value creation among large firms. Lessons from the Spanish experience. *Long Range Planning*, 40(6), 594–610.
- Lantos, G. P. (2002). The ethicality of altruistic corporate social responsibility. *Journal of Consumer Marketing*, 19(3), 205–232. <https://doi.org/10.1108/07363760210426049>.
- London, T., & Hart, S. L. (2011). Creating fortune with the base of the pyramid. In T. London & S. L. Hart (Eds.), *Next generation business strategies for the base of the pyramid. New approaches for building mutual value* (pp. 1–16). Upper Saddle River: Pearson Education.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1–18. <https://doi.org/10.1111/j.1467-6486.2006.00580.x>.
- Mullerat, R. (2010). *International corporate social responsibility: The role of corporations in the economic order of the 21st century*. Alphen aan den Rijn: Kluwer Law International.
- Perrini, F. Pogutz, S. Tencani, A. (2006). *Developing corporate social responsibility: A european perspective*. Cheltenham: Edward Elgar Publishing.
- Pfizer, M., Bockstette, V., & Stamp, M. (2013, September). Innovating for shared value: Companies that deliver both social benefit and business value rely on five mutually reinforcing elements. *Harvard Business Review*, 100–107.
- Porter, M. E., & Kramer, M. R. (2002, December). The competitive advantage of corporate philanthropy. *Harvard Business Review*.
- Porter, M. E., & Kramer, M. R. (2006, December). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*.
- Porter, M. E., & Kramer, M. R. (2011, January–February). Creating shared value. *Harvard Business Review*.
- Prahalad, C. K. (2006). *Fortune at the bottom of the pyramid: Eradicating poverty through profits*. Wharton School Publishing.
- Spitzeck, H., & Chapman, S. (2012). Creating shared value as a differentiation strategy—The example of BASF in Brazil. *Corporate Governance*, 12(4), 499–513. <https://doi.org/10.1108/14720701211267838>.
- Thomson, I. (2015). “But does sustainability need capitalism or an integrated report” a commentary on “the international integrated reporting council: A story of failure” by Flower, J. *Critical Perspectives on Accounting*, 27, 18–22. <https://doi.org/10.1016/j.cpa.2014.07.003>. Elsevier Ltd.
- Tidd, J., & Bessant, J. (2011). *Zarządzanie innowacjami. Integracja zmian technologicznych, rynkowych i organizacyjnych*. Warszawa: Wolters Kluwers Polska.
- Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. New York: Public Affairs.

Portfolio of Products

► Product Life Cycle

Positional Externalities

► Conspicuous Consumption/Positional Goods

Positional Goods

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Synonyms

Status good

Definition/Description

Positional goods are defined by Fred Hirsch as goods whose value for the consumer depends more on how these goods compare with the

goods consumed by others rather than on their direct utility. According to Hirsch, as the level of average consumption rises, so does the relevance—though also the negative side effects—of positional consumption (Hirsch 1976).

Hirsch defines a so-called positional economy which is different than the economy driven by standard neoclassical assumptions (Hirsch 1976). The material economy relies on assumptions for value creation that are driven by agents' rational behavior, so if production of goods is increased without loss of quality of the product, then the price of the product will be changed only through the adjustment of supply and demand to a new equilibrium point (Hirsch 1976). In the positional economy, people's relative position is measured by the access to and ability to acquire possession of goods that are scarce due to the effect of social competition. If a good becomes affordable to more people, it loses its value. Competing for works of art, good jobs, leadership positions, or luxurious leisure are examples of goods that are positional (Hirsch 1976).

Positional goods are often considered to derive their value if they are a factor that distinguishes their owner as a member of a social group in a favorable position in society. They are often associated with Thorstein Veblen's concept of conspicuous consumption (Veblen 1899/1994). A concept that is closely associated with the positional goods idea is also Robert Frank's notion of positional externalities (Frank 2011).

The Conceptual Framework

Fred Hirsch refers to a duality of economic growth, with positional economy opposing to material economy (Hirsch 1976). The main argument stems from the idea that there are goods in the economy which are offered to all, but few can afford. These goods therefore gain an additional social status value—they become signals to the prosperity of the people who own such goods. These social status value goods are coined by Hirsch as "positional goods" (Hirsch 1976, p. 25). As Koutsobinas put it in his book *The Political Economy of Social Status*, it is not only mechanical market exchange that drives economic change, but people's psychological

tendencies towards exclusive goods that are highly valued by others (Koutsobinas 2014). Economist Vatiero defined positional goods as both a double rival and double excludable good (Vatiero 2011). Other definitions of positional goods, such as the one given by economist R. Mathews, have related them to a function of individual income relative to other people's income (Schneider 2007). Positional goods are often associated with the concept of the "superstar phenomenon" of economist Sherwin Rosen (Rosen 1981).

From Hirsch's seminal work which was issued back in 1978 to present days, positional goods and their role in economic life has been widely examined. Status goods are considered to appear in homogenous markets and are distinct from regular goods with the fact that they become more sought after by consumers as their price rises (Koutsobinas 2014).

The positional economy is related to all aspects of goods, services, work positions, etc. that are either considered scarce in an absolute or socially imposed way or are subject to congestion or crowding when there is more extensive use of the goods, and as a consequence of crowding the perceived value of the good falls (Koutsobinas 2014). This distinction between positionality of goods is also regarded as vertical or horizontal positionality—with goods of competition being considered to have vertical positionality, and goods of coordination having a horizontal positionality (Hollis 1984).

Upon trying to define which goods are more positional than others, economists have established that the more visible a good is, the more positional it is considered (Carlsson et al. 2007). In this sense income is found to be more positional than leisure (Carlsson et al. 2007), as the value of automobiles is more positional than the safety of the car model that is implied.

Conspicuous Consumption

The positional economy and the somewhat innate (natural) inclination of people towards social status value have its roots in history of mankind and can be viewed from an anthropological point of view. Positional goods can be regarded as the tail

of a peacock or the colors of male birds in nature—features with no practical meaning except demonstration of power, social status, and biological advantage over competitors (Veblen 1899).

Conspicuous consumption supposes that the consumer buys some good because it is associated with some type of exclusivity. The term is coined by Thorstein Veblen in his 1899 work *Theory of the Leisure Class* (Veblen 1899). Veblen states that “conspicuous consumption of valuable goods is a means of reputability to the gentleman of leisure” (Veblen 1899, p. 36). The positional goods concept is situated in the foundation of theories in economics that assume social status is a key factor for consumer’s decision-making. Social status–driven decision-making of the individual consumer has an actual impact on aggregate demand and prices of goods. A hypothesis that researchers have endorsed is that visible goods are more positional than less visible goods (Carlsson et al. 2007; Frank 1985).

Positional Externalities

In Frank’s wording, a positional externality “occurs when new purchases alter the relevant context” (Frank 2011, p. 1). A typical example of positional externality that Frank gives is when some of the candidates for a job begin to wear expensive custom-tailored suits at job interviews, then a side effect of their action will become that other candidates become less likely to make favorable impressions on interviewers. Based on experiments, Frank postulates that within limits, people appear willing to sacrifice absolute consumption for improved relative position (Frank 2011).

Positionality creates patterns of behavior that are associated with the so-called “expenditure cascade,” which refers to the increase in expenditures by top earners resulting in increased expenditures even among those consumers whose incomes are not as high and have not risen (Frank 2011).

Effects on the Economy and Importance for the Public Sector

Analyzing economies, studies have shown that positional goods have a significant share of

consumption. According to Frank (2005, p. 137), “the conflict stems from the fact that concerns about relative consumption are stronger in some domains than in others. The disparity gives rise to expenditure arms races focused on positional goods—those for which relative position matters most. The result is to divert resources from non-positional goods, causing welfare losses.”

Positional goods equilibrium diverges from standard public goods equilibria where the rational incentive is considered to be the free-rider strive to contribute nothing or least amount possible. In the positional economy, status-seeking may counterbalance the free-riding incentives public goods provision if the positional preferences are sufficiently high (Bougherara et al. 2019).

Identifying positionality of goods has been suggested for policy prescription. Identifying positional goods has been proposed to serve as a tool for taxation policy measures—for example, if a good is highly positional, it may imply higher or more progressive taxes (Carlsson et al. 2007).

Positional economy rationality has been investigated in relation to public goods provision as well. Under certain conditions—for example, when positional preferences of individuals are homogeneous, then the individuals will tend to overinvest in the public good compared to equilibrium with no positional preferences, resulting in a zero-sum positional race with a higher public good provision. When agents have heterogeneous positional preferences, the overall impact on social welfare is positive when endowments are homogeneous (Bougherara et al. 2019).

Positionality of goods is often assumed to be relevant for more affluent societies, and more often analysis is oriented towards developed countries. However, it is in more recent years that the idea that there is a positional economy in every country—no matter a developed or a developing country—is gaining popularity, with policy prescription inspired from the positional economy of developed countries being on the rise (Koutsobinas 2014).

Summary

The positional economy is considered a concept that hard to measure, and for that reason it is still hard for economists to establish its actual size. However, it becomes more apparent in recent years that positional goods actually influence economic relations not only on the microlevel, but most likely on the meso- and macrolevels as well. The degree of positionality of a good is often considered to stem from social conventions and interactions rather than pure economic rationale of decision-makers, therefore the concept of positional goods is providing a bridge between the disciplines of economics and psychology.

Cross-References

- [Conspicuous Consumption/Positional Goods](#)
- [Public Goods](#)

References

- Bougherara, D., Costa, S., Grolleau, G., & Ibanez, L. (2019). Do positional preferences cause welfare gains? *Economics Bulletin*, 39(2), 1228–1241.
- Carlsson, F., Johansson-Steinman, O., & Martinsson, P. (2007). Do you enjoy having more than others? Survey evidence of positional goods. *Economica*, 74(296), 586–598. <https://doi.org/10.1111/j.1468-0335.2006.00571.x>.
- Frank, R. (1985). The demand for unobservable and other nonpositional goods. *The American Economic Review*, 75(1), 101–116.
- Frank, R. (2005). Positional externalities cause large and preventable welfare losses. *American Economic Review*, 95(2), 137–141.
- Frank, R. (2011). Are positional externalities different from other externalities?. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.496.7378&rep=rep1&type=pdf>. Accessed 10 June 2019.
- Hirsch, F. (1976). *Social limits to growth*. Harvard University Press.
- Hollis, M. (1984). Positional goods. *Royal Institute of Philosophy Lectures*, 19, 97–110.
- Koutsobinas, T. (2014). *The political economy of status: Superstars, markets and culture change*. Cheltenham: Edward Elgar Publishing.
- Rosen, S. (1981). The economics of superstars. *The American Economic Review*, 71(5), 845–858.
- Schneider, M. (2007). The nature, history and significance of the concept of positional goods. *History of Economics Review*, 45, 60–81.
- Vatiero, M. (2011). *The institutional microeconomics of positional goods*. Lugano: University of Lugano. <https://extranet.sioe.org/uploads/isnie2011/vatiero.pdf>. Accessed 10 May 2020.
- Veblen, T. (1899/1994). *The theory of the leisure class: An economic study of institutions*. New York: Penguin Books.

Positional Spending

- [Conspicuous Consumption/Positional Goods](#)

Positive Action

- [Affirmative Action](#)

Positive Discrimination

- [Affirmative Action](#)

Positive Leadership

- [Charismatic Leaders](#)

Postgrowth

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Synonyms

De-growth; Delinking; Development; GDP (gross domestic product); Green growth; Growth paradigm; Growth policy; Innovation; Limits to growth; Stationary state; Transformation; UN SDGs (UN Sustainable Development Goals)

Description

Economic growth is the core idea of economics and is dominating all fields of economic policy on a global scale. Critique has been formulated since the 1970s and today evidence is overwhelming that growth and environmental goals are incompatible. Therefore, the challenge especially for advanced rich nations is to present a new model for long-term development. In the postgrowth era, growth will no longer be the dominating goal. Development and structural change will continue, however restricted by environmental guardrails. The core idea of the postgrowth era is “sustainable development.” This has far-reaching consequences and a “great transformation” is required. The transformation process can partly be designed (political reforms) and is partly the result of an evolutionary search and discovery process. The basic political challenge is to replace the promise of permanently increasing income and consumption by other contributions to good life, that is, socio-economic reforms and social innovations so that overall wealth and happiness will not decline. Only if these two processes – GDP decline and socio-economic innovation – work simultaneously, conflict potentials are low and acceptance is high. The transformation to the sustainable postgrowth age is a fundamental cultural and institutional change which affects all fields of life and policy: consumption patterns, work-life-balance, role of government (social safety and redistribution, public goods), innovation (productivity, obsolescence), companies’ business models, unions’ mission. Overall, neither economics as a discipline nor economic policy is well prepared for the postgrowth era and the dramatic transformation processes.

Dominance and Decline of the Growth Paradigm

Rise and Dominance

The idea of economic growth started to dominate economics and economic policy after WW II. In economics the theory of economic growth emerged as a rapidly expanding new field of

research (with pioneering work by E. D. Domar, R. F. Harrod, R. M. Solow) which crowded out the focus on crisis and business cycle. Policy was dominated by cold war and system competition – and out-growing the competitor became crucial. Since then growth has conquered center stage (see Dasgupta 2007; Schmelzer 2016).

Economic growth was attractive as it promised so many advantages: higher incomes for all (overriding distributional conflicts), more jobs (full employment), more government revenues (financing public goods, welfare state, and arms race), catching-up for poor countries. And even when the environment problems became obvious the answer was “growth,” that is, fast modernization of industry, high incomes to finance more environment-friendly solutions (“get rich first, clean up later”; Environmental Kuznets Curve). As economic growth seemed to be without cost, it was rational to exploit the benefits. Once “growth” was established as the top priority, all policies had to pass the test of growth compatibility – from infrastructure and education to energy and environment (e.g., OECD program: “Going for Growth”, <http://www.oecd.org/economy/going-for-growth/>). On a global scale, the growth policy dominance (imperative) has been imposed on developing nations by World Bank and IWF in form of the “Washington (growth) Consensus” (Dasgupta 2007, p. 27).

Critique and Decline

Critique of the growth paradigm started early (see, e.g., Boulding 1966) and had a first highlight with the report “Limits to Growth” by the Club of Rome (Meadows et al. 1972): “If present growth trends ... continue unchanged, the limits to growth will be reached within the next one hundred years.” Consequence: “Sudden and uncontrollable decline in both population and industrial production.” Many other critical reports and publications followed (e.g., Daly 1996; Stiglitz et al. 2009; Jackson 2009; Latouche 2010). But all this had little impact on the dominance of the growth paradigm. It triggered reforms to avoid some of the most obvious damages (e.g., water and air pollution, waste management). Such end-of-pipe policies made production slightly more expensive

but never where a threat to the growth paradigm. The corrections which have been made recently are labeled “green growth” (see OECD 2011), delinking growth of output from growth of resource input. “Green growth” has also been a reaction to the World Financial Crisis of 2008, which has shattered the credibility of unrestricted growth policy.

The most fundamental critique of the growth paradigm was that it is not possible to “generalize” this idea. If applied by all nations, the limits of the planet will be surpassed with dramatic consequences for mankind (Meadows et al. 1972; Olson 1973). Therefore, the “catching-up” promise for developing countries (based on higher growth rates) collapsed and the search for a new development paradigm began, a paradigm which could be generalized for all nations and also respects the basic rights of future generations. The process of global reflection on intragenerational and intergenerational justice produced as one important output the Brundtland definition of sustainable development (WCSD 1987): Fulfill the needs of the present (especially the needs of the poor) without shifting burdens on future generations (especially by overburdening essential eco-systems).

This is now formulated in the form of binding and ambitious sustainable development goals like the UN SDGs (2015) and the Paris Agreement on climate change (2015). This has shifted political priorities. The IPCC Report (2018) and the IPBES Report (2019) contributed to increase political awareness and activities significantly. Extreme weather conditions, interpreted as herald of climate change, and biodiversity loss (bees, insects) made it visible and clear to millions: business as usual is no longer an option – and this includes ever expanding production and consumption.

Also, over the last decade, growth has turned “uneconomic” (Daly 2014) and unattractive, basically because growth no longer delivers its initial promises:

- When the level of income is already high, more income does not contribute much to further increase peoples’ happiness (well-being). Are there more attractive ways to increase happiness?

- Growth is a win-win-strategy, however, some win more and distribution (of income and wealth) is perceived unfair (not enough trickle-down). Instead of being a “social mollifier,” growth delivers ammunition for social conflict.
- Growth comes with new technologies and (eco-)efficiency increases. However, the size of eco-efficiency increases is not enough to compensate the growth effect.

The end of the growth era is an “inconvenient” diagnosis (“truth”) as it will rock the material and the ideological fundamentals of society. The socio-political consensus within our societies as well as globally was based on the promise and perspective of a rising tide that lifts all boats. This has been the social glue (upward mobility) and global perspective (catching-up). As it is vanishing, what could replace it as a “social mollifier”? Is the shared value base and are institutions strong enough to manage the transition without disaster (system resilience)? Much will depend on economics as the discipline which invented and promoted the old outdated “growth paradigm.” Will this discipline be able to provide an alternative and useful advice for managing the transition period?

Growth Fading Away? (De-growth)

There is a wide-spread fear (even) in rich countries that growth drivers might dwindle, inherent dynamics of capitalism (competition and innovation) is lost and that the promise of ever increasing income and wealth no longer holds (e.g., Gordon 2016). Long-term growth trends reflect declining growth rates in almost all countries and benefits of growth are concentrated on a small group at the top. The widespread and diverse debate on system-immanent forces that might end the growth era includes factors such as:

- Innovation/technological progress weakens
- Aging population (tends to be less innovative)
- Nationalism (anti-globalization)
- Productivity growth decline
- Redistributive policies over-burden the rich entrepreneurial class (negative incentive effects)

- Increasing welfare state (consumption instead of investment)
- Work-life-balance (less willingness to work hard)
- Decay of infrastructure (complementary to private investment)
- Monopolization (stifling competition)

Additional barriers result from environmental SDGs and changing lifestyles (sufficiency) which could stop economic growth or turn it negative:

- Decarbonization will end of fossil energy consumption, dematerialization requires the reduction of material flows, and protection of biodiversity will restrict land use.
- Population will (has to) decline; sufficiency reduces labor market participation.
- Capital stock (industry, buildings, infrastructure) declines in transformation process as stranded assets increase.
- Technological progress will focus more on eco-efficiency instead of labor productivity.
- The sufficiency trend reduces consumers' demand (with negative effects on firms' investment) and leads to "secular stagnation" (Summers 2016).

Randers (2012) uses the following simple "forecast model":

$$\text{GDP} = \text{GDP}/\text{worker} * \text{worker}$$

With declining (and aging) workforce (working hours), growth depends on (increasing) labor productivity. If this also stagnates (aging, service economy), growth phases out, the economy is converging towards the "stationary state" (Mill 1848; Keynes 1930).

In sum: The traditional expansive forces of innovation, ingenuity, and effort will continue to be strong drivers of economic growth. In addition, governments promise to rekindle growth by "whatever it takes." However, it would be naïve and over-optimism to hope that growth will prevail forever. It is wiser to be prepared for an age without growth – and it is the job of economists to analyze to

consequences and to deliver the new concepts for stabilizing economy and society, especially resolving distributional conflicts in the absence of a growing cake. The minimal consensus now seems to be to make economies less growth dependent. In case of (exogenously) declining growth rates, society has to be prepared mentally, institutionally and physically (infrastructure). This would increase stability of society (resilience), reducing the success chances for radical political parties. Social stability should not be put to the test, instead preparations for the no-growth-world should be intensified (pension systems, etc.).

From Growth to Sustainable Development

Contradiction: Growth Versus Environmental Goals (De-growth)

Environmental sustainable development goals are defining limits to the use of environmental resources (impact I). Most prominent example (fixed in the Paris Agreement 2015): In order to stop climate change (temperature increase), CO₂-emissions have to stop by mid-century (decarbonization).

Economic growth is measured as increase of real GDP. GDP represents the value of all end products in one year and "real" means that price effects (inflation) are eliminated. There is a huge literature on the critique of the GDP concept and on the mismeasuring which it induces. And many proposals have been made to correct and to add (see Stiglitz et al. 2009). In fact, the GDP concept has been developed as a tool of output measurement. It was never been intended as an indicator for wealth. If at all, GDP/capita might serve this function.

The relation between impact I and GDP growth can be illustrated by a simple decomposition:

$$I = I/\text{GDP} * \text{GDP}$$

I/GDP is eco-efficiency, that is, environmental impact per unit of GDP. If I/GDP declines, I can decline – even if GDP grows.

Example: 2% p.a. GDP growth rate would increase the GDP by roughly 50% in the period 2020–2040. If the environmental protection goal is to reduce impact I over that period by 50% than the formula reads:

$$1/2 = I/GDP * 1,5 = 1/3 * 3/2$$

Eco-efficiency has to increase by a **factor 3**, that is, to produce one unit of GDP in 2040, only a third of resources/emissions is needed compared to 2020. This implies an annual increase of resource efficiency of more than 5%. Ambitious efficiency increases (like “factor 3” in two decades) could delink (decouple) economic growth and environmental impact.

Problem: So far, there is no empirical evidence that such efficiency increase rates are possible over many years. Most OECD countries show rates of 1–2% p.a. (see, e.g., Kurz 2014; Kurz 2019). Higher rates would require an “efficiency revolution” which has not materialized so far. Also government policy options to change this seem to be very limited. Moreover, if successful, stimulation of eco-innovation will stimulate growth and thus the intended reduction of impact I. This is called the “rebound effect” (see ► “Rebound Effects of Eco-efficiency”). More details on “factor 4” and “factor 5” are provided in Weizsäcker et al. (1997) and Weizsäcker et al. (2009).

Based on optimism about future eco-efficiency increases and on the neglect of rebound effects, the concept of “Green Growth” (see Kurz 2014) nourishes hope that the growth paradigm can survive. While critics point out to the lack of empirical evidence, defenders of growth refer to the chance of increases in the future. At least related to essential natural resources (like ozone layer, climate stability, ecosystem services), the survival of mankind depends on “save operating space” (Rockström et al. 2009). With technological over-optimism, planetary boundaries could be violated and processes triggered which are out of human control (tipping points). Without evidence for upcoming quantum leaps in eco-efficiency, economic growth is the variable which has to be controlled. Under given conditions, the only form of green growth is de-growth (in rich countries).

In sum: Given the empirical trend in efficiency increase, growth and sustainable development (e.g., climate protection) are incompatible. This holds not only related to climate protection goals (SDG 13) but also to material flows (material efficiency) and to biodiversity (efficiency of land use). As delinking by high rates of efficiency increase fails, ambitious environmental goals turn into restrictions for output (GDP growth). It is then necessary that a smaller scale of output contributes to reduce input (of environmental resources). In macroeconomic terms, this means a decline of GDP (de-growth); the microfundament is less consumption of private households (sufficiency, changes in lifestyle). Either (rich) nations give up their growth goals and growth policy or they will fail to comply with their SDGs and hence shift incalculable burdens on (grand-)children: either give up income or give up moral integrity. If the environmental sustainable development goals dominate, growth is no longer desirable.

A more general formula and an extension is the so-called **IPAT** equation:

$$I = I/GDP * GDP/person * persons$$

$$\text{Impact} = \text{Technology} * \text{Affluence} * \text{Population}$$

For the reduction of environmental impact I, three strategic options are available:

- **I/GDP**: reduction of the impact per unit of output (GDP), that is, **eco-efficiency**.
- **GDP/person**: reduction of income per person which is related to a reduction of consumption expenditure, that is, a fundamental change in lifestyle, that is, **sufficiency revolution** in the rich countries (see ► “Sufficiency”).
- **Persons**: Stabilization of (world) **population** contributes to lower I. Stabilization is a side-effect of increasing wealth (lower fertility rates). Additional instruments include birth control, financial incentives, education/empowering women. In some (rich) countries, decline is so fast that aging population becomes a serious (transition) problem.

Applied to climate change the formula reads:

$$\text{CO}_2 = \text{CO}_2/\text{kWh} * \text{kWh}/\text{GDP} * \text{GDP}/\text{person} \\ * \text{persons}$$

The goal of reducing CO₂-emissions could be compatible with economic growth, if carbon intensity of the energy system (CO₂/kWh) and/or energy efficiency of the economy (kWh/GDP) decline. One scenario for decarbonization within two decades could be: reduction of CO₂ per unit of GDP by 50% and switching to renewable sources for the “rest” 50%; a decline of population would allow for slight increases of GDP/person.

If GDP/person, that is, people’s income increase no more, would this be the end of increasing the “wealth of nations” which has been the explicit promise and job of economics since 1776? This dismal perspective is unavoidable if income is the only determinant of well-being/happiness. However, this is not the case: end of growth is not end of the pursuit of happiness. A further extension of IPAT illustrates this (with H for happiness):

$$\text{I} = \text{I}/\text{GDP} * \text{GDP}/\text{H} * \text{H}/\text{persons} \\ * \text{person (IPATH equation)}$$

The challenge is to generate happiness with less GDP, that is, less related to output of the economic system. For more details on IPATH and double delinking, see ► “[Sufficiency](#)”.

The two core strategic options for SD are efficiency and sufficiency (population policy neglected). The efficiency option faces serious limitations like rebound effects (see ► “[Rebound Effects of Eco-efficiency](#)”). Moreover, efficiency increases in one field (e.g., reducing CO₂/GDP for climate protection) are not only based on innovation (i.e., reduced energy intensity) but also on substitution, that is, shifting of problems to potentially less “harmful” fields (e.g., expansion of renewable energy). However, the negative side-effects of substitution are never zero (e.g., critical materials and land consumption). Government policy could stimulate and direct the innovation process with financial incentives and regulation

but cannot guarantee results. Innovation is always a search process and outcomes are uncertain. These weaknesses of the efficiency option support the case for the sufficiency option and for sufficiency policy, which is widely neglected so far. This option addresses the real core of SD, which is on limitations (Begrenzungs-krise), socio-economic development within planetary boundaries. On the micro-level, it addresses individual responsibility, lifestyles, and values (consumers’ addictions). On the macro-level, this translates into challenging the growth paradigm. The core policy recommendation based on the sufficiency option is: replace growth policy by sufficiency policy.

Only with a combination of sufficiency (reducing production and consumption, that is, GDP) and an efficiency revolution (reducing resource input and emission per unit of GDP), there is a high probability for sustainable development, for example, decarbonization within two decades.

New Paradigm: Sustainable Development Replaces Growth

The Brundtland definition could serve as the imperative of the postgrowth society. Development and change will continue to be a fundamental characteristic also in postgrowth-societies. However, development has to be reembedded into society (Polanyi 1944) and into eco-systems. If this is successful, development is called “sustainable development.” In the postgrowth era, “growth” is replaced by “sustainable development.” Therefore, the new paradigm and the new era could be named “sustainable development” – replacing one-dimensional economic growth. Problematic with this terminology is that the term “sustainability” has been (ab-)used since 1987 in so many ways that it will be hard to establish this as the terminus technicus for a new age. However, so far no generally accepted term for the new era has emerged.

Sustainable development is the step from an expansive, imperialistic robber economy (Wenar 2016) towards a civilized economy. It is not a complete change of the (capitalist) system, and it is reform rather than revolution. However, the reform must be fundamental – not really covered

by the worn-out term “reform.” Therefore, “transformation” and “great transformation” (WBGU 2011) have been introduced to the debate and might be a more adequate formulation.

The permanent challenge in the process of economic development, especially during rapid transformation processes, is to rebalance society and keep up justice and fairness. “More for everyone” is no longer available as dominating mechanism for conflict resolving. In a postgrowth society, the prospect of overall increasing incomes is eliminated. Better life cannot come from higher incomes and more goods. As “expansion” and “more for all” is no longer available as a conflict resolution mechanism, redistribution issues tend to become more significant, a shift from “expand” to “conserve,” from “more” to “more fair.” Protection of and support for vulnerable groups (e.g., low income, handicapped) can only come from the reduction of other groups’ income or wealth – not from an increasing “cake.” The new focus is to defend and preserve the “wealth of nations”.

For economics as a discipline, the challenge is a scientific revolution, a paradigm change (Kuhn 1962). Economic growth dominated research and economic policy recommendations for decades. In the postgrowth-era “growth” could be replaced by the more open concept of (economic) “development” – as outlined by Schumpeter (1911). Core idea is economic development as an open decentralized search process without growth orientation but emphasizing permanent, sometimes disruptive change and transition processes which could be cumulative and destructive or rather smooth (by design). Economic development will continue to be driven by competition and by innovation. However, both of these fundamental concepts will have to be revised in the reembedding process. However, development is not an absolutely free and open process. Environmental boundaries and limitations together with (old and new) social development goals (poverty reduction, decent work, etc.) make development “sustainable.” Focus of economic research will no longer be on drivers of GDP growth, but rather on how to resolve conflicts between sustainable development goals, how to improve performance

in more than one of them, on exploring synergies and on the transformation process.

Diagnosing the end of an era is not easy in the middle of the transition process. It is not absolutely clear whether the growth era is over already. However, there is no doubt that it

- (a) Will end – this has been emphasized already by Mill (1848) and Keynes (1930). “The idea of a stationary state is an integral part of the ‘economic imagination’ and the ‘obsession with growth . . . will very shortly, as reckoned by historic time, come to an end.’” (Boulding 1973, p. 89).
- (b) Must end – as it is not compatible with the survival of mankind (as illustrated here in the previous section).
- (c) Is in decline – as substantiated by the empirical tendency of the falling growth rates and the numerous warnings of mainstream economics on vanishing of growth dynamics.

In the end, the decline and end of the growth age and the beginning of a postgrowth era could be based on a combination of changing individual preferences and changing political priorities. Well-informed people in rich countries are interested in personal integrity and do not want to live on cost of future generations, hence are willing to change lifestyles (sufficiency, demand side) and voting behavior (rise of green parties, F4F movement). This is affecting the competitive spirit which is driving growth and it supports the implementation of new environmental restrictions as barriers to growth (factor input, supply side). Consequence: GDP growth rates will tend to decline and eventually turn negative. Therefore, the question “what next?” is relevant and has to be addressed in research and in political debate.

“Postgrowth” stands for the era after the growth paradigm and for a postgrowth society. The term is referring to the old paradigm “growth.” “Postgrowth” has much in common with “de-growth” (► “De-growth”). However, there is a different focus. “de-growth” debates tend to continue the (GDP) growth rate orientation: growth rate has to be negative instead of positive. “Postgrowth” stands for a scientific

revolution (replacing the economic growth paradigm) and for a great transformation in economy and society (postgrowth society). After the growth era and the growth paradigm – what comes next? This is the fundamental question for a new social contract, the shared common interest that holds societies together and it is the very practical question of how to measure status and progress of society (i.e., what will replace GDP).

The sustainable development paradigm is based on a vision about “the future we want” (e.g., specified in the UN SDGs). In the new era, the individual dream of striving for a good life does not have to be buried. However, there will significant modifications of basic elements like work, income, consumption, status. Transformation is not just a (mechanical) “switch” from one state to another but an evolutionary search and learning process with high uncertainty. It is important to understand to what extent it will be a disruptive, spontaneous process and to what extent it could be designed by efficiency and sufficiency policy.

Implications for Measurement: Asset Approach

Sustainable development and “the future we want” (UN 2012) cannot be reduced to a one-dimensional goal and indicator but has to be replaced by a broader concept. Neither does individual happiness (well-being) depend on income only nor can the “wealth of nations” (Smith 1776) be measured by GDP only. The 17 UN SDGs (with 169 subgoals and indicators) are a milestone in this direction. In this context, GDP is still a relevant indicator (SDG 8) – but not longer the most significant one.

A multidimensional phenomenon needs more than one indicator for measurement. Improvement of one indicator should not be interpreted as “progress” without reflecting the change of other indicators. This was one core failure in the growth era, the mismeasurement of wealth and progress (see Stiglitz et al. 2009). As a consequence of mismeasurement, (increasing) income flows have been interpreted and perceived as progress. In fact, a large part of it stems from consumption of

assets and the substance of the assets is declining. Assets have been neglected to a larger extent, basically because they are hard to measure and it is even more difficult to quantify them in monetary terms.

In the era of sustainable development, conservation of assets is the core idea. These assets include environment (eco-systems, nonrenewable materials), human capabilities and know-how, produced structures and machines, social institutions.

Formulated in economic terms the capital stock (assets) of an economy includes environmental capital N , human capital L , produced capital K , and social capital S . Technological progress (know-how) could be measured as a separate factor T or as incorporated in A and K . The sum of all assets is national wealth W :

$$W = L + K + N + S + T$$

To conserve the wealth of a nation, all of these assets have to be conserved. These assets might be considered as substitutes to some degree and the challenge (political goal) would then be to conserve the sum of assets (Hartwick Rule; Hartwick 1977). If, for example, N is declining, this could and has to be compensated, for example, by increasing K . However, there are limits to substitution which have to be defined in the political process (essential resources like climate stability).

The potential of these stocks are the input factors in the production process and the result of their combination is the output of goods and services, a flow which is measured by the GDP:

$$GDP = GDP(L, K, N, S, T)$$

For each of these factors, the challenge is to conserve the substance. This substance is declining in the production process as a consequence of physical deterioration and because of innovation (technical and economic obsolescence; Kurz 2015). This is measured in economic terms as depreciation. To conserve substance, depreciation has to be compensated by investment, for example, new machines. For each asset investment, ln has to be as large as depreciation $ln = D$.

If I_n is smaller than D , the substance of the asset is declining, that is, the wealth of a nation declines, wealth is consumed today. Future generations are less wealthy and their ability to produce income also declines.

In the simplest case (closed economy) investment is possible only if part of the production is not used for consumption C but for savings S :

$$I_n = D = S \text{ with } GDP = C + S$$

Savings have to be large enough to compensate depreciation of all assets. Only with savings larger than aggregate depreciations ($S > D$), the economy has net savings (“genuine saving”; Dasgupta 2007).

It is possible to consume GDP totally (in case of emergency, for example, war, famine). The consequence of such over-consumption is the decay of the production potential. Future incomes and consumption levels will be lower – and this might start a downward-spiral of decaying production potential and over-consumption. Therefore, the confusion of gross income and net income is a short-term temptation but has disastrous long-term consequences. With the GDP measurement method, the decline will eventually also become visible.

In the sustainable development paradigm, the asset approach is the adequate measurement method. It makes the mismeasurement of the conventional GDP approach visible. The neglect of assets (wealth) is the most fundamental mismeasurement. All other weaknesses of the GDP (SNA) concept are well-known and most could be corrected: household production not included, public sector only with cost of input factors, defensive cost increase rather than decrease GDP, distribution is not considered, etc.

Compared to the elaborated and well-established GDP calculation, the asset approach is suffering from methodological problems as well as the lack of empirical data. The most important methodological problem is the lack of a common denominator, a unit that would allow aggregation. Some parts are easy to calculate in monetary terms (e.g., machines, buildings), while others cannot be adequately monetarized (value of species and

social capital). Although there is no complete and consistent statistical system available to measure the state and development of assets, there is at least some empirical evidence on quantities and qualities:

- L: In many rich countries, population is declining and aging, that is, quantity of human capital declines. Investment in education systems is low compared with the devaluation of knowledge and skills (e.g., sophisticated diesel engineering obsolete). Investment is focusing on the top tiers (e.g., elite universities), inclusion is in decline.
- K: The modernization of capital stock is suffering from low private investment. In addition complementary public investment (schools, bridges, railway system, etc.) is not keeping up with depreciation. Transformation is adding to this “stranded assets” (e.g., coal-fired power plants). Overall, K is in decline in many (rich) countries.
- N: Empirical evidence on the loss of climate stability, biodiversity, and global commons (ocean acidification and plastic waste) as well as increasing local (air, water) damage is overwhelming. Attempts have been made to “translate” this in monetary units, for example, for climate change by the Stern Report (Stern 2006) and for biodiversity by the global TEEB project (The Economics of Ecosystems and Biodiversity, <http://www.teebweb.org/>). Extraction of nonrenewable resources has resulted in a “resource curse” rather than in an increase of the wealth of nations (Norwegian sovereign wealth fund as one exemption). No doubt: N is declining.
- S: Social cohesion, volunteering, trust in democracy (equal rights and opportunities), government institutions, and legal system (anticorruption) are in decline (Putnam 2000). Radicalization and separation rather than integration and common sense seem on the move in many societies.
- T: Increasing by R&D spending (and global diffusion). However, economic effectiveness seems to decline (Gordon 2016).

Of course, these are just a few spotlights which cannot replace more detailed investigations and research. And of course, there are significant differences between nations (Dasgupta 2007). Nevertheless, the overall picture is dismal. Essential resources are depleted and almost none of the assets seems to increase. Therefore, even the “flexible” Hartwick Rule seems to be violated. Most countries and probably the planet in total are in decline. The once so optimistic perspective that every next generation will be richer than the one before has faded away. The world is in a regressive rather than in a progressive state. So what happened to the idea of progress? As it turned out it is a self-deception: There has been and there still is progress for many (rich) people, but not on a global scale, that is, no overall increase of the wealth of nations. As mankind is receiving the bill for over-consumption, only a few manage to escape the burden. To make these conclusions more solid, much more research would be needed in this field.

Policies for a Postgrowth Society

As the sustainable (postgrowth) economy and society is in many aspects fundamentally different from the growth age, change and restructuring has been characterized as “great transformation.” It is not just about decline (and rise) of industries, that is, standard structural change, but moreover it is a cultural revolution, change of values, attitudes, and institutions. The goal is a prospering economy and society within environmental limitations no longer depending on economic growth (Wachstumsunabhängigkeit). Independence of growth (Raworth 2017: “growth agnostic,” “A-growth”) is not a characteristic of any actual economy. This redirection of the development process has not yet started. And there is little experience how this could best be supported by government policy. Although it is clear that government has to play an important role (WBGU 2011), unrealistic assumptions about public policy capabilities have to be avoided.

As outlined two components are essential:

1. Shared long-term vision of “future we want” and good life – beyond supply of more goods. This positive vision has to be developed and communicated continuously – not only by government but also by civil society organizations and by the science system. Without this component, the transformation process will lose acceptance.
2. Professional transformation planning which minimizes transformation costs and frustrations – for individuals, companies, and the economy in total. Changes in GDP (per capita income) are still relevant, however no longer dominating government policy. Economic fluctuations will continue, that is, years with positive growth rates might occur.

Long-Term Vision

Could a postgrowth society be attractive and win voters’ support? This depends first of all on problem awareness. Do (many) people understand that their lifestyle is damaging the planet and burdening future generations? Sufficiency and de-growth are then welcome as a “pain relief” and there is willingness to pay a price. After all, this price is no exorbitantly high for two reasons: For wealthy people higher income is not highly attractive (decreasing marginal utility; Easterlin 1995) and future costs of inactivity would be even higher (Stern 2006). As illustrated already by Mill (1848) and Keynes (1930) a stationary state could be part of a positive vision. However, the visions and images created by the powerful needs-stimulating advertising-industrial complex drive societies permanently in the opposite direction.

The basic transformation conflict which will be hard to moderate is about intragenerational justice. Under de-growth conditions, protection of vulnerable groups means more redistribution of incomes and wealth. To protect low-income households from decline of income, higher income groups will have to pay more taxes. How will the privileged react? Do the lucky ones in the lottery of life understand their responsibility

and are they willing to share (more) with the less privileged? The uncertainty about the outcome of the redistribution struggle and the fear of individual social decline is a huge barrier to transformation. Investment in social capital (inclusion, participation, dialogue, and conflict resolution mechanisms) is vital and has to start today. The better prepared it is, the less painful will the birth of a postgrowth society be (Jackson 2018).

Transformation Process – Slower by Design, not Disaster (Victor 2008)

In the transformation process to SD, pressure increases for all groups. Different qualifications and skills are needed, often with lower payment and status, sometimes at different locations (dislocation). Overall, uncertainty is increasing with only vague hope for a better future. Starting from a quite comfortable status quo, defense of this status and aversion against change is plausible. During the transformation process, all forms of resistance will occur (in companies, in the political arena). Transition design and management will be crucial based on resilient and reliable institutions (schools, education, science, media, courts, police).

Government policy and the science system are confronted with unresolved research issues: To what extent is it possible to control and to manage macroeconomic growth rates? Is growth feasible (design vs. systems dynamics)? Now the issue not just about the slope of a trend curve but much more fundamental: How to end an era of almost hundred years of economic growth orientation (soft landing)? How to sustain microdynamics (creativity and innovation) and make sure that “stationary state” is different from “stagnation”? How to avoid a self-feeding crisis (socio-economic tipping point) with huge losses for all (like world economic crisis 1929).

First of all a reliable framework has to be established by definition of goals to reduce uncertainty and to change expectations: deadline for nuclear power, for coal-fired power plants, for fossil-fuel cars. Next, transition planning has to include stimuli and compensation measures to

make structural change more acceptable for affected people and companies.

All forms of growth policy have to be stopped: growth-stimulating measures (e.g., in the tax code), unspecific subsidies for R&D, revise deregulation. Laws which define growth as goal for government policy have to be abated. Government expenditure has to be restructured, for example, infrastructure investment: no new roads, runways and terminals – bike lanes and public transportation instead. Environmental restrictions have to be “translated” in regulations and concrete caps, for example, parking lots, runway slots.

What could government do to better prepare companies and managers for the no-growth world? Stimulate more competition or encourage more co-operation? Are higher (net) profits necessary to kindle (eco-, social-) entrepreneurial spirits? How to provide more (green) venture capital for start-ups? Companies are used to a growth world and are, in general, not prepared to thrive in a no-growth environment – where competition intensity might increase, traditional business models will fail and average entrepreneurial talent might not be enough.

Consumption and Product Innovation

The micro-fundament of postgrowth is consumption. Increasing incomes are needed to fulfill consumption wishes far beyond basic needs. Human needs seem to be unlimited and the business sector is not only producing new goods but also the preferences and the demand. Permanent product innovation keeps up consumers demand. Innovation is at the same time the engine of premature obsolescence. Acceleration of innovation is identical with reduction of product life-cycles. Hyperconsumption creates rising material and waste flows. All this is supported and stimulated by a sophisticated market research, marketing and advertising industry. However, this industry is just the appendix. The real cause is misled innovation. The flood of “new” consumer goods has to be critically evaluated and redirected so that it can really contribute to good life instead of driving the rat race. The core question of sustainable

development in rich countries is “how much is enough” (sufficiency). This starts a creative search for new lifestyles and consumption patterns which emphasize “less” in all fields of consumption (from mobility to housing and food). This is not the end of the pursuit of happiness and increasing well-being. However, fundamental learning and change process (social innovation) are necessary. How could government support and stimulate this by systematic sufficiency policies? Many measures have been proposed (e.g., general speed limit, restrictions on advertising, control of premature obsolescence) but there is still a lack of consistent and effective concepts (Potocnik et al. 2018).

Future of Work and Sufficiency Policies

Consumption is part of the decision on time allocation: how much time for work (income), how much for leisure time (work-life-balance)? In a broader perspective, work is not just paid work but includes all activities which are necessary to create the social product and to sustain individual and social assets (capital). Markets and market incomes reflect only part of it. Work in private households and in civil society organizations is neglected, that is, investment in human capital and in social capital. Work is not just a sophisticated trick to organize a peaceful and pious society (as Smith 1776 suggested) but a component of a good life which is not just important for income generation but also self-esteem and for social inclusion (Illich 1973; Schumacher 1973). Flexibility and reduction of working hours will be key as well as the organization and enrichment of work. These are important elements of “good life” in a postgrowth society. Government, companies, and unions have to reconsider their concepts to support more flexibility and less focus and paid work.

Income and Redistribution

Fairness is an important component of happiness and it is a core issue of good life in postgrowth societies. Without growth distribution becomes more important. This includes equal opportunities (starting in the education system), access to public goods (infrastructure), distribution of income and wealth. All government activities will have to

include distributional aspects more systematically. In transformation processes, fear of social degradation (“Abstiegsangst”) is increasing and has to be addressed. After a period of “greed is good,” it is important to emphasize the fundamentals of the social contract: There have to be (equal) chances for everyone (social mobility). And those who make it to the top have an obligation to repay to society (for what they have received from the beginning in the health care and education systems to the institutions which guarantee their safety). Success is never the result of individual effort only.

Perspectives

While the global debate on sustainable development and on the UN SDGs has broad public and political attention, this is almost never framed as a “postgrowth” debate. In the context of poor countries, this is not surprising. But in advanced rich countries, the perspective of long-term growth has to be addressed instead of systematically neglecting it. It should be addressed more intensively in (economic) research and in public policy for two reasons:

1. There is a realistic chance that long-term zero or negative growth will dominate in many high developed countries. There are many (system-immanent) drivers in this direction which in combination might be strong enough to be beyond control (optimal adaptation).
2. The values and policy priorities have changed significantly as a consequence of the knowledge about (the cost of) climate change and biodiversity loss. With new priorities conflicting goals have to be reevaluated. If growth is incompatible with environmental sustainability goals, it turns from problem-solver to problem. It is therefore no longer desirable and no-growth is not a disaster. Government policy has to switch from supporting to restricting growth.

For both reasons, it is urgent to reinforce research and public debate on the long-term

visions which could replace the growth promise and on the transformation period which could be crisis-ridden. The window for debate is closing and pressure to act is increasing. Only few pioneer countries are moving ahead (such as Denmark and Sweden, see Sachs et al. 2019), although there is room to move even under conditions of international competition. Environmental disasters are hitting everywhere; change of awareness, attitudes, and behavior is proceeding simultaneously in many countries. The typical prisoner's dilemma (co-operate only if the others would do so) is no longer relevant. And yet political change is so slow.

As it is obvious, well-reported, measured, and documented what happens to the present generation and what will hit future generations even more dramatically, it is strange to see all kinds of debates on additional public debt to finance investment, for example, in (sustainable) infrastructure projects in the context of a "Green New Deal". This could reduce next generation's environmental cost (e.g., cost of climate adaptation) and hence leave them with higher net income. Instead they will have to pay higher taxes to repay the government loans. So the net income effect may not be much difference, however, the risk portfolio is much more positive: It is easier to handle creditors than to handle the incalculable risks of the climate system. However, this debate misses the core point: This generation should not continue to burden future generations at all – neither with climate change nor with additional government debt. Instead it is high time to start with repaying the debt of decades of over-consumption. This is not a time of emergency – at least not in the rich nations. Means, tools, and technologies are available. Therefore, there are no good reasons for passing on the burden only to continue the over-consumption party. The Corona Crisis has interrupted the party, but hopes and expectations are that a fast recovery and the return to normal is possible (V scenario). People and nations are not prepared for a "new normal" yet.

As outlined already by Veblen (1899), (demonstrative, conspicuous) consumption is the fundament of social status. Status and recognition in a

postgrowth society have to be delinked from consumption, income, and wealth. This reduces the incentive to go for and to defend higher incomes. Other components need to get more public attention and recognition, for example, intellectual contributions and volunteering in social services. As emphasized by Schumpeter (1942), capitalism cannot survive if it is not attractive for its intellectual elites to defend the system.

Science system is free (not) to address the postgrowth issues. As policy priorities change and public interest increases (e.g., S4F), responsible science has to respond, or its relevance will decline. There is the perception that "panic" (Greta Thunberg) would be an adequate reaction to the sustainability (climate) challenges. In panic human beings and society could do all kinds of irrational things. If science does not provide answers and guidance, unexpected panic reactions might dominate. "Listen to science" is good advice only if science delivers – not just diagnosis (of climate change) but also solutions. The end of the growth age hits rich societies and citizens unprepared. Most people are still in the delirium of the growth party – as the band continues to play on the Titanic.

Cross-References

- ▶ [Degrowth](#)
- ▶ [De-growth](#)
- ▶ [Sufficiency](#)
- ▶ [Rebound Effects of Eco-efficiency](#)

References

- Boulding, K. E. (1966). The economics of the coming spaceship earth. In H. Jarrett (Ed.), *Environmental quality in a growing economy* (pp. 3–14). Baltimore: Johns Hopkins Press.
- Boulding, K. E. (1973). The shadow of the stationary state. *Daedalus*, 102(4) The No-Growth Society, 89–101.
- Daly, H. E. (1996). *Beyond growth: The economics of sustainable development*. Boston: Beacon Press.
- Daly, H. E. (2014). *From uneconomic growth to a steady-state economy*. Cheltenham/Northampton: Edward Elgar Publishing.
- Dasgupta, P. (2007). *Economics. A very short introduction*. Oxford/New York: Oxford University Press.

- Easterlin, R. (1995). Will raising the incomes of all increase the happiness of all? *Journal of Economic Behavior and Organization*, 27, 35–47.
- Gordon, R. J. (2016). *Rise and fall of American growth: The U.S. standard of living since the Civil War*. Princeton/Oxford: Princeton University Press.
- Hartwick, J. M. (1977). Intergenerational equity and the investment of rents from exhaustible resources. *American Economic Review*, 67, 972–974.
- Illich, I. (1973). *Tools of conviviality*. New York: Harper and Row.
- Jackson, T. (2009). *Prosperity without growth: Economics for a finite planet*. London etc: Earthscan.
- Jackson, T. (2018). *The post-growth challenge. Secular stagnation, inequality and the limits to growth. CUSP working paper no 12*. Guildford: University of Surrey.
- Keynes, J. M. (1930). Economic possibilities for our grandchildren. In *Essays in persuasion* (pp. 358–373). New York: W. W. Norton.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: Chicago University Press.
- Kurz, R. (2014). Green growth and sustainable development. In R. Moczadło et al. (Eds.), *Regional and international Competition – A challenge for companies and countries* (pp. 11–20). Pforzheim: Pforzheim University.
- Kurz, R. (2015). Quality, obsolescence and unsustainable innovation. *Ekonomski Vjesnik, Econviews. Review of Contemporary Business, Entrepreneurship and Economic Issues*, 28, 511–522.
- Kurz, R. (2019). Post-growth perspectives: Sustainable development based on efficiency and on sufficiency. *Public Sector Economics*, 43(4), 401–422. <https://doi.org/10.3326/pse.43.4.4>.
- Latouche, S. (2010). *Farewell to growth*. Cambridge, UK: Polity Press.
- Meadows, D., et al. (1972). *The limits to growth. Report to the Club of Rome*. New York: Universe Books.
- Mill, J. S. (1848). *Principles of political economy with some of their applications to social philosophy*. London: Longmans.
- OECD. (2011). *Towards green growth*. Paris: OECD.
- Olson, M. (1973). Introduction. The no-growth society. *Daedalus*, 102(4), 1–13.
- Polanyi, K. (1944). *The great transformation*. New York: Farrar & Rinehart.
- Potocnik, J., et al. (2018). *Sufficiency. Moving beyond the gospel of eco-efficiency*. Brussels: Friends of the Earth Europe.
- Putnam, R. D. (2000). *Bowling alone. The collapse of American community*. New York etc: Simon & Schuster.
- Randers, J. (2012). *2052: A global forecast for the next forty years, launched by the Club of Rome*. White River Junction: Chelsea Green Publishing.
- Raworth, K. (2017). *Doughnut economics. Seven ways to think like a 21st-century economist*. London: Random House.
- Rockström, J. et al. (2009). A safe operating space for humanity. *Nature*, 461, 472–475.
- Sachs, J., et al. (2019). *Sustainable development report 2019*. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).
- Schmelzer, M. (2016). *The hegemony of growth: The OECD and the making of the growth paradigm*. Cambridge, MA: Cambridge University Press.
- Schumacher, E. F. (1973). *Small is beautiful. A study of economics as if people mattered*. London: Blond & Briggs.
- Schumpeter, J. A. (1911). *Theorie der wirtschaftlichen Entwicklung*. Berlin: Duncker & Humblot. Engl.: *Theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. New York: Harper & Brothers.
- Smith, A. (1776). *The wealth of nations. An Inquiry into the nature and causes of the wealth of nations*. New York: Random House.
- Stern, N. (2006). *The economics of climate change (Stern Review)*. London: Grantham Institute.
- Stiglitz, J. E., Sen, A., & Fitoussi, J.-P. (2009). *Report by the commission on the measurement of economic performance and social progress*. Paris.
- Summers, L. (2016). The age of secular stagnation: What it is and what to do about it. *Foreign Affairs* 95(2), 2–9.
- UN (2012). United nations conference on sustainable development, Rio+20, <https://sustainabledevelopment.un.org/rio20>
- Veblen, T. (1899). *The theory of the leisure class*. New York: MacMillan.
- Victor, P. (2008). *Managing without growth. Slower by design, not disaster*. Cheltenham: Edward Elgar.
- WBGU German Advisory Council on Global Change. (2011). *World in transition. A social contract for sustainability*. Berlin: WBGU.
- WCED World Commission on Environment and Development. (1987). *Our common future*. New York: Oxford University Press.
- Weizsäcker, E. U. v., Lovins, A. B., & Lovins, L. H. (1997). *Factor four: Doubling wealth, halving resource use*. London/Sterling: Earthscan.
- Weizsäcker, E. U. v., et al. (2009). Factor five. Transforming the global economy through 80% improvements in resource productivity. In *A Report to the Club of Rome*. London/Sterling: Earthscan.
- Wenar, L. (2016). *Blood oil. Tyrants, violence, and the rules that run the world*. Oxford: Oxford University Press.

Poverty

► Malnutrition and Sustainable Management

Power Equalizing

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Synonyms

Accountability to impacted stakeholders;
Collaboration; Critical social responsibility;
Dialogue; Equality; Nonexploitative power;
Social justice

Definition

Power is a complex and contested concept that is notoriously difficult to define. It relates to the ability to influence people or a situation. This ability to influence can involve a continuum of varying degrees of pressure to obtain compliance or agreement, from persuasion through force – either threatened, physical, or legal (Lukes 1974). Power can be exercised directly in interpersonal interactions and indirectly through extra local relations of ruling of the power elites.

In the context of sustainable development, power dynamics are at the center of struggles over the rights and interests of businesses, governments, groups, communities, and ecosystems. There is no straightforward fit between these stakeholder's often incompatible rights and interests. In fact there are differing levels of status, resources, and political leverage which skew sustainability issues in favor of dominant interests. Sustainable management needs to address the issue of inequality between the range of stakeholders involved in ecological and social license conflicts. If the status quo of power inequalities persists, it will continue to be difficult to achieve change toward pro-sustainability outcomes. In the absence of power-equalizing mechanisms, it will be hard to address the lack of accountability for failures of social and

environmental responsibility of business operations and governments. Consequently, to enable sustainable development, there is a pressing need for leadership which is based on cooperative and nonexploitative use of power and power-equalizing strategies.

Introduction

There is a worldwide struggle occurring between the rights and interests of nation-states, multinational mining companies (MNCs), citizens, and ecosystems. How the trade-offs occur indicates the flow of power with high-power entities (e.g., MNCs) tending to gain at the expense of low-power groups (e.g., small rural communities and animals in proximity to mine sites). Dominant interest groups in society have established systems of governance and norms for business practices that are maintained to their advantage through legislation, policies, the media, and dominant discourses. Marx and Engels (1848) historic claim that the owners of the means of production are the elites of society remains true in contemporary forms of capitalism which is based on often unchecked globalized flows of capital and labor.

Foucault (1980) explains that dominant ideas of the powerful can create docile bodies of the citizenry. The citizenry capitulates, in this case, to the logic of capital in the hands of the elites and their right to plunder the earth's resources for the supposed benefit of society. MNCs gain power and authority through legislation (e.g., mines acts that approve licenses and leases); political influence; leverage through the promise of jobs, including the threat to cut jobs; the promise of taxes and royalties; and access to human and financial resources. MNCs can also leverage social influence by gaining a community license to operate. The government has power and authority by virtue of its regulatory role of business; the legally constituted system of governance; its representative role on behalf of the public's interest; and access to human and financial resources.

Foucault (1980) explains that where there is power, there is also resistance to that power. This relates to the idea of power not being a possession or given to the elites but able to be exercised and challenged through a range of social processes and institutions. Resistance and reaction to the business practices of MNCs typically take the form of activism by impacted stakeholders and their supporters. Impacted social groups and communities have power that is located in democratic processes such as social power to resist via the right to protest and lobby; legal redress such as class action against business entities for harm and loss; submissions against licensing and appeals to business operations; voting; and the ability to collectivize to make claims to protect human rights, health, and the environment. People power can take many forms and has varying degrees of ability to influence high-power stakeholders. At the same time, people power does not always have direct legal authority or the ability to readily access capital and other resources to mount campaigns and raise public awareness in situations of ecological conflict.

When environmental and social justice interest groups such as Get Up! garner financial and political influence, their authority is relentlessly challenged by the dominant vested interests. Get Up! is a community-based and community-funded organization with a website that promotes activism for a fair, flourishing, and just Australia (see <https://www.getup.org.au>). The maligning of leftist and greenie groups such as Get Up! reached a fever pitch in 2014 when the prime minister of Australia cultivated an “us versus them” politics. He denied climate change was an issue and argued against a carbon emission tax on polluting industries, calling on people to join his “Team Australia” or be constructed as anti-development and anti-Australian. In such conservative, neo-liberalist contexts, MNCs can exacerbate patterns of advantage and disadvantage in a host society. For example, in early 2019, a backlash from powerful industry groups against the Western Australian state government saw the government dropped its attempt to legislate environmental offset requirements on industry.

The chairman of the government’s Environmental Protection Authority was targeted in a multi-million dollar smear campaign that resulted in the government withdrawing its environmental offset legislation.

A dominant discourse that maintains the power of big business is that they are crucial for nation-state’s economic survival. This is linked to an unquestioned belief that wealth so generated will trickle down to bring about equality of opportunity and address the welfare needs of the society. The key assumption is that capitalism and the wealth-centralizing tendencies of MNCs can provide for human well-being and environmental sustainability. This assumption is being challenged on a number of fronts by the anti-globalization movement and other activist groups and organizations. Nevertheless, the dominant mode of production continues to be the use of natural resources, and often the exploitation of human labor and animals, for the extreme wealth of a few entities and individuals. Mills (1957/1978) claims the very rich are the power elite which includes the military, the state, and corporations. He writes that the power elites of society have a myriad of ways to accumulate advantages that generate further wealth. This accumulation of extreme wealth is possible due to the exploitation and profiteering of elites at the expense of disadvantaged groups, localities, environments, and animals. That is, the profit-driven logic of big business, especially in the mining sector, creates inequality and can exacerbate pre-existing inequalities in the host nation-state.

Inequality is embedded in western capitalist societies which have adopted strong neoliberalist policies and a light touch approach to regulating the mining and large-scale farming sectors. Neo-liberal ideology favors tax breaks and concessions to big business to stimulate the economy. It is usually coupled with a constrained or regressive welfare, education, and health policy agenda which does little to address the unfair access to the wealth of a society. In Australia, for example, there is a two-tiered economy where the wealth accrues to the owners of big business entities. The other economy for the majority of the population is typified by poverty, housing insecurity,

unemployment, stagnating wages, impoverished rural localities, and health disparities. Globally, the gap between the rich and the poor is widening unless governments are proactive in implementing universal welfare and income protection and in equalizing taxation disparities.

The basis for economic and land rights inequality is located in the legalized pursuit of profits by privately owned MNCs whose business is premised on the depleting of the natural resources. For example, the ability of Indigenous People to claim exclusive ownership to their ancestral lands remains contested even in countries where the legal recognition of their land rights has been achieved. When MNC power is not sufficiently checked, it results in the plundering of nation-state's and sovereign people's lands and resources.

The Sustainability Issue

Globally, there are increasing ecological conflicts; gaps between wealthy and poor people and countries; loss of biodiversity; and climate change impacts. These factors can combine to disproportionately harm disadvantaged groups and countries and add to environmental degradation. There is little evidence that claims of corporate social and environmental responsibility by MNCs are of sufficient substance to be turning these concerning trends around. Corporate social responsibility (CSR) refers to business's proactive efforts to ensure a social value to their operations. Ideally, CSR would manifest when social, environmental, and economic dimensions of sustainability are in balance. A dynamic balance between social, environmental, and economic sustainability is not possible in the case of the extractive industry sector. Mining is inherently unsustainable. Profits are possible precisely because of the exploitation of the environment and unequal treatment of stakeholders. It is usually the responsibility of nation-state governments to ensure that industry is adequately regulated. Some writers suggest the failure to ensure the sustainability of industry is an example of state crime.

CSR tends to be limited to social reporting of a narrow range of philanthropic activities, and a commitment to CSR rarely extends to directly informing the governance and operation of the business entities. The idea of the triple bottom line challenges business practices to be geared toward economic, environmental, and socially sustainable outcomes. Yet as has been shown, there is an unequal set of power dynamics where economic interests outweigh environmental and social sustainability claims. CSR is often espoused but not evident in the resource extraction sector which has the greatest adverse impact on people, place, and ecosystems. MNCs should not be the sole arbiters of business sustainability and CSR to enable this sustainability when they are collectively the main threat to it.

A different order of ideas and strategies is needed to counter the limits of industry-defined and industry-instigated CSR. Issues of unsustainable development are most evident in situations of conflict over land rights, the rights of communities to live without being polluted or intruded upon by MNCs, and the rights of animals and ecosystems to survive. These also tend to be situations of major power disparities skewed in the favor of MNCs where the trade-offs are determined by business interests. When there is such unequal bargaining power, attention needs to be given to how power is being used and possibly abused. CSR literature tends not to explicitly confront this issue of unequal power as the issue that needs addressing for sustainable development.

The idea of *critical* social responsibility draws attention to the unequal and unfair access to power of MNCs especially in the mining sector and often in tandem with governments. Governments can experience conflicting loyalties as they are meant to be both the regulator of that industry and act in the interests of the public. Critical social responsibility refers to strategies which constrain the power of dominant stakeholders and seek their accountability to low-power stakeholders (Ross 2017). When the environment is the impacted stakeholder, it becomes more pressing to ensure it is not irreversibly harmed. For example, despite rigorous research by an expert, an Australian state

government refused to accept that the increasing acidity caused by large-scale mining in the remote Burrup Peninsula is causing the deterioration of Indigenous rock art. The evidence is not enough to shift the dominant interests of government to protect the largest and oldest collection of rock art in the world. This presumably would look different if the rock art was not located in a booming resource area. The government and industry groups argue that development and the rock art can coexist together, maintaining their dominant discourse of being the authorities and experts on the matter. The art is being dissolved by the acid from mining operations, and the science that proves this is a known risk worldwide. Yet more mines and expansions are in the development pipeline at this time.

Interrelatedly, in situations where local communities are being adversely impacted by mining operations, it is manifestly unfair that these same communities have to struggle to be heard about those impacts (see, e.g., a community activist website CAPS Inc., <https://caps6218.org.au>). Research shows that industry intrusions into communities have very divisive effects; it depletes infrastructure and social capital, with no obligation on the business to compensate for harm done. Sustainable development is not possible in circumstances of unequal power between the stakeholders. The piecemeal successes that are hard-won by environmental activists are not of sufficient magnitude to turn the tide of plundering of the planet's shrinking resources.

Ways to Enable Power Equalizing for Sustainable Development

There needs to be a range of power-equalizing strategies across all the points of leverage used by MNCs to maintain their control. The main purpose of big business is profit-making for their shareholders and owners. The logic of profit-making is not sustainability centered or driven. It cannot be left to the voluntary self-regulation of businesses to care about, or to know, what the public's interest is and to act in the public's interest. Nation-states that hold the regulatory

authority to ensure development is sustainable will always be under pressure from big business and in tension with impacted stakeholder's rights and interests. Thus, it is essential that legislation in the areas of environmental protection; health and public safety; foreign ownership of land; and planning is attuned to challenges from business interests. As part of the lobbying and pressure tactics of big business, nation-states could limit the use of media campaigns by business as one point of counter-leverage to self-interested promotion. Where state-level authorities are overridden by business pushback against pro-sustainability measures and decisions, the federal level of authority needs to be invoked. When the governance system of a nation-state is overridden by MNCs and when failures of CSR occur, an international authority with legally binding powers needs to arbitrate on the sustainability issue. The social precautionary principle should be exercised in tandem with the environmental precautionary principle at this international level. Higgins (2010) argues that there should be no business or entity which is beyond the rule of law. She proposes a Bill of Nature's Rights and an extension of the Declaration of Human Rights to include Mother Earth. Brown calls for a global democracy, an international parliament of the people:

We need a strategy. We need action based on the reality that is our own responsibility [as citizens of Earth], everyone's responsibility ... democracy – ensuring that everyone is involved in deciding Earth's future – is key to success. (2014, p. 194)

In specific situations of ecological conflict, direct strategies which engage all interested stakeholders need to be premised on dialogue where parties meet as equals and where power is equalized and nonexploitative. The dialogues need to be pro-sustainability focused with the requirement that the economic dimensions of the sustainability issue need to be in balance with social and environmental considerations. The multi-stakeholder dialogues need to be backed up by a legal requirement of participation by high-power stakeholders to ensure appropriate accountability for harm done and to negotiate fair and sustainable outcomes.

One method for ensuring a power-equalizing approach to the dialogues is the use of legally binding warrants or agreement protocols. The warrants that will need to be instigated and upheld by all parties are:

1. A willingness to focus on matters of significance to impacted stakeholders
2. Attention to, and the checking of adverse effects of, corporate and government power relations
3. Substantive and relevant contributions to the issue
4. Building sincere relationships and holding relationships over the life of the issue (Ross 2017, p. 9)

The warrant-based dialogue method is designed to enable equal participation of all interested stakeholders. There is not though an equal responsibility to resolve the sustainability issue. The high-power entities have different orders of responsibility, that is, higher levels of responsibility, to take accountability for their actions, or failures to act, that have caused the unjust or unsustainable situation. It is not the environment in all its diversity and dynamic livingness that is responsible for human intrusion against it. It is also not the communities who are experiencing, for example, industry-generated pollution or devastation from the collapse of tailings dams that are responsible for the harm.

Summary

Sustainability managers have a role to play in providing leadership in situations of ecological conflict to ensure power-equalizing strategies are employed as part of MNC's corporate social responsibility. MNCs can become sustainability focused by supporting power-equalizing strategies with adversely impacted stakeholders. Further, MNCs' willingness to fairly negotiate the trade-offs between economic, social, and environmental aspects of development can significantly contribute to the securing and keeping a community license to operate.

Cross-References

- [Ecology and Ecosystem: Sustainability](#)
- [Environmental Responsibility](#)
- [Equality](#)
- [Social License to Operate](#)
- [Social Sustainability](#)
- [Stakeholder Dialogue](#)
- [Sustainable Growth](#)

References

- Brown, B. (2014). *Optimism: Reflections on a life of action*. Melbourne & London: Hardie Grant Books.
- Foucault, M. (1980). *Power/knowledge: Selected writings and other interviews*. New York: Pantheon.
- Higgins, P. (2010). *Eradicating ecocide: Laws and governance to prevent the destruction of our planet*. London: Shephard-Walwyn Publishers Ltd.
- Lukes, S. (1974). *Power: A radical view*. London: Macmillan.
- Marx, K., & Engels, F. (1848). *The communist manifesto*. (trans: Moore, S.). London: Workers' Educational Association.
- Mills, C. W. (1957/1978). *The power elite*. Oxford: Oxford University Press.
- Ross, D. (2017). A research based model for corporate social responsibility: Towards accountability to impacted stakeholders. *Journal of Corporate Social Responsibility*, 2(8), 1–11.

Powers That Be

- [Authority vs. Bureaucracy](#)

Practice

- [Compliance](#)

Practitioner Community

- [Community of Practices](#)

Prahalad's "Bottom of the Pyramid"

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Synonyms

Base of the Pyramid; BOP; Inclusive Business

Definition

Bottom of the Pyramid (BOP) (also referred to as "Base of the Pyramid") is a term used to describe the poorest socioeconomic segment of the world's population, as well as a management concept that recognizes this segment as a viable market for the world's largest companies. The concept was introduced in the seminal article by Prahalad and Hart in 2002 and subsequently expanded upon in Prahalad's book *The Fortune at the Bottom of the Pyramid. Eradicating Poverty through Profits*, published in 2004.

Prahalad (2004) describes four consumer tiers that constitute the **world economic pyramid**. The very top of it is composed of middle and upper class in developed countries and the few rich from the developing world. They comprise around 20% of the global population and account for about 85% of total income. The middle of the pyramid, tiers 2 and 3, encompasses the middle-income people in developing countries and the poor in developed markets. Finally, the 4 billion people (two-thirds of humanity) largely excluded from the global economy represent the bottom of the pyramid. As defined by the author, this is the world's population with annual income, based on purchasing power parity (PPP) in US dollars, less than \$1,500. It represents a \$13 trillion market full of unsatisfied needs and a perfect testing field for new products and technologies for consumers all over the world. Prahalad proposes that multinational corporations (MNCs) can seek new growth opportunities in low-income markets

and, at the same time, contribute to poverty alleviation and the creation of **inclusive capitalism**. However, doing business at the BOP poses great challenges for companies and requires radical innovation in technology and business models.

Characteristics of BOP Markets

The growing income gap between tier 1 and tier 4 consumers hinders the latter's access to the global economy. Despite its size, the BOP for long has been neglected by the corporate sector, since low-income markets with hard-to-reach and culturally distant consumers have been perceived as not viable (Prahalad and Hart 2002). However, as Prahalad (2004) argues, the view of consumers in developing countries among managers in MNCs has been shaped by a set of false or outdated assumptions. First, it has been assumed that BOP consumers cannot afford even basic Western products and services and, thus, MNCs with the current cost structures cannot profitably serve that market. The second common assumption is that the poor have no use for Western products and services. Third is the view that BOP consumers do not need advanced technology and are not willing to pay for it, and thus, the BOP cannot be a source of innovation. Fourth, BOP markets have been perceived as not important to the long-term growth and success of MNCs. Fifth, initiatives in BOP markets have been viewed as not challenging enough to attract managers willing to run them.

However, the author (Prahalad and Hart 2002; Prahalad 2004) shows that due to ever increasing competition in saturated tier 1, 2, and 3 markets, companies looking for untapped possibilities to grow have started to challenge the dominant views of the poor. The aggregate buying power of the poor is large enough to offer substantial growth opportunities. Tier 4 consumers, contrary to the common view, are very brand conscious. The poor often buy branded and luxury items as an illustration of their aspiration to a different quality of life. They also spend a significant percent of their income on connectivity, as it contributes to the improvement of their economic

opportunities. They are also eager to try out new technologies “because they have nothing to forget” (Prahalad 2004, p. 16). Consumers at the BOP are value-conscious, expecting great quality at prices they can afford. Since many BOP consumers live in high-cost ecosystems controlled by local monopolies and slumlords, they usually pay much higher prices (the “poverty penalty”) for products than middle-class consumers. This creates opportunities for large corporations, whose economies of scale and efficient supply chains allow them to deliver higher quality goods at lower prices without sacrificing attractive margins. Although many tier 4 consumers live in hard-to-reach rural areas, there is also a huge urban population. Additionally, with new information and communications technology, efficient distribution systems can be created even in rural communities.

Key Assumptions of Prahalad's BOP Concept

Prahalad's concept is based on four basic assumptions. First, engagement of private enterprises at the BOP is a critical driver of inclusive capitalism (Prahalad 2004). It creates access to high-quality products and services, previously reserved for the middle-class, and reach. Giving the BOP consumers choice creates a way to escape the high-cost ecosystems in which most of them live.

“By stimulating commerce and development at the bottom of the economic pyramid, MNCs could radically improve the lives of billions of people and help bring into being a more stable, less dangerous world” (Prahalad and Hammond 2002).

Second, the BOP provides new business opportunities that can be realized only through innovation (Prahalad 2011). **Innovation at the BOP** is a continuous process of learning and refinement. According to the author, the innovation process needs to start with deep immersion into local communities in order to access information about their unique needs and problems. While BOP markets are heterogeneous, solutions must be specific to an industry and to a particular target

within the BOP. Companies need to focus on: (1) Affordability – providing world-class-quality solutions for low prices; (2) Awareness – ensuring that the consumers know what is available and how to use it; (3) access – ensuring that products can be accessed even in the most remote locations; (4) availability – ensuring an uninterrupted supply of products and services.

Third, initiatives in BOP markets must be integrated with the firms' core businesses (Prahalad 2004). The author believes that given the size of the BOP markets and opportunities they offer, MNCs do not need to engage in charitable initiatives to help the poor, but rather act in their own best self-interest. The approach presented by Prahalad is based on a win-win assumption – BOP initiatives can contribute to both enhancing the quality of life of local communities and improving companies' profitability. He argues that a shift in thinking about the poor as a problem toward recognizing them as consumers and entrepreneurs opens up new business opportunities. Additionally, MNCs can leverage their experience from serving low-income markets and transfer sustainable innovations for the BOP to their traditional, high-income markets (Prahalad 2011).

Fourth, solutions to the problem of poverty need to be co-created in an ecosystem (Prahalad 2004). Alleviating poverty requires wide intra-sector and intra-industry partnerships. Business opportunities at the BOP cannot be realized unless there is cooperation between large and small companies, governments, nongovernmental organizations (NGOs), development agencies, as well as BOP consumers and entrepreneurs. Eradicating poverty requires large-scale entrepreneurship. However, according to the author, it is MNCs that should take a leading role in this process. Developing necessary infrastructure at the BOP is a resource- and management-intensive task. Large corporations have managerial, technological, and financial resources to handle such initiatives. They also have access to unique global knowledge base and can transfer solutions from market to market. What is more, by sharing their knowledge and capabilities, MNCs are in the best position to bridge various stakeholders and stimulate cooperation.

Operationalization of the BOP Concept

Commercial Infrastructure at the BOP

To overcome the challenges of doing business in low-income markets and serve BOP consumers, companies need to develop the right commercial infrastructure (Prahalad and Hart 2002). The popular assumption is that the poor cannot afford standard Western products and services. Many people at the BOP are either unemployed or are paid below the living wage. Thus, creating buying power is the first condition enabling business operations in low-income markets. This can be achieved through initiatives focused on increasing access to credit and earning opportunities for the local communities. While commercial credit is key for development of market economy, historically it has been unavailable to the poor since most of them operate in the informal economy. Extending credit to the poor and supporting micro-entrepreneurship is possible through a microlending model.

Further, the vast majority of tier 4 consumers live in poorly connected rural areas and urban slums. Thus, investment in better distribution systems and transport links is essential to serve these hard-to-reach communities and improve their access to high-quality products and services.

Another crucial element of commercial infrastructure at the BOP relates to shaping the aspirations of local communities. This can be achieved through investment in sustainable development and consumer education. Such investment not only positively influences consumer choices at the BOP but also may provide the early market pull for disruptive, sustainable technologies in developed markets.

Finally, serving tier 4 consumers is not possible without tailoring solutions to the unique needs and problems of local markets. New business models should not disrupt local cultures and lifestyles. MNCs must combine advanced technology with deep local insight. For example, selling products in small packages so that the poor can afford it, but at the same time investing in sustainable packaging materials in order to decrease the environmental impact of the additional waste produced by the local consumption.

Success Factors

According to Prahalad and Hart (2002), business success at the BOP depends on several factors. First, MNCs need business leadership with high cultural sensitivity and deep understanding of local complexities. Second, MNCs must invest in R&D and market research focused on the unique needs of the poor and possible adaptations of foreign solutions that could address them, as well as identification of potential applications of local solutions. Third, success at the BOP requires the creation of business models that increase employment intensity and, as a result, boost income among the poor. Further, MNCs must reinvent their cost structures to offer affordable products and services. Business processes need to be focused rather on functionality and not the product itself.

Finally, since empowering the lowest income classes generates threat to the existing power structures, serving tier 4 consumers requires building a local base of political support, as well as the creation of alliances with different stakeholders, including local governments, SMEs, and NGOs. With wide partnerships, corporations not only gain deep local insight into and access to resources but also build their credibility.

In an article co-authored with Brugmann (2007), Prahalad puts special attention on MNCs' ability to build trust-based and partner-like relationships with NGOs involved in helping the poor. The interests and capabilities of corporations and NGOs increasingly converge, encouraging the co-creation of "integrated business models in which the company becomes a key part of the NGO's capacity to deliver value and vice versa" (Brugmann and Prahalad 2007, p. 16). Cooperation between NGOs and the private sector aimed at developing hybrid business models in low-income markets helps deliver products at low prices to BOP consumers and/or provide niche products to consumers in developed markets. It increases the corporation's credibility and builds its legitimacy, while expanding the NGO's impact.

According to the authors, governance of company-NGO partnerships should be based on

the following principles (Brugmann and Prahalad 2007):

- Engagement of local customers and entrepreneurs
- Task-oriented relationships
- Combination of global knowledge and standards with local insight
- Companies and NGOs as equal partners
- Social legitimacy through creation of value propositions with credible economic, social, and environmental dimensions

Criticism

Despite being a very appealing proposition, Prahalad's concept has attracted a range of criticism. Karnani (2007) argues that "there is no fortune to be made by selling to the poor" (p. 97) for at least five reasons. First, the author points to the size of the markets presented by Prahalad as having been largely overestimated. According to the World Bank, estimates are of 2.7 billion, not 4 billion people living in poverty in 2001 and, since the average consumption of poor people is \$1.25 per day, this implies a BOP market size of merely \$1.2 trillion. Additionally, BOP consumers spend 80% of their income on basic needs and not on luxury items. Second, providing products in small packages and creating access to credit do not make the products affordable. On the contrary, price per unit is higher than if the product is bought in large packaging and paid for in cash. Third, it is not MNCs that should take the lead in alleviating poverty, but rather local SMEs, which are better suited to exploit opportunities at the BOP. Low-income markets are geographically dispersed, poorly communicated, and culturally diverse. Products targeted at the poor are not technologically complex nor brand intensive. This all reduces the economies of scale in distribution, technology, operations, and marketing, making these market not attractive for large corporations. Karnani (2007, 2009) argues that the BOP concept is "dangerous delusion" (2007, p. 96) because it creates room for exploitation of the poor, who are not value-conscious consumers,

but rather often make economically irrational choices. "The only way to help the poor and alleviate poverty is to raise the real income of the poor" (2007, p. 100) and this can be best achieved not by selling to the poor (even at lower prices) but by buying from them, i.e., looking at them as producers. The key is to create opportunities for steady employment at living wages, increase productivity, and develop efficient markets. Finally, the author concludes that Prahalad's propositions detract from the failure of governments in fulfilling their traditional functions.

Similarly, Jaiswal (2008) argues that the engagement of corporations in economic development of **least developed countries (LDCs)** is unrealistic because of extreme poverty, poor legal framework, high level of corruption, as well as the underdeveloped infrastructure and financial system. He points out that the cases of large corporations thriving at the BOP presented in the literature refer to the most emerging markets, such as India, Brazil, or Mexico, and not LDCs in general. What is more, Jaiswal argues that MNCs should not take a leading role in helping the poor, as their activities are not only typically ineffective, but even detrimental. Marketing practices of MNCs at the BOP can negatively affect the quality of life of the poor by encouraging them to allocate scarce resources to non-essential consumer products instead of satisfying basic needs, such as nutrition and health (see also Gupta 2013). The author underlines that the key to poverty alleviation is free basic education and affordable technical education delivered in cooperation between private and public stakeholders.

Simanis et al. (2008) criticize the propositions presented by Prahalad for oversimplicity and translating poverty alleviation to the "managerially accepted language of customer needs and product development" (p. 57). According to the authors, this strongly economic approach increased opposition among the non-profit and public-sector actors, many of whom started to perceive the BOP merely as a smart business strategy for selling to the poor. Additionally, the BOP has been reduced to one homogenous market, while "in fact, it is not a market at all (...)

[but] a demographic classification” (p. 58, addition – M.R.). The markets at the BOP first need to be created and this requires a co-venturing approach based on empowerment and the participation of local communities (see section BOP 2.0 and the BOP Protocol in ► [Base of the Pyramid](#)).

Cross-References

► [Base of the Pyramid](#)

References

- Brugmann, J., & Prahalad, C. K. (2007). Cocreating Business’s new social compact. *Harvard Business Review*, February.
- Gupta, S. (2013). Making the case for harming the poor – A review of marketing tactics at the bottom of the pyramid. *Journal of Applied Business and Economics*, 14(5), 30–40.
- Jaiswal, A. K. (2008). The fortune at the bottom or the middle of the pyramid? *Innovations: Technology, Governance, Globalization*, 3(1), 85–100.
- Karnani, A. (2007). The mirage of marketing to the bottom of the pyramid: How the private sector can help alleviate poverty. *California Management Review*, 49(4), 90–111.
- Karnani, A. (2009) *The bottom of the pyramid strategy for reducing poverty: A failed promise*. 80 ST/ESA/2009/DWP/80.
- Prahalad, C. K. (2004). *The fortune at the bottom of the pyramid. Eradicating poverty through profits*. Upper Saddle River: Pearson Education.
- Prahalad, C. K. (2011). Bottom of the pyramid as a source of breakthrough innovations. *Journal of Product Innovation Management*, 29(1), 6–12.
- Prahalad, C. K., & Hammond, A. (2002). Serving the World’s poor, profitably. *Harvard Business Review*, September.
- Prahalad, C. K., & Hart, S. L. (2002). The fortune at the bottom of the pyramid. *strategy + business*, (26).
- Simanis, E., Hart, S., & Duke, D. (2008). The base of the pyramid protocol: Beyond “Basic Needs” business strategies. *Innovations: Technology, Governance, Globalization*, 3(1), 57–84. <https://doi.org/10.1162/itgg.2008.3.1.57>.

Precautionary Principle

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Synonyms

“Vorsorgeprinzip”

Definition

The Precautionary Principle is an environmental policy principle used in legislation, policy, and risk management. New technologies like climate engineering, genetically modified crops, nanotechnology, or artificial intelligence are often linked to risks, which are difficult to predict. The Precautionary Principle is applied in decision-making about uncertain but plausible threats to human health or the environment, e.g., as a consequence of using new technologies. In situations which lack scientific certainty, it can be challenging to find the right measures to protect human health or the environment from harm. Put simply, the Precautionary Principle states that lack of certainty shall not be a reason to refrain from taking action to tackle a threat. In other words, it says that in a situation of uncertainty, regulatory action might be a good option (even if scientific data are incomplete or controversial). The Precautionary Principle should be applied if possible effects on human health and environment are serious or unacceptable, even if the risk cannot be estimated. In such situations of uncertainty of scientific results, the Precautionary Principle can be followed as a guidance in decision-making, in the preparation of new legislation, and in applying existing regulations. The Precautionary Principle applies where the probability of occurrence and or the extent of effect cannot be described sufficiently due to incomplete data, inconclusiveness, or public debate about risks. There are various forms of the Precautionary Principle differing

Praxis

► [Phronesis](#)

in strength and weight regarding the need to take action and/or to provide data about the expected outcome. Generally the Precautionary Principle can be summarized as follows: as “uncertainty not being a reason for non-intervention” or as “uncertainty being a reason for (or even demanding) action.” Other policy principles related to the Precautionary Principle are the preventive principle (taking measures to avoid harm), the risk-based principle (scientific evidence-based decision-making), the source principle (treating environmental damage at the source if possible), or the polluter pays principle (actor responsible for the environmental damage carries the cost).

Introduction

The Precautionary Principle is an environmental policy principle intended as a guidance in policy making. It is necessary because obtaining complete scientific certainty is often unrealistic. On the other hand, waiting for full certainty might not be prudent. In the 1970s and 1980s, the awareness regarding hidden costs of technological progress increased. Natural resources were perceived as limited resources, and a common understanding developed regarding the need to address unwillingly created risks of new technologies (Zander 2010). Ricci (2006) refers to an ancient principle of legislation, namely, Justinian’s “do no harm” as one of the conceptual origins of the Precautionary Principle. Many authors refer to the so-called Vorsorgeprinzip when explaining the initial conceptualization of the Precautionary Principle. “Vorsorgeprinzip” was a leading principle in the German Environmental Law of the early 1970s (Holdway 2009; Maguire and Ellis 2003; Tosun 2013). The Precautionary Principle was introduced to facilitate a cautionary approach in environmental policy. Initially, the German term was used in a broader sense than precaution alone, comprising a precautionary as well as a preventive approach. Later a distinction was made between preventive and precautionary concepts (see Trouwborst 2009).

In the 1980s and 1990s, the Precautionary Principle was integrated into several global or international documents. In the Rio Declaration on Environment and Development of 1992 (Annex 1, Principle 15), the Precautionary Principle was given as follows: “In order to protect the environment the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation” (United Nations Environment Programme, UNEP 1992).

Other legal documents mentioning the Precautionary Principle include the Convention on Biodiversity (Preamble), as well as the Lisbon Treaty 2007 amending the Treaty on European Union, Maastricht 1992. Article 191(2) refers to several policy principles, especially to the Precautionary Principle: “Union policy on the environment shall aim at a high level of protection... [and] shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay” (Commission of the European Communities, CEC 2000; Ricci 2006). Three other policy principles mentioned in this article of the European treaties are the preventive principle (taking measures to avoid harm and use resources diligently), the source principle (treating environmental damage as close to the source as possible), and the polluter pays principle (party responsible for the environmental damage carries the cost; Proelss 2016).

Even though the Precautionary Principle is widely integrated in international environmental law, there is no clear-cut definition. It neither represents a detailed operational procedure nor does it set a certain level of protection. It is just a guiding principle, e.g., for environmental law of the European Union (CEC 2000). In the Communication document on how to use the Precautionary Principle, it is specified that it should be applied for uncertain risks to human health and the environment if there is reasonable scientific basis for concern (CEC 2000). Measures

following the Precautionary Principle should be proportional with regard to the envisaged level of protection (excluding any risk at all is usually not possible). Actions based on the Precautionary Principle should be consistent in comparable situations, and they should be cost-effective. Also reviews at regular intervals should clarify whether new scientific information for an improved scientific risk assessment is available (Proelss 2016; von Schomberg 2006). For compliance with the CEC Communication, the attribution of the burden of proof should also be defined. This means it should be clarified whether the actions proposed are assumed to be harmful unless proven otherwise (Proelss 2016). The application of the Precautionary Principle in a decision-making process is independent from setting the appropriate level of protection. Establishing the appropriate level of protection is considered a normative decision in political context without direct link to the application of the Precautionary Principle (Holdway 2009; von Schomberg 2006).

Forms of the Precautionary Principle: Inaction, Action, and Burden of Proof

Depending on the context, there are different forms of the Precautionary Principle. The forms basically vary with regard to three aspects:

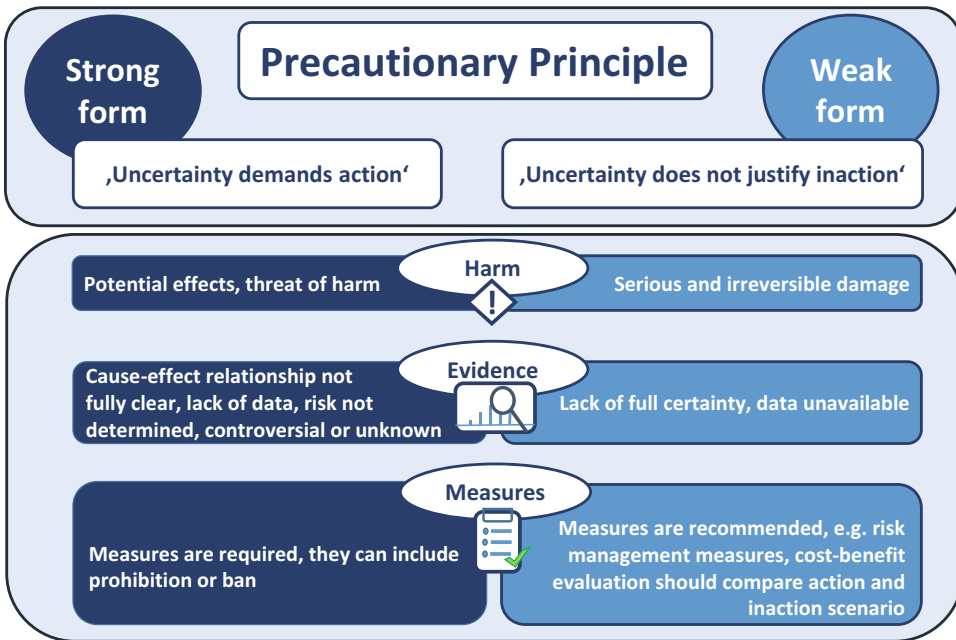
- How serious does the harm need to be to invoke the Precautionary Principle?
- How strongly is a reduction of uncertainty required?
- How strongly is the need expressed to take action?

So, key points of differentiation refer to harm, evidence, and action or measures. Many authors describe two basic forms of the Precautionary Principle, a weaker and a stronger version (e.g., Maguire and Ellis 2003; Tosun 2013). In summary, the weaker version indicates that uncertainty about adverse effects on environment or human health is no reason for noninterference. The stronger version on the

other hand indicates that uncertainty is a good reason to take action. Both versions represent extremes, but there are some gradations in between. Stewart (2002), for example, gives four forms, two of these represent weaker versions and two represent stronger versions of the Precautionary Principle. Science for Environment Policy (2017) describes a stronger, a weaker, and an intermediate form of the Precautionary Principle. The strong form corresponds to a situation where the policy principle is invoked due to a threat of harm although the cause-effect relationship is not fully clear (including lack of data, undetermined risks, and according to some authors also unknown risks). The weak form corresponds to circumstances where the policy principle is applied only in cases of serious and irreversible damage and lack of data as a source of scientific uncertainty. Measures corresponding to the strong form are often strict (e.g., bans), whereas for the weak form, measures commonly include risk management activities. Some authors also give an additional form of the Precautionary Principle, where the so-called burden of proof can be attributed to different actors, e.g., to the proponent of a potentially damaging action rather than to the population in the area (Morgera 2017). So if an actor likes to change a production process to produce a new chemical, for example, he/she would have to prove that the risk of the new production process is acceptable. The weaker form of the Precautionary Principle is more conservative of the status quo; the stronger form of the Precautionary Principle is more open to change processes. Figure 1 gives an overview of a strong and a weak form of the Precautionary Principle differing with regard to three key aspects (harm, evidence, and measures).

The Precautionary Principle: Supported and Controversially Discussed

As explained above, a number of environmental policy principles are used in legislation and decision-making. Among these policy principles, the Precautionary Principle is one of the most widely applied principles, and, at the same time, it is most



Precautionary Principle, Fig. 1 Overview of two basic forms, a strong form and a weak form, of the Precautionary Principle. Both forms vary with regard to three aspects

(harm, evidence, and measures; Garnett and Parsons 2016; Maguire and Ellis 2003; Science for Environment Policy 2017; Zander 2010)

intensely discussed (Holdway 2009; Paterson 2007). Decision-making about environmental risks regarding new chemicals or new technologies requires active contributions from stakeholders in legislation, policy, and risk management. However stakeholders might differ in their perception of risk and the perceived need for intervention. Discussion about the Precautionary Principle is mainly related to the issue that there is no detailed clear-cut definition of it. Some authors state that this policy principle is expressed very vaguely (Garnett and Parsons 2016; Stewart 2002; Zander 2010); other authors recall that the Precautionary Principle is no less vague than others (Sandin et al. 2002). So, the Precautionary Principle does not give a standard operational process description for decisions about interventions regarding complex and uncertain risks. However it favors intervention over doing nothing (Tosun 2013). Thereby the Precautionary Principle can help to protect human health and the environment (Mariqueo-Russell 2017; Zander 2010), but it also increases the need for a more transparent exchange of ideas

and risk management (Tosun 2013). Scientists and policy makers who favor the Precautionary Principle see this as an advantage when it comes to integrating the protection of human health and environmental resources into legislation and decisions. If ideas of stakeholders regarding harm, evidence, and measures are discussed and described in the decision-making process, transparency is guaranteed (Holdway 2009).

To give guidance on how to use the Precautionary Principle in EU legislative processes and decision-making, the EU issued a Communication on the Precautionary Principle (CEC 2000). The Communication outlines a framework for the application of the policy principle. It is expressed that the Precautionary Principle has a scientific basis, as it is applied after gathering information for a scientific risk assessment. Also guidance regarding the measures is given (they should be proportional to the level of protection, non-discriminatory, consistent, based on a cost-benefit analysis of the action and non-action scenario, and the evidence should be subject to review at regular intervals

(CEC 2000; von Schomberg 2006)). This guiding document can help to better apply the Precautionary Principle; however the application of the Precautionary Principle in practice has also caused controversial debate (Science for Environment Policy 2017).

A review of the use of the Precautionary Principle in the European Union in practice has shown that even though judicial decisions largely follow the EU guidance, the application of the Precautionary Principle in legislative decision-making is not always consistent (Garnett and Parsons 2016). However inconsistency is rather linked to the practical application than to the policy principle itself.

Critics of the Precautionary Principle state that it potentially hampers innovation or could be misused to set up barriers for the introduction of new technologies (CEC 2000; Paterson 2007). However, sometimes scientific results are interpreted in different ways between countries. In the discussion about the import of genetically modified crops from the United States into the European Union, the EU adopted a cautionary (or in the view of critics also more protectionist) attitude due to different interpretations of the Precautionary Principle in the United States and the European Union. The World Trade Organization Agreement on Sanitary and Phytosanitary Measures is another example for country-dependent approaches to dealing with uncertain risks. In this agreement it is stated that in case of scientific uncertainty, sanitary or phytosanitary measures can be taken and need to be reviewed regularly (Tosun 2013). So the focus here is on implementing measures in spite of a current lack of scientific evidence.

Outlook: Precautionary Principle and Sustainable Management in Response to Climate Change

On the one hand, a prudent approach to legislation seems useful and is widely supported especially with regard to the need to manage limited environmental resources sustainably. On the other hand, environmental policy and legislation need

to give room to innovative technologies, e.g., to better cope with the challenges of climate change. So the Precautionary Principle is important for policy and legislation in the future. One of the largest future challenges will be to find and implement viable measures to address climate change. As far as major global anthropogenic effects on the earth's climate are concerned, global consensus was reached on the fact that the anthropogenic contribution to global warming is significant and that the effects are serious (Grassl and Metz 2013; Intergovernmental Panel on Climate Change, IPCC 2007). However, climate change is a complex issue, e.g., with regard to the unequal distribution of effects across different countries and between generations. Also, it is difficult to establish direct causal relationships for specific emissions and effects on a small scale. So there is uncertainty about the detailed effects of climate change at a specific location and a specific time. One option to facilitate decision-making about climate change mitigation and adaptation is to follow a precautionary strategy (Frisch 2018). While setting a clear temperature limit in spite of scientific uncertainty regarding specific impacts can be seen as a precautionary approach (Grassl and Metz 2013), controversy about suitable measures for the mitigation of climate change effects also might require precautionary decision-making processes (Grassl and Metz 2013; Reynolds and Fleurke 2013). Applying the Precautionary Principle well to complex phenomena like climate change means to use the principle as guidance step by step. These steps comprise identifying serious harm, recognizing uncertainty, and investigating alternatives such as reduction of emissions or reduction of CO₂ concentration by climate engineering. Here it should be taken into account that the alternatives also pose potential risks to human health and the environment. The steps also include a discussion of the distribution of responsibility to demonstrate the safe use of new technologies. Finally stakeholders should ensure that decisions are subject to review and measures are proportionate (Reynolds and Fleurke 2013). The Precautionary Principle can be an important tool to address complex challenges like climate change because it integrates

uncertainty, complexity, and the difference of values among different stakeholders. Involving stakeholders is a good option to adapt the Precautionary Principle to context and challenge (Karlsson 2004; Paterson 2007). The Precautionary Principle as outlined in international agreements such as the Rio Declaration on Environment and Development can give direction for a more sustainable management of resources.

Summary

The Precautionary Principle is an environmental policy principle. It can help to take action, e.g., by policy makers when there is possible harm to the environment or human health, even though conclusive scientific evidence is not yet available. There are two basic forms of the Precautionary Principle, a stronger form (“uncertainty justifies action”) and a weaker form (“uncertainty does not justify inaction”), which differ with respect to the definition of harm, the interpretation of scientific evidence, and the need to take action. On an international and national level, there are numerous examples for the use of the Precautionary Principle in agreements and decision-making. However there is some discussion regarding how and when to use it. The Precautionary Principle can provide guidance when addressing enormous challenges like climate change or the sustainable management of limited natural resources.

Cross-References

- [Climate Change](#)
- [Rio Declaration on Environment and Development](#)
- [Risk Management](#)
- [Stockholm Convention \(2001\)](#)

References

Commission of the European Communities (CEC). (2000). Communication from the Commission

- on the Precautionary Principle. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52000DC0001>. Accessed 20 May 2019.
- Frisch, M. (2018). Modeling climate policies: The social cost of carbon and uncertainties in climate predictions. In E. A. Lloyd & E. Winsberg (Eds.), *Climate modeling* (pp. 413–448). Cham: Springer.
- Garnett, K., & Parsons, J. D. (2016). Multi-case review of the application of the Precautionary Principle in European Union law and case law. *Risk Analysis*, 37(3), 1–15.
- Grassl, H., & Metz, B. (2013). 14 climate change: Science and the Precautionary Principle. In EEA – European Environment Agency (Ed.), *Late lessons from early warnings: Science, precaution, innovation*. (EEA Report No 1/2013, pp. 308–346). <http://www.eea.europa.eu/publications/late-lessons-2>. Accessed 20 May 2019.
- Holdway, A. (2009). Reducing uncertainty: The need to clarify the key elements of the Precautionary Principle. *Consilience: The Journal of Sustainable Development*. <https://consiliencejournal.org/wp-content/uploads/sites/25/2016/10/5-27-1-PB.pdf>. Accessed 20 May 2019.
- Intergovernmental Panel on Climate Change (IPCC). (2007). Climate change 2007: Synthesis report. Contribution of working groups I, II and III to the fourth assessment report of the Intergovernmental Panel on Climate Change. In R. K. Pachauri & A. Reisinger (Eds.), *Core writing team*. Geneva: IPCC, 104 pp. <https://www.ipcc.ch/report/ar4/syr/>. Accessed 20 May 2019.
- Karlsson, S.I. (2004). Institutionalized knowledge challenges in pesticide governance: The end of knowledge and beginning of values in governing globalized environmental issues. In S. A. Ebbin (Ed.), *International environmental agreements: Politics, law and economics*, 4(2), 195–213.
- Maguire, S., & Ellis, J. (2003). The Precautionary Principle and global chemical risk management: Some insights from the case of persistent organic pollutants. *Greener Management International*, 41, 33–46.
- Mariqueo-Russell A. (2017). Rights of nature and the Precautionary Principle. In A. L. Tabios Hillebrecht & M. V. Berros (Eds.), *Can nature have rights? Legal and political insights* (RCC Perspectives: Transformations in Environment and Society, Vol. 6, pp. 21–27). München: Rachel Carson Center.
- Morgera, E. (2017). The ecosystem approach and the Precautionary Principle. In E. Morgera & J. Razzaque (Eds.), *Encyclopedia of environmental law: Biodiversity and nature protection* (Elgar Encyclopedia of environmental law series, Vol. III, pp. 70–80). Cheltenham: Edward Elgar Publishing.
- Paterson, J. (2007). Sustainable development, sustainable decisions and the Precautionary Principle. *Natural Hazards*, 42(3), 515–528.
- Proelss, A. (2016). Principles of EU environmental law: An appraisal. In Y. Nakanishi (Ed.), *Contemporary*

- issues in environmental law. *Environmental protection in the European Union* (Vol. 5, pp. 29–45). Tokyo: Springer.
- Reynolds, J. L., & Fleurke, F. (2013). *Climate engineering research: A precautionary response to climate change?* (Carbon and Climate Law Review 2/2013; Tilburg Law School Research Paper No. 025/2013). SSRN: <https://ssrn.com/abstract=2340906>. Accessed 30 May 2019.
- Ricci, P. F. (2006). *Environmental and health risk assessment and management. Environmental pollution* (Vol. 9, pp. 1–38). Dordrecht: Springer.
- Sandin, P., Peterson, M., Ove Hansson, S., Rudén, C., & Juthé, A. (2002). Five charges against the Precautionary Principle. *Journal of Risk Research*, 5 (4), 287–299.
- Science for Environment Policy. (2017). *The Precautionary Principle: Decision making under uncertainty* (Future Brief 18). Produced for the European Commission DG Environment by the Science Communication Unit, UWE, Bristol. http://ec.europa.eu/environment/integration/research/newsalert/pdf/precautionary_principle_decision_making_under_uncertainty_FB18_en.pdf. Accessed 30 May 2019.
- Stewart, R. (2002). Environmental regulatory decision making under uncertainty. In T. Swanson (Ed.), *An introduction to the law and economics of environmental policy: Issues in institutional design* (pp. 71–126). Oxford: Elsevier.
- Tosun, J. (2013). *Risk regulation in Europe assessing the application of the Precautionary Principle* (SpringerBriefs in political science, Vol. 3, pp. 39–50). New York: Springer.
- Trouwborst, A. (2009). Prevention, precaution, logic and law: The relationship between the Precautionary Principle and the preventative principle in international law and associated questions. *Review of European, Comparative and International Environmental Law*, 18(1), 26–37.
- United Nations Environment Programme (UNEP). (1992). Rio declaration on environment and development. <http://www.jus.uio.no/lm/environmental.development.rio.declaration.1992/portrait.a4.pdf>. Accessed 30 May 2019.
- von Schomberg, R. (2006). The Precautionary Principle and its normative challenges. In E. Fisher, J. Jones, & R. von Schomberg (Eds.), *Implementing the Precautionary Principle: Perspectives and prospects* (pp. 19–42). Cheltenham: Edward Elgar Publishing.
- Zander, J. (2010). *The application of the Precautionary Principle in practice: Comparative dimensions*. Cambridge: Cambridge University Press.

Prequalification Processes (Clients Demanding of Potential Suppliers)

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Synonyms

Initial selection; Preselection; Presolicitation; Pre-tender; Shortlisting

Definition

Assessment of prospective or potential suppliers, contractors, or consultants using pre-approved criteria such as eligibility, financial ability, technical capability, etc., to establish a list of suppliers, contractors, or consultants that meet the minimum criteria for a specific contract or a regular project before inviting them to submit their solicitations, proposals, tenders, or bids (UN 2020; IDB 2019; WB 2018; ADB 2018; UNCITRAL 2014; EBRD 2012).

Introduction

An ideal procurement system, whether from the public or private perspective, is one when a procuring entity (organization in need of goods, services, or construction works) can easily get its needs for goods, services, or works from the best of the available suppliers, consultants, and contractors in the market, and adopting a pre-qualification process is one of the available strategies in “choosing amongst the prequalified, the ones best qualified to be solicited” (UNCITRAL 2011).

While purchasing activity of public entity is the same as that of the purchasing departments in businesses, the latter has more flexibility since public procurement uses government funds; hence, it must comply with specific procedures in the applicable government regulations while

Premium

- Bonuses (Employee for Performance)

adhering to international state agreements, e.g., the World Trade Organization Public Procurement Agreement (WTO-GPA), or loan/grant agreements, e.g., sovereign projects of multilateral development banks (MDBs).

This contribution, however, is limited to prequalification process in public procurement, which private purchasers may use as guide in understanding the minimum requirements and procedures for prequalification process in applying for a government project or contract. Although it also excludes any prequalification process in case of public-private partnership (PPP), it may still be useful as guide in projects financed by MDBs that have similar guidelines for procurement projects and PPP projects such as the Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD) and the Inter-American Development Bank (IDB).

In public procurement, prequalification should be differentiated from preselection (e.g., Article 49 of the 2011 UNCITRAL Model Law on Public Procurement) or presolicitation (e.g., presolicitation notices and conferences under the US Federal Acquisition Regulation) (Cibinic et al. 2011).

In prequalification, all prequalified suppliers or contractors may present submissions/offers/bids/tenders (UNCITRAL 2014; IDB 2019; ADB 2018).

In the case of preselection, the 2011 UNCITRAL Model for Public Procurement (UNCITRAL Model Law) explains that the maximum number of prequalified suppliers or contractors that will be permitted to present their submissions must be already indicated in the preselection proceedings (i.e., the preselection notice must indicate, for example, that the minimum suppliers or contractors that will be “prequalified” are the first three most qualified suppliers or contractors). The maximum number of participants that will be invited in the preselection proceeding is also indicated (UNCITRAL 2014). While both prequalification and preselection processes use the “pass or fail” qualification criteria in the evaluation of prospective or potential suppliers or contractors (UN 2020; WB 2018; ADB 2018; UNCITRAL 2014; EBRD 2012), the preselection

procedure requires an additional “competitive” requirement, usually a ranking, in the establishment of the maximum number of suppliers of contractors (e.g., the preselection involves, after a pass/fail examination, a ranking against the qualification criteria and the selection of the best qualified up to the established maximum) (UNCITRAL 2014). In short, preselection is more restrictive than prequalification as it provides both the minimum and maximum numbers of “preselected” (i.e., usually, the best of all the prequalified) suppliers or contractors to be invited to a solicitation, offer, bid, or tender.

Presolicitation is commonly used in the United States (i.e., presolicitation notice under the US Federal Acquisition Regulation, 48 CFR § 5.204) (GSA, 2019) as a procurement vehicle to develop competition in advance to prospective procurement through the use of presolicitation notices (e.g., general procurement notices informing potential competitors of the intention to conduct a procurement using other than competitive procedures) or presolicitation conferences (i.e., early exchanges with industry when competitive negotiations are employed instead of open and competitive bidding) (Cibinic et al. 2011).

Just like prequalification, presolicitation invites potential “qualified” competitors to submit an expression of interest in response to a presolicitation notice, and the procuring entity has the obligation to include all the interested competitors (those who submit a timely expression of interest in response to the presolicitation notice) in the issuance of the tender or solicitation through either a request for quotation (RFQ) or a request for proposal (RFP) (Id.). Presolicitation, however, gives the procuring entity an obligation to evaluate a single response to a presolicitation notice for a possible sole source award (Id.), which is not the case in a prequalification process, unless it is an embedded stage in a restrictive procurement procedure, e.g., competitive dialogue or competitive negotiation, under the European Union (EU) procurement regulations (EC 2018b).

A similar practice, but referred to as “pre-tender market consultation,” is observable in OECD countries like Latvia (through its website) and New Zealand (“Meet the buyers events for certain

categories of supplies”, e.g., small and medium enterprises), a practice in which “sellers send their expression of interest to meet with particular buyers via a simple web form” and “buyers shortlist businesses they want to meet” (OECD 2019), albeit no contract award can be made from an invitation or notice to a pre-tender market consultation, unlike in the US notice to a presolicitation.

This contribution, however, focuses its discussion on the use of prequalification process as a formal stage in the selection of potential suppliers, contractors, and consultants. It includes the usual procedures for registration and qualification of suppliers such as the supplier registration system or prequalification system for suppliers, which provides the minimum requirements for supplier registration to minimize the qualification procedures (Article 59 (5), Directive 2014/24; EC 2018a). Any procuring entity may maintain a supplier registration system that allows all registered (“prequalified”) suppliers to participate in a public procurement. Nonetheless, such registers cannot be used as substitute for the “prequalification process” under open and competitive solicitation/bidding/tender using multi-staged procurement (EBRD 2012) nor the “prequalification stage” in restrictive or selected solicitation/bidding/tender (EC 2018a).

The prequalification process, also known as “initial selection process” (WB 2018), that is included in this contribution refers to the “generally acceptable” (i.e., common requirements or standards in prequalification process irrespective of jurisdiction) process of shortlisting applicants in the procurement of goods, works/construction, or consulting services to ensure that only those with appropriate and adequate capacity, capability, and resources are invited to submit their bids, proposals, or tenders, using the standard guidelines and requirements for prequalification in the UN Procurement Manual (UN 2020); the Inter-American Development Bank’s Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank (IDB 2019); the World Bank Group Procurement in Investment Project Financing for Goods, Works, and Non-consulting and Consulting Services (WB

2018, as revised in 2018); the Asian Development Bank Prequalification Guidance Note on Procurement (ADB 2018); the European Bank for Reconstruction and Development Guidance Notes on the Prequalification of Tenders (EBRD 2012); the EU Directives on Public Procurement 2014; the US Federal Acquisition Regulations on presolicitation notices (48 CFR § 5.204) and prequalification (48 CFR § 236.272); and the 2011 UNCITRAL Model of Public Procurement (UNCITRAL 2011) and its Guide to Enactment (UNCITRAL 2014).

Purpose of Prequalification Process

Prequalification process is intended to identify, at an early stage, suppliers or contractors with qualifications and experience that are suitably qualified to perform a specific contract (UN 2020; IDB 2019, WB 2018; ADB 2018; UNCITRAL 2014; EBRD 2012) and, thereby, minimize the risk of non-performance (ADB 2018; EBRD 2012). This stage may also be considered as the beginning of the formal procurement process to select a private sector provider (UN 2020). Only vendors/suppliers/contractors that meet established criteria are invited to a solicitation, tender, or bid (shortlist) (Id.).

Application of Prequalification Process

Prequalification process constitutes as an exception to the general rule on public and unrestricted solicitation (UNCITRAL 2014). Prequalification exercises apply in instances where there is a need to limit the list of invitees (bidders/offerors/tenderers) (WB 2018), by narrowing down the number of submissions that a procuring entity will evaluate from those qualified suppliers or contractors (UNCITRAL 2014).

In fact, procuring entities use prequalification process as a tool to facilitate the effective procurement of relatively complex subject matter (Id.) or high-value goods, construction, or services (e.g., the need for custom-designed equipment, plant, specialized services, some complex information

and technology, procurement under turnkey, design, and build), or management contracting (WB 2018; ADB 2018; EBRD 2012), and as a necessary requirement for innovative works or in other cases in which the high cost of preparing detailed bids/tenders/offers could discourage competition (IDB 2019).

In some cases, prequalification process is also used in purchases of a relatively low value but of a highly specialized nature (UNCITRAL 2014) or as basis of framework agreements (EBRD 2012) (i.e., an agreement between the procuring entity and the selected suppliers concluded upon the completion of the first stage of the framework agreement procedure, qualification of suppliers/contractors) (UN 2011) or in cases “where the number of bidders which are likely to be qualified is high or where a standing list of prequalified bidders is to be established for group or contracts to be awarded over time” (ADB 2018).

The UN Procurement Manual categorizes the use of prequalification process in at least three instances:

- a. The high costs of preparing detailed bids could discourage competition (such as custom designed equipment, design and build projects, or specialized services).
- b. The requirement involves complex technical components for which the vendor needs to have minimum technical capability and capacity to complete the works to the required quality standard such as construction works.
- c. As determined necessary to achieve the best outcome for the procurement process for highly complex needs (UN 2020).

In most procurement systems, prequalification process is “optional and should be used for ‘fit-for-purpose’ basis” (ADB 2018) albeit may be used regardless of the method of procurement used (UNCITRAL 2014). Nonetheless, “not all EU Member States used the prequalification process regularly” due to “lack of standard tender documents and contract forms” and “unnecessary additional effort from both the contracting entity and tenderer” (Niewiadomska et al. 2011).

It is worth to note, however, that prequalification process in the EU procurement system is already embedded in four of the five procurement procedures under the 2014 EU Directive on public procurement: (1) restrictive procedure (i.e., a two-stage process where only preselected tenderers may submit tenders on the second stage), (2) competitive procedure with negotiation (i.e., shortlisting of at least three candidates who are invited to submit an initial tender and then negotiate), (3) competitive dialogue (i.e., the use of competitive dialogue among shortlisted operators based on their capacity to perform the contract), and (4) innovation partnership (EC 2018a), i.e., a three-stage procurement process that involves prequalification, negotiation, and delivery in a project for development of innovative solution with corresponding resulting innovative products, services, or works (Valenza et al. 2019). It is not commonly used in the EU open procedure since all interested operators can submit tenders and all tenders must be considered without any prior selection process (EC 2017; OECD 2019), except in the case of dynamic purchasing system (DPS), a fully electronic system used by contracting authority for purchases of commonly used works, services, or goods that is open to any tenderer that satisfies the selection criteria (prequalification criteria) (Valenza et al. 2019). Any tenderer, however, can apply for prequalification to join in DPS at any time (Id.).

The US Federal Acquisition Regulation authorizes prequalification of sources only when it is necessary to ensure timely and efficient performance of critical construction projects by providing a list of sources that are determined to be qualified to perform a specific construction contract and limiting the offer to those with proven competence to perform the required manner (48 CFR § 236.272).

Requirements for Prequalification Process

The first requirement for the use of prequalification process is the approval of its use by the procurement authority or the head of the

contracting activity (UN 2020). It must be specifically included with rationale or justification in the procurement plan, source selection plan, or acquisition plan of the procuring agency (Id.). Invitations for prequalification must be published or advertised in the relevant agency website and any other relevant media (Id.). Charges for the prequalification documents and development costs (including consultancy fees and advertising costs) are allowed provided the cost should be limited to minimal charges (UNCITRAL 2014) or “nominal fee for the cost of reproduction and of dispatching of the documents by courier” (EBRD 2012).

Procedures for Prequalification Process

Prequalification process begins with an invitation for expressions of interest (EOI) (UN 2020) or an invitation for prequalification (IFP) (WB 2020). The EOI/IFP notice should include the relevant information for the prospective bidders/offerors/tenderers to consider:

- Basic information about the project/contract (i.e., name of the procuring entity, including contact details, number of contract, and/or brief description of the project/contract, details, e.g., deadline for submission of EOI other prescribed forms)
- Special conditions/requirements of the project/contract (scope of work)
- Evaluation criteria, i.e., eligibility, experience, financial condition, etc., and their relative weights (qualification criteria and requirements)
- The procedure for final selection (prequalification procedures) (WB 2020)

The following are the common procedures for prequalification process:

1. The process guarantees that solicitation or tender documents, i.e., requests for proposals (ROP), requests for quotations (ROF), and invitation to bid (ITB), are issued only to vendors/suppliers/contractors with adequate

capabilities and resource. (UN 2020; WB 2018; ADB 2018; UNCITRAL 2014; EBRD 2012). Adequate time must be allowed for potential vendors/suppliers/contractors to prepare responsive applications or expression of interest (UN 2020). For UN-funded projects, the period between the invitation for prequalification and the deadline for submission of a response shall be “no less than 10 working days” (Id.), but, in most cases, it is usually “consistent with the WTO-GPA provisions on the submission of applications,” i.e., not less than 25 days from the date of publication of notice (EBRD 2012).

2. In prequalification, minimum requirements are normally assessed on a pass/fail basis against published criteria (UN 2020; WB 2018; ADB 2018; UNCITRAL 2014; EBRD 2012). All applicants or interested competitors that substantially meet the minimum qualification requirements are invited to submit a tender, a bid, an offer, or a quotation (Id.). “Scorable” prequalification criteria, i.e., criteria related to the special requirements of the project that are scored against a predefined scoring scale for purpose of comparing the relative capabilities of all applicants, may be added to the pass/fail prequalification criteria (ADB 2018).
3. The assessment of an applicant’s qualifications does not usually take into consideration the qualifications of other firms such as its subsidiaries, parent entities, affiliates, subcontractors, or any other firm different from the firm that submitted the prequalification application (ADB 2018; WB 2018), except in case when one of the requirements in the notice of prequalification includes a specialized process, e.g., construction operation that requires installation and commissioning of specialized engineering systems or underwater repair work, and the qualifications of the specialist from subcontractors are not available in-house, which could result in disqualification of the applicant (EBRD 2012).
4. At the end of the prequalification process, the procuring entity is required to inform all applicants or interested competitors of the results of the prequalification (IDB 2019; WB 2018;

- ADB 2018; EBRD 2012). The invitation to submit a bid or an offer or tender to a prequalified supplier/vendor/contractor shall include the names of all prequalified suppliers/vendors/contractors (EBRD 2012).
5. Prequalification procedures are conducted using objective terms and conditions (WB 2018) that are fully disclosed to participating suppliers or contractors; they are also designed to ensure a minimum level of transparency and to facilitate the exercise by a supplier or contractor that has not been prequalified of its right to challenge its disqualification (UNCITRAL 2014).
 6. Complaints challenging the terms of prequalification/initial selection documents are allowed within a specific period, usually at least 10 business days prior to the deadline for submission of bids/proposals/tenders (WB 2018).

It is worth to note that prequalification is “distinct from the bid process” (ADB 2018; EBRD 2012); hence, it is not intended to cover any aspect of the proposal for the project or factors related to the indicative contract (UNCITRAL 2014). These elements, i.e., price and merits of the specific tender (EBRD 2012) and technical and financial aspects of specific bids (ADB 2018), are considered at the later stages of the procurement process.

Qualification Criteria

Prequalification criteria must adhere to the basic principles of public procurement or its “three overarching principles” – competition, transparency, and integrity (Schooner 2002); and since prequalification may “limit competition,” it requires that the qualification criteria must be not only “appropriate for the purposes of the specific procurement” (UNCITRAL 2014) but also objective (i.e., capable of objective assessment and application), proportionate, non-discriminatory (CCH 2019) (i.e., equal or equitable treatment) (UNCITRAL 2014), fair, and transparent (EBRD 2012).

Moreover, the prequalification criteria must not “inhibit competition nor limit the number of eligible applicants” through an “overly strict or excessive criteria, i.e., beyond what is strictly necessary for the needs of the contract... or overly lenient results to an excess of unsuitably qualified applicants” (ADB 2018).

The typical qualification criteria include eligibility or legal status (i.e., registration, nationality/citizenship; for MDB-funded projects, e.g., ADB, EBRD, IDB, WB, eligibility includes affiliation to any of their member states), general and particular experience (i.e., historical contract non-performance, contract of similar size and nature, current obligations and pending awards), technical capability (i.e., management capabilities, personnel capabilities, average annual turnover equipment availability, manufacturing capacity, workplace health and safety management system), financial situation/position, and litigation history (UN 2020; IDB 2019; WB 2018; ADB 2018; UNCITRAL 2014; EBRD 2012). Sustainable procurement considerations, i.e., social and environmental sustainability, may also be applied in the prequalification of firms (WB 2018).

Advantages of Prequalification

Prequalification provides advantages both to the procuring entity and the prospective bidders/offers/tenderers (ADB 2018; EBRD 2012).

For procuring entity and prospective suppliers/vendors/contractors, prequalification allows them to:

- Screen potential bidders/offers/tenderers for contract specific requirements and capability (ADB 2018; EBRD 2012)
- Reduce or eliminate the need to evaluate bids/offers/tenders from unqualified bidders/offers/tenderers (ADB 2018)
- Enable prospective bidders/offers/tenderers to understand minimum requirements, providing them with the opportunity to join with other prequalified bidders/offers/tenderers to bid/submit offer/tender for a contract (Id.)

- Expose potential conflicts of interest of prospective bidders/offerors/tenderers with other parties involved in the prequalification (Id.)
- Enable identification of prospective bidders/offerors/tenderers eligible for domestic preference, where this is applicable (ADB 2018; EBRD 2012)
- Enabling prospective bidders/offerors/tenderers who may be insufficiently qualified on their own to avoid the expense of tendering or to enter into a joint venture, consortium, or association, which may have a better chance of success, or consider working as a sub-contractor on a project (EBRD 2012)

For procuring entities, prequalification enables them to:

- Alter the procurement strategy in response to the level of interest from qualified prospective offerors/bidders/tenderers (ADB 2018)
- Select potential contractors/suppliers, who meet project-/contract-specific qualification criteria and, therefore, are deemed to be capable of performing the project/contract satisfactorily (EBRD 2012)
- Assess the interest generated by the project among qualified firms and to make any necessary adjustments to the procurement process (including, in particular, the evaluation methodology, the conditions of contract – sharing of risk, payment terms, liquidated damages, warranty, or completion times – which may be perceived as onerous by potential bidders/offerors/tenderers) (Id.)
- Reduce the amount of work and time involved in evaluating tenders from unqualified contractors or suppliers (ADB 2018; EBRD 2012)
- Encourage local firms to form joint venture with other local or foreign firms, thereby benefiting from their resources and experience (EBRD 2012)
- Eliminate or significantly reduce problems associated with low prices submitted by bidders/offerors/tenderers of doubtful capability (Id.)

On the other hand, prospective bidders/offerors/tenderers benefit from prequalification process by:

- Avoiding the expense of bidding if not sufficiently qualified (ADB 2018)
- Building confidence that unqualified competitors will be excluded from submitting unrealistically low bids (Id.)

Moreover, the well-qualified firms may also price their tenders with the knowledge that they will be competing with other qualified tenderers that meet the appropriate minimum competence criteria, while they are assured that competitors lacking the necessary qualifications will be excluded from tendering, thus encouraging leading contractors or suppliers to tender (Id.).

Disadvantages of Prequalification

Potential disadvantages of prequalification include that (i) it may increase the total procurement process time and (ii) it may facilitate corruption and collusion among applicants, since the identification of prequalified applicants will be made public (ADB 2018).

References

- Asian Development Bank (ADB). (2018). Prequalification guidance note on procurement, June 2018.
- CCH. (2019). Awarding public contracts – Ireland. *International Encyclopedia of Cyber Law*, WL 973562.
- Cibinic, J., Jr., et al. (2011). *Formation of government contracts* (4th ed.). New York: Wolters Kluwer Law and Business.
- Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC.
- European Bank for Reconstruction and Development (EBRD). (2012). Guidance notes on the prequalification of tenderers, June 2012.
- European Commission (EC). (2017). Measurement of impact of cross-border penetration in public procurement, final report, February 2017.
- European Commission (EC). (2018a). EXEP report on regulatory aspects and legal interpretation in e-procurement, 2018.
- European Commission (EC). (2018b). Public procurement guidance for practitioners on avoiding the

most common errors in projects funded by the European Structural and Investment Banks, February 2018.

General Services Administration. (2019). Department of Defense, National Aeronautics Defense, Federal Acquisition Regulation, Vol. I, Part 1–51.

Inter-American Development Bank (IDB). (2019). Policies for the procurement of goods and works financed by the Inter-American Development Bank, May 2019.

Niewiadomska, E., et al. (2011). Public procurement assessment: Review of laws and practice in the EBRD region. EBRD.

OECD. (2019). Report on the implementation of the recommendation of the Council on Public Procurement, C (2019)94 final, pp. 60–61.

Schooner, S. L. (2002). Desiderata: Objectives for a system of government contract law. *Public Procurement Law Review*, 11, 103.

UNCITRAL. (2014). Guide to enactment of the UNCITRAL model law on public procurement.

United Nations. (2011). Glossary of procurement-related terms used in the 2011 UNCITRAL model law on public procurement, official records of the General Assembly, sixty-sixth session, supplement no. 17 (A/66/17), annex 1, 22 June 2011.

United Nations (UN). (2020). United Nations procurement manual, ref. no.: Dos/2020.9, 30 June 2020.

2011 United Nations Commission on International Trade Law (UNCITRAL) model law on public procurement (see also, Nicholas, Caroline, UNCITRAL Working Group (Procurement), and UN Secretariat, The UNCITRAL model law: An example for the global community; R. H. Garcia (Ed.), *International public procurement: A guide to best practices*. London: Globe Business Publishing Ltd, 2009. “The Model Law has become an important international benchmark in procurement law reform and has been adopted or has been used as basis for domestic legislation in several ten of states”).

Valenza, A., et al. (2019). Assessing the implementation of the 2014 directives on public procurement: Challenges and opportunities at regional and local level. European Union.

World Bank Group (WB). (2018). Procurement in investment project financing: Goods, works, non-consulting and consulting services, July 2016 (revised November 2017 and August 2018).

World Bank Group (WB). (2020). Standard procurement document: Prequalification document works, February 2020.

Preservation

- Sustainability (World Commission on Environment and Development Definition)

Presolicitation

- Prequalification Processes (Clients Demanding of Potential Suppliers)

Pressure Groups

- Sustainability and NGOs

Pre-tender

- Prequalification Processes (Clients Demanding of Potential Suppliers)

Preventing Information Misuse

- CSR and Data Protection

Prevention of Wasteful Use of a Resource

- Conservation: Sustainability

Preselection

- Prequalification Processes (Clients Demanding of Potential Suppliers)

Preventive Environmental Strategy

- Pollution Prevention

principal-Agent Conflicts

► Agency Theory

Principal-Agent Theory

► Agency Theory

Principle of Solidarity

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Definition

The principle of solidarity is a socio-ethical and political concept which states that it is fair and just that benefits and obligations are justly shared between members of the society.

Description of the Principle of Solidarity

The name of the principle is derived from a French word *solidarité*, meaning solidarity or support. In modern Europe, the word solidarity gained much attention in the 1980s, thanks to social and workers' movement *Solidarność* in Communist Poland which was led by Lech Wałęsa and which played an essential role in the advocacy of workers' and social rights.

The fundamental idea behind the principle of solidarity is a Christian understanding of a person as an individual substance of rational nature which has intrinsic value. Interconnected persons create societies. Due to interconnectedness, rationality, and intrinsic value belonging to a person,

people bear the responsibility for the community. In turn community, as a group of persons, has a responsibility to cater to a person. In essence, the principle bridges the opposing sides of individualism and socialism by understanding obligation from two starting positions: the person and the community. Looking from two starting perspectives makes the solidarity principle different from individualism which starts from persons and from socialism which starts from the collective. Also, the principle of solidarity is not aimed against competition. It does not advocate for some weak sentimental. What it is aimed at is emphasizing the responsibility of individuals for the whole. Societies can function properly only if individuals understand that for their own good and progress, it is necessary to take an active part in accomplishing the common good. This taking part often consists of sharing part of resources, and sometimes it entails limiting individual perhaps unrealistic aspirations. In the Christian tradition, the principle of solidarity together with the principle of the common good, the principle of subsidiarity, the principle of freedom, democratic principles, and private property forms a core of social principles which are underpinning moral societies.

The Pontifical Council for Justice and Peace (2004) in *Compendium of the Social Doctrine of the Church* (§ 194) emphasizes that ties uniting men should be recognized, as well as the freedom for common growth which all men share and can participate in. The idea is further developed like this: "(...) into the willingness to give oneself for the good of one's neighbour, beyond any individual or particular interest" (§ 194). It also means that people are required to recognize that they are in debt to the society because of all living conditions societies provide and that these conditions should be preserved for future generation so that they may as well partake in the gift of the society (§ 195). This principle has to be manifested in the communities since the collective can only function adequately if an individual feels a lasting commitment to the whole, but the whole also acknowledges an individual and its freedom and value. In the

Catholic social teaching, this principle is especially noticeable in the encyclical letter by the Pope John XXIII (1963) *Pacem in Terris*.

As a political concept, solidarity has a long history in Europe, but it is not always clear what it means; this mainly refers to the notion of European solidarity which is used in political discourse in many different contexts (Gainer 2017; Schmale 2017). For example, the principle might be evoked to rationalize why does society, through various methods of taxation, redistributes wealth in order that people who are worse off in that society receive aid so they can live their life with dignity aligned with their intrinsic value as persons. Another context in which principle of solidarity is used is globalization, it is often being stated that countries should act in accordance with the principle of solidarity and it should be avoided that one country takes advantage of another. Also, in many countries, various versions of social security policies are based on the principle of subsidiarity. Furthermore, the principle of solidarity might be evoked to call for groups or individuals in a certain community to help others when they face certain dangers or have suffered harm.

The principle of solidarity, besides values of lasting peace, unity, equality, freedom, and security, is one of the key ideas on which the European Union has been built (EurWORK 2011). The principle is mentioned explicitly in Articles 2 and 3 of the Treaty of the European Union (Consolidated version of the Treaty on European Union 2012). In Article 3, it is highlighted that the European Union is going to promote solidarity among member states. The principle is also present in many European civil law systems, and in them, it usually has two connotations (Steinvorth 2017, p. 9). The first one is that resources of people or organizations not responsible for the damage are sometimes used to help repair them. The second context in which solidarity is used is when help is called for by partner parties if some difficulties arise which were previously stipulated in the agreements. For example, the European Foundation for the Improvement of Living and Working Condition (EurWORK 2011) states that the principle of

solidarity “is often used in the context of social protection” and that “Implementation of the Solidarity Chapter of the EU Charter aims to build a bridge between programmatic solidarity rights (social and economic rights) and justiciable civil and political rights. Justiciable rights equate to effective and enforceable rights. The challenge is to establish clearly justiciable solidarity rights (e.g. trade union freedom of association, information and consultation, collective bargaining and collective action), and, further, to develop and implement programmatic social and economic solidarity rights: e.g. health, education, etc.”

Cross-References

► Principle of Subsidiarity

References

- Consolidated version of the Treaty on European Union. (2012). https://eur-lex.europa.eu/resource.html?uri=cellar:2bf140bf-a3f8-4ab2-b506-fd71826e6da6.0023.02/DOC_1&format=PDF. Accessed 11 Feb 2019.
- EurWORK. (2011). Solidarity principle. <https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/solidarity-principle>. Accessed 11 Feb 2019.
- Gainer, F. (2017). Introduction: Writing the contemporary history of European solidarity. *European Review of History: Revue européenne d'histoire*, 24, 837–853. <https://doi.org/10.1080/13507486.2017.1345861>.
- John XXIII. (1963). *Pacem in Terris*. http://w2.vatican.va/content/john-xxiii/en/encyclicals/documents/hf_j-xxiii_enc_11041963_pacem.html. Accessed 10 Feb 2019.
- Pontifical Council for Justice and Peace. (2004). Compendium of the social doctrine of the Church, Ch 4. http://www.vatican.va/roman_curia/pontifical_councils/justpeace/documents/rc_pc_justpeace_doc_20060526_compendio-dott-soc_en.html#PRESENTATION/. Accessed 7 Feb 2019.
- Schmale, W. (2017). European solidarity: A semantic history. *European Review of History: Revue européenne d'histoire*, 24, 854–873. <https://doi.org/10.1080/13507486.2017.1345869>.
- Steinvorth, U. (2017). Applying the idea of solidarity to Europe. In A. Grimm & S. M. Giang (Eds.), *Solidarity in the European Union a fundamental value in crisis* (pp. 9–20). Cham: Springer International Publishing AG.

Principle of Subsidiarity

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Definition

The principle of subsidiarity is a socio-ethical and political concept which is based on the idea that decisions should be made on the lowest possible level of an organizational hierarchy. If the lowest organizational level is not in a position, or objectively cannot make a decision, the authority is transferred to the first higher level. Principle of subsidiarity can be looked at as sort of a defense mechanism against interference of higher-level authorities in matters concerning smaller communities, private concerns, and individuals.

Description of the Principle of Subsidiarity

The name of the principle of subsidiarity is derived from a Latin word *subsidium*, meaning help, relief, or reinforcement. This word was used for units in the Roman army who were tasked to give support to the central fighting units if the first line needed it (Thorne 2011). The principle of subsidiarity is a prominent principle of social ethics and is found in the Catholic social teaching and is especially emphasized in the encyclical letters *Rerum Novarum* (Leo XIII 1891) and *Quadragesimo Anno* (Pius XI 1931). In the *Compendium of the Social Doctrine of the Church* (Pontifical Council for Justice and Peace 2004, § 186), principle of subsidiarity is explained by stating that it is unfair to assign to the higher authority something that can be done by subordinate organizational part.

Similarly, on an individual level, it is wrong to take away from individuals something they can

accomplish by themselves. To do that would mean that social body would absorb the individual. The reason for the Catholic tradition of arguing in favor of subsidiarity is because the Church fought to protect against socialism but also to ensure that capitalism does not take advantage of an individual. In the background of such thinking is the idea that the full development of an individual's potential is human good (Follesdal 2013). Also, from this principle of subsidiarity follows that every norm, law, or a process in the society should be aimed at supporting individuals and attaining the common good.

The primary purpose of the principle of subsidiarity is determining the capability of a particular entity, or part of a society, in achieving the common good. In other words, the principle of subsidiarity is the defense of free initiative in society. Thus, society can take on itself only those activities which individuals, or its smaller parts, cannot achieve by themselves. Government of any kind should not take away individual's responsibility on governing his life. The principle of subsidiarity is created not to stand opposite to the principle of solidarity because what the principle of subsidiarity actually stands for is the demand of individuals to invest as much effort as possible in their social life and activities. Said in different words, since the society uses its authority and power for action, the principle of subsidiarity limits and directs how much power can be used and in what circumstances. Social authority should only be used to resolve issues which members of the society are unable to resolve by themselves. As such, the principle of subsidiarity protects individuals from totalitarian states, advocates federalism and decentralization, and emphasizes rights of minorities, small communities, and individuals opposed to rights of the majority.

In essence, the principle of subsidiarity can help to determine when and what kind of intervention is needed from a position of a higher organizational unit in the dealings of a unit on the lower level in the organization. All unnecessary intervention is considered to be unproductive because on one hand the higher authority will spend its resources in an

unnecessary way and on the other hand, in doing so, lower organizational units will not reach their full potential.

In the context of a contemporary political organization, the principle of subsidiarity will advocate in favor of federalism and decentralization. For example, in the European Union, the principle of subsidiarity was formally recognized in the Maastricht Treaty. In the EU the principle of subsidiarity is used “(…) to guarantee a degree of independence for a lower authority in relation to a higher body or for a local authority in relation to central government. It therefore involves the sharing of powers between several levels of authority, a principle which forms the institutional basis for federal states” (Panizza 2018).

Examples of Possible Use of the Principle of Subsidiarity

Principle of subsidiarity can be used to call for or to justify many decisions in different areas of social life. For example, the principle of subsidiarity can be used in order to stop government from ordering a privately owned business to make a certain decision. It can also be used to argue against subsidizing a certain company if the company should be able to resolve matters it is facing on its own. In addition, the principle of subsidiarity can be evoked in everyday situations if an intervention from a higher authority, in activities of a lower organizational unit, is called for. For example, in the workplace context, micromanagement is often looked at as a wrong approach to management. The individual which is being micromanaged by a higher authority can never develop enough to face and resolve challenges that should be solvable on that level, and the activity itself often is the cause of much frustration. On the other hand, the higher-level authority is using its limited resources on something that is fundamentally counterproductive.

Cross-References

► [Principle of Solidarity](#)

References

- Follesdal, A. (2013). The principle of subsidiarity as a constitutional principle in international law. *Global Constitutionalism*, 2, 37–62. <https://doi.org/10.1017/S2045381712000123>.
- Leo XIII. (1891). *Rerum Novarum*. http://w2.vatican.va/content/leo-xiii/en/encyclicals/documents/hf_l-xiii_enc_15051891_rerum-novarum.html. Accessed 9 Feb 2019.
- Panizza, R. (2018). The principle of subsidiarity. Fact sheets of the European Union. http://www.europarl.europa.eu/ftu/pdf/en/FTU_1.2.2.pdf. Accessed 9 Feb 2019.
- Pius XI. (1931). *Quadragesimo Anno*. http://w2.vatican.va/content/pius-xi/en/encyclicals/documents/hf_p-xi_enc_19310515_quadragesimo-anno.html. Accessed 7 Feb 2019.
- Pontifical Council for Justice and Peace. (2004). Compendium of the social doctrine of the church, Ch 4. http://www.vatican.va/roman_curia/pontifical_councils/justpeace/documents/rc_pc_justpeace_doc_20060526_compendio-dott-soc_en.html#PRESENTATION/. Accessed 7 Feb 2019.
- Thorne, J. (2011). Battle, tactics, and the emergence of the limites in the west. In P. Erdkamp (Ed.), *A companion to the Roman army* (paperback ed., pp. 218–234). Oxford/Malden: Wiley-Blackwell.

Principles for Responsible Investments

► [UN Principles for Responsible Investments \(PRI\)](#)

Principles of Good Corporate Governance

► [Codes of Good Governance](#)

Private Finance Initiative

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Synonyms

PFI

Definition

Public-Private Partnerships (PPPs) are an alternative way of traditional public sector supplying that constitutes and make new assets. PPPs' most widely used type is the Private Finance Initiative (PFI), which can be defined as financing public projects through private sector investment (Starodubtseva 2015). PFI is used as a financial instrument to finance off-balance-sheet public projects for notifying public debt and includes projects/services, such as schools, hospitals, road construction, prisons, highways, leisure centers, bridges, tunnels, sports facilities, infrastructure. The purpose of PFI was to increase collaboration between the private and the public sectors (Allen 2001; Eaton and Akbiyikli 2005; The House of Commons Committee of Public Accounts 2018; HM Treasury 2019). PFIs were officially used in the UK and spread fastly from there and copied to other countries (Hodge et al. 2017). The use of PFIs increased after 1997 and PFI and its variants are used in many countries today such as Austria, Greece, Portugal, Ireland (Ismail and Rashid 2007; Barlow et al. 2010; The House of Commons Treasury Committee 2011).

Private Finance Initiatives

The private sector has always supplied goods and services to the public (Eaton and Akbiyikli 2005). Governments around the world have tried to increase the engagement of the private sector in providing public services in many different forms such as privatization, private finance for social infrastructures, and contracting out of services (Hall 1998). Privatization is considered as one of the most significant economic policy reforms since the 1970s (Clifton et al. 2006). The UK government is one of the pioneers in privatization (Grout 1997), and during Thatcher's government, these privatizations became widespread. The aim of her government was to create more private-sector involvement in the public sector. In 1992, the UK Chancellor of the Exchequer Norman Lamont explained that PFI was about "ways to extend the range for private

financing capital of projects." PFIs continued to expand under the UK's labor government in 1997, and the UK's coalition government of 2010 also supported this method as a way of financing projects in infrastructure (Eaton and Akbiyikli 2005; The House of Commons Treasury Committee 2011). PFIs formally began in the UK (Pollitt 2000; Khaderi and Abd Shukor 2016), but today PFI and its several types have been increasingly used in many countries (Akintoye and Kumaraswamy 2016; Barlow et al. 2010; Ismail and Rashid 2007). Although PFI continues to be used in many countries, in the 2018 budget negotiations in the UK, Finance Minister Philip Hammond said that he will remove PFI for future construction works. He stated that he made this decision because there was a potential risk to the government budget of PFI. With this decision, it was decided to suspend the PFI, which was signed in 1998 and has a validity of 52 years, in a way that does not include ongoing projects. In short, PFI will disappear completely in the UK by 2050 (Booth 2018). But the reason why the government does not terminate existing contracts is the high compensation payments in the contracts. PFI was criticized by the committee because of these clauses in the contracts, by the budget account office for posing a risk to the government budget (The House of Commons Committee of Public Accounts 2018).

PFI is a type of procurement that involves the private sector operating the design, build, financing, and operation (DBFO) of public facilities. It is a method where the public sector makes a contract with the private sector to build and operate public projects and uses the PFI for a period of 25–30 years (depending on the type of the project) to make the projects. In these projects, the public sector rents the project from the private sector while making annual payments without owning the asset. These annual payments involve interest repayments and debt, asset preservation, maintenance and services, shareholder dividends, and sometimes other services (HM Treasury 2019; House of Commons Committee of Public Accounts 2018; Starodubtseva 2015). PFI projects consist

of three main parties: (i) The Awarding Authority, (ii) The Special Purpose Vehicle (SPV), and (iii) Third-Party Funders. The Awarding Authority can be a local authority or government agency who is responsible for the procurement of the Project. Secondly, SPV is a private sector consortium that is responsible for the completion of the public project from the beginning of the contract to the end and also is the legal owner of the privilege granted by the public. Lastly, Third Party Funders represent bank loans, equity, or bonds (Alshawi 2009). Figure 1 explains the PFI process.

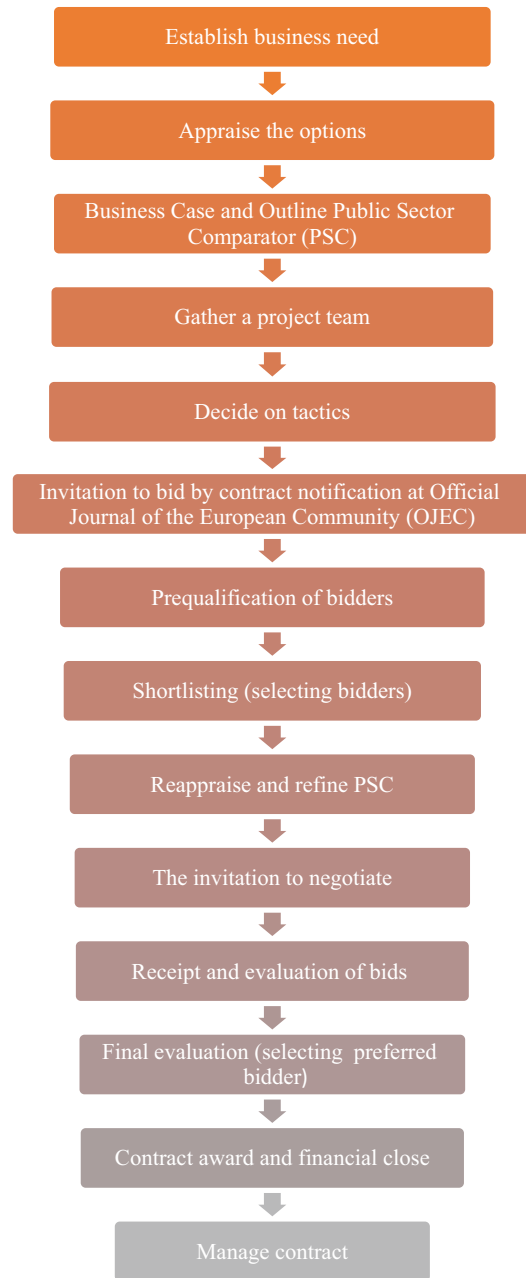
In addition, there are different arguments on whether PFI provides value for money. Supporters of PFI debated that PFI is not only about borrowing money from private companies but composing a structure for better value for money with the help of innovation and management skills of the private sector and transferring risk from the public sector to the private sector (Grout 1997; Eaton and Akbiyikli 2005; Akbiyikli et al. 2011; Khaderi and Abd Shukor 2016). On the other hand, critics stated that PFI is an expensive method of financing public services. PFI projects have long lifetimes, which brings supplemental and unforeseen costs so there is uncertainty about whether they deliver value for money (Froud 2003; Edwards et al. 2004; Coulson 2008).

Real-Life Examples of PFI Projects

PFI includes projects and services that provide benefits to the public sector. According to the HM Treasury Report announced on March 31, 2018, some of the current PFI projects in the UK are shown in Table 1.

Advantages and Disadvantages

PFI can create real benefits in the shape of business profit. PFI projects provide private sector involvement in the public sector, and in this way the public and private sectors can work together. The main aim of PFI is to increase capital flow to



Private Finance Initiative, Fig. 1 A step by step guide to the PFI process. (Source: Based on Treasury Taskforce, Step by Step Guide to the PFI Procurement Process 1999, retrieved from Allen (2001))

projects by using the private sector's money and skills (Eaton and Akbiyikli 2005). Furthermore, through PFI projects, a substantial amount of business risk is transferred from the public sector

Private Finance Initiative, Table 1 Some of the current PFI projects in UK

Project name	Department	Sector	Period of contract (years)	Capital value (£m)
Barnsley Schools PFI	Department for Education	Schools (Non-BSF)	25	47
Bromsgrove Schools PFI	Department for Education	Schools (Non-BSF)	31	64,4
Oldham Sheltered Housing PFI	Ministry of Housing, Communities and Local Government	Housing (HRA)	30	108
Suffolk FRS Serviced Accommodation PFI Project	Home Office	Emergency Services	27	18,8
PFI Eastbrook	Department for Environment, Food and Rural Affairs	Offices	30	18,2
PFI Nursing Homes (Farm Lane)	Department of Health and Social Care	Social Care	25	4,7
Gloucestershire – Community Fire Safety Project	Home Office	Emergency Services	26	25,9
Royal Stoke University Hospital	Department of Health and Social Care	Hospitals and Acute Health	38	415,1
Peterborough City Hospital	Department of Health and Social Care	Hospitals and Acute Health	33	416
PFI Extra-Care Sheltered Housing (Mary Seacole)	Department of Health and Social Care	Social Care	25	3,5

Source: HM Treasury, <https://www.gov.uk/government/publications/private-finance-initiative-and-private-finance-2-projects-2018-summary-data>, Accessed on September 2019

to the private sector. PFI projects also encourage innovation, good design, and delivery of high quality and productivity. PFI can decrease costs and provide a better quality result. It allows doing things that are difficult such as stimulating a new private sector industry development. It also encourages the delivery of projects on time because the private sector cannot receive payment until they deliver the asset. Additionally, PFI affects performance by providing better services determining service levels and imposing penalties in the case of nondelivery of an asset. The public and private sectors make standardized contracts in PFI projects, and both parties encounter fewer contractual errors (National Audit Office (NAO) 2011).

On the other hand, PFIs have some potential disadvantages too. One of the important disadvantages is that PFI can decrease competition because small and medium-sized enterprises may not afford to bid for projects due to their high costs and complexity (House of Commons Treasury Committee 2011). Furthermore, the

lack of long-term contract flexibility can be a major problem for the private sector; therefore, it is very important that both parties negotiate (Dixon et al. 2005). Besides, in PFI contracts such as with a duration of 30 years or more, contracting parties have limited aptitude to predict, prove, or write unexpected events in the future. The complex nature of these contracts includes many parties that have different benefits may be an additional reason for asymmetric information (Mansor and Rashid 2016). Lastly, the public sector pays for the risk transfer in PFI contracts, but the ultimate risk still belongs to the public sector, and also PFI may heighten commercial risks due to expensive contracts with long periods (NAO 2011).

Summary

PFI is the financing of public projects through the use of the private sector. Initially launched in 1992 in the UK, but it has been increasingly used in

many countries nowadays as part of financialization and privatization programs. It uses the private sector's management skills and increases efficiency. The main purpose of PFI projects is to increase the collaboration between the private and the public sectors.

Cross-References

- [Accountability](#)
- [Efficiency](#)
- [Tax Benefits in Brazil](#)

References

- Akbiyikli, R., Dikmen, S. U., & Eaton, D. (2011). Private Finance Initiative (PFI) for road projects in UK: Current practice with a case study. *Traffic & Transportation*, 23(3), 215–223.
- Akintoye, A., & Kumaraswamy, M. (2016). *Public-private partnerships*, Research Roadmap, CIB General Secretariat. In A. Akintoye, M. Beck & M. Kumaraswamy (Eds), *Public-private partnership: A global review* Routledge, London, ISBN 978-04-415-72896-6.
- Allen, G. (2001). *The Private Finance Initiative (PFI)*, House Of Commons Library Research Paper 01/117.
- Alshawi, M. P. (2009). *Concept And Background To Public-Private Partnership (PPP) / Private Finance Initiative (PFI)*. Chairman Iraq Institute for Economic Reforms (IIER) Baghdad, Iraq.
- Barlow, J., Roehrich, J. K., & Wright, S. (2010). De facto privatization or a renewed role for the EU? Paying for Europe's Healthcare Infrastructure in a Recession. *Journal of the Royal Society of Medicine*, 103, 51–55.
- Booth, L. (2018). Goodbye PFI, *House of Commons Library*, Goodbye PFI (parliament.uk), Accessed on February 2023.
- Clifton, J., Comin, F., & Fuentes, D. D. (2006). Privatizing public Enterprises in the European Union 1960–2002: Ideological, pragmatic, inevitable? *Journal of European Public Policy*, 13(5), 736–756.
- Coulson, A. (2008). Value for money in PFI proposals: A commentary on the UK Treasury guidelines for public sector comparators. *Public Administration*, 86(2), 483–498.
- Dixon, T., Pottinger, G., & Jordan, A. (2005). Lessons from the private finance initiative in the UK benefits, problems and critical success factors. *Journal of Property Investment & Finance*, 23(5), 412–423.
- Eaton, D., & Akbiyikli, A. (2005). *A report on PFI and the delivery of public services - quantifying quality*. London: Royal Institution of Chartered Surveyors.
- Edwards, P., Shaoul, J., Stafford, A., & Arblaster, L. (2004). *Evaluating the operation of PFI in roads and hospitals*, ACCA Research Report, 84 <http://image.guardian.co.uk/sys-files/Society/documents/2004/11/24/PFI.pdf>.
- Froud, J. (2003). The private finance initiative: Risk, uncertainty and the state. *Accounting, Organizations and Society*, 28, 567–589.
- Grout, P. A. (1997). The economics of the private finance initiative. *Oxford Review of Economic Policy*, 13(4), 53–66.
- Hall, J. (1998). Private opportunity, public benefit? *Fiscal Studies*, 19(2), 121–140.
- HM Treasury, Current Projects as 31 March 2018. <https://www.gov.uk/government/publications/private-finance-initiative-and-private-finance-2-projects-2018-summary-data>. Accessed on September 2019.
- HM Treasury. (2019). *Private finance initiative and private finance 2 projects: 2018 summary data*, May 2019.
- Hodge, G., Greve, C., & Boardnab, A. (2017). Public-private partnerships: The way they were and what they can become. *Australian Journal of Public Administration*, 76(3), 273–282.
- Ismail, S., & Rashid, K. A. (2007). Rashid private finance initiative (PFI) in Malaysia: The need for and issues related to the Public Sector Comparator (PSC). *Jurnal Akuntansi dan Keuangan Indonesia*, 4(2), 137–154.
- Khaderi, S. S., & Abd Shukor, A. S. (2016). Innovative Implementation of Private Finance Initiative (PFI) Procurement: Challenges and Key Issues in Pre-Construction Stage. *7th Asian Conference on Environment-Behaviour Studies National Taiwan University, Taipei, Taiwan, 09–10 April 2016 / Environment-Behaviour Proceeding Journal*, 1(3), 71–78.
- Mansor, N. S., & Rashid, K. A. (2016). Incomplete contract in Private Finance Initiative (PFI) contracts: Causes, implications and strategies. *Procedia - Social and Behavioral Sciences*, 222, 93–102.
- National Audit Office (NAO). (2011). *Lessons from PFI and other projects*, Report by the Comptroller and Auditor General, HC 920, Session 2010–2012, 28 April 2011.
- Pollitt, M. G. (2000). The declining role of the state in infrastructure investments in the UK. University of Cambridge, Cambridge Working Papers in Economics.
- Starodubtseva, L. B. V. (2015). *PFI: Costs and benefits*, House of Commons Library Briefing Paper Number 6007.
- The House of Commons Committee of Public Accounts, Private Finance Initiatives, Forty-Sixth Report of Session 2017–2019, 13 June 2018.
- The House of Commons Treasury Committee, Private Finance Initiative, Seventeenth Report of Session 2010–2012, 18 July 2011.

PRME

- [United Nations Principles for Responsible Management Education](#)

Probity

► Integrity

Product (RED)

► Product RED

Product Life Cycle

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Synonyms

Commercial life; Life cycle; Portfolio of products;
Product management; Useful life

Definition

Product life cycle is a model that explains the route of a certain product through its useful life in an industry. This model divides the life of a product in four stages; these stages constitute the life span of a product. The first stage is the introduction, where the product is designed, manufactured, and released to the market. The second stage is growth, where sales increase due to increased market penetration and product improvements. The third stage is maturity where sales reach its peak and the cost of the product is reduced by scalability. The fourth stage is the decline; at this stage sales begin to fall probably due to the introduction of new products or obsolescence (Maqbool Waris et al. 2016; Levitt 1965).

Introduction

As stated in the definition, the Product Life Cycle (PLC) is a way of explaining the passage of a

product by an industry. Everyday companies of all sizes and sectors launch new products into the market. The main objective is that the product is as long as possible in the market in order to obtain profits; however, it cannot be used forever, each product has a time of useful life. In this order of ideas, Vernon (1966) proposes the model of the PLC that works to explain the transit of the products through the market where they are offered.

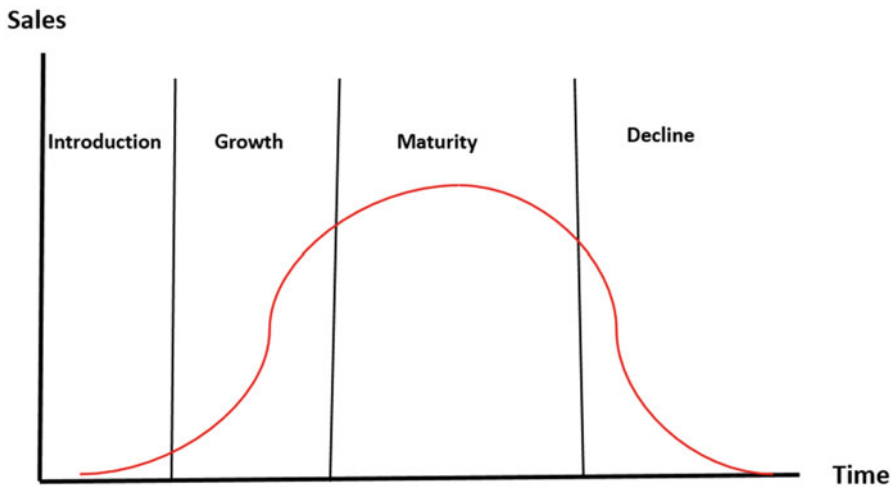
As mentioned, PLC consists mainly of four stages (introduction, growth, maturity, and decline) (Fig. 1). PLC allows the explanation of the dynamics of the markets in relation to the products that are offered (Day 1981). Additionally, PLC was developed from an analogy of biology, specifically from the stages of human growth (Todd et al. 1980). In this order of ideas PLC is a tool for companies to formulate strategies that fit each stage of the PLC.

Originally, PLC was conceived to explain the decisions of foreign direct investment of the companies (Audretsch et al. 2017; Vernon 1966). But in the course of time it became a tool widely used for marketing (Kotler 1984), and among others, it has the purpose of increasing the profits of the products, reduce costs, maximize the value of the products offered and generate more value for customers in the product offerings (Stark 2015).

Also, PLC specifically explains why a product is released. It is important to mention that PLC is not the same for all products; there are products whose life cycle is much shorter than others or products that remain long in the same stage. The above leads to making better decisions about products.

Key Issues

First of all it is important to define what the product is, which in its simplest conception is a set of benefits that a company offers to its clients (Kotler 1984). Few management concepts have been so widely accepted, but at the same time reviled as PLC. The key issues of this concept focus on its simplicity and focus. Some authors point out that PLC has the disadvantage of being very simple (Lambkin and Day 1989), on the opposite side are



Product Life Cycle, Fig. 1 Product life cycle (PLC)

those that consider it a tool of decision making on the strategies of Business (Anderson and Zeithmal 1984). For the above in both cases it is advisable to establish an analysis.

As mentioned, PLC consists mainly of four stages (introduction, growth, maturity, and decline). However, it is important to mention that in each stage the decisions about the products are different. For example in the introductory stage the uncertainty is greater, in order to reduce it the companies manufacture different variants of products (Klepper 1996).

Table 1 presents the characteristics of the stages of PLC. The characteristics presented give an overview of the behavior of the products according to the stage where they are. It is important to mention that these characteristics can have variations according to various factors such as the strategy of the company, the response of the clients, the type of product, and the seasonality. Also, as mentioned, the same product can have different life cycles mainly by the market where it is.

It is important to answer the question that at the time of the PLC the product starts to generate profits. First, during the introductory stage it is lost, since being a new product in the market it still does not present a high volume of sales. It is from the growth stage that the product begins to generate enough sales to obtain profits that allow the recovery of the investment. In the maturity stage the product reaches its maximum peak of sales

and profits, at this point of the PLC it is possible to start considering innovations in the product in order to lengthen the life cycle and/or to think about entering international markets.

One of the most important criticisms of PLC is its simplicity (Taylor 1986). This is based on the fact that the model in its original conception has not considered several exogenous factors that can affect a product, such as: location, environment, and social conditions of the environment. And despite the above, PLC is a very useful strategic analysis tool.

Also, for a company, the development and production of a product is less complex (Stark 2015). The critical part lies in the control of the PLC, since the loss of control at some stage of the PLC can cause significant losses. For example, production costs can be exceeded and/or late on the market causing damage to the company's customers.

One of the main defects of the PLC is the way they are approached by the model innovations (Taylor 1986). In this order of ideas, the products are released to the market (introductory stage) when they are recently created, in most cases these products come to replace others who are in another stage of PLC. Generally, the new products and the products they replace it with are very similar; this generates duplicity. Therefore, innovations within PLC are difficult to address sometimes.

Product Life Cycle, Table 1 Stages of PLC

Characteristics	Introduction	Growth	Mature	Slope
Sales	Low sales	Rapid increase in sales	Maximum sales	Low sales
Costs	High cost for customers	Average cost per client	Low cost per client	Low cost per client
Utilities	Negatives	Increase in profits	High utilities	Low in profits
Clients	Innovators	Early adapters	Majority average	Lingerer
Clients	Few	Growing number	Stable number that begins to shrink	Dwindling number

Source: Kotler and Armstrong (2008)

Another important factor to consider in the PLC is the sustainability. Nowadays companies have to look for alternatives of how to optimize their resources through the technology to be able to offer products friendlier with the environment. Through collaboration with other companies, it is possible to minimize the negative effects of some products with the environment (Trujillo-Suarez 2015; Vila et al. 2015). Also its approach is diverse. Initially it was conceived to explain the investment decisions of the Companies (Vernon 1966). Later, because of its simplicity, it has been used to explain the behavior of business (Audretsch et al. 2017; Anderson and Zeithmal 1984) and to make marketing decisions (Borna and Wahlers 2018). Within the PLC, it has been identified that the same product can be in two stages of the PLC. This refers mainly to products that have been sold in different markets at the same time as companies have used different strategies. For example, in developed countries, mainly products are exported in the introductory stage and in emerging markets, mature products are exported (Audretsch et al. 2017).

It is important to mention that PLC was taken as an analogy of biology; however, one of its limitations is that some products do not behave like a living being (Borna and Wahlers 2018), i.e., it is not generalizable to all. There are products that skip stages and others are kept many years in the same stage, such as Coca-Cola. This makes the PLC not a suitable tool for decision making in certain products.

In conclusion, PLC is a model that caused great impact in its launch; however, it has been surpassed by other models that serve to analyze the markets

and products that exist in the market. Despite this, PLC continues to be a benchmark for analyzing and making decisions in various fields of management, business, and engineering (Goncalvez de Oliveira 2018; Stark 2015). In addition to the increasingly sophisticated product offerings, the increase in competition and the speed of the markets makes it necessary to be more dynamic in the PLC.

Future Directions

The main challenge of PLC is to continue being current today. This validity goes beyond continuing with its initial proposals; it lies in updating the current business needs. Also, following this trend as future areas of research is to test the effect of sustainability in the PLC. Also, to determine new factors that affect the extension of the PLC, in turn to serve as a strategy for companies. While PLC is applicable to several areas of knowledge, it is important to expand its application to other areas. It is important to generate metrics of each of the stages of the PLC to ascertain if you can maintain more or to extend PLC. Likewise is important to test the issues and challenges for the management of a product that have different stages of PLC in different markets.

Due to its importance in the economy, the application of PLC in the service sector is an important area of researching for extending the knowledge about PLC. PLC has shown to be useful for taking decisions about the management of products. However, it is important to clarify if PLC can explain the useful life of services or hybrid products (a mixture between products and services).

Summary

The PLC model is a way to explain and understand the passage of a specific product for a market. The main objective of PLC is to enlarge the life of a product in order to obtain more economic benefits for the organizations. For its implementation, PLC is divided into four stages that depicts a life cycle; these are: introduction, growth, maturity, and decline. Its importance is centered in the time that a product can offer benefits to its consumers and which are the best and suitable strategies to carry out for a specific product. Also, the products have different stages depending on sales, costs, utilities, and clients.

For around 50 years, the PLC has been the most used mode to explain the behavior of a product in a market; however, some new advances and ways to explain the life span of products have relegated it. Is very necessary to update PLC by connecting it to new business practices and approaches (i.e., organizational learning and technology). Furthermore, PLC have been enclosed only in products but in current times the services are an important part of products (for example, the delivery services when you buy a product online); for this reason it is necessary to develop a model of PLC with included services.

Cross-References

- Life Cycle
- Life Cycle Assessment
- Sustainability

References

- Anderson, C. R., & Zeithmal, C. P. (1984). Stage of the product life cycle, business strategy, and business performance. *Academy of Management Journal*, 27(1), 5–24.
- Audretsch, D., Sanders, M., & Zhang, L. (2017). International product life cycles, trade and development stages. *Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-017-9588-6>
- Borna, S., & Wahlers, R. (2018). Product identity over the time and the concept of product life cycle. *Journal of Management and Strategy*, 9(2), 27–33.

- Goncalvez de Oliveira, P. S. (2018). Factors that influence product life cycle management to develop greener products in the mechanism industry. *International Journal of Production Research*. <https://doi.org/10.1080/00207543.2015.1071893>
- Klepper, S. (1996). Entry, exit, growth, and innovation over the product life cycle. *The American Economic Review*, 86(3), 562–583.
- Kotler, P. (1984). *Marketing management analysis, planning and control* (5th ed.). Prentice Hall Inc.
- Kotler, P., & Armstrong, G. (2008). *Fundamentos de Marketing* (8th ed.). Pearson Educación.
- Lambkin, M., & Day, G. S. (1989). Evolutionary processes in competitive markets: Beyond the product life cycling. *Journal of Marketing*, 53, 4–20.
- Levitt, T. (1965). Exploit the product life cycle. *Harvard Business Review*, 43, 81–94.
- Maqbool Waris, M., Sanin, C., & Szczerbicki, E. (2016). Smart innovation management in product life cycle. In L. Borzowski, A. Grzech, J. Swiatek, & Z. Wilimowska (Eds.), *Information systems architecture and technology: Proceedings of 36 th international conference on information systems architecture and technology – ISAT 2015 – Part I, Advances in intelligent systems and computing* 429 (pp. 183–192). Springer International Publishing.
- Stark, J. (2015). Product lifecycle management. In J. Stark (Ed.), *Product lifecycle management* (Decision engineering) (Vol. volume 1, pp. 1–29). Springer.
- Taylor, M. (1986). The product-cycle model: A critique. *Environment and Planning*, 18, 751–761.
- Todd, J. T., Mark, L. S., Shaw, R. E., & Pittenger, J. B. (1980). The perception of human growth. *Scientific American*, 242(2), 132–144.
- Trujillo-Suarez, M. (2015). Evaluación heurística para el diseño de ciclos de vida de productos sostenibles. *Revista Electrónica Gestión de las Personas y Tecnología*, 8(24), 51–66.
- Vernon, R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80, 190–200.
- Vila, C., Abellán-Nebot, J. V., Albiñana, J. C., & Hernández, G. (2015). An approach to sustainable product lifecycle management (Green PLM). *Procedia Engineering*, 132, 585–592.

Product Management

- Product Life Cycle

Product Obsolescence

- Planned Obsolescence

Product RED

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Synonyms

RED; (RED); Product (RED); (PRODUCT)^{RED};
PRODUCT^(RED); (RED)TM; (Product)^{REDTM}

Definition

Product (RED) is a private-sector consumer marketing initiative that was launched formally by singer Bono and Bobby Shiver, Chairman of DATA at the World Economic Forum Annual Meeting in the Swiss mountain village of Davos in 2006. Product (RED) is designed to raise funds and create awareness for the Global Fund to fight against AIDS, Tuberculosis, and Malaria in Africa. As a brand licensed to companies, (RED) teams up with the world's well-known brands or companies. Each brand or company produces unique (RED)-branded products or services and donates money from their sales to support the Global Fund. So far, Global Fund grants supported by (RED) have benefitted millions of people's lives in Africa through a diverse range of life-saving programs. As a celebrity-driven charity, (RED) has received support from numerous influential celebrities, including singers, musicians, actors/actresses, models and founders. They help energize people who want to participate by creating an interest in the brand. These aid celebrities or brands mainly create motivation for action via the digital dissemination of ideas, meanings and messages through a network of channels to the wider community. (RED) successfully creates a sense of unity that brings together business people, celebrities and consumer-citizens around international aid. In doing so, (RED) offers a more innovative and sustainable approach to funding to fight AIDS thanks to

multi-stakeholder and multi-sectoral collaborations between business and public.

(RED): An Explanation of its Relationship with ONE

Product (RED), styled as (PRODUCT)REDTM, is a licensed brand (Ghosh & Shankar, 2013) that combines business and international aid to raise awareness and funds to help eliminate AIDS, tuberculosis, and malaria in Africa (Bell, 2011).

(RED) was initiated in 2006 by Bono and Bobby Shiver (Phelps, 2017; Ponte et al., 2009) as a business funding model for philanthropic efforts (Wirgau et al., 2010).

(RED) is also a division of the ONE campaign, "a global grassroots advocacy and campaigning organization" that aims to eliminate extreme poverty and treatable disease (ONE, 2019; RED, 2019a). (RED) is recognized as a tax-exempt and charitable organization by the UK Internal Revenue Service under Sect. 501(c)3 (RED, 2019f).

(RED) Logo

The (RED) logo, developed by Wolff Olins, facilitates the transition of (RED) from an idea to a tangible, visceral vision. There are many versions for each company and their products (Wolf Olins, 2019), such as The Gap^(RED)'s best-selling T-shirt, INSPI(RED).

The (RED) logo is a strong visual symbol that represents all partner companies with the same vision. Therefore, it provides a co-branding umbrella model that unites global activism around a shared concern for people suffering from HIV/AIDS in Africa (Duvall & Guschwan, 2013; Ponte & Richey, 2014).

(RED) Manifesto and Consumers

The (RED) manifesto has an explicit mission to eliminate the spread of mother-to-child HIV transmission and to encourage consumers to buy (RED) products to support the Global Fund

(Gallant, 2013). The (RED) manifesto provides consumers with a clear sense of mission: “Every Generation is known for something. Let’s be the one to deliver an AIDS-free generation” (Phelps, 2017). Consumers seem to have responded positively to Product (RED) by buying (RED) products, such as iPods, T-shirts, watches and cologne (Wirgau et al., 2010). Since its launch in 2006, (RED) says it has generated over \$600 million and impacted the lives of over 140 million people through HIV/AIDS prevention and treatment services in Ghana, Kenya, Lesotho, Rwanda, South Africa, Eswatini, Tanzania and Zambia (RED, 2019b).

(RED) Partnerships

(RED) is a co-branding exercise of individually-negotiated licensing agreements with many well-known companies, such as Apple, MCM, Starbucks, Durex, Belvedere Vodka, SAP and Air Asia (Peterson, 2009; RED, 2019e). (RED) also develops collaborations with diverse brands operating in distinct sectors, such as HBO, Youtube, RollingStone, and 5B, which support (RED) activities in many ways (RED, 2019e). For instance, “*The Lazarus Effect*” documentary, which emphasizes the impact of antiretroviral treatment for HIV/AIDS patients by transforming their lives from debilitating to a healthier, productive life, was produced in 2010 through collaboration between HBO and (RED). Similarly, the (RED)Nights concert series organized by Rolling Stone Magazine in 2009, donated a proportion of the ticket sales to the Global Fund to Fight AIDS (Kreps, 2009).

The PRODUCT (RED) campaign brings companies together to communicate with consumers through diverse (RED)-branded products and services (Peterson, 2009) to make their purchases meaningful (Dadush, 2009). These companies donate a portion of the profits from these sales to a nonprofit agency called the Global Fund (Bell, 2011; Peterson, 2009). This then distributes money in six African countries to fight AIDS (Bell, 2011). For instance, through the sale of (RED) products (iPhone/iPod/apple watch

devices), Apple has raised over \$200 million for the Global Fund (RED, 2019c). Similarly, Starbucks has generated \$15 million through an in-store promotion in its American and Canadian outlets (RED, 2019d).

Celebrity Involvement

One of the most common and successful strategies used by (RED) has been celebrity involvement backed by the world’s most iconic brands (Mitchell, 2016; Ponte & Richey, 2011; Richey & Ponte, 2008). It heavily employs celebrity activism and ethical consumerism, mobilized by aid celebrities through a kind of affective affinity that helps to move attention from the product to a social cause to help distant others (Ponte & Richey, 2011). From the very beginning of the (RED) story, Bono and Bobby Shriver have themselves paved the way for this transformation from a personal to a global commitment in fighting AIDS/HIV (Dadush, 2009).

In this way, (RED) can strengthen its meaning, power and impact through the many celebrities behind it, including Oprah Winfrey, director Steven Spielberg, model Gisele Bundchen, actress Scarlett Johansson and photographer Annie Leibovitz (Arnoldy, 2007). Such (RED) celebrities embody “a discourse of race, consumption, philanthropy, and ultimately of globalization” (Bell, 2011). Through working with these celebrities, (RED) has attracted much attention and raised awareness about the fight against HIV/AIDS (Farrell, 2012; Ponte & Richey, 2011).

Summary

(RED) has clearly pioneered a new mechanism based on co-branding and consumption in the fight against disease and poverty. It has succeeded in engaging business and capturing consumer attention by using various effective communication channels that help to transmit the (RED) mission of an AIDS-free world to a wider community.

Both as a new way of fundraising and as a means of CSR, (RED) represents a new and

much more comprehensive approach to doing business (Dadush, 2009; The Global Fund, 2010). Its success seems likely to push other firms to generate (RED)-like value for society.

Cross-References

- Awareness Management
- Cause-Related Marketing
- Consumerism
- Corporate Social Responsibility
- Corporate Social Responsibility Strategy
- Corporate Sustainable Innovation
- CSR and Media
- CSR Communication
- Philanthropic CSR
- Social Marketing
- Stakeholder Management
- Stakeholder Relationship Management

References

- Arnoldy, B. (2007). Buy a red T-shirt to fight AIDS. But does it really help. *Christian Science Monitor*.
- Bell, K. (2011). "A delicious way to help save lives": Race, commodification, and celebrity in product (RED). *Journal of International and Intercultural Communication*, 4(3), 163–180.
- Dadush, S. (2009). Profiting in (RED): The need for enhanced transparency in cause-related marketing. *NYUJ Int'l L. & Pol.*, 42, 1269.
- Duvall, S. S., & Guschwan, M. C. (2013). Commodifying global activism and racial unity during the 2010 FIFA world cup. *Communication, culture & critique*, 6(2), 298–317.
- Farrell, N. (2012). Celebrity politics: Bono, product (RED) and the legitimising of philanthrocapitalism. *The British Journal of Politics and International Relations*, 14(3), 392–406.
- Gallant, L. (2013). Product (RED): The case against consumerism as a form of aid. *Te Canadian Undergraduate Journal of Development Studies Volume X, Issue I: Spring/Summer*, 22.
- Ghosh, S., & Shankar, K. (2013). Red, white and pink: Linking public good contributions to private good sales. *Journal of Economic Behavior & Organization*, 88, 96–108.
- Kreps, D. (2009). U2, Scarlett Johansson, Courtney love set to rock (RED) concert. RollingStone: Resource Document. <https://www.rollingstone.com/music/music-news/u2-scarlett-johansson-courtney-love-set-to-rock-red-concert-71275/>. Accessed August 4, 2019.
- Mitchell, K. (2016). Celebrity humanitarianism, transnational emotion and the rise of neoliberal citizenship. *Global Networks*, 16(3), 288–306.
- Olins, W. (2019). (RED). Resource document. <https://www.wolffolins.com/case-studies/red/>. Accessed August 2, 2019.
- ONE (2019). About ONE. Resource document. <https://www.one.org/us/about/>. Accessed August 5, 2019.
- Peterson, K. (2009). *Examining the product (RED) campaign: Millennials' self-identity and perception of the cause-branding initiative*. (Doctoral dissertation, Texas Christian University).
- Phelps, Stan (2017). How U2's bono and the color red elevated purpose in business. Resource document. Forbes. <https://www.forbes.com/sites/stanphelps/2017/02/09/how-u2s-bono-and-the-color-red-elevated-purpose-in-business/#46c3f9164fa5>. Accessed August 5, 2019.
- Ponte, S., & Richey, L. A. (2011). (PRODUCT) RED™: How celebrities push the boundaries of 'causerism'. *Environment and Planning A*, 43(9), 2060–2075.
- Ponte, S., & Richey, L. A. (2014). Buying into development? Brand aid forms of cause-related marketing. *Third World Quarterly*, 35(1), 65–87.
- Ponte, S., Richey, L. A., & Baab, M. (2009). Bono's product (RED) initiative: Corporate social responsibility that solves the problems of 'distant others'. *Third World Quarterly*, 30(2), 301–317.
- RED. (2019a). How are (RED) and ONE related? Resource document. <https://www.red.org/faqs-contact>. Accessed August 1, 2019.
- RED. (2019b). How (RED) works. Resource document. <https://www.red.org/how-red-works>. Accessed August 1, 2019.
- RED. (2019c). This is how APPLE is fighting aids. Resource document. <https://www.red.org/partners/apple>. Accessed August 2, 2019.
- RED. (2019d). THIS IS HOW STARBUCKS IS FIGHTING AIDS. Resource document. <https://www.red.org/partners/starbucks>. Accessed August 2, 2019.
- RED. (2019e). Proud partners. Resource document. <https://www.red.org/partners>. Accessed August 2, 2019.
- RED. (2019f). Is (RED) a 501c3?. Resource document. <https://www.red.org/faqs-contact>. Accessed September 2, 2019.
- Richey, L. A., & Ponte, S. (2008). Better (red)™ than dead? Celebrities, consumption and international aid. *Third World Quarterly*, 29(4), 711–729.
- The Global Fund. (2010). Partnership in Action: (Product)-RED™. In *Partnering for Global Health: The Global Fund and the Private Sector* (pp. 10–11). Resource document. https://www.theglobalfund.org/media/1426/replenishment_2010haguepartneringforglobalhealthwithprivatesector_report_en.pdf?u=636979131800000000. Accessed August 2, 2019.
- Wirgau, J. S., Farley, K. W., & Jensen, C. (2010). Is business discourse colonizing philanthropy? A critical discourse analysis of (PRODUCT) RED. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 21(4), 611–630.

PRODUCT^{RED}

- [Product RED](#)

(PRODUCT)^{RED}

- [Product RED](#)

(Product)^{RED}TM

- [Product RED](#)

Productive Efficiency

- [Dynamic Efficiency](#)

Productivity

- [Rebound Effects of Eco-efficiency](#)

Product-Service Systems

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Synonyms

[Cyclical economy business models](#); [Service-focused product outcomes](#); [Servitization](#); [Sharing economy business models](#)

Definition

The overall objectives behind *product-service systems* appear threefold: (1) endeavoring to

design and create a seamless integration of product and service in patterns of consumption (Especially where aimed at consumer-end practice; partially yet significantly, to influence consumer habits); (2) doing so by sustainable means and to sustainable ends (e.g., (i) achieving waste reduction and energy savings; (ii) maintaining businesses' market position; and (iii) doing so with social responsibility in mind, esp. with regard to the management and reuse of finite resources); and (3) engaging consumers and customers (as well as other stakeholders) in the co-design of product-service delivery. The shift from product purchase and ownership to utility, use, reuse, sharing, pooling, etc. had characterized product-service systems (Without capitalization hereinafter) to date. The conceptualization and design of product-service systems are aimed at seamless integration at each stage and value component of creation, customization delivery, use, consumption, and exchange. However, this is not without challenges innate to a number of strategic (For example, Leseure et al. (2010) examine servitization challenges for manufacturing firms), economic, technological, operational, and cultural characteristics that businesses, partners, regulators, consumers, and users need to contend with. As the coined term indicates, there are sets of hybrid, complementary, and somewhat ambiguous qualities at the heart of the meaning of "product-service systems" (PSSs). An integration – primarily within a business model (product-service systems may exist outside of *business as such*). However, with increased privatization and commercialization of the public sphere, it is safe to describe the term with due attention to "business models") – of the [traditionally; ostensibly] tangible products and manifestly intangible services (though services often consist of some key material activities). Arguably, the notions of intransience vs transitory nature distinguish the two. What is important to note here are the shifts from production to provision and the emphasis on function and utility. Components may include networks, chains, operations, and infrastructures both extant and bespoke. Song (2017) summarizes (Derived from Becker et al. (2008)) a product-service system as an

“integrated bundle of product, software, and service elements.”

Introduction and Developmental Overview

Such combinations as described above have become very pronounced since the practice was first employed in the 1990s; e.g., Vandermerwe (2000) refers to an early, healthcare-related case from 1997, even before the then novel term was fully formulated. (First authoritative definitions and fully articulate use traceable to early authors such as Mont (2000, 2002).) Moreover, arguably, there were elements of service added to products developed and marketed by leading firms throughout the history of mass production and product-oriented markets (e.g., prominently, Shapiro and Mathe 1993).

However, there are three considerable aspects to product-service systems that set them aside from any such past examples. First, are the technological conditions that enable a true integration of tangible and intangible of the incidences of production of a unit of value, and the continuation of services accompanying such integration. These conditions become ever more pronounced with the advances of interactive digital technologies and increasingly hybrid intangible interrelationships of products and services. (Brands that may spring to mind include Uber, Kapten, and Lyft in automotive mobility and Microsoft, Apple, and others in IT.) Second, product-service systems are also linked to economic tightening and the intensifying competition in many markets characterized by growth through integration and consolidation. (See below on key developments in autonomous vehicles and PSS collaborations and projects related to them.) (e.g., Smirnov et al. (2017) speak of commoditization and market saturation forcing companies to implement new product and marketing paradigms, frequently formulated as orientation to services relating to PSS life cycles.)

The third, and for this definition the most vital aspect – involves the social, environmental, and economic responsibilities of businesses ranging

from small manufacturers, design studios, to start-ups to multinational corporations. Most notably among the latter two, vertically integrated (loosely, at times) *co-opetition* networks (e.g., Ritala et al. 2014) tend to be crossing industries which are epitomized by the meaning of PSS in the context of sustainability. (Examples also include entrepreneurial product design firms (For example, assastudio.com for cutting-edge practice of co-design and PSS in product design, 3D printing, and innovation) engaged in 3D/4D printing for varied corporate and institutional clients). Thus, product-service systems are often seen as green and environmentally friendly, resource-fitting, and socially responsible (e.g., sharing by pooling of reusable products, services, and resources) and attaining new forms of improved value-for-money on multiple levels, from users/consumers to businesses and (supra)societal-level clienteles (e.g., the increasing consideration of blockchain as such a tool. (See the World Economic Forum sources, by Liao & Fang (2020), and May (2020) for further details on a qualitative shift, adopting this novel tool globally).) This indeed often consequently proves a value proposition fit for marketing purposes at a time when many stakeholders (from consumers to high-end regulators) espouse socially dependable discourses.

This overview of the term *PSS(s)* shall aim to elucidate on the features referred to above. This, especially as commonsensical manifestations of the specialist term and its everyday connotations continue to gain significance in everyday use (e.g., car-pooling, pay-per-use); in public discourse, the media, and commerce, as well as in academic treatises and reference works. Notwithstanding express environmental value, the relationship of PSSs with the somewhat problematical (Problematical, as it was indicating a largely unfounded optimism of the late 1990s of boundless growth of developed economies and the postmodern *belief* that consumption would continue unabated and extrapolated into a future where economic woes of the past would no longer happen to occur in post-industrial societies. Returning to basics appeared a shock in the post-subprime crash world, and matters of tangible production,

utilization, and control over resources; “real,” tangible value; and such like had once more become very prominent) phrase “experience economy” lay at its consumer-oriented aspect at competitive-market base. It is also worth evaluating the delivery on promises of social, economic, and environmental sustainability. This particularly applies in the context of growing corporate consolidation, thus far metaphorically exponential in its nature and level; yet it is conceivable that such exponentiality of use may actually materialise in its nature and level. Here is where some of the most widely reported contemporary examples in product-service systems appear to occur (including the acquisition of innovations). For example, driverless cars and other autonomous vehicles (AVs) with their environmentally friendly features. At the turn of the decade, these initiatives are being matured by the world’s foremost ICT service-led firms such as Amazon and Google (e.g., McFarland 2019; Hearn 2019), while prior leaders in the automotive industry and early AV innovators (For more on innovation and PSS, see Velamuri et al. (2013)) may repeatedly take second place (Lauer 2019) as understood in examples and analyses cited. Originally, these have been expanding by start-ups and automotive firms. (PSS in automobile markets appear at times in “micro”-factory contexts: e.g., eco-friendly automobile retail, as covered by Nieuwenhuis (2018), preceded by a different take on a related subject by Williams (2006).) This occurred outside the realm of major [digital] technology (hardware, software, internet) corporations. The latter have shown considerable interest in the latter part of the twenty-first century’s second decade, with a likely future impact. The subsector is significantly defined by a set of start-ups or ICT technology-driven mobility service firms including Uber and Lyft, Nvidia, and Mobileye suppliers of vision-based AVs and car navigation software. The emergent subsector is currently particularly of interest to Apple’s autonomous driving systems and to Google – with its expansive ambition – while analysts such as Keith and McDuffie (2020) suggest that integration of such service approaches and established automotive firms is where the solution may be. In order to understand the roots of such fairly advanced occurrences, it is essential to

look at the development of the PSS concept and its fundamentals.

Mont (2000, 2002) is among the very first authors (For an early definition of PSS, see also Roy (2000)) who articulated PSSs as a novel entity in its own right. Indeed, her 2002 paper is so instrumental in defining the nature, scope, and impact of PSSs – in its infancy at the time – that it deserves special attention. This entry refines the terminology and advocates the then budding PSSs for widespread adoption, decrying the absence of policy support and of adequate operational infrastructure at the time. (Such infrastructures are fast emerging as will be seen below, with some considerable integrative ICT leaps in the late “twenty-teens.”) Mont maps out the development of the PSS approach and scant extant analysis of the time, further articulating the need, means, possible and likely design characteristics, and directions for PSS(s). Advocating for the *dematerialization of the economy* and creating the products and services with unbound performance though with a lower material flow to unburden the environment, Mont stated that conditions were ripe for such change. Namely, 70% of developed economy workforce was already in services and that 65–75% of those employed in production engaged in service tasks including research, process design, logistics, planning, as well as legal, HR, and accounting (2002: 238). Hence, the author’s summative proposal is thus: to develop PSS by means of (1) shifting the emphasis from product sales to product use and (2) the change to a “leasing society.” Citing another seminal work by Stahel (1997), Mont emphasized the *functional economy* attribute of services; before *cyclical economy* itself was formulated, Mont precludes it with the insistence on “closing the material cycle” and the stress on the *consumer end part product life cycle* in a cultural shift toward *provision*: the utility approach that replaces the product focus of traditional modes of consumption.

Mont (2002) thus defines a PSS:

as a system of products, services, supporting networks and infrastructure that is designed to be: competitive, satisfy customer needs and have a lower environmental impact than traditional business models.

Many practical challenges to implementation are cited in the text, including sub-optimization which stands in the way of integrating the elements of PSSs into systems with reduced environmental impact. As product-service systems developed over time, these were overcome by organizational means chiefly employing digital technologies covered in the latter part of this entry.

An equally influential contribution by Tukker (2004) presents a classification of PSSs, citing eight product-service system categories under three main principal headings, as shown below. (See also Van Ostaeyen et al. (2013).)

Product-oriented services:

- *Product-related service*
- *Advice and consultancy*

Use-oriented services

- *Product lease*
- *Product renting or sharing*
- *Product pooling*

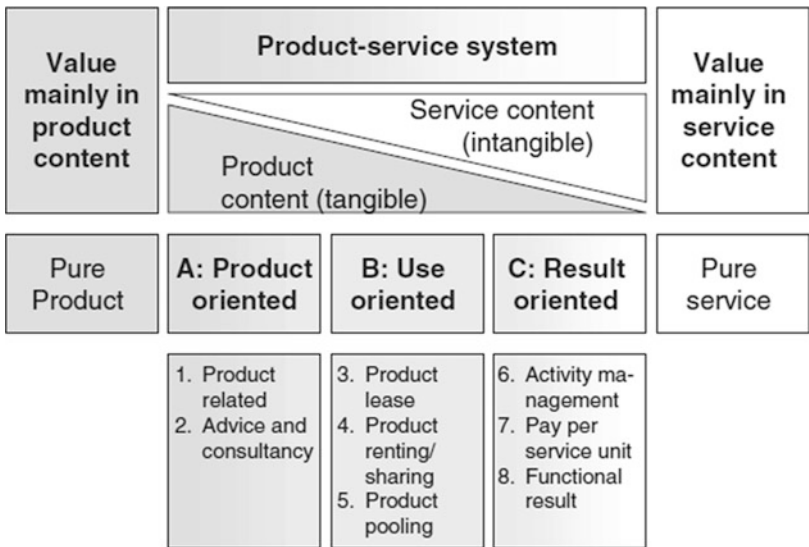
Result-oriented services

- *Activity management/outsourcing*

- *Pay-per-service unit*
- *Functional result*

(Tukker 2004: 248–9)

Regarding the visible applications of PSS in everyday use, many noteworthy examples include Rolls-Royce aviation engines and parts, not sold but leased by means of “Total Care” and “power by the hour” service programs (Isaksson et al. 2009), or the strategic move by Philips from focusing on the long-life induction lamp (Stahel 1997: 127) to “pay-per-lux” program (Philips 2013), a form of *pay-per-use* PSS (e.g., Tauqeer and Bang 2018; Tukker 2004; Maaruf and Mohamed Abdi 2017). In media and entertainment sectors, the crisis brought about by the late-1990s Web and its propensity for copyright theft had led to the development of many service-oriented usage models under the overall heading of *streaming*. The utilization of product (music, film, TV, gaming, etc.) and service (streaming, smart search, bundling, mobile apps) had led to developments that far surpass original expectations of contingency tactics in the early 2000s. Such contingency tactics, including – in terms of content-consumer targeting and licensing models (on licensing, see Dutra et al. 2018) – Netflix or Spotify media and rather notably, a



Product-Service Systems, Tukker’s (2004) classification of main categories of product-service systems. Tukker, A. (2004). Eight types of product-service system: eight

ways to sustainability? Experiences from SusProNet. Business strategy and the environment, 13(4), 246–260.

highly competitive market for *smart speakers and virtual assistants* (e.g., Chung et al. 2017). On virtual assistants, both pragmatic and ethical considerations arise in healthcare (e.g., Hoy 2018). This and other related contexts are considered in the section below.

Potential Future Developments and Noteworthy Considerations

Repeated references are being made to healthcare reform driven by artificial intelligence/AI (e.g., Jiang et al. 2017; Baskaran et al. 2010). It is not inconceivable that a near foreseeable future may be characterized by a blend of health services delivered by machines, *bots*, and humans alike through seamless PSSs further defined by increased automation. Indeed, a working paper dated 2019 hails such prospects through a technological methodology system far surpassing original expectations (part of a thorough speculative investigation by Limata 2019). Given past practice in utilization of PSSs for healthcare (e.g., Mittermeyer et al. 2011) and some notable extrapolations of AI-blockchain combinations for PSS such as Limata's 2019 postulation, there appears a substantial convergence potential in the field – and not only confined to the impact of such hybrids in healthcare. Expanding on further, with examples of digital information management is *the notion of Blockchain [4.0]*. Blockchain crypto-technology forms a means of transparently storing all transactional information on to public, decentralized networks no single user may control. Such information forms a *block and its sequential use manifests as a chain*. In the context of *circular economy*, Limata (Constituent works of Limata's speculative inquiry deserve scrupulous attention surpassing this definition) (2019) *draws on the work of multiple authors* and postulates probable outcomes of the *r/evolutionary* potential of blockchain, as its constituent technologies may be implemented in a new social, political, and economic paradigm as they emerge from relative obscurity. Its meta-technology permanently stores data immutable by any one user, on all transactions and communications, be it

monetary (“Blockchain 1.0”), *legal* (2.0), *social* (“3.0”: deserving more attention), or “Blockchain 4.0.” The latter concerns likely integration of AI and blockchain's autonomous *smart ledger*. This may potentially change the way all human activity is recorded, registered, distributed, managed, legislated, monitored, accounted for, paid for, and controlled. Relationships of trust and enforceable records normally mediated by institutions across various sectors, professions, and (supra)state organizations would be delegated to an un-meditated network of computers and cryptic itemized units of software content capable of memorizing every activity in a dynamic way. Its *general-purpose* technology would thus form an *organizing paradigm* affecting all areas of *community life* (3.0), *law* (2.0), and *commerce* (1.0) through a *public, private, or consortium blockchain*. Community life may further consequently extend to encompass *government/elections, science, health, and culture* and *even the realm of ideas*. Conceptually expanding PSS, solutions offered by blockchain authors and practitioners appear to nest PSS within infinite transparency of all activity based on network integrity (*intrinsic trust*), peer-to-peer distributed power (*no one dominates*), value incentives (*all stakeholders*), security (*no repudiation*), privacy (*people control own data*), preserved/enforced ownership/rights, and inclusion (low barriers). PSS goals – seamless integration and elegant design for a circular economy – may thus be enabled by such technology, which does rest on global consensus. It remains unclear how probable such consensus may be and whether the general-purpose technology of such reach and richness may be adopted as broadly as projected.

Summary

Product-service systems are growing in relevance and ubiquity; many of the day-to-day consumer preferences have been marked by product-service systems' impact. The very notion of a product-service system (PSS) relates to more than one aspect of sustainability. These include environmentally friendly practices, business models for

the cyclical economy, resource-sharing, and others. It is most likely that PSSs will become more prominent in the future. They are intrinsically connected to some key features of the state-of-the-art technologies defined and supported by computing, including but not limited to the Internet of Things and blockchain.

Cross-References

- [Business Model](#)
- [Innovation](#)
- [Servitization](#)

References

- Baskaran, V., Bali, R. K., Arochena, H., Naguib, R. N. G., Shah, B., Guergachi, A., & Wickramasinghe, N. (2010). Knowledge management as a holistic tool for superior project management. *International Journal of Innovation and Learning*, 7(2), 113–133.
- Becker, J., Beverungen, D., & Knackstedt, R. (2008). Reference models and modeling languages for product-service systems status-quo and perspectives for further research. In *Proceedings of the 41st annual Hawaii international conference on system sciences (HICSS January 2008)* (pp. 105–105). IEEE.
- Chung, H., Park, J., & Lee, S. (2017). Digital forensic approaches for Amazon Alexa ecosystem. *Digital Investigation*, 22, S15–S25.
- Dutra, A., Tumasjan, A., & Welp, I. M. (2018, September 11). Blockchain is changing how media and entertainment companies compete: Companies are using new applications to rethink their business models and — in some cases — disrupting their industries. *MIT Sloan Management Review*, 60, 39–45.
- Hearn, A. (2019). Google's self-driving car project buys British AI firm Latent Logic. [online] *The Guardian*. 12 December 2019. Available at: <https://www.theguardian.com/technology/2019/dec/12/googles-self-driving-car-project-buys-british-ai-firm-latent-logic>. Accessed 27 Jan 2020.
- Hoy, M. B. (2018). Alexa, Siri, Cortana, and more: An introduction to voice assistants. *Medical Reference Services Quarterly*, 37(1), 81–88.
- Isaksson, O., Larsson, T. C., & Rönnbäck, A. Ö. (2009). Development of product-service systems: Challenges and opportunities for the manufacturing firm. *Journal of Engineering Design*, 20(4), 329–348.
- Jiang, F., Jiang, Y., Zhi, H., Dong, Y., Li, H., Ma, S., et al. (2017). Artificial intelligence in healthcare: Past, present and future. *Stroke and Vascular Neurology*, 2(4), 230–243.
- Keith, D. R., & McDuffie, J. P. (2020). Why 'autos plus tech' is the best path for automated vehicles. *MIT Sloan Management Review*.
- Lauer, S. (2019). European companies can't compete against global giants. [online] *The Guardian*. 17 May 2019. Available at: <https://www.theguardian.com/world/2019/may/17/european-companies-cant-compete-against-global-giants>. Accessed 27 Jan 2020.
- Leseure, M., Hudson-Smith, M., Martinez, V., Bastl, M., Kingston, J., & Evans, S. (2010). Challenges in transforming manufacturing organisations into product-service providers. *Journal of Manufacturing Technology Management*, 21(4), 449–469.
- Liao, R., & Fang, Z. (2020). Supply chains have been upended. Here's how to make them more resilient. [online] World Economic Forum. 6 April 2020. Available at: <https://www.weforum.org/agenda/2020/04/supply-chains-resilient-covid-19/>. Accessed 21 April 2020.
- Limata, P. (2019). Speculating on the application of blockchains in the circular economy. *Center for Relationship Banking and Economics Working Paper Series. Working Paper No. 32*, November 2019.
- Maaruf, P., & Mohamed Abdi, A. (2017). *Pay per screen: Developing result-oriented PSS in small and medium-sized enterprises: A case study at a mercury recycling equipment manufacturer*. Karlskrona: Blekinge Institute of Technology.
- May, A. (2020). Blockchain to tackle supply chain failures exposed by COVID-19 and boost economic recovery. [online] World Economic Forum. 27 April 2020. Available at: <https://www.weforum.org/press/2020/04/blockchain-to-tackle-supplychain-failures-exposed-by-covid-19-and-boost-economic-recovery/>. Accessed 16 May 2020.
- McFarland, M. (2019). Amazon invests in self-driving vehicle startup Aurora. [online] *CNN Business*. 7 February 2019. Available at: <https://edition.cnn.com/2019/02/07/tech/amazon-autonomous-vehicles/index.html>. Accessed 8 Nov 2019.
- Mittermeyer, S. A., Njuguna, J. A., & Alcock, J. R. (2011). Product-service systems in health care: Case study of a drug-device combination. *The International Journal of Advanced Manufacturing Technology*, 52(9–12), 1209–1221.
- Mont, O. (2000). *Product-service systems* (Vol. 3). Naturvårdsverket.
- Mont, O. K. (2002). Clarifying the concept of product-service system. *Journal of Cleaner Production*, 10(3), 237–245.
- Nieuwenhuis, P. (2018). Micro factory retailing: An alternative, more sustainable automotive business model. *IEEE Engineering Management Review*, 46(1), 39–46.
- Philips. (2013). Philips' transition from linear to Circular Economy. [online]. 13 December 2013. Available from: <https://www.innovationservices.philips.com/news/philips-transition-linear-circular-economy/>. Accessed 28 Jan 2020.
- Ritala, P., Golnam, A., & Wegmann, A. (2014). Coopetition-based business models: The case of

- Amazon.com. *Industrial Marketing Management*, 43(2), 236–249.
- Roy, R. (2000). Sustainable product-service systems. *Futures*, 32(3–4), 289–299.
- Shapiro, R. D., & Mathe, H. (1993). *Integrating service strategy in the manufacturing company*. London: Chapman & Hall.
- Smirnov, A., Shilov, N., Oroszi, A., Sinko, M., & Krebs, T. (2017). Changing information management in product-service system PLM: Customer-oriented strategy. In *IFIP international conference on product lifecycle management* (pp. 701–709). Springer, Cham.
- Song, W. (2017). Requirement management for product-service systems: Status review and future trends. *Computers in Industry*, 85, 11–22.
- Stahel, W. R. (1997). The functional economy: Cultural and organizational change. In *The Industrial green game: implications for environmental design and management* (pp. 91–100). Washington, DC: National Academy Press.
- Tauqeer, M. A., & Bang, K. E. (2018). Servitization: A model for the transformation of products into services through a utility-driven approach. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4), 60.
- Tukker, A. (2004). Eight types of product-service system: Eight ways to sustainability? Experiences from SusProNet. *Business Strategy and the Environment*, 13(4), 246–260.
- Van Ostaeyen, J., Van Horenbeek, A., Pintelon, L., & Dufloy, J. R. (2013). A refined typology of product-service systems based on functional hierarchy modeling. *Journal of Cleaner Production*, 51, 261–276.
- Vandermerwe, S. (2000, Fall). How increasing value to customers improves business results. *MIT Sloan Management Review*, 42, 27–37.
- Velamuri, V. K., Bansemir, B., Neyer, A. K., & Möslin, K. M. (2013). Product service systems as a driver for business model innovation: Lessons learned from the manufacturing industry. *International Journal of Innovation Management*, 17(01), 1340004.
- Williams, A. (2006). Product-service systems in the automotive industry: The case of micro-factory retailing. *Journal of Cleaner Production*, 14(2), 172–184.

Product-to-Service Shift

- [Strategy in a Circular Economy: Discussion of Opportunities and Limitations](#)

Pro-ecological Rewards

- [Green Rewards](#)

Professional Behavior

- [Professional Ethics](#)

Professional Code of Ethics

- [Professional Ethics](#)

Professional Community

- [Community of Practices](#)

Professional Conduct

- [Professional Ethics](#)

Professional Ethics

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Synonyms

[Applied ethics](#); [Business conduct](#); [Business etiquette](#); [Professional behavior](#); [Professional code of ethics](#); [Professional conduct](#); [Professional etiquette](#); [Professional standards](#); [Work ethics](#)

Definition/Description

The idea of professional ethics is built on the twin concepts of profession and ethics. Profession is any work involving superior skills based on specialized knowledge and training. Ethics is the basis for understanding what is right and wrong.

Applying the idea of right and wrong to the conduct of a profession rests on professional ethics. In simpler words, practicing a profession in such a manner that the practitioner has an innate sense of right and wrong is following the professional ethics of any type of work. Professional ethics is concerned with the ethical issues and challenges related to professions such as medicine and law. The professional ethics are in the form of principles, guidelines, and rules. The members of the profession are organized in the form of a body or association. Such a body creates and adopts a professional code of ethics for its members who commit themselves to follow it in the practice of their profession. The codes of ethics are formulated as there is asymmetry of power between the professionals who are educated, trained, and specialized in a field of activity and the clients who demand services from the professionals but are not aware of the details of the field of activity. The clients just rely on the professionals in good faith. Formal declaration of code of ethics serves to provide assurance to the clients that they will not be put to disadvantage.

Introduction

Ethics (also called moral philosophy) is a branch of philosophy that deals with the questions of what is right and wrong, moral and immoral, or good and evil. Profession is an occupation that requires special knowledge and skills through study and training such as engineering, law, or medicine.

Applied ethics, using the moral philosophy, provides guiding principles that help to decide the standard of behavior expected of a person or a group in a given situation. Professional ethics are a subset of such guiding principles that apply to a certain profession and are intended to help the experts who possess specific knowledge and skills, certification, and perform the duties of a particular profession.

Professionals adopting a particular profession get together, usually in the form of an association and federation, to evolve a set of principles that they agree to apply to themselves in the conduct of

their occupation. Such a set of principles is called the professional code of ethics.

The popular example of professional code of ethics is the Hippocratic Oath that is administered to graduating medical students all over the world. It is an ancient Greek oath that is adapted to suit the modern times and that commits the medical professionals to several duties such as treating the sick to the best of their ability, preserving the privacy of their patients, and passing on the medical knowledge to the next generation.

Profession, Professional, and Professionalism

The world of work occupies a major part of an individual's life. Work is essential to living and existence. During the course of work, individuals adopt certain occupations based on the particular skills that they have inherited or learned or both. Occupation is a general term to denote any work that an individual is engaged to earn livelihood. The emphasis in occupation is on what one does to earn livelihood. Examples of occupation are acting, community work, photography, stock broking, and web designing. When the work is primarily manual and mechanical involving dexterity in working with hands and machines in which case it becomes a trade. Example of a practitioner engaged in trade is beautician, carpenter, and waiter. Work involving higher level skills backed by specialized knowledge and training is a profession. Examples of a profession are medical doctor, mining engineer, lawyer, and teacher.

A professional is a person who belongs to a profession. An occupation transforms to a profession when there are certain characteristics present. The professionals get together in a formal arrangement such as an association to give themselves a charter of duties and responsibilities and adopt self-imposed norms of conduct in their profession. They give themselves to moral commitments and they assure their clients and customers that they would adhere to the norms. The professionals see themselves as a part of fraternity that professes

common values. They usually adopt a voluntary code of ethics.

Professionalism is the conduct exhibited by and the qualities and attributes that characterize a professional. Contrary to common perception, professionalism is not merely personal competence but more. Some of the major attributes that distinguish a professional are specialized knowledge in the professional area, competency to handle the job, commitment to the profession, and self-regulation of behavior and conduct in performance of duties. Professionalism is a trait that is much valued in organizations as it brings a lot of benefits.

Ethics, Applied Ethics, and Professional Ethics

Ethics is a term derived from Greek *ethikos* that is itself derived from *ethos* which means custom, character, or habit. Ethics is a branch of philosophy, called moral philosophy that is concerned with defining and developing the concepts of right and wrong behavior. These concepts are immutable; they do not change and are not relative to the situation or circumstances.

Ethical theories are generally divided into three types: meta-ethics, normative ethics, and applied ethics. Meta-ethics deal with the nature of moral judgment whether it is absolute or derived. Normative ethics is concerned with the criteria that define what is right or wrong. Applied ethics relates to practical considerations involving morality and applications of concepts of ethics to various spheres of life and professions such as medical ethics or business ethics.

Professional ethics deals with the ethical issues and challenges related to certain professions. It provides the means to resolve ethical problems. The professional ethics usually are in the form of principles, guidelines, and rules. Often, the professionals as members, in the form of association or bodies, adopt such principles as guidelines as they go about practicing their profession. These principles help them to resolve ethical dilemmas that they might face in the course of performing their duties and responsibilities.

Professional Code of Ethics

Professional code of ethics (or sometimes, professional code of conduct) are based on the principles of professional ethics to propose and prescribe the required norms of behavior for members of a particular profession. Such codes need to go beyond the law to be effective. A code of ethics is about choice; if there is no choice, then it is not ethics but law. The code of ethics encapsulates the expectations that society including stakeholders, such as clients, have of the professionals.

The reason why professionals are expected to have voluntary, self-imposed codes of ethics lies in the concept of “power gradient.” Power gradient is the difference that exists in power held by a superior in comparison to the subordinate. The steeper is the power gradient, the more power the higher authority has comparatively. The concept of power gradient can be applied to the situation of a professional like a doctor or lawyer and her relationship to her client. Almost always, the professional is expected to have more knowledge, information, and expertise than the client. In fact, the client pays for the expert advice of the professional.

The professional has an asymmetrical position with respect to her client. To compensate for the unfair balance of power in the professional–client relationship, there need to be assurance from the professional that the expertise will be used for the benefit of the client rather than to the advantage of the professional. Further, assertion is also needed that the expertise will not be against the client for monetary or other benefit. In simple words, the doctor or the lawyer should not charge a very high fee for services that are not truly valued at that price just because the client cannot bargain the price. The professional should not provide inferior service charging a fee that the client pays for superior quality of service. Overall, the power gradient concept entails that the professional should ensure that the client is not made to suffer on account of asymmetry.

The professional code of ethics may not have the legal sanction behind it to be enforced. In some cases such as medical councils, there might be some formal power of registration or

certification that might be invoked to enforce the code of ethics. There might be penalties if any of the codes is not followed. These penalties might be deregistration of the certification that may make it impossible for the professional to carry on practicing her profession. In most other cases, there is no legal sanction behind the professional code of ethics. There is just the sanctity of the collective strength of the body of professionals that creates the code and expects it to be adhered to. Thus, in most cases there is only the soft power of the weight of the collective body behind the code of ethics and the respect that such an association of professionals commands. The existence of a professional body that creates code of ethics for its members helps to raise the status of the profession too if it is made public and is open and transparent. However, there could still be a risk of window dressing if the code of ethics is made public.

The influence of professional code of ethics often goes beyond the profession itself and also beyond national boundaries. An example is the case of medical ethics where the code of ethics may have a salutary effect on other professions. Besides, a national voluntary code may have ramifications beyond the borders like the medical ethics codes having relation to the International Code of Medical Ethics of the World Medical Association.

Emerging Professions and Code of Ethics

Traditionally there were three professions to which the code of ethics was applied. These were the divinity, law, and medicine. Later the military services were added. Over time, new professions have emerged that have required the development of the professionalism and consequently the code of ethics for these new professions. Teachers, librarians, managers, accountants, auditors, and drug testers are some examples of such professions. All of such examples are of professions where people place faith in the experts and rely on what they certify or suggest. There are also emerging professions such as artificial intelligence experts, big data specialists,

genome scientists, and bioinformatics experts. These are some such new careers opening up. Some of these careers already have ethical dilemma and issues to resolve. Genetic testing has been a controversial area where several ethical dilemmas are faced. There is the issue of genetic testing results being shared with insurance companies, employers, and others endangering the safety and infringing the privacy of individuals. There is also the issue of conflict of interests among the individual rights as well as the demands of public health. Another interesting example is of the emerging ethical dilemma in the area of commercialization of space including the lunar development and outer space commerce.

Sustainability and allied issues are opening up several avenues of new professions, careers, and jobs. A few examples of such professions are carbon management consultants, renewable energy specialists, waste management specialists, energy efficiency specialists, and environmental law experts. It is to be noted that in each of these professions assurance is required from those entrusted with responsibility of managing the physical environment.

Over time, it is expected that as the existing established professions fine tune their codes of ethics in light of new developments, the emerging and newer professions would have to evolve their codes of ethics in line with the demands of the situation.

Summary

A profession is work involving higher level skills backed by specialized knowledge and training. Ethics is branch of philosophy dealing with right and wrong behavior. Professional ethics is concerned with the ethical issues and challenges related to certain professions. It provides the means to resolve ethical problems. Such professional ethics usually are in the form of principles, guidelines, and rules.

Professional codes of ethics are often voluntary statements about how organizations and individuals will behave with members within and outside. As such, the codes of ethics spell out some of

the more obvious and important ethical values for a professional organizations and professionals to follow. Ethical behavior requires that the people involved in the profession have to articulate their ethical values. Creating and accepting a code of ethics helps the professional organizations and the professionals to determine their ethical values and to codify them in a set of principles that can form the guidelines for their behavior.

Existing professions develop their codes of ethics and continue to update and refine them in the light of changing circumstances. Newer and emerging professions evolve to absorb the challenges that confront them and come up with codes of ethics that would suit their requirements.

Cross-References

- [Accountability](#)
- [Business Ethics](#)
- [Compliance](#)
- [Entrepreneurial Sustainability](#)
- [Environment and Ethics in Sustainability](#)
- [Ethical Dilemmas](#)
- [Ethical Theories II](#)
- [Ethics](#)
- [Ethics Management](#)
- [Integrity](#)
- [Marketing \(Ethics of\)](#)
- [Media Ethics](#)
- [Responsibility](#)

References

- Center for the Study of Ethics in the Professions, Illinois Institute of Technology (n.d.). <https://www.cs.ox.ac.uk/efai/is-ai-ethics-special/professional-codes-of-ethics/>
- Internet Encyclopedia of Philosophy. (n.d.). Retrieved from <https://www.iep.utm.edu/ethics/>
- Project on Ethics in Artificial Intelligence at University of Oxford. (n.d.). Retrieved from <http://ethics.iit.edu/teaching/professional-ethics>
- Space Future. (n.d.). Retrieved from http://www.spacefuture.com/archive/a_code_of_ethics_and_standards_for_lunar_development_and_outer_space_commerce.shtml
- WMA International Code of Medical Ethics. (n.d.). Retrieved from <https://www.wma.net/policies-post/wma-international-code-of-medical-ethics/>

Professional Etiquette

- [Professional Ethics](#)

Professional Standards

- [Professional Ethics](#)

Programmed Obsolescence

- [Planned Obsolescence](#)

Progress

- [Innovation and Territorial Development](#)

Prolongation

- [Sustainability \(World Commission on Environment and Development Definition\)](#)

Promoting Socially Engaged Subjects and Goods

- [Social Marketing](#)

Promotional CSR

- [CSR 1.0/2.0/3.0](#)

Pro-social Marketing

- [Cause-Related Marketing](#)

Prototype Idea

- ▶ [Disruptive Innovation](#)

Prudence

- ▶ [Phronesis](#)

Public Acceptance

- ▶ [Social Acceptance](#)

Public Attitude

- ▶ [Social Acceptance](#)

Public Benefit Organization

- ▶ [Nongovernmental Organization](#)

Public Benefits

- ▶ [Public Value](#)

Public Engagement

- ▶ [Public Participation](#)

Public Good

- ▶ [Water](#)

Public Goods

- ▶ [Public Value](#)

Public Health

- ▶ [Workplace Health Promotion](#)

Public Interest

- ▶ [Public Value](#)

Public Involvement

- ▶ [Public Participation](#)

Public Participation

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Synonyms

[Citizen engagement](#); [Community involvement](#); [Public engagement](#); [Public involvement](#); [Stakeholder engagement](#)

Definition/Description

Public participation is an accessible, responsible process through which individuals and groups

within a typical geographical area exchange views and influence the decision-making process (Odhiambo and Opiyo 2017). Similarly, it can be viewed as a public-based process that allows the goals and needs of the populace to be structured at the community level, and also one in which the populace work with governmental and non-governmental organization in order to make suitable contributions towards addressing priority needs of the society (Kandil 2018). In addition, appropriate public participation enables the populace to provide informed and timely input, which ultimately influences the decisions that affect their environment. The activities that require public participation include voting, aspiration for political post, attending meetings, public, private, or political discussion or debate on issues, serving on advisory committees, drafting of policies, signing of petition on a desired government action or policy, volunteering in community activities, and contributing money towards community development (Dietz and Stern 2009).

Furthermore, public participation creates a firm environment in which the encouragement and facilitation of the public bodies charged with decision-making are highly emphasized (Meadowcroft 2004). This empowers the populace in such a way that they are not just observers but contributors of facts and information that ensure fairness in the decision-making process. It also enhances inclusiveness of all groups of people, which include the loudest voice or an underrepresented group. Summarily, public participation tends to enhance trust between parties, reinforces the confidence of stakeholders, and results in an efficient and implementable decisions that reflect general values and interest and also offer benefits for people. It also tends to enhance the faith of the populace in the government, as well as aids better and justifiable outcomes of decision-making and policy formulation (Kandil 2018; Meadowcroft 2004).

Public participation is the process by which the population, either as individuals, groups, and communities, interrelate with the state and other nonstate actors in order to impact decisions, policies, programs, and legislation, and oversight service delivery, development, and other matters

concerning their governance and the ecosystem. It is extensively known as a major feature of project planning and monitoring, policy-making, civic responsibility, and environmental processes (Kandil 2018b; Andre et al 2006). For public participation to be distinctively meaningful, the following essential elements have been identified as critical factors that are capable of successfully integrating the populace in the decision-making process. These are: influence, sincere listening, early involvement, fair and open dialogue, mutual learning, representativeness of public values, inclusiveness, etc. Equally important is the understanding of human values, motivations, and paradigms of the citizenry as well as an understanding of the dynamics of relationships and the structures surrounding government and public interaction (McCoy et al. 1994).

Tools for Public Participation

Public participation encompasses a variety of approaches, processes, and tools. Often times, participatory approaches in public decision-making are usually classified along a continuum, which spans from nominal participation (information exchange) to full participation (comanagement) as described in Table 1 (Krishnaswamy 2012). In between these two ends of the continuum lies the opportunity that enables consultation and collaboration among the relevant stakeholders. Determining the approach and expected level of participation is strongly related to the objectives and peculiar context for which the stakeholders are being involved in the process. It is inadequate to assume that a roundtable discussion or survey is sufficient on the basis that it has been used in a community in the past (Empel 2008; Kandil 2018b).

Several valuable tools have been developed to help determine the appropriate level of public engagement needed to ensure effective participatory processes such as the public participation matrix and Vroom–Yetton decision tree (Robinson 2003). It is recommended that the service of experienced experts be sought when designing

Public Participation, Table 1 Continuum of public participation

	Information exchange	Consultation	Collaboration	Comanagement/ Control
Description	Information is communicated primarily in one direction, with limited opportunity for dialogue	Public opinions are sought and considered in expert or managerial decision-making. Information flows in two directions but decision-makers not obliged to integrate comments received	Representatives of the public are actively involved in developing solutions and directly influencing decisions. This usually involves iterative activities, dialogue, and in-depth working relationships with more focus on joint responsibilities	Decision-making authority and sometimes responsibility for organizing public participation is partly or wholly delegated directly to the public or their representatives
Examples	Discussion paper, comment sheet	Public hearing, survey, open house	Round tables, workshops, public advisory committees	Community forest board

Source: Krishnaswamy 2012

1) Does the manager have enough information to make high quality decision?

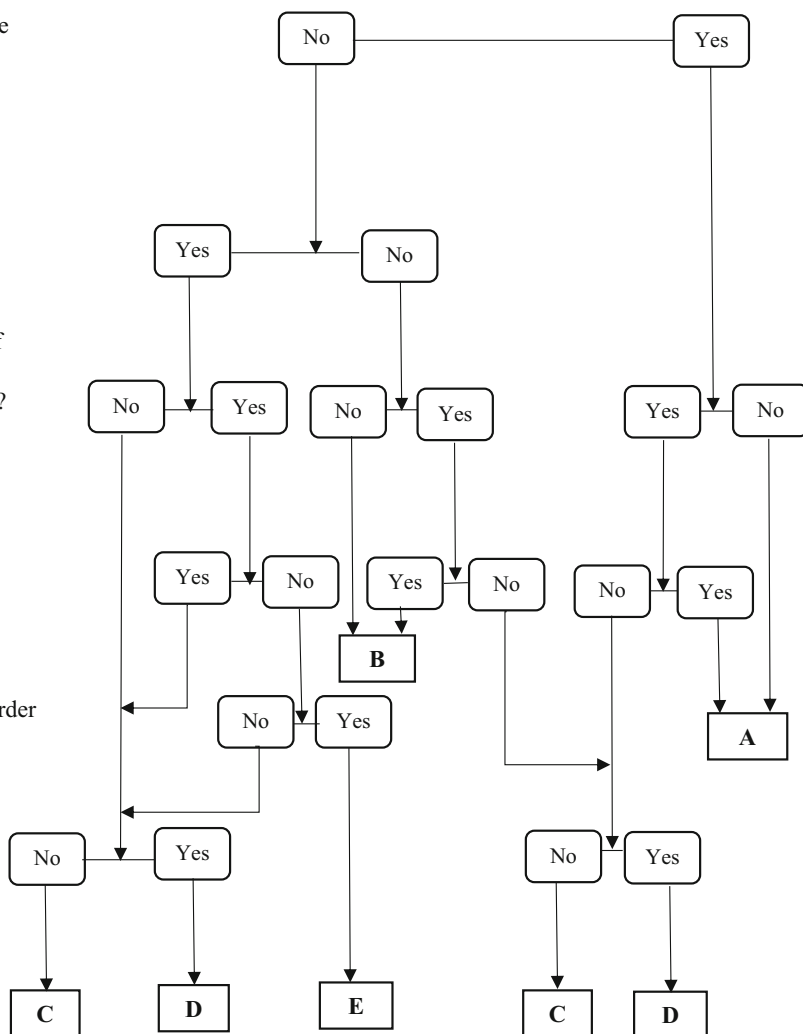
2) Is the problem structured in a way that there is room for alternative solutions?

3) Is public acceptance of the decision critical to effective implementation?

4) If public acceptance is required, is it reasonably assured if the manager decides alone?

5) Are the public and stakeholders willing to engage in a dialogue in order to improve the situation?

6) Would the quality of public input be improved if learning occurs among the public and stakeholders about the issues?



Public Participation, Fig. 1 Vroom-Yetton decision tree for selecting public participation methods. (Source: Robinson 2003)

Public Participation, Table 2 Interpretation of Vroom–Yetton decision tree

Code	Description	Approach/Interpretation
A	The manager solves the problem or makes the decision alone without public involvement	Information exchange
B	The manager seeks information from segments of the public but decides alone in a manner which may or may not reflect public influence	Consultation
C	The manager shares the problem with separate segments of the public or stakeholders, getting ideas and suggestions, and then decides which reflects public influence	Collaboration: Involve public with separated stakeholder segments
D	The manager shares the problem with the public and stakeholders as an assembled group, getting ideas and suggestions, and then decides which reflects public influence	Collaboration: Involve public with mixed participants
E	The manager shares the problem with the public and stakeholder as an assembled group, and together the manager and the group attempt to reach agreement on a solution	Comanagement/control

Source: Robinson 2003

and determining the public participation tool. The Vroom–Yetton decision tree is illustrated in Fig. 1 as an example of tools for determining the depth of public participation. The decision tree was developed by Victor Vroom and Phillip Yetton in 1973 as a model for contingency decision-making in organizations. The original goal was to facilitate the engagement of subordinate officers in corporations to help improve quality of decision-making. The model was however later modified to give room for participation of the general public in decision-making (Robinson 2003). Tools to build different types of participation range from stakeholder consultations and public hearings to community watchdog groups and public–private partnerships (Moseti 2010). These tools can also be classified as direct and indirect tools. Indirect tools include comment sheets, toll-free lines, referenda, and surveys, while direct tools include public advisory committees, focus groups, workshops, round tables, open houses, and public hearings. Nowadays, there are emerging tools which are usually electronic or web based and are designed specifically to convey information or technical details visually (Krishnaswamy 2012) (Table 2).

In organizing public participation, it is also helpful to assess the performance of the tools used based on criteria and indicators for effective engagement process. In this case while criteria broadly measure the key factor in the public

participation process like anonymity and relevance, indicators assess aspects of criteria (Krishnaswamy 2012). Table 3 below categorizes the criteria into three core elements of public participation: breadth, depth, and outcomes. Breadth of the public participation addresses the level of adequacy of incorporation of public values in the decision-making process. The depth evaluates the quality of engagement of the public including the level of interaction and exchange of opinions between participants. The last core element “outcomes” involves the measurement of the extent to which the shared ideas and perspectives relate to the goals of conducting the participatory process (Krishnaswamy 2012).

Summary

The potential of the populace in participating in decisions that affect them and the environment can be determined by the disposition of government officials to engage the general public as well as the efforts of the populace to participate. It is important to note that policy decisions are not made in a linear and organized manner, but of a multifaceted procedure with an ever-changing condition. For the public to believe the validity of their input, public participation must be incorporated into the larger culture of decision-making. Public participation cannot exist merely as a series

Public Participation, Table 3 Core evaluation elements of successful participation tools

Core elements	Criteria and indicators
Breadth	<i>Representation</i> – Incorporate a wide range of public values
	<i>Accessibility</i> – Be available to all public interests
	<i>Renewal</i> – Allow for new participants over time
	<i>Anonymity</i> – Protect participants' identities when necessary
Depth	<i>Listening and Dialogue</i> – Foster a two-way flow of information
	<i>Flexibility</i> – Be flexible in scope
	<i>Deliberation</i> – Provide opportunities for frank and open discussion
	<i>Transparency and Credibility</i> – Promote and make available in a clearly understandable form; independent input from scientific and other value-based sources
	<i>Relationship Building</i> – Promote positive personal and institutional relationships
	<i>Relevance</i> – Influence the decision-making process
Outcomes	<i>Effectiveness</i> – Improve the quality of decisions
	<i>Mutual learning</i> – Contribute to all participants' knowledge
	<i>Reciprocity</i> – Reward or provide incentives
	<i>Cost-effectiveness</i> – Output or outcome is cost-effective relative to inputs

Source: Krishnaswamy 2012

of singular events where only the loudest voice is heard. There must be an inclusive community of participation where stakeholders have equal voice and play a continuous role in the policy-making process.

Cross-References

► [Stakeholder Governance and Citizen Science](#)

References

André, P., Enserink, B., Connor, D., & Croal, P. (2006). *Public participation international best practice*

- principles. Special publication series no. 4.* Fargo: International Association for Impact Assessment.
- Dietz, T., & Stern, P. C. (2009). *Public participation in environmental assessment and decision making*. Washington, D.C.: National Academies Press. Retrieved May 12, 2020, from <https://www.nap.edu/catalog/12434/public-participation-in-environmental-assessment-and-decision-making>.
- Empel, C. v. (2008). The effectiveness of community participation in planning and urban development. In A. Gospodini, C. Brebbia, & E. Tiezzi (Eds.), *The Sustainable City V* (Vol. 117, pp. 549–556). WIT Presss. <https://doi.org/10.2495/SC080521>.
- Kandil, S. (2018, February 22). *Public Participation Guide: Introduction to Public Participation*. Retrieved from United States Environmental Protection Agency: <https://www.epa.gov/international-cooperation/public-participation-guide-introduction-public-participation>
- Kandil, S. (2018b, February 22). *Public Participation Guide: Tools to Generate and Obtain Public Input*. Retrieved from United States Environmental Protection Agency: <https://www.epa.gov/international-cooperation/public-participation-guide-tools-generate-and-obtain-public-input>
- Krishnaswamy, A. (2012). Strategies and tools for effective public participation in natural resource management: Extention note. *Journal of Ecosystems and Management*, 13(2), 1–13. Retrieved March 12, 2020, from <https://pdfs.semanticscholar.org/b27b/d1b5d9abad7164bc14dfb63a3a91d77a78d9.pdf>.
- McCoy, K. L., Krumpe, E. E., & Cowles, P. D. (1994). *The principles and processes of public involvement: A state-of-the-art synthesis for agencies venturing into ecosystem management* (pp. 94–0517). Moscow: Department of Resource Recreation & Tourism, College of Forestry, Wildlife & Range Sciences, Moscow and The East Side Ecosystem Management Team Cooperative Agreement: PNW.
- Meadowcroft, J. (2004). Participation and sustainable development: Modes of citizen, community, and organizational involvement. In E. Elgar & W. Lafferty (Eds.), *Governance for sustainable development: The challenge of adapting form to function* (pp. 162–190). <https://doi.org/10.4337/9781845421700.00014>.
- Moseti, Y. (2010). Public participation for sustainable development in local cities. *46th ISOCARP Congress*, (pp. 1–7). Nairobi, Kenya. Retrieved March 27, 2020, from https://www.google.com/search?newwindow=1&rlz=1C1CHBF_enDE850NG867&sxsrf=ALeKk006i_HWsb93gzoHMVDiIPliHYJtiA%3A1590262779082&ei=3vJXrjSBMTaSAfShrCwBQ&q=Public+participation+for+sustainable+development+in+local+cities&oq=Public+participation+for+sustainable
- Odhiambo, M., & Opiyo, R. (2017). *Effective public participation mechanisms in Mombasa, Kilifi, Taita Taveta and Kajiado counties*. Nairobi: CISP – Comitato Internazionale per lo Sviluppo dei Popoli - International Committee for the Development of Peoples. Retrieved January 10, 2020, from <http://developmentofpeoples>.

org/uploads/analysis/analysisPARTICIPATION-MAIN-Book_Amended.pdf.

Robinson, L. (2003). *Two tools for choosing the appropriate depth of public participation in decision-making*. Enabling change. Retrieved April 19, 2020, from http://www.enablingchange.com.au/Two_decision_tools.pdf

Public Procurement and CSR

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Synonyms

Smart public procurement; Social and responsible public procurement; Strategic public procurement; Sustainable public procurement

Description

The link between public procurement and corporate social responsibility (CSR) is not something new. McCrudden (2006) had in fact argued on the “use of public procurement in the pursuit of CSR” more than a decade ago. He even traced its connection from social policies in the nineteenth century that integrated “social and environmental concerns in business operations” through, for example, the prohibition of child labor under the US Fair Labor Standards Act of 1938, and until the development of “CSR-supportive policies” in public procurement in the European Member States, for example, introduction of social clauses in government contracts (Belgium), inclusion of social and environmental consideration in public procurement contracts (French), and significant amount of green public procurement, that is, 40–70% of published tenders on Tenders Electronic Daily in 2004 (Austria, Finland, Germany, the Netherlands, Sweden, and the UK). Accordingly, public procurement, especially public procurement law, provides an excellent treatment on the subject matter of CSR, the level of government authority, and the place of performance of contract (McCrudden, as cited by Snider et al. 2013).

Introduction

This contribution will not attempt to reargue on the important links between public procurement and CSR, albeit, provide a two-pronged approach on how to strengthen their links. The first prong (which is the most common) discusses the role of public procurement as a strategic tool to promote CSR by analyzing the existing public procurement policies and practices that may encourage and/or require private suppliers or contractors to strengthen CSR in their operations. The second prong focuses on the use of the purchasing powers by public procurers by looking at the possibility of maximizing CSR as an “incentive-based market-mechanism” in which the government acts as a purchaser (McCrudden 2006), and thereby, transform any government agency to a potential “CSR Champion.”

In doing so, this entry highlights the methodologies, including best practices, in public procurement that promote CSR among private suppliers in the public procurement market, while assessing the potentiality of adopting these practices in public procurement with an objective of maximizing the capability of business sectors and the government to “mutually shape each other” in a symbiotic relationship (Gammage and Novitz 2020) for a more sustainable future.

Public Procurement as a Strategic Tool for CSR

Public procurement, also known as “government acquisition” or “government contracting,” has evolved from a traditional “process- and transaction-based approach, i.e., the simple process of obtaining the needed supplies or services through contractual means, to the most recently accepted approach of using public procurement as a strategic function of government” (Lloyd and McCue 2004), an approach that aims not only to “mirror the private sector purchasing” (Guinepero, 2000, as cited by Lloyd and McCue 2004) but, more importantly, to achieve policy objectives such as climate mitigation, innovation or social inclusion, investment, and competitiveness (European Commission 2019).

While the term “strategic public procurement” is often used as a synonym for “sustainable public procurement,” the former indicates a broader scope, since, it focuses not only on the economic, social and environmental goals but also on other “horizontal issues” such as innovation and other public procurement policy considerations, that is, green public procurement (GPP), socially responsible public procurement (SRPP), and public procurement for innovation (PPI) (Handler 2015).

Corporate social responsibility (CSR), on the other hand, refers to the “actions that appear to further some social good, beyond the interests of the firm and that which is required by law” (McWilliams and Siegel 2001), which can either be “explicit,” that is, voluntary and formalized corporate policies on responsibility to promote social interests, or “implicit” (mandatory social obligations for companies arising from social consensus, i.e., prohibition of child labor) (Matten and Moon 2008).

Interestingly, however, the important role of public procurement as a CSR driver (OECD 2020) is significant only in enhancing “implicit CSR” by ensuring compliance by private suppliers or contractors to the requirements of the government in promoting “social interests” such as the prohibition of child labor. In fact, in some cases, companies that are already participating in public procurement do not find it necessary to pursue other “voluntary philanthropic activities” such as for example payment of “living wage” together with retirement and health benefits (Burton et al. 2000, as cited in Snider et al. 2013) since compliance alone to the minimum social standards, for example, payment of minimum wage is already profitable (Snider et al. 2013) and sanctions such as debarment or exclusion from future government contracts are imputed only in case violations of the minimum government standards, that is, criminal convictions or grave misconduct even without conviction such as bribery (Arrowsmith and Maund 2009).

The challenge, therefore, is to enhance the promotion of “explicit CSR” through public procurement by not only requiring “more social responsibility” from private companies with whom the government is doing business but also

promoting that doing so is, in fact, more profitable.

Governments around the world spend an estimated US\$9.5 trillion in public contracts every year (World Bank 2020), which represents 12–14% of GDB on average across OECD countries (BHRRC 2017; European Commission 2019) and 15–25% of non-OECD (developing) states (UNHR 2011; World Bank 2020). The USA alone spends an average of USA\$350 to USA\$500 billion a year, which makes it largest single purchaser in the global economy (BHRRC 2017).

In the European Union, public procurement accounts for 40% of public spending, or nearly EUR 2000 billion/year (European Commission 2019), which gives the governments of Member States a significant influence over the markets, where they represent a large part of the market share (i.e., 14% of EU GDP) (Maitre-Ekern 2018).

It is not a rocket science to therefore conclude that the combined government purchasing power has the potential of influencing the market, more particularly, the economic operators that participate in public procurement market (i.e., bidders, suppliers, tenderers, contractors) to do more “socially responsible activities” by incorporating “more explicit CSR” as requirements for competition in accessing public procurement opportunities. In fact, the role of public procurement as a “strategic instrument” to “respond to social, environmental and economic objectives” has already been identified by numerous international and national organizations such as the European Commission (2017). There are already recorded best practices in public procurement that ‘influences CSR (1) through standards that apply to any firm seeking to sell to the government; (2) through contracting process in proposal evaluations; and (3) through contract specifications and deliverables that accomplish CSR-related purposes’ (Snider et al. 2013).

In Europe, for example, public authorities have started to use their purchasing power in introducing sustainability in public procurement such as the use of Green Public Procurement (GPP) criteria (Maitre-Ekern 2018), for example, the use recycled materials in new products in selected

government procurement activities in Germany, the Netherlands, and Finland (Tojo and Thidell 2018).

Under the 2014 EU Procurement Directives, sustainability considerations may be incorporated directly in public procurement as part of the award criteria (e.g., fair trade certification as an award criterion) or conditions in the performance of the contract (e.g., where a supplier reduces the carbon emissions associated with production or delivery of a product or service, or a works contractor employs disadvantaged workers or trains apprentices) provided that these considerations are “link to the subject matter” of the procurement and can be verified, or indirectly by encouraging companies to change their general corporate practices (Semple 2016) through adherence to voluntary policies such as eco-labels or code of conduct in regulating product design features by incorporating environmental standards in product description, that is, the specific characteristics of the goods and services that they are offering the government (which is the common practice in bid/tender evaluation), and in “product and processing methods” or on how the product is produced, that is, including issues on emission during production and transport (Bugge et al. 2020).

In other countries, such as Japan, public procurement is used as a tool not only to call for the contributions of corporations in delivering sustainable development goals on environmental issues, fairness, and free competition, including responsible procurement, adherence to ISO 26000 on social responsibility and ISO 20400 on sustainable procurement as reference but also to introduce green purchasing to small- and medium-sized companies as part of the supply chain through a simplified system of self-commitment, evaluation, and reporting concerning environmental management under the name “Eco-action 21” in 1998 (Kozuka 2020). Government agencies are already required to (i) facilitate green procurement, (ii) introduce environment accounting, and (iii) promote environment reporting (id).

While most of GPP criteria and ecolabels or certification requirements schemes remain voluntary (e.g., Energy Star, use of life cycle costing),

some standards are, in fact, already mandatory through horizontal legislation, that is, mandatory energy performance standards (MEPS) set under the EU Ecodesign Directive, sector oriented laws on chemical restrictions (packaging, electronics), and the EU law and policy for conflict minerals, or they are already the “de facto market requirements” (Dalhammar et al. 2018).

The “environmental turn” in public procurement had already led to the adoption of several EU green public procurement framing measures, many of which were actually binding obligations on contracting authorities to procure “green”: specific mandatory GPP rules contained in the Energy Star Regulation (2008), to buy energy-efficient IT office equipment; the Clean Vehicles Directive (2009), mandating environmental friendly vehicles; the Energy Performance of Buildings Directive (2010), introducing an obligation for new buildings owned and occupied by public authorities to be “nearly zero-energy” by end of 2018; and the Energy Efficiency Directive (2012), to purchase energy-efficient buildings and equipment of the highest energy labeling class (Schebesta 2018).

Aside from the direct economic benefits in the form of energy savings and increased demand, one possible spillover from green public procurement is the adoption by private developers of certification scheme like the Leadership in Energy and Environmental Design (LEED) green building certification program, for example, the adoption of the US Green Building Council’s LEED standard in the construction of green building in selected cities in the State of California (USA) resulted not only to the adoption of the said standard by the private-sector in the government contracting market but also by the supplier investments in green building expertise (Simcoe and Toffel 2012).

Government can even trigger the development of new and more energy-efficient products on the market through public procurement for innovation (PPI). Manufacturers who are hesitated to develop better products due to demand uncertainty may participate in PPI that guarantees a certain amount of new products will be bought by the government, for example, the USA and

Sweden have successfully used procurement to induce the launch of more energy-efficient appliances such as fridges and freezers (Dalhammar et al. 2018).

Since public procurement market is a locus of corruption and other poor-governance practices (Popa 2018), which are manifested by the usual “red flags” for corrupt practices such as single-bidder, that is, a simple indicator for corruption risk index (CRI) or other complex CRI indicators, for example, no call for tender, restricted procedure, risky evaluation criteria, extreme submission period, and extreme decision period (Fazekas and Kocsis 2017), governments can implement institutional reforms toward diversification of interactions between public and private actors through, for example, explicit quantitative targets for diversification, as well as auditing of close connections in public procurement in order discourage and disrupt corrupt interactions (Popa 2019).

Governments can do all of these, not only by acting as the “buyers” but also as public procurement policy formulator, implementer, and regulator. Governments can, therefore, do more than just, for example, incorporate a clause on the protection of human rights in the contract conditions for government contracting. They can, in fact, extend the requirement in mitigating the risks of child labor, forced labor, and human trafficking not only in the business operation of their winning bidders or tenderers but also within the “supply chains of the companies with whom they do business” (UNHR 2011). They can even adopt the model public procurement provisions such as mandatory due diligence reporting obligations for relevant public bodies, inclusion of modern slavery provisions in social clauses of public procurement, and mandatory exclusion provisions for suppliers involved in modern slavery violations or for failure to report under mandatory reporting provisions (BHRRC 2017), and even extend these requirements not only in their own business operation but also within their supply chain, such as in the case of the United Kingdom Modern Slavery Act of 2015 (Johnston 2020).

Although legislative intervention is often needed to perform the abovementioned activities

and overcome the limited scope for the promotion of sustainable development such labor standards for workers in the global supply chains (Rühmkorf 2020), government contracting is not, however, precluded from adopting international standards such as the ILO Convention on Labor Clauses for Public Contracts, which promotes socially responsible public procurement by requiring bidders and contractors to align themselves with the locally established prevailing pay and other working conditions as determined by law or collective bargaining, or implement some of existing policy approaches that align with international standards such United Nations Guiding Principles on Business and Human Rights and the OECD Due Diligence Guidance for Responsible Business Conduct (UNHR 2011), and, thereby, mitigate the adverse social and environmental externalities generated by multinational enterprises (MNEs) that take advantage of weak accountability systems and poor enforcement of laws in developing countries, using them as safe havens for profit-making at the expense of sustainability (Zhao 2020).

To address the social and environmental problems arising in global supply chains, for example, human trafficking, hard solutions in disclosure and due diligence are already replacing voluntary initiatives not only to reduce their adverse impacts of these problems but also to enforce sanctions, more particularly focused on the liability of the actor with the most control in the supply chain (Villiers 2020).

Songi and Dias (2020) even argued on the importance of a sanction-based regulatory approach or a hybrid regulatory model that combines a mixture of both mandatory and voluntary approaches in sustainability reporting regime using a “comply or else” model, instead of either “comply or explain” or “apply or explain” self-regulatory model in order to address the lack of maturity in defining corporate performance measures of values in most jurisdictions. They justified this model using the case of Africa where companies are not required to engage in corporate sustainability activities under the prevailing CSR law (The Companies Act) but are, however,

mandated to embrace corporate sustainability under the Broad-Based Black Economic Empowerment Act, 69 Act No. 46 of 2013 by requiring South African-based companies to engage in Preferential Procurement Policy in favor of local companies (Mongalo 2020).

Preferential treatment is in fact becoming one of the modalities for the implementation of explicit CSR. In the case of the UK, for example, certified companies are given preferential treatment under the UK Public Services (Social Value Act of 2011) due to the importance of certification schemes not only as a proxy for social value but also as an effective regulatory tool in reconciling sustainability concerns with the functional mechanisms of market economies (Möslein 2020).

CSR policies are already becoming an important part of government contracting as shown by the inclusion of social and environmental impacts as part of the award criteria to be weighed against price (e.g., by allowing a 10% price preference for tenders offering social benefits) (Arrowsmith and Maund 2009). In fact, suppliers, for example, in public utilities can be excluded for anticipated failure to fulfill certain CSR requirements and public procurers can even use these criteria – CSR requirements – to narrow down registered suppliers to a “preferred list” (Id.).

Aside from preferential treatment for CSR compliant companies, public procurement is already used as “an extraordinarily adaptable tool” to increase CSR compliance through enforcement measures such as disqualifying non-compliant companies from being awarded government contracts (Snider et al. 2013). The question, however, is if the government can use legal measures to promote sustainable corporate behavior through an ex ante regulation, that is, regulatory minimum standards or mandate disclosure, and ex post litigation, that is, filing a case for damages for corporate misbehavior (Shapira 2020), why does the government remain passive in mainstreaming the same standards in the selection of private companies with whom it is doing business despite the recorded best practices in promoting CSR compliance through public procurement.

Public Procuring Entities as CSR Champions: A “Walk-the-Talk” Strategy

The term “procurement” was first used in a regulatory term in the 1960s, and the use of “tenders” in the selection of suppliers and contractors became a common practice only around mid-1970s, which replaced the then practice of securing external supply of goods and services like private enterprises through either “direct procurement” (Morlino 2019) or “sole-source negotiations” (Wittie 2003).

Prior thereto, public procurers acted more like private enterprises than contracting administrators due to the absence of a public law-type procedure, a very limited market research, and a practice of identifying contractors without a predetermined public procedure (Morlino 2019). The “histories of protracted wresting” between the government and contractors in preventing delays in the delivery of public works and services (Yukins 2017) aggravated by major corruption scandals in the 1990s (Morlino 2019) has resulted to making public procurement as one of the highly regulated (Prat et al. 2012) and legislated government activities.

Unlike, however, with other government functions, public procurement activities call for two-tier governmental functions – purchasing and regulating (Arrowsmith and Kunzlik 2009). In assuming one or a combination of these roles, the common mechanisms that public sector adopts in promoting CSR include (1) regulating by defining the minimum standards for business performance embedded within the legal framework; (2) facilitating by stimulating companies to engage in SR agenda or to drive social and environmental improvements; (3) partnering as a participant or facilitator, for example, public private partnership; and (4) endorsing CSR through various means, that is, CSR in policy documents or direct recognition of the efforts of individual enterprises through award schemes (Choi 2010).

As procuring entity and a regulatory agency, governments can even participate in the development of standards in describing specificity the materials and products that they need to purchase, while regulating the use of the said standards to

serve a more varied array of purposes, including protecting public health and safety by giving voluntary standards the force of law, integrating public regulatory requirements with private standards regimes, specifying the technical details of regulatory requirements, or helping government officials to evaluate regulatory compliance and enforce the law (Bremer 2019).

What is lacking, however, is for the government to leverage on its purchasing power in order to regulate the transformation of the traditional approach in public procurement as a “compliance driven and reactive” CSR tool through sanctions like debarment for corrupt practices or disqualification/ineligibility for pass-performance to a more proactive “CSR-centered” legislation (Okoye 2020).

Public authorities can, in fact, require not only from their contractors or suppliers the integration of “explicit CRS” in their business strategies, but, more so, their integration in their own management and operations the explicit CSR requirements that they are requiring from their business partners, thereby, making them a model for CSR integration, especially in cases where they likewise play the role of shareholders.

In some countries, government is also a shareholder (e.g., countries in Nordic economies), wherein government and public pension funds are considered as “major socially responsible investors in Europe,” thereby making public entities such as states and municipalities as important shareholders in both private and listed companies (Mahonen and Johnsen 2020). Nonetheless, it does not necessarily ensure that sustainable corporate practices are adopted in companies where a government is a shareholder. In fact, there are countries even with a “clean and green image” like New Zealand where sustainability considerations are yet not central in their corporate governance that is still grounded on prioritizing sustainability next only to shareholder primary norms of promoting wealth maximization (Watson 2020).

The challenge, therefore, is not only on defining what CSR is (Pilato 2020), but more on what CSR means when applied in a government setting such as public procurement.

Public procuring entities (i.e., government agencies, institutions, or local government units) may, in fact, adopt the best practices on “responsible business conduct,” a conduct which calls for companies to become socially responsible either by “voluntarily” integrating social, environmental, ethical, consumer, and human rights concern in their business strategy operations (OECD 2020) and not just simply apply the minimum requirements of the law in government contracting. In procuring goods or services, public procuring entities are acting as economic actors, hence, they are expected to behave responsibly and lead by example in implementing the main international corporate responsibility instruments not only for public interest and accountability of public spending but also for the legitimacy of public policies on responsible business conduct (UNHR 2011).

Public procuring entities should lead by example in integrating due diligence criteria in the selection of their suppliers and contractors (UNHR 2011). If public interest required mandatory disclosure from private firms of their group policy in relation to “environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters,” including the outcome of these policies; the risks related to these matters and how the group manages those risks; and the non-financial key performance indicators relevant to the particular business, in their annual accounts (Clarke and Anker-Sorensen 2020), as part of hard regulatory requirements to steer corporate behavior (Chiu 2019), the same mandatory requirements should be used to “steer” the same behavior from public procuring entities since they are also acting as economic actors in a public procurement market.

In EU, for example, the EU Non-financial Disclosure Directive already includes corporate reporting obligations to report the development, performance, position, and impact of its activity to environmental, social, and employee matters, respect for human rights, anti-corruption, and bribery matters, which is the same concept of materiality for environment and social impact disclosures in accordance with the Global Reporting Initiative’s Reporting Standards (GRI) (Chiu 2019).

The question is why not subject public procuring entities to the same reporting requirements like the case of state-owned companies in China and Sweden (www.globalreporting.org) or the case of international organizations like the United Nations Office for Project Services (www.unops.org), which have voluntarily submitted their operations to GRI reporting standards.

Adopting international standards like the GRI standards in government contracting will not underline sustainability in the organizational operation of public procuring entities but will also promote sustainability to their contracting private companies, and this can even extend to overseas partners of their suppliers, and thereby promote extraterritorial sustainability (Snider et al. 2013).

Summary

If it remains a challenge to promote both explicit and implicit CSR to private companies, it is even more challenging to integrate them in government operations, more particularly in public procurement.

Some of the challenges include ensuring that the legal framework for public procurement provides the mechanisms to address not only environmental issues through sustainability requirements in the technical evaluations of the submitted proposals, tenders, or bids but also social issues such as child labor, forced labor, and human trafficking in the operations of private companies through contractual provisions in the entire supply chain.

Strong CSR policies in government contracting require a strong monitoring and verifying compliance mechanisms, coupled with an effective engagement among stakeholders (i.e., business, social partners, and civil society) in strengthening sustainability in public procurement, while building capacity and raising awareness among public officials on sustainability integration in public procurement and strengthening international collaboration on responsible procurement through sharing of best practices and exchanging of tools and information risks related

to products and markets, including follow-up and monitoring (UNHR 2011).

To address this challenge, public procurement should not be a function limited to contracting officials. Like most CSR champions, the public procurement unit must have sustainability team that will provide an up-to-date information on the unit's sustainability objectives, including how the unit is managing its ethical strategy, and an up-to-date information about the availability of environmentally preferable goods and services, while ensuring that the sustainability strategy is communicated throughout the organization to get the involvement of all units in developing sustainable procurement strategy that will ensure capacity building within the procuring organization (Theron and Dowden 2017), and adopting voluntary CSR reporting standards like GRI or even UN Global Compact can be a first step toward a more socially responsible government contracting.

Cross-References

- ▶ [CSR and Role of Government as a Regulator](#)
- ▶ [ISO 14000 Standards Series](#)
- ▶ [OECD Guidelines for Multinational Enterprises](#)
- ▶ [OECD Principles of Corporate Governance](#)
- ▶ [United Nations Global Compact](#)

References

- Arrowsmith, S., & Kunzlik, P. (2009). Public procurement and horizontal policies in EC law: General principles. In S. Arrowsmith & P. Kunzlik (Eds.), *Social and environmental policies in EC procurement law: New directives and new directions*. Cambridge University Press.
- Arrowsmith, S., & Maund, C. (2009). CSR in the utilities sector and the implications of EC procurement policy: A framework for debate. In S. Arrowsmith & P. Kunzlik (Eds.), *Social and environmental policies in EC procurement law: New directives and new directions*. Cambridge University Press.
- Bremer, E. S. (2019). Government use of standards in the United States and Abroad. In J. Contreras (Ed.), *The Cambridge handbook of technical standardization law*. Cambridge University Press.

- Bugge, H. C., Dalhammar C., & Maitre-Ekern, E. (2020). Developing legislation to prevent environmental damage from products: a herculean but necessary task. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability* (pp. 1–20). Cambridge University Press.
- Burton, B. K., Farh, J., & Hegarty, W. H. (2000). A cross-cultural comparison of corporate social responsibility orientation: Hong Kong vs. United States students. *Teaching Business Ethics*, 4, 151–167, as cited in Snider, et al., 2013.
- Business and Human Rights Resource Centre (BHRRC) (2017) Modern slavery in company operation and supply chains: Mandatory transparency, mandatory due diligence, and public procurement due diligence.
- Chiu, I. H. Y. (2019). Disclosure regulation and sustainability: Legislation and governance implications. In J. Contreras (Ed.), *The Cambridge handbook of technical standardization law*. Cambridge University Press.
- Choi, J.W. A study of the role of public procurement: Can public procurement make society better, a paper presented during the 4th International Public Procurement Conference held in Seoul, South Korea on 26–28 August, 2010. Available at <http://www.ippa.org/images/PROCEEDINGS/IPPC4/13ProcurementPreferences/Paper13-4.pdf>. Last visited 22 Aug 2020.
- Clarke, B., & Anker-Sorensen, L. (2020). The EU as a potential norm creator for sustainable corporate groups. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Dalhammar, C., Richter, J. L., & Machacek, E. (2018). Energy efficiency regulations, market and behavioural failures and standardization. In E. Maitre-Ekern et al. (Eds.), *Preventing environmental damage from products*. Cambridge University Press.
- European Commission. (2017). Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions on Making Public Procurement work in and for Europe, COM (2017) 572 final, 3.10.2017.
- European Commission. (2019). *Seizing opportunities in the public procurement of tomorrow: Five years of modern and strategic public procurement 2014–2019*. Luxembourg: Publications Office of the European Union.
- Fazekas, M., & Kocsis, G. (2017). Uncovering High-Level Corruption: Cross-national objective corruption risk indicators using public procurement data. *British Journal of Political Science*, 50, 155–164, Cambridge University Press.
- Gammage, C., & Novitz, T. (2020). Trade, investment and corporate sustainability. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Handler, H. J. (2015). Strategic public procurement: An overview. Available at SSRN: <https://ssrn.com/abstract=2695546> or <https://doi.org/10.2139/ssrn.2695546>. Last visited 22 Aug 2020.
- Johnston, A. (2020). Market-led sustainability through information disclosure: The UK approach. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Kozuka, S. (2020). Corporate governance reform, social norms and sustainability in Japanese companies. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Lloyd, R. E., & McCue, C. P. (2004) What is public procurement? Definitional problems and implications. International public procurement conference proceedings. Vol. 3. Available at <http://www.ippa.org/IPPC1/PROCEEDING%20PAPERS/LloydMcCue.pdf#:~:text=Public%20procurement%20is%20one%20of%20the%20most%20highly,laws%20and%20regulations%20governing%20its%20conduct.%20Federal%20Government.> Last visited 22 Aug 2020.
- Mahonen, J., & Johnsen, G. (2020). Law, culture and sustainability: Corporate governance in the Nordic countries. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Maitre-Ekern, E. (2018). Exploring the spaceship earth: A circular economy for products. In E. Maitre-Ekern et al. (Eds.), *Preventing environmental damage from products*. Cambridge University Press.
- Matten, D., & Moon, J. (2008). Implicit' and 'explicit' CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424. <https://doi.org/10.5465/AMR.2008.31193458>.
- McCrudden, C. (2006). Corporate Social responsibility and public procurement. Working paper no. 9/2006. University of Oxford Faculty of law legal studies research paper series.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127. <https://doi.org/10.2307/259398>.
- Mongalo, T. H. (2020). The social and ethics committee: Innovating corporate governance in South Africa. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Morlino, E. (2019). *Procurement by international organizations: A global administrative law perspective*. Cambridge University Press.
- Möslein, F. (2020). Certifying 'Good' companies: A comparative study of regulatory design. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.

- OECD. Leveraging responsible business conduct through public procurement, highlights of the OECD seminar on the challenges, opportunities and good practices on public procurement and responsible business conduct held on 5 March 2020.
- Okoye, A. (2020). CSR and a capabilities approach to development: CSR Laws as an allocative device? In O. K. Osuji, F. N. Ngwu, & D. Jamali (Eds.), *Corporate social responsibility in developing and emerging markets: Institutions, actors and sustainable development*. Cambridge University Press.
- Pilato, V. (2020). Institutional theory and corporate social responsibility in developing countries – A comparative institutional perspective. In O. Osuji, F. N. Ngwu, & D. Jamali (Eds.), *Corporate social responsibility in developing and emerging markets: Institutions, actors and sustainable development*. Cambridge University Press.
- Popa, M. (2018). What do good governments actually do? An analysis using European procurement data. *European Political Science Review*, 10(3), 369–391.
- Popa, M. (2019). Uncovering the structure of public procurement transactions. *Business and Politics*, 21(3), 351–384.
- Prat, A. J., Rendon, R. G., and Snider, K. F. (2012) Public procurement and corporate social responsibility: A comparison of private firms and U.S. defense contractors, a paper presented during the 5th International Public Procurement Conference held in Seoul, South Korea on 17–19, August, 2012. Available at <http://www.ippa.org/IPPC5/Proceedings/Part13/PAPER13-9.pdf>. Last visited 22 Aug 2020.
- Rühmkorf, A. (2020). Stakeholder values versus corporate sustainability: Company law and corporate governance in Germany. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Schebesta, H. (2018). Revision of the EU green public procurement criteria for food procurement and catering services – Certification schemes as the main determinant for public sustainable food purchases? *European Journal of Risk Regulation*, 9.
- Semple, A. (2016). The link to the subject matter: A glass ceiling for sustainable public contracts? In B. Sjaafjell & A. Wiesbrock (Eds.), *Sustainable public procurement under the EU law: New perspectives on the state as stakeholder*. Cambridge University Press.
- Shapira, R. (2020). Amenable Controls: How companies influence laws, reputation and morals. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability* (pp. 641–654). Cambridge University Press.
- Simcoe, T., & Toffel, M. W. (2012) Public Procurement and the private supply of green buildings, Working paper 18385, National Bureau of Economic Research. <http://www.nber.org/papers/w18385>. Last visited 22 Aug 2020.
- Snider, K. F., Halpern, B., Rendon, R. G., & Kidalov, M. V. (2013). Corporate social responsibility and public procurement: How supplying government affects managerial orientations. *Journal of Purchasing & Supply Management*, 19, 63, at 65–66. 83.
- Songi, O., & Dias, A. K. (2020). Sustainability reporting in Africa: A comparative study of Egypt, Equatorial Guinea, Kenya, Nigeria, Botswana, and South Africa. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Theron, C., & Dowden, M. (2017). *Strategic sustainable procurement: Law and best practice for the public and private sectors*. Routledge.
- Tojo, N., & Thidell, A. (2018). Material recycling without hazardous substances: Interplay of two policy streams and impacts on industry. In E. Maitre-Ekern et al. (Eds.), *Preventing environmental damage from products*. Cambridge University Press.
- United Nations Human Rights. (2011). Guiding principles on business and human rights: Implementing the United Nations “protect, respect and remedy” framework.
- Villiers, C. (2020). Global supply chains and sustainability: The role of disclosure and due diligence regulation. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Watson, S. (2020). Moving beyond virtue signaling: Corporate sustainability for New Zealand. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, corporate governance and sustainability*. Cambridge University Press.
- Wittie, P. (2003). *Origins and history of competition requirements in Federal Government Contracting: There's nothing new under the sun, a paper presented during the ninth annual federation procurement Institute in Annapolis*. Maryland.
- World Bank. (2020) Procurement for development. Available at <https://www.worldbank.org/en/topic/procurement-for-development>. Last visited 22 Aug 2020.
- Yukins, C. (2017). The U.S. Federal procurement system: An introduction. GWU law school public law research paper no. 2017-75.
- Zhao, J. (2020). Extraterritorial attempts at addressing challenges to corporate sustainability. In B. Sjaafjell & C. M. Bruner (Eds.), *The Cambridge handbook of corporate law, Corporate governance and sustainability*. Cambridge University Press.

Public Procurement of Buildings

► Energy Efficiency in Public Building Procurement

Public Relations and Finance

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Synonyms

Financial Communication; Financial Marketing;
Investor Relations

Definition and Fields of Public Relations

The term public relations (PR) can be traced back to the end of the eighteenth century and is supposed to be introduced by Thomas Jefferson (Gackowski 2017). However, modern PR started at the beginning of the twentieth century with companies defending their reputation in newspaper articles. Later, Boston University was the first to establish a School of Public Relations in 1947 (Tikkanen 2022). Originating from the USA, PR expanded around the globe, for example, in Germany, five phases from the early formation in the 1960s, over expansion in the 1990s, up to a sophisticated differentiation can be observed (Köhler 2018). Today, PR is seen as a fundamental part of the general strategy of a company and encompasses all communication activities toward different stakeholder groups (Schmidt and Rennhak 2020). However, since research on PR is scattered around disciplines and depends on cultural context factors, different definitions of the phenomenon are discussed (Schmidt and Rennhak 2020). In communication research, one broadly accepted definition is given by Cutlip et al. (2000). According to the authors, public relations is a management function that establishes and maintains beneficial relationships between an institution and the public addressing the success of the institution. By referring to different criteria, PR can be segmented into various areas (Laskin 2014). Among others, the relationship management of stakeholders on financial

markets is the focus of many corporations. Accordingly, the term investor relations (IR) or financial communications emerged for this special field of activities in PR.

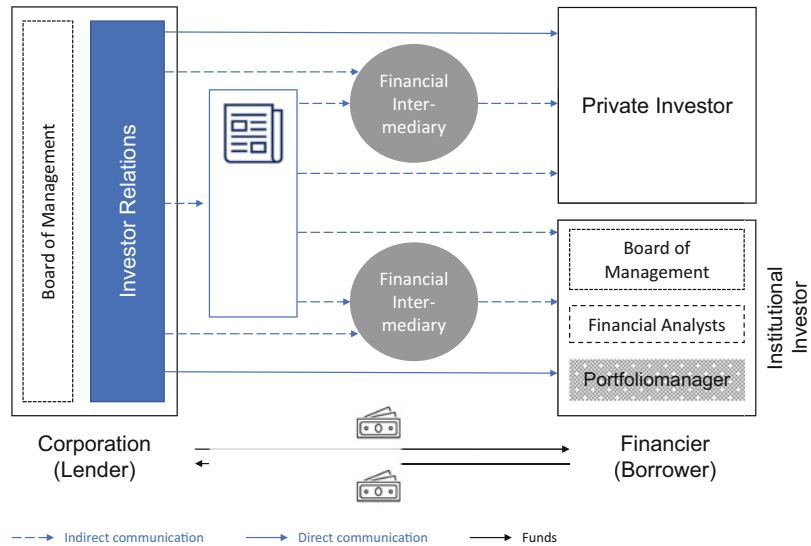
In the USA, IR is supposed to be used for the first time by General Electric in 1953, while BASF AG was the first company in Germany to have established an IR department in 1988 (Gackowski 2017). Reflecting the increased separation of ownership and control in modern economic systems, IR activities developed in line with the emergence of organized financial markets at the beginning of the twentieth century (Laskin 2018b). Furthermore, the rise of IR over the decades is closely linked to increased financial market regulation in response to financial market crises (Laskin 2018b; Gackowski 2017): The first period of IR began after the Great Depression in the 1930s. Security Law was enacted to diminish frauds in the issuance and trading of financial instruments by sharing information with financial market participants. The second milestone for the increased role of IR dates back to the Enron case. Subsequently, disclosure regulation on financial data was extended. Additionally, with the Sarbanes–Oxley Act in 2002, corporate governance structures were modified and sanctions for misbehavior of managers and board of directors were introduced. Finally, financial market regulation was improved fundamentally after the financial crisis in 2008, which enhanced the role of IR further. Because of the stricter regulation and rapid digitalization, sharing financial data became less important for IR in favor of nonfinancial disclosure activities. The new focus was on relationship building by reporting on the process of value creation (Doan and McKie 2017).

Definition and Perspectives on Investor Relations

Various definitions of IR appear in academic research, because of the interdisciplinary character of the research topic (Doan and McKie 2017; Bassen et al. 2010). First, IR can be defined as an organizational unit in a corporation that focuses

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Fig. 1 Investor relation as functional unit (source: owns figure)



on financial communications, facilitating the exchange of funds on financial markets between lender and borrower (see Fig. 1). This definition is predominant in communication science (Köhler 2015). Financial communication can directly address the two target groups: institutional and private investors (see Fig. 1). In addition, IR communicates indirectly to these two groups via financial media and financial intermediaries (see Fig. 1). Today all stock-listed corporations maintain close relationships to financial market participants. The traditional role of the Investor Relations Officer (IRO) turned from mere communicational to a more financial one (Hope et al. 2021; Bassen et al. 2016; Laskin 2009; Rao and Sivakumar 1999). Furthermore, IROs are professionally organized in national umbrella associations (e.g., National Investor Relation Institute (NIRI) in the USA; Deutscher Investor Relations Verband (DIRK) in Germany). Since IR is an omnipresent phenomenon around the world and is becoming increasingly important as a profession, communication research is mainly conducted in the areas of relationship building and reputation management (Köhler 2015; Laskin 2014; Brennan and Tamarowski 2000; Rao and Sivakumar 1999). Communication scholars largely use qualitative research methods (Doan and McKie 2017).

IR is also a field of research in corporate finance literature. Correspondingly, a second definition based on an activity-based concept of IR is used (Soppera 2019). This definition of IR comprises all kinds of communication activities on financial markets and focuses on relationship-building with financial market participants. Hence, the one-sided flow of information in the first definition of IR (see Fig. 1) is extended to a bilateral exchange of information. This definition is in line with the activity-based definition of corporate finance (Merbecks 2022) and opens up avenues for more interdisciplinary research on IR (Laskin 2018b; Doan and McKie 2017). The business stream on IR research formulates explanatory models and tries to test them by using quantitative methods (Doan and McKie 2017; Kirk and Vincent 2014).

Initially, the existence of IR was explained in the context of the (information) efficient financial market hypothesis (Fama 1970). By providing decision-relevant information to the market participants, IR is the cornerstone for all three levels of efficient markets (Laskin 2018b). Subsequently, New Institutional Economics introduced market imperfections into the basic neoclassical model of perfectly competitive financial markets: information risks, asymmetric information, and transactions costs. Consequently, researchers

were able to explain the functions of IR in greater detail by referring to conflicts of interest on financial markets. These conflicts occur due to the asymmetric distribution of information and general informational risks and are based on signaling and agency theory (Soppera 2019; Köhler 2015). Disclosure of decision-relevant information to the financial community is a market-based instrument to alleviate financial market imperfections (Soppera 2019). The benefits of disclosing information to financial markets are analyzed theoretically and empirically based on two cause-effect theories: First, disclosure of information is supposed to have indirect influence on stock prices and financing costs (Brennan and Tamarowski 2000; Farragher et al. 1994). Second, disclosure activities are supposed to have a direct impact on the firm's shareholder value (Bassen et al. 2010). Many quantitative studies are conducted to show the impact of IR on market variables by using large databases (Doan and McKie 2017).

Moreover, the functions performed by IR received attention in corporate governance literature (Crifo et al. 2019; Köhler 2015). IR is supposed to act as a corporate governance mechanism on financial markets for the harmonization of shareholder and management interests. In addition, in response to many corporate scandals, the alignment of interests of other stakeholders became important as well for the IR and became a research topic. Besides, the rise of the corporate sustainability movement accelerated the governance functions undertaken by IR (Crifo et al. 2019). Nonfinancial information on environmental, social, and governance (ESG) factors is relevant for socially responsible investors. Hence, the role of IR in transforming financial markets by building reputation on Green Finance is analyzed in some research projects (Fieseler 2011).

Further insights into the functions performed by IR and recommendations for the design of IR result from behavioral finance approaches. Behavioral finance questions the rationale decision-making paradigm used for the explanation of IR in the financial market models introduced above. Instead, financial market anomalies are in the lime-light of this part of the research. Based on new findings from behavioral analysis, not only

decision-relevant information but expectations of financial market participants should be addressed primarily by IR (Soppera 2019; Köhler 2015).

Although the interdisciplinary character of IR is obvious, current IR research remains separated between the communication and the business discipline. Hence, practical IR management lacks sufficient academic support on strategizing and operations. A more integrated view on IR incorporating marketing, finance, communication, and financial market law offers research avenues for further research (Binder-Tietz et al. 2021; Doan and McKie 2017).

Investor Relations Practices

Functions and activities of IR practices differ broadly across countries, industries, and firms (BNY Mellon 2020; Karolyi et al. 2020; Laskin 2006). Over the last decades IROs have become an integral part of strategic management and are performing a leadership role in many corporations (Maas 2021; Hoffmann and Binder-Tietz 2020). Therefore, referring to marketing research seems to be promising for a more detailed analysis of these numerous activities. This conceptualization of IR based on marketing theories is promoted by the German IR research strand (Streuer 2021; Schiereck and Hinrichsen 2021; Köhler 2015; Link 1993), which in a broader sense defines IR as financial marketing management. This marketing perspective on IR is beyond the above proposed narrow functional definition of IR that focused on communication activities in financial markets by a distinct corporate function. In addition, this extended academic perspective on IR matches the definitions of IR practice introduced by umbrella associations (NIRI 2022; DIRK 2022). Financial marketing management is performing an important role on non-perfect financial markets by reducing uncertainty and conquering other frictions that occur in the context of completing and exchanging financial contracts (Link 1993; Ross 1989). From a marketing perspective, IR management is performing a strategic management role by setting strategic goals and defining targets (Hoffmann et al. 2021; Tam

et al. 2022) in line with the corporate strategic long-term guideposts (see Fig. 2). Basically, IR must support the strategic goal of solvency which is central to financial management (see Fig. 2). The solvency goal offers guidance to more detailed targets in IR, for example, reputation or the market value of the corporation (see Fig. 2). A marketing perspective on IR also encourages for further research on the long-term value proposition (Laskin 2011) and the differentiation between the information-seeking behavior of different stakeholder groups (Doan and McKie 2017).

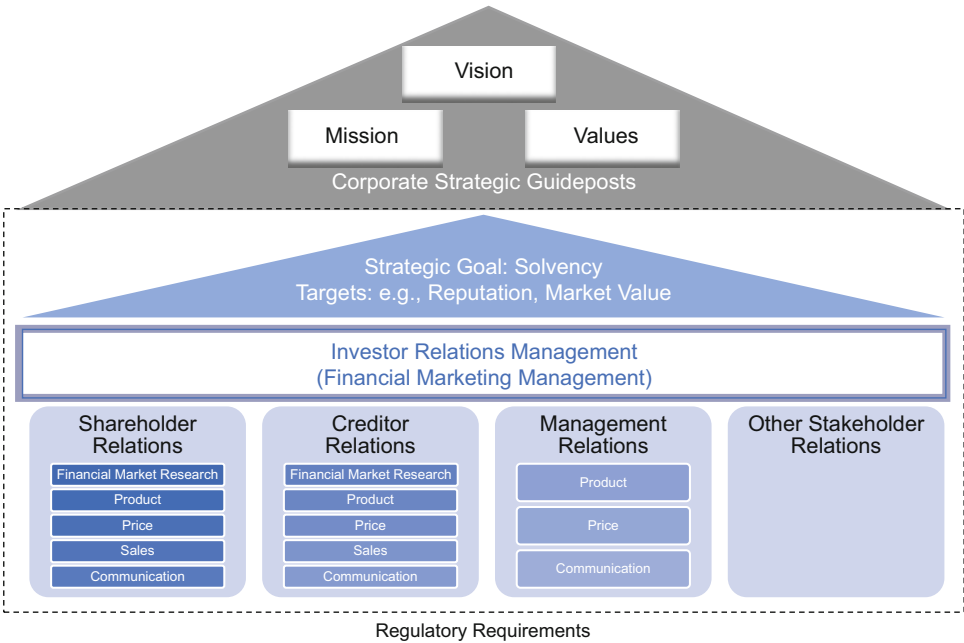
IR conceptualized by financial marketing management offers different ways for the classifications of IR activities in practice. The most common classification in practice is the distinction between shareholder and creditor relations (see Fig. 2). Existing literature on shareholder relations is extensive and diverse. Therefore, referring to the company’s life cycle model offers guidance for the organization of the main topics currently addressed:

- Early Stage: Performing IR for a start-up corporation focuses on emotions and confidence

and requires knowledge for legal requirements. Hence, researchers address the relevance of storytelling for successful funding in entrepreneurial corporations (Byrum 2018).

- Growth Stage: Since the role of IR on primary financial markets was neglected in early IR research, the examination of IR activities for the success of Initial Public Offering is currently increasing (Chahine et al. 2020).
- Maturity Stage: Because of the increasing relevance of sustainability goals for investors, public firms are often confronted with shareholder activism. This issue is addressed in detail in current IR researchlikewise (Hoffman et al. 2016; Laskin 2018c).
- Decline Stage: IR is highly involved in delisting decisions of public companies. Hence, a new field of research is emerging grounded on network theory (Schierreck and Hinrichsen 2021).

Although debt market participants are clearly addressed by IR activities in practice as well, empirical evidence on this stakeholder relationship is still in an emerging state and offers avenues



Public Relations and Finance, Fig. 2 Investor relations management (source: own figure)

for further research projects (Kim et al. 2021; Walchshofer 2021). Especially, the growing interest in sustainable finance innovations and the corresponding emergence of the “Green Bond” markets will support the increasing importance of IR’s role in debt markets.

Cross-References

- Behavioral Finance
- Communication of CSR Information
- CSR Communication
- Insider Trading
- Nonfinancial Disclosure
- Shareholder and Stakeholder Activism
- Stakeholders

References

- Bassen, A., Basse Mama, H., & Ramaj, H. (2010). Investor relations: A comprehensive overview. *Journal für Betriebswirtschaftslehre*, 60, 49–79.
- Bassen, A., Köhler, K., & Streuer, O. (2016). Typologie und Rollenprofile von Investor Relations Officers (IROs): Eine empirische Untersuchung über Anspruch und Wirklichkeit des Rollenverständnisses von IROs. *Corporate Finance*, 7, 125–132.
- Binder-Tietz, S., Hoffmann, Ch. P., & Reinholz, J. (2021). Integrated financial communication: Insights on the coordination among investor relations and public relations departments of listed corporations in Germany, Austria and Switzerland. *Public Relations Review*. <https://doi.org/10.1016/j.pubrev.2021.102075>.
- BNY Mellon. (2020). *Global trends in investor relations – A survey analysis of IR practices worldwide* (12th ed.). <https://www.bnymellon.com/us/en/insights/all-insights/global-trends-in-investor-relations.html>.
- Brennan, M., & Tamarowski, C. (2000). Investor relations, liquidity, and stock prices. *Journal of Applied Corporate Finance*, 12, 26–37.
- Byrum, K. (2018). Financial and investor relations for start-up businesses and emerging companies. In A. V. Laskin (Ed.), *Handbook of financial communication and investor relations* (pp. 157–165). Hoboken: Wiley.
- Chahine, S., et al. (2020). Investor relation and IPO performance. *Review of Accounting Studies*, 25, 474–512.
- Crifo, P., Escrig-Olmedo, E., & Mottis, N. (2019). Corporate governance as key driver of corporate sustainability in France: The role of board members and investor relations. *Journal of Business Ethics*, 159, 1127–1146.
- Cutlip, S. M., Center, A. H., & Broom, G. M. (2000). *Effective public relations* (8th ed.). Upper Saddle River: Prentice Hall.
- DIRK. (2022). <https://www.dirk.org/ueber-uns/wir-ueber-uns>.
- Doan, M. A., & McKie, D. (2017). Financial investigations: Auditing research accounts of communication in business, investor relations, and public relations. *Public Relations Review*, 43, 306–313.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance*, 25, 383–417.
- Farragher, E. J., Kleiman, R., & Bazaz, M. S. (1994). Do investor relations make a difference? *The Quarterly Review of Economics and Finance*, 34, 403–412.
- Fieseler, C. (2011). On the corporate social responsibility perceptions of equity analysts. *Business Ethics*, 20, 131–147.
- Gackowski, T. (2017). The idea of investor relation in the modern economy: A communication approach. *Economic Research*, 30, 1–13.
- Hoffman, C., Bronn, P., & Fieseler, C. (2016). A good reputation: A protection against shareholder activism? *Corporate Reputation Review*, 19, 35–46.
- Hoffmann, C. P., & Binder-Tietz, S. (2020). Strategic investor relations management: Insights on planning and evaluation practice among German prime standard corporations. *Journal of Communication Management*, 25, 142–159.
- Hoffmann, C. P., et al. (Eds.). (2021). *Handbuch investor relations und Finanzkommunikation*. Wiesbaden: Gabler/Springer. https://doi.org/10.1007/978-3-658-23389-1_5-11.
- Hope, O.-K., Huang, Z., & Moldovan, R. (2021). Wall Street analysts as investor relations officers. *Journal of Corporate Finance*, 67. <https://doi.org/10.1016/j.jcorpfin.2021.101893>.
- Karolyi, G. A., Kim, D., & Liao, R. (2020). The theory and practice of investor relations: A global perspective. *Management Science*, 20. <https://doi.org/10.1287/mnsc.2019.3405>.
- Kim, E., Sethuraman, M., & Steffen, T. D. (2021). The informational role of investor relations: Evidence from the debt market. *The Accounting Review*, 96, 275–302.
- Kirk, M. P., & Vincent, J. D. (2014). Professional investor relations within the firm. *The Accounting Review*, 96, 1421–1452.
- Köhler, K. (2015). *Investor relations in Deutschland*. Wiesbaden: Gabler/Springer (Dissertation University Leipzig 2014).
- Köhler, K. (2018). Investor relations in Germany institutionalization and professional roles. In A. V. Laskin (Ed.), *Handbook of financial communication and investor relations* (pp. 429–441). Hoboken: Wiley.
- Laskin, A. V. (2006). Investor relations practices at Fortune 500 companies: An exploratory study. *Public Relations Review*, 32, 69–70.
- Laskin, A. V. (2009). A descriptive account of the investor relations profession: A national study. *Journal of Business Communication*, 46, 208–233.
- Laskin, A. V. (2011). How investor relations contributes to the corporate bottom line. *Journal of Public Relations Research*, 23, 302–324.

- Laskin, A. V. (2014). Investor relations as a public relations function: A state of the profession in the United States. *Journal of Public Relations Research*, 26, 200–214.
- Laskin, A. V. (Ed.). (2018a). *Handbook of financial communication and investor relations*. Hoboken: Wiley.
- Laskin, A. V. (2018b). Investor relations and financial communication: the evolution of the profession. In A. V. Laskin (Ed.), *Handbook of financial communication and investor relations* (pp. 3–22). Hoboken: Wiley.
- Laskin, A. V. (2018c). The narrative strategies of winners and Losers: Analyzing annual reports of publicly trade corporations. *International Journal of Business Communication*, 55, 338–356.
- Link, R. (1993). Investor relations im Rahmen des Aktienmarketings von Publikumsgesellschaften. *Betriebswirtschaftliche Forschung und Praxis*, 55, 105–132.
- Maas, M. (2021). Der investor relations Manager. *Corporate Finance*, 8, 163–167.
- Merbecks, U. (2022). Institutional investors. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer.
- NIRI. (2022). <https://www.niri.org/about-niri>.
- Rao, H., & Sivakumar, K. (1999). Institutional sources of boundary-spanning structures: The establishment of investor relations departments in Fortune 500 industries. *Organization Science*, 10, 27–42.
- Ross, S. A. (1989). Institutional markets, financial marketing, and financial innovation. *Journal of Finance*, 44, 541–556.
- Schiereck, D., & Hinrichsen, A. V. (2021). Aktie und Kapitalmarkt. In C. P. Hoffman et al. (Eds.), *Handbuch Investor relations und Finanzkommunikation*. Wiesbaden: Springer. https://doi.org/10.1007/978-3-658-23389-1_5-1.
- Schmidt, C., & Rennhak, C. (2020). *Public relations klipp & klar*. Wiesbaden: Springer/Gabler.
- Soppera, A. (2019). Investor relations practices and capital market expectations: A survey of European micro-cap and small-cap firms. Dissertation no. 4856 University of St. Gallen.
- Streuer, O. (2021). Aktienmarketing und Wertorientierung als Handlungsfeld der investor relations. In C. P. Hoffman et al. (Eds.), *Handbuch investor relations und Finanzkommunikation*. Wiesbaden: Springer. https://doi.org/10.1007/978-3-658-23389-1_30-1.
- Tam, L., et al. (2022). In search of communication excellence: Public relations' value, empowerment, and structure in strategic management. *Journal of Marketing Communications*, 28, 183–206.
- Tikkanen, A. (2022). Public relations. In: *Encyclopaedia Britannica*. <https://www.britannica.com/topic/public-relations-communications>.
- Walchshofer, M. (2021). Creditor Relations als Handlungsfeld der Investor Relations und Finanzkommunikation. In C. P. Hoffman et al. (Eds.), *Handbuch investor relations und Finanzkommunikation*. Wiesbaden: Springer. https://doi.org/10.1007/978-3-658-23389-1_31-1.

Public Sector

- [Corruption Perception Index](#)

Public Service and/or Public Information Campaigning

- [Social Marketing](#)

Public Value

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Synonyms

[Public benefits](#); [Public goods](#); [Public interest](#)

Definition

According to Moore (1995), public value is constituted by the satisfaction of the wishes of the citizens and the community of reference. In the author's view, managers of public organizations can create value in two distinct ways:

- Through the use of financial resources and the authority assigned to them, which are used to produce goods and services designed to satisfy public needs
- Communicating the expected and actual performances to the citizens, to obtain the approval of their work by the community and thus guaranteeing the legitimacy of their action

The following characteristics can be attributed to the public value:

- It focuses not only on the objectives set by the political bodies of public administrations but

also on the expectations of the community in question.

- Its evaluation is not restricted to the analysis of short-term results but goes necessarily from a long-term perspective.

Introduction

Accounting and business administration scholars have long focused on identifying a universal goal, common to all types of organizations, which can be considered as the basic objective for which organizations are established and kept alive. Zappa (1956) has identified this objective in the survival of the organization.

Currently, the prevailing literature on this subject identifies the basic objective of organization and corporate action in the creation and distribution of value. This means that a requirement for the lasting survival of organizations is the creation a higher value than the value of the utilities employed in the production procedure.

The identification of value as the primary end of organizations is a broadly acknowledged approach in the accounting and business administration literature. However, over time this value has been identified and measured in different forms. In for-profit organizations, this value has been identified, for a long time, in the profits to be distributed to the holders of own capital. This value is obtained as a surplus of revenues over costs. The appropriateness of the return of investors is essential for them to preserve their capital investment, thus enabling the organization to survive over time (Zanda et al. 1997, p. 171).

Considering excessively limiting the identification of value in mere profit, some scholars have referred to the value of equity, others at market value, and others to the added value. With specific reference to public organizations, more recent settings focus on *public value*.

To this end, it is useful to propose a brief historical excursus on some of the most relevant conceptual settings on the subject of value. International literature has provided useful contributions on this subject. A milestone can be considered Porter's (1985) value chain. It identifies

the set of activities necessary to design, produce, and sell a certain product/service, including post-sales assistance to customers. These activities allow the company to achieve a competitive advantage compared to its competitors. This "competitive advantage" can be understood as "the search of privileged positions aimed at breaking competition and generating profits" (Guatri 1991, p. 3).

During the 1980s of the twentieth century, theories of value creation and total quality were formulated.

A significant contribution to the subject of public organizations is Moore's (1995) public value model. Other relevant contributions are Normann and Ramirez's (1993) value constellation and Rebora and Meneguzzo's (1990) service quality chain, constituting a re-adaptation of Porter's value chain to public administrations.

This contribution will focus on Moore's (1995) public value model.

For a long period, the assessment of organizations' performance, aimed at identifying a "value" to be attributed to the organization, was carried out mainly based on economic, financial, and equity indicators, which can be found in the financial statements. However, this approach is difficult to apply to not-for-profit organizations. Although no substantial problems are found in the attribution of economic and monetary value to the costs incurred in the production process, the atypical exchange mechanisms characterizing these organizations make it extremely difficult (or, in some cases, impossible) to assign a monetary value to the services provided by public administrations.

Until not long ago, it was customary to attribute to for-profit companies the institutional object of maximizing profit. Therefore, the concept of "value" focused on a specific stakeholder: the shareholder. This approach can be identified with shareholder theory, which postulates the maximization of profit, to be regularly and appropriately distributed to shareholders. Based on this theory, the prevailing interest that for-profit organizations must satisfy is the owners' expectations, since they are the privileged stakeholders, providing the capital necessary for the establishment and survival of the organization, and bear the entrepreneurial risk.

The prevailing attention to the owners' perspective has shown obvious limits, as it neglects to consider that for-profit and not-for-profit organizations are entities, which must meet the needs of a multitude of stakeholders. Each of these stakeholders bears their interests, not necessarily coincident with those of the owners. In this way, stakeholder theory has spread, identifying an objective common to all organizations, that is, the creation of value and its equitable dissemination among the various stakeholders.

The consciousness that organizations are not only a tool for the production of wealth but also a fundamental means for its spread among the various stakeholders is not new in business administration studies. This concept is emphasized in Freeman's (1984) Stakeholder Theory.

The production of value by organizations cannot be oriented only to shareholders; value is a multidimensional concept, whose distribution must take place among several subjects. From this point of view, it can be defined as "a communion of multiple interests, which await appropriate satisfaction" (Bergamaschi 2009, p. 122). In this sense, by value creation, we mean the "adoption of governance choices and management/organizational practices allowing to achieve, over time, results having a higher value than that consumed through the use of goods and services in the production process" (Bergamaschi 2009, p. 122).

The multidimensionality of value makes its identification and measurement highly complex processes for each type of organization, and to an even greater extent, for public administrations. The latter often deliver services free of charge (or at set prices), which do not consent to cover the production costs. Therefore, public administrations are usually not able to autonomously reintegrate the resources consumed in the production process; this reintegration can be done through tax revenues or transfers from other public bodies. The lack of capacity to autonomously reintegrate the resources consumed does not mean, however, that significant and measurable value has not been created for the administered community.

In for-profit organizations, the income is a well-founded instrument to identify the value

produced or destroyed. In reverse, for not-for-profit organizations (and public organizations), it is more problematic to identify this value since there are not always compensating equivalents for the goods and services produced. In these organizations, the concept of value is attributable to the qualitative and quantitative degree of satisfying the needs of individual citizens and/or the administered community. This entails the need for measurements that could not be limited to the monetary meter.

Public value theories have been formulated in this context. Among these theories, it is worth mentioning the following:

- Accenture (2004), assuming that there are two main levers of public sector value (PSV), that is, outcomes and cost effectiveness. It identifies the creation of public values through the production of improved outcomes in a more cost-effective way.
- Rebora and Meneguzzo (1990), assuming that the public administration system is characterized by a high complexity, due to which the various entities located along the value chain (in which value can be produced or destroyed) are weakly connected to each other. In this context, it is not possible to improve the satisfaction of the public services' users by acting exclusively on the entities located downstream of the value chain. These entities, in fact, are in turn "customers" of entities operating at a higher (e.g., regional or national) level. Instead, it would be advisable to first identify the final user of public services and the final products/services. Starting from this identification, it is possible to trace the public value chain, in which various public entities operate. In this way, it is possible to identify the various customers, internal to public administrations, who receive services from the entities upstream in the value chain and who provide services to other entities located downstream in the value chain. This means that the overall improvement of the public services users' satisfaction necessarily implies attention to all the phases in which the public value chain is articulated and to all the entities operating in it.

- And, of course, the theory addressed in this contribution: Moore (1995).

The concept of public value is composite, so it is difficult to provide a univocal definition. It encompasses at least two distinct aspects:

1. The reference to economic value, which has been mentioned previously
2. The reference to social value

Unlike for-profit organizations, whose existence is compounded in the creation of economic value for shareholders and other stakeholders (such as customers, workers), public sector not-for-profit organizations must create value in many other ways, coherently with the above-cited Stakeholder Theory (Freeman et al. 2018). In addition to the economic perspective, they must take into account the needs of citizens, and in general of their community, as well as the political needs arising from the representatives of the community who hold elective offices. The latter perspective is associated with the concept of social value.

While the economic value is obtained from the positive difference between revenues and costs, the social value is obtained by the positive difference between the benefits and the charges related to the activity carried out.

Public Value Creation

According to Moore (1995), public value creation postulates:

- The achievement of institutional objectives, outlined by the governing bodies of the individual organization
- The correspondence of the results produced not only to the objectives defined at the planning level but also to the expectations of the community
- The achievement of these results while respecting efficiency, making the best use of available resources and avoiding their waste

The satisfaction of stakeholder expectations must take place in two ways:

- As individuals
- As a community

Public value is a function of the following elements:

- The outputs generated, in terms of quantity and quality of the services produced
- The outcomes obtained, intended as effects or results of public action
- The level of trust that the organization has succeeded in obtaining
- The certainty that the same organization can satisfy stakeholder expectations also in the future

In the original formulation of public value theory, Moore focused on three main issues (Benington and Moore 2011, p. 3):

1. The role of government in society, interpreted not merely as a service-provider, rule-setter, and social safety net but also as a creator of public value and sharper of the public sphere under an economic, political, social, and cultural point of view
2. The role of government managers, interpreted not merely as bureaucratic clerks and passive servants to their political master but also as stewards of public assets that should suggest to governments what to do with the public assets and how to provide appropriate services to users
3. The techniques needed by public managers, interpreted not merely as procedures aimed at guaranteeing reliability of procedures in public administrations but also as tools helping public organizations to adapt more rapidly to changing environmental conditions

Three main elements emerge from Moore's public value formulation in 1995 (Benington and Moore 2011, p. 4):

- (a) The strategic triangle
- (b) The authorizing environment
- (c) The state authority

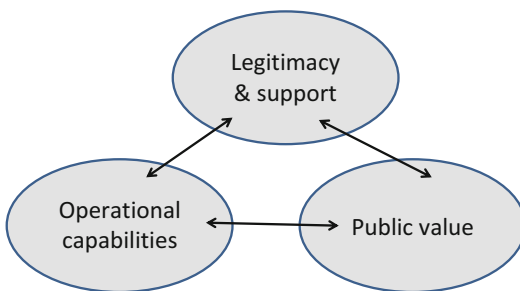
As for the first element abovementioned, Moore identifies three dimensions of public value, constituting the so-called *strategic triangle*. This is a diagram focusing the alertness of government managers on three relevant topics (Moore and Khagram 2004: p. 1).

1. What relevant “public value” the organization sought to produce?
2. What “sources of legitimacy and support” would be relied upon to authorize the organization to act and provide the resources necessary to sustain the effort to create public value?
3. What “operational capabilities” are necessary to deliver the desired results?

The strategic triangle is displayed in Fig. 1.

Managers should try to maximize the alignment among the three elements of the strategic triangle, which are seldom aligned in their natural status. Therefore, public managers must constantly try to create a balance among these three elements and must focus on the following aspects (Benington and Moore 2011, p. 4):

- *Defining public value*, that is, clarifying the strategic goals and public value outcomes expected in a specific situation
- *Creating an “authorizing environment,”* that is, an environment in which elected politicians and other stakeholders give their support to the organization, which is necessary to perform the organization’s strategic action
- *Building operational capacity*, that is, get the resources (finance, technology, staff, skills, etc.) required to fulfill the target public value outcomes



Public Value, Fig. 1 Strategic triangle

According to this triangle, strategies for public administrations must meet three tests, that is (Moore 1995, p. 71; Moore and Khagram 2004, Alford and O’Flynn 2009, p. 173):

1. Be focused on the creation of something valuable (i.e., something constituting public value).
2. Be legitimate and politically sustainable. This means that public action must be able to attract resources and support from its authorizing environment.
3. Be operationally and administratively feasible, that is, realizable with the accessible organizational and external capabilities.

As for the second element abovementioned, Moore identifies an *authorizing environment* constituted not only by elected politicians but also by organizations and other stakeholders, whose support is necessary to legitimate public managers’ action.

As for the third element abovementioned, Moore requires the use of *state authority* in the creation of public value. This means that public administrations hold power based on three elements: (a) legislation, (b) money, and (c) authority.

Key Issues

The concept of public value was originally formulated by Mark Moore in 1995 in the book *Creating Public Value: Strategic Management in Government*. At the time, the author aimed to propose a conceptual framework to support public managers in understanding the strategic challenges and choices they had to make. The notion of public value was therefore meant as a tool to help public managers similar to the notion of private value for private sector managers. The development of this framework occurred through several years of commitment with public sector managers from the USA and other parts of the world taking part in executive programs at Harvard’s J.F. Kennedy School of Government (Benington and Moore 2011, p. 1).

Initially, the aim was to import (and, if necessary, to adapt) the “private management knowledge” in the management of public (and

specifically government) agencies. The basic idea moved from the assumption that while the purpose of private managers was to create private (economic) value, the aim of public agencies should be to “create public “social value.” A first problem was to understand what is public value and how to operate for its production. Therefore, the workgroup established by Moore developed the concept of “strategy in the public sector,” which is graphically represented through the “strategic triangle.”

Future Directions

Moore’s (1995) original contribution and his further publications on this topic have stimulated a wide debate on the concept of public value, both at the practitioner and academic levels.

In the meantime, public value has become a widely debated topic and there emerged other meanings of this concept, different from the original Moore’s formulation. The main arising significances of public value are summarized by Alford and O’Flynn (2009) and see public value as:

1. *Paradigm*
2. *Rhetoric*
3. *Narrative*
4. *Performance*

Public value can be understood as a *paradigm*, that is, as a “big idea.” This point of view is shared by Stoker (2006), who asserted the emergence of a public value management paradigm aimed at balancing democracy and efficiency; by Christensen and Laegreid (2007), who argued that a public value paradigm has developed in Britain and New Zealand as a post-New Public Management paradigm; and by O’Flynn (2007), who focused on the managerial outcomes of a public value paradigm.

Public value can also be understood as *rhetoric*, that is, as a rhetorical strategy aimed at protecting the interests of public managers. This point of view emphasizes the great power of rhetoric that can convince its audience.

Public value can be understood as a *narrative*, that is, “a story of the world of public managers” (Alford and O’Flynn 2009, p. 182). There are many interpretations of public value as a narrative. Among them, this interpretation of public value can emerge from two different aspects of Moore’s contribution: (a) the relevance of paying attention to the stories of public managers involved in the Kennedy Project for the development of the concept of public value and (b) the need of managers of an account of the value produced by their organization, which needs not only a story but also a proven accomplishment of what has been concretely done. In other words, in the value production process, there should be a story (or an account) of the aims pursued by the organization.

Public value can finally be considered as *performance*, that is, as a performance measurement tool. This is the approach of Kelly et al. (2002), according to which public value is “the value created by government through services, laws, regulations and other actions” (Alford and O’Flynn 2009, p. 184).

Summary

For a long time, the concept of “value” was applied to public administrations on the basis of assumptions similar to those that characterize private for-profit organizations, mainly using economic, financial, and equity indicators. The atypical exchange mechanism of public administration (and, in general, of not-for profit organizations) makes it difficult to assign a monetary value to the services that these organizations provide. The concept of value cannot focus exclusively on shareholders; in all types of organizations, and especially in public administrations, it must be observed from a multi-dimensional perspective. In these organizations it can be understood as the qualitative and quantitative degree of satisfying the needs of individual citizens and/or the administered community. Therefore, its measurement cannot be limited to the monetary meter. In brief, public value postulates:

- The achievement of the organization's institutional objectives
- The conformity of the results achieved not only to the objectives defined at the planning level but also to the expectations of the community
- The use of available resources avoiding their waste (i.e., their efficient use)

Cross-References

- [Durable Survival of the Organization](#)
- [Stakeholder Theory](#)
- [Stakeholders](#)

References

- Accenture. (2004). *Public sector value model*. High performance delivered.
- Alford, J., & O'Flynn, J. (2009). Making sense of public value: Concepts, critiques and emergent meanings. *International Journal of Public Administration*, 32(3–4), 171–191.
- Benington, J., & Moore, M. H. (2011). *Public value. Theory & practice*. New York: Palgrave Macmillan.
- Bergamaschi, M. (2009). *Creazione del valore e organizzazione in sanità*. Milano: McGraw Hill.
- Christensen, T., & Lægreid, P. (2007). *Transcending new public management: The transformation of public sector reforms*. Aldershot: Ashgate.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Freeman, R., Harrison, J., & Zyglidopoulos, S. (2018). *Stakeholder theory: Concepts and strategies (elements in organization theory)*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108539500>.
- Guatri, L. (1991). *La teoria di creazione del valore. Una via europea*. Milano: Egea.
- Kelly, G., Mulgan, G., & Muers, S. (2002). *Creating public value: An analytical framework for public service reform*. Discussion paper, Cabinet Office Strategy Unit, UK.
- Moore, M. H. (1995). *Creating public value: Strategic management in government*. Cambridge, MA: Harvard University Press.
- Moore, M. H., & Khagram, S. (2004). *On creating public value: What business might learn from government about strategic management* (Working paper of the Corporate Social Responsibility Initiative, Kennedy School of Government). Cambridge, MA: Harvard University.
- Normann, R., & Ramirez, R. (1993). From value chain to value constellation: Designing interactive strategy. *Harvard Business Review*, 71(4), 65–77.
- O'Flynn, J. (2007). From new public management to public value: Paradigmatic change and managerial implications. *Australian Journal of Public Administration*, 66(3), 353–366.
- Porter, M. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Rebora, G., & Meneguzzo, M. (1990). *Strategia delle amministrazioni pubbliche*. Torino: Utet.
- Stoker, G. (2006). Public value management: A new narrative for networked governance? *American Review of Public Administration*, 36(1), 41–57.
- Zanda, G., Lacchini, M., & Onesti, T. (1997). *La valutazione delle aziende*. Torino: Giappichelli.
- Zappa, G. (1956). *Le produzioni nell'economia delle imprese, Tomo I*. Milano: Giuffrè.

Public-Private Governance

- [Shared Community-Based Governance](#)

Pure Duality

- [Chief Executive Officer \(CEO Duality\)](#)

Q

Quality Delegation

► [Quality Empowerment](#)

Quality Empowerment

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Synonyms

[Employee empowerment](#); [Employee involvement](#); [Participatory management](#); [Quality delegation](#)

Description

Quality empowerment (QE) is an integral part of total quality management (Lawler 1994). QE focuses on increasing employees' responsibilities and/or authority, which contrasts it with the traditional top-down, command and control management model. A quality-empowering model of management promotes employee ownership and leadership, involves employees in planning, distributes information, encourages

learning and growth, and ultimately achieves high-quality output and customer satisfaction. The effective use of QE can therefore enhance a company's internal culture, brand reputation, and financial success by distributing power, information, knowledge, and rewards throughout the organization. QE has many additional benefits for both the organization and the employee, including increased trust and motivation, decreased employee turnover, and greater innovations. The philosophy underlying QE can contribute to sustainable development as it can shrink power imbalances, support democratic decision-making, stimulate innovations crucial to solving wicked problems (Buchanan 1992), and strengthen society while reducing negative impact on the environment.

QE may also be called "employee empowerment." It is also sometimes referred to as "employee involvement," "quality delegation," and "participatory management." Although these terms are often used interchangeably, QE maintains a special focus on quality and conveys additional meaning inherent to the word "empowerment." "Empowerment" absorbs the terms involvement, enrichment, enlargement, and delegation but also expands to include "alternative intrinsic and/or extrinsic employee involvement practices ... increases the scope of employee decision making responsibility and authority provided" (Dimitrades 2001, p. 20).

Introduction

Empowering employees is considered the cornerstone of total quality management systems (Ripley and Ripley 1992). Quality systems could trace its roots back to the medieval Europe (American Society for Quality 2019). However, some of these systems, such as the Factory and Taylor systems, could have a negative effect on employee empowerment as they emphasized control and inspection and risked reducing the employees' sense of "autonomy in the workplace" (American Society for Quality 2019) or limited employee well-being in other ways. In the mid-twentieth century, Japanese manufacturers implemented the new "total quality" approach, which improved all elements of organizational processes, including human resource and quality management. Later US adopted this model, named it total quality management (TQM), and created new awards, systems, and designations. Effective TQM programs have been shown to improve operating performance and stock price performance (Hendricks and Singhal 1997, 2001).

Following the human relations movement of the 1950s and 1960s, quality empowerment emerged as a key principle of TQM because "the greatest motivation and the greatest number of good decisions come when people are free to make their own decisions — at least where their own workspace or environment is concerned" (Ripley and Ripley 1992, p. 28). To further motivate and cultivate employees' achievement in a work setting, management began job enrichment to give employees additional responsibilities that would have previously only been carried out at higher levels of the organization, as well as job enlargement to increase the horizontal scope of a workers' job (American Society for Quality 2019). The TQM tool "quality circles" where employee volunteers meet regularly to solve problems in their work area is an example of how effective empowerment and teamwork contribute to quality and productivity, thus marking a core value shift from quality inspecting to building

quality (Lawler and Mohrman 1985; Ripley and Ripley 1992).

QE's direct influence on employee motivation and subsequently their self-efficacy make it an important tool in sustainable management (Hostager et al. 1998). As a growing number of companies have adopted sustainability initiatives, the role of individual employees in implementing those policies becomes ever more important (Lamm et al. 2015). For example, individual employee's motivation has been proposed as a primary driver to their engagement in organizational ecoinitiatives (Ramus and Killmer 2007).

The Practices of Quality Empowerment

The concept of empowerment continues to evolve since the human relations management movement started in the first half of the twentieth century. In the 1960s–1970s, empowerment focus was on power sharing or workplace democratization. In the 1970s–1980s, the focus shifted to enabling human welfare through increasing self-worth, knowledge, dignity, and respect. Evidence showed that productivity and worker empowerment were both compatible and mutually reinforcing (Ripley and Ripley 1992). In the 1980s–1990s, empowerment emerged as a way to promote quality and productivity by encouraging employee participation in decision-making. Suggestion programs such as "quality circle" were widely adopted (Lawler and Mohrman 1985). They collect ideas from people closest to the work and encourage participative decision-making, which increases a sense of ownership, accountability, and teamwork, as well as increasing the commitment of employees across the organization to quality, all resulting in a culture of continuous improvement. This approach to empowerment arguably had the most effect on TQM, as visionary leaders realized the strategic significance of having empowered employees: it can result in better decision making and higher levels of training, motivation, and productivity. Such QE programs prevent problems by

encouraging certain “behaviors, attitudes, and controls” that are effective to managing product or service quality in the workplace. QE therefore has the potential to improve a firm’s financial performance, response to customers, and competitive advantage.

Applying the Philosophy of Quality Empowerment to Sustainable Development

The UN World Commission Report on Environment and Development (also known as the “Brundtland Report”) defined “sustainable development” as meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs (Brundtland 1987b). The Brundtland Report called for international action to meet the common challenges ranging from ozone depletion to biological diversity to equality, which are issues that transcend nationality, culture, ideology, and race. Sustainable development represents “a form of progress for social and economic development that enhances the resource-base rather than degrades it. It requires a more equitable distribution of wealth than currently prevails within and among nations, and it aims at the eradication of global mass-poverty, keeping options open for the future” (Brundtland 1987a, p. 292).

The primary approach driven by a QE philosophy – distribute power, information, knowledge, and rewards – can be applied to promoting sustainable development and help solve or lessen complex, global problems such as the ones noted above. At the individual level, empowered employees enjoy more autonomy in their work and problem-solving and stronger support to develop their skills and talents to produce better results (Dahlggaard-Park 2015). As a result, organizations may experience more efficient and/or innovative problem-solving and increased competitiveness due to higher quality. Better product quality management can also have a positive impact on the environment, as in the case of an

empowered employee who identifies and eliminates unnecessary waste in her work. Along the same vein, solving global mass poverty also requires empowerment that focuses on increasing poor people’s freedom of choice and action to shape their own lives (Rayan 2002).

The threats to human survival are common in that their effects often occur far from their sources – that often the people who suffer their consequences do not benefit from the activities (Brundtland 1987a). The flatter organization structure found in an empowered organization (American Society for Quality 2019) can potentially mitigate “the [improper] distribution of power ... [that] lies at the heart of most environment and development challenges.” Empowered organizations challenge traditional power structure by institutionalizing a new one where visionary leaders listen to and support employees for learning and growth, therefore enhancing the well-being of the employees, their family, and communities. A QE philosophy recognizes and improves the positions of the disadvantaged, thus contributing to the unity of human needs by creating a functioning multilateral system that recognizes that “the world is one” with the premise that all humans have fundamental rights (Brundtland 1987b). Empowerment thus has the potential to affect wicked problems on a global scale.

Summary

Quality empowerment has the potential to evolve from a strategic human resource management approach to one that develops and draws on the talent of all humans. The primary approach of QE focuses on increasing the independence, scope of duties, and decision-making capacity of people closest to the issue. Visionary leaders can apply this approach to create a structure where individuals can realize their potential in their roles and commit to continuous improvement and innovations. This results in an enhanced sense of control and well-being that sustains more equitable social and economic development.

Cross-References

► Quality Management

References

- American Society for Quality. (2019). *The history of quality. Learn about quality.* <https://asq.org/quality-resources/history-of-quality>. Accessed 7 July 2019.
- Brundtland, G. H. (1987a). Our common future—Call for action. *Environmental Conservation*, 14(4), 291–294.
- Brundtland, G. H. (1987b). *Report of the world commission on environment and development: Our common future*. United Nations.
- Buchanan, R. (1992). Wicked problems in design thinking. *Design Issues*, 8(2), 5–21.
- Dahlggaard-Park, S. M. (2015). *The SAGE encyclopedia of quality and the service economy*. SAGE Publications.
- Dimitrades, Z. S. (2001). Empowerment in total quality: Designing and implementing effective employee decision-making strategies. *Quality Management Journal*, 8(2), 19–28.
- Hendricks, K. B., & Singhal, V. R. (1997). Does implementing an effective TQM program actually improve operating performance? Empirical evidence from firms that have won quality awards. *Management Science*, 43, 1258–1274.
- Hendricks, K. B., & Singhal, V. R. (2001). The long-run stock Price performance of firms with effective TQM programs. *Management Science*, 47, 359–368.
- Hostager, T. J., Neil, T. C., Decker, R. L., & Lorentz, R. D. (1998). Seeing environmental opportunities: Effects of Intrapreneurial ability, efficacy, motivation and desirability. *Journal of Organizational Change Management*, 11(1), 11–25.
- Lamm, E., Tosti-Kharas, T., & King, C. E. (2015). Empowering employee sustainability: Perceived organizational support toward the environment. *Journal of Business Ethics*, 128(1), 207–220.
- Lawler, E. E. (1994). Total quality management and employee involvement: Are they compatible? *Academy of Management Perspectives*, 8(1), 68–76.
- Lawler, E. E., & Mohrman, S. A. (1985). Quality circles after the fad. *Harvard Business Review*, 63(1), 65–71.
- Ramus, C. A., & Killmer, A. B. C. (2007). Corporate greening through prosocial Extrarole Behaviours—a conceptual framework for employee motivation. *Business Strategy and the Environment*, 16(8), 554–570.
- Rayan, D. (Ed.). (2002). *Empowerment and poverty reduction: A sourcebook*. The World Bank.
- Ripley, R. E., & Ripley, M. J. (1992). Empowerment, the cornerstone of quality: Empowering Management in Innovative Organizations in the 1990s. *Management Decision*, 30(4), 20–43.

Quality Management

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Definition/Description

In the 1950s and 1960s, pioneers of quality management such as W. Edwards Deming, Joseph M. Juran, and Philip Crosby contributed to building early models and frameworks, of which most notable are Deming's 14 points, Crosby's Zero defects, and Juran's Quality Trilogy, for helping the organizations to implement "good quality management" (Oakland 2003). These early approaches were used as fundamentals for developing quality management models in the 1980s and 1990s as Total Quality Management (TQM), ISO 9000, PDCA, and Six Sigma Process Management (Hoyle 2007) and business excellence models and awards (Sousa 2003). Throughout the evolution of quality management thinking, there is movement from the quality of products and services and related processes, throughout business outputs and all processes, to TQM and quality assurance (Hoyle 2007). In ISO 9000, quality management is defined as "coordinated activities to direct and control an organization with regard to quality." These activities are quality planning, quality improvement, quality control, and quality assurance (ISO 2015a). In ISO 9000:2015, quality planning is defined as "part of quality management focused on setting quality objectives and specifying necessary operational processes, and related resources to achieve the quality objectives," quality control as "part of quality management focused on fulfilling quality requirements," quality improvement as "part of quality management focused on increasing the ability to fulfill quality requirements," and quality assurance as "part of quality management focused on providing confidence that quality requirements will be fulfilled."

The Concept of TQM

The process toward achieving quality can be organized in few stages, inspection, statistical quality control, and quality assurance with the wider management issues of planning, control, and organization (Garvin 1988). These stages were followed by the development of the concept of TQM. The TQM, as we understand it today, was developed through the 1980s and contained the major features for policies, directions, and strategies of organization captured in a basic TQM model (Oakland 2003). Major components of this basic framework were quality circles (teams), processes associated with customer relations, and processes related to suppliers as the essence of this model, tools regarding statistical process control and problem-solving, and quality systems such as ISO 9000, linked through culture, communication, and commitment (Oakland 2003). From this early framework, the culture, communication, and commitment were integrated into a new framework for TQM in which processes are “a key linkage between the enablers of planning (leadership driving policy and strategy, partnership and resources), through people into the performance (measured by people, society, customers, and key outcome)” (Oakland 2003). Research carried out by Qasrawi and coauthors (2017) suggests that TQM practices lead to the improvement of organizational performance. Hoyle (2007) stated that “all the principles, methodologies, tools, and techniques in the field of quality management serve one purpose, that of enabling organizations to close the gap between the standard required and the standard reached.”

Quality Management Principles

ISO 9000:2015 focuses on seven quality management principles Customer focus, Leadership, Engagement of people, Process approach, Improvement, Evidence-based decision making, and Relationship management. The customer focus principle involves attracting and retaining

“the confidence of customers and other relevant interested parties” (ISO 2015a). Meeting customer demands and exceeding customer expectations are managed through links between customer and business processes (Sousa 2003) to create more value for the customers. Leaders tend to create an environment in which employees are motivated to achieving the objectives of the organization. Oakland (2003) stated that effective leadership and total quality management applied together “result in the company or organization doing the right things,” so leaders are important for business success. Engagement of employees is important to utilize the effectiveness and efficiency of an organization and leads to the increased capability of the organization to create and deliver value (ISO 2015a). In standard ISO 9000:2015, process approach principle is defined as follows: “Consistent and predictable results are achieved more effectively and efficiently when activities are understood and managed as interrelated processes that function as a coherent system.” Deming’s PDCA cycle is incorporated in the process approach employed in quality management systems standards such as ISO 9000. This cycle can be defined as follows: “Plan: establish the objectives of the system and its processes, and the resources needed to deliver results in accordance with customers’ requirements and the organization’s policies, and identify and address risks and opportunities; — Do: implement what was planned; — Check: monitor and (where applicable) measure processes and the resulting products and services against policies, objectives, requirements and planned activities, and report the results; — Act: take actions to improve performance as necessary” (ISO 2015a, b). Further, according to the standard ISO 9000:2015, improvement is defined as “essential for an organization to maintain current levels of performance, to react to changes in its internal and external conditions, and to create new opportunities.” Decisions based on evidence lead to increased reliability and objectivity in achieving desired results (ISO 2015a), and according to ISO 9000, sustained success is more likely to be achieved if organizations manage their relationships with all of its interested parties.

Quality Management System

In the late 1990s, the focus of the companies moved from the quality of products and services to incorporating quality in business processes through ISO standards certifications (van der Wiele and Brown 2002). ISO 9001 is a generic standard for quality management systems, which makes a significant improvement to a company's performance. According to ISO 9000:2015, quality management system is "part of a management system with regard to quality" and management system is defined as follows: "set of interrelated or interacting elements of an organization to establish policies and objectives, and processes to achieve those objectives." The requirements of ISO 9001 are quality management system requirements. Liebesman (2008) suggests that the adoption of ISO 9001 requirements increases various outputs such as customer satisfaction, revenue recognition, and information security. Saraiva and Duarte (2003) emphasized the social and economic implications as an important motive for the increased ISO 9001 implementation globally. Quality management systems need to be designed in a sense that all components fit together and "work together to achieve a common purpose," and it covers all the functions and activities of the organization that contribute to this purpose (Hoyle 2007).

Quality Management Tools and Techniques

There are techniques and tools which focus on a particular aspect of quality management are process flowcharting, cause and effect analysis, advance product quality planning, statistical process control (SPC), quality costs, just-in-time, quality circles, six sigma, design of experiments (DOE), measurement systems analysis (MSA), 8D, and risk assessment techniques such as failure mode and effects analysis (FMEA), and hazard analysis and critical control points (HACCP) (Hoyle 2007; Oakland 2003). These quality management tools and techniques are widely

employed in various organizations as elements of a quality management system that provide better organizational performance.

Summary

During the 1950s and 1960s, gurus of quality management such as W. Edwards Deming, Joseph M. Juran, and Philip Crosby had built principles and frameworks upon today's quality management is based on. These early approaches lead to further development of quality management, which were used as a fundamental basis for developing new models in the 1980s and 1990s, of which the most notable are: TQM, ISO 9000, PDCA, six sigma process management, and business excellence models and awards. Within understanding and developing basic concepts of quality management thinking, the initiative was made to move from the quality of products and services towards TQM and quality assurance. The TQM, as it had been developed during the mid- to late 1980s had incorporated the major features for quality management practices of organization captured in a basic TQM model, followed by moving the focus from the quality of products and services towards incorporating the quality business in ISO standards certification in the late 1990s. The evolution of quality management underlines the relevance of all the practices in the area of quality management to enable "organizations to close the gap between the standard required and the standard reached" (Hoyle 2007). Quality management is defined in ISO 9000:2015 as "coordinated activities to direct and control an organization with regard to quality." These activities are identified as quality planning, quality control, quality improvement, and quality assurance (ISO 2015a). According to the same standard, there are seven quality management principles: customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and relationship management, whose application gives the organization the capacity to respond to the demands of a changing environment.

Cross-References

- [Integrated Management Systems](#)
- [ISO 14000 Standards Series](#)
- [ISO 26000 Standard](#)
- [Total Quality Management and European Foundation of Quality Management](#)

References

- Garvin, D. A. (1988). *Managing quality: The strategic and competitive edge*. New York: The Free Press.
- Hoyle, D. (2007). *Quality management essentials*. Oxford: Elsevier Limited. <https://doi.org/10.4324/9780080471396>.
- ISO. (2015a). *ISO 9000 quality management systems - fundamentals and vocabulary*. Geneva: International Organization for Standardization.
- ISO. (2015b). *ISO 9001 quality management systems — Requirements*. Geneva: International Organization for Standardization.
- Liebman, S. (2008). How to manage risk in a global economy. *Quality Progress*, 41, 58–60.
- Oakland, J. S. (2003). *Total quality management - text with cases*. Total quality management. Oxford: Elsevier.
- Qasrawi, B. T., Almahamid, S. M., & Qasrawi, S. T. (2017). The impact of TQM practices and KM processes on organisational performance. *International Journal of Quality & Reliability Management*, 34(7), 1034–1055. <https://doi.org/10.1108/IJQRM-11-2015-0160>.
- Saraiva, P. M., & Duarte, B. (2003). ISO 9000: Some statistical results for a worldwide phenomenon. *Total Quality Management & Business Excellence*, 14(10), 1169–1178. <https://doi.org/10.1080/1478336032000107726>.
- Sousa, R. (2003). Linking quality management to manufacturing strategy: An empirical investigation of customer focus practices. *Journal of Operations Management*, 21(1), 1–18. [https://doi.org/10.1016/S0272-6963\(02\)00055-4](https://doi.org/10.1016/S0272-6963(02)00055-4).
- van der Wiele, T., & Brown, A. (2002). Quality management over a decade. *International Journal of Quality & Reliability Management*, 19(5), 508–523. <https://doi.org/10.1108/02656710210427494>.

Quality of Life

- [Poff-Michalos Procedure, The](#)
- [Work–Life Balance](#)

Quality of Services

- [Medicine and CSR](#)

Quantification of Business Ethics

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Synonyms

[Comparability of business ethics](#); [Measurable objectification of business ethics](#); [Measurement of business ethics](#)

Definition

Quantification of ethics implies that data input is used for an ethical judgment of a particular organization or in some cases even of individual persons. In the last couple of years, the debate on quantification of business ethics has gained prominence in the academic and practical discourse, given the increased use of key performance indicators (KPIs) to evaluate the ethical performance of organizations. This tendency goes along with an increased use of figures and quantification schemes, providing information on organizational ethical performance or alternative concepts found in business ethics. The implications of these schemes are highly relevant for the current sustainability discourse, as they increasingly determine whether and how much sustainability funds invest in a particular sector or company, as they influence the public perception of an enterprise and as they are increasingly relevant for compliance with ESG criteria in the supply chains of larger enterprises.

Historic Development of Quantifying Business Ethics

The notion of quantifying ethics originated in different academic and practical contexts including the measurement of normative concepts in political science expressed in indexes measuring the abundance of states to human rights and rule of law, the general tendency of quantification in the business world and the increasing use of credit ratings for companies.

In the context of business ethics, ratings pertaining to normative concepts appeared very recently starting with the first approaches of measurement of abstract concepts such as consumer sentiment in the 1952 established University of Michigan's Index of Consumer Sentiment (ICS), the Conference Board Consumer Confidence Index (CBBMI), and the American Customer Satisfaction Index. Building on this, scientists have become increasingly involved in the ethical performance of individual companies and their impact on consumer decisions. In contrast to the Corruption Perception Index or to the aforementioned measurement tools of consumer satisfaction, contemporary approaches have become more normative and less descriptive. The Business Ethics Index developed by Tsalikis and Seaton (2007) is a tool to measure ethical behavior of companies, comprised of four measurements representing the dimensions of "personal-vicarious" and "past-future", highlighting consumer sentiments toward business ethical practices. In the last years, the focus has switched from general evaluation to explicitly ethical issues. One prominent example for this development is the Good Company Index, which examines specific company behavior through three of its primary roles: how the company acts as an employer, as a seller, and as a steward of the community and environment. Although the Good Company Index partially embraces the idea of ethicality, it is more a general assessment of companies in terms of the relationship of the company with the individual stakeholders. The most widespread form of quantification schemes in business ethics can be encountered in the form of ESG ratings, measuring a company's long-term commitment to socially

responsible investments (SRI) and environmental, social, and governance (ESG) investment standards. Examples for ESG data would be ratings of MSCI ESG, ISS ESG, Sustainalytics, and Vigeo Eiris as well as standards on sustainability reporting. Therefore, the aforementioned ESG ratings have to be put in a larger context of the quantifying ethically relevant concepts and have gained momentum against the backdrop of the taxonomy debate in the European Union and recent legislation in nonfinancial disclosure (see La Torre et al. 2020). In general, we encounter a tendency of the use of key performance indicators (KPIs) in the business world and public administration, which help to standardize processes and are used to measure the profitability of a specific department or the usefulness of a specific business strategy (see Agostino and Arnaboldi 2017; Taylor 2007). Likewise, some concepts are devoted to specific topics such as diversity including the Bloomberg Gender-Equality Index or the Thomson Reuters Diversity and Inclusion Index, or climate change including the ET Carbon Rankings.

Methods of Quantifying Business Ethics

Quantifying business ethics involves collecting, processing, and presenting data. The methodology usually corresponds with the concepts represented by the rating, ranking, index, or certificate (see Diez-Cañamero et al. 2020).

Data Input and Sources

The data input in quantifying business ethics differs depending on the area observed. For the measurement of ecological aspects, primarily scientific data points are used, such as CO₂ emissions, water and energy consumption, or quantity of waste. Social aspects could be facts such as the signing of certain agreements and frameworks, the introduction of certain tools and processes such as human rights training, or the fundamental analysis of business models. Diversity can be measured by the composition of the board members or the numbers of employees with severe disabilities (Global Reporting Initiative 2021). In political science, measurement instruments such as the Freedom

House Index provide an overview of the political regime type of the observed country, by accessing raw data from a set of country-specific indicators including aspects such as centralization of power or human rights conduct. Questions addressed in the Freedom House Index include evaluation questions such as: Could all candidates make speeches, hold public meetings, and enjoy fair or proportionate media access throughout the campaign, free of intimidation? Did voting take place by secret ballot? (Freedom House 2021) Further data input can be generated from surveys and other statistical data. The Corruption Perception Index constitutes another tool of measuring an ethically relevant concept, namely, the level of corruption in a specific country and is based on surveys, which track how the local population perceives corruption (Lambsdorff 2007). The Good Company Index that is based on The ISS-oekom Corporate Rating uses primarily financial data, whereas the CK Financial Sanction Screen measures the monetary amount of fines for each company (see Diez-Cañamero et al. 2020).

Data Processing and Evaluation

The existing data are then further processed by methodologies. The data points are either taken over directly and only weighted differently in an overall concept, as in the case of scientific data, or the existence or nonexistence of a certain fact is checked using a binary variable technique, or data is classified based on the subjective opinion of an expert. The Freedom House, for instance, converts data concerning the political system into a mathematical formula. The Corruption Perception Index converts data into a score and used as an input for research or as a criterion for decision making. The main question here is how quantification schemes interpret and compare data. In some cases, the evaluation process is audited externally by an external committee or in the form of financial audits (Diez-Cañamero et al. 2020). The Good Company Ranking uses for example the assessment of experts, which are confronted with data input (see Gazdar 2006). Moreover, the Good Company derives its final scoring by aggregating the results of the dimensions of society, employees, environment, and

financial integrity (Good Company Ranking 2018).

Data Output and Presentation

The data is usually presented in the concepts of ratings, rankings, indices, or certification solutions. Ratings mean that the data used are evaluated using a methodology and, in the end, the combination of the data results in a value that can be compared with other companies or, based on its level, should already be interpretable on its own. An example would be the products of MSCI ESG, ISS ESG, Sustainalytics, and Vigeo Eiris. In rankings, entities are compared using a methodology and placed in an ordinal or cardinal order. An example of a ranking in this sense would be the Good Company Ranking. In the case of ethical certification, it is checked whether an entity or person has reached a certain predefined threshold and is consequently classified as ethical in the sense of the seal when this threshold is fulfilled. An example of this would be the German FNG certificate for sustainable financial funds.

The result of these processes varies. Some rankings and ratings culminate in normative statements such as The Times Top 50 Employers for Women or the Good Company Index or the MSCI World ESG Leaders Index, which classifies companies in AAA, AA, A, BBB, BB, B, and CCC. In political science, the Freedom House Index derives assessments of countries as “free,” “partly free,” and “unfree” (Freedom House 2021). As laid out by previous research, “the distinction between good and deviant has come to be analogous to the distinction between democracy and non-democracy” (Lidén 2014, p. 51), which is why the classification of political regime types bears implications for ethical judgments.

Critique of Quantifying of Business Ethics

The increasing tendency toward ESG ratings and other quantification schemes notwithstanding, the business ethics reflection on ESG ratings is a novel phenomenon in the business ethics discourse. Literature on ESG ratings schemes stems originally

from literature on accounting and finance. However, existent business ethics approaches and contributions from other fields of ethics (Brauneis and Goodman 2018) bear rich implications for the assessment of the current situation. This applies in specific to the epistemological role of measurement and quantification in social sciences in general (Michell 2003) and ethics in particular (Miller 2005). Typically, the debate on quantification of ethics or of ethical conduct revolves around organizations compromising a larger number of persons and not on the performance of individuals (Liang et al. 2018).

The possibility and permissibility of quantifying ethics hinges on certain assumptions on the meta-ethical level. Assumptions are here based on the general question of ethical accountability of collective organizations, the acceptance of universal principles of ethics and finally the feasibility of measuring and then quantifying ethics (see Merry 2021). The first and foremost question is whether quantification as such is possible in the context of business ethics. This concerns primarily the measurement of social indicators such as numbers and statistics on human trafficking and the debate on quantifying CO₂ emissions or environmental figures to a lesser extent (Windolph 2011). Especially, the measurement of social determinants such as wealth, poverty, or inequality is therefore the object of dispute in economics and ethics (Piketty 2014; Purdam et al. 2008; Van den Bergh 2009).

The second debate concerns the ethical permissibility of quantifying concepts such as human rights, child labor, and the idea of deriving judgment solely from the evaluation of statistical information. On the contrary, some utilitarian approaches have promoted the option to measure the ethicality of an arrangement or situation by offsetting its positive and negative consequences. Contemporary approaches endorsing quantification-based approaches to business ethics could be identified in the works of William McAskill or Peter Singer. A concrete example of a key performance indicator-based understanding of ethics is the United Nations Sustainable Development Goals, which are often translated in quantifiable concepts (Spaiser et al. 2017). Likewise,

the World Bank data concerning absolute poverty is used as a criterion for economic decisions and social policies. The idea of offsetting positive and negative consequences of corporate actions however has drawn criticism from deontological approaches, which have emphasized on the importance of actions and motives behind actions over consequences and the reliability of data. Moreover, consequentialist approaches have been accused of oversimplifying complex nature of human behavior and human interaction as well as the consequences generated by both. These two approaches produce major ramifications for the debate on quantifying ethics, owing to the fact that quantification schemes are likely to influence judgments and perceptions of economic subjects such as investors and owing to the fact that deontological approaches would be opposed of merely analyzing the consequences (such as CO₂ emissions) of corporate actions. Here, the ascribed “governance of numbers” and “fixation to metrics” have evolved as major aspects of the general critique on quantifying of ethics (Muller 2019). Along similar lines, questions arise on the normative implications of ESG ratings:

- Do ESG rating imply that a company is ethical/unethical? How is the line between compliant/incompliant drawn?
- What are the implications of cooperating/interacting/dealing with/buying from a company having a good/bad ESG rating?

Prevailing ethical theories would differ in their evaluation of both questions. From a consequentialist standpoint, it would be plausible to argue that quantification schemes make it easier to identify ESG risks for investors, who aim to stake money in projects they regard as sustainable, and that simplification will facilitate the growing pivot to sustainable finance products (see Landi and Sciarelli 2019). Deontological approaches however would warn that standardized ESG ratings could have major ramifications for the classification of companies and could lead to biases, given the specific business sectors companies are operating. Moreover, strict standards on ESG could hinder the access of companies in developing

economies to finance what would require a stronger focus on “capabilities” for the design of ESG ratings.

Apart from the more general debate on the feasibility and permissibility of ESG ratings and quantifying ethics, research has dealt with the practical concerns in implementing these measurement schemes. Several studies (Berg et al. 2019; Dimson et al. 2020; Gibson et al. 2019) have highlighted the divergence among ESG ratings, when it comes to the classification of single companies based on different approaches on how to define and then quantify the KPIs making up the respective ESG rating of a company.

A general observation here is that the complexity of concepts such as business ethics, sustainability, or ESG makes measurements more difficult and prone to biases. According to Windolph (2011), major critique points on ESG ratings and other ethical quantification schemes include the lack of standardization, the lack of transparency, biases, trade-offs, and incentive structures for rating agencies. In difference to the debate in the early 2010s (Windolph 2011), standardization of ESG topics has become more common, owing to the fact that the European Union has standardized sustainability reporting by introducing the Non-Financial Reporting Directive (2014/95/EU). Likewise, initiatives such as the Global Reporting Initiative have contributed to more and more similar reporting schemes, what includes disclosure of cases of corruption [GRI 205] and suppliers considered to have significant risk for incidents in sustainability reports [GRI 408] (Brown et al. 2009; Marimon et al. 2012). The growing tendency of standardizing ESG rating might here conflict with research pointing at biases in the design of quantification schemes. Perceptions of sustainability and the inclusion of specific topics and the noninclusion of other topics raised in the discourse often influence the way ESG ratings are set up. This is important against the backdrop of an intensive discussion within the sustainability discourse and different concepts on sustainability and ethics on an international level. Moreover, even more general framework such as the United Nations Sustainable Development Goals are concerned with

conflicting norms, for example, the perceived trade-off between ecological sustainability versus economic development (see International Council for Science 2015). Factoring in and acknowledging these inherent biases, conflicts, and limitations makes a significant difference in providing a more nuanced picture on the ethics performance of an individual company. Given the role of moral judgment of political regimes, the classification of a single country in a specific group, for instance, could further have major ramifications on the judgment of a country’s government and its comparison to others (see Guerin and Manzcchi 2009; Kriebitz and Ammah 2020).

A further aspect of critique raised in the discussion concerns the fact that the sources of ESG rating are often deemed opaque, especially in terms of the methodology that is used for deriving the ratings of a specific company (Delmas and Blass 2010).

Summary

The use of quantification schemes in ethics, in particular in form of ESG ratings, has evolved as a major tendency in the applied business ethics. Consequently, the debate on how to deal with quantification schemes and normative judgments has gained visibility. This concerns in specific the opaqueness of many ESG measurement tools and other methodological questions. The far more general questions on the assumptions of most ESG rating systems and other business ethics ratings tools is still in its infancy, though. This concerns the feasibility of classifying companies as unethical or immoral, based on a specified data input. Other discourses which are occupied with the treatment of data might be helpful. The concurrent debate on data and AI ethics bears here major ramifications for the ESG discourse, as it pinpoints to the role of biases in the selection of data sets. Given the different approaches to ESG topics and to sustainability and ethics topics in general, transparency might be crucial for understanding how a rating scheme is deriving its exact judgment. This debate connects therefore to the general questions on how to put ethical KPIs in

figures and to assess the ethical performance of companies in specific. By taking this input into consideration, ESG ratings and other ethics measurement tools could gain validity and acceptance.

Cross-References

- [Banks and the Sustainable Development Goals](#)
- [Carbon Offsets](#)
- [Corruption Perception Index](#)
- [Greenwashing](#)
- [Nonfinancial Disclosure](#)

References

- Agostino, D., & Arnaboldi, M. (2017). Rational and ritualistic use of key performance indicators in hybrid organizations. *Public Money & Management*, 37(6), 409–416.
- Berg, F., Koelbel, J. F., & Rigobon, R. (2019). *Aggregate confusion: The divergence of ESG ratings*. MIT Sloan School of Management.
- Brauneis, R., & Goodman, E. P. (2018). Algorithmic transparency for the smart city. *Yale Journal of Law & Technology*, 20, 103.
- Brown, H. S., De Jong, M., & Lessidrenska, T. (2009). The rise of the global reporting initiative: A case of institutional entrepreneurship. *Environmental Politics*, 18(2), 182–200.
- Delmas, M., & Blass, V. D. (2010). Measuring corporate environmental performance: The trade-offs of sustainability ratings. *Business Strategy and the Environment*, 19(4), 245–260.
- Diez-Cañamero, B., Bishara, T., Otegi-Olaso, J. R., Mínguez, R., & Fernández, J. M. (2020). Measurement of corporate social responsibility: A review of corporate sustainability indexes, rankings and ratings. *Sustainability*, 12(5), 2153.
- Dimson, E., Marsh, P., & Staunton, M. (2020). Divergent ESG ratings. *The Journal of Portfolio Management*, 47(1), 75–87.
- Freedom House. (2021). Freedom in the World 2021. Methodology. Retrieved May 4, 2021, from <https://freedomhouse.org/reports/freedom-world/freedom-world-research-methodology>
- Gazdar, K. (2006). Das Good-Company-Ranking im internationalen Vergleich. In *Erfolgsfaktor Verantwortung* (pp. 51–58). Berlin/Heidelberg: Springer.
- Gibson, R., Krueger, P., & Schmidt, P. S. (2019). *ESG rating disagreement and stock returns*. Swiss Finance Institute Research Paper (19–67).
- Global Reporting Initiative. (2021). GRI 405: Diversity and equal opportunity 2016. Retrieved May 4, 2021, from <https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/>
- Good Company Ranking. (2018). Studie Good Company Ranking 2018. Retrieved May 4, 2021, from <https://www.mazars.de/Home/ber-uns/Aktuelles/Presse-Medien/Publikationen/Studien/Archiv-2018/Studie-Good-Company-Ranking-2018>
- Guerin, S. S., & Manzocchi, S. (2009). Political regime and FDI from advanced to emerging countries. *Review of World Economics*, 145(1), 75–91.
- International Council for Science. (2015). Report: Review of targets for the sustainable development goals: The science perspective. *Journal of Education for Sustainable Development*, 9(2), 237–237.
- Kriebitz, A., & Ammah, L. (2020). Statistical capacity, human rights and FDI in Sub-Saharan Africa patterns of FDI attraction in Sub-Saharan Africa. *Journal of Management and Sustainability*, 10, 162.
- La Torre, M., Sabelfeld, S., Blomkvist, M., & Dumay, J. (2020). *Rebuilding trust: sustainability and non-financial reporting and the European Union regulation*. Meditari Accountancy Research.
- Lambsdorff, J. G. (2007). *The methodology of the corruption perceptions index 2007*. Internet Center for Corruption Research. http://www.icgg.org/corruption.cpi_2006.html. Accessed March 30, 2021.
- Landi, G., & Sciarelli, M. (2019). Towards a more ethical market: The impact of ESG rating on corporate financial performance. *Social Responsibility Journal*, 15(1), 11–27.
- Liang, F., Das, V., Kostyuk, N., & Hussain, M. M. (2018). Constructing a data-driven society: China's social credit system as a state surveillance infrastructure. *Policy & Internet*, 10(4), 415–453.
- Lidén, G. (2014). Theories of dictatorships: Sub-types and explanations. *Studies of Transition States and Societies*, 6(1), 50–67.
- Marimon, F., del Mar Alonso-Almeida, M., del Pilar Rodríguez, M., & Alejandro, K. A. C. (2012). The worldwide diffusion of the global reporting initiative: What is the point? *Journal of Cleaner Production*, 33, 132–144.
- Merry, S. E. (2021). *The seductions of quantification*. University of Chicago Press.
- Michell, J. (2003). Epistemology of measurement: The relevance of its history for quantification in the social sciences. *Social Science Information*, 42(4), 515–534.
- Miller, C. A. (2005). New civic epistemologies of quantification: Making sense of indicators of local and global sustainability. *Science, Technology, & Human Values*, 30(3), 403–432.
- Muller, J. Z. (2019). *The tyranny of metrics*. Princeton University Press.
- Piketty, T. (2014). *Capital in the twenty-first century*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Purdam, K., Afkhami, R., Olsen, W., & Thornton, P. (2008). Disability in the UK: Measuring equality. *Disability & Society*, 23(1), 53–65.

- Spaiser, V., Ranganathan, S., Swain, R. B., & Sumpter, D. J. (2017). The sustainable development oxymoron: Quantifying and modelling the incompatibility of sustainable development goals. *International Journal of Sustainable Development & World Ecology*, 24(6), 457–470.
- Taylor, J. (2007). The usefulness of key performance indicators to public accountability authorities in East Asia. *Public Administration and Development: The International Journal of Management Research and Practice*, 27(4), 341–352.
- Tsalikis, J., & Seaton, B. (2007). Business ethics index: USA 2006. *Journal of Business Ethics*, 72(2), 163–175.
- Van den Bergh, J. C. (2009). The GDP paradox. *Journal of Economic Psychology*, 30(2), 117–135.
- Windolph, S. E. (2011). Assessing corporate sustainability through ratings: Challenges and their causes. *Journal of Environmental Sustainability*, 1(1), 5.

Quantum Theory

► [CSR Butterfly Effect](#)

R

R&D Policy

- [Rebound Effects of Eco-efficiency](#)

Race Discrimination

- [Board Diversity and Inclusivity](#)

Radiation

- [Chernobyl Disaster, The](#)

Rainbow Warriors

- [Greenpeace \(Environment\)](#)

Raising Awareness

- [Whistleblowing](#)

Random Events

- [CSR Butterfly Effect 2](#)

Rebound Effects of Eco-efficiency

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Synonyms

[Decoupling](#); [Delinking](#); [Factor 4](#); [Growth](#); [Innovation](#); [Jevons Paradoxon](#); [Productivity](#); [R&D policy](#); [Sufficiency](#)

Description

Eco-efficiency still is the most important option for harmonizing economic growth and environmental goals, for example, as formulated in the UN SDGs 2015. Eco-efficiency increases provide the chance to continue growth of output (GDP) and to reduce input (natural resource consumption) at the same time, that is, delinking (decoupling) the two variables. If eco-efficiency increases significantly, doubling of GDP within three decades could be combined with halvening of resource inputs (“factor 4”). However, there is no empirical evidence for such high rates of eco-efficiency increase. An “efficiency revolution” would be necessary but has not materialized yet. Moreover, increases in eco-efficiency tend to reduce cost of production and prices of products – hence stimulate output and

resource consumption. This expansive effect is called “rebound effect.” It has been analyzed already in 1866 by W. St. Jevons (the Coal Question). Empirical studies today find significant rebound effects, often between 25% and 100%. The larger it is, the less can eco-efficiency contribute to sustainable development (reduction) goals. Eco-efficiency increases and their expansive effect are the fundament of “green growth.” Eco-efficiency stimulates the economy and increases growth rates. This is good for jobs and incomes but not for the environmental impact. The rebound effect can be reduced if eco-efficiency increase is combined with quantity (caps) or price (tax) measures. However, the rebound effect reduces the practical relevance of eco-efficiency increases. Sustainability policy should therefore not only be based on efficiency but has to consider the second option, sufficiency, too.

Eco-efficiency and Sustainable Development

Increase of eco-efficiency is the dominating answer to almost all challenges in the context of sustainable development. The basic idea is simple: Environmental impact I (pollution) depends on two components: the size of GDP and the pollution (resource consumption) which is necessary to produce one unit of GDP:

$$I = I/GDP * GDP$$

I/GDP is a measure of “eco-efficiency.” Increasing eco-efficiency means reduction of pollution per unit of output. This could also be formulated in terms of productivity as GDP/I . The challenge then is to increase eco-productivity, the output per unit of pollution.

If I/GDP would be constant, the consequence of economic growth would be a proportional growth of I . If eco-efficiency increases, it is possible to delink economic growth and pollution, improving environmental quality without lowering the standard of living (GDP).

If, for example, over a period of 20–30 years eco-efficiency (productivity) would quadruple

(“factor 4”, see Weizsäcker et al. 1997), GDP could double (grow at 2–3% p.a.) and yet I could be reduced by 50% (= delinking).

$$I = I/GDP * GDP$$

$$\frac{1}{2} = \frac{1}{4} * 2$$

This would require an increase of eco-efficiency of 4–5% p.a., that is, an “efficiency revolution.” Climate policy goal in Germany is to reduce CO₂-emissions by 80–95% in the period 1990–2050, that is, up to “Factor 20.” This requires an increase of CO₂-efficiency of 3% p.a. (80% goal) or even more ambitious 5% p.a. (95% goal). In fact, for example, energy efficiency increases by (only) 1–2% p.a. in the OECD countries (e.g. Parrique et al. 2019; UNEP 2019; IEA 2020). An “efficiency revolution” would be needed – but is not (yet) taking place. Rebound effects can provide one explanation for this lack of success.

Rebound Effects (RE)

The phenomenon is simple and omnipresent: (Binswanger 2001; Santarius 2012; Sorrell & Dimitropoulos 2008): If a product gets more efficient, that is, less resource consuming and hence less costly to operate, this creates an incentive to buy and use more of it. Resources could be labor or natural resources.

The most famous historical case has been analyzed by W. St. Jevons (1866), the Coal Question: “It is wholly a confusion of ideas to suppose that the economical use of fuel is equivalent to a diminished consumption. The very contrary is the truth. New modes of economy will lead to an increase of consumption.” The explanation is: “If the quantity of coal used for blast-furnance be diminished in comparison with yield, the profits will increase, price will fall, demand increase . . . (over-)compensate the initial reduction of coal consumption.” This has been called the Jevons Paradoxon: Increase in resource efficiency may result in an increase rather than a decrease of total resource

consumption. Today, there are many more examples:

- While energy efficiency of machines and consumer goods (refrigerator, heating, etc.) increases, overall energy consumption does not decline.
- With more efficient light technology (LEDs) nobody is bothering about turning out the light.
- More fuel efficient car engines encourage higher powered cars (SUVs), driving more and longer distances.
- With better insulation of buildings, heating costs decline, higher room temperature is “affordable,” not necessary to wear a sweater any more.

The overall “message” of the Jevons Paradoxon is a warning, not to overestimate what technology can do for a reduction of (natural) resource consumption.

Analytical Foundations and Empirical Evidence

RE are identified by comparing two cases: What would be the effect of an efficiency increase on the quantity of demand (e.g., energy demand) if price remains constant (i.e., *ceteris paribus* analysis)? Energy demand would then be constant and the higher efficiency would completely reduce overall energy consumption. This hypothetical case is compared with the more realistic case that price declines due to more efficient (cost reducing) technology. The delta is the “rebound effect.”

If fuel consumption of cars declines from 7 l/100 km to 6.3, this is a 10% increase of fuel efficiency – and the expectation would be that total fuel consumption (and CO₂-emissions) will also decline by 10%. If the decline is only 5% (1%), there is a rebound effect of 50% (90%). The “gap” of five percentage points is the result of higher demand for fuel (more and longer rides, faster driving, etc.). Half of the efficiency increase is lost, “consumed” by users. If there is no reduction at all (0%), the rebound effect is 100% (full rebound). If there is actually an increase in

demand, this would be called “backfire” (addressed by Jevons 1866).

Efficiency increase has direct and indirect effects and empirical results depend on the scope of analysis. Focus of RE analysis is on direct, sector-specific effect of a more eco-efficient technology on lower costs and prices and higher demand (e.g., more fuel efficient cars, demand for fuels). However, price reductions also have an income effect, that is, lower price is equal to higher (real) income. The savings from the fuel efficient car could also be used for an (additional) flight and hence would not be reflected in the demand for car fuel – an underestimation of the rebound effect. In more general macroeconomic terms: Eco-efficient technologies have the potential to stimulate overall GDP-growth (“green growth”) which is related to all kinds of additional natural resource consumption (macrorebound). The new technology also comes with its inherent eco-impacts, for example, e-cars depend on critical resources for batteries; more efficient buildings “consume” (additional) insulation material. These effects throughout the (global) supply-chain would have to be included in a complete analysis of RE.

Increases in eco-efficiency are part of the economic innovation process. They are typically the result of cost-intensive R&D activities and innovators will try to charge a high price to cover these costs and to earn an (extra-ordinary) profit as a reward for their successful search efforts. It depends on their monopoly power whether the eco-efficient technology comes with low(er) prices and hence how fast the eco-efficient technology diffuses beyond the niche market. Monopoly power could be a restriction on diffusion and hence on rebound effects, at least a temporary effect until barriers to market entry erode. In fact already Jevons’ coal question highlights an innovation process: a more efficient steam engine, now attractive for new uses throughout the economy (diffusion); this is the basic reason for higher (coal) demand, not so much the increased demand of incumbents.

The explanation of RE can be based on standard microeconomics and rational decision making only: lower cost (total cost of ownership)

increase demand. Behavioral (economics) aspects beyond rational decision making can add some aspects:

- People tend to forget the initial (high) investment cost and make everyday decisions based on marginal cost: the additional cost of the “extra mile” with an efficient diesel car then is calculated as $5 \text{ l} = 6 \text{ €/100 km}$ (when it actually is 0.30 €/km, that is, 30 €/100 km).
- People “reward” themselves for doing something eco-friendly (moral licensing). Shoppers who bring their own bags to the supermarket tend to buy more sweets, crisps, ice cream, etc. Households which succeed in reducing their water consumption tend to increase their electricity consumption (see Karmarkar and Bollinger 2014).

Policies for Coping with Rebound Effects

Increase Eco-efficiency Growth Rate

If RE reduce the environmental effect of eco-efficiency improvements, one policy reaction could be to go for higher eco-efficiency growth rates, outpacing the growth of demand. The question then is how to stimulate eco-efficiency, what tools and measures are available? The challenge is to stimulate innovation activity and to change it into an eco-efficient direction. In general government has to organize a public debate on “the future we want” to change investors’ expectations and hence their strategies and search activities. The set of instruments includes:

- Government R&D expenditures (from basic research to market entry and diffusion) for “green” technologies and market segments (e.g., wind and solar energy).
- Financial incentives (e.g., favorable depreciation rules) to make investments more attractive (profitable).
- Price signal (e.g., taxing negative external effects).
- Technology forcing by regulations (e.g., ambitious fuel-efficiency fleet standards).

- Redirect science system in general (see WBGU 2011).

Control Price Reductions and/or Demand

RE can be directly addressed and reduced if either the cost and price reductions are eliminated or the potential expansion of quantity demand is restricted.

To eliminate the decline of prices, a (eco-)tax could be introduced – with tax rates increasing with the rate of eco-efficiency growth (and tax revenue spend for eco or social goals). This could be, for example, a CO₂-tax with eco-bonus. The same function could be fulfilled if real incomes could be reduced when people work less and enjoy more leisure time (reduction of working hours).

Most effective would be quantitative restrictions (caps). More efficient (cheaper) fishing technology could cause a decline of fish population. Fishing quotas could avoid this. Another example is the EU-ETS which defines reductions of CO₂-emissions (in tons) – no matter what eco-efficiency does; efficiency increases are crucial for the price of certificates, that is, the cost for companies and society. Other regulations include, for example, in the mobility sector limitation of cars “horsepower” and/or speed limits (so that it makes less sense to buy high-powered cars). Parking restrictions for SUVs instead of additional (larger) SUV parking lots and/or general reduction of parking space. In general this is the aspect of sufficiency in the sustainable development debate: how much is “enough,” promoted not only by government regulation but also by social debate and pressure (Kurz 2019).

Summary and Perspectives

Eco-efficiency is not an easy, comfortable path to SD. The potential of an efficiency revolution has been overestimated due to the neglect of rebound effects. Efficiency increases are not enough to achieve sustainability goals in growing economies. Increasing efficiency (technological progress, eco-innovation) does not guarantee SD.

Nobody is able to predict whether this gap can be closed by eco-innovation policy – given that this policy is expected to stimulate growth (rebound effect). Rebound effects are not just limited caveat against technological solutions of eco-problems, reducing their effectiveness by 20–30% of what would be “ideally” possible. The debate on RE is a reminder that technological solutions are not enough for SD and could support the unwillingness to think deeper and to change more fundamentally.

The major political consequences for the SD debate are that the wide-spread preference for technological (efficiency) solutions is – either naively or willingly – neglecting a relevant “side-effect.” There are policy options to reduce this effect but these are neither popular nor easy to enforce. When the efficiency revolution loses some of its glamour, sufficiency gains attractiveness.

No doubt, efficiency revolution and eco-innovation play a vital role in handling “hot spots” of environmental degradation. Urgent problems are reduced and shifted on what seems to be less risky fields, for example, nuclear and fossil substituted by renewable energy – seemed to be without any cost (sun is sending no bill). Eventually it turns out that old risks have been traded against new ones – often not less serious (in e-mobility the problem of resource consumption, e.g., rare earth like lithium and cobalt). With ingenuity a given planet will deliver always larger quantities of goods with less harmful side-effects. This general efficiency or modernization promise turns out to be flawed (Kurz 2015). New technologies can buy time and help to shift problems into a less risky direction – before they pop up again and require new technological solutions. Therefore, rebound is a reminder that efficiency and technology cannot be the ultimate solution, only a tool for crisis management.

Nevertheless, technology can buy time, shift the problem – but it will return, directly (coal) or indirectly (increased consumption of other goods). Technology is not a causal therapy – however, it is comfortable for (almost) everyone, as consumers do not have to change their behavior, politicians do not have to make unpopular

proposals and decisions, and companies find new markets (green growth). The more fundamental issue of sufficiency (limits of consumerism) is much harder to address.

With an increasing awareness and support for SDGs, emphasis will have to shift away from the technology race to the perception that the “future we want” is not (only) a (re)engineering job but a fundamental reorientation of human and economic development, a cultural revolution.

Cross-References

- [De-Growth](#)
- [Postgrowth](#)
- [Sufficiency](#)

References

- Binswanger, M. (2001). Technological progress and sustainable development: What about the rebound effect? *Ecological Economics*, 36, 119–132.
- IEA International Energy Agency. (2020). *World energy investment 2020*. IEA, Paris. <https://doi.org/10.1787/6f552938-en>.
- Jevons, W. S. (1866). *The coal question*. London: Macmillan.
- Karmarkar, U., & Bollinger, B. (2014). BYOB: How bringing your own shopping bags leads to treating yourself and the environment. Harvard Business School working paper 14-065.
- Kurz, R. (2015). Quality, obsolescence and unsustainable innovation. *Ekonomski Vjesnik, Econviews. Review of Contemporary Business, Entrepreneurship and Economic Issues*, 28, 511–522.
- Kurz, R. (2019). Post-growth perspectives: Sustainable development based on efficiency and on sufficiency. *Public Sector Economics*, 43(4), 401–422. <https://doi.org/10.3326/pse.43.4.4>.
- Parrique, T. et al. (2019). *Decoupling debunked: Evidence and arguments against green growth as a sole strategy for sustainability*. Brussels: European Environmental Bureau.
- Santarius, T. (2012). *Green growth unravelled. How rebound effects baffle sustainability targets when the economy keeps growing*. Berlin: Heinrich Böll Foundation.
- Sorell, S., & Dimitropoulos, J. (2008). The rebound effect: Microeconomic definitions, limitations and extensions. *Ecological Economics*, 66, 636–649.
- UNEP United Nations Environment Programme. (2019). *Global resource outlook. Natural resources for the future we want*. Nairobi: UNEP.

WBGU German Advisory Council on Global Change. (2011). *World in transition. A social contract for sustainability*. Berlin: WBGU.

Weizsäcker, E. U. v., Lovins, A. B., & Lovins, L. H. (1997). *Factor four: Doubling wealth, halvening resource use*. London.

Weizsäcker, E. U. v., et al. (2009). *Factor five. Transforming the global economy through 80% improvements in resource productivity. A report to the Club of Rome*. London/Sterling: Earthscan.

Recovery

- ▶ [Disaster Management](#)

RED

- ▶ [Product RED](#)

Red Tape

- ▶ [Authority vs. Bureaucracy](#)

(RED)

- ▶ [Product RED](#)

(RED)TM

- ▶ [Product RED](#)

Reduction at Source

- ▶ [Pollution Prevention](#)

Regional Cooperation

- ▶ [Fisheries Committee for the West Central Gulf of Guinea \(FCWC\)](#)
- ▶ [UNEP Abidjan Convention Secretariat, Abidjan, Côte d'Ivoire](#)

Regional Fisheries Management Organization

- ▶ [Fisheries Committee for the West Central Gulf of Guinea \(FCWC\)](#)

Regional Seas

- ▶ [UNEP Abidjan Convention Secretariat, Abidjan, Côte d'Ivoire](#)

Regulation

- ▶ [Mandatory CSR](#)
- ▶ [Market-Based Mechanism of Regulation](#)
- ▶ [Soft Law](#)

Regulations

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Synonyms

- [Mandatory CSR](#)

Definition

The comprehension of the role covered by regulation in corporate social responsibility (CSR) practices is a complex phenomenon due to a high degree of debate between academics regarding its effects. This complexity increased during the last year due to the proliferation of new forms of regulation about various topics such as non-financial reporting, GHG emissions, and sustainable corporate governance. However, despite the positive impacts of the introduction of sustainable rules, many academics agree about the existence of limitations related to the adoption of sustainable behaviors on a mandatory basis.

The Epistemology of the Concept of Regulation

The word “*regulation*” derives from the Latin *regere* that means “conduct.” According to this evidence, we have observed several attempts to favor the transition from traditional to more sustainable paradigms during the last years. In this sense, despite a large part of the CSR definition required a voluntary approach by the subjects (Dahlsrud 2008), the current scenario is characterized by several rules about mandatory CSR.

This paradigm shift has been driven by the different approaches proposed by worldwide regulators and policymakers about CSR. Specifically, during the last years, we have observed a passage from a voluntary approach to a mandatory one within some of the most common definitions of CSR proposed. A possible paradigm of analysis is represented by the conjoint analysis of some documents published by European Commission, WBCSD, and more recently, from the United Nations. Specifically, the European Commission (2001) defined CSR as “*a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis*” while the WBCSD (1999) proposed a definition of CSR who consists in “*the continuing*

commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.” On the other hand, recently, the United Nations has published the Agenda 2030 which required the Member States within the SDGs 12.6 to “*encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.*”

The nonfinancial reporting practices represent one of the main fields characterized by mandatory CSR. In this sense, an increasing number of academics have started to analyze these new forms of regulation. However, many of these studies have confirmed the need to increase CSR awareness through tools not based on mandatory provisions. Specifically, a large part of these studies has regarded the effects related to the introduction of the Directive 2014/95/EU in Europe and the King Code III in South Africa.

The studies performed on Directive 2014/95/EU highlighted several criticisms that negatively impacted nonfinancial reporting harmonization (La Torre et al. 2018). These studies confirmed some of the main criticisms underlined by stakeholders during the preliminary consultation about the Directive 2014/95/EU (Monciardini 2016). In fact, the firsts studies conducted about its effects showed the existence of several criticisms, such as the lack of comparability between nonfinancial reports, the abuse of unethical mechanisms such as greenwashing, and a low degree of integration of sustainable practices within the business models (Doni et al. 2019; Pizzi et al. 2020). In this sense, after 5 years since its implementation, the European Commission launched a new consultation in order to revise its contents (Venturelli et al. 2020).

The Directive 2014/95/EU criticisms confirmed as evidenced by academics that have studied other jurisdictions. In particular, many academics paid specific attention to South Africa, which represents one of the first countries to introduce within their legal systems

explicit requirements in terms of nonfinancial reporting practices through the King Code III (Adams 2017). Regarding the specific criticisms of the King Code III, some studies have highlighted how firms often adopt a “tick box approach” to comply with the legal requirements without an intrinsic orientation toward sustainable and ethical principles (Ackers and Eccles 2015). In this sense, this evidence suggests how an effective transition to more sustainable business models needs a cultural change from preparers (Bebbington and Larrinaga 2014).

Summary

Like the financial practices, recent years have been characterized by an increasing degree of regulation about nonfinancial practices. These changes have been driven by the worldwide community’s increasing attention to new topics such as the mitigation of the negative effects related to climate change and the role of women within society. The first evidence collected by academics about these phenomena has revealed how firms’ approaches to nonfinancial practices are characterized by criticism related to a possible “tick-box approach” risk. In this sense, the effects related to nonfinancial regulation in some sectors remain low. However, the regulation of practices such as GHG emissions and human rights has positively impacted worldwide sustainable development. According to this evidence, the regulation activity is characterized by a high degree of complexity for policymakers. In this sense, future research could be addressed to identify new potential areas of investigation to identify new regulation strategies.

Cross-References

- Compliance
- Mandatory CSR

References

Ackers, B., & Eccles, N. S. (2015). Mandatory corporate social responsibility assurance practices: The case of

- king III in South Africa. *Accounting, Auditing & Accountability Journal*, 28(4), 515–550.
- Adams, C. A. (2017). Conceptualising the contemporary corporate value creation process. *Accounting, Auditing and Accountability Journal*, Emerald Group Publishing Ltd., 30(4), 906–931.
- Bebbington, J., & Larrinaga, C. (2014). Accounting and sustainable development: An exploration. *Accounting, Organizations and Society*, 39(6), 395–413.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.
- Doni, F., Bianchi Martini, S., Corvino, A., & Mazzoni, M. (2019). Voluntary versus mandatory non-financial disclosure. *Meditari Accountancy Research*, Emerald Group Publishing Ltd., 28(5), 781–802.
- European Commission. Directorate-General for Employment. (2001). *Promoting a European framework for corporate social responsibility: Green paper*. Office for Official Publications of the European Communities.
- La Torre, M., Sabelfeld, S., Blomkvist, M., Tarquinio, L., & Dumay, J. (2018). Harmonising non-financial reporting regulation in Europe: Practical forces and projections for future research. *Meditari Accountancy Research*, 26(4), 598–621.
- Monciardini, D. (2016). The ‘Coalition of the Unlikely’ Driving the EU regulatory process of non-financial reporting. *Social and Environmental Accountability Journal*, 36(1), 76–89.
- Pizzi, S., Venturelli, A., & Caputo, F. (2020). “The ‘comply-or-explain’ principle in directive 95/2014/EU. A rhetorical analysis of Italian PIEs”, sustainability accounting, management and policy journal. *Emerald Group Publishing Ltd.*, 12(1), 30–50.
- Venturelli, A., Pizzi, S., Caputo, F., & Principale, S. (2020). The revision of nonfinancial reporting directive: A critical lens on the comparability principle. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.2598>.
- World Business Council for Sustainable Development. (1999). *Corporate social responsibility: Meeting changing expectations*. World Business Council for Sustainable Development.

Relational Capital

- Social Capital, Interpretation of
- Social Capital, Measurement of

Relationship

- Cooperation and Open Innovation

Relationships

- ▶ [Triple Helix and Innovation](#)

Relationships Development

- ▶ [Sustainable Modernity](#)

Relative Advantage

- ▶ [Competitive Advantage](#)

Relevant Stakeholders

- ▶ [Sustainable Stakeholder Dialogue](#)

Religious

- ▶ [Spirituality in Management](#)

Remuneration

- ▶ [Board of Directors and Corporate Governance](#)

Remuneration Committee

- ▶ [Board Committees and Corporate Governance](#)

Remuneration Effectiveness

- ▶ [Rewards Effectiveness](#)

Remuneration Report

- ▶ [Greenbury Report \(UK\)](#)

Renewable Energy

- ▶ [Energy-Renewable](#)
- ▶ [Solar as a Sustainable Energy](#)
- ▶ [Sustainable Energy](#)

Renewable Raw Materials

- ▶ [Renewable Resource](#)

Renewable Resource

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Synonyms

[Renewable raw materials](#); [Sustainable resources](#)

Definition

In the world we live in, human survival and satisfaction of wants are hinged on the utilization of resources, which most times occur naturally within our environment. These are referred to as natural resources and can be distinctively classified as nonrenewable and renewable resources (Grafton 2005). Nonrenewable resources are formed over long geological periods with an

extremely low formation rate; examples include coal, petroleum, natural gas, and metallic minerals. Due to low formation rate, these materials cannot be replenished once depleted; except for metallic minerals that can be reused through recycling. On the other hand, renewable resources are usually unlimited in nature, self-replenishing over a cyclic period of time, and cannot be entirely depleted. They are replenished easily at a rate that is almost equal or faster than the rate being used by humans. These resources are continuously available for usage, and rarely affected by human consumption because of their regenerating life cycle, notable examples include sun, wind, water, geothermal, soil, biomass, and the capacity of the ecosystems to assimilate and degrade waste (Miller and Spoolman 2015).

Nearly half of the world's population is directly dependent on renewable natural resources for its livelihood; around 2.5 billion people live directly from agriculture – farming crops and livestock, while 1.6 billion people rely on forest resources for all or part of their livelihoods. In addition, 150 million people count wildlife as a valuable livelihood source, and 560 million derive all or part of their livelihood from fishing and/or aquaculture (UNEP 2012). It must however be noted that renewable resources are seldom perfectly renewable; due to the fact that all can be overused to the point where they are irreversibly damaged and as such cannot be further replenished, leading to the term “unsustainable use” (Beltratti et al. 1998). Various human activities such as urban sprawl, cultivation, irrigation, grazing, deforestation, fishing, hunting, and habitat destruction can all be causes of the destruction of an otherwise renewable resource. To therefore achieve the sustainable use of these renewable resources, a long-term management approach that enhances optimal exploitation of resources with zero environmental degradation has been voted for as the way forward (Gritsevskiy 2016).

Types of Renewable Resource

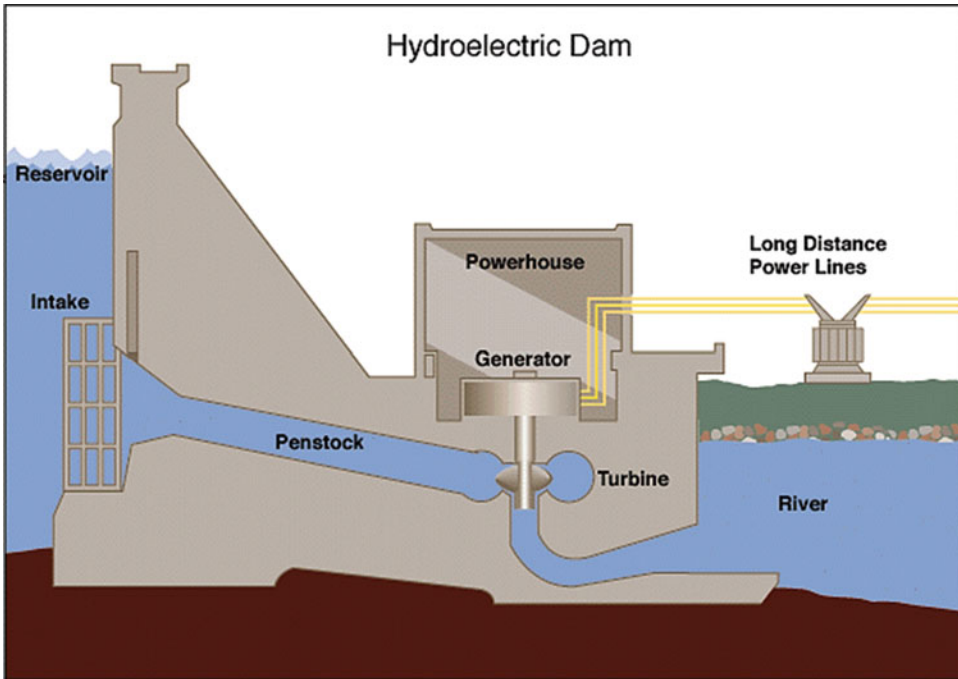
Water

Water is a vital resource required for all day-to-day human activities, and it is constantly

replenished by the water cycle; the earth is made-up of 70% water, of which less than 2.5% is fresh water (Abolhosseini et al. 2014). The larger percent of this fresh water is locked in the form of ice caps and glaciers. Only one-third of fresh water is available for human use, which could be for domestic or industrial purposes. World over, agriculture accounts for 70% of all water consumption, compared to 20% for industry and 10% for domestic use (Lindkvist et al. 2017). Water as a natural resource is pivotal to the generation of hydropower, which is the most common and largest renewable means of generating electricity for human and industrial consumption (Kothari et al. 2011). Hydroelectric power plants capture the energy of falling water to generate electricity; these plants are usually situated on or near a large water body (Fig. 1). The volume and elevation of water height determines the amount of energy that can be derived from fast-moving water from the gate of a dam on a big river. The high kinetic energy of the fast-moving water is then used to turn the blades in a turbine, which spins a generator that generates electricity. Hydropower is a safer means of power generation because it produces the least solid waste and emits no carbon dioxide into the atmosphere, maintaining a balance in the arboreal habitat (U.S. Energy Information Administration 2019).

Wind

Wind is produced by the uneven heating of the Earth. The air above the land is heated up at a faster rate compared to the air over water during the day. The heated air expands and becomes lighter, thereby making it to rise in the atmosphere, while the cooler air from the water surface blows and replaces it, thereby creating air stream (wind). It is harnessed by converting it into a more useful form of energy such as electrical and mechanical energy (Kothari et al. 2011). A wind turbine converts the kinetic energy of the wind into mechanical energy using the aerodynamics of its blades (rotation of blades), which is then converted into electrical energy via an electric generator (Fig. 2). The kinetic energy of the wind is converted into electrical energy by the rotation of the blades of a wind turbine. The blades are mounted on a rotating shaft of an



Renewable Resource, Fig. 1 Hydropower plant (Source: Adapted from U.S. Energy Information Administration 2019)

electrical generator, which spins and generates electricity (U.S. Energy Information Administration 2019). There are two types of wind turbines, namely:

- (i) Horizontal-axis turbine
- (ii) Vertical-axis turbine

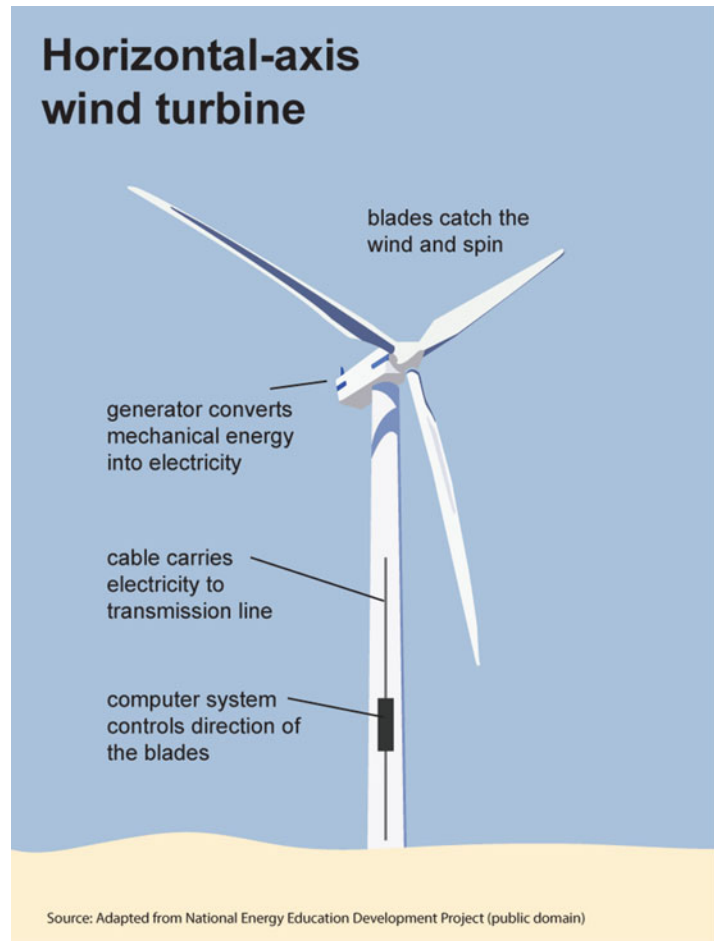
The power generated from wind turbines is used for national electrical grids or for providing electricity for grid-isolated locations. Wind energy is also used to power mechanical machines to do work such as pumping of water aeration, ventilation, or milling of grains. It is a very clean, renewable, and inexhaustible form of energy (U.S. Energy Information Administration 2019).

Solar

The sun is the fundamental source of all other sources of energy. Energy from the sun has been used for time immemorial for warmth and drying of agricultural produce. Light from the sun is a

natural resource that supports life on Earth (Lindkvis et al. 2017). The sun radiates about 3.8×10^{26} Watts of power in all the directions. Out of this, about 1.7×10^{17} Watts is received by earth. The sun is the most abundant source of energy on earth. Contemporarily, solar energy is being harnessed, using different technologies to generate thermal energy or electrical energy, which is used in the residential and commercial sectors for water heating, house (air) heating, drying, or electricity generation. The first installation of solar thermal energy equipment occurred in the Sahara Desert around 1910 (Patel 2020). Photovoltaic (PV) or solar cells are used in converting sunlight into electricity. The amount of electricity generated depends on the number of solar cells arranged together. Small PV cells can be used to power small electronics, security light, watches, calculators, while larger arrangements can be used to pump water, power communication equipment, or power a whole building with electricity. It is an extremely clean renewable form of energy, as it does not emit carbon dioxide when it is being used. It is also considered as inexhaustible

Renewable Resource,
Fig. 2 Wind turbine
(Source: Adapted from
U.S. Energy Information
Administration 2019)



(U.S. Energy Information Administration 2019) (Fig. 3).

Geothermal

Geothermal is a form of energy derived from the heat generated deep within the core of the earth. It is fueled by the radioactive decay of minerals within the core and also from the solar energy absorbed at the surface of earth. Geothermal resources are theoretically more than adequate to meet human's energy needs, but only a very small fraction may be profitably exploited (Preston 1995). Scientists have discovered that the temperature of the earth's inner core is about 10,800 degrees Fahrenheit (°F), which is as hot as the surface of the sun; temperatures in the mantle range from about 392 °F at the upper boundary

with the earth's crust to approximately 7,230 °F at the mantle-core boundary; however, the thermal efficiency of geothermal plants only ranges between 10 and 23%. Geothermal power is reliable, sustainable, and environmentally friendly. It finds widespread application in timber mills, water heating, air/house heating, and generation of electricity (Ramesh et al. 1997; Abolhosseini et al. 2014).

Biomass

Biomass refers to all organic matter existing in the biosphere, whether of plant or animal origin, as well as those materials obtained through their natural or artificial transformation; it is present in a variety of different materials: wood, sawdust, straw, seed waste, manure,



Renewable Resource, Fig. 3 Solar panels (Source: U.S. Energy Information Administration [2019](#))

paper waste, household waste, wastewater, etc. (Perea-Moreno et al. [2019](#)). It is diversified in species, properties, and ways of utilization. It also distributes more evenly on the earth than many other natural resources. The stored solar energy in biomass can be effectively utilized for the production of biorenewable energy. Contemporarily, the fluctuation and increase in the prices of fossil fuels and the adverse environmental effect of burning these fuels have resulted in a more clarion call for the development of renewable energy resource, which is being considered globally as a safer and better alternative with the capacity to reduce the emission of greenhouse gases and other air pollutants. Interestingly, biomass has over the years been used, also, as a resource material for the production of bioplastics and chemicals with minimal or zero adverse environmental impacts in relation to the production of these materials from nonrenewable resources (Peart [1999](#)).

Summary

Natural resources, both renewable and non-renewable, which most times occur naturally within our environment, are critical to human survival on earth. Renewable resources are usually unlimited in nature and are self-replenishing over a cyclic period of time and cannot be entirely depleted. This is because it is replenished easily at a rate that is almost equal to or faster than the rate of exploitation by humans such as water, soil, wind, sun, geothermal, and biomass. Water constitutes about 70% of the earth surface and is naturally replenished through the water cycle. Water is the largest and most important renewable source of electricity due to uneven heating of the earth caused by more rapid heating of the air over land relative to air over water during the day leading to air stream that forms wind. Wind is another important renewable resource that is harnessed and converted into different forms of energy such as electrical and mechanical energy.

Sun is considered the earth's most fundamental energy source naturally providing warmth and light to support life on earth. Solar energy is also harnessed to produce thermal and electrical energy.

Cross-References

► Renewable Resource

References

- Abolhosseini, S., Heshmati, A., & Altmann, J. (2014). *A review of renewable energy supply and energy efficiency technologies. Discussion paper series. Discussion paper no. 8145*. Bonn: Institute for the Study of Labor (IZA).
- Beltratti, A., Chichilnisky, G., & Heal, G. (1998). Sustainable use of renewable resources. In *Sustainability: Dynamics and uncertainty* (pp. 49–76). Dordrecht: Springer Science+Business Media. <https://doi.org/10.1007/978-94-011-4892-4>.
- Grafton, R. Q. (2005). In R. Q. Grafton, L. Robin, & R. J. Wasson (Eds.), *Understanding the environment: Bridging the disciplinary divides*. Sydney: UNSW Press.
- Gritsevskiy, A. (2016). Renewable vs. non-renewable energy sources, forms and technologies. Retrieved April 14, 2020, from United Nations Statistics Division (UNSD): <https://unstats.un.org/oslogroup/meetings/og-04/docs/oslo-group-meeting-04-comments-issue-3-2-iaea.pdf>.
- Kothari, D., Singal, K., & Ranjan, R. (2011). *Renewable energy sources and emerging technologies* (2nd ed.). New Delhi: Prentice Hall India Learning Private Limited.
- Linkvis, E., Ekeberg, Ö., & Norberg, J. (2017). Strategies for sustainable management of renewable resources during environmental change. *Proceeding of the Royal Society B-Biological science*, 284(20162762), 1–8. <https://doi.org/10.1098/rspb.2016.2762>.
- Miller, G. T., & Spoolman, S. (2015). *Sustaining the earth* (11th ed.). Stamford: Cengage learning.
- Patel, K. (2020). Solar thermal system. Retrieved April 14, 2020, from <https://solarenergyforum.com/solar-thermal-system/>.
- Peart, R. M. (1999). Natural energy and biomass, part 1.2 natural energy. In *CIGR handbook of agricultural engineering, volume v energy and biomass engineering* (pp. 3–6). St. Joseph: The American Society of Agricultural and Biological Engineers. <https://doi.org/10.13031/2013.36410>.
- Perea-Moreno, M. A., Samerón-Manzano, E., & Perea-Moreno, A. J. (2019). Biomass as renewable energy : Worldwide research trends. *Sustainability*, 11(863), 1–19. <https://doi.org/10.3390/su11030863>.
- Preston, T. (1995). Strategy for sustainable use of natural renewable resources: Constraints and opportunities. In *Tropical feeds and feeding systems* (pp. 121–144). Rome: Food and Agricultural Organization of the United Nations (FAO).
- Ramesh, R., Kumar, K. U., & Anandkrishnan, M. (1997). *Renewable energy technologies: Ocean thermal conversion and other sustainable energy options*. New Delhi: Narosa Publishing House.
- U.S. Energy Information Administration. (2019). *Hydropower explained*. Retrieved April 14, 2020, from EIA: <https://www.eia.gov/energyexplained/hydropower/>
- UNEP. (2012). *Renewable resources and conflict. Toolkit and guidance for preventing and managing land and natural resources conflict*. Newyork: EU and The United Nations Interagency Framework Team for Preventive Action.

Renewal

► Innovation and Territorial Development

Reporting

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Synonyms

Accounting synthesis; Financial statements analysis; Written and digital document

Description

Reporting reduces the asymmetry of the information and allows to provide, to disclose and to disseminate the organization's information to stakeholders. The organization publishes the report after collecting accounting and financial data, transforming it into information and building

the report with financial statements and auditing assessment. Reporting is an official or unofficial act of the organization to justify the performance and economic-financial analysis, in a specific period, which allows to create knowledge and to be communicated to stakeholders that influence its decision process.

The Need of Disclosure

The need of disclosure of the accounting and financial information is crucial to communicate for capital, financial and labour markets and to the society (Hrasky and Smith 2008). The investor must have detailed information about the investment promoted by the organization and to justify the allocation of resources with growing pressure for the diversity of reporting (Holton 2005).

On one hand, according to Healy and Palepu (2001), financial reporting and disclosure are important strategies to communicate performance and governance to stakeholders. On the other hand, according to Holthausen (2009), research in the accounting literature convincingly concludes that accounting standards alone do not determine financial reporting outcomes. Indeed, the organization produces reports that are useful to stakeholders. The focus of accounting information systems, according to Beest et al. (2009), is to provide financial information with high standards of quality, in the same units, to make the decision useful to the board of the organization.

Benston (1969, p. 521) argues that the unexpected accounting data *“is the difference between the data reported and the amounts calculated as just described”*. The organization publishes a report when it needs other stakeholders to know about the situation and needs to tell them and describe it precisely. A report is to inform someone, giving transparency of some process to be evaluated. Transparency proposed by Crowther and Rayman-Bacchus (2004, p. 241) is *“the external impact of the actions of the organization can be ascertained from that organization’s report, pertinent facts are nor disguised within that report and can be seen to be a part of the process of recognition of responsibility”*.

This external impact is the focus of the Benston (1969, p. 516) discussion, because it concerns an invalid representation of reality, but with two circumstances: 1st—*“corporate officers could be dishonest—they might be misappropriating the resources of the corporation”*; 2nd—*“corporate officers could be mistaken about the value of disclosure. They might not realize that the marginal value of financial statements is greater to stockholders than is its marginal cost to the enterprise.”* In this line, the focus is on transmitting information with a clear purpose, to a specific audience. These reports may cover a wide range of topics. The purpose of reports is to communicate information that has been organized following regulation, guidelines, and a detailed process of collecting the information, researching and analysing data (Yuthas et al. 2002).

It is relevant to observe the period of the report, because it is expected to have regularity of reporting, such as annual or interim report. As Campbell et al. (2001) recognize the importance of signalization through the effectively communication of the misison and, also, its strategies to the organization’s stakeholders.

As Clatworthy and Jones (2003) research, the reporting of good or bad news should present an adequate language to transmit the correct information. It is relevant to argue that Skinner (1994) publishes reasons to voluntary disclose bad news, and it lays on the language of a specific professional trained to communicate the information from the business correctly. Indeed, Benoit (1997) argues that sometimes some negative issue, especially when it is done in the form of an official document, demands a huge investigation and to consider justifications.

Hardy and Hubbard (1976, p. 917) argue that *“accountants should be concerned about effectiveness of internal and external accounting reporting”*. The authors agree and are concerned, particularly, with the possibility that the exposure to the many aspects of effective reporting, which is received by college students, may have a bearing on subsequent deficiencies which may exist in practice.

Once the report is published, Healy and Palepu (2001) stated that, for better understanding of these reports, the household savings (investors)

lie on the financial intermediaries (regulators of capital markets and financial institutions) and information intermediaries (auditors and accounting regulators) to guarantee that the information is reliable and without errors. As a result of that, intermediaries help the investors understand the information disclosed and the investors to allocate the resources correctly.

The Report Itself

The need of information and accountability forced organizations to develop the financial accounting and to report their numbers to inform stakeholders, banks and taxation authorities about its performance and economic-financial analysis. From the organization's perspective, accounting has been structured to produce a report as a written or digital document about a subject or a topic that someone has observed, heard, done or investigated about the organization, an event or even an external situation that impacted the organization, such as a pandemic situation. This is allowed to understand Zeff's (2007, p. 290) perspective that “*‘comparability’ is a very difficult notion to understand even within a country, let alone globally*”.

Accounting has changed alongside the development of business and relations in the organization. Industrial revolution could be one of the most important changes that obliged accounting to adapt from the evaluation of owner equity to a broader tool that must inform all the stakeholders how the organization is being managed, and for this reason, this is the best way for managers to communicate with the stakeholders. In the limit, the need of a higher level of quality of the report demands that stakeholders should have information to make decisions and “*to promote the comparability as key factor of usefulness of financial information*” as Gordon and Gallery (2012, p. 11) defend. The report for the external user turned out to be the most important tool to an organization's communication with their stakeholders and to perform the accountability of the firm.

The organization must disclose information to show public the way the organization has been

managed. It is known by the Agency Theory (Jensen and Meckling 1976) that there is an agent conflict between managers and stakeholders. Reporting is the process where the organization talks to the public to promote transparency. The agency theory shows the divergence of objectives between agent and principal where moral hazards tend to happen after the contract and adverse selection may happen before and after (Akpanuko and Umoren 2018, p. 297).

In 1929, the financial crises gave the accounting profession the challenge to produce reports comparable to each organization. From this time on, principles and regulations in accounting turn out to be the best way to make sure that the report would be useful for the stakeholders. Today, report to public or private organizations or not-for-profit organizations assume different frameworks, such as the accounting report, controlled and defined by the International Accounting Standards Board (IASB) with the International Financial Reporting Standard (IFRS), the Financial Accounting Standards Board (FASB) with FASB Accounting Standards, Corporate Social Responsibility reports, for example, following the model of the Integrated Report. Consequently, the financial accounting information, according to Palliserry (2012, p. 333), “*is the product of corporate accounting and external reporting systems that measure and routinely disclose audited, quantitative data concerning the financial position and performance of the publicly held firms*”.

Report in accounting means that the organization fights for transparency on the decisions of the organization. As Erickson et al. (2011) detail, the corporate report strategies are analysed from the point of view of theories of communication. This justifies why the report not only made accounting aggregation of the financial information in the financial statements—Income Statement, Balance Sheet, Statement of Cash flow—but also all the information that must be disclosed with this accounting information like footnotes and auditing report.

The quality of the report is important for two reasons: stakeholders need to understand the information correctly and they must trust in the information presented. The quality level of

the report is related with comprehension of the information and the trust of stakeholders. Five dimensions of quality were selected for assessment (comparability, disaggregation, interpretability, presentation, and timeliness) (Hodge 2012). They way the organization report its numbers are analysed by the users of information to understand how company's decision has been done and to understand other issues regarding the company's environment. Quality of reporting, relations of reporting by organization and stock prices, CSR report and the information given by this report to the users are some examples of research in this field. Organizations that have a high-quality level of report should present less information asymmetry and, consequently, should present less transaction costs with their stakeholders. In a digital world, with bigdata, artificial intelligence and completely connected with fast-run decisions, the accounting report providing timeless and accuracy is crucial to decision-makers rely on the correct information.

Regulation

The regulation focus on reporting has been increasing all over the world. However, in relation with reporting exist guidelines, as Hardy and Hubbard (1976, pp. 918–919) identify: “1. Reports should be relevant to user needs and responsibilities; 2. Reports should be on a personal level; 3. Reports should include supportive comments; 4. Reports should be consistence; 5. Reports should be timely and regular.”

The regulation of the IASB about the financial report for external users is developed with the objective to be comparable between organizations. Thus, the Conceptual Framework (IASB 2018) defines the main elements of the financial reporting. The purpose is to assist the IASB with the IFRS Standards; to develop accounting policies in order to apply these standards to transactions or events; and to help stakeholders to understand standards.

On the Conceptual Framework of IASB (2018, p. A19), the objective of financial reporting is “to provide financial information about the reporting

entity that is useful to existing and potential investors, lenders and other creditors in making decisions to providing resources to the entity”. In this sense, organizations that have negotiation with suppliers, lenders and investors should be worried to produce accounting information following this guidance. Also, given the Conceptual Framework, the general-purpose financial reporting is to show the value of the reporting organization (IASB 2018, p. A20). However, the data reported should be used to estimate the value of the organization.

The financial reporting should be used by stakeholders that look for information that will meet their needs, even though this information is not the same for each of these users (IASB 2018, p. A20). For example, the information that the lenders want to see in the financial reporting are in many cases different from the information the investors are looking for. Lenders want to see if the organization produces enough liquidity to pay their liabilities. However, the investors are seeking for the profit and the value of the business, even though the liquidity may be jeopardized. The authors agree with Trumbull (1953, p. 471) when he said: “the unsettled controversy between accountants favoring ‘all-inclusive’ income reports and those favoring ‘selective’ income reports which exclude certain special items of gain and loss cannot be fully understood”.

Another important characteristic of the financial reports is that they are based on estimates, judgments and models, as such they are not exact descriptions of the event, they are supposed to account (IASB 2018, p. A20). The Conceptual Framework establishes the rules to comply with these points. Furthermore, Schwieger (1977, p. 946) argues that it “must be able to recognize different types of accounting changes and must be knowledgeable of the proper method of accounting, the disclosure requirements and the effect on the audit opinion of each”. It can be, also, defined as a statement of event or situation when it has to do with the public services or revealed by the media.

In a summary, the financial reporting provides information about the financial position of the organization, their economic resources and claims in favour of the organization. Financial reports are also responsible to provide the information about

all the transactions and other events that changed the organization' report, showing to the investors the full concept of the operation of this organization.

Conceptual Framework also defines the qualitative characteristics of useful financial information reported (IASB 2018, pp. A25–A27). The fundamental qualitative characteristics are defined as relevance (also, materiality) and faithful representation. The financial report must be relevant, that is, capable of making difference in the users decisions. The financial information presented in the financial report is useful if it has predictive value, confirmatory value or both (IASB 2018, p. A25). Also, to be faithful the information should have three characteristics: complete, neutral and free of error (IASB 2018, p. A26).

It is a characteristic of the accounting reporting that should be comparable, verifiable, timeliness and understandable (IASB 2018, p. A73). Following these characteristics, the objective of financial reporting is providing information about assets, liabilities, equity, income and expenses. This information is useful to stakeholders for prospective future net cash inflows of the organization, assessing management's stewardship of the organization's economic resources (IASB 2018, p. A19).

The company should disclose correctly the financial information as reported by the IAS 1—Presentation of Financial Statements (IASB 2021). The objective of this standard is providing the basis for presentation to the report of financial statements and ensuring the comparability between entities. The complete financial statements to be reported according to IASB (2021, p. A980–A981) are: “(a) a statement of financial position as at the end of the period; (b) a statement of profit or loss and other comprehensive income for the period; (c) a statement of changes in equity for the period; (d) a statement of cash flows for the period; (e) notes, comprising significant accounting policies and other explanatory information; (ea) comparative information in respect of the preceding period as specified in paragraphs 38 and 38A; and (f) a statement of financial position as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective

restatement of items in its financial statements, or when it reclassifies items in its financial statements”.

One area of the negative reporting is the GRI-Oriented Sustainability reporting as Hahn and Lulfs (2014) defend. The report must show the true and fair view of the organization and Global Reporting Initiative (GRI) provides standardized reporting guidelines allowing to disclose positive and negative indicators of an organization's sustainable performance. In this sense, the organization reports the annual evaluation of GRI indicators with total transparency and the assessment demands explanations for the negative results and solutions to the consequences.

One area of the positive reporting is the uncertainty as van der Bles et al. (2019) support in their framework of uncertainty communication. The report must identify the facts, numbers and explanation of the “*situation in which something is not known, or something that is not known or certain*” (Cambridge University Press 2021). Then, on the report, uncertainty demands that “*inherent part of knowledge, and yet in an era of contested expertise, many shy away from openly communicating their uncertainty about what they know, fearful of their audience's reaction*” (van der Bles et al. 2019, p. 2).

One of the newest areas of reporting is the accounting for climate that allows to describe climate-related matters and notes into financial reporting (CDSB 2020) which assess the increasing level of risks (political, legal, technologic, market, social, economic and financial) and opportunities (energy source, resources efficiency, products and services) that demand a strategic plan based on risk management with financial impact. As CDSB (2020, p. 12) argues “*range of forward-looking information is already embedded in financial reporting in areas such as fair value accounting, impairment testing, the measurement of provisions and the recognition of contingent liabilities*”.

One of the oldest areas of reporting is the aggressive financial reporting and the aggressive tax report in order to promote fraudulent reporting as Frank et al. (2009) research. We could observe, though, several scandals, such as: Enron

Corporation in 2001 or Parmalat SpA in 2003 using these type fraudulent strategies.

Although there is the general regulation about the financial statements, IAS and IFRS have been issued continuously to regulate the specific evaluation of assets, liabilities, equity, revenues and expenses. Furthermore, the annual report demands the report of the internal and external auditor to give more accuracy and reliability to the report, in general, and increase the quality of the accounting information to help stakeholders assess the annual reports and take the decision for the best allocation of their resources.

Summary

Reporting is the tool that an organization uses to communicate with their stakeholders, which allows to decrease the asymmetry of information and to increase the accountability. The first drive is the comparability of the report between organizations which is possible due to the international regulation, for example, IFRS Standards and IFRIC Interpretations provide framework to recognise assets, liabilities, equity, revenue and expenses. The second drive is the timeliness of the report between organizations which is mandatory to tax agencies, banks and shareholders and could be voluntary to other stakeholders with less authority.

Cross-References

- [Accountability](#)
- [Corporate Governance Reporting](#)
- [Integrated Reporting for Sustainability](#)
- [Reporting Framework](#)
- [Reports on Payments to Governments](#)

References or Further Readings

Akpanuko, E. E., & Umoren, N. J. (2018). The influence of creative accounting on the credibility of accounting reports. *Journal of Financial Reporting and Accounting*, 16(2), 292–310.

Beaver, W. (1997). *Financial reporting: An accounting revolution*. London: Prentice Hall.

Bedford, N. M., & Baladouni, V. (2016). A communication theory approach to accountancy. *The Accounting Review*, 37(4), 650–659.

Beest, F. V., Braam, G., & Boelens, S. (2009). *Quality of financial reporting: measuring qualitative characteristics* (Nijmegen Center for Economics (NICE)-working paper 09-108) (pp. 1–41). Nijmegen: Institute for Management Research Radboud University.

Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 25(2), 177–186.

Benston, G. J. (1969). The value of the SEC's accounting disclosure requirements. *The Accounting Review*, 44(3), 515–532.

Cambridge University Press. (2021). *Cambridge dictionary online*. Cambridge, UK: Cambridge University Press. <https://dictionary.cambridge.org/>. Accessed 22 June 2021.

Campbell, D., Shrives, P., & Bohmbach-Saager, H. (2001). Voluntary disclosure of mission statements in corporate annual reports: Signaling what and to whom? *Business and Society Review*, 706(1), 65–87.

Cardoso, R. L., Saraiva, E., Tenório, F. G., & Silva, M. A. (2009). Regulação da contabilidade: teorias e análise da convergência dos padrões contábeis brasileiros aos IFRS. *Revista de Administração Pública*, 43(4), 773–799.

CDSB (Climate Disclosures Standard Board). (2020). *Are climate-related matters relevant to financial reporting? Integrating climate-related matters into financial reporting*. <https://www.cdsb.net>. Accessed 25 June 2021.

Chambers, R. J., & Wolnizer, P. W. (1991). A true and fair view of position and results: the historical background. *Accounting Business and Financial History*, 7(2), 197–121.

Clatworthy, M., & Jones, M. J. (2003). Financial reporting of good news and bad news: Evidence from accounting narratives. *Accounting and Business Research*, 55(3), 171–185.

Crowther, D., & Rayman-Bacchus, L. (2004). The future of corporate social responsibility. In D. Crowther & L. Rayman-Bacchus (Eds.), *Perspectives on corporate social responsibility* (pp. 229–249). Aldershot: Ashgate.

dos Santos, R. de A. (2016). *Modelo preditivo de fraude ocupacional nas organizações privadas*. São Paulo: Pontifícia Universidade Católica de São Paulo. <https://tede2.pucsp.br/handle/handle/18875>. Access 25 July 2021.

Erickson, S. L., Weber, M., & Segovia, J. (2011). Using communication theory to analyze corporate reporting strategies. *Journal of Business Communication*, 48(2), 207–223.

FASB (Financial Accounting Standards Board). (2021). *Reference library of standards*. New York: FASB. <https://www.fasb.org/>. Accessed 04 July 2021.

Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*, 84(2), 467–496.

- Gordon, I., & Gallery, N. (2012). Assessing financial reporting comparability across institutional settings: The case of pension accounting. *The British Accounting Review*, 44, 11–20.
- Hahn, R., & Lulfs, R. (2014). Legitimizing negative aspects in GRI-oriented sustainability reporting: A qualitative analysis of corporate disclosure strategies. *Journal of Business Ethics*, 123(3), 401–420.
- Hardy, J. W., & Hubbard, E. D. (1976). Internal reporting guidelines: Their coverage in cost accounting texts. *The Accounting Review*, 51(4), 917–921.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1–3), 405–440.
- Hodge, N. (2012). Annual Reports in the Pacific: Transforming data into information and knowledge. *Pacific Health Dialog*, 18(1), 207–2014.
- Holton, V. (2005). Diversity reporting: how European business is reporting on diversity and equal opportunities. *Women in Management Review*, 20(1), 72–77.
- Houlthausen, R. W. (2009). Accounting standards, financial reporting outcomes, and enforcement. *Journal of Accounting Research*, 47(2), 447–458.
- Hrasky, S., & Smith, B. (2008). Concise corporate reporting: communication or symbolism? *Corporate Communications: An International Journal*, 13(4), 418–432.
- IASB (International Accounting Standards Board). (2018). Conceptual framework for financial reporting. <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/conceptual-framework-for-financial-reporting.pdf>. Accessed 29 July 2021.
- IASB (International Accounting Standards Board). (2021). *IAS 1 – Presentation of financial statements*. <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/ias-1-presentation-of-financial-statements.pdf>. Accessed 31 July 2021.
- IFRS Foundation (International Financial Reporting Standards Foundation). (2021). *Website of the international accounting standards*. New York: IFRS Foundation. <https://www.ifrs.org/>. Accessed 01 July 2021.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- John, B., & Healeas, S. (2000). *Financial reporting standard for smaller entities: A fundamental or cosmetic change?* (Occasional research paper, n. 30). London: Certified Accountants Educational Trust.
- Leftwich, R. W., Watts, R. L., & Zimmerman, J. L. (1981). Voluntary corporate disclosure: The case of interim reporting. *Journal of Accounting Research*, 19, 50–77.
- Pallisserry, F. (2012). True and fair financial reporting: A tool for better corporate governance. *Journal of Financial Crime*, 19(4), 332–342.
- Schwieger, B. J. (1977). A summary of accounting for and reporting on accounting changes. *The Accounting Review*, 52(4), 946–949.
- Skinner, D. J. (1994). Why firms voluntarily disclose bad news. *Journal of Accounting Research*, 32(1), 38–60.
- Trumbull, W. P. (1953). Disclosure as a standard of income reporting. *The Accounting Review*, 28(4), 471–481.
- van der Bles, A. M., van der Linden, S., Freeman, A. L. J., Mitchell, J., Galvao, A. B., Zaval, L., & Spiegelhalter, D. J. (2019). Communicating uncertainty about facts, numbers, and science. *Royal Society Open Science*, 6, 1–42.
- Yuthas, K., Rogers, R., & Dillard, J. F. (2002). Communicative action and corporate annual reports. *Journal of Business Ethics*, 41(1/2), 141–157.
- Zeff, S. (2007). Commentary: Some obstacles to global financial reporting comparability and convergence at a high level of quality. *The British Accounting Review*, 39(4), 290–302.

Reporting Framework

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Synonyms

Accountability

Definition

Since 2017, an increasing number of companies have started to disclose their nonfinancial information. This change has been driven both from a high degree of sensibilization to sustainable development and from the increasing number of forms of regulation about nonfinancial information. According to this evidence, the recent past has been characterized from the exigence to identify new reporting frameworks in order to disclose the different types of nonfinancial information. Specifically, the reporting frameworks are adopted by the companies that want to effectively disclose a standardized and comparable non-financial information towards their stakeholders.

The Differences Between Financial and Nonfinancial Reporting

In doctrine, there is no clear distinction between the concept of mandatory and voluntary disclosure (Quagli and Teodori 2005), and this lack implies the absence of a clear distinction between financial and nonfinancial information. The conceptual difference that exists between these categories of information often depends on the regulatory context in which a company operates. In this sense, what concerns the economic-financial sphere is required by law and what, instead, pertains to the qualitative sphere falls within the ambit of what is voluntarily accounted for.

With the term nonfinancial information, academics and practitioners refer, instead, to that set of information that concern:

- Sustainability considered as the set of actions and programs promoted by the company to guarantee a respectful and efficient productive activity in terms of environmental and social aspects.
- Governance, which includes elements properly related to aspects of form and substance that make up the governance of a company and how they relate to the corporate context, internal and external.
- Intangibles, or rather to that set of assets that make up the immaterial structure of a complex organization, expression, for example, of intellectual, relational, and social capital.
- Risks, in the broadest sense of that type of information that identifies the set of generic and specific risks of a company.

However, there is an obligation to specify that the incessant evolution of the global competitive context and the consequent emergence of new business models do not allow us to provide a precise definition of what is really meant by nonfinancial information. Specifically, increasing the amount of nonfinancial information beside the financial results allows the stakeholders to fulfill the gaps resulting from the disclosure of the single financial information.

However, regulators are pursuing a different approach limiting the amount of disclosure to prevent the disclosure of uncertain and deceptive information (Wyatt 2008).

The development of the reporting, over time, has led to an increase in the number of information communicated to the outside, thus favoring an anomalous process of widening the number of pages in the annual reports that, often, and especially in elephantine organizations, is equivalent to ineffective information. It goes without saying that it should be remembered, the expansion of information, from a stakeholder perspective, can be perceived as an asset, but only when this information is more useful for making investment decisions (Eccles and Krzus 2012); in reality what happens, especially in many organizations of considerable size, is that the annual report becomes a tool to carry out an exercise of information display, thus determining an unnecessary complexity in terms of readability. Also, literature has revealed how the disclosure of nonfinancial information can be used by managers with the controversial aim of providing a distorted image of the company through the use of impression management (Tata and Prasad 2015).

The approaches adopted by companies with respect to the theme of the link between financial and nonfinancial information can be different in practice depending on the different level of interdependence existing between the two types of information (Mio 2011).

In some cases, there is an absence of coordination without some form of correlation between them; such situation could risk generating at the communication level the presence of conflicting and nonaligned information. Frequent is the case in which, instead, the same information is present in different reports, where different are also the stakeholders to whom these documents are addressed. In these terms, companies have to interact with a heterogeneous panorama of interlocutors composed of stakeholders interested in the investment side of the company, communities sensible towards the social and environmental dimension of the disclosure, and governmental institutions that mainly focusing on the adherence on law requirements of the disclosed information.

It follows, for example, that in the presence of a risk arising from a compensation claim for environmental damage, the “stakeholder-investor” perspective, different from that of the “stakeholder-local community,” will determine, in the first case, the evidence of monetary aspects with respect to the analysis, in the second case, of the evaluation of externalities, often not measurable in monetary terms.

The Differences Between Different Types of Nonfinancial Reporting Framework

Within the theme of the connectivity of the information present in the Integrated Reporting, Paternostro (2013) refers to a scheme of representation of the interdependencies between financial and nonfinancial information and not, through the explanation of different types of reports. The following is a summary diagram showing the contents, the time horizon, the types of capital, the information, whether financial and/or non-financial, the information matrix (if qualitative and/or quantitative).

- Financial statement: Information on performance and company, past and present time horizon – financial capital – financial information – quantitative information.
- Management commentary: Information on several aspects, past, present, and future time horizon – financial and structural capital – financial and other information – quantitative and qualitative information.
- Social and environmental report (social and environmental report): Information on several aspects, past, present, and future time horizon – social and relational, human and natural capital – nonfinancial information – quantitative and qualitative information.
- Report on corporate governance (corporate governance report): Information on the company and governance, past and present time horizon – financial and human capital – financial and other information – quantitative and qualitative information.
- Reports on intellectual capital (intellectual capital report): Information on various aspects such as external environment, strategy, resource allocation and business model, past, present, and future time horizon – intellectual, relational, and human capital – especially other information – quantitative information and qualitative.

Some empirical cases have also highlighted the presence of cross-references, when in a document an explicit reference is made to another that presents more detailed information on a specific topic.

Less common, on the other hand, is undoubtedly the case of a coordinated disclosure that takes the form of drafting separate documents that are designed, prepared, and published in an autonomous but at the same time coordinated manner.

Lastly, the integrated disclosure represents a standalone topic due to the coordination between economic, environmental, and social aspects. Furthermore, it represents also a tool used by managers during decision-making processes. In fact, the integration of financial and nonfinancial dynamics under a common umbrella favors the development of forward-looking evaluations.

In this perspective, the IIRC has proposed a framework of disclosure with the aim of increasing the number of integrate reports around the world. Specifically, it aims to improve the quality of information provided to the financial capital providers, suggest a more efficient approach for companies for disclosing their material factors, and support the decision-making processes in the short, medium, and long terms. This framework constitutes a real paradigm shift where, in addition to the great support, it can give in terms of decision-making, the information tool presents strong elements of distinction with respect to traditional reports ranging from the communicative approach, to the impact on management, to the inter-functional logic, to the information focus, to the time frame of reference, to the principle-based approach, to the capacity for synthesis, to the openness to digital content.

On this last aspect, authoritative doctrine (Tapscott & Ticoll, 2003) considers, in this sense, that financial reporting alone is not able to guarantee high levels of transparency, understood as the possibility for institutional stakeholders to access information on issues relevant to their interests, if not supported by an integrated reporting process based on a web-based perspective. Specifically, the modern era communication is based on different platforms. For instance, the use of newspaper articles to disclose financial information is considered to be a single perspective channel of disclosure. On the other side, the Internet takes the transparency to a new level with a more dynamic and shared transparency.

It goes without saying that such a level of integration can guarantee a type of business communication:

- Two-way or relational due to the feedback received from stakeholders.
- Multiple in terms of information content, because it presents strategic-competitive, economic-financial, social, and environmental data.
- Diachronic, as regards time perspective, because it manifests references of a retrospective, concomitant, and prospective nature.
- Qualitative-narrative as well as quantitative-monetary, as to the nature and modality of the information provided.

The aforementioned is verified, moreover, in an international context in which the adoption of nonfinancial reporting tools concerning aspects such as intangible assets, KPIs (Key performance Indicators), ESG (Environmental, Social, and Governance), and the web-based approach.

These aspects are fully accepted in the Integrated Report, a tool with respect to which the ferment is not only great about the different perspectives of analysis (Dumay et al. 2016) at a scientific level, but also with respect to the numerous managerial implications. Specifically, integrating financial, management, governance, and sustainability information in a single document coherently explains the company's strategy and the future perspectives and provides an optimal

picture of the company activity and management to the stakeholders.

Summary

The increasing attention paid by internal and external stakeholders on firms' activity has favored the rapid growth of new form of reporting standards. Specifically, this phenomenon has regarded both the traditional annual reports prepared in according to the laws and the standalone reports prepared on voluntary basis. Furthermore, during the last years, an increasing number of business organizations have started to disclose their nonfinancial information through integrated reports. However, the exigence to disclose the largest number of information in order to engage with stakeholders required the identification of new reporting frameworks. Specifically, this exigence regards the new form of corporate reporting through websites and social media. In this sense, the academia could interact with practitioners in order to identify new form of reporting in order to increase the overall degree of nonfinancial information transparency.

Cross-References

► Integrated Reporting

References

- Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016, September). Integrated reporting: A structured literature review. In *Accounting Forum* (Vol. 40, No. 3, pp. 166–185). Taylor & Francis.
- Eccles, R. G., Krzus, M. P., Rogers, J., & Serafeim, G. (2012). The need for sector-specific materiality and sustainability reporting standards. *Journal of applied corporate finance*, 24(2), 65–71.
- Mio, C. (2011). Informativa non financial nell'Annual Report. *Contabilità finanza e controllo*, 3, 247–258.
- Paternostro, S. (2013). The connectivity of information for the integrated reporting. In *Integrated reporting* (pp. 59–77). Cham: Springer.
- Quagli, A., & Teodori, C. (2005). *L'informativa volontaria per settori di attività*. FrancoAngeli.

- Tapscott, D., & Ticoll, D. (2003). The naked corporation: How the age of transparency will revolutionize business. Simon and Schuster.
- Tata, J., & Prasad, S. (2015). CSR communication: An impression management perspective. *Journal of Business Ethics*, 132(4), 765–778.
- Wyatt, A. (2008). What financial and non-financial information on intangibles is value-relevant? A review of the evidence. *Accounting and Business Research*, 38(3), 217–256.

Reporting Wrongdoing

► Whistleblowing

Reports on Payments to Governments

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Synonyms

Country-by-country reports of payments to governments

Definition

Reports of payments to governments are a form of public country-by-country (CbC) reports. Reports of payments to governments are reports through which multinational companies disclose, to the public in general, more or less detailed information on where they have undertaken their activities and generated their revenues and profits, as well as other relevant information such as information about taxes paid and subsidies received.

Introduction

The notion of transparency has become one of the most important when discussing proposals for new types of public reporting by corporations. This importance is undoubtedly associated with the idea that corporate transparency is useful in fighting tax avoidance and corruption. These phenomena, tax avoidance and corruption, are certainly among the corporate practices most damaging to the corporations' reputation and the public's trust in them. The 2017 Edelman Trust Barometer (Edelman 2017) reports that when asked "What can businesses do that would cause the most damage to your trust in a better future?", amidst the top five most-selected responses, one can find the following two: "pay bribes to government officials to win contracts" and "move profits to other countries to avoid taxes."

On the importance of transparency and public reporting, Choudhury (2016, p. 185), resorting to a very recent example, asserts their importance from a social regulation point of view by emphasizing that "when the UK government determined that there was an insufficient number of women on corporate boards," rather than requiring corporations to "increase the number of women in management," it mandated instead "that they disclose the number of women holding managerial positions within firms." Another example comes from India, where the government also "focused on disclosure" when it "became concerned about the country's energy usage" and required "corporations to report on corporate efforts to conserve energy" (*ibid.*). One final example comes from the USA, where, "in an effort to curtail the violence in the Democratic Republic of Congo (DRC), Congress directed the Securities and Exchange Commission to mandate corporate disclosure when using conflict minerals" (*ibid.*).

Among the new types of reporting designed to help companies to be more transparent is the reporting of payments to governments. Reports of payments to governments are a form of CbC reports (Murphy 2016; Wójcik 2015) that detail the monetary streams pertaining to a multinational corporation's relations with the governments of the countries in which they operate. This type

of reporting has arisen and developed as a result of the civil society organizations' concerns related with phenomena such as corruption and tax avoidance, as well as multinational corporations' increasing power and environmental responsibility (Wójcik 2015). Murphy (2016, p. 97) goes as far as considering that "the contention that globalization is not working for the benefit of everyone" lays in the origin of the demand for CbC reporting. According to this expert in CbC reporting, "some nation states and large parts of the world's population have lost out as the power of the global corporation has risen, including its power to not pay tax in the right place at the right rate and at the right time" (p. 97). The issue of taxation is nowadays inextricably linked to the issue of inequality. A testimony of this is the recent intervention of the Dutch historian Rutger Bregman at the World Economic Forum (WEF) in Davos. In a panel on inequality developed in partnership with the Time magazine, Rutger Bregman asserted that the main issue at hand when discussing inequality was "taxes, taxes, taxes, and all the rest is bullshit in my opinion" (Elliot 2019).

The focus of this entry is on public CbC reporting, in the form of the reports on payments to governments, rather than on CbC reporting to tax authorities. CbC reporting to tax authorities is also an important way of addressing the concerns mentioned above. This reporting for multinational companies is now well-known because of the OECD action plan on base erosion and profit shifting (BEPS), according to which information on these matters is to be provided to tax authorities (Murphy 2016). However, the focus of this entry is on the requirement to make publicly available the income generated, taxes paid, and other related information on a country-by-country basis.

Reporting on payments to governments is closely linked with corporate social responsibility (CSR) and sustainability reporting. In a 2013 document, KPMG considered that "while diversity and sustainability have been the vanguard of CSR, anti-corruption and tax arguably constitute the next wave" (KPMG 2013, p. 2). Whereas the issue of the fight against corruption is nowadays a

well-established aspect of CSR and sustainability reporting, the same is not the case of tax evasion. The most important CSR-related instruments include corruption as an important aspect of CSR. The OECD Guidelines for Multinational Enterprises, the United Nations Global Compact, and the Global Reporting Initiative (GRI) all attribute great importance to corruption. For example, the GRI Standards include a specific standard devoted to corruption (GRI 205: Anti-corruption). Regarding the case of taxation, whereas the OECD Guidelines for Multinational Enterprises includes a full chapter on taxation, the standard ISO 26000, providing guidance on social sustainability, has only one brief mention to taxation. The GRI Standards do not include a specific standard on this matter at all. However, the standard "GRI 201: Economic Performance" requires companies to provide information on the "Direct economic value generated and distributed," including "payments to government by country."

Key Issues

Reporting on payments to governments has developed enormously in the past few years, at least when considering the legislation pertaining to this type of reporting. It has become mandatory in such important regions and countries as the European Union (EU) and Canada. In the EU, large companies in the extractive industries (oil, gas, mining, and forestry) are obliged to provide information on the taxes that they pay and on some additional aspects of their relations with governments for each country in which they operate. This was through the so-called New Accounting Directive, which was approved by the European Parliament in June 2013 (European Commission 2013).

According to the New Accounting Directive, paragraph 44, "to provide for enhanced transparency of payments made to governments, large undertakings and public-interest entities which are active in the extractive industry or logging of primary forests should disclose material payments made to governments in the countries in which they operate in a separate report, on an annual

basis.” This report “should incorporate disclosures on a country and project basis” (par. 45). The information that such large undertakings are required to disclose is the following (article 43):

- (a) the total amount of payments made to each government;
- (b) the total amount per type of payment;
- (c) where those payments have been attributed to a specific project, the total amount per type of payment made for each such project and the total amount of payments for each such project.

Besides the large undertakings from extractive industry or logging of primary forests, the EU, also in June 2013, also made mandatory the disclosure of payments to governments by banks and investment firms. Directive 2013/36/EU, “on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms,” mandated that:

“From 1 January 2015 Member States shall require each institution to disclose annually, specifying, by Member State and by third country in which it has an establishment, the following information on a consolidated basis for the financial year:

- (d) name(s), nature of activities and geographical location;
- (e) turnover;
- (f) number of employees on a full time equivalent basis;
- (g) profit or loss before tax;
- (h) tax on profit or loss;
- (i) public subsidies received.”

In Canada, there is legislation similar to the one proposed in the New Accounting Directive, the Extractive Sector Transparency Measures Act (ESTMA), which dates from 2015.

With regard to the legislation on reports of payments to governments in the EU, two relevant reports examining how it has been applied have already been published. The first examined the implementation of mandatory reporting of payments to governments by the extractive sector in the UK (Chatzivgeri et al. 2017). The second report

extended this work to examine the wider EU context (The STAR Collective 2018). Albeit acknowledging that “there is scope for improvement” in terms of a number of issues (p. 5), the authors of this latter report declare having “found substantively positive findings in terms of the usage of the reports and how the EU’s reporting requirements in practice were perceived by the corporate world” (p. 4). They also mention examples of good reports on payments to governments. For example, in terms of “disclosure of additional tax information,” the reports of payments to governments prepared by Rio Tinto and BHP Billiton were considered as giving “users a much fuller picture of companies’ commitment to good tax citizenship” (p. 36). These reports “provide numerous examples of additional disclosures which provide users with a better understanding of the companies’ attitude towards paying taxes” (p. 33).

Future Directions

One of the most important recent initiatives that is likely to lead to further developments in reporting on payments to governments is the “proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU with regard to disclosure of income tax information by certain undertakings and branches” (European Commission 2016). According to this proposal, MNE groups with a total consolidated group revenue of over EUR 750 million will be required to “draw up and publish a report on income tax information on an annual basis” (art. 48b). The information to be required from these corporations, on a country-by-country basis, is the following (art. 48c):

- (a) a brief description of the nature of the activities;
- (b) the number of employees;
- (c) the amount of the net turnover, which includes the turnover made with related parties;
- (d) the amount of profit or loss before income tax;
- (e) the amount of income tax accrued (current year) which is the current tax expense recognised on taxable profits or losses of the financial year by undertakings and branches resident for tax purposes in the relevant tax jurisdiction;

- (f) the amount of income tax paid which is the amount of income tax paid during the relevant financial year by undertakings and branches resident for tax purposes in the relevant tax jurisdiction; and
- (g) the amount of accumulated earnings.

Another important initiative related to the development of this type of reporting is GRI's Global Sustainability Standards Board (GSSB) 2017 Project Proposal related to "Disclosures on tax and payments to government." A multi-stakeholder committee of experts was appointed by the GSSB to develop a draft Standard on this matter, and an exposure draft was developed and submitted to public comment. The GSSB received a number of public comments which will be considered by the committee in the development of this new GRI standard. According to the most recent information provided by the GRI (2019), this new standard will be considered as an economic standard and will be known as *GRI 207: Tax*. "The Standard's development process is currently under review by the Due Process Oversight Committee. Subject to final approvals, it is anticipated that the Standard will be made available for public use in December 2019" (GRI 2019).

Cross-References

- Corporate Social Responsibility
- Corporate Social Responsibility Reporting
- Corruption
- Global Reporting Initiative
- Sustainability Reporting
- Tax Citizenship

References

Chatzivgeri, E., Chew, L., Crawford, L., Gordon, M., & Haslam, J. (2017). *Reports on Payments to Governments: A report on early developments and experiences*. Available at: <http://www.publishwhatyoupay.org/wp-content/uploads/2017/06/REPORTS-ON-PAYMENTS-TO-GOVERNMENTS-A-REPORT-ON-EARLY-DEVELOPMENTS-AND-EXPERIENC-ES-1-2.pdf>.

- Choudhury, B. (2016). Social disclosure. *Berkeley Business Law Journal*, 13(1), 183–216.
- Edelman. (2017). *2017 Edelman trust Barometer – Global report*. Edelman. Available at: <https://www.slideshare.net/EdelmanInsights/2017-edelman-trustbarometer-global-results-71035413>
- Elliot, L. (2019). 'This is about saving capitalism': The Dutch historian who savaged Davos elite. *The Guardian*. Available at: <https://www.theguardian.com/business/2019/feb/01/rutger-bregman-world-economic-forum-davos-speech-tax-billionaires-capitalism>.
- European Commission. (2013). *Directive 2013/34/EU of the European parliament and of the council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013L0034&from=EN>.
- European Commission. (2016). *Proposal for a directive of the European parliament and of the council amending Directive 2013/34/EU as regards disclosure of income tax information by certain undertakings and branches*. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016PC0198&from=EN>.
- GRI. (2019). Disclosures on tax and payments to government. Available at: <https://www.globalreporting.org/standards/work-program-and-standards-review/disclosures-on-tax-and-payments-to-government>.
- KPMG. (2013). *A new era in international tax. Tax morality, transparency, base erosion and profit shifting*. KPMG International. Available at: <https://assets.kpmg/content/dam/kpmg/pdf/2013/12/A-new-era-in-international-tax-O-201306.pdf>
- Murphy, R. (2016). Country-by-country Reporting. In T. Pogge & K. Mehta (Eds.), *Global tax fairness* (pp. 96–112). Oxford: Oxford University Press.
- The STAR Collective. (2018). Exploring the efficacy of the EU law concerning Reports on Payments to Governments: Reflections for the EU. Available at <https://www.pwyp.org/wp-content/uploads/2018/11/The-STAR-Collective-EU-Report.pdf>.
- Wójcik, D. (2015). Accounting for globalization: evaluating the potential effectiveness of country-by-country reporting. *Environment and Planning C*, 33(5), 1173–1189.

Requirements

- NP 4469: Portuguese Social Responsibility Standard

Reservation (in India)

► Affirmative Action

Residual Claimant Theory

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Synonyms

Residual owner

Background

With the development of law and economics discipline, agency theory becomes the force of theoretical understanding of corporate governance. In particular, Armen Alchian and Harold Demsetz's seminal paper *Production, Information Cost, and Economic Organization* and Michael Jensen and William Meckling's *Theory of the Firm: Managerial Behaviour, Agency Cost and Ownership Structure* in 1970s offered a contractual understanding of company opposed to the traditional standpoint. The company in the eyes of Alchian and Demsetz (1972) does not own any of its inputs; rather it is the owner of various resources both tangibly and intangibly through the "cooperative specialization" to increase productivity, and as a result the company is viewed no different from "ordinary market contracting between any two people" (p. 777). For example, a relationship between an employer and an employee within a company is seen the same as the relationship between a customer and a grocer. A customer can fire her grocer by stopping buying from him, can assign her grocer task of obtaining any item to sell at a mutually agreeable price, and can even punish her grocer by filing a lawsuit if defective goods are provided by the grocer, and these are all an employer can do to her employee (Alchian and

Demsetz 1972). Put differently, company is deemed as an artifact of continuous re-negotiating contracts or a "legal fiction which serve as a nexus for a set of contracting relationships among individuals" (Jensen and Meckling 1976, p. 310). Or in Fama's words, "The firm is just the set of contacts covering the way inputs are joined to create outputs and the way receipts from outputs are shared among inputs" (Fama 1980, p. 290). Ownership of company gets to be irrelevant from this contractarian aspect.

Shareholders are therefore regarded as the input owners of equity capital, same as the input owners of labor, credits, raw materials, or others. Input owners cooperate within the company to strive for enhanced productivity with their respective comparative advantages and thereby for higher rewards. However, there is a problem to ascertain the rewards when all those input owners are working as a team. The final output is usually not separable which means each individual's contribution to the output is difficult to identify. Just as pointed out by Alchian and Demsetz (1972), when the productivity and rewards are highly and accurately related, then the input productivity would be greater; otherwise input productivity would become smaller if there is only a loosely correlated relationship. Put it simply, given that one can shirk without being punished, the incentive to shirk will be large since only a small percentage of losses caused by the shirker would be borne by herself and the large part would be borne by others. So, it is of great importance to reward each input owner as team member correctly in order to incentivize higher productivity.

One viable option is through observing the behavior of individual input owner to ascertain their contribution. But the monitoring is costly, and we cannot completely rely on the market due to the information asymmetry and no less incentive to shirk for new substituents. Alchian and Demsetz (1972) thereupon suggested to entitle the ultimate monitor the *net earnings of the team, net of payments of other inputs* (p. 782). That is, let the ultimate monitor to be the residual proprietary claimant to earn "his residual through the reduction in shirking that he brings about, not only by the prices that he agrees to pay the owners

of the inputs, but also by observing and directing the actions or uses of these inputs,” and with the enhanced incentive, the monitor with residual proprietary claims would no longer shirk as in the past (Alchian and Demsetz 1972, pp. 782–783). Shareholders are chosen to be such monitors and thereby entitling them all the residual claims.

Definition and Implications

The residual claimant theory holds that after fixed claimants have received their compensation for their contribution, the residual claimant could catch whatever is left from the income stream. In the corporate context, shareholders are treated as residual proprietary claimants who could “reap the marginal dollar” of the corporate profits and “suffer the marginal dollar” of any corporate losses as well (LoPucki 2004, pp. 1343–1344). They are entitled, and only entitled, what is left from the income stream after all fixed claims are met. As the recipients of the residual cash flow and income stream, in a healthy and solvent company, shareholders would therefore have the greatest impetus to maximize the wealth of the company since they could seize the entire, or at least most of, surplus after the fixed claims of other stakeholders are satisfied (Macey 1999; Bainbridge 2008).

Such gain allocation rule allows shareholders to catch whatever is left from the income stream and thereby tightly ties their benefits to the performance of the company. The residual claimants’ wealth could be maximized in the event that company wealth is maximized on the ground of that residual nature. As residual owner, shareholders could obtain higher dividends and share value when the company runs well while get less or even lose all their investment if the company runs badly. In particular, the position in the allocation sequence of corporate profits underlines shareholders’ eagerness to pursue the success of the company. Contrary to the so-called definable and compulsory returns, such residual risk-bearing nature could stimulate those residual claimants choosing, and wholeheartedly supporting, the best investment project for the

development of the company. It follows that maximizing the wealth of shareholders could be equated with maximization of the company wealth owing to the residual nature that, in turn, would foster the economic efficiency and benefit the society as a whole. Just as some scholars commented, the aggregation of all shareholder interests in a company is equivalent to the company’s interests (Yap 2010).

Problems

There are however several problems existed in the residual claimant theory. To begin with, shareholders are normally not entitled to claim dividends or any profits in a solvent company. It is in fact the board of directors who has the control of its deposition and decides where the residual should go. Directors in most jurisdictions have the right to decide not to pay shareholders dividends and instead deliver the residual to non-shareholding stakeholders by retaining the profits for future business, increasing employee benefits, improving customer service, and expanding the R&D, among others. Shareholders cannot get anything, at least directly (Stout 2012), unless the board decides to pay them. Due to the independent personality of company, shareholders cannot enjoy corporate profits directly in most jurisdictions unless directors so decide, and they are not allowed to direct companies including forcing board to declare dividends. Rules empowering the board of directors the right to determine how to utilize and allocate the assets in all the major jurisdictions significantly compromise the argument that shareholders are the residual claimants who are entitled to “every penny of profit left over after the firm’s contractual obligations to creditors, suppliers, and employees have been met” (Blair and Stout 2006, p. 728).

Only in insolvency law, shareholders may get the residual after the claims of employees, creditors, and others being fully satisfied. Nevertheless, even under such context, shareholders are by no means the only and appropriate residual owners under all the circumstances. Just like the simple and straightforward example illustrated by

Professor Lynn LoPucki (2004), in a company which is at the vicinity of insolvency, if the unsecured debts owed by the company are much more than its assets, it would be the unsecured creditors who own the residual, namely, the remaining assets after the outstanding taxes, employees, or secured creditors are fully paid off. "All of the gains and losses from action" taken during the reorganization, for example, would therefore fall to the unsecured creditors instead of shareholders under this circumstance. In addition, stakeholders such as employees who make the firm-specific investment could also be seen as the residual proprietary claimants since under such situation they would also lose out. According to Lynn LoPucki's (2004) empirical study, the identity of the residual owner is difficult to ascertain, and indeed, multiple residual owners exist with differing priority levels.

Another important justification for the residual claimant theory is the issue of incentive. As shown above, shareholders are argued to have the greatest incentive to maximize the company wealth and monitor directors' accountability due to the so-called residual position. On the other hand, non-shareholding stakeholders, it is argued, have no incentives to advance the corporate success (Sundaram and Inkpen 2004). Their interests are regarded to be hardly, if not impossible, aligned with corporate performance. In other words, if stakeholders only have fixed claims, such as monthly interest and salaries among other fixed payouts, then creating any marginal profits cannot make any difference to them as fixed claimants, and they thereby have little impetus to maximize the company value. It is argued that stakeholders as fixed claimants "do no better whether the firm performs *spectacularly well* or *just well*" (Sundaram and Inkpen 2004, p. 354).

Nevertheless, stakeholders can also catch benefits more than their fixed claim. Take local community/government, for example; if a company runs well, it can definitely collect more tax revenues. This means the local administration would also have incentive to improve the infrastructure and provide more convenient facilities among others to attract the company stay in its area and help corporate growth because they can catch

more in addition to the so-called fix claims. Similarly, employees may also have the right incentive to help the company perform better as it is not uncommon for employees in a well-performed company to get generous bonuses in addition to wages, and the better performance the company has, the more bonus the employees can obtain. Creditors and suppliers would also get more security for their contribution when companies run well. Thus, stakeholders are in effect able to obtain a fraction of extra benefits, namely, the residue, apart from the so-called fixed rights to a particular flow of income stream, and such incentive can be made explicit in advance like the design of performance-based salary and bonus. Put differently, stakeholders' claims are not entirely fixed. Take employee, for example; although their wages are normally fixed claims, other rewards such as bonus and certain retirement benefits are definitely unfixed. So, stakeholders can also have the incentive to impel directors to run companies better.

With regard to the argument of residual risks, which is related to that of incentive, shareholders are not the only group who undertake them. A creditor may lose her interests as well as principal when a company fails. A supplier provides highly specialized products and services to a given company which may be devaluated or completely worthless to other companies; if the company runs badly or fails, the supplier would lose out in view of the fact that the specialized production line and machinery might be useless. Similarly, an employee who wishes to join a certain company may invest a large amount of time, energy, and money to develop specialized and unique set of skills required by the company. Such employee's fate would be then closely linked with the company on grounds that her specialized firm-specific skill may be useless for other companies. Stakeholders therefore assume the risks as well. Moreover, the limited liability of shareholders means part of the residual risk has already been shifted to other stakeholders such as creditors. On the ground that the liability of shareholders would not exceed the initial investment, around some critical point like in the vicinity of corporate insolvency shareholders may take excessive risks to

‘gamble’. Under these circumstances, shareholders have no material interests, namely, they have few chances to be paid, and they as economic actors have no reason to resist very risky investing projects. There is severe potential of externalization because shareholders are able to “reap of all the benefits of risky activity but do not bear all of the cost” (Easterbrook and Fischel 1991, pp. 49–50). For the worse, in the event that shareholders have possibly no chance to get anything, shareholders would have a more vociferous preference to precede high-risk activities, especially when these shareholders lose the incentive to increase any margin since their residual claim has gone under water in this setting. Just like Professor Gregory Scott Crespi (2007) has pointed out, there is a vicinity of insolvency inefficient investment incentives problem. Of course, even in an ordinary situation, such a phenomenon of disproportionate gain by externalizing costs remains. On the one hand, their losses would never exceed what they have already paid; and on the other hand, the costs are borne partly by creditors among other stakeholders (Easterbrook and Fischel 1985).

Summary

As a result, the standpoint that shareholders have most to lose or to gain in the context of residual claimant theory is not always accurate. Especially when considering the fact that shareholders nowadays usually diversify their investment and thereby the risk by adopting a diversified portfolio strategy, their interests are not always identical to the company’s best interests as previously discussed. The incentive argument for shareholder is not tenable. The risk-preferred strategy for shareholders when they are able to diversify unsystematic risks or close to insolvency with little hope to be paid might be correspondingly different from the interest of the company and other stakeholders. While shareholders can diversify their unsystematic risk, company cannot. If directors are required to act for shareholder interest, then they may only focus on the systemic risk and leave the company vulnerable to idiosyncratic risk (Yan 2015).

We can see unsecured creditors own the residual of what secured creditors left while shareholders could still be called ultimate residual claimants by definition. In other words, shareholders could be always deemed as the last persons who have a claim on whatever is left after all other claimants’ claims are met, even if they have little chance to seize any surplus due to their sequence being in the very end and the cash flow having little possibility to move to them. However, thanks to the limited liability rule, under such situation shareholders have much to gain and little to lose from taking excessive risks, the conventional incentive argument becomes untenable, and residual claimant theory therefore cannot support the shareholder-centered model anymore. In particular, with the development of financial derivative, shareholders are not necessarily affected by company’s decision under certain conditions. Indeed, they can be indifferent to corporate performance and alienate their personal interests from their shares. Take hedge funds, for example; they may not care about the decline of share price as it is possible for them to profit from the bad performance. Especially when they sell short the shares, declining of share price rather than increasing is desired.

Cross-References

- ▶ [Corporate Objectives](#)
- ▶ [Shareholder Model](#)
- ▶ [Stakeholder Model](#)

References

- Alchian, A. A., & Demsetz, H. (1972). Production, information cost, and economic organization. *American Economic Review*, 62(5), 777–795.
- Bainbridge, S. (2008). *The new corporate governance in theory and practice*. New York: Oxford University Press.
- Blair, M. M., & Stout, L. A. (2006). Specific investment: Explaining anomalies in corporate law. *Journal of Corporation Law*, 31(3), 719–744.
- Crespi, G. S. (2007). Maximizing the wealth of fictional shareholders: Which function should directors embrace? *Journal of Corporation Law*, 32(2), 381–427.

- Easterbrook, F. H., & Fischel, D. R. (1985). Limited liability and the corporation. *University of Chicago Law Review*, 52(1), 89–117.
- Easterbrook, F. H., & Fischel, D. R. (1991). *The economic structure of corporate law*. Cambridge: Harvard University Press.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88(2), 288–307.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- LoPucki, L. M. (2004). The myth of the residual owner: An empirical study. *Washington University Law Quarterly*, 82(4), 1341–1374.
- Macey, J. R. (1999). Fiduciary duties as residual claims: Obligations to nonshareholder constituencies from a theory of the firm perspective. *Cornell Law Review*, 84(5), 1266–1281.
- Stout, L. A. (2012). *The shareholder value myth*. San Francisco: Berrett-Koehler Publishers.
- Sundaram, A. K., & Inkpen, A. C. (2004). The corporate objective revisited. *Organization Science*, 15(3), 350–363.
- Yan, M. (2015). Agency theory re-examined: An agency relationship and residual claimant perspective. *International Company and Commercial Law Review*, 26(4), 139–144.
- Yap, J. L. (2010). Considering the enlightened shareholder value principle. *Company Lawyer*, 31(2), 35–38.

Residual Owner

► Residual Claimant Theory

Resilience

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Synonyms

Adaptability; Elasticity; Equilibrium; Flexibility

Definition

Resilience is the ability, competence, or capability to endure and overcome a change caused by a disturbance, shock, or stress.

Background

The word *resilience* has its origin in the Latin word “*resi-lire*,” which means *springing back*. The concept of resilience has become a ubiquitous concept (Meerow and Stults 2016) rooted in different worldviews and scientific traditions such as psychology, ecology, and engineering (Teigão dos Santos and Partidário 2011). The concept of resilience evolved from psychology in the 1940s (Manyena 2006). Resilience entered the field of ecology when systems thinking became popular. Crawford Stanley Holling (1973) defined a concept of ecological resilience in order to “understand the capacity of ecosystems with alternative attractors to persist in the original state subject to perturbations” (Holling 1973). In engineering, the concept of resilience was first used to “explain elasticity and describe a material’s ability to withstand an external shock” (Davoudi 2012). Multiple meanings of the concept have since emerged; it is used in various fields and settings.

Specified resilience is concerned with problems related to aspects of a system that might arise from a set of sources. *General resilience* means resilience to all kinds of disturbances, shocks, or stresses faced by ICT-networks, communities, societies, economies, ecosystems, or socio-ecological systems (e.g., Folke et al. 2010; Hollnagel et al. 2010). In this entry we: (a) identify the core of the concept of resilience, and (b) analyze how resilience is used in different contexts (individual, social, and planetary contexts).

What Is the Core of Resilience?

In general, resilience is related to “a system’s ability to endure and overcome a change” (e.g., Fox-Lent et al. 2015; Madni and Jackson 2009). It

is “the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events” (NRC 2012). In human sciences, resilience refers to a competence or a trait by which people return to equilibrium after a shock or a stress in an individual, organizational, societal, or socio-ecological context. Resilient people have the ability to “cope with external stresses and disturbances as a result of social, political, and environmental change” (Adger 2000, p. 347).

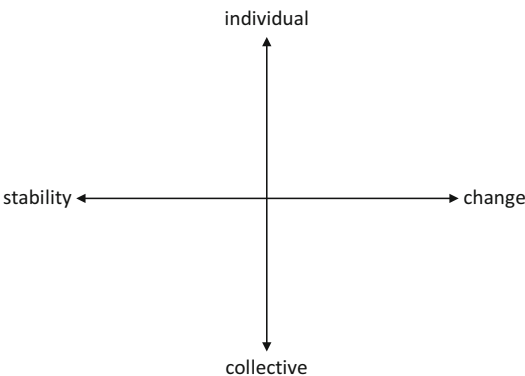
Resilience is a bridging concept between disciplines and approaches stimulating interdisciplinary understanding (Davoudi 2012). It provides a framework for understanding interdependencies between ecological and social fields (Welsh 2014) and it offers a solution to the paradox of *stability* and *change* that are both needed in order to have transformation in *individual* or *collective* life (e.g., Ahern 2011). The dynamics of resilience are demonstrated in Picture 1. The core of resilience has something to do with maintaining equilibrium. On the other hand, elasticity is needed because development and progress refer to changes and transformations. For example, adaptability and transformability is a basis for social-ecological system resilience: adaptive capacity maintains certain processes and transformability means the capacity to create a fundamentally new system when needed (Folke et al. 2010).

Resilience can be understood as a perspective, rather than as a neatly defined notion (Brand and Jax 2007). The meaning of resilience may also be

culturally or contextually dependent (Eggebert 2018). This is essential in order to have equitable resilience in a specific context. Equitable resilience simultaneously deals with social vulnerability and differential access to power, knowledge, and resources. The starting point for equitable resilience is people’s subjective perception of the position they have. This “accounts for their realities and for their need for a change of circumstance to avoid imbalances of power into the future” (Matin et al. 2018).

In its largest sense, resilience is a descriptor of complex system dynamics. It helps to understand interconnections between inequality, climate change, and biodiversity. The roadmap from such problems toward a sustainable future depends on new social structures, but also behavioral changes of citizens are needed (United Nations 2015). This deep and large regenerative process underlines a new narrative created from notions of resilience and sustainability (Gillard et al. 2016). The new narrative is related to the capacity for continuous reconstruction. Both individuals and communities are key actors in deliberating transformation toward the shared local understanding (Hamel and Välikangas 2003; Ziervogel 2016).

Resilient systems, organizations, and societies are diverse. They are characterized by robustness, resourcefulness, and rapidity to recover (Ganin et al. 2016; Larkin et al. 2015; Ayyub 2014; Francis and Bekera 2013; Bhamra et al. 2011). Resilient people accept reality and they have the ability to improvise (Coutu 2002). From the point of view of systems thinking, there is evidence that the stability of any system is based on diversity. Systemic risks can be minimized by enhancing the diversity of the operational environment (Haldane and May 2011).



Resilience, Picture 1 Dynamics of resilience

How Resilience Is Used in Different Contexts?

Resilience is used in various fields, settings, and scientific traditions. We identified five partly overlapping contexts for resilience in recent academic research: (1) Psychological resilience,

(2) Sociocultural resilience, (3) Urban resilience, (4) Resilience in economics, and (5) Socioecological resilience.

Psychological resilience has positive correlations to quality of life. Resilience, taken from the clinical psychology point of view, can be described as a personal ability to cope with a stressful situation and to maintain internal balance and continue successful activity (Diržytė et al. 2017). Researches into psychological resilience deal with, for example, obligations felt (Greenfield 2009), well-being at work (Liu et al. 2018; Slater et al. 2018), aging (Landes et al. 2014), social support (Hill et al. 2014), and vulnerability (Cipolla 2018). Thus, resilience has an essential role to play in individuals' subjective well-being (Yildirim and Belen 2019).

Sociocultural resilience deals with cultural traditions (Daskon 2010), cultural heritage (Gandini et al. 2017), religion (Annalakshmi and Abeer 2011), trust (Pierce et al. 2014), ethics (Barrett et al. 2016), and education as a tool for adding understanding of resilience in a society (e.g., Gamman and Thorpe 2018).

Local culture and traditional values and how to support and recognize them are critical for resilience. People's skills, customs, values, common experiences, moral, and spiritual systems are important for resilience in livelihood (Daskon 2010). Identified and perceived system boundaries, purposes, and timescales frame individual stakeholders' perspectives and perceptions of resilience. This also refers to innovations.

Sociocultural resilience building is substantially about innovation and experimentation (Schauppenlehner-Kloyber and Penker 2016). Therefore, a connection between education and resilience is evident. Abstract reasoning and anticipation skills obtained through education help to "undertake preventive measures without needing to first experience the harmful event and then learn later" (Hoffmann and Mutarak 2017).

Innovation in general can be a matter for democracy because grassroots innovation can contribute to social justice and environmental resilience (Smith and Stirling 2016). Anne Eggebert (2018) stresses the value of networks

and relationships in a society: shared processes, for example, during studies in school can help to build individual, collective, and cultural resilience (Eggebert 2018). Human resilience is both a result of learning and a trait (Laird et al. 2019).

Urban resilience has become the key concept to understand existing urban dynamics. It is also a concept to use in responding to the challenges that are emerging while creating livable urban futures (Romero-Lankao et al. 2016) because "release and reorganization are essential to the full cycle of adaptive renewal, thereby conferring survival, resilience, and future" (Burton 2010). In urban areas, resilience is intertwined with sustainability and disaster management such as the perennial issues of vulnerabilities, risks, and adaptability (Kim and Lim 2016). Equitable urban resilience supports development that is contextually rooted, responsive to change, and socially just (Matin et al. 2018). Due to this, in urban planning, resilience and sustainability are often used as synonyms (Suárez et al. 2016).

Development, progress, and innovations always happen between exploitation and conservation. Due to this, flexible urban governance is needed in order to create urban resilience (Boyd and Osbahr 2010). Urban resilience is related to interactions between social and technical systems (Taysom and Crilly 2017). Resilience of both human and technology is remarkably similar. It is related to the "ability to sense, recognize, adapt and absorb variations, changes, disturbances, disruptions and surprises" (Hollnagel et al. 2006). Urban resilience also covers, for example, the important role of quality of life (Diržytė et al. 2017).

Resilience in economics is related to "the ability of the system to withstand either market or environmental shocks without losing the capacity to allocate resources efficiently" (Perrings 2006, p. 418). Resilience in economics deals with themes such as recovering from a recession (Ormerod 2010), the effects of climate change in economics (Simane and Zaitchik 2014), unusual conditions (Wamsler and Brink 2014), supply chains (Mari et al. 2014), and nonprofit firms (Larsson et al. 2016).

Socio-ecological resilience is closely related to the resilience of economics. It is “capacity of a system to absorb a disturbance and reorganize while undergoing change” in the face of a fluctuating environment (Walker et al. 2004). Therefore, socio-ecological resilience refers to climate change (Kim and Lim 2016; Ziervogel et al. 2016), land-use (Mansergh 2010), and forest alteration (McWethy et al. 2010).

Resilience thinking calls for capacity-building processes as exceeding thresholds “might precipitate a forced transformation to some state outside its Holocene stability domain toward an Anthropocene Era, society must seriously consider ways to foster more flexible systems that contribute to Earth System resilience and to explore options for the deliberate transformation of systems that threaten Earth System resilience” (Folke et al. 2010). Capacity-building can guide individuals, organizations, and governments in generating reflexivity about how to respond better to complex problems (Boyd and Osbahr 2010). The baseline of the strengthened transformative capacity is formed by agency and a sense of social cohesion (Ziervogel et al. 2016). Resilience is a constantly evolving evolutionary process (Kim and Lim 2016).

Summary

Since first used in psychology and ecology, multiple meanings have emerged for the concept of resilience. Resilience is a bridging concept between individual, social, and planetary approaches. In its largest sense, resilience is a descriptor of complex system dynamics. Resilience is related to a system’s ability to endure and overcome a change. It is a dynamic concept: the core of resilience has something to do with maintaining equilibrium, on the other hand, elasticity is needed because development and progress refer to changes and transformations. Therefore, resilience can also be understood as a perspective, and the meaning of resilience is culturally or contextually dependent.

Cross-References

- Elasticity
- Flexibility
- Sustainability Resilience

References

- Adger, W. N. (2000). Social and ecological resilience: Are they related? *Progress in Human Geography*, 24(3), 347–364.
- Ahern, J. (2011). From fail-safe to safe-to-fail: Sustainability and resilience in the new urban world. *Landscape and Urban Planning*, 100(4), 341–343.
- Annalakshmi, N., & Abeer, M. (2011). Islamic worldview, religious personality and resilience among Muslim adolescent students in India. *Europe’s Journal of Psychology*, 7(4), 716–738.
- Ayyub, B. M. (2014). Systems resilience for multihazard environments: Definition, metrics, and valuation for decision making. *Risk Analysis*, 34(2), 340–355.
- Barrett, B. F. D., Horne, R., & Fien, J. (2016). The ethical city: A rationale for an urgent new urban agenda. *Sustainability*, 8(11), 1197.
- Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: The concept, a literature review and future directions. *International Journal of Production Research*, 49(18), 5375–5393.
- Boyd, E. & Osbahr, H. (2010). Responses to climate change: exploring organisational learning across internationally networked organisations for development. *Environmental Education Research*, (16)5/6, 629–643.
- Brand, F. S., & Jax, K. (2007). Focusing the meaning(s) of resilience: Resilience as a descriptive concept and a boundary object. *Ecology and Society*, 12(1), 23.
- Burton, P. J. (2010). Striving for sustainability and resilience in the face of unprecedented change: The case of the mountain pine beetle outbreak in British Columbia. *Sustainability*, 2(8), 2403–2423.
- Cipolla, C. (2018). Designing for vulnerability: Interpersonal relations and design. *She Ji: The Journal of Design, Economics, and Innovation*, 4(1), 111–122.
- Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(5), 46–56.
- Daskon, C. D. (2010). Cultural resilience-the roles of cultural traditions in sustaining rural livelihoods: A case study from rural Kandyan villages in Central Sri Lanka. *Sustainability*, 2(4), 1080–1100.
- Davoudi, S. (2012). Resilience: A bridging concept or a dead end? *Planning Theory & Practice*, 13(2), 299–333.
- Diržytė, A., Rakauskienė, O. G., & Servetkienė, V. (2017). Evaluation of resilience impact on socio-economic inequality. *Entrepreneurship and Sustainability Issues*, 4(4), 489–500.

- Eggebert, A. (2018). The unlikelyness of us. *She Ji: The Journal of Design, Economics, and Innovation*, 4(1), 11–30.
- Folke, C., Carpenter, R., Walker, B., Scheffer, M., Chapin, T., & Rockström, J. (2010). Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4), 20.
- Fox-Lent, C., Bates, M. E., & Linkov, I. (2015). A matrix approach to community resilience assessment: An illustrative case at Rockaway Peninsula. *Environment Systems and Decisions*, 35(2), 209–218.
- Francis, R., & Bekera, B. (2013). A metric and frameworks for resilience analysis of engineered and infrastructure systems. *Reliability Engineering and System Safety*, 121, 90–103.
- Gamman, L., & Thorpe, A. (2018). Makeright—Bags of connection: Teaching design thinking and making in prison to help build empathic and resilient communities. *She Ji: The Journal of Design, Economics, and Innovation*, 4(1), 91–110.
- Gandini, A., Garmendia, L., & Mateos, R. (2017). Towards sustainable historic cities: mitigation climate change risks. *Entrepreneurship and Sustainability Issues*, 4(3), 319–327.
- Ganin, A. A., Massaro, E., Gutfraind, A., Steen, N., Keisler, J. M., Kott, A., Mangoubi, R., & Linkov, I. (2016). Operational resilience: Concepts, design and analysis. *Scientific Reports*, 6, 19540.
- Gillard, R., Gouldson, A., Paavola, J., & Van Alstine, J. (2016). Transformational responses to climate change: Beyond a systems perspective of social change in mitigation and adaptation. *WIREs Climate Change*, 7(2), 251–265.
- Greenfield, E. A. (2009). Felt obligation to help others as a protective factor against losses in psychological well-being following functional decline in middle and later life. *Journal of Gerontology: Psychological Sciences*, 64B(6), 723–732.
- Haldane, A., & May, R. (2011). Systemic risk in banking ecosystems. *Nature*, 469, 351–355.
- Hamel, G., & Välikangas, L. (2003). The quest for resilience. *Harvard Business Review*, 81(9), 52–63.
- Hill, P. L., Payne, B. R., Jackson, J. J., Stine-Morrow, E. A. L., & Roberts, B. W. (2014). Perceived social support predicts increased conscientiousness during older adulthood. *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 69(4), 543–547.
- Hoffmann, R., & Muttarak, R. (2017). Learn from the past, prepare for the future: Impacts of education and experience on disaster preparedness in the Philippines and Thailand. *World Development*, 96, 32–51.
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4, 1–23.
- Hollnagel, E., Woods, D. D., & Leveson, N. (2006). *Resilience engineering: Concepts and precepts*. Ashgate Publishing Ltd.
- Hollnagel, E., Pariès, J., Woods, D., & Wreathall, J. (2010). *Resilience engineering in practice: A guidebook*. Ashgate Publishing Ltd.
- Kim, D., & Lim, U. (2016). Urban resilience in climate change adaptation: A conceptual framework. *Sustainability*, 8(5), 405.
- Laird, K., Lavretsky, H., Paholpak, P., Vlasova, R., Roman, M., St. Cyr, N., & Siddarth, P. (2019). Clinical correlates of resilience factors in geriatric depression. *International Psychogeriatrics*, 31(2), 193–202.
- Landes, S. D., Ardelt, M., Vaillant, G. E., & Waldinger, R. J. (2014). Childhood adversity, midlife generativity, and later life well-being. *The Journals of Gerontology: Series B*, 69(6), 942–952.
- Larkin, S., Fox-Lent, C., Eisenberg, D. A., Trump, B. D., Wallace, S., Chadderton, C., & Linkov, I. (2015). Benchmarking agency and organizational practices in resilience decisionmaking. *Environment Systems and Decisions*, 35(2), 185–195.
- Larsson, M., Milestad, R., Hahn, T., & von Oelreich, J. (2016). The resilience of a sustainability entrepreneur in the Swedish food system. *Sustainability*, 8(6), 550.
- Liu, X., Liu, W., Ping, M., Li, C., Liu, X., & Song, P. (2018). Correlation between resilience and social support and anxiety in obstetric nurses. *Frontiers of Nursing*, 5(4), 311–315.
- Madni, A. M., & Jackson, S. (2009). Towards a conceptual framework for resilience engineering. *IEEE Systems Journal*, 3(2), 181–191.
- Mansergh, I. (2010). North Central Victoria – Climate change and land-use: Potentials for third century in a timeless land. *Proceedings of the Royal Society of Victoria*, 122(2), 161–183.
- Manyena, S. B. (2006). The concept of resilience revisited. *Disasters*, 30(4), 433–450.
- Mari, S. I., Lee, Y. H., & Memon, M. S. (2014). Sustainable and resilient supply chain network design under disruption risks. *Sustainability*, 6(10), 6666–6686.
- Matin, N., Forrester, J., & Ensor, J. (2018). What is equitable resilience? *World Development*, 109, 197–205.
- McWethy, D. B., Whitlock, C., Wilmshurst, J. M., McGlone, M. S., Fromont, M., Li, X., Dieffenbacher-Krall, A., Hobbs, W. O., Fritz, S. C., & Cook, E. R. (2010). Rapid landscape transformation in South Island, New Zealand, following initial Polynesian settlement. *PNAS*, 107(50), 21343–21348.
- Meerow, S., & Stults, M. (2016). Comparing conceptualizations of urban climate resilience in theory and practice. *Sustainability*, 8(7), 701.
- NRC. (2012). *Disaster resilience: A national imperative*. Washington, DC: The National Academies Press.
- Ormerod, P. (2010). Risk, recessions and the resilience of the capitalist economies. *Risk Management*, 12(1), 83–99.
- Perrings, C. A. (2006). Resilience and sustainable development. *Environment and Development Economics*, 11(4), 417–427.

- Pierce, J., Lovrich, N., Johnson, B., Reames, T., & Budd, W. (2014). Social capital and longitudinal change in sustainability plans and policies: U.S. cities from 2000 to 2010. *Sustainability (Switzerland)*, 6(1), 136–157.
- Romero-Lankao, P., Gnatz, D. M., Wilhelmi, O., & Hayden, M. (2016). Urban sustainability and resilience: From theory to practice. *Sustainability*, 8(12), 1224.
- Schauppenlehner-Kloyber, E., & Penker, M. (2016). Between participation and collective action—From occasional liaisons towards long-term co-management for urban resilience. *Sustainability*, 8(7), 664.
- Simane, B., & Zaitchik, B. F. (2014). The sustainability of community-based adaptation projects in the Blue Nile highlands of Ethiopia. *Sustainability*, 6(7), 1–18.
- Slater, P. J., Edwards, R. M., & Badat, A. A. (2018). Evaluation of a staff well-being program in a pediatric oncology, hematology, and palliative care services group. *Journal of Healthcare Leadership*, 10, 67–85.
- Smith, A., & Stirling, A. (2016). Innovation, sustainability and democracy: An analysis of grassroots contributions. *Journal of Self-Governance and Management Economics*, 6(1), 64–97.
- Suárez, M., Gómez-Baggethun, E., Benayas, J., & Tilbury, D. (2016). Towards an urban resilience index: A case study in 50 Spanish cities. *Sustainability (Switzerland)*, 8(8), 774.
- Taysom, E., & Crilly, N. (2017). Resilience in socio-technical systems: The perspectives of multiple stakeholders. *She Ji: The Journal of Design, Economics, and Innovation*, 3(3), 165–182.
- Teigão dos Santos, F., & Partidário, M. (2011). SPARK: Strategic planning approach for resilience keeping. *European Planning Studies*, 19(8), 1517–1536.
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. A/RES/70/1. Available at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- Walker, B., Holling, C. S., Carpenter, S. R., & Kinzig, A. (2004). Resilience, adaptability and transformability in social-ecological systems. *Ecology and Society*, 9(2), 5.
- Wamsler, C., & Brink, E. (2014). Planning for climatic extremes and variability: A review of Swedish municipalities' adaptation responses. *Sustainability (Switzerland)*, 6(3), 1359–1385.
- Welsh, M. (2014). Resilience and responsibility: Governing uncertainty in a complex world. *Geographical Journal*, 180(1), 15–26.
- Yildirim, M., & Belen, H. (2019). The role of resilience in the relationships between externality of happiness and subjective well-being and flourishing a structural equation model approach. *Journal of Positive Psychology and Wellbeing*, 3(1), 62–76.
- Ziervogel, G., Cowen, A., & Ziniades, J. (2016). Moving from adaptive to transformative capacity: Building foundations for inclusive, thriving, and regenerative urban settlements. *Sustainability*, 8(9), 955.

Resilient Sustainability

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Synonyms

Territorial resilience community; The resilient sustainability

Definition

Conceptualizing resilience and sustainability allows us to perceive the existing differences and complementarity in terms of a process of action that seeks to create defense mechanisms and progression, in face of adverse contexts or change, requiring new skills and joint strategies of action. Interpretation implies a systemic approach, resulting from acting forces in contexts of fragility and uncertainty, promoting initiatives of rebalancing and progression, toward sustainability and development. Resilient sustainability has a territorial application and implies collective dynamics, which on the whole presuppose to attenuate or overcome adversity, allowing the maintenance of conditions for the continuity of social organization, natural resources, and cultural values. In this context, the actions of the communities and the policies developed are fundamental to generating synergies that propel optimism and constructive attitudes toward territorial sustainability. Sustainable communities, and therefore resilient in the forms and processes of social and economic action, are structurally organized and cooperative, promoting actions to safeguard and protect their status quo while revealing the capacity and flexibility to restore the structure and vitality of their community.

Introduction

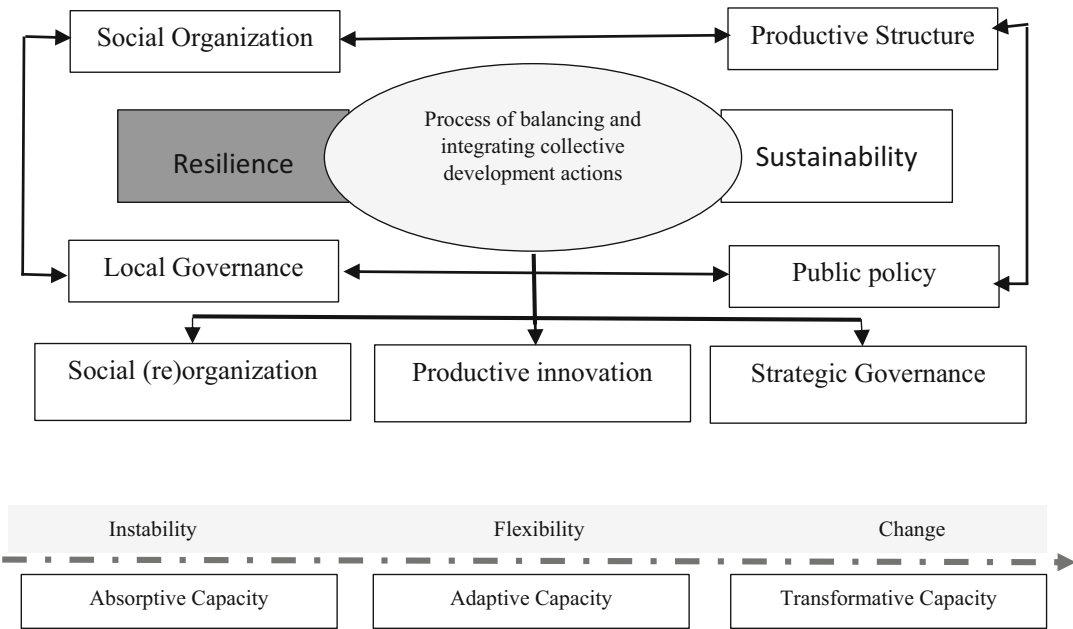
Resilient sustainability is a dynamic process of transformation to a more desirable trajectory, accepting continuous (permanent deformations and changes) of the systems and going beyond the concepts of limit and threshold (Davoudi et al. 2013). Thus, resilience must be perceived as the capacity of a social system to preserve its organizational configurations and functions, reorganizing itself and promoting concerted actions of reestablishment and self-control in the face of contextual change or threats, creating collective work contexts, cooperative and articulated for the perceived changes and identified challenges. It presupposes creative actions and concerted strategies capable of mobilizing communities and stakeholders for collective goals and development promoters. Initiatives should have a dimension of involvement of local actors (governates, investors, and the population) in an approach to preserving and enhancing natural and cultural resources.

Background and Meaning

Resilience, initially developed by Holling (1973) as a concept associated with an ecological research context, has been applied in recent decades to the social and economic fields, seeking to infer behaviors and evaluate the feedback produced (Tóth 2015). This concept emerges in the regional studies, given the interest in evaluating the dynamics between the territory and its actors in the construction of balances. The term reflects its Latin root “resiliere” has inherent Latin origins, meaning “to leap or bounce back, to pull back, to retreat, to shrink (go back).” Nowadays the term resilience has become a highly attractive and used buzzword in approaches to socio-economic contexts and in particular those that reveal resistance and overcoming in the face of contexts of loss or crisis (Bristow and Healy 2014; Fingleton et al. 2012). There is a widespread use of the term/concept without yet an agreed and unambiguous

operational conceptual principle, resilience, as usually employed or used, has multiple meanings and different contexts (social, economic, climatic, biological, etc.). Walker et al. (2004: 2) present resilience as “the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain the same function, structure, identity and feedbacks.” In practice resilience as a “descriptive concept gives insight into the dynamic properties of an ecological-economic system. Sustainability as a normative concept captures basic ideas of intergenerational justice when human well-being depends on natural capital and services” (Derissen et al. 2011: 67). The dynamic established in the territorial relationship between the communities and their social and productive activities, geography, and natural resources determines a joint process that, in the context of change and/or imbalance, allows to promote sustainability and development. “The sustainability of development depends on its ability to prevent new risk creation and the reduction of existing risk” (Hudson 2009: 12). When we look at the concept of sustainable development and its interpretation, we see that, in structural terms, it is sustained by economic, environmental, and social well-being. The interaction and reconciliation of these three components is fundamental to the pursuit of sustainable development and the consequent achievement of well-being (Fig. 1).

Territories that present major structural weaknesses, as a result of their geographical specificity or their economic and social development, seek to develop mechanisms of action that allow creating conditions for the maintenance of their communities, economic activities that sustain and promote process of conservation and enhancement of natural resources (Strickland-Munro et al. 2010; Simmie 2014). These processes, leveraged in creative strategies and in the promotion of differentiated collective initiatives, contribute, of diverse nature, to socio-economic and environmental sustainability. It should be noted that this resilience is the result of synergies developed by their communities and the interaction with adjacent areas,



Resilient Sustainability, Fig. 1 Structural factors of the resilient sustainability process and its implications in socio-economic and territorial organization

built, formally and informally, processes of resistance to contexts of change (less social and economic dynamism) or geographical conditions of specificity, which require higher costs (accessibility, access to resources, investment, etc.). Essentially, and according to Béné et al. (2012: 48), building resilience would require “interventions that strengthen the three components: absorptive resilience, adaptive resilience, transformative resilience, together, and at multiple levels (individual, family, community, regional, etc.)” promoting flexible processes of qualification for change and reorganization. “Resilience itself confers a measure of the capacity of a system to absorb disturbance and reorganise, while undergoing change, with the same or similar system retained” (Folke 2006: 258). Hartman (2018: 69) relates a “set of six key conditions towards building destination resilience: 1) variety and redundancy; 2) connectivity; 3) polycentric governance; 4) environmental sensitivity; 5) learning and reflexivity; and 6) adaptive thinking and systems.” In this context, “community

resilience as the ability to anticipate risks, limit impacts, and rise again quickly through survival, adaptation, evolution, and growth in the face of changes” (Community and Regional Resilience Institute 2013). “The permanent capacity of a territory to devise and deploy new resources and capacities that allow them to anticipate, prepare, respond and adapt favorably to the dynamics of transformation driven by this changing environment is called territorial resilience” (Sánchez-Zamora et al. 2016: 109). “Resilient communities have a variety of employment opportunities, various income, as well as a variety of financial services facilities from financial and social institutions; and they are able to manage their natural assets and resources in addition to having the ability to protect, enhance, maintain and mobilize natural and community resources” (Community and Regional Resilience Institute 2013). Resilient and sustainable communities are defined as structurally organized and interacting to minimize the effects of change while having the ability to recover by restoring the vitality and socio-

economic dynamics of the community (Tobin 1999). “Resilience affords a system the capability to adapt, enabling a buffer effect by which the system can better absorb or withstand disturbances” (Walker et al. 2004: 28). Processes that include the preservation of their structures and the restoration of the essential basic functions that represent and shape the system or community under analysis (UNISDR 2009; Adger 2000). In this context, the concept of resilience gains relevance and application, integrating increasingly the discourse of politicians, economic and social organizations, businessmen, and citizens. Its meaning and scope create bridges and communication platforms between scientific areas, administrative entities, economic and social players, and the community itself, generating approaches and communication/dialogue processes among which there was no history of reflection and collaboration (Béné et al. 2012).

Resilient sustainability is a dynamic process of transformation to a more desirable trajectory, accepting continuous (permanent deformations and changes) of the systems and going beyond the concepts of limit and threshold (Davoudi et al. 2013). In this framework, resilience should be considered as a capacity potentially developed by a given system to preserve its structural configurations and functions, and suggests that the structure has the capacity to reorganize itself, creating contexts of collective, cooperative, and articulated work for perceived changes and identified challenges. “Development involves resistance and adaptation as well as growth and competition” (Jonas 2012: 268). Sustainable development, in an evolutionary dimension of permanent transformations and readjustments, cannot succeed without allowing societies to promote dynamic readaptive capacities, promoting their resilience. Resilience increases the probability of sustaining development in the future, ensuring continuity and evolution (Folke et al. 2002). Thus the intrinsic development of relationships, interactions, and adaptations, tendentially creative, allow to promote equilibria and the sustainability of the communities and territories where they are inserted, thus promoting resilient sustainability.

Summary

Resilient sustainability has a territorial application and implies collective dynamics, which on the whole presuppose to attenuate or overcome adversity, allowing the maintenance of conditions for the continuity of social organization, natural resources, and cultural values. In this context, the actions of the communities and the policies developed are fundamental to generating synergies that propel optimism and constructive attitudes toward territorial sustainability. It comprises creative actions, concerted strategies, and responsibilities between governments, local associations and sectors, investors, and the population, capable of generating involvement and synergies that promote development, respecting local identities and the environment.

Cross-References

► [Resilience](#)

References

- Adger, W. N. (2000). Social and ecological resilience: Are they related? *Progress in Human Geography*, 24, 347–364.
- Béné, C., Wood, R. G., Newsham, A., & Davies, M. (2012). *Resilience: New Utopia or New Tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes*. IDS working paper volume 2012 number 405, CSP working paper Number 006.
- Bristow, G., & Healy, A. (2014). Regional resilience: An agency perspective. *Regional Studies*, 48(5), 923–935.
- Community and Regional Resilience Institute. (2013). Building resilience in America’s communities: Observations and implications of the CRS pilots.
- Davoudi, S., Brooks, E., & Mehmood, A. (2013). Evolutionary resilience and strategies for climate adaptation. *Planning Practice & Research*, 28(3), 307–322.
- Derissena, S., Martin, F., Quaasa, F., & Baumgärtner, S. (2011). The relationship between resilience and sustainability of ecological-economic systems. *Ecological Economics*, 70(6), 1121–1128.
- Fingleton, B., Garretsen, H., & Martin, R. (2012). Recessionary shocks and regional employment: Evidence on the resilience of U.K. regions. *Journal of Regional Science*, 52(1), 109–133.

- Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global Environmental Change*, 16, 253–267.
- Folke, C., Carpenter, J., Elmqvist, T., Gunderson, L., Holling, C., & Walker, B. (2002). Resilience and sustainable development: building adaptive capacity in a world of transformations. *Ambio*, 31(5), 437–448.
- Hartman, S. (2018). Resilient tourism destinations? Governance implications of bringing theories of resilience and adaptive capacity to tourism practice. In E. Innerhofer, M. Fontanari, & H. Pechlaner (Eds.), *Destination resilience: Challenges and opportunities for destination management and governance* (pp. 66–76). London: Routledge.
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4, 1–23.
- Hudson, R. (2009). Resilient regions in an uncertain world: Wishful thinking or a practical reality? *Cambridge Journal of Regions, Economy and Society*, 3(1), 11–25.
- Jonas, A. E. G. (2012). Region and place: Regionalism in question. *Progress in Human Geography*, 36(2), 263–272.
- Sánchez-Zamora, P., Gallardo-Cobos, R., & Ceña-Delgado, F. (2016). La noción de resiliencia en el análisis de las dinámicas territoriales rurales: una aproximación al concepto mediante un enfoque territorial. *Cuadernos de Desarrollo Rural*, 13(77), 93–116.
- Simmie, J. (2014). Regional economic resilience: A Schumpeterian perspective. *Raumforschung und Raumordnung*, 72(2), 103–116.
- Strickland-Munro, J. K., Allison, H. E., & Moore, S. A. (2010). Using resilience concepts to investigate the impacts of protected area tourism on communities. *Annals of Tourism Research*, 37(2), 499–519.
- Tobin, G. A. (1999). Sustainability and community resilience: The holy grail of hazards planning? *Environmental Hazards*, 1(1999), 13–25.
- Tóth, B. I. (2015). Regional economic resilience: Concepts, empirics and a critical review. *Miscellanea Geographica – Regional Studies on Development*, 19(3), 70–75.
- UNISDR. (2009). Terminology: *Resilience*. Retrieved from United Nations office for Disaster Risk Reduction website: www.unisdr.org/we/inform/terminology#letter-r
- Walker, B. H., Holling, C. S., Carpenter, S. R., & Kinzing, A. (2004). Resilience, adaptability and transformability in social-ecological systems. *Ecology and Society*, 9(2), 5.

Resource

- [Resource Intensity](#)

Resource Abundance

- [Resource Intensity](#)

Resource Depletion Debates

- [Consumerism](#)

Resource Intensity

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Synonyms

[Efficiency](#); [Material intensity](#); [Resource](#); [Resource abundance](#); [Resource productivity](#)

Definition

Resource intensity is a quantitative method of the resources (e.g., natural resources, land, air) needed for the production process and a measure of the efficiency of resource use. It is generally expressed as a proportion of products used for value (e.g., money, quantity). Resource efficiency is a measure of production per unit of output which requires resources as an input. Resource efficiency is vital ideas for assessing dematerialization policies that are driven by efficiency (Environmental Justice Organizations, Liabilities and Trade 2019). In science economics, the main problem is resource scarcity or resource limit. There are several dimensions of resource intensity. Energy intensity is frequently used in sustainability issues. This indicator is also used to evaluate product and service energy efficiency such as equipment and buildings, cars, and

transport systems. An economy's resource intensity may alter because of a number of variables (Cleveland and Ruth 1999):

- Technical improvements and developments to produce good more efficiently
- Replacement of new materials with more desirable characteristics for older materials, e.g., input or resource substitution for production process
- Differentiated goods and services by the eco-friendly industry and consumed over time by the industry as a result of shifts between industries or shifts within industries (such as information technologies)

Introduction

Economic theory suggests that increase in a country's resource intensity provides higher growth rate. Even large volume of empirical studies indicate that resource intensity tends to hinder rather than accelerate growth rate. The link between resource abundance and underdevelopment is therefore unknown yet (Bulte et al. 2005). Potentials for dematerialization – the autonomy of resource development – describe the real growth boundaries caused by natural resource scarcity. In this sense, accounting for the resource intensity became crucial. Ever since the endeavour of Ayres and Kneese (1969) to measure material flows by the mass balance principle, to the recent Material Flow Accounting (MFA) technique, many quantitative methods are generated by academics as well as practitioners (Bithas and Kalimeris 2018). In MFA, the link between growth and natural resources is defined as the material intensity (MI) of the economy and is calculated as the amount of resources required for the one unit of good. The ratio of resources to GDP is usually referred to as the domestic material consumption (DMC)/GDP. However, DMC does not characterize the link between resources intensity and GDP as a whole. The independence of economic growth from natural resources is force-stable

under appropriate implementations. The amount of resources required to create one unit of income measures the efficiency of resource intensity in the economic process by comparing actual physical inputs (material flows) with the actual output of the production procedure (Bithas and Kalimeris 2018):

Resource intensity = Resource use/value added

Resource efficiency = Value added/resource use

where:

The resources used in the production process = the resource footprint caused by the aggregate consumption

The value added in the production processes = the price of the goods (Hertwich 2008)

According to Hertwich (2008), resource intensity can be defined across various economic units:

- Firm level: resource efficiency per output
- Product level: life cycle resource use per unit cost of the product
- Industry level: total resource use divided by the total value added
- Nation level: total resource use of a country (the sum of individual resource use) divided by gross domestic product (GDP)

In an intense competitive environment, organizations are increasingly dependent on their environment to obtain the resources they need. The degree of commitment to the resources required by the activities of the organizations in their environment is defined as resource dependence approach. In this context, resource uncertainty is one of the most important environmental challenges for organizations. Uncertainty in finding resources connotes the absence, scarcity of critical resources (Pfeffer and Salancik 2003), because the uncertainty about finding resources makes it difficult for the customer to manage mission-related activities (Macedo and Pinho 2006). At this point, the effect related to the resource intensity on the customer may occur when the firm

loses power and control against the supplier in a market with a limited number of suppliers (Fink et al. 2006). There are three elements that make up the resource uncertainty: resource intensity, resource availability uncertainty, and resource interconnectedness.

Thus, resource intensity is one of the main issues on sustainability such as sustainable growth, sustainable development, and sustainable growth goals. International economic and financial institutions develop programs and policies that focus on the resource efficiency, resource intensity, as well as resource scarcity. The issue also became hot spot in the concept of environmental and energy economics.

Summary

Resource intensity is a method for measuring the resources required for the production and disposal process. Hence, resource intensity is specified both as a measure of the efficiency of resource usage and the amount of resources involved in unit cost. Resource intensity is appointed by alterations in the mix of materials to produce individual goods and services, and the product composition of output. There are several dimensions of resource intensity. It can be defined across various economic units.

Key Issues

- Resource efficiency
- Material flow accounting (MFA)
- Biotic resources
- Fossil resources
- Mineral resources
- Land
- Water
- Air
- Health, functioning ecosystems, genetic diversity, life-support systems (Hertwich 2008)

Cross-References

- [Ecological Economics](#)
- [Life Cycle Assessment](#)
- [Rebound Effects of Eco-efficiency](#)

References

- Ayres, R. U., & Kneese, A. V. (1969). Production consumption and externalities. *American Economic Review*, 59(3), 289–297.
- Bithas, K., & Kalimeris, P. (2018). Unmasking decoupling: Redefining the resource intensity of the economy. *Science of the Total Environment*, 619–620, 338–351.
- Bulte, E. H., Damania, R., & Deacon, R. T. (2005). Resource intensity, institutions and development. *World Development*, 33(7), 1029–1044.
- Cleveland, C., & Ruth, M. (1999). Indicators of dematerialization and the materials intensity of use. *Journal of Industrial Ecology*, 2(3), 15–50.
- Environmental Justice Organizations, Liabilities and Trade. (2019). Mapping environmental justice: resource intensity and productivity. Retrieved from <http://www.ejolt.org/2012/12/resource-intensity-and-productivity/>. Accessed 2 Aug 2019.
- Fink, R. C., Edelman, L. F., Hatten, K. J., & William, L. J. (2006). Transaction cost economics, resource dependence theory, and customer–supplier relationships. *Industrial and Corporate Change*, 15(3), 497–526.
- Hertwich, E. G. (2008). Measuring the resource intensity production and consumption. OECD Conference on Resource Intensity.
- Macedo, I. M., & Pinho, J. C. (2006). The relationship between resource dependence and market orientation: The specific case of non-profit organizations. *European Journal of Marketing*, 40(5/6), 533–553.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford: Stanford University Press.

Resource Productivity

- [Resource Intensity](#)

Resource-Based Economy

- [Access Economy \(Ethics\)](#)

Resource-Based View

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Synonyms

[Firm resources approach](#); [Resource-driven view](#)

Definition

The central argument in the resource-based view (RBV) is that despite a firm having well-defined goals to accomplish, how the mission will be fulfilled is often limited by resource availability (Rangan 2004). The RBV focuses on the utilization and deployment of resources, leading to the development of resource-driven competencies and eventual competitive advantage (Prior and Glaser 2003). Resources in a firm can be either internal or external to the firm and may be acquired or already owned by the firm (Arbab Kash et al. 2014). The process through which a firm coordinates and deploys these resources will eventually affect its competitive advantage.

The RBV can be defined as:

...the identification and co-ordination of key resources, whether internal or external to the firm, tangible or intangible, and its eventual deployment to achieve firm objectives and organisational goals, in a bid to outperform competitors.

Wernerfelt's (1984) work titled "A Resource-Based View of the Firm" is considered one of the most influential papers that influenced RBV and indeed the wider body of strategy research as it explains the critical linkages between resources and output/products (Wernerfelt 1984, 1995). The author is a key seminal author in the RBV as it directs strategy scholars back toward resources as being critical to output/products and, ultimately, firm performance (Priem and Butler 2001).

Introduction

The resource-based view (RBV) is a well-established research stream within strategy research, with its origins linked to Edith Penrose's work in 1959, who gave valuable insights into the process of resource acquisition, utilization, and expansion for gaining competitive advantage (Rugman and Verbeke 2002). The central focus of attention for the RBV lies with firm-level resources (such as work force, finances, expertise, etc.) rather than the industry-level analysis favored by Porter (Green et al. 2008). The argument of the RBV is that the overarching goals of strategy are to accomplish stated firm objectives and organizational goals using often limited resources (van Nimwegen et al. 2008). The RBV also poses a counterargument to the earlier established industry-business environment-focused view of Porter, by arguing that competitive advantage can only be sustainably sourced via the development of superior capabilities (Barney 1991). These capabilities are developed based on resources available within the firm, and the utilization/underutilization of these resources will determine the direction of firm growth. In early conceptual work in strategy research, it was not uncommon to link resources to firm strengths/weaknesses and the lack of it to opportunities/threats within the competitive environment (e.g., Ansoff 1965; Andrews 1971).

The RBV also interprets responses to environmental factors and internal resource considerations during the decision-making process (Barney and Clark 2007; Hillman et al. 2009). This view of strategy suggests that companies should concentrate on the management of internal resources and find markets where these resources can be deployed to attain competitive advantage (Soosay et al. 2016). The RBV is crucial for management researchers as it assists strategists/managers in leveraging their firm's internal resources (e.g., assets, capabilities, and competencies) that hold the potential to deliver superior competitive advantages over competitors (Kraaijenbrink et al. 2010).

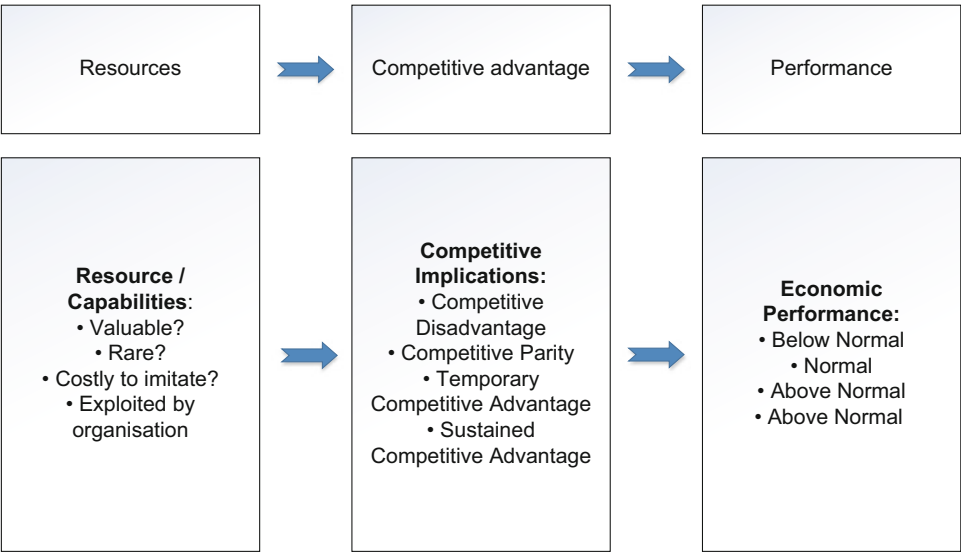
RBV and Strategy Analysis

A classical problem within strategy analysis is the issue of what is considered as a resource, and the RBV view takes into consideration that resources within firms are heterogeneous (Parker et al. 2015). The non-homogeneity of resources also implies that for them to be competitive in nature, they need to be valuable, scarce (rare), inimitable, non-substitutable, durable, appropriate, and organizational focused (Barney 2001; Jugdev and Mathur 2013). This concept of uniqueness in the resource base was put forward by Barney (1996) and known as the VRIO (valuable, rare, inimitable, organizational focused) framework shown in Fig. 1 below.

The framework shown above outlines how firms can move beyond just having resources to transforming it to competitiveness and improved performance (Jugdev and Mathur 2013). This framework has since grown to become an important one for strategy analysts in practice. It also details how firm resources lead to competitive advantage, with resources

translating to superior competitive advantage about its peers, leading to an increase in performance. This framework is widely regarded as the most significant theoretical framework of RBV (Newbert 2007).

While Wernerfelt’s (1984) work mostly emphasizes the link between resources and gaining business advantage (diversification, in this case), Barney (1991) provided a very detailed and formalized depiction of the business-level resource-based perspective via the VRIO framework, highlighting that organizational resources that are valuable, rare, hard to duplicate, and difficult to substitute can lead to sustained competitive advantage. The critical question when adopting the resource-based view is the question of defining what constitutes a firm’s resource. Some theorists believe that a firm’s unique capabilities in terms of technical expertise and managerial ability (intangible), while others only consider tangible assets (e.g., offices, equipment, human resources), are the key sources of heterogeneity that may result in sustained competitive advantage.



Resource-Based View, Fig. 1 VRIO framework. (Adapted from Barney 1997)

Summary

In adopting the resource-based view, it is critical to understand that a resource can be either tangible or intangible, as long as it results to distinctive competence and superior organizational routines that impact one or more of the firm's value chain functions leading to competitive advantage (Hitt and Ireland 1985). The definition presented in this study is therefore theoretically relevant to the seminal literature in the field of strategy, outlining how a firm can position itself using resources for competitive advantage within the business environment.

Cross-References

- [Big Data and Data Mining](#)
- [Blue Ocean Strategy](#)
- [Change Management](#)
- [Communication of CSR Information](#)
- [Corporate Strategy](#)
- [Data Protection](#)
- [New Markets](#)
- [Resource Intensity](#)
- [Resource-Based View](#)
- [Strategic Management and CSR](#)
- [Strategy](#)

References

- Andrews, K. R. (1971). *The Concept of Corporate Strategy* (Homewood, Illinois, Dow Jones-Irwin). Inc., 1971.
- Ansoff, H. I. (1965). *Corporate strategy: An analytical approach to business policy for growth and expansion* (Vol. 15). New York: McGraw-Hill.
- Arbab Kash, B., Spaulding, A., Gamm, L. D., & Johnson, C. E. (2014). Healthcare strategic management and the resource-based view. *Journal of Strategy and Management*, 7, 251. <https://doi.org/10.1108/JSMA-06-2013-0040>.
- Barney, J. B. (1991). The resource based view of strategy: Origins, implications, and prospects. *Journal of Management*, 17(1), 97–211.
- Barney, J. B. (1996). The resource-based theory of the firm. *Organization science*, 7(5), 469–469.
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643–650.
- Barney, J. B., & Clark, D. N. (2007). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford: Oxford University Press on Demand.
- Green, S. D., Larsen, G. D., & Chung-Chin, K. (2008). Competitive strategy revisited: Contested concepts and dynamic capabilities. *Construction Management and Economics*, 26(1), 63–78.
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404–1427.
- Hitt, M. A., & Ireland, R. D. (1985). Corporate distinctive competence, strategy, industry and performance. *Strategic Management Journal*, 6(3), 273–293.
- Jugdev, K., & Mathur, G. (2013). Bridging situated learning theory to the resource-based view of project management. *International Journal of Managing Projects in Business*, 6(4), 633–653.
- Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management*, 36(1), 349–372.
- Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: An assessment and suggestions for future research. *Strategic Management Journal*, 28(2), 121–146.
- Parker, D. W., Parsons, N., & Isharyanto, F. (2015). Inclusion of strategic management theories to project management. *International Journal of Managing Projects in Business*, 8(3), 552–573.
- Priem, R. L., & Butler, J. E. (2001). Is the resource-based for strategic management perspective research? *The Academy of Management Review*, 26, 22–40. <https://doi.org/10.5465/AMR.2001.4011928>.
- Prior, D., & Glaser, S. (2003). *The resource-based view of the firm: a literature review*. Macquarie University, Department of Business.
- Rangan, V. K. (2004). Lofty missions, down-to-earth plans. *Harvard Business Review*, 82(3), 112–119.
- Rugman, A. M., & Verbeke, A. (2002). Edith Penrose's contribution to the resource-based view of strategic management. *Strategic Management Journal*, 23, 769–780. <https://doi.org/10.1002/smj.240>.
- Soosay, C., Nunes, B., Bennett, D. J., Sohal, A., Jabar, J., & Winroth, M. (2016). Strategies for sustaining manufacturing competitiveness: Comparative case studies in Australia and Sweden. *Journal of Manufacturing Technology Management*, 27(1). <https://doi.org/10.1108/JMTM-04-2014-0043>.
- van Nimwegen, G., Bollen, L., Hassink, H., & Thijssens, T. (2008). A stakeholder perspective on mission statements: An international empirical study. *International Journal of Organizational Analysis*, 16(1/2), 61–82.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Wernerfelt, B. (1995). The resource-based view of the firm: Ten years after. *Strategic Management Journal*, 16(3), 171–174.

Resource-Driven View

► Resource-Based View

Responsibility

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Synonyms

Accountability; Liability

Definition

Social responsibility is an ethical framework and suggests that an entity, an organization, or an individual has an obligation to act for the benefit of society.

Responsibility may refer to a lot of areas, for example (in alphabetical order):

- Collective responsibility
- Corporate social responsibility
- Legal responsibility (disambiguation)
- Moral responsibility
- Professional responsibility
- Social responsibility

There is however no agreed definition of corporate social responsibility or CSR, so this raises the question as to what exactly can be considered to be corporate social responsibility. According to the EU Commission (2002) “CSR is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.”

There are a lot of terms for CSR: corporate responsibility; corporate ethics; corporate accountability; sustainability; triple bottom line; and responsible business. The three main

principles upon which CSR is based are accountability, transparency, and sustainability.

Corporate Social Responsibility in the Literature

A growing number of scholars have recognized that the activities of an organization impact upon the external environment and have suggested that one of the roles of accounting should be to report upon the impact of an organization in this respect. Such a suggestion first arose in the 1970s.

Dahl states: “every large corporation should be thought of a social enterprise; that is an entity whose existence and decisions can be justified as they serve public or social purposes.”

Similarly Carroll (1979), one of the early CSR theorists, states that: “business encompasses the economic, legal ethical and discretionary expectations that society has of organization at a given point in time.”

The idea of social responsibility is a theory in which everyone in society must fulfill their civic duties. It means that the actions of each person in any given society should be motivated by a desire to benefit society as a whole. Social responsibility is founded on a system of ethics, in which any decisions made, or actions taken, should be ethically considered. Undertaking an action or decision that is harmful to society or the environment in any way would be considered socially irresponsible. Social responsibility is a duty every individual has to perform so as to maintain a balance between the economy and the ecosystems. Social responsibility therefore means sustaining the equilibrium between the two. It pertains not only to business organizations but also to everyone whose any action impacts the environment.

Like affirmed by Vallaey (2011), social responsibility, a new core responsibility that complements moral and legal responsibilities, is a collective, not a personal, responsibility that fosters political creativity. CSR is the way firms integrate social, environmental, and economic concerns into their values, culture, decision-making, strategy, and operations in a transparent and

accountable manner and thereby establish better practices within the firm, create wealth, and improve society. The World Business Council for Sustainable Development describes CSR as the business contribution to sustainable economic development.

Corporate social responsibility (CSR) first appeared in the 1960s and has since been embraced by an ever-increasing number of organizations worldwide (Carroll 1991). According to Carroll (1983), “corporate social responsibility involves the conduct of a business so that it is economically profitable, law abiding, ethical and socially supportive. To be socially responsible then means that profitability and obedience to the law are foremost conditions when discussing the firm’s ethics and the extent to which it supports the society in which it exists with contributions of money, time and talent” (p. 608).

Furthermore, attempts have been made to determine the rationales behind firms engaging in the CSR efforts and its components.

Initially, shareholders were considered the only stakeholders. Nobel Laureate Milton Friedman (1970) said: “the business of business is business,” and “the only social responsibility of business is maximizing profits.” Gradually companies grew in size and clout and started playing ever-increasing role in society. This led to redefining stakeholders. Today, society at large, customers, vendors, employees, government, etc. are considered as much stakeholders as shareholders. Business uses scarce resources of society and often adversely affects environment; islands of plenty cannot exist amidst oceans of poverty; problems are too vast and complex; government efforts need to be supplemented by business; and social and environmental problems can threaten the survival of business (Lalit, J., Senior Vice President & Company Secretary, Jubilant Life Sciences Ltd., in a presentation of the theme dedicated to corporate social responsibility in 2013).

Existing research drew on different theories to explain the CSR phenomenon, including stakeholder theory, agency theory, legitimacy

theory, and institutional theory (Frynas and Yamahaki 2016). Under the stakeholder theory (Freeman 1984), firms incorporated CSR in their operations largely because of stakeholders’ pressure. Belkaoui and Karpik (1989), based on the agency theory, posited that image building and public perceptions dictate managers’ expenditure decisions on the social causes. Reverte (2009) used combinations of theories to study the CSR phenomenon. For example, the stakeholder theory was used in conjunction with the agency theory to explain the determinants of CSR. Frynas and Yamahaki (2016) noted that multi-theory studies enhanced the understanding of CSR. Stakeholder theory is one approach to the managing of an organization. It is particularly important for an understanding of CSR and its incorporation into organizational activity.

Regardless of the theories, the CSR components proposed in the previous publications are basically aligned. Specifically, several pioneering studies developed CSR indices based on Carroll’s (1979) four themes of social responsibilities: economic, legal, ethical, and discretionary. The discretionary responsibility was later replaced with philanthropic responsibility (Carroll 1991).

Carroll (1991) considers that social responsibility of business firms includes economic, legal, ethical, and philanthropic responsibilities to the society in which the firm belongs. Carroll’s CSR hierarchy places the economic responsibilities in the first priority followed by the legal and ethical responsibilities and finally the philanthropic responsibilities.

In 1991 Carroll first presented his CSR model as a pyramid. He once again his original historical explanation for the relative weighting, saying: “To be sure, all these kinds of responsibilities have always existed to some extent, but it has only been in recent years that ethical and philanthropic functions have taken a significant place” (p. 40) (Fig. 1).

The pyramid of corporate social responsibility gives us a “framework for understanding the evolving nature of the firm’s economic, legal,



Responsibility, Fig. 1 The pyramid of corporate social responsibility (Carroll 1991). Philanthropic responsibilities: Contribute resources to the community; improve quality of life; Ethical responsibilities: Obligation to do what is right, just, and fair; avoid harm; Legal responsibilities: Law is society’s codification of right and wrong. Play by the rules of the game; Economic responsibilities: The foundation on which all other rest

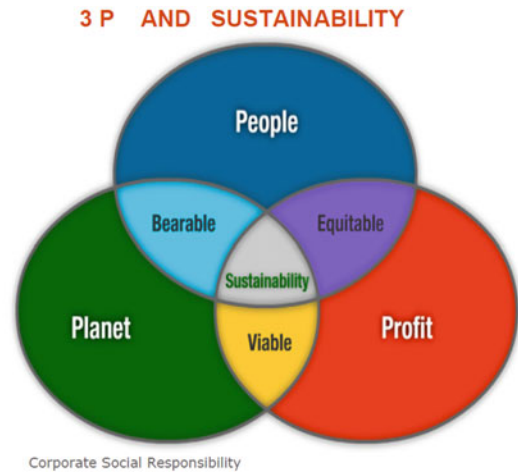
ethical, and philanthropic performance” (Carroll 1991, p. 47).

Additional CSR components were later developed following a guideline by Global Reporting Initiative (GRI).

Global Reporting Initiative (GRI) is an organization that provides a framework for sustainability reporting. This framework can be used by all types of organizations.

Although the GRI is independent, it remains a collaborating center of United Nations Environment Programme (UNEP) and works in cooperation with the United Nations Global Compact.

Sustainability reporting is the action where an organization publicly communicates their economic, environmental, and social performance. The GRI’s mission is to make sustainability reporting by all organizations as routine and comparable as financial reporting. GRI Guidelines are the most widely used in the world for reporting. More than 4,000 organizations from 60 countries use the Guidelines to produce their sustainability reports. The GRI Guidelines provide a holistic framework that addresses broad performance – social, environmental, and



Responsibility, Fig. 2 Elkington (1997), 3 P and sustainability

economic – as to how an organization is reporting to stakeholders. GRI is used widely internationally as a generally accepted reporting framework and, as such, provides a method for increased comparability.

In a nutshell, the stakeholder theory (Freeman 1984) was most frequently used in CSR studies, followed by institutional theory (Scott 2001) and legitimacy theory (Suchman 1995).

Moreover, the authors classified the theories with respect to CSR practices into the external- and internal-driver groups. The stakeholder theory, institutional theory, legitimacy theory, and resource independence theory (Pfeffer and Salancik 1978) belong to the external-driver group, while the internal-driver group includes the Edith Penrose’s resource-based view (Lockett and Thompson 2004) and Jensen and Meckling’s (1976) agency theory (Carroll).

Another interesting model has been coined by John Elkington in 1997, like presented in the Fig. 2.

The term coined by famous author John Elkington in his book *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, published in 1997.

He espouses seven dimensions of revolutions taking place that would necessitate looking at triple bottom line:

Markets – increasing competition.
 Values – shift from “hard” commercial values to “softer” triple bottom line values.
 Transparency – business is finding its activities under increasing scrutiny.
 Life cycle performance – scrutiny of entire life cycle process of the product: from raw material stage to discarding stage.
 Partnerships – compulsion to align with others in synchronization with triple bottom line principles. Time – growing importance of working on real-time basis.
 Corporate governance – the need to satisfy all stakeholders.

He propounds that the three prongs of the fork constituting triple bottom line are economic prosperity, environmental preservation, and social justice.

In order to evaluate a business, apart from economic results, which are normally made available, we should also evaluate the contribution made toward environment and society. Another similar term coined by same author is 3P (people, planet, and profits).

Summary

The work examines social responsibility. After the definition of the theme, CSR is analyzed remembering the most known literature. Among the many existing models, the work presents the pyramid of corporate social responsibility of Carroll (1991) and the model of the 3P of Elkington (1997). Moreover, for completeness, it introduces GRI, like the organization that provides a framework for sustainability reporting.

Cross-References

- [Accountability](#)
- [Corporate Social Responsibility](#)
- [Endowment Fund](#)
- [Responsiveness](#)
- [Social Obligations \(CSR\)](#)

References

- Belkaoui, A., & Karpik, P. G. (1989). Determinants of the corporate decision to disclose social information. *Accounting, Auditing & Accountability Journal*, 2(1), 36–51.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *The Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1983). Corporate social responsibility. *Vital Speeches of the Day*, 49, 604. (McMurry Inc.).
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- CSR. (2008). *Corporate social responsibility guidelines*. Bangkok: Corporate Social Responsibility Institute.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone.
- European Commission. (2002). Brussels, 2.7.2002, COM (2002) 347 final.
- Freeman, R. E. (1984). *Strategic management a stakeholder approach*. Boston: Pitman.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times*, 33, 122–126.
- Frynas, J. G., & Yamahaki, C. (2016). Corporate social responsibility: Review and roadmap of theoretical perspectives. *Business Ethics: A European Review*, 25(3), 258–285.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Lockett, A., & Thompson, S. (2004). Edith Penrose's contributions to the resource-based view: An alternative perspective. *Journal of Management Studies*, 41(1), 193–203.
- Perceptions and Definitions of Social Responsibility. http://inni.pacinst.org/inni/corporate_social_responsibility/standards_definitions.pdf, p. 1.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Reverte, C. (2009). Determinants of corporate social responsibility disclosure ratings by spanish listed firms. *Journal of Business Ethics*, 351–366.
- Scott, R. W. (2001). *Institutional and organizations* (2nd ed.). Thousand Oaks: Sage Publications.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Vallaes, F. (2011). *Les Fondements Éthiques de la Responsabilité Sociale*. PhD thesis, Université Paris Est. Retrieved July 4, 2013 from <http://blog.pucp.edu.pe/item/149507/these-de-doctorat-les-fondements-ethiques-de-la-responsabilite-sociale>.

Responsibility in Nonprofit Sector

► [Accountability in Nonprofit Sector](#)

Responsible Banking

► [Inclusive/Selective/Compliant Banking](#) [Finance/](#)

Responsible Care

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Synonyms

[Chemical sector commitment program](#); [HSE program for chemical sector](#)

Description

Responsible Care[®] has been the global chemical sector performance initiative for the last 30 years and it is currently implemented by 62 chemical associations in nearly 70 countries around the world (ICCA 2018). It is a global chemical industry voluntary initiative.

The Responsible Care[®] program reflects also the industry's effort to reach the WSSD 2020 goal established during the World Summit on sustainable development, held in Johannesburg in 2002, that "chemicals are used and produced in ways that lead to the minimization of significant adverse affects on human health and the environment" (Ganzleben et al. 2013).

Responsible Care program's actions include also cooperation with UN environment, distributors, governments, and regulators, as well as accelerating progress towards the UN sustainable

development goals (SDGs) (see ► ["SDGs"](#)) by 2030 in the area of health and wellness (UN 2019). Product stewardship is a fundamental component of the Responsible Care[®] initiative and includes the risk evaluation and the development of actions for reducing the possible consequences to human health and the environment related to those risks.

The commitment of the global chemical sector to reduce environmental impacts and risks for human health is an ongoing process and together with Responsible Care, many other initiatives have been implemented.

For instance, in February 2006 in Dubai, the first International Conference on Chemicals Management (ICCM1) adopted the Strategic Approach to International Management (SAICM), a framework for global chemicals management.

Introduction

The chemical sector has always been considered, in the common thought, the most dangerous and impacting industry in regards of the natural environment and human health. It is not so unusual to read on the news about accidents or near misses happened in chemical plants around the world, followed by uncontrolled toxic chemicals release and/or intense fires and/or explosions. More than 25,000 chemical industrial accidents have been recorded in the world in the past 90 years (FACTS 2019). Some of these accidents have become famous due to the severe or persistent effects on the workers and the local population in terms of health injuries and/or environmental contamination. One of them is the accident occurred in Seveso (Italy) in 1976, during which a toxic cloud containing dioxin was released in the environment, causing very long consequences to human and animal health in the area (HSE 2019). Some years after the Seveso disaster, the European Commission enacted the Directive 82/501/EC, aimed at improving the safety of sites containing large quantities of dangerous substances, known as the "Seveso Directive." The main aspect of the directive and the following laws regards the necessity to prevent accidents

and impacts through a good integrated system which aims at assessing risks (see ► [“Risk Management”](#)), preventing risky situations, and managing emergencies.

Chemical Sector Commitment Towards Sustainable Development

Chemistry can be considered either as science or as industrial sector and it covers a fundamental role to reach the goals of sustainable development. Chemical products are in fact either final products or raw materials for many other downstream manufacturing industries. Through continuous innovation and performance improvement in processes, technologies, and products, the chemical sector can provide more sustainable solutions to its customers, who are other industries as well as final consumers. That is why its full involvement and commitment is so important in the process for sustainable development.

The topic of sustainability is not new to the chemical sector as the Responsible Care (RC) program was born in Canada in 1984 by CCPA (Canadian Producers Association), 3 years before the official definition of sustainable development was given by Brundtland. In 1989 the program was launched in Europe by CEFIC (European Chemical Industry Council) and then adopted by single countries (Belanger et al. 2009). Since the launch of the program, chemical industrial associations as well as single companies around the world have implemented many initiatives and addressed to reduce the negative effects on environment and human health connected with the extraction, manipulation, process, use, and disposal of chemical substances.

RC promotes behaviors oriented to safety, health, and environment within the more general framework of corporate social responsibility (CSR) (see ► [“CSR”](#)). At the beginning the RC program committed the companies to improve continuously their performances through an integrated management system of safety, health, and environment. Over the years, the RC program has enlarged in

order to cover the sustainable management of products along their whole life cycle (product stewardship) (see ► [“Product Life Cycle”](#)). Product stewardship (PS) has then become a pillar in the RC program; it can be considered as the practice of making health, safety, and environmental protection an integral part of the life cycle of chemical products (ICCA 2007).

Together with PS, companies have to take into account in their strategies also their social responsibility. The guarantee of the safety and health of employees and all those who, at any title, work or are located in the chemical sites is the first commitment of the Responsible Care program towards the social dimension of sustainability. The strategic vision of any company which adheres to RC program has to be based on continuous improvement of the quality of places of work and overall well-being of employees.

Each company that decides to be part of the RC initiative has to sign the Responsible Care Global Charter, which was published in 2006 and revised in 2014 by ICCA, and in this way commits to dedicate its people, technologies, and business practices to six key elements, reported below (ICCA 2019):

1. Proactively support safe chemicals management
2. Safeguard people and the environment by continuously improving our environmental, health, and safety performance; the security of our facilities, processes, and technologies; and by driving continuous improvement in chemical product safety and stewardship throughout the supply chain
3. Strengthen chemicals management systems by participating in the development and implementation of lifecycle-oriented, sound science and risk-based chemical safety legislation, and best practices chemicals management systems
4. Influence business partners to promote the safe management of chemicals within their own operations
5. Engage stakeholders, understanding, and respond to their concerns and expectations for

safer operations and products, and communicate openly on our performance and products

6. Contribute to sustainability through improved performance, expanded economic opportunities, and the development of innovative technologies and other solutions to societal challenges

All signatories to the Responsible Care Global Charter make a commitment to continuously improve their performance and also report on their progress. Companies have to collect and report data for a core set of environmental, health, and safety (EHS) (see ► [“Health and Safety”](#)) performance measures (ICCA 2019).

The commitment to Responsible Care program is made through a constructive dialogue based on concrete facts, with clear indicators, which demonstrate the continuous improvement of company performances towards environmental, health, and safety protection along the whole life cycle of their products.

Responsible Care[®] initiative is an essential part to the wider strategic approach to international chemicals management (SAICM). As a result of a long process of negotiations among governments, nongovernmental organizations and other stakeholders within the framework of the preparatory committee for the development of a strategic approach to international chemicals management, the first session of the International Conference on Chemicals Management (ICCM1) took place in Dubai in 2006. This step was taken in response to the endorsement taken in 2002 at the World Summit on sustainable development in September 2002, for the development of a strategic approach to international chemicals management (SAICM) (SAICM/ICCM 2006). During this conference, the chemical industry was represented by the international council of chemical associations (ICCA) which introduced the global product strategy (GPS) (SAICM 2006). The product stewardship under GPS and the Responsible Care[®] Global Charter are industry's voluntary initiatives that contribute to SAICM implementation.

Since its birth in 2006, GPS has supported industry to build on its product stewardship actions through the value chain. It provides an instrument to share best practices and information about chemical safety, with the following objectives (ICCA 2011):

- Enhance product stewardship worldwide
- Improve chemicals management through risk assessment and risk management
- Enhance transparency about chemical substances and products
- Reduce differences in the safe handling of chemical substances between developing, emerging, and industrialized countries

ICCA provides GPS guidelines, but each company has to modify the program according to the own experience and capacity, as well as the specific context and market where it acts, in order to implement specific strategies which address health and safety, process safety, pollution prevention (see ► [“Pollution”](#)), and all the elements that are necessary to achieve the sustainability goal.

Summary

In the past 30 years the chemical sector has made significant steps forward to reduce its negative impact on the environment, to reduce the risks associated with the use of chemical substances, to prevent damages to local populations and workers, and to construct a common trust and change the common perception in its regards. The Responsible Care[®] initiative represents the global commitment made by the chemical sector towards all the stakeholders. Companies which commit to Responsible Care[®] program do not limit themselves to consider the people who are inside their production and logistics sites, but the general aim is to demonstrate to all the stakeholders, and in particular to local communities, that industrial chemical activities can represent a significant opportunity for development in a sustainable manner.

Cross-References

- [Corporate Social Responsibility \(CSR\)](#)
- [Health and Safety](#)
- [Pollution](#)
- [Product Life Cycle](#)
- [Risk Management](#)
- [SDGs](#)

References

- Belanger, J., Topalovic, P., Krantzberg, G., & West, J. (2009). Responsible care: History & development. https://www.researchgate.net/publication/242545221_Responsible_Care_History_Development. Accessed 25 Aug 2019.
- Failure and Accidents Technical information System (FACTS). (2019). <http://www.factsonline.nl>. Accessed 23 Aug 2019.
- Ganzleben, C., Guarinoni, M., Pelsy, F., Banfi, P., & Barrios, P. (2013). *WSSD 2020 chemicals goal and an assessment of EU efforts to meet the WSSD commitment, EU report*. Luxembourg: Publications Office.
- HSE. (2019). <http://www.hse.gov.uk/comah/sragtech/casesveso76.htm>. Accessed 11 Sept 2019.
- ICCA. (2007). Product Stewardship guidelines. <https://www.icca-chem.org/wp-content/uploads/2016/05/ICCA-Product-Stewardship-Guidelines.doc>. Accessed 22 Aug 2019.
- ICCA. (2011). Global product strategy ICCA guidance on chemical risk assessment. <https://www.icca-chem.org/wp-content/uploads/2015/08/Global-Product-Strategy-ICCA-Guidance-on-Chemical-Risk-Assessment.pdf>. Accessed 7 Sept 2019.
- ICCA. (2018). *Responsible Care® status report*. <https://www.icca-chem.org/wp-content/uploads/2019/01/Responsible-Care-Status-Report-2018.pdf>. Accessed 27 Aug 2019.
- ICCA. (2019). *Responsible Care® status report 2018*. The Global Picture. [icca-chem.org/news/icca-publishes-responsiblecare-status-report-for-2018/](https://www.icca-chem.org/news/icca-publishes-responsiblecare-status-report-for-2018/)
- SAICM. (2006). First session of the International Conference on Chemicals Management (ICCM1). <http://www.saicm.org/About/ICCM/ICCM1/tabid/5980/Default.aspx>. Accessed 10 Sept 2019.
- SAICM/ICCM.1/7. (2006). Report of the International Conference on Chemicals Management on the work of its first session. <http://www.saicm.org/Portals/12/documents/meetings/ICCM1/Final%20ICCM%20Report%20Eng.pdf>. Accessed 5 Sept 2019.
- UN. (2019). *Sustainable development goals*. <https://sustainabledevelopment.un.org>. Accessed 10 Sept 2019.

Responsible Consumption

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Synonyms

[Alternative consumerism](#); [Conscious consumerism](#); [Conscious consumption](#); [Ecological consumption](#); [Environmental-friendly consumption](#); [Green consumption](#); [Socially responsible consumerism](#)

Definition

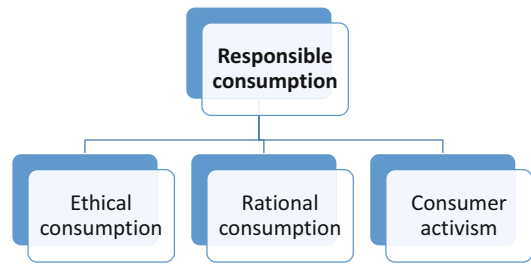
Responsible consumption is both an ideology and a form of social movement that promotes the idea of a rational, economic, self-aware consumer who can adjust and limit its expectations and needs to serve common good through consumer behavior. It focuses not only on consumer rights but also on consumer obligations and has three dimensions: rational consumption, ethical consumption, and consumer activism.

Both historical and modern perspective consumptions play a vital role in supporting human existence. That is why its form is so crucial for human and social group development. However, studies and modern trends show that the contemporary style of consumption harms society, nature, and human psychology. Besides present consumptions, patterns are not justified by real needs, negating social, ecological, and spiritual costs. Contemporary consumption attaches importance to goods that exceed the utility value of it, but it determines the identity and status of the buyer. In highly developed countries, it takes the form of hyper-consumption very often accompanied with *affluenza* that brought criticism of contemporary consumerism (among others, Veblen 1994; Fromm 2007; Bauman 2001; Baudrillard 2006; Ritter 2009; Barber 2009; Aldridge 2006) and created the

necessity of searching for alternative consumption patterns.

Responsible consumption is both an ideology and form of social movement based on the desire to reconcile citizenship and consumerism. The idea shapes the vision of a rational, economical, self-aware consumer who can adjust and limit its expectation and needs to serve common good. The roots of responsible consumption are located in the consumer rights movement, but the idea itself is evolving. Its meaning and essence were extended by other social movements like, for example, the human rights, the civil rights, the women's right, the environmental protection and conservation, the animal rights and welfare, the transparency and anti-corruption movements, and science development. Responsible consumption became a positive example of citizens regaining sovereignty over-consumption. Through the act of consumption, the contemporary consumer determines his position in the field of social matters and other problems of a political or economic nature of the modern world. It is an active form of public control over business activities in times when we can observe the weakening of the regulatory role of national governments toward international corporations as a result of globalization processes. Unlike traditional consumer protection movements, it focuses on legitimizing the consumer's position as sources to achieve social goals and to protect the interests of both consumers and citizens. It creates a vision of the dominant consumer who through purchasing process expresses support or opposition toward social or environmental issues rather than creating pressure on the government. Its primary objective is to strengthen the position of consumers who, through responsible and prudent decisions, develop a form of collective force by defining the accepted nature of the commodity and its type of sale.

Responsible consumption focuses not only on consumer rights but also on consumer obligations. The powers are the ability to meet your own needs, choose, and state own opinions and access to information and consumer education. Responsibilities focus on using consumer power in the market to eliminate fraud and actions detrimental to consumers, as well as strive to support ethical purchasing behavior



Responsible Consumption, Fig. 1 Responsible consumption. (Source: Own elaboration)

and support patterns of sustainable production and consumption. The evaluation of products or services is based on the degree of meeting the expected value of both personal and social character. The responsible consumer purchases goods that are socially responsible, environmentally friendly, and produced with compliance to ethics standards. On the other side, he/she avoids products that do not meet these requirements, boycott such goods, and express the opposition. Therefore we can distinguish three main dimensions of responsible consumption: rational consumption, ethical consumption, and consumer activism (Fig. 1).

Rational consumption has three elements: biological, economic, and social. The biological aspect of consumption describes levels of utilization of food and nonfood product sufficient for living. The economic character is based on cost calculation and the optimal allocation of resources for maximizing consumer utility. Social aspects addressed the impact of the consumption processes over society.

The ethical perspective of responsible consumption comes out as a result of market trends and changes in consumer behavior, as so the evolution of moral standards like the rise of environmental ethics. We can distinguish five areas of purchasing behavior that allow segmentation of ethical consumers: (1) healthy food (with emphasis on organic food), (2) goods locally produced and supplied, (3) fair-trade products, (4) animal welfare, and (5) environmental friendly. It is expressed both in positive consumer behaviors – supporting the product as mentioned in earlier groups, as well as negative

ones based on negating and boycotting products, brands, and enterprises that ignore the features discussed above.

The third part of responsible consumption is consumer activism that means active participation in shaping consumer reality through participation in demonstrations, sending petitions or protests, and supporting NGO and social organizations connected with environmental and social issues alight with a consumer boycott.

Summary

In a consumer society, consumption plays a significant economic but also a culture-forming role. The concept of responsible consumption refers to its cultural significance emphasizing its impact on the surrounding reality. Responsible consumption uses market economy mechanisms, both on the demand and supply side, in the interest of citizens and the public good. Expanding the sphere of factors shaping purchasing decisions by social, ecological, and moral aspects, the consumer can more effectively influence the environment. With the contemporary dominance of the economic paradigm over the others, growing social awareness and a sense of shared responsibility for the local, regional, or global environment of consumers allows expanding the impact of consumer decisions on the economic sphere, including business behavior. On the other hand, responsible consumption based on a philosophy of life and consumption that is more environmentally friendly changes the value system. Moreover, it has an impact on how pressure on the social and natural environment does not exceed its capacity to support sustainability.

Cross-References

- [Conspicuous Consumption/Positional Goods](#)
- [LOHAS](#)
- [Sustainable Consumption](#)
- [Sustainable Marketing](#)

References

- Aldridge, A. (2006). *Konsumpcja*, Warszawa, Wyd. Sic!.
- Barber, B. R. (2009). *Skonsumowani. Jak rynek psuje dzieci, infantyлізуje dorosłych i połyka obywateli*, Warszawa, Wyd. Muza.
- Baudrillard, J. (2006). *Społeczeństwo konsumpcyjne, jego mity i struktury*, Warszawa Wyd. Sic!
- Bauman, Z. (2001). *The Individualized Society*. Cambridge. Polity Press.
- Fromm, E. (2007). *Mieć czy być*, Poznań, Wyd. REBIS.
- Ritter, G. (2009). *Enchanting a disenchanted world. Continuity and Change in the Cathedrals of Consumption* (3rd edn) Thousand Oaks, CA. Pine Forge Press.
- Veblen, Th. (1994). *The Theory of the Leisure Class: An Economic Study of Institutions*. New York: Penguin Books.

Responsible Finance

- [Finance and CSR](#)

Responsible Governance

- [Responsiveness](#)

Responsible Government

- [Responsiveness](#)

Responsible Investing/ Investment

- [Socially Responsible Investing and Finance](#)

Responsible Investment

- [Socially Responsible Investment \(SRI\)](#)
- [Sustainable Investment](#)

Responsible Investments

- [UN Principles for Responsible Investments \(PRI\)](#)

Responsible Leadership

- [Sustainable Leadership](#)

Responsible Supply Chain Management

- [Sustainable Chain Management](#)

Responsive Business Conduct

- [Codes of Conduct in Greece](#)

Responsiveness

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Synonyms

[Accountability](#); [Responsibility](#); [Responsible governance](#); [Responsible government](#); [Social responsibility](#); [Stakeholder Engagement](#)

Definition

Responsiveness refers to the ability of public administration and private firms to be accountable toward stakeholders about their ability to achieve their interests and expectations. The concept of responsiveness is strictly connected with the

concept of responsibility; this last referred to the motivations that lead an organization to use resources in the interest of the resources' owners.

Since the 1980s of the last century, the reform movements in the public sector emphasized the importance to overcome the mere compliance to formalized processes and procedures toward a more citizens' need- and expectation-centered approach.

Also in the private sector, the debate about social responsibility starting in the 1960s of the last century has resulted in the belief that responsiveness is not limited to the communication activities by companies, but it expresses the global corporate responsibility that is leading the business according with the awareness of stakeholders' expectations and their engagement in activities and strategies.

Therefore, the spread of concepts as social responsibility and sustainability induces a new way to interpret both the organizations' responsibility, embracing economic, social, and environmental impacts of their actions, and the organizations' responsiveness, moving from the capability to response to external pressures and expectations to a more proactive approach as the stakeholder engagement.

Introduction

Many scholars and practitioners paid attention to the principle of responsiveness both in public and private sector, and this concept developed during the past until now together with the concept of responsibility. Responsiveness is essential for a responsible government or governance, but the concept differs from that of responsibility (Brummer 1991): the first refers to the accountability for organization's actions, while the latter refers to the motivation of those actions.

In the public sector, responsiveness is a prominent theme in the literature of public administration and refers to the effort made by a government agency to be accountable about its ability to provide services to the public.

At first, responsiveness was limited to the communication of the execution of specific

government tasks, according with a bureaucratic point of view; then the concept expanded including the ability by government to satisfy broader interests referring to citizens' expectations and to achieve goals in an effective way using efficiently the public resources. Today the principle of responsiveness widens its meaning concerning the ability to achieve a public interest that is not merely an aggregation of individual interests and emphasizing the engagement of all social players (government, citizens, private organizations, and so on) who collaborate together for the interests of all of them. In this sense, according to Dahl (1971), responsiveness is at the base of democracy.

Also in the private sector, the principle of responsiveness evolved together with the one of responsibility. Responsiveness is the organization's response to stakeholders' issues which affects its sustainability performance, and it is realized through decisions, actions, and performance, as well as communication with stakeholders. The observation of corporate responsibility according with a global point of view, including different dimensions (economic, social, and environmental ones) for sustainable success in the long run, implies a new way to interpret responsiveness. In fact, it is not limited to the communication toward stakeholders, but it is a way to lead the business according with the awareness of stakeholders' expectations and their active engagement in corporate activities and strategies.

Theoretical Framework

In the public sector, the principle of responsiveness is related to the main theories characterizing the administrative issue.

The "classic public administration theory" was founded in the latter part of the nineteenth century upon the conviction that precise prescribed rules were powerful instruments for the economic development and the building of modern states (Bresser and Luiz 2007). The role of bureaucratic authority structures in facilitating economic growth has been a sociological concern since

Max Weber's classic contributions almost 100 years ago (Evans and Rauch 1999). The public organizations had to be accountable to constituents about their ability to execute their task in a compliant and impartial way (Kernaghan and Langford 1990).

The reform movements since the 1980s of the last century have been driven in large part both by the requirement that governments respond to the changes in the international economic system and by the demands for government services and regulations in national political systems. In this context, two main lines of thoughts about public management developed (Aucoin 1990).

The first one is inspired by the "public choice theory" (Buchanan and Tullock 1962; Niskanen 1971), which aims at understanding the public administration with the usual economic tools, focusing on the need to re-establish the primacy of representative government over bureaucracy. In this respect, the responsiveness of politicians is the capacity to ensure that the broader interests in public policy are reflected in what is decided, avoiding the achievement of narrow self-interests by special groups (Aucoin 1990).

The second line of thought, the so-called "managerialism" (Peters and Waterman 1982) refers to the need to re-establish the primacy of managerial principles over bureaucracy, focusing on the capacities by organizations to realize their goals by means of management structures and processes. In this case, the use of the word "management" aims at emphasizing the importance of the effective and efficient use of the resources, according with the organization's objectives and the laws' requirements, in contrast with the word "administration" intended as the mere compliance to formalized processes and procedures. The managerialism paradigm gives priority to the responsiveness of politicians to their constituencies, by means of consultations and communications (Aucoin 1990).

The "New Public Management" (NPM) theory (Osborne and Gaebler 1992; Osborne and Plastrik 1997) takes its intellectual foundations from public choice theory and from managerialism (Bourgon 2007). This line of thoughts is based

on some pillars, as the citizen-centered approach and the creation of value by resources.

Citizen-centered approach means that the role of the citizens is not reduced to that of a customer or a mere user of government services, but it recognizes the citizens' rights and interests. In other words, this means that the need of public interest should be reconciled with the need to be responsive to citizens' needs and expectations.

With regard to value creation, NPM's approach focuses on the results and performance, emphasizing the importance of an effective and efficient use of the resources in the interests of citizens. Considering that it could be difficult for individuals determining the quantity and quality of services corresponding to the resources given in the form of taxes, the governments should be responsive to citizens in this regard. This behavior favors the creation of relations of trust and consensus between the state and its citizens, nurturing a virtuous cycle between resources and performance, this last expression of the correct use of resources.

Nowadays, the environment is even more complex because of the effects of globalization, the emergence of new global economic engines, the impact of information technologies, and the interconnected roles of private sector, public sector, and civil society institutions. In this context, also the concept of public interest evolves from the aggregation of individual interests to the common (or shared) interests of citizens (Bourgon 2007). The government should be responsive about its role, that is, the capacity to articulate and realize this public interest (e.g., ensuring that services are accessible to all entitled to these, that communications are comprehensible, and that resources are used according with a sustainable vision).

In the private sector, the principle of responsiveness is strictly connected with the concept of corporate social responsibility (CSR).

CSR has been evolving for decades (Mosca and Civera 2017). The debate started in the 1960s of the last century with Friedman, who stated there is one and only one social responsibility of business, that is, to use its resources and engage in activities designed to increase its profits

so long as it stays within the rules of the game, engaging in open and free competition without deception or fraud. According with Friedman's thought, the responsibility of managers is to conduct business in accordance with owners' desires, which generally are to make as much money as possible, while conforming to their basic rules of the society, both those embodied in law and those embodied in ethical custom. Therefore, the managers are the agent of the individuals who own the corporation, and their primary responsibility is to them.

McGuire (1963) confirms the primacy of economic concerns, but he starts to outline a concept of social responsibility as company's responsibility toward society, which extends beyond the economic and legal obligations. Manne and Wallich (1972) demand the freedom in behavior for social responsibility.

Ackerman and Bauer (1976) criticize the use of the word responsibility, this last being connected with the process of assuming an obligation, placing emphasis on behavior's motivation. They prefer talking about social responsiveness, that is, the ability to respond to social demands. In other words, they focus more on the result or performance as a response to demand than on the motivations of this response. Sethi (1975) also notices a difference between social responsibility and social responsiveness: in the author's opinion the first is about a behavior coherent with the prevailing social norms, value, and expectations, while the last is about the ability to respond to social pressures in a anticipatory and preventive manner.

In summary, the attempts to define social responsibility focused on the freedom of behaviors (responsibility) or on the manner of response (responsiveness).

Carroll's four-part definition of CSR was originally stated as economic, legal, ethical, and discretionary (philanthropic) expectations that society has toward organizations (Carroll 1979, 1991). These dimensions help to frame the nature of business' responsibilities to the society of which it is a part. Organizations can refer to different mode or philosophy to manage these responsibilities responding to social issues

(social responsiveness) with a reaction approach or proactive approach (Wilson 1974). Being responsive enables organizations to act on their social responsibilities without being bogged in the definitional problems that occur when organizations try to get a precise fix on what their true responsibilities are before acting (Carroll 1979). In other words, while corporate social responsibility has ethical or moral threads, corporate social responsiveness has no moral or ethical connotations but is concerned only with the managerial processes of response.

Many models were developed for assessing individual organization responsibility (Tuzzolino and Armandi 1981), and systems approaches were created to understand the mechanisms of response (Preston and Post 1975). According to Salbu (1993), the different models of responsiveness used for the implementation and evaluation of CSR programs may even affect the substance of the CSR content.

The responsiveness is a key concept in stakeholder engagement model. According to Freeman (Freeman 1984; Freeman and Dmytriiev 2017), organizations have a wider obligation to consider the effects of their actions on group of people who qualify as stakeholders, influencing and influenced by corporate behaviors, and have to act transparently in this regard.

The Accountability Principles (2018) define responsiveness as the way an organization responds to material sustainability topics and their related impacts on its external and internal stakeholders. An effective response is aligned with the organization's objectives and integrated into its strategy including decisions, actions, and performance, as well as communication with stakeholders.

Responses may include establishing policies, objectives, and targets, enhancing governance structures, developing or advancing management systems and processes, developing or implementing action plans, engaging stakeholders, measuring and monitoring sustainability performance and impacts, reporting, issuing communications, and/or achieving assurance.

It follows that responsiveness is not limited to the communication activities toward stakeholders,

but it is a way to lead the business according with the awareness of stakeholders' expectations and their engagement in activities and strategies. In other words, it expresses the global responsibility that a company has toward its stakeholders and that consists in the ability to understand and satisfy stakeholders' expectations in the long run, minimizing risks and catching opportunities (Salvioni et al. 2016; Gennari and Salvioni 2018). With this regard, Gorenak and Bobek (2010) discussed the "total responsibility" management, which sets up processes and business models that are responsible and sustainable at their core, involving goals, strategies, and operational actions.

Key Issues

In both public and private sector, the concept of responsiveness developed during the decades starting from the capability to response to external pressures and expectations to the proactive approach characterizing the stakeholder engagement.

In the public sector, organizations use an approach called "citizen participation or engagement" to ensure that they will not lose sight of their stakeholders' needs. The most prominent and effective form of citizen participation involves bringing citizens into the agency as decision-makers, also using ICT in an innovative way (e.g., e-participation). Responsiveness, together with accountability, can move governments from reform to transformation to meet the challenges of implementing the UN 2030 Agenda.

The same happens in the private sector, with the emphasis on the concept of inclusivity that is the participation of stakeholders in developing and achieving an accountable and strategic response to the sustainable development of the organization (AA1000 2008). Stakeholder engagement is the tool that organizations use to help them achieve inclusivity (AA 2015). An inclusive organization accepts its accountability to those on whom it has an impact and who have an impact on it. Inclusivity is about engaging at all

levels, including at the level of the organization's governance, to achieve better outcomes.

Summary

The principle of responsiveness is developing over and over again, according with the changes in the social and economic environments.

Modern public administration involves a tension between a better responsiveness to citizens and an effective collaboration with them as partners, losing the benefits of considering these values in an integrated way (Vigoda 2002). Collaboration is founded on responsiveness, but it reaches beyond. Collaboration means negotiation, participation, cooperation, mutual understanding, and a more equitable distribution of power and resources. Scholars focused attention on the responsibilities of public administration in its interaction with citizens but paid less attention to the active roles of citizens and to their obligations in the community (Lynn 1998; Pollit and Bouckaert 2000). The relationships between public administration and citizens develop long a continuum that ends to a new generation step characterized by a rational and applicable level of integration across all social players (including media, academia, private sector, etc.) (Vigoda 2002).

In the private sector, the link between responsiveness and responsibility stresses the risk management, that is, the management of the relation between the ability to respond and the risk reduction. The approach of sustainable development in the long term implies that corporate goals and strategies consider a new type of value generated by risk reduction and the exploitation of opportunities, thanks to the constant and bidirectional relations with stakeholders, that is, the stakeholder relationship management (Salvioni and Gennari 2017). In fact, from a risk management perspective, the benefits of stakeholder engagement include higher levels of trust with stakeholder groups, stakeholders' contribution to decision-making processes affecting their future, the better understanding of risks, and opportunities both by company and stakeholders themselves.

A stakeholder orientation demands that organizations seek and involve risk stakeholders in the risk management process. The level of involvement will depend on both the identified risks and how stakeholders are expected to be affected by the proposed solutions and decision-making processes (Ndlela 2019).

Strategic responsiveness is the ability to assess environmental change and mobilize firm resources around responsive actions taken to adapt the firm to new challenges in the environment (Andersen et al. 2007), and it includes the capability to observe, react, and adapt to prior and emerging risks.

This ability allows company to compete in a globalized world characterized by growing competition to obtain approval and resources from significant stakeholders, changing the premises for corporate success (Brondoni 2014), which depends on the capability to create shared value (Porter and Kramer 2006; Porter and Kramer 2011). In this sense, responsiveness becomes a tool to identify and manage risks of relations with stakeholders and a basis for the creation of a sustainable positioning of companies in the long time.

Cross-References

- CSR: Evolution of Concept
- Public Participation
- Social Acceptance
- Stakeholders
- United Nations Agenda 2030 on Sustainable Development Goals, The

References

- AccountAbility. (2008). AA1000. Accountability principles standard. https://www.accountability.org/wp-content/uploads/2016/10/AA1000APS_italian.pdf. Accessed 30 May 2019.
- AccountAbility. (2015). AA1000. Stakeholder engagement standards. https://www.accountability.org/wp-content/uploads/2016/10/AA1000SES_2015.pdf. Accessed 30 May 2019.
- AccountAbility. (2018). AA1000. Accountability principles. <https://www.accountability.org/wp-content/>

- uploads/2018/05/AA1000_ACCOUNTABILITY_PRINCIPLES_2018_Single_Pages.pdf. Accessed 30 May 2019.
- Ackerman, R., & Bauer, R. (1976). *Corporate social performance: The modern dilemma*. Reston: Reston Publishing Co.
- Andersen, T. J., Denrell, J., & Bettis, R. A. (2007). Strategic responsiveness and Bowman's Risk–Return Paradox. *Strategic Management Journal*, 28(4), 407–429.
- Aucoin, P. (1990). Administrative reform in public management: Paradigms, principles, paradoxes and pendulums. *Governance: An International Journal of Policy and Administration*, 3(2), 115–137.
- Bourgon, J. (2007). Responsive, responsible and respected government: Towards a New Public Administration theory. *International Review of Administrative Sciences*, 73(1), 7–26.
- Bresser, P., & Luiz, C. (2007). The structural public governance model. *International Public Management Review*, 8(1), 16–32.
- Brondoni, S. M. (2014). Ouverture de 'global networks and sustainable development. *Symphonya. Emerging Issues in Management*, 1, 1–9.
- Brummer, J. J. (1991). *Corporate Responsibility and Legitimacy: An Interdisciplinary Analysis*. Westport: Greenwood Press.
- Buchanan, J. M., & Tullock, G. (1962). *The calculus of consent*. Ann Arbor: University of Michigan Press.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Dahl, R. A. (1971). *Polyarchy: Participation and opposition*. New Haven: Yale University Press.
- Evans, P., & Rauch, J. E. (1999). Bureaucracy and growth: A cross-national analysis of the effects of "Weberian" state structures on economic growth. *American Sociological Review*, 64(5), 748–765.
- Freeman, R. E. (1984). *Corporate strategy: A stakeholder approach*. Boston: Ballinger Publishing.
- Freeman, R. E., & Dmytriiev, S. (2017). Corporate social responsibility and stakeholder theory: Learning from each other. *Symphonya. Emerging Issues in Management*, 2, 7–15.
- Friedman, M. (1992). *Capitalism and freedom*. Chicago: University of Chicago Press.
- Gennari, F., & Salvioni, D. M. (2018). CSR committees on boards: The impact of the external country level factors. *Journal of Management and Governance*, 1–27. <https://doi.org/10.1007/s10997-018-9442-8>.
- Gorenak, S., & Bobek, V. (2010). Total responsibility management indicators and sustainable development. *International Journal of Sustainable Society*, 2(3), 248–264.
- Kernaghan, K., & Langford, J. W. (1990). *The responsible public servant*. Montreal: Institute for Research on Public Policy.
- Lynn, L. E. (1998). The new public management: How to transform a theme into a legacy. *Public Administration Review*, 58(3), 231–237.
- Manne, H., & Wallich, H. C. (1972). *The modern corporation and social responsibility*. Washington, DC: American Enterprise Institute for Public Policy Research.
- McGuire, J. W. (1963). *Business and society*. New York: McGraw-Hill.
- Mosca, F., & Civera, C. (2017). The evolution of CSR: An integrated approach. *Symphonya. Emerging Issues in Management*, 1, 16–35. <https://doi.org/10.4468/2017.1.03mosca.civera>.
- Ndlela, M. N. (2019). A stakeholder approach to risk management. In *Crisis communication*. Switzerland: Palgrave Pivot.
- Niskanen, W. (1971). *Representative government and bureaucracy*. Chicago: Aldine.
- Osborne, D., & Gaebler, T. (1992). *Reinventing government: How the entrepreneurial spirit is transforming the public sector*. Reading: Addison-Wesley.
- Osborne, D., & Plastrik, P. (1997). *Banishing bureaucracy*. Reading: Addison-Wesley.
- Peters, T. J., & Waterman, R. H. (1982). *In Search of Excellence*. New York: Harper and Row.
- Politt, C., & Bouckaert, G. (2000). *Public management reform*. Oxford: Oxford University Press.
- Porter, M. E., & Kramer, M. R. (2006). Strategy society. The link between competitive advantage and CSR. *Harvard Business Review*, 84, 78–92.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*, 89, 62–77.
- Preston, L., & Post, J. (1975). *Private management and public policy: The principle of public responsibility*. Englewood Cliffs: Prentice Hall.
- Salbu, S. R. (1993). Corporate social responsiveness: Choosing between hierarchical and contractual control. *Journal of Business Ethics*, 12(1), 27–35.
- Salvioni, D. M., & Gennari, F. (2017). CSR, sustainable value creation and shareholder relations. *Symphonya. Emerging Issues in Management*, 1, 36–49.
- Salvioni, D. M., Gennari, F., & Bosetti, L. (2016). Sustainability and convergence: The future of corporate governance systems? *Sustainability*, 8(1203), 1–25.
- Sethi, S. P. (1975). Dimensions of corporate social responsibility. *California Management Review*, 17(3), 58–64.
- Tuzzolino, F., & Armandi, B. (1981). A need hierarchy for assessing corporate social responsibility. *Academy of Management Review*, 4, 21–28.
- Vigoda, E. (2002). From responsiveness to collaboration: Governance, citizens, and the next generation of public administration. *Public Administration Review*, 62(5), 527–540.
- Wilson, I. H. (1974). Reforming the strategic planning process: Integration of social responsibility and business needs. *Long Range Planning*, 7(5), 2–6.

Reverse Innovation

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Synonyms

Disruptive innovation; Social innovation; Sustainable innovation; Trickle-up innovation

Definition

Reverse innovation is also referred to as trickle-up innovation and takes place when it is first used in a developing world before moving to more developed countries. The term was first used by *Dartmouth* Professor Vijay Govindarajan and Chris Trimble and *GE*'s Jeffrey R. Immelt in a *Harvard Business Review* article published in 2009 (Immelt et al. 2009). Govindarajan and Trimble later elaborated on the phenomenon in a book, *Reverse Innovation: Create Far from Home, Win Everywhere*, published by the *Harvard Business Press* in 2012 (Govindarajan and Trimble 2012). It involves a process whereby products made as inexpensive models to meet the needs of developing markets with limited infrastructure are later sold as low-cost innovative goods for developed markets.

Introduction

The traditional path of globalization of products involves firms removing expensive features from their established product and selling the defeatured products in the developing world. This approach often times does not directly meet the needs of such markets and is targeted mostly at the affluent segments in these markets. The case for reverse innovation arises when a need or requirement for low cost products arise in one or more developing countries (Govindarajan and Ramamurti 2011). Once the product has been

successful in these markets, they are sold in the developed world with a few upgrades – including the West – at lower prices, which creates new markets for these innovations (Ostraszewska and Tylec 2015).

The term was originally defined as “innovation blowback” by Hagel and Brown (2005), where they predicted that the periphery of today’s global business environment had the highest potential of success. Most of the unmet needs of the world were at the borders of companies, markets, industries, geographies (Corsi and Di Minin 2014), intellectual disciplines, and generations. They saw these areas where the customer needs were unmet and where disruptive innovations had the greatest chances of success.

As shown in Fig. 1, historically multinational corporations from developed countries introduced new products in their own countries before selling them to emerging markets. In reverse innovation, a product is initially developed to meet a need in the developing world and later finds a market in the developed world.

The industries where reverse innovation is widely used is first discussed, followed by a proposed typology of reverse innovation focusing on cases when most of the innovation is taking place in the developing countries (also referred to as “Reverse Innovation in the Strong Sense”) versus conditions when only one of its key innovative capabilities takes place in a developing country (also referred to as “Reverse Innovation in the Weak Sense”). Finally, the caveats of the practice are discussed.

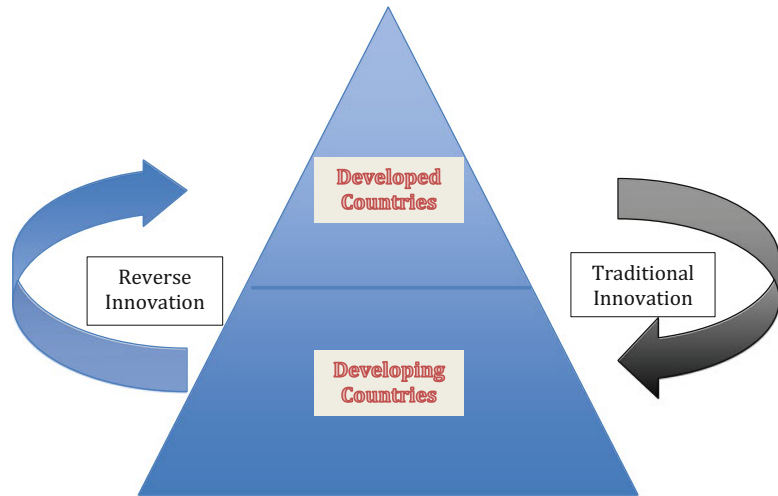
Industries Where Reverse Innovation Is Prevalent

Reverse innovation has the potential of transforming several industries, including banking, consumer products, energy, healthcare, technology, and transportation among others. Some examples within each industry are as follows:

Banking: The banking industry in developing countries had ignored the low end of the market for a long time before the 2006 Nobel Peace winner, Muhammad Yunus, founded

Reverse Innovation,

Fig. 1 Contrasting traditional with reverse innovation



Bangladesh's Grameen Bank, unleashing the microfinance revolution, which has found global acceptance, including in impoverished neighborhoods in developed countries. The microcredit banking model is now used in over a hundred countries around the world.

Consumer products: Proctor and Gamble (P&G) used a honey-based cold remedy created in Mexico later in more profitable markets in Europe and the United States. Nestle sold its low-fat, low-cost dried noodles originally created for rural India as a healthy alternative in Australia and New Zealand (Agnihotri 2015). Gatorade, the most popular energy drink throughout the world, traces its origins to scientists trying to keep cholera patients hydrated in Bangladesh in the 1960s. Chicken Tikka Masala, the number one food in the United Kingdom, traces its origins back to India.

Energy: Most of the developing world lacks access to the electric grid. As the infrastructure is built, renewable energy will be more central to these countries' solutions. For example, by 2030, the proportion of India's energy derived from solar and wind power will be as much as five times greater than the proportion of the United States. Where these two resources are inadequate, natural gas-powered or biogas powered turbines that are less than one-hundredth of those used in the wealthy world (Govindarajan and Trimble 2012). These energy alternatives have the potential of future use in the developed world.

Healthcare: GE built an ultra-portable electrocardiograph machine for doctors in India so that they could carry it easily from village to village (Ahmed et al., 2017). The low-cost machine later found a market in the United States and other advanced countries at a substantially lower price than existing electrocardiograph machines (Bhatti et al. 2017). Other blocks of the healthcare systems such as service delivery, health information, health financing, and health leadership and governance from the developing world are gradually finding usage in the developed countries (DePasse and Lee 2013; Tran and Ravaud 2016). Yoga, first introduced in India, has now found a home throughout the world including Western countries (Kumar and Aanand 2016).

Technology: Nokia is testing new business models on mobile phones for classified ads in Kenya which has a potential of being transferred to advanced markets in the future. It has already created new features in its handheld phones in the United States, based on observations of how phones are shared in Ghana. Microsoft is creating new phone app services for regular mobile phones which allow users with access to web sites such as Twitter and Facebook (Agarwal and Brem 2012). Primarily built for low-cost markets in India and South Africa, there is a strong potential for these apps in developed markets as a low-cost cloud computing platform.

Transportation: Tata Motors created a very basic car for less than \$2,000 for the Indian market

called the Nano. In 2009, an upgraded version was sold in Europe as the Tata Europa. The long-term goal was to compete in the low end of the market with leading automotive manufacturers. A team of MIT engineers designed the Leveraged Freedom Chair (LFC), which is 80% faster and 40% more efficient than a conventional wheelchair. It sells for approximately \$250 on par with the price of wheelchairs in developing countries. The technologies that generate its high performance and low cost have been incorporated into a Western version, the GRIT Freedom Chair and sells for \$3295, which is less than half the price of competing products in the United States.

A Typology of Reverse Innovation

Von Zedtwitz et al. (2015) offered a typology of reverse innovation. Considering four sequential phases of concept ideation, product development, primary target market introduction, and subsequent secondary market introduction, the authors distinguish between reverse innovation in the strong sense and reverse innovation in the weak sense. The five major flow types of each category of reverse innovation are discussed below.

Reverse Innovation in the Strong Sense

These innovations have at least two of its key innovation phases taking place in a developing country. The specific types are:

- *Developing country spillover*: Products conceived in advanced countries, developed and initially commercialized in developing countries, and then commercialized in advanced countries. An example would be that of the water purifier, Lifestraw, ideated in Denmark and developed in Vietnam for developing countries in Africa and Asia, and later sold in developed ones.
- *Double reverse innovation*: Products conceived in developing countries, developed in advanced countries, commercialized first in developing countries, and then commercialized in advanced countries. For example, Fiat 147, a flexible fuel vehicle, was originally conceived in Brazil and developed in Italy in the 1970s for the Brazilian market and later adopted in other developed markets.
- *Advanced country-targeted innovation*: Products conceived and developed in developing countries, commercialized first in advanced countries, and then commercialized in developing countries. For example, Research and Development for SAP's Business One Suite, an ERP system for small and medium-sized companies, is done by SAP Labs in China targeting customers in developed countries first before marketing it to its Chinese customers.
- *Developing country innovation*: Products conceived and developed in developing countries, and commercialized in advanced countries. For example, Bosch's R&D unit in Malaysia developed high-end screwdrivers that targeted Japan and subsequently European countries.
- *Reversed PLC*: Products conceived and developed in developing countries, and commercialized in advanced countries. For example, P&G created Vicks Honey Cough at its R&D center in Caracas, Venezuela, in 2003 with Mexico as its target market in mind, but 2 years later rebranded the product and marketed it to Hispanic customers in California and Texas, and to markets in Western Europe, the following year.

Reverse Innovation in the Weak Sense

These innovations have only one of its key innovation phases taking place in a developing country. The specific types are:

- *Spillback innovation*: Products conceived and developed in advanced countries and specifically targeting developing markets, but eventually commercialized also in advanced countries. For example, in 1990, Parmalat developed a new milk packaging ("milk in a pouch") in order to accommodate lower purchasing power in those countries. The same packaging was later introduced in developed countries like Canada as an environmentally friendly solution.
- *Cost/capacity innovation*: Products conceived in advanced countries, developed in developing countries, and commercialized in advanced

countries. For example, most of the core design in STMicroelectronics's TV set-up boxes is still done in France, but the main bulk of development is carried out in India, with their higher-end boxes targeting advanced countries.

- *Reverse spillover*: Products conceived in advanced countries, developed in developing countries, initially commercialized in advanced countries, and then commercialized in developing countries. For example, Siemens moved the development of its "*Advanced Multifunctional Operator Service System*" from Munich to Bangalore for cost and capacity reasons.
- *Front-end reverse innovation*: Products conceived in developing countries, but developed and commercialized in advanced countries. For example, Wuxi AppTech develops technological solutions that help global drug and medical device manufacturers shorten lead times and lower R&D cost, and targets customers mainly in the United States and Europe.
- *Developing country-inspired PLC*: Products conceived in developing countries, developed and commercialized in advanced countries, and then sold in developing countries. For example, Eli Lilly sold a cancer chemotherapy drug worldwide as Oncovin, first in the advanced world and later in Africa and other developing countries (Harris et al. 2015).

Caveats of Reverse Innovation

Even though reverse innovation shows tremendous promise, there are important pitfalls that companies must consider. Over the past few decades, some ventures have failed, while others have been converted to philanthropic programs. Only a limited number of them have gained commercial momentum. In order to be successful, such ventures should not be seen as a form of corporate imperialism focused primarily on profiting from the poor. They shouldn't either be a utopian quest for the impossible and a misallocation of investment capital.

The other major risk is for firms to avoid being seen as viewing the world's poor and rural spaces

primarily as laboratories for incubating innovations for the rich (Sarkar 2011). The poor should not be seen as guinea pigs for exploitation, but as underserved consumers with special and unique needs. The companies shouldn't be seen as being in the market just for cost constraints and looking for long-term higher returns in developed markets. Such circumstances are likely to damage long-term reputation of the firm and risk further operations in these markets.

In sum, reverse innovation is not a magic bullet. Companies should initially focus on serving the unique needs of the underserved in the bottom of the pyramid, and not think about how those innovations can be scaled up for the developed world. If they lend themselves to applications in the developed market by offering environmentally sustainable solutions to existing problems, then well and good, but that should not be the original goal for companies. Only the most sophisticated of the multinational corporations have been able to systematically benefit from reverse innovation. Understanding local needs, and the characterization of innovation flows across industries, they are advised to develop their own unique roadmaps leveraging their R&D capabilities and transforming themselves into being more competent global reverse innovators.

Summary

Reverse innovation is also known as trickle-up innovation and takes place when it initially takes place in a developing country before being introduced in a developed country. This is mostly taking place in industries such as banking, consumer products, energy, healthcare, technology, and transportation. Reverse innovation is typically considered to take place in four stages, including product ideation, product development, primary target market introduction, and subsequent secondary market introduction. These can take place in the strong as well as the weak sense. Even though the strategy has grown in popularity over the years, there are some caveats to which companies should pay close attention.

Cross-References

- [Capacity of Innovation](#)
- [Communication and Innovation](#)
- [Cooperation and Open Innovation](#)
- [Corporate Sustainable Innovation](#)
- [Disruptive Innovation](#)
- [Inclusive Innovation](#)
- [Innovation and CSR](#)
- [Innovation and Territorial Development](#)
- [Social Innovation](#)
- [Sustainable Business Model Innovation](#)
- [Sustainable Innovation](#)
- [Triple Helix and Innovation](#)

References

- Agarwal, N., & Brem, A. (2012, June). Frugal and reverse innovation-literature overview and case study insights from a German MNC in India and China. In *Engineering, technology and innovation (ICE), 2012 18th international ICE conference* (pp. 1–11). IEEE.
- Agnihotri, A. (2015). Low-cost innovation in emerging markets. *Journal of Strategic Marketing*, 23(5), 399–411.
- Ahmed, F., Ahmed, N. E., Briggs, T. W., Pronovost, P. J., Shetty, D. P., Jha, A. K., & Govindarajan, V. (2017). Can reverse innovation catalyse better value health care? *The Lancet Global Health*, 5(10), e967–e968.
- Bhatti, Y. A., Prime, M., Harris, M., Wadge, H., McQueen, J., Patel, H., et al. (2017). The search for the holy grail: Frugal innovation in healthcare from low-income or middle-income countries for reverse innovation to developed countries. *BMJ Innovations*, 3, 212–220.
- Corsi, S., & Di Minin, A. (2014). Disruptive innovation. . . in reverse: Adding a geographical dimension to disruptive innovation theory. *Creativity and Innovation Management*, 23(1), 76–90.
- DePasse, J. W., & Lee, P. T. (2013). A model for ‘reverse innovation’ in healthcare. *Globalization and Health*, 9(1), 40–50.
- Govindarajan, V., & Ramamurti, R. (2011). Reverse innovation, emerging markets, and global strategy. *Global Strategy Journal*, 1(3–4), 191–205.
- Govindarajan, V., & Trimble, C. (2012). *Reverse Innovation: Create far from home, win everywhere*. Boston: Harvard Business Press.
- Hagel, J., III, & Brown, J. S. (2005). *The only sustainable edge: Why business strategy depends on productive friction and dynamic specialization*. Boston: Harvard Business Press.

- Harris, M., Weisberger, E., Silver, D., & Macinko, J. (2015). They hear “Africa” and they think that there can’t be any good services’—perceived context in cross-national learning: A qualitative study of the barriers to Reverse Innovation. *Globalization and Health*, 11(1), 45.
- Immelt, J. R., Govindarajan, V., & Trimble, C. (2009). How GE is disrupting itself. *Harvard Business Review*, 87(10), 56–65.
- Kumar, V. R., & Aanand, S. (2016). Yoga: A case of reverse Innovation. *Purushartha: A Journal of Management Ethics and Spirituality*, 8(2), 12–18.
- Ostraszewska, Z., & Tylec, A. (2015). Reverse innovation—how it works. *International Journal of Business and Management*, 3(1), 57–74.
- Sarkar, M. B. (2011). Moving forward by going in reverse: Emerging trends in global innovation and knowledge strategies. *Global Strategy Journal*, 1(3–4), 237–242.
- Tran, V. T., & Ravaut, P. (2016). Frugal innovation in medicine for low resource settings. *BMC medicine*, 14(1), 102–110.
- Von Zedtwitz, M., Corsi, S., Søberg, P. V., & Frega, R. (2015). A typology of reverse innovation. *Journal of Product Innovation Management*, 32(1), 12–28.

Revisionism

- [Chernobyl Disaster, The](#)

Reward Strategy

- [Total Rewards](#)

Rewards Effectiveness

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Synonyms

[Compensation effectiveness](#); [Remuneration effectiveness](#)

Definition

Rewards effectiveness may be defined as an effective rewards philosophy, procedures, programs, and tools used to reward employees for desired behaviors which, in turn, drive customer satisfaction and result in profits for the organization. Effective rewards are designed to be an extension of business strategy. Today, however, reward effectiveness may be widely defined in terms of meeting the objectives of the organizations, fulfilling the expectations of employees, or even realizing the needs of other organizational stakeholders, when viewed from the perspective of corporate social responsibility (CSR). Thus, it is a multidimensional construct which simultaneously combines the economic efficiency of the rewards, the level of achievement of the objectives of the system, and, additionally, *responsible rewarding*.

Introduction

Understanding rewards effectiveness and the scope of its evaluation process has evolved dramatically (Armstrong et al. 2011). Measuring rewards effectiveness is an important element of a strategic and integrated approach to rewards that help organizations achieve a sustainable, competitive advantage. To clearly understand the effectiveness of rewards, it is important to first define the most important terms. Traditional rewards programs were mostly financial in nature and emphasized the function of extrinsic motivation (Armstrong 2006; Bremen and Sejen 2012; Lawler 2000). Similarly, the traditional view on rewards effectiveness was mainly oriented toward economic efficiency (Corby et al. 2005) as well as on the achievement of the main goals of the rewards system (Gomez-Mejia and Balkin 1989). Additionally, the effectiveness of traditional rewards programs was highly discussed (see, e.g., Lawler 2000; Gerhart and Ryne 2003) because of high labor costs, without assuring employee commitment and loyalty function, one of today's most important goals.

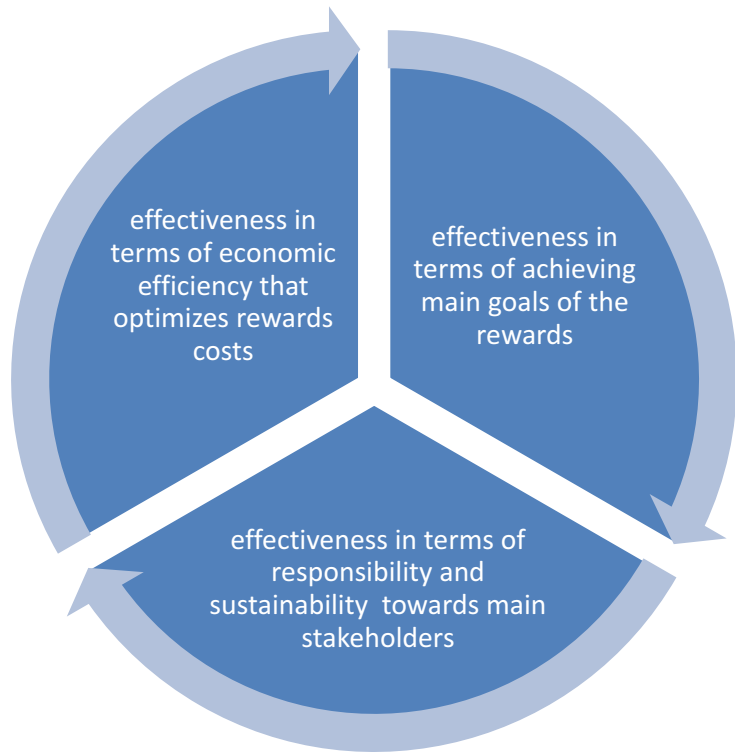
A rewards system consists of the rewards policies and practices of a company. The main goals of this system are to attract, motivate, develop, and retain the best people in the workplace and to bring forward the best of their talents and passion (Smith 2013: 327). Moreover, the new trends in rewards, just as with sustainable rewards, enhance a strategic approach to rewards and integrate important goals, creating sustainable development for the organization's main stakeholders (Armstrong and Murlis 2007; Lawler 2000) and setting new directions in the evaluation process of rewards effectiveness (Brown 2008; Greene 2015; McMullen 2013; Scott et al. 2006). Today, the rewards effectiveness should be understood in a larger context. Previously, rewards were evaluated mainly from the perspective of economic efficiency. This involved analysis of expenditures relative to the achievement of the main goals of the rewards system, such as the ability to attract, engage, and keep the best employees. Today, however, this is not sufficient, and the new method of analysis will be explained in a broader meaning.

The New Approach to Rewards Effectiveness

Rewards effectiveness is generally understood in terms of the contribution of rewards programs to organizational strategy (Balkin and Gomez-Mejia 1990). Effective rewards programs help an organization gain a competitive advantage by attracting and retaining talented people and effectively impacting their attitudes and behaviors in the company. The term may be also widely defined in terms of meeting the objectives of the firm, fulfilling the expectations of employees, or even realizing the needs of other organizational stakeholders, when viewed from the perspective of corporate social responsibility (CSR) (Beck-Krala 2018). Effective rewards programs are designed to be an extension of business strategy (Ritcher 2002), explicitly supporting key priorities and goals and communicating the level and nature of the contribution the organization expects from its people (Bremen and Sejen

Rewards Effectiveness,

Fig. 1 The components of rewards effectiveness
(Source: Own based on: Scott and Beck-Krala (2019))



2012: 60). Thus, effective rewards within organizations foster integration of key stakeholder goals through effective rewards philosophy, procedures, programs, and tools used to reward employees for desired behaviors which, in turn, drive customer satisfaction and result in profits for the organization. The perspective of sustainable rewards in assessing the effectiveness of employee rewards requires calculating the return on investment for employee rewards while, at the same time, attending to the needs and well-being of key stakeholders of the organization (Beck-Krala 2018). It seems particularly important in light of reported cases of abuse related to unethical management practices, such as excessive employee stress and exploitation, wage discrimination (Transparency International UK 2016), or counterproductive employee behavior (Werbel and Balkin 2010) resulting from the ineffective or improper design of rewards programs. Rewards effectiveness is a multi-dimensional construct which simultaneously combines the economic efficiency of the rewards, the level of achievement of the

objectives of the system, and, additionally, *responsible rewarding* (Fig. 1).

Responsible rewarding, as a component of an effective rewards program, implies the need for sustainable human capital management and social analysis of the effects of applied rewards systems. This approach seems to be significant in the face of emerging abuse in this area and so-called consumption of human capital (Ehnert 2008), as well as emerging unethical employee behavior leading to high social costs (Klimkiewicz and Beck-Krala 2015). In this regard, effective rewards need to balance the interests of the main stakeholder groups and bring them value or at least do no harm in the short and long term. In practice, this means rewarding employees according to legal requirements as well as moral and ethical standards and evaluating the impact of the rewards on stakeholders. Thus, shaping sustainable rewards systems, apart from economic efficiency and effectiveness, focuses on creating a policy of equal opportunities and offering fair remuneration and a healthy and safe work environment which might be extended to work-life programs (Beck-

Rewards Effectiveness, Table 1 Main perspective of rewards effectiveness

Rewards effectiveness – main perspectives		
Supporting business strategy by realizing rewards strategy	Creating economic efficiency	Creating sustainable development and well-being of main organizational stakeholders
• Brings to the organization employees with required values, skills, and behaviors • Motivates and engages as well as keeps best employees	• Optimizes costs by internal and external financial analysis • Brings return on investments in rewards in a long- term perspective	• Is sustainable and socially responsible • Meets moral and ethical standards and norms • Brings value to all important stakeholders for the long-term • Does not harm the stakeholders

Source: Based on Scott and Beck-Krala (2019)

Krala et al. 2019). The cases of Volkswagen or Wells Fargo, where rewards programs unintentionally pushed employees to unethical behaviors that had negative impact on their customers (Transparency International UK 2016: 3), justify the need for such a broad understanding of rewards effectiveness. These three perspectives of effective rewards are specified in Table 1.

Evaluation of Rewards Effectiveness in the Literature Review

Sustainable rewards assume that regular monitoring and evaluation of effectiveness in achieving organizational goals and supporting employee well-being is an important part of this approach (Beck-Krala and Klimkiewicz 2016). Monitoring the effectiveness of rewards programs is important today, when many organizations face extensive competition for talent while working to optimize costs. Rewards systems become obsolete as a natural process related to the passage of time; therefore, systematic monitoring and evaluation of the effectiveness of rewards is necessary in the organization's management process. Despite the importance of the issue, little attention is devoted to this problem in both management sciences (Armstrong et al. 2011; Greene 2010) as well as in management practice (Brown 2014). Employers indicate the following reasons for failure to evaluate rewards systems:

- Lack of reliable measures (Corby et al. 2005; Brown 2008)

- Lack of conviction about the need for such analyses among managers and executives (Kearns 1995; Corby et al. 2005).
- Lack of resources, time, and specific information or data (Armstrong et al. 2011).
- Lack of knowledge and experience of the compensation professionals (Kearns 1995; Corby et al. 2005; Armstrong et al. 2011).

So far, most research on the evaluation of rewards effectiveness has been related to low awareness and the lack of such evaluation, for example, studies provided by Corby et al. 2005, Kearns 1995, and Armstrong et al. 2011.

Subsequent studies focused on potential criteria and measures used for rewards evaluation (Armstrong et al. 2011; Brown 2008; Scott et al. 2006; Corby et al. 2005). Only a small number of publications focused on a comprehensive approach to the evaluation process of rewards effectiveness (Scott et al. 2006; Brown 2008; Armstrong and Cummins 2011; Beck-Krala and Klimkiewicz 2016). Recently, developments in the literature related to effective sustainable rewards have been noted. This stream of research focuses on rewards in the context of CSR requirements underlying the cohesiveness of rewards with moral and ethical norms (Klimkiewicz and Beck-Krala 2017; Linder and Mottis 2013; Sahakiant et al. 2015), including the so-called Green Rewards (Renwick et al. 2012).

According to researchers, intuition and best practices are no longer enough, as rewards programs must be evaluated based on hard facts and quantitative measures (Gross and Friedman

2004). Incorporating the corporate social responsibility approach requires a more comprehensive methodology that includes both shareholder and stakeholder views (Beck-Krala 2018). Today, rewards systems must be regularly monitored and evaluated to achieve their goals. Depending on the characteristics of the organization and its needs, there can be various objectives of such evaluation, for example (Scott and McMullen 2014, Armstrong et al. 2011; Brown 2008; Scott et al. 2006; Corby et al. 2005):

- (a) Determining whether the rewards programs are well established
- (b) Verifying whether the programs meet their objectives as planned and support core human capital objectives and the objectives of the company
- (c) Verifying if the programs motivate employees to high performance and create employee engagement
- (d) Verifying if employees are satisfied with the programs
- (e) Diagnosing early potential problems with the programs and looking for further developments
- (f) Determining if the costs of the programs are optimized and affordable

Independent of the objectives, a systematic and comprehensive assessment of the rewards systems can be a source of many benefits for both the organization and its employees, for example, employee satisfaction and engagement, better performance, employee loyalty, and better work-life balance.

Evaluation of compensation systems is extremely important because direct and indirect rewards are often the largest expenditures made by a company. Without rigorous evaluation, it is difficult to determine if these resources are used well and, if not, how the rewards system can be improved. Despite the need to assess the effectiveness of rewards systems, few organizations evaluate their rewards systems or have any concrete evidence to justify their rewards practices (Armstrong et al. 2011; Beck-Krala and Scott 2013).

Comprehensive Approach to Reward Evaluation

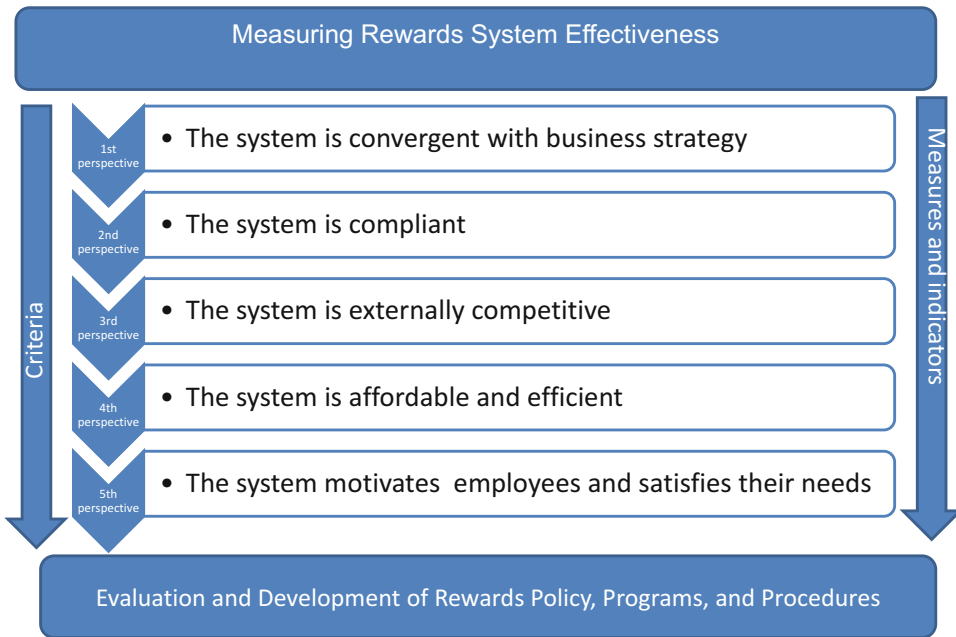
In the literature, the comprehensive approach for rewards effectiveness evaluation can be found in the works of Scott et al. (2006), Armstrong et al. (2011), and Beck-Krala and Klimkiewicz (2016). As the last approach underlines the social perspective of evaluation, this model is presented in this publication. This model also incorporates the work of other researchers, e.g., the training efficiency model of Kirkpatrick and the return on investment measure (ROI) adapted by Philips (1996). However, the methodology concerns the rewards system and focuses on the most important aspects that should be evaluated. Moreover, rewards evaluation has adopted the CSR perspective and, therefore, requires a more comprehensive methodology that includes both shareholder and stakeholder views (Klimkiewicz and Beck-Krala 2015) (Fig. 2).

In this model, the authors proposed an analysis of the effectiveness of rewards systems from five dimensions (Beck-Krala and Klimkiewicz 2016):

- Philosophy of the system and its convergence with the firm's strategy
- Compliance of the system with formal regulations
- External competitiveness of the total compensation system
- Cost-effectiveness of the payroll (and return on investments from compensation)
- Satisfaction of the main stakeholders (e.g., employee satisfaction) with the system

Within these five dimensions, employers can analyze areas of the system that are most important to the organization. Based on the total rewards package (Armstrong and Cummins 2011) in a specific organization, the analysis should include these five perspectives. The components that should be evaluated include financial compensation, non-financial compensation, growth opportunities, and a safe and healthy working environment with hazard-free working conditions.

As employees are one of the most important stakeholders of the organization, their point of



Rewards Effectiveness, Fig. 2 Comprehensive model of reward effectiveness evaluation (Source: Based on Beck-Krala and Klimkiewicz (2016))

view may be taken into account when evaluating a rewards system. Therefore, widening the meaning and scope of rewards systems effectiveness will include such measures as employee opinions about the rewards system or customer satisfaction.

According to the research, rewards systems should be evaluated based on hard facts and quantitative measures. Managerial intuition regarding rewards programs and best practices are no longer sufficient (Gross and Friedman 2004). For many years, the effectiveness of rewards was reduced to economic issues based on the analysis of financial ratios and salary costs; therefore, quantity indicators and measures were mainly used (Armstrong et al. 2011; Beck-Krala 2018). For example, studies show that quantitative indicators related to job performance evaluation, e.g., improvement of productivity and quality of work, are most often used in industry (Beck-Krala 2018). Formerly, the focus on quantitative measures was most often characteristic of employers who considered rewards mainly in the context of the costs they generated and not the potential investments in employees and the benefits that the system could bring to the organization (Scott et al. 2006). Later, attention was paid to the goals and functions that

rewards need to meet, and rewards effectiveness was considered to be in the category of employee satisfaction with wages, so there was a focus on qualitative measures. Currently, when effectiveness of rewards must bring an added value to stakeholders, it is important to combine various perspectives and both qualitative and quantitative measures (Table 2).

The choice of adequate measures is not sufficient in and of itself. Another important issue concerns the whole **process of evaluation**. Scott proposed the procedure that explains main steps to be taken when analyzing and assessing rewards programs (Scott et al. 2006). The most important stages in the process are as follows:

- Setting goals or objectives of the evaluation
- Identifying evaluation criteria (according to the evaluation perspectives showed in the first dimension of the proposed model above)
- Selecting an evaluation methodology
- Collecting and analyzing data
- Interpreting findings
- Developing and implementing program improvement strategies

Rewards Effectiveness, Table 2 Measuring rewards effectiveness within an organization from the MSP sector

Dimension	Methods of evaluation	Measures/Indicators
The system is convergent (with business strategy and values)	Evaluation against organizational goals and success criteria	The firm has a clear and formal compensation strategy Alignment of business strategies or goals with rewards programs Goals are evident in incentives and performance assessment criteria Employees know and understand the compensation system
The system is compliant (legally, internally, fair)	Evaluation of equity and fairness of the system, compliance with legal regulations, and motivational rules	Analysis of average pay level for different demographic groups of employees at different positions Analysis of procedures and documentation on equal treatment and legal regulations Opinion of employees on equality in pay system and distribution of rewards Transparency of the system
The system is externally competitive	Evaluation of pay levels and attractiveness of the total rewards package against external market	Use of external survey Actual market position of the pay level Indicator of staff turnover Employee opinions on competitiveness of the total rewards (range of benefits, pay levels, incentive programs)
The system is cost effective and affordable	Evaluation and monitoring of payroll costs	Productivity indicators – the ratio of incomes compared with payroll costs monitored over time Average cost of employee compensation package compared over time and with the market Monitoring of HC ROI
The system satisfies employee needs and motivates employees	Are employees satisfied with the system? Are managers satisfied with the system? Are customers satisfied with the service provided?	Manager and employee opinions on the compensation system Cafeteria plan – flexible benefits Absence indicator The level of customer satisfaction Monitoring of customer complaints

Source: Based on Beck-Krala (2014)

Evaluation of perspectives, methods, and measures is important within the evaluation; however, this is just part of the evaluation process and not the end. The process itself, its continuity, and further action taken are important to receive desired outcomes and benefits of the evaluation process.

Summary

Understanding the importance of effective rewards indicates the need for regular monitoring and evaluation of the main dimensions of rewards effectiveness. The switch from the traditional to the new

approach toward rewards – such as sustainable rewards – has redefined the understanding of the term *rewards effectiveness*. Thus, today the term rewards effectiveness, apart from economic efficacy and goal achievement, also includes new aspects in the scope of analyses related to the social perspective and can be identified with the interests of the most important stakeholders of the organization, employees, and customers.

Cross-References

- [Eco-efficiency](#)
- [Effectiveness](#)

- Social Impact Assessment
- Sustainable Rewards

References

- Armstrong, M. (2006). A handbook of human resource management practice. 10th Edition, Kogan Page Publishing, London.
- Armstrong, M., & Cummins A. (2011). The Reward Management Toolkit, Kogan Page, London.
- Armstrong, M., & Murlis, H. (2007). *Reward management. Handbook of remuneration strategy and practice*. London and Philadelphia: Kogan Page.
- Armstrong, M., Brown, D., & Reilly, P. (2011). Increasing the effectiveness of reward management: An evidence-based approach. *Employee Relations*, 2, 106–120.
- Balkin, D., & Gomez-Mejia, L. (1990). Matching compensation and organizational strategies. *Strategic Management Journal*, 11, 153–190.
- Beck-Krala, E. (2018). Evaluation of rewards programs as an element of sustainable employee rewards – Research results. *Entrepreneurship and Management*, 19(6), 133–145.
- Beck-Krala, E. (2014). Implementation of the methodology for compensation systems evaluation. *Organizacja i Zarządzanie*, 28(4), 5–18.
- Beck-Krala, E., & Klimkiewicz, K. (2016). Occupational safety and health as an element of a complex compensation system evaluation within an organization. *International Journal of Occupational Safety and Ergonomics*, 22(4), 523–531. <https://doi.org/10.1080/10803548.2016.1183338>.
- Beck-Krala, E., Scott, D., & Klimkiewicz, K. (2019). Socially responsible and sustainable rewards programmes: The new frontier. In S. J. Perkins (Ed.), *The routledge companion to reward management* (pp. 97–111). London/New York: Taylor & Francis Group/Routledge.
- Beck-Krala, E., & Scott, D. (2013). *Research design for compensation systems evaluation*, [w:] 4th European reward management conference (RMC 2013), Brussels, December 2–3, 2013 (pp. 1–13). Belgium: European Institute for Advanced Studies in Management.
- Bremen, J., & Sejen, M. (2012). Advancing total rewards & the employee value proposition. *WorldatWork Magazine*, 1(2012), 55–61.
- Brown, D. (2014). The future of reward management: From total reward strategies to smart rewards. *Compensation and Benefits Review*, 46(3), 147–151.
- Brown, D. (2008). Measuring the effectiveness of pay and rewards: The Achilles' heel of contemporary reward professionals. *Compensation and Benefits Review*, 5, 23–41.
- Corby, S., White, G., & Stanworth, C. (2005). No news in good news? Evaluating new pay systems. *Human Resources Management Journal*, 1, 4–24.
- Ehnert, I. (2008). *Sustainable human resource management – A conceptual and exploratory analysis from a paradox perspective*. Bremen: Physica-Verlag, Springer. <http://www.springer.com/us/book/9783790821871>. Accessed 7 Dec 2016.
- Gerhart, B., & Ryne, S. L. (2003). *Compensation: Theory, evidence, and strategic implications*. London: Sage Publications.
- Gomez-Mejia, L. R., & Balkin, D. B. (1989). Effectiveness of individual and aggregate compensation strategies. *Industrial Relations Journal*, 28(3), 431–445.
- Greene, R. (2010). Evaluating the ongoing effectiveness of rewards strategies and programs. *WorldatWork Journal*, 18(2), 59–66.
- Greene, R. (2015). Incentive compensation: Measures matter. *WorldatWork Journal*, 24(3), 18–27.
- Gross, S. E., & Friedman, H. M. (2004). Creating an effective total reward strategy: Holistic approach better supports business. *Benefits Quarterly*, 20(3), 7–12.
- Kearns, P. (1995). *Measuring human resources and the impact on bottom line improvements*. Hitchin: Technical Communication (Publishing), Ltd..
- Klimkiewicz, K., & Beck-Krala, E. (2015). Responsible rewarding systems – He first step to explore the research area. *Research Papers of the Wroclaw University of Economics*, 387, 66–79. <https://doi.org/10.15611/pn.2015.387.06>.
- Klimkiewicz, K., & Beck-Krala, E. (2017). A comprehensive view on occupational health and safety as a part of responsible rewarding. *Research Papers of the Wroclaw University of Economics*, 464, 69–79. <https://doi.org/10.15611/pn.2017.464.06>.
- Lawler, E. (2000). *Rewarding excellence: Pay strategies for the new economy*. San Francisco: Josse-Bass Publishers/Wiley.
- Linder, S., & Mottis, N. (2013). *Incentives for socially responsible behavior (SRB): Is “bribing” managers a promising way to foster SRB? Presented at the ERM conference*. Belgium: EAISM.
- McMullen, T. (2013). Reward strategy and practice. Reward effectiveness: How do you know if your reward programs are working? *Journal of Compensation and Benefits*, March/April, S. 5–13.
- Philips J.J. (1996). Accountability in human resources management, Gulf Publishing, Houston.
- Renwick, D., Redman, T., & Maguire, S. (2012). Green human resource management: A review and research agenda. *International Journal of Management Reviews*, 15(1), 1–14.
- Ritcher, A. S. (2002). How does your compensation strategy measure up? *Journal of Strategic HR Review*, 3, 2–40.
- Sahakians, I., Festing, M., & Steger, T. (2015). Paying your employee right: Exploring the concept of socially responsible rewards. In *Uncertainty is a great opportunity*. Presented at the EURAM 2015, Warsaw: Kozminski Academy.
- Scott, D., & Beck-Krala, E. (2019). Evaluating reward strategies, programmes and policies: Research and

- practice. In S. J. Perkins (Ed.), *The Routledge companion to reward management* (pp. 112–124). London/New York: Taylor & Francis Group/Routledge.
- Scott, K. D., & McMullen, T. (2014). Assessing reward effectiveness: A survey of reward, HR and line executives. *WorldatWork Journal*, 23(4), 7–19.
- Scott, K. D., Morajda, D., & McMullen, T. D. (2006). Evaluating pay program effectiveness. *WorldatWork Journal*, 15(2), 50–59.
- Smith, M. (2013). Building the business case for investing in employees. *Compensation & Benefits Review*, 44(6), 327.
- Transparency International UK, (2016). Incentivising Ethics: Managing incentives to encourage good and deter bad behaviour, Paul Moxey, Transparency International UK, UK.
- Werbel, J., & Balkin, D. B. (2010). Are human resource practices linked to employee misconduct: A rational choice perspective. *Human Resource Management Review*, 20(4), 317–326.

Rights of Employees

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Synonyms

Employee rights and freedoms; Employee rights;
Labor rights; Labor rights and freedoms

Definition/Description

Rights of employees is part of international labor law and covers all rights and obligations within the employer-employee relationship (Sepulveda et al. 2004). The narrower framework includes current employees, but a more intricate system of legal regulation can include former employees and job applicants into the category.

Rights of employees is part of the universal human rights, with them being stated in the Universal Declaration of Human Rights (articles 23 and 24) (UN 1948). On the international level employment law is governed by the system of international labor standards created and

administered by the International Labor Organization (ILO). The system of legally binding and non-legally binding acts creates a framework that acts as a unifying governance structure for countries, and near-universal worker protection (ILO 2019b).

The legal system of employee rights consists of universally applicable rights and sector-specific rights. Universal rights comprise of a few general categories: right to work (fundamental right that provides foundation to the whole legal system); right to privacy of the employee; right to due process; right to participation and association; right to occupational health and safety; right to fair wages (a category where both concrete issues such as minimum wage issues and overtime pay are considered, as well as more indirect problems such as gender pay gaps, etc.); freedom of speech and conscience; freedom from discrimination (UN 1948).

Sustainable organizations have the long-term goal to achieve balance between people, planet, and profit. Therefore, creating a working environment based on the protection of the rights of employees is therefore one of the essential features of sustainable management. This is part of the UN sustainable development paradigm (UN General Assembly 2015).

Employee Rights: The Old Way and the New Way

Perceptions about labor have evolved considerably in the last decades. Labor rights emerged as a natural human right, and were elevated by the national and international authorities. A significant role for the building and promotion of international labor law and standards was played by the International Labor Organisation (ILO) – one of the United Nations’ specialized agencies which focuses on fostering and enhancing the labor rights paradigm.

The classic way that labor has been perceived is the one of the worker not being the “bearer of power” (Painter and Puttick 2004, p. 7). Leading labor law expert Kahn-Freund provided an

influential perspective of the employment relationship was that of the power structure in which the employer held the decision-making power and the worker is subordinated to the employer (Davis and Freedland 1983; Painter and Puttick 2004). On the basis of his analysis Kahn-Freund provided the perspective that labor law holds the main function to provide a force that can counteract to the employer-employee inequality in bargaining power. The most well-known labor market models in neo-classical economics support this view of labor relations.

However, a new ideological understanding has been evolving in recent years. The so-called New Labour transformation it has argued that an emphasis on promoting equality of opportunity and capabilities has become an integral part of labor relations, and a system in which workers are able to participate in the benefits of a stronger labor market, and a more prosperous and competitive economy is in order (Painter and Puttick 2004, p. 7).

The transformation of labor relations has brought changes in both the perceptions of stakeholders, and the management framework of companies. More and more companies have realized the benefits of higher employee engagement into the company, such as being shareholders, or being regarded as partners rather than subordinates. In this new paradigm, labor rights gain a new type of significance – that of a framework for cooperation between partners, rather than an instrument for equalizing bargaining power.

Employee Rights Between Two Contexts

In recent years there has been a debate between scholars whether labor rights and their protection could be appointed to the sustainable development paradigm as part of the social sustainability side of the concept.

Applying labor rights to the framework of sustainable development seems appealing to both scholars and practitioners. However, the existing international instruments, including the United Nations (UN) Sustainable Development Goals

(SDGs), do not provide enough clarity on the relationship between the environmental, economic, and social aspects of a sustainable development agenda, as well as their application in practice (Novitz 2020).

The sustainable development framework, however, has been considered as a more likely alternative for the development of labor rights regimes, as business is more willing to cooperate within this framework, as it adheres to economic efficiency more than the traditional employee rights paradigm of the ILO (Novitz 2020).

Key international settlements such as the UN Resolution on Agenda 2030 for Sustainable Development (UN General Assembly 2015) and the UN SDGs thus gain a pivotal role for the future development of labor law and regulations. Some even argue that sustainability can be perceived as a “double agent” for promotion of employee rights and support to worker claims (Matthysen 2020).

Employee Rights at a Glance

Right to Work

The right to work is the fundamental human right that stands in the center of employment law. Established in the Universal Declaration of Human Rights, it has become a core principle in the legal framework of labor relations.

According to the UN Committee on Economic, Social, and Cultural Rights (CESCR) the right to work has the following features:

- Availability – states should help workers seek employment opportunities and find work.
- Accessibility – access to work is achieved through ensuring physical accessibility, information accessibility, and non-discrimination.
- Acceptability and quality – people should be ensured the right to choose work freely, with every employer providing at least the minimum safe working conditions provided by national and international labor standards (CESCR 2006).

Right to Privacy

Employee privacy rights are the rules that aim to limit the employer's interference into the employee's personal life and possessions. They set the limit on how an employer can monitor the employee's actions or communication with others. The right to privacy protects employees on the extent to which an employer has the right to acquire information about the personal life of the employee both in the workplace and outside of it. Employee right of privacy has been a trend of rising importance with the advent of social media and online presence of people.

Right to Due Process

Due process refers to fairness in procedures and legal matters, with the rights of the parties involved protected and the process kept free from discrimination and prejudice (UN 2003, p. 251). Due process is applicable to any formal proceeding and constitutes the necessity to apply the established rules with fairness. In the employer-employee relations due process is most commonly regarded in relation to lawful termination. Even in most severe matters of termination of the work relation, employees still have rights that have to be protected. It is not unusual for employees to contest a termination or other types of punishment forms in court.

Right to Participation and Association

The right to participation and association is the foundation of labor union and professional associations of workers. It is the right of workers to organize and take collective action in protecting their rights and interests. As it is considered that the employer has a natural supremacy in power over the employee, the right to participation and association provides employees with the possibility to overcome this natural power asymmetry. The right to participation and association allows the employees to take part in unions and forbids employers to let employees go on the basis of union participation. Employee associations have the ability to perform collective negotiations authority, with the purpose to protect employee rights and negotiate better conditions with the employers (Burda and Wyplosz 2008).

The right to participation and association has been secured by a number of international legal acts, including the fundamental:

- Universal Declaration of Human Rights (UN 1948)
- International Covenant on Economic, Social and Cultural Rights (UN General Assembly 1966)
- Freedom of Association and Protection of the Right to Organise Convention (No. 87) (ILO 1948)
- Right to Organise and Collective Bargaining Convention (No. 98) (ILO 1949)

Different analysis of worker rights conditions in this field have been performed as part of social and economic analysis of the labor market. One measure of civil liberties and workplace-oriented measure of freedom of association and collective bargaining rights (the FACB index) shows stronger labor rights in open economies (Flanagan 2006, p. 29).

Right to Healthy and Safe Working Conditions

Occupational health and safety refers to the right of workers to perform their jobs in maximally safe environment that does not cause deterioration in their physical or psychological health (Joint Industrial Safety Council 1987). Occupational health and safety standards are widely promoted by the International Labor Organization, and are usually well regulated by national legislations. Some sectors of economic activity, however, always bear some occupational hazard due to the nature of the production process, for which reason special legislation and specific international standards are adopted.

Right to Fair Wages

The right to fair wages is provided by both the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights (UN 1948; UN General Assembly 1966).

The international labor standards set by the International Labor Organization (ILO) cover the

topic of wages among others (ILO 2019a, b). Relevant ILO instruments are the Protection of Wages Convention (1949), the Equal Remuneration Convention (1951), the Minimum Wage Fixing Convention (1970), etc. (ILO 2019a). The right to fair wages has been considered to cover the topics of minimal pay, as well as wage inequality in the workplace and gender pay gaps in the workplace.

Freedom of Conscience and Speech

The freedom of conscience and speech in employment law refers to the impact that personal opinions on social, religious, and political topics could have on employer-employee relations. It guarantees the right of employees to express their personal opinions on different topics freely. The topic is one where delicate balance is sought after, as employers sometimes do have the right to sanction employees should their expression become abusive, implies discrimination, or is a demonstration of a socially unacceptable behavior (United Nations 2003, p. 525).

Freedom from Discrimination

The freedom from discrimination principle implies that the amount of employees' pay should not depend on sex, race, or any other discriminative factor. The freedom from discrimination is perceived to be one of particular importance in women's rights regarding labor.

Economic theory too predicts that increased competition between companies to hire labor leads to erosion in discrimination, with employers with less discriminatory tastes having a larger pool of labor force they can choose from (Flanagan 2006, p. 63).

Summary

Protecting employee rights is an essential part of the functioning of any business, and it is considered to be a core prerequisite for sustainable management of companies. With employee rights protection being a well-developed system of legal acts on both international and national

levels, convergence of companies from around the world toward a common culture of sustainable worker-employee relationship is promoted. While disputes in this relation still show that problems of power asymmetry are still present in the worker-employee relations (globally, there are regions in the world where severe problems stand unresolved), it is clear that the overall trend of development is toward achieving sustainability in this field.

Cross-References

- [United Nations Agenda 2030 on Sustainable Development Goals, The](#)

References

- Burda, M., & Wyplosz, C. (2008). *Macroeconomics: A European text* (8th ed.). Oxford University Press.
- Committee on Economic, Social and Cultural Rights (CESCR). (2006). *General comment no. 18: The right to work (Art. 6 of the Covenant); E/C.12/GC/18*. UN Committee on Economic, Social and Cultural Rights (CESCR). <https://www.refworld.org/docid/4415453b4.html>. Accessed 21 Aug 2021.
- Davis, P., & Freedland, M. (1983). *Kahn-Freund's labour and the law* (3rd ed.). Stevens.
- Flanagan, R. (2006). *Globalization and labor conditions: Working conditions and worker rights in a global economy*. Oxford University Press.
- International Labor Organization (ILO). (1948). Freedom of Association and Protection of the Right to Organise Convention, 9 July 1948, C87. <https://www.refworld.org/docid/425bc1914.html>. Accessed 22 Aug 2021.
- International Labor Organization (ILO). (1949). Right to Organise and Collective Bargaining Convention, 1 July 1949, C98. <https://www.refworld.org/docid/425bc23f4.html>. Accessed 22 Aug 2021.
- International Labor Organization (ILO). (2019a). ILO Labor Standards. <https://www.ilo.org/global/standards/lang%2D%2Den/index.htm>. Accessed 24 Oct 2019.
- International Labor Organization (ILO). (2019b). *Rules of the game: An introduction to the standards-related work of the International Labour Organization*. Geneva: International Labour Office.
- Joint Industrial Safety Council. (1987). Safety-health and working conditions. https://www.ilo.org/wcmsp5/groups/public/%2D%2Ded_protect/%2D%2D-protrav/%2D%2D-safework/documents/instructionalmaterial/wcms_175900.pdf. Accessed 22 Aug 2021.

- Matthysen, J. (2020). *The SDGs as double agent for progressive sustainable development*. Ghent Centre for Global Studies. <https://www.globalstudies.ugent.be/the-sdgs-as-double-agent-for-progressive-sustainable-development/2/>. Accessed 10 Aug 2021.
- Novitz, T. (2020). *The normative promise of sustainability for labour standards – And the limitations of the SDGs*. Ghent Centre for Global Studies Blog. <https://www.globalstudies.ugent.be/the-normative-promise-of-sustainability-for-labour-standards-and-the-limitations-of-the-sdgs/2/>. Accessed 10 Aug 2021.
- Painter, R. W., & Puttick, K. (2004). *Employment rights* (3rd ed.). Pluto Press.
- Sepulveda, M., van Banning, T., Gudmundsdottir, G. D., Chamoun, C., & van Genugten, W. J. M. (2004). *Human rights reference handbook* (third revised edition). University of Prince.
- UN General Assembly. (1966). International covenant on economic, social and cultural rights, 16 December 1966, United Nations, Treaty Series (Vol. 993, p. 3). <https://www.refworld.org/docid/3ae6b36c0.html>. Accessed 21 Aug 2021.
- UN General Assembly. (2015). Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1. <https://www.refworld.org/docid/57b6e3e44.html>. Accessed 22 Aug 2021.
- United Nations (UN). (1948). Universal Declaration of Human Rights. <https://www.un.org/sites/un2.un.org/files/udhr.pdf>. Accessed 1 Sept 2019.
- United Nations (UN). (2003). Some other key rights: Freedom of thought, conscience, religion, opinion, expression, association and assembly. In *Human rights in the administration of justice: A manual on human rights for judges, prosecutors and lawyers. Professional training series no. 9* (pp. 521–545). New York/Geneva: United Nations.

Rightsizing

- [Employee Downsizing](#)

Rigorous Sustainability

- [Strong Sustainability](#)

Rio Conference

- [Earth Summit \(1992\)](#)

Rio de Janeiro Earth Summit

- [Earth Summit \(1992\)](#)

Rio Declaration

- [Rio Declaration on Environment and Development](#)

Rio Declaration on Environment and Development

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Synonyms

[Rio Declaration](#)

Definition/Description

The Rio Declaration on Environment and Development is one of the two main political documents adopted at the United Nations Conference on Environment and Development, held in Rio de Janeiro between June 3 and 14, 1992, also known as the Earth Summit (United Nations 2023a).

The declaration consists of 27 principles, which outline the rights and responsibilities of countries to achieve sustainable development. The Declaration addresses international and domestic issues, and it specifically outlines the international nature of most environmental problems. It proclaims the necessity for responsible action of nation states on both the national and international level, to solve such problems (United Nations General Assembly 1992).

The Rio Declaration is a document of considerable political significance, as it is a written

expression of the fundamental ideas that formulate the ideological basis for future policy and decision making and balance between socioeconomic development and the environment.

From the standpoint of international law, the Declaration is not a legally binding document, unlike traditional sources of international law, such as treaties and conventions. However, as it expresses fundamental principles of social affairs and interactions, it is considered by some experts a supplementary source of international law, much like customary law and international principles (Popovic 1993).

The principles that are drawn in the Rio Declaration are fundamental in the sphere of environmental law. They are often considered the formal expression of the fundamental values that are drivers for the change towards a more environmentally sustainable way of using natural resources.

How Did the Rio Declaration Come to Be?

The effort towards sustainability was commenced at the 1972 United Nations Conference on the Environment, held in Stockholm, Sweden. The event was the first world conference to center the environment as the main issue that nations should address. The main outcome of the conference was the adoption of a series of principles for sound management of the environment including the Stockholm Declaration and Action Plan for the Human Environment (United Nations 2023b).

The Stockholm Declaration of 1972 contained 26 principles, and it placed environmental issues at the center of international concerns. This political document marks the start of a dialogue between industrialized and developing countries on the link between economic growth, air, water, and ocean pollution (United Nations 2023b).

The second global conference that focused on environment and development was the United Nations Conference on Environment and Development (UNCED), also known as the “Earth Summit,” held in Rio de Janeiro, Brazil, from June 3 to 14, 1992. The conference took place

on the occasion of the 20th anniversary of the Stockholm conference of 1972. It brought together political leaders, diplomats, scientists, media, and nongovernmental organizations from more than 179 countries (United Nations 2023a). The main objective of the Earth Summit was to produce an agenda and a new plan for international action on environmental and development issues that would help guide international cooperation and development policy in the future. Thus, the Rio Declaration on Environment and Development was created, being one of the main political documents signed at the Earth Summit. The package of documents included other seminal legal and political documents such as the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity, the Declaration on the principles of forest management, and Agenda 21 (United Nations 2023a).

The history of the negotiation process of the Rio Declaration shows the long-standing divergence in opinions between developed and developing countries in terms of environmental governance. Evidence shows that developed countries and NGOs wanted the Earth Summit to conclude with an “Earth Charter,” which would focus on environmental issues (Louka 2006, p. 33). For that reason, the proposal of such a charter was rejected by the G-77 and China as they reviewed it as a measure that would be accepted at the expense of the economic development of developing countries and emerging economies (Louka 2006, p. 33). For this reason, the Rio Declaration did not assume a purely environmental focus and instead is heavily influenced by the ideas of fair and equitable economic and social development of states.

The 1992 Rio Earth Summit was followed by a number of conferences in the coming decades. The most prominent of those were the 2002 World Summit on Sustainable Development, or Rio+10, held in Johannesburg (South Africa), and the 2012 United Nations Conference on Sustainable Development (UNCSD) or Rio+20, held once again in Rio de Janeiro (Brazil).

One of the main political outcomes of the 2002 World Summit on Sustainable Development was

the Johannesburg Declaration, which built up on the principles of the Rio Declaration and provided an even stronger focus on social and economic development of states.

Another powerful tool for international cooperation after the signing of the UNFCCC became the Conferences of parties (COP) meetings of member states to the convention. With the adoption of the Kyoto Protocol, and in 2015 – of the Paris Agreement (United Nations Climate Change 2023), COP meetings became the most prominent global political forum for climate change discussions and advancement.

Implementation of the Rio Declaration

The main philosophy of the Declaration is that human development and environmental protection should evolve together, and it is best that they are not considered separately. This understanding has come to dominate the sustainability paradigm on a global level and in terms of theory, and it is one of the cornerstones of practical decision-making.

Central principles relating to development in the Declaration that find significant development in international politics after the adoption of the document are the principle of centrality of human beings to the concerns of sustainable development (No. 1); the primacy of poverty eradication (No. 5); the importance of the environment for current and future generations and its equal footing with development (No. 3 and 4); the special consideration given to developing countries (No. 6); the principle of common but differentiated responsibilities – CBDR (No. 7) (Stakeholder Forum for Sustainable Future 2011). These principles are also acknowledged and enriched in the Johannesburg Declaration of 2002. The principles regarding economic and social development also constitute the foundation of the United Nations Millennium Development Goals and the Sustainable Development Goals that inherited and enriched the movement later. Their practical application has also been found within the conduct of UN specialized agencies such as the UNEP, UNDP, UNICEF.

The Declaration also enshrined the two critical economic principles of polluter pays (No. 16) and precautionary approach (No. 15), and it introduced principles relating to the participation and the importance of specific groups for sustainable development (No. 10, 20, 21, 22) (Stakeholder Forum for Sustainable Future 2011).

The Rio Declaration also included the duty of notification in emergency situations or when a country is to engage in an activity likely to have transboundary environmental impacts – a rule that would later on become an important part of the principles of international environmental law and would be featured in different international legal tools (Louka 2006, p. 141).

From an empirical standpoint, the principles of the Rio Declaration are a soft law instrument, and their implementation may take many shapes (Stakeholder Forum for Sustainable Future 2012). While quantifying the number of acts that stem from the Declaration is a significant challenge, there are various international agreements or national acts that have transposed the Principles. Where principles have been applied in practice, their application has often been tested in courts. In the case of international law, the result is that some of the Rio Declaration principles have been accepted as part of international jurisprudence (Stakeholder Forum for Sustainable Future 2012).

The most prominent examples of the legal application of the Rio Declaration's Principles are within the application of Principles No. 5, 10, 15, 17, and 24, all of which demonstrate varying elements of successful transposition and wide adoption of the principle in legal acts. Studies show that principles No. 3 and 21 are also steadily gaining momentum on implementation and that increasingly more effort is being made to apply them in practice (Stakeholder Forum for Sustainable Future 2012).

In international law, the principles of the Rio Declaration are reviewed as a supplementary source of law. Much like customary law, their legal significance is confirmed in international case law. Two examples of using the Rio Declaration principles in judicial decision-making on the international level are the invoking of

Principle No. 2 in a few cases in international courts and the invoking of Principle No. 17 in cases such as *Pulp Mills on the River Uruguay* (Argentina v. Uruguay) (Stakeholder Forum for Sustainable Future 2011).

Poverty Eradication and the Contribution of the Rio Declaration

On a local level, the declaration's principles focus on the need of each state to achieve endogenous economic growth while protecting the environment and minimizing the negative environmental externalities that economic activity creates. The declaration puts a stress on the need to engage women and youth in the process of achieving sustainable development.

The Rio Declaration stresses the necessity to achieve a balance between developed and developing nations. By acknowledging the historical role of developed states in man-made climate change, and the need for those countries to bear the relative bigger cost of current pollution eradication, it confirms the right of developing countries to achieve economic growth and stresses the importance for global poverty to be addressed by both developed and developing countries in a joint effort to eradicate it.

The first principles of the Rio Declaration have become a significant instrument of the strive of the United Nations towards promoting the economic growth of developing countries. Consequently, high-level forums and the work of UN agencies on development put a strong emphasis on the creation of a socially equitable society in all countries.

A direct successor of Principle 5 (eradicating poverty and raising the standards of living for all) are the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) at a later stage (Stakeholder Forum for Sustainable Future 2012). With the system of the SDGs being the most comprehensive so far, with them being adopted across national economies as key performance indicators (United Nations General Assembly 2017), the first and second Rio Principles have become

one of the most highly institutionalized goals of the member states.

Rio Declaration and the Participation of Citizens in Sustainable Development

The Rio Declaration is also a document that aims to promote citizen's participation in environmental decision making. The delegates at the United Nations Conference on Environment and Development of 1992 agreed upon that environmental issues can be best handled with the participation of all concerned citizens at the appropriate level of governance (Popovic 1993).

In terms of national governance, the delegates agreed that good governance is a significant part of the mechanisms for sustainable development. They reassured that the right to access to information concerning the environment and the opportunity to participate in decision-making processes, as well as the provision of effective legislative, executive, and judiciary services by the state to its citizens were outlined as primary rights of citizens that should be guaranteed (Popovic 1993).

As a result, the Rio Declaration became one of the instruments that increase the participation of citizens in the public governance process, safeguarding the opportunity to create binding obligations on states regarding participation of the public in environmental decision making (Popovic 1993).

Principle 10 is the foundation of the UNECE Convention on Access to Information, Public Participation in Decision-making, and Access to Justice in Environmental Matters (Aarhus Convention). The Aarhus Convention has provided valuable means by which the various elements of the Principle have been promoted through application at the national level, as well as providing a forum (the Compliance Committee) that can hear complaints where it is claimed that Nation States are not adhering to the Convention (Stakeholder Forum for Sustainable Future 2012).

Notably, cases have been brought by civil society organizations that have challenged their government's lack of implementation or compliance to the Convention, which has resulted in the

development of a body of caselaw that has strengthened the principle overall. Since the adoption of the Aarhus Convention by the European Union, there has been a booming of cases in front of the Court of Justice in the EU (Andrusevych and Kern 2016).

The Precautionary Principle, the Polluter Pays Principle (PPP), and the Environmental Assessment Principle

Principle 15 is also known as the Precautionary Principle. It introduces the understanding that environmental protection should be promoted wherever there are “threats of serious or irreversible damage, and that lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation” (United Nations General Assembly 1992).

This principle has been widely accepted as a foundation of environmental law at both the national and international levels. It has been tested in a range of courts and jurisdictions, notably the World Trade Organisation (WTO) arbitral body where initially it was found in some cases that trade rules superseded the precautionary principle.

Despite the development of this principle in both theory and practice, there have been many concerns that it can be used as a trade barrier by different states and could also create a bias against new technologies and processes (Louka 2006, p. 34).

The application of the precautionary principle is also highly dependent on the states’ politics. For example, the United States, having a skeptical approach towards the principle, views it as a new nontariff barrier to trade. On the opposite side, the European Union has transformed the principle into a constitutional principle and applies it largely to its trade policies (Louka 2006, p. 51).

Principle 16 is widely known as the Polluter Pays Principle (PPP). It states that polluters should bear the costs for their pollution and that countries have the rights to exploit their own resources sovereignly only if they do not endanger

the environment of other countries (United Nations General Assembly 1992). The PPP principle establishes a demand for the person who is in charge of polluting activities to be financially responsible for the damage caused by pollution (Louka 2006).

Over the years, the PPP has gained significant influence in both environmental law and environmental economics. In both international and domestic law, this principle has found itself to be a seminal rule of thumb (e.g., the philosophy behind greenhouse gas emission quotas). In economics, the PPP is most often regarded within the scope of the Coase vs. Pigou approach towards environmental harm and sanctions (Baffi 2012). It is an opinion expressed by scholars and practitioners that the principle’s practical value is diminished because most polluters will tend to pass the costs of pollution onto consumers (Louka 2006). Thus, the principle also raises the question of the price of the final good and whether allocation of a pollution sanction to the polluter may lead to a rise in prices that would ultimately cause society to be worse off instead of better off (Bugge 2009).

Despite its relevant simplicity in wording, the PPP may also have much more complex economic and institutional implications due to the nature of the polluting activities that it regulates. It is very often not a single entity that causes the pollution, and it becomes harder to allocate the polluter sanction as a longer production chain is involved (Bugge 2009). Thus, the application of the PPP may lead to social justice dilemmas (Bugge 2009).

Despite the critique it has faced, the PPP has put a foot in the right direction in relation to the more careful consideration of effectiveness of economic and institutional approaches towards environmental regulations. While it cannot be expected for a single universal principle to succeed in reducing all negative consequences, effectiveness is more easily achievable through an efficient combination of social, political, economic, and biophysical considerations (Swaney 1992). In this sense, the PPP principle provides a significant political step forward in the consideration of environmental impact and accountability.

Principle 17 concerns Environmental Impact Assessments (EIAs). Principle 17, alongside Article 14 of the Convention of Biological Diversity, and specific provision of Agenda 21, became the foundation of the political effort to make states introduce EIAs into their national legislation (Sánchez and Croal 2012).

EIAs have a significant development in the face of the adoption of these rules by a number of countries and also by international financial institutions such as the World Bank, the International Finance Corporation, and others that also acknowledged this practice. In 2003 the Equator Principles were launched by commercial banks as voluntary commitments to incorporate the results of environmental and social assessments into certain credit programs (Sánchez and Croal 2012).

The development of EIAs into strategic environmental assessments (SEA) has been highly supported by the European union (EU) and the Organization for Economic Cooperation and Development (OECD) (Sánchez and Croal 2012).

Challenges to the Principles of the Rio Declaration

Upon its negotiation and adoption, some experts have claimed that the outcome of the Rio Declaration presents a step back from the Stockholm Declaration (Louka 2006, p. 35). There has been difficulty in applying the Rio Principles in practice.

In terms of eradicating poverty, despite the Rio Declaration provides a political foundation for the MDGs and that they have had a significant impact on the reduction of poverty on a global level, nations still face difficulties in reducing disparities in standards of living by lowering both national and across-country inequalities (Stakeholder Forum for Sustainable Future 2011). This aspect is now addressed by the SDGs in the hope that this agreement set out in Rio will lead to a successful resolution.

In terms of civil participation in environmental decision making, despite Principle No.10 has achieved success with being recognized and implemented in legal acts, there is still lack of

ability for many groups and stakeholders to participate in the process at national and local level (Stakeholder Forum for Sustainable Future 2012).

The precautionary principle, while successfully implemented in a range of instruments and tested in case-law, remains mired by ideological divergence, and in relation to the PPP, there remain some ideological and economic differences to its practical application which have undermined the successful implementation of the principle on the whole.

In terms of achieving sustainable production and consumption (No. 8), there has been a setback in achieving this principle. Despite the impressive national and international efforts, global production is still a long way from the sustainability levels that are ever more required, and in terms of global consumption, there are still global patterns of consumption that are unsustainable but that have been left largely unaddressed (Stakeholder Forum for Sustainable Future 2011).

There are also local tensions in terms of the application of national sovereignty on resources of Principle No.2. On a transnational and global level, there are still too many issues associated with management of the commons that relates to trans-boundary pollution, climate change, and biodiversity (Stakeholder Forum for Sustainable Future 2011). Nations have still not found the best institutions that would create sustainable management of common pool resources that are spread out between many people on a large territory, thus creating conditions for transboundary prisoner dilemmas, and potentially “tragedies of the common” (Hardin 1968).

Summary

The Rio Declaration gives people the right for development but also the obligation for preserving the environment. It highlights the need for effective public-private cooperation, as the nature of the environment as a common good dictates such a cooperation. The declaration emphasizes that humans are in the center of the sustainable development, but it stresses that human activity should not harm the environment in such a way

that future generations will bear the negative externalities in time.

Despite some setbacks in application, the Rio Declaration and the Rio Principles are a major political commitment towards sustainable development and have become a significant part of the international environmental legal framework.

Cross-References

- [Earth Summit](#)
- [Johannesburg Declaration](#)
- [Local Agenda 21](#)

References

- Andrusevych, A., & Kern, S. (Eds.). (2016). *Case Law of the Aarhus Convention Compliance Committee (2004–2014)* (3rd ed.). European Economic Bureau.
- Baffi, E. (2012). Coase versus Pigou: A still difficult debate after fifty years. *Global and Local Economic Review*, 16(2), 35. <https://ssrn.com/abstract=2363283>.
- Bugge, H. C. (2009). The polluter pays principle: Dilemmas of justice in national and international contexts. In J. Ebbesson & P. Okowa (Eds.), *Environmental law and justice in context* (pp. 411–428). Cambridge University Press.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162(3859), 1243–1248.
- Louka, E. (2006). *International environmental law: Fairness, effectiveness, and world order*. Cambridge University Press.
- Popovic, N. A. (1993). The right to participate in decisions that affect the environment. *Pace Environmental Law Review*, 10, 683–708.
- Sánchez, L. E., & Croal, P. (2012). Environmental impact assessment, from Rio-92 to Rio+20 and beyond. *Ambiente & Sociedade*, 15(3). <https://doi.org/10.1590/S1414-753X2012000300004>.
- Stakeholder Forum for Sustainable Future. (2011). *Review of implementation of the Rio Principles: Detailed review of the implementation of the Rio Principles*. United Nations Department of Economic and Social Affairs.
- Stakeholder Forum for Sustainable Future. (2012). *Review of the implementation of the Rio Principles: Synthesis*. United Nations Department of Economic and Social Affairs.
- Swaney, J. A. (1992). Market versus command and control environmental policies. *Journal of Economic Issues*, 26(2), 623–633.
- United Nations. (2023a, January 31). *United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3-14 June 1992*. Retrieved from

www.un.org: <https://www.un.org/en/conferences/environment/rio1992>.

United Nations. (2023b, January 31). *United Nations Conference on the Human Environment, 5–16 June 1972, Stockholm*. Retrieved from www.un.org: <https://www.un.org/en/conferences/environment/stockholm1972>.

United Nations Climate Change. (2023, January 31). *The Paris Agreement - What is the Paris Agreement?* Retrieved from www.unfccc.int: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

United Nations General Assembly. (2017). *Resolution adopted by the General Assembly on 6 July 2017 on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development, AA/RES/71/313*. New York: United Nations.

United Nations General Assembly. (1992). *Rio declaration on environment and development*. Rio de Janeiro: United Nations.

Rio Summit

- [Earth Summit \(1992\)](#)

Rio+10

- [Johannesburg Summit of 2002 on Sustainable Development](#)

Rio+20

- [Local Agenda 21](#)

Risk

- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

Risk Committee

- [Board Committees and Corporate Governance](#)

Risk Governance

► Risk Management

Risk Management

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Synonyms

[Risk governance](#)

Definition

Risk management (RM) is a process of identifying, evaluating, and prioritizing risks, followed by response actions and monitoring. Risk differs from uncertainty, because probabilities may be calculated for risks, but not for uncertainty, which refers to more fundamental unknowns. The RM goal is usually not to eliminate all risks, since this is typically either impossible or very costly. The point is managing risks at an acceptable level ensuring the best balance between threats and opportunities, in particular critical risks and those that are more likely to materialize. While everyone needs to manage risk, even if our job is not being a risk manager, taking risk is fundamental in business.

RM is an ongoing and iterative process, which must be repeated indefinitely, not only because risks cannot be fully and definitely eliminated but also because risks are permanently changing. The social, political, and business environment is constantly changing, and new threats, vulnerabilities, and opportunities emerge every day. Individuals, governments, or organizational risk managers should also understand and consider the velocity of risk. While new risks continue to

emerge at a fast pace, particularly given an increasingly hyper-connected business environment, digital transformation is promoting more effective, predictive, and continuous organizational RM tools, through continuous gathering, comparison, and correlation of data, hence helping to reduce those risks or their undesired consequences.

Introduction

All organizations and individuals face threats, internal or external, that may significantly affect their activities and sustainable value. The starting point of RM is the definition of risk. Risk should be something that can be quantified, even if not very precisely. Risk is measured taking into account the probability of something occurring, together with the related potential impact. However, no probability may be assigned to uncertainty, thus rendering the management of uncertainty extremely difficult. RM deals with foreseeable risk events with determined potential outcomes – and while the notion of risk is typically associated with negative outcomes, positive outcomes should also be considered. Risks are selected for attention and treated on an ongoing basis to diminish the associated likelihood of occurrence and/or the consequences of events affecting objectives. The growth of RM is linked to the growth of risks themselves, due to a more globalized and complex world, to the increasing availability of technological tools to support effective RM, and to regulators and investors calling for greater disclosure of RM policies in order to better understand financial and nonfinancial risks faced by organizations.

An increasingly important area of risks for businesses derives from an increasing emphasis on social and environmental sustainability, rather than just financial and economic sustainability [1]. The World Economic Forum commented, in its 2019 Global Risks Report, that “Environment related risks account for three of the top five risks by likelihood and four by impact” (World Economic Forum 2019, p. 15). Investors are increasingly paying attention to environmental,

social, and governance (ESG) [2] risks when making investment decisions, and organizations are being held accountable for the impact of their activities. As an example of this increasing attention, Principles for Responsible Investment (PRI) [3] were developed by major investors and supported by the United Nations. UNPRI (2019, p. 4) defines “responsible investment as a strategy and practice to incorporate ESG factors in investment decisions and active ownership,” in order to promote long-term, sustainable value. Clearly, as sustainable investment has been shifting from a niche to a more mainstream approach, managing sustainability and ESG risks has therefore become more prominent and more deeply integrated into and alongside the wider organizational strategy.

Given the increasing, and necessary, inclusion of sustainability within wider managerial concerns and processes, this text aims primarily to provide an overview on RM in general, to assist an effective inclusion and management of specific sustainability risks, alongside the other general risks.

Risk Management Frameworks

The scope of RM may be narrower (such as credit, operation, reputational, financial, or IT RM) or wider (enterprise-wide RM – ERM). Several frameworks provide principles and generic guidelines on RM that can be used by any public or private organizations and even individuals. Examples include the Australia/New Zealand Standard for Risk Management (AS/NZS ISO 3100:2009 “Risk Management – Principles and Guidelines”); the International Organization for Standardization standard (ISO 31000:2018); the International Electrotechnical Commission standard (IEC 31010:2019 “Risk management – Risk assessment techniques”), which complements ISO 31000:2018; and the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. The “Enterprise Risk Management – Integrated Framework,” published by COSO in 2004 (COSO ERM), has been widely accepted and used by organizations in their approach to manage corporate risks in an

integrated way. In 2004, COSO defined ERM as: “...a *process*, effected by an entity’s board of directors, management and other personnel, applied in strategy setting and *across the enterprise*, designed to identify *potential* events that may affect the entity, and *manage* risk to be *within its risk appetite*, to provide reasonable assurance regarding the *achievement of the entity objectives*” (italics added to highlight major topics of an ERM). An updated framework, titled “Enterprise Risk Management – Integrating with Strategy and Performance,” published in 2017, shed light on the importance of embedding risk both into the strategy-setting process and in driving performance, as risk influences and aligns strategy and performance across all departments and functions (COSO 2017). COSO ERM is used for identifying risks, managing those entity-wide risks within a defined risk appetite defined by management and supporting the achievement of the strategic objectives of the organization (COSO 2017).

Globally, the described RM frameworks for managing risk have far more similarities than differences, and they all describe a process for embedding RM into the organization’s governance, strategy and planning, management, values, and a strong corporate culture about risk.

Risk Threshold Development

The RM goal is to assess and proactively prevent risks from reaching dangerous levels, keeping them within acceptable predefined thresholds. These limits are called risk appetites. Risk appetite is an integral part of ERM (COSO 2009) and represents the balance between potential benefits and dangers of taking certain actions. Therefore, the starting point before conducting any RM activities is the definition of the overall risk appetite and the acceptable tolerance per risk category.

Alternative strategies need to be articulated with risk thresholds. Consequently, risk appetite levels need to be set in adherence with the overall risk culture of the organization and its strategic objectives. Once the risk appetite is defined, it needs to be embedded and continuously enforced across the organization to ensure a broadly

common risk language, monitored over time and revised in light of a changing competitive environment or strategy. Risk tolerance is related to risk appetite and objectives. While risk appetite is broad, risk tolerance is operational, defining the actual boundaries for the various risks (COSO 2009). However, defining which risks or levels of risk should be accepted or avoided is challenging, due to increasing uncertainty around regulatory, political, social, and market environments.

Risk Management Process

The RM process begins with the identification and quantification of risks, which implies developing risk scenarios, quantifying impact, and assessing probabilities through RM tools. Based on risk thresholds (risk appetite and tolerances) defined by management, risks are prioritized and mitigating actions taken to address critical risks in terms of likelihood and impact. Identifying and assessing the strength of interconnections between risks, as well as between risks and potential mitigating actions, is fundamental to define priorities and to avoid, or at least manage, contaminations.

In today's fast-paced digital environment, actions taken to address risks should be preventive as much as possible, and not only reactive, as risk event outcomes emerge with disarming velocity. RM needs to focus on risk likelihood, impact, and velocity (how quickly the risk would generate an outcome), and not only on the first two variables (Ernst & Young 2018).

Risk Monitoring

Key risk indicators (KRIs) are used to indicate changes in risk or to provide early warning signals. Defining proper qualitative and quantitative KRIs, alongside the more traditional key performance indicators (KPIs), may be challenging. However, defining KRIs is fundamental to embed RM in everyday management concerns, rather than remaining a separate activity, since managerial behavior has been shown to be

influenced by measurement processes, particularly when tied with incentives. Risk appetite levels and risk tolerance need to be reflected in each KRI to try to keep activities within the overall desired risk appetite defined by management. Reported KRIs, alongside traditional KPIs, should be monitored on an ongoing basis and actioned upon in a timely manner when further mitigation is required.

Measurement of sustainability data is not simple, so defining KRIs and KPIs incorporating environmental and social dimensions has been challenging. Various providers of sustainability indicators and information have emerged, although differences in calculation methodologies and issues around data exist. As one example of such sets of indicators, the Sustainability Accounting Standards Board (SASB) has developed a Materiality Map[®] that identifies sustainability factors likely to impact the financial condition or operating performance of organizations within a given industry, providing very specific accounting metrics.

Akin to the challenge of choosing among a wide diversity of indicators is the challenge of deciding risk mitigation actions. In fact, due to the high interconnection and complexity of the current business context, adverse, even potentially unintended, impacts from risk mitigation actions may emerge. So, organizations taking actions which improve scores in particular indicators may face themselves with deteriorating performance according to other indicators.

Communicating and Reporting Risk

RM practices should not be limited to ad hoc discussions between management and risk managers. Formal risk maps and risk scorecards conveying risk likelihood, consequences, and any interactions and dependencies between them, as well as the actions for mitigation of critical risks, should be communicated both within the organization and between organizations and their environment. It is also important to preserve the insights regarding key risks when undertaking

their identification and assessment, in order to support further review and update processes.

Formal and clear roles and responsibilities should be defined for any risk function, in particular, risk appetite setting, approval, and review, as well as risk owners that have the primary responsibility for managing risk. Such roles and responsibilities must be duly communicated within the organization. In organizations with mature RM functions, reporting may be done to a Chief Risk Officer or a Chief Information Risk Officer, rather than directly to the Chief Executive Officer; however, the most important thing is having a clearly defined reporting line for KRIs.

Dissimilarity of Risk Management Practices

RM frameworks do not imply uniformity of RM techniques across organizations. RM activities need to be customized to meet every organization's goals and objectives, taking into account its structure, processes, operations, projects, or products. Managing the risk of each organization depends on its risk profiles, tolerance and appetite for risks, and the extent to which day-to-day business decisions comply with that threshold. As each organization has different missions and strategic objectives, different risk appetites will be established (COSO 2009). There is no "right" risk appetite and tolerance and no one-size-fits-all standard.

Managing External and Uncontrollable Risks

Complexity and interconnectedness have increased the incidence of "black swan events," extremely rare risks, unknowable and unpredictable before they occur, for example, the 2007 financial crisis or the 11 September terrorist attack. Significant losses may be incurred from ignoring and not managing effectively such external and uncontrollable events (Taleb et al. 2009). Kaplan and Mikes (2012) suggest that organizations should qualitatively distinguish preventable,

strategic, and external risks in their approach to effective RM processes. Preventable risks are internal controllable risks arising in routine operational processes, due to internal problems related with, for example, budgeting, human resources, or project management; these preventable risks should be avoided through mechanisms like automation or treated through rules and internal control monitoring. Strategic risks are incurred when seeking to increase performance to maximize value and depend on strategic objectives. Managing these risks requires open risk discussions and cost-benefit analyses for reducing the likelihood of unfavorable risk events or mitigating related outcomes. Finally, an alternative approach is required for external risks, which are non-preventable risks that arise externally to strategy and operations and are beyond the influence and control of the organization, such as political, geopolitical, and environmental changes and natural disasters. As typically unlikely and unpredictable risks, RM should focus on their potential impact and on how to best mitigate their effects should they occur (Kaplan and Mikes 2012).

Technological Developments for Risk Management

Building agile and flexible RM tools and techniques is key to respond quickly to current market dynamics. Technological advances allow for closer and more realistic measurement of risk, using algorithms and probability models for risk evaluations and monitoring on a real-time basis. More risk data being monitored by complex and statistical systems enables to identify and focus on high-priority risks. Rethinking how risks can be identified, assessed, and monitored by means of emerging technologies, such as robotic process automation (RPA), big data, the cloud, and artificial intelligence (AI), will also change the way risk is being managed. RPA, by automating repetitive tasks, will free up risk managers for more strategic added-value work. The emergence of big data, diversified types of data characterized by high volume, velocity, and variability, largely increased the potential to identify and monitor

multiple risks near real time, potentially using cloud solutions to access the large resources (from storage to computing power) required to explore that data. This exploration will be driven by AI, which will enable predictive analytics and insights by modeling future scenarios for testing risk hypotheses, drawing upon the increasingly large amounts of information available.

However, digital initiatives in a world of more and more data and more automation also require managing the risks of sophisticated cyberattacks, putting security and confidentiality at stake. Over recent years, cyber-risks have increased in terms of impact and likelihood, leading to theft of data and negative impact on operations (World Economic Forum 2019). Risks like biases in AI also expand the list of risks to be managed. Another challenge raised by big data to RM is information overload. With the proliferation of data, RM needs to adapt (COSO 2017), and automated monitoring solutions should be adopted.

Alignment of the Right Talent to Risk Management

To better manage risk, the risk of competence and talent needs to be considered in connection with RM. New skills are likely to be needed, such as technological, risk factor data analytics, use of exploratory multivariate statistics, visualization tools and predictive analysis tools, and cyber and privacy skills, as well as critical thinking. Given the velocity of risk, a healthy level of intellectual curiosity will also be required (Ernst & Young 2018).

Summary

RM is much more than appointing a Chief Risk Officer and identifying or eliminating risks. It is also neither just a compliance issue based on rules (Kaplan and Mikes 2012) nor a reactive approach to risks. It is a culture, capabilities and practices put in place to identify and assess all types of risks and define priorities and strategies for eliminating

or mitigating them, in particular those highly likely, high-impact, and high-velocity risk events. The aim is to create or preserve value or avoid losses, aligned with the tone set by the defined risk appetite and tolerance.

Risk should be managed to achieve strategy and business objectives, rather than as purely individual risks (COSO 2017), but the potential impact of external risks should not be ignored (Kaplan and Mikes 2012). Different analytic approaches should be applied to preventable and non-preventable risk events. The implementation of new technologies and embedded RM systems makes risk identification, evaluation, prioritization, and monitoring more effective. Conducting continuous RM on a real-time basis is a high priority in the current hyper-volatile and hyper-connected environment, to ensure an agile approach to predict and respond to increasingly high-velocity risks.

Cross-References

- [Economic Sustainability](#)
- [Environment, Social, and Governance \(ESG\)](#)

References

- Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2009). *Enterprise risk management – Understanding and communicating risk appetite*. <https://www.coso.org>. Accessed 19 Aug 2019.
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). (2017). *Enterprise risk management – Integrating with strategy and performance*. New York: COSO.
- Ernst & Young. (2018). How can you turn digital risk into a source of competitive advantage. https://www.ey.com/en_gl/digital/how-can-you-turn-digital-risk-into-a-source-of-competitive-advan. Accessed 19 Aug 2019.
- Kaplan, R. S., & Mikes, A. (2012). Managing risks: A new framework. *Harvard Business Review*, 90(6), 1–19.
- Taleb, N. N., Goldstein, D. G., & Spitznagel, M. W. (2009). The six mistakes executives make in risk management. *Harvard Business Review*, 87(10), 78–81.
- UNPRI. (2019). Principles of responsible investment. <https://www.unpri.org/download?ac=6303>. Accessed 19 Aug 2019.
- World Economic Forum. (2019). *The Global Risks report 2019* (14th ed.). Geneva: World Economic Forum.

Risk Management (Environmental Risk and Social Risk) and CSR

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Synonyms

Corporate Social Responsibility (CSR); Critical CSR; Environment; Environmental-Social-Governance (ESG) Criteria; Risk; Socially responsible investment; Society; Stakeholders

Introduction

Corporate Social Responsibility (CSR) and Risk Management consist two relatively modern developing trends in business administration, which are not irrelevant and independent from each other. CSR is a strategic issue for every big corporation worldwide since the interest shown by both consumers and investors is big. Proportionally, dealing with corporate risk demands the occupation of specialized workforce since it is commonly acceptable that a good corporate fame could be destroyed easily in seconds due to environmental omissions and social oversights in the era of globalization. Thus, Risk Management and CSR are fields that attract the interest of managers, investors, banks, media, consumers, and rest stakeholders of modern firms and their in-between interactions could be examined bearing in mind the needed course towards sustainability for every company.

Risk Management and Globalization

Globalization has created an environment with many chances for entrepreneurship, although it is characterized by complexity, uncertainty, and riskiness. It seems that globalization has operated as catalyst for the increase of risk factor in

international business because (a) the enormous international competition has created very big group of companies that are consisted by several unlike units which do not know how to cooperate with consistency, (b) the velocity of spread for information, corporate scandals and rumors, is remarkable due to technology leapfrogging, and (c) the managing of huge organizations is often based on a central system of administration that misses local particularities (Kytte and Ruggie 2005: 5–7).

Thus, there have been formed corporate groups with interdependencies and hidden weak points among their affiliate companies, which are aggregated in a complex global business environment where uncertainty challenges decision-making process. The network-based operating models must include all stakeholders to develop a complete risk management system. These stakeholders have the means to achieve greater level of connectivity nowadays than in recent past, and finally additionally to consumers and investors, stakeholders like employees, nongovernmental organizations, local communities, politicians, regulators, suppliers, plus media create a complicated system of stakeholders' relationship that every modern company has to manage knowing that this equals with risk management (Kytte and Ruggie 2005).

From a corporation point of view, a social or environmental risk comes up from its own behavior or from other's actions who are somehow involved with it; thus, a sort of direct or indirect responsibility could be attributed to the corporation. Stakeholders could detect these points of friction between their interests and companies interests and they will try to press the firm for behavioral changes. These points of friction should be treated as vulnerabilities for the company itself, and thus, this kind of social risk should be included in decision-making. A well-established CSR policy that practically improves corporate processes and functions could be a mechanism to mitigate disputes between a company and its stakeholders.

Companies in the USA, Europe, and Japan have already a good knowledge of their stakeholders. However, nowadays, their networks are

global and often the central administration ignores the interests, the sensitivities, and the interests of specific groups of stakeholders. Possibly such points of friction can arise where there are political jurisdictions with weak regulatory frameworks and means of enforcement, increased fraud and corruption, and poor provision of social services. As bigger and more well-known a firm is, the better for a stakeholders' group to be opposed and bring their issues in public. The idea of civil society covers the existence of voluntary and not-for-profit organizations, philanthropic institutions, nongovernmental organizations (NGOs), activists' groups, community groups, local clubs, etc., that communicate each other make alliances or they maintain opposed interests and even they compete to influence more than other stakeholders the same company. In any case, the possibility for protests, boycotts, negative assessments for a company in social media, etc., are examples of choices available for civil society to apply pressure (Kytle and Ruggie 2005).

CSR Dimensions

The Kennedy School of Government has defined CSR to *"encompass not only what companies do with their profits, but also how they make them. It goes beyond philanthropy and compliance to address the manner in which companies manage their economic, social and environmental impacts and their stakeholder relationships in all their key spheres of influence: the workplace, the marketplace, the supply chain, the community and the public policy realm."* (Kytle and Ruggie 2005: 9).

There is a debate regarding the influence of CSR on a company's value, stocks performance, social capital, brand capital, and marketing. Researchers and businesspeople find evidences that are controversial and contradicted. However, it seems that significant criticality is detected on the factor of communication between a company and its stakeholders. More or less a well-communicated CSR policy could yield more benefits than a more complete CSR policy with poor communication side (Albuquerque et al. 2019:

4453). CSR operates as a product differentiation strategy and should be influenced more by consumers concerns and ideas than by investors. Projects that enhance company's CSR fame will reduce the cost of equity in comparison with similar projects. Investing in companies with CSR policy of high-level limits the total riskiness of a portfolio (Albuquerque et al. 2019). Belo et al. (2012) support that companies with significant spending in brand capital, based on advertising spending, have lower stocks returns than companies that show defiance to brand capital. However, the same researchers have found that companies with more robust brand capital have higher average stock returns of 5.2% annually and finally they conclude that spending in both brand capital and physical capital shows instability. Larkin (2013) has found that companies that maintain high brand perception have higher debt capacity and resilience in periods with financial frictions that support the idea that a strong brand value limits company's risk. Lins et al. (2017) support that companies with significant social capital, based on CSR assessment, have significantly higher stock returns during the financial crisis of 2007–2009. They highlight the critical parameter of trust between these companies and their stakeholders, which comes as result of intense investments in social capital, concluding that CSR policies are a risk management tool.

Risk Management in Depth

Every company when thinking risk management should consider the concepts of threats, vulnerabilities, controls, and countermeasures. There are some factors that operate as threats for a company's course to robustness, for example, Internet hacking. Threats could be either catastrophic, random, and unpredictable like a natural disaster that could destroy critical infrastructure or slow burn that burden company's operation day by day like climate change or the rise of a new service that enters the market. The next step is a company to detect which parts of itself are vulnerable to the recognized threats. A sector in

vulnerability status could be an unstable corporate intranet. Whether the threat of Internet hacking meets the vulnerable intranet, there is a risk. In that case, a company should employ control and countermeasures to assess the vulnerability on time, to take precautionary measures by installing firewalls for example and even create a specialized IT team to take over the situation in case of a cyber-attack (Kytle and Ruggie 2005).

The mathematical equation of Risk Management could be described like below:

$$\text{Social Risk} = \text{Threat} \times \text{Vulnerability}$$

where $\text{Threat} = \text{Stakeholder} \times \text{Issue}$

We could recognize five general kinds of risk: (a) technological, (b) economic, (c) political, (d) environmental, and (e) social. Technological factor has proved to be a key element for modern competition. Technological risk embraces a wide range of risks relevant to threats to automated systems, Internet, R & D, production lines, usage of energy, etc. and chief information officer (CIO) is liable for it. Economic risk is about preservation of profit and development rates, stock price course, shareholders' interests, etc. and chief financial officer (CFO) is liable for it. Political risk is complex especially for international organizations because factors like geo-politics interfere and demand from a Chief Executive Officer (CEO) to keep balances among governments and political parties. Environmental risk involves issues like climate change, carbon emissions, waste management, and a Health, Safety and Environment Manager could be responsible for it, etc. Nowadays, the current legal framework for environmental preservation is complicated since there is national and international legislation like in EU, regulations that accrue from international organizations and states alliances, several certifications, prizes, fines, etc.

Social risk comprises points of friction between a company and at least one of its stakeholders. This conflict of interests has as a result the reaction from stakeholders' end, which could be expressed with the application of pressure to

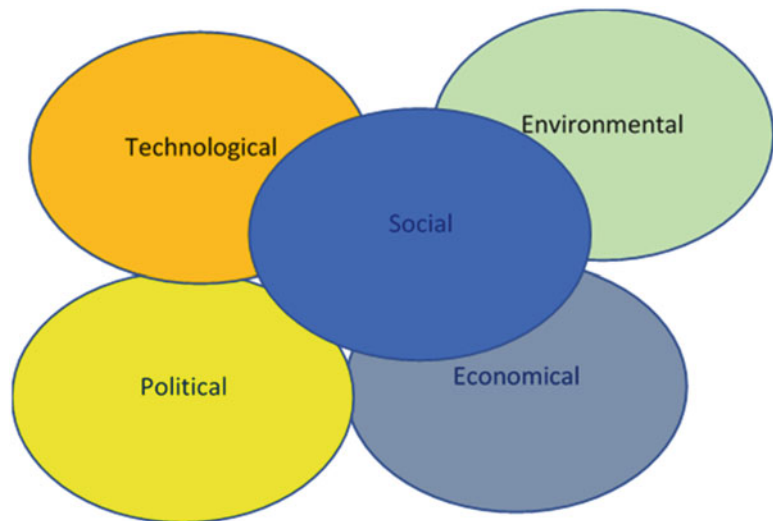
vulnerable areas for a company like its reputation. Social risk involves at least a stakeholders' group and could maintain on parallel another attribute, for example, an environmental risk could transformed to a social risk finally. The same could apply with a technological risk when new advanced production machines fail and cause accidents at workplace, for example. An issue of corruption with the involvement of a governmental officer could also become a social problem mirroring the corrosion in civil servants and their entanglement with private sector (see Fig. 1 below). Usual social problems are related to accident rates, environmental issues, discrimination at workplace, etc. A social problem has the power to extremely affect a company's profits, and thus, the rise of such an issue could imply changes in multiple sides of its operations like public relations, human resources, supply chain, marketing policy, etc. In general, as the phenomenon of civil society is getting stronger as people worldwide improve their educational level and societies approach closer democracy, companies should learn to respect sensitive issues and invent ways to deal with them by admitting, explaining, and correcting their actions.

Stakeholders as the Link Between CSR and Risk Management

There are three parameters of CSR that highlight the link between it and risk management: (a) CSR is a business need especially as a corporation is extending and is going internationally, (b) CSR spending is not a luxury or an optional activity, and (c) CSR should be connected with the core activities of a firm in order to be substantial (Kytle and Ruggie 2005) and such CSR is categorized as strategic CSR because it consists a strategic decision for an organization that decides to apply CSR principles over its functions and expects significant benefits from such strategy (Werther and Chandler 2006). CSR policy is a cornerstone for a successful risk management because it embraces the stakeholders' relationships, recognizes sensitive issues for them, receives the feedback from

**Risk Management
(Environmental Risk
and Social Risk) and CSR,**

Fig. 1 The interconnections among risk types reveal that all of them could have at least dual attribute, mainly the social attribute among others since they could affect society and cause social concerns



the interaction of the company with them, and finally operates as a countermeasure for social or environmental risk (Kytte and Ruggie 2005).

Especially regarding international firms, a corporate CSR policy supports corporate risk management because it (a) augments information, knowledge, and intelligence about what these risks are and (b) provides useful means to face them. **The key element regarding CSR and risk management is the correct recognition of stakeholders and the proper management of stakeholder relationship** (Kytte and Ruggie 2005).

When there are harmful effects for a society due to a company's actions, stakeholders react by applying punishments to it like boycotts or badmouthing, or abrogating business agreements with it. Godfrey (2005) support that stakeholders are used to be more stringent when the harmful side effects of a company's operation are accompanied by bad intentions. Active members of our civil society pay attention to the existence of mens rea and the existence of a well-established CSR policy could be proof of the lack of it. In this case, we could claim that the insurance effect has worked through the mitigation factor (Godfrey et al. 2009: 428).

The group of stakeholders is divided into two parts, primary and secondary stakeholders. As primary stakeholders are categorized these

subgroups of stakeholders that have direct relations and activities with a company. Due to that fact, they maintain legitimate claims on the company and leverage to apply strong legal pressure. On the other side, secondary stakeholders do not have direct exchanges with a company; thus, they cannot apply initially any legal or utilitarian power to it. A CSR program that targets to primary stakeholders is more likely to be considered as a continuation of business between the two parties. Such CSR activities create exchange capital among a company and its primary stakeholders and empower their trust and bonds. A CSR program that focuses on secondary suppliers, like civil society, creates moral capital since the germane activities cannot be seen so obviously as utilitarian in favor of company's side in order to serve its financial targets (Freeman et al. 2009; Godfrey et al. 2009).

CRS Benefits Risk Management

There is an interesting dialogue with scientific and business reasoning regarding the positive side effects of CSR in risk management, which embraces supply chain risk, regulatory risk, product and technology risk, litigation risk, physical risk, reputational risk, etc. (Starks 2009). Consequently, these interactions could affect a firm's

cost of capital. Benabou and Tirole (2010) found that companies with rich CSR history maintain a lower systematic risk exposure. Albuquerque et al. (2019) support that companies with robust CSR policy achieve a product differentiation strategy and aftermath a lower price elastic demand thus lowers systematic risk. Other researchers have focused on the interaction between a firm's CSR and bond credit ratings as indicators of firm's risk. There have not found strong elements that prove a direct relationship between a strong Corporate Social Performance (CSP) and credit ratings in general, but there are indications that in EU, in countries with advanced CSR mentality, companies with strong CSP enjoy improved credit ratings (Gillan et al. 2020). Jagannathan et al. (2017) claim that risks related to nature and society could have big impact on company's environment, which could be unusual, and thus, there may not be available the necessary experience to tackle them by a firm's side. Therefore, especially investors pay attention to these risks. Especially after the Paris Agreement in 2015, there has risen a strong belief that a successful CSR policy with strong CSP limits corporate risk (Hoepner et al. 2016). Consequently, funding organizations and banks examine with high interest Environmental, Social and Governance (ESG) criteria before funding a new project or provide a corporate loan.

CSR has a lot of advantages for a company since it produces reputational capital, manages reputational risk, and improves its performance by improving resources management and accumulates knowledge and information intelligence from stakeholder relationship management. The resultant reputational capital stock is useful for a company as a launch pad for new initiatives and acts as a buffer in periods of crises (R. Lizarzaburu 2014). Several studies support that CSR benefits risk management efforts of a firm by providing an insurance-like protection (Lins et al. 2017), which is extremely necessary in crisis and recession periods. It seems that especially CSR programs that are related to society and environment bring closer consumers to environmentally and socially responsible firms. It seems that most CSR programs suggest a way to preserve Corporate

Financial Performance (CFP) rather than produce it. CSR policy could increase the social capital and improve the brand of a firm preserving economic value probably without generating economic value (insurance effect), and this is valuable too, especially during difficult times (Godfrey et al. 2009: 426–427).

Corporations with intense CSR footprint achieve to maintain a better image amid a financial depression when overall trust in firms is expected to be low. CSR in general empowers the trust among a firm and its stakeholders and augments its social capital. The experience from the recent depression of 2008–2009 has offered evidences for this reasoning although this connection predates the depression (Fitzgerald 2003; Lins et al. 2017). Furthermore, the experience from the pandemic of Coronavirus and the birth of an ad hoc CSR type called Critical CSR corroborates this mutually beneficially relationship. Critical CSR as a hybrid between strategic and tactical CSR has served as a shield for the protection of employees and other stakeholders from COVID-19. The protection measures for employees like the provision of the possibility for work from home and the implementation of supportive CSR actions like the donations of equipment and money to hospitals keep a strong bond among firms, employees, governments, and citizens. Finally Critical CSR has operated as a guide for a successful risk management in coronavirus era (Panagiotopoulos 2021).

Reputational risk is one of the risks that a company could face due to malfeasance and the resultant social reaction. This risk consists a significant reduction in company's good fame, a decline in its popularity and the development of opposite feelings and impressions from consumers and civil society in general, which threatens the corporate value. Vizcaino-González (2010) has distinguished two types of reputational risk, the immediate situational reputational risk and the expected reputational risk. The first type concerns facts that are unexpected and a company must deal with them without preparation and available time, like environmental accidents and physical disasters. The second type embraces cases with a

negative footprint to environment and society, but there is time for company's management to deal with it, communicate it to stakeholders, and make corrective actions to mitigate the negative impact (Vizcaíno-González 2010).

Finally, CSR leads to Socially Responsible Investments (SRI) and SRI entails investments and operations of lower risk. We could summarize that a complete CSR policy can assist a company to:

- Exploit efficiently all its resources
- Assure a working environment of high Health, Safety, Environment (HSE) standards
- Better performance in stock market either in normal conditions or amid a period of crisis like a pandemic or a financial depression (Duchin et al. 2010).
- Avoid penalties and fines related with environmental issues, local legislation, etc.
- Create brand loyalty
- Enhance brand recognition based on green marketing
- Approach local communities and overcome difficulties through channels of communication
- Easier funding through banking sector due to Environmental, Social, and Governance (ESG) criteria (Sciarelli et al. 2021).

Summary

CSR could contribute to two categories: (a) money saved and (b) money earned (Panagiotopoulos 2020). Risk management entanglement with CSR directs us into money saved field. A firm can avoid fines and penalties, boycotted products, overexploitation of resources, scandals, and rumors. Furthermore, in case of special circumstances like an accident at the workplace, a company with developed CSR policy could be treated with less stringent attitude by its stakeholders like its customers. Furthermore, amid period of recession, there are researches with the inference that customers prefer to support

companies with good social profile. The same applies in stock market where the share of companies with advanced CSR policy performs better than those companies that have not, especially during a period of crisis.

There are three parameters of the globalized business system that affect CSR and its correlation with risk management: (a) networked operations, value chains and global economy, (b) enhancement of international networks of stakeholders, and (c) dynamic tension between and among stakeholders (Kytle and Ruggie 2005: 6). Gone is the era when a company could easily screen the edges of its value chain and control it. Globalization has brought new business opportunities and risks since international value chains are extended in several countries, with several subcontractors, sub-supply chains, and remote regions. As the multitude of such partners is augmented, each new part of its chain aggregates its own set of local stakeholders. In globalization era with a fierce international competition, a ripple and abnormality in any spot in this system of interconnected chains like labor practices or polluting accidents could be used against a company's integrity with a hit exactly in the core of its management.

There is a plethora of evidences that something has changed regarding environmental and social issues in multidimensions and sides. The existence of global issues has given the ground and the reasoning for the turn of spotlight to companies. Civil society has developed expectations for companies. Companies have developed CSR programs. Banks and consulting firms have designed ESG criteria and evaluate firms with them. Governments and coalitions of states have established ambitions, environmental targets for decarbonization, and zero emissions. The change is not unilateral. The whole world has changed and the nexus of risks for companies have changed too. The dialogue for the tangible advantages of CSR to companies will be continued; however, the interconnection between risk management and CSR either tangible or intangible remains critical for the

sustainable course of a modern company. Firms that will continue to ignore their stakeholders cannot understand in depth their risk management issues, and they cannot effectively protect their survival and progress. CSR and risk management have not only been interconnected each other, but mainly they cultivate the ties between corporations and civil society for a better common future.

Cross-References

- [Corporate Social Responsibility](#)
- [ESG](#)
- [Stakeholders](#)

References

- Albuquerque, R., Koskinen, Y., & Zhang, C. (2019). Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science*, 65(10), 4451–4469. <https://doi.org/10.1287/mnsc.2018.3043>.
- Belo, F., Lin, X., & Vitorino, M. A. (2012). Brand capital and firm value. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1805124>.
- Benabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica*, 77(305), 1–19. <https://doi.org/10.1111/j.1468-0335.2009.00843.x>.
- Duchin, R., Ozbas, O., & Sensoy, B. A. (2010). Costly external finance, corporate investment, and the subprime mortgage credit crisis. *Journal of Financial Economics*, 97, 418–435.
- Fitzgerald, N. (2003). *Rebuilding trust in business. A perspective on corporate social responsibility*. London: Unilever and London Business School.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2009). *Managing for stakeholders: Survival, reputation, success*, by R. Edward Freeman, Jeffrey S. Harrison, and Andrew C. Wicks. New Haven, Conn.: Yale University Press, 2007. Hardcover, 200 pp., \$26. ISBN: 978-0300125283. *Business Ethics Quarterly*, 19(4), 621–629. <https://doi.org/10.5840/beq200919435>.
- Gillan, S. L., Koch, A. C., & Starks, L. T. (2020, March). *Firms and social responsibility: A review of ESG and CSR research in corporate finance*.
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30, 425–445. <https://doi.org/10.1002/smj.750>.
- Hoepner, A. G. F., Oikonomou, I., Sautner, Z., Starks, L. T., & Zhou, X. (2016). ESG shareholder engagement and downside risk. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2874252>.
- Jagannathan, R., Ravikumar, A., & Sammon, M. (2017). *Environmental, social, and governance criteria: Why investors are paying attention* (No. w24063; p. w24063). National Bureau of Economic Research. <https://doi.org/10.3386/w24063>.
- Kytle, B., & Ruggie, J. G. (2005). Corporate social responsibility as risk management: A model for multinationals. *John F. Kennedy School of Government, Harvard University, Working Paper No. 10*. https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/programs/cpi/files/workingpaper_10_kytle_ruggie.pdf
- Larkin, Y. (2013). Brand perception, cash flow stability, and financial policy. *Journal of Financial Economics*, 110(1), 232–253. <https://doi.org/10.1016/j.jfineco.2013.05.002>.
- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of the American Finance Association*, LXXII(4), 1785. <https://doi.org/10.1111/jofi.12505>.
- Panagiotopoulos, F. I. (2020). *Energy management and corporate social responsibility: The case of air transportation*. University of the Aegean.
- Panagiotopoulos, I. Φ. (2021). Novel CSR & novel coronavirus: Corporate social responsibility inside the frame of coronavirus pandemic in Greece. *International Journal of Corporate Social Responsibility*, 6(1), 10. <https://doi.org/10.1186/s40991-021-00065-7>.
- R. Lizarzaburu, E. (2014). Corporate social responsibility and stakeholder strategies: An impact in risk management. *Journal of Research in Marketing*, 2(1), 98. <https://doi.org/10.17722/jorm.v2i1.22>.
- Sciarelli, M., Cosimato, S., Landi, G., & Iandolo, F. (2021). Socially responsible investment strategies for the transition towards sustainable development: The importance of integrating and communicating ESG. *The TQM Journal*, 33(7), 39–56. <https://doi.org/10.1108/TQM-08-2020-0180>.
- Starks, L. T. (2009). EFA keynote speech: “Corporate governance and corporate social responsibility: What do investors care about? What should investors care about?”. *Financial Review*, 44(4), 461–468. <https://doi.org/10.1111/j.1540-6288.2009.00225.x>.
- Vizcaino-González, M. (2010). Riesgo de reputación: Revisión teórica y aproximación a su valoración. *Revista Galega de Economía*, 19(1), 199–216.
- Werther, W. B., & Chandler, D. (2006). *Strategic corporate social responsibility: Stakeholders in a global environment*. SAGE Publications.

Risk Management and CSR

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Definition

The risk is defined as the possibility that events will occur and affect the achievement of strategy and business objectives.

To mitigate risk, companies have to develop risk management systems. Risk management systems fundamentally aim to address uncertainty in the marketplace. Their primary goal is to create controls and countermeasures that minimize or eliminate the disruption, loss, or damage to business operations and shorten the recovery time from an unwanted event, thereby reducing its impact on business.

Specifically, risk management is the process of identifying, assessing, and controlling threats to an organization's capital and earnings. These threats, or risks, could stem from a wide variety of sources, including financial uncertainty, legal liabilities, strategic management errors, accidents, and natural disasters.

The traditional risk management process is developed as follows:

- Establish a causal relationship between the presence of a threat or a group of threats and a specific undesirable outcome.
- Identify elements of the business process that are at risk of experiencing the undesirable outcome. In this sense, the term "vulnerability" is often used to describe this state. When a threat meets potential vulnerability, the business element or process is deemed to be "at risk."
- Take action to eliminate or reduced the identified risk factors, thereby reducing the presence of the associated undesirable outcome.

Corporate social responsibility is related to corporate risk management through two means:

by providing intelligence about what those risks are and by offering an effective means to respond to them. The key to both is more effectively "managing stakeholder relationship."

Introduction

Considering the increasing complexity of market and of doing business, risk management has become a fundamental part of internal control in order to identify, measure, and assess the different kinds of risks that a company has to face.

Risk management has influenced research in the area of business and society. One of the dominant themes in the field has been the study of the relationship of corporate social responsibility (CSR) to financial performance. A subset of these studies began to look at the relationship of CSR to risk. Early studies in the field were concerned about adjusting returns for risk in order to make returns comparable from firm to firm. Spicer (1978), however, did look directly at the CSR-risk relationship and found evidence for a negative correlation between the two: as CSR increased, risk decreased. Risk was sometimes included as a control variable and sometimes as a dependent or independent variable. Orlitzky and Benjamin (2001) provided a very good meta-analytic review of the literature on CSR-firm risk and found support for a negative relationship between CSR and risk.

The argument relating risk management to CSR is fairly straightforward. In fact, Bowman's (1980) article, which has spurred so much research on risk in strategic management, specifically mentions corporate social responsibility as a means for reducing business risk. According to this argument, firms with proactive CSR engage in managerial practices like environmental assessment and stakeholder management (Wood 1991) that tend to anticipate and reduce potential sources of business risk, such as potential governmental regulation, labor unrest, or environmental damage (Orlitzky and Benjamin 2001). Unfortunately, the work in the area of business and society seems to have largely ignored the advances within strategic management, which has moved to a more refined

Type	ESG-related risk or opportunity	Environmental	Social	Governance
Strategic	• Shifting customer preferences toward products that are manufactured with ethical supply chains		■	
	• Growing Investor Interest in ESG issues, resulting in proxy voting against the company on a range topics (e.g., diversity, deforestation and human rights)	■	■	■
Operational	• Increased cost of raw materials due to sustainable forestry practice requirements	■		
	• Reduction of waste and raw material costs through improved manufacturing processes	■		
	• Changing weather patterns and increased natural disasters disturbing operations and business continuity	■		
Financial	• Reputation impacts and societal concerns due to a tax avoidance strategy and lack of tax transparency		■	■
	• Investment in local content to generate sustained and inclusive growth through economic diversification and employment opportunities		■	
	• Increased taxation from carbon tax regulation	■		
Compliance	• Enhanced reporting requirements for greenhouse gas emissions and energy usage	■		
	• Inaccurate or fraudulent disclosure of emissions resulting in fines and penalties and loss of consumer trust	■		■

Risk Management and CSR, Fig. 1 Example ESG-related risks or opportunities (by COSO)

conception of the relationship of risk to management generally, as well as of its measurement.

Furthermore, nonfinancial risk management is useful to achieve corporate responsibility and social responsibility goals (Wong 2013). In fact, nonfinancial risk management tends to minimize risks and the negative effects of unsustainable practices, such as penalties, not compliance, and so on (Porter 1985, 1991; Porter and van der Linde 1995; Welford 2000; Spedding and Rose 2008).

Typical categories of risk include strategic, operational, financial, and compliance. Some organizations may include a separate category for “sustainability” or “reputational” risks. However, these risks can usually be grouped in other risk categories (e.g., climate-related risks are often operational or financial in nature). Further, reputational implications are often an impact from another type of risk, rather than a risk in and of itself (e.g., reputational damage resulting from an environmental incident or pollution). In addition, many ESG-related risks are not entirely new but rather represent an additional source to an existing risk or compound the risk’s impact or likelihood of materializing. For example, climate change

impacts often increase the risk of raw material cost fluctuations, which is an existing risk for many entities (see Fig. 1 by COSO 2018).

Key Issues

Since the early 2000s, several industry and government bodies have expanded regulatory compliance rules that scrutinize companies’ risk management plans, policies, and procedures. In an increasing number of industries, boards of directors are required to review and report on the adequacy of enterprise risk management processes. As a result, risk analysis, internal audits, and other means of risk assessment have become major components of business strategy.

Risk management standards have been developed by several organizations, including the National Institute of Standards and Technology and the ISO. These standards are designed to help organizations to identify specific threats, assess unique vulnerabilities to determine their risk, identify ways to reduce these risks, and then implement risk reduction efforts according to organizational strategy.

The ISO 31000 principles, for example, provide frameworks for risk management process improvements that can be used by companies, regardless of the organization's size or target sector. The ISO 31000 is designed to "increase the likelihood of achieving objectives, improve the identification of opportunities and threats, and effectively allocate and use resources for risk treatment," according to the ISO website. Although ISO 31000 cannot be used for certification purposes, it can help provide guidance for internal or external risk audit, and it allows organizations to compare their risk management practices with the internationally recognized benchmarks.

The ISO recommended the following target areas, or principles, should be part of the overall risk management process:

- The process should create value for the organization.
- It should be an integral part of the overall organizational process.
- It should factor into the company's overall decision-making process.
- It must explicitly address any uncertainty.
- It should be systematic and structured.
- It should be based on the best available information.
- It should be tailored to the project.
- It must take into account human factors, including potential errors.
- It should be transparent and all-inclusive.
- It should be adaptable to change.
- It should be continuously monitored and improved upon.

The ISO standards and others like it have been developed worldwide to help organizations systematically implement risk management best practices. The ultimate goal for these standards is to establish common frameworks and processes to effectively implement risk management strategies.

These standards are often recognized by international regulatory bodies or by target industry groups. They are also regularly supplemented and updated to reflect rapidly changing sources of

business risk. Although following these standards is usually voluntary, adherence may be required by industry regulators or through business contracts.

All risk management plans follow the same steps that combine to make up the overall risk management process:

- Risk identification. The company identifies and defines potential risks that may negatively influence a specific company process or project.
- Risk analysis. Once specific types of risk are identified, the company then determines the odds of it occurring, as well as its consequences. The goal of the analysis is to further understand each specific instance of risk and how it could influence the company's projects and objectives.
- Risk assessment and evaluation. The risk is then further evaluated after determining the risk's overall likelihood of occurrence combined with its overall consequence. The company can then make decisions on whether the risk is acceptable and whether the company is willing to take it on based on its risk appetite.
- Risk mitigation. During this step, companies assess their highest-ranked risks and develop a plan to alleviate them using specific risk controls. These plans include risk mitigation processes, risk prevention tactics, and contingency plans in the event the risk comes to fruition.
- Risk monitoring. Part of the mitigation plan includes following up on both the risks and the overall plan to continuously monitor and track new and existing risks. The overall risk management process should also be reviewed and updated accordingly.

Future Directions

As regards the field of risk, since 2013, the European Parliament, in the resolutions of 6 February 2013, has acknowledged the importance of business divulging information on sustainability such as social and environmental

factors, with a view to identifying sustainability risks and increasing investor and consumer trust.

In particular, the subsequent EU Directive 2014/95 represents an important step toward the spread of CSR throughout European Countries. It indicates “nonfinancial and diversity information” to be disclosed by large companies in their annual report or in a separate document.

According to Directive 2014/95/EU, the non-financial information (NFI) to be included is essentially “information to the extent necessary for an understanding of the undertaking’s development, performance, position and impact of its activity, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters, including:

- a brief description of the undertaking’s business model;
- a description of the policies pursued by the undertaking in relation to those matters, including due diligence processes implemented;
- the outcome of those policies;

- the principal risks related to those matters linked to the undertaking’s operations including, where relevant and proportionate, its business relationships, products or services which are likely to cause adverse impacts in those areas, and how the undertaking manages those risks;
- non-financial key performance indicators relevant to the particular business.”

Furthermore, recently, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the World Business Council for Sustainable Development (WBCSD) have partnered to publish a guidance to help entities better understand the potential effects of sustainability risks and to manage and disclose them effectively (COSO 2018).

As represented in Fig. 2 by the COSO, the guidance provides 5 components and 20 principles and offers, at the same time, a practical approach to entities using other risk management frameworks, such as ISO 31000 or entity-specific risk management frameworks.



Risk Management and CSR, Fig. 2 COSO’s enterprise risk management framework (by COSO)

8. INCORPORATING SUSTAINABILITY IN PRUDENTIAL REQUIREMENTS		
Work towards incorporating climate risks into institutions' risk management policies and on the potential calibration of banks' capital requirements in the Capital Requirement Regulation and Directive to take into account climate change-related risks while safeguarding financial stability and ensuring coherence with the EU taxonomy.	Issue under discussion in the on-going legislative procedure	2018-2019
The Commission will invite the European Insurance and Occupational Pensions Authority to assess the impact of prudential rules for insurance companies on sustainable investment	(NL)	Q3 2018

Risk Management and CSR, Fig. 3 Incorporating sustainability in prudential requirements (by EC, Action Plan: Financing Sustainable Growth)

Also the European Commission, in its action plan, financing sustainable growth, has given a growing importance to incorporate sustainability in the process of risk management. In this direction, the European Commission will explore the feasibility of the inclusion of risks associated with climate and other environmental factors in institutions' risk management policies and the potential calibration of capital requirements of banks as part of the Capital Requirement Regulation and Directive. The aim would be to take into account such factors, where this is justified from a risk perspective, to safeguard the coherence and effectiveness of the prudential framework and financial stability. Any recalibration of capital requirements, based on data and the assessment of the prudential risk of banks' exposures, would need to rely on and be coherent with the future EU taxonomy on sustainable activities.

In Fig. 3, the work plan of this specific initiative set out by this action plan is represented:

- Risk Management (Environmental Risk and Social Risk) and CSR
- Social Risk

References

- COSO. (2018). *Enterprise risk management – Applying enterprise risk management to environmental, social and governance-related risks*. New York: The Committee of Sponsoring Organizations of the Treadway Commission.
- Orlitzky, M., & Benjamin, J. D. (2001). Corporate Social Performance and Firm Risk: A Meta-Analytic Review. *Business and Society*, 40(4), 369–396. <https://doi.org/10.1177/000765030104000402>.
- Porter, M. E. (1985). *Competitive advantage*. New York: The Free Press.
- Porter, M. E. (1991, April). Green competitiveness. *Scientific American*.
- Porter, M.E., & van der Linde, C. (1995, September/October). Green and competitive: Ending the stalemate. *Harvard Business Review*, 120–134.
- Spicer, B. H. (1978). Market risk, accounting data and companies' pollution control records. *Journal of Business Finance and Accounting*, 5: 67–83. <https://doi.org/10.1111/j.1468-5957.1978.tb00175.x>.
- Spedding, L., & Rose, A. (2008). *Business risk management handbook - a sustainable approach*. Oxford: CIMA of Elsevier.
- Welford, R. (Ed.). (2000). *Corporate environmental management 3: Towards sustainable development*. London: Earthscan.

Cross-References

- Risk Management
- Risk Management and CSR

- Wong, A. (2013). Corporate sustainability through non-financial risk management. *International Journal of Business Management*, 14(4), 575–566.
- Wood, D. (1991). Corporate Social Performance Revisited. *The Academy of Management Review*, 16(4), 691–718. Retrieved August 11, 2020, from www.jstor.org/stable/258977.

Further Readings

- Abdullah, M., Abdul Shukor, Z., Mohamed, Z. M., & Ahamad, A. (2015). Risk management disclosure. *Journal of Applied Accounting Research*, 16(3), 400–432.
- Abraham, S., & Cox, P. (2007). Analyzing the determinants of narrative risk information in UK FTSE 100 annual reports. *British Accounting Review*, 39, 227–248.
- Abraham, S., & Shrivs, P. J. (2014). Improving the relevance of risk factor disclosure in corporate annual reports. *The British Accounting Review*, 46(1), 91–107.
- Ahmed, A. S., Beatty, A., & Bettinghus, B. (2004). Evidence on the efficiency of interest rate risk disclosures by commercial banks. *The International Journal of Accounting*, 39, 223–251.
- AICPA. (1994). *Improving business reporting. A customer focus*. New York: American Institute of Certified Public Accountants.
- Al-Maghzom, A., Hussainey, K., & Aly, D. (2016). Corporate governance and risk disclosure: Evidence from Saudi Arabia. *Corporate Ownership and Control*, 13(2), 145–166.
- Amran, A. (2006). *Corporate social reporting in Malaysia: An institutional perspective*. Unpublished Ph.D. thesis, University of Malaya, Kuala Lumpur.
- Amran, A., Bin, A. M. R., & Hassan, B. C. H. M. (2009). Risk reporting. An exploratory study of risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, 24(1), 39–57.
- Anderson, D. R., & Anderson, K. E. (2009). Sustainability risk management. *Risk Management and Insurance Review*, 12(1), 25–38.
- Aras, G., & Crowther, D. (2009). *The durable corporation: Strategies for sustainable development*. Burlington/Farnham: Gower.
- Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of risk communication. *The International Journal of Accounting*, 39(3), 265–276.
- Bowman, E. H. (1980). A risk/return paradox for strategic management. *Sloan Management Review*, 21, 17–31.
- Cabedo, J. D., & Tirado, J. M. (2004). The disclosure of risk in financial statements. *Accounting Forum*, 28(2), 181–200.
- Camilleri, M. A. (2015). Environmental, social and governance disclosures in Europe. *Sustainability Accounting, Management and Policy Journal*, 6(2), 224–242.
- Cole, C. J., & Jones, C. L. (2004). The usefulness of MD&A disclosure in the retail industry. *Journal of Accounting, Auditing & Finance*, 9, 361–388.
- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions? *European Accounting Review*, 14(1), 3–39.
- Elshandidy, T., Shrivs, P. J., & Bamber, M., et al. (2018). Risk reporting: a review of literature and implications for future research. *Journal of Accounting Literature*, 40(1): 54–82.
- European Commission. (2014). Disclosure of non-financial and diversity information by large companies and groups – Frequently asked questions, Brussels, April 15, 2014. <http://europa.eu/rapid/press-release>. Accessed June 2017.
- European Commission. (2018). Action plan: Financing sustainable growth. Communication from the Commission to the European Parliament, the European Council, The Council, The European Central Bank, The European Economic and Social Committee and The Committee of the Regions, March 8, 2018.
- Galea, C. (2009). *Consulting for business sustainability*. Sheffield: Greenleaf.
- Gray, R. H., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies: A methodological note. *Accounting, Auditing & Accountability Journal*, 8(2), 78–101.
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77–108.
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317–349.
- Hutton, R., Cox, D., Clouse, M., Gaensbauer, J., & Banks, B. (2007). The role of sustainable development in risk assessment and management for multinational corporations. *Multinational Business Review*, 15(1), 89.
- ICAEW. (2002). *Prospective financial information: Guidance for UK directors*. London: Institute of Chartered Accountants in England and Wales.
- ICAEW. (2011). *Reporting business risks: Meeting expectations*. London: Institute of Chartered Accountants of England and Wales. Retrieved from: <https://www.icaew.com/~media/corporate/files/technical/financial%20reporting/information%20for%20better%20markets/ifbm/rbr%20final.ashx>
- Kajüter, P. (2006). *Risk disclosures of listed firms in Germany: A longitudinal study*. Paper presented at the 10th financial reporting & business communication conference, July, Cardiff Business School. Unpublished.
- Kinderman, D. P. (2015). Explaining the rise of national corporate social responsibility: The role of global frameworks, world culture, and corporate interests

- (January 10, 2015). Forthcoming as, Corporate Social Responsibility in a Globalizing World, 107–146. Cambridge University Press.
- Lajili, K. (2007). Corporate Risk Disclosure and Corporate Governance. *J. Risk Financial Manag.* 2009, 2, 94–117.
- Lajili, K., & Zeghal, D. (2005). A content analysis of risk management disclosure in Canadian annual reports. *Canadian Journal of Administrative Sciences*, 22(2), 125–142.
- Linsley, P. M., & Lawrence, M. J. (2007). Risk reporting by the largest UK companies: Readability and lack of obfuscation. *Accounting, Auditing & Accountability Journal*, 20(4), 620–627.
- Linsley, P., & Shrives, P. (2005). Examining risk reporting in UK public companies. *Journal of Risk Finance*, 6(4), 292–305.
- Linsley, P., & Shrives, P. (2006). Risk reporting: A study of risk disclosure in the annual reports of UK companies. *British Accounting Review*, 38, 387–404.
- Linsley, P., Shrives, P., & Kajuter, P. (2008). Risk reporting: Development, regulation and current practice. In M. Woods, P. Kajuter, & P. Linsley (Eds.), *International risk management: Systems, internal control and corporate governance* (pp. 185–207). London: Elsevier.
- Linsmeier, T. J., Thornton, D. B., Venkatachalam, M., & Welker, M. (2002). The effect of mandated market risk disclosures on trading volume sensitivity to interest rate, exchange rate, and commodity price movements. *The Accounting Review*, 77(2), 343–377.
- Manes Rossi, F., Nicolò, G., Levy Orelli, G., & Guthrie, J. (2017a). Integrating reporting and risk disclosure in the Italian experience. In *Atti del Convegno Annuale AIDEA*, Roma, settembre 2017.
- Manes Rossi, F., Nicolò, G., & Levy Orelli, R. (2017b). Reshaping risk disclosure through integrated reporting: Evidence from Italian early adopters. *International Journal of Business and Management*, 12(10), 11–23.
- Marshall, A., & Weetman, P. (2007). Modelling transparency in disclosure: The case of foreign exchange risk management. *Journal of Business Finance & Accounting*, 34(5–6), 705–738.
- Meier, H. H., Tomaszewski, S. G., & Tobing, R. (1995). Political risk assessment and disclosure in annual financial reports: The case of Persian Gulf war. *Journal of International Accounting, Auditing and Taxation*, 4(1), 49–68.
- Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12(2), 237–256.
- Mohobbot, A. (2005). Corporate risk reporting practices in annual reports of Japanese companies. *Japanese Journal of Accounting*, 16(1), 113–133.
- Oliveira, J., Lima Rodrigues, L., & Craig, R. (2011). Risk-related disclosures by non-finance companies: Portuguese practices and disclosure characteristics. *Managerial Auditing Journal*, 26(9), 817–839.
- Raar, J. (2002). Environmental initiatives: Towards triple-bottom line reporting. *Corporate Communications: An International Journal*, 7(3), 169–183.
- Rajgopal, S. (1999). *The risk management of everything: Rethinking the politics of uncertainty*. London: Demos.
- Schrand, C., & Elliott, J. (1998). Risk and financial reporting: A summary of the discussion at the 1997 AAA/FASB conference. *Accounting Horizon*, 12(3), 271–282.
- Solomon, J. F., Solomon, A., Norton, S. D., & Joseph, N. L. (2000). A conceptual framework for corporate risk disclosure emerging from the agenda for corporate governance reform. *The British Accounting Review*, 32(4), 447–478.
- Solomon, J. F., Solomon, A., Norton, S. D., & Joseph, N. L. (2011). Private climate change reporting: An emerging discourse of risk and opportunity? *Accounting, Auditing & Accountability Journal*, 24(8), 1119–1148.
- Venkatachalam, M. (1996). Value-relevance of banks' derivative disclosures. *Journal of Accounting and Economics*, 22, 327–355.

Robin Hood Tax

► Tobin Tax

Role of For-Profit Organizations in Sustainable Development

► Role of the Private Sector in Sustainable Development

Role of Private Organizations in Sustainable Development

► Role of the Private Sector in Sustainable Development

Role of Private Sector in Achieving the Sustainable Development Goals (SDGs)

► Role of the Private Sector in Sustainable Development

Role of the Private Sector in Sustainable Development

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Synonyms

Role of for-profit organizations in sustainable development; Role of private organizations in sustainable development; Role of private sector in achieving the Sustainable Development Goals (SDGs)

Definition/Description

The expression “role of the private sector in sustainable development” refers to the role of for-profit organizations in the creation, adoption, development, and execution of public policies that promote environmental, social, and economic aims. The private sector has a critical role in sustainable development in general and the United Nations’ Sustainable Development Goals (SDGs) in particular (UN General Assembly 2015). Arguments in support the active role of the private sector in sustainable development include the improvement of innovation and technology, the provision of resources and jobs, the adoption of sustainable business models, the significance of the private sector in addressing environmental issues, and the capability, know-how, leadership, and efficiency that businesses offer. Although the degree of private sector participation in sustainable development varies because of business’s strategic decision-making, many businesses have realized the importance of the matter and the opportunities it represents and have taken measures to involve themselves in such programs.

Introduction

The development of societies can be analyzed from different perspectives. What in one view is

a “developed society” may be “underdeveloped” in another. Development is traditionally associated with economic progress. Other factors, however, have gained importance in both the definition and perception of what constitutes a developed society. For instance, environmental issues, poverty levels, and broader social problems such as inequality and injustice have become essential aspects of assessing development.

The conventional approach to development is associated with modernization theory (Baker 2006). This theory is derived from a broad concept of development which associates development with the idea of modernization: “To be modernized, a society has to become more technically sophisticated and urbanized and to make increased use of markets for the distribution of economic goods and services” (Baker 2006). The concept of sustainable development challenges this conventional approach to development – the modernization theory (Baker 2006). Sustainable development, by way of contrast, conceptualizes development more comprehensively. Sustainable development extends beyond economic, market-led growth in the near term, which favours private for profit. It extends the concept of development to include attention to the impacts of economic development on the social and natural environments and considers future generations’ interests as well (Sheehy and Farneti 2021).

The private sector is directly linked with development. It is a major economic actor in both developed and developing countries. The private sector, for instance, provides nine out of ten jobs in emergent nations (Center for Strategic & International Studies 2018). The extent to which the private sector should be involved in sustainable development, however, is a contested matter as some parties prefer state or nonprofit sector to have a greater share of resources and responsibilities.

In recent years, especially after the 2007–2008 global financial crisis and the subsequent definition of the SDGs which combined to bring attention to the issues, the private sector has been more engaged with sustainable development. Governments and international organizations have turned to the private sector to increase available funds

and obtain relevant know-how to address development issues (Scheyvens et al. 2016). Additionally, a rising number of private organizations have adopted sustainable development measures. As set out in the United Nations (UN) Global Compact, a public-private initiative of the UN, “[t]he defining feature of these organizations is a growing desire to link their policies and behaviour – rooted in accountability and transparency – with broader sustainable development priorities and objectives. Fundamentally, they recognize that what is good for societies and the planet is also good for business over the long term” (UN Global Compact 2014). Private organizations have realized that basic resources such as water, energy, and minerals are different from regular fungible commodities transacted in markets (UN Global Compact 2014). The private sector, therefore, is developing business models with broader social, economic, and environmental values in mind while seeking commercial success (Scheyvens et al. 2016).

“Private Sector” and “Sustainable Development”

Understanding the role of the private sector in sustainable development requires the identification of the concepts of “private sector” and “sustainable development” independently. The concept of the “private sector” is associated with businesses (Mio et al. 2020) or for-profit organizations (UN Global Compact 2014). It encompasses private organizations of different sizes – small, medium, and multinational companies – in various industries, such as food, mining, and pharmaceutical (Blowfield 2012; Gentry and Esty 1997). In essence, any organization that is not governmental body and is profit-focused is considered “private sector.”

“Sustainable development” is a contested and dynamic concept (Baker 2006; Mio et al. 2020; Sheehy and Farneti 2021). It is contested because there are different approaches to sustainable development, and it is dynamic because it is an

ongoing process where the desirable characteristics and targets change over time and space (Baker 2006). Baker explains that “sustainable development” is a model that “seeks to reconcile the ecological, social, and economic dimensions of development, now and into the future, and adopts a global perspective in this task. It aims at promoting a form of development that is contained within the ecological carrying capacity of the planet, which is socially just and economically inclusive. It focuses not upon individual advancement but upon protecting the common future of humankind” (Baker 2006).

Sheehy and Farneti conceptualize “sustainable development” more precisely as follows: “Its scope is primarily public international bodies and nation-states with multinational enterprises involved through initiatives such as the United Nations Global Compact. It is focused on public international development policy encompassing initially environmental goals but expanding to include social and economic goals” (Sheehy and Farneti 2021). “Sustainable development,” therefore, is concerned with broader public policies for both public and private organizations, public policies such as the SDGs. It is not designed to provide guidance for private organizations: that is the task of corporate social responsibility (CSR) and “corporate sustainability” (Sheehy and Farneti 2021).

Consequently, the role of the private sector in sustainable development refers to the role of businesses and for-profit organizations in the creation, adoption, development, and execution of public policies that promote environmental, social, and economic purposes. Today, the role of the private sector in sustainable development is captured by association with the SDGs.

Sustainable Development Goals (SDGs)

The SDGs are the culmination of decades of gatherings between world leaders and the private sector in different UN conferences: Rio de Janeiro in 1992, Johannesburg in 2002, and Rio de Janeiro

in 2012 (Rio +20) (Scheyvens et al. 2016). The main antecedents of the SDGs are the Global Compact, which engages businesses to identify and promote corporate practices built upon universal principles (Ruggie 2002), and the Millennium Development Goals (MDGs), which set eight goals promoting sustainable development (Mio et al. 2020).

In 2015, the UN adopted the 2030 Development Agenda and the SDGs (UN General Assembly 2015). The Agenda refers to a global “plan of action” to achieve the SDGs by 2030 (Mio et al. 2020; Rashed and Shah 2021; Van Zanten and Van Tulder 2018). The 17 SDGs are no poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation, and infrastructure; reduced inequality; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice, and strong institutions; and partnerships to achieve the goals.

These 17 SDGs address the “triple bottom line” – social, environmental, and financial aspects – of development (Scheyvens et al. 2016). The SDGs, as Van Zanten and Van Tulder note, “are more than a wish list. They are an intergovernmental agreement – based on multi-stakeholder engagement processes – that urges companies to help solve developmental challenges” (Van Zanten and Van Tulder 2018).

Of particular importance is Goal 17, “partnership to achieve the goals,” because it expressly incorporates the participation of other actors, including the private sector, in achieving the SDGs and, consequently, global sustainable development. One of the targets of Goal 17 is to “[e]ncourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships” (Florini and Pauli 2018).

The SDGs constitute the most important global effort to include businesses in the deliberation, development, and adoption of sustainable

development. According to Scheyvens et al., “[t]he close involvement of the private sector in the SDG process reflects a conscious shift in the past decade that has seen the private sector become more entwined in the world of development policy and planning” (Scheyvens et al. 2016). Although the SDGs are addressed to all actors in society – governments, civil society, NGOs, and nonprofit organizations – the private sector is a central actor in the achievement of the SDGs (Mio et al. 2020).

Importantly, there are other non-UN initiatives promoting the private sector participation in sustainable development. This list includes the CERES Principles, the ICC Business Charter for Sustainable Development, and the OECD Guidelines for Multinational Enterprises (Scheyvens et al. 2016).

What Is the Role of Private Sector in Sustainable Development?

The private sector has a critical role in sustainable development in general and the SDGs in particular (Mio et al. 2020; UN Global Compact 2014; Van Zanten and Van Tulder 2018). The main arguments that explain why the role of the private sector is critical in achieving sustainable development are the following:

1. Innovation and technology (Denoncourt 2020; Garcia 1997; Rashed and Shah 2021; Scheyvens et al. 2016). Businesses, unlike other actors, have the economic capacity and the competitive drive to innovate (Denoncourt 2020; Garcia 1997). Innovation and cutting-edge technologies are fundamental to address unmet needs that prevent sustainable development.
2. Provision of resources and jobs (Scheyvens et al. 2016; Rashed and Shah 2021). The private sector is the primary source of employment and wealth, fundamental factors for the development of countries and the elimination of poverty.

3. Social entrepreneurship (Blowfield 2012; Garcia 1997). Beyond a generator of resources and jobs, the private sector can design business models that are both commercially viable and beneficial to the poor (Blowfield 2012).
4. Environmental matters (Rashed and Shah 2021; Shepherd and Patzelt 2017). Particularly, businesses can help preserve ecosystems, neutralize climate change, decrease environmental degradation and deforestation, improve farming practices, provide more access to freshwater, and maintain biodiversity (Shepherd and Patzelt 2017).
5. Capability (Gomez-Echeverri 1997; Rashed and Shah 2021; Sachs 2012). The private sector provides the worldwide reach and massive capacity required to reach large-scale solutions (Sachs 2012).
6. Know-how (Berrone et al. 2019; Rashed and Shah 2021; Scheyvens et al. 2016). Businesses have technical, specialized expertise and knowledge related to specific industry sectors that can be used to improve sustainable development (Berrone et al. 2019).
7. Leadership (Scheyvens et al. 2016). The trend is that businesses have a more directive and governance function in global sustainable development (Scheyvens et al. 2016).
8. Efficiency (Faulkner 1997; Panayotou 1997). According to Faulkner, “[t]he private sector has financial, technological, and management resources as well as a proven track record of providing lower production costs, delivering services more efficiently, maintaining capital equipment at a higher standard, making decisions faster than public bureaucracies, and offering consumers greater choice” (Faulkner 1997).

The degree of involvement of the private sector in sustainable development may vary. Michael Blowfield argues that the private sector can be considered a development tool or a development agent (Blowfield 2012). As a development tool, businesses have a positive impact on development due to their economic contribution. As development agents, they are responsible for enabling or preventing development. “And whereas the

business-as-usual approach to development emerges from managerial calculations related to costs, returns and competition, business as a development agent is also motivated by stakeholder concerns, pressures and demands” (Blowfield 2012). Although the private sector is not obliged to be a development agent, many businesses have adopted this role voluntarily (Blowfield 2012; Scheyvens et al. 2016).

The active role of the private sector in sustainable development does not undermine or replace the role of governments and other actors (Gomez-Echeverri 1997; Scheyvens et al. 2016). The role that these actors play in the achievement of sustainable development is, however, considered fundamental. For instance, under the SDGs, “businesses, governments and civil society actors are equally called upon to pursue a more sustainable path forward” (Scheyvens et al. 2016). Multiple authors have argued that the best, most efficient way to address the issues that hinder sustainable development is a partnership between the government and the private sector (Faulkner 1997; Gomez-Echeverri 1997).

Various examples of business engagement with the SDGs can be seen in studies such as Rahdari et al.’s study of sustainability in global supply chains (Rahdari et al. 2020) and Sheehy et al.’s study of the use of sustainability standards in retailers in the Asia-Pacific (Sheehy et al. 2021).

Summary

The role of the private sector in sustainable development refers to the role of private sector, for-profit organizations, in the creation, adoption, development, and execution of public policies that promote environmental, social, and economic purposes. The role of the private sector in sustainable development is generally associated with the 17 SDGs. It has been argued that the private sector plays a crucial role in achieving these goals. Several reasons substantiate this position. While today the private sector is not compelled to take steps toward sustainable development, many businesses have voluntarily adopted practices that

improve the “triple bottom line” of sustainability broadly conceived.

Cross-References

- ▶ [Corporate Sustainable Innovation](#)
- ▶ [Sustainable Business Model](#)
- ▶ [Sustainable Business Solutions](#)
- ▶ [Sustainable Companies](#)
- ▶ [Sustainable Development Goals \(SDGs\)](#)
- ▶ [Sustainable Entrepreneurship](#)
- ▶ [Sustainable Performance](#)
- ▶ [United Nations Agenda 2030 on Sustainable Development Goals, The](#)

References

- Baker, S. (2006). *Sustainable development*. New York: Routledge.
- Berrone, P., Ricart, J. E., Duch, A. I., Bernardo, V., Salvador, J., Piedra Peña, J., & Rodríguez Planas, M. (2019). EASIER: An evaluation model for public-private partnerships contributing to the sustainable development goals. *Sustainability*, 11(8), 2339–2364. <https://doi.org/10.3390/su11082339>.
- Blowfield, M. (2012). Business and development: Making sense of business as a development agent. *Corporate Governance*, 12(4), 414–426.
- Center for Strategic & International Studies. (2018). The role of the private sector in achieving the Sustainable Development Goals (SDGs). <https://www.csis.org/events/role-private-sector-achieving-sustainable-development-goals-sdgs>
- Denoncourt, J. (2020). Companies and UN 2030 sustainable development goal 9 industry, innovation and infrastructure. *Journal of Corporate Law Studies*, 20(1), 199–235. <https://doi.org/10.1080/14735970.2019.1652027>.
- Faulkner, P. C. (1997). Engaging the private sector through public-private partnerships. In L. Gomez-Echeverri (Ed.), *Bridges to sustainability: Business and government working together for a better environment* (pp. 157–173). New Haven: Yale University.
- Florini, A., & Pauli, M. (2018). Collaborative governance for the Sustainable Development Goals. *Asia & the Pacific Policy Studies*, 5, 583–598. <https://doi.org/10.1002/app5.252>.
- Garcia, L. E. (1997). Sustainable development and the private sector: A financial institution perspective. In L. Gomez-Echeverri (Ed.), *Bridges to sustainability: Business and government working together for a better environment* (pp. 130–141). New Haven: Yale University.
- Gentry, B. S., & Esty, D. C. (1997). Private capital flows: New and additional resources for sustainable development. In L. Gomez-Echeverri (Ed.), *Bridges to sustainability: Business and government working together for a better environment* (pp. 18–45). New Haven: Yale University.
- Gomez-Echeverri, L. (1997). The private sector as a panacea and other myths. In L. Gomez-Echeverri (Ed.), *Bridges to sustainability: Business and government working together for a better environment* (pp. 174–184). New Haven: Yale University.
- Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. *Business Strategy and the Environment*, 29, 3220–3245. <https://doi.org/10.1002/bse.2568>.
- Panayotou, T. (1997). The role of the private sector in sustainable infrastructure development. In L. Gomez-Echeverri (Ed.), *Bridges to sustainability: Business and government working together for a better environment* (pp. 174–184). New Haven: Yale University.
- Rahdari, A., Sheehy, B., Khan, H.-U.-Z., Sepasi, S., Braendle, U., & Rexhepi, G. (2020). Exploring global retailers' corporate social responsibility performance. *Helyion*, 6(8), 1–13.
- Rashed, A. H., & Shah, A. (2021). The role of private sector in the implementation of sustainable development goals. *Environment, Development and Sustainability*, 23, 2931–2948.
- Ruggie, J. G. (2002). The theory and practice of learning networks: Corporate social responsibility and the global compact. *The Journal of Corporate Citizenship*, 5, 27–36.
- Sachs, J. (2012). From millennium development goals to sustainable development goals. *Lancet*, 379, 2206–2211.
- Scheyvens, R., Banks, G., & Hughes, E. (2016). The private sector and the SDGs: The need to move beyond ‘business as usual’. *Sustainable Development*, 24, 371–382.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 5965. <https://doi.org/10.3390/su13115965>.
- Sheehy, B., Tuslian, W., & Lie, L. (2021). The use of international soft law for corporate social responsibility reporting in the retail industry: A study of four major retailers in the Asia-Pacific. *Canberra Law Review*, 19(1), 60–80.
- Shepherd, D. A., & Patzelt, H. (2017). *Trailblazing in entrepreneurship: Creating new paths for understanding the field*. Cham: Palgrave Macmillan.
- UN General Assembly. (2015). Resolution 70/1 adopted by the General Assembly on 25 September 2015: Transforming our world: the 2030 Agenda for Sustainable Development. https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- UN Global Compact. (2014). The role of business and finance in supporting the post-2015 agenda. <https://>

d306pr3pise04h.cloudfront.net/docs/news_events%2F9.6%2FPost2015_WhitePaper_2July14.pdf

Van Zanten, J. A., & Van Tulder, R. (2018). Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, 1, 208–233.

Rules

- [Compliance](#)

Rule of Common Good

- [Utilitarianism](#)

Rules of Conduct

- [Corporate Codes of Conduct](#)

S

SA8000 Standard

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Synonyms

SA8000:2014; Social Accountability 8000 Standard

Web Link

www.sa-intl.org

Definition

SA8000 is a voluntary international standard for auditable third-party verification issued by Social Accountability International (SAI), with the scope of advancing human rights at work.

Introduction

SA8000 is a voluntary international standard for auditable third-party verification issued by Social Accountability International (SAI), a global

nongovernmental organization founded in 1997 with the scope of advancing human rights at work. Today, the SA8000 Standard is the leading worldwide social certification standard for factories and organizations in the field of workers' rights and sustainable workplaces. The Standard is consistent with the provisions of international conventions, including the Universal Declaration of Human Rights, the International Labor Organization (ILO) conventions, and the UN Convention on the Rights of the Child. It also respects and supplements national labor laws around the world to secure ethical working conditions. The certification standard is applicable to every type of organization, regardless of its size, geographic location, or industry sector, for profit or nonprofit scope. Regular revisions are pursued, to ensure alignment with new and emergent human rights issues. At the end of 2018, over 4000 facilities across 62 countries were SA8000 certified. The Standard can help improve conditions relating to unsustainability that often derive from a global supply chains, making it possible to protect workers from a lack (or even absence) of laws as per what often prevails in developing economies.

History

In the 1980s, the phenomenon of globalization, the increasing relevance of corporate social responsibility (CSR) for the business world, and the growing demand for social justice expressed

by society led corporations to appreciate the need for improving their social and environmental accountability. In this period, voluntary disclosure of information on ethical, social, and environmental policies and practices spread, above all among large multinational enterprises (MNEs). The aim was to gain and maintain social legitimacy.

Even in the field of labor practices, leading firms began to adopt their own codes of conduct on a voluntary basis. However, because the provisions were heterogeneous across firms, different requests were directed to the supply chain from different firms, generating a confused situation or suppliers having to respond to nonconsistent technical audits from clients.

Moreover, the information disclosed by corporations – in the context of lacking independent assessments – were often considered unreliable (if not voluntarily manipulated) by stakeholders, and therefore missing their main objective to enhance the firm's reputation.

In this context, in 1994, the International Labor Organization (ILO) started a cooperative endeavor with the Council of Economic Priorities (CEP). CEP is a nonprofit research organization based in New York and London founded in 1969 and devoted to accurate and impartial analysis of the social and environmental accountability of corporations. The objective of the cooperation was to explore how to reduce the plague of child labor and it attracted the interest of important MNEs who were facing accusations in this respect. Starting from this, the initiative expanded towards the wider objective of improving working conditions through the elaboration of an international standard and involved representatives of managers and entrepreneurs, labor unions, and nongovernmental organizations (NGOs). On October 15, 1997, the standard SA8000 was first officially released by the Council on Economic Priorities Accreditation Agency (CEPAA) (which later on, in 2000, changed its designation to Social Accountability International), a multi-stakeholder nonprofit initiative, established by the CEP specifically to develop the standard. Since then, the standard has been regularly revised to maintain its leading role in a changing society. Superseding previous versions of 2001, 2004, and 2008, the

current version of the standard (the fourth) was released in 2014 (SA8000:2014).

SAI Mission and Governance

Today, SAI is a global multistakeholder standard-setting organization based in New York. Its mission is to advance human rights in workplaces. On its official website, it states “We envision a world where workers, businesses, and communities thrive together.” Consistently, SAI is committed to protecting the rights and dignity of workers through developing systems of accountability based on socially responsible standards.

The governance of SAI is based on two pillars: the Board of Directors and the Advisory Board. The Board of Directors – presently composed of 10 members – defines the main strategies of the organization and has responsibility for activities and operations. Its members have a very mixed background, coming from MNEs, NGOs, consulting firms, community interests, and governmental agencies. The Advisory Board provides directions for SAI's policies and has mainly a counseling role supporting the Board, with no responsibility for operations. It has a double soul, as approximately half of the members are affiliated with business (and some of them are currently directors in primary MNEs like Walt Disney, HP, Gucci, and Tata Steel), while the other half is affiliated with main stakeholders groups (e.g., NGOs, trade unions, socially responsible investing, governments, and academia). Both organs are supported by the Founders' Committee, comprising retired SAI Advisory Board members who have contributed exemplary services and who continue to provide their expertise, including attendance at meetings as nonvoting members.

It should be noted that SAI is the developer and publisher of SA8000, but it does not carry out auditing and certification itself. These services are performed independently by certification bodies, which have to first of all apply for accreditation. Social Accountability Accreditation Services (SAAS) is the only accreditation agency that evaluates, accredits, and monitors organizations entitled to certify the conformity of an organization to

SA8000. Emerging in 1997 as a department within SAI, since 2007 SAAS has been an independent nonprofit accreditation agency. Currently, there are only 29 accredited certification bodies entitled by SAAS to provide SA8000 certification.

Content of the SA8000 Standard and the Certification Process

The SA8000 Standard aims to provide a system of requirements to encourage organizations to apply, maintain, and develop socially acceptable and fair practices in the workplace. Compared to other accountability standards and codes designed to signal companies' commitment towards sustainability and social responsibility – like Global Compact, AccountAbility 1000 (AA1000) (see ► [“AA1000 Series of Standards, The”](#)), Global Reporting Initiative (GRI) (see ► [“Global Reporting Initiative”](#)), Fair Labor Organization (FLA) Workplace Code, and ISO 26000 (see ► [“ISO 26000 Standard”](#)) – SA8000 distinguishes itself because it is a certification standard (this means that the system has to be audited by an independent organization), it is an industry non-specific standard, and it extends to the whole supply chain of the certified firms (Gilbert and Rasche 2007; Sartor et al. 2016; Göbbels and Jonker 2003).

Indeed, SA8000 is an auditable certification standard for third-party verification modeled on ISO standards (Llach et al. 2015). Thus, for organizations to gain and maintain certification, they must comply with specific requirements,

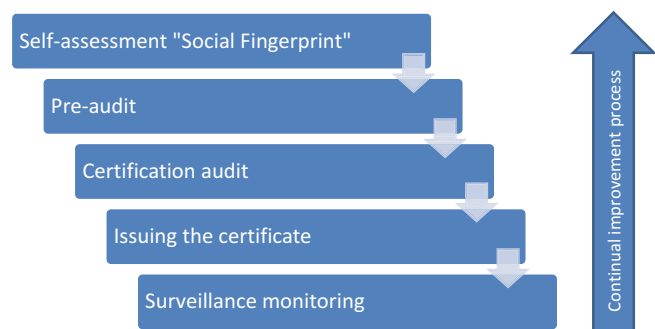
integrating them into their management practices, but also demonstrating to be able to go beyond, adopting a management system directed towards continuous improvement of performance.

Even if the requirements in terms of workplace conditions and management system have to be met by organizations, certification is only available per specific worksite. This means that individual factories are monitored and certified for compliance with the Standard, rather than a company: to be certified, every facility must be audited.

The certification process is illustrated in Fig. 1. The first step in the SA8000 certification process is a management system self-assessment undertaken by the organization. SAI released a specific online tool called Social Fingerprint which helps to evaluate if an organization is ready to apply for certification. Social Fingerprints evaluates the maturity level of an organization management system in ten areas considered most critical to social performance (e.g., risk identification and assessment, monitoring, external verification, and stakeholder engagement), giving, as a result, an overall ranking on a scale from 1 to 5 and also identifying areas for improvement.

If the organization considers itself mature enough to pursue the certification, it selects one among the accredited certification bodies and starts the evaluation process. The certification body – after visiting the facility – generates a preaudit report with a list of corrective measures and improvements required to obtain certification. After the organization has put in place corrective actions, the actual certification audit takes place, verifying compliance with the Standard. If the

SA8000 Standard,
Fig. 1 SA8000
certification process



organization fits the requirements, it is granted SA8000 certification. Hereafter, periodic surveillance audits are conducted at least every 6 months. The certification expires after 3 years, and then facilities must be again subjected to the full certification process to become recertified.

The SA8000 requirements are mainly derived from principles expressed in international conventions such as the International Labor Organization Conventions, the United Nations Conventions on the Rights of the Child, and the UN Declaration of Human Rights. The Standard comprises three main documents:

- (a) The SA8000:2014 Standard presents the intent and scope of the standard itself, the normative elements and definitions adopted, and the social accountability requirements.
- (b) The SA8000 Performance Indicator Annex contains the minimum performance expectations of a SA8000 certified organization.
- (c) The SA8000 Guidance Document offers support for both organizations and auditors to interpret and implement the SA8000 requirements, providing examples and methods for verifying compliance.

The requirements of the Standard are grouped in eight issues, plus the obligation of a management system driving towards continuous improvement in all areas of the Standard:

- 1. Child Labor
- 2. Forced and Compulsory Labor
- 3. Health and Safety
- 4. Freedom of Association and Right to Collective Bargaining
- 5. Discrimination
- 6. Disciplinary Practices
- 7. Working Hours
- 8. Remuneration
- 9. Management System

For each requirement, the SA8000 Standard provides general principles of fair treatment of workers and minimum performance expectations.

It should also be noted that SA8000 also involves the supply chain, as the organization

shall conduct due diligence on all its suppliers, subcontractors, and subsuppliers to assure their compliance with the Standard. Here SA8000 plays the important role of ethical sourcing standard.

It is clearly stated that each certified organization shall also comply with local and national laws and, in case it is subjected to other requirements for the same issues addressed in the Standard, the most favorable provision for workers shall be applied. Given that the requirements of the Standard have the aim to ensure that basic workplace standards are met, normally the legal provisions applicable to companies in developed countries are far more restrictive, making certification of their local factories in a large part meaningless. Thus, certification is more important for two groups of companies: developed countries' firms with a global supply chain (as guarantees that all their suppliers comply with the Standard's requirements) and developing countries suppliers (as allows to demonstrate providing fair treatment of workers in their facilities, not risking the brand reputation of the client company).

The Certified Organization

In general terms, the SA8000 Standard is universally applicable to any organization, regardless of the profit or nonprofit scope and the industry, and in any country. However, it is recognized that in some specific circumstances, special challenges can arise in meeting all the Standard requirements due to industry norms and technical needs. Similarly, some countries can be considered unsuitable for hosting certifiable organizations if they do not offer enough guarantees for a reliable mechanism to enforce local laws, or if they have laws acting explicitly against the Standard.

Thus, to reduce the reputational risk of the certification and guarantee the integrity of the Standard, several specific restrictions to certification are explicitly provided and regularly updated. Currently, SA8000 certification cannot be applied to Maritime Activities, Fishing Workplaces, and Offshore Workplaces including drilling platforms and oil rigs, mainly because they have working

hours and/or remuneration systems that do not comply with the Standard requirements. Presently, there are no countries where SA8000 certification is restricted, but Myanmar and Pakistan were restricted in the past.

Table 1 presents highlights of the SA8000 certified organizations as at December 31, 2018, showing that more than 4000 facilities in 62 countries are certified, involving two million workers. Even if this seems a rather small number compared to the over one million companies and organizations in over 170 countries certified to ISO 9001 (source: www.iso.org), it should be considered that voluntary social auditing and certification still represent a niche in the business world, even if rapidly growing. Regarding size (Table 2), despite the fact that CSR disclosure is typically pursued by large companies, over 60% of the

certification is with respect to facilities with less than 250 workers. This is probably due to difficulties (and costs) in obtaining and maintaining the certification for companies with a long supply chain, often involving suppliers and subcontractors in developing countries in which complying with the standard could be very challenging. Even if MNEs tend to be relatively exposed to reputational risk, and thus could derive more benefit from certification, they show a low propensity towards adopting SA8000.

In terms of industry trends, 12.1% of certified organizations belong to the textile industry, 11.6% to apparel, 7.6% to construction, 5.9% to cleaning services, 4.1% to food, and 2.8% to metal products, with all other industries presenting much lower percentages. In particular, the first two industries represented (textile and apparel) – which together have more than 20% of the certified organizations – have been exposed to several scandals in recent decades linked to labor exploitation, forced work, and child labor in the supply chains of important MNEs. Here, SA8000 can be seen as a useful tool to limit reputational risk and improve sustainability.

The data regarding the number of SA8000 certified organizations by country (Figure 2) are quite surprising. Consistent with what could be expected given the industry-level percentages, India and China both have a high number of certified organizations (representing the second and third most certified countries, with 28% and 17% of the total number of certified organizations, respectively). These two countries are key areas of delocalization for textile and apparel MNEs companies, which are in search suppliers willing to attain/maintain an ethical outlook (Stigzelius and Mark-Herbert 2009). Thus, being certified as SA8000 can significantly help enhance the chance of local firms being chosen as a supplier by MNEs.

However, the first country by percentage is, perhaps surprisingly, Italy, which is neither a developing country nor has a high number of MNEs delocalizing in developing countries (Heras-Saizarbitoria et al. 2018). Italy's position in this respect is mainly due to the effect of particular regional incentive policies. In particular, in 2001, the Tuscany Region launched the project

SA8000 Standard, Table 1 SA8000 Standard highlights as on December 31, 2018

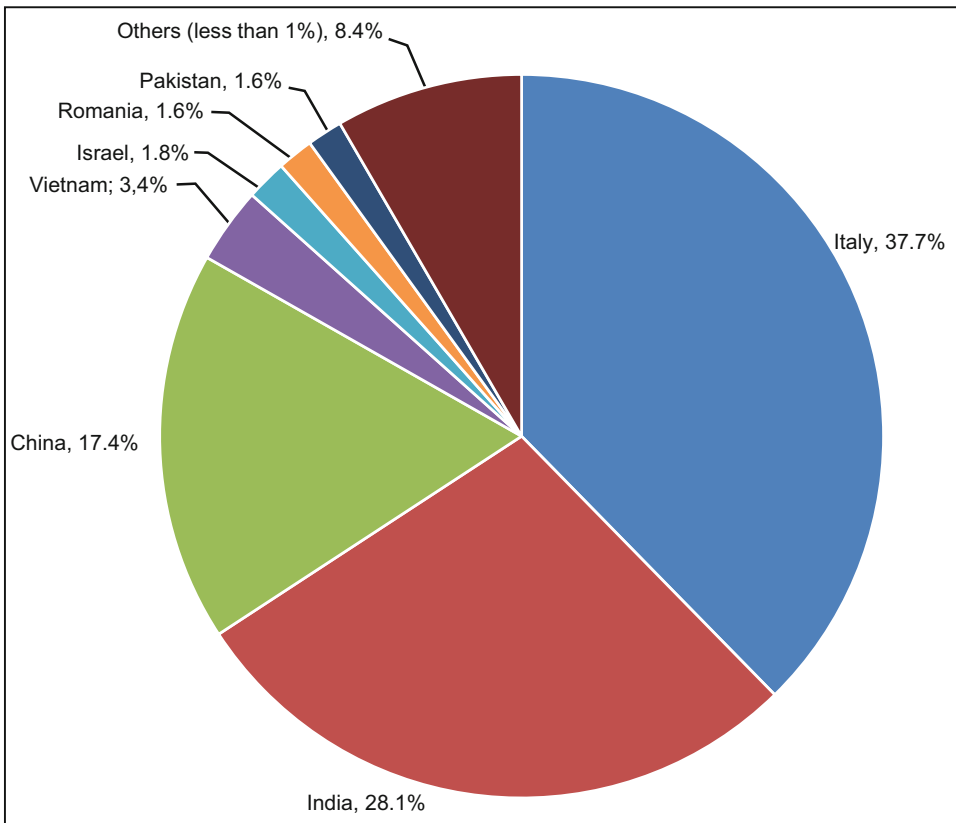
	Total number
Employees	2,060,632
Certified facilities	4042
Countries represented	62
Industries represented	56

Source: Social Accountability Accreditation Services (2019)

SA8000 Standard, Table 2 Certified facilities by size as on December 31, 2018

Workers employed	Number of facilities	% of total
1–25	660	16.3
26–100	1228	30.4
101–250	622	15.4
251–500	544	13.5
501–800	263	6.5
801–1200	183	4.5
1201–2000	124	3.1
2001–3000	97	2.4
3001–6000	77	1.9
6001–10,000	29	0.7
10,001–15,000	5	0.1
15,001+	10	0.2
Not applicable	200	5
Total	4042	100

Source: Social Accountability Accreditation Services (2019)



SA8000 Standard, Fig. 2 SA8000-certified organizations by country as on December 31, 2018. (Source: Created by the authors using data from Social Accountability Accreditation Services (2019))

“Fabbrica Ethica” (Latin for “ethical factory”) with the aim of promoting a wider spread of CSR in the business world, providing incentives to push firms to gain the SA8000, such as funds to cover the certification costs, 0.5% tax breaks, additional points in public funding calls for tenders, and in public procurement calls for tenders (Del Baldo 2015). The effect of the project has been so impactful that other Italian regions wishing to encourage and strengthen social performance in the workplace issued similar incentives generating a positive imitative effect. This made Italy the world leader for SA8000 certificated organizations – most of which are SMEs with a just national supply chain (Santos et al. 2018) – with an impressive 37.7%. However, the question is if this Standard – originally targeted for developing countries with labor-intensive industries – is

really meaningful for SMEs with a mainly local supply chain located in a country where the national laws are generally much more restrictive than the SA8000 minimum requirements?

Finally, it is notable that no other Western country represents more than 1%: Germany has just 11 certified facilities, France has only 2, the UK and USA have one each. This means that, to date, the Standards completely missed reaching the target of large MNEs.

Benefits and Criticalities of the Standard

The SA8000 offers numerous advantages to the certified firms, first of all in terms of enhancing sustainable supply chain management (Koster et al. 2019; Merli et al. 2015).

Involving the whole supply chain, the Standard can lead to stronger collaboration with suppliers and a deeper knowledge of purchasing processes. The sharing of ethical principles helps to manage the relationship between partners and facilitates both the exchange of information and conflict resolution between buyer and supplier while reducing information asymmetry.

Moreover, fair treatment of workers can enhance engagement, motivation, and productivity of human resources, with a benefit for the effectiveness of the whole firm and its competitiveness (Murmura et al. 2017).

Finally, maybe the most important expected benefits of the certification are on corporate image, and particularly in reducing the risk of being exposed to scandals linked to unethical behaviors. That makes SA8000 an instrument adoptable for protecting reputations (Miles and Munilla 2004). There are two contexts in which the Standard is most effective in improving social performance: developed countries' firms with a global supply chain and developing countries' firms with weak laws in terms of the protection of workers' rights. In most other cases, it can be effectively meaningless, except as a public relations tool.

Besides this criticality, and the anomalous geographical distribution of the certified facilities discussed before, it is possible to highlight at least four others problems, so much so that some authors suggest that the Standard qualifies as an instrument used for greenwashing (see ► [“Greenwashing”](#)), realizing a disconnect between the positive image projected to stakeholders with regard to CSR and companies' actual internal practices in this area (Boiral et al. 2017).

First, the naming itself of the Standard can create ambiguity. The name of SA8000, “Social Accountability,” implicitly suggests that the certification covers all CSR operational aspects, while it is solely focused on workplace conditions and thus could be misunderstood by stakeholders. Even if SA8000 can currently be considered the most important auditable standard in the field of CSR (Sartor et al. 2016), it must be recognized

that it just covers one of the aspects of social responsibility.

Second, the certification bodies presently accredited by SAAS are mainly driven by commercial interests. Although NGOs are eligible to become auditors, currently most of the SA8000 accredited certification bodies are for-profit firms establishing commercial relationships with their clients, which may not be trustworthy. The fact that the auditors are directly paid by the factories being audited undoubtedly raises questions of their independence.

Third, the vagueness of some prescriptions suggests a lack of transparency. A certain indeterminacy on crucial issues like minimum acceptable wages, rights to collective bargaining, and periodic surveillance audit procedures contributes to diminishing the credibility of the Standard.

Fourth, there is still a scarcity of empirical research on the effective outcomes of SA8000 adoption in terms of benefits and (eventual) detriments; thus it is difficult to express a judgment on its value in terms of enhancement of social performance and reinforcement of competitive advantage (Sartor et al. 2016).

Nevertheless, the Standard today still represents one of the most credible assessments of workers' employment conditions.

Summary

SA8000 is a voluntary international standard for auditable third-party verification issued by Social Accountability International (SAI). Today the Standard is the leading worldwide social certification standard for factories and organizations in the field of workers' rights and sustainable workplaces.

Cross-References

- [AA1000 Series of Standards, The](#)
- [Global Reporting Initiative](#)
- [Greenwashing](#)
- [ISO 26000 Standard](#)

References

- Boiral, O., Heras-Saizarbitoria, I., & Testa, F. (2017). SA8000 as CSR-washing? The role of stakeholder pressures. *Corporate Social Responsibility and Environmental Management*, 24(1), 57–70.
- Del Baldo, M. (2015). A state of the art of CSR diffusion in Italy: Limits and potentials corporate social responsibility in Europe. In S. O. Idowu, R. Schmidpeter, & M. F. Fifka (Eds.), *Corporate social responsibility in Europe* (pp. 435–468). New York: Springer.
- Gilbert, D. U., & Rasche, A. (2007). Discourse ethics and social accountability: The ethics of SA 8000. *Business Ethics Quarterly*, 17(2), 187–216.
- Göbbels, M., & Jonker, J. (2003). AA1000 and SA8000 compared: A systematic comparison of contemporary accountability standards. *Managerial Auditing Journal*, 18(1), 54–58.
- Heras-Saizarbitoria, I., Talamazzi, G., Testa, F., & Boiral, O. (2018). Drivers, obstacles and benefits of the adoption of SA8000: A survey in Italian companies. In I. Heras-Saizarbitoria (Ed.), *ISO 9001, ISO 14001, and new management standards. Measuring operations performance*. New York: Springer.
- Koster, M., Vos, B., & van der Valk, W. (2019). Drivers and barriers for adoption of a leading social management standard (SA8000) in developing economies. *International Journal of Physical Distribution & Logistics Management*. <https://doi.org/10.1108/IJPDLM-01-2018-0037>.
- Llach, J., Marimon, F., & del Mar Alonso-Almeida, M. (2015). Social accountability 8000 standard certification: Analysis of worldwide diffusion. *Journal of Cleaner Production*, 93, 288–298.
- Merli, R., Preziosi, M., & Massa, I. (2015). Social values and sustainability: A survey on drivers, barriers and benefits of SA8000 certification in Italian firms. *Sustainability*, 7(4), 4120–4130.
- Miles, M. P., & Munilla, L. S. (2004). The potential impact of social accountability certification on marketing: A short note. *Journal of Business Ethics*, 50(1), 1–11.
- Murmura, F., Bravi, L., & Palazzi, F. (2017). Evaluating companies' commitment to corporate social responsibility: Perceptions of the SA 8000 standard. *Journal of Cleaner Production*, 164, 1406–1418.
- Santos, G., Murmura, F., & Bravi, L. (2018). SA 8000 as a tool for a sustainable development strategy. *Corporate Social Responsibility and Environmental Management*, 25(1), 95–105.
- Sartor, M., Orzes, G., Di Mauro, C., Ebrahimpour, M., & Nassimbeni, G. (2016). The SA8000 social certification standard: Literature review and theory-based research agenda. *International Journal of Production Economics*, 175, 164–181.
- Stigzelius, I., & Mark-Herbert, C. (2009). Tailoring corporate responsibility to suppliers: Managing SA8000 in Indian garment manufacturing. *Scandinavian Journal of Management*, 25(1), 46–56.

Website Citations

- <http://www.cepweb.org>. Accessed 4 Mar 2019.
- <http://www.iso.org>. Accessed 4 Mar 2019.
- <http://www.saasaccreditation.org>. Accessed 4 Mar 2019.
- <http://www.sa-intl.org>. Accessed 4 Mar 2019.

SA8000 Standard II

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Synonyms

SA8000:2014; Social management standard

Definition

SA8000[®] Standard is a standard for social responsibility created by Council on Economic Priorities Accreditation Agency in 1997 (CEPAA 1997). Its main focus is on ethical employment and workplace practices. Certification according to this standard assures that a company follows rules referring to the Universal Declaration of Human Rights and International Labour Organization (ILO) conventions and labor laws established at international and national levels (→ Cross Reference: International Labour Standards) (SAI 2014, 2021). The standard's compliance requires a properly designed “management system” which is defined as an operational map (SAI 2021). The management system consists of formal internal regulations covering policies, procedures, and processes. It encompasses actions toward identification and assessment of risks; monitoring, internal involvement, and communication; complaint management and resolution; corrective and preventive actions; and training and capacity building. The management system refers to a team responsible for “social performance” but also to the management of suppliers and contractors, including external verification and stakeholder engagement. The term “social

performance” means full compliance with SA8000 (SAI 2021).

Over the years, the standard has evolved into an overall framework which helps certified organizations to demonstrate their dedication to the fair treatments of workers across industries in various countries. The standard was revised in 2001, 2004, and 2008. The current version is from 2014 (SA8000:2014). Recent documentation on this standard is available on the Social Accountability International’s website (SAI 2019).

Key Dimensions

The standard consists of eight parts (SAI 2021):

1. Child labor: refers to types of work performed by young workers, their hours of work, health and safety, and other risks which could happen during apprenticeship, as well as cooperation with interested parties, including government, local unions, and NGOs.
2. Forced or compulsory labor: refers to restrictions on freedom of movement, financial sanctions (debt bondage), overtime working hours, conditions of cooperation with contractors, and migrant workers.
3. Health and safety: applies to an organization’s actions for creating a safe and healthy workplace environment, ensuring clean and sanitary condition in facilities, and providing protective equipment for personnel and first aid. Apart from material preparation, procedural elements are also necessary, such as risk management, appointment of a senior management representative and “health and safety commitment,” training on risks, and emergency preparedness, procedures, and record-keeping.
4. Freedom of association and right to collective bargaining: includes anti-union discrimination, communication on freedom of association, noninterference in workers’ organizations (e.g., trade unions), or collective bargaining.
5. Discrimination: refers to cultural norms relating to sexual harassment and the treatment of pregnant women, migrant workers or ethnic minorities, workers with disabilities, but also due to age and trade union membership.
6. Disciplinary practices: apply to treating all personnel with dignity and respect.
7. Working hours: include the issue of overtime and work-time averaging. This also addresses fatigue-related accidents.
8. Remuneration: relates to living wage calculation, piecework, and the way how payments to workers are made (e.g., by cash, checks, etc.). It further includes specification toward apprenticeship and casualization of the workforce, covering areas including short-term contracts or homework.

Each part is described similarly in the “SA8000: 2014 Guidance Document” (SAI 2016). The inner structure of each comprises five sections. These include relevant SA8000 definitions, SA8000 requirements, background and intent, implementation guidance, and auditor guidance.

The main points to consider in each particular section are as follows:

- Child labor refers to the obligation not to engage nor support the use of child labor. Child labor is defined in reference to ILO recommendation 146. Action toward this part of standard is defined to include communication policies, employment of young workers under certain circumstances, apprenticeship or on-the-job training programs, and hazards for young workers.
- Forced or compulsory labor also includes human trafficking issues. The organization is required to consider the following issues relating to this subject: freedom of movement, withholding documents, debt bondage, training, resignation letters, and cooperation with trusted employment agencies.
- Health and safety refers to risk assessment or more generally to create a viable risk management system. The organization’s actions in this regard are noted to include identification of potential risks, existence of policies and procedures to deal with the risks, defined management leadership, undertaking actions toward

promoting health and safety, performance monitoring and improvement, and collecting evidence that organizations meet this standard.

- Freedom of association and the right to collective bargaining refers to ensuring the freedom to join a trade union, assuring worker's ability to collective bargaining without discrimination, and noninterference in the worker's intent.
- The organization should undertake actions against discrimination in selection and recruitment procedures. This includes actions to avoid interference in the rights of personnel to observe their beliefs and practices, as well as to prohibit harassment and subjecting workers to various tests, including, for instance, pregnancy, virginity, or other health tests.
- Disciplinary practices should not be enforced as a retaliation against workers and as punishment. A progressive course of action is recommended in favor of nonaggressive discipline methods.
- The working hour management system should include a working hour recording system including regulation for voluntary and non-voluntary overtime.
- Remuneration refers to a wage system which should ensure fairness, providing services for workers at cost prices.

Key Issues

The SA8000 implementations are growing in numbers. The increase is driven by such countries as India, China, Romania, and Brazil which demonstrates how the standard is spreading into large and developing markets. However, the biggest share of issued certifications comes from Italian companies (31%) (Llach et al. 2015).

Studies on implementing the SA8000 standard in developing economies show that the main driver for its implementing is the influence of customer pressure (Koster et al. 2019). The major barrier in the SA8000 implementations is perceived net performance gains.

The standard's construction is similar to other ISO principles referring to quality (ISO 9000) (→ Cross Reference: ISO 9000) or the

environment (ISO 14000) (→ Cross Reference: ISO 14000 standard). The SA8000 is similar to other certified quality or environmental management systems which encourage companies to introduce integrated management system (Santos et al. 2018).

The implementation of SA8000 is perceived as decreasing information asymmetry between management and employees which is claimed to positively impact an organization's performance but not its profitability (Orzes et al. 2017). The research findings demonstrate that socially responsible activities could bring benefits for an organization which are not observed in a company's balance sheet.

Future Directions

Specific knowledge and details on the causal decision-making processes undertaken to certify an organization according to SA8000 and the underlying values and motives are still incomplete (Koster et al. 2019). Moreover, some scholars argue that certification does not mean that internationalization of accountability standards took place but is merely a symbolic gesture to impress stakeholders (Testa et al. 2018).

The future challenge lies in influencing the supply chain to move toward SA8000, as the standard refers only to one focal company (Sartor et al. 2016). However, SA8000 is observed as a key route to improving the supply chain management by bringing together issues related with the standard like health, safety, and environmental management (Chiarini and Vagnoni 2017).

Implementation of the SA8000 compared with the ISO26000 (→ Cross Reference: ISO 26000) produces weaker impact on socially responsible strategic management (Chiarini and Vagnoni 2017). Moreover, none of the mentioned standards indicate a clear influence on financial issues. These aspects prompt questions relating to the noneconomic impacts of the SA8000 on organizational performance, as well as on society.

Furthermore, the resulting challenges in developing this standard constitute required adjustment toward different national cultures, increasing the

dialogue with stakeholders, and adaptation by small companies (Llach et al. 2015).

Cross-References

- ▶ [AA1000](#)
- ▶ [ISO 14000 Standards Series](#)
- ▶ [ISO 26000 Standard](#)
- ▶ [ISO 9000](#)

References

- Chiarini, A., & Vagnoni, E. (2017). Differences in implementing corporate social responsibility through SA8000 and ISO 26000 standards: Research from European manufacturing. *Journal of Manufacturing Technology Management*, 28(4), JMTM-12-2016-0170. <https://doi.org/10.1108/JMTM-12-2016-0170>.
- Council on Economic Priorities Accreditation Agency (CEPAA). (1997). *Social accountability 8000*. New York: CEPAA.
- Koster, M., Vos, B., & van der Valk, W. (2019). Drivers and barriers for adoption of a leading social management standard (SA8000) in developing economies. *International Journal of Physical Distribution & Logistics Management*, 49(5), 534–551. <https://doi.org/10.1108/IJPDLM-01-2018-0037>.
- Llach, J., Marimon, F., & del Mar Alonso-Almeida, M. (2015). Social accountability 8000 standard certification: Analysis of worldwide diffusion. *Journal of Cleaner Production*, 93, 288–298. <https://doi.org/10.1016/j.jclepro.2015.01.044>.
- Orzes, G., Jia, F., Sartor, M., & Nassimbeni, G. (2017). Performance implications of SA8000 certification. *International Journal of Operations & Production Management*, 37(11), 1625–1653. <https://doi.org/10.1108/IJOPM-12-2015-0730>.
- Santos, G., Murmura, F., & Bravi, L. (2018). SA 8000 as a tool for a sustainable development strategy: SA 8000 as a tool for a sustainable development strategy. *Corporate Social Responsibility and Environmental Management*, 25(1), 95–105. <https://doi.org/10.1002/csr.1442>.
- Sartor, M., Orzes, G., Di Mauro, C., Ebrahimpour, M., & Nassimbeni, G. (2016). The SA8000 social certification standard: Literature review and theory-based research agenda. *International Journal of Production Economics*, 175, 164–181. <https://doi.org/10.1016/j.ijpe.2016.02.018>.
- Social Accountability International (SAI). (2014). *Social Accountability 8000. International Standard*. <http://www.sa-intl.org/index.cfm?fuseaction=Page.ViewPage&PageID=1689>. Accessed 30 Nov 2019.
- Social Accountability International (SAI). (2016, May). *Guidance document for social accountability 8000 (SA8000®:2014)*. <https://sa-intl.org/resources/sa80002014-guidance-document/>. Accessed 30 Oct 2021.
- Social Accountability International (SAI). (2019). <http://www.sa-intl.org/>. Accessed 1 Dec 2019.
- Social Accountability International (SAI). (2021). SA8000® Standard. <https://sa-intl.org/programs/sa8000/>. Accessed 30 October 2021.
- Testa, F., Boiral, O., & Heras-Saizarbitoria, I. (2018). Improving CSR performance by hard and soft means: The role of organizational citizenship behaviours and the internalization of CSR standards. *Corporate Social Responsibility and Environmental Management*, 25(5), 853–865. <https://doi.org/10.1002/csr.1502>.

SA8000:2014

- ▶ [SA8000 Standard](#)
- ▶ [SA8000 Standard II](#)

SAM Sustainability Indices

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Synonyms

[ESG index](#); [Social responsibility index](#)

Definition

SAM Sustainability Indices are social responsibility indices that track the stock performance of the world's leading companies in terms of economic, environmental, social, and governance (ESG) criteria. These indices are benchmarks for investors who have recognized that sustainable business practices are critical to generating long-term shareholder value and who wish to reflect their sustainability convictions in their investment portfolios. The indices also provide an effective engagement platform for investors who wish to encourage companies to improve their corporate sustainability practices.

Introduction

Social responsibility indices, like traditional stock market indices, are indicators that track changes in the price of the leading stocks on the stock market, in this case, the social responsibility market. The methodology used for creating an index varies, depending on the institution that designs, manages, and publishes it.

SAM, founded in 1995, is one of the world's first asset management companies focusing on sustainable investing. In 1999, SAM launched the Dow Jones Sustainability Index (DJSI) in partnership with S&P Dow Jones Indices. SAM was renamed RobecoSAM in 2013, and together with S&P Dow Jones Indices, it launched the DJSI Diversified Family.

SAM has developed four sustainability index families: the Dow Jones Sustainability Indices (DJSI); the S&P ESG Index Family; the S&P Fossil Fuel Free Carbon Efficient Index families; and the ESG factor Indices.

Key Issues

The **Dow Jones Sustainability Indices (DJSI)** are a family of best-in-class benchmarks for investors who want to choose socially responsible companies in their portfolios (considering economic, environmental, and social criteria).

The DJSI combine the experience of an established index provider (S&P Dow Jones) with the expertise of a specialist in sustainable investing (SAM) to select the most sustainable companies from across 61 industries.

The DJSI applies a transparent, rules-based component selection process based on the companies' total sustainability scores resulting from the annual SAM Corporate Sustainability Assessment (CSA). Only the top-ranked companies within each industry are selected for inclusion in the Dow Jones Sustainability Index family. No industries are excluded from this process.

The DJSI family comprises global, regional, and country benchmarks: DJSI World; DJSI North America; DJSI Europe; DJSI Asia Pacific; DJSI

Emerging Markets; DJSI Korea; DJSI Australia; DJSI Chile; and DJSI MILA Pacific Alliance.

Every year, DJSI World invites 4,500 of the largest companies listed on the S&P Global BMI, from which 10% of the best-in-class companies in terms of economic, social, and environmental management are chosen from each industry (20% in regional indices and 30% in country indices). The selection is based on a **questionnaire** containing questions about corporate governance, environmental policies, CSR communication, human capital development, philanthropy, health and safety, engagement with stakeholders, etc.

In summary, the aspects to be assessed and included in the index cover economic, environmental, and social factors, such as the following:

Economic

- Code of Conduct
- Corporate governance
- Customer relationship management
- Financial soundness
- Investor relations
- Risk and crisis management
- Measurement systems and dashboards
- Strategic planning

Environmental

- Environmental policies and management
- Environmental performance
- Environmental reporting

Social

- Dialogue with stakeholders
- Human capital development
- Knowledge management
- Employment practice indicators
- Talent attraction and retention
- Supplier standards
- Philanthropic activities
- Social reporting

However, for investors who wish to limit their exposure to controversial activities, RobecoSAM and S&P Dow Jones Indices also offer the DJSI

Indices with exclusion criteria such as armaments and firearms, alcohol, tobacco, gambling, and adult entertainment.

The **S&P ESG Index Family** offers investors exposure to companies according to their ESG profile in the context of country-specific and regional indices (23 S&P ESG Indexes exist in 2019). The index family is based on S&P DJI ESG Scores, calculated by RobecoSAM, and based on the results of the annual SAM Corporate Sustainability Assessment (CSA). The index family includes broad market indices such as the S&P 500 ESG, S&P Europe 350 ESG, S&P Global 1200 ESG, and S&P Japan 500 ESG, designed to closely track their parent indices with a similar risk and return profile.

The S&P ESG Index Family is designed for investors wishing to integrate ESG factors into their core investments while not straying far from the overall profile of S&P broad market indices.

The **S&P Fossil Fuel Free Carbon Efficient Index families** were developed to meet investors' growing demand for low-carbon and fossil fuel-free investment vehicles. They are suitable for investors who wish to hedge against exposure to climate change-related risks, such as the risk of stranded assets, and/or who wish to reduce the carbon footprint of their portfolios and contribute to a transition to a low-carbon economy.

ESG factor Indices combine ESG with other common factors (such as low volatility or dividend yield). They are suitable for investors that want to avoid ESG-related risks in their portfolios by directing their investment toward more sustainable companies without forgetting other common factors in the investment decision.

Competitors

The **Financial Times Stock Exchange 4 Good (FTSE4Good)** was created in 2001 by the FTSE in partnership with Ethical Investment Research and Information Service (EIRIS) and UNICEF. Although it is listed on the London Stock Exchange, it is broken down into a family of indices according to geographic area (e.g., Europe, United Kingdom, United States, Japan, Australia, and Spain).

The index is managed by an independent executive board which oversees the preselection criteria based on recognized CSR standards, which considers 300 indicators on 14 topics related to the three core ESG criteria (environmental, social, and governance).

Environmental

- Climate change
- Water usage
- Biodiversity
- Pollution and resources
- Supply chain

Social

- Health and safety
- Working conditions
- Human rights and community
- Responsibility to clients
- Supply chain

Governance

- Corporate governance
- Risk management
- Fiscal transparency
- Anti-corruption

Businesses excluded include tobacco, weapons, or controversial weapons components (antipersonnel mines, nuclear weapons, chemical or biological weapons, depleted uranium, and cluster munitions).

Future Directions

Investment in companies included on sustainability indices (or socially responsible investment – SRI) have gained vital importance among large investors, as responsible policies in social and environmental matters are viewed as a reflection of good management practice by the organization both externally and internally, helping to minimize risks and prevent crises, thereby avoiding slumps in

their stock prices, and protecting shareholders.

Analysts agree that indices such as the DJSI and the FTSE4Good provide reliable verification of companies' economic social and environmental performance. Given the difficulty and stiff competition among firms to enter these indices, being listed by them conveys a positive image of solvency, which is valued by anyone looking to invest in or to do business with these companies.

For listed companies, belonging to an internationally recognized sustainability index, implies an acknowledgement of their CSR policies and enhances their reputation, helping them to secure sources of funding.

In principle, SRI performs as well as conventional investment, meaning it is possible to choose responsible companies without having to pay more. Numerous empirical studies conducted in the United States and Europe reveal that there is no significant difference between the performance of SRI and conventional investments. In nominal terms, the profitability of SRI is usually higher than that of conventional investment, but taking account the investment risk, this difference is offset, because SRI often has a higher risk (volatility) index. This conclusion was obtained by Bauer, Koedijk, and Otten (2005) among others, after analyzing data from three countries: Germany, the United Kingdom, and the United States.

Summary

Sustainability Indices are social responsibility indices that track the stock performance of the world's leading companies in terms of economic, environmental, social and governance criteria (ESG). This chapter describes SAM Sustainability Indices, their main competitors and future directions for Socially Responsible Investment (SRI).

Cross-References

- [Corporate Social Performance](#)
- [Corporate Social Responsibility](#)

- [Finance and CSR](#)
- [Socially Responsible Investment \(SRI\)](#)

References

- Bauer, R., Koedijk, K., & Otten, R. (2005). International evidence on ethical mutual fund performance and investment style. *Journal of Banking and Finance*, 29(7), 1751–1767.
- RobecoSAM: <https://www.robecosam.com/en/about-us/>

Sanctions of Social Capital

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Synonyms

[Behavioral incentives](#); [Conformity](#); [Consequences of social capital](#); [Norm enforcement](#); [Social control](#)

Definitions and Description

The three fundamental components that can be observed in most forms of social capital include: a network, a cluster of norms, values and expectations that are shared by group members, and sanctions/punishments and rewards, which help maintain the norms and networks (Halpern 2001). In a society with strong norms, transparent and effective sanctions can reduce criminal action incentives, and those who are not fearful but feel secure in their environment have better chances to develop stronger ties within their community. Woolcock and Narayan (2000) define effective norms as ones that can encourage transactions, lower transaction costs, minimize information costs, enable exchanges in the absence of written contracts, promote accountable citizens, and improve collective resource management. Coleman (1990) claimed that norms are generated to cope with the potential costs of externalities,

that is, in situations when an action has a negative (positive) impact on other parties, without being reflected in direct compensation; thus the producer of externality pays no costs (obtains no benefits) for the unintended impact of their activity. A norm addresses the issue by controlling the externality-generating behavior, and thereby introducing sanctions (rewards).

Essentially all three components of social capital (networks, norms, and sanctions) possess two principal aspects: formal – explicitly and institutionally codified – and informal – implicit and tactical. A large portion of sanctions are informal, nonetheless they are effective in maintaining social norms (Luzzati 2000). For instance, life in a neighborhood is often associated with certain kinds of informal sanctions, although it might be of a mild form but still very effective, for good and bad behaviors. Neighbors find ways to express resentment to social conduct that breaches the neighborhood's unwritten rules. Quite often, their sanction is indirect and implicit, such as through gossiping or other mild forms of reputation damaging.

A social network sets its standards by sanctioning individuals who break its norms and rewarding people who adhere to them. This particular set of sanctions and the informal, often unwritten norms are reflections of social capital. A network with strong social capital is a network with strong ties, shared values, effective communication, and is capable of supervising its norms. Very commonly, the most successful sanction is to sever from the community the social ties of an individual who breaches norms. If value lies in connections within and beyond networks, and social capital is an asset that can be obtained through those connections, then the dissolution of connections can deny someone their social value and capacity of value-generation. An example is when a monarch would banish someone from court, or from the country, as a punishment. This banishment does not simply mean a loss of contacts and wealth; it also means removing the power and capacity of that individual to create value from a social network, by denying them of their impact, reputation, or ability to grant favors. This form of sanction requires a dynamic social

network in which connections are created and dissolved quite rapidly. In such a dynamic social network, dissolving or forming social ties can be used as a sanction or reward. In a large, dynamic network, cooperators are quickly pulled into the network through tie formation, and non-cooperators are pushed out through tie dissolution. This mechanism also causes activities within a dynamic network to be amplified. If people who conform to a norm, like reciprocity, are rewarded with new connections, then the network attracts cooperative people and becomes more cooperative as a result. In contrast, for a stagnant network with few new people entering or moving through the network, reciprocity is mostly monitored by whether or not it is returned. Non-cooperators will be forced out of a dynamic social network and would struggle to join another network precisely because of this mechanism; reciprocity becomes a selective attribute. A social network with strong internal ties and multiple weak bridging ties is rich in social capital.

There are a number of typologies of sanctions. Sanctions can be identified as formal or informal: formal sanctions are imposed through formal means by an institution/organization, often documented in policy, rules or regulations, and can include fines or rewards for deviation or compliance; informal sanctions are imposed by individuals or groups without the use of a formal system, such as shaming, boycotts, gossiping, etc. Another distinction between different types of sanctions is between internal and external sanctions. Internal sanctions are consequences imposed by the individual herself, based upon compliance with social norms. For example, an individual might suffer from embarrassment, shame, or depression as a result of non-compliance and associated exclusion from social groups. External sanctions, on the other hand, are consequences imposed by others such as expulsion from a group, public humiliation, punishment by management, arrest and imprisonment, etc. Sanctions can also be defined as positive or negative: actions that meet normative expectations or conform to norms are subject to a positive sanction; failure to meet such expectations leads to punishment – also known as

negative sanction. Sanctions do not always have to be activated to be effective, as their mere threat or possibility of a sanction can influence behavior.

Posner and Rasmusen (1999) analyzed in detail the variety of sanctions that can enforce norms, as well as the degree of enforcement associated with each type of sanction. They divided sanctions into six types: automatic sanctions, guilt, shame, informational sanctions, bilateral costly sanctions, and multilateral costly sanctions. A norm can be enforced by more than one sanction. The violator's action carries its own penalty in *automatic sanction*. Norms also impose themselves in the sense that the violator is immediately punished without anybody's deliberate interference. But the punishment may not be sufficient, as the violator only recognizes the cost to himself and not to others. In the case of *guilt*, as a result of his education and upbringing, the violator feels guilty about his infringement. Guilt is an internal punishment, and thus does not depend on information being disseminated. It could be thought of as a type of automatic sanction, as it is perceived by the violator as a cost to himself, however differs from a simple automatic sanction in requiring expenditure to create. A level of effort must be made to instill the potential for feeling guilt, as well as the amount of guilt to instill. The sense of guilt may be innate, but it is also established by formal education, purposeful moral control by parents and relatives, and the examples offered by both adults and peers. As with *shame*, the violator feels that his action has lowered his value either in his own eyes or from the view of other people. In its most usual form, shame emerges when other people find out about the violation and think badly of the violator. The violator may also feel ashamed even if others do not discover the violation, knowing what they would think if they did discover it, a moral sentiment which can operate almost automatically. Shame is often a byproduct of bilateral or multilateral sanctions. When people criticize a norm violator they are trying to impose a multilateral sanction, but the uselessness of the criticisms to the violator, and thus the efficacy of the sanction, may be due entirely to shame. Shame, like guilt, is a product, in part at least, of both formal and

informal education. It is worth noting that since the attention is on the violator's status rather than on the violation, there can be shame even if there is no breach of a moral code: one can be ashamed simply of doing something stupid that is harmful to nobody, as behaving stupidly is considered failing to live up to their own self-image. Humiliation is considered as a form of shame, while shame itself is a purely external sanction for violations of the moral code. As an external sanction, shame can be felt even if other people take no action.

In case of *informational sanctions*, the act of violation conveys information about the violator that he would rather others not know, for example, a student wears casual clothing to a job interview, unintentionally signaling his lack of interest in getting the position. The sanction not only imposes severe costs on the violator, but its cost to the enforcer of sanction is actually negative, because he has removed a potential loss by avoiding dealings with this person who by his violation has revealed himself to be an unreliable transactional partner. The personal characteristic revealed by the violation, not necessarily directly related to the violation that has been made, yet still can convey valuable information. For *bilateral costly sanctions*, the violator is punished by the actions of and at the expense of just one other person, whose identity is revealed by the norm. The expense to the enforcer could be the effort needed to cause the violator disutility, or the utility that the enforcer imposing the sanction loses by punishing the violator. These require only a minimal dissemination of information; the designated punisher is the only person who needs to learn of the violation. The difficulty lies in getting the punisher to carry out the punishment, given that it is costly to him, which as mentioned earlier may require a more complex sanctioning system involving second-order internal norms, or facilitating punishment by reducing its costs. Finally, with *multilateral costly sanctions*, the violator is punished by the actions and at the expense of many other people involved. Multilateral punishments require more information than bilateral ones. The free-rider problem is exacerbated because more people are involved in executing

the sanction but ameliorated because each punisher's cost of punishment can be less for the same total deterrent.

All six sanctions have analogies in terms of rewards for obedience to norms. A reward may take the form of a feeling of a well-done job, material appreciation from one or more people, automatic benefit from coordinated interaction with another, the signaling of desirable qualities, or other people's good opinions.

Effective sanctions rest critically on the foundation of shared norms and network structure (Coleman 1988). Norms influence behavior because they become part of one's motives for action through a socialization process that begins in infancy. Compliance with standing norms is a stable, acquired disposition, irrespective of the consequences of conformity. Long-term interactions with significant others usually form such lasting dispositions, via repeated socialization, individuals learn and internalize the common values embodied in the norms. Internalization is defined as the mechanism through which people develop a psychological need or motivation for conformity with a set of shared norms. Once norms are internalized, norm-abiding conduct will be viewed as positive or acceptable, and people will usually feel guilt or shame at the possibility of a deviant behavior. When internalization is successful, external punishments will not necessarily play a role in achieving conformity and it follows that normative beliefs and actions will be consistent because individuals are compelled to conform.

Early rational choice models of conformity maintained that, because norms are often imposed by sanctions, conformity is simply considered a payoff-maximizing strategy (Rommetsveit 1955). Others' approval and disapproval act as external sanctions in a "cost-benefit model" of compliance (Axelrod 1986; Coleman 1990). To avoid negative sanctions or to attract positive sanctions, rule-complying strategies can be rationally formed. This class of rational choice models explains norms behaviorally, attributing them to behavioral patterns while ignoring expectations or values, relying heavily on sanctions as a motivating factor. Along this line, Axelrod (1986) showed the

creation of norms taking place when individuals follow a regular pattern of behavior and are punished if they act otherwise. Coleman (1990) argued similarly that a norm corresponds with a series of sanctions that serve to guide a particular behavior.

It has been shown that not all social norms involve sanctions (Hoebel 1954). Moreover, sanctioning usually functions effectively in smaller groups and in the context of repeated interactions, with known identity of participants and simple monitoring. Still, even in such cases there may be a so-called "second-order" public goods problem. That is, imposing negative sanctions on violators is in everybody's interest, but the individual who observes a violation has to decide on whether or not to punish the violator as sanction typically involves costs, and there is no guarantee that others will similarly impose a sanction when witnessing the same violation. A possible solution to this dilemma is the existence of "meta-norms" that direct the punishment of violation of lower-level norms (Axelrod 1986). It is worth noting, however, that upholding the meta-norms requires the presence of a more complex sanctioning system.

Norms are not only upheld by external sanctions. Even in cases of complete anonymity, where the risk of being found violating is almost zero, many people still tend to adhere to norms; fear of sanctions is simply not a motivating force in this case. As a result, Scott (1971) argued that cases of "spontaneous" compliance result from internalization; people who have developed an internal sanctioning system feel guilty and shameful about behavior in a deviant manner. Nevertheless, this does not mean that external sanctions never play a role in compliance: it may indeed play an important role, for example, in the initial development of a sanction. There are several mechanisms that can account for conformity once a standard is already formed.

Community norms are partially established through the existence of sanctions (Posner and Rasmusen 1999). A sanction should be of the correct magnitude; citizens will be over deterred if it is too harsh and avoid making effective actions. Similarly, a sanction should not be too

costly; the expense would largely depend on how often it has to be imposed, that is, on the frequency of the norm's infringement. Due to the informality of compliance, it is necessary that the application of a sanction not require too much information. Punishment would not exist at all if it will not be effective unless many people learn about the violation.

Norms are particularly effective devices for social control, relative to law, when individual violations are simply minor, or the difficulty of proving guilt is too great, to justify the expense of courts, police, and prisons. But the sanctions for violating norms are often too weak to dissuade all people from many offenses, while the creation of norms is too slow to provide for all the rules necessary for society's governance – therefore the laws also need to have their place. If the informal penalty for breaching a requirement is insufficient, the government can provide additional punishment via laws and regulations. Nonetheless, it is a common observation that norms are more important to the prevention of minor crime than laws although one may wonder whether the norms could long survive the absence of laws. The case of commercial norms which emerged before being imposed by courts is an example of a possible scenario. The government can often leave to the private sector the promulgation of a desired norm while offering penalties for violations once the norm has been created. Legal sanctions for violating norms are also relevant due to the fact that many individuals are impervious to informal sanctions. They lack guilt and shame, or worry for ostracism because they do not have any valuable transactional opportunities, or a reputation to risk; but they are still vulnerable to the law's tangible sanctions.

Summary/Conclusion

Network, norms, and sanctions/rewards are the three fundamental components of social capital, within which sanctions/rewards play the important role of maintaining the norms and networks. There are a number of typologies of sanctions: it can be identified as formal or informal, internal and

external, or taxonomized based on the degree of enforcement (such as automatic sanctions, guilt, shame, informational sanctions, bilateral costly sanctions, and multilateral costly sanctions). A social network establishes its shared norms and values by sanctioning individuals who violate them and rewarding people who adhere to them. A network with strong social capital is a network with strong ties, shared values, effective communication and is capable of supervising its norms, partially through the use of sanctions. A sanction should be of the correct magnitude; citizens will be over deterred if it is too severe and avoid making effective actions.

Cross-References

- [Economic Sanctions](#)
- [Social Capital, Interpretation of](#)
- [Social Capital, Measurement of](#)

References

- Axelrod, R. (1986). An evolutionary approach to norms. *American Political Science Review*, 80(4), 1095–1111.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Coleman, J. S. (1990). *Foundations of social theory*. Harvard University Press.
- Halpern, D. (2001). Moral values, social trust and inequality: Can values explain crime? *British Journal of Criminology*, 41(2), 236–251.
- Hoebel, E. A. (1954). *The law of primitive man*. Cambridge (Mass.). Harvard University Press.
- Luzzati, T. (2000). Norme sociali e sanzione: il ruolo del singolo individuo. *Economia politica*, 17(1), 53–68.
- Posner, R. A., & Rasmusen, E. B. (1999). Creating and enforcing norms, with special reference to sanctions. *International Review of Law and Economics*, 19(3), 369–382.
- Rommetsveit, R. (1955). *Social norms and roles; Explorations in the psychology of enduring social pressures*. University of Minnesota Press.
- Scott, J. F. (1971). *Internalization of norms: A sociological theory of moral commitment*. Englewood Cliffs: Prentice-Hall.
- Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer*, 15(2), 225–249.

Sarbanes-Oxley and Nonfinancial Reporting

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Synonyms

Corporate responsibility

Definition

The Sarbanes-Oxley Act (Public Accounting Reform of Investor Protection Act), commonly known as SOA or SOX, has been introduced in 2002 and it represents one of the main rules about financial reporting, corporate governance, and accountability for companies listed on NYSE. The SOX has been introduced in order to favor the achievement of the highest level of investors' trust about financial markets. In fact, it followed a period characterized for several financial scandals and irresponsible behaviors from managers. In this sense, one of the main aims of SOX was to favor the introduction of more ethical behaviors by managers.

Despite the absence of specific requirement about nonfinancial disclosure, the SOX impacts on nonfinancial information provided in traditional annual reports. Specifically, SOX has broadened the scope of accounting report to the sustainability programs provided into the strategic planning of the companies.

The SOX: A Brief History

The SOX represents the most relevant reform about financial markets after the introduction of Security Exchange Act in 1934. The introduction of the SOX followed a period characterized from several corporate scandals caused by the ineffectiveness of external and internal control on companies' activity.

One of the main phenomena related to the introduction of SOX was the Enron's bankruptcy (Burrowes et al. 2004). The financial scandal was unexpected for investors due the existence of managers' manipulation on financial data in order to increase the market value of Enron (Petrick and Scherer 2003). The bankruptcy effect was disruptive for the entire economy due the negative effects on investors' financial resources.

According to this evidence, in 2002, the US context was characterized by a high level of distrust about financial markets. In this sense, SOX impacted on managers' behaviors. In fact, as evidenced in prior studies, large part of companies' bankruptcy has been connected to abuse of position from external managers. Specifically, prior studies suggest how in that period large part of the firms was characterized from lack of control of shareholders about managers' behaviors. In order to fill this gap, the main idea behind the introduction of SOX was to redefine companies' internal organization to new operational paradigms (Sisaye 2015).

From "Corporate Responsibility" to "Corporate Social Responsibility"

Although the main aim of SOX is to preserve investors from financial frauds, the SOX impacts indirectly on nonfinancial disclosure (Ryznar and Woody 2014). This relationship is related to the SOX's provisions of an explicit connection to the concept of "corporate responsibility." Specifically, the Title III of SOX who is called "corporate responsibility" consists of a set of provisions about the contents of the traditional annual reports and financial report provided by the firms. Furthermore, Title 3 analyzes the role covered from managers, directors, and auditors in terms of code of conduct.

Nowadays, the increasing number of nonfinancial information provided by listed firms imposed for US firms to consider them in their strategies in order to be compliant with SOX. In fact, an increasing number of US firms has started to disclose nonfinancial information into their traditional communication tools (KPMG 2017) and

an increasing number of investors have started to consider the “socially responsible investment” in their financial strategies (Sparkes 2017). Furthermore, similarly to financial fraud, the recent non-financial scandals have shown how the disclosure of false nonfinancial information impacts negatively on financial markets (Du 2015).

Several studies have tried to evaluate the SOX’s effect on nonfinancial disclosure. Specifically, these studies reveal how SOX indirectly represent a way to reduce the risks of unethical behaviors of managers in nonfinancial reporting. In fact, as evidenced before, a large part of literature has shown how the absence of a set of common rules impact positively on the risks of managers unethical behaviors. Specifically, these studies highlight the existence of nonfinancial disclosure based on impression management strategies or characterized by greenwashing (Siano et al. 2017). Furthermore, empirical studies based on the US context reveal that firms interested by financial scandals adopt socially responsible practices in order to mitigate the negative effects connected to their hypocrisy (Janney and Gove 2011).

However, the comprehension of the interlinkage between SOX and nonfinancial reporting represents a complex activity. In fact, despite the theoretical implications related to internal auditors’ involvement in nonfinancial reporting practices, only few insights were collected by academics. Within this debate, the European context could represent an interesting setting due to the cross-listing’s phenomenon. In fact, European PIEs interested by Directive 2014/95/EU that operate overseas and are listed in the US market are influenced by the SOX (Litvak 2007). Furthermore, a large number of US organizations started to revise their paradigms in order to actively contribute to the sustainable development (World Economic Forum 2020). In this sense, building on the prior evidences about IFRS, the next years will be useful to understand in which way mandatory internal control systems can influence the quality of nonfinancial reporting practices.

Summary

The achievement of stakeholders’ trust represents one of the main goals for listed firms. Nowadays, the recent scenario has been characterized for several financial scandals that have impacted negatively on stakeholders’ perception about financial markets. Moreover, an increasing number of firms have started to disclose false information about their nonfinancial impacts in order to increase their legitimacy. Furthermore, in context characterized by absence of a set of common rules about nonfinancial reporting, the use of greenwashing and the abuse of impression management strategies represent two criticisms for an effective stakeholder engagement. According to this evidence, financial markets need tool able to mitigate directly or indirectly these risks. In this sense, the SOX represents an interesting tool to mitigate these risks through the provisions of a set of common rules about managers and auditors’ behaviors. However, the increasing number of nonfinancial information disclosed by listed firms on their reports and websites will increase the necessity to update the content of SOX to the new investors’ exigence.

References

- Burrowes, A. W., Kastantin, J., & Novicevic, M. M. (2004). The Sarbanes–Oxley Act as a hologram of post–Enron disclosure: A critical realist commentary. *Critical Perspectives on Accounting*, 15(6–7), 797–811.
- Du, X. (2015). How the market values greenwashing? Evidence from China. *Journal of Business Ethics*, 128(3), 547–574.
- Janney, J. J., & Gove, S. (2011). Reputation and corporate social responsibility aberrations, trends, and hypocrisy: Reactions to firm choices in the stock option backdating scandal. *Journal of Management Studies*, 48(7), 1562–1585.
- KPMG. (2017). The Road Ahead. The KPMG Survey of Corporate Responsibility Reporting.
- Litvak, K. (2007). The effect of the Sarbanes-Oxley Act on non-US companies cross-listed in the US. *Journal of Corporate Finance*, 13(2–3), 195–228.

Petrick, J. A., & Scherer, R. F. (2003). The Enron scandal and the neglect of management integrity capacity. *American Journal of Business*, 18(1), 37–50.

Ryznar, M., & Woody, K. E. (2014). A framework on mandating versus incentivizing corporate social responsibility. *Marq. L. Rev.*, 98, 1667.

Siano, A., Vollero, A., Conte, F., & Amabile, S. (2017). “More than words”: Expanding the taxonomy of greenwashing after the Volkswagen scandal. *Journal of Business Research*, 71, 27–37.

Sisaye, S. (2015). *Ecology, sustainable development and accounting*. Routledge.

Sparkes, R. (2017). A historical perspective on the growth of socially responsible investment. In *Responsible investment* (pp. 39–54). Routledge.

World Economic Forum. (2020). *Davos manifesto 2020: The universal purpose of a company in the fourth industrial revolution*.

Scared

- ▶ Spirituality in Management

Scruples

- ▶ Core Values

SDG 3

- ▶ Workplace Health Promotion

SDGs

- ▶ Economic Sustainability and Development

Seafood Production

- ▶ Fisheries

Secular Stagnation

- ▶ Sufficiency

Securitization of Nature

- ▶ Speciesism

Security

- ▶ Policy and Military Force Sustainability

Self-Development

- ▶ Eudaimonic Management

Self-Interest Rightly Understood

- ▶ Enlightened Self-Interest

Self-Management

- ▶ Social Management

Self-Reliance

- ▶ Hunger and Poverty

Self-Sufficient Communities

- ▶ Sustainable Communities

Selling Cycle for Sustainability

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Synonyms

[Selling steps](#); [The selling cycle](#)

Definition

In 2007, the Marketing and Sales Standards Setting Body (MSSSB) (see Rogers [2007](#)), the then UK national body, representing the sales profession (in addition to the marketing profession) stated that the Key Purpose of selling is:

To create, build and sustain mutually beneficial and profitable relationships through personal and organisational contact (Rogers [2007](#), quoting MSSSB, page XIX).

This is clearly beyond the simple here and now transaction that is generally understood by “selling.” A professional salesperson was expected to have competencies that involve knowing the target market, planning an effective sale, financing the sale, leading sales teams, communicating effectively, creating sales opportunities, implementing the sales cycle, supporting sales, and managing customer relationships.

Selling can apply to various situations including

- Direct selling, or face to face contact with the customer
- Retail selling, where products are offered through a shop
- Agency selling, when products and services are offered on behalf of a supplier
- Telesales, where products and services are sold directly on the telephone
- Door to door selling, which involves visiting potential customers in their homes
- B2B, businesses sell directly to other businesses

- Business to government selling, businesses develop solutions offered to government agencies and departments
- Mail order selling, when customers buy from a catalogue
- Online selling, or selling via the Internet

Introduction

Selling has, in the opinion of many, a very bad reputation as a profession, due to the unscrupulous behavior of the few, probably encouraged by an irresponsible corporate culture that may be focused on short sighted “here and now gain at any price.” Nevertheless, it has also been called the lifeblood of business. This is understandable since no company can survive if it cannot sell its products or services, either to its customers, or stakeholders (including owners, employees, authorities, local community, etc.).

Selling per se is usually reflected on the concept of sales cycle. This contains the steps that every organized sale’s person goes through. We will describe the seven steps that make up this cycle.

It starts with what has come to be known as the sales preparation stage. In this stage, the sales person identifies sales prospects, carries out the background research about the company, and determines a plan for selling to it. This is followed by the second stage, or introduction to client stage, when sales’ people introduce themselves to the client and try to set up a meeting with the targeted representative of the company. Stage 3 starts straight after the introduction but extends to subsequent meetings/communications when the sale’s person investigates the needs of the company and develops the relationship with the representative. In stage 4, the sales person gives the sale’s presentation, which would have benefited from all the previous stages. In stage 5, the sale’s person invites any feedback and objections from audiences and addresses them systematically based on the advantages the client derives from the product or service. In this stage, some “give and take” negotiations take place with a view to reach a mutually satisfactory outcome. Stage 6 is

reached when a deal has been closed. This signals the beginning of the formal relationship and the sales person is aware that honoring promises and looking after the new client is the best way to keep the relationship going.

Key Issues

As stated above, selling may not have had a very good reputation because of the unethical practice of unscrupulous sellers. However, no business can survive without selling its commodities. This brings up the question: how can professional selling be made more trustworthy? Clearly any activity can be carried out ethically or unethically and perhaps sales training should take into account underpinning values before recruiting their sales workforce. The golden rule (thou shall treat others as you wish to be treated) appears to be a contender for a foundation of ethical behavior. Hence, it is popular among business authors. Once a value foundation has been agreed, businesses need to review sources of claim of unethical behavior and integrate the learning within their salesforce training programs. If the golden rule is accepted by sales people, then they would be more willing to adopt the tricomponent model of doing business (i.e., not only focusing on making a profit but also demonstrating social and environmental responsibilities).

Once the tricomponent model of doing business is accepted, then it is important to systematically highlight the various areas where irresponsible practice may occur. A systematic way of reviewing sources of irresponsible behavior is to refer to the above sales cycle stages and identify potential problems.

For example, in stage one, the preparation stage, where the sales person identifies sales prospects, carries out the background research about the company, and determines a plan for selling to it, the responsible sales person would genuinely look if there is a need for the products being sold. He should aim to find out as much as possible about the company and how the product would benefit it: more sales, more profits, more care for

its employees, environment protection, and subsequent reputation etc.

In the second stage, the introduction of the salesman stage, the responsible salesperson will aim to be as transparent as possible about their identity, aims, and objectives.

In the third stage, or fact-finding stage, the responsible salesperson avoids adopting leading questions or misusing information given in confidence.

In the fourth, presentation stage, the salesperson should ensure that all statements or claims are true.

In the fifth, dealing with objections stage, it is important that all relevant information is provided so the client makes a decision in view of all the facts.

In the sixth, closing the deal stage, the salesperson should avoid putting any pressure on the clients and rush them into a decision that they may regret later. It is also expected that other clients in similar conditions should receive a similar deal.

Once the sale has been completed (seventh stage), it is expected that the salesperson honors all their promises, including the after-sell ones.

Finally, it is worth remembering that at times the targeted company's needs may not be as expected. In such cases, the salesperson should explain that the product may not be appropriate and, if possible, offers some alternative advice.

Future Directions

Selling is a very demanding responsibility especially as it involves a plethora of skills including selling theory, communication skills, human psychology, emotional strength, knowledge of the industry associated with the product among others. For the global companies that deal with an international clientele, there is also the need to understand local languages in addition to appreciating cultural differences, which are also colored by local politics. Although most people would sympathize with sustainability arguments, it is clear that such arguments may be located at a lower level of either company culture or economic

geographical areas. Given that disadvantaged communities may put price at the top of their concern and may miss out issue of social or environmental concerns, it seems to make sense to encourage global companies to integrate social and environmental issues as part of the design of any offer so that whatever option faces a customer there is always no threat to social or environmental issues.

The digital revolution presents both advantages and disadvantages to selling. Among the advantages are the opportunities for resourcing of prospects and relevant information about needs and speedier communications. Among the disadvantages are the easy access to all sorts of products including some that may be detrimental to social and environmental dimensions.

Perhaps it is worth noting that selling should be part of a larger marketing strategy. Indeed, if there is irresponsible selling, this may simply suggest a lack of effective marketing strategy. Marketing is about focusing on the needs of customers and offering something that adds value to the available options for meeting customers' needs. A possible problem is that a sales person focuses on the product they are selling as opposed to the marketer who focuses on addressing needs. However, if the company systematically targeted relevant groups that would benefit from their product then the sales function should be compatible with the marketing philosophy. Adversely, if selling is unethical (e.g., aggressive or irresponsible selling), then this may reflect the culture of the company irrespective of official documents.

Cross-References

- [Environmental Responsibility](#)
- [Globalization](#)
- [Marketing \(Ethics of\)](#)
- [Social Responsibility](#)

References

- Rogers, B. (2007). *Rethinking sales management: A strategic guide for practitioners*. Chichester: Wiley.

Selling Steps

- [Selling Cycle for Sustainability](#)

Semiology

- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

Semiotics

- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

Sense Making

- [Making Sense of CSR Reports: A Methodological Perspective from Semiotics](#)

Sense Making, Organizational

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Synonyms

[Enactment](#); [Meaning-making](#); [Sensemaking](#)

Summary

Sensemaking is an interdisciplinary concept drawing upon traditions of sociology, philosophy, social psychology, and organizational studies. The theory of sensemaking was developed to explain the way in which organizations create their worldviews. Sensemaking in organizations

is the process by which they make sense of their environments through a process of intervention. Organizations impose their scripts and frames on the flux of their context in order to create their environments through a process known as enactment. Conceptually sensemaking is a postmodernist approach developed to analyze and explain the process by which organizations create, apply, and maintain meaning to equivocal events and information they encounter in order to create an understanding of their environments. This entry will present a brief overview of the concept and characteristic sensemaking as developed by Karl Weick and review their implications for organization.

Introduction: Defining Sensemaking in Organizations

The concept of sensemaking when defined as the process whereby individuals and organizations give meaning to their experience of reality has a long tradition in the social sciences. Aspects of the sensemaking process have been studied and conceptualized by a number of early scholars including James in psychology (James 1890) who examined the relationship between cognition and self-consciousness and their role in objectifying reality and Dewey in philosophy (Dewey 1922) who analyzed the effect of accumulated stresses that spark reconstruction of social habit.

The key concepts of sensemaking have been developed in the work of a number of scholars including Goffman who posed the concept of frames and the process of framing as the mechanism whereby social reality is defined and acted upon by individuals (Goffman 1974). According to Maitlis and Christianson (Maitlis and Christianson 2014, p. 60), sensemaking was first comprehensively conceptually developed in the 1960s through the work of Garfinkel (Garfinkel 1967) and Weick (Weick 1979). It is Weick however who is widely credited with having first examined the implications of the concept of sensemaking for the process of organization and the management of organizations.

According to Weick organizations operate in dynamically changing, complex environments characterized as being in a state of flux (Weick 2011). In order to make this ongoing flow of information and stimuli manageable, organizations attribute significance to some features of their environment by emphasizing particular parts – either information or events – of the flow of experience. Combined, these parts yield an interpretation of their environment upon which organizations base their perceptions and expectations of changing events.

According to Maitlis and Christianson: “Sensemaking is the process through which people work to understand issues or events that are novel, ambiguous, confusing, or in some other way violate expectations” (Maitlis and Christianson 2014, p. 57). Sensemaking is the process that occurs when actors seek to reconstruct their understanding of their environments after experiencing an event that challenges their assumptions regarding the alignment between their environmental perceptions and expectations (Weick et al. 2005, p. 414). Karl Weick, a social psychologist whose theories have greatly influenced the conceptualization of sensemaking, has proposed enactment theory (Daft and Weick 1984; Weick 1969) to explain sensemaking as a four-stage process of organization consisting of (1) change, (2) enactment, (3) selection, and (4) retention (Weick et al. 2005, p. 414).

Change

Organizations constantly encounter change. Unlike ongoing change, the change indicated as the first stage in the sensemaking process is that which occurs when an organization encounters an issue, event, or situation that serves as a “trigger” or a “cue” for sensemaking (Maitlis and Christianson 2014, p. 70). A cue or triggering event is defined by its equivocality. As explained by Kudesia: “Ambiguity and equivocality differ in one important regard. Ambiguity implies that there is some ‘true’ state of the environment out there to be discovered. Equivocality suggests instead that the state of the environment must be invented: by focusing on certain pieces of information and acting on the basis of certain interpretations of that information,

organizations help invent their environments” (Kudesia 2017, p. 9).

The distinction between equivocality and ambiguity is important. Whereas ambiguity can be managed by collecting more information to reveal what is true, collecting more information can actually increase the difficulty of dealing with equivocality and require a counterintuitive process whereby the meanings of events and information are instead reduced (Weick 1979). Encountering an equivocal event therefore requires that the organization attempt to make sense of it (Drazin et al. 1999) – hence the use of the word sense in sensemaking. Sensemaking becomes a conscious process when the experience of events does not meet expectations (Weick 2001). Maitlis and Christianson have identified three types of sensemaking-triggering events: (1) environmental or organizational crisis, (2) threats to organizational identity, and (3) consciously planned intervention (Maitlis and Christianson 2014, pp. 71–76). Earlier studies have primarily analyzed sensemaking as triggered by crisis events (Meyer 1982; Milliken 1990). More recently studies of sensemaking triggered by (1) identity crisis wherein the self-consistency of an organization’s identity is felt to be challenged (Maitlis and Christianson 2014, p. 73) and (2) planned change which results either accidentally or intentionally in the understanding of an organization have been reported.

Enactment

For Weick organizations are “social structures that combine the generic subjectivity of interlocking routines, the intersubjectivity of mutually reinforcing interpretations, and the movement back and forth between these two forms by means of continuous communication. Tensions between the innovation of intersubjectivity and the control of generic subjectivity animate the movement and communication. The goal of organizations, viewed as sensemaking systems, is to create and identify events that recur to stabilize their environments and make them more predictable. A sensible event is one that resembles something that has happened before” (Weick 1995, p. 170). Organizations therefore make sense of their environments by perceiving them in a way that aligns and reinforces their understanding of them

and thus enables the prediction and expectation of future events.

Sensemaking is the process that takes place when this alignment between expectation and prediction is disrupted. Disruption leads to a process of enactment. Enactment as defined by Weick is the way in which organizations “construct, rearrange, single out, and demolish many of the ‘objective’ features of their surroundings... unrandomize variables, insert vestiges or orderliness, and literally create their own restraints as a product of their perception of events and information” (Weick 1979, p. 164).

Weick stresses the difference between enactment and reaction. This perception within Weick’s conceptualization of sensemaking can best be understood as an active and selective process whereby organizations build an “enacted environment” from events and information (Weick 1988, 1993) and not as a simple, passive reaction to changes.

Enactment involves a process of selective attention known as the bracketing of information. Organizations identify equivocal events that confound their expectations and single them out for interpretation. These bracketed instances of events or information represent gaps between perception and expectation and indicate some degree of breakdown in the organization’s worldview and lead to efforts to reduce uncertainty (Ashforth and Fried 1988; Kiesler and Sproull 1982).

Selection

Noticing and bracketing information mark the beginning of sensemaking. Once equivocal information is identified, it is subjected to selection – reduced in volume and organized into a coherent story in order to generate what Weick terms a “locally plausible story” (Weick et al. 2005, p. 414). Selection is a process of interpretation wherein the possible meanings of bracketed information are reduced in order to make it actionable.

Far from being a process of clinical objectivity, selection is influenced by the generic subjectivity of the organization as indicated by Weick, as well as by relationships of power as noted by Ocasio. For Ocasio, selection is “both a cognitive process and a political process as organizational members

struggle with the definition of the situation and the resulting choices consistent with the definition” (Ocasio 2000, p. 51).

Weick, Sutcliffe, and Obstfeld explain that: “noticing and bracketing, triggered by discrepancies and equivocality in ongoing projects, *begin* to change the flux of circumstances into the orderliness of situations” [italics original] (Weick et al. 2005, p. 414). Selection reduces possible interpretations which are then consolidated in the following stage of retention.

Retention

Retention is the process whereby plausible interpretations are identified and retained. For Weick, plausible interpretations are those which make sense in terms of their being: “related to past experience, connected to significant identities, and used as a source of guidance for further action and interpretation” (Weick et al. 2005, p. 414). Retained stories become part of the organizations identity and then serve as an understanding that frames the ongoing process of enactment by serving as “a sensible rendering of previous events stored in the form of casual assertions, and made binding on some current enactment and/or selection” (Weick 1979, p. 166).

Phenomena similar to the concept of the interpretations that emerge from Weick’s retention process have been identified by other scholars. These include Lord and Roti (1986) who define schemas by which organizations act to bring structure to experience, Gioia who describes cognitive maps as “scripts” that act as a “default mode of organizational cognition” (Gioia 1992, p. 386), and both Goffman (Goffman 1974) and Schein (Schein 1992) who employ the concept of a “frame” in a similar manner.

Weick’s Characteristics of Sensemaking

Weick has defined seven characteristics of sensemaking that both define it and distinguish it from “understanding, interpretation and attribution” – specifically its being: “(1) grounded in identity construction, (2) retrospective, (3) enactive of sensible environments, (4) social, (5) ongoing, (6) focused on and by exacted cues, and (7) driven

by plausibility rather than accuracy” (Weick 1995, p. 17).

The process of sensemaking is linked to identity in that organizations create the reality of their environments by interacting with it in a way which is meaningful in terms of their own subjectivity. Organizations project their own identities onto their environments and “observe the consequences” (Weick 1995, p. 23). Identity defines action, and the consequences of these actions in turn shape identity.

Weick has observed that retrospection is perhaps the key distinguishing characteristic of sensemaking as a process (Weick 1995, p. 24). Sensemaking is triggered by the experience of the unexpected. As such it starts with the interpretation of what has occurred and concludes when a suitable explanation has been found. Choo has identified this retrospective imposition of meaning under the enacting organization model of sensemaking and contrasted it against the forward-looking nature of meaning creation assumed under rational organization models of decision-making and the scaled knowledge creating models of systems theory (Choo 2006).

Weick uses the example of legislators and managers to illustrate the process by which organizations enact their environment. For Weick: “when people enact laws they take undefined space, time, and action and draw lines, establish categories and coin labels that create new features of the environment that did not exist before” (Weick 1995, p. 31). By making sense of an environment, organizations give it meaning through the act of interpretation. Sensemaking is a result of action.

The social nature of sensemaking lies in the fact that stories and narratives that define enacted environments are shared. For Weick “sensemaking is never solitary because what a person does internally is contingent on others. Even monologues and one-way communication presumes an audience. And the monologue changes as the audience changes” (Weick 1995, p. 40). Rather than seeing sensemaking as a process of creating a shared understanding of reality, Weick’s emphasis is on the negotiated nature of the process involved and the existence of what are termed “cues for

coordination” including stereotypes and roles (Weick 1995, p. 42).

Sensemaking is cyclical and ongoing. As Weick explains: “sensemaking never starts. The reason is that it never starts is that pure duration never stops. People are always in the middle of things, which become things, only when those same people focus on the past from some point beyond it. Flows are the constants of sensemaking. . .” (Weick 1995, p. 43). Sensemaking is an ongoing process because it involves the dual goals of making sense of that which has occurred at the same time as creating order out of the flux (Weick 1993, p. 635).

Sensemaking is based upon the analysis and interpretation of extracted cues. According to Weick: “extracted cues are simple, familiar structures that are seeds from which people develop a larger sense of what may be occurring” (Weick 1995, p. 50). The context influences both what cues are extracted and how they are interpreted. This is due to sensemaking representing an intersubjective as opposed to an objective process and as an act of interpretation and not a process of clinical observation or “noticing” (Weick 1995, p. 51).

The last characteristic – one closely aligned with the previous characteristic of interpretation – is that sensemaking aims for “plausibility, coherence, and reasonableness” (Weick 1995, p. 61) not accuracy in proposing an acceptable understanding of equivocal experiences. Weick elaborates on this by observing that “it would be nice if these acceptable accounts were also accurate. But in an equivocal, postmodern world, infused with the politics of interpretation and conflicting interests and inhabited by people with multiple shifting identities, an obsession with accuracy seems fruitless, and not of much practical help. . .” (Weick 1995, p. 61).

Sensemaking and Organization

Sensemaking is a part of the postmodernist tradition. As defined by Powell, Lovallo, and Fox, the field of behavioral strategy aims to merge “cognitive and social psychology with strategic management theory and practice,” thereby “grounding strategic management in realistic assumptions about human cognition, emotion, and social

interaction” (Powell et al. 2011, p. 1369). Powell, Lovallo, and Fox have identified three approaches to behavioral strategy in the scholarly literature – reductionist, pluralist, and contextualist. Unlike the positivism and objectivism that define the reductionist approach, and the nominalism and pragmatism of the pluralist approach, the contextualist approach is based upon phenomenology, symbolic interactionism, and the social creation of reality.

Sensemaking is a characteristic example of a contextualistic approach and has developed out of a critique of the perceived shortcomings of the reductionist approach to organization and management strategy. Sensemaking is a part of the postmodern tradition by virtue of it taking reality as a social construction which is created by the members of an organization as they share, maintain, and impose their meanings on their environments.

Blatt, Christianson, Sutcliffe, and Rosenthal have described sensemaking as a social process of human agency for creating meaning out of experience that acts: “as a lens that focuses our attention on human agency, equivocality and relationships. It focusses our attention of agency because action is viewed as part of people’s efforts to make sense; on equivocality because sensemaking is triggered by people’s need to understand an equivocal flow of experience; and on relationships as sensemaking is social” (Blatt et al. 2006, 898). The value of sensemaking in the study of strategy and management therefore lies in its utility to serve as a lens to facilitate the analysis of organization as a process.

As discussed above, the environments within which organizations operate can be characterized by complexity. The volume of information available to most modern organizations exceeds their ability to process and understand it. Enacting environments by bracketing equivocal information and events as cues allows organizations to filter available data and thereby promote their capacity – in the words of Starbuck and Milliken – to “comprehend, understand, explain, attribute, extrapolate and predict” (Starbuck and Milliken 1988, p. 51).

The importance of sensemaking lies in its focus on the process of “organizing,” not to “organization” itself. Tsoukas and Chia have explained

the difference between organization as structure as opposed to process. For Tsoukas and Chia: “the organization is both a given structure (i.e., a set of established generic cognitive categories) *and* an emerging pattern (i.e., the constant adaptation of those categories to local circumstances). Institutionalized cognitive categories are drawn upon by individuals-in-action but, in the process, established generalizations may be supplemented, eroded, modified or, at any rate, interpreted in oftentimes unpredictable ways [original italics]” (Tsoukas and Chia 2002, p. 573). The process of organization is sensemaking – it is therefore the process from which the patterns emerge. Understood thus as a process of organizing, the concept of sensemaking as enactment has implications for several aspects of the management of organizations.

In studies of strategy and management, the concept of sensemaking has been frequently applied to the analysis of failed responses to crisis situations and myopia in decision-making. Such studies include Weick’s famous study of failed decision-making in the response to a forest fire at the Mann Gulch disaster (Weick 1993), instances of friendly fire in combat situations over Iraq (Snook 2000), organizational crisis (Mullen et al. 2006), and breakdowns in leadership responses to crisis (Combe and Carrington 2015). Weick has identified a critical dilemma faced by organizations as they make sense of their environments in that in practice: “. . . sorting out a crisis as it unfolds often requires action which simultaneously generates the raw material that is used for sensemaking and affects the unfolding crisis itself. There is a delicate tradeoff between dangerous action which produces understanding and safe inaction which produces confusion” (Weick 1988, p. 305). Drawing upon the understanding that sensemaking is the process that precedes decisions, Snook has highlighted this organizational importance of sensemaking when he observed that it: “underscores the importance of initially framing such senseless tragedies as ‘good people struggling to make sense,’ rather than as ‘bad ones making poor decisions’” (Snook 2000, p. 207).

Recently sensemaking has been integrated into approaches for promoting design thinking and

creativity (Madsbjerg 2017) and identified as a leadership skill in business management (Ancona 2012; Ancona et al. 2007).

Cross-References

► [Sensemaking](#)

References

- Ancona, D. (2012). Framing and acting in the unknown. In S. Snook, N. Nohria, & R. Khurana (Eds.), *The handbook for teaching leadership* (pp. 3–19). Los Angeles: Sage.
- Ancona, D. G., Malone, T. W., Orlikowski, W. J., & Senge, P. M. (2007). Praise of the incomplete leader. *Harvard Business Review*, 85(2), 92–100.
- Ashforth, B. E., & Fried, Y. (1988). The mindlessness of organizational behaviors. *Human Relations*, 41(4), 305–329.
- Blatt, R., Christianson, M. K., Sutcliffe, K. M., & Rosenthal, M. M. (2006). A sensemaking lens on reliability. *Journal of Organizational Behaviour*, 27, 897–917.
- Choo, C. W. (2006). *The knowing organization: How organizations use information to construct meaning, create knowledge, and make decisions*. New York: Oxford University Press.
- Combe, I. A., & Carrington, D. J. (2015). Leaders’ sensemaking under crises: Emerging cognitive consensus over time within management teams. *The Leadership Quarterly*, 26(3), 307–322.
- Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9(2), 284–295. <https://doi.org/10.5465/AMR.1984.4277657>.
- Dewey, J. (1922). *Human nature and conduct*. Mineola: Dover.
- Drazin, R., Glynn, M. A., & Kazanjian, R. K. (1999). Multilevel theorizing about creativity in organizations: A sensemaking perspective. *Academy of Management Review*, 24(2), 286–307. <https://doi.org/10.5465/amr.1999.1893937>.
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Englewood Cliffs: Prentice-Hall.
- Gioia, D. A. (1992). Pinto fires and personal ethics: A script analysis of missed opportunities. *Journal of Business Ethics*, 11(5), 379–390.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Boston: Northeastern University Press.
- James, W. (1890). *The principles of psychology* (Vol. 1). New York: Dover.
- Kiesler, S., & Sproull, L. (1982). Managerial response to changing environments: Perspectives on problem

- sensing from social cognition. *Administrative Science Quarterly*, 27, 548–570.
- Kudesia, R. S. (2017). Organizational sensemaking. In *Oxford research encyclopedia of psychology*. Oxford: Oxford University Press.
- Lord, R., & Roti, R. (1986). Schema theories, information processing, and organizational behavior. In H. P. Sims & D. A. Gioia (Eds.), *The thinking organization: Dynamics of organizational social cognition*. San Francisco: Jossey-Bass.
- Madsbjerg, C. (2017). *Sensemaking: The power of the humanities in the age of the algorithm*. New York: Hachette Books.
- Maitlis, S., & Christianson, M. (2014). Sensemaking in organizations: Taking stock and moving forward. *The Academy of Management Annals*, 8(1), 57–125. <https://doi.org/10.1080/19416520.2014.873177>.
- Meyer, A. D. (1982). Adapting to environmental jolts. *Administrative Science Quarterly*, 27, 515–537.
- Milliken, F. J. (1990). Perceiving and interpreting environmental change: An examination of college Administrators' interpretation of changing demographics. *Academy of Management Journal*, 33(1), 42–63. <https://doi.org/10.5465/256351>.
- Mullen, J., Vladi, N., & Mills, A. J. (2006). Making sense of the Walkerton crisis. *Culture and Organization*, 12(3), 207–220. <https://doi.org/10.1080/14759550600865933>.
- Ocasio, W. (2000). How do organizations think? In T. K. Lant & Z. Shapira (Eds.), *Organizational cognition: Computation and interpretation* (pp. 33–49). Mahwah: Lawrence Erlbaum Associates, Publishers.
- Powell, T. C., Lovaglio, D., & Fox, C. R. (2011). Behavioral strategy. *Strategic Management Journal*, 32(13), 1369–1386.
- Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed.). San Francisco: Jossey-Bass.
- Snook, S. A. (2000). *Friendly fire: The accidental shootdown of US Black Hawk helicopters over Northern Iraq*. Princeton: Princeton University Press, UK.
- Starbuck, W. H., & Milliken, F. J. (1988). Executives' perceptual filters: What they notice and how they make sense. In D. Hambrick (Ed.), *The executive effect: Concepts and methods for studying top managers*. JAI: Greenwich.
- Tsoukas, H., & Chia, R. (2002). On organizational becoming: Rethinking organizational change. *Organization Science*, 13(5), 567–582.
- Weick, K. E. (1969). *The social psychology of organizing*. Reading, MA: Addison Wesley.
- Weick, K. E. (1979). *The social psychology of organizing*. New York: McGraw-Hill, Incorporated.
- Weick, K. E. (1988). Enacted sensemaking in crisis situations. *Journal of Management Studies*, 25(4), 305–317.
- Weick, K. E. (1993). The collapse of Sensemaking in organizations: The Mann gulch disaster. *Administrative Science Quarterly*, 38(4), 628–652. <https://doi.org/10.2307/2393339>.
- Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks: SAGE Publications.
- Weick, K. E. (2001). *Making sense of the organization*. Oxford, UK: Blackwell Publishers.
- Weick, K. E. (2011). Reflections: Change agents as change poets – On reconnecting flux and hunches. *Journal of Change Management*, 11(1), 7–20. <https://doi.org/10.1080/14697017.2011.548937>.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409–421. <https://doi.org/10.1287/orsc.1050.0133>.

Sense of Duty

► Core Values

Sense of Honor

► Core Values

Sensemaking

- CSR Disclosure, Quality Measurement of
- Sense Making, Organizational

Separation Technologies

- Sustainability of Waste Management System: Treatment and Separation for Material Recovery

Service Marketing

- Customer Service

Service-Focused Product Outcomes

- Product-Service Systems

Servitization

- [Product-Service Systems](#)

Sexual Abuse

- [Sexual Harassment](#)

Sexual Bullying

- [Sexual Harassment](#)

Sexual Harassment

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Synonyms

[Sexual abuse](#); [Sexual bullying](#); [Sexually discriminating behavior](#); [Sexual molestation](#); [Sexually offensive behavior](#); [Unwanted sexual advances](#)

Definition

Sexual harassment (sexual bullying, sexual abuse, sexually discriminating behavior, sexually offensive behavior) is probably as old as human species. It was known in Ancient Rome under the term of any accosting, stalking, and abducting which was clearly forbidden. However, it was just around 200 years ago that it was initially publicly recognized, discussed, and fought in modern times as something that is omnipresent, and especially as something essentially immoral even if relevant cultural differences are given, and bad for any victim of it and for any work or business a victim is engage in.

Sexual Harassment

In 1833, an Austrian painter Johann Michael Neder (1807–1882) made the painting “At the tavern” which depicts obvious scene of sexual harassment of a waitress by a guest of the tavern. In the nineteenth century, arts and especially paintings were besides being “art for art’s sake” also sources of social ideas and criticism, and this one was a representation of sexual harassment almost 150 years before it was commonly recognized during the 1970s in the USA (EEOC [2017](#)) and UN and EU by the document “Prohibition of discrimination, harassment, including sexual harassment, and abuse of authority” (EU Council [1976](#)).

As far as Neder’s painting is among the first to depict this obviously immoral no matter if common practice, it represents 200 years of public recognition of sexual harassment as a specific type of non-consensual sexually offensive act and as a specific type of harassment. Important for sexual harassment, by being sexual which is obvious, is that an action by a harasser must be frequently repeated and relevantly influencing the person who is harassed and the work she/he is performing while suffering a harassment. Compared to Neder’s example of sexual harassment, nowadays much less is considered as such.

Many of the following actions may constitute sexual harassment (Webb [1997](#)): wolf whistles, discussion of one’s partner’s sexual inadequacies, sexual innuendo, comments about women’s bodies, “accidentally” brushing sexual parts of the body, graphic descriptions of pornography, pressure for dates, sexually explicit gestures, unwelcome touching and hugging, sexual sneak attacks (e.g., grabbing breasts or buttocks), sabotaging women’s work, sexist and insulting graffiti, inappropriate invitations, sexist jokes and cartoons, hostile put-downs of women, public humiliation, obscene phone calls, displaying pornography in the workplace, inappropriate gifts (e.g., lingerie), pressing or rubbing up against the victim, sexual assault, leaning over, invading a person’s space, etc.

In the period between 1997 and 2011, the number of sexual harassment charges analyzed by the

US Equal Employment Opportunity Commission (EEOC 2017) went down from 15,889 charges in 1997 to 11,364 charges in 2011. Almost 50% of all charges were established to be filed with no reasonable cause. Last but not least, the number of charges filed by males in the same period went from 11.60% in 1997 to 16.3% in 2011.

The overall data in the case of women are to be taken cautiously, no matter if women cases still constitute huge majority of all cases in a given business culture or country, since, for example, the percentage of sexually harassed women according to dozens of various data which may or may not be completely reliable may vary between one in three and one in ten. However, even if the second ratio is closer to the correct one, this presents a real and urgent problem for women as human beings and female employees as employees and for any business public or private. More to that, there's no projection of percentage of not filed cases which, as we shall see later on, in majority cases end with victims' change of job.

In short, and according to EEOC data (EEOC 2017), in 79% of all cases of sexual harassment, victims were women; in 51% of all cases, harassers were superiors; and the places in which it occurs in the highest percentage include business, trade, banking, and finance, and women in these industries on average create 25% of all employees and much lesser on higher managerial positions (Baker 2008; Boland 2005; Clark 2013). However, there is space for doubt concerning the specific professions and sectors of economy, since some new research show that in some quite different sectors, there is a lot of sexual harassment but that in the same time it is not researched at all or researched marginally and poorly, such as tourism (Ram et al. 2016).

Overall losses in business due to all types of harassment, sexual included, are quite hard to calculate because of the data about harassment in principle, and because of the projection of established cases to all probable cases that went under the radar (first of all because harassers are not charged), and finally because of various often quite huge differences in cultures, especially in business cultures as organizational behavior practices and corporate cultures. In the future, it is obviously needed to establish a global criterion

tolerant to cultural differences on the one hand and sticking to this global rule and criterion strictly, which will at least establish reliable data, projections, and perhaps efficient prevention policies.

Given these facts, the following will be explicated henceforth: the description of sexual harassment will be supplied, some contemporary issues surrounding the description, the list of types, and finally some frequently used and effective policies and actions that are applied for sexual harassment prevention. What is global about sexual harassment is only the very general description of it and general condemnation of this shameful practice, while an application of prevention of it, especially in business, established procedures for filing charges, and similar are often under the influence of local cultures which are transmitted to business cultures as in any other part of it, especially to legal cultures and regulations concerning harassment in general and sexual type of it as well.

Description of Sexual Harassment

Many common definitions of sexual harassment say that it is:

[T]he practice of forcing another party to act in an involuntary manner by use of force, intimidation, threat, coercion or some other form of pressure to abuse, intimidate, or aggressively dominate other in sexual manner, or inappropriate threat of punishments or promise of rewards in exchange for sexual favors and it is in most modern legal contexts illegal. (Dromm 2012; McLaughlin et al. 2012; Paludi and Barickman 1991).

By being sexual and harassment, sexual harassment overlaps between harassments and sexual acts in a special way. Namely, not all sexual acts are assaults or offensive acts, and not all harassments are sexual which sexual harassment surely is.

Within sexually offensive acts, some are similar yet quite different such as rape, and within harassments as disturbing and upsetting offensive characteristically repetitive acts, some are similar yet again quite different such as non-sexual workplace, racial, religious, or nowadays online harassment (sexual online harassment is a new

type of sexual harassment, and it will be mentioned separately).

Consequently, it is of utmost importance to describe sexual harassment precisely and effectively in order on the one hand to identify it correctly and to prevent it and on the other hand to prevent its misuse and abuse due to misconceived understanding of it. Sexual harassment as being described legally speaking often doesn't include acts that do not repeat on a regular basis and acts of simple teasing or offhand comments. Further on, it doesn't include other types of harassment which aren't sexual which in practice of prevention can be quite important. Finally, it doesn't include other types of sexual assaults or offensive acts such as rape.

These and other, mainly legal controversies, surrounding sexual harassment, raised criticism of it in legal and other terms (Hajdin 2002; MacKinnon and Siegel 2004). Namely, much confusion can occur, and this is obvious if one counts the dismissed charges for sexual harassment by organizations that are dealing with it (EEOC 2017). Legal cases are completely different story, and they represent especially dangerous field, because neither victims nor harassers often know much about finesse of these criteria and similar cases.

On the other hand, the fact, which recent research shows (McLaughlin et al. 2017), is that women as the major group among victims of sexual harassment, especially during their early careers and working years, do not report it, do not engage in private lawsuits, but rather change the actual workplace environment to put it mildly.

Some further possibilities, like direct and indirect, public or private, and explicit or implicit sexual harassment, make this description issue even more important. In order to show at least some possible practical problems, some of these distinctions will be separately explicated hereafter.

Some Contemporary Issues About Sexual Harassment

EEOC defines sexual harassment quite strictly, and because of that stringency of the definition,

it is quite interesting to see many common misunderstandings of this type of employment discrimination:

It is unlawful to harass a person (an applicant or employee) because of that person's sex. Harassment can include "sexual harassment" or unwelcome sexual advances, requests for sexual favours, and other verbal or physical harassment of a sexual nature. Harassment does not have to be of a sexual nature, however, and can include offensive remarks about a person's sex. For example, it is illegal to harass a woman by making offensive comments about women in general. Both victim and the harasser can be either a woman or a man, and the victim and harasser can be the same sex. Although the law doesn't prohibit simple teasing, offhand comments, or isolated incidents that are not very serious, harassment is illegal when it is so frequent or severe that it creates a hostile or offensive work environment or when it results in an adverse employment decision (such as the victim being fired or demoted). The harasser can be the victim's supervisor, a supervisor in another area, a co-worker, or someone who is not an employee of the employer, such as a client or customer. (EEOC 2017).

Some issues are obvious, and due to the possibility of their occurrence in the practice of sexual harassment prevention, they need to be at least mentioned.

First, sexual harassment is wrong because it is wrong to harass a person because of her/his sex generally speaking. However, sexual harassment as a type of employment discrimination is even more wrong because a person is harassed because of its sex but this isn't done with an end in itself, or only because of it in terms of motive or a reason for action, rather as a means to some business end different from sex, and generally not sexual in its nature, such as an job advancement or not during process of recruitment, during actual work, especially concerning training, achieving results, development and benefits, and finally during ending the work process by any type of employment termination.

Second, sexual harassment doesn't have to be sexual in its nature; rather it is sufficient to be "offensive remarks about a person's sex" or even generally about sex. The crucial word here is "offensive" since it must be intended, performed, and received as "offensive." Namely, not all remarks of this nature are offensive. Some of

them may be quite the opposite as a part of policy of reducing sexual harassment, or a part of a joke that everybody finds funny rather than offensive, and which makes fun of both sexes making mixed-sex working environment more relaxed and normal. However, it is illegal to harass a woman or a man by making general offensive remarks about the whole sex as well. Here it is of utmost importance to notice that even in such circumstances, implicit offensive remarks are possible and performed since harassers are aware of the illegality of making explicit remarks.

Third, in many countries, law prohibits any sexual harassment, but teasing and similar are not to be included, because "harassment is illegal when it is so frequent or severe that it creates a hostile or offensive work environment." The "frequency" of harassment that causes "offensive" work environment and offenses an employee is crucial because basically it is bad for employees and at the end for the whole business and society (because the effects are often spilled over from professional to private lives of employees).

The obvious case is also the one in which victims of harassment are being regularly fired instead of protected and harassers identified and punished. In reality, since they are superiors, there is no one to punish them, especially in private businesses. Such situations are regulated generally by responsible restructuring processes which include various ethical policies (Cascio 2002). The pattern of action or behavior by a harasser is needed to be identified in order to establish sexual harassment, but there is also the similar pattern by a highly probable victim of harassment which is quite important in prevention and also needs to be identified. Such procedures and policies make these actions easy and normal in many organizational cultures.

Fourth, historically speaking, surely sexual harassment was recognized because a particular type of it creates majority of its history, namely, harassing women at workplace by superior men, and in some countries and regions of the world, this is still the most frequent type. However, during the twentieth and twenty-first centuries, women are in the much better situation than before, so the new types emerged. Namely, there

is a harassment of men at workplace by superior women, and this surely is sexual harassment as any other. Yet this may be discussed in a broader context of ways in which women advanced in historically dominantly man's positions and professions unaware that they are becoming man-like bosses, such as middle and top management, and of course of ways of management models in so-called "female ways" of management.

As an addition to this, so to say examples of the vertical sexual harassment, i.e., superior woman/man harassing inferior employees, woman/man, and it may go both ways; there is also horizontal type in which there is harassment among employees at the same job level, sometimes as a tool for advancement in quite competitive work environments.

There is also a type which cuts across different sections of a business and between not directly related employees in core business terms. Finally, there is a type in which an employee is harassed by a client or by a customer (which leads us back to the beginning and Neder's painting). These complicated forms of sexual harassment show that the problems with its definition aren't just of legal nature of the very act, rather as well of its relation to groups outside of an organization in which harassment takes place.

Circumstances and Occurrences

Sexual harassment is omnipresent. It may occur in private and public life; in schools, academia, factories, corporations, government, all state institutions, and professional institutions; and even in NGOs. Probable harassers and victims may be everybody, even a complete stranger. A "street harasser" is a prototype of it (Macmillan et al. 2000). However, in a majority of established cases, a harasser is a person known to a victim and is in some kind of power or authority relation to and over a victim due to various differences between them (in age, sex, occupation, position at the workplace, wealth, influence, or sometimes simple physical strength).

Concerning the actions, it is quite important that a harasser may or may not be at all aware of

his or her actions of sexual harassment, i.e., that he or she is doing something illegal, immoral, and offensive toward a victim. In this respect, sexual harassment should be explicitly forbidden and mentioned in a suitable document addressed to a potential member of a community, an institution, or an organization (school, faculty, firm, company, government institution, etc.).

Also, on the side of a victim, it may be that he or she is completely unaware of what's going on and doesn't know what to do. In this respect, sexual harassment should be explicated to all potential members of any group in order for them to recognize it and react before it becomes seriously frequent and causes harm to all included (treatment of potential harassers and potential victims of harassment may prevent many future situations and contribute to the development of a non-harassment atmosphere within a group as a type of common and normal behavior).

Concerning places and times, sexual harassment may occur almost anywhere and anytime; however, it is more likely that it will occur at those places and during times in which a harasser can effectively use his or her power over a potential victim, i.e., in places and times in which the very act of sexual harassing need not to be completely explicit yet completely obvious and clear to the victim (e.g., a harasser of influence over a victim's development and advancement at the workplace may harass at the place of power such as his or her office in order to make his or her actions completely clear yet implicit in order to escape possible charges).

Given the fact that more and more of our actions are performed online in various types of formal and informal communication, it is not necessary that sexual harassment occurs in physical space since it can occur online. Some research suggests quite interesting facts about online harassment generally, namely, that men are more sexually harassed by being "called offensive names," "purposefully embarrassed," and "physically threatened" while women by being "stalked" and "sexually harassed" (Barak 2005; Maeve 2014). The same research shows that woman and man, no matter if they are harassed in different ways, are both harassed for a sustained period

which is quite important for establishing harassment, especially sexual.

Impact and Prevention

The basic reason for prevention of sexual harassment is because it is a morally incorrect action, and additionally it may include various impacts toward the victim or environment, i.e., causing stress, depression, and similar disorders in victim, and sometimes unbearable life and/or work conditions, and eventually low results at workplace.

Some research report that "severe or chronic sexual harassment can have the same psychological effects as rape or sexual assault" (Koss 1987), and for such victims, some type of therapy is surely needed. In various organizations, sexual harassment directly reflects on work results, decrease of productivity and job satisfaction, etc. However, as said, it is very hard to find reliable data on the amount of this negative influence of sexual harassment on business success.

Given that sexual harassment is a sexual offence and a type of harassment, it should be identified and prevented as any other sexual offence and any other type of harassment, namely, by programs which educate the general population of any group (in families in case it is about private type and in local communities, schools, faculties, workplaces, and local governing institutions in cases it is about public type). It's all about educating and cultivating a group into a new cultural routine or a habit of non-offensive work practices.

Such programs, some of which showed some results, often include ways of identification of potential harassers, and potential victims, and both are made aware of their behavior and attitudes. Such educative activities may lower a general opportunity for any type of harassment and sexual as well. However, there are no 100% effective programs.

Many public institutions, organizations, and companies as well as many private corporations have clear, expedite, and effective procedures for dealing with any and also sexual harassment. Namely, in various codes of conducts, ethical

codes, or similar ethical documents all types of harassment, sexual included, are described and explicitly forbidden. In countries in which the practice is illegal, there is also a practice that the harasser is reported to the police in case if harassment is proven by some formal internal officer or a body of an organization or a company.

The ongoing debates are concentrated between two different solutions for prevention. One says that if an act of harassment went on and solid evidence of it is established, then the whole case should be reported to the police if such action is illegal. If proven, such case would remove the harasser, give some satisfaction to the victim, and strongly influence others in an organization, especially other potential harassers.

Different approach says that creating particular anti-harassment organizational culture and corporate climate would minimize possibility of any harassment and consequently sexual as well. The third option says that both ways should be combined so that in any case of severe sexual harassment, a harasser should be reported, while if smaller cases occur, then a radical change in organizational culture should be made and implemented top-down without exceptions.

Summary

Sexual harassment is a fact. There are harassers and victims. However, in Western societies, the number of cases is falling, while globally it seems that it is constant or rising due to various causes such as differences in cultures among nations with rising population which are connected with poor work regulations, work environment, and organizational culture in general.

As regards criticism of sexual harassment, while in the same time it recognizes the horrible nature of the act toward the individual and the group, still it claims that instating on it as a "sexual" more than "harassing" aspect doesn't produce results. Critics also claim that many "things" are counted as "sexual harassment" but which are "sexual" only accidentally. Namely, in

most cases, it is about the fact that some people do not know how to live, cope, learn, and work with others, so they do what they do, and sometimes they act as sexual harassers among many other offensive, immoral, and sometimes even illegal things they do in order to achieve personal goals in life.

Leaving aside these criticisms, it should be said that severe cases of genuine sexual harassment exist, harassers are proven guilty, and some improvements exist. The fact that the majority of victims in these genuine cases are women (more than 2/3), that the majority of harassers are superiors (more than 1/2), that harassment occurs in the specific sectors of economy and mostly at a workplace, and that the harassers are often engaged in other types of misuse of their power, influence, and similar over inferiors shows that sexual harassment is a part of a broader pattern of misuse and abuse of power of superiors over subordinates generally and only perhaps in particular professions and businesses more than in some others.

No matter how progressive we think of ourselves and of our contemporary twenty-first-century civilization and culture in which we live as its proud members, it is quite illustrative that the Ancient Roman rule still so up to date prohibits and that nineteenth-century painting still so currently describes an activity which we think is fundamentally barbaric and immoral, but which we didn't eradicated so far.

Cross-References

► [Sexual Abuse](#)

References

- Baker, C. (2008). *The women's movement against sexual harassment*. New York: Cambridge University Press.
- Barak, A. (2005). Sexual harassment on the internet, social science. *Computer Review*, 1, 77–92.
- Boland, M. L. (2005). *Sexual harassment in the workplace*. Naperville: Sphinx Publishing.
- Cascio, F. W. (2002). Strategies for responsible restructuring. *Academy of Management Executive*, 16, 80–91.

- Council of the European Economic Communities. (1976). On the implementation of the principle of equal treatment for men and women (76/207/EEC), 9 February 1976, Amended 23 September 2002.
- Dromm, K. (2012). *Sexual harassment: An introduction to the conceptual and ethical issues*. Broadview Press.
- Hajdin, D. (2002). *The law of sexual harassment, a critique*. SUP: Selinsgrove.
- Koss, M. P. (1987). Changed lives: The psychological impact of sexual harassment. In M. A. Paludi (Ed.), *Ivory power: Sexual harassment on campus* (pp. 73–92). State University of New York Press: Albany, NY.
- MacKinnon, C. A., & Siegel, R. B. (Eds.). (2004). *Directions in sexual harassment law*. Yale University Press: New Haven.
- Macmillan, R., Nieorbisz, A., & Welsh, S. (2000). Experiencing the streets: Harassment and perceptions of safety among women. *Journal of Research in Crime and Delinquency*, 37(3), 306–322.
- Maeve, D. (2014). Online Harassment. PEW Research Center Internet & Technology. <http://www.pewinternet.org/author/mduggan/>. Accessed 15 August 2017.
- McLaughlin, H., Uggen, C., & Blackstone, A. (2012). Sexual harassment, workplace authority, and the paradox of power. *American Sociological Review*, 77, 625–647.
- McLaughlin, H., Uggen, C., & Blackstone, A. (2017). The economic and career effects of sexual harassment on working women. *Gender and Society*, 2017, 1–22.
- Paludi, M., & Barickman, A. (1991). *Academic and workplace sexual harassment*. SUNY Press.
- Ram, Y., Tribe, J., & Biran, A. (2016). Sexual harassment: Overlooked and under-researched. *International Journal of Contemporary Hospitality Management*, 28(10), 2110–2131.
- U.S. Equal Employment Opportunity Commission., URL: <https://www.eeoc.gov/index.cfm>, EEOC. (Retrieved: 13. 08. 2017).
- Webb, S. L. (1997). *Shockwaves: The global impact of sexual harassment*. New York: MasterMedia.

Sexual Molestation

► Sexual Harassment

Sexually Discriminating Behavior

► Sexual Harassment

Sexually Offensive Behavior

► Sexual Harassment

Shadow Trades

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Synonyms

Black markets; Exploitative business practices; Illegitimate business; Illicit trade; Informal sector; Underground economy

Definition/Description

Throughout history there has often been a dark-side to legitimate international business, as for example with the slave trade which was an intrinsic part of Atlantic triangle trade in sugar and cotton, or in the opium trade in China in exchange for tea and silk for Europe. Over the twentieth century growing deregulation of global business facilitated the concurrent growth of various shadow trades as human trafficking, money laundering, waste dumping, organ harvesting, contraband smuggling, and arms transfers. While these illicit businesses may seem peripheral and small in comparison with the legitimate global trade in goods and services, the former's operations are closely intertwined in the same supply chains with the latter's.

Forms and Extent

Human trafficking: Estimates of global forced labor which include human trafficking, there were 21 million global victims in the early 2010s. Sexual exploitation which attracts more attention constitutes 20% of this number, while another 70% are

bonded in agriculture, manufacturing, construction, and domestic work. Some trafficked humans end up in legally fraught areas of drug couriering, armed robbery, street hawking, begging, even organ harvesting. Human trafficking is estimated to be worth US\$32 billion, while the victims generate about US\$150 billion in profit for private enterprises producing raw materials and/or products for the global marketplace. While people smuggling and bonded labor may be differentiated from human trafficking, the illicit businesses involved are closely linked.

Organ harvesting: The sale of human body parts tends to be reported regularly in a number of developing-emerging economies, while occasionally in industrialized-developed countries there have been scandals over cadaver sales to hospitals, universities, and research institutes. Given little definitive research, the size and value of the market have to be of widely varying estimate. The need for concurrent surgery has spurred the growth transplant tourism in which the developing-country donor is flown to the developed-country of the recipient, or vice-versa. Contributing to the growth of this shadow trade are the diminished role of government, the diffusion of healthcare standards, and normalization capitalist forms of exchange.

Waste dumping: The trade in waste typically involves the shipping of everything from household trash to industrial chemicals, usually from developed/industrialized economies to developing and/or emergent economies with adverse consequences for the environment of the latter as well as the health of their peoples. More subtle than the dumping of solid toxic wastes but no less lethal is the related field of pollution or the jettisoning of waste into the air, earth, and water with local, regional, and global consequences. Although the Basel Convention exists, this treaty is weak given the directionality of the trade from developed-industrialized to the developing-emergent economies. Research focus has been on the consequences and remedies, not on pre-emption or penalization of the businesses which profit from this dark trade which threatens environmental sustainability.

Arms transfers: The arms trade encompasses nuclear arms on the one hand and the small arms trade on the other, and every type of weapon in-between. The revenue of the global arms export totals over US\$150 billion or about 7.5% of total world trade in merchandise. Despite the efforts of some governments, regional organizations, IGOs, and NGOs to develop policies and initiatives on arms control, the trade is growing. Much of this substantial world trade is conducted by major corporations of developed-industrialized nations and is subsidized by their governments and taxpayers. Furthermore, many leading importers of arms are from developing-emerging economies where such high public spending represents diversion from health, education, and housing services, not to mention economic consequences of inter- and intrastate conflicts.

Money laundering: Deregulation of the financial markets in the twentieth century which boosted global economic growth, also aided kleptocrats of dysfunctional states as well as criminal gangs and terrorist organizations to launder their dubious income. By the mid-2010s global money laundering is estimated to have reached between US\$800 billion and US\$2 trillion, or as much as 2–5% of global GDP. Related is the phenomenon of tax havens with their secrecy laws, which are centers for money-laundering via legitimate banks. Attempts have been made by to black-list tax-havens in micro-states of the developing world though onshore financial centers in the developed world have greater capacity to launder money. Furthermore, many of the other dark-trades are dependent on money-laundering of the proceeds for their effectiveness and this oftentimes bypasses the more established financial institutions.

Interlinked trades: Diamonds, other gems, gold, rare earths, and many other forms of resources mining in conflict-zones are used to fund civil wars. The profits are used to purchase arms from a legitimate industry in the developed world subsidized and supported diplomatically by their governments. Yet another dark trade is the processing and smuggling of hard drugs such as cocaine from and via Latin American

and Caribbean states or heroin from East and Central Asian countries. Often the routes for these drugs into Europe and North America are the same as those used for people smuggling. Perhaps less evident is the impact of the trade in counterfeit pharmaceuticals which, while profitable for their manufacturers, risks the lives and health of their users, resulting in social cost borne usually by governments of developing countries. Thus the shadow trades enumerated in this section comprise a far from exhaustive list, and there are many linkages between the various trades.

Catalysts or Concomitants

Economic differential: The exploitation of people in developing countries by most of the dark trades can be seen directly in the trade in body parts, and human trafficking. This may be seen indirectly in arms and toxic wastes sourced from industrialized countries as well as some emergent economies, for sale to developing countries. Declining agricultural commodity prices set largely by global institutions leaves the farmers in developing countries little option but to grow illicit crops or have themselves smuggled into developed countries to work on subsidized farms. Money laundering is derived in part from the smuggling of drugs into the developed world for sale at prices much higher than paid for their production in developing countries. Yet the rise of capitalist free-market ideology globally inhibits government intervention in the economy in a way which might affect all businesses, legal or otherwise.

Government incompetence: Exploitation of labor is patently possible when neither the laws of the host-country or the home-country apply in free-trade zones, ostensibly to create jobs at the cost of forgoing tax revenue. Conflict zones where governments or rival armed groups, even foreign occupiers exploit people and resources which then enter the global supply chain of the jewelry industry, industrial processes, food, and household electronics. Disenfranchisement from legitimate

opportunities to improve their economic lot compels people to create and participate in the quasi-legal or extra-legal “second economy.” Embargoes imposed by countries invariably spawn large-scale smuggling, ironically often with the collusion of parties concerned in the conflict. While governments or influential persons in it are sometimes direct participants in shadow trades, if only by being corrupted to overlook them, more often than not facilitating these unwittingly either by incompetent inaction or misguided policies.

Corporate culpability: Supply chains involving child labor or forced labor, minerals from war-zones, dumping toxic wastes from manufacturing process or discarded products, pollutants left in the country of production often result in products marketed legitimately globally. Furthermore, many legitimate businesses share the same supply chains, use the inputs of or are used by shadow trades, with or without their knowledge, and are thus tainted. Human trafficking and organ harvesting, for instance, use travel agencies, ships, and airlines, some of which might deem these lucrative business side-lines. Legitimate logistics may be done on behalf of corporations which might be in ethically questionable trade such as in arms or waste. Perfectly legitimate businesses may have owners that use them as a cover for their dubious businesses as in money laundering. Advertising and marketing by multinational corporations then must share some responsibility for fostering dissatisfaction among citizens of developing countries with their standard of living, one consequence being people smuggling of economic migrants to the industrialized world. Only the consequences of adverse publicity for profitability and stock value seem to drive corporations towards corporate social responsibility.

Summary

While international crime is defined as activities that nation-states perpetrate on other nation-states or parts of their own and others, dark trade is

perpetuated by firms, organizations, informal groups, and even individuals. These take advantage of regional political-economic integration, trade treaties, renewed nationalism in new states, break-away provinces, dysfunctional or non-functioning states. By definition of being shadow trades, these are neither readily discernible nor their links clearly manifest, for researchers to access and confirm definitively. Nonetheless, a fair amount is known or reasonably conjectured about the nurturing contexts for these illegitimate businesses and complex web of complicity in their operations by governments and corporations. Current approaches of regulation, law enforcement, and charity do not adequately address the growth of the shadow trades is manifestly evident. Legitimate businesses need to be proactive against shadow trades still prevalent in the twenty-first century that nonetheless share the same supply-chains, financial institutions, communications technologies, and favorable trade treaties. The uncritical promotion of international trade as the means of co-opting developing countries into the capitalist world economy on the questionable promise of sustainable economic growth needs to be challenged.

Cross-References

- Arms Export
- Fair Trade
- Human Rights
- Social Justice

Further Readings

- Albanese, J. S. (2011). *Transnational crime and the 21st century: Criminal enterprise, corruption, and opportunity*. New York: Oxford University Press.
- Efrat, A. (2012). *Governing guns, preventing plunder: International cooperation against illicit trade*. New York: Oxford University Press.
- Glenny, M. (2008). *McMafia: A journey through the global underworld*. London: Bodley Head.
- Gollnhofer, J. F., & Schouten, J. W. (2017). Complementing the dominant social paradigm with sustainability. *Journal of Macromarketing*, 37(2), 143–152.

- Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, 51(1), 23–34.
- Naim, M. (2010). *Illicit: How smugglers, traffickers and copycats are hijacking the global economy*. New York: Random House.
- Tenbrunsel, A. E. (2008). Ethics in today's business world: Reflections for business scholars. *Journal of Business Ethics*, 80(1), 1–4.

Websites

- Havoscope Black Market. <https://www.havoscope.com/>
- Interpol. <https://www.interpol.int/Crime-areas>
- OECD Directorate for Public Governance. <http://www.oecd.org/gov/risk/illicit-trade.htm>
- United Nations Office on Drugs and Crime. <http://www.unodc.org/>

Shallow Environmentalism

- Weak Sustainability

Shared Capital

- Social Capital, Interpretation of
- Social Capital, Measurement of

Shared Community-Based Governance

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Synonyms

Local governance; Multi-actors and multilevel policies; Multilevel governance; Participatory governance; Public-private governance; Territorial governance

Definition

A shared community-based governance is the outcome of a decision-making process nurtured and delivered by formal and informal networks of stakeholders. Networks are formed by actors with a strong territorial connection and include public entities, large companies, small- and medium-sized businesses and not-for-profit organizations that are motivated to cooperate with the objective to improve the social, cultural, and productive system. They are based on trust and shared values that benefit the development of corporate and citizenship initiatives oriented to a common good. Many public and private policies can be effectively realized at the national, regional, and local level to support corporate social responsibility (CSR) and sustainable development goals (SDGs). The multilevel and multi-stakeholder approach to a responsible and sustainable growth calls for a shared community-based governance and can be explained as a model that is bottom-up driven, based on participatory governance systems whose protagonists are embedded in a local community.

Introduction

During the last few decades, a developing field of research on CSR and sustainability have been nurturing mainstream perspectives, supporting the stakeholder theory (Freeman et al. 2010) and considering the interface with innovative concepts of governance, such as private-public governance, multilevel and territorial governance, among others. These new perspectives should be investigated conceptually and empirically because they are founded on a mutually reinforcing alignment of multilevel and multi-actors social responsibilities. “Sustainability requires institutional contexts that enable actors to enact socially responsible principles and practices as well as apply and develop social capital and creativity” (Ashley and Crowther 2012, p. 182). The advancement of participatory governance has been highly suggested by the European Commission and the United Nation as a driving force of CSR by

stressing the significance of cooperation at the regional, sub-regional, and local level between the different actors engaged (UNGC 2007).

At the European level, the White Paper on multilevel governance has been delivered to the member states and local and regional authorities to solicit partnerships and execute policies (based on vertical and horizontal exchanges among social actors from diverse institutional spheres and jurisdictions). The theoretical construct of shared governance has been put into use by networks of local actors in several experiences of territorial social responsibility (Del Baldo and Demartini 2012).

Various approaches of shared governance have been distinguished based on the coordination of multi-actor-driven policies aimed at sustainability that have been implemented at different territorial levels, such as regions, provinces, or towns (Midttun 2005). These approaches indicate the shift from novel public management policies to network governance policies that are characterized by the involvement of public, private, not-for-profit and non-governmental entities, as well as private citizens in fulfilling public services and striving for the common good. They give rise to social innovation at the micro, macro, and meso level and enrich social capital, contributing to problems being solved and opportunities being identified through collective actions (Ostrom and Ahn 2009; Voorberg et al. 2015).

Key Issues

Scholars and policy makers are aware that political, social, and production processes and interactions occur at the local level. The function of the space – the territory – is not only geographic but also ecological, social, economic, and cultural in that it mainly supports the interactions and relations among the members of an ecosystem, which is distinguished by a shared cultural identity.

The model of shared governance is based on social dialogue, democratic participation and socio-economic inclusion. These contingencies are incited by intangible factors, such as rules, values, norms, traditions, and knowledge that establish the human, structural, and relational

capitals inset into territorial communities (Demartini and Del Baldo 2015). While sharing values and behavior patterns bring about a climate of trust and collaboration, the paths of sustainable development are based on the aptitude of public institutions, entrepreneurial associations, companies, not-for-profit organizations, universities, banks, etc., to take part in and activate networks that are conceived as knowledge assets that influence the territorial processes of value creation (Lerro and Schiuma 2009). In this case, knowledge is translated into a shared language and actions owing to circular knowledge exchange and dissemination. As a result, territorial capital can be understood as the output of tangible and intangible assets stemming from individuals and organizations participating in networks belonging to a definite community. Community-based networks (including municipal and regional authorities, consumers, enterprises, not-for-profit associations, universities, civic organizations, etc.) are guided toward a model of sustainable economic development. In such contexts, each actor plays a pertinent role: public institutions are responsible for soliciting, regulating, and supervising responsible governance; not-for-profit organizations and citizens can encourage and “educate” both public and private companies, and the latter actively contribute by enhancing the socio and economic conditions of the local area. The integration of reciprocal perspectives, needs, and expectations allow actors to weather fragmented views and practice a systematic thinking, which is the key characteristic of shared governance.

Therefore, the territorial competitiveness of sustainability is a pathway promoted by a plurality of actors whose relationships drive the use of a model of a shared community-based governance. This type of cooperative and participative governance generates more engagement with citizens and other stakeholders involved at the local level.

Future Direction

There is a global need for territorial governance approaches based on multi-actors and multilevel

policies that can achieve sustainable development goals (UN 2015). Secure and collaborative relations between different kinds of organizations proffer the foundation for mixed networks (Gerencser et al. 2008) formed by actors that play various roles and act in synergy.

Shared governance enables the transition from government to governance and to interactive planning and multilevel shapes of cooperation founded on trust and transparency. Therefore, it necessitates an explicit shift from a top-down approach to a bottom-up approach (supporting vertical and horizontal subsidiaries) and multilevel cooperation. The shared governance model depends on the territorial declination and factual implementation of CSR and sustainability. It also signals the importance of the local community’s commitment to participative governance and the sharing of knowledge, which enhances community learning and co-creation that in turn drives sustainability. Moreover, it yields new practical and conceptual tools used to overcome traditional centralized models of public management and apply cooperative and delocalized mechanisms for sustainability management.

Concurrently, these innovative trajectories underline the need for theoretical constructs that consider the centrality of the territory and the embeddedness of actors engaged in sustainability-oriented projects.

Summary

Sustainability in society and economy calls for public and private actors to establish socially responsible principles in policy making, finance, education, consumption, taxing, pricing, and use of environmental assets. Intangible factors like social and relational capital represent the soft asset, which favors the orientation of companies, institutions, and organizations rooted in a territorial community toward social and responsible paths of governance capable of enhancing social cohesion and generating social and economic innovation. Territorial paths of shared governance activated by local networks of actors that share a common set of values and are oriented to mutual

goals are capable of leading and preserving sustainability over time.

Cross-References

- ▶ [Principle of Subsidiarity](#)
- ▶ [Social Capital, Interpretation of](#)

References

- Ashley, P. A., & Crowther, D. (2012). *Territories of social responsibility. Opening the research and policy agenda*. Surrey: Gower.
- Del Baldo, M., & Demartini, P. (2012). Bottom-up or top-down: Which is the best approach to improve CSR and sustainability in local contexts? Reflections from Italian experiences. *Journal of Modern Accounting and Auditing*, 8(3), 381–400.
- Demartini, P., & Del Baldo, M. (2015). Knowledge and social capital: Drivers for sustainable local growth. *Chinese Business Review*, 14(2), 106–117.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art*. Cambridge: Cambridge University Press.
- Gerencser, M., Van Lee, R., Napolitano, F., & Kelly, C. (2008). *Megacommunities: How leaders of government, business and non-profits can tackle global challenge together*. Great Britain: Palgrave Macmillan.
- Lerro, A., & Schiuma, G. (2009). Knowledge-based dynamics of regional development: The case of Basilicata region. *Journal of Knowledge Management*, 13(5), 287–300.
- Middtun, A. (2005). Policy making and the role of government realigning business, government and civil society. Emerging embedded relational governance beyond the (Neo)liberal and welfare state models. *Corporate Governance: The International Journal of Business in Society*, 5, 159–164.
- Ostrom, E., & Ahn, T. (2009). The meaning of social capital and its link to collective action. In G. T. Svendsen & G. L. H. Svensen (Eds.), *Handbook of social capital* (pp. 17–35). Cheltenham: Edward Elgar.
- United Nation Global Compact. (2007). Joining forces for change: Demonstrating innovation and impact through un-business partnerships. Retrieved from: https://www.unglobalcompact.org/docs/news_events/8.1/Joining_forces_for_change.pdf.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. <https://www.un.org/sustainabledevelopment/32>. Accessed 23 May 2018.
- Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357.

Shared Economy

- ▶ [Collaborative Economy](#)

Shared Good

- ▶ [Creating Shared Value](#)
- ▶ [Shared Value](#)

Shared Understanding

- ▶ [Spirituality in Management](#)

Shared Value

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Synonyms

[Common good](#); [Creating shared value](#); [Shared good](#); [Thick value](#)

Definition

Shared value is a sustainable model for production, consumption, and exchange so that all the actors in the value cycle benefit environmentally, socially, and economically.

Introduction

Values are related to things worth wanting. With the things worth wanting, life is supposed to be better. Dreaming of and making a better future is based on values.

An *intrinsically valuable thing* is worth pursuing for its own sake. It is unconditionally valuable, that is, it is valuable in every circumstance. Happiness – if defined broadly – can be such an intrinsically valuable thing. *Instrumentally valuable things* pave the way for a better life, but they are not valuable by themselves (Shafer-Landau 2010, 18–55). More fulfilling jobs, less pollution, and more equal pay are examples of instrumentally valuable things.

Capitalism contains an assumption of psychological *egoism*; this means that human beings are motivated by self-interest. The opposite of self-interest is *altruism*, which means that people desire to help others (Shafer-Landau 2010). Altruism is based on the fact that no one is all-powerful. People are stronger together than alone. This raises a question of whether shared values would be more beneficial for the common future of humankind on Earth than egoistic values. The question is with whom should we share our values? In Table 1 we demonstrate possibilities for value sharing in its widest scale.

In the circumstances of a finite Earth the transition from surplus value to negative value is more evident. Resource depletion, waste, and toxification create negative value. The maxim of

negative value is climate change, because it poses a fundamental threat to the economy itself (Moore 2015). How can we create “value that matters, value that lasts and value that multiplies?” (Haque 2011, 34). In other words, the critical question is how can we share value with customers, business owners, employees, society, and global development on Earth?

Shared Value in Sustainability Management

The use and meaning of value in economics varies a lot. Value is often determined narrowly by the dynamics of price due to scarcity and preferences (Mazzucato 2018). A new way to think and act is a move from seeking the profit of one toward benefiting many (Matinheikki et al. 2017). Value is shared when it benefits many.

Shared value has its roots in Corporate Social Responsibility (CSR) (Bowen 1953).

CSR relates to “economic, legal, ethical, and discretionary expectations that society has of organisations at a given point in time” (Carroll 1979). Shared value is an “extension of organizational ethics” (Davis 1960).

Shared value is about thick value, the opposite of thin value that focuses only on profit, growth, and shareholder value (Haque 2011). Shared value is “the extent to which partners have beliefs in common about what behaviors, goals, and policies are important or unimportant, appropriate or inappropriate, and right or wrong” (Morgan and Hunt 1994, 25). Michael E. Porter and Mark R. Kramer (2011) define shared value as policies and operating practices that enhance the competitiveness of a company, and, at the same time, advance economic and social conditions in the communities in which it operates. Michael E. Porter and Mark R. Kramer’s (2011) definition deals with policies and practices on companies and communities. Shared value enhances the competitiveness of a company and it also advances circumstances of people living in the communities.

John W. Forje (2007) uses the concept of shared values in the context of public policies

Shared Value, Table 1 Aspects of sharing values. Adopted from Salonen (2013, 2050)

I	Human reality	Organic
My family		
My friends and relatives		
People in my country		
All people	Human reality and nonhuman reality	Organic and abiotic
People and animals		
People, animals, and plants		
Ecosystems		
Planet Earth		

and global development: “A partnership of shared values must be constructed for the common good.” Governments put the interests of the poor first by “pushing forward the virtues of democratic governance, partnership, participation, and benefit-sharing among the key stakeholders,” that is a developmental democratic state (Forje 2007).

Kristen M. Watrous, Ann H. Huffman, and Robert D. Pritchard (2006) have studied shared values in organizational behavior. They showed that “shared values are relevant throughout an employee’s tenure with an organization: from recruitment, to hiring, to socialization, to turnover.” Their results also emphasize the importance of shared organizational values (Watrous et al. 2006.) Murray A. Rudd (2000) also shares the idea that organizational unity and shared values cooperate. The most important prerequisites for the creation of shared value are “shared vision and common objectives” (Rudd 2000). Juri Matinheikki, Risto Rajala, and Antti Peltokorpi (2017) also stress shared vision in an organization. Existing practices should be reformed by forming a strong shared vision and putting it into action (Matinheikki et al. 2017).

Shared values between employees and management help the understanding of a vision of the organization. Shared values are created through a deep feeling of belonging and by dialogue (Turulja and Bajgorić 2018). Ilona Skačauskienė, Denisa Hrušecká, Aušra Katinienė, and Martin Čepel (2018) also share the idea of knowledge being a key factor of success for any organization. Requirements for employees’ knowledge have been rising, especially with regard to “the widely discussed fourth industrial revolution in the emerging network economy and knowledge society.” They remark that members of an organization are the key actors to create synergy by collecting, assessing, and storing unique knowledge (Skačauskienė et al. 2018).

Shared Value in the Future

The framework of shared values has focused mainly on the economic and social aspects of

sustainable development. Three major groups of shared value and co-benefits of actions have been company, society, and stakeholders (Jonikas 2013). The latest research concerning shared values focuses on, for example, new ways of authentic assessment in *work integrated learning* in order to enable students entering working life (Young et al. 2019), *networks* and *stakeholders* involved as participants in value creation processes (Ketonen-Oksi 2018), *knowledge management* as a strategic resource (Skačauskienė et al. 2018; Turulja and Bajgorić 2018), and *social responsibility practices* as a competitive advantage (Miralles-Quirós et al. 2019; Na and Kang 2018).

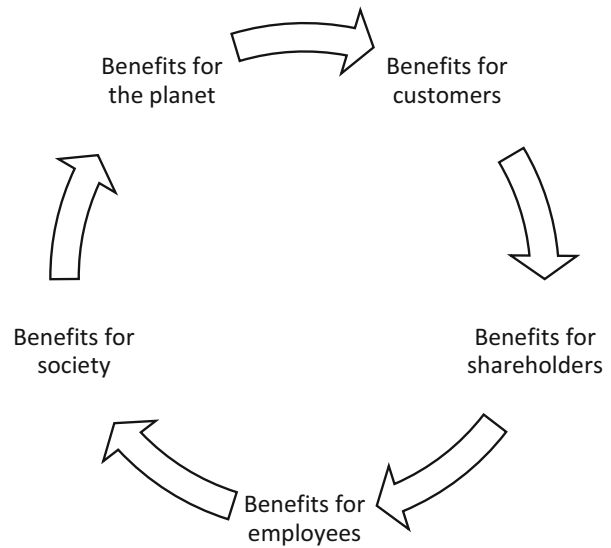
In the midst of current environmental challenges, shared value should also be related to shared responsibility, which includes an environmental aspect (Hecht et al. 2012). The Sustainable Development Goals – Agenda 2030 set legitimate consensus norms for the common future of humankind (UN 2015). There is already a lot of good will, but still a lack of shared understanding in the multidisciplinary creation of a sustainable future. In order to shape hope for the future, we have demonstrated the value cycle of shared value with multiple co-benefits in Fig. 1.

The core of shared value is in customer-orientation, because, in a long run, there are no firms without customers. The modern customer is a participant in processes that create information on behavior intentions and this information gained, assembled, and delivered will create new value. “Shared value has a significant effect on behavior intention, and a distinctive competitive advantage has a significant effect on behavior intention” (Na and Kang 2018). Customers ask why they need this product or service offered to them. If they trust that the offered product or service will help them to have good life, it is of interest. Also, they may wonder what problems does a company fix in society? Does it exist for society or only for owners? What is the purpose of the company from the point of view of society? Due to shared value, for example, public health may benefit (Jin 2018).

In order to have shared value, shareholders ask: why does their company exist? By creating

Shared Value,

Fig. 1 Value cycle of shared value with multiple co-benefits



solutions for the sustainable future, they the company may have better reputation, and the possibility to have a competitive advantage and profit (Mohtsham Saeed and Arshad 2012). Thus, shared value also includes benefits for employees by offering a workplace. More often employees also ask: why do they appreciate the work they do? If they have good reasons to wake up and work for the company, their intrinsic motivation is better. They may also feel that they have fulfilling and meaningful work (Triziner et al. 2011; Valentine and Fleischman 2008).

In order to increase shared value, we human beings may ask: what future generations will remember us for? Benefits for the planet are related to global development goals, such as Agenda 2030, which are targeted to ensure diverse environments, secure natural resources, and to combat climate change. Without a healthy environment human dignity and equality is not possible to reach. A healthy environment is also a key to peace. Societies that are peaceful, just, inclusive as well as free from fear and violence are the most prosperous basis for shared value (Salonen and Åhlberg 2012; Horobet and Belascu 2012; UN 2015; Fukuda-Parr 2019).

It is possible to establish the sort of value sharing that incorporates co-benefits between customers, shareholders, employees, society, and the

Earth. This may mean, for example, that owners of the grocery store decide to increase selling locally produced organic vegetables. By doing so their business embraces different benefit perspectives: “money spent on a consumer choice benefits the local community, food and nutrition promote public health and animal well-being, and consumer choice maintains biodiversity and helps establish global food security.” (Salonen et al. 2014, 77).

Summary

Values are something worth wanting, either for their own sake (intrinsically valuable things) or as a way for a better life (instrumentally valuable things). Values deal with egoism (self-interest) and altruism (helping each other). Value is shared when it benefits many. Moreover, it can benefit both human reality and nonhuman reality on the individual, societal, and planetary level. New trends seem to be embedding shared value discussions in work integrated learning, networks, knowledge management, and shared responsibility, which includes an environmental aspect. These themes are increasing as inclusive societies free from fear and violence are the most prosperous basis for shared value.

Cross-References

- [Competitiveness](#)
- [Creating Shared Value](#)
- [Global Performance](#)
- [Integrated Value](#)
- [Value Creation](#)

References

- Bowen, H. (1953). *Social responsibilities of the businessman*. New York: Harper.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4, 497–505.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2(3), 70–76.
- Forje, J. W. (2007). Rethinking Development: Going Beyond the Political and Economic Equations of the Various Human Dimensions for Sustainable Development in Africa – Problems, Prospects and the Way forward. *International Journal of Sustainable Development and Planning*, 2(1), 12–24.
- Fukuda-Parr, S. (2019). Keeping out extreme inequality from the SDG agenda – The politics of indicators. *Global Policy*, 10(Supplement 1), 61–69.
- Haque, U. (2011). *The new capitalist manifesto. Building a disruptively better business*. Boston: Harvard Business Review Press.
- Hecht, A. D., Fiksel, J., Fulton, S. C., Yosie, T. F., Hawkins, N. C., Leuenberger, H., Golden, J. S., & Lovejoy, T. E. (2012). Creating the future we want. *Sustainability: Science, Practice and Policy*, 8(2), 62–75.
- Horobet, A., & Belascu, L. (2012). Corporate social responsibility at the global level: An investigation of performances and integration of socially responsible investments. *Economics & Sociology*, 5(2a), 24–44.
- Jin, C.-H. (2018). The effects of creating shared value (CSV) on the consumer self-brand connection: Perspective of sustainable development. *Corporate Social Responsibility and Environmental Management*, 26(6), 1246–1257.
- Jonikas, D. (2013). Conceptual framework of value creation through CSR in separate member of value creation chain. *Bulletin of Geography. Socio-economic Series*, 21, 69–78.
- Ketonen-Oksi, S. (2018). Creating a shared narrative: The use of causal layered analysis to explore value co-creation in a novel service ecosystem. *European Journal of Futures Research*, 6(1), 1–12.
- Matinheikki, J., Rajala, R., & Peltokorpi, A. (2017). From the profit of one toward benefitting many – Crafting a vision of shared value creation. *Journal of Cleaner Production*, 162, 83–93.
- Mazzucato, M. (2018). *The values of everything. Making and taking in the global economy*. London: Penguin Random House.
- Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Redondo Hernández, J. (2019). ESG performance and shareholder value creation in the banking industry: International differences. *Sustainability (2071-1050)*, 11(5), 1404.
- Mohitsham Saeed, M., & Arshad, F. (2012). Corporate social responsibility as a source of competitive advantage: The mediating role of social capital and reputational capital. *Journal of Database Marketing & Customer Strategy Management*, 19(4), 219–232.
- Moore, J. (2015). *Capitalism in the web of life. Ecology and the accumulation of capital*. London: Verso.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment–trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38.
- Na, Y. K., & Kang, S. (2018). Effects of core resource and competence characteristics of sharing economy business on shared value, distinctive competitive advantage, and behavior intention. *Sustainability*, 10(10), 3416.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Rudd, M. A. (2000). Live long and prosper: Collective action, social capital and social vision. *Ecological Economics*, 34(1), 131–144.
- Salonen, A. (2013). Responsible Consumption. In S. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 2048–2055). Berlin: Springer.
- Salonen, A., & Åhlberg, M. (2012). The path towards planetary responsibility – Expanding the domain of human responsibility is a fundamental goal for life-long learning in a high-consumption society. *Journal of Sustainable Development*, 5(8), 13–26.
- Salonen, A., Fredriksson, L., Järvinen, S., Kortenien, P., & Danielsson, J. (2014). Sustainable consumption in Finland – The phenomenon, consumer profiles and future scenarios. *International Journal of Marketing Studies*, 6(4), 59–82.
- Shafer-Landau, R. (2010). *The fundamentals of ethics*. Oxford: Oxford University Press.
- Skačkauskienė, I., Hrušecká, D., Katinienė, A., & Čepel, M. (2018). Evaluation of knowledge synergy components. *E+M Ekonomie a Management*, 21(1), 144–158.
- Triziner, A., Oren, L., Bar, Y., & Kadosh, G. (2011). Corporate social responsibility, organizational justice and job satisfaction: How do they interrelate, if at all? *Revista de Psicología del Trabajo y de las Organizaciones*, 27(1), 67–72.
- Turulja, L., & Bajgorić, N. (2018). Knowing means existing: Organizational learning dimensions and knowledge management capability. *Business Systems Research*, 9(1), 1–18.

- UN. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. Available at: <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- Valentine, S., & Fleischman, G. (2008). Ethics programs, perceived corporate social responsibility and job satisfaction. *Journal of Business Ethics*, 77(2), 159–172.
- Watrous, K. M., Huffman, A. H., & Pritchard, R. D. (2006). When Coworkers and Managers Quit: The Effects of Turnover and Shared Values on Performance. *Journal of Business and Psychology*, 21(1), 103–126.
- Young, K., Palmer, S., Binek, C., Tolson, M., & Campbell, M. (2019). Assessment-led reform: Creating a sustainable culture for on and off campus WIL. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 73–87.

Shareholder Activism

- ▶ [Shareholder and Stakeholder Activism](#)
- ▶ [Shareholder Engagement](#)

Shareholder and Stakeholder Activism

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Synonyms

[Activism](#); [ESG](#); [Financial activism](#); [Institutional investors](#); [Shareholder activism](#); [Social activism](#); [Socially responsible investment](#); [Stakeholder activism](#); [UN Development Goals](#)

Definition

Corporations are frequent targets of activism (Briscoe and Gupta 2016; Goranova and Ryan 2014; Greenwood and Schor 2009; Kahan and Rock 2010; Renneboog and Szilagyi 2011). *Activism* can be defined as “a doctrine or practice that emphasizes direct vigorous actions especially in support of or opposition to one side of a

controversial issue” (Merriam-Webster 2020). Historically, activism has developed and been studied as *financial* and *social activism*, with increasing interest in understanding the direct and indirect effects it has on companies (Briscoe and Gupta 2016; McNulty and Nordberg 2016; Yue et al. 2013). The nature, goals, and actors of activism include financial, social, shareholder, and stakeholder activism. *Financial activism* is rooted in the 1980s’ rise of institutional investors and aims to protect shareholders’ interests and increase shareholder value (Goranova and Ryan 2014). It is typically exercised by *shareholders*, investors in a company, and often referred to as stockholders, as they hold stock (or shares) in the firm. *Social activism* dates back to the 1960s’ civil rights movements. At the time, it was exercised by civic society with the main goal of pushing a broad range of social issues onto the agenda of states and governments (Reid and Toffel 2009). Over time, it evolved to include a broader range of issues (such as environmental conservation practices, social responsibility practices, abortion rights, and special groups’ rights) raised by a wider group of activist (beyond civic society), increasingly targeting corporations (Aguilera et al. 2015; Berry 2003; King and Pearce 2010). Freeman (1984) introduced the term *stakeholder* into management language, and social activism has often been described as stakeholder-centered (Bundy et al. 2013; Goranova and Ryan 2014). The term *stakeholder(s)* refers to any group affecting or being affected by company behavior (Freeman 1984) or anybody holding a legitimate stake or interest in a firm (Donaldson and Preston 1995).

Introduction

The development of activism targeting corporations has been and remains of great interest to management scholars and practitioners as well as policy makers, given that it can be a powerful force affecting organizational policies and practices. Activism is on the rise and has been found effective (Becht et al. 2009; Briscoe and Gupta 2016; Davis and Thompson 1994; Goranova and

Ryan 2014; Kahan and Rock 2010; Greenwood and Schor 2009; Renneboog and Szilagyi 2011; Shi et al. 2018). Many studies have sought to understand how activism influences company-level actions, indicating that investors have an effect on a broad range of company activities such as firm's innovation, mergers and acquisitions, and the creation of strategic alliances and strategic decisions in general.

Financial activism exercised by shareholders has had considerable effects on companies (Gillan and Starks 2007; Goranova and Ryan 2014; Thomas and Cotter 2007). Historically, shareholders in the USA were first granted the right to submit financial resolutions in 1942 (SEC 1942). However, in the 1970s, a US court ruled that companies had to include social issues proposals from their shareholders in their proxy statements, a landmark decision that paved the way for shareholders' *social activism* in the broadest sense, pressuring companies to improve their societal and environmental impact. The 1980s saw the rise of institutional investors which are a type of shareholder (Proffitt and Spicer 2006). Shareholders can include individuals, families, institutional investors, pension funds, hedge funds, nongovernmental organizations (NGOs), and religious groups. Shareholder activism of financial nature can take the form of direct confrontations with boards of directors and management to express frustration or dissatisfaction with a company's decisions or structures, for instance, the successful, lengthy campaign of Oracle shareholders aimed at cutting CEO Larry Ellison's compensation (Waters 2017). Or, it can also unfold as formal battles to change a company's strategy and/or board composition, as in the case of the battle mounted by Nelson Peltz, owner of 1.5% stake in Procter & Gamble, to win a seat on the board and change the company's corporate strategy (Nicolau and Dye 2017).

In the beginning, financial activism was mainly exercised by large public pension funds, such as CalPERS, the California Public Employees' Retirement System, one the largest in the world according to the 2018 Global Pension Asset Survey (Thinking Ahead Institute 2019). However, institutional investors are a heterogeneous type of

shareholder, and over time many of them have become activists. These include pension funds, mutual funds, insurance companies, hedge funds, indexed funds (such as BlackRock, Vanguard, or State Street), a variety of financial intermediaries and Sovereign Wealth Funds (SWFs), and state-owned investment funds such as Norway's Government Pension Fund Global, the New Zealand Superannuation Fund, or the Abu Dhabi Investment Authority (OECD 2011). In the 1990s, hedge funds also entered the activism stage and became known for campaigning on an agenda of shareholder-value maximization, seeking financial performance (as opposed to social) and requiring companies' immediate action (Bratton 2007, 2008; Cheffins and Armour 2011). The CFA, the global association of investment professionals, defines hedge funds as "pooled investment vehicles that can invest in a wide variety of products, including derivatives, foreign exchange, and publicly traded securities" (CFA Institute 2020). Given the power of corporations, shareholder activism has become a force that companies need to deal with, and institutional investors now play a critical role in the strategic, global movement of shareholder activism (Aguilera et al. 2016).

Social activism initially developed in the form of shareholders' mounting campaigns for issues of social nature, either in the company's annual general meeting (where shareholders and the board of directors typically meet to discuss and review company's affairs) or directly with the boards of directors (Sjostrom 2008; Tkac 2006). Over time, this type of activism has increased steadily and has influenced a wide range of topics including the social governance of corporations, corporate environmental impact, corporate social responsibility (CSR), and gender issues (Ferri and Sandino 2009; Lee and Lounsbury 2011; Thomas and Cotter 2007; Pye and Pettigrew 2005). Shareholder activism of social nature has also received the support and endorsement of other *stakeholders*, for instance, NGO or unions (Greenwood 2007). Religious organizations such as the New York-based Interfaith Center on Corporate Responsibility have been instrumental in legitimizing and supporting

shareholder proposals on human rights issues and labor standards, while labor unions have successfully campaigned for workers' interests even at the expense of shareholder value-maximizing goals (Agrawal 2012). When directed toward large corporations, particularly multinationals, shareholder activism has also better chances of capturing media's attention, which in turn might facilitate a campaign's success and its spillover effects to other companies (Thomas and Cotter 2007). Since the definition of stakeholders is broad, efforts have been made to identify a core set of stakeholders whose participation in companies' affairs allows it to survive. This group is often referred to as *primary stakeholders* (Clarkson 1995; Eesley and Lenox 2006; Shropshire and Hillman 2007) and includes shareholders, employees, customers, and suppliers, as opposed to *secondary stakeholders*, such as governments, community activists, advocacy groups, religious organizations, and NGOs (Clarkson 1995). In general, secondary stakeholders do not have a formal, contractual relationship with the company (as is the case for primary stakeholders). Shareholders are often considered as primary stakeholders, as holding shares in a firm is seen as having a formal bond or contract with that firm. However, in common management lexicon, a difference of terminology is normally made between shareholders and stakeholders, as shareholders are not regarded as a type of stakeholder, rather as the investors or owners of the company, hence commonly considered in a class of their own. Therefore, in this chapter, we maintain both terms *shareholders* and *stakeholders*. Ever since the 1960s' civil rights movements, stakeholders (both primary and secondary) have not only supported shareholder activism of social nature, but they also started to directly target corporations, governments, universities, and hospitals with social and financial objectives (Briscoe and Gupta 2016; Davis and Thompson 1994; Rao et al. 2000; Soule 1997; Van Dyke et al. 2004).

Key Issues

Although activism has been studied into two parallel streams (financial and social), in practice

activist shareholders and stakeholders increasingly raise both financial and social concerns (O'Rourke 2003; Goranova and Ryan 2014; McNulty and Nordberg 2016). The boundaries between financial and social activism are increasingly blurred, and it is becoming more difficult to draw a line between social and financial claims. For instance, campaigning for employees' well-being or for flexible hours can be seen as a social goal; however, employees represent a company's human capital and generate revenue and costs. Consequently, where should the line be drawn on such campaign? Is it a social or a financial goal, given that human capital is at the heart of value creation and competitive advantage but well-being and flexible hours are also seen as a key part of work-life balance? This gives rise to a new type of activism of mixed nature. In essence, in the twenty-first century, financial actors such as investors or shareholders, traditionally behind financial activism, are becoming increasingly active in social matters. Most recent examples of this transformation are Allianz Global committing to increase social impact investment (Gordon 2018) and BlackRock urging CEOs to contribute to society (Mooney 2018). In its most general form, this new type of shareholder activism "means nothing more than an active, engaging shareholder who does not simply consider the investment made as purely financial but as strategic" (Ringe 2018, p. 388). At the same time, social actors (such as other stakeholders), long focused on social goals, increasingly campaign for issues that, although social on the surface, entail a great potential of change in the fundamentals of how a business is run and operates. A recent example is offered by Google's CEO Sundar Pichai announcing the company would be stepping back from plans of a possible relaunch of its search engine in China, following Google's employees' activism for more transparency and ethical behavior (Bradshaw 2018). This new type of activism also features shareholders and stakeholders regarding their interest in a given firm not only as financial or social but related to a broader set of issues of profoundly mixed financial, social, and environmental nature. Examples are employees caring not only

for their compensation but also for their emotional attachment to their company and its values (as in the above-described example of Google) or consumers going beyond price points in their decisions and campaigning for the certification of the organic origins or traceability of a product's ingredients. Examples of activism of blurred nature and actors on a global scale are the Socially Responsible Investment (SRI) and the Benefit Corporation movements. SRI is an investment approach that makes use of financial and nonfinancial criteria in investment decision-making, with nonfinancial criteria being its key characteristic. SRI has become known for considering a variety of issues often referred to as "Environmental, Social, and Governance" (ESG) as part of investment decision-making (Kölbel et al. 2018). Although SRI originated in the 1920s with religious groups stating that they would exclude from their investments "sin shares" such as alcohol or gambling, it gained momentum in the 1960s with the civil rights movements and the Vietnam War (Guay et al. 2004). Over the last 10 years, SRI has developed into a mainstream investment approach supported by some of the world's largest religious organizations and institutional investors, such as the Church of England, ShareAction, Hermes Funds, BlackRock, Vanguard, Ontario's Teachers Pension Fund, Axa Investment Managers, and Aberdeen Asset Management. Two international agreements have greatly contributed to this development: the UN Sustainable Development Goals (United Nations 2015a) and the Paris Climate Agreement (United Nations 2015b). An example will help to clarify the importance of this shift in the nature and actors of activism. A manufacturer of solar panel might achieve a certain level of carbon emission savings depending on its revenue or turnover. Investors and stakeholders campaigning for a broader, positive company impact on the environment can increase it by supporting management's strategic decision-making to scale through infrastructure or human capital or innovation investments so that it is able to increase solar panels'sales and/or make the panels more energy efficient and therefore increase carbon emission savings. Another

example is offered by investors who have announced they will be divesting from industries heavily linked to fossil fuels, forcing companies to innovate and shift to sustainable and renewable energy sources. The second example of activism of blurred nature of global scale is the Benefit Corporation movement, one of the most remarkable developments of the last decade (Mayer 2017). Following growing dissatisfaction among business and investors with shareholder primacy, the Benefit Corporation movement has been successful in influencing legislators, initially in the USA (including the important Delaware jurisdiction) and subsequently in other countries, to allow the incorporation of a company as public benefit corporation (B-Corporation) (Alexander 2016; Mayer 2016). This represents a very recent and key development, allowing a new corporate typology with a formal public and social purpose, along with commercial and financial goals (Steingard & Clark 2016). As of September 2020, 3564 companies had become B-Corp certified (B-Corporation 2020). In 2017, French food and beverage consumer group Danone became the first large, multinational corporation to announce its intention to apply for B-Corporation certification (The Economist 2017).

In view of the above-described developments, many argue for bringing the fields of social and financial activism closer together and for relaxing the, at times, rigid definitions of *activism*, *shareholders*, and *stakeholders* (Briscoe and Gupta 2016, Goronova and Ryan 2014). These calls lead to another important consideration. The boundaries of financial and social activism and the types of actors and scopes of activism are increasingly blurred, something that scholars such as Guay, Doh, and Sinclair (2004, p. 128) have noted, as they define shareholder activism as "a mix of SRI, corporate governance, and stakeholder capitalism." Consequently, studying, theorizing, and discussing activism in compartmental terms no longer reflect the reality of the twenty-first century. In addition, even the classification of stakeholders as primary and secondary no longer reflects reality, as the social, political, and financial weight of so-called secondary stakeholders (with or without a contractual bond with a

company) can match or exceed that of primary stakeholders.

Summary

Activism of blurred nature will continue to characterize this century, raising important questions in regard to the often-assumed antagonism between shareholders and stakeholders and between activists and corporations. Activism of blurred nature also raises new perspectives on the recurring question of in whose interest a company should be managed and how corporations can be a force for good, purveyors of economic development, social cohesiveness, and protection of the environment. Obtaining financial returns is in itself a legitimate goal for those who take risks, invest money in business enterprises, and expect returns on their investments. Generating financial returns is also a key responsibility of those entrusted with the governance and management of company affairs. However, in the context of the grand challenges of the twenty-first century (societal tensions, unrest and inequalities, and the climate crisis), shareholder value maximization should be far from being the only objective of activists and corporations. Engaging and managing shareholders and stakeholders who can or have become activist in various shapes and forms increasingly represents a key corporate activity which relates to risk management and corporate resilience, demands management and board attention, and is ultimately related to value creation for investors and for society. This, the future challenges of shareholder and stakeholder activism, may relate to the need for a fundamental shift in our way of thinking about the broader purpose of capital, the purpose of business, and therefore the purpose of corporations (Emerson 2018; Meyer 2016, 2017; Starbuck 2014). Since the 2008 financial crisis, a growing chorus of activist voices have been urging governments, investors, businesses, and society to move away from short termism and the obsession with monthly-quarterly financial returns and to embrace a longer-term way of thinking around value creation for investors and society (Barton and Wiseman 2014). Reengineering a system that

for the last decades has been functioning on short termism is certainly not easy. However, thinking that business and capital should serve society and not vice versa might provide a good starting point and a direction for an ambitious yet very necessary change of our system of wealth creation and distribution.

Cross-References

- [Corporate Social Responsibility \(CSR\)](#)
- [Dialogue](#)
- [Shared Value](#)
- [Stakeholder Theory](#)

References

- Agrawal, A. (2012). Corporate governance objectives of labor union shareholders: Evidence from proxy voting. *Review of Financial Studies*, 25(1), 187–226.
- Aguilera, R. V., Desender, K., Bednar, M., & Lee, J. (2015). Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *The Academy of Management Annals*, 9(1), 483–573.
- Aguilera, R. V., Capapé, J., & Esade, J. S. (2016). Sovereign wealth funds: A strategic governance view. *Academy of Management Perspectives*, 30(1), 5–23.
- Alexander, F. (2016). Delaware public benefit corporations: Widening the fiduciary aperture to broaden the corporate mission. *Journal of Applied Corporate Finance*, 28, 66–74.
- Barton, D., & Wiseman, J. (2014). Focusing capital on the long term. *Harvard Business Review*, January–February 2014. Available at <https://hbr.org>
- B-Corporation. (2020). A global community of leaders. Retrieved September 25 from: <https://bcorporation.net/>
- Becht, M., Franks, J., Mayer, C., & Rossi, S. (2009). Returns to shareholder activism: Evidence from a clinical study of the Hermes UK Focus Fund. *Review of Financial Studies*, 22, 3093–3129.
- Berry, G. (2003). Organizing against multinational corporate power in Cancer Alley. *Organization & Environment*, 16(1), 3–33.
- Bradshaw, T. (2018). Google chief tries to quell staff anger over China project. *Financial Times*. 17 August 2018. Available at <https://www.ft.com>
- Bratton, W. W. (2007). Hedge funds and governance targets. *Georgetown Law Journal*, 95, 1375–1433.
- Bratton, W. W. (2008). Private equity's three lessons for agency theory. *European Business Organization Law Review*, 9, 509–533.
- Briscoe, F., & Gupta, A. (2016). Social activism in and around organizations. *The Academy of Management Annals*, 10(1), 671–727.

- Bundy, J., Shropshire, C., & Buchholtz, A. (2013). Strategic cognition and issue salience: Towards an explanation of firm responsiveness to stakeholder concerns. *Academy of Management Review*, 38(3), 352–376.
- CFA Institute. (2020). *Hedge funds*. Retrieved September 24 from: <https://www.cfainstitute.org>
- Cheffins, B. R., & Armour, J. (2011). The past, present, and future of shareholder activism by hedge funds. *Journal of Corporation Law*, 37, 51–102.
- Clarkson, M. B. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Davis, G. F., & Thompson, T. A. (1994). A social movement perspective on corporate control. *Administrative Science Quarterly*, 39(1), 141–173.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.
- Eesley, C., & Lenox, C. E. (2006). Firm responses to secondary stakeholder action. *Strategic Management Journal*, 27(8), 765–781.
- Emerson, J. (2018). *The purpose of capital*. San Francisco: Blended Value Group Press.
- Ferri, F., & Sandino, T. (2009). The impact of shareholder activism on financial reporting and compensation: The case of employee stock options expensing. *Accounting Review*, 84, 433–466.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Englewood Cliffs: Prentice-Hall.
- Gillan, S. L., & Starks, L. T. (2007). The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance*, 19, 55–73.
- Goranova, M., & Ryan, L. (2014). Shareholder activism: A multidisciplinary review. *Journal of Management*, 40(5), 1230–1268.
- Gordon, S. (2018). Allianz GI's vice-chair seeks to make impact on social investment. *Financial Times*, 26 March 2018. Available at: [https://www.ft.com/Allianz GI's vice-chair seeks to make impact on social investment](https://www.ft.com/Allianz-GI's-vice-chair-seeks-to-make-impact-on-social-investment)
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74(4), 315–327.
- Greenwood, R., & Schor, M. (2009). Investor activism and takeovers. *Journal of Financial Economics*, 92(3), 362–375.
- Guay, T., Doh, J., & Sinclair, G. (2004). Non-governmental organizations, shareholder activism, and socially responsible investments: Ethical, strategic, and governance implications. *Journal of Business Ethics*, 52(1), 125–139.
- Kahan, M., & Rock, E. (2010). Embattled CEOs. *Texas Law Review*, 88, 987–1051.
- King, B. G., & Pearce, N. A. (2010). The contentiousness of markets: Politics, social movements, and institutional change in markets. *Annual Review of Sociology*, 36, 249–267.
- Kölbel, J. F., Heeb, F., Paetzold, F., & Busch, T. (2018). Beyond returns: Investigating the social and environmental impact of sustainable investing. Available at SSRN: <https://ssrn.com/abstract=3289544> or <https://doi.org/10.2139/ssrn.3289544>.
- Lee, M.-D. P., & Lounsbury, M. (2011). Domesticating radical rant and rage: An exploration of the consequences of environmental shareholder resolutions on corporate environmental performance. *Business and Society*, 50(1), 155–188.
- Mayer, C. (2016). Reinventing the corporation. *Journal of the British Academy*, 4, 53–72.
- Mayer, C. (2017). Who is responsible for irresponsible business? An assessment. *Oxford Review of Economic Policy*, 33(2), 1–25. Available at SSRN: <https://ssrn.com/abstract=2941358>
- McNulty, T., & Nordberg, D. (2016). Ownership, activism and engagement: Institutional investors as active owners. *Corporate Governance: An International Review*, 24(3), 346–358.
- Merriam-Webster. (2020). *Activism*. Retrieved September 25 from: <https://www.merriam-webster.com/>
- Mooney, A. (2018). BlackRock chief Larry Fink issues companies with code of conduct. *Financial Times*, 16 January 2018. Available at: [http://ft.com/Blackrock chief Larry Fink issues companies with code of contact](http://ft.com/Blackrock-chief-Larry-Fink-issues-companies-with-code-of-contact)
- Nicolau, A., & Dye, J. (2017). Nelson Peltz claims victory in P&G board seat recount. *Financial Times*, 16 November 2017. Available at: <https://www.ft.com>
- O'Rourke, A. (2003). A new politics of engagement: Shareholder activism for corporate social responsibility. *Business Strategy and the Environment*, 12(4), 227–239.
- OECD. (2011). The role of institutional investors in promoting good corporate governance. Available at <https://www.oecd.org/daf/ca/49081553.pdf>
- Proffitt, W. T., & Spicer, A. (2006). Shaping the shareholder activism agenda: Institutional investors and global social issues. *Strategic Organization*, 4(2), 165–190.
- Pye, A., & Pettigrew, A. (2005). Studying board context, process and dynamics: Some challenges for the future. *British Journal of Management*, 16(s1), S27–S38.
- Rao, H., Morrill, C., & Zald, M. N. (2000). Power plays: How social movements and collective action create new organizational forms. *Research in Organizational Behavior*, 22, 237–281.
- Reid, E., & Toffel, M. (2009). Responding to public and private politics: Corporate disclosure of climate change strategies. *Strategic Management Journal*, 30(11), 1157–1178.
- Renneboog, L., & Szilagyi, P. G. (2011). The role of shareholder proposals in corporate governance. *Journal of Corporate Finance*, 17(1), 167–188.
- Ringe, W. G. (2018). Shareholder activism: A renaissance. In J. N. Gordon & W. G. Ringe (Eds.), *The Oxford handbook of corporate law and governance* (pp. 387–424). New York: Oxford University Press.
- SEC. (1942). Rule X-14-A-7: Duty of management to set forth stockholder's proposals. Exchange Act Release No. 3347, Investment Company Act Release No. 417, 1942 WL 34864, December 18.

- Shi, W., Connelly, B. L., & Cirik, K. (2018). Short seller influence on firm growth: A threat rigidity perspective. *Academy of Management Journal*, 61(5), 1892–1919.
- Shropshire, C., & Hillman, A. J. (2007). A longitudinal study of significant change in stakeholder management. *Business & Society*, 46(1), 63–87.
- Sjostrom, E. (2008). Shareholder activism for corporate social responsibility: What do we know? *Sustainable Development*, 16(3), 141–154.
- Soule, S. A. (1997). The student divestment movement in the United States and tactical diffusion: The Shantytown protest. *Social Forces*, 75(3), 855–882.
- Starbuck, W. (2014). Why corporate governance deserves serious and creative thought. *Academy of Management Perspectives*, 28(1), 15–21.
- The Economist. (2017). *Be a sinner, be a saint*. Retrieved September 24 from: <https://www.economist.com>
- Thinking Ahead Institute. (2019). *The world's largest pension funds*. Retrieved September 25 from: <https://www.thinkingaheadinstitute.org>
- Thomas, R. S., & Cotter, J. F. (2007). Shareholder proposals in the new millennium: Shareholder support, board response and market reaction. *Journal of Corporate Finance*, 13, 368–391.
- Tkac, P. (2006). One proxy at a time: Pursuing social change through shareholder proposals. *Economic Review*, 91, 1–20.
- United Nations. (2015a). *The 2030 agenda for sustainable development*. Retrieved September 25 from: <https://sdgs.un.org/goals>
- United Nations. (2015b). *Paris agreement*. Retrieved September 24 from: <https://unfccc.int>
- Van Dyke, N., Soule, S. A., & Taylor, V. A. (2004). The targets of social movements: Beyond a focus on the state. *Research in Social Movements, Conflicts, and Change*, 25(1), 27–51.
- Waters, R. (2017). Oracle bows to shareholders by cutting Larry Ellison's pay. *Financial Times*, 6 October 2017. Available at: <https://www.ft.com>.
- Yue, L. Q., Rao, H., & Ingram, P. (2013). Information spillovers from protests against corporations: A tale of Walmart and Target. *Administrative Science Quarterly*, 58(4), 669–701.

Shareholder Democracy

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Synonyms

Corporate democracy; Shareholder franchise; Stakeholder democracy

Definition/Description

Shareholder democracy, an off-shoot of the “shareholder primacy” approach to corporate governance, seeks to increase the role of shareholders in management and decision-making in the corporation. The core idea is that shareholders should regain some of the power that was lost to directors as a result of the rise of management and the board of directors in corporate decision-making. Shareholder democracy sees a parallel between the positions of management of the corporation and the management of democratic societies and suggests that shareholders should have more control and a more active role in the affairs of the corporation.

Shareholder democracy, its advocates argue, is necessary for several reasons, including increased accountability of corporate managers, avoidance or reduction of agency problems and conflict of interests between shareholders and managers, and the role of shareholders as the residual claimants of the corporation.

The broader agenda of shareholder democracy includes enhancing shareholders' voting power, strengthening shareholder advisory resolutions, allowing derivative suits and stock ownership consolidation in institutional investors, and creating say-on-pay rules, shareholder advisory committees, and proxy advisory firms.

Introduction

Corporations are among the most efficient vehicles for conducting business. Through the incorporation process, an incorporator creates a juridical person that the legal system recognizes as an independent person with different rights and duties. This juridical person is styled “the corporation,” a critical actor of contemporary capitalism.

Corporate persons, however, do not act independently of the human persons who incorporate, operate, and make strategic decisions for them. They are fictional entities and, as such, require human persons to make decisions about acquiring rights and duties. A corporation is a

legal vehicle steered by someone. Whether shareholders or directors, one or more human persons is always behind the decisions of the corporation.

Two bodies of the corporation have been traditionally entitled to make corporate decisions: the board of directors and the general meeting of shareholders. What decisions belong to each of these bodies, and therefore what decision power is allocated to each, is a contested matter. Some contend that the corporation's decision process must prioritize shareholders because the corporation must serve the interests of this group ("shareholder primacy") (Hayden and Bodie 2010). Conversely, others believe that the board of directors should be the locus of corporate decision-making as it is best positioned to steer the course of the company ("board primacy") (Hayden and Bodie 2010).

The concept of "shareholder democracy," while acknowledging that boards of directors play an active role in the corporation's decision-making process, holds that shareholders should retain some power over corporations including increased decision-making.

Shareholders and Democracy

The concept of "shareholder democracy" suggests a political parallel between the state and the corporation. This parallel refers to the idea that in the same way that people entitled to a vote in a democratic society define the direction of the country, people entitled to a vote in a corporation should determine the course of the company (Duffy 2002; Latham and Emerson 1952). Although the concept of "democracy" may seem strange in the realm of private corporations, it is a concept that evokes the idea that directors, just as elected politicians, ought to be constrained by the will of the voters, in the case of the corporation, the shareholders (Duffy 2002; Schwartz 1983).

Some authors have argued that "[b]ecause shareholder democracy has become an integral and growing part of a broader democratic process, undermining shareholder democracy

results in undermining the democratic process in our society as a whole" (Matheson and Nicolet 2019). Thus, democratic theories and processes which underpin democracies elsewhere ought to be reinforced and extended into other contexts, including the corporation. Other authors have differentiated the "democratic" systems of the corporation and the state. Differentiating factors include, first, that not every stakeholder has a vote in the corporation, whereas all adults have a vote in a democratic society (Duffy 2002). Second, unlike shareholders, voters in a democratic society have equal voting powers (Duffy 2002). In the corporation, some shareholders may hold significant blocks of shares and so have inordinately large voting rights. Finally, the mobile nature of the right to vote differentiates "democracy" in corporations and states (Duffy 2002). In corporations, shareholders can sell their shares, transferring voting rights and duties to purchasers.

Shareholder Democracy: Definition

Although "shareholder democracy" is not a single, undisputed concept (Garrett 1956; Schwartz 1983), it refers broadly to the idea that shareholders should regain some of the power over the corporation that has been lost as a result of the increased power of the board of directors in the management and decision-making of the corporation. It suggests that shareholders should have more control and a more active role in the affairs of the corporation (Garrett 1956; Gower 1955) – contrary to the ideas underpinning the "board primacy" approach.

Notably, "[s]hareholder democracy refers to the ability of shareholders to dictate or influence the policy, governance, functions, and decisions of the corporation, either directly or through the board of directors and management, as a result of shareholders' ownership rights" (Matheson and Nicolet 2019). Consequently, shareholder democracy "attempts to give the ordinary shareholder a meaningful position in his [sic] relation to modern publicly-held corporations" (Garrett 1956).

Reasons for and Against Shareholder Democracy

Several justifications are given for shareholder democracy. First, shareholders' efforts to increase their participation power are motivated by their desire to make corporate managers – officers and directors – more accountable (Fairfax 2008; Fairfax 2009; Smythe 2006). “Ultimately, many shareholders and their proponents believe that expanding shareholder democracy will lead to greater managerial accountability, thereby curbing managers' abuses of authority and ensuring that managers pay heed to shareholders' concerns” (Fairfax 2008).

A second reason relates to agency problems and the potential conflict of interests that may arise between shareholders and managers (Bebchuk 2007; Schwartz 1983). Although directors, conceived as agents of shareholders, are expected to act in alignment with shareholders' interests, they may in fact pursue their own interests in opposition to those of the shareholders. Shareholder democracy attempts to reduce this issue by involving shareholders more intimately in review, opinion, and decision-making. Third, there is a normative argument: it is argued that as the corporation's owners, shareholders are entitled to have greater participation in governance (Matheson and Nicolet 2019). Since shareholders are the owners of the corporation, they and not the directors are entitled to control the company.

Finally, shareholder democracy advocates argue that “shareholders are the sole residual claimants and, as such, are in the best position to exercise control for the good of all corporate constituents” (Hayden and Bodie 2010). Residual claimants, the last actors to receive payment from a corporation, are at the greatest risk. As a result of this risk, shareholder democracy advocates argue that shareholders should have greater control over the affairs of the corporate body.

Criticisms of shareholder democracy are mainly based on efficiency arguments. From an efficiency perspective, shareholder democracy is an inappropriate approach because, collectively, shareholders cannot manage the corporation

efficiently (Garrett 1956). Board primacy advocates argue that the successful management of corporations rests upon a clear and significant separation of powers between the shareholders as owners and the directors as managers (Garrett 1956). Other criticisms are based upon the possibility that some shareholders may be seeking to advance their own personal or political agendas (Fairfax 2008), or that shareholder empowerment benefits some shareholders more than others (Fairfax 2008), or that the interests of some shareholders – such as hedge funds – are opposed to the interests of the corporation's stakeholders more broadly (Fairfax 2008), or that “activist shareholders with only short-term interests may seek, and bring about, substantial changes that harm the prospects of some of the corporation's long-term goals” (Matheson and Nicolet 2019).

Strategic Focuses of Shareholder Democracy Advocates

Shareholder democracy is promoted through various strategies designed to give shareholders more power and control. Shareholder democracy first has focused on shareholders' voting power (Fairfax 2008; Fairfax 2009; Feis 1976). Enhancing shareholders' voting power increases the authority of this corporate body vis-à-vis the corporation (Fairfax 2009). Shareholder democracy seeks to enhance shareholder's voting power by reducing corporate management's control of the proxy machinery – the management's power to recommend candidates for nomination to the board and its relationships with significant shareholders who will delegate their voting rights or support the management's recommendations (Fairfax 2008; Fairfax 2009; Garrett 1956; Matheson and Nicolet 2019). “It has been asserted that the proxy statement is not the exclusive property of the management, and that those who challenge the management should have the right to include their independent nominations for directors in the management's proxy statement” (Garrett 1956).

Another way to enhance shareholders' voting power and improve shareholder democracy is by

establishing a system of annual elections rather than a system of staggered boards (Bebchuk 2007; Fairfax 2008). Shareholder democracy advocates view staggered/classified boards “as an entrenchment device that makes it difficult to replace the entire board in a single year” (Matheson and Nicolet 2019). Another way to enhance voting rights is to establish a majority voting regime instead of a plurality system (Fairfax 2008; Matheson and Nicolet 2019). Finally, voting power can be increased by the elimination of supermajority voting rules and the separation of the positions of the CEO and the chair of the board (Fairfax 2008).

A second strategy of shareholder democracy advocates has focused on shareholder advisory resolutions. These resolutions allow shareholders to submit proposals for action at a general meeting of shareholders (Fischel 1982; Garrett 1956; Matheson and Nicolet 2019). “This shareholder proposal process represents one of the only formal mechanisms available for shareholders not only to initiate dialogue, but also to potentially initiate corporate programs or policies on a given issue. As such, that process represents a critical component of shareholder activism” (Fairfax 2008).

Other strategies advanced by shareholder democracy proponents are (1) say-on-pay rules, which allow shareholders to have a say and monitor managerial pay within the corporation (Hayden and Bodie 2010; Matheson and Nicolet 2019); (2) derivative suits, “whereby shareholders could assert a claim against the managers for improper conduct” (Schwartz 1983); (3) shareholder advisory committees, where shareholders would have the opportunity, at a minimum, to receive information from corporate managers and provide feedback (Matheson and Nicolet 2019); (4) stock ownership consolidation in institutional investors, giving shareholders financial credibility and incentives to play a more active role in the corporation (Matheson and Nicolet 2019); and (5) proxy advisory firms, which “provide research and recommendations as to how institutional investors should vote their shares in publicly held companies” (Matheson and Nicolet 2019).

Summary

Shareholder democracy, an off-shoot of the “shareholder primacy” approach to corporate governance, attempts to give shareholders more power and a more active role in the management and decision-making of the corporation. Shareholder democracy is a contested concept, and various strategies have been proposed to implement the idea. These strategies include enhancing shareholders’ voting power, strengthening shareholder advisory resolutions, allowing derivative suits and stock ownership consolidation in institutional investors, and creating say-on-pay rules, shareholder advisory committees, and proxy advisory firms. Shareholder democracy, its advocates argue, is necessary because shareholders are the corporation’s residual claimants and because it increases the accountability of corporate managers and reduces agency problems between shareholders and managers.

References

- Bebchuk, L. A. (2007). The myth of the shareholder franchise. *Virginia Law Review*, 93(3), 675–732.
- Duffy, M. J. (2002). Shareholder democracy or shareholder plutocracy corporate governance and the plight of small shareholders. *University of New South Wales Law Journal*, 25(2), 434–461.
- Fairfax, L. M. (2008). Making the corporation safe for shareholder democracy. *Ohio State Law Journal*, 69(1), 53–108.
- Fairfax, L. M. (2009). The future of shareholder democracy. *Indiana Law Journal*, 84(4), 1259–1308.
- Feis, W. J. (1976). Is shareholder democracy attainable? *The Business Lawyer*, 31(2), 621–643.
- Fischel, D. R. (1982). Corporate governance movement. *The Vanderbilt Law Review*, 35(6), 1259–1292.
- Garrett, R. (1956). Attitudes on corporate democracy—a critical analysis. *Northwestern University Law Review*, 51(3), 310–336.
- Gower, L. C. B. (1955). Reviewed work(s): Shareholder democracy. A broader outlook for corporations by Frank D. Emerson and Franklin C. Latham. *Harvard Law Review*, 68(5), 922–928.
- Hayden, G., & Bodie, M. T. (2010). Shareholder democracy and the curious turn toward board primacy. *William and Mary Law Review*, 51(6), 2071–2122.
- Latham, F. C., & Emerson, F. D. (1952). Proxy contest expenses and shareholder democracy. *Western Reserve Law Review*, 4(1), 5–18.

- Matheson, J. H., & Nicolet, V. (2019). Shareholder democracy and special interest governance. *Minnesota Law Review*, 103(4), 1649–1698.
- Schwartz, D. E. (1983). Shareholder democracy: A reality or chimera? *California Management Review*, 25(3), 53–67.
- Smythe, D. J. (2006). Shareholder democracy and the economic purpose of the corporation. *Washington and Lee Law Review*, 63(4), 1407–1420.

Shareholder Engagement

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Synonyms

[Corporate Engagement](#); [Shareholder Activism](#)

Definition

Shareholder engagement is the sub-class of shareholder activism, defined as a way for the shareholders to communicate and discuss their perspectives, concerns and ideas with their management, especially the board of directors and executive managers. Shareholders aim to have dialogues with the company, especially with the board of directors, who will receive constructive feedback on how to make improvements on the performance of the company. It also aims to ensure that the investment they made in the companies have an adequate and proper corporate governance and management mechanism. Ultimately, it focuses on bringing the attention of the board of directors and the management team to company changes in the near future. The person who attempts to use her/his shareholder rights of a public limited company (plc) to engage within the corporation's management is called *Shareholder Activist*. These shareholder activists believe a company's management can be improved by their engagements. They are not attempting to sell their share ownerships if they are not satisfied with the performance and management of the

company but rather attempt to gain control of the company and replace management or force a major change for the company. The behaviour of shareholders attempting to influence the management of a corporate by exercising their shareholder rights as partial owners are also well-known as Shareholder Activism. In particular, shareholder engagement is critical to institutional investors who hold shares on behalf of hundreds and millions of individuals and organisational entities, and they have a fiduciary duty to ensure that their holdings are in the best interests of the underlying investors.

Introduction

Forms of Shareholder Engagement

The forms of shareholder engagement between shareholders/shareholder activists and management team include annual general meetings, investor meetings, one-to-one dialogue meetings, shareholder voting, shareholder proposals, shareholder written consent, shareholder proxy statements, shareholder campaigns, discussions in the annual report, presentation of a corporate social responsibility report, announcements on the company website. In many circumstances, shareholder engagement begins with submitting a proposal by a shareholder representative. According to Institutional Shareholder Services (ISS) research, shareholder proposals had a 10% growth from 2012 to 2013 (ISS 2013). Issues like board members/chairman/leader elections, political lobbying and board components are commonly debated in shareholder proposals. The annual general meetings, investor meetings and one-to-one dialogue meetings are very popular in practice. Under the regulation Fair Disclosure (FD) of the Securities and Exchange Commission (SEC), corporates are required to be prepared in advance, and specific topics are selected for discussion purposes, provide fair and transparent disclosure of information, and enhance prohibitions against insider trading. There is a recent trend of shareholders demanding personal interaction with directors rather than just the investor relations officer (IRO) or members of

the management team. The one-to-one meetings reflect a new era in corporate governance. In some circumstances, offensive tactics (e.g., media channels, lawsuits/litigation threats) might force more pressure or a conversation for changes.

Shareholder Engagement Discussions

The communication topics are much diversified, and some of the major issues addressed by the shareholder activists include but are not limited to environmental, social, and governance (ESG) issues/corporate social responsibility (CSR) issues (O'Rourke 2003), corporate strategies, climate changes, divestment requests, risk management, executive compensation, profit distribution to the internal culture and business model of a company, board diversity. These topics are aimed at bringing the attention of the board of directors and the management team for a change in the near future. These shareholder activists believe a company's management can be improved by their engagements, and currently the management team did not do a good job. These shareholder activists are not attempting to sell their ownerships but rather attempt to gain control of the company and replace management or force a major change for the company. The behaviour of shareholders attempting to influence the management of a corporate by exercising their shareholder rights as partial owners are also well-known as *Shareholder Activism*. According to the Harvard Law Review (Harvard 2019), 2018 was a record year for shareholder activism. A record amount of capital of \$65 billion was deployed in new activist campaigns, which equals 30% over the average amount deployed from 2015 to 2017. The shareholder activist campaigns in 2018 held 60% in US companies, 25% targeted European companies, and approximately 10% targeted Asia-Pacific companies. Overall, the statistics overstate the success of shareholder activism.

Shareholder Engagement Process

Direct shareholder engagement is unlikely to be accessible to all shareholders. Hence, the engagement process starts with thoughtful preparations to ensure an effective and efficient dialogue. As a corporate, it is aimed to assess shareholder

ownership first and target specific shareholder representatives. Secondly, it is necessary to draw an effective shareholder policy to communicate successfully with shareholders. One of the corporate governance practices is to establish a shareholder engagement policy, which outlines formal guidance for companies to interact and communicate with shareholders. The shareholder engagement policy aims to facilitate effective communication between shareholders, boards and managers. Board members and managers can also find the relevant guidelines for best dealing with activist shareholders. Within the shareholder engagement policy, both parties could engage by following the interaction methods and types of discussion topics. Many corporations also consult a third party to help establish these parameters. As opposed to responding to ad hoc shareholder demands, a proactive, documented approach is becoming more common among corporations that engage with their shareholders. In addition, there is no standard shareholder engagement frequency. It depends on the nature of the demands and the board's preference. Some organizations' only communication is via proxy disclosures and press releases, while others prefer more frequent and proactive engagement of shareholders. However, it is commonly believed that increasing engagement frequency can improve the efficiency of corporate governance and management.

According to the survey of National Association of Corporate Directors (NACD 2018), over 20% of listed companies were approached by activist shareholders in the years 2015–2016. The statistics also showed that over 50% of the boards of listed companies have designated plans to respond to activist investors. Boards of small-cap companies indicated that they faced pressure from activist shareholders more often than large-cap companies (NACD 2018). As indicated by 44% of the responses of small-cap companies, they were more likely to assign a board director to meet with institutional investors in person at least once a year (NACD 2018). But, in fact, only small numbers of small-cap companies established a protocol for addressing shareholder inquiries and pressures.

Summary

Although it has become more common, organisations still have many questions about how to begin shareholder engagement, how frequently this engagement should be made, who should be responsible for it, and what discussion topics should be involved. Based on the statement of Deloitte (2013), boards that have strategically increased shareholder engagement have found it provides a good source of communication from shareholders directly. Southwood (2003) researched four case studies of shareholder engagement on issues of socially responsible investment and debated the conflicts of interest between shareholder power and sustainable business performance. He explained that the decisive long-term factor for sustainable business performance is the major rationale for shareholder engagement rather than the power of shareholders in enforcement. Hoepner et al. (2018) first concluded the truthfulness of whether shareholder engagement on ESG issues can benefit shareholders by reducing firms' downside risk with empirical evidence. Shareholder engagement activities will likely continue worldwide. Recent regulatory and corporate governance trends show that shareholder engagement has become very important in maximizing the shareholder relationship with its management. The impact of those relationships could have material consequences for both sides. A proactive and well-planned shareholder engagement strategy can be an effective tool to help foster relationships, enhance transparency, and hear from shareholders firsthand. Properly planned and executed shareholder engagement can benefit the management board and organisation. Gifford (2010) found that a strong business case and the values of the managers of investee companies are the most important contributors to shareholder salience.

However, it needs to be clarified that what the key rationales for the activity of shareholder engagement are; what channels of ESG engagement can create value for shareholders for the long-term purpose. It is reckoned that institutional investor engagement on ESG issues has paid extraordinarily widespread throughout the

financial markets in the world. Some scholars have discussed that the trend is caused by the growing public interest in ESG/CSR topics, the growing size of institutional shareholdings, low passing rate for shareholder proxy proposals (e.g., Gillan and Starks 2007; Grewal et al. 2016). Given the growth of the institutional shareholder's engagement on ESG issues, we still need more insights into understanding whether ESG-related engagement can create value and reduce shareholder risk.

Cross-References

- Shareholder Activism
- Shareholder Rights
- Shareholder Theory/Shareholder Value

References

- Deloitte. (2013). Shareholder engagement: A new era in corporate governance. *The Wall Street Journal*. <https://deloitte.wsj.com/riskandcompliance/2013/10/01/shareholder-engagement-a-new-era-in-corporate-governance/>. Accessed 01 Dec 2019.
- Gifford, E. J. M. (2010). Effective shareholder engagement: The factors that contribute to shareholder salience. *Journal of Business Ethics*, 92(1), 79–97.
- Gillan, S., & Starks, L. (2007). The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance*, 19, 55–73.
- Grewal, J., Serafeim, G., & Yoon, A. (2016). Shareholder activism on sustainability issues (Working paper). *Harvard Business School*.
- Harvard. (2019). The road ahead for shareholder activism. Harvard Law School Forum Corporate Governance and Financial Regulation. *Harvard Colleague*. February 13, 2019. <https://corpgov.law.harvard.edu/2019/02/13/the-road-ahead-for-shareholder-activism/>. Accessed 01 Dec 2019
- Hoepner, A.G., Oikonomou, I., Sautner, Z., Starks, L.T., & Zhou, X. (2018). ESG shareholder engagement and downside risk. *SSRN working paper*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2874252. Accessed 01 Dec 2019.
- ISS. (2013). Executive compensation insights. *ISS Corporate Services*. Vol. 13.3. https://www.issgovernance.com/file/publications/MaximizingTheShareholderRelationshipVol_13.3.pdf. Accessed 01 Dec 2019
- NACD. (2018). 2017-2018 public company governance survey: executive summary. *National Association of Corporate Directors (NACD)*. <https://www.>

nacdonline.org/files/2017%E2%80%932018%20NACD%20Public%20Company%20Governance%20Survey%20Executive%20Summary.pdf. Accessed 01 Dec 2019.

- O'Rourke, A. (2003). A new politics of engagement: Shareholder activism for corporate social responsibility. *Business Strategy and the Environment*, 12(4), 227–239.
- Southwood, P. (2003). Shareholder engagement: Prospects for improving corporate social responsibility. *International Journal of Business Performance Management*, 5(2–3), 223–236.

Shareholder Franchise

► Shareholder Democracy

Shareholder Model

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Synonyms

[Shareholder primacy](#); [Shareholder Wealth Maximization \(SWM\)](#)

Definition

Shareholder model holds that the primary goal of commercial companies is to maximize shareholder wealth, namely, the company should be run for shareholder interests. Most people in the Anglo-American legal sphere see it as the primary corporate purpose, especially under the prevalent thought that “an organization should have a single valued objective” (Jensen 2001, p. 10). According to the neoclassical economics, shareholders are regarded as residual proprietary claimants for the income stream after all fixed claims are met. Consequently, it is argued that shareholders' interests can be aligned with the interests of the company, and thereby maximizing their interests would be

equated to maximizing corporate interests as a whole. The aggregate social welfare is also seen enhanced when shareholder value is increased. The board of directors and their delegates of daily management, executive officers, are as a result expected to serve for shareholder value. Providing better employee welfare, improving customer services, and contributing more to communities, among other things, are considered improper for managers to pursue unless these activities can serve as a means to maximize shareholder value in due course. By the same token, when conflicts arise between shareholders and non-shareholders, directors and managers are only required to address the interests of the former and to take actions to produce the highest possible returns for them even at the expense of the latter.

Overview

Companies are economic entities which should “strive to maximise value for shareholders,” and profit maximization thereby become the baseline goal for directors and executives of the company (Macey 2008, p. 2). When asked, “who owns the large public companies,” most senior managers of companies in the United States (US) answered it was shareholders (Macey 2008, p. 4). Similarly, according to a survey of course syllabi of US law schools, many faculties to this day still believe the focus on shareholders' financial returns is *settled law* (West 2011, p. 18). When those law or business students grow up and become corporate executives, they will undoubtedly view the corporate objective – namely, their main responsibility – as serving shareholder interests in all circumstances. Managing companies for purposes other than shareholder wealth maximization is as a result seen as unethical at best and illegitimate at worst. It is not surprising then when Professors Hansmann and Kraakman (2001, p. 439) claimed “[t]here is no longer any serious competitor to the view that corporate law should principally strive to increase long-term shareholder value,” or when Milton Friedman (1970, p. 33) asserted:

In a free enterprise, private-property system, a corporate executive is an employee of the owners of the business. He has a direct responsibility to his employers. That responsibility is to conduct the business in accordance with their desires, which generally will be to make as much money as possible while conforming to the basic rules of society.

In *Dodge v Ford Motor Corp* (1919) 170 NW 684 (US), often cited by shareholder primacists as the classic case for supporting shareholders' superior position, the Michigan Supreme Court held: "[t]he ultimate objective of companies as currently enshrined in law – i.e., to generate maximum value for shareholders – is in principle the best means also of securing overall prosperity and welfare" (Stout 2008, p. 167). More recently, Chancellor Leo Strine of the Delaware Chancery Court also wrote: "the corporate law requires directors, as a matter of their duty of loyalty, to pursue a good faith strategy to maximize profits for the stockholders" (Strine 2012, p. 155).

Although pivotal contribution from various corporate constituents such as employees, suppliers, and communities should not be ignored as regards the survival and prosperity of a company, taking their interests into account is a means for facilitating the end of maximizing shareholder wealth in the eyes of most people including the general public, business professionals, corporate lawyers, and even policy makers. This point is well exemplified by the so-called "enlightened shareholder value" approach in section 172(1) of the *Companies Act 2006* of the United Kingdom (UK). As Professor Davies argues, non-shareholder interests would not be taken into consideration unless "it is desirable to do so in order to promote the success of the company for the benefit of its members" (Davies and Worthington 2012, p. 542). Logically, it might not be unacceptable under certain circumstances to impair non-shareholders' interests for the sake of shareholder primacy.

Shareholder model as a corporate objective and norm (Posner 1997) of corporate governance is regarded as the fundamental view of modern corporate law scholarship (Smith 1997, p. 278). Even opponents of this approach concede its prevalence and dominance (e.g., Greenfield 2007). The most

direct impact of shareholder model is to require directors of board and corporate officers to strive for the highest possible shareholder profits; any behavior that is inconsistent with shareholder model is subsequently considered as *corporate deviance* (Macey 2008, p. 2). Basically, such an objective and governance norm determine that company law and good corporate governance practice should endeavor to design a system which on the one hand centers on shareholders' interests and on the other incentivize those who run the company to make as much profit as possible by aligning their interests with shareholders'.

Problems of Shareholder Model

Although agency theory (Jensen and Meckling 1976; Alchian and Demsetz 1972) has replaced traditional proprietorship theory (i.e., based on the concept of ownership) and has been generally regarded as the theoretical basis for shareholder model since the 1970s, the principal-agent model is indeed problematic. There are no explicit or implicit contracts between directors/managers and shareholders, and the former are elected and employed by the company instead of the latter, owing duties to the company in most circumstances. Issues such as separate legal personality and extensive board authority, including distributing dividends, cannot be explained by agency theory (Yan 2015). Suffice it to say here, the economic terms "principal" and "agent" do not bear the exact same meaning as their juridical counterparts; moreover agency theory fails to provide a rationale for the *sui generis* power or autonomy of the board.

Since the separation of control from ownership in modern large companies, shareholders no longer operate the business in person or take direct control of the company. Accordingly, is it meaningful to contend the agent nature of directors where shareholders as "principals" have little power to order or instruct their agents? Along with the changing nature of the ownership, relinquishing control rights by shareholders is seen to enhance efficiency by authorizing directors to manage companies for better return on their

investment (Blair 1995). In this regard, it is necessary to grant directors independent positions and unrestrained power to make corporate decisions while only subject to the most fundamental principles, such as fiduciary duties. If shareholders are allowed to constantly interfere with the management, efficiency would be substantially compromised. The “empowerment of centralized management” is one vital element to ensure the effectiveness of widely held public companies in terms of the significance of “business decisions with the speed and efficiency” (Strine 2006, pp. 1762–64). As in the traditional principal-agent relationship, directors as agents need decision-making power to run the company; they must obtain at least some discretion. Just as Professor Bebchuk (2006) pointed out, the power of the board in the United States is due to insulating boards from shareholder intervention more than the separation of control from ownership. Otherwise, it will be pointless to elect directors to run companies in the event that every decision is required to be made by, or negotiated with, shareholders as the so-called principals.

Besides, shareholder wealth maximization means, as the term itself suggests, generating the highest possible returns for shareholders, which mainly encompasses maximizing the value of shares of the company and the dividends to shareholders. In practice, it would be simplified into one assignment for directors and managers – that is, to maximize the share price for shareholders in order to secure their highest possible utility from the investment. The emphasis on shareholder model gives rise to increased risks of short-termism. Directors and their delegated managers are probably forced to adopt short-term strategies in order to boost share prices to satisfy shareholders. Particularly when their personal interest is closely tied to corporate financial performance measured by share price, short-termism will be difficult to avoid. Management may subsequently have strong inducement to manipulate the share price in order to get larger performance-based payment and the like. High trading frequency is a typical example of the lopsided focus on immediate profit from the fluctuations in the stock markets. Empirical studies clearly show that the average holding period of shares has significantly

decreased in recent decades. It is not infrequent for certain institutional investors to use a price index or computer program to complete a stock transaction without getting any details of investee companies. Directors would therefore be under pressure to adopt strategies to satisfy shareholders’ appetites.

The fact that companies are not able to succeed or achieve business goals in the absence of various non-shareholding stakeholders’ contributions cannot be ignored either. Apart from shareholders, other corporate stakeholders’ investments such as credits provided by creditors, labor and know-how provided by employees, services and products provided by suppliers, and infrastructure provided by governments are indispensable (Blair 1995). More importantly, these non-shareholding stakeholders become increasingly more essential in the survival and success of modern companies, while the importance of shareholders is constantly decreasing. For example, the role of equity issuance and physical capital in investment “is much less important than it was” in modern public companies at present (Kay 2012). Especially after adopting diversified and balanced portfolios, investors/shareholders become less concerned about the success of any particular company than her overall portfolio. Meanwhile, from time to time, it is likely for a shareholder to wish one of her investing companies to fail in order to obtain higher aggregated proceeds from the portfolio.

At the same time, the interests of non-shareholding stakeholders can also be affected by company’s performance (Blair and Stout 2006). If a company is badly run or becomes insolvent, creditors may not get back the interest along with the principal and employees may be made redundant. They have an interest in the company and cannot obtain enough protection by the incomplete contract due to the unbalancing bargaining power, informational asymmetry, and bounded rationality. On the grounds that the liability of shareholders would not exceed the initial investment, around some critical point such as the vicinity of corporate insolvency, shareholders are likely to take excessive risks. There is severe potential of externalization since shareholders are able to “reap all of the benefits of risky activity but do not bear all of the

cost” (Easterbrook and Fischel 1991, pp. 49–50). Worse, in the event that shareholders have possibly no chance to get anything, they will have much stronger preference for high-risk activities, especially when they lose the incentive to increase any margin since their so-called residual claim has gone under water in this setting (Easterbrook and Fischel 1991, p. 69). Moreover, the empty voting facilitated by modern financial and hedging techniques may further exacerbate such negative externalization.

Many problems occur when the shareholder model serves as the corporate objective – that is to say the primary goal for those who run the company should be shareholder wealth maximization. These problems become especially prominent after the corporate scandals and financial crisis in the beginning of the century. At best, it may not lead to the best corporate governance practice, and at worst it may provide the wrong emphasis on company law (Yan 2017). Both the theoretical foundation and the economic rationale for the shareholder model can be questioned. The problems in the context of shareholder wealth maximization, inter alia, short-termism, and externalization also warrant a serious re-consideration of the current shareholder-centered model. And we cannot solely rely upon external law to protect stakeholders and control negative externalities (Yan 2017).

Summary

The rationale claimed by shareholder primacists can be challenged and therefore may not be as valid as expected. On the other side, the pressure to pursue immediate profits or externalize costs may be released if shareholder model is replaced by a broader purpose. Meanwhile, other important values including fairness and justice can also be better preserved in the context of a broader corporate objective. As a result, it is time to reconsider the corporate objective in order to address the regulatory gap and functional limitation of external measures regarding the control of short-termism and externalization.

Cross-References

- [Corporate Objectives](#)
- [Stakeholder Model](#)

References

- Alchian, A. A., & Demsetz, H. (1972). Production, information cost, and economic organization. *American Economic Review*, 62(5), 777–795.
- Bebchuk, L. A. (2006). Letting shareholders set the rules. *Harvard Law Review*, 119(6), 1784–1813.
- Blair, M. M. (1995). *Ownership and control: Rethinking corporate governance for the twenty-first century*. Washington: The Brookings Institution.
- Blair, M. M., & Stout, L. A. (2006). Specific investment and corporate law. *European Business Organization Law Review*, 7(2), 473–500.
- Davies, P., & Worthington, S. (2012). *Principles of modern company law* (9th ed.). London: Sweet & Maxwell.
- Easterbrook, F. H., & Fischel, D. R. (1991). *The economic structure of corporate law*. Cambridge: Harvard University Press.
- Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. *Times*.
- Greenfield, K. (2007). Saving the world with corporate law. *Emory Law Journal*, 57(4), 947–984.
- Hansmann, H., & Kraakman, R. (2001). The end of history for corporate law. *Georgetown Law Journal*, 89(2), 439–468.
- Jensen, M. C. (2001). Value maximisation, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance*, 14(3), 8–21.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kay, J. (2012). *The Kay review of UK equity markets and long-term decision making*. Retrieved from <https://www.gov.uk/government/news/kay-review-publishes-report-on-uk-financial-sector>
- Macey, J. (2008). *Corporate governance: Promises kept, promises broken*. Princeton: Princeton University Press.
- Posner, R. A. (1997). Social norms and the law: An economic approach. *American Economic Review*, 87(2), 365–369.
- Smith, D. G. (1997). The shareholder primacy norm. *Journal of Corporation Law*, 23(2), 277–323.
- Stout, L. A. (2008). Why we should stop teaching *Dodge v Ford*. *Virginia Law & Business Review*, 3(1), 163–190.
- Strine, L. E. (2006). Toward a true corporate Republic: A traditionalist response to Bebchuck’s solution for improving corporate America. *Harvard Law Review*, 119(6), 1759–1783.

- Strine, L. E. (2012). Our continuing struggle with the idea that for-profit corporations seek profit. *Wake Forest Law Review*, 47, 135–172.
- West, D. M. (2011). The purpose of the corporation in business and law school curricula. *Governance Studies at Brookings*. Retrieved from https://www.brookings.edu/wp-content/uploads/2016/06/0719_corporation_west.pdf
- Yan, M. (2015). Agency theory re-examined: An agency relationship and residual claimant perspective. *International Company and Commercial Law Review*, 26(4), 139–144.
- Yan, M. (2017). The corporate objective revisited: Part I. *Business Law Review*, 38(1), 14–20.

Shareholder Primacy

- [Shareholder Model](#)

Shareholder Primacy Theory

- [Shareholder Theory/Shareholder Value](#)

Shareholder Proposal

- [Shareholder Resolutions and CSR](#)

Shareholder Resolutions and CSR

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Synonyms

[Shareholder proposal](#)

Definition

A shareholder resolution is a form of shareholder activism through which shareholders make a proposal to a company regarding a particular issue that they need the firm should address. This proposal should be voted in the shareholder general meeting. If the proposal passes, it serves as an advice to the board of directors in setting the strategy and management of the company. Activist shareholders seek to influence managers to change the strategic priorities and the behavior of the firm. Lately, activist shareholders have been paying greater attention to corporate social responsibility (CSR). This is demonstrated by the significant increase in the number of resolutions about social, environmental, and corporate governance aspects since the 1970s. By submitting a resolution covering CSR topics, shareholders try to promote and incentivize CSR practices by pressing managers and making them aware of their demands. Nowadays, shareholder resolutions on CSR are mostly common in Anglo-Saxon countries, particularly the United States (US), where the protection of shareholder rights is higher. In this country, the Securities and Exchange Commission (SEC) Rule 14a-8 regulates the process of submitting a resolution. Companies must respond to all shareholder resolutions by choosing among three options: (i) Managers can omit a proposal on legal grounds before the general meeting, (ii) the proposal can be included in the proxy statement to be voted in the general meeting, and (iii) managers can engage with the proponents to negotiate an agreed withdrawal prior to the general meeting.

Introduction

A shareholder resolution is a proposal that a shareholder or a group of shareholders make to the board of directors of public companies. By means of a resolution, shareholders show their dissatisfaction with how the firms are being managed and try to use their power to influence the way in which managers are running the company.

The filling of a shareholder resolution is a type of shareholder activism. Activist shareholders have several mechanisms at their disposal, which may be classified according to the frequency of their use, as well as to their privacy (Yamahaki and Frinas 2016). Specifically, a shareholder resolution is an extraordinary and public form of shareholder activism. It is the most relevant form through which shareholders exert direct pressure on companies. Shareholder resolutions are particularly common in countries with an Anglo-Saxon corporate governance system.

The filling of resolutions has become an important mechanism through which shareholders and investors try to foster CSR practices in their firms. Activist shareholders fill resolutions to challenge the legitimacy of the firm's behavior and the way in which it is currently managed. At the same time, they also try to improve the corporate social performance of their firms. Resolutions may cover a diverse set of policies and topics related to corporate governance, as well as social and environmental concerns. Nonetheless, there are specific topics that are salient within each field. For instance, social resolutions usually focus on labor and human rights, international operations, product responsibility, or healthcare. Within the environmental area, climate change (e.g., GHG emissions, energy) and animal protection highlight among other issues. Finally, corporate governance-related resolutions are mainly concerned with transparency and external reporting, compensation, and diversity in the board of directors. Corporate governance resolutions are usually more common than social and environmental ones. Shareholder resolutions seek to indicate the investors' concerns and to raise managers' awareness about these issues by suggesting the need for a change and solve them (David et al. 2007). In so doing, activist shareholders try to pressure firms to engage in CSR activities (O'Rourke 2003).

Some companies are more prone to be subject to shareholder CSR-related resolutions than others. Investors target firms with low CSR performance to signal the ineffectiveness of managers in improving the social responsibility of the firm (David et al. 2007). Shareholders also

focus on large companies because they are more visible and operate in more different environments; hence, they are more likely to suffer from social and environmental issues that must be addressed (Eding and Scholtens 2017; Rojas et al. 2009). Additionally, the presence of responsible shareholders in the ownership structure of a firm is related to its likelihood of receiving a CSR proposal (Eding and Scholtens 2017).

Once a firm receives a resolution, there are three possible outcomes: the company can try to omit the resolution on adequate grounds, shareholders may decide to withdraw it before being voted, or the resolution can be included in the annual proxy statement to be subject to voting in the annual general meeting. Shareholder resolutions are nonbinding recommendations. Those that pass are only advisory; hence, they may not be effectively implemented. However, regardless of the result, shareholder resolutions are useful mechanisms to raise awareness about CSR issues because they can have an internal and an external impact eventually. Shareholder resolutions help to increase the attention of managers and society about social and environmental problems. By means of being included in the annual proxy statement, these issues are made known to other investors and stakeholders of the firm, thereby increasing the pressure on managers. Additionally, some resolutions reach the general public because, if they are too relevant, they may be covered by the media. It is also noteworthy that a resolution may have a spillover effect on firms operating in the same industry. If these companies observe that industry peers receive a resolution, they might proactively adjust their behavior before being subject to one themselves.

Historical Evolution and Current Stage

The history of shareholder resolutions dates back to 1942. In that year, the Securities and Exchange Commission (SEC) allowed US shareholders to fill proposals to their firms through resolutions for the first time. However, the SEC prohibited the inclusion of social policy issues in the proxy statement on grounds of the "proper subject"

test, included in the rule 14a-8 of the Securities Exchange Act in 1948 (Proffitt and Spicer 2006). This situation changed in 1969, when a court authorized a group of activist shareholders of Dow Chemical, known as the Medical Committee for Human Rights, to present a resolution asking the firm to stop producing napalm, which was being used in the war of Vietnam (Ryan 1988). This moment represented the starting point of the submission of CSR-related shareholder resolutions. The Dow Chemical case led to the revision and adjustment of the “proper subject” test in 1976. This modification officially permitted the inclusion of social and environmental issues in the proxy statement, although other CSR-related resolutions had already been filled since the Dow Chemical milestone (Rojas et al. 2009).

During the 1970s, religious associations were the predominant group of investors filling CSR resolutions. Religious investor groups were pioneers in submitting social proposal because they had a moral motivation and a long-term perspective (Proffitt and Spicer 2006). Several organizations that grouped and organized religious investors appeared in that decade to help them in the process of filling resolutions. The Interfaith Center on Corporate Responsibility (ICCR) founded in 1971 is highlighted among the rest, and it still exists today. Despite being a key precursor, shareholder resolutions filled by religious investors in the 1970s received little attention as these groups were small. It was not until the 1980s that the relevance of CSR resolutions increased as other investors followed the lead of religious groups. In this decade, pension funds, institutional investors, and NGOs started to make CSR proposals through resolutions (Gillan and Starks 2007; Proffitt and Spicer 2006; Sjöström 2008). These investors often collaborated with religious groups, and they jointly sponsored resolutions on CSR (Dunn 2013).

Nowadays, resolutions are a common practice of CSR activist shareholders, and more social issues are being included in proxy statements. Shareholders that owned significant stakes in companies are paying increasing attention to social and environmental problems and urging managers to address them (Proffitt and Spicer

2006). Around 1,000 resolutions related to social and environmental issues were filled in US listed companies between 2014 and 2016 (SIF Foundation 2016). Some large well-known companies have received these resolutions, such as Home Depot, Cisco, Microsoft, Google, or Yahoo (Guay et al. 2004; Sjöström 2010). Religious groups are still relevant players in organizing the filling of resolutions. As a matter of fact, ICCR is one of the most important associations of activist shareholders, and it tracks the filling of CSR resolutions in United States. This organization has around 300 members with a total portfolio of \$100 billion (Goodman et al. 2014).

The Process and Outcomes of Shareholder Resolutions

Filling shareholder resolutions is a common practice in Anglo-Saxon states. By allowing shareholders to make proposals and to indicate deviance from what they consider an adequate running of their firms, it shows a high level of shareholder protection in countries with a common law corporate governance system. Among these countries, United States is the most active. The SEC Rule 14a-8 regulates the process of filling shareholder resolutions. The resolution should comprise a 500-word proposal. An investor needs to own \$2,000 in shares during at least 1 year to fill a resolution. Social or environmental resolutions are normally co-sponsored by several shareholders with the same objective. Activist investors usually lobby and form coalitions to increase the relevance and impact of their proposals (Rojas et al. 2009). This is important given that a resolution needs to be firmly supported to succeed. The practice of joining other investors when submitting a proposal is especially common among small shareholders. Several organizations, such as the above-mentioned ICCR, help shareholders to organize, share information, and coordinate resolutions. Activist shareholders also engage with other stakeholders, beyond other investors, to increase the social legitimacy of their proposal. For example, NGOs are important advisors when preparing

resolutions. Sometimes, they even pose their own resolutions by acquiring stakes in targeted firms or by engaging with shareholders that allow them to use their votes at general meetings (Guay et al. 2004). They try to promote change and push shareholder activism to address CSR issues.

Shareholders have to submit the resolutions at least 120 days before the release of the company's proxy statement. Firms must respond to all resolutions, regardless of the stake owned by the shareholders posing the proposal. Companies may choose between three responses: (i) omitting the resolution if it is not adequately presented, (ii) including the proposal in the proxy statement to be voted in the general meeting, or (iii) negotiating a withdrawal with the proponents before the general meeting. Each option indicates a different attitude, sensitivity, and responsiveness to shareholders' demands. Firms should study these options to decide their course of action because they have advantages and disadvantages (Rehbein et al. 2013).

The most strongly opposing and least responsive action that managers could take against a CSR resolution is formally omitting it with the permission of the SEC. This option is considered a failure because it clearly indicates that the company is not willing to consider or discuss the proposal. To get the permission, the company should prove that the resolution failed to satisfy the requirements for its submission or that it violated the proxy rules. SEC Rule 14a-8 also allows firms to legally omit resolutions if the subject matter is not considered proper, for example, if the issue is not relevant (it does not affect 5% of the corporate business) or if it is related to personal grievances. The company should start the omission process no later than 80 days before filling the proxy statement, and it should send the opposing declaration to the resolution proponents at least 30 days prior to the release of the statement. If the SEC agrees with the firm, the resolution may be excluded from the proxy statement. If the firm omits the resolution without permission, the SEC will proceed with enforcement actions against the company, such as the annulment of the general meeting.

If managers do not openly oppose the resolution or if they fail to get the SEC permission to

omit it, the proposal must be included in the proxy statement and be voted in the general meeting. The firm must send the proxy statement to all shareholders that are entitled to vote so that they know in advance the matters that will be discussed. Management makes recommendations on what shareholders should vote. Managers normally oppose most CSR resolutions and usually make a statement justifying their positions and advising shareholders to vote against them (Gillan and Starks 2007; Rehbein et al. 2013). Managers tend to oppose resolutions because (i) they do not want to see their power diminish or (ii) they consider that the proposals are unfeasible and/or detrimental for business (David et al. 2007; Rehbein et al. 2004). Therefore, most social and environmental proposal fails (Proffitt and Spicer 2006; Goodman et al. 2014). When this happens, the resolution could be resubmitted in the following year if it reached a minimum threshold of supporting votes (3% in its first year, 6% in its second, and 10% in its third and subsequent years). If the proposal is approved, it may not have any substantial effect on corporate behavior. Passed resolutions are non-binding and only serve as advice to the board of directors. So, if managers opposed the proposal, it may only lead to symbolic rather than substantial changes in corporate policies or actions, or it may even end up in not being considered at all.

Finally, managers can opt to settle a negotiated withdrawal with the resolution proponents before the annual general meeting. In contrast to the two prior alternatives, negotiating a withdrawal is a private way of handling a proposal (Semenova and Hassel 2019). This option is considered the most responsive corporate action because it initiates a dialogue between managers and proponents with the aim of negotiating a win-win agreement that satisfies both parties (Dunn 2013). Negotiating a withdrawal shows that the firm seriously considers the CSR resolution and that it is committed to comply and implement the proposal, at least to some extent (David et al. 2007). The negotiation process is then an attempt to adjust the competing interests of both parties to decide a common set of environmental and/or social issues that satisfy them. The firm is willing to accept

some of the terms of the proposal and adapt some changes, while activist shareholders may soften their demands. Although a settled withdrawal represents the most positive corporate response because it normally implies that some measures will be taken (David et al. 2007; Uysal 2014), it may sometimes represent a bad outcome. In some case, shareholders might decide to withdraw a resolution if they regard that they will not get the sufficient support in the general meeting (Rojas et al. 2009).

If the shareholders that propose the resolution are not satisfied with the firm's response (i.e., it was omitted or did not get enough votes), they still have a last call. In some cases, the shareholders that filled the resolution might regard that the issue addressed in the proposal is so important that they may not be willing to continue investing in the company and they could take the exit option: sell their stock and use their voice to publicly claim that this decision is driven by the reluctance of the firm to address a CSR proposal (Goodman et al. 2014). This situation is the most harmful because it has negative effects for both shareholders and firms. The former find that their demands have not been considered and feel betrayed, while the latter may see that its behavior is publicly scrutinized.

Companies analyze each resolution individually, and they decide the action that they will take considering the filler (Dunn 2013). Some proponents are more salient and powerful; hence, they may be able to negotiate a withdrawal. For instance, and in contrast to individual investors, mutual and public pension funds are more likely to get a commitment from the management to implement their proposals (Rojas et al. 2009). It is key for firms to take into account the demands of large activist shareholders to guarantee the access to financial resources (Dunn 2013). The topic of the resolution is also an important determinant of the firm's response. Negotiated withdrawals are more common when the resolution deals with an environmental or social issue than with corporate governance (Dunn 2013). For example, Rojas et al. (2009) found that proposals related to energy, human rights, international labor, or equal employment are more prone to be

negotiated and withdrawn. These authors also observed that these topics are usually covered in the resolutions filled by the most influential investors. Thus, there seems to be a topic-shareholder relationship that reinforces the success of the resolution. Finally, some firm characteristics are also important factors in explaining the likelihood of a resolution being negotiated. Companies with low levels of CSR performance (Clark and Crawford 2012) or that have been previously subject to a resolution (Reid and Toffel 2009) are more likely to negotiate a withdrawal.

Whatever the response and outcome, shareholder resolutions are useful mechanisms to increase awareness about CSR, because it helps to direct the attention of managers, other stakeholders, and other companies to environmental and social concerns, which may not be considered otherwise. Regarding management, CSR resolutions incentivize problem-solving decisions and foster an internal analysis of the firm (Proffitt and Spicer 2006). Managers must assess whether the issue is relevant for the company and decide whether or not to omit the resolution, recommend a negative vote, or negotiate a withdrawal. CSR resolutions may also have an impact on other stakeholders, beyond shareholders. Due to the public attention of some shareholder proposals, employees, customers, suppliers, or NGOs could take notice of the issue that the resolution addresses. Consequently, these stakeholders may contribute to exerting additional pressure on firms to adapt their policies (David et al. 2007; Rehbein et al. 2013). Finally, there could be a spillover effect to other firms (Rojas et al. 2009). Companies that operate in the industry of a firm being targeted with a resolution may have a proactive attitude. These companies could try to adapt their own behavior if they fear that they could be challenged with a similar resolution from their shareholders in the short term.

Cross-References

- [Corporate Governance](#)
- [Shareholder Activism](#)

References

- Clark, C. E., & Crawford, E. P. (2012). Influencing climate change policy: The effect of shareholder pressure and firm environmental performance. *Business & Society*, 51(1), 148–175.
- David, P., Bloom, M., & Hillman, A. J. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28(1), 91–100.
- Dunn, P. (2013). Social and environmental shareholder resolutions: Investor activism and corporate compromises. In S. Yunn & S. Gates (Eds.), *Institutional investors' power to change corporate behavior: International perspectives* (pp. 127–148). Bingley: Emerald Group Publishing Limited.
- Eding, E., & Scholtens, B. (2017). Corporate social responsibility and shareholder proposals. *Corporate Social Responsibility and Environmental Management*, 24(6), 648–660.
- Gillan, S. L., & Starks, L. T. (2007). The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance*, 19(1), 55–73.
- Goodman, J., Louche, C., Van Cranenburgh, K., & Arenas, D. (2014). Social shareholder engagement: The dynamics of voice and exit. *Journal of Business Ethics*, 125(2), 193–210.
- Guay, T., Doh, J. P., & Sinclair, G. (2004). Non-governmental organizations, shareholder activism, and socially responsible investments: Ethical, strategic, and governance implications. *Journal of Business Ethics*, 52(1), 125–139.
- O'Rourke, A. (2003). A new politics of engagement: Shareholder activism for corporate social responsibility. *Business Strategy and the Environment*, 12(4), 227–239.
- Proffitt, W. T., Jr., & Spicer, A. (2006). Shaping the shareholder activism agenda: Institutional investors and global social issues. *Strategic Organization*, 4(2), 165–190.
- Rehbein, K., Waddock, S., & Graves, S. B. (2004). Understanding shareholder activism: Which corporations are targeted? *Business & Society*, 43(3), 239–267.
- Rehbein, K., Logsdon, J. M., & Van Buren, H. J. (2013). Corporate responses to shareholder activists: Considering the dialogue alternative. *Journal of Business Ethics*, 112(1), 137–154.
- Reid, E. M., & Toffel, M. W. (2009). Responding to public and private politics: Corporate disclosure of climate change strategies. *Strategic Management Journal*, 30(11), 1157–1178.
- Rojas, M., M'zali, B., Turcotte, M., & Merrigan, P. (2009). Bringing about changes to corporate social policy through shareholder activism: Filers, issues, targets, and success. *Business and Society Review*, 114(2), 217–252.
- Ryan, P. J. (1988). Rule 14a-8, institutional shareholder proposals, and corporate democracy. *Georgia Law Review*, 23, 97–184.
- Semenova, N., & Hassel, L. G. (2019). Private engagement by Nordic institutional investors on environmental, social, and governance risks in global companies. *Corporate Governance: An International Review*, 27(2), 144–161.
- SIF Foundation. (2016). Report on US sustainable, responsible and impact trends, 11th edition. US SIF: The Forum for Sustainable and Responsible Investment, Washington.
- Sjöström, E. (2008). Shareholder activism for corporate social responsibility: What do we know? *Sustainable Development*, 16(3), 141–154.
- Sjöström, E. (2010). Shareholders as norm entrepreneurs for corporate social responsibility. *Journal of Business Ethics*, 94(2), 177–191.
- Uysal, N. (2014). The expanded role of investor relations: Socially responsible investing, shareholder activism, and organizational legitimacy. *International Journal of Strategic Communication*, 8(3), 215–230.
- Yamahaki, C., & Frynas, J. G. (2016). Institutional determinants of private shareholder engagement in Brazil and South Africa: The role of regulation. *Corporate Governance: An International Review*, 24(5), 509–527.

Shareholder Rights

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Description

Shareholders are the owners of a company, and as such, they are entitled to certain rights. Which explicit rights a shareholder has depends on the size of his equity stake and the jurisdiction in which the company is operating. Primary shareholder rights include the right to participate and vote at the company's general shareholder meetings and the managing directors' election. Shareholders have the right to obtain relevant and material information on the corporation on a timely and regular basis and are entitled to decide upon the distribution of a company's profit (World Bank, 2022).

In most countries, at least some of the shareholder rights are codified not in law but in “Codes of Corporate Governance,” which work according to a “comply or explain” mechanism. While small shareholders usually have limited incentive to

participate actively in supervising the management due to their small financial stake, institutional investors often play an active role in corporate governance and oversee the interests of the shareholders.

Following the growing attention on environmental, social, and governance issues (ESG), many shareholders no longer take only a financial interest in their company but expect that the company takes a responsible role in society.

Introduction

Any individual or legal entity that is a legal owner of equity shares of a company is a shareholder of the corporation. As shareholders own the company, they are entitled to certain rights, such as the right to influence company decisions by participating in general shareholder meetings of the company and the election of managing directors (OECD, 2015). In practice, how extensive the rights of shareholders are depends on the legal system the corporation is active in and the size of the equity stake of the individual shareholder. In some jurisdictions, different classes of shares grant different rights, for instance, a missing voting right can be compensated by a higher dividend.

The discussion about shareholder rights goes back to the beginnings of public companies, where the East India Company was the first to issue shares to the public as permanent capital in the seventeenth century in England. Following this example, previously family-owned companies started to acquire additional funding by acquiring further equity from outside shareholders. This development led to companies where ownership by the shareholders and control by the directors were separated (Hutton et al., 2017). As a result, the population of shareholders consists of potentially thousands of individuals who all pursue their personal interests. For practical reasons, the shareholders cannot make all decisions on the operating business themselves; this is why they delegate the management of corporate activities to a management team that is supposed to act on behalf and in the interest of

the shareholders. Still, certain significant decisions remain with the shareholders, such as the selection of the board members, amendments to the company's organic documents, or the approval of extraordinary transactions (OECD, 2015).

Berle and Means (1932) were the first to describe the potential conflict between shareholders and managers in their renowned publication "The modern corporation and private property." Ever since then, it has been under discussion how the rights of the owners of a company ("shareholder rights") could be protected from a potential self-interest of the company's managers doing the operating business. As Berle & Means state (Berle & Means, 1932, p. 121), "[H]ave we any justification for assuming that those in control of a modern corporation will also choose to operate it in the interests of their owners?" This problem has been widely discussed as the "Principal-Agent Problem" (Jensen & Meckling, 1976), and many publications have discussed how to prevent managers from acting in their self-interest (caused, for instance, by moral hazard, adverse selection, or consumption on the job). In general, strengthening the shareholder's rights could reduce the agency's problems. In jurisdictions with more concentrated ownership structures (common outside the US and UK), shareholder protection works not only against the self-interested behavior of managers but also against the misuse of large shareholders' power (Ruhwedel, 2003).

Shareholder Rights to Protect Shareholder's Interests

As shareholder rights are codified in the jurisdiction of each country individually, there are no uniform rights for all shareholders worldwide. In most countries, at least some of the shareholder rights are codified not in law but in "Codes of Corporate Governance." These codes work with a "comply or explain" mechanism that obliges the companies to either follow the code's rules or explain with which regulations they do not comply. Empirical evidence shows that the

introduction of such comply or explain codes benefits shareholders with increased company value (Fauver et al., 2017).

Shareholder protection laws in many jurisdictions worldwide have improved tremendously in the outgoing twentieth century, including rules such as the independence of board members, the introduction of audit committees, and the separation of the roles of chief executive officer and chairman (La Porta et al., 2000). Shareholder rights can be differentiated into *ex ante* rights and *ex post* rights. While *ex ante* rights include preemptive rights and qualified majorities for particular decisions, *ex post* rights allow the seeking of redress once rights have been violated (OECD, 2017).

Even though there is no globally accepted framework on shareholder rights, many countries follow the suggestions made by the OECD (2015) in their publication “G20/OECD Principles of Corporate Governance,” first published in 1999 and, since 2015, supported by the G20 states. The core values of the OECD framework are a high level of transparency, accountability, board oversight, and respect for the rights of shareholders and the role of key stakeholders. The OECD highlights that there is no single model of good corporate governance. An example is the two different models of board systems. In the case of a one-tier board, the shareholders elect outside directors to represent their interest in a single company board in which inside directors (such as the CEO) and outside directors are represented alike. In the case of a two-tier board, the shareholders elect their representatives to a supervisory board that controls the directors’ management as a separate body. In both cases, protection of shareholder rights is possible as long as the specific corporate governance rules and regulations enable this. As these general ideas are reflected in the comprehensive and fundamental publication by the OECD (2015), the principles can be found codified alike in the laws and Corporate Governance Codes of all countries with developed capital markets (World Bank, 2022).

However, some common elements underlie good corporate governance. Concerning the rights and equitable treatment of shareholders and

essential ownership functions, the OECD names the following (OECD, 2015, chapter II, shortened):

1. Shareholders should have the right to
 - Secure methods of ownership registration
 - Convey or transfer shares
 - Obtain relevant and material information on the corporation on a timely and regular basis
 - Participate and vote in general shareholder meetings
 - Elect and remove members of the board
 - Share in the profits of the corporation
2. Shareholders should be sufficiently informed about and have the right to approve or participate in decisions concerning fundamental corporate changes as follows:
 - Amendments to the statutes, articles of incorporation, or similar governing documents of the company
 - The authorization of additional shares
 - Extraordinary transactions
3. Shareholders should have the opportunity to participate effectively and vote in general shareholder meetings and should be informed of the rules, including voting procedures, that govern general shareholder meetings:
 - Sufficient and timely information shall be provided.
 - Processes and procedures for general shareholder meetings should allow for equitable treatment of all shareholders.
 - Shareholders should have the opportunity to ask questions to the board, place items on the agenda of general meetings, and propose resolutions.
 - Effective shareholder participation in key corporate governance decisions, such as the nomination and election of board members, should be facilitated. Shareholders should be able to make their views known on the remuneration of board members, and key executives, as applicable.
 - Shareholders should be able to vote in person or in absentia, and equal effect should be given to votes.
 - Impediments to cross-border voting should be eliminated.

4. Shareholders, including institutional shareholders, should be allowed to consult on issues concerning their fundamental shareholder rights.
5. All shareholders of the same series of a class should be treated equally. Capital structures and arrangements that enable certain shareholders to obtain a degree of influence or control disproportionate to their equity ownership should be disclosed.
 - Within any class series, all shares should carry the same rights. All investors should be able to obtain information about the rights attached to all series and classes of shares before they purchase. Any changes in economic or voting rights should be subject to approval by those classes of shares that are negatively affected.
 - The disclosure of capital structures and control arrangements should be required.
6. Related-party transactions should be approved and conducted to ensure proper management of conflict of interest and protect the interest of the company and its shareholders.
 - Conflicts of interest inherent in related-party transactions should be addressed.
 - Members of the board and key executives should be required to disclose to the board whether they, directly, indirectly, or on behalf of third parties, have a material interest in any transaction or matter directly affecting the corporation.
7. Minority shareholders should be protected from abusive actions by, or in the interest of, controlling shareholders acting directly or indirectly and should have adequate means of redress. In addition, abusive self-dealing should be prohibited.
8. Markets for corporate control should be allowed to function efficiently and transparently.
 - The rules and procedures governing the acquisition of corporate control in the capital markets and extraordinary transactions such as mergers, and sales of substantial portions of corporate assets, should be clearly articulated and disclosed so that investors understand their rights and recourse. Transactions should occur at transparent prices and under fair conditions

that protect the rights of all shareholders according to their class.

- Anti-takeover devices should not be used to shield management and the board from accountability.

Additional rights such as the approval or election of auditors, direct nomination of board members, the ability to pledge shares, the approval of distributions of profits, shareholder ability to vote on board members and key executive compensation, approval of material-related party transactions, and others have also been established in various jurisdictions (Swain, 2022). In most cases, these rights are still codified in law and not in the abovementioned corporate governance codes subject to “comply or explain.”

Some jurisdictions allow different share classes where each share class has specific rights (see no. 5 above). A typical example is the differentiation between common shares and preferred shares. Common shares grant all the rights described above. Preferred shares, on the other hand, do not entitle the shareholder to vote at the general shareholder meeting. However, this lack of voting right is compensated by a preferred dividend and preferred right in case of insolvency (Seligman, 1985). Investing in these kind of preferred shares might be interesting for small shareholders who are not interested or lack time and voting power to influence the decisions in the general shareholder meeting.

In some cases, certain classes of shares come with different voting rights, for example, A-shares with ten votes attached and B-shares with only one vote attached. Giving this kind of “superpower” to class A shareholders can be seen critically from a corporate governance perspective if not every potential investor has access to invest in these shares as they might be held by the founding family, for instance (Seligman, 1985).

Shareholder Activism

Empirical studies show that suitable corporate governance structures lead to better performance (McKinsey & Co., 2020). Therefore the

protection of shareholder rights is in the vital interest of all shareholders (Hoepner et al., 2022). The shareholder rights described above should generally protect shareholders from exploitation. Nevertheless, they are only of limited use in motivating small shareholders, in particular, to exercise their rights actively. The smaller the financial stake in the company, the less incentive there is to participate in the general shareholder meeting actively. It can be observed empirically that many shareholders do not use the right to vote and therefore do not exercise their shareholder rights (Hewitt, 2011).

The question arises: Who is able and willing to protect the rights of shareholders and use the rights they are given? In the USA, so-called Proxy Advisors have a long tradition of not only providing services to shareholders such as vote administration and execution but also giving recommendations on how to vote. However, yet again, small shareholders are usually unwilling to invest money to use the professional services offered by proxy advisors (Larcker et al., 2015).

Over the last years, it can be observed over the world that institutional investors tend to become more involved in corporate governance discussions and act on behalf of shareholders' interests. They act as "active investors" and get involved in various ways, for instance, by claiming supervisory board seats in the case of two-tier boards or taking over as external directors on one-tier boards. In addition, activist shareholders initiate changes in the composition of the management board and suggest improvements in corporate governance structures. They put pressure on the management, organize voting majorities, and have, in many cases worldwide, already initiated significant changes (Swain, 2022). Other areas in which active investors intervene are M&A-related topics or ESG issues. Active investors sometimes act "behind the scenes"; in other issues, they use the press to increase pressure or file litigations. In any case, they try to assemble other shareholders to organize voting majorities to be successful with their requests at the general shareholder meeting (Larcker et al., 2015).

There are many cases in which active investors had a positive contribution toward an

improvement of corporate governance (McKinsey & Co., 2020). Nevertheless, it must be taken into account that activist investors represent their personal interests, which are not necessarily in the interest of all shareholders (McNulty & Nordberg, 2016). An example of a self-interested behavior of a large shareholder could be a supplier relationship that is not structured at arm's length or an excessive withdrawal of dividends which hinders the company's future growth. Moreover, especially if the active investor has a relatively short investment horizon, it is conceivable that stakeholder interests might be neglected, and activities taken might instead favor short-term returns than long-term corporate success. Therefore, empirical results on the impact of shareholder activism on company performance do not point in a clear direction (Barros et al., 2021).

While, on the one hand, institutional investors often take an active role in corporate governance, the growing importance of index-tracking funds partly offsets this development and can lead to increased passivity of shareholders as a whole, on the other. Index-tracking funds hold significant stakes in many companies, but as they focus on cost-efficiency, they do not actively monitor the management (Barzuza et al., 2019). Besides, the market for passive funds is dominated by large investment companies, which hold significant stakes in many companies and therefore lead to a concentration of ownership (Cheffins, 2019).

Balance of Shareholder Rights and Stakeholder Rights

While discussing shareholder rights, one must consider that shareholders are not the only party taking an interest in the company. As part of the stakeholder theory, it has been discussed for decades whether the rights of stakeholders such as employees, the public, or suppliers should be considered as vital as the rights of shareholders (Freeman, 2001). In contrast to the stakeholder-oriented approach, the supporters of the shareholder value theory have focused solely on

maximizing the company value in the short run (Rappaport, 1999).

The focus on shareholder value has been criticized heavily over the last years as the idea of corporate purpose and the relevance of environmental, social, and corporate governance policies (ESG) has gained importance. The recognition that ESG policies play a vital role for companies these days (Hutton et al., 2017) is fostered by demanding customers who expect companies to act socially and sustainably. However, not only do customers put pressure on the companies but also there are several legislative initiatives like the EU Green Deal to ensure ESG-responsible business behavior. Recently besides the public, increasingly influential shareholders stress that they expect corporations to not only act in favor of increasing profit but also play an active and responsible role in society. A wake-up call in this sense was the 2020 annual letter by BlackRock CEO Larry Fink, entitled “A Fundamental Reshaping of Finance.” As BlackRock was long regarded as prototype of a purely shareholder value-oriented investor, their shift toward a demand for ESG-responsible behavior in their investment companies caused a mindset-change not only in companies where BlackRock had a stake. Nowadays, many institutional investors define explicit demands concerning ESG topics. If companies do not meet investors’ requirements in this regard, they risk the availability of capital and thus declining company values in the long term. On the other hand, engagement on environmental, social, and governance (ESG) issues can benefit shareholders by reducing firms’ downside risks (Hoepner et al., 2022).

Summary

Shareholder rights are codified in law, and in addition to that in “Codes of Corporate Governance,” in which following a “comply or explain” mechanism, the companies have to state if they do not comply with specific regulations. The rights of shareholders differ from country to country. Still, the rights stated in the OECD/G20 Principles of

Corporate Governance are widely accepted in most countries with developed capital markets. Fundamental shareholder rights include the right to participate and vote at the company’s general shareholder meetings and the managing directors’ election. In addition, shareholders have the right to obtain relevant and material information on the corporation on a timely and regular basis, and they are entitled to decide upon the distribution of a company’s profit.

Each shareholder is entitled to the codified rights and can vote in the annual shareholder meeting. As small shareholders have limited incentives to inform themselves and exercise their voting rights due to their small financial stake, shareholder rights are often not exercised in practice. At the same time, the growing importance of index tracking funds also has the effect that voting rights are not exercised. On the other hand, institutional investors often play an active role in corporate governance and carefully watch the shareholders’ interests. In the past, the shareholder value theory played a principal role, and the focus of shareholders was mainly on profit maximization. Following the growing attention on environmental, social, and governance issues (ESG), this has changed, and many shareholders no longer take only a financial interest in their company but also expect that the company takes a responsible role in society.

Cross-References

- ▶ [Activist Investor](#)
- ▶ [Auditors and Corporate Governance](#)
- ▶ [Codes of Good Governance](#)
- ▶ [Corporate Governance](#)
- ▶ [Dividend](#)
- ▶ [Family-Owned Firms](#)
- ▶ [German Corporate Governance Code](#)
- ▶ [Good Governance](#)
- ▶ [Institutional Investors](#)
- ▶ [OECD Principles of Corporate Governance](#)
- ▶ [Shareholder and Stakeholder Activism](#)
- ▶ [Shareholder Theory/Shareholder Value](#)
- ▶ [UK Corporate Governance Code \(2010\)](#)

References

- Barros, V., Guedes, M. J., Santos, J., Sarmiento, J. M. (2021). Shareholder Activism and Firms' Performance. Paper presented on the 2021 European Financial Management Association Annual Meeting.
- Barzuza, M., Curtis, Q., & Webber, D. H. (2019). Shareholder value (s): Index fund ESG activism and the new millennial corporate governance. *Southern California Law Review*, 93, 1243.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New Brunswick: Transaction Publishers.
- Cheffins, B. R. (2019). The rise and fall (?) of the Berle–Means corporation. *Seattle University Law Review*, 42, 445–498.
- Fauver, L., Hung, M., Li, X., & Taboada, A. G. (2017). Board reforms and firm value: Worldwide evidence. *Journal of Financial Economics*, 125(1), 120–142. <https://doi.org/10.2139/ssrn.2607785>.
- Freeman, R. E. (2001). A stakeholder theory of the modern corporation. *Perspectives in Business Ethics* Sie, 3(144), 38–48.
- Hewitt, P. (2011). The exercise of shareholder rights: Country comparison of turnout and dissent. OECD Corporate Governance Working Papers, No. 3, OECD Publishing, Paris. <https://doi.org/10.1787/5kg54d011vlf-en>.
- Hoepner, A. G. F. et al. (2022). ESG Shareholder Engagement and Downside Risk. ECGI Finance Working Paper no. 671/2020. http://ssrn.com/abstract_id=2874252.
- Hutton, W., Mayer, C., & Schneider, P. (2017). The rights and wrongs of shareholder rights. *Seattle University Law Review*, 40, 375–397.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X).
- La Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58, 3–27. [https://doi.org/10.1016/S0304-405X\(00\)00065-9](https://doi.org/10.1016/S0304-405X(00)00065-9).
- Larcker, D. F., McCall, A. L., & Ormazabal, G. (2015). Outsourcing shareholder voting to proxy advisory firms. *The Journal of Law and Economics*, 58(1), 173–204.
- McKinsey & Company. (2020). *Investors remind business leaders: Governance matters*. McKinsey Global Publishing.
- McNulty, T., & Nordberg, D. (2016). Ownership, activism and engagement: Institutional investors as active owners. *Corporate Governance: An International Review*, 24(3), 346–358.
- OECD. (2015). G20/OECD principles of corporate governance. OECD Publishing, Paris. <https://doi.org/10.1787/9789264236882-en>.
- OECD. (2017). Methodology for assessing the implementation of the G20/OECD principles of corporate governance. OECD Report to the G20 Finance Ministers and Central Bank Governors. https://www.oecd-ilibrary.org/governance/methodology-for-assessing-the-implementation-of-the-g20-oecd-principles-of-corporate-governance_9789264269965-en.
- Rappaport, A. (1999). *Creating shareholder value: A guide for managers and investors*. Simon and Schuster.
- Ruhwedel, F. (2003). Eigentümerstruktur und Unternehmenserfolg – Eine theoretische und empirische Analyse deutscher börsennotierter Unternehmen. Eugen Lang Verlag, Frankfurt am Main.
- Seligman, J. (1985). Equal protection in shareholder voting rights: The one common share, one vote controversy. *The George Washington Law Review*, 54, 687.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94, 461–488.
- Swain, P. (2022). Shareholders' Rights & Shareholder Activism 2022. Chambers Global Practice Guide. <https://practiceguides.chambers.com/practice-guides/shareholders-rights-shareholder-activism-2022>.
- World Bank. (2022). Subnational Studies – Measuring Business Relations, Protecting Minority Investors. <https://subnational.doingbusiness.org/en/data/exploretopics/protecting-minority-investors/what-measured>.

Shareholder Theory/ Shareholder Value

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Synonyms

Shareholder primacy theory; Shareholder value creation; Shareholder value maximization; Shareholder wealth maximization; Shareholder-centric approach

Definition/Description

Shareholder theory states that the primary objective of management is to maximize shareholder

value. This objective ranks in front of the interests of other corporate stakeholders, such as employees, suppliers, customers, and society. Shareholder theory argues that shareholders are the ultimate owners of a corporate's assets, and thus, the priority for managers and boards is to protect and grow these assets for the benefit of shareholders. Shareholder theory assumes that shareholders value corporate assets with two measurable metrics, dividends and share price. Therefore, management should make decisions that maximize the combined value of dividends and share price increases. However, shareholder theory fails to consider that shareholders and corporates may have other objectives that are not based on financial performance. For example, as early as 1932, Berle and Means argued that corporations have a variety of purposes and interests including encouraging entrepreneurship, innovation, and building communities. This wider view is gaining more traction in recent decades as evidenced by an increased interest in ethical investment funds. This suggests that shareholders and potential shareholders are not only interested in financial gains but are also interested in corporates being socially responsible (Kyriakou 2018). Therefore shareholder value creation is important; however, it needs to be balanced with other stakeholders' interests. This is referred to as an enlightened approach to shareholder value maximization.

This entry outlines the origins of shareholder value theory, provides a rationale for prioritizing shareholder value theory, documents arguments for taking a wider view beyond shareholder value, and explains enlightened shareholder value.

The Origins of Shareholder Value Theory

The origin of shareholder value maximization as the primary objective of corporates was influenced by changes in the structure of businesses, the economic environment, and financialization of the markets. These are now outlined in brief.

Business structure and the economic environment: The roots of shareholder value theory can be

traced to the late eighteenth century when the capital investment required to finance innovative manufacturing businesses during the industrial revolution led to a change in the structure of businesses, from traditional small family-run corporates to large publicly owned corporates with dispersed shareholders and professional managers. This change in governance, called managerialism, led to new modes of coordinating enterprise, technology, and planning. From the 1970s, the focus on managerialism gave way to a growing focus on shareholder value maximization. The economic environment is considered to have contributed to this change in focus. The 1970s was a challenging time for US corporates as they experienced a decline in competitiveness due to the rise of foreign corporates. The result was decreases in their share prices. Questions were being asked about the performance of management in this era. The widespread reduction in the value of corporate stocks led to a focus by business leaders, policy makers, regulators, and politicians throughout the 1980s and 1990s on the role of the board and their duty and relationship to shareholders. In particular, agency theory, an economic theory that argues that humans are inherently self-serving, was deemed to provide an appropriate explanation for the poor performance of corporates. The view being that boards were taking decisions that benefited directors, not shareholders. This resulted in the widespread promotion of shareholder wealth maximization as the primary goal of corporates. Directors were not opposed to this approach as they believed that by focusing on wealth maximization, they could avoid their corporate being the target of a takeover bid. This reason was particularly pertinent in the 1980s as a wave of merger activity was sweeping through major stock markets. In addition to being a defense against takeover, a focus on wealth maximization also led to calls for the alignment of director and shareholder incentives. The result was a higher executive director pay that was typically linked to share price increases. This further motivated management to focus on shareholder wealth maximization. However, it is also argued to have fueled a focus on short-term gains that benefit transient investors and directors, to the

detriment of long-term shareholders and other stakeholders that are interested in the sustainability of the corporate (Clarke and Friedman 2016; Englander and Kaufman 2004).

Financialization: During the 1980s financial institutions became substantial investors in corporate shares. Financial institutions pursue wealth maximization as their primary investment objective. This increased attention from well-informed investors and led to pressure on directors to deliver high returns on their tangible assets. If high returns are not reported, then corporates faced the risk of being taken over and broken up. This shifted the priorities of corporates to cost-cutting, divestiture, outsourcing, and offshoring as managers did whatever was necessary to meet the earnings expectations of the market (Dallas 2017). Improvements in information technology in the 1980s and 1990s also resulted in easier access to information on corporates, increased interest from a wider range of investors and hence greater liquidity in the stock market. In particular, it enabled more trading by transient shareholders whose main focus is liquidating short-term abnormal gains. The shift in focus to reporting short-term gains is argued to conflict with the long-term sustainability of corporates.

The arguments for and against the pursuit of shareholder wealth maximization are now outlined in brief.

The Rationale for Prioritizing Shareholder Value

Four main arguments in support of the primacy of shareholders over other stakeholders are forwarded in the literature; the agency perspective, the control perspective, the residual claims perspective, and congruence with social wealth.

The agency perspective: The first view, the agency perspective, is that directors have a contractual obligation to prioritize shareholder value maximization over other stakeholder claims. Under agency theory the corporate is seen as a “nexus of contracts” (Alchian and Demsetz 1973). Shareholders are the owners. They are external to the corporate and hence cannot manage the

corporate. Therefore, shareholders hire agents (managing boards) to protect their interests and to run the corporate on their behalf (Jensen and Meckling 1976). To fulfill their contractual obligation, boards should take decisions that promote the long-term sustainability of the corporate. The traditional view is that long-term sustainability is synonymous with financial prowess. Therefore, the focus should be on financial decision-making that maximizes shareholder value in terms of dividend returns and increases in share price. This traditional view is captured by Friedman when he stated: “Few trends could so thoroughly undermine the foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible” (Friedman 1970, p. 113). Friedman went on to explain that catering for multiple stakeholders with multiple objectives increases the risk of managerial mismanagement and may even conflict with shareholder wealth. Therefore, the role of the board is to manage, grow, and protect shareholder assets. This can be achieved by a focus on sustainable development.

Control: Under the control view, shareholders are the controlling influence and hence the most important stakeholder. Each share has voting rights and though shareholders transfer their control rights to the governing board to run the corporate on their behalf, they have influence over the board. They can attend annual general meetings and remove individual directors, and they can influence board decision-making through their voting rights at meetings. Therefore, though they have transferred operational decision-making control to the board, shareholders retain ultimate control. As a result, shareholders are the most important stakeholder, and the governing board, managers, and employees should act to maximize shareholder wealth. The maximization of shareholder wealth is achievable when long-term sustainability is achieved.

Residual claims: Shareholders provide funds to the corporate for investment. The corporate invests these funds in assets. Therefore, any assets purchased with shareholders’ funds are the property of the shareholders. However, under law, the

contractual rights of other claimants, such as employees and suppliers, rank in front of shareholders' contractual claims. This means that shareholders are only entitled to the residual value when the corporate is wound up after all other contractual claimants have been satisfied. Consequentially, shareholders bear more risk and hence have a greater interest in the corporate's long-term sustainability relative to other stakeholders. Each decision made by the board has a direct impact on shareholder wealth, whereas all other stakeholder claims are typically fixed. Therefore, governing boards should focus on maximizing equity shareholder wealth as this will ensure the long-term sustainability of the corporate.

Congruence with social wealth: A fourth argument in support of shareholder value maximization is that it has value for the wider society. When governing boards focus on shareholder wealth maximization, this results in benefits for other stakeholders. For example, to increase sales revenues, policies may be introduced that improve customer service or provide a wider product range. This will lead to additional profits for shareholders as customers return more often. However, it also benefits customers who experience higher quality service and have access to a wider range of products. Similarly, to reduce staff recruitment costs, a corporate might invest in staff training or introduce flexible working hours. This will cut costs due to lower staff turnover, lower sick rates, and improved productivity from happier workers. The changes are also beneficial for workers who increase their human capital by gaining new skills and can better manage their work-life balance. In addition, financial gains to shareholders will also have a societal impact as in modern developed economies, a majority of the population have investment in stock markets. This investment may be direct, through the purchase of shares, or indirect, through their pension funds. Thus a focus on shareholder value is argued to be beneficial for society at large. Politicians in several jurisdictions have equated the performance of the stock market with the interests of their voting public (Cioffi and Höpner 2006).

Why Take a Wider View Beyond Shareholder Value

As early as 1992, Michael Porter claimed that economic instability and insecurity results from a focus on shareholder value maximization. More recently Clarke (2015) argued that the relentless search for returns, regardless of the consequences, and the self-interest and irresponsibility embodied in the pursuit of shareholder value, was at the heart of corporate scandals, such as Enron and WorldCom in the early 2000s, and the reckless excesses leading to the global financial crisis of 2008. Moreover, government bailouts of banking corporations in the aftermath of the financial crisis, with the associated short- and long-term costs to taxpayers, indicate that an excessive focus on maximizing shareholder wealth not only damages shareholders but also has a negative impact on society.

Some opposing arguments for the rationale forwarded under agency theory, control, residual claims, and congruence with social welfare are now outlined.

Agency theory: Agency theory identifies that directors could be self-serving at the expense of shareholders and that this can have negative consequences for the long-run sustainability of a corporate. It argues that monitoring directors and incentive alignment that leads to decision-making that is congruent with shareholder value maximization should result in director decision-making that is consistent with shareholder value maximization. However, the empirical literature is inconclusive as to whether methods used to reduce agency, lead to better outcomes for shareholders (Pargendler 2016). There are plenty of examples of corporate failures despite clean audit reports by auditors, for example, Enron. In addition, it is claimed that techniques used to align board decision-making, for example, share options, have not curbed dysfunctional decision-making, for example, Nortel. It would seem that agency theory is an oversimplification of the complexity and heterogeneity of financial and corporate reality. Economics is not the only driver of human interactions; it is also shared by politics, ideologies, legal systems, social conventions, modes of

thought, etc. (Letza et al. 2008). Therefore, a focus on shareholder wealth is appealing for its simplicity but fails to take into account the complexity of the corporate world.

Control: While shareholders own shares in corporations, they are defined under law as separate legal entities. They exist separate to their aggregate members, with their own rights and duties that do not derive from the rights of their shareholders (Letza et al. 2008). Therefore, as distinct social entities, the directors' duty is to each distinct entity, not the aggregate shareholders.

Residual claims: Though shareholders are not guaranteed a return, they are not the only stakeholder to invest in corporations without a guaranteed return. Taxpayers, through government agencies, and employees, also invest in corporations without a guaranteed return. Government agencies provide infrastructure that corporations use and may even directly provide grants or subsidies to corporations. The return is tax revenues and societal gain. Employees make investments in "corporation-specific" human capital and unpaid hours of input with the expectation that they will reap returns (wages) from that corporation in the future. When the role is specialized, or the employee is older, their mobility is impaired and the potential loss in terms of future returns (wages) is greater. Employees cannot diversify their investment as easily as shareholders can. In addition, shareholders can exit at any time. This is not as easy for taxpayer investment or for some employees. Therefore, it could be argued that shareholders are not the key risk takers, as other stakeholders such as taxpayers and employees also face considerable risk. Indeed, their loss when a corporation fails may be even greater than shareholders' losses.

Congruence with social wealth: Pargendler (2016) suggests that there is little congruence between focusing on shareholder value and social wealth. They find that share price increases do not benefit society equally, that the wealthiest 10% of the population own 81% of the stock, whereas the bottom 80% of the population hold 9% of shares. Moreover, given this skewed concentration of ownership, shareholders have few incentives to act as stewards

for the public good. Thus, there is little overlap between the interests of shareholders and those of wider society. Pargendler's (2016) conclusion focused on the outcome of the pursuit of financial objectives, where the output is dividends and share price increases; however, there are other beneficial outcomes from corporate sustainability that benefit the wider stakeholder body. Recognition of these benefits has led to calls for an approach termed "enlightened shareholder value."

Enlightened Shareholder Value

Under shareholder value theory, the corporate is viewed as a body of shareholders with the board's duty to the shareholders. Shareholder value theory also assumes there is a single, common and uniform measure of shareholder value, dividends and share price increases, and that shareholders are only interested in financial returns. However, this may not be an appropriate assumption. As early as the 1970s, activist shareholders have submitted proposals on social issues at annual general meetings. This suggests that shareholders have interests other than financial returns and that by catering for other stakeholder interests, boards are in fact catering for shareholder interests. Moreover, furthering shareholder value is not mandated under corporate law (Stout 2012), and the law has imposed duties on boards to other stakeholders, such as to employees and suppliers. For example, in the UK (Companies Act 2006) and Ireland (Companies Act 2014), directors have a duty to promote the success of the corporate for the benefit of its shareholders while having regard to the interests of employees and to creditors generally, particularly in times of threatened insolvency. A stakeholder-orientated approach to governance is evident in continental Europe and Japan where shareholder value and stakeholder interests are not separate and isolated from each other but interdependent, mutually influential, and reciprocally supportive (Letza et al. 2008). More widely, investors in many markets reported that even where a primary duty to shareholders is accepted, this does not exclude engagement and action on sustainability issues (Sullivan et al. 2015). This

approach is referred to as the “enlightened shareholder value” approach.

The enlightened shareholder value approach focuses on long-term value creation and the interests of various stakeholders, in advancing shareholder value. Shareholder interests are predominant; however, the promotion of their interests does not require ignoring the interests of other groups deemed to be important to the success of the corporate. Boards are permitted to take different stakeholder interests into account if deemed to be congruent with long-term shareholder wealth maximization. It would be hard for boards to make decisions that treat the well-being of employees or the environment as the primary cause for action (unless based on other legal obligations under employment or environmental law). An enlightened approach does not extend to additional rights for stakeholders, nor does the approach prioritize other stakeholders at the expense of shareholders. However, it argues that all stakeholders benefit from a long-term view and hence the sustainability of the corporate. As with any corporate investment, investment in a corporate stakeholder group should earn a return for the whole corporate, and there is some tangential evidence to suggest that this is the case. For example, De Klerk et al. (2015) report higher share prices in corporates with higher levels of sustainability disclosures. Thus it would seem that sustainability and value maximization have the potential to be complementary undertakings that result in a virtuous circle in which “doing good” helps companies do well, and doing well provides the wherewithal to do more good (Martin et al. 2009). Policy makers also are promoting a more enlightened approach. There are increasing legal requirements on corporates to publish on social and environmental matters, for example, the EU Non-Financial Reporting Directive 2014/95/EU. In addition, stock exchanges have started to require their members to comply with Corporate Governance Codes that contain requirements on disclosures of social and environmental matters (KPMG 2017a).

A refocus to enlightened shareholder value is consistent with the growing numbers of institutional investors who include sustainability criteria and metrics when developing and

assessing portfolios of shares (Chen and Scholtens 2018; Miralles-Quiros et al. 2017; Sullivan et al. 2015). Even Michael Jensen, the champion of agency theory, has conceded that in order to maximize value, managers must not only satisfy but enlist the support of all corporate stakeholders (Jensen 2002).

Summary

Taking an enlightened shareholder value approach is not as clear cut as pursuing financial objectives that result in stronger financial ratios, higher dividends, and increases in share price. Setting non-financial objectives is difficult as there are measurement and reporting issues with limited guidance from policy makers. However, financial performance and sustainability are not divorced from each other. Share price is a vital indicator of corporate performance. It reflects the underlying value of the corporate, including potential future sustainability. Financial performance is important not only for shareholders but also for other stakeholders. For example, without financial sustainability, employees’ future income stream is at risk, suppliers’ future income stream is at risk, customers’ access to products is at risk, and the public cannot benefit from the infrastructure funded by tax and direct investment by corporates.

Conflict typically arises between shareholders and other stakeholders, not because of the pursuit of financial objectives, but due to agency issues, wherein self-serving boards make decisions that focus on short-term gains that put the long-term sustainability of the corporation at risk. This approach only benefits short-term transitional shareholders who trade for quick speculative gains. This behavior does not serve the interests of long-term shareholders, who are interested in the sustainability of the corporate. As a result of agency behavior, legislative and regulatory intervention is required to ensure corporations respond to the growing public demand, that they recognize their wider social and environmental responsibilities and avoid a singular focus on short-term financial shareholder wealth maximization.

Cross-References

- [Accountability](#)
- [Agency Theory](#)
- [Corporate Activism](#)
- [Executive Remuneration and CSR](#)
- [Governance](#)
- [Stakeholder](#)

References

- Alchian, A. A., & Demsetz, H. (1973). The property right paradigm. *The Journal of Economic History*, 33(1), 16–27.
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. New York: Macmillan.
- Chen, X., & Scholtens, B. (2018). The urge to act: A comparison of active and passive socially responsible investment funds in the United States. *Corporate Social Responsibility and Environmental Management*, 25(6), 1154–1173.
- Cioffi, J. W., & Höpner, M. (2006). The political paradox of finance capitalism: Interests, preferences, and center-left party politics in corporate governance reform. *Politics and Society*, 34(4), 463–502.
- Clarke, T. (2015). Changing paradigms in corporate governance: New cycles and new responsibilities. *Society and Business Review*, 10(3), 306–326.
- Clarke, C., & Friedman, H. H. (2016). Maximizing shareholder value: A theory run amok. *Journal of Management*, 10(4), 45–60.
- Dallas, L. L. (2017). Is there hope for change: The evolution of conceptions of good corporate governance. *San Diego Law Review*, 54, 491.
- De Klerk, M., de Villiers, C., & van Staden, C. (2015). The influence of corporate social responsibility disclosure on share prices. *Pacific Accounting Review*, 27(2), 208–228.
- Englander, E., & Kaufman, A. (2004). The end of managerial ideology: From corporate social responsibility to corporate social indifference. *Enterprise and Society*, 5(3), 404–450.
- Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. *New York Times Magazine*, p. 17.
- Jensen, M. C. (2002). Value maximization and the corporate objective function. In J. Andriof, S. Waddock, S. Rahman, & B. Husted (Eds.), *Unfolding stakeholder thinking: Theory responsibility and engagement* (pp. 65–84). Sheffield: Greenleaf Publishing.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- KPMG. (2017a). Carrots & sticks: Global trends in sustainability reporting regulation and policy. GRI, United Nations Environment Programme, & Centre for Corporate Governance in Africa. KPMG. <https://www.carrotsandsticks.net/>. Accessed 9 Mar 2019.
- KPMG. (2017b). The KPMG Survey of corporate responsibility reporting 2017. KPMG. <https://home.kpmg/xx/en/home/insights/2017/10/the-kpmg-survey-of-corporate-responsibility-reporting-2017.html>. Accessed 9 Mar 2019.
- Kyriakou, S. (2018, October 3). Advisors may lose clients if they ignore ethical investments. FTAdvisor, Financial Times Limited. <https://www.ftadviser.com/investments/2018/10/03/advisers-may-lose-clients-if-they-ignore-ethical-investments/>. Accessed 9 Mar 2019.
- Letza, S., Kirkbride, J., Sun, X., & Smallman, C. (2008). Corporate governance theorising: Limits, critics and alternatives. *International Journal of Law and Management*, 50(1), 17–32.
- Martin, J., Petty, W., & Wallace, J. (2009). Shareholder value maximization: Is there a role for corporate social responsibility? *Journal of Applied Corporate Finance*, 21(2), 110–118.
- Miralles-Quiros, M. D. M., Miralles-Quiros, J. L., & Arraiano, I. G. (2017). Are firms that contribute to sustainable development valued by investors? *Corporate Social Responsibility and Environmental Management*, 24(1), 71–84.
- Pargendler, M. (2016). The corporate governance obsession. *Journal of Corporation Law*, 41(2), 359.
- Porter, M. E. (1992). Capital disadvantage: America's failing capital investment system. *Harvard Business Review*, 70(5), 65–82.
- Stout, L. A. (2012). *The shareholder value myth: How putting shareholders first harms investors, corporations, and the public*. San Francisco: Berrett-Koehler Publishers.
- Sullivan, R., Martindale, W., Feller, E., & Bordon, A. (2015). Fiduciary Duty for the twenty-first Century. United Nations Global Compact, Finance UNEP Initiative, PRI, Inquiry. <https://www.unpri.org/fiduciary-duty/fiduciary-duty-in-the-21st-century/244.article>. Accessed 9 Mar 2019.

Shareholder Value Creation

- [Shareholder Theory/Shareholder Value](#)

Shareholder Value Maximization

- [Shareholder Theory/Shareholder Value](#)

Shareholder Wealth Maximization

- [Shareholder Theory/Shareholder Value](#)

Shareholder Wealth Maximization (SWM)

- [Shareholder Model](#)

Shareholder-Centric Approach

- [Shareholder Theory/Shareholder Value](#)

Shareholder-Oriented Systems Versus Relationship-Based System

- [Anglo-American Board Model \(One-Tier\) Versus European Model \(Two-Tier\)](#)

Sharing Economy

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Synonyms

[Access economy](#); [Access-based consumption](#); [Access-based service](#); [Collaborative consumption](#); [Peer-to-peer economy](#); [Social sharing](#)

Definition

“Sharing” as a concept predating long time ago is a form of exchange in human behavior and constitutes the most basic pattern of human economic behavior (Price 1975). In recent years, sharing has gained increased attention as a mode of consumption and even becomes more attractive than purchasing for some consumers, as its heightened importance as being a part of sustainable models of consumption has been emphasized in the accumulated body of extant research (Belk 2014; Hellwig et al. 2015). In this sense, there exist several distinct concepts that can be used interchangeably with sharing economy, such as peer-to-peer economy (Nielsen 2014), collaborative consumption (Botsman and Rogers 2010), social sharing (Benkler 2004), access economy (Rifkin 2000), and access of ownership (Bardhi and Eckhardt 2012). However, sharing can be defined as “people coordinating the acquisition and distribution of a source for a fee or other compensation,” which refers to both monetary and nonmonetary transactions (Belk 2014, p. 1597). Further, sharing also refers to “the consumption of goods and services through activities such as renting, swapping, or trading,” referring to distinct forms of sharing such as second-hand buying, donating, and borrowing (Hamari et al. 2016). Also, Botsman and Rogers (2010) described the concept of sharing as “systems of organized sharing, bartering, lending, trading, renting, gifting, and swapping.” Further, access of ownership refers to the sharing of goods or services for a limited time period via peer-to-peer sharing activities such as lending or renting among individuals (Bardhi and Eckhardt 2012).

In concurrence with the meaning of the concept, sharing business models enable people to share their own assets with other individuals in distinct and different stances. In this context, people could have access to use other individual's flats (e.g., Airbnb, CouchSurfing), cars and bicycles (e.g., Turo), clothes (e.g., Modacruz, Dolap.com), pet care (e.g., Rover), and taxi services (e.g., Uber). On the other hand, sharing economy platforms differ with regard to its purpose. While

some of them provides not-for-profit access-based consumption to the consumers for a temporary time period, enabling individuals to use them for free (e.g., Couchsurfing), others are stimulated by financial motives and rely heavily upon monetary compensations (e.g., Airbnb).

Introduction

With the development of Internet and information technologies, online platforms have been risen to the surface with an intent of encouraging user-generated content, sharing, and cooperation among the consumers. For instance, Wikipedia can be a good example for collaborative online encyclopedia, based upon the accumulated information sharing of individuals. Also, YouTube and Instagram could be given as great examples for content sharing platforms, as individuals share their own creative contents within the platform. Hence, the concept of sharing economy is stemmed from several technological developments which make the sharing activity of tangible and intangible goods and services easier for people.

In virtue of allowing individuals to share their goods or services via monetary or nonmonetary transactions, the phenomenon of sharing economy has changed the definition of “ownership” and “employment” (Belk 2014). In this sense, a new concept of “sharing rather than purchasing” has received a great deal of attention among today’s consumers considering its three major contributions to the economy (i.e., developing new revenue models), society (i.e., increasing social engagement among the individuals), and the environment (i.e., protecting the limited resources via cooperative consumption). The new concept has shifted the mindsets of consumers over recent decades and gained the heightened interest of entrepreneurs, governments, the media, and academic researchers. While traditional economic view support the certain premise that transfer of ownership takes place when people exchange of goods and services, the new sharing economy has suggested new forms of

exchanging goods and services such as “access over ownership,” consisting activities of borrowing, lending, and renting rather than purchasing and owning the goods and services (Botsman and Rogers 2010).

With respect to its economic influences, PwC has reported the five industries that take the major role in the context of sharing economy as travel, car sharing, staffing, music, and video streaming, generating \$15 billion in their global annual revenue but expecting a huge increase in their market share up to \$335 billion by 2025 (PwC 2016). On the other side, both corporations and individuals have started to assess the alternative of sharing as an environmentally friendly option and more profitable choice when purchasing goods and services. In this context, the sharing economy can be regarded as an umbrella concept incorporating the notion of “collaborative consumption,” which encourages the sharing and consumption of goods and services via online platforms and enables consumers to exploit less resources in concert with the sustainable development goals of the United Nations.

Key Issues

There exist four distinct aspects that would lead individuals to engage in the sharing-based economy. First, consumers may engage in sharing activities via online platforms, which are called “collaboration online.” In this form of activity, individuals create their own content with an aim of sharing their knowledge among the online users. For instance, consumers make transfer of knowledge via file sharing and share their own content with other consumers. Second, another aspect in the sharing economy is related to the concept of “social commerce,” which is a peer-to-peer cooperation that is mediated by social media via integrating both offline and online settings. In this form of commerce, users may highly involve in the exchange process by the help of social media and make their own contributions to the goods or products. Social commerce combines shopping and social interactions in both offline

and online platforms owing to taking opportunities of information technologies and social media.

Besides, the third aspect of sharing economy – “sharing online” – implies to the “access over ownership,” referring to the share of goods and services by means of information technologies. For example, collaborative consumption platforms (e.g., CouchSurfing, BlaBlaCar) can be regarded as a “sharing online” option of sharing-based economy, as individuals use online platforms to share their own houses or cars regardless of monetary or nonmonetary purposes. The fourth one includes the ideological considerations of sharing economy, which implies to the collective activities such as campaigns disseminated through the help of social media and open sources. For instance, users may generate mutual funds with an aim of helping needy people and initiate a social media campaign to make it happen via cooperating different people and encouraging them in line with the aim of the campaign.

On the other hand, sharing economy models may differ with respect to their market mediation, which refers to the mode of exchange. While some require monetary transactions (e.g., Airbnb), others may not require any compensation (e.g., CouchSurfing). The mode of exchange is encouraged by prosocial and altruistic motives or the economic and reciprocal desires of individuals or corporations. However, it is certain that both ways create distinct consumer preferences and experiences in their collaborative consumption journeys. While altruistic urges may necessitate much more emotional feelings about the goods or services, the economic motives put stronger emphasis on the functionality of the products or services.

Summary

The new sharing economy phenomenon has received a great deal of attention among scholars, practitioners, individuals, the media, and the government, since it has changed the traditional definition of transfer of ownership. In this sense,

individuals make their consumption of goods through several activities rather than purchasing. The new form of exchange of goods or services incorporate many different motives inside of consumers such as economic, social, environmental, and hedonic values driving them to engage in sharing-based activities. However, it has changed the mindsets of people and created a huge market potential for both consumers and corporations in the new era of consumption.

Cross-References

- [Collaborative Consumption](#)
- [Responsible Consumption](#)
- [Sharing Economy](#)
- [Sustainability in Economy of Communion Enterprises](#)

References

- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881–898.
- Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595–1600.
- Benkler, Y. (2004). Sharing nicely: On shareable goods and the emergence of sharing as a modality of economic production. *The Yale Law Journal*, 114, 273.
- Botsman, R., & Rogers, R. (2010). Beyond Zipcar: Collaborative consumption. *Harvard Business Review*, 88(10), 30.
- Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, 67(9), 2047–2059.
- Hellwig, K., Morhart, F., Girardin, F., & Hauser, M. (2015). Exploring different types of sharing: A proposed segmentation of the market for “sharing” businesses. *Psychology & Marketing*, 32(9), 891–906.
- Nielsen. (2014). *Is sharing the new buying?* New York: Nielsen.
- Price, J. A. (1975). Sharing: The integration of intimate economies. *Anthropologica*, 17(1), 3–27.
- PwC. (2016). *The sharing economy. Consumer intelligence series*. London: PricewaterhouseCoopers.
- Rifkin, J. (2000). *The age of access: How the shift from ownership to access is transforming modern life*. London: Penguin.

Sharing Economy Business Models

- [Product-Service Systems](#)

Sharing Organizations

- [Sustainability in Economy of Communion Enterprises](#)

Shift Point

- [Tipping Point](#)

Shopholic

- [Compulsive Buying](#)

Shopping Addiction

- [Compulsive Buying](#)

Shortlisting

- [Prequalification Processes \(Clients Demanding of Potential Suppliers\)](#)

Side Effects

- [Externalities](#)

SIGMA Framework

- [SIGMA Management Framework](#)

SIGMA Management Framework

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Synonyms

[SIGMA Framework](#); [SIGMA Management Model](#)

Definition/Description

The Sustainability: Integrated Guidelines for Management (further on abbreviated as SIGMA) project was launched in 1999, as a partnership between the British Standards Institution (BSI) and Forum for the Future and Account Ability, with the goal of providing companies with the framework on how to become more sustainable (Knight, 2006). The project was strongly supported by the UK Department of Trade and Industry (DTI), and over twenty organizational partners. The developed SIGMA guidelines contain Guiding Principles and a Management Framework, which can be applied in organizations of all sizes and in all industries.

The project's main goal is to improve companies' understanding of sustainability and integrate sustainability concepts in day-to-day operations. To achieve this goal, companies have to develop a set of measures, proper management structures, and a decision-making process (Sitnikov, 2013). Ultimately, the sustainability must become an integral part of the corporate culture.

The SIGMA Management Framework is based on the "Plan, Do, Check, Act" model (Deming, 1982; Sokovic et al., 2010) and has four distinct phases that are rooted in the fundamental organizational processes: Leadership and Vision; Planning; Delivery; Monitor, Review and Report (Knight, 2006; Mertins & Orth, 2012).

The SIGMA guidelines also introduce a SIGMA toolkit, which addresses specific

management challenges, and provides practical templates and case studies for addressing those challenges. Even though the SIGMA management framework was conceptualized as a stand-alone model, it can be neatly integrated with other initiatives like AA1000 Framework and International Organization for Standardization (ISO) 14,001.

SIGMA

The Sustainability: Integrated Guidelines for Management (further on abbreviated as SIGMA) Management Framework is the most substantial part of the SIGMA guidelines. The framework is based on the Plan-Do-Check-Act model (Deming, 1982) in accordance with the following logic: Policy and planning (Plan); Implementation (Do); Verification and assessment of efficacy (Check); Management review and improvements (Act) (Mertins & Orth, 2012). This is not a prescriptive methodology but a rather systematic structure for managing activities and addressing corporate social responsibility (CSR) effectiveness. Further, it is flexible enough to ensure continuous improvement of the sustainability initiatives (through PDCA cycle).

Details of the framework will be reviewed based on the four distinct phases: Leadership and Vision; Planning; Delivery; Monitor, Review and Report (Knight, 2006).

The initial phase is focused on leadership and vision. Strong sponsorship from top management ensures alignment of all processes, systems, and standards, including ones focused on sustainability. During this phase, a vision focused on sustainability is developed, communicated, discussed, and through that process, organizational identity and corporate culture is crafted.

In the planning phase, the overall system is developed based on the company's current state and future desires. After the priorities are set based on the required changes, a detailed implementation plan is developed. As many organizations have CSR and sustainability practices in place, they should use the opportunity to assess them systematically.

The delivery phase is centered around the business model and providing economic logic behind the new actions. Sustainability and CSR programs are implemented in a responsible and accountable fashion while providing value for the end customer.

The monitor, review, and report phase is focused on checking progress and learning and adopting when required. A transparent and timely reporting is particularly important, not only for this phase but all four.

The guidelines provide rich detail for each phase "including suggested activities to focus on: key questions to ask; suggestions for who needs to be involved; potential timing for activities; expected outcomes; further resources, as well as hints and tips to assist with implementation, mapping of what is already underway and establishing what is required" (Knight, 2006, p. 12). The framework provides a structure on how all mentioned elements interact, interdepend, and support each other with the goal of advancing the overall CSR activity.

Many organizations have CSR management, pursue different initiatives through different approaches, and work on continuous improvement. The key distinction of SIGMA is the utilization of the five capitals and accountability as a basis for all CSR and sustainability activity. The five capitals model calls for sustainable wealth creation or "capital" (Ivory & Ascuí, 2019). Organizations use five types of capital: natural, social, human, manufactured and financial for the creation of products or services (Forum for the Future, n.d.; Owen & Kemp, 2012; Porritt, 2012).

The Five Capitals Model

Organizations use five types of capital to create products or services, and attempt to maintain or even enhance the capitals. The model entices organizations to consider how different capitals influence each other and how they impact long-term profitability.

Natural capital, also known as environmental, is the natural resources. All organizations rely on natural capital as they need energy and have an

environmental impact as they create waste. Organizations should consider that some resources are not renewable (i.e. oil, gas), while others are (i.e. timber, water, grain), and with that in mind, try to organize more balanced operations. Further, organizations can enhance natural capital by recycling, re-using, substituting scarce materials with more abundant ones, using renewable energy sources, etc. The importance of such goals is emphasized in the 2030 Agenda for Sustainable Development which was adopted unanimously by the 193 members of the United Nations (UN) in September 2015 (The Grantham Research Institute on Climate Change and the Environment, 2018). The agenda was operationalized through the 17 Sustainable Development Goals (SDG) and 169 targets (United Nations, n.d.-a) widely used by both private and public sectors across the world. The following SDG are focused on environment and natural resources:

- Goal 12: Responsible Consumption and Production. The goal is attempting to ensure sustainable consumption and production patterns. The global “material footprint” like plastic bottles and electronic waste is increasing sharply while recycling data is discouraging.
- Goal 13: Climate Action call for action to combat climate change and its impacts. Most notable issues are the rising global average temperature and greenhouse gas emissions. A positive signal is increase in financing to address these concerns coming from both governments and corporations.
- Goal 14: Life Below Water. The goal is concentrates on conservation and sustainable use of oceans, seas, and marine resources, which is extremely important in the shipping, tourism, fishing industries, just to name a few.
- Goal 15: Life on Land aims to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss” (United Nations, n.d.-b, para. 1).

Human capital includes health, skills, knowledge, intellectual contributions, motivation, etc.

Organizations depend on a workforce to function, so they want to ensure individuals are healthy, motivated, skilled, and ready to work. To maintain and enhance human capital, organizations should invest in their workforce, provide training and education, provide fair compensation, create opportunities for advancement, support a high standard of health, and so forth. Several SDG (United Nations a) address these issues, including:

- Goal 3: Good Health and Well-being. The goal is aimed at all ages, and quality of life at any age. The goal is tightly connected to the goal 1: No Poverty, the goal 2: No Hunger, and the goal 6: Clean Water and Sanitation.
- Goal 4: Quality Education aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (United Nations, n.d.-c, para. 1). Just in recent years, COVID-19 has wiped out 20 years of education gains.

Social capital is a value-added to economic output through human relationships, such as networks, communication channels, communities, schools, and similar. These social relationships are necessary for organizational effectiveness. Inside the company, individuals build trust through interactions, share cultural values, and ultimately organizations operate effectively. Social interaction is equally important in the external environment, as companies operate in the wider society. Organizations can enhance their social capital by being responsible, paying taxes, obeying laws, minimizing negative social impact, providing safe working conditions through ethical sourcing, and so on. Goals (United Nations a) corresponding to this type of capital are:

- Goal 5: Gender equality. Focus is empowerment of women, their equal representation in decision-making, and equal pay, and all topics that are on the top of many corporate agendas.
- Goal 8: Decent Work and Economics Growth designed to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (United Nations, n.d.-d, para. 1).

Manufactured capital includes real estate, infrastructure, and technologies owned, leased, or controlled by the organization. Organizations can sustain competitive advantage through manufactured capital while improving efficiency and sustainability. Some of the measures organizations can use to grow their manufactured capital include modular manufacturing systems, zero-waste and zero-emission production systems, reverse logistics with the re-manufacturing system, industrial ecology, etc. Many of which are represented in the following SDG (United Nations a):

- Goal 7: Affordable and Clean Energy. The overall efforts are aimed at higher utilization of modern renewable energy, especially in the sectors like heating and transportation.
- Goal 9: Industry, Innovation and Infrastructure. In the past several years we have witnessed many disrupted supply chains and many closed manufacturing facilities. As a result of that, resilience became a top priority for many corporations and countries. More robust systems are being developed through innovation as well as inclusive and sustainable industrialization.
- Goal 11: Sustainable Cities and Communities is meant to make cities and human settlements inclusive, safe, resilient and sustainable.

Organizational assets in the form of currency that can be owned and traded compose financial capital. They typically include notes, shares, and bonds and reflect the power of other types of capital. Financial capital is the traditional measure of business performance. Sustainable organizations have to understand how economic value is generated. Organizations can enhance financial capital by distributing created wealth, building strong supplier and customer relationships, effectively managing risk, building brand and reputation, and so forth. Some of the SDG (United Nations a) related to the financial capital are:

- Goal 10: Reduced Inequality. The goal is advancing for reduced inequality within and among countries. The COVID-19 crisis

unfortunately, increased the income inequalities in numerous countries around the world.

The final goal, Goal 17: Partnerships for the Goals (United Nations, n.d.-e, para. 2) is focused on facilitation of the sustainable development goals, through global partnerships and joint responsibility of all stakeholders. As mentioned at the beginning, the mentioned 17 goals have 169 interrelated and often interdependent targets, so clearly many goals could be related to the several capitals. The five capitals model remains at the core of conceptual framework, yet the SDG are more operational in many organizations.

Summary

In this entry, the SIGMA Management framework was presented. The importance of the framework was emphasized, given it is at the core of the SIGMA Guidelines and at the core of organizational understanding of sustainability. The framework is a principle-based approach that utilizes the five capitals model and accountability for overall sustainable activity.

Cross-References

- [Five Capitals Framework \(Forum for the Future\)](#)

References

- Deming, W. E. (1982). *Quality, productivity, and competitive position*. Cambridge, Massachusetts: The MIT Press.
- Forum for the Future. (n.d.) *The five capitals - A framework for Sustainability*. <https://www.forumforthefuture.org/the-five-capitals>. Accessed February 6, 2022.
- Ivory, S., & Ascui, F. (2019). *Evaluating corporate sustainability in the Agrifood industry using a five capitals framework* (Abstract from 9th annual Australasian business ethics network conference 2019). Australia: Melbourne.
- Knight, D. (2006). The SIGMA management model. In J. Jonker & M. de Witte (Eds.), *Management models for corporate social responsibility* (pp. 11–18). Berlin,

Heidelberg: Springer. https://doi.org/10.1007/3-540-33247-2_2.

- Mertins, K., & Orth, R. (2012). Intellectual capital and the triple bottom line: Overview, concepts and requirements for an integrated sustainability management system. In J. Surakka (Ed.), *Proceedings of the 4th European Conference on Intellectual Capital* (pp. 516–528). Academic Publishing International.
- Owen, J. R., & Kemp, D. (2012). Assets, capitals, and resources: Framework for corporate community development in mining. *Business and Society*, 51(3), 382–408. <https://doi.org/10.1177/0007650312446803>.
- Porritt, J. (2012). The five capitals framework. In I. J. Porritt (Ed.), *Capitalism as if the world matters* (pp. 157–167). Routledge. <https://doi.org/10.4324/9781849770675>.
- Sitnikov, C. S. (2013). SIGMA management framework. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 2149–2156). Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-28036-8_578.
- Sokovic, M., Pavletic, D., & Pipan, K. K. (2010). Quality improvement methodologies—PDCA cycle, RADAR matrix, DMAIC and DFSS. *Journal of achievements in materials and manufacturing engineering*, 43(1), 476–483.
- The Grantham Research Institute on Climate Change and the Environment. (2018, February 26). *What are the Sustainable development goals (SDGs)?* <https://www.lse.ac.uk/granthaminstitute/explainers/sustainable-development-goals-sdgs/>. Accessed March 24, 2022.
- United Nations. (n.d.-a). Goals, 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. <https://sdgs.un.org/goals/goal4>. Accessed March 21, 2022.
- United Nations. (n.d.-b). Goals, 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. <https://sdgs.un.org/goals/goal8>. Accessed March 21, 2022.
- United Nations. (n.d.-c). Goals, 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. <https://sdgs.un.org/goals/goal15>. Accessed March 24, 2022.
- United Nations. (n.d.-d). The 17 Goals. <https://sdgs.un.org/goals>. Accessed March 21, 2022.
- United Nations. (n.d.-e). Goals, 17 Strengthen the means of implementation and revitalize the global partnership for sustainable development. <https://sdgs.un.org/goals/goal17>. Accessed March 24, 2022.

SIGMA Management Model

- SIGMA Management Framework

Simultaneous Maxima

- Theory of Simultaneous Maximums

Simultaneous Maximization

- Theory of Simultaneous Maximums

Single Report

- Integrated Reporting

Situated Learning

- Community of Practices

Skill-Based Volunteering Programs

- Employee Volunteer Programs

Skimming

- Corruption

Skyscraper

- Tall Building Sustainability

S-LCA

- Social Life Cycle Assessment

SLD

- Sustainable Lighting Design
-

SLO

- Social License to Operate
-

Slow Food movement

- Slow Food Movement and Sustainability
-

Slow Food Movement and Sustainability

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Synonyms

Slow Food movement; Slow movement and sustainable food production; Sustainable food movement; Sustainable slow movement in food

Definition

Globalization may contribute to the destruction of traditional lifestyles and culture and hence to some difficulties in the lives of local people. It may also result in barriers to the creation of social movements. However, the Slow Food movement, which can be defined as a return to traditional values in both rural life and urban life, is an opportunity to counter the threat of globalization to traditional lifestyles and is a holistic, space-oriented solution that responds to the problem of sustaining local identity (Sağır 2017). The aim of this entry is to evaluate this trend using the

concept of sustainability and to examine the negative effects of globalization on society and the food industry.

Introduction

People's consumption habits affect their environmental conditions. Particularly, they may pollute their environment by changing the balance of consumption. Environmental deterioration can be viewed from a number of different perspectives, including environmental pollution, deterioration in the number or diversity of living organisms, or deterioration of people's habitats. It also manifests itself in the malnutrition of living organisms (Avgerinou et al. 2019; Türküm 1998). The relationship between the environment and nutritional status has been frequently mentioned in the context of the changing balance of nature and environmental pollution in recent times, especially in the light of the significant increase of the world's population over the last century (Ademowo et al. 2019). The point to note here is that reaching food does not always mean reaching safe food. In order to meet the increasing food demand, which is a result of the increasing world population, some food businesses may need to increase their production capacity. This adaptation may result in negative situations such as compromising the safety of the food produced in some of the enterprises, difficulty in controlling these parameters due to the excess amount of products, or disruptions in the logistics chain (Kasza et al. 2019). Therefore, the food safety concept has gained importance as a way of enabling new generations to reach food while their health is guaranteed (Godfray et al. 2010). The first step in this process was taken in 1972, with the establishment of the United Nations Environment Program (UNEP) (Çevik 2010). The next development was the signing of a charter on biological diversity following the United Nations Conference on Environment and Development in 1992 (Topçu and Topçu 2012). In spite of these important steps, the third Global Environment Report of UNEP in 2002, nevertheless, highlighted little positive change

(Bergman et al. 2015). Despite approximately 2 billion people being healthy enough, more than 1.1 billion people, especially those living in Africa and Asia, could not find potable drinking water; more than 2 billion people were deprived of safe treatment services; and approximately 800 million people had chronic malnutrition problems (Vilakazi et al. 2019). In other words, there were many difficulties in guaranteeing the supply of safe food (Tse et al. 2017). On the other hand, although the numbers were not encouraging, the report did highlight the importance of food safety, and quality food, and healthy eating habits that can be accessed at an affordable price. The most important conclusion was that access to cost-effective food quality should be made possible without disturbing the environmental balance. One of the most effective ways of achieving this is through the application of sustainability principles (Sodiq et al. 2019). By doing so, the environment is not damaged and the benefits can be transferred from generation to generation due to the effective conservation of resources. The Slow Food movement is one way to do this. The symbol of this movement is a small snail (Fig. 1). The snail indicates slowness. In a sense, it also represents the journey of human beings. The slow snail not only can travel surprisingly long distances but also leaves traces where it passes.

The Slow Food movement was created by Carlo Petrini in Italy in 1986 as a response to the growth of fast food. Its main logic is based on the protection of local cuisine, a respect for nature,

and creation of opportunities to eat a healthy and balanced diet. It is an international movement with a total of 100,000 members from 150 different countries (Petrini 2003). In general, slow food is seen as a response to the negative impact of speed on daily life. However, a slow life is not a nostalgic desire to return to the past, to the good old days, or borne out of laziness. On the contrary, a slow life is a process in which daily life is approached with care and attention at its own pace by keeping to routines. Slow life is the art of living in a meaningful, sustainable, thoughtful, and enjoyable way (Andrews 2008). Slow Food also advocates biodiversity in food farming across the globe. It aims to protect domestic or wild animals and vegetable species against the standardization of flavors and supports the consumer's need for awareness. It also seeks to ensure the sustainability of cultural identities to which food and gastronomic traditions depend (Whitehouse 2017). In the literature, the concept of slow food is emphasized in a way that it stands at the crossroads of ecology, gastronomy, taste, and ethics (Hall 2012). At the same time, it opposes the standardization of flavor and culture and is against multinational companies in the food industry and the unlimited power of industrial design (Sağır 2017). For this reason, it takes a place in the food industry with its unique touches such as serving sustainable innovative food products by reflecting the traditional values of societies (Gaitán-Cremaschi et al. 2019). Hence, it is clear that the Slow Food movement can make an important contribution to sustainability. Increasing demand for organic and local foodstuffs and an awareness of sustainability and the importance of quality of life are factors in the Slow Food movement that resonate with the concept of sustainability. As its definition implies, slow food is composed of a good food + clean food + fair food trilogy, and as a result of this, it has adopted the concept of sustainable quality in food (Patrignani and Whitehouse 2018), Tolstokorova 2018, www.slowfood.com). The sustainability of food quality should not be left only to food production and the food supply system. At the same time, each individual should be responsible for preserving local food, traditions, and cultures



Slow Food Movement and Sustainability, Fig. 1 The symbol of the Slow Food movement (source: <https://landinstitute.org>)

(Petrini 2003). These features should be regarded as valuable treasures that should be well-preserved and documented from one generation to the other (Cabeça 2018). Today, ensuring the continuity of traditions and social values has become one of the important values of not only individuals, families, and farmers who earn their living from food, but also companies (Bashutkina 2019). An example would be working life in Japan. Discipline, group spirit, loyalty to authority, religion, and national spirit are some of the main factors that have influenced the development of Japanese industry (Liao et al. 2016). Loyalty to the group was directed to the business group, loyalty to authority was directed to the boss or supervisor, loyalty to the state turned toward the company, and individuals became identified with the job. The success of the business and the success of the company have been a requirement of the individual's national feeling toward the state (Murat 2012). Moving from the same scope, it is possible to encounter reflections from traditions in activities held in other businesses. For example, in Muslim societies, some companies offer special meals for the month of Ramadan. They serve traditional food and use entertainment tools such as public theatre performances, shadow puppet theatre shows that have become cultural symbols in the entertainments during the Ramadan period (Kızılbulut 2019; Odabas and Attar 2018). Therefore, the sustainability of traditional values can be realized in different areas as in the examples mentioned.

Developments in this approach in the field of food allow the Slow Food movement to spread (Altuna et al. 2017). The Slow Food movement is spreading rapidly, supporting the idea that people are striving for sustainable, healthy eating. This entry examines the Slow Food movement in the context of the concept of sustainability.

The Emergence of the Slow Food Movement

Carlo Petrini, an Italian gourmet, started the Slow Food movement in response to the opening of a McDonald's restaurant in Piazza di Spagna in Rome in 1986 (Petrini 2003). A group of political and cultural Italian activists prepared a manifesto for the movement. Its focus is on the negative

effects of people having to live life at a fast pace. Therefore, this movement should not be seen only as a reaction to the opening of a McDonalds. The Slow Food movement aims to raise awareness about the role of fast and mass-consumed foods in peoples' life balance and to find ways to combat the rapidly growing fast food sector by finding alternative food solutions. Food businesses that produce good quality small-scale food with sustainable techniques are also included in this movement. It is accepted in the manifesto that globalization provides advantages in some areas but that it also harms the environment and can produce negative effects on life and eating patterns. Examples include the negative impact it has on the agricultural sector; the standardization of taste in some mass-produced foods; the deterioration of the seeds of fruits and vegetables produced from domestic sources; the selection of crops; and health problems caused by ready to eat foods. In short, the Slow Food movement was established to emphasize that there are individuals or living organisms that cannot keep up with all the developments brought about by globalization, and that this creates problems in the system (Hendriks et al. 2017). For this reason, almost all of the activities are dominated by adaptation to individuality, support for a sustainable approach, and the motto that food culture is an integral part and representative of society. Table 1 gives a chronological list of activities organized within the scope of the Slow Food movement. The expected outcomes of these activities include raising awareness of gastronomic pleasures to a society accustomed to fast-food culture; emphasizing the importance of enjoying freshly cooked food; educating consumers to respect nature and agricultural diversity; and preserving regional food cultures (Petrini and Padovani 2006). The movement is democratic in nature and based on the principle of volunteerism. The volunteerism principle is strategically placed in the formation of the Slow Food movement (Clancy 2017). Volunteers function as motivators in activities and the achievement of success. Volunteers support many issues, from guiding participants to activities, working as facilitators in workshops, managing events in the field of sustainability, and

Slow Food Movement and Sustainability, Table 1 Advantages and disadvantages of the Slow Food movement

Advantages and disadvantages of the slow food movement
<i>Advantages</i>
It encourages the production of local products. Therefore, a contribution is made to the national economy (Snyder et al. 2018)
It is profitable for local producers and provides earnings for local sellers (Counihan 2016)
It contributes to the spread of naturally produced food products. The naturally produced food products lead to significant short- and long-term health benefits for consumers by having better taste, supporting immune system, and providing improvement in general health condition with their rich nutrient content such as antioxidants, vitamins, and minerals (Goldberg 2012)
It supports sustainable agriculture by conducting studies for the continuation of biodiversity (Munjal et al. 2016)
It encourages researchers to carry out projects to prevent the food products that are threatened with extinction (Fontefrancesco and Corvo 2019)
<i>Disadvantages</i>
Some naturally produced food products are expensive, and not everyone has the budget to buy them (Haws et al. 2017)
In order to produce more products, more agricultural land is needed (Snyder et al. 2018)
Food distribution is more complicated (nonorganic food and organic food cannot be transported together, which leads to increased transportation and storage costs; there are risks of product contamination between organic and nonorganic food) (Hansmann et al. 2020)
If developed countries focus on local food production, the demand for imported food products may decrease as a result of encouraging local food production. This situation creates a disadvantage for less developed countries where a part of their livelihood is the export of agricultural products (Barragán-Ocaña et al. 2019)

ensuring efficient interaction among participants (Markwell et al. 2012). They also take roles in formation of local groups called “convivia” (Pietrykowski 2004). The convivia is the plural form of the name “convivium” (Jacobs 2013). The conviva are known as types of local communities and are run with the help of volunteers (Hatipoglu 2015). The members of the convivia work to integrate the basic principles of the Slow Food movement as much as possible into their daily life. As the movement expands, its activities are spreading all over the world. The activities are about many different themes such as ensuring food safety by preserving food biodiversity, preserving food quality, bringing producers and consumers together on appropriate platforms, and raising awareness of the society on conscious food consumption (Voinea et al. 2016). As can be seen from this diversity of activities, activities within the scope of Slow Food range from local to international projects (Fontefrancesco and Corvo 2019). The development of innovative travel methods, such as Slow Food Travel destinations in order to ensure the recognition of the foods

specific to the culture of the countries, and the preservation of food and food culture varieties that are about to be forgotten with biodiversity studies are some examples of these multi-disciplinary initiatives (Nässén 2017).

Slow Food Movement Principles

Slow food starts with good, clean, fairly produced food. In particular, the movement seeks to combat standardization in order to preserve local tastes and different cultures within a country. In addition, other principles have been adopted to promote access to quality food by providing sustainable conditions (Pietrykowski 2004):

- To protect nature, local biodiversity, and cultural heritage and to establish a seed bank for this purpose
- To adapt to the natural rhythm of life
- To protect and to promote local and traditional nutrients
- To promote organic farming and to protect products from genetic engineering interventions

- To save animal lineages, cereals, and fruit and vegetable seeds from extinction
- To support local producers
- To know what people eat and how that food is produced
- To improve the productivity of local farmers
- To conduct scientific studies to prevent the loss of local products
- To facilitate taste (flavor) training
- To raise awareness about producers and production methods
- To turn peoples' tables into feasts

When these principles are evaluated, it is clear the Slow Food movement is not about getting enough food. What is more important is the taste of that food and establishing a social setting in which to enjoy it with others. Moreover, the concept of slow food encompasses a wide spectrum of food and nutrition issues, including the environment, agriculture, politics, finance, and culture (Sidali et al. 2011). People's preferences for certain foodstuffs obviously affect the market for those products, and the economic development of the region where they are produced, as well as the distribution channels. Moreover, this demand impacts export-import balances, and even the culture of people working to produce the foodstuffs (Cheremisina et al. 2019). In this sense, various constructive activities are organized by members of various *convivia* to influence production in line with the movement's principles. These activities include the promotion of new kinds of food products and analysis of feedback on them. Thematic workshops also showcase local culture and food expertise for consumers (Stančová and Cavicchi 2019).

Advantages and Disadvantages of the Slow Food Movement

Every activity and every principle in any field has its advantages and disadvantages (Hall 2012; Nosi and Zanni 2004; Kjørstad 2017). The advantages and disadvantages of the Slow Food movement are summarized in Table 1.

As can be seen from Table 1, the Slow Food movement approach may provide advantages in some issues but may lead to disadvantages in

some areas. It is possible to examine the factors mentioned in the table under the headings of economy, health, and environment in general. It is clear that the food products and opportunities offered by the Slow Food movement serve the society with a healthy nutrition philosophy (Voinea et al. 2016), because the food products are produced using traditional methods, on the local land, and utilizing local labor (Thomé-Ortiz 2018). It is clear that this brings benefits in terms of nutritional value of the food product. Hence, the movement is also open to new research and collaborations in food industry (Altuna et al. 2017). Being related to food industry, when considered from an environmental perspective, it is seen that it does not harm nature due to the adoption of its environmentally friendly policy (Chung et al. 2018). In doing so, contribution is made to the national economy in areas such as local food production, encouragement to local food consumption, increase in trade, and contribution to the tourism sector (Snyder et al. 2018; Counihan 2016).

However, the approach may sometimes not be cost-effective in production and purchasing, because production costs are high and larger area of agricultural land is needed to increase production (Ren et al. 2019). In addition, the logistics chain must be well planned. The logistic chain is practical, because this movement reduces the distance between the producer and the consumer (Rodrigues et al. 2020). Even if food products are purchased directly from the producer or bought from the market, individuals must be conscious and careful about food product safety. Otherwise, it is possible to observe negative consequences such as rapid deterioration, degradation, and contamination from other products (Hansmann et al. 2020; Ahmed et al. 2019).

Sustainable Development and Food

Since it contains many variables, studies on the concept of sustainable development indicate that there is no consensus regarding a precise definition (Sinakou et al. 2018; Noe et al. 2017). However, it could be said to be the ability of any system or ecosystem to sustain activity and production in the long term with a general approach

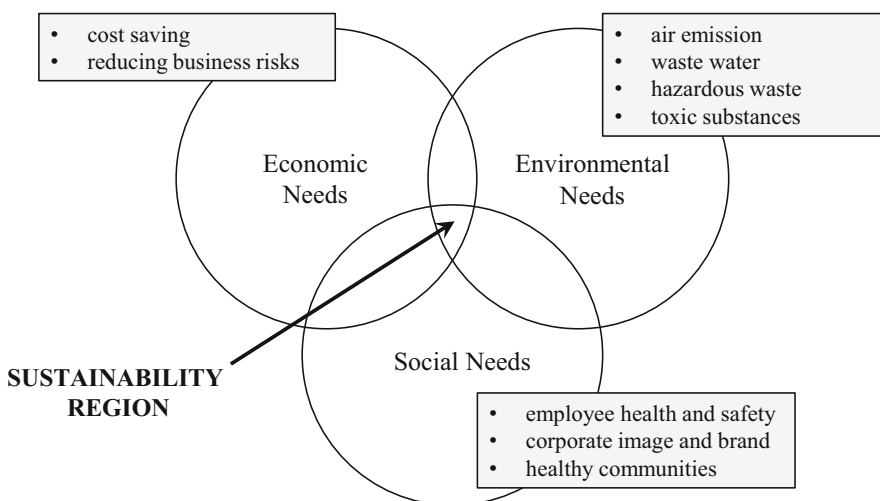
without disrupting, overusing, and overburdening resources (Van Marrewijk 2003; Glavič and Lukman 2007). It has three interrelated dimensions such as social, environmental, and economic (Domańska et al. 2018; Lele 1991) (Fig. 2).

Economic sustainability is the ability to produce goods and satisfy needs in the future. It avoids approaches that adversely affect agriculture and industrial production and protects welfare, resources, and the capital. Welfare is a central concept in the economic interpretation of sustainable development (Mikulčič et al. 2016). The probability of resource depletion has an important place in the economic dimension of sustainability (Székely and vom Brocke 2017). Because of this probability, sustainability has always been a central element of the renewable natural resources' economy. This criterion should also be considered in predicting business risk factors (Ighravwe and Babatunde 2018).

The environmental dimension of sustainability does not approach the environment solely with economic concerns. Environmental sustainability covers the continuation of the existence of resources in the future, a preference for renewable resources, and the limited use of nonrenewable resources (Güney 2019). Concepts that have no economic value, such as biodiversity, atmospheric equilibrium, and the maintenance of other

ecosystem functions, are also considered within this element (Sandberg et al. 2019). In this context, while environmental science investigates the sustainability laws of subhabitats, it focuses more closely on the broad framework outside of all systems through the environmental economy. For example, there is no substitute for clean air. In addition, water resources are not only an economic resource or even just one of living conditions. It is an environmental element that is related to many subsystems and other living systems. In this context, environmental sustainability can be defined as preserving valued things or qualities in the physical environment (Springmann et al. 2018). These concepts are also among topics of particular focus for sustainable food production and the Slow Food movement (Fontefrancesco and Corvo 2019).

Although sustainability studies are always handled on the axis of economic and technological approaches, the aspect of the issue related to society and individuals reveals the importance of social sustainability (Domańska et al. 2018). The social dimension of sustainable development emphasizes meeting the basic needs of the society (Domańska et al. 2018). A socially sustainable society must have the flexibility to protect and develop its resources and to prevent and/or solve problems in the future. In addition, social



Slow Food Movement and Sustainability, Fig. 2 Three dimensions of sustainable development (Domańska et al. 2018)

sustainability is an indicator of the level of social quality (Ballet et al. 2020). Hence, it is possible to evaluate a society depending on the approach to the issues such as human rights, gender equality, and access to health, social services, and human relations within the scope of social sustainability. These issues are also important within the Slow Food movement (Agarwal 2018). Therefore, it is possible to say that the Slow Food movement can act in accordance with the principles of sustainable development (Fontefrancesco and Corvo 2019).

When the three main elements of sustainable development are examined, it becomes a natural necessity to associate the concept of sustainable development with food (Asian et al. 2019; Viljoen & Wiskerke 2012; Brklacich et al. 1991). The concept of sustainable development is to protect the cultural integrity, ecological processes, biodiversity, and life-sustaining systems by preserving the environment in which human beings interact, without disturbing or changing that environment (Waas et al. 2010). In fact, the starting point and aim of the sustainable development concept coincides with the principles of the Slow Food movement trend and provides integrity within it (Morgan and Sonnino 2013), because these concepts feed on the same basis that agriculture is one of the initiators of the sustainable food chain (El Bilali 2018). When it is associated with sustainability, systems and practices will continuously improve the production of adequate and high-quality agricultural products at an affordable cost which are included for the protection of agricultural land, farmers, environment, and natural agricultural resources. Therefore, “Good Agricultural Practices” regulations have been developed and implemented in almost every country in recent years (Leong et al. 2020; El Bilali 2018; Swanson 2008). Another approach that has been adopted to ensure sustainability in the field of food and agriculture is “Green Economy Practices.” The green economy approach, which has been handled in international platforms in recent years, is a recently focused and developing concept. For this reason, although it contains partial differences in the literature, it usually has overlapping definitions. In this context, definitions of green

Slow Food Movement and Sustainability, Table 2 Definitions of green economy (Aoki-Suzuki and Managi 2015)

Source	Definition
United Nations environment Programme (UNEP)	Ensuring human welfare and social equality in low-carbon, environmentally sensitive jobs
Organisation for economic co-operation and development (OECD)	Ensuring the continuity of the environment and development, the creation of new investments and employment
World Bank (WB)	The efficient use of natural resources by minimizing environmental damage
United Nations (BM)	Employment-based growth while preserving the environment and creating new job opportunities and ensuring the sustainability of economic growth
United Nations economic and social Commission for Asia and the Pacific (UNESCAP)	Providing sustainable economic development that is environmentally sensitive by promoting low carbon

economy in international platforms are given in Table 2 (Destebaşı et al. 2015).

When the overlapping points of the definitions of various international organizations for green growth are evaluated together, the green economy can be described as a tool that ensures the sustainability of the environment, increases social welfare, supports clean technologies and innovation, strengthens economic growth, and increases new job opportunities in order to achieve sustainable development by using natural resources efficiently and preventing environmental degradation. The green economy approach requires technological and structural changes in many areas such as production and consumption patterns, planning, infrastructure, employment, and workforce structure (Aldieri and Vinci 2018). It is possible to evaluate these changes in the green economy process as an advantage and unifying factor. Following the green economy path requires investment in new technologies, new products,

new equipment, and new infrastructures (Lorek and Spangenberg 2014).

Sustainable food production is one of the areas for investment in a green economy (Newton and Cantarello 2014). The industrial activities of the green economy do not only include energy production and food activities without damaging the environment, but also the activities that bring industrial production in harmony with nature. In this context, the green economy includes treatment plans for waste disposal, constructive approaches for the efficient use of resources in food production, activities for the restoration of degraded natural areas, renewable energy systems, minimization of carbon footprint, and many other research and development activities (Loiseau et al. 2016). Sustainable food systems associated with the green economy are also defined as the processes in which individuals or groups cooperate with each other in relation to food, and form their own structures (Brears 2018). These structures and processes include production, processing, distribution, wholesale and retail sales, consumption, and waste disposal, which are also some of the important issues for the Slow Food movement.

The Slow Food Movement and Sustainability

The food industry is in a period of rapid change on account of a number of different factors such as market economy status, food production conditions, consumer profile, consumer perception, raw material supply, etc. (Santeramo et al. 2018). Some of these developments are desirable, but some may have negative results. For example, consumers' choices are effective in food purchasing decisions. The characteristics that affect the purchasing behavior of consumers are demographic (individual characteristics such as age, gender, marital status, income, education, and occupation), socio-cultural (family, counseling groups, social class, and culture), and psychological (motivation, perception, learning, beliefs, and personality) (Jensen et al. 2019). In this case, it is necessary to produce food by considering the characteristics of the target consumer segment. In addition, consumer perception is another

concept that can be investigated within this scope. For example, the occurrence of some diseases at certain times or seasonally may cause inappropriate concerns in the society that malnutrition triggers cancer due to rumors, even if the target food has not a negative side case (Eryilmaz et al. 2018). In particular, a number of companies are breaking or bending regulations to get ahead of the competition. However, although the sector is currently large, it is likely to shrink dramatically if resources are not used effectively or if the food production process is not managed efficiently (Öndeş et al. 2011). One of the reasons for the emergence of sustainable development is the need to find solutions to these potential problems.

In addition, the Slow Food movement is not only concerned with food production, but also has various principles regarding food culture (Fusté-Forné 2019). It aims to encourage the production of food using local materials, to preserve traditional recipes and to deliver those food products to visitors in a traditional way. In this way, the Slow Food movement aims to preserve cultural values as well as sustainable food production. Other common points of sustainable food production and the Slow Food movement approaches are summarized as follows (Heitmann et al. 2011):

- To improve access of all community members to adequate, nutritious, and healthy food
- To support small family farming and ensure sustainable agriculture practices
- To ensure direct connection of consumers and producers in processing and marketing processes
- To ensure the recirculation of financial capital and creation of job opportunities in food- and agriculture-related enterprises
- To improve the working and living conditions of the labor force in the farm and food system
- To support local production, processing, and consumption

Research shows that local products are being sold in sustainable food systems and that products are being produced with sustainable agricultural systems, thus preserving natural resources,

especially local seeds (La Trobe and Acott 2000). At this stage, producers play an active role in improving producer and consumer interaction and increasing community solidarity (Opitz et al. 2019). In these systems, where intermediaries are not present, it is also stated that the producers receive the value of their labor, while consumers do not have to pay excessive prices for environmentally friendly foods. Moreover, money that is spent by consumers stays in the local economy and strengthens the position of small producers. This mechanism increases the fresh and nutritious food product variety in farms, and therefore, it contributes positively to human health (Apak and Gürbüz 2018). In sustainable food systems, food safety and security, health protection and development, prevention of diseases, protection of nature, protection of agricultural biodiversity, strengthening of local and rural areas, and socio-economic development are all facilitated together (Béné et al. 2019a).

Summary

To counter the negative effects of industrialization and globalization on agriculture and food production, the Slow Food movement is becoming increasingly important in the world within the framework of ecological and social sustainability principles. It may not be possible for everyone to reach clean, organic food without genetically modified organisms today. However, the Slow Food movement aims to improve this situation in the future (Fontefrancesco and Corvo 2019). In addition, it raises awareness of these issues and constitutes a driving force in society. There have been various discussions about the importance of food, eating habits, and environmental conditions to human health (Zonneveld et al. 2019; Voinea et al. 2016). All of these things follow the basic philosophy of the Slow Food movement. Moreover, the Slow Food movement has a strong connection to sustainable food production. These concepts have economic, health, and environmental advantages, but both approaches can be costly (Altuna et al. 2017; Sağır 2017). For example,

more agricultural land is needed for the production of a wide variety of abundant and safe food. This requirement can affect the economies of less developed countries (Snyder et al. 2018). Still, it is clear that Slow Food movement initiatives are important and can help make food production more sustainable (Dixit 2019).

The use of sustainable food systems to retain food safety and food quality has been demonstrated in many studies to be achievable (El Bilali 2018). The global sustainability map can be considered as an example in this context. The map considers not only production and nutrition, but also economic and social variables. In this context, about 20 years of scientific literature on food systems was scanned, and 20 variables that can be obtained for 97 countries data were determined. The variables can be used to monitor the effects of sustainability changes in phenomena that put pressure on the global food system such as changing climate, increasing population, and increasing food demand (Béné et al. 2019b). As can be seen from the example given, in order to create a fairer and more sustainable world, the use of the Slow Food movement approach will help consumers become more socially aware and responsible. Its impact on both food and sustainability contributes to the development of food production (Nässén 2017).

Cross-References

- [Sustainability and Sustainable Development in the Food Industry](#)

References

- Ademowo, O. S., Dias, H. I., Pararasa, C., & Griffiths, H. R. (2019). *Nutritional Hormesis in a modern environment. In the science of Hormesis in health and longevity* (pp. 75–86). Academic Press.
- Agarwal, B. (2018). Gender equality, food security and the sustainable development goals. *Current Opinion in Environmental Sustainability*, 34, 26–32.
- Ahmed, S., Siddique, M. A., Rahman, M., Bari, M. L., & Ferdousi, S. (2019). A study on the prevalence of heavy metals, pesticides, and microbial contaminants and

- antibiotics resistance pathogens in raw salad vegetables sold in Dhaka, Bangladesh. *Heliyon*, 5(2), e01205.
- Aldieri, L., & Vinci, C. P. (2018). Green economy and sustainable development: The economic impact of innovation on employment. *Sustainability*, 10(10), 3541.
- Altuna, N., Dell'Era, C., Landoni, P., & Verganti, R. (2017). Developing innovative visions through the collaboration with radical circles: Slow food as a platform for envisioning new meanings.
- Andrews, G. (2008). *The slow food story: Politics and pleasure*. Pluto Press.
- Aoki-Suzuki, C., & Managi, S. (2015). Green economy and green growth in international trends of sustainability indicators. *The Economics of Green Growth: New indicators for Sustainable Societies*, 7.
- Apak, Ö. C., & Gürbüz, A. (2018). Turistlerin Yöresel Gıda Ürünlerine İlgi Düzeyleri (interest levels of local food products). *Journal of Tourism and Gastronomy Studies*, 334, 349.
- Asian, S., Hafezalkotob, A., & John, J. J. (2019). Sharing economy in organic food supply chains: A pathway to sustainable development. *International Journal of Production Economics*.
- Avgerinou, C., Bhanu, C., Walters, K., Croker, H., Liljas, A., Rea, J., ... & Kharicha, K. (2019). Exploring the views and dietary practices of older people at risk of malnutrition and their carers: A qualitative study. *Nutrients*, 11(6), 1281.
- Ballet, J., Bazin, D., & Mahieu, F. R. (2020). A policy framework for social sustainability: Social cohesion, equity and safety. *Sustainable Development*.
- Barragán-Ocaña, A., Reyes-Ruiz, G., Olmos-Peña, S., & Gómez-Viquez, H. (2019). Production, commercialization, and intellectual property of transgenic crops in Latin America. *Journal of Agribusiness in Developing and Emerging Economies*.
- Bashutkina, M. (2019). Traditions VS innovations. In Proceedings of the 2019 Global Fashion Management Conference-GAMMA conference (No. CONFERENCE). 11-14 July 2019.
- Béné, C., Oosterveer, P., Lamotte, L., Brouwer, I. D., de Haan, S., Prager, S. D., ... & Khoury, C. K. (2019a). When food systems meet sustainability—current narratives and implications for actions. *World Development*, 113, 116-130.
- Béné, C., Prager, S. D., Achicanoy, H. A., Toro, P. A., Lamotte, L., Bonilla, C., & Mapes, B. R. (2019b). Global map and indicators of food system sustainability. *Scientific data*, 6(1), 1–15.
- Bergman, Å., Becher, G., Blumberg, B., Bjerregaard, P., Bornman, R., Brandt, I., ... & Iguchi, T. (2015). Manufacturing doubt about endocrine disrupter science—a rebuttal of industry-sponsored critical comments on the UNEP/WHO report “state of the science of endocrine disrupting chemicals 2012”. *Regulatory Toxicology and Pharmacology*, 73(3), 1007-1017.
- Brears, R. C. (2018). The green economy and the water-energy-food nexus. In *The green economy and the water-energy-food nexus* (pp. 23–50). London: Palgrave Macmillan.
- Brklacich, M., Bryant, C. R., & Smit, B. (1991). Review and appraisal of concept of sustainable food production systems. *Environmental Management*, 15(1), 1–14.
- Brundtland, G. H. (1987). Report of the World Commission on environment and development: “our common future.”. United Nations.
- Cabeça, S. M. (2018). Cultural mapping: A sustainable methodology for intangible cultural heritage. *Memoriamedia Review*, 3.
- Çevik, M. (2010). Sürdürülebilir Kalkınma Yaklaşımının Toplumsal-Mekansal Boyutları: Türkiye Uygulamaları Üzerine Bir Tartışma. *TÜCAUM VI. Ulusal Coğrafya Sempozyumu*, 3–5.
- Cheremisina, S., Sribny, V., & Nesterenko, E. (2019). Improving the methodological support of the processes of functioning and development of the food market in the region. In *In Volgograd state university international scientific conference “competitive, sustainable and safe development of the regional economy” (CSSDRE 2019)*. Atlantis Press.
- Chung, J. Y., Kim, J. S., Lee, C. K., & Kim, M. J. (2018). Slow-food-seeking behaviour, authentic experience, and perceived slow value of a slow-life festival. *Current Issues in Tourism*, 21(2), 123–127.
- Clancy, M. (2017). 5 practicing slow. Slow tourism, food and cities: Pace and the search for the “good life”.
- Counihan, C. (2016). Cultural heritage in food activism: Local and global tensions. *Edible Identities: Food and Cultural Heritage*.
- Destebeşi, A. N., Yavuz, Ö., & Toplar, S. (2015). Yeşil ekonomi ile sürdürülebilir kalkınma. In *Ege Üniversitesi 18. Uluslararası İktisat Kongresi: İzmir / Türkiye*.
- Dixit, S. K. (2019). *The Routledge handbook of gastronomic tourism*. Routledge.
- Domańska, A., Żukowska, B., & Zajkowski, R. (2018). Green entrepreneurship as a connector among social, environmental and economic pillars of sustainable development. Why some countries are more agile? *Problemy Ekorozwoju*, 13(2).
- El Bilali, H. (2018). Relation between innovation and sustainability in the agro-food system. *Italian Journal of Food Science*, 30(2).
- Eryılmaz, G. A., Kılıç, O., & Başer, U. (2018). Gıda güvenliği konusunda tüketici davranışlarının belirlenmesi: Samsun ili kentsel alan örneği. *Çanakkale Onsekiz Mart Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 4(2), 237–245.
- Event calendar: Dr. Wes Jackson to be included in Slow Food Nation's weekend long event, <https://landinstitute.org/news-events/event-calendar/wes-jackson-give-keynote-address-slow-food-nations-denver-co/>, accessed on 26 August 2019).
- Fontefrancesco, M. F., & Corvo, P. (2019). Slow food: History and activity of a global food movement toward SDG2. In W. L. Filho, A. Azul, L. Brandli, P. Özuyar, & T. Wall (Eds.), *(a cura di), zero hunger: Encyclopedia*

- of the UN sustainable development goals. Cham: Springer.
- Fusté-Forné, F. (2019). The Routledge handbook of gastronomic tourism. *European Journal of Tourism Research*, 23, 225–227.
- Gaitán-Cremaschi, D., Klerkx, L., Duncan, J., Trienekens, J. H., Huenchuleo, C., Dogliotti, S., ... & Rossing, W. A. (2019). Characterizing diversity of food systems in view of sustainability transitions. A review. *Agronomy for Sustainable Development*, 39 (1), 1.
- Glavič, P., & Lukman, R. (2007). Review of sustainability terms and their definitions. *Journal of Cleaner Production*, 15(18), 1875–1885.
- Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., ... & Toulmin, C. (2010). Food security: The challenge of feeding 9 billion people. *Science*, 327(5967), 812–818.
- Goldberg, I. (2012). *Functional foods: Designer foods, pharmafoods, nutraceuticals*. Springer Science & Business Media.
- Güney, T. (2019). Renewable energy, non-renewable energy and sustainable development. *International Journal of Sustainable Development & World Ecology*, 26(5), 389–397.
- Hall, C. M. (2012). The contradictions and paradoxes of slow food: Environmental change, sustainability and the conservation of taste. In *Slow tourism: Experiences and mobilities* (pp. 53–68).
- Hansmann, R., Baur, I., & Binder, C. R. (2020). Increasing organic food consumption: An integrating model of drivers and barriers. *Journal of Cleaner Production*, 123058.
- Hatipoglu, B. (2015). “Cittaslow”: Quality of life and visitor experiences. *Tourism Planning & Development*, 12(1), 20–36.
- Haws, K. L., Reczek, R. W., & Sample, K. L. (2017). Healthy diets make empty wallets: The healthy=expensive intuition. *Journal of Consumer Research*, 43(6), 992–1007.
- Heitmann, S., Robinson, P., & Povey, G. (2011). Slow food, slow cities and slow tourism. *Research themes for tourism*, 114–127.
- Hendriks, B., Dormans, S., Lagendijk, A., & Thelwall, M. (2017). Understanding the geographical development of social movements: A web-link analysis of slow food. *Global Networks*, 17(1), 47–67.
- Ighravwe, D. E., & Babatunde, M. O. (2018). Determination of a suitable renewable energy source for mini-grid business: A risk-based multicriteria approach. *Journal of Renewable Energy*, 2018.
- Jacobs, A. (2013). *A kitchen cabinet full of slow food: Redefining locality*. Central European University: Doctoral dissertation.
- Jensen, J. D., Christensen, T., Denver, S., Ditlevsen, K., Lassen, J., & Teuber, R. (2019). Heterogeneity in consumers’ perceptions and demand for local (organic) food products. *Food Quality and Preference*, 73, 255–265.
- Kasza, G., Szabó-Bódi, B., Lakner, Z., & Izsó, T. (2019). Balancing the desire to decrease food waste with requirements of food safety. *Trends in Food Science & Technology*, 84, 74–76.
- Kızılbulut, E. (2019). *Milliyetçilik olgusunun tüketim alışkanlıklarına etkileri: İstanbul örneği*. Batman Üniversitesi Sosyal Bilimler Enstitüsü: Master’s thesis.
- Kjørstad, I. (2017). Slow food: Counteracting fast food and fast living. In *System innovation for sustainability* (Vol. 3, pp. 141–159). Routledge.
- La Trobe, H. L., & Acott, T. G. (2000). Localising the global food system. *International Journal of Sustainable Development & World Ecology*, 7(4), 309–320.
- Lele, S. M. (1991). Sustainable development: A critical review. *World Development*, 19(6), 607–621.
- Leong, W. H., Teh, S. Y., Hossain, M. M., Nadarajaw, T., Zabidi-Hussin, Z., Chin, S. Y., ... & Lim, S. H. E. (2020). Application, monitoring and adverse effects in pesticide use: The importance of reinforcement of good agricultural practices (GAPs). *Journal of Environmental Management*, 260, 109987.
- Liao, M. H., Xu, Y. C., & Sone, H. (2016). Old-established companies’ traditions and innovations—focusing on e-business of Japan and Taiwan. In *2016 10th international conference on innovative Mobile and internet Services in Ubiquitous Computing (IMIS)* (pp. 531–532). IEEE.
- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkänen, K., ... & Thomsen, M. (2016). Green economy and related concepts: An overview. *Journal of Cleaner Production*, 139, 361–371.
- Lorek, S., & Spangenberg, J. H. (2014). Sustainable consumption within a sustainable economy—beyond green growth and green economies. *Journal of Cleaner Production*, 63, 33–44.
- Lowry, L. L., & Lee, M. (2016). CittaSlow, slow cities, slow food: Searching for a model for the development of slow tourism.
- Markwell, K., Fullagar, S., & Wilson, E. (2012). Reflecting upon slow travel and tourism experiences. *Slow tourism: Experiences and mobilities*, 227–233.
- Mikulčić, H., Klemeš, J. J., & Duić, N. (2016). Shaping sustainable development to support human welfare. *Clean Technologies and Environmental Policy*, 18(6), 1633–1639.
- Morgan, K., & Sonnino, R. (2013). *The school food revolution: Public food and the challenge of sustainable development*. Routledge.
- Munjal, S., Sharma, S., & Menon, P. (2016). *Moving towards “slow food”, the new frontier of culinary innovation in India*. Worldwide Hospitality and Tourism Themes.
- Murat, S. (2012). Japon Çalışma Hayatı. *Sosyal Siyaset Konferansları Dergisi*, (37-38), 189–203.
- Nässén, S. (2017). Slow food for thought: Food as cultural heritage expressed in the slow food movement’s external communication.

- Newton, A. C., & Cantarello, E. (2014). *An introduction to the green economy: Science, systems and sustainability*. Routledge.
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. New York: McGraw-Hill Education.
- Nosi, C., & Zanni, L. (2004). Moving from “typical products” to “food-related services” the slow food case as a new business paradigm. *British Food Journal*, 106(10/11), 779–792.
- Odabas, Z. Y., & Attar, G. E. (2018). Celebration of Ramadan: The case of Turkey. In *Global leisure and the struggle for a better world* (pp. 75–94). Cham: Palgrave Macmillan.
- Öndeş, T., Kaygın, E., & Kaygın, C. Y. (2011). Örgütsel küçülmeye stratejik bir bakış. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 25(2), 123–136.
- Opitz, I., Zoll, F., Zasada, I., Doernberg, A., Siebert, R., & Piore, A. (2019). Consumer-producer interactions in community-supported agriculture and their relevance for economic stability of the farm—an empirical study using an analytic hierarchy process. *Journal of Rural Studies*, 68, 22–32.
- Patrignani, N., & Whitehouse, D. (2018). Slow tech: A good, clean, and fair ICT. In *Slow tech and ICT* (pp. 81–112). Cham: Palgrave Macmillan.
- Petrini, C. (2003). *Slow food: The case for taste*. Columbia University Press.
- Petrini, C., & Padovani, G. (2006). *Slow food revolution: A new culture for dining & living*. Rizzoli Intl Pubns.
- Pietrykowski, B. (2004). You are what you eat: The social economy of the slow food movement. *Review of Social Economy*, 62(3), 307–321.
- Ren, C., Liu, S., Van Grinsven, H., Reis, S., Jin, S., Liu, H., & Gu, B. (2019). The impact of farm size on agricultural sustainability. *Journal of Cleaner Production*, 220, 357–367.
- Rodrigues, R. G., de Sá, M. M., Padilha, A. C. M., & de Souza, M. (2020). El movimiento slow food en el contexto del turismo enogastronómico: El caso de la Serra Gaúcha (RS, Brasil). *Estudios y perspectivas en turismo*, 29(2), 369–389.
- Sağır, G. (2017). Küreselleşmeden geleneksele dönüşte slow food ve citta slow hareketi. *The Journal of Social Science*, 1(2), 50–59.
- Sandberg, M., Klockars, K., & Wilén, K. (2019). Green growth or degrowth? Assessing the normative justifications for environmental sustainability and economic growth through critical social theory. *Journal of Cleaner Production*, 206, 133–141.
- Santeramo, F. G., Carlucci, D., De Devitiis, B., Seccia, A., Stasi, A., Viscecchia, R., & Nardone, G. (2018). Emerging trends in European food, diets and food industry. *Food Research International*, 104, 39–47.
- Sidali, K. L., Spiller, A., & Schulze, B. (Eds.). (2011). *Food, Agri-culture and tourism: Linking local gastronomy and rural tourism: Interdisciplinary perspectives*. Springer Science & Business Media.
- Sinakou, E., Boeve-de Pauw, J., Goossens, M., & Van Petegem, P. (2018). Academics in the field of education for sustainable development: Their conceptions of sustainable development. *Journal of Cleaner Production*, 184, 321–332.
- Snyder, F., Hu, Z., & Zheng, X. (2018). Slow food in Europe, the USA and China: A comparative perspective. Peking University School of transnational law. *Research Paper*, 18–16.
- Sodiq, A., Baloch, A. A., Khan, S. A., Sezer, N., Mahmoud, S., Jama, M., & Abdelaal, A. (2019). Towards modern sustainable cities: Review of sustainability principles and trends. *Journal of Cleaner Production*, 227, 972–1001.
- Springmann, M., Clark, M., Mason-D'Croz, D., Wiebe, K., Bodirsky, B. L., Lassalle, L., . . . & Jonell, M. (2018). Options for keeping the food system within environmental limits. *Nature*, 562(7728), 519–525.
- Stančová, K. C., & Cavicchi, A. (2019). Food: Innovation and diversification paths. In *Smart specialisation and the Agri-food system* (pp. 1–24). Cham: Palgrave Pivot.
- Swanson, B. E. (2008). *Global review of good agricultural extension and advisory service practices*. Rome: Food and Agriculture Organization of the United Nations.
- Székely, N., & vom Brocke, J. (2017). What can we learn from corporate sustainability reporting? Deriving propositions for research and practice from over 9,500 corporate sustainability reports published between 1999 and 2015 using topic modelling technique. *PLoS One*, 12(4), e0174807.
- Thomé-Ortiz, H. (2018). Heritage cuisine and identity: Free time and its relation to the social reproduction of local food. *Journal of Heritage Tourism*, 13(2), 104–114.
- Tolstokorova, A. V. (2018). Food Dividends of Migration: Agents of Cross-Borderness and Cultural Continuity. *Журнал Фронтальных Исследований*, (2 (10)).
- Topçu, F. H., & TOPÇU, F. H. (2012). Biyolojik Çeşitlilik Sözleşmesi: Müzakereden Uygulamaya. *Marmara Üniversitesi Avrupa Topluluğu Enstitüsü Avrupa Araştırmaları Dergisi*, 20(1), 57–97.
- Tse, D., Zhang, B., Yang, Y., Cheng, C., & Mu, H. (2017). Blockchain application in food supply information security. In *2017 IEEE international conference on industrial engineering and engineering management (IEEM)* (pp. 1357–1361). IEEE.
- Türküm, A. S. (1998). *Çağdaş toplumda çevre sorunları ve çevre bilinci* (pp. 165–181). Eskişehir: Çağdaş Yaşam Çağdaş İnsan. Anadolu Üniversitesi Açık Öğretim Fakültesi İlköğretim Öğretmenliği Lisans Tamamlama Programı.
- Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2-3), 95–105.
- Vilakazi, N., Nyirenda, K., & Vellemu, E. (2019). *Unlocking water issues towards food security in Africa*. IntechOpen: In Food Security in Africa.
- Viljoen, A., & Wiskerke, J. S. (Eds.). (2012). *Sustainable food planning: Evolving theory and practice*. Wageningen Academic Publishers.
- Voinea, L., Atanase, A., & Schileru, I. (2016). Perceptions of the slow food cultural trend among the youth.

Amfiteatru Economic Journal, 18(Special Issue No 10), 847-861.

Waas, T., Verbruggen, A., & Wright, T. (2010). University research for sustainable development: Definition and characteristics explored. *Journal of Cleaner Production*, 18(7), 629–636.

Whitehouse, M. (2017). Deifying diet: The slow food movement as an emergent religion (Doctoral dissertation).

Zonneveld, K. L., Neidert, P. L., Dozier, C. L., Gureghian, D. L., & Bayles, M. W. (2019). Assessing factors that influence young children's food preferences and choices. *Journal of Applied Behavior Analysis*, 52(1), 240–257.

Slow Movement and Sustainable Food Production

► [Slow Food Movement and Sustainability](#)

Small Entrepreneurs

► [SMEs \(and CSR\)](#)

Smart Appliances

► [Smart Grid](#)

Smart Cities

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Synonyms

[Digital cities](#); [Intelligent cities](#); [Technopoles](#); [Wired cities](#)

Definition

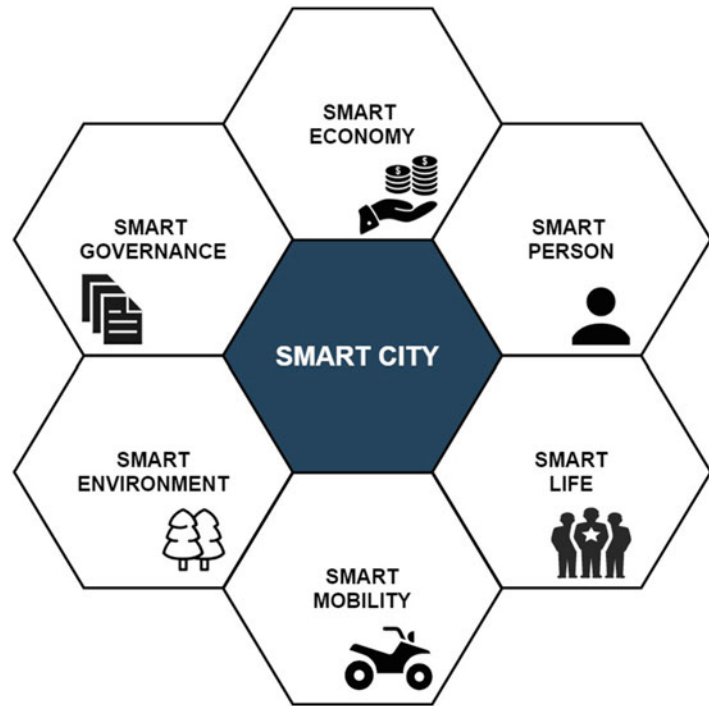
The percentage of the world population living in cities is increasing. While around 55% of the world's population inhabits cities now, it is expected to reach 30% by 2030. The inhabitants provide and require uninterrupted access to many diverse services and infrastructure such as transportation, health, energy, education, and security. The traditional city infrastructures are not designed to deal with an increasing load and have inadequate resources. Therefore, the concept of the search for an ideal city has emerged in order to overcome the urban problems experienced after the industrial revolution. Since the 1980s, the widespread use of information and communication technologies has led to concepts such as information cities, smart cities, digital cities, virtual cities, and wired cities. The concept of a smart city is a participatory and sustainable urban development vision that aims to establish effective city management to meet public needs in accordance with the needs of the era and to increase the quality of life by using information and communication technologies. For a city to be defined as a smart city, it is necessary to evaluate the city's every component, not just smart electronic devices and software. Smart cities can be analyzed under the components of smart governance, smart economy, smart person, smart life, smart mobility, and smart environment, as shown in Fig. 1.

Introduction

Throughout history, members of the profession such as urban planners, architects, environmentalists, social scientists, administrators, and citizens have put forward various ideas for creating better urban spaces. While the creation of concentrated urban areas by these groups sometimes came to the fore, sometimes the protection of traditional areas with lower density was emphasized. In the same way, while sometimes public transportation-oriented development is at the forefront, sometimes environmental-oriented urban development has gained value. However, according to a report published by the United Nations in 2016, cities are

Smart Cities,

Fig. 1 Components of smart cities



the settlements where approximately 54.5% of the world's population live, make a living, and receive services. Also, the population continues to increase exponentially each year and by 2030, this number will rise to over 60% (United Nations 2016).

After the industrial revolution, the inadequacy of traditional city infrastructure became evident. In the decades before 2000, negative pressures on nature such as global warming, greenhouse gas emissions, and environmental pollution became a global problem, which caused approaches such as green city, eco-city, slow city, and habitable city to appear. Since the 1980s, the widespread use of information and communication technologies generated concepts such as information cities, smart cities, digital cities, virtual cities, and wired cities. Moreover, in today's cities, providing uninterrupted access to services and infrastructure, such as transportation, health, energy, education, and security became of great importance. Therefore, the concept of smart cities, aiming to create a better urban area and increase the quality of life by making use of technology, has directly affected modern societies and urban

life. Especially after the 2000s, the rapidly changing and developing technology has affected every aspect of life. Developments and rapid transformation in information and communication technologies have generated various urban planning and expansion approaches.

The concept of a smart city is a participatory and sustainable urban development vision that aims to establish effective city management in order to meet public needs following the needs of the era and to increase the quality of life by using information and communication technologies. One of the alternate smart city definitions in literature is as follows: "These are cities where critical infrastructure components and public services such as urban management, education, health, public security, real estate, and transportation are made smarter and more efficient, interconnected, using intelligent information technologies." (Washburn et al. 2010). Conceptual relatives of the smart city include digital city, intelligent city, virtual city, ubiquitous city, and information city (Ishida 2017). Although these definitions are conceptually relative, they differ from each other at certain points, yet they overlap

with each other in terms of starting point and content.

To define a city as being a smart city, it is necessary to evaluate every component of the city, and not just its smart electronic devices and software. Smart cities can be analyzed into six components. These are smart governance, smart economy, smart person, smart transportation, smart life, and smart environment (Aldairi and Tawalbeh 2017; Deloitte and Vodafone 2016). Figure 1 shows the main components of a smart city.

The Main Elements of Smart Cities

Another way of looking at smart cities is through their utilization in providing services. These services consist of the tangible and intangible elements of a smart city. The elements can be integrated, managed from a center, or be discrete self-governing entities. They include GIS integration, management from a single center, and the management information system, disaster and emergency systems, transportation, buildings, environment and infrastructure, data collection, and health.

GIS integration: The methods that enable the collection and analysis of various geographical data to solve the problems faced by cities in the fields of ecology, socio-economy, and planning are called GIS. GIS supports to make rational decisions by making location-based analysis.

Management from a Single Center and The Management Information System: It is a database programmed to produce regular reports on the work and transactions carried out for each management level in an organization. While performance measurement is realized employing the digitalization of workflow processes; it aims to monitor management processes in an effective, high quality, and reliable manner and to report to decision-makers about the process.

Disaster and Emergency Systems: Intelligent natural disaster and emergency systems are created to prevent natural disasters, take precautions against natural disasters and minimize the damages that may occur as a result of natural disasters.

Notifications can be made before, during, and after the disaster by providing interaction between public institutions and citizens through smart applications (Yaman and Çakır 2018). Applications such as disaster information systems and smart maps are used in smart natural disaster and emergency systems.

Transportation: Transport management in smart cities is performed by an electronic traffic and transportation control system. It aims to make urban traffic more functional and safer by making traffic measurements, observation, and information. It is the general name of the systems that enable actions such as in-vehicle and road tracking, location tracking, station and route information accessed live by the users, and the management point through various applications. These systems increase the quality of service and life in cities. Although many cities today are not smart, they make use of a smart transportation management system. Intelligent transportation system, license tag recognition, speed measurement, acceleration of traffic flow, preparation of statistical reports, detection and recording of rule violations form smart hardware and software. As part of smart public transport, the system in which information such as speed, route, location, and arrival time for all vehicles used in public transportation is presented to passengers in real-time is called a smart station system. It has an aspect that increases citizen satisfaction by shortening the waiting time at the station and facilitating public transportation for disadvantaged individuals such as the disabled, especially thanks to audio information applications.

Buildings: Buildings are a whole with their architectural design, carrier system, building material, siding, installation, and automation systems. The concept refers to the digitization of all equipment such as heating, cooling, ventilation, elevators, fire and security alarms, recycling systems, lighting to increase energy and resource efficiency and improve the quality of life. New types of smart buildings as well as a remote-control system with artificial intelligence technology enable building management according to data sets. For example, an artificial intelligence elevator system is expected to manage elevator traffic

more efficiently and appropriately through the data it collects during its service.

Environment and Infrastructure: Measurement and control activities for resources are carried out with the help of information and communication technologies for environmental sustainability. The use of technology in line with the goals of rationalizing meters and establishing monitoring systems, rationalizing buildings and structures, smart management of waste and water, promoting renewable energy, and reducing carbon dioxide emissions take place under this heading.

Central Supervision Control and Data Acquisition (SCADA): This term is an abbreviation consisting of the initials of the words Supervisory Control and Data Acquisition, and refers to a system that monitors, controls, collects data, and stores data to benefit in terms of cost, speed, security, and quality. Instant monitoring, remote control, and intervention operations can be implemented through this system, which is especially used in energy facilities (nuclear, natural gas, electricity, etc.), production facilities, and control centers (traffic, earthquakes, etc.).

Smart Grid and Smart Meter: By integrating the grid systems with computer and network technologies, monitoring and control activities can be realized in network systems. In this way, a sustainable, optimized, and secure network system can be created by providing real-time and two-way information flow at all stages, from production to consumption. Energy and communication lines and transportation systems are an important part of smart cities when they are built with smart grids. Smart meter, which is an integrated part of smart grids, refers to a digitalized hardware. As it makes precise and frequent measurements, it provides real-time transmission of information about the power reaching the meter and the amount of consumption. This provides detection and efficiency in a wide range from loss-leak detection to investment planning.

Health Services: Smart health systems use mobile communication and network technologies for many health services such as improving healthcare services, reducing healthcare costs, increasing the quality of life of patients, early

diagnosis of diseases, and quicker intervention for people in need of healthcare. The use of smart healthcare systems significantly helps to reduce healthcare costs. Thanks to early detection and prevention mechanisms, patients receive less treatment, there are fewer unnecessary recurrences, and deployed systems are used more efficiently (Solanas et al. 2014). Intelligent health systems are used with applications such as e-pulse, e-prescription, and central doctor appointment system.

Technology in Smart Cities

Nowadays, the integration of technology with cities is inevitable in terms of both livability and sustainability. One of the most important elements that distinguish smart cities is undoubtedly the application of technologies that take human life at its center and aim to better the quality of life. The use of technology helps to determine the needs of citizens and meet their needs more efficiently. Thus, private and public institutions will be able to provide better services. State of the art smart city technologies can be listed as follows: mobile devices, digital platforms, the internet of things, big data, open data, 3D printing, socially interactive robots, driverless vehicles, drones.

Mobile devices and digital platforms: Mobile or portable devices rapidly entered human life with the beginning of the information age and immensely impacted and changed ways of living. Historically, accessing data has never been easier than today. These devices provide a wireless internet connection and GPS signal to the user anytime and anywhere. One of the most important factors that make mobile devices impactful is the increasing number of mobile applications every second. Mobile applications provide the focal point, where the service provider reaches the user, brings together many services including transportation, entertainment, health, banking, and security. Digital platforms that provide services through mobile applications create new business models for private institutions and public institutions and play an effective role in human life in social,

economic, and cultural terms. GPS signals, location information, and many different and private data they store are analyzed by service providers and returned to the user as customized service. Mobile devices are also one of the channels through which city services are delivered to the user for smart cities, which are based on the interconnection of each actor. Connecting to the city's wireless network access points with these devices make the users a living part of the city's technological infrastructure. Thus, mobile devices serve as a channel through which smart solutions offered by the smart city can be accessed. If the applications installed on mobile devices and access to the digital platforms are examined, it is seen that the services provided by the public sector and municipalities take place more efficiently and intelligently due to mobile applications.

Open and Big Data: Big data, which has been frequently heard in recent years, has been defined by Microsoft as follows: "Big data, is the process of applying serious processing power, machine learning, and artificial intelligence algorithms to seriously large and often very complex information sets." (Microsoft 2013). The amount of data collected all over the world has reached significant levels with the introduction of computers into human life. The advancing technology and developed algorithms can make more meaningful inferences, which have reached enormous dimensions.

With the increasing urban population, the quality of service provided by the physical infrastructure of the cities is insufficient. The necessity of providing smart solutions has emerged to collect infrastructure inputs in a city and to process this large amount of data. Big data provides useful insights for smart cities from data collected from devices such as RFID tags, sensors, and tracking devices, and distinguishes smart cities from traditional cities. Thus, it is easier to detect inefficient use and waste of resources, which can be prevented by constant monitoring and recording the tally of resources. Moreover, with the resources that will be distributed more efficiently, the energy to be spent and the damage to nature can be minimized (Al Nuaimi et al. 2015).

Presenting the collected and analyzed data clearly will increase the transparency of smart city management, facilitate decision making, and more different and efficient service areas will emerge by encouraging sharing. This idea appears as an open data concept. Open data is basically defined as freely used, reused, and distributed by anyone (Open Knowledge Foundation 2012). With the evaluation of open data, the participation in cities will increase and it will be easier for multidisciplinary work. At the same time, transparency in management will be ensured by making data such as election data accessible to people by administrations.

Internet of Things (IoT): The internet of things can be defined as the creation of new usable services that will enable all kinds of electronic devices to communicate with each other and with other services over the internet by gaining sensing, feeling, networking, and data processing capabilities. With the development of technologies such as internet technologies, sensor networks, and RFID, the communication and processing capability of technological objects with each other has increased. The internet of things concept forms the basis of smart services offered in cities. One of the most important elements in the digital infrastructure of the city is devices that communicate with each other. The many services in smart cities collect necessary data using the internet of things. In smart cities that aim to utilize energy resources in the most efficient way, smart grids are integrated by using the internet of things. More efficient energy services can be provided to users with the data collected by objects that communicate with each other and have sensory features. As the type of data to be collected and the quality of the analysis increase, so does the variety of services that can be provided.

3D printing: 3D printing, in other words, additive manufacturing, is the conversion of digital data into 3D objects. Nowadays, 3D printing technology started to be embedded in smart city strategies, where the importance of increasing productivity is frequently emphasized. To meet the housing needs of people, the use of this

technology is thought to be easier, more efficient, and faster. WinSun company built the world's first 3D printed home in China and claims that it can build ten houses within 24 h (Starr 2015). It can also efficiently use recycled materials from 3D printing devices. The reuse of old or unusable houses, furniture, and all kinds of urban objects with 3D printing will increase the quality of life and contribute to the upcycling of unused materials. In the following years, a whole city can be produced with 3D printing with the developing technology.

Socially interactive robots: With the integration of technologies such as artificial intelligence and machine learning with robot technology, the concept of socially interactive robots emerged. The most important point distinguishing these robots from traditional industrial robots is that they can adapt to change and have features related to learning. Robots, which do the work of people in many fields such as education, health, housework, with less cost and less error, will become constant parts of smart cities (Flandorfer 2012). Robots will take part in many areas such as warning the officers in emergencies, cleaning the city, reporting the deterioration of the roads, as well as rescuing people from burning buildings, cleaning and maintenance of large buildings, and being of use in the service sector (Torras 2016). However, while some argue that decreasing the job opportunities for people is a drawback of increasing the contributions of robots to cities, others argue that they will leave people to do more of the work they desire. Another ethical problem is the rights and responsibilities of robots as intelligent beings.

Drones: There are many areas in smart cities where drones can be used to make city life more sustainable. The primary areas are geographical measurements and data production by equipping the necessary equipment for measurement, informing the authorities by detecting violations of security by monitoring the city from above or from inside, providing data about traffic conditions and detecting traffic rule violations, operating in the fields for fertilization, irrigation, natural disaster in search and rescue operations, and transportation of various products in agriculture. When the necessary infrastructure is provided for the use

of drones, they will play an important role in smart cities (Mohammed et al. 2014).

Best Practices of Smart Cities

In the smart city definition of IHS, a London-based information provider, the number of smart cities is expected to increase from 21 in 2013 to 88 by 2025 (IHS Markit 2014). In this context, three smart city best practices are discussed as examples.

Copenhagen: Copenhagen has a population of approximately 1.2 million. According to the smart city index made by Sweden-based EasyParkGroup company, the city of Copenhagen was evaluated as the smartest city with an average score of 8.24/10 under the seven categories (EasyPark 2017). Copenhagen was also selected as the green capital of Europe in 2014 since it is taking firm steps toward its goal of becoming the first city to reduce its carbon dioxide emissions to zero by 2025. In the bulletin published on the way to becoming a smart city, the main goal was to increase the quality of life, growth, and sustainability (The Ministry of Housing, Urban and Rural Affairs 2015). The city clearly presents its smart city strategy and shows how assertive it is in this regard with its large-scale investments as well as planning. In order to achieve its goals, a project coordination board has been established with the cooperation of seven public units. The coordination board moves smart city projects with a single strategy. In this respect, projects are planned and implemented with four basic principles. These are the use of the collected data in problem solving, the use of new technologies or known technologies with new methods, the efficient use of the municipal or city budget, and the use of new methods to involve people and businesses in the process. The principle of participation and interaction of all the elements of the city is one of the most important prerequisites of being a smart city. The Copenhagen project coordination board provides this in production and implementation of projects with the aim of city residents contributing to city development by sharing data and feedback. New road maps are drawn with the feedback of

both Copenhagen's seven public units and city residents, and existing systems are also improved based on feedback. Thus, city residents can report defective city elements that do not work with the mobile application, as well as share their improvement and new project ideas on this platform (The Ministry of Housing, Urban and Rural Affairs 2015).

Singapore: The city of Singapore is the capital of the Republic of Singapore with a population of 5.5 million. The city has a population of 3.5 million, who live in urban areas. Singapore is an example of Asian economic development and is the most important model for city-states in terms of change and innovation. This city is a global financial center despite its lack of natural resources. It is important in terms of providing an open business environment to the society, making technology-oriented investments, and having a revolutionary education system (World Cities Culture Forum 2018). Due to its geographical location, its efficiency in airline and maritime transportation, and its tax policy, Singapore is like a threshold at the entrance of the Asian market for large technology companies. The country hosts the centers of technology giants such as Razer, Red Hat, and IBM, and its capital city of the same name is a regional center for technology. The smart mobility approach in Singapore is dominated by rail. In Singapore, 80% of citizens live within 10 min of walking distance to a train station, and 75% of the people prefer using public transportation during peak hours. Moreover, reducing vehicle dependency and developing an environmentally friendly solution led to the planning of a 700 km bicycle path network to be finished by 2030 (Benner 2016). Today, data sets are considered a new type of currency and are made available to the public online. Data sets from 70 public institutions were made available to everyone through a portal to support solutions for the benefit of society and to ensure transparency. This data portal is a data repository that contains data on the economy, education, environment, health, infrastructure, society, and transportation. Static and real-time data on land transportation are shared with the public through the application named LTA DataMall to create

innovative and comprehensive solutions together. Singapore monetary authority, a financial regulatory agency, shares its data sets and software application interfaces with financial institutions and service providers through the application called MAS API. Citizens control the sharing of their data in online jobs through the application named MyInfo, also designed by the Singapore government.

Stockholm: Stockholm is a city that hosts various educational, scientific, and cultural institutions, and the center of many national and international companies such as Ericsson, Skanska, Klarna Group, in particular banks and insurance companies. Stockholm also serves many offices of the national government. Stockholm Municipality aims to make public services easier, more developed, more comprehensive, and more efficient thanks to the electronic services offered, and offers e-services in more than 70 areas. Within the scope of the Horizon 2020 program, the GrowSmarter project was carried out with 40 stakeholders under the coordination of Stockholm Municipality between 2015 and 2019. Twelve smart city solutions such as smart traffic management, big data management, smart street lighting, smart electricity management were implemented as a pilot (CORDIS 2017). In Stockholm, new technologies were used as an instrument and facilitator of transparency, accountability, participation, and governance principles. One of the projects developed to share democratic decision-making processes with citizens and the business world is a mobile application called "Make a Suggestion." The application was developed to increase the influence of citizens on city management. It is a platform where deficiencies in the external environment such as traffic, streets, and environment can be reported. With the study initiated by the Municipality of Stockholm in 2011, more than 100 data sets under 6 headings, including culture and archive, population, traffic, environment, geography, and citizen satisfaction, were made available to the public in order to promote innovation and transparency. With open data sharing via the website, one-third of the open data shared by the Swedish public sector is provided by the

city of Stockholm alone (City of Stockholm 2017).

Summary

Today, technology advances very rapidly and is integrated into human life. Computers that were not expected to enter homes before are now in the pockets of every person. Devices that are identical to each other over the internet collect and process a lot of data and communicate over the network. With the widespread use of the internet and the introduction of processing power to many devices around it, the concept of the internet of things has come into being.

Cities, where people live, have also been affected by the development of technology. Technology has been used for more livable, efficient, and sustainable cities and the concept of smart city has emerged. Resource efficiency and social sustainability reveal significant challenges for urban economies. Climate change and natural resource scarcity is an increasing concern for cities; taking measures throughout the city to alleviate climate change and emergencies has an important place in urban development strategies. This situation increases the interest in smart cities.

Smart economy (e-commerce and e-commerce, increasing efficiency), smart environment (renewable energy, measurement, pollution control and monitoring, renovation of buildings and social facilities), smart governance (the ability of the city to function effectively and effectively as an organism), concepts such as smart life (a culturally vibrant city with cultural opportunities) have become a part of the smart city with smart applications. With the increasingly widespread use of mobile devices and digital platforms, the concepts of big data and open data coming out with the collected data, the concept of the internet of things, three-dimensional printers, socially interactive robots, and drones, smart cities have become structures connected to a network.

Smart City strategies search and find innovative solutions such as interacting with different

actors, managing resources, and providing services. The components intelligently react to urban systems, and digital nervous systems. In this sense, they have led to the emergence of the city concept based on technology and innovation in the city by going beyond the classical city. State-of-the-art research focuses on cities learning to learn with advances in artificial intelligence and technology. Moreover, developments in nanotechnology address the creation of self-learning structures such as health, infrastructure, and transportation. Thus, in the future, it can be possible to ensure the continuity of systems that make city management directly smart, such as infrastructure, with social interactive robots. Some researchers are searching for ways to produce smart homes and therefore smart cities from seeds.

Cross-References

- [Building Energy Management](#)
- [Energy Demand Management](#)
- [Energy-Renewable](#)
- [Governance](#)
- [Smart Grid](#)
- [Sustainable Energy](#)
- [Sustainable Growth](#)
- [Sustainable Transportation](#)

References

- Al Nuaimi, E., Al Neyadi, H., Mohamed, N., & Al-jaroodi, J. (2015). Applications of big data to smart cities. *Journal of Internet Services and Applications*, 6(25). <https://doi.org/10.1186/s13174-015-0041-5>.
- Aldairi, A., & Tawalbeh, L. (2017). Cyber security attacks on smart cities and associated mobile technologies. *Procedia Computer Science*, 109, 1086–1091. <https://doi.org/10.1016/j.procs.2017.05.391>.
- Benner, T. (2016). *Singapore: A smart nation*, Ed. Mark May. Available from: http://www.anfei.mx/public/files/articulos/Scientific_American_Singapore.pdf
- City of Stockholm. (2017). *Open data*. Available from: <https://international.stockholm.se/governance/smart-and-connected-city/opendata/>
- CORDIS. (2017). *Grow smarter*. Available from: https://cordis.europa.eu/project/rcn/194441_en.html

- Deloitte and Vodafone. (2016). *Smart city road map*. Available from: <https://www.sehirsizin.com/Documents/Deloitte-Vodafone-Akilli-Sehir-Yol-Haritasi.pdf>.
- EasyPark (2017). *Smart cities index 2019*. Available from: <https://easyparkgroup.com/smart-cities-index/>
- Flandorfer, P. (2012). Population ageing and socially assistive robots for elderly persons: The importance of sociodemographic factors for user acceptance. *International Journal of Population Research*, 1–13. <https://doi.org/10.1155/2012/829835>.
- IHS Markit. (2014). *Smart cities to rise fourfold in number from 2013 to 2025*. Available from: <https://news.ihsmarkit.com/press-release/design-supplychain-media/smart-cities-rise-fourfold-number-2013-2025>
- Ishida, T. (2017). Dijital city, smart city and beyond. International World Wide Web Conference, Smart City Workshop (AW4City), Perth, Australia. <https://doi.org/10.1145/3041021.3054710>.
- Microsoft. (2013). *The big bang: How the big data explosion is changing the world*. Available from: <http://blogs.msdn.com/b/microsoftenterpriseinsight/archive/2013/04/15/big-bang-how-the-big-data-explosion-is-changing-theworld.aspx>
- Mohammed, F., Idries, A., Mohamed, N., Al-Jaroodi, J., & Jawhar, I. (2014). UAVs for smart cities: Opportunities and challenges. *International Conference on Unmanned Aircraft Systems (ICUAS)*, 267–273. <https://doi.org/10.1109/ICUAS.2014.6842265>.
- Open Knowledge Foundation. (2012). Available from: www.opendatahandbook.org/guide/en/
- Solanas, A., Patsakis, C., Conti, M., Vlachos, I. S., Ramos, V., Falcone, F., Postolache, O., Perez-Martinez, P. A., Di Pietro, R., Perrea, D. N., & Martinez-Balleste, A. (2014). Smart health: A context-aware health paradigm within smart cities. *IEEE Communications Magazine*, 52(8), 74–81. <https://doi.org/10.1109/MCOM.2014.6871673>.
- Starr, M. (2015). *World's first 3D-printed apartment building constructed in China*. Available from: <http://www.cnet.com/news/worlds-first-3d-printed-apartment-building-constructed-in-china>
- The Ministry of Housing, Urban and Rural Affairs. (2015). *Smart city methods: From ideas to action, case examples*. Available from: https://erhvervsstyrelsen.dk/sites/default/files/smart_city_2015_english.pdf.
- Torras, C. (2016). Service robots for citizens of the future. *European Review*, 24(1), 17–30. <https://doi.org/10.1017/S1062798715000393>.
- United Nations. (2016). *The world's cities in 2016: data booklet*. <https://doi.org/10.18356/8519891.f-en>.
- Washburn, D., Sindhu, U., Dines, R. A., Balaouras, S., Hayes, N. M., Nelson, L. E. (2010). *Helping CIOs understand "Smart City" initiatives: defining the smart city, its drivers, and the role of the CIO*. Available from: https://s3-us-west-2.amazonaws.com/itworldcanada/archive/Themes/Hubs/Brainstorm/forrester_help_cios_smart_city.pdf.
- World Cities Culture Forum. (2018). Available from: <http://www.worldcitiescultureforum.com/cities/singapore>
- Yaman, M., & Çakır, E. (2018). Intelligent disaster and emergency applications in the digitalized world. *Journal of the Human and Social Science Researches*, 7(2), 1124–1138.

Smart Grid

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Synonyms

Bidirectional decentralized power system; Electrical grid; Intelligent networks; Smart appliances

Definition

The network system, which is obtained by integrating computer and network technology of the twenty-first century into the networks that run almost the same way since the beginning of the twentieth century, is called “smart grid.” Smart grid is basically a distributed system formed by the integration of operation, knowledge, and telecommunication systems (Arnold 2011; Dinçer et al. 2011). Smart grids offer a sustainable, reliable, and high energy efficiency energy network by providing real-time bidirectional information transfer from energy generation to energy consumption at any stage (Thomas and McDonald 2015; Paul et al. 2014).

Smart grids are a fact that increases energy efficiency and effectiveness, decrease first investment, operation, and upkeep cost and where consumers also play an active role with new technologies (Çetinkaya 2012; Küçükbayrak et al. 1993). Some of the world-recognized and frequently used definitions of smart grids are:

- (i) According to US Department of Energy: 2030 network is conceived as a fully automatic power network which controls the endpoint with each customer by providing at all points bidirectional information and electric energy flow between power plant and end user's device.
- (ii) According to the European Technology Platform: A smart grid is smartly an electric network coordinating all users (generators, consumers, and users who can perform both operations) actions for sustainable, economical, and safety electric energy production.
- (iii) According to Electric Power Research Institute: Smart grid term corresponds to the modernization of the electric power system to optimize automatically, to safe, and to display the operation of all components connected with each other so as industrial customers, building energy management systems, energy storage applications, end users and their thermostats, electric vehicles, devices, and other household appliances by means of high energy lines in centralized and distributed production facilities.

In addition, all other definitions can be listed as follows:

- (iv) It is a power system consisting of several transmission and distribution systems that are efficient, reliable, depended on each one automation, and coordinated with each other.
- (v) It is a power system responding to the needs of the energy markets with production/transmission/distribution companies and self-healing in emergency conditions.
- (vi) It is a power system included a smart telecommunication infrastructure providing adaptive, credible, and promptly information flow, requiring growing digital economy and serving the customers with the number expressed in millions.

Power transmits another place produced in one place in alternative current systems. The fundamental of these systems is based on the fact that large production points until the last quarter of the twentieth century satisfy an

uncontrollable power of consumption under certain principles (Barai et al. 2015). In a network based on smart grid structure, the transmission and the distribution are provided to be within manageable rules with efficient resource utilization (Kanabar et al. 2012; Kuzlu et al. 2017).

Application Methods in Smart Grids

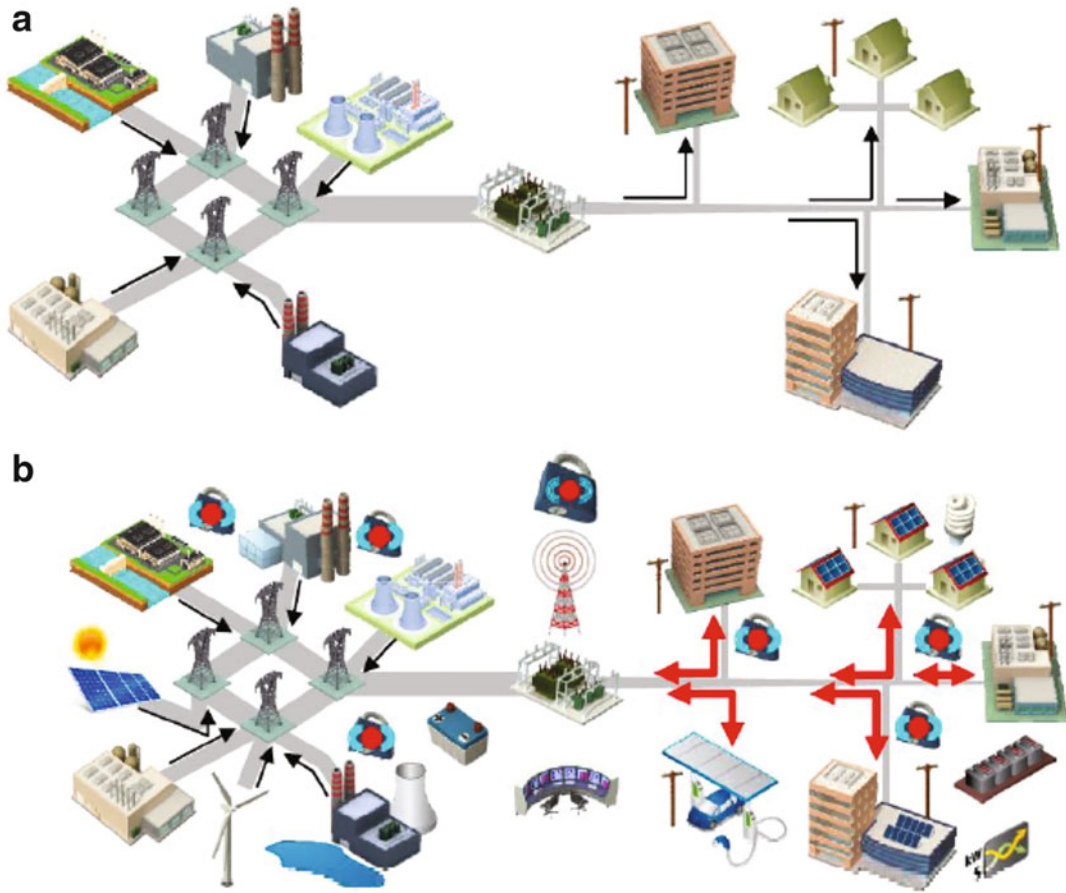
The electrical infrastructure in many regions of the world is interconnected, where large power plants are connected to each other through long transmission lines (Gonzalez-Longatt and Torres 2018). Instability occurring in case of system crash in any part of the interconnected network system causes to collapse the whole system and therefore energy interruption in other countries related to this country.

The effort to make them more efficient, safer, more environment-friendly, and more manageable with developing technological means of the electric network starting from the production stage of energy up to transmission, distribution, and consumption covering all processes is revealed as the "smart grid" concept (Hossain et al. 2013). This concept which appeared due to insufficient existing networks while intending full automation and high efficiency of networks is confronted as a new model combined of several technologies from communication to information technologies, control systems to semiconductor technologies (Borlase 2018).

The conventional and smart grid network systems are shown in Fig. 1.

Today, smart network applications can be grouped under three main headings:

- (i) Distributed generation applications: These applications are of great importance for energy efficiency, reliability, and use of renewable energy resources. Smart grids must provide the integration of a wide range of energy sources on the distribution network from small-scale power generation to high power plants. Thus, renewable energy resources will provide to expand up to the household level and to produce their energy. In this case, energy efficiency will increase by reducing production and consumption and transmission



Smart Grid, Fig. 1 The network system of (a) conventional, (b) smart grid (Erdoğan 2017)

losses. In a conventional network, the households of being static consumer level are expected the transformation to prosumers with distributed production opportunity.

- (ii) Distributed storage applications: It is aimed to store energy production excess stored in distributed storage systems to network and to use on condition that meets energy demand when necessary. Distribution of a very large storage system to the grid from high volume energy storage systems to the household storage system is very important for more effective usage of sources being energy continuity such as renewable energy resources.
- (iii) Demand side load management applications: Production demand balance and energy prices can be managed smarter in networks with distributed production and storage

facilities. Time interval where energy consumption is high is forced the network components. Although this problem is solved with the help of consumers, energy prices and energy efficiency can be increased. Energy production and storage strategies to be implemented on demand will significantly increase energy efficiency.

The abovementioned three applications are possible using effective communication and control tools. It should be real-time monitoring and control of the network for responding to the instantaneous changes and preserving the optimal work of power system. For this, the smart grid components should be acquiring to data recording, processing, and transmission. This too will be possible if the power components contain systems

(microprocessors) capable of communication and programming. Protocols to manage communication and interaction of these units (e.g., TCP/IP, ATM, SDH/SONET), communication infrastructure (e.g., modems, routers, wireless communication) and servers (application and databases), will be needed (Falvo et al. 2013).

Communication Systems in Smart Grids

Developments in today's wired and wireless communication technologies have accelerated the construction of the communication network of smart grids (Brandt 2015). In smart grid architecture, the communication requirement includes both communication of near field (building and on-site) and far field (local and intercity) (Emmanuel and Rayudu 2016). A smart power distribution infrastructure serving millions of users will need a high-speed data transmission infrastructure with high bandwidth to enable them to work and communicate in harmony. This infrastructure is now possible with both fiber technology and wireless communication facilities. The proposed main communication technologies by IEEE for smart grid applications are ZigBee, WiMAX, wireless LAN (Wi-Fi) technologies, GSM/GPRS, DASH 7, and communication (PLC) on power systems (Wang et al. 2011; Usman and Shami 2013; Nafi et al. 2016). The main advantage of smart grids is the establishment of a bidirectional communication network between consumers and energy sources. The bidirectional communication has become an important requirement in smart grid applications. The real-time communication capability of smart grids will be a milestone for the modernization of electricity networks. In this case, database centers, software based on manufacturer-consumer, distributed control units, wide-field applications will communicate through this infrastructure. This communication infrastructure can be built to accommodate a variety of communication paths, including broadband transmission and wireless technologies over the power line and fiber optic cable for today. The use of today's communication technologies in smart grids is summarized in Table 1.

The transition from today's vision to smart grid vision is a long-term change process, and this process of change brings along many social, technical, and economic challenges (Lin and Magnago 2017). Although it is difficult to predict the future of smart grids, it is obvious that it will add many benefits to the world at every stage.

Benefits of Smart Grids

Smart grid systems will increase efficiency using advanced level monitoring and maximize the potential and performance of assets. Losses in transmission and distribution are reduced with smart systems (Ma et al. 2016). Companies use resources more reliably and efficiently utilizing remote monitoring and control technologies. Due to digital communication, it is ensured that the system can work again as little damage as possible due to a mistake or interruption caused by human error or natural disasters in the smart grid. Moreover, it provides efficient use of fossil fuels with increasing the utilization of renewable resources. By providing consumers with better control of their electricity usage and consumption costs, electricity production companies provide better management of their high production demands and reduce their need for extra investment in high production demand. Considering the power networks, all points of the system ensure in a structure that vigilant, responsive, adaptive, cost-effective, environment-friendly, synchronous, flexible, powerful, and capable of connecting with any system. Smart grid procures the optimization of current control. It is agreed to the systems of alternative energy transmission and distribution as a digital version upgrade. Smart grids can be compatible with deferred or changed investments. Not only an intelligent transmission system can quickly isolate problem areas avoiding large-scale power cuts but also regulating and stabilizing the process after system crashes and accelerating the flow of energy.

The construction of the smart grid system structures shown in Fig. 1b will offer various opportunities and capabilities on a global scale in many areas. Opportunities in household scale are as follows:

Smart Grid, Table 1 The use of todays communication technologies in smart grids

Usage area	PLC power line communication	ZigBee	Wifi	WiMax	GSM and GPRS	DASH 7
Manufacture	Traditional	The researched systems that are not yet used but can be improved	The researched systems for use	The researched systems for use	System currently used	The researched systems for use
	Based on distributed renewable resources	Systems that are not yet used but can be improved	Systems that are not yet used but can be improved	The researched systems for use	System currently used	The researched systems for use
	Transmission line monitoring and protection	Systems that are not yet used but can be improved	The researched systems for use	The researched systems for use	System currently used	The researched systems for use
Transmission	Insulator monitoring	Systems that are not yet used but can be improved	Systems that are not yet used but can be improved	Systems that are not yet used but can be improved	The researched systems for use	The researched systems for use
	FACTs monitoring and control	Systems that are not yet used but can be improved	The researched systems for use	Systems that are not yet used but can be improved	System currently used	The researched systems for use
	Transformer automation and protection	System currently used	Systems that are not yet used but can be improved	The researched systems for use	System currently used	The researched systems for use
Distribution	Distribution line monitoring and protection	System currently used	The researched systems for use	Systems that are not yet used but can be improved	System currently used	The researched systems for use
	Tool monitoring and protection	System currently used	Systems that are not yet used but can be improved	Systems that are not yet used but can be improved	System currently used	The researched systems for use
	Home automation and control	System currently used	System currently used	Systems that are not yet used but can be improved	System currently used	The researched systems for use
Consumer	Industrial automation and control	System currently used	System currently used	Systems that are not yet used but can be improved	System currently used	The researched systems for use
	Automatic meter reading	System currently used	System currently used	Systems that are not yet used but can be improved	System currently used	The researched systems for use
	Electric vehicles	The researched Systems for use	The researched systems for use	Systems that are not yet used but can be improved	System currently used	The researched systems for use

Flexible pricing system can be implemented with the smart meters. Thus, by their own preferences, the consumer will be able to shift their consumption with smart meters to the hours when the electricity price is low. If the consumers have the domestic energy storage units, the purchased energy with low price can be used in the high price time, or they don't have energy problems with short-term interrupts. This will gain significantly demand flexibility to network. Smart meters (AMR) supporting wide-field communication systems (e.g., GSM/GPRS, PLC) will provide an opportunity to remote management and testing of consumer information and of the energy system. The measurement, monitoring, and troubleshooting will carry out by remote control. Smart meters having the ability to communicating with wide area (GSM/GPRS, PLC, satellite communication) will allow providing multimedia services (Internet, telephony, etc.) of the houses via the power line. Smart systems will enable remote management of devices and communicate within the home devices themselves with narrow area in-house device communications (ZigBee, Wi-Fi, PLC, etc.) and ensure that smart home systems become more integrated and effective. Smart meters will be to facilitate the use and management of renewable energy systems and residential energy storage systems in homes. Bidirectional smart meters will be to contribute to both the consumer and the energy production by allowing the sale of the excess energy produced at home. Consumers are expected to have a productive consumer profile (prosumer) with these capabilities. Prosumers based on clean renewable resources will reduce CO₂ emissions and contribute to the production of environment-friendly energy. Excessed energy from renewable energy sources with the increase of electric vehicles can be used in transportation, and transportation by heavy pressure on the environment will be possible to realize a little more cost-effective and environment-friendly.

Opportunities in site/building are as follows:

With the integration of renewable energy sources into the microgrid, the energy dependence of the sites/buildings on the network can be reduced, and environment-friendly production and consumption can be supported. The management and control of in-site/building communication and site/building services (safety, irrigation, and in-house lighting systems) will be provided over the power distribution line (PLC).

Opportunities in the city are as follows:

Distributed sensor and control applications over the smart grid will provide the in-city services (lightning, irrigation of parks, safety, etc.) management, and automation. The gaining energy from solid wastes disposal facilities will use in the energy need of the in-city services over the smart network. The use of renewable energy resources in buildings will reduce the city's energy dependence to outdoors.

Opportunities in the country are as follows:

As a result of the widespread use of smart grids and renewable energy sources, dependence on oil, natural gas, and coal will decrease, and the weight of natural resources in satisfying the energy demand of countries will increase. Transmission-distribution losses and costs with on-site production and consumption using smart grids can be reduced. More efficient and reliable energy use will be possible. Demanded load management strategies and optimal consumption strategies can be implemented by the smart grid. Thus, excessive energy supply (overproduction) will be preventable, where energy prices can be kept at reasonable levels (Lund et al. 2012).

Opportunities in the global scale are as follows:

The usage of the renewable energy resources and smart grids will provide the major

contributions in increasing efficiency by on-site production and consumption, reducing the environmental pressure of human activity such as global warming and remaining more livable world. Smart networks connecting in global level will give flexibility to energy production and consumption and reduce conflicts and concerns based on energy sharing between countries. With the global smart grid integration, it will be easier for energy-producing countries to share their energy supply with the world. The socioeconomic effects of this possibility will make the world more global, and the borders of the country will become less important. Communication, remote measurement, and control facilities on a global scale will improve over the global network. This condition would simplify the operation of international scientific research and observation stations.

Summary

Nowadays, electricity reaches approximately 4.8 billion people, while more than 1.8 billion people have little or no access to electricity. Globally, more than 1.6 billion electricity meters have been installed at end-use points (homes, apartments, commercial buildings, industrial centers, factories, etc.). These meters measure the use of electrical energy to provide a turnover of more than 1 trillion dollars annually to the global electricity industry. There are around 43,000 medium and large power generation facilities that provide electricity to people in more than 200 countries around the world. These power plants transfer the generated electricity to the transmission lines through more than 120,000 amplifier centers with large and very large transformers installed. The distribution of electricity is started from approximately 200,000 distribution centers. Thus, any failure in such large grid systems can lead to major power outages. For example; On November 9, 1967, in the United States of America, New York, New

Jersey, New England, and Ontario regions, the electrical system failure affecting approximately 25 million people can be shown. Moreover, the illegal use of electricity brings considerable financial and hardware load to these systems and creates a damaging effect on the system. These and other such disadvantages reveal the necessity of better management of energy systems.

Consequently, smart grids being a nature-friendly technology, it plays an active role in fixed and traveling energy storage and scattered renewable energy sources. It is necessary to store energy for many reasons because the renewable energy sources are far away from consumption centers, not regular, and the weather forecast is not sufficiently accurate, also nowadays offer reliability of all modern energy systems, system stability, more efficient use of energy resources, minimization of transmission/distribution problems, and costs. Therefore, the three main objectives of smart grids are:

- (i) Preferable balancing offer demand side of the energy system, maximizing load factor preventing daily fluctuations in the load curve, for optimizing the network capacity
- (ii) Regulating the fluctuations in energy costs because of production and transmission limitations
- (iii) Constituting microgrids that allow for more distributed production (conventional or renewable) and energy storage in end user side

Cross-References

- [Sustainability Accounting](#)

References

- Arnold, G. W. (2011). Smart grid. In J. H. Kim & M. J. Lee (Eds.), *Green IT: Technologies and applications*. Berlin, Heidelberg: Springer.

- Barai, G. R., Krishnan, S., & Venkatesh, B. (2015). Smart metering and functionalities of smart meters in smart grid—a review. In *IEEE electrical power & energy conference (EPEC2015)*, London, Ontario, October 26–28, pp. 138–145.
- Borlase, S. (Ed.). (2018). *Smart grids: Advanced technologies and solutions* (Electric power and energy engineering) (2nd ed.). CRC Press, Taylor & Francis Group.
- Brandt, T. (2015). *IT solutions for the smart grid: Theory, application, and economic assessment*. Wiesbaden: Springer Wieweg.
- Çetinkaya, H. B. (2012). Smart grids and SCADA applications in terms of energy management and energy efficiency. In 3th national energy efficiency forum and fair.
- Dinçer, H., Mutlu, F., & Kuzlu, M. (2011). Inserting of digital technology to electrical network: Smart grid. In EMO IVth symposium of energy efficiency and quality, Kocaeli, Turkey.
- Emmanuel, M., & Rayudu, R. (2016). Communication technologies for smart grid applications: A survey. *Journal of Network and Computer Applications*, 74, 133–148.
- Falvo, M. C., Martirano, L., Sbordone, D., & Bocci, E. (2013). Technologies for smart grids: A brief review. In *12th international conference on environment and electrical engineering*, May 5–8, Wrocław.
- Gonzalez-Longatt, F., & Torres, J. L. R. (Eds.). (2018). *Advanced smart grid functionalities based on power factory*. Cham: Springer.
- Hossain, M. R., Oo, A. M. T., & Ali, A. B. M. S. (2013). Smart grid. In A. Ali (Ed.), *Smart grids, green energy and technology*. London: Springer.
- Kanabar, M. G., Voloh, I., & McGinn, D. (2012). Reviewing Smart Grid Standards For Protection, Control, And Monitoring Applications. In *IEEE PES Innovative Smart Grid Technologies (ISGT)*, January 16–20, Washington, DC, pp. 281–289.
- Küçükbayrak, S., Ersoy, M. A., & Gürbüz, Ü. (1993). Energy storage systems, <http://www.termodinamik.info/?pid=2857>. Accessed 27 Apr 2016.
- Kuzlu, M., Pipattanasomporn, M., & Rahman, S. (2017). A comprehensive review of smart grid related standards and protocols. In *International Istanbul smart grids and cities congress*, April 19–21, Istanbul Turkey, pp. 12–16.
- Lin, J., & Magnago, F. H. (2017). *Electricity markets: Theories and applications* (IEEE press series on power engineering). Wiley-IEEE Press, ISBN: 978-1-119-17935-1.
- Lund, H., Andersen, A. N., Ostergaard, P. A., Mathiesen, B. V., & Connolly, D. (2012). From electricity smart grids to smart energy systems—a market operation based approach and understanding. *Energy*, 42, 96–102.
- Ma, Y., Tong, X., Zhou, X., & Gao, Z. (2016). The review of smart distribution grid. In *International conference on mechatronics and automation*, August 7–10, Harbin, pp. 154–158.
- Nafi, N. S., Ahmed, K., Gregory, M. A., & Datta, M. (2016). A survey of smart grid architectures, applications, benefits and standardization. *Journal of Network and Computer Applications*, 76, 23–36.
- Paul, S., Rabbani, M. S., Kundu, R. K., Zaman, S. M. R. (2014). A review of smart technology (smart grid) and its features. In *1st international conference on non conventional energy (ICONCE 2014)*, January 16–17. Kalyani. WB, pp. 200–203.
- Thomas, M. S., & McDonald, J. D. (2015). *Power system SCADA and smart grids*. Boca Raton: CRC Press.
- Usman, A., & Shami, S. H. (2013). Evolution of communication technologies for smart grid applications. *Renewable and Sustainable Energy Reviews*, 19, 191–199.
- Wang, W., Xu, Y., & Khanna, M. (2011). A survey on the communication architectures in smart grid. *Computer Networks*, 55, 3604–3629.

Smart Public Procurement

► Public Procurement and CSR

SMEs (and CSR)

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Synonyms

Small entrepreneurs

Definition

The Small and Middle Enterprises (SMEs) cover a central role within the worldwide ecosystems due to their wide diffusion.

The relationship between SMEs and CSR is strong because they represent the most common form of enterprises within the large part of the countries. Moreover, SMEs are typically characterized by the direct involvement of the local communities during their life cycle and a relevant influence exerted on the local and regional

economies. In this sense, although the physiological criticism related to the adoption of CSRs tools, the SMEs favor the diffusion of virtuous mechanism useful for the achievement of highest degree of sustainable development.

CSR in SMEs Strategies: Constraint or Opportunity?

During the last years, in order to cope with the modern globalized economy and the complex supply chain networks, SMEs have started to act sustainable and adopt CSR in their production activities. Several authors have analyzed the relationship between CSR and SMEs. Contrarily to MNEs and large firms, the debate has been characterized by different opinions about the effectiveness of the adoption of CSR practices in SMEs. Specifically, the academics have highlighted different implications and barriers related to the adoption of these practices.

According to Preuss and Perschke (2010), the approach to CSR by SMEs is different from the large firms. Specifically, the authors highlighted how the entire set of operations that describe a CSR practices is characterized by differences caused by the peculiarities of the SMEs such as the role of the ownership, the economic barriers, and the absence of market pressures. Also, being involved in less pressures at the regulatory and stakeholder level, SMEs tend to prioritize the adoption of CSR practices in their activities rather than allocating resources for the CSR communication. This behavior reveals a different approach of SMEs governance towards their stakeholders (Schons and Steinmeier 2016).

In these terms, Jamali et al. (2009) suggested how the contribution of SMEs is characterized by a more informal approach and by the absence of formalization. This evidence confirms the existence of different approaches to CSR. In fact, several authors have started to discuss about the existence of divergences between “walking” and “talking” about CSR practices (Schons and Steinmeier 2016). In particular, the “walking” identifies the actions that have been taken by companies to measure their CSR progresses

throughout years, while the “talking” comprehends the communication tools that have been adopted to disclose CSR information and progresses towards stakeholders.

However, the literature has highlighted the existence of positive externalities related to the voluntary adoption of these practices by SMEs. Specifically, an increasing number of academics have started to provide some insights both about the drivers that impact on CSR adoption and both on the subsequent financial performance (Vazquez-Carrasco and Lopez-Perez 2013).

The different involvement in market pressures impacts on the adoption of CSR in SMEs. Specifically, contrarily to the large firms, the determinant that impacts on CSR adoption is represented by the ownership characteristics. Literature reveals how the majority of business decisions in SMEs are taken by a single entity or a small group of subjects and the decisions are highly influenced by their personality traits and knowledge. This evidence is linked with the family nature of many SMEs (Sen and Cowley 2013). This evidence is linked with the family nature of many SMEs and the subsequent paternalistic mechanisms of their governance.

From this point of view, family SMEs adopt CSR in order to preserve and communicate the socio-emotional value that characterize the company (Drago et al. 2018).

On the other side, the adoption of CSR in SMEs can be also considered as a proactive coping mechanism. Specifically, by focusing on environmental, social, and governance dimensions, SMEs show their interest in listening their stakeholders request and related market pressures.

In addition, the introduction of CSR in SMEs represents a channel to communicate the investments in sustainability when green innovations are adopted by these companies (Cuerva et al. 2014).

Finally, regarding the financial performance, several papers have highlighted a positive relationship between cost reduction and CSR practices caused by the achievement of more favorable relationship with suppliers, clients, and financial institutions. Specifically, the adoption of CSR in SMEs allows to gain better financial conditions

from banks and opens a path towards public subsidies (Du et al. 2017).

The Link Between SMEs and Sustainable Development Goals

According to World Bank, the SMEs represent over the 90% of the worldwide business and the 50% of the worldwide employment. Furthermore, they contribute to the 40% of the national income (GDP) in developing countries. The evidence shown above highlights the strategic role covered by this type of enterprises for the achievement of the Sustainable Development Goals (SDGs). The strongest connection between SMEs and SDGs is represented by the exigence to create new job position in developing countries. In this sense, the SMEs represent a central item within the strategies inspired by the “*Leaving no behind*” principle. In fact, contrarily to MDGs, one of the main innovations of the Agenda 2030 is represented by the direct involvement of the private sectors. Specifically, the CSR in private companies is going through different changes, and the contribution on the pursuit of the SDGs represents an occasion to improve collaboration among companies (Scheyvens et al. 2016).

The Agenda 2030 underlined the need of a direct involvement of private sector. In detail, the United Nations stated: “*no one will be left behind. Recognizing that the dignity of the human person is fundamental, we wish to see the Goals and targets met for all nations and for all segments of society. And we will endeavor to reach the furthest behind first.*” In fact, as evidenced before, the SMEs represent typically the main job provider in developing countries. Furthermore, the evidences collected by OECD reveal how SMEs contribute positively to the GDP even in developed countries such as the UK and the Greece.

The main SDGs that required the direct involvement of the SMEs are represented by SDG8 (*Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all*), SDG9 (*Build resilient infrastructure, promote inclusive and sustainable*

industrialization, and foster innovation) and SDG10 (*Reduce inequality within and among countries*). The SDG8 required a direct involvement of SMEs within the target 8.3 who required to the Governments to promote policies in order to favor the growth and the diffusion of the SMEs within the countries. The contribution of the SDG9 is represented by the requirement in target 9.3 of policies inspired by the exigence to allow SMEs to engage with financial institutions in order to support their growth. Finally, the contribution of SDG10 consists in a set of targets oriented to the improvement of the work condition of the SMEs.

Conclusion

The achievement of the SDGs requires a direct involvement of the private sectors. As evidenced by the World Bank, the SMEs cover the 90% of the entire worldwide economic systems. In this sense, it appears obvious that the achievement of the SDG could not be unrelated to the direct involvement of the SMEs. Although the CSR has been wide analyzed by academics during the last decades, only few studies have analyzed the managerial implications related to the adoption of CSR practices by SMEs. According to this evidence, the future research could be addressed to fill these gaps in order to provide to policy makers evidence-based results useful for the definition of new policies to sustain the SDGs.

Cross References

► [Good Governance](#)

References

- Cuerva, M. C., Triguero-Cano, Á., & Córcoles, D. (2014). Drivers of green and non-green innovation: Empirical evidence in Low-Tech SMEs. *Journal of Cleaner Production*, 68, 104–113. <https://doi.org/10.1016/j.jclepro.2013.10.049>.
- Drago, C., Ginesti, G., Pongelli, C., & Sciascia, S. (2018). Reporting strategies: What makes family firms beat around the bush? Family-related antecedents of annual

- report readability. *Journal of Family Business Strategy*, 9(2), 142–150. <https://doi.org/10.1016/j.jfbs.2017.11.006>.
- Du, X., Weng, J., Zeng, Q., Chang, Y., & Pei, H. (2017). Do lenders applaud corporate environmental performance? Evidence from Chinese private-owned firms. *Journal of Business Ethics*, 143(1), 179–207. <https://doi.org/10.1007/s10551-015-2758-2>.
- Jamali, D., Zanhour, M., & Keshishian, T. (2009). Peculiar strengths and relational attributes of SMEs in the context of CSR. *Journal of Business Ethics*, 87(3), 355–377.
- Preuss, L., & Perschke, J. (2010). Slipstreaming the larger boats: Social responsibility in medium-sized businesses. *Journal of Business Ethics*, 92(4), 531–551.
- Scheyvens, R., Banks, G., & Hughes, E. (2016). The private sector and the SDGs: The need to move beyond ‘business as usual’. *Sustainable Development*, 24(6), 371–382.
- Schons, L., & Steinmeier, M. (2016). Walk the talk? How symbolic and substantive CSR actions affect firm performance depending on stakeholder proximity. *Corporate Social Responsibility and Environmental Management*, 23(6), 358–372.
- Sen, S., & Cowley, J. (2013). The relevance of stakeholder theory and social capital theory in the context of CSR in SMEs: An Australian perspective. *Journal of Business Ethics*, 118(2), 413–427. <https://doi.org/10.1007/s10551-012-1598-6>.
- Vázquez-Carrasco, R., & López-Pérez, M. E. (2013). Small & medium-sized enterprises and Corporate Social Responsibility: A systematic review of the literature. *Quality & Quantity*, 47(6), 3205–3218.

SMEs Growth

- [OECD Guidelines for SMEs](#)

SMEs Innovation

- [OECD Guidelines for SMEs](#)

Smog

- [Air Pollution](#)

Snitch

- [Whistleblowing and CSR](#)

Social

- [Life Cycle Sustainability Assessment](#)

Social Acceptance

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Synonyms

[Community acceptance](#); [Public acceptance](#); [Public attitude](#); [Social environmental impact of project](#); [Socioeconomic impact](#); [Socio-political acceptance](#); [Stakeholders acceptance](#)

Definition

Social acceptance is the attitude of society or a specific social group to a specific problem arising from the redistribution of costs and benefits.

Social acceptance can be analyzed from two perspectives. The first one, and the majority of the research is focused on this approach, understands it as an attitude of public opinion or a specific group to a particular problem. Mostly it focuses on positive and negative strategies with a concentration of nature, structure, and level of objection. Among this approach, we can distinguish a narrow and broad path. Narrow criteria to social acceptance are very often centered on frequent problems referred to as NIMBY (not in my backyard) point of view. The objection is then structured around the locations of particular projects. In particular the projects of the infrastructural nature, close to the place of residence of the local community. Social acceptance is understood by terms of any action taken by residents or as a lack of opposition. The in-depth approach includes the spectrum of geographical, institutional, or cultural aspects. The starting point is the inclusion of the local community

perspective. The most important is transparency of action, based on the fact that the local community can co-participate as stakeholders in developing the infrastructure and whether they can trust investors, especially if they come from outside of the local community. In this understanding, social acceptance is gaining special significance, especially during the time of digitalization of the economy, social media, and the Internet being used for authorization of stakeholders and monitoring of democracy and civil rights.

The second approach indicates that social acceptance is the result of a dynamic and multidimensional process in which the project itself, opinions of stakeholders, and the context of the undertaken actions are mutually supplementing. The focal points are that the acceptance of local communities is related to the feeling of justice. It comes as a result of both costs and profits from both project implementation processes and the desired results of its implementation. The focus is on cost and benefit distribution. Therefore social acceptance is defined as a set of outcomes and aspects that leave local at least as well off as they were before the project. It is understood as a set of desirable results that leave the local community in the situation not worse than before the project. According to this approach, we can distinguish three dimensions of social acceptance (Wüstenhagen et al. 2007): (1) sociopolitical acceptance (technologies, policies, institutional changes, policymakers, the public, key stakeholders), (2) community acceptance (place attachment, landscape identity, fairness of process, residents, local authorities, trust), and (3) market acceptance (consumers, investors, green tariffs, intra firm, incumbents, new parties).

Summary

Social acceptance examines the public's attitude toward a specific problem by analyzing the perpetrators and losses that a particular social group suffers as a result of implementing a particular project. Sociopolitical, community, and market dimensions create a base for the analysis. Social

acceptance should be the result of achieving balance in the abovementioned areas that guarantee that a particular status of a social group will not be worse after project implementation than before its start.

Cross-References

- ▶ [Environmental Impact](#)
- ▶ [Environmentalism Movement](#)
- ▶ [Legitimacy of Operations](#)
- ▶ [Stakeholder Engagement](#)
- ▶ [Sustainable Development Planning](#)
- ▶ [Sustainability Management Process](#)

References

- Wüstenhagen, R., Wolsnik, M., & Brürer, M. J. (2007). Societal acceptance of renewable energy innovation: An introduction to the concept. *Energy Policy*, 35, 2737–2750.

Social Accountability 8000 Standard

- ▶ [SA8000 Standard](#)
-

Social Accountability International (SAI)

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Synonyms

[Organization for Social Auditing](#); [NGO Behind SA8000](#)

Introduction

“Social Accountability International (SAI)” is a global nongovernmental organization that aims to enhance human rights at work. In order to achieve its mission, SAI in a multi-stakeholder approach created the SA8000® Standard for fair labor practices. This standard helps to implement international standards on decent work, which meet the requirements of the “Universal Declaration of Human Rights” and “International Labour Organization (ILO) conventions.” It also reflects and complements national and international labor laws. The standard is being used in over 4,000 companies in more than 62 countries and 56 industries (last updated: May 3, 2019). SAI regularly revises the SA8000® Standard in order to respond to upcoming social and human rights issues. The last time that the standard was revised was in 2014.

SAI is responsible for the development, revision, and publication of SA8000®. It is not accountable for the auditing and certification itself. These services are carried out independently of SAI by accredited institutes. Besides the standard itself, SAI provides guidance on the standard’s implementation and determines the program’s auditing methodology. Additionally, SAI offers benchmarks and reports, e.g., on living wage and conducts trainings for auditors of the SA8000® Standard as well as for companies that aim to improve working conditions in their global supply chain.

Social Accountability Accreditation Services (SAAS) is a department of SAI that develops evaluation and quality assurance systems through third-party assessment and accreditation services. SAAS maintains its own independent decision-making process for its accreditation systems. All certification bodies that conduct SA8000 audits have to apply to SAAS for accreditation.

The History

In 1969, Alice Tepper Marlin founded a nonprofit organization in order to further investigate

“corporate social responsibility”: The Council on Economic Priorities (CEP). CEP offered monthly newsletters on research reports and provided studies on corporate social responsibility for investors (such as global corporate ratings) and published corporate reports as well as several guidelines and books, such as *The Better World Investment Guide: One Hundred Companies Whose Policies You Should Know About Before You Invest Your Money* (Hall 1991) or *Shopping for a Better World: The Quick and Easy Guide to All Your Socially Responsible Shopping* (Hollister et al. 1994). Additionally, CEP awarded a corporate responsibility prize, started the Campaign for Cleaner Corporations, and provided Corporate Environmental Data Clearinghouse (CEDC). A large variety of researchers worked together on the CEDC in order to analyze the environmental policies and performance of corporations. Reports based on the results of the analysis provided the investment community with unbiased, comprehensive, and concise information on issues regarding the corporate responsibility. In its work CEP focused on several topics referring to the responsibility of companies:

- “the environment
- women & minority advancement
- disclosure of information
- labor relations, family benefits
- charitable giving, community outreach
- military contracts, nuclear power
- tobacco, product liability, animal testing
- South Africa and Third World concerns.” (O’Brien 1998, 11)

Newly discovered facts on inhumane working conditions in developing countries caused a greater public dispute on social responsibility. In reaction to this public concern, CED founded the “Council on Economic Priorities Accreditation Agency (CEPAA)” in 1997.

CEPAA’s remit was to set up a universal standard for responsible employment practices in manufacturing industry. It took nearly a year until the advisory board published the final draft of SA8000® Standard on decent work in 1998. SA8000® Standard is a voluntary multi-industry

standard for companies that are interested in independent third-party certification regarding decent work in their own facilities and in those of their business partners and salesmen. The advisory board, consisting of 25 people of different backgrounds, such as businesses, trade unions, and nongovernmental organizations, designed the SA8000 to be compatible with the ISO 9001 quality standard. Now, as it has been finalized, the advisory board regularly revises the standard to ensure its topicality. The latest revision took place from May 2013 to February 2014 so that the current version of the standard is the “SA8000: 2014.”

In 2000, CEPAA was renamed into SAI, a new affiliate of CEP. CEP itself doesn't exist anymore (closed in 2001), but SAI as a former entity of CEP still carries on publishing and revising SA8000 and its supporting documents and offering instruments that help organizations to maintain and continually improve their social performance.

Definition: Mission, Objectives, and Focus Areas

SAI's mission is to advance human rights at workplaces in order to contribute to a world where workers, businesses, and communities thrive together. To achieve its mission, SAI publishes and reviews the SA8000® Standard on decent work, which focuses on nine “key areas”:

- “Child labour
- Forced labour
- Health and safety
- Freedom of association and collective bargaining
- Discrimination
- Disciplinary practices
- Working hours
- Compensation
- Management systems.” (SAI 2019)

“Management systems” (the last of the nine key areas) treat structures and procedures that

companies must adopt in order to ensure periodical management reviews regarding the standard.

SA8000® comprises existing international agreements, such as the Universal Declaration on Human Rights, the International Labour Organization conventions, and the UN Convention on the Rights of the Child. But it also sets new standards governing workers' rights, like working hours per week, which are not allowed to exceed 48 h or 6 days a week.

Additionally, SAI provides background information, explanations, and supporting documents regarding the standard, which help organizations to develop their social performance continually. Aspects include capacity building, stakeholder engagement, collaboration between buyers and suppliers, and the development of instruments in order to push ongoing improvement. Four strategic programs offer companies an easier approach toward decent work:

- One of those programs is the Social Fingerprint® program, which is supposed to support companies to understand and measure their social impact and to improve it. The program includes ratings, trainings, and toolkits designed to break down the management system concept into component processes that systematically ease the company's improvement (and the one of its suppliers).
- Another strategic program is “TenSquared,” which was designed by SAI in cooperation with the Rapid Results Institute (RRI) and The Walt Disney Company in order to enhance health and safety at workplace. For that reason, SAI or the RRI identifies shared interests of workers and managers and translates them into action within 100 days. SAI and RRI cooperate with local organizations in the country of implementation, which helps to correspond to specific challenges.
- SAI supports and promotes “living wage.” Therefore, SAI, as a member of the Global Living Wage Coalition (GLWC), developed the “Anker methodology” – a tool that helps to estimate the wage for a basic-but-decent

lifestyle for workers and their families in a specific place.

- The last of the four strategic programs is the “International Recruitment Integrity System” (IRIS). It is a social compliance scheme to improve ethical international recruitment. It was developed by the International Organization for Migration (IOM) in cooperation with a bunch of partners, including SAI. The IRIS Standard (published and reviewed by IRIS) sets a benchmark for ethical recruitment. With the help of the IRIS standard, companies are able to establish a voluntary certification scheme for ethical labor recruitment and a compliance and monitoring mechanism.

Besides its strategic programs, SAI offers trainings and capacity building services on human rights at work (face-to-face as well as online). The auditor training course covers information on the SA8000® Standard as well as auditing techniques and general information regarding the auditing process. All SA8000® auditors have to pass the “basic auditor training.” Those who aim to become lead auditors additionally have to pass the “lead auditor training.” Even though both courses are designed for certification bodies and internal auditors, they are also relevant to purchasing agents, managers, and employees, who are supposed to audit any other decent work standard.

Furthermore, SAI offers trainings with a specific focus in its Professional Development Series, e.g., “Management Systems for Social Performance” or “Building Internal Social Performance Teams.” These courses are designed for sourcing personnel, corporate compliance managers, suppliers, and auditors that like to better themselves and keep informed. The custom training program is made for companies that aim to improve their performance or want to expand their control of subcontractors or suppliers. It covers a variety of topics in order to meet companies’ individual needs. SAI helps to identify these specific needs and develops a strategic plan and training.

Finally, SAI offers companies two ways to show their commitment to social responsibility: via certification and/or via becoming a corporate member of SAI. All corporate members are supposed to place the following public statement on their website:

As a Corporate Member of SAI, we share the mission to improve working conditions in our supply chain, in accordance with performance criteria based on relevant ILO conventions and national law, utilizing management systems and multi-stakeholder dialogue.

There are three different types of corporate membership depending on the level of engagement: supporter, explorer, and signatory. SAI offers most services to those companies that are at the signatory level and fewest to those on the supporter level. Regardless of the level, all companies have to support the abovementioned statement. Further, they ensure to use a management system approach to enhance their social performance. Moreover, they are supposed to join the “Social Fingerprint® Supply Chain Management program” which takes place annually and have to use all services provided by SAI.

Structure of Governance

SAI is a charitable 501(C)(3) organization located in the United States of America. It is based in New York and governed by a board of nine directors chaired by Dan Henkle, the former president of Gap Foundation and senior vice president of Global Sustainability at Gap Inc.

An advisory board supports SAI’s work with its professional expertise. It consists of two different types of members: those who are affiliated with business (eight members) and those who are affiliated with NGOs, trade unions, socially responsible investing, and government (seven members).

Retired SAI Advisory Board members are united in the Founders’ Committee. The Founders’ Committee members are allowed to

participate in SAI Advisory Board's activities, such as meetings, in which they may take part as nonvoting members. Founders' Committee members include Tom DeLuca (Chair), Dr. Morton Winston, and Achim Lohrie, among others.

An annual conference of all board members and directors fosters the exchange of knowledge regarding CSR practices of different stakeholders.

SAI finances itself either by single corporate/private donations or via its corporate memberships and training programs.

Summary: Major Accomplishments/Contributions

More than two million workers experience concrete benefits from the implementation of the SA8000® management system. More than 4,000 facilities have been certified across 62 countries and 56 industrial sectors (last updated: May 3, 2019). Implementing SA8000® and/or participating in SAI's corporate program gives confidence to all employees and managers regardless of their position within the company's hierarchy and supply chain. It leads to a greater awareness about core labor rights and therefore enables workers to claim their rights, such as organizing trade unions or bargain collectively.

Not just workers and managers benefit from SAI's work but also consumers and investors, to whom credible assurance for ethical purchasing decisions is offered.

Finally, it helps companies to demonstrate their dedication to decent work. Keeping in mind that the standard is regularly revised, it enables companies to face new and emergent social and human rights issues. Dealing with SAI's topics enhances the corporate reputation and eases the management of the supply change management. Additionally, it helps to improve employee recruitment, retention, and productivity.

Companies that are SA8000-certified meet most of the requirements of "The Foreign

Trade Association's Business Social Compliance Initiative (BSCI)." Therefore, they shall add the information that they are certified to the BSCI IT platform in order to avoid duplication.

Cross-References

- [Corporate Social Responsibility \(CSR\)](#)
- [SA8000 Standard](#)
- [Social Auditing](#)

References

- Hall, P. (1991). *The better world investment guide: One hundred companies whose policies you should know about before you invest your money*, San Francisco.
- Hollister, B., Will, R., & Marlin, A. T. (1994) *Shopping for a better world: The quick and easy guide to all your socially responsible shopping*, San Francisco.
- O'Brien, R. (1998). *The social investment community and its modes of communication*. <http://www.web.net/~robrien/papers/sri/sripaper.doc>. Accessed 4 May 2019.
- SAI. (2019). www.sa-intl.org. Accessed 4 May 2019.

Social Accounting

- [Sustainability Accounting](#)
- [Sustainability Report and Sustainability Reporting](#)

Social Activism

- [Shareholder and Stakeholder Activism](#)

Social and Civil Firms

- [Sustainability in Economy of Communion Enterprises](#)

Social and Environmental Accounting

- [Sustainability Accounting](#)

Social and Environmental Impact Assessment

- [Social Impact Assessment](#)

Social and Responsible Public Procurement

- [Public Procurement and CSR](#)

Social Auditing

- [Business Compliance Initiatives](#)

Social Banking

- [Ethical Banking](#)

Social Breakdown

- [Social Dumping \(CSR\)](#)

Social Business

- [Social Enterprise](#)

Social Business Venture

- [Social Enterprise](#)

Social Capital, Interpretation of

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Synonyms

[Human relationships](#); [Membership of social groups](#); [Networks](#); [Personnel capital](#); [Relational capital](#); [Shared capital](#)

Definitions and Description

Social capital is an approach that considers the actions carried out by policymakers aimed at finding efficient, but not necessarily economic, solutions to social problems (Portes 1998).

Social capital differs from human and economic capital mainly in its tangibility. While human capital is based on education, training, and experience (Leitão and Pereira 2022), which are transformed into competencies, skills, and knowledge that entrepreneurial individuals possess (Gianesini et al. 2018) and that are recognized in the form of educational achievements, economic capital is measured in monetary terms.

The most insightful approaches to interpreting social capital have been proposed by James Coleman, Pierre Bourdieu, and Robert Putnam. The latter author's approach is indebted to Coleman to some extent, while Bourdieu's concept differs significantly from both.

Bourdieu (1980) presented a seminal analysis of social capital, noting that this type of capital comprises the sum of current or potential resources associated with the possession of a network of institutionalized relationships (Bourdieu 1985). His approach to this concept is instrumental and focuses on the benefits that accrue to individuals through participation in a group and the intentional construction of sociability to create this resource. According to Bourdieu (1985), actors can use social capital to increase direct access to economic resources, including subsidized credit, investment tips, and protected markets. In addition, they can build their cultural capital through contacts with specialists or experts (i.e., embodied cultural capital); alternatively, they can associate with organizations that provide them with valuable credentials (i.e., institutionalized cultural capital).

A less central source of interpretation is found in Loury (1977, 1981), who argues that orthodox economic theories focus exclusively on individual human capital and make the level of competition in the marketplace dependent on educational attainment alone. The idea of legitimacy, which any individual can be legitimized by his or her abilities, contrasts with the evidence suggesting that no one is able to do so by ability alone.

Loury (1977, 1981) laid the foundation for the subsequent work of Coleman (1988), who outlined the importance of social capital in promoting human capital. Coleman (1988) defined social capital as a mixture of two crucial elements, namely, social structures and individual or corporate actors. Thus, the former facilitate social action, while the latter enable that social action by ensuring reciprocity and the enforcement of norms in the group. The motivations of both individuals and firms deserve further research efforts, as they form the core of social capital. The contribution coming from Coleman (1988) has the undeniable value of introducing and popularizing

the concept of social capital, highlighting its importance in the acquisition of human capital, and showing some of the mechanisms by which it comes about (Portes 1998).

The theoretical foundations contained in Coleman (1988) formed the basis for the formulation of social capital provided by Putnam (1993a). Following Putnam (1993a), social capital is a factor that facilitates interpersonal cooperation in cities, regions, and countries and can be used to combat many social disorders. In addition, Putnam (1993b) advocates that this type of capital includes all the features of social organizations (e.g., networks, norms, and trust), which facilitate action and cooperation for the common good. Putnam (2001) extends these characteristics to include the connections between individuals, social networks, and the norms of reciprocity and trust that result from interactions among them.

Another feature commonly used to describe the concept of social capital is the potential reduction in transaction costs that results from better coordination (Fukuyama 2001). In this regard, social capital expands networks and deepens their cohesion. Therefore, there is a positive relationship between social capital and outcomes expressed through civic engagement, development, and democratic participation.

Putnam (2001) goes beyond a mere relationship to a particular causality in which social capital is a determinant of civic participation and development. This has led to a great deal of effort by political and economic researchers devoted to the causally link leading social capital to every positive and advancing component of a sustainable social order.

The last words are dedicated to Becattini (2004), a prominent political economist who emphasizes the Marshallian sense of industrial concentration of productive activities and positions social capital as the true anchor of the ecosystemic relationships built by the entrepreneur and the networks of formal and informal institutions at the level of the territory and Marshallian industrial districts that contribute to the reduction of both switching and transaction costs. There is an opportunity to revisit these industrial districts and deepen

the role of social capital based on the connectivity of global networks of people and innovation activities focused on fostering new digital and sustainable ecosystems.

Summary

The interpretation of social capital is a major challenge, as is evident from the contributions of the maestros of the social capital theory discussed and presented here. Access to the conditions of social capital, the development of social capital, and the effectiveness of its application, both in activities in society, in the economy, and in the policy arena, are crucial steps to ensure a better interpretation of the increasing importance of this type of intangible asset. In this regard, the barely reconcilable roles of social structures and networks, as well as family and interpersonal relationships, deserve to be the subject of further in-depth multidisciplinary research and targeted policy action. In addition, the nature of the role that social capital plays, for example, as a facilitator or mediator with respect to the relationships between motivations and exchanges, including reciprocity, expectations, and norms of enforcement, on the part of participating groups (i.e., formal, and informal) deserves more attention from scholars, policymakers, entrepreneurs, and social innovators. In the Coleman's (1988) tradition, social capital is based on three main components, namely, owners, sources, and resources. The distinction between tangible and intangible capital and the exploration of cognitive social capital at the individual, institutional, or organizational level should be on the agenda of future research and policy. Positioning social capital as a facilitator of social action and collaboration for mutual benefit should be considered a priority to pursue. In this context, social capital has a key role to play in fostering mutual trust and social participation and thus in ensuring the quality of democracy. Moreover, social capital can help reduce transaction costs and provide the necessary link between digital and sustainable ecosystems that serve the common good and sustainable progress.

Cross-References

- [Five Capitals Framework \(Forum for the Future\)](#)
- [Social Capital, Measurement of](#)

References

- Becattini, G. (2004). *Industrial districts. A new approach to industrial change*. Cheltenham: Edward Elgar.
- Bourdieu, P. (1980). *Le sens pratique (The Practical Sense)*. Paris: Minuit.
- Bourdieu, P. (1985). The forms of social capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Westport: Greenwood.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120. <https://www.jstor.org/stable/2780243>.
- Fukuyama, F. (2001). Social capital, civil society and development. *Third World Quarterly*, 22, 7–20. <https://doi.org/10.1080/713701144>.
- Gianesini, G., Cubico, S., Favretto, G., & Leitão, J. (2018). Entrepreneurial competences: Comparing and contrasting models and taxonomies. In S. Cubico, G. Favretto, J. Leitão, & U. Cantner (Eds.), *Entrepreneurship and the industry life cycle. Studies on entrepreneurship, structural change and industrial dynamics*. Cham: Springer. https://doi.org/10.1007/978-3-319-89336-5_2.
- Leitão, J., & Pereira, D. (2022). Sustainable growth and exporting performance of new companies: What is the role of the founders' human capital and social capital? In J. Leitão & V. Ratten (Eds.), *Context-based entrepreneurship. Studies on entrepreneurship, structural change and industrial dynamics*. Cham: Springer. https://doi.org/10.1007/978-3-031-05307-8_3.
- Loury, G. (1977). A dynamic theory of racial income differences. In P. A. Wallace & A. LaMond (Eds.), *Women, minorities, and employment discrimination* (pp. 153–186). Lexington: Heath.
- Loury, G. (1981). Intergenerational transfers and the distribution of earnings. *Econometrica*, 49(4), 843–867. <https://doi.org/10.2307/1912506>.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24(1), 1–24. <https://doi.org/10.1146/annurev.soc.24.1.1>.
- Putnam, R. (1993a). The prosperous community: Social capital and public life. *American Prospect*, 13, 35–42.
- Putnam, R. (1993b). What makes democracy work? *National Civic Review*, 82, 101–107. <https://doi.org/10.1002/ncr.4100820204>.
- Putnam, R. (2001). Social capital: Measurement and consequences. *Canadian Journal of Policy Research*, 2, 41–51.

Social Capital, Measurement of

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Synonyms

Family relationships; Relational capital; Shared capital

Definition

The historical evolution of the social capital (SC) conceptualization is rooted in the sociological field, appearing in the second half of the twentieth century.

The approaches developed on the SC concept are diverse but converge on its multidimensionality and a general meaning: individuals and groups gain access to resources, benefits, and opportunities through their human sociability. Accordingly, SC comprises several elements, such as social relations, social support, or social cohesion, that are not interchangeable with the whole term. Hence, SC in organizations deals with intangible assets and does not exist and function except in a specific context (Bourdieu and Wacquant 1992).

Recently, the interest in SC measurement has gained momentum in the management and accounting literature in relation to sustainability reporting initiatives and the UN 2030 Agenda. By the way, there are no universally accepted standards for measuring SC, since the measurement approaches depend on the diverse SC conceptualization, the context of investigation, and the social

setting. To date, the present SC disclosure in organizations mainly deals with narrative descriptions.

Origins and Main Contents

Bourdieu, Coleman, and Putnam authored the most shared conceptualizations of SC.

Bourdieu (1980) defines the SC as the potential and concrete resources an individual derives from belonging to a stable network of social connections. Coleman (1988) introduces the economist's principle of rational action and defines the SC as a collective asset that facilitates some actions to fulfill individuals' interests, but the wider group benefits from the outcome. As for Putnam (1993, 2000), SC is a collective feature composed of trust, shared norms, and civic sense, realizing action and cooperation for mutual benefit. The latter definition corresponds to the one most applied by global institutions in highlighting the importance of SC in creating value for individuals, institutions, profit and not-for-profit organizations, and communities (e.g., Lin 2001).

However, SC can also have adverse functions, effects, and consequences. For instance, it can lead to the dissemination of incorrect information and the adoption of unhealthy lifestyles or illegal behaviors (e.g., Banfield 1958; Canestrini 2016).

Recently, SC has received interest in sustainable management and accounting literature. The SC is a heuristic concept for sustainable management and accounting field because, among the others, it allows the understanding of power and inequality distribution and how people access resources, benefits, and opportunities as well as economic capital, increase their cultural capital, develop human capital, or acquire influence without employing economic resources.

Adding to the previous, in the scope of entrepreneurship literature, following Aldrich and Zimmer (1986), the founders of new ventures use their SC including their own personal networks from which they will be able to select the needed workers. This option based on SC is justified by Aldrich and Langton (1997), who advocate that the founders of new ventures prefer employees with whom they can share

responsibilities and previous co-working experiences in the early stages of the firm's development.

Previous research has claimed the crucial contribution of SC to individuals, organizations, and communities. Among the others, Ostrom (1999) argues that SC helps achieve more security and peace and lower transaction costs through helpfulness and solidarity, with no increase in gross domestic product (GDP). Hence, sustainability reporting initiatives of international institutions such as those of the International Integrated Reporting Council (IIRC), the World Business Council for Sustainable Development (WBCSD), and the Global Reporting Initiative (GRI) have flourished providing attempts of SC measurements. Indeed, organizations disclose the SC in their reports, along with other forms of capital (e.g., IIRC 2021).

In terms of entrepreneurial endeavors, Leitão and Pereira (2022), when assessing the sustainable growth of start-ups, demonstrate that start-up founders when deciding to add teammates to the new venture look for people highly skilled, trained in the same target industry, using their SC based on connections established in previous co-working experiences.

Furthermore, within the UN 2030 Agenda, SC intervenes on two levels (e.g., Siboni and Rignanese 2022). At the general level, it embodies collective action to achieve sustainable development. Mutual trust and solidarity performed by people living and working in a society develops cooperation and allows that social context to function effectively, while, at the particular level, it represents the key factor in pursuing Goal No. 17 (Partnership for the Goals).

Proposals for Measurement

There are no widely accepted, standard, or comparable approaches to measuring SC. This is mainly due to the abstraction of the concept. Hence, it cannot be measured directly but requires an operationalization process. Such a process follows the theoretical underpinnings adopted to interpret the SC. Still, an agreed definition of the concept is lacking in the literature. Furthermore,

the SC changes from the context of investigation as it depends on the social setting and varies in time and place.

The SC that institutions, as well as profit and nonprofit organizations, disclose according to the criteria and guidelines contained in the reporting frameworks is a compound of determinants. Usually, it considers elements such as (1) social networks within the organization and relationships between stakeholder groups and the community; (2) shared rules, behaviors, and values; (3) trust, reciprocity, and commitment developed; and (4) reputation and legitimacy to operate in a given social context. Consequently, SC consists of intangible assets, information, and knowledge that increase individual and collective well-being and protect benefits for external stakeholders. SC academic disclosure found in the literature is often narrative and varies according to the context and approach to the SC (Adams 2020).

SC can be focused from different levels of analysis, distinguishing a heterogeneity of dimensions and subtypes. Existing attempts to measure SC are based on a specific theoretical understanding of the concept and a particular level of analysis. Accordingly, such attempts have used proxies or indicators and identified and measured the determinants or manifestations from which SC can be inferred.

Some measurement solutions have focused on the social level at which the interaction occurs, which refers to different types of SC network ties. Hence, it is possible to consider the SC developed among individuals within homogeneous groups (bonding SC), among people belonging to different social groups crossing sociodemographic and organizational lines (bridging SC), and among people who have vertical connections to formal institutions and political or economic leadership (linking SC).

Another approach to SC articulates the configuration and pattern of connections into structural, cognitive, and relational dimensions of SC (e.g., Nahapiet and Ghoshal 1998; Subramaniam et al. 2013):

- The structural dimension considers the network of people known to an individual from which she/he can access benefits. This network

is characterized by elements such as the number of bonds a person has, closeness or social distance between people, frequency of contact, and hierarchy between relations. The study of structural SC applies a network approach to tangible relationships within a specific social context.

- The relational dimension considers the nature and quality of the relationships. A relationship is based on interactions between individuals over time through which interpersonal trust, obligations and expectations, respect, and identification with other individuals are established. It is tangible by detecting the flow of resources reached through the interaction in social relationships articulated by nature and quality.
- The cognitive dimension is the set of shared values and norms that define ways of acting appropriately in a social context, predisposing people to mutually beneficial collective action referring to shared objectives. Therefore, it relates to cognitive schemes, language codes, and systems of meaning that provide the basis for communication and create narratives to interpret a shared reality. This dimension of SC manifests itself in using specific languages and codes.

Moreover, depending on the level of analysis, SC development can be focused at the micro (individuals) or meso (group or organization) or macro (community or national context) level. Furthermore, issues related to actors developing SC, substance/form that SC takes, as well as outputs, and outcomes it generates are other levels of analysis for SC understanding.

Often, the empirical research and practical applications of the concept intersect the various types, dimensions, and analysis levels described above, applying multi-method and multilevel strategies (e.g., Van Deth 2003). Moreover, they include potential indicators for one or more subtypes of SC, such as the structural dimension to detect SC at the meso level; the observation of bonding, bridging, and linking relationships within the relational dimension; and the cognitive dimension involved at the macro level. In

addition, in literature, the SC has been variously described and measured starting both from the elements that indicate its source or determinants and from those that represent outcomes, sometimes with a mixture of these components.

Examples of Measurement

Within the rich tradition of SC measurements, there are some precedents suitable for sustainable management. Each example operationalizes a precise definition of the concept and underpins one or more types of SC (bonding, bridging, and linking SC), dimensions (structural, relational, and cognitive), and level of analysis (micro, meso, and macro). The following are worth mentioning, from the tools measuring the SC worldwide to those pertaining to organizations.

The most recent tool with the broadest scope is the World Social Capital Monitor, WSCM (<https://sustainabledevelopment.un.org/partnership/?p=11706>), created by the UN Sustainable Development Group and operative since 2016. The WSCM measures SC within the UN SDG partnerships examining the social goods as an interdisciplinary nonmaterial asset for SDG achievement. It consists of an online self-completed questionnaire containing eight questions concerning climate, trust, measures to finance public goods through austerity and taxes, local investments, availability, friendliness, and hospitality. Therefore, the WSCM elaborates some indicators applicable to developed countries as well as to poor rural areas, among the illiterate and in conflict regions, creating timelines by city, region, and country to alert, make forecasts and benchmarks, and allow comparisons between 141 countries. The WSCM's ultimate purpose is to encourage SC awareness and include SC in other indexes, entering among the first non-material indicators collected from citizens' inputs.

The WSCM was informed based on other experiences, such as the World Bank Integrated Questionnaire for the Measurement of Social Capital – SC-IQ (Grootaert et al. 2004). The World Bank developed the SC-IQ, grounding it on the Social Capital Initiative created in 2002

through 12 studies in Africa, Asia, and Latin America (Grootaert and van Bastalaer 2002a, b), and applied it in Albania and Nigeria. The SC-IQ aims to demonstrate the SC impact on development outcomes at the national level, especially in developing countries. The SC-IQ defines the SC as the glue that holds societies through internal social and cultural coherence, norms, and values that govern interactions among people and institutions. It addresses six dimensions of SC: groups and networks, trust and solidarity, collective action and cooperation, information and communication, social cohesion and inclusion, and empowerment and political action. It generates quantitative data through a questionnaire and individual interviews, allowing in-context adjustments and modifications to the survey instrument.

The Social Capital Assessment Tool (SOCAT) is another tool offered by the World Bank (Grootaert and Van Bastelaer 2002a) for SC measurement as the previous one, but focusing on communities and organizations. The SOCAT integrates quantitative and qualitative data on SC surveyed by focus groups and a community questionnaire on community assets and governance, collective action, the density of local organizations, and the relationships among organizations and between organizations and the community, developing around 100 correlation items.

With specific reference to organizations, the Network for Business Sustainability, NBS (www.nbs.net), developed a tool in 2014 for decision-making and reporting. It defines SC as relationships inside and outside an organization that allows access to resources, knowledge, or information and holds internal and external forms. This approach articulates the SC into three dimensions – social networks, trust and reciprocity, and shared norms and values – to which it associates specific measures and tools. Specifically, organizations survey the different SC characteristics according to these dimensions through questionnaires, focus groups, and social network analysis. Existing instruments for surveys such as the World Bank's SC-IQ mentioned above can be adapted for the purpose, as did two organizations

in South Africa (a platinum industry and a freight transport company) for SC understanding and management.

Finally, the SC can be applied to develop research and measurements within the management and accounting field by crossing it with other constructs, such as the Millar's work (2021), which combines concepts such as cultural capital, SC, and habitus to explore financialization, inequality, and life in the fund management sector.

Summary

There are many definitions of the concept of SC. A high level of consistency in sustainable management and accounting literature agreed in considering SC as the resources, knowledge, and information that an individual, group of people, or an organization accesses through social networks within and between the organizations, community, and institutions.

The approaches developed to measure SC follow the conceptualization adopted, the type of SC (bonding, bridging, and linking SC), the dimensions of SC (structural, relational, and cognitive), and the level of analysis (micro, meso, and macro) considered. Furthermore, the SC measurement varies depending on whether the study focuses on the form it takes and what kind of outcomes it generates. Several examples of applications are provided.

Cross-References

- ▶ [Five Capitals Framework \(Forum for the Future\)](#)
- ▶ [Global Reporting Initiative](#)
- ▶ [Human Capital Management](#)
- ▶ [Inclusion](#)
- ▶ [Integrated Reporting](#)
- ▶ [Integrated Reporting for Sustainability](#)
- ▶ [Management Accounting and Sustainability](#)
- ▶ [Sanctions of Social Capital](#)
- ▶ [Social Capital, Interpretation of](#)
- ▶ [Sustainable Development Goals \(SDGs\)](#)
- ▶ [Sustainability Reporting](#)

- United Nations Sustainable Development Goals 2030, The
- World Business Council for Sustainable Development

References

- Adams, C. A. (2020). Sustainability reporting and value creation. *Social and Environmental Accountability Journal*, 40(3), 191–197. <https://doi.org/10.1080/0969160X.2020.1837643>.
- Aldrich, H., & Langton, N. (1997). Human resource management practices and organizational life cycles. In P. D. Reynolds, W. D. Bygrave, N. M. Carter, P. Davidsson, W. B. Gartner, C. M. Mason, & P. P. McDougall (Eds.), *Frontiers of entrepreneurship research* (pp. 349–357). Wellesley: Babson College Center for Entrepreneurship.
- Aldrich, H., & Zimmer, C. (1986). Entrepreneurship through Social Networks. In D. Sexton, & R. Smilor (Eds.), *The Art and Science of Entrepreneurship* (pp. 3–23). Cambridge, MA: Ballinger Publishing Company.
- Banfield, E. G. (1958). *The moral basis of a backward society*. New York: Free Press.
- Bourdieu, P. (1980). The forms of social capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Westport: Greenwood.
- Bourdieu, P., & Wacquant, L. (1992). *An invitation to reflexive sociology*. Cambridge: Polity Press.
- Canestrini, P. (2016). Health and wellbeing. In L. Lombi & M. Marzulli (Eds.), *Theorising sociology in the digital society* (pp. 92–103). Milano: FrancoAngeli.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Grootaert, C., & van Bastelaer, T. (Eds.). (2002a). *The role of social capital in development: An empirical assessment*. New York: Cambridge University Press.
- Grootaert, C., & van Bastelaer, T. (Eds.). (2002b). *Understanding and measuring social capital: A multi-disciplinary tool for practitioners*. Washington, DC: World Bank.
- Grootaert, C., Narayan, D., Nyhan, J. V., & Woolcock, M. (2004). *Measuring social capital: An integrated questionnaire*. World Bank Working Paper No. 18. Washington, DC: World Bank.
- IIRC – International Integrated Reporting Council. (2021). *International framework*. London. The International Financial Reporting Standards Foundation. <https://www.integratedreporting.org/>
- Leitão, J., Pereira, D. (2022). Sustainable Growth and Exporting Performance of New Companies: What Is the Role of the Founders' Human Capital and Social Capital?. In: Leitão, J., Ratten, V. (eds) Context-based Entrepreneurship. Studies on Entrepreneurship, Structural Change and Industrial Dynamics. Springer, Cham. https://doi.org/10.1007/978-3-031-05307-8_3
- Lin, N. (2001). Building a network theory of social capital. In N. Lin, K. S. Cook, & R. S. Burt (Eds.), *Social capital: Theory and research* (pp. 3–30). New Brunswick: Transaction Publishers.
- Millar, J. (2021). The gilded path: Capital, habitus and illusio in the fund management field. *Accounting, Auditing & Accountability Journal*, 34(8), 1906–1931. <https://doi.org/10.1108/AAAJ-12-2019-4320>.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Ostrom, E. (1999). Social capital – A fad or a fundamental concept? In P. Dasgupta & I. Serageldin (Eds.), *Social capital: A multifaceted perspective* (pp. 172–214). Washington, DC: World Bank.
- Putnam, R. D. (1993). The prosperous community: Social capital and public life. *The American Prospect*, 13, 25–42.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon Schuster.
- Siboni, B., & Rignanese, P. (2022, forthcoming). Analysis of company practices to promote sustainability and good relations in the workplace. In M. Fantini, S. Farolfi, F. Lazzari & L. Mazzara (Eds.), *Buon Vivere (Good living) and relationship economy*. Bologna: il Mulino.
- Subramaniam, N., Stewart, J., Ng, C., & Shulman, A. (2013). Understanding corporate governance in the Australian public sector A social capital approach. *Accounting, Auditing & Accountability Journal*, 26(6), 946–977. <https://doi.org/10.1108/AAAJ-Jan-2012-00929>.
- Van Deth, J. W. (2003). Measuring social capital: Orthodoxies and continuing controversies. *International Journal for Social Research Methodology*, 6(1), 79–92. <https://doi.org/10.1080/13645570210156040>.

Social Care

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Synonyms

Community services; Government-provided services; Social service; Social welfare; Social work; Support services

Definition

Social care relates to the care by public or private companies for people in society who need special help such as help with washing or eating to live comfortably. In general, the term social care or its frequently used synonyms social work or social welfare also refers to all kinds of personal care and other practical assistance that contributes to improving the quality of life, subjective well-being of individuals, groups, and communities in need or at risk of being in need. Usually, these groups include children, young and older adults, individuals with mental or physical disabilities, individuals suffering from alcohol and substance abuse, and people of ethnic and racial minorities, among others. Social care is intended to promote independence, self-development, help with daily living activities, and personal care. Thus, the concept of social care is broad and provided by both formally (public, private agencies) and informally (family, kin, friends). Usually, formally funded services are based on the assessments done by a social worker and other professionals involved in the care plan. Regardless of how each agency funds and provides its services, gaps and barriers exist in the delivery of services. Research has shown that gaps and barriers in service delivery can be improved through integration of health and personalized social care. The following sections summarize the need, integration, and personalization of social care.

Need

Need for social care is diverse and arises due to illness, disability, social disadvantages, injustice, and vulnerability to the negative environments, among others (WHO 2018). Also, individuals in certain age groups such as older adults and children are vulnerable to illness and negative environments than others. Some of these negative environments to which older adults and children are vulnerable include homelessness, unhealthy living conditions, susceptibility to communicable and infectious diseases, abusive treatments,

etc., among others. Social care need for *older adults, young adults and other individuals, children, and families and care givers* are described below.

Older Adults: Worldwide, 125 million people are aged 80 years or older (WHO 2018). The pace of population aging is increasing and it is estimated that by 2050, one in six people in the world will be over the age of 65, up from one in 11 in 2019 (United Nations 2019). Although, older adults bring opportunities and contribute to their families and society as a whole, the extent of their opportunities and contribution depends on their health. Older adult's health is a variable and is influenced mostly by their physical and socioeconomic environments and their genetic inheritance. Therefore, an older individual from a disadvantaged background is more likely to experience poor health and be in need of health and social care services. There is little evidence that older adults today are experiencing better health than their parents (WHO 2017a). In fact, older adults with multiple health problems and frailty are growing (Chi et al. 2011; Smith et al. 2012), requiring the most extensive support including personal care such as washing, feeding, and so forth in addition to the supervision of their medical conditions. Thus, care and services required by older individuals are diverse in terms of their health, living arrangements, income, and other resources that determine the extent of social care they need. Most of the developed countries have their own systems to provide some kind of long-term care services to the older adults; however, the system of providing long-term care services to older adults may not exist at all in some developing countries. In this context, it is worth mentioning that the number of older people needing support for activities of daily living in developing countries is estimated to quadruple by 2050. This situation implies that in the twenty-first century all countries will have to build an integrated system of long-term care either from the scratch or by remodeling the existing one to a broad-based and whole system approach that maximizes older people's functional ability and supports their autonomy and dignity (WHO 2017a).

Young Adults and Other Individuals: The social care need for adults below 65 years is also increasing. Research has shown that social care costs will rise significantly not only because people are living longer, but also because many young individuals are developing chronic diseases such as diabetes, pain, osteoarthritis sensory impairments, and disabilities arising from chronic diseases, accidents, vision loss, and amputation, among others (Marengoni et al. 2012; WHO 2017a). Therefore, based on the severity of illness and disability among these people, an array of care and support services is required to maintain their autonomy and dignity and ease other activities of their daily living. In addition to young adults, other individuals or groups who need care and support to improve their quality of lives are homeless people, people with mental health problems, learning disabilities, alcoholism, and substance abuse. Apart from self-harm, mental illness, alcoholism, and substance abuse contribute to domestic violence, abuse, and may cause serious harm to people and communities as a whole. Therefore, to prevent violence and harm, these individuals may need specialized and coordinated care provided by health care or other agencies either at home or at hospital or correction and rehabilitation facilities, among others.

Children: Another vulnerable group requiring social care is children. The physical and mental health of a child is closely related to the physical and mental health of the caregiver and surrounding environment. Therefore, a healthy environment at home and around helps a newborn grow into a healthy child. On the contrary, an unhealthy environment at home and around negatively affects the overall growth and development of a newborn into a healthy child. Also, children are more vulnerable than adults to environmental risks such as unhygienic living condition, lack of safe drinking water, etc. Unlike adults, they have little or no control over their environment, may be unaware of the environmental risks and unable to make choices to protect their health and well-being (WHO 2017b). In 2015, 26% death of 5.9 million children below the age of 5 years could have been prevented by addressing the

environmental risks (WHO 2017b). Further, children are also vulnerable to homelessness, economic difficulties, problems with substance abuse, abusive home environment, disabilities and illness, etc., which decrease their quality of lives. Therefore, to promote the overall welfare and improve the quality of life of vulnerable children, a wide range of social care services are needed either within their own home environment or in other care facilities funded by public or private agencies. Some examples of such services to safeguard and promote the welfare of vulnerable children are assessment and care planning for children at risk of significant harm, provision for safe housing, protection from abusive behavior (both physical and mental), fostering and adoption services, and services for children with severe disabilities and significant illness, etc.

Families and Care Givers: Historically, women – wives, daughters, and daughters-in-law – have always been the informal care givers to children, older adults, and other individuals in family who need special care and assistance. However, changes in the family structure and promotion of gender equalities have necessitated additional social care for families and care givers. For example, most of today's families are nuclear or single family in structure, meaning that there is less number of helping hands than found in a conjugated or joined family. Further, due to the promotion of gender equality, majority of today's women have entered the work force, requiring them to play multiple roles because of which they have less time to provide additional care and support required by some members of their family (Cantor 1989). In addition, single-parent families are increasing with projected labor shortage in the twenty-first century. This situation implies that there is an increased need for surrogate care givers in such families in order to reduce the caregiver's stress.

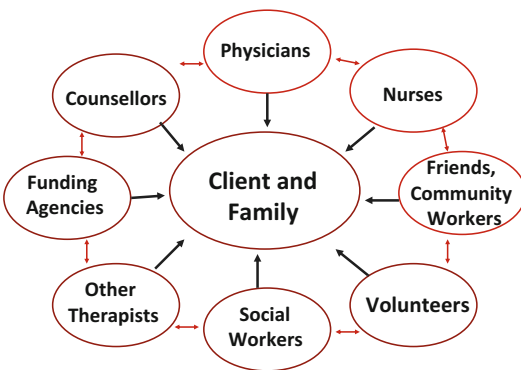
In the context of the aforementioned needs, research has shown that social and health care need to be integrated and personalized to achieve its desired outcome (Amelung et al. 2014; Malbon et al. 2019). The following sections briefly present the integration and personalization of social care.

Integration

Sir Norman Peter Lamb, former MP of the United Kingdom, once said that people do not want health care or social care; they just want the best care. To provide the best care, social care needs to be integrated with health care because no single part of the system can deliver effectively in isolation. For example, lack of social care in times of poverty, illness, abuse, and homelessness is closely associated with illness and poor health outcomes. Poor health outcomes may intensify disability, increase immobility, and create isolation, leading to depression. Depression can cause serious harm including suicide and other self-harm such as substance abuse, etc. Therefore, integration of social care into health care is crucial because social and health care needs are interrelated and one need may affect the other. Successful integration of social care into health care requires coordination of care provided by a multidisciplinary and well-functioning team, who has different skills and work collaboratively to provide optimal care and achieve a common goal. In integrated care, client and family remain as the centerpiece whose needs are met collaboratively. The other members of the team with specialized expertise include social workers, physicians, counselors and nurses, among others. Social worker is one of the key members of the team who assesses the needs and addresses the practical, social, and emotional issues that affect the health and well-being of the client and family,

manages risk, supports independence, and coordinates care to keep people at home in collaboration with the other members of the team. Figure 1 illustrates the multidisciplinary model of integrated social care. Thus, the ability of the care team and various funding agencies to work together is the key to the success of integration (Amelung et al. 2014). Further, proper coordination of funds from the public, private, or both, along with the client's own funds and assets, is necessary to meet the cost of the care. Regardless of differences in policies, funding, infrastructure, and provision, many developed countries have adopted the whole system approaches to integrated care. Canada and the USA have successfully implemented the whole system approaches to integrated care model to serve the elderly and others in need. Some popular integrated care model in the North.

America are Program of All Inclusive Care for the Elderly (PACE) and Social Health Maintenance Organizations (Social HMOs) in the USA, *Système de soins Intégrés pour Personnes Âgées* (SIPA), Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA) and Comprehensive Home Option of Integrated Care for the Elderly (CHOICE) in Canada. The success of PACE, Social HMOs, SIPA, PRISMA, and CHOICE demonstrates important information about what works and under what circumstances in whole system approach to integrated care services (Kodner 2009). These North American examples of integrated care model suggest that the process of sustainable integration requires collective efforts of the care team and different agencies involved, so that the whole system approach to working with people, their families, and communities makes the best use of available public resources and people's own strengths and assets to bring the desirable outcome.



Social Care, Fig. 1 Multidisciplinary model of integrated social care. (Source: The author)

Personalization

Personalization is the process of making something suitable for the needs of a particular person. Therefore, personalization of social care means giving people more choices and control over

their lives in all settings of social care, whether they are provided by the formal agencies, or funded by themselves. It also recognizes the user as a person with strengths and preferences and it starts with the user instead of the service (SCIE 2012). In other words, outcomes of the personalized care must be relevant to the client and their caregivers even though they may be different from the policies and practices of the organizations. It is generally recognized that personalization of social care brings its desirable outcome. However, issues such as inequality in exercising choice and control while providing personalized care may exist. For example, fear for growing social and health inequalities has been reported in the Australian National Disability Insurance Scheme (NDIS) – a social care scheme based on an international trend toward personalization of social care. Thus, personalization of social care is a complex process and requires attention when designing policy delivery system for personalized schemes to preserve social and health equity (Malbon et al. 2019).

Summary

Need for social care will continue to rise with the rise in elderly population and vulnerable groups in the communities. Decrease in family capacity to care for the needy ones at home arising from changes in the family structure (single-family) and women entering the work force have necessitated new response from the social care, which is also integrated into health care. It is expected that in the coming years, all countries will either need to build a broad-based and integrated social care systems, or reform the existing ones making it broad-based and integrated to meet the diverse and increased need of people, families, and communities.

Cross-References

- Occupational Safety and Health Administration
- Social Acceptance

- Social Business
- Social Risk
- Socially Responsible Investment
- Workplace Health Promotion

References

- Amelung, V. E., Reichert, A., Urbanski, D., Matejevic, L., O’riordan, E., Blatt, E., et al. (2014). *Integrating health and social care a global perspective of experience, best practices and the way forward*. INAV – Institute for Applied Health Services Research.
- Cantor, M. H. (1989). Social care: Family and community support systems. *The Annals of the American Academy of Political and Social Science*, 503, 99–112.
- Chi, M., Lee, C., & Wu, S. (2011). Multiple morbidity combinations impact on medical expenditures among older adults. *Archives of Gerontology and Geriatrics*, 52, 210–214.
- Kodner, D. (2009). Integrated service model: An exploration of North American models and lessons. In J. Glasby & H. Dickinson (Eds.), *International perspectives on health and social care: Partnership working in action* (pp. 68–78). Oxford: Wiley-Blackwell.
- Malbon, E., Carey, G., & Meltzer, A. (2019). Personalisation schemes in social care: Are they growing social and health inequalities? *BMC Public Health*, 19, 805.
- Marengoni, A., Angleman, S., Melis, R., Mangialasche, F., Karp, A., Garmen, A., Meinow, B., & Fratiglioni, L. (2012). Aging with multimorbidity: A systematic review of the literature. *Ageing Research Reviews*, 10(4), 430–439.
- SCIE (Social Care Institute for Excellence). (2012). Personalisation: A rough guide. SCIE Guide 47. <https://www.scie.org.uk/personalisation/introduction/rough-guide>. Accessed 12 Jan 2020.
- Smith, S. M., Soubhi, H., Fortin, M., Hudon, C., & O’Dowd, T. (2012). Interventions for improving outcomes in patients with multimorbidity in primary care and community settings (Review). *Cochrane Database of Systematic Reviews*, 4, 1–71.
- United Nations. (2019). World population ageing 2019 highlight. <https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf>. Accessed 21 Jan 2019.
- WHO. (2017a). 10 facts on aging and health. <https://www.who.int/features/factfiles/ageing/en>. Accessed 1 Feb 2020.
- WHO. (2017b). Inheriting a sustainable World? Atlas on children’s health and environment. ISBN 978-92-4-151177-3.
- WHO. (2018). Aging and health. <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>. Accessed 2 Feb 2020.

Social Case of CSR

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Synonyms

Best practice; Early adopter

Definition

The identification of a “Social case” represents one of the main strategies used by policy makers, NGOs, and organizations to favor the development of socially responsible practices. During the last years, many organizations have been considered as best practices due to their attempts to integrate within their traditional practices ethical and sustainable principles. In particular, several authors started to discuss about the need to rethink global economy through the adoption of new paradigms based on social cases’ previous experience. Furthermore, the topic regards also NGOs and Governments, which represents some of the main sustainable development’s enablers identified by academics. In fact, several studies underlined the pivotal role covered by these institutions within the decision-making process related to the implementation of new forms of regulations about CSR.

The Need of Social Cases of CSR

During the last years, the international markets have been interested by several changes that have revised the traditional paradigms. This evidence was driven by several factors such as the rise of new form of nonfinancial regulations, the external pressures made by stakeholders, and the organizations’ need to maintain, gain, and repair their competitive advantage (Deegan 2019; Lozano 2015). In

this sense, contrary to the past, the current scenario is characterized by a wide number of organizations, which based their business models on sustainable and ethical principles (Geissdoerfer et al. 2017; Saxton et al. 2020). Furthermore, the disclosure of nonfinancial information does not represent a rare phenomenon due to the proliferation of reports at the international level (Dumay et al. 2015).

However, the implementation of sustainable and ethical practices by organizations requires a high degree of orientation toward these practices due to the existence of several barriers. In particular, a transition from linear to sustainable paradigms requires specific skills that mitigate the cultural, technical, and economic barriers that usually characterize these practices (Hahn and Kühnen 2013). In this sense, socially responsible strategies require an ex ante evaluation of the organizations due to the need to align corporate communication and behaviors (Schoeneborn et al. 2020).

According to this evidence, social cases’ benchmarking represents one of the main strategies used by organizations to develop their strategies. A clear example of this phenomenon is represented by the isomorphism that has characterized the quality of the nonfinancial reports prepared by the European PIEs after the transposition of the Directive 2014/95/EU. Furthermore, another example is represented by the positive correlation related to the M&A of a nonsocially responsible organizations by a Group with prior experience in CSR. In addition, a growing number of institutions started to assign awards in order to certify the sustainable behaviors of certain organizations. Finally, the financial markets reward organizations through an increase of the market value in the presence of CSR’s strategies.

However, the identification of a social case represents a complex activity due to the risks of unethical behaviors such as greenwashing, impression management, and SDG-washing (OECD 2017; Pizzi et al. 2021). In this sense, an in-depth analysis of the social case cannot exclude these risks as evidenced by the large number of

corporate scandals that have interested leading firms during the last years (Diouf and Boiral 2017; Siano et al. 2017).

Conclusion

The recent past was characterized by the rapid growth of socially responsible organizations. This paradigm shift favors the achievement of more sustainable ecosystems. However, despite the positive externalities related to the trend, the road ahead a more sustainable Planet requires further initiatives in order to engage with nonsocially oriented organizations. According to this evidence, early adopters will sustain these processes through their activities. In fact, as evidenced by some of the main policies developed by European Member States, socially responsible organizations could cover a pivotal role through their activities. In this sense, the contribution of academics will be relevant in order to share the lesson learned from the social cases within the international context.

Cross-References

► Benchmarking

References

- Deegan, C. M. (2019). Legitimacy theory: Despite its enduring popularity and contribution, time is right for a necessary makeover. *Accounting, Auditing and Accountability Journal*, 32(8), 2307–2329. Emerald Group Publishing Ltd.
- Diouf, D., & Boiral, O. (2017). The quality of sustainability reports and impression management: A stakeholder perspective. *Accounting, Auditing and Accountability Journal*, 30(3), 643–667. Emerald Group Publishing Ltd.
- Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy: Blending organisational and stakeholder concerns through non-financial information disclosures. *Journal of Accounting and Organizational Change*, 11(1), 2–23.
- Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The circular economy – A new sustainability paradigm? *Journal of Cleaner Production*. Elsevier Ltd.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5–21. Elsevier Ltd.
- Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1), 32–44. Wiley.
- OECD. (2017). Ever heard of SDG washing? The urgency of SDG Due Diligence | Development Matters. Available at <https://oecd-development-matters.org/2017/09/25/ever-heard-of-sdg-washing-the-urgency-of-sdg-due-diligence/>. Accessed 30 Dec 2019.
- Pizzi, S., Rosati, F., & Venturelli, A. (2021). Investigating the determinants of SDG reporting: An exploratory study based on the SDG Reporting Score. *Business Strategy and the Environment*. 30(1), 404–421
- Saxton, G. D., Ren, C., & Guo, C. (2020). Responding to diffused stakeholders on social media: Connective power and firm reactions to CSR-related Twitter messages. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-020-04472-x>.
- Schoeneborn, D., Morsing, M., & Crane, A. (2020). Formative perspectives on the relation between CSR communication and CSR practices: Pathways for walking, talking, and T(w)alking. *Business and Society*, 59(1), 5–33. SAGE Publications Ltd.
- Siano, A., Vollero, A., Conte, F., & Amabile, S. (2017). ‘More than words’: Expanding the taxonomy of green-washing after the Volkswagen scandal. *Journal of Business Research*, 71, 27–37. Elsevier Inc.

Social Cohesion

► Hunger and Poverty

Social Commitment

► Social Obligations (CSR)

Social Concerns

► Sustainability of Boards

Social Contract

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Synonyms

General will

Definition

Social contract is a political philosophy and theory of how governments justify the existence of the state and the exercise of government power. It is based on an imaginary state in which humans living in nature decide to organize themselves in a manner which would be recognized as the modern state – i.e., surrendering to a non-clan-based authority or to an authority imposed by violent conquest. Social contract theory further assumes that there are “natural rights,” rights which are an inherent part of human nature, which can be traded and surrendered. In its simplest form, a social contract is an agreement between people to surrender these natural rights by way of agreement to create a government that would improve their well-being by limiting violent conflict for access to and control over resources.

As a theory arising in the seventeenth century, the era of the Enlightenment, Europeans were setting the philosophical foundations for challenging monarchies, encountering peoples in other parts of the world as never and before, and there was a growing dissatisfaction with prior explanations and justifications for the status quo, particularly with religious and sanguinal explanations for the organization of governance. Social contract was an approach that provided a procedure and rationale for the organization of government, with an ultimate goal to demonstrate that social rules can be generated by rational agreement. Three well-known approaches, those of

Hobbes, Locke, and Rousseau, have provided the groundwork for subsequent refinement.

Introduction

Although the idea gained widespread interest and acceptance in the seventeenth century, it finds its roots in the ideas of classical antiquity. In Plato’s *Republic*, this agreement is described as “justice.” It is described as what transpires when parties have both inflicted and suffered injustice and come to an agreed resolution. As put in the dialogue: “[people] think that they had better agree among themselves to have neither; hence there arise laws and mutual covenants; and that which is ordained by law is termed by them lawful and just” (Book II, trans Jowett). Although Plato’s dialogue concerns the origins and nature of justice, the core idea of the social contract is evident.

Social Contract of the Enlightenment

In the era of the Enlightenment, the social contract theorists began with an idea about people in a state of nature (Sheehy 2004). The question they aimed to answer was how could people coexist in a world in the absence of a governing authority. Or, put in the positive, how was it that people came to organize themselves into a non clan-based society? There are three main Enlightenment era philosophers whose ideas came to be foundations for the debate, thinking, and actions which were to follow. These thinkers differed in their models of human nature, the nature of the grant of rights and the role expected of government.

Thomas Hobbes (1588–1679), writing in the period of the English Civil War (1642–1651), took as his model of human nature a more pessimistic model. He argued that since people are fundamentally selfish, they will struggle violently to take care of their own needs and interests without regard to others. In Hobbes words, life would be “war of all against all,” something he witnessed

in the violence around him. As a result, in his famous summary, Hobbes stated that human life would be “solitary, poor, nasty, brutish and short” (Leviathan, i. xiii. 9).

Hobbes believed that no single person in this natural state was sufficiently strong to be free of fear of others and further that no person was so weak as not to pose a threat. His solution, therefore, was that people renounce some rights in order to create a state, a “commonwealth,” that would be sufficiently powerful to protect the rights of every person. Hobbes called that governance institution “Leviathan” (Dietz 1990). In this context, Hobbes argued that citizens granted absolute and nonrescindable rights to an absolute sovereign.

The second major social contract thinker, John Locke (1632–1704), in contrast to Hobbes, took a different starting point for his argument. In Locke’s view, the state of nature, although pre-political, was not premoral. The law of nature, which Locke argued, was in his view the foundation of all morality, the invention of the deity, and bestowed upon humanity. In the state of nature, he believed, people were free to pursue their own interests and execute their plans, without interference. Locke argued that by virtue of the law of nature people were able to live in a relatively peaceful society (Yolton 1958).

In Locke’s view, people in their natural state would be morally bound by the laws of nature not to harm another in terms of life or property. In his words: “all be equal and independent, no one ought to harm another in his life, health, liberty or possessions” (Locke 1690 Second Treatise, Ch2:8). Locke realized, however, that people would not be protected by simply possessing rights. Without a government protecting the populace at large, some people who would try to harm or enslave others, and the general populace would live in fear. Following this logic, Locke argued that people would agree to form a state only if it would provide a “neutral judge” acting to protect the life, liberty, and property of those who lived in it (Gaba 2007).

A fundamental element of Locke’s social contract rested on his initial position that the government was a fiduciary which bore duties while

citizens held the rights. This thinking led to the conclusion that if a group of people disagreed with important decisions of the government of the day, the group retained the right to form a new social contract and create a new government (Gardner 1990).

A core part of Locke’s theory, however, addressed state rights, in particular, monopoly on violence and a right to taxation. To Locke the monopoly right to violence provided government with the legal means to control a society, as well as power to administer laws and to provide security. Thus the state, with the exception of self-defense, held a monopoly on violence. Further, although Locke’s social contract explicitly protected property, it did not do so in an absolute manner. Rather, property was subject to taxation.

The third major social contract theorist, Jean-Jacque Rousseau, had two distinct theories of social contract. The first, found in his essay, *Discourse on the Origin and Foundations of Inequality Among Men (Discourse)*, is an account of the moral and political evolution of humans over time. It contains a naturalist, psycho-evolutionary account of the social contract, an evolution which he sees as problematic. Rousseau believed that the state of nature was state of peace and simplicity. People lived an uncomplicated, if somewhat lonely, life. The few needs they had were easily satisfied by nature. Due to nature’s abundance and the small size of the population, there was no need to compete, and people rarely encountered one another and certainly had less cause for conflict or fear. Rousseau believed that people in the state of nature were morally pure, were endowed with empathy and pity, and not inclined to harm one another (Rousseau 2012). His view was that society corrupts humanity’s innate, natural goodness.

Rousseau’s second account, found in his treatise the *The Social Contract*, provides an ideal account. Following his prior evolutionary ideas, Rousseau recognized that the population would become denser and put people into close contact. The result would be a Hobbesian war of all against all. In that situation, the poor would consent to exploitative conditions to avoid violence. In *The*

Social Contract Rousseau argued that rather than surrendering to these relations, an alternative was following something he referred to as the general will. This general will would arise either as an expression of democratic processes or some type of metaphysical form apart from the individual desires.

The social contract is referred to as a “contract” not because of its legal character, but because it involves an exchange of promises as an agreement. The “contract” involves citizens giving up some personal power and freedom to the state and in exchange the state provides security and protections of other liberties. As a political theory, social contract theorists insist that government legitimacy is founded on a social contract. Without such a grant, governments lack legitimacy: The original populace are the source of legitimacy. Locke called it popular sovereignty (Gardner 1990).

Not social contract theorists share these views. Some libertarian philosophers hold that a social contract is real agreement between citizens and governments, and as a result they believe that the foundations of government are of questionable legitimacy. These libertarian critics suggest that each individual citizen ought to be able to decide on an individual basis, and that those who are not given the choice are there against their will – enduring a type of coercion or enslavement (Stone 2014). As a function of some of their theories of consent, they may be sceptical of democracy and oppose social contract theories generally as the social contract theories provide little opportunity for individual acts of choice.

Modern Social Contract Theory

The goal of the social contract theory is to show that members of a society have reason to support and abide by the basic social rules, laws, institutions, and/or principles of that society (Sheehy 2004). Contemporary theory of social contract was established in the sixteenth to seventeenth centuries. According to theorists such as Hobbes, Locke, and Rousseau, a social contract forms the

foundation for a non-clan- or non-ethnic-based society. It provides for institutions of governance and in most instances ensures some form of the rule of law. The original theorists of the social contract represented the initial state of nature – a state in which no government existed – and from that initial position hypothesized and formulated an ideal or preferred form of social organization or government (Sheehy 2004).

Recent Developments in Social Contract and Related Theories

In 1972, the publication of John Rawls’ notable *Theory of Justice* brought moral thinking, social contract, and political philosophy back to the main stream. Rawls argued that social contract is hypothetical, not a historical contract. The preliminary situation or “original position” is one in which all the parties to the negotiation are behind a “veil of ignorance.” This veil of ignorance, argued Rawls, operates such that each person participating in negotiating the social contract comes to the negotiation without knowing what rights and status he/she will have in the ensuing society. Accordingly, the veil of ignorance ensures that people coming from their particular contexts and environments, while capable of a sense of justice, would not develop and advocate principles of justice which would advance their own particular position or special interests (Sterba 1989). By having negotiators blind to their status, Rawls thought negotiators would negotiate for a system which was just and fair for all.

Accordingly, Rawls believed that free and rational people would agree to a social contract only if in their original position they were of equal status and capacity. They would be able to agree on a social contract only if they did not know their social status or class position, their natural traits or acquired abilities, nor their particular goals. Rawls further argued that the agreement would occur only if the particular characteristics of their own society are also hidden.

In this situation, argued Rawls, people in their original position would choose two principles of justice. The first principle requires equality

between people with respect to basic liberties, whereby each person's most extensive basic liberty should be compatible with a similar liberty for others. When these liberties cannot be exercised in all social positions, people in the initial position would favor the second principle of justice. According to this second principle, social and economic inequalities can be just only if unequal distribution of these benefits is to the advantage of the least favored members of society (Rawls 1999). Since no person knows anything about themselves and could end up being anyone else in any other status, each has concern for all and thus commitment to justice as fairness to all.

Further thinking by Thomas Scanlon, developing a view known as "Contractualism," although superficially similar to social contract thinking, focuses on policy justifications. Contractualism is distinguished from "Contractarianism," which in Hobbesian fashion argues that rational maximization of self-interests leads to the construction of moral and political authority. In contrast, Scanlon's contractualism excludes self-interest and focuses on the justification of own interests to others, as morally motivated commitment of rational people. Scanlon argued that policies can be just only where one person can require another to suffer some harm and the harmed party cannot reasonably object. This approach is different from Rawls which seeks consensus on principles. Individuals' acceptance of a principle thus depends on their own assessment of the strength of their reasons for rejecting it, compared to the alternative solutions to the issue. The reasons, Scanlon argued, allow for justifications which are responsive to the situation of others and therefore individuals are motivated not only by self-regard but also by respect for others (Wallace 2002).

Summary

The social contract theories of Hobbes, Locke, and Rousseau held that justification of the state depended on demonstrating that the people consent or accept the organization of governance

institutions. Based on that agreement, the social contract is an argument for political organization based on justice and commitment.

Modern thinkers further developed these ideas focusing on the notions of justice and the justification to solve the problem of determining what principles can be acceptable to all reasonable citizens in agreeing to social contract. Contractualist arguments see this agreement as the outcome of what suitably morally motivated people would rationally agree to as their collective morality. Whatever the motivation, rationality remains the basis for adopting a social arrangement, from early to modern social contract thinkers.

References

- D'Agostino, Fred; Gaus, Gerald; Thrasher, John, "Contemporary Approaches to the Social Contract", The Stanford Encyclopedia of Philosophy (Summer 2019 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/sum2019/entries/contractarianismcontemporary>.
- Dietz, M. G. (Ed.). (1990). *Thomas Hobbes and political theory*. Lawrence: University Press of Kansas.
- Gaba, J. M. (2007). John Locke and the meaning of the takings clause. *Missouri Law Review*, 72, 525.
- Gardner, J. A. (1990). Consent, legitimacy and elections: Implementing popular sovereignty under the Lockean constitution. *University of Pittsburgh Law Review*, 52, 189.
- Rawls, J. (1999). *A theory of justice*. Oxford University Press.
- Rousseau, J. J. (2012). *Rousseau: The basic political writings: Discourse on the sciences and the arts, discourse on the origin of inequality, discourse on political economy, on the social contract, the state of war*. Hackett Publishing.
- Sheehy, B. (2004). Corporations and the lateral obligations of the social contract. *Newcastle Law Review*, 8(2), 48–71. *bepress Legal Series*, 1738.
- Sterba, J. (1989). Toulmin to Rawls. In R. Cavalier, J. S. Gouinlock, & J. P. Sterba (Eds.), *Ethics in the history of western philosophy* (pp. 399–421). Basingstoke: Palgrave Macmillan.
- Stone, P. (2014). Social contract theory in the global context. *Law, Ethics and Philosophy*, 2, 177–189.
- Wallace, J. (2002). Scanlon's Contractualism. *Ethics*, 112(3), 429–470.
- Wolff, R. P. (1977). *Understanding Rawls: A reconstruction and critique of A theory of justice*. Princeton, N.J.: Princeton University Press.
- Yolton, J. W. (1958). Locke on the law of nature. *The Philosophical Review*, 67, 477–498.

Social Control

► Sanctions of Social Capital

Social Disintegration

► Social Dumping (CSR)

Social Dumping (CSR)

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Synonyms

[Social breakdown](#); [Social disintegration](#)

Description

The term “social dumping” refers to a multi-dimensional scenario in which labor-related criteria in one nation are lower than they should be, giving certain business enterprises an edge over their rivals. In a nutshell, it is a manner of flouting social and/or labor legislation while obtaining an “unfair” market advantage by employing low-cost skilled labor.

Introduction

“In every improved and civilized society, this is the state into which the laboring poor, that is, the great body of the people, must necessarily fall unless the government takes some pains to prevent it,” Adam Smith says in his treatise *The Wealth of Nations* (Guendelsberger, 2019). Dumping in international trade is an example of

unfair competition since products are sold at a price that does not accurately reflect their cost (European Parliament, 2018). It is viewed as unethical commercial practice because dumped goods and services pose a significant social, political, legal, and economic danger to business organizations, employees, unions, and other stakeholders. That is why Alber and Standing (2000) wrote that social dumping has a pejorative ring around it.

Even though there is much debate about social dumping, a crucial topic in the European Union, no formal definition has yet been established. “Although there is no definition in EU legislation, social dumping is a phrase used to refer to unfair competition caused by the employ of varied wage and social safety standards to various categories of employees,” Thyssen explained when addressing the European Parliament in 2015 (Eurofound, 2016). Bernaciak (2014) defined social dumping as “the practice, undertaken by self-interested market participants, of undermining or evading existing social regulations to gain competitive advantage.” It can also be explained as a situation when social standards do not advance at a pace proportional to economic growth due to external competitive pressures. The term labor-induced value drain refers to a situation in which businesses that operate in countries with lax labor standards produce and export goods at meager prices by employing unfairly inexpensive labor in relatively poor working conditions (Corden & Vousden, 2001). It is defined by Sapir (2015) as “downward social pressure as a result of competition from nations with lower social conditions.” For example, it is a case of a Croatian construction firm constructing residences in Germany and utilizing Croatian staff who are EU citizens with employment contracts in Croatia and are temporarily stationed there. It is a fair presumption that Croatian workers would not have the same wages as their German counterparts, giving a comparative advantage to the company that employs them.

Vaughan-Whitehead (2003) claims that social dumping shares a common goal with trade dumping, in that both are used to gain a higher market share by offering lower prices. She defines social

dumping as “any practice pursued by an enterprise that deliberately violates or circumvents legislation in the social field or takes advantage of differentials in practice and/or legislation in the social field in order to gain an economic advantage, notably in terms of competitiveness, the state also playing a determinant role in this process.” However, she argues that the social implications of social dumping can be more harmful than trade dumping, as it often involves exploiting vulnerable workers and creating dangerous working conditions. Despite the negative impacts of social dumping, many businesses continue to engage in this practice to gain a competitive advantage in the marketplace. Center for Economic Policy Research defines it as a management decision in a developed country to supply its domestic market through production based in a developing or low-wage country where labor standards do not comply with minimum legal requirements adopted by the home country, therefore allowing the business to enjoy lower costs (Eurofound, 2016).

Social dumping can therefore result from (customized and replenished Sapir, 2015):

- Imports of cheaper goods from developing or low-wage countries to developed or high-wage countries.
- Imports of services employing posted workers from developing countries. Posted employees are people with a work contract in a developing country who are temporarily transferred to a developed nation by their employer while performing a specific project/contract.
- Relocation of business activities from developed to developing countries (typically production, but it can also be R&D, accounting, or any other phase in the value building chain).
- Thwarting the exploitation of a shadow economy and hidden work that mocks official policies and programs by relying on unreliable numbers and statistics.

Social Dumping and EU Perspective

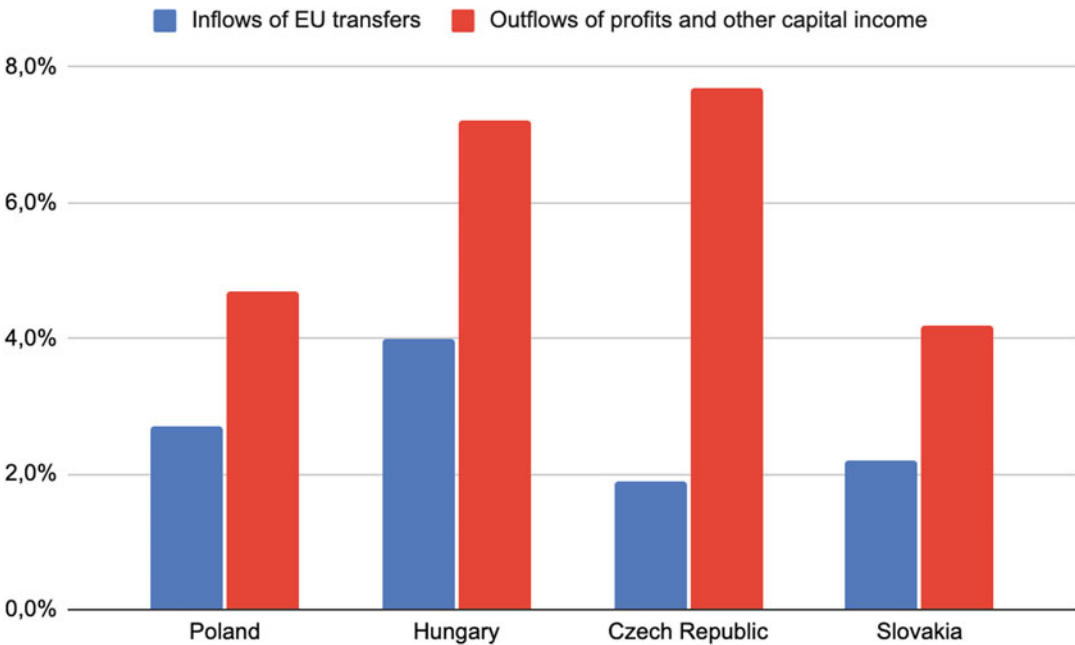
Social dumping is a complex and divisive issue in Europe, with the term often carrying negative

connotations that imply unfair treatment of workers (Eurofound, 2016). Despite this, social dumping practices can also be found within domestic markets and are opposed by groups like the European Trade Union Confederation. Meanwhile, business organizations view social dumping as a beneficial strategy for their members' success. Given the complex and sensitive nature of this topic, there is much more to be said on the matter in the near future.

The issue of social dumping has generated a lot of debate. “In our union, the same work at the same place should be remunerated in the same manner,” stated former European Commission president Juncker in 2014, addressing both desired context and varied approaches among newer and older EU member states. In political speeches, anti-EU politicians frequently make use of social dumping to gain support and legitimacy.

In 1993, the EU's “global competitiveness” strategy was drawn up, and the single European market was established. In the 1990s, the tenets of the four freedoms (freedom of labor, capital, commodities, and services) were given fervent priority; the freedom of labor is obviously of particular interest here. European Union's citizenship resulted from the Maastricht treaty; it gave all EU nationals freedom to live, move, and work freely in all member countries (Sandberg & Nielsen, 2014 cites Vestergaard & Sørensen, 2004).

Social dumping is regarded as a by-product of open borders and the free movement of labor. Western Europeans are concerned about the detrimental influence social dumping has on their welfare systems, which is why there is an unfavorable attitude toward immigration in some nations. Eastern European countries have lower minimum wages, making them an attractive place for foreign direct investment and for gaining a competitive advantage through the hiring of cheap skilled labor. According to Bernaciak (2014), the accession of “post-communist Europe” into the European Union in 2004 has enabled firms to relocate production to cheaper or less regulated areas in Southern and, more recently, Central-Eastern Europe, or utilize the threat of exit to extract concessions from employees in more stringent regulatory settings. How it influenced the flows and transfers of money and profits showed



Social Dumping (CSR), Fig. 1 Inflows and outflows in Eastern Europe 2010–2016. (Capital and ideology. Cambridge and London: The Belknap Press of Harvard University Press)

Piketty (2020) in Fig. 1. Picketty explained that, on average, the annual net flow from the EU to Poland was 2.7% of GDP each year between 2010 and 2016 (the difference between total spending received and total contributions paid to the EU budget). Over the same period, profits and other property income (net of the corresponding inflow) outflow was 4.7% of GDP. For Hungary, these percentages were 4.0% and 7.2%.

Labor migration from new, developing EU member countries has recently become a major issue. Several Central European EU member state ministers have called for better application of current rules, while those from developed EU nations are demanding the toughening of measures to guarantee “equal pay for equal work at the same place.” After the accession of new member states to the EU in Southern and Eastern Europe, many “old” member states temporarily imposed labor market restrictions. However, these restrictions have had the unintended consequence of encouraging fraudulent self-employment among migrants that may amount to social dumping. Migrants have traditionally been paid lower wages than local workers in receiving nations, allowing businesses to save on

employee compensation and social contributions. Furthermore, the availability of foreign workers has decreased companies’ reliance on local workers, putting pressure on wages and working conditions in host countries.

As a result, everyone is perplexed. Employees in exporting nations are not being compensated fairly for the value they deliver and the profits their firms make. If the government was compelled to give special treatment to employers who receive cheaper concessions or exemptions from regulation, budgets in exporting countries would be lost. Employees in importing countries are also perplexed. They suffer from low foreign competition due to production being relocated to cheaper international locations.

Companies that benefit from social dumping are those that operate in a foreign country and gain inexpensive skilled labor, which results in increased profits. Customers of such firms also benefit since they obtain cheaper goods, which is why this kind of production and consumption is usually well accepted by local customers who rarely question the source of cheap items, as long as they are accessible. This is partially why certain writers feel that market actors’ social

dumping techniques are encouraged by liberalization and deregulation policies (Alber & Standing, 2000; Peters, 2008; Boulhol, 2009; Bernaciak, 2014).

In industries where robots are still inadequate in fine motor control, speech, pattern recognition, and empathy, the most cost-effective and straightforward solution is to use low-wage human labor (Guendelsberger, 2019). The textile industry in Europe is an excellent example of a local industry suffering from social dumping. Many of it has shut down production in Europe and relocated to developing nations with inexpensive labor and abysmal social norms. Because of lengthy value chains, the environmental and social criteria required in exporting nations are unknown to the ultimate consumers who enjoy low prices. Simultaneously, textiles manufacturing has risen, accompanied by the idea of “quick fashion,” which implies fast-changing fashions that urge customers to buy more and change their clothes more frequently. The introduction of new technologies and processes has significantly accelerated the production cycle, resulting in increased textile waste, environmental problems, and the industry’s continued distancing from the circular economy. Meanwhile, the local textile sector has survived only if it has captured some unique preferences or clients with greater purchasing power that are not sensitive to price.

In recent decades, European labor markets have seen significant shifts in pay levels and employment conditions on a wide scale (Sandberg & Nielsen, 2014). The pay gap impacts all aspects of the economy, from wage levels to productivity to security to working hours, job permanency, and vacation rights. That is why European Parliament (2016) adopted a Resolution on Social Dumping in the EU. The European Parliament has recognized that there is a wide range of practices and situations that can be classified as social dumping, which can have a negative impact in terms of economics, social welfare, and public finances:

1. The economic aspect – it occurs when companies use illegal or abusive practices to gain an unfair advantage over their competitors, often leading to market distortions that harm

legitimate businesses, particularly small- and medium-sized enterprises (SMEs).

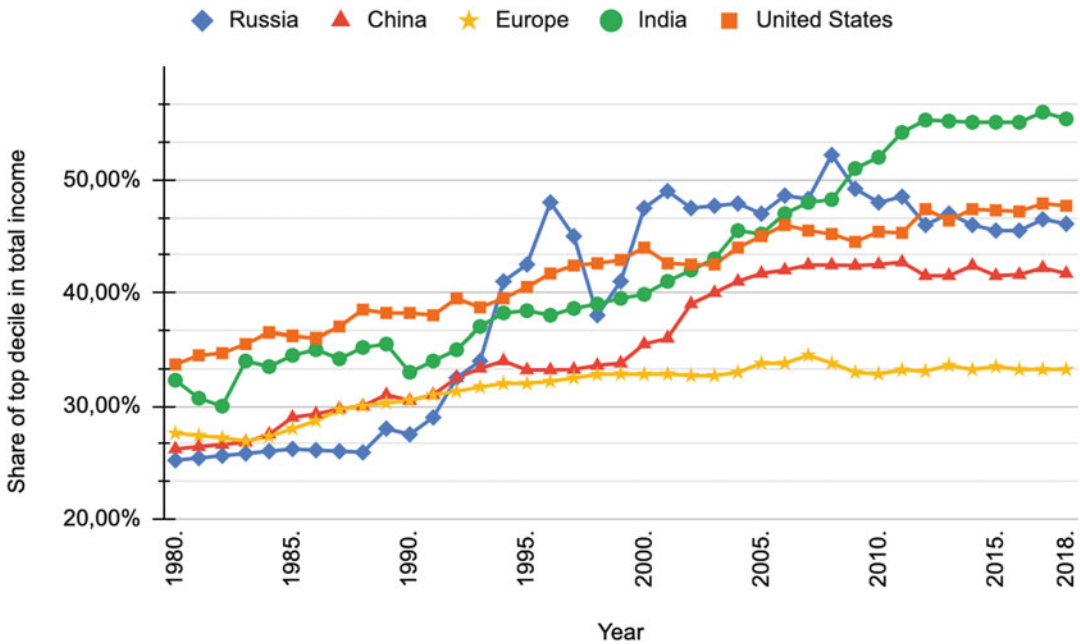
2. The social aspect – it can result in discrimination and unfair treatment of workers across the EU, depriving them of their basic rights to fair wages and social protections.
3. The financial and budgetary aspect – the non-payment of due social security contributions and taxes resulting from social dumping represents a threat to the financial sustainability of social security systems and the member states’ public finances.

To address these and related problems, it is essential that governments take strong action to prevent and combat social dumping through policies aimed at promoting equity and fairness in the workplace.

European Parliament calls for several actions to curb social dumping, such as: reinforcing controls and coordination between the EU member states; addressing regulatory gaps in enforcing the principles of equal pay and equal social protection; helping social systems to converge; combating social dumping for mobile workers in the most vulnerable industries (e.g., textile, construction, transportation, fast food, and warehousing, among others); and limiting the free circulation of posted workers (Eurofound, 2016). The Commission proposed a national minimum wage based on the principle of a gradual approach to achieving at least 60% of the national average wage, with an aim to minimize excessive wage gaps as much as possible. The report also called for a mechanism in which firms could be held liable for a higher degree of care, not only their own subsidiaries but also third-country subcontractors who worked with them, to prevent corruption, human rights abuses, significant physical harm or environmental damage, and the violation of ILO conventions.

Global Impact of Social Dumping

In a narrower sense, social dumping is defined as “respecting or failing to respect the law,” according to Vaughan-Whitehead (2003),



Social Dumping (CSR), Fig. 2 The rise of inequality around the world, 1980–2018. (Capital and ideology. Cambridge and London: The Belknap Press of Harvard University Press)

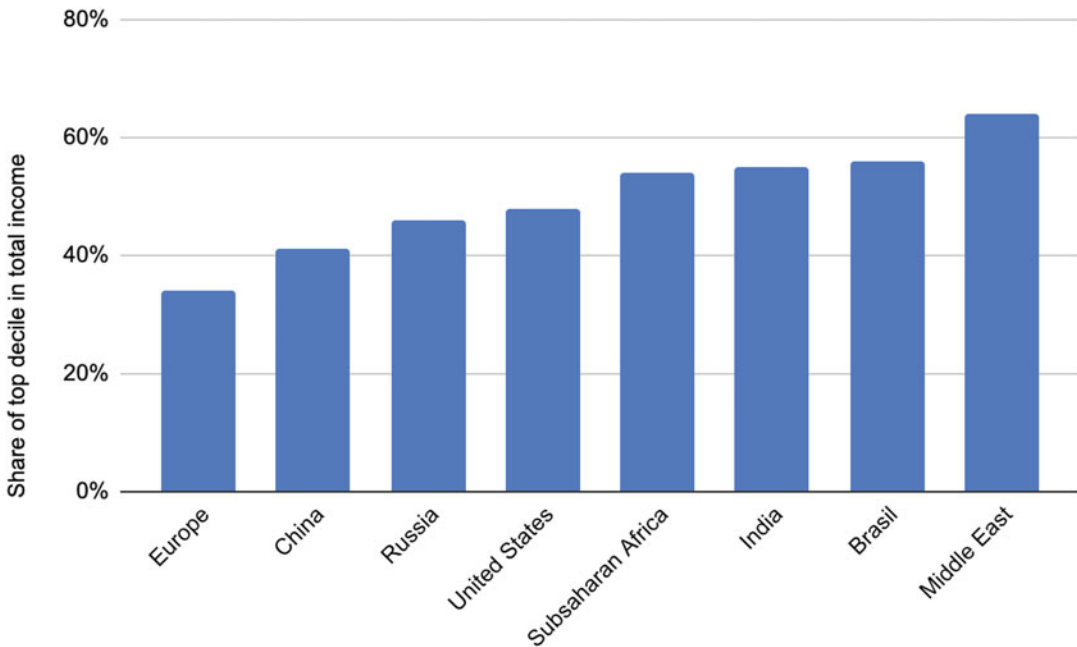
whereas in a broader sense, it refers to “unfair competition.” Social dumping is not exclusively limited to those from new EU member states or developing countries. While lower wages and social protections in other countries may incentivize rule evasion, this does not represent the whole picture. Multinational companies from high-wage countries actively search for ways to skirt regulatory constraints in both developed and developing nations. This can force other market participants into social dumping practices. For example, large construction companies may set low prices for subcontractors, in order to keep their own costs down while absolving themselves of responsibility for rule violations. Consequently, this puts pressure on lower-level firms (often populated by workers from developing countries) to engage in social dumping (Bernaciak, 2014). The result of social dumping is rising inequalities worldwide, as shown in Fig. 2. Piketty (2020) explains how the top decile share (the 10% highest incomes) in total national income grew from 26% and 34% in 1980 in the different parts of the world to 34% and 56% in 2018. Inequality increased everywhere, but the size of the increase varies significantly

from country to country at all levels of development. For example, it was more significant in the USA than in Europe and greater in India than in China.

The inequality of different regions is shown in Fig. 3. Piketty (2020) states that in 2018, the share of the top decile (the 10% highest incomes) in national income was 34% in Europe (EU+), 41% in China, 46% in Russia, 48% in the USA, 54% in sub-Saharan Africa, 55% in India, 56% in Brazil, and 64% in the Middle East.

United Nation’s Guiding Principles for Business and Human Rights (UNGPR)

Social dumping between developed and developing worlds created a significant increase in inequality and a decrease in the level of fair working conditions. The exploration of vulnerable countries and weak social protection is extensively used by many multinational companies that benefit from long value chains. The United Nations 2011 launched United Nations Guiding Principles for Business and Human Rights



Social Dumping (CSR), Fig. 3 Inequality in different regions of the world in 2018. (Source: Capital and ideology. Cambridge and London: The Belknap Press of Harvard University Press)

(UNGP) to address this issue. These principles aim to answer who is responsible for employee human rights in exporting third-world nations. The UNGP recognizes the responsibility of governments to protect human rights and promotes the “Protect, Respect, and Remedy Framework.” The UNGP emphasizes ensuring that domestic laws are adequately enforced, noting that failure to do so is frequently a significant legal gap in state practice. Such laws might range from non-discrimination and labor laws to environmental, property, privacy, and anti-bribery laws. States should advise on appropriate methods, including human rights due diligence, and how to consider issues of gender effectively, vulnerability, and/or marginalization, recognizing the specific challenges that may be faced by indigenous peoples, women, national or ethnic minorities, religious and linguistic minorities, children, persons with disabilities, and migrant workers and their families. Business organizations have to respect human rights, which entails complying with internationally accepted human rights – those defined at the least in the International Bill of Human Rights and the principles guaranteeing

fundamental rights set out in the International Labor Organization’s Declaration on Fundamental Principles and Rights at Work. Human rights problems may impact business enterprises through their actions or owing to their commercial ties with other stakeholders (United Nations, 2011a).

The International Labor Organization’s Declaration on Fundamental Principles and Rights at Work, which all of its member nations are required to follow, includes four categories of principles and rights: freedom of association and the right to collective bargaining; the elimination of compulsory labor; the abolition of child labor; and the elimination of discrimination in respect of employment and occupation. These are covered by the eight core conventions of the International Labor Organization (ILO).

At the same time, national laws may not comprehensively cover all internationally recognized human rights. They can be feeble, they might not apply to everyone, and governments or the courts may not enforce them. UNGP clarifies that companies should respect the higher standard where national laws fall below internationally

recognized human rights standards. Where national laws conflict with those standards, companies should still seek ways to honor those standards' principles within the bounds of national law. Enterprises can affect the human rights of their employees and contract workers, their customers, workers in their supply chains, communities around their operations, and end users of their products or services (United Nations, 2011b).

UNGP has emerged as a more effective instrument for promoting human rights in the value chain for multinational and exporting firms from developed countries. It has quickly become one of the most vital tools for socially responsible actions and practices.

The European Commission initially backed member states in adopting action plans on UNGP as a voluntary option. Since the implementation of UNGP has not improved, the European Commission has announced its intention to implement a new EU-wide "mandatory supply chain due diligence" regime based on and compatible with the UNGP. The new legislation is expected sometime in 2023.

Corporate Social Responsibility (CSR) as a Strategic Tool to Combat Social Dumping

The United Nations World Summit Outcome Document (2005) has identified economic development, social development, and environmental protection as three critical pillars of development. We should look at them from a more comprehensive and holistic standpoint since each dimension is interrelated and supports the other two. The social category is further divided into the following subcategories: labor, society, human rights, and product responsibility (Perez-Batres et al., 2012).

Responsibility for the value chain and working conditions applied in exporting countries suggested by UNGP have aimed at erasing social dumping. Because most of the social dumping takes place in the value chain, many other regulations and laws encourage European businesses to be more concerned with working and human

rights conditions in their value chains. Directive on nonfinancial reporting (2014/95/EU) and a draft of the newly developed directive on corporate sustainability reporting emphasize responsibility for the company's value chain. Many reporting standards, such as the example Global Reporting Initiative's Reporting Standards (GRI Standards), are similar. The emphasis on responsibility for the value chain is because most businesses in Europe have neglected to include employee social and working conditions in their supply or value chains in their CSR efforts. Most of the CSR's focus has been on the conditions inside the company's operating locations and in the communities where reputation is linked to corporate success. Many firms have started incorporating supply chains into their CSR efforts in recent months due to UNGP and the laws and standards referenced above. The shortening of value chains that happened because of Covid-19 and the greater concentration of companies to local production and local suppliers made it easier to control the supply chain and could eventually help decrease social dumping practices.

Summary

The complex and ambiguous nature of the social, political, and economic climate in Europe, which lacks shared legislative references and commercial methods across the EU, makes social dumping a perplexing and challenging problem to be investigated and improved. Even though more stringent regulation is to be expected, as it may improve the status of social dumping, it is not likely that the problem will be completely solved in the near future. The global impact may worsen in the years to come due to the disruption of global value chains due to climate change, Covid-19 pandemic, and volatile energy markets.

Cross-References

- [Corporate Social Responsibility](#)
- [Circular Economy](#)

References

- Alber, J., & Standing, G. (2000). Social dumping, catch-up or convergence? Europe in a comparative global context. *Journal of European Social Policy*, 10(2), 99–119. <https://doi.org/10.1177/a012485>.
- Bernaciak, M. (2014). *Social dumping and EU integration process* (ETUI working papers, 2014.06). <https://doi.org/10.2139/ssrn.2512684>. Accessed 17 April 2022.
- Boulhol, H. (2009). Do capital market and trade liberalization trigger labor market deregulation? *Journal of International Economics*, 77(2), 223–233. <https://doi.org/10.1016/j.jinteco.2008.12.001>.
- Corden, W. M., & Vousden, N. (2001). Paved with good intentions: Social dumping and raising labour standards in developing countries. In Z. Drabek (Ed.), *Globalisation under threat* (pp. 124–143). Cheltenham: Edward Elgar.
- Eurofound. (2016). *Social dumping*. European Foundation for the Improvement of Living and Working Conditions. <https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/social-dumping>. Accessed 18 April 2022.
- Guendelsberger, E. (2019). *On the clock – What low-wage work did to me and how it drives America insane*. New York: Little, Brown.
- European Parliament. (2016). *Resolution on social dumping in EU*. <https://oeil.secure.europarl.europa.eu/oeil/popups/summary.do?id=1452126&t=e&l=en>. Accessed 20 April 2022.
- European Parliament. (2018). *Dumping explained: Definition and effects*. <https://www.europarl.europa.eu/news/en/headlines/economy/20180621STO06336/dumping-explained-definition-and-effects>. Accessed 23 April 2022.
- Perez-Batres, L. A., Doh, J. P., Miller, V. V., & Pisani, M. J. (2012). Stakeholder pressures as determinants of CSR strategic choice: Why do firms choose symbolic versus substantive self-regulatory codes of conduct. *Journal of Business Ethics*, 110, 157–172. <https://doi.org/10.1007/s10551-012-1419-y>.
- Peters, J. (2008). Labour market deregulation and the decline of labor-power in North America and Western Europe. *Policy and Society*, 27(1), 83–98. <https://doi.org/10.1016/j.polsoc.2008.07.007>.
- Piketty, T. (2020). *Capital and ideology*. Cambridge/London: The Belknap Press of Harvard University Press.
- Sandberg, M., & Nielsen, N. J. (2014). Between social dumping and social protection – The challenge of creating orderly working conditions among polish circular migrants in the Copenhagen area, Denmark. *Ethnologia Europaea*, 44(1), 23–37.
- Sapir, A. (2015). *Single market and social protection: Friends or foes?* Bruegel. <https://www.bruegel.org/wp-content/uploads/2016/03/Sapir-2015-Stockholm.pdf>. Accessed 22 April 2022.
- United Nations. (2005). *World summit outcome document*. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_60_1.pdf. Accessed 23 April 2022.
- United Nations. (2011a). *The UN guiding principles on business and human rights*. <https://www.ungpreporting.org/resources/the-ungps>. Accessed 15 April 2022.
- United Nations. (2011b). *The UN guiding principles on business and human rights*. https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf. Accessed 20 April 2022.
- Vaughan-Whitehead, D. (2003). *EU enlargement versus social Europe? – The uncertain future of the European social model*. Cheltenham: Edward Elgar.

Social Economy Enterprise

► Social Enterprise

Social Enterprise

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Synonyms

Social business; Social business venture; Social economy enterprise; Social entrepreneurial venture; Social entrepreneurship organization

Definition

Social enterprise is a common term describing the activity of various organizations, projects, and ventures that pursue a social mission by using market mechanisms (Chell 2007; Haugh 2006; Mair 2010; Okano 2019). The reason for its existence is to solve or reduce and mitigate social problems, meet social needs, and initiate social change (Austin et al. 2006). At the same time, a social enterprise is characterized by market orientation, innovation, proactivity, risk-taking, and bottom-up, autonomous status (Lumpkin et al. 2013; Sullivan Mort et al. 2003). This type of organization is oriented

toward creating a mixed value consisting of economic, social, and environmental value – known as multiple bottom lines, triple bottom line, or double bottom line (Bibby 2002; Emerson 2003; Thompson and Doherty 2006) (see ► [“Triple Bottom Line”](#)).

Social enterprises take different legal forms depending on historical, socioeconomic, cultural, and other national contexts (Chandra and Kerlin 2021; Defourny and Nyssens 2010, 2021; Kerlin 2012, 2017). They operate as associations, foundations, cooperatives, social cooperatives, mutual societies, or nonprofit companies, as well as obtain social enterprise status (Borzaga et al. 2020).

A social enterprise is referred as a hybrid organization (see ► [“Hybrid Organizations”](#)) because it combines in its activities different objectives, resources, motivations, products manufactured, ownership, and others (Battilana et al. 2012; Doherty et al. 2014; Evers 2005; Grassl 2012).

Conceptual Foundation

The term “social enterprise” appeared first in public discourse in the 1980s (Defourny and Nyssens 2008, 2010). It is analyzed in relation to the concept of social entrepreneurship (Bacq and Janssen 2011; Chell 2007; Dacin et al. 2010; Hota et al. 2020; Mair and Marti 2006) (see ► [“Social Entrepreneurship”](#)) and in reference to social economy (Borzaga et al. 2020; Defourny and Nyssens 2008, 2010, 2021; Orhei 2011). The emergence and activity of social enterprises are a global phenomenon (Bosma et al. 2016; Lepoutre et al. 2013).

The increased interest in the solutions offered by social entrepreneurship is explained by the social, economic, and political changes in the last decades of the twentieth century and, in general, by the growth of social problems and social inequalities requiring innovative ways to solve them (Yunus 2007). The origins of social entrepreneurship are identified in business ethics (► [“Corporate Social Responsibility”](#)) and the growing interest of the commercial sector in

socially responsible activities and in the need to strengthen the independence and effectiveness of nonprofit organizations (García-Jurado et al. 2021).

Academic discourse distinguishes three perspectives in defining social enterprises (Comini et al. 2012): the European, the American, and the emerging (developing) countries. In the European context, social enterprise is described as a private activity conducted in the public interest, characterized by participatory governance, democratic control, and social ownership (Defourny and Nyssens 2008; Laville et al. 2015; OECD 1999; Pestoff and Hulgård 2015). In the USA, two independent schools describing social entrepreneurship stand out: the social enterprise school of thought (also called the earned income school of thought), which emphasizes the use of market resources and managerial practices to increase the efficiency and effectiveness of the social sector (Dart 2004; Eikenberry and Kluver 2004), and the social innovation school of thought, which focuses on the social entrepreneur and the innovations introduced to meet social needs (Defourny and Nyssens 2010; Hoogendoorn et al. 2010). The socially inclusive business in developing countries (South America, Asia) is focused on poverty reduction, aiming at scale, sustainability, and effectiveness of enterprises and their long-term impact.

The context for the operation of social enterprises is determined not only by the space (geographical area) of their operation but also by time, tradition, human life cycle, gender, religiosity or spirituality, stakeholders, field of work, sphere of action, and the disciplinary origin represented by the researcher (Chanda and Kerlin 2021). Thus, the multidimensionality and multifaceted nature of social enterprises is indicated (Chell et al. 2010).

Issues

Considering the importance of social enterprises in the economy, society, and state, there is a need for research in this area. This topic is of interest to public institutions (OECD 1999, 2003; European

Commission 2014) and the research community (Granados et al. 2011; Hota et al. 2020; Majumdar and Reji 2020; Romani-Dias et al. 2018; Short et al. 2009).

The interests of social entrepreneurship researchers focus on four areas: defining social enterprises and related concepts, comparing social enterprises with other organizational forms, analyzing the entrepreneurial process, and analyzing the determinant for the development of social entrepreneurship (Urbano et al. 2017). At the same time, the essence of the phenomenon, the social aspects of social businesses, innovation, human resource management, business strategies and value creation, and challenges faced by social entrepreneurs are of interest to researchers (Gupta et al. 2020).

In other words, the unit of observation within social enterprises can be mission-services relationship, legal form, business model, innovation, and governance (Hoogendoorn et al. 2010), but the knowledge of shared value creation and social impact measurement is of particular importance today (European Commission & OECD 2016; Grieco et al. 2015; Ormiston and Seymour 2011). The activities of social enterprises are evaluated not only in terms of generating social benefits but more broadly in terms of assessing their ability to create shared value (Porter and Kramer 2011).

Future Directions

Social enterprises are an element of socio-economic practice that has been developing in different parts of the world for more than 30 years. They are the subject of research within social entrepreneurship and social economics, but these areas of knowledge have not yet achieved the status of a well-established research field (García-Jurado et al. 2021). Research in this area is a new and challenging area to explore, characterized by a number of weaknesses, such as the lack of a clearly established theory, the lack of quantitative and qualitative data, the vagueness of concepts fundamental to the area (e.g., social value), the poorly outlined context

of the analyses carried out (Saebi et al. 2019), and paradoxes arising from the very nature of enterprises combining different orders and logics of action (Peattie and Morley 2008; Nicholls 2010). The future topics worth exploring in this field are as follows (Gras et al. 2014): innovation within social enterprises, forms and business models of social enterprises to ensure their sustainable development, contextual factors' influence upon social ventures (see ► [“Social Business”](#)), shared value, and social impact. Topics such as ethical aspects of social enterprises' cooperation with stakeholders (support recipients, employees, local communities, donors, customers, etc.) are also interesting and worth exploring.

Summary

A social enterprise is any business venture created with a social purpose that operates on a continuum – socially responsible enterprises and nonprofit organizations operating for profit (Alter 2007; Perrini 2006). Social enterprise is defined as a hybrid organization (Doherty et al. 2014; Grassl 2012) and is assessed in terms of the product produced, the outcome, and the impact (Denny and Seddon 2014). Such organizations take different legal forms depending on institutional circumstances and context. Furthermore, distinctions are made between organizations closer to market logics and those that reflect the predominance of social logics. At the same time, different types of social enterprises are distinguished spatially (geographically) (Comini et al. 2012; Hoogendoorn et al. 2010) and different types of business models for social enterprises are identified (Grassl 2012).

Cross-References

- [Hybrid Organizations](#)
- [Social Business](#)
- [Social Entrepreneurship](#)
- [Triple Bottom Line](#)

References and Further Readings

- Alter, K. (2007). Social enterprise typology. Virtue Ventures LLC. https://www.globalcube.net/clients/philippson/content/medias/download/SE_typology.pdf. Accessed 4 January 2020.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship Theory and Practice*, 30(1), 1–22.
- Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship and Regional Development*, 23(5–6), 373–403.
- Battilana, J., Lee, M., Walker, J., & Dorsey, C. (2012). In search of the hybrid ideal. *Stanford Social Innovation Review*, 10(3), 50–55.
- Bibby, A. (Ed.). (2002). *Climbing the ladder – Step by step finance for social enterprise*. London: Social Enterprise London.
- Borzaga, C., Galera, G., Franchini, B., Chiomento, S., Nogales, R., & Carini, C. (2020). *Social enterprises and their ecosystems in Europe. Comparative synthesis report. Executive summary*. Luxembourg: Publications Office of the European Union, European Commission.
- Bosma, N. S., Schött, T., Terjesen, S. A., & Kew, P. (2016). *Global entrepreneurship monitor 2015 to 2016. Special report on social entrepreneurship*. London: Global Entrepreneurship Research Association.
- Chandra, Y., & Kerlin, J. A. (2021). Social entrepreneurship in context: Pathways for new contributions in the field. *Journal of Asian Public Policy*, 14(2), 135–151. <https://doi.org/10.1080/17516234.2020.1845472>.
- Chell, E. (2007). Social enterprise and entrepreneurship: Towards a convergent theory of the entrepreneurial process. *International Small Business Journal*, 25(1), 5–26. <https://doi.org/10.1177/026624260701779>.
- Chell, E., Nicolopoulou, K., & Karataş-Özkan, M. (2010). Social entrepreneurship and enterprise: International and innovation perspectives. *Entrepreneurship and Regional Development*, 22(6), 485–493. <https://doi.org/10.1080/08985626.2010.488396>.
- Comini, G., Barki, E., & de Aguiar, L. T. (2012). A three-pronged approach to social business: A Brazilian multi-case analysis social businesses. *Revista ADM*, 47(3), 385–397. <https://doi.org/10.5700/rausp1045>.
- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *The Academy of Management Perspectives*, 24(3), 37–57.
- Dart, R. (2004). The legitimacy of social enterprise. *Non-profit Management & Leadership*, 14(4), 411–424.
- Defourny, J., & Nyssens, M. (2008). Social enterprise in Europe: Recent trends and developments. *Social Enterprise Journal*, 4(3), 202–228.
- Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Mapping the intellectual structure of social entrepreneurship research: A convergences and divergences. *Journal of Social Entrepreneurship*, 1(1), 32–53.
- Defourny, J., & Nyssens, M. (Eds.). (2021). *Social enterprise in Central and Eastern Europe: Theory, models and practice*. London: Routledge. <https://doi.org/10.4324/9780429324529>.
- Denny, S., & Seddon, F. A. (2014). *Social enterprise: Accountability and evaluation around the world*. London: Routledge.
- Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *International Journal of Management Reviews*, 16(4), 417–436.
- Eikenberry, A. M., & Kluver, J. D. (2004). The marketization of the nonprofit sector: Civil society at risk? *Public Administration Review*, 64(2), 132–140.
- Emerson, J. (2003). The blended value proposition: Integrating social and financial returns. *California Management Review*, 45(4), 35–51.
- European Commission. (2014). *A map of social enterprises and their eco-systems in Europe. A report submitted by ICF Consulting Services*. Brussels: European Commission Directorate General for Employment, Social Affairs and Inclusion.
- European Commission & OECD (European Commission. Directorate General for Employment, Social Affairs and Inclusion & Organisation for Economic Co-operation and Development). (2016). *Policy brief on scaling the impact of social enterprises. Policies for social entrepreneurship*. Luxembourg: Publications Office of the European Union.
- Evers, A. (2005). Mixed welfare systems and hybrid organizations: Changes in the governance and provision of social services. *International Journal of Public Administration*, 28(9), 737–748. <https://doi.org/10.1081/PAD-200067318>.
- García-Jurado, A., Pérez-Barea, J. J., & Nova, R. J. (2021). A new approach to social entrepreneurship: A systematic review and meta-analysis. *Sustainability*, 13(5). <https://doi.org/10.3390/su13052754>.
- Granados, M. L., Hlupic, V., Coakes, E., & Mohamed, S. (2011). Social enterprise and social entrepreneurship research and theory: A bibliometric analysis from 1991 to 2010. *Social Enterprise Journal*, 7(3), 198–218.
- Gras, D., Moss, T. W., & Lumpkin, G. T. (2014). The use of secondary data in social entrepreneurship research: Assessing the field and identifying future opportunities. In *Social entrepreneurship and research methods* (pp. 49–75). Research methodology in strategy and management, 9. Emerald Group Publishing Ltd. <https://doi.org/10.1108/S1479-83872014000009011>.
- Grassl, W. (2012). Business models of social enterprise: A design approach to hybridity. *ACRN Journal of Entrepreneurship Perspectives*, 1(1), 37–60.
- Grieco, C., Michelini, L., & Iasevoli, G. (2015). Measuring value creation in social enterprises: A cluster analysis of social impact assessment models. *Nonprofit and Voluntary Sector Quarterly*, 44(6), 1173–1193. <https://doi.org/10.1177/0899764014555986>.
- Gupta, P., Chauhan, S., Paul, J., & Jaiswal, M. P. (2020). Social entrepreneurship research: A review and future research agenda. *Journal of Business Research*, 113,

- 209–229. <https://doi.org/10.1016/j.jbusres.2020.03.032>.
- Haugh, H. (2006). Social enterprise: Beyond economic outcomes and individual returns. In J. Mair, J. Robinson, & K. Hockett (Eds.), *Social entrepreneurship* (pp. 180–206). New York: Palgrave Macmillan.
- Hoogendoorn, B., Pennings, E., & Thurik, R. (2010). What do we know about social entrepreneurship? An analysis of empirical research. *International Review of Entrepreneurship*, 8(2), 71–112.
- Hota, P. K., Subramanian, B., & Narayanamurthy, G. (2020). Mapping the intellectual structure of social entrepreneurship research: A citation/co-citation analysis. *Journal of Business Ethics*, 166, 89–114. <https://doi.org/10.1007/s10551-019-04129-4>.
- Kerlin, J. A. (2012). Defining social enterprise across different contexts: A conceptual framework based on institutional factors. *Nonprofit and Voluntary Sector Quarterly*, 42(1), 84–108. <https://doi.org/10.1177/0899764011433040>.
- Kerlin, J. A. (2017). *Shaping social enterprise: Understanding institutional context and influence*. Bingley: Emerald Publishing Limited.
- Laville, J.-L., Young, D., & Eynaud, P. (Eds.). (2015). *Civil society, the third sector and social enterprise: Governance and democracy*. Oxford: Routledge.
- Lepoutre, J., Justo, R., Terjesen, S., & Bosma, N. (2013). Designing a global standardized methodology for measuring social entrepreneurship activity: The global entrepreneurship monitor social entrepreneurship study. *Small Business Economics*, 40(3), 693–714. <https://doi.org/10.1007/11187-011-9398-4>.
- Lumpkin, G. T., Moss, T. W., Gras, D. M., Kato, S., & Amezcua, A. S. (2013). Entrepreneurial processes in social contexts: How are they different, if at all? *Small Business Economics*, 40(3), 1–23.
- Mair, J. (2010). Social entrepreneurship: Taking stock and looking ahead. In A. Fayolle & H. Matlay (Eds.), *Handbook of research on social entrepreneurship* (pp. 15–28). Cheltenham, Northampton: Edward Elgar Publishing.
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36–44.
- Majumdar, S., & Reji, E. M. (Eds.). (2020). *Methodological issues in social entrepreneurship knowledge and practice*. Springer. <https://doi.org/10.1007/978-981-13-9769-1>.
- Nicholls, A. (2010). The legitimacy of social entrepreneurship: Reflexive isomorphism in a pre-paradigmatic field. *Entrepreneurship Theory and Practice*, 34(4), 611–633.
- OECD (The Organisation for Economic Co-operation and Development). (1999). *Social enterprises*. Paris: OECD.
- OECD (The Organisation for Economic Co-operation and Development). (2003). *The non-profit sector in a changing economy*. Paris: OECD.
- Okano, M. T. (2019). Social enterprise in the current context: A systematic review of the last 10 years. *Journal on Innovation and Sustainability RISUS*, 10(2), 109–122. <https://doi.org/10.23925/2179-3565.2019v10i2p109-122>.
- Orhei, L. (2011). The competence of social entrepreneurship: A multidimensional competence approach. *HAN Business Publications*, 6, 87–105.
- Ormiston, J., & Seymour, R. (2011). Understanding value creation in social entrepreneurship: The importance of aligning mission, strategy and impact measurement. *Journal of Social Entrepreneurship*, 2(2), 125–150. <https://doi.org/10.1080/19420676.2011.606331>.
- Peattie, K., & Morley, A. (2008). Eight paradoxes of the social enterprise research agenda. *Social Enterprise Journal*, 4(2), 91–107. <https://doi.org/10.1108/17508610810901995>.
- Perrini, F. (Ed.). (2006). *The new social entrepreneurship: What awaits social entrepreneurship ventures?* Cheltenham and Northampton: Edward Elgar Publishing.
- Pestoff, V., & Hulgård, L. (2015). Participatory governance in social Enterprise, 5th EMES international conference on social enterprise, Helsinki. http://emes.net/content/uploads/publications/participatory-governance-in-social-enterprise/ESCP-5EMES-40_Participatory_Governance_Social_Enterprise.pdf. Accessed 10 September 2021.
- Porter, M. E., & Kramer, M. R. (2011). The big idea: Creating shared value. *Harvard Business Review*, 89, 2–17.
- Romani-Dias, M., Iizuka, E. S., Larroude, E. R. A., & Barbosa, A. S. (2018). Mapping of academic production on social enterprises: An international analysis for the growth of this field. *International Review of Social Research*, 8(2), 156–171.
- Saebi, T., Foss, N.J., & Linder, S. (2019). Social entrepreneurship research: Past achievements and future promises. *Journal of Management*, 45(1), 70–95. <https://doi.org/10.1177/0149206318793196>.
- Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in social entrepreneurship: Past contributions and future opportunities. *Strategic Entrepreneurship Journal*, 3(2), 161–194.
- Sullivan Mort, G., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualisation. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1), 76–88. <https://doi.org/10.1002/nvsm.202>.
- Thompson, J., & Doherty, B. (2006). The diverse world of social enterprise: A collection of social enterprise stories. *International Journal of Social Economics*, 33(5/6), 361–375. <https://doi.org/10.1108/03068290610660643>.
- Urbano, D., Ferri, E., Peris-Ortiz, M., & Aparicio, S. (2017). Social entrepreneurship and institutional factors: A literature review. *International studies in entrepreneurship*. In M. Peris-Ortiz, F. Teulon, & D. Bonet-Fernandez (Eds.), *Social entrepreneurship in non-profit and profit sectors* (pp. 9–29). Cham: Springer.
- Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. New York: Public Affairs.

Social Entrepreneurial Venture

- [Social Enterprise](#)
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Social Entrepreneurship

- [Social Management](#)
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Social Entrepreneurship Organization

- [Social Enterprise](#)
-

Social Environmental Impact of Project

- [Social Acceptance](#)
-

Social Impact Analysis

- [Social Impact Assessment](#)
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Social Impact Assessment

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Synonyms

[Social and environmental impact assessment](#);
[Social impact analysis](#); [Social impact measure-](#)
[ment methods](#); [Social impact monitoring](#)

Definition

The impacts to social and economic systems made by industrial and environmental changes have long been of interest to social scientists. Social impacts (SI) are defined by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994, p. 1) as “consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society.” Social impact assessment, as a process of analyzing, monitoring, and managing the intended and unintended social consequences, both positive and negative, is therefore strongly linked to the concept of corporate social responsibility (CSR). While CSR holds enterprises responsible for their impacts on society, the SIA should provide the tools and measures for assessing the effectiveness of CSR. In the following entry, the SIA is defined, and the social assessment process cycle and SIA methodologies are discussed.

Introduction

The impacts to social and economic systems made by industrial and environmental changes have long been of interest to social scientists. In 1969, the National Environmental Policy Act (NEPA) was published, and, since then, the environmental impact assessment has been the key component of environmental planning and decision-making (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment 1994). In the early 1970s, in the social impact assessment (SIA), the first formalized set of practices and procedures was established to document and predict the socioeconomic impacts of large-scale projects (Jacquet 2014). Social and environmental assessment become more and more important, as planning agencies insisted on providing a prior assessment to identify possible adverse consequences of interventions taken by organizations. For example, the World Bank requires their grant holders to monitor and assess

the socioeconomic effects of awarded grants, according to strict criteria.

Social impact assessment is strongly linked to the concept of corporate social responsibility (CSR). According to the European Commission (2011), CSR refers to processes that “integrate social, environmental, ethical, and human rights concerns into their business operations and core strategy in close collaboration with their stakeholders with the aim of:

- maximizing the creation of shared value for their owners/shareholders and for their other stakeholders and society at large;
- identifying, preventing and mitigating their possible adverse impacts” (EU Commission 2011, p. 6).

While CSR holds enterprises responsible for their impacts on society, the SIA should provide the tools and measures for assessing the effectiveness of CSR.

Although SIA emerged as a tool for external control provided by independent agencies, it has gained the attention of social and business organizations (Dendena and Corsi 2015). Nongovernmental organizations (NGOs) are interested in monitoring their impact, as this enables them to identify the positive effects of their projects and justify the financial support they are requesting from the government. In turn, business organizations are interested primarily in measuring the impact their activities may have in terms of financial benefits. Here, both tangible and intangible aspects are carefully assessed and incorporated into an evaluation and monitoring strategy. Organizations exert a great deal of positive impact in providing jobs, offering innovative products, and improving quality of life; however, their undertakings often also have adverse impacts, such as jobs with poor or unsafe working conditions, production of dangerous products, or pollution of the environment.

After the financial crisis of 2008–2009, numerous studies investigated the causes and the costs to society at both the macro and micro levels. As Ötke-Robe and Podpiera (2013) note, “The financial crisis that hit the world economy in

2008–2009 has transformed the lives of many individuals and families, even in advanced countries, where millions of people fell, or are at risk of falling, into poverty and exclusion” (Ötke-Robe and Podpiera 2013). This example shows how influential the social impact of business might be and how important it is to consider its consequences in terms of sustainable development.

Assessment of Social Impacts

Social impacts (SI) are defined as the “consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society. The term also includes cultural impacts involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society” (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment 1994, p. 1). Social impacts may affect lifestyle, culture, community, quality of life, and health. Thus, the social impact measurement is an attempt to capture, describe, and account for the extra value a given activity creates or destroys (The SROI Network 2012). The assessment of social impact (SIA) includes “processes of analyzing, monitoring, and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions” (Vanclay 2003, p. 6). The aim of social impact assessment is, therefore, to ensure that development will maximize benefits and minimize costs. In the traditional view, economic value is generated by the business organization, and social value is the domain of the nongovernmental sector (Weisbrod 1988). Therefore, in their assessments, decision-makers in the regulatory domain or in the business sector often do not consider the difficult to measure costs and benefits of a qualitative nature. In consequence, social impacts are often ignored or not included in the valuation studies

(Maas and Liket 2011). By focusing on the impact of the whole life cycle of the project, SIA enables an extension of the single bottom-line to a two (Clark et al. 2004) or three bottom-line approach (Elkington 1999). As social, economic, and bio-physical effects are inextricably linked, any change in one of these domains will cause changes in subsequent domains. SIA should capture in a holistic way the change process as well as the consequences occurring in all included domains (Vanclay 2003).

Assessing a project according to a broad scope of impacts, such as economic, social, or environmental, helps to bring a more ecologically, socioculturally, and economically sustainable and equitable society. SIA not only helps to identify and limit adverse or unintended impacts but also focuses on proactive development of better outcomes. By gathering information from stakeholders directly or indirectly affected by the project, it is possible to consider a wide range of perspectives, expectations, and intentions. SIA is said to contribute to the process of adaptive management of policies, programs, plans, and projects. This enables working on both monitoring the effects and transformation and/or designing of the process and operation of planned interventions that lead to certain impacts (Vanclay 2003).

Social Assessment Process Cycle

The social assessment process begins with the characterization of the existing state and requires deep analysis of the project content and identifying and analyzing the stakeholders, as well as social factors and variables. Mapping of the outcomes requires implementing the theory of change, which describes the relationship among inputs, taken activities, outputs, outcomes, and impacts. Therefore, the analysis of data is used to develop mitigative plans and subsequent consultation with stakeholders. Implementation of mitigative plans, enhancing public participation, and ensuring monitoring with active stakeholder involvement close the process (Rietbergen-McCracken and Narayan 1998). Based on the

Guidelines and Principles for Social Impact Assessment provided by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (1994) and the International Principles for Social Impact Assessment endorsed by the International Association for Impact Assessment (IAIA), the following principles specific for SIA practice may be formulated (Social Impact Assessment – definition – IAIA website; Vanclay 2003; Interorganizational Committee on Guidelines and Principles for Social Impact Assessment 1994).

1. Fundamental assumptions

SIA should identify a diverse scope of stakeholders and involve all potentially affected groups and individuals. SIA should include equity considerations; this means that clear identification of possible benefits and threats for all affected groups, including underrepresented ones, should be provided.

2. Scope and stakeholders

SIA should be focused on the assessment of issues and concerns that really count, and not refer only to those that are easily measurable. This also means that SIA should engage its stakeholders to provide valuable data and should be inclusive, respectful, meaningful, and tailored to the needs of potentially impacted stakeholder groups. SIA should also take into account differences in local cultures.

3. Advance reflection on planned interventions

Many social impacts of planned interventions can be predicted; therefore, these should be addressed to reduce their negative social consequences and enhance their positive impacts. The potential mitigative measures of social and environmental impacts should be considered in advance. Also, when impacted communities approve the planned intervention and where they are regarded as beneficiaries, SIA should consider the alternatives, especially in cases when some unavoidable impacts are expected. All these concerns should be reported to the project planners, so that actions and alternatives may be considered.

4. Methodological approach

SIA should provide a clear description of methodological approaches, identify the most suitable methods and assumptions, and define the significance of the changes in advance. SIA is to be based on objective, comprehensive, social impact analysis that requires trained social scientists who are SIA practitioners qualified to provide high-quality results. The project should rest upon the most up-to-date information. This requires identification of appropriate data sources, use of published scientific literature, and primary and secondary data from the affected area. In cases where some data is not accessible, SIA should provide a plan for gaps in data management measures.

5. Conducting SIA

SIA should be an integral part of the development process, involved in all stages from inception to final stage, including audit. Implementation of monitoring and mitigation programs will enable management to address uncertainty resulting from potential adverse impacts.

6. Ethical concerns

In all planned interventions and their assessments, avenues should be developed to build the social and human capital of local communities and to strengthen democratic processes. There should be no use of violence, harassment, intimidation, or undue force in connection with the assessment or implementation of a planned intervention. Developmental processes that infringe on the human rights of any sector of society should not be accepted.

measurement may be divided according to its prospective user:

1. Methods developed for nongovernmental or governmental corporations: social return on investment (SROI), Ongoing Assessment of Social Impacts (OASIS), social cost-benefit analysis (SCBA), and local economic multiplier (LEM)
2. Methods developed for for-profit organizations: social return assessment (SRA), Atkinson Compass Assessment for Investors (ACAFI), triple bottom line (TBL), Measuring Impact Framework (MIF), and Best Available Charitable Option (BACO)

A method initially developed for one type of organization could be adapted for use by other kinds of organizations. In general, social impact assessment methods may differ according to purpose (screening, monitoring, reporting, evaluation), time frame (prospective, ongoing, retrospective), orientation (input, output), length of time frame (short or long term), perspective (micro, mezzo, macro), and approach – process methods, impact methods, or monetization (Maas and Liket 2011). Other examples of social impact assessment methods include social cost-benefit analysis (SCBA), social impact assessment (SIA), social return on investment (SROI), and participatory impact assessment (PIA).

Scope of Application for Social Impact Assessment

Originally the most researched areas of impact assessment covered population, employment, and housing issues. Over the years, the field has greatly expanded and currently includes a wide spectrum of research, e.g., impacts to physical and psychological health and well-being and a new focus on long-term impacts related to community sustainability (Esteves et al. 2012).

In 1994, the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment recommended a list of SIA variables in five general categories:

Social Impact Assessment Methodologies

Since the 1990s, many methods for measuring social impact have been developed.

Based on the literature, research, Internet searches, and expert information, Maas and Liket (2011) identified 30 quantitative (social) impact measurement methods. The

1. Population characteristics, which refer to changes in populations, ethnic and racial distribution, relocated populations, influx or outflow of temporary workers, and seasonal residents
2. Community and institutional structures metrics, which refer to voluntary associations, activities of interest groups, size and structure of local governments, historical experience with changes in employment, income characteristics, employment equity of minority groups, local/regional national linkages, industrial/commercial diversity, and presence of planning and zoning activities
3. Political and social resources characteristics, which refer to the distribution of power and authority, identification of stakeholders, interested and affected parties, and leadership capability
4. Individual and family changes metrics, which refer to perceptions of risk, health, and safety, concerns related to displacement or relocation, trust in political and social institutions, residential stability, attitudes toward policy/project, family and friendship networks, and concerns about social well-being
5. Community resources metrics, which refer to changes in community infrastructure, land use patterns, and effects on cultural, historical, and archeological resources

These variables were intended to be suggestive and provide a starting point for social assessors (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment 1994). Since then, SIA has been applied to a wide range of planned interventions in the field of sustainability, including natural resources management, demographic changes, conflict management, or assessment of social impacts that derive from different types of incidents, such as disasters (Vanclay and Esteves 2011). The techniques of SIA have found broad applications in the not-for-profit sector and social enterprises (Molecke and Pinkse 2017) in projects aimed at increasing quality of life and bettering living conditions in developing countries and also in protection of human rights (Esteves et al.

2017; van der Ploeg and Vanclay 2017). SIA has gained some popularity in the healthcare sector (Banke-Thomas et al. 2015) but also – as it brings a participatory perspective and enables strengthening of the stakeholder view – may be beneficial in investigating the social impact of practices of business institutions. The literature provides also examples of SIA usage in diverse sectors, such as infrastructure projects, energy sector, and transportation (Elkington et al. 2006; Then et al. 2017).

Limitations

Despite the growing interest in SIA methodology and the wide scope of its application, there are some concerns that limit its usage. First, researchers point out the poor experience of project managers regarding social issues. The lack of competence in this field toward individuals responsible for commissioning and delivering impact assessments may hinder the assessment itself. Secondly, SIA practitioners may find it difficult to make their point while proposing and developing alternatives for agreed-upon actions. Estimating the best possible solutions often requires that political decisions be made. In this case, the particular interests of the most influential group may prevail over the interests of a less influential group. Conducting SIA against agreed-upon principles may, in turn, decrease the objectivity and credibility of the method. The lack of financial support provided by regulatory agencies may impact the quality of the conducted SIA, resulting in compliance to just the minimal standards agreed upon by the policy makers. SIA projects require high-quality data; secondary data sources become quickly outdated, and it is necessary to supplement desktop research with local data. Also, methodological issues, such as reliability and validity and robustness and significance levels, are weaknesses in many SIA studies and negatively impact the quality of the analysis. SIA also often fails in fulfilling public expectations of being a deliberative process to determine the acceptability of a project. When seen as just an incremental project

improvement or an attempt for project legitimization, SIA may be underestimated and perceived as a process of low significance (Esteves et al. 2012).

Summary

Social impact assessment is still a relatively young concept, but its importance is increasing within the changing paradigm as to how effective action is defined. The requirements of SIA are changing, and a highly adaptive approach is required to comply with the expectations of various business, governmental, and nongovernmental organizations.

SIA requires a reflective approach in evaluating both its theoretical bases and the extent to which its practice may sustain organizational development and enhance its attractiveness for diverse groups of stakeholders.

Good SIA practice points at its key features, such as its participatory character, orientation toward important matters, affected people, proponents, and regulatory and support agencies. SIA should also increase understanding of how to conduct change and how to respond to its consequences (Esteves et al. 2012; Vanclay 2003).

Cross-References

- [Auditing and Sustainability](#)
- [Environmental Compliance Audit](#)
- [Environmental Impact](#)
- [Impact Assessment](#)
- [Social Auditing](#)
- [Sustainability Accounting](#)

References

- Banke-Thomas, A. O., Madaj, B., Charles, A., & van den Broek, N. (2015). Social Return on Investment (SROI) methodology to account for value for money of public health interventions: A systematic review. *BMC Public Health*, 15, 582. <https://doi.org/10.1186/s12889-015-1935-7>.
- Clark, C., Rosenzweig, W., Long, D., & Olsen S. (2004). Double Bottom Line Project Report: Assessing Social Impact in Double Bottom Line Ventures; Methods Catalog. Retrieved from <https://escholarship.org/uc/item/80n4f1mf> (Accessed 4 June 2019).
- Dendena, B., & Corsi, S. (2015). The environmental and social impact assessment: A further step towards an integrated assessment process. *Journal of Cleaner Production*, 108, 965–977. <https://doi.org/10.1016/j.jclepro.2015.07.110>.
- Elkington, J. (1999). Cannibals with forks: The triple bottom line of 21st century business (Paperback edition). *A Capstone paperback*. Oxford: Capstone.
- Elkington, J., Emerson, J., & Beloe, S. (2006). The value palette: A tool for full Spectrum strategy. *California Management Review*, 48(2), 6–28. <https://doi.org/10.2307/41166336>.
- Esteves, A. M., Franks, D., & Vanclay, F. (2012). Social impact assessment: The state of the art. *Impact Assessment and Project Appraisal*, 30(1), 34–42. <https://doi.org/10.1080/14615517.2012.660356>.
- Esteves, A. M., Factor, G., Vanclay, F., Götzmann, N., & Moreira, S. (2017). Adapting social impact assessment to address a project's human rights impacts and risks. *Environmental Impact Assessment Review*, 67, 73–87. <https://doi.org/10.1016/j.eiar.2017.07.001>.
- European Commission. (2011). A renewed EU strategy 2011–14 for Corporate Social Responsibility. [http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com\(2011\)0681/_com_com\(2011\)0681_en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com(2011)0681/_com_com(2011)0681_en.pdf). Accessed 31 May 2019.
- International Association for Impact Assessment. (1994, May). Guidelines and principles for social impact assessment. NOAA Technical Memorandum NMFS-F/SPO-16. <https://www.st.nmfs.noaa.gov/tm/spo/spo16.pdf>. Accessed 31 May 2019.
- Jacquet, J. B. (2014). *A short history of social impact assessment*. <https://doi.org/10.13140/RG.2.1.1470.5686>.
- Maas, K., & Liket, K. (2011). Social impact measurement: Classification of methods. In R. Burritt (Ed.), *Eco-Efficiency in Industry and Science: v. 27. Environmental management accounting and supply chain management* (Vol. 27, pp. 171–202). Dordrecht/New York: Springer. https://doi.org/10.1007/978-94-007-1390-1_8.
- Molecke, G., & Pinkse, J. (2017). Accountability for social impact: A bricolage perspective on impact measurement in social enterprises. *Journal of Business Venturing*, 32(5), 550–568. <https://doi.org/10.1016/j.jbusvent.2017.05.003>.
- Otker-Robe, I., & Podpiera, A. M. (2013). *The social impact of financial crises: Evidence from the global financial crisis (English)*. Policy Research working paper; no. WPS 6703; Paper is funded by the Knowledge for Change Program (KCP). Washington, DC: The Worldbank. <http://documents.worldbank.org/curated/en/498911468180867209/The-social-impact->

of-financial-crises-evidence-from-the-global-financial-crisis. Accessed 31 May 2019.

Rietbergen-McCracken, J., & Narayan, D. (1998). *Participation and social assessment: Tools and techniques*; toolkit ([Rev. and updated version]). Washington, DC: World Bank.

Social Impact Assessment – definition, IAIA website. <https://www.iaia.org/wiki-details.php?ID=23>.

Accessed 31 May 2019.

The SROI Network. Accounting for Value. (2012). A Guide to Social Return on Investment. <http://www.socialvalueuk.org/app/uploads/2016/03/The%20Guide%20to%20Social%20Return%20on%20Investment%202015.pdf>. Accessed 31 May 2019.

Then, V., Schober, C., Rauscher, O., & Kehl, K. (2017). *Social return on investment analysis: Measuring the impact of social investment. Palgrave studies in impact finance*. Cham: Springer. <https://doi.org/10.1007/978-3-319-71401-1>.

Van der Ploeg, L., & Vanclay, F. (2017). A tool for improving the management of social and human rights risks at project sites: The Human Rights Sphere. *Journal of Cleaner Production*, 142, 4072–4084. <https://doi.org/10.1016/j.jclepro.2016.10.028>.

Vanclay, F. (2003). International principles for social impact assessment. *Impact Assessment and Project Appraisal*, 21(1), 5–12. <https://doi.org/10.3152/147154603781766491>.

Vanclay, F., & Esteves, A. M. (Eds.). (2011). *New directions in social impact assessment: Conceptual and methodological advances*. Cheltenham: Elgar.

Weisbrod, B. A. (1988). *The nonprofit economy*. Cambridge: Harvard University Press.

Social Impact Measurement Methods

► [Social Impact Assessment](#)

Social Impact Monitoring

► [Social Impact Assessment](#)

Social Index

► [Corporate Sustainability Reporting Index](#)

Social Innovation

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Synonyms

[Sustainable innovation](#)

Definition

The last recent decades witnessed a fundamental change in the philosophy of doing business in which the underlying motive is to create value for society rather than increasing the wealth of shareholders. This ultimate shift in business perspective spurred the emergence of the term “social innovation” (Phillips et al. 2019). Social innovation as an overarching research stream encompasses a line of intra and interorganizational efforts that primarily focus on easing societal problems. Although the definition of social innovation remains contested, the common feature of majority of the definitions reflects the innovative activities to create and realize novel solutions for societies’ unsolved problems and unmet needs such as poverty, epidemics, environmental problems, human rights, and social inequality (Mulgan 2006; Phills et al. 2008). In this domain, social innovation echoes the innovative efforts of social entrepreneurs who address the societal problems and initiate social transformation through founding profit or non-profit oriented organizations. Accordingly, social entrepreneurs are considered as the generators of social innovations that are needed for the well-being of societies rather than maximizing profit of shareholders. In other words, social innovations are deliverers of sustainable outcomes that are beneficial for societies.

Introduction

Societies worldwide are struggling with fundamental challenges. Therefore, governments are

seeking ways to resolve these problems by encouraging innovative practices which are viewed as the panacea for these severe issues (Lubberink et al. 2017a). The industrialization as the core hallmark of civilization is ignited by the capability to undertake innovations, thus, civilizations are considered as the outcomes of innovations (Simms 2006). As the initial conceptualization of innovation is introduced by Schumpeter with its role in economic development, the concept has been integrated to other fields such as management (Cajaiba-Santana 2014). Although innovation is usually conceptualized with its economic or technological aspects, the social dimension of it started to gain burgeoning interest from the practitioners and scholars with its potential to alter the classical standpoint of government policies and private sector approaches for doing business.

Following the industrialization movements in the nineteenth century, the role of social innovation and social entrepreneurs have become the center of attentions through microcredit agencies, cooperatives, mutual exchange activities, community housing, and etc. (Mulgan 2006). While the concept has been under the attention of scholars since 1980s, its importance was sparked by the OECD (2011) in the aim of highlighting the inadequacy of governmental and market solutions to societal problems. In essence, the ultimate goal of social innovation is to bring wealth to a society through social change which is undertaken by social entrepreneurs (Lettice and Parekh 2010). Social entrepreneurship reflects the process in which social entrepreneurs create and develop a profit or non-profit oriented enterprise in order to initiate social change that can be beneficial for the societies. For instance, Muhammed Yunus who is a globally celebrated social entrepreneur, the founder of Grameen Bank and other microcredit ventures in other countries, started a social change with his social innovation efforts (Mungan 2006). Muhammed Yunus as a social entrepreneur has been aspired to tackle the financial exclusion in poverty-stricken communities through the micro-crediting system which saved ten million people around the world from poverty (Soskin

2012). In this vein, like Muhammed Yunus, the fundamental premise of social entrepreneurs is to serve for societies' problems and needs through social innovations. However, the successful implementation and diffusion of social innovation does not only rely on social entrepreneurs but also the stakeholders who can play a role in building a supportive institutional environment for social innovation adoption and diffusion. Therefore, social innovations require institutional change to solve the societal problems that makes social innovations a complex process to change the fundamental routines in a social system (Westley and Antadze 2010). For instance, since environmental degradation is considered as societal problems, green innovations are considered as social innovations (Dangelico et al. 2013; Howard-Grenville et al. 2014). In terms of institutional support, governments around the world have taken actions through regulations for green production systems, green products, and services. In this process, not only producers but also consumers have adopted the idea that the product they prefer will provide value for them, their society, and their environment as well. Accordingly, the mindset of consumers is transformed in this process of social change which shows that social innovation embodies the involvement of stakeholders including government agencies, universities, local communities, universities, and etc. In line with this view, social entrepreneurs work with stakeholders in order to enhance the mechanisms that can help adoption of social innovation practices to pervade. Therefore, social entrepreneurs need formal and informal institutional support to implement and promote their social innovation practices (Purtik and Arenas 2019).

Related Issues

In addition to social entrepreneurs as the agents of social change, social intrapreneurs also play a role in starting a social transformation. Social intrapreneurship is addressed both at individual level and organizational level. While the individual level addresses the entrepreneurial efforts

of organizational members in an existing organization who seek ways to improve societies' wellbeing, the latter denotes the efforts of existing corporations that focus on societal problems (Alt and Craig 2016; Kistruck and Beamish 2010). Although the conceptualization shows distinction at level of analysis, the concept of social entrepreneurship and social intrapreneurship both address the well-being of a society through employment of social innovations.

As stated before, social innovations have the potential to lead the rise of a sustainable mindset through a network society including informal and formal institutions (Mulgan 2006; Phills et al. 2008). Social innovations address unfruitful systems by generating sustainable solutions for climate change, epidemics, social inequalities, education problems, and other global challenges (Murray et al. 2010). Regarding these issues, the concept of social innovation can be used interchangeable with responsible and sustainable innovation (Lubberink et al. 2017a). This conceptual overlap is considered as the result of the common motive that are societal and environmental problems. However, while sustainable innovation addresses the triple bottom line in which economic, social, and environmental aspects are covered simultaneously, social innovation responds to the double bottom line. In this vein, responsible and sustainable innovation can cover the social dimension of innovation (Lubberink et al. 2017b). Additionally, social innovations contribute to sustainable development with its sustainable consumption mechanisms (Jaeger-Erben et al. 2015; Voorberg et al. 2015). For example, "collaborative consumption" or "sharing economy practices" are the reflections of changes in consumers pattern of consumption. Time banking activities in which individuals exchange their knowledge and experience mutually or carpooling practices are considered as the primary examples for sharing economy practices (Demirel and Payne 2018). Through these practices, individuals can decrease their consumption level of natural resources. Besides, consumers can improve their lifestyles with collaborative consumption practices (Ziesemer et al. 2019).

Another social innovation effort worth mentioning is the movement towards to the development of bottom of the pyramid markets that constitute the two-thirds of the people living in poverty. The bottom of the pyramid refers to the four billion people whose daily income is less than \$2. According to Prahalad (2013), while large companies can serve to those markets, they can eliminate poverty and build a sustainable society through social and technological innovations. They can improve the life conditions in those markets by selling low-cost computers, contributing to education, selling low-cost apps for special skills, and etc. While companies can make profit with their low-cost products by serving a large population, they can also ignite economic development in those countries. In addition, providing basic needs can provide short run benefits, thus, companies go beyond these practices and make efforts to improve and enable entrepreneurial opportunities for individuals that is required for a more sustainable economic development. Social entrepreneurs not only engage in social innovation but also create an ecosystem in which the people in poverty become creators or producer of products and services. All in all, social innovations focus on the well-being of societies by creating a sustainable ecosystem that can yield mutual benefit for all stakeholders.

Summary

Considering the alarming global issues, social innovation plays a crucial role in overcoming the present unsustainable state of societies. Social innovations denote the social change through the support of formal and informal institutions including local communities, governmental agencies, and etc. Social innovations can be initiated by social entrepreneurs or intrapreneurs. Since social innovations are complex to implement and need the support of informal and formal institutions, local communities and governmental agencies should collaborate with social enterprises in implementation and diffusion process. In this vein, social enterprises are dependent on

stakeholders to realize their ideas. In conjunction with this view, social enterprises need stakeholder management capabilities to build and manage sustainable relationships with their stakeholders.

Cross-References

- Bottom of The Pyramid
- Inclusive Innovation
- Reverse Innovation
- Social Enterprise
- Social Entrepreneurship
- Sustainable Innovation
- Triple Bottom Line

References

- Alt, E., & Craig, J. B. (2016). Selling issues with solutions: Igniting social intrapreneurship in for-profit organizations. *Journal of Management Studies*, 53(5), 794–820. <https://doi.org/10.1111/joms.12200>.
- Cajaiba-Santana, G. (2014). Social innovation: moving the field forward. A conceptual framework. *Technological Forecasting and Social Change*, 82, 42–51. <https://doi.org/10.1016/j.techfore.2013.05.008>.
- Dangelico, R. M., Pontrandolfo, P., & Pujari, D. (2013). Developing sustainable new products in the textile and upholstered furniture industries: Role of external integrative capabilities. *Journal of Product Innovation Management*, 30(4), 642–658. <https://doi.org/10.1111/jpim.12013>.
- Demirel, B., & Payne, A. K. H. (2018). Social innovation adoption behavior: The case of Zumbara. *International Journal of Innovation and Technology Management*, 15(02), 1850016–1850019. <https://doi.org/10.1142/S0219877018500165>.
- Howard-Grenville, J., Buckle, S. J., Hoskins, B. J., & George, G. (2014). Climate change and management. *Academy of Management Journal*, 57, 615–623.
- Jaeger-Erben, M., Rückert-John, J., & Schäfer, M. (2015). Sustainable consumption through social innovation: A typology of innovations for sustainable consumption practices. *Journal of Cleaner Production*, 108, 784–798. <https://doi.org/10.1016/j.jclepro.2015.07.042>.
- Kistruck, G. M., & Beamish, P. W. (2010). The interplay of form, structure, and embeddedness in social intrapreneurship. *Entrepreneurship Theory and Practice*, 34(4), 735–761. <https://doi.org/10.1111/j.1540-6520.2010.00371>.
- Lettice, F., & Parekh, M. (2010). The social innovation process: Themes, challenges and implications for practice. *International Journal of Technology Management*, 51(1), 139–158.
- Lubberink, R., Blok, V., Van Ophem, J., & Omta, O. (2017a). Lessons for responsible innovation in the business context: A systematic literature review of responsible, social and sustainable innovation practices. *Sustainability*, 9(5), 721–737. <https://doi.org/10.3390/su9050721>.
- Lubberink, R., Blok, V., van Ophem, J., & Omta, O. (2017b). A framework for responsible innovation in the business context: Lessons from responsible, social and sustainable innovation. *Responsible innovation* 3, 181–207. Cham: Springer. https://doi.org/10.1007/978-3-319-64834-7_11.
- Mulgan, G. (2006). The process of social innovation. *Innovations: Technology, Governance, Globalization*, 1(2), 145–162.
- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation*. London: Young Foundation.
- OECD (2011). Fostering innovation to address social challenges. <http://www.oecd.org/sti/inno/47861327.pdf>. Accessed 21 Jan.
- Phillips, W., Alexander, E. A., & Lee, H. (2019). Going it alone won't work! The relational imperative for social innovation in social enterprises. *Journal of Business Ethics*, 156(2), 315–331. <https://doi.org/10.1007/s10551-017-3608-1>.
- Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering social innovation. *Stanford Social Innovation Review*, 6(4), 34–43.
- Prahalad, D. (2013). Design strategy for the bottom of the pyramid. In *Social Innovation* (pp. 131–144). Berlin/Heidelberg: Springer. https://doi.org/10.1007/978-3-642-36540-9_12.
- Purtik, H., & Arenas, D. (2019). Embedding social innovation: Shaping societal norms and behaviors throughout the innovation process. *Business & Society*, 58(5), 963–1002. <https://doi.org/10.1177/0007650317726523>.
- Simms, J. R. (2006). Technical and social innovation determinants of behavior. *Systems Research and Behavioral Science: The Official Journal of the International Federation for Systems Research*, 23(3), 383–393. <https://doi.org/10.1002/sres.734>.
- Soskin, O. I. (2012). Economic policy for small and medium-sized businesses within the model of national capitalism: Austrian practice. *Journal of European Economy*, 11, 155–170.
- Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357. <https://doi.org/10.1080/14719037.2014.930505>.
- Westley, F., & Antadze, N. (2010). Making a difference: Strategies for scaling social innovation for greater impact. *The Innovation Journal: The Public Sector Innovation Journal*, 15(2), 1–19.
- Ziesemer, F., Hüttel, A., & Balderjahn, I. (2019). Pioneers' insights into governing social innovation for sustainable anti-consumption. *Sustainability*, 11(23), 6663–6679. <https://doi.org/10.3390/su11236663>.

Social Intervention

- [Social Management](#)

Social Investing

- [Socially Responsible Investing and Finance](#)

Social Investment

- [Socially Responsible Investment \(SRI\)](#)
- [Sustainable Investment](#)

Social Issues Marketing

- [Cause-Related Marketing](#)

Social Justice

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Synonyms

[Eco-justice](#); [Ecological justice](#); [Environmental justice](#); [Human justice](#); [Justice](#); [The all-subjected principle](#); [Transnational justice](#); [Trans-species justice](#)

Definition

Social justice is a central obligation of civil society where the measure of the ethical integrity of a society is how it treats its most vulnerable members. Rawls' (1971) theory of justice as fairness in the context of political liberalism has been influential in modern western capitalist societies.

Rawlsian justice is based on the principle that free and rational people accept the rightness of equality for all members of society as the basis for all other agreements, social cooperation, and forms of government. It presumes that justice will be achieved by a redistribution of societal resources to ensure fairness for all. Feminist scholars have criticized his theory for not giving sufficient regard to emotions in his rational ethic of justice and for not asking the question – fairness for whom? Despite the universalist, modernist undertones of his ideas, Rawls argues for international justice for all types of societies. International justice is needed to ensure minimum standards of including people in political decisions and protecting human rights. Rawls explains that justice must not be only a nation-bound concern or the reserve of liberal societies. He extends justice to include the notion of the law of peoples which all decent peoples will uphold, and this includes not being imperialistic or aggressive toward other people.

Introduction

Contemporary understandings of social justice have built upon this scholarship, and yet it remains a complex idea without a universally agreed meaning. It usually refers to the experience of equality, fairness, and well-being of social groups who have been subject to disadvantage and discrimination. Sociologists argue that social justice occurs when people are free from oppression and all forms of violence. Oppression involves socio-personal harm caused by exploitation, marginalization, powerlessness, imperialism, and violence (Young 1990). Oppression exists in the structures or enduring patterns of behavior in society and includes racism, sexism, ageism, classism, and speciesism. It also includes any other pattern of discrimination that becomes institutionalized in a society's systems and in cultural norms and language. Young (1990) argues that social justice occurs when social institutions enable the inclusion of people in decisions that affect them, which is consistent with ideas of participatory democracy. There can be no social justice where there is oppression.

Justice is integral to the aims of a range of professions, including social work, law, environmental science, and criminology. The International Federation of Social Workers regards social justice as a central principle in social work practice that supports the empowerment and liberation of people. The international association for the legal profession promotes peace and justice through law. Environmental activists and criminology scholars are concerned with environmental or ecological justice in relation to natural resource-based development. Social injuries can occur when people's health and well-being are impacted by toxic environments and when there is devastation of ecosystems and traditional cultures (White 2013). The area of green or environmental victimology takes this further with the argument that not only are humans the victims of environmental crime but so too are animals and ecosystems (White 2018).

This is similar to the idea of trans-species social justice where all species are valued as beings with feelings, needs, and rights. In a similar vein, Australian Indigenous knowledge is based on reciprocal relationships between all living beings and the landscape such that humans are the custodians of their fellow beings and the land.

Transnational justice is suggested by scholars and activists concerned with access to resources, rights, and human security issues such as slave labor, child migration, and asylum seekers. Mass movements of people due to exploitation, persecution, or trauma can become entangled in nation-state border protection laws and categorizations that hide dominant power structures. Powerful groups and businesses can use these structures and laws to deny claims to human rights. Examples of human rights that are not upheld are the right to safe and fair work conditions, the right of children to be mobile without being exploited, and the right of all people to seek asylum.

Justice is a central principle in several international declarations that provide umbrella ethics and guidelines which nation-states interpret in their laws and customs. For example, the 1948 Universal Declaration of Human Rights conveys many principles which are congruent with social justice such as:

Article 3. Everyone has the right to life, liberty and security of person.

Article 4. No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5. No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment (United Nations 2019).

The link between achieving social justice and human rights is direct, and each is a necessary condition of the other. Human rights include the legal and civil notions of rights; economic, social, and cultural rights; and the rights of groups and countries. Justice is also an underpinning imperative of sustainability in international socio-economic statements and commitments by nation-states in recent decades – including the 2000 Millennium Development Goals and the 2012 Sustainable Development Goals which aim for an end to poverty, the protection of the planet, and efforts to ensure that all people enjoy peace and prosperity.

Nevertheless, claims to social justice have to be struggled for, and even where international conventions and national anti-discrimination laws exist, it cannot be assumed that people's right to be treated justly will be upheld. There are privileged groups with powerful vested interests in maintaining the status quo of society to their own advantage. The global capitalist economic system creates injustice as part of its logic of profitmaking, use of natural resources, impacts on local communities, and movement of capital across national boundaries. The scale and impact of dominant modes of economics call into question the sovereignty of nation-states, their laws, and the adequacy of modernist notions of social justice.

The Sustainability Issue

Social justice is not possible without sustainable development. Sustainable development will not occur without sophisticated notions of social and eco-justice. In turn, a sophisticated understanding of social justice work needs to be backed up by legal protections and the political will of the

people through their governments. The issue is that development in capitalist globalized economies is not sustainable and not equitable with some countries, social groups, and ecosystems bearing the cost more than others. The issue is thought to be addressed by multinational corporations undertaking corporate social responsibility (CSR) to ensure a net positive social value to business operations. CSR is considered to be a necessary part of securing a social license to operate. The impetus for being seen to be practicing CSR has derived in part from the failures of governments and mining corporations that have resulted in often expensive community backlash and in reputational harm. Examples of failures of corporate social responsibility include BHP Billiton and the Ok Tedi mining disaster in Papua New Guinea; CSR Ltd. and the Wittenoom asbestos disaster in the Pilbara of Western Australia; and the class action and financial settlement against building product manufacturer, James Hardie, by victims of asbestos exposure.

Social justice language and practices need centering in matters of sustainable development and management issues. This requires a more refined understanding of social justice to guide efforts to ensure accountability where the extractive industries in particular have adverse impacts on people, animals, and ecosystems. The Rawlsian notion of justice as fairness and the equal distribution of resources is relevant but has not been successful in guiding efforts to rebalance the extremes of business profits and capitalist wealth on an international scale. Fraser (2009) asks – who counts as a subject of justice – and argues for a global or transnational justice that adopts an all-subjected principle. This contrasts with a nation-bound idea of an all-affected basis for justice. At least in theory, it allows for adjudication where there are competing views, rights, and claims. Fraser refers to circumstances of competing views as abnormal justice where there are claims and counterclaims, and it is not necessarily clear who counts and who is deciding who counts. She explains the all-subjected principle of justice as:

What turns a collection of people into fellow subjects of justice is not shared citizenship or nationality, or common possession of abstract personhood, or the sheer fact of causal interdependence, but

rather their joint subjection to a structure of governance, which sets the ground rules that govern their interaction. For any such governance structure, the all-subjected principle matches the scope of moral concern to that of subjection. (Fraser 2009, p. 292)

This approach places social relationships, whether in the form of direct interactions or indirect form through the influence of governance structures, and how power is exercised, at the center of how to respond to justice claims. All parties in a justice issue are to be regarded as equal moral claimants with an equal voice in deliberations about the issue. The reality though can be one of inequality in terms of political influence and financial resources to mount a legal claim for justice in the absence of robust democratic and dialogical methods of settling disputes.

Way Forward: Eco-social Justice for Sustainable Development

Attention needs to be given to balancing the asymmetries of power relations in justice claims in resource development disputes. It is important that deference, preferably enshrined in legislation, is given to the least powerful parties experiencing adverse impacts. This is about impacted stakeholder justice which is inclusive of animal's rights and is consistent with the social precautionary principle and sustainability. However, eco-activists and scholars recognize the limits of relying on international declarations, governments, and legislation to protect the rights of people, animals, and ecosystems. For example, White (2009) argues from an eco-justice stance that there is a need for transnational victims' activism as part of resistance to state crime and environmental harm caused by the extractive industries. White describes state crime in this context as occurring when governments fail to ensure industries operate within the limits of sustainability and when there is insufficient regulation of, and consequences relating to, environmental and other harm. Higgins proposes laws such as a Bill of Nature's Rights and an extension of the Declaration of Human Rights to include Mother Earth as part of what is needed to eradicate ecocide and to hold perpetrators

accountable for the destruction of the planet. She argues that without environmental sustainability, life itself on this planet of finite resources is at risk and calls on the “commanding voice of the people ... to make ecocide a crime” (Higgins 2010, p. 166).

Summary

Social justice requires all forms of sustainability, economic, environmental, and social and has an affinity in particular with social sustainability. Social sustainability refers to a state of human and non-human well-being when social, economic, and environmental factors align to support present time and intergenerational equality and flourishing.

Most western governments have environmental protection legislation which contains an environmental precautionary principle. This is where caution is exercised if there is uncertainty about the risk of harm from a development or expansion proposal. The subjected public can argue against a development that may irretrievably damage the environment or threaten endangered species by using this principle. According to social justice as all subjected, a social precautionary principle is also needed for the protection of the social well-being and assets of communities and for human and animal health. This principle is based on the value of caring for life and the planet.

There are no quick answers or one-size-fits-all solution to unsustainable development. The intersecting interests and issues in any circumstance of injustice involve powerful business and pro-development national governments. It is clear though there can be no social justice without environmental justice.

Cross-References

- [Corporate Social Responsibility](#)
- [Corporate Sustainability](#)
- [Economic Sustainability](#)
- [Ethic of Love](#)

- [Power Equalizing](#)
- [Sustainable Growth](#)

References

- Fraser, N. (2009). Who counts? Dilemmas of justice in a post Westphalian world. *Antipode*, 41(1), 281–297.
- Higgins, P. (2010). *Eradicating ecocide: Laws and governance to prevent the destruction of our planet*. London: Shephard-Walwyn Publishers Ltd.
- Rawls, J. (1971). *A theory of justice*. Oxford: Oxford University Press.
- United Nations. (2019). Universal Declaration of Human Rights. <http://www.un.org/en/universal-declaration-human-rights/>. Accessed 6 Mar 2019.
- White, R. (2009). Environmental victims and resistance to state crime through transnational activism. *Social Justice*, 36(3), 46–60.
- White, R. (2013). Resource extraction leaves something behind: Environmental justice and mining. *International Journal for Crime and Justice*, 2(1), 50–64.
- White, R. (2018). Ecocentrism & criminal justice. *Theoretical Criminology*, 22(3), 342–362.
- Young, I. (1990). *Justice and the politics of difference*. Princeton: Princeton University Press.

Social Justice and Equity

- [Social Sustainability](#)

Social Legitimacy

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Synonyms

[Moral legitimacy](#); [Organizational legitimacy](#)

Definition of Legitimacy

In the field of management, social legitimacy refers to the degree to which the general public and other stakeholders support a specific behavior

or program implemented by a private or public organization. It refers to the social acceptance of organizations (also named organizational legitimacy). One of the first comprehensive definitions is provided by Suchman (1995, p. 574) who describes legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions.” In other terms, the concept is socially constructed in that it reflects a congruence between the behaviors of the legitimated entity and the shared (or assumedly shared) beliefs of some social group. Legitimacy depends on a collective audience (evaluators) that approves or supports the company behavior despite a single or particular observer may have reservations or disapprove it. The underlying idea is that companies conclude a kind of “social contract” to run their business that implies congruity between the social values associated to their activities and the commonly accepted rules of conduct in the broader social system they belong to (Cho and Patten 2007). When there is a lack of congruity because society’s expectations are not satisfied, there is a problem of legitimacy that could compromise the above-mentioned contract and consequently hinder company’s credibility and continuity, i.e., making it impossible for the company to obtain the human, financial, and other resources it needs to operate.

The Basis of Legitimacy and Its Classifications

A widespread definition of legitimacy is the one provided by Suchman (1995, p. 574) who defines legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.”

Legitimacy theory is rooted in the works of Weber and Parsons (see Dowling and Pfeffer 1975; Sethi 1979) and is classified as a sociopolitical theory as it concerns the relationship between companies and members of the external

society, recognizing that companies influence and are influenced by the society in which they operate (Branco and Rodrigues 2012). There are various sociopolitical theories; among them, institutional theory is the one that mostly emphasizes the relevance of legitimacy. Institutionalists largely believe that the behavior of actors and organizations is guided by the logic of appropriateness and not simply by economic rationality.

However, the process of legitimation stemming from the reciprocal influence between the company and the wider society is not uniquely defined because the way (or criteria) in which societal actors evaluate organizations and their actions can differ.

According to Suchman (1995), legitimacy can be rule-, moral-, pragmatic- or cognitive-based. In the first case, legitimacy is linked to its coherence with rules and laws. In the second case, an activity or company’s behavior is held as legitimate if it is the “right thing to do,” if it is consistent with moral standards (i.e., there is a moral evaluation). In the third case, legitimacy depends on the judgment of close stakeholders or constituencies that assess something as legitimate if it brings a benefit or desirable outcome to the evaluator (i.e., stakeholders themselves). Finally, legitimacy is achieved when there is a take-for-granted assumption within the society that the organization and/or its actions are necessary and inevitable. In this last case, legitimacy stems from cultural models, dominant ideas, and beliefs and does not depend on the evaluation of some group of stakeholders. Similarly, Scott (1995) identified three pillars that sustain the legitimacy of institutions: the regulative pillar that emphasizes legitimacy as a consequence of obedience to nonlegal and legal obligations; the normative pillar that highlights a more ethical basis to obtain legitimacy; and the cultural-cognitive pillar that approaches legitimacy via the adaptation of a commonly accepted framework. These three pillars present the institutional surrounding, which constitutes appropriate decision-making and actions in order to gain legitimacy. Scott’s (1995) regulative Pillar aligns with DiMaggio and Powell’s (1983) coercive isomorphism. The normative pillar provides a more widespread sight although there are similarities

with the work of DiMaggio and Powell's (1983) normative isomorphism (Scott 1995). The cultural-cognitive pillar of Scott (1995) is an equivalent of the mimetic isomorphism of DiMaggio and Powell (1983).

A refined classification of the different criteria used to define legitimacy and the tactics exercised to obtain and then maintain legitimacy is offered by Deephouse et al. (2017). These authors emphasize how legitimacy may stem from different criteria (regulation, pragmatism, ethics, and cultural frameworks that support regulatory, pragmatic, moral, and cultural-cognitive legitimacy) and different sources (the public opinion, the state, the profession, the media, a group of stakeholders, etc.) that evaluate what is legitimate. The interplay of these criteria and sources/evaluators represent the different types of legitimacy.

The work of Deephouse et al. (2017) is also important because it adds the idea of legitimacy as a dynamic process as the evaluation criteria may change over time with the formation of new scenarios, the internal change of organizations and the transformation of society's rules and standards against which company behavior is evaluated. Previous studies conceived legitimacy as a property, resource or thing that is possible to have or they conceived legitimacy as a form of socio-cognitive perception or evaluation. When legitimacy is understood as an interactive process, it means that legitimacy is continuously challenged and organizations need to find the appropriate response. Some organizations will respond by demonstrating appropriateness, or affirming adequate performance or their fit with social values and systems of meanings. However, organizations may also react to a legitimacy challenge by launching activities that change social values and meaning systems or modify (e.g., through lobbying) regulations. In the first case, organizations tend to conform to external pressures, while in the second case organizations strategically act to institutionally innovate the local context.

As stated by Suddaby et al. (2016), legitimacy is an important subject in political science, philosophy, psychology, and sociology. However, its popularity is due to management and business studies.

Business studies investigate the social legitimacy of organizations adopting two different theoretical frameworks that basically represent the origins of legitimacy theory (Spence et al. 2010). One group of studies rely on the institutional approach. These institutional based studies focus on how situational aspects that are external to the firm generate pressures influencing company behaviors and actions. The other group of studies rely on resource dependence theory. These are strategic oriented studies that conceive legitimacy as something that managers can manipulate and therefore focus on how companies can obtain a key resource, namely societal support. Within the institutional approach, legitimacy is considered as a set of constitutive beliefs, which are adapted to conform to external expectations about what is acceptable. When this framework is adopted, investigations regard the process by which institutions construct and interpenetrate organizations (DiMaggio and Powell 1983; Meyer and Rowan 1977) and attention is given to external actors that exert pressures on companies like government authorities (Ahmed Haji 2013; De Villiers and Van Staden 2006; Deegan and Rankin 1996) and nongovernmental organizations (Deegan and Islam 2014). When resource dependency theory is preferred, legitimacy is considered as an operational resource on which the organization is dependent for survival (Dowling and Pfeffer 1975). Preference for this second framework leads authors to assume the perspective of company managers "looking out" to the society and to focus on how companies try to alter their status of legitimacy through disclosure and communication strategies (Ashforth and Gibbs 1990; Aerts and Cormier 2009).

Legitimacy and CSR

Legitimation is one of the three key motivations that drive firms to adopt socially responsible practices or a sustainable behavior. According to Bansal and Roth (2000), firms adopt corporate social responsibility (CSR) practices either to gain competitiveness or to obtain legitimacy. In the first case, company's behavior rests on

self-interest and aims to efficiency and efficacy. CSR is a mean to achieve organization's goals. In the second case, company's behavior is influenced by values and beliefs in the society as companies aim "to gain the license to operate and goodwill in the public eye" (words of Podnar and Golob 2007, p. 336).

Legitimacy or social legitimacy is also one of the most commonly used theories to explain the disclosure of CSR practices through sustainability reports or other media (Campbell et al. 2003). While some authors attribute more emphasis to other theoretical explanations (Guthrie and Parker 1989), many authors confirm legitimacy theory as the primary explanation for social reporting.

Legitimacy theory ascribes the adoption and reporting of CSR practices to the external pressure that a society places on companies, which can activate communication strategies in order to acquire, maintain or reconquer the legitimacy of their operations (Cho and Patten 2007; Darrell and Schwartz 1997). In other terms, CSR practices and sustainability reporting can be the result of a company's attempt to be compliant or comply with external pressures. However, reporting can also be used as a tool of strategic adaptation (Gray et al. 1995). In the latter case, CSR is a strategy adopted to legitimize corporate existence and this is evident when the company deliberately emphasizes on a given form of CSR beyond some threshold level needed to satisfy explicit demands.

Empirical investigations on the relationship between CSR and the achievement or maintenance of company legitimacy span through different sectors. A large amount of studies has explored the use of socioenvironmental reporting to gain legitimacy by polluting companies like those operating in the oil and gas sector (Islam and Islam 2011). These companies work in a controversial industry frequently criticized for issues ranging from environmental violations, to human rights abuses, detrimental impact on local communities, and breaches of labor and safety standards. Therefore, their organizational legitimacy is often being challenged (Palazzo and Scherer 2006). There are also many studies investigating how CSR disclosure can be used to recover the loss of legitimacy after an industrial

disaster or scandal caused by a company (Summerhays and De Villiers 2012; Aureli et al. 2016; Demajorovic et al. 2019). High-profile disasters, such as the Exxon Valdez oil spill in 1989 and BP's oil spill in the Gulf of Mexico in 2010 are remarkable examples. However, the use of CSR as a device to maintain legitimacy with key constituents (audiences) can refer to almost all industries and types of companies, including accountancy firms (Duff 2016, 2017).

Since legitimacy issues emerge because of negative media publicity and the increased level of stakeholders' sensitivity to ethical, social, and environmental issues (Maignan and Ferrell 2004), many authors also investigate the role of media in creating negative public sentiment. The media agenda setting theory states that media generate awareness of the event or disaster in the community and their news create pressure on companies. Therefore, the number and type of articles in the media must also be studied (Deegan and Islam 2014). This approach differs from previous studies that associate media with the most influential stakeholders (Brown and Deegan 1998). In the latter case, it is argued that the pressure of the media is the expression of – and therefore perfectly fit to – the pressure of a specific social group. On the contrary, the media agenda setting theory claims that media's role is to attract the attention of the public; consequently, the opinion of the media is not necessarily the same as that of the public (Gillet-Monjarret 2015).

The disclosure of CSR information to gain legitimacy is not standardized. Companies do not pursue the same communication strategy: some may opt for an image enhancement strategy, others may deny responsibility for the events (disclaimer strategy), and others may choose an avoidance strategy, aiming to distract public attention from a given event or situation which could damage the organization (Summerhays and De Villiers 2012). In addition, the usage of sustainability or social reports is only one of the possible strategies that a company adopts to gain or maintain legitimacy. As found by Cho (2009), an organization can implement different strategies to face the same event happened in two different moments. In general, companies may opt for two

different types of strategies: symbolic actions (i.e., practices that enable the company to pursue its own interests and preserve its resources) or through substantive practices (i.e., they initiate a legitimization strategy that may compromise the company's own interests and resources) (cf. Ashforth and Gibbs 1990).

Summary

The adoption of CSR practices and their communication to the society is widely acknowledged as a means to obtain legitimacy. However, some researchers have recently offered a contrasting view; for example, Bachmann and Ingenhoff (2016, 2017) suggest that CSR disclosures can also decrease a company's legitimacy, because stakeholders may become skeptical and distrust company's narratives.

References

- Aerts, W., & Cormier, D. (2009). Media legitimacy and corporate environmental communication. *Accounting, Organizations and Society*, 34(1), 1–27.
- Ahmed Haji, A. (2013). Corporate social responsibility disclosures over time: Evidence from Malaysia. *Managerial Auditing Journal*, 28(7), 647–676.
- Ashforth, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation. *Organization Science*, 1(2), 177–194.
- Aureli, S., Medei, R., Supino, E., & Travaglini, C. (2016). Sustainability disclosure after a crisis: A text mining approach. *International Journal of Social Ecology and Sustainable Development*, 7(1), 35.
- Bachmann, P., & Ingenhoff, D. (2016). Legitimacy through CSR disclosures? The advantage outweighs the disadvantages. *Public Relations Review*, 42(3), 386.
- Bachmann, P., & Ingenhoff, D. (2017). How do media companies gain legitimacy? An experimental study on the (ir)relevance of CSR communication. *International Journal of Strategic Communication*, 11(1), 79–94.
- Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, 43, 717–736.
- Branco, M. C., & Rodrigues, L. C. L. (2012). Issues in corporate social and environmental reporting research: An overview. *Issues in Social and Environmental Accounting*, 1(1), 72–90.
- Brown, N., & Deegan, C. (1998). The public disclosure of environmental performance information – A dual test of media agenda setting theory and legitimacy theory. *Accounting and Business Research*, 29(1), 21–41.
- Campbell, D., Craven, B., & Shrives, P. (2003). Voluntary social reporting in three FTSE sectors: A comment on perception and legitimacy. *Accounting, Auditing & Accountability Journal*, 16(4), 558–581.
- Cho, C. H. (2009). Legitimation strategies used in response to environmental disaster: A French case study of total SA's Erika and AZF incidents. *European Accounting Review*, 18(1), 33–62.
- Cho, C. H., & Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society*, 32(7), 639–647.
- Darrell, W., & Schwartz, B. N. (1997). Environmental disclosures and public policy pressure. *Journal of Accounting and Public Policy*, 16(2), 125–154.
- De Villiers, C., & Van Staden, C. J. (2006). Can less environmental disclosure have a legitimising effect? Evidence from Africa. *Accounting, Organizations and Society*, 31(8), 763–781.
- Deegan, C., & Islam, M. A. (2014). An exploration of NGO and media efforts to influence workplace practices and associated accountability within global supply chains. *The British Accounting Review*, 46(4), 397–415.
- Deegan, C., & Rankin, M. (1996). An analysis of environmental disclosures by firms prosecuted successfully by the Environmental Protection Authority. *Accounting, Auditing & Accountability Journal*, 9(2), 52–69.
- Deephouse, D. L., Bundy, J., Tost, L. P., & Suchman, M. C. (2017). Organizational legitimacy: Six key questions. In R. Greenwood, C. Oliver, T. Lawrence, & R. Meyer (Eds.), *The SAGE handbook of organizational institutionalism* (2nd ed.). Thousand Oaks: SAGE.
- Denajorovic, J., Lopes, J. C., & Santiago, A. L. F. (2019). The Samarco dam disaster: A grave challenge to social license to operate discourse. *Resources Policy*, 61, 273–282.
- DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147–160.
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *The Pacific Sociological Review*, 18, 122–136.
- Duff, A. (2016). Corporate social responsibility reporting in professional accounting firms. *The British Accounting Review*, 48(1), 74–86.
- Duff, A. (2017). Corporate social responsibility as a legitimacy maintenance strategy in the professional accountancy firm. *The British Accounting Review*, 49(6), 513–531.
- Gillet-Monjarret, C. (2015). Assurance of sustainability information: A study of media pressure. *Accounting in Europe*, 12(1), 87–105.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2), 47–77.
- Guthrie, J., & Parker, L. D. (1989). Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research*, 19(76), 343–352.

- Islam, A. M., & Islam, A. M. (2011). Environmental incidents in a developing country and corporate environmental disclosures: A study of a multinational gas company. *Society and Business Review*, 6(3), 229–248.
- Maignan, I., & Ferrell, O. C. (2004). Corporate social responsibility and marketing: An integrative framework. *Journal of the Academy of Marketing Science*, 32(1), 3–19.
- Meyer, J., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Sociological Review*, 83, 340–363.
- Palazzo, G., & Scherer, A. G. (2006). Corporate legitimacy as deliberation: A communicative framework. *Journal of Business Ethics*, 66, 71–88.
- Podnar, K., & Golob, U. (2007). CSR expectations: The focus of corporate marketing. *Corporate Communications: An International Journal*, 12(4), 326–340.
- Scott, R. (1995). *Institutions and organizations*. Thousand Oaks: Sage.
- Sethi, S. P. (1979). A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. *Academy of Management Review*, 4(1), 63–74.
- Spence, C., Husillos, J., & Correa-Ruiz, C. (2010). Cargo cult science and the death of politics: A critical review of social and environmental accounting research. *Critical Perspectives on Accounting*, 21(1), 76–89.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Suddaby, R., Bitektine, A., & Haack, P. (2016). Legitimacy. *Academy of Management Annals*, 11(1), 451.
- Summerhays, K., & De Villiers, C. J. (2012). Oil company annual report disclosure responses to the 2010 Gulf of Mexico oil spill. *Journal of the Asia-Pacific Centre for Environmental Accountability*, 18(2), 103–130.

Social License to Operate

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Synonyms

Accountability; Community engagement; Corporate social responsibility disclosure; CSR; SLO; Sustainable environments

Description

Local communities in the developed economies realized that the operations of environmentally invasive industries would lead to certain benefits to their neighborhoods but increasingly needed persuading these were worth the negative consequences. Their concerns typically include but were not limited to: increased levels of pollution and the potential resulting impact on public and employees' health, changes in the nature and composition of the community, the impact on existing local businesses and the economy in general, restricted access to services, and overall impact on their quality of life.

Bowen's seminal work on corporate social responsibility (Bowen, 1953; Gond & Moser 2021; Cornelius & Wallace, 2023) and the later introduction of stakeholder theory (Freeman, 1984) led to the realization of the need for greater accountability and compensation for these negative impacts for those directly and indirectly affected communities. In the late 1990s, the mining industries introduced the concept of a **social license to operate (SLO)** as an active part of their corporate social responsibility to stakeholders of their operations (Gunningham et al., 2004), to address these concerns. Since then, SLOs have become an integral part of the continuing approval process by stakeholders of ongoing mining operations at existing mines and for newly proposed sites (Prno & Slocombe, 2012; Thomson & Boutilier, 2011).

It is seen as a collaborative arrangement between the industry and stakeholders to sanction agreed operations, to encourage sustainable developments, and to agree compensatory measures that the industry can take to benefit affected communities and assuage unavoidable negative consequences. In the absence of an agreed SLO, and even when required legal permissions have been obtained from regulatory bodies, communities can still resist such developments. The consequences to the reputation and brand of the organization by operating under these circumstances can be substantial and difficult to remedy. The potential increases in operational costs could also be sizeable. As such, an SLO is seen as a

flexible way forward for society and so has been, and continues to be, introduced in diverse industries and novel operational settings. Although not necessarily a panacea for resolving inevitable conflict between stakeholders and organizations in all situations, it does provide a rational basis for dialogue, leading to an agreed SLO with overall benefits to both parties, albeit typically after suitable compromises. Table 1 provides an indicative list of such industries:

As mentioned, one of the major strengths of the SLO is its flexibility. It is not required to be a formal signed document, but as Bice (2014), Black (2017), and Parsons and Moffat (2014) argue, it is a metaphorical concept. It can comprise a signed legal license from an appropriate regulatory authority, should this be required, and a social license sanctioned by shareholders. The latter is rarely a signed document (Baumber, 2018; Franks & Cohen, 2012) but rather a tacit agreement with various stakeholder groups regarding operating practices, schedules, and any mitigating compensatory provisions that might be agreed. These can be unrelated to any immediate consequence of the operations or activities of the organization and more designed for social value creation within or beyond the affected communities. For example, sponsoring regeneration of derelict local infrastructures, to providing a school in a remote rural area of a developing economy. Furthermore, the proposed activity by the organization might have overall significance to a greater constituency of stakeholders, e.g., nuclear power-generating plant construction and commissioning, building wind turbine parks, hydraulic fracturing (fracking) for extraction of shale gas and oil, coal seam gas (CSG) mining, etc. This flexibility and the need for specificity have prompted the existence of multifaceted, multiple forms, of SLOs (Brueckner & Eabrasu, 2018; Gough et al., 2018; Hurst et al., 2020) that accommodate individual projects, specific industries, or even those proposed by particular organizations. As Luke, Brueckner, and Emmanouil (2018: 648) observe: “[. . .] industry-community conflict situations and the heterogeneity of social license outcomes.” They may also address projects that operate at the local, district, regional, national, or

Social License to Operate, Table 1 Industries that have introduced an SLO agreement

Industry	References
Mining	Thomson and Boutilier (2011) Bice (2014) Moffat and Zhang (2014) Parsons, Lacey, and Moffat (2014) Zhang et al. (2015) Ofori and Ofori (2019)
Energy – fossil fuels	Lacey and Lamont (2014); Richert (2015) Hall, Lacey, Carr-Cornish, and Dowd (2015) Smits, Van Leeuwenb, and Van Tatenhoveb (2017) Luke, Brueckner, and Emmanouil (2018)
Conservation	Sonter, Barrett, and Soares-Filho (2014) Garnett, Lawes, James, Bigland, and Zander (2015) Oakes et al. (2015) Kendal and Ford (2017)
Transportation	Thornton, Kagan, and Gunningham (2009)
Agriculture	Williams and Martin (2011) Arnaldo (2011) Becker and Kennedy (2011)
Forestry	Edwards and Lacey (2014) Edwards, Lacey, Wyatt, and Williams (2016) Ford and Williams (2016) Lacey, Edwards, and Lamont (2016) Wyatt (2016)
Energy – renewables	Hall (2014) Hall et al. (2015) Baumber (2018) Barich et al. (2022)
Aquaculture	Baines and Edwards (2018)
Textiles	Roth (2011)
Animal husbandry	Duncan, Graham, and McManus (2018)
Crowdfunding campaigns	Saniei and Kent (2021)

even international levels (Parsons & Moffat, 2014).

It is argued (e.g., Dare et al., 2014; Esteves & Vanclay, 2009; Hurst et al., 2020) that, in addition to ongoing access to resources, the benefits to the organization of obtaining a social license to operate include the following: increased reputation

among stakeholders through legitimacy, trust, and credibility; an increase in competitive advantage in the market place; and, positive effects on its employees.

The pragmatic flexibility for social license(s) to operate as a concept led to the evolution of three distinct main models for this initial acceptance and ongoing sanctioning: the Triangle model; Pyramid model; and the Three Strand model. For each model, legitimacy and trust are central and critical to achieving sustainable and socially acceptable outcomes for stakeholders.

The Triangle Model

The Triangle model (Wüstenhagen et al., 2007) represents a social license to operate predicated on, and a consequence of, acceptances by stakeholders in three fundamental domains: the socio-political and legal, that of the affected community, and the specific market in which the operations/activities are planned to take place (see Fig. 1). The rationale is that acceptance in these distinct domains will signify overall social acceptance and will lead to legitimacy for both the vendor and the specific project, or venture, under scrutiny. Its origins stem from the renewable energy industry.

The socio-political/legal domain requires acceptance by the public, including germane and critical stakeholders, policy makers, and

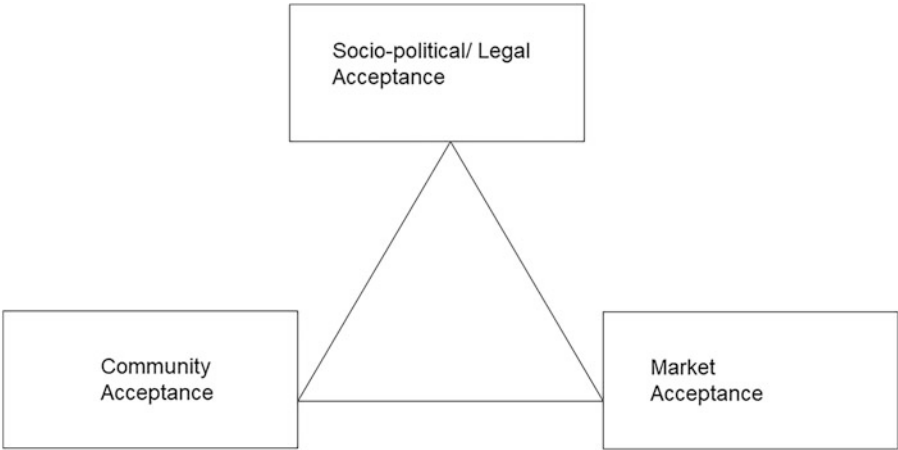
regulatory authorities regarding the proposed operating processes and procedures, and use of any proposed technologies. Community acceptance requires stakeholders to accept and trust that they will be afforded procedural justice and distributional justice regarding all operations and activities. Finally, market acceptance requires acceptance by the public at large, funding and regulatory authorities, the local communities, the vendor’s employees, and consumers.

Once these have been achieved, a social license will tacitly be in place.

The Pyramid Model

The Pyramid model was introduced by Boutilier and Thomson (2011) and was initially developed for the mining industry but has a greater currency, given the expansion of the concept into other industries. The model considers there to be a hierarchy of four distinct stages of acceptance in a social license to operate. These represent the degrees of acceptance for a project and start at the point of an initial proposal being withheld or an ongoing one failing and having its social license being withdrawn. It introduces the psycho-social conditions (legitimate, credible, and trustworthy) required to transition through these levels.

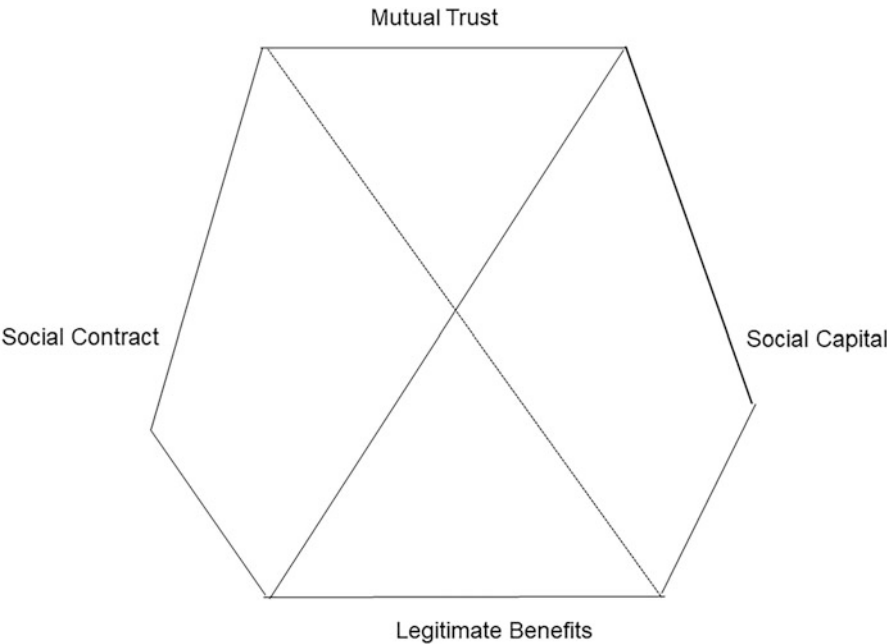
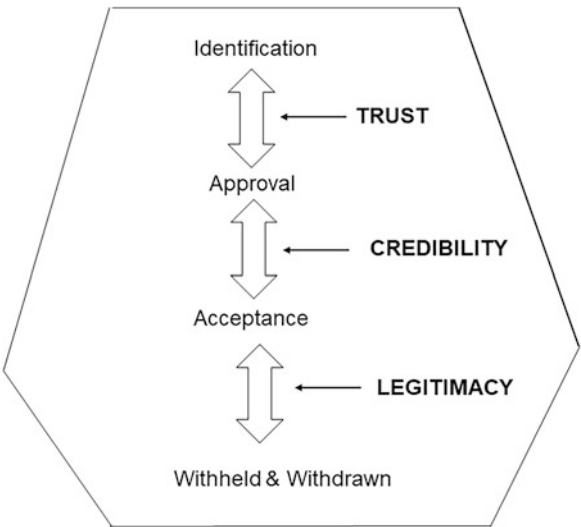
The basal level of acceptance can be reached by the organization achieving legitimacy among



Social License to Operate, Fig. 1 The Triangle Model. (Adapted from Wüstenhagen et al., 2007)

Social License to Operate,

Fig. 2 Pyramid Model of social license to operate. (Adapted from Boutilier & Thomson 2011)



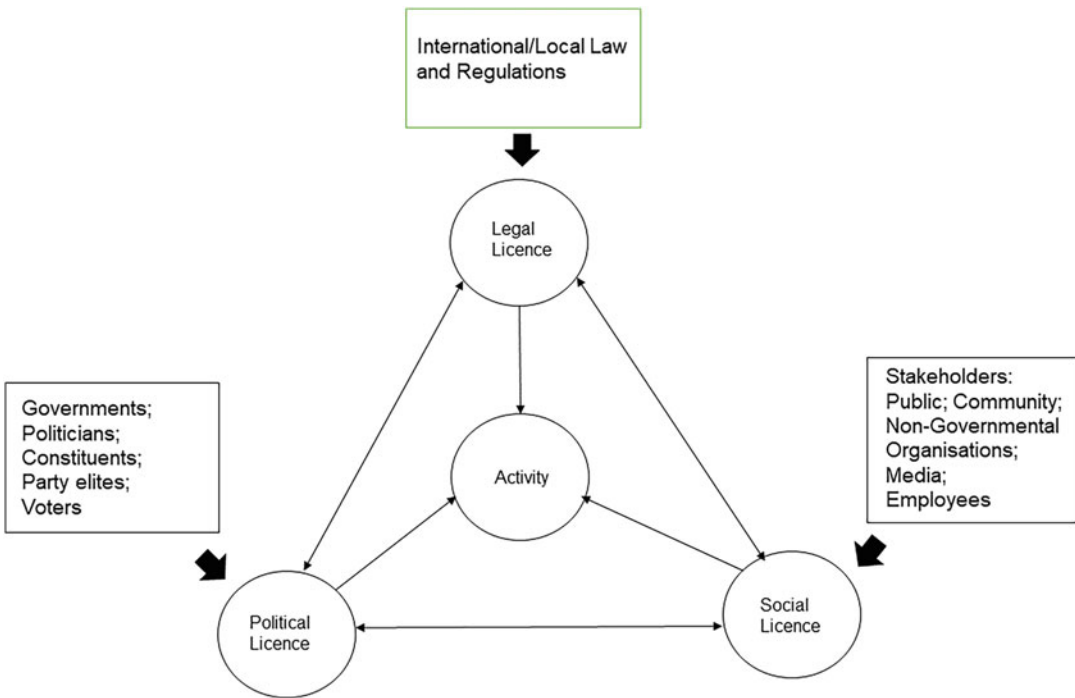
Social License to Operate, Fig. 3 Pyramid Model of social license to operate: four components. (Adapted from Boutilier & Thomson 2011)

stakeholders for the project. Approval follows with the organization achieving credibility with trust finally leading to psychological identification (Pirson & Malhotra, 2011). A schema for the Pyramid model is exhibited in Fig. 2.

The social license also has a corresponding set of four components that the organization needs to

provide to establish acceptance from stakeholders (see Fig. 3). Black (2017) suggests that these can be considered as strategies for developing or improving - establishing, maintaining or Improving) - a social license that an organization must follow.

Providing legitimate benefits for stakeholders is seen as essential. For the social



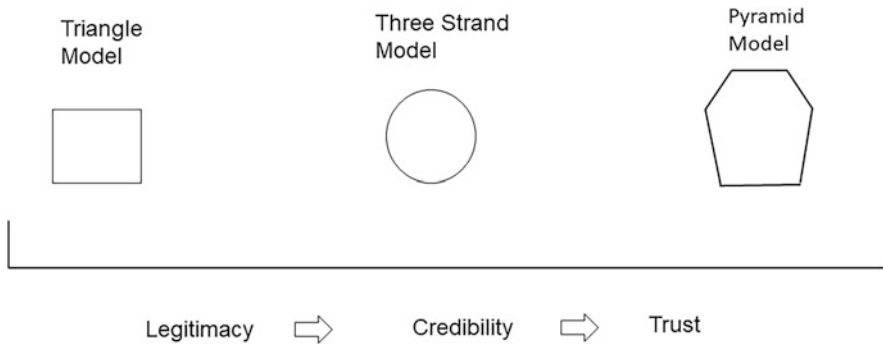
Social License to Operate, Fig. 4 The Three Strand Model. (Adopted from Morrison, 2014)

license to operate to be more robust and sustainable, the organization should increase its social contract together with its social capital with affected stakeholders. These can be achieved through authentic and ethical engagement and can lead, ultimately, to mutual trust between the organization and its stakeholders.

The Three Strand Model

The third major social license to operate model in the literature is the Three Strand model. Following empirical research undertaken by Gunningham and coworkers, a multiple-faceted license model was identified. This comprised: a regulatory license, one based on a social license, and an economic license (Gunningham et al., 2004). The regulatory license required appropriate sanctioning by the project being compliant with

international and local legislation, any additional regulations governing the specific industry, and where deemed appropriate, acceptance by magistrates or judges. For the social license, acceptance is needed from a variety of stakeholders, including those affected in the immediate vicinity of the venture, a wider constituency of relevant pressure groups, the general public, international environmentalists, etc., depending on the particular nature of the project. The economic license also needs acceptance by all streams of funders and management from the proposing organization. Subsequently, Morrison (2014) introduced the Three Strand model in which the economic license is replaced by a political license dimension with Van Putten and coworkers (2018) arguing that, in practice, this does not substantively change the acceptance of the social license to operate. This was universally accepted and represents the currently proposed Three Strand model (see Fig. 4).



Social License to Operate, Fig. 5 Social license to operate models hierarchy. (Adapted from Van Putten et al., 2018)

Summary

Despite differences to accommodate the nature of the proposed project, the three social license to operate models (Triangle, Pyramid, and Three Strand) embrace the three necessary key components of legitimacy, credibility, and trust, albeit in varying degrees (Van Putten et al., 2018). This hierarchy is represented, diagrammatically, in the schema in Fig. 5.

Cross-References

- [John Gerard Ruggie and the UN Guiding Principles on Business and Human Rights](#)
- [United Nations Human Rights Committee](#)

References

- Acquier, A., Gond, J.-P., & Pasquero, J. (2021). Rediscovering Howard R. Bowen's legacy: The unachieved agenda and continuing relevance of social responsibilities of the businessman. *Business & Society*, 50(4), 607–646.
- Arnaldo, A. (2011). Farmers heal the land: A social licence for agriculture in Iceland. In J. Williams & P. Martin (Eds.), *Defending the social licence of farming: Issues, challenges and new directions for agriculture, technology & engineering* (pp. 83–92). Clayton, Australia: CSIRO Publishing.
- Baines, J., & Edwards, P. (2018). The role of relationships in achieving and maintaining a social licence in the New Zealand aquaculture sector. *Aquaculture*, 485, 140–146.
- Barich, A., Stoklosa, A. W., Hildebrand, J., Eliasson, O., Medgyes, T., Quinonez, G., Casillas, A. C., & Fernandez, I. (2022). Social license to operate in geothermal energy. *Energies*, 15, 139.
- Baumber, A. (2018). Energy cropping and social licence: What's trust got to do with it? *Biomass and Bioenergy*, 108, 25–34.
- Becker, J., & Kennedy, A. (2011). American agriculture's social licence to operate. In J. Williams & P. Martin (Eds.), *Defending the social licence of farming: Issues, challenges and new directions for agriculture, technology & engineering* (pp. 93–102). Clayton, Australia: CSIRO Publishing.
- Bice, S. (2014). What gives you a social licence? An exploration of the social licence to operate in the Australian mining industry. *Resources*, 3(1), 62–80.
- Black, L. (2017). *The social licence to operate: your management framework for complex times*. Abingdon, Oxon: Taylor Francis.
- Boutillier, R. G., & Thomson, I. (2011). Modelling and measuring the social licence to operate: Fruits of a dialogue between theory and practice. Available at: <http://www.sociallicense.com/publications/ModellingandMeasuringtheSLO.pdf>
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York, NY: Harper.
- Brueckner, M., & Eabrasu, M. (2018). Pinning down the social licence to operate (SLO): The problem of normative complexity. *Resources Policy*, 59, 217–226.
- Cornelius, N., & Wallace, J. (2023). John gerard ruggie and the UN guiding principles on business and human rights. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, R. Abreu, (Eds.), *Encyclopedia of Sustainable Management*. Springer, Cham. https://doi.org/10.1007/978-3-030-02006-4_452-1
- Dare, M., Schirmer, J., & Vanclay, F. (2014). Community engagement and social licence to operate. *Impact Assessment and Project Appraisal*, 32(3), 188–197.
- Duncan, E., Graham, R., & McManus, P. (2018). No one has even seen... smelt... or sensed a social licence?: Animal geographies and social licence to operate. *Geoforum*, 96, 318–327.
- Edwards, P., & Lacey, J. (2014). Can't climb the trees anymore: Social licence to operate, bioenergy and

- whole stump removal in Sweden. *Social Epistemology*, 28, 239–257.
- Edwards, P., Lacey, J., Wyatt, S., & Williams, K. J. H. (2016). Social licence to operate and forestry – An introduction. *Forestry: An International Journal of Forest Research*, 89(5), 473–476.
- Esteves, A. M., & Vanclay, F. (2009). Social development needs analysis as a tool for SIA to guide corporate-community investment: Applications in the minerals industry. *Environmental Impact Assessment Review*, 29(2), 137–145.
- Ford, R. M., & Williams, K. J. H. (2016). How can social acceptability research in Australian forests inform social licence to operate? *Forestry*, 89, 512–524.
- Franks, D. M., & Cohen, T. (2012). Social licence in design: Constructive technology assessment within a mineral research and development institution. *Technological Forecasting and Social Change*, 79(7), 1229–1240.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Marshfield, MA: Pitman.
- Garnett, S. T., Lawes, M. J., James, R., Bigland, K., & Zander, K. K. (2015). Portrayal of sustainability principles in the mission statements and on home pages of the world's largest organizations. *Conservation Biology*, 30, 297–307.
- Gehman, J., Lefsrud, L. M., & Fast, S. (2017). Social licence to operate: Legitimacy by another name? *Canadian Public Administration*, 60(2), 293–317.
- Gond, J.-P., & Moser, C. (2021). The reconciliation of fraternal twins: Integrating the psychological and sociological approaches to 'Micro' corporate social responsibility. *Human Relations*, 74(1), 5–40.
- Gough, C., Cunningham, R., & Mander, S. (2018). Understanding key elements in establishing a social license for CCS: An empirical approach. *International Journal of Greenhouse Gas Control*, 68, 16–25.
- Gunningham, N., Kagan, R. A., & Thornton, D. (2004). Social license and environmental protection: why businesses go beyond compliance. *Law & Social Inquiry*, 29(2), 307–341.
- Hall, N. (2014). Can the “social licence to operate” concept enhance engagement and increase acceptance of renewable energy? A case study of wind farms in Australia. *Social Epistemology*, 28(3–4), 219–238.
- Hall, N., Lacey, J., Carr-Cornish, S., & Dowd, A.-M. (2015). Social licence to operate: Understanding how a concept has been translated into practice in energy industries. *Journal of Cleaner Production*, 86(1), 301–310.
- Hurst, B., Johnston, K. A., & Lane, A. B. (2020). Engaging for a social licence to operate (SLO). *Public Relations Review*, 46(4), 1–9.
- Kendal, D., & Ford, R. M. (2017). The role of social license in conservation. *Conservation Biology*, 32(2), 493–495.
- Lacey, J., & Lamont, J. (2014). Using social contract to inform social licence to operate: An application in the Australian coal seam gas industry. *Journal of Cleaner Production*, 84, 831–839.
- Lacey, J., Edwards, P., & Lamont, J. (2016). Social licence as social contract: Procedural fairness and forest agreement-making in Australia. *Forestry: An International Journal of Forest Research*, 89(5), 489–499.
- Luke, H., Brueckner, M., & Emmanouil, N. (2018). Unconventional gas development in Australia: A critical review of its social licence. *The Extractive Industries and Society*, 5(4), 648–662.
- Moffat, K., & Zhang, A. (2014). The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy*, 39, 61–70.
- Morrison, J. (2014). *The social licence: How to keep your organization legitimate*. New York, USA: Palgrave Macmillan.
- Oakes, L. E., Hennon, P. E., Ardoin, N. M., D'Amore, D. V., Ferguson, A. J., Ashley Steel, E., Wittwer, D. T., & Lambin, E. F. (2015). Conservation in a social-ecological system experiencing climate induced tree mortality. *Biological Conservation*, 192, 276–285.
- Ofori, J. J. Y., & Ofori, D. R. (2019). Earning a social license to operate: Perspectives of mining communities in Ghana. *The Extractive Industries and Society*, 6(2), 531–541.
- Parsons, R., & Moffat, K. (2014). Constructing the meaning of social licence. *Social Epistemology*, 28(3–4), 340–363.
- Parsons, R., Lacey, J., & Moffat, K. (2014). Maintaining legitimacy of a contested practice: How the minerals industry understands its ‘social licence to operate’. *Resources Policy*, 41, 83–90.
- Pirson, M., & Malhotra, D. (2011). Foundations of organizational trust: What matters to different stakeholders? *Organization Science*, 22(4), 817–1120.
- Prno, J., & Slocombe, S. (2012). Exploring the origins of ‘social licence to operate’ in the mining sector: Perspective from governance and sustainability theories. *Resources Policy*, 37, 346–357.
- Richert, C. (2015). Measuring the extent of a social license to operate: The influence of marine biodiversity offsets in the oil and gas sector in Western Australia. *Resources Policy*, 43, 121–129.
- Roth, G. (2011). Retaining the social licence: The Australian cotton industry case study. In J. Williams & P. Martin (Eds.), *Defending the social licence of farming: Issues, challenges and new directions for agriculture, technology & engineering* (pp. 69–82). Clayton, Australia: CSIRO Publishing.
- Saenz, C. (2018). The context in mining projects influences the corporate social responsibility strategy to earn a social Licence to operate: A case study in Peru. *Corporate Social Responsibility and Environmental Management*, 25(4), 554–564.
- Saniei, S., & Kent, M. L. (2021). Social license to operate in crowdfunding campaigns. *Public Relations Review*, 47, 1–8.
- Smits, C. C. A., Van Leeuwenb, J., & Van Tatenhoveb, J. P. M. (2017). Oil and gas development in Greenland: A social license to operate, trust and legitimacy in environmental governance. *Resources Policy*, 53, 109–116.

- Sonter, L. J., Barrett, D. J., & Soares-Filho, B. S. (2014). Offsetting the impacts of mining to achieve no net loss of native vegetation. *Conservation Biology*, 28, 1068–1076.
- Thomson, I., & Boutilier, R. (2011). Social licence to operate. In P. Darling (Ed.), *SME mining engineering handbook* (3rd ed., pp. 1779–1796). Englewood: Society for Mining, Metallurgy and Exploration.
- Thornton, D., Kagan, R. A., & Gunningham, N. (2009). When social norms and pressures are not enough: Environmental performance in the trucking industry. *Law and Society Review*, 43, 405–436.
- Van Putten, I. E., Cvitanovic, C., Fulton, E., Lacey, J., & Kelly, R. (2018). The emergence of social licence necessitates reforms in environmental regulation. *Ecology and Society*, 23(3), 24.
- Williams, J., & Martin, P. (2011). *Defending the social licence of farming: Issues, challenges and new directions for agriculture, technology & engineering*. Clayton, Australia: CSIRO Publishing.
- Wüstenhagen, R., Wolsink, M., & Bürer, M. J. (2007). Social acceptance of renewable energy innovation: An introduction to the concept. *Energy Policy*, 35, 2683–2691.
- Wyatt, S. (2016). Aboriginal people and forestry companies in Canada: Possibilities and pitfalls of an informal ‘social licence’ in a contested environment. *Forestry: An International Journal of Forest Research*, 89(5), 565–576.
- Zhang, A., Moffat, K., Lacey, J., Wang, J., Gonzalez, R., Uribe, K., et al. (2015). Understanding the social licence to operate of mining at the national scale: A comparative study of Australia, China and Chile. *Journal of Cleaner Production*, 108, 1063–1072.

Social Life Cycle Assessment

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Synonyms

[LCA](#); [Life Cycle Assessment](#); [S-LCA](#)

Introduction

The concept of Social Life Cycle Assessment (S-LCA) cannot be understood without first talking about its antecedents, since it is closely linked to the concept of Life Cycle Assessment (LCA) or Life Cycle Analysis. The concept of life

cycle has a biological origin as it considers the changes in the life of an organism. The definition of life cycle is “the series of stages in form and functional activity through which an organism passes between successive recurrences of a specified primary stage” (*Life Cycle | Definition of Life Cycle by Merriam-Webster*, 2021). Translating that life cycle concept into a business context, product life cycle involves managing, especially from a decision-making point of view, at all stages of the product’s life: introduction, growth, maturity, and decline. This business approach is usually called Product Lifecycle Management (PLM). Life cycle assessment, instead, is a methodology that assesses the environmental impacts generated by a product, from raw materials to the possible recycling afterwards. From the 1970s, the interest in assessing the environmental impact of production processes began to emerge. In the 1990s, there began to be references in the literature about the specific social impact of products, that is, how humans are affected by products or systems (Jorgensen et al., 2012), with which the independent concept of S-LCA began to be used. In the last 20 years, there are two clear turning points that have revolutionized the analysis and development of S-LCA, both enhanced by “Life Cycle Initiative,” a “public-private, multi-stakeholder partnership enabling the global use of credible life cycle knowledge by private and public decision makers” (*Life Cycle Initiative*, 2021) hosted by United Nations Environment Programme (UNEP). In this sense, UNEP/SETAC Guidelines for Social Life Cycle Assessment of Products in 2009 marks a before and an after in the implementation and development of the S-LCA. In 2013, Methodological Sheets for Subcategories in Social Life Cycle Assessment (S-LCA) are released to supplement the Guidelines by providing detailed information on each of the subcategories by stakeholder category (United Nations Environment Programme (UNEP) & Society of Environmental Toxicology and Chemistry (SETAC), 2013). This approach does not seem to be so closely linked to the production process itself but to the conduct of the company (Jorgensen et al., 2008), which has broadened the scope in which S-LCA has an interest:

investment, design, industrial management, consumers, or public decision-making (Jorgensen et al., 2008). In fact, the concepts “social” or “societal” are used in a generic and indeterminate way, making it necessary to clarify the concept with precision when selecting and defining indicators (Grießhammer et al., 2006). In recent years, there are several bibliometric analyses and reviews that delve into this field of research, such as those of (Huertas-Valdivia et al., 2020; Petti et al., 2018; Wu et al., 2014). In this entry, we briefly review the definition of Social Life Cycle Assessment, as well as its evolution and productivity in the literature. Later, we will include the S-LCA framework. Finally, we will highlight the key issues and future directions for Social Life Cycle Assessment.

Definition

The Guidelines for Social Life Cycle Assessment of Products (2009) defines Social Life Cycle Assessment (S-LCA) as a “social impact (and potential impact) assessment technique that aims to assess the social and socio-economic aspects of products and their potential positive and negative impacts along their life cycle encompassing extraction and processing of raw materials; manufacturing; distribution; use; re-use; maintenance; recycling; and final disposal” ((United Nations Environment Programme (UNEP) & Society of Environmental Toxicology and Chemistry (SETAC), 2009). This is the most widely used definition, although other authors extend the scope of action to communication and consumption. Thus, Norris et al. (2014) propose that S-LCA is “a technique for collecting, analyzing and communication information about the social conditions and impacts associated with production and consumption” (Norris et al., 2014). In any case, there is consensus between the consideration of current and potential impacts as well as the consideration of positive and negative impacts. The goals of S-LCA approaches are product, process, or company comparisons and product or process improvement potentials (Jorgensen et al., 2008), as well as the improvement of the social

conditions for the stakeholders affected by the assessed product’s life cycle (Jorgensen et al., 2010).

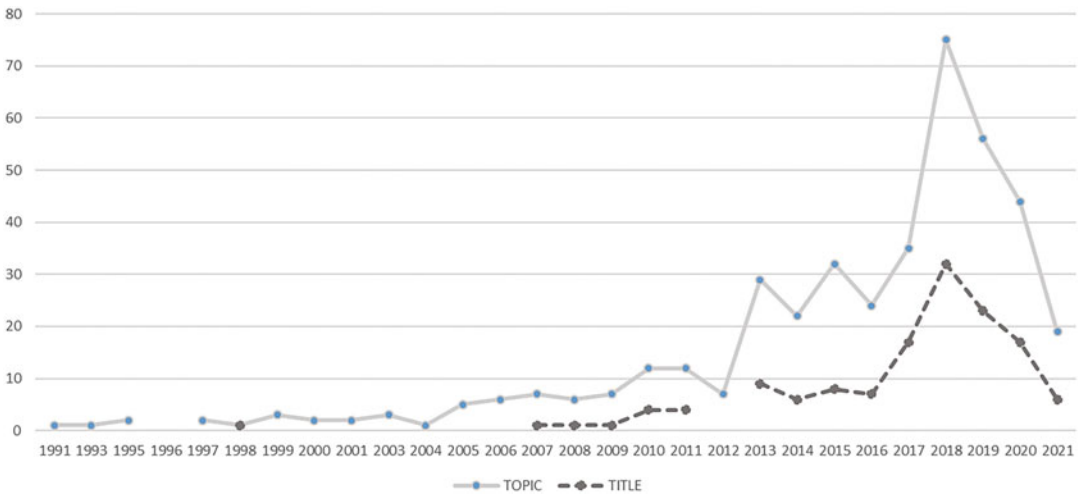
Social Life Cycle Assessment in Literature

The consideration of social and socioeconomic criteria in LCA began in 1993 with the report by Fava et al. (1993) entitled “A Conceptual Framework for Life Cycle Impact Assessment,” but it was not until 10 years later that it appears as a concept in “Life-cycle based methods for sustainable product development” by Klopffer in 2003. The qualitative leap occurred in 2008, when the article “Methodologies for social life cycle assessment” written by Jorgensen et al. (2008) was released, endorsed by the publication of the Guidelines for Social Life Cycle Assessment of Products in 2009 by the United Nations Environment Programme (UNEP) and the Society for Environmental Toxicology and Chemistry’s (SETAC). As of this moment, the production of articles related to S-LCA begins to emerge. The next turning point is also marked by the publication in 2013 of Methodological Sheets for Subcategories in Social Life Cycle Assessment, also by UNEP and SETAC.

Figure 1 shows the evolution of papers in Web of Science Core Collection with the following search criteria (May, 2021): “Social life cycle assessment” OR “Social life-cycle assessment” OR “SLCA” OR “S-LCA” OR “Social-LCA” OR “Social LCA,” filtered by articles.

Considering the years of publication of the Guide and the Methodological Sheets (2009 and 2013), productivity in the 2014–2021 period is five times higher in articles related to S-LCA in the topic (title, abstract, and keywords) and six times higher in articles related to S-LCA in the title (Table 1).

In the last few years, several authors have focused on the state of the art of social life cycle assessment (SLCA). To date, the last available bibliometric review is that of Huertas-Valdivia et al. (2020), which includes



Social Life Cycle Assessment, Fig. 1 Evolution of articles with the concept “Social Life Cycle Assessment” in the topic and in the title (Web of Science Core Collection). (Source: Authors)

Social Life Cycle Assessment, Table 1 Evolution of S-LCA articles in web of science core collection by period

	Up to 2008	2009–2013	2014–2021
Articles (topic)	42	67	307
Articles (title)	3	18	116

Source: Authors

previous papers classifying contributions and identifying approaches (Arcese et al., 2018; Bonilla-Alicea & Fu, 2019; Iofrida et al., 2018; Jorgensen et al., 2008), understanding definitions (di Cesare et al., 2018) or providing a more comprehensible picture of S-LCA (Solene Sureau et al., 2018). After Huertas-Valdivia et al. (2020), only one contribution is devoted to past and future of S-LCA (Ramos Huarachi et al., 2020). During the entire period but especially since 2013, most of the papers focused on case studies in which the application of the S-LCA is analyzed. In this sense, Petti et al. (2018) reviewed that 26% of case studies were applied to manufacturing and 26% in agriculture, followed by 24% of case studies applied to energy sector and 21% applied to waste management sector, identifying only one case study dealing with tourism. Regarding the geographical area, 48% of case studies are implemented

in developed economies and 46% developed economies (Petti et al., 2018).

The *International Journal of Life Cycle Assessment* leads the ranking of journals with 128 articles through May, 2021. In the last 3 years, *Sustainability* has risen in the ranking proposed by (Huertas-Valdivia et al., 2020), equaling the following journal in the ranking, *Journal of Cleaner Production*. Articles in these two journals triple the next journals on the list (Table 2).

Top nine authors who have contributed more articles on S-LCA are Matthias Finkbeiner, Marzia Traverso, Anne Katrin Lehmann, Michael Zwicky Hauschild, Anna Irene De Luca, Andreas Jorgensen, Luigia Petti, Jean-Pierre Reveret, and Alessandra Zamagni, mainly from technical universities (Berlin, Aachen, and Denmark) and one author from a research spin-off, Ecoinnovazione (Table 3).

Social Life Cycle Assessment Framework

Delving into social impact assessment methodologies exceeds the purpose of this entry, but it must be said that S-LCA coexists with other methodologies such as Cost Benefit Analysis (CBA), Social Return on Investment (SROI), Social Impact Assessment (SIA), and social accounting, among

Social Life Cycle Assessment, Table 2 Six highest-ranked journals, ordered by number of articles on S-LCA in the topic

Journal	Number
International Journal of Life Cycle Assessment	128
Journal of Cleaner Production	36
Sustainability	36
Journal of Industrial Ecology	12
Resources-Basel	9
Resources Conservation and Recycling	6

Source: Authors

others. Each of them responds to different goals and contexts. In the S-LCA framework, the integration of social issues gives more priority on the process and the integration of stakeholder positions and on the treatment of product utility (Grießhammer et al., 2006), describing the corresponding social and symbolic functions for the consumer.

The methodological framework of the SLCA includes the following: (1) goal and scope definition, (2) inventory analysis, (3) impact assessment, and (4) interpretation (Grießhammer et al., 2006):

1. Goal and scope definition. In addition to the goal of the study (i.e., product development, comparative purposes) and the scope and boundaries of the issue, the temporal scope must be determined. Once these settings have been determined, the appropriate indicators to reach that goal are selected.
2. Inventory analysis/life cycle inventory. At this stage, relevant information identified during the scope definition is collected. In this way, a balance must be found between the administrative advantages of using generic data and its lack of specificity (Jorgensen et al., 2008).
3. Impact assessment/life cycle impact. At this stage, information is translated into impacts, containing its classification, characterization, and normalization and valuation of impacts.
4. Interpretation of results, and evaluation. The interpretation includes several checks such as completeness, consistency, sensitivity, materiality, and responsiveness.

Social Life Cycle Assessment, Table 3 Eight top authors, ordered by number of articles on S-LCA

Authors	University	Number
Finkbeiner, M.	Technical University of Berlin	19
Traverso, M.	RWTH Aachen University	17
Lehmann, A.	Technical University of Berlin	10
Hauschild, M.Z.	Technical University of Denmark	9
De Luca, A.I.	Universita Mediterranea di Reggio Calabria	7
Jorgensen, A.	Technical University of Denmark	7
Petti, L.	University of Chieti-Pescara	7
Reveret, J.P.	University of Quebec Montreal	7
Zamagni, A.	Ecoinnovazione Srl	7

Source: Authors

The Guide to the Methodological Sheets states that social life cycle impact assessment (stage 3) “is the process by which inventory data is aggregated within subcategories and categories.” This guide considers two types of impacts (p. 8):

- Type 1/Type I. These impact categories rely on internationally accepted levels of minimum performance and use scales describing risk, performance, or the degree of management.
- Type 2/Type II. Categories that represent the impact pathways or cause-effect chains, using quantitative data. In the taxonomy for social impact pathway indicators, the guide suggests three levels: elementary flows, midpoint impacts, and end-point impacts (Weidema, 2020), inherited from ISO 14040 series for Life Cycle Analysis. Elementary flows divide into biophysical pressures, economic pressures, and social pressures, each of it having different levels. For example, the level “Economic pressures” (level 1) divides into “Human time (labour & leisure hours),” “Insufficient payment of labour or taxes,” and “Monetary expenditure, except wages” (level 2). At the same time, “Human time (labour & leisure hours)” divides into “Labour hours” and

“Leisure hours” (level 3) (Weidema, 2020). The use of different levels of indicators: Midpoint and end-point indicators can indicate causal-effect relationships (Wu et al., 2014).

Jorgensen et al. (2008) establishes that the formulation of indicators must first consider nature (quantitative, semiquantitative, and qualitative) and second the capacity for measuring direct or indirect impact (through proxy measures). He reviews the highest frequency for indicators in 11 papers, classifying them into qualitative or descriptive indicators:

- Human rights: nondiscrimination, freedom of association, and collective bargaining; child labor; and forced and compulsory labor
- Labor practices and decent work conditions: wages; benefits; physical working conditions; psychological and organizational working conditions; and training and education of employees
- Society: corruption, development support and positive actions toward society; local community acceptance; and ensuring of commitment to sustainability issues from and toward business partners
- Product responsibility: Integration of customer health and safety concerns in product; information about product to users; and marketing communications

A few years, later, there begins to be relative consensus in the groups of stakeholders used, so that social and socioeconomic impacts may be observed in relation with five main stakeholder categories: workers/employees, local community, society (national and global), consumers, and value chain actors (Benoit et al., 2010). These are the groups of stakeholders used in the Methodological Sheets, with several assessment subcategories. Each sheet includes the definition of the subcategory, its relevance to sustainable development, international conventions and agreements, recommended standards, data needed to compile the subcategory, data availability and sources, generic and specific indicators (inventory indicators, units of measurement, and data

sources/methodology), and limitations and references (Table 4).

Key Issues and Future Directions

Authors in literature agree that one of the barriers in the development of S-LCA is the lack of clarity in its definition. Sometimes, the goal and scope of S-LCA is misunderstood with that of Corporate Social Responsibility (CSR). Unlike CSR, S-LCA has developed a framework, but the application varies due to the lack of standardization (Tsalidis et al., 2021). Thus, despite attempts at homogenization, it is still a challenge to obtain a comprehensive set of indicators that cover social issues in all settings (Grießhammer et al., 2006), and that is why it is so important to promote research and the use of theoretical models to identify pathways that seek to explain relevant phenomena in S-LCA (Solène Sureau et al., 2020). In fact, not only the use of theoretical frameworks but also the use of more formal analysis methods, such as multivariate analysis, will help to understand the cause-effect chains in the impact pathways.

It is necessary to clearly define each indicator in its context, differentiating between obligatory (more general) and optional (more adapted) indicators connected with other indicators in the field of CSR (namely, GRI, SA8000, etc.) (Grießhammer et al., 2006), improving the social sustainability considerations for less developed stakeholder groups such as consumers or value chain actors (Tokede & Traverso, 2020). The lack of publications in the field of management also shows one of the future directions in research on S-LCA. If we want to promote sustainability management in companies, conducting more case studies is needed in management journals that disseminate the S-LCA framework as a tool to support decision-making.

In the last 5 years, LCA and S-LCA have evolved toward Life Cycle Sustainability Assessment (LCSA), under the formula of $LCSA = LCA + LCC$ (Life Cycle Costing, indicating the coverage of all costs during life cycle) + SLCA (Wu et al., 2014; Finkbeiner

Social Life Cycle Assessment, Table 4 Categories and subcategories used in the methodological sheets for sub-categories in S-LCA

Local community	Value chain	Consumer	Worker	Society
Delocalization and migration Community Engagement Cultural heritage Respect of Indigenous rights Local employment Access to immaterial resources Access to material resources Safe and healthy Living conditions Secure living conditions	Fair competition Respect of intellectual property rights Supplier relationships Promoting social Responsibility	Health and safety Feedback mechanism Privacy Transparency End-of-life responsibility	Freedom of association and collective bargaining Child labor Fair salary Hours of work Forced labor Equal opportunities/discrimination Health and safety Social benefit/social security	Public commitment to sustainability issues Prevention and mitigation of conflicts Contribution to economic development Corruption Technology Development

Source: UNEP/SETAC (2013)

et al., 2010). LCSA refers to the evaluation of environmental, social, and economic impact and benefit of a product throughout its life cycle, aiming to accommodate knowledge from different disciplines (Zamagni et al., 2013). The creation of a common assessment technique from different sustainability concepts and tools, such as LCSA proposes, may be the path to finally provide an integrated and standardized framework to analyze and promote the environmental, social, and economic aspects for the development of sustainability impact management.

Summary

SLCA is a technique that assesses both social and socioeconomic aspects of products, as well as their positive and negative potential impacts along their life cycle. The aim of SLCA is to compare products, processes, or companies, but also to detect improvement potentials, not only in the product or in the process but also in the social conditions. The focus on the integration of social issues on the process and on the product is one of the characteristics regarding other impact assessment methodologies, such as Cost Benefit Analysis (CBA), Social Return on Investment (SROI),

Social Impact Assessment (SIA), or social accounting.

Cross-References

- Eco-efficiency
- Ecology and Ecosystem
- Life-Cycle Analysis
- Life Cycle Management
- Value Chain Management

References

Arcese, G., Lucchetti, M. C., Massa, I., & Valente, C. (2018). State of the art in S-LCA: Integrating literature review and automatic text analysis. *International Journal of Life Cycle Assessment*, 23(3), 394–405. <https://doi.org/10.1007/s11367-016-1082-0>.

Benoit, C., Norris, G. A., Valdivia, S., Ciroth, A., Moberg, A., Bos, U., Prakash, S., Ugaya, C., & Beck, T. (2010). The guidelines for social life cycle assessment of products: Just in time! *International Journal of Life Cycle Assessment*, 15(2), 156–163. <https://doi.org/10.1007/s11367-009-0147-8>.

Bonilla-Alicea, R. J., & Fu, K. (2019). Systematic map of the social impact assessment field. *Sustainability*, 11(15). <https://doi.org/10.3390/su11154106>.

di Cesare, S., Silveri, F., Sala, S., & Petti, L. (2018). Positive impacts in social life cycle assessment: State of the

- art and the way forward. *International Journal of Life Cycle Assessment*, 23(3), 406–421. <https://doi.org/10.1007/s11367-016-1169-7>.
- Finkbeiner, M., Schau, E. M., Lehmann, A., & Traverso, M. (2010). Towards life cycle sustainability assessment. *Sustainability*, 2(10), 3309–3322. <https://doi.org/10.3390/su2103309>.
- Grießhammer, R., Benoit, C., Dreyer, L. C., Flysjö, A., Manhart, A., Mazijn, B., Méthot, A. L., & Weidema, B. P. (2006). *Feasibility study: Integration of social aspects into LCA*. Paris: UNEP-SETAC Life Cycle Initiative.
- Huertas-Valdivia, I., Ferrari, A. M., Settembre-Blundo, D., & Garcia-Muina, F. E. (2020). Social life-cycle assessment: A review by bibliometric analysis. *Sustainability*, 12(15). <https://doi.org/10.3390/su12156211>.
- Iofrida, N., de Luca, A. I., Strano, A., & Gulisano, G. (2018). Can social research paradigms justify the diversity of approaches to social life cycle assessment? *International Journal of Life Cycle Assessment*, 23(3), 464–480. <https://doi.org/10.1007/s11367-016-1206-6>.
- Jorgensen, A., le Bocq, A., Nazarkina, L., & Hauschild, M. (2008). Methodologies for social life cycle assessment. *International Journal of Life Cycle Assessment*, 13(2), 96–103. <https://doi.org/10.1065/lca2007.11.367>.
- Jorgensen, A., Finkbeiner, M., Jorgensen, M. S., & Hauschild, M. Z. (2010). Defining the baseline in social life cycle assessment. *International Journal of Life Cycle Assessment*, 15(4), 376–384. <https://doi.org/10.1007/s11367-010-0176-3>.
- Jorgensen, A., Dreyer, L. C., & Wangel, A. (2012). Addressing the effect of social life cycle assessments. *International Journal of Life Cycle Assessment*, 17(6), 828–839. <https://doi.org/10.1007/s11367-012-0408-9>.
- Life Cycle Initiative. (2021). <https://www.lifecycleinitiative.org/about/about-lci/>
- Life Cycle|Definition of Life Cycle by Merriam-Webster. (2021). <https://www.merriam-webster.com/dictionary/life%20cycle>
- Norris, C. B., Norris, G. A., & Aulisio, D. (2014). Efficient assessment of social hotspots in the supply chains of 100 product categories using the social hotspots database. *Sustainability*, 6(10), 6973–6984. <https://doi.org/10.3390/su6106973>.
- Petti, L., Serrelli, M., & di Cesare, S. (2018). Systematic literature review in social life cycle assessment. *International Journal of Life Cycle Assessment*, 23(3), 422–431. <https://doi.org/10.1007/s11367-016-1135-4>.
- Ramos Huarachi, D. A., Moro Piekarski, C., Neves Puglieri, F., & de Francisco, A. (2020). Past and future of social life cycle assessment: Historical evolution and research trends. *Journal of Cleaner Production*, 264. <https://doi.org/10.1016/j.jclepro.2020.121506>.
- Sureau, S., Mazijn, B., Garrido, S. R., & Achten, W. M. J. (2018). Social life-cycle assessment frameworks: A review of criteria and indicators proposed to assess social and socioeconomic impacts. *International Journal of Life Cycle Assessment*, 23(4), 904–920. <https://doi.org/10.1007/s11367-017-1336-5>.
- Sureau, S., Neugebauer, S., & Achten, W. M. J. (2020). Different paths in social life cycle impact assessment (S-LCIA)-a classification of type II impact pathway approaches. *International Journal of Life Cycle Assessment*, 25, 382–393. <https://doi.org/10.1007/s11367-019-01693-9>.
- Tokede, O., & Traverso, M. (2020). Implementing the guidelines for social life cycle assessment: Past, present, and future. *International Journal of Life Cycle Assessment*, 25(10), 1910–1929. <https://doi.org/10.1007/s11367-020-01814-9>.
- Tsalidis, G. A., de Santo, E., Gallart, J. J. E., Corberá, J. B., Blanco, F. C., Pesch, U., & Korevaar, G. (2021). Developing social life cycle assessment based on corporate social responsibility: A chemical process industry case regarding human rights. *Technological Forecasting and Social Change*, 165, 120564. <https://doi.org/10.1016/j.techfore.2020.120564>.
- United Nations Environment Programme (UNEP), & Society of Environmental Toxicology and Chemistry (SETAC). (2009). *Guidelines for social life cycle assessment of products*.
- United Nations Environment Programme (UNEP), & Society of Environmental Toxicology and Chemistry (SETAC). (2013). *The methodological sheets for Sub-categories in Social Life Cycle assessment (S-LCA)*. www.lifecycleinitiative.org
- Weidema, B. P. (2020). *Towards a taxonomy for social impact pathway indicators* (pp. 11–23). Cham: Springer. https://doi.org/10.1007/978-3-030-01508-4_2.
- Wu, R., Yang, D., & Chen, J. (2014). Social life cycle assessment revisited. *Sustainability*, 6(7), 4200–4226. <https://doi.org/10.3390/su6074200>.
- Zamagni, A., Pesonen, H.-L., & Swarr, T. (2013). From LCA to life cycle sustainability assessment: Concept, practice and future directions. *International Journal of Life Cycle Assessment*, 18(12), 1637–1641. <https://doi.org/10.1007/s11367-013-0648-3>.

Social Management

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Synonyms

Community development; Self-management;
Social intervention; Social entrepreneurship

Introduction

In a globalized world like today, the human being becomes more and more the reason and motive for the main policies of the State. On the basis of this reality, social organizations take over from states in the equitable, sustainable, and democratic development of human rights by becoming actors of social change.

To respond to these objectives, society supports various projects to promote its positive development in order to build a public value beyond the individual and private interest of each agency or individual. However, in order to manage these values, we must seek solutions that, while delimiting their field of action, serve to develop the different actions with which the human being achieves their objectives. In this sense, the term social management serves to respond to the construction of various spaces that encourage social interaction.

Definition

The term social management etymologically consists of words that come from Latin. First, there is the word “social” that has its origin in the Latin word *socius* which is equivalent to “friend.” Second, the English verb “manage” comes from the Italian *maneggiare* (to handle), which derives from the two Latin words *manus* (hand) and *agere* (to act).

However, the concept of social management cannot be reduced to the sum of the elements of the two isolated concepts: social + management. “Social” refers to the field in which it is applied, while “Management” explains strategy, direction, and leadership. However, in the sector for which we are going to use it, the concept of social management is related to the strategic direction that must be given to the economic, political, and cultural aspects (Palacios 1994).

Nevertheless, at the time of its analysis it should not be forgotten that a concept can be examined through its meaning, which results in its identification with a subject. In turn, a concept gives cognitive meaning to an abstract idea in

relation to a context expressed in verbal or written language. Finally, to fulfill the objective that the concept must obtain, it must answer three questions: nature (what it is), scope (how is it used), and purpose (what it is for).

From all of the above, it can be inferred that social management is not identified with a single concept since it is under construction and must be validated by practices in different contexts. That is why, there are authors who prefer to give approaches rather than finished and fixed definitions or concepts. For example, we can talk about a public approach, social development, social policy, social innovation, social inclusion, or efficiency (Parra 2014).

Social management is a complete process of actions and decision-making, ranging from the study and understanding of a problem, to the design and implementation of proposals with a social purpose.

Social management is a set of mechanisms that promote social inclusion and effective community engagement in social projects. It allows subjects to cultivate a sense of belonging, citizen participation, and social control in order to improve society.

In short, social management can only be defined through small, clear, and specific concepts based on a strategy that develops the criteria of equity, efficacy, efficiency, and sustainability. All this allows to guide the decision-making, the actions to be followed, and the control and evaluation of the results achieved.

Social management is therefore an ever-evolving concept that, unlike general management, has a key element: the construction of public value.

Social management puts social profitability before economic profitability with the ultimate objective of solidarity. In this sense, social management is not only concerned with the equitable distribution of economic income, but also concerned with the conservation of the environment, and the implementation of equality policies.

Finally, social management fuses the theoretical framework with learning from experience, thus producing its own view of problems.

Factors That Determine Social Management

On the basis that social management is a developing process, it is necessary to take into account the existence of different factors:

(a) Learning

Social management involves the development of collective, continuous, and open learning through which the community incorporates all those elements that improve its activity. Thus, for example, aspects related to the environment, which were not taken into account in the 1980s, are today protagonists in the management of any company or entity.

(b) Projects

All social management is linked to a project that aims to meet the needs and social problems of a community. To do this, it uses actions and ideas that are interrelated and carried out in a coordinated manner with the intention of achieving a goal that contains social objectives.

(c) Dialogue

Social management implies the need of dialogue between the different communities present in society; hence the joint action of public power, companies, civil organizations, and citizens is necessary. At the same time, it is about creating open spaces in which different disciplines intervene. For example, social management is carried out with elements that come from law, social work, education, economics, and anthropology among others (Fantova, 2005).

This dialogue favors the joint and continuous learning of all these social groups, which allows them to influence the design of public policies. It is, in short, the construction of a space of social relationship and institutional links that is achieved through a set of actions. In this way, social management constitutes a channel through which society acts with an entrepreneurial spirit to

promote social change (Orrego Correa & Arboleda Álvarez 2006).

To achieve the expected results, it is necessary to strengthen community ties and work for the recovery of cultural identity and the collective values of the community on which changes are to be made. This leads to the development of social management using different elements:

- **Coresponsibility:** All actors recognize that they play a part in the responsibility of solving a social issue or problem, which does not imply that they have full responsibility.
- **Multipolarity:** The actors are diverse and think differently. The social causes are diverse, and no one can claim to manage everything or everyone, because each one has his own ideas.
- **Participatory management:** The strength of a social management is in the participation of the actors in it, although not everyone participates in the whole process or to the same degree, but a clear participatory path from design to evaluation can be established in the program or project.
- **Concertation:** No one can impose. It is about mutually agreeing on the best ways and tools through practical forms such as consensus, agreements, coordination, or agreements. Concertation implies that each actor contributes something that is their own, resulting in the sum of efforts of the different actors.

Keys Issues

Effective social management involves knowing recognized social rights and the public system that administers them within a complex framework in which the political, economic, and social dimension of the human being interacts.

Activities Related to Social Management

Given the broad scope of social management, there are very close activities or even essential elements in order to achieve good results in some cases. This would be the case of what is

known as self-management and community development (Parra & Porta 2014).

- **Self-management:** It is a process through which the individual capacity of a human being or a group is developed, identifying their basic interests and needs through an organization. Self-management is self-directed and coordinated with the interests and actions of other groups. This concept implies planning, participatory democracy, and sustainable development.
- **Community development:** It is a process where members of a community come together to take collective action and generate solutions to common problems. It is a broad term that serves to define the practices of civic leaders, activists, and committed citizens to improve various aspects of communities with the aim of building stronger local communities.

References

- Fantova, F. (2005). Nuevos modelos en gestión social: calidad y excelencia en las organizaciones sociales. *Manual para la gestión de la intervención social*. Madrid. Ed. C.C.S.
- Orrego Correa, C. L., & Arboleda Álvarez, O. L. (2006). Las organizaciones de economía solidaria: un modelo de gestión innovador. *Cuadernos de Administración del Valle.*, 34, 99–110.
- Palacios, N. (1994). *La Administración en las empresas de economía solidaria*. USTA: Elementos básicos de planeación. Bogotá.
- Parra, C. (2014). Instrumentos para el fomento de la emprendeduría social. In *Emprendeduría social: Alternativa sostenible para una nueva economía* (pp. 27–53). Barcelona: J.M. Bosch Editor.
- Parra, C., & Porta, F. (2014). *Emprendeduría social: Alternativa sostenible para una nueva economía*. Barcelona: J.M. Bosch.

Social Management Accounting

- [Management Accounting and Sustainability](#)

Social Management Standard

- [SA8000 Standard II](#)

Social Marketing

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Synonyms

[Health and values marketing](#); [Health-oriented marketing](#); [Marketing for the reaching of common good](#); [Marketing of cultural objectives](#); [Marketing of the social good](#); [Promoting socially engaged subjects and goods](#); [Public service and/or public information campaigning](#)

Definition

The practice of utilizing marketing programs, tools, methods, and procedures for “social good.” Its focus and aim are betterment, influence, and effective behavioral change in the public interest. Social Marketing is especially relevant in the fields of health, well-being, and positive social change.¹

The internal terms of reference (“inherent”, “central” or “primary” may be too a strong a phrase here), defining *Social Marketing* and related practice can be seen as somewhat intrinsically contradictory: This, as they aim to utilize the tools normally employed in commerce and for profit-making to be implemented in attaining greater good and the enactment of positive cultural change within societies. The ambition of this well-established, composite discipline tends to be

¹Kotler and Zaltman (1971) offer a far more comprehensive definition in their seminal text; many subsequent texts compete for attention. Still, this entry opts to offer the most straightforward reading at the opening.

ever more far-reaching and works on a very large scale (with globally expanded programs at times), as some of its more recent practice tends to show.

Evolving aspects of Social Marketing include increasing connections between state actors, public services, and large privately owned businesses including corporations. Public-private partnerships (PPP) in Social Marketing can be traced to well before the term (PPP) was coined within policy (e.g., Parker et al. 2019; Walsh et al., 1993). Partnerships between state and supra-state actors and for-profit organizations appear to be on the increase in Social Marketing. This includes pharmaceutical companies, media organizations, marketing firms, and, more recently, tech giants.² Matters of debate within the field and subject of Social Marketing³ include setting adequate preferences between large-scale and targeted approaches; the ethics and impact of its practice; and the scope and effectiveness of it.

Introduction

To date, social marketing for public health remains the most developed aspect of its practice. Hence the considerable attention was given here. Referred to by Walsh et al. (1993: 106) as key authors who defined the concept of social marketing in health: Codifying the field were Kotler, Manoff, Fine, Novelli, Lefebvre, and Flora. Origins of the modern-day theory and practice of social marketing may be traced back to the early 1950s (if not earlier). The first known, formally articulated mention of the actual practice of social marketing found in an academic text on business practice can be traced back to Wiebe (1951). His paper, "Merchandising Commodities and Citizenship on Television" poses the question of

utilization of business practice for the greater societal, common good.

Wiebe clearly addresses the marketing and media communities at a time when Public Service Announcements (PSAs) were already in use in American television. Practices that utilize media for policy announcements and reinforcement of policy messages aimed at the public can be traced decades back across the world and can be said to have originated in the fields of propaganda, followed by then nascent public relations in the early twentieth century (Bernays 2005: pp. 135–140) [note: Bernays' seminal work was originally published in 1928].

Relatively marginal to the contemporary field of social marketing, PSAs, PIFs, and similar information formats were the media contents attracting Wiebe's attention, giving rise to his critical work.⁴ The matters of PR, Public Service Announcements (USA), Public Information Films/Campaigns (UK), and other related media approaches would be worth revisiting below. To the complement and aid of the discipline, elements of media advertising and persuasion methods continue being utilized where needed (e.g., Reichert et al. 2001). Conversely to established practice in the 1950s, Wiebe's challenge was a profound one: It was about a conscious and sustained effort to educate and influence the public on what can be broadly described as the greater good of society. It took time for the shift to occur in marketing practice beyond the use of advertising media.

Treating social causes by a form of marketing mix took time. When aiming to address societal matters as marketers would treat products and services, early practitioners (and theorists alike) had to create a new set of rules and methods fit for utilization by rethinking and adapting those adopted from commerce. Early examples of effective marketing practice for social betterment can be found in the 1960s, with Richard K Manoff as

²With the likely approval of contemporaneous governments, Google and other technology giants had taken upon themselves the role of spreading awareness of health matters as well as campaigning in favor of good safety practice at the time of the global COVID-19 pandemic likely to leave a lasting socioeconomic legacy.

³The term "social marketing," hereinafter; i.e., presented in lowercase.

⁴Included among the insights concerning persuasion in Wiebe's ground-breaking 1951 text: Public engagement, PR aspects of sociopolitical roots of Wiebe's treatise draw readers' attentions to the 1943 bond selling campaigns for social good, i.e., winning the war against fascism (1951: 682–3).

the most prominent pioneer. This was followed by theoretical treatises that had fully articulated the term in the early 1970s, where Kotler led the way.

Highlighting the need for further recognition of Wiebe's unprecedented paper is mainly due to its critical, judicious significance best observed in meaningful retrospect. What seems unique about Wiebe's seminal text is how advanced its thinking was for its time. The complex understanding of *advertising (and implicitly, marketing) as social mechanism* truly comes to the fore decades later. The fullness of Wiebe's proposition is manifest in the current age of multiplicity of media forms, devices, channels, formats, messages, and of the breadth and depth of health-related and environmental discourses, variety of suppliers, and global audiences.

Moreover, there are several other aspects of this seminal work that have attracted the attention of practitioners and theorists alike over the decades. Further insightful illustrations include the counterpoint of social good and *the merchandising of commodities*, whereby "cultural objectives cannot be purchased at your nearest drug or department store" (Wiebe 1951: 680) pointing out with great accuracy that *retail outlet acts as a social mechanism that facilitates a desired behavior*. Once more: Many years on, unceasing development of critical management studies continues to address such inherent complexities at the level of definition.

A remarkably persuasive work by Andreassen⁵ (1994: 108) lays the foundation to its entire discussion at *the level of definition* ("Why Definitions Matter") on the level of definition *as prime cause*; it is worth addressing a few more remarkable thoughts from 1951. *Minimum expenditure of energy on the part of audiences in advertising* (and by extension, marketing) was frequently considered by esteemed authors in this field. Especially so as applies to a more sophisticated

and advanced, abstract aspect and notion of "Price" of the social marketing mix.⁶

As it took time for the work of social marketing to build momentum, major leaps occurred in late 1960s practice and early 1970s theory as mentioned above. Projects by the USAID in the 1970s across Africa, Asia, and South America, cover a wide range of subjects including agriculture, family planning, nutrition, oral rehydration products. Since the late 1980s, significant new involvement of commercial and non-governmental actors took place in fields beyond those established⁷ (e.g., Freimuth et al. 1988; Ling et al. 1992; Walsh et al. 1993).

Following comparatively nascent and experimental developments, social marketing had become a truly global practice, and particularly prominent in global health improvement strategies especially aimed at developing countries, as a number of treatises from across the academic and practice spectrums show this to be the case (e.g., Claeysens 2013; Firestone et al. 2017; Gebremariam 2005). Areas relating to developed countries tend to focus on alcohol (Kubacki et al. 2015), smoking, and drugs (more detail in section below). Gender-based violence (in the West) is also covered in theory and practice (e.g., Paluck et al. 2010). Global studies of the reach and effectiveness of social marketing for health purposes tend to include SOCMOB (social mobilization, e.g., in Ling et al. 1992) and FOAM (free open access medical education, e.g., in Burkholder et al. 2018).

Critiques of social marketing relate to ethical convolution, effectiveness and targeting, impact (sometimes with undesired outcomes), measurability, and wholesale utility of some approaches, among others. Also, as indicated at the very level of definition above, there are intrinsic contradictions between the constituent respective fields on which social marketing is based. Those internal tensions between constituent fields include their

⁵This text was addressed more than once; a notable example is a somewhat dialogic response approach by Dann (2007) who explores the connotations of the discipline's value neutrality vs. ethics and dissects the self-definitions as viewed by practitioners.

⁶An abstract yet impactful notion of price as effort, which also plays such a key role in early twenty-first century "seamless engagement" practices in the more recently established field of interactive digital marketing

⁷Counterpointing the involvement of Kellogg with the subheading of this text as "prevention for profit."

respective generic aims and necessities, and the requirement for abstract approaches to strategic framing complicates matters further; such strategic framing, being characterized by continuous long-term programs with very specific and concrete outcomes in mind.

Counterpoints: Practice vs. Theory; Marketing vs. Public Health; Inherent Ethics vs. Generic Tools

Practitioners and authors alike tend to address the tension between theory and practice, also, the intrinsic gaps between social good and tools employed, adopted, and adapted from commercial contexts (e.g., Robinson 2009/2011; Rothschild 1979, among many others). Kotler and Levy (1971) set the tone for much of social marketing programs and approaches to evolve over the decades by defining *demarketing*. This is particularly visible in healthy nutrition campaigns and anti-smoking (de)marketing prominent in developed Western economies. Thus, while Gallopel-Morvan et al. (2011) applaud the effectiveness of visual warnings on tobacco packaging, Hastings et al. (2004) advise caution⁸ concerning fear-focused campaigns: while those targeted seem largely unaffected due to confounding factors such as education, fear-oriented marketing in authors' view appears to raise anxiety levels among those audiences already more conscious of health concerns. Targeting and segmentation are well-covered in some critical work. For example, in Newton et al. (2013), the intersection of ethics and segmentation was explored at length utilizing different ethical frameworks of *just health care (TJHC)* and *integrative social contracts theory (ISCT)*, belonging to distinctive

fields constituent and present within social (health) marketing.

There are reasons why so much of this entry demands focus on health. Other socially compelling fields such as (ethical) tourism (Truong and Hall 2013), (information) security sectors (Ashenden and Lawrence 2013), or racism (Madill and Abele 2007) tend to suggest that still much needs to be done to successfully adopt social marketing practice to the benefit of these multifaceted and momentous fields of behavioral practice closely intersecting with social life and the economy. Environmental sustainability matters share many features with health issues addressed in social marketing, including the fact that this field too had enjoyed relative success as compared to the above (e.g., Lefebvre 2013; Maibach 1993; McKenzie-Mohr 2000).

The subject of delinquency (briefly referred to by Wiebe in 1951) does not seem to figure visibly in social marketing literature; there are examples of tackling youth violence through social marketing (e.g., Quinn et al. 2007). Public information programs seem more prominent in those areas of life, and it is open to discussion what sort of long-term societal investment combined with coherent state strategies need to be adopted for social marketing programs in those delicate subjects. The one aspect of social marketing that does relate to all of the above is also well-reported in its use for health purposes: that of education, namely, *educating* the targeted groups, contingently named *audiences* and/or *consumers* in much of the literature (terminological examples are plentiful; e.g. Gregson et al. 2001). The concept of "education (programs)" plays a considerable role in social marketing practice.

The built-in incongruences of public health (education) and marketing become apparent at more fundamental levels: those of health education, social science, and business practice, respectively. Economic imperatives, various interests involved, and the ongoing fluidity of the notion of "public" may all come to the fore. However, the different logics of such disparate disciplines involved in social marketing appear recurrent from the outset. In addition, the

⁸Other critical texts point out that the drugs prevention programs (in NE England) had failed to attain professed goals, requesting a rethink for the "intervention mentality" (Hastings et al., 2002).

definition of “common good” is also a fundamental principle to be considered.⁹

Quoting Wiebe for insight “The social scientist often disavows the achievement of a specified behaviour as an objective” (1951: 679) indicates the inherent discursive rift between the pragmatic core of marketing practice and the critical insight sought by social sciences. This is not only a matter of applicability alone. Hence, inherent variances between the ideations of respective constituent disciplines may be traced along the historical and practical developments of the interaction of components in an intrinsically hybrid, convergent, conjoined discipline such as social marketing.¹⁰ Indeed, Lacznia et al. (1979) cite marketeers’ concerns about being perceived by the public¹¹ as “neopropagandists.” It appears such matters are largely resolved not least as the field of social marketing had become a profession and a sector in its own right. Some critics of social marketing argued in favor of balance with media advocacy (Wallack 1990: 1991), a high-end publicity and media strategy affecting the way corporate media operate, with the support of state-sanctioned decision-makers. The practice of social marketing is set to develop further, and as the interdependent globalized world enters a new set of health challenges epitomized by the COVID pandemic and emerging related threats, the global, personalized, and highly targeted reach of social

marketing is likely to spread further and deeper, utilizing digital communications, devices, and new generations of social media.¹²

Potential Developments

Sustained impact of social marketing campaigns is one of the main critical points highlighted by experts across the board. Long-term nature of programs, strategic design, accuracy of targeting and research, quality of communications, engaging educational aspects, non-judgmental approaches, and understanding of target community imperatives, habits, traditions and belief systems, feedback loops, and post-campaign data collection and analysis – all figure as key components of effective social marketing programs. The authors across the board also agree that there is a need to understand all of those and many more as sources of potential pitfalls to be addressed in advance and through the duration of the program implemented in field practice.

One of the novel features of social marketing that had emerged during the COVID outbreak is the need to utilize digital communications, social media, and information campaigns in uniquely targeted ways (Chen et al. 2020; Semple & Cherrie 2020). Western responses to the pandemic do include those and other tools. Unprecedented moves by technology giants – especially the world’s leading search engine – may usher a new era in social marketing as ICT firms adopt a new social role (Google 2020; Lee 2020).

Summary

Social marketing has developed significantly since it was first defined in the 1950s. Arguably, some forms of social marketing existed before the term was coined and the practice identified as a distinct field of activity. The engagement of

⁹ *Common good and social betterment* can be seen to have a fundamentally utilitarian ring to them. Such definitions in modern society may not possess deontological value. Thus, utilitarianism may not be pronounced as such in social marketing – though there are authors that indicate that quite clearly. Moreover, the shift from the common good defined as welfare (Hayek 1978) had occurred during the infancy of social marketing. Hence, it is not the commissioned but the logic of commissioning that may require more scrutiny.

¹⁰ Social marketing is by no means an exception; Bloch (2012) provides an authoritative exploration of similar ontological chasms between natural and social sciences in anthropology.

¹¹ Given the continued contentious status of the neighboring area of public information campaigns into the twenty-first century, such concerns do not appear entirely unfounded (e.g., Brownsell 2009; Seymour 2013). See also Weiss & Tschirhart (1994) for policy-led ‘apologesis’ of such practice.

¹² It is not without irony that *social marketing* may in earnest adopt the tools of *social media*, frequently confused by an uninformed reader.

business tools and methods for the common good is not without controversy; some authors suggest that it may be counterproductive at times; others point at the increased marketization and commercialization of its methods and goals. Nonetheless, all agree that it is relevant, important, and impactful. The practice of social marketing is not only to stay: it is ever evolving and becoming more sophisticated, utilizing a number of tools and methods including the transformative and impactful interactive media, this especially in the wake of the COVID pandemic.

Cross-References

- [Marketing to Children Responsibly: Sustainable Marketing](#)

References

- Andreasen, A. R. (1994). Social marketing: Its definition and domain. *Journal of Public Policy & Marketing*, 13(1), 108–114.
- Ashenden, D., & Lawrence, D. (2013, September). Can we sell security like soap? A new approach to behaviour change. In *Proceedings of the 2013 new security paradigms workshop* (pp. 87–94). ACM.
- Bernays, E. L. (2005). *Propaganda*. Ig publishing.
- Bloch, M. (2012). *Anthropology and the cognitive challenge*. Cambridge University Press.
- Brownsell, A. (2009, October 6). When public-information campaigns go wrong. *Campaign*. [online] Available at: <https://www.campaignlive.co.uk/article/when-public-information-campaigns-go-wrong/943453>. Accessed 4 Apr 2020.
- Burkholder, T. W., Bellows, J. W., & King, R. A. (2018). Free open access medical education (FOAM) in emergency medicine: The global distribution of users in 2016. *Western Journal of Emergency Medicine*, 19(3), 600.
- Chen, S., Yang, J., Yang, W., Wang, C., & Bärnighausen, T. (2020). COVID-19 control in China during mass population movements at new year. *The Lancet*, 395(10226), 764–766. [online] Available at: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30421-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30421-9/fulltext). Accessed 25 Apr 2020.
- Claeyssens, V. (2013). Social Marketing in Public-Private Partnerships. In *The 2nd world non-profit and social marketing conference*. Dublin: ECDC. Available at: <http://2013.wsmconference.co.uk/2011/downloads/12S7SS2%20Virginie%20Claeyssens.pdf>. Accessed 4 Apr 2020.
- Dann, S. (2007). Reaffirming the neutrality of the social marketing tool kit: Social marketing as a hammer, and social marketers as hired guns. *Social Marketing Quarterly*, 13(1), 54–62.
- Firestone, R., Rowe, C. J., Modi, S. N., & Sievers, D. (2017, February). The effectiveness of social marketing in global health: A systematic review. *Health Policy and Planning*, 32(1), 110–124. [online] Available at: <https://academic.oup.com/heapol/article/32/1/110/2555385>. Accessed 4 Apr 2020.
- Freimuth, V. S., Hammond, S. L., & Stein, J. A. (1988). Health advertising: Prevention for profit. *American Journal of Public Health*, 78(5), 557–561.
- Gallopel-Morvan, K., Gabriel, P., Le Gall-Ely, M., Rieunier, S., & Urien, B. (2011). The use of visual warnings in social marketing: The case of tobacco. *Journal of Business Research*, 64(1), 7–11.
- Gebremariam, A. (2005). Factors predisposing to low birth weight in Jimma hospital south western Ethiopia. *East African Medical Journal*, 82(11), 554.
- Google. (2020). *Coronavirus (COVID-19): How Google is helping – The keyword*. [Blog] Google Blog. Available at: <https://blog.google/inside-google/company-announcements/coronavirus-covid19-response/amp/>. Accessed 25 Apr 2020.
- Gregson, J., Foerster, S. B., Orr, R., Jones, L., Benedict, J., Clarke, B., . . . Zotz, K. (2001). System, environmental, and policy changes: Using the social-ecological model as a framework for evaluating nutrition education and social marketing programs with low-income audiences. *Journal of Nutrition Education*, 33, S4–S15.
- Hastings, G., Stead, M., & MacKintosh, A. M. (2002). Rethinking drugs prevention: Radical thoughts from social marketing. *Health Education Journal*, 61(4), 347–364.
- Hastings, G., Stead, M., & Webb, J. (2004). Fear appeals in social marketing: Strategic and ethical reasons for concern. *Psychology & Marketing*, 21(11), 961–986.
- Hayek, F. (1978). *Law, legislation and liberty*, Volume 2. University of Chicago Press.
- Kotler, P., & Levy, S. J. (1971). Demarketing, yes, demarketing. *Harvard Business Review*, 79, 74–80.
- Kotler, P., & Zaltman, G. (1971). Social marketing: An approach to planned social change. *Journal of Marketing*, 35(3), 3–12.
- Kubacki, K., Rundle-Thiele, S., Pang, B., & Buyucek, N. (2015). Minimizing alcohol harm: A systematic social marketing review (2000–2014). *Journal of Business Research*, 68(10), 2214–2222.
- Laczniak, G. R., Lusch, R. F., & Murphy, P. E. (1979). Social marketing: Its ethical dimensions. *Journal of Marketing*, 43(2), 29–36.
- Lee, A. (2020, April 25). *Two-week Google Doodle series thanks coronavirus helpers [Updated]*. [online] The Woodlands, TX: 9to5google/Wright's Media. Available at: <https://9to5google.com/2020/04/25/thank-you-coronavirus-helpers/>. Accessed 25 Apr 2020.

- Lefebvre, R. C. (2013). *Social marketing and social change: Strategies and tools for improving health, Well-being, and the environment*. Wiley.
- Ling, J. C., Franklin, B. A., Lindsteadt, J. F., & Gearon, S. A. (1992). Social marketing: Its place in public health. *Annual Review of Public Health*, 13(1), 341–362.
- Madill, J., & Abele, F. (2007). From public education to social marketing: The evolution of the Canadian heritage anti-racism social marketing program. *Journal of Nonprofit & Public Sector Marketing*, 17(1–2), 27–53.
- Maibach, E. (1993). Social marketing for the environment: Using information campaigns to promote environmental awareness and behavior change. *Health Promotion International*, 8(3), 209–224.
- McKenzie-Mohr, D. (2000). Promoting sustainable behavior: An introduction to community based social marketing. *Journal of Social Issues*, 56(3), 543–554.
- Newton, J. D., Newton, F. J., Turk, T., & Ewing, M. T. (2013). Ethical evaluation of audience segmentation in social marketing. *European Journal of Marketing*, 47(9), 1421–1438.
- Paluck, E. L., Ball, L., Poynton, C., & Sieloff, S. (2010). *Social norms marketing aimed at gender based violence: A literature review and critical assessment*. New York: International Rescue Committee.
- Parker, L. A., Zaragoza, G. A., & Hernández-Aguado, I. (2019). Promoting population health with public-private partnerships: Where's the evidence? *BMC Public Health*, 19, 1438.
- Quinn, G. P., Bell-Ellison, B. A., Loomis, W., & Tucci, M. (2007). Adolescent perceptions of violence: Formative research findings from a social marketing campaign to reduce violence among middle school youth. *Public Health*, 121(5), 357–366.
- Reichert, T., Heckler, S. E., & Jackson, S. (2001). The effects of sexual social marketing appeals on cognitive processing and persuasion. *Journal of Advertising*, 30(1), 13–27.
- Robinson, L. (2009/2011). *The problem with social marketing: Why you can't sell change like soap*. [Blog] Changeology. Available at: <https://changeologyblog.wordpress.com/2009/09/22/200909problem-with-social-marketing-why-you-html/>. Accessed 4 Apr 2020.
- Rothschild, M. L. (1979). Marketing communications in nonbusiness situations or why it's so hard to sell brotherhood like soap. *Journal of Marketing*, 43(2), 11–20.
- Semple, S., & Cherie, J. W. (2020). COVID-19: protecting worker health. *Annals of work exposures and health*. [online] Available at: <https://www.iom-world.org/media/1691/covid-19protecting-worker-health.pdf>. Accessed 25 Apr 2020.
- Seymour, T. (2013, October 4). Public Information Films: The true kings of horror. *The Guardian*. [online] Available at: <https://www.theguardian.com/film/2013/oct/04/v-h-s-2-public-information-films-gareth-evans>. Accessed 25 Mar 2020.
- Truong, V. D., & Hall, C. M. (2013). Social marketing and tourism: What is the evidence? *Social Marketing Quarterly*, 19(2), 110–135.
- Wallack, L. (1990). *Two approaches to health promotion in the mass media*. [online] WHO. Available at: [https://apps.who.int/iris/bitstream/handle/10665/52235/WHF_1990_11\(2\)_p143-164.pdf](https://apps.who.int/iris/bitstream/handle/10665/52235/WHF_1990_11(2)_p143-164.pdf). Accessed 24 Apr 2020.
- Walsh, D. C., Rudd, R. E., Moeykens, B. A., & Moloney, T. W. (1993). Social marketing for public health. [online]. *Health Affairs*, 12(2), 104–119. Available at: <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.12.2.104>. Accessed 24 Apr 2020.
- Weiss, J. A., & Tschirhart, M. (1994). Public information campaigns as policy instruments. *Journal of Policy Analysis and Management*, 13(1), 82–119.
- Wiebe, G. D. (1951). Merchandising commodities and citizenship on television. *Public Opinion Quarterly*, 15(4), 679–691.

Social Marketing (SM)

► **Social Marketing, Development Education, and Corporate Social Responsibility: The Common Grounds Sustainability**

Social Marketing, Development Education, and Corporate Social Responsibility: The Common Grounds Sustainability

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Synonyms

Corporate social responsibility (CSR); Development education (DE); Social marketing (SM)

Definition

Although the concepts covered in this section are relatively new with clear meaning, development education (DE), social marketing (SM), and

corporate social responsibility (CSR) have been at times confused with other terms. Hence, it is perhaps important to remind the reader that development education is not about educational development, and social marketing is not about social media marketing, causal marketing, or even social entrepreneurship marketing. Given that the title refers to three concepts, we will proceed to defining them in turn. First, we will focus on SM.

SM is a recent field that appears to have crystalized over the last 40 years or so. It initially appeared as a sister discipline to marketing when some marketers noted that it would make sense to apply the powerful techniques of marketing to address social issues. A definition that was suggested by an international committee of marketers defined the purpose of marketing as follows: *“To apply marketing alongside other concepts and techniques in order to influence individuals, organizations, policy makers, and decision makers to adopt and sustain behaviour which improves people’s lives”* (Fourali 2009, p. 21). Soon after a consensus definition endorsed by the International Social Marketing Association, the European Social Marketing Association and the Australian Association of Social Marketing among others was created. It was designed to define more clearly the key dimensions of SM, including purpose, principles, and procedure as follows:

Social Marketing seeks to develop and integrate marketing concepts with other approaches to influence behaviours that benefit individuals and communities for the greater social good.

Social Marketing practice is guided by ethical principles. It seeks to integrate research, best practice, theory, audience and partnership insight, to inform the delivery of competition sensitive and segmented social change programmes that are effective, efficient, equitable and sustainable. (French and Russell-Bennett 2015, p. 140)

According to the above definitions, SM is to be differentiated not only from commercial marketing but also from social responsibility initiatives. The reason for the latter is that while some CSR initiatives may be undertaken to enhance a company’s brand, SM’s primary purpose is social and does not seek potential commercial gains from its projects.

Regarding DE, it is seen as education for social action and improvement. It aims to address inequalities (local and global) through critical analysis of social issues and the promotion of social change through education. It particularly targets neoliberal views of competitive individualism and promotes a more inclusive humanitarian perspective.

For CSR, it has been defined by the World Business Council for Sustainable Development (WBCSD) as:

the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large. (Watts and Holme 1998, p. 3)

CSR position appears to encourage businesses to assume their responsibilities towards social and environmental issues since these businesses depend on the support from these two dimensions, according to the noblesse oblige principle.

The above three areas (SM, DE and CSR) are very similar in their thrust for addressing social issues and should be contrasted to identify opportunities for mutual learning.

Introduction

There are several disciplines that have been designed to help address social disadvantages and environmental irresponsibilities. CSR, DE, and SM are three of them. These three disciplines should be contrasted in turn to identify opportunities for mutual learning. Although the above three definitions appear to show broad similarities in purpose, it would be still useful to look at them more closely and decide how much similarities and differences can be observed at: philosophical, procedural, and effectiveness of each approach. In turn, the observed similarities and differences may highlight certain strengths and weaknesses that may represent opportunities for improvements for each of the three areas (Fourali 2018).

Philosophically, a number of CSR practitioners announced that there does not seem to be a clear philosophical tradition that underpins the discipline. One might argue that this may not apply to DE or SM although a more worked out system of ethics

could be developed that clarify to all the interpinning principles and addressing objections from various perspectives. SM programs routinely argue that their aims are both individual and social good (which, presumably, are also the aims of DE and CSR) and advise practitioners to refer to both deontological (rights and duties) and utilitarian principles (size of beneficiaries) which are not necessarily at odds with each other. Accordingly, one might consider the golden rule (treat others as you would wish to be treated in the same situation) a basic reference for all three disciplines, given its worldwide acceptability in most cultures. Obviously, there are always critics of any rule, but once we have a broadly acceptable ethical basis, we could always develop its interpretation and application in various contexts to maximize benefits. For example, a commonly shared perspective by the three disciplines appears to be their caution against excesses of ideologies, especially neoliberalism. Such warning was already there in education (the eldest of the three disciplines) in the eighteenth century when an enlightened approach to education was strongly advocated. Having said that, it is clear that the current approach of CSR addresses any excesses by encouraging businesses to take into considerations all stakeholders and not just traditional ones such as shareholders or clients. They would advocate for the inclusion of employees, suppliers, customers, local communities, etc.

Procedurally, one might consider both strategic and methodological dimensions. If we consider critical methodologies, one might argue that DE has a tradition of critical discursive approaches which seem to be far ahead of SM and CSR. This may simply reflect the longer history and, therefore, maturity of education in general and DE in particular, compared to the relatively new fields of CSR and SM. DE's qualitative research methodology is supported by several approaches including postpositivists, constructivists, critical theory, humanists, postmodernists, etc. However, DE does not seem to have yet developed (or at least adopted) consistent strategic approaches of implementing programs. Despite the occurrence of some models, they seem to appear to be too broad in perspective to accurately and systematically implement. This is

no surprise as some DE practitioners have already pointed at this weakness.

Critically, although SM and CSR appear to have a less mature critical research tradition, they seem to compensate for this weakness by the practical procedures they adopt in analyzing situations and implementing strategic changes. This is due to the fact that both these disciplines have historically been derived (at least partly) from the world of business. For instance, if we consider CSR, we may refer to Carroll's CSR model that systematically identifies various forms of responsibilities (Economic, Legal, Ethical, and Philanthropic), their justification, and interpretation for the company. On the other hand, SM is developing powerful techniques for planning and implementing social marketing programs that may be selected and adjusted to different scenarios (e.g., Fourali's or Kotler's). As an example of a systematic approach to SM, consider Fourali's 11 step model including problem identification, planning/scoping, developing a purpose, situation analysis, targeting beneficiaries, specifying objectives, clarifying the offer to target group, selecting an effective marketing mix, gathering resources, implementation of campaign/program, and monitoring situation. These steps benefit from an armamentarium of tools derived from various disciplines to maximize the effect of the campaign.

Regarding the evaluating the effectiveness of each discipline, both SM and CSR would claim that there is plenty of evidence to demonstrate the effectiveness of their projects. In contrast, DE's evidence appears to be patchy and the jury is still out there about what would constitute an effective way of measuring its effectiveness. Again, a number of DE practitioners argued for the development of measurement strategy tools to gage the impact of the projects. Some argued for the adoption of business models such as Kaplan and Norton's balanced score card.

In the light of the above one might ask "what lessons one may derive from the above analysis?"

Regarding the complaint aired by some educationists about the lack of clear evidence for assessing the impact of projects by DE workers, a number of suggestions have been put forward as to the cause of this weakness. These include: lack of experience with business management tools

that are focused on evidence-based decisions; distrust of ‘business-related tools’ perceived by some educationists as reminiscent of neoliberal ideology; more focus by DE workers in critical, liberatory dimensions of education, and the interpinning structure of disadvantage; branding of educational initiatives as reflecting unique situations and, by definition, are not amenable for generalizability to other situations. However, one might argue that while these arguments may explain some of the reasons behind the lack of work on assessing the impact of DE, they do not justify the situation. Indeed, since DE’s purpose is to help alleviate the human condition through education, it would be very hard to achieve this without systematically evaluating the outcomes of its various projects.

In terms of philosophical development, both CSR and SM can learn from DE since it has a more developed philosophical tradition linked to generations of studies on educational goals and principles that can help create a more equal society.

Methodologically, DE also has a longer tradition of educational research, particularly the use of in-depth qualitative analyses. Again, such advance could benefit both CSR and SM.

Perhaps a third area from which CSR and SM can benefit, and linked to both philosophy and methodology, is the critical traditions that DE has been associated with. Such critical traditions help understand the context or history of certain state of play that should present richer information to help social change projects. In particular DE has a strong tradition of awareness of the effects of education, history, or power on our societies. Current examples of power, such as the triple domination bottom line of media, finance, and political hegemony, are routinely reviewed by educationists.

On the other hand, DE can also learn a lot from CSR and SM work. In particular, both CSR and SM, and especially SM, have demonstrated a rich and integrated eclecticism (i.e., their ability to borrow tools and technics from various disciplines to benefit their programs). Such disciplines included psychology, sociology, marketing,

management, etc. This should come as no surprise since both CSR and SM are traditionally linked to business environments where effectiveness and efficiency are key performance indicators for the success of a program. It is worth noting that adopting business models in CSR or SM is not a blind adoption of neoliberal philosophy. Rather it is an attempt to ensure that practitioners demonstrate the effectiveness of their programs which, in turn, justifies more support and investment in their social initiatives.

Key Issues

There are several initiatives purporting to help with social problems or justice. So far, such issues appear to have worked separately despite the similarity of the ethical aims. Their separation may be due to disciplinary walls rather than similarity of purpose. It is arguable that the realizations of the shared aims (social, environmental, and governance) can be much more helped if these three fields of studies start looking beyond the historical walls (such as education, versus governance versus business issues) and look for common aims and how best to achieve them using similar or combined methodologies.

Future Directions

It is envisaged that the three disciplines of development education, CSR, and SM could start systematically learning from their strength and weaknesses and develop ways of mutual sharing of expertise to help make them more effective. Such learning can be done through improved communications but also through seeking learning from beyond the usual “boundaries” of the disciplines. Accordingly, researchers in the three disciplines should look for breakthroughs as well as effective practices and arguments with a view to adapt them to their respective circumstances. This should not be difficult to undertake because of the natural similarities of their purpose.

It is important through that the rapprochments should avoid nonthought through adoptions that may lead to confusions and inefficiencies. It is of crucial importance that the theoretical underpinning is thoughtfully considered before determining their relevance to each situation. Hence, we advocate a theoretically consistent eclecticism.

There may be several ways practitioners/researchers in these respective fields can start learning and consulting with each other. In this respect, developing multidisciplinary communications and forums are encouraged in as sober a manner as possible without disciplinary partisanship that may prevent the free flow of ideas. Rather the approach should be how can we support our respective audiences and what can we “borrow” from each other’s successful experiences. To do this, it is important to develop transparent tools for assessing effectiveness and efficiencies that can help identify areas of strength and weaknesses rather than spend time in empty debate or presumptions that do not help advance the fields. Ultimately, any advance in such debate would help improve the human condition, which should be a guiding principle.

Cross-References

- [Competitive Advantage](#)
- [Globalization](#)

References

- Fourali, C. (2009). Developing world-class social marketing standards: A step in the right direction for a more socially responsible marketing profession. *Social Marketing Quarterly*, 15(2), 14–24.
- French, J., & Russell-Bennett, R. (2015). A hierarchical model of social marketing. *Journal of Social Marketing*, 5(2), 139–159.
- Fourali, C. (2018). Development education and social marketing: Two disciplines with one purpose, Issue 26 of Policy and Practice.
- Watts, P., & Holme, L. (1998). World Business Council for Sustainable Development. <https://growthorientedentrepreneurship.files.wordpress.com/2016/07/csr-wbcsd-csr-primer.pdf>. Accessed 19 Nov 2019.

Social Movement Actors and Local-Community Actors

- [Sustainability and NGOs](#)

Social Obligations (CSR)

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Synonyms

[Commitment](#); [Corporate social responsibility](#); [Responsibility](#); [Social commitment](#); [Social responsibility](#)

Definition/Description

Social obligations in corporate social responsibility (hereafter CSR) represent the commitment of business entities to proactively engage with stakeholders to address social issues such as protecting human and children's rights, preserving health, addressing poverty and unequal wealth, and preventing corruption or unethical trade and labor practices. It is a commitment to create positive business impacts and distribute them fairly to the company's stakeholders while respecting social customs and expectations. In this context, the term *obligation* could be synonymous with the term *responsibility* (in the corporate sense). The adjective *social* is regularly used in the concept of corporate social responsibility and represents the core value of CSR. It usually covers all environmental, social, and governmental (ESG) aspects and balances them. Modern business organizations, due to their role in society, do have a strong impact on the development of society and

affect them directly through their own activities. There is almost no crucial problem in modern society that can be solved without the direct involvement of the corporate sector. Therefore, corporate social obligations include the sensitivity of a company, its managers, employees, shareholders, and other stakeholders to various issues of social life within a specific society. Social obligations formulated through a specific set of actions are part of the CSR strategy and sustainability of its business model.

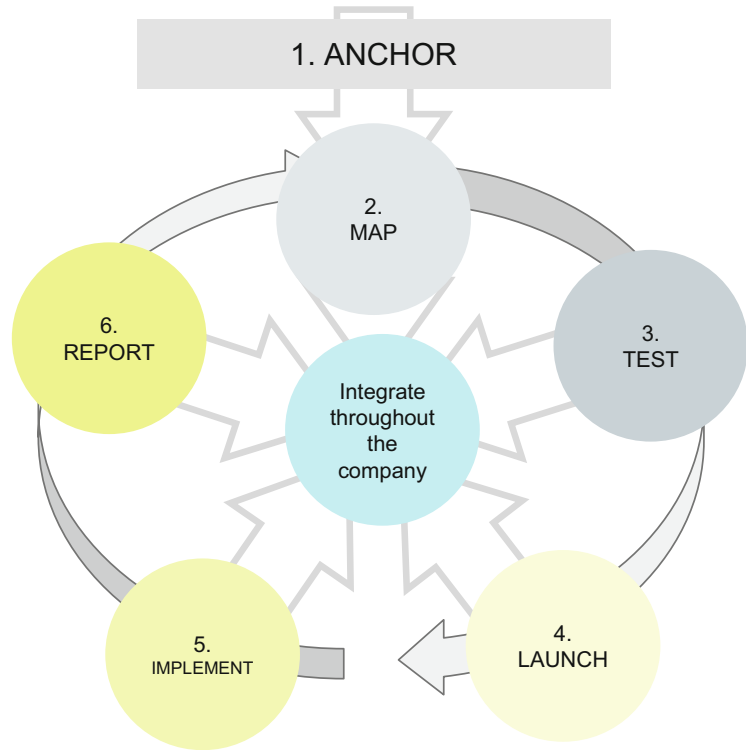
Corporate Context of Social Obligations

As society is changing, standards do too. Even before Friedman and Freeman published their work, the social responsibility of business was a topic of discussion among shareholders and different stakeholders. Bowen's (1953) understanding of the social responsibility of businessmen was "the obligation of businessmen to pursue those policies, to make those decisions, or to follow those lines of action that are desirable in terms of the objectives and the values of our society." Barton (2011) wrote that we should rethink *how we view business' value and its role in society*. Managing social obligations may be considered as a matter of making a balance between corporate interests and social objectives. However, such a comparison does not represent a full-scale picture of corporate social obligations since business and social goals are inevitably interconnected. A company is primarily a social organization because it consists of human individuals, the employees. This "human element" makes a company function like a live organism, responding to surrounding impulses. People that make up a company have cultured ethical values, which are usually consistent with generally accepted behaviors. Therefore, social obligations in business are not something that is done and controlled operationally – on the contrary, it is a permanent relationship and responsiveness of a company beyond its economic goals.

The development of a strong corporate society prevailed from the 1970s to 2000 with an exclusive focus on finances and market values.

Corporations made high profits while neglecting the extremely harmful consequences of economic growth, such as environmental damage, corruption, and social injustice. The moral integrity of corporate managers was up for public debate in many cases of child labor, violations of health regulations, or the irretrievable destruction of large amounts of land. Therefore, the public call for strong corporate responsibility was justified. Early discussions of CSR were only about dividing companies into those that "choose" to be responsible or not. Responsibility cannot be a matter of decision-making because no one should choose to act morally one hour and immorally the next. That would be inconsistent and corrupt behavior. Expressing social sensitivity as an option was counterproductive and revealed that the corporate sector did not fully understand the social obligations it has to deal with. Companies that did not comprehend their social obligations did not learn about CSR until consumers became aware of the impact of companies on sustainable development and consumer habitat. Therefore, the discussion of whether a company accepts or denies social obligations is not fruitful because it can jeopardize its very existence. The only sensitivity to these issues was the moral and ethical orientation of the people performing the business actions from the top to the bottom of the organizational hierarchy.

The relevant context of social obligations in CSR represents a valid ratio made of applied legal conduct in alignment with social expectations. The term and context of social obligation is a fundamental component of CSR, but it does not have to be a synonym for responsibility. Although there is no unique definition of CSR, one is constant: They regularly refer to the social obligations of companies. The context of social obligations is found in almost every CSR definition. Kotler and Lee (2005) define CSR broadly as "a commitment to improve (societal) well-being through discretionary business practices and contributions of corporate resources." Wan-Jan (2006) stated that the "lack of a widely agreed definition contributed to misunderstandings and cynicism towards the (CSR) concept itself and argued that hence the need for a working definition." Wan-Jan (2006

Social Obligations (CSR),**Fig. 1** Building strategic social obligations. (Ditlev-Simonsen, 2022)

citing Kitchin, 2002) captured the problem of defining CSR well, stating: “One moment (CSR) seems to mean the engagement of non-governmental organizations (NGOs), the next it is all about charitable donations, and 5 min later it seems to mean the ethical treatment of employees.” Moratis (2016) acknowledges the shift in CSR definition by ISO 26000 “as it propagates an explicit moral perspective on corporate responsibilities towards society.” This shift makes corporate moral responsibility a minimum standard of social obligations rather than something a company can choose to do. Every CSR approach, however different, has a social obligation or responsibility built into its core.

In CSR, the term social obligations refer to concepts such as social issue, social concern, social activity, social impact, social responsibility, social performance, and social risk. Sethi (1979) states that “corporate behavior in response to market forces or legal constraints is defined as a social obligation.” The way employees, managers, and owners of a company perceive a particular social problem is a way they construct the company’s

response to that problem. In this way, companies develop conducts for socially responsible action, such as CSR policies. As seen on Fig. 1 for approach to be strategically sustainable, the initiative needs to come from top management, or at least it should be anchored in top management. CSR is not “add on” for the company but needs to be integrated within structure, culture, and strategy. Explicitly expressing the company’s commitment to sustainability is of crucial importance. After that, managers should first and foremost identify the key areas of social impact and map them, so the management must take account of what they are already doing. After management realizes the current state, they can set concrete goals associated with the areas where the company has a major social impact (Ditlev-Simonsen, 2022). For companies, in general, it is better to be part of the solution than part of the problem. In the study by Kasturi et al., CSR is considered a necessary aspect of corporate culture and should be aligned with organizational behavior (2015, StudyCorgi, 2020). Helping others is a natural response and a socially evolved behavior. It is an

instinct, a particular social behavior (obligation) of any being that perceives when others are at risk or suffering from adverse conditions. Company social obligations can manifest in a variety of responsible behaviors. Carroll (1991) sees several corporate social obligations: as economic, ethical, legal, and philanthropic. Jamali and Mirshak (2007) make a connection between Carroll's multiple perspectives and Windsor (2001) when they say: "From this perspective, economic and legal responsibilities are socially required, ethical responsibility is socially expected, while philanthropy is socially desired." In this statement, the words "required, expected, desired" determine the propriety of activities that a company or its managers should or should not do. This determination makes the corporate context of social obligations about morally correct and socially expected behavior. The next step is to consult with stakeholders to collect feedback on the plan (Fig. 1).

From Stakeholder's Expectations Over Social Obligations to Social Changes

When it comes to social obligations, the following question arises: Is it social responsibility or social obligation? There is a difference between an appropriate response (responsibility) and an obligation. In CSR, there is a constructive relationship between the two. Managers do not have a duty to act morally; morality is a personal sense of righteousness. A company may fulfill an obligation (social, legal, political, or otherwise) through a contract based on law or industry regulation. A company's obligation may be to take positive social or environmental action, but this does not mean that it has developed a moral sense of responsibility. Obligation means acting lawfully, i.e., acting as required by law, public institutions, or valid social guidelines. That is why some perceive CSR as acting beyond legal requirements. In the case of social obligations (CSR), companies develop codes of conduct, policies, and regulations to ensure that they act in a socially acceptable manner. It is not the same intuitive response if a company refers to a social problem only with a PR statement or if the company gets involved in

solving the social problem with other community members.

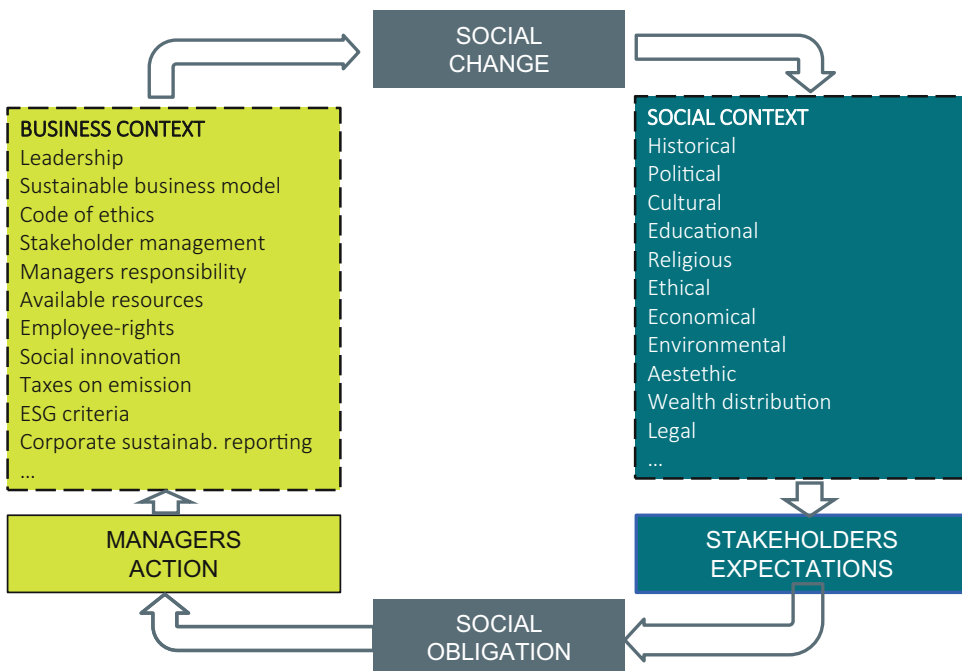
Stakeholders are crucial for the competitiveness of business organizations, and their relevance is immense and obvious. Therefore, it is very important for a company to clearly identify its social obligations if it wants to achieve CSR or specific sustainability goals. The company must properly identify its social obligations to develop the right policies and procedures to ensure appropriate social impact on a regular basis. Social obligations vary widely from one company to another and depend on the industry and community in which the company operates. Different industries face different types of social obligations. The social obligations of an automobile manufacturer regarding safety of passengers differ significantly from those of a pharmaceutical company and safety of patients. In addition, a car manufacturer will have to deal with safety issues of road users or high greenhouse gas emissions due to large-scale production, while pharmaceutical companies will have to commit and deal with the ethical issue of animal testing as part of their R&D process. These two companies have different stakeholders, and therefore their perception of social obligations is different. Isa (2012) summarizes this stakeholder perception as follows: "CSR means something to everybody, although not always the same thing." How well managers understand stakeholder expectations determines how they perceive the company's social obligations. This is evidenced by Clarkson's (1995) 10-year observational data that confirmed: "(1) corporations manage relationships with stakeholder groups rather than with society as a whole, (2) it is important to distinguish between social issues and stakeholder issues..." This means that social obligations derive from stakeholder needs that companies are trying to meet. Stakeholders contribute extensively to the formulation of CSR policies, through early-stage dialogues balancing the conflicting belief of profitability and social obligations related to social responsibilities dimension (Basavaraj & Sreelakshmi, 2022 citing Lauring & Thomsen, 2008) There is no doubt that business organizations will constantly create different values in a

modern society, but which type of value will have social advantage? The forces of influence of various stakeholders (especially internal ones) are becoming more powerful and can no longer be ignored. Perhaps modern organizations could be described as a network of influences that creates economic value within a specific social context.

The way Frederick et al. (1992) divided a company's stakeholders into primary (internal) and secondary (external) stakeholders indicates the multidimensional nature of social obligations. This makes the list of corporate social obligations quite long and raises the question of what are the basic (narrow) versus broader corporate social obligations. A study of Australian managers by Quazi (2003) found "a significant relationship between the level of education, training status, and religiosity of managers and their perception of CSR." This implies the relationship of managers' perceptions, their patterns of social commitment, and the creation of socially responsible human resource policies. Wartick and Cochran (1985), in presenting the model of corporate social performance, state that the challenges of CSR are

as follows: "economic responsibility, public responsibility, and social responsiveness, it also examines social issues management as a dimension of corporate social performance." All of the above terms contain the adjective "social" because of social differences within stakeholder needs and expectations. The wide variety of stakeholders leads to a wide range of possible social obligations that a company must deal with (Fig. 2).

Additional challenge for companies managing stakeholder expectations is that these expectations change over time. Stakeholder diversity is driven by constant social changes due to market realities, innovations, or global trends. This leads to a changing context for the company's social obligations and the social performance of managers (Fig. 2). By fulfilling their social obligation, business organizations balance between their short- and long-term goals. Barton (2011) wrote that business organizations should fight their myopic way on social reality and revamp incentives and structures to focus their organizations on the long term. Porter and Kramer (2011) state that



Social Obligations (CSR), Fig. 2 Perceiving social obligations and change

business, acting as business and not as charitable donors, can become a powerful force in addressing societal issues. Instead of buying conscience through nonsystematic donations and philanthropy that are not related to the strategy, management should utilize power, resources, knowledge, and talent of business entity to address some of the greatest issues humanity faces today. It is not a one-size-fits-all solution, but as seen on Figs. 1 and 2 management should carefully pick social obligations that are related to its business model.

Relevance of a certain social change can significantly affect the corporate perception of social obligations. Nickels et al. (2008) point out the relevance of social change, explaining, “Far smaller and far slower social changes in earlier periods triggered civil wars, rebellions, and violent intellectual and spiritual crises. The extreme social transformations of this (twentieth) century have caused hardly any stir.” Contemporary social changes affect a wide range of business aspects, from individual development (Stewart & Healy, 1989) to the development of business opportunities (Bergh et al., 2011). Any societal change can create new stakeholder expectations that may require a new type of response from the company. At a certain sociological moment, companies need to develop strategic sense of stakeholder needs. Such a sense cannot be created by legal, economic, or other mandatory instructions. Because society is in a constant state of change, the corporate content of social obligations is also constantly changing. This emphasizes the importance of constant coordination between stakeholders and the company. Such coordination can ensure that a company regularly discusses common interests and social values with the community. But plan is nothing without execution.

The implementation procedure ensures that desired results are achieved and is the underpinning for implementing change. CSR goals are not always part of job description, so the most effective and efficient way to include them is to quantify them and integrate them as a part of progress evaluation and follow-ups. Another efficient and effective way is to include them as a part of compensation plan through CSR bonuses, where

CSR goals become an integral part of employee's working performance. Here the amount of paid bonuses directly correlates on both, employee's and organizational performance that can be tracked and measured. Employees will be more productive if they can demonstrate progress, maintain records of their work, reach specific CSR goals, and receive encouraging variable compensation (bonus). On the other hand, it will help the organization to accomplish its sustainability goals.

At the end, the company should present on its CSR objectives, not only because this type of reporting will soon become mandatory and there are already ESG compliance regulations in place, such as EU taxonomy **and the EU corporate sustainability reporting directive, but also because it is a healthy managerial practice and makes a foundation for a long-lived, resilient business model. At the moment, EU law requires certain large companies to disclose information on the way they operate and manage social and environmental challenges, but trend is clear, and soon every organization will have to disclose some kind of report on ESG objectives.** Management should regularly communicate the fulfillment of their social obligations to stakeholders hoping to create additional value for both. Often companies realize that they are doing a lot in the pursuit of sustainability – they just do not call it sustainability or corporate responsibility (Ditlev-Simonsen, 2022). The most appropriate communication of this type is CSR disclosures, commonly known as CSR reporting, nonfinancial reporting, ESG reporting, or integrated reporting. Companies that have CSR programs may use CSR reports to demonstrate their dedication to generating social value and safeguarding social interests. It is a two-way communication between stakeholders and companies about expected, implemented, and achieved social obligations. This kind of report makes it possible to assess a company's social commitment as well as the degree of openness toward society.

ESG-related reports provide a consistent means to track, evaluate, and analyze CSR performance and overall health of the business organization while identifying crucial areas for impact

improvement, compiling an organizational knowledge base and opportunity for future growth. It also keeps management and stakeholders advised on what is happening in organization. By definition, reporting is a backward-looking process, but it allows also a forward-looking component that gives management opportunity to share reached and future CSR goals within different time frames (Ditlev-Simonsen, 2022). It is vital to break big objectives down into smaller chunks because many CSR ambitions require years to be achieved. Becoming zero-impact continent or carbon-neutral organization will take decades; therefore, a comprehensive strategy is crucial. Holistic approach means to have clear, tangible, and measurable connections between operational and strategic CSR plan, ESG reporting, performance management, and rewarding policies. All usually fragmented and scattered elements need to work in harmony and be coherent if organization wants to be truly competitive and achieve balance between long- and short-term objectives.

Manager's Perspective on Company's Social Obligations

What do companies strive for when they fulfill social obligations? Is it just about the moral satisfaction of the managers, the fulfillment that they have done something good for society, satisfied the stakeholders, and behaved appropriately? For a company, fulfilling a social obligation means participating in the process of creating and managing social value. Social value accounts for nearly two-thirds of the company's Triple Bottom Line (TBL, Elkington, 1998). Businesses have unique organizational capabilities to create, accumulate, process, and disseminate different types of social value. Entrepreneurship is a creative process of creating new economic and social values. When companies process social value, they must do so in an appropriate way – and that is their core social obligation.

Social obligations combine the acceptance of ethical standards and morally bound actions of corporate persons. Ethical and moral

underpinnings represent a genuine commitment by the company to determine what is and is not socially acceptable. A manager's moral sense is instilled in him as a person through his cultural upbringing and education, which means that social obligations are a matter of deeply held personal values. What a person becomes in their career cannot be known in advance, but the person's developed moral values should enable constantly positive, socially safe actions and prevent negative consequences. What happens if a businessperson does face a situation where they have conflicting duties, responsibilities, and/or obligations or they cannot satisfy all at the same time? In that case, one thing is for sure, they must make a decision, and Becker (2019) suggests they need to ethically reflect on an organizational set of values, norms, and principles and make a decision about their hierarchical order: What type of social obligation has strategic priority and overrides others in such a conflict?

There are numerous social processes that are very complex and in which companies have an important stake. The social interdependencies reflect in business social impact. The size of the company may play a role in these relationships. Due to the strong social impact of companies, Lazzarini (2018) emphasizes the importance of implementing social impact measurement practices in companies, as they “can help organizations blend social and economic goals.”

Through their size and global influence, multinational corporations (MNCs) are able to create and process more social value. This has been discussed in the context of the “Bottom of the Pyramid” model (BOP), in which MNCs are seen as an opportunity to improve the socioeconomic potential of two-thirds of the poorest people in global society. Because MNCs accumulate and disseminate large financial and nonfinancial assets, it was assumed that they could also improve social value through BOP strategies. Sinkovics et al. (2014) attempt to convey the understanding and limitations of BOP business models designed to simultaneously create commercial and social value. They emphasize that “what qualifies as social value in one country context may differ greatly in another country

context due to differences in the economic, political, and institutional environment. Therefore, comparisons between the social value created by companies originating from developed and developing countries need to consider the different manifestations and shades of social value.” This approach has been criticized for the contradictory and even negative impacts of MNCs in third world countries. Moreover, this approach has unfairly neglected the social potential of small and medium enterprises (SMEs), especially knowing that SMEs make the “backbone” of national economies due to their number, the highest percentage of employees, and by created and exported value.

In modern markets and in modern societies, there is a constant alignment of economic and social values. Awareness of harmful market trends in relation to social values has reached a point. Under these circumstances, social entrepreneurship has engaged as a nonprofit model to preserve and stop the depletion of social capital. Social entrepreneurs are committed to increasing social value across a range of sectors including activism, elder care, poverty alleviation, biodiversity conservation, sustainable and green agriculture, and health improvement. In terms of creating economic and social value, Acs et al. (2013) argue, “To think of social entrepreneurship as separate from commercial entrepreneurship may not be useful.” They explain that “economic value can be treated as reflecting social value, depending on its context and effect.” For this reason, social entrepreneurship is based on striking a balance between social, environmental, and economic business goals. Social value is inherent in each of the above, according to Auerswald (2009), when he states that “entrepreneurs of various types create both private and social value.” Value creation is a general obligation of any business, while social value has many variations.

Summary

This entry explains the CSR context of social obligations. Social obligations in the modern business world offer companies the opportunity

to add social value to their business. This allows companies to add sustainable social elements to their economic value creation. A company uses different types of social capital (people, natural resources, and infrastructure) to operate and therefore has an obligation to act in a socially appropriate way in this engagement. This entry highlights how social changes affect the way companies perceive their social obligations. Businesses should meet each social obligation equally, while also considering the problem of conflicting social obligations. This conflict can occur when the interests of one stakeholder of the company differ significantly from those of another stakeholder. Social obligations can be determined and fulfilled only if the interests of the stakeholders and those of the company are aligned. In this way, the company can identify the relevant social values to which it must adhere. The biggest CSR challenge regarding to social obligations is the changing nature of social values and their connection with the elements of the long-term sustainability of the business model.

Cross-References

- [Corporate Social Responsibility](#)
- [Guidance on Social Responsibility](#)
- [Social Justice](#)
- [Social Responsibility According to ISO 26000](#)

References

- Acs, Z. J., Boardman, M. C., & McNeely, C. L. (2013). The social value of productive entrepreneurship. *Small Business Economics*, 40(3), 785–796. <https://doi.org/10.1007/s11187-011-9396-6>.
- Auerswald, P. E. (2009). Creating social value. *Stanford Social Innovation Review*, Spring, https://ssir.org/articles/entry/creating_social_value?msclid=d652b97fcfb311ecb35835508972afa4 Accessed 9 May 2022.
- Barton, D. (2011). Capitalism for the long term. *Harvard Business Review*, 89(3), 84–91.
- Basavaraj, S., & Sreelakshmi, P. (2022). Corporate social responsibility and sustainability development mapping: Practical application beer and Nigel Roome Model. In A. Das Gupta (Ed.), *A casebook of strategic*

- corporate social responsibility towards business sustainability (pp. 11–38). Singapore: Springer.
- Becker, C. U. (2019). *Business ethics – Methods and application*. New York/London: Routledge.
- Bergh, P., Thorgren, S., & Wincent, J. (2011). Entrepreneurs learning together: The importance of building trust for learning and exploiting business opportunities. *International Entrepreneurship and Management Journal*, 7(1), 17–37. <https://doi.org/10.1007/s11365-009-0120-9>.
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York: Harper & Brothers.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. [https://doi.org/10.1016/0007-6813\(91\)90005-G](https://doi.org/10.1016/0007-6813(91)90005-G).
- Clarkson, M. B. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117. <https://doi.org/10.5465/amr.1995.9503271994>.
- Ditlev-Simonsen, C. D. (2022). *A guide to sustainable corporate responsibility – From theory to action*. Cham: Palgrave Macmillan.
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of 21st century business*. Gabriola Island, BC: New Society Publishers.
- Frederick, W. C., Post, J. E., & Davis, K. (1992). *Business and society: Corporate strategy, public policy, ethics*. New York: McGrawHill.
- Isa, S. M. (2012). Corporate social responsibility: What can we learn from the stakeholders? *Procedia – Social and Behavioral Sciences*, 65, 327–337. <https://doi.org/10.1016/j.sbspro.2012.11.130>.
- Jamali, D., & Mirshak, R. (2007). Corporate social responsibility (CSR): Theory and practice in a developing country context. *Journal of Business Ethics*, 72(3), 243–262. <https://doi.org/10.1007/s10551-006-9168-4>.
- Kasturi, R., Chase, L., & Karim, S. (2015). The truth about CSR. *Harvard Business Review*, 93(1–2), 40–49.
- Kitchin, T. (2002). Corporate social responsibility: A brand explanation. *Brand Management*, 10(4–5), 312–326.
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility: Doing the most good for your company and your cause*. Hoboken, NJ: Wiley.
- Lazzarini, S. G. (2018). The measurement of social impact and opportunities for research in business administration. *RAUSP Management Journal*, 53(1), 134–137. <https://doi.org/10.1016/j.rauspm.2017.12.010>.
- Moratis, L. (2016). Out of the ordinary? Appraising ISO 26000's CSR definition. *International Journal of Law and Management*, 58(1), 26–47. <https://doi.org/10.1108/IJLMA-12-2014-0064>.
- Nickels, W. G., McHugh, J. M., & McHugh, S. M. (2008). *Understanding business* (9th ed.). New York: McGraw-Hill Irwin.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*, 89(1–2), 62–67.
- Quazi, A. M. (2003). Identifying the determinants of corporate managers' perceived social obligations. *Management Decision*, 41(9), 822–831. <https://doi.org/10.1108/00251740310488999>.
- Sethi, S. P. (1979). A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. *Academy of Management Review*, 4(1), 63–74. <https://doi.org/10.2307/257404>.
- Sinkovics, N., Sinkovics, R. R., & Yamin, M. (2014). The role of social value creation in business model formulation at the bottom of the pyramid—implications for MNEs? *International Business Review*, 23(4), 692–707. <https://doi.org/10.1016/j.ibusrev.2013.12.004>.
- Stewart, A. J., & Healy, J. M. (1989). Linking individual development and social changes. *American Psychologist*, 44(1), 30.
- StudyCorgi. (2020). *The truth about CSR by Rangan, Chase, Karim*. 11 Nov 2020, studycorgi.com/the-truth-about-csr-by-rangan-chase-karim/. Accessed 6 April 2022.
- Wan-Jan, W. S. (2006). Defining corporate social responsibility. *Journal of Public Affairs: An International Journal*, 6(3–4), 176–184. <https://doi.org/10.1002/pa.227>.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *Academy of Management Review*, 10(4), 758–769. <https://doi.org/10.5465/amr.1985.4279099>.
- Windsor, D. (2001). The future of corporate social responsibility. *The International Journal of Organizational Analysis*, 9(3), 225–256. <https://doi.org/10.1108/eb028934>.

Social Performance

- ▶ Corporate Social Performance
- ▶ CSR Reporting

Social Precautionary Principle

- ▶ Ethic of Love

Social Purpose Companies

- ▶ Benefit Corporations

Social Responsibility

- ▶ [Corporate Community Involvement](#)
- ▶ [Corporate Social Responsibility](#)
- ▶ [NP 4469: Portuguese Social Responsibility Standard](#)
- ▶ [Policy and Military Force Sustainability](#)
- ▶ [Responsiveness](#)
- ▶ [Social Obligations \(CSR\)](#)

Social Responsibility According to ISO 26000

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Synonyms

[CSR](#); [Organisational Responsibility](#); [Sustainability](#); [Sustainable Organisations](#)

Introduction

While for many years there was confusion about both the subject and the object of social responsibility and even though actual literature is still claiming that there is no “universal understanding of (Corporate) Social Responsibility” (Scherer and Patzer 2011, p. 321; Gogoll and Wenke 2017, p. 183), the concept has been clearly and globally consensually defined some years ago in the first international standard of Social Responsibility: ISO 26000: 2010 (ISO 26000 2010).

The outcome of this standard owns a high degree of relevance and legitimacy because of its consensual development process within one of the largest multi-stakeholder processes in the history of ISO standards (Mueckenberger and

Jastram 2010; Mena and Palazzo 2012; Hahn and Weidtmann 2012). In addition to company representatives from industry in both developing and emerging countries, government and trade union representatives were present, alongside consumers, nongovernmental organizations, and people from SSRO (service, support, research, and others). During a period of 6 years (2005 to 2010), they discussed the form and content of the new standard. In total, experts and observers from 99 countries as well as from 42 private and public sector organizations directly participated in the global development process (Kleinfeld 2011, p. 11; Kleinfeld and Martens 2014, p. 6).

ISO 26000 describes social responsibility in the context of the whole organization, providing guidance and concrete recommendations in order to identify and to take their (specific) responsibilities toward society for organizations of any legal form. The concept of (C)SR promoted by this international standard encompasses a wide range of aspects and, thus, contradicts the hitherto widely held view that it is only concerned with environmental aspects, sponsorship, or pure altruism and philanthropy (see COM(2001) 366 (2001), Green Paper).

Instead, in today’s understanding, SR is perceived as a crosscutting task that runs through all divisions of the company based on corporate policy and corporate governance. Good and credible (C)SR which focuses on an organization’s core business ultimately contributes to its sustainable success and secures its future. (C)SR can be a competitive advantage and a quality feature if properly understood and credibly practiced (Kleinfeld and Kettler 2011).

The History

For a long time, different answers have been given to the question what social responsibility is or should be.

The most provocative understanding seemed to be held by Milton Friedman who in his famous article in the New York Times Magazine from 1970 stated “The Social Responsibility of

Business is to increase its profits” (Friedman 1970). Being a strong advocate of economic liberalism and of shareholder value, he argued that social objectives should be primarily followed by politics since business people, for not having been democratically elected, were neither authorized nor capable of taking over the role of political actors and governments. And, by mixing up the division of functions between business and politics, the basis of a free society could be significantly endangered. Both arguments are rather plausible. Questionable from today’s understanding, however, are the underlying assumptions of this position. This is mainly true for Friedman’s definition of the subject as well as of the object of social responsibility. Regarding the former, he says: “Only people can have responsibilities” (Friedman 1970). Social responsibility of business, thus, means the social responsibility of individuals who manage it. According to the classical position of the principal-agent theory, however, corporate executives are agents of stockholders and owners, so their primary responsibility is toward them and their – assumingly – merely capitalistic interests. Even more outdated is his idea about the object of SR. Following the rationale of his article, acting socially responsible means spending someone else’s money for a general social interest. This is corresponding to only one minor aspect of the definition of SR developed, e.g., some years later by Archie B. Carroll: to the dimension of philanthropy which, according to Carroll and contemporary approaches of (C)SR, is neither an economic or legal duty nor may it be legitimately expected from business by society but refers to something which can only be “desired” (Carroll 1991). Besides, Carroll and other business ethicists of the 1980s and the 1990s ascribed economic, legal, and ethical responsibilities to the corporation as such which was reflected by the use of the term corporate social responsibility (CSR).

However, until today, especially in business practice, it is still widespread to understand (C)SR as (purely voluntary) social engagement (Schrader 2011, p. 303), whereas even Friedman had a broader understanding as a look to the full quote in his article shows:

That responsibility (...) generally will be to make as much money as possible while conforming to the basic rules of the society, both those embodied in law and those embodied in ethical custom. (Friedman 1970)

In Europe, one cause for the narrow understanding of SR can be found in the first definition published by the European Commission in 2001. On the basis of the work of the European Business Network for Social Cohesion, initiated by the European Commission in 1996 (renamed in “CSR-Europe” in 2000), the so-called Green Paper of the EU was developed (title: “Promoting a European framework for Corporate Social Responsibility,” COM(2001) 366 (2001)). With its definition, the Green Paper for the first time established a common understanding of CSR in Europe:

Corporate Social Responsibility (CSR) is a fundamental concept designed to help companies with the voluntary integration of social and ecological concerns into their corporate activities and their relationships with stakeholders. (COM(2001) 366 (2001), p. 7)

Following the Green Paper definition, CSR focuses on the following aspects: voluntary corporate activities in the field of social and environmental responsibility, involving relevant stakeholders.

In the year of the publication of the Green Paper, the demand for an international standard in the area of (C)SR was raised by international consumer organizations and shortly afterward an official request sent to ISO. Almost 10 years passed from the idea to the publication of the final standard ISO 26000 (at the end of 2010): Not only the content of but also the need for this standard was controversially debated before and during its development process. And until the final vote it was not certain whether the majority required for the adoption of the standard would be found.

Another reason for the long duration of the standard development was of course the complexity of both the topic and the special process design. As described above, representatives and experts from six stakeholder categories per country – namely, industry, labor, government,

academia, consumer, and NGOs – from almost 100 countries, organized in national committees and in one international working group (WG SR), were involved in the development process. A balanced relationship between participants from developed, emerging, and developing countries was ensured and actively promoted (Kleinfeld 2011, Vitt et al. 2011, pp. 6, 45–48).

As a result, ISO 26000 offers a comprehensive guide that, although not (yet) approved for certification on an international level, provides concrete recommendations for the systematic recognition, determination, implementation, and communication of an organization's social responsibility. Unlike any other initiatives in the area of CSR until then, it addresses all kinds of organizations, regardless of their ownership structure, legal form, size, and location. Finally, its definition of social responsibility and the definitions of several key terms closely related to SR have been developed and were adopted based on international consensus.

The First Globally Acceptable Definition of SR

ISO 26000 defines social responsibility as the:

responsibility of an organization (2.12) for the impacts (2.9) of its decisions and activities on society and the environment (2.6), through transparent and ethical behaviour (2.7) that

- *contributes to sustainable development (2.23), including health and the welfare of society;*
 - *takes into account the expectations of stakeholders (2.20);*
 - *is in compliance with applicable law and consistent with international norms of behaviour (2.11); and*
 - *is integrated throughout the organization (2.12) and practised in its relationships.*
- (ISO 26000:2010, p. 3)

With this definition of social responsibility, ISO 26000 clearly distinguishes itself from what was understood in common corporate practice by CSR until 2010 (Kleinfeld 2011, pp. 5–7).

As the main object of an organization's responsibility, it highlights the consequences and impacts of corporate and organizational decisions and activities, respectively. The term "social" in this definition of social responsibility refers to the third dimension, apart from the subject and the object of responsibility, which is the authority or instance – here the society and the environment including their health and welfare – answering the question to *whom* the organization is responsible.

In order to identify and to take their specific responsibility, organizations should engage with their stakeholders, firstly by getting to know their interests and expectations, secondly by evaluating them as legitimate or not, and finally by involving relevant stakeholders in the form of a (critical) dialogue within the corporate decision-making processes.

In line with Friedman's and Carroll's understanding of social responsibility, ISO 26000 explicitly includes legal compliance and ethically acceptable behavior into its definition, thus indicating that SR cannot be reduced to philanthropy or a purely voluntary commitment toward society. By referring to "international norms of behavior" as well, compliance in this context is not limited to applicable law but includes the so-called soft law in the form of internationally agreed conventions, guidelines, and other norms, thereby going beyond classical compliance approaches.

Moreover – and this is also an expression of an extended conception of CSR in the light of current practice – the fulfillment of social responsibility according to ISO 26000 requires a holistic implementation approach, which should not only be realized in a formal-structural but in an informal-cultural way at the same time. Responsibility toward society is a crosscutting issue, which presupposes a certain behavior on the part of both the individual actor and the organization as a whole. The related topics and fields of action are not isolated from each other and, therefore, can be considered and treated effectively only in an integrated manner. Responsible decision-making and behavior should become an attitude deeply rooted in the organizational culture and lived throughout the organization including in its

internal and external relationships (Martens and Kleinfeld 2018, pp. 23–24).

According to ISO's definition of SR, by taking this responsibility, organizations can make a key contribution to sustainable development, including health and the welfare of society worldwide. Through a comprehensive socially responsible use of resources (sustainability management), they simultaneously ensure sustainability of their own value creation. Finally, the standard gives recommendations on how to manage organizations sustainably. The primary objective is to promote sustainable development of society through an organization's own decisions and activities and to influence or help other organizations to do the same according to their capacity.

On a European level, as a result of the Lisbon Summit agenda, the revision of the OECD Guidelines at the beginning of 2011, against the background of the financial and economic crisis and, in particular, as a result of the introduction of ISO 26000, the European Commission finally reviewed its understanding of CSR, which is valid until today, according to which CSR is:

... the responsibility of enterprises for their impacts on society. [...] To fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders, [...]. (COM (2011) 681 final (2011), p. 6)

Critique

Criticism of ISO 26000, however, should not be ignored. Obviously, the multi-stakeholder process also revealed weaknesses. Because of financial deficits, especially on the part of the NGOs, broad participation of all stakeholders at each international meeting (i.e., during the eight working group plenary sessions between 2005 and 2010) was not possible. Therefore, imbalances (or “asymmetry”) in the influence of individual stakeholder groups could not be completely ruled out.

A frequently mentioned critique is the “indetermination of the ISO 26000's demands.” This

criticism can be countered by referencing the international nature of the target group and the intended universal applicability of the norm, which was not planned to contain “requirements” and guidelines, respectively, since it was solely designed to be a guidance document (Kleinfeld et al. 2019, pp. 8–10).

Apart from this, the standard seeks to provide guidance to all kinds of organizations, regardless of their nature and size, and therefore must reflect the diverse contexts of organizations.

Perhaps the main criticism of ISO 26000 is its high degree of complexity and sheer size. But these traits, at the same time, are its major advantage: the cooperation of the emerging and developing nations has ensured a broad, full-scale consideration of the SR-related issues, thus engendering the standard's universality. On the other hand, a document with implications of such a scale cannot provide detailed recommendations for individual target groups but must remain general when describing fields of action. The task to apply the norm with a view to specific needs is therefore left to the potential user organizations themselves (Kleinfeld et al., 2019, pp. 8–10).

Against this background, one of the first and most important exercises according to ISO 26000 is the identification and description of fields of action (issues) of social responsibility relevant to one's own organization as well as the determination of a company's sphere of influence. The standard itself provides references and orientation and, in some places, addresses the specific requirements of potential user groups. For example, it contains explicit statements on benefits and application for small- and medium-sized organizations (ISO 26000:2010, p. 8) as well as recommendations on how government organizations can orient themselves to the norm, without wanting to replace their special role as a state actor (ISO 26000:2010, p. 9).

Major Accomplishments/Contributions

In a country-by-country comparison, it can be seen that there are different views on what has

been meant by (C)SR (Matten and Moon 2008). Only clear definitions of the term, which have been developed consensually in a global understanding process, would remove ambiguities. This is precisely what the global multi-stakeholder process that led to ISO 26000 was aiming for and in the end could achieve.

Apart from that, the definition and the concept of social responsibility provided by this standard sends a clear signal not only for the necessity but also for the feasibility of ethical orientation in a global economy. Its greatest achievement is to offer for the first time a holistic, integrative, and coherent approach to dealing with ethically relevant topics for businesses and any other kind of organization of the twenty-first century.

Summary

According to ISO 26000 “SR” is the “Social Responsibility” of all types of organisations for their impacts on society and environment (via corporate and organizational decisions and activities) regardless of their size, type of ownership, location and legal form. It comprises a wide range of aspects and emphasises the dialogue with stakeholders (ISO 26000 2010, p. 3).

Cross-References

- [Corporate Social Responsibility \(CSR\)](#)
- [Discourse Ethics](#)
- [ISO 26000 Standard](#)

References

- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- COM(2001) 366. (2001). Promoting a European framework for Corporate Social Responsibility. <https://www.eumonitor.eu/9353000/1/j9vvik7mlc3gyxp/vikqhjet6py6>. Accessed 7 Oct 2019.
- COM(2011) 681 final. (2011). A renewed EU strategy 2011–14 for Corporate Social Responsibility. [http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com\(2011\)0681_/com_com\(2011\)0681_en.pdf](http://www.europarl.europa.eu/meetdocs/2009_2014/documents/com/com_com(2011)0681_/com_com(2011)0681_en.pdf). Accessed 7 Oct 2019.
- Friedman, M. (1970). The social responsibility of business is to increase its profit. *The New York Times Magazine*, September 13, 1970.
- Gogoll, F., & Wenke, M. (2017). *Unternehmensethik, Nachhaltigkeit und Corporate Social Responsibility*. Stuttgart: Kohlhammer.
- Hahn, R., & Weidtmann, C. (2012). Transnational governance, deliberative democracy, and the legitimacy of ISO 26000: Analyzing the case of a global multi-stakeholder process. *Business and Society*, 55(1), 90–129.
- ISO 26000:2010. (2010). Guidance on social responsibility.
- Kleinfeld A. (2011). *Gesellschaftliche Verantwortung von Organisationen und Unternehmen, Fragen und Antworten zur ISO 26000*. Berlin: Beuth Verlag GmbH.
- Kleinfeld, A., & Kettler, A. (2011). Unternehmensethik auf dem Vormarsch. ISO 26000 macht Ethik zur Norm globalen Wirtschaftshandels. FORUM Wirtschaftsethik, 19. Jg. Nr. 1/2011.
- Kleinfeld, A., & Martens, A. (2014). DIN ISO 26000: Eine Zusammenfassung der wesentlichen Daten und Fakten. In: A. Kleinfeld & A. Martens (Ed.), DIN ISO 26000 – Gesellschaftliche Verantwortung erfolgreich umsetzen. Beispiele, Strategien, Lösungen, 5–11.
- Kleinfeld, A., Shukla, M., Kröder, H., Zubrod, A.K., Ottens, A.K., Venkova, A., Kamitz, A. L. (2019). SDG- Voyager. A practical guide to aligning business excellence with Sustainable Development Goals. <http://www.htwg-konstanz.de/fileadmin/pub/ou/kicg/Publikationen/SDG-Voyager.pdf>. Accessed on 20 Oct 2019.
- Martens, A., & Kleinfeld, A. (2018). CSR und Compliance: Unterschiede und Schnittmengen theoretischer wie praktischer Art. In A. Kleinfeld & M. Martens (Eds.), *CSR und compliance* (pp. 3–33). Berlin: Springer-Gabler Verlag.
- Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A conceptual framework for a comparative understanding of Corporate Social Responsibility. *Academy of Management Review*, 33(2), 404–424.
- Mena, S., & Palazzo, G. (2012). Input and output legitimacy of multi-stakeholder initiatives. *Business Ethics Quarterly*, 22(3), 527–556.
- Mückenberger, U., & Jastram, S. (2010). Transnational norm-building networks and the legitimacy of corporate social. *Journal of Business Ethics*, 97(2), 223–239.
- Scherer, A. G., & Patzer, M. (2011). Corporate social responsibility. In M. S. Assländer (Ed.), *Handbuch Wirtschaftsethik* (pp. 321–329). Stuttgart: Verlag J.B. Metzler.
- Schrader, U. (2011). Corporate citizenship. In M. S. Assländer (Ed.), *Handbuch Wirtschaftsethik* (pp. 303–312). Stuttgart: Verlag J.B. Metzler.
- Vitt, J., Franz, P., Kleinfeld, A., & Thorns, M. (2011). *Gesellschaftliche Verantwortung nach DIN ISO 26000*. Berlin: Beuth Verlag GmbH.

Social Responsibility Disclosure

- ▶ [Corporate Social Responsibility Disclosure](#)
- ▶ [Sustainability Accounting](#)

Social Responsibility Education

- ▶ [University Social Responsibility](#)

Social Responsibility Index

- ▶ [SAM Sustainability Indices](#)

Social Responsible Development

- ▶ [Sustainable Modernity](#)

Social Risk

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Synonyms

[CSR Risk](#); [Environmental Social Governance \(ESG\) Risk](#); [Non-financial Risk](#); [Sustainability Risk](#)

Definition

The risk is defined as the possibility that events will occur and affect the achievement of strategy and business objectives.

To mitigate risk, companies have to develop risk management systems. Risk management systems fundamentally aim to address uncertainty in the market place. Their primary goal is to create controls and countermeasures that minimize or eliminate the disruption, loss, or damage to business operations and shorten the recovery time from an unwanted event and, thereby, reducing its impact on business.

Nowadays, the results of the greater interdependencies and hidden vulnerabilities that businesses have to face are an increased number of uncertainties in corporate decision-making. Current network-based operating models highlight the growing importance of the extended enterprise by establishing greater connectivity among and between stakeholders across the globe. This connectivity has also created entirely new stakeholders and requires innovative form of risk management.

These changes in the operating model have led to a significant shift in market power – not just customers and traditional investors but also toward stakeholders, such as communities, employees, regulators, politicians, suppliers, media, etc. As a result of this shift in market power, social risk is a rising area of concern for companies.

Social risk arises when firm's behavior or the action of others in its operating environment creates vulnerabilities. In the case of social risk, stakeholders may identify those vulnerabilities and apply pressure on the corporation for behavioral changes. As the ability to listen to corporate stakeholders' perspectives on social issues becomes a competitive necessity, managing social risks will need to become more fully embedded in corporate strategy.

Introduction

Social risk management strategies can be extremely complex undertakings that must account for and balance numerous conditions, perspectives, and variables across the business enterprise. The very nature of social risk places management teams in the challenging position of setting clear direction for a diffused function. For the complex and evolving area of social risk, corporate social responsibility programs represent an excellent mechanism for

Type	ESG-related risk or opportunity	Environmental	Social	Governance
Strategic	• Shifting customer preferences toward products that are manufactured with ethical supply chains		■	
	• Growing investor interest in ESG issues, resulting in proxy voting against the company on a range of topics (e.g., diversity, deforestation and human rights)	■	■	■
Operational	• Increased cost of raw materials due to sustainable forestry practice requirements	■		
	• Reduction of waste and raw material costs through improved manufacturing processes	■		
	• Changing weather patterns and increased natural disasters disturbing operations and business continuity	■		
Financial	• Reputation impacts and societal concerns due to a tax avoidance strategy and lack of tax transparency		■	■
	• Investment in local content to generate sustained and inclusive growth through economic diversification and employment opportunities		■	
	• Increased taxation from carbon tax regulation	■		
Compliance	• Enhanced reporting requirements for greenhouse gas emissions and energy usage	■		
	• Inaccurate or fraudulent disclosure of emissions resulting in fines and penalties and loss of consumer trust	■		■

Social Risk, Fig. 1 ESG risks and their risk categories COSO (2018)

addressing these challenges across the business enterprise (COSO 2018).

Typical categories of risk include strategic, operational, financial, and compliance. Some organizations may include a separate category for “sustainability” or “reputational” risks. However, these risks can usually be grouped in other risk categories (e.g., climate-related risks are often operational or financial in nature). Further, reputational implications are often an impact from another type of risk, rather than a risk in and of itself (e.g., reputational damage resulting from an environmental incident or pollution). In addition, many ESG (Environmental, social, and governance)-related risks are not entirely new but rather represent an additional source to an existing risk or compound the risk’s impact or likelihood of materializing. For example, climate change impacts often increase the risk of raw materials cost fluctuations, which is an existing risk for many entities (see the following figure by COSO 2018).

In the previous figure, the examples of social risks are those about customer preferences, reputation coming from tax avoidance strategy, or lack of transparency.

Recently, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the World Business Council for Sustainable Development (WBCSD) have partnered to publish a guidance to help entities better understand the potential effects of sustainability risks and to manage and disclose them effectively (COSO 2018). According to this guide, the ESG-related risks are as represented in the following figure:

This document provides guidance for applying ERM processes to ESG-related risks. Relevant ESG-related risks will depend on the organization, which may apply a narrow definition, focusing on a selection of pertinent environmental or social risks, or a broad application that considers a myriad of issues, such as the MSCI issues set out in the following figure.

Key Issues

As regard as the field of risk, since 2013, the European Parliament, in the resolutions of 6 February 2013, have acknowledged the importance of business divulging information on sustainability such as social and environmental

	MSCI definition	Robeco definition
Environmental	Climate change, natural resources, pollution and waste and environmental opportunities	The contribution an entity makes to climate change through greenhouses gas emissions, along with waste management and energy efficiency. Given renewed efforts to combat global warming, cutting emissions and decarbonizing have become more important.
Social	Human capital, product liability, stakeholder opposition and social opportunities	Human rights, labor standards in the supply chain, any exposure to illegal child labor and more routine issues such as adherence to workplace health and safety. A social score also rises if a company is well integrated with its local community and therefore has a "social license" to operate with consent.
Governance	Corporate governance and corporate behavior	A set of rules or principles defining rights, responsibilities and expectations between different stakeholders in the governance of corporations. A well-defined corporate governance system can be used to balance or align interests between stakeholders and can work as a tool to support a company's long-term strategy.

Social Risk, Fig. 2 ESG related risks COSO (2018)

3 pillars	10 themes	37 ESG key issues	
Environment	Climate change	Carbon emissions Product carbon footprint	Financing environmental impact Climate change vulnerability
	Natural resources	Water stress Biodiversity and land use	Raw material sourcing
	Pollution and waste	Toxic emissions and waste Packaging materiality and waste	Electronic waste
	Environmental opportunities	Opportunities in clean tech Opportunities in green building	Opportunities in renewable energy
Social	Human capital	Labor management Health and safety	Human capital development Supply chain labor standards
	Product liability	Product safety and quality Chemical safety Financial product safety	Privacy and data security Responsible investment Health and demographic risk
	Stakeholder opposition	Controversial sourcing	
	Social opportunities	Access to communications Access to finance	Access to health care Opportunities in nutrition and health
Governance	Corporate governance	Board Pay	Ownership Accounting
	Corporate behavior	Business ethics Anti-competitive practices Tax transparency	Corruption and instability Financial system instability

Social Risk, Fig. 3 ESG Key issues COSO (2018)

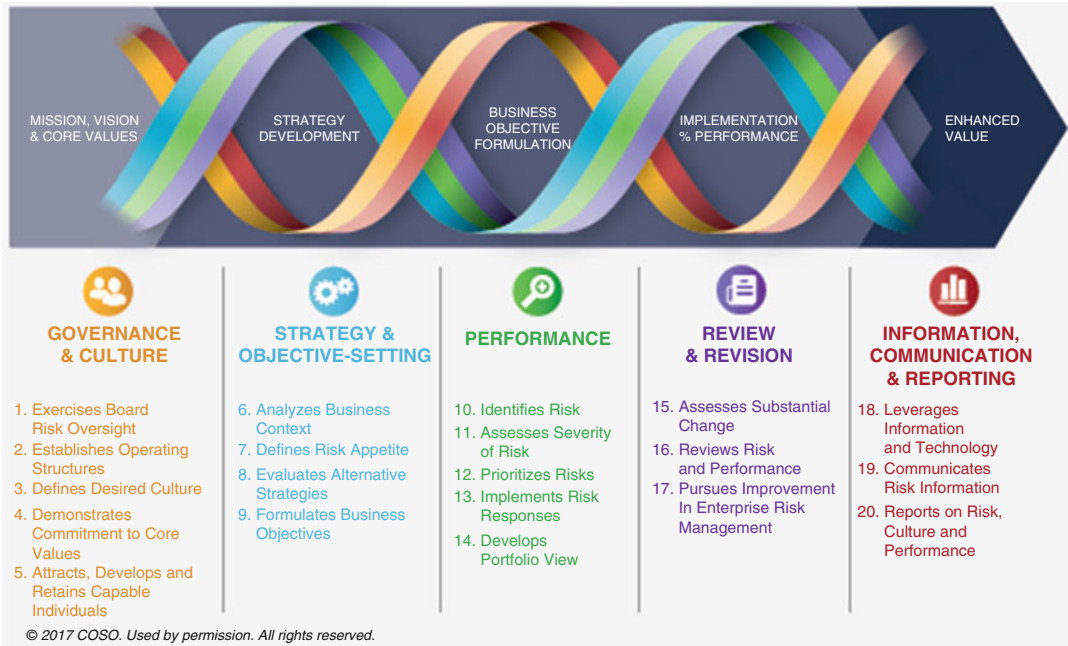
factors, with a view to identifying sustainability risks and increasing investor and consumer trust.

In particular, the subsequent EU Directive 2014/95 represents an important step toward the spread of CSR throughout European Countries. It indicates "non-financial and diversity information" to be disclosed by large companies in their annual report or in a separate document.

According to Directive 2014/95/EU, the non-financial information (NFI) to be included is essentially

information to the extent necessary for an understanding of the undertaking's development, performance, position and impact of its activity, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters, including:

- a brief description of the undertaking's business model;
- a description of the policies pursued by the undertaking in relation to those matters, including due diligence processes implemented;
- the outcome of those policies;



Social Risk, Fig. 4 Guidance for risk management by COSO (2018)

- the principal risks related to those matters linked to the undertaking's operations including, where relevant and proportionate, its business relationships, products or services which are likely to cause adverse impacts in those areas, and how the undertaking manages those risks;
- non-financial key performance indicators relevant to the particular business.

Furthermore, recently, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the World Business Council for Sustainable Development (WBCSD) have partnered to publish a guidance to help entities better understand the potential effects of sustainability risks and to manage and disclose them effectively (COSO 2018).

As represented in the following figure by the COSO, the guidance provides 5 components and 20 principles and offers, at the same time, a practical approach to entities using other risk management frameworks, such as ISO 31000 or entity-specific risk management frameworks.

Also the European Commission, in its action plan, financing sustainable growth, has given a growing importance to incorporate sustainability

in the process of risk management. In this direction, the European Commission will explore the feasibility of the inclusion of risks associated with climate and other environmental factors in institutions' risk management policies and the potential calibration of capital requirements of banks as part of the Capital Requirement Regulation and Directive. The aim would be to take into account such factors, where this is justified from a risk perspective, to safeguard the coherence and effectiveness of the prudential framework and financial stability. Any recalibration of capital requirements, based on data and the assessment of the prudential risk of banks' exposures, would need to rely on and be coherent with the future EU taxonomy on sustainable activities (European Commission 2018)

Cross-References

- Risk Management
- Risk Management and CSR
- Risk Management (Environmental Risk and Social Risk) and CSR

References

- Abdullah, M., Abdul Shukor, Z., Mohamed, Z. M., & Ahamad, A. (2015). Risk management disclosure. *Journal of Applied Accounting Research*, 16(3), 400–432.
- Abraham, S., & Cox, P. (2007). Analyzing the determinants of narrative risk information in UK FTSE 100 annual reports. *The British Accounting Review*, 39, 227–248.
- Abraham, S., & Shrivres, P. J. (2014). Improving the relevance of risk factor disclosure in corporate annual reports. *The British Accounting Review*, 46(1), 91–107.
- Ahmed, A. S., Beatty, A., & Bettinghus, B. (2004). Evidence on the efficiency of interest rate risk disclosures by commercial banks. *The International Journal of Accounting*, 39, 223–251.
- AICPA. (1994). *Improving business reporting. A customer focus*. New York: American Institute of Certified Public Accountants.
- Al-Maghzom, A., Hussainey, K., & Aly, D. (2016). Corporate governance and risk disclosure: Evidence from Saudi Arabia. *Corporate Ownership and Control*, 13(2), 145–166.
- Amran, A. (2006). Corporate social reporting in Malaysia: An institutional perspective. Unpublished Ph.D. thesis, University of Malaya, Kuala Lumpur.
- Amran, A., Bin, A. M. R., & Hassan, B. C. H. M. (2009). Risk reporting. An exploratory study of risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal*, 24(1), 39–57.
- Anderson, D. R., & Anderson, K. E. (2009). Sustainability risk management. *Risk Management and Insurance Review*, 12(1), 25–38.
- Aras, G., & Crowther, D. (2009). *The durable corporation: Strategies for sustainable development*. Burlington/Farnham: Gower.
- Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of risk communication. *The International Journal of Accounting*, 39(3), 265–276.
- Cabedo, J. D., & Tirado, J. M. (2004). The disclosure of risk in financial statements. *Accounting Forum*, 28(2), 181–200.
- Camilleri, M. A. (2015). Environmental, social and governance disclosures in Europe. *Sustainability Accounting, Management and Policy Journal*, 6(2), 224–242.
- Cole, C. J., & Jones, C. L. (2004). The usefulness of MD&A disclosure in the retail industry. *Journal of Accounting, Auditing and Finance*, 9, 361–388.
- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions? *The European Accounting Review*, 14(1), 3–39.
- COSO. (2018). *Enterprise Risk management – Applying enterprise risk management to environmental, social and governance-related risks*. New York: The Committee of Sponsoring Organizations of the Treadway Commission.
- Elshandidy, T., Shivres, P. J., Bamber, M., & Abraham, S. (2018). Risk reporting: A review of the literature and implications for future research. *Journal of Accounting Literature*, 54, 54–82.
- European Commission. (2014). Disclosure of non-financial and diversity information by large companies and groups – Frequently asked questions, Brussels. <http://europa.eu/rapid/press-release>. Accessed June 2017.
- European Commission. (2018). Action plan: Financing sustainable growth. Communication from the Commission to the European Parliament, the European Council, The Council, The European Central Bank, The European economic and Social Committee and The Committee of the Regions, March 8, 2018.
- Galea, C. (2009). *Consulting for business sustainability*. Sheffield: Greenleaf.
- Gray, R. H., Kouhy, R., & Lavers, S. (1995). Constructing a research database of social and environmental reporting by UK companies: A methodological note. *Accounting, Auditing & Accountability Journal*, 8(2), 78–101.
- Hackston, D., & Milne, M. J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77–108.
- Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317–349.
- Hutton, R., Cox, D., Clouse, M., Gaensbauer, J., & Banks, B. (2007). The role of sustainable development in risk assessment and management for multinational corporations. *Multinational Business Review*, 15(1), 89.
- ICAEW. (2002). *Prospective financial information: Guidance for UK directors*. London: Institute of Chartered Accountants in England and Wales.
- ICAEW. (2011). *Reporting business risks: Meeting expectations*. London: Institute of Chartered Accountants of England and Wales. Retrieved from <https://www.icaew.com/~media/corporate/files/technical/financial%20reporting/information%20for%20better%20markets/ifbm/rbr%20final.ashx>
- Kajüter, P. (2006). Risk disclosures of listed firms in Germany: A longitudinal study. Paper presented at the 10th financial reporting & business communication conference, July, Cardiff Business School, Unpublished.
- Kinderman, D. P. (2015). Explaining the Rise of National Corporate Social Responsibility: The Role of Global Frameworks, World Culture, and Corporate Interests (January 10, 2015). Chapter 4 in Kiyoteru Tsutsui and Alwyn Lim, eds., *Corporate Social Responsibility in A Globalizing World* (Cambridge University Press, 2015), pp. 107–146. Available at SSRN: <https://ssrn.com/abstract=2548051>
- Lajili, K. (2007). Corporate governance and risk disclosure, working paper No. 07-24, 2007. University of Ottawa, Telfer School of Management.
- Lajili, K., & Zeghal, D. (2005). A content analysis of risk management disclosure in Canadian annual reports. *Canadian Journal of Administrative Sciences*, 22(2), 125–142.
- Linsley, P. M., & Lawrence, M. J. (2007). Risk reporting by the largest UK companies: Readability and lack of

- obfuscation. *Accounting, Auditing & Accountability Journal*, 20(4), 620–627.
- Linsley, P., & Shrives, P. (2005). Examining risk reporting in UK public companies. *The Journal of Risk Finance*, 6(4), 292–305.
- Linsley, P., & Shrives, P. (2006). Risk reporting: A study of risk disclosure in the annual reports of UK companies. *The British Accounting Review*, 38, 387–404.
- Linsley, P., Shrives, P., & Kajuter, P. (2008). Risk reporting: Development, regulation and current practice. In M. Woods, P. Kajuter, & P. Linsley (Eds.), *International risk management: Systems, internal control and corporate governance* (pp. 185–207). London: Elsevier.
- Linsmeier, T. J., Thornton, D. B., Venkatachalam, M., & Welker, M. (2002). The effect of mandated market risk disclosures on trading volume sensitivity to interest rate, exchange rate, and commodity price movements. *The Accounting Review*, 77(2), 343–377.
- Manes Rossi, F., Nicolò, G., Levy Orelli, G., & Guthrie, J. (2017a). Integrating reporting and risk disclosure in the Italian experience. In Atti del Convegno Annuale AIDEA, Roma.
- Manes Rossi, F., Nicolò, G., & Levy Orelli, R. (2017b). Reshaping risk disclosure through integrated reporting: Evidence from Italian early adopters. *International Journal of Business and Management*, 12(10), 11–23.
- Marshall, A., & Weetman, P. (2007). Modelling transparency in disclosure: The case of foreign exchange risk management. *Journal of Business Finance & Accounting*, 34(5–6), 705–738.
- Meier, H. H., Tomaszewski, S. G., & Tobing, R. (1995). Political risk assessment and disclosure in annual financial reports: The case of Persian Gulf war. *Journal of International Accounting, Auditing and Taxation*, 4(1), 49–68.
- Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*, 12(2), 237–256.
- Mohobbot, A. (2005). Corporate risk reporting practices in annual reports of Japanese companies. *Japanese Journal of Accounting*, 16(1), 113–133.
- Oliveira, J., Lima Rodrigues, L., & Craig, R. (2011). Risk-related disclosures by non-finance companies: Portuguese practices and disclosure characteristics. *Managerial Auditing Journal*, 26(9), 817–839.
- Porter, M. E. (1985). *Competitive advantage*. New York: The Free Press.
- Porter, M. E. (1991). America's Green Strategy. *Scientific American*, 264(4), 168.
- Porter, M. E., & van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review*, 73, 120–134.
- Raar, J. (2002). Environmental initiatives: Towards triple-bottom line reporting. *Corporate Communications: An International Journal*, 7(3), 169–183.
- Rajgopal, S. (1999). *The risk management of everything: Rethinking the politics of uncertainty*. London: Demos.
- Schrand, C., & Elliott, J. (1998). Risk and financial reporting: A summary of the discussion at the 1997 AAA/FASB conference. *Accounting Horizons*, 12(3), 271–282.
- Solomon, J. F., Solomon, A., Norton, S. D., & Joseph, N. L. (2000). A conceptual framework for corporate risk disclosure emerging from the agenda for corporate governance reform. *The British Accounting Review*, 32(4), 447–478.
- Solomon, J. F., Solomon, A., Norton, S. D., & Joseph, N. L. (2011). Private climate change reporting: An emerging discourse of risk and opportunity? *Accounting, Auditing & Accountability Journal*, 24(8), 1119–1148.
- Spedding, L., & Rose, A. (2008). *Business risk management handbook – A sustainable approach*. Oxford: CIMA of Elsevier.
- Venkatachalam, M. (1996). Value-relevance of banks' derivative disclosures. *Journal of Accounting and Economics*, 22, 327–355.
- Welford, R. (Ed.). (2000). *Corporate environmental management 3: Towards sustainable development*. London: Earthscan.
- Wong, A. (2013). Corporate sustainability through non-financial risk management. *International Journal of Business and Management*, 14(4), 575–566.

Social Service

► Social Care

Social Sharing

► Collaborative Consumption ► Sharing Economy

Social Sustainability

Gönenç Dalgıç Turhan

İzmir, Turkey

Co-founder, Agate for Trade International Ltd.,

Izmir, Turkey

Synonyms

Democratic civil society; Equity; Human-environment relationship; Human well-being; Social justice and equity

Definition of Social Sustainability

Social sustainability emphasizes the societal spheres and humanity focused pillar of sustainable development. The literature has noted that it is “an open and dynamic concept which will change over time (from year to year/decade to decade) in a place” (Dempsey et al. 2009, p. 292) so that several disciplines within social sciences, such as sociology, geography, anthropology, urban studies, and so on, have engaged in discussion of the concept from different perspectives (Eizenberg and Jabareen 2017). Hence, the literature is lack of a common definition on social sustainability. However, in general, social sustainability aims to explore answers to the question of how to improve the living conditions of people. In addition, it also focuses on how the governance of the development process can be strengthened (Boström 2012). Despite the significance of social concerns and societal issues on sustainability, several scholars agree on that social sustainability was examined as a secondary concept in comparison to economic and environmental aspects of sustainable development until the late 1990s (i.e., McKenzie 2004; Boström 2012; Murphy 2012). In this vein, it is considered that economic and environmental sustainability concerns seemed to be the primary focus and social sustainability was neglected relatively, but thereafter, it has received common recognition and substantial attention. Contrary to the situation in the late 1980s and early 1990s, today, some scholars, for instance, Cuthill (2010), express that social sustainability has a crucial impact and prominent notion on economic and environmental aspects of sustainability; therefore, the concept of sustainable development derives from the social sustainability.

Situating Social Sustainability in Sustainable Development

Antecedents of the development of social sustainability go back to the 1980s (Linnenluecke and Griffiths 2010) when an awareness has been nurtured on the adverse impacts of industrialization

such as overlooking social equity or fundamental human and labor rights of employees who are the most important factor of production. As revealed from the reports by United Nations Development Programme (UNDP), in the twenty-first century, development is recognized within a more comprehensive approach assessing both economic and social aspects such as well-being of population, average income, people’s freedom, gender inequity, life expectancy, literacy, education, health, and safety (UNDP 2015). According to Human Development Report (1996: 1), development is the “end,” whereas economic growth is a “means.” Therefore, the ultimate purpose of the development should focus on society and improving the well-being of the people (Human Development Report 1996). This awareness leads to transformation of the context of development from the basis of economic growth to human development. The concept of sustainable development and one of the main pillars of this tridimensional concept, social sustainability, has proceeded under these circumstances.

The concept of sustainability has arisen through Our Common Future, a report by World Commission on Environment and Development (WCED), which is an entity of the United Nations (UN) also known as the Brundtland Commission (WCED 1987). Brundtland Commission coined the term of sustainable development and defined it as “*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*” (WCED 1987, p.43). Hence, Our Common Future is a significant milestone for the development of the concept of sustainability by which economic welfare has linked to environmental coherence and social equity for the development. The report describes the concept of needs as follows: “*in particular the essential needs of the world’s poor, to which overriding priority should be given.*” Therefore, according to Our Common Future (WCED 1987), primary purposes of development are the reassurance of human needs and desires (such as nutrition, sheltering, clothing, employment) and increasing people’s quality of life above than the minimum standards of living. Moreover, the report also calls attention to the risk

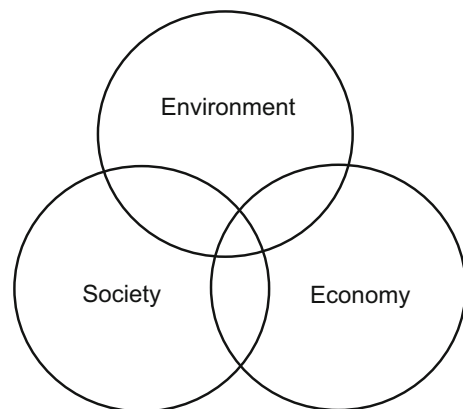
of depletion of renewable and nonrenewable resources due to the pressure generated by the growth of population and productive activities. As a result, the report reveals that sustainable development can only be possible in case of the utilization of resources in harmony with the demographic, commercial, institutional, and technological developments considering of current and future needs of human beings and future generations. Under these circumstances, sustainable development is recognized as a comprehensive paradigm that contain three dimensions – namely, economic sustainability, social sustainability, and environmental sustainability. Hajirasouli and Kumarasuriyar (2016) interpret the perspective presented by the Brundtland Report's sustainable development. According to them, political system should guarantee the effective participation of citizens in the decision-making process, whereas economic system should be arranged and managed with the purpose of a sustained surplus. In addition, social system should provide resolutions of the problems and negative impacts generated from “disharmonious development” (Hajirasouli and Kumarasuriyar 2016, p.24). Thus, social sustainability is considered as a fundamental and significant component of sustainable development and efforts to conceptualize the relationship between the social dimension of sustainable development and the economic and environmental dimensions of sustainable development have begun.

Following to the widespread acceptance of the definition of sustainable development by world political, academic, and business leaders in Rio de Janeiro at the UN Conference on Environment and Development (Clark et al. 2005), in 1994, John Elkington coined the term “triple bottom line” that addresses a balanced approach integrating economic, environmental, and social interests simultaneously (Elkington 2004). To him, “a desired level of ecological, social, and economic sustainability cannot be achieved separately without at least achieving a basic level in these areas simultaneously” (Elkington 1999, p.75). Thereafter, academic studies have been incrementally conducted to provide theoretical and empirical basis for the tridimensional

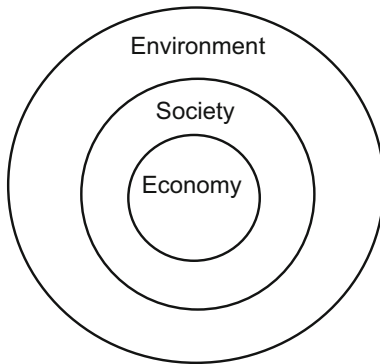
sustainability practices (i.e., Dyllick and Hockerts 2002; Bansal 2005; Giddings et al. 2002; Morelli 2013). Whereas Morelli (2013) states a hierarchical model indicating high dependence of economic and social sustainability on the environment, several scholars express that economic, social, and environmental aspects of sustainability are interrelated. In regard of the interrelation of these aspects, Giddings et al. (2002: 189) highlight a symmetrical interconnection with three equal sized rings just like a Venn diagram, which symbolizes a balance and reconciliation of economic, social, and environmental interests (Fig. 1).

In this model, the risk of thinking the dimensions separately is discussed as a weakness (Giddings et al. 2002: 189). According to this argument, as the interconnection presented by separated parts of the aspects, the decision about the prioritization of a dimension generates a limitation. As a resolution of this concern, another model where the economy takes a part within the social aspect and both are embraced by the environment has been put forward (Montiel 2008) (Fig. 2).

Nested model highlights an interdependence between there dimensions of sustainable development. Accordingly, economy is depended on society and environment surrounds society and so economy (Giddings et al. 2002: 192). Thus, economy is considered as a part of human activity and



Social Sustainability, Fig. 1 Three-ring view of sustainability dimensions. (Source: Giddings et al. 2002: 189)



Social Sustainability, Fig. 2 Nested view of sustainability dimensions. (Source: Giddings et al. 2002: 192)

economic sustainability depends on social features which correspond to environment. In other words, social sustainability is directly affected by environmental sustainability and directly affects the economic sustainability.

Derived from the nested model of sustainability, social sustainability has a crucial importance to achieve sustainable development goals and requires a particular focus within the sustainability agenda. However, regarding what social sustainability refers to is still under debate and there is not a commonly recognized definition of the concept. The existing definitions reflect different study perspectives or social disciplines (Weingaertner and Moberg 2014). For instance, two sociologists Griessler and Littig (2005) focus on needs and work and express the importance of the relationship between nature and society. As Sachs (1999) states that social sustainability is considered either a requirement to continue structures in societies or a precondition for sustainable development. It is also stated that social sustainability “must rest on basic values of equity and democracy” (Sachs 1999, p.27). According to Polèse and Stren (2000), social sustainability intends to a development, and it can be possible only if balancing the evolution of civic society, which will result in a more prosperous environment. From this point of view, social integration, cultural diversity, and equity have a crucial role. In a similar vein, Barbier (1987) expresses the significance of maintaining social values including culture, equity, and social justice. Woodcraft et al. (2011) define social

sustainability as a process of creating a prosperous society, which can be able to occur through understanding the needs of people. Another definition by Hawke Research states that social sustainability refers to “a positive condition within communities and a process within communities that can achieve that condition” (McKenzie 2004, p. 23).

Instead of providing a common definition, some authors focus on the components (Colantonio 2009; Jaeger et al. 2011), interpretations (Chiu 2003), themes (McKenzie 2004), or divisions (Cuthill 2010) of social sustainability. These studies identify that the most accepted and discussed key elements of social sustainability as basic human needs including health, housing, education, and social security, social justice and equity, quality of life, diversity, social cohesion, participation and democracy, and human well-being. In addition, Vallance, Perkins, and Dixon (2011, p.342) present a threefold schema for the conceptualization of social sustainability and their work has gained widespread influence. Accordingly, their framework contains three subcategories. The first category “development sustainability” points to basic needs, the creation of social capital, justice, and so on. The second category “bridge sustainability” addresses changes in behavior to achieve bio-physical environmental goals. Finally, “maintenance sustainability” emphasizes the preservation of socio-cultural features in the face of change and the ways in which people react to those changes (Vallance et al. 2011).

Summary

Derived from abovementioned definitions and stated elements of social sustainability, it can be concluded that social sustainability contains a process for the improvement of living conditions of people. Therefore, it refers to both conditions that enable increasing the living standards and the process for progress. In this regard, social sustainability can only be achieved in case of systems have been established for physical well-being of people, equity, and citizen engagement.

Cross-References

- [Corporate Social Responsibility](#)
- [Ethic of Love](#)
- [Sustainable Development](#)

References

- Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197–218.
- Barbier, E. B. (1987). The concept of sustainable economic development. *Environmental Conservation*, 14(2), 101–110. <https://doi.org/10.1017/S0376892900011449>.
- Boström, M. (2012). A missing pillar? Challenges in theorizing and practicing social sustainability: Introduction to the special issue. *Sustainability: Science, practice and policy*, 8(1), 3–14.
- Chiu, R. L. (2003). 12 social sustainability, sustainable development and housing development. In *Housing and social change: East-west perspectives* (Vol. 221). New York: Routledge.
- Clark, W. C., Crutzen, P. J., & Schellnhuber, H. J. (2005). *Science for global sustainability: Toward a new paradigm*. Harvard University, John F. Kennedy School of Government Faculty Research Working Papers Series, March, 2005.
- Colantonio, A. (2009). *Social sustainability: A review and critique of traditional versus emerging themes and assessment methods*.
- Cuthill, M. (2010). Strengthening the ‘social’ in sustainable development: Developing a conceptual framework for social sustainability in a rapid urban growth region in Australia. *Sustainable Development*, 18(6), 362–373.
- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2009). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 19(5), 289–300.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Elkington, J. (1999). Triple bottom line revolution: Reporting for the third millennium. *Australian CPA*, 69(11), 75–76.
- Elkington, J. (2004). Enter the triple bottom line. The triple bottom line: Does it all add up. 11(12), 1–16.
- Eizenberg, E., & Jabareen, Y. (2017). Social sustainability: A new conceptual framework. *Sustainability*, 9(1), 68.
- Giddings, B., Hopwood, B., & O’Brien, G. (2002). Environment, economy and society: Fitting them together into sustainable development. *Sustainable Development*, 10(4), 187–196.
- Griessler, E., & Littig, B. (2005). Social sustainability: A catchword between political pragmatism and social theory. *International Journal for Sustainable Development*, 8(1/2), 65–79.
- Jaeger, C. C., Tàbara, J. D., & Jaeger, J. (Eds.). (2011). *European research on sustainable development: volume 1: Transformative science approaches for sustainability*. Springer Berlin Heidelberg.
- Hajirasouli, A., & Kumarasuriyar, A. (2016). The social dimension of sustainability: Towards some definitions and analysis. *Journal of Social Science for Policy Implications*, 4(2), 23–34.
- Linnenluecke, M. K., & Griffiths, A. (2010). Corporate sustainability and organizational culture. *Journal of World Business*, 45(4), 357–366.
- McKenzie, S. (2004). *Social sustainability: Towards some definitions: Hawke Research Institute*. University of South Australia Magill.
- Montiel, I. (2008). Corporate social responsibility and corporate sustainability separate pasts, common futures. *Organization & Environment*, 21(3), 245–269.
- Morelli, J. (2013). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability*, 1(1), 2.
- Murphy, K. (2012). The social pillar of sustainable development: A literature review and framework for policy analysis. *Sustainability: Science, Practice and Policy*, 8(1), 15–29.
- Polèse, M., & Stren, R. E. (2000). *The social sustainability of cities: Diversity and the management of change*. University of Toronto Press.
- Sachs, I. (1999). Social sustainability and whole development: Exploring the dimension of sustainable development. In E. Becker & T. Jahn (Eds.), *Sustainability and the social sciences. a cross-disciplinary approach to integrating environmental considerations into theoretical reorientation*. London, Zed Books, 25–36.
- United Nations Development Programme (UNDP). (2015). *Frequently Asked Questions (FAQs) about the Human Development Index (HDI)*. Retrieved March 17, 2017, from <http://hdr.undp.org/en/faq-page/human-development-index-hdi#t292n36>.
- United Nations Development Programme (UNDP). (1996). *Human Development Report*. New York: Oxford University Press. Retrieved March 17, 2017, from http://hdr.undp.org/sites/default/files/reports/257/hdr_1996_en_complete_nostats.pdf.
- Vallance, S., Perkins, H. C., & Dixon, J. E. (2011). What is social sustainability? A clarification of concepts. *Geoforum*, 42(3), 342–348.
- Weingaertner, C., & Moberg, Å. (2014). Exploring social sustainability: Learning from perspectives on urban development and companies and products. *Sustainable Development*, 22(2), 122–133.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford: Oxford University.
- Woodcraft, S., Bacon, N., Hackett, T., Caistor-Arendar, L. and Hall, F. (2011). *Design for Social Sustainability: A framework for creating thriving new communities*. Young Foundation.

Social Welfare

- [Social Care](#)
-

Social Welfare Measurement

- [Human Development Index \(HDI\)](#)
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Social Work

- [Social Care](#)
-

Social, Environmental, and Ethical Reporting

- [Sustainability Accounting](#)
-

Social/Commerce Tensions

- [Consumerism](#)
-

Socially Responsible Behavior

- [Corporate Social Responsibility and Institutional Theory](#)
-

Socially Responsible Consumerism

- [Responsible Consumption](#)
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Socially Responsible Investing

- [Ethical Banking](#)
-

Socially Responsible Investing and Finance

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Synonyms

[Ethical investing](#); [Green finance/investing](#); [Responsible investing/investment](#); [Social investing](#); [Socially responsible investment \(SRI\)](#); [Sustainable investing](#)

Definition

Socially responsible investing (SRI) and finance is an investment strategy which considers the social, environmental, and ethical (SEE) consequences of the investment decisions within the context of financial analysis, while conventional investment strategy only focuses on the traditional risk and return considerations in the investment decision making process. It is also well known as “sustainable investing” or “responsible investing” or “social investing” or “green investing” or “ethical investing.” It seeks to make financial returns with the considerations of SEE criteria for a positive effect in the society and environment. The investors who care about the impacts of their investment funds in the society and environment are named as socially responsible investors. In general, socially responsible investors encourage the positive business impacts by applying the above SEE criteria in the investment screening process. Contemporarily, socially responsible investing has become the leading investment strategy of various investment banks and asset management companies. There are various SRI strategies have been used in the industry to achieve the SRI objectives, including negative screening; positive screening; environmental, social and governance (ESG) integration; divestment; shareholder activism; shareholder engagement; shareholder resolution; shareholder voting; impact investing; and community investing,

which will be explained in details in the following section.

Introduction

Social issues are distinguished from economic issues, which is defined to be related to people's personal lives and interactions. Some of the major social issues include, but are not limited to, alcohol and tobacco (and its laws), gambling, employee relations, minority issues, corporate governance, military goods/services, labour standards in supply chains, human rights, health and safety, bribery and corruption, stakeholder relationship management, gun rights and wars, abortion, suicide and assisted suicide, censorship, corporal punishment, drug laws, ageism/youth rights, etc. The environmental issues include climate change, climate pollution, deforestation, biodiversity, ozone depletion, nuclear issue, chemicals of concern, etc. The idea of investing to companies with high environmental scores is aiming to reduce the value of global environmental costs from their investment decisions. According to the report of the United Nations Environment Programme Finance Initiative (UNEP FI 2011), the annual environmental costs from global human activity amounted to US \$ 6.6 trillion in 2008, which equated to 11% of global GDP in 2008, and these costs include greenhouse gas (GHG) emissions, over-usage of water, air pollutions, and other unsustainable resource usages. The environmental costs are expected to reach 18% of GDP in 2050 under a "business-as-usual" scenario (UNEP FI 2011). In other words, the value of global environmental external costs from human activity is significantly high and rising. The effect of environmental externalities hence is increasing if human activity and business continues as usual. The other important issue for investors to make considerations is the ethical issues in business organizations. The ethical criteria in general include human rights, woman abortion, animal tests, pornography, gambling, third world pharmaceuticals, health care issues, genetic engineering issues, religious issues, etc. Some of the ethical issues can be interchanged

with the social issues. Literally, there is no clear definition of ethical issues in business as everyone has their own concept of righteousness; home environment, religious beliefs and traditions, and thus making ethics hard to define, but not impossible to make. The dilemma that many business owners face is the definition of business ethics, and acceptable business behaviour. Overall, SRI strategies with considerations of SEE criteria incorporate societal needs and benefits in the selection and management of investment portfolios. SIR aims to reduce the social, environmental, and ethical costs and helps the world to grow sustainability.

The start of SRI can be traced back to the Quakers who prohibited members from engaging in the slave trade in 1758 and the fiduciary investment service company managed Quakers' assets by following SRI guidelines. John Wesley (1703–1791) adopted SRI in his sermon on "the use of money" which stated that social investing is based on the fact that do not harm others through the business practices and avoid investing in industries that can harm the health of others (Antonacci 2017). The beginning era for the first public offering of socially responsible investment fund was initiated in 1928, which was a small Pioneer Fund from the USA with restrictions of investing in alcohol or tobacco (Antonacci 2017), and then following with the launch of Pax World Fund in 1971 under the objective that their profits were not generated from supporting the production of weapons (Antonacci 2017). In the 1980s, SRI played a key role in the reactions to end the apartheid government in South Africa. In 1989, representatives from the SRI industry gathered at the first SRI in the Rockies Conference to exchange ideas and gain momentum for new initiatives. In the 1990s, the focus of SRI had shifted in a large scope of issues, such as alcohol and/or tobacco stocks, mutual fund proxy disclosure, human rights, and others. Since the late 1990s, SRI has become increasingly defined as a means to promote environmentally sustainable development. Investors started to consider the effects of global climate change from the perspectives of a business and corporation. In the UK, socially responsible pension fund regulations were

constructed in 1999. The first sell-side brokerage in the world to offer SRI research was the Brazilian bank Unibanco. The service was launched in January 2001 by Unibanco SRI analyst Christopher Wells from the São Paulo headquarters of the bank. More recently, the world well-known FTSE4Good index was launched in the UK in 2002, while the UN Principles for Responsible Investment (UNPRI) was launched in 2006. To sum, the applications of SRI strategies are particularly prevalent in the contemporary financial markets.

Overview of SRI Strategies

Nowadays, socially responsible investing has become the mainstream of various asset management companies and investment banks. There are various SRI strategies that have been used in the industry to achieve the SRI objectives, including negative screening, positive screening, ESG integration, divestment, shareholder activism, shareholder engagement, shareholder resolution, shareholder voting, impact investing, and community investing. At the beginning, investment strategies are screened into negative screening and positive screening according the SEE criteria, which entails the incorporation of ESG criteria into the financial analysis. Alternatively, shareholders can engage the companies with SEE issues by initiating shareholder activism, shareholder engagement, and shareholder voting. However, the investment strategies are not limited with the above options. Additional SRI strategies, like ESG integration, divestment, positive investing, impact investing, and community investing, are also discussed at below.

Negative Screening

The mainstreaming of SRI started from small-scale “sin stocks” screening by religiously motivated investors to a variety of approaches adopted by large institutional investors and business case of SRI. Investment strategies are designed by excluding a list of companies with SEE concerns or low SEE ratings which is known as the negative screening process.

Positive Screening

Examples of positive screening include the launching of sustainability themed investment funds (e.g., renewable energies investment funds); best-in-class companies selecting which investment is made to companies who experience the highest SEE rating in the industry; selecting companies with good and positive SEE ratings on relevant criteria; and selecting companies by applying ESG integration standards.

Divestment

Divestment is the process of selling subsidiary assets, investments, or divisions in order to maximize the value of the parent company. Also known as divestiture, it is the opposite of an investment and is usually done when that subsidiary asset or division is not performing up to expectations, such as the divestment activates in the fossil fuel industry.

Shareholder Activism

Shareholder activism is a notion that shareholders attempt to have a positive influence on the management and the running of the business by engaging and communicating with the board of directors and company leaders. The shareholder actions include starting a conversation or dialogue with the corporate management team on issues which might have a negative effect on the performance of the company. It is also known as an alternative option for shareholders to see its ownership and give up hopes on the performance of the companies. Shareholders believe that engaging with the corporate management level and working cooperatively can improve the financial performance over time and enhance the well-being of both shareholders and stakeholders. People who engaged in the shareholder activism are called shareholder activists. The events of shareholder activism could include but are not limited to shareholder engagement (dialogue with management team), public campaigns, shareholder voting, and shareholder resolutions.

Shareholder Engagement

Shareholder engagement is the sub-class of shareholder activism which shareholders are aiming to

have dialogues with the company, especially with the board of directors who will receive constructive feedback on how to make improvements on the corporate governance and management matters.

Shareholder Voting

By corporate laws, shareholders have the rights to exercise their voting rights at the annual general meeting of corporation or by the shareholder proxy voting. Shareholder voting rights give you the power to elect directors at the annual general or special meetings and make your perspectives on the issues of the company management that may affect the value of your shares. The shareholder proxy voting is the term used to describe the means for shareholders to participate in a company's annual shareholders meeting, without attending the meeting. Shareholders who do not attend a meeting will have a chance to vote on the matters to be considered at the annual general meeting. Corporate bylaws typically require a quorum for voting at a shareholder meeting. A quorum is typically reached when the shareholders present or represented at the meeting own over half of the corporation's shares. Approving a resolution typically requires a simple majority of share votes. Alternately, each shareholder may have one vote, regardless of how many shares of company stock he/she owns.

Shareholder Resolutions

A shareholder resolution is a proposal submitted by shareholders for a vote at the company's annual meeting. The submission and handling of resolutions are usually following the regulatory guidance from the Securities and Exchange Commission (SEC). Shareholder resolutions have been an important part of shareholder activist campaigns. Shareholders can submit resolutions with various corporate social responsibility issues, such as nuclear power, global warming, labour relations, tobacco smoking, human rights, and animal welfare, but primarily with corporate governance, such as executive compensation, board compositions.

Impact or Community Investing

The degree of expected social impacts through investment is different based on the choice of SRI strategies. Impact investing or community investing is one of the extreme types that aims to make contributions to the conscious creation of social impact through investment. It is a sub-class of socially responsible investing which aims to make investments into society or community-based organizations. G8 social impact investment task force defined impact investing as those that intentionally target specific social objectives along with a financial return and measure the achievement of both. Impact investing is particularly targeted for the purpose of providing capital to businesses that potentially have social or environmental impacts. The capital can be in a variety of forms such as private equity, debt, working capital lines of credit, and loan guarantees. The examples of impact investing are in the fields of venture capital community, microfinance, community development finance, technology corporation development finance, and start-up businesses. Community investing institutions use investor capital to finance or guarantee loans to individuals and organizations that have historically been denied access to borrow capitals from traditional financial institutions. These loans are used for housing, small business creation, and education or personal development in the USA and UK or are made available to local financial institutions abroad to finance international community development. One of the challenges from the community investing institutions is to ensure the success of the loan and its returns for investors.

ESG Integration

Nearly 30 years ago, Rudd (1981) firstly concluded that the integration of ESG criteria in investment process can worsen portfolio diversification. Hoepner (2010) challenged his theory with a conclusion that the inclusion of ESG criteria into investment process likely worsens portfolio diversification via the first and second drivers (number of stocks, correlation of stocks), but it similarly likely improves portfolio

diversification through a reduction of the average stock's specific risk (the third driver, average specific risk of stocks). The ignorance of ESG criteria in many cases violates their fiduciary risk management duties. The integration of ESG criteria/screens in investment strategies are expected to lead to a diversification penalty, compared to otherwise identical conventional investment strategies. Over decades, authors and relevant researchers believe that ESG criteria must have a generally negative effect on portfolio diversification, because they limit the investment universe (e.g., Barnett and Salomon 2006; Renneboog et al. 2008; Rudd 1981). However, there is a robust evidence that ESG issues are publicly material and can affect shareholder value in both short and long term (UNEP FI 2011). It is argued that the impact of ESG issues on share price can be valued and quantified. The United Nations Principles for Responsible Investment (UN PRI) is one of the largest institutional investment coalitions comprising over 500 asset owners and managers representing assets of over \$18 trillion, an indication of the growing recognition of ESG integration as a value driver. The principles encourage investors, especially institutional investors, to integrate ESG factors into their investment decisions. Being signatories of UN PRI, investors are volunteering to collaborate to improve the performance of the corporate and its corporate governance and management. The activities of these asset owners have demonstrated the feasibility of ESG integration.

Summary

Overall, SRI strategies with considerations of SEE criteria incorporates societal needs and benefits in the selection and management of investment portfolios. SIR aims to reduce the social, environmental, and ethical costs and help the world to grow sustainability. While conventional investment strategies concentrate only on traditional risk and returns considerations in the decision-making process, SRI and finance considers SEE-related factors in the investment

decision-making process as discussed above. Hence, the question often arises as to whether it pays financially to be ethical or whether it matters in incorporating ESG criteria in the investment decisions. The majority debate has focused on the relationship between SRI and financial performance as to whether there is anything to gain or lose by deciding to be ethical and socially responsible in making investment decisions. Several studies have found that there is no conclusive evidence as to whether the performance of SRI outperforms those of traditional investment and vice versa. The discussion is still ongoing from the 2000s. Despite this, socially responsible investing has a growing trend in the current financial markets and has become an important principle guiding the investment strategies of various investment funds and accounts in the market.

Cross-References

► [Socially Responsible Investing](#)

References

- Antonacci, G. (2017). Sustainable momentum investing: doing well by doing good. Harvest, 09 June. <https://www.hvst.com/posts/sustainable-momentum-investing-doing-well-by-doing-good-XzMtZWm>. Accessed 11 November 2019.
- Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27(11), 1101–1122.
- Hoepner, A. G. (2010). Portfolio diversification and environmental, social or governance criteria: Must responsible investments really be poorly diversified? *SSRN eLibrary*, 10.
- Renneboog, L., Ter Horst, J., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behaviour. *Journal of Banking and Finance*, 32(9), 1723–1742.
- Rudd, A. (1981). Social responsibility and portfolio performance. *California Management Review*, 23(4), 55–61.
- UNEP Financial Initiative. (2011). Why environmental externalities matter to institutional investors. The United Nations Environment Programme Finance Initiative Report. UNEP: Geneva, Switzerland. https://www.unepfi.org/fileadmin/documents/universal_ownership_full.pdf. Accessed 11 Nov 2019.

Socially Responsible Investment

- Risk Management (Environmental Risk and Social Risk) and CSR
- Shareholder and Stakeholder Activism

Socially Responsible Investment (SRI)

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Synonyms

Ethical investment; Responsible investment;
Social investment; SRI

Definition

Socially responsible investment (SRI) consists of integrating environmental, social, and governance principles into the selection and management of investment portfolios (ESG principles).

SRI means choosing investment portfolios that include responsible companies without needing to bear a higher cost, because socially responsible investment funds (SRIFs) are just as profitable as conventional ones.

SRI implies adding a fourth criterion to the three traditional investment criteria: liquidity, profitability, and risk. The fourth criterion concerns asking questions about the social and environmental impact of the companies into which investors put their money. Investors are beginning to acknowledge that factors related to corporate social responsibility (CSR) have an influence on the future performance of companies, thereby affecting the yields generated by their portfolios. As a result, they are beginning to take account of CSR-associated risks in the management of their portfolios, and in order to improve their chances

of attracting capital, companies are being obliged to demonstrate market-oriented but also responsible behavior.

- Rewarding the companies with the best behavior
- Ruling out those that harm the environment or violate human and/or employment rights in the course of their business operations
- Maintaining an ongoing dialogue with the company's administrative/management bodies about matters relating to its CSR policies
- Exercising the political rights inherent to the ownership of the company's shares

Introduction

Historically, SRI has its origins in the nineteenth century. At that time, in countries such as the United Kingdom and the United States, this type of investment was linked to the financial activities of some religious communities, such as the Quakers, who rejected any investment in activities involving the slave trade or alcohol (Balaguer et al. 2007).

But the current form of SRI stems largely from the political movements of the 1960s and 1970s in the US, when apartheid in South Africa and later the Vietnam War prompted some groups to avoid investments in companies that had connections with these matters. It was in this way that socially responsible investment became defined by its exclusion of certain activities.

This concept of exclusion, linked to the notion of negative discrimination, continues to be one of the distinctive features of this type of investment. Naturally, the reasons for such exclusions vary considerably and are not uniform across all countries; in the United States, almost 100% of socially responsible investment funds (SRIFs) penalize the tobacco industry, whereas in the United Kingdom, arms manufacturers and animal testing are the primary reasons for "censure" by the SRIFs (Sánchez et al. 2002).

As SRI evolved, new company selection criteria were considered. Although SRI was originally motivated by essentially moral, ideological, and social concerns and focused on boycotting or excluding certain business sectors from investment portfolios,

over time, SRI has moved from a negative approach (of excluding companies) toward a more positive one that seeks to include more exemplary companies in investment portfolios. This new direction has gained strength in recent years, and with its longer term, more financially oriented perspective, we can describe it as sustainable investment. It seeks to incorporate, in an integrated manner, economic, environmental, and social criteria into the evaluation of financial portfolios, investing in the best-in-class companies in each sector.

Key Issues

SRI may be based on the following investment strategies:

- 1. **Negative screening/exclusion.** This strategy excludes some investments in certain companies, sectors, or countries.
- 2. **Positive/best-in-class screening.** Investments are chosen in the industries, companies, or projects with the best performance in terms of the ESG criteria.
- 3. **International ESG standards-based screening.** Selection of investments that comply with international standards-based on ESG criteria, such as those published by the OECD, the UN, and UN agencies (including Global Compact, ILO, UNICEF, and UNHCR).
- 4. **Integration of ESG factors.** Explicit, systematic inclusion of ESG factors by asset managers in their traditional financial analysis.
- 5. **Sustainability-themed investment.** Investment in themes or assets linked to sustainable development (e.g., clean energy or sustainable agriculture).
- 6. **Impact/community investment.** Impact investments are investments made in companies, organizations, and funds that are intended to generate a social and environmental impact alongside a financial return. According to the Global Impact Investing Network (GIIN), impact investments can be made in emerging markets as well as in developed markets and target a range of returns from below market to market rate, depending on the circumstances of each. But these investments differ from

philanthropy in that the investor retains ownership of the asset and expects a positive financial return (GIIN, 2012).

Impact investment also includes micro-financing, community investment, social enterprise funds, and solidarity funds. We must not confuse **solidarity funds** with **socially responsible funds**. Funds known as solidarity funds assign a percentage of the management commission to certain charitable organizations or non-governmental bodies, even though they may not meet certain criteria for selecting investments.

- 7. **Corporate engagement and shareholder action.** This is a long-term process that seeks to influence a company’s behavior and increase transparency. It consists of using shareholder power to influence business behavior through active participation in the company (e.g., communication with the managers and/or the board of directors), by shareholders submitting proposals, and proxy voting under ESG guidelines. As shareholders, investors exercise their right to vote and attempt to engage with and/or exert pressure on the company to persuade it to adopt a clear position with regard to its policies on sustainable development issues.

Negative and Positive Criteria Principles Used in SRI

Negative or exclusion criteria	Positive or approval criteria
Environmental destruction	Promotion of local or community development in developing countries
Arms/nuclear industry	Environmental protection
Alcohol and tobacco industries	Information transparency
Child labor exploitation	Respect for basic workers’ rights
Betting industry	Projects harmoniously integrated into the local community
Use of aggressive or offensive advertising	
Promotion of violence	
Pornography industry	

Source: Balaguer et al. (2007)

Principles for Responsible Investment (UN)

In 2005, Kofi Annan, the United Nations General Secretary, invited global institutional investment leaders to agree upon the development of the Principles for Responsible Investment (PRI). In 2006, 6 principles were approved following several meetings of 20 leading institutional investors from 12 countries and dozens of experts from different sectors in the investment field.

The main purpose of the PRIs is to provide a structural framework for the integration of the ESG criteria (environmental, social and corporate governance) into decision-making processes and asset management and to guarantee the ethical purposes of the investment funds that subscribe to them. Adoption of the principles is entirely voluntary, and the signatories, whether they were institutional investors, asset managers, or financial services providers, pledged to abide by them.

Principles for Responsible Investment

Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes.

Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.

Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.

Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.

Principle 5: We will work together to enhance our effectiveness in implementing the Principles.

Principle 6: We will each report on our activities and progress toward implementing the Principles

For more information: <http://www.unpri.org/about-pri/the-six-principles/>

How to Appraise Companies to Decide Whether They Should Form Part of the SRI

Social rating agencies are for-profit or nonprofit organizations that have developed research methodologies for examining business aspects that fall

within the sphere of social and environmental impacts and for studying the policies, processes, procedures, and systems set up to mitigate the negative impacts generated during the course of the company's business operation.

The independence of these agencies lies in the fact that their services are paid for by the parties that make use of the information they provide (investors, fund managers) unlike audits, which are paid for by the company that is audited.

Both SRI funds and stock market sustainability indexes make use of the company vetting reports issued by these agencies.

The methodology employed to obtain the data is based on the compilation and analysis of corporate information: information provided by the company (financial report, sustainability reports, etc.), questionnaires sent directly to the company, and any necessary verification by external sources. This information is used to establish a social rating.

Most of the longer established social ratings agencies (that sprung up in the 1980s and 1990s) began as wholly independent firms, specializing in social and environmental data, and generally unconnected to the large financial groups. With the great numbers of investors entering the SRI field, large financial groups, such as Morgan Stanley, acquired some of these agencies with a view to enhancing their nonfinancial information management.

The main ratings agencies are:

- **MSCI** (Morgan Stanley Capital International) which set up major sustainability stock market indexes in 2010, including the MSCI ESG Indexes, and in 2014, it acquired **KLD Research & Analytics Inc.**

For more information: <https://www.msci.com/indexes>

- **RobecoSAM.** Founded in 1995, RobecoSAM is an investment specialist focused exclusively on sustainable investing. To this end, it offers a comprehensive palette of products including in-house asset management, Sustainability Indices, corporate sustainability assessments, active ownership and engagement, and

customized portfolio benchmarking solutions. Since 1999, they have published a family of sustainability indexes, such as the Dow Jones Sustainability Index family (DJSI), S&P ESG Index Family, S&P Fossil Fuel Free Index family, and ESG factor Indices.

For more information: <https://www.robeco.com/en/about-us/>

- **Vigeo Eiris** manages ESG indices that are frequently referenced across the financial industry such as Euronext Vigeo Eiris Indices, Ethibel Sustainability Indices (ESI), Vigeo Eiris Best Emerging Market (EM) Performers ranking, and CAC 40[®] Governance index.

For more: <http://vigeo-eiris.com/>

- **Sustainalytics** is a global leader in ESG and corporate governance research information and ratings since 1992.

For more information: <http://sustainalytics.com>

Future Directions

SRI is currently considered to be among the most dynamic and innovative types of investment in the investment funds sector. Indeed, it is possible to assert that capital markets today have understood the transcendent importance of social responsibility in business administration and risk management. This notable growth and development of SRI in international financial markets has been driven by several factors such as:

- The emergence of socially responsible stock markets indexes (such as the Dow Jones Sustainability Index).
- Evidence proving that SRIFs do not generate lower returns.
- The recent more considerate approach adopted by investors toward social and environmental issues.
- Government support for SRI in countries such as the United Kingdom, France, and Germany, where the pension plans are required to publish their policies on SRI, and in the Netherlands, where tax incentives exist for this type of investment.

These factors will contribute to the continuing growth of SRI in the future.

Cross-References

- Corporate Social Performance
- Corporate Social Responsibility (CSR)
- Environment, Social, and Governance (ESG)
- Finance and CSR
- SAM Sustainability Indices
- Socially Responsible Investing and Finance
- Sustainable Investment

References

- Balaguer, M. R., Albareda, L., & Lozano, J. (2007). La inversión socialmente responsable en España: El screening de los fondos de inversión socialmente responsables. In *Responsabilidad Social Corporativa* (pp. 77–101). Barcelona: ACCID.
- GIIN. (2012). What is impact investing? <http://www.thegiin.org/cgi-bin/iowa/investing/index.html>
- Sánchez, P., Rodríguez M. A., Ricart, J. E., Capdeville, S., Gai, E. (2002). La inversión socialmente responsable: evolución, tendencias e implicaciones para la dirección de las empresas. Documento de investigación 464, IESE.

Socially Responsible Marketing

- Societal Marketing
- Sustainable Marketing II

Societal Marketing

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Synonyms

Socially responsible marketing

Definition

The traditional marketing view is based upon the premise that marketing process is technical rather than moral in nature via concentrating on converting the customer demands into products regardless of its ethical or moral effects (Crane and Desmon 2002). However, Philip Kotler whose philosophy relying on what is good for customers might not be good for society has incorporated two important aspects into the marketing science, (a) morality and (b) society. In that vein, Kotler has broadened the marketing field by means of extending marketing practices into nonbusiness areas (e.g., marketing of social ideas, persons, and causes) and revising the marketing concept with the considerations of societal orientation (Kotler 1972). In other words, Kotler (1972) has redefined the marketing concept through the way of enlarging its existent key elements of customer satisfaction and profitability with an additional element of “long-run customer welfare.” In this sense, societal or socially responsible marketing refers to “the incorporation of societal-based considerations in the design and implementation of marketing strategies whether they are designed to influence the acceptability of the products, services, social ideas, or an organization’s attempts to relate to all of its publics” (El-Ansary 1974). The logic behind this phenomenon is that the lack of social welfare comes with the dark side of the marketing such as environmental pollution owing to car purchases and health issues due to the excessive consumption of tobacco and alcohol products. Therefore, the concept of societal marketing was aimed to reconstruct the marketing arena via including ethical and societal considerations into the practices. In other words, societal marketing notion describes that a firm should design marketing practices via taking into consideration three elements: (a) customer satisfaction, (b) firm profitability, and (c) long-term human welfare.

Key Issues

Relying upon the societal marketing concept, Kotler (1972) has also classified

products with an intent of understanding whether they are appropriate to have societal orientation indeed. These four groupings of products depend on the benefits in the sense of providing short-term customer satisfaction or long-term consumer welfare: (a) deficient products, offering any short-term or long-term benefits to the customers; (b) salutary products, addressing low immediate demands and attractions but appealing to long-run consumer benefits; (c) pleasing products, giving strong feeling of satisfaction to the customer but having potential to be harmful for consumer welfare in the long term; and (d) desirable products, providing both customer delight immediately and long-term customer welfare. Within this framework, Philip Kotler suggests eliminating the deficient products from company products list immediately, while he advocates to make modification on both salutary and pleasing products with an aim of transforming them into the desirable products, which in fact constitutes the eventual purpose of marketing practices.

The central premise behind the notion of societal marketing relies upon the consideration that an enlightened marketer should be aware of the socially responsible practices which are good for their customers as well as for their business in the long run. Since marketing term is regarded as selling, influencing, and persuading in the minds of people much more than satisfying the human needs, the incorporation of societal orientation was the great contribution to the field. Societal marketing practices may involve such examples like finding out the balance between customer orientation and the quality of the ecology, introducing environmentally responsible products or services, designing products concerning its ethical and moral aspects, integrating communication systems intending to educate consumers, and providing reliable information in their advertising appeals (El-Ansary 1974). For instance, one of the advertisements of Budweiser was showing how their company was established by its immigrant founder. Also, Coca Cola’s societal marketing campaign was successful in delivering the message of cultural harmony and showing the advertisement that different people from different

ethnicities were singing “America is Beautiful.” Besides, The Body Shop, which is a British cosmetics company, strongly advocates human rights and climate change. Further, another example can be given for AVON, which is a beauty and cosmetics company and is well known with its famous societal marketing concept through the sale of pink ribbons for the campaign called as “National Breast Cancer Foundation.”

In fact, the phenomenon of societal marketing provides several advantages to the companies such as helping to improve company reputation, gaining competitive advantage over the rivals, decreasing customer retention and building long-term relationships with the customers, enhancing sales and market share, increasing company growth and profitability in the long run, using company resources in an efficient way, and improving the life quality of people in the society. However, it is also vital to note that the concepts of social marketing and societal marketing are related in some ways but are different indeed. While social marketing is aimed to make a social change via attracting the attention of people, societal marketing is more inclined to shape marketing decisions and strategies within a company by considering three main concerns (i.e., customer satisfaction, firm profitability, and society welfare).

The Historical Evolution of the Concept

In the 1990s, environmental problems and harmful effects of products on consumers were highly placed on the media, which, in turn, increases the popularity of the issues such as the consumerism and environmentalism in the society (Peattie 1995). In this sense, companies faced with the challenge that conducting social and environmental strategies will gain both reputation and profit to them as a response to customer reactions (Walley and Whitehead 1994). However, even though environmental issues have been central of the attention in the 1990s, it has showed an exponential increase in the 2000s (Chabowski et al. 2011). In this context, an accumulated body of research paid great attention to the societal

issues in the marketing field in fact dated back to the 1960s with the emergence of the concept of “societal marketing” (Kotler and Levy 1969). Besides, several researchers have also introduced new concepts to the extant literature with the effect of environmentalism and consumerism movements among consumers such as “environmentalism” (e.g., Drumwright 1994), “social marketing” (e.g., Andreasen 1994), “enviropreneurialism” (e.g., Menon and Menon 1997), and “corporate social responsibility” (e.g., Brown and Dacin 1997).

Summary

Societal marketing concept, which has been introduced to the pertinent literature in the 1960s by Philip Kotler, aims to revise the traditional view of marketing. With the effects of consumerism and environmentalism movements in the society, it was great attempt to introduce this new phenomenon of “societal marketing,” which relies upon the balance between three major elements for companies: (a) customer satisfaction, (b) company profitability, and (c) society long-term welfare in designing marketing practices. In this sense, this concept is intended to increase market share and maximize profitability by means of integrating social and environmental concerns into the marketing strategies, which, in turn, result in building long-term relationships with customers and enhancing the human welfare within the society.

Cross-References

- [Corporate Sustainability](#)
- [Social Marketing](#)
- [Strategic Corporate Social Responsibility](#)
- [Sustainable Marketing II](#)

References

- Andreasen, A. R. (1994). Social marketing: Its definition and domain. *Journal of Public Policy & Marketing*, 13 (1), 108–114.

- Brown, T. J., & Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *The Journal of Marketing*, 61(1), 68–84.
- Chabowski, B. R., Mena, J. A., & Gonzalez-Padron, T. L. (2011). The structure of sustainability research in marketing, 1958–2008: A basis for future research opportunities. *Journal of the Academy of Marketing Science*, 39(1), 55–70.
- Crane, A., & Desmond, J. (2002). Societal marketing and morality. *European Journal of Marketing*, 36(5/6), 548–569.
- Drumwright, M. E. (1994). Socially responsible organizational buying: Environmental concern as a noneconomic buying criterion. *The Journal of Marketing*, 58(3), 1–19.
- El-Ansary, A. I. (1974). Towards a definition of social and societal marketing. *Journal of the Academy of Marketing Science*, 2(2), 316–321.
- Kotler, P. (1972). What consumerism means for marketers. *Harvard Business Review*, 50(3), 48–57.
- Kotler, P., & Levy, S. J. (1969). Broadening the concept of marketing. *The Journal of Marketing*, 33(1), 10–15.
- Menon, A., & Menon, A. (1997). Enviropreneurial marketing strategy: The emergence of corporate environmentalism as market strategy. *The Journal of Marketing*, 61(1), 51–67.
- Peattie, K. (1995). *Environmental marketing management: Meeting the green challenge*. London: Pitman.
- Walley, N., & Whitehead, B. (1994). It's not easy being green. *Reader in Business and The Environment*, 36, 10–14.

Societal System

- [Systemic Transition](#)

Societal Transition

- [Transition Sustainability](#)

Society

- [Environment, Social, and Governance \(ESG\)](#)
- [Risk Management \(Environmental Risk and Social Risk\) and CSR](#)

Society and Governance

- [Directors and CSR](#)

Socioeconomic Impact

- [Social Acceptance](#)

Socio-environmental Report

- [Environmental Report Following GBS Standard](#)

Socio-political Acceptance

- [Social Acceptance](#)

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SOFT Analysis

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Soft Law

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Synonyms

International law; Law; Regulation

Definition

Soft law is a category of law that is not enforced by public authorities. Rather, it is type of norms or principles that are an expression of what is generally accepted among parties to whom it applies. As such, it is intended to influence the conduct of parties rather than force parties into certain types of behaviors that comply with the rules (Cini 2000). The term “soft law” covers a wide range of instruments that have different focuses. As a result, it is difficult to formulate a comprehensive, coherent set of criteria to include an instrument in the category of soft law. Soft law includes rules, principles, norms, and prescriptions and can be found in contracts, resolutions, recommendations, codes of conduct, and whole host of other instruments such as standards and guide (Boyle 1999; Weeks 2016; Sheehy 2019). In summary, soft law can be defined as “normative provisions contained in non-binding texts” (Shelton 2000).

The Nature of Soft Law

Soft law is not a clearly delimited and defined term. Following law’s binary principles – legal or illegal – legal scholars may look to a simple binary definition of “binding/nonbinding” to distinguish hard law from soft law (Shelton 2000). Indeed, one group of legal scholars, the positivists generally deny that “soft law” is a legal category, since by their definition of law anything which is law is binding (Klabbers 1998). A better approach to soft law is defining it as a residual category: “the realm of ‘soft law’ begins once legal arrangements are weakened along one or more of the dimensions of obligation, precision, and delegation” (Abbott and Snidal 2000).

One approach to understanding the concept is by illustrating it through examples. Soft law includes a wide range of instruments, and so it may be best understood as a spectrum of instruments rather than a set category of similar legal objects. Soft law may be described along a spectrum of “softness.” So, soft law may range from mere guidance or statements on behavior at one end of the spectrum to being a set of mandatory

prescriptions and prohibitions which are all but enforceable through the courts on the other (Shelton 2000).

Thus, an understanding of soft law may be developed by examining the source of the legal instrument. Traditional hard law is considered an authoritative pronouncement backed up by force. Soft law instruments, by way of contrast may issue from private standard setting bodies, industry associations, international public law bodies, or other organizations. Even determination of the source of the law may be insufficient as some instruments considered soft law may be delegated legislation/regulation or soft law, dependent upon whether a government expressly authorized creation (Alarie et al. 2014).

A second approach to understanding soft law comes from an analysis of legal effect more broadly. If an instrument gives legal effect it is not soft law. Rather, it is clearly hard law as it engages with legal rights and duties within a public legal system. It is not that soft law cannot be within a public legal system. Where it is within a public legal system, it must be executive or administrative in nature and not legislative (McGarry 1944).

A third approach to tackling the concept of soft law comes from an attempt to categorize instruments. Baldwin and Houghton have proposed eight categories. These are (1) procedural rules, (2) interpretive guides, (3) instructions to officials, (4) prescriptive/evidential rules, (5) commendatory rules, (6) voluntary codes, (7) rules of practice, management or operation, and (8) consultative devices and administrative pronouncements (Baldwin and Houghton 1986). Such classification of instruments, however, does not amount to a definition of soft law.

A fourth approach which some may try is classifying soft law according to substantive focus or jurisdiction. Soft law, however, can address any area of legal concern, from environmental matters to prices and warranty policies in consumer affairs. Further, soft law may be used in the context of local governments, international public actors, or specific industries by private actors such as industry associations. Accordingly, neither the substantive focus nor jurisdiction is

adequate to categorize a rule, norm, or principle as “soft law.”

Consequently, soft law often has an aspirational aim or persuasive intent, focused on a class of actors with a view of changing or confirming accepted behavior. To understand what effect a document is intended to have requires analysis of the overall content, the language of the instrument to determine the audience, the parties, the specific behaviors under normative review, and the proposed effect. Most significant in soft law is that it excludes a legal effect. That is, soft law is not expected to change or threaten the legal position of actors who fail to comply with the prescriptions and prohibitions contained in a soft law instrument.

Soft law is a bridge between law and policy (Sossin and Smith 2002). Soft law encompasses both policy and a particular set of policy instruments that intend to change behavior. An essential status of the executive policy is that the administration does not establish regulatory rules for guiding decision-making, especially when administering the legislation. To the extent that “regulatory rules” can be equated to “influencing behavior,” policy and soft law are similar. However, the policy covers a broader range of documents than soft law. Soft law has become the “principal administrative mechanism used to elaborate the legal standards and political and other values underlying bureaucratic decision-making” (Sossin and Smith 2002). The bureaucratic transaction costs of creating soft law may in some instances be lower than the costs of creating hard law.

Advantages and Disadvantages of Soft Law

Soft law has many practical advantages. It is more easily developed and amended as it does not rely on the complex and cumbersome processes involved in hard law. No legislature is involved and the politics of competing recognized political parties are not in operation. As a result, soft law instruments can be drafted and disseminated more easily. Furthermore, often the intended effects of hard law do not eventuate

or only partially. In addition, events in the environment such as changes in markets or regulations mean that hard law is no longer appropriate. In such instances, the appropriate solution is some type of law reform and amendment. As with the initial legislative process, however, the process of reforming hard law is equally difficult. Soft law, being an extra-legislative type of law, is more easily amended to address unintended consequences or changes in the environment (Baldwin and Houghton 1986).

In addition, soft law allows a collaborative approach to be taken including greater interaction between the public and private sectors. As a result, soft law is more readily tailored to a specific problem and understood and accepted by the relevant actors. Further, soft law, to a greater extent than hard legislation, can provide innovative solutions that are fitted to the needs of individual industries, government agencies, or other actors (Aronson 2007).

Another benefit of soft law is that it allows states to be more ambitious in identifying desired behavior and engaging more intimately with actors than they would be able to if they had enforcement powers. A further benefit is that soft law instruments are better able to address diversity among actors and are available to non-state actors, such as international secretariats, business associations, and nongovernmental organizations (NGOs) (Kirton and Trebilcock 2017). Thus a wider range of actors are able to develop regulation suited to their own needs and constituencies.

Abbott and Snidal argue that in the international arena, states prefer soft law where contracting is difficult because of the costs associated with the number of parties involved, matters of factual uncertainty, the political challenge of domestic ratification, managing the implications of engaging in politically charged issues, and basic issues of distributional asymmetries (Abbott and Snidal 2004). In these contexts, “states can limit their legal obligation through hortatory language, exceptions, reservations and the like” (Abbott and Snidal 2004).

Soft law is not a panacea for the problems of hard law. It has its own drawbacks. Perhaps the main weakness of soft law is its lack of public authoritative enforcement mechanisms. That is, where a party has breached a soft law, one cannot bring that party to a court or tribunal to have rights and duties adjudicated and a remedy granted. Further, soft law instruments may not attract significant resources because they do not require the expensive infrastructure of public law, such as courts, inspectors, and the like. The lack of resources has additional ramifications, as, for example, a lack of regular updating and poorly developed reforms. Finally, soft law by nature relies on discretion of regulatory parties. It may in certain instance lead to unnecessarily higher compliance standards (Baldwin and Houghton 1986), or insufficiently stringent requirements.

As a result of these weaknesses, publicly promulgated soft law instruments may be found to permit a wider range of activities as compliant than were originally intended (Abbott and Snidal 2000; Reisman 1992). A further weakness is when soft law is treated as if it were hard law. Such treatment leads to potential misuse (Raz 1979).

Soft law as nonbinding rules interprets or informs our understanding of binding legal rules to create expectations about future conduct.

Summary

Soft law is useful in that it establishes norms of accepted or preferred behavior. It provides information and guidance to parties, both public authorities and private parties, that can be useful to courts, tribunals, and other regulatory bodies as well as to managers, civil society actors such as NGOs, and industry associations.

Soft law instruments come in a wide variety of types, from codes of conduct to general principles. Further, they are used in wide array of contexts – from local government pronouncements to international public instruments. Finally, they can be found in all areas of regulatory endeavor from environmental controls to consumer products to guidance to governmental bodies.

Cross-References

- [International Law](#)
- [Regulation](#)

References

- Abbott, K. W., & Snidal, D. (2000). Hard and soft law in international governance. *International Organization*, 54(3), 421–456.
- Abbott, K. W., & Snidal, D. (2004). Pathways to international cooperation. In E. Benvenisti & M. Hirsch (Eds.), *The impact of international law on international cooperation: Theoretical perspectives* (pp. 50–54). New York: Cambridge University Press.
- Alarie, B., Datt, K. H., Sawyer, A. J., & Weeks, G. (2014). Advance tax rulings in perspective: A theoretical and comparative analysis. *New Zealand Journal of Taxation Law and Policy*, 20, 326–391.
- Aronson, M. (2007). Private bodies, public power and soft law in the high court. *Federal Law Review*, 35(1), 1–24.
- Baldwin, R., & Houghton, J. (1986). Circular arguments: The status and legitimacy of administrative rules. *Public Law*, 2(239–284), 239–240.
- Boyle, A. E. (1999). Some reflections on the relationship of treaties and soft law. *International & Comparative Law Quarterly*, 48(4), 901–913.
- Cini, M. (2000). *From soft law to hard law? Discretion and rules-making in the Commission's State Aid Regime* (Working Paper 35) (p. 4). European University Institute.
- Kirton, J. J., & Trebilcock, M. J. (2017). *Hard choices, soft law: Voluntary standards in global trade, environment and social governance*. Routledge.
- Klabbers, J. (1998). The undesirability of soft law. *Nordic Journal of International Law*, 67, 381–391.
- Megarry, R. E. (1944). Administrative quasi-legislation. *Law Quarterly Review*, 60, 125.
- Raz, J. (1979). The rule of law and its virtue. In J. Raz (Ed.), *The authority of law: Essays on law and morality* (pp. 221–222). Oxford University Press.
- Reisman, W. M. (1992). The concept and functions of soft law in international politics. In E. G. Bello & P. B. A. Ajibola (Eds.), *Essays in honour of judge Taslim Olawale Elias, volume I contemporary* (p. 135). London: Martinus Nijhoff.
- Sheehy, B. (2019). TNC code of conduct or CSR? A regulatory systems perspective. In M. M. Rahim (Ed.), *Global code of conduct on transnational corporations: Challenges and opportunities*. Springer.
- Shelton, D. (2000). *Commitment and compliance: The role of non-binding norms in the international legal system*. Oxford University Press.
- Sossin, L., & Smith, C. W. (2002). Hard choices and soft law: Ethical codes, policy guidelines and the role of the courts in regulating government. *Alberta Law Review*, 40, 867.
- Weeks, G. (2016). *Soft law and public authorities: Remedies and reform*. Bloomsbury Publishing.

Soil Consumption

► Desertification

Solar as a Sustainable Energy

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Synonyms

Concentrating solar power; Energy from solar photovoltaic; Renewable energy; Sustainable energy

Definition

Solar energy is clean and renewable energy that uses sun as a power source. Solar energy can be harnessed using various solar technology for meeting residential, commercial, and industrial needs for thermal, electrical, and other forms of energy in a sustainable way. Two types of solar energy applications are available – passive and active systems. For the passive system, solar energy can be collected without using special mechanical devices or equipment. Greenhouses and sunrooms are common examples. Residential and industrial buildings can be designed to absorb and retain heat from the sun. On the other hand, in the active system, solar energy is collected using solar panels comprised of solar photovoltaic (PV) cells. Various technologies to capture and transforming it to thermal and electrical energy have developed over the years, such as Parabolic Trough, Concentrating Solar Power Tower, Dish Stirling, etc. The main goals are to increase efficiency and reduce costs.

The growth of solar energy throughout the world has been significant in the last two decades. Asian countries with high energy demand have been investing substantially in solar and other

renewable energy to reduce their dependency in fossil fuel and improve climate and health of their citizens. Continuous efforts are reducing global warming, although not successful in meeting the Sustainable Development Goals of the Paris Agreement. China and the United States continue to be the world leaders in solar energy production. During the last decade, the growth of solar energy was highest among all renewable energy. The goal is to make the cost of solar energy as competitive as fossil fuel to help the solar energy market grow.

Solar as a Sustainable Energy

Solar energy is virtually inexhaustible and most abundant energy resources – earth receives more power from the sun in 1 h than global energy needs for 1 year. Even with a 10% efficient solar conversion system covering 0.16% of the land of the earth would provide 20 TW of power, nearly twice the world's consumption rate of fossil energy and an equivalent 20,000 1-GW nuclear fission plant (Rajeshwar et al. 2008).

The applications of solar energy are innumerable – it can be used for cooking, heating, water treatment, generating electricity, agriculture and urban planning, transportation, and many more. The first solar cell was built in Bell Laboratories in 1954, starting the new era of clean energy production (This Month in Physics History n.d.). However, the adoption of solar energy in the society had been slow due to many factors such as low efficiency, availability of technology, and relatively high cost compared to the energy produced by fossil fuel. Over the years, scientific communities and consumers became aware of the adverse effects of fossil fuel and pursued sustainable and renewable energy sources. Solar energy is the most abundant renewable carbon-free resource among the other renewable energy options.

Over the last decade, global energy consumption proliferated, reaching twice on average, and the demand is expected to peak between 2020 and 2025 (World Energy Scenario 2019 n.d.). Three of the Sustainable Development Goals (SDGs) for energy, namely to achieve universal access to energy, to reduce the severe health impacts of air

pollution, and to tackle climate change by meeting the Paris Agreement on climate change of below 2 °C climate goal are yet to be met (United Nations Sustainable Development [n.d.](#)). The Sustainable Development Scenario (SDS) report has provided an outline to bring the world back to track in achieving these goals. Renewable energy such as solar and wind is predicted to significantly meet these SDGs (Renewables – World Energy Outlook 2019 – Analysis [n.d.](#)).

Among Asian Countries, China and India continue to maintain strong economic growth with high energy demand. China's energy market is currently the largest among global contenders due to its continuous mid-single-digit growth rate. To meet the high energy demand, China continues to escalate renewable energy generation. China is anticipating that the renewables will become its primary energy source by 2050. The government is using technology, innovation, and power-market reform to achieve it. China has spent more on cleaning up its energy system in recent years than to the United States and European Union combined. They are the largest consumer of solar PV and expected to account for almost half of the global distributed PV. China's PV capacity is expected to reach at least 400 GW to provide 10% of its primary energy need by 2030 (Sweerts et al. [2019](#)).

Similarly, India is exploring its vast renewable energy potential and investing more in solar power than coal. However, coal remains to be the primary energy source for India at present. In 2019, a 58% share of new capacity in renewable energy was invested in India, and a goal was set for 20 GW of solar installation by 2022 (Singh and Pal [2020](#)). The goal was achieved 4 years ahead of time, and the new goal was set to reach 100 GW by investing \$100 billion by 2022. Among other Asian countries, Japan and South Korea are at the forefront to drive the growth of solar PVs (Renewables – World Energy Outlook 2019 – Analysis [n.d.](#)).

Most of the African countries are in dire need of energy production and supply. The potential of solar energy production is very high since Africa receives the most sun during a year that any other continent. Although production and usage of solar

energy are not very high yet, abundant natural resources coupled with tremendous growth opportunities are attracting investments in renewable energy production, including Foreign Direct Investment – a \$32 billion investment was reached in 2018 (World Energy Council [n.d.](#)). International collaboration with developed regions and emerging markets such as China and India also have grown substantially in recent years.

The European Union and the United States were at the forefront of research and development (R & D) of renewable energy and provided leadership in the expansion of solar energy. The clean-energy investment in the United States was increased by 12% (\$64.2 billion) in 2018 (World Energy Council [n.d.](#)). The U.S. Energy Department is committed to expanding the solar energy market by facilitating R&D effort and manufacturing for the nation's solar energy resources. Among other renewable energy, the demand for solar energy in the United States is very high, and the amount of solar power installed has increased more than 23 times over the past decade. Over 29% of all new generating capacity added to the US electrical grid in 2015 was solar (Solar [n.d.](#)).

In recent years, the adoption of supportive energy policies and reduced cost for solar photovoltaic and other renewables has led to the progress of the clean energy that is less carbon-intensive. The production of solar PV improved by 31% in 2018 among all renewable technologies. Between 2019 and 2024, renewable power capacity is expected to grow 50%, where solar PVs is projected to account for almost 60% of the expected growth (Renewables – World Energy Outlook 2019 – Analysis [n.d.](#)).

As a sustainable energy source, solar energy is abundant and environmentally friendly since it does not release CO₂, SO₂, or similar pollutants in the environment. However, there are a few drawbacks, such as availability of power during nighttime and reduction of energy production during stormy or rainy weather. These disadvantages are currently being addressed, and various solutions are being experimented.

Two main obstacles for solar energy to meet its full potential are the conversion capacity and cost

(Crabtree and Lewis 2007). The scientific community, department of energy, and other policymakers have been instrumental in making significant progress in addressing both issues. The progress in solar energy technology and the associated cost will be discussed in the next section, followed by the summary and conclusion.

Solar Energy Technology

Solar energy technology has tremendous potential to produce clean energy to meet the world's demand. However, solar science is a relatively new field compared to fossil fuel science that have been developed over 250 years stimulated by industrial revolutions and the abundance of fossil fuel (Crabtree and Lewis 2007). This technology was driven by the oil crisis in the 1970s and has evolved and experienced tremendous growth in the last two decades. Solar PVs, solar heating and cooling, and solar thermal electricity are well known around the world. The modular design and scalability make solar PVs popular among consumers. However, availability, the geography of the land, and weather condition affects solar energy production capacity.

Solar panels, voltage controllers, blowers, pumps, and other mechanical and electrical equipment are used to transform the captured solar energy into heat and electricity. The two main categories of solar energy technologies are solar PVs and Concentrating Solar Power (CSP). The solar PVs can be installed as roof top panels on residential or commercial buildings, or ground mounted for utility suppliers. Besides solar PVs, solar energy is generated and stored in solar-thermal facilities similar to traditional fossil-fueled power plants. These are called Concentrating Solar-Thermal Power (CSP) systems, which generate clean electricity and heat for industrial, commercial, and residential uses. These facilities utilize different types of designs, such as *Parabolic Trough*, *CSP Tower*, and *Dish Stirling* for capturing solar power. Efficiencies of solar energy systems vary between 15% (for solar PVs) ("Solar

Panel Efficiency," 2020) and 30% (for Dish Stirling design) (Singh and Kumar 2018). These different types of solar technologies and models are described in brief.

Solar PV

Solar PV cells are made of glass with a back-sheet, framed with aluminum. The amount of sun that can be captured by a cell is dependent upon a few factors – tilt or pitch, orientation or azimuth, and shade. Tilt and orientation are measured in degrees relative to the horizon and North, respectively. The absence of nearby trees and buildings provides ideal shading. The location of the solar system and weather conditions, such as the presence of cloud also affect the amount of energy production. Another two factors are insolation and irradiance. Insolation is a measure for the amount of sunlight a property gets over time in watts-hour per square meter, and irradiance is used to measure the amount of sun exposure in watts per square meter. Google has estimated that 79% of all homes in the United States have adequate roof space and receive sufficient sunlight. National Renewable Energy Laboratory has estimated that nearly 40% of all energy use can be produced by rooftop solar panels, including homes, businesses, factories, and other structures (Rauschenbach 1980).

There are many variations of solar PV systems that are available to meet social and consumer's needs. Some of them are as follows:

- Off-grid or on-grid system
- Building-integrated or rack-mounted system
- Residential or utility systems
- Distributed or centralized systems
- Rooftop or ground-mounted systems
- Tracking or fixed-tilt systems
- New constructed or retrofitted systems

The versatility and scalability have helped solar PVs to gain popularity. Solar PV is expected to have the fastest growth among all renewable energy sources.

Concentrating Solar Power (CSP)

A Concentrating Solar Power (CSP) infrastructure utilizes heat produced by concentrating solar power and convert it into electricity. Various designs are available for concentrating solar power. A Parabolic Trough design consists of mirrors that are curved as a parabola in two dimensions and straight in the other dimension. If an object is placed along the focal line, it will be heated up by the sunlight – it can be used as a solar cooker. For large-scale applications, heat is collected in fluid running through a tube and can be used to drive machinery or generate electricity.

For a CSP Tower design, a large number of mirrors are used to concentrate solar beam on a receiver built in a centrally located tower. The heat generated (with a temperature between 400 °C and 1000 °C) is converted into electricity that can be stored for future use. A dish-Stirling system uses a large reflective parabolic dish to concentrate the solar heat to a receiver which then transforms it to usable form by using Stirling engine (Dish/Engine System Concentrating Solar Power Basics [n.d.](#)). The largest CSP in the world is located at Morocco with an electrical capacity of 510 Mega Watts (MW), followed by Ivanpah Solar Electric Generating System in the United States with a capacity of 392 MW of clean electricity. It can power 94,400 average American homes. Most of the power generated Ivanpah power plant will be sold to Pacific Gas & Electric and Southern California Edison Company (Celebrating the Completion of the World's Largest Concentrating Solar Power Plant [n.d.](#)).

The CSP plants and the power generation processes are durable and reliable. The Middle East and North Africa (MENA) region has an excellent solar resource condition, and a CSP Plant project called *enerMENA* was funded by German Federal Foreign Office. This project is a collaboration between the German Aerospace Center (DLR) and 45 partners from MENA regions (*enerMENA* [n.d.](#)). The World Bank's Energy Sector Management Assistance Program released its Global Solar Atlas 2.0, which indicates Direct Normal Irradiance (DNI) for each country and region. Western USA, Southern Africa,

Australia, and parts of South America are suitable for establishing CSP plants due to the high DNI. Global Solar Atlas helps policymakers and investors in making decisions based on the downloadable dataset and online queries. The cost of energy generate from CSP continues to drop over time – currently, it ranges from \$150/MWh to \$200/MWh.

CSPs can also be used for desalinization of water as a byproduct of the electricity generation process. An increase of 8% of CSP generation was estimated in 2018. Although CSP power plants produce clean energy, there are some environmental impact such as vast land use, water consumption, visual impact, noise produced by the cooling towers, smell, fire hazard and glint. Most of these adversities can be controlled by locating the CSP plants in arid/desert areas. However, the glint and glare of reflected light from CSP systems need to be considered if they are located close to the airport or flight path (FAA-Airport-Solar-Guide-2018 [n.d.](#)).

A recent meta-study of lifecycle analysis for CSP estimated that including building materials, the greenhouse gas emissions (carbon dioxide equivalent) from CSP electricity is 26 g/kWh of power. The overall environmental impact of CSP is very similar to that of other renewable energy sources. A few examples of CSP plants are Mojave solar project in California, USA, Ouarzazate solar power station in Morocco, Solnova solar power station in Spain, and Supcon solar plant in China.

Cost of Solar Energy

The low cost of fossil fuel, such as coal, has been its main advantage over solar energy. However, a study has shown that the air and water pollution generated by fossil was related to the life cycle costs and public health effect such as breathing problem, neurological damage, heart attack, cancer, premature death, etc., and the cost for coal was estimated as \$74.6 billion every year (Epstein et al. 2011). Renewable energy will eliminate this indirect cost of fossil fuel.

With the advancement of solar energy technology, the cost of clean energy continues to fall, and

solar energy is increasingly becoming a viable option for consumers. Supportive energy policies are also assisting in the expansion of solar energy in residential, commercial, and industrial arena. New utility business models such as *pay-as-you-go* (Change 2017) solar solution in Africa are useful for start-up energy entrepreneurs of small and medium sizes to provide utility services such as cooking, internet access, and water to larger portion of the population some of which were unreachable earlier by traditional grid system. Many solar energy users have become prosumers and have been exporting excess electricity produced by their solar panels back to the grid and getting a refund on their electricity cost.

SunShot Initiative was launched in 2011 by the US Department of Energy to compete with the fossil fuel cost. The solar energy Technology Office (SETO) funds advancement in solar PV through two competitive outlets, SunShot National Laboratory Multiyear Partnership (SuNLaMP) and Funding Opportunity Announcements for research projects at university, private companies, and national laboratories. Department of Energy committed to reduce the costs of solar energy by 75% to \$0.06 per kilowatt-hour for utility-scale PV solar power by 2020 and achieved it 3 years ahead of schedule. It had made considerable progress to make solar power cost-competitive with fossil fuels without subsidies, by supporting the development of more efficient solar cells and cost-effective manufacturing process. In 2016, US Energy Department announced new goals for 2030 to make solar one of the least expensive sources of energy generation. The Levelized Cost Of Energy (LCOE) was decided to be cut by an additional 50% to \$0.03 per kWh for utility-scale and \$0.05 per kWh for CSP power plants. The goals also included to address and resolve grid integration challenges and key market barriers for solar adoption (SunShot 2030 n.d.).

To make solar more affordable, some of the costs, such as getting permits, connecting a solar system to the power grid, and other similar expenses, also need to be adjusted. Once Battery Electric Vehicles (BEVs) are integrated into the grid using emerging integration technology, the personal vehicles will be able to use solar energy

to support the transmission and distribution of electrical power.

Summary and Conclusion

Global energy demand is growing at a fast pace. The climate change and adverse health effects of fossil fuel have made consumers, the scientific community and industry consider renewable energy a sustainable and clean alternative energy option. Among other renewable energies, solar energy is increasingly becoming the most economical option for meeting global electricity, thermal, and other power need. This new industry is also expected to generate substantial economic activities and job opportunities in every sector from the production of solar energy, electricity generation, heating and cooling systems, transportation, and more (Union of Concerned Scientists 2009).

Asian countries such as China and India are investing heavily to meet the fast growth of their energy need. The United States has made significant progress in reducing the cost of solar energy to make it competitive with coal and committed to making it less expensive than fossil fuel in the coming years. The solar energy industry is still comparatively young, and there is tremendous economic opportunity for the countries that invent, manufacture, and export clean energy technologies.

Cross-References

- ▶ [Energy Demand Management](#)
- ▶ [Energy Efficiency in Public Building Procurement](#)
- ▶ [Energy Pricing for Households for Promoting Energy Efficiency](#)
- ▶ [Global Warming](#)
- ▶ [Needs and Barriers for Local Energy Market Solutions](#)
- ▶ [Sustainability and Solar Energy](#)
- ▶ [Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators](#)
- ▶ [Sustainable Energy](#)
- ▶ [Sustainable Performance](#)

References

- Celebrating the Completion of the World's Largest Concentrating Solar Power Plant. (n.d.). <https://www.energy.gov/articles/celebrating-completion-worlds-largest-concentrating-solar-power-plant>. Accessed 30 June 2020.
- Change, E. (2017). *As pay-as-you-go solar proliferates, here are 7 lessons for business success*. <https://www.renewableenergyworld.com/2017/12/12/bolstering-payg-agent-networks-7-lessons-learned-from-other-industries/?topic=263751#gref>. Accessed 30 June 2020.
- Crabtree, G. W., & Lewis, N. S. (2007). Solar energy conversion. *Physics Today*, 60, 37–42.
- Dish/Engine System Concentrating Solar Power Basics. (n.d.). <https://www.energy.gov/eere/solar/articles/dishengine-system-concentrating-solar-power-basics>. Accessed 30 June 2020.
- DLR – Institute of Solar Research—The project enerMENA. (n.d.). <https://www.dlr.de/sf/en/desktopdefault.aspx/tabid-12621/>. Accessed 30 June 2020.
- FAA-Airport-Solar-Guide-2018. (n.d.). https://www.faa.gov/airports/environmental/policy_guidance/media/FAA-Airport-Solar-Guide-2018.pdf. Accessed 30 June 2020.
- Rajeshwar, K., McConnell, R., & Licht, S. (2008). *Solar hydrogen generation: Toward a renewable energy future*. New York: Springer.
- Rauschenbach, H. S. (1980). *Solar cell array design handbook. The principles and technology of photovoltaic energy conversion*. New York: Springer.
- Renewables - World Energy Outlook 2019 – Analysis. (n.d.). <https://www.iea.org/reports/renewables-2019>. Accessed 30 June 2020.
- Renewables – World Energy Outlook 2019 – Analysis. (n.d.). <https://www.iea.org/reports/world-energy-outlook-2019/renewables>. Accessed 30 June 2020.
- Singh, U. R., & Kumar, A. (2018). Review on solar Stirling engine: Development and performance. *Thermal Science and Engineering Progress*, 8, 244–256.
- Singh, Y., & Pal, N. (2020). Obstacles and comparative analysis in the advancement of photovoltaic power stations in India. *Sustainable Computing: Informatics and Systems*, 25, 100372.
- Solar. (n.d.). <https://www.energy.gov/science-innovation/energy-sources/renewable-energy/solar>. Accessed 30 June 2020.
- Solar Panel Efficiency: What Panels Are Most Efficient? (n.d.). <http://news.energysage.com/what-are-the-most-efficient-solar-panels-on-the-market/>. Accessed 30 June 2020.
- SunShot 2030. (n.d.). <https://www.energy.gov/eere/solar/sunshot-2030>. Accessed 30 June 2020.
- Sweerts, B., Pfenninger, S., Yang, S., Folini, D., Van der Zwaan, B., & Wild, M. (2019). Estimation of losses in solar energy production from air pollution in China since 1960 using surface radiation data. *Nature Energy*, 4(8), 657–663.
- The SunShot Initiative. (n.d.). <https://www.energy.gov/eere/solar/sunshot-initiative>. Accessed 30 June 2020.
- This Month in Physics History. (n.d.). <http://www.aps.org/publications/apsnews/200904/physicshistory.cfm>. Accessed 30 June 2020.
- Union of Concerned Scientists. 2009. Clean Power, Green Jobs. (n.d.). <https://www.ucsusa.org/resources/clean-energy-green-jobs>. Accessed 30 June 2020.
- United Nations Sustainable Development. (n.d.). <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Accessed 30 June 2020.
- World Energy Council. (n.d.). <https://www.worldenergy.org>. Accessed 30 June 2020.
- World energy scenario 2019. (n.d.). <https://www.google.com/search?q=world+energy+scenario+2019&oq=world+energy+ecenario&aqs=chrome..69i57j0l7.9442j0j8&sourceid=chrome&ie=UTF-8>. Accessed 28 June 2020.

Source

- Whistleblowing and CSR

Source Reduction

- Pollution Prevention

South East Atlantic

- UNEP Abidjan Convention Secretariat, Abidjan, Côte d'Ivoire

Sovereign Wealth Funds

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Synonyms

Country investment funds; Country wealth fund;
State governed fund

Definition

A sovereign wealth fund (SWF) is a government-owned investment fund principally used to benefit the economy and citizens of a country. This fund, which comes from the country's central bank reserves, is made of sums of money accumulated over time. Such sums of money are simply income from many sources, such as, among others, budget and trade surpluses, revenues from exports of natural resources, privatizations or official foreign currency transactions, etc. Most often these investments are more tolerant towards risk, in that they tend to prefer return over liquidity. They are usually overseas long-term holdings in foreign exchange assets.

Every country decides for itself the objectives of the SWF and these tend to evolve over time. According to the Sovereign Wealth Fund Institute, a nonprofit organization, the SWFs are traditionally classified into five types as:

- Stabilization funds
- Savings or future generations funds
- Pension reserve funds
- Reserve investment funds
- Strategic development sovereign wealth funds

The names of the SWFs implicitly outline their respective objectives. Countries could have multiple objectives such as stabilization/savings as seen in Azerbaijan, Botswana, Trinidad and Tobago, and Norway or stabilization/saving/development as seen in Kazakhstan (Al-Hassan et al. 2013). On a side note, SWFs may also help avoiding the phenomenon of "Dutch disease." This is the case where the economic success in one sector in a country leads to the decline in other sectors in the said country. This is because the sector which is successful experiences increased demand leading to increased revenues including foreign currency inflows. This in turn causes the said country's currency to appreciate (i.e., become expensive relative to other currencies), which in turn leads to exports of the said country becoming expensive and therefore leading into falling export demands in other sectors.

Some countries have created SWFs to diversify their revenue streams. For example, the United Arab Emirates relies on oil exports for its wealth. Therefore, it devotes a portion of its reserves to an SWF that invests in diversified assets which creates stability.

SWFs are very important in that they allow countries to manage their respective risks in a timely and efficient manner.

Brief History

Some of the earliest SWFs originated in the United States in the nineteenth century to fund public services (Firzli and Franzel 2014). These were however only state funds. SWF for a sovereign state originated in the Middle East to invest the excess oil revenues starting around 1950s. The Kuwait Investment Authority is considered to be the first SWF and was established in 1953. It is however only since the 2000s that SWFs have become increasingly prominent with increasing oil prices and sustained growth in the Asian economies.

The total assets under management by SWFs have been growing and their holdings are estimated to be between 3 and 5 trillion US dollars (IMF 2012). According to the World Economic Forum, as of 2018, the UAE's fund was worth about US\$683 billion. The Forum also finds that Norway's SWF, the largest in the world, has exceeded US\$1 trillion since 2017.

The sheer size and investment capacity of such SWFs make them quite powerful and often very useful to recipient countries. Over 30% of the funding to rescue financial institutions from the financial crises of 2007–2008 is supposed to have come from Asian and Arab SWFs, according to Ben Bernanke, ex-Chair of the Federal Reserve of the United States, as quoted in the Financial Times (Woertz 2008).

Some Examples of the Biggest SWFs

Norway's SWF, with roughly over US\$1 Trillion under management as of 2019, is considered to be the world's largest SWF.

The Chinese SWF, namely, China Investment Corporation has, as of 2018, about US\$940 billion under management.

The United Arab Emirates SWF, namely, Abu Dhabi Investment Authority has, as of 2019, about US\$800 billion under management.

Pertinent CSR Issues

SWFs which have been traditionally long-term passive investors have been welcomed by many countries. However, more and more SWFs now seek to diversify and are investing with hedge funds and private equity. Moreover, most of the funds, apart from the Norwegian one, do not disclose their holdings nor their corporate governance structures and practices, making them dangerously opaque. This facet combined by the exceedingly large sums of money at their disposal creates some element of risk.

One of the additional and commensurate concerns is that perhaps SWFs could have some political influence. The financial clout and the intransparency of the funds fueled by their supranational status have in the past created situations of tension causing legislative changes. For example, in 2006, a British firm named P&O was taken over by Dubai Ports World (DPW), a state-owned UAE company. P&O held management contracts of six major ports in the United States, which now belonged to DPW. This business deal very soon took on the form of national security with many political figures arguing that such a deal would compromise port security. This particular incident, among other similar concerns, also led to passing of the Foreign Investment and National Security Act 2007 in the United States whereby scrutiny increased considerably in the context of investments made by foreign governments or SWFs. European governments have long been wary of SWFs given the nondisclosure policies of the latter on their investments. This has consequently led to many more demands for more transparency in both terms of objectives and the content of the portfolio investments of SWFs.

In the context of CSR therefore, SWFs currently fall considerably short of the required mark given their governance structures and stakeholder transparency issues.

Cross-References

- [Global Governance](#)
- [Reports on Payments to Governments](#)
- [UN Principles for Responsible Investments \(PRI\)](#)

References

- Al-Hassan, A., Papaioannou, M., Skancke, M., & Cheng Chih S. (2013). *Sovereign wealth funds: Aspects of governance structures and investment management* (Working Paper WP/13/231). International Monetary Fund.
- Firzli, N., & Franzel J. (2014). Non-Federal sovereign wealth funds in the United States and Canada. *Revue Analyse Financière*. Q3.
- International Monetary Fund (IMF). (2012). Safe assets: Financial system cornerstone? Global financial stability report. www.imf.org/external/pubs/ft/gfsr/2012/01/pdf/c3.pdf. Accessed on 19 December 2019.
- Woertz, E. (2008). GCC needs the dollar and the US needs the funding. *The Financial Times*.

Soviet Union

- [Aral Sea Disaster, The](#)
- [Chernobyl Disaster, The](#)

Special Compensation

- [Bonuses \(Employee for Performance\)](#)

Speciesism

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Synonyms

[Abuse of non-human rights](#); [Anthropocentrism](#); [Discrimination](#); [Objectifying of species](#); [Securitization of nature](#); [Trans-species injustice](#)

Definition

Speciesism, also called anthropocentrism, refers to the superiority of the human species and their control over non-human animals. Speciesism is a form of discrimination that has been perpetuated throughout the history of human and non-human animal relationships. Discrimination are actions which cause harm based on unfair social practices such as marginalization and stereotyping. The result is that non-human animals are treated as objects. This leads to a culture where it is acceptable to violate the basic rights of non-human animals. The specific nature of speciesism is influenced by cultural and economic practices where there are differences in how domestic animals and pets are regarded, compared with farm animals and wild animals. Human's ability to live and sustain life on the planet is intricately interrelated with non-human animal's ability to survive and flourish.

The human-centered concept of social justice needs to be extended to include the idea of trans-species social justice where all species are equally valued beings. Further, the idea of ecocentrism locates an ethical concern for all species with an inseparable valuing of the intrinsic worth of all sentient beings, including Mother Earth as a living being. This ethical stance provides a compelling values-based approach for sustainability managers and activists to challenge environmental and social harm by large-scale resource extraction industries and agribusinesses.

Introduction

There is a continuing loss of non-human animal diversity, including species extinction, across the full spectrum of wild animals at a global level. Further, many national economies are reliant on job and wealth creation from the use and exploitation of non-human animals. For example, after years of severe drought in rural and remote Australia in the summer of 2019, a disaster on top of disaster occurred when the first signs of welcome rainfall turned to tragedy. Extreme flooding resulted in the death of hundreds of thousands of

cattle and sheep and the largely unrecognized loss of wildlife in the media.

These catastrophic events indicate the unsustainability of current trajectories of capitalist development and the interrelated wicked problem of climate change. Unsustainability can be understood as an indicator of lack of social, economic, and environmental justice and as a lack of species justice. Large-scale agribusinesses are known to deplete landscapes and use non-human animals for human consumption and wealth accumulation by the elites of society. Gina Rinehart is Australia's wealthiest woman with an estimated net worth of 21.5 billion US dollars. She earns 1 million dollars every 30 minutes from mining and more recently from large-scale farming of cattle.

A trans-species social justice coupled with a commitment to ecological justice is premised on the capacities of love and non-violence in relationship with all species and the living planet. Non-violence refers to the non-forcing of the other beings and involves seeking to engage them as an invitation where there is a constant awareness to the nonverbal and other behaviors of the animal that may be signalling unease or unwillingness. Speciesism is underpinned by a dualism between humans and non-humans. This dualism is premised on the western idea of nature as a resource for human ends and its instrumental use rather than being intrinsically worthy of respect (Plumwood 2000).

The discourses which reinforce this dualism can be subtle and part of contradictory stances by high-profile, pro-animal rights groups. For example, the Royal Society for the Prevention of Cruelty to Animals (RSPCA) is a well-known and highly respected organization. It promotes the five freedoms of animals, namely, freedom from hunger and thirst; discomfort; pain, injury, or disease; fear and distress; and freedom to express normal behavior by providing sufficient space, proper facilities, and company of the animal's own kind. At the same time, it maintains a dominant discourse in some of its language of humane killing when referring to farm animals who are called livestock. Activists against harm to non-human animals can make important contributions to animal welfare and safety – for example, campaigns against live sheep and cattle exports in Australia

which is also supported by the RSPCA. However, Francione and Charlton's (2013) abolitionist approach is against the animal welfare rights approach and argues against any use of non-human animals. They promote a number of principles to achieve this end, including the right of all sentient beings to not be the property of others and veganism as the moral baseline of animal's freedom and equality. Crucially, abolitionists recognize the principle of non-violence as a core principle of the animal rights movement.

At a global level, there is a similar tendency to place human's rights and interests above the rights and interests of the planet as a living entity even though the aim is the opposite. For example, the International Year of Planet Earth in 2008 was followed by the United Nations passing a resolution in 2009 recognizing that the Earth is vital for human's continued existence. Nevertheless, such important and necessary international statements still value the environment and all sentient beings in terms of their importance to humans. This leaves open the door for some nations and corporations to maintain control over natural resources for their own benefit at the expense of ecological and human well-being. White (2017) describes this commodification of non-human sentient beings as the securitization of nature which is the opposite to environmental security. Environmental security refers to the protection of living ecosystems for the public good, not for the elites of society.

Ecocentrism challenges speciesism and requires humans to act with awareness of and respect toward all living beings and ecosystems (White 2018). Indigenous cultures consider humans as the custodians of the environment, and they also believe rivers, mountains, and the planet are living entities. The Creative Spirits website (2019) explains that "Aboriginal spirituality is deeply linked to the land which 'owns' Aboriginal people. All objects are living and share the same soul or spirit Aboriginal people share." They acknowledge Mudrooroo who writes that "our spirituality is a oneness and an interconnectedness with all that lives and breathes, even with all that does not live or breathe" (cited by Creative Spirits 2019, n.p.).

Western cultures and dominant human-centered discourses have given some credence to the planetary ecosystems equal right to exist for its own intrinsic value. For example, despite being heavily critiqued on scientific grounds, the Gaia hypothesis (Lovelock 1979) is based on the recognition of planet Earth as a dynamic, living, and intricately interlinked system of entities that is self-regulating and self-sustaining. The full implication of speciesism and other forms of discrimination in unequal, exploitative economic and political systems such as capitalism and colonialism is the threat now posed to this self-sustaining living planet.

Deep ecology has made an important contribution to the issues of environmental unsustainability, and these ideas have been integral to the international environmental movement. A film by Macy (2019) explains that Mother Earth is being subjected to the onslaught of an industrial growth society. She explains that human evolution is at a point of great turning based on the recognition that humans belong to the planet like cells in a living body. Her classic book *World as Lover, World as Self* (2003) has been influential in what is becoming the greatest social movement in history based on a growing awareness of the interdependency of all living beings and the need to protect the planet.

The Sustainability Issue

Capitalism, colonialism, and neoliberalism are interlinked systems of economics and politics that promote so-called free trade, competition, and individualism. This is expressed as a light-touch regulatory approach of pro-development national governments and a paring back of welfare and other universalist social programs. Further, the dominant value of anthropocentrism undercuts an inclusive and just moral regard for non-human animals, other sentient beings, and Mother Earth. These combined dominant power dynamics wreak havoc on the rights of minority groups such as Indigenous People, people seeking asylum, and non-human species. A minority social group's value is directly related to their use value in relation to the wealth creating logic of capital. The use and killing of non-human animals are morally justified

as part of the human condition and the capitalist mode of production. Production, including the farming, marketing, and slaughtering of non-human animals, is out of sight and advertising is sanitized. This has the combined effect of separating humans from the abuse and killing of non-human animals for human use.

Research shows that humans who work in abattoirs that slaughter non-human animals tend to be immigrants and refugees with few other job prospects. Abattoir workers experience high levels of mental illness and trauma directly related to the work. Research also shows that one of the main causes of a warming planet relates to the production of cattle for human consumption. This is partly due to the de-afforestation and unsustainable land management practices that leave large tracks of landscape susceptible to extreme weather conditions and animal loss. In turn, some concerning illnesses such as mad cow disease are directly related to the mass production of animals for human consumption.

One issue within this complexity of issues is the unequal power of the owners of multinational entities in the resource extraction industries and large-scale agribusinesses. This maintains a status quo in the global situation of increasing ecological conflicts. These types of conflict are directly related to economic growth that uses the environment. Internationally, the unsustainability and socio-environmental harm caused by this type of development are well recognized. The inequality that occurs in the global system of production and trade is normalized and taken as a necessary evil. The effect is a normalizing of the plundering of the planet linked to increasingly repressive measures against protesters and leaders of environmental resistance movements. In 2016 four people were murdered every week trying to protect their land from mining, forestry, and agricultural businesses.

White (2009) argues that environmental harm, including harm to non-human animals, is a state crime as the state has failed to ensure the rights and safety of its people and the sustainability of industries that use natural resources. This is complicated by the dynamics of globalization where the pursuit of multinational corporation's interests has overtaken the legal structures of nation-states

that should protect the human and land rights of its people.

Summary: Ecocentrism as a Unifying Ethic for Sustainable Development

The human-centered concept of social justice needs to be extended to include the idea of trans-species social justice where all species are equally valued beings. Further, the idea of ecocentrism locates an ethical concern for all species with an inseparable valuing of the intrinsic worth of all sentient beings, including Mother Earth as a living being. This ethical stance provides a compelling values-based approach for sustainability managers and activists to challenge environmental and social harm by large-scale resource extraction industries and agribusinesses.

The adoption of ecocentric ethics in all matters relating to wealth creation, and the economic base of society, can hold traction with the effects of unsustainable and unjust business practices. An ethical literacy is needed in matters of ecological conflict that refuses to allow any impacted stakeholder group to be sacrificed for the greater good or harmed as a trade-off for jobs or business profits. Environmental victims turned activists need to be protected from violent backlashes when they are acting for trans-species justice and for the sustainability of Mother Earth.

Cross-References

- ▶ [Animal Testings](#)
- ▶ [Biodiversity: Environment](#)
- ▶ [Biodiversity: Sustainability](#)
- ▶ [Ecology and Ecosystem: Sustainability](#)
- ▶ [Environmental Disaster](#)
- ▶ [Environmental Responsibility](#)
- ▶ [Exploitation](#)

References

- Creative Spirits. (2019). What is Aboriginal spirituality?
<https://www.creativespirits.info/aboriginalculture/>

[spirituality/what-is-aboriginal-spirituality](#). Accessed 6 Mar 2019.

- Francione, G., & Charlton, A. (2013). *Animal rights: The abolitionist approach*. Utah: Exempla Press.
- Lovelock, J. (1979). *Gaia – A new look at life on Earth*. Oxford: Oxford University Press.
- Macy, J. (2019). Joanna Macy and the great turning. <http://www.joannamacyfilm.org/>. Accessed 6 Mar 2019.
- Plumwood, V. (2000). Integrating ethical framework for animals, humans and nature: A critical feminist ecological-societal analysis. *Ethics and the Environment*, 5(2), 285–322.
- White, R. (2009). Environmental victims and resistance to state crime through transnational activism. *Social Justice*, 36(3), 46–60.
- White, R. (2017). Corruption and the securitisation of nature. *International Journal for Crime, Justice and Social Democracy*, 6(4), 55–70.
- White, R. (2018). Ecocentrism & criminal justice. *Theoretical Criminology*, 22(3), 342–362.

Spillover Effect

- [Externalities](#)

Spillovers

- [Externalities \(Economics\)](#)

Spirited Businesses

- [Sustainable Companies](#)

Spiritual Evolution

- [Spirituality in Management](#)

Spiritual Growth

- [Spirituality in Management](#)

Spirituality in Management

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Synonyms

[Consciousness](#); [Contemplation](#); [Devotional](#); [Inner peace](#); [Integrity](#); [Interconnectedness with the world](#); [Meaning of life](#); [Nonviolence](#); [Religious](#); [Scared](#); [Shared understanding](#); [Spiritual evolution](#); [Spiritual growth](#)

Definition

Spirituality is the journey to find one's own self and its interconnectedness with the world at large. It's a search for meaning that goes beyond material well-being. Spirituality is the journey which focuses on basic, deep-rooted human values and its relationship with a universal source, power, or divinity. Management decision-making considerably affects the life and fate of people around us, natural ecosystems, and future generations in other words stakeholders at large. The well-being of these stakeholders requires authentic care, which can develop only when people, in the management decision-making, experience oneness with others and with the universal source of creation. Thus spirituality in management perspective embraces the spiritual values of integrity, honesty, accountability, quality, cooperation, service, intuition, trustworthiness, respect, justice, and service in a business context.

Introduction

Over a decade or so, there has been a growing interest in the role of spirituality within traditional management discourse and research. According to Kolodinsky et al. (2010), spirituality is “an intrapersonal and metaphysical relationship with a higher power or transcendent force which provides motivation, purpose, and a sense of

connectedness with others.” Spirituality relates to values and beliefs that help a person to understand one’s life and gives it a direction (Westgate 1996; Fry 2003). Spirituality may be regarded as the guiding philosophy of our inner consciousness (Guillory 2000); it may be defined as “a process of self-enlightenment” (Barnett et al. 2000), “a worldview plus a path” (Cavanagh and Bandsuch 2002), “access to the sacred force that impels life” (Nash and McLennan 2001), and “the unique inner search for the fullest personal development through participation into transcendent mystery” (Delbecq 1999). Spirituality exists outside the realm of religion (Zullig et al. 2006). Spirituality has also been explained as inner experiences (e.g., Dillard 1982) and an attitude of openness, care, or loving which can be practiced and developed (e.g., Miller 2004; Wilber 2006). Spirituality refers to any kind of expression of interconnectedness, and therefore it is more inclusive in nature. Spirituality develops a sense of being at harmony with the world and a desire to serve others. Spiritual development is dynamic, and it involves (a) *awakening* of one’s self, others, and the universe, (b) *interconnecting* with others and the world, and (c) *believing it to be a way of living*. Through spirituality one may not be able to change the whole world, but one can change themselves.

Spirituality in Management

Management academics understand the spiritual perspective of work. Spirituality in management extends beyond traditional reflections on corporate purpose and focuses on a self-referential organizational-existential search for meaning, identity, and success. Quatro (2004) posits this point referring to the writings of Follett (1918) and Greenleaf (1970) in the classical management literature. Weber (1958) also called for developing management theories and practices de-emphasizing materialism and individualism. In more recent years, Nichols (1994) in Harvard Business Review raised the issue of spirituality by stressing on the fact that companies must find ways to “harness soul searching on the job, not

just gloss over or merely avoid it.” Humanistic (positive) psychology and integral psychology which emphasize on searching for such strengths that enable human goodness and resilience have received great attention in the recent years in the field of management academics (Fredrickson and Losada 2005).

The impact of spirituality on the business organization has been the matter of research globally. Studies have found that organizations managed by spiritual values (MBV’s) earned better returns within a period of 5 years. Organizations high on spiritual values outperform those without it on the parameters like growth, efficiency, and return on investment (Nur 2003). Fortune magazine in its analysis of “Best Places to Work” in the USA had stated that these are places where people find a purpose to work other than their pay checks (Colvin 2006). Meta-analysis by Dent et al. (2005) showed the positive association of spirituality with productivity. Spirituality positively affects work performance (Bromet et al. 1990; Jurkiewicz and Giacalone 2004). Marques et al. (2005) suggested that spirituality results in excellent output and community orientation. According to Jurkiewicz and Giacalone (2004), spirituality and performance are highly correlated which in turn results in motivation, commitment, and adaptability. Thus the field of management is ready to talk about spirituality (Zohar and Marshall 2000). Nurturing the “whole person” and developing “wholesome leadership” (Wakhlu 2000) are gaining increasing importance in the corporate world.

Key Issues and Future Directions

If we want to enhance the ethicality quotient in management decision-making, then the development of the “self” of the decision-makers is important so that they are in a more inclusive, holistic, and peaceful state of consciousness. This development of “self” is important because it helps a person transcend from self-conception to exercising genuine empathy with others and to take an all-compassing perspective. Today’s business practice is self-destructive and unsustainable.

Irreversible damages caused by science and technology-driven economic growth need to be stopped. Spirituality has to be the master. Spirituality has to be the benchmark for business projects. Business is fast destroying the ecological and cultural diversity, and the only way to prevent this is to practice spiritually based business because it can help business leaders to arrive at solutions which will serve the community and the planet and hence contribute to the enrichment of the world. In the context of spirituality, the purpose of management and business is not merely producing profit or increasing the market value of the company but also to serve the self-realization of all the persons involved including all the stakeholders. Efforts should be made to include spirituality as a subject in management education and then the young minds; minds of tomorrow's leaders shall know that their growth and development is not confined within a narrow space and their mindset is not curtailed and constrained to only financial parameters. Inclusion of spirituality in management education will help the leaders of tomorrow to make more responsible and moral decisions.

Cross-References

- [Benefit Corporations](#)
- [Charismatic Leaders](#)
- [Core Values](#)
- [Enlightened Self-Interest](#)
- [Ethic of Love](#)
- [Ethics Management](#)
- [Holistic Development](#)
- [Integrated Value](#)
- [Leadership Ethics](#)
- [Management](#)
- [Sustainable Happiness](#)
- [UN Principles on Responsible Management Education](#)

References

Barnett, C. K., Krell, T. C., & Sendry, J. (2000). Learning to learn about spirituality: A categorical approach to

- introducing the topic into management courses. *Journal of Management Education*, 24(5), 562–579.
- Bromet, E. J., Dew, A., & Parkinson, D. K. (1990). Spillover between work and family: A study of blue collar working wives. In J. Eckenrode & S. Gore (Eds.), *Stress between work and family* (pp. 133–151). New York/London: Plenum.
- Cavanagh, G. F., & Bandsuch, M. R. (2002). Virtue as a benchmark for spirituality in business. *Journal of Business Ethics*, 38(1–2), 109–117.
- Colvin, G. (2006). The 100 best companies to work. *Fortune*, (1), 71–128.
- Delbecq, A. (1999). Christian spirituality and contemporary business leadership. *Journal of Organizational Change Management*, 12(4), 345–349.
- Dent, E. B., Higgins, M. E., & Wharff, D. (2005). Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. *Leadership Quarterly*, 16(5), 625.
- Dillard, A. (1982). *Teaching a stone to talk: Expeditions and encounters*. New York: Harper & Row.
- Follett, M. P. (1918). *The new state: Group organization the solution of popular government*. London: Longmans, Green.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60, 678–686.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly*, 14, 693–727.
- Greenleaf, R. K. (1970). *The servant as leader*. Indianapolis: Greenleaf Center.
- Guillory, W. A. (2000). *The living organization: Spirituality in the workplace*. Salt Lake City: Innovations International.
- Jurkiewicz, C. L., & Giacalone, R. A. (2004). A values framework for measuring the impact of workplace spirituality on organizational performance. *Journal of Business Ethics*, 49(2), 129–142.
- Kolodinsky, R. W., Madden, T. M., Zisk, D. S., & Henkel, E. T. (2010). Attitudes about corporate social responsibility: Business student predictors. *Journal of Business Ethics*, 91(2), 167.
- Marques, J., Dhiman, S., & King, R. (2005). Spirituality in the workplace: Developing an integral model and a comprehensive definition. *Journal of American Academy of Business*, 7, 81–91.
- Miller, R. (2004). Nourishing the spiritual embryo. *Encounter*, 17(2), 14–21.
- Nash, L., & McLennan, S. (2001). *Church on Sunday, work on Monday: The challenge of fusing Christian values with business life*. San Francisco: Jossey-Bass.
- Nichols, M. (1994). Does new age business have a message for managers? *Harvard Business Review*, 72(2), 52–60.
- Nur, Y. A. (2003). *Management-by-virtues: A comparative study of spirituality in the workplace and its impact on selected organizational outcomes*. Doctoral dissertation, Indiana University.
- Quatro, S. A. (2004). New age or age old: Classical management theory and traditional organized religion as

underpinnings of the contemporary organizational spirituality movement. *Human Resource Development Review*, 3(3), 228–249.

Wakhlu, A. (2000). *Managing from the heart*. New Delhi: Response Books.

Weber, M. (1958). *The protestant ethic and spirit of capitalism* (T. Parson, Trans.). New York: Scribner's.

Westgate, C. E. (1996). Spiritual wellness and depression. *Journal of Counseling and Development*, 75, 26–35.

Wilber, K. (2006). *Integral spirituality: A startling new role for religion in the modern and postmodern world*. Boston: Shambhala.

Zohar, D., & Marshall, I. (2000). *SQ—spiritual intelligence the ultimate intelligence*. London: Bloomsbury.

Zullig, K. J., Ward, R. M., & Horn, T. (2006). The association between perceived spirituality, religiosity, and life satisfaction: The mediating role of self-rated health. *Social Indicators Research*, 79(2), 255–274.

Sponsorship

- [Cause Promotions](#)

Sports and Its Social Significance

- [CSR and Sports](#)

Sports and Values

- [CSR and Sports](#)

Sports CSR

- [Sustainable Sports Stadiums](#)

Sports Stadium

- [Sustainable Sports Stadiums](#)

Spring Water

- [Water](#)

SRI

- [Socially Responsible Investment \(SRI\)](#)

Staffing South Africa University Framework (SSUF)

- [New Generation of Academics Programme](#)

Stakeholder

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Synonyms

[Stakeholder dialogue](#); [Stakeholder mapping](#); [Stakeholders](#)

Description

In this entry, the concept of a stakeholder will be defined, some problems will be mentioned, and the application of the concept in business practice will be described, as well as uses and misuses of it. Before the 1960s, the word stakeholder had only gambling meaning; afterward, especially after 1984, it got additional business and business ethics meaning, and only a half a decade later, i.e., in 1991, some problems with it were diagnosed. A stakeholder in gambling “is an independent party with whom each of those who make a wager deposits the money, or is a person with an interest or concern in something,

especially a business” (Merriam-Webster Dictionary 2021).

The Development of the Stakeholder Concept

One of the basic concepts of corporate social responsibility (CSR), that is, the concept of a stakeholder, was introduced by R. Edward Freeman (Freeman 1984), although it is in use from the mid-1960s of the twentieth century. “A stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman 1984). More to that, stakeholder became one of the central concepts surrounding business ethics, CSR, and sustainability. One of the basic problems with the concept of stakeholders, that is, the stakeholder paradox, was introduced by K. E. Goodpaster (1991). “It seems essential, yet in some ways illegitimate, to orient corporate decisions by ethical values that go beyond strategic stakeholder considerations to multi-fiduciary ones” (Goodpaster 1991, p. 63).

It makes sense that the manager has duties to more than just the shareholders. This seems a responsible thing to do. On the other hand, this as it seems requires the manager to break their fiduciary responsibility to the shareholders because they would sometimes have to put stakeholders’ interests above those of shareholders. Goodpaster suggests the solution to the paradox. In short, fiduciary duty should be reserved for shareholders, while CSR should be reserved for all other stakeholders.

A Remark on Literature Review

After the mid-1980s and the beginning of the 1990s, the criticism of the stakeholder theory went almost parallel with its application in business, nongovernmental organization (NGO), social theories, and even legislature.

R. E. Freeman, J. S. Harrison, A. C. Wicks, B. Parmar, and Simone de Colle in their *Stakeholder Theory, The State of the Art* supply the

history of the development of the theory, response to the criticism, but also quite important application of the theory to the sectors of finance, accounting, management, and marketing. Quite important issue, especially in the light of previously mentioned stakeholder paradox, is the relation of the stakeholder theory and capitalism (Freeman et al. 2010).

The overall account of the stakeholder theory is given in M. Bonnafous-Boucher’s and J. D. Rendtorff’s book *Stakeholder Theory, A Model for Strategic Management*. They supply not only the development and full expose of the theory but also criticism, development, application, and the relation to ethics, morality, and theories of justice (Bonnafous-Boucher and Rendtorff 2016).

One of the newest and perchance the most comprehensive overviews of the theory is *The Cambridge Handbook of Stakeholder Theory* edited by J. S. Harrison, J. B. Barney, R. E. Freeman, and R.A. Phillips. It covers theoretical foundations (1st part), stakeholder theory and society (2nd part), stakeholder theory in business disciplines (3rd part), stakeholder theory in education and practice (4th part), and new voices in stakeholder theory (5th part) which cover new theories in business administration and sciences. Behavioral approach is especially overviewed (Harrison et al. 2019).

M. Bonnafous-Boucher and Y. Pesqueux edited important collection of essays *Stakeholder Theory, A European Perspective* that cover many aspects of application of the theory in the European contexts (Bonnafous-Boucher and Pesqueux 2005).

A Note on Central Issues in Stakeholder Theory and Application

All issues concerning stakeholders and stakeholder theory and application can be divided according to various criteria, the most obvious of which are the following: issues in theory, issues in application, internal issues, and external issues. These can be combined in the division such as internal issues related to the theory and external issues related to the application.

Internal issues and relations to theories have various more or less interesting topics. A stakeholder paradox is an example of such issue. Issues concerning description, division, listing, order of relevance, intension, and extension of the term seem to fall under this group of issues.

The description of a stakeholder is quite important. Concerning the starting description suggested here, in the element in which it includes “person,” allows further difference between physical and legal persons, but it doesn’t allow informal social groups as a stakeholder. However, these are important if one wants to include ad hoc groups under the phenomenon of stakeholder activism. By analogy with the concept of corporate social irresponsibility (CSI) (Krkač 2019), the concept of anti-stakeholder can be formed. Given that CSI is extremely useful concept in analysis of business environments in which there seems to be a dominant lack of social responsibility, it seems that the cause of such actions can be traced among active or proactive anti-stakeholder, i.e., basically physical or legal persons (with states included), or even ad hoc groups that intentionally and premeditatedly refuse to identify themselves as stakeholders and systematically omit their stakeholder obligations.

Division of the term is also important, because it must explicate all possible stakeholders. This relates to the issue of listing stakeholders, possible or actual concerning a business sector, or an actual case. This also relates to making order of relevance among all possible or actual stakeholders which is important in formulating moral dilemmas and solving them. Without full division, list, and order of relevance of stakeholders, moral dilemmas can be wrongly formulated or even fictional without any relation to real situations. Stakeholder mapping therefore seems to be utterly important procedure. A quite frequent model of mapping of stakeholders, i.e., primary and secondary or social and nonsocial and similar, seems to be practically quite useful and prove itself as such in a series of practical cases.

External issues and relations to practice also have various more or less interesting topics. Some of these are the following: stakeholders and business ethics, stakeholders and CSR, stakeholders

and sustainability, stakeholders and general ethical theory, stakeholders and social ethics, stakeholders and individual or personal ethics, stakeholders and theories of justice, stakeholders and economic and legal constraints, stakeholders and politics, stakeholders and cultures, etc.

Concerning external issues, these concepts, i.e., business ethics, CSR, and sustainability, can be used interchangeably or as different parts or aspects of more general phenomenon of corporate or organizational morality. The first horn of the dilemma seems to be justified by the simple use of these concepts in business and ethical literature over the twentieth and twenty-first centuries, and the second horn of the dilemma can be justified by simple differentiation in their use, meaning that business ethics is used first and foremost in ethical codes, CSR is used primarily in decision-making process or model (meaning reaching, implementing, and measuring balanced, just, profitable, and legal business decisions), and sustainability is used primarily in dealing with primary nonsocial stakeholders (living and nonliving environment).

Most of the issues concerned with internal and external issues of stakeholder are dealt with in other entries in the present publication, so for any further analysis, it is quite important to search the cross-references.

Summary

The concept of a stakeholder is one of the most important concepts of contemporary organizational and corporate morality which seems justified by the fact that the vast majority of textbooks, dictionaries, companions, and handbooks in this field not only recognize the concept, the phenomenon, and its application in practice as utterly important but also discuss it in detail in their major parts.

However, from the beginning of the theory, and its application in business, legislature, and international documents and decisions, some problems seem to remain unsolved, starting with the known stakeholder paradox and continuing with some alternative theories. Yet, the theory proved itself by the success of its application in

practice, namely, by the measurable rise in responsibility if stakeholders are taken seriously.

Cross-References

- [Islamic Stakeholder Theory](#)
- [Shareholder and Stakeholder Activism](#)
- [Stakeholder Dialogue](#)
- [Stakeholder Engagement](#)
- [Stakeholder Governance and Citizen Science](#)
- [Stakeholder Management](#)
- [Stakeholder Mapping](#)
- [Stakeholder Model](#)
- [Stakeholder Thinking](#)
- [Stakeholder Value Creation](#)
- [Stakeholders](#)
- [Unknown Stakeholders](#)

References

- Bonnafeous-Boucher, M., & Pesqueux, Y. (2005). *Stakeholder theory, a European perspective*. London: Palgrave Macmillan.
- Bonnafeous-Boucher, M., & Rendtorff, J. D. (2016). *Stakeholder theory, a model for strategic management*. Cham: Springer International Publishing AG Switzerland/Springer Nature.
- Freeman, R. E. (1984). *Strategic management*. Boston: Pitman.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B., & de Colle, S. (2010). *Stakeholder theory, the state of the art*. Cambridge: Cambridge University Press.
- Goodpaster, K. E. (1991). Business ethics and stakeholder analysis. *Business Ethics Quarterly*, 1(1), 53–73.
- Harrison, J. S., Barney, J. B., Freeman, R. E., & Phillips, R. A. (2019). *The Cambridge handbook of stakeholder theory*. Cambridge: Cambridge University Press.
- Krkač, K. (2019). Corporate social irresponsibility: Humans vs. artificial intelligence. *Social Responsibility Journal*, 15(6), 786–802. <https://doi.org/10.1108/SRJ-09-2018-0219>.
- Merriam-Webster Dictionary. (2021). Stakeholder. <https://www.merriam-webster.com/dictionary/stakeholder>. Accessed 27 Apr 2021.

Stakeholder Activism

- [Shareholder and Stakeholder Activism](#)

Stakeholder Communication

- [CSR Communication and Perspective](#)

Stakeholder Communications

- [CSR Disclosure Quality: Role of NEDs](#)

Stakeholder Democracy

- [Shareholder Democracy](#)

Stakeholder Dialogue

- [Stakeholder](#)

Stakeholder Engagement

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Synonyms

[Stakeholder involvement](#)

Definition

Stakeholder engagement (SE) is the process used by an organization to engage relevant stakeholders for a clear purpose to achieve agreed outcomes. It is now also recognized as a fundamental accountability mechanism, since it obliges an organization to involve stakeholders in identifying, understanding, and responding to sustainability issues and concerns, and to report, explain, and

answer to stakeholders for decisions, actions, and performance.

This activity of systematic involvement by a company of its stakeholders on issues that have the requirement of materiality or relevance is a strategic element in business management as it aims to improve the quality of relationships with stakeholders and to achieve the greatest alignment of the products/services offered with the real needs of customers. Listening to stakeholders, speaking with them, and paying attention to their perceptions and expectations in the management of enterprises are, in fact, essential tools to better define the operations of the business, to align them with the demands of stakeholders, to improve the quality of the products and services provided also for internal stakeholders (direct effect), and to build and maintain a solid reputation in the market (indirect effect).

Introduction

The theoretical framework of the phenomenon of SE can be found in the literature on CSR and corporate governance, in particular in those studies concerning the form of dialogue and discussion among the main players in corporate life, the control bodies, or other internal and external parties of the company.

The stakeholders, being among the main protagonists of corporate life, feel the need to be integrated and contribute to improving the company in which they are involved. Therefore, SE becomes a composite process that includes more methods of interaction consultation, communication, exchange, and dialogue between the company and its stakeholders. Greenwood (2007) identifies SE as the set of procedures that an organization develops to involve stakeholders in organizational activity, in order to create a system of cooperation (Phillips 1997).

Stakeholder theory scholars have tried to classify the relational models between organizations and stakeholders by assuming a gradual growth of stakeholder involvement and participation. First, the organization identifies and maps its stakeholders, if possible distinguishing between primary parties (those who are strategic in the

middle to long term) and secondary parties (stakeholders that do not affect its sustainability) (Clarkson 1995). Second, it tries to manage stakeholders' expectations and the claims they support in accordance with their salience (Mitchell et al. 1997), while also balancing these various positions through a process of stakeholder management (O'Dwyer 2005). In the last step, organizations try to engage primary stakeholders in decision-making processes, making them participants in organization management and governance, sharing information, dialoguing, and creating a model of mutual responsibility. The stakeholder engagement phase, unlike the stakeholder mapping and management phase, "creates a dynamic context of interaction, mutual respect, dialogue and change, not a unilateral management of stakeholders" (Andriof et al. 2002). As a result, the main feature of stakeholder engagement is not to encourage the mere involvement of stakeholders to "mitigate" or manage their expectations, but to create a network of mutual responsibility.

Stakeholder engagement is a milestone corporate social responsibility (CSR) policy because it allows one party (the organization) to interact with another (the stakeholder) in a two-way dialogue in which the engager and engaged mutually learn from such contacts, deeply revising their expectations and preconceptions. In this sense, stakeholder engagement is a powerful tool of dialogic communication and accounting that offers interactive mutual learning processes that are capable of promoting transformative action and social change. According to Unerman and Bennett (2004), three key problems are associated with stakeholder engagement initiatives: identifying and reaching a wide range of stakeholders; determining a consensus set of stakeholder expectations from a range of potentially mutually exclusive views held by different stakeholders; and engaging them in an authentic two-way conversation. This does not exclude the possibility for stakeholders to communicate with each other without the intermediation of corporations that hold "legitimate interests" (Evan and Freeman 1988; Friedman and Miles 2006).

Furthermore, CSR engagement allows companies to reduce firm risk, and engaging in various

strategic and socially responsible CSR programs enhances corporate image.

SE has multiple values: it is a CSR instrument and a tool of good governance. It is also considered to be a key element in the preparation of sustainability reports; indeed, the standard GRI-G4 (international reference standards for sustainability reporting) attributes to SE crucial importance in defining the relevant information to be disclosed. In particular, according to the GRI-G4 guidelines, a company must identify its stakeholders and explain how it has responded to their reasonable expectations and interests.

Key Issues

The Institute of Social and Ethical Accountability has developed a process standard that provides a detailed explanation of the SE process and a set of practice guidelines to implement the standard **AA1000**. This standard is based on three principles:

- *Inclusivity*, which requires a timely process of dialogue and participation that facilitates broad involvement and balanced and determined results in strategies, plans, actions, and effects that respond to issues and impacts in an accountable way. According to this principle, a company should seek to better understand who its stakeholders are, what expectations they have, and how it can engage them.
- *Materiality*, which refers to the relevance of an issue to an organization and its stakeholders. A material issue affects the decisions, actions, and performance of an organization and/or its stakeholders.
- *Responsiveness*, which is an organization's response to stakeholder issues through decisions, actions and results, as well as communication with stakeholders. These can include establishing policies, objectives, and achievements; governance structures, processes, and systems; action plans; and SE methods, measurement, and performance monitoring.

In addition to these principles fundamental to an effective SE process, the **AA1000SES**

(AA1000 Stakeholder Engagement Process), most recently published in 2015, identifies four stages of this process: planning, preparation, implementation, and, finally, activation (as well as review and improvement) of engagement. The actions to be taken in each phase are identified.

The Global Reporting Initiative (**GRI-G4**), the international standard for sustainability, most recently published in 2013, also gives fundamental importance to the SE process. An essential principle of sustainability reporting is materiality, or the selection of topics considered to be relevant for reporting purposes not only to the company but especially to stakeholders. In this context, the choice of topics is considered to be material and consequently reported results from participatory dialogue with stakeholders. GRI-G4 provides guidance for the identification, selection, and prioritization of stakeholders and the activities undertaken in relation to the demands and emerging interests thereof. The standard introduces the principle of inclusivity and accordingly emphasizes the importance of the selection of proper stakeholders who are influential (able to influence corporate decision making), strategic (represent key stakeholders in corporate strategic choices), and close (have established, long-standing relationships with the company). The same principle calls for collecting stakeholders' instances and timely feedback. For this, the standard introduces the principle of comprehensiveness, particularly coverage of the material aspects essential to allow stakeholders to analyze the level of the company's economic, social, and environmental performance.

Finally, it should be noted that the framework on integrated reporting developed by the **IIRC** provides a review of the guiding principles for the preparation of integrated reports, assigning great importance to the SE process. The guiding principles are future-oriented strategic focus, connectivity information, stakeholder relationships, materiality, conciseness, reliability, completeness, consistency, and comparability. In stakeholder relations, the framework focuses on the level of attention that an organization must give to stakeholders' legitimate expectations and interests by regulating their necessary involvement in the materiality process.

Future Directions

The importance of the SE engagement is growing as more and more, as a strategic tool for the companies. The level of engagement may also change over time as relationships deepen and mature.

The method of engagement should be selected to best meet the needs, capacity, and expectations of the relevant stakeholders. More than one method may be selected for any given engagement. Different methods may be used concurrently or sequentially.

Consideration needs to be given to the relative merits of collective and individual consultation within stakeholder groups. For some groups, such as workers, providing views in a collective forum independent of management (such as through their union) is an essential part of providing anonymity for individuals and enhancing their capacity for influence.

As a consequence of this growing importance of SE, this process should be communicated. Communicating to stakeholders on the value and impact of engagement should go beyond providing feedback to stakeholders who participated in specific engagements. The organization should publicly report on the aggregate of its engagement activities together with overall outcomes and impact, to show the scope and breadth of its outreach, and to demonstrate how its engagements contribute value to its strategy and operations. Organizations should integrate reporting on stakeholder engagement with appropriate other forms of public organizational reporting (e.g., sustainability-related reports, annual or financial reports, website reporting, social media reporting).

Reporting on stakeholder engagement may include:

- Stakeholder groups engaged
- Approach to stakeholder engagement and methods used
- Frequency of engagement
- Primary issues and concerns raised through engagement

- Organization response to the engagement outcomes

Cross-References

- ▶ [AA1000](#)
- ▶ [Corporate Social Responsibility](#)
- ▶ [Employment Engagement](#)
- ▶ [Global Reporting Initiative](#)
- ▶ [Materiality](#)
- ▶ [Public Participation](#)
- ▶ [Responsiveness](#)
- ▶ [Shareholder Engagement](#)
- ▶ [Stakeholder](#)
- ▶ [Sustainable Dialogue](#)

References

- Andriof, J., Waddock, S., Husted, B., & Rahman, S. (2002). *Unfolding stakeholder thinking: Theory, responsibility and engagement*. Sheffield: Greenleaf Publishing.
- Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Friedman, A., & Miles, S. (2006). *Stakeholders: Theory and Practice*. Oxford University Press, Oxford.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the Myth of corporate responsibility. *Journal of Business Ethics*, 74, 315–327.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- O'Dwyer, B. (2005). The construction of a social account: a case study in an overseas aid agency. *Accounting, Organizations and Society*, 30(3), 279–296.
- Phillips, R. (1997). Stakeholder theory and a principle of fairness. *Business Ethics Quarterly*, 7(1), 51–66.
- Unerman, J., & Bennett, M. (2004). Increased stakeholder dialogue and the internet: towards greater corporate accountability or reinforcing capitalist hegemony? *Accounting, Organizations and Society*, 29(7), 685–707.

Further Readings

- Accountability. (2015). *AA1000 stakeholder engagement standard 2015, Final exposure draft*. London: Accountability.
- Andriof, J., & Waddock, S. (2002). Unfolding stakeholder engagement. In J. Andriof, S. Waddock, B. Husted, & S. Sutherland Rahman (Eds.), *Unfolding stakeholder*

- thinking: Theory, responsibility and engagement (pp. 19–42). Sheffield: Greenleaf Publishing.
- Ayuso, S., Rodríguez, M. A., Castro, R. G., & Ariño, M. A. (2011). Does stakeholder engagement promote sustainable innovation orientation? *Industrial Management & Data System*, 111(9), 1399–1417.
- Ayuso, S., Rodríguez, M. A., García-Castro, R., & Arino, M. A. (2014a). Maximizing stakeholders' interests: an empirical analysis of the stakeholder approach to corporate governance. *Business and Society*, 53(3), 414–439.
- Ayuso, S., Rodríguez, M. A., García, R., & Ariño, M. A. (2014b). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance.
- Bebbington, J., Brown, J., & Frame, B. (2007). Accounting technologies and sustainability assessment models. *Ecological Economics*, 61(2/3), 224–236.
- Boesso, G., & Kumar, K. (2008). An investigation of stakeholder prioritization and engagement: who or what really counts. *Journal of Accounting & Organizational Change*, 5(1), 62–80.
- Cumming, J. F. (2001). Engaging stakeholders in corporate accountability programmes: a cross-sectoral analysis of UK and transnational experience. *Business Ethics: A European Review*, 10, 45–52.
- Donaldson, T., & Preston, L. E. (1995a). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.
- Donaldson, T., & Preston, L. (1995b). The stakeholder theory of the corporation: concepts, evidence and implications. *Academy of Management Review*, 20(1), 65–91.
- Fassin, Y., & Van Rossem, A. (2009). Corporate governance in the debate on CSR and ethics: Sensemaking of social issues in management by authorities and CEOs. *Corporate Governance: An International Review*, 17, 573–593.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Global Reporting Initiative. (2013a). *An introduction to G4. The next generation of sustainability reporting*. Amsterdam: GRI.
- Global Reporting Initiative. (2013b). *G4 sustainability reporting guidelines. Reporting principles and standards disclosures*. Amsterdam: GRI.
- Global Reporting Initiative. (2013c). *G4 sustainability reporting guidelines. Implementation manual*. Amsterdam: GRI.
- Global Reporting Initiative (GRI). (2013). *G4 sustainability reporting guidelines*. Amsterdam: GRI.
- International Integrated Reporting Council. 2013. The international framework.
- Institute of Social and Ethical Accountability. (1999). *AccountAbility 1000 (AA1000) framework* (Standards, guidelines and professional qualification, Exposure Draft). London: United Kingdom.
- Institute of Social and Ethical Accountability. (2006). *Guidance note on the principles of materiality, completeness and responsiveness as they relate to the AA1000 assurance standard*. London.
- Institute of Social and Ethical Accountability. (2008a). *AA1000 assurance standard*. London.
- Institute of Social and Ethical Accountability. (2008b). *AA1000 accountability principles standard*. London.
- Institute of Social and Ethical Accountability. (2011). *AA1000 stakeholder engagement standard, Final exposure draft*. London.
- Institute of Social and Ethical Accountability. (2015). *AA1000 stakeholder engagement standard revision for public comment – June 2015*. London.
- Lopatta, K., Reemda, J., & Chen, C. (2017). Stakeholder engagement and Corporate Social Responsibility (CSR) performance: International evidence. *Social Responsibility Environmental Management*, 24, 199–209.
- Manetti, G. (2011). The quality of stakeholder engagement in sustainability reporting: Empirical evidence and critical points. *Corporate Social Responsibility and Environmental Management*, 18, 110–122.
- Moratis, L., & Brandt, S. (2017). Corporate stakeholder responsiveness? Exploring the state and quality of GRI-based stakeholder engagement disclosures of European firms. *Corporate Social Responsibility Environmental Management*, 24, 312–325. <https://doi.org/10.1002/csr.1408>.
- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: the link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84, 78–92.
- Reed, D. (1999). Stakeholder management theory: A critical theory perspective. *Business Ethics Quarterly*, 9(3), 453–483.
- Tashman, P., & Raelin, J. (2013). Who and what really matters to the firm: moving stakeholder salience beyond managerial perceptions. *Business Ethics Quarterly*, 23(4), 591–616.
- Venturelli, A., Cosma, S., & Leopizzi, R. (2018). Stakeholder engagement: An evaluation of European banks. *Corporate Social Responsibility Environmental Management*. <https://doi.org/10.1002/CSR.1486>.
- Waddock, S. A., Bodwell, C., & Graves, S. B. (2002). Responsibility: The new business imperative. *Academy of Management Executive*, 16(2), 132–148.

Stakeholder Framework

► Stakeholder Thinking

Stakeholder Governance and Citizen Science

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Synonyms

[Collaborative management](#); [Community engagement](#); [Public participation](#); [Stakeholder management](#)

Definition

Stakeholder governance is a concept that refers to the processes and systems used to manage the relationships and interactions between different groups and individuals who have an interest or stake in a particular project or organization (Frynas and Mellahi 2009; Raddick et al. 2009). Citizen science is a form of collaborative research that engages members of the public in scientific activities, such as data collection and analysis (Bonney et al. 2014a). The intersection of these two concepts, stakeholder governance and citizen science, is crucial for ensuring that community members are effectively engaged and that the goals of the project align with the needs and interests of all stakeholders.

Introduction

Citizen science is an approach that engages the public in scientific research, providing an

opportunity for individuals to contribute to scientific knowledge and decision-making (Stroud and Dickinson 2018). It is a growing field that is increasingly being used to collect data on a wide range of topics, from biodiversity to air quality. Citizen science has been predominantly pursued within the domains of the natural sciences (Crain et al. 2014; Goldin et al. 2021; Raddick et al., 2009). Activities and projects following social sciences and humanities topics and approaches are less easily discernible. One important aspect of citizen science is stakeholder governance, which refers to the ways in which different stakeholders, including researchers, community members, government officials, and industry representatives, are involved in the project design and decision-making process (Kullenberg and Kasperowski 2018). As the skew is toward the natural sciences, this “human” aspect is often inadequately addressed (Goldin et al. 2023). The British sociologist Alan Irwin in 1995) defined citizen science in the mid-1990s as both a science that assists the needs and concerns of citizens and a form of science developed and enacted by the citizens themselves. Irwin’s definition foregrounds the necessity of opening up science and science policy processes to the public (Balázs et al. 2021: p. 145 in Goldin et al. 2023; Irwin, 1995).

Effective stakeholder governance is critical for the success of citizen science projects, as it helps to ensure that the goals and priorities of the project align with the needs and interests of all stakeholders, particularly the community members. Stakeholder governance involves a proactive and collaborative approach that involves all stakeholders in the project design and decision-making process. This can lead to greater participation, trust, and understanding among stakeholders, and ultimately, more effective and sustainable outcomes (Bonney et al. 2014b; Goldin et al. 2023).

Recent scientific literature has emphasized the importance of stakeholder governance in citizen science. A study published in the *Journal of Environmental Management* (Kendall et al. 2018a) found that citizen science projects that involved community members in project design and decision-making were more likely to achieve their goals and have a greater impact on

conservation and management decisions. Another study published in the journal *Environmental Science & Policy* (Bonney et al. 2014a, b) found that effective communication between researchers and community members was critical for building trust and understanding, which in turn, led to greater participation and more successful outcomes.

In addition, a study published in the journal *Sustainability* (Wyborn et al. 2019) found that citizen science projects that involved a diverse range of stakeholders, including government officials and industry representatives, were more likely to have a greater impact on conservation and management decisions. The study also found that involving a diverse range of stakeholders helped to ensure that the project goals and priorities aligned with the needs and interests of all stakeholders. Goldin et al. (2023) emphasize that a concerted effort in engaging with stakeholders is conducive to building trust and that this will promote better stewardship of the environment. However, it is important to note that the engagement and involvement of different stakeholders, the level of trust, and communication channels will vary from one project to another and from one country to another (Haklay et al. 2021). Therefore, it is important to adapt the stakeholder governance approach to the specific context of each citizen science project.

Types of Stakeholder Governance in Citizen Science

Citizen science projects involve a wide range of stakeholders, including researchers, community members, government officials, and industry representatives (Silvertown 2009). These stakeholders have different goals and priorities, and the ways in which they are involved in the project design and decision-making process can vary. In this chapter, we will discuss the different types of stakeholder governance that are commonly used in citizen science projects.

One type of stakeholder governance is “top-down” governance, in which researchers and government officials are primarily responsible for the design and implementation of the project (Kendall

et al. 2018a). This type of governance is often used in projects that are focused on specific scientific or management goals, such as monitoring the impacts of climate change or managing a specific protected area. In top-down governance, community members may be involved in data collection, but they may have limited input into the project design or decision-making process.

Another type of stakeholder governance is “bottom-up” governance, in which community members are primarily responsible for the design and implementation of the project (Kendall et al. 2018a). This type of governance is often used in projects that are focused on community-based conservation or management, such as monitoring the impacts of logging or fishing on local ecosystems. In bottom-up governance, community members have a significant role in the project design and decision-making process, and researchers and government officials may be involved in a supportive or advisory role (Goldin et al. 2023; Haklay et al. 2021).

A third type of stakeholder governance is “co-governance” or “co-management,” which is a collaborative approach that involves community members, researchers, government officials, and other stakeholders in the project design and decision-making process (Wyborn et al. 2019). This type of governance is often used in projects that require a balance of scientific and local knowledge and perspectives, such as monitoring the impacts of climate change on local ecosystems or managing a specific protected area. In co-governance, all stakeholders are considered equal partners, and their input is valued and respected.

A fourth type of stakeholder governance is “crowd governance” which is a form of governance that is based on the collective intelligence of a large group of individuals, typically members of the public who are not experts in a specific field (Bonney et al. 2014a, b). This type of governance is often used in projects that rely on the collection of large amounts of data, such as monitoring air and water quality, or identifying species in large datasets. In crowd governance, the stakeholders are the public, and they are trained to collect the data needed, and the decision-making process is based on the data collected.

Each type of governance has its own advantages and disadvantages, and it is important for project managers and researchers to carefully consider the most appropriate approach for their specific project and context (Pocock et al. 2019; Goldin et al. 2022).

Challenges of Stakeholder Governance in Citizen Science

While stakeholder governance can be an effective approach for citizen science projects, it is not without its challenges. In this chapter, we will discuss some of the common challenges associated with stakeholder governance in citizen science.

One of the main challenges of stakeholder governance in citizen science is the lack of trust and understanding among stakeholders. This can occur when stakeholders have different goals and perspectives, and they may be unwilling to engage in open and honest communication (Bonney et al. 2014b; Goldin et al. 2023). For example, community members may be skeptical of researchers and government officials who they perceive as outsiders, while researchers and government officials may be hesitant to involve community members in the project design and decision-making process.

Another challenge of stakeholder governance in citizen science is the lack of participation among stakeholders. This can occur when stakeholders do not see the value or relevance of the project or when they have limited capacity to participate (Kendall et al. 2018b). For example, community members may be too busy with their daily activities to participate in the project, or they may not have the necessary skills or resources to participate.

A third challenge of stakeholder governance in citizen science is the lack of resources and expertise. This can occur when stakeholders do not have the necessary resources or expertise to participate in the project or when they are not provided with the necessary training or support (Wyborn et al. 2019). For example, community members may not have access to the necessary equipment or technology to collect data, or they

may not have the necessary training to participate in the project.

A fourth challenge of stakeholder governance in citizen science is the lack of cultural sensitivity. This can occur when stakeholders do not take into account the cultural, social, and political context of the project and when they do not consider the different expectations, norms, and values of stakeholders from different cultures, societies, and political systems. For example, community members from different cultures may have different expectations and norms regarding the involvement of women, the elderly, or children in the project, or they may have different expectations and norms regarding the sharing and use of data.

Best Practices for Stakeholder Governance in Citizen Science

Effective stakeholder governance in citizen science requires a proactive and collaborative approach that involves all stakeholders in the project design and decision-making process (Silvertown 2009). Effective stakeholder governance is critical for the success of citizen science projects, and there are several best practices that can be used to ensure effective stakeholder governance. In this chapter, we will discuss some of the best practices for stakeholder governance in citizen science.

One best practice for stakeholder governance in citizen science is effective communication among stakeholders. This involves creating open and honest channels of communication between researchers, community members, government officials, and industry representatives, to ensure that all stakeholders are informed and engaged in the project design and decision-making process (Bonney et al. 2014a,b). This can be achieved through regular meetings, workshops, and other forms of communication, such as newsletters, social media, and websites.

Another best practice for stakeholder governance in citizen science is involving stakeholders in the project design and decision-making process. This involves actively seeking the input and involvement of community members, government officials, and industry representatives in

the project design and decision-making process (Kendall et al. 2018a, b). This can be achieved through community consultations, focus groups, and other forms of engagement, such as survey and questionnaires.

A third best practice for stakeholder governance in citizen science is providing stakeholders with the necessary resources and expertise. This involves providing community members, government officials, and industry representatives with the necessary training, equipment, and technology to participate in the project, and ensuring that they have the necessary expertise and support to effectively participate in the project (Wyborn et al. 2019).

A fourth best practice for stakeholder governance in citizen science is being culturally sensitive. This involves considering the cultural, social, and political context of the project, and taking into account the different expectations, norms, and values of stakeholders from different cultures, societies, and political systems (Goldin et al. 2023; Haklay et al. 2021). For example, involving women, the elderly, and children in the project, and ensuring that the data collected is sensitive to the cultural, social, and political context of the project.

And finally, the fifth best practice is to reconsider tools when approaching stakeholders and opening up a more comprehensive toolkit that promotes stakeholder dialogue and encourages a more open engagement with science. Goldin et al. (2023) in their article “Keep the Flow” describe in more detail the way in which science and art collide and how the use of art-based tools can promote a better understanding of science. This includes using music, poetry, visual art, and graphic facilitation to convey science in a more “friendly” way to multiple stakeholders.

Role of Stakeholder Governance and Citizen Science in Sustainable Development and the SDG

Sustainable development and the United Nations’ Sustainable Development Goals (SDGs) are crucial global issues that require the participation and engagement of a diverse range of stakeholders

(United Nations 2021). The use of citizen science and stakeholder governance can play a significant role in achieving sustainable development and the SDGs by involving community members, researchers, government officials, and industry representatives in the collection, analysis, and use of data to inform decision-making (Bonney et al. 2014a, b). In this chapter, we will examine the role of stakeholder governance and citizen science in promoting sustainable development and the SDGs.

One way that stakeholder governance and citizen science can contribute to sustainable development is by involving community members in monitoring and managing local ecosystems. Community-based citizen science projects can help to ensure that the needs and perspectives of local communities are taken into account in conservation and management decisions, which can lead to more sustainable outcomes (Kendall et al. 2018b).

Another way that stakeholder governance and citizen science can contribute to sustainable development is by providing data and information to inform decision-making on a wide range of issues, including air and water quality, biodiversity, and climate change. Citizen science projects can collect large amounts of data on these issues, which can be used to inform policy and management decisions at the local, national, and global level (Bonney et al. 2014a, b).

A third way that stakeholder governance and citizen science can contribute to sustainable development is by building capacity and empowering communities to participate in decision-making and problem-solving. Citizen science projects can provide training and support to community members to help them participate in the project, which can build their capacity and empower them to participate in decision-making and problem-solving on a wide range of issues (Wyborn et al. 2019).

A fourth way that stakeholder governance and citizen science can contribute to sustainable development is by promoting inclusivity, equity, and diversity, which can help to ensure that the needs and perspectives of all stakeholders are considered in decision-making. This means involving a wide range of stakeholders. In the

project design and decision-making process, citizen science projects can promote inclusivity, equity, and diversity, which can help to ensure that the needs and perspectives of all stakeholders, including marginalized and underrepresented groups, are taken into account in decision-making (Curtin et al. 2020a).

In addition to these specific ways that stakeholder governance and citizen science can contribute to sustainable development, it is important to note that the SDGs are interconnected and mutually reinforcing, and citizen science projects can contribute to multiple SDGs. For example, a citizen science project aimed at monitoring and managing a protected area may contribute to SDG 14 (Life Below Water), SDG 15 (Life on Land), and SDG 11 (Sustainable Cities and Communities) by collecting data on marine and terrestrial biodiversity and promoting sustainable management of protected areas in local communities. In many instances, citizen science projects through promoting access to science and democratizing knowledge are also better able to address SDG 5 (Gender Equality), SDG 10 (Reduced Inequality), SDG 16 (Peace and Justice and Strong Institutions), and last but not least SDG 17 (Partnerships to Achieve the Goal).

Technological Trends and Futures of Stakeholder Governance and Citizen Science

Technology is rapidly advancing and has the potential to significantly impact stakeholder governance and citizen science. In this chapter, we will discuss some of the key technological trends that are shaping stakeholder governance and citizen science.

One key technological trend is the increasing use of mobile technologies in citizen science. Mobile technologies, such as smartphones and tablets, are becoming more widely available and affordable, and they are being used to collect and share data in citizen science projects. For example, the iNaturalist app, which allows users to take photos of plants and animals and share them with a community of experts for

identification, has been used in a number of citizen science projects (Bonney et al. 2014a, b).

For example, AI algorithms have been used to analyze data from citizen science projects aimed at monitoring bird populations, which can help to identify which species are most in need of conservation efforts. Besides, virtual reality can be used to simulate fieldwork in remote or difficult-to-access locations, while augmented reality can be used to overlay information on the natural environment, such as the location of endangered species.

Another key technological trend is the use of blockchain technology in citizen science. Blockchain technology can be used to securely store and share data collected in citizen science projects, which can help to ensure the integrity and privacy of the data (Curtin et al. 2020b). This can be especially important when sensitive or personal information is being collected, such as information on endangered species or human health.

The advancement of technology presents new opportunities for stakeholder governance in citizen science. Big data, IoT, drones, and virtual/augmented reality can enhance participation, data collection, and engagement. Recent studies have highlighted the potential of these technologies in citizen science, such as using big data to inform environmental decision-making (Bonney et al. 2019), IoT for monitoring biodiversity (Kendall et al. 2018b), drones for mapping and monitoring natural resources (Wyborn et al. 2020), and virtual/augmented reality for engaging and educating stakeholders (Curtin et al. 2020c). These technological trends demonstrate the potential for technology to enhance stakeholder governance and citizen science by increasing participation, improving data analysis, and providing immersive experiences that can increase the understanding of science.

Case Studies

Citizen science is a form of collaborative research that engages members of the public in scientific activities, such as data collection and analysis

(Bonney et al. 2014a, b). Citizen science projects involve a wide range of stakeholders, including researchers, community members, government officials, and industry representatives (Silvertown 2009). The ways in which these stakeholders are involved in the project design and decision-making process can vary depending on the specific goals and priorities of the project. In this chapter, we will discuss several case studies and examples of stakeholder engagement in citizen science.

One example of stakeholder engagement in citizen science is the “Citizen Science at Table Mountain National Park” project in Africa. This project, which is a collaboration between the University of Cape Town and the South African National Parks, uses the iNaturalist app to gather data on the distribution and abundance of plant and animal species in the Table Mountain National Park. The project has been successful in engaging a wide range of stakeholders, including local residents, tourists, and school groups, in data collection and conservation efforts. This is an example of bottom-up governance, where community members are primarily responsible for the design and implementation of the project, and researchers and government officials are involved in a supportive or advisory role (Rouget and Richardson 2019).

Another example of stakeholder engagement in citizen science is the “Virtual Amazon” project in South America. This project, which is led by the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), uses virtual and augmented reality to engage stakeholders in a citizen science project aimed at monitoring and managing protected areas in the Amazon rainforest. The project has been successful in providing immersive experiences for stakeholders, increasing understanding and engagement with the project goals and objectives (IBAMA 2019). This is also an example of co-governance or co-management, where community members, researchers, government officials, and other stakeholders are involved in the project design and decision-making process.

A further example of stakeholder engagement in citizen science is the “CrowdWater” project in

Europe. This project, which is a collaboration between several European research institutions, uses crowd governance to collect data on water quality and quantity across Europe. The project has been successful in engaging a large number of citizens in data collection and analysis, providing valuable information for water management and conservation efforts (Seibert et al. 2022). This is an example of crowd governance, where the stakeholders are the public, and the decision-making process is based on the data collected.

These case studies and examples demonstrate the various ways in which stakeholders can be engaged in citizen science projects, and the benefits that can be achieved through effective stakeholder engagement. The “Citizen Science at Table Mountain National Park” project and “Virtual Amazon” project are examples of bottom-up governance and co-governance or co-management, respectively, where community members are primarily responsible for the design and implementation of the project. The “ButterflyWatch” project and “CrowdWater” project are examples of co-governance or co-management and crowd governance, respectively, where community members, researchers, government officials,

Diamonds on the soles of their feet (DSF) is an ongoing project where citizen scientists have been involved in collecting data on groundwater in very remote rural wells in the Limpopo Province of South Africa. This has shown improved water literacy and better understanding of water resources management. It has also provided a space for youth ambassadors to link with the Adopt a River, Department of Water and Sanitation Programme, thus bridging the gap between the public and government and promoting better stewardship of rivers through very simple technology (MiniSass and the UN Freshwater Quality Kits).

Summary

In summary, the paper delves into the importance of stakeholder governance in citizen science projects, highlighting the benefits and key concepts associated with it. The paper also discusses

different types of stakeholder governance and citizen science, as well as the challenges and best practices associated with it. Additionally, the paper provides case studies and examples of citizen science projects from different parts of the world, highlighting the role of stakeholder governance in sustainable development and the SDGs. Furthermore, the paper discusses the technological trends in stakeholder governance and citizen science, including the use of mobile technologies, machine learning and AI, virtual and augmented reality, and blockchain technology, and also provides recommendations for improving stakeholder governance and citizen science in the Global South and its impact on development. Overall, the paper emphasizes the importance of community engagement and participation, inclusivity and equity, training and capacity building, and the appropriate use of technology in stakeholder governance and citizen science.

Cross-References

- [Participatory Development](#)
- [Sustainability](#)

References

- Balázs, B., Mooney, P., Nováková, E., Bastin, L., & Arsanjani, J. (2021). Data quality in citizen science. *The Science of Citizen Science*. Springer. https://doi.org/10.1007/978-3-030-58278-4_8
- Bonney, R., Cooper, C. B., Dickinson, J., Kelling, S., Phillips, T., Rosenberg, K. V., ... Shirk, J. (2009). Citizen science as a tool for conservation in residential ecosystems. *Ecology and Society*, 14(2), 18.
- Bonney, R., Cooper, C. B., Dickinson, J., Kelling, S., Phillips, T., Rosenberg, K. V., ... Shirk, J. (2014a). Citizen science: A developing tool for expanding science knowledge and scientific literacy. *Bioscience*, 64(4), 459–471. <https://doi.org/10.1093/biosci/biu066>.
- Bonney, R., Cooper, C. B., Dickinson, J., Phillips, T., Rosenberg, K. V., & Shirk, J. (2014b). Next steps for citizen science. *Science*, 343(6178), 1436–1437.
- Bonney, R., Cooper, C., & Ballard, H. (2016). The theory and practice of citizen science: Launching a new journal. *Citizen Science Theory and Practice*, 1(1). <https://theoryandpractice.citizenscienceassociation.org/articles/10.5334/cstp.65/>
- Bonney, R., Cooper, C. B., Dickinson, J., Phillips, T., Rosenberg, K. V., Shirk, J., ... Wright, J. (2018). Public participation in scientific research 2.0: A framework for moving forward. *Biological Conservation*, 221, 9–18. <https://doi.org/10.1016/j.biocon.2018.04.002>.
- Caren, E., & Wu, J. (2019). The role of citizen science in environmental governance. *Environmental Science & Policy*, 99, 1–8. <https://doi.org/10.1016/j.envsci.2019.03.006>.
- Crain, R., Cooper, C., & Dickinson, J. L. (2014). Citizen science: A tool for integrating studies of human and natural systems. *Annual Review of Environmental Resources*, 39(1), 641–665. <https://doi.org/10.1146/annurev-environ-030713-154609>
- Curtin, C., Brown, J., Larson, L., & Gentry, P. (2020a). Stakeholder engagement in citizen science: A review of best practices. *Environmental Science & Policy*, 105, 26–34.
- Curtin, C., Head, L., & Emmerson, C. (2020b). Stakeholder governance in citizen science: A systematic review of the literature. *Environmental Science & Policy*, 106, 1–14.
- Curtin, C., Kull, C. A., Fazey, I., Rist, S., & Baulch, S. (2020c). Advancing the governance of citizen science for sustainability. *Sustainability Science*, 15(8), 3315–3329. <https://doi.org/10.1007/s11625-020-00824-3>.
- Dickinson, J. L., Shirk, J. L., Bonter, D. N., Bonney, R., Crain, R. L., Martin, J., ... Silvertown, J. (2012). The current state of citizen science as a tool for ecological research and public engagement. *Frontiers in Ecology and the Environment*, 10(6), 291–297. <https://doi.org/10.1890/110236>.
- Frynas, J. G., & Mellahi, K. (2009). The role of stakeholder management in responsible corporate governance. *Journal of Business Ethics*, 89(1), 67–76.
- Goldin, J., Mokomela, R., Villholth, K., & Kanyerere, T. (2021). Diamonds on the soles of their feet: groundwater monitoring in the Limpopo, South Africa. *Journal for Education for Sustainable Development*, 15(1), 25–50. <https://doi.org/10.1177/09734082211014435>
- Goldin, J., Kanyerere, T., & Muchingami, I. (2022). Jewels of Africa: Citizen science on the African continent. *Archaeology and Anthropology in Architecture and Archaeology*, 3(4), 2–14. <https://doi.org/10.33552/OAJAA.2022.03.000566>.
- Goldin, J., Suransky, C., & Kanyerere, T. (2023). Keep the flow: Citizen science as agonistic learning. *Citizen Science: Theory and Practice*, 8(1).
- IBAMA. (2019). Projeto virtual amazonia. Retrieved from <https://www.ibama.gov.br/projeto-virtual-amazonia>. <https://doi.org/10.13140/RG.2.2.25991.70641>.
- Irwin, A. (1995). *Citizen science: A study of people, expertise and sustainable development*. Psychology Press.
- Kendall, B. E., Dickinson, J. L., Phillips, T., & Bonney, R. (2018a). Community-based citizen science as a tool for conservation and management of biodiversity. *Journal of Environmental Management*, 212, 225–232.

- Kendall, B. E., Dickinson, J. L., Phillips, T., & Bonney, R. (2018b). Community-based citizen science: Engaging the public in environmental research and management. *Frontiers in Ecology and the Environment*, 16(4), 199–207.
- Kendall, B., Dickinson, J., Phillips, T., Rosenberg, K., & Shirk, J. (2018c). The future of citizen science: Emerging technologies and shifting paradigms. *Frontiers in Ecology and the Environment*, 16(2), 69–77. <https://doi.org/10.1002/fee.1731>.
- Kullenberg, C., & Kasperowski, D. (2018). A systematic review of citizen science: The what, why, who, and how of participation. *PLoS One*, 13(3), e0194869. <https://doi.org/10.1371/journal.pone.0194869>.
- Pocock, M. J. O., Roy, H. E., August, T., Kuria, A., Bara, F., Bett, J., Githuru, M., Kairo, J., Kimaru, J., Kinuthia, W., Kissui, W., Madindou, I., Mbogo, K., Mirembe, J., Mugo, P., Muniale, F. M., Njorogo, P., Njuguna, E. G., Oleno, M. I., Opige, M., Otieno, T. O., Ng'weno, C. C., Pallangyo, R. G., Thenya, T., Wanjiru, A., & Trevylan, R. (2019). Developing the global potential of citizen science: Assessing opportunities that benefit people, society and the environment in East Africa. *Journal of Applied Ecology*, 56, 274–281. <https://doi.org/10.1111/1365-2664.13279>.
- Raddick, M. J., Bracey, G., Gay, P. L., Lintott, C. J., Murray, P., Schawinski, K., ... & Vandenberg, J. (2009). Galaxy zoo: Exploring the motivations of citizen science volunteers. arXiv preprint arXiv:0909.2925.
- Rouget, M., & Richardson, D. M. (2019). Using citizen science to inform conservation and management of Table Mountain National Park, South Africa. *Biological Conservation*, 237, 174–182. <https://doi.org/10.1016/j.biocon.2019.06.029>.
- Seibert, J., Blanco, S., Scheller, M., Schwarzenbach, F., Ze, W., & van Meerveld, I. (2022). Engaging the public for water data collection—experiences from the CrowdWater project (No. EGU22-6319). Copernicus meetings.
- Silvertown, J. (2009). A new dawn for citizen science. *Trends in Ecology & Evolution*, 24(9), 467–471. <https://doi.org/10.1016/j.tree.2009.03.017>.
- Stroud, J. J., & Dickinson, J. L. (2018). The role of citizen science in supporting scientific research and environmental decision-making. *Bioscience*, 68(12), 982–992. <https://doi.org/10.1093/biosci/biy086>.
- United Nations. (2021). Sustainable development goals. Retrieved from <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- Wyborn, C., Kull, C. A., Baulch, S., Fazey, I., & Rist, S. (2019a). Understanding and improving the contribution of citizen science to sustainability governance. *Nature Sustainability*, 2(2), 120–130. <https://doi.org/10.1038/s41893-019-0199-5>.
- Wyborn, C., Kullenberg, C., & Elwood, S. (2019b). Engaging citizens in environmental monitoring and management: A review of the role and design of citizen science programs. *Environmental Science & Policy*, 96, 42–53.
- Wyborn, C., Martin-Ortega, J., Leitch, A., & Baulch, J. (2019c). Stakeholder engagement in citizen science: A review of existing literature and recommendations for best practice. *Sustainability*, 11(1), 1–20.
- Wyborn, C., Davila, F., Pereira, L., Lim, M., Alvarez, I., Henderson, G., ... & Woods, E. (2020). Imagining transformative biodiversity futures. *Nature Sustainability*, 3(9), 670–672.

Stakeholder Identification

- [Theorizing Governance from a Banking Perspective](#)

Stakeholder Involvement

- [Stakeholder Engagement](#)

Stakeholder Management

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Description

Stakeholder management describes a systematic approach of interacting with individuals, groups and organizations who have an interest in an organization. The parties influenced by an organization's activities are called stakeholders. In the case of business companies, typical stakeholder groups include customers, suppliers, employees, financiers, as well as a local and global community. The process of addressing these groups can be broken down into individual steps. Those range from an initial prioritization of stakeholders, to the realization of a differentiated strategy, up to the measurement of success and associated loops of feedback and learning. This entry yields an

overview of such basic stakeholder management activities and frameworks. Still, flexibility in the execution of these steps can help to tailor the solution to a given problem. Moreover, as stakeholder management conceptually aims at actively shaping exchange relationships in a way that integrates interests against the background of value creation, this entry presents a critical perspective on whether this is achieved in reality. In complementation of stakeholder theory, agency theory provides a foundation for this discussion. The entry closes by accentuating empirical findings on stakeholder management with regard to corporate social responsibility, a known field of conflicting interest, illustrating that stakeholder management should not turn into stakeholder manipulation.

Fundamentals of Stakeholder Management

According to ► [stakeholder theory](#), stakeholders are “groups of persons who have a stake, a claim, or an interest in the operations and decisions of the firm” (Cai et al. 2012: 469). Following this view, managers are expected to bring their own and their firms’ goals into balance with the expectations of those ► [stakeholders](#) (Donaldson and Preston 1995). In other words, stakeholder theory describes how managers act in the attempt to align stakeholder interests and their firm’s achievement of objectives efficiently (Freeman 1984). Accordingly, the activities of a business can be depicted as constellation of relationships with those stakeholders, directed towards ► [value creation](#) (Freeman 2017), and stakeholder management can be defined as management of these relationships (Freeman et al. 2007). While the approach can be applied to organizations and projects of various kinds, the emphasis in the following shall be on managing the stakeholders of a business company.

As illustrated by Miles (2017), an exhaustive, consensual taxonomy of stakeholders may be neither feasible nor aspired. Yet, to address and shape corresponding relationships in the sense of stakeholder management, classifications related to

business traditionally mention certain groups: financiers, employees, customers, suppliers, regulators, the local community, and the overall society. As criterion for categorizing those stakeholders can be seen which type of “stake” those hold in the business. Thus, to allow a targeted management of stakeholders, it is essential for a company to understand what creates value for each of these, simply put “what everyone wants.” Following Freeman (2017), different stakeholders’ interests are by no means independent of one another but can be interconnected to varying extents. As such, *financiers* have invested into a company, and therefore aspire to participate in its profitability by means of return. For *employees*, their company is crucial to make a living, as it provides salary and further forms of remuneration for the employees’ work contribution, as well as structure and meaning. *Customers*, as recipients of a company’s goods and services, are interested in a reliable satisfaction of their demands. Conversely, *suppliers* consider the focal company as part of their customer base, being vice versa interested in addressing its demands by means of market-directed activities. *Regulators* and their enforcement organizations desire that organizations adhere to their standards. The *local community*, in the understanding of stakeholder management, is affected by the physical presence of a company, which it allows and supports, receiving socio-economic benefit in exchange. This local perspective can be extended by considering *society at large*, referring to everyone affected by the company on a global level.

Some views are known to give most attention to the role of customers in stakeholder management, similar to traditional approaches of marketing (Friedman and Miles 2006). Yet, as argued by Freeman (2017), the scope of an employed stakeholder definition should be adapted to the present task a company seeks to fulfill. For example, if a decision affects one stakeholder group in particular, further segmentation within this group might be helpful. Broader categories might also apply for strategic decisions on a global scale. With stakeholder management aiming at addressing each stakeholder group in the best way against the background of a given problem, the adequacy

of groups defined is crucial for its success. Following the notion by March and Simon (1958) that relationships between a company and its stakeholders have the nature of an exchange, it becomes apparent that a flexible grouping of stakeholders might be required depending on the type of a given exchange, facilitating targeted actions as a result.

Stakeholder Prioritization and Management Process

To describe the activity of stakeholder management as a process, literature yields various approaches with different suggestions regarding number and types of steps involved. However, based on a literature review by Pedrini and Ferri (2018), three steps can be derived as an essence: (1) ► [strategy](#) development, (2) strategy execution, and (3) performance measurement. As the authors explain, *strategy development* involves the definition of targets, planning of target-directed activities, and provision of required resources. In the subsequent step of *strategy execution*, this strategy is to be implemented by means of the agreed procedure and resources. Subject of the final step, *performance measurement*, is the systematic comparison of achieved and planned outcomes.

While this process description is intentionally generic to reflect consensual patterns in literature, detailing and adding steps can contribute to tailoring the process to specific questions of stakeholder management. As such, the *identification* of stakeholder groups as described above can be seen as an initial step on its own, further complemented by a *prioritization* of those groups. Basic dimensions of prioritization are interest and power, often graphically depicted as two-dimensional grid as introduced by Mendelow (1991). While *interest* refers to how a stakeholder is affected by company activities and attaches importance to these, *power* refers to the extent of the influence on the company. Based on a stakeholder's position on this grid, managerial actions can be chosen accordingly. For instance, stakeholders which are both high in interest and power,

like key customers, could be managed more actively than such with low interest and low power. The latter, like distant members of the local community, would rather need monitoring to allow the company to get active when necessary. A related concept, allowing to prioritize conflicting demands from different stakeholders in particular, is *stakeholder salience*, involving the dimension of power as well, but with legitimacy and urgency in addition (Mitchell et al. 1997). For example, a configuration of stakeholders with high legitimacy and urgency, but with low power, is seen as challenging. This rests on the assumption that, in lack of power, these are more likely to pursue their interests by means of unlawful measures.

Another extension of the basic stakeholder management process promoted by scholars refers to linking its last step of performance measurement back to the beginning, portraying stakeholder management as an ongoing activity or cycle. With this understanding, companies exhibit a learning curve based on prior interactions, allowing them to adapt the development of their stakeholder strategy accordingly and exchange feedback with their stakeholders. Moreover, it shall be noted that this process of stakeholder management is certainly not to be seen stand-alone but related to further key activities as ► [stakeholder engagement](#) in the understanding of a dialogue (e.g., Unerman 2010).

Stakeholder Management as Agency Problem, by Example of Corporate Social Responsibility

According to ► [agency theory](#), stakeholders can be understood as principals, while the company, or more precisely its management, functions as their agent (Jensen and Meckling 1976). However, as outlined by Hill and Jones (1992), managers have information advantages over the company's stakeholders. By simply knowing more about the true actions of their company, based on first-hand insider knowledge, managers are able to pursue their own utility, deviating from the utility functions of respective stakeholders

(Jensen and Murphy 1990). Under ideal – yet hypothetical – conditions as perfect information and efficiently balanced incentives, managers would act in the stakeholders' interest alone (Freeman 1994), so their demand for ► [corporate social responsibility](#) (CSR) would be considered in an adequate manner and reported back to them in a transparent way (Reynolds and Yuthas 2008). Yet, with the actual situation being characterized by ► [moral hazard](#), managers are tempted to act opportunistically instead (Warfield et al. 1995). Further following agency theory, the deviance from stakeholder interests is explained by two models: hidden action, and hidden information (Grant et al. 1996).

Hidden action models describe that stakeholders can neither observe their agents' actions objectively, nor in a perfect manner (Narayanan 1985; Stein 1989). Thus, stakeholders have to assess managerial actions based on limited information, which they either receive from the company directly, or have no choice but gathering on their own with additional effort. By means of their proprietary information, managers and therefore companies can act in a way that not primarily follows, or even contradicts, stakeholder interests. With stakeholders defined as those affected by a company's actions, hidden action models make apparent that it is not necessarily clear to stakeholders what the company's actions even are. With respect to the activity of stakeholder management, this equips companies with degrees of freedom that constitute an asymmetry within the exchange relationship between company and stakeholders. *Hidden information models* explain that companies can act opportunistically even if their behavior can – at least partially – be observed by stakeholders. With a sense for which impression certain actions make on stakeholders, companies can steer these impressions by acting in a way that results in beneficial interpretations on the side of stakeholders. In other words, companies can not only obtain and use insider information, but also signal a message towards stakeholders which is favorable, but might be manipulative or false (Spence 1973). It is noteworthy that managers are technically also stakeholders of a company themselves; however, against the

background of a “stakeholder-agency theory,” they are understood as firm representatives that “filter or distort” the communication directed towards other stakeholders (Hill and Jones 1992: 140).

From an empirical point of view, a well-known example for the exploitation of managerial information advantages in the course of stakeholder management is the field of CSR, particularly its reporting. Henceforth, following the argumentation by Kroeckel et al. (2018), it is initially to be stated that the concept of CSR has a research tradition which is likewise long and divergent (cf. Carroll 1999). From a narrow perspective, any social responsibility of companies would be limited to profit maximization within the scope of action which is legally possible (van der Wiele et al. 2001). Allocating resources to non-profit applications, such as charity, would be unreasonable, as detrimental to this overarching target of profitability (e.g., Pinkston and Carroll 1996). A broader view on CSR describes it as activities “beyond the interests of the firm and that which is required by law” (McWilliams and Siegel, 2001: 117). Over time, four conceptual positions have been suggested based on the latter: (1) CSR as *social* obligation to anyone (Bowen 1953), (2) CSR as obligation towards *stakeholders* alone (Clarkson 1995), (3) CSR as *ethics-driven* without any self-interest of the company (Swanson 1995), and (4) CSR as a managerial *process* with a focus on being responsive to stakeholder demands (Ackerman 1975).

Against these viewpoints, the *reporting* of CSR can be condensed to “the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large” (Gray et al. 1996: 3). Simply put, ► [CSR reporting](#) means nothing else but communicating content about CSR – however, it is not guaranteed that the reported content is sincere. According to stakeholder theory, CSR reporting in the course of stakeholder management does not necessarily reflect the ethical principles that the concept of CSR itself leads to expect. Instead, CSR reporting can be a means to the end of expressing fulfillment of stakeholder requirements (Berman et al. 1999;

Ballou et al. 2006). Hence, CSR reporting is partially the attempt of companies to show themselves in a good light and satisfy stakeholders in the first place (Hooghiemstra 2000; Patten 2002). Albeit companies might act in alignment with actual stakeholder interests, it is to be concluded that CSR communication is genuinely a measure to fulfill stakeholders' demand for CSR information, not necessarily for CSR itself (McWilliams and Siegel 2001).

Consequently, the levels of CSR that companies proclaim are empirically identified as inaccurate reflections of their CSR level if assessed by ratings, or even intentionally misleading, as detailed in the following. First, the communication of CSR by companies focuses on positive CSR events, neglecting negative ones (Scalet and Kelly 2010). Second, companies systematically intensify their CSR communication in response to scandals (Arvidsson 2010; Gray et al. 2001). Third, CSR communication is employed to camouflage controversial business practices in the spirit of greenwashing (Laufer 2003; Delmas and Burbano 2011). Fourth, while the concept of CSR empirically exhibits a positive association with company performance, its reporting alone is known for the opposite relationship if it is revealed to be exaggerated (Barnea and Rubin 2010; Cai et al. 2012). And fifth, companies conducting socially irresponsible practices are more likely to even take preventive measures against future controversies by increasingly proclaiming CSR activity in the sense of an "insurance" (Kang et al. 2016). In the context of agency theory, these empirical findings about CSR communication suggest that companies exploit, and even expand, existing information advantages over their stakeholders. In the spirit of Akerlof (1970), the circumstance that company characteristics are neither fully visible nor credible for stakeholders is related to inefficiencies; in the case of CSR, stakeholders have difficulties to distinguish sincere from manipulative information, hindering their pursuit of legitimate claims related to the activities of a company. In the long term, successful company-stakeholder relationships are characterized by an open and honest communication (Rolloff 2008), corresponding to

the nature of these relationships as an exchange between interdependent parties in value creation – with value not being limited to financial value creation in the firm but also stakeholder value beyond financial and firm goals.

Cross-References

- ▶ [Agency Theory](#)
- ▶ [Corporate Social Responsibility](#)
- ▶ [CSR Reporting](#)
- ▶ [Moral Hazard](#)
- ▶ [Reporting](#)
- ▶ [Stakeholder Engagement](#)
- ▶ [Stakeholder Governance and Citizen Science](#)
- ▶ [Stakeholder Theory](#)
- ▶ [Stakeholders](#)
- ▶ [Strategy](#)
- ▶ [Value Creation](#)

References

- Ackerman, R. W. (1975). *The social challenge to business*. Cambridge: Harvard University Press.
- Akerlof, G. A. (1970). The market for 'lemons': Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500.
- Arvidsson, S. (2010). Communication of corporate social responsibility: A study of the views of management teams in large companies. *Journal of Business Ethics*, 96(3), 339–354.
- Ballou, B., Heitger, D., & Landes, C. (2006). The rise of corporate sustainability reporting: A rapidly growing assurance opportunity. *Journal of Accountancy*, 202(6), 65–74.
- Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics*, 97(1), 71–86.
- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal*, 42(5), 488–506.
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York: Harper & Row.
- Cai, Y., Jo, H., & Pan, C. (2012). Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics*, 108(4), 467–480.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3), 268–295.

- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64–87.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Freeman, R. E. (1994). The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, 4, 409–421.
- Freeman, R. E. (2017). Five challenges to stakeholder theory: A report on research in progress. In D. M. Wasieleski & J. Weber (Eds.), *Stakeholder management* (pp. 1–20). Bingley: Emerald Group.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success*. Yale University Press.
- Friedman, A. L., & Miles, S. (2006). *Stakeholders: Theory and practice*. Oxford: OUP.
- Grant, S., King, S., & Polak, B. (1996). Information externalities, share-price based incentives and managerial behavior. *Journal of Economic Surveys*, 10(1), 1–21.
- Gray, R., Owen, D., & Adams, C. (1996). *Accounting & accountability: Changes and challenges in corporate social and environmental reporting*. London: Prentice Hall.
- Gray, R., Javad, M., Power, D. M., & Sinclair, C. D. (2001). Social and environmental disclosure and corporate characteristics: A research note and extension. *Journal of Business Finance & Accounting*, 28(3–4), 327–356.
- Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of Management Studies*, 29(2), 131–154.
- Hooghiemstra, R. (2000). Corporate communication and impression management: New perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1–2), 55–68.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of a firm: Managerial behavior, agent costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98(2), 225–264.
- Kang, C., Germann, F., & Grewal, R. (2016). Washing away your sins? Corporate social responsibility, corporate social irresponsibility, and firm performance. *Journal of Marketing*, 80(2), 59–79.
- Kroeckel, M., Bendig, D., & Brettel, M. (2018). Satisfying stakeholders at all costs: Myopic marketing management and corporate social responsibility reporting. In *Proceedings of the American Marketing Association summer educators' conference*.
- Laufer, W. S. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, 43(3), 253–261.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.
- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127.
- Mendelow, A. (1991, December). Stakeholder mapping. In *Proceedings of the 2nd international conference on information systems* (pp. 10–24).
- Miles, S. (2017). Stakeholder theory classification, definitions and essential contestability. In D. M. Wasieleski & J. Weber (Eds.), *Stakeholder management* (pp. 21–47). Bingley: Emerald Group.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Narayanan, M. P. (1985). Managerial incentives for short-term results. *The Journal of Finance*, 40(5), 1469–1484.
- Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: A research note. *Accounting, Organizations and Society*, 27(8), 763–773.
- Pedrin, M., & Ferri, L. M. (2018). Stakeholder management: A systematic literature review. *Corporate Governance: The International Journal of Business in Society*, 19(1), 44–59.
- Pinkston, T. S., & Carroll, A. B. (1996). A retrospective examination of CSR orientations: Have they changed? *Journal of Business Ethics*, 15(2), 199–206.
- Reynolds, M., & Yuthas, K. (2008). Moral discourse and corporate social responsibility reporting. *Journal of Business Ethics*, 78(1–2), 47–64.
- Roloff, J. (2008). Learning from multi-stakeholder networks: Issue-focussed stakeholder management. *Journal of Business Ethics*, 82(1), 233–250.
- Scalet, S., & Kelly, T. F. (2010). CSR rating agencies: What is their global impact? *Journal of Business Ethics*, 94(1), 69–88.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Stein, J. (1989). Efficient capital markets, inefficient firms: A model of myopic corporate behavior. *The Quarterly Journal of Economics*, 104(4), 655–669.
- Swanson, D. L. (1995). Addressing a theoretical problem by reorienting the corporate social performance model. *Academy of Management Review*, 20(1), 43–64.
- Unerman, J. (2010). Stakeholder engagement and dialogue. In *Sustainability accounting and accountability* (pp. 105–122). Routledge.
- Van der Wiele, T., Kok, P., McKenna, R., & Brown, A. (2001). A corporate social responsibility audit within a quality management framework. *Journal of Business Ethics*, 31(4), 285–297.
- Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting and Economics*, 20(1), 61–91.

Stakeholder Mapping

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Synonyms

Mapping of a company's stakeholders

Description

An expression “A picture is worth a thousand words” (Flanders 1911, the expression is in fact a paraphrase of Henrik Ibsen’s words: A thousand words leave not the same deep impression as does a single deed.) applies to most pictures, images, and perhaps symbols as well, and maps are no exceptions to the rule given the fact that a stakeholder mapping as modeling results with a stakeholder map as a model which as an image presents itself and as a guiding pattern imagines future actions.

A stakeholder mapping (further on abbreviated as SM) is a new name for an old practice and a technique that was performed from the beginnings of business practice, perhaps even from the beginning of a mankind. When performing actions that will influence many, humans are capable of seeing and planning the influence of their actions on all relevant parties in a way that they maximize the success of an action and minimize the harm of it on others. In early humans, these include primordial elementary practices of pattern recognition and modeling actions. When this is done in business, it is called SM (Mendelow 1991; Goodpaster 1998).

Since the introduction of the stakeholder concept by the “father of stakeholder theory” (Laplume et al. 2008) R. E. Freeman (Freeman 1984), the issue of how to identify, mutually relate, present, and apply stakeholders in a business, or how to do a stakeholder mapping, was raised and answered in business theory, business practice, and many overlapping spheres of human

activities (in science, culture, and everyday private life). A single reasonably justified, accepted by majority of experts and practitioners, and applied model of stakeholder mapping is not yet found. However, many models have proven themselves clear and consistent in a conceptual business modeling and are successfully applied in business practice.

The Nature and Risks of SM Modeling

In business administration and in its aspect of stakeholder management and corporate social responsibility (CSR) a SM is the modeling of stakeholders and their stakes in the perspective of their relevance (various criteria of relevance are listed here) for a particular business process and vice versa (synonyms include stakeholder analysis, stakeholder visualization, etc.). The first steps of stakeholder management include SM, i.e., stakeholder identification, stakeholder needs documentation, stakeholder interests, and expectations analysis (while management of these, reviews, and repeat of actions belong to further steps which depend on this conceptual modeling). SM can be done for any organization whatsoever and for any company, business period, business plan, brand, line of products or services, or even for a particular product or a service.

Concerning criticism of and response to SM, it does not exist really; rather it is a kind of continuity of more fundamental debates about stockholder vs. stakeholder theory of corporation (the so-called Friedman vs. Freeman Debate), fiduciary duties of company directors, and especially the stakeholder paradox (Goodpaster 1991) since, if among stakeholders, there are others than stockholders and which all have the same conceptual position or for that matter different, what does it mean for the concept of multiple stakeholders listing and mapping (Neville and Menguc 2006)? What exists here concerning criticism is a kind of competition between various SM modeling lists, criteria, divisions, visualizations, and applications in business practice. Many business people, practitioners, ethical officers, activists, researchers, and professors have their own way

of SM; sometimes they use the known ones with their slight “improvements,” and sometimes they invent completely new ways (but there is no much innovation on this matter).

Given that previously said is correct, in what follows the nature and risks of SM modeling will be described in terms of types of SM in view of stakeholder listing, mapping, and visualization, and some concluding remarks will be supplied concerning various SM modelings and risks of making most frequent mistakes in business practice.

SM concerns two major tasks. The first is an identification of relevant stakeholders (further on abbreviated as RS) and their mutual relations in view of a particular business process, and the second is an identification of relevant stakeholders’ interests (further on abbreviated as RI) in view of a particular business process. These two tasks are obviously different and should not be mixed due to unnecessary risks that the mixture can produce during the realization of a business plan, and on the other hand they are interdependent.

RS is obviously vital since it is important to identify all relevant stakeholders. Dangers are also obvious. Some of them include non-identification of a stakeholder, misidentification of a stakeholder, mixing stakeholders in different groups without clear reason or a criterion, etc. These dangers can influence results of a business process. For example, a fairly small and irrelevant stakeholder group can be non-identified, and it can produce high risk during the business process in which there will be no resources to deal with potential harm that this non-identification can probably produce.

RI is obviously vital as well since even if all stakeholders are properly identified, it is by all means possible to identify them under the wrong aspect.

More to that, since interests of stakeholders differ if viewed from the side of a business and from the side of a particular stakeholder group, it is important to meet these interest with minimal possible overlap. In principle, SM is a practice done by a company toward its stakeholder. However, it is often enlightening and wondrous to see a

duck as a rabbit or that two arrows are actually of the same length.

For example, a group of employees during an introduction of a new business practice can view their interest in higher payments due to more learning and work that they have to do regularly, and it can also be a fact that in overall time of a business process, they will be more efficient and actually work less with better results, so it is quite important to set straight the real RI and to present these RI to relevant stakeholders.

SM is quite often presented visually, i.e., in terms of an actual map which represents identified and mutually related stakeholders of a business. This is an excellent way to do it; however, at least two dangers can occur. The first is that this is only a half of a job of SM since stakeholders’ interests should be presented as well. The second is that such presentations are static, i.e., they present stakeholders as if they have one and the same relation, say hierarchical, toward the business process, while in reality their relations are different and often change due to goals and risks of a particular stage of the business process.

For example, innovators, inventors, or generally speaking research and development (further abbreviated as R&D) and market researchers are of utmost importance at the beginning of marketing process of a particular product, while in the middle of it when sale is important, or at the end of it when say recycling is important, completely different groups of stakeholders and interests may be more important since not taking them into account especially if it is possible to do so with cutting costs can present unnecessary risk of failure of the business process.

Therefore, SM besides visual presentation should also present their interests, and if possible their change if it is highly probable, and also the change of their relation to business during all stages of a business process (fortunately enough nowadays there are various computer software that can help professionals in such presentations and some of them are even open source).

It should not be forgotten that SM is first and foremost a practice, a technique, and a conceptual modeling procedure which explicates already present and manifested but implicit concepts, groups,

and interest in order to achieve minimal clarity and perspicuity needed for reasonable, just, and successful business practice (decision-making process and standard operating procedures; further abbreviated as SOP). As such, SM by being performed by professionals is an integral aspect not just of an overall business plan, but of overall process of a business practice, of a daily life of a company.

The results of SM include identification of stakeholder groups, identification of their interests, mutual interdependence of stakeholders and their interest, identification of the stakeholders' relevance for the success of the business practice in all its stages, potential risks (by negative stakeholders), etc. Without reaching these results, a business practice can be legal, potentially financially successful, and in the same time overall failure due to various misunderstandings and misidentifications of stakeholders and their roles in a business process (this issue goes under the topic of the corporate social irresponsibility (CSI) which is as important as CSR).

Types of SM Modeling I: Listing

In order to model stakeholders and their interests, one has to have some criteria. These criteria vary from simple non-business to quite precise business variable, the former often including more universal variables such as primary/secondary, social/non-social, and key/lesser, while the later including more particular business features such as potential for cooperation (Savage et al. 1991), power, legitimacy, support (Mitchell et al. 1997), satisfaction (Turner et al. 2002), value hierarchies and key performance areas (Fletcher et al. 2003), and need and importance (Cameron et al. 2010).

Criteria of modeling SM are irrelevant as far as they cover all relevant stakeholders, namely, owners, management, employees, suppliers, buyers, customers, competitors, markets, state, media, NGOs, environment, eco- and bio-systems, etc. It is quite important to understand that these criteria do not differ between stakeholders strictly but only in level, since mapping is a practice and technique and as such it does not

need strict distinctions and concept borders (blurred are enough), rather the adjustment capability.

Differing between primary and secondary, and/or key/other stakeholders, is quite useful criteria since these standards split them by importance (internal value, need, interest, expectation, etc.) which should be viewed in scope of a business plan. These basic criteria are often combined with others among which social/non-social criterion is also practically useful since social stakeholders include present groups of humans which are managed directly, while non-social include besides past and/or future groups of humans also non-living environment, ecological and biological systems, or surroundings which can be managed only indirectly, that is to say via some social group (professionals in a company, governmental organizations, NGOs, or similar).

By using such quite tolerant and simple criteria and by adding some special due to special features of a business plan, and if the same is done with their basic interests and risks as stakeholders of a business plan, one gets a stakeholder list. Such list in majority of cases include standard stakeholders such as the following (here they will be grouped in accordance with mentioned criteria): stockholders and management (all levels); employees and suppliers (primary-social-key), further on market, media, key competitors, local communities, governmental and NGO organizations, and similar (secondary-social-other) in which buyers, users, and customers are exception in case of lifelong customers (which can be treated as primary); also resources, various levels of environment, and similar (primary-non-social-other here, but key from the sustainability perspective); and finally all organizations which care for all primary-non-social-other stakeholders (therefore, secondary-non-social-other).

Types of SM Modeling II: Mapping and Visualizing

However, a list is not a map. In order to create a stakeholder map, one needs to put stakeholders from the list in relation to the business plan and to

each other. These relations can differ in time, strength, nature, and similar (see Wolfe and Putler 2002 for various issues concerning stakeholder relations). If a stakeholder list is combined with one or more criteria, one gets a stakeholder map, as it was shown in previous paragraph in which list of stakeholders was combined with already mentioned universal criteria: being social/non-social, primary/secondary, and key/other.

Relations between stakeholder groups should always be justified by a strict application of one or more clear criteria. No matter what a system of relations actually is, various systems can be graphically presented in the same way, and one system can be presented in different ways. For example, a three-criterion system of features, social/non-social, primary/secondary, and key/other, can be visually presented in a circular, hierarchical, or grid model. Only when such systems are visually presented, they are in fact mapped and are a stakeholder map. This is so because a map is not just a visualization of system of formal relations between concepts and/or of a system of morphological relations which will determine future actions but previous to that and perhaps more importantly, a conceptual pattern, model, and as such a guide of future business actions.

Therefore, it is quite important that a system of relations between stakeholders from the list is visually presented in a way that on the one hand, it corresponds to the system and that on the other hand, it corresponds to the future business actions and the whole business process. It is also important that the final map is consistent and if possible coherent with the overall business plan, i.e., its all aspects.

Such finished stakeholder maps naturally forms various graphical forms, such as hierarchical form (pyramids or reversed pyramids), circular form (diagrams), parallel diagrams, overlapping (Venn's) diagrams, matrix, various grids (two-, three-, or multidimensional grids), three-dimensional grouping, and sometimes even grouping which vary in time periods of business activity. As said, it is of utmost importance that visual/graphical presentation of a stakeholder map fits the features of a general stakeholder

management plan which should fit the overall business plan. It is easy that a stakeholder map by its visualization, for instance, by hierarchical form, should suggest strict, fast, and precise execution, while in reality the system of relations between stakeholders suggest execution with parallel constant dialogues and accommodations, say due to the nature of a new and revolutionary product or a service (for various shortcomings of such visualizations, see Fassin 2008).

However, some manners of graphical presentations of SM are more frequent than others. If one conducts simple online test by checking various Internet search engines for stakeholder mapping, analysis, and visualization (as the present author did in 2017 concerning images and repeated in 2021), the results would be the following. Out of first 100 images (their sources were checked in order to verify that the image concerns the stakeholder mapping) on 3 search engines approximately ($\pm 2\%$), 37% were two-dimensional grids with 2 criteria, 28% were mutually connected stakeholders with arrows (in squares, balloons, and similar shapes), 23% were presented via overlapped Venn's diagrams, and 12% were presented in parallel circles with the same center and different radiuses or pyramids with layers (the research was done as a part of business ethics, CSR, and sustainability MBA course at ZSEM).

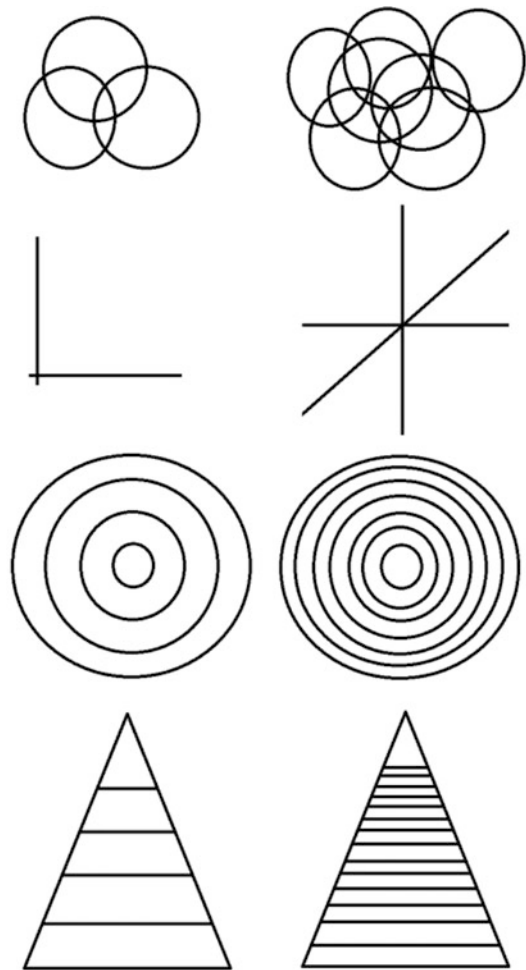
Concerning color, a vast majority (94%) use various colors consistent with rules of use in terms of basic visual literacy, and only minority (6%) do not use color but supply visualization in black and white. The ratio of text, color, shapes, and various connectors in almost all cases is normal and enables clear view, but not always a clear understanding. Other features are mostly simple and are given by default, because of possibilities of computer software (it should be mentioned that there is some percent of stakeholder maps that are drawn by hand during presentations and this should not be underestimated because drawing a map, especially by an experienced and talented draftsman, is a process followed by additional experience of flow or procedural nature of SM which is often quite important and poorly replaced by say movements of slides one after another).

However, all these presenting models have two major flaws which for the present purpose can be called “It is complicated,” on the one hand, or “It is oversimplified” on the other. This is so basically for two reasons; the business reality is far more complicated than the image shows, and pictures are here not just to replace 1000 words but also to emphasize what is crucial, leaving irrelevant issues aside. One should always keep in mind that the map presents itself. If it needs more words, then an educated viewer can infer for herself by simply looking at the image, then it is not map at all, and it creates more problems than it allegedly solves.

Two obvious flaws are as said too complicated visualization which becomes very unclear and hard to read and too simple visualization which is too clear as if there are no problems at all. Too complicated are such because they want to present all interconnections or overlap and failing to present typical patterns and too simplified are such because they want to reduce the complicated reality to few issues and failing to present again basic patterns of it. In order to show this point, let us observe the following illustration (see Fig. 1 below)

Some obvious flaws of typical presentations of stakeholder maps (as shown on Fig. 1) should be mentioned. First, all of them are good, useful, and efficient if there are only few stakeholders included and only few of their features (say needs or interest), but if there are many, the presentation loses its sense because it becomes too complicated and unclear which is shown by the amount of text needed in order to describe and explicate it. Second, diversity among stakeholders even if taken statically not to mention their dynamism say in time and/or relevance becomes invisible (even with the use of colors and arrows). Third, mutual relations among stakeholders become unique which is often not the case.

In order to bypass these and other shortcomings, there are different solutions. The first is to multiply the map in order to show different segments, say in business process or in segment of a company, or in risk or value of different stakeholders. The second is to combine different forms for different stages of a business process. For



Stakeholder Mapping, Fig. 1 Typical graphical presentations of stakeholder map. Depending on the point of view, the left column can be viewed as reality and the right as the presentation and vice versa

instance, for listing stakeholders, pie charts are suitable. Further on, listing and hierarchical order pyramids or a reverse pyramids are again quite useful. Then, for the groups of stakeholders and their relations Venn's diagrams are good, and finally grids are excellent for mapping the particular group of stakeholders. All these can be used and even placed above some timeline and additional presentation of various features of particular stakeholders, e.g., value, risk, interest, need, etc. However, such graphical presentations are not very regularly found in stakeholder map presentation (as noted before).

To cut long story short, it is important that the visualization fits not just the map, or the stakeholder management plan, but also an overall business plan. One should always keep in mind that visual aspect of a stakeholder map, i.e., its actual shape, size, divisions within it, colors, dynamics if present, etc., or what viewers and listeners of a plan who will apply it in practice are in the first contact with is the major influence on their concept of the whole stakeholder map. Namely, if a map represents quite dynamic system which will apply to a dynamic business activities and processes which could accommodate on weekly basis, then the visualization should be dynamic as well. As said, any map presents itself, but it points outside of itself, i.e., to the future practice (almost as a signpost that points to some direction or place, but does not go there), and therefore any map determines future practice, and so far as a SM is a map, it should do precisely that, no more and no less (it cannot do what is not in its nature or function).

Concluding Remarks

By presenting a stakeholder map, a SM process is finished, and its application is possible and precisely planned, i.e., stakeholder management plan can be executed to its end. However, no stakeholder map is an island (sometimes it is a peninsula). It is an integral aspect of a stakeholder management plan and stage of a process, which is a part of a business plan that includes managerial, financial, production, marketing, and other aspects. Therefore, consistency with all other aspects of a business plan and practice is important. Besides this complexity relation that is quite simple, there are other relations that are more complicated since they cut across various no matter if sometimes routine actions of a company, a profession, or even the whole business sector, such as SOPs, marketing procedures, management procedures, CSR (and CSI) procedures, etc.

One among such cross sections is obvious if one sees SM as a part not just of a stakeholder management plan and execution, and therefore of management aspect of a business plan, but also of a broader CSR plan which in its most

wide meaning includes all plans and executions related to business ethics, CSR, and sustainability (sometimes even to philanthropy, sponsorships, and similar). Because of these multidimensional relations of SM with other aspects of a business, every mistake in it can create unnecessary risks in many distant, different, and strange parts of a business, sometimes not even obviously connected to SM, stakeholder management plan, and execution, and these can and should be easily avoided by careful, quick, clear, and useful SM.

Summary

In this entry, stakeholder mapping (SM) is presented. The importance of SM is emphasized given their principal conceptual clarity and division, as well as their presentation, in most cases graphical and dynamical. SM is the first step of the ethical dilemmas solutions, and of the decision-making process under the view of CSR, legality, and profitability.

Cross-References

- [Stakeholder](#)
- [Stakeholders](#)
- [Stakeholder dialogue](#)
- [Unknown stakeholders](#)

References

- Cameron, B. G., Seher, T., & Crawley, E. F. (2010). Goals for space exploration based on stakeholder network value considerations. *Acta Astronautica*, 68(11–12), 2088–2097. <https://doi.org/10.1016/j.actaastro.2010.11.003>.
- Fassin, Y. (2008). Imperfections and shortcomings of the stakeholder model's graphical representation. *Journal of Business Ethics*, 80(4), 879–888.
- Flanders, T. (1911). *Speakers give sound advice* (p. 18). Syracuse Post Standard.
- Fletcher, A., Guthrie, J., Steane, P., Roos, G., & Pike, S. (2003). Mapping stakeholder perceptions for a third sector organization. *Journal of Intellectual Capital*, 4, 505–527.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

- Goodpaster, K. E. (1991). Business ethics and stakeholder analysis. *Business Ethics Quarterly*, 1(1), 53–73.
- Goodpaster, K. E. (1998). Business ethics and stakeholder analysis. In M. Clarkson (Ed.), *The corporation and its stakeholders: Classic and contemporary readings* (pp. 103–124). University of Toronto Press.
- Laplume, A., Sonpar, K., & Litz, R. (2008). Stakeholder theory: Reviewing a theory that moves us. *Journal of Management*, 34(6), 1152–1189.
- Mendelow, A. (1991). *Stakeholder mapping, Proceedings of the 2nd international conference on information systems*. Cambridge, MA.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–888.
- Neville, B. A., & Menguc, B. (2006). Stakeholder multiplicity: Toward an understanding of the interactions between stakeholders. *Journal of Business Ethics*, 66(4), 377–391.
- Savage, G. T., Nix, T. W., Whitehead, C. J., & Blair, J. D. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Executive*, 5(2), 61–75.
- Turner, J. R., Kristoffer, V., & Thurloway, L. (Eds.). (2002). *The project manager as change agent. Series the project manager as change agent*. London: McGraw-Hill Publishing Co.
- Wolfe, R. A., & Putler, D. S. (2002). How tight are the ties that bind stakeholder groups? *Organization Science*, 13(1), 64–80.

Stakeholder Model

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Synonyms

[Stakeholder theory](#)

Background

Modern companies are very different from the primitive factory model “when the typical corporation owned and operated a canal, a railroad, or a big manufacturing plant” (Blair 1995, pp. 232–233). A company consists of not only equity capital but also other financial and non-financial resources, and its wealth-generating increasingly

depends on various different types of resources contributed by various stakeholders (Blair and Stout 2006). In short, the company needs the support of all its diverse stakeholders in order to sustain and prosper. As Freeman’s (1984) seminal book *Strategic Management* demonstrated 30 years ago, ignoring stakeholders would give rise to disastrous consequences. In order to obtain their support, what is fair and essential is to take the interests of stakeholders into account. Especially, given today’s competitive economic environment, the only viable way to preserve competitive advantage and profitability is to encourage every corporate stakeholder to make a wholehearted contribution.

Human capital or intangible investment made by stakeholders is of increasing importance, whereas shareholders’ role becomes less important. Even for manufacturing companies which were heavily dependent on physical plant and equipment invested by shareholders, the intangibles contributed by stakeholders such as intellectual property, brand reputation, service capabilities, and alike make up a rapidly increasing share of the assets (Blair 1995). There is also a simultaneous trend that shareholders are more willing to be *passive and functionless investors* instead of *active participants*, concerned only with receiving “a return on their capital accruing with the mere passage of time” (Ireland 1999, p. 42). This indicates they would come to be more opportunistic and apathetic. As Professor Ireland (1999, p. 54) aptly notes, “the great majority of share dealings involve not issues raising capital for new investment but the buying and selling of titles to revenue issued long ago.” Most shareholders, including institutional investors, only put an insignificant amount of their money into any individual company in terms of a diversified portfolio strategy, and they are not committed to a company in either a moral or practical sense (Green 1993). The role of equity and physical capital in investment “is much less important than it was” in modern public companies at present (Kay 2012, p. 25). Based on Berle’s observation that shareholder investment by way of purchasing stock does not contribute savings to a company or undertake the residual risk of a new/increased economic operation in the preface

to the revised edition in 1968 (Berle and Means 1991), Professor O'Sullivan (2001, p. 49) further points out:

Shareholders in these economies generally invest their money in the securities issued by successful enterprises on the basis of investments in productive assets that have already been made. In other words, public shareholders do not 'wait' until the developmental investments that these companies make bear fruit but buy shares in these companies after they have paid off.

Meanwhile, Professor Deakin (2005, p. 15) argues that "[m]ost trades of shares in listed companies consist of movements from one shareholder to another with no new capital being supplied to the company." It is believed that net contribution of new equity to the corporate sector has become negative. By contrast, stakeholders' firm-specific investment is, on the one hand, much greater (e.g., Williamson 1984) and, on the other, more valuable (e.g., Zingales 2000) than the financial investment.

Consequently, for large public companies, which are of course "mature" enough, the contribution made by stakeholders and the role performed by them is obviously no less important to corporate success. Shareholders are not materially different from any other stakeholder group as a resource provider. They are not the only group which bears residual risks, since stakeholders suffer as well when the company runs badly. In fact, shareholders can take advantage of diversification to reduce and dilute idiosyncratic risks, while other stakeholders cannot. Shareholders are not the only residual proprietary claimants either (Yan 2015). Any increased earnings, namely, the residual, may go to the creditors when the company cannot afford all of its debt. Even in a well-run company, the residual can go to employees as bonuses or go to customers in the form of improved service, instead of directly going to shareholders as dividends (Zingales 2000). It is then obviously inappropriate to overstate the role and importance of shareholders, especially in a large public company (Blair 1995). The argument that stakeholders have a right to be treated as an end rather than a means is therefore worth considering seriously. By virtue of the stakeholders'

important role and intrinsic value, their interests should not only be an instrument serving as a means for long-term shareholder interests.

Definition

As an alternative model for corporate objective, stakeholder theory is antithetical to the shareholder model and requires directors of the company being *accountable to* more than the shareholders, namely, directors should take interests wider than shareholders into account. While the origin of "stakeholder" is difficult to trace, it is generally agreed that the term did not formally appear until 1963 (Freeman 1984). Stakeholders first meant "those groups without whose support the organization would cease to exist" such as shareholders, employees, customers, suppliers, and so forth (Freeman 1984, pp. 31–32). With continuous evolution, it is broadly defined as "any group or individual who can affect or is affected by the achievement of the organization's objective" (Freeman 1984, p. 46). Stakeholder theory as a theory of the firm is intended to "explain and guide the structure and operation of the established corporation" (Donaldson and Preston 1995, p. 70). Generally speaking, a company is viewed as an entity through which various participants accomplish multiple purposes, thereby ensuring the interests of those with a stake in companies are taken into account and not automatically subordinated to any other group's interests (Yan 2017). And accordingly, the company should create value for all stakeholders rather than solely for shareholders.

Justification

Based on Donaldson and Preston's (1995) categorization of descriptive, normative, and instrumental aspects of the theory, we can see the descriptive aspect of the stakeholder model explains what the company is and how it operates in order to predict future corporate behavior. As summarized, stakeholder theory has been used to describe the following: "(a) the nature of the firm, (b) the way

managers think about managing, (c) how board members think about the interests of corporate constituencies, and (d) how some corporations are actually managed” (Donaldson and Preston 1995, p. 70). As John Kaler (2003) argues, being descriptive explains the reality of business, it is “about making a factual claim about a theory” (p. 73). The descriptive stakeholder theory is based on its descriptive accuracy.

The normative stakeholder theory emphasizes the intrinsic value of stakeholders and acknowledges that the shareholder’s role is not materially different from that of other stakeholders – they are simply one group of resource investors/providers (e.g., Donaldson and Preston 1995; Handy 1991). Each stakeholder agrees to put her valuable resources, labor, or both together with others’ to pursue the success of the business and derive benefits from it. For example, Freeman et al. (2004) argue that “business is about putting together a deal so that suppliers, customers, employees, communities, managers, and shareholders all win continuously over time” (p. 365). The morals and values perceived as fundamental to running companies, including fairness, are emphasized (Phillips 1997; Phillips et al. 2003). Meanwhile, the welfare of all stakeholders cannot be unaffected by the performance of the company. By the words of Janet Williamson (1996, p. 212):

Employees are affected by the wide range of decisions the impact upon their employment with the company; customers are affected by decisions on the price, specifications and standards of products; suppliers are affected by purchasing decisions; creditors are affected by financial procedures; and the local community is affected by recruitment policy and environmental impact. . . .

Like shareholders, stakeholders’ investment could also be at risk. For example, when a company is badly run or becomes insolvent, creditors may not get back the loan as well as the interest, and employees may be made redundant. They have an interest in the company – in Freeman’s (1984) term, each stakeholder has a stake in the company. And these stakeholder groups cannot obtain enough, if any, protection via an incomplete contract by virtue of unbalancing bargaining power, informational asymmetry, and/or bounded

rationality. Corporate decisions can lead to significant social consequences by affecting others and the economy at large (Parkinson 1993). Due to its involvement and influence in various aspects of social life, a large public company is expected to be more aware of social obligations including fairness, justice, and the like (Letza et al. 2004).

It thus implies that directors’ duties and accountability should not be limited to ensuring returns to shareholders, but extend to those who are interested in, and affected by, the company and whose role is no less significant (Allen 1992). Furthermore, under certain situations, so the argument goes, directors are even required to possess “a willingness to exhaust the resources of the company” to satisfy stakeholders’ interests (Green 1993, p. 1421). Accordingly, the shareholder-centered model is criticized for “using the *prima facie* rights claims of one group — shareholders — to excuse violating the rights of others” (Freeman et al. 2004, p. 365). Opponents of the shareholder model point out it damages other stakeholders’ interests and argue that the shareholders as one group of corporate constituents have no reason to automatically override other groups’ interests. In the context of the stakeholder model, every stakeholder has a right to be treated as an end and not simply a means to facilitate the shareholder profits (Donaldson and Preston 1995; Freeman 1984). Accordingly, reputation, positive relationships with customers and suppliers, and motivated employees are not just for fostering the business goals of increasing shareholder value as in the context of the shareholder model. All stakeholder interests should be considered by directors of the board, even if they go against shareholders’ sectional interests. Treating stakeholders as an end means they are no longer merely a means for maximizing shareholder wealth; instead, stakeholders’ welfare should be seen as an ultimate and intrinsic objective of the company (Freeman and Phillips 2002).

In contrast to the normative stakeholder theory’s emphasis on moral values and fundamental human rights, instrumental stakeholder theory focuses on how stakeholder value can be used as a means to improve corporate performance. It finds the stakeholder model is more economically

efficient than its rival approach. First, it recognizes that companies are not able to succeed or achieve business goals in the absence of stakeholders' contribution, whether pecuniary or non-pecuniary. Apart from shareholders, other non-shareholding stakeholders' investments, such as the credits provided by creditors, the labor and know-how provided by employees, the services and products provided by suppliers, and the infrastructure provided by the government among others, are indispensable. Secondly, as Thomas Jones (1995, p. 432) observes, there is a distinct competitive advantage:

This instrumental theory of stakeholder management essentially turns the neoclassical theory of the firm upside down. It implies that behaviour that is trusting, trustworthy, and co-operative, not opportunistic, will give the firm a competitive advantage. In the process, it may help explain why certain 'irrational' or altruistic behaviours turn out to be productive and why firms that engage in these behaviours survive and often thrive.

Put differently, the stakeholder model is argued as beneficial to fostering both existing and future contributors' potential, which subsequently helps advance aggregate wealth (Keay 2010). The internal logic is that the shareholder model would damage other stakeholders' incentive by virtue of their inferior position vis-à-vis shareholders. They might worry about being subordinated by shareholders' interests. This may also explain claims that the stakeholder model is – in contrast with the argument from a traditionally pure ethical perspective – a key to allowing businesses to make more profits (Campbell 1997). When stakeholders know their interests will be adequately considered by corporate management during the corporate decision-making process, they will be more likely to invest in that company and “go the extra mile.” Specifically, creditors may charge a lower interest rate or lend more when they are confident that it would be safe to put money into the company, employees may be more loyal to the company and work more passionately and productively, suppliers may also be more willingly to make firm-specific investment, and so forth. While shareholder model advocates insist that stakeholders would be better off under

the maximization of shareholder wealth (e.g., CLRSG 1999), stakeholder model advocates doubt its validity and believe that such an approach may not necessarily benefit other stakeholders or society as a whole (e.g., Dodd 1932). The lopsided focus on shareholder interests could be easily conducive to negative externalities, such as transferring costs of the company to stakeholders and retaining benefits for shareholders (Lee 2006).

Summary

A good company should provide a fair return to its shareholders, deliver quality products and services to consumers, build a good relationship with suppliers, take care of creditors' interests, improve job security and welfare for employees, and contribute to the well-being of the local communities and the prosperity of society. A narrow, shareholder-focused approach is increasingly more difficult to justify as a suitable guide for directors and their delegated managers in a company.

Cross-References

- [Corporate Objectives](#)
- [Stakeholder Thinking](#)

References

- Allen, W. T. (1992). Our schizophrenic conception of the business corporation. *Cardozo Law Review*, 14(2), 261–281.
- Berle, A. A., & Means, G. C. (1991). *The modern corporation and private property*. New Brunswick: Transaction Publishers. (Originally published 1932).
- Blair, M. M. (1995). *Ownership and control: Rethinking corporate governance for the twenty-first century*. Washington, DC: The Brookings Institution.
- Blair, M. M., & Stout, L. A. (2006). Specific investment and corporate law. *European Business Organization Law Review*, 7(2), 473–500.
- Campbell, A. (1997). Stakeholders, the case in favour. *Long Range Planning*, 30(3), 446–449.
- CLRSG. (1999). *Modern company law for a competitive economy: The strategic framework*. London: DTI.

- Deakin, S. (2005). The coming transformation of shareholder value. *Corporate Governance: An International Review*, 13(1), 11–18.
- Dodd, E. M. (1932). For whom are corporate managers trustees? *Harvard Law Review*, 45(7), 1145–1163.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence and implication. *Academy of Management Review*, 20(1), 65–91.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing.
- Freeman, R. E., & Phillips, R. A. (2002). Stakeholder theory: A libertarian defense. *Business Ethics Quarterly*, 12(3), 331–349.
- Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and “the corporate objective revisited”. *Organization Science*, 15(3), 364–369.
- Green, R. M. (1993). Shareholders as stakeholders: Changing metaphors of corporate governance. *Washington and Lee Law Review*, 50(4), 1409–1421.
- Handy, C. (1991). What is a company for? *RSA Journal*, 139, 231–241.
- Ireland, P. (1999). Company law and the myth of shareholder ownership. *Modern Law Review*, 62(1), 32–57.
- Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 20(2), 404–437.
- Kaler, J. (2003). Differentiating stakeholder theories. *Journal of Business Ethics*, 46(1), 71–83.
- Kay, J. (2012). *The Kay review of UK equity markets and long-term decision making*. Retrieved from <https://www.gov.uk/government/news/kay-review-publishes-report-on-uk-financial-sector>
- Keay, A. (2010). Stakeholder theory in corporate law: Has it got what it takes? *Richmond Journal of Global Law and Business*, 9(3), 249–300.
- Lee, I. B. (2006). Efficiency and ethics in the debate about shareholder primacy. *Delaware Journal of Corporate Law*, 31(2), 533–587.
- Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: A critical review of corporate governance. *Corporate Governance: An International Review*, 12(3), 242–262.
- O’Sullivan, M. (2001). *Contests for corporate control: Corporate governance and economic performance in the United States and Germany*. Oxford: Oxford University Press.
- Parkinson, J. (1993). *Corporate power and responsibility: Issues in the theory of company law*. Oxford: Oxford University Press.
- Phillips, R. A. (1997). Stakeholder theory and a principle of fairness. *Business Ethics Quarterly*, 7(1), 51–66.
- Phillips, R. A., Freeman, R. E., & Wicks, A. C. (2003). What stakeholder theory is not. *Business Ethics Quarterly*, 13(4), 479–502.
- Williamson, O. (1984). Corporate governance. *Yale Law Journal*, 93(7), 1197–1230.
- Williamson, J. (1996). The road to stakeholding. *The Political Quarterly*, 67(3), 209–217.

- Yan, M. (2015). Agency theory re-examined: An agency relationship and residual claimant perspective. *International Company and Commercial Law Review*, 26(4), 139–144.
- Yan, M. (2017). The corporate objective revisited: Part II. *Business Law Review*, 38(2), 55–60.
- Zingales, L. (2000). In search of new foundations. *Journal of Finance*, 55(4), 1623–1653.

Stakeholder Perspective Approach

► Stakeholder Theory

Stakeholder Relationship Management

- Competitiveness
- Stakeholder Value Creation

Stakeholder Theory

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Synonyms

Influence group analysis; Key actors analysis; Stakeholder perspective approach

Definition

Since the announcement of corporate social responsibility (CSR) concept in around 1950s, the scholars have tried to “unearth” the true meaning of CSR and have used several perspectives or approaches. One of the approaches that has significant role in examining and identifying the role of business in terms of its relationship with society is stakeholder approach. There are many theories and concepts in this approach, trying to decode the

relationship between the company and society and how both of party can influence one another.

To understand the stakeholder approach, first we must understand the meaning of the term “stakeholders.” Freeman gives a very broad definition: “a stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization’s objectives.” The groups or individuals, who are related to or affected by business, are commonly referred to as stakeholders. They are the following: the employees, customers, shareholders, suppliers, the local community, and the society at large (Freeman and Mcvea 2001). Jones and Wicks (1999) offers three typologies that he has extracted from the academic scholars in defining the stakeholder approach which are normative, instrumental, and descriptive/empirical.

These early formulations suggested (often simultaneously) that (1) firms/managers should behave in certain ways (normative), (2) certain outcomes are more likely if firms/managers behave in certain ways (instrumental), and (3) firms/managers actually behave in certain ways (descriptive/empirical) (Jones and Wicks 1999).

Normative stakeholder theory or also known as “narrative interpretation” is a theory which explains that the moral behavior is the foundation, in the contexts of engaging stakeholders. Rather than focusing on data or evidence, this theory focuses on normative issues such as moral obligation. While instrumental theory is contingent theory, the predicted outcomes are contingent on behavior of a certain type. It does not require the theorist to make simplifying assumptions about the fundamental nature of human behavior, such as the assumption of self-interest (or opportunism) made by economists (Jones and Wicks 1999). Lastly empirical or descriptive theory focuses in describing the actual behavior of the manager.

Post et al. (2002) argued that the stakeholder theory accentuated the notion that corporations must be viewed as operating at the center of a “network of interrelated stakeholders that create, sustain and enhance value creating capacity” (Post et al. 2002).

Introduction

The emergence of corporate social responsibility (CSR) concept in the business scene since around 1950s has highlighted the intertwined and reciprocal relationships between business and society. Although the search of the “true meaning” of CSR is still ongoing to this day. Scholars have tried to formulate the concept of CSR.

There are two factors that need to be understood in understanding strategic CSR, that is social responsibilities and social issues. Social responsibilities refer to the expectations that society put on companies while social issues refer to the factors where the given responsibilities are tied. Said factors, beside affecting companies’ ability to meet its objectives, can also affect their social responsibilities. Scholars suggested that there are two sides of the social contract: “formal”, which refers to firm’s explicit responsibilities such as obeying laws and regulations, creating jobs, paying taxes, etc., and “semiformal” contracts that refer to society’s implicit expectations towards the companies (Galbreath, Building Corporate Social Responsibility into Strategy, 2009).

Galbreath (2006) came out with 4 (four) strategic options to conceptualize CSR. Four strategic options are described, including: the shareholder strategy, the altruistic strategy, the reciprocal strategy, and the citizenship strategy. In the shareholder strategy, CSR is merely a component of an overall profit motive, the focus of the companies is only maximizing shareholder returns. While in altruistic strategy, interwoven relationship between the firm and its community is acknowledged and understood where the companies felt as they are a part of the community and must give back for the greater good of community (Galbreath 2006). Moving forward to reciprocal strategy when relationship goes beyond feeling and formal partnerships is involved for example between the firm and specific community group or nongovernmental organizations (NGO). While citizenship strategy goes further in recognizing various stakeholders, who are related to or impacted by the business, they must admit that stakeholders have different interests and expectations, and therefore there should be different

approach to engage. This is known as a stakeholder approach.

The term stakeholder started to emerge in around 1960s, pioneered by Stanford Research Institute (now SRI International). The stakeholder approach in CSR scene emerged in around 1980s.

One of the prominent scholars on the stakeholder approach was Edward Freeman, who wrote in his article about strategic management – A Stakeholder Approach in 1984. He offers the following characteristics of stakeholder approach, namely (Freeman and Mcvea 2001):

1. A stakeholder approach is intended to provide a single strategic framework, flexible enough to deal with environmental shifts without requiring managers to regularly adopt new strategic paradigms.
2. A stakeholder approach is a strategic management process rather than a strategic planning process. Strategic planning focuses on forecasting how the environment would be in the future, followed by independently developing plans for the firm to exploit its position.
3. The central concern of a stakeholder approach is the survival of the firm, seen in Freeman's words as "the achievement of an organization's objectives". Management must direct a course for the firm, not only trying to optimize current output, and that's how the company survive unstable environment.
4. A stakeholder approach encourages management to develop strategies by looking out from the firm and identifying, and investing in, all the relationships that will ensure long-term success. This emphasize on critical role for values and "value-based-management" within the business strategy.
5. Stakeholder approach is both a prescriptive and descriptive approach, rather than purely empirical and descriptive. This encourages strategic management that integrates economic, political, and moral analysis. This approach will have impacts on research in the discipline as well as practical results for managers.
6. The stakeholder approach is about concrete "names and faces" for stakeholders rather

than merely analyzing particular stakeholder roles. This calls for the management to delve in understanding of who are the real, concrete stakeholders specific to the company, and the circumstances in which it finds itself.

7. A stakeholder management calls for an integrated approach to strategic decision-making. Managers should find ways on fulfilling the needs of multiple stakeholders simultaneously rather than set of strategy stakeholders by stakeholders; strategies that integrate all stakeholders' perspective rather than offsetting one against another.

This characteristic shows embeddedness between stakeholders of the company with the company's management. SRI International then stated that it is important for managers to understand shareholders, employees, customers, suppliers, and society general so that the company can have the objectives that are supported by the stakeholders. In return, the company can achieve long-term success because the support from stakeholders would likely to help the business to sustain. This also suggests that managers should go all out in exploring their relationships with all stakeholders in order to develop business strategies.

Stakeholder approach has been used in developing the CSR strategy of the company. In this regard, companies not only have the social responsibility to fulfill but it also has to respond to the needs of specific constituents who are related to or impacted by their business. New developments also showed that because the advancement and acknowledgement of CSR keep growing since 1950s, stakeholders' (e.g., society, customers, etc.) expectations have evolved dramatically. It would be difficult to determine what are those responsibilities or moral obligations that based these responsibilities when the ones who have the obligations are unclear.

Therefore, it is so critical to have the clear definition of stakeholder, at least in terms of managerial implementation. However, usually the definition could be too broad, and it makes it difficult for the companies to understand the impacts of certain stakeholders to their organization/

company. Therefore, not only should the definition be sufficiently comprehensive and not too inclusive, but also should be clear enough to avoid misinterpretations. Stakeholder analysis tools, such as stakeholder mapping, power/interest matrix, and stakeholder moral responsibilities' matrix have been developed to provide a practical framework for managers (Kakabadse 2005).

To help determining certain impacts of certain stakeholders to the companies, Phillips (2003) offered an approach that highlight stakeholder's legitimacy. He argued that there are three types of stakeholders based on their legitimacy, which are: normative, derivative, and nonstakeholders. He suggests that normative stakeholders are those stakeholders to whom the company has a moral obligation, an obligation of stakeholder fairness, over and above that due other social actors simply by virtue of their being human. Meanwhile, derivative stakeholders are those groups whose actions and claims must be accounted for by managers due to their potential effects upon the organization and its normative stakeholders (Phillips 2003). Lastly, there are groups who are not considered as stakeholders at all and to these groups, the company has no moral obligations or responsibilities, as they also do not really have an impact to the company.

However, it should be noted that distinguishing clearly various categories of the stakeholders would be difficult. In certain circumstances, non-stakeholders can shift to derivative or normative stakeholders. The normative bond between a stakeholder group and company might be broken so that what used to be a normative stakeholder can become nonstakeholders. Or in some cases, a person of a stakeholder group can stop being a member of that group thus no longer a stakeholder.

Essentially, some of these stakeholders will have more influence than others and the business must have an understanding of how much influence and power each of these stakeholder groups have at present and also in the future (Papasolomou and Krambia 2005). Due to this imbalance power that is distributing around the stakeholders, the enthusiasts of this approach proposed that corporate managers have the task to

balance the interests of the different groups who are affected by or related to the business. The needs to balance these interests of the stakeholders demand the corporate to form the policy based on the perspective of all stakeholders.

When thinking about stakeholders, it should be noted that they have to be managed over the long run. Harrison and St. John, (in Freeman and Mcvea 2001), differentiate two basic posture on stakeholder management, that is: buffering and bridging. Buffering is the traditional approach for most "external" stakeholder groups, and it has objective at containing the effects of stakeholders on the firm. This approach includes several activities including market research, public relations, and planning. While buffering draws the line between the company and its external stakeholders, recognition of common goals and blurring the lines around the organization is required in bridging approach, and it involves interdependence and proactive partnering (Freeman and Mcvea 2001). This approach proposes a framework for determining the importance of developing partnering tactics and to rely on more traditional methods when it is convenient.

Key Issues

In the field of corporate social responsibility (CSR), relationship between companies and their stakeholders always spark interest both in academic community and among the company managers. The managers are aware of the diversity of legal norms, standards, practices, and CSR needs for a country, region, or line of business and of the fact that local managers are subject to constant pressure from stakeholders in order to enhance their involvement in CSR (Idowu et al. 2018). Stakeholders are consisted of various individuals or groups that have different needs and expectation toward the company and impose different interest.

Since the birth of stakeholder approach in business management area, it is a difficult task for managers to make attempts on balancing the interests of these different groups and individuals

which might also have possibilities to stand up against each other. Not including or refusing one of the identified interest or expectations of stakeholders when developing the objective may cause in backlash from the certain stakeholders which can hurt the business. However, companies tend to be socially perceived as responsible for certain stakeholder, for example, local community, and this could also raise criticism from different stakeholder groups.

Although, the stakeholder approach can help company managers to understand the relationships of the companies with their constituencies who are involved in their activities in various levels, it does not independently offer means or tools to capture the quality of these relationships. It would not be able to help the managers to understand forces that influence these stakeholder's expectations or the power and bargains of the stakeholders. This makes it difficult for the managers to identify or assess the potential threats that stakeholders might possess against the objectives of the companies.

Some scholars also argued that stakeholders approach is ill-spirited as it tends to imply the needs to sacrifice the business objectives of the organization, for example, generating profits for other social goals that could be not sustainable economically in order to be accepted by the stakeholders. Meanwhile the true purpose of the stakeholder approach is not to ignore or reject the company's business purposes, such as gaining profits, but rather broaden the shareholder model.

Another issue emerges when the definition of stakeholders is too broad and it affects the scope of the stakeholders in the business, it opens the possibility to include stakeholder groups or individuals that would likely to harm the company rather than support it, for example, the group that has tie-up with the competitors. While, managerially, stakeholders theory would not be complete without the existence of competitors in considerations, the company is not managed for the benefit of the competition.

Because the stakeholder approach put the attention on stakeholders' expectation, it should be noted that their expectations are not always in

line with the existing rules or law. When the aspirations from larger society that are represented through stakeholders are not met, there are potentials that society will impose their aspirations by going beyond the law.

These expectations or demands might come from considerations of what is sometimes disparagingly called conventional morality. Ignoring or not taking any claims into account when applying ethical norms to business, society, and stakeholders can still constrain business in a various ways other than by law, for example, by practicing social pressure and moral sanctions (such as boycotts, defamation of company brand image, or publicizing harmful corporate actions), thus these kind of repercussion should be anticipated by really listening to what the stakeholders might have in their aspiration by also keep informing the society with the good deed that has been done through the reports and other communication means.

Summary

Stakeholder theory has significant role in examining and identifying the role of business in terms of its relationship with society. There are many theories and concepts that in this approach are trying to decode the relationship between the company and society and how both of party can influence one another. To understand the stakeholder theory, first we must understand the meaning of the term "stakeholders." Freeman gives a very broad definition: "a stakeholder in an organization is (by definition) any group or individual who can affect or is affected by the achievement of the organization's objectives,"

To be able to understand this approach, Edward Freeman offers the characteristics of stakeholder approach, i.e., (1) providing a single strategic framework; (2) management process rather than a strategic planning process; (3) the survival of the firm; (4) encourages management to develop strategies; (5) prescriptive and descriptive; (6) concrete "names and faces;" and (7) calls for an integrated approach to strategic decision-making.

Stakeholder approach has been used in developing the CSR strategy of the company. In this regard, companies not only have the social responsibility to fulfill but it also has to respond to the needs of specific constituents who are related to or impacted by their business. However, there is imbalance power that is distributing around the stakeholders, thus this approach proposed that corporate managers have the task to balance the interests of the different groups who are affected by or related to the business. It also should be noted that their expectations are not always in line with the existing rules or law. When the aspirations from larger society that are represented through stakeholders are not met, there are potentials that society will impose their aspirations by going beyond the law.

Although the stakeholder approach can help company managers to understand the relationships of the companies with their constituencies who are involved in their activities in various levels, it does not independently offer means or tools to capture the quality of these relationships. This makes it difficult for the managers to identify or assess the potential threats that stakeholders might possess against the objectives of the companies.

Cross-References

- [Business Case of CSR](#)
- [Stakeholder Model](#)
- [Stakeholders](#)
- [Theorizing Governance from a Banking Perspective](#)

References

- Carroll, A. B. (2009). A history of corporate social responsibility: Concepts and practices. In C. Andrew, M. Dirk, M. Abigail, M. Jeremy, & S. S. Donald (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford, UK: Oxford University Press.
- Freeman, E., & Mcvea, J. (2001). *A stakeholder approach to strategic management*. Working Paper No.01-02. University of Virginia.

- Galbreath, J. (2006). Corporate social responsibility strategy: Strategic options, global considerations. *Corporate Governance*, 6(2), 175–187.
- Galbreath, J. (2009). Building corporate social responsibility into strategy. *European Business Review*, 21(2), 109–127.
- Idowu, S. O., et al. (2018). *Current issues in corporate social responsibility: An international consideration* (CSR, sustainability, ethics & governance). New York: Springer.
- Jamali, D. A. (2008). Stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *Journal of Business Ethics*, 82, 213.
- Jones, T., & Wicks., A. (1999). Convergent stakeholder theory. *The Academy of Management Review*, 24(2), 206–221.
- Kakabadse, N. K. (2005). Corporate social responsibility and stakeholder approach: A conceptual review. *International Journal of Business Governance and Ethics*, 1, 277–300.
- Papasolomou, I. D., & Krambia, M. K. (2005). Corporate social responsibility: The way forward? Maybe not! *European Business Review*, 17(3), 263–279.
- Phillips, R. (2003). Stakeholder legitimacy. *Business Ethics Quarterly*, 13, 25–41.
- Post, J. E., et al. (2002). Managing the extended enterprise: The new stakeholder view. *California Management Review*, 45, 6–28.
- Vos, J. F. (2003). Corporate social responsibility and the identification of the stakeholders. *Corporate Social Responsibility and Environmental Management*, 10, 141–152.

Stakeholder Thinking

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Synonyms

[Stakeholder framework](#); [Stakeholder model](#)

Definition

The definition of “stakeholder thinking” comes from the first definitions of stakeholder and the birth of stakeholder theory by Freeman. Indeed, even if the stakeholder concept found its roots in

the works of Rhenman and Stymne (1965) in Sweden and Ansoff (1965) in the United States, the concept became popular thanks to Freeman's publication of 1984.

"Stakeholder" is at the center of stakeholder thinking. Hence the meaning of "stake" and "holder" is important within the stakeholder thinking. Simple, the word "stake" means a right to do something in response to any act or attachment. Since, rights are generally attached with liabilities, this word also denotes liabilities of someone for enjoying a particular right. A stake could be a reasonable share of something. From the organizational stakeholder perspective, Carroll identifies three sources of stakes: ownership at one extreme, interest in between, and legal and moral right at the other extreme. The word "holder" is comparatively easy to understand. It denotes a person or entity that faces some consequences or need to do something as a consequence of act or to meet a certain need. Combining these two sets of meaning, stakeholder can be defined as "any group or individual who can affect or is affected by the achievement of the firm's objectives." For instance, the employees, customers, investors, competitors, government, and non-governmental organizations (NGOs) can be the stakeholder of a company (Rahim 2015).

Key Issues

Stakeholder thinking is a concept that has grown over time as fields such as business ethics, business and society, corporate social performance, and strategic management.

Freeman, generally known as the founder of the Stakeholder theory, in his work "Strategic Management: A Stakeholder approach" (1984), considered the company at the center of many interactions between stakeholders.

Carroll extended the interest in stakeholder thinking by authoring a business and society textbook and subsequent editions using the stakeholder approach (1989, 1993, 1996).

In the theoretical context of stakeholder theory, different stakeholder groups interact with company.

Stakeholders are defined as persons or groups that have, or claim, ownership, rights, or interests in a corporation and in its activities, past, present, or future. Stakeholders with similar interests, claims, or rights can be classified as belonging to the same group: employees, shareholders, customers, and so on (Clarkson 1995).

In literature, however, there are many definitions of stakeholders (Mitchell et al. 1997), all of which share their roots in the definition from Freeman (1984): "Any group or individual who can affect or is affected by the achievement of the organization's objectives."

Stakeholders might also be constructed in categories such as primary vs secondary, active vs passive, economic vs social, core vs strategic.

Literature offers different proposals to classify stakeholders by their respective level of importance, as resumed in the following table by Mainardes et al. (2012) (Table 1).

The corporation success depends on the managers ability to create satisfaction for each stakeholder group, so that each group continues as a part of the corporation's stakeholders system.

Stakeholder Thinking, Table 1 Stakeholder classification typologies

Authors	Classification/criteria used
Goodpaster (1991)	The strategic and the moral stakeholder
Savage et al. (1991)	Stakeholder's potential powers to threaten or cooperate with the organization
Clarkson (1995)	The primary (with formal relationships) and the secondary (without formal relationships)
Mitchell et al. (1997)	Power, legitimacy, and urgency
Rowley (1997)	Network density and the centrality of the organization focus
Scholes and Clutterbuck (1998)	Power of influence, impact on the organization and affinity with organizational objectives
Kamann (2007)	Power and the level of interest
Fassin (2009)	Classical stakeholders, stakewatchers, stakekeepers

Mainardes et al. (2011)

Donaldson and Preston (1995) have argued that the stakeholder approach is useful for descriptive, normative, and instrumental reasons. Thus, the power of stakeholder thinking is extended beyond its usefulness in describing organization relationships. The dual dimensions of stakeholder thinking, such as ethical and strategic one, have been discussed by Goodpaster (1991).

Five questions should be asked by managers to capture the information essential for effective stakeholder management: who are my stakeholders? What are their interests? What opportunities and challenges do the stakeholders present to the firm? What responsibilities does the organization have to its stakeholders? What strategies or actions have to be implemented by firms to respond to stakeholders' requests? (Carroll 1996).

The stakeholders, being among the main protagonists of corporate life, feel the need to be integrated and contribute to improving the company in which they are involved. Therefore, stakeholder engagement (SE) becomes a composite process that includes more methods of interaction consultation, communication, exchange, and dialogue between the company and its stakeholders. Greenwood (2007) identifies SE as the set of procedures that an organization develops to involve stakeholders in organizational activity, in order to create a system of cooperation (Phillips 1997).

Stakeholder theory scholars have tried to classify the relational models between organizations and stakeholders by assuming a gradual growth of stakeholder involvement and participation. First, the organization identifies and maps its stakeholders, if possible distinguishing between primary parties (those who are strategic in the middle to long term) and secondary parties (stakeholders that do not affect its sustainability) (Clarkson 1995). Second, it tries to manage stakeholders' expectations and the claims they support in accordance with their salience (Mitchell et al. 1997), while also balancing these various positions through a process of stakeholder management (O'Dwyer 2005). In the last step, organizations try to engage primary stakeholders in decision-making processes, making them participants in organization management and governance, sharing information, dialoguing, and creating a model of mutual responsibility. The

stakeholder engagement phase, unlike the stakeholder mapping and management phase, "creates a dynamic context of interaction, mutual respect, dialogue and change, not a unilateral management of stakeholders" (Andriof et al. 2002). As a result, the main feature of stakeholder engagement is not to encourage the mere involvement of stakeholders to "mitigate" or manage their expectations, but to create a network of mutual responsibility.

Future Directions

Undoubtedly, nowadays, stakeholder theory could not develop enough understanding of the heterogeneity of stakeholder claims and interests in focal firms. More importantly, the common or generic categories of stakeholders – for example, suppliers, customers, shareholders – are considered inadequate because they do not offer a realistic portrait of the stakeholders that interact with firms. Additionally, stakeholder theory is silent on what occurs when these generic categories breakdown (Freeman et al. 2010). This silence limits the ability of stakeholder theory to prioritize stakeholder claims. Building on stakeholder salience, Perrault (2017) proposed "status" as an attribute that explains how managers assign salience to various stakeholders and attempts to define how stakeholder claims are prioritized based on their status. Perhaps the first step for future research on this connection would be to empirically examine Perrault's (2017) proposition of the relevance of status with stakeholder salience and other salience attributes, for example, power and legitimacy. Knowing how status translates into power and how stakeholders possessing different levels of status push their claims on focal firms should provide important knowledge for this field. Within the broader premises of the stakeholder theory examining the associations between status and power and between status and legitimacy would be helpful to understanding negative, additive, subsuming, and synergistic results.

Moreover Crane et Ruebottom (2012) proposed an adaptation to stakeholder theory whereby stakeholders are conceptualized on the basis of their social identity. They proposed an

alternative approach based on the notions of social identity, as the fundamental key for group cohesion, mobilization, and action.

Previous research has suggested that, apart from the originally proposed attributes of salience (Mitchell et al. 1997), proximity (Driscoll and Starik 2004), frequency of contact (Luoma-aho 2005), status and organization (as discussed above) also determine stakeholder salience. The attribute of proximity is relevant to modern organizational forms and to not-for-profit organizations because they build more on networks and coalitions (Yaziji and Doh 2009). Khurram et al. (2019) believe that there is a need to empirically examine the proximity and frequency of contact to be attributes of stakeholder salience. Moreover, a detailed effort should also be directed toward untangling these attributes and drawing conceptual boundaries that differentiate between the two.

Nowadays, a stronger general equilibrium analysis that better incorporates dynamic aspects of the stakeholder salience model is necessary. Future research should investigate the salience and importance of stakeholders considering the dynamic relationship between a company and its stakeholders, also in light of the greater and greater importance given to digitalization.

Cross-References

- Stakeholder
- Shareholder Engagement
- Stakeholder Management
- Stakeholder Mapping
- Stakeholder Model

References for Further Readings

- Andriof, J., Waddock, S., Husted, B., & Rahman, S. (2002). *Unfolding stakeholder thinking: Theory, responsibility and engagement*. Sheffield: Greenleaf Publishing.
- Andriof, J., & Waddock, S. (2002). Unfolding stakeholder engagement. In J. Andriof, S. Waddock, B. Husted, & S. Sutherland Rahman (Eds.), *Unfolding stakeholder thinking: Theory, responsibility and engagement* (pp. 19–42). Sheffield: Greenleaf Publishing.
- Ansoff, I. H. (1965). *Corporate strategy*. New York: McGraw-Hill.
- Ayuso S, Rodríguez MA, García-Castro R, Ariño MA. (2014). Maximizing Stakeholders' Interests: An Empirical Analysis of the Stakeholder Approach to Corporate Governance. *Business & Society*, 53(3), 414–439. <https://doi.org/10.1177/0007650311433122>.
- Boesso, G., & Kumar, K. (2008). An investigation of stakeholder prioritization and engagement: Who or what really counts. *Journal of Accounting & Organizational Change*, 5(1), 62–80.
- Brenner, S. N., & Cochran, P. (1991). The stakeholder theory of the firm: Implications for business and society theory And research. *Proceedings of the International Association for Business and Society*, 449–467.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4, 497–505.
- Carroll, A. B. (1987, March–April). In search of the moral manager (pp. 7–15). *Business Horizons*.
- Carroll, A. B. (1989). *Business and society: Ethics And stakeholder management*. Cincinnati: South-Western Publishing Co. Also See 2nd Edition, 1993 And 3rd Edition, 1996.
- Carroll, A. B. (1991, July–August). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (1993). *Business and society*. Cincinnati, OH: South-Western.
- Carroll, A. B. (1994, April). Social issues in management research: Expert's views, analysis and commentary. *Business and Society*, 33(1), 5–29.
- Clarkson, M. B. E. (1995). A stakeholder framework for Analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Clarkson, M. B. E. (1994). *Proceedings of the second Toronto conference on stakeholder theory*. Toronto: The Centre for Corporate Social Performance and Ethics, University Of Toronto.
- Donaldson, T., & Le, P. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91.
- Donaldson, T., & Preston, L. E. (1995, January). The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review*, 20(1), 65–91.
- Evan, W. M., & Freeman, R. E. (1988). A stakeholder of the modern corporation: Kantian capitalism. In T. L. Beaucamp & N. E. Bowie (Eds.), *Ethical theory and business*. Englewood Cliffs: Prentice-Hall.
- Fassin, Y. (2009). The stakeholder model refined. *Journal of Business Ethics*, 84(1), 113–35.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). *Stakeholder theory: The state of the art*. Cambridge: Cambridge University Press.
- Goodpaster, K. E. (1991). Business ethics and stakeholder analysis. *Business Ethics Quarterly*, 1(1), 53–74.
- Harrison, J. S., & St. John, C. H. (1994). *Strategic management of organizations and stakeholders*. Minneapolis/St. Paul: West Publishing Co.

- Kamann, D. (2007). Organizational design in public procurement: a stakeholder's approach. *Journal of Purchasing & Supply Management*, 13(1), 127–36.
- Mainardes, E.W., Alves, H. and Raposo, M. (2011). Stakeholder theory: issues to resolve. *Management Decision*, 49(2), 226–52.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who And what really counts. *Academy of Management Review*, 22(4), 853–886.
- Phillips, R. (1997). Stakeholder theory and a principle of fairness. *Business Ethics Quarterly*, 7(1), 51–66.
- Me, P., & Mr, K. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 78–92.
- Rahim, M. M. (2015). Stakeholder thinking. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility : Csr, sustainability, ethics and governance* (p. 502). Heidelberg: Springer.
- Reed, D. (1999). Stakeholder management theory: A critical theory perspective. *Business Ethics Quarterly*, 9(3), 453–483.
- Rhenman, E., & Stymne, B. (1965, April). Foèretagsledning I En Foèràènderlig Vaèrld. Stockholm: Aldus/Bonniers. Toronto Conference, The: Reflections on Stakeholder Theory. (1994). *Business and Society*, 33(1), 82–131.
- Rowley, T. J. (1997). Moving beyond dyadic ties: A network theory of stakeholder influences. *Academy of Management Review*, 22(4), 887–910.
- Savage, G., Nix, T., Whitehead, C. and Blair, J. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Executive* 5(1), 61–75.
- Scholes, E. and Clutterbuck, D. (1998). Communication with stakeholders: an integrated approach. *Long Range Planning*, 31(2), 227–38.
- Weiss, J. W. (1994). *Business ethics: A managerial, stakeholder approach*. Belmont: Wadsworth.

Definition

Stakeholder Value Creation (SVC) is a decision-making approach based on the premise that business success is dependent on its ability to inclusively create collective value with and for multiple stakeholders. While still evolving, SVC emerged from the realization that an over-emphasis on shareholder dominance is harmful to society and the environment (Hampden-Turner et al. 2019a, pp. 28–37). In contrast with the short-term, profit-maximizing emphasis of shareholder value creation strategies, when making wealth-generation choices, corporate decision-makers increasingly embrace the rationale of stakeholder theory. SVC signifies a shift toward sustainable strategies driven by entrepreneurial purpose.

Both the novelty and the comprehensiveness of the SVC concept signify a broadened approach to business decision-making. This necessitates the realization of a new purpose and role for business at both the macro-, and microlevel of the organization's operating environment. At microlevel, SVC profoundly impacts an organization's *raison d'être*. Transitioning from an isolated shareholder value perspective to fundamentally creating integrated optimized value via an inclusive stakeholder-orientated approach significantly broadens the potential for the role of business in society. This unleashes innovation so that sustainable strategies evolve from being focused exclusively on environmental matters or the responsibility of governments or individual companies, to becoming a *connected endeavor* (Jonker and O'Riordan 2016, p. 5; O'Riordan 2017, p. 165).

Stakeholder Value Creation

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Synonyms

Stakeholder relationship management

Explication of Related Concepts

Stakeholder Theory goes beyond the traditional narrow shareholder view of management, which emphasizes the exclusive interests of shareholders. Based on the premise that exaggerating the interests of one group depletes the overall value created by and for the entire alliance, stakeholder thinking advocates a decision-making approach, which collaboratively, inclusively, and concurrently realizes a broad and multiple range

of collective stakeholder interests (O’Riordan 2017, pp. 59–61). Because this approach includes the interests of shareholders, by definition, it incorporates the shareholder value creation perspective (see ► [“Stakeholder Theory”](#)).

Stakeholders are defined as those groups and individuals who can affect or are affected by the achievement of some intended purpose (adapted from Freeman 1984, p. 52). Stakeholders are broad-ranging in scope because they comprise all those parties who potentially impact and/or are impacted by the choices made by those decision-makers aiming to realize some chosen objective (see, for example, Greenwood 2007; Mitchell et al. 1997, pp. 853–854; O’Riordan and Fairbrass 2008). Culminating in a comprehensive network of potential “players,” stakeholders can derive from the macro-, and/or microenvironment of an organization’s operating context. The relevant groups and/or individual stakeholders requiring consideration by decision-makers in the pursuit of some intended purpose is context-specific, i.e., dependent on the circumstances of each venture or purpose (O’Riordan 2017, p. 61). This topic is addressed in a separate entry written by the author in this Encyclopedia (see ► [“Stakeholders”](#)).

Stakeholder Relationship Management or Stakeholder-Orientated Management constitutes a range of formal and informal corporate activities focused on solving social and environmental challenges. The premise that relationships are the key to synergy and sustainable harmony advocates architecting stakeholder interests into products and services already at their conception and design stage. The underpinning rationale for this approach comprises the “Triple Bottom Line” (Elkington 1997, p. 2), and more recently, the “Triple Top Line” concept proposed by McDonough and Braungart (2002). Together, these concepts recommend regarding stakeholders in both the top line (sales) and the bottom line (profits) strategy (see ► [“Triple Bottom Line”](#)).

The conscious inclusion of stakeholder interests into the business operations of the firm can include managing stakeholder relationships via policies, practices, and programs. It can include

activities such as stakeholder prioritization and other choices about how to engage with stakeholders for the ultimate PURPOSE of generating economic, social, and ecological values. Sustainable strategic relationships ensue relating to the decision-making processes of planning, leading, organizing, implementing, and controlling the organization’s engagement with stakeholders within the business. This approach additionally includes operationalizing the corporate strategy into business functions, such as: production, marketing, accounting, and personnel management. Developing stakeholder relationships triggers the requirement to engage with stakeholders (see ► [“Stakeholder Relationship Management”](#)).

Stakeholder Engagement is defined as an inclusive approach to business practice by involving Stakeholders in a positive manner in organizational activities to achieve mutually acceptable outcomes (Greenwood 2007). It comprises establishing, developing, and maintaining stakeholder relations. This includes stakeholder identification, consultation, communication, dialogue, and exchange. It highlights how companies must “remain relevant” to stakeholders to survive in a challenging business environment. It emphasizes how “being relevant” requires regular interaction with important stakeholder groups (Greenwood and van Buren 2010). Stakeholder Relationships thus require a mindset shift, which views the organization as one party in a network within communities at all levels of Society from global to national (e.g., countries), to local (e.g., cities) and business communities (e.g., consumers, investors, minorities, etc.). This further entails managing the individual and collective expectations of those stakeholder groups.

Conceptual Foundation and Historical Development

The question of how to create value is related to philosophical reflections about how to lead a “good life.” Debates on how to best achieve “prosperity” are inspired by varying perspectives on how to realize the full development of each being’s “natural” potential. Such discussions have

been ongoing since the height of Greek philosophy in the fifth century BC. They have always been inherently linked to considerations about the synergies of success and responsibility, which were viewed by Aristotle as two sides of the same coin (Ross and Brown 2009). In the Middle Ages, this way of thinking was incorporated into Christianity where it was combined with Christian notions of the good life and how people (should) interact with one another. The Charity Commandment “love thy neighbor as thyself” (Matthew 22: 39 2011) advises individuals to include others in their considerations in the pursuit of any activity. [For clarification: “others” means: all individuals in the sense of “anyone” and not merely “others like me.” This advocates the inclusion of all (human) beings regardless of potential perceived “differences” based on mental constructs. This principle assumes equality on matters including gender, race, and sexual orientation, among others. Moreover, the circularity of this commandment reminds us that to reach our full potential, we must both receive love and give it to others in a cyclical way]. Other religions adopt similar notions, such as Daoism, which is related to Confucianism, and the principle of Dharma in Buddhism. These generally view the notion of being “responsible” to “others” as the first step on the path to “enlightenment.” The rationale for these assumptions is based on the unified view that every (human) being is sacred (or created in the image of God as believed by Christian religions), and therefore entitled to “love.” This is paralleled in the Greco-Christian notion of *agape*, meaning to embrace a universal, unconditional love, which transcends and persists regardless of circumstance (Nygren 1953). Notwithstanding the origin, these principles advocate that every being is unequivocally sacred. More universally, going beyond the theological view, they form the origin of humanism exemplified by Erasmus in his correspondence with Luther (Erasmus Centre 2019), and Thomas More in his book: *Utopia* (More 2016). These notions could be considered as the forerunners of an attitude, which reasons that every individual deserves consideration when undertaking any chosen activity (O’Riordan 2017, p. 4).

They could accordingly be interpreted as the early precursors for stakeholder theory.

The above review of the philosophical quest for “utopia” in a social context (society) presents the early foundations for modern-day thinking on Human Rights and the concept of “good citizenship.” The reflections of the early Greek philosophers, as well as the diverse deliberations of various theologians and humanist advocates, remind us that we are all “united” under the same principles to “love” our “neighbour.” This rationale determines the rules for social behavior and their principles were translated into norms in various contexts. The Greco-Christian philosophical notion of *agape* encouraging the persistent unconditional universal inclusion of “everyone” in all considerations regardless of circumstance could be considered to lay the basis for the transcending nature of inclusiveness in Stakeholder thinking today.

Ever since businesses were granted limited liability in Britain and France in the nineteenth century, discussions had been ongoing about what society can expect in return, how business affects people’s lives, and about how we can create a better, easier, happier world (Bregman 2016). Adam Smith and Emmanuel Kant were both inspired by the enlightenment movement, which laid the foundation, at least in an abstract way, for thinking on Human Rights. Kant translated the Charity Commandment into a modern-day guideline by emphasizing in his categorical imperative that in any activity all individuals should be considered under the rule that guides that activity. This was later formalized in the creation of the UN Declaration of Human Rights in 1949. According to Kant (1785), the rights of the individual are best honored by adhering to deontological principles, i.e., that the action should be based on the duty to honor universal principles. Kant’s advice to always treat others in relationships as ends and not as means, contrasts with the consequentialist approach of Adam Smith, who advocated the utilitarianist view of achieving the “best” outcome in any social context. Smith designed the market concept as a platform upon which individuals can be effective in meeting their own needs.

They must however be responsible toward others in meeting those needs (Smith 1759). This was based on the optimistic belief that individual rights can be achieved via market mechanisms. To safeguard stakeholder relationships, social legislation was enacted by the Government in the following 150 years during the period between the publication of Adam Smith's *Wealth of Nations* and the Second World War. In this period, legislation supporting the rights of the individual in the market was drawn up, such as maternity leave, working hours, and other similar social legislation. These developments exemplify in an economic or market setting, the ongoing attempts to ensure that all life is honored. This focus on the interests of "others" could be considered to set the stage for the first Stakeholder Relationships between business and society.

Academics studying strategy identified that 70 years ago management decision-making was increasingly influenced by stakeholders. In the 1950s and 1960s, America and Europe experimented with managerial capitalism in which big business worked with the government and unions to offer workers job security and perks. However, after the stagnation of the 1970s, shareholder value took hold, as firms sought to maximize the wealth of their owners and, in theory, maximize efficiency (The Economist 2019, p. 9). Arguably, one of the most prominent articulations of the view that the only responsibility of the corporate executive was to maximize profits for shareholders, derived from the economist Milton Friedman. In an article in the *New York Times* in 1970, Friedman stated that the social responsibility of business is to increase its profits (Friedman 1970). Friedman's view influenced the next 40 years of economics leading to finance-based thinking. This hardened the "business case" against the logic of corporate social, environmental, or other responsibility, thereby diminishing the relevance of any stakeholder groups beyond the needs and interests of the provider of capital to the enterprise – the shareholder (Idowu and Schmidpeter 2017, in O'Riordan 2017, p. ix). According to Remmé (2013), in that time, while some companies showing leadership developed in the direction of stakeholder thinking,

many were primarily inward looking, seeing only those stakeholders who were important for the success of their primary processes. This era has been described as "a period of total ignorance in the free-market capitalist world" ...or perhaps... "part of the nonchalant attitude of the old capitalism" (Idowu and Schmidpeter 2017, in O'Riordan 2017, p. ix).

Over the years however, several developments compelled corporate decision-makers to look beyond that narrow shareholder focus. Examples include a book published in 1972 with the title: *Limits to Growth*. Presenting research, which was commissioned by a think-tank called the "Club of Rome," this book outlined the findings from a study undertaken by the researcher husband-and-wife team Donella and Dennis Meadows. Researching at the Massachusetts Institute of Technology, they built a computer model to track the world's economy and environment thereby identifying the patterns and dynamics of human presence on earth (Meadows et al. 1972). The research forecasted environmental and economic collapse within a century if "business as usual" continued. The book's findings sparked a worldwide debate about the earth's capacity to withstand constant human and economic expansion (O'Riordan 2017, pp. 30–31). Such developments triggered an increasing awareness and concern among many people in society, which were later highlighted by Gro Harlem Brundtland, Chairperson of the UN World Commission on Environment and Development. She noted in a 1987 report titled "Our Common Future," the occurrence of "major unintended changes," which, despite some positive trends with respect to falling infant mortality, increasing life-span, and education opportunities for children among other developments, are influenced by and influence a vastly increased human population (O'Riordan 2017, p. 30). According to Remmé (2013), insights such as these sent a shockwave through Western societies, as they made people aware of pressing concerns regarding the environmental and social impact of business and the scarcity of resources. Ultimately, these developments influenced a broader mindset perspective on the role of business in society.

While scientific findings addressing “the predicament of mankind” relating to climate change have long been criticized by certain groups as doomsday fantasy, new evidence emphasizes the need for society to pay attention to environmental issues. Amplified among other factors by the Trump administration’s denial of global warming, controversy continues to rage amid debates questioning the accuracy of evidence, which indicates the deadly serious impact of climate change. Today, driven by previously unimaginable communication possibilities triggered by new technology, the role of the media and social networking is facilitating a new level of public awareness of environmental and social problems. Among the many persistent, pressing, pertinent problems currently facing society, climate change is sadly however merely one example. Mankind continues to face a long list of what have been termed “wicked” problems (O’Riordan and Hampden-Turner 2021). Wicked problems are comparable to what Aristotle termed “*aporia*.” Some puzzle, impasse, or difficulty (e.g., Camillus 2008). Problems are deemed to be “wicked” when their nature is highly ambiguous with no obvious or reliable solutions (e.g., a solution that works in one timeframe or context might not work in another). They include among others: nutrition and access to water issues, deforestation, lack of food and skills, insecurity, insufficient health care, and pollution.

From the outset, Freeman’s Stakeholder Theory challenged managers to look beyond profits. Today, Professor Freeman continues his unwavering message that the essence of “real” capitalism lies in creating value for all stakeholders and not just shareholders at the expense of other groups and individuals. Stating that “Capitalism is in trouble,” Professor Freeman appeals to us all to “be the generation that makes it better.” His theory in a nutshell is that business must act in the role of a good citizen in the community and society. Moreover, in an interview with *Forbes India*, Freeman emphasizes that businesses should be driven by purpose (Freeman 2018). What better purpose than to invest its resources to address the wicked problems facing mankind?

Capitalism in Crisis: What’s Gone Wrong?

Eugen Schmalenbach, one of the fathers of German business administration, pointed out that because profit maximization is individualistic, it ignores the external effects of business on society. The negative impact of the actions of business decision-makers are then ultimately borne by society (Muscheid 2013). The dominance of shareholder and finance-based thinking in the business world has led to an all-time low in public trust in business and its leaders (e.g., Mallenbaker 2013; May et al. 2007, p. 7; O’Riordan 2017, p. 37; Peters and Roess 2010, p. 8). Moreover, despite the focus on apparent “hard facts” based on numbers and profit maximization in the classic economic models, we possess no plausible concept of how wealth is created.

A key issue with the shareholder value creation rationale is that it is linear. Economists and financial experts focus on endless growth and rarely consider human relationships in their calculations when, as far as wealth and value are concerned, money as the main aim of business is a “sterile” objective. Money can be destructive if it is not created into value. An overemphasis on money has led to a largely unconnected society, in which progress is hindered and ecological and social values are depleted. Freeman points out that it was, ironically, Friedman himself who recognized that the shareholder value rule would work only if businesses obeyed the law and ethical custom. However, many of Friedman’s followers ignored Schmalenbach’s cautioning about the cost to the public of a narrow shareholder focus. The *homo oeconomicus* model developed over time from its original purpose as a mathematically calculable approach for economists into a normative behavioral model for real economic actors (Raworth 2018, p. 117). Under the rule of profit maximization as the main hypothesis, “people” were assumed to equate to “things” and measurement criteria and strategy adapted accordingly. As business and ethics became increasingly disconnected, the quip about business ethics being an oxymoron became recognizable. This approach evidently triggered Elkington’s (1997)

comparison of corporations to cannibals, who, because they are eating with forks, claim to behave in a civilized manner. The inherent flaw and fundamental systemic issues are obvious. While these realizations do not presume that economics or finance are useless or intrinsically corrupt per se, they highlight that money is only created by leveraging and lending out assets. Crucially, however, value is achieved when all parties in an enterprise have more resources between them than they started out with (Hampden-Turner et al. 2019a, pp. 51–61).

Research undertaken by O’Riordan (2017, p. 389) identified both the disconnecting quality of an overemphasis on profit maximization, as well as the converse connecting quality of inclusive prosperity maximization. Based on Drucker’s reasoning that all quantity is ultimately based on quality, “more profit” is a meaningless objective if it is not connected with some rational explanation of what quality it seeks to serve. Nevertheless, the role of people and social instincts, including the relevance of culture, and how values shape human progress are typically ignored in contemporary economics despite evidence of their salience (e.g., Harrison and Huntington 2000). Charles Hampden-Turner refers to this as “the colossal mistake in science,” which studies people using instruments designed for use in the natural sciences (Hampden-Turner 2018). Clearly, if this cause-and-effect logic worked, we could “cause” people to be more productive.

Management decision-making based purely on a rationale of disconnected economic-thinking and the view that the only responsibility of the executive is to maximize profits for shareholders is a false premise that is not sustainable. The rationale for this realization is outlined in the historical development presented above. It is based on the reasoning proposed by philosophers since the beginning of civilization about how to lead a “good life,” achieve “prosperity,” and thereby realize the full development of each being’s natural potential. Instead of fostering a wealth-creating cycle generating surplus value by generously supporting stakeholder groups, including employees, customers, the community, the government, and the environment, shareholder dominance

in management decision-making is destroying not merely wealth but also eradicating creativity and innovation (Hampden-Turner et al. 2019a, pp. 22, 53). People are increasingly beginning to realize that an overemphasis on shareholder interests is harmful to society and the environment (Hampden-Turner et al. 2019a, pp. 28–37).

The overly prolonged belief that a short-term shareholder focus is a reasonable way to invest collective resources is misled. The prime purpose of industry has become reduced to a means to make money for shareholders by exploiting other stakeholders’ interests in the process. The resulting disconnect between business and society has led to social problems arising from gross inequalities. Rather than realizing “utopia” in the sense of advancing human rights and “good citizenship” in line with the reflections of the early Greek philosophers, theologians, and humanists who maintained that we are all united under the same principles to “love our neighbour,” instead, a highly complex web of persistent multiple sustainability challenges has emerged. The “predicaments of mankind” noted previously have been described as “wicked” problems. They are frequently symptoms of other problems, meaning that addressing one typically uncovers more challenges (O’Riordan and Hampden-Turner 2021). The existential dilemmas we face today amplify the urgent need for a new concept of “progress” in management thinking. Addressing the disconnect requires a mindset shift placing the people who actually create the wealth at the center of the business and awarding them accordingly. The related issues were the theme of a book titled: *New Perspectives on Corporate Social Responsibility: Locating the Missing Link*, which focused on the missing link in the business value “chain” (O’Riordan and Zmuda 2015).

Future Directions

In a Ted Talk on 14 June 2013, the Harvard Business School Professor Michael Porter renowned for his theories on economics and business strategy asks why society has not yet satisfactorily addressed the wicked problems it faces

and why have they not yet been solved? In doing so, Porter bridges the terrain linking social and corporate ventures. While admitting that there are undoubtedly many bad actors in business, including examples from the banking, pharmaceuticals, and fast-food industries, among others, Porter reaches the conclusion of what he terms “the awkward reality” that not enough progress is being made by other groups. While some incremental improvement has been realized to date by Government, NGOs, and via Philanthropy, according to Porter, based on the current model, these lack the resources (i.e., money in the form of either Government taxes or philanthropic donations) to achieve the large-scale impact required to address the wicked and increasingly intensifying problems facing mankind. In contrast with those who claim that environmental and social problems are typically *caused* by business, i.e., that *business is the problem*, Porter’s thesis is that because business makes profits by solving problems, *business is the best means to solve social problems*. Moreover, Porter highlights the powerful role of business in society based on the positive impact it can generate on stakeholder well-being by delivering taxes, incomes, and charitable donations, among other benefits (Porter 2013).

Wicked problems call for wicked solutions. Stakeholder Value Creation (SVC) by passionate entrepreneurs is one such solution. However, the premise for realizing inclusive sustainable value outcomes is a change in perceptions about stakeholder relationships and how commercial value is created. The crucial prerequisite for achieving this mindset shift is for decision-makers from the public and private sector to cease making disconnected choices from the perspective of the past profit-maximizing logic. Presupposing that the purpose of business is to make profits is short-sighted. This was explained in an analogy expressed by Dennis Bakke, founder of the international power company AES, who stated in an interview with Robert M. Grant: “Profits are to business as breathing is to life” (Grant and Jordan 2015, p. 23). As Grant and Jordan point out, while breathing is essential to life, it is not the purpose

for living (Grant and Jordan 2015, p. 23). Similarly, profits are essential for the existence of the corporation, but they are not the reason for its existence. Instead, according to Freeman (2018) from an online article with Forbes in India, the purpose of business is usually determined by a passionate entrepreneur chasing a dream to change the world. Executives must create as much value as possible for customers, suppliers, employees, communities, and other stakeholders.

What creates wealth are relationships and mutuality. This fosters equality as a meta value above other values. (Equality in terms of interests and access to opportunities, not equality in outcomes, as the socialists would have it). Based on this rationale, we treat others as equals not for moral reasons but because it elicits the best from them. Concurrently, protecting and promoting a range of stakeholder interests in this way requires a transformed strategic mindset regarding the way value is created by corporations. Instead of struggling against their competitors as if they were their “enemies” in the “battlefield” of the marketplace as is the case in the current shareholder-orientated approach, stakeholders collaborate as value cocreators cooperating via relationships with further stakeholders in other network entities. Via the conscious choice to transition to this innovative, synergic, harmonized logic, consistent, coherent, synchronized possibilities unfold, thereby leading to an ultimate higher yield for the benefit of all.

Stakeholder thinking is aligned with the values of the Greco-Christian philosophical notion of agape. It encourages the unconditional universal inclusion of “everyone” in our consideration in a way which transcends and persists regardless of circumstance. Based on the rationale of its inclusive principles, stakeholder theory undoubtedly holds the potential for a better way forward. Business can benefit from creating wealth when it meets needs at a profit while considering the impact of its actions and the external effects of its corporate strategies. That is how wealth is created, which leads to more wealth for all.

Future developments will require fundamental change in the relationship between business and other stakeholders in society today and how to

manage Stakeholder Relationships. Including the interests of more stakeholders in their choices confronts decision-makers with a challenging task. Finding new ways to address the frequently diverse and sometimes conflicting interests and concerns of a wide range of distinctive, context-specific network of stakeholders, as well as differing levels of involvement with them, is not easy. Freeman (2018) highlights the need today for a mindset shift in the form of a deeper connection and purpose for business. Based on the objective to seek to create mutual value by connecting all the entities that are impacted by the decisions of the organization, Freeman emphasizes how, going forward, every business model must be built on stakeholder principles, which then form the essence of capitalism. A mindset reset, as well as new strategies and measurement methods and criteria are required to achieve this shift. It will necessitate a transition to a circular business model. This theme is addressed in a separate Encyclopedia entry by this author (see ► [“Innovative Business Models”](#)).

While Adam Smith designed the market idea as a platform upon which individuals can be effective in meeting their own needs, he highlighted that they must be responsible toward others in meeting those needs (Smith 1759). If we assume that we are all here to serve some purpose (Aristotle argued that all living beings strive for perfection as a principle purpose), then we require some goal or purpose to direct our activities. If the principal goal of society is well-being, then the only reasonable role for business is to serve the well-being of others. This is how business meets needs and ultimately generates sustainable profits. Optimally organizing the systems and structures in society to ensure long-term prosperity in a way that results in a fair distribution of wealth where people continue to exist in harmony with nature could consequently become the over-arching rationale for business. While being careful not to understate the important role and needs of other stakeholders, business plays a very powerful role in sustainable SVC.

The SVC notion was proposed by O’Riordan (2017) in her book: *Managing Sustainable*

Stakeholder Relationships: Corporate Approaches to Responsible Management, as an umbrella concept, which represents the three interrelated principles of multiple, collaborative, and connected value. SVC is “Multiple” because it is inclusively created by and for many varied parties in a network. It is “Collaborative” because the value is created mutually among and between the various constituents in the network. It is “Connected” in the sense of being “shared” based on the idea that was popularized by M.E. Porter and M.R. Kramer (2011). They defined shared value as “policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates” (Porter and Kramer 2011, p. 6). Similar to Porter and Kramer’s (2011) interpretation, connected value is created by reconsidering products and markets, reformulating productivity in the value chain, and developing supporting local clusters. It differs significantly from shared value in the sense that it focuses not on an organization-centric profit-maximization aim in the first instance, but rather on creating value driven by purpose via *the stakeholder connections*, i.e., *within but also between* the parties in the network (O’Riordan 2017, pp. 377–416).

Constructed upon the fundamental idea of creating a multiple, collaborative, and connected value proposition within the notion of a circular economy, SVC designates a process for realizing a supply of offerings to clients, customers, and/or the community, ultimately leading to (re-)design via cocreation, and thereby, sustainable added value for a range of constituents. The combined effect of these three principles enables the creation of *augmented broad-ranging stakeholder-orientated value optimization* in place of narrowly focused shareholder-orientated profit maximization. For clarification, by definition, the three principles of SVC are interrelated based on the rationale that they are founded on many of the values of sustainability (Brundtland 1987; Elkington 1997; McDonough and Braungart 2002) (see ► [“Sustainability”](#)).

Summary

Stakeholder Value Creation constitutes the conscious awareness about how wealth is created and how the choices of decision-makers impact others. It strives to address the challenge that shareholders and the financial sector of the economy have become severed from stakeholders within companies who do the actual work and create the wealth we all enjoy. The resulting gross inequalities have led to reduced salaries and wages and other declining rewards for those working on productive tasks and delivering genuine value. Moreover, it has diverted funds from the most important contributors away from sustainable ventures. Consequently, the current system is performing under par on general effectiveness, productivity, and innovation. Economic Man is bereft of purpose and meaning (Hampden-Turner et al. 2019b, p. 19). These issues are socially constructed by the way we have chosen to design the system. The excesses wrought by the traditional perceptions require replacement with a new mindset. SVC advocates a transition to that new way of thinking. It constitutes an increased awareness driven by the entrepreneurial purpose of decision-makers to inclusively create positive impact for all the interest groups who can affect or be affected by the business process of transforming resource inputs (land, labor, capital, enterprise) into outputs (products and services). SVC thus signifies a shift toward sustainable business strategies by highlighting that the value generated by corporations can inclusively create collective well-being with and for multiple stakeholders in society.

Cross-References

- [Innovative Business Models](#)
- [Shareholder Theory/Shareholder Value](#)
- [Stakeholder Relationship Management](#)
- [Stakeholders](#)
- [Sustainability](#)
- [Triple Bottom Line](#)

References

- Bregman, R. (2016). *Utopia for realists: How can we build the ideal world*. New York: Back Bay Books.
- Brundtland, G. H. (1987). *Our common future*. Oxford: Oxford University Press.
- Camillus, J. C. (2008, May). Strategic planning: Strategy as a wicked problem. *Harvard Business Review*.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.
- Erasmus Centre. (2019). Erasmus centre for early modern studies: Humanism. https://www.erasmus.org/index.cfm?itm_name=humanism-EN. Accessed 25 Sept 2019.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing.
- Freeman, R. E. (2018). *Businesses should be driven by purpose*. <http://www.forbesindia.com/article/third-anniversary-special/edward-freeman-businesses-should-be-driven-by-purpose/32934/1>. Accessed 16 May 2018.
- Friedman, M. (1970). *The Social Responsibility of Business is to Increase its Profits*. The New York Times Magazine, September 13, 1970. The New York Times Company.
- Grant, R. M., & Jordan, J. (2015). *Foundations of strategy* (2nd ed.). Hoboken: Wiley.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74, 315–327.
- Greenwood, M., & van Buren, H. J. (2010). Trust and stakeholder theory: Trustworthiness in the organisation–stakeholder relationship. *Journal of Business Ethics*, 95, 425–438.
- Hampden-Turner, C. (2018, May). *True value: The elusive nature of synergistic relations – How can we measure a dynamic phenomenon?* Keynote speech at the FOM Master Forum, Düsseldorf, Germany. Video on the KCC website: <https://www.fom.de/forschung/kompetenzcentren/kcc.html>
- Hampden-Turner, C., O’Riordan, L., & Trompenaars, F. (2019a). *Capitalism in crisis: What’s gone wrong and how can we fix it? A stirring vision of an egalitarian economy* (Vol. 1). London: Filament Publishing. ISBN 978-1-912635-56-6.
- Hampden-Turner, C., O’Riordan, L., & Trompenaars, F. (2019b). *Capitalism in crisis: How to move towards a circular economy* (Vol. 2). London: Filament Publishing. ISBN 978-1-912635-98-6.
- Harrison, L., & Huntington, S. (2000). *Culture matters: How values share human progress*. New York: Basic Books, Perseus Group.
- Jonker, J., & O’Riordan, L. (2016). New business models: Examining the role of principles relating to transactions and interactions. In H. G. Brauch, U. O. Spring, J. Grin, & J. Scheffran (Eds.), *Hexagon series on human and environmental security and peace* (pp. 543–557). Heidelberg/New York/Dordrecht/London: Springer.
- Kant, I. (1785). *Groundwork of the metaphysics of morals*. Cambridge texts in the history of philosophy. Revised

- Edition published in 2012. Cambridge University Press. ISBN-10:1107401062.
- Mallenbaker. (2013). CSR articles. <http://www.mallenbaker.net/csr/articles.php>. Accessed 14 Sept 2013.
- Matthew 22:39. (2011). The Bible. New international version. Worldwide: Biblica Link.
- May, S., Cheney, G., & Roper, J. (2007). *The debate over corporate responsibility*. Oxford University Press.
- McDonough, W., & Braungart, M. (2002). Design for the triple top line: New tools for sustainable commerce. *Corporate Environmental Strategy*, 9(3), 251–258. [https://doi.org/10.1016/S1066-7938\(02\)00069-6](https://doi.org/10.1016/S1066-7938(02)00069-6).
- Meadows, D., Meadows, D., Randers, J., & Behrens, W. (1972). *The limits to growth. A report for the Club of Rome's project on the predicament of mankind*. Potomac Associates.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- More, T. (2016). *Utopia*. London: Verso.
- Muscheid, W. (2013). *Schmalenbachs dynamische Bilanz: Darstellung, Kritik und Antikritik* (Vol. 3). Berlin: Springer.
- Nygren, A. (1953). *Agape and Eros* (trans: Watson, P. S.). London: S.P.C.K.
- O’Riordan, L. (2017). Managing sustainable stakeholder relationships: Corporate approaches to responsible management. In S. O. Idowu & R. Schmidpeter (Eds.), *Sustainability, ethics & governance series* (Monograph). Heidelberg: Springer Publishing.
- O’Riordan, L., & Fairbrass, J. (2008). CSR – Theories, models and concepts in stakeholder dialogue – A model for decision-makers in the pharmaceutical industry. *Journal of Business Ethics*, 83(4), 754–758.
- O’Riordan, L., & Hampden-Turner, C. (2021). Conceptual framework for CR management: Corporate social responsibility in Germany. In S. O. Idowu & M. T. Idowu (Eds.), *Global CSR practices*. Springer International Publishing.
- O’Riordan, L., & Zmuda, P. (2015). Conceptual framework for CR management: A critical review of sustainable business practice based on a case study of a leading transnational corporation. In L. O’Riordan, P. Zmuda, & S. Heinemann (Eds.), *New perspectives on corporate social responsibility: Locating the missing link* (pp. 473–504). Wiesbaden: Springer.
- Peters, A., & Roess, D. (2010). *The role of governments in promoting corporate responsibility and private sector engagement in development*. Gütersloh: UN Global Compact and Bertelsmann Stiftung.
- Porter, M. (2013). Ted Talk: Why companies can solve social problems. <https://www.youtube.com/watch?v=0ilh5YYDR2o>. Accessed 14 June 2013.
- Porter, M. E., & Kramer, M. (2011, January–February). Creating shared value: How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review*, 89, 62–77.
- Raworth, K. (2018). *Die Donut-Ökonomie*. München: Hanser.
- Rémé, J. H. M. (2013). *Stakeholder thinking*. Encyclopedia of Corporate Social Responsibility. https://link.springer.com/referenceworkentry/10.1007%2F978-3-642-28036-8_652. Accessed 2 Sept 2019.
- Ross, W. D., & Brown, L. (2009). *The Nicomachean ethics*. Oxford: Oxford University Press.
- Smith, A. (1759). *The theory of moral sentiments: By Adam Smith, professor of moral philosophy in the University of Glasgow*. London: Printed for A. Millar, in the Strand.
- The Economist. (2019, August 24–30). What companies are for: Competition, not corporatism, is the answer to capitalism’s problems. *The Economist*.

Stakeholders

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Synonyms

Stakeholder management; Stakeholder theory

Definition

Stakeholders are defined as those groups and individuals who can affect or are affected by the achievement of some intended purpose (adapted from Freeman 1984, p. 52). Because stakeholders comprise those with some possible “interest” in some envisioned venture, they are broad ranging both in scope and influence (see, for example, Greenwood 2007; Mitchell et al. 1997, pp. 853–854; O’Riordan and Fairbrass 2008). Stakeholders can accordingly potentially comprise “everybody,” i.e., all those parties possibly impacting and/or impacted by decision-makers aiming to achieve some chosen objective.

In the quest to realize some intended purpose, the **relevant groups** and/or individual stakeholders requiring consideration by decision-makers are **context-specific**, i.e., dependent on

the circumstances of each venture and/or purpose (O’Riordan 2017, p. 61). Potentially deriving from the broader spheres of the political, social, economic, technological realm, among others, the stakeholder spectrum not only spans the entire **macro-environment** affecting some chosen intention, but also the **micro-setting**. Selected examples of stakeholder groups and individuals at the macro-level could, for instance, include Society in general or some specific Community; Government; Policy Makers; Authorities (regulatory and other); the Media; Nongovernmental Organizations; Trade Unions; Business; Industries; among others. While at the micro-level, stakeholder groups could include subgroups or individual actors of the above, such as specific Organizations or Leaders. At the internal Corporate level, many stakeholder subgroups can further emerge, including, for instance: Employees; Customers; Members; Suppliers; Managers; Owners; Shareholders; Creditors; Investors; among others. Each of these groups holds its own distinct types and levels of involvement, and often exhibits diverse and conflicting interests and concerns (O’Riordan 2017, p. 79).

Explication of Related Concepts

Stakeholder Theory is based on the premise that business success is dependent on its ability to make itself relevant for its stakeholders. This broad scope signifies its reach beyond the traditional shareholder view. Instead of the narrow focus on profit maximization in the exclusive interests of shareholders, stakeholder theory advocates a decision-making approach, which inclusively addresses a broad range of stakeholder constituents (including shareholder interests). The significance of stakeholders in realizing whatever chosen purpose is being pursued by decision-makers cannot therefore be overstated. Any number of parties could, as individuals and/or groups, potentially impact an intended venture in two possible ways: either as **friends** and supporters/facilitators of an activity (without whom it would be accomplished less optimally or perhaps not at all); or alternatively, as skeptics with a critical eye

on the venture; and maybe even as **foes** (i.e., possibly blocking or otherwise harming the endeavor). Simply put: the success of any activity stems from its stakeholders (Hampden-Turner et al. 2019, pp. 20–22).

Historical Conceptual Development

Grounded in the age-old wisdom of the maxim encouraging the principle of “honouring” our “neighbour” and echoed in the golden rule advocating treating others as we ourselves would like to be treated, stakeholder theory essentially reminds us to “do unto others as you would have them do to you” (Matthew 22:39). While the “stakeholder” term was apparently first recorded in the 1960s, and although there is some discussion about the development of the concept, the academic literature recognizes the University of Virginia Professor Robert Edward Freeman as the “Father” of Stakeholder Theory (O’Riordan 2017, p. 59). In his book written in the 1980s entitled: “Strategic Management: A Stakeholder Approach” (1984), Freeman broadened the established corporate perspective by focusing on not merely the shareholders, but by additionally identifying the salience of the other key stakeholder groups of a corporation.

The stakeholder view emphasizes the need for decision-makers to be aware that organizations operate as crucial catalysts not in isolation, but as part of several communities. This recognition requires new forms of interaction (e.g., Burchell and Cook 2006, 2008, p. 40; Ethical Corp 2009; Mitchell et al. 1997). For instance, O’Riordan (2017, p. 60) notes that “customer capitalism” (Martin 2010) highlights the relevance for managers to take the other participants inherent in the network within which firms operate, when approaching strategic planning activities (Murray and Vogel 1997, p. 142). Similarly, Carroll and Shabana (2010, p. 101) advocate that business initiatives involving stakeholders in a positive manner can create organizational opportunities thereby ultimately leading to competitive advantage (Greenwood 2007, p. 317; ISO 2011, p. 4). Thus, the stakeholder view emphasizes how managers increasingly need to take the interests of a

broad range of stakeholders in society into account when developing their business strategies (Freeman 1984). This suggests that it makes sense to recognize the needs of the people and to connect the business strategy of the organization with societal needs via offering products and service solutions. In doing so, it is possible that the three rationales proposed by Mitchell et al. (1997, p. 854), including either the *power* of stakeholders to influence the firm, the *legitimacy* of their relationship with the firm, or the *urgency* of their claim on the firm, are likely to influence how managers rank and prioritize stakeholders' interests (O'Riordan 2017, p. 182). Given the aim of management to generate wealth and thereby ensure the firm's long-term survival, organizational decision-makers who choose to ignore the significance of stakeholders do so at their peril (see ► [“Stakeholder Value Creation”](#)).

The impact of corporate decisions on stakeholder groups was recognized by the United Nations (UN) World Commission on Environment and Development (WCED), which proposes a management decision-making logic grounded in stakeholder theory. The principles of Sustainable Development (i.e., the process needed to achieve sustainability) put forward in the Brundtland Report (1987) are based on the premise of meeting the needs of current generations without compromising the ability of future generations to meet their own needs (Brundtland 1987). The expected outcome is the long-term assurance of a global, peaceful, healthy, well-being for mankind via business activities.

The Brundtland definition advocates the connection of economic with social and environmental aims via what was originally termed the “triple bottom line” (TBL) principles (Elkington 1997, p. 2). The TBL advocates a decision-making approach, which takes a triad of interests into regard. They include: Profits (development of a solid economic structure, which facilitates industrialization and reduces unemployment and social issues); People (elimination of poverty, facilitation of human health and education); and Planet (protecting the environment). This leads to synergy and sustainable harmony (see ► [“Triple Bottom Line”](#)).

Further noteworthy developments in this field included an update of the TBL concept by McDonough and Braungart (2002). They advocated the requirement to architect stakeholder interests into products and services already at their conception and design stage. Hence the term “Triple Top Line” (TTL) reflecting stakeholder regard already in the top line (sales), as well as the bottom line (profits) (see ► [“Triple Bottom Line”](#)).

The principles inherent in Sustainability and the TBL/TTL call on corporate decision-makers to reflect upon the impact of their choices on stakeholder groups and individuals in both the ecological and social spheres, among others. This contemporary view has been labeled “Corporate Social Responsibility” (CSR) or “Corporate Responsibility” (CR), which, from the broad and increasing range of possible definitions available, can be understood to include the economic, legal, and ethical expectations placed on organizations by society at some given point in time (Carroll and Buchholtz 2009). In parallel with the increasing critical public and media attention provoked by ongoing corporate “misdeeds,” various authors (e.g., Lindgreen and Swaen 2010; Carroll 1979) note the burgeoning of the academic research on the topic of corporate (social) responsibility. O'Riordan (2017, p. 6) additionally highlights a growth in practitioner concern for responsible business practice, sustainable development, and stakeholder management (see, for example, International Business Leaders Forum (IBLF) 2010; International Organisation for Standardisation (ISO) 2011, p. 4; Organisation for Economic Co-operation and Development (OECD) 2001; World Business Council for Sustainable Development (WBCSD) 2002) (see ► [“Corporate Responsibility”](#)).

Possibly influenced by the rising awareness of the need for sustainable development, triple bottom/top line thinking and corporate responsibility in business decision-making, Laplume et al. (2008) identified a substantial rise in the prominence of stakeholder theory since 1995. Content analysis of the major themes in stakeholder theory undertaken by O'Riordan (2017, pp. 59–60) reveals that the literature clusters around five key

themes. These include its definition and salience, stakeholder actions and responses, firm actions and responses, firm performance, and theory debates (Laplume et al. 2008, p. 1160). Within this context, stakeholder and legitimacy theories (Gray et al. 1995, p. 52; Lindblom 1994; Stark 1994) are concepts which imply that stakeholders have a “stake” in the business (Campbell 2000; Haniffa and Cooke 2005, p. 3; Mitchell et al. 1997; Woodward et al. 2001, p. 357). These both legitimize stakeholder interests and justify that managers invest time and other resources on their stakeholders (O’Riordan 2006).

Today, a salient aspect of responsible management involves preserving with its stakeholders a “licence to operate” or “goodwill to conduct business” (e.g., Ethical Corp 2009; Ulrich and Fluri 1995). In contrast with the isolated shareholder view of the firm, the inclusive stakeholder-orientated perspective emphasizes a network model of stakeholder theory of the firm (Rowley 1997). This recognizes the company as one player within the context of the complicated web of duties and obligations, which all stakeholders hold (see, for example, Crane and Matten 2004, p. 51). The stakeholder perspective thereby “connects” the business with the market and the social system. The theme of *how* business connects with other stakeholders in its network is further developed in two separate entries written by the author in this encyclopedia (see ► “Stakeholder Value Creation” and ► “Innovative Business Models”).

Key Issues

While the traditional view of the corporation suggests that its primary, if not sole responsibility is to its owners, or stockholders, the stakeholder concept proposed by Freeman in 1984 adopts a broader view advocating that an organization’s responsibilities address not only shareholders and owners, but many other constituencies as well, including employees, suppliers, customers, the local community, local, state, and federal governments, environmental groups, and other special interest groups (O’Riordan 2017, p. 5). The stakeholder view also stipulates that shareholders

are best served when a wider range of stakeholder interests are respected. The increased scope of attention inherent in both the inclusive stakeholder concept, as well as the four components of corporate responsibility, trigger new expectations in society regarding the role of organizations. This significantly broadens the scope of management consideration in decision-making.

Existential, persistent, complex issues, arising from adverse man-made and/or natural events taking place at the macro-level (such as climate change, resource depletion, environmental degradation, pollution), as well as the ongoing impact of social and economic developments (such as changes in commodity prices, global economic crises, poverty, access to healthcare, and education issues), cumulatively set the stage for a highly multifaceted and complex operating setting for all decision-makers in the political, social, and economic sphere, among others. The diverse, broad-ranging, interrelated “wicked” issues (Camillus 2008) resulting from these events pose practical management challenges for business decision-makers (O’Riordan and Hampden-Turner 2021). Moreover, they trigger complex questions with respect to who is deemed to be responsible for what, who has a duty to whom, and how to optimally organize and harmonize competing stakeholder interests (O’Riordan 2017, p. 5). Answering these questions trigger tricky debates on matters ranging from responsibility to ethics relating to the overarching interdependency between modern business and society within a capitalist system (May et al. 2007; Welford 1995, p. 114; 2013).

Stakeholder interest in the behavior of firms, and particularly large companies, has been reignited in the past decade or due to numerous reported adverse “events” involving firms from a range of industry sectors, such as banks, telecoms operators, energy companies, and many others (see, for example, The Economist 2013; Mallenbaker 2012; May et al. 2007, p. 7; Peters and Roess 2010; Wagner 2007). According to O’Riordan (2017, p. 7), today the corporate responsibility challenge is no longer about the question of *whether* to behave responsibly, but *how*. Addressing this challenge confronts business decision-makers with a complicated

TBL/TTL balancing act of attempting to unite their company's economic interests with the broader interests of society and the environment.

Responsible Stakeholder Management remains an ambiguous endeavor because identifying how to leverage the resources of the firm to most optimally address the sustainable development challenges noted previously is a complex management task. It is further complicated by the subjective nature of the multidimensional stakeholder expectations involved in this emerging field. Because it is difficult to define, it persistently remains a matter of vivid debate, the overall outcome of which is challenging to measure, and therefore problematic to justify as a strategic approach using conventional financial management or accounting methods (Jonker 2012). Moreover, the management tools for translating notions of sustainable responsible management into everyday business practice inadequately provide feasible management solutions. This is either because they are underdeveloped and lack comprehensiveness, or, in contrast, because they are so overly complicated that management decision-makers view them as incomprehensible (O'Riordan and Zmuda 2015). The resulting lack of transparency for all stakeholders, especially for decision-makers facing the management challenge of identifying an optimal business response, additionally triggers intense debate regarding the rationale (i.e., *why*) integrating responsible solutions into business operations might be considered and justified as a good idea (O'Riordan 2017, p. 7).

Solutions to these challenges require a fundamental reconsideration of the role of business in society. This necessitates a comprehensive review of the entire macro-level system (including political, economic, social, and technological structures and incentives, among others). While this scope clearly reaches beyond the capacity and influence of individual decision-makers within isolated companies, the quest to identify an improved role for business in society prompts the requirement for decision-makers at all levels to critically consider the impact of their actions when designing economic policies and commercial strategies. This expanded reach considerably complicates the task of managing sustainable

stakeholder relationships from a corporate perspective. Stakeholder "engagement," "dialogue," or more generally "relationship management" refers to the approach, system, and processes employed by decision-makers (either as individuals or in an organization) to interact with stakeholders for some intended purpose (see ► ["Stakeholder Relationship Management"](#)).

A review of the literature by O'Riordan (2017, pp. 92–94) proposed eight open issues comprising five management "misunderstandings," or "misconceptions," and three "unsolved challenges" facing decision-makers when attempting to manage sustainable stakeholder relationship. The five misunderstandings/misconceptions from a corporate perspective include:

1. **The Illusion of Separation and the Absurdity of Ignoring the Connections** instead of appreciating the fundamental interdependencies between business and society. Instead, organizational success is clearly dependent upon a constructive relationship with society.
2. **Overlooking the Obvious at Everybody's Peril** instead of recognizing that an alternative approach is required to appropriately address the pressing sustainability issues of our time. Transition to a stakeholder mindset requires new measures and effective mechanisms within the economic, social, and political system as well as at organizational (management) level.
3. **The "Blind" Belief that the Business of Business is Business** instead of realizing that business succeeds best when it serves society's needs with valuable commercial solutions. The business of business is the well-being of society.
4. **The Paradox of Profits and the Limits to Altruism** instead of understanding that over time, a business that is not profitable (either due to an overemphasis on increasing sales or decreasing costs, or, alternatively because of excessive philanthropy) runs the risk of operating as a burden to taxpayers or ceasing to exist. In both cases, the resulting economically unprofitable organizations deliver no value to society.

5. **The False Truth of “Ethical” Business** instead of grasping the voluntary nature of responsible business behavior. Those in search of a moral in business are best advised to read an Aesop’s fable. Because business is amoral it cannot be generally prescribed or judged in the normative moral sense. The interpretation of ethical or moral matters is context-specific. While extremely important as drivers of business values in an organizational context, they are chosen and implemented exclusively on an individual (e.g., leadership) basis. Consequently, they require evaluation at an individual (subjective) level of analysis. Hence, it is difficult to deem or measure business via indicators such as “ethical” or “unethical,” due to the individual nature of ethical conduct (e.g., motivation, as well as the structures, systems, and processes) inherent in the (subjective) notion of responsible profits.

Extrapolated from an extensive review of past scholarship, these aspects arguably reflect the typical prevailing “mindset” with respect to the role of business in society. They pose significant barriers to unleashing the full potential of corporate responsible management strategies in the transition from a shareholder to a stakeholder decision-making perspective (O’Riordan 2017, pp. 92–94). Three key unsolved challenges include:

1. **Rethinking the Logic of Competition:** Rather than on exclusively fighting against one another to accumulate money and materialistic objects for a chosen few, competitive behavior must be reflected. Those who steadfastly believe in the rationale of a shareholder approach must reconsider the sustainability of its wealth-creation logic. To realize the full potential of business in society, the mechanisms of competition must focus on the relationships *between* stakeholders collectively striving together. To optimally unleash the highest potential of each individual group, the wider benefits and costs must be recognized. Distributing the resulting wealth for the
- advantage of a broader range of interests requires new assessment mindset and methods.
2. **The Mystery of Measurement and Management:** If effective measurement is a prerequisite for all management practice, when deciding how to invest the firm’s resources in a sustainable way from a broadened TBL/TTL perspective, what precisely counts as value, who decides, and how is this measured?
3. **Perfection is the Child of Time:** Addressing the above-noted issues will require transformation to a more sustainable future. Such fundamental long-term transition in the traditional industrial capitalist system includes a broadening of the time horizon perspective in policy and business planning. This involves essential changes in the current system, mechanisms, and methods.

Crucially, corporate approaches based on a stakeholder perspective are complicated because they represent value judgments. This involves the proactive (subjective) choice to focus management decisions (both of an internal and external dimension) toward value creation. This signifies a new approach, which clearly goes beyond mere compliance with existing legal requirements. Unsurprisingly however, possibly due to inadequate common agreement regarding the misconceptions and challenges presented above, as well as a lack of consensus on how the perceived value generated by business in society is created, measured, and reported, the topics of business accountability and responsibility continue to remain elusive notions and contested issues for business managers and their stakeholders (see, for example, Acutt et al. 2004, p. 302; Carroll 1999; Crane and Matten 2010, p. 224; Ferrell et al. 2010; O’Riordan and Fairbrass 2008, p. 746). Nevertheless, while stakeholder relationship management is not a new concept, it is widely recognized in academia and increasingly by business as vital to the organization’s success. According to AA1000 (2015, pp. 4 and 6), this is in part due to the principle of including the interests, involvement, and active participation of stakeholders in strategic business choices. The aim being to identify,

develop, and realize accountable, sustainable, strategic TBL/TTL value creation (O’Riordan 2017, p. 79). For further details please refer to the related entry by this author (see ► “Stakeholder Value Creation”).

Future Directions

The principle of inclusivity, which encourages the practice of integrating regard for the interests and participation of stakeholders in decision-making, assumes that there is a role for business in social and environmental problems. The question is: what is that role? Answering it requires reflection on the way the key issues noted in the previous section have been approached in the past so that we can learn from the evidence to navigate a better path going forward. The *noblesse oblige* rationale reasons that the status and power of organizations signify an obligation or moral duty of generous behavior toward others. Because an organization has the competence to offer solutions, it has a responsibility to act. By highlighting the salience of a broader range of stakeholders beyond the traditional shareholder view, Freeman (1984), and later Freeman et al. (2007), and again Freeman et al. (2010) proposed how management could address the interests of a wider and more diverse spectrum of interest groups than merely the owners of the firm.

Freeman’s rationale emerged from the realization that an overemphasis on shareholder dominance is harmful to society and the environment. In their recent book, Hampden-Turner et al. (2019, p. 37) suggest that the threat posed by shareholders to public companies is analogous to cancer’s threat to the human body. Cancerous in the sense that, if any one element in a system is expanded unilaterally, it will first unbalance, then destroy it. The short-term, profit-maximization objective inherent in the shareholder approach is fatal because quick, riskless money-making is a fraud. The point is *not* that shareholders should receive less. However, it is crucial to appreciate that shareholders will only add value if they are *not placed first*

when *it is the stakeholders who are actually doing the work*. Moreover, PROFITS are the CONSEQUENCE of some intended PURPOSE; in that order, profits are not the purpose in the first instance (Hampden-Turner et al. 2019, pp. 28–37).

Awareness of the need to restore the equilibrium of the whole is beginning to dawn on decision-makers. The stakeholder perspective presented by Freeman with its emphasis on a collectively inclusive interpretation of the well-being of society is increasingly replacing the traditional shareholder dominance. Crucially, this development is likely to be essential if the planet is to survive the current effects of climate change and global warming. Simply put, Sustainability requires the efforts of all stakeholders working together. Gradually, the evolution of capitalism is reaching a new stage. Going forward, the best kind of capitalism will draw on the commitments of all those with a stake in the venture. Stakeholder Capitalism is overtaking Shareholder Capitalism. Moreover, it must do so in order to address the “wicked” sustainability challenges facing mankind (Hampden-Turner et al. (2019, pp. 36–37).

It is simply absurd to claim that employees, suppliers, customers, and the environment are mere ‘agents’ for shareholders, that someone who has owned shares for ten minutes ‘owns’ the work of a 20-year employee or 40-year supplier, or cares about the planet. (Hampden-Turner et al. 2019, p. 29)

Solving sustainability challenges will require the cooperation of stakeholders who must be allowed to own what they have helped to create.

Wealth creation and a saved planet belong to all of us and depend on all of us giving what we can. (Hampden-Turner et al. 2019, p. 29)

Relationships among stakeholders are the keys to wealth creation. Most wealth is created however not so much by specific persons or groups, but by the quality of the relationships among these. Companies grow where these are in harmony (Hampden-Turner et al. 2019, p. 31). Accordingly, rather than competing with those we encounter day by day, we need to cooperate

with them to forge win-win solutions. This progresses the organizational purpose from a focus on efficiently “doing things better” to effectively “doing better things.” Inspiring all stakeholders to strive together to “make a difference” is signified in the original Latin meaning of the word competition, which focuses on striving together (as in sports, based on rules to which both parties agree). Via this approach, sustained responsible profits are enabled by means of knowledge as a key connecting mechanism (O’Riordan 2017, pp. 387–388). This stakeholder theme is further developed in a separate entry written by the author in this encyclopedia (see ► “Stakeholder Value Creation”).

Summary

Stakeholders comprise all individuals, groups, or constituents with some possible “interest” in a particular endeavor. Essentially, business comprises the interactions of stakeholder groups creating value for other stakeholder groups. Because stakeholder groups are broad ranging both in scope and influence, they can comprise all those parties who could potentially impact and/or be impacted by decision-makers aiming to achieve some (consciously) chosen objective. While business decision-makers are thus wise to consider their stakeholder’s interests, nevertheless, addressing them has always been tricky. Perceptions of what constitutes the “fair” management of different groups are subjective in nature and fundamentally depend on the context-specific circumstances of each venture, as well as the mindset values intrinsically underlying its purpose. Going forward, business decision-makers will gradually begin to more purposefully recognize that sustainable superior profits essentially derive from satisfactorily fulfilling the expectations of key stakeholder groups, such as customers, employees, and suppliers. Thus, awareness will grow that the conventional exclusive shareholder-orientated business logic of achieving profits at the expense of others, leading to “tragedy of the commons” outcomes, depletes not merely profits in the medium to long term but

the overall collective value. Because diverse stakeholder groups will increasingly expect greater equilibrium of return in stakeholder relationships, achieving sustainable profits will hinge on the how equitably decision-makers choose to treat those groups. Healthy stakeholder relationships shaped by win-win logic unleash a flow of collective value. The profitability of others thus sustains one’s own superior profit performance and long-term economic progress is achieved in the collective interest and the well-being of society.

Cross-References

- Corporate Responsibility
- Innovative Business Models
- Risk Management (Environmental Risk and Social Risk) and CSR
- Stakeholder
- Stakeholder Relationship Management
- Stakeholder Value Creation
- Triple Bottom Line

References

- AA1000 (AccountAbility). (2015). Accountability institute website. <http://www.accountability.org/research/organisational/index.html>. Accessed 25 Nov 2015.
- Acutt, J. N., Medina-Ross, V., & O’Riordan, T. (2004). Perspectives on corporate social responsibility in the chemical sector: A comparative analysis of the Mexican and South African cases. *Natural Resources Forum*, 28, 302–316.
- Brundtland, G. H. (1987). *Our common future*. Oxford: Oxford University Press.
- Burchell, J., & Cook, J. (2006). It’s good to talk? Examining attitudes towards corporate social responsibility dialogue and engagement processes. *Business Ethics: A European Review*, 15(2), 154–170.
- Burchell, J., & Cook, J. (2008). Stakeholder dialogue and organisational learning: Changing relationships between companies and NGOs. *Business Ethics: A European Review*, 17(1), 35–36.
- Camillus, J. C. (2008, May). Strategic planning: Strategy as a wicked problem. *Harvard Business Review*.
- Campbell, D. J. (2000). Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer Plc corporate reports, 1969–1997. *Accounting Forum*, 24(1), 80–100.

- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1999). Corporate social responsibility: The evolution of a definitional construct. *Business and Society*, 38(3), 268–295.
- Carroll, A. B., & Buchholtz, A. K. (2009). *Business and society: Ethics and stakeholder management*. Mason: Cengage Learning.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*. <https://doi.org/10.1111/j.1468-2370.2009.00275.x>.
- Crane, A., & Matten, D. (2004). *Business ethics: A European perspective*. New York: Oxford University Press.
- Crane, A., & Matten, D. (2010). *Business ethics: A European perspective*. New York: Oxford University Press.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.
- Ethical Corp. (2009). *If Roche sneezes the pharmaceutical industry catches a cold*. www.ethicalcorp.com. Accessed 21 Sept 2009.
- Ferrell, O. C., Fraedrick, J., & Ferrell, L. (2010). *Business ethics: Ethical decision-making and cases*. Boston: Centage Learning.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing.
- Freeman, R. E., Martin, K., & Parmar, B. (2007). Stakeholder capitalism. *Journal of Business Ethics*, 74, 303–314. Springer.
- Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). *Stakeholder theory: The state of the art*. Cambridge University Press.
- Gray, R. H., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47–77. University Press.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74, 315–327.
- Hampden-Turner, C., O’Riordan, L., & Trompenaars, F. (2019). *Capitalism in crisis: What’s gone wrong and how can we fix it? A stirring vision of an egalitarian economy*. London: Filament Publishing. ISBN 978-1-912635-56-6.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391–430.
- IBLF (International Business Leaders Forum). (2010). *Integrating CSR into mainstream business practice*. *International business leaders forum (TPI) working paper no. 2/2010* by Refal Serafin). www.thepartneringinitiatives.org. Accessed 15 Dec 2010.
- ISO. (2011). Guidance on social responsibility international organisation for standardisation, International Standard ISO/DIS 26000. Geneva.
- Jonker, J. (2012). *New business models: An exploratory study of changing transactions creating multiple value (s)* (Working paper). Nijmegen School of Management, Radboud University Nijmegen.
- Laplume, A. O., Sonpar, K., & Litz, R. A. (2008). Stakeholder theory: Reviewing a theory that moves us. *Journal of Management*, 34(6), 1152–1189.
- Lindblom, C. K. (1994). *The implications of organisational legitimacy for corporate social performance and disclosure*. Paper presented at the Critical Perspectives on Accounting Conference, New York.
- Lindgreen, A., & Swaen, V. (2010, March). Corporate social responsibility. *International Journal of Management Reviews*, Special Issue, 1–7.
- Mallenbaker. (2012). *Corporate social responsibility news and resources*. <http://www.mallenbaker.net/csr/CSRfiles/enron.html>. Accessed 22 Dec 2012.
- Martin, R. (2010). The age of customer capitalism. *Harvard Business Review*, 88, 1–2.
- May, S., Cheney, G., & Roper, J. (2007). *The debate over corporate responsibility*. Oxford University Press.
- McDonough, W., & Braungart, M. (2002). Design for the triple top line: New tools for sustainable commerce. *Corporate Environmental Strategy*, 9(3), 251–258. [https://doi.org/10.1016/S1066-7938\(02\)00069-6](https://doi.org/10.1016/S1066-7938(02)00069-6).
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Murray, K. B., & Vogel, C. M. (1997). Using a hierarchy-of effects approach to gauge the effectiveness of corporate social responsibility to generate goodwill toward the firm: Financial versus non-financial impacts. *Journal of Business Research*, 38, 141–159.
- O’Riordan, L. (2006). CSR and stakeholder dialogue: Theory, concepts, and models for the pharmaceutical industry. MRES dissertation, University of Bradford, Bradford.
- O’Riordan, L. (2017). Managing sustainable stakeholder relationships: Corporate approaches to responsible management. In S. O. Idowu & R. Schmidpeter (Eds.), *Sustainability, ethics & governance series*. Heidelberg: Springer.
- O’Riordan, L., & Fairbrass, J. (2008). CSR – Theories, models and concepts in stakeholder dialogue – A model for decision-makers in the pharmaceutical industry. *Journal of Business Ethics*, 83(4), 754–758.
- O’Riordan, L., & Hampden-Turner, C. (2021). Corporate social responsibility in Germany. In S. O. Idowu (Ed.), *Current global practices of corporate social responsibility: In the era of sustainable development goals*. Springer International Publishing.
- O’Riordan, L., & Zmuda, P. (2015). Conceptual framework for CR management: A critical review of sustainable business practice based on a case study of a leading transnational corporation. In L. O’Riordan, P. Zmuda,

- & S. Heinemann (Eds.), *New perspectives on corporate social responsibility: Locating the missing link* (pp. 473–504). Wiesbaden: Springer.
- OECD (Organisation for Economic Co-operation and Development). (2001). *Competition and regulation issues in the pharmaceutical industry*. OECD Report. <http://www.oecd.org/competition/sectors/1920540.pdf>. Accessed 26 Mar 2016.
- Peters, A., & Roess, D. (2010). *The role of governments in promoting corporate responsibility and private sector engagement in development*. Gütersloh: UN Global Compact and Bertelsmann Stiftung.
- Rowley, T. J. (1997). Moving beyond dyadic ties: A network theory of stakeholder influences. *Academy of Management Review*, 22(4), 887–910.
- Stark, A. (1994, May–June). What's the matter with business ethics? *Harvard Business Review*, 38–48.
- The Economist. (2013). A kinder, more restful capitalism. <http://www.economist.com/news/finance-and-economics/21589918-banks-try-assuage-misgivings-best-and-brightest-kinder-more>. Accessed 22 Nov 2013.
- Ulrich, P., & Fluri, E. (1995). *Management: Eine Konzentrierte Einführung (Management a Concise Introduction)* (7th ed.). Bern/Stuttgart/Wien: Haupt.
- Wagner, G. R. (2007). Gesellschaftliche Verantwortung als Unternehmensbild? [Social responsibility as a corporate philosophy]. In S. Hilger (Ed.), *Kapital und Moral. Ökonomie und Verantwortung in historisch-vergleichender Perspektive* (pp. 35–66). Köln/Wien: Böhlau.
- WBCSD (World Business Council for Sustainable Development). (2002). *The business case for sustainable development: Making a difference towards the Johannesburg summit 2002 and beyond*. Geneva.
- Welford, R. (1995). *Environmental strategy and sustainable development: The corporate challenge for the 21st century*. London: Routledge.
- Welford, R. (2013). Shared value: Ten lessons from the CSR Asia summit. www.CSR-Asia.com. Accessed 23 Sep 2013.
- Woodward, D., Edwards, P., & Birkin, F. (2001). Some evidence on executives: Views of corporate social responsibility. *British Accounting Review*, 33, 357–397.

Stakeholders Acceptance

► Social Acceptance

Standard

► NP 4469: Portuguese Social Responsibility Standard

Standard for Environmental Management System

► ISO 14001 Standard

Standardization

► Sustainability Standards and Standardization

Standards

► Core Values

Standards for the Assurance of CSR Information

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Synonyms

Assurance normalization; Assurance norms;
Assurance standardization; Assurance standards

Description

Standards for the assurance of CSR information arise as an initiative of different standardizing bodies to establish guidelines to be followed by professionals in the assurance process. Its objective is to increase rigor in the practice of this service and thereby improve the credibility of the information.

Noteworthy from an international perspective is the ISAE3000, issued by the IAASB (accounting nature organization) for the assurance of any type of nonfinancial information, and the AA1000AS, issued by AccountAbility

Standards for the Assurance of CSR Information,

Fig. 1 Assurance of sustainability reports following declared standard according to the GRI database



Source: Self-elaborated. Compiled from the GRI database (accessed in November 2018)

(organization focused on sustainability) for the assurance of CSR information specifically. The use of these standards is widely accepted, and they encourage the development of other national standards. Both of them develop a methodology that guarantees a systematic assurance process through different approaches deriving from their distinct nature and scope. The ISAE3000 establishes more formal ethical requirements and control systems, while the AA1000AS emphasizes commitment with stakeholders and compliance with fundamental CSR information principles. Notwithstanding, far from making these norms competitive, these differences make them complementary and thereby offer a more complete perspective for the development of the assurance, facing the demands imposed by the particularities of sustainability information.

Introduction

The assurance of sustainability reports has gained strength in the agendas of various standardizing bodies, both internationally and at the level of each country (O'Dwyer et al. 2011). The need to give credibility to these documents has expedited the development of different assurance frameworks (FEE 2006; Iansen-Rogers and Oelschlaegel 2005; Kolk and Perego 2010).

An analysis of reports taken from the Global Reporting Initiative (GRI) database, an extensive repository of sustainability reports, shows an increasing trend in standardized assurance processes. As shown in Fig. 1, assurance reports with the declared use of a standard guiding the service rose from 64% in 2013 to 75% in 2017.

Two standardization bodies are noteworthy at the international level: AccountAbility, a nonprofit organization aimed at standardization, research, and advice on sustainability matters that issues the AA1000 Assurance Standard (AA1000AS), and the International Auditing and Assurance Standards Board (IAASB), a committee of the International Federation of Accountants (IFAC) issuing audit, assurance, and other related norms, which is responsible for the publication of the International Standard on Assurance Engagements 3000 (ISAE3000). Both are the most widely and increasingly used guides leading the external assurance services for sustainability reports (CorporateRegister.com 2013; Jones III and Jonas 2011; KPMG 2008; Manetti and Becatti 2009; Manurung and Basuki 2010). As shown in Fig. 2, among the assurance reports registered in the GRI database with declared use of standards, 84% referred to international standards in 2012. This proportion increased gradually to 92% in 2017.

Although both international standards are widely accepted, there seems to be a greater willingness to use the ISAE3000 against the

Standards for the Assurance of CSR Information, Fig. 2

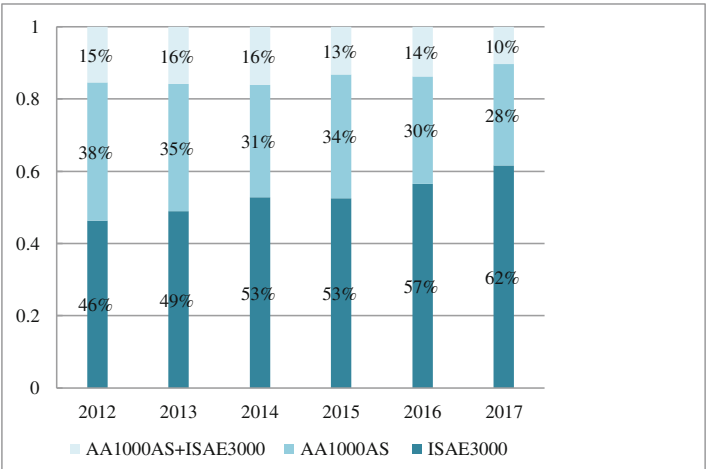
Use of international vs. national standards on GRI database assurance reports (declared standardization)



Source: Self-elaborated. Compiled from the GRI database (accessed in November 2018)

Standards for the Assurance of CSR Information, Fig. 3

Use of international standards in the assurance reports of GRI database



Source: Self-elaborated. Compiled from the GRI database (accessed in November 2018)

AA1000AS. A slight tendency to use both standards together is also reflected (Fig. 3). The predominance of the ISAE3000 could be owed to factors such as international acknowledgment of its issuing organization as a standard-setting body for the accounting profession and the weight of the Big 4 in the assurance market (see ► [“Assurance Market”](#)).

The importance of international standards is reflected not only in their use but also in the influence they exert on the development of other national standards in different countries (KPMG 2013; Manetti and Becatti 2009). As an example,

Table 1 collects some of the national standards currently used according to GRI registers and identifies, wherever applicable, the international standards on which they are based. Thus, among the European standards are the Generally Accepted Assurance Principles for the Audit or Review of Reports on Sustainability Issues (IDW AsS 821) emitted by the Institute of Public Auditors (IDW) in Germany; the Action Guide 21 issued in Spain by the Institute of Chartered Accountants of Spain (ICJCE); the standard 3410 N Assurance Engagements with respect to Sustainability Reports, issued by the Royal Dutch

Standards for the Assurance of CSR Information, Table 1 National assurance standards

Geographical scope		Standard	Issuer	International standard influence
Europe	Germany	IDW AsS 821	IDW	ISAE3000
	Spain	Action Guide 21	ICJCE	ISAE3000
	Netherlands	Dutch Standards 3410N	Royal NIVRA	ISAE3000/AA1000AS
	Sweden	REV R 6	FAR	ISAE3000
	Switzerland	NAS 950	Fiduciary Room	ISAE3000
	France	NOR: JUSC1222116A	Ministry of Justice	—
America	Argentina	Technical Resolution No. 35	FACPCE	ISAE3000
	Brazil	NBC TO 3000	CFC	ISAE3000
	United States	AT Section 101	AICPA	—
Asia	Japan	Practical guide for the assurance of sustainability information	J-SUS	ISAE3000
	Sri Lanka	SLSAE3000	CA Sri Lanka	ISAE3000
Oceania	Australia	ASAE3000	AUASB	ISAE3000

Source: Self-elaborated

Institute of Chartered Accountants (Royal NIVRA) in the Netherlands; the RevR6 Assurance of sustainability reports issued by the Institute of the Accountancy Profession (FAR) in Sweden; and the NAS 950 formulated by the Fiduciary Room in Switzerland. Likewise, in France, the Ministry of Justice published the Order of 13 May 2013 that determines the modalities under which the independent third-party body conducts its mission (NOR: JUSC1222116A) and regulates the assurance process of social and environmental information established in its Commercial Code.

In America, initiatives are developed in countries like Argentina, where the Argentine Federation of Professional Councils of Economic Sciences (FACPCE) launches the Technical Resolution No. 35, Adoption of International Standards of Assurances Engagements and Related Services; Brazil, with the issuance of the NBC TO 3000 by the Federal Accounting Council (CFC); and the United States, where the American Institute of CPAs (AICPA) formulates the standard AT Section 101, Attest Engagements.

In Asia, the contribution of the Japanese Association of Assurance Organizations for

Sustainability (J-SUS) that publishes the practical guide for the assurance of sustainability information is worthy of attention. In addition, the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka) issues the Sri Lanka Standard on Assurance Engagements 3000: Assurance Engagements Other than Audits or Reviews of Historical Financial Information (SLSAE3000). Likewise in Oceania, the Auditing and Assurance Standards Board (AUASB) of Australia launches the ASAE3000: Assurance Engagements Other than Audits or Reviews of Historical Financial Information.

Interestingly, these mostly generic standards refer to any assurance service other than financial reporting. Furthermore the influence of international standards on the initiatives of the different countries, mainly the ISAE3000, highlights. To a large extent, this influence can be explained by the accounting nature of most national issuing agencies.

Most of the initiatives developed in different countries maintain coherence or are adaptations of international standards, thus enhancing the importance of the latter. ISAE3000 and AA1000AS are both present, either directly or indirectly, in most

assurance processes. Below they are discussed at length.

International Standards: AA1000AS and ISAE3000

The AA1000AS is part of the framework known as the AA1000 series (see ► [“AA1000 Series of Standards, The”](#)), first published in 1999 by AccountAbility. In 2003, this organization issued a revised version with a specific assurance standard, the first worldwide standard for the assurance of sustainability reports. Its current version, published in 2008, is the result of a review process with a multi-stakeholder orientation, based on experience and continuous learning (AccountAbility 2008a). This standard addresses any professional that provides external assurance services for sustainability reports. In addition to establishing the guidelines for professionals to implement the assurance process, it is considered a tool for companies to assess the degree of adherence to the principles established by AccountAbility in terms of management, performance, and communication of sustainability issues (AccountAbility 2008a). These basic principles (AA1000APS) are materiality, completeness, and responsibility, under the fundamental premise of the involvement of stakeholders (AccountAbility 2008b). A guide for assurance providers complements the standard, to achieve a deeper understanding of the key aspects that allow it to be correctly applied (AccountAbility 2008c).

The contents presented in this document follow in the logical sequence of an assurance process. After an introduction explaining aspects like its evolution, development, or scope, the standard is structured in five parts. The first part establishes the main purpose or aim, which is to institute the requirements for the assurance providers to evaluate the information and conclude on adherence to the fundamental principles as well as quality. The next part proposes indications concerning the use of the standard. It distinguishes between two types of engagements, depending on whether the assessment only evaluates adherence to the

principles (type 1) or it also evaluates the reliability of certain contained information in terms of completeness and precision (type 2). Two levels of assurance, high and moderate, are also considered. The first one provides the highest level of confidence at a lower risk of providing an erroneous conclusion. Given the amount and nature of the analyzed information, the norm contemplates the possibility of establishing high levels for some issues and moderate levels for others. Likewise, it establishes the need to refer to the standard, when applied in the process, including the rest of the AA1000 framework documents and other related standards, guidelines, and legal requirements whenever required. The third section addresses the conditions for accepting an assurance engagement, in terms of the determination of the scope and due checks and agreements to be reached by the professional with the contracting company before the implementation; the independence and impartiality requirements of professionals; the necessary skills; the professional care; and the contract terms. Let us point out that the commitment to stakeholders is explicitly mentioned among the necessary competencies. The fourth section establishes the guidelines for implementing the process. It distinguishes three more phases after the acceptance: planning, performing, and reporting. In the planning phase, decisions are made concerning tasks or the use of resources; engagement performing is the one in which the necessary and sufficient evidence is collected so that the assessor can form an opinion on the analyzed information and establish the need for proper documentation; and the reporting task must take some minimum contents into account along with the chance to prepare a separate report for company management. Additionally, the standard includes a definitions section that clarifies the key concepts. The assurance engagement is defined as the one in which

...an assurance provider evaluates and expresses a conclusion on an organization's public disclosure about its performance as well as underlying systems, data and processes against suitable criteria and standards in order to increase the credibility of the information for the intended audience. (AccountAbility 2008a, p. 23)

On the other hand, the ISAE3000 was issued for the first time by the IAASB in 2004 to lead any engagement other than the audit or historical review of financial information, including the external assurance of sustainability reports. The current version was published in 2013, and despite focusing its interest on the standardization of the accounting profession, the use of the ISAE3000 was not limited to this kind of professionals.

This standard is structured in five sections: introduction, objectives, definitions, requirements, and application and other explanatory materials. The introduction considers aspects such as scope and the relationship with other standards. The ISAE3000 establishes that professionals who implement the assurance engagement should be governed by parts A and B of the Code of Ethics emitted by the International Ethics Standards Board for Accountants (IESBA), which includes the requirements of professional ethics that auditors must comply with in the service of the public interest, and the International Standard on Quality Control 1 (ISQC 1), issued by the IAASB, which determines the responsibilities and requirements regarding the quality control systems of the assurance services. The second section describes the objectives of the assessor accepting an assurance engagement, which should be aimed at evaluating and verifying that the analyzed information contains no errors, and it must express and communicate a written conclusion on the obtained results. The definitions section aims to facilitate the understanding of the most relevant terms. Thus, assurance engagement is defined as that in which:

... a practitioner aims to obtain sufficient appropriate evidence in order to express a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the subject matter information (that is, the outcome of the measurement or evaluation of an underlying subject matter against criteria). (IAASB 2013, paragraph 12 (a))

Depending on the assumed risk, the engagements may be considered reasonable or limited, similar to the high and moderate levels of the AA1000AS. The norm refers to the assurance of a large number

of possible subjects, so it would be illogical to set a certain level of assurance a priori. The fourth section establishes the requirements to carry out the process. It begins by referring to the need to comply with each of the requirements of the standard and other specific rules, if necessary, emphasizing the importance of ethical standards, quality control, or any other legal provisions. It references aspects like the fact that the assurers should act with professional skepticism (an attitude that implies an inquisitive and critical mentality on the evidence) and apply their professional judgment to make decisions throughout the process, and it indicates the required assurance skills and techniques to be used. The rest of the requirements establish the guidelines for the acceptance, planning, performance, and preparation of the assurance report. The acceptance and continuation of an engagement must consider the necessary preconditions, scope limitations, and terms of agreement between the supplier and the contracting firm. Likewise, it must take into account the characteristics and responsibilities of the partners and the teams to ensure an adequate quality control of the process. Regarding work planning, the standard considers aspects such as scope, materiality (relative importance), and adequate understanding of the subject based on the assurance level. The norm establishes the way to perform the service and obtain evidences, considering the risk and the treatment of the different assurance levels, the actions regarding the work of experts and other professionals, as well as the inclusion of any required written representations. It also defines procedures for significant subsequent events and the existence of other related information and makes reference to the need for evaluating the information with respect to applicable criteria. The requirements for the preparation of the assurance report focus on its basic contents and the elaboration and types of possible conclusions. Finally, it establishes the need for the entire process to be properly documented. The standard ends with an application section and other explanatory material that clarifies and specifies concerns related to each of the previous sections.

Standards for the Assurance of CSR Information, Table 2 International standard comparative

		AA1000AS (AccountAbility)	ISAE3000 (IAASB)
Similarities	Assurance engagement purpose	Increased credibility of the users	Increased credibility of the users
	Assurance levels	Depending on the risk: high or moderate	Depending on the risk: reasonable or limited
	Process phases	Acceptance, planning, performance, reporting	Acceptance, planning, performance, reporting
Differences	Issuer's approach	Sustainability	Accounting
	Assured document	Sustainability reports	Any nonfinancial report
	Professional's objective	To assure that materiality, completeness, and responsibility principles (type 1) and information reliability (type 2) are met	To assure that the information is free from material errors
	Other related regulations	AA1000APS	Code of ethics and ISQC 1, both from IFAC standard setters

Source: Self-elaborated

After its brief description, Table 2 summarizes the similarities and differences between key aspects of the two standards. It can be said that the common objective of the AA1000AS and the ISAE3000 is to ensure greater rigor in the practice of assurance, improve the credibility of the communication exercise, and provide criteria to judge the degree of confidence in such assurance services (Owen and O'Dwyer 2004). Both standards are issued by international organizations and can be used by any kind of professional. This favors greater geographic diffusion and acceptance. Furthermore, they establish different assurance levels, depending on the risk assumed and the degree of added confidence and define a four-stage process that considers acceptance, planning, performance, and reporting.

However, while the IAASB is an accounting organization, AccountAbility is oriented toward sustainability. This causes differences in terms of the scope and the contents of their respective standards (Manetti and Toccafondi 2012). In fact, the AA1000AS focuses exclusively on the assurance of CSR information, while the ISAE3000 is applicable to the assurance of any type of nonfinancial information. Regarding the assurors' objective, according to the AA1000AS, it must be to check the compliance with the

materiality, completeness, and responsibility principles included in the AA1000APS standard, based on stakeholders' interests (type 1), and verify the reliability of certain information considered material when it proceeds (type 2). Nevertheless, the ISAE3000 asserts that the professional's main objective is to verify that the information is free from material errors, expresses a conclusion concerning the evaluated information, and communicates whatever the standard requires.

In sum, developed standards and global frameworks have important implications for assurance professionals. They allow for a more structured and credible service (Crawford 2011). However, the different perspectives emanating from each of them may justify that, in practice, significant differences are observed in the assurance reports with respect to definitions, methodology and contents (Adams and Evans 2004; Deegan et al. 2006a, b; Hasan et al. 2003; Jones et al. 2014; Perego 2009). Risk minimization, robustness and rigor fundamentally characterize ISAE3000, while greater orientation toward the stakeholders (Edgley et al. 2010) characterizes the AA1000AS. So, two essential aspects of this generic comparison should be highlighted to achieve a better understanding of the assurance process: the

existing structural similarities and the differences in approach.

A Similar Process with Two Different Approaches

As indicated, both AA1000AS and ISAE3000 refer to the need to implement a systematic process that includes acceptance, planning, performance, and reporting stages.

The establishment of the assurance level is an essential element in the acceptance phase that determines the type of service to be offered. The assurance level of sustainability reports must be clearly stated to avoid a gap in expectations between the company, the service provider, and even the information users (Manetti and Becatti 2009). In this case, limited or moderate levels are the most common because the sustainability reports integrate quantitative and qualitative data deriving from processes difficult to formalize due to aspects such as stakeholder participation or the balance of their needs (Ballou et al. 2006; Manetti and Becatti 2009). In addition to the scope considerations, ISAE3000 and the AA1000AS agree that the assurance providers must perform a series of checks before accepting a request to confirm they comply with the requirements and standards under which they are accepted and that the reporting company acts in good faith. First of all, suppliers must verify that the purpose of the engagement is appropriate and that adequate criteria for evaluating the information are available to the public. These criteria must be relevant, exhaustive, reliable, neutral, and comprehensive. According to the AA1000AS, the criteria could be specifically developed, although those already established and found in legal requirements, guidelines, and standards are preferable. Likewise, before accepting an engagement, assurers must ensure they have the necessary ethical capacities and requirements to perform the service. In this sense, both standards establish minimum levels of quality, experience, and knowledge to perform the assurance with due diligence. Assuror independence is a fundamental requirement for both

standards. It should be noted that ISAE3000 emphasizes ethical and quality requirements and the technical capabilities of the professionals, while the AA1000AS also expresses, in a concrete way, the need for professionals with demonstrable skills in CSR information and a professional relationship with stakeholders.

Regarding planning, both norms agree on the importance of this stage in which the assurance strategy is developed. It is considered a reiterative phase that must be present throughout the process, taking into account aspects such as the scope of the engagement, the expected timing, the required resources, and the intended users. On the other hand, concerning the performance of the assurance, both standards establish the guidelines for obtaining evidence needed to form an opinion, including examples of tests to be implemented. While ISAE3000 is more detailed in terms of how to deal with certain aspects, such as the treatment of materiality or the work of external professionals, the AA1000 devotes a specific section to evaluating information on sustainability performance.

The result of the assurance process is the issuance of a report clearly reflecting the assuror's opinions and recommendations. This is the only visible part for users to decide on the credibility of the information. In this sense, the ISAE3000 gives a more specific definition of the different types of possible opinions and the circumstances under which they should be applied. Likewise, both standards establish minimum contents of the assurance report. Table 3 summarizes them and shows numerous similarities and some differences that reflect the different standard approaches. Both take into account fundamental information such as the addressees of the assurance report, the responsibility of the organization and the provider, the specification of the standards used, the description of the assured information and the work performed, the indication of encountered limitations, the criteria applied, the level of assurance, the results and conclusions obtained, the declaration of independence, and the assuror's competences and identification. However, while the AA1000AS includes observations and recommendations among its fundamental elements, the

Standards for the Assurance of CSR Information, Table 3 Contents of the assurance report according to international standards

Contents	AA1000AS	ISAE3000
Title of the report		x
Assurance report addressees	x	x
Responsibility of the organization and the assurance provider	x	x
Assurance standards	x	x
Description of scope and type of assurance	x	x
Description of assured information	x	x
Description of the work performed	x	x
Limitations	x	x
Applied criteria	x	x
Assurance level	x	x
Results and conclusions	x	x
Observations and/or recommendations	x	
Declaration of assurer's independence	x	x
Declaration of the assessor's competences	x	x
Quality control requirements		x
Provider's name	x	x
Date and place	x	x

Source: Self-elaborated

ISAE3000 places greater emphasis on the requirements of quality control.

The comparative between the two norms of major implementation at an international level highlights that a very clear sequence in the process of assurance is defined in both cases. However, the different nature of the issuing organizations has a significant influence on the approach of these standards. While the ISAE3000 establishes more formal ethical requirements and control systems and relies on existing regulations for the audit profession, the AA1000AS is a more specific standard, emphasizing the commitment with stakeholders and the compliance with fundamental principles of CSR information. In addition, the AA1000AS highlights the company's

management systems and the strengths and weaknesses in the content of the sustainability reports, while the ISAE3000 focuses on documenting perceived challenges and limitations in the information process (Crawford 2011; Iansen-Rogers and Oelschlaegel 2005). As a consequence, the result obtained using one or the other standard may be different (Iansen-Rogers and Oelschlaegel 2005). Given this situation, some authors advocate the regularization and issuance of a common standard for all assurance providers in an attempt to minimize the deficiencies in the process (Smith et al. 2011; Utama 2011). Others consider that the ISAE3000 and the AA1000AS should be contemplated as being complementary to one another, not substitutes. Combining them will provide better results in the assurance process (Borkowski et al. 2011; Deegan et al. 2006b; Iansen-Rogers and Oelschlaegel 2005; Jones III and Jonas 2011; Marx and van Dyk 2011).

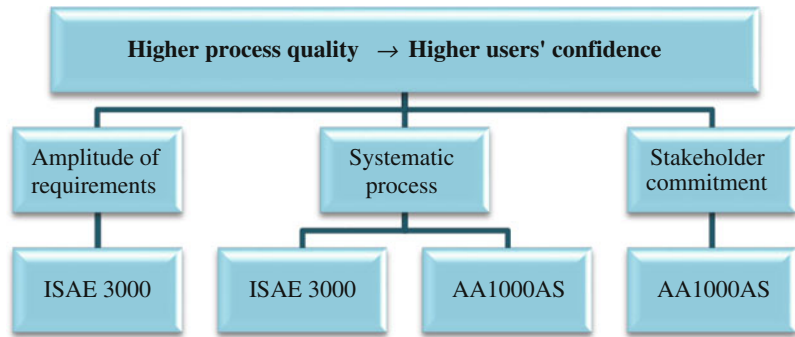
Summary

The standardizing initiatives are an important driver for the development of external assurance of sustainability reports. In this regard, international standards ISAE3000 and AA1000AS (issued by the IAASB and AccountAbility, respectively) are worth mentioning. Both standards intend to guide the work performed by assurance professionals to determine the degree of confidence users can place in the information. The acceptance of these standards is evident, both for their use by the assurers and their impact on the development of national standards in different countries.

Both standards consider that the purpose of assurance is to increase information credibility. This leads them to considering many concerns in a similar way. However, the different nature of their issuing organisms and each of their scopes also cause differences in their approach. As shown in Fig. 4, the existence of a structured process starting from a common element provides the system to perform the service in a coherent and professional manner. Given its emphasis on ethical and quality requirements,

Standards for the Assurance of CSR Information,

Fig. 4 Combination of international standards: ISAE3000 and AA1000AS. (Source: Self-elaborated)



Source: Self-elaborated

the ISAE3000 may provide the necessary formalism to increase the confidence from the point of view of the process. The AA1000AS can promote greater confidence in the fulfillment of assurance sustainability report objectives because it emphasizes the importance of the stakeholders more explicitly, this being the key element of the CSR and its communication.

The joint consideration of these two standards may provide a holistic approach to the process with technical aspects close to those of the traditional financial audit and the necessary adaptations that the particular characteristics of sustainability information require.

Cross-References

- [AA1000 Series of Standards, The](#)
- [Assurance Market](#)
- [Standardization](#)

References

- AccountAbility. (2008a). *AA1000 assurance standard 2008*. London: AccountAbility.
- AccountAbility. (2008b). *AA1000 Accountability principles standard 2008*. London: AccountAbility.
- AccountAbility. (2008c). *Guidance for the use of AA1000AS 2008*. London: AccountAbility.
- Adams, C. A., & Evans, R. (2004). Accountability, completeness, credibility and the audit expectations gap. *Journal of Corporate Citizenship*, 14, 97–115.
- Ballou, B., Heitger, D. L., & Landes, C. E. (2006). The future of corporate sustainability reporting: A rapidly growing assurance opportunity. *Journal of Accountancy*, 202(6), 65–74.
- Borkowski, S. C., Welsh, M., & Wentzel, K. (2011). Sustainability reporting assurance: Your next growth area? *Pennsylvania CPA Journal*, 82(2), 24–27.
- CorporateRegister.com. (2013). *CR perspectives 2013: Global CR reporting trends and stakeholder views*. London: CorporateRegister.com.
- Crawford, D. (2011). Revolution or evolution? Emerging non-financial assurance standards. CMA Management. <https://www.thefreelibrary.com/Revolution+or+evolution%3f+Emerging+non-financial+assurance+standard.s.-a0271596274>. Accessed 3 July 2015.
- Deegan, C., Cooper, B. J., & Shelly, M. (2006a). An investigation of TBL report assurance statements: Australian evidence. *Australian Accounting Review*, 16 (39), 2–18.
- Deegan, C., Cooper, B. J., & Shelly, M. (2006b). An investigation of TBL report assurance statements: UK and European evidence. *Managerial Auditing Journal*, 21(4), 329–371.
- Edgley, C. R., Jones, M. J., & Solomon, J. F. (2010). Stakeholder inclusivity in social and environmental report assurance. *Accounting, Auditing & Accountability Journal*, 23(4), 532–557.
- FEE. (2006). *Key issues in sustainability assurance: An overview*. Brussels: Fédération des Experts Comptables Européens.
- Hasan, M., Roebuck, P. J., & Simnett, R. (2003). An investigation of alternative report formats for communicating moderate levels of assurance. *Auditing: A Journal of Practice & Theory*, 22(2), 171–187.
- IAASB. (2013). *ISAE 3000 (revised), assurance engagements other than audits or reviews of historical financial information*. New York: International Federation of Accountants.
- Iansen-Rogers, J., & Oelschlaegel, J. (2005). *Assurance standards briefing: AA1000 assurance standard & ISAE3000*. Amsterdam: AccountAbility and KPMG Sustainability.
- Jones, A., III, & Jonas, G. A. (2011). Corporate social responsibility reporting: The growing need for input from the accounting profession. *The CPA Journal*, 81 (2), 65–71.
- Jones, P., Hillier, D., & Comfort, D. (2014). Assurance of the leading UK food retailers' corporate social

- responsibility/sustainability reports. *Corporate Governance*, 14(1), 130–138.
- Kolk, A., & Perego, P. (2010). Determinants of the adoption of sustainability assurance statements: An international investigation. *Business Strategy and the Environment*, 19(3), 182–198.
- KPMG. (2008). *KPMG international survey of corporate responsibility reporting 2008*. Amstelveen: KPMG International.
- KPMG. (2013). *The KPMG survey of corporate responsibility reporting 2013*. The Netherlands: KPMG International.
- Manetti, G., & Becatti, L. (2009). Assurance services for sustainability reports: Standards and empirical evidence. *Journal of Business Ethics*, 87(1), 289–298.
- Manetti, G., & Toccafondi, S. (2012). The role of stakeholders in sustainability reporting assurance. *Journal of Business Ethics*, 107(3), 363–377.
- Manurung, A. M., & Basuki, H. (2010). An analytical assessment of assurance practices in social environmental and sustainable reporting in the United Kingdom and North America. *Gadjah Mada International Journal of Business*, 12(1), 75–115.
- Marx, B., & van Dyk, V. (2011). Sustainability reporting and assurance: An analysis of assurance practices in South Africa. *Meditari Accountancy Research*, 19(1/2), 39–55.
- O'Dwyer, B., Owen, D., & Unerman, J. (2011). Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting. *Accounting, Organizations and Society*, 36(1), 31–52.
- Owen, D., & O'Dwyer, B. (2004). *Assurance statement quality in environmental, social and sustainability reporting: A critical evaluation of leading edge practice*. Nottingham: Centre for Corporate Social Responsibility.
- Perego, P. P. (2009). Causes and consequences of choosing different assurance providers: An international study of sustainability reporting. *International Journal of Management*, 26(3), 412–425.
- Smith, J., Haniffa, R., & Fairbrass, J. (2011). A conceptual framework for investigating 'capture' in corporate sustainability reporting assurance. *Journal of Business Ethics*, 99(3), 425–439.
- Utama, S. (2011). An evaluation of support infrastructures for corporate responsibility reporting in Indonesia. *Asian Business & Management*, 10(3), 405–424.

State Governed Fund

- [Sovereign Wealth Funds](#)

Stationary State

- [Postgrowth](#)

Status Good

- [Positional Goods](#)

Status-Seeking

- [Conspicuous Consumption/Positional Goods](#)

Steps for Innovation

- [Sustainable and Innovation Process](#)

Stock Options

- [Bonus](#)
- [Executive Remuneration and CSR](#)

Stockholm Convention (2001)

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Synonyms

[Stockholm Convention on Persistent Organic Pollutants](#)

Definition

In the course of the twentieth century, the use of chemicals increased substantially. This development led to a growing awareness of the negative effects some of these chemicals had on the environment. Global consensus was reached to manage these chemicals with an international treaty. The Stockholm Convention on Persistent Organic Pollutants (POPs) is an international agreement aiming to safeguard human health and the environment. POPs are chemicals with special characteristics: they do not degrade easily, remain in the environment for a long time, and therefore can be transported over long distances. They are bioaccumulating; this means that they reach high concentrations in the fatty tissue of organisms. Furthermore they are poisonous for humans and the environment.

The Convention holds provisions for the elimination of these substances. If it is not possible to eliminate them, the Convention holds provisions for their reduction. Some of the POPs are substances which are not produced intentionally but form as by-products. The Convention also includes provisions for these unintentionally produced substances. Negotiations for the Stockholm Convention on POPs were accomplished in 2001, and the Convention entered into force in 2004. At the beginning, the Convention listed 12 persistent organic pollutants (the “dirty dozen”) including substances like DDT or dioxins. Article 8 of the Convention also provides details on how to add new substances. The full text of the Convention can be found on the website of the Stockholm Convention (UNEP 2017a). Up to now the list of substances regulated by the Stockholm Convention has been enlarged several times.

Development of the Convention

Since the 1960s, there has been a growing public unease about the negative consequences of toxic chemicals on human health and the environment. One substance of increasing concern was the pesticide DDT. It used to be one of the most commonly applied insecticides in

agriculture worldwide. It was (and is) also used as an agent to kill mosquitoes which can transmit malaria. This is referred to as vector control because mosquitoes are the vectors transmitting malaria and new infections are avoided by killing insects transmitting the disease. In the 1970s and 1980s, the agricultural use of DDT was banned in many countries, e.g., the United States and Europe, as a consequence of its negative effects on the wildlife (Mirmigkou and de Boer 2015).

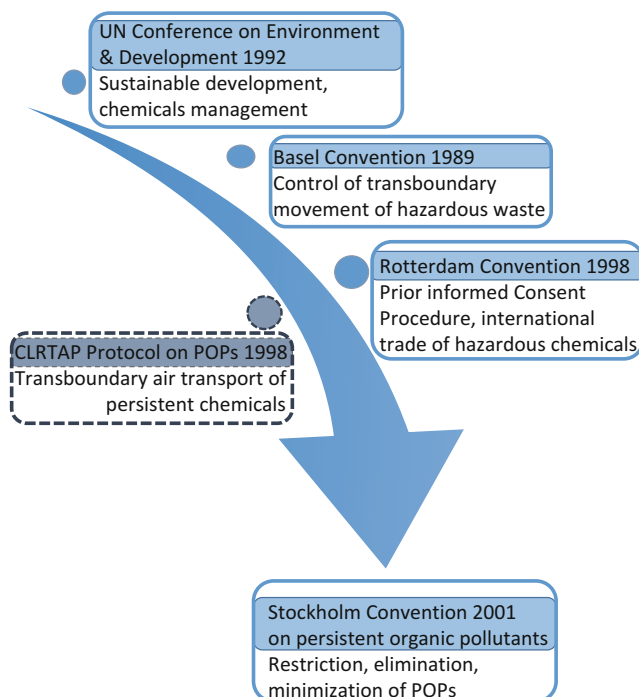
Chemical management was one of the major topics in the 1992 United Nations Conference on Environment and Development. In Chapter 19 of the Agenda 21 document on environmentally effective management of toxic chemicals, it says that states commit themselves to reducing the exposure to toxic substances as far as possible. Also states endeavor to substitute these substances with less toxic chemicals to finally come to a phase out of substances that represent unacceptable risks to human health and the environment (Selin 2010). This way the UN Conference on Environment and Development provided an impulse for a global management of POPs (Vanden Bilcke 2003).

At the time several international agreements on hazardous substances were set up which differ in focus (see Fig. 1). Two important global agreements were the Basel Convention (1989) on the movement of hazardous waste between countries and the Rotterdam Convention (1998) on international trade of hazardous chemicals. Similar to the Stockholm Convention (2001), these global treaties aimed at protecting human health and the environment from hazardous chemicals including hazardous waste.

A regional multilateral agreement was the Protocol on POPs to the Convention on Long-Range Transboundary Air Pollution, abbreviated as the CLRTAP Protocol on POPs (1998). This international agreement was about reducing the transport of certain toxic and persistent substances across borders and the control or reduction of their discharge. This agreement could also be seen as one of the starting points of the development of the Stockholm Convention (Kohler and Ashton 2011). In 1997 the Governing

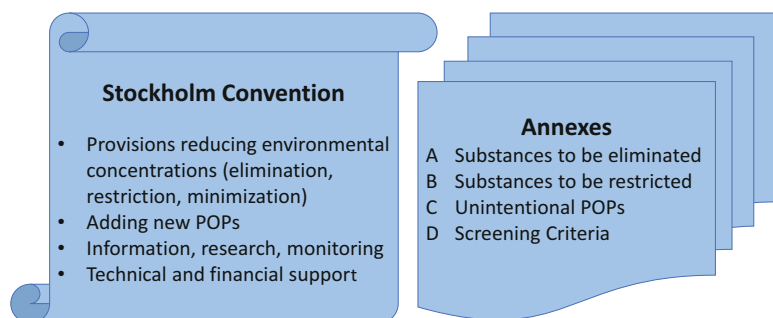
Stockholm Convention

(2001), Fig. 1 Important international treaties on the management of hazardous chemicals. Solid lines represent global agreements, and dashed lines represent regional treaties. The agreements differ with regard to the life cycle stage of the chemicals. All agreements aim at protecting human health and the environment



Stockholm Convention

(2001), Fig. 2 Structure of the Stockholm Convention containing provisions regarding elimination, restriction, and minimization of substances. The Annexes of the Convention contain lists of substances and screening criteria



Council of the United Nations released the decision to initiate a global treaty on POPs (Vanden Bilcke 2003). About 2.5 years later, the negotiations were completed successfully. The Stockholm Convention was signed in 2001 and came into force in 2004 (Richter et al. 2001). More than 180 countries signed the Convention; the current number can be found on the website of the Stockholm Convention.

Convention Structure

The text of the Stockholm Convention contains regulations pertaining to different stages of the

life cycle of POPs. The life cycle stages that were considered are formation, production and use, international trade, and disposal of waste and management of stockpiles (Richter et al. 2001; UNEP 2017a). The objective of the Convention (protection of human health and the environment) is given in Article 1. The structures of the Articles and Appendices reflect the different fields of action: reducing environmental concentrations, listing of POPs, information exchange, and support (see Fig. 2). Articles 3 and 4 regulate the reduction and elimination of POPs pesticides and industrial chemicals. Signing parties need to prohibit these chemicals and or take legal or administrative measures. Article 5 addresses

the minimization or, if possible, elimination of unintentional POPs like dioxins. Article 6 regulates the disposal of waste and the management of stockpiles. Articles 8 and 22 describe the procedure of adding new substances to the list. Substances of which production and use are to be eliminated are listed in Annex A of the Convention. The pesticide Lindane is an example of a chemical listed in Annex A. Substances to be restricted in use are given in Annex B (e.g., DDT, which can be used under a specific exemption for vector control to fight malaria). Annex C lists unintentional POPs like dioxins or hexachlorobenzene (Kohler and Ashton 2011; Vanden Bilcke 2003). Signatory parties should minimize or if possible eliminate the formation of substances like dioxins or hexachlorobenzene. Annex D of the Convention contains screening criteria which help to identify substances that should be added to the Stockholm Convention. Integrating the Precautionary Principle into the text of the Stockholm Convention was a matter of discussion before it was agreed upon (Maguire and Ellis 2003). The Precautionary Principle means that absence of scientific certainty should not be a reason for not taking action (see entry ► [“Precautionary Principle”](#)). Finally the Precautionary Principle was referred to in several parts of the Convention text. It is mentioned, for example, in the Preamble, in the objective, and in the provisions for designating new additional POPs to the Convention (Article 8). Hereby, e.g., the addition of new candidate POPs can be suggested even if full scientific certainty about negative effects of the chemicals is currently not available.

Stockholm Convention POPs

The POPs regulated under the Stockholm Convention have four main characteristics:

- These chemicals are toxic to humans and the environment.
- They do not degrade easily and prevail in the environment for a long time after release.

- They can be transported over long distances. Consequently POPs are found in remote locations where they have not been produced or applied before, for example, in Polar Regions (Li and MacDonald 2005).
- POPs bioaccumulate. This means that the substances accumulate in the fatty tissue of organisms. Concentrations of POPs can rise exponentially along the food chain with the highest concentrations found in top predators such as polar bear or bald eagle. The latter phenomenon of increasing concentrations at higher positions in the food chain is called biomagnification.

These specific characteristics of POPs make a sustainable management of these chemicals particularly challenging. Due to their persistence and toxicity, they can cause environmental problems far from the original location of use and long after release. The Stockholm Convention addresses a variety of substances. POPs can be grouped into three main categories, namely, pesticides like DDT or Lindane, industrial chemicals like polychlorinated biphenyls (PCB), and so-called unintentionally produced POPs. Unintentional POPs are substances which were not produced intentionally but form during the production of other chemicals. Examples for unintentionally produced POPs are dioxins or PCB. Among the POPs a group of substances which belong to hexachlorocyclohexanes (HCHs) are especially challenging to manage: alpha-HCH, beta-HCH, and Lindane (which is 99% gamma-HCH; Vijgen et al. 2019). Estimates of the amount of obsolete and waste alpha-, beta-, and gamma- HCHs are very high and exceed estimates of other obsolete pesticides (Vijgen et al. 2011). This is due to the fact that only one of the isomers (gamma-HCH) has insecticidal effects. During the production of Lindane, high amounts of other isomers formed during production. Uncontrolled disposal of these isomers caused serious environmental problems on former production sites and their surroundings; Fig. 3 shows a photograph of a disposal site of HCH-waste.



Stockholm Convention (2001), Fig. 3 Photograph of the landfill at Sabiñánigo, Spain, where large quantities of HCH waste from Lindane production were dumped in the past, resulting in serious environmental contamination of

the area around Sabiñánigo and the Gállego River. (Photograph taken by Malte Lessmann in 2015, used with permission)

As outlined in Article 8 of the Convention, new toxic and persistent chemicals which are transported over long distances can be added to the list of POPs. As the list of POPs can be enlarged, the Stockholm Convention has been described as dynamic (Kohler and Ashton 2011). At first scientists had raised the question whether the process of adding new chemicals was structured well enough to facilitate the addition of substances (e.g., Ballschmiter et al. 2002). However, since the adoption of the Stockholm Convention, the list of substances has been enlarged successfully. By 2017, 12 initial and 16 more recently added POPs were listed in the Annexes of the Convention. The current list of the Stockholm Convention POPs can be found on the website of the Convention (UNEP 2017b).

Impact of the Stockholm Convention

Recent evaluations of the Stockholm Convention conclude that the treaty is effective as a framework to regulate POPs on a global scale during their complete life cycle (UNEP 2017c, 2019). Monitoring data show that the regulations of the Stockholm Convention on POPs are successful, but the results differ for various POPs. For many of the initial POPs listed in 2001, reduced concentrations of POPs in the environment are reported. For more recently added POPs, environmental concentrations are slowly beginning to decline for some compounds, whereas for a few substances, the concentrations remain stable or increase (UNEP 2017c). For many of the initial POPs, the concentrations in human milk have also declined since the

Stockholm Convention entered into force, but for some of the persistent organic pollutants, concentrations in human milk are still too high (van den Berg et al. 2017). Unintentionally produced POPs and POPs waste will remain an ongoing challenge in the future (Liu et al. 2018). The open-ended listing of new persistent and toxic chemicals will require continued efforts to update national implementation plans and to start reducing the environmental concentrations of these substances.

The implementation of the Stockholm Convention is a stepwise process. It needs ongoing action and management in all signatory countries, as the management of POPs is a multi-sectoral problem involving different stakeholders. The Convention does not give different targets for developed and less developed countries. Specific circumstances in less developed countries need to be taken into account in scientific discussions by expert groups as well as during implementation in these countries (Wang and Sun 2016). Funding and technical as well as scientific assistance are required to implement the measures. Stockpiles in many countries have been addressed since the Convention came into force. Once POPs are released into soil and groundwater, removal or remediation costs increase substantially. Currently many contaminated sites remain, and legacies pose human health and environmental risks. Also they hamper the development of these locations (Bernhardt and Gysi 2016; Weber et al. 2008). The review process and assessment of new proposed candidate POPs require scientific review and information exchange. The conference has set up formal scientific bodies like the POPs Review Committee as well as more informal expert groups. Signing parties committed themselves to favor or conduct research as far as possible and to perform a monitoring of POPs concentrations. For some countries and regions, monitoring data are scarce. Also searching for alternative substances for POPs and gathering information on possible new candidate POPs require scientific exchange between parties. Therefore the Stockholm Convention can be seen as an international

agreement enhancing international scientific exchange (Magulova 2012).

Future Sustainable Chemicals Management

At the beginning of negotiations for the Stockholm Convention, there was a common understanding that global efforts were required to eliminate risks of persistent hazardous chemicals. Even though negotiations were difficult at times, there was a broad consensus that the treaty was a good basis for the implementation of improved chemicals management (Richter et al. 2001). Further challenges for the implementation of the Stockholm Convention include the assessment of industrial chemicals and the improvement of the implementation process. A large part of the signing countries has submitted national implementation plans; however data might be incomplete and still need to be updated for more recently added POPs. The existence of stockpiles and comparatively small progress with regard to the destruction of PCB indicates that ongoing efforts are required. This holds especially for industrial chemicals and more recently added POPs (UNEP 2017c, 2019).

The Stockholm Convention addresses chemicals and associated risks for stockpiles produced and released decennia ago. New initiatives of sustainable chemicals management aim at avoiding environmental risks, such as the ones related to the Stockholm Convention POPs, by suggesting a more sustainable approach to chemicals management. For chemicals and hazardous waste, the World Summit on Sustainable Development (WSSD) Johannesburg 2002 renewed the commitments made in Agenda 21. WSSD stated the following goal: “by 2020, that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment” (Kath 2011). Direct progress regarding the actions mentioned in the Johannesburg plan of implementation could improve chemicals management, e.g., by strengthening synergies between Basel, Rotterdam, and Stockholm

Conventions, by promoting partnerships for effective and sustainable chemicals management, and by using national pollutant release and transfer registers for more transparency. Additionally, more progress could be achieved by uncoupling economic development and pollution or waste generation (Kath 2011). The expected growth of global population will require increasing food production in the future. This might lead to a growing demand for agrochemicals and/or an increasing demand for sustainable alternatives to chemicals. Alternatives currently discussed are integrated pest management, agroecological approaches, and biological crop protection.

Developing greener and more sustainable chemistry can help to tackle such challenges in the future (UNEP 2019). Some of the innovations and new inventions in chemistry in the past turned out to have negative effects on human health and the environment after more information became available. So, a combination of international treaties, science-based advanced assessment procedures for chemicals, and green chemistry innovations can provide tools to prevent hazardous chemicals reaching the market in the future.

Summary

The Stockholm Convention is a global agreement to reduce risks to human health as well as environmental risks caused by persistent organic pollutants. It was signed in 2001 and came into force in 2004. The Convention signatories need to restrict or eliminate the production and use of substances which are especially toxic and persistent. Also they need to reduce the releases of unintentionally produced POPs. The Convention also comprises provisions for environmentally sound management and the disposal of POPs waste. There are synergies with two other global treaties on chemicals management (the Basel Convention and the Rotterdam Convention). The list of substances is open-ended, new chemicals can be added. The implementation of the Convention shows positive effects for some substances. Continuing efforts are needed especially for

industrial chemicals and more recently added POPs.

Cross-References

- [Basel Convention on the Control of Hazardous Wastes](#)
- [Johannesburg Summit of 2002 on Sustainable Development](#)
- [Precautionary Principle](#)

References

- Ballschmitter, K., Hackenberg, R., Jarman, W. M., & Looser, R. (2002). Man-made chemicals found in remote areas of the world: The experimental definition for POPs. *Environmental Science and Pollution Research International*, 9(4), 274–288.
- Bernhardt, A., & Gysi, N. (2016). The world's worst pollution problems 2016: The toxics beneath our feet. Pure Earth and Green Cross Switzerland. <http://www.worstpolluted.org/docs/WorldsWorst2016.pdf>. Accessed 20 May 2019.
- Kath, S. (2011). Johannesburg 2002 The world summit on sustainable development. In P. Wexler, J. van der Kolk, A. Mohapatra, & R. Agarwal (Eds.), *Chemicals, environment, health: A global management perspective* (pp. 63–81). Boca Raton: CRC Press, Taylor & Francis Group.
- Kohler, P., & Ashton, M. (2011). Implementing the Stockholm Convention. In P. Wexler, J. van der Kolk, A. Mohapatra, & R. Agarwal (Eds.), *Chemicals, environment, health: A global management perspective* (pp. 229–242). Boca Raton: CRC Press, Taylor & Francis Group.
- Li, Y.-F., & MacDonald, R. (2005). Sources and pathways of selected organochlorine pesticides to the Arctic and the effect of pathway divergence on HCH trends in biota: A review. *Science of the Total Environment*, 342(1–3), 87–106.
- Liu, X., Fiedler, H., Gong, W., Wang, B., & Yu, G. (2018). Potential sources of unintentionally produced PCB, HCB, and PeCBz in China: A preliminary overview. *Frontiers of Environmental Science & Engineering*, 12(6), 1–14.
- Maguire, S., & Ellis, J. (2003). The precautionary principle and global chemical risk management: Some insights from the case of persistent organic pollutants. *Greener Management International*, 41, 33–46.
- Magulova, K. (2012). Stockholm Convention on persistent organic pollutants: Triggering, streamlining and catalyzing global scientific exchange. *Atmospheric Pollution Research*, 3(4), 366–368.
- Mirmigkou, S., & de Boer, J. (2015). DDT and metabolites. In M. Alaei (Ed.), *Dioxin and related*

compounds. *The handbook of environmental chemistry* (Vol. 49, pp. 355–378). Cham: Springer.

- Richter, S., Steinhäuser, K. G., & Fiedler, H. (2001). Globaler Vertrag zur Regelung von POPs: Die Stockholm Konvention. *Umweltwissenschaften und Schadstoff-Forschung*, 13(1), 39–44.
- Selin, H. (2010). *Global governance of hazardous chemicals: Challenges of multilevel management*. Cambridge, MA: The MIT Press.
- United Nations Environment Programme (UNEP). (2017a). The text of the Stockholm Convention. <http://chm.pops.int/TheConvention/Overview/TextoftheConvention/tabid/2232/Default.aspx>. Accessed 20 May 2019.
- United Nations Environment Programme (UNEP). (2017b). The new POPs under the Stockholm Convention. An introduction to the chemicals added to the Stockholm Convention as Persistent Organic Pollutants by the Conference of the Parties. <http://www.pops.int/TheConvention/ThePOPs/TheNewPOP/s/tabid/2511/Default.aspx>. Accessed 19 Feb 2019.
- United Nations Environment Programme (UNEP). (2017c). Report on the effectiveness evaluation of the Stockholm Convention on Persistent Organic Pollutants. <http://chm.pops.int/Implementation/EffectivenessEvaluation/Outcomes/tabid/5559/Default.aspx>. Accessed 19 Feb 2019.
- United Nations Environment Programme (UNEP). (2019). Global Chemicals Outlook II. <https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/policy-and-governance/global-chemicals-outlook>. Accessed 20 May 2019.
- van den Berg, M., Kypke, K., Kotz, A., Tritscher, A., Lee, S. Y., Magulova, K., et al. (2017). WHO/UNEP global surveys of PCDDs, PCDFs, PCBs and DDTs in human milk and benefit-risk evaluation of breastfeeding. *Archives of Toxicology*, 91(1), 83–96.
- Vanden Bilcke, C. (2003). The Stockholm Convention on persistent organic pollutants. *The Review of European Comparative & International Environmental Law*, 11(3), 328–342.
- Vijgen, J., Abhilash, P. C., Li, Y. F., Lal, R., Forter, M., Torres, J., et al. (2011). Hexachlorocyclohexane (HCH) as new Stockholm Convention POPs – A global perspective on the management of Lindane and its waste isomers. *Environmental Science and Pollution Research*, 18(2), 152–162.
- Vijgen, J., de Borst, B., Weber, R., Stobiecki, T., & Forter, M. (2019). HCH and lindane contaminated sites: European and global need for a permanent solution for a long-time neglected issue. *Environmental Pollution*, 248, 696–705.
- Wang, Y., & Sun, Y.-Z. (2016). The causes of the scientific and regulatory gap in the listing of new persistent organic pollutants into the Stockholm Convention. *Environmental Science and Technology*, 50(12), 6117–6118.
- Weber, R., Gaus, C., Tysklind, M., Johnston, P., Forter, M., Hollert, H., et al. (2008). Dioxin- and POP-contaminated sites – Contemporary and future relevance and challenges. *Environmental Science and Pollution Research*, 15(5), 363–393.

Stockholm Convention on Persistent Organic Pollutants

► Stockholm Convention (2001)

Strategic Corporate Social Responsibility

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Definition

Organizations engage in Strategic Corporate Social Responsibility (Strategic CSR) when they integrate responsible behaviors in their corporate practices (Camilleri, 2018; Porter & Kramer, 2011). Therefore, strategic CSR is often evidenced by the businesses' engagement with key stakeholders, including customers, employees, shareholders, regulatory authorities, and communities as their nonfinancial activities can have an effect on society and the natural environment (Camilleri, 2017a). The ultimate goal of strategic CSR is to create both economic and social value (Carroll & Shabana, 2010; Falck & Heblich, 2007).

Introduction

The businesses' CSR practices may result in a sustained competitive advantage if they are willing to forge strong relationships with their stakeholders (Camilleri, 2015a; Freeman & McVea, 2001). Therefore, businesses ought to communicate with employees, customers, suppliers, regulatory stakeholders, as well as with their

surrounding community (EU, 2016; Bhattacharya et al., 2009). Positive stakeholder relationships can lead to an improved organizational performance, in the long run (Camilleri, 2015a).

The most successful businesses are increasingly promoting the right conditions of employment for their employees, within their supply chains (Camilleri, 2017b). They are also instrumental in improving the lives of their suppliers (Camilleri, 2017c; Porter & Kramer, 2011). They do so as they would like to enhance the quality and attributes of their products or services, which are ultimately delivered to customers and consumers. Hence, their long-term investments on strategic CSR activities are likely to yield financial returns for them. At the same time, they will add value to society (McWilliams et al., 2006; Falck & Heblich, 2007). Therefore, the strategic CSR involves the promotion of socially and environmentally responsible practices they are re-aligned with the businesses' profit motives (Camilleri, 2017b, c).

Key Theoretical Underpinnings

The strategic CSR perspective resonates well with the agency theory. In the past, scholars argued that the companies' only responsibility was to maximize their owners' and shareholders' wealth (Levitt, 1958; Friedman, 1970). Hence, companies were often encouraged to undertake CSR strategies, which can bring value to their businesses and to disregard those activities which are fruitless. However, at times, the fulfillment of philanthropic responsibilities can also benefit the bottom line (Lantos, 2001).

Although, it could be difficult to quantify the returns of responsible behaviors, relevant research has shown that those companies that practiced social and environmental responsibility did well by doing good (Falck & Heblich, 2007; Porter & Kramer, 2011). Some of the contributions on this topic suggest that corporate philanthropy should be deeply rooted in the firms' competences and linked to their business

environment (Camilleri, 2015a, b; Porter & Kramer, 2002; Godfrey, 2005). Many authors often referred to the CSR's core domains (economic, legal, and ethical responsibilities) that were compatible and consistent with the relentless call for the business case of CSR (Camilleri, 2015b; Carroll & Shabana, 2010; Vogel, 2005).

Many commentators argued that the strategic CSR practices may result in a new wave of social benefits as well as gains for the businesses themselves (Fombrun et al., 2000; Porter & Kramer, 2011) rather than merely acting on well-intentioned impulses or by reacting to outside pressures (Van Marrewijk, 2003). Lozano (2015) indicated that the business case is the most important driver for CSR engagement. Thus, proper incentives may encourage managers "to do well by doing good" (Falck & Heblich, 2007). If it is a company's goal to survive and prosper, it can do nothing better than to take a long-term view and understand that if it treats society well, society will return the favor. Companies could direct their discretionary investments to areas (and cost centers) that are relevant to them (Gupta & Sharma, 2009). The reconciliation of shareholder and other stakeholders addresses the perpetual relationship between business and society, as companies are expected to balance the conflicting stakeholder interests for long-term sustainability (Orlitzky et al., 2011; Camilleri, 2017c; Camilleri, 2019).

Conclusion

Many companies are increasingly recognizing the business case for CSR as they allocate adequate and sufficient resources to financial and non-financial activities that will ultimately benefit their stakeholders. Their motivation behind their engagement in strategic CSR practices is to increase their profits and to create shareholder value. At the same time, they strengthen their competitive advantage through stakeholder management.

References

- Bhattacharya, C. B., Korschun, D., & Sen, S. (2009). Strengthening stakeholder–company relationships through mutually beneficial corporate social responsibility initiatives. *Journal of Business Ethics*, 85(2), 257–272.
- Camilleri, M. A. (2015a). Valuing stakeholder engagement and sustainability reporting. *Corporate Reputation Review*, 18(3), 210–222.
- Camilleri, M. A. (2015b). The business case for corporate social responsibility. In S. Menzel Baker & M. Mason (Eds.), *Marketing & public policy as a force for social change conference*. (4th June). Proceedings, (pp. 8–14). American Marketing Association.
- Camilleri, M. A. (2017a). *Corporate sustainability, social responsibility and environmental management: An introduction to theory and practice with case studies*. Cham, Switzerland: Springer.
- Camilleri, M. A. (2017b). Corporate citizenship and social responsibility policies in The United States of America. *Sustainability Accounting, Management and Policy Journal*, 8(1), 77–93.
- Camilleri, M. A. (2017c). The rationale for responsible supply chain management and stakeholder engagement. *Journal of Global Responsibility*, 8(1), 111–126.
- Camilleri, M. A. (2018). The SMEs' technology acceptance of digital media for stakeholder engagement. *Journal of Small Business and Enterprise Development*, 26(4), 504–521.
- Camilleri, M. A. (2019). Measuring the corporate managers' attitudes toward ISO's social responsibility standard. *Total Quality Management & Business Excellence*, 30(14), 1549–1561.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85–105.
- European Union. (2016). *Corporate social responsibility (CSR) in the EU*. Brussels, Belgium: European Commission Publications. <http://ec.europa.eu/social/main.jsp?catId=331>.
- Falck, O., & Heblich, S. (2007). Corporate social responsibility: Doing well by doing good. *Business Horizons*, 50(3), 247–254.
- Fombrun, C. J., Gardberg, N. A., & Sever, J. M. (2000). The Reputation Quotient SM: A multi-stakeholder measure of corporate reputation. *Journal of Brand Management*, 7, 241–255.
- Freeman, R. E., & McVea, J. (2001). A stakeholder approach to strategic management. In *The Blackwell handbook of strategic management* (pp. 189–207).
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, 13, 32–33.
- Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *The Academy of Management Review*, 30(4), 777–798.
- Gupta, S., & Sharma, N. (2009). CSR-A business opportunity. *Indian Journal of Industrial Relations*, 44, 396–401.
- Lantos, G. P. (2001). The boundaries of strategic corporate social responsibility. *Journal of Consumer Marketing*, 18(7), 595–632.
- Levitt, T. (1958). The dangers of social-responsibility. *Harvard Business Review*, 36(5), 41–50.
- Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1), 32–44.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1–18.
- Orlitzky, M., Siegel, D. S., & Waldman, D. A. (2011). Strategic corporate social responsibility and environmental sustainability. *Business & Society*, 50(1), 6–27.
- Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56–68.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2), 95–105.
- Vogel, D. J. (2005). Is there a market for virtue? The business case for corporate social responsibility. *California Management Review*, 47(4), 19–45.

Strategic CSR

- [CSR 1.0/2.0/3.0](#)
- [Market for Corporate Control and CSR](#)
- [Porter and Kramer's \(2006\) "Shared Value"](#)

Strategic Human Resources Management

- [Human Capital Management](#)

Strategic Management and Corporate Sustainability

- [Strategic Management and CSR](#)

Strategic Management and CSR

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Synonyms

[Strategic management and corporate sustainability](#); [Strategy and corporate sustainability](#); [Strategy and CSR](#)

Description

Over the last 60 years, the relation between strategic management and corporate social responsibility has been evolving from opposition towards convergence. For decades, researchers representing the two fields have either expressed indifference toward the achievements of the other group or rejected them outright. While for strategic management scholars, CSR was little more than a luxury add-on that only most successful companies could afford (Freeman and McVea 2001), many business and society academics rejected any attempt to integrate the social and environmental dimensions of operational activities with core business strategy considering it simply unethical (Husted and Allen 2011). The two fields shifted towards convergence already in 1980s (Drucker 1984; Freeman 1984), but it was not until late 1990s (Lee 2008), when the link between strategic management and CSR began to be explored intensively and concepts around strategic CSR (see ► [“Strategic CSR”](#)) started to emerge, overcoming the traditional dichotomy between social and economic goals. The common denominator of these concepts is that they call for integration of CSR into core business strategy and development of business case for corporate social and environmental investment.

Strategic Management

The field of strategic management began to emerge in the 1960s. Strategic management is about the direction of organizations, in particularly business firms (Rumelt et al. 1994). It has traditionally focused on identifying the factors that affect firm performance (Hoskisson et al. 1999), more specifically the factors of success and failure among organizations (Guerras-Martín et al. 2014). Strategic management includes: the selection of goals; the choice of products and services to offer and the choice of firm’s competitive position in the product markets; the choice of the scope and diversity level; and the design of organizational structure, administrative systems, and policies that coordinate work (Rumelt et al. 1994).

Although definitions of the field vary to a large extent, there is an implicit consensus among scholars as to the meaning of strategic management. Based on the results of a lexicographic analysis of nearly 400 articles from the top management journals, Nag et al. (2007) identified six key elements that constitute the implicit consensual definition of strategic management: “The field of strategic management deals with (1) the major intended and emergent initiatives (2) taken by general managers on behalf of owners, (3) involving utilization of resources, (4) to enhance the performance (5) of firms (6) in their external environments” (p. 942). The first element refers to deliberate and planned initiatives (such as strategy development and implementation, acquisition, alliances, and diversification) as well as emergent activities of learning and innovation. The second definitional element explains, who are the key actors in strategy research. It concerns senior managers and governing bodies of companies, who operate as agents of the owners. The third element points to the internal and external resources that managers use in their strategic initiatives. The key objectives of strategic management including growth, advantage, dominance, returns, and performance are encompassed by the fourth element, while the focal unit of the analysis in the strategic management research is described by the fifth one. Strategy scholars focus

on the firm as a whole, be it single-business, multibusiness, multimarket, or multinational. Finally, the sixth element of the definition refers to the immediate environment of a firm (industry) as well as broader external contingency factors generating business threats and opportunities.

The field has attracted the interest of researchers representing different disciplines including economics, sociology, marketing, and management (Nag et al. 2007). Various theories and methodologies, addressing different research topics, have been developed to identify the factors driving success among firms (Guerras-Martín et al. 2014). The evolution of the field has been shaped by simultaneous movement of two pendulums (Guerras-Martín et al. 2014). First, inside-outside pendulum concerns the tensions between a firm's internal and external environment (Hoskisson et al. 1999). More specifically, while some strategic management scholars have focused on internal factors, such as strengths and weaknesses, that might explain firm's performance, others have tended to look at opportunities and threats in the external environment. Second, micro-macro pendulum refers to the tensions between two levels of analysis in the strategic management research, whether it is focused on identifying success factors at the firm (macro) level or on group/individual level (micro) (Guerras-Martín et al. 2014).

Corporate Social Responsibility

The early studies on CSR date back to the 1930s and the Harvard Law Review debate between Adolph A. Berle and Merrick Dodd on the subject of the proper purpose of the public corporation. On the one side stood Berle, who held the view that corporation exists to generate profit for its shareholders. On the other side, Dodd argued that corporation is as an economic institution that serves both society and shareholders (Stout 2002). Later, in the 1950s, the debate has spread to management studies (Crane et al. 2008).

At the core of CSR lay the issue of "social obligations and impacts of corporations in society" (Crane et al. 2008, p. 6). CSR is considered as

"a field of scholarship" (Crane et al. 2008, p. 6) without a paradigm that is still in the state of emergence (Lockett et al. 2006). Its definitions vary depending on the discipline. The literature concerning CSR is strongly siloed and encompasses various concepts, constructs, and theories that are at times in conflict with each other. While in economics researchers focus on CSR understood as a profit sacrificing activity (McWilliams and Siegel 2001), management scholars see it as a voluntary business strategy aimed at creation of shared value (Porter and Kramer 2011). In legal studies, some view CSR as the use of assets to benefit nonshareholder stakeholders (Sheehy and Feaver 2014), while others define it as "international private business self-regulation" focused on minimizing social harms of and contribution to social welfare by companies (Sheehy 2015). In political sciences, the understanding of CSR has been centered around corporate citizenship aimed at protecting citizens from government failures (Matten et al. 2003). Finally from institutional perspective, CSR is viewed as an organizational response to an institutional change embedded in growing social awareness and environmental limitations and supported by stakeholders pressure and regulation. Institutionalists define CSR as an emerging international business norm (Mühle 2011).

Opposition Between Strategic Management and CSR

Although origins of research on CSR in management studies date back to around the same time as beginnings of strategic management, the fields have been developing largely independently. On the one side of the argument, social and environmental issues were not completely ignored in the strategic management research, as they were taken into account as external factors influencing (mostly limiting) strategic options. However, strategic management scholars did not use the achievements of their business and society counterparts (Dąbrowski 2016). What is more, some strategists, particularly those with a strong economics orientation, considered CSR nothing but a

cost (Husted and Allen 2011) or an illustration of the **agency problem**, that is, managers misusing resources of the principals and acting in their own rather than shareholders' best interest (Friedman 1970). In this vein, from a strategic point of view, Karnani argues that whereas people acting as private citizens should do good, companies have only a responsibility to their shareholders to do well (Karnani 2011b), and adds that laws are much more effective than voluntary CSR at inducing firms to implement socially desirable behavior (Karnani 2011a).

On the other side of the argument, the classical understanding of CSR, constructed around notions such as voluntarism, social altruism, and profit sacrificing (Horrigan 2010, pp. 34–35), took a deontological approach. The view was that firms' obligations were ethical obligations to voluntarily engage in social activities. Within this altruistic approach (see ► **"Altruistic CSR"**), CSR is defined as "situations where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law" (McWilliams et al. 2006). Firm motivation plays a crucial role in differentiating between strategic CSR, a type of CSR that is seen merely as a type of profit maximization strategy, and real, altruistic CSR that is motivated by ethical considerations. "If firm's motivation for social action is profit, then it is not social action but simply good business" (Husted and Allen 2011, p. 37).

Towards Convergence

The fields began to draw closer in the 1980s, and although some scholars continue to take adversarial positions between them, to a large degree significant advances have come from this trend. Some authors argue that in the increasingly complex and turbulent business environment, companies' ability to grow and to improve continuously is also a function of its social competencies, ethical responsibility, and environmental contributions (Hardjono and Marrewijk 2001). Creation of shareholder value alone is slowly giving way to a broader, more holistic view of organization and

its performance (Beltratti 2005). The paradigm of shareholder wealth maximization, however, is not only not supported by strategic rationales but has also proved to be detrimental to the shareholders themselves (Stout 2012). As a result, strategic management scholars started to recognize corporate social responsibility as an important factor contributing to corporate long-term success.

The link between strategic management and CSR began to gain attention in academic community in the 1980s. One of the first strategy scholars, who pointed at the complementary relationship between the fields, was Drucker (1984). Drucker argued that CSR was compatible with profitability and that social responsibilities could be converted into business opportunities. "The proper 'social responsibility' of business is to tame the dragon, that is to turn a social problem into economic opportunity and economic benefit, into productive capacity, into human competence, into well-paid jobs, and into wealth" (Drucker 1984, p. 62). This strategic approach to CSR has been developed in later years by Porter and Kramer (2002, 2006, 2011). In a series of articles for the Harvard Business Review giving birth to the concept of creating shared value (CSV), authors argued that in a world of open, knowledge-based competition social and business goals form a symbiotic relation (see ► **"Porter and Kramer's (2006) 'Shared Value'"**).

What is more, since the 1980s there has been a growing number of business and society scholars (Freeman 1984; Hart 1995; Husted and Allen 2011; Visser 2012) who call for integration of CSR into core business strategy. They argue that the anticapitalistic image of CSR has led to its marginalization in the eyes of many managers and scholars. They note that traditional CSR (despite its noble intentions) has become "a confusing cliché which cheats consumers and society at large" (Ahen and Zettinig 2015, p. 95). Porter and Kramer (2006) claim it is cosmetic, "overly narrow, passive and a disguise for causing harm" (Ahen and Zettinig 2015, p. 95), primarily motivated by possible reputation gains. This problem resulted in corporate social responsibility being perceived "as an 'add-on' luxury that can be only afforded by the most successful businesses,

or as a damage limitation insurance, rather than as a core element of the business strategy” (Freeman and McVea 2001, p. 7). Thus, as Ahen and Zettinig (2015) argue, the existence of genuine CSR without being embedded in strategy has been challenged.

CSR initiatives have evolved from philanthropy to strategies that integrate social and environmental issues into firms’ core business operation through innovation (Gugler and Shi 2009). Strategic CSR does not aim at removing the firm from the economic landscape, but at aligning business goals with those of the society for co-created and shared value (Ahen and Zettinig 2015). Linking social and environmental activities with long-term strategic goals offers prospects of greater credibility and value added, since a company can impact its stakeholders in more meaningful ways by tapping its unique capabilities and tailoring to the local context (Jamali 2007).

Business Case for CSR

The strategic shift in CSR research has spurred search for **business case for CSR**. “A ‘business case’ is ‘a pitch for investment in a project or initiative that promises to yield a suitably significant return to justify the expenditure’” (Carroll and Shaban 2010, p. 92). In regard to CSR, business case refers to the potential positive impact of corporate social performance (CSP) on corporate financial performance (CFP) (Carroll and Shaban 2010). The literature provides various rationales for how CSR improves organization’s bottom line (detailed discussion on CSR-related sources of competitive advantage can be found in entry ► “Strategic CSR”). These include differentiation (Cruz et al. 2015), human resources advantages (lower labor costs and higher productivity) (McWilliams and Siegel 2011), support from external stakeholders (i.e., government, local communities, suppliers, advocacy groups, investors) (Fombrun et al. 2000), avoiding regulation costs (Mullerat 2010), and innovativeness (Porter and Kramer 2011).

Conceptual research on the strategic implications of CSR has been accompanied by empirical

studies seeking evidence for the existence of CSR business case. These studies have focused mostly on the empirical research linking CSR and financial performance (CFP) (Carroll and Shaban 2010). Despite the enormous academic effort to investigate the relationship between these two dimensions of corporate performance, the studies still provide inconclusive results (Lu et al. 2014). On the one hand, Orlitzky et al. (2003) summarize this relationship using meta-analysis of 52 studies while adjusting for sampling and measurement errors. The results show that, across the existing studies, CSR is positively related to financial performance. However, available studies do not provide clear results concerning the direction of the causation between CSR and financial performance. In other words, it is unclear whether companies “are doing well by doing good” or “are doing good, because they’re doing well” and have sufficient resources to invest in CSR. Similarly, the results of the meta-analysis conducted by Margolis and Walsh (2003) and Margolis et al. (2009) indicate that the overall weight of the studies shows a positive but weak correlation between CSR and financial performance. On the other hand, in another meta-analysis, Wang et al. (2015) estimated that the overall effect size of the CSR–CFP relationship is positive and significant. It is, however, stronger for firms in developed economies than for firms from the emerging ones. What is more the authors show that subsequent financial performance is associated with prior social responsibility, while the reverse direction is not supported. These results support the “doing good by doing well” hypotheses.

Reasons for the mixed results include inconsistency in defining and measuring CSR and firm performance, inconsistency in samples, imprecision and inconsistency in research design, omitted variable problems, a lack of necessary analyses of causality and/or endogeneity, a lack of methodological rigor, and a lack of theory (Margolis and Walsh 2003; McWilliams et al. 2006). Firm performance is influenced by many variables simultaneously, what makes it difficult to isolate just the CSR impact (Husted and Allen 2007). Orlitzky et al. (2011) conclude that empirical evidence regarding the potential strategic benefits of CSR

should be interpreted with caution for two reasons: (1) inconsistencies between CSR ratings used as a measure of corporate social performance and actual outcomes that result in loss of stakeholder trust towards companies' social and environmental efforts; and (2). low paradigmatic consensus in CSR research.

Despite the lack of clear, quantitative evidence for the positive influence of corporate social and environmental investment on organizational performance, there is strong consensus in the literature that nonmarket issues can have a substantial impact on company's competitiveness. However, the relationship between CSR and strategic management goals is not automatic or, in other words, not every CSR investment translates into business success. A business case for CSR has to be created proactively through intelligent design of voluntary activity that contribute to the solution of societal or environmental problems and, in the same time, have positive measurable business effect (Michelon et al. 2013). Most of the companies have potential for one or several business cases for CSR. This potential is often not recognized because of distorted accounting and management information systems and other organizational rigidities.

Some argue that the positive effect of CSR initiatives on financial performance strengthens, when a company pursues CSR initiatives that are linked to preferences of its most salient stakeholders and allocates resources to these initiatives in a strategic way (Michelon et al. 2013). Husted and Allen (2007) contend that payoffs of engaging in CSR are contingent upon the fitness of social activities with certain firm characteristics. CSR activities designed in such a way help firms develop intangible, valuable, and difficult to imitate assets, which can be a source of competitive advantage.

Summary

In the 1980s, the indifference and opposition between strategic management and CSR scholars started to shift towards mutual understanding and cooperation. While the former recognized CSR as

a source of competitive advantage and long-term value driver, the latter acknowledged that CSR programs without strategic focus have little potential to generate virtual social change. The trend towards convergence between the two fields has opened up new avenue for research exploring the link between CSR and organizational performance. The inconsistent results of these studies show that not all social and environmental activities translate into enhanced corporate financial performance, suggesting need for further inquiry into effective integration of CSR with core business strategy.

Cross-References

► Strategic CSR

References

- Ahen, F., & Zettinig, P. (2015). Critical perspectives on strategic CSR: What is sustainable value co-creation orientation? *Critical Perspectives on International Business*, 11(1), 92–109. <https://doi.org/10.1108/MBE-09-2016-0047>.
- Beltratti, A. (2005). The complementarity between corporate governance and corporate social responsibility. *The Geneva Papers on Risk and Insurance – Issues and Practice*, 30(3), 373–386. <https://doi.org/10.1057/palgrave.gpp.2510035>.
- Carroll, A. B., & Shaban, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85–105.
- Crane, A., et al. (2008). The corporate social responsibility agenda. In *The Oxford handbook of corporate social responsibility* (pp. 3–15). Oxford: Oxford University Press.
- Cruz, L. B., Boehe, D. M., & Ogasavara, M. H. (2015). CSR-based differentiation strategy of export firms from developing countries: An exploratory study of the strategy tripod. *Business & Society*, 54(6), 723–762.
- Dąbrowski, T. J. (2016). Zarządzanie strategiczne i społeczna odpowiedzialność biznesu – od separacji do konwergencji. *Kwartalnik Nauk o Przedsiębiorstwie*, 2, 47–59.
- Drucker, P. F. (1984). Converting social problems into business opportunities: The new meaning of corporate social responsibility. *California Management Review*, 26(2), 53–63.
- Fombrun, C. J., Gardberg, N. A., & Barnett, M. L. (2000). Opportunity platforms and safety nets: Corporate

- citizenship and reputational risk. *Business and Society Review*, 105(1), 85–106.
- Freeman, R. E. (1984). *Strategic management – A stakeholder approach*. Boston: Pitman.
- Freeman, R. E., & McVea, J. (2001). *A stakeholder approach to strategic management*. Available at: <http://bit.ly/1pr95x3>. Accessed 25 June 2015.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*.
- Guerras-Martín, L. A., Madhok, A., & Montoro-Sánchez, A. (2014). The evolution of strategic management research: Recent trends and current directions. *Business Research Quarterly*, 17, 69–76.
- Gugler, P., & Shi, J. Y. J. (2009). Corporate social responsibility for developing country multinational corporations: Lost war in pertaining global competitiveness? *Journal of Business Ethics*, 87(Suppl. 1), 3–24. <https://doi.org/10.1007/s10551-008-9801-5>.
- Hardjono, T. W., & Van Marrewijk, M. (2001). The social dimensions of business excellence. *Corporate Environmental Strategy*, 8(3), 223–233.
- Hart, S. L. (1995). A natural-resource-based view of the firm. *The Academy of Management Review*, 20(4), 986–1014. <https://doi.org/10.2307/258963>.
- Horrigan, B. (2010). *Corporate social responsibility in the 21st century: Debates, models and practices across government, law and business*. Cheltenham: Edward Elgar Publishing.
- Hoskisson, R. E., et al. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, 25(3), 417–456.
- Husted, B. W., & Allen, D. B. (2007). Strategic corporate social responsibility and value creation among large firms. Lessons from the Spanish experience. *Long Range Planning*, 40(6), 594–610.
- Husted, B. W., & Allen, D. B. (2011). *Corporate social strategy*. Cambridge: Cambridge University Press.
- Jamali, D. (2007). The case for strategic corporate social responsibility in developing countries. *Business and Society Review*, 112(1), 1–27. <https://doi.org/10.1111/j.1467-8594.2007.00284.x>.
- Karnani, A. (2011a). CSR stuck in a logical trap. *California Management Review*, 53(2), 105.
- Karnani, A. (2011b). “Doing well by doing good”: The grand illusion. *California Management Review*, 53(2), 69.
- Lee, M.-D. P. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. *International Journal of Management Reviews*, 10(1), 53–73.
- Lockett, A., Moon, J., & Visser, W. (2006). Corporate social responsibility in management research: Focus, nature, salience and sources of influence. *Journal of Management Studies*, 43(1), 115–136. <https://doi.org/10.1111/j.1467-6486.2006.00585.x>. Blackwell.
- Lu, W., et al. (2014). A decade’s debate on the Nexus between corporate social and corporate financial performance: A critical review of empirical studies 2002–2011. *Journal of Cleaner Production*, 79, 195–206.
- Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48, 268–305.
- Margolis, J. D., Elfenbein, H. A., & Walsh, J. P. (2009). Does it pay to be good...and does it matter? A meta-analysis of the relationship between corporate social and financial performance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1866371>.
- Matten, D., Crane, A., & Chapple, W. (2003). Behind the mask : Revealing the true face of corporate citizenship. *Journal of Business Ethics*, 45, 109–120.
- McWilliams, A., & Siegel, D. S. (2001). Corporate social responsibility: A theory of the firm perspective. *The Academy of Management Review*, 26(1), 117–127.
- McWilliams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495.
- McWilliams, A., Siegel, D. S., & Wright, P. M. (2006). Corporate social responsibility: Strategic implications. *Journal of Management Studies*, 43(1), 1–18. <https://doi.org/10.1111/j.1467-6486.2006.00580.x>.
- Michelon, G., Boesso, G., & Kumar, K. (2013). Examining the link between strategic corporate social responsibility and company performance: An analysis of the best corporate citizens. *Corporate Social Responsibility and Environmental Management*, 20(2), 81–94. <https://doi.org/10.1002/csr.1278>.
- Mühle, U. (2011). *The politics of corporate social responsibility: The rise of a global business norm*. Frankfurt: Campus.
- Mullerat, R. (2010). *International corporate social responsibility: The role of corporations in the economic order of the 21st century*. Alphen aan den Rijn: Kluwer Law International.
- Nag, R., Hambrick, D. C., & Chen, M.-J. (2007). What is strategic management, really? Inductive derivation of a consensus definition of the field. *Strategic Management Journal*, 28(9), 935–955.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441.
- Orlitzky, M., Siegel, D. S., & Waldman, D. A. (2011). Strategic corporate social responsibility and environmental sustainability. *Business & Society*, 50(1), 6–27. <https://doi.org/10.1177/0007650310394323>.
- Porter, M. E., & Kramer, M. R. (2002, December). The competitive advantage of corporate philanthropy. *Harvard Business Review*.
- Porter, M. E., & Kramer, M. R. (2006, December). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*.
- Porter, M. E., & Kramer, M. R. (2011, January–February). Creating shared value. *Harvard Business Review*.
- Rumelt, R. P., Schendel, D. E., & Teece, D. J. (1994). *Fundamental issues in strategy: A research agenda*. Boston: Harvard Business School Press.
- Sheehy, B. (2015). Defining CSR: Problems and solutions. *Journal of Business Ethics*, 131, 625–648.

- Sheehy, B., & Feaver, D. (2014). Anglo-American directors' legal duties and CSR: Prohibited, permitted or prescribed? *Dalhousie Law Journal*, 37(1), 347–395.
- Stout, L. A. (2002). Bad and not-so-bad arguments for shareholder primacy. *Southern California Law Review*, 75(5), 1189–1209.
- Stout, L. A. (2012). *The shareholder value myth: How putting shareholders first harms investors, corporations and the public*. San Francisco: Berrett-Kohler Publishing.
- Visser, W. (2012). *The age of responsibility: CSR 2.0 and the new DNA of business*. London: Wiley.
- Wang, Q., Dou, J., & Jia, S. (2015, May 4). A meta-analytic review of corporate social responsibility and corporate financial performance: The moderating effect of contextual factors. *Business & Society*, 1–39.

Strategic Performance Management System

- [Balanced Scorecard and Sustainability](#)

Strategic Performance Management Tool

- [Balanced Scorecard and Sustainability](#)

Strategic Plan

- [SWOR Analysis](#)

Strategic Public Procurement

- [Public Procurement and CSR](#)

Strategic Scorecard

- [Balanced Scorecard](#)

Strategic Sustainability Communication

- [CSR Communication and Perspective](#)

Strategy

- [Management](#)

Strategy and Corporate Sustainability

- [Strategic Management and CSR](#)

Strategy and CSR

- [Strategic Management and CSR](#)

Strategy in a Circular Economy: Discussion of Opportunities and Limitations

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Synonyms

[Business model perspective](#); [Closed-loop production](#); [Cradle to Cradle](#); [Product-to-service shift](#)

Definition

A closed-loop production, also called Cradle to Cradle or “circular economy,” offers to fundamentally rebuild the current take-make-waste system of production (McDonough and Braungart 2010).

The aim of the circular economy is twofold: on the demand side, to eliminate the need for new resources, and on the supply side, to achieve a product-to-service shift through rental and repair rather than ownership. Therefore, business model innovation of inputs, processes, and relationships with end-users is necessary at an organizational level (Bocken et al. 2014, 2016; Kindström 2010). A business model perspective on organizational strategy is particularly relevant to the circular economy as it focuses on both a strategic and operational level, including designs, products, processes, values, and wastes as key concepts that might normally be ignored by more corporate strategic management (Bocken et al. 2014). There are at least two critical differences in implementing business model innovation in a circular economy. First is the essential importance of initial design that enables a circular flow (Centobelli et al. 2020; Urbinati et al. 2017). Second is the joined-up and inter-dependent nature of supply chains and value networks (Lieder and Rashid 2016), which requires more intense consideration of more diverse, and perhaps initially unwilling, stakeholders, including shareholders, employees, clients, suppliers, society, environment, and government (Geissdoerfer et al. 2018a).

Introduction: Key Concepts and Debates

This Encyclopedia entry discusses the opportunities and limitations of the so-called circular or closed-loop production systems in business.

Sustainability experts within corporate contexts increasingly recognize that environmental problems, from climate change to biodiversity loss and pollution, are caused by social and economic factors, such as an increase in population, production, and consumption (O'Sullivan 2020). A closed-loop production, also called Cradle to Cradle (C2C), or "circular economy" offers to fundamentally rebuild the current take-make-waste system of production (McDonough and Braungart 2010). Reusing materials and increasing the durability of products already in use promise to counter the throw-away culture of planned or built-in obsolescence (Bulow 1986).

Ideally, a circular system aims not just to increase the level of material and energy recovery but to eliminate the continuous need for new and often scarce resources (De Man and Friege 2016; Kopnina 2021). This aim is facilitated by the calls to accelerate the "product-to-service shift" (PSS) or dematerialization of product use through rental and repair rather than ownership, which requires the re-organization of business through the transition from selling to leasing or pay-per-use schemes (Savini 2021; Stevens et al. 2021). In some conceptions, a circular economy can be seen to criticize the folly of using up our non-renewable resources ("capital" in economist terms), like the "small is beautiful" critique of mass production (Schumacher 1973). Notably, as will be discussed in more detail below, the circular economy is associated with growth, or "large is beautiful."

C2C, which may be said to be one of the "inspirations or design principles underlying circular economy," identifies three key principles of alternative production systems: (a) waste equals food, (b) use current solar income, and (c) celebrate diversity. *The waste equals food principle* emphasizes that unproductive waste should be eliminated. A fruit tree's "waste" provides nutrients for other species or soil when decomposed. *The use of renewables principle* supports the sun and wind energy, which, aside from installation, storage, transmission, and maintenance, are immaterial and relatively infinite. *Celebrate diversity* refers to natural systems that support complex biodiverse communities, or ecosystems, where each member has developed a unique response to its surroundings that works in concert with other organisms. Considering the discussion of limitations of the circular economy, it is worth noting that in the definition of the Convention on Biological Diversity, "Biological diversity" means the variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystems (CBD 2023).

C2C products take nature's diversity as a prototype for tailoring designs to maximize their

positive effects and enhance the local landscape (McDonough and Braungart 2010). Biomimicry designs, for example, imitate the complexity of natural forms, as well as their function and reciprocity with other natural elements (Stevens et al. 2021). These principles are translated into the C2C certification, which awards products an achievement distinction in the categories of Material Health, Material Reutilization, Renewable Energy, Water Stewardship, and Social Fairness. The products could achieve a Basic, Bronze, Silver, Gold, or Platinum level, with the lowest achievement level representing the product's overall mark (Cradle to Cradle Certified 2020). Various companies have developed metrics used to define a material based on its properties such as recyclability, scarcity, and toxicity (e.g., <https://www.metabolic.nl/news/the-seven-pillars-of-the-circular-economy/>).

Circular economy evaluations using the 10-R scale and C2C accreditation are aimed to evaluate the inputs of production (raw materials, energy, etc.) associated with all the production outputs, use, and disposal (Kirchherr 2022; Ünal and Shao 2019). The 10-R scale starts with the R of Refuse, which implies avoidance of production and consumption in the first place, and is followed by the Rs of Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle, and Recover (Potting et al. 2017).

However, as good as they sound, circular frameworks can be subverted into the business-as-usual growth economy model. The popularity of the idea that recycling and eco-efficiency and, even more so, infinite reuse of products can serve as a “new engine of growth” can be explained by the fact that much of circular economy terminology if not practiced was jumpstarted by the reports of the Ellen MacArthur Foundation. The circular economy continues to be significantly intertwined not necessarily with career academics but with practising academics receiving at least some funding from corporate partners, or “pracademics” and practitioners (Kirchherr 2022). It was noted that the circular economy's success in business and policy circles rests upon the promise that circularity is central to sustainable development promising to marry a growth

economy (and corporate profit) with sustainability (Kirchherr 2022). As the section below explains, this can be problematic.

The Challenges of Greenwashing

Precisely because the circular economy promises to support growth and supporting corporate optimism, it also opens the door for greenwashing (Kirchherr 2022; Kopnina and Benkert 2022). McDonough and Braungart's book, *The Upcycle* (2013) illustrates this optimism by suggesting that the production of the “right” products can add value and have a net positive effect on ecosystems. However, using the CBD's definition of biodiversity, it is unclear as to how any human designs, used for utilitarian purposes, can contribute to the functioning of ecosystems, considering that these ecosystems far predate human industry. There is an ethical and pragmatic difference between socio-economic and cultural changes due to biodiversity loss and extinction that terminates not just millions of lives of individuals within the species, but entire species (Kopnina et al. 2018). Thus, the discussion of upcycling and net positive effects may be part of nothing more than marketing, carrying the danger of complacency of both companies and consumers to the easy promises of cleaner production.

A social anthropologist specializing in cultural and social barriers to sustainable/green behavior, Cindy Isenhour (2010) notes that individual consumers might be either uninformed or unmotivated, or tricked by the supposedly “green” marketing that stimulates the consumption of new products, causing a rebound effect. Also, consumer responsibility rhetoric can be seen as a strategy of corporate and political leaders to “defend their ability to resist the regulation of resource-intensive, polluting or socially damaging products” (Isenhour 2010, p. 456). A distinction between ideal, realistic, and subverted circular practice is helpful (Kirchherr et al. 2017).

The companies that get certified as Cradle to Cradle (C2C) (<https://www.c2ccertified.org/get-certified/product-certification>) or placed on the

list of “good practice” of the MacArthur Foundation (https://ellenmacarthurfoundation.org/case_studies) often still focus on merely minimizing damage, not radically eliminating it. The “best case practices” by the Ellen Macarthur Foundation include Coca-Cola and other corporations, which stimulate downcycling, rather than infinite reuse (Kirchherr 2022; Kopnina 2021).

While the first R of circular economy is *Refuse*, the use of virgin or downcycled materials and not fully reused existing ones is common with manufacturers that improve their production only marginally, without the needed overhaul of the *entire* supply chain as mode of operation. Also, sustainability specialists have identified opportunities for the so-called “post-growth” circularity that reaches beyond growth fetishism, emphasizing the downscaling of the economy to make it consistent with biophysical boundaries via the application of the R principles (Bauwens 2021; Kirchherr 2022). Another concern is dubbed the “circular economy rebound,” meaning that expected savings from the circular economy may be invested unsustainably, thus offsetting any sustainability benefits previously accrued (Kirchherr 2022; Zink and Geyer 2017).

As argued by critical assessors, in the circular economy, it is thus crucial to make a distinction between ideals and practice but also underline the limitations of the very concept of circularity (Bauwens 2021; Carus and Dammer 2018; de Man and Friege 2016; Holmes et al. 2021; Johansson and Henriksson 2020; Kirchherr 2022; Kopnina 2021; Kopnina and Padfield 2021), distinguishing between biological/organic cycle products. de Man and Friege (2016) note that waste is rarely “food” as any consumed food literally changes into toilet waste, which is not the same in nutritional value as injected components. Also, both the method of food production and the type of food produced, e.g., the climate-related differences in the locally grown laboratory meat versus soya-based meat substitutes, need to be considered, if the “waste is food” principle is to be followed (Kopnina et al. 2023). Within the technological cycle, where products can be evaluated by the 10-R strategy, different

considerations will apply (such as durability and potential for infinite reuse of materials).

There is also a question of whether a circular economy is competitive with a post-growth or degrowth strategy that some of the more forward-looking sustainability specialists bring into doubt (Bauwens 2021; Hofmann 2022). As Bauwens (2021, p. 219) states:

While the circular economy is a popular topic on many countries’ political agendas, an expanding body of empirical evidence shows that, thus far, increases in the global gross domestic product (GDP) have been tightly coupled with an increase in the size of the material footprint and associated ecological impacts of the economy (Hickel and Kallis, 2019). Global absolute decoupling of GDP growth and resource consumption (i.e., a decline in the global material footprint in absolute terms while the global GDP continues to increase), a necessary condition for green growth, is still far from a reality.

Yet, while it still has a long way to go in practice, a circular economy can be potentially transformative.

Strategic Ways Forward

Kirchherr (2022) reflects that some post-growth or degrowth discourses, in combination or independent of circular economy thinking or not, may be unrealistic and undesirable as they would hamper the development of alternative economies (that ironically need to grow to replace linear or unsustainable ones). Kirchherr (2022) states that while calls for the economy to be “small-scale and localized to primarily serve local communities’ needs” may sound romantic and desirable, harking back to the “small is beautiful” ideals (Schumacher 1973), “this may equate with a detour to the Middle Ages.” This point of critique might be especially relevant as a few billion consumers have been born since Schumacher’s famous volume has first been published. Kirchherr offers both caution and hope as far as the strategy of circular development is concerned:

Once rapid growth of circular businesses has occurred, with these companies driving linear players out of the market, the economy may be, measured in GDP, smaller than its linear

predecessor, if dominant products are ultra-durable and/or more resource efficient. This economy may also be larger, though. After all, consumers tend to re-invest savings induced by CE (think of savings occurring because of an ultra-durable smartphone that suddenly lasts 10 years). . . . However, it is conceivable that these savings are re-invested sustainably (think of a weekend get-away at an eco-farm close-by), setting off a perpetuum mobile towards sustainability. We just do not know. (Kirchherr 2022)

Good examples of what type of products can be seen as worth re-invested savings can be found in pre-industrial production systems, for example in vegan diets, or clay containers that used to be used for transportation and storage.

Strategic Action at Multiple Levels

Unlike traditional, market-based strategy which is focused on discrete organizations in a competitive environment, strategy in a circular economy is inter-organizational and multi-level: individuals, small- and medium-sized enterprises, multinational enterprises, industry representative bodies, local government, charities and nongovernmental organizations, and nations and supranational organizations all have roles to play in enabling circularity (de Jesus and Mendonça 2018; Geissdoerfer et al. 2020; Ghisellini et al. 2016; Kalmykova et al. 2018; Lieder and Rashid 2016). The following summary will focus on the three levels that have attracted particular attention in the circular economy literature so far: national and supranational policies, circular business models, and intrafirm dynamic capabilities.

At the highest level, much has been written about the contrasting approaches being taken toward the circular economy in China and Europe (Ghisellini et al. 2016; McDowall et al. 2017). China's rapid growth from the 1970s onwards had been built on intense industrialization and urbanization, heavy exploitation of natural resources, production processes with weak environmental oversight, and utilizing inefficient methods, leading ultimately to environmental damage, social problems, and a slowing economy (Su et al. 2013). Building on several preceding

initiatives, the Circular Economy Law Promotion that came into force in 2009 produced a comprehensive national approach and mandated action at all levels of government and industry across China (Mathews and Tan 2011; McDowall et al. 2017). This is perhaps the most obvious example in a circular economy context of a traditional top-down, deliberate strategy. However, in common with the mainstream academic strategy literature (e.g., Friesl et al. 2021; Hrebiniak 2013; Weiser et al. 2020), the Circular Economy Law Promotion has faced barriers to implementation and enforcement at local levels (Ranta et al. 2018). There were policies on resource recycling and reuse, cleaner production, pollution, and waste but perhaps most significantly on place-based planning interventions (McDowall et al. 2017; Zhu et al. 2019). Eco-industrial parks, supported by various national government departments and regional and municipality authorities, are a particularly powerful method in China's top-down approach, incentivizing firms to co-locate in planned zones and to innovate their processes to reuse waste resources and use energy efficiently (Homrich et al. 2018; Mathews and Tan 2011; McDowall et al. 2017).

Europe has taken a different approach from China. It is more focused, in that it concentrates more on minimizing virgin natural resource exploitation and waste minimization while also supporting sustainable economic growth (Domenech and Bahn-Walkowiak 2019; Ghisellini et al. 2016). It is more bottom-up, in that it uses policy, regulation, and finance as incentives to nudge organizations toward 10-R activities (and disincentivize linear cradle-to-cradle activities) but has not utilized planning tools to manipulate spatial re-arrangements in supply chains (McDowall et al. 2017). In addition, while China has concentrated on supply issues, European countries are far more focused on changing consumers into users (Lazarevic and Valve 2017). Therefore, while the European Commission (2015) has developed a high-level policy in this area – *Closing the Loop: An EU Action Plan for the Circular Economy* – this is more catalytic than a deliberate plan. Therefore, most of the European literature on strategy in the

circular economy is focused on lower levels of analysis.

A thorough definition is given by Bocken et al. (2014, p. 43): “Business models are concerned with how the firm defines its competitive strategy through the design of the product or service it offers to its market, how it charges for it, what it costs to produce, how it differentiates itself from other firms by the value proposition, and how the firm integrates its own value chain with those of other firm’s in a value network.” Therefore, a business model perspective on organizational strategy is particularly relevant to the circular economy as it focuses on both a strategic and operational level, including design, products, processes, and value (and waste) as key concepts that might normally be ignored by more corporate strategic management. Some archetypes of circular business models emphasize the way that value is added (and waste avoided) as a basis for competitive and collaborative advantage: closing (recycling), extending (prolonging usability through repair and reuse), intensifying (gaining more use in a shorter period), narrowing (using fewer resources by being more efficient), and dematerializing (product substitution by service and software solutions) (Bocken et al. 2016; Geissdoerfer et al. 2018a).

Other typologies emphasize different relationships: different ownership, manufacturing and maintenance relationships, location of operations, customer use (single sequential, parallel), and payment models (Tukker 2015). Still, others emphasize the technological, social, and organizational dimensions of circular business models (Bocken et al. 2014). But as with most strategies, it is not the vision that is the tricky bit, it is the implementation (e.g., Friesl et al. 2021; Hrebiniak 2013; Weiser et al. 2020). Therefore, the literature on circular business model innovation is particularly important to a successful transition to a circular economy. Geissdoerfer et al. (2018b) propose four types: start-up (new business model for a new business), business model transformation (change the existing business model), business model diversification (add a new business model(s) to an existing one), and business model acquisition (purchase another business with a

desired business model). Apart from the “born circular” start-up, the other three business model innovation types involve strategy implementation, change management, and integration of new business units, on which there is well-established literature.

There are at least two critical differences in implementing business model innovation in a circular economy. First is the essential importance of initial design that enables a circular flow, characterized as four designs for X practices: a design for recycling (DfR), design for remanufacturing and reuse (DfR), design for disassembly (DfD), and design for environment (DfE) (Centobelli et al. 2020; Urbinati et al. 2017). Second is the joined-up and inter-dependent nature of supply chains and value networks (Lieder and Rashid 2016), which requires more intense consideration of more diverse, and perhaps initially unwilling, stakeholders, including shareholders, employees, clients, suppliers, society, environment, and government (Geissdoerfer et al. 2018a). This places special emphasis on multinational enterprises that have powerful positions in long and complex global supply chains, exemplars being members of the Ellen MacArthur CE100 Network (Urbinati et al. 2017), to act as catalysts to circular supplies globally.

At the lowest level of analysis, the emphasis has been on capabilities and, more specifically, on dynamic capabilities. A number of highly cited articles highlight that organizational capabilities are significant (e.g., Bocken et al. 2014; Boons and Lüdeke-Freund 2013). However, few studies have attempted to peer inside this black box to analyze these important capabilities in any detail. The work by Sehnem et al. (2022) is an example of a study that highlights some of the important capabilities that are required, particularly dynamic, relational, absorptive, and (eco)innovation and business model innovation capabilities. Linking back to the previous point that implementing strategy generally and carrying out circular business model innovation specifically are more problematic than formulating a new strategy, several papers have focused on the significance of dynamic capabilities: sensing, seizing, and reconfiguring (e.g., Marrucci et al. 2022).

Khan et al. (2020) list a series of activities linked to each: sensing involves activities such as identification of customer needs, tracking new market trends, and analyzing competitors' actions; seizing involves strategy formulation, finding strategic partners, planning investments, and planning requisite HR, among other activities; while reconfiguring involves activities like mergers and acquisitions, organization redesign, and acquiring plant and know-how. Inigo et al. (2017) also argue that dynamic capabilities can be split into those which encourage evolutionary or radical business model innovation. Using the sensing dynamic capability to illustrate their point, evolutionary activity might include holding stakeholder dialogs, anticipating and responding to regulations, and creating sustainability-related associations, whereas more radical activities emphasize focusing attention on critical and disruptive stakeholders and technologies. Finally, Wade et al. (2022) highlight that the activities constituting dynamic capabilities may develop through time. Using the reconfiguring dynamic capability as an example, early on prototype products may be released and new business models may be developed, followed by business model execution, then changing external industry expectations, and finally business model evolution and building credibility.

Summary

A circular economy is a simple, yet bold idea. It aims to minimize – better still, eradicate – the need for new natural resources, by shifting from an exploitative, take-make-waste production system to a closed-loop, cradle-to-cradle industrial ecosystem. This is in part achieved through the design of modular, decomposable products, which use less resources and are more durable and, at the end of their extended use, can be broken up into parts which can themselves be re-utilized. But this technological innovation also needs to go hand in hand with social innovation, involving a product to service shift away from ownership, toward rental and repair. All of this can be summarized

by the 10-R activities that individuals and organizations, at many levels and in many places, need to engage in to enable a successful circular economy to emerge: Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle, and Recover.

Ideally, a circular economy approach places overcoming environmental problems, such as climate change, biodiversity loss, and pollution, centrally in economic planning and organizational strategy. This involves diverse stakeholders who must act coherently at multiple levels. From a more top-down perspective, supranational, national, regional, and local governments must provide a context in which a circular economy can emerge, through legal frameworks, regulation, planning, incentives, and education. In contrast from a more bottom-up, organic perspective, organizations need to develop the capabilities and circular business models and more importantly the dynamic capabilities to constantly adapt through business model innovation, which can underpin the 10-R activities across complex global supply chains and among rapidly developing societies.

Cross-References

- ▶ Collaborative Consumption
- ▶ Life-Cycle Analysis
- ▶ Value Chain Management

References

- Bauwens, T. (2021). Are the circular economy and economic growth compatible? A case for postgrowth circularity. *Resources, Conservation and Recycling*, 175(4), 105852. <https://doi.org/10.1016/j.resconrec.2021.105852>.
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56. <https://doi.org/10.1016/j.jclepro.2013.11.039>.
- Bocken, N. M., De Pauw, I., Bakker, C., & Van Der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of*

- Industrial and Production Engineering*, 33(5), 308–320. <https://doi.org/10.1080/21681015.2016.1172124>.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19. <https://doi.org/10.1016/j.jclepro.2012.07.007>.
- Bulow, J. (1986). An economic theory of planned obsolescence. *Quarterly Journal of Economics*, 101(4), 729–749. <https://doi.org/10.2307/1884176>.
- Carus, M., & Dammer, L. (2018). The circular bioeconomy—Concepts, opportunities, and limitations. *Industrial Biotechnology*, 14(2), 83–91. <https://doi.org/10.1089/ind.2018.29121.mca>.
- CBD (Convention on Biological Diversity). (2023). <https://www.cbd.int/convention/articles/?a=cbd-02>
- Centobelli, P., Cerchione, R., Chiaroni, D., Del Vecchio, P., & Urbinati, A. (2020). Designing business models in circular economy: A systematic literature review and research agenda. *Business Strategy and the Environment*, 29(4), 1734–1749. <https://doi.org/10.1002/bse.2466>.
- de Jesus, A., & Mendonça, S. (2018). Lost in transition? Drivers and barriers in the eco-innovation road to the circular economy. *Ecological Economics*, 145, 75–89. <https://doi.org/10.1016/j.ecolecon.2017.08.001>.
- de Man, R., & Friege, H. (2016). Circular economy: European policy on shaky ground. *Waste Management and Research*, 34(2), 93–95. <https://doi.org/10.1177/0734242X15626015>.
- Domenech, T., & Bahn-Walkowiak, B. (2019). Transition towards a resource efficient circular economy in Europe: Policy lessons from the EU and the member states. *Ecological Economics*, 155, 7–19. <https://doi.org/10.1016/j.ecolecon.2017.11.001>.
- European Commission. (2015). Closing the loop: An action plan for the circular economy. Communication from the commission to the European Parliament. The Council, the European Economic and Social Committee and the Committee of the Regions. COM/2015/0614, Brussels. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015DC0614>. Accessed 20 Dec 2022.
- Friesl, M., Stensaker, I., & Colman, H. L. (2021). Strategy implementation: Taking stock and moving forward. *Long Range Planning*, 54(4), 102064. <https://doi.org/10.1016/j.lrp.2020.102064>.
- Geissdoerfer, M., Morioka, S. N., de Carvalho, M. M., & Evans, S. (2018a). Business models and supply chains for the circular economy. *Journal of Cleaner Production*, 190, 712–721. <https://doi.org/10.1016/j.jclepro.2018.04.159>.
- Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018b). Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, 401–416. <https://doi.org/10.1016/j.jclepro.2018.06.240>.
- Geissdoerfer, M., Pieroni, M. P., Pigosso, D. C., & Soufani, K. (2020). Circular business models: A review. *Journal of Cleaner Production*, 277, 123741. <https://doi.org/10.1016/j.jclepro.2020.123741>.
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11–32. <https://doi.org/10.1016/j.jclepro.2015.09.007>.
- Hofmann, F. (2022). Circular economy and economic (de-) growth? Let's shift the baselines! *Resources, Conservation, and Recycling*, 187, 106604. <https://doi.org/10.1016/j.resconrec.2022.106604>.
- Holmes, H., Wieser, H., & Kasmire, J. (2021). Critical approaches to circular economy research: Time, space and evolution. In R. B. Swain & S. Sweet (Eds.), *Sustainable consumption and production* (Vol. II, pp. 55–74). Cham: Palgrave Macmillan.
- Homrich, A. S., Galvao, G., Abadia, L. G., & Carvalho, M. M. (2018). The circular economy umbrella: Trends and gaps on integrating pathways. *Journal of Cleaner Production*, 175, 525–543. <https://doi.org/10.1016/j.jclepro.2017.11.064>.
- Hrebiniak, L. G. (2013). *Making strategy work: Leading effective execution and change* (2nd ed.). Upper Saddle River: FT Press.
- Inigo, E. A., Albareda, L., & Ritala, P. (2017). Business model innovation for sustainability: Exploring evolutionary and radical approaches through dynamic capabilities. *Industry and Innovation*, 24(5), 515–542. <https://doi.org/10.1080/13662716.2017.1310034>.
- Isenhour, C. (2010). On conflicted Swedish consumers, the effort to stop shopping and neo-liberal environmental governance. *Journal of Consumer Behavior*, 9, 454–469. <https://doi.org/10.1002/cb.336>.
- Johansson, N., & Henriksson, M. (2020). Circular economy running in circles? A discourse analysis of shifts in ideas of circularity in Swedish environmental policy. *Sustainable Production and Consumption*, 23, 148–156. <https://doi.org/10.1016/j.spc.2020.05.005>.
- Kalmykova, Y., Sadagopan, M., & Rosado, L. (2018). Circular economy – From review of theories and practices to development of implementation tools. *Resources, Conservation, and Recycling*, 135, 190–201. <https://doi.org/10.1016/j.resconrec.2017.10.034>.
- Khan, O., Daddi, T., & Iraldo, F. (2020). The role of dynamic capabilities in circular economy implementation and performance of companies. *Corporate Social Responsibility and Environmental Management*, 27(6), 3018–3033. <https://doi.org/10.1002/csr.2020>.
- Kindström, D. (2010). Towards a service-based business model – Key aspects for future competitive advantage. *European Management Journal*, 28(6), 479–490. <https://www.sciencedirect.com/science/article/pii/S0263237310000538>
- Kirchherr, J. (2022). Circular economy and growth: A critical review of “post-growth” circularity and a plea for a circular economy that grows. *Resources, Conservation, and Recycling*, 179, 106033. <https://doi.org/10.1016/j.resconrec.2021.106033>.

- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation, and Recycling*, 127, 221–232. <https://doi.org/10.1016/j.resconrec.2017.09.005>.
- Kopnina, H. (2021). Exploring posthuman ethics: Opening new spaces for postqualitative inquiry within pedagogies of the circular economy. *Australian Journal of Environmental Education*, 38(3–4), 361–374. <https://doi.org/10.1017/ae.2021.16>.
- Kopnina, H., & Benkert, J. (2022). Critical evaluation of sustainable development goals and circular economy in (business) education: Reflections on a long-term sustainability strategy of degrowth. In M. Öztürk (Ed.), *Engagement with sustainable development in higher education* (pp. 51–65). Cham: Springer. https://doi.org/10.1007/978-3-031-07191-1_4.
- Kopnina, H., & Padfield, R. (2021). (Im)possibilities of “circular” production: Learning from corporate case studies of (un)sustainability. *Environmental and Sustainability Indicators*, 12, 100161. <https://doi.org/10.1016/j.indic.2021.100161>.
- Kopnina, H., Washington, H., Taylor, B., & Piccolo, J. J. (2018). Anthropocentrism: More than just a misunderstood problem. *Journal of Agricultural and Environmental Ethics*, 31(1), 109–127. <https://doi.org/10.1007/s10806-018-9711-1>.
- Kopnina, H., Boatta, F., Baranowski, M., & De Graad, F. (2023). Does waste equal food? Examining the feasibility of circular economy in the food industry. In H. Lehmann, C. Hinske, V. de Margerie, & A. S. Nikolova (Eds.), *The impossibilities of circular economy, separating aspirations from reality* (pp. 11–22). New York: Routledge. <https://doi.org/10.4324/9781003244196-3>.
- Lazarevic, D., & Valve, H. (2017). Narrating expectations for the circular economy: Towards a common and contested European transition. *Energy Research and Social Science*, 31, 60–69. <https://doi.org/10.1016/j.erss.2017.05.006>.
- Lieder, M., & Rashid, A. (2016). Towards circular economy implementation: A comprehensive review in context of manufacturing industry. *Journal of Cleaner Production*, 115, 36–51. <https://doi.org/10.1016/j.jclepro.2015.12.042>.
- Marrucci, L., Daddi, T., & Iraldo, F. (2022). Do dynamic capabilities matter? A study on environmental performance and the circular economy in European certified organisations. *Business Strategy and the Environment*, 31, 2641–2657. <https://doi.org/10.1002/bse.2997>.
- Mathews, J. A., & Tan, H. (2011). Progress toward a circular economy in China: The drivers (and inhibitors) of eco-industrial initiative. *Journal of Industrial Ecology*, 15(3), 435–457. <https://doi.org/10.1111/j.1530-9290.2011.00332.x>.
- McDonough, W., & Braungart, M. (2010). *Cradle to Cradle: Remaking the way we make things*. Amsterdam: North Point Press.
- McDonough, W., & Braungart, M. (2013). *The upcycle: Beyond sustainability – Designing for abundance*. Cham: Macmillan.
- McDowall, W., Geng, Y., Huang, B., Barteková, E., Bleischwitz, R., Türkeli, S., et al. (2017). Circular economy policies in China and Europe. *Journal of Industrial Ecology*, 21(3), 651–661. <https://doi.org/10.1111/jiec.12597>.
- O’Sullivan, J. N. (2020). The social and environmental influences of population growth rate and demographic pressure deserve greater attention in ecological economics. *Ecological Economics*, 172, 106648. <https://doi.org/10.1016/j.ecolecon.2020.106648>.
- Potting, J., Hekkert, M. P., Worrell, E., & Hanemaaijer, A. (2017). *Circular economy: Measuring innovation in the product chain*. Planbureau voor de Leefomgeving (PVL, Netherlands Environmental Assessment Agency). Policy report, 2544. <https://www.pbl.nl/en/publications/circular-economy-measuring-innovation-in-product-chains>. Accessed 12 Sept 2022.
- Ranta, V., Aarikka-Stenroos, L., Ritala, P., & Mäkinen, S. J. (2018). Exploring institutional drivers and barriers of the circular economy: A cross-regional comparison of China, the US, and Europe. *Resources, Conservation, and Recycling*, 135, 70–82. <https://doi.org/10.1016/j.resconrec.2017.08.017>.
- Savini, F. (2021). The circular economy of waste: Recovery, incineration and urban reuse. *Journal of Environmental Planning and Management*, 64(12), 2114–2132. <https://doi.org/10.1080/09640568.2020.1857226>.
- Schumacher, E. F. (1973 [2011]). *Small is beautiful: A study of economics as if people mattered*. New York: Random House.
- Sehnem, S., de Queiroz, A. A. F. S., Pereira, S. C. F., dos Santos Correia, G., & Kuzma, E. (2022). Circular economy and innovation: A look from the perspective of organizational capabilities. *Business Strategy and the Environment*, 31(1), 236–250. <https://doi.org/10.1002/bse.2884>.
- Stevens, L., Kopnina, H., Mulder, K., & De Vries, M. (2021). Biomimicry design thinking education: A base-line exercise in preconceptions of biological analogies. *International Journal of Technology and Design Education*, 31(4), 797–814. <https://doi.org/10.1007/s10798-020-09574-1>.
- Su, B., Heshmati, A., Geng, Y., & Yu, X. (2013). A review of the circular economy in China: Moving from rhetoric to implementation. *Journal of Cleaner Production*, 42, 215–227. <https://doi.org/10.1016/j.jclepro.2012.11.020>.
- Tukker, A. (2015). Product services for a resource-efficient and circular economy – A review. *Journal of Cleaner Production*, 97, 76–91. <https://doi.org/10.1016/j.jclepro.2013.11.049>.
- Ünal, E., & Shao, J. (2019). A taxonomy of circular economy implementation strategies for manufacturing firms: Analysis of 391 cradle-to-cradle products. *Journal of Cleaner Production*, 212, 754–765. <https://doi.org/10.1016/j.jclepro.2018.11.291>.

- Urbinati, A., Chiaroni, D., & Chiesa, V. (2017). Towards a new taxonomy of circular economy business models. *Journal of Cleaner Production*, 168, 487–498. <https://doi.org/10.1016/j.jclepro.2017.09.047>.
- Wade, B., Meath, C., & Griffiths, A. (2022). Capabilities for circularity: Overcoming challenges to turn waste into a resource. *Business Strategy and the Environment*, 31, 2658–2681. <https://doi.org/10.1002/bse.2998>.
- Weiser, A. K., Jarzabkowski, P., & Laamanen, T. (2020). Completing the adaptive turn: An integrative view of strategy implementation. *Academy of Management Annals*, 14, 969–1031. <https://doi.org/10.5465/annals.2018.0137>.
- Zhu, J., Fan, C., Shi, H., & Shi, L. (2019). Efforts for a circular economy in China: A comprehensive review of policies. *Journal of Industrial Ecology*, 23(1), 110–118. <https://doi.org/10.1111/jiec.12754>.
- Zink, T., & Geyer, R. (2017). Circular economy rebound. *Journal of Industrial Ecology*, 21(3), 593–602. <https://doi.org/10.1111/JIEC.12545>.

Strong Sustainability

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Synonyms

Rigorous sustainability

Definition/Description

The concept of sustainability includes a spectrum of perspectives ranging from a technocentric “very weak sustainability” position through to an ecocentric “very strong sustainability” one (Gibbs et al. 1998). Nowadays, it has been emphasized qualitative side of growth and strong sustainability (rigorous sustainability) position gearing to the green economy and environmental protection (Davies 2013). Environmental protection is seen to be crucial because certain natural

resources, e.g., “critical natural capital,” are irreversible (Neumayer 2003; Turner 1993), provide some functions, and are not substitutable by produced capital (Balaceanu and Apostol 2014; Klarin 2018). Their loss reflects on all other forms of capital (Neumayer 2003; Turner 1993). Critical natural capital is stressed by defining sustainability as leaving a stock of natural capital for the future generations as big as enjoyed by the current generation (Cabeza Gutiérrez 1996).

Strong sustainability position has various variants such as “environmental” and “ecological sustainability” (Pezzey and Toman 2005; Turner 1993). Environmental sustainability is focused on maintaining the factors and practices that contribute to the quality of environment (BusinessDictionary 2018a) which is necessary for conducting the economic activities and quality of life of people on a long-term basis (Elkington 1994). Ecological sustainability is focused on protection and restoration of the integrity of the Earth’s ecological systems (Bosselmann 2017) for maintaining their essential functions and processes and retaining their biodiversity in full measure over the long term (BusinessDictionary 2018b). “Very strong sustainability” position again stresses steady-state economic system based on thermodynamic limits and constraints and minimization of matter and energy throughput (Davies 2013; Turner 1993).

Introduction

An outline of a strong sustainability position is presented by Daly (1990). According to him, next principles are essential for sustainable development:

- The human scale should be limited to the level which, if not optimal, is at least within carrying capacity and therefore sustainable.
- Technological progress for sustainable development should be efficiency increasing rather than throughput increasing.
- Renewable resources should be exploited on a sustained-yield basis.

- Nonrenewable resources should be exploited at a rate equal to the creation of renewable substitutes.

From this perspective flow different variants of the precautionary principle (Howarth 1997) which constrain resource degradation or depletion.

The need to develop sustainability indicators is central when assessing whether an economy is sustainable or not. Within the field of economics, this search for an operational definition of sustainable development has led, among many other contributions, to the concepts of weak and strong sustainability (Cabeza Gutés 1996). The basic difference between a weak and strong sustainability position is the ability to exchange between different types of capital, which creates a source base for the satisfaction of human needs and desires. Total capital is considered to be aggregated and an umbrella association of components of natural, economic, and social capital (Hediger 2000).

Weak sustainability implies a constant amount of total capital assets (resources) over the time, while natural and produced (manmade, manufactured) capital are interchangeable (Solow 1986, 1993). According to Hediger (2000) natural capital is defined as the base of the natural resources in a specific geographic area. It consists of the capital of the ecosystem or environmental capital, which includes the stock of renewable resources (currently used and also unused in economic processes), partially cultivated and natural soil, as well as the environmental factors that

are necessary for the functioning of ecosystems. It determines the overall quality of the environment in the area and stocks of nonrenewable resources (Hediger 2000).

Strong sustainability (rigorous sustainability) position regards natural capital as providing some functions that are not substitutable by produced capital (Balaceanu and Apostol 2014; Klarin 2018; Turner 2000). These functions, labeled “critical natural capital,” are stressed by defining sustainability as leaving the future generations a stock of natural capital not smaller than the one enjoyed by the present generation (Neumayer 2003; Turner 1993). The weak and strong concepts outlined above can be considered to represent two opposing ends of sustainability. This entry focuses on the second of these views (Table 1).

Key Issues

Strong sustainability position stresses sustainability in terms of nondecreasing natural capital. Irreversible losses of environmental assets should be avoided because some elements of the natural capital stock are not substitutable by produced capital (Balaceanu and Apostol 2014; Klarin 2018; Turner 2000). For example, biogeochemical cycles cannot be replaced, and they are essential for human life (Turner 2000). Those ecological assets which are essential are called “critical natural capital” (Neumayer 2003; Turner 1993). Other multifunctional ecological assets, such as landscape, space, and relative peace and

Strong Sustainability, Table 1 Features of strong and very strong sustainability position (Davies 2013; Gibbs et al. 1998; Howarth 1997; Neumayer 2003; Turner 1993, 2000)

Perspectives	Biocentric	Ecocentric
Sustainability labels	Strong System as one element, changes as a whole	Very strong (deep ecology) A “cultural” change; external as well as internal elements of system altered
Green labels	Resource preservationist position	Extreme preservationist position
Ethics	Extension of ethical reasoning; collective interests take over individual interests	Acceptance of bioethics Intrinsic value in nature (i.e., valuable in its own right)
Type of economy	Deep green economy; no economic and population growth	Very deep green economy; heavily regulated to minimize “resource-take”

quiet, are not essential for human survival, but they are considered important for human well-being (Turner 2000). Advocates of strong sustainability position see that ecosystem functions and services mentioned above cannot be adequately valued economically. They also argue that a “system” is to be thought as one element, which changes as a whole (Davies 2013). Strong sustainability position represents preservationist position (Davies 2013) and recommends the avoidance of those options which may generate the worst outcomes and encompasses the precautionary principle (Turner 2000). Conservation of natural capital and the application of the safe-minimum standard are therefore important components of a strong sustainability strategy. The safe-minimum standard for biological diversity illustrates the practical steps that could be taken to increase the likelihood that the economy is sustainable (Bishop 1993). Extinction threatens sustainability because it may affect the stability of economically important ecosystems and it may entail losses of plants, animals, and microorganisms that would otherwise have become important resources in the future (Turner 2000). The practical, scientifically valid, and ethical goal of business is to systematically and proactively maintain “the possibility that human and other life will flourish on the earth forever” (Ehrenfeld 2000, p. 36). Strong sustainability demands an understanding of the “macro-economy as a sub-system of the finite ecosystem” (Neumayer 2013, p. 28) based on natural science. “Strongly sustainable” business should be shaped by the systems thinking natural, social, economic, and psychological scientific knowledge. It should proactively create conditions that together resolve the underlying causes of the “global problématique” (Özbekhan 1970).

The strong sustainability rule requires that at least critical natural capital must be protected as an important part of the capital bequest (Daly 1995). Providing future generations with a set of life opportunities that is undiminished relative to the present may be construed as an ethical duty that is grounded on a contractarian view of distributive justice (Howarth 1997). Collective interests take over individual interests (Davies 2013). According to Turner (2000), strong sustainability

position recognizes constraints on substitution processes and incorporates ethical concerns such as intergenerational equity as a moral duty. Strong sustainability is thus a normative and ethical concept rather than an analytical and operational one (Dietz and Neumayer 2007). According to Ayres et al. (2001), it rejects the optimism based on a continuous growth, the prices market dynamics, and the environment’s adaptable character. It emphasizes the idea that sustainability is the equivalent of the ability of providing to the following generations the same level of non-renewable resources and/or quality of environment than enjoyed by the present generation (cf. Cabeza Gutes 1996). What concerns the growth, the strong sustainability, is focused on aspects that are related to quality of life (Daly 1990; Ayres et al. 1998). Thus no economic and population growth is allowed (Davies 2013). Those who believe in the non-substitutability of natural capital support strong sustainability.

Strong sustainability position has various variants such as “environmental sustainability” and “ecological sustainability” (Pezzey and Toman 2005; Turner 1993). Morelli (2011) has discussed the concept “sustainability” related to the concept “environmental sustainability” in his article *“Environmental Sustainability: A Definition for Environmental Professionals* particularly regarding the importance of valuing ecological services and recognizing people’s interconnectedness. Taking into account the ideas presented by *Our Common Future* (WCED 1987), he has defined the concept “environmental sustainability”:

As meeting the resource and services needs of current and future generations without compromising the health of the ecosystems that provide them, ...and more specifically, as a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity. (Morelli 2011, p. 6)

From the economic point of view, environmental sustainability is focused on maintaining the factors and practices that contribute to the quality of environment (BusinessDictionary 2018a) which is necessary for conducting

the economic activities and quality of life of people on a long-term basis (Elkington 1994). “Environmental” economics has considered as opposed to “ecological” economics (Pearce 1998). Environmental economics is the subset of economics that is concerned with the efficient allocation of environmental resources (ELC 2007). Ecological economics in its part refers to an economic system that is consistent with and honors the basic principles of ecology. In a broader sense, it refers to economic theory and practice that see the economy as operating within, rather than dominating, the spheres of nature, society, and culture (Capra and Jakobsen 2017).

Ecological sustainability has recently risen to prominence as a solution to serious environmental and social problems. With the growing world population and the increasing use of natural environments, the deterioration of environment makes economic development unsustainable. The signs are looming, such as the greenhouse effect and biodiversity loss due to the pollution of the air, water, and soil. Ecological sustainability is focused on protection and restoration of the integrity of the Earth’s ecological systems (Bosselmann 2017) for maintaining their essential functions and processes and retaining their biodiversity in full measure over the long term (BusinessDictionary 2018b). It can be seen as a development that provides the necessary environmental conditions which enable life on a certain level of well-being for present and future generations (Lele 1991). It is also a holistic view which stresses that sustainable development requires environmental protection and which is placed in a global ecological, socioeconomic, and political context (Sharpley 2000).

Ecological sustainability has three milestones: eco-efficiency, eco-equity, and eco-effectiveness (Dyllick and Hockerts 2002) (Table 2). The concept of eco-efficiency can be traced back to the 1970s as the concept of “environmental efficiency” (Freeman et al. 1973). In 1990, Schaltegger and Sturm introduced eco-efficiency as a “business link to sustainable development.” Later, it was popularized by the WBCSD (World Business Council for Sustainable Development)

Strong Sustainability, Table 2 The milestones and focuses of ecological sustainability (Brooke 2000; Dyllick and Hockerts 2002; ESCAP 2009; Gray and Bebbington 2000; UN 2009)

Milestones	Focuses
Eco-efficiency	Efficient economic activity with regard to nature’s goods and services Fundamental changes in the way societies produce and consume resources
Eco-equity	The equal rights of all peoples to environmental resources Social responsibility of the current generation for the future generations
Eco-effectiveness	Solutions for ecological problems A shift of mindset and transformation of business models

for the business sector in the course of UNCED (United Nations Conference on Environment and Development) in 1992 (UN 1992). In 2009, ESCAP (United Nations Economic and Social Commission for Asia and Pacific) defined eco-efficiency as a key element for promoting fundamental changes in the way societies produce and consume resources and thus for measuring progress in green growth (ESCAP 2009). Eco-efficiency plays an important role in expressing how efficient economic activity is with regard to nature’s goods and services (UN 2009).

Eco-equity lies at the nexus of the relationship between business and society (Dyllick and Hockerts 2002). It is an environment-centered principle and refers to the “equity between peoples and generations and, in particular, the equal rights of all peoples to environmental resources” (Gray and Bebbington 2000, p. 3). Eco-equity focuses on social responsibility of the current generation for the future generations. To cultivate eco-equity, the traditional views of the human-nature relationship, such as technocentrism and anthropocentrism, should be replaced with biocentrism and ecocentrism (cf. Daly and Cobb 1994). Biocentrism recognizes Earth’s organisms, ecocentrism in its part Earth’s interactive living and nonliving systems as central in importance (Barnard 2006; Piccolo 2017). Education

provides an excellent means for this realization. The overall goal of the UN Decade of Education for Sustainable Development (2005–2014) was to integrate the principles, values, and practices of sustainable development into all aspects of education and learning (UNESCO 2009).

Eco-effectiveness aims beyond merely reducing negative environmental impact by ending ecological degradation. Its ultimate goal is environmental protection. It aims to stop contamination and depletion by directing individual and organizational attention to the underlying and fundamental factors of environmental problems and to make possible long-term prosperity through a fundamental redesign of the system. In essence, efficiency is about “doing things right,” while effectiveness is about “doing the right thing.” Seeking an ultimate solution for ecological problems, eco-effectiveness requires a shift of mindset and transformation of business models (Brooke 2000).

Ecocentric sustainability represents very strong sustainability position or deep ecology (Turner 1993). The core idea in very strong sustainability position is that nature has intrinsic value which means that it is valuable in its own right. Advocates of deep ecology have extreme preservationist attitude to nature (Davies 2013). They argue for a particular type of non-substitutability based on an ethical rejection of the trade-off between produced and natural capital (Turner 2000). It stresses steady-state economic system based on thermodynamic limits and constraints and minimization of matter and energy throughput (Davies 2013; Turner 1993).

Deep ecology is based on eight principles or statements:

1. The well-being and flourishing of human and nonhuman life on Earth have value in themselves. These values are independent of the usefulness of the nonhuman world for human purposes.
2. Richness and diversity of life forms contribute to the realization of these values and are also values in themselves.
3. Humans have no right to reduce this richness and diversity except to satisfy vital needs.

4. The flourishing of human life and cultures is compatible with a substantially smaller population. The flourishing of nonhuman life requires a smaller human population.
5. Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.
6. Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present.
7. The ideological change will be mainly that of appreciating life quality rather than adhering to an increasingly higher standard of living.
8. Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes (Naess 1986).

Advocates of very strong sustainability position argue that when culture of a system changes, also external as well as internal elements of the system are altered (Davies 2013). Culture is here understood as a conceptual scheme encoding social behavior. It mediates human action including decisions on what and how to manage biological resources and transform ecosystems (Vayda 1983; Yengoyan 1986). “Cultural change” means radical change of human behavior to the nature and deeper connection with life, where humans are integral part of the environment and have to find a role in protecting the earth. This also stands as an environmental philosophy or social movement considering the religious and mystical undertones (Turner 2000).

Unfair distribution of resources within and between generations is a common problem to be solved in strong and very strong sustainability position (cf. Gladwin and Kennelly 1995). Teaching eco-responsible values and beliefs can raise awareness concerning it and other environmental problems. It requires both ecocentric ways of teaching and learning (Shoreman-Ouimet and Kopnina 2016) and also new ways of thinking including new economic models (Spash 2015) and broad scientific and

philosophical thinking (Callicott 2013; Steffen et al. 2015).

Summary

Weak and strong sustainability positions are often used concepts within the field of economics. Weak sustainability position implies a constant amount of resources over the time, while natural and produced capital are interchangeable. Strong sustainability position in its part has biocentric perspective and preservationist ideal. Based on it, a system is to be seen as one element which changes as a whole. Advocates of strong sustainability position recommend the precautionary principle and stresses that those options which may generate the worst outcomes and encompasses should be avoided. Strong sustainability position regards natural capital as providing some functions that are not substitutable by produced capital. Consequently, conservation of natural capital and the application of the safe-minimum standard are in the core of strong sustainable strategy. In ethical reasoning collective interests take over individual ones. Strong sustainability position represents deep green economy where no economic and population growth is allowed.

Advocates of strong sustainability position emphasize three milestones: eco-efficiency, eco-equity, and eco-effectiveness. Eco-efficiency is focused on economic activity with regard to nature's goods and services and stresses fundamental changes in the way societies produce and consume resources. In the core of eco-equity are the equal rights of all peoples to environmental resources and social responsibility of the current generation for the future generations. Eco-effectiveness again try to find solutions for ecological problems. It also has requirements concerning a shift of mindset and transformation of business models.

Very strong sustainability or deep ecology has ecocentric perspective. It has extreme preservationist ideal and stresses a "cultural" change. Based on bioethics, the advocates of very strong sustainability position emphasize

intrinsic value in nature thinking that nature is valuable in its own right. They also support the idea of very deep green economy that economy must be heavily regulated to minimize "resource-take."

Cross-References

- Biodiversity
- Sustainable Development

References

- Ayres, R., van den Bergh, J., & Gowdy, J. (1998). Viewpoint: Weak versus Strong Sustainability. Tinbergen Institute, Tinbergen Institute Discussion Papers. https://www.researchgate.net/publication/4871307_Viewpoint_Weak_versus_Strong_Sustainability. Accessed 4 Dec 2018.
- Ayres, R. U., van den Bergh, J. C. J. M., & Cowdy, J. M., (2001). Strong versus weak sustainability: Economics, natural sciences, and "consilience". *Environmental ethics*. June 2001. <https://doi.org/10.5840/enviroethics200123225>
- Balaceanu, C., & Apostol, D. (2014). The perspective of concept sustainability. 5th world conference on educational sciences – WCES 2013. *Procedia – Social and Behavioral Sciences*, 116, 2257–2261. <https://doi.org/10.1016/j.sbspro.2014.01.555>.
- Barnard, H. (2006). *Nature, Human nature and value. A study in Environmental Philosophy*. Dissertation thesis, Cardiff/Ann Arbor, University of Wales/ProQuest LLC. <https://orca.cf.ac.uk/54314/1/U584128.pdf>. Accessed 5 Dec 2018.
- Bishop, R. (1993). Economic efficiency, sustainability and biodiversity. *Ambio*, 22, 69–73.
- Bosselmann, K. (2017). *The principle of sustainability: Transforming law and governance*. New York: Routledge.
- Brooke, C. (2000). A framework for evaluating organizational choice and process redesign issues. *Journal of Information Technology*, 15, 17–28.
- BusinessDictionary. (2018a). What is environmental sustainability? Definition and meaning. <http://www.businessdictionary.com/definition/environmental-sustainability.html>. Accessed 3 Dec 2018.
- BusinessDictionary. (2018b). What is ecological sustainability? Definition and meaning. <http://www.businessdictionary.com/definition/ecological-sustainability.html>. Accessed 3 Dec 2018.
- Cabeza Gútes, M. (1996). The concept of weak sustainability. *Ecological Economics*, 17, 147–156.

- Callicott, J. B. (2013). *Thinking like a planet: The land ethic and the earth ethic*. Oxford: Oxford University Press.
- Capra, F., & Jakobsen, O. D. (2017). A conceptual framework for ecological economics based on systemic principles of life. *International Journal of Social Economics*, 44(6), 831–844. <https://doi.org/10.1108/IJSE-05-2016-0136>.
- Daly, H. (1990). Sustainable development: From concept and theory to operational principles. *Population and Development Review*, 16, 25–43. <https://doi.org/10.2307/2808061>. https://www.jstor.org/stable/2808061?seq=1#metadata_info_tab_contents. Accessed 4 Dec 2018.
- Daly, H. E. (1995). On Wilfred Beckerman's critique of sustainable development. *Environmental Values*, 4(1), 49–55. https://www.jstor.org/stable/30301392?read-now=1&refreqid=excelsior%3A6fea239dc3a8f51696c28839b0b6fbf5&seq=1#page_scan_tab_contents. Accessed 5 Dec 2018.
- Daly, H., & Cobb, J. (1994). *For the common good: Redirecting the economy toward community, the environment and a sustainable future*. Boston: Beacon Press.
- Davies, G. R. (2013). Appraising weak and strong sustainability: Searching for a middle ground. *Consilience: The Journal of Sustainable Development*, 10(1), 111–124.
- Dietz, S., & Neumayer, E. (2007). Weak and strong sustainability in the SEEA: Concepts and measurement. *Ecological Economics*, 61(4), 617–626. <https://doi.org/10.1016/j.ecolecon.2006.09.007>.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11, 130–141.
- Ehrenfeld, J. R. (2000). Colorless green ideas sleep furiously: Is the emergence of “sustainable” practices meaningful? *Reflections: The SoL Journal on Knowledge, Learning, and Change*, 1(4), 34–47. <https://doi.org/10.1162/152417300569935>.
- ELC (Environmental Literacy Council). (2007). Environmental economics, 1: The Essentials. http://www.rgvi.gtk.szie.hu/system/files/upload/course_material/enviroecon-vol1.pdf. Accessed 6 Dec 2018.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>.
- ESCAP (United Nations Economic and Social Commission for Asia and Pacific). (2009). Eco-efficiency indicators: Measuring resource-use efficiency and the impact of economic activities on the environment. <https://www.unescap.org/search/node/ecoefficiency%202009>. Accessed 30 Dec 2018.
- Freeman, M. A., Haveman, R. H., & Kneese, A. V. (1973). *The economics of environmental policy*. New York: Wiley.
- Gibbs, D. C., Longhurst, J., & Braithwaite, C. (1998). ‘Struggling with sustainability’: Weak and strong interpretations of sustainable development within local authority policy. *Environment and Planning A*, 30, 135–1365.
- Gladwin, T. N., & Kennelly, J. J. (1995). Shifting paradigms for sustainable development: Implications for management theory and research. *Academy of Management Review*, 20, 874–907.
- Gray, R. H., & Bebbington, K. J. (2000). Environmental accounting, managerialism and sustainability: Is the planet safe in the hands of business and accounting? *Advances in Environmental Accounting and Management*, 1, 1–44.
- Hediger, W. (2000). Sustainable development and social welfare. *Ecological Economics*, 32, 481–492.
- Howarth, R. B. (1997). Sustainability as opportunity. *Land Economics*, 73(4), 569–579. Defining sustainability. https://www.jstor.org/stable/3147246?read-now=1&refreqid=excelsior%3Af9e82a51924c29acd2577471c434b9bf&seq=1#page_scan_tab_contents. Accessed 5 Dec 2018.
- Klarin, T. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics and Business*, 21(1), 67–94. <https://doi.org/10.2478/zireb-2018-0005>. ISSN 1331-5609; UDC: 33+65.
- Lele, S. M. (1991). Sustainable development: A critical review. *World Development*, 19(6), 607–621. [https://doi.org/10.1016/0305-750X\(91\)90197-P](https://doi.org/10.1016/0305-750X(91)90197-P).
- Morelli, J. (2011). Environmental sustainability: A definition for environmental professionals. *Journal of Environmental Sustainability*, 1(1), Article 2. <http://scholarworks.rit.edu/jes/vol1/iss1/2>. Accessed 5 Dec 2018. <https://doi.org/10.14448/jes.01.0002>.
- Naess, A. (1973). The shallow and the deep, long-range ecology movement. A summary. *Inquiry*, 16(1), 95–100. <https://doi.org/10.1080/00201747308601682>.
- Naess, A. (1986). The deep ecological movement some philosophical aspects. *Philosophical Inquiry*, 8, 1–2.
- Neumayer, E. (2003). *Weak versus strong sustainability: Exploring the limits of two opposing paradigms*. Cheltenham/Northampton: Edward Elgar Publishing. <https://doi.org/10.4337/9781781007082>.
- Neumayer, E. (2013). *Weak versus strong sustainability: Exploring the limits of two opposing paradigms* (4th ed.). Cheltenham: Edward Elgar.
- Özbekhan, H. (1970). The predicament of mankind. Quest for structured responses to growing world-wide complexities and uncertainties. A proposal. The Club of Rome. <http://quergeist.net/Christakis/predicament.pdf>. Accessed 5 December 2018.
- Pearce, D. W. (1998). Auditing the earth: The value of the world's ecosystem services and natural capital. *Environment*, 40(2), 23–28.
- Pezzey, J. C. V., & Toman, M. A. (2005). Sustainability and its economic interpretations. In R. D. Simpson, M. A. Toman, & R. U. Ayres (Eds.), *Scarcity and growth: Natural resources and the environment in the new millennium* (pp. 121–141). Washington,

- DC: RFF Press. <http://people.anu.edu.au/jack.pezzey/PezzeyToman2005.pdf>. Accessed 3 Dec 2018.
- Piccolo, J. J. (2017). Intrinsic values in nature: Objective good or simply half of an unhelpful dichotomy? *Journal for Nature Conservation*, 37, 8–11.
- Schaltegger, S., & Sturm, A. (1990). Öologische Rationalität (Environmental rationality). *Die Unternehmung*, 4, 117–131.
- Sharpley, R. (2000). Tourism and sustainable development: Exploring the theoretical divide. *Journal of Sustainable Tourism*, 8(1), 1–20.
- Shoreman-Ouimet, E., & Kopnina, H. (2016). *Culture and conservation: Beyond anthropocentrism*. New York: Routledge.
- Solow, R. M. (1986). On the intergenerational allocation of natural resources. *Scandinavian Journal of Economics*, 88(1), 141–149. <https://doi.org/10.2307/3440280>.
- Solow, R. (1993). An almost practical step toward sustainability. *Resources Policy*, 19, 162–172. https://haskayne.ucalgary.ca/files/haskayne/RobertSolow_AnAlmostPracticalStepTowardSustainability_Sep93.pdf. Accessed 23 Nov 2018.
- Spash, C. L. (2015). Bulldozing biodiversity: The economics of offsets and trading-in nature. *Biological Conservation*, 192, 541–551.
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., et al. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223), 1259855. <https://doi.org/10.1126/science.1259855>.
- Turner, R. K. (1993). Sustainability: Principles and practice. In R. K. Turner (Ed.), *Sustainable environmental economics and management: Principles and practice* (pp. 3–36). London: Belhaven Press.
- Turner, R. K. (2000). Sustainable development and climate change. CSERGE Working Paper PA 95-01. Centre for Social and Economic Research on the Global Environment University of East Anglia and University College London. ISSN 0967-8875. <https://pdfs.semanticscholar.org/4664/fa9b297744d909adb5983faafe6d5c3a17d2.pdf>. Accessed 23 Nov 2018.
- UN (United Nations). (1992). Agenda 21, the Rio Declaration on Environment and Development, the Statement of Forest Principles, the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity. Conference on Environment and Development (UNCED), Rio de Janeiro, 3–14 June 1992. <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>. Accessed 30 Dec 2018.
- UN (United Nations). (2009). Eco-efficiency indicators: measuring resource-use efficiency and the impact of economic activities on the environment. United Nations Economic and Social Commission for Asia and Pacific, Environment and Development Policy Section, Environment and Development Division. <https://sustainabledevelopment.un.org/content/documents/785eco.pdf>. Accessed 5 Dec 2018.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2009). United Nations Decade of Education for Sustainable Development (DESD, 2005–2014). Review of Contexts and Structures for Education for Sustainable Development. http://www.unesco.org/education/justpublished_desd2009.pdf. Accessed 28 Oct 2018.
- Vayda, A. P. (1983). Progressive contextualization: Methods for research in human ecology. *Human Ecology*, 11(3), 265–281.
- WCED (World Commission on Environment and Development). (1987). Our common future. http://mom.gov.af/Content/files/Bruntland_Report.pdf. Accessed 27 Nov 2018.
- Yengoyan, A. (1986). Theory in anthropology: On the demise of the concept of culture. *Comparative Studies in Society and History*, 28(2), 368–374.

Structural Contingency Theory

► Contingency Theory

Structure and Composition of Hospital Board

► Hospital Governance

Substance

► Water

Subtle Communication and Sensibilities of Publics

► CSR Communication and Annual Reports

Succession and Evaluation

► Board of Directors and Corporate Governance

Sufficiency

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Synonyms

[Affluence](#); [Happiness](#); [Innovation](#); [IPAT equation](#); [Lifestyle](#); [Obsolescence](#); [Secular stagnation](#); [Sufficiency policy](#); [Sustainable consumption](#)

Description

The basic idea of sufficiency has been around for centuries in religious and philosophical contexts: How much is enough for a good life? Today sufficiency is at the core of the debate on sustainable development (especially in rich countries). While eco-efficiency helps to buy time with “business as usual” (solve all problems created by technology by better technology), the core development problem is a cultural and moral one about limitations. Sufficiency is an individual decision about lifestyle and consumption patterns. Individuals reflect and may find that more income and more consumption do no longer contribute to increase their well-being. They might also check their values and find certain consumption patterns no longer compatible with the future of their grandchildren. The overall conclusion would be: “less is better.” Consciously consuming less (combined with less income and less payed work) could actually increase well-being (happiness). As the formation of consumer preferences is to a larger extent, a social process, peer groups (status), suppliers (advertisement), and government (infrastructure) play a vital role. Government provides the framework and institutions that make the individual sufficiency decisions hard to implement as they are basically designed in favor of increasing production and consumption (economic growth). Growth policy has to be replaced by sufficiency policy. The macroeconomic consequence could be secular

stagnation or a smaller GDP (degrowth). Sufficiency cannot provide an effective contribution to SD as long as there is no systematic and consistent government sufficiency policy which includes all relevant policy fields and instruments.

Introduction

The basic idea of sufficiency has been around for centuries in religious and philosophical contexts: How much is enough? (Skidelsky and Skidelsky 2012), how much is necessary for a good life? Economist from A. Smith to J. St. Mill and to J. M. Keynes addressed the issue and the perspectives of increasing wealth by providing more and more consumer goods. Another root of the sufficiency debate is the critique of “consumerism” (see Veblen 1899; Galbraith 1958).

The new context today is sustainable development (SD): What level of consumption is possible today (living generations) without ruining the natural foundations of life for future generations? Formulated as a moral question: How could the present generation fulfill their needs and enjoy life if this would be at the cost of future generations? Embedded in the SD debate, sufficiency has a cultural dimension; it is about a common shared vision of the good life and about the “future we want” (United Nations Conference on Sustainable Development 2012, sustainabledevelopment.un.org).

The question is no longer an abstract philosophical one as science provides more and more evidence on the impacts of our production and consumption patterns on future generations – with climate change as the most prominent example. Others include loss of biodiversity, pollution of oceans, soil, water, and air with waste and toxic substances, depletion of non-renewable resources. There is increasing awareness that the planet entered the “Anthropocene,” that is, human race is dominating the evolutionary process, and that mankind is living beyond “planetary boundaries”, that is, consuming the substance instead of living from the dividends. Responsible for overburdening the carrying capacity of the planet are primarily people in the rich nations (global north) – but in general

rich people throughout the world (the affluent billion). Sufficiency is primarily addressing this “elite.” With respect to poor countries, “sufficiency” has a quite different meaning and is addressing the increase of consumption to fulfill at least the basic needs.

With the SDGs and the Paris Agreement in 2015, the debate on (environmental) boundaries for economic development has made significant progress. Together with national implementation plans and national sustainable development strategies, the framework to discuss sufficiency is pretty clear. Political relevance and urgency increases with the insight that increasing eco-efficiency – as a quasi-automatic by-product of technological progress – alone will not solve SD problems. Sufficiency has a vital function (see ► [“De-growth”](#)).

Sufficiency addresses the question how many products and services consumers actually need (Princen 2003; Kurz and Zahrnt 2016; Potočník et al. 2018). Would less quantities and spending actually reduce consumers’ well-being (happiness, overall life satisfaction, utility)? Interwoven but conceptually different from the “less” is the “different” aspect: choosing different product (e.g., more fuel-efficient car). While most sufficiency debates cover both aspects, the challenge clearly is on the “less,” the “zero option.” More efficient (“smart”) solutions easily find acceptance – at least in market niches. The core sufficiency challenge to the (about 1 billion) rich all over the world with affluent lifestyles is: less mobility (less kilometers travelled), less energy demand (lower room temperature), less land consumption (smaller apartments). Sufficiency is not identical with “Verzicht” (abdication, self-deprivation) – which includes an element of (willingly) suffering, for example, in a religious context (and thus could be beneficial).

Sufficiency is a challenge for individual consumer behavior and it has significant macroeconomic implications. It is a challenge to the core idea of economic growth. Less consumer demand means less production, less investment, and a smaller GDP (see entries on ► [“De-growth”](#) and ► [“Postgrowth”](#)). It causes new economic adaptation and transition problems which are challenging for theory and for policy (Samadi 2017).

IPAT and SD: What Could Sufficiency Contribute?

Any environmental impact I can be decomposed into three factors which explain the overall effect (IPAT equation, see ► [“De-growth”](#); Kurz 2019):

$$I = I/GDP * GDP/person * persons$$

$$\text{Impact} = \text{Technology} * \text{Affluence} * \text{Population}$$

These three components illustrate the basic strategic options for addressing environmental problems:

- **I/GDP** stands for the **efficiency** of resource use, delinking GDP from impact by new “smart” technologies (see ► [“Rebound Effects of Eco-efficiency”](#)).
- **$GDP/person$** or per capita income is often used as an indicator for economic wealth. Less income (less consumption) means less impact. How much income and consumption is enough? This is the **sufficiency** question.
- **Persons**: increasing **population** on the planet will increase the (negative) impact on the environment. Population increase and population policy will not be addressed here. From a sufficiency perspective, the question would be “how many children are enough?” – with the perspectives of individual preferences and of macroeconomic implications (aging).

$GDP/person$ has been used as a proxy for standard of living and happiness H . The goal of economic policy has always been to increase peoples’ incomes. Now this would have to be reversed. This can also be illustrated by an extension of the IPAT equation:

$$I = I/GDP * GDP/H * H/person * persons$$

This equation could be called the **IPATH** equation. It highlights a fourth component for impact reduction: **GDP/H** , that is, the expenditure for market-based goods and services needed per “unit of happiness.” This has to decline. The challenge is to explore options for happiness (well-being, prosperity) which do not rely on (so much)

material goods. Happiness H per person does not have to decline. An implication is that with less expenditure for consumption less income is needed. This gives the opportunity of more leisure time (less paid work). In sum, a fundamental change in consumption patterns and lifestyles (in the rich countries), a “sufficiency revolution” that has to be triggered yet.

IPATH illustrates the “double delinking”:

- delinking type 1 is I/GDP , the efficiency revolution
- delinking type 2 is GDP/H , the sufficiency revolution

The efficiency revolution plays an important role in achieving SDGs. However, so far the revolution is only a modest one, not powerful enough to comply with SDGs like reduction of CO_2 -emissions (see entries on ► “De-growth” and ► “Post-growth”). Maybe, it is possible to stimulate higher rates of efficiency increase in the future. However, it would be irresponsible to rely on this option only. Nobody is able to predict whether it will be possible to close the gap (with eco-innovation policy). The existing gap has to be filled with sufficiency and sufficiency policy.

What could the sufficiency option contribute to SD in quantitative terms? An example which is focusing on CO_2 -emissions helps to illustrate the potential scope. If the following simplifying assumptions hold:

- The affluent billion of the world population emits 17 t CO_2 per capita p.a.
- The rest of the world population (6 billion people) emits 3 t CO_2 per capita p.a.
- The affluent billion succeeds in a 50% reduction of their consumption (and incomes) until 2050 – and as a consequence of their per capita CO_2 -emissions.

The result would then be that global CO_2 -emission would decline by 8.5 billion tons p.a., from 35 billion tons p.a. today to 26.5 billion p.a., that is, a 24% reduction of total global CO_2 -emissions. If reductions of 80–90% are necessary to avoid a global temperature increase of more than 2 °C (Paris Agreement) and if an efficiency factor

4 (= 75% reduction) is assumed, sufficiency could close the gap. If the efficiency effect is smaller, sufficiency is even more important. In this scenario, the 50% reduction of consumer spending is extremely ambitious and the question is what could make such an option attractive to the affluent?

Is Sufficiency Attractive?

The basic idea of any capitalist system is to keep people satisfied by permanently increasing the quantity and quality (innovation) of goods – combined with decent work for everyone to finance consumption. Under these conditions, the system works well and is stable. Only recently there is more attention for the question “how much is enough” (Skidelsky and Skidelsky 2012). Being trapped in the work-consumption-circle is no longer a generally shared vision and this type of “social contract” is losing attraction for wealthier nations and individuals. Mill (1848) and Keynes (1930) recognized this and emphasized the positive aspects of a “stationary state.” Today there is ample empirical evidence that beyond a certain level of income, further increase of income and consumption will not increase well-being and happiness (see Easterlin 1995; Frey 2008).

But could “less” really be an attractive perspective for a majority of people? A little bit less seems to be attractive – at least if the success of publications on “simplify your life” is accepted as an indicator. Doubtful is whether significantly less would find any public support. Would anyone join an initiative to reduce consumption expenditures by 1% every year over a period of 20 years (i. e., roughly 20% in total)? How many would subscribe to the idea “50 % less”?

Consumers’ awareness of SD challenges has increased, they are well-informed, transparency, and purchasing decisions are supported by all kinds of (green, fair) labels. But these “enlightened preferences” have little effect as people have learned to live with cognitive dissonance and companies invest heavily in advertisement to stabilize demand for their products, turning “unsaturable needs” from a textbook assumption into a reality. In fact, there is a (global)

homogenization of (western) lifestyles and popular culture (see Ritzer 1993) driven by communication technology and the urbanization trends. Children grow up more in virtual realities than in nature.

The competition-driven innovation system throws out “new” products every day, often just minor (incremental) changes and “fashions.” Innovation is celebrated without realizing the dark side of “creative destruction” (Schumpeter 1942), the premature obsolescence of perfectly functioning products (see Kurz 2015). Consumers are locked-in with the old products (stranded assets).

Today sufficiency is primarily an individual search process, testing new consumption patterns and exploring and finding new lifestyles (social innovation). Government policy is not supportive as it is focused on fostering the innovation and growth process, the increase of GDP/capita as the only relevant indicator for economic wealth. Nevertheless, there are tracks of sufficiency and the niche of LOHAS (lifestyle of health and sustainability) seems to expand. Established companies did spot the trend and integrate it in their advertisement, however not always in their strategies (see Joanes 2019). An outstanding example is the “don’t buy this jacket” campaign of the outdoor equipment provider Patagonia (see www.patagonia.com). New companies in the sharing economy have commercialized sufficiency ideas (sharing cars and rides, sharing apartments). Civil society organizations are organizing many projects to support less consumption (like repair cafés, urban gardening). The young generation is asking for work-life-balance and is willing to give up income in order to raise kids. Mobility patterns are changing, urban citizens own no car (don’t even have a driver license), flight shame is often mentioned. Vegetarian and vegan food is on the rise. New forms of living together are tested. So far, most of this has no significant overall effect: mobility is increasing (although smarter); average size of apartment increases (as number of single households increases), etc. In sum: There is change in niches, high creative potential, some “business cases” – and ample opportunity for more.

Macroeconomic Effects: Secular Stagnation

Sufficiency has consequences for other household decisions as well as on the macroeconomic level. A macroconsequence of a continuously declining private demand could be long-term economic stagnation (secular stagnation, see Summers 2016) or even decline (see ► “De-growth”). This depends also on the other components of demand: investment I, government spending G and trade balance (Ex-Im):

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{Ex} - \text{Im})$$

When consumer demand declines, investment will follow. With a declining GDP, tax revenues and hence government spending will decline (permanent deficit spending ruled out). Exports could compensate all this. Together with an expected decline of imports (closely related to economic activity), this would create a large surplus in the trade balance. Other countries would have to run a deficit – and will not accept this long-term.

Therefore, if sufficiency in lifestyles and consumer spending becomes more significant, the probability of secular stagnation increases. This conclusion follows not only from the demand factors but also from the supply-side restrictions (see ► “De-growth”). Sufficient lifestyles affect the demand-side and supply-side of the economy simultaneously. If individuals consume less, they need less income and hence could reduce worktime (enjoy more leisure time). If labor supply declines, various effects will compensate this: increasing wages, automatization, global supply chains. In some segments (with specific high qualifications), labor supply could become a bottleneck and restricting output (GDP growth). More leisure time could be invested in community projects and thus increase social capital, that is, increase the wealth of nations.

If secular stagnation is a realistic long-term perspective, the second interesting question is related to the adaption process, the transition from growth-oriented to low-growth or no-growth societies. How to make this a smooth adaption rather than a cumulative downward spiral? While scale is shrinking the process of structural

change continuous and might even accelerate (e.g., for the automobile industry). There is little knowledge and research on designing such a transition process (see ► “De-growth”).

Keynes’ (1930) optimistic vision was that within a century, average people could reduce working hours to 15 h per week. This forecast is based on

$$\text{GDP} = \text{GDP/hour} * \text{hours/worker} * \text{workers}$$

If labor productivity (GDP/hour) grows at 2% p.a. over 100 years, it would easily be possible to reduce labor time for a given number of workers producing a constant GDP to 15 h/worker. But why is everyone still working much longer (e.g., 35 h/week in Germany)? Obviously workers were not satisfied with their income (GDP) as of 1930. Most of the efficiency gains were thus used for higher incomes and consumption levels. And this is still the situation: productivity increase can be used for wage increases or for reduction of working hours. Only when workers are satisfied with their income levels, Keynes’ vision could unfold its full potential: More leisure time could make people happier.

Sufficiency Policy

Sufficiency is not only a challenge for individual decision making but also for political decision making on framework conditions which are always a determinant in consumers’ decision making. A government sufficiency policy could enable and incentivize consumers. However, no consistent concept has been formulated yet. It has to steer clear of paternalism and eco-dictatorship. It would be naïve to leave it to individuals alone to change their decisions without addressing the political framework conditions which influence these decisions. Good-intended moral behavior will finally surrender to hostile circumstances. The legal and institutional framework has to be favorable for moral decision making. Moreover, if consumers would have to include a complex, multidimensional goal system like the UN SDGs in their decision making, they would be

hopelessly overburdened. Complexity reduction and translation is necessary.

A holistic concept of sufficiency policy must include (almost) all fields of government policy, at least must check their relevance and the effectiveness of potential changes. Following the conventional list of economic policy instruments, important components of sufficiency policy are:

1. Information: Reduction of complexity by creating and supporting reliable labels (fair trade, FSC, etc.). Support for traditional consumer protection organization should be redirected to include sustainability issues. Results of behavioral economics on (irrational) consumer behavior provide new approaches (nudging).
2. Education: Consumer behavior and decision making is far away from the autonomous textbook individual. Preferences are formed as part of the industrial production process. Education could contribute to make individuals more independent from status and consumer goods and strengthen their personal capabilities.
3. Voluntary agreements: Companies often claim a pioneer role in sustainability and Corporate Social Responsibility (CSR) and could voluntarily do more beyond reporting, especially in their product policy (longevity vs. obsolescence).
4. Government spending: Internal processes, purchasing behavior, infrastructure investment (bike lanes and public transportation instead of highways) have to change. An extended social safety net (basic income) could back sufficient lifestyles.
5. Prices could be a simple indicator for sustainable consumption and change consumer decisions significantly – if only they would tell the (ecological and social) “truth”. Government can correct market prices by taxes and subsidies. Alternative are cap-and-trade systems.
6. Regulation (command and control) always seems to be the ultima ratio. However, this instrument has significant advantages as it relieves individuals from decision making, is fair (equal for everyone) and effective, for example, fuel-efficiency standards, phase-out of fossil car engines.

Summary and Perspectives

Sufficiency is one of the two core strategic options for achieving sustainable development goals. Political debate is dominated by the other one, the efficiency option: Use less resources per unit of output (GDP). If eco-efficiency increases, it is possible to delink economic growth and environmental impact (resource consumption). The success of this option depends crucially on eco-innovation in the business sector: If more eco-efficient production processes and more eco-friendly products are delivered (with only moderate price increases and combined with improved social and labor standards), SD is not bothering consumers too much. That such ambitious innovation processes could be accelerated is the hope of all concepts of “Green Growth.” Per capita income will continue to increase and the promise of modernization is intact.

Different from the efficiency revolution the sufficiency revolution is more challenging and has the potential of a cultural revolution, a fundamental change of society and economy. It is not just about eating a little bit less meat or less flying. Sufficiency is questioning the whole concept of “pursuit of happiness” by increasing the production and consumption of more goods. It is about breaking up the vicious circle of more needs, more income, more (alienated) work, more (compensating) consumption. Jonas (1979) formulated this as the duty to work against hedonistic consumerism – and increasing “flight shame” might be a first success. Refocusing the materialistic system and developing cultural perspectives beyond can rely on many sources – from Fromm (1976, to have or to be) to Illich (1973, self-sufficiency, conviviality). The open question is whether developed nations will be able to achieve the huge cultural accomplishment to voluntarily impose limitations on the use of natural resources. This is not impossible as has been demonstrated related to the factor labor (child work, slave work) and the Paris Agreement (2015) could be another success story.

As a consequence of the poor results of eco-efficiency strategies, the sufficiency strategy needs much more attention. It addresses the

core of the sustainability idea: After a period of unprecedented increase of material wealth (GDP), the cost and benefits of additional income and consumption have to be re-evaluated. More sophisticated technological solutions (eco-efficiency) can help to moderate some conflicts and to follow the growth path for a while (buy time) but eventually the challenge of refocusing individual lives and social consumption patterns cannot be neglected (as economists like Mill and Keynes have already pointed out). Instead of postponing sufficiency, a more proactive attitude is necessary.

Sufficiency will have deep impacts on the business sector and – on a global scale – on consumption patterns and lifestyles also in emerging economies. What is possible is already demonstrated in many innovative projects (including car-sharing, urban gardening, repair coffees) and more creative solutions will emerge, all demonstrating that sufficient lifestyles are not equal to abdication and are not a barrier but a promising way to the pursuit of happiness.

Sufficiency is about change of individual consumption patterns but it is also about sufficiency policy. Without a systematic and consistent government policy, sufficiency will have little effect. Research on and implementation of sufficiency policy is the next crucial step for SD.

Cross-References

- [De-growth](#)
- [Postgrowth](#)
- [Rebound Effects of Eco-Efficiency](#)

References

- Easterlin, R. (1995). Will raising the incomes of all increase the happiness of all? *Journal of Economic Behavior and Organization*, 27, 35–47.
- Frey, B. S. (2008). *Happiness: A revolution in economics*. Cambridge, MA/London: MIT Press.
- Fromm, E. (1976). *To have or to be*. New York: Harper & Row.
- Galbraith, J. K. (1958). *The affluent society*. New York: Houghton Mifflin.
- Illich, I. (1973). *Tools of conviviality*. New York: Harper & Row.

- Joanes, T. (2019). *Sufficiency for sustainability: Determinants and strategies for reducing clothing consumption*. Frederiksberg: Copenhagen Business School.
- Jonas, H. (1979). Das Prinzip Verantwortung: Versuch einer Ethik für die technologische Zivilisation, Frankfurt a.M.: dtv. Engl. 1984: The imperative of responsibility: In search of an ethics for the technological age. Chicago: University Press of Chicago.
- Keynes, J. M. (1930). Economic possibilities for our grandchildren. In *Essays in persuasion* (pp. 358–373). New York: W. W. Norton.
- Kurz, R. (2015). Quality, obsolescence and unsustainable innovation. *Ekonomski Vjesnik, Econviews. Review of Contemporary Business, Entrepreneurship and Economic Issues*, 28, 511–522.
- Kurz, R. (2019). Post-growth perspectives: Sustainable development based on efficiency and on sufficiency. *Public Sector Economics*, 43(4), 401–422. <https://doi.org/10.3326/pse.43.4.4>.
- Kurz, R., & Zahmt, A. (2016). Sufficiency and sufficiency policy. <http://www.foeurope.org/d82ba06acecc69708a5e5d12bcbb5e570>
- Mill, J. S. (1848). *Principles of political economy with some of their applications to social philosophy*. London: Longmans.
- Potočník, J., et al. (2018). *Sufficiency. Moving beyond the gospel of eco-efficiency*. Brussels: Friends of the Earth Europe.
- Princen, T. (2003). Principles for sustainability: From cooperation and efficiency to Sufficiency. *Global Environmental Politics*, 3(1), 33–50.
- Ritzer, G. (1993). *The McDonaldisation of society*. London: Sage.
- Samadi, S., et al. (2017). Sufficiency in energy scenario studies: Taking the potential benefits of lifestyle changes into account. *Technological Forecasting and Social Change*, 124, 126–134.
- Schumpeter, J. A. (1942). *Capitalism, socialism and democracy*. London: Routledge.
- Skidelsky, R., & Skidelsky, E. (2012). *How much is enough? Money and the good life*. New York: Other Press.
- Summers, L. (2016). The age of secular stagnation: What it is and what to do about it. *Foreign Affairs*, 95(2), 2–9.
- United Nations. (2012). The future we want. Outcome document of the United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil, 20–22 June 2012, <https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf>
- Veblen, T. (1899). *The theory of the leisure class*. New York: MacMillan.

Sunken CSR and SMEs

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Synonyms

Authentic CSR; Explicit CSR; Formal CSR; Implicit CSR; Informal CSR; Opportunistic CSR

Definition

CSR (corporate social responsibility) can be either extrinsically motivated or based on intrinsic reasons (Looser and Wehrmeyer 2015). Extrinsic motivations are often instrumentally driven since they are aimed at increasing the shareholder value, while intrinsic motivations arise from the idealistic conviction that acting in a certain way is the right thing to do. Extrinsic CSR is formalized and oriented towards external recognition and increasing legitimacy by improving company's image, legitimization, and market share. This approach often underpins the “green-washing” phenomena (Castelló and Lozano 2011; Gray et al. 2014; Mahoney et al. 2013; Visser 2011).

By contrast, intrinsic CSR is consistent with responsible practices triggered by a vision promoted by the entrepreneur and/or the top management (Jenkins 2006; Lamont 2002) and shared within the organization, thus making CSR a moral duty (Campbell 2007; Del Baldo 2013; Looser and Wehrmeyer 2015). This approach – diffused among small and medium-sized enterprises (SMEs) – is often not based on formalized tools and structured CSR policies and it usually rests on an ethical construct that triggers personal and authentic-driven relationships with stakeholders (Graafland and Van de Ven 2006).

S

Sufficiency Policy

► Sufficiency

Introduction

Within the lines of thought that nurture the debate on CSR, there are divergent positions and

assumptions about the motivations that lead firms to embrace CSR actions and strategies. Literature points out that motivations can be tied to both opportunistic and idealistic reasons.

The former, assume the existence of a win-win relationship between CSR and financial success. Companies can gain several benefits from a formalized strategic engagement in CSR, such as through investor relations management, stakeholder engagement, energy-saving programs, or environmentally practices that contribute at reducing costs and risks. CSR increases legitimacy and improves a company's reputation. It allows organizations differentiate from competitors and increase profit and market share (Weber 2008). In other words, extrinsic CSR is conceived by managers as a market-driven opportunities. Coherently, it manifests in the adoption of certified management systems and accountability tools, such as social report, sustainability report or integrated report (Cassimon et al. 2015) because it is aimed at external recognition (Matten and Moon 2008) and competitive goals attainment.

The latter (idealistic reasons) underpin the behavior of companies that are characterized by a responsible conduct and a purpose-driven business culture, thus making CSR a moral duty (Fifka 2012; Story and Neves 2015). Although literature emphasizes CSR integration within larger corporations, CSR also plays a pivotal role in SMEs despite being less institutionalized. The moral activity is the stronger motive for CSR because it represents the will to obey a certain moral norm as it is desirable for itself (Looser 2019). Intrinsic CSR manifests in fact in the form of codified norms, rules, and unwritten laws (Fassin 2008) and can be synthesized as "walking to talk" (first CSR practices, then communication). Some authors argue that the moral motive is more important within CSR than the economic view and that intrinsic motivation triggers an authentic-led involvement in CSR (Graafland and van de Ven 2006; Story and Neves 2015; Williams and Schaefer 2013) and generates a socio-competitive creativity (Molteni 2009).

Key Issues

Explicit CSR is triggered by individualism and incentivizing responsive actors that are rooted in liberal market economies. In these contexts, globalization, deregulation, and highly competitive markets create the need for explicitly formalize and communicate. Explicit approaches are required in response to stakeholder pressure (such as consumers and the civil society, among others). In other words, explicit CSR is not conceived as a voluntary and deliberate corporate decision but rather as a reaction to or reflection of society's demands (Looser 2019). Both mandatory and voluntary programs and strategies implemented by corporations usually combine social with business value. CSR as "business case" rests in fact on the assumed positive relationship between corporate social activities and financial performance and the aim to maximize profit. It often involves partnerships with governmental and nongovernmental organizations aimed at increasing legitimacy by improving the company's image (Matten and Moon 2008).

By contrast, implicit CSR is mainly determined by values and norms nurtured by personal relationships and collaborative networks involving companies and stakeholders. It is rarely explicitly described as CSR, rather it underpins codified and unwritten rules. Having an implicit approach to CSR is seen as "moral activity" and a "natural" and normal behavior to do business.

Extrinsic CSR is diffused among large companies while SMEs are more often intrinsically motivated and operationalize their values in the absence of an explicit agenda. In a nutshell, instead of formally report about CSR, SMEs "walk the talk." SMEs rely on long-standing informal networks – triggered by entrepreneurs who are driven by values derived from their personal, familial, and local community – rather than on formal policies (Aragón Amonarriz and Iturrioz Landart 2016; Del Baldo 2012, 2013; Fifka 2012; Gunilla 2014; Murillo and Vallentin 2012; Spence and Schmidpeter 2003). Consequently, CSR implementation is often related to moral commitment rather than to profit-

maximization because the entrepreneur is rarely motivated by purely economic factors. In this context, CSR emerges from the value-set shared by the entrepreneur and his/her collaborators. More often, he/she is characterized by a strong identification with the organization (organizational commitment) and is given personal power linked to authority, as is typical stewardship relationships. Values and personal commitment about proper conduct of business are the most important motivators within SMEs whose success relies on trust, reputation, and long-term partnerships. Therefore, the concept of CSR rests on ethical concerns, which most of SMEs fill by their family long-lasting values.

Some studies point out that intrinsic motives generate a more authentic involvement (while extrinsic one are often perceived as misleading) and that actual CSR performance is often more strongly correlated with the intrinsic/moral view than with the extrinsic/financial view (Graafland and Mazereeuw-Van der Duijn Schouten 2012).

Drawing from the entrepreneur's ethic-driven orientation (Jenkins 2006), several types of SMEs' approach to CSR have been pointed out, such as the ideal-based companies (Molteni 2009) and the territorial companies (Del Baldo 2010). Since ethics and religious beliefs are among the most consistent reasons behind socially responsible approaches (Looser 2019), a moral orientation underpinning CSR (Hoivik von Weltzien and Melé 2009) has been marked in "spiritual enterprises" (Capaldi 2013; Malloch 2009) and economy of communion companies (Del Baldo and Baldarelli 2015).

At the same time, literature highlights a limited degree of commitment of SMEs to formalized CSR actions. Many of the voluntary activities carried out are in fact scarcely systematic, and they have low visibility outside the company. This approach at the scientific level is known as the phenomenon of "sunken CSR" (Matten and Moon 2004; Russo and Tencati 2009). However, it should be further investigated and additional empirical research can shed new light on the specificities of SMEs in approaching and

communicating CSR, as well as on the specific factors that hinder or facilitate CSR diffusion among SMEs (Jenkins 2004; Spence et al. 2004).

Future Directions

Several authors point out the role of CSR in enhancing financial performance (Weber 2008) and increase company reputation, while others argue that CSR is a moral duty resting on a "social contract" (Campbell 2007) that supports responsible business behaviors (Arend 2013; Arjaliès and Mundy 2013). Moreover, some authors argue that in Europe extrinsic CSR is tied to large and public companies (Fifka 2012; Spence et al. 2003) while SMEs are mainly intrinsically motivated and do not adopt formal CSR policies (Looser and Wehrmeyer 2015; Matten and Moon 2008). By contrast, companies from the USA primarily evolve explicit CSR based on their liberal market economy (Matten and Moon 2007). Several studies point out that CSR can vary over countries in its explicit/implicit construct according to different societal, cultural, political, and economic systems. However, other studies point out that SMEs manifest an implicit CSR orientation independently from the market economies they are embedded in (Looser 2019). Increasing formalization represents a concern for SMEs giving rise to the prejudice that informal CSR is worth less due to a lack of instruments to communicate the factual orientation (Looser 2019). Hence, closer scrutiny is needed to differentiate between explicit/strategic and implicit/non-strategic approaches.

Summary

Despite the increased recognition and emphasis attributed to CSR, numerous problems and scandals involving large corporations continue to emerge. This contradiction nurtures a growing interest in intrinsic CSR rooted in ethical concerns spread among the company's culture. While larger

companies have to consider the expectations of shareholders and multiple stakeholders, SMEs do not need to be accountable to stakeholders through a systematic and formalized approach grounded on the adoption of sustainability reports useful to assess and demonstrate their CSR performance. However, the difference between extrinsic and intrinsic CSR is often very difficult (first) to understand and (second) to bridge and some authors advocate that the extrinsic and the intrinsic motive for CSR could evolve and be integrated.

Cross-References

- Informal CSR
- Intrinsic CSR

References

- Aragón Amonarriz, C., & Iturrioz Landart, C. (2016). Responsible family ownership in small- and medium-sized family enterprises: An exploratory study. *Business Ethics: A European Review*, 25(1), 75–93.
- Arend, R. J. (2013). Ethics-focused dynamic capabilities: A small business perspective. *Small Business Economics*, 41(1), 1–24.
- Arjalès, D. L., & Mundy, J. (2013). The use of management control systems to manage CSR: A levers of control perspective. *Management Accounting Research*, 24(4), 284–300.
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy Management Review*, 32(3), 946–967.
- Capaldi, N. (2013). How American spiritual capital inform business and affects the common good. In S. Groschl (Ed.), *Uncertainty, diversity and the common good. Changing norms and new leadership paradigms* (pp. 25–40). Farnham, UK: Gower.
- Cassimon, D., Engelen, P. J., & Van Liedekerke, L. (2015). When do firms invest in corporate social responsibility? A real option framework. *Journal of Business Ethics*. <https://doi.org/10.1007/2Fs10551-015-2539-y>. Accessed 06 January 2018.
- Castelló, I., & Lozano, J. M. (2011). Searching for new forms of legitimacy through corporate responsibility rhetoric. *Journal of Business Ethics*, 100(1), 11–29.
- Del Baldo, M. (2010). Corporate social responsibility and corporate governance in Italian SMEs: Toward a “territorial” model based on small “champions” of CSR. *International Journal of Sustainable Society*, 2(3), 215–247.
- Del Baldo, M. (2012). Corporate social responsibility and corporate governance in Italian SMEs: The experience of some “spirited business”. *Journal of Management and Governance*, 16(1), 1–36.
- Del Baldo, M. (2013). CSR-oriented SMEs: A question of entrepreneurial virtues in action? Reflections in theory and practice. In J. O. Okpara & S. O. Idowu (Eds.), *Corporate social responsibility: Challenges, opportunities and strategies for 21st century leaders* (pp. 145–170). Berlin/Heidelberg: Springer.
- Del Baldo, M., & Baldarelli, M. G. (2015). From weak to strong CSR: The experience of the EoC (economy of communion) industrial parks in Germany and Italy. *UWF*, 23(4), 213–226.
- Fassin, Y. (2008). SMEs and the fallacy of formalising CSR. *Business Ethics: A European Review*, 17(4), 364–378.
- Fifka, M. S. (2012). The irony of stakeholder management in Germany: The difficulty of implementing an essential concept for CSR. *UWF*, 21(1–2), 113–118.
- Graafland, J. J., & Mazereeuw-Van der Duijn Schouten, C. (2012). Motives for corporate social responsibility. *De Economist*, 160(4), 377–396.
- Graafland, J. J., & van de Ven, B. (2006). Strategic and moral motivation for corporate social responsibility. *Journal of Corporate Citizenship*, 22, 111–123.
- Gray, R., Adams, C. A., & Owen, D. (2014). *Accountability, social responsibility and sustainability. Accounting for society and the environment*. Harlow: Pearson.
- Gunilla, A. (2014). Sustainability and SMEs: The next steps. In C. Weidinger, F. Fischler, & R. Schmidpeter (Eds.), *Sustainable entrepreneurship. Business success through sustainability* (pp. 265–268). Berlin/Heidelberg: Springer.
- Hoivik von Weltzien, H., & Melé, D. (2009). Can a SME become a global corporate citizen? Evidence from a case study. *Journal of Business Ethics*, 88, 551–562.
- Jenkins, H. (2004). A critique of conventional CSR theory: An SME perspective. *Journal of General Management*, 29(4), 37–57.
- Jenkins, H. (2006). Small business champions for corporate social responsibility. *Journal of Business Ethics*, 6(3), 241–256.
- Lamont, G. (2002). *The spirited business: Success stories of soul friendly companies*. London: Hoddes and Stoughton.
- Looser, S. (2019). Overview: Formal management systems, intrinsic CSR, and the role of culture in management. In W. Wehrmeyer, S. Looser, & M. Del Baldo (Eds.), *Intrinsic CSR and competition. Doing well amongst European SMEs* (pp. 7–16). Cham: Palgrave Macmillan.
- Looser, S., & Wehrmeyer, W. (2015). Doing well or doing good? Extrinsic and intrinsic CSR in Switzerland. *UWF*. <https://doi.org/10.1007/s00550-015-0360-9>, 1–14, published on line 14 August 2015, Berlin/Heidelberg: Springer.

- Mahoney, L. S., Thorne, L., Cecil, L., & LaGore, W. (2013). A research note on standalone corporate social responsibility reports: Signaling or greenwashing? *Critical Perspectives on Accounting*, 24(4–5), 350–359.
- Malloch, T. R. (2009). *Spiritual enterprises. Doing virtuous business*. New York: Encounter Books.
- Matten, D., & Moon, J. (2004). ‘Implicit’ and ‘explicit’ CSR: A conceptual framework for understanding CSR in Europe. *ICCSR Research Paper Series*, 29, 1–44.
- Matten, D., & Moon, J. (2007). Pan-European approach. A conceptual framework for understanding CSR. In W. C. Zimmerli, M. Holzinger, & K. Richter (Eds.), *Corporate ethics and corporate governance* (pp. 179–200). Berlin/Heidelberg: Springer.
- Matten, D., & Moon, J. (2008). ‘Implicit’ and ‘explicit’ CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- Molteni, M. (2009). Aziende a movente ideale. In L. Bruni & S. Zamagni (Eds.), *Dizionario di Economia Civile* (pp. 65–75). Roma: Città Nuova.
- Murillo, D., & Vallentin, S. (2012). CSR, SMEs and social capital: An empirical study and conceptual reflection. *Journal of Applied Ethics*, 3, 17–46.
- Parguel, B., Benoit-Moreau, F., & Larceneux, F. (2011). How sustainability ratings might deter “greenwashing”: A closer look at ethical corporate communication. *Journal of Business Ethics*, 102(1), 15–28.
- Russo, A., & Tencati, A. (2009). Formal vs. informal CSR strategies: Evidence from Italian micro, small, medium-sized, and large firms. *Journal of Business Ethics*, 85(2), 339–353.
- Spence, L. J., & Schmidpeter, R. (2003). SMEs, social capital and the common good. *Journal of Business Ethics*, 45(1–2), 93–108.
- Spence, L. J., Schmidpeter, R., & Habisch, A. (2003). Assessing social capital: Small and medium sized enterprises in Germany and the U.K. *Journal of Business Ethics*, 47, 17–29.
- Spence, L. J., Habisch, A., & Schmidpeter, R. (Eds.). (2004). *Responsibility and social capital: The world of small and medium sized enterprises*. London: Palgrave Macmillan.
- Story, J., & Neves, P. (2015). When corporate social responsibility (CSR) increases performance: Exploring the role of intrinsic and extrinsic CSR attribution. *Business Ethics: A European Review*, 24(2), 111–123.
- Visser, W. (2011). The nature of CSR leadership. Definitions, characteristics and paradoxes. *CSR International Paper Series*, 4, 1–10.
- Weber, M. (2008). The business case for corporate social responsibility: A company-level measurement approach for CSR. *European Management Journal*, 26(4), 247–261.
- Williams, S., & Schaefer, A. (2013). Small and medium sized enterprises and sustainability: Managers’ values and engagement with environmental and climate change issues. *Business Strategy and the Environment*, 22(3), 173–186.

Supervisory Directors

► Two-Tier Board

Supplier Questionnaire

► Supplier Self-Assessment Questionnaire

Supplier Self-Assessment Questionnaire

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Synonyms

[A self-assessment survey](#); [Supplier questionnaire](#); [Vendor questionnaire](#); [Vendor survey](#)

Definition

A growing number of manufacturing companies adopt a strategy focusing on their core competencies while outsourcing the non-core activities from their suppliers as a response to stiff competition, ever-changing technology, and shortened product life cycle. Also, concurrently, they are required to comply with regional, national, and international laws and regulations in order to remain in business because environmental and social issues cross the regulatory boundaries from companies to customers, suppliers, competitors, and the community. In this regard, supplier management practices which have been principally studied within the context of sustainable supply chain management, are deemed a prerequisite for ensuring compliance of suppliers with buyer companies’ corporate sustainability standards (CSS). Self-assessment, as one of the most widely used supplier management practice, seeks to identify and influence on the areas which entail

improvement endeavors, while recognizing and maintaining the existing practices. In 1994, European Foundation for Quality Management (EFQM) defined the self-assessment as “a comprehensive, systematic and regular review of an organization’s activities and results referenced against a model of business excellence.” The underlying rationale for conducting a self-assessment questionnaire is the necessity to determine the readiness of the supplier to adopt sustainable practices. Therefore, in line with the supplier self-assessment, the performance of sustainable supply chain could be improved. To address the sustainability issues among suppliers, a self-assessment questionnaire can either be conducted by the buyer itself such as Wafios and EnQuest (Wafios 2019; EnQuest 2019) or by collaborative platforms, industrial partnerships, and industrial coalitions, such as Sedex, Responsible Business Alliance, and DRIVE Sustainability (Drive Sustainability 2019; Responsible Business Alliance 2019b).

Introduction

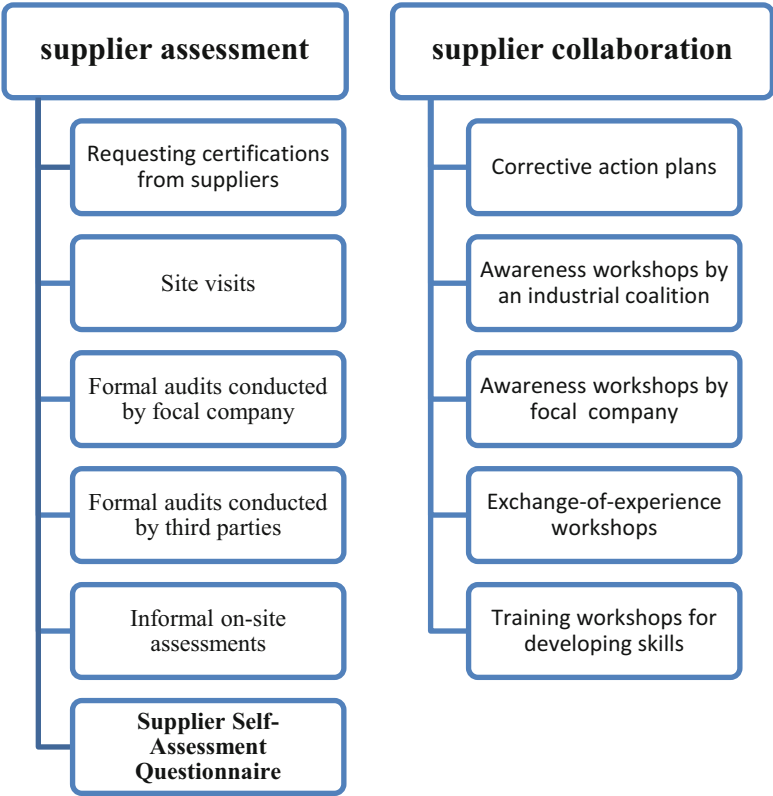
As a result of stiff competition, ever-changing technology, and shortened product life cycle, manufacturing companies have adopted a strategy in which they focus on their core competencies while outsourcing the non-core activities from their suppliers (Lam et al. 2007). At the same time, they are also required to comply with regional, national, and international laws and regulations in order to remain in business because environmental and social issues cross the regulatory boundaries from companies to customers, suppliers, competitors, and the community (Trowbridge 2006). In this regard, supplier management practices which have been principally studied within the context of sustainable supply chain management are considered a prerequisite for ensuring compliance of suppliers with buyer companies’ CSS (Grimm et al. 2016). The most commonly used ones – including product content requirements, product content restrictions, product content labeling or disclosure, *supplier questionnaires*, supplier environmental management systems, supplier compliance auditing, product

stewardship, education and collaboration, and industrial ecology – give rise to a sustained competitive advantage to companies that incorporate them into their supply chains. They can thus reduce social and environmental impact and foster sustainable development (Hamner 2006).

Supplier Management Practices

Supplier assessment/evaluation and supplier collaboration are the two dimensions of the supplier management practices. The foremost supplier assessment elements which are requesting certifications from suppliers, supplier evaluation and selection in line with the defined sustainability criteria, supplier monitoring and auditing programs, and supplier self-assessment questionnaire as shown in Fig. 1, are used to manage suppliers to ensure their compliance with CSS. Starting with the third party supplier certifications such as ISO 9000, ISO14000, and SA 8000 standard, the relevant certifications prove that suppliers meet the certain minimum requirements. Thus, this pre-selection process enables the buyer to externally verify its suppliers and obtain short-list of them. Suppliers can be further evaluated in accordance with the selected sustainability criteria during supplier selection processes which both allow for choosing more capable suppliers and eliminating the risk of any non-compliance that might elicit in later periods. Based on the requested corporate sustainability standards, it is also possible to use social and environmental audits with the purpose of assessing actual sustainability performance of suppliers. Concerning the auditing, the process could be carried out with the integration of various organizations such as the buyer itself, non-governmental organizations (NGOs), or independent auditing companies. In other words, the auditing process can be conducted by the first-party audits in which the supplier itself handles its self-assessment; by the second-party audits which incorporates into the buying company or the buyer’s buyer; and by the third-party audits with the participation of an independent, accredited auditing company. Despite being a more informal type of auditing, supplier monitoring

Supplier Self-Assessment Questionnaire, Fig. 1 Supplier self-assessment questionnaire as a supplier assessment practice. (Source: adapted from the study of Grimm et al. (2016))



continuously observes suppliers’ performance. In the assessment phase, the buyer can request its suppliers to fill out the self-assessment questionnaire in order to be sure that they comprehend its expectations. In accordance with the assessment results, feedback is given to the suppliers (Grimm et al. 2016).

The Importance of Self-Assessment in the Supplier Management

Self-assessment, as an imperative tool for sustained business improvement, seeks to identify and influence on the areas which entail improvement efforts, while recognizing and maintaining the existing practices. Based on the definition of EFQM, self-assessment could be considered as “a comprehensive, systematic and regular review of an organization’s activities and results referenced against a model of business excellence.” The process of the self-assessment enables the

organization to discriminate its strengths, identify areas in which improvements can be achieved, and eventuate in planned improvement actions that are monitored for progress. The widespread use of quality standards and awards including the ISO9000, Malcolm Baldrige National Quality Award (MBNQA), the European Quality Award (EQA), and the Deming Prize has contributed to the increasing popularity of self-assessment which has been utilized to measure business performance. Relatedly, contribution of the self-assessment tool is twofold. Firstly, it can certainly facilitate the continuous improvement across supply chains, and secondly, it gathers different kinds of data, standards, and certifications and serves as a benchmarking platform, such as an industry coalition. In line with the assessment results, each member of the benchmarking organization can therefore identify its weakness and strength in comparison with the industrial average, and then develop an agenda for further improvement (Lam et al. 2007). To address the sustainability practices

among suppliers, a self-assessment questionnaire can either be conducted by the buyer itself such as Wafios and EnQuest (Wafios, 2019; EnQuest, 2019) or by collaborative platforms, industrial partnerships, and industrial coalitions such as Sedex, Responsible Business Alliance, and DRIVE Sustainability (Drive Sustainability, 2019; Responsible Business Alliance, 2019b).

The underlying reason for using several supplier assessment practices, in particular *supplier self-assessment questionnaire*, is the necessity to determine the readiness of the supplier to adopt sustainable practices. Indeed, the performance of sustainable supply chain could be improved by developing sustainability standards and assessing suppliers on those standards. In doing so, buyer companies continually review outcomes of supplier performance on each sustainability dimension. Companies which integrate environmental and social targets in their sustainable supply chain policies are putting pressure on their suppliers to adopt sustainable practices (Kumar and Rahman 2016).

Illuminating Examples on the Supplier Self-Assessment Questionnaires

There have been ample examples of supplier self-assessment questionnaires which have been conducted thus far. International Flavors and Fragrances Inc. (IFF), for instance, has employed Supplier Ethical Data Exchange (Sedex), a global membership organization with its more than 50,000 members in over 150 countries enables its members to manage their sustainable performance. The Sedex Self-Assessment Questionnaire which is one of the key tools used by the Sedex members in order to inform their responsible sourcing programs collects data across four key pillars including labor standards, health and safety, environment, and business ethic. In detail, although Sedex does not have its own code and determine a policy, its self-assessment questionnaire is based on the following codes: ETI Base Code: 2014 (Ethical Trading Initiative), SA8000:2014 – Social Accountability (SAI – Social Accountability International), ISO 14001: 2015 – Environment Management System

(International Organization for Standardization) and OHSAS 18001 occupational health and safety management system (Occupational Health & Safety Advisory Services) (Sedex 2019). In 2011, due to its doubling the number of suppliers, IFF requested its major suppliers to register with Sedex and asked them to fill out the Sedex self-assessment questionnaire in order to identify potential sustainability issues (Watson 2013).

In a similar vein, the myriad UK retailers including Marks & Spencer have experienced the mobile technology at which they monitor working conditions of suppliers and sub-suppliers by becoming a member of Sedex (Balch 2016). In fact, Marks & Spencer as a founding member, participating company, and member of the Board, has been involved in Sedex since 2004 and aims at driving continuous improvement of working and environmental conditions in global supply chains (Marks & Spencer 2019). By way of an example, M&S Foods works with Sedex as an industry ethical trade database and SMETA as an industry audit protocol in order to set a common standard and eliminate ethical audit duplications. In accordance with the process, all suppliers which are registered on Sedex and linked to M&S Foods must complete all sections of the Sedex self-assessment questionnaire in full. The buyer also monitors completion of the questionnaire (Marks & Spencer 2016).

The last but not the least instantiation, the Responsible Business Alliance (RBA), formerly known as the Electronic Industry Citizenship Coalition (EICC), was founded in 2004 by a group of leading electronics companies. Nowadays, RBA member companies that operate in electronics, retail, auto, and toy sectors, including Apple Inc., Facebook, IBM Corporation, and so on, are held accountable for using a range of training and assessment tools within the scope of a common code of conduct. The aforesaid training and assessment tools such as the RBA Self-Assessment Questionnaire (see the references to view a sample) enables its members to continually improve in the social, environmental, and ethical responsibility of their supply chains, while simultaneously strengthening the rights and well-being of workers and communities (Responsible Business Alliance 2019a). On the other hand, from a

supplier's perspective, the self-assessment questionnaire designed online allows for sharing the data with multiple customers, in particular those who have similar social and environmental compliance targets and thus facilitate meeting the standards (Gunther 2014).

Summary

To recapitulate briefly, instead of the supplier self-declaration of compliance, sustainable supplier management must be based on standards and include effective identification, assessment, monitoring measures, and compliance incentive systems (Foerstl et al. 2010). To this end, sustainable supplier management practices which are either performed by the buyer companies themselves or supported by strategic business partners are composed of both "assessment" such as supplier questionnaires, audits, site-visits, and "collaboration," including corrective action plans, workshops, and training. However, in comparison with collaboration, by virtue of their more unidirectional focus, supplier assessment practices are described by merely collecting information and thus evaluating suppliers' sustainability performance in this regard (Grimm et al. 2016).

Cross-References

- Auditing and Sustainability
- Compliance
- Corporate Sustainability Performance
- Environmental Assessment
- Environmental Compliance Audit
- ISO 14000 Standards Series
- SA8000 Standard
- Social Auditing
- Social Sustainability
- Sustainable Performance
- Sustainable Supply Chain Management

References

Balch, O. (2016). Abuse of migrant workers is now a top risk for businesses. Resource document. *The Guardian*.

- <https://www.theguardian.com/sustainable-business/2016/feb/16/migrant-workers-top-risk-businesses>. Accessed 6 Sept 2019.
- Drive Sustainability. (2019). Self-Assessment Questionnaire on CSR/Sustainability for automotive sector suppliers. Resource document. https://drivesustainability.org/wp-content/uploads/2018/10/CSR-DriveSustainability_SAQ-FORM_A4_EN_FINAL_hq_copy_right.pdf. Accessed 6 Sept 2019.
- EnQuest. (2019). Supplier Self-Assessment Questionnaire. Resource document. https://www.enquest.com/fileadmin/user_upload/Supplier_Self_Assessment_Questionnaire.pdf. Accessed 6 Sept 2019.
- Foerstl, K., Reuter, C., Hartmann, E., & Blome, C. (2010). Managing supplier sustainability risks in a dynamically changing environment – Sustainable supplier management in the chemical industry. *Journal of Purchasing & Supply Management*, 16, 118–130. <https://doi.org/10.1016/j.pursup.2010.03.011>.
- Grimm, J. H., Hofstetter, J. S., & Sarkis, J. (2016). Exploring sub-suppliers' compliance with corporate sustainability standards. *Journal of Cleaner Production*, 112, 1971–1984. <https://doi.org/10.1016/j.jclepro.2014.11.036>.
- Gunther, M. (2014). Interview: Sustainability in the electronics industry: We're trying to improve conditions for people and the planet. Resource document. *The Guardian*. <https://www.theguardian.com/sustainable-business/2014/nov/21/sustainability-in-the-electronics-industry-were-trying-to-improve-conditions-for-people-on-the-planet>. Accessed 6 Sept 2019.
- Hammer, B. (2006). Effects of green purchasing strategies on supplier behaviour. In J. Sarkis (Ed.), *Greening the supply chain* (pp. 25–37). London: Springer.
- Kumar, D., & Rahman, Z. (2016). Buyer supplier relationship and supply chain sustainability: Empirical study of Indian automobile industry. *Journal of Cleaner Production*, 131, 836–848. <https://doi.org/10.1016/j.jclepro.2016.04.007>.
- Lam, P. K., Chin, K. S., Yang, J. B., & Liang, W. (2007). Self-assessment of conflict management in client-supplier collaborative new product development. *Industrial Management & Data Systems*, 107(5), 688–714. <https://doi.org/10.1108/02635570710750435>.
- Marks & Spencer. (2016). Marks and Spencer code of practice – Ethical trading. Resource document. <https://corporate.marksandspencer.com/documents/plan-our-approach/foods/ethical-trading-code-of-practice-february2016.pdf>. Accessed 6 Sept 2019.
- Marks & Spencer. (2019). Collaborations and memberships. Resource document. <https://corporate.marksandspencer.com/sustainability/clothing-and-home/collaborations-and-memberships>. Accessed 6 Sept 2019.
- Sedex. (2019). Empowering responsible supply chains. Resource document. <https://cdn.sedexglobal.com/wp-content/uploads/2019/03/Sedexbrochure.pdf>. Accessed 6 Sept 2019.
- The Responsible Business Alliance. (2019a). About the RBA. <http://www.responsiblebusiness.org/about/rba/>. Accessed 6 Sept 2019.

- The Responsible Business Alliance. (2019b). A sample of Self-Assessment Questionnaire. www.responsiblebusiness.org/media/docs/2019%20Corporate%20SAQ_for%20posting%20Online.pdf. Accessed 6 Sept 2019.
- Trowbridge, P. (2006). A case study of green supply chain management at advanced micro devices. In J. Sarkis (Ed.), *Greening the supply chain* (pp. 307–322). London: Springer.
- Wafios. (2019). Questionnaire: Supplier self-assessment. Resource document. https://www.wafios.com/fileadmin/_migrated/content_uploads/Supplier_Self-Assessment.pdf. Accessed 6 Sept 2019.
- Watson, B. (2013). International Flavors and Fragrances: Greening a taste and smell supply chain. Resource document. *The Guardian*. <https://www.theguardian.com/sustainable-business/international-flavors-fragrances-household-chemicals>. Accessed 6 Sept 2019.

Supply Chain

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Synonyms

[Supply Network](#); [Value Chain](#)

Definition

A *Supply Chain* covers all the activities to create a product or a service from raw material supplier to final customer. As such, a supply chain consists of several companies working together to generate value and to achieve competitive advantage. More specifically a supply chain contains the material and information flow between different entities. Therefore, a supply chain typically describes the logistical processes linking the different companies such as transportation, warehousing, supply, and demand planning.

Introduction

Every company is part of at least one supply chain. Usually a company is part of several supply chains or a supply network. Supply chains get more complex when companies focus on core capabilities and outsource the rest to suppliers as well as when companies serve international markets, offshore some of their activities, and built global supply chains. Thus, in a globalized economy with a distinct supplier landscape, supply chains and their management gain in importance.

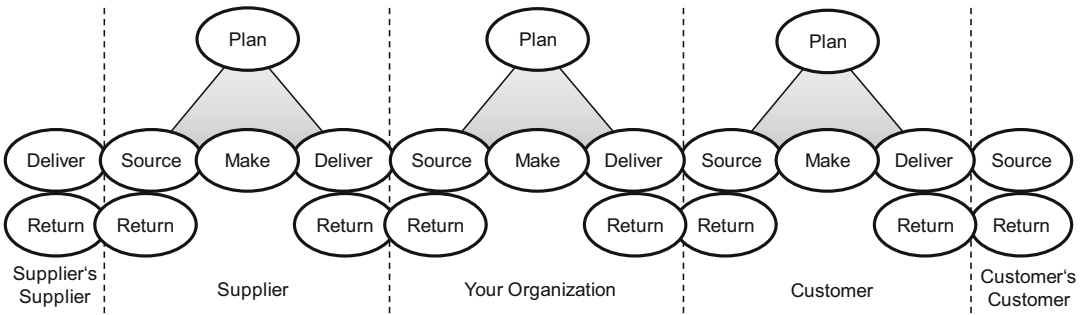
The scientific literature offers different definitions for the term supply chain, but definitions of major players such as the Council for Supply Chain Management Professionals (CSCMP 2013) or renowned textbooks (see, e.g., Chopra and Meindl 2016; Jacoby 2009; Simchi-Levi et al. 2007) typically include the following key aspects: The supply chain ranges from raw material supplier to final customer meaning it covers the whole way of a product or service. The supply chain includes both material and information flow (and sometimes also cash flows as compensatory payments between companies to share gains of a measure in a fair way). The supply chain focuses on logistical aspects to generate value for the customer and competitive advantage for the companies involved.

Stage View of Supply Chains

A supply chain is composed of different stages or echelons. These stages describe the way of the product from raw material supplier to final customer. Thus, one way to display a supply chain is to show the sequence of different partners involved in making the supply chain happen (see Fig. 1). Typical stages are – starting from point of origin – raw material or component suppliers, manufacturers, distributors or wholesalers,

Supply Chain,
Fig. 1 Supply Chain
Stages (Chopra and Meindl
2016)





Supply Chain, Fig. 2 SCOR model (APICS 2017; Zhou et al. 2011)

retailers, and customers/consumers (see e.g., Chopra and Meindl 2016). The type and number of stages depends on the type of product and supply chain. One important difference is between direct or indirect distribution of a product (e.g., direct sales versus retailing). As a company is typically a part of several supply chains and there are several players on each stage of a supply chain, the supply chain can also be displayed as an intertwined supply network to do justice to this aspect. Often, however, a simple picture of a linear supply chain is chosen for the sake of simplicity.

Process View of Supply Chains

A supply chain can be divided into different functional processes. This view of a supply chain typically focuses on one company in a supply chain and its links with other companies. The macroprocesses of a company are Supplier Relationship Management (SRM) describing the supply side of a company, Internal Supply Chain Management containing all internal processes of the company, and Customer Relationship Management (CRM) describing the demand or distribution side of a company (Chopra and Meindl 2016). Typical logistical processes of a company described in the literature are procurement, production, distribution, and reverse logistics. These processes are often used for displaying the process view of a supply chain (Deckert 2015).

A reference model for the process view of a supply chain is the Supply Chain Operations

Reference (SCOR) model (see Fig. 2) by the Supply Chain Council (SCC), now merged with APICS – The Association for Operations Management. The SCOR model contains four levels of processes. On the top level, the processes Plan (planning of the supply chain), Source (relationship with suppliers), Make (internal transformation process), Deliver (outbound logistics), and Return (reverse logistics) are distinguished (APICS 2017; Zhou et al. 2011). The processes Source, Make, Deliver, and Return correspond to the main logistical processes (see above). The subordinate levels contain different variants of the core processes adding accuracy and granularity. For example, on the second level the process Make is broken down into the sub-processes “Make-to-Stock,” “Make-to-Order,” and “Engineer-to-Order.” The newer versions of the model include the top level process Engage including support processes such as supply chain risk management or supply chain technology management (APICS 2017).

The SCOR model also offers performance metrics for the different levels of the model. The categories covered by these metrics are reliability, responsiveness, agility, cost and asset management efficiency (APICS 2017). There are empirical findings which show that the SCOR model is valid and the relationship of its processes is empirically supported (Zhou et al. 2011).

Issues of Supply Chains

The core issue of a supply chain is matching supply with demand. The main target is to

generate a supply chain surplus, i.e., the generated customer value minus supply chain cost, through cooperative measures. One aspect that affects the performance of a supply chain is the supply chain uncertainty, especially supply and demand uncertainty. Based on the uncertainty of the supply chain, a company has to find its strategic sweet spot between cost and service level. A strategic fit can be achieved if the desired responsiveness of a supply chain is achieved with adequate supply chain costs (Chopra and Meindl 2016; Simchi-Levi et al. 2007).

Related to the issue of matching supply with demand is a phenomenon called the “Bullwhip Effect” in which small changes of customer demand lead to disproportionately high and delayed fluctuations in the upstream processes. The upstream fluctuations can be five to ten times higher than actual customer demand (Jacoby 2009). The factors contributing to the bullwhip effect are demand forecasting, lead time, batch ordering, price fluctuations, and inflated orders, e.g., due to shortage gaming (Simchi-Levi et al. 2007). Measures for coordination in a supply chain such as aligning goals and incentives, improving supply chain visibility and operational performance, designing stabilizing pricing strategies, and building strategic partnerships can dampen the bullwhip effect (Chopra and Meindl 2016).

Summary and Outlook

The supply chain deals with all the activities to provide a product or a service from beginning (raw material) to end (use or consumption). The core issue of a supply chain is the matching of supply with demand and a focus on logistical aspects. A newer trend is to also focus on sustainability metrics to achieve a Sustainable Supply Chain. As companies are not only held responsible for their part in the supply chain, but also for parts covered by their supply chain partners, activities such as supplier rating gain in importance.

The SCOR model, e.g., now contains a special application called SustainableSCOR designed for

environmental accounting of a supply chain. The application is based on the standards for sustainability reporting by the Global Reporting Initiative (GRI) and contains metrics for materials used, energy consumed, water volume withdrawn, air emissions, as well as liquid and solid waste (APICS 2017).

Cross-References

- [Global Reporting Initiative](#)
- [Supply Chain Management](#)
- [Sustainable Supply Chain](#)

References

- APICS. (2017). SCOR supply chain operations reference model. Quick Reference Guide. https://www.apics.org/docs/default-source/scc-non-research/apics_scc_scor_quick_reference_guide.pdf. Accessed 8 Feb 2019.
- Chopra, S., & Meindl, P. (2016). *Supply chain management. Strategy, planning, and operation* (6th ed.). Harlow: Pearson.
- Council of Supply Chain Management Professionals (CSCMP). (2013). Supply chain management terms and glossary. https://cscmp.org/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms.aspx?hkey=60879588-f65f-4ab5-8c4b-6878815ef921. Accessed 4 Jan 2019.
- Deckert, C. (2015). Nachhaltige Logistik – Verbesserte Ressourcennutzung und Umweltverträglichkeit durch Green Logistics und City Logistik. In C. Deckert (Ed.), *CSR und Logistik: Spannungsfelder Green Logistics und City-Logistik* (pp. 3–41). Berlin/Heidelberg: Springer Gabler.
- Jacoby, D. (2009). *Guide to supply chain management*. New York: Bloomberg Press.
- Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and managing the supply chain: Concepts, strategies and case studies* (3rd ed.). New York: McGraw-Hill.
- Zhou, H., Benton, W. C., Jr., Schilling, D. A., & Milligan, G. W. (2011). Supply chain integration and the SCOR model. *Journal of Business Logistics*, 32(4), 332–344.

Supply Chain Analysis

- [Value Chain Analysis](#)

Supply Chain Management

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Synonyms

[Integrated outbound operations](#); [Logistics network management](#); [Supply network management](#); [Technology/people/outputs integration](#)

Definition

The precise definition of supply chain management had already been subject to change as a result the use of computing, ICT, digital technologies, and their increasingly intrinsic physical impact. One such definition relates precisely to the blending and morphing of tangible and intangible elements of supply chains, i.e., the *digital/physical* dichotomy as it is incorrectly labeled. (Digital is physical, especially as far as electronic data transmission is concerned. This contributor had previously argued that a correct dichotomy may be defined differently. This, especially as the nature of technology innovation is likely to transform the physicality of tools used beyond recognition. Formulations such as “digital/material” or “tangible/intangible,” “electronic/corpuscular.”) “Supply chains can be described as a series of linked suppliers and customers, who can be termed links, actors or players” (Graham et al. 2004). (The authors went on to propose a networked approach to supply chains. Hence the sentence cited above ends with: “chains are commonly portrayed as simple linear processes.” While dynamically influencing media and entertainment, such network structures as postulated by Graham et al. (2004) (e.g., blockchain, in Dutra et al. 2018) are yet to develop full effectiveness in tangibly material form. NB blockchain is addressed below.) While many other, more detailed, and thorough formulations are of equally good use (e.g., the seminal work of

Mentzer et al. 2001), (For detailed definition by Mentzer et al. (2001: 18): “supply chain management is defined as the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole.”) the one cited above was chosen for the relative elegance in the way in which it involves the transformation, blending, and merging of different forms of physicality and control. To further note, concerning the notions of transformation and control, transparency, together with resilience, is becoming a particularly important feature of supply chains, especially in sustainability contexts. This is explored, elaborated, and expanded in the sections below.

This definition and subject entry would need to depart somewhat from encyclopedic tradition: Due to the unprecedented transformative global crisis impacting health, trade, economy, safety, security, transportation, travel, and social conduct, more attention shall be given to current affairs than is the norm. (The term “the new normal” is already in widespread use across the world’s media and professional commentary. It remains to be seen how permanent “the new norm” may become. Ignoring such rapid change, however, would present a missed opportunity. Among other uses, encyclopedias do have historical value.)

A note on the supply chain impact of the COVID-19 global pandemic – also addressed below: While major crises do tend to cause remarkable tremors in field practice, it remains to be seen how lasting their effects may be. On the other hand, seemingly lateral developments – such as the invention of the printing press or that of the Internet – may cause far-reaching and considerable transformations less anticipated by analysts, practitioners, and others in their own current temporal contexts. It is a thankless task to assess the impact of contemporary events; nonetheless, an economic quake of the size of a global pandemic should not be ignored, especially in such conditions as those reported.

To follow a conventional approach to supply chain management, a succinct description may be as follows: *The management of product control and value-adding delivery (service) processes commanding all steps from production to consumption*. Such process management is centered on design, collaboration, and responsiveness; it involves logistics, inventory, stock control, and increasingly necessary automation. As is further elaborated in sustainability contexts, risk plays a major role, as do the strategy and organizational culture of companies involved.

Industry reports at a time of crisis happen to support the above. The value of established approaches is in that they tend to encompass follow-ups, provided of course (1) they have been correctly postulated in the first place and that (2) there were no major paradigm shifts that may have proven a latter explanation more encompassing than its antecedent (as is sometimes the case in science).

Overview

The subject of supply chain management, primarily contingent on recognition of technology-dependent and process-driven practice was first informed by would-be scientific means utilized in the fields of strategy, tactical operations, and logistics. (Strategic management texts informed by mathematics, applications of science for industry, economics, resource management, etc. have originally informed supply chain management theory (e.g., Ansoff 1965).) Such strategic operational practice was subsequently assessed, informed, and enhanced by means of theory, initially in the process- and statistics-influenced and hypothesis-defined science aspects of organizational performance. The processual schools of strategy in particular had at the time been defined instrumental and so by means-to-ends principles. As such, the approach would not have had notable critical components, (The influential work of Porter's competitive advantage (1985) employs considerably utilitarian concepts.) which would later emerge to make an impact on both theory and practice. As the significance of stakeholder

relations and those of the social impact of business activity and of corporate behavior gained broader recognition, supply chains were consequently addressed by means of sustainability conceptualization. Carter and Rogers (2008) are among the authors that worked to critically summarize and redefine supply chain management within the context of sustainability. This work proves of present value in the global context explored further, especially as its (i) comprehensive and (ii) conservative approach addresses sustainable supply chains in their risk-related and economic sustainability aspects. The focus on feasibility and functionality properties is visibly required.

In their highly impactful analysis, Carter and Rogers criticize much of the sustainability discourse (The subject field may be understood with root reference to Club of Rome imperatives (e.g. Oelze et al. 2018).) especially in the context of supply chains of the time in that it fails "to explicitly include what Carroll (1979) refers to as an organization's economic responsibility" (2008: 361). Such insight and critique are of particular value to this entry, given the timing and impact of events at the focus of change. Further, the authors called for a more consistent use of the term *sustainability* across literature and the industry, advocating for greater presence of economic and risk factors across the field. As shown in other, later treatises and across consequent practice, this assessment had made an impression. Some of the authors' other challenging questions include the correlation between environmentally conscious corporate strategies and profit-making ("Does it pay to be green?"). Drawing also on organizational aspects of engineering literature and finding them helpful, this comprehensive anthology invites for a more consistent and systematic use of sustainability in supply chain management texts. The entry also posits and attains the ambition to formulate theory-building for the purpose of sustainable supply chain management. Expanding on organizational sustainability, focused on "the natural environment, society, and economic performance," Carter and Rogers (2008: 364) further formulate the "triple bottom line." Citing theory as well as practice and expanding on the work of numerous important

analyses, the authors emphasize the importance of *interrelationships among risk management, transparency, (organizational) culture, and strategy*.

An integrative wide-ranging formulation of *sustainable supply chain management* (SSCM) is as follows:

as the strategic, transparent integration and achievement of an organization's social, environmental, and economic goals in the systemic coordination of key interorganizational business processes for improving the long-term economic performance of the individual company and its supply chains. Carter and Rogers (2008: 368)

Confronting/contrasting various sources of established thought in sustainability and supply chain literature, the authors propose that “goodness” at the intersection of environmental and social considerations is irresponsible toward both business goals and sustainability itself, were it not to involve economic factors. Thus, they arrive at a well-read nomenclature of economic advantages at the said intersection of environmental and social factors. Cited as: 1. *Cost savings due to reduced packaging waste*; 2. *Lowering labour costs – [as] Better working conditions can increase motivation and productivity*; 3. *Proactively shaping future regulation (...) leading to a difficult-to-replicate competitive advantage*; 4. *Reduced costs, shorter lead times, and better product quality [standards]*; 5. *Enhanced reputation (...) attractive to [stakeholders across the board]*.

The sheer impact of this work; its contrasting priorities against the backdrop current matters in the field and within the world economy at a time of unique crisis; and its systematic and detailed nature, all qualify it as a reference text. This, while providing due recognition to several relevant and influential works especially within the arenas of definition and particularly within the notion of commercialization, streamlining and strategizing of healthcare fundamental to the subject matter explored within the paradigmatic impact of COVID.

So that no singular text, however much influential, takes full precedence, the reader is invited to consult the following works and a

comprehensive bibliography slightly skewed toward the ongoing “transaction revolution” in supply and demand structures across the world. Indeed, worthy of attention among less known work is the paper by Syahrir and Vanany (2015) addressing *healthcare and disaster supply chains*. (Emergency operations fit for “epidemic attack through logistic operation for drugs” and “disruption problem of supply chain logistics for the availability of medical needs such as medicines in the health care facilities” (...). Also: “Problems that often arise in disaster relief operations are the lack of coordination and little knowledge of good logistics system[s]” (Syahrir and Vanany 2015: 6). Noting that “other research in the area of healthcare supply chain which consider abnormal situation[s] still needs to be done in the future” (2015: 4, 7).) Conditions that persist prior to the pandemic may be traced to, e.g., Byrnes (2004), Dobrzykowski et al. (2014), and Chakraborty et al. (2014). Also, bullwhip (positive feedback loop) effects in healthcare supply chains by Samuel et al. (2010); finance/resource strains and quality of care resolved by supply chain fine-tuning (Kwon et al. 2016). Closer to core subject matter in SSCM subjects range from the work of Glaeser and Kerr (2009) whose localized solutions may be of use in a post-COVID world; to more generic collaborative forms that may also fit a post-upheaval rethink (Hudnurkar et al. 2014); case particularities explored by Oelze et al. (2018); to extensive analysis of Gupta and Palsule-Desai (2011); quantitative modeling by Brandenburg et al. (2014); and many others.

As the above text represents a highly pragmatic approach analogous to established utilitarian notions of strategy, the sections below will observe a substantive rationality of changing principles.

Beyond Business Imperatives: Transparency, Control, and Consumer Preference Ethics

The notion of control: Accordingly, *transparency* in stakeholder terms, or *relative market power* – when centered on businesses – define the

important features of supply chains as addressed here. This, with particular attention to the environment – and health matters: especially the impact of [stakeholder] transparency and relative market power on health provision (and by it) in major crises and natural disasters, as has become rather evident at the time of writing [during the first wave of the COVID-19 pandemic]. Innovation plays a role in the enhancing of stakeholder positions, as well as improving business prospects. At times, the two are aligned owing to such technological innovation that is integrated into business models, customer relations, and marketing inherent in the supply structure. For instance, food (supply) businesses acting in transparently ethical manner: tracing an ethically sourced and environmentally friendly tuna catch (The Provenance Team 2020); Manuka honey (Steens Honey 2020); yoghurt (Kruschwitz 2014); or bananas and pineapples (Dole Earth 2011), customers and consumers tracking the entire process of production, procurement, and supply – identifying the very people and means involved and the places and locations of original product input.

However, concerning food production and supply – and food security in particular – the warnings that came with the global pandemic are likely to occupy the continued attention of both public and private decision-makers across the world's stakeholder spectrum (e.g., S&P Global 2020). More troublingly, Baker McKenzie reported a 0% global growth for 2020, a record worse than the 2008 crisis analyzing a likely impact on supply chains of multiple sectors. The sections below address what may be a lasting transformation of all trade with unprecedented worldwide impact.

Disruption, Risk, and Global Rethink: A Case Concerning Noticeably Vital Contemporaneous Events

The COVID pandemic may prove to be the tipping point of irreversible transformation of supply

chains (e.g., Kilpatrick 2020). This entry will aim to incorporate analytical and factual matters relating to the impact of the COVID pandemic. This, with the particular understanding that supply chain management may undergo considerable, and likely lasting transformation in its wake. Such transformation may come as a result of this event (or process) unprecedented in terms of many aspects of the economy of an interdependent world. Pandemics did occur in many past occasions; however, the world's economy, business, and trade were never as integrated, interdependent, data-driven, and globalized as they are in the early twenty-first century. The impact of COVID on healthcare supply chains will also be addressed below, e.g., Ranney et al. (2020).

As the COVID impact is proving transformative in a number of unprecedented ways (Shih 2020), the direction and means of physical and economic activity from basic to global are already reportedly affected. This is not limited to the re-stratification and destructive consolidation of the market and actual companies and sectors especially in transport. The disruptive effect of the pandemic may likely cement many cumulative effects of incremental changes and intermediate albeit regular technological leaps traceable to the increased need for automation and processing since the 1980s. Adding the impact of artificial intelligence, 4D printing, and Internet of Things (Mahto and Sniderman 2019) to this essential field of activity may radically alter the corporate landscape and methodology of industry practice, further empowering global ICT firms, i.e., those colloquially known as “[hi-]tech giants,” who appear to be the main winners in business amid the crisis (Amazon had reported highest increase in e-commerce growth related directly to the global pandemic. Particular increase of its previously lossmaking “Whole Foods” division in both revenue and profits reported despite initial concerns over self-imposed limitations on services due to COVID of resource stretch.) (Keyes 2020).

On the other hand, there is a rethink of global supply structures – and not without paradox,

given the conventional wisdom built over the decades of neoliberalism in global business. Namely, some industry analyses published at the time of writing (e.g., Holmes 2020; Mullin 2020, and others) point out that more conservatively designed supply chains based on higher sunk costs, lower reliance on outsourcing, and elements of local and regional analogue physicality (though integrated into the digital agility for planning and risk response) may prove robust and resilient to *force majeure* challenges such as the global lockdown. As the virus pandemic appears to be changing the very ways in which socioeconomic life and business operations are conducted worldwide, “more local supply can also enhance agility as companies can be more responsive to changes in local demand” (Frikkee 2020). Adding that while some cost may be passed on to the customer, more balanced business models and less haste in sustaining last-minute demand structures would see the rebuilding of national and regional supply infrastructures supported by AI, enhanced communication models, and automation created for worker safety and risk responsiveness. All this seems in line with sustainability priorities.

The most momentous aspect of that rethink is the World Economic Forum report – and toolkit for governments and businesses alike – focusing on blockchain technology as the means to “tackle supply chain failures exposed by COVID-19 and boost economic recovery” (May 2020).

Blockchain and Potential Developments from Food to Healthcare

Beyond, and predating the World Economic Forum reported plans, blockchain was being hailed as the ultimate solution to world’s economic woes and a solution for fair, transparent, and clean, decentralized method of ordering, paying, accounting for, buying and selling, supplying, and delivering goods and services by means of “smart contracts”. (As stated by Jessi

Baker, Provenance founder and CEO in her BBC Worldwide interview (The Provenance Team 2020).) Starting out as a fairly obscure even mysterious approach to software and trading in cryptocurrency circles, where all value is subject to agreement and complex, convoluted contractual exchange with data-value interaction collected, permanently saved and allocated at every transaction: Blockchain has been recently associated with some of the most ambitious plans for the rebooting of the world economy, supply of goods, services, and trade in the wake of the COVID crisis. Seldom do international bodies of such magnitude of influence such as World Economic Forum intervene so directly. It is therefore safe to assume that blockchain technology will emerge from its relative anonymity, earlier the preserve of the illustrious bitcoin and the focus of cryptocurrency entrepreneurs and enthusiasts. Should this be the case, it would form an about-turn as the very notion of decentralized cryptocurrencies was largely rebuffed in past instances by governments, central banks, and traditional financial services alike. Therefore, it is very likely that the new, reinvented utilization of blockchain would not be presented in the same form as in the past. Citing the World Economic Forum press release, dated 27 April 2020:

Resilience in supply chains depends on trust, transparency and integrity, which can be improved through the responsible deployment of blockchain technologies that offer a “shared truth”.

The current pandemic underscores the need for businesses and governments to improve the integrity and provenance of pharmaceutical products and medical supplies, as well as food, goods and industrial and consumer products.

The press release elaborates further, adding that the toolkit announced had been over a year in the making, with multiple stakeholders involved around the world, *including governments, companies, start-ups, academic institutions, civil society, international organizations, and technology and supply chain experts.* Special

attention in the press release was given to fundamental and resilient supply of products and services essential for the safe, secure, and robust functioning of everyday life globally. (Reportedly, the carbon footprint of blockchain is of sizeable proportions (Liu et al. 2019; Stoll et al. 2019).) It remains to be seen how supply chains and networks, tools, and methods may change in specific implementation and generic form in a post-pandemic world.

Summary

Supply chain management is being tested and redefined by contemporary events within the economy and industries across the world, the most prominent and visible of which is the global pandemic that endures at the time of writing. The notion of supply chain management is intrinsically connected to several key features of modern-day business activity: ICT/information and communication technologies; automation; electronic data interchange; and viable solutions for economic, social, and environmental aspects of sustainable business and economic activity. By their very nature, supply chains are integrative, yet their fragility has been proven by the impact of the global viral pandemic. It appears that, the more refined and advanced and reliant on technology, outsourcing, and globalized labor/services/goods output a supply chain is, the more susceptible it is to the “acts of God” events such as the global outbreak that seems to be reshaping our world. Conversely, it seems that the more conservative supply chains with greater sunk costs and fewer international interdependencies have performed better at the wake of the outbreak. This may be changing, as business and technology solutions are being sought to make them more robust. One technology that seems to be rising to prominence in the post-pandemic world is blockchain, itself essentially connected to the notion of supply chains: an information tech with WEF backing.

Cross-References

► [Big Data and Data Mining](#)

References

- Ansoff, H. I. (1965). *Corporate strategy: An analytic approach to business policy for growth and expansion*. McGraw-Hill Companies.
- Brandenburg, M., Govindan, K., Sarkis, J., & Seuring, S. (2014). Quantitative models for sustainable supply chain management: Developments and directions. *European Journal of Operational Research*, 233(2), 299–312.
- Byrnes, J. (2004). *Fixing the healthcare supply chain*. Harvard Business School Working Knowledge, Available at: <http://hbswk.hbs.edu/archive/4036.html>. Accessed 10 Nov 2009.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360–447.
- Chakraborty, S., Bhattacharya, S., & Dobrzykowski, D. D. (2014). Impact of supply chain collaboration on value co-creation and firm performance: A healthcare service sector perspective. *Procedia Economics and Finance*, 11, 676–694.
- Dobrzykowski, D., Deilami, V. S., Hong, P., & Kim, S. C. (2014). A structured analysis of operations and supply chain management research in healthcare (1982–2011). *International Journal of Production Economics*, 147, 514–530.
- Dole Earth. (2011). *Dole Europe GmbH – Bananas and Pineapples – Trace to source* [online]. Available at: <http://www.dole.eu/dole-earth/>. Accessed 1 May 2020.
- Dutra, A., Tumasjan, A., & Welpe, I. M. (2018). Blockchain Is changing how media and entertainment companies compete: Companies are using new applications to rethink their business models and – in some cases – Disrupting their industries. *MIT Sloan Management Review*. 11 September 2018.
- Frikkee, T. (2020). Covid-19 crisis has laid bare weaknesses in supply chains [online]. *Financial Times*. 12 May 2020. Available at: <https://www.ft.com/content/9bb6939d-6a31-4a33-bb62-ecbf74da8491>. Accessed 16 May 2020.
- Glaeser, E. L., & Kerr, W. R. (2009). Local industrial conditions and entrepreneurship: How much of the spatial distribution can we explain? *Journal of Economics & Management Strategy*, 18(3), 623–663.
- Graham, G., & Hardaker, G. (1998). Defence sector procurement and supply chain relationships. *Supply Chain Management: An International Journal*, 3(3), 142–148.
- Graham, G., Burnes, B., Lewis, G. J., & Langer, J. (2004). The transformation of the music industry supply chain.

- International Journal of Operations & Production Management*, 24(11), 1087–1103.
- Gupta, S., & Palsule-Desai, O. D. (2011). Sustainable supply chain management: Review and research opportunities. *IIMB Management Review*, 23(4), 234–245.
- Holmes, H. (2020). *Food security: Are we cutting food too fine with our just in time supply chain?* [online]. The Grocer. 12 May 2020. Available at: <https://www.thegrocer.co.uk/supply-chain/food-security-do-we-need-to-rethink-our-just-in-time-supply-chain-post-coronavirus/604872.article>. Accessed 16 May 2020.
- Hudnurkar, M., Jakhar, S., & Rathod, U. (2014). Factors affecting collaboration in supply chain: A literature review. *Procedia-Social and Behavioral Sciences*, 133(1), 189–202.
- Keyes, D. (2020). *Amazon posts highest e-commerce growth in over three years* [online]. Business Insider. 4 May 2020. Available at: https://www.businessinsider.com/amazon-q1-sales-soared-online-in-store-2020-5?IR=T&utm_medium=email&utm_term=BII_Daily&utm_source=Triggermail&utm_campaign=BI%2520Intelligence%2520Daily%25202020.5.15. Accessed 16 May 2020.
- Kilpatrick, J. (2020). *COVID-19: Managing supply chain risk and disruption. Coronavirus highlights the need to transform traditional supply chain models* [online]. Deloitte. Available at: <https://www2.deloitte.com/global/en/pages/risk/articles/covid-19-managing-supply-chain-risk-and-disruption.html#>. Accessed 12 May 2020.
- Kruschwitz, N. (2014). *Working toward totally transparent Yogurt*. MIT Sloan Management Review.
- Kwon, I. W. G., Kim, S. H., & Martin, D. G. (2016). Healthcare supply chain management; strategic areas for quality and financial improvement. *Technological Forecasting and Social Change*, 113, 422–428.
- Liu, K. H., Chang, S. F., Huang, W. H., & Lu, I. C. (2019). The framework of the integration of carbon footprint and Blockchain: Using Blockchain as a carbon emission management tool. In *Technologies and eco-innovation towards sustainability I* (pp. 15–22). Singapore: Springer.
- Mahto, M., & Sniderman, B. (2019). *Transforming manufacturing and supply chains with 4D printing*. MIT Sloan Management Review.
- May, A. (2020). *Blockchain to tackle supply chain failures exposed by COVID-19 and boost economic recovery* [online]. World Economic Forum. 27 April 2020. Available at: <https://www.weforum.org/press/2020/04/blockchain-to-tackle-supply-chain-failures-exposed-by-covid-19-and-boost-economic-recovery/>. Accessed 16 May 2020.
- Mentzer, J. T., DeWitt, W., Keebler, J. S., Min, S., Nix, N. W., Smith, C. D., & Zacharia, Z. G. (2001). Defining supply chain management. *Journal of Business Logistics*, 22(2), 1–25.
- Mullin, R. (2020). *COVID-19 is reshaping the pharmaceutical supply chain: The coronavirus pandemic may mark a rebalancing of where drugs are made as nations recognize a security imperative* [online]. C&EN. 27 April 2020. Available at: <https://cen.acs.org/business/outsourcing/COVID-19-reshaping-pharmaceutical-supply/98/i16>. Accessed 16 May 2020.
- Oelze, N., Brandenburg, M., Jansen, C., & Warasthe, R. (2018). Applying sustainable supply chain management frameworks to two German case studies. *IFAC-Papers Online*, 51(30), 293–296.
- Ranney, M. L., Griffith, V., & Jha, A. K. (2020). Critical supply shortages—The need for ventilators and personal protective equipment during the Covid-19 pandemic [online]. *New England Journal of Medicine*, 382, e41. Available at: <https://www.nejm.org/doi/full/10.1056/NEJMp2006141>. Accessed 12 May 2020.
- S&P Global. (2020). *Special report: COVID-19 is taking a bite out of food supply chains* [online]. Available from: <https://www.spglobal.com/en/research-insights/featured/covid-19-is-taking-a-bite-out-of-food-supply-chains>. Accessed 16 May 2020.
- Samuel, C., Gonapa, K., Chaudhary, P. K., & Mishra, A. (2010). Supply chain dynamics in healthcare services. *International Journal of Health Care Quality Assurance*, 23(7), 631–642.
- Shih, W. (2020). *Is it time to rethink globalized supply chains?* MIT Sloan Management Review.
- Steens Honey. (2020). *Track & trace: Know where you Manuka Honey has been sourced – Steens Honey* [online]. Available at: <https://steenshoney.com/pages/traceme>. Accessed 1 May 2020.
- Stoll, C., Klaaßen, L., & Gallersdörfer, U. (2019). The carbon footprint of bitcoin. *Joule*, 3(7), 1647–1661.
- Syahrir, I., & Vanany, I. (2015). Healthcare and disaster supply chain: Literature review and future research. *Procedia Manufacturing*, 4, 2–9.
- The Provenance Team. (2020). *'How blockchain could solve some of the world's problems' – BBC World Service* [online]. The Provenance. 28 April 2020. Available at: <https://www.provenance.org/news/press/how-blockchain-could-solve-some-of-the-worlds-problems-bbc-world-service>. Accessed 6 May 2020.

Supply Network

► Supply Chain

Supply Network Management

► Supply Chain Management

Support Service

- [Customer Service](#)

Support Services

- [Social Care](#)

Surveillance Audit

- [Environmental Compliance Audit](#)

Survivability

- [Sustainability \(World Commission on Environment and Development Definition\)](#)

Survival of Solar Energy

- [Sustainability and Solar Energy](#)

Sustainability

- [Algae Bioenergy](#)
- [Blue Circular Economy](#)
- [Corporate Social Responsibility](#)
- [Disruptive Sustainability](#)
- [Economic Sustainability and Development](#)
- [Environment, Social, and Governance \(ESG\)](#)
- [Environmental Responsibility](#)
- [Global Performance](#)
- [Life Cycle Sustainability Assessment](#)
- [Social Responsibility According to ISO 26000](#)
- [Sustainability Science](#)
- [Traditional and New Sustainable Production Methods in Food Industry](#)

Sustainability (World Commission on Environment and Development Definition)

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Synonyms

[Endurance](#); [Livelihood](#); [Longevity](#); [Maintenance](#); [Preservation](#); [Prolongation](#); [Survivability](#); [Sustainment](#)

Definition/Description

Sustainable connotes anything that can be sustained or maintained for a long time, even forever. In the contemporary context, it generally refers to the use of natural resources. Sustainability acts in a way that the present generation uses natural resources to satisfy its needs in a way so as to leave enough for the future generations to satisfy their needs.

The key idea of sustainable development is expressed as: “to meet the current needs without destroying the ability of future generations to meet theirs.” This idea was proposed in 1987 by the United Nations’ World Commission on Environment and Development (WCED). The WCED is popularly called the Brundtland Commission. It published this definition in the book *Our Common Future*. Sustainable development is growth of the economy in such a manner that it provides enough for sustaining the present generation while leaving the natural system in a state that it continues to provide for the economic sustenance of the future generations.

Introduction

Sustainability is a widely used term. The dictionary meaning of the term “sustainability”

connotes any activity that is capable of being sustained, that is, it can be continued indefinitely or at least for a very long time. Thus, any term prefixed with “sustainability” or “sustainable” can be assumed to be a phenomenon or activity that can be continued indefinitely. Sustainable farming could mean farming methods and practices that could go on being used indefinitely. Sustainable business may mean those businesses that could be carried on profitably for an indefinite time. Sustainable development could thus be economic development that is feasible to be undertaken in the long-term without any noticeable negative impact on the environment.

The term “sustainability” and “sustainable development” have been defined in various ways by a number of scholars and practitioners over time. The concept of “sustainable development” was articulated by the Brundtland Report published in 1987. The Report was prepared by the World Commission on Environment and Development (WCED) of the United Nations, headed by Gro Harlem Brundtland, a Norwegian politician. It is also popularly known as the Brundtland Commission after her surname. It is to be noted that the WCED defines sustainable development and not sustainability.

The definition of sustainable development by the Brundtland Commission is stated as: “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Besides the above definition, the WCED report elsewhere explains sustainable development in these words: “A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations” (WCED 1987, p. 43 of 300).

Difficulties in Defining “Sustainability” and “Sustainable Development”

There have been several attempts to define the terms “sustainability” and “sustainable

development” over the years. These efforts were particularly pronounced after the WCED came out with its definition in 1987.

O’Riorden (1985) commented on the difficulty of defining sustainability, describing the process of trying to define it as: “Exploration into a tangled conceptual jungle where watchful eyes lurk at every bend.” Such a statement reflects the challenge in attempting to define or even explain the meaning of the term “sustainability” and “sustainable development.” The reasons why the field of sustainability seems a “tangled, conceptual jungle” are several. First, the issue of sustainability has gained so much importance in recent years that there are multiple efforts at defining it resulting in too many definitions. Secondly, there is lack of consensus on what exactly the term “sustainability” means. Such lack of consensus is understandable as there are too many experts working on the idea in so many different fields of human activity. Everyone looks at sustainability from the prism of their own narrow disciplines and specialties leading to multiple as well as differing perspectives. Lastly, practitioners exhibit little patience with finely devised definitions and prefer action over theorization. In different fields, implementation plans simply avoid defining “sustainability” as there are too many diverse definitions to choose from. In practice, it is generally found more feasible to adopt a working or operational definition that serves the limited purpose of implementation.

Criticism of the WCED Definition of Sustainable Development

Reiterating the definition of sustainable development by the Brundtland Commission “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” is necessary to look at point of criticisms of this definition.

The Brundtland definition of sustainable development places emphasis on long-term perspective and the ethical connotations of sustainability. Critics point out that it does not, however, identify the necessity for sustainable

environment, a society that provides a fair deal to its members and an economy that is working well. Several critics have pointed out that these features are essential to understanding sustainable development and should be a part of any good definition of sustainable development.

Costanza and Patten (1995) opine that critics have argued that sustainability cannot be adequately defined because of a few reasons. Among these is the futility of posing the challenge of sustainability as definitional rather than one of discussing of what will be sustainable or arriving at a consensus on what do we want to be sustainable. There is also the problem of sustainability not being applied over time and space.

Some critics allege that the major drawback of the Brundtland definition is that while it is certainly inspirational in nature, it is definitely not practical as it cannot be used in implementation. It is neither precise nor measurable. No one seems to agree on what it actually means. Over the years, it has been interpreted and misinterpreted to mean whatever the protagonists may want it to mean.

It is often mentioned in literature on sustainability that the term “sustainable development” is an oxymoron as sustainability and development are mutually incompatible. The logic is that for society to develop it must necessarily use more resources. If the society lives within sustainable means, production and consumption should actually be decreased or at least held constant.

Critics put forth the argument that if sustainability is taken in the sense of something being continued indefinitely then it does not match the requirement of the sustenance of physical environment. The ecology of earth is the outcome of billions of years of evolution. There are natural disasters that harm the ecology but it has the capability to rebuild and rejuvenate though it takes a lot of time to do so. But man-made harm exceeds the capacity of the earth to heal itself. Thus, sustainable development is a chimera as one cannot pursue two mutually opposing goals.

Perhaps the most strident criticism of the Brundtland definition and, in general, the idea of sustainability and sustainable development is the allegation of critics that it is a cover for businesses to carry on their harmful operations without

bothering about the physical environment. The concern for environment is only a smokescreen to hide the true intentions of businesses that is only profitability at any cost. The term “greenwash” has been devised to represent a situation where businesses present misleading information deliberately to present a favorable public image in order to hide their true intentions or to put a cover over their environmentally harmful activities.

Summary

The popular term “sustainability” has been defined in several ways over a long period of time. The effort to define it gained momentum after WCED mentioned both sustainability and sustainable development in its report *Our Common Future* published in 1987. It was defined in terms of the prudent use of natural resources. Sustainability could be achieved if the present generation used natural resources wisely leaving enough for the future generations. Sustainable development was visualized as an economy that could develop by using natural resources without causing excessive harm by indiscriminate exploitation.

There have been innumerable attempts at defining sustainability and sustainable development before 1987 and these have continued later. The WCED definition did not help to close the matter. Possibly this is because of the nature of the term sustainability. It is taken to mean so many different things depending on diverse perspectives. It is a complex issue. In practice, sustainability is defined in operational terms, satisfying the requirements of the situation that is being dealt with.

There is much criticism of the WCED definition ranging from a simple accusation of it being simple, simplistic, or being inspirational rather than of being of some real use. Sustainability and sustainable development are both criticized on several counts. The primary criticism is that the term sustainable development uses two words that are mutually contradictory. Anything that aims at economic development cannot be sustainable. There are other points of criticism among them

the more scathing is that businesses use sustainability as a cover for their environmentally harmful activities.

The controversies over the definitions and the meaning of the terms sustainability and sustainable development are not going to die down any time soon.

Cross-References

- [Brundtland Report](#)
- [Greenwashing](#)
- [Rio Declaration on Environment and Development](#)
- [Sustainable Development](#)

References

- Costanza, R., & Patten, B. C. (1995). Defining and predicting sustainability. *Ecological Economics*, 15 (1995), 193–196. Retrieved from: <https://www.pdx.edu/sites/www.pdx.edu.sustainability/files/Costanza%20and%20Patten%201995.pdf>.
- O’Riorden, T. (1985). Research and policy review: Future directions for environmental policy. *Environment and Planning A*, 17, 1431–1446.
- WCED. (1987) *Report of the World Commission on Environment and Development: Our Common Future* is available at <http://www.un-documents.net/our-common-future.pdf>. Also available in the form of a book: WCED. (1987, 27 April). *Our Common Future*: World Commission on Environment and Development – Oxford University Press.

Sustainability Accounting

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Synonyms

[Corporate social reporting](#); [Corporate social responsibility reporting](#); [Nonfinancial reporting](#); [Social accounting](#); [Social and environmental accounting](#); [Social responsibility disclosure](#); [Social, environmental, and ethical reporting](#); [Triple bottom-line accounting](#)

Definition

Since the premiere of the Sustainability Accounting Guidelines in August 2002 at the World Summit on Sustainable Development in Johannesburg, sustainability accounting that was initiated by Rob Gray has attracted sustained attention since the early 1990s in various academic accounting literature and has been recognized as the most evolved form of environmental accounting (Lamberton 2005). Gray et al. (2014) proposed three distinct techniques of sustainability accounting based on this concept: (1) sustainable cost, which is the (hypothetical) expense of recovering the Earth to its pre-organizational state; (2) natural capital inventory accounting that entails the tracking of natural wealth through time, with fluctuations in holding levels used as an indicator of the (decreasing) value of the natural environment; and (3) analysis of the input-output relationship, which aims to estimate the price of bringing the world to its post state. The study takes into account the physical material flow and energy sources or inputs, as well as the production of goods and waste in physical units.

Generally, sustainability accounting can be defined as a management scheme used by a company by including nonfinancial information related to its ecological, social, and financial impacts on the planet and in surrounding communities, as stated by the Sustainability Accounting Standards Board (SASB 2017), because it represents a company’s stewardship of its environmental and social implications associated with the producing goods and services and also the governance of the environmental and social capitals necessary to generate lengthy values, including that of the effects of challenges and opportunities on innovation, business models, and governance practices, and vice versa.

Introduction

Sustainability accounting has progressed over the last four decades, allowing for a better knowledge of how accounting tools and processes help business sustainability management. According to the empirical contributions of critical academics,

firms have failed to meet high sustainability goals and have used environmental disclosure to conceal their bad performance (Ehrenfeld 2005). Thus, in the opinion of these critical academics, sustainability accounting serves an extremely restricted function in aiding corporate sustainability and may be phased out in the future. The pragmatic approach, on the other hand, emphasizes the purpose from a management standpoint, which is to give a collection of tools that assist corporate managers when considering sustainability.

Sustainability accounting is a variation on standard financial or management accounting since, unlike traditional financial accounting, it promotes knowledge of company sustainability and environmental implications. Its primary function is to innovate or further alter standard accounting concepts in order to assist management in fostering a company's long-term success. Nonetheless, the debate over the adoption of corporate sustainability principles, as well as the best way to apply these standards, yields contradictory results. Therefore, corporate management has varying interpretations of the function of accounting for sustainability, which is reflected in distinct implementation methodologies.

Sustainability accounting seeks to account for firms' relationships with society and the natural environment (Peršić et al. 2017). It is a framework for reflecting on and illustrating the economic, social, and environmental repercussions. Companies have used sustainability accounting as a management tool to demonstrate the link between ecological and socio-impact in order to fulfill financial impacts goals. It made a name for itself in the domains of social and environmental accounting, corporate responsibility, and nonfinancial accounting. Furthermore, unlike conventional accounting, which is concentrated on assembling, recording, and presenting financial occurrences that have an influence on the company's financial condition as well as its long-term viability and earnings, sustainability accounting, as an integrative approach, is aimed at providing reliable and realistic information to various stakeholders on the human and ecological elements of business practices (owners, managers, creditors, auditors, etc.) (Fülöp and Hernádi 2013).

Key Issues

In *Accounting for Sustainability: Asia Pacific Perspectives*, Lee and Schaltegger (2018) encouraged all of the book's contributors to provide their perspectives on sustainable accounting or accounting for sustainability. Some writers describe their strategy to sustainability accounting using the Brundtland Report's wide concept of sustainable development. While some use traditional accounting, others use a more practical approach to accounting for sustainability. Disagreements in perspectives may arise as a result of misunderstandings about what sustainable development stands for and how it pertains to sustainability accounting, uncovering some key troubles in the area of rich diversity, the dispersion of different goals subsumed under "sustainability," and the challenge of incorporating the perspective.

According to Schaltegger et al. (2006), while the term sustainability accounting refers to the most current information management and accounting methodologies that focus on creating and provide elevated information to help a company shift to sustainability, the term sustainability reporting refers to new formalized and structured form of communication that presents information about corporate sustainability. The objective of sustainability reporting is "to inform development of an integrated business strategy for corporate management and assess sustainability risks and opportunities inherent to investment decisions" (SASB 2017).

There are different sorts of sustainability accounting: internal and external. The internal component represents sustainability issue management, and the external component involves official reporting of these concerns, also known as sustainability reporting (Stacchezzini et al. 2016). Sustainability accounting and reporting may be described as an organization's response to managing and reporting a company's concerns related to sustainability topics in order to legitimize corporate activities through a social compact.

Sustainability accounting is a key aspect of strategic accounting, and it is a significant tool for detecting, evaluating, and managing social

and environmental hazards through recognizing resource efficiency, utilization, and cost savings. It integrates environmental and social challenges with financial potential. As a result, sustainability accounting refers to that portion of accounting that takes into consideration the actions, techniques, and systems used to record, evaluate, and report on the financial and ecological and social implications of a given economic system (e.g., the company, production site, nation, etc.). Schaltegger et al. (2006) stated that sustainability accounting examines the relationships and interdependence of social, environmental, and economic challenges, which comprise the three pillars of sustainability. Its goal is to assess companies' environmental, social, and governance performance by examining how they manage several types of nonfinancial capital related with sustainability (environmental, human, and social) and corporate governance challenges, on which they rely for long-term value development.

Finally, the purpose or objective of sustainability accounting is to provide information and statements relevant to internal stakeholders for the development of an integrated business strategy and managing corporate sustainability and to also provide information that is relevant to external stakeholders for risk assessment and opportunities inherent in investment strategies. As a result, determining the framework of strategic accounting is critical when structuring corporate sustainability accounting. On a strategic level, the complete sustainable accounting framework is supported by numerous critical components: goals, guidelines, data collection methods, accounting records, measurement procedures, reporting to stakeholders, and qualitative information attributes (Lamberton 2005).

Sustainability accounting and reporting, which cater to the gathering, analysis, and transmission of corporate sustainability information, have emerged as critical management tools for achieving corporate sustainability (Schaltegger et al. 2006). Sustainability accounting and reporting must be able to facilitate information on the company's performance and development progress in respect to all corporate sustainability difficulties, including contextual factor and

additional challenges, in order to assist management.

Sustainability accounting and reporting, which must offer the company's management with unbiased actual information and data for making triple bottom-line choices, imposes cost on organizations who undertake the conduct or practice and realization. In the economic realm, the costs should be offset by rewards that outweigh the costs in order for the spending to be justified.

In terms of participation, sustainability accounting and reporting may include corporate social responsibility (CSR) accounting, which should not only cover the company's CSR achievements, performance, and contributions but also address the information requirements or needs and disclosure of the expenses and gains associated with relevant stakeholder. Corporate sustainability is not confined to the corporate organization itself but also draws attention to the corporation's social embeddedness and the influence it has on its social environment, as a result of the wide approach and its varied contextual components.

Ecological and socio-management, as well as sustainability accounting and reporting, are typically used in tandem with traditional management method and techniques. This may result in wasted knowledge of management and business solutions where, for example, attempts to develop creative goods and other process-based improvements aimed at sustainability are not identified early enough. As a result, one of the primary difficulties for sustainability accounting and reporting is the merger of environmental and social accounting and reporting methodologies into core company management processes and systems. Corporate sustainability management, particularly sustainability accounting and reporting, is therefore pushed to reform an organization's traditional business environment through methodological and information transformation.

Schaltegger and Burritt (2010) outline six specific reasons for adopting sustainable accounting, three of which are directly connected to gaining the permission to function, including greenwashing, industry pressure, and governmental and stakeholder intimidation. Greenwashing is

depicted as a technique to boost communication activities with less engagement in significant sustainability actions, whereas industry and stakeholder pressure is seen as a reaction to urgent shareholder concerns. The other three reasons for implementing sustainability accounting are corporate responsibility, sustainability as a business case, and self-regulation, all of which need proactive participation. Accountable information is required for corporate responsibility, which may be obtained through sustainable accounting. Furthermore, sustainability accounting may aid in the justification of a corporate strategic plan and may result in cost savings or incremental income, creating a major victory scenario in terms of environmental/social and financial sustainability. The last reason is that the corporation commits to meeting specific conditions in order to avoid further necessary restrictions, often known as self-regulation.

Natural capital and ecosystem services are becoming increasingly important in sustainable accounting. Natural capital, in its most basic form, refers to holdings of environmental assets from which flows of ecosystem services contribute to human benefits. Accounting flows from natural, regenerative, and biological mechanisms are sought for by sustainability accounting (Fenichel and Abbott 2014).

Accounting for corporate sustainability challenges a new perspective that improved management and reporting systems, new accounting structures, and new data and analytical tools to better analyze and manage scarce resources and natural capital's continuous productive capability. Planning for the future, a technique of process of well-functioning organizations and governments, is simply less viable without precise accounting and reporting systems, and sustainability reporting will become part of these systems.

To begin to investigate what an account of (un)sustainability would look like, one must turn to the variety of experiments present in the business and academic literature. There are three basic ways to building a sustainability story: those that focus on indicators, those that utilize a financial narrative (financial quantification), and those that

use other nonfinancial quantitative narratives (nonfinancial quantification).

Summary

Companies must now discover a solution to make social, environmental, and economical challenges work together, as well as the importance of sustainability accounting in the process. Sustainability accounting examines the relationships and interdependence of social, environmental, and economic challenges, which comprise the three pillars of sustainability (Schaltegger et al. 2006). In terms of terminology, sustainability accounting refers to accounting methods that generate and disseminate high-quality information to help a company achieve sustainability, whereas sustainability reporting is a new standardized methodology of communicating and presenting information regarding company sustainability.

There are two reasons why the integration of sustainable accounting and reporting is critical. First, uncommunicated accounting information has no effect and hence cannot contribute to the company's long-term success. Second, reporting is necessary to validate information regarding the current state of, and progress toward, business sustainability; otherwise, the information is seen as shallow.

For meaningful contributions to corporate sustainability, sustainability accounting and reporting should be included in a structured sustainability approach to performance management. As a result, sustainability performance management could be divided into strategy and sustainability reporting that is driven by conventional accounting standard (the "inside-out perspective"), which is characterized by reporting that is planned and achieved on the basis of corporate strategy, accounting, and management performance, and sustainability accounting that is driven by an appropriate reporting methodologies (the "outside-in perspective"), which is characterized by reporting that is driven by reporting and cohesion. External rules, grading, and assessment schemes set information needs and indicators for reporting-driven, sustainable accounting, which

in turn define accounting processes and information management systems.

Sustainability accounting and performance management cannot be effective unless the societal and corporate environments are considered. Sustainability reporting has no relevance unless it is based on credible information and performance. As a result, corporate management must address stakeholder perceptions and expectations if efforts and performance gains are to be recognized and company sustainability is to be improved. This suggests that both the “inside-out” and “outside-in” viewpoints have advantages and disadvantages, and combining them may be the most beneficial.

Understanding nonfinancial risks and opportunities and demonstrating how they are managed is what CSR requires for firms. Sustainability accounting is a management tool that supports managers and other stakeholders in giving a reflection of previous performance as well as a forecast of future performance in terms of social, environmental, and financial objectives. The purpose of sustainability reporting is to promote transparency and accountability while also allowing for more knowledgeable and reliable judgment in a context where monetary and nonproblems are becoming increasingly intertwined. Unlike in the past, where the emphasis was mostly on the historical performance of indicators, the attention these days is more clearly on understanding environmental challenges and their relationship to core business. As a result, in complex business contexts, sustainability accounting becomes crucial as a key tool for organizations to grasp the complexity of business environments and build a cohesive plan to address significant challenges and deliver long-term value.

Cross-References

► [Management Accounting and Sustainability](#)

References

Ehrenfeld, J. R. (2005). The roots of sustainability. *MIT Sloan Management Review*, 46(2), 23.

- Fenichel, E. P., & Abbott, J. K. (2014). Natural capital: From metaphor to measurement. *Journal of the Association of Environmental and Resource Economists*, 1(1/2), 1–27.
- Fülöp, G., & Hernádi, B. H. (2013). Sustainability accounting: A success factor in corporate sustainability strategy. *New Challenges of Economic and Business Development*, 4(1), 229–241.
- Gray, R., Adams, C., & Owen, D. (2014). *Accountability, social responsibility, and sustainability: Accounting for society and the environment*. Edinburgh: Pearson Education Limited.
- Lamberton, G. (2005). Sustainability accounting—A brief history and conceptual framework. *Accounting Forum*, 29(1), 7–26. <https://doi.org/10.1016/j.accfor.2004.11.001>.
- Lee, K., & Schaltegger, S. (2018). *Accounting for sustainability: Asia Pacific perspectives*. Cham: Springer.
- Peršić, M., Jankovic, S., & Krivačić, D. (2017). Sustainability Accounting: Upgrading Corporate Social Responsibility. https://doi.org/10.1007/978-3-319-39089-5_15.
- SASB (Sustainability Accounting Standards Board). (2017). SASB Conceptual Framework. <https://www.sasb.org/wp-content/uploads/2019/05/SASB-Conceptual-Framework.pdf>. Accessed 4 January 2020.
- Schaltegger, S., & Burritt, R. (2010). Sustainability accounting for companies: Catchphrase or decision support for business leaders? *Journal of World Business*, 45(4), 375–384. <https://doi.org/10.1016/j.jwb.2009.08.002>.
- Schaltegger, S., Bennett, M., & Burritt, R. (2006). *Sustainability accounting and reporting*. Dordrecht: Springer.
- Stacchezzini, R., Melloni, G., & Lai, A. (2016). Sustainability management and reporting: The role of integrated reporting for communicating corporate sustainability management. *Journal of Cleaner Production*, 136, 102–110. <https://doi.org/10.1016/j.clepro.2016.01.109>.

Sustainability Accounting Standards Board (SASB)

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Definition

The Sustainability Accounting Standards Board (hereafter SASB) is a nonprofit organization

founded in 2011 that develops industry-specific sustainability accounting standards for the production of information on material nonfinancial topics for US investors. Currently, SASB has produced sustainability accounting standards covering material issues for 77 industries that operates in ten different sectors. SABS aims that its standards will be integrated into listed companies' filings to the Securities and Exchange Commission. This chapter provides a brief description of SASB as an organization and its governance structure. Afterward, it summarizes the key characteristics of the process that SASB follows to develop the standards. This process is based in industry expert feedback and public consultation. The chapter concludes with some guidance offered by SASB on how firms should apply their guidelines when producing disclosures on material social, environmental, and governance topics.

Introduction

The Sustainability Accounting Standards Board (hereafter SASB) is a nonprofit organization that produces sustainability accounting standards that guide firms to report on environmental, social, and governance material topics for investors within a specific industry. SASB was founded in 2011 with the purpose of offering the providers of financial capitals, mainly investors, information that allows them to evaluate the nonfinancial impacts of the corporations in which they invest or plan to invest. As acknowledged in its webpage, SASB expects to help the decision-making process of investors by promoting a "shared understanding of companies' sustainability performance" and increase long-term value creation by promoting sustainability.

In contrast to previous global international initiatives for the elaboration of sustainability disclosures, such as the Global Reporting Initiative or the International Integrated Reporting Council, SASB focuses on US listed companies (Flasher et al. 2018). Specifically, it seeks that its sustainability accounting standards will be integrated into the 10-K and 20-F mandatory filings of the

Securities and Exchange Commission (hereafter, SEC). The organization has the accreditation of the American National Standards Institute that guarantees that its sustainability accounting standards are developed through an open, balanced, consensual, and due process (Khan et al. 2016).

Another significant difference with respect to Global Reporting Initiatives is the targeted audience of the information produced with the standards. While the Global Reporting Initiative Standards aims to elaborate useful information to firms' key stakeholders, SASB, similarly to the International Integrated Reporting Council, focuses on producing disclosures that are relevant for the participants of capital markets. This is consequent to the growing relevance of certain social and environmental topics for investors, as shown in the increasing number of CSR resolutions submitted by activist shareholders (Proffitt and Spicer 2006). In this regard, SASB covers those particular nonfinancial issues that could end up in having an impact in the financial performance of firms.

SASB Organizational Structure

SASB is dependent on the Sustainability Accounting Standards Board Foundation (hereafter SASB Foundation). Similarly to Financial Accounting Standards Board and the International Accounting Standards Board, the SASB Foundation has a dual governance structure: the SASB Foundation's Board of Directors and the Standards Board. On the one hand, the SASB Foundation's Board is the governance board. It is in charge of deciding strategic and operational issues. It is also responsible for monitoring the Standards Board and nominating its members. On the other hand, the Standards Board is the technical board, and it is in charge of the standard-setting process itself.

As stated in its webpage, the SASB Foundation gets no governmental funding. Its financial resources come from two different sources: (i) contributions from private individual, firms,

and philanthropic entities and (ii) commercial activities (e.g., publications, training, etc.).

Sustainability Accounting Standards and the Standard-Setting Process

The sustainability accounting standards cover material topics for investors that are industry-specific. As of November 2018, SASB has produced standards with suggested metrics for 77 industries across 11 sectors. The standards are considered to be easy to be implemented by companies.

The standards are included in the SASB Materiality Map. The SASB Materiality Map is an interactive tool that identifies material topics for each specific sector and industry. Once that companies determine their material topics using the Map, they can download the corresponding standard to report on them.

Each standard provides explanations on three areas. Firstly, it offers accounting metrics for the material industry-specific issues. Secondly, it includes a technical protocol that guides firms for the compilation of data. Finally, it also provides metrics for normalization (SASB 2018).

SASB's standard-setting involves a five-phase process. In the first and second phases, SASB gathers feedback from research and expert consultation, respectively (Lee et al. 2018). Afterwards, in the third phase, the outcome of the two initial phases is subject to a technical analysis by specific industry-working groups. During these three phases, SASB performs a materiality test to identify which are the material topics for the industry. Khan et al. (2016) describe the way in which SASB conducts this test that consists of three elements: the interest test, the financial impact test, and the forward-looking test. The interest test evaluates the relevance of an issue through (i) a keyword search in Bloomberg as well as in SEC filings and documents and (ii) the assessment of the industry-working group participants. The financial impact test evaluates the influence of a topic on the financial situation and performance of firms. This test relies on investor

and market data and news. Finally, the forward-looking test evaluates the likelihood of the future financial impact of a topic that fails to meet the financial test but that could be material for financial capital providers. The outcome of phase 3 is an exposure draft (fourth phase, which is open to public consultation for 90 days during the fifth phase). The final standard is published considering the feedback obtained during this consultation period and after the review of the Standards Board. SASB allows the possibility of updating the standards to make changes and adjustments (Khan et al. 2016).

The composition and functioning of the industry-working groups is described in SASB industry-working groups due process report (SASB 2015). These groups include members from three different types of stakeholder groups with experience in the specific industry: financial statement preparers, information users, and public constituencies (Flasher et al. 2018). The feedback from the industry-working group is collected by means of an online survey and outreach consultation (Khan et al. 2016).

Application of the Sustainability Accounting Standards

SASB published a document that offers guidance on how companies should apply the standards (see SASB 2018). The standards distinguish three types of elements. Elements introduced by the term “shall” are required should the company seek their disclosures to be considered in accordance with the SAB standards. Elements introduced by the term “should” offer recommended guidance. Finally, elements introduced by the term “may” offer optional guidance.

Regarding the reporting boundaries to be considered when compiling data, SASB states that the firm should consider the same entities that are included when producing consolidated financial statements.

In relation to the reporting format, SASB provides the following suggestion when applying the standards. First, the financial data included in

nonfinancial disclosures should be aligned with the data provided in the financial statements. Second, metrics should be normalized and be expressed in the International System of Unit so that an adequate comparison and benchmarking is enabled. Third, the firm should also describe the uncertainty related to the reporting of certain aspects, as well as the estimates used for measuring certain elements. Fourth, the information provided should be referenced to the firm's fiscal year.

Finally, SASB allows firms to omit disclosure topics or specific metrics, as well as to make change to metrics. However, both omissions and changes should be disclosed as well as their justification.

Cross-References

- [Corporate Social Responsibility Reporting](#)
- [CSR Communication](#)
- [Global Reporting Initiative](#)
- [Integrated Reporting](#)
- [Reporting](#)
- [Reporting Framework](#)
- [Sustainability Report and Sustainability Reporting](#)

References

- Flasher, R., Luchs, C. K., & Souza, J. L. (2018). Sustainability assurance provider participation in standard setting. *Research in Accounting Regulation*, 30(1), 20–25.
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697–1724.
- Lee, S., Kim, B., & Ham, S. (2018). Strategic CSR for airlines: Does materiality matter? *International Journal of Contemporary Hospitality Management*, 30(12), 3592–3608.
- Proffitt, W. T., Jr., & Spicer, A. (2006). Shaping the shareholder activism agenda: Institutional investors and global social issues. *Strategic Organization*, 4(2), 165–190.
- Sustainability Accounting Standards Board (SASB). (2015). SASB industry working groups due process report, infrastructure sector. Available at <https://www.sasb.org/wp-content/uploads/2015/09/INF-IWG-Due-Process-Report.pdf>
- Sustainability Accounting Standards Board (SASB). (2018). SASB standards application guidance. Available at <https://www.sasb.org/wp-content/uploads/2018/11/SASB-Standards-Application-Guidance-2018-10.pdf>

Sustainability and Community-Based Organizations

- [Sustainability and NGOs](#)
-

Sustainability and NGOs

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Synonyms

Pressure groups; Social movement actors and local-community actors; Sustainability and community-based organizations; Sustainability of anti-market environmentalists; Sustainability of civil-society organizations; Sustainability of non-profit organizations; Sustainability of the third sector

Definition

Non-governmental organization (NGO) is an umbrella term to define many organizations ranging from transnational federations to grassroots or community-based organizations at local, national, or even global levels. It includes any independent voluntary group of people acting together on a continuous basis for some social, cultural, legal, or environmental common purposes, other than making money or illegal activities. Sustainability in the framework of NGOs has two perspectives. Firstly, sustainability of NGO means being able to survive so that the NGO can continue to serve its constituency and fulfil its commitments to the

community within which it operates. In order to sustain itself, an NGO must ensure a flow of social, financial, and human resources. From the second approach of meaning, sustainability of an NGO underlines the NGOs role in improving sustainability practices of business organizations.

Introduction

Non-governmental organizations (NGOs) have existed in various forms for many centuries, but the term “NGO” was first used in the United Nations’ (UN) Charter in 1945 to differentiate it from international private organizations. Although there is no generally accepted definition for NGOs, they can be defined as social, cultural, legal, and environmental advocacy groups that have noncommercial goals (Toker 2013) and that are independent from government, party political, and economic actors and not engaged in criminal or violent activities. In another definition, an NGO is classified as a commercial entity that earns the majority of its revenue through projects or donations, relying primarily on outside sources of funding (Hansmann 1980). NGOs are mostly established for “charitable purposes to assist with social and community development, providing services free of charge to beneficiaries and gains capital through donations and grants” (Willets 2002). Their functions include public health and safety; education; charity; the provision of food, clothing, and shelter; labor; sports; politics; religion; advocacy; philanthropy; business support; and civil rights.

The second term sustainability is no longer a new buzzword in business; rather, it is something that many companies in various industries have begun to take very seriously. The term, which was first used in the UN’s Brundtland Report in 1987, refers to action that “meets the needs of present without compromising the ability of future generations to meet their own needs” (Brundtland et al. 1987, p. 16). That is, society must use more of a resource than can be regenerated. Sustainability is a broad concept that encompasses regulations, systems, ratings, trends, and developments in

business ethics, corporate social responsibility, reputation management, and accountability.

The term sustainability also includes “the acceptance of any costs involved in the present as an investment for the future” (Crowther 2012). The word is mostly used within the framework of sustainable development and concerned with the effects that actions taken in the present have on the options available in the future. The issue of sustainability has risen to prominence recently, not just in business and academia, but in popular consciousness as well. It has been popularized in the general community by talking about carbon footprints. Businesses, too, are making statements about their aims for carbon neutrality.

Sustainability in relation to an NGO has two dimensions. Firstly, it relates to the social and financial survival of the NGO which can fulfil its commitments to the society. Secondly, sustainability of NGOs also highlights the ever increased NGOs role in improving sustainability practices of business organizations.

The Relationship of Sustainability with NGOs

Marshall McLuhan’s declaration that we live in a global village (1967) in which technology connects everyone has become a motto to explain our relationship with the internet and social media. Today, governments and nation states are becoming less important, while multinational companies operating in a global environment have become more powerful and able to draw the boundaries of our village. However, technology has also opened up business to public scrutiny and empowered individuals as customers and concerned citizens. This is thus an era of power redistribution, which has resulted in increasing concern with ethics, human rights, and environmental issues. A concern for sustainability highlights the triple bottom line – Brundtland’s three pillars of economic, environmental, and social – and their equal importance.

The relation of sustainability and NGOs has two aspects. Firstly and generally sustainability of

an NGO means its survival as an organization in the society. Secondly, the term sustainability of NGOs refers to the increasing role and relation between the NGO and actions of companies in the field of sustainability. Since sustainability is a complex subject that is not only related with physical environment, NGOs these days are evaluated with NGO sustainability index which monitor an NGO across seven interrelated dimensions ranging from legal, environmental, financial capacity to infrastructure, advocacy, and even public image.

Since the 1990s, due to the collaboration of business and NGOs in sustainability-related issues, a growing number of leading companies are taking the challenge of sustainability seriously, with reducing their environmental footprint and bolstering their reputations but also improving operations and financial performance. In ecosystem challenges, business mostly partners up – with governments, investors, local communities, NGOs, and other companies as joint ventures – often with multiple parties. The Marine Stewardship Council (MSC) is a good example for the NGO and business collaboration in the sustainability topic. It is a partnership that sets standards for the fishing industry, struggled in its first few years with high staff turnover and unstable funding. In the past decade, however, it has become a force. Its certification standards cover 10% of the global seafood harvest, and almost a quarter of global shoppers recognize the MSC label. This covers more than 20,000 products sold in over 100 countries (Albani and Henderson 2014).

“Grow Africa” is another good collaboration example between the World Economic Forum and the African Union to enhance food security in Africa. It is a public-private partnership platform established in 2011 which focused on increasing private investment in African agriculture. And in 2012, US President Barack Obama threw the G8’s weight behind this partnership approach for African agriculture by announcing the New Alliance for Food Security and Nutrition. By the end of 2012, the G8’s New Alliance and Grow Africa worked closely to secure more than \$3 billion in private-sector investment commitments from

nearly 50 local and global companies (Albani and Henderson 2014).

The third example is the collaboration success between Unilever and the World Wildlife Fund (WWF) in 1997 committed to the clear goal of encouraging sustainable fishing practices (Albani and Henderson 2014). The partners, using the successful Forest Stewardship Council (FSC) as an example, started by consulting with stakeholders such as commercial fishermen, governments, and environmental organizations. Only then did they design the standards for what constituted sustainable fishing practices and seafood traceability; these are reviewed on a regular basis. In 1999, the MSC began operating as an independent nonprofit, free of Unilever’s and WWF’s control, and it is changing the fishing industry beyond the 10% of fisheries that have signed up (Albani and Henderson 2014). Over time, as trust and confidence build and as the group moves from design to institutionalization, a successful collaboration can and should phase out the facilitator. Ideally, individuals who started out as representatives of companies with competing interests become a cohesive group working toward a common goal of sustainability.

Thus, sustainability mostly refers human impacts on nature, environment, and the resource base shortly called people, profit, and planet (Elkington 1998). There are financial, environmental, and social aspects to the issue. Research starting as early as 1999 has looked at sustainability from five different angles: **consumer** sustainability, **firm/organization** sustainability, **societal** sustainability, **laws and regulations** defining sustainability, and **scholarly** defined sustainability (McDonagh and Prothero 2014). Consumer sustainability deals with individual sustainability issues, consumer behavior and practices, values, and preferences in sustainable consumption. Organizational sustainability researchers investigate the sustainability practices of firms and markets. Marketing communication, promotional activities, product development, and design also fall within this field, which conceptualizes and reframes sustainability in terms of institutional, social, and system perspectives, while theorizing the concept of sustainability. The investigation of

sustainability in relation to laws and regulations explores legislation about sustainability within a society, such as environmental laws, regulations, and public policies. The last area of sustainability research deals with a spectrum of sustainability-related issues to provide a broad literature review (Yüksel and Çalıyurt 2017, p. 288).

Regarding NGOs, sustainability primarily means “being able to survive so that the organization can continue to serve its constituency and fulfil its commitments to its supporters and the community in which it operates” (Weerawardena et al. 2010). NGOs emerge to satisfy a need that neither business nor public sectors can satisfy (Etzioni 1972). Theoretically, an NGO is neither financially sustainable using a for-profit business model nor receiving sufficient public support to move governments to action (Hansmann 1980; McDonald 2007). Yet despite these fundamental challenges, the nonprofit sector has become larger than ever and continues to grow in an increasingly competitive environment. The bulk of research in the field is focused on balancing money and mission as primary issue in managing NGOs. An NGO must “ensure a flow of resources in order to sustain itself through earned income, governmental support and private donations” (Bryson et al. 2001; Valentinov 2008). Thus, financial sustainability is crucial for the long-term survival and effectiveness of all types of international NGOs. The challenge to achieve such levels of financial sustainability of an NGO depends on its ability to diversify income and access new funds.

Sustainability is also a controversial topic because it means different things to different people. Firstly, there is a general acceptance that sustainability is synonymous with sustainable development, which attempts to bridge the divide between economic growth and environment protection. However, sustainability also refers to “the ability to continue in an unchanged manner or development in a sustainable manner” (Hart and Milstein 2003). Secondly, a sustainable organization can survive merely by recognizing environmental and social issues and incorporating them into its strategic planning. These perceptions consider sustainability as a two-dimensional environmental and the social approach. There are four

aspects of sustainability that need to be recognized: **societal influence**, which defines the impact of society on organization; **environmental impact**, which defines the effect of the organization’s actions of the upon its geophysical environment; **organizational culture**, the relationship between the organization and its internal stakeholders, particularly employees; and **finance**, providing an adequate return for the level of risk undertaken (Crowther and Seifi 2017, p. 20).

Although sustainable development is often discussed as an environmental issue concerned with resource depletion or energy consumption, it is actually a much broader concept concerned with economic, environmental, and social policy. It should not only be considered for its contribution to financial performance measures but is a value-added activity from both organizational and consumer perspectives. Ethics and business ethics play an important role in understanding the importance of sustainability. Future sustainability research should take this holistic approach into consideration as these three pillars have not yet been treated as equal, with economic sustainability particularly neglected. While there are many answers to the question of sustainability, it is important to ask the right questions to find the most appropriate answer. Sustainability-related debates are relevant to all of stakeholders, whether as consumers, employees, investors, citizens, or managers of future generations.

Sustainability was initially considered a “fad,” but economic crises show that being sustainable means surviving. Sustainability protects the organization against economic crises, environmental disasters, pollution, global warming, and energy shortages, improves staff loyalty, and raises share value. To create a sustainable environment, we must train people from different disciplines and urge them to learn more about sustainability issues in their own areas. Accordingly, many companies have recently created the position of “sustainability director,” which is a clear indication of the concept’s emergence in the business world.

Today, many firms worldwide monitor their business operations in terms of social, environmental, and sustainability practices because the CSR and sustainability have become a public

interest issue in the last 20 years (Sen and Bhattacharya 2001). A growing consumer movement, which first gained power after the 1960s, has developed organized and collaborative campaigns worldwide, which have influenced how firms perceive and engage with CSR. Through their CSR activities, NGOs participate in the sustainability actions of business. For example, Greenpeace's campaigns targeting unsustainable environmental practices have attracted attention to sustainability. Moreover, these collective actions have been shared on blogs and social media to influence companies' response strategies. Thus, sustainability involves a holistic process of continuity, competence, efficiency, resourcefulness, and responsibility, which provides benefits for all stakeholders. By following sustainable practices, an organization may reduce its energy, water, waste, and materials costs. Sustainability programs should be embedded into all levels of organizations, aligned with all other strategy and plans, and audited systematically.

The NGO sustainability these days has become more institutionalized. There is an NGO sustainability index which assigns scores to NGOs according to seven interrelated dimensions. These criteria are related with legal, organizational, and financial capacity of an organization. However organizational dimensions are important, NGO sustainability index also monitors advocacy, service, infrastructure, and public image performance of an NGO to assign them as a viable organization. Sustainability is a complex, interlinked subject that is not restricted to the physical environment. NGOs confronted with increased competition must reflect on the strategies to follow to achieve greater organizational sustainability. NGOs can adopt entrepreneurial strategies to increase sustainability, as can for-profits. Successful nonprofits are also constantly vigilant to reduce costs over the long term, as can for-profits. Both can seek mutually beneficial alliances to achieve their broader cost-related goals.

Summary

Non-governmental organizations (NGOs) or "civil society organizations" are any nonprofit,

voluntary citizens' groups organized on a local, national, or international level. NGOs perform a variety of services and humanitarian functions, bring citizen concerns to government attention, advocate and monitor policies, and encourage political participation through provision of information. As governments have lost power compared to corporations, NGOs and civil society groups have stepped in as a monitoring and enforcing actors of social and environmental standards. This enormous power shift also gives an opportunity to NGOs to become important actors, in both the social and economic sphere.

The term sustainability has different meanings and concerns for NGOs. From one aspect, it is related with financial viability or long-term economic growth; from another aspect, it is about environmental sustainability and addressing issues of climate change, population growth, and resource imbalances. Sustainable NGOs are those which are able to respond strategically and effectively to such external changes. They revise their mission and objectives accordingly, access new sources of income, and adapt their systems and processes to meet the new challenges. New methodologies are being developed to identify and assess the organizational characteristics of effective and sustainable NGOs. Commonly, these are based on an assessment of core attributes such as leadership capabilities and management competencies, the capacity to deliver specific services (health, education, etc.), or the ability to pay salaries and cover running costs. But increasingly they also include analysis of an NGO's ability to anticipate and handle change, in particular adapting to changes in the external environment and the consequences of such changes on their income as well as aging or outdated systems and processes. The trend seems to be one of developing greater independence and resilience through diversifying income sources and a willingness to explore more entrepreneurial routes to financial sustainability.

Not very long ago, the dividing line between business, NGO, and society appeared clearly drawn. Sustainability, as a core concept of strategic management, lies on this border. It is a new term to highlight human impacts on nature, environment, and resource base. Through a sustainability approach, the business world has tried to

understand, learn, and implement this concept in their management function. Faced with increasing social and economic problems, business has adopted more sustainable and socially responsible ways of doing business to adopt a corporate responsibility, which defines a firm's involvement in sustainability and social responsibility actions (Türker and Toker 2017, p. 161).

Today, there is a growing concern on economic development and sustainability. The term sustainability refers to financial, environmental, and social aspect of the issue. Regarding NGOs, sustainability primarily means being able to survive so that the organization can continue to serve the society. In a narrow sense, an NGO must ensure a flow of resources to survive.

The NGO sustainability index analyzes and assigns scores across seven interrelated dimensions: legal environment, organizational capacity, financial viability, advocacy, service provision, infrastructure, and public image. Sustainability is a complex, interlinked subject that is not restricted to the physical environment. NGOs confronted with increased competition must reflect on the strategies to follow to achieve greater organizational sustainability. NGOs can adopt entrepreneurial strategies to increase sustainability, as can for-profits. Successful nonprofits are also constantly vigilant to reduce costs over the long term, as can for-profits. Both can seek mutually beneficial alliances to achieve their broader cost-related goals.

Cross-References

- [Corporate Citizenship](#)
- [Corporate Responsibility](#)
- [Corporate Responsibility Index](#)
- [Corporate Social Responsibility](#)
- [Philanthropic CSR](#)
- [Philanthropy](#)
- [Stakeholder Engagement](#)

References

- Albani, M., & Henderson, K. (2014). Creating partnerships for sustainability. *McKinsey Insights*. <https://www.mckinsey.com/business-functions/sustainability/our-insights/creating-partnerships-for-sustainability>. Accessed 21 Apr 2019.
- Brundtland, G. H., Khalid, M., Agnelli, S., Al-Athol, S. A., & Chidzero, B. (1987). Report of the world commission on environment and development: Our common future, UN General Assembly. <http://www.un-documents.net/our-common-future.pdf>. Accessed 25 Feb 2018.
- Bryson, J. M., Gibbons, M. J., & Shaye, G. (2001). Enterprise schemes for nonprofit survival, growth, and effectiveness. *Nonprofit Management & Leadership*, 11(3), 271–288.
- Crowther, D. (2012). *A social critique of corporate reporting. Semiotics and web-based integrated reporting*. Farnham: Gower.
- Crowther, D., & Seifi, S. (2017). The flawed logic of sustainable development. In K. Çaliyurt & Ü. Yüksel (Eds.), *Sustainability and management: An international perspective* (pp. 11–27). New York: Routledge.
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of the 21st century*. Gabriola Island: New Society Publishers.
- Etzioni, A. (1972). The untapped potential of the 'Third sector'. *Business & Society Review*, 1(Spring), 39–44.
- Hansmann, H. B. (1980). The role of nonprofit enterprise. *Yale Law Journal*, 89(5), 835–901.
- Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Executive*, 17(2), 56–67.
- McDonagh, P., & Prothero, A. (2014). Sustainability marketing research: Past, present, and future. *Journal of Marketing Management*, 30(11–12), 1186–1219.
- McDonald, R. E. (2007). An investigation of innovation in nonprofit organizations: The role of organizational mission. *Nonprofit and Voluntary Sector Quarterly*, 36(2), 256–281.
- McLuhan, M. (1967). *The medium is the message: An inventory of effects*. London: Penguin.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38(2), 225–243.
- Toker, H. (2013). NGOs and CSR. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 1759–1761). Berlin/New York: Springer.
- Türker, D., & Toker, H. (2017). Integrated sustainability and social responsibility communication. In K. Çaliyurt & Ü. Yüksel (Eds.), *Sustainability and management: An international perspective* (pp. 161–173). London/New York: Routledge.
- Valentinov, V. (2008). The economics of nonprofit organization: In search of an integrative theory. *Journal of Economic Issues*, 17(3), 745–761.
- Weerawardena, J., McDonald, R. E., & Mort, G. S. (2010). Sustainability of nonprofit organizations: An empirical investigation. *Journal of World Business*, 45, 346–356.
- Willets, P. (2002). *What is a non-governmental organization?* UNESCO encyclopaedia of life support systems.

Institutional and infrastructure resource issues. Article 1.44.3.7. London: City University.

Yüksel, Ü., & Çaliyurt, K. (2017). Re-visiting sustainability: An overview of sustainability and collective actions. In K. Çaliyurt & Ü. Yüksel (Eds.), *Sustainability and management: An international perspective* (pp. 288–294). New York: Routledge.

Sustainability and Profitability

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Synonyms

Overcoming Trade-Offs

Definitions

In traditional business, there has long been a trade-off thinking between sustainability and profit. However, this paradigm is currently in flux. Issues such as the extinction of species or climate change are increasingly also seen as economic challenges. So, companies increasingly see themselves as part of society and see this role as an opportunity to impact positively

At the same time, rethinking and seeing an entrepreneurial opportunity in this change represent a significant challenge. However, this is the basis of sustainable business models - overcoming the dichotomy of profit and sustainability.

An important aspect is the combination of social and or ecological as well as economic effects. Sustainable companies that are not economically successful will not be able to stay in the market. Similarly, it is becoming increasingly apparent that companies without a social/ecological impact are less and less successful economically. This social/ecological effect can arise because negative is avoided and/or positive values are created

The positive economic effects of such sustainable companies are now also recorded by

international studies. Thus, it was shown that increased sustainability has a positive effect on the economic future, and competitive advantages can be secured. These advantages can be seen above all in employee satisfaction, the reduction of corporate risks, increases in sales, increased customer loyalty, and the employer brand's strengthening

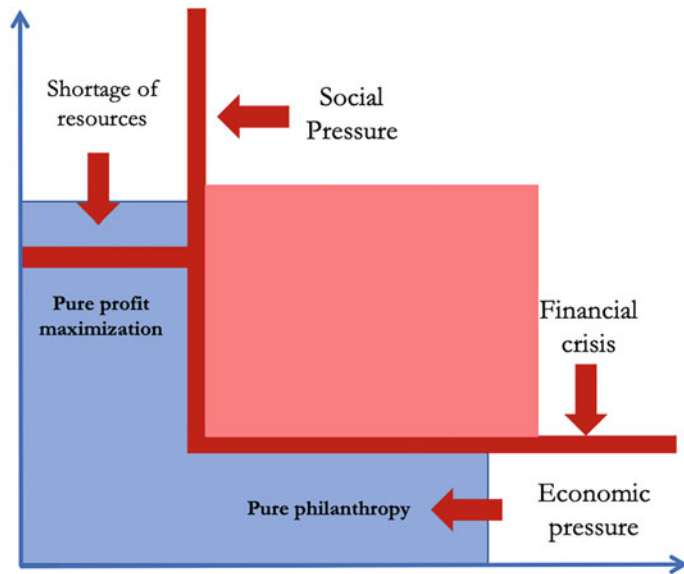
Current Business Models Are Coming under Pressure

To the question “profit or sustainability?”, the same answer is increasingly coming from business practice as well as academia: “Both!” Thus, a strong dynamic can currently be observed in large- and medium-sized companies. For years, the economic principle of pure profit maximization was considered sacrosanct, but this seems to be coming to an end. In the same way, society’s view of business is changing. Trust in the ethically correct actions of economic and political actors is increasingly declining. However, it is not only institutions that are being criticized; entire economic systems and countries are also losing trust in ethical correctness. So, it is not surprising that society sees change as inevitable [see (Edelman., 2019) (Edelman., 2020) (Edelman., 2021)]. More and more companies recognize that the planet is changing rapidly and that issues such as climate change or species extinction directly threaten life on planet earth. Accepting these challenges as a company and seeing them as an opportunity represents a new paradigm - entrepreneurial success through sustainability.

Sustainability is increasingly equated with future viability. Companies that refuse to embrace sustainable transformation will not be successful in the long term. In addition to the social issues, it is above all the ecological challenges that play a significant role. In contrast to traditional forms of business risk, social and ecological risks manifest themselves over a more extended period and lie outside the company’s active control radius. Thus, companies will be affected in different dimensions (e.g., by climate change). Therefore, risk management requires making investment decisions for longer-term capacity building and developing adaptation strategies (CDP, 2016).

Sustainability and Profitability,
Fig. 1 Current business models under pressure

Current business models are coming under pressure



For this reason, companies are increasingly under pressure to integrate the assessment of the critical environmental and social opportunities and risks of their investments into future earnings potential (Oekom, 2018). In addition to these factors, however, the business itself is also pushing for more sustainability. CEOs of global corporations and asset managers state that sustainability is essential to the success of companies and that sustainability contributes to profits [see (Winston, 2019), (BlackRock., 2021)].

Because it is clear that only those companies that also generate a benefit for their environment are successful in the long term. Furthermore, only these companies are attractive for future cooperation, such as employees, customers, investors, or other actors in the economy (Whelan & Fink, 2016) (Fig. 1).

Inclusive Growth through Sustainable Entrepreneurship

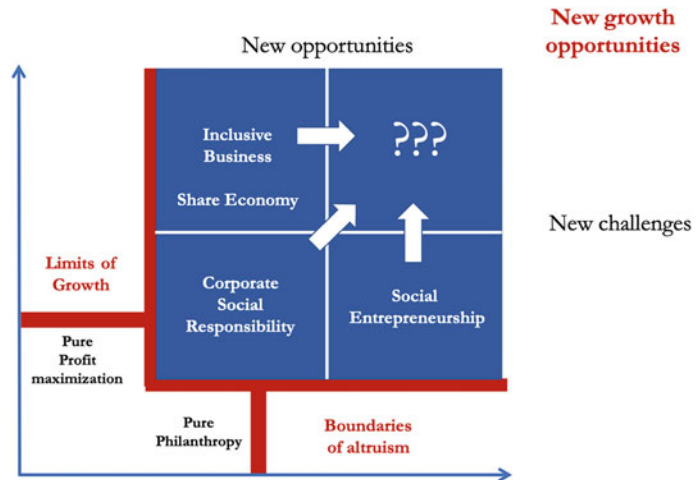
Successful companies of the twenty-first century are characterized by the fact that they have overcome the trade-off thinking between sustainability

and profit. Furthermore, these entrepreneurs think of the present from the future by integrating sustainable management into the company's strategy. In this way, they try to fulfil the desired positive future impact on society with a current business model, consisting of a combination of social, ecological, and economic components.

Currently, it is mainly recently founded companies which try to combine these two dimensions, "public welfare-oriented commitment" with "classic entrepreneurship" and thus create social entrepreneurship. It usually happens due to the desire to combine the meaningfulness of work and receive money for their own life design. Besides, the limits of growth as well as the limits of altruism form a limit for an economy based on pure profit maximization and pure philanthropy.

An important factor is the reorientation of management systems. Sustainable management must be integrated into the corporate DNA. This integration is the fundamental difference to the "old" CSR concept, in which sustainability stands exclusively next to the actual business activities without being included in the central business activities.

Sustainability and Profitability,
Fig. 2 New growth opportunities



Several industries have already experienced that overcoming the old trade-off between sustainability and profit is financially profitable and sustainable. For example, business models based on sustainable innovations showed new growth opportunities for entrepreneurs. By integrating good public components, incumbent corporations and companies are being driven from their position as market leaders. Many examples can be found, starting with the automotive industry in terms of alternative driving technologies, community-based knowledge portals, sharing economy in the accommodation industry, and sustainable online search engines (Fig. 2).

What Does this Mean for our Economy?

Instead of the profit maximization that had been pursued for decades, comprehensive value creation for all stakeholders and a positive impact on society are becoming the primary corporate goals. In doing so, leading managers fundamentally challenged the previous business paradigm of “shareholder value” in 2019 (the declaration of 181 American CEOs).

Empirical studies show that companies that integrate vital sustainability issues into their business model are more successful. Business potentials such as improving the employer brand, increasing the attractiveness of a company on the financial market,

or merely the vast market potential of sustainable products have spread to the boardrooms and strategy departments. Furthermore, politicians are also proactively shaping a new economic framework. As part of the European Union’s “Green Deal,” more and more companies are being guided toward greater sustainability.

To successfully deal with these “new” stakeholder demands, a “sustainable business transformation” is needed. Successful entrepreneurs are already showing how the classic dichotomy between economic success and sustainable development can be overcome. They are developing integrated management approaches that measure and control the company’s impact to create equal value for all stakeholders along the entire value chain.

References or Further Readings

- BlackRock. (2021). BlackRock. Von <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>. abgerufen.
- CDP. (2016). BSR. Von <https://www.bsr.org/en/our-insights/report-view/bsr-cdp-climate-change-supply-chain-report-2015-2016> abgerufen.
- Edelman. (2019). Edelman Trust Barometer. Von <https://www.edelman.com/trust/2019-trust-barometer>. abgerufen.
- Edelman. (2020). Edelman Trust Barometer. Von <https://www.edelman.com/trust/2020-trust-barometer>. abgerufen.

- Edelman. (2021). Edelman Trust Barometer. <https://www.edelman.com/trust/2021-trust-barometer>
- Oekom. (2018). ISS-Oekom Research. Von <https://www.issgovernance.com/file/publications/cr-review-2018-en.pdf>. Abgerufen.
- Whelan, T., & Fink, C. (2016). Harvard business review. Von <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability>
- Winston, A. (2019, September 24). Harvard business review. Von <https://hbr.org/2019/09/what-1000-ceos-really-think-about-climate-change-and-inequality>. abgerufen.

Sustainability and Renewable Energy

► Sustainability and Solar Energy

Sustainability and Solar Energy

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Synonyms

Environmental and social viability of solar energy; Financial; Survival of solar energy; Sustainability and renewable energy; Sustainability and solar power; Sustainable development of solar energy

Definition

The word sustainability is derived from Latin and today the term sustainability refers accepting any costs involved in the present as an investment for the future. Another definition refers sustainability as maintaining the use of natural resources with considering the future generation and their needs (Kazmi 2020). This concept, which is mostly used

within the framework of sustainable development, is concerned with the effects that present actions have on the options available in the future and associated with ecological, social, and economic sustainability (Jeronen 2020). The second term, solar energy refers to the freely available and practically inexhaustible energy supply produced by radiation from the Sun.

Introduction

Sustainability highlights human impacts on the natural environment and the resource base known as 3P: people, profit, and planet (Elkington 1998). The term implies the acceptance of any costs involved in the present as an investment for the future (Crowther 2012). Sustainability is a controversial topic because it means different things to different people. Mostly used within the framework of sustainable development, it is concerned with the effects our present actions have on future options. Sustainability has risen to prominence recently among the general community through debates about decreasing carbon footprints while some companies have announced their intentions to achieve carbon neutrality in their production processes.

Due to concerns about climate change and global warming, there is worldwide acceptance about the close connection between a sustainable future and sustainable development, and their connection with sustainable energy sources, which has gained importance in the last 20 years. Today, energy is a central issue globally in nearly every human challenge and opportunity. Access to energy is essential, for example, providing jobs and incomes, climate change, or food production. It is especially important to work toward supplying affordable and clean energy, which is the seventh of 17 Sustainable Development Goals (SDG) as it links with other SDGs.

Today, the sustainable development agenda dominates environmental concerns about climate change. The Paris Agreement, implemented in 2016, is the most powerful current mechanism to

strengthen the global response to this threat. It aims to limit global warming to 1.5 °C to achieve more sustainable and equitable society. One hundred and seventy-five Parties (174 states and the European Union) signed the agreement on the first date it was open for signature, and 10 developing countries had submitted their national adaptation plans to decrease the effect of climate change in their countries (UNCC 2021). The society, business, and even school children are more aware of the threat of global warming. There have been many conferences, employee information seminars, street protests, and even “school strikes,” inspired by 16-year-old Swedish activist Greta Thunberg, which gathered hundreds of thousands of students in more than 100 countries (Murphy 2019).

The Concept of Sustainability and Solar Energy

There is a general acceptance that sustainability is synonymous with sustainable development, which refers to efforts to bridge the divide between economic growth and environmental protection. Sustainability is described as a paradigm for thinking the future in consideration with environmental, societal, and economic aspects of an issue, but sustainable development refers to a holistic approach that ends with sustainability (Jeronen 2013). However, sustainability is a broader term referring to the possibilities of continuing in an unchanged manner or developing in a sustainable way (Hart and Milstein 2003). Sustainable development is focused on the preservation of the natural ecosystems and on the rational use of the natural treasures of the Earth. Thus, the concept is oriented toward upgrading life and environment quality by preserving nature and extending its use with reproduction. The main argument is that uncontrolled and overuse of natural resources damages the ecological balance and leads to ecological disasters. The basic principle of sustainable development is to use those natural resources that we can reproduce. Therefore,

sustainability comprises several aspects: energy consumption, population, agriculture and biodiversity, global warming and contamination, equality in the use of resources, and urbanism. Sustainable development is often discussed as an environmental issue regarding resource depletion or energy consumption, although it is a much broader concept related with economic, environmental, and social policy areas. There are four aspects of sustainability that need to be recognized: **societal influence**, which is the impact of society on organizations; **environmental impact**, which defined “the effect of the actions of the organisation upon its geophysical environment; **organizational culture**, which is defined as relationship between the organization and its internal stakeholders, particularly employees; **finance**, which is referred as providing an adequate return for the level of risk undertaken” (Crowther and Aras 2008, p. 47).

The Industrial Revolution was based on the consumption of great quantities of energy. Energy consumption was used as a measure a country's level of development. Today, however, two centuries later, with the emergence of industry and increased energy consumption, the problem of the quality of environment is becoming as serious as development. The environmental concerns of global warming, climate change, and ozone depletion have raised awareness regarding the use of sustainable energy forms, such as the Sun and wind. Sustainable energy is long-lasting with much less emission of polluting gases. Examples are the Sun, wind, and geothermal energy, which are environmentally friendly, renewable energy forms, compared to classical sources like wood, coal, oil, and water. Today, renewable resources represent less than 1% of total electricity production. The Sun offers the cleanest and the most accessible source of energy as its irradiation is free (Toker 2015). Solar energy comes from the Sun; one star among 400 billion stars in the Milky Way Galaxy, and contains more than 99% of all matter in the Solar system. Its energy is clean and inexhaustible, and can be transformed into other forms of energy: thermal, electric, chemical,

mechanical, etc. Of all the clean technologies, solar energy is the most efficient renewable energy source to reduce global warming.

During the environmental awakening and mass movement, the concept of sustainable development was defined in the declaration of the ministerial conference of the UN Economic Committee for Europe in 1990 in Norway. It was also accepted by the European Union in 1990. The development of new institutions, and establishing new laws and organizational bodies to protect the environment were the next steps in this process. Many national and international conferences have drawn attention to climate change and environmental protection since the 1990s. The main issue at the 1992 UN Rio Conference was the strategy of the sustainable development and its impact on the environment. During the 1997 Kyoto Conference, environmental protection associations agreed to decrease gas emissions, which contributed 5% of the greenhouse effect in 2008–2012 compared to their level of use in 1990 (Britannica 2021). The Brundtland Report in 1987 introduced environmental issues into the sustainable development concept by arguing for “meeting the needs of the present generation without comprising the ability for future generations to meet their own needs” (WCED 1987, p. 41). In business terms, the report showed that the environment is not a limitless pool of natural capital that we can use without liability (Blowfield 2013).

Summary

Sustainability is a complex, interlinked subject that is not restricted to the physical environment. While sustainability was initially assumed to be a fad, economic crises show that being sustainable means to survive. In the 2000s, the “greening” started to morph into “sustainability” and be translated into business jargon, such as the “triple bottom line” and “eco-efficiency,” before diffusing into virtually every major development. Today, concern about sustainability has

become attached to climate change to dominate all industries and the global economy (Bergquist 2017). It has become a mainstream topic in business.

Currently, sustainable development needs bolder actions to ensure the survival of future generations. Using renewable sources and rapid development of clean energy production systems is vital for the future. “The importance of renewable energy will definitely continue to grow in a world, where the demand for energy will be 56% more than today in 2040” (Bloomberg 2013). Energy is the dominant contributor to climate change, accounting for around 60% of total global greenhouse gas emissions. However, the share of renewable energy in final energy consumption reached 17.5% in 2016, with only 55% derived from environmentally friendly, renewable energy forms (UN SDG 2021). Universal access to renewable energy and its efficient use is crucial to creating more sustainable and inclusive communities. Solar energy is the most efficient, renewable, and sustainable source for today and the near future.

Cross-References

- Renewable Energy
- Sustainability
- Sustainable Development

References

- Bergquist, A.-K. (2017). *Business and sustainability: New business history perspectives* (Working paper, 18–034). Harvard Business School.
- Bloomberg. (2013, July 25). World energy consumption to increase 56% by 2040 led by Asia. <https://www.bloomberg.com/news/articles/2013-07-25/world-to-use-56-more-energy-by-2040-led-by-asia-eia-predicts>. Accessed 21 Mar 2019.
- Blowfield, M. (2013). *Business and sustainability*. Oxford: Oxford University Press.
- Britannica. (2021). Kyoto protocol. <https://www.britannica.com/event/Kyoto-Protocol>. Accessed 17 Apr 2021.

- Crowther, D. (2012). *A social critique of corporate reporting. Semiotics and web-based integrated reporting*. Farnham: Gower.
- Crowther, D., & Aras, G. (2008). *Corporate social responsibility. E-book*. Ventus Publishing ApS. ISBN 978 8776814111.
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of the 21st century*. Gabriola Island: New Society Publishers.
- Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Executive*, 17(2), 56–67.
- Jeronen, E. (2013). Sustainability and sustainable development. In S. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Springer: Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_662.
- Jeronen, E. (2020). Sustainable development. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management* (pp. 1–7). Cham: Springer. Online ISBN 978-3-030-02006-4. <https://doi.org/10.1007/978-3-030-02006-4>.
- Kazmi, A. (2020). Sustainability (world commission on environment and development definition). In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-030-02006-4_84-1.
- Murphy, J. (2019, September 28). Hundreds of thousands join Canada climate strikes. *BBC Montreal*. <https://www.bbc.com/news/world-us-canada-49856860>. Accessed 17 Apr 2021.
- Toker, K. A. (2015). Solar energy. In S. O. Idowu, N. Capaldi, M. Fifka, L. Zu, & R. Schmidpeter (Eds.), *Dictionary of corporate social responsibility: CSR, sustainability, ethics and governance* (pp. 497–498). Cham: Springer International.
- United Nations Climate Change (UNCC). (2021). <https://unfccc.int/process/the-paris-agreement/status-of-ratification>. Accessed 17 Apr 2021.
- United Nations-Sustainable Development Goals (UN SDG). (2021). Affordable and clean energy. <https://www.un.org/sustainabledevelopment/energy/>. Accessed 16 Apr 2021.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford: Oxford University Press.

Sustainability and Solar Power

► Sustainability and Solar Energy

Sustainability and Sports Stadiums

► Sustainable Sports Stadiums

Sustainability and Sustainable Development in Real Estate Industry

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Synonyms

Circular real estate; Eco-friendly building; Green building; Green real estate development; Sustainable property development

Definition

Real estate generally refers to land including the air above it and the ground below it, and any permanent improvements made to or on the land, whether natural or man-made such as water, trees, minerals, buildings, bridges, and other fixed structures and infrastructure components (Chen 2021; Planning Commission 2002). The term is also used to describe the “bundle of rights” associated with the ownership and use of the physical characteristics of space and location (Mettling and Cusic 2019). Real estate can therefore be considered as an immobile and physically tangible product with intangible ownership rights (Kohlhepp and Kohlhepp 2018). Real estate development otherwise referred to as property development is

the process of creating or increasing the value of real estate through carrying out tangible improvements on it (Bulloch and Sullivan 2010). It is a business process that includes activities ranging from acquisition of virgin land and selling off of developed parcels; to renovation of existing building and leasing out to others; and conversion of existing building from one use type to another. Real estate development is a continuous process of reconfiguration and improvement of the built environment to meet the various needs of space (Belayhun 2021; Bromley 2016). Real estate is therefore a core ingredient of the urban environment which in-turn represents a spatial factor of sustainability (Walacik et al. 2020). Thus, it is important to understand sustainable development to adequately delineate the concept of sustainable real estate development. There is arguably innumerable definition of sustainable development, however, the definition put forward by the Brutland Report “... *development that meets the needs of the present without compromising the ability of future generations to meet their own needs*” seems to have gain more prominence. Like many other definitions, this definition promotes the concept of *futurity* and *equity* within and amongst societies in the pursuance of development (Keeping and Shiers 2004).

Introduction

Human developmental goals and aspirations shape the natural, built, and as well as virtual environment through anthropogenic activities. These environments consequently shape the lives and experiences of organisms. Whether it is the clearing of rainforests for agriculture, construction of the world's longest bridge for mobility, or development of 5G network for hyper transmission speed, all these alterations to the environments affects lives in multiple dimensions (Booth et al. 2013). The real estate industry as a big component of the built environment has tremendous bearing on development, chiefly in terms of advancing economic and social growth.

This is particularly crucial for many developing countries where there is usually critical shortage of accommodation especially in the form of residential and commercial properties which forces many citizens to seek alternative in informal shelters (Gunter and Manuel 2016; Mouzoughi et al. 2014).

Globally however, especially in the developed countries, there has been a notable amount of building adaptation from one type of use to another in the last 20 years. This trend in building adaptation is facilitated by the fact that adaptations are typically faster to complete and occupy and often cost less relative to new construction. Also, since the early 2000s, the emerging importance of sustainability has grown significantly in the building industry and adaptation represents a sustainable direction (Wilkinson 2014). Buildings are long-lived products, and according to Lucon et al. (2014), a significant proportion of buildings that will be in use globally by the year 2050 are already in existence. This opinion is also echoed by Kelly (2009) which estimates that 81% of the building stock expected to be in operation in 2050 has already been built and in operation. Other studies have estimated that 87% of the building stocks that the UK will have by 2050 and 89% of the building products that will be in use in Sydney by 2030 are already built (Wilkinson 2014; Matemilola et al. 2018). As a result, there is the need to adapt the existing building stock to ensure high performance through periodic efficiency retrofitting to upgrade facilities and equipment, improve design, and ensure efficient water and energy usage and that overall building systems are performing optimally. Adaptation and reuse of existing buildings will significantly reduce the amount of construction wastes destined for landfills and will reduce the use of raw materials. These approaches are inevitable to evolve a built environment that has the least environmental impact and fosters a more equitable and healthier society (Becqué et al. 2016; Wilkinson and Sayce 2015).

For far too long, profit is the only important goal investors in real estate set-out to achieve but

growing awareness of the finite nature on natural resources, progressive social injustice and trend in climate change have informed the need for clear and comprehensive sustainability program in the industry (Yusoff et al. 2018). The built environment is responsible for the emissions of one-third of the global greenhouse gases (GHG), thus according to UNEP's Buildings and Climate Change report (2009:4), the built environment is significantly critical to the delivery of a cost-effective emission reduction and that nations will struggle to meet their emission reduction targets without a sizable gain from the sector. For the real estate sector to contribute to intergenerational justice, mitigate climate change while ensuring long-term economic viability of business, proactive measures must be taken, world over to integrate and implement sustainability aspects in real estate design, development, and operation (Wilkinson and Sayce 2015; Yusoff et al. 2018).

Real Estate and Sustainability

Since the rise of sustainable development topic to the top of global political agenda, the need for a sustainable means of developing the urban environment in general and the real estate subsector in particular have been identified to be critical to all aspects of sustainability. The real estate development process has significant bearing on material resource and energy consumption, waste generation, and the physical design and impact of urban spaces (Wilkinson and Sayce 2015). Rather than employing resources and strategies that can increase the carbon footprint of a building, sustainable real estate development is therefore considered as the act of assimilating environmental-friendly design, materials, techniques, and technology into the construction process of a building product (Merrill 2021). The goal of sustainable real estate development is to reduce a building's impact on the environment from the design and materials to the daily operations of the building, thus, sustainability in real estate is enhanced when stakeholders in the real

estate industry offer services that aim to sustain the concept of real estate and sustainability (Razali and Adnan 2015). It is therefore pertinent that stakeholders in the property industry and their advisers understand the relevance of sustainability indicators to assess, record, and manage the move towards sustainable development (Keeping and Shiers 2004).

Sustainable growth is impossible without a robust real estate market that offers facilities for all human activities while enhancing the public spaces in cities and towns. The need for appropriate real estate development solutions is prompted by issues with haphazard urban development, energy use, pollution, and climate change, among others. When discussing sustainable real estate, "sustainable development" refers to building a constructed environment that effectively uses resources and considers environmental factors (Kibert 2005). Sustainable development means prioritizing high-caliber initiatives, social diversity, mixed-use buildings, and sustainable structures. According to Choguill (2008), no city will be viable if its constituent elements are not. As a result, it's crucial to start with buildings. Unfortunately, because facilities are one of the leading producers of CO₂ emissions, they negatively influence the environment considerably. It contributes to global warming and the greenhouse effect. For example, over 40% of all energy used in the European Union (EU) nations is used by structures, with residential buildings accounting for around 63% of this total (Balaras et al. 2007).

Indeed, the real estate sector is significantly and increasingly impacting other environmental factors. It consumes the most energy and produces the most CO₂ emissions. Although measuring is complicated, many studies imply that the real estate industry is the most significant contributor to CO₂ emissions.

- Over 40% of the world's energy is consumed by this sector each year.
- Buildings account for 20% of all global greenhouse gas emissions.

- Building CO₂ emissions are anticipated to rise by 56% by 2030.
- By 2030, it is anticipated that the proportionate share of global GHG emissions will increase by 7%.
- Forty percent of raw materials worldwide are used for buildings (3 billion tons annually).
- Building industry is projected to consume 12% of the world's freshwater by 2030.

However, observable disparities within the real estate value chain sub-sectors that have varying degrees of maturity in addressing their environmental and social repercussions are impeding the effectiveness of the real estate industry's sustainability initiatives. But compared to some of its competitors, including engineering and construction or building supplies, the sector lags. Building construction and management, from purchasing and engineering through design and disposal, need an integrated approach. The sustainability results are therefore erratic.

According to Carbon Trust, most investment portfolios typically only include a tiny amount of real estate. However, given that residential and commercial real estate collectively serves as the conduit through which up to 40% of carbon emissions are produced through their development and subsequent use, it is an important asset class for people looking to make environmentally conscious investments (Bissiri et al. 2019). Since many believe that real estate has the most potential to reduce carbon emissions at the lowest cost of any other economic sector, even though it does contribute to the issue of carbon emissions, it also contributes to the solution. Since the environment hosts most human social and economic activities, the real estate industry is increasingly acknowledging the importance of sustainability issues for everyone involved in the creation, use, ownership, and management of the real estate. These issues have also enabled a developing commercial imperative because it is believed to affect how the real estate market functions and the economics of real estate investment. This has made it possible to proactively recognize and address

sustainability concerns (Matemilola and Salami 2020; Turner and Onorato 1999).

Achieving Sustainability in the Real Estate Industry

The World Bank estimates that emissions from the real estate industry must be reduced by up to 36% by the year 2030 if the target of the Paris agreement to limiting global warming to well below 2 °C must be reached (Peiser and Wiegelmann 2020). In a world that is fast evolving and urbanizing, the real estate industry is critically important to reaching the sustainable development targets and stakeholders in the industry; investors, developers, occupiers, experts, and governments must play their roles (RICS 2019). Globally, the real estate industry has become one of the prime targets for governmental legislations and regulations. Nations and cities around the world are now pushing for new policies to help mitigate the environmental implications from the built environment. Thus, new building techniques and practices that can foster conservation and sustainability are now being adopted with the institution of green building schemes such as Building Research Establishment Environmental Assessment Method (BREEAM) in the UK, Leadership in Energy and Environmental Design (LEED) and Energy Star in the US, Deutsche Gesellschaft für Nachhaltiges Bauen (DGNB) in Germany, Comprehensive Assessment System for Built Environment Efficiency CASBEE in Japan, Green Star in Australia, High Quality Environmental standard (HQE) in France, Protocol ITACA (developed by ITACA – the Italian Conference of Regions and Autonomous Provinces) in Italy, and the Sustainable Building Tool (SBTool) in Canada (Peiser and Wiegelmann 2020; Sev 2011; Apanavičienė et al. 2015).

There is a considerable level of misconception about sustainability and environmental protection and many individuals limit the scope of sustainability to the consideration of environmental

aspects of an activity. In fact, green building is sometimes erroneously used synonymously with sustainability (Falkenbach et al. 2020; Matemilola et al. 2019). However, beyond green building schemes, analysis of sustainable real estate is generally considered in the context of building impact on the occupants and workers – such as health impact (micro approach); global impact such as emission generation and resource usage (macro

approach); urban/regional sustainability issues including greenfields and brownfields (meso approach). Ideally, the theoretical basis for sustainability involves environmental-ecologic, social-cultural, and economic-financial dimensions consideration; however, in the real estate practice, it is not as simple. For example, to increase building efficiency (floor-space per land area-density) may be environmentally and

Sustainability and Sustainable Development in Real Estate Industry, Table 1 Real estate sustainability issues

Sustainability dimension	Sustainability issues	Principal objectives
Economic sustainability	Maintenance of high and stable levels of local economic growth and employment I. Improved project delivery II. Increased profitability & productivity	Increased productivity; steady profit growth; employee happiness; supplier satisfaction; and client satisfaction; minimizing defects; reliable and shorter completion times Lower projects costs and improved cost predictability; providing services that are most beneficial to customers and concentrate on expanding client business
Environmental sustainability	Effective protection of the environment I. Avoiding pollution II. Protecting and enhancing biodiversity III. Transport planning	Reducing harmful emissions; preventing noise and dust disturbances through effective site and depot management; minimizing and eliminating waste; preventing pollution-related incidents and environmental law violations Establishing new habitats and enhancing the ecosystem; protection of delicate ecosystems through careful planning and management of construction projects Plan for green transportation for site and business activities
	Prudent use of natural resources I. Improved energy efficiency II. Efficient use of resources	Reduced energy use during corporate operations; energy-efficient depots and facilities Utilize local resources and low-embodied energy materials; design for whole-life costs; minimizing waste through lean design and construction; using products with recycled or sustainable materials; minimizing and managing waste and water
Social sustainability	Social progress which recognizes the needs of everyone I. Respect for staff II. Working with local communities and road users III. Partnership working	Providing efficient training and evaluations, equitable terms and conditions of work, and equal opportunities; a safe, healthy, and favorable work environment; keeping up morale and satisfaction among employees; involvement in decision-making Minimizing local inconvenience; minimizing delays and disruptions in the traffic; creating efficient communication channels; boosting the local economy through supporting local employment and procurement; providing services that improve the neighborhood's surroundings Establishing enduring connections with customers; establishing enduring connections with nearby suppliers; corporate responsibility; providing services that are most beneficial to customers and concentrate on expanding client business

Adapted from Akadiri et al. (2012)

economically sustainable but not socially sustainable (Walacik et al. 2020). Thus, the coverage of sustainability extends beyond green issues, and such additional factors create added value in the measurement of real estate sustainability. Real estate market sustainability can therefore be categorized to varying degrees of sustainability or unsustainability types. Based on Kauko (2017) and as analyzed by Walacik et al. (2020), a sustainable real estate market is attained when maximum environmental sustainability is maintained while ensuring highest economic value and social equity so that the ability of future market participants to meet their own needs is not hampered. The principal sustainability issues associated with real estate is abridged in the Table 1.

Summary

Real estate which includes land and any permanent improvements made to or on it is a core ingredient of the urban environment which in turn represents a spatial factor of sustainability. Sustainable real estate development therefore as a strategic ingredient for achieving sustainable development must be adequately delineated. Since the rise of sustainable development topic to the top of global political agenda, the need for a sustainable means of developing the urban environment in general and the real estate sub-sector in particular have been identified to be critical to all aspects of sustainability. For far too long, the only important goal that real estate investors have set out to accomplish has been making a profit. However, growing awareness of the finite nature on natural resources, progressive social injustice, and trend in climate change have informed the need for clear and comprehensive sustainability program in the industry. Without a robust real estate market that provides facilities for all human activities while increasing the public spaces in cities and towns, sustainable growth is impossible. The need for appropriate real estate development solutions has been motivated by issues with haphazard urban development, energy use, pollution, and climate change,

among others. Globally, the real estate industry has become one of the prime targets for governmental legislations and regulations. The built environment is indeed reported to be responsible for the emissions of one-third of the global greenhouse gases (GHG), thus built environment is significantly critical to the delivery of a cost-effective emission reduction and that nations will struggle to meet their emission reduction targets without a sizable gain from the sector. Nations from all around the world are currently promoting new regulations to assist reduce the environmental effects of the built environment. Thus, with the establishment of green building schemes like BREEAM in the UK, LEED and Energy Star in the USA, DGNB in Germany, CASBEE in Japan, Green Star in Australia and South Africa, and the SBTool in Canada, new building techniques and practices that can foster conservation and sustainability are now being adopted. These tools are evolved to provide a way to quantify a building's environmental effects through assessment of the environmental and resource-efficient performance of a building, optimize building performance, and minimize environmental impacts.

References

- Akadiri, P. O., Chinyio, E. A., & Olomolaiye, P. O. (2012). Design of a sustainable building: A conceptual framework for implementing sustainability in the building sector. *Buildings*, 2, 126–152.
- Apanavičienė, R., Daugėlienė, A., Baltramonaitis, T., & Maliene, V. (2015). Sustainability aspects of real estate development: Lithuanian Case Study of Sports and Entertainment Arenas. *Sustainability*, 7, 6497–6522.
- Balaras, C., et al. (2007). European residential buildings and empirical assessment of the Hellenic building stock, energy consumption, emissions and potential energy savings. *Building and Environment*, 42(3), 1298–1314.
- Becqué, R., et al. (2016). *Accelerating building efficiency: Eight actions for urban leaders*. Washington, DC: World Resource Institute.
- Belayhun, M. (2021). *Real estate development. Definition, process and management*. s.l.: GRIN Verlag.
- Bissiri, M., Reis, I. F., Figueiredo, N. C., & da Silva, P. P. (2019). An econometric analysis of the drivers for residential heating consumption in the UK and

- Germany. *Journal of Cleaner Production*, 228, 557–569.
- Booth, G., Clayton, M. J., & Kim, J. B. (2013). *A framework for designing sustainable real estate developments using Quadruple Net Value Analysis and Building Information Modelling*. s.l., Proceedings of the 19th International CIB World Building Congress.
- Bromley, V. (2016). *What is property development?* [Online]. Available at: <https://medium.com/the-property-developer/what-is-property-development-2c82464efdee>. Accessed 30 Nov 2021.
- Bulloch, B., & Sullivan, J. (2010). Information—the key to the real estate development process. *Cornell Real Estate Review*, 78–88.
- Chen, J. (2021). *Real estate investing guide – Real estate*. [Online]. Available at: <https://www.investopedia.com/terms/r/realestate.asp>. Accessed 30 Nov 2021.
- Choguill, C. (2008). Developing sustainable neighbourhoods. *Habitat International*, 32(1), 41–48.
- Falkenbach, H., Lindholm, A.-L., & Schleich, H. (2020). Review articles: Environmental sustainability: Drivers for the real estate investor. *Journal of Real Estate Literature*, 18(2), 201–223.
- Gunter, A., & Manuel, K. (2016). A role for housing in development: Using housing as a catalyst for development in South Africa. *Local Economy*, 31(1–2), 312–321.
- Kauko, T. (2017). *Pricing and sustainability of urban real estate*. 1st ed. s.l.: Routledge.
- Keeping, M., & Shiers, D. E. (2004). *Sustainable property development: A guide to real estate and the environment* (1st ed.). Oxford: Blackwell Science Ltd.
- Kelly, M. J. (2009). Retrofitting the existing UK building stock. *Building Research & Information*, 37(2), 196–200.
- Kibert, C. J. (2005). *Sustainable construction: Green building design and delivery*. Hoboken: John Wiley.
- Kohlhepp, D. B., & Kohlhepp, K. J. (2018). *Real estate development matrix* (1st ed.). New York: Routledge.
- Lucon, O., et al. (2014). Buildings. In M. Brown & T. Pálvolgyi (Eds.), *Climate change 2014: Mitigation of climate change. Contribution of working group III to the fifth assessment report of the intergovernmental panel on climate change* (pp. 671–738). Cambridge/New York: Cambridge University Press.
- Matemilola, S., & Salami, H. A. (2020). Environmental assessment. In S. Idowu et al. (Eds.), *Encyclopedia of sustainable management*. Cham: Springer Nature Switzerland AG.
- Matemilola, S., Adediji, O. H., & Enoguanbhor, E. C. (2018). Land use/land cover change in petroleum-producing regions of Nigeria. In *The political ecology of oil and gas activities in the Nigerian aquatic ecosystem* (pp. 257–276). s.l.: Elsevier Inc.
- Matemilola, S., Elegbede, I. O., & Bello, M. U. (2019). Sustainable community development in Nigeria: The role of real estate development. In T. Walker, C. Krosinsky, L. N. Hasan, & S. D. Kibsey (Eds.), *Sustainable real estate: Multidisciplinary approaches to an evolving system* (pp. 427–448). Cham: Springer Nature.
- Merrill, T. (2021). *Sustainable real estate development: The future is now*. [Online]. Available at: <https://www.thanmerrill.com/sustainable-real-estate-development/>. Accessed 20 Dec 2021.
- Mettling, S., & Cusic, D. (2019). Rights in real estate. In *Principles of real estate practice* (pp. 16–28). s.l.: Performance Programs Company.
- Mouzughi, Y., Bryde, D., & Al-Shaer, M. (2014). The role of real estate in sustainable development in developing countries: The case of the Kingdom of Bahrain. *Yusra Mouzughi 1,**, *David Bryde 2,†* and *Maheer Al-Shaer; 6*, 1709–1729.
- Peiser, R., & Wiegmann, T. (2020). Real estate and sustainability: the moral imperative. *The Professor*, 67–68.
- Planning Commission. (2002). Real estate. In *Tenth five year plan 2002–07: Dimensions and strategies* (Vol. I, pp. 829–846). New Delhi: Planning Commission, Education Division.
- Razali, M. N., & Adnan, Y. M. (2015). Sustainable property development by Malaysian property companies. *Property Management*, 33(5), 451–477.
- RICS. (2019). *Sustainable investment in real estate*. [Online]. Available at: <https://www.rics.org/ssa/wbef/megatrends/natural-environment/sustainable-investment-in-real-estate/>. Accessed 19 Dec 2021.
- Sev, A. (2011). A comparative analysis of building environmental assessment tools and suggestions for regional adaptations. *Civil Engineering and Environmental Systems*, 28(3), 231–245.
- Turner, J. C., & Onorato, R. S. (1999). Social identity, personality, and the self-concept: A self-categorizing perspective. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The psychology of the social self* (pp. 11–46). s.l.: Lawrence Erlbaum Associates Publishers.
- United Nations Environment Programme (UNEP). (2009). *Buildings and climate change: Summary for decision-makers*. s.l.: United Nations Environment Programme.
- Walacik, M., Renigier-Bilozor, M., Chmielewska, A., & Janowski, A. (2020). Property sustainable value versus highest and best use. *Sustainable Development*, 1–18.
- Wilkinson, S. J. (2014). Building adaptation. In S. J. Wilkinson, H. Remøy, & C. Langston (Eds.), *Sustainable building adaptation innovations in decision-making* (pp. 1–90). Oxford: John Wiley & Sons, Ltd.
- Wilkinson, S. J., & Sayce, S. L. (2015). Introduction to sustainable property development. In S. J. Wilkinson, S. L. Sayce, & P. H. Christensen (Eds.), *Developing property sustainably* (pp. 1–19). s.l.: Routledge.
- Yusoff, M. N., et al. (2018). Sustainable property development: A challenge. *Indian Journal of Public Health Research and Development*, 9(11), 1476–1482.

Sustainability and Sustainable Development in the Food Industry

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Synonyms

Sustainability in food industry; Sustainable production and sustainable development in food industry

Definition

The term sustainability began to be used as an explicit social, environmental, and economic ideal in the late 1970s and 1980s (Caradonna 2014). It is fundamental to meet vital needs, to use resources effectively, and to conserve the natural balance in order not to exhaust those resources. Although the sustainability approach has been examined in different terms depending on the field in which it is addressed, it essentially characterizes the sustainability approach (Edtmayr et al. 2016). In relation to sustainability, the term sustainable development can be defined as the entire policies pursued in order to increase the welfare and standards of living in a sustainable manner (Diouf 2019). Sustainable development can be applied in many areas of industry. However, the food industry is a good example of a sector in which sustainable development is important. Moreover, increasingly visible threats to the world's eco-system created by traditional methods of production in the sector which adversely affect all living organisms have demonstrated why sustainable development needs to occur. The development of a culture within the food industry which works with nature rather than destroys it has become a necessity. It is critical that good quality raw materials are used, and that by-products and waste materials are handled in an

environmentally sensitive manner. Feedback from the production process is also necessary in improving the technical infrastructure. In this entry, a conceptual analysis of sustainability will be undertaken within the context of the food industry and the position with regard to sustainable development examined.

Introduction

Environmental problems caused by human consumption habits have become important global issues (Laszlo and Cescau 2017). In no particular order of importance, these problems include global warming, reduction in habitable land, overproduction of some foodstuffs, and health problems such as malnutrition (Hughes et al. 2017). Another of these problems, unplanned urbanization, is difficult to predict. One of its consequences is damage to the ecosystem as food has to be produced on less and less fertile land. The other consequence is the waste problem as a result of people's negative behavior in disposal of food waste due to urban overconsumption (Valenzuela and Böhm 2017). Unfortunately, more than half of the world's population lives in cities. However, it is not appropriate to directly link the irregular consumption of resources and the destruction of nature only to urbanization. With conscious consumption habits, people can establish a sustainable environment regardless of their location. In this way, life quality, access to food, and the conservation of nature can be ensured.

Global environmental problems began to emerge at the end of the twentieth century in proportion to the progress of the industrial revolution (Carvalho et al. 2018). In the following century, the industry's dependence on non-renewable energy sources created a situation that requires caution to ensure sustainability (Bowden and Payne 2010).

However, society has started to become aware of the problems regarding the sustainability of life, and some positive responses come from some of the initiatives. Start-ups, non-governmental organizations, and associations,

whose number is increasing day by day, are typical examples of this. In this context, the point that should be considered is that instead of focusing on short-term solutions to problems, people's consumption habits should be managed well in order to reduce the damage to the environment. Therefore, sustainability is a planned process that can achieve this (Caradonna 2014). Although sustainability goes beyond just environmental issues (social and economic dimensions are other related domains), environmental factors need to be kept central to any definition of sustainability (Crist et al. 2017). Therefore, it is possible to define the concept of sustainability as the long-term reproduction of a system in order to sustain itself. When the concept of sustainability is considered in the context of the food industry, it can be defined as bringing sustainability by using awareness and resources effectively in the stages of the supply of raw materials, processing, packaging, logistics, and consumption of food (Krishnan et al. 2020).

This sustainable cycle from raw materials to consumption and even disposal of waste in the food industry is actually similar in other industries. Organizing the production and service activities of all industrial areas within this framework will contribute to the development of the country (Ghafoorpoor et al. 2018). The level of development of a country can be characterized by the sustainability of its environmental, economic, and social dimensions. Such sustainability will manifest itself as one development tool in an efficient cycle (Holden et al. 2017). The food industry is in a highly strategic and functional position in terms of ensuring competitive advantage within the scope of sustainable development policies (Costanza et al. 2016). Hence, within the scope of this chapter, the importance of sustainability in the food industry will be discussed and the principles of sustainable development will be examined in an industrial context.

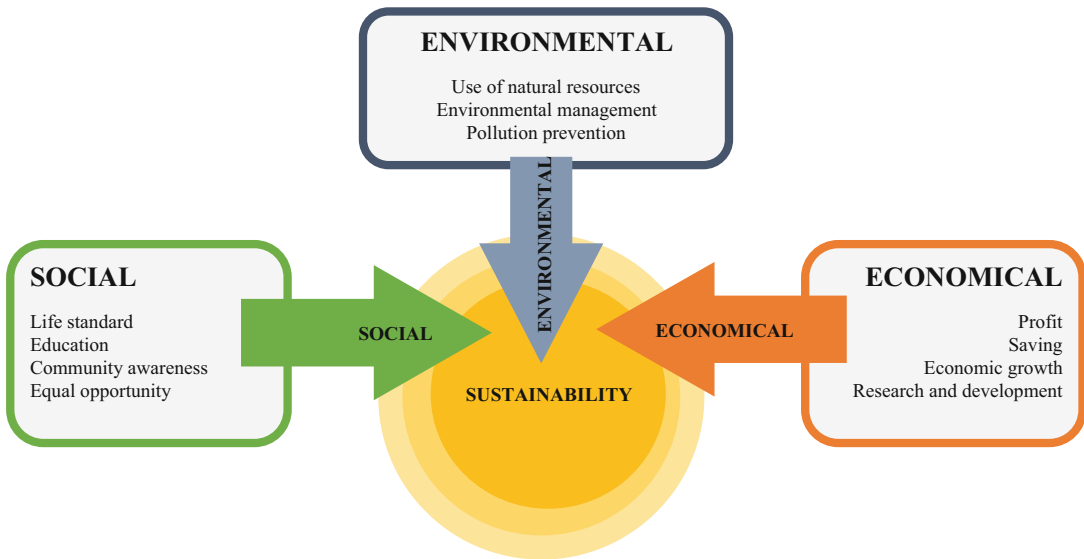
The Concept of Sustainability

Sustainability in life, the planet, cities, manufacturing, food security, energy, technology,

waste management, etc., has become a frequently encountered concept lately (Sikdar et al. 2017). Despite this, sustainability as an idea is so comprehensive and addresses so many different industrial fields that it can be difficult to give it a precise definition (Moore et al. 2017).

The definition of sustainability has changed over time depending on developments in the economy, politics, and technology (Caradonna 2014). Sustainability as a policy concept has its origin in the Brundtland Report of 1987 (Brundtland 1987). The report focuses on the balance established in a sustainable framework between expectations and limited resources in nature (Kuhlman and Farrington 2010). It can also be used in the sense of leaving future generations a sustainable world with reasonable ecological, economic, and social conditions (Sikdar et al. 2017).

The concept of sustainability is a holistic approach encompassing ecological, economic, and social dimensions (Bastianoni et al. 2019). In addition to a clean natural environment that can renew itself, the concept also encompasses social conditions based on equality and prosperity, and an economic system that considers society and the environment. In other words, while sustainability is often associated only with environmental protection, it also covers the economy and society. Based on the approaches made on sustainability, it can be seen that sustainability is closely related to the concept of development. Development aims at increasing the welfare of individuals (Ukko et al. 2019). Sometimes, the concept of development has been associated with economic growth (Chen et al. 2020). However, nowadays, it has become clear that development cannot be achieved only by economic growth, and many different factors should be taken into consideration (Lee et al. 2016). Therefore, the term sustainable development has become commonplace where, in addition to economic growth, other factors in increasing levels of welfare are being taken into account, such as social equality, the natural environment, gender equality, education, health, and responsible production and consumption (Fig. 1) (Costanza et al. 2016).



Sustainability and Sustainable Development in the Food Industry, Fig. 1 Areas that form the basis of the sustainability concept (Sulewski et al. 2018)

As it is seen from Fig. 1, the sustainability concept treats society, nature, and the economy as intertwined clusters (Edtmayr et al. 2016). Each of these clusters also has a function within itself. Considering the social cluster terms such as life standard, education, community awareness, and equal opportunity comes into account. For example, individuals with low living standards may not have good educational opportunities if they do not have economic opportunities. No matter how high the level of awareness and consciousness is, this situation may not bring what is expected in terms of equal opportunity, and the social side of the concept of sustainability is disrupted (Passani et al. 2016). Considering the second cluster, the environmental cluster, there are concepts of use of natural sources, environmental management, and prevention of pollution. For example, if there is a problem in accessing natural resources, environmental management cannot be done effectively in the waste disposal parameter. Unfortunately, prevention of pollution cannot be achieved effectively as one of the sine qua non principles in environmental management. It is difficult to talk about a successful sustainability in conditions where environmental factors cannot be regulated (Ali and Vladich 2016). In the economic cluster,

the third and the last cluster, the factors of profit, saving, economic growth, research, and development are dominant. Enterprises, including the food industry, aim to make a profit by settling their production lines. Thus, they provide economic growth (Ribeiro et al. 2018). If production is carried out under more prosperous conditions, this will also provide progress in research and development activities, because the business has the power to invest in these activities. This contributes to economic sustainability. The factors mentioned reflect the balance that the three main clusters of sustainability have created within themselves. Hence, each of these clusters is inter-related, so the sustainability of each is interdependent. In other words, if natural resources are consumed in a way that cannot be renewed, the economy cannot be sustained.

At this point, the most important thing to note is that nature is not necessarily in itself the most threatened element under consideration. Individuals have disrupted the ecosystem, but the world has existed for 4.5 billion years and will continue to exist no matter how individuals act. However, the future of humanity is at risk and depends on the ability of individuals to adapt to a sustainable way of life. Therefore, the environment will

survive without economy and social life, while the economy and the social life will not survive the destruction of the environment (Mensah and Casadevall 2019).

The Need for Sustainability: Its Discovery and Progress Through History

As has been noted above, although the concept of sustainability is most often used in the context of the environment, this perspective can be used in many areas such as food, chemistry, pharmacology, construction, textile, technology, energy, culinary arts, etc. (Boye and Arcand 2013). In 1972, the first global assessment of the socio-economic environment was approved at the United Nations Conference on Human Environment in Stockholm (Bastianoni et al. 2019). The aim was to prepare for the future and to avoid possible environmental threats. Thus, environmental sanctions were agreed and enforced for the first time (Klarin 2018). Eco-development was also emphasized at the Stockholm Conference. Accordingly, it has been essential that economic development be carried out without disturbing the balance of nature and without harming the environment (Ali and Vladich 2016). Prior to this conference, little or no attention was paid to the development of international environmental law. Until this period, it has been observed that the first practices regarding the protection of the environment were aimed at the protection of natural life and rivers. Since then, a structure for cooperation within the United Nations (UN) has been established by signing many regional and universal agreements regarding different environmental problems (Kayhan 2013). For the first time, with the Stockholm Conference, environmental problems started to be addressed at a global level and with wide participation. This conference led to the rapid development of international environmental law and the establishment of the United Nations Environment Programme (UNEP) (Kaniaru 2016). Hence, ensuring the implementation of the concept of sustainability on behalf of the environment is considered very important. The main purpose of

the United Nations declaration is to ensure that nature contributes to the development of humanity without being damaged.

As mentioned in the previous section, sustainability uses environmentally friendly technologies primarily to ensure the balance of nature and the balance of the population in all its activities and plannings (Kamani et al. 2019). In order to realize the concept of sustainability, it is necessary to focus on economic, environmental, and social sustainability altogether. One of the important tools in making this happen is sustainable development (Munasinghe 2009). The sustainable development approach determines the common denominator in the economic and social development goals of countries as “sustainability” (Klarin 2018).

To summarize, the history of sustainability dates back more than 40 years (Nocca 2017). Today, the sustainability concept is used not only for nature but also in many different fields (Caradonna 2014). For example, many companies use this concept to create a sustainability index. There are many different types of sustainability index such as the data about the financial and economic performance of companies forming the Corporate Sustainability Index (ISE)’s “theoretical portfolio” (Liu et al. 2018). In other words, the sustainability index considers the economic and social benefit of remanufacturing and problems arising from environmental pollution. It gives information about the value of companies and is also designed to provide information to investors at the same time (Edtmayr et al. 2016). Many of them are used to measure the companies’ performance around the world and to compare their performance with others depending on some parameters.

The main parameters here are the ones that are critical elements for sustainability. Some of them are environment, biodiversity, climate change, human rights, supply chain management, health and safety, etc. (Edtmayr et al. 2016). Apart from this, there are many projects that are examples of interdisciplinary approaches to sustainability such as sustainability in business and industry, sustainability in information and communication industry, sustainability in governance, sustainability in

food production, and sustainability in agriculture, etc. For example, the waste material formed after the process is as important as the raw material in food production. For example, in addition to the product produced in the beverage industry, many materials such as shell and pulp which will come out as waste. After processing, these waste products can be used as a raw material for the feed industry or as a fertilizer material, or even reused as decoration material for food, for example, following drying or spray-drying processes (Eswari et al. 2020). This process is an example of circular economy in an interdisciplinary sense in the theme of sustainability in the fields of food, chemistry, agriculture, economy, technology, and environment (Chen et al. 2020).

Sustainability in the Food Industry

The world's population is expected to exceed 8 billion by 2030 (Giles-Corti et al. 2016). To meet the nutritional needs of the world's population, the production of sustainable, safe, and healthy food and the improvement of the quality of life are an important responsibility for the food industry. At the same time, the industry must respond to the need for such things as nutritious and personalized foods and adapt itself to developments in technology.

For this reason, sustainability in food is important in terms of meeting the natural nutritional needs of the next generations in society. A sustainable approach to food production is one of the most critical issues for the sector in the development of strategic solutions. It involves activities in the following areas (Dwivedi et al. 2017):

- Efficient use of energy
- Responsible management of water and wastewater
- Optimizing resource usage
- Responsible packaging
- Preventing greenhouse gas emissions

Water is among the most important aspects of sustainability in food. Both the needs of the growing global population for water and the needs of

the agricultural sector cause water resources to deplete rapidly (Nouri et al. 2019). Moreover, water is disappearing due to rapid and irregular urbanization (Bhattarai and Budd 2019). In order to prevent this, there are a number of important initiatives that need to be implemented by the food industry, by local producers, and by society, as outlined below.

Groundwater drawn without planning and excessively is a major factor in droughts (Aydın and Tuna 2018). For example, problems of finding clean water are encountered in many regions due to the excessive operation of deep boreholes drilled without planning (Rogers and Chung 2017). Another example of this situation is the withdrawal of groundwater as a result of unplanned use of groundwater and the formation of sinkholes as a result of karstification in limestone (Goudie 2018). If society tends to consume natural resources immediately and unconsciously, these resources will be depleted immediately. This, in turn, leads to the notion of being a society based on consumption rather than production, without considering future generations (Cattaneo et al. 2020). For this reason, among the first steps to be taken for sustainability is to purchase food strictly on the basis of need, considering available capacity. Another point that needs to be handled carefully in the conscious use of resources is the issue of waste (Cattaneo et al. 2020). When determinations on waste are taken into consideration solely on the basis of the social dimension, it can be understood that the issue is an evolving one. For example, at an individual level, the disposal of 100 grams of bread is rather immaterial. However, when the amount of bread thrown into the garbage every day at a national or international level is calculated (enough to feed the population of Africa for 2 days), the magnitude of waste and the danger of malnutrition in the future are understood. In more than half of the due diligence studies on sustainability in the food sector, the importance of sustainable industrial and community awareness is noted (Passani et al. 2016).

In addition to the effective use of resources and the prevention of unnecessary waste, another factor affecting sustainability in the food industry is the implementation of sustainable packaging

technology. When the concept of sustainability is examined in terms of food packaging, the following points can be made (Helanto et al. 2019):

- It must be cost-effective and meet market performance criteria.
- It must be compatible with consumer expectations.
- It must be produced from recyclable or biodegradable materials and thus be efficiently recyclable.

Sustainable food packaging technology is a green process (Wikström et al. 2019). Another application area that can be given to the green process in the food industry is green supply chain (Yan et al. 2016). The green supply chain is defined as the process of incorporating environmental criteria or concerns into organizational purchasing decisions and long-term relationships with suppliers (Krishnan et al. 2020). It is possible to consider a green supply chain as being at the intersection of the economic interests of enterprises and environmental sustainability. The importance of a green supply chain is increasing as natural resources are rapidly depleted and the need for economic sustainability grows. Hence, a green supply chain is a new paradigm that combines product development and environmentally friendly product or service production strategies. In this paradigm, the aim is to cleanse the supply chain of negative externalities arising from production such as lack of coordination, shortage of supply, low prices, adverse natural events (excessive rainfall, floods, and storms), and decrease in yields per acre (Çalık 2019). The objectives of a green supply chain can be listed as follows (Liu et al. 2018):

- To make the best use of limited natural resources
- To minimize energy consumption
- To prevent environmental damage and to look for alternatives to reduce environmental pollution caused by industry
- To create recycling awareness
- To ensure sustainable development

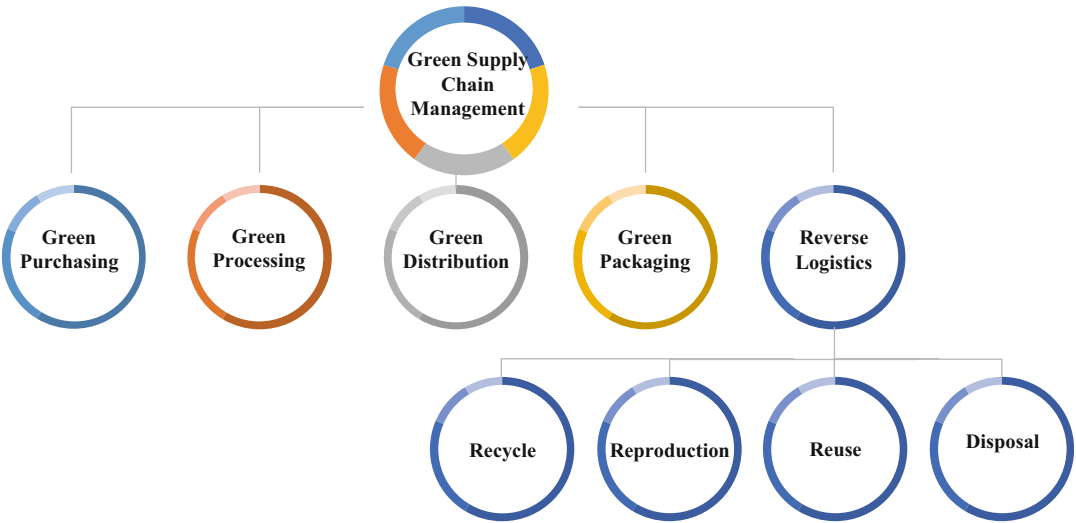
The listed objectives of a green supply chain will provide support to food industry companies in ensuring environmental and economic sustainability. It also plays an important role in enabling efficient resource use and in ensuring ecological efficiency. Activities covered by green supply chain management, such as green purchasing, green production, green marketing, green packaging, and reverse logistics, are among the pioneering sustainability topics in the food industry (Fig. 2).

In summary, food is of critical importance in maintaining healthy and good quality lifestyles for the next generation. Hence, society needs to adopt the concept of food sustainability in order to learn about sustainable nutrition and therefore sustainable living, and to avoid wasteful consumption.

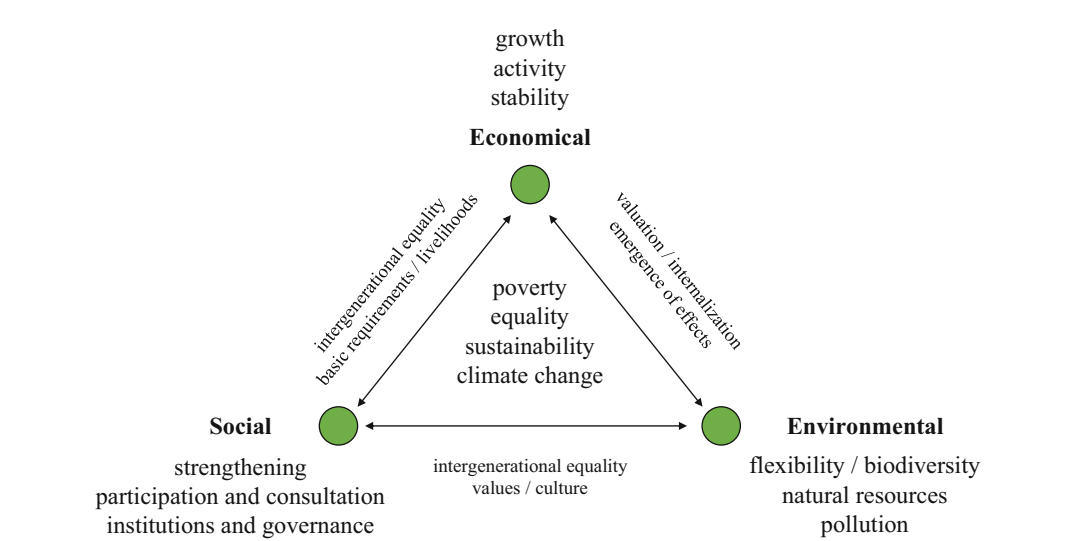
Sustainable Development

The concept of sustainable development has its roots in the 1980 World Conservation Strategy report by the International Union for Conservation of Nature and Natural Resources (IUCN) (International Union for Conservation of Nature & World Wildlife Fund 1980). The term sustainable development has been expressed with various definitions at different times (Ramcilovic-Suominen and Pülzl 2018). The publication in 1987 of “Our Common Future” provided one of the most common definitions of sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (Olawumi and Chan 2018). The general acceptance of this concept and its widespread use are noted by the World Environment and Development Commission’s (1987) in its report entitled “Our Common Future” (Buhr 2007). In this report, sustainable development is defined as the development that meets today’s needs without compromising the ability of future generations to meet their own needs.

Since the concept of sustainable development was first proposed, it has been redefined many times, causing the concept to become unclear.



Sustainability and Sustainable Development in the Food Industry, Fig. 2 Components of green supply chain management (Yan et al. 2016)



Sustainability and Sustainable Development in the Food Industry, Fig. 3 Sustainable development triangle (Munasinghe 2019)

Moreover, the respective definitions generally reflect the academic branches in which it is being used. While economists often tend to emphasize the need to maintain a certain level of living standards, ecologists are interested in biodiversity and ecological flexibility, while sociologists prioritize the need to preserve sociological ties and interrelations within communities (Diouf

2019). In the food industry, the concept of sustainable development is considered as an approach in which postprocess waste management becomes sustainable and consumption-conscious in line with the efficient use of food resources (Notarnicola et al. 2012). Figure 3 schematizes the key elements of sustainable development and the links

between them. Each concept in the corners of the triangle has its own driving forces and targets around it. While the economy is mainly focused on increasing human welfare by increasing the consumption of goods and services, the environmental area is focused on maintaining the integrity and flexibility of ecosystems. The social area emphasizes the enrichment and strengthening of human relations, as well as the achievement of individual and group goals.

The Importance of Sustainable Development in the Food Sector

In the future, the world will struggle with climate change, environmental transformation, and population growth (Hughes et al. 2017). All main and subsectors have different responsibilities both

generally and in the food industry specifically. Therefore, governments, businesses, and consumers should be part of this effort to create a sustainable system and thus achieve sustainable development goals. Food companies will need to develop exemplary practices in the following areas:

- Reformulation of products
- Minimal approach in package design
- Supplier relations
- Creating production standards
- Informing consumers
- Using resources efficiently

Nevertheless, various challenges may arise in trying to reach a fairer, healthier, and environmentally sustainable food system (Table 1).

The challenges mentioned in Table 1 may in fact be interpreted as the cause of problems to be

Sustainability and Sustainable Development in the Food Industry, Table 1 Challenges for sustainable development activities in food industry (Teixeira 2018; Şenocak and Mohan Bursalı 2018)

Challenges	Findings/Causes	Suggestions
Inadequate demand Issues with meeting demand supply	Loss of consumer purchasing power Inadequate capacity of the sector to meet demand or not being organized for production Increasing demand of consumers for sustainable food consumption specific to the product	The working principle of the food market mechanism can be examined Resource management can be done effectively for sustainable production For low-income consumers, price reductions can be made in some product segments Solutions can be developed for individuals to have a healthy and affordable diets (Johnson-Down et al. 2019)
Operational business challenges	Performance evaluations using simple documentation techniques Performance measurements that are not made at appropriate time intervals Inefficiency in operational processes Lack of long-term return on investment Excessive or unused capacity Inconsistent execution of operational processes Lack of leadership and innovation	New business models can be developed Efficient motivation tools can be created for businesses to reach short-term goals Investors can be trained or encouraged to anticipate the cause of environmental problems and to deal with them in sustainable ways (Bastianoni et al. 2019)
Lack of governmental encouragement, leadership, or guidance	Inadequate enterprises and entrepreneurship Long authorization/approval period for the implementation of innovative approaches in food production and R&D activities	Food enterprises can be encouraged and can be guided by government policy to use sustainable food resources Opportunities can be given to business and society to develop sustainable products and services within the scope of sustainable development principles (Messerli et al. 2019)

dealt with in the food industry. Examples of other problems created by the food industry:

Resource and waste management: Effective use of resources is a requirement in the food industry to minimize environmental damage. The food industry can sometimes be a major threat to the environment since special processes are required to eliminate solid wastes and water-miscible waste (Ferronato and Torretta 2019). There are, of course, environmentally sustainable measures that can be taken in this regard. Efforts can be made to recover by-products that are formed so they can be recycled (Boye and Arcand 2013). For example, some food by-products can be used for animal feed or fertilizer production. In addition, cogeneration applications in the food industry can be given as an example in this context. Cogeneration is the production of energy from the same system in both electrical and heat forms, and it is more economical than producing both forms of energy individually in separate places (Bianco et al. 2016). Any branch of industry that needs constant hot air for drying or heating can benefit from cogeneration plants. Some industries that need large amounts of cold air or water can benefit from absorption chillers, such as food-freezing plants, refrigeration plants, or large cold stores for the preservation of foods such as meat, fish, chicken, or vegetables. This application contributes to increasing price efficiency and recycling of wastes by using biological wastes as well (Bianco et al. 2016).

Energy use: Energy resources such as gas, electricity, coal, and oil are used in the food industry, mainly for cooling and heating operations. Energy use to produce food products, chemicals, cars, etc., should be reduced as much as necessary, and accumulated gases in the atmosphere should be controlled (Bowden and Payne 2010).

Water use: The water used in food production should be hygienic (Hampikyan et al. 2017). The use of hygienic water enables the consumer to access clean food and the food producer to produce safe food. However, water consumption in the food industry is significant and can be excessive owing to being used both before and during food processing (Faille et al. 2018).

Packaging: The food industry is an area where packaging is used intensively (Wikström et al. 2019). Some types of packaging materials are not biodegradable and cause environmental pollution. Factors such as the shape and size of the food package are also some of the parameters that are important within the scope of the environmental pollution (Fadare et al. 2020). For example, if the packaging material is slightly larger than it should be, it will cause storage space loss, logistical problems, and consequently higher transportation costs. If transportation frequency increases, it will lead to an increase in energy consumption and in operational costs. For example, before designing a storage facility in a food business, it is necessary to master the characteristics and quantity of the food to be processed. The design of this part should be at a level to facilitate the entry and exit of the food product. In this way, the unique physical handling features and movement regularity, order frequency, and speed of transportation of food products are evaluated. At the same time, a good layout reduces labor cost and increases replacement efficiency and error-free order rate. Therefore, locations that are fixed and variable should be well-known (Jagtap et al. 2019).

At the UN Sustainable Development Summit, 2030, Sustainable Development Goals were adopted by 193 countries (Fig. 4) (Gil et al. 2019). Out of a total of 17 targets, 8 were identified based on the challenges outlined in Table 1 above as important issues in food/related areas within the scope of sustainable development. The sustainable development goals stated in Fig. 4 can be summarized in terms of goals and objectives as follows (Darıcı and Canbolat 2019):

- Goal 1. To end poverty of all kinds, wherever it happens
- Goal 2. To end hunger, ensure food security, improve nutritional opportunities and support sustainable agriculture
- Goal 3. To ensure a healthy life for people and the welfare of everyone at all ages



Sustainability and Sustainable Development in the Food Industry, Fig. 4 Sustainable development goals. (Source: <https://www.un.org/en/>)

- Goal 4. Provide all-encompassing and equally high-quality education and provide lifelong education for all
 - Goal 5. To ensure gender equality and strengthening the social standing of women and girls
 - Goal 6. To guarantee access to water and sanitation for all and the sustainable management of water and sanitation
 - Goal 7. To provide accessible, reliable, sustainable and modern energy for all
 - Goal 8. To ensure sustainable and inclusive economic development, to provide full and productive employment and decent jobs
 - Goal 9. To build durable infrastructure, promoting sustainable and inclusive industrialization and new inventions
 - Goal 10. To reduce inequalities within and between countries
 - Goal 11. To make cities and human settlements embracing everyone, safe, strong and sustainable
 - Goal 12. To ensure sustainable consumption and production
 - Goal 13. To take urgent steps to combat climate change and its effects
 - Goal 14. To protect and sustainably use the oceans, seas and marine resources for sustainable development
 - Goal 15. To protect, restore and ensure sustainable use of terrestrial ecosystems, ensure sustainable use of forests, combat desertification, stop and reverse the loss of productivity of soils and stop biodiversity loss
 - Goal 16. To encourage peaceful and inclusive societies for sustainable development, ensure access to justice for all, and build effective, accountable and inclusive institutions at all levels
 - Goal 17. To strengthen the implementation tools of global partnership for sustainable development and revitalize global partnership
- In addition, it should be noted that sustainable development cannot be evaluated independently from the cultural structure of society (Munasinghe 2009). For example, the food industry should be examined as to its provision of healthy and safe nutrition taking the norms and practices of society into account. Therefore, it is an indispensable tool

to keep society and industry in a sustainable cycle (Carvalho et al. 2018).

Summary

The concept of sustainability is relevant to many areas of the food industry. While it has added value in previous periods, it has now become an increasingly important parameter for the continuity of today's food enterprises. To be successful, the industry needs to fulfill a number of requirements to adapt to sustainable development. The first is the adoption of new technologies based on sustainability, and the development of relevant strategies to use resources effectively in order to apply those new technologies. "Digitalization" applications can be given as an example of one of the most widely known new technologies used (Gbadegeshin 2019). Thanks to digital applications, all processes from raw material supply to consumption can be controlled easily from the field to the fork. As a result of dynamic developments in the digital field, the food industry can be set up to meet both the vital needs of consumers while at the same time satisfying their more emotional desires. Second is sustainability in the evaluation of new technologies primarily for the structuring of legislation and the promotion of university-industry-cooperation projects. The last one is to increase the number of reliable scientific studies considering topics such as climate change, efficient use of energy, supply chain management, food security, and food production modeling and to examine the effects of these factors on food products. When these requirements are met by the food industry, environmental sensitivity will develop, thereby raising the welfare level of society and making production and consumption possible within a framework of sustainability (Popp et al. 2014).

Cross-References

► Sustainable Development

References

- Ali, S., & Vladich, H. (2016). Environmental diplomacy. In C. Constantinou, P. Kerr, & P. Sharp (Eds.), *The SAGE handbook of diplomacy* (pp. 601–616). Los Angeles: SAGE.
- Aydın, A. B., & Tuna, M. C. (2018). Research on The Importance of Groundwater. *ISS2018*, 8.
- Bastianoni, S., Coscieme, L., Caro, D., Marchettini, N., & Pulselli, F. M. (2019). The needs of sustainability: The overarching contribution of systems approach. *Ecological Indicators*, 100, 69–73.
- Bhattacharai, K., & Budd, D. (2019). Effects of rapid urbanization on the quality of life. In *Multidimensional approach to quality of life issues* (pp. 327–341). Singapore: Springer.
- Bianco, V., De Rosa, M., Scarpa, F., & Tagliafico, L. A. (2016). Implementation of a cogeneration plant for a food processing facility. A case study. *Applied Thermal Engineering*, 102, 500–512.
- Bowden, N., & Payne, J. E. (2010). Sectoral analysis of the causal relationship between renewable and non-renewable energy consumption and real output in the US. *Energy Sources, Part B: Economics, Planning, and Policy*, 5(4), 400–408.
- Boye, J. I., & Arcand, Y. (2013). Current trends in green technologies in food production and processing. *Food Engineering Reviews*, 5(1), 1–17.
- Brundtland, G. H. (1987). Our Common Future: Report of the World Commission on Environment and Development. Geneva, UN-Dokument A/42/427. <http://www.un-documents.net/ocf-ov.htm>.
- Buhr, N. (2007). Histories of and rationales for sustainability reporting. *Sustainability Accounting and Accountability*, 57, 59–62.
- Çalik, M. (2019). Kisa Gıda Tedarik Zincirinde Müşteri Muhasebesi. *Dumlupınar University Journal of Social Science/Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, (61), 195.
- Caradonna, J. L. (2014). *Sustainability: A history*. New York: Oxford University Press.
- Carvalho, N., Chaim, O., Cazarini, E., & Gerolamo, M. (2018). Manufacturing in the fourth industrial revolution: A positive prospect in sustainable manufacturing. *Procedia Manufacturing*, 21, 671–678.
- Cattaneo, A., Federighi, G., & Vaz, S. (2020). The environmental impact of reducing food loss and waste: A critical assessment. *Food Policy*, 2020, 101890.
- Chen, T. L., Kim, H., Pan, S. Y., Tseng, P. C., Lin, Y. P., & Chiang, P. C. (2020). Implementation of green chemistry principles in circular economy system towards sustainable development goals: Challenges and perspectives. *Science of the Total Environment*, 716, 136998.
- Costanza, R., Fioramonti, L., & Kubiszewski, I. (2016). The UN sustainable development goals and the dynamics of well-being. *Frontiers in Ecology and the Environment*, 14(2), 59–59.

- Crist, E., Mora, C., & Engelman, R. (2017). The interaction of human population, food production, and biodiversity protection. *Science*, 356(6335), 260–264.
- Darıcı, B., & Canbolat, M. A. (2019). Türkiye’de Bölge Planlarının Sürdürülebilir Kalkınma Hedefleri ile Uyumunun Karşılaştırılması: GAP, DAP, DOKAP ve KOP Örnekleri. *Celal Bayar University Journal of Social Sciences/Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 17(2), 153.
- Diouf, G. (2019). Millenium Development Goals (Mdgs) and Sustainable Development Goals (Sdgs) in social welfare. *International Journal of Science and Society*, 1(4), 17–24.
- Dwivedi, S. L., van Bueren, E. T. L., Ceccarelli, S., Grando, S., Upadhyaya, H. D., & Ortiz, R. (2017). Diversifying food systems in the pursuit of sustainable food production and healthy diets. *Trends in Plant Science*, 22(10), 842–856.
- Edtmayr, T., Sunk, A., & Sihn, W. (2016). An approach to integrate parameters and indicators of sustainability management into value stream mapping. *Procedia Cirp*, 41, 289–294.
- Eswari, A. P., Sharmila, V. G., Gunasekaran, M., & Banu, J. R. (2020). New business and marketing concepts for cross-sector valorization of food waste. In *Food waste to valuable resources* (pp. 417–433). London: Academic.
- Fadare, O. O., Wan, B., Zhao, L., & Guo, L. H. (2020). Microplastics from consumer plastic food containers: Are we consuming it? *Chemosphere*, 253, 126787.
- Faille, C., Cunault, C., Dubois, T., & Benezech, T. (2018). Hygienic design of food processing lines to mitigate the risk of bacterial food contamination with respect to environmental concerns. *Innovative Food Science & Emerging Technologies*, 46, 65–73.
- Ferronato, N., & Torretta, V. (2019). Waste mismanagement in developing countries: A review of global issues. *International Journal of Environmental Research and Public Health*, 16(6), 1060.
- Gbadegehin, S. A. (2019). The effect of digitalization on the commercialization process of high-technology companies in the life sciences industry. *Technology Innovation Management Review*, 9(1), 49.
- Ghafoorpoor Yazdi, P., Azizi, A., & Hashemipour, M. (2018). An empirical investigation of the relationship between overall equipment efficiency (OEE) and manufacturing sustainability in industry 4.0 with time study approach. *Sustainability*, 10(9), 3031.
- Gil, J. D. B., Reidsma, P., Giller, K., Todman, L., Whitmore, A., & van Ittersum, M. (2019). Sustainable development goal 2: Improved targets and indicators for agriculture and food security. *Ambio*, 48(7), 685–698.
- Giles-Corti, B., Vernez-Moudon, A., Reis, R., Turrell, G., Dannenberg, A. L., Badland, H., ... & Owen, N. (2016). City planning and population health: A global challenge. *The Lancet*, 388(10062), 2912–2924.
- Goudie, A. S. (2018). *Human impact on the natural environment*. New York: Wiley.
- Hampikyan, H., Bingol, E. B., Cetin, O., & Colak, H. (2017). Microbiological quality of ice and ice machines used in food establishments. *Journal of Water and Health*, 15(3), 410–417.
- Helanto, K. E., Matikainen, L., Talja, R., & Rojas, O. J. (2019). Bio-based polymers for sustainable packaging and biobarriers: A critical review. *BioResources*, 14(2), 4902–4951.
- Holden, E., Linnerud, K., Banister, D., Schwanitz, V. J., & Wierling, A. (2017). *The imperatives of sustainable development: Needs, justice, limits*. London: Routledge.
- Hughes, T. P., Kerry, J. T., Álvarez-Noriega, M., Álvarez-Romero, J. G., Anderson, K. D., Baird, A. H., ... & Bridge, T. C. (2017). Global warming and recurrent mass bleaching of corals. *Nature*, 543(7645), 373.
- International Union for Conservation of Nature, & World Wildlife Fund. (1980). *World conservation strategy: Living resource conservation for sustainable development*. Gland: IUCN.
- Jagtap, S., Rahimifard, S., & Duong, L. N. (2019). Real-time data collection to improve energy efficiency: A case study of food manufacturer. *Journal of food processing and preservation*, 00: e14338. ISSN 1745-4549. <https://doi.org/10.1111/jfpp.14338>.
- Johnson-Down, L., Willows, N., Kenny, T. A., Ing, A., Fediuk, K., ... & Sadik, T. (2019). Optimisation modelling to improve the diets of First Nations individuals. *Journal of Nutritional Science*, 8, e31, 1–18.
- Kamani, M. H., Eş, I., Lorenzo, J. M., Remize, F., Roselló-Soto, E., Barba, F. J., ... & Khaneghah, A. M. (2019). Advances in plant materials, food by-products, and algae conversion into biofuels: use of environmentally friendly technologies. *Green Chemistry*, 21(12), 3213–3231.
- Kaniaru, D. (2016). The development of the concept of sustainable development and the birth of UNEP. In *International environmental law-making and diplomacy* (pp. 155–171). London: Routledge.
- Kayhan, A. (2013). Birleşmiş Milletler Çevre Programı Üzerine Bir İnceleme. *Milletlerarası Hukuk ve Milletlerarası Özel Hukuk Bülteni*, 33(1), 61–90.
- Klarin, T. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics and Business*, 21(1), 67–94.
- Krishnan, R., Agarwal, R., Bajada, C., & Arshinder, K. (2020). Redesigning a food supply chain for environmental sustainability—An analysis of resource use and recovery. *Journal of Cleaner Production*, 242, 118374.
- Kuhlman, T., & Farrington, J. (2010). What is sustainability? *Sustainability*, 2(11), 3436–3448.
- Laszlo, C., & Cescou, P. (2017). *Sustainable value: How the world's leading companies are doing well by doing good*. London: Routledge.
- Lee, C. C., Chang, C. H., Arouri, M., & Lee, C. C. (2016). Economic growth and insurance development: The role of institutional environments. *Economic Modelling*, 59, 361–369.

- Liu, C., Cai, W., Dinolov, O., Zhang, C., Rao, W., Jia, S., ... & Chan, F. T. (2018). Energy based sustainability evaluation of remanufacturing machining systems. *Energy*, 150, 670–680.
- Mensah, J., & Casadevall, S. R. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. *Cogent Social Sciences*, 5(1), 1653531.
- Messerli, P., Murniningtyas, E., Eloundou-Enyegue, P., Foli, E. G., Furman, E., Glassman, A., Hernández Licona, G., ... & Kim, E. M. (2019). Global Sustainable Development Report 2019: The Future is Now – Science for Achieving Sustainable Development. United Nations, New York.
- Moore, J. E., Mascarenhas, A., Bain, J., & Straus, S. E. (2017). Developing a comprehensive definition of sustainability. *Implementation Science*, 12(1), 110.
- Munasinghe, M. (2009). *Sustainable development in practice*. New York: Cambridge.
- Munasinghe, M. (2019). *Sustainability in the twenty-first century: Applying sustainomics to implement the sustainable development goals*. Cambridge: Cambridge University Press.
- Nocca, F. (2017). The role of cultural heritage in sustainable development: Multidimensional indicators as decision-making tool. *Sustainability*, 9(10), 1882.
- Notarnicola, B., Hayashi, K., Curran, M. A., & Huisingh, D. (2012). Progress in working towards a more sustainable agri-food industry. *Journal of Cleaner Production*, 28, 1–8.
- Nouri, H., Stokvis, B., Galindo, A., Blatchford, M., & Hoekstra, A. Y. (2019). Water scarcity alleviation through water footprint reduction in agriculture: the effect of soil mulching and drip irrigation. *Science of the Total Environment*, 653, 241–252.
- Olawumi, T. O., & Chan, D. W. (2018). A scientometric review of global research on sustainability and sustainable development. *Journal of Cleaner Production*, 183, 231–250.
- Passani, A., Bellini, F., Klitsi, M., & Vanobberger, W. (2016). *Exploring Impacts of Collective Awareness Platforms for Sustainability and Social Innovation*. Eurokleis Press, Rome, Italy.
- Popp, J., Lakner, Z., Harangi-Rakos, M., & Fari, M. (2014). The effect of bioenergy expansion: Food, energy, and environment. *Renewable and Sustainable Energy Reviews*, 32, 559–578.
- Ramcilovic-Suominen, S., & Pülzl, H. (2018). Sustainable development—a ‘selling point’ of the emerging EU bioeconomy policy framework? *Journal of Cleaner Production*, 172, 4170–4180.
- Ribeiro, I., Sobral, P., Peças, P., & Henriques, E. (2018). A sustainable business model to fight food waste. *Journal of Cleaner Production*, 177, 262–275.
- Rogers, J. D., & Chung, J. (2017). A review of conventional techniques for subsurface characterization of landslides. *Environmental Earth Sciences*, 76(3), 120.
- Şenocak, B., & Mohan Bursalı, Y. (2018). İşletmelerde Çevresel Sürdürülebilirlik Bilinci Ve Yeşil İşletmecilik Uygulamaları İle İşletme Başarısı Arasındaki İlişki. *Suleyman Demirel University Journal of Faculty of Economics & Administrative Sciences*, 23(1), 161–183.
- Sikdar, S. K., Sengupta, D., & Mukherjee, R. (2017). *Measuring progress towards sustainability*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-42719-5>.
- Sulewski, P., Kłoczko-Gajewska, A., & Sroka, W. (2018). Relations between agri-environmental, economic and social dimensions of farms’ sustainability. *Sustainability*, 10(12), 4629.
- Teixeira, J. A. (2018). Grand challenges in sustainable food processing. *Frontiers in Sustainable Food Systems*, 2, 19.
- Ukko, J., Saunila, M., Rantala, T., & Havukainen, J. (2019). Sustainable development: Implications and definition for open sustainability. *Sustainable Development*, 27(3), 321–336.
- Valenzuela, F., & Böhm, S. (2017). Against wasted politics: A critique of the circular economy. *Ephemera: Theory & Politics in Organization*, 17(1), 23–60.
- Wikström, F., Verghese, K., Auras, R., Olsson, A., Williams, H., Wever, R., ... & Soukka, R. (2019). Packaging strategies that save food: A research agenda for 2030. *Journal of Industrial Ecology*, 23(3), 532–540.
- Yan, M. R., Chien, K. M., & Yang, T. N. (2016). Green component procurement collaboration for improving supply chain management in the high technology industries: A case study from the systems perspective. *Sustainability*, 8(2), 105.

Sustainability and Vulnerability

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Definition

Vulnerability is not an easily definable concept like the debate on the studies revealed in this regard. Everything within the concept of “environmental sustainability” is certainly to be understood as the search for predictable and uncertain factors, which presents a risk and leads to damage to people and places and which “reduces the ability to respond to threats” (Cutter 2003). The vulnerability is composed of susceptibility to damage, exposure, sensitivity, and adaptability. For this reason, the vulnerability could be defined

as: “the forward-looking probability of experiencing a loss in the future relative to some benchmark of welfare ... caused by uncertain events” or the “continuous forward-looking state of outcomes” (Alwang et al. 2001).

Introduction

The current climate changes pose many questions about the future of our planet and the life that dwells on it. The rise in temperatures due to the greenhouse effect, caused by the emissions of climate-changing gases produced by man, from the use of fossil fuels, is already leading to important and dangerous changes within the delicate earth climate system. Extreme weather events are increasingly frequent and always have a greater intensity. Many species, like humans, run the risk of not being able to continue to survive under the same conditions as some centuries ago. Some of these species will not be able to adapt in time because of the rapidity of change, and they will become extinct. Many other species have already become extinct. The ability of man to stop and imagine a sustainable development model will be essential to find a solution to all this.

Much hope had been placed in COP21 in Paris (https://ec.europa.eu/clima/policies/international/negotiations/paris_en) where the hope of awareness of the human factor in the environmental crisis involving the whole planet was placed. The goal was then to contain the rise in temperatures within the 1.5 °C limit by the end of the century, build resilience, and reduce vulnerability. It is well-known that the indigenous and the poorest will be at the highest risk of becoming vulnerable. At COP24 in Katowice, Poland, a “rule book” is defined to implement the Paris agreement in the hope of reducing greenhouse gas emissions as quickly as possible and curbing this climate crisis.

Vulnerability, Sustainability and Climate Change

Vulnerability scholars have focused on the impact of climate change within human societies. From

the studies of the 1990s of the last century to the present, the research effort by academics, institutions, and governments has been important. Politically, the vulnerability is mentioned in the original UNFCCC text. Over time, however, many doubts have been raised about the vulnerability analysis models based only on climate change, and many scholars have begun to transfer their attention to the concept of resilience, arguing that it is more solid in capturing socio-ecological dynamics.

The vulnerability, however, can be studied through the study of biophysical elements taking into consideration the natural sciences or through the study of social vulnerability (poverty, social inequalities) or the analysis of elements of both.

The interaction between natural sciences and social sciences means that vulnerability does not exhaust its field of research solely to the climatic field but is enriched by socioeconomic studies that affect different spatiotemporal planes and together with system dynamics that make the vulnerability not immobile over time but evolving.

Community studies try to understand how human and biophysical stresses together affect the vulnerability of some territories. Although studies focus very often on the action of globality and not on the action of the local community and the interaction between it and other external actions, local action is what is wished for by most climate scholars to achieve results significant globally.

The association with climate change means that the concept of vulnerability most often takes on a negative meaning. The communities that are associated with them in the imaginary become “passive victims” of harmful events and their difficult forecast. This meaning, if coupled with the indigenous and poorer populations, means that they are defined as disadvantaged with respect to a more general concept of progress without, however, associating this meaning with an analysis that takes into consideration a profound research into the causes that lead to risk factor and the susceptibility of damages: exclusion factors,

marginalization, difficulty accessing education, and social inequality.

Often such damages are associated with extreme meteorological events, which are in strong growth compared to the past and are accompanied by episodes of heavy rainfall (which often cause floods, landslides) and periods of severe drought. The impact of such extreme situations can only have a strong social repercussion. Cities, as well as rural areas, often remain deeply damaged by such events as they suffer from poor historical planning that takes these events into account.

Suffice it to say that the extreme rainfall associated with soil sealing in our cities too often gives rise to easy flooding which, in addition to paralyzing mobility, seriously endangers the lives of citizens themselves. Also for this reason the vulnerability can also be read as a food security key (Alwang et al. 2001).

In rural areas, where agricultural activity is more developed, the communities placed in conditions of climatic stress risk generating damage caused by heat waves, which lead to drought, and by strong and abundant rainfall (and even by meteorological events) more extreme like the strong and sudden hailstorms that could destroy the harvest. If the fruit plants are damaged or the soil becomes unusable because there are no nutrients, the economic-social repercussions become very strong.

Uncultivated and free areas live in a further state of danger. The undergrowth, often in a state of complete abandonment, saw the increase in fires and consequent damage to vegetation. Moreover the strong work of deforestation, especially in the hills and mountains, has meant that these places were increasingly subject to the danger of landslides because, due to the absence of the roots of the trees, the abundance of rains, not finding obstacles, leads the land downstream, putting at risk, in addition to nature, small and large population centers. This is why we talk about hydrogeological risk and the safety of the territories because vulnerability to extreme weather events is likely to bring entire communities to their knees (Monteleone and Sabatino 2014). The morphological

knowledge of the territories, of the geological composition, of the hydrology, and of the historical study of what happened in the past in a given territory are fundamental to face a conflict of future risks. Bioengineering after a careful analysis of areas and territories can play a very important role in planning safety interventions.

An even more important role in seeking solutions to combat environmental vulnerability is assigned to actions and political choices that must favor processes of greater adaptation and environmental mitigation. Deforestation, crops, and intensive livestock are seriously endangering our planet and are not part of the idea of sustainable development (Brown 2009). Intensive crops severely damage the soil, depriving it of nutrients very quickly and making it much a rider and subject to erosion, compaction, sealing, and salinization. At the same time, the choice of seeds that guarantee a strong yield (often GMO), which are then protected with pesticides, often leads to intensive agriculture that is not based on the need for an ecological system to have a biological diversity of products. This absence of biodiversity makes these territories, and the communities that live and work with them, vulnerable should a risk agent (banana crisis) arise.

Key Issues

There is the need to develop an integrated and multidisciplinary action capable of analyzing vulnerable areas starting from the single local realities. In this way it should be possible to assess which kinds of risk the environment and society are exposed to, thus adopting safety and development plans.

Future Directions

Identifying elements of vulnerability soon will mean investigating within environmental and social contexts and trying to develop adaptation, financing, and governance strategies capable of

reducing the risk of damage. Important places of artistic, historical, and cultural interest built in areas of high hydrogeological risk within small and medium urban centers will also be in danger.

This is also why political actions in recent years have not taken into proper consideration the problem of vulnerability in their choices.

Developing overall action frameworks will mean adopting tools that, coming from different disciplines, can develop and fully cover the vulnerability situation over time (Ford et al. 2018). Quantitative climatic modeling and social modeling are too often observed unrelated to each other, but the real objective must be to be able to integrate them together to be able to harmonize a thought and a plan of action, including a political one, that can bring harmony between human and environment.

Summary

Ongoing climate change raises many questions about the future of life on our planet. Droughts, floods, heat waves, and extreme weather events, together with social problems such as poverty, put entire populations in a situation of strong vulnerability. The poorest and most humble populations in the world are the ones most affected by the unpredictability and violence that characterize climate change. Securing territories from hydrogeological risk, fighting deforestation and desertification, adequately treating rural areas, through climate change mitigation and adaptation plans together with social reforms and the use of new technologies, with the support of specialists from different disciplines, it will be essential to be able to create a development that is truly sustainable.

Cross-References

- [Biodiversity: Sustainability](#)
- [Conservation: Sustainability](#)
- [Ecology and Ecosystem: Sustainability](#)
- [Social Sustainability](#)

References

- Alwang J, Siegel PB, Jorgensen SL (2001). Vulnerability: a view from different disciplines (Vol. 115, p. 60). Social protection discussion paper series.
- Brown, L. R. (2009). *Plan B 4.0: Mobilizing to save the civilization* (pp. 55–75 and pp. 192–211). New York: W.W. Norton & Co. October.
- Cutter SL (2003) The vulnerability of science and the science of vulnerability. *Ann Assoc Am Geogr.* <https://doi.org/10.1111/1467-8306.93101>
- Ford, J. D., Pearce, T., McDowell, G., Berrang-Ford, L., Sayles, J. S., & Belfer, E. (2018). Vulnerability and its discontents: the past, present, and future of climate change vulnerability research. <https://link.springer.com/article/10.1007/s10584-018-2304-1>
- https://ec.europa.eu/clima/policies/international/negotiations/paris_en
- Monteleone, S., & Sabatino, M. (2014). Hydrogeological hazards and weather events: Triggering and evolution of shallow landslides. *International Soil and Water Conservation Research*, 2(2), 23–29. <https://www.sciencedirect.com/science/article/pii/S2095633915300034?via%3Dihub>.

Sustainability as a Management Approach

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Synonyms

[Sustainable management](#)

Definitions

Studies show that sustainability is gaining importance in society and companies. In terms of the economic side, sustainable management must be integrated into the company. How can sustainability be used as a management approach?

Based on a Purpose and the associated Values, a sustainable management system can be integrated into a company's DNA. In this way, the

corporate strategy changes from within. Further on, sustainable innovations are promoted in this way, changing the market and enabling competitive advantages. In the same way, value creation takes place. Once the company has adopted sustainable management at its core, it also positively affects its impact on society and stakeholders. This happens through the company's interactions through the different departments that are in contact with the corporate environment.

Structure of Sustainable Management

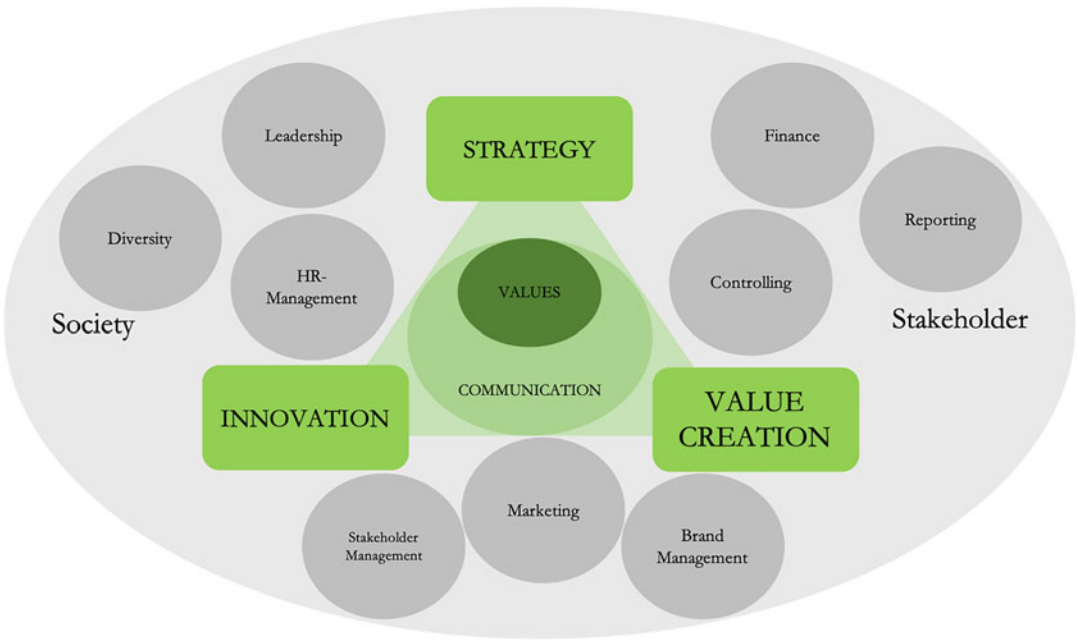
At the heart of sustainable management is the integrative idea. Sustainability must be implemented based on every company, and must be part of the corporate DNA. To achieve this integration, the trade-off thinking between sustainability and profit must first be overcome. In this way, sustainability management becomes obsolete and is replaced by sustainable management, which is implemented, for example, in marketing, controlling, HRM, etc. Sustainability is, therefore, not an add-on but a part of the company's values. Therefore, it should not be seen as a cost item but rather as increasing profitability by avoiding negative impact and/or generating positive impact. Only if this idea is the central starting point can an impact be generated with corporate strategy, innovations, and value creation that positively affects the company, stakeholders, and society (Fig. 1).

This transformation of the company can also be illustrated using Michael Porter's classic model of shared value. He stated that companies could build a unique selling proposition (USP) with procurement, production, marketing, sales, and customer service. However, this is becoming increasingly difficult due to current circumstances such as the aftermath of the Covid-19 pandemic, financial crises, environmental disasters, and digitalization and artificial intelligence. For example, production in different parts of the world is influenced by the environment. On the other side, marketing and sales are influenced and standardized by algorithms. It is becoming more

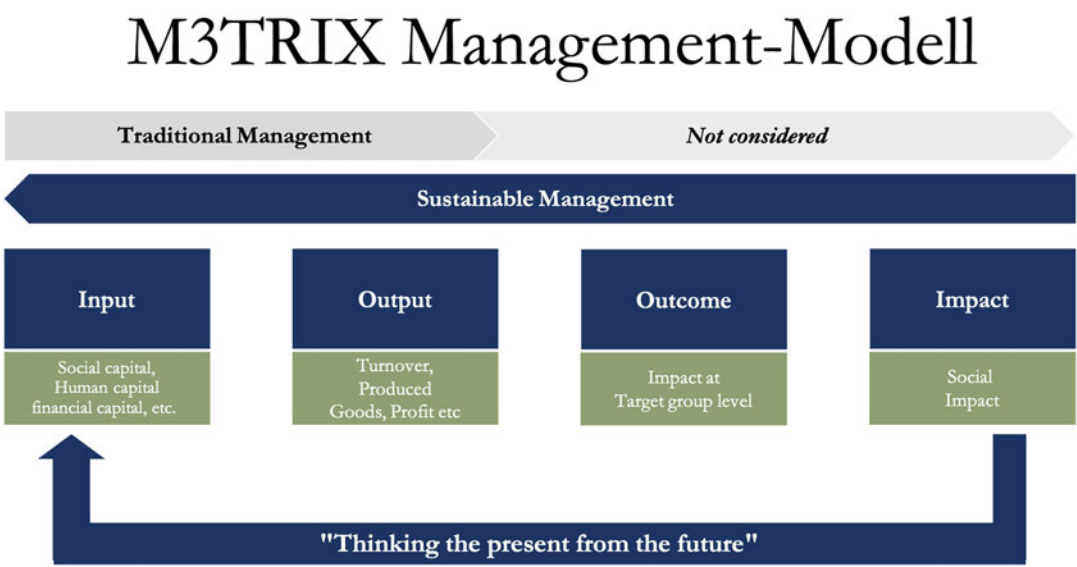
challenging to stand out from the competition and develop a USP through these factors. Porter stated that the factors of leadership management, compliance and business law, product development/research, and finance, HR, and controlling are only secondary in a company because all companies conduct these in the same way. However, this is the difference in the approach of sustainable management. Procurement, Production, Marketing, Sales, and Customer Service are all carried out in the same way. However, the USP is formed by other factors, such as the leadership style, how the controlling system is set up (e.g., through non-financial key performance indices), how the company focuses on research and development, and how the workforce is treated. In this way, the thought process in a company also changes. For example, sustainable values embedded in these formerly secondary factors come to the forefront, thereby changing how a company is managed. This ensures that the understanding of sustainability emerges from within and is not imposed from the outside.

M3TRIX Modell for Sustainable Business Transformation

Sustainability's critical factor as a Management Approach is that a distinction is made between sustainable management and traditional management. The traditional understanding of management refers primarily to efficiency – that is, the relationship between input and output. A certain output (e.g., sales, produced goods, profit) should be increased. In the same process, the input (e.g., social capital, human capital, and financial capital) should be reduced. So far, this method has also worked well, but the economy is facing a major transformation due to an ecological and social transformation. In this transformation, it is necessary to consider not only efficacy but also effectiveness. The factors, outcome, and impact have to be integrated into the corporate strategy. Indeed, studies have shown that companies without positive impact would be less profitable, generate less revenue, and become unattractive to



Sustainability as a Management Approach, Fig. 1 The holistic system of sustainable management (according to Schmidpeter)



Sustainability as a Management Approach, Fig. 2 The IOOI model according to the M3TRIX Institute

investors due to the growing investment risk (Oekom 2018; Whelan and Fink 2016; Winston 2019). Thus, companies are increasingly questioning their existence and role in society and want to avoid negative impact, or create positive impact (e.g., social or environmental impact)

for their environment, thus integrating a purpose for doing business into the corporate strategy. To achieve the desired impact, however, a new outcome (impact at target group level) is needed. Once this cycle has been established, this model's efficiency can be increased through new business management measures and/or sustainable innovations.

To best implement this model, companies must think about the future from the present. "What strategic changes need to be made today to achieve the desired impact in the future." (Fig. 2)

Example of the Model

An automotive manufacturer wants to rethink its impact and develop a Purpose for its own business. The company's impact relates to reducing CO₂ emissions from cars and creating better air quality for flora and fauna (Impact). To achieve this goal, the automotive company will build a sharing economy platform. To do this, it will use capital in the form of human, social, and financial capital (Input) to produce its various alternative fuel automobiles and the platform (Output) to generate the desired impact.

Summary

Instead of having an isolated Sustainability Management department business enterprises integrate Sustainability widely in all different management functions. Thereby Sustainability becomes not only part of the strategic management but is part of all management decisions and processes across the firm. This is the base for a new. On this base a new management paradigm emerges in business administration and management science which defines a new role of business in society. This new management paradigm overcomes the old trade off thinking between profit and sustainability. This new management approach defines business as an essential part of the solution rather than the problem to the current social and ecological challenges.

Cross-References

► [Business Model](#)

References

- Oekom. (2018). *ISS-Oekom Research*. Von <https://www.issgovernance.com/file/publications/cr-review-2018-en.pdf>. abgerufen
- Whelan, T., & Fink, C. (2016). *Harvard Business Review*. Von <https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability>
- Winston, A. (2019, September 24). *Harvard Business Review*. Von <https://hbr.org/2019/09/what-1000-ceos-really-think-about-climate-change-and-inequality>. abgerufen

Sustainability Assurance

► [Auditing and Sustainability](#)

Sustainability Auditing Standards

► [Auditing and Sustainability](#)

Sustainability Awareness

► [CSR and Sports](#)

Sustainability Balanced Scorecard

► [Balanced Scorecard and Sustainability](#)

Sustainability Disclosures

► [Sustainability Report and Sustainability Reporting](#)

Sustainability Education and Environmental Awareness

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Synonyms

[Environmental awareness](#); [Environmental education](#); [Sustainable environment](#)

Introduction and Definition

Sustainability education is education approach that aims to develop students, schools, and communities with the values and the motivation to take action for sustainability, in their personal lives, within their community and at a global scale, now and in the future. Sustainability Education for Sustainable Development is a common term used to describe education (ESD). Future-focused, sustainability education puts an emphasis on preserving the environment and fostering a more ecologically and socially equitable society via responsible conduct. Taking measures to promote more sustainable lifestyles necessitates taking into account the interconnection of the environmental, social, cultural, and economic systems (ACARA 2015). It enables

all individuals to acquire the knowledge, abilities, attitudes, and values required to build a sustainable future. Assessment of historical practices, evaluation of scientific and technical advancements, and fair assessments based on anticipated future implications on the economy, society, and environment are all necessary components of sustainability education. Giving people the knowledge, abilities, and drive to organize and manage change toward sustainability within a company, sector of the economy, or community is part of education for sustainability. People who are educated about sustainability are encouraged to visualize a variety of sustainable futures.

What Is Sustainability Education?

The goal of sustainability education is to increase students' awareness and knowledge of environmental issues, as well as to help them become better thinkers, innovators, and problem solvers who can help their communities adopt more sustainable lifestyles. Education for sustainability is based on a broad definition of education and learning that embraces individuals of all ages, backgrounds, and stages of life and that occurs in official and informal learning environments, such as classrooms, workplaces, families, and communities. The goal of education for sustainability is to provide people the tools they need to comprehend how the political, social, and economic systems are interconnected. It promotes community involvement in which all of the interested parties carefully consider what they want their kids to understand, practice, and value when they graduate from the formal educational system. Every community is thus urged to make an effort to anticipate both the short-term and long-term social, economic, and environmental conditions. Key sustainable development topics like climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumerism are made available to teaching and learning through education for sustainable development. At all stages of formal education and training, as well as in nonformal and informal learning,

sustainability education is crucial for achieving a sustainable society.

Education Issues, Sustainability Issues, and Resolution

Regardless of the fact that improving education is necessary for achieving sustainability, progress has been very slow worldwide. There are several causes for this lack of development, but sometimes it is due to a lack of comprehension or eyesight. Because they are entangled with conflicting and frequently irreconcilable values, interests, and knowledge claims, sustainability issues are complicated, unclear, and hotly debated. Others blame a lack of finance or policy. In light of the rising social expectations, the performance of the global educational systems is already being scrutinized. One current worldwide issue that might lead to educational change in many countries is economic security. Environmental problems like pollution, climate change, environmental degradation, and resource depletion have had an adverse effect on both economic growth and environmental health. As a result, greenhouse gases have had an effect on the environment. The necessity for sustainable development is a result of all these causes. It can harm the ecosystem irreparably if left unchecked. Through goals adoption, the current widespread acceptance of educational resolutions will enhance sustainability education. Additionally, advocates of sustainable education should resist overworked facilities that might have an impact on the learning environment.

Awareness and Creativity

Fundamental universal awareness was adopted for the new millennium by the General Assembly of the United Nations and includes tolerance, freedom, solidarity, respect for nature, equality, and shared responsibility (Leiserowitz 2006). The public and the educational community need to become more aware of the necessity of reorienting education in order to attain

sustainability. Partnerships are a key component of education for sustainability because they help create networks, foster relationships, and enhance communication among various community sectors. Attempts to identify crucial connections between education and more sustainable practices are vital to raising awareness. The statement established a series of more precise objectives (17 SDGs) linked to five pillars: planet, people, peace, prosperity, and partnership, in order to transfer this mutual awareness into actions. Awareness, reflection, and critical thinking in sustainability can be fostered by art and creativity. There is an increased awareness of business and academic research toward creative thinking. However, the investigation of its uptake by industry is still limited. Consciousness of the relevance of sustainability to their lives and the environment is important. Understanding creativity as a tactic to increase the learning capacity of students' passive activities is highly encouraged. Everyone should be aware that creativity is a valuable quality that everyone should possess and may exercise collectively. It is better to buy reusable items instead of disposables like paper towels, bottles, and bags made of plastic, start recycling and composting to reduce the amount of waste we produce, eat organic and pesticide-free food, support regional businesses and farmers, and start a communal garden. Additionally, innovative processes and products can be designed to encourage sustainable behavior or offer pro-sustainability solutions (Brem and Puente-Díaz 2020). Awareness on health status through education for sustainability by creating education campaigns on vaccination, clean water, and abstinence from alcoholism and drugs, which are simple concepts to sustainable developments. Compared to single-message public education programs, the success of sustainability education will require significantly more time and be more expensive. The idea of sustainability must be considered as a thought and action process toward goals that cannot be entirely attained but propel societies toward improvement and development (Williams et al. 2017). There are several studies on creative training or sustainability education. Studies combining these two topics, however, are uncommon.

Participation in creative activities or creativity training for sustainability education has been found to positively impact learning motivation, working effects, self-concept, confidence, subjective well-being, resilience, and the positive psychology of learners (Jindal-Snape et al. 2013; Sellman 2012; Amabile et al. 2005).

Education for Sustainability and Awareness Can Be Infused in These Areas

1. Economic growth: To build a sustainable economy that is expanding in the proper direction.
2. Protecting the environment: Another objective is focused on how humans may contribute to safeguarding and improving the natural environment by decreasing waste and pollution, as well as working to lower the global carbon footprint.
3. Social inclusion: This goal focuses on giving future generation's access to housing and supporting the development of robust, healthy, and thriving international communities. Another view, known as "entrepreneurialism" (Cox and Ziv 2005), places a high value on the ability of people to innovate. Anthropocentrism is its defining characteristic, and it aims to reconcile and integrate social and ecological objectives while keeping a clear focus on human needs. It frequently combines economism with technological optimism.

Sustainability education was developed in response to the UN International Environmental Education Program (1975–1995), which had outlined a vision and sparked environmental awareness education. Every person has the ability to develop the knowledge, abilities, attitudes, and values necessary to create a sustainable future through sustainability education. By challenging conventional ways of perceiving and interacting with the world, education for sustainability encourages individuals and groups to reflect on their own experiences and worldviews. Ecological, social, and economic systems that uphold regional and global equity and justice across generations and into the

future are also included in the definition of sustainability for education.

Education Assessment Through Awareness

Teaching the principles of sustainability is a lot like teaching the reasoning behind an abstract concept or learning them by heart. When education assessment is used in real and useful ways, students are given the knowledge, skills, perspectives, and attitudes they need to live sustainably in their communities. An educational initiative called "awareness through education" promotes tolerating people who may appear, learn, or act in ways that are dissimilar from our own and views incapacity (physical, intellectual, and medical) as a normal aspect of the human experience. Sustainability education is recognized as a crucial driver of sustainable growth and a vital tool of high academic standards. This vision and the significance of a suitable educational response are clearly reflected in the 2030 Agenda for Sustainable Development, which the United Nations adopted in 2015. The fourth Sustainable Development Goal on education, on quality education, focuses especially on sustainability education and related strategies (UNESCO 2017). The goal of education evaluation via awareness is to lessen the inherent fear and awkwardness that most students experience when they encounter someone who is different. Through educational tools, self-evaluation raises pupils' self-awareness and involves them in metacognitive activities (Basnet 2011).

Types of Sustainability Education

All academic topics are included in sustainability education, which goes far beyond the curriculum. It equips pupils with practical skills that they may utilize to better the world. It gives today's students the independence they will need in the future. The four basic categories of sustainability education are environmental, human, social, and economic.

Human sustainability: Maintaining human capital is essential to human sustainability. Instead

of being shared by individuals or countries, human resources is a natural monopoly of the individual. Human capital includes people's physical and mental well-being as well as their education, leadership, and service access. Individual investments in their education, health, and nutrition are now recognized as a necessary component of economic growth. Given that the average lifespan of a person is relatively brief and limited, human sustainability requires ongoing upkeep through expenditures made throughout a person's lifetime. The beginning of human sustainability is facilitated by encouraging maternal health and nutrition, safe childbirth, and newborn and early childhood care. To fully achieve some of the potential that each person possesses, human sustainability requires an investment of two to three decades in education and apprenticeship. The expenses of preventative and curative healthcare, adult education, and skill development could be on par with or higher than formal schooling. Human capital needs to be maintained and has a solid structure by controlled population census.

Social sustainability: In order to retain social capital, society must be sustainable. Resources and services that form the foundation of society are referred to as social capital. Community cohesion for reciprocity, mutual benefit, human connection, intolerance, compassion, forbearance, love, and generally acknowledged norms of integrity, discipline, and ethics are components of social sustainability. Social sustainability is promoted through shared norms, regulations, and knowledge (including libraries, movies, and diskettes). The component of social capital that receives the least attention from rigorous measurement but is nonetheless vital to social sustainability is shared values. Given the high rates of violence and mistrust, social capital is undercapitalized. Cultural values, equal opportunities, and connections among people from different religious and cultural backgrounds are all necessary for the maintenance and replenishment of social capital. The most serious barriers to sustainability can be social disintegration and violence (Goodland 2002). The social pillar, which includes free education, housing, work, and access to social services, should be maintained

in order to prevent this at all costs. It also covers health and senior care. It also covers the elimination of poverty, job security, a balanced budget, access to education, nondiscrimination against women, the safety of jobs, the elimination of poverty, and the elimination of all forms of gender-based violence (EU 2019). At various levels, including corporate, geographic, social, and interpersonal (political, ethical, and managerial), social conscience has been sharpened while also offering focus points on sustainability development goals and initiatives. Educating women is one educational endeavor that can raise the economic capacity of entire nations. Additionally, according to Lawrence Summer, the chief economist to the World Bank, "Once all the benefits are recognized, investments in the education of girls may well be the highest-return investment available in the developing world" (King and Hill 1993). As a result, some countries have initiatives to actively educate girls in school and are reducing obstacles to their attendance.

Economic sustainability: This entails protecting and preserving capital. Capital, both economic and manufactured, is interchangeable. Natural capital, like undisturbed forests and clean air, has not received much attention in economics in the past. Economics places monetary value on everything and has a difficult time appraising natural capital, intangible, cross-generational, and especially open-access resources like air. In the face of risk and uncertainty, economic policy should consistently apply and err on the side of caution (Goodland 2002). Trade and investment, job growth, the expansion of the private sector, domestic and global trends, and assets all contribute to economic sustainability. Its tools include national and international financing, government collaborations, commerce and employment policies, and tax policy.

Environmental sustainability: This refers to the laws, rules, and other policy frameworks governing issues such as air and water pollution, solid waste management, ecosystem management, biodiversity conservation, and the environmental conservation, wildlife, and endangered and threatened species. Community involvement is acknowledged as essential to the collective

change toward an environmentally responsible society in sustainability education. Environmental sustainability addresses issues such as environmental deterioration, global warming, global climate change, the environment and human rights, as well as biological improvement, mitigated air quality, enhanced watershed management, and better regulation of resource extraction. Instruments used by national, regional, or municipal governments may include financial incentives, market-based tools like tariffs and tax deductions, subsidies, awareness programs, and educational initiatives (EU 2019). Institutions are expected to make sufficient efforts toward sustainable development, particularly in averting the catastrophe of climate change. University buildings could be constructed to the greatest environmental standards, trash could be reduced, institutional footprints could be smaller, and plastics could be banned from campus completely (Times Higher Education 2019). Additionally, universities might eliminate waste, minimize institutional footprints, and prohibit the use of plastics on their campuses while also building to the greatest environmental standards (Times Higher Education 2019). It is crucial to conduct research on both public advocacy efforts and climate change. Learning should incorporate sustainability. Although sustainable development was motivated by social issues and is a necessity for people, it aims to enhance human welfare by safeguarding natural resources. Natural capital is different from economic capital in that it comprises of resources including land, air, water, ecosystem services, and mineral. As a result, a lot of it gets turned into manufactured or economic capital. The environment encompasses the sources of the raw materials needed to meet human requirements and making sure that the capacity of drains for composting human waste is not surpassed in order to avoid harming people. Humankind must learn to exist within the constraints of the biosphere (Goodland 2002).

Globally Responsible Management Education

Management education is primarily about leadership development for social impact. Students

should be prepared to become ethical leaders in the global community. Management programs highlight their societal and global duty for a shared sustainable future even within traditional professions like accounting, finance, public service, and business administration. An increasing number of research (Muff et al. 2013; Werther and Chandler 2014; Williams 2014) is highlighting the opportunities and obligations that management education has for world development and global prosperity. These trends are already evident in a number of managerial and leadership practices used by businesses that support the UN Global Compact's objectives for human rights, labor rights, and anticorruption (Rasche and Kell 2010; Lawrence and Beamish 2013). These trends are already discernible in a number of managerial and leadership practices used by businesses engaged in sustainable development, human rights, labor rights, and the UN Global Compact's anticorruption agenda. However, many global management programs still need to make some adjustments to their strategic priorities and curricula in order to be more relevant to the trends in global responsibility for profits, people, planet, and sustaining partnerships (Fisk 2010; Sosik and Jung 2010; Wankel and Stachowicz-Stanusch 2011). Learning: The Treasure Within, the report written by the Jacques Delors-led Intergovernmental Panel on Education for the Twenty-First Century, was presented to UNESCO. The report urges for the complete goal of reorienting education to achieve sustainability and strongly advises that all reform be performed in the spirit and substance of sustainable development. Therefore, sustainability goals and education have a legitimate position in whatever modifications result from attempts at national or local educational reform. The audience at the international forum in Vienna identified holistic education, stakeholder awareness, engagement, and capacity building as its main objectives. The difficulty, however, was identified as the timely evolution of human civilization toward a profound transformation. The UN has been successful in integrating the social pillar alongside the economic and environmental aspects. Additionally, it has gained political support on a worldwide scale and

influenced a number of players, including all tiers of government, nongovernmental organizations (NGOs), academic and research institutions, and the general people. Therefore, the worldwide critique will be applied to enhance sustainability education.

Management Education in Theory

It acts as a justification for decisions to be made. An explicit understanding of the theoretical background supporting practice in educational establishments improves managerial activity. Academic scholars have classified models and theories of educational management. According to Cuthbert (1984), there are five categories of educational management theories: analytical-rational, pragmatic-rational, political, phenomenological, and interactionist models. In their quest to comprehend and manage educational institutions, students of educational administration who turn to systems studies for guidance will not find a single, universal theory but rather a variety of theoretical approaches, each jealously guarded by a specific epistemic community (Ribbins 1985). One of the 17 UN Sustainable Development Goals is to provide access to high-quality education. In order to identify the most crucial ESD teaching points, it is first necessary to examine the evolution of sustainable development. Sustainability for education competences (UNECE 2012) present essential characteristics of sustainability education will aid the management education theory with holistic approach, envisioning change, and achieving transformation.

Principled Challenges to Practical Opportunities

A key component of influencing the future is responsible management education, which entails translating theoretical issues into real-world opportunities. The fundamentals of management education are giving students the skills they need to become future producers of creating wealth for

industry and society as well as to contribute to a diverse and viable global economy. The values of international efforts like the United Nations Global Compact, which promote global social obligations, should also be embedded into academic pursuits and curriculum. Establishing educational structures, resources, procedures, and situations that promote successful leadership experiences; doing empirical and theoretical research that enhances knowledge of the dynamics, contributions, and effects of businesses in the production of long-term social, environmental, and economic value; interaction with business company managers to deepen understanding of their difficulties upholding social and environmental obligations and to mutually develop successful solutions to these difficulties; and facilitating and encouraging discussion and debate on important topics relating to sustainability and global social responsibility with interested groups and stakeholders, including education, business, government, consumers, the media, and civil society organizations are all very important for illustrating the tenets of education reform (Tavanti and Wilp 2015).

Culturally Responsive Teaching

By assisting the teacher in comprehending the cultural nuances that may lead to a relationship between the teacher and the student breaking down, culturally responsive teaching (CRT) seeks to close the achievement gap between the two parties. In accordance with sustainability developmental goal 4, a quality education must be comprehensive, inclusive, and encourage learning opportunities for all. It includes entrepreneurship, sustainability education, technical, vocational, and tertiary skills, as well as competence from early childhood education to secondary education (UNESCO 2019). Quality education, according to Ng's (2015) research, "includes holistic development", prepares learners with the skills and abilities for the future, instills students with the correct values, and instills students with a good learning disposition. This is provided by a good instructor, supported

by excellent teaching and learning procedures and holistic learning environment. Universities influence many of the world's future leaders significantly. Therefore, managing, reporting, and building strategy on sustainable development challenges have a big impact (Adams 2018). Change may be prompted by the way students are taught. Teachers who participate in CRT must apply critical intercultural awareness abilities to assess their own values, culture, attitudes, and perceptions with objectivity. This thought gives teachers a better understanding of the history and lifestyles of other cultures. Culturally responsive teaching also entails developing learning environments where students are treated with respect and confidence (Scheurich 1998). Additionally, they offer standards-based instructional methodologies and curriculum through the utilization of demanding, captivating activities that take place in the context of students' cultural and language contexts (Hilberg et al. 2000). Through the integration of their students' cultural and linguistic backgrounds with difficult learning situations requiring higher order thinking and critical inquiry, CRT techniques give teachers the abilities to educate students how to become critical thinkers. Researchers demonstrated to teachers how to incorporate their teaching with students' home experiences in Funds of Knowledge, a well-researched critical thinking mediation (González et al. 2013).

Sustainability Resolution Relating to All Bio-Sectors, E-Sectors, and Allied

According to the Sustainable Development Goals (SDGs) of the United Nations (2015–2030), which are stated by the Aichi-Nagoya Declaration on Education for Sustainable Development (2014), education must address biodiversity, climate change, production, sustainable consumption, and the urgency of the civilizational crisis in the country. It involves safeguarding ecosystems and the elements that make them up from unwelcome changes (Clive et al. 2019). Its goals are to preserve natural resources and the current natural environment, as well as to repair damaged

and reverse trends where feasible. Additionally, there is an urgent need to acknowledge the worth and relevance of traditional knowledge and indigenous insight in all contexts in geographic, socio-cultural, and educational as well as its applicability in environment.

Summary

Sustainability education and awareness depends on people participation towards educational growth. Successful implement must cut across governments and school districts in order to develop strategies, as sustainability and education remain two of the most important topics in human history. The likelihood of effective implementation and curriculum reorientation to attain sustainability will be increased by thoughtful consideration and planning around such challenges as well as issues unique to each location. This approach should cut across all nations and not sectionalized. In principle, increase in sustainability education and awareness level increases the people's good behavioral conduct on environmental, social, and economic sustainability. Governments, institution, private sectors, industries, and businesses should support education for sustainability for a better future and generation.

Cross-References

- [Awareness Management](#)
- [Education for Sustainable Development](#)
- [Ethics of Sustainability Education](#)

References

- Adams, C. A. (2018). Debate: Integrated reporting and accounting for sustainable development across generations by universities. *Public Money and Management*, 38, 332–334.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367–403.
- Australian Curriculum, Assessment and Reporting Authority (ACARA) (2015). What is Education for Sustainability? United Nations Economic Commission for

- Europe Strategy for Education for Sustainable Development (2012). Learning for the future: Competences in Education for Sustainable Development.
- Basnet, B. (2011). Is self-assessment effective in enhancing student learning?. In *AAEE conference*, Fremantle.
- Brem, A., & Puente-Díaz, R. (2020). Creativity, innovation, sustainability: A conceptual model for future research efforts. *Sustainability*, 12(8), 3139.
- Clive, H., Andrew, M., Nicoletta, P., & Simone, B. (2019). Environmental protection and ecology. In B. Fath (Ed.), *Encyclopedia of Ecology* (2nd ed., pp. 319–326). Amsterdam: Elsevier.
- Cox, W., & Ziv, J. (2005). Dimensions of sustainability. In *3rd International SIIV conference*, Bari.
- Cuthbert, R. (1984). The Management Process, E324 Management in Post Compulsory Education, Block 3, Part 2: Buckingham: Open University Press.
- EU Policy Forum on Development. (2019). Working group: (a) Environmental pillar. (b) Social pillar. (c) Economic pillar of sustainable development. Available online: <https://europa.eu/capacity4dev/search?text=group%20discussion>. Accessed 15 Aug 2019.
- Fisk, P. (2010). *People, planet, profit: How to embrace sustainability for innovation and business growth*. London: Kogan Page.
- Goodland, R. (2002). Sustainability: Human, social, economic and environmental. *Encycl. Glob. Environ. Change* 5, 481–491.
- González, N., Moll, L. C., & Amanti, C. (Eds.). (2013). *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. New York: Routledge.
- Hilberg, R. S., Sharp, R. G., & DeGeest, L. (2000). The efficacy of CREDE's standards-based instruction in American Indian mathematics classes. *Equity and Excellence in Education*, 33(2), 32–40.
- Jindal-Snape, D., Davies, D., Collier, C., Howe, A., Digby, R., & Hay, P. (2013). The impact of creative learning environments on learners: A systematic literature review. *Improving Schools*, 16(1), 21–31.
- King, E. M., & Anne Hill, M. (1993). *Women's Education in Developing Countries: Barriers, Benefits, and Policies*. Baltimore: John Hopkins University Press, for the World Bank.
- Lawrence, J. T., & Beamish, P. W. (2013). *Globally responsible leadership: Managing according to the UN Global Compact*. Thousand Oaks: Sage Publications.
- Leiserowitz, A. (2006). Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values. *Climatic Change*, 77(1), 45–72.
- Muff, K., Dyllick, T., Drewall, M., North, J., Shrivastava, P., & Haertle, J. (2013). *Management Education for the World: a Vision for Business Schools Serving People and Planet*, Edward Elgar, Cheltenham.
- Ng, P. T. (2015). What is quality education? How can it be achieved? The perspectives of school middle leaders in Singapore. *Educational Assessment, Evaluation, and Accountability*, 27, 307–322.
- Rasche, A., & Kell, G. (2010). *The United Nations global compact: Achievements, trends and challenges*. Cambridge, UK: Cambridge University Press.
- Ribbins, P. (1985). Organisation theory and the study of educational institutions. In M. Hughes, P. Ribbins, & H. Thomas (Eds.), *Managing education: The system and the institution* (p. 223). London: Holt, Rinehart and Winston.
- Scheurich, J. J. (1998). Highly successful and loving, public elementary schools populated mainly by low-SES children of color: Core beliefs and cultural characteristics. *Urban Education*, 33(4), 451–491.
- Sellman, E. (2012). Chapter 2: Creative approaches to inclusion. In E. Sellman (Ed.), *Creative learning for inclusion: Creating learning to meet special needs in the classroom* (pp. 3–14). New York: Routledge.
- Sosik, J. J., & Jung, D. I. (2010). *Full range leadership development: Pathways for people, profit, and planet*. New York: Routledge.
- Tavanti, M., & Wilp, E. A. (2015). Globally responsible management education: From principled challenges to practical opportunities. In D. Palmer (Ed.), *Handbook of research on business ethics and corporate responsibilities* (pp. 196–220). Hershey: IGI Global.
- Times Higher Education. (2019). (a) University Impact Ranking 2019, (b) University Impact Ranking 2019 by SDG: Methodology. Available online: https://www.timeshighereducation.com/rankings/impact/2019/sustainablecities-and-communities#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/scores. Accessed 14 July 2019.
- UNECE. (2012). *Competences in education for sustainable development*. Utrecht: United Nations Economic Commission for Europe. Available online: <https://www.unece.org/fileadmin/DAM/env/esd/>
- UNESCO. (2017). Education for sustainable development goals. Learning objectives. Available online: <http://unesdoc.unesco.org/images/0024/002474/247444e.pdf>. Accessed 1 May 2020.
- UNESCO, 40th General Conference. (2019). Framework for the implementation of education for sustainable development for the period of 2020–2030 (ESD for 2030). Available online: <https://unesdoc.unesco.org/ark:/48223/pf0000370215>. Accessed 13 July 2020.
- Wankel, C., & Stachowicz-Stanusch, A. (2011). *Management education for integrity: Ethically educating tomorrow's business leaders*. Bingley: Emerald.
- Werther, W. B., & Chandler, D. (2014). *Strategic corporate social responsibility: Stakeholders, globalization, and sustainable value creation*. Thousand Oaks: Sage Publications.
- Williams, O. F. (2014). *Corporate social responsibility: The role of business in sustainable development*. London/New York: Routledge/Taylor & Francis Group.
- Williams, A., Kennedy, S., Philipp, F., & Whiteman, G. (2017). Systems thinking: A review of sustainability management research. *Journal of Cleaner Production*, 148, 866–881.

Sustainability Governance

► Inclusive Leadership

Sustainability in Curricula (SE)

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Synonyms

Education for sustainable development in curricula; Education for sustainability in curricula

Definition

Sustainability Education (SE) seeks to enable students and graduates to gain and generate knowledge about sustainability, and reflect critically on behavior and decisions for sustainable development in a way that they can contribute to a sustainable future. Instead of the term SE, some authors (e.g., Wamsler 2020) use the term Education for Sustainability (EfS) or Education for Sustainable Development (ESD) (see Weiss and Barth (2019)). The terms sustainability and sustainable development are used interchangeably in this context (Disterheft et al. 2013). Sustainability in Curricula (or EfS/ESD in Curricula) refers to the institutional or academic process of developing curricula or implementing sustainability in curricula in higher education (Barth 2015; Weiss and Barth 2019). Developing and implementing ESD in curricula means to integrate topics of sustainable development like climate change, poverty reduction, biodiversity, and sustainable consumption in teaching through new approaches to all aspects of education (Wiek et al. 2011). These aspects include content of curricula, learning objectives, pedagogies, and assessment of

students' achievements. Structural changes of Sustainability Curricula generated in the process need to reflect that sustainability is a crosscutting issue involving several disciplines (Weiss and Barth 2019).

Introduction

Integration of Sustainability or Education for Sustainable Development (ESD) in Curricula receives increasing scientific interest since the late 1990s (Weiss and Barth 2019). One reason for the recent growth of this area of research is that ESD asks for new, innovative approaches to the development of curricula. This is due to the interdisciplinary nature of sustainability and the systemic implications of the topic. Education for sustainable development originated from environmental education, a concept, which emerged in the 1970s (Barth and Rieckmann 2016; Gamage and de Silva 2022). In environmental education, the focus is to provide information about the environment, to give the opportunity to experience the environment (e.g., during field work), and to foster the development of a personal relationship with nature (Cotton and Winter 2010). Today, environmental education is considered part of ESD (Garcia et al. 2017).

The Brundtland report "Our common future" (WCED 1987) was published by the United Nations to give a strong impulse for sustainable development. With its key topics of intergenerational equity and global partnership, this report represents a milestone in the social and scientific discourse on sustainability. Additional momentum for ESD in institutes of higher education came from a number of international conferences, starting in the 1990s (UNESCO 2018): The United Nations conference on Environment and Development in Rio in 1992 with the Agenda 21 action program introduced ESD (Gamage and de Silva 2022). Ten years later, the 2002 World Summit on Sustainable Development in Johannesburg announced the decade for ESD 2005–2014. The 2012 United Nations Conference on Sustainable Development in Rio showed that global environmental and socioeconomic issues

continued to be challenging. In 2014, the Global Action Program on ESD followed the decade for ESD. Shortly after that, the 2015 Paris Agreement was adopted providing a global framework to try to reduce global warming to well below 2 °C. At the same time, the Sustainable Development Goals (SDGs) were released, which represent a universal call to take steps to end poverty and protect the planet. ESD is crucial to achieve sustainable development and can be regarded as a process of learning. ESD is therefore linked to several SDGs. Most prominently, ESD is part of SDG 4 on quality education (United Nations 2015). More specifically, target 4.7 states “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development” (United Nations 2015, p. 17).

Institutions of higher education have a special role in education for sustainable development, as they teach the change agents of the future (Fadeeva et al. 2014; Salovaara and Soini 2021). ESD aims at increasing awareness for sustainable development as well as developing competencies, promoting sustainable and responsible actions (Rieckmann 2012). Through education, the aim is to enable learners with knowledge, skills, attitudes and competencies to engage and collaborate toward social, environmental, and economic sustainability (Gamage and de Silva 2022) and thereby attain societal transformation. As outlined by Garcia et al. (2017), a development balancing the three dimensions of sustainability asks for an integral and interdisciplinary approach in teaching and learning. Therefore, institutions of higher education have started to integrate sustainability into curricula (Barth and Rieckmann 2016).

Sustainability at Institutions of Higher Education

According to Schneider et al. (2018), there is a special responsibility of institutions of higher education for Sustainability Education. One reason is that these institutions not only are multipliers, but they also educate change agents of the future

(Salovaara and Soini 2021). Besides good governance (Žalėnienė and Pereira 2021), institutions have three fields of activities: teaching, research and community outreach (Fia et al. 2022; Leal Filho and Dahms 2018). In all fields, institutions of higher education can integrate sustainability.

Sustainability in Curricula can be addressed on three levels (Fia et al. 2022): on a macro-level (e.g., activities referring to all university or campus such as strategic and policy issues), on a meso-level (for instance, referring to activities of a faculty or a study program). Activities or content regarding individual courses or individual workshops are regarded as micro-level activities (Cotton and Winter 2010). Activities on all three levels are interrelated. Implementing sustainability via a strategic whole institution approach achieves higher impact compared to fragmented activities on individual levels. This is because a strategic approach leads to synergies between activities on macro-, meso-, and micro-level and helps to overcome common barriers to implementation of Sustainability in Curricula (Weiss et al. 2021; Zepeda Quintana et al. 2022) (Fig. 1).

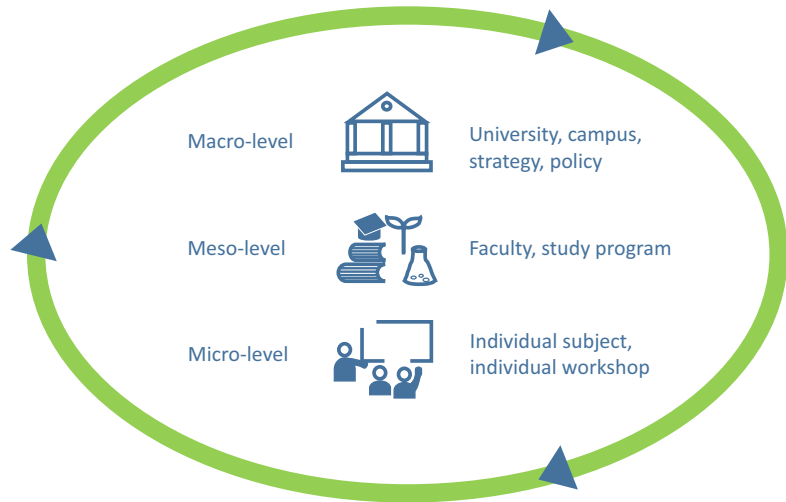
Curricular Versus Noncurricular Sustainability Education

Sustainability education can take place in formal and less formal settings (OECD 2007) and in curricular or noncurricular format. Formal learning refers to situations of an organized learning process leading to qualifications like degrees and diplomas. Nonformal educational settings include organized forms of education, where usually no qualification is obtained like community learning or learning organized in volunteer activities. Informal learning describes educational situations which are not organized and where learning takes place unintentionally (OECD 2007).

Sustainability Education in institutions of higher education can be facilitated in different modes (Pallant et al. 2020): curricular education, cocurricular education, which are both formal forms of education and extra-curricular education, which is less formal as no qualification is obtained usually. Curricular education has the advantage

Sustainability in Curricula (SE),

Fig. 1 Macro-, meso-, and micro-level of the implementation of Sustainability Education at institutions of higher education (own work based on concepts of different levels of implementation in Fia et al. 2022; Kleiman 2010; Weiss and Barth 2019). Strategic whole-institution approaches create synergies and make the implementation more efficient



that students get credit points and receive support of teaching staff (Gamage and de Silva 2022).

At institutions of higher education, Sustainability Education not only takes place via the formal curriculum, but also via the so-called hidden curriculum (Chambers et al. 2016; Cotton and Winter 2010). This term is used to refer to unintentional learning opportunities through campus culture and values expressed on campus, e.g., if the university is a Fairtrade university, decisions are taken in democratic ways or if waste is separated. This provides students with implicit learning opportunities, which are complementary to learning opportunities of the formal curriculum.

more sustainability in Curricula. This holds especially for learners. Boarin et al. (2020) state that sustainability is perceived as a critical element of curricula by learners at different levels of higher education. Students prefer having more sustainability classes as integral part of curriculum (Grund and Brock 2020; Wang et al. 2022). According to Garcia et al. (2017), ESD needs new and participatory educational methods, which enable students to gain knowledge and activate them to change behavior. This is in line with the observation that processes of curriculum innovation can be initiated and led by students (Weiss and Barth 2019).

Sustainability in Curricula

There is a growing body of literature on ESD at institutions of higher education. The most important topic in this field of research is the development of curricula (Barth and Rieckmann 2016). To date, there is no consensus regarding the content of a sustainability curriculum (Gamage and de Silva 2022; O'Byrne et al. 2014). Therefore, sustainability contents in curricula are described via characteristics rather than via topics (Disterheft et al. 2013): ESD is supposed to be inter- or transdisciplinary, takes on an integrated approach, and aims at transformative action. In general, teachers and learners are in favor of

Competencies and Methods for Sustainability in Curricula

The idea of ESD is to change societies through learning and through facilitating the acquisition of competencies (Fadeeva et al. 2014). This means that graduates are provided with a literacy in sustainability. This results in graduates with the ability to critically reflect on economic growth, consumption patterns, digitalization and globalization (Fadeeva et al. 2014). To achieve this, competencies were defined and described by several authors. According to Wiek et al. (2011), a competency is a "functionally linked complex of knowledge, skills, and attitudes that enable

successful task performance and problem solving.” One of the influential contributions regarding competencies for Sustainability Education is De Haan (2006), who developed the concept of *Gestaltungskompetenz* (shaping competency). Shaping competency refers to the competency of acting and problem-solving based on skills, knowledge, and competencies for behavior change to reach sustainable development. Shaping competency comprises several key competencies, among others competency in anticipatory thinking; competency in interdisciplinary work as well as awareness of global relations and cooperation. Further work was done by Brundiers et al. (2021), Cebrián et al. (2020), Lozano et al. (2017), and Wiek et al. (2016). In a review of competencies mentioned in descriptions of 45 master programs related to sustainability science, Salovaara et al. (2020) found that the competency of strategic thinking, normative competencies, and the competency of systems thinking were the most frequently mentioned ones.

Based on competencies, concepts for pedagogies and methods to teach sustainability were developed. Evans (2019) derived five competencies and five pedagogies to teach these. Generally, it was shown that integrated (interdisciplinary and transdisciplinary), participative, and applied methods work best. Especially problem- and project-based methods combine very well with most sustainability competences. Both methods share some common characteristics such as focus on applied, real-life topics. Problem-based methods facilitate deeper understanding of theory, thus learning is more student-centered, whereas project-based methods yield more case-specific insights, offer opportunities to learn project management, and often result in practical products related to the project (Brundiers and Wiek 2013). Research shows that problem-based and project-based methodologies are useful and effective educational settings for the implementation of ESD in teaching (Álvarez et al. 2021; Brundiers and Wiek 2013). Other frequently used methods are service learning, also known as community-based learning. Here, students get involved as volunteers in social groups or projects and typically receive credit points for their studies. Additionally,

methods like cross-disciplinary workshops, case studies, and simulation games are used (Cebrián et al. 2020). It is important to note that ESD and curricular innovation also require training, competencies and support of educators (Anastasiadis et al. 2021; Fadeeva et al. 2014). Professional development of teachers’ competencies works best if integration of sustainability is approached in a strategic whole-institution effort (Fadeeva et al. 2014).

Challenges of Implementing Sustainability in Curricula

One of the key obstacles of curricular innovation is the discipline-based structure of many institutions of higher education, which hampers interdisciplinary approaches required for ESD (Disterheft et al. 2013; Harré et al. 2020; Weiss et al. 2021). If institutions apply reductionist approaches limited to one of the dimensions of sustainability only, the potential of ESD cannot be reached (Disterheft et al. 2013). The introduction of institution-wide sustainability learning outcomes can help to overcome disciplinary boundaries (Levesque and Wake 2021). Weiss et al. (2021) describe different degrees to which sustainability is implemented into curricula at institutions of higher education. Weaker forms are characterized by a level of implementation with Sustainability Education as add-on to the curriculum rather than stronger forms with built-in Sustainability Education or completely redesigned curricula. Further barriers include lack of strategy or vision and organizational issues such as lack of resources and organizational structure (Weiss et al. 2021) and crowded curricula (Verhulst and Lambrechts 2015). Greenwashing and commercialization of education may be challenging for the introduction of sustainability curricula in institutions of higher education (Disterheft et al. 2013), especially if the implementation is weak. Good coordination, an institution-wide strategy and interdisciplinary collaboration are enabling factors for the implementation of Sustainability in Curricula. Strong leadership and simultaneous implementation of sustainability in all fields of

activities of institutions of higher education is beneficial (Weiss et al. 2021). Other challenges include human factors such as reluctance to change or lack of awareness (Verhulst and Lambrechts 2015). This means that a good integration of top-down approaches and bottom-up processes is important for successful implementation of Sustainability in Curricula (Verhulst and Lambrechts 2015).

Summary

The United Nations decade for ESD (2005–2014) as well as the SDGs inspired institutions of higher education to integrate Sustainability in Curricula. This requires activities on a strategic, whole-institution level, but also on the level of faculties, study programs, and individual courses. Important barriers to implementation are disciplinary boundaries and a lack of strategy and vision. Key enabling factors are strong leadership, interdisciplinary competency of staff and other actors as well as integration of top-down and bottom-up processes.

Cross-References

- Education for Sustainable Development
- United Nations Sustainable Development Goals 2030, The

References

- Álvarez, I., Etxeberria, P., Alberdi, E., Pérez-Acebo, H., Eguía, I., & García, M. J. (2021). Sustainable civil engineering: Incorporating sustainable development goals in higher education curricula. *Sustainability*, 13, 8967. <https://doi.org/10.3390/su13168967>.
- Anastasiadis, S., Perkiss, S., Dean, B. A., Bayerlein, L., Gonzalez-Perez, M. A., Wersun, A., Acosta, P., Jun, H., & Gibbons, B. (2021). Teaching sustainability: Complexity and compromises. *Journal of Applied Research in Higher Education*, 13(1), 272–286. <https://doi.org/10.1108/JARHE-02-2020-0029>.
- Barth, M. (2015). *Implementing sustainability in higher education*. New York: Routledge.
- Barth, M., & Rieckmann, M. (2016). State of the art in research on higher education for sustainable development. In M. Barth, G. Michelsen, M. Rieckmann, & I. Thomas (Eds.), *Routledge handbook of higher education for sustainable development* (pp. 100–113). London: Routledge.
- Boarin, P., Martinez-Molina, A., & Juan-Ferruses, I. (2020). Understanding students' perception of sustainability in architecture education: A comparison among universities in three different continents. *Journal of Cleaner Production*, 248, 119237. <https://doi.org/10.1016/j.jclepro.2019.119237>.
- Brundiers, K., & Wiek, A. (2013). Do we teach what we preach? An international comparison of problem- and project-based learning courses in sustainability. *Sustainability*, 5(4), 1725–1746. <https://doi.org/10.3390/su5041725>.
- Brundiers, K., Barth, M., Cebrián, G., et al. (2021). Key competencies in sustainability in higher education—Toward an agreed-upon reference framework. *Sustainability Science*, 16, 13–29.
- Cebrián, G., Junyent, M., & Mulà, I. (2020). Competencies in education for sustainable development: Emerging teaching and research developments. *Sustainability*, 12, 579.
- Chambers, D. P., Walker, C., Williams, K., Rayner, J., Farrell, C., et al. (2016). Engaging students with environmental sustainability at a research intensive university: Examples of small successes. In F. W. Leal & P. Pace (Eds.), *Teaching education for sustainable development at university level. World sustainability series* (pp. 205–219). Cham: Springer.
- Cotton, D., & Winter, J. (2010). 'It's not just bits of paper and light bulbs': A review of sustainability pedagogies and their potential for use in higher education. In P. Jones, D. Selby, & S. Sterling (Eds.), *Sustainability education: Perspectives and practice across higher education* (pp. 39–54). London/New York: Taylor & Francis Group.
- de Haan, G. (2006). The BLK '21' programme in Germany: A 'Gestaltungskompetenz'-based model for education for sustainable development. *Environmental Education Research*, 12(1), 19–32. <https://doi.org/10.1080/13504620500526362>.
- Disterheft, A., Caeiro, S., Azeiteiro, U. M., & Leal Filho, W. (2013). Sustainability science and education for sustainable development in universities: A way for transition. In S. Caeiro et al. (Eds.), *Sustainability assessment tools in higher education institutions: Mapping trends and good practices around the world* (pp. 3–27). Cham: Springer. https://doi.org/10.1007/978-3-319-02375-5_1.
- Evans, T. L. (2019). Competencies and pedagogies for sustainability education: A roadmap for sustainability studies program development in colleges and universities. *Sustainability*, 11(19), 1–36.
- Fadeeva, Z., Galkute, L., Mader, C., & Scott, G. (2014). Assessment for transformation – Higher education thrives in redefining quality systems. In Z. Fadeeva, L. Galkute, C. Mader, G. Scott, & S. Mohun (Eds.), *Sustainable development and quality assurance in*

- higher education: *Transformation of learning and society* (pp. 1–22). Basingstoke: Palgrave Macmillan UK.
- Fia, M., Ghasemzadeh, K., & Paletta, A. (2022). How higher education institutions walk their talk on the 2030 Agenda: A systematic literature review. *Higher Education Policy*. <https://doi.org/10.1057/s41307-022-00277-x>.
- Gamage, K. A. A., & de Silva, E. K. (2022). Sustainable development. In K. A. A. Gamage & N. Gunawardhana (Eds.), *The Wiley handbook of sustainability in higher education learning and teaching*. Hoboken: Wiley-Blackwell. <https://doi.org/10.1002/9781119852858.ch1>.
- Garcia, J., da Silva, S. A., Carvalho, A. S., & de Andrade Guerra, J. B. S. O. (2017). Education for sustainable development and its role in the promotion of the sustainable development goals. In J. Davim (Ed.), *Curricula for sustainability in higher education. Management and industrial engineering*. Cham: Springer. https://doi.org/10.1007/978-3-319-56505-7_1.
- Grund, J., & Brock, A. (2020). Education for sustainable development in Germany: Not just desired but also effective for transformative action. *Sustainability*, 12(7), 2838.
- Harré, N., Azizi, A., Brothers, P., Coomber, T., King, E., et al. (2020). An interdisciplinary teaching module on the global clothing industry: Lessons from working across four disciplines and two universities. In E. Sengupta, P. Blessinger, & T. S. Yamin (Eds.), *Integrating sustainable development into the curriculum (innovations in higher education teaching and learning)* (Vol. 18, pp. 107–124). Bingley: Emerald Publishing. <https://doi.org/10.1108/S2055-36412020000018025>.
- Kleiman, P. (2010). Staging sustainability: Making sense of sustainability in HE dance, drama and music. In P. Jones, D. Selby, & S. Sterling (Eds.), *Sustainability education: Perspectives and practice across higher education* (pp. 155–171). London/New York: Taylor & Francis Group.
- Leal Filho, W., & Dahms, L.-M. (2018). Incorporating sustainable development issues in teaching practice. In W. Leal Filho (Ed.), *Implementing sustainability in the curriculum of universities: Approaches, methods and projects* (pp. 323–330). Cham: Springer. https://doi.org/10.1007/978-3-319-70281-0_20.
- Levesque, V. R., & Wake, C. P. (2021). Organizational change for sustainability education: A case study of one university's efforts to create and implement institution-wide sustainability competencies. *International Journal of Sustainability in Higher Education*, 22(3), 497–515. <https://doi.org/10.1108/IJSHE-09-2019-0285>.
- Lozano, R., Merrill, M., Sammalisto, K., Ceulemans, K., & Lozano, F. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education: A literature review and framework proposal. *Sustainability*, 9(10), 1889. <https://doi.org/10.3390/su9101889>.
- O'Byrne, D., Dripps, W., & Nicholas, K. (2014). Teaching and learning sustainability: An assessment of the curriculum content and structure of sustainability degree programs in higher education. *Sustainability Science*, 10, 43–59. <https://doi.org/10.1007/s11625-014-0251-y>.
- Organisation for Economic Co-operation and Development (OECD). (2007). Thematic review on recognition of non-formal and informal learning. Country background report: United Kingdom. <https://www.oecd.org/unitedkingdom/41782373.pdf>. Accessed 25 Aug 2022.
- Pallant, E., Choate, B., & Haywood, B. (2020). How do you teach undergraduate university students to contribute to UN SDGs 2030? In W. Leal Filho et al. (Eds.), *Universities as living labs for sustainable development* (World sustainability series) (pp. 69–85). Cham: Springer. https://doi.org/10.1007/978-3-030-15604-6_5.
- Rieckmann, M. (2012). Future-oriented higher education: Which key competencies should be fostered through university teaching and learning? *Futures*, 44(2), 127–135.
- Salovaara, J. J., & Soini, K. (2021). Educated professionals of sustainability and the dimensions of practices. *International Journal of Sustainability in Higher Education*, 22(8), 69–87. <https://doi.org/10.1108/IJSHE-09-2020-0327>.
- Salovaara, J. J., Soini, K., & Pietikäinen, J. (2020). Sustainability science in education: Analysis of master's programmes' curricula. *Sustainability Science*, 15, 901–915. <https://doi.org/10.1007/s11625-019-00745-1>.
- Schneider, P., Folkens, L., Busch, M., & Leal Filho, W. (2018). The teaching-research-practice nexus as framework for the implementation of sustainability in curricula in higher education. In W. Leal Filho (Ed.), *Implementing sustainability in the curriculum of universities: Approaches, methods and projects* (pp. 113–136). Cham: Springer. https://doi.org/10.1007/978-3-319-70281-0_8.
- UNESCO, United Nations Educational Scientific and Cultural Organization. (2018). In A. Leicht, J. Heiss, & W. J. Byun (Eds.), *Issues and trends in education for sustainable development*. Paris: UNESCO.
- United Nations. (2015). Transforming our world: The 2030 Agenda for sustainable development. Resolution adopted by the general assembly on 25 September 2015. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E. Accessed 25 Aug 2022.
- Verhulst, E., & Lambrechts, W. (2015). Fostering the incorporation of sustainable development in higher education. Lessons learned from a change management perspective. *Journal of Cleaner Production*, 106, 189–204.
- Wamsler, C. (2020). Education for sustainability: Fostering a more conscious society and transformation towards sustainability. *International Journal of Sustainability in Higher Education*, 21(1), 112–130. <https://doi.org/10.1108/IJSHE-04-2019-0152>.

- Wang, Y., Sommier, M., & Vasques, A. (2022). Sustainability education at higher education institutions: Pedagogies and students' competences. *International Journal of Sustainability in Higher Education*, 23(8), 174–193. <https://doi.org/10.1108/IJSHE-11-2021-0465>.
- Weiss, M., & Barth, M. (2019). Global research landscape of sustainability curricula implementation in higher education. *International Journal of Sustainability in Higher Education*, 20(4), 570–589. <https://doi.org/10.1108/IJSHE-10-2018-0190>.
- Weiss, M., Barth, M., Wiek, A., & von Wehrden, H. (2021). Drivers and barriers of implementing sustainability curricula in higher education – Assumptions and evidence. *Higher Education Studies*, 11(2), 42–64.
- Wiek, A., Withycombe, L., & Redman, C. L. (2011). Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science*, 6, 203–218. <https://doi.org/10.1007/s11625-011-0132-6>.
- Wiek, A., Bernstein, M., Foley, R., Cohen, M., Forrest, N., et al. (2016). Operationalising competencies in higher education for sustainable development. In M. Barth, G. Michelsen, M. Rieckmann, & I. Thomas (Eds.), *Routledge handbook of higher education for sustainable development* (pp. 241–260). London/New York: Routledge.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford: Oxford University Press.
- Žalėnienė, I., & Pereira, P. (2021). Higher education for sustainability: A global perspective. *Geography and Sustainability*, 2(2), 99–106. <https://doi.org/10.1016/j.geosus.2021.05.001>.
- Zepeda Quintana, D. S., Esquer, J., & Munguía, N. (2022). Factors that hinder the implementation of sustainability initiatives in higher education institutions. In K. A. A. Gamage & N. Gunawardhana (Eds.), *The Wiley handbook of sustainability in higher education learning and teaching*. Hoboken: Wiley-Blackwell. <https://doi.org/10.1002/9781119852858.ch5>.

Sustainability in Economy of Communion Enterprises

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Synonyms

Civil economy; Sharing economy; Sharing organizations; Social and civil firms

Definition

Sustainability in Economy of Communion enterprises (EoC) is the economic expression of a charisma that is implemented in the economic field. It considers the company as part of a wider life that is based on values and on the view of world fraternity among people and organizations in order to solve poverty issues.

The analysis develops in the understanding of the evolution starting from frail sustainability to robust sustainability in EoC companies. It is necessary to proceed by successive approximations, so we propose to concentrate the consideration on some pillars and gears, which we found particularly implemented in the EoC and which are assuming considerable relevance from a theoretical point of view as well.

Economy of Communion is the economic expression of a charisma (Bruni and Sena 2013; Baldarelli 2013), but it is also the source of a new culture that develops only if it is shared and if there is an attitude of openness toward the discovery of new ways of company management and of the existence itself thought out and realized while acting together. The implicit potential in the EoC may be developed in comparison and in “communion.” That is, in the ability of questioning oneself in order to reach new solutions for new problems within a logic that considers “eudaimonic happiness” as the preeminent aspect of thinking and acting together.

EoC Pillars in the Passage from Frail Sustainability to Robust Sustainability

The pillars, that we will deal with, are dialogue, trust, and reciprocity.

Dialogue is intended as accurate dialogue, which creates trust within itself, and it is the result of care and of a positive and truthful relationship. Dialogue which is not created without listening to and sharing with the other players with whom we are speaking, so we are not talking of a merely contractual relationship, rather we try to go beyond and develop a relationship which involves economics, social, and environmental aspects that

are based on values (Lubich 2001; Argiolas 2017).

The meaning of dialogue is better understood if we refer to the reputation of interactive relationships, till so long as a real evolutionary classification underlining the various constructive implications, even from the economic interpretation, these bring (Ruisi 2011).

Concerning this, we must not forget an important trend, represented by the gradual diminishing of interpersonal goods, which has directed to the formation of the novel “poor,” who have various positional things, but have few accurate relations, and, for this reason, they are unfortunate (Bruni and Porta 2006). It follows that the existence of relational “new poverties” tends to deteriorate and flatten the overall economic system and, consequently, the businesses themselves too. The relationship is necessary to go far outside the contract and embrace gratuity, at minimum in one of the two parties (Baldarelli et al. 2015; Baldarelli and Del Baldo 2017). The second aspect, which we will analyze, regards trust (Pelligra 2007), which is generated by way of the typology of relations just outlined and, particularly, whenever the parties place themselves on the same plane without the utilitarian purpose of one abusing his/her power over the other.

Second, in order to generate trust, you need to be able to put yourself in the position of the other party and to fully understand their problems.

Reciprocity, according to the model adopted, points out various relational modes, which we will explain. The same author subdivides reciprocity into three categories, viz., “cautious,” “philia” (brotherly love), and “courageous.” The first is so defined: In order to make cooperation possible, it is necessary that there are players to imitate who are pioneers in this activity (Bruni 2006; Bruni et al. 2008); the second kind of reciprocity-philia works in cooperation if there are the following conditions: equivalence, namely the adequacy of the reaction, equality, freedom, nontransitivity and conditionality, or rather an element in common; “courageous” reciprocity, on the other hand, always works in cooperation (Bruni et al. 2008). Such an interaction form is healthily stated by the reciprocity relation wherein open-handed and

getting is experienced. This form of reciprocity consists in the incidence of an inherent reward the player gains from the act itself, both previously and regardless of the consequence.

To take this path, we underline also the importance of the good life by seeking truth, goodness, and beauty within the company decision-making process.

The pillars highlighted go into the undercurrents of commercial activities and, therefore, of businesses generating originality and sensibility toward destitution and poverty, and they act as motors of the passage from weak sustainability to strong sustainability.

EoC Tools in the Way from Frail Sustainability to Robust Sustainability

In the EoC business, a part of functioning time is expended on constant building up and lacing relations. Communion must always be searched for. For this reason, it is important to equip oneself with tools which may favor facilitating processes in order to boost it or rebuild it (Argiolas 2017).

Signing up to a Pact on the mission requires clearly – although still dynamically – significant it, representing which elementary principles the firm will have to magnet motivation from the relations that it will launch with the stakeholders, whether they be inner or outside ones, close or distant.

The second tool is sharing which consists of giving one’s own experiences, but especially, how they have impacted the ways of seeing problematic issues and finding solutions within themselves, sharing that which one is with the others, with all correlated characteristics and skills, successes or failings, worries or hopes.

The third is sharing experiences. Some knowledge, experiences, risk “dying out” in whoever has them if they are not shared. A way to let your professional competence of which you knowingly are aware be known, and a way of acquiring yet others.

The fourth tool is testing. It includes a pathway that permits, both the worker and internal/external

agent, to improve his/her labor relation, in qualitative terms (Baldarelli et al. 2015). It may be brought about through periodic consultations in small clusters harmonized by a moderator who has the task of ensuring that whatever is said goes for the real benefit of the single persons and of the company: It is a chance to together remove what the stumbling block is, or decisively drive toward that which favors original “life,” original “ideas” in the business as well, since one does not stop at correcting a mistake, rather goes on to reciprocal growth.

In the colloquial interview, which is the final tool we will analyze, both questions relating to the trend of company life, of communion relations among its leaders, but also the position of the individual person with his/her needs of various types are considered, depending on cases and players involved. So that the colloquial interview produces its effects, total listening is necessary, moving our culture, our way of being to welcome the other. The point of gravity shifts from I to “We.”

The originality is in not ever tracking singular choices, rather decisions taken together for the quality of life of the third party who has to bear the consequences of them. All this helps to overcome the limitation of the ego which, trustfully speaking, generates reciprocity.

The tools analyzed develop in the definition of the purposes, in the behaviors of governance, and in the statement of the company. They allow the decision-making procedure to progressively change until it includes those characteristics of strong sustainability, which we are here dealing with.

Summary

These considerations about EoC pillars and tools stand not just for companies; however, the dynamics originating mean revitalization of the market, of the economic system and society which, in this way, becomes, authentic for a rediscovery of values and beauty of putting them into practice.

Finally, in the EoC scheme, we glimpse at an effective support to the combination that changes old-style knowledge, which especially deals with both scholars within the same branch of learning, and an interdisciplinary dimension, in “wisdom.”

References

- Argiolas, G. (2017). *Social management. Principles, governance and practice*. Cham: Springer.
- Baldarelli, M. G. (2013). Account(ing)-ability and “charisma”: Conceptual network and implementation. *Economic Research*, 26(1), 63–82.
- Baldarelli, M. G., & Del Baldo, M. (2017). From weak to strong CSR: The contribution of new categories in the account(ing) ability of EoC industrial parks. In S. Vertigans & S. O. Idowu (Eds.), *Corporate social responsibility: Academic insights and impacts* (pp. 45–65). Cham: Springer. <https://doi.org/10.1007/978-3-319-35083>.
- Baldarelli, M. G., Del Baldo, M., & Ferrone, C. (2015). The relationships between CSR, good governance and accountability in the economy of communion (EoC) enterprises. In S.O. Idowu, C.S. Frederiksen, A.Y. Mermod, & M.E.J. Nielsen (Eds.), *Corporate social responsibility and governance: Practice and theory* (pp. 3–38). Cham: Springer.
- Bruni, L. (2006). *Il prezzo della gratuità*. Roma: Città Nuova.
- Bruni, L., & Porta, P. L. (Eds.). (2006). *Felicità e libertà. Economia e benessere in prospettiva relazionale*. Milano: Guerini.
- Bruni, L., & Sena, B. (Eds.). (2013). *The charismatic principle in social life*. N.Y: Routledge.
- Bruni, L., Gilli, M., & Pelligra, V. (2008). Reciprocity: Theory and facts. *International Review of Economics*, 23(10/11), 260–278. <https://doi.org/10.1108/03068299610149589>.
- Lubich, C. (2001). *Economia di comunione. Storia e profezia*. Roma: Città Nuova.
- Pelligra, V. (2007). *I paradossi della fiducia*. Bologna: Il Mulino.
- Ruisi, M. (2011). *Prospettive relazionali intra- e inter-aziendali nelle nuove tendenze della ricettività turistica*. Roma: Aracne.

Sustainability in Entrepreneurship

► Entrepreneurial Sustainability

Sustainability in Food Industry

► Sustainability and Sustainable Development in the Food Industry

Sustainability in Tourism Marketing (Sustainable Tourism Marketing)

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“If we leave environmental protection to environmentalists, marketing products to marketers and social equity to activists groups, the system will be separated, and common objectives are hard to achieve. Sustainable marketing has sustainability as its underlying objective. This includes a quality of life instead of standard of living. A sustainable approach provides a macro-holistic view of marketing and integrates economic viability, social equity and environmental responsibilities towards the desire to achieve livable and living communities” (Jamrozy 2007, p. 125).

Introduction and Theoretical Framework

Definition

Sustainability in the framework of the marketing of tourism or sustainable tourism marketing means marketing of tourism products and destinations respecting, protecting, and preserving the environmental and cultural resources and local livelihoods. The tourism marketing paradigm is signaled to shift from economic profit priorities toward sustainability. In this respect, marketing approaches are indicated to evolve from the production, sales, and customer orientation toward marketing alternatives such as societal, causal, green, responsible, and relationship marketing (Jamrozy 2007). The study of Constantinides (2006) can be visited in order to see the evolution of marketing approaches in general beginning from the 1960s till the appearance of e-marketing

and suggestions for the twenty-first-century marketing. The STMM (sustainable tourism marketing model) suggested by Jamrozy (2007) integrates tourism into a larger holistic context and focuses on marketing a quality of life for all stakeholders in the system. It is indicated in this study that “the fundamental shift is to market tourism not as a leisure product but as an experience that enhances quality of life, not just for the individual participants, but for living systems at large; the human and non-human, the guests and the hosts. Such an integrated view perceives tourism as a social psychological activity, where the benefits are not or not only economic profits, but also (ex) changes of ones own belief system, an appreciation and a sense of need for diversity. The tourism system is not limited to demand and supply but a system of synergetic agents. Tourism experiences do not ‘add’ to the quality of life but are part of living system communities” (Jamrozy 2007, p. 126).

Main Issues Related to the Sustainable Tourism Marketing

As sustainable tourism is a multidisciplinary field involving multifaceted actors and businesses, interrelated and interconnected are the marketing conceptualizations for sustainable tourism. It is not easy to decide by the sector how to communicate its sustainability in terms of the practices of the tourism businesses as well as the message attempted to be given to the consumer side. Thus, sustainable marketing of tourism involves a huge array including the tourism products, the tourism businesses, the destinations, and the consumers.

Beginning from the current research areas for tourism marketing and their related subtopics, they are resumed as follows: Consumer behavior (motives, perception, satisfaction); market segmentation, targeting, and positioning (psychographic and behavioral segmentation factors); brand management (destination branding, destination image, destination personality, destination image measures); service performance (service quality, service delivery, service failure); demand

models and pricing (demand prediction models and pricing strategies); strategic marketing and marketing concept (market orientation, relationship marketing, experiential marketing); and e-marketing (transaction, promotion, Web 2.0, user-generated content, social media, and mobile services) (Tsiotsou and Ratten 2010, p. 534).

“Management of demand” is emphasized by Kastenholz (2004) playing a central role in the context of a careful target marketing approach as an important instrument for the sustainable development of a tourist destination. Market segmentation, targeting, and positioning (Tsiotsou and Ratten 2010) according to the new consumer trends such as ageing population, students and their families at foreign countries, and ethnic (Dolnicar and Leisch 2003; Chen and Uysal 2003) and budgetary segmentations (Tsiotsou and Ratten 2010) are suggested as the research areas to be realized. Font and McCabe (2017) emphasize the importance of sustainability in the tourism and marketing conceptualizations, and they question in what ways the importance of sustainability in the future world of tourism can be communicated by the tourism academicians to especially marketing professionals that are practicing in the tourism industry. Dinan and Sargeant (2000) argue that the tools and techniques of “social marketing” may have much to offer tourism organizations seeking a more sustainable approach to their market.

In addition to the mentioned areas to research and development, many new concepts and factors are to be inevitably involved in the seriously planned sustainable tourism marketing programs. That is to say, the ever-evolving technology and multidisciplinary concepts of sustainability drive the global business and management practices including those of the tourism industry to adopt new paths and methods for the adaptation. e-Marketing thus has become a popular pathway for this new era of economy as well as the concepts such as “individualized,” “specialized,” and “tailor-made” production and communication means. Social media and e-word of mouth (eWOM) are explored in the context of IT applications of tourism as a very important aspect of marketing for tourism (Beckendorff et al. 2019; Xiang et al. 2015).

A few of the most important arguments that underscore the potential that tour operators have in promoting sustainable tourism are dealt with by the study of Budeanu (2005). One is looking for a possibility for the mass tourism to become sustainable. Another suggestion is that there is a lack of incentives for the tour operators to support the adoption of more sustainable behaviors on the side of their customers and suppliers. Another argument is the pivotal role of the large tour operators in designing policies and actions to help all tourism stakeholders make positive contributions to ensuring environmental, cultural, and economic sustainability (Budeanu 2005). OTAs, social media, and other channels are used more by Gen Y which are much more active and much more engaged in travel planning (Xiang et al. 2015).

Massi and De Nisco (2018), for example, mention about the e-marketing of the ecotourism handled from both the supply and the demand sides to suggest what is missing on the demand side especially. The study of Sharpley and Pearce (2007) examining the case of the English national parks can also be referred if the sustainable tourism marketing and the related ecological and socioeconomic aspects are required to be revised and understood. The sustainable tourism marketing is mentioned by Eiseman (2018) emphasizing the co-productive process between consumer and producer additionally, by exemplifying certain destinations employing demarketing in order to decrease the quantity of waste and the harm given to the environment because of the touristic activities. If the choice of more sustainable tourism products and practices are encouraged by the suppliers, then the marketing of a more sustainable behavior on the consumer side is mentioned as the economical dimension of the sustainable tourism (Jamroz 2007, p. 124). Issues related to the sustainable destination management in today’s world involve not only the sustainability of the destinations and encouraging more sustainable consumer behaviors; it does not suffice. Demarketing has become a useful tool to facilitate the life at the destination for both sides of the host and the guest and to avoid the negative impacts of tourism and increase sustainability at the destinations.

Consumers of tourism products look for alternative holiday concepts. A growing number of public choose greener products to avoid giving harm to the environment while on holiday. Environmentally sustainable labels have become the key tool to gain competitive advantage for some tourism businesses. “Green sells... postmodern travelers want to believe that their use of tourism facilities and their presence in tourist destinations, will not damage the resources they visit and embrace the promises offered by tourism companies” (Font and Buckley 2001, p. 1). On the contrary, the green products may be avoided by the consumers as these products require higher prices. About the marketing and communication of the sustainable tourism practices of businesses, “greenwashing” and “greenhushing” are two concepts to be mentioned which are placed at the negative and the positive extremes of the interpretations of sustainability (Font et al. 2017; Delmas and Cuerel Burbano 2011). In fact, greenwashing is perceived negatively, and it is mostly made for a brilliant image and perception of sustainability even if the efforts of sustainability practiced by the business are far less or even nonexistent. And it is practised to gain financially more. On the contrary, greenhushing is communication of a less number of practices of sustainability than existing efforts and practices. That(greenhushing) saves the businesses from losing the customers who would on the contrary escape and eliminate their visits. Because in general, the green holidays are perceived costly in the consumer's eye (Font et al. 2017).

It is quite difficult to decide where to stop and how to act while communicating the sustainability in tourism marketing to the clientele. Hanna et al. (2018) examining the consumers' point of view found out that consumers support the messages of the businesses concerned with sustainability placing greater priority upon affordability of consumer experience and opportunities expected at the “sustainable” destination rather than the overt discourses of sustainability which are rejected. Similarly, in an empirical study to discover how the purchase decisions could be better influenced in travel brochures, it was found out that preference is confirmed by consumers generally for emotionally laden communication styles for

sustainable tourism products while they stayed indifferent for the sustainability attributes and standard product features (Wehrli et al. 2017).

To understand sustainable tourism marketing, destination-related conceptualizations carry a great importance. Sustainable tourism development and marketing are mentioned by some as bringing a competitive advantage to a destination (Kiral'ova 2019; Hassan 2000), while it is regarded by some others as the role of governmental function of the host communities to control the negative impacts of tourism (Basu 2017). Opposing to the “traditional concept” and “systemic approach” to the destination, the most recent destination concept is suggested as “smart destination” with the adoption of ICT and adaptation of digitalization which involves “interweaving of digital and real realms, public-private-consumer collaboration, participatory governance, creative and knowledgeable people, value co-creation, personalized services” (Jovicic 2019, p. 280). The impact of technology over the sustainability of tourism and tourism marketing can also be mentioned as an area to be researched. A research shows the usefulness of the virtual reality technology implications in sustainable tourism marketing in such a way to contribute to the choice of visiting intentions of potential visitors by making them experience the destination by a virtual 3D technology (Huang et al. 2016).

Vertical integration, with, for instance, Airbnb also engaged in marketing activities at the destination level, means that a growing share of revenue is channeled toward global corporations, a process in which even very small enterprises are involved. Here, the collaborative economy contradicts various goals linked to reduced inequality (goal 10) (Gössling and Hall 2019).

About the sustainable marketing of cultural heritage tourism, a sustainable heritage tourism marketing model (SHTMM) was suggested by Chhabra (2009) including the local community involvement/benefits, preservation and conservation as the sustainability aims, and the environment analysis, partnerships, and marketing mix components on a holistic model. Similarly, the study of Gilmore et al. (2007) framing the sustainable tourism marketing at a cultural heritage site points out the importance of an ongoing

collaborative, interactive, and hands-on management with relevant expertise to create a strategy of sustainable tourism marketing.

About the environmental behavior formation related to sustainable tourism marketing, the findings of the study of Dolnicar and Leisch (2008) show that selective target marketing represents a feasible complement to current sustainable tourism management techniques which focus on tourists at the destination who may not necessarily be interested in protecting the local environment.

As a summary, sustainable tourism marketing is an evolving area composed of many areas to research, develop, and control continuously including the consumer behavior and psychology, pricing, positioning, communicating, distributing, and promoting by benefiting from the technology and innovations while defining long-term, holistic, multidimensional, cooperative, inclusive, strategic, and adaptive managerial and operational plans and programs which preserve, protect, and respect the three basic pillars of sustainability.

Summary

For a further clarification of the conceptual framework of the “sustainable tourism marketing” or “marketing for the sustainability of tourism” or “sustainability in tourism marketing,” it is inevitable to accept that the discussions (e.g., by Pomeroy et al. 2011) and suggestions (e.g., by Jamroz 2007; Pomeroy et al. 2009) are made and confusions exist in the area. However, there is a need for researching more distinctively about the clarification of the conceptualizations and measurability of this field of marketing. The terms related to sustainability carry always the same meaning; they do not change meaning when they are combining with the marketing of tourism or tourism marketing. The concept of “sustainability” is not and should not be limited and reduced to only the meaning of “time” or “longer period of time” in terms of sustaining the marketing efforts. If done so, the whole “sustainable tourism marketing” conceptions will also be interpreted or understood falsely. Sustainability as usually referred to by Brundtland Report is

defined as an aspect of development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987, p. 43). The corrective action toward the sustainable tourism marketing conceptualizations and applications should be followed by this angle. Lansing and De Vries (2007) argue that a universal recognition and objective evaluation criteria must be defined first for the sustainable tourism practices and then would follow the sustainable tourism marketing which will be ethically more correct.

As summarized by the study of Pomeroy et al. (2009), tourism marketing includes both tangible and intangible product and services mix and people on both sides of the supply and the demand. And additionally, to cover and comprise all these components as well as the sustainability issues which are inevitable to apply in any sector in today’s world, a contemporary marketing mix for sustainable tourism marketing is suggested. Thus, it is indicated to include the 4Ps of the product marketing mix which are “product, place, promotion, and price.” Additionally, the 3Ps of services marketing are “people, process, and physical evidence.” And also the 3Ps for tourism by Morrison (1989, p. 503, 505) are “packaging, programming, and partnership.” Then this tourism marketing mix of 10Ps content is suggested to be intersected with the reflection of three basic pillars of sustainability (social, environmental, economic pillars) to the sustainable tourism marketing mix as 3Ps of sustainable tourism marketing, namely, “populations, planet, and profit” (Pomeroy et al. 2009).

Cross-References

- [Culture, Tourism, and Sustainability \(Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism\)](#)
- [Environment, Tourism, and Sustainability \(Ecotourism Management, Environment and Sustainable Tourism\)](#)
- [Sustainable Tourism](#)
- [Sustainable Tourism Products and Policies](#)

References

- Basu, B. K. (2017). Is sustainable tourism development possible? Broad issues concerning Australia and Papua New Guinea. In R. N. Ghosh & M. A. B. Siddique (Eds.), *Tourism and economic development case studies from the Indian Ocean Region*. London: Routledge.
- Beckendorff, P. J., Xiang, Z., & Sheldon, P. J. (2019). *Tourism information technology* (3rd ed.). Boston: Cab International.
- Budeanu, A. (2005). Impacts and responsibilities for sustainable tourism: A tour operator's perspective. *Journal of Cleaner Production*, 13, 89–97. <http://www.elsevier.com/locate/jclepro>
- Chen, J., & Uysal, M. (2003). Leisure traveler typology: A case of ten eastern states. *Journal of Hospitality & Leisure Marketing*, 10(1/2), 51–62.
- Chhabra, D. (2009). Proposing a sustainable marketing framework for heritage tourism. *Journal of Sustainable Tourism*, 17(3), 303–320. <https://doi.org/10.1080/09669580802495758>.
- Constantinides, E. (2006). The marketing mix revisited: Towards the 21st century marketing. *Journal of Marketing Management*, 22(3–4), 407–438. <https://doi.org/10.1362/026725706776861190>.
- Delmas, M. A., & Cuerel Burbano, V. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64–87.
- Dinan, C., & Sargeant, A. (2000). Social marketing and sustainable tourism is there a match? *International Journal of Tourism Research*, 2, 1–14.
- Dolnicar, S., & Leisch, F. (2003). Winter tourist segments in Austria. *Journal of Travel Research*, 41(3), 281–292.
- Dolnicar, S., & Leisch, F. (2008). Selective marketing for environmentally sustainable tourism. *Tourism Management*, 29, 672–680.
- Eiseman, D. (2018). Marketing sustainable tourism: Principles and practice. In M. Camilleri (Ed.), *Tourism planning and destination marketing* (pp. 121–140). Bingley: Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78756-291-220181006>.
- Font, X., & Buckley, R. (2001). *Tourism ecolabelling: Certification and promotion of sustainable management*. New York: CAB International.
- Font, X., & McCabe, S. (2017). Sustainability and marketing in tourism: Its contexts, paradoxes, approaches, challenges and potential. *Journal of Sustainable Tourism*, 25(7), 869–883. <https://doi.org/10.1080/09669582.2017.1301721>.
- Font, X., Elgammal, I., & Lamond, I. (2017). Greenhushing: The deliberate under communicating of sustainability practices by tourism businesses. *Journal of Sustainable Tourism*, 25(7), 1007–1023. <https://doi.org/10.1080/09669582.2016.1158829>.
- Gilmore, A., Carson, D., & Ascensão, M. (2007). Sustainable tourism marketing at a World Heritage site. *Journal of Strategic Marketing*, 15(2–3), 253–264. <https://doi.org/10.1080/09652540701318930>.
- Gössling, S., & Hall, C. M. (2019). Sharing versus collaborative economy: How to align ICT developments and the SDGs in tourism? *Journal of Sustainable Tourism*, 27(1), 74–96. <https://doi.org/10.1080/09669582.2018.1560455>.
- Hanna, P., Font, X., Scarles, C., Weeden, C., & Harrison, C. (2018). Tourist destination marketing: From sustainability myopia to memorable experiences. *Journal of Destination Marketing & Management*, 9, 36–43.
- Hassan, S. S. (2000). Determinants of market competitiveness in an environmentally sustainable tourism industry. *Journal of Travel Research*, 38, 239–245.
- Huang, Y. C., Backman, K. F., Backman, S. J., & Chang, L. L. (2016). Exploring the implications of virtual reality technology in tourism marketing: An integrated research framework. *International Journal of Tourism Research*, 18, 116–128. <https://doi.org/10.1002/jtr.2038>.
- Jamroz, U. (2007). Marketing of tourism: A paradigm shift toward sustainability. *International Journal of Culture, Tourism and Hospitality Research*, 1(2), 117–130.
- Jovicic, D. Z. (2019). From the traditional understanding of tourism destination to the smart tourism destination. *Current Issues in Tourism*, 22(3), 276–282. <https://doi.org/10.1080/13683500.2017.1313203>.
- Kastenholz, E. (2004). 'Management of demand' as a tool in sustainable tourist destination development. *Journal of Sustainable Tourism*, 12(5), 388–408. <https://doi.org/10.1080/09669580408667246>.
- Kiral'ova, A. (2019). Sustainable tourism marketing strategy: Competitive advantage of destination. In *Sustainable tourism: Breakthroughs in research and practice* (pp. 183–206). IGI Global. <https://doi.org/10.4018/978-1-5225-7504-7.ch010>.
- Lansing, P., & De Vries, P. (2007). Sustainable tourism: Ethical alternative or marketing ploy? *Journal of Business Ethics*, 72, 77–85. <https://doi.org/10.1007/s10551-006-9157-7>.
- Massi, M., & De Nisco, A. (2018). The internet-based marketing of ecotourism: Are ecotourists really getting what they want? In M. Camilleri (Ed.), *Tourism planning and destination marketing* (pp. 161–182). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78756-291-220181008>.
- Morrison, A. (1989). *Hospitality and travel marketing*. Albany: Delmar Publishers.
- Pomeroy, A., Johnson, L., & Noble, G. (2009). Sustainable tourism marketing: What should be in the mix? In *Proceedings of the Australian and New Zealand marketing academy conference* (pp. 1–8). Melbourne: Australian & New Zealand Marketing Academy.
- Pomeroy, A., Noble, G., & Johnson, L. (2011). Conceptualising a contemporary marketing mix for sustainable tourism. *Journal of Sustainable Tourism*, 19(8), 953–969. <https://doi.org/10.1080/09669582.2011.584625>.
- Sharpley, R., & Pearce, T. (2007). Tourism, marketing and sustainable development in the English national parks:

The role of national park authorities. *Journal of Sustainable Tourism*, 15(5), 557–573. <https://doi.org/10.2167/jost613.0>.

Tsiotsou, R., & Ratten, V. (2010). Future research directions in tourism marketing. *Marketing Intelligence & Planning*, 28(4), 533–544. <https://doi.org/10.1108/02634501011053702>.

WCED (World Commission on Environment and Development). (1987). *Our common future*. Oxford: Oxford University Press.

Wehrli, R., Priskin, J., Demarmels, S., Schaffner, D., Schwarz, J., Truniger, F., & Stettler, J. (2017). How to communicate sustainable tourism products to customers: Results from a choice experiment. *Current Issues in Tourism*, 20(13), 1375–1394. <https://doi.org/10.1080/13683500.2014.987732>.

Xiang, Z., Magnini, V. P., & Fesenmaier, D. R. (2015). Information technology and consumer behavior in travel and tourism: Insights from travel planning using the internet. *Journal of Retailing and Consumer Services*, 22, 244–249.

Sustainability Index

- [Dow Jones Sustainability Index](#)

Sustainability Jobs

- [Green Jobs](#)

Sustainability Leadership

- [Sustainable Leadership](#)

Sustainability Management

- [Corporate Sustainability](#)
- [Exxon Valdez](#)
- [Inclusive Leadership](#)
- [Sustainability Management and Market Risk](#)

Sustainability Management Accounting

- [Environmental Management Accounting](#)
- [Management Accounting and Sustainability](#)

Sustainability Management and Market Risk

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Synonyms

[Corporate Social Responsibility \(CSR\) management](#); [Market risk](#); [Sustainability management](#); [Sustainable development](#); [Volatility](#)

Definition

From a social and environmental perspective, sustainability is a relatively recent concern in people and, therefore, in companies. Currently, investors require corporate actions to manage the consequences of companies' activities on society and the planet. Moreover, when investors select their financial asset portfolios, they consider the risk of such investments, that is, the possible variation in expected return. The relationship between sustainability and risk has been little studied in the literature, both theoretical and empirically. Most of the scarce research found that the most sustainable companies have a more stable market price, especially in the long term.

Similarly, sustainable market indexes are less volatile and more stable in periods of crisis than the other indexes. Interest in linking sustainability and market risk is recent, and researchers have not yet shown sufficient interest, despite the important practical implications. Without a doubt, we can

say that portfolio managers are ahead of scientific research. In any case, there are theoretical reasons and empirical data to affirm that better management of business sustainability leads to a reduction in market risk, whether this is considered as the variation of cash flows or as the volatility of share prices. Moreover, in the latter case, at an individual company level or collectively, as a market index.

Introduction

Sustainability is a concern in companies in the last decades. Economic development implies negative consequences for the environment and causes social changes that are not always desirable. In this sense, and because of the scandals produced by large corporations regarding polluting activities, the exploitation of workers, etc., a code of ethical conduct was imposed to oblige those companies that want to stay in the market to apply corporate social responsibility (CSR) policies. Companies have to be accountable for their actions. In this sense, the United Nations established the Agenda 2030, a set of sustainable development goals to care for the planet and people, including fighting against poverty, clean water and energy, decent work, gender equality, etc. All of this implies cost to companies. However, do the benefit they get in return compensates for such efforts?

CSR has been widely studied in the literature. An extensive array of research has focused on measuring its three components: environmental, social, and governance (ESG), to determine the final ESG score. Another line of work has established, in general, a positive relationship between financial performance, which is measure as accounting profitability or market valuation, and CSR. There are even comprehensive previous theoretical and empirical analyses about the composition of the board of directors and CSR's extent, focusing on gender diversity (Valls Martínez et al. 2019, 2020). However, so far, little attention has been paid to the relationship between sustainability and market risk.

Today, portfolio managers and individual investors consider ESG-score a critical variable in financial asset selection. Every rational investment decision must consider two basic parameters: profitability and risk. Currently, the concept of profitability includes not only financial performance but also social and environmental performance, and even psychic performance (feel good about their own decisions). The risk is the possibility of not obtaining the expected returns. Therefore, are sustainable companies more or less risky than those that do not apply sustainability measures?

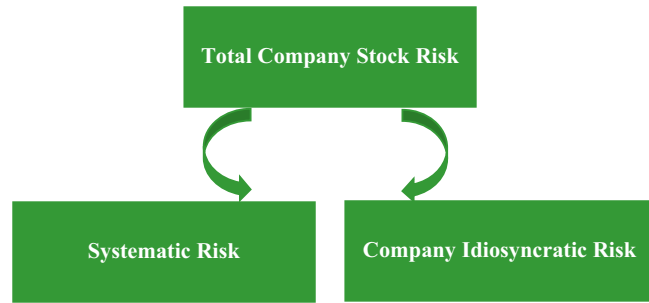
There is little empirical research on this issue, but most find that those market indices that comprise sustainable businesses are more stable over time. Similarly, those companies with better ESG-scores have a less volatile share price.

Relationship Between Sustainability Management and Market Risk

In the middle of the twentieth century, Bowen's book *Social Responsibilities of the Businessman* (Bowen 1953) was the beginning of CSR research, which was linked to its founder's philosophy and character. A few years later, that perspective evolved and moved from a personalist vision to consider the company's commitment to society. In this way, the company's objective is no longer to maximize shareholders' profit. Now it is also essential to take into consideration stakeholders' interests. However, in the 1990s, with the advent of international financial, social, and environmental scandals, a whole set of ethical codes of conduct emerged to control these risks, involving companies in achieving a sustainable model, in this sense, for example, the *Green Book* of the European Union.

Consequently, we can say that there existed a CSR before the current regulatory phase. Indeed, the real origin of CSR has its roots in religious tradition. The *Monte de Pietà*, financial institutions emerged in Italy during Renaissance under Catholic Church auspices, prohibited usury and provided loans for the most disadvantaged sectors

Sustainability Management and Market Risk, Fig. 1
Company stock risk



of the population. Similarly, the Islamic Sharia forbids the *riba* (abusive gains made in trade) (Martín Cervantes and Valls Martínez 2021).

Market risk can be understood in different ways. Some studies identify market risk with the variations in the company's products price. In this sense, those companies committed to sustainability achieve stable market prices, thus reducing the volatility of the company's cash flows. For example, the small ecological production of coffee in Brazil shrinks the volatility of market prices, thus improving the living conditions of farmers, avoiding emigration to large cities. In this way, developing countries' economy is improved (Pronti and Coccia 2020).

On the other hand, it has been proven that one of the problems in ensuring the supply of food at stable prices is the environmental degradation of land, water, and energy resources. Therefore, it is necessary to carry out actions that guarantee environmental sustainability and resource efficiency (Becker et al. 2014). In short, considering the link between CSR and cash flows, in volatile economic environments, and especially in times of crisis, companies that want to have better financial results increasingly resort to implementing and disclosing sustainable activities (Erokhin et al. 2019).

However, when considering the investment in financial assets, mainly in company shares, either individually or through collective investment institutions (such as mutual funds or pension plans), market risk refers to stock prices volatility (see Fig. 1).

The total *company stock risk* is the fluctuation of the stock market's share price. This risk is the sum of two components: the systematic risk and

Sustainability Management and Market Risk, Table 1 Stock volatility

β	Strategy	Volatility	Market risk
$\beta > 1$	Aggressive stocks	High volatility	Above-market risk stocks
$\beta = 1$	Neutral stocks	Normal volatility	Equal-market risk stocks
$\beta < 1$	Defensive stocks	Low volatility	Below-market risk stocks

$\beta < 0$ is not usual and implies that the stock prices move opposite the market

the idiosyncratic risk. The *systematic risk* depends on the market in which the financial asset is traded and encompasses economic, monetary, political, and social factors affecting the particular market. *Company idiosyncratic risk* includes all the aspects of a company or industry. In other words, it arises from the uncertainty that surrounds a company due to the development of its business, whether due to the company's circumstances or those of the sector to which it belongs.

Systematic risk affects all market assets to a greater or lesser extent. It is determined by a parameter called *beta* or *volatility coefficient*, β , and whose value reflects the volatility of the share price compared to the average volatility of the market in which the security is traded (see Table 1).

According to Table 1, if an investor is risk-averse, will prefer defensive stocks, that is, lower beta. In this way, when the market rises the profit obtained will be less but, likewise, when the market falls, the losses will also be reduced. In other words, the risk assumed with the investment will be lower if the stock remains

more stable over time, which requires shorter betas.

Environmental performance reduces both systematic risk and beta (Salama et al. 2011) as well as idiosyncratic risk (Utz 2018). As it is known, CSR integrates environmental, social, and corporate governance (ESG) measures. Studies have found a negative relationship between CSR and stock price volatility, in such a way that those companies that apply CSR policies to a greater extent show higher stability in the stock market price of their shares (Adascalitei 2015; Benlemlih et al. 2018; Xu and Liu 2018). However, this relationship varies according to CSR's dimension considered, being especially strong in the case of environmental responsibility (Nguyen and Nguyen 2015). News that negatively affects the company's reputation positively influences its volatility. CSR's effects on risk are felt more in the long term than in the short time (Bosch-Badia et al. 2018), and, therefore, companies need to protect their image in society.

Market indices include companies qualified as socially and environmentally responsible. Finally, when comparing sustainable market indices, such as Dow Jones Sustainability, with other market indices, it can be seen that ESG indices offer better returns and are less volatile. Therefore, socially responsible investment is suitable for sustainable companies, investors, and society (Lupu et al. 2016).

The influence of sustainability on risk reduction is mainly based on *Stakeholder Theory* (Freeman 1984). Directors must consider all stakeholders' interests (customers, suppliers, investors, public administration, and people in general), not just shareholders, to protect the company from economic and reputational losses. When companies develop and effectively disclose CSR policies, they create a culture of safety toward their stakeholders, who, in the event of a crisis caused by a social (such as worker exploitation) or environmental (such as exceptional pollution) scandal, impose less severe penalties. Consequently, CSR makes companies more resilient and better able to withstand such harmful incidents than their competitors. In this way,

CSR becomes a kind of shield that protects companies from negative assessments of specific actions, giving them a margin of action that would otherwise not be allowed (Nguyen and Nguyen 2015).

In short, when a contingency occurs, companies with marked CSR practices tend to suffer the consequences later and with less intensity than those that do not implement such policies. For example, if the company takes measures to control the waste it discharges, it is less likely to produce accidental contamination. Therefore, its reputation will be less affected, and fines related to environmental damage or a reduction in sales due to the loss of customer loyalty will not reduce economic returns. Besides, workers will feel more involved in repairing the damage, willing to work longer hours and seek outside support, for example, by asking for help from public authorities or involving the general public in helping the company by purchasing its products.

Therefore, CSR measures reduce the probability of adverse incidents and, if they occur, mitigate the negative effects. Customers, workers, and people are safer. For instance, if the company invests in the products' safety and conducts severe good working tests, the customer's risk of an accident will be minimal. Similarly, properly occupational health and safety plan investment lead to fewer workers suffering casualties. Analogously, sustainability measures (reducing polluting waste, renewable energies, water savings, etc.), although costly, reduce the risk of environmental incidents, which have disastrous consequences for the planet and the company's profitability and reputation.

On the contrary, if companies disregard stakeholders' interests, they will have high costs in the future, such as those arising from claims for damages to workers, the population or the environment, stricter regulations, negative image, and loss of credibility with customers, etc.

It is not enough for companies to implement adequate social and environmental sustainability policies; they must also transmit these practices to their stakeholders. Namely, they must make an efficient disclosure. Higher disclosure means

greater corporate transparency, facilitating access to credit by reducing capital restrictions. Therefore, the company's idiosyncratic risk will be lower. According to the *resource dependence theory*, this idea established that companies need to control access to resources for their survival. Since the resources are in the stakeholders' hands, it is essential to gain their trust to ensure access to the resources required at all times.

In addition, reliable disclosure contributes to enhancing the company's reputation (fair remuneration of the workforce, adequate working conditions, energy efficiency policies, pollution control, etc.), strengthening the confidence of the capital markets, and, consequently, reducing systematic risk as well as the volatility of cash flows (Benlemlih et al. 2018). In this line, *legitimacy theory* states that shareholders reject companies whose activities are not desirable or appropriate according to a set of values and beliefs considered to be socially correct. This fact would lead to the withdrawal of invested funds, resulting in increased share prices volatility (Tasnia et al. 2020).

To summarize, risk management theory considers total company stock risk to be the degree to which a company's stock price varies over time. This total risk can be dissociated into two different risks: systematic and idiosyncratic. The company's systematic risk is determined by the particular market to which the company belongs, that is, by its specific environment. On the other hand, company idiosyncratic risk derives from its peculiar characteristics. The company's sustainability policies reduce both the total risk of its two components, that is, the systematic risk and the idiosyncratic risk (Lueg et al. 2019).

Conclusions

Sustainability scores are a fundamental variable in financial investment so that investors scarcely demand unsustainable companies. Moreover, every investor must consider the risk involved in the selected financial asset. In general, profitability and risk are two variables that move in the same direction, so that those investments that, a

priori, offer more profitability also involve greater risk. The final decision taken will depend on the individual investor's risk profile. Investors are often risk-averse, so they will prefer to sacrifice profitability favoring greater security. In this sense, sustainable investments are more suitable for most investors, according to the results obtained in most empirical research developed so far. Sustainability reduces the market risk in whatever form it is considered (systematic or idiosyncratic, individual, or market index). Moreover, effective sustainability management enables financial companies to overcome a sudden financial crisis, adds shareholder value, and reduces risk. Nevertheless, for the effects of sustainable policies to be truly successful, they need to be adequately disclosed, both within the company (workers) and outside (other stakeholders).

Cross-References

- Corporate Finance
- Corporate Sustainability Performance
- Corporate Sustainability Reporting Index
- Economic Sustainability
- Finance and CSR
- Risk Management
- Risk Management and CSR
- Socially Responsible Investment (SRI)
- Sustainable Companies
- Sustainable Development

References

- Adascalitei, S. (2015). Measuring and modeling volatility using high frequency data – Does corporate social responsibility make any difference? *Procedia Economics and Finance*, 20(15), 1–7. [https://doi.org/10.1016/s2212-5671\(15\)00040-4](https://doi.org/10.1016/s2212-5671(15)00040-4).
- Becker, B., Zoss, M., & Lehmann, H.-J. (2014). Global food security – The consequences for Switzerland. *Agrarforschung Schweiz*, 5(4), 138–145.
- Benlemlih, M., Shaukat, A., Qiu, Y., & Trojanowski, G. (2018). Environmental and social disclosures and firm risk. *Journal of Business Ethics*, 152(3), 613–626. <https://doi.org/10.1007/s10551-016-3285-5>.
- Bosch-Badia, M.-T., Montllor-Serrats, J., & Tarrazon-Rodon, M.-A. (2018). Sustainability and ethics in the

- process of price determination in financial markets: A conceptual analysis. *Sustainability (Switzerland)*, 10 (5). <https://doi.org/10.3390/su10051638>.
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. Harper.
- Erokhin, V., Endovitsky, D., Bobryshev, A., Kulagina, N., & Ivolga, A. (2019). Management accounting change as a sustainable economic development strategy during pre-recession and recession periods: Evidence from Russia. *Sustainability (Switzerland)*, 11(11). <https://doi.org/10.3390/su11113139>.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
- Lueg, K., Krastev, B., & Lueg, R. (2019). Bidirectional effects between organizational sustainability disclosure and risk. *Journal of Cleaner Production*, 229, 268–277. <https://doi.org/10.1016/j.jclepro.2019.04.379>.
- Lupu, I., Hurduzeu, G., & Nicolae, M. (2016). Connections between sentiment indices and reduced volatilities of sustainability stock market indices. *Economic Computation and Economic Cybernetics Studies and Research*, 50(1), 157–174.
- Martín Cervantes, P. A., & Valls Martínez, M. (2021). Corporative social responsibility vs. public administration. In A. Farazmand (Ed.), *Global encyclopedia of public administration, public policy, and governance*. Springer.
- Nguyen, P., & Nguyen, A. (2015). The effect of corporate social responsibility on firm risk. *Social Responsibility Journal*, 11(2), 324–339. <https://doi.org/10.1108/SRJ-08-2013-0093>.
- Pronti, A., & Coccia, M. (2020). Multicriteria analysis of the sustainability performance between agroecological and conventional coffee farms in the east region of Minas Gerais (Brazil). *Renewable Agriculture and Food Systems*. <https://doi.org/10.1017/S1742170520000332>.
- Salama, A., Anderson, K. P., & Toms, S. (2011). Does community and environmental responsibility affect firm risk? Evidence from UK panel data 1994–2006. *Business Ethics: A European Review*, 20(2), 192–204. <https://doi.org/10.1111/j.1467-8608.2011.01617.x>.
- Tasnia, M., Syed Jaafar AlHabshi, S. M., & Rosman, R. (2020). The impact of corporate social responsibility on stock price volatility of the US banks: A moderating role of tax. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-01-2020-0020>.
- Utz, S. (2018). Over-investment or risk mitigation? Corporate social responsibility in Asia-Pacific, Europe, Japan, and the United States. *Review of Financial Economics*, 36(2), 1–16. <https://doi.org/10.1016/j.rfe.2017.10.001>.
- Valls Martínez, M. C., Cruz Rambaud, S., & Parra Oller, I. M. (2019). Gender policies on board of directors and sustainable development. *Corporate Social Responsibility and Environmental Management*, 26(6), 1539–1553. <https://doi.org/10.1002/csr.1825>.
- Valls Martínez, M. C., Martín Cervantes, P. A., & Cruz Rambaud, S. (2020). Women on corporate boards and sustainable development in the American and European markets: Is there a limit to gender policies? *Corporate Social Responsibility and Environmental Management*, 27(6), 2642–2656. <https://doi.org/10.1002/csr.1989>.
- Xu, S., & Liu, D. (2018). Do Financial markets care about corporate social responsibility disclosure? Further evidence from China. *Australian Accounting Review*, 28 (1), 79–103. <https://doi.org/10.1111/auar.12161>.

Sustainability Management and Reporting

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Synonyms

Corporate sustainability performance; Corporate sustainability reporting; Non-financial reporting; Sustainability performance measurement; Triple bottom line reporting

Description of Sustainability Management and Reporting

Sustainability management and reporting has gained an increasing deal of interest since 1987 when the term “sustainable development” was coined by the World Commission on Environment and Development (WCED) in the report entitled “Our Common Future” and also known as “Brundtland Report” (WCED 1987). The notion and ultimate purpose of this new model of global development has led to a contemporary change in societal values. Besides, organizations feel this pressure in their operations as well. Therefore, to achieve economic, social, and environmental sustainability goals framed by the concept of sustainable development, organizations have taken on their responsibilities to do business with a holistic perspective of integrating social aspects, environmental concerns, and financial interests

and outcomes. Thus, they have adopted sustainability principles into their values, strategies, measurement, and reporting mechanisms. The basis of sustainability reporting has evolved through the developments of financial and non-financial reporting from the early twentieth century onward. The scope of corporate reporting initiatives was limited to financial statements until the 1970s and then expanded by incorporating social auditing and environmental reporting (Fărcaș 2015). Since the 1990s, sustainability reporting has provided information about the organizational performance with a nested emphasis on the contexts of financial, social, and environmental dimensions. A sustainability report is a sign of remarkable organizational efforts regarding its respect and sensitivity to societal and environmental concerns during its operations and practices to make profit and a reputable credential for corporate transparency, accountability, and creating value for stakeholders. Thus, sustainability reporting is considered a measurement of the progress of sustainable business activities and a communication vehicle that presents reliability.

The Concept of Sustainability Management and Reporting

The awareness of the adverse impacts of industrialization, urbanization, and increasing population such as degradation of environment and humanitarian problems such as inequality, injustice of income distribution, and poor quality of life led to the adoption of sustainable development goals with a global consensus. At the organizational level, this awareness makes pressure on organizations to rethink humanitarian and environmental concerns while they operate their businesses. Theoretically, the reason for this pressure arises from stakeholder theory (Freeman 1984) focusing on the relationship between the organization and their shareholders and other interest groups. Accordingly, the quality of this relationship affects the continuity and the performance of the organization (Donaldson and Preston 1995). Although different stakeholders (employees, customers, suppliers, investors, governments, etc.)

may have different demands and expectations and thus they may evaluate the concept of sustainability from different perspectives because of their self-interests or concerns, it is inevitable that stakeholders can be assumed as a pressure group for organizations to pursue sustainability goals in their operations. As a result of this pressure, corporate sustainability has been accepted as a comprehensive concept that requires the simultaneous acceptance and satisfaction of economic, social, and environmental needs and interests of both present and future stakeholders (Van Marrewijk 2003: 101; Dyllick and Hockerts 2002: 131). Thus, developing relationships with stakeholders with sustainability lenses can be assumed as both major assets that should be managed and the primary sources of organizational prosperity.

As a significant milestone in sustainability management, Elkington's (1994) well-known triple bottom line (TBL) approach which argues the reconciliation of economic, social, and environmental standards of an organization has been generated from a 3P formulation that includes people, planet, and profits (Elkington 1997). In this formulation, people represents the social dimension of sustainable development, whereas the planet and profits represent environmental and economic aspects of the concept respectively. Elkington (2004: 3) suggests "seven drivers" – namely markets, values, transparency, life-cycle technology, partnerships, time, corporate governance – that encourage organizations to manage social and environmental concerns together with the economic ones. To him, political and economic communities are going to experience a transition of "global cultural revolution" that will take place with these drivers (Elkington 2004: 3). Third of his seven proposed drivers is transparency. Accordingly, with the transparency revolution, international transparency will increase and, as a result, organizational practices and behaviors will be under scrutiny. Therefore, all stakeholders will be more aware of what is happening in the business world that catalyzes benchmarking and ranking the organizations. The transparency revolution pursue organizations to adopt Elkington's (2004) TBL thinking, planning, and accounting. Derived from the changes and new

developments regarding stakeholder expectations and corporate transparency perspective due to the TBL approach, an increasing number of organizations have transformed from conventional to sustainable practices and integrate sustainability into their values, products, processes, and reporting frameworks as well. Thus, by sustainability reporting, it will be possible to measure the sustainability performance so that it will be more manageable, and at the same time, stakeholders will be informed about the extent to which the corporate activities carried out by the organization are compatible with the sustainability principles and goals.

From Traditional Reporting to Sustainability Reporting

To strengthen organizational performance, and constitute permanent and reliable stakeholder relations, organizations need appropriate measurement and control mechanisms. As a part of these efforts, measurement of the performance and reporting has become remarkable. The history of corporate reporting goes back to the economic transition from a trade-based system to an industrialized system. From the early twentieth century, the American capital market began to expand and attract more investment. Thus, sharing financial and accounting information with all stakeholders has been accepted as a necessity (Fărcaș 2015), but reporting was limited to arbitrary initiatives and contained only financial information. Following the banking crisis experienced in 1933 in the United States, financial reporting became mandatory by the Securities Act of 1933 (Karğın et al. 2013: 30) which was a legal and authorized entity for standardization of the US financial reporting from 1933 to 1973 (Fărcaș 2015: 108) and served as an inspiring milestone to develop new standards of financial reporting at national and international levels. From the mid-1970s, due to the increasing awareness of social and environmental concerns, the concept of social and environmental auditing and reporting has started to gain widespread attention (Gray

2000) and they have been considered in corporate reporting as well. The improvement in the context of traditional financial reporting has continued to proceed toward social accounting and reporting by the 1970s and environmental issues by the 1980s (Hahn and Kühnen 2013). The concept of corporate reporting has gained a new perspective to present comprehensive information more than the numerical, commercial values in financial reports. Therefore, the scope of reporting has expanded including both quantitative and non-quantitative but descriptive information regarding all stages of the value chain. This shift has continued through sustainability reporting as organizations have endeavored to be more sustainable in their operations since the 1990s. To assess sustainability performance, they have been applying several tools and guidelines developed in recent years (i.e., Global Reporting Initiative (GRI) Guidelines, the United Nations Global Compact (UNGC) (n.d.) Principles, Integrated Reporting (IR), and Carbon Disclosure Project (CDP) system) and publishing sustainability reports increasingly.

Cross-References

- ▶ [Corporate Accountability](#)
- ▶ [Corporate Financial Performance](#)
- ▶ [Corporate Sustainability Performance](#)
- ▶ [Global Reporting Initiative](#)
- ▶ [Integrated Reporting](#)
- ▶ [Sustainable Development](#)
- ▶ [Triple Bottom Line Reporting](#)

References

- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65–91.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.

- Elkington, J. (1997). The triple bottom line. *Environmental Management Readings and Cases*, 2, 49–66.
- Elkington, J. (2004). Enter the triple bottom line. *The Triple Bottom Line: Does It All Add Up*, 11(12), 1–16.
- Fărcaș, T. V. (2015). The development of corporate reporting over time: From a traditional system to an integrated system. *Audit Financiar*, 13(124), 106–113.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Gray, R. (2000). Current developments and trends in social and environmental auditing, reporting and attestation: A review and comment. *International Journal of Auditing*, 4(3), 247–268.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5–21.
- Karğın, S., Aracı, H., & Aktat, H. (2013). Entegre Raporlama: Yeni Bir Raporlama Perspektifi. *Muhasebe ve Vergi Uygulamaları Dergisi (MUVU)/Journal of Accounting & Taxation Studies (JATS)*, 6(1), 27–46.
- United Nations Global Compact – UNGC. (n.d.). The ten principles of the UN global compact. Retrieved December 07, 2016, from <https://www.unglobalcompact.org/what-is-gc/mission/principles>
- Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(2), 95–105.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford: Oxford University.

life should no longer compete, instead a holistic perspective is required to achieve a sustainable future. Thus, to reach sustainable development goals at global level, achieving sustainable development at organizational level has a significant importance. Therefore, the top priority of business professionals in recent years is managing sustainability as the core of the organization. Sustainability management refers to the integration of sustainability-related issues into corporate activities and strategies. To operate in a sustainable way, an increasing number of organizations have applied to several environmental and social management systems that allow measuring, managing, and controlling the environmental and social performance. In recent years, the most widely used of these systems are the International Organization for Standardization (ISO) 14,000 of environmental management system, the European Union (EU) Eco-Management and Audit Scheme (EMAS), Social Accountability (SA) 8000 standards, and Global Reporting Initiative (GRI) standards of reporting. When sustainability is defined as the ultimate purpose of sustainable development, several studies have stated that sustainability management is a challenging process, requires long-term progress, and encourages businesses for change (Kiesner & Baumgartner, 2019; Esquer-Peralta et al., 2008).

Sustainability Management Process

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Synonyms

Corporate social responsibility (CSR) management; Corporate sustainability management; Environmental management

Description

Sustainable development that has become impressive since the 1980s, has reached a consensus that economic, planetary, and humanitarian aspects of

Management and Sustainable Development

In the twentieth century, following the Industrial Revolution, the world has witnessed several economic, social, and political developments. During this century, economic prosperity has increased with revolutionary impacts. Population growth has been recorded after the end of the world wars that shook many countries of the world. Parallel to the industrialization experienced, the population distribution balances started to intensify toward urbanization. On the other hand, the socioeconomic developments experienced in this period have led to some negative environmental and social consequences such as the destruction of natural resources, the rapid consumption of

nonrenewable energy resources, and the protection of the fundamental rights of employees, which are among the most important production factors. These adverse impacts have led to an awareness on handling of economic, social, and environmental issues from a new perspective (Özmehmet, 2008). In line with these developments, sustainable development refers to an extended consideration of economic growth at present without damaging or losing the existing social and environmental resources required by the future generations (WCED, 1987). The concept has a supranational character in terms of the scope of its definition announced by the Brundtland commission and the initial stage of its development. Nevertheless, it has become a concept that is targeted and applied from the global level to the national, regional, and organizational level (Altuntaş & Türker, 2012). The understanding of sustainable development has transferred to the organizational level by means of corporate sustainability that is defined as “meeting the needs of present organizational stakeholders without compromising the organization’s ability to meet the needs of future stakeholders” (Dyllick & Hockerts, 2002, p. 131). In this regard, corporate sustainability, in its simplest sense, indicates the reflection of a sustainability-oriented development perspective onto the corporate level (Altuntaş & Türker, 2012). Whereas sustainable development embodies an ethical, normative, and generic guidance, contributions of the businesses to sustainable development goals become visible through the corporate sustainability management approaches and practices.

Approaches for Sustainability Management Process

Sustainability management process requires a triangular relationship among economic, environmental, and social aspects of the organizational performance. Moreover, sustainability management encourages a transformational process that involves the integration of ecological, social, economic, legal, ethical, and technical dimensions (Angiel & Angiel, 2015; Pawłowski, 2012:

81–82). In this regard, organizations may implement several approaches in order to achieve their own corporate sustainability targets. As sustainability is a comprehensive concept, neither the scholars nor the practitioners agree on a common methodology on how to manage the sustainability management process. Instead, some managers focus primarily on ecological/environmental aspects of the concept, while some professionals predominantly consider corporate social performance. Therefore, management approaches are clustered in the fields of environmental, social, and/or holistic views in parallel to the multidimensional characteristic of the concept of sustainability. Environmental approaches of sustainability management process focus on the conservation of natural resources, air and water pollution, energy use, wastes, greenhouse gas emissions (Diesendorf, 2000), biodiversity, renewable and nonrenewable sources, and fuel usage (AtKisson, 1996). In this regard, ISO 14000 of the environmental management system and EMAS (The EU Eco-Management and Audit Scheme) are implemented for environmental sustainability management processes (Esquer-Peralta et al., 2008). The main concerns of social approaches to the sustainability management process are human rights and social security (Lee & Saen, 2012). Therefore, indicators related to human and labor rights, equal opportunity, non-discrimination, equal remuneration for women and men, security practices, freedom of association, and prevention of child labor practices are frequently stated (Gallego, 2006) for social sustainability management processes. In general, SA 8000 of social accountability standards and ISO 26000 are applied to achieve social sustainability goals (Gilbert & Rasche, 2007). Bringing together the environmental and social focus of sustainability with economic sustainability performance, holistic approach to sustainability management processes make sense. In order to evaluate how much the organization’s efforts have contributed to sustainability, sustainability reporting has a significant importance and, in this regard, GRI standards (GRI, 2022) are used by many organizations throughout the world. Furthermore, many scholars also discuss approaches such as change

management processes for corporate sustainability (Lozano et al., 2015), integrated management systems to support corporate sustainability, and the European Foundation for Quality Management (EFQM) Model for sustainability management process (Akkucuk & Gencer, 2017).

Sustainability Management Process and Value Creation

Sustainability management approaches create value for organizations, regardless of characteristics such as size, location, or sector they operate in. Sustainability management process establishes a nexus between financial and nonfinancial performances of an organization.

In general, sustainability management process enables organizations to mitigate negative environmental, social, and governance impacts, to improve reputation and brand loyalty, to raise awareness for external stakeholders to understand the organization's true value, and tangible and intangible assets, to emphasize the link between financial and nonfinancial performance, and to improve efficiency (GRI, 2022).

As organizations succeed in integrating social and environmental sustainability performance into financial projections and strategic business goals, customer value also extends. The meaning of the concept of customer value in terms of business management is related to the mutual relationship and interaction between the organizations and the customer. In this context, there is a relationship and interaction between the organizations and the customer in terms of sustainability. In today's business world, as the production and marketing strategies of organizations have become more customer-oriented, organizations determine their values and practices considering sustainability perceptions of customers, and customers are informed about their sustainability approaches through corporate communication tools by organizations. The relationship and interaction between organizations and customers brings up the concepts of sustainable customer and sustainable consumption as well

as sustainable organizations (Gilg et al., 2005; Seyfang, 2006).

Furthermore, sustainability management efforts create value for organizations in regard to supply chain management activities. Sustainable supply chains should include not only the profit and loss dimensions of the business, but also the social and environmental dimensions, which are an important performance measure for sustainability and referred to as the triple bottom line (Elkington, 1997; Kleindorfer et al., 2005; Esty & Winston, 2009; Gupta & Benson, 2011).

Fidge and Hahn (2004) put forward the Sustainable Value-Added approach in the evaluation of corporate sustainability performance with a focus on opportunity cost, generally considering the expenditures made to cover environmental or social damages or the value created to measure the organizational contributions of sustainability practices. Accordingly, it is necessary to focus on the difference between created value and resource use. Sustainable Added Value measures how much value an institution creates by simultaneously evaluating the economic, social, and environmental performances of that institution. The reason for this is that each of the three dimensions (economic, environmental, and social) is a separate source of capital and it is not possible to substitute these sources for each other (Figge & Hahn, 2004).

Summary

The United Nations Global Compact (UNGC) aims to create a culture of sustainable development in the business world and to have a desire for all organizations possessing a shared responsibility within their scope of impact. In this regard, organizations need to take action to improve the current situation on human rights, labor standards, ethical standards, and the environment. Recognizing, supporting, and implementing sustainability-related issues in business processes lead to the sustainability management process. In return, negative environmental, social, and managerial effects could be reduced and risks derived from ongoing economic, environmental, and social developments could be better managed.

Cross-References

- Corporate Social Responsibility (CSR) Management
- Corporate Sustainability
- Environmental Management
- Sustainability Reporting
- Sustainable Development
- Sustainable Value Creation

References

- Akkucuk, U., & Gencer, Y. G. (2017). *EFQM model and sustainability of organizations*. In international conference on advances in management engineering and information technology.
- Altuntaş, C., & Türker, D. (2012). Sürdürülebilir Tedarik Zincirleri: Sürdürülebilirlik Raporlarının İçerik Analizi. *Dokuz Eylül University Journal of Graduate School of Social Sciences*, 14(3), 39–64.
- Angiel, J., & Angiel, P. J. (2015). Perception of river value in education for sustainable development (the Vistula River, Poland). *Sustainable Development*, 23(3), 188–201.
- AtKisson, A. (1996). Developing indicators of sustainable community: Lessons from sustainable Seattle. *Environmental Impact Assessment Review*, 16(4), 337–350.
- Diesendorf, M. (2000). Sustainability and sustainable development. In *Sustainability: The corporate challenge of the 21st century* (vol. 2, pp. 19–37).
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Oxford: Capstone Publishing.
- Esquer-Peralta, J., Velazquez, L., & Munguia, N. (2008). Perceptions of core elements for sustainability management systems (SMS). *Management Decision*, 46, 1027–1038.
- Esty, D. C., & Winston, A. S. (2009). *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. Hoboken, NJ: Wiley.
- Figge, F., & Hahn, T. (2004). Sustainable value added – Measuring corporate contributions to sustainability beyond eco-efficiency. *Ecological Economics*, 48(2), 173–187.
- Gallego, I. (2006). The use of economic, social and environmental indicators as a measure of sustainable development in Spain. *Corporate Social Responsibility and Environmental Management*, 13(2), 78–97.
- Gilbert, D. U., & Rasche, A. (2007). Discourse ethics and social accountability: The ethics of SA 8000. *Business Ethics Quarterly*, 17(2), 187–216.
- Gilg, A., Barr, S., & Ford, N. (2005). Green consumption or sustainable lifestyles, identifying the sustainable consumer. *Futures*, 37(6), 486–503.
- Global Reporting Initiative – GRI. (2022). GRI standards. <https://www.globalreporting.org/standards/download-the-standards/>
- Gupta, N., & Benson, C. C. (2011, November). Sustainability and competitive advantage: An empirical study of value creation. *Competition Forum*, 9(1), 123–136.
- Kiesner, A. L., & Baumgartner, R. J. (2019). Sustainability management in practice: Organizational change for sustainability in smaller large-sized companies in Austria. *Sustainability*, 11(3), 572.
- Kleindorfer, P. R., Singhal, K., & van Wassenhove, L. N. (2005). Sustainable operations management. *Production and Operations Management*, 14(4), 482–492.
- Lee, K. H., & Saen, R. F. (2012). Measuring corporate sustainability management: A data envelopment analysis approach. *International Journal of Production Economics*, 140(1), 219–226.
- Lozano, R., Ceulemans, K., & Seatter, C. S. (2015). Teaching organizational change management for sustainability: Designing and delivering a course at the University of Leeds to better prepare future sustainability change agents. *Journal of Cleaner Production*, 106, 205–215.
- Özmehmet, E. (2008). Dünyada ve Türkiye’de sürdürülebilir kalkınma yaklaşımları. *Journal of Yaşar University*, 3(12), 1853–1876.
- Pawłowski, L. (2012). Do the Liberal capitalism and globalization enable the implementation of sustainable development strategy?(Czy liberalny kapitalizm i globalizacja umożliwiają realizację strategii zrównoważonego rozwoju?). *Problemy Ekorozwoju-Problems of Sustainable Development*, 7(2), 7–13.
- Seyfang, G. (2006). Ecological citizenship and sustainable consumption: Examining local organic food networks. *Journal of Rural Studies*, 22(4), 383–395.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford: Oxford University.

Sustainability Measurement

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Definition

According to Heal (2011), the concept of sustainability indicates a way of doing things which

could continue in the long run without any major consequences. The concept of sustainability has flourished over the last two decades. In the concept of sustainability, the key questions arise from sustaining what, for whom, where, and for how long, to achieve well-being in the long run (O'Connell et al. 2013).

Introduction

In time, businesses started to harm the environment and the society they live in. For this reason, concerns have started to be heard about the present and future of humanity and the environment around the world. The issue of sustainability has come to the fore in order to eliminate these concerns and to carry out business activities without endangering the present and future of society and the environment. Since the sustainability is contextual, the measurement of institutional sustainability has become a subject that has been discussed all over the world since the 1990s, and many researches have been made on this subject. However, since then, there has not been a worldwide accepted measurement method (HUD USER 2021). Yet, measuring sustainability can help to assess the advancement, encourage broad participation of stakeholders, meet or anticipate new requirements, find barriers to the program, and communicate goals. The sustainability is measured by evaluating the performance of social, environmental, and economic principles. This means expanding the traditional business reporting framework. For this reason, many organizations are developing organization-specific or industry-specific measurement tools and best practices (Sustainable highways 2021).

Sustainability measurement is the quantitative basis for the informed management of sustainability. There are two distinct questions: first, how the level of well-being is changing over time, and second, how the level of well-being can be sustained. GDP and its indicators and Human Development Index (HDI) are attempts to answer the first question, the level of well-being, but the

second question leads into a detailed discussion of sustainability. The remarkable example for unsustainability is Saudi Arabia. Even Saudi Arabia has huge oil reserves, and it is not sustainable in the long run (Heal 2011).

There are many approaches to assessing and implementing sustainability. Consensus is emerging that the indicators related to physical, ecological, and economic policies and systems and their interactions which support well-being are fundamental (O'Connell et al. 2013). Sustainability measurement has two forms, weak and strong, which depend on the elasticity of substitution between natural capital and other forms of capital including physical capital, intellectual capital, etc. (Heal 2011).

Measuring Sustainability

The term sustainability assessment where it covers the collection and evaluation of relevant sustainability data is used widely in the literature by policy makers. The complexity of sustainability issues makes sustainable measurement very difficult. Most of the data are inaccessible for private or academic institutions all around the world. The Global Agenda Council on Measuring Sustainability aims to take an initiative, Environmental Big open Data Initiative (EBODI). The conceptual changes in sustainability result the need to consider disparate data, varying scales, and methodologies to evaluate complexity of sustainability (O'Connell et al. 2013).

The sustainability data sets can range from relatively simple variables (e.g., temperature) to relatively complex variables (e.g., metrics which describe forest fragmentation and risks to biodiversity). There are also several variables referring to the sustainability discourse which cannot be quantitatively measured (e.g., climate vulnerability, food security, and sustainable competitiveness) (O'Connell et al. 2013). Sustainability indicators point at the links among the economic, social and environment. Traditional indicators are based on the economic and environmental indicators such as stock holder profits, gross domestic

product (GDP), water availability, pollution, production factors, and other natural resources indicators. For example, the GDP as a traditional economic indicator measures the overall economic well-being of a country. However, GDP refers the monetary level of economic activity and fails to explain sustainability dimensions such as environmental health of a country. At this point, the index of sustainable economic welfare (ISEW), a sustainability comparable indicator provides a more complete picture on the sustainability issue. For instance, the ISEW accounts for air pollution by estimating the cost of damage or approximates the cost of climate change due to

greenhouse gas emissions per ton of emissions (Sustainable measures 2019) (Table 1).

Sustainability Measurement Requires

- Determining and monitoring key sustainability measurement variables and indicators that are relevant to sustainability issues and problems
- The generation of suitable model-based data and projections across scales
- Addressing the absence of relevant theory regarding sustainability in linked socio-economic policies and systems

Sustainability Measurement, Table 1 Traditional indicators versus sustainable indicators

Traditional indicators	Sustainability indicators	Emphasis
Economic indicators		
Median income Per capita income relative to the US average	Number of hours of paid employment at the average wage required to support basic needs	What wage can buy defines basic needs in terms of sustainable consumption
Unemployment rate Number of companies Number of jobs	Diversity and vitality of local job base. Number and variability in size of companies. Number and variability of industry types. Variability of skill levels required for jobs	Resilience of the job market. Ability of the job market to be flexible in times of economic change
Size of the economy as measured by GNP and GDP	Wages paid in the local economy that are spent in the local economy Dollars spent in the local economy which pay for local labor and local natural resources. Percentage of local economy based on renewable local resources	Local financial resilience
Environmental indicators		
Ambient levels of pollution in air and water	Use and generation of toxic materials (both in production and by end user). Vehicle miles traveled	Measuring activities causing pollution
Tons of solid waste generated	Percentage of products produced which are durable, repairable, or readily recyclable or compostable	Conservative and cyclical use of materials
Cost of fuel	Total energy used from all sources. Ratio of renewable energy used at renewable rate compared to nonrenewable energy	Use of resources at sustainable rate
Social indicators		
SAT and other standardized test scores	Number of students trained for jobs that are available in the local economy. Number of students who go to college and come back to the community	Matching job skills and training to needs of the local economy
Number of registered voters	Number of voters who vote in elections. Number of voters who attend town meetings	Participation in democratic process. Ability to participate in the democratic process

Source: Bueno 2009

- Estimating impacts of sustainability policies and implementations
- Developing quantitative methods and approaches for assessing trade-offs between different sustainability dimensions (O'Connell et al. 2013).

Four Key Building Blocks in Sustainability Measurement

O'Connell et al. (2013) indicate four key building blocks as essential in sustainability measurement:

- Data: specification, collection, elimination, modeling, and analysis as the basis for measurement
- Evaluation: interpreting the data in relation to sustainability objectives
- Feedback: providing information to promote sustainable development
- Institutional or policy mechanism: formal and informal rules and policies to implement the sustainability framework by the policy makers

Various Approaches Which Support Sustainability Measurement

Within the literature, different disciplined fields of study are critical for addressing the concept of sustainability:

- Discipline-based science: economics, ecology, hydrology, agronomy, etc., which provide knowledge about different dimensions of sustainability (e.g., climate, biodiversity, agriculture, fisheries, forests, energy and resources, water, economic development, health, and lifestyle)
- Place-based: multidisciplinary and interdisciplinary approach to examine sustainability issues and their interaction within a particular region
- Integrative approaches: problem-based approaches, goal-oriented approaches,

solution-based approaches, etc. (O'Connell et al. 2013).

Key Issues

Patterns that are not probably sustainable in the long run (Heal 2011):

- Energy resources
- Water availability
- Species
- Forests
- Fish population
- Bioenergy production
- Agricultural production that is also threatened by the climate change and pollution

Thus, sustainability requires the sustainability of natural capital.

Summary

The sustainability measurement is the quantitative basis for the informed management of sustainability. Due to the fact that the main purpose of the sustainability measurement indicators is to inform public policy-making, the sustainability indicators can provide information on any aspect of the interplay between the environment and socio-economic activities. Therefore, they involve indicators, benchmarks, audits, indexes and accounting, assessment, other reporting systems. They can be performed at a wide range of spatial and temporal scales. The sustainability measurement metrics are still advancing.

Cross-References

- [Food Security](#)
- [Human Development Index \(HDI\)](#)
- [Index of Sustainable Economic Welfare](#)
- [Sustainable Development](#)

References

- Bueno, P. B. (2009). Indicators of sustainable small-scale aquaculture development. Measuring the contribution of small-scale aquaculture: An assessment. *FAO Fisheries and Aquaculture Technical Paper*, 534, 145–160.
- Heal, G. (2011). *Sustainability and its measurement* (NBER working paper series. Working paper 17008). Cambridge, MA: National Bureau of Economic Research.
- O'Connell, D., Braid, A., Raison, J., Hatfield-Dodds, S., Wiedmann, T., Cowie, A., Littleboy, A., & Clark, M. (2013). Navigating sustainability: measurement, evaluation and action. In Report prepared for the World Economic Forum Global Agenda Council on Measuring Sustainability. Retrieved from https://www.researchgate.net/profile/Deborah_OConnell/publication. Accessed 9 Aug 2019.
- Sustainable Measure. (2019). Sustainability indicators. Retrieved from <http://www.sustainablemeasures.com/node/89>. Accessed 8 Aug 2019.
- Further Reading**
- Babicky, P. (2012). Rethinking the foundations of sustainability measurement: The limitations of the environmental sustainability index (ESI). *Social Indicators Research*, 113, 133–157.
- Bell, S., & Morse, S. (2005). *Sustainability indicators: Measuring the immeasurable*. London: Earthscan.
- OECD- Organization for Economic Co-operation and Development. (2001). Environmental indicators: Towards sustainable development. Retrieved from <https://www.oecd.org/site/worldforum/33703867.pdf>. Paris, France.
- UNEP- United Nations Environment Programme. (2014). Sustainability metrics: Translation and impact on property investment and management. Property Working Group of the United Nations Environment Programme Finance Initiative. Retrieved from https://www.unepfi.org/fileadmin/documents/UNEPFI_SustainabilityMetrics_Web.pdf. Accessed 08 Aug 2019.
- Sustainablehighways (2021). How is sustainability measured. Retrieved from <https://www.sustainablehighways.org/99/how-is-sustainability-measured.html>. Accessed 12 January 2021.
- HUD USER (2021). Evidence matters: measuring sustainability. Retrieved from <https://www.huduser.gov/portal/periodicals/em/summer11/highlight2.html>. Accessed 12 January 2021.

Sustainability of Anti-market Environmentalists

► Sustainability and NGOs

Sustainability of Boards

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Synonyms

Environmental concerns; Governance concerns of the board of directors; Social concerns

Definition

The concept of sustainability of boards is an umbrella term covering issues connected to how boards of directors impact and should affect the environmental, social, and governance issues.

Introduction

In the context of the sustainability of boards, sustainability is most often connected to environmental, social, and governance concerns that boards of directors should pay attention to. These concerns are usually summarized using the acronym ESG.

ESG – Environmental, Social, and Governance Concerns

Each of the elements of ESG, environment, society, and governance, has a multitude of elements. For example, in the environment category, organizations might look at things like gas emissions or wastewater disposal. Regarding the social element, things like worker rights, labor unions, or diversity are the topic. Finally, in terms of governance, things that can become a topic include board composition, relations with stakeholders,

and ethical processes and policies. Looking at ESG from an overarching perspective, those issues gather all the standard elements of corporate social responsibility. Each of the mentioned topics influences how the public perceives organizations because they are becoming more important for stakeholders. They are often found on the list of priorities or concerns.

For example, in the World Economic Forum Report for both 2018 and 2019, the environmental risks are firmly placed in a highly impactful and highly likely risk category (Collins 2018, p. 3; 2019, p. 5). This means that they should not be ignored by the board of directors responsible for the organization (Deloitte 2018). Social concerns are high on the stakeholders' list of interest as well. Governance topics have also been in much focus. For example, researchers have tried to answer how is the board composition and size related to corporate social performance and sustainability (Ortiz-de-Mandojana and Aragon-Correa 2015; Rao and Tilt 2016; Zubeltzu-Jaka et al. 2020) or how can boards influence sustainability initiatives in organizations (Galbreath 2012; Sanchez et al. 2017). These are just examples, but the main points that are coming across are that boards are important agents when considering sustainability issues. To summarize, stakeholders seem to pay more and more attention ESG concerns and risks, or in general terms, to sustainability, so the boards need to pay attention to those issues (Galbreath 2012).

Furthermore, paying attention to ESG concerns is not only a request coming from the general public; there are also requests from the regulatory bodies that specific companies that are considered as being of public interest should file nonfinancial reports. In the EU for example, companies over 500 employees which are designated as public interest companies need to disclose information on environmental protection; social responsibility and treatment of employees; respect for human rights; anti-corruption and bribery; and diversity on company boards (in terms of age, gender, educational, and professional background) (Directive 2014/95/EU 2014). All elements of the nonfinancial reporting mentioned

by the EU fall firmly within the context of the ESG concerns.

Sustainability and Boards

Usually, if something is not in the focus of the organization's board of directors, then it will not be in that organization's strategy. In his literature review, Minciullo (2019, pp. 29–30) emphasizes that the board of directors impacts the integration of sustainability in strategy. Moreover, he goes on and expands by highlighting elements that have been found to have a significant impact on sustainability. Those elements are board composition, diversity, and having a board committee in charge of environmental issues (Minciullo 2019, p. 30). Besides a wide variety of academic literature on the subject, the sustainability of boards is also a frequent topic in professional journals and publications. In that type of literature, authors describe, for example, how boards can take advantage of the risks that sustainability entails, how and what should be done by boards to support sustainability initiatives in organizations, or who should be on the board of directors to achieve optimal results (Deloitte 2018; Lawler and Worley 2012; Smith and Soonieus 2019; Spitzer and Mandyck 2019). Again, as before, these professional papers point to the same topics as academic journals.

Summary

As described above, the sustainability of boards is an overarching idea that looks at how boards of directors approach sustainability issues that encompass ESG issues. Research branches off in many directions on the impact that boards can have in the context of sustainability initiatives in organizations. Besides academic interest, the board's role and responsibility regarding sustainability are topics of many professional publications. All are emphasizing that board involvement is important in dealing with sustainability concerns.

Cross-References

- Corporate Sustainability Performance
- Embedded Sustainability
- Sustainability as a Management Approach
- Sustainability Management Process
- Sustainability Management and Reporting
- Sustainability Report and Sustainability Reporting
- Sustainability Reporting
- Sustainability Reporting Guidelines
- Sustainability Standards and Standardization

References

- Collins, A. (2018). *The global risks report 2018* (13th ed.). Switzerland: World Economic Forum.
- Collins, A. (2019). *The global risks report 2019* (14th ed.). Switzerland: World Economic Forum.
- Deloitte. (2018). *Sustainability and the board: What do directors need to know in 2018?* Deloitte. Global Center for Corporate Governance. <https://www2.deloitte.com/global/en/pages/risk/articles/on-the-board-s-agenda-march.html>
- Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. (2014). The European Parliament and the Council of the European Union. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0095>
- Galbreath, J. (2012). Are boards on board? A model of corporate board influence on sustainability performance. *Journal of Management & Organization*, 18(4), 445–460. <https://doi.org/10.1017/S1833367200000699>.
- Lawler, E. E., & Worley, C. G. (2012, September 18). Why boards need to change. *MITSloan Management Review*. <https://sloanreview.mit.edu/article/why-boards-need-to-change/#:~:text=Change>
- Minciullo, M. (2019). *Corporate governance and Sustainability: The role of the Board of Directors*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-18885-6>.
- Ortiz-de-Mandojana, N., & Aragon-Correa, J. A. (2015). Boards and sustainability: The contingent influence of director interlocks on corporate environmental performance: Director interlocks and corporate environmental performance. *Business Strategy and the Environment*, 24(6), 499–517. <https://doi.org/10.1002/bse.1833>.
- Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138(2), 327–347. <https://doi.org/10.1007/s10551-015-2613-5>.
- Sanchez, R., Galbreath, J., & Nicholson, G. (2017). Building sustainability competence from the top down: A model for researching and improving boards of directors' influence on firms' sustainability performance. In R. Sanchez, A. Heene, S. Polat, & U. Asan (Eds.), *Research in competence-based management* (Vol. 8, pp. 69–107). Bingley: Emerald Publishing Limited. <https://doi.org/10.1108/S1744-211720170000008004>.
- Smith, C. N., & Soonieus, R. (2019). *What's stopping boards from turning sustainability aspirations into action?* Fontainebleau, France: INSEAD Corporate Governance Centre.
- Spitzer, S. W., & Mandyck, J. (2019, May 30). What boards need to know about sustainability ratings. *Harvard Business Review*.
- Zubeltzu-Jaka, E., Álvarez-Etxeberria, I., & Ortas, E. (2020). The effect of the size of the board of directors on corporate social performance: A meta-analytic approach. *Corporate Social Responsibility and Environmental Management*, 27(3), 1361–1374. <https://doi.org/10.1002/csr.1889>.

Sustainability of Civil-society Organizations

- Sustainability and NGOs

Sustainability of Nonprofit Organizations

- Sustainability and NGOs

Sustainability of Sports Stadiums

- Sustainable Sports Stadiums

Sustainability of the Third Sector

- Sustainability and NGOs

Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment

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Definition/Description

Increased global concern on the state of our climate, water, and soil have driven the waste management sector to look for technical solutions that enable lowering of the environmental impacts. This has led to investigations on the environmental impacts of waste management systems for which life cycle assessment (LCA) has been widely used. The LCA methodology is a standardized approach and the principles and general guidelines are laid down in the ISO 14040 and 14044 standards. The main aim has been in comparing different treatment methods and with 1 t of municipal solid waste (MSW) as a functional unit (FU). LCA can be utilized as a support for investment or development decisions, in research and development as well as in providing information for decision makers. Two main MSW treatment technologies, which have been investigated the most, are landfill disposal and incineration. In general, landfill disposal is less favorable than waste incineration, while the operation environment and technological advancement have a large impact on the net results. However, the LCA studies on MSW management to date have mostly focused on European or Asian countries (and to some extent in North and South America) while a large share of nations have not a single MSW management LCA study.

Introduction

The development of waste management sector has been driven by the development of human

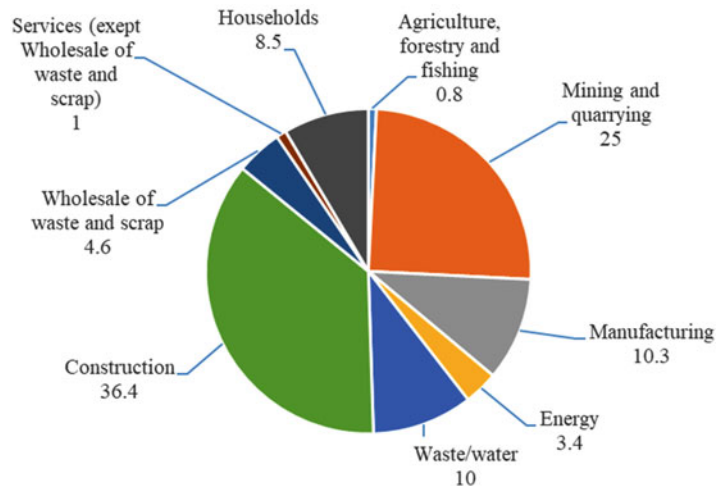
settlements in general. In the era of humans and humans living in hunter gatherer bands, the “waste” was dispersed on a wider area and mainly what remained were bones from the hunted animals. The age of agriculture brought with it larger pockets of human settlements, and waste generation started to concentrate. However, the waste as a stressing problem became more evident with the industrial age and larger cities with limited space for the waste. The transport of waste to further away became a necessity and landfills started to be formed. At present, in the age of information technology with the increased global concern on the state of our climate, the development of waste management sector is driven by the determination to look for technical solutions that enable the applied circulation of materials at the same time when safe treatment of waste and avoidance of environmental hazards is still very important.

The construction and mining sectors are among the main contributors to the waste generation. In the 28 EU countries the share of construction waste was 36% and mining industry 25% of the total waste generated in year 2016, Fig. 1, which was 2500 million tonnes. The treatment of this generated waste in EU-28 countries in 2016 was heavily dependent on landfilling with a share of 45.5% of the generated waste. However, EU is globally the most developed continent in the field of waste management and recovery. The share for recycling was 37.5%, backfilling 10.1%, energy recovery 5.6%, and incineration without energy recovery 1%.

The waste management is regulated by national and international legislation. In the EU-28 region the waste framework directive (2008/98/EC) lays down the concepts of waste and concepts for recycling and recovery. The directive presents the principle of organizing waste management in such a manner that it does not endanger the human health or pose adverse impacts on the environment. It also introduces the waste hierarchy, which has been adopted in many national legislations. There are also directives for specific waste management options, for example, if waste is to be landfilled, the landfill should be in compliance with the landfill directive (1999/31/EC) or if waste is going to incineration the emission should be minimized in accordance with the

Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment,

Fig. 1 The generation of waste by economic activities and households in 2016 (Eurostat 2018)



waste incineration directive (1991/31/EC). The national legislation can then have more strict requirements for waste management such as land-fill bans on organic municipal solid waste (MSW), for example, in Germany, Denmark, Sweden, and Finland.

The waste hierarchy proposes the preferred order of measures taken for waste and waste management. Firstly, where possible, the waste reduction measures should be enforced. When this is not possible, the reuse of waste should be preferred after which material recycling is the next on list of treatment options followed by energy recovery of waste and lastly safe disposal of waste. In the age of circular economy, also the waste management is more in the spotlight and strict aims for enhancing recycling have been laid down, especially in EU. The efficient source separation of waste is the single most effective measure to obtain suitable materials for waste recycling but in some cases, this is not possible and mechanical sorting is required to obtain waste fractions for recycling. The aim in recycling of the waste is to reduce the need for utilizing virgin materials in making of the new products, which reduces the environmental impacts.

To estimate the environmental impacts of waste management a systemic way for calculating the environmental impacts is required. Environmental impacts of waste management systems have been widely assessed by utilizing life cycle assessment (LCA). LCA is a widely adopted method for calculating the environmental impacts

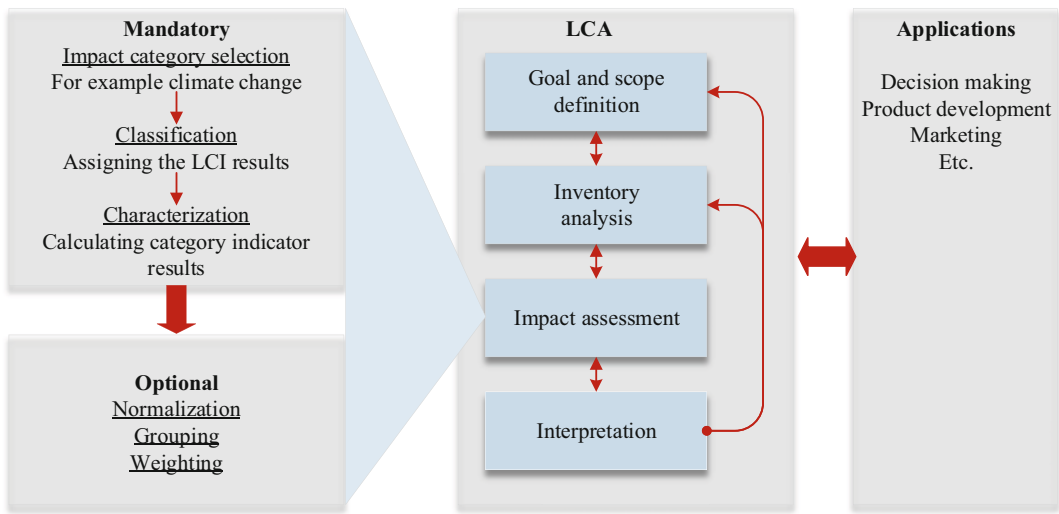
of products and various production systems. It has been successfully adopted for acquiring information for the decision makers also in waste management sector.

This entry of the encyclopedia focuses on the environmental impact management of waste management systems. The basic principles of LCA are presented while focusing on the specific aspects of environmental impact evaluation of waste management systems, more specifically to LCA of MSW management, which has a plethora of management options.

Application of Life Cycle Assessment to Analyzing the Environmental Impact

The environmental impact analysis utilizing LCA is as standardized approach and the principles and general guidelines are laid down in the ISO standards 14040 and 14044 (ISO 14040 2006; ISO 14044 2006). In addition, carbon footprint calculation, a widely used special application of LCA, considering only global warming potential is described in standard 14067 (ISO 14067 2014) and further information is provided in PAS 2050 (British Standards Institution (BSI) 2011) and greenhouse gas (GHG) protocol (Greenhouse Gas Protocol 2011).

The LCA procedure consists of four main phases, the order of which is described in Fig. 2. However, the LCA is an inherently iterative process where the output of a given phase may result



Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment, Fig. 2 The four main steps in LCA. (Modified from ISO 14040 2006)

in a need to return to the earlier phases of the LCA. The starting point is the goal and scope definition where the aim of the study as well as the function are clearly described, which are then used to define the system boundary that encompasses the relevant processes and the functional unit (FU). The FU is needed because LCA methodology is a relative approach and all subsequent analysis are related to the selected FU. The life cycle inventory analysis (LCI) phase entails the gathering of all the relevant input and output data of the processes included inside the system boundary. This includes, for example, the used materials, energy, as well as the produced products, waste, and other generated emissions from a given process. The LCI data is then utilized in the life cycle impact assessment (LCIA) phase to ascertain the environmental impact by associating the data with the selected impact categories. The LCIA includes mandatory phases optional phases, which are summarized to Fig. 2.

In LCA study, there are usually situations where the production system under study has more than one output product and there is a question how to calculate the environmental impact of the product under investigation. One possibility is to conduct allocation between the products.

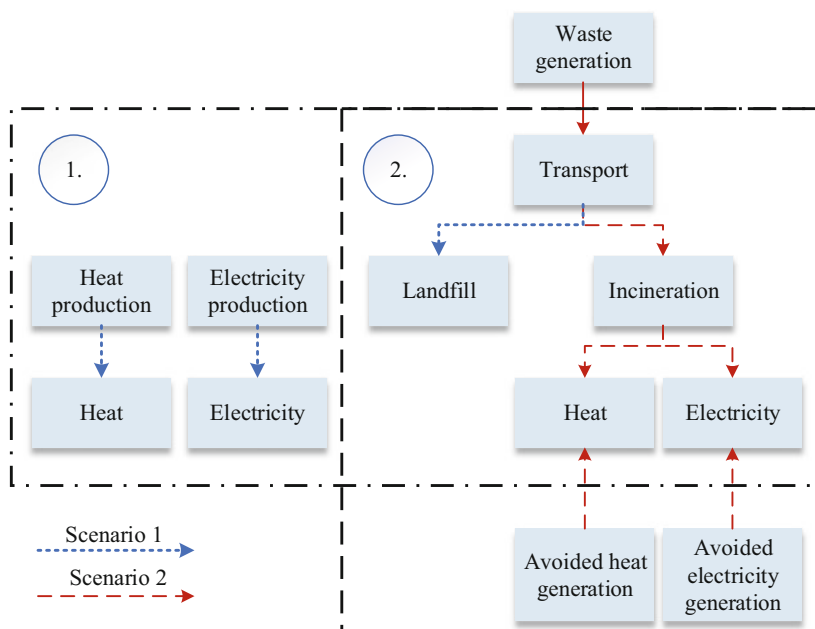
However, according to standard ISO 14044 (2006), allocation should be avoided if possible by dividing the unit processes or by using system expansion. When allocation cannot be avoided, it should in the first place be done based on physical properties (mass, energy content), and if this is not possible, by some other means, which reflect the relation of the products such as economic value. For example, in an article by Havukainen et al. (2018), allocation between biogas and produced composted digestate was conducted in order to calculate the carbon footprint for nitrogen and phosphorus included in the compost. Mass-based or energy-based allocation would not have been optimal in allocation emissions between gaseous energy carrier and solid fertilizer product, which meant that economic values were used.

In some cases, it is possible to expand the system boundary to include several production systems. One example is comparison of waste landfilling scenario to a scenario where waste is directed to incineration. The main aim of both scenarios is managing of the waste, but waste incineration also produces heat and electricity, which might not be produced in the landfilling scenario, which makes straight comparison of the scenarios difficult. One option is to include

in the landfilling scenario emissions from additional production of equivalent amounts of heat and electricity, as in incineration scenario, from alternative sources, as is shown in Fig. 3 with system boundary 1 (additional production). This option was selected by Uusitalo et al. (2014) and similar quantities of products in all scenarios. Another option is to include in the incineration scenario the avoided emissions from displacing electricity and heat generation from alternative fuel sources by subtracting these emission from other emissions generated in the scenario, which is shown in Fig. 3 with system boundary 2 (avoided production). Liikanen et al. (2018) included the avoided emissions from displacing electricity and material products when comparing MSW management scenarios for Sao Paulo city and similar option was selected by Deviatkin et al. (2017) when comparing the different options for recycling of thermal residue in South Karelia region. The difference between additional and avoided production methods is only in the way the results are calculated and presented, since the

difference in net results between scenarios will be the same with both methods.

In the waste management LCA studies, the assumption of zero-burden condition is usually applied to the waste fractions (Laurent et al. 2014), which means that the waste coming to the studied system boundary does not carry the environmental burdens from the previous stages of life cycle. With such an approach, the system boundaries usually begin with the impact from collection and transportation of waste to the studied disposal facilities. The assumption of zero-burden condition is suitable when comparing different waste management options since the upstream emissions would be similar for all the assessed options and those parts, which are similar can be disregarded in a study where different treatment options are compared (Finnveden 1999). However, in case when the input waste amount to compared systems are not similar, for example, due to waste prevention actions in some of the compared waste treatment scenarios, the system boundary should, in principle, be drawn to include



Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment, Fig. 3 Two system boundaries with

additional production (1) and avoided production (2) (European Commission – Joint Research Centre 2010)

the upstream processes as stated by, for example, by Djuric Ilic et al. (2018). It is also important to investigate if the input materials should be considered waste or coproduct since according to ISO 14044 (2006), the outputs and inputs would be allocated only to coproducts.

Examples of LCA Studies on MSW Management

LCA has become an established means for investigating environmental impacts also in waste management sector and several studies have been conducted in different operating environments around the world. Khandelwal et al. (2019) conducted a review on 153 LCA studies concerning MSW management, most of which were concerning Europe or Asia and high-income countries (and to less extent in North and South America), while there were several countries from which there were not a single LCA on MSW management. The main waste management technologies, which were investigated in the studies were landfill disposal and incineration followed by mechanical treatment and biological treatment with the most common FU being 1 t of MSW. A few examples about the LCA conducted in MSW management in different operation environments and selected goal and scope, FUs, technologies as well as environmental impact categories are presented in Table 1. The impact assessment results of these studies are summarized in chapters Environmental Impact Assessment of MSW Management of Hangzhou, changes in Environmental Impacts from Improving MSW Management in Sao Paulo and Greenhouse Gas Emissions of MSW Management Options in South Karelia.

Environmental Impact Assessment of MSW Management of Hangzhou

The environmental impacts of waste management in Hangzhou were studied by Dong et al. (2014) and more recently by Zhou et al. (2018). In the study by Dong et al. (2014), the comparison was made between landfill disposal without LFG collection, landfill disposal with energy recovery from LFG and incineration. The LFG collection

and energy recovery scenario already reduced the GWP by 74% to 300 kg_{CO₂,eq.}/t MSW from 1100 kg_{CO₂,eq.}/t MSW, which is generated in scenario without LFG collection. This is due to the high assumed collection rate of LFG, which was 70%. The incineration scenario then resulted in GWP of 200 kg_{CO₂,eq.}/t MSW, which is then 30% less than the scenario with LFG to energy scenario. In the study by Zhou et al. (2018), the mixed MSW management in Hangzhou comprised of five incineration plants and one landfill. The main treatment options were also landfill disposal and incineration, while there was also separate landfilling of food waste and to small extent also directing of food waste to anaerobic digestion. The LHV_{ar} of MSW was low 5.6 MJ/kg, which meant that coal was used as auxiliary fuel and collection rate of LFG was assumed to be 65%. Directing waste to incineration reduces the GWP by 46% to 271 kg_{CO₂,eq.}/t MSW from 502 kg_{CO₂,eq.}/t MSW.

Changes in environmental impacts of waste management system in Hangzhou by RDF production from waste for a waste-to-energy plant in comparison to untreated waste incineration were investigated in work done by Havukainen et al. (2017). The waste management comprised of two landfills and four waste incineration plants. The main characteristics of the study region waste management were that there was no effective source separation of biowaste, which meant that the lower heating value as received (LHV_{ar}) of waste was low, only 4–5 MJ/kg. This meant that coal was used as an auxiliary fuel in the waste incineration plants and it was assumed that this coal would not be needed if RDF would be produced. Another trait in the region was that waste-to-energy plants were only producing electricity since district heat is not consumed in the region. There was also relatively low landfill gas (LFG) recovery rate of 30% in the main landfill of the region, while on the other one there was no recovery.

The main findings in the study by Havukainen et al. (2017) were that RDF production from waste can reduce the emissions from the MSW management but the benefits greatly depend on the subsequent treatment of organic reject from the RDF

Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment, Table 1 A few examples of LCA studies on MSW management and properties of the studies

References	Hupponen et al. (2015)	Havukainen et al. (2017)	Dong et al. (2014)	Zhou et al. (2018)	Liikanen et al. (2018)
Country	Finland	China	China	China	Brazil
Goal and scope	To study how to guide the decision making of MSW management toward more environmentally friendly procurements	To study how to guide the decision making of MSW management toward more environmentally friendly procurements	To study the environmental assessment of different MSW treatment technologies	To study the environmental impact evolution of MSW management system in Hangzhou	To study the environmental impacts of steps to improve MSW management in Sao Paulo
Functional unit	Annual MSW generated	MSW generated in 2013	1 t of MSW	1 t of MSW	MSW treated in 2015
Impact category	GWP	GWP, EP, AP	GWP, AP, NE, POF, HT, ET	GWP, AP, NEP, POP	GWP, AP, EP
Technologies	LF, INC	LF, INC, RDF+INC, AD, CO, ET	LF, INC	LF, INC, AD	LF, SRF+INC, RDF+CK, AD, CO
Allocation	No	No	No	No	No
System expansion	Avoided production	Avoided production	Avoided production	Avoided production	Avoided production

Technologies: *LF* landfill, *INC* incineration, *RDF* refuse-derived fuel (RDF) generation, *AD* anaerobic digestion, *ET* ethanol production, *CK* use in cement kiln, *CO* composting. Impact categories: *GWP* global warming potential, *EP* eutrophication potential, *AP* acidification potential, *POF* photochemical ozone formation, *NEP* nutrient enrichment potential, *HT* human toxicity, *ET* ecotoxicity

production. Reductions to GWP of waste management were not obtained when organic reject was directed to landfill, but if organic reject would be dried and directed to incineration, emissions could be reduced by 10% and if reject would be directed to anaerobic digestion or ethanol production the emission reduction could be 20%. The impact of organic reject treatment can be more significant than improvement in electric efficiency, since improving the electric efficiency of waste-to-energy plant from 24% to 32% reduced the emissions of the studied system by 14%, while changing the treatment of organic reject from landfill disposal to anaerobic digestion reduced the GWP by 20%. For acidification and eutrophication potential the impact of organic treatment was even greater, since if organic reject is directed to landfill or incineration the emissions were increased while directing them to anaerobic digestion or ethanol production reduced the emission from the waste management system. However, the main improvement in the waste management would be obtained from improving source separation of food waste and proper utilization of it, for example, in anaerobic digestion. This would reduce the LFG production if the waste is directed to landfill and improve the LHV_{ar} of waste, which would improve the energy recovery from waste-to-energy plant.

The LCA studies by Dong et al. (2014) and Zhou et al. (2018) have been made in a more traditional way by comparing different treatment options, namely, landfill disposal and waste incineration. The aim of their studies is to find out what environmental benefits could be gained by improving the landfill technology or transitioning away from landfill disposal to waste incineration. The study by Havukainen et al. (2017) focuses more on developing the present waste management situation, which includes both waste disposal and waste incineration. The focus is on improving the properties of waste to avoid coal consumption as alternative fuel. This causes a change of flows between landfill disposal and waste incineration since more waste is directed to waste incineration plants to replace coal. These two studies show that you can have a different approach in assessing the waste

management development even in the same regional setting. The studies by Dong et al. (2014) and Zhou et al. (2018) focus on a larger change in waste management, which might take a longer period to realize, while the study by Havukainen et al. (2017) focuses on a more subtle change, which is considering the improvement of the current waste management options and taking into consideration the limitations and possibilities of the current waste.

Changes in Environmental Impacts from Improving MSW Management in Sao Paulo

Changes in environmental impacts by a stepwise improvement of MSW management in Sao Paulo were investigated by Liikanen et al. (2018). The baseline situation was that mixed MSW is sent to two landfills in Sao Paulo. The steps to improve the situation were first to increase slightly home composting (5% of organic waste), second to introduce source separation of organic waste (20%) to composting or anaerobic digestion in addition to home composting, and finally on top of these improvements directing 18% of MSW to mechanical treatment and subsequent utilization of RDF in incineration or cement plant. Increasing the home composting slightly had only a minor impact on GWP with 1% reduction in comparison to landfill disposal (baseline 278 kgCO_{2,eq}/t MSW). Source separation of organic waste and directing it to anaerobic digestion provided higher emission reduction of 11% GWP, while adding mechanical treatment of waste and incinerating the produced RDF resulted only to 1% emission reduction. This was caused by low emission reductions from displaced average electricity, which was mainly based on hydropower and high collection rates for LFG, 80% for one landfill, and 64% for the other one. Highest GWP reduction of 40% was achieved when RDF was directed to cement kiln to replace coal.

The improvement steps in Sao Paulo were selected in such a manner that they could be realistically realizable one after the other with some years in between the steps. The imperfectly working source separation, mechanical sorting, and other practical factors have been considered in selecting the development steps. The

stepwise approach allows for quantifying the improvements in environmental performance, which can be reached with smaller steps in the development of waste management.

Greenhouse Gas Emissions of MSW Management Options in South Karelia

The study by Hupponen et al. (2015) focused on investigating how GHG emissions could be taken into consideration when conducting a tendering process for waste management procurements in South Karelia. The landfill disposal scenario was compared to three waste incineration scenarios: incineration in grate furnace two different locations or fluidized bed boiler after pretreatment in third location. All the scenarios had lower GWP than the landfill scenario with the scenarios including grate incineration had highest reduction of 110–140%. The differences between the two grate furnace scenarios was that grate furnace with higher reduction had higher total annual efficiency because part of the heat was used as steam in process industry, when district heat can be utilized effectively only in cold seasons. The fluidized bed incineration scenario had lower GWP reduction potential of 40% since the substituted district heat near that plant was mainly produced from biofuels.

In South-Karelian case, the landfill disposal and incineration are compared in a regional setting. The different incineration technologies available within reachable distance are considered as well as regional aspects in utilizing the energy produced from waste. The aim was to produce as realistic information as possible from the environmental impacts of the different available options as well as factors that affect the environmental performance. The idea behind is to show what kind of information could be provided by LCA for the public procurements related to waste treatment options and locations, which traditionally are mainly decided by economic factors.

Conclusions from the MSW Management LCA Studies

The summarized LCA studies in chapters 4.1–4.3 show that LCA can have a variety of usages in environmental impact assessment of waste

management. Study by Havukainen et al. (2017), Dong et al. (2014), and Zhou et al. (2018) mainly focused on the comparison of technologies, while the study by Liikanen et al. (2018) investigated the impact of stepwise development of waste management and Hupponen et al. (2015) wanted to discover how decision making about MSW procurement could take GHG emissions into consideration.

The environmental impact results (GWP, AP, and EP) of two main MSW treatment technologies, namely, landfill disposal and incineration, in few selected LCA studies are summarized to Table 2. In addition to studies presented in chapters Environmental Impact Assessment of MSW Management of Hangzhou, changes in Environmental Impacts from Improving MSW Management in Sao Paulo and Greenhouse Gas Emissions of MSW Management Options in South Karelia, results of few additional studies are presented. The large variation in the results in different regions highlight the importance data related to the study region in addition to data related to technological performance. The studies of Manfredi et al. (2009) and Astrup et al. (2009), which consider a range of input data without a specific regional data, show that the variation can be quite significant. In general, landfill disposal is causing more environmental impacts than incineration, but the operating environment has a significant impact on the results. In the study by Hupponen et al. (2015), both heat and electricity from waste-to-energy plant are utilized and displace other energy production while in study by Havukainen et al. (2017) and Liikanen et al. (2018), only electricity could be utilized, which was one of the main reasons for lower GWP in study by Hupponen et al. (2015). The displaced energy has also a huge role in the results since, for example, in study by Liikanen et al. (2018) displaced average electricity was mainly renewable based and this led cement kiln usage to replace coal, which resulted in the lowest GWP. The technological advancement had also high impact on the GWP, for example, low collection rate of LFG (30%) in the study by Havukainen et al. (2017) was the key factor in higher emissions in comparison to results by Liikanen

Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment, Table 2 GWP, AP and EP results of selected LCAs on MSW management of two main technologies

	GWP kgCO ₂ ,eq./t	Acidification gSO ₂ ,eq./t	Eutrophication gPO ₄ ,eq./t	Country/ Region	References
Landfill					
MSW	−69...162	−	−	−	Manfredi et al. (2009)
MSW	490	−440	−	Italy	Arena et al. (2003)
MSW	595...1311	127...374	86	Italy	Cherubini et al. (2009)
MSW	710	−280	36	China	Havukainen et al. (2017)
MSW	300...1100	−1250...1000	−	China	Dong et al. (2014)
MSW	502...505	−302...−308	−	China	Zhou et al. (2018)
MSW	278	−456	−	Sao Paulo	Liikanen et al. (2018)
MSW	234	−	−	Finland	Hupponen et al. (2015)
Incineration					
MSW	−844...−126	−	−	−	Astrup et al. (2009)
MSW	390	−	−	Europe	Arena et al. (2015)
MSW	46	−4600	−	Italy	Arena et al. (2003)
MSW	273	2370	354	Thailand	Chaya and Gheewala (2007)
MSW	360	−860	−72	China	Havukainen et al. (2017)
MSW	200	−1750	−	China	Dong et al. (2014)
MSW	271...370	−478...−411	−	China	Zhou et al. (2018)
MSW	−92...140	−	−	Finland	Hupponen et al. (2015)
RDF	95	−3660	−	Italy	Arena et al. (2003)
RDF co-combustion	−1512...563	−	−	−	Astrup et al. (2009)
RDF	230...400	−1300...−2400	−120...−250	China	Havukainen et al. (2017)

et al. (2018) where collection rate was much higher (64–80%). The landfill gas yield is another significant factor, which changes according to waste composition. Furthermore, the general uncertainties, inaccuracies, and assumptions affect the results.

In general, in the development of waste management, the policy actions and citizen perception and participation in waste source separation affect the waste management as well as the operating environment. For example, landfill ban on organic waste in Finland had a large impact on waste management and the share of waste incineration increase with the expense of landfill disposal while the share of recycling has not increased yet as much. The increase in renewable energy generation will also affect the LCA results in the future (even during the lifetime of the waste-to-energy plants) by affecting the emission

reductions from displaced energy. However, there are regions where the biggest challenge is caused by the steep increase in waste generation. For example, in larger cities in China, the waste generation rate is still increasing rapidly, which causes huge pressure on the development of waste management. Along with limited space for landfill disposal, it means that waste incineration must be utilized more. The source separation would improve the situation notably but the education of citizens and changes in mindsets takes time.

Summary

LCA is an effective way to quantify the environmental impacts in the waste management sector. The methodology has been standardized and guides for its use have been developed to further

improve the quality of LCAs. In the LCA studies concerning MSW management, the main FU has been 1 t of treated MSW, and majority of the studies have been focusing on the European or Asian location. From the impact categories used in the LCA studies on MSW, the GWP was most used.

The example cases highlight the fact that LCA can be applied to waste management studies in a multitude of ways. Perhaps the most traditional manner to use LCA in waste management is to compare different treatment options to show the impact of complete change in the waste management. LCA can also be utilized to show the impacts of more subtle changes in the waste management system resulting from introduction of improvements to the present situation in the case region or in quantifying the achievable environmental benefits of stepwise development with realistic boundary conditions. In addition, LCA is a useful tool for assessing the impact that the selection of the waste treatment location has on environmental impacts, due to differences in operational environment, such as options for utilizing the produced energy.

Cross-References

- Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment
- Sustainability of Waste Management System: Treatment and Separation for Material Recovery
- Sustainability of Waste Management System: Waste Generation and Collection
- Sustainability of Waste Management Systems: Energy Recovery
- Sustainability of Waste Management Systems: Final Disposal

References

Arena, U., Mastellone, M., & Perugini, F. (2003). The environmental performance of alternative solid waste management options: A life cycle assessment study.

- Chemical Engineering Journal*, 96, 207–222. <https://doi.org/10.1016/j.cej.2003.08.019>.
- Arena, U., Ardolino, F., & Di Gregorio, F. (2015). A life cycle assessment of environmental performances of two combustion- and gasification-based waste-to-energy technologies. *Waste Management*, 41, 60–74. <https://doi.org/10.1016/j.wasman.2015.03.041>.
- Astrup, T., Moller, J., & Fruergaard, T. (2009). Incineration and co-combustion of waste: Accounting of greenhouse gases and global warming contributions. *Waste Management & Research*, 27, 789–799. <https://doi.org/10.1177/0734242X09343774>.
- British Standards Institution (BSI). (2011). PAS 2050:2011 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services.
- Chaya, W., & Gheewala, S. H. (2007). Life cycle assessment of MSW-to-energy schemes in Thailand. *Journal of Cleaner Production*, 15, 1463–1468. <https://doi.org/10.1016/j.jclepro.2006.03.008>.
- Cherubini, F., Bargigli, S., & Ulgiati, S. (2009). Life cycle assessment (LCA) of waste management strategies: Landfilling, sorting plant and incineration. *Energy*, 34, 2116–2123. <https://doi.org/10.1016/j.energy.2008.08.023>.
- Deviatkin, I., Havukainen, J., & Horttanainen, M. (2017). Comparative life cycle assessment of thermal residue recycling on a regional scale: A case study of South-East Finland. *Journal of Cleaner Production*, 149, 275–289. <https://doi.org/10.1016/j.jclepro.2017.02.087>.
- Djuric Ilic, D., Eriksson, O., Ödlund (former Trygg), L., & Åberg, M. (2018). No zero burden assumption in a circular economy. *Journal of Cleaner Production*, 182, 352–362. <https://doi.org/10.1016/J.JCLEPRO.2018.02.031>.
- Dong, J., Chi, Y., Zou, D., Fu, C., Huang, Q., & Ni, M. (2014). Comparison of municipal solid waste treatment technologies from a life cycle perspective in China. *Waste Management & Research: The Journal of the International Solid Wastes and Public Cleansing Association, ISWA*, 32, 13–23. <https://doi.org/10.1177/0734242X13507311>.
- European Commission – Joint Research Centre. (2010). *General guide for life cycle assessment – Detailed guidance*. Luxembourg: Publications Office of the European Union.
- Eurostat. (2018). Waste generation by economic activities and households, EU-28, 2016 [WWW Document]. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Waste_generation_by_economic_activities_and_households,_EU-28,_2016_\(%25\).png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Waste_generation_by_economic_activities_and_households,_EU-28,_2016_(%25).png). Accessed 22 Mar 2019.
- Finnveden, G. (1999). Methodological aspects of life cycle assessment of integrated solid waste management systems. *Resources, Conservation and Recycling*, 26, 173–187. [https://doi.org/10.1016/S0921-3449\(99\)00005-1](https://doi.org/10.1016/S0921-3449(99)00005-1).
- Greenhouse Gas Protocol. (2011). Product life cycle accounting and reporting standard.

- Havukainen, J., Zhan, M., Dong, J., Liikanen, M., Deviatkin, I., Li, X., & Horttanainen, M. (2017). Environmental impact assessment of municipal solid waste management incorporating mechanical treatment of waste and incineration in Hangzhou, China. *Journal of Cleaner Production*, 141. <https://doi.org/10.1016/j.jclepro.2016.09.146>.
- Havukainen, J., Uusitalo, V., Koistinen, K., Liikanen, M., & Horttanainen, M. (2018). Carbon footprint evaluation of biofertilizers. *International Journal of Sustainable Development and Planning*, 13, 1050–1060. <https://doi.org/10.2495/SDP-V13-N8-1050-1060>.
- Hupponen, M., Grönman, K., & Horttanainen, M. (2015). How should greenhouse gas emissions be taken into account in the decision making of municipal solid waste management procurements? A case study of the South Karelia region, Finland. *Waste Management*, 42, 196–207. <https://doi.org/10.1016/j.wasman.2015.03.040>.
- ISO 14040. (2006). Environmental management – Life cycle assessment – Principles and framework.
- ISO 14044. (2006). Environmental management – Life cycle assessment – Requirements and guidelines.
- ISO 14067. (2014). Greenhouse gases. Carbon footprint of products. Requirements and guidelines for quantification and communication.
- Khandelwal, H., Dhar, H., Thalla, A. K., & Kumar, S. (2019). Application of life cycle assessment in municipal solid waste management: A worldwide critical review. *Journal of Cleaner Production*, 209, 630–654. <https://doi.org/10.1016/j.jclepro.2018.10.233>.
- Laurent, A., Bakas, I., Clavreul, J., Bernstad, A., Niero, M., Gentil, E., Hauschild, M. Z., & Christensen, T. H. (2014). Review of LCA studies of solid waste management systems – Part I: Lessons learned and perspectives. *Waste Management*, 34, 573–588. <https://doi.org/10.1016/j.wasman.2013.10.045>.
- Liikanen, M., Havukainen, J., Viana, E., & Horttanainen, M. (2018). Steps towards more environmentally sustainable municipal solid waste management – A life cycle assessment study of São Paulo, Brazil. *Journal of Cleaner Production*, 196, 150–162. <https://doi.org/10.1016/j.jclepro.2018.06.005>.
- Manfredi, S., Tonini, D., Christensen, T. H., & Scharff, H. (2009). Landfilling of waste: Accounting of greenhouse gases and global warming contributions. *Waste Management & Research*, 27, 825–836. <https://doi.org/10.1177/0734242X09348529>.
- Uusitalo, V., Havukainen, J., Manninen, K., Höhn, J., Lehtonen, E., Rasi, S., Soukka, R., & Horttanainen, M. (2014). Carbon footprint of selected biomass to biogas production chains and GHG reduction potential in transportation use. *Renewable Energy*, 66. <https://doi.org/10.1016/j.renene.2013.12.004>.
- Zhou, Z., Tang, Y., Dong, J., Chi, Y., Ni, M., Li, N., & Zhang, Y. (2018). Environmental performance evolution of municipal solid waste management by life cycle assessment in Hangzhou, China. *Journal of Environmental Management*, 227, 23–33. <https://doi.org/10.1016/j.jenvman.2018.08.083>.

Sustainability of Waste Management System: Treatment and Separation for Material Recovery

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Synonyms

Mechanical treatment; Separation technologies

Definition/Description

Increased global concern on the state of our climate has driven also the waste management sector to look for solutions that enable lowering of the environmental impacts by increasing waste reduction and material recycling. Material recycling is more feasible and efficient when there is source separation in place because source separation usually leads to the best quality of the separated materials. However, sometimes source separation does not work properly (e.g., because of the low education level of people) or it is difficult to apply (e.g., because of a fixed and dense city infrastructure). The strict material recycling targets in the EU necessity that mechanical separation is included as a tool for increasing the recycling rate. The aim of the mechanical treatment is to separate materials suitable for recycling from the mixed waste stream by separating recoverable components and impurities to different streams. A multitude of processes is usually required to obtain recyclable materials out of the mixed waste stream, for example, from mixed municipal solid waste (MSW) or mixed construction and demolition waste (C&D waste). However, it should be borne in mind that often the most important factors from the environmental impacts point of view for recovery of materials by mechanical treatment are yield of recoverables,

quality and demand of recovered materials as well as the environmental impact of replaced virgin materials. At the end of the day, the tightened recycling rates strive for the development of various treatment and separation technologies and their better performance is achieved.

Introduction

Increased global concern on the state of our climate has driven the waste management sector to look for technical solutions that enable the lowering of the environmental impacts. The goal, especially in the EU, has been to firstly reduce the waste generation as much as possible. This is achieved by striving to design products and services according to the circular economy concept that support the goal of waste reduction as well as the efficient recycling at the end of life (EoL) of the product. Only as a last resort should there be a safe disposal of waste.

Legislation lays down the definitions and regulations guiding the development also in waste management sector. In EU-28, the overarching legislation is provided by the waste framework directive (2008/98/EC). Waste framework directive, among other legislative acts, provides the basis for measures to be taken in waste management with the waste hierarchy stating as the preferred approach to be waste reduction and after that recycling.

The source separation of waste is the most efficient way to get waste materials suitable for recycling. Source separation is never perfect because there are always people who are not willing or able to do the separation work. Although there are impurities in the source separated fractions, they have a higher share of desired materials than the outputs of mechanical treatment. However, source separation is not possible in some cases due to various reasons and efficient mechanical treatment is needed to obtain waste fractions for recycling and to complete the separation of different materials out of the mixed stream in order to facilitate the increase in the recycling rate.

The tightening goals for recycling rates are justified by the anticipated lower environmental impacts from waste management. Often, the separation and pretreatment processes themselves do not make very large impacts compared to the impacts of utilization or avoidance of landfilling. For example, when it is possible to improve the fuel properties of waste to reduce the auxiliary coal need the environmental benefits are evident (Havukainen et al. 2017). In some cases, however, if disposal of the waste material would not cause large environmental impacts and if recovery of it either does not replace environmentally intensive materials, the mechanical treatment phases can make a large contribution to the whole life cycle impacts (Deviatkin 2017). In such a case, it is possible that treatment causes more environmental impacts than can be achieved benefits with the recovery of that material.

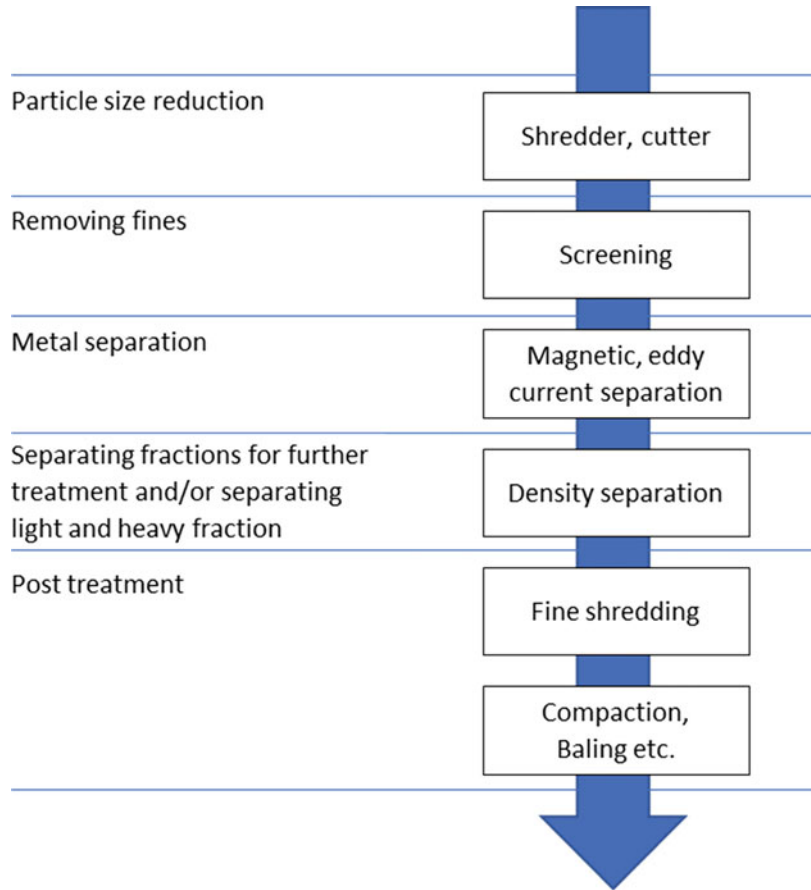
This entry of the encyclopedia focuses on the mechanical treatment and separation of usable materials from mixed waste streams. The basic principles of mechanical treatment, as well as the treatment processes, are presented. Besides, mechanical treatment of waste to produce solid recovered (SRF), preparation from waste, and mechanical separation of plastic waste are discussed in more detail.

Technologies

The aim of the mechanical treatment is to separate materials suitable for recycling from the mixed waste stream by separating recoverable components and impurities to different streams (Gundupalli et al. 2017). A multitude of processes is usually required to obtain recyclable material out of the mixed waste streams, for example, from mixed MSW or mixed C&D waste. The first step usually is size reduction to separate entangled materials from each other, as well as reduce the particle size, thus facilitating the efficient separation of materials in subsequent processes. The following material separation can include separation based on particle size, density-based separation, magnetic separation, etc. Figure 1 presents a simplified chart with the possible treatment phases

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Fig. 1 Simplified chart of possible waste separation steps and possible technologies or devices suitable for the separation step



and suitable technologies or devices which can be used in the different treatment phases.

The mechanical processes are not recovering 100% of the desired material from the mixed waste, neither they produce 100% pure fractions of the separation which means that the efficiency of the processes is never ideal. The purity rate, the recovery degree, and the overall efficiency are used to describe the efficacy of the separation processes to perform separation of desired fractions from the reject fractions.

Figure 2 presents a simplified flowchart of mass flows of a separation process. These mass flows can be used to calculate the purity degree, the recovery degree, as well as the efficiency of the separation.

There are almost always some impurities in the fraction which has been separated for the recovery purposes. For example, when separating metals from a mixed flow, the separated metal fraction

can include, e.g., wood fixed in the demolished nails or plastic coverings of metallic pipes. The purity degree (P) can be used to calculate the recoverable percentage of material from separated total mass flow (for example, from underflow).

$$P_{X1} = \frac{X_1}{X_1 + Y_1} 100\% \quad (1)$$

where

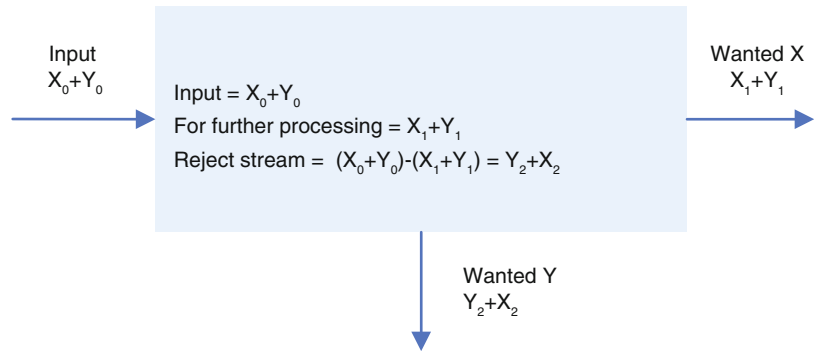
X_1 = mass of wanted material to be separated
 Y_1 = mass of other material unintentionally separated from the input mass

The recovery degree (R) shows the percentage of the separated recoverable material from the input recoverable material.

$$R_{X1} = \frac{X_1}{X_0} 100\% \quad (2)$$

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Fig. 2 Simplified flowchart of separation mass flows



Sustainability of Waste Management System: Treatment and Separation for Material Recovery,
Table 1 Material recovery efficiencies of selected separation technologies (McDougall and White 2001)

Technology	Separating	Efficiency (%)
Magnet separator	Ferrous metal	60–90
Eddy current separator	Nonferrous metal	60–90
Disc screen	Particulates	50–90
Trommel screen	Particulates	80–90
Vibrating screen	Particulates	60–90
Air classifier	Heavy and light fraction	60–90

where

X_0 = mass of wanted material in the input stream

The efficiency (E) combines both purity and recovery degree and provides an overall efficiency of a given separation technology.

$$E = \left| \frac{X_1}{X_0} - \frac{Y_1}{Y_0} \right| 100\% \quad (3)$$

where

Y_0 = mass of other material in the input stream

There is a wide range of recovery efficiencies for the separation technologies, which can be seen from Table 1.

Particle Size Reduction

Particle size reduction is needed to reduce the particle size and to some extent help separate the entangled materials from each other. The main aim is to enable the separation of materials from each other in the subsequent processes (McDougall and White 2001). After the treatment, the material has more homogenous particle size distribution while the bulk density is not necessarily changing. Commonly used equipment includes hammermills, impact crushers, cutters, cascade mills, and jaw crushers. The factors that affect crusher selection include (Tchobanoglous et al. 1993):

- Properties of the material to be processed
- Feeding method of the crusher
- Criteria for the produced particle size distribution
- Desired properties of the processed material
- Desired usage of the processed material
- Equipment placement circumstances
- Transport and storage circumstances of the crushed material

Hammermills are commonly used for crushing EoL vehicles (ELVs), C&D waste, especially if C&D waste contains concrete, bricks, and other hard inert materials, as well as commercial and industrial waste (C&I waste). Hammermill consists of metal bars or plates that act as hammers which are mounted on a horizontal or a vertical shaft. The hammers hack the material against a crushing wall with a rotational speed of 700–1200 rpm. Increasing the number of hammers enables the production of small particle

size while causing a reduction of the feeding rate (Christensen 2010). There is a grate with a certain size of slots, through which the crushed particles drop out from the hammer mill. The size of the slots determines the maximum particle size coming out from the mill. Flail mills are like hammermills, but the material is not forced through a grate and hammers are further from each other. The processed material from hammermill and flail mill has heterogeneous particle size distribution, while hammermill has smaller output particle size distribution. It is also possible to use shredder which has, for example, teeth attached on one shaft providing a robust shredding of, for example, C&D waste as in Fig. 3.

Cutting shredders are based on the rotating and intersecting blades that are placed between each other on a shaft with a rotational speed of approximately 60–190 rpm and an option for changing the rotation direction. These can be used for different kinds of waste but especially for stretchy and high-tensile materials as well as bag rippers. Shredders are often used for size reduction of MSW and to some extent also to C&D waste if it is mostly containing wood, plastic, and cardboard.

Screening

During the screening process, the incoming material is separated into two or more categories based on the particle size. As a basis for design, the following characteristics are used: the desired mass flow of the incoming material, separation

capacity per screen area, and delay time of the screening. Screens can be used for the following purposes (Tchobanoglous et al. 1993):

- Removal of too big particles and pieces
- Removal of too small particles
- Sorting into light combustible and heavy incombustible fractions
- Separation of paper, plastic, and other light fractions from glass and metal
- Separation of glass, gravel, and sand from combustibles
- Separation of rocks and other large pieces from soil ingredients
- Separating big particles from ash
- Quality improvement of handled final product (for example, compost)

Various types of screening devices include trommel screens, vibrating screens (Fig. 4), and disc screens. Rotating trommel screen has been used in several applications for waste material screening and can be used as a primary screening or final screening method. The material is tumbling in the trommel until it finds a suitable opening on the screen or it comes from the other end of the trommel. The sizes of the openings in the trommel, rotating speed, and inclination all affect the trommel throughput and efficiency of the trommel.

Density Separation

Density separation utilizes the different densities and aerodynamic properties of the materials in the separation process based on a gas flow or liquid. Air separation is based on the idea that with a certain velocity of the air it is possible to float certain pieces. The required velocity is dependent on the density, form, and size of the particles. Air classifier is the most commonly used and simplest technology for density separation. Waste is dropped from the top of a chute while air is introduced from the bottom. The air can float certain particles but not heavy particles, which enables separating the light fraction from heavy fraction (Fig. 5). This technology is used, for example, after crushing the ELVs to separate a heavy fraction and light fraction (also called fluff). Density separation can also be based on

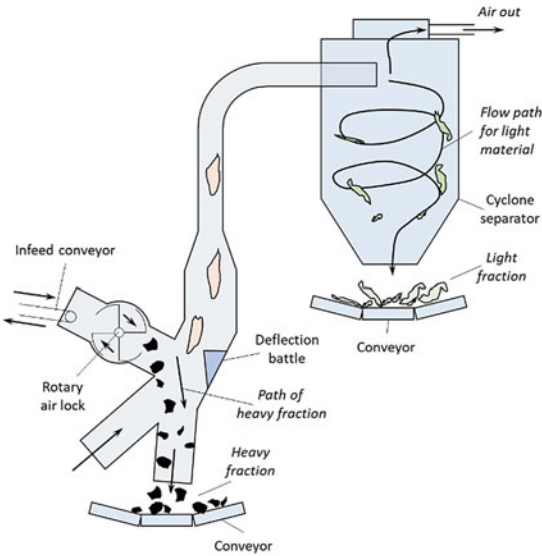


Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 3 Mobile Terminator 5000S crusher crushing mixed C&D waste (© Havukainen)



Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 4 Mobile Kee-track screen separating crushed

mixed C&D waste: a = fine underflow, b = magnetic fraction, c = energy waste with other material continuing to air classifier (© Havukainen)



Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 5 Operating principle of an air classifier (left,

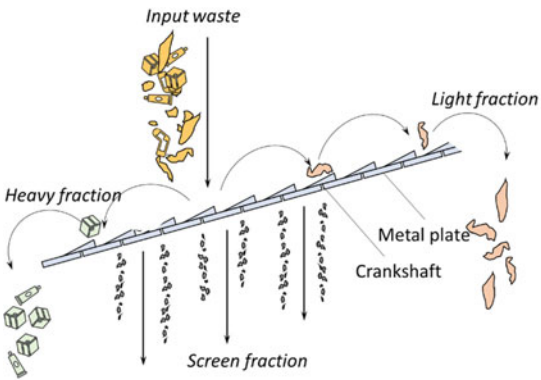


modified from Thorton 2019) and air classifier separating fluff after ELVs crushing (right, © Havukainen)

using liquids that have different densities to enable the sinking or floating of the materials. This requires specific kinds of liquids whose density can be changed. Sinking/floating devices

can be used, for example, for separating light metals.

A Ballistic separator is utilizing various properties of the waste, namely particle size, density,



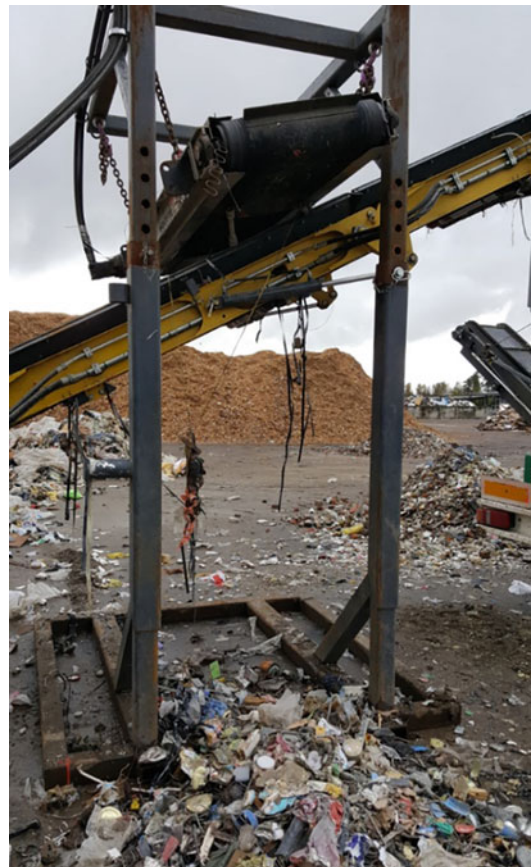
Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 6 Operating principle of a ballistic separator (left,

modified from Tinsley 2019) and Ballistor 6400 (right, © Lauri Rahikainen, Vimelco)

and rigidity (Christensen 2010). It can be used to separate heavy particles out of the light materials and can be placed, for example, after trommel screen to separate heavy and light fractions. It usually consists of a vibrating inclined deck which has openings in it to allow fluidizing air to pass through it. The deck is vibrating in downward or upward direction. The heavy fraction moves with the movement of vibrations. The light fraction is moving to the opposite direction because of the heavy reorganization of the waste on the deck as well as deck vibration and fluidizing air. A third fraction is formed from the material which is falling through the openings in the deck (Fig. 6).

Magnetic Separation

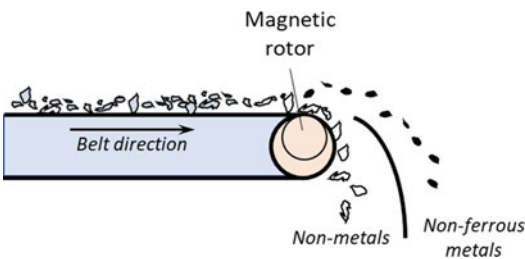
Magnetic separation is used to separate pieces of ferrous metals from the waste stream by utilizing the magnetic field. The magnetic separation can use either permanent or electrical magnets and the efficiency of the separation can be over 95%. The system usually involves an overhead magnet with belt conveyor which conveys the material. To ensure effective separation of the ferrous metals, there usually has to be size reduction before magnetic separation. In Fig. 7, the magnetic separation is situated after crushing and screening devices on top of the conveyor taking the screened material to the next treatment phase.



Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 7 A magnetic separator over the conveying belt of the Keestrack mobile screen and separated magnetic fraction on the ground (© Havukainen)

Eddy Current Separation

Eddy current separation is a process where a voltage is formed to a conductive piece placed in the variable magnetic field. This voltage causes an electric current to the piece which induces an electrical field in turn that is polarized opposite to the variable magnetic field. The created opposite polarization causes a repulsive force between the magnetic field and the conductive piece (McDougall and White 2001). With this method, the conductive pieces can be removed from the other material flow. Alternating current or permanent magnets with different poles can be used to produce the variable magnetic field, Fig. 8. In addition to magnetic separation, eddy current



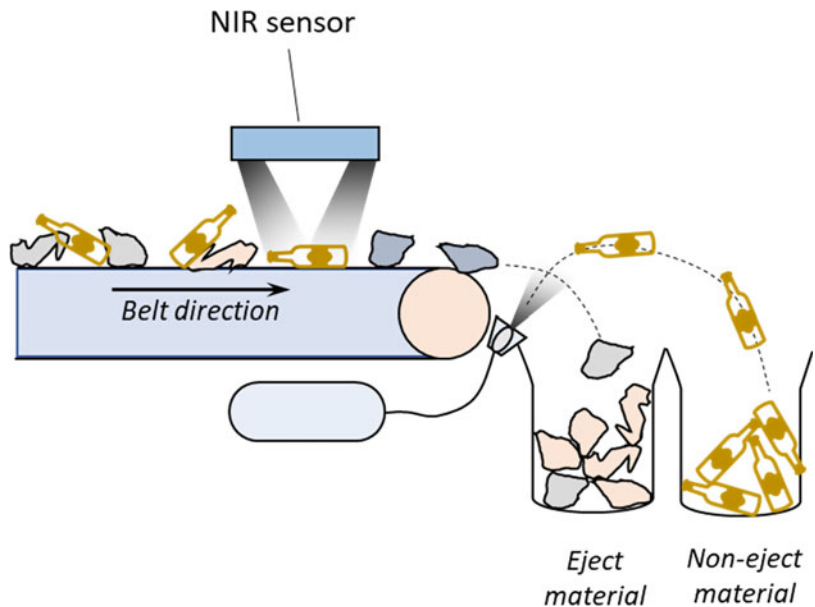
Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 8 Principle of eddy current separation. (Modified from Magnapower Equipment Ltd. 2019)

separation is widely used. The purity and recovery degree can be even 98%.

Optical Sorting

Optical sorting is used to separate different materials from the waste by utilizing optical identification. The color of the material is often used as an optical identifier. The method can be used for relatively large particles with particle size over 20 cm when treating, for example, MSW. One application is to distinguish different color waste bags from each other, for example, when one color is used for mixed waste and another for energy waste. Optical sorting can also be used for significantly smaller particle size, for example, when separating copper from other metals. The copper parts are removed by an air blow by engineered air blowing from a gap between conveyors to the conveyor below. NIR (near-infrared) separation technologies utilize optical detection on the NIR wavelength region light (700–1200 nm), which allows for better penetration of the detection reducing the problems related to the impurities (Fig. 9). NIR technology is widely used in optical sorting because it enables the detection of plastic grades, as well as different fibers such as paper, cardboard, and wood. Optical sorting can achieve high sorting efficiencies. For

Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 9 Illustration of the principle of an optical sorting technology. (Modified from EMS Turnkey Waste Recycling Solutions 2012)



example, Koyanaka and Kobayashi (2010) reported a sorting efficiency of 85% for nonferrous metals with a multivariate analysis-based optical sorting technology including 3D shape detection camera and a weight meter.

Compaction

The purpose of compaction is to reduce the volume requirement of material to facilitate efficient storing and transportation. Technologies usable for compaction include baling, cubing, pelletizing, and briquette production. Baling can be used for reducing volume requirement of material for transport or storage purposes of recovered material whereas cubing, pelletizing, or briquet production are sometimes used to produce densified refuse-derived fuel (RDF) or SRF. Increased costs of treatment are weighed against the transportation costs and for longer transportation distances the treatment can be justified. The performance of compaction is characterized by compaction ratio and volume reduction. Compaction ratio is the ratio of the initial volume and compacted volume whereas volume reduction is the ratio of reduced volume by compaction and the initial volume (Tchobanoglous et al. 1993).

The characteristics that need to be considered in the selection of compaction equipment include purposes for the densification, desired throughput of the material, moisture content, specific weight of the input material, available handling equipment before and after compaction as well as site-specific constraints such as available floor area and height of the space for the equipment. Another consideration is that the compacted bales, cubes, pellets, or briquets require some cover from rain even though some materials might endure moisture. One alternative for a cover for bales is to wrap them after compaction to protect them against moisture as illustrated in Fig. 10.

Robotic Separator

The development of industrial robots, artificial intelligence as well as material analyzing sensors have enabled the development of indirect sorting by automatic sorting lines. Indirect sorting means that sensors detect the materials and

robots can be used to extract the detected materials from a waste stream (Gundupalli et al. 2017). The robots allow the sorting to take place the whole week around the clock as opposed to manual picking. The utilized sensors can be selected based on the desired separated fractions such as laser-induced breakdown spectroscopy (LIBS), X-ray detection, NIR sensor, and visual light spectrum (VIS) sensor. LIBS and XRF can be used for detecting metals, different plastic qualities, or wood quality. Cameras and image recognition can be also used.

Applying a set of sensors can provide a wider range of materials to be detected and in combination with artificial intelligence a possibility for autonomous decision-making and learning of robots based on the analysis results, Fig. 11. The robotic sorting line can be used, for example, for detecting and extracting materials from presorted MSW, C&I waste, C&D plastics, waste packages, and scrap metal.

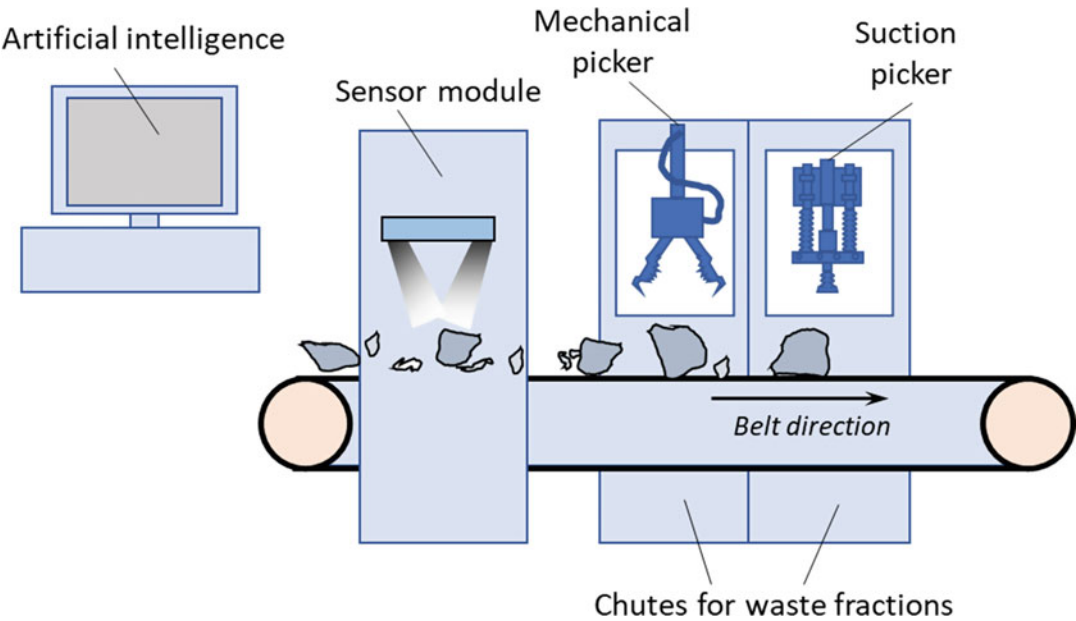
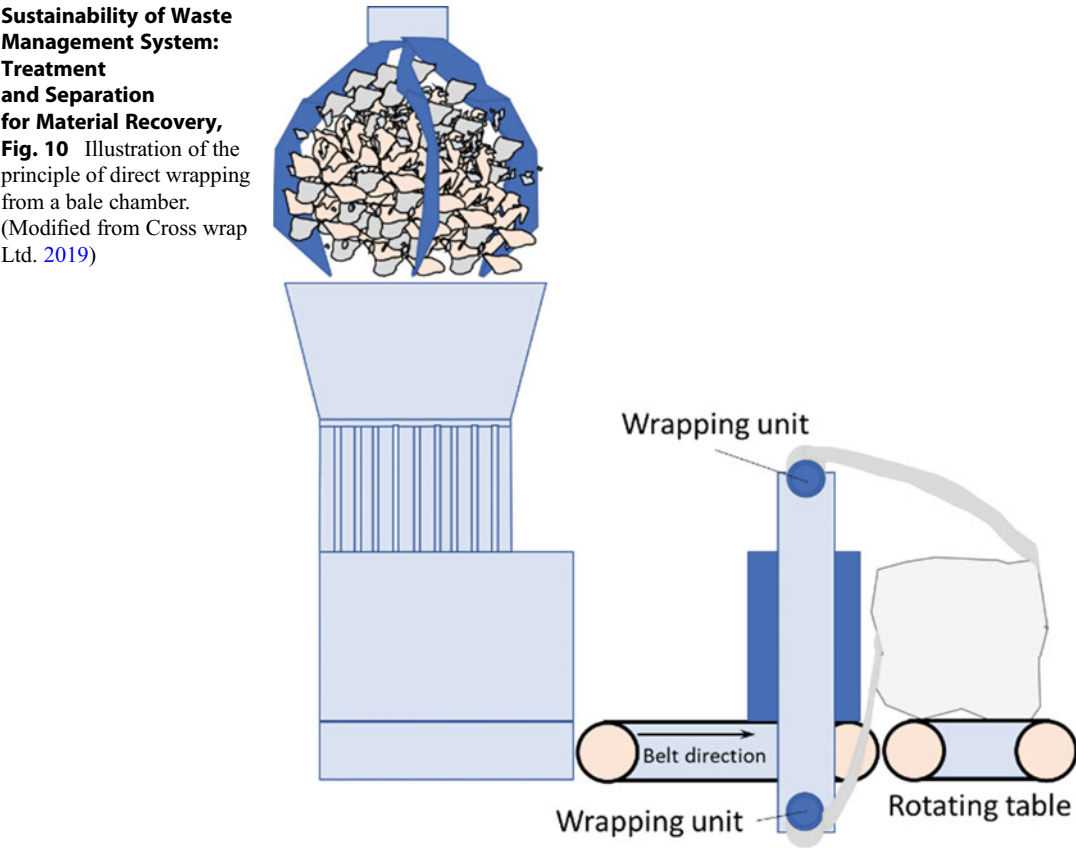
Separation and Treatment Lines

SRF Production

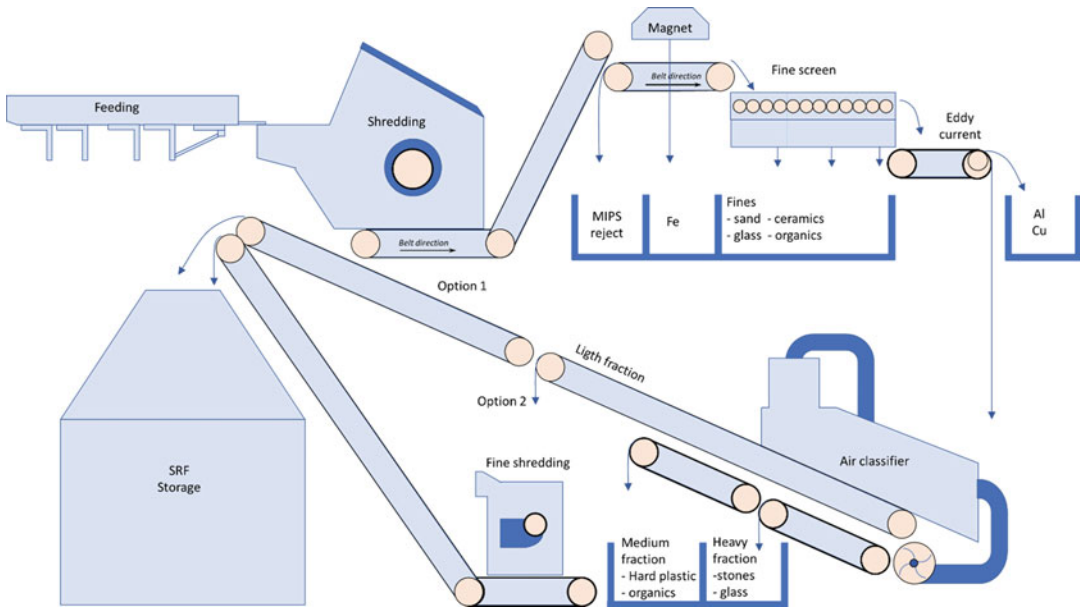
The aim of the SRF production line is to produce a more homogenous fuel and increase material recycling. The treatment line with crushing, screening, and various other separation devices provides an end product with more homogenous heating value compared to the untreated waste. The resulting smaller particle size distribution lowers the requirements for conveyors and feed devices. The treatment process enables the removal of harmful substances which results in lower emissions and cheaper flue gas treatment systems. In addition, the removal of harmful substance reduces the corrosivity and fouling in the subsequent combustion processes. Another benefit of the SRF production lines is to separate recyclable fractions of the waste streams, such as ferrous and nonferrous metals. According to Wilén (2004), the benefits of producing SRF from the waste include the possibility of utilizing the SRF in fluidized bed combustion or gasification with a possibility for higher steam values and subsequent higher power production efficiency.

Sustainability of Waste Management System: Treatment and Separation for Material Recovery,

Fig. 10 Illustration of the principle of direct wrapping from a bale chamber. (Modified from Cross wrap Ltd. 2019)



Sustainability of Waste Management System: Treatment and Separation for Material Recovery,
Fig. 11 Illustration of the principle of the waste separation process utilizing robots. (Modified from ZenRobotics 2019)



Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 12 Illustrative treatment line for SRF production

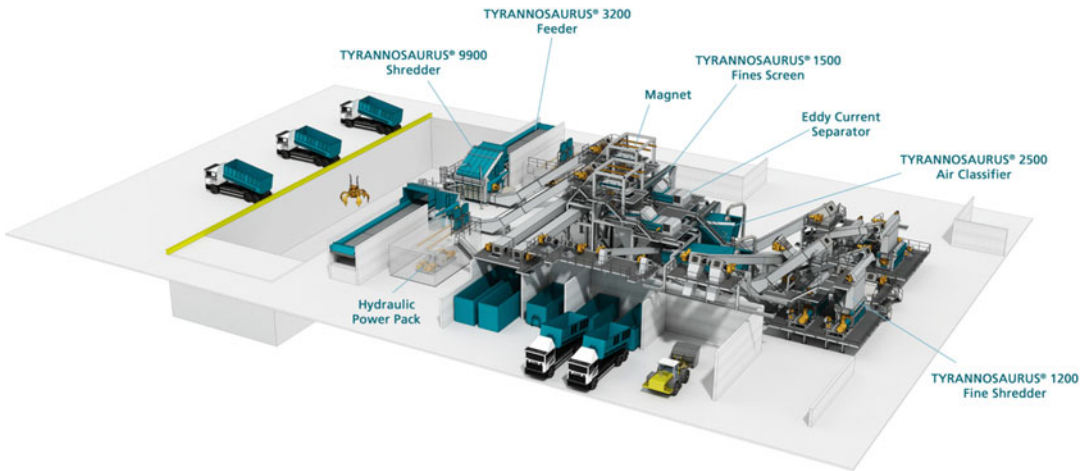
(MIPS massive impact protection). (Modified from Kuusinen 2016)

In the SRF treatment process, such as in Fig. 12, waste is first fed into a size reduction device to provide a smaller particle size for subsequent separation processes. Following treatment processes can include a magnetic and eddy current separation separating ferrous and nonferrous metal fractions for material recycling. A fine screen can then be used for removal of the fine fraction containing most of the organic waste, sand, and glass. This fine fraction removal can also be achieved with, for example, a trommel screen or ballistic separator. Fine fraction removal decreases the moisture content of waste since part of the moist organic fraction is removed. The resulting fine fraction contains mainly organic waste and can be directed to an anaerobic digestion or composting process, but the end product from these processes is contaminated by the impurities ending up to the fine fraction, thus requiring further removal of these impurities. After the removal of metals and fine fraction, the waste can be directed to a density separation process, for example, air classifier, whose main aim is to separate light fraction and heavy fraction. The heavy fraction contains heavy waste fractions such as stones as well as remaining glass and

organics. The resulting light fraction can be used as SRF or it can be directed to the additional size reduction process. Figure 13 depicts how the SRF production line can be compactly assembled at site.

Plastic Waste Separation

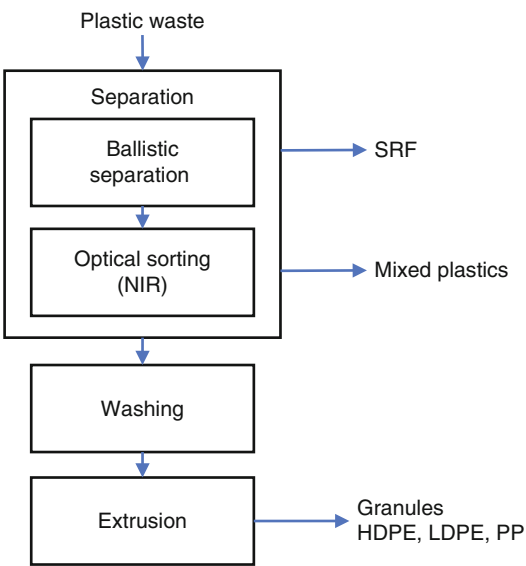
Mechanical treatment processes can be used to separate different plastic qualities from a source-separated mixed plastic waste. For example, in Finland, there is source separation of mixed plastic packaging organized according to the extended producer responsibility system. This mixed plastic packaging waste is directed to a plastic separation system that can then separate the different plastic polymers. For example, in the plastics treatment plant of Fortum Waste Solutions Ltd., the source-separated plastic packaging waste is separated into LDPE, HDPE, PP, mixed plastic fraction, as well as the fraction going for SRF production. LDPE, HDPE, and PP are granulated to be used in the plastics industry and mixed plastic is utilized in mixed plastic products such as profiles. According to Kampmann (2019), the outputs from plastic separation can include PET bottles, HDPE bottles, mixed plastics, PET,



Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 13 SRF production line. (Courtesy of BMH)

HDPE, PP, or PS depending on the sorting scheme, source separation efficiency, and mechanical treatment efficiency.

Plastic waste separation can start with a ballistic separator which would separate 2D and 3D plastic waste from each other to different lines. The 3D plastic has distinguishable greater thickness compared to 2D plastics. The following separation line utilizing optical sorting with NIR technology can then be utilized to detect and subsequently separate desired plastic qualities. The 2D fraction can include, for example, films composed of LDPE and the 3D fraction plastic grades HDPE, PP, and PET. Both fractions will also include materials that can be further directed to mixed plastic fraction or to SRF production. After the separation of the plastic fractions the sorted plastic fractions can be directed to the subsequent washing system. This can include shredding, different processes for the washing, and drying process. Subsequently, the dried plastic fractions can then be directed to granulation and the ready granulates can be used in the plastics industry, Fig. 14. This kind of separation line has difficulties with separating black plastics since NIR technology is not able to detect it (Kampmann 2019). One possibility could be to install a hyperspectral camera such as Specim FX50 to detect black plastics (Specim 2019).



Sustainability of Waste Management System: Treatment and Separation for Material Recovery, Fig. 14 Illustrative flow chart of a possible line for plastic waste separation. (Modified from Koivuniemi 2019)

Summary

Material recycling is more feasible and efficient when there is source separation in place because source separation usually leads to the best quality of the separated materials. However, sometimes

source separation does not work properly (e.g., because of the low education level of people) or it is difficult to apply (e.g., because of a fixed and dense city infrastructure). Also, in the cases where source separation works well, there still exist significant amounts of recyclables in the mixed residual waste, and for reaching the challenging recycling targets, additional mechanical treatment and separation is needed. Mechanical treatment and separation are then used to improve material recovery and efficiency of energy recovery.

It is important to understand that both source separation and mechanical separation of materials are incomplete and after the separation, the residual part of waste still contains some recoverable materials and the separated recoverables contain impurities. This fact needs to be taken considered also in the evaluation of the environmental sustainability of waste treatment and separation. According to results from numerous life cycle assessment studies, it seems that the most important factors for the environmental sustainability of waste separation for recovery purposes are usually:

- The yield of recoverables (material recovery or recycling rate of the whole waste potential and avoidance of disposal of these materials)
- The replaced materials or fuels with the recovered materials (quality of the separated materials and demand for such materials and environmental impact of replaced virgin materials determine if there is a potential for reducing environmental impacts)

The strict material recycling targets in the EU necessitates that also mechanical separation is included as a tool for increasing the recycling rate. More guidelines and rules are being developed on how the different mass flows, for example, from an MBT plant are calculated into the recycling targets. This leads to a clearer overview of the current mechanical recycling rate nationally, as well as EU-wide. At the end of the day, the development of various treatment and separation technologies is going on and better performance is achieved.

Cross-References

- [Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment](#)
- [Sustainability of Waste Management Systems: Final Disposal](#)
- [Sustainability of Waste Management System: Treatment and Separation for Material Recovery](#)
- [Sustainability of Waste Management System: Waste Generation and Collection](#)

References

- Christensen, T. H. (Ed.). (2010). *Solid waste technology & management*. Chichester: Wiley.
- Cross wrap Ltd. (2019). Bale wrapping [WWW Document]. URL <https://crosswrap.com/>. Accessed 15 Sept 2019.
- Deviatkin, I. (2017). *The role of waste pretreatment on the environmental sustainability of waste management*. Acta Universitatis Lappeenrantaensis. Lappeenranta University of Technology. <https://doi.org/10.3109/02841859909175587>.
- EMS Turnkey Waste Recycling Solutions. (2012). Air Separation – Suction Systems [WWW Document]. URL <http://www.emswasterecycle.com/air-separation-suction-systems/>. Accessed 18 Sept 2019.
- Gundupalli, S. P., Hait, S., & Thakur, A. (2017). A review on automated sorting of source-separated municipal solid waste for recycling. *Waste Management*, 60, 56–74. <https://doi.org/10.1016/j.wasman.2016.09.015>.
- Havukainen, J., Zhan, M., Dong, J., Liikanen, M., Deviatkin, I., Li, X., & Horttanainen, M. (2017). Environmental impact assessment of municipal solid waste management incorporating mechanical treatment of waste and incineration in Hangzhou, China. *Journal of Cleaner Production*, 141. <https://doi.org/10.1016/j.jclepro.2016.09.146>.
- Kampmann, E. M. (2019). *Quality and recyclability of plastic from household waste*. DTU.
- Koivuniemi, M. (2019). Plastic recycling (in Finnish). In *Waste management days 2–3.10.2019*. Tampere.
- Koyanaka, S., & Kobayashi, K. (2010). Automatic sorting of lightweight metal scrap by sensing apparent density and three-dimensional shape. *Resources, Conservation and Recycling*, 54, 571–578. <https://doi.org/10.1016/j.resconrec.2009.10.014>.
- Kuusinen, T. (2016). BMH technology waste to energy – How to produce good quality solid recovered fuel from waste [WWW Document]. Nordic Baltic Bioenergy 19–21 April, Vilnius. URL https://www.lsta.lt/files/events/2061-04-19_LITBIOMA/28_Kuusinen_Teemu_webb_NBB16.pdf. Accessed 23 Sept 2019.

- Magnapower Equipment Ltd. (2019). Eddy current separator operation [WWW Document]. URL <https://www.magnapower.co.uk/contact-us/>. Accessed 17 Sept 2019.
- McDougall, F. R., & White, P. (Peter). (2001). *Integrated solid waste management: A life cycle inventory*. Blackwell Science.
- Specim. (2019). Specim FX50 [WWW Document]. URL <https://www.specim.fi/slides/specim-fx50/>. Accessed 28 Oct 2019.
- Tchobanoglous, G., Theisen, H., & Vigil, S. (1993). *Integrated solid waste management: Engineering principle and management issue*. New York: McGraw-Hill Inc.
- Thorton, N. (2019). Solid waste management [WWW Document]. URL <https://slideplayer.com/slide/3608750/>. Accessed 18 Sept 2019.
- Tinsley. (2019). Ballistic separators [WWW Document]. URL <https://www.tinsleycompany.com/recycling/ballistic-separators/>. Accessed 18 Sept 2019.
- Wilén, C. (2004). *Review of waste processing technology for SRF*. Espoo.
- ZenRobotics. (2019). Robotic waste recycling solutions [WWW Document]. URL <https://zenrobotics.com/>. Accessed 20 Sept 2019.

Sustainability of Waste Management System: Waste Generation and Collection

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Description

Waste means any substance or object, which the holder discards or intends or is required to discard. Waste generation begins at the point in time when it is being discarded. After that, generation cannot be prevented or reduced. Solid waste includes, among others, municipal, agricultural, mining, industrial, commercial solid waste, construction and demolition waste, electronic waste, and sludge generated during wastewater treatment.

Solid waste is generated in all the stages of the life cycles of different products and materials. The largest volumes of waste are usually generated during mining and quarrying of raw materials, as

well as from construction and demolition activities. Municipal solid waste (MSW) is the most commonly known, very heterogeneous waste which is defined as solid waste originating from households and similar kind of waste generated in commerce, offices, public institutes, and municipal services. Generation rate of waste from different business fields is varying according the volume of the business activities and specific waste generation of producing a unit of each product. Municipal solid waste generation rate is affected mostly by the population and gross domestic product (GDP) per capita.

Waste collection systems consist of the waste collection bins on the yards of the houses or enterprises, loading of the waste to the collection vehicles, and further transportation to the waste treatment or disposal facilities. Waste can be collected as separate fractions or mixed waste straight from the households or other sources, or from regional collection points. If waste is not being collected, it is considered as littering, which should be avoided. Collection systems are commonly not working properly in developing counties.

Waste generation phase defines the amount and composition of waste that has to be treated, recovered, and disposed. Waste collection phase has good potential to separate recyclables and recoverables from disposable waste. Thus, these phases are very important for the sustainability of waste management.

Introduction

Waste management refers in the context of this entry and four other entries of this encyclopedia to the management of solid waste materials. Solid waste means all waste, rubbish, or litter collected and treated which is solid in nature even if its moisture content is high, such as sewage sludge. Solid waste includes municipal, agricultural, mining, industrial, commercial solid waste, construction and demolition waste, electronic waste, and sludge separated from different wastewater treatment processes. In the legislation of the European Union, waste is defined as following: “waste

means any substance or object, which the holder discards or intends or is required to discard” (Directive 2008/98/EC).

Waste management is widely related to different sustainability aspects. The original reasons for waste management are preventing and reducing environmental impacts and health hazards related to solid waste. Waste, especially biodegradable waste, is a good growing media for pathogens, which can then spread to humans via air, water, or food. Waste material can cause pollution to air, water, and soil, also in other forms like landfill gases, toxic leachates, toxic gases from inappropriate waste incineration and littering. Apart from direct environmental impacts, waste is also related to resource efficiency, diminishing natural resources and fossil materials, and rare-earth elements. It is also important for land use issues in the form of landfilling and illegal dumping. On the other hand, waste management is an important factor in municipal economy. In some developing countries the costs of waste management can be several tens of percent from the whole municipal costs. Socially, waste management is related, for example, to business possibilities and employment. One problematic issue of employment in waste management sector is scavengers, who collect waste having some monetary value and who sometimes are even living on the dump sites.

Solid waste generation is a key factor for the environmental impacts of waste management. Generation rate defines how much waste enters to the collection, treatment, recovery, and disposal systems, and it sets the basis for the extent of environmental impacts from each of these phases. Information on waste generation rates and its composition are vital for designing the waste management systems. Internationally, widely spread waste hierarchy (or priority order) defines prevention of waste generation as the highest priority option in waste management followed by preparing for reuse, recycling (use as material for manufacture), other recovery (e.g., energy recovery), and safe disposal, in this order (Directive 2008/98/EC). Waste generation phase determines also the composition of the waste directed to the waste management system.

Waste collection defines how a large share of the generated waste is directed to controlled and official treatment and disposal. Waste can be dumped or incinerated illegally, instead of collection with official systems, which usually leads to much worse environmental impacts than any legal waste management operations. Waste treatment and recovery and their sustainability can be affected with collection system by applying separate collection of different waste fractions.

Waste Generation

The term waste generation refers to the moment when the object or material is discarded, like defined in the EU directive on waste (2008/98/EC). This means that waste generation cannot be reduced with different waste treatments or utilization operations. It can be reduced only before the waste has been generated.

Solid Waste Generation

Solid waste generation sources can be divided into different economic activities. In the statistics of the European Union, rough categories of economic activities are: mining and quarrying, manufacturing, energy, construction and demolition, households and other economic activities. Waste generation from different economic activities depends strongly on the volume and intensity of each activity. Mining and quarrying forms often one of the largest shares of the total waste generation because the volumes needed for metal refining and construction purposes are large and the densities of the soil and rock materials are high. Construction and demolition waste makes also large share of the total waste generation in most of the countries, because the construction sites also handle great volumes of materials and large share of the waste materials are mineral waste (concrete, soil), which has high density. Manufacturing waste generation is totally dependent on the industrial structure of the country or region, its natural resources, labor price and knowledge level. Energy conversion produces mainly ashes and flue gas treatment residues,

and their amount depends on the sources of energy used for electricity and heat generation.

In the European Union (28 member countries), the total waste generation in 2016 was approximately 2500 million (metric) tonnes (Mt) including all the economic activities. This means that, on average, about 5 tonnes of waste per inhabitant. The shares of different economic activities in waste generation were the following (Eurostat, Waste statistics 2019):

- Mining and quarrying 25%
- Manufacturing 10%
- Energy 3%
- Construction and demolition 36%
- Households 8% and
- Other economic activities 16% (including waste water sludge 10%; services 4.6%; wholesale of waste and scrap 1%; and agriculture, forestry, and fishing 0.8%)

When using the waste generation statistics, it is important to understand how the statistics were formed. If the statistical system works well, there are certain rules on what shall be included to the statistics and what is to be excluded. These rules differ across countries making direct comparison of the statistics difficult in some cases. For example, in the European Union waste statistics, the rejects, which have been recycled internally at the site where waste was generated, is not included to statistics. This means that, for example, in agricultural waste, the manure used on the own fields of the farms is not included in the statistics. Manure is however commonly the largest waste fraction of agricultural waste, and it can be treated, for example, with anaerobic digestion to produce biogas and still be used as fertilizer for the fields. Manure is one of the largest waste flows for biogas production. Still it is not included in the statistics and the numbers in statistics cannot be used, for example, for estimating the biogas potential from agriculture. For example in Finland, the generated amount of manure is about 14 Mt and the amount of agricultural, forestry, and fishing waste in statistics is about 3 Mt (Luostarinen et al. 2017).

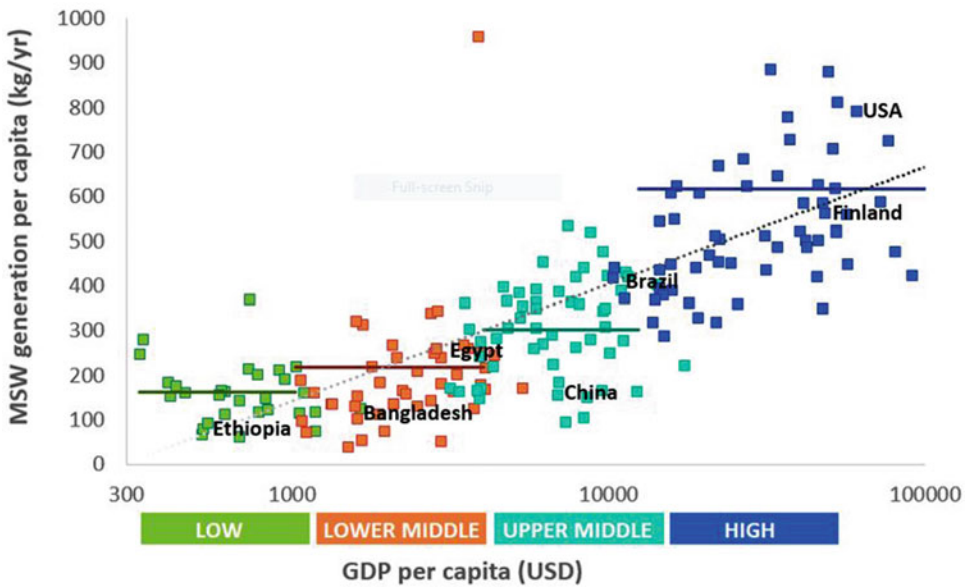
The most well-known and monitored waste material is municipal solid waste (MSW), which

is defined commonly as solid waste originating from households and similar kind of waste generated in commerce, offices, public institutes, and selected municipal services, such as schools and healthcare centers. Yet, municipal sewage sludge and construction and demolition waste are excluded from MSW. For MSW there is the most information available from all waste categories. The aspects of MSW generation are introduced here as one example category of different waste materials. MSW has been selected here because there is plenty of information available from MSW generation, and on the other hand, the data related to waste generation in other branches of economy is less available and more difficult to define so that it would be comparable with each other.

Globally the generation of MSW is estimated to be approximately 2 billion metric tonnes per year and it has been forecasted to grow to 3.4 billion tonnes per year by 2050. Final disposal represents still about 70% of the treatment of MSW globally. Most of the greenhouse gas emissions of waste management sector, about 1.6 billion tonnes or 4–5% of the global GHG emissions, originate from landfills, where the biological degradation of waste produces methane and carbon dioxide (What a Waste 2.0 2018).

MSW generation rate varies in a wide range in different countries and regions. The most important factors influencing the generation rate are population and its density and wealth (measured, e.g., with gross national income (GNI) per capita or gross domestic product (GDP) per capita). Figure 1 presents the variation of MSW generation rate per capita in relation to GDP per capita. It is clear that growing incomes increase MSW generation though the variation in different wealthy levels is large. It also has to be taken into account that the statistics of waste management are often very inaccurate. They are often rough estimates especially in such countries where infrastructure is poor and GDP per capita is low.

Several studies have been carried out to make models for forecasting of MSW generation (Daskalopoulos et al. 1998; Dyson and Chang 2005; Beigl et al. 2008; Kolekar et al. 2016). Daskalopoulos et al. (1998) has presented simple



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 1 Annual generation of municipal solid waste (MSW) per capita in different

countries having different gross domestic product (GDP) per capita (Global Waste Outlook 2015)

correlation equations for MSW generation in country level in Europe (1) and the USA (2) using GDP and population as variables:

$$\text{MSW} = 0.1292 \cdot \text{GDP}^{0.4412} \cdot \text{Population}^{0.4855} \quad (1)$$

$$\text{MSW} = 4.08413 \cdot \text{GDP}^{0.458} \cdot \text{Population}^{1.24075} \quad (2)$$

where

GDP is gross domestic product expressed in billion US dollars,

MSW is municipal solid waste generation, million tonnes per year.

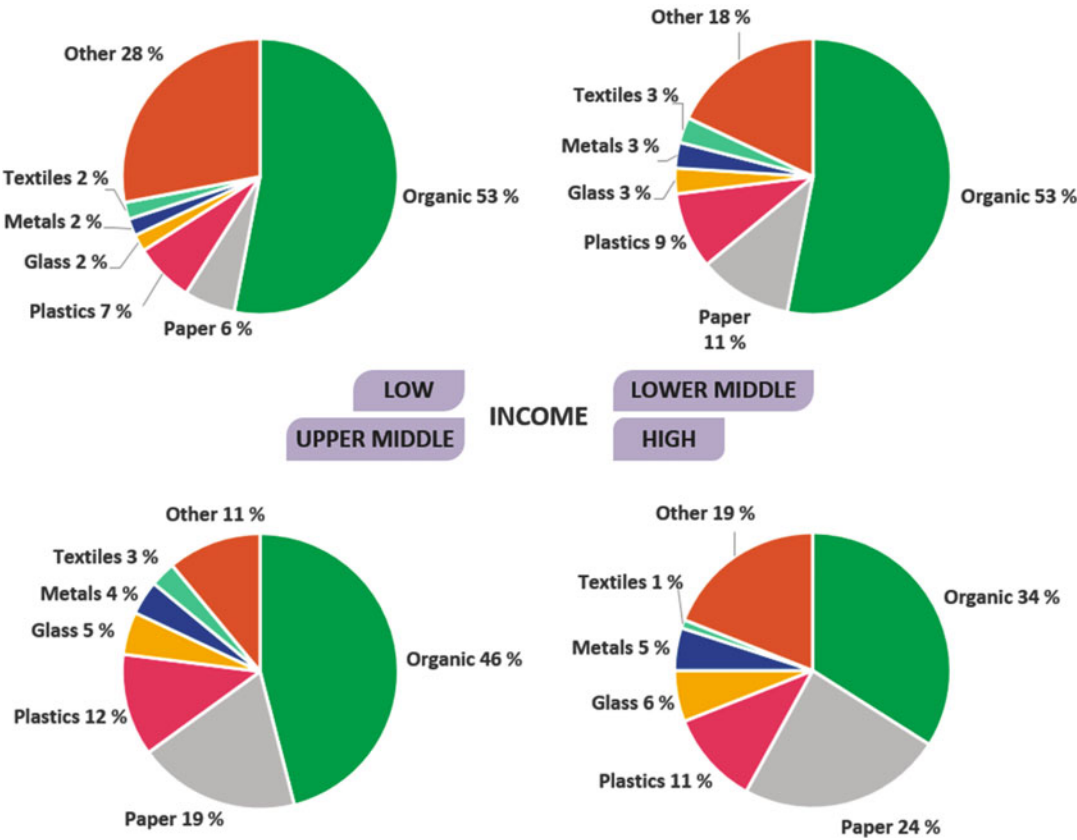
Composition and Properties of Waste

Waste generation phase determines also the composition of waste. It is possible to affect the composition of treated waste materials significantly with the collection and separation systems and especially with separate collection of recyclables. Composition of industrial, construction, or mining waste can be influenced with the processes. The more effective the processes are, the less

utilizable waste material is produced. Also these business lines can use many of their own by-products in their own production before they are discarded and converted to waste.

Composition of the generated MSW is affected by consumption habits and abilities. It means that the income level of people is affecting also the composition of waste. We can see from the results of Global Waste Outlook (2015) in Fig. 2, that the share of organic waste is higher when income level of the country is lower. In the low income countries people are consuming less different products. Food waste forms higher share of all the waste, when the total amount of waste is much lower than in high income countries, and still the people have to prepare their food and eat. On the other hand, food products in high income countries are more often pre-manufactured. For that reason they don't produce as much waste at homes as the less prepared food materials. Pre-manufactured food is usually also packed more carefully, which also increases packaging waste in high income countries.

Figure 3 presents analyzed MSW compositions in example regions of different countries. Finland



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 2 Rough compositions of MSW in different income level countries (Global Waste Outlook 2015)

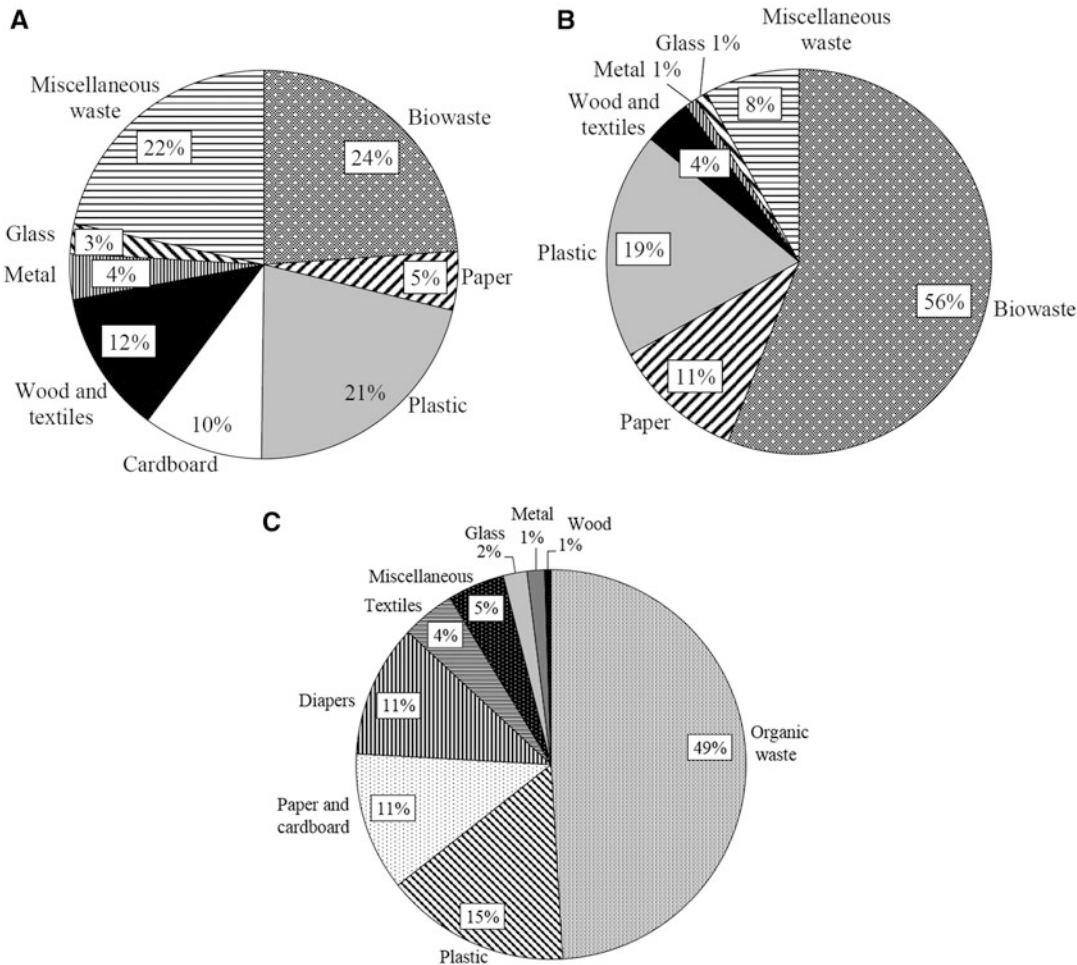
(South Karelia region) represents high income country. It can be seen that the contents of biowaste (organic waste) is significantly lower than in Brazil (Sao Paulo) and China (Hangzhou), which both represent higher middle income countries. The composition of Finnish waste does not however contain all the MSW materials because there is a well-operating separate collection system in the case region. Large share of biowaste has been separated at source in biowaste bins for composting purpose. Thus, it is important to understand from the used data, how and from which phase of waste management the composition has been determined.

Waste Collection

Waste collection includes (1) the waste collection bins on the yards of the houses or

enterprises, (2) loading the waste from the bins to the collection vehicles and (3) transportation of the waste to the first discharging place, which can be a waste treatment or disposal site or a transfer station before longer transportation. The last phase can be separated also from collection to belong in a separate transportation phase.

Waste collection is one of the key steps in the waste management systems both economically and environmentally. Waste collection from scattered generation places, especially households, forms the large share of the total costs of waste management. In developing countries it can form almost the whole cost of waste management if there is no other treatment than final disposal on non-sanitary landfills or unofficial dumps. In developed countries, other treatment costs are significant, but also collection costs increase when



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 3 Compositions of MSW: (a) Mixed residual MSW in South-Karelia, Finland

(Horttanainen et al. 2013), (b) Mixed MSW in Hangzhou, China (Havukainen et al. 2017), (c) Mixed MSW in Sao Paulo (Liikanen et al. 2018)

there are several different waste fractions to be collected.

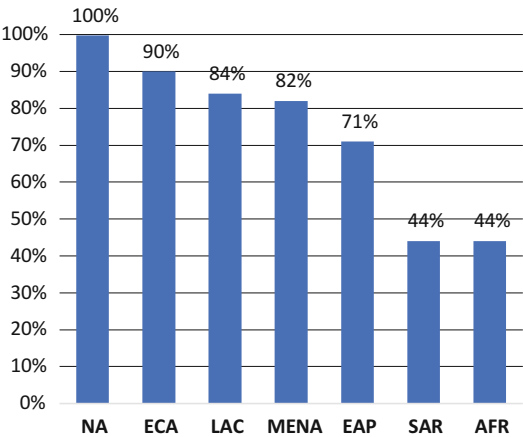
It is not self-evident that all the waste is collected and directed to the official waste management system, which has legally and environmentally justified permissions for waste treatment and disposal. World Bank has done surveys on the collection rate of MSW in different parts of world and found that the collection rate can vary between 44% and 100%. In the developing countries the waste management and collection infrastructure is often inadequate. Significant part of waste is dumped illegally in street sides and rivers or incinerated in backyards (Fig. 4).

Purposes and Aims of Waste Collection

The main purpose of waste collection is to deliver waste from its generation location to appropriate treatment or disposal and in such a way to avoid harmful environmental impacts both in the location of generation and in the subsequent phases of waste management. Simultaneously, collection makes it possible to get waste materials recovered, and it also enables collection of data related to waste generation and treatment.

Waste collection phase includes short-term storage of waste in the waste bins. They should be planned so that they protect the environment and people from the possible harmful impacts of

waste. Such impacts are, for example, odors released from decomposing organic waste and noxious animals, like rodents, birds, and flies, attracted by the potential nutrition in the waste. Bins should also protect the waste material from spoiling before possible recycling and recovery purposes. Rain water for, example, can lower the quality of waste transported to energy recovery as well as increase the transportation costs.



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 4 Collection rate of waste (MSW) in different regions (North America (NA), Europe and Central Asia (ECA), Latin America and Caribbean (LAC), Middle East and North Africa (MENA), East Asia and Pacific (EAP), South Asia Region (SAR), and Sub-Saharan Africa (AFR)). (What a waste 2.0 2018)

Waste collection is an effective phase of waste management for separation of different waste materials. People have, in principle, a better ability for correct and accurate waste separation than any machines. It is possible to get better quality recoverables with well working source separation system than with mechanical separation.

Different Waste Collection Systems

The collection bins should be designed so that it is easy to recognize the correct bin for a waste fraction brought to the bin. Citizens should be informed properly about the separate collection system, its purposes and separation instructions at the collection sites and through different media. Figure 5 presents examples of separate collection bins of a regional collection point on the yard of a grocery store. Figure 6 presents source separation on the yard of a row house. It is also important to make source separation easy inside homes with different well-organized collection systems like the one presented in Fig. 7.

Waste can be collected from the source locations with different systems. Collection bins can be located on the yards (e.g., in shelters like in Fig. 6), where the collection truck enters and the bins are picked and emptied by the vehicle driver or an assisting person. In some countries, the collection bins are brought in certain days and daytimes to the street side to be emptied. In



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 5 A regional collection point of recyclables on the yard of a grocery store in

Finland. Series of collection bins, a bin for cardboard and instructions in the bin of metals



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 6 A waste collection shelter for recyclables and residual waste on the yard of a row house in Finland. Paper and organic waste (biowaste)

collection bins in one side of the shelter. Two shelters include bins for residual waste, paper, plastic packages, biowaste, cardboard, metal, and glass



Sustainability of Waste Management System: Waste Generation and Collection, Fig. 7 A sink with a waste cupboard including four buckets for different waste fractions

some regions the trash bags (different colors for different fractions) are brought to the street side to be picked from there to the waste trucks. The waste management fee is usually paid for the waste management company according to

the size, number, and frequency of emptying of different waste bins. Some modern tightly populated city districts have pneumatic collection system that transports the trash bags in a pipeline network to a collection point where the truck

empties or changes the container. This kind of a collection system can include also such source separation possibility that the user can select which waste he/she has placed to the system and according to that selection the system transports the bag into a correct container.

Waste can be collected also with regional collection points. In European countries, this system is often used for recyclables so that people can bring their source separated recyclable materials to the collection point, for example, when they go to a grocery store or to a gasoline filling station. The collection points are meant for those citizens who don't have separate bins for all the recyclables on their home yards, like often is the case with detached houses. The recyclable fractions can be left to these points without payment. The waste management cost is then often covered by extended producer responsibility system (including the waste management cost into the prize of a product). Some countries and regions are collecting some of the recyclables with the so-called comingled waste system, where several recyclable materials are collected in the same bin. These different fractions have to be such that they can easily be separated from each other mechanically with a good separation rate and purity.

Waste is collected often with changeable containers from such sources where the generation of waste is large. This kind of waste sources can be, for example, large department stores, construction sites, and factories. Different metal containers are used for different waste fractions. They can be open or covered. An empty container is left to the place when a full one is picked and transported to the treatment. The containers can be equipped with a compression system, when the waste has low bulk density like packaging waste.

When planning the waste collection system, the routes should be designed so that the driving distances are minimized and moving between the collection points would be smooth. Different computational systems are used for the optimization of the routes like geographical information system (GIS). Also geographic positioning systems (GPS) are used for follow up and documentation of the collection, and navigation systems for helping especially the new drivers of the vehicles.

It is also possible to equip at least larger waste bins with sensors, which follow the filling level of the bins and send the information (via internet) to the collection company. The information of the filling levels is then used for online route planning of the collection trucks. This kind of technology has been observed to save 30% in the number of emptying times in a pilot project in Finland (Uusio Uutiset 2013).

Waste collection systems are very diverse in different parts of the world. In the developing countries, the collection is more based on manual work compared to developed countries. Waste is often collected from densely populated city districts with small vehicles or carriages. Recyclables are collected by waste pickers door to door or from the waste bins and containers. In some countries, the private poor waste pickers are used as unofficial waste management personnel for the cities.

Sustainability Aspects in Waste Generation and Collection

Waste generation and the type of collection determine the composition of waste fractions directed to different treatments. If the waste directed to energy recovery contains a lot wet organic waste, it has deteriorating impact on the energy production and its environmental sustainability. If the heating value of waste is very low, there can be need to add higher energy content fuels (often fossil fuels like coal) to the incineration process to raise the combustion temperatures to the levels demanded in legislation (usually at least 850 °C) and needed to destroy the toxic organic compounds. Fossil fuel addition increases both greenhouse gas emissions and costs of the incineration. This kind of case and possibilities for improvements of the situation have been introduced and analyzed in Havukainen et al. (2017) for the city of Hangzhou in China. When the problem of wet MSW would be solved by mechanical preparation of refuse-derived fuel (RDF) in the case study, one consequence was generation of a wet mixed reject material from the process. It was shown in the life cycle assessment for the scenarios that a rational

treatment and utilization (like anaerobic digestion) should be implemented for the organics containing reject to prevent its landfilling and the methane emissions caused by that, and so to make the RDF using system environmentally sustainable (Havukainen et al. 2017).

Development of commercial (hypermarket) waste collection and treatment was studied in Hupponen et al. (2018). There was a source separation system already in the baseline scenario, which was the existing collection when the study was carried out. The collected fractions, their mass shares, and treatment methods were the following: cardboard (49%, recycling), biowaste (24%, anaerobic digestion), energy waste (11%, combustion and heat and power production), PE-plastics (2.4%, recycling), small shares of paper, metal and glass to recycling and mixed residual waste (13%, landfilling). The residual mixed waste contained 50% biowaste, 19% energy waste, 13% cardboard, 6% paper, and a small share of glass and metal. So it would be realistic to improve the source separation and get one third of the mixed waste mainly to biowaste and energy waste fractions. With these measures it was possible to reduce the greenhouse gas (GHG) emissions of the system by 5%. The most effective realistic measure for GHG emission reduction was directing the mixed residual waste to energy recovery (heat and power production with annual total efficiency of 63%), which reduced the net emissions of GHG by 93% from the baseline situation. This study, with many others concentrating on waste materials containing mainly packaging waste, shows that collection and transportation of the waste do not form significant proportion of the GHG emissions of the total waste management system (Hupponen et al. 2018).

Summary

Waste is defined as any substance or object, which the holder discards or intends or is required to discard. Waste can be generated in every phase of the life cycle of the products, materials, and services. Even the waste treatment, separation,

recycling, and recovery processes often produce secondary waste.

Waste generation rate can be affected before the waste is generated (substance or material is discarded). The rate of generation is affected by the complicity of the refining and manufacturing phases in the waste materials of different business lines. MSW generation increases with increase of population and wealth. Waste generation defines both the amount and composition of waste materials. Production processes and consumption should be developed to reduce generation of waste and to improve sustainable recycling and recovery of the waste, which cannot be prevented.

The statistics and other data, concerning waste generation, are often rather inaccurate and sometimes even unreliable. Data quality usually improves with the technical level of waste management; but in the well-developed countries where waste is mostly treated according to high standard legislation, there are significant deficiencies in the accuracy of waste generation data.

Waste collection phase of waste management secures the directing of waste materials to correct treatment and reduces environmental impacts of waste storing and spreading in the surroundings of the waste sources. From sustainability point of view, it is most important that all the waste is collected systematically by stakeholders who obey the legislation. Most of the litter in the nature, including the plastic marine litter, originates from such cities where the waste collection system does not work properly.

Separate collection of different waste fractions makes it possible to receive good quality material for recycling and recovery purposes, if the people are aware and motivated to source separation. It is however important to understand in the planning of waste management system that it is unrealistic to expect even nearly all recoverables to be placed in the correct separate collection bins. So there is usually always some residual waste containing still recoverable materials. Also, there are always some impurities in the separately collected recyclables, which have to be removed mechanically or manually and there has to be tolerance in the production processes and products utilizing the waste materials.

Cross-References

- ▶ Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment
- ▶ Sustainability of Waste Management System: Treatment and Separation for Material Recovery
- ▶ Sustainability of Waste Management Systems: Energy Recovery
- ▶ Sustainability of Waste Management Systems: Final Disposal

References

- Beigl, P., Lebersorger, S., & Salhofer, S. (2008). Modelling municipal solid waste generation: A review. *Waste Management*, 28(1), 200–214.
- Daskalopoulos, E., Badr, S., & Probert, S. D. (1998). Municipal solid waste – A prediction methodology for the generation rate and composition in the European countries and the United States of America. *Resources Conservation and Recycling*, 24(2), 155–166.
- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste.
- Dyson, B., & Chang, N.-B. (2005). Forecasting municipal solid waste generation in a fast-growing urban region with system dynamics modelling. *Waste Management*, 25(7), 669–679.
- Eurostat. (2019). Statistics explained, Waste statistics. Available on-line: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Waste_statistics#Total_waste_generation
- Global Waste Outlook. (2015). <http://www.unep.org/ietc/Portals/136/Publications/Waste%20Management/GWMO%20report/GWMO%20full%20report.pdf>
- Havukainen, J., Zhan, M., Dong, J., Liikanen, M., Deviatkin, I., Li, X., & Horttanainen, M. (2017). Environmental impact assessment of municipal solid waste management incorporating mechanical treatment of waste and incineration in Hangzhou, China. *Journal of Cleaner Production*, 141(10), 453–461.
- Horttanainen, M., Teirasvuo, N., Kapustina, V., Hupponen, M., & Luoranen, M. (2013). The composition, heating value and renewable share of the energy content of mixed municipal solid waste in Finland. *Waste Management*, 33, 2680–2686.
- Hupponen, M., Grönman, K., & Horttanainen, M. (2018). Areas on which to focus when seeking to reduce the greenhouse gas emissions of commercial waste management. A case study of a hypermarket, Finland. *Waste Management*, 76, 1–18.
- Kaza, S., Yao, L., Bhada-Tata, P., & Van Woerden, F. (2018). What a waste 2.0, World Bank Group. Available on-line: <https://openknowledge.worldbank.org/handle/10986/30317>
- Kolekar, K. A., Hazra, T., & Chakrabarty, S. N. (2016). A review on prediction of municipal solid waste generation models. *Procedia Environmental Sciences*, 35, 238–244.
- Liikanen, M., Havukainen, J., Viana, E., & Horttanainen, M. (2018). Steps towards more environmentally sustainable municipal solid waste management – A life cycle assessment study of São Paulo, Brazil. *Journal of Cleaner Production*, 196, 150–162.
- Luostarinen, S., Grönroos, J., Hellstedt, M., Nousiainen, J., & Munther, J. (2017). SUOMEN NORMILANTA – laskentajärjestelmän kuvaus ja ensimmäiset tulokset. Luonnonvara- ja biotalouden tutkimus 47/2017. Luonnonvarakeskus. Helsinki. 54 s. (in Finnish). Available on-line: http://jukuri.luke.fi/bitstream/handle/10024/540239/luke_luobio_47_2017.pdf?sequence=1&isAllowed=y
- Uusio Uutiset (recycling and waste management magazine), 7.3.2013 (in Finnish). Available on-line: <https://www.uusiouutiset.fi/ei-enaajaiden-jateastioiden-tyhjennysia/>

Sustainability of Waste Management Systems: Energy Recovery

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Synonyms

Incineration, Combustion, Energy recovery, Waste-to-energy

Definition/Description

Energy recovery from waste represents an economically, socially, and expectedly environmentally acceptable option of waste management. Energy recovery is widely represented by waste incineration, gasification, pyrolysis, and anaerobic digestion. Sustainability of all energy recovery methods is not only determined by the recovery

processes themselves but by a wide range of components of the energy recovery systems, such as waste properties, operating conditions, types of products, and demand on them, to name a few. For example, biowaste is more suitable for anaerobic digestion than incineration. At the same time, incineration of waste without the possibility to utilize heat produced neither as district, nor process heat, could have a higher impact on the environment than its gasification or pyrolysis. When systematically assessing energy recovery methods, the types of products being derived (electricity, heat, chemicals, biogas, monomers, oils, etc.), and the alternatives substituted on the market plays one of the most important roles in the sustainability of energy recovery from waste.

Introduction

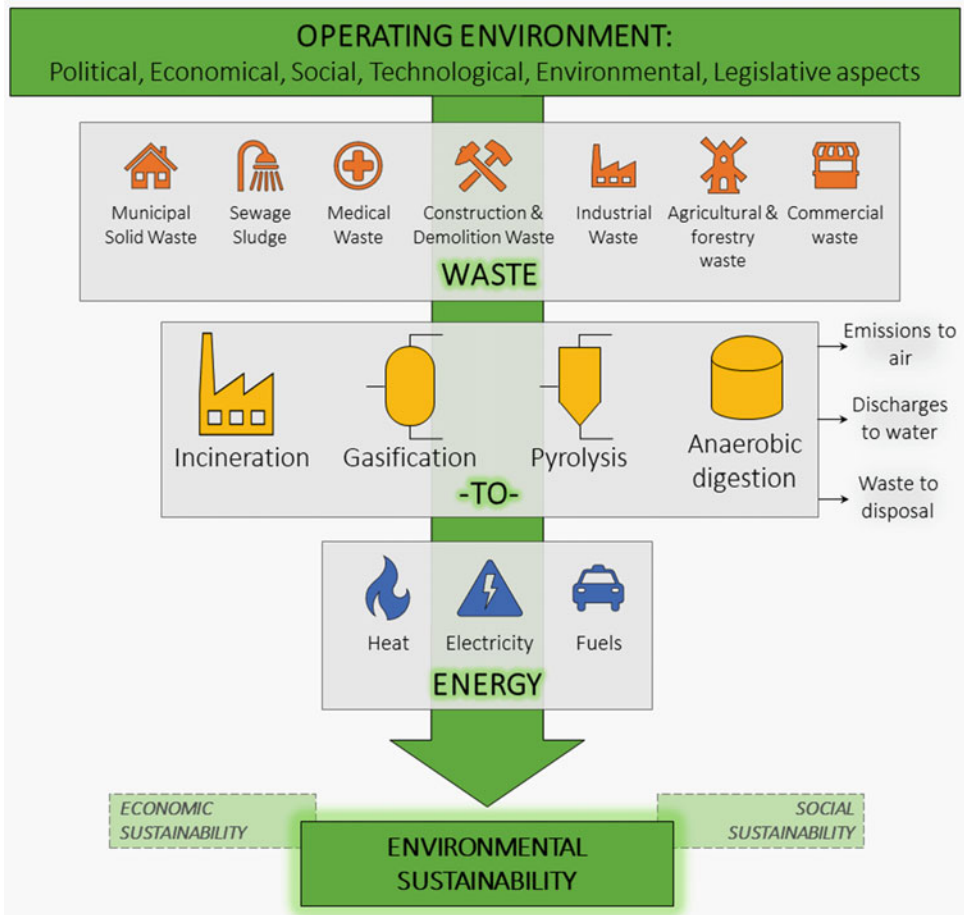
Waste generation during industrial production and consumption is a fact of life. This can be compared to a metabolic waste generation by living organisms during their life-sustaining activities. As nature has gone through a long course of evolution, biological processes emerged to treat the metabolic waste and allow for the biological cycles of nutrients and other elements. On the contrary, waste generated by industrial or man-made processes and activities oftentimes cannot be treated the same way by nature and such waste requires special management provided by humans.

To enable proper handling of waste, waste management was proposed as a solution. The term “waste” is used to refer to any waste generated as a part of anthroposphere, as opposed to the waste generated during natural activities occurring without human interaction. The term “waste management” is used to refer to any activity related to management of waste from the place of its generation, or even beyond when talking about waste prevention, to its final disposal in the environment without any further interaction by humans, be it in a solid, gaseous, or liquid form. Waste management includes not only technological solutions, but also legislative, political, societal, economic, and environmental aspects as illustrated in Fig. 1.

Lately, the increasing awareness of the destructive impacts of humans on this planet led to a special emphasis on the environmental pillar of sustainability. By environmentally sustainable waste management, a system in which the consumption of virgin raw materials in any sector of the economy is minimized by reusing, recycling, or recovering valuable substances from waste, while decreasing the environmental impact is determined. Sustainability of waste management could be improved in all its aspects and should be an overarching aim of the entire waste management system and not considered for each phase of waste management independently. Such systematic thinking can be supported by using the approach of life cycle assessment (LCA).

Energy recovery from waste is an efficient measure on the path toward sustainability because it serves multiple functions. First, energy recovery allows for minimization of waste volumes ending up in landfills, which reduces the generation of landfill gas, which contains a strong greenhouse gas – methane, reduces risks of landfill fires, which release toxic emissions to the atmosphere and reduces the risks of soil and water pollution caused by landfill leachate. Second, energy recovery results in the destruction of hazardous substances contained in the waste. Third, energy recovery from waste allows for the production of heat, electricity, or fuels, which can be used to avoid generation of equivalent products from other sources, often fossil. Also, waste-to-energy is defined as a specific role toward implementation of the EU action plan for the circular economy (European Commission 2017). Therefore, energy recovery is considered a suitable measure toward providing a sustainable disposal option to various wastes, yet the factual statements can only be made based on the results of environmental, as well as social and economic impact assessments.

On the other hand, energy recovery from waste also possesses certain environmental burdens. The highest risks are related to the formation of toxic airborne emissions, as well as the generation of solid waste, such as slag, ash, and air pollution control residues, which can be toxic in nature depending on the waste being incinerated. These impacts and risks can be minimized and controlled by using advanced technologies and



Sustainability of Waste Management Systems: Energy Recovery, Fig. 1 Relation of energy recovery to sustainability through the production of heat, electricity, and fuels from various wastes under the impact of various

aspects. Social and economic aspects of sustainability are affected by energy recovery but are not included in this term of Encyclopedia

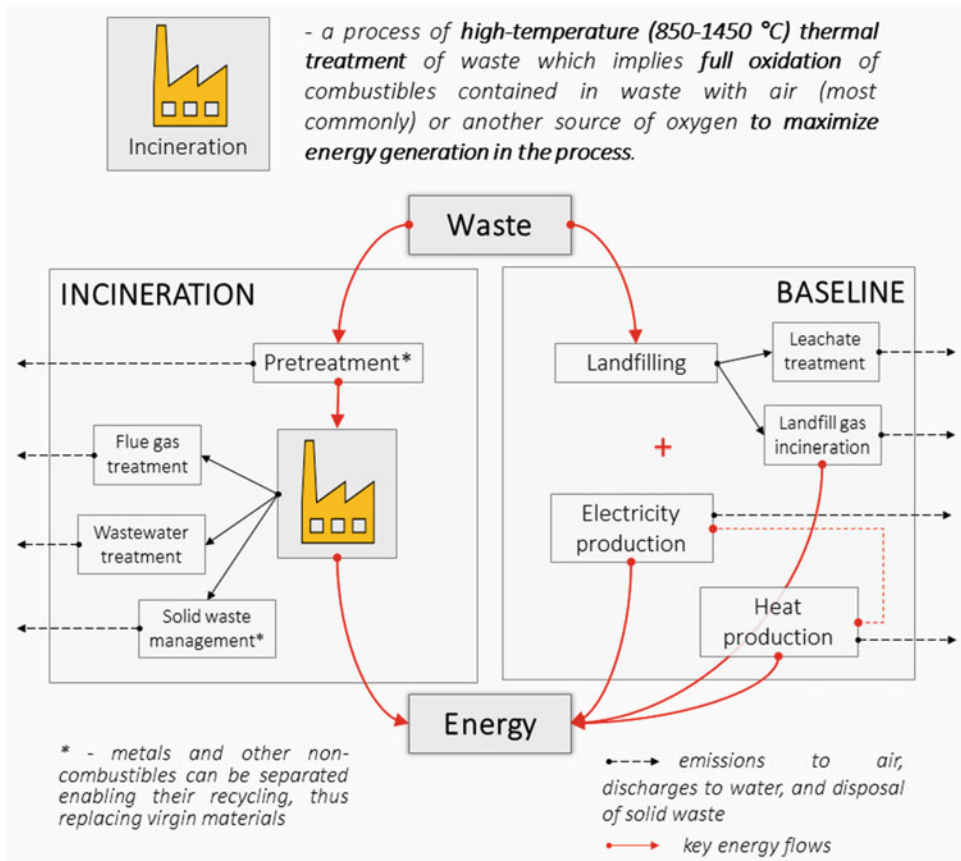
scientific know-how. However, the use of advanced technologies for air pollution control or ash management might be costly and require materials and energy inputs to their operation. Therefore, the environmental sustainability of energy recovery technologies should be analyzed.

In this entry of Encyclopedia, the sustainability aspects related to energy recovery from waste are being discussed. Environmental sustainability was given a focal point, while the economic and social pillars of sustainability were excluded from this term of Encyclopedia. Energy recovery encompasses all methods of converting waste into energy. Those methods include thermal methods, such as incineration, gasification, and

pyrolysis, biological methods, such as anaerobic digestion, fermentation, as well as chemical methods, such as esterification (World Energy Council 2016). Landfill gas recovery is also considered as an energy recovery option, yet this method is not intentionally meant for direct energy recovery from waste, rather as an option of reducing the environmental impact of waste landfilling.

Incineration

Waste incineration is a process of high-temperature (850–1450 °C) thermal treatment of



Sustainability of Waste Management Systems: Energy Recovery, Fig. 2 Key components of the waste incineration system affecting sustainability, as well as the

key components of the baseline scenario, which is assumed to be landfilling and production of substituted electricity and heat

waste, which implies full oxidation of combustibles contained in waste with air or other source of oxygen (Fig. 2). As a result of waste incineration, waste is converted into solids residues, which are collectively called ash, flue gas, and energy. Two common ways of waste incineration are known: mass-fired incineration and combustion of fuels derived from waste, also known as refuse-derived fuel (RDF) or solid recovered fuel (SRF). SRF is a type of RDF, which is certified according to the standard EN 15359 (2011). Mass-fired incineration is applied to waste generated as such without extensive pretreatment. Mass-fired incineration of MSW would most commonly be performed in grate incinerators, whereas incineration of RDF or sewage sludge would be favored in fluidized bed boilers because of higher suitability of RDF

for the process. Hazardous waste is being commonly incinerated in rotary kilns.

Each of the incineration technologies has its **benefits, drawbacks, and limitations, which affect their sustainability**. Sustainability-related aspects could be related to the waste being incinerated, to the technology used for incineration, to the possibilities for energy recovery and utilization, to the air pollution control (APC) system, to the disposal of solid waste from incineration, such as slag, ash, and APC residues, and to the operating environment. Research work of Liikanen et al. (2017) focuses on the influence of various parameters on the sustainability of waste incineration, among other waste management options. Sustainability of waste incineration depends on the composition of waste being incinerated and its

properties. The high content of water decreases the heating value of waste thus reducing the potential for energy substitution with waste, as well as affects the need for auxiliary fuels in the process. The high content of heavy metals and chlorine affect their emissions and release of polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F). The high content of fossil carbon negatively affects climate change. Finally, variability in the composition and quality of the waste incinerated requires more flexible and efficient flue gas treatment technologies.

Grate incinerators are the most commonly applied technologies for mass-incineration of waste. In grate incineration, combustion occurs in the volume of waste on a moving metallic grate. Grates can be of different types, such as rocking, reciprocating, and traveling, among others. The grates are needed to move the waste from the feeding zone to the ash discharger while enabling its sufficient mixing with air to support combustion. Grate incinerators are suitable for highly heterogeneous waste, and thus, can be used to provide effective treatment to waste otherwise not suitable for incineration in fluidized bed incinerators. Even though the pretreatment of waste is not essential, it can be done to improve waste incineration efficiency and thus sustainability. Pretreatment might include particle size reduction and separation of recyclables, as well as wet and inert materials, yet the certain share of combustibles is also lost during the process. Considering environmental sustainability, the need for pretreatment should be determined based on the energy output of incineration, as well as the possibility to recycle materials separated, mainly metals, as compared to their separation from the bottom ash using magnetic separation for ferrous metals and eddy-current separators for nonferrous metals. On the other hand, the suitability of grate incinerators for highly heterogeneous waste possesses a serious threat on the APC systems, which are required to remove a larger variety of toxic pollutants from the flue gases.

Fluidized bed combustion (FBC) is commonly used to incinerate waste-derived fuels (RDF or SRF). Combustion of waste occurs in a

vertical cylindrical or rectangular waste incineration chamber, which is filled with fine sand particles that are kept in a fluidized form by blowing air from the bottom of the furnace. Sand particles absorb the heat from waste incineration and the heat is used to dry and heat up the moist waste supplied to the process. Because the waste incinerated is relatively homogeneous, near-complete oxidation of waste is achieved, and it is easy to control the temperatures of combustion. This also helps to control the formation of gaseous emissions, e.g., nitrogen oxides. It is also possible to add limestone to the sand bed for sulfur dioxide emissions reduction. Fluidized bed combustion requires waste to be size reduced and metals to be separated to prevent slagging of the sand bed and fouling of the heat exchangers in the boilers. Better fuel quality also makes it possible to raise the temperature and pressure of the steam generated higher than it can be achieved in grate incinerators. In this way, the electric efficiency of the process is improved. Another benefit of using RDF or SRF instead of mixed waste is a considerably smaller amount of ash generated.

Energy recovery from waste incineration and its effective utilization is the key driver toward the viability and sustainability of this waste disposal method. Energy can be recovered as both heat and electricity. While electricity can be supplied to the grid ensuring its utilization, the local demand on heat by households as district heating or by the industry as steam or thermal energy determines the possibilities for its utilization. Special attention should be given to boilers enabling efficient heat transfer, while other methods to increase energy efficiency, such as preheating of combustion air, water cooling of grates, flue gas condensation, and flue gas recirculation should be considered to increase the overall energy efficiency of incineration. The sustainability of energy recovery is also driven by the type of fuel being phased out when electricity is replaced with that from the waste incineration plant. Avoidance of fossil fuels brings substantial benefits to the process, while incineration of waste in countries where the majority of energy is derived from renewable energy sources might have little

sustainability advantages compared to other options of waste recovery and management.

The emissions from the waste incineration process are of large social, as well as environmental, concern for waste incinerators. Various APC systems have been developed and are being used in waste incinerators. Those systems often include a combination of either of the following methods: electrostatic precipitators, bag filters, cyclones, wet scrubbers, semi-wet scrubbers, active carbon injection, selective catalytic and non-catalytic reduction processes, and adsorption processes. These methods enable efficient reduction of dust, nitrogen oxides, sulfur oxides, acids, heavy metals, and chlorinated compounds. Also, process conditions might be varied to influence the emissions of nitrogen oxides, carbon monoxide, heavy metals, and PCDD/Fs. Finally, the content of chloride-based compounds, mercury, and other toxic metals in flue gases can be reduced by avoiding those elements in the feeding waste. The regulations concerning waste incineration and its emissions are strict in the EU and other developed countries. The regulations state the limits and measurement demands for a higher number of emission components than the regulations of conventional fuels combustion. In addition, there are regulations for combustion conditions to ensure the destruction of toxic organic compounds in all the process conditions.

Recovery of metals and other incombustibles from mixed waste is one aspect having a significant impact on the sustainability of waste incineration. On one hand, incombustibles contained in the mixed waste can be removed prior to waste incineration. When doing so, other waste fractions will also be lost during the mechanical pretreatment of mixed waste due to an inefficient separation of different waste fractions. This leads to a decrease in the energy input to the incineration process. Furthermore, the final disposal of rejects, fine, and heavy fractions from the RDF production should be considered since their recycling might be challenging. Removal of incombustibles from waste to produce RDF increases the incineration efficiency. On the other hand, incombustibles can be subjected to

incineration in grate incinerators. By doing so, incombustibles will end up in the bottom ash and slag, from where ferrous, nonferrous, and mineral fractions can be recovered. Therefore, systematic assessment of alternative systems for handling incombustibles in waste should be performed accounting for the separation processes themselves also for the mass and quality of metals and other noncombustibles separated and recycled. Recovery of metals is expected to preserve natural resources, which would otherwise be used to produce metals substituted with those recovered from waste.

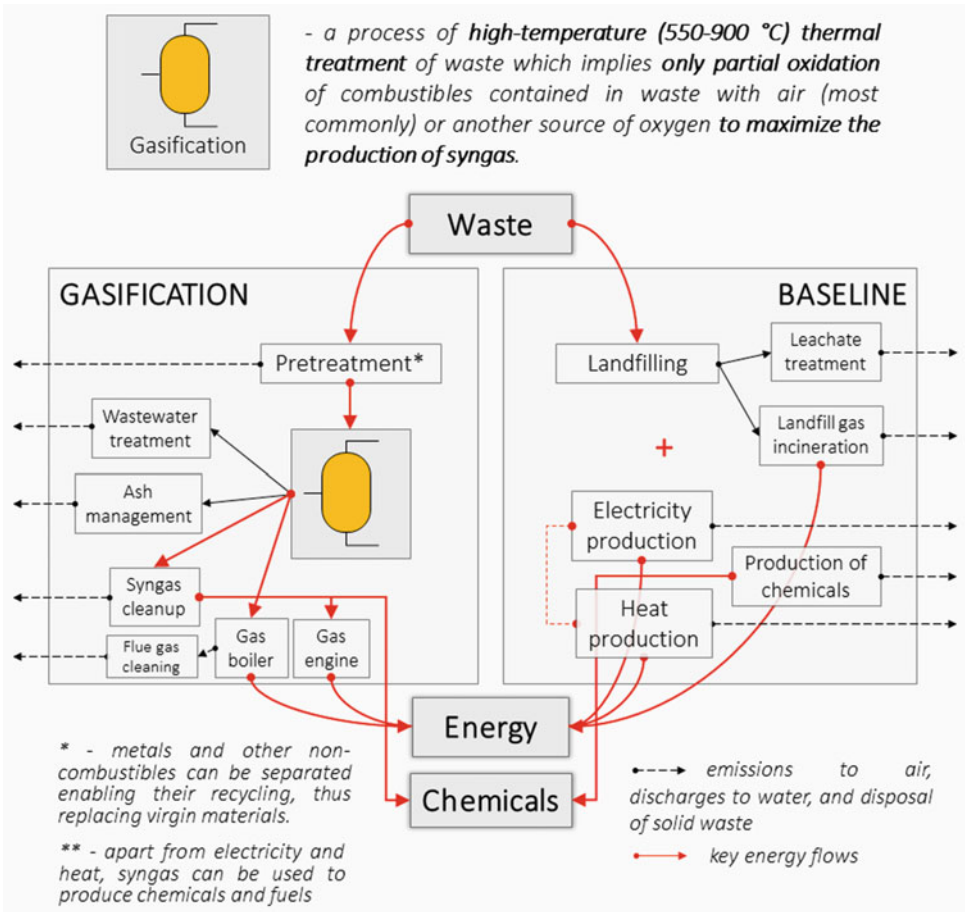
The operating environment, which includes political, legal, and geographical aspects, might be one of the most decisive aspects of the sustainability of waste incineration and other waste-to-energy technologies. The legal aspects affect sustainability in terms of the emission limits, which are getting more stringent with the development of novel APC techniques and increasing social pressure. Political aspects affect sustainability through the country- or region-specific policies on waste management, recycling, and incineration. Geographical aspects determine the availability and proximity of heat consumers, which is an important factor accounting for the high losses of thermal energy during its delivery to the point of utilization. Electricity transmission has a lower dependency on the local market since it can be supplied to the grid and utilized. Finally, when the sustainability of waste incineration is assessed, the potential reduction of the environmental impact is calculated through the avoided electricity and heat production, which would otherwise occur without waste incineration. Oftentimes, marginal electricity and heat sources are accounted for, and not grid mixes. Determination of a marginal electricity or heat source is done through analysis of historical data for a specific area on the generation of electricity and heat. When the electricity grid is carbon-intensive and the efficiency of energy recovery from waste is high, energy recovery from solid waste can have higher benefits than material recycling from the climate change point of view. See Subsection "MSW management in Sao Paulo, Brazil" of this entry.

More detailed discussion on the sustainability of waste incineration as well as any other energy recovery methods, includes consideration of various aspects. One of the aspects is the type of electricity and heat displaced on the market, i.e., the so-called consequential vs. attributional approaches. Another aspect is the use of the zero-burden approach considering that waste carries no burden from the preceding life cycle stages. With the increasing trend of the circular economy, waste should rather be considered as a resource, thus carrying certain debit from the previous life cycle stages. Consideration of the baseline scenario also has significant impacts on the results. For example, landfilling of organic waste is banned in some European countries making

landfilling only a hypothetical option. More considerations on the LCA of waste management can be found in another entry of this Encyclopedia (see entry ► [“Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment”](#)).

Gasification

Waste gasification is a process of high-temperature (550–900 °C) thermal treatment of waste, which implies only partial oxidation of combustibles contained in waste with air or other source of oxygen (Fig. 3). As a result of waste gasification, waste is converted into fuel gas,



Sustainability of Waste Management Systems: Energy Recovery, Fig. 3 Key components of the waste gasification system affecting sustainability, as well as the

key components of the baseline scenario, which is assumed to be landfilling and production of substituted electricity, heat, chemicals, and fuels

which is also referred to as syngas or producer gas, and ash. Syngas mainly consists of carbon dioxide, hydrogen, carbon monoxide, and methane, while the presence of particulates, tars, acids, and other impurities is possible. Unlike waste incineration, waste gasification is performed to only partially oxidize waste, which is required to generate enough heat for the self-supporting gasification process. Air is usually supplied at 20–30% of the stoichiometric need. Arena (2012) elaborates on waste gasification in more details.

As with waste incineration, there are several factors that affect the sustainability of waste gasification. Waste should be rather uniform and preferably have a particle size of below 100 mm. Therefore, the quality and composition of waste determine their applicability for the process as such. Oftentimes, waste needs to be size-reduced and noncombustibles be removed prior to gasification. The gasification process is energetically self-sufficient meaning that no external energy is needed for the process. Furthermore, no specific and dedicated air pollution control system is needed since the fuel gas could be sent to further clean-up to remove acidic compounds, tars, particles, and other impurities. Air pollution control is, however, needed after the combustion of fuel gas, yet the requirements for its incineration could be lower than during incineration provided that producer gas has been cleaned up properly.

There are certain benefits of waste gasification over incineration. Firstly, higher energy efficiencies could be achieved when fuel gas is combusted in gas boilers, which have higher efficiencies when compared to conventional waste incineration boilers. Secondly, the fuel gas is an intermediate product, which can be stored, transported, and utilized in places with the highest demand, thus enabling the substitution of fossil fuels. This is an advantage since the substitution of electricity and heat during waste incineration might not always result in avoided environmental impact.

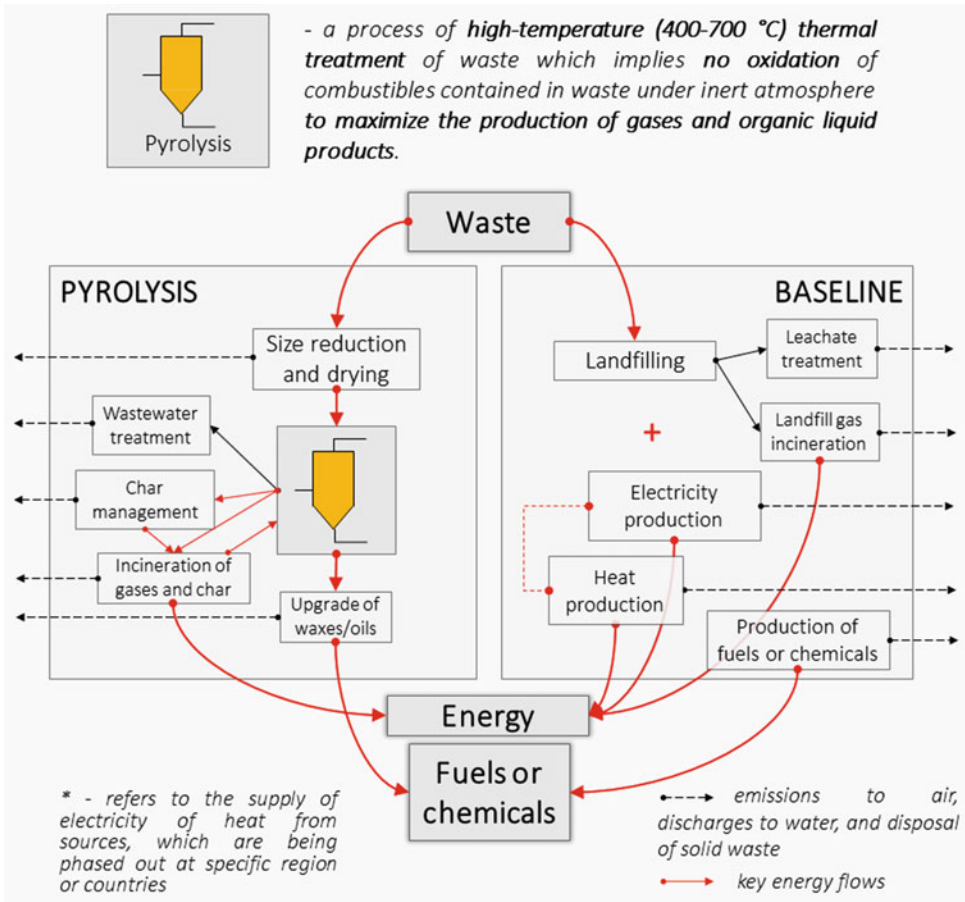
Gasification can be used also for co-combustion purposes. Waste can be gasified and the fuel gas can be combusted in an existing

plant burning conventional fossil fuels. With the fuel gas from waste, it is possible to replace fossil fuels without changing the whole process and without supplying solid waste to the conventional furnace.

Pyrolysis

Waste pyrolysis is a process of high-temperature (typically around 400–700 °C) thermal treatment of waste, which implies heating of combustibles contained in waste in an oxygen-free environment (Fig. 4). As a result of waste pyrolysis, waste is converted into organic liquid products, such as oils and waxes, which are condensed from produced gas, non-condensable flammable gases, and char. The pyrolysis conditions can be adjusted to maximize the yield of a specific component. Pyrolysis has been mostly practiced to dispose of tires, plastic, or dried sewage sludge. Pyrolysis gained less attention in the treatment of MSW due to its high moisture content, high heterogeneity, and large particle size, yet some experimental research has been performed. Chen et al. (2014) elaborate on MSW pyrolysis in detail. Martínez et al. (2013) and Williams (2013) explain the pyrolysis of tires. Inguanzo et al. (2002) discuss the pyrolysis of sewage sludge, while Anuar Sharuddin et al. (2016) explains the pyrolysis of plastic waste.

Sustainability of waste pyrolysis strongly depends on the quality of waste feedstock, which is explained by the need for waste drying and size reduction (Fig. 4). Integration of the pyrolysis unit to a combined heat and power plant to incinerate non-condensable gases and char to generate energy, which can be supplied to the pyrolysis process itself, as well as on the local market, is a feasible option to improve the sustainability of the process. The majority of the environmental impact does not occur in the pyrolysis unit itself, but elsewhere in the value chain, i.e., during incineration of gases, char, and organic liquid products. Organic liquid products could be further refined to produce fuel and/or chemicals. Therefore, the yield of the organic products, which might be affected by using catalysts, the need for their



Sustainability of Waste Management Systems: Energy Recovery, Fig. 4 Key components of the waste pyrolysis system affecting sustainability, as well as the key components of the operating environment expressed

through the baseline scenario, which is assumed to be landfilling and production of substituted electricity, heat, fuels, and chemicals

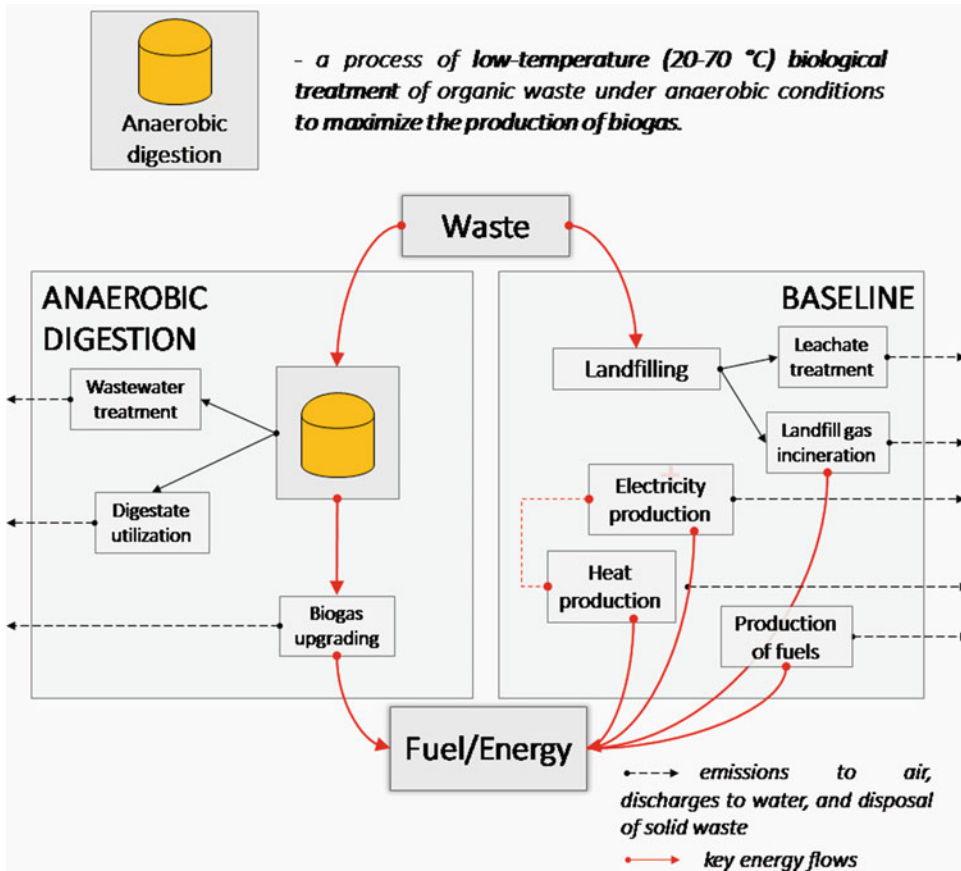
upgrading, and the fuels being replaced strongly affect the sustainability of the process.

Anaerobic Digestion

Anaerobic digestion is a process of low-temperature (37 °C for a mesophilic process and 55–70 °C for a thermophilic process) biological treatment of organic waste, which implies degradation and stabilization of organics contained in waste under anaerobic conditions (Fig. 5). As a result of anaerobic digestion, organic waste is converted into biogas and microbial biomass, i.e., digestate. Anaerobic digestion

has been applied, e.g., to the treatment of sewage sludge, biowaste, and agricultural waste. Commonly, anaerobic digestion is applied to moist waste consisting of quickly biodegradable organic matter, which is separated from other solid waste.

Sustainability of anaerobic digestion is determined by many factors, including the energy need for the process, the moisture content of the feedstock, need for feedstock collection and transportation, among others. Berglund and Börjesson (2006) showed that the energy input to biogas production corresponds to some 25–40% of the energy output in biogas produced, but the variation is high depending on heating needs due to varying climate conditions, the yield of biogas,



Sustainability of Waste Management Systems: Energy Recovery, Fig. 5 Key components of the waste anaerobic digestion system affecting sustainability, as well

as the key components of the operating environment expressed through the baseline scenario

and the level of automation. Most of the energy input is for the heating and electricity supply to the anaerobic digestion process. Application of digestate on land might result in reduced eutrophication and global warming potentials when compared with the use of mineral fertilizers produced using energy incentive Haber-Bosch process. Finally, the upgrade of the biogas is an important step toward sustainability since this biogas can be utilized as a transport fuel, thus replacing natural gas or gasoline.

Examples

MSW Management in São Paulo, Brazil

Incineration of MSW with energy recovery in Brazil might have a higher impact on global

warming potential (GWP), also referred to as climate change, acidification potential, and eutrophication potential when compared with MSW landfilling equipped with landfill gas recovery and generation of electricity from Brazilian electricity mix (Liikanen et al. 2018). A higher impact from incineration compared to the reference situation was, first, due to an assumption for a high collection rate of landfill gas (64% or 80% depending on the landfill), and second, due to low environmental impact from the Brazilian electricity grid mix (75% of electricity generated is from hydropower). However, when the landfill gas collection rate was decreased to 50%, MSW incineration was more favorable. Similarly, when the type of electricity substituted was changed to natural gas or heavy fuel oil, incineration was more favorable when compared to landfilling.

Overall, the production of RDF from MSW and its combustion in a cement kiln to replace coal, as well as anaerobic digestion of an organic fraction was the best scenario in the study.

MSW Management in Hangzhou, China

The MSW management in China could be improved by the production of RDF and efficient recovery of the organic rejects generated therein as highlighted by Havukainen et al. (2017). Production of RDF led to increased efficiency of energy recovery during waste incineration and avoidance of the use of coal as auxiliary fuel to raise the combustion temperatures to the level demanded by legislation and dioxin reduction. However, landfilling of organic rejects could diminish these benefits, so its proper management, e.g., by anaerobic digestion, should be practiced. Significant potential toward sustainability of energy recovery from MSW lies in improved source-separation of biowaste and, thus increased energy recovery efficiencies and avoided consumption of auxiliary fuel during waste incineration, which is currently coal.

MSW Management in South Karelia, Finland

Incineration of MSW in the region of South Karelia, Finland, helps to mitigate climate change, yet not under all operating environments as studied by Hupponen et al. (2015). Mitigation of climate change was possible due to avoided emissions from landfilling, as well as avoided emissions from electricity and heat substitution in the waste incineration plants. However, when the heat substituted was mainly derived from biofuels (72%), the reduction of the impact on climate change was significantly lower compared to the cases where heat replaced was derived from natural gas. When comparing different incineration solutions, it is important to take into account the annual efficiency of energy production instead of technical efficiency. For heat recovery, seasonality of heat demand is an important aspect since district heating of buildings is only required during winter time, whereas steam can be utilized in the industry all year round, which increases the total annual efficiency of industrial heat recovery significantly. Effective heat recovery, in general, represents a

very important possibility to improve the environmental sustainability of waste-to-energy, which can be seen when comparing the results of waste-to-energy studies done for countries in cold climate and warm climate regions. It is important to realize that industrial needs for heat exist also in warmer climate zones and this possibility should be utilized more effectively in waste-to-energy.

Commercial Waste Management in Finland

Energy recovery from mixed waste and energy waste had the largest global warming reduction potential out of several waste fractions as studied by Hupponen et al. (2018). Apart from incineration, recycling of biowaste, cardboard, polyethylene, paper, metals, and glass was studied. Despite the fact that waste incineration releases substantial amounts of greenhouse gases, large benefits for mitigation of climate change are achieved through substitution of energy, which was derived from hard coal, natural gas, peat, or a Finnish electricity grid mix. While incineration and recycling of all waste fractions resulted in a reduced impact on climate change, recycling of cardboard proved to have higher impacts than the production of cardboard from virgin raw materials. This might be related to the low impact from virgin cardboard production in pulp and paper mill integrates where energy is supplied via combustion of wood and other bio-based residues.

Ash Recycling in Finland

Proper management of thermal residues, which is a collective term used to refer to bottom ash, boiler slag, fly ash, and air pollution control residues, affects the entire sustainability of waste incineration; yet, the impact from thermal residues management has a relatively low impact compared to waste incineration itself. Recycling of bottom ash, boiler slag, and fly ash from incineration of various fuels, including municipal solid waste was studied by Deviatkin et al. (2017a). The studied recycling options included forest fertilization, landfill construction, road construction, and road stabilization, depending on legal and technical acceptability of different types of thermal residues and fuels used in incineration. Each of the studied recycling methods had a reduced impact

compared to landfilling across several impact categories, such as global warming potential, ozone layer depletion potential, acidification potential, and eutrophication potential. In some cases, substitution of products manufactured from virgin materials resulted in large avoided impact on climate change, such as substitution of cement, whereas avoided phosphorous fertilizer production led to significant reduction of abiotic resource depletion potential. The impact of ash recycling on toxicity-related impact categories varied significantly from avoided impact to induced one depending on a specific scenario. In most of the cases, leaching from thermal residues was determined by the liquid-to-soil ratio, which was modeled based on precipitation in a specific area, depth of ash disposal, the density of materials, among other parameters.

However, ash recycling might also cause additional impacts on the environment as studied in another paper of Deviatkin et al. (2017b). Advanced treatment of bottom ash allowing efficient separation of ferrous metals, nonferrous metals, and minerals of four different fractions with consequent utilization of only limited amount of the minerals in the production of cementitious products has a slightly larger non-toxic environmental impact when compared with the production of similar products from conventional materials. This was due to induced environmental impact during pretreatment of bottom ash, as well as additional consumption of cement during the production process when minerals obtained from ash were utilized. The situation would change if more minerals were utilized. Moreover, if the impact of the recycling of non-ferrous and ferrous metals were included, the results can be expected to have a lower environmental impact.

Comparison of Waste Incineration Versus Gasification

In the study by Arena et al. (2015), incineration of residual MSW in a moving grate combustor was compared with its gasification in a vertical shaft gasifier. The results indicated that waste incineration has lower emissions than gasification across

many impact categories, including the impact on climate change. The higher impact from gasification was due to the use of metallurgical coke in the process to enable high temperatures in the molten section of the gasifier.

Pyrolysis of Waste Plastics

In the study by Perugini et al. (2005), pyrolysis of waste plastics had a lower impact on climate change compared to its incineration or landfilling. Mechanical recycling of polyethylene and low-temperature pyrolysis of polyolefins released 4.2 times fewer greenhouse gases than incineration with energy recovery and 3.1 times less compared to landfilling. The largest avoided impact originated from avoided production of polyethylene and polypropylene.

Nitrogen Recovery from Sewage Sludge

Sustainability of energy recovery from sewage sludge during its digestion or incineration might be further reduced by seizing the potential of nitrogen recovery during its drying (Deviatkin 2017). A reduction of the impact on climate change of 30% could be achieved when nitrogen is recovered during thermal drying of sewage sludge when compared to its incineration without nitrogen recovery and production of nitrogen fertilizers via an energy-intensive Haber-Bosch process.

Summary

Energy recovery from various waste streams might represent sustainable waste management options. Despite the significant emissions originating either directly during the waste-to-energy processes, e.g., incineration, or during incineration of products obtained therein, such as syngas, pyrolysis oil, or biogas, energy recovery from waste usually contributes to the reduction of environmental impact through avoided conventional disposal of waste, which is oftentimes landfilling in developing countries or in countries with economies in transition, and due to expected avoided production of electricity, heat, fuels, and chemicals, which could be produced from waste.

Availability and composition of waste strongly affect the sustainability of energy recovery from waste. Furthermore, sustainability of energy recovery is determined by the right choice of the treatment method, e.g., anaerobic digestion of biowaste versus its incineration, or pyrolysis of plastic waste versus its incineration in countries with the low carbon intensity of electricity grid mixes. Finally, the operating environment determines the sustainability of the energy recovery options within a range of other waste management methods. Therefore, attention should be given not only to the energy recovery methods but also to the environmental impact of the conventional disposal methods of specific waste and to the types of replaced products.

Cross-References

- Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment
- Sustainability of Waste Management System: Treatment and Separation for Material Recovery
- Sustainability of Waste Management System: Waste Generation and Collection
- Sustainability of Waste Management Systems: Final Disposal

References

- Anuar Sharuddin, S. D., Abnisa, F., Wan Daud, W. M. A., & Aroua, M. K. (2016). A review on pyrolysis of plastic wastes. *Energy Conversion and Management*, 115, 308–326. <https://doi.org/10.1016/J.ENCONMAN.2016.02.037>.
- Arena, U. (2012). Process and technological aspects of municipal solid waste gasification. *A Review of Waste Management*, 32, 625–639. <https://doi.org/10.1016/j.wasman.2011.09.025>.
- Arena, U., Ardolino, F., & Di Gregorio, F. (2015). A life cycle assessment of environmental performances of two combustion- and gasification-based waste-to-energy technologies. *Waste Management*, 41, 60–74. <https://doi.org/10.1016/J.WASMAN.2015.03.041>.
- Berglund, M., & Börjesson, P. (2006). Assessment of energy performance in the life-cycle of biogas production. *Biomass and Bioenergy*, 30, 254–266. <https://doi.org/10.1016/J.BIOMBIOE.2005.11.011>.
- Chen, D., Yin, L., Wang, H., & He, P. (2014). Pyrolysis technologies for municipal solid waste: A review. *Waste Management*, 34, 2466–2486. <https://doi.org/10.1016/J.WASMAN.2014.08.004>.
- Deviatkin, I. (2017). *The role of waste pretreatment on the environmental sustainability of waste management*. Lappeenranta: Lappeenranta University of Technology.
- Deviatkin, I., Havukainen, J., & Horttanainen, M. (2017a). Comparative life cycle assessment of thermal residue recycling on a regional scale: A case study of South-East Finland. *Journal of Cleaner Production*, 149, 275–289. <https://doi.org/10.1016/j.jclepro.2017.02.087>.
- Deviatkin, I., Sormunen, A., Rantsi, R., Havukainen, J., & Horttanainen, M. (2017b). LCA of MSWI BA treatment with an advanced treatment technology and consequent recycling of the mineral fractions obtained. In *Sixteenth international waste management and landfill symposium*. Cagliari.
- European Commission. (2017). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – The role of waste-to-energy in the circular economy package.
- Havukainen, J., Zhan, M., Dong, J., Liikanen, M., Deviatkin, I., Li, X., & Horttanainen, M. (2017). Environmental impact assessment of municipal solid waste management incorporating mechanical treatment of waste and incineration in Hangzhou, China. *Journal of Cleaner Production*, 141, 453–461. <https://doi.org/10.1016/j.jclepro.2016.09.146>.
- Hupponen, M., Grönman, K., & Horttanainen, M. (2015). How should greenhouse gas emissions be taken into account in the decision making of municipal solid waste management procurements? A case study of the South Karelia region, Finland. *Waste Management*, 42, 196–207. <https://doi.org/10.1016/j.wasman.2015.03.040>.
- Hupponen, M., Grönman, K., Horttanainen, M. (2018). Areas on which to focus when seeking to reduce the greenhouse gas emissions of commercial waste management. A case study of a hypermarket, Finland. *Waste Management*, 76, 1–18. <https://doi.org/10.1016/j.wasman.2018.03.024>.
- Inguanzo, M., Domínguez, A., Menéndez, J., Blanco, C., & Pis, J. (2002). On the pyrolysis of sewage sludge: The influence of pyrolysis conditions on solid, liquid and gas fractions. *Journal of Analytical and Applied Pyrolysis*, 63, 209–222. [https://doi.org/10.1016/S0165-2370\(01\)00155-3](https://doi.org/10.1016/S0165-2370(01)00155-3).
- Liikanen, M., Havukainen, J., Hupponen, M., & Horttanainen, M. (2017). Influence of different factors in the life cycle assessment of mixed municipal solid waste management systems – A comparison of case studies in Finland and China. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2017.04.023>.
- Liikanen, M., Havukainen, J., Viana, E., & Horttanainen, M. (2018). Steps towards more environmentally sustainable municipal solid waste management – A life cycle assessment study of São Paulo, Brazil. *Journal of*

- Cleaner Production*, 196, 150–162. <https://doi.org/10.1016/J.JCLEPRO.2018.06.005>.
- Martínez, J. D., Puy, N., Murillo, R., García, T., Navarro, M. V., & Mastral, A. M. (2013). Waste tyre pyrolysis – A review. *Renewable and Sustainable Energy Reviews*, 23, 179–213. <https://doi.org/10.1016/J.RSER.2013.02.038>.
- Perugini, F., Mastellone, M. L., & Arena, U. (2005). A life cycle assessment of mechanical and feedstock recycling options for management of plastic packaging wastes. *Environmental Progress*, 24, 137–154. <https://doi.org/10.1002/ep.10078>.
- Williams, P. T. (2013). Pyrolysis of waste tyres: A review. *Waste Management*, 33, 1714–1728. <https://doi.org/10.1016/J.WASMAN.2013.05.003>.
- World Energy Council. (2016). World energy resources. Waste to energy [WWW Document] URL https://smartnet.niua.org/sites/default/files/resources/weresources_waste_to_energy_2016.pdf (accessed 10.06.2021)

Sustainability of Waste Management Systems: Final Disposal

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Synonyms

Disposal; Landfilling

Definition/Description

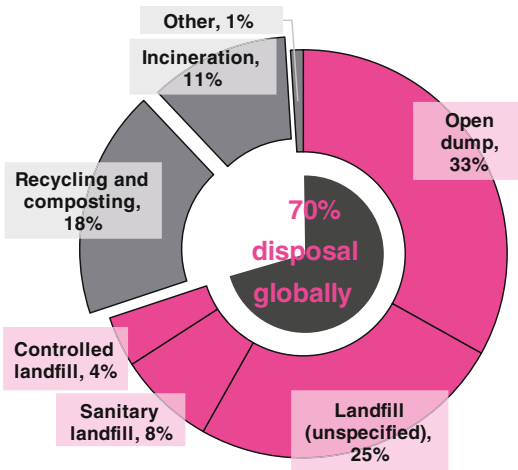
Waste disposal onto land is a historically common way of handling our waste. In modern society, however, waste disposal in an uncontrolled manner, i.e., its open dumping and littering, is considered illegal in most parts of the world. Yet, open dumping is still the most common waste disposal method worldwide covering 33% of municipal solid waste (MWS) generated. Waste is mostly being dumped in low-income countries, which lack infrastructure and financial instruments for efficient transition toward environmentally

sustainable waste management systems. Compared to dumping, sanitary landfilling (covers 8% of MSW generated globally) introduces a range of measures to surpass the negative impacts on the environment, which include leachate and landfill gas collection and treatment. Nevertheless, landfilling is the least desired waste management method in developed countries, which is due to the loss of economic benefits embodied in waste and the depressing impacts on the environment during landfilling. This entry of the Encyclopedia focuses on the environmental impacts of the final disposal of waste and its impacts on human health and natural environment.

Introduction

The beginning of the twentieth century can unconditionally be marked as an era of waste management. After decades of tightening legislation, first, on air pollution control and then on the protection of water bodies, environmentally safe treatment and disposal of waste have been a focal point for policymakers and companies across many nations. There has been a firm move toward promoting material recycling and even closure of the material loops. Such moves were the strongest in developed countries. This has been made possible through sustainable waste management, which has gained momentum due to a profound understanding of the negative impacts caused by waste landfilling, or even by illegal open dumping of waste.

Nevertheless, even after making significant efforts toward closing the material loops, waste landfilling and dumping remain the dominating waste management methods globally. As of 2016, landfilling and open dumping accounted for disposal of 70% of all municipal solid waste (MSW) generated (Fig. 1) (Kaza et al. 2018). Furthermore, the Circularity gap report (Circle Economy 2019) calculates that only 9% of extracted resources make their way back to the production processes. For this reason, analysis of the final disposal methods and their relation to sustainability is essential, even if being seen obsolete in the developed world.



Sustainability of Waste Management Systems: Final Disposal, Fig. 1 Shares of MSW treatment and disposal methods globally (Kaza et al. 2018)

Definitions of final disposal in regulations of different countries vary. According to the European Directive on Waste (The European Parliament and the Council of the EU 2008), disposal means “any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy.” The disposal methods include, among many other methods, deposit into or on to land, deep injection, specially engineered landfill, and incineration on land and sea. According to the Resource Conservation and Recovery Act (USEPA 2019), disposal means “the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.” According to the Australian EPA (2019), disposal is a “final stage in the management of waste, which includes treatment of waste prior to disposal, incineration of waste, with or without energy recovery, deposit of waste on land or water, discharge of liquid waste to sewer, permanent indefinite or long-term storage of waste.” For the purpose of this entry, the definition of disposal provided in the EU Directive on Waste has been followed.

Final disposal is the least desired method of waste handling according to the waste hierarchy,

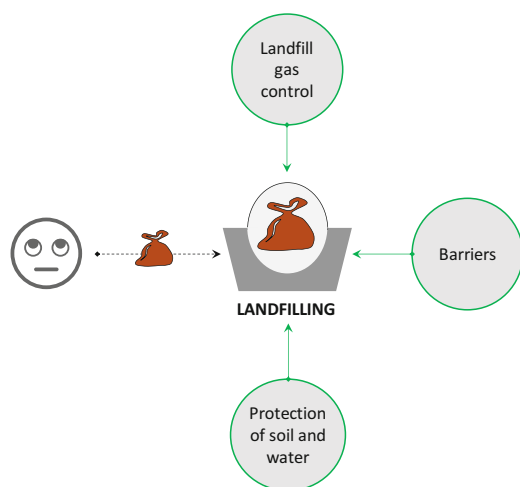
which has been widely adopted in waste management legislation across the world (Fig. 2). The key reason for avoiding final disposal, apart from the negative impacts on the environment, is the loss of materials, which enter the society via consumption of various products during their disposal, thereby generating the need for extraction of an equivalent amount of raw materials or even more accounting for the ecological rucksacks of products.

Final disposal can be avoided by a range of methods. At first, generation of waste as such could be prevented through reduced and responsible consumption, which however requires societal transition. Measures toward dematerialization of production processes, digitalization, extension of products lifetimes, and promotion of the product-as-a-service business models could help to reduce the amounts of waste. Once waste is generated, its final disposal can be prevented through its reuse, redistribution, remanufacturing, recycling, or recovery. Yet, these waste management options require technological know-how and creation of favorable operating environments, including economic, political, and legislative drivers.

This entry focuses on the most common final disposal method practiced worldwide, namely, landfilling, open dumping, and open burning. It will mainly focus on the environmental impacts of the final disposal of MSW. What relates to the economic dimension of sustainability, final disposal of waste results in the loss of economic value contained in waste, which otherwise could be recycled for the manufacturing of new materials and products. Regarding the social counterpart, final disposal of waste poses high risks of negative impacts on human health and natural capital, as well as creates visual nuisances if located in populated areas.

Landfilling

According to the estimates of the current state of the global waste management systems, which naturally include a large body on uncertainty, 4% of all waste globally is disposed of in controlled landfills, 7.7% of waste is sent to sanitary landfills



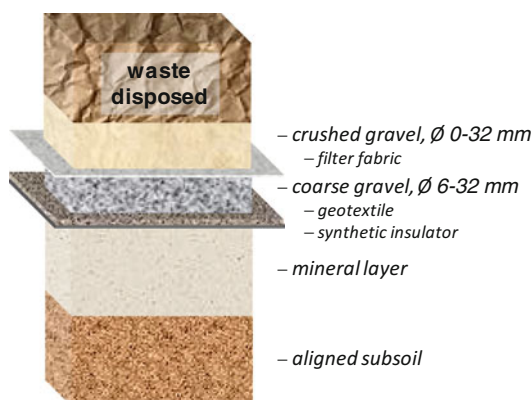
Sustainability of Waste Management Systems: Final Disposal, Fig. 3 Key mechanisms of environmental protection during waste landfilling

Protection of Soil and Water

The main source of possible impact from landfills on soil and water is due to land occupation and leachate formation. Leachate is a liquid generated during penetration of precipitation through the waste landfilled, as well as free water contained in the waste landfilled, especially contained in biowaste. As a result of contact with waste, leachate is enriched in organic matter, which is determined by the biological and chemical oxygen demands, suspended solids, a wide range of macrocomponents, such as phosphorus, chloride, sulfate, and a spectrum of heavy metals including chromium, cobalt, and lead (Kjeldsen et al. 2002; Renou et al. 2008).

To prevent the penetration of leachate into soil and groundwater, landfills are equipped with bottom liners as well as leachate collection and treatment systems. A bottom liner is a structure consisting of several layers, whose thickness and materials are determined by the type of the landfill (for inert waste, for nonhazardous waste, or for hazardous waste). In general, the bottom liner consists of a layer of aligned subsoil, geosynthetic clay liner, geomembrane, and a drainage layer (Fig. 4).

The drainage layer contains coarse materials, such as gravel to ensure free flow of leachate. Under the drainage layer, there should be a



Sustainability of Waste Management Systems: Final Disposal, Fig. 4 A typical structure of the bottom liner of a landfill

synthetic or natural barrier to prevent water penetration to the soil effectively. Above the drainage layer, there should be a layer of material (e.g., geotextile) which prevents particulate matter and organics to penetrate into the drainage layer and to fill the pores there. The bottom liner is usually characterized by its permeability to ensure slow penetration of liquids through the liner. However, the bottom liner is not sufficient without a leachate collection system, which is required to withdraw the leachate formed from the bottom of the landfill. The leachate collection system is essentially a network of pipes placed in the drainage layer of the bottom liner connected with the collection pump, a pond, and with an off-site wastewater treatment plant, if needed. After a landfill closure, the amount of leachate formed is significantly reduced by construction of a landfill top cover. Nevertheless, the European Directive on Landfill of Waste demands that landfills are taken care of for the period of at least 30 years after their closure, which also includes leachate collection and treatment.

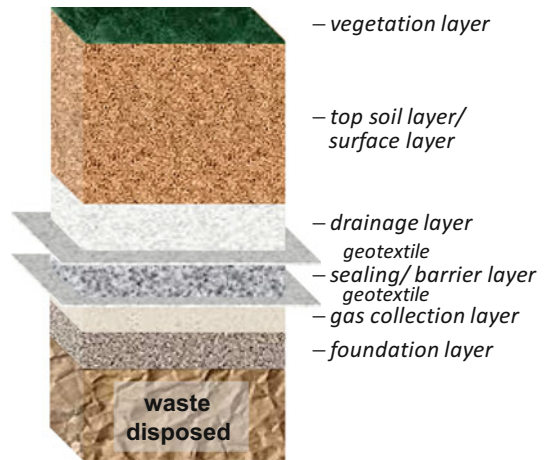
Landfill Gas Control

Food and green waste comprise a significant portion of MSW globally – approximately 44% according to Kaza et al. (2018). The lowest share of biowaste in MSW in the EU is recorded in Lithuania, Norway, and Slovenia being less than 20% (EEA 2013). The share of bio-based waste is

expected to be lower in high-income countries. However, recent research done in Finland showed that the content of biowaste was 48.4% and 42.9% in two case studies performed (Liikanen et al. 2016). Furthermore, the share of biowaste is above 50% in Greece, Portugal, Slovakia, and Malta (EEA 2013). The share of biowaste is even higher in China being reported at the level of 55.8% (Zhou et al. 2014). It is worth mentioning that methodologies on reporting waste generation might vary between countries.

Accounting for the high share of biowaste in MSW, it is expected that substantial amounts of biogas are formed during waste landfilling. Biogas, which is more specifically referred to as landfill gas, is a gas formed during microbial degradation of landfilled waste under anaerobic conditions. Landfilling of 1 t of MSW generates approximately 100–300 m³ of landfill gas, which is roughly comprised, in equal proportions, of methane and carbon dioxide (Themelis and Ulloa 2007). Both gases are greenhouse gases making landfill gas a serious threat to climate change. However, carbon dioxide is often considered climate neutral since it is formed during the degradation of biogenic matter of waste and is a part of the natural carbon cycle. On the other hand, methane is considered to contribute to climate change since it cannot be directly sequestered by biomass via photosynthesis and thus remains in the atmosphere for a certain time.

To reduce the negative impacts of landfills caused by the release of the landfill gas, landfill top covers as well as landfill gas collection and treatment systems are being employed (Fig. 5). The top cover usually consists of several layers, which include a precover or a foundation layer, a gas collection layer of gravel, a sealing or a hydraulic layer of clay, a drainage layer of gravel, a protection layer, and a surface layer of soil for vegetation growth. The top cover minimizes rainfall penetration, as well as prevents the escape of the landfill gas and enables partial oxidation of methane. In the porous drainage layer, the rain and melting water penetrating through the surface layer flows easily with the help of gravitation toward the surface water collection system.



Sustainability of Waste Management Systems: Final Disposal, Fig. 5 A typical structure of the top cover of a landfill

Sealing layer minimizes the water flowing downward and landfill gas flowing upward. Gas collection layer also consists of a porous material where the landfill gas flows easily toward the perforated gas collection pipes, which have under pressure conditions. The landfill gas collection system is also a network of horizontal pipes and vertical dwells connected with gas pumps and with a flaring plant or an energy recovery unit. Landfill gas generation is often described with a first-order decay model described by the following equation:

$$Q_g = \sum_{i=1}^n \sum_{j=0.1}^1 k \left(\frac{M_i}{10} \right) L_{0i} e^{-kt_{ij}}$$

where i, j are the indices, n is duration of waste acceptance in landfill (yr), k is first-order decay rate constant (yr⁻¹), M_i is the tonnage of waste disposed in year i (Mg), L_{0i} is methane generation potential of waste disposed in year i (m³ Mg⁻¹), and t_{ij} is the age of j th section of waste M_i (yr) (Amini et al. 2013). The landfill gas generation decreases steadily during the aftercare period. When landfill gas is incinerated, methane is oxidized to carbon dioxide, thus reducing the impacts on climate change. Similar to the leachate collection, landfill gas collection should be in place for at least 30 years after the landfill closure to

minimize its impacts on the environment. With this time frame, most of the landfill gas is expected to be generated and possibly collected, thus minimizing the environmental impacts.

Emissions of methane can be estimated using the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC 2006). There are various parameters that affect the generation of methane, a key greenhouse gas generated during landfilling. Those parameters include the composition of waste, the share of degradable organic carbon (DOC), which varies across waste fractions and is the highest for wood and straw – 0.43 and is only 0.15 for food waste. However, not all DOC decomposes into landfill gas, so the fraction of DOC, which dissimilates, DOC_f , is introduced and equals to 0.1 for wood and 0.7 for food waste thus indicating the higher degradation of organics contained in food waste. The model accounts for the methane generation rate, the fraction of methane in landfill gas, oxidation factor, and carbon storage in paper and wood. Also, the model accounts for the different types of landfill structures through a methane correction factor (MCF). It is worth mentioning that the majority of those parameters have a wide range and thus the results could be only indicative if no primary data from the landfill was obtained. Furthermore, field measurements of the landfill gas generation are challenging, thus leading to a wide use of default values and models. Kaza et al. (2018) estimated that 2.01 billion tons of MSW was generated in 2016, while waste management sector is responsible for the emissions of 1.6 billion tons of carbon dioxide equivalents, which includes, but not limited to, final disposal of waste.

Deficiencies of Landfill Protection Systems

Despite the high emphasis on the development and implementation of landfill protection systems, there are certain factors that affect their impacts on the environment. One of the major environmental concerns of landfill is the formation and release of landfill gas. At first, landfill gas collection systems are not generally installed in actively used landfills, thus resulting in the release of LFG during its

active phase. When the LFG collection system is installed, the collection of gas begins. However, not all LFG is collected from landfills. One reason for inefficient collection is the breakage of the sealing system resulting in the release of LFG into the atmosphere. Another reason is blockage of the piping systems with water, waste, or landfill cover materials preventing efficient collection of the gas. The LFG collection rates vary significantly between 20% and 90%, yet the higher range is challenging to achieve. Finally, a part of LFG, yet insignificant, is formed after the end of the aftercare period, thus being released to the environment.

When considering the bottom liners, another set of deficiencies arise. First, the bottom structures can crack due to soil movement, thus resulting in the release of leachate into soil and possibly further to groundwater. Also, the leachate collection system can be blocked with physical objects preventing the removal of leachate from the bottom of the landfill, thus resulting in leachate accumulation increasing the risks of its penetration to the natural environment. The release of leachate poses risks of toxic impacts on the natural environment.

Finally, the large source of acute impacts of landfill is due to landfill fires. Landfill fires are generally occasional events occurring due to high content of oxygen causing increased biological activity and thus causing spontaneous self-ignition of waste. When fires spread deeper, they cause deep seated fires, which are challenging to extinguish. Landfill fires are a source of a wide range of compounds including dioxins and furans released to the atmosphere without any control possibility thus affecting neighboring communities.

Other Disposal Methods

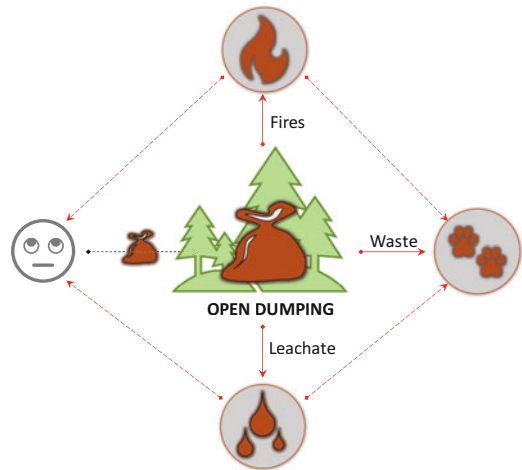
Open Dumping

Open dumping of waste is a long-standing way of handling the waste generated by households or during industrial production. In the past, the population was scarcer, materials were often

bio-based, and no knowledge on the negative impact of waste disposal on human health or environment existed. Nowadays, the situation is controversial: population growth follows an exponential trend, especially in developing countries or countries with economies in transition yet the population growth peaked in the 1970s, materials are complex and are often fossil-based. Also, a significant body of research has been collected on the health impacts of substances released to water through leachate and to air through occasional fires during open dumping of waste (WHO 2015).

Open dumping is essentially an uncontrolled placement of waste in any locations where waste starts to be accumulating making it a commonly accepted place among citizens and law-breaching companies. Oftentimes, open dumping is considered an illegal waste disposal method even in developing countries. But due to lack of legislative mechanisms and being a commonly accepted practice, it is still a common practice in many places. Also, the difference between open dumping and official landfilling is faint because many of the official landfills in developing countries are just accepted by authorities but are not constructed according to any environment protection practices. According to the report prepared for the World Bank (Kaza et al. 2018), 93% of MSW is still dumped in low-income countries with the share being 66% for the lower-middle income countries, 30% for the upper-middle income countries, and only 2% for the high-income countries. The increasing prosperity of people living in developing countries in the future is expected to reduce the share of waste being dumped with an increasing share of landfilling or even introduction of waste recycling systems.

There are various mechanisms of the negative impact of open dumps on the environment (Fig. 6). Firstly, open dumps affect wildlife due to waste being physically present in the natural environment, which is also referred to as littering. Secondly, open dumping of waste leads to accumulation of waste on the ground preventing normal vegetation as well as pollution of soils through leachate. Thirdly, open dumping



Sustainability of Waste Management Systems: Final Disposal, Fig. 6 Impacts of open dumping on the environment and human health

deteriorates groundwater and in turn affects people whose water is supplied from the polluted water sources as well as sea life through flushing of waste from dumps located close to rivers or on seashores. Also, open dumping of waste leads to air pollution through the release of particles, creation of offensive odor in the vicinity, and through the formation of toxic substances during uncontrolled and occasional fires. All of these negative impacts are also probable in controlled and sanitary landfills, but they are much more common and happen more often and with larger impacts in the open dumping, which do not have any protective structures or practices to prevent the environmental impacts.

Presence of waste in the natural environment affects wildlife. Animals and other living organisms see open dumps as places of easily available food. Therefore, open dumps attract wild animals as well as domestic livestock. Eating food waste, which might contain toxic substances and pathogens, by livestock might result in their accumulation in the food chain and a consequent transfer to human bodies. Animals are also under risk of suffocation by accidental intake of large waste items. Another risk of open dumps is due to spreading of diseases by rodents populating the dumps.

The most significant impacts of open dumps on the environment and human health are, however, those originating from soil degradation, pollution of water bodies, and from the release of airborne emissions. Dumping of waste occupies significant land territories and leads to their pollution through leaching of organic and inorganic pollutants, as well as toxic substances during atmospheric precipitation. Leached substances are then transferred to the underlying soil and are being partly accumulated therein or transferred further to groundwater. Rain and stormwater also leach organics and hazardous substances from waste to the surface waters and even flush waste to the rivers, lakes, and seas. In some regions of developing countries, dumps are still established on the riversides. During flooding seasons, the waste goes with water and ends up in seas and oceans resulting in ocean littering and plastics. Surface water pollution affects fish and other seafood and spoils drinking water in many cities.

Deliberate or unintentional burning of open dumps releases a wide range of pollutants to the atmosphere. The emissions of the highest concern to the human health are those from the incineration of synthetic materials, such as rubber and plastics, which lead to the formation of dioxins, furans, and polycyclic aromatic compounds. Subsection “[Open Burning](#)” elaborates more on the impacts of open burning of waste.

Open Burning

Open burning is illegal incineration of waste under uncontrolled conditions practiced either by individuals or organizations either deliberately or unintentionally. Since open burning is an illegal activity, precise estimates of the waste amounts being openly burned are impossible. According to Kaza et al. (2018), who collected the data from different countries, the share of waste being openly burned is less than 1%, whereas the study by Wiedinmyer et al. (2014), who calculated the results based on various assumption and parameters described in their study, estimate that 41% of the MWS generated is illegally burned. Regardless of the actual number, open burning of waste is still a common practice in developing countries

and might even occur in industrialized countries as a result of an unintentional fire on a landfill or a dump site.

Burning usually occurs in an oxygen-depleted atmosphere, which is a result of waste self-compaction in large dumps. Such incineration conditions lead to incomplete oxidation of waste, thus resulting in the formation of toxic persistent organic compounds (POPs), such as dioxins, furans, benzenes, and polycyclic aromatic hydrocarbons, which also belong to POPs. The concentrations of POPs are significant and represent a serious threat to the health of humans exposed to the fumes from open burning. Also, greenhouse gases, particulate matter, and many other substances and compounds are released during open burning. Cogut (2016) elaborates in detail the impact of open burning showing that the developing countries, which suffer the most from the open burning, also do not have the capacity to eliminate open burning of waste.

Environmental Impact Assessment

Because landfilling is the least desired waste management option, a lot of studies consider landfilling as a default situation of waste management in their assessments of the environmental impacts of alternative waste management systems. With such an approach, alternative waste management systems are often given the credit from avoided waste disposal. However, considerations should be given to the type of waste being assessed, the types of the impacts, and to the operating environments. Landfilling of waste having a large share of organics has the highest impact on climate change due to generation of landfill gas. Since landfill gas could be utilized for electricity or heat generation, it is oftentimes considered in life cycle assessment studies, thus giving a credit to the landfilling system (Liikanen et al. 2018). Niskanen and Horttanainen (2012) showed that an improved gas collection could reduce the impacts on climate change by two-thirds compared to the baseline, whereas improved oxidation and improved utilization of

landfill gas only reduce the impacts by a few percentage. In a study by Niskanen et al. (2013), the authors showed that at landfill gas collection efficiencies above 77%, the impacts from landfilling become negative due to the substitution of energy produced from incineration of methane generated in landfills. Therefore, the policies for the reduction of the climate change impacts from disposal should aim at the reduction of the share of organic waste, which could be achieved through source-separation and at increased collection of landfill gas during long periods accounting for the long decay rates of some waste fractions.

However, landfills do not always have high impacts on climate change. Disposal of inorganic waste, such as ash or slag from waste incineration or incineration of other fuels, might be a more acceptable option than its extensive fractionation from the climate change points of view, since landfilling of inorganic materials does not release any biogas (Deviatkin et al. 2016). On the other hand, landfilling of inorganic materials leads to the loss of substances embodied therein, such as phosphorus or alkaline substances, which could be used to replace fertilizers or cement (Deviatkin et al. 2017; Havukainen et al. 2016). Furthermore, landfilling of ash leads to leaching of heavy metals contained therein, which could otherwise be immobilized if ash were used in the concrete production.

Summary

Final disposal of waste is a commonly practiced waste management method globally. It includes open dumping, open burning, landfilling, and a range of other, less often practiced methods. Final disposal accounts for 70% of all MSW generated globally. Considering the value embodied in waste and the environmental impacts from final disposal, especially from open dumping, which accounts for a substantial of 33% of all MSW generated, final disposal conceals an enormous potential for the reduction of environmental,

social, and economic impacts through its avoidance and use of waste secondary material.

The largest impacts from final disposal of waste originate from the occupation of soil and its pollution, pollution of groundwater, the release of airborne emissions, and presence of alien objects in the natural environment. These impacts are considerably reduced with the transition from historically widely practiced open dumping to more engineered landfilling. Landfilling of waste introduces a wide range of measures to reduce the impacts from waste disposal on the environment mainly through the prevention of leachate leakage and through mitigation of landfill gas release. Still, landfilling remains a sink of valuable materials, which could otherwise be recycled, thus avoiding extraction of virgin materials from nature, not to mention a limited lifetime of the protecting structures, which deteriorate with time and pose increased risks for the environment and human beings.

Cross-References

- [Energy Recovery](#)
- [Life Cycle Assessment](#)

References

- Amini, H. R., Reinhart, D. R., & Niskanen, A. (2013). Comparison of first-order-decay modeled and actual field measured municipal solid waste landfill methane data. *Waste Management*, 33, 2720–2728. <https://doi.org/10.1016/j.wasman.2013.07.025>.
- Australian EPA. (2019). Waste definitions, waste guidelines. https://www.epa.sa.gov.au/files/4771336_guide_waste_definitions.pdf. Accessed 10 June 2021.
- Circle Economy. (2019). Circularity gap [WWW Document]. https://circulareconomy.europa.eu/platform/sites/default/files/circularity_gap_report_2019.pdf. Accessed 10 June 2021.
- Cogut, A. (2016). Open burning of waste: A global health disaster. *R20 Regions of Climate Change*.
- Deviatkin, I., Sormunen, A., Rantsi, R., Havukainen, J., & Horttanainen, M. (2016). LCA of MSWI bottom ash utilization with advanced treatment. *English Proceedings of Eleventh International Conference on Waste Management and Technology*.
- Deviatkin, I., Havukainen, J., & Horttanainen, M. (2017). Comparative life cycle assessment of thermal residue

- recycling on a regional scale: A case study of South-East Finland. *Journal of Cleaner Production*, 149, 275–289. <https://doi.org/10.1016/j.jclepro.2017.02.087>.
- EEC. (1999). Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste. *Official Journal of the European Communities*. <https://doi.org/10.1039/ap9842100196>.
- EEA. (2013). Managing municipal solid waste – a review of achievements in 32 European countries. <https://doi.org/10.2800/71424>.
- Havukainen, J., Nguyen, M. T., Hermann, L., Horttanainen, M., Mikkilä, M., Deviatkin, I., & Linnanen, L. (2016). Potential of phosphorus recovery from sewage sludge and manure ash by thermochemical treatment. *Waste Management*, 49, 221–229. <https://doi.org/10.1016/j.wasman.2016.01.020>.
- IPCC. (2006). Guidelines for national greenhouse gas inventories. *Agriculture, Forestry and Other Land Use*. <https://doi.org/10.1016/j.phrs.2011.03.002>.
- Kaza et al. (2018). What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. <https://doi.org/10.1596/978-1-4648-1329-0>.
- Kjeldsen, P., Barlaz, M. A., Rooker, A. P., Baun, A., Ledin, A., & Christensen, T. H. (2002). Present and long-term composition of MSW landfill leachate: A review. *Critical Reviews in Environmental Science and Technology*, 32, 297–336. <https://doi.org/10.1080/10643380290813462>.
- Liikanen, M., Sahimaa, O., Hupponen, M., Havukainen, J., Sorvari, J., & Horttanainen, M. (2016). Updating and testing of a Finnish method for mixed municipal solid waste composition studies. *Waste Management*, 52, 25–33. <https://doi.org/10.1016/j.wasman.2016.03.022>.
- Liikanen, M., Havukainen, J., Viana, E., & Horttanainen, M. (2018). Steps towards more environmentally sustainable municipal solid waste management – A life cycle assessment study of São Paulo, Brazil. *Journal of Cleaner Production*, 196, 150–162. <https://doi.org/10.1016/j.jclepro.2018.06.005>.
- Niskanen, A., & Horttanainen, M. (2012). Estimation of environmental impacts for gas management system at case landfill. In *Proceedings of a 8th International Conference on Waste and Wastewater*, Kalmar, Sweden.
- Niskanen, A., Värri, H., Havukainen, J., Uusitalo, V., & Horttanainen, M. (2013). Enhancing landfill gas recovery. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2012.05.042>.
- Renou, S., Givaudan, J. G., Poulain, S., Dirassouyan, F., & Moulin, P. (2008). Landfill leachate treatment: Review and opportunity. *Journal of Hazardous Materials*, 150, 468–493. <https://doi.org/10.1016/J.JHAZMAT.2007.09.077>.
- The European Parliament and the Council of the EU. (2008). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. <https://doi.org/10.1016/j.jpdc.2017.02.002>.
- Themelis, N. J., & Ulloa, P. A. (2007). Methane generation in landfills. *Renewable Energy*. <https://doi.org/10.1016/j.renene.2006.04.020>.
- USEPA. (2019). Part 257 – Criteria for classification of solid waste disposal facilities and practices [WWW Document]. *Resource Conservation and Recovery Act*. URL https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c94567294dff611654af7a3944a91d69&mc=true&r=PART&n=pt40.27.257#sg40.27.257_1104.sg8. Accessed 23 May 2019.
- WHO. (2015). Waste and human health: evidence and needs [WWW Document]. https://www.euro.who.int/_data/assets/pdf_file/0003/317226/Waste-human-health-Evidence-needs-mtg-report.pdf. Accessed 10 June 2021.
- Wiedinmyer, C., Yokelson, R. J., & Gullett, B. K. (2014). Global emissions of trace gases, particulate matter, and hazardous air pollutants from open burning of domestic waste. *Environmental Science & Technology*, 48, 9523–9530. <https://doi.org/10.1021/es502250z>.
- Zhou, H., Meng, A., Long, Y., Li, Q., & Zhang, Y. (2014). An overview of characteristics of municipal solid waste fuel in China: Physical, chemical composition and heating value. *Renewable and Sustainable Energy Reviews*. <https://doi.org/10.1016/j.rser.2014.04.024>.

Sustainability Organization

► CERES Principles

Sustainability Performance Measurement

► Sustainability Management and Reporting

Sustainability Planning

► Sustainable Development Planning

Sustainability Report

► Environmental Report Following GBS Standard

Sustainability Report and Sustainability Reporting

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Synonyms

Corporate social and environmental reporting (CSER); Corporate social disclosures; Corporate social responsibility (CSR) report; Corporate social responsibility reporting (CSRR); Social accounting; Sustainability disclosures

Definitions

There is a high variety of approaches and interpretations in the conceptual discussions of sustainability reporting. In line with the growing awareness of sustainability by practitioners, its definition continues to systematically evolve. Schaltegger et al. (2006) define sustainability reporting in terms of its practical process: as the publication of external reports, where management appoints sustainability goals, collects data, and displays their sustainability information, usually in the forms of printed brochures or electronic formats. Another notable definition is presented by Junior et al. (2014), focusing on its role as a communication tool: “sustainability reports are an important communication tool, focusing on environmental and social performances, between an organisation and its stakeholders.” Sustainability reports can usually be found among companies, data providers, sustainability research firms, pension consultants, investment firms with sustainability products, nongovernmental organizations, and academic institutions (Brockett and Rezaee 2012).

Introduction

The adverse environmental impacts from modern industrializations have been discussed and

warned of by scientists for a considerable amount of time. However, the conversations of companies presenting accountability of their impacts to society at large first gained prominence during the 1970s. This would create a new buzz among business academic and practitioners, slowly leading to a buildup of conceptual foundations (Gray 2001).

By 1987, the Brundtland Report was published. Titled “Our Common Future,” it was an evolutionary report which brought nations together to discuss sustainable development. It defined sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” – a catchphrase to be often utilized by future sustainability actors (Keeble 1988). Unfortunately, sustainability reporting also faced considerable animosity within the industry during that period, so much so that discussions surrounding it stagnated.

By the 1990s, however, the trend had reversed. Talks of environmental accounting and reporting faced a considerable resurgence (Gray 2001). Notable achievements include the first Earth Summit in 1992, held in Rio de Janeiro. Another is the publishing of “Coming Clean” in 1993, the first report to combine environmental, economic, and social dimensions of corporate performance by notable organizations such as Deloitte Touche Tohmatsu International, International Institute for Sustainable Development, and SustainAbility. However, it must also be recognized that most of the existing sustainability reports still focused on traditional reporting issues, such as health and safety, employee relationship, and philanthropy and charitable donations (Kolk 2004).

While the 1990s busied itself with continuing the developments of environmental accountability, by the next decade, companies had broadened their concerns to economic, environment, employees, and community matters. It had certainly significantly evolved from its first inception during the 1980s, when separate environmental and financial report was considered a hallmark achievement (Kolk 2004). Since 1999, the rate of sustainability reporting from the largest 250 companies had grown significantly (Gray 2001). During this new millennium, social and

environmental accounting had finally been encapsulated within regulations and the psyches of most global organizations.

Benefits of Sustainability Reporting

Apart from its benefits to the environment and society at large – which in itself has also been questioned – sustainability reporting also brings significant benefits to companies. According to Rupley et al. (2017), disclosures on corporate social responsibility (CSR) information are substantially economically profitable for companies. It can provide higher credit ratings and create positive capital market reaction to disclosure regulations. Standards which eliminate or reduce disclosures have been proven to deprive capital market of value-relevant information. Additionally, when companies initiate voluntary disclosures, it also brings substantial benefits: it lowers firm risks, lowers costs of equity, lowers costs of debt, increases credit ratings, and increases stock market performance during times of financial crisis.

Other benefits of sustainability disclosures have been reported by Schaltegger et al. (2006, p. 302): as acts of legitimizing corporate activities, products, and services that have produced environmental and social impacts; drives an improvement in corporate reputation and branding value; increases competitive advantage; and, finally, serves as a driver for an overall increase of transparency and accountability within the organization and its employees.

The Sustainability Reporting Process

Overall, the process of corporate sustainability reporting is rather simple and straightforward, similar to conventional reporting process. However, complexities arrive when looking at the particular details. For example, the industry sectors where companies belong to can significantly influence the different sensitive topics it may face, leading to different external pressures and criticisms. If a company isn't careful, or lacks

awareness of the sensitive topics, it can cause severe backlash from civil societal watchdogs and the general public.

At its core, sustainability reporting mainly consists of three objects: inputs, process, and outputs. First, inputs consist of source documents, events, and performance transactions. Second, processing objects measures and reports activities based on sustainability reporting guidance. Finally, outputs are recognized as sustainability reports which communicate company performances pertaining to financial and nonfinancial key performance indicators (KPIs) (Brockett and Rezaee 2012, p. 41).

Reports should also disclose both the positive and negative performances of the company's overall sustainability vision, such as successes and shortcomings of its sustainable programs, overall organizational risks and opportunities, changes during reporting to provide a better overview of (economic, governance, social, ethical, and environmental EGSEE) performances, the different policies to support its sustainability goals, and, finally, problem-solving methods to tackle any potential environmental and/or social impacts (Brockett and Rezaee 2012, p. 42).

Different Types of Standards in Sustainability Reporting

There is a wide breadth of different standards for the process of sustainability reporting. The following is not an exhaustive list but instead only includes two of the most notable types of standards widely used within industries: the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB).

GRI

The GRI, founded in 1997, was the first and, according to the organization, is the most widely used global sustainability reporting standards, with an adoption rate of 93% from the top 250 companies in the world (GRI a). The GRI organizes sustainability information according to the GRI's material topics, a set of standards companies have to provide in their disclosures. There

are two main categories: universal standards and topic-specific standards. The former consists of the GRI Foundations (GRI 101), General Disclosures (GRI 102), and Management Approach (GRI 103). It contains a series of guides to assist organizations in reporting their sustainable information. Meanwhile, topic-specific standards are further divided to three topic-specific standards: Economic (GRI 200), Environmental (GRI 300), and Social (GRI 400). Economic Standards include measurements on economic performance, anti-corruption, and taxes. Environmental Standards include topics such as energy, biodiversity, and emissions. Finally, Social Standards include information on employment, diversity, and marketing (GRI b).

SASB

Another prominent organization dealing in assisting companies to report sustainability matters is the SASB. For SASB, the organization categorizes sustainability topics into five sustainability dimensions. First is environment, which tackles issues such as natural resource inputs to production or pollution caused by companies to the environment (SASB n.d.). Second is social capital, which refers to the overall management of social relations companies have with society, for example, with customers, local communities, and vulnerable groups. The third dimension is human capital, which deals with companies' human resources, such as employees and contractors. Issues include employees' productivity and the health and safety of employees. Fourth is business model and innovation, which organizes issues such as product innovation, efficiency and responsibility in products, and disposal of products. Finally, the fifth sustainability dimension is leadership and governance, which manages issues of regulatory compliance, conflicts of interest, and corruption and bribery (SASB n.d.).

Other organizations which deal with sustainability reporting assistance, standards, and regulations include the United Nations Principles for Responsible Investment (UNPRI); the International Integrated Reporting Committee (IIRC); "Commission Guidance Regarding Disclosure

Related to Climate Change," a report published by the Securities and Exchange Commission (SEC); and "ISO 26000," or "guidelines for social responsibility reporting," developed by the International Organization for Standardization (ISO) (Brockett and Rezaee 2012, p. 29; Camilleri 2017).

Sustainability Reporting Around the World

While the first developments and sharing of ideas within the topics of sustainability and sustainability accountability occurred within the more advanced markets within Western hemisphere, it has recently taken progress to other parts of the world. Japan leads the way for sustainability reporting in a non-Western cultural setting, while countries in Asia, Latin America, and Africa are still struggling to find their feet in implementing standardized sustainability disclosures, whether in terms of regulations or initiatives (Amran and Haniffa 2011).

There is a substantial amount of differences between disclosures in developed and developing economies. In terms of the determining factors that propel companies to disclose their CSR activities, stakeholders such as regulators, shareholders, environmentalists, and the media play a large role in deciding the extent of sustainability disclosures for advanced markets. For emerging economies, disclosures are more determined by external stakeholders, such as foreign investors, international media, and international regulatory bodies (Ali et al. 2017). This is actually quite understandable, given that emerging economies face similar hardships in codifying and enforcing regulatory foundations not only in sustainable disclosures but also in other aspects of social and political spheres. Corruptions, incompetent public officials, and civil unrest are just one of the few issues faced by governments and market regulators in developing economies. Therefore, the regulatory gaps that exist are instead left to global regulatory bodies or organizations where the regulatory standards are already in place.

The following is a short excerpt of the developments of sustainability reporting around the world.

Sustainability Reporting in North America

In a study comparing sustainability reporting between North American, Asian, and European oil and gas firms, it was found that North American firms had the highest numbers of disclosures. Specific topics that North American firms focused on were environmental fuel consumptions, internal stakeholders, and shareholders (Gill et al. 2008).

Sustainability Reporting in Europe

In a comparison of corporate sustainability reporting between Central-Eastern and Western Europe, Steurer and Konrad (2009) found that the Western Europe countries had significantly higher numbers and extents of sustainability reporting. This was found to be determined by sociopolitical and socioeconomic conditions.

Sustainability Reporting in Asia

In a content analysis study of Asia Pacific countries by Amran and Haniffa (2011), South Korea, Japan, and Thailand led the way in terms of sustainability reporting, while Hong Kong and Indonesia produced poorer results. Companies that had larger firm sizes belonged to industrial membership, had a more advanced economy, or had stricter disclosure regulations, as well as their association with environmental certifications (Cormier et al. 2005). Meanwhile, in a study by Choi et al. (2013), Australian companies' carbon emission disclosures were found to have significantly risen over time, especially from the national regulation of National Greenhouse and Energy Reporting Act (the NGER Act) from 2007.

Sustainability Reporting in Latin America

Ortas and Moneva (2011) analyzed the sustainability reporting of Latin American countries, consisting of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru, and Venezuela. There had been

extensive growth of the total number of sustainability reports, while there had been only 30 GRI reports between 1999 and 2004; by 2009, it had risen to 489 reports. Among them, Brazil, Chile, and Mexico lead the number of disclosures.

Sustainability Reporting in Africa

A study conducted by Dawkins and Ngunjiri (2008) identified that corporate social responsibility reporting (CSRR) of South African companies was found to be substantially higher than the reporting implemented by the Fortune Global 100. For South African companies, positive benchmark performances in the dimensions of diversity, community, and employee relations were found to be considerably higher than the top 100 global companies.

Sustainability Reporting in the Middle East

Although the literatures surrounding sustainability reporting in the Middle East remain scarce, there have been a surge of developments. In a study by Nobanee and Ellili (2016), sustainability disclosures of United Arab Emirates listed banks, between 2003 and 2013, were measured. They found that, generally, sustainability disclosures were quite low. They also found that there were higher extents of reporting for conventional banks, compared to Islamic banks. Indeed, for the former, sustainability disclosures had considerably and positively affected banking performances, although no effect was found for the latter group.

Criticisms

Overall, the evolution of sustainability reporting reflects a significant progress of corporate attitudes to their environmental and societal impacts. It manages to provide a different portrayal to the business industry as a whole not only as a caricature of greed and profit-driven villains but as social change actors, driven to bring positive ecological and social impacts. However, is this transformation justified, or does it only portray a

problematic emblem of new, meaningless, business slogans? Sustainability reporting is not without their fair share of criticisms. According to Milne and Gray (2013), the gap between the practices of corporate sustainability reporting and the very act of sustaining humankind's ecological survivability is too large. Although there has been the conceptualization of "triple bottom line" (TBL) in business industries and other movements, business idea of corporate sustainability has overridden the actual realities of ecological concerns. Even among notable standards developed by SustainAbility, KPMG, and GRI, the mountainous copies of sustainability reports are seen as inadequate in terms of their purpose for environmental preservation. They may actually accomplish quite the opposite, promoting the view that everything is alright in ecological terms, and may inherently advocate business-as-usual practices for companies.

Summary

There is no denying that sustainability reporting has come a tremendously long way since its inception. However, is the progress of sustainability reporting over the decades, put simply, enough? Enough to turn around the impacts of anthropogenic climate change, along with air and pollution and loss of biodiversity – as a result of the history of massive unaccountable industrializations? It has the potential to, of course, as with other sustainable measures – but only with strict and extensive scenarios of several "if's": If companies are able to curb their productions and manufacturing of polluting or nonrenewable resources, if increasing sustainability regulations can be effective in swaying the behaviors of troubled companies and bring powerful legal repercussions, and if societies can be motivated to significantly decrease their volumes of consumptions. Unfortunately, our only method of deciphering whether the developments of sustainability reporting have been successful in ecological and social transformation is within the confinements of the future.

References

- Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273–294.
- Amran, A., & Haniffa, R. (2011). Evidence in development of sustainability reporting: A case of a developing country. *Business Strategy and the Environment*, 20(3), 141–156.
- Brockett, A., & Rezaee, Z. (2012). *Corporate sustainability: Integrating performance and reporting*. Hoboken, New Jersey: Wiley.
- Camilleri, M. A. (2017). International policies and regulatory instruments for non-financial reporting. In M. A. Camilleri (Ed.), *Corporate sustainability, social responsibility and environmental management, an introduction to theory and practice with case studies* (pp. 27–40). Cham: Springer Nature.
- Choi, B., Lee, D., & Psaros, J. (2013). An analysis of Australian company carbon emission disclosures. *Pacific Accounting Review*, 25(1), 58–79.
- Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions? *European accounting review*, 14(1), 3–39.
- Dawkins, C., & Ngunjiri, F. W. (2008). Corporate social responsibility reporting in South Africa: A descriptive and comparative analysis. *The Journal of Business Communication* (1973), 45(3), 286–307.
- Gill, D. L., Dickinson, S. J., & Scharl, A. (2008). Communicating sustainability: A web content analysis of North American, Asian and European firms. *Journal of Communication Management*, 12(3), 243–262.
- Gray, R. (2001). Thirty years of social accounting, reporting and auditing: what (if anything) have we learnt? *Business Ethics: A European Review*, 10(1), 9–15.
- Junior, R. M., Best, P. J., & Cotter, J. (2014). Sustainability reporting and assurance: A historical analysis on a world-wide phenomenon. *Journal of Business Ethics*, 120(1), 1–11.
- Keeble, B. R. (1988). The Brundtland report: 'Our common future'. *Medicine and War*, 4(1), 17–25.
- Kolk, A. (2004). More than words? An analysis of sustainability reports. *New Academy Review*, 3(3), 59–75.
- Milne, M. J., & Gray, R. (2013). W(h)ither ecology? The triple bottom line, the global reporting initiative, and corporate sustainability reporting. *Journal of Business Ethics*, 118(1), 13–29.
- Nobanee, H., & Ellili, N. (2016). Corporate sustainability disclosure in annual reports: Evidence from UAE banks: Islamic versus conventional. *Renewable and Sustainable Energy Reviews*, 55, 1336–1341.
- Ortas, E., & Moneva, J. M. (2011). Origins and development of sustainability reporting: Analysis of the Latin

American context. *Journal of Globalization, Competitiveness & Governability*, 5(2), 16–37.

- Rupley, K. H., Brown, D., & Marshall, S. (2017). Evolution of corporate reporting: From stand-alone corporate social responsibility reporting to integrated reporting. *Research in Accounting Regulation*, 29(2), 172–176.
- Schaltegger, S., Bennett, M., & Burritt, R. (2006). Sustainability accounting and reporting: development, linkages and reflection. An introduction. In S. Schaltegger, M. Bennett, & R. Burritt (Eds.), *Sustainability accounting and reporting* (pp. 1–33). Hoboken, New Jersey: Springer.
- Steurer, R., & Konrad, A. (2009). Business–society relations in Central-Eastern and Western Europe: How those who lead in sustainability reporting bridge the gap in corporate (social) responsibility. *Scandinavian Journal of Management*, 25(1), 23–36.
- Sustainability Accounting Standards Board. (n.d.). Sustainability framework. <https://www.sasb.org/standards-overview/materiality-map/>. Accessed 10 Dec 2019.

Sustainability Reporting

- [Communication of CSR Information](#)
- [Global Reporting Initiative](#)

Sustainability Reporting Frameworks

- [Sustainability Reporting Guidelines](#)

Sustainability Reporting Guidelines

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Synonyms

[Sustainability reporting frameworks](#); [Sustainability reporting standards](#)

Description

Sustainability reporting guidelines (see also Reporting Frameworks) provide aid for organizations in the preparation of sustainability disclosures (Searcy and Buslovich 2014). They define reporting principles ensuring high quality of disclosure as well as specific indicators measuring sustainability performance. Their emergence is one of the major forces driving the development of sustainability disclosure understood as “the process of communicating the social and environmental effects of organizations’ economic actions to particular interest groups within society and to society at large” (Gray et al. 1987, quoted in Kotonen 2009) (see Corporate Social Responsibility Reporting; Sustainability Reporting; Sustainability Report & Sustainability Reporting; Sustainable Reporting). There is a variety of international and local initiatives that assist organizations with their sustainability reporting. While some of them may have a comprehensive scope, others focus on specific sectors or issues. The most widely recognized initiatives include (in alphabetical order) CDP, Climate Disclosure Standards Board (CDSB), European Commission □ Guidelines on Non-financial Reporting, UN Global Compact Communication on Progress (COP), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Sustainability Accounting Standards Board (SASB), the FSB Task Force on Climate-Related Financial Disclosures (TCFD).

CDP

CDP, launched as **Carbon Disclosure Project** in 2002, provides the global online disclosure system for companies, cities, states, and regions that enables them to measure and manage their environmental impact. It primarily focused on GHG emissions but has expanded into water and forestry issues. The organization holds online repository of self-reported environmental data from entities worldwide. Additionally, it conducts annual scoring of corporate disclosers and

recognizes top companies that form **The A Lists**. The Climate A List was established in 2011. Later in 2015 and 2016, the scoring process was introduced also for water and forestry reporting, respectively (CDP 2021).

The CDP's data allows investors, businesses, and policy makers to evaluate environmental opportunities and risks and to make informed decisions. As for 2021 the organization's network included over 9600 companies, over 800 cities, over 130 states, and over 590 investors with 110 trillion USD in assets. CDP promotes and encourages, however does not require, third-party verification as an integral part of the disclosure process. The organization awards verified report additional points in the annual scoring process (CDP 2021).

Climate Disclosure Standards Board (CDSB)

The CDSB (2019) was formed at the World Economic Forum's annual meeting in 2007 as an international consortium of business and environmental non-governmental organizations (NGOs). One of the organization's board members is CDP (discussed above) that also serves as its secretariat. The CDSB offers framework for reporting environmental information in mainstream corporate reports (e.g., annual report or the Form 10-K). The framework is aligned with and complements the objective of financial reporting – it assists organizations in disclosing environmental information that is connected with their overall strategy, performance, and prospects. In this way, it aims at providing financial stakeholders with decision-useful and reliable information that can be utilized for the efficient allocation of capital.

The framework encompasses principles that guide the process of determining, preparing, and presenting environmental information. They indicate that the disclosure shall be (1) prepared applying the principle of relevance and materiality; (2) faithfully represented; (3) connected with other information; (4) consistent and comparable; (5) clear and understandable; (6) verifiable;

and (7) forward looking (CDSB 2019, pp. 11–16).

The CDSB Framework provides also reporting requirements that define the content of the environmental disclosure. According to the requirements, disclosures should include the following:

1. Description of the governance of environmental policies, strategy, and information.
2. Description of the environmental policies and strategy, as well as targets, timeline, and key performance indicators (KPIs) against which the company's performance is assessed.
3. Information on environmental risks and opportunities affecting the organization, as well as on how those are managed.
4. Information on performance (quantitative and qualitative results) together with measurement methodologies.
5. Comparison of the performance with the targets set and results reported in previous periods.
6. Outlook, i.e., management's conclusions about the effect of environmental impacts, risks, and opportunities on the company's capacity to innovate, manage risks, execute strategy, and create long-term value.
7. Definition of the organizational boundary for environmental information.
8. Description of the reporting policies used for preparing environmental information.
9. Information on the reporting period.
10. Restatements.
11. Statement of conformance with the CDSB Framework.
12. Assurance (in case it has been provided, which is not a requirement itself) (CDSB 2019, pp. 18–26).

European Commission Guidelines on Non-financial Reporting

In 2014, the European Union (EU) introduced the Non-financial Reporting Directive (2014/95/EU) that requires large public interest entities with over 500 employees (listed companies, banks, and insurance companies) to disclose certain

non-financial information. From the year 2017, around 6000 large companies and groups are obliged to publish statements on their environmental impact, social, employee and human rights issues, anti-corruption, and bribery matters, as well as diversity on company boards (EC 2020).

The Directive gives companies flexibility in terms of disclosure methodology. However, in order to assist companies in the reporting process, the European Commission (EC) issued in 2017 non-binding guidelines (EC 2017). EC's methodology is principle-based and universal for companies across all sectors. Its key principles indicate that non-financial information disclosed should be material; fair, balanced, and understandable; comprehensive but concise; strategic and forward-looking; stakeholder oriented; and consistent and coherent with other elements of the management report (EC 2017, p. C/215/5–9). The use of independent external assurance is recommended as a method to increase fairness and accuracy of disclosed data.

While defining the content of non-financial statement or report, the guidelines refer to the requirements of the Directive. The latter include business model, policies and due diligence, outcome of the policies, risks related to non-financial issues and their management, and KPIs (EC 2017, p. C/215/9–14). Although the guidelines include examples of KPIs that companies may use in particular thematic aspects, they do not provide specific indicators. In 2019, the guidelines were supplemented by a set of guidelines on reporting climate-related information (EC 2019).

UN Global Compact Communication on Progress (COP)

The COP is an annual disclosure through which business signatories of the UN Global Compact report on progress in implementing the ten principles of the initiative (see United Nations Global Compact). While the format of a COP is flexible (it can be a stand-alone document or a part of a sustainability or annual report), it needs to meet three minimal requirements (UNGC 2013, p. 1):

1. A statement by the CEO expressing continued support for the initiative and renewing the participant's commitment.
2. A description of practical actions (taken or planned) aimed at implementing the ten principles in each of the four issue areas (human rights, labor, environment, anti-corruption). If the company does not address one or more of the defined areas, it must provide an explanation ("report or explain" rule).
3. A measurement of outcomes (qualitative or quantitative).

Third-party assurance is not a requirement for the COP.

The COPs are categorized into three differentiation levels based on the depth of their disclosure:

1. GC Learner: COPs that do not meet one or more of the minimum requirements.
2. GC Active: COPs that meet the minimum requirements.
3. GC Advanced: COPs that meet the minimum requirements and provide information on additional advanced criteria in the following areas: implementing the UN Global Compact principles into strategies and operations; taking action in support of broader UN goals; corporate sustainability governance and leadership (UNGC 2013, p. 2).

The UN Global Compact provides a basic guide for preparing COP (UNGC 2019). The document introduces a simple COP structure, suggestions, and examples, which are also available as an online template to fulfill the minimum requirements for GC Active level. Advanced disclosers seeking to prepare more comprehensive report are encouraged to use the GRI reporting framework.

Global Reporting Initiative (GRI)

The GRI (see Global Reporting Initiative) has pioneered sustainability reporting since 1997. It offers the most widely used sustainability

reporting framework in the world (Clayton et al. 2015) that assists organizations (businesses, NGOs, and public institutions) in assessing their social and environmental impact and sustainability-related decision-making (GRI 2020). GRI Standards are based on the **triple bottom line (TBL)** (see Triple Bottom Line) concept (Robins 2006) that expands the traditional, financially focused accounting approach to include organization's social and environmental performance. Although the core GRI framework is designed for organizations of any size, type, sector, or geographic location, it is additionally supplemented by sector- and country-specific standards. The GRI has been announced as the recommended reporting framework of the UN Global Compact (UNGC 2010).

The initial set of the reporting guidelines (G1) was introduced in 2000. After 2 years, the second generation of the guidelines (G2) was released and referenced in the Plan of Implementation of the World Summit on Sustainable Development. 2006 and 2011 the third generation (G3) and its update (G3.1) were published, respectively. The latter was replaced by the fourth generation (G4) in 2013. Finally, in October 2016, GRI Standards (GRI 2016) as the first global standards for sustainability reporting were launched.

GRI Standards encompass three universal standards that are to be used by every organization preparing a sustainability report. These include *GRI 101: Foundation*, *GRI 102: General Disclosures* (requirements on contextual information about an organization and its reporting practices), and *GRI 103: Management Approach* (requirements on information about the approach an organization uses to manage a material topic). Additionally, reporting organizations choose from 33 topic-specific standards (*GRI 200: Economic*, *GRI 300: Environmental*, *GRI 400: Social*) in order to disclose information on their material issues. The GRI advises, but does not require, external assurance for sustainability-related data (GRI 2013).

The *GRI 101: Foundation* standard describes two groups of reporting principles:

1. Principles for defining report content that determines the process of selecting the content of the report, taking into account the activities undertaken by the organization, its impact, and the significant expectations and needs of its stakeholders.
 - Stakeholder inclusiveness.
 - Sustainability context.
 - Materiality.
 - Completeness.
2. Principles for defining report quality that determine the choices regarding the quality of information and its appropriate presentation.
 - Accuracy.
 - Balance.
 - Clarity.
 - Comparability.
 - Reliability.
 - Timeliness.

An organization preparing a report in accordance with the GRI Standards can choose one of two options depending on the degree to which the standards have been applied: (1) Core, obligation to report against *GRI 101*, *102*, and *103* and one disclosure for each material topic, and (2) Comprehensive – obligation to report against every disclosure for each material topic.

International Integrated Reporting Council (IIRC)

The IIRC comprises reporting organizations, regulators, investors, standard setters, academia, accountants, and NGOs. The coalition promotes integrated reporting (see Integrated Reporting, Integrated Reporting for Sustainability), defined as “a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term” (IIRC 2021, p.10), as a next step in the evolution of corporate reporting. The aim of this form of disclosure is to overcome shortcomings of traditional financial and sustainability reporting that, as some authors argue, have failed to provide holistic view of company's

operations (Lodhia 2014; Clayton et al. 2015). Integrated reporting focuses on the organization's ability to create value from different types of capitals, not necessarily owned by the company: financial, manufactured, intellectual, human, social and relationship, and natural (IIRC 2021). "In essence, integrated reporting is a hybrid practice that spans between the different worlds of financial reporting and sustainability reporting" (van Bommel 2014, p. 1158).

In its International <IR> Framework, firstly published in 2013 and updated in 2021, the IIRC sets principles guiding integrated reporting, as well as defines the overall content of an integrated report. The Framework provides seven guiding principles (IIRC 2021, pp. 25–37):

1. Strategic focus and future orientation – reporting organization should present its strategy, how it relates to value creation in different time horizons and to the use of and effects on the capitals.
2. Connectivity of information – an integrated report should show interdependencies between financial and non-financial information in order to provide the holistic picture of the organization's value creation process.
3. Stakeholder relationships – an integrated report should present stakeholder engagement process.
4. Materiality – issues disclosed in an integrated report should be identified based on their effect on the organization's ability to create value over the short, medium, and long term.
5. Conciseness – information should be provided in a concise way.
6. Reliability and completeness – all material matters, both positive and negative, should be disclosed in an integrated report.
7. Consistency and comparability – information should be presented in a consistent way that enables comparison of organization's performance over time and with other entities.

While the IIRC's Framework is principle-based, it does not provide organizations with any specific indicators for integrating non-financial and financial data or does it require third-party

assurance of non-financial data. Nevertheless the latter is encouraged by the IIRC, as it is viewed as a fundamental mechanism enhancing credibility and reliability of integrated reports (IIRC 2014).

According to the IIRC's Framework, an integrated report should include eight content elements (IIRC 2021, pp. 38-):

1. Organizational overview and external environment – presentation of what organization does and the context of its operations.
2. Governance – information on governance structure and its impact on organization's capability to create value.
3. Organization's business model – description of inputs, business activities, outputs, and outcomes.
4. Risks and opportunities – identification of key risks and opportunities that affect the organization's value creation process and description of how those are managed.
5. Strategy and resource allocation – future-oriented information regarding organization's strategic objectives and resource allocation plans.
6. Performance – qualitative and quantitative information on performance related to strategic objectives and impact on the capitals.
7. Outlook – information on challenges and uncertainties that the organization is likely to encounter and their potential impact on business model and future performance.
8. Basis of preparation and presentation of the report's content.

Sustainability Accounting Standards Board (SASB)

The **Sustainability Accounting Standards Board (SASB) Foundation** was founded in 2011 as a non-profit standards-setting organization (SASB 2020) with mission to help companies communicate financially material and decision-useful information to investors. Provisional version of Sustainability Accounting Standards was published in 2014. Three years later, the organization issued an exposure draft of the standards.

Their codification and final release took place in November 2018. The SASB provides standards for 77 industries across 11 sectors ensuring comparability of information across companies within an industry (SASB 2020).

The SASB's framework focuses on the industry-specific sustainability issues (both environmental and social) that have financial impacts and therefore are relevant to capital providers (SASB 2020). The SASB's intention is to provide investors with assistance in integrating sustainability information into fundamental analysis, comparison, and portfolio management. Standards are addressed to US public companies and can be used on voluntary basis to disclose information to investors in SEC filings (SASB 2017a).

SASB conceptual framework is based on three basic principles: (1) evidence-based, assessment of sustainability topics materiality is based on evidence-based research; (2) market-informed, standards are shaped in consultation with participants in capital markets (issuers and investors); and (3) industry-specific – standards focus on sustainability issues at the industry level (SASB 2017a). Reports prepared according to SASB standards are expected to have the same level of rigor and accuracy as all other information contained in financial filings. The SASB suggests that companies should consider third-party assurance but does not explicitly state that such assurance is necessary to enhance the credibility of the sustainability disclosure (SASB 2017b).

The SASB introduces a five-dimensional classification of sustainability issues: (1) environment, environmental-related impacts on company's financial condition or operating performance; (2) social capital, management of relationships with key external stakeholders focused on gaining legitimacy; (3) human capital, management of company's human resources and its impact on organization's long-term value; (4) business model and innovation, integration of environmental, human, and social issues in company's business model; and (5) leadership and governance – management of issues that are inherent to the business model and that are in potential conflict with stakeholders. As a subset of those general

categories, each SASB industry-specific standard defines disclosure topics tailored to the context of particular industry (SASB 2017a).

The FSB Task Force on Climate-Related Financial Disclosures (TCFD)

In 2015 the Financial Stability Board (FSB) established an industry-led disclosure task force on climate-related financial risks with American politician, businessman, and philanthropist Michael R. Bloomberg as chair and private sector individuals from financial and non-financial companies as members. The TCFD's aim is to develop recommendations for voluntary reporting on climate-related financial risk. Recommendations allow companies assess and manage their risks, as well as assist financial stakeholders including investors, lenders, and insurers in effective capital allocation. It is believed that higher transparency in regard to financial impact of climate-related risks strengthens the stability of the financial system and contributes to transition toward sustainable economy (TCFD 2015).

Final Recommendations of the Task Force on Climate-Related Financial Disclosures were issued in 2017 (TCFD 2017a). They are intended for companies that wish to voluntarily disclose climate-related information in their mainstream annual financial filings. The TCFD defines seven principles for effective, high-quality disclosure that should (1) represent relevant information; (2) be specific and complete; (3) be clear, balanced, and understandable; (4) be consistent over time; (5) be comparable among companies within a sector, industry, or portfolio; (6) be reliable, verifiable, and objective; and (7) be provided on a timely basis (TCFD 2017b, p. 18).

The guidelines are structured around four core elements:

1. Governance – the governance of risks and opportunities related with climate change.
2. Strategy – the impact of these risks and opportunities on the organization's businesses, strategy, and financial planning.

3. Risk management – the identification, assessment, and management processes of climate-related risks.
4. Metrics and targets – the metrics and targets set for assessment and management of climate-related risks and opportunities (TCFD 2017b, pp. 13–15).

Additionally the TCFD recommends using scenario analysis as a tool to assess medium- and long-term strategic implications of climate change. The organization provides technical supplement to assist companies in climate-related scenario analysis consistent with the TCFD guidelines (TCFD 2017c).

Similarly to other guidelines, TCFD Recommendations does not impose requirement for independent external assurance. However, “disclosures should be subject to internal governance processes that are the same or substantially similar to those used for financial reporting” (TCFD 2017b, p. 53).

Criticism

Critics of the present sustainability reporting guidelines raise concerns related with poor quality of information disclosed by the companies. Flower (2015) argues that for firms to publish complete, correct, and comparable information on sustainability performance, two conditions must be met: (1) firms should be provided with reporting standards which would assure comparability and completeness of reports; (2) firms should apply these standards correctly and consistently. While the first condition is generally met, the second remains problematic. Empirical evidence (Boiral 2013; Macellari et al. 2021) shows that although companies claim to prepare their sustainability reports according to specific guidelines, they often do not faithfully apply them. In result, sustainability reports, even those externally verified, lack credibility and balance and fail to present fair view of firm’s performance.

Another concern refers to the proliferation of many different guidelines that put severe disclosure burden on companies. This leads business to

concentrate more on the so-called box-ticking and detracts from investing in initiatives that could actually drive real change to global social and environmental problems (Vives 2016). Some argue that efficacy of sustainability reports is low “due to the confusing glut of standards and frameworks” (Leinaweaver 2015).

Cross-References

- Corporate Social Responsibility Reporting
- CSR Communication and Annual Reports
- Global Reporting Initiative
- Integrated Reporting
- Integrated Reporting for Sustainability
- Reporting
- Reporting Framework
- Sustainability Management and Reporting
- Sustainability Report and Sustainability Reporting
- Sustainability Reporting
- Sustainable Reporting

References

- Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A+ GRI reports. *Accounting, Auditing & Accountability Journal*, 26(7), 1036–1071.
- CDP. (2021). *CDP website*. Available at: <https://www.cdp.net/en/info/about-us/what-we-do> Accessed 18 Mar 2021.
- CDSB. (2019). *CDSB framework for reporting environmental and climate change information*. Available at: https://www.cdsb.net/sites/default/files/cdsb_framework_2019_v2.2.pdf. Accessed 15 Feb 2020.
- Clayton, A. F., Rogerson, J. M., & Rampedi, I. (2015). Integrated reporting vs. sustainability reporting for corporate responsibility in South Africa. *Bulletin of Geography. Socio-Economic Series*, 29(29), 7–17. <https://doi.org/10.1515/bog-2015-0021>.
- EC. (2017). *Communication from the Commission. Guidelines on non-financial reporting (methodology for reporting non-financial information)* (2017/C 215/01). Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017XC0705(01)&from=EN). Accessed 17 Feb 2020.
- EC. (2019). *Communication from the Commission. Guidelines on non-financial reporting: Supplement on reporting climate-related information* (2019/C 209/01).

- Available at: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC0620\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC0620(01)&from=EN). Accessed 17 Feb 2020.
- EC. (2020). *Non-financial reporting*. Available at: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en. Accessed 17 Feb 2020.
- Flower, J. (2015). The international integrated reporting council: A story of failure. *Critical Perspectives on Accounting*. Elsevier Ltd, 27, 1–17. <https://doi.org/10.1016/j.cpa.2014.07.002>.
- Gray, R., Owen, D., & Maunders, K. (1987). *Corporate social reporting – Accounting and accountability*. Hemel Hempstead: Prentice-Hall.
- GRI. (2013). *The external assurance of sustainability reporting*. Global Reporting Initiative.
- GRI. (2016). *Consolidated Set of GRI sustainability reporting standards 2016*. Available at: <https://www.globalreporting.org/standards/gri-standards-download-center/>. Accessed 19 Apr 2018.
- GRI. (2020). *GRI website*. Available at: <https://www.globalreporting.org/information/about-gri/Pages/default.aspx>. Accessed 23 Mar 2020.
- IIRC. (2014). *Assurance on <IR>. An exploration of issues*. Available at: <https://integratedreporting.org/wp-content/uploads/2015/07/IIRC-Assurance-Overview-July-2015.pdf>. Accessed 21 Feb 2019.
- IIRC. (2021). *The international <IR> framework*. Available at: <https://integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf>. Accessed 19 Mar 2021.
- Kotonen, U. (2009). Formal corporate social responsibility reporting in Finnish listed companies. *Journal of Applied Accounting Research*, 10(3), 176–207.
- Leinaweaever, J. (2015). Is corporate sustainability reporting a great waste of time?, *The Guardian*, 6 January. Available at: <https://www.theguardian.com/sustainable-business/2015/jan/06/corporatesustainability-reporting-waste-time>. Accessed 19 Nov 2021.
- Lodhia, S. (2014). Exploring the transition to integrated reporting through a practice lens: An Australian customer owned Bank perspective. *Journal of Business Ethics*. Springer Netherlands, 585–598. <https://doi.org/10.1007/s10551-014-2194-8>.
- Macellari, M., et al. (2021). Exploring bluewashing practices of alleged sustainability leaders through a counter-accounting analysis. *Environmental Impact Assessment Review*. Elsevier, 86(September 2020), 106489. <https://doi.org/10.1016/j.eiar.2020.106489>.
- Robins F. (2006). The challenge of TBL: a responsibility to whom?. *Business and Society Review*, 111, 1–14.
- SASB. (2017a). *SASB conceptual framework*. Available at: https://www.sasb.org/wp-content/uploads/2020/02/SASB_Conceptual-Framework_WATERMARK.pdf. Accessed 19 Nov 2021.
- SASB. (2017b). *Sustainability accounting standards. Proposed changes to provisional standard. Exposure Draft*. Available at: https://www.sasb.org/wp-content/uploads/2017/09/ResourceTransformation-BasisForConclusions.pdf?__hssc=105637852.4.1536182979365&__hstc=105637852.f338dd03b569b950ae8146ee310e6bb9.1536083469909.1536168348787.1536182979365.8&__hsfp=3969827736&hsCtaTracking=0f5d088fb6d5-4cf1-a59a-839eda51e388%7C4a93996d-7171-4860-a37a-bef6cf862acd. Accessed 19 Nov 2021.
- SASB. (2020). *SASB website*. Available at: <https://www.sasb.org>. Accessed 17 Feb 2020.
- Searcy, C., & Buslovich, R. (2014). Corporate Perspectives on the Development and Use of Sustainability Reports. *Journal of Business Ethics*, 121, 149–169. <https://doi.org/10.1007/s10551-013-1701-7>.
- TCFD. (2015). *Press release: FSB to establish Task Force on Climate-related Financial Disclosures*. Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2016/01/12-4-2015-Climate-change-task-force-press-release.pdf>. Accessed 18 Feb 2020.
- TCFD. (2017a). *Press Release: Final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) help companies disclose climate-related risks and opportunities efficiently and effectively*. Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/Press-Release-Final-TCFD-Recommendations-Report-Release-29-June-2017-FINAL-IMMEDIATE-RELEASE-UPDATED-SUPPORTERS-LINK.pdf>. Accessed 18 Feb 2020.
- TCFD. (2017b). *Recommendations of the task force on climate-related financial disclosures*. Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf>. Accessed 18 Feb 2020.
- TCFD. (2017c). *Technical supplement: The Use of Scenario analysis in disclosure of climate-related risks and opportunities*. Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Technical-Supplement-062917.pdf>. Accessed 18 Feb 2020.
- UNGC. (2010). *Press Release: GRI and UN global compact forge new alliance*. Available at: <https://www.unglobalcompact.org/news/50-06-24-2010>. Accessed 18 Feb 2020.
- UNGC. (2013). *UN global compact policy on communicating progress*. Available at: https://www.unglobalcompact.org/docs/communication_on_progress/COP_Policy.pdf. Accessed 17 Feb 2020.
- UNGC. (2019). *Basic guide. Communication on progress*. Available at: https://www.unglobalcompact.org/docs/communication_on_progress/Tools_and_Publications/COP_Basic_Guide.pdf. Accessed 17 Feb 2020.
- van Bommel, K. (2014). Towards a legitimate compromise? *Accounting, Auditing & Accountability Journal*. <https://doi.org/10.1108/AAAJ-04-2013-1309>.
- Vives, A. (2016). *Is competition between sustainability reporting standards healthy?* *TriplePundit.com*. Available at: <https://www.triplepundit.com/story/2016/competition-between-sustainabilityreporting-standards-healthy/25526>. Accessed 19 Nov 2021.

Sustainability Reporting Quality

- [CSR Disclosure Quality: Role of NEDs](#)

Sustainability Reporting Standards

- [Auditing and Sustainability](#)
- [Sustainability Reporting Guidelines](#)

Sustainability Resilience

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Definition

The term resilience (from the Latin “resiliens-entis” and has the meaning of “bouncing”) takes on different meanings based on the context within which it is used. Often this term is used in engineering, psychology, computer science, and biology. When we talk about resilience in biology, the term describes a body’s ability to self-repair after suffering damage and returning to its original state. In natural environments, it is the ability of ecosystems to restore their initial state, or create a new equilibrium, after a shock.

Introduction

Resilience is defined by scholars as “the speed with which a community, an ecological or socioeconomic system returns to their initial state, and they do so by innovating, after having been subjected to a shock, caused by natural events or anthropogenic activities” (Mezzi and Pelizzaro). The difference between resilience and

sustainability is that sustainability seeks a new balance between man and planet while resilience acts in a reality that is not in balance (Zolli 2012). The current climate changes place human civilization in front of a great crossroads. The development model applied globally in the last two centuries has had a negative impact on the ecosystem balance of the planet. Today the challenge that humans are called to collect as a human community is to transform the current development model into a model capable of being sustainable and of repositioning the environment and nature at the center of global policies.

In this global context, resilience is part of the environmental sphere. Among the interests of the studies, man becomes a reality by trying to solicit political institutions to find solutions to prevent damage and to structure adaptation programs that provide a great deal of opportunity in all situations to restore a negative pre-event balance.

Strong heat waves, sudden “water bombs,” floods, exploitation and waterproofing of the soil, advanced deserts, deforestation, and melting of glaciers and arctic poles are some of the biggest problems that endanger natural ecosystems and same human civilization.

For this reason, it is fundamental to succeed in the near future in finding solutions capable of remedying these dangers while safeguarding the Earth’s homeostasis.

The Value of Resilience

Johan Rockström, one of the fathers of resilience, along with a team of 26 other scientists, described the Earth as a dynamic system that has multiple states of equilibrium and its resilience. Rockström developed the “the quadruple squeeze,” that is, it identified four stress factors strongly linked to resilience: the human population growth, the climate change, the decline of ecosystems, and the “surprise” factor, which is part of the unpredictability of events (Rockström and Karlberg 2010).

Rockström and his team have also tried to outline real “planetary boundaries” in which

humanity is all within sustainable development. The insurmountable boundaries traced by the team are nine: the rate of biodiversity loss, the level of ocean acidification, the rate of land exploitation, the rate of consumption of freshwater, the level of ozone in the atmosphere, the economic change, the level of chemical pollution, the balance in the nitrogen and phosphorus cycles, and the amount of atmospheric particulate. Since the 1960s of the last century, we have crossed the border of the cycle while in the 1990s that of climate change and the loss of biodiversity while others are getting closer to being overcome.

Nature, in addition to being a physical universe, is the set of delicate balances in which flora and fauna coexist completely interconnected together, adapting to atmospheric and climatic conditions.

The human being, since its appearance on earth, has always had an impact on nature by changing the environment in which it carried out its activities. Its impact on ecosystems has been growing over the centuries up to the last two centuries, with the two industrial revolutions, the advent of the oil age, globalization, and the world population growth, accelerating the exploitation of resources and creating significant changes to ecosystems, damaging their delicate balances even irremediably.

The speed with which this crisis has arisen derives from the model of human development which, in search of growth and consumption without limits, has not taken into consideration the natural cycles and the real capacity of renewable resources to regenerate. Furthermore, the continuous exploitation of nonrenewable resources, with products that quickly become waste, will generate their exhaustion in ever-faster times. The damage, therefore, and the stress that man causes to ecosystems mean that a change of course concerning the current development model is fundamental.

World population growth over the last 100 years has been very important and has reached updated levels (Livi Bacci 2016). In 1800 there were about 1 billion inhabitants on

Earth. On the eve of 2000, this number grew to around 6 billion inhabitants, and the estimated number is still growing by 2050 when about 9 billion inhabitants will be counted on Earth. This growth was possible thanks to the improvement in the quality of life, medical discoveries, and the “Green Revolution” in agriculture. However, current population growth is not sustainable in the long run from the limited resources of our planet.

The NGO “Global Footprint Network,” analyzing the data in its possession, tells that in the last 70 years, the “Overshoot Day,” that is the day on which the human being ends the world natural resources produced by the Earth in a year, is always registered before the expiration of a period of 365 days.

The broader concept of resilience understood as the speed with which a community, an ecological system, returns to its initial state by innovating after a shock due to natural causes fits into this context. Resilience has three key dimensions that characterize it:

1. The bounce
2. Adaptation to variability and uncertainty
3. Positive transformation

The first dimension, or “*bouncing*,” refers to the narrower meaning of resilience. A body that has received a shock regains stability and returns to its initial state. Today, this concept should be implemented within human communities. As a crisis, an environmental disaster, a shock, they hit the community; it must react to the shock until it returns to a situation of pre-shock balance. However, this scenario is not yet achievable with the same capacity by all the communities that live on our planet. In the reports that the IPCC, Intergovernmental Panel on Climate Change, periodically presents to the global political community, it is highlighted how the climatic changes caused by man will not have a homogeneous impact on the entire human race. The richer communities will cope with more resources and technologies to extreme events than the planet’s indigenous and poorest populations. The latter will pay the

highest price if nothing is done to stop the global climate crisis.

The *adaptation to variability and uncertainty*, then, brings with it the idea of structuring and planning political actions toward higher attention to the risks to which extreme weather events subject communities (Pelling 2011). There is the talk of adaptation plans to deal with environmental crises in rural, agricultural, and above all, due to the high concentration of people, citizens. Cities are today the main center of attention of resilience scholars. In their construction and the thought of their development, the attention necessary to limit crises is too often missed. Suffice it to say that in the face of extreme events such as water bombs, the streets of our cities often become real rivers, which in the case of heat waves, at risk is the health of the weakest people.

In the recent past, there have been many initiatives to share good practices of urban resilience (Coppola 2016). 100 resilient cities is an organization dedicated to helping cities around the world to become more resilient and to respond to environmental, social, and economic questions. In the same way, the ICLEI – Local Governments for Sustainability, an international association of local services, has managed a program that focuses on urban adaptation mitigation issues.

The last dimension is that of *real change*, the positive transformation that resilience must bring within human communities. We are now talking more and more about “ecological transition” when we want to define the new path that many companies, communities, and institutions have begun to follow to implement concrete actions in contrast to climate change. The C40 Cities climate leadership group network is the most important and largest network of cities committed to combating climate change and reducing greenhouse gases. In its 10 years of life, it has brought together the largest cities in the world by bringing their mayors into contact and providing services in six areas of activity: adaptation and water; power; finance and economic development; waste management; urban planning and development; and transport.

Key Issues

Climate changes, vulnerability, uncertainty, extreme weather events, melting of glaciers and sea level rise, exploitation of resources, pollution, heat islands, absence of public green, soil sealing, degradation and abandonment, construction and building abuses, and neglect of the territory are all problems that the communities all over the world will face soon.

Future Directions

The study of resilience already brings an important set of proposals and policies that try to change the existing reality. “Ecological” resilience is intertwined with “social” resilience. Scholars hope that in the coming years, new ideas will always come out of the in-depth analysis of the systems and their interconnection to enable science and politics to give ever-better answers to environmental problems. The challenge of those who will seek the right path to combat climate change, with the objective of achieving a true ecological transition as soon as possible, will increasingly be able to deal with stressors and shocks. It will ask to reduce the factors that make a community vulnerable and to reduce the fear of uncertainty, increasing adaptation and securing territories and cities. Many technological tools are already available in many countries. A large influx of technological innovation is expected in the near future from developing countries as they are often victims of extreme events, even of a catastrophic nature.

Communities will have to build a real “resilient mentality.” Psychologists, neuroscientists, and sociologists are already working to study and discover factors of resilience in the field of human relations, of the human being in itself, and in the relationship with others. It counts in being resilient the network of people to which we refer, to the lifestyle that takes place, at the cultural level, and to religious affiliation (Ungar

2011). Resilience in psychology recalls an individual's ability to positively overcome traumatic events. Social and ecological resilience will be the basis of future policies.

Summary

Resilience is the ability of a body to return to a state of equilibrium after suffering a strong disturbance. With climate change underway, with extreme weather events increasingly frequent, scholars have begun to apply this concept to the study of ecosystems. Soon it will be important to try to apply policies to adapt to climate change, as well as sustainable development, to reduce the risk and the situation of vulnerability experienced by many territories around the world. The human being must therefore apply a concept of “ecological resilience” intertwined with that of “social resilience”.

Cross-References

- [Climate Change](#)
- [Sustainability and Vulnerability](#)

References

- Coppola, A. (2016). *Cambiamento climatico, resilienza e politiche urbane*. Italiani Europei
- Livi Bacci, M. (2016). *Storia minima della popolazione del mondo*. Il Mulino: Quinta edizione.
- Mezzi, P., & Pelizzaro, P. (2016). *La città resiliente – Strategie e azioni di resilienza urbana in Italia e nel mondo*. Altra Economia Soc. Coop: Milano.
- Pelling, M. (2011). *Adaptation to climate change – From resilience to transformation*. Oxtom: Routledge.
- Rockström, J., & Karlberg, L. (2010). *The quadruple squeeze: Defining the safe operating space for freshwater use to achieve a triply green revolution in the Anthropocene*. New York: Springer.
- Ungar, M. (2011). *The social ecology of resilience, social ecologies and their contribution to resilience* (pp. 13–31). New York: Springer.
- Zolli, A. (2012). Learning to Bounce back. *New York Times*. https://www.nytimes.com/2012/11/03/opinion/forget-sustainability-its-about-resilience.html?pagewanted=all&_r=1&

Sustainability Risk

- [Social Risk](#)

Sustainability Science

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Synonyms

[Sustainable development](#); [Sustainability](#)

Definition

Sustainability science is an academic discipline focusing on understanding complex social-ecological systems in order to enhance solutions-oriented decision-making and the ability of institutions and citizens to pursue a sustainable future for human and nonhuman entities that interact with each other.

Evolution of Sustainability Science

Sustainability science is a growing branch of science. The evolution of sustainability science began 20 years ago as a solution proposed by the scientific community to better understand cross-disciplinary boundaries in tackling global sustainability issues such as climate change. The notion of sustainability science was established as an international science policy project during the World Summit on Sustainable Development in 2002. It announced a shared vision of bringing

together different branches of science for reaching sustainability and consolidating the bond between science and society (Clark and Dickson 2003; Jäger 2009).

Three priority themes formed the basis for the evolution of sustainability science: (a) developing a research frame for sustainable development, drawing on a planetary point of view to create a shared understanding of the interconnectedness of society and environment; (b) carrying out targeted research on the understudied key questions that are critical for gaining a deeper understanding of the interconnectedness; and (c) linking knowledge to action for achieving transformative change toward sustainability (National Research Council 1999).

There are two orientations to sustainability science: environmental and developmental (Bettencourt and Kaur 2011). Kates et al. (2001) determined the basis for sustainability science by specifying three targets: (a) exploring the interactive system between the human and nonhuman worlds; (b) guiding human and nonhuman interactions; and (c) promoting individual, social, and institutional learning to navigate the transition to a sustainable future. Taking a more detailed look, ten fields of sustainability-related research were identified through meta-analysis. The human dimension of research included economic development, health, and lifestyle. The nonhuman world was presented by climate, biodiversity, agriculture, energy and resources, fishery, forestry, and water. These provided the foundation for a research framework for the following aspects of sustainability science, “goal setting, indicator setting, indicator measurement, causal chain analysis, forecasting, backcasting, and problem–solution chain analysis” (Kajikawa 2008, 231). Thus, one of the core questions of sustainability science is “How can the dynamic interactions between nature and society be better subsumed into emerging models and conceptualizations that integrate the Earth system, human development, and sustainability?” (Kates et al. 2001, 642).

Currently, sustainability science is based on understanding of systemic and transformative societal change to achieve the 17 sustainable development goals of the United Nations Agenda

2030 (UNESCO 2018). Smith et al. (2018) call for a “deep interdisciplinarity and transdisciplinary to support the indivisibility and universality of sustainable development” accordance with the sustainable development goals of Agenda 2030. According to Schneider et al. (2019), the scientific community willing to take on Agenda 2030 as a leading guideline should address the following tasks: (a) reflecting on the values, (b) elaborating how values are linked to activities, and (c) finding a common value-basis for sustainable futures. By doing so, the scientific community improves accountability and clarifies its ethical and epistemic basis.

Research in sustainability science combines human and nonhuman reality in order to understand complex social-ecological dynamics on local and global level (Miller et al. 2014). The field of research is administered by contributions from various disciplines and researchers with different world views, values, and paradigms. Thus, the concept of sustainability remains elusive, and its nature seems mostly indistinct (Joon and Oki 2011, 247). In this sense, sustainability science may be appropriately described as a meta-discipline, like the environmental studies in the 1980s (Caldwell 1983).

Comparing Different Approaches to Sustainability

Barriers to sustainability transformations often exist due to “complexity, uncertainty, and contested values” (Funtowicz and Ravetz 1993; also Rittel and Webber 1973). Interdependencies between human and nonhuman reality underscore the need for systems thinking. Systems thinking is associated with a holistic worldview. A person with a holistic worldview is able to interpret the world as an integrated whole rather than as a collection of individual pieces (Capra 1996). According to Capra (ibid.), the systems approach is a new paradigm in modern science. It is possible for the systems approach to become a science because “there is approximate knowledge,” which means that there are limitations in every scientific concept (Capra 1996, 41).

The concept of sustainable development is based on the idea of balancing environmental, social, and economic dimensions in research (O'Connor and Kenter 2019). In a decision-making situation, however, balancing of the dimensions in cases of trade-offs or conflicts is difficult. As a result of balancing, a sustainability transformation may result to *weak sustainability*. It prioritizes short-term well-being, well-being of nation, and linear economy. If we view the case from a scientific point of view, the vital ecosystem services provided by nature are essential for mankind's survival. The concept of *strong sustainability* assumes that the natural environment – as the basis for biodiversity and human and social well-being – is of primary and intrinsic value in sustainable development. In order to have a fair, efficient, and thorough transition to a sustainable future, Neumann et al. (2017) suggested that “an applicable and detailed concept of strong sustainability should be developed that holds for all natural capitals addressed in the 2030 Agenda and guides the implementation process ahead.” In other words, decision-making, policies, consumption habits of citizens, and any kind of human actions in accordance with the idea of strong sustainability should maintain, in the following order: first, diverse life; second, social justice; and third, a robust economy that is instrumentally valuable (Barry 2002; Bauman 2008; Hediger 1999; Kidder 1995; Marshall and Toffel 2005; Ott 2003). This could also be a question of temporal, regional, and material orientations, as demonstrated in Table 1.

Solutions that are in accordance with a strong sustainability approach thus prioritize long-term well-being over short-term well-being, planetary well-being over national well-being, and circular economy over linear economy.

Future Directions

Sustainability science helps us rise to the great environmental and developmental challenges of our time (Kates 2011). In this planetary transformation, the role of values and visions is essential. A key question is what *values* are related to wicked sustainability problems that societies face around the world. More specifically: What kinds of values are associated with a sustainable future and how can they be activated in a local and global level? And what are viable *visions* for sustainable future accordance with the Agenda 2030 and how do these visions translate into action? (Miller et al. 2014; Horcea-Milcu et al. 2019.) As an example, Society's Commitment to Sustainable Development (2016) shares a vision of the Finland we want by 2050, “A prosperous Finland with global responsibility for sustainability and the carrying capacity of nature.”

How have *socio-technical changes* been navigated in the past, and what strategies, tactics, and interventions could be promising in the future (Miller et al. 2014)? The Antarctic ozone hole is one of the most visible human impacts on the Earth. Since the implementation of the Montreal Protocol, research has shown that levels of ozone-destroying chlorine are declining, resulting in less ozone depletion (Strahan and Douglass 2018). The recovery of the ozone hole can now be seen as a success story of sustainability science, politics, and international cooperation (Sachs 2008, 113–114).

Values, visions, and socio-technical changes are a basis of the sustainability transformation which refers to the cultural evolution. In the future, solution-oriented research could be further emphasized in sustainability science (Sarewitz et al. 2012; Wiek et al. 2012). Further research

Sustainability Science, Table 1 Applying the concept of strong sustainability versus weak sustainability (adapted from Salonen and Hakari 2018)

	Strong sustainability	Weak sustainability
Temporal orientation	Long-term Well-being	Short-term Well-being
Regional orientation	Planetary Well-being	Well-being of nation
Material orientation	Circular economy (cradle-to-cradle)	Linear economy (cradle-to-grave)

could therefore be driven by the question of how citizens, society, and institutions can adjust their visions toward sustainable futures and implement just socio-technical change to achieve these ends. In order to support sustainability transformation, according to Miller et al. (2014), sustainability science can: (a) enrich the role of values in decision-making process; (b) support individuals, institutions, and societies in pursuing sustainability; (c) foster socio-technical transition (for example, in consumption and production); and (d) promote lifelong learning for education for sustainable development (Miller et al. 2014).

Continuous *learning* in society is at the center of a sustainable future. Phenomenon-based learning may be a way forward for facilitating transdisciplinary education in society (Lehtonen et al. 2018). According to UNESCO (2018), understanding of how transformative actions occur is the core of capacity building in a society. It is based on intertwined planetary reality. For example, peace is a question of social harmony and justice (Galtung 1969). Peace and sustainable development are closely tied to processes of globalization and socio-economic development. There is also an evident need to research the interconnectedness of sustainability and peace in the context of sustainability science.

Sustainability science is a solution-based interdisciplinary field of research. It deals with the deep systematic changes that are needed to meet the needs of present and future generations while building inclusive societies and conserving the planet's life-support systems. These changes permeate every dimension of society and touch the values and ways of every human life.

Cross-References

- [Agenda 2030](#)
- [Climate Change](#)
- [Education for Sustainable Development](#)
- [Sustainable Development](#)
- [Sustainable Development Goals \(SDGs\)](#)
- [Sustainable Development Goals \(UN Global Goals\)](#)

- [Sustainable Transition](#)
- [Systemic Transition](#)
- [Transition Sustainability](#)
- [United Nations Agenda 2030 on Sustainable Development Goals, The](#)

References

- Barry, J. (2002). The ethical foundations of a sustainable society. In T. Fitzpatrick & M. Cahill (Eds.), *Environment and welfare* (pp. 21–42). New York: Palgrave Macmillan.
- Bauman, Z. (2008). *Does ethics have change in a world of consumers?* Cambridge: Harvard University.
- Bettencourt, L., & Kaur, J. (2011). Evolution and structure of sustainability science. *PNAS*, 108(49), 19541.
- Caldwell, L. K. (1983). Environmental studies: Discipline or metadiscipline? *The Environmental Professional*, 5(3/4), 249–259.
- Capra, F. (1996). *The web of life. A new scientific understanding of living systems*. New York: Doubleday.
- Clark, W. C., & Dickson, N. M. (2003). Sustainability science: The emerging research program. *PNAS*, 100(14), 8059–8061.
- Commission on Sustainable Development. (2016). *The Finland we want by 2050 — Society's commitment to sustainable development*. Helsinki: Prime Minister's Office.
- Funtowicz, S., & Ravetz, J. (1993). Science for the post-normal age. *Futures*, 25(7), 739–755.
- Galtung, J. (1969). Violence, peace, and peace research. *Journal of Peace Research*, 6(3), 167–191.
- Hediger, W. (1999). Reconciling 'weak' and 'strong' sustainability. *International Journal of Social Economics*, 26(7/8/9), 1120–1144.
- Horcea-Milcu, I. A., Abson, D. J., Apetrei, C., Duse, I. A., Freeth, R., Riechers, M., Lam, D. P., Dorminger, C., & Lang, D. J. (2019). Values in transformational sustainability science: Four perspectives for change. *Sustainability Science*, 14(5), 1425–1437.
- Jäger, J. (2009). The governance of science for sustainability. In W. N. Adger & A. Jordan (Eds.), *Governing sustainability* (pp. 142–158). Cambridge: Cambridge University Press.
- Joon, K., & Oki, T. (2011). Visioning: An essential framework in sustainability science. *Sustainability Science*, 6(2), 247–251.
- Kajikawa, Y. (2008). Research core and framework of sustainability science. *Sustainability Science*, 3(2), 215–239.
- Kates, R. (2011). What kind of a science is sustainability science? *PNAS*, 108(49), 19449–19450.
- Kates, R., Clark, W., Corell, R., Hall, J., Jaeger, C., Lowe, I., McCarthy, J., Schellnhuber, H., Bolin, B., Dickson, N., Faucheux, S., Gallopin, G., Grubler, A., Huntley, B., Jäger, J., Jodha, N., Kaspersen, R., Mabogunje, A.,

- Matson, P., Mooney, H., Moore, B., O’Riordan, T., & Svedin, U. (2001). Sustainability science. *Science*, 292 (5517), 641–642.
- Kidder, R. (1995). *How good people make tough choices: Resolving the dilemmas of ethical living*, 2nd edition 2009. London: Harper.
- Lehtonen, A., Salonen, A., Cantell, H., & Riuttanen, L. (2018). A pedagogy of interconnectedness for encountering climate change as a wicked sustainability problem. *Journal of Cleaner Production*, 199(20), 860–867.
- Marshall, J., & Toffel, M. (2005). Framing the elusive concept of sustainability: A sustainability hierarchy. *Environmental Science & Technology*, 39(3), 673–682.
- Miller, T., Wiek, A., Sarewitz, D., Robinson, J., Olsson, L., Kriebel, D., & Loorbach, L. (2014). The future of sustainability science: A solutions-oriented research agenda. *Sustainability Science*, 9, 239–246.
- National Research Council. (1999). *Our common journey: A transition toward sustainability*. Washington, DC: The National Academies Press.
- Neumann, B., Ott, K., & Kenchington, R. (2017). *Sustainability Science*, 12, 1019. <https://doi.org/10.1007/s11625-017-0472-y>.
- O’Connor, S., & Kenter, J. (2019). Making intrinsic values work; integrating intrinsic values of the more-than-human world through the life framework of values. *Sustainability Science*, 14(5), 1247–1265.
- Ott, K. (2003). The case for strong sustainability. In K. Ott & P. Thapa (Eds.), *Greifswald’s environmental ethics* (pp. 59–64). Greifswald: Steinbecker Verlag.
- Rittel, H., & Webber, M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155–169.
- Sachs, J. (2008). *Common wealth. Economics for a crowded planet*. New York: Penguin Press.
- Salonen, A., & Hakari, S. (2018). Early childhood educators and sustainability: Sustainable living and its Materialising in everyday life. *Utbildning & Demokrati*, 27(2), 81–102.
- Sarewitz, D., Kriebel, D., Clapp, R., Crumbley, C., Hoppin, P., Jacobs, M., & Tickner, J. (2012). The sustainability solutions agenda. *New Solutions*, 22(2), 139–151.
- Schneider, F., Kläy, A., Zimmermann, A. B., Buser, T., Ingalls, M., & Messerli, P. (2019). How can science support the 2030 agenda for sustainable development? Four tasks to tackle the normative dimension of sustainability. *Sustainability Science*, 14(6), 1593–1604.
- Smith, M. S., Cook, C., Sokona, Y., Elmqvist, T., Fukushima, K., Broadgate, W., & Jarzebski, M. P. (2018). Advancing sustainability science for the SDGs. *Sustainability Science*, 13(6), 1483–1487.
- Strahan, S. E., & Douglass, A. R. (2018). Decline in Antarctic ozone depletion and lower stratospheric chlorine determined from Aura microwave limb sounder observations. *Geophysical Research Letters*, 45(1), 382–390.
- UNESCO (2018). A UNESCO position paper on the future of Education for Sustainable Development (ESD). Revised draft after Technical Consultation Meeting on the Future of ESD, 9–10 July 2018, Bangkok, Thailand.
- Wiek, A., Ness, B., Brand, F. S., Schweizer-Ries, P., & Farioli, F. (2012). From complex systems analysis to transformational change: A comparative appraisal of sustainability science projects. *Sustainability Science*, 7(1), 5–24.

Sustainability Scorecard

► Balanced Scorecard and Sustainability

Sustainability Standards and Standardization

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Synonyms

Frameworks; Guidelines; Standardization

Definition

Standards can be defined as predefined rules and procedures for organizational behavior with regard to issues that are usually not required by law. In general, standards are voluntary in nature, meaning that organizations have the discretion to adhere to standards or not. Standards can hence be seen as a form of self-regulation or “governance beyond government,” and this form of governance has gained much traction in recent years. Although not without critique, scholars, policymakers, and business leaders have recognized standards as a key instrument for effectively dealing with some of the world’s most pressing social and ecological challenges. From the perspective of companies, standards may function as an instrument that guides them in implementation

challenges, as a way to enhance the credibility of their claims, in benchmarking their performance and in communicating with stakeholders, among other functions. In the realm of corporate social responsibility (CSR) and sustainability, issues covered by standards encompass social and/or environmental issues, such as those reflected by the Sustainable Development Goals. Prominent examples of CSR standards include ISO 26000, United Nations Global Compact, Global Reporting Initiative, and SA 8000 and the AA 1000 standards series.

A World of Standards

The functioning of our modern world largely relies on standards. Standards can be defined as predefined rules and procedures for organizational behavior with regard to issues that are usually not required by law. They represent agreements of, shared interpretations on, and platforms for the self-regulation of organizations. Although organizations may in certain cases be required to adhere to one or more standards, many standards are voluntary in nature, meaning that organizations have the discretion to adhere to standards or not. Standards can hence be seen as a form of self-regulation by non-state actors or as “governance beyond government,” providing order without law (Terlaak 2007a). This does not imply that public organizations are categorically excluded from standards, whether it be standard setting, promoting standards, or adopting standards themselves. In fact, as forms of public-private governance, voluntary standards involving governments, non-governmental organizations, and businesses have gained much traction in recent years. Scholars, policymakers, and business leaders alike have recognized that private governance and public-private governance are key for effectively dealing with some of the world’s most pressing social and ecological challenges, notably those reflected by the Sustainable Development Goals. Hence, in the realm of corporate social responsibility (CSR) and sustainability, the use of standards is ubiquitous

among companies, addressing issues in the social and/or environmental domain. Some of the more well-known examples of such standards are ISO 26000, United Nations Global Compact, Global Reporting Initiative, and SA 8000 and the AA 1000 standards series. While these standards vary in type and have different characteristics, companies may also use standards for different reasons.

Function of (and Reasons for Using) Standards

Standards have received a lot of attention from scholars or organization science over the past decade. Academics have conceptualized and commented on their roles and functions from various theoretical lenses. According to Brunsson et al. (2012), from the perspective of organization studies, standards can be seen to contribute to the standardization of organizations, to be the result of standardization by organizations, and to refer to standardization as (a form of) organization. It is through standards and standardization (also in terms of the organization capacity of the human psyche) that people and organizations get to grips with the complexities and refraction of reality (Balzarova and Castka 2012).

Within these broad and abstract formulations of the goals and functions of standards, standards have been theorized to have several more specific functions for organizations, and indeed there are many reasons for organizations to adopt standards. From the overall goal of standardization efforts to enable reaching consensus on solutions that meet the requirements of business as well of the broader needs of society, standards can assist organizations in making legitimate sense of tangled problems, contested concepts, and multifaceted issues. Standards may hence serve a useful purpose in enabling organizations to interpret give meaning to their environment and their relationships to it, to structure their operations, to develop and implement policies, and to standardize strategic management processes (e.g., Rasche 2011; Hahn 2012). This function of standards may especially be useful in the context of CSR, which has

been dubbed as an essentially contested concept and lacking universal description (Okoye 2009).

Perhaps more importantly, the context of CSR standards may function as an indispensable signalling device for addressing problems related to the relative unobservability of a firm's CSR quality, understood as a firm's CSR commitments, actions, and performance (Johnston 2006; Terlaak 2007b; Perez-Batres et al. 2012). Through the reduction of information asymmetries that are inherent to CSR since stakeholders have de facto a different information position than the firms communicating about CSR, standards can assist in the interpretation and assessment of companies' CSR quality. As standards provide a common language and carry a legitimizing function, they can also function as a strategy to enhance the credibility of the CSR claims of companies (Castka and Balzarova 2008; Mueller et al. 2009; Mijatovic and Stokic 2010; Pflugrath et al. 2011; Delmas and Cuere-Burbano 2011). As an extension of this, standards may function as a platform for stakeholder dialogue, providing companies and their stakeholders an opportunity to and guidance in interacting about the issues they deem important and that demonstrate where their interest overlap (cf. Pedersen 2006). Also, through CSR standards, companies may differentiate themselves from competitors and secure legitimacy in their struggle for survival (Miles and Munilla 2004; Rasche 2011).

From a more practical point of view (see Moratis 2016), empirical research has shown that the most important functions of standards in corporate practice are to address the variety of CSR-related demands and expectations toward companies in a uniform and efficient way. Standards hence provide companies with an opportunity to "streamline" their relationships with society as a whole and their stakeholders. In addition, companies tend to view the function of standards as serving as a general point of reference or inspirational document for the development and implementation of CSR policies as important, while using standards as a differentiating strategy is not seen as important.

Types of Standards

The large number of standards, particularly in the CSR domain, that have surfaced over the past two decades does not make it easy to oversee the field. Against this background, it is useful to endeavor to classify the wide variety of standards. Rasche (2011) distinguishes between three different types of CSR standards: (1) principle-based standards, outlining broadly defined principles that are supposed to assist firms in reflecting on CSR (e.g., United Nations Global Compact); (2) reporting-based standards that outline performance indicators that companies can report on and that enable assessment against others (e.g., Global Reporting Initiative); and (3) certification standards that predefine compliance targets and compare a company's performance against these targets through audits (e.g., SA 8000).

While many standards fall within this categorization, it ignores the fact that usefully classifying standards can be based on other characteristics. For instance, it seems relevant to distinguish between internal standards and external standards, the former relating to self-defined standards (e.g., codes of conduct) while the latter relating to standards that have been developed by external, independent parties. Also, there is a difference between so-called management standards that particularly assist companies in implementation issues in very structured ways, usually concerning a certification element (e.g., ISO 14001), and guidance-oriented standards that merely provide suggestions for companies to address issues that are not suited for certification (e.g., ISO 26000). In the field of CSR, an important difference can be made between comprehensive CSR standards that aim to cover the entire range of CSR-related topics and issue-based standards which concentrate on one or sometimes a few closely related topics. Also, an important difference when looking at standards is whether they are first party (i.e., the company itself), second party (i.e., a certification organization paid for by the company), or third party (i.e., a stakeholder) audited or certified. The independence of the auditing or certification process may relate to

the perceived credibility of a company's CSR claims.

It should be noted that many competing standardization schemes have come into existence over the past years and that different versions of standards (or standards within a standards series) have been developed as well as new standards (with slightly different characteristics), having been modelled on an original standard. This has led to a marketplace for standards, allowing companies to "shop" and opportunistically choose between standards that are for the larger part similar when it comes to their contents but differ in legitimacy based on the organization(s) that developed the standard.

Critique

It should be noted that, despite their potential and widespread use, CSR standards are at the same time subjected to critique and even disdain. Adhering to such standards has been argued to represent a corporate strategy of abdicating rather than assuming responsibility – and to the extent it is viewed as a legitimate way for organizations to take responsibility, it has been dubbed a superficial way. Sceptics tend to conceive of standards as fig leaves and claim to witness many firms opting for low-exigency standards. Such corporate behavior would illustrate symbolic CSR implementation at worst and selective CSR implementation at best (Christmann and Taylor 2006; Mueller et al. 2009), compromising the degree to which standards reflect a firm's actual CSR quality. From a corporate communications point of view, standards may thus not improve the credibility of corporate CSR claims and not reflect the actual CSR quality of firms but rather be considered as a symbol of corporate greenwashing and the deceiving of stakeholders (cf. Laufer 2003; Ramus and Montiel 2005; Marquis and Qian 2014). Sceptics may also argue that CSR cannot be standardized as it is a too normatively oriented concept of which the value resides in idiosyncratic interpretations of the concept by individual firms that develop and vary over time.

Summary

Standards and standardization have important functions in both daily and organizational life. In the context of sustainability, too, standards and standardization are essential to guide and govern the behavior of organizations. This entry aims to enhance the understanding of sustainability standards and standardization through defining them, identifying their functions, suggesting a typology, and providing a brief critique.

Cross-References

- ▶ AA1000 Series of Standards, The
- ▶ Auditing and Sustainability
- ▶ BS8001 Circular Economy Standard
- ▶ Business Compliance Initiatives
- ▶ CERES Principles
- ▶ Compliance Management System
- ▶ Corporate Social Responsibility Reporting
- ▶ EMAS: Eco-Management and Audit Scheme
- ▶ Embedded CSR
- ▶ Embedded Sustainability
- ▶ Environmental Compliance Audit
- ▶ Environmental Report Following GBS Standard
- ▶ Fair Trade
- ▶ Integrated Reporting
- ▶ Integrated Reporting for Sustainability
- ▶ ISO 14000 Standards Series
- ▶ ISO 14001 Standard
- ▶ ISO 20121 Standard (Event Sustainability)
- ▶ ISO 26000 Standard
- ▶ ISO 31000: Risk Management Guidelines
- ▶ ISO 37001 Anti-bribery Management Systems
- ▶ ISO 9000
- ▶ ISO19600 Compliance Management Systems
- ▶ Management Accounting and Sustainability
- ▶ Nonfinancial Disclosure
- ▶ Occupational Safety and Health Administration
- ▶ OECD Guidelines for Multinational Enterprises
- ▶ OECD Guidelines for SMEs
- ▶ OECD Principles of Corporate Governance
- ▶ SA8000 Standard

- Social Accountability International (SAI)
- Social Accounting
- Social Auditing
- Sustainability Accounting Standards Board (SASB)
- Sustainability Management and Reporting
- Sustainability Management Process
- Sustainability Measurement
- Sustainability of Waste Management System: Environmental Impact Management with Life Cycle Assessment
- Sustainability of Waste Management System: Treatment and Separation for Material Recovery
- Sustainability of Waste Management Systems: Energy Recovery
- Sustainability of Waste Management Systems: Final Disposal
- Sustainability Reporting Guidelines
- UN Guiding Principles on Business and Human Rights
- UN Principles for Responsible Investments (PRI)
- UN Principles on Responsible Management Education
- United Nations Agenda 2030 on Sustainable Development Goals, The
- United Nations Global Compact
- United Nations Human Rights Committee
- United Nations Principles for Responsible Management Education
- United Nations Sustainable Development Goals 2030, The

References

- Balzarova, M., & Castka, P. (2012). Stakeholders' influence and contribution to social standards development: The case of multiple stakeholder approach to ISO 26000 development. *Journal of Business Ethics*, 111(2), 265–279.
- Brunsson, N., Rasche, A., & Seidl, D. (2012). The dynamics of standardization: Three perspectives on standards in organization studies. *Organization Studies*, 33(5), 613–632.
- Castka, P., & Balzarova, M. (2008). Social responsibility standardization: guidance or reinforcement through certification? *Human Systems Management*, 27(3), 221–242.
- Christmann, P., & Taylor, G. (2006). Firm self-regulation through international certifiable standards: Determinants of symbolic versus substantive implementation. *Journal of International Business Studies*, 37(6), 863–878.
- Delmas, M., & Cuere-Burbano, V. (2011). The drivers of greenwashing. *California Management Review*, 54(1), 64–87.
- Hahn, R. (2012). ISO 26000 and the standardization of strategic management processes for sustainability and corporate social responsibility. *Business Strategy and the Environment*, 22(7), 442–455.
- Johnston, J. (2006). *Signaling social responsibility: On the law and economics of market incentives for corporate environmental performance* (Regulatory Policy Program Working Paper RPP-2006-01). Cambridge: Harvard University.
- Laufer, W. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, 43(3), 253–261.
- Marquis, C., & Qian, Q. (2014). Corporate social responsibility reporting in China: Symbol or substance? *Organization Science*, 25(1), 127–148.
- Mijatovic, I., & Stokic, D. (2010). The influence of internal and external codes on CSR practice: The case of companies operating in Serbia. *Journal of Business Ethics*, 94(4), 533–552.
- Miles, M., & Munilla, L. (2004). The potential impact of social accountability certification on marketing: A short note. *Journal of Business Ethics*, 50(1), 1–11.
- Moratis, L. (2016). The (in)credible bulk: The role of CSR standards in enhancing the credibility of corporate CSR claims. In S. Idowu & M. Aluchna (Eds.), *Dynamics of CSR* (pp. 239–263). Berlin: Springer.
- Mueller, M., Dos Santos, V., & Seuring, S. (2009). The contribution of environmental and social standards towards ensuring legitimacy in supply chain governance. *Journal of Business Ethics*, 89(4), 509–523.
- Okoye, A. (2009). Theorising corporate social responsibility as an essentially contested concept: Is a definition necessary? *Journal of Business Ethics*, 89(4), 613–627.
- Pedersen, E. (2006). Making corporate social responsibility operable: How companies translate stakeholder dialogue into practice. *Business & Society Review*, 111(2), 137–163.
- Perez-Batres, L., Doh, J., Miller, V., & Pisani, M. (2012). Stakeholder pressures as determinants of CSR strategic choice: Why do firms choose symbolic versus substantive self-regulatory codes of conduct? *Journal of Business Ethics*, 110(2), 157–172.
- Pflugrath, G., Roebuck, P., & Simnett, R. (2011). Impact of assurance and assurer's professional affiliation on financial analysts' assessment of credibility of corporate social responsibility information. *Auditing: A Journal of Practice & Theory*, 30(3), 239–254.
- Ramus, C., & Montiel, I. (2005). When are corporate environmental policies a form of greenwashing? *Business & Society*, 44(4), 377–414.

- Rasche, A. (2011). Corporate responsibility standards. In M. Painter-Morland & R. Ten Bos (Eds.), *Continental philosophy and business ethics* (pp. 263–284). Cambridge: Cambridge University Press.
- Terlaak, A. (2007a). Order without law: The role of certified management standards in shaping socially desired form behaviors. *Academy of Management Review*, 32(3), 968–985.
- Terlaak, A. (2007b). Satisficing signalling: Corporate social strategy and certified management standards. In *Academy of management best paper proceedings*. Briarcliff Manor: Academy of Management.

Sustainability Strategies

- [Corporate Social Responsibility Strategy](#)

Sustainability Strategy

- [Corporate Sustainability](#)

Sustainability Transition

- [Sustainable Transition](#)
- [Transition Sustainability](#)

Sustainability, Peak Oil

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Synonyms

[Highest global oil production level](#); [Maximum level of crude oil production](#)

Description

In 1956, Marion King Hubbert, studying the trend of US oil reserves and production, elaborated a model and predicted that world production of conventional oil would peak around 2000. According to the Hubbert model, oil production in a large geographical region follows a symmetric, bell-shaped curve, at the top of which the peak is reached; this happens when approximately half of the available oil resources are extracted. Later in the 1990s, a new study about oil depletion was published by two petroleum geologists, and the peak oil issue started to receive a renewed interest around the world. Based on the same Hubbert curve, they predicted that oil production would have reached its peak around 2010 (Bardi 2019).

Even if in 2019 the predicted peak oil has not been reached at global scale yet and we can still count on oil, its supply has become less sustainable because it counts more and more on unconventional oil reserves, which require more expensive, complex, and environmental impacting, extraction, and production processes. The easily accessible and cheap crude oil seems to be in decline.

Introduction

Today, fossil fuels represent the most important global commodities and are essential for all human activities as they supply the majority of the total energy consumed by societies. Oil is the most important energy source in the world, and its main use at the moment is in the transport sector. It must be remarked that oil is not only used as a fuel, but it is also the fundamental raw material for the petrochemical sector which is at the basis of many other downstream industrial sectors, which produce thousand different products, such as plastics, textile fibers, dyes, detergents, drugs, etc. Petrochemical sector seems to be the main source of oil consumption growth. It has been calculated that even if the recycling rate of plastics doubled at global scale, this would result in a reduction of oil demand of 1.5 million b/d, compared to a

forecasted increase of consumption at global scale of five million b/d (IEA 2018).

According to the BP statistics, global oil production rose by 2.2 million b/d in 2018, and almost all of the net increase was accounted for by the USA, considered an absolute record. At the same time, global oil consumption grew by an above-average 1.4 million barrels per day (b/d), equivalent to 1.5%. The largest growth occurred in China (680,000 b/d) and in the USA (500,000 b/d), while important declines occurred in Venezuela (−580,000 b/d) and Iran (−310,000 b/d) (BP 2019).

The increase in oil prices does not reflect directly the scarcity of oil reserves, but it is linked to several technical, political, and economic factors. This is the reason why oil price cannot be used for making predictions about oil resources depletion, and different theories have been elaborated over the years about the peak oil. To predict the time when oil will be no longer available for human activities is very complicated due to the lack of reliable data regarding three aspects: the cumulative production, i.e., the quantity of crude oil which has been extracted until now; the estimate of the amount of oil which can be extracted from known fields; and the quantity of oil which still has to be discovered (Campbell and Laherre 1998).

The Peak Oil Predictions

In the field of fossil fuels studies, one of the most popular names is Hubbert.

Marion King Hubbert proposed his model and predicted the decrease of oil production, basing his assumptions on empirical studies about the production of coal and oil in USA, conducted until the time he presented his work in 1956. He stated that: "...the total amount of oil discovered is the sum of cumulative production and proved reserves. Since this is approaching the peak of the curve, the figure suggests that, even if we are less than half through in our exploration for petroleum, the period of declining rates of discovery has almost arrived" (Hubbert 1956). Hubbert applied his model to the production of oil in

USA and predicted that the production of oil would have reached its peak in 1970, while the production of oil at global scale would have reached its peak around 2000 (Bardi 2019).

Since that moment, a general fear started to circulate at global scale, and many studies were carried out in order to assess the most veritable time in which humanity would have faced the peak oil and then the irreversible decline in oil production. It has been argued later that Hubbert never proposed a theory that should have explained the reasons for his "bell shaped" curve. Many years later, Campbell and Laherrere wrote a paper titled "The end of cheap oil," in which they updated Hubbert's model with new estimates of oil reserves and predicted that the global crude oil production would have reached the peak around 2004–2005 (Campbell and Laherrere 1998).

This study also generated a movement of ideas called the "peak oil movement," followed in 2001 by the birth of the ASPO (Association for the Study of Peak Oil and Gas), constituted by different scientists and researchers, with the aim of studying and sharing knowledge about the peak oil, and alerting, at the same time, about oil scarcity (ASPO 2019).

All these predictions have been demonstrated to be only partially correct, especially because they did not take into account the huge importance that unconventional oil would have reached on the market later on.

The Role of Unconventional Oil

In recent years, the majority of new oil come into production derives from unconventional resources. Conventional oil is extracted through traditional process, based on single wells in which oil flows to the surface, almost naturally, thanks to the difference of pressure with the underground, or through the use of artificial lift mechanisms. A producing system for unconventional oil is instead more complicated, requiring more sophisticated recovery technologies and a completely different production scale (Deutch 2014). Unconventional oil includes: heavy oil, tar sands and

shale, or tight oil (Gordon 2012). All these unconventional sources require special extraction and production processes.

Usually when the price of oil is high, added to the uncertainty about the amount of reserves and the prediction of the peak moment, there is an increase in investments in innovative exploration and extraction techniques, and this in turn makes unconventional oil production competitive.

The annual flow rate of production is usually smaller for unconventional oil than for conventional oil, in addition to hugely capital-intensive nature of the production processes as well as bigger environmental impact (see environmental impact). For example, the hydraulic fracturing technique used to extract tight oil may constitute a risk for fresh water resources pollution; oil sands recovery requires a lot of energy and pollutes a lot of water (Hughes 2011).

For sure, the production of unconventional oil has given the opportunity to expand the global oil supply in the recent years, but this has happened with a substantially higher economic and environmental cost. Furthermore, many scientists agree that these unconventional sources are unlikely to offset the depletion of conventional oil production for long time (Alekklett et al., 2010).

A useful indicator for assessing the cost efficiency in the use of energy sources is the Energy Return on Investment (EROI). It has been calculated that EROI for discovering oil in the USA has decreased from more than 1000:1 in 1919 to 5:1 in the 2010s, and for production from about 25:1 in the 1970s to approximately 10:1 in 2007. Unconventional oil, such as tar sands and shale oil, gives a lower EROI, having a mean EROI of 4:1 and 7:1 (Hall et al. 2014).

Conclusions

Even if the exact date for peak oil is still unknown, we all should start to adopt alternative strategies to preserve oil reserves, to find better alternatives, use oil more efficiently, and save it just for the petrochemical use until we will be able to shift the world dependence from crude oil to biobased materials.

Rather than investing in searching new oil extraction sites, a better and more efficient alternative could be to introduce policies that reduce demand for fossil fuels by encouraging energy conservation and efficiency, using renewable electricity and biofuels (see energy biofuels) in the transport sector, using carpooling (see carpooling) and carsharing, and implementing intelligent traffic management measures. It has been calculated, for instance, that an efficiency improvement in traditional cars can bring a positive effect, in terms of reduction in oil demand, which is three times bigger than that given by 300 million electric vehicles forecasted in 2040 (IEA 2018).

Considerable savings of oil can also come by modal shifts from private vehicles to public transport in the case of passengers, and from road to rail in the case of freight (Wakeford 2012).

Summary

The prosperity and stability of modern society is strictly linked to the production and consumption of energy and especially oil (Tverberg 2012), which is still the world's largest energy source, providing 33% of global primary energy consumption (BP 2018). For this reason, scenarios and projections, regarding the availability of oil reserves, the production costs, and market prices, are very important for decision and policy making. The world has not faced the peak oil yet, and this is due especially to the exploitation of unconventional oil and the exploration activities in difficult geographic areas. So, even if human population can still count on oil supply, what has to be considered is at which conditions this happens. Easy and cheap oil reserves have been exploited already, and what we are using now are reserves of low-quality oil which is more difficult to extract, more pollutant (see pollution), and more expensive to work with; unconventional oil which needs very impacting extraction processes; and oil extracted from new fields discovered through expensive and impacting techniques, as in deep waters. So,

as much as oil production gets closer to its predicted peak, it becomes less and less sustainable.

Cross-References

- [Carpooling](#)
- [Energy Biofuels](#)
- [Environmental Impact](#)
- [Pollution](#)

References

- Aleklett, K., Höök, M., Jakobsson, K., Lardelli, Snowden, S., & Soderbergh, B. (2010). The peak of the oil age. *Energy Policy*, 38(3), 1398–1414.
- ASPO (2019). <https://peak-oil.org>. Accessed 13 September 2019.
- Bardi, U. (2019). Peak oil, 20 years later: Failed prediction or useful insight? *Energy Research & Social Science*, 48, 257–261.
- BP (2019). BP Statistical Review of World Energy 2019.
- Campbell, C. J., & Laherrere, J. F. (1998). The end of cheap oil. *Scientific American*, 80–86.
- Deutch, J. M. (2014). *The global revolution of unconventional oil. New markets, new governances, new policies*. FEEM Press.
- Gordon, D. (2012). Understanding Unconventional Oil. The Carnegie Papers. Energy and Climate May 2012.
- Hall, C. A. S., Lambert, J. G., & Balogh, S. B. (2014). EROI of different fuels and the implications for society. *Energy Policy*, 64, 141–152.
- Hubbert, M.K. (1956). Nuclear energy and the fossil fuels. Publication N. 95 Shell Development Company. Presented before the Spring Meeting of the Southern District, American Petroleum Institute, March 1956.
- IEA (2018). World Energy Outlook 2018.
- Tverberg, G. (2012). Oil supply limits and the continuing financial crisis. *Energy*, 37(1), 27–34.
- Wakeford, J.J. (2012). Implications of global oil depletion for South Africa: vulnerabilities, impacts and transition to sustainability. PhD. dissertation, Stellenbosch University, South Africa.

Sustainable

- [Traditional and New Sustainable Production Methods in Food Industry](#)

Sustainable and Innovation Process

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Synonyms

[Development of innovation](#); [Models of innovation](#); [Steps for innovation](#); [Sustainable Innovation](#)

Definition

The innovation process is related to the way innovation is conceived and produced, the different steps leading to innovation (creativity, marketing, research and development [R&D], design, production, and distribution) and the articulation between the different steps (Natário 2004). The innovation process is not confused with process innovations that correspond, according to the Oslo Manual (OECD/Eurostat 2018), to the implementation by the company of a production or delivery method new or significantly improved. The implementation of a new or significantly improved process does not need to be new to the market but should be for the company. It is not relevant if the innovation was originally developed by the company.

Sustainability arises in association with competitiveness, and it is regarded as a fundamental tool to acquire competitive advantages in the market (Pufal 2019). According to Pufal (2019, p. 17), it “becomes an essential prerequisite for the success and survival of companies and is only

achieved if it is an integral part of the organization's strategy."

Sustainable development is defined by UNCED that emphasizes the intergenerational balance: the capacity to satisfy the needs of the present generation without compromising future generations (United Nations 2018) (<http://www.sustainable-environment.org.uk/Principles/Definitions.php>).

Sustainable development is about being able to meet current needs without compromising future generations.

Therefore, business decisions should reflect the balance between the three dimensions of sustainable development: economic, sociocultural, and environment (Barbier 1987).

Key Issues

Since the 1980s, the linear approach to innovation processes has been questioned and progressively rejected to give way to systemic and interactive approaches. Presently, emphasis is given on the interactive nature of innovation, the complexity of the process, and the various feedbacks (Natário 2004).

The innovation process is no longer seen as a linear chain process with origin on applied research and sequence linkages. The linear and mechanistic process of innovation was abandoned by economists (Freeman 1987; Dosi 1988; Edquist 1997; Clark and Guy 1988; Cowan and Paal 2000; Conceição and Ávila 2001).

The linear innovation model shows that the relations between research and the market are organized in a sequential and linear way, starting from research to the market (Schumpeter's technology push model) or starting from the identification of market needs to research (Schmookler's market or demand-pull model) (Clark and Guy 1988; Kline and Rosenberg 1986). Nevertheless, this model presents some limitations: it is unidirectional and does not consider the numerous and complex loops, feedbacks, and interactions. The model is more suitable to explain the evolution of radical innovations but less that of incremental innovations. Nevertheless, it is the incremental

innovations that make the daily business of the company or the territory.

The linear model of innovation was contested and abandoned between the 1970s and 1980s when the systemic approach emerged (Lundvall 1992, 2010). Innovations result from a process of feedbacks from markets and user-producer interactive learning (Lundvall 2010). Innovation becomes a systemic process where networks and consumer/user-producer relationships lead to new forms of collaboration.

The steps leading to innovation are not linear and sequential, and the systemic approach overlaps. Innovation results from systemic linkages, with interactions between stages, and it is driven by forward or backward linkages between different functions and different innovation actors.

Therefore, the process of innovation is interactive (Lundvall 1992), resulting from the complex interaction between various actors and institutions; it is systemic (Edquist 1997) and cumulative (Cowan and Paal 2000): the technologies used in the present influence the learning process, and the dynamics of the accumulated experience and the future of the company will depend on what it has been able to do in the past in terms of accumulated learning and innovation.

In this context, a third innovation model, the multichannel interactive learning model, was presented by Caraça et al. (2009). For them, the "innovation process does not happen in a vacuum, but rather as a response to influencing, enabling and constraining factors. There is a near environment with actors and other organisations affecting the firm's innovation process - the micro environment, and in turn this is enveloped by a wider and evolving set of institutional structures, macro-economic, political, social, and ecological forces - the macro environment" (Caraça et al. 2009, p. 864).

Sustainability as a strategic tool to acquire competitive advantages in the market requires a proactive and innovative attitude of organizations and territories. In this context, the process of innovation is interactive and interdependent, cumulative, systemic, multi-actor, multidirectional and multicultural, and interdisciplinary, following the perspective of the third innovation model of

Caraça et al. (2009). Innovations, in turn, should seek to incorporate the balance between the three dimensions of sustainable development: economic, sociocultural, and environmental (Barbier 1987).

Future Directions

Future investigations may focus on the study of innovation process, as a systemic dynamic, incorporating the sustainability and social responsibility aspects, in order to respond to the growing challenges of companies and territories to obtain competitive advantages and not to compromise future generations, as advocated by United Nations report (2018).

Summary

This chapter covers the innovation process and its stages, highlighting the importance of sustainable innovation. In this sense, and in an evolutionary perspective, particular attention is given to linear and non-linear models of innovation, with emphasis on the interaction and systemic approach, integrating the dimensions of sustainable development.

Cross-References

- Corporate Sustainable Innovation
- Innovative Business Models
- Reverse Innovation
- Social Innovation
- Sustainable Business Model Innovation
- Sustainable Development
- Sustainable Development Goals (UN Global Goals)
- Sustainable Entrepreneurship
- Sustainable Innovation
- Sustainable Transition

References

Barbier, E. (1987). The concept of sustainable economic development. *Environmental Conservation*, 14(2),

101–110. <https://doi.org/10.1017/S0376892900011449>.

- Caraça, J., Lundvall, B.-Å., & Mendonça, S. (2009). The changing role of science in the innovation process: From queen to Cinderella? *Technological Forecasting and Social Change*, 76(6), 861–867.
- Clark, J., & Guy, K. (1988). Innovation and competitiveness: A review. *Technology Analysis & Strategic Management*, 10(3), 363–395.
- Conceição, P., & Ávila, P. (2001). *A Inovação em Portugal: II Inquérito Comunitário às Atividades de Inovação*. Oeiras: Celta Editora.
- Cowan, R., & Paal, G. (2000). *Innovation policy in a knowledge-based economy*. Brussels/Luxembourg: European Commission Enterprise Directorate General, Commission of the European Communities.
- Dosi, G. (1988). Sources, procedures and microeconomic effects of innovation. *Journal of Economic Literature*, XXVI, 1120–1171.
- Edquist, C. (1997). *Systems of innovation: Technologies, institutions and organizations*. London and Washington: Pinter.
- Freeman, C. (1987). *Technology policy and economic performance: Lessons from Japan*. London: Pinter Publishers.
- Kline, S. J., & Rosenberg, N. (1986). An overview of innovation. In R. Landau & N. Rosenberg (Eds.), *The positive sum strategy: Harnessing technology for economic growth* (pp. 275–305). Washington: National Academy Press.
- Lundvall, B.-Å. (1992). *National Systems of innovation: Towards a theory of innovation and interactive learning*. London: Pinter Publishers.
- Lundvall, B.-Å. (2010). *National systems of innovation: Toward a theory of innovation and interactive learning*. London/New York/Delhi: Anthem Press.
- Natário, M. M. (2004). *Inovação, competitividade e demografia empresarial: o caso da raia Central Ibérica* (Tese de Doutoramento). Évora: Universidade de Évora.
- OECD/Eurostat. (2018). *Oslo manual 2018: Guidelines for collecting, reporting and using data on innovation, the measurement of scientific, technological and innovation activities*. Paris/Luxembourg: Eurostat/European Commission. <https://doi.org/10.1787/9789264304604>.
- Pufal, N. (2019). Sustainability and innovation capabilities in an innovation award winner company. *Journal of Business Administration Research*, 2(1), 15–22.
- United Nations. (2018). Implementation of Agenda 21, the Programme for the. Report of the Secretary-General. United Nations. Retrieved from <https://sustainabledevelopment.un.org/resources/documents>

Sustainable Arenas

- Sustainable Sports Stadiums

Sustainable Banking

► Ethical Banking

Sustainable Brands

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Synonyms

Earth-friendly brands; Eco-friendly brands; Ecological brands; Green brands; Low carbon footprint brands; Low-waste brands; Viable brands; Zero-carbon brands; Zero-waste brands

Description

Without a doubt, there is increased customer demand across multiple industries toward more sustainable and greener products and brands. This increased customer demand has motivated brand owners to have a deeper look into the carbon footprint of their products and assess their environmental impact. In today's world, brand owners face the dilemma of either doing business as usual or changing business models to build more sustainable brands. However, old ways of doing business are becoming obsolete and irrelevant.

There have been two key milestones in history to establish responsibility for sustainability at a global level. In 1987, the Brundtland commission's report, *Our Common Future*, called for a new model of global economic development (Brundtland report 1987). The report offered what has become a common definition of sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987; p. 41). This development can be considered as the first key milestone. Sharing a global footprint for sustainability, the

2030 agenda for sustainable development was adopted by all United Nations (UN) member states in 2015, which can be considered as the second key milestone achieved globally. According to UN's 2030 agenda, 17 SDGs illustrated the clear focus and dedication for the responsibility for environment and the humanity (United Nations 2020).

According to Porter and van der Linde (1995), the best choices for sustainable development that meet the needs of the society are environmentally and economically viable, economically and socially equitable as well as socially and environmentally bearable. As a matter of fact, many companies have organized their sustainability efforts around social, environmental, and economic dimensions.

Thus, sustainable brands can be defined as brands that have achieved to integrate social, environmental, and economic issues into their brand development, ecosystem, and business processes.

Main Dimensions of Sustainable Brands

According to Wanamaker (2018), social aspect of sustainability contains elements such as quality of life, education, community development, equal opportunity, law, and ethics. Economic aspect of sustainability contains elements such as smart growth, long-range planning, cost savings, R&D spending, and cost of living. And finally, environmental aspect of sustainability contains elements such as resource management, environmental protection, habitat restoration, and preservation. Along these lines, Sustainable Development Goal 12 is about responsible consumption and production, as shared by United Nations (2020) and provides guidelines to companies to help them better understand their environmental and social impacts of products and services, both of product life cycles and how these are affected by use within lifestyles. According to SDG 12, companies should identify "hot spots" in their value chains where there is potential to improve environmental and social impact (United Nations 2020).

According to Lynch and De Chernatony (2004), brands are a combination of emotional

and functional aspects that are perceived by customers as providing an incremental value, exclusive experience, and a fulfilled promise. These aspects make the brands an extremely powerful strategic asset for the companies (Kotler and Keller 2011). Integrating sustainable brand management into business practice can bring together the demands of customers, companies, and society and gain a win-win situation (Grubor and Milovanov 2017).

Summary

Sustainable Development Goal 12 (United Nations 2020) is about responsible consumption and production and provides guidelines for companies regarding environmental and social impacts of products and services, as well as the product life cycles and how these are affected by use within lifestyles.

Building sustainable brands and integrating sustainable brand management into business practice should be on the top of the agenda for business leaders in today's world. Brands are how external stakeholders perceive a company and its performance, and they constitute an important proportion of company's intangible value. Hence, they should be in the heart of sustainability practices of any company. Successful sustainable brand management can be an enormous advantage for marketers by differentiating their brands from those of competitors, adding incremental value, and generating more demand and intention to purchase more sustainable or green products (Mohd Suki 2016). One example of starting sustainable brand management is for companies to explain and communicate the environmental footprint of their products to their customers and other stakeholders. This practice can improve customers' knowledge and help assist their evaluation of sustainable products and brands (Rios et al. 2006). On the other hand, this practice can also enable companies to take a hard look into their products' footprint, and evaluate "hot spots" and

opportunity areas where an improvement can be made.

Cross-References

- Brand Management
- Corporate Strategy
- Green, Circular, and Bio Economy
- Life Cycle Management
- Life Cycle Sustainability Assessment
- Responsible Consumption
- Sustainable Business Model
- Sustainable Chain Management
- Sustainable Logistics
- Sustainable Supply Chain Management
- Value Chain

References

- Brundtland, G. H. (1987). Our common future –Call for action. *Environmental Conservation*, 14(4), 291–294.
- Grubor, A., & Milovanov, O. (2017). Brand strategies in the era of sustainability. *Interdisciplinary Description of Complex Systems: INDECS*, 15(1), 78–88.
- Kotler, P., & Keller, K. (2011). *Marketing management* (14th ed.). Upper Saddle River: Prentice Hall.
- Lynch, J., & De Chernatony, L. (2004). The power of emotion: Brand communication in business-to-business markets. *Journal of Brand Management*, 11(5), 403–419.
- Mohd Suki, N. (2016). Green product purchase intention: Impact of green brands, attitude, and knowledge. *British Food Journal*, 188(12), 2893–2910.
- Porter, M. E., & van der Linde, C. (1995). Toward a new conception of the environment competitiveness relationship. *Journal of Economic Perspectives*, 9, 97–118. <https://doi.org/10.1257/jep.9.4.97>.
- Rios, F. J. M., Martinez, T. L., Moreno, F. F., & Soriono, P. C. (2006). Improving attitudes toward brands with environmental associations: An experimental approach. *Journal of Consumer Marketing*, 23(1), 26–33.
- United Nations (UN) (2020). *The 17 goals*. <https://sdgs.un.org/goals>
- Wanamaker, C. (2018). *The environmental, economic, and social components of sustainability: The three spheres of sustainability*. Adapted from the U.S. Army Corps of Engineers. <https://soapboxie.com/>
- World Commission on Environment and Development (WCED). (1987). *Our common future*. New York: Oxford University Press.

Sustainable Building

► Green Building

Sustainable Business

► European Framework on CSR ► Integrated Value

Sustainable Business Model

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Synonyms

Eco-friendly business model; Green business model

Definition/Description

A sustainable business model is a streamlined and combined illustration of the pertinent activities of a firm that expresses its logic, data, and other evidences that justify the customer value proposition and a revenue and cost-viable structure that implies the creation of monetary and non-monetary value for a wide ranging of stakeholders that incorporates proactively multistakeholder management.

From the Business Model Concept to Sustainable Business Model

Business model's definition is essential for business success and they can be seen as structured management tools (Wirtz et al. 2016; Magretta 2002). The concept of business model has developed, as Fig. 1 shows, and is still not completely understood as a research subject (Wirtz et al. 2016; Veit et al. 2014; Baden-Fuller and Mangematin 2013; Osterwalder et al. 2005).

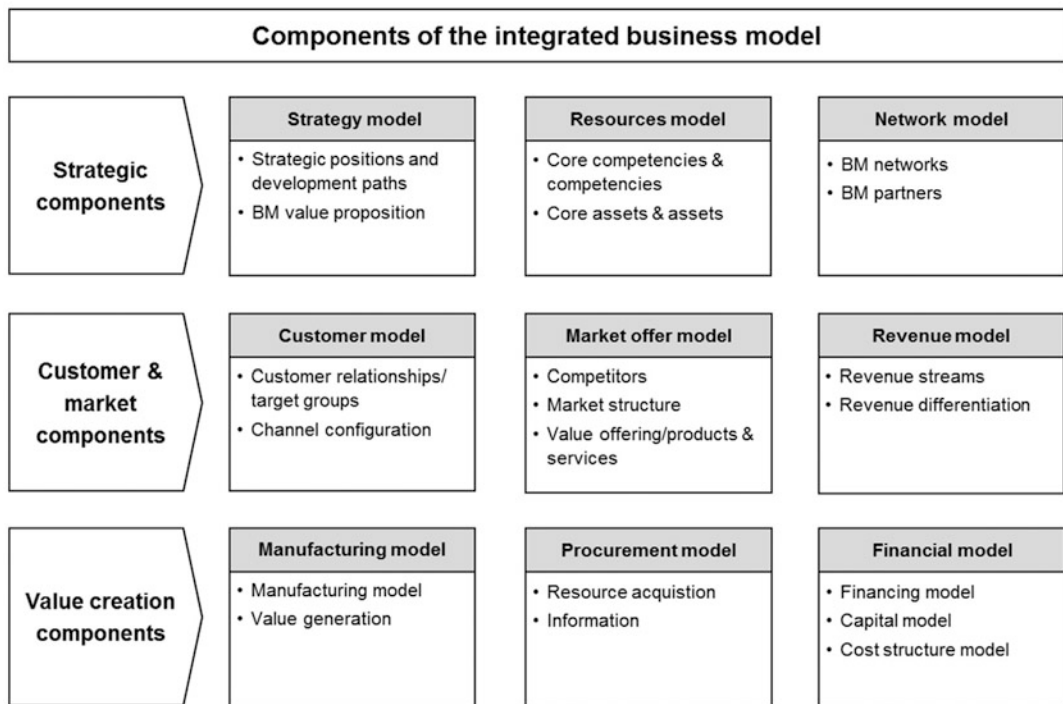
There are many definitions of business model, even some of them agree regarding the central characteristics, even though the definition is diverse. A business model may be defined as a simpler and combined representation of the main and relevant activities of a firm. It gives you the description of how information, products, and/or services with market value is generated by the value-added component of a company (Wirtz et al. 2016).

For a clear comprehension of the business model definition is necessary, also to comprehend the relevant components of the business model (Wirtz et al. 2016). Analyzing the literature, we may observe a heterogeneous approach. Some authors (e.g., Hamel 2000; Bouwman 2003; Voelpel et al. 2004; Lehmann-Ortega and Schoettl 2005) pay attention to a minimum of aspects, others (e.g., Hedman and Kalling 2002; Yip 2004; Osterwalder et al. 2005; Osterwalder and Pigneur 2010) consider a more understandable perspective. But most of them agree on the components based in the market offerings and resources. Figure 2 shows the business model components outlined (Wirtz 2011) that should be understood as interrelated components.

This research area deals with the decomposition of the business model concept into partial models and components and the categorization of specific business models parameters. More recently the area of “innovation” is seen as an independent and self-contained concept in the literature (Wirtz et al. 2016). In this perspective of business model innovation, reinventing the business model can be leveled with the development or creation of entirely new business models

	1975	1997	1999	2000	2001	2002	2003	2005	2007	2009	2011	2013	
Technology-oriented	• Konczal • Dufrene	• Shaw • Timmers	• Bambrury • Eriksson/ Penker • Aml/Zott • Wirtz		• Aml/Zott • Applegate • Gordijn/ Ackermans • Papakiri- koposidis et al. • Hawkins • Rappa • Rayport/ Jaworski • Weill/Vitale	• Biendstock et al. • Dubosson- Torbey et al. • Eisenmann • Papakiri- koposidis et al. • McGarrn/ Lyytinen • Osterwalder/ Pigneur	• Afuah/ Tucci • Wang/ Chang • Hedman/ Kalling • Wirtz/ Lihotzky	• Patel/ Galais • Rajala/ Westerlund • Haaker et al. • Kallio et al. • Rappa	• Eriksson et al.	• Andersson/ Johannesson/ Zdravkovic • Bjorkdahl • Clemens • Tankhwaile	• Gambardella/ McGahan • Sosna/Treviño- Rodriguez/Velamuri • Wirtz/Schiller/ Ulrich	• Huang	
Organisation theory-oriented		• Treacy/ Wiersema		• Linder/ Cantrell				• Keen/ Qureshi • Tikkanen et al.	• Zott/ Amit	• Al-Debei et al. • Hurt	• Osterwalder/ Pigneur	• Baden-Fulcr/ Morgan	
Strategy-oriented				• Hamel • Wirtz • Mahadevan • Afuah/Tucci	• Hamel	• Belz • Chesbrough/ Rosembloom • Magretta	• Winter • Mansfield	• Afuah • Lehman/ Ortega • Schaefer • Morris • Schweizer	• Chesbrough • Debelak • Lai/Weill	• Johnson et al. • McPhillips/ Merlo • Richardson • Zott/Amit	• Kind/ Nissen/ Sargard	• Casadesus- Masanelli/ Ricart • Smith/Binns/ Tushman • Teece • Casadesus- Masanelli/ Ricart • Demil/Lecocq	• Desyllas/Sako • Keen/Williams
	Early phase	Formation phase of first overall concepts					Differentiation phase						

Sustainable Business Model, Fig. 1 Literature synopsis of the business model research. (Source: Wirtz et al. 2016)



Sustainable Business Model, Fig. 2 Components of an integrated business model. (Source: Wirtz et al. 2016)

(Voelpel et al. 2004) as opposed to only revising parts. For them, business model innovation occurs when a firm adopt a novel approach to

commercializing its underlying assets (Wirtz et al. 2016) and includes a more comprehensive approach and more revolutionary implication.

Even Voelpel et al. (2004) state that within the fast business evolution scenario new ways of sustainable competitive advantage can be accomplished from business model reinvention based on disruptive innovation and not only on incremental or continuous improvement.

In the management literature there is thus a clear linkage (Boons and Lüdeke-Freund 2013) between the business model of a firm and its innovation activities and innovation is strictly linked to the search of sustainability since is justified in normative concepts such as environmental sustainability or sustainable development (e.g., Boons 2009; Carrillo-Hermosilla et al. 2009, 2010; Hall and Clark 2003).

Sustainable Business Model

Due climate changes and environmental problems around the world, increase in the last years the pressures to the BM becomes more sustainable engaging more sustainable and smart innovation with positive and triple impacts on environment, society, and economy. Global pressures about global sustainability implies the collaboration between companies and stakeholders (Lowitt 2013). Sustainable business models can be considered as a subcategory of business models. Literature suggests different perspectives about sustainable business models (SBM). Bocken et al. (2014) argued that a triple bottom line approach is incorporated in SBM and reflects a wide ranging of stakeholder interests, involving environment and society. This perspective focused on the possibility of the companies promote, incorporate, and implement corporate innovation for sustainability as a key driver of competitive advantage.

Several authors provided a more complete definition of SBM including beyond environment their contribution for society (Lüdeke-Freund 2010) to improve quality of life (Garetti and Taisch's 2012). SBM obtains economic, social, and environmental value for a varied group of stakeholders (Bocken et al. 2013).

Another perspective about SBM is to discuss what it is business model innovations for

sustainability. According to the literature these innovations could be defined as innovations that produce substantial positive and/or meaningfully reduced negative impacts for the environment and/or society, through alterations of the organization methods and its generation of value network, deliver value, and capture value (i.e., create economic value) or modifications of their value plans (Bocken et al. 2014).

Additionally, business model canvas was developed attending to a sustainable perspective. Sustainable business canvas extended the original canvas by suggesting ten elements. This canvas BM includes the organizational effectiveness and efficiency perspective, positive and negative externalities, as well as productivity drivers (Sempels 2014), or summing up building blocks for a triple bottom line, which takes into account of the sustainability perspectives, i.e., incorporating environment, business, and society approaches (Dewulf 2010).

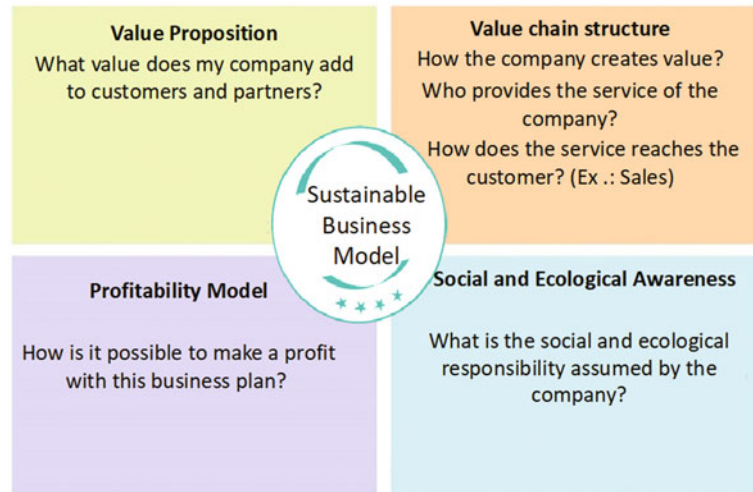
Figure 3 presents a sustainable business model based on four components: benefits (value proposition), value chain structure (how services are supplied), profitability model, and social and ecological awareness of the business.

The first step is to look at the value that the business idea can generate. A business model describes the potential value that would benefit the founder. The result of defining the value/benefit ratio will define the business. Products are part of the value chain structure and have a purpose in the market. The ability of a business to deliver extraordinary value through a product or service is a predictor of customer compliance.

In the second step, you need to answer the question: How to identify values for customers? The value chain structure is a description of the task listing partners and their roles. It answers the question: Who provides the service and how? For the business model to work, core competencies need to be carefully analyzed with the key business activities that will support those competencies.

The third step addresses the profitability model. In addition to what and how, the business model also describes how high the yield must be for the business to be ecologically sustainable and economically successful. It answers the question:

Sustainable Business Model, Fig. 3 Sustainable business model. (Source: Lindner, J./Fröhlich, G.: *Wirtschaft gestalten* Band II, 2015, p.28. (<https://www.oebv.at/produkte/wirtschaft-gestalten-hlw-ii-arbeitsbuch-bw>))



How does business generate income? Every business, even if it is not profit oriented, has to generate income to cover costs. The profitability model determines the cost structure.

The fourth step aims at social and ecological awareness because the sustainable business model only emerges through the integration of this step and will answer the question: How future oriented is the business plan? Sustainable management entails managing the business in a socially and ecologically responsible manner while ensuring that it is economically successful.

Profits will be realized by satisfying customer needs and lowering harmful environmental impacts, possibly through more efficient production procedures or diminished or changed consumption patterns.

Sustainability and Circularity in BM

As circular economy sustainability comes as a key factor to promote competitive advantage of companies. In this context circular economy implies a systematic innovation. According to Valkokari et al. (2014) the change toward sustainable and circular business model innovation should incorporate aspects from macro- (global trends and drivers), meso- (ecosystem and value co-creation), and microlevels (company, customers, and consumers).

A circular business model can be expressed as the reasoning of how an organization produces, delivers, and encapsulates value with and within closed material loops (Mentink 2014). Circular business models usually merge creation of commercial value with implementation of resource efficiency strategies, such as repair and remanufacturing, by benefit from the economic and environmental value incorporated in products (Bakker et al. 2014; Bocken et al. 2016). According to Nußholz (2017) many of the business models are designed and developed to fit the linear system, in which the environment negative externalities are not integrated in resource prices.

In summary circular business model could be understood as a sustainable kind of BM that tends to become more prominent, due to the challenges to save natural resources and reduce environmental impacts to control climate changes and at the same time improve quality of social and positive social impacts globally.

Summary

Is difficult to offer a single sustainable business model definition since the concept of business model still presents great discussion and perspectives. Even the concept of sustainable development does not imply a particular subject, but preferably a process where ecological, economic,

and social values are balanced in nonstop action. Justifying its definition in a set of components in an integrated and related approach offers value creation to the market, seeking the fair financial revenue we may observe that a sustainable business model implies inter-organizational networks and large societal systems. These networks do not only include companies, but also other stakeholders. Based on these understandings the elements (four) of a business model are presented: value proposition, supply chain, customer interface, and financial model. They are recognized as a set of essential normative requests that are needed to be met for successfully marketing sustainable innovations.

Cross-References

- [Competitiveness](#)
- [Green Marketing](#)
- [Innovative Business Models](#)
- [Sustainable Marketing II](#)
- [Transition Sustainability](#)
- [World Business Council for Sustainable Development](#)

References

- Baden-Fuller, C., & Mangematin, V. (2013). Business models: A challenging agenda. *Strategic Organization*, 11(4), 418–427.
- Bakker, C., Den Hollander, M., Van Hinte, E., & Zijlstra, Y. (2014). *Products that last: Product design for circular business models*. Delft: TU Delft Library.
- Bocken, N., Short, S., Rana, P., & Evans, S. (2013). A value mapping tool for sustainable business modelling. *Corporate Governance*, 13(5), 482–497.
- Bocken, N., Short, S., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Bocken, N., De Pauw, I., Bakker, C., & Van der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of Industrial and Production Engineering*, 33, 308–320.
- Boons, F. A. A. (2009). Creating ecological value. In *An evolutionary approach to business strategies and the natural environment*. Cheltenham: Elgar.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45(2013), 9e19.
- Bouwman, H. (2003). State of the art on business models. Retrieved from: <https://doc.telin.nl/dsweb/Get/Document-37237/B4U%20SOTA.pdf>
- Carrillo-Hermosilla, J., del Río, P., & Könnölä, T. (2009). Eco-innovation. In *When sustainability and competitiveness shake hands*. Palgrave Macmillan. https://www.sciencedirect.com/science/article/pii/S0959652610000612?casa_token=8aGgYvWniKMAAAAAA:J8qJL_xZiyf8k0WxMRBwJRK5sd73StlZeqh0wJFV7XhoBS0uwTjkNAheqKVR3pFChfnd_WINEg
- Carrillo-Hermosilla, J., del Río, P., & Könnölä, T. (2010). Diversity of eco-innovations: Reflections from selected case studies. *Journal of Cleaner Production*, 18, 1073–1083.
- Dewulf, K. (2010). *Play it forward: A game-based tool for sustainable product and business model innovation in the fuzzy front end*. Paper presented at the 6th EMSU conferences (ERSCP-2010).
- Garetti, M., & Taisch, M. (2012). Sustainable manufacturing: Trends and research challenges. *Production Planning and Control*, 23(2–3), 83–104.
- Hall, J., & Clark, W. (2003). Introduction to the special issue on environmental innovation. *Journal of Cleaner Production*, 11, 343–346.
- Hamel, G. (2000). *Leading the revolution*. Boston: Harvard Business School Press.
- Hedman, J., & Kalling, T. (2002). *IT and business models*. Malmö: Liber/Abstrakt.
- Lehmann-Ortega, L., & Schoettl, J. M. (2005). From buzzword to managerial tool: The role of business models in strategic innovation. *Cladea Annual Assembly, 2005(5)*, 1–14.
- Lowitt, E. (2013). *The collaborative economy*. San Francisco: Jossey-Bass (Wiley).
- Lüdeke-Freund, F. (2010). *Towards a conceptual framework of business models for sustainability* (pp. 1–28). Delft: ERSCP-EMU Conference.
- Magretta, J. (2002). La importancia de los modelos de negocio. *Harvard Deusto Business Review*, (110), 28–35.
- Mentink, B. (2014). *Circular business model innovation: A process framework and a tool for business model innovation in a circular economy*. Master of Science in Industrial Ecology Thesis, Delft University of Technology & Leiden University.
- Nußholz, J. (2017). Circular business models: Defining a concept and framing an emerging research field. *Sustainability*, 9, 1–16.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. Hoboken: Wiley.
- Osterwalder, A., Pigneur, Y., & Tucci, C. L. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems*, 16, 1–25.
- Sempels, C. (2014). Implementing a circular and performance economy through business model innovation. In *A new dynamic: Effective business in a circular*

- economy. Isle of Wight: Ellen MacArthur Foundation.
- Valkokari, K., Valkokari, P., Palomäki, K., Uusitalo, T., Reunanen, M., Macchi, M., Rana, P., & Liyanage, J. P. (2014). Road-mapping the business potential of sustainability within the European manufacturing industry. *Foresight*, 16(4), 360–384.
- Veit, D., Clemons, E., Benlian, A., Buxmann, P., Hess, T., Kundisch, D., Leimeister, J. M., Loos, P., & Spann, M. (2014). Business models. *Business & Information Systems Engineering*, 6(1), 45–53.
- Voelpel, S. C., Leibold, M., & Tekie, E. B. (2004). The wheel of business model reinvention: How to reshape your business model to leapfrog competitors. *Journal of Change Management*, 4(3), 259–276.
- Wirtz, B. W. (2011). *Business model management: Design – instruments – success factors*. Wiesbaden: Gabler.
- Wirtz, B. W., Pistoia, A., Ullrich, S., & Göttel, V. (2016). Business models: Origin, development and future research perspectives. *Long Range Planning*, 49(1), 36–54.
- Yip, G. S. (2004). Using strategy to change your business model. *Business Strategy Review*, 15(2), 17–24.

Sustainable Business Model Innovation

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Synonyms

Business model; Business model innovation; Innovation

Definition

Although the literature on business model, business model innovation, and sustainable business model innovation have increased in the last decade, it may be considered that the classification and conceptualization of sustainable business model innovation is still in its infancy (Lüdeke-Freund and Dembek 2017). In the literature, the concept of business model innovation is used instead of the existing traditional business model concept, considering the role of innovation in gaining competitive advantage (Adams et al.

2016). Changing environmental conditions and increasing social and environmental awareness have enabled firms to pursue greener practices and put sustainability at the center of their strategies (Bocken et al. 2014). The importance of creating value with the triple bottom line approach put forward by Elkington (2013) has led firms to attach importance to sustainability along with business model innovation, and the emergence of the sustainable business model innovation field and the transformation of the business model. Thus, sustainable business model innovation, in its simplest sense, refers to the changes at the core of business model innovation, which is considered as a key element of the success of an organization, under the rising global sustainability pressures. Sustainable business model innovation highlights the need for innovation in designing a business model and embraces the integration of the ambition of social and environmental objectives besides the economic outcomes into business model innovations.

The Development of Sustainable Business Model Innovation

Business models and business model innovation have received substantial attention both from literature and business. Recently, business model innovations have welcomed sustainability concerns into their agenda. Under these circumstances, to understand the extent of the concept of sustainable business model innovation, a closer look at what a business model is and what a business model innovation means leads to discovering the recent changes and the evolution of the business model to sustainable business model innovation.

Business Model

Business models, which have an important and powerful role for corporate governance, are on the agenda of both the academic world and business life in the twentieth century in terms of what it is and how it will be used.

The business model, which presents a new perspective in the field of management, addresses

the way firms do business with a holistic perspective (Fang 2013; Zott et al. 2010). It basically has the feature of being a guideline, therefore it is a guide for the strategies to be implemented through organizational structures, processes, and systems (Osterwalder and Pigneur 2010). It explains how firms can create value for their stakeholders and differentiate themselves from their competitors in an intensely competitive environment (Fang 2013; Osterwalder and Pigneur 2010). The most important reason why the business model is a strategic positioning (Yip 2004) is that it enables firms to gain value through their innovations and improvements (Ambrož and Omerzel 2017; Chesbrough and Rosenbloom 2002).

In the literature, the business model has been tried to be explained with various dimensions in different studies, and it has been tried to be understood both in theory and in practice. While Shafer et al. (2005) consider the business model dimensions as strategic choices, value network, value creation, and value capture, Johnson et al. (2008), in their four-dimensional model, handled dimensions as the consumer's value proposition, profit formula, key resources, and key activities, emphasizing the importance of cooperation between these dimensions and creating value. On the other hand, Osterwalder and Pigneur (2010)'s Canvas business model consists of nine dimensions, and these are customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. The business model requires a firm to describe the activities and method of doing business that sustains its existence, and to define its position in the value chain and to explain in detail how it profits (Osterwalder et al. 2005). From this perspective, the functions of the business model gain importance and help to implement the business model and to determine the financial capital needed in this process. Furthermore, Chesbrough and Rosenbloom (2002) discuss the functions of a business model. Accordingly, a business model exploits value proposition, market segment identification, value chain structure definition, repositioning the firm within the value network, and competitive corporate strategy formulation.

Business Model Innovation

Especially in times of fierce instability, business model innovation has a critical importance for firms. In fierce competition environments that require continuous innovation, where innovations can be easily imitated and where it is difficult to maintain a sustainable competitive advantage, this competitive environment can be the way out. In its most basic definition, business model innovation is the innovation carried out on the business model to innovate instead of product innovation. In this process, to create a new business model, the basic components of the business model are re-evaluated and new value propositions, revenue streams, and cost structures are created. Business model innovation is believed to provide more competitive advantage when compared to product and service innovations (Chesbrough and Appleyard 2007). Radical changes in business processes to gain competitive advantage or ensure the survival of firms are called business model innovation (Linder and Cantrell 2000).

Implementing business model innovation, which is about creating new value, is a difficult and complex process for firms. Since the definition of Schumpeter, which is accepted as the beginning of the development process of the concept of innovation, it has been shaped by emphasizing its different features. Innovation can be considered as the most effective way of differentiation known today. Differentiation is possible with the existence of hard-to-imitate capabilities of firms (Barney 1991). From the point of view of a resource-oriented approach, developing capabilities suitable for firms' resources and integrating these capabilities with their strategies will provide firms with a competitive advantage in the competitive environment in the market. Business model innovation is also an important capability for firms, and successful business model innovation capability can increase an organization's resilience to changes in its environment and create a sustainable competitive advantage (Mitchell and Coles 2003; Geissdoerfer et al. 2018).

Business model innovation is a systematic procedural activity that enables the firm to gain a new position in the market with new customers and to offer new value to existing customers (Ambrož

and Omerzel 2017). Lingardt et al. (2009) emphasize the necessity of presenting the new value created in a business model innovation to customers in a new way, also they state that two or more components of the existing business model must be changed in order to be able to talk about a business model innovation. Business model innovation, which is not just about innovation, is about the value that innovation creates for firms and enables the firm to increase customer value and gain competitive advantage (Matzler et al. 2013). The most important stakeholder that determines the new value created is the customers, and they reveal the reality of new value with their purchasing behavior. Therefore, the value created by innovation beyond product and technology innovation reveals business model innovation for the firm (Sawhney et al. 2006).

Sustainable Business Model Innovation

As a rule of thumb, the primary condition for a firm's survival is its ability to create economic value. It is possible to carry out all activities, whether in the long or the short term, with the existence and permanence of the resources that enable it to carry out its activities. A business model created by keeping away from the environmental damages brought about by economic growth will contribute to the sustainable goals of the firm. A sustainable business model is related to the firm's resources, processes, and practices that it uses while performing its activities, to provide significant positive effects for the natural environment and society or to significantly reduce the negative effects (Bocken et al. 2014; Stubbs and Cocklin 2008; Wells 2013; Lüdeke-Freund et al. 2018). In other words, sustainability of business models is only possible if the contributions of the business model create a noticeable value in social and economic dimensions. In the sustainable business model, obtaining economic value and making profit is only a tool in the sustainability process and firms need to make efforts to achieve social and environmental goals besides the economic benefits (Freeman and Gilbert Jr. 1992; Stubbs and Cocklin 2008). With this aim, developing structural and cultural

capabilities and to cooperate with the key stakeholders of the system (Stubbs and Cocklin 2008) is necessary for the firms that want to adopt a sustainable business model.

The basic idea of sustainable business model innovation, which starts from the traditional business model innovation but is a much more comprehensive model, can be expressed as revealing the contribution of the business model to sustainability by creating value at the environmental and social level. It aims to introduce a new model by combining the sustainability and innovation ability of the firm and to reveal the environmental and social value creation potential of the firm through this model. With this purpose, strategy and sustainability are the main concepts that are considered as a whole and that are strengthened together.

Summary

Despite the increasing environmental awareness and the changing demands and needs of the consumers, the commitment to sustainability at the organizational level is not yet at a high degree (Kiron et al. 2013). Sustainable business model innovation, which has emerged as a new dimension of business model innovation, includes the belief that sustainability efforts cannot be realized without innovation (Aghion et al. 2009; Shakeel et al. 2020). This understanding necessitated the redesign and improvement of the business models of the sustainable product/service/process innovations (Boons and Lüdeke-Freund 2013; Schaltegger et al. 2012) and this requirement revealed that the elements of business model innovation should be integrated with sustainability. Therefore, sustainable business model innovation defines the processes in which business models are developed and firms transform their current business model goals for sustainable development (Roome and Louche 2016). It is considered as a tool that contributes to the social and environmental conditions through providing solutions to existing problems and that can mitigate the adverse impacts of the industrialization (Bocken

et al. 2014; Evans et al. 2017). Sustainable business model innovation emerges as an area that attracts the attention of today's business world and the academic environment, revealing the potential for sustainable business development and guiding firms to show their talents in this direction (Lüdeke-Freund and Dembek 2017).

Cross-References

- [Business Model](#)
- [Business Model Innovation](#)
- [Sustainable Business Model](#)

References

- Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented innovation: A systematic review. *International Journal of Management Reviews*, 18(2), 180–205.
- Aghion, P., Hemous, D., & Veugelers, R. (2009). No green growth without innovation. *Bruegel Policy Brief-2009/07*.
- Ambrož, R., & Omerzel, D. G. (2017). Business model innovation in tourism: How to survive in highly competitive environments. *Academica Turistica*, 10(2), 175–183.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- Chesbrough, H. W., & Appleyard, M. M. (2007). Open innovation and strategy. *California Management Review*, 50(1), 57–76.
- Chesbrough, H., & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox corporation's technology. *Industrial and Corporate Change*, 11(3), 529–555.
- Elkington, J. (2013). Enter the triple bottom line. In *The triple bottom line: Does it all add up?* (pp. 1–16). Routledge.
- Evans, S., Vladimirova, D., Holgado, M., Van Fossen, K., Yang, M. Y., Silva, E. A., & Barlow, C. Y. (2017). Business model innovation for sustainability: Towards a unified perspective for creation of sustainable business models. *Business Strategy and the Environment*, 26(5), 597–608.
- Fang, M. (2013). On business model innovation of service industry in post-crisis era. In Y. Yang & M. Ma (Eds.), *Proceedings of the 2nd international conference on green communications and networks 2012 (GCN 2012)* (Vol. 4, pp. 9–16). Berlin/Heidelberg: Springer.
- Freeman, R. E., & Gilbert, D. R., Jr. (1992). Business, ethics and society: A critical agenda. *Business & Society*, 31, 9.
- Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, 401–416.
- Johnson, M. W., Christensen, C. C., & Kagermann, H. (2008). Reinventing your business model. *Harvard Business Review*, 86(12), 50–59.
- Kiron, D., Kruschwitz, N., Reeves, M., & Goh, E. (2013). The benefits of sustainability-driven innovation. *MIT Sloan Management Review*, 54(2), 69.
- Linder, J. C., & Cantrell, S. (2000). *Changing business models*. Chicago: Institute for Strategic Change, Accenture.
- Lingardt, Z., Reeves, M., Stalk, G., & Deimler, M. S. (2009). *Business model innovation*. When the Game Gets Tough, Change the Game, BCG.
- Lüdeke-Freund, F., & Dembek, K. (2017). Sustainable business model research and practice: Emerging field or passing fancy? *Journal of Cleaner Production*, 168, 1668–1678.
- Lüdeke-Freund, F., Carroux, S., Joyce, A., Massa, L., & Breuer, H. (2018). The sustainable business model pattern taxonomy—45 patterns to support sustainability-oriented business model innovation. *Sustainable Production and Consumption*, 15, 145–162.
- Matzler, K., Bailom, F., von den Eichen, S. F., & Kohler, T. (2013). Business model innovation: coffee triumphs for Nespresso. *Journal of Business Strategy*, 34(2), 30–37.
- Mitchell, D., & Coles, C. (2003). The ultimate competitive advantage of continuing business model innovation. *Journal of Business Strategy*, 24, 15.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation*. Hoboken: Wiley.
- Osterwalder, A., Pigneur, Y., & Tucci, C. L. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the Association for Information Systems*, 16(1), 1.
- Roome, N., & Louche, C. (2016). Journeying toward business models for sustainability: A conceptual model found inside the black box of organisational transformation. *Organization & Environment*, 29(1), 11–35.
- Sawhney, M., Wolcott, R. C., & Arroniz, I. (2006). The 12 different ways for companies to innovate. *MIT Sloan Management Review*, 47(3), 74–82.
- Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2012). Business cases for sustainability: the role of business model innovation for corporate sustainability. *International Journal of Innovation and Sustainable Development*, 6(2), 95–119.

- Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business Horizons*, 48(3), 199–207.
- Shakeel, J., Mardani, A., Chofreh, A. G., Goni, F. A., & Klemeš, J. J. (2020). Anatomy of sustainable business model innovation. *Journal of Cleaner Production*, 261, 121–201.
- Stubbs, W., & Cocklin, C. (2008). Conceptualizing a “sustainability business model”. *Organization & Environment*, 21(2), 103–127.
- Wells, P. (2013). Sustainable business models and the automotive industry: A commentary. *IIMB Management Review*, 25(4), 228–239.
- Yip, G. S. (2004). Using strategy to change your business model. *Business Strategy Review*, 15(2), 17–24.
- Zott, C., Amit, R., & Massa, L. (2010). *The business model: Theoretical roots, recent developments, and future research* (IESE Business School working paper, no. 862). Pamplona: University of Navarra.

Sustainable Business Models

► Sustainable Business Solutions

Sustainable Business Processes

► Sustainable Business Solutions

Sustainable Business Solutions

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Synonyms

Sustainable business models; Sustainable business strategies; Sustainable business processes; Sustainable value creation; Sustainable innovation; Sustainable practices; Sustainable market solutions

Definition/Description

The relationship between companies and sustainability is a critical issue in both developed and developing countries. The private sector has come to realize that long-term profitability depends at least to some degree on social justice and environmental protection. As a result, business objectives and values have changed, as well as the business solutions through which they are implemented. The triple bottom line is no longer a marginal concept but central to the management of the business. “Sustainable business solutions” are those decisions, models, and strategies adopted by corporations or for-profit organizations that positively affect their relationships with one or more stakeholders – including customers, suppliers, employees, and communities – by simultaneously delivering economic, social, and environmental benefits (triple bottom line). Sustainable business solutions, which can increase profitability, are constantly evolving. Multiple sustainable business solutions have been proposed and adopted. They include multi-stage strategies, eco-efficiency models, inclusive business ventures, circular production and manufacturing processes, and solutions addressing overproduction and overconsumption.

Introduction

Traditionally, businesses have implemented economically efficient solutions in the provision of goods and services to seek profit maximization. This type of solution is a fundamental part of capitalism, the world’s dominant economic model (Hart and Milstein 1993). The traditional idea of national development is also associated with market-based development. The underlying theory is that a society is developed if it is modernized and “[t]o be modernized, a society has to become more technically sophisticated and urbanized and to make increased use of markets for the distribution of economic goods and services” (Baker 2006).

The unintended negative social and environmental impact of businesses, however, has led questions about the viability and sustainability of

traditional business models (Wells 2004). Fields and Atiku explain that “[t]raditional business and management practices have been blamed for the crises of the planet specifically. Issues like ecological overshoot, population growth, water and food shortages, financial crises, greed and corruption, as well as greater expectations of shareholders are ... causing the rethink and transformation of business practices and other unsustainable human activity” (Fields and Atiku 2019). As a result, the relationship between businesses and sustainability has become a focus of discussion in both developed and developing countries (Wells 2004).

The private sector has come to accept that business decisions have a broad and more profound impact. An increasing number of companies have realized that long-term profitability now depends on social justice and environmental protection (Fields and Atiku 2019). Especially after the 2007–2008 global financial crisis and the creation of the Sustainable Development Goals (SDGs) by the United Nations (UN), businesses have developed solutions with broader values including social, economic, and environmental agendas in corporate decision-making process (Scheyvens et al. 2016). The UN Global Compact, a UN initiative to achieve sustainable development, explains that an ever-expanding group of enterprises now “recognize that what is good for societies and the planet is also good for business over the long term” (UN Global Compact 2014). Value, therefore, has been redefined. Before, the only value pursued by businesses was economic. Now, companies aim to create social and environmental value for their stakeholders apart from financial success.

It has been recognized that businesses have an important role in sustainable development in general and the SDGs in particular (Mio et al. 2020; UN Global Compact 2014; Van Zanten and Van Tulder 2018). Businesses are central actors in achieving these goals (Mio et al. 2020) and engines for economic growth and sustainable development (Bonnell and Veglio 2011).

Consequently, business objectives have changed. They are no longer purely economic and market-based. Businesses are also social institutions and, as such, they are not independent of society in general

(Wells 2004). For sustainable businesses, social and environmental considerations play an essential role in corporate decision-making. As a result, the business solutions used to implement these objectives have also had to change. These solutions take account of those economic, social, and environmental issues associated with the company’s business-as-usual.

“Sustainable Solutions”

Defining the concept and scope of the expression “sustainable business solutions” requires understanding the concept of “sustainable solutions.”

The concept of “sustainable solutions” is associated with the idea of “sustainable development,” which refers to public policy that encompasses economic, social, and environmental goals (Baker 2006; Sheehy and Farneti 2021). The most critical component of both “sustainable development” and “sustainable solutions” is the achievement of the triple bottom line: economic, social, and environmental objectives (Hart and Milstein 1993).

Therefore, a “sustainable solution” is “one that is long-lasting and resilient, environmentally responsible, economically feasible and socially acceptable” (Wong et al. 2020). The development of sustainable solutions, thus, requires balancing the three dimensions of sustainability, that is, the triple bottom line (Fiksel et al. 2014).

Sustainable Business Solutions

Businesses, governments, NGOs, nonprofit organizations, and civil society must move toward sustainable development (Mio et al. 2020). “Sustainable business solutions,” thus, refer to the strategies and actions that businesses adopt toward sustainable development.

Accordingly, “sustainable business solutions” are “sustainable solutions” implemented by businesses. This concept refers to the way companies do business (Bonnell and Veglio 2011). Particularly, “sustainable business solutions” are decisions, models, and strategies adopted by businesses –

corporations or for-profit organizations – seeking the achievement of the triple bottom line, that is, solutions that are economically, socially, and environmentally viable (Elkington 2006; McCormick et al. 2016; Scheyvens et al. 2016; Wells 2004). The triple bottom line is no longer marginal but central to the business (Wells 2004). As a result, environmental and social issues are no longer ex post regulatory requirements but ex ante business priorities.

“Sustainable business solutions” are also closely linked to stakeholder theory. “Stakeholder theory posits that the integration of economic, ethical, social and environmental issues is a joint aspect of the decision-making process regarding corporate strategic management” (Devalle et al. 2020). This integration in the decision-making process is necessary because businesses are constituted by multiple relationships between different business stakeholders (Freeman 2010). According to Freeman, “[b]usiness is about how customers, suppliers, employees, financiers (stockholders, bondholders, banks, etc.), communities and managers interact and create value” (Freeman 2010). Consequently, the best business solutions create as much value as possible for all stakeholders (Freeman 2010).

To sum up, “sustainable business solutions” are those decisions, models, and strategies adopted by corporations or for-profit organizations that positively affect their relationships with one or more stakeholders – including customers, suppliers, employees, and communities – by simultaneously delivering economic, social, and environmental benefits.

Examples of Sustainable Business Solutions

Sustainable business solutions are constantly evolving. The more awareness and technological innovation exists, the more sustainable solutions companies will offer. Hart explains that “[w]hereas yesterday's businesses were often oblivious to their negative impact on the environment and today's responsible businesses strive for zero

impact, tomorrow's businesses must learn to make a positive impact. Increasingly, companies will be selling solutions to the world's environmental problems” (Hart 1997).

“Sustainable business solutions” also represent business opportunities. They are no longer seen as a burden on businesses but an opportunity to increase profitability while seeking social and environmental benefits. According to Fiksel et al., “[i]n the last few decades, the business community has come to recognize that environmental and social responsibility can actually reduce costs and increase competitiveness, so that today sustainability is widely embraced as a strategic imperative” (Fiksel et al. 2014).

Multiple sustainable business solutions have been proposed. For instance, Hart argues that businesses can achieve sustainable development when they adopt a three-stage strategy. These stages are pollution prevention, product stewardship, and clean technology (Hart 1997). In the first step, businesses must shift from pollution control – cleaning up waste – to pollution prevention, minimizing or eliminating waste. The second step requires minimizing the environmental impacts of the whole life cycle of a product. Finally, Hart explains that businesses must develop sustainable technology to supply goods and services (Hart 1997). Solutions that adopt this strategy can be categorized as sustainable business solutions.

Saling et al. explain the concept of eco-efficiency, a sustainable business solution focused on business productivity that has been encouraged by the World Business Council for Sustainable Development (WBCSD) since 1993 (Saling et al. 2002). Eco-efficiency aims to provide more economic value while reducing environmental impact. It refers to “the ecological optimization of overall systems while not disregarding economic factors” (Saling et al. 2002).

Bonnell and Veglio develop another application of sustainable business solutions. Drawing on the ideas of the WBCSD, they discuss the concept of inclusive business models/ventures. These business models focus on the inclusion and diversification of human capital. Stated differently, they are “sustainable business solutions that expand access

to goods, services, and livelihood opportunities for low-income communities in commercially viable ways” (Bonnell and Veglio 2011).

Diaz-Granados describes an example of sustainable business solutions in manufacturing processes: “cradle to cradle” (C2C). Diaz-Granados explains that C2C is an “alternative approach that “waste” produced by industrial manufacturing processes can be used in a new manufacturing cycle without degrading or downcycling the materials used in the process but rather improving the whole cycle” (Diaz-Granados 2021). Other examples of alternative business solutions based on circular flows of products and materials can be found in sharing platforms and models for reselling, renting, and leasing products (McCormick et al. 2016).

Finally, Bocken et al. provide an example of two companies that apply sustainable business solutions (Bocken et al. 2016). These companies are Fairphone, which has created a phone that can be easily disassembled and repaired, and Patagonia, which implemented a “Don’t Buy This Jacket” advertisement to encourage people to buy only what they need. With these two solutions, Fairphone and Patagonia have attempted to address overproduction and overconsumption of their own products. Bocken et al. note that positive impacts of these solutions may include “the reduction in the consumption of resources, sustainable living and long-term customer loyalty, and new repair and service markets,” as well as “premium margins on high-quality products and high levels of customer loyalty” for businesses (Bocken et al. 2016).

Sustainable business solutions, Elkington argues, require strong corporate governance. “The better the system of corporate governance, the greater the chance that we can build towards genuinely sustainable capitalism” (Elkington 2006). According to Elkington, an increasing proportion of business sustainability issues are associated with corporate design. As a result, a clear corporate governance system where boards are held accountable for the sustainable corporate agenda is a critical step in achieving the triple bottom line (Elkington 2006).

Summary

The negative social and environmental impact of businesses has led to questioning the viability of traditional business models. As a result, the relationship between companies and sustainability has become a critical focal point for discussion in developed and developing countries. The private sector has realized that long-term profitability depends on social justice and environmental protection. Therefore, business objectives and values have changed, as well as the business solutions through which they are implemented. The triple bottom line is no longer marginal but central to the business.

“Sustainable business solutions” are those decisions, models, and strategies adopted by corporations or for-profit organizations that positively affect their relationships with one or more stakeholders – including customers, suppliers, employees, and communities – by simultaneously delivering economic, social, and environmental benefits.

Sustainable business solutions, which can increase profitability, are constantly evolving. Multiple sustainable business solutions have been proposed and adopted. They include multi-stage strategies, eco-efficiency models, inclusive business ventures, circular production and manufacturing processes, and solutions to address overproduction and overconsumption.

References

- Baker, S. (2006). *Sustainable development*. New York: Routledge.
- Bocken, N. M., De Pauw, I., Bakker, C., & Van Der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of Industrial and Production Engineering*, 33(5), 308–320.
- Bonnell, V., & Veglio, F. (2011). Inclusive business for sustainable livelihoods. *Field Actions Science Reports*, 5, 1–5. <http://journals.openedition.org/factsreports/840>.
- Devalle, A., di Trana, M. G., Fiandrino, S., & Vrontis, D. (2020). *Integrated thinking rolls! Stakeholder engagement actions translate integrated thinking into practice*. Meditari Accountancy Research. <https://doi.org/10.1108/MEDAR-12-2019-0654>.

- Diaz-Granados, J. (2021). Cradle to cradle. In *Encyclopedia of sustainable management* (pp. 1–1). Springer. https://doi.org/10.1007/978-3-030-02006-4_407-1.
- Elkington, J. (2006). Governance for sustainability. *Corporate Governance: An International Review*, 14(6), 522–529.
- Fields, Z., & Atiku, S. O. (2019). Collective green creativity and eco-innovation as key drivers of sustainable business solutions in organizations. In IGI Global (Ed.), *Green business: Concepts, methodologies, tools, and applications* (pp. 415–439). IGI Global. <https://doi.org/10.4018/978-1-5225-7915-1.ch022>.
- Fiksel, J., Bruins, R., Gatchett, A., Gilliland, A., & Ten Brink, M. (2014). The triple value model: A systems approach to sustainable solutions. *Clean Technologies and Environmental Policy*, 16(4), 691–702.
- Freeman, R. E. (2010). Managing for stakeholders: Trade-offs or value creation. *Journal of Business Ethics*, 96(1), 7–9.
- Hart, S. (1997). Beyond greening: Strategies for a sustainable world'. *Harvard Business Review*, 75(1), 66–76.
- Hart, S. L., & Milstein, M. B. (1993). Creating sustainable value. *Academy of Management Executive*, 17(2), 56–69.
- McCormick, K., Neij, L., Mont, O., Ryan, C., Rodhe, H., & Orsato, R. (2016). Advancing sustainable solutions: An interdisciplinary and collaborative research agenda. *Journal of Cleaner Production*, 123, 1–4. <https://doi.org/10.1016/j.jclepro.2016.01.038>.
- Mio, C., Panfilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. *Business Strategy and the Environment*, 29, 3220–3245. <https://doi.org/10.1002/bse.2568>.
- Saling, P., Kicherer, A., Dittrich-Krämer, B., Wittlinger, R., Zombik, W., Schmidt, I., ... Schmidt, S. (2002). Eco-efficiency analysis by BASF: The method. *The International Journal of Life Cycle Assessment*, 7(4), 203–218.
- Scheyvens, R., Banks, G., & Hughes, E. (2016). The private sector and the SDGs: The need to move beyond 'business as usual'. *Sustainable Development*, 24, 371–382.
- Sheehy, B., & Farneti, F. (2021). Corporate social responsibility, sustainability, sustainable development and corporate sustainability: What is the difference, and does it matter? *Sustainability*, 13(11), 5965. <https://doi.org/10.3390/su13115965>.
- UN Global Compact. (2014). *The role of business and finance in supporting the Post-2015 agenda*. https://d306pr3pise04h.cloudfront.net/docs/news_events%2F9.6%2FPost2015_WhitePaper_2July14.pdf
- Van Zanten, J. A., & Van Tulder, R. (2018). Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, 1, 208–233.
- Wells, P. (2004). Creating sustainable business models: The case of the automotive industry. *IIMB Management Review*, 16(4), 15–24.
- Wong, J. K. H., Lee, K. K., Tang, K. H. D., & Yap, P.-S. (2020). Microplastics in the freshwater and terrestrial environments: Prevalence, fates, impacts and sustainable solutions. *Science of the Total Environment*, 719, 137512. <https://doi.org/10.1016/j.scitotenv.2020.137512>.

Sustainable Business Strategies

► Sustainable Business Solutions

Sustainable Chain Management

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Synonyms

Green/environmental supply chain management; Integrated chain management; Responsible supply chain management; Sustainable operations management; Sustainable supply chain management

Description of Sustainable Chain Management

Recently, the notion of supply chains has expanded with the perspective of sustainability, and it is assumed that organizations should focus on not only financial returns and economic interests of the business but also the social and environmental concerns (Esty and Winston 2009; Gupta and Benson 2011; Kleindorfer et al. 2005). Thus, supply chain management has evolved beyond pure economic concerns due to the rising transparency and customer awareness of where, with whom, with what kind of impacts to the environment, and under what kind of working conditions the production process is arranged. Therefore, supply chain management research

has started to focus on the matters of environment, working conditions, labor rights, and responsible value creation for the stakeholders. By the way, sustainability, which refers to a holistic perspective of integrating social issues, environmental concerns, and economic responsibilities, has started to be considered in organizational operations and has gained an increasing deal of interest by researchers in the field of business management (Carter and Rogers 2008). Sustainable chain management, in its simplest sense, refers to either a new paradigm or a development in the chain management through integrating critical indicators of sustainability performance measurement into supply chain processes and operations. Based on this, both business professionals and academicians have recognized the integration of environmental and social issues into the logistics and supply chain operations. By the way, recently, supply chains are required to be socially and environmentally responsible to their stakeholders.

The Development of Sustainable Supply Chain Management

Following the emergence of the stakeholder theory by Freeman (1984), since the 1990s, companies have realized the significance of their stakeholders and have started to organize their relations with their suppliers, which have an important place among all stakeholder groups, from the perspective of supply chain management. In the most general sense, the supply chain covers the information flows and activities in the process from raw material to the final consumer.

Council of Supply Chain Management Professionals (CSCMP) states that supply chain management involves all planning and management activities of the organizations during the whole process of sourcing, procurement, and logistics. In addition, it also encompasses the conversion, coordination, and collaboration among suppliers, focal companies, and customers. Thus, it is expressed that “supply chain management integrates supply and demand management within and across companies” (CSCMP 2022).

Due to the increasing competition conditions, the effects of globalization, and the rapid development of technology, the structures within the supply chain have started to become complex and supply chain management strategies have been reshaped by companies (Beamon 1999). As Seuring and Müller (2008) highlight that production processes are generally disintegrated and have different stages at different places in the world. However, suppliers, customers, intermediaries, third-party service providers are always in contact and connected with both material and capital flows. Since the beginning of the 2000s, increasing concerns and developing awareness about the social effects of the activities of companies on the environment and society have revealed the necessity of considering the supply chain from a new perspective (Taticchi et al. 2013). To satisfy the customer’s changing demands and needs with environmental awareness, companies have chosen to manage their supply chains effectively with a sustainability perspective, paying attention to the correct and fair use of natural resources (Vachon and Klassen 2006). Meanwhile, if companies on the supply chain are environmentally and socially responsible, the value of the product increases or decreases in the opposite case. For instance, some of the apparel giants such as Nike, Levi Strauss, Benetton, Adidas, or C&A have been blamed for several claims including problems occurring during the production process such as inhumane or working conditions, employing child workers or contamination of the local environment in recent years. As a result, organizations have become more willing to integrate environmental and social matters into their operations and activities, and follow required standards (i.e., ISO standards or GRI guidelines) in daily routines. Under these circumstances, sustainable supply chain management, which can be used as green or environmental supply chain management interchangeably, has gained an increasing interest (Seuring and Müller 2008).

Sustainable supply chain management refers to the management of supply chain operations and resources in order to obtain economic value as well as to minimize environmental impacts and increase social welfare (Taticchi et al. 2013). It

presents a holistic approach of the combination of supply chain management and sustainable development (Esfahbodi et al. 2016). Moreover, sustainable supply chain management encompasses corporate social responsibility, environmental management, and supply chain management simultaneously. This perspective also supports the thesis of supply chain management, put forward by Vachon and Mao (2008), to be positively related to the economic, environmental, and social dimensions of sustainable development.

In the United Nations (UN) Global Compact 2010 Report, where the importance of sustainable development is emphasized, sustainable supply chain management refers to the promotion of governance activities to be implemented throughout the product life cycle of goods and services that can be demonstrated by the management of environmental, social, and economic impacts (UN 2010). For a company that puts sustainability at the center of its strategies, integrating these principles into the supply chain by complying with the principles of the UN Global Compact will enable it to support sustainable development goals and create economic, environmental, and social value in the long run.

According to literature, the stages of greening a supply chain process in design, production, and waste minimization bring together important areas such as environmental risk management, product safety, occupational health and safety, pollution prevention, product life cycle management, resource protection, and waste management (Srivastava 2007). Implementing green sustainable supply chain activities enables companies within the supply chain to better integrate their different activities, thereby increasing efficiency, lowering costs, better managing risks and thus operational efficiency is improved for companies (Gupta and Benson 2011).

Carter and Rogers (2008) describe the economic results of sustainable supply chain activities from five main points: (1) cost savings as a result of reducing waste expenditures, (2) reducing health and safety costs and lowering recruitment and turnover costs as a result of improved working conditions, (3) increasing motivation and productivity, as a result of better working conditions and

dealing with environmental and social problems through a proactive approach to gain competitive advantage, (4) increasing product quality through implementing social and environmental management systems (i.e., ISO 14000, SA 8000), and (5) increasing the corporate reputation, which often has a greater impact on financial performance, and making the company more attractive to all its stakeholders.

Summary

Due to the importance and impact of supply chain management in the activities and sustainability practices of companies, the value created by sustainability policies through the supply chain has become essential today. Sustainable supply chain management ensures communication coordination among suppliers, considering the economic, environmental, and social dimensions of sustainable development of companies throughout the supply chain. The expectation of the company that implements sustainable supply chain management is to keep its suppliers in this chain, to comply with environmental and social criteria, to meet the expectations and needs of customers, to achieve economic targets, and to maintain its competitive advantage (Seuring and Müller 2008). From this perspective, companies are responsible to environmental, social, and economic consequences of their own and their suppliers' operations (Koberg and Longoni 2019).

Cross-References

► [Sustainable Logistics](#)

References

- Beamon, B. M. (1999). Designing the green supply chain. *Logistics Information Management*, 12(4), 332–342.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360–387.

- Council of Supply Chain Management Professionals (CSCMP). (2022). Definitions of Supply Chain Management. Retrieved from https://cscmp.org/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms.aspx. Accessed 13 June 2022.
- Esfahbodi, A., Zhang, Y., & Watson, G. (2016). Sustainable supply chain management in emerging economies: Trade-offs between environmental and cost performance. *International Journal of Production Economics*, 181, 350–366.
- Esty, D. C., & Winston, A. S. (2009). *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. Hoboken: Wiley.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Gupta, N., & Benson, C. C. (2011, November). Sustainability and competitive advantage: An empirical study of value creation. *Competition Forum*, 9(1), 123–136.
- Kleindorfer, P. R., Singhal, K., & Van Wassenhove, L. N. (2005). Sustainable operations management. *Production and Operations Management*, 14(4), 482–492.
- Koberg, E., & Longoni, A. (2019). A systematic review of sustainable supply chain management in global supply chains. *Journal of Cleaner Production*, 207, 1084–1098.
- Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 16(15), 1699–1710.
- Srivastava, S. K. (2007). Green supply-chain management: A state-of-the-art literature review. *International Journal of Management Reviews*, 9(1), 53–80.
- Taticchi, P., Tonelli, F., & Pasqualino, R. (2013). Performance measurement of sustainable supply chains. *International Journal of Productivity and Performance Management*, 62(8), 782–804.
- United Nations (UN). (2010). United Nations global compact leaders summit 2010 building a new era of sustainability summary report. Retrieved from <https://www.unglobalcompact.org/library/227>. Accessed 14 June 2022.
- Vachon, S., & Klassen, R. D. (2006). Green project partnership in the supply chain: The case of the package printing industry. *Journal of Cleaner Production*, 14(6–7), 661–671.
- Vachon, S., & Mao, Z. (2008). Linking supply chain strength to sustainable development: A country-level analysis. *Journal of Cleaner Production*, 16(15), 1552–1560.

Sustainable Change Management

► Managing Change for Sustainability

Sustainable City Branding

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Synonyms

Environmental city branding; Environmental place marketing; Sustainable place marketing

Definition

Sustainable City Branding is the management of a city's reputation to reflect the city's achievements and ambitions in environmental, social, and economic development. Sustainable City Branding focuses on the citizens' attaining a sustainable, good quality of life based on United Nations Sustainable Development Goals SDGs, U.N. (2015).

Place and city branding developed as a result of increasing competition between cities to attract tourist, visitors, investors, and residents and is heavily biased toward economic development. Sustainable City Branding reflects city policy that adopts a balanced approach between economic, social, and environmental policies to attract and retain citizens.

Sustainable City Branding is increasingly influential in urban governance putting citizens at the centre of policy-making decisions to improve the well-being of the citizens and enhances the reputation of the city. Adoption of Sustainable City Branding demonstrates a recognition by policy makers of the importance of the city's inhabitants experiencing a sustainable, good quality of life that generates loyalty and commitment from citizens and enhances the reputation of the city.

Over half the world's population live in cities. People are attracted to cities to access employment, social life, good infrastructure, culture, and a good quality of life (Croad, 2020). Cities

can not only improve resource efficiency and contribute to sustainability, but can also lead to pollution of air and water and other negative factors. Part of the Sustainable City Branding process is to constantly monitor factors of urban living to inform city policy and to achieve a sustainable high quality of life.

Introduction

In the twenty-first century, Sustainable City Branding has developed due to the increasing awareness of environmental issues and access to technology. It is an amalgamation of disciplines including Tourism Management, Natural Sciences, Urban Studies, and Marketing (Morgan et al. 2011). In the 1970s, place promotion based in Tourism Management was used to attract tourists to locations, later in the 1980s and 1990s as neoliberalism influence moved local governance from a managerial role to an entrepreneurial role, urban policy making adopted city marketing to attract skilled workers, investment and visitors, focusing on economic growth (Eisenschütz, 2010). Also, in the 1980s, the Brundtland Report called for a conciliation of economic efficiency, equity, and environmental protection. The Earth Summit in Rio made local governments responsible for “sustainable development” initiatives (Mancebo & Sachs, 2015).

Accessibility to technology via mobile devices and the use of social media platforms has increased the voice of citizens and given citizens an increasing ability to communicate among each other, to mount campaigns and to make their expectations known to local and national policy makers. Citizens can make their approval or discontent with city policy clear and can urge others into action. The obligation for urban governance to embrace the requirements of the citizens has become central to policy making, locally and nationally. Increased support for environmental protection issues and the drive towards zero carbon from mainstream, apolitical citizens has focused policy makers more toward the benefits of sustainability in city policy making which is communicated through Sustainable City

Branding to demonstrate how the priorities of citizens are being acknowledged and fulfilled (Arcanjo, 2020).

According to Schaefer et al. (2015), the Organisation for Economic Co-operation and Development (OECD) identified that sustainability depends on developing economic growth and social development while ensuring that natural assets are protected and maintained. It further established that environmental policies are not sustainable in the long term without economic growth and wealth creation. Developing Sustainable City Branding to effectively manage the city’s reputation regarding the sustainable development of the city is the key to effective urban development and to relevant, effective policy making that addresses the sustainable quality of life expectations of the city’s citizens.

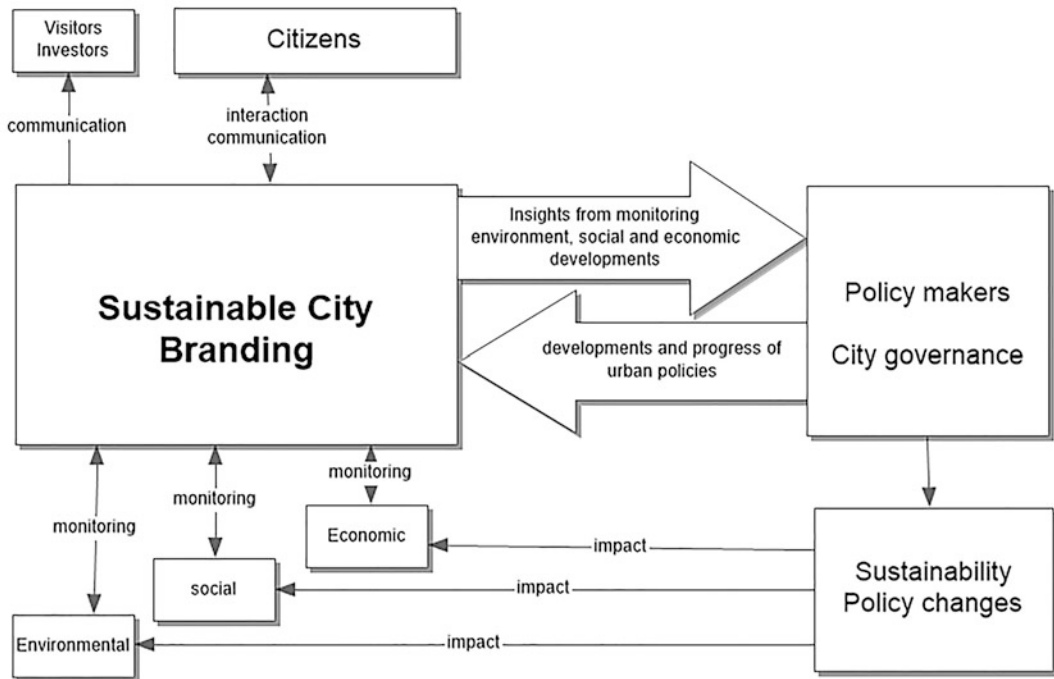
Key Issues

Sustainability City Branding is predicated on effective monitoring and communication. To achieve credible Sustainable City Branding the image and reputation needs to accurately reflect the achievement of satisfaction of the citizens and other stakeholders with the environmental, social and economic development of the city.. Through monitoring of the environmental, social and economic developments in achieving sustainability goals and maintaining interactive communication with citizens to evaluate the quality of life and well-being standards achieved through sustainability. Effective, accurate Sustainable City Brand will make the city attractive to visitors and investors (Fig. 1).

The Sustainable City Branding Cycle (Croad, 2020) is the interconnection between sustainability policy, stakeholders and the monitoring, communication role of Sustainable City Branding to provide good quality of life through balanced development of environment, social, and economic elements.

Environmental

Sustainable City Branding’s focus for monitoring environmental issues in the city include clean and safe water to drink and for other uses such as washing; clean air and efficient waste disposal



Sustainable City Branding, Fig. 1 The Sustainable City Branding monitoring and communication cycle. (Croad, 2020)

preventing contamination of water resources such as rivers, streams, lakes, and seas. Energy efficiency and availability of green spaces are also important components on the many environmental issues that Sustainable City Branding needs to monitor and feedback into urban policy making.

Clean air is important to stakeholder's health, and to maintaining clean and attractive buildings and monuments. Air quality management plans are needed to tackle air pollution from traffic, domestic heating, and local industry.

Sustainable City Branding policy will require effective policies for management of waste; including management of collection and disposal of solid waste through composting, recycling, and incineration with energy recovery will be developed and implemented with landfill only used as a last resort. Policies will include stakeholder's involvement to encourage, engage, and involve stakeholders to minimize, reuse, and recycle waste and to contribute to innovations to address the growing problem of waste disposal in cities.

Sustainable City Branding will include policies for green spaces, recreational areas for the health and well-being of citizens, fostering biodiversity, and protecting habitats. It also ensures no harmful use of pesticides in areas used by people such as playgrounds, parks and sports facilities.

It is important for Sustainable City Branding that the city functions efficiently and minimizes the use of natural resources. This includes avoiding city sprawl and maximizing the land use in cities by the development of brown field sites. Energy efficiency is key to Sustainability City Branding adopting the development of energy-efficient buildings that require less energy for lighting, heating, and cooling.

Efficient city infrastructure and transport, through an effective Sustainable Urban Transport Plan, is key to stakeholder's quality of life and to economic development and an important part of Sustainable City Branding. The reduction of emissions from internal combustion engines, through increased use of public transport using nonfossil

fuels, walking and cycling are positive contributors to achieving positive environmental outcomes and will be part of the city's contribution to reduce greenhouse gas emissions. An effective digital infrastructure will enable effective communication and involvement whilst minimising the carbon footprint.

Economic Factors

The economic focus for Sustainable City Branding includes support for employment in the knowledge economy through education and training, establishing Eco-innovation and sustainable employment initiatives to improve sustainability and develop policies to support and encourage technological innovation and creativity to ensure the sustainable future of cities. Specifically, there is a need to invest in green technologies to realize economic returns as has been achieved in cities such as Hamburg. Programmes are needed to integrate science and technology into all cities.

Policy focus on environmental technology projects to address other environmental problems associated with the generation of waste in cities is needed, providing support to create green jobs at all levels of skill and experience and to support enterprises in new technologies. Green public procurement is another policy to be considered in Sustainable City Branding; procurement activities should consider environmental implications along with other considerations to reward environmental endeavors of suppliers. Policy strategies for encouraging technological eco-innovation and entrepreneurship in sectors such as renewable energies, biofuels, and investment to developing competitive green technology firms and related industry will be positive contributors to the economic sustainability of the city.

Social Factors

The Sustainable City Branding monitoring focuses on social factors which include improving communication and transparency of policy making for the stakeholders of the city. This includes well-managed and democratically integrated environmental, social, and economic management systems.

As part of the social policy for Sustainable City Branding, events associated with positive ecological orientation can provide positive emotional experiences and improve the lived and perceived quality of life that a city provides. Marin-Aguilar and Vila-López (2014) identify the National Fair of San Marcos in Aguascalientes, Mexico, in 2011 as an environmentally orientated megaevent that contributes to positive social attitudes toward the city and enhances a sense of community and belonging.

Social policy for Sustainable City Branding will benefit from the support and inclusion of urban heritage, based on the city's history, culture, and traditions. This will include the conservation of historical buildings, heritage sites, and traditional festivals which will encourage stakeholders to form emotional and physical attachments to urban heritage and improve social well-being and positive connections to the city.

Future Direction

A key initiative to contributing to the framework on which Sustainable City Branding is developed is the European Green City Award (EGCA) which required cities to satisfy the following conditions:

1. Maintaining high environmental standards.
2. Continually striving toward sustainable development with an emphasis on ambitious environmental goals.
3. Being an inspiration to other cities.

In the application phase, a city needs to demonstrate its results and plans for future years and decades in domains including climate change adaptation, local transport, green urban areas, nature and biodiversity, noise pollution, waste production and management, water management, and so on (Demaziere, 2020).

Another initiative is the "CittaSlow"; this slow movement is a contributor to sustainability branding policy in some cities aiming to contribute positively to the society by protecting and preserving the traditions, heritage, culture, and natural attributes of the city. This is a reaction to the increased globalization of many cities with global

high street chains taking over the high street and out-of-town retail parks having a deleterious effect on local independent businesses. This may be an appropriate movement for some cities, or even as a part of a sustainable city-branding strategy (Doyduk & Okan, 2017).

There are some examples of cities that have successfully adopted Sustainable City Branding such as Sweden which has developed a holistic approach to sustainable development and Sustainable City Branding. It is acknowledged internationally as an exemplar illustration of the sustainable city concept with the functions of waste management, water management, and energy management that are integrated, and the residents are seen as an integral part of the ecological cycle which is central to the city brand (Demaziere, 2020).

Hamburg has also adopted sustainability policies and Sustainable City Branding successfully. It was historically a highly industrialized city and has successfully transitioned to a city that has high standards of environmental performance. Hamburg's Sustainable City Branding has been strengthened by receiving the EGCA in 2011 and is now perceived as a green, sustainable, innovative, and environmentally conscious city (Flämig et al., 2019). Hammarby Sjostad and Hamurg illustrate the successful adoption of key factors of Sustainable City Branding.

Increasingly, Sustainable City Branding strategies use communication within the city to adopt circular economies to reduce waste and encourage recycling, and also encourage exchange cultures that strengthen community involvement and inclusivity. The Covid19 pandemic has supported the Sustainable City Branding focus on buying locally and reducing physical travel while encouraging and developing technology to facilitate virtual global communication using virtual platforms such as Zoom and Teams. This adaptation to virtual methods of communication has been adopted throughout commerce, and by citizens of all age and economic groups, contributing to sustainability through social, environmental, and economic benefits.

Strategies to Foster Sustainable City Branding

Strategies to foster Sustainable City Branding include the following: education – lifelong learning relating to the life enhancing the role of suitability; infrastructure (physical and digital) – facilitating sustainability, employment, and training in sustainable industries; and built environment – supporting heritage and culture while developing energy-efficient aesthetically pleasing built environment. Policy needs to support local businesses and increased community activities to strengthen communities.

Summary

Sustainable City Branding manages the reputation of the city, reflecting a focus on sustainable high-quality life goals. The unsustainable economic focus for city development has been replaced with a drive toward a conciliation of economic, social, and environmental balanced development; the Earth Summit in Rio made local governments responsible for taking “sustainable development” initiatives (Mancebo & Sachs, 2015).

The main challenge of Sustainable City Branding is coordination of urban policies that are coherent and match the requirements for sustainable life in the city. Although there is consensus among most policy makers that improvement of the urban environment is a major objective for sustainability and quality of life, there is a lack of consistency in aims and policy agreement between departments and organizations in the same city as to how to achieve effective sustainability policies and Sustainable City Branding. There needs to be a strong basis of agreement in cities because without clear policies on sustainability and effective operational strategies, progress cannot be made.

Effective coordination and cooperation between policy makers, citizens, and key organizations in cities to achieve sustainability and credible Sustainable City Branding in a city is needed. The Leipzig Charter on Sustainable European

Cities positively contributes to this goal, prioritizing health, esthetics, and sustainability in cities (Environment Directorate-General European Commission, 2010).

Environment Directorate-General European Commission (2010) contributes to the framework for effective policy making for Sustainable City Branding with focus on supporting sustainable local communities, effective infrastructure, increased use of renewable energy, and energy efficiency. Sustainable high-quality urban development will attract inward investment and economic growth. Equity issues need to be included in sustainability policies in cities and promoted in Sustainable City Branding to ensure diversity and inclusivity in cities to meet criteria for balanced long-term economically, socially, and environmentally successful development in cities.

Cross-References

- [Corporate Sustainability](#)
- [Sustainability Accounting](#)
- [Sustainable Entrepreneurship](#)
- [Sustainable Management](#)
- [Triple Bottom Line](#)

References

- Arcanjo, M. (2020). *Doing well by doing good*. Environmentalism and the Role of Responsible Investing.
- Croad, J. (2020). *How small cities attract and retain skilled people: Development of a model*. ResearchGate.
- Demaziere, C. (2020). Green city branding or achieving sustainable urban development? Reflections of two winning cities of the European green capital award: Stockholm and Hamburg. *Town Planning Review*, 91(4), 373–396.
- Doyduk, H. B. B., & Okan, E. Y. (2017). Sustainable city branding: Cittaslow—the case of Turkey. In *Advertising and branding: Concepts, methodologies, tools, and applications* (pp. 1013–1032). IGI Global.
- Eisenschitz, A. (2010). Neo-liberalism and the future of place marketing. *Place Branding and Public Diplomacy*, 6(2), 79–86.
- Environment Directorate-General European Commission. (2010). *Making our cities attractive and sustainable: How the EU contributes to improving the urban environment*. Office for Official Publications of the European Communities.
- Flämig, H., Lunkeit, S., Rosenberger, K., & Wolff, J. (2019). *Enlarging the scale of BEVs through environmental zoning to reduce GHG emissions: A case study for the city of Hamburg* (p. 100418). Research in Transportation Business & Management.
- Mancebo, F., & Sachs, I. (2015). *Transitions to sustainability*. Springer.
- Marin-Aguilar, J. T., & Vila-López, N. (2014). How can mega events and ecological orientation improve city brand attitudes? *International Journal of Contemporary Hospitality Management*, 26(4), 629–652.
- Morgan, N., Pritchard, A., & Pride, R. (2011). *Destination brands: Managing place reputation*. Routledge.
- Schaefer, K., Corner, P. D., & Kearins, K. (2015). Social, environmental and sustainable entrepreneurship research: What is needed for sustainability-as-flourishing? *Organization & Environment*, 28(4), 394–413.
- SDGs, UN. (2015). *United Nations sustainable development goals*. UN Org.

Sustainable Communities

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Synonyms

[Ecovillage](#); [Environmentally friendly communities](#); [Green City/Town](#); [Green communities](#); [Green Village](#); [Intentional Community](#); [Self-sufficient communities](#)

Definition

There is no single, agreed upon, definition for sustainable community simply because both the terms therein are open to a myriad of interpretations. Despite this, there have been several attempts in this context.

Community can be understood as a diverse social group which shares, among others, values, beliefs, perspectives, and/or identity.

Sustainable on the other hand is understood as the ability to consistently maintain and/or carry forward at a given level. In this vein, sustainable also means using our (natural) resources in a way so as to not burden the future generations. This would thus include the SEE factors, i.e., social, environmental and economic factors.

Sustainable community could be therefore defined as a community with the shared idea and purpose of making efficient and effective use of (natural) resources to meet the social, environmental, and economic needs of the present and future inhabitants of the community.

According to Egan (2004) “Sustainable communities meet the diverse needs of existing and future residents, their children and other users, contribute to a high quality of life and provide opportunity and choice. They achieve this in ways that make effective use of natural resources, enhance the environment, promote social cohesion and inclusion and strengthen economic prosperity” (p. 7).

To achieve a sustainable community, several different and necessary aspects need to be brought together. Egan (2004) states these aspects are governance, transport and connectivity, services, environment, equity (fairness), economy, housing and built environment, and finally social and cultural aspects. Egan’s wheel is an often referred to benchmark in this context.

In other words, sustainable communities are places where people want to live and work, not just for now but also in future.

Background

History has shown that many civilizations have collapsed due to shortsighted policies on protecting our delicate ecosystems and stemming of population growth.

With no change in mortality and fertility, the world population is projected to grow to 10.1bln according to UN (2019). To sustain this level of population, the need for resources is going to multiply many times. OECD (2018) projects use

of resources such as metals, fossil fuels, biomass, and nonmetallic materials will grow more than twice from 79Gt in 2011 to 167GT in 2060. Since materials and their related activities are responsible for a large part of the greenhouse gas emissions, the resulting environmental damage is likely to be beyond repair (OECD 2018). It is now obvious that the environment is not as resilient and self-healing as previously believed.

The awareness created by environmental organizations and interested stakeholders has been accelerated by catastrophic man-made accidents such as the Exxon Valdez Spill (Leahy 2019), Chernobyl (Blakemore 2019), the BP Deepwater Horizon oil spill (Department of Justice 2012), Union Carbide Limited gas leak (Dubey and Khandekar 1984), etc.. This environmental awareness has been also deeply compounded by heightened human and animal rights awareness. Sustainable community, in many ways, is a personal manifestation of a deep-seated desire to achieve a much more conscious way of living.

Attempts at building sustainable communities have been made in the past, but most have been restricted to solving shortage of housing issues rather than achieving a sustainable community (Office of the Deputy Prime Minister 2003). Unlike its general interpretation, sustainable community is not just about decent, affordable housing. Instead, it is about setting up a self-sustaining, thriving, inclusive community working effectively to build an environmentally, socially, and economically sustainable present and future for its diverse population. This includes transportation, housing, food, culture, job opportunities, education, health care, etc. (Egan 2004).

Several (local) governments around the world along with NGOs have developed advisory bodies, guidelines, and practical toolkits to plan cities or city expansions, rural development, create eco-villages, etc. under the premise of sustainable community incorporating necessary and conducive environmental, social, and economical aspects (Penha-Lopes and Henfrey 2019). The long-term benefits of such communities are manifold in terms of preservation of nature, protection

of social norms, upholding of respect and rights, and general well-being.

The dramatic change in pace of life over the past couple of decades punctuated frequently by natural catastrophes, man made and natural crises, have all spurred on the need for building many more such communities.

Some Famous Examples

Curitiba in Brazil. Adler (2016).

BedZed in UK. Campbell (2020).

Dancing Rabbit Ecovillage in US. Gunther (2020).

Saint Michael's Sustainable Community in Costa Rica. (Foundation for Intentional Community 2020)

Crystal Waters Permaculture Village in Australia. Kinninment and Gaffney (2018)

Vauban district of Freiburg in Germany. Thorpe (n.d.)

CSR Context

In pursuit of profits and delivering year on year growth to their various vested stakeholders, companies often cut corners or are forced to do so under the relentless pressure of performance growth. The idea of continuous growth is myth though this does not stop its pursuit. Resources are not endless and typically tend to have a linear growth pattern, while population and its related consumption of resources are exponential (Sherwood et al. 2017). A company whose CSR policies proactively engage with stakeholders with an aim to deliver them their long-term prosperity while not compromising environmental, social and economic aspects could soon see itself become the nucleus of a sustainable community with a healthy, thriving, eco-friendly, inclusive society developing around it.

One way to stem the potential destruction of the planet given our myopic tendencies is to proactively encourage more and more mainstream sustainable communities. In other words, make sustainable community a standard and not just a

perk. A way to encourage development of more and wide-reaching sustainable communities is for companies to be proactively sustainable in the sense of SEE factors.

A company whose CSR policies proactively engage with sustainability with an aim to deliver long-term prosperity to its stakeholders while not compromising environmental, social and economic aspects could soon see itself become the nucleus of a sustainable community with a healthy, thriving, eco-friendly, inclusive society developing around it.

Cross-References

- [Community of Practices](#)
- [Community Sustainability](#)
- [Shared Community-Based Governance](#)

References

- Adler, D. (2016, May 6). Story of cities #37: How radical ideas turned Curitiba into Brazil's 'green capital'. *Guardian*. <https://www.theguardian.com/cities/2016/may/06/story-of-cities-37-mayor-jaim-lemer-curitiba-brazil-green-capital-global-icon>. Accessed 21 Aug 2020.
- Blakemore, E. (2019, May 17). The Chernobyl disaster: What happened, and the long-term impacts. *National Geographic*. <https://www.nationalgeographic.com/culture/topics/reference/chernobyl-disaster/>. Accessed 20 Aug 2020.
- Campbell, M. (2020, March 11). What's life like in the UK's first zero carbon, Eco village? *Euro News*. <https://www.euronews.com/living/2020/03/10/what-s-life-like-inside-the-uk-s-first-zero-carbon-eco-village>. Accessed 21 Aug 2020.
- Department of Justice. (2012, November 15). *BP Exploration and Production Inc. agrees to plead guilty to felony manslaughter, environmental crimes and obstruction of Congress surrounding Deepwater Horizon incident*. <https://www.justice.gov/opa/pr/bp-exploration-and-production-inc-agrees-plead-guilty-felony-manslaughter-environmental>. Accessed 19 Aug 2020.
- Dubey, S., & Khandekar S. (1984, December 31). Bhopal gas leak worst industrial disaster in history, 2500 people die, injures thousands. *India Today*. <https://www.indiatoday.in/magazine/cover-story/story/19841231-bhopal-gas-leak-worst-industrial-disaster-in-history-2500-people-die-injures-thousands-803517-1984-12-31>. Accessed 19 Aug 2020.

- Egan J. (2004). *The Egan review: Skills for sustainable communities*. London: Office of the Deputy Prime Minister. https://www.ihbc.org.uk/recent_papers/docs/Egan%20Review%20Skills%20for%20sustainable%20Communities.pdf. Accessed 19 Aug 2020.
- Foundation for Intentional Community. (2020, January 4). *Saint Michael's sustainable community*. ic.org. <https://www.ic.org/directory/saint-michaels-eco-village/>. Accessed 19 Aug 2020.
- Gunther, S. (2020, May 22). 5 thriving, sustainable communities. *Treehugger*. <https://www.treehugger.com/thriving-sustainable-communities-4863872>. Accessed 20 Aug 2020.
- Kinniment, M., & Gaffney, A. (2018, July 2). Sunshine Coast eco village turns 30 as pioneering permaculture ideas become mainstream. *ABC News*. <https://www.abc.net.au/news/2018-07-03/crystal-waters-eco-village-celebrates-30-years/9929342>. Accessed 19 Aug 2020.
- Leahy, S. (2019, April 9). Exxon Valdez changed the oil industry forever – But new threats emerge. *National Geographic*. <https://www.nationalgeographic.co.uk/2019/03/exxon-valdez-changed-oil-industry-forever-new-threats-emerge>. Accessed 19 Aug 2020.
- OECD. (2018). *Global material resources outlook to 2060 economic drivers and environmental consequences*. oecd.org. <https://www.oecd.org/environment/waste/highlights-global-material-resources-outlook-to-2060.pdf>. Accessed 20 Aug 2020.
- Office of the Deputy Prime Minister. (2003). *Sustainable communities: Building for the future*. <https://webarchive.nationalarchives.gov.uk/20120919140956/http://www.communities.gov.uk/documents/communities/pdf/146289.pdf>. Accessed 19 Aug 2020.
- Penha-Lopes, G., & Henfrey, T. (2019). Reshaping the future: How local communities are catalysing social, economic and ecological transformation in Europe. <https://www.ecolise.eu/wp-content/uploads/2016/02/Status-Report-on-Community-led-Action-on-Sustainability-Climate-Change-in-Europe-2019.pdf>. Accessed 19 Aug 2020.
- Sherwood, J., Ditta, A., Haney, B., Haarsma, L., & Carbajales-Dale, M. (2017). Resource criticality in modern economies: Agent-based model demonstrates vulnerabilities from technological interdependence. *BioPhysical Economics and Resource Quality*, 2(9). <https://link.springer.com/article/10.1007/s41247-017-0026-z>
- Thorpe, D. (n.d.). *The world's most successful model for sustainable urban development?* smartcitiesdive.com. <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/words-most-successful-model-sustainable-urban-development/229316/>. Accessed 19 Aug 2020.
- United Nations (UN). (2019). *World population prospects 2019*. Department of Economic and Social Affairs. <https://population.un.org/wpp/Download/Standard/Population/>. Accessed 19 Aug 2020.

Sustainable Companies

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Synonyms

Community-based companies; Convivial enterprises; Humanistic enterprise; Spirited businesses

Definition

Despite irresponsible behaviors are still diffused, a number of studies have highlighted the emergence of companies that mirror a strong sustainability orientation and are authentically CSR (corporate social responsibility) oriented (Jenkins 2004, 2006; Del Baldo 2017). Even if they represent a diversified universe, these companies can be considered sustainable companies, because they are characterized by the tension toward the multiple dimensions (economic, social, environmental) of sustainable development, are marked by a long-term orientation, and ascribe a fundamental relevance to people (inside and outside the company), relational capital, and the community they belong to.

Sustainable companies integrate sustainable development goals (SDGs) into their business (UN 2015). They are high-performing companies whose competitive success grows out of their commitment to an ethical-led substratum. They embody a humanistic enterprise model, that is a way of doing business that places people at its core, where work is conceived as an expression of human value and profit as a mean to achieving the true good, that is, to improve the lives of workers, customers, suppliers, and, more generally, all stakeholders, included in the environment. Sustainable companies can also be appreciated as “companies with a soul” since they have a specific character, drawn from the principles triggered by the entrepreneurs/managers that are

mirrored in their mission and translated into the governance.

Introduction

Corporate sustainability has been conceived as “meeting the needs of a firm’s direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities), without compromising its ability to meet the needs of future stakeholders as well” (Dyllick and Hockerts 2002, p. 131). Moreover, it has been defined as “companies’ responsibility for their impact on society” (EC 2011). The sustainability model of the Lisbon Treaty and the EU 2020 strategy – described as smart, inclusive, and green growth – rests on activities that include voluntary social and environmental actions, the respect of sustainability standards, transparency and stakeholder engagement, sustainable operations, and relationships culminating in new business models in which sustainability constitutes the core business. Through CSR companies are targeted toward the ultimate goal of sustainability and voluntarily incorporate social, ethical, and environmental concerns in their daily business operations (WCED 1987; Elkington 1994).

Sustainable companies are a manifestation of sustainable entrepreneurship. The latter refers to the discovery, creation, and exploitation of entrepreneurial opportunities that contribute to sustainability by generating social and environmental benefits for the whole society (Osburg 2014). Sustainable entrepreneurship has been widely acknowledged as the answer to environmental and social challenges (Zahra et al. 2009).

Sustainable companies manifest a “conviviality” that is intended as the attitude to improve relationships with stakeholders and the territory/community to which they are embedded because business’ success goes alongside with the surrounding local context (Balloni and Trupia 2005). One of the principle motivations of entrepreneurs/manager who lead sustainable companies is the desire to do something useful for their own community. This is because the histories of their businesses have always been founded

on “passion” rather than mere calculation. Accordingly, they spend their efforts in behaving as responsible citizen and advancing sustainability. Moreover, they feel responsible of best practices by acting as stimulators of partnerships and exchanges among other companies.

Embeddedness is experienced as active participation to the territorial community and represents a distinctive feature of territorial companies (Del Baldo 2012a). A sense of belonging to a specific territorial context is a key driver of the business model and allows the company to nurture responsible networks, based on a shared ethical orientation. Such networks – that comprise internal and external stakeholders (i.e., public and civic institutions, banks, trade associations, unions, local authorities, nonprofit organizations, chambers of commerce, among others) – are social in nature and rest on personal relationships among individuals that allow the exchange of social goods (Niccolini 2008). Therefore, sustainable companies have a narrative identity: they trace a path whose origins derive from the local social capital.

Key Issues

Sustainable companies rest on both tangible and intangible resources that render them dynamic and innovative. The social and the environmental strategy, as well as the involvement of stakeholders, contribute to develop competitive resources. Features such as the culture, history, beliefs, and shared convictions (the so-called *genius loci*) represent the humus of the intangible assets. Sustainable companies aim to use their activity to progress (and make it flourish) the local and global community. Accordingly, they contribute to build a model in which territory becomes the place where sustainable development can be concretely operationalized.

Sustainable companies are not merely intended to generate economic benefits, but as drivers of a “neo-capitalism” that has been defined as “humanistic capitalism.” In this framework the common good is the guiding force and humankind is at the center of production and consumption processes.

Among the core principles of sustainable companies the following embody the features of the humanistic model: respect for the individual, the environment and the territory, and responsibility to society.

First, sustainable companies promote respect for the physical and cultural integrity of individuals and for interpersonal relations. They promote the value of human resources, increasing the wealth and skills of each employee and collaborators. They guarantee working conditions that are respectful of individual dignity and safe working environments.

Second, relationships with stakeholders are driven by cooperation, loyalty, and mutual respect, which consist in acting with a sense of responsibility.

Third, they contribute to environmental sustainability. The commitment to safeguard the environment is put into practice by planning activities that seek a balance between economic and environmental needs over the law.

Finally, they contribute at promoting the economic, social, cultural, and civil growth. Sustainable companies nurture the “dream” to generate social and environmental goods, because they are aware that profit is not enough and a higher purpose is to be found.

As afore mentioned, there is a diversified universe formed by several types of companies that can be considered sustainable companies. Such companies are often driven by an ethical substratum (Hoivik von Weltzien and Melé 2009; Hoivik von Weltzien 2014) and through their activity generate material positive impact on society and the environment. Among the various forms and types are benefit corporations and B corps (Clark et al. 2013; Hiller 2013; Honeyman 2014), società benefit (Castellini et al. 2017; Nigri et al. 2017; Nigri and Del Baldo 2018; Del Baldo 2019), inclusive business (Jenkins et al. 2010; Gradl and Knobloch 2010; Gradl and Jenkins 2011), community-based companies (Peredo and Chrisman 2006), spiritual enterprises (Malloch 2008; Pruzan 2001; Capaldi 2013), territorial companies (Del Baldo 2010, 2012a), economy of communion companies (Del Baldo and Baldarelli 2015), convivial enterprises, and

purpose-driven businesses (Jenkins 2004, 2006; Molteni 2009).

Among the possible types of sustainable companies an emerging model is represented by benefit corporations and B Corps that have been recognized by legislation in the USA and Italy in recent years (B Lab 2016). Their mission differs from shareholder value maximization in that they represent alternative models of enterprise (hybrid organizations) that bridge the for-profit and not-for-profit model (Clark et al. 2013). A benefit corporation is an institutional form with a recognized legal structure. It is for-profit entity that has voluntarily and formally committed to pursue a general or specific public benefit by creating social and environmental outcome, in addition to its responsibility to return profits to the shareholders. Benefit corporations “are required to have a purpose of creating ‘general public benefit’ and are allowed to identify one or more ‘specific public benefit’ purposes” (Clark et al. 2013, p. 17). General public benefit is intended as a material positive impact on society and the environment, as evaluated against the B Lab standard (a not-for-profit third-party standard-setting certifying organization founded in Pennsylvania in 2007) including, among others: providing low-income or underserved individuals or communities with beneficial products/services; going beyond the creation of jobs in the normal course of business; protecting or restoring the environment; improving human health; promoting the arts, sciences, or advancement of knowledge (White 2015).

While a benefit corporation has the obligation to draw up an annual report to assess and communicate its financial, social, and environmental performance, a B-Corp refers to a business of any legal form that has obtained a certification as to its level of responsible business conduct. A B-Corp is subject to a “B Impact Assessment” (BIA) powered by B Lab that evaluates companies across five broad categories: environment, employees, customers, community, and governance.

Further types of sustainable companies are those of SMEs (small and medium-sized enterprises) that are authentically oriented to CSR.

SMEs are often purpose-driven companies (Del Baldo 2012b). In such contexts the owner-entrepreneur forges the company's mission and the business models. The ethical and socially orientation mirror his/her values, attitudes, and behaviors. "To evaluate the conditions on which the firm can cultivate an ethical and collective conscience, one must start from the motivations that inspire entrepreneurial or managerial behaviour" (Sciarelli 2007, p. 110). A growing piece of research, centered on various cases involving SMEs, allowed verifying an important connection between orientation toward sustainability of companies led by entrepreneurs ("champions of CSR") and the sharing of those values typical of their local context (Putnam et al. 1993).

Many companies strive to integrate CSR and sustainability into their core business. Implementing sustainability within the business context means integrating it into the core business and/or reorienting enterprises with the aim of creating sustainability. This implies an authentic and effective sustainability orientation, while "the prevailing approaches to CSR are so disconnected from strategy as to obscure many great opportunities for companies to benefit society" (Porter and Kramer 2011, p. 68).

In this regard a further example of sustainable companies is represented by inclusive business initiatives aimed at creating a corporate shared values. While CSR programs can have a limited connection to the business, inclusive business initiatives are internal to a company's profitability and competitive position and involve collaboration with stakeholders (Porter and Kramer 2011) to discover opportunities that benefit society by strengthening the competitive context in which they operate.

Inclusive businesses support sustainability-oriented projects and actions on national and international levels addressing the issues of poverty, environmental change, among others. In this regard there is increasing interest in local communities, and the operationalization of sustainability at the local level, especially in disadvantaged communities and underdeveloped

countries (Leca and Naccache 2011; Mair and Seelos 2007) where an important role can be played by community-based enterprises capable to promote institutional changes and provide a strategy for sustainable local development (Peredo 2003) when the community acts entrepreneurially. "Community-based-enterprises are managed and governed to pursue the economic and social goals of a community in a manner that is meant to yield sustainable individual and group benefits over the short- and long-term" (Peredo and Chrisman 2006, p. 4). Community-based enterprises are built upon the collective skills and resources of the community, and they have multiple social and economic goals acting corporately in pursuit of the common good. They depend on social capital since they are created on the basis of collectively owned cultural, social, and ethnic endowments.

Future Direction

Sustainable companies aim at spreading a shared and durable prosperity. This goal is impossible to achieve if leaders are oriented toward short-term financial and competitive success, or adopt CSR strategies merely aimed to increase the company's (and their own) legitimacy. In accordance with these lines of thought, sustainable companies need for a coherent leadership model, capable of triggering and stimulating social innovation (Vogel and Fischler-Strasak 2014).

The model of humanistic capitalism centered on sustainable companies (such as benefit corporations, purpose-driven companies, territorial companies, community-based companies) leans on the construction of the common good. Sustainable companies, often less visible than irresponsible ones, consider people, community, and the territory as key resources and should be experienced as common good, because they do not limit themselves to being hidden champions, rather they offer the chance to inspire the institutional and business world in actually implementing sustainability.

Summary

Raising consciousness of social and environmental problems on a global scale requires more awareness for the responsible behavior of companies (Avery and Bergsteiner 2011). The economic growth and wealth creation that are essential to achieve sustainable development goals will come primarily from private enterprise (Nelson and Prescott 2008). In this regard a key role is played by sustainable companies that can assume different forms. Among the diverse possible types, community-based enterprises, as well as territorial company, convivial enterprises, benefit corporations, and B Corp, are all examples of actual declinations of promising models for a sustainable development seeing communal values and the notion of the common good as essential elements (Del Baldo 2014; Jenkins et al. 2010).

References

- Avery, G., & Bergsteiner, H. (2011). Sustainable leadership practices for enhancing business resilience and performance. *Strategy & Leadership*, 39(3), 5–15.
- B Lab. (2016). Benefit impact assessment. <http://benefitcorp.net/b-impactassessment>. Accessed 8 June 2017.
- Balloni, V., & Trupia, P. (Eds.). (2005). *Origine, Caratteristiche e Sviluppo Dell'imprenditorialità Nelle Valli dell'Esino e del Misa*. Ancona: Ed. Conerografia, Economia Marche.
- Capaldi, N. (2013). How American spiritual capital inform business and affects the common good. In S. Groschl (Ed.), *Uncertainty, diversity and the common good. Changing norms and new leadership paradigms* (pp. 25–40). Surrey: Gower.
- Castellini, M., Marzano, M., & Riso, V. (2017). Are B Corporations' a model of disclosure of intellectual capital? An analysis by ecosystem, paper presented at the 13th interdisciplinary workshop on intangibles and intellectual capital, EURAM conference 'soft regulating integrated reporting for SMEs: The case of Italy', Ancona, Italy, September 21–22, 2017, Università Politecnica delle Marche.
- Clark, W. H. Jr., Biddle, D., Reath L. L. P., Vranka, L., & Canonchet Group LLC. (2013). White paper. The need and rationale for the benefit corporation. B Lap Version of January, 18, 2015. https://benefitcorp.net/sites/default/files/Benefit_Corporation_White_Paper.pdf. Accessed 8 June 2017.
- Del Baldo, M. (2010). Corporate social responsibility and corporate governance in Italian SMEs: Toward a 'territorial' model based on small 'champions' of CSR. *International Journal of Sustainable Society*, 2(3), 215–247.
- Del Baldo, M. (2012a). Familial and territorial values for sustainable entrepreneurship in Italy: Some reflections in theory and practice. *Journal of Modern Accounting and Auditing*, 8(8), 1185–1203, Serial Number 87, August.
- Del Baldo, M. (2012b). Corporate social responsibility and corporate governance in Italian SMEs: The experience of some "spirited businesses". *Journal of Management and Governance*, 16(1), 1–36.
- Del Baldo, M. (2014). Developing businesses and fighting poverty: Critical reflections on the theories and practices of CSR, CSV, and inclusive business. In L. Pate & C. Wankel (Eds.), *Emerging research directions in social entrepreneurship, advances in business ethics research* (pp. 191–223). Dordrecht: Springer Science Business Media.
- Del Baldo, M. (2017). Authentic CSR and leadership: Towards a virtues-based model of stakeholder dialogue and engagement: The Loccioni Group experience. In S. O. Idowu & S. Vertigans (Eds.), *Stages of corporate social responsibility. From ideas to impacts* (pp. 179–203). Cham: Springer International Publishing Switzerland.
- Del Baldo, M. (2019). Acting as a benefit corporation and a B Corp to responsibly pursue private and public benefits. The case of Paradisi Srl (Italy). *International Journal of Corporate Social Responsibility*, 4, 1–18.
- Del Baldo, M., & Baldarelli, M. G. (2015). From weak to strong CSR: The experience of the EoC (Economy of Communion) industrial parks in Germany and Italy. *uwf UmweltWirtschaftsForum*, 23(4), 213–226.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- EC (European Commission). (2011). *A modern understanding of corporate social responsibility, COM (2011) 681 final: A renewed EU strategy 2011–14 for corporate social responsibility*. Brussels: EC.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Gradl, C., & Jenkins, B. (2011). *Tackling barriers to scale: From inclusive business models to inclusive business ecosystems. The CSR initiative at the Harvard Kennedy School*. Cambridge, MA: Harvard Kennedy School.
- Gradl, C., & Knobloch, C. (2010). *Endeva report, inclusive business guide, how to develop business and fight poverty*. Berlin: Endeva.
- Hiller, J. S. (2013). The benefit corporation and corporate social responsibility. *Journal of Business Ethics*, 118(2), 287–301.

- Hoivik von Weltzien, H. (2014). The heart of leadership is ethics. *Impresa Progetto-Electronic Journal of Management*, 11, 1–9.
- Hoivik von Weltzien, H., & Melé, D. (2009). Can a SME become a global corporate citizen? Evidence from a case study. *Journal of Business Ethics*, 88, 551–562.
- Honeyman, R. (2014). *The B Corp handbook: How to use business as a force for good*. San Francisco: Berrett-Koehler.
- Jenkins, H. (2004). A critique of conventional CSR theory: An SME perspective. *Journal of General Management*, 29(4), 37–57.
- Jenkins, H. (2006). Small business champions for corporate social responsibility. *Journal of Business Ethics*, 67(3), 241–256.
- Jenkins, B. E., Ishikawa, E., Geaneotes, A., & Paul, J. (2010). *Inclusive business: Expanding opportunity and access at the base of the pyramid*. Washington, DC: IFC.
- Leca, B., & Naccache, P. (2011). Supporting new ventures creation in disadvantaged communities to favor institutional change: The institutional work of the ITCP in Rio de Janeiro. Paper presented at the EURAM 11th, management culture in the 21st century, 1st–4rd June, Tallinn, Estonia.
- Mair, J., & Seelos, C. (2007). Profitable business models and market creation in the context of extreme poverty: A strategic view. *Academy of Management Perspectives*, 21(4), 49–63.
- Malloch, T. R. (2008). *Spiritual enterprises. Doing virtuous business*. New York: Encounter Books.
- Molteni, M. (2009). Aziende a movente ideale. In L. Bruni & S. Zamagni (Eds.), *Dizionario di Economia Civile* (pp. 65–75). Roma: Città Nuova.
- Nelson, J., & Prescott, D. (2008). *Business and the millennium development goals: A framework for action* (2nd ed.). Washington, DC: IFC International Business Leaders Forum.
- Niccolini, F. (2008). *Responsabilità sociale e competenze organizzative distinte*. Pisa: ETS.
- Nigri, G., & Del Baldo, M. (2018). Sustainability reporting and performance measurement systems: How do small- and medium-sized benefit corporations manage integration? *Sustainability*, 10(12), 4499. <https://doi.org/10.3390/su10124499>.
- Nigri, G., Michelini, L., & Grieco, C. (2017). Social impact and online communication in B-corps. *Global Journal of Business Research*, 11, 87–104.
- Osburg, T. (2014). Sustainable entrepreneurship: A driver for social innovation. In C. Weidinger, F. Fischler, & R. Schmidpeter (Eds.), *Sustainable entrepreneurship* (pp. 103–115). Berlin/Heidelberg: Springer.
- Peredo, A. M. (2003). Emerging strategies against poverty: The road less traveled. *Journal of Management Inquiry*, 12(2), 155–166.
- Peredo, A. M., & Chrisman, J. J. (2006). Toward a theory of community-based enterprise. *Academy of Management Review*, 31(2), 309–328.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. How to reinvent capitalism – And unleash a wave of innovation and growth. *Harvard Business Review*, 89, 62–77.
- Pruzan, P. (2001). The question of organizational consciousness: Can organizations have values, virtues and visions? *Journal of Business Ethics*, 29, 271–284.
- Putnam, R. D., Leonardi, R., & Nanetti, R. Y. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
- Sciarelli, S. (2007). *Etica e responsabilità sociale nell'impresa*. Milano: Giuffrè.
- UN (United Nations). (2015). Sustainable development goals (SDGs). United Nations sustainable development goals. <https://sustainabledevelopment.un.org/sdgs>. Accessed 12 January 2019.
- Vogel, P., & Fischler-Strasak, U. (2014). Fostering sustainable innovation within organizations. In C. Weidinger, F. Fischler, & R. Schmidpeter (Eds.), *Sustainable entrepreneurship. CSR, sustainability, ethics and governance* (pp. 191–205). Berlin: Springer.
- WCED (World Commission on Environment and Development). (1987). *Brundtland report, our common future*. Oxford: Oxford University Press.
- White, T. J. (2015). Benefit corporations: Increased oversight through creation of the benefit corporation commission. *Journal of Legislation*, 41, 329.
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24, 519–532. <https://doi.org/10.1016/j.jbusvent.2008.04.007>.

Sustainable Competitive Advantage

► Sustainable Competitiveness

Sustainable Competitiveness

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Synonyms

Sustainable Competitive Advantage

Definition/Description

“Sustainable competitiveness is the ability to generate and sustain inclusive wealth without diminishing the future capability of sustaining or increasing current wealth levels” (Solability 2022a). Solability has published the Global Sustainable Competitive Index (GSCI) since 2012 (Solability 2022b; Zhongming et al. 2020).

The above cited and generic definition is tangential to the Brundtland Report “Our Common Future” that defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987). Instead of then-existing earlier descriptions mainly focusing on economic aspects, the report combined economic development with social and environmental stability. The above definitions include the economic, social, and environmental dimension.

A commonly cited index to measure competitiveness is the Global Competitiveness Index (GCI) by the World Economic Forum (WEF), that has defined competitiveness as “the set of institutions, policies and factors that determine the level of productivity of a country” (WEF 2011) and sustainable competitiveness as “the set of institutions, policies, and factors which make a nation productive over the long term while ensuring social and environmental sustainability” (WEF 2015).

Sustainable competitiveness relates to both sustainability and competitiveness as well as to several sustainability and competition-related concepts, such as sustainable competitive advantage. However, despite a significant amount of research and literature on sustainability and competitiveness, and a growing amount on sustainable competitiveness, there still is no uniform definition for the term sustainability (Adams et al. 2016), nor competitiveness, nor unambiguous understanding regarding the concepts or measurement methods, nor interpretations of results of such measurements (Balkyte and Tvaronavičienė 2010; Kirjavainen and Saukkonen 2020, Salimova et al. 2018).

What Do We Speak About When We Speak About Sustainable Competitiveness?

Several global organizations and other stakeholders as well as academic scholars have described both sustainability and competitiveness and developed measurement indexes. However, despite the massive amount of research and literature, sustainable competitiveness remains unanimously determined; as well as its underlying terms sustainability (Adams et al. 2016) and competitiveness (Balkyte and Tvaronavičienė 2010; Kirjavainen and Saukkonen 2020, Salimova et al. 2018). In addition, although the number of work and reports is growing, the angle to competitiveness has not been from the globalization and sustainable development point of view (Balkyte and Tvaronavičienė 2010).

Regarding “sustainability” in relation to the term sustainable competitiveness, Solability has defined sustainable competitiveness as sustainable management, with interplay between sustainability and profitability, and as sustained competitiveness, as follows: “Sustainability is not a new concept. It is an evolution of existing management thinking and paradigm. The difference to conventional management is that the horizon on which management decisions are taken is wider in width (issues) and depth (time). Sustainable management therefore is superior to conventional management. Sustainable management is sustainable competitiveness, is the foundation to sustain competitiveness. Sustainability is profitable – and profitability is sustainable” (Solability 2022a).

Regarding “competitiveness,” the term is often approached either from the international (global) level, national (country) level, regional (city or region) level, or organization (firm) level (Balkyte and Tvaronavičienė 2010; Kirjavainen and Saukkonen 2020). Further, the definition of competitiveness can include a narrower time-related dimension (Coyne 1986; Huang et al. 2015; Kirjavainen and Saukkonen 2020).

Several major economic organizations, such as Organization for Economic Co-Operation and

Development (OECD) (Hatzichronoglou, 1996), the World Economic Forum (WEF), and the International Institute for Management Development (MIF) have all created concepts for competitiveness and indexes to measure them. Models from renowned and cited authors such as Porter (1990) have been utilized.

Building upon various definitions based on an in-depth and cited literature review on competitiveness, Balkyte and Tvaronavičienė outline that “Competitiveness is not just about growth or economic performance but should take into consideration the ‘soft factors’ of competitiveness, such as the environment, quality of life, technology, knowledge, etc.” (Balkyte and Tvaronavičienė 2010, p. 344). Thus, “globalization, economic dynamism and social progress, sustainability and competitiveness go hand in hand” (Balkyte and Tvaronavičienė 2010, p. 360) and “the different sets of competitive advantages interact and reinforce each other” (Balkyte and Tvaronavičienė 2010, p. 359).

Accordingly, regarding sustainable competitiveness, Herciu and Ogorean consider the main theme of sustainable competitiveness as a search for a model that would equalize economic prosperity and environmental and social dimensions of sustainability (Herciu and Ogorean 2014). In addition, they note that before adjusting the global competitiveness index to include two then new elements, the environmental and the social, in practice means that also the concept of the triple bottom line (Elkington 1997) will become generalized from the microeconomic standpoint to the macroeconomic level (Herciu and Ogorean 2014).

Regarding competitiveness at the firm level, largely cited Coyne (1986) considers the term “sustainable competitive advantage” from the company competitive advantage point of view, and from a certain time-related economic perspective: “The most important condition for sustainability is that existing and potential competitors either cannot or will not take the action required to close the gap. If the competitors can and will fill the gap, the advantage by definition is not sustainable” (Coyne 1986, p. 58). The aspect of time relating to the competitive advantage can also

occur via perception of the competitive advantage as either “temporary” or “sustainable” (Huang et al. 2015).

Further, approached at the firm level, from the perspective of “an individual economic entity” (Salimova et al. 2018, p. 161) and taken into account that “despite a significant amount of studies on the issue of ensuring the competitiveness of enterprises, there is no unambiguous interpretation of this term” (Salimova et al. 2018, p. 164) as well as building upon literature, they however conclude the “competitiveness as an enterprise” as “the ability to be flexible and adaptive in changing conditions of competition, while maintaining integrity and efficiency of business management” (Salimova et al. 2018, p. 165).

Why Does Sustainable Competitiveness Matter?

First, although no uniform definition for sustainable competitiveness exists, one acknowledged meaning is a competitive advantage, or strategic competitive advantage it brings to its user.

At the firm level, the sustainable competitive advantage means a strategic competitive advantage as an “integrated set of actions that produce a sustainable advantage over competitors” (Coyne 1986).

The closely associated term to sustainable competitiveness is corporate social responsibility (CSR). In the European Commission’s Green Paper promoting a European framework for CRS, it is defined as “a concept through which the company voluntarily integrates the social and environmental dimensions in its business operations and in its relations with stakeholders” (COM 2001 366). CSR is capable of creating value as a competitive advantage (Aggerholm et al. 2011; Du et al. 2010; Carlini et al. 2019; Siegel and Vitaliano 2007). If a firm is imaged as a socially responsible company, the stakeholder engagement is positively impacted (Greening and Turban 2000; Carlini et al. 2019). However, the opposite impact may occur and the company brand may be harmed, if stakeholders perceive the signals of social responsibility as fake signals and the

company as a humbug (Anselmsson et al. 2016; Carlini et al. 2019; Scheidler et al. 2019).

Regarding the closely associated and underpinning term sustainable development illustrated by the Brundtland Report (Brundtland 1987), the European Union converted a strategy for sustainable development (COM 2001 264). Furthermore, the European Union revised their strategy furnishing “a long-term vision for sustainability in which economic growth, social cohesion and environmental protection go hand in hand and are mutually supporting” (European Union 2006). European Union further expressed that there were certain unsustainable trends and in this regard, the requirement for greater efforts to address these issues (European Union 2009). At the same time, the European Commission’s reviews acknowledged the progress within the European Union to promote sustainable development via many policies. Also, it noticed the European Union’s attempts to head the development in the fields of advancing a low-carbon economy and address the climate change. Today, sustainable development is among the European Union’s long-term targets (Article 3(3) of the Treaty on European Union).

Earlier, through the United Nation’s conference in Rio de Janeiro in 1992, the nations agreed that the economic growth and environmental sustainability should ally (Weiss 1993).

In addition to sustainable competitive advantage and CSR, a further closely associated term is strategic corporate social responsibility. It has been described as “any ‘responsible’ activity that allows a firm to achieve a sustainable competitive advantage, regardless of motive” where strategic corporate responsibility creates sustainable competitiveness to a company (McWilliams and Siegel 2011).

How to Measure Sustainable Competitiveness?

This question has started to interest scholars since the 1980s. Although no unanimous method to measure sustainable competitiveness yet exists (Balkyte and Tvaronavičienė 2010; Popescu

et al. 2017; Salimova et al. 2018), attempts to measure it have been carried out by organizations and stakeholders, approaching the theme from various viewpoints.

Regarding the international (global) ranking level, the index directly originating in the term sustainable competitiveness is the global sustainable competitiveness index (GSCI). It has been published by Solability since 2012 (Solability 2022b; Zhongming et al. 2020) and has gained academic attention (Doyle and Perez-Alaniz 2017; Herciu and Ogorean 2014; Rosati and Faria 2019). GSCI measures sustainable competitiveness as “competitiveness of countries based on 189 measurable, *quantitative* indicators derived from reliable sources, such as the World Bank, the IMF, and various UN agencies. The 189 indicators are grouped into 6 sub-indexes: Natural Capital, Resource Efficiency & Intensity, Social Cohesion, Intellectual Capital, Economic Sustainability, and Governance Efficiency” (Solability 2022b). According to them, “it is the most comprehensive ranking of countries currently available” (Solability 2022b).

Regarding the international (global level), a renowned and commonly cited index linked to competitiveness is the global competitiveness index (GCI). It has been published via the Global Competitiveness Reports by World Economic Forum (WEF). The WEF definition for competitiveness is “the set of institutions, policies and factors that determine the level of productivity of a country” (WEF 2011), measuring countries and placing them in the global ranking order. The WEF defines their most recent (2020) GCI Report as “the Global Competitiveness Report has since its first edition aimed to prompt policy makers beyond short-term growth and to aim for long-run prosperity. The 2020 special edition is dedicated to elaborating on the priorities for recovery and revival, and considering the building blocks of a transformation toward new economic systems that combine ‘productivity’, ‘people’ and ‘planet’ targets” (WEF 2020).

Neither at the national level, “despite its importance, a fully operational model to be used in any context has not yet been designed” (Popescu et al. 2017). However, the authors evaluate and analyze

sustainable competitiveness from the macroeconomic perspective via three factors: the economic, the social, and the natural, and utilization of four indexes (Human Development Index, Environmental Performance Index, Global Competitiveness Index, and GDP per capita) (Popescu et al. 2017). However, they conclude that “these indices are not able to offer exhaustive image of the sustainable performances assessment” (Popescu et al. 2017, p. 24). “Is it possible for a country to be commercially competitive and at the same time protect the environment and social welfare?” has been asked and explored (Thore and Tarverdyan 2016).

At a firm level, as an example of measurement elements, one model suggests including the factors of innovation and training; social capital; resource efficiency and environmental compatibility; stakeholder relationship management; and management capital (Salimova et al. 2018, p. 167).

How To Implement Sustainable Competitiveness?

While the definition of the term sustainable competitiveness and the underpinning terms of are not yet agreed upon, the problem of implementation calls for solution, offering paths for future studies (Adams et al. 2016). Business models play a role in relation to sustainability innovation (Rohrbeck et al. 2013). The search for a sustainability related business model at the same questions the current neo-liberalistic lens on the world (Adams et al. 2016; Boons and Lüdeke-Freund 2013).

However, as the question of implementation is of significance and its meaning is likely to increase in the future (Adams et al. 2016), ways to apply and implement sustainable competitiveness have been and can be suggested from various perspectives.

At an organization level, a possibility to implement sustainable competitiveness comes via implementation of international standards. The International Organization for Standardization (ISO) is one of the organizations providing global

standards. Approached from the perspective of sustainable development of society (ISO 2017), Salimova et al. have proposed to utilize five ISO standards: ISO 9001:2015 Quality Management systems; ISO 9004:2018 Quality Management – Quality of an organization – Guidance to achieve sustained success; ISO 14001:2015 Environmental Management Systems – Requirements with Guidance for use; ISO 26000:2010 Guidance on social responsibility; and ISO 22301:2012 Societal Security – Business Continuity management systems – Requirements (Salimova et al. 2018). Further, it has been suggested if and how the ISO 31000:2018 Risk management standard and the ISO 31022:2020 Guidelines for the management of legal risk could help to advance sustainability and address sustainability-related risks and mitigate them (Hirvonen-Ere 2019). In addition, at a country (regional) level, proper risk management has been suggested as a major success factor for a country in its sustainability development (Rutkauskas 2008).

At a corporate level, paraphrasing two old truths of the project management approach (you get what you measure and you get what you reward) a practical implementation guide “What Gets Measured Gets Done” has been created to implement what is termed “Dynamic Corporate Sustainability” (Solability 2022c).

Further, at a firm level, utilization of existing means in an expanded and novel manner could be one of those ways. An example of this approach is implementing not only economic competitiveness but also sustainability and the green economy via the contract management mode of operation to cover the company’s business contracts and contracting activity to promote the headway of sustainability in the corporate world (Hirvonen-Ere 2019). Business contracts are strategic assets creating competitive advantage, whereas lack of sufficient contract management causes conflicts, losses, and value erosion (Cummins 2015). “In addition to business goals measured by direct monetary value, Contract Management can be used in an expanded manner...to drive other types of business goals, such as breakthrough of sustainability” (Hirvonen-Ere 2022, p. 293).

Summary

During the past three decades since the 1980s, the concept of sustainable competitiveness has developed and lived from the plain economic approach to include social and environmental dimensions. Sustainable competitiveness is often approached from the firm level, regional level, national level or international (global) level, or a combination of those, moving from the microeconomic view toward the macroeconomic perspective. At the company level, the concept has transformed from the solely economic concept of the company to produce a gap and win its rival companies, and be able to sustain this competitive advantage, to include the environmental and social aspects as sources of bringing the organization strategic competitive advantage. At the national level and in the international and global comparisons, the gross domestic product (GDP) is no longer considered as a sufficient indicator to measure sustainable competitiveness; it has expanded to combine the plain economic aspect with the environmental and social dimensions and a balance between them.

A commonly cited index to measure competitiveness is the global competitiveness index (GCI) by the World Economic Forum, which has defined competitiveness as “the set of institutions, policies and factors that determine the level of productivity of a country” (WEF 2011) and sustainable competitiveness as “the set of institutions, policies, and factors which make a nation productive over the long term while ensuring social and environmental sustainability” (WEF 2015). A cited index to measure sustainable competitiveness is the global sustainable competitiveness index (GSCI) by Solability, that has defined the term as follows: “Sustainable competitiveness is the ability to generate and sustain inclusive wealth without diminishing the future capability of sustaining or increasing current wealth levels.” Both definitions include the economic, social, and environmental dimension.

However, despite a massive amount of research and reports on sustainability and competitiveness, and a growing number of studies on

sustainable competitiveness, there is no unanimous agreement on the definition, concept, model, measurement nor the interpretation of the outcomes of such measurements. Even though many agree that prosperity and economic growth promote social and environmental sustainability, the growth ideal and current neo-liberalistic world scheme have also been questioned in the search of a sustainability-related business model.

For the aforesaid reasons and because the significance of the topic is expected to continue to grow also hereafter, the theme provides broad avenues for future research.

Cross-References

- [Business Ethics](#)
- [Competitiveness](#)
- [Creating Shared Value](#)
- [Embedded CSR](#)
- [Embedded Sustainability](#)
- [Enlightened Self-Interest](#)
- [ISO 31000: Risk Management Guidelines](#)
- [Social Responsibility According to ISO 26000](#)
- [Sustainable Development](#)
- [Sustainable Management](#)

References or Further Readings

- Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., & Overy, P. (2016). Sustainability-oriented innovation: A systematic review. *International Journal of Management Reviews*, 18(2), 180–205.
- Aggerholm, H. K., Andersen, S. E., & Thomsen, C. (2011). Conceptualising employer branding in sustainable organisations. *Corporate Communications: An International Journal*, 16(2), 105–123.
- Anselmsson, J., Bondesson, N., & Melin, F. (2016). Customer-based brand equity and human resource management image: Do retail customers really care about HRM and the employer brand? *European Journal of Marketing*, 50(7/8), 1185–1208.
- Balkyte, A., & Tvaronavičienė, M. (2010). Perception of competitiveness in the context of sustainable development: Facets of “sustainable competitiveness”. *Journal of Business Economics and Management*, 11(2), 341–365.
- Bilbao-Osorio, B., Blanke, J., Campanella, E., Crotti, R., Drzeniek-Hanouz, M., & Serin, C. (2013). Assessing

- the sustainable competitiveness of nations. In *World economic forum the global competitiveness report* (pp. 53–82). https://www3.weforum.org/docs/GCR2013-14/GCR_Chapter1.2_2013-14.pdf World Economic Forum.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- Brundtland, G. (1987). Report of the world commission on environment and development: Our common future. United Nations General Assembly document A/42/427.
- Carlini, J., Grace, D., France, C., & Lo Iacono, J. (2019). The corporate social responsibility (CSR) employer brand process: Integrative review and comprehensive model. *Journal of Marketing Management*, 35(1–2), 182–205.
- COM. (2001 264). Communication from the commission a sustainable Europe for a better world: A European Union Strategy for sustainable development (Commission's proposal to the Gothenburg European Council) / * COM/2001/0264 final */ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52001DC0264>.
- COM. (2001 366). Commission of the European Communities, Brussels, 18.7.2001 COM(2001) 366 final GREEN PAPER Promoting a European framework for Corporate Social Responsibility.
- Coyne, K. P. (1986). Sustainable competitive advantage—What it is, what it isn't. *Business Horizons*, 29(1), 54–61.
- Cummins, T. (2015). Strategic contracting as a source of organizational success. *Journal of Strategic Contracting and Negotiation*, 1(1), 7–14.
- Doyle, E., & Perez-Alaniz, M. (2017). From the concept to the measurement of sustainable competitiveness: Social and environmental aspects. *Entrepreneurial Business and Economics Review*, 5(4), 35–59.
- Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, 12(1), 8–19.
- Elkington, J. (1997). The triple bottom line. *Environmental Management: Readings and Cases*, 2, 49–66.
- European Commission. (2010). Europe 2020. A strategy for smart, sustainable and inclusive growth. Communication from the Commission. Brussels: European Commission, COM(2010) 2020 final.
- European Union. (2006). Renewed EU strategy for Sustainable Development. Council of European Union. Brussels, 26 June 2006 10917/06. <http://register.consilium.europa.eu/pdf/en/06/st10/st10917.en06.pdf>
- European Union. (2009). Review of the EU Sustainable Development Strategy - Presidency Report. Council of the European Union, Brussels, 1 December 2009 16818/09. <https://data.consilium.europa.eu/doc/document/ST%2016818%202009%20INIT/EN/pdf>
- European Union. Sustainable development. EUR-Lex. <https://eur-lex.europa.eu/EN/legal-content/glossary/sustainable-development.html>
- Greening, D. W., & Turban, D. B. (2000). Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & Society*, 39(3), 254–280.
- Hatzichronoglou, T. (1996). *Globalisation and competitiveness: Relevant indicators* (OECD science, technology and industry working papers, 5, 62). <https://doi.org/10.1787/18151965>
- Herciu, M., & Ogorean, C. (2014). An overview on European Union sustainable competitiveness. *Procedia Economics and Finance*, 16, 651–656.
- Hirvonen-Ere, S. (2019). The way of business contracts: How to promote (transport) sustainability and incentivize the green economy via Contract Management. In E. Eftestøl-Wilhemsson, S. Sankari, & A. Bask (Eds.), (pp. 182–211). Sustainable and efficient transport: Edward Elgar Publishing. Cheltenham. <https://doi.org/10.4337/9781788119283.00021>.
- Hirvonen-Ere, S. (2022). Business contract design via Contract Management operationalized methodology. In M. Corrales Compagnucci, H. Haapio, & M. Fenwick (Eds.), *Research handbook on contract design* (pp. 294–313). Edward Elgar Publishing. Cheltenham. <https://doi.org/10.4337/9781839102288.00026>.
- Huang, K. F., Dyerson, R., Wu, L. Y., & Harindranath, G. (2015). From temporary competitive advantage to sustainable competitive advantage. *British Journal of Management*, 26(4), 617–636.
- International Organization for Standardization. (2017). The ISO Survey of management system standard certifications – 2017 – Explanatory Note 2018.
- International Organization for Standardization. (2018). 31000:2018. Risk management - Guidelines. <https://www.iso.org>
- International Organization for Standardization. (2020). ISO 31022:2020 Risk management - Guidelines for the management of legal risk. <https://www.iso.org>
- Kirjavainen, J., & Saukkonen, N. (2020). Sustainable competitiveness at the national, regional, and firm levels. In W. Leal Filho, A. M. Azul, L. Brandli, P. G. Özuyar, & T. Wall (Eds.), *Responsible consumption and production* (Encyclopedia of the UN Sustainable Development Goals) (pp. 740–751). Cham: Springer. https://doi.org/10.1007/978-3-319-95726-5_4.
- McWilliams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495.
- Popescu, G. H., Sima, V., Nica, E., & Gheorghe, I. G. (2017). Measuring sustainable competitiveness in contemporary economies—Insights from European economy. *Sustainability*, 9(7), 1230.
- Porter, M. (1990). The competitive advantage of nations. *Harvard Business Review*, 68(2), 73–93.
- Rohrbeck, R., Konnertz, L., & Knab, S. (2013). Collaborative business modelling for systemic and sustainability innovations. *International Journal of Technology Management*, 63(1/2), 4–23.
- Rosati, F., & Faria, L. G. (2019). Addressing the SDGs in sustainability reports: The relationship with

- institutional factors. *Journal of Cleaner Production*, 215, 1312–1326.
- Rutkauskas, A. V. (2008). On the sustainability of regional competitiveness development considering risk. *Technological and Economic Development of Economy*, 14(1), 89–99.
- Salimova, T. A., Biryukova, L. I., Shilkina, A. T., & Khakhaleva, E. V. (2018). Towards a methodology of sustainable competitiveness of organization. *International Journal of Civil Engineering and Technology*, 9(11), 161–172.
- Scheidler, S., Edinger-Schons, L. M., Spanjol, J., & Wieseke, J. (2019). Scrooge posing as Mother Teresa: How hypocritical social responsibility strategies hurt employees and firms. *Journal of Business Ethics*, 157(2), 339–358. (Published online 2018).
- Siegel, D. S., & Vitaliano, D. F. (2007). An empirical analysis of the strategic use of corporate social responsibility. *Journal of Economics and Management Strategy*, 16(3), 773–792.
- Širá, E., Vavrek, R., Kravčáková Vozárová, I., & Kotulič, R. (2020). Knowledge economy indicators and their impact on the sustainable competitiveness of the EU countries. *Sustainability*, 12(10), 4172.
- Solability. (2022a). Sustainable competitiveness. <https://solability.com/sustainable-competitiveness/competitiveness>. Accessed 2022.
- Solability. (2022b). The GSCI. Global sustainable competitiveness index. <https://solability.com/the-global-sustainable-competitiveness-index/the-index>. Accessed 2022.
- Solability. (2022c). What gets measured gets done. Integrating Corporate Sustainability. A Rough Guide. <https://solability.com/what-gets-measured-gets-done-2>. Accessed 2022.
- Thore, S., & Tarverdyan, R. (2016). The sustainable competitiveness of nations. *Technological Forecasting and Social Change*, 106, 108–114.
- Weiss, E. B. (1993). Environmentally sustainable competitiveness: A comment. *The Yale Law Journal*, 102(8), 2123–2142.
- World Economic Forum (WEF). (2011). The global competitiveness report 2011–2012. World Economic Forum, Geneva. https://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf
- World Economic Forum (WEF). (2015). The global competitiveness report 2015–2016. World Economic Forum, Geneva. https://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf
- World Economic Forum (WEF). (2020). Global competitiveness report special edition 2020: How countries are performing on the road to recovery. <https://www.weforum.org/reports/the-global-competitiveness-report-2020/in-full/executive-summary-70fef507ea>
- Zhongming, Z., Linong, L., Xiaona, Y., Wangqiang, Z., & Wei, L. (2020). The global sustainable competitiveness report 2020 solability sustainable intelligence. <http://119.78.100.173/C666/handle/2XK7JSWQ/306384>

Sustainable Construction Management

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Synonyms

Green construction

Definition

Construction activities change the world into a more suitable habitat for humans and make up the built environment. Hence, construction consumes resources, processes them into desired products and end products, utilizes them, and disposes of them at the end of their life. Therefore, the construction industry lies at the core of human-induced unsustainable ways of living. Meanwhile, sustainable construction management tries to assess the environmental, social, and economic impacts of construction works to reach a more sustainable way of living. While the first sustainable practices tended to focus on energy and resource consumption, nowadays quantitative approaches that look at the whole life cycle can be used in evaluating environmental impacts. In this context, environmental aspects can be determined according to the use of resources, waste generation, disposal, and environmental impacts. Social aspects deal with sustainable living and include safety and security, health and comfort, accessibility, adaptability to climate change, and maintenance. While the construction industry generates many jobs and income, the economic aspects of a project usually examine life cycle costs wholly or in part. Since many of the aspects are interrelated, and their assessment and management rely on evaluation criteria. The adoption of sustainable construction practices not enforced by law is a participatory process involving many stakeholders in the industry. The barriers and necessary actions for adoption are mainly related to the

awareness, knowledge, and understanding of the practice.

Key Issues

There has been significant progress since the inception of the aim to achieve sustainability in construction works. At first, sustainability was more concerned with issues of energy and resource efficiency as evidenced by Kibert's (1994) definition of sustainable construction as "the creation and operation of a healthy built environment based on ecological principles and resource efficiency." Later, a more holistic point of view that also regards socio-economic issues developed. For emphasis, Kibert's definition evolved to "how the construction industry together with its product the 'built environment'... can contribute to the sustainability of the earth including its human and non-human inhabitants" (Kibert 2007). While the sustainable construction concept has the pillars of sustainability (environment, society, and economy) at its core, the triple bottom line approach to sustainability, which recommends that management should focus on 3P's (people, planet, and pocketbook), also holds true.

Successful implementations have shown that a sustainable way of doing things works better than conventional constructional practices in many areas; some of the best practices are established as legislative requirements. Therefore, a shift to a new model of sustainable construction practices from business as usual is necessary. According to Agenda 21, this shift would be easier in developing countries (du Plessis 2002). Yet, the management process is participatory and requires input from many stakeholders. Nonetheless, the situation in each locality, industry, and society differs according to drivers and barriers. The most common barriers include a lack of client understanding, knowledge, and processes in the construction sector. At the same time, the most significant drivers besides improving the quality of life are environmental sustainability indicators. Therefore, the most effective actions to promote sustainable practices are related to the awareness, knowledge, and understanding of sustainable

construction, in addition to the development of new concepts and services (Durdyev et al. 2018; Häkkinen and Belloni 2011). Yet, approaching specific situations instead of general barriers is the key to successful adoption. Also, a way to enable all the stakeholders to work together is necessary. On this basis, tools such as a sustainability performance checklist (Shen et al. 2007), a corporate indicator system (Zhao et al. 2012), and an alliance contract model (Kivilä et al. 2017) are developed.

Assessment Criteria

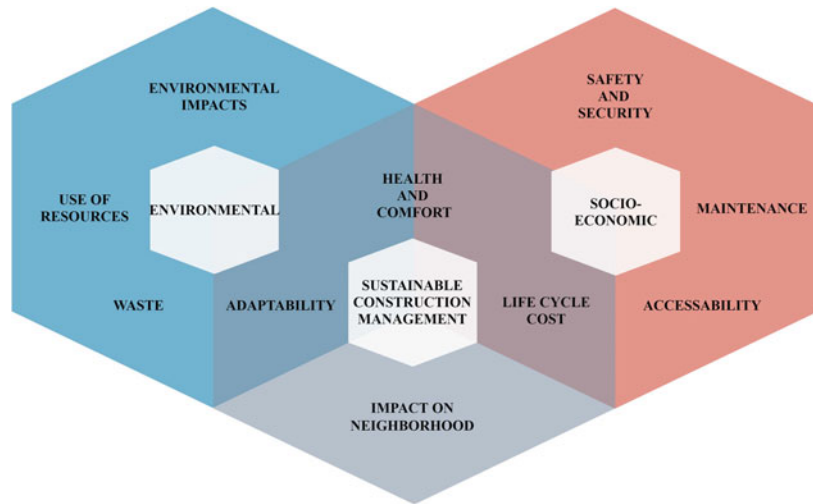
Various terms identify sustainability in the construction sector. For example, green building systems aim to decrease environmental loads and are evolving in a more sustainability-oriented direction, yet they are still more involved with the construction phase. In contrast, zero energy, negative energy, nearly zero energy, or zero emission building schemes mainly consider the use phase. However, a whole life cycle approach is necessary for holistic sustainable construction management; meaning product, construction process, use and maintenance, end of life and benefits, and loads beyond the life cycle system boundaries must be identified for sustainable construction management. Such a lifecycle-based approach as a decision support tool is defined in the European schemes, specifically CEN/TC 350 "Sustainability of construction works." Fig. 1 shows the notable criteria that require assessment and management concerning the pillars of sustainability. Accordingly, environmental aspects related to the use of resources, waste generation and disposal, and environmental impacts can be determined. Socio-economic aspects include safety and security, health and comfort, accessibility, adaptability to climate change, maintenance, and life cycle costs. Meanwhile, many of the aspects are interrelated, and their assessment is discussed below.

Environmental Criteria

Global environmental problems continue to increase along with the increase in human population and needs. Many studies examined and

Sustainable Construction Management,

Fig. 1 Criteria to be assessed and managed concerning the aspects of sustainability



determined criteria for the environmental aspect of construction practices, since around 40% of carbon and other greenhouse gas emissions, in addition to 40% of worldwide energy consumption, is related to the construction industry. Also, this industry consumes almost 50% of global raw materials and 16% of water (Pacheco-Torgal 2015). Moreover, the waste generated from construction and demolition activities accounts for around half of the global solid waste. The amount of solid waste due to construction sector is 1.2 billion tons in 2012, and it is expected to increase to 2.2 billion tons in 2025 (Transparency Market Research 2018). Therefore, most of the studies on the built environment emphasize the necessity to focus on constructions that manage energy and material resources more efficiently and utilize renewable energy resources. Typical approaches to assess and manage the sustainability of a product require methodologies such as life cycle analysis and standard series such as ISO 14000. The lifecycle of the products used for construction show the way for the environmental performance assessment of a building. Here, ISO environmental product declaration (EPD) can be used to distinguish between similar systems and is mandatory for building materials in various countries including European countries.

Socioeconomic Criteria

Social aspects cover subjective phenomena, such as safety and security, accessibility, and

maintenance, and they require both qualitative and quantitative criteria and metrics. Usually, only the use stage of the lifecycle is considered during the social assessment, in other words, stages before and after use are excluded from the analysis. While most of the social criteria are personalized and hard to assess, building codes provide quantitative benchmarks for health and comfort, yet much research still focuses on the determination of more acceptable ranges according to feedback from users. Health and comfort encompass many issues since the frequency of health problems is usually related to indoor environmental quality. Thus, healthy environments cannot be separated from thermal, visual, and acoustic comfort, which are related to indoor air quality, thermophysical properties of the building, spatial characteristics, detailing, building design, specialized products and equipment. In this context, the building envelope and building materials are the common focus of research, since they are directly related to thermal comfort, indoor air quality, and the building's energy consumption.

Sustainable construction is a big industry that is competitive, it generates many green jobs and income. Economic criteria in a construction project is assessed via lifecycle costs in full or partial considerations. In addition, cost plays a significant role in the realization of a project; feasibility studies are important in producing sustainable constructions. Although cost is not considered as

one of the biggest barriers in implementing sustainable constructions, a negative image of sustainable constructions is having high initial costs. However, this may not always be true because the maturity of the market and penetration of sustainable technologies and practices affect costs. Especially in renovations or large-scale constructions, it is possible to decrease building energy requirements and improve various social criteria without increasing the initial investment costs. Many of the criteria are interrelated, and all of them affect the sustainability of development and impacts on the neighborhood.

Summary

The assessment of sustainability criteria leads the way in the management of a project's sustainability. There are multiple criteria regarding the environmental impacts, the use of resources and waste. Feasibility and life cycle analysis can expose the positive and negative effects of alternatives. They are easier to quantify even though their relationship to other sustainability criteria is not a deeply explored research area. Even though criteria for health and comfort have some generally accepted quantitative values in the building codes, most of the social aspects are subjective. For this reason, they are not easy to quantify and require qualitative research and evaluation methods. The research done on environmental issues is remarkably more than socioeconomic pillars of sustainability. However, the sociological dimension of a project is essential to its inception and continuity, since increasing and sharing the knowledge for sustainable constructions help to decrease its undesirable effects.

Careful analysis, management, and spread of best practices in the construction industry result in a decrease of the impacts of new construction projects on the built and natural environment. While the spread of these practices does not show the aspired effects of neutralizing the effects of human-induced loads in a short time frame, the acceptance and adoption of sustainability practices are high. However, there are barriers to the adoption of sustainable construction practices,

including a lack of client understanding, and knowledge and processes, in the construction sector. Therefore, the most beneficial mechanisms to promote such practices are related to education, the sharing of sustainable construction and management protocols, and the development of new concepts. Since sustainable construction management is a holistic and interconnected topic that requires effort from many stakeholders through various points of the construction lifecycle, relationship and communication between the stakeholders are crucial in ensuring the spread of sustainable construction as well as its management.

Cross-References

- ▶ [Building Energy Management](#)
- ▶ [Carbon Emissions](#)
- ▶ [Green Building](#)
- ▶ [Green Jobs](#)
- ▶ [Life-Cycle Assessment](#)
- ▶ [Net Zero Emission](#)
- ▶ [Renewable Resource](#)
- ▶ [Sustainable Development](#)

References

- du Plessis, C. (2002). Agenda 21 for sustainable construction in developing countries. In *CSIR Report*.
- Durdyev, S., Zavadskas, E. K., Thurnell, D., Banaitis, A., & Ihtiyar, A. (2018). Sustainable construction industry in Cambodia: Awareness, drivers and barriers. *Sustainability*, 10(2), 392.
- Häkkinen, T., & Belloni, K. (2011). Barriers and drivers for sustainable building. *Building Research & Information*, 39(3), 239–255.
- Kibert, C. (1994). Principles of sustainable construction. In *Proceedings of the 1st international conference on sustainable construction, Tampa, FL, US, 6–9 November* (Vol. 1994, pp. 1–9).
- Kibert, C. J. (2007). The next generation of sustainable construction. *Building Research & Information*, 35(6), 595–601.
- Kivilä, J., Martinsuo, M., & Vuorinen, L. (2017). Sustainable project management through project control in infrastructure projects. *International Journal of Project Management*, 35(6), 1167–1183.
- Pacheco-Torgal, F. (2015). Introduction to biotechnologies and biomimetics for civil engineering. In

- Biotechnologies and Biomimetics for civil engineering* (pp. 1–19). Cham: Springer.
- Shen, L. Y., Li Hao, J., Tam, V. W. Y., & Yao, H. (2007). A checklist for assessing sustainability performance of construction projects. *Journal of Civil Engineering and Management*, 13(4), 273–281.
- Transparency Market Research. (2018). Construction waste market: Global industry analysis, size, share, growth, trends and. *Forecast*, 2017–2025.
- Zhao, Z. Y., Zhao, X. J., Davidson, K., & Zuo, J. (2012). A corporate social responsibility indicator system for construction enterprises. *Journal of Cleaner Production*, 29, 277–289.

Sustainable Consumption

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Synonyms

Appropriate Consumption; Conscious Consumption; Responsible Consumption

Introduction

The topic of sustainable consumption is enjoying increasing international attention (Jackson 2007, p. 254) in academic studies and general society (Zaccai 2007). This is due to the fact that well-known environmental as well as social challenges are reaching new tipping points (UNEP 1999, p. 2). Already three of nine planetary boundaries (for more information see the Stockholm Resilience Centre) have been crossed (nitrogen cycle, biodiversity loss, and climate crisis); crossing more could have enormous negative impacts on all of humanity (Rockström et al. 2009). These effects of human impacts can no longer be easily reversed and, as a consequence, affect life on earth (Mont 2019, p. 1).

Today's task is therefore to respect biophysical limits of this planet by reducing global consumption rates (UNEP 2021a), because unsustainable consumption and production patterns make a major negative contribution to current sustainability challenges (UNCED 1992). In 1999, the Global Environmental Outlook 2000 by the United Nations Environmental Programme already emphasized the necessity to reverse the trends of population growth, permanent economic growth, and high consumption patterns or to accept that the environment will suffer significant irreparable damage (UNEP 1999, p. 3). If consumption patterns will not change and with an expected population growth to just under 10 billion by 2050, a total of three planets will be needed to continue the current standard of living (UN 2021a). Even though environmental gains have already been achieved (UNEP 1999, p. 3) through technological solutions such as higher energy efficiencies and climate change mitigations measures, the processes cannot be stopped due to the rapid economic growth, the actual consumption patterns (ipcc 2018), a growing population and the destruction of non-renewable resources (UNEP 1999, p. 3). Therefore, it is of great importance to learn to accept the natural limits of the planet and to reflect this accordingly in consumption and production behavior (UN 2021a), because the way many societies- in particular in the industrialized world- live, use electricity, water, eat, cook, dress, and travel are mayor forces facilitating those challenges (Maxwell 2013, p. 691).

Especially food, transport, and leisure play an overriding role when considering consumption of consumer goods, as they account for a large share of energy demand and energy intensity (Schoot and Anton 2007, p. 37). The reasons for their over-consumption are complex as they are a consequence of the modern consumer society (defra 2003, p. 5). The goals consumers pursue by consumption are very diverse and range from nutrition to pleasure from self-realization to socialization.

However, collective and non-material goods and services, such as security and education, also play a role as societies want products and services

that contribute to an improvement of the quality of life. At the same time, those consumers have difficulties to accept that this also creates negative impacts, thereby making the achievement of a long-term balance between “economic development, environmental protection and social cohesion” impossible (defra 2003, p. 5).

As a consequence the modern consumer society, which consumes (and wastes) more resources than ever before (UNEP 2021c), first needs to understand that rising consumption is having a devastating impact on the entire planet (Maxwell 2013, p. 691). Ecological damage such as depletion of renewable resources, loss of biodiversity (UNEP 2001, p. 17) and forests, extinction of species and generation of hazardous waste are just some of the consequences (UNEP 1999). In addition to ecological damage, there is also social damage, such as poverty, cultural harm and social injustice also resulting in economic damage (UNEP 2001, pp. 17–18).

It is for example estimated that about one third of the food produced ends up in the garbage can (UN 2021a). Consuming those resources in such an unsustainable way also contributes to the gap between rich and poor (UNEP 2021c), because consumption opportunities are very unfairly distributed. While today millions of people have few consumption possibilities and cannot even satisfy their basic needs (UNDP 1998a, p. 41), the others live far beyond their natural limits (UNEP 1999, p. 2). That is because the richest 1% of the population is richer than the entire rest of the planet (Credit Suisse 2016). So while the majority of society is unable to meet food, health care and educational needs, the minority of society is responsible for the environmental degradation (UNCED 1992; UNEP 1999, p. 2).

This social injustice leads to the debate of the human development perspective in relation to sustainable consumption. This perspective considers people independent of their possessions and demands a world in which there is justice in terms of consumption, equal opportunities and potential. It is therefore important to emphasize that poorer social classes should at least be given the opportunity to make their own consumption decisions (UNDP 1998a, pp. 39–41). Hence it is

comprehensible that emerging economies also want to adopt the modern consumer patterns (Dobré 2007, p. 167), even though studies have found that more consumption does not make society happier. After reaching a certain level, the sense of well-being is detached from materialistic goods (Jackson 2009). Also it should be stated here that countries with excessive consumption rates also are more likely to deal with diseases resulting from over-consumption (Nkamnebe 2013, p. 2427).

To summarize, it is important to state here, that while poorer countries are struggling hard to maintain an improved standard of living through consumer choices in the first place, richer countries are already trying to make up for the standard of living they have achieved and make it more sustainable (UNDP 1998a, pp. 39–41). The “model of abundance” (Dobré 2007, p. 167) has therefore developed cracks and cannot be carried on forever on the shoulders of the planet and on the natural resources. The difficult thing about this situation is that poorer countries are often dependent on the export of their resources, but requiring to build an economy that is not dependent on exports. While industrialized countries need to move away from permanent growth (as a symbol for positive development) in the long term and become more resource efficient. This is the task (and the duty) for over-consuming nations (Bauchmüller 2021), because a more sustainable consumption could contribute positively to poverty reduction as well as to a low-emission and green economy (UNEP 2021c).

Definitions

This chapter defines important terms regarding sustainable consumption. It includes the terms sustainability, consumption, and sustainable consumption.

Definition Sustainability

Sustainability is described with a three-pillar model that encompasses the economy (e.g., support local economy), ecology (e.g., conservation), and social issues (e.g., fair wages). The three

pillars are seen as overlapping with each other therefore requiring permanent and balanced coordination (Enquete-Kommission 1998). More precisely, sustainability includes the securing of human existence, the preservation of resources, and the assurance of opportunities for action and development for present and future generations (Pufé 2017). Sustainable consumption is based on such a concept of sustainability.

Definition Consumption

In the economist's, the concept of consumption is defined as the use of goods and services by private or public households (Carroll 2021). But according to Stø et al. (2008, p. 247), consumption includes not only the consumption phase itself, but also the upstream and downstream stages of the value chain. These include the upstream stages of production, distribution, planning, and purchasing, but also reshaping, co-production, and the downstream stage of disposals (ibid.). Stern et al. (1997, p. 20) go even further and explicitly mention the accompanying resource use in their definition: "Consumption consists of human and human-induced transformations of materials and energy. Consumption is environmentally important to the extent that it makes materials or energy less available for future use" (Stern et al. 1997, p. 20).

By looking at these different definitions, it becomes apparent that different approaches to the topic of consumption exist. This is because the debates about consumption can be traced back to at least the times of classical philosophy (Jackson 2005, p. 9).

Today, the topic is embedded in various fields of research, such as economics, psychology, sociology, anthropology, and the environmental studies, which illuminate the topic from different angles. Thus, while sociology and anthropology are more concerned with consumption-related group identity, the environmental studies focus more on unsustainability in relation to the environment (Reisch and Thøgersen 2015, p. 1; UNDP 1998a, p. 40).

Definition Sustainable Consumption

The International Institute for Sustainable Development (IISD) defines sustainable consumption

as "The use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the lifecycle, so as not to jeopardize the needs of future generations" (IISD 2021). This means that sustainable consumption has to be understood as an umbrella term, which addresses different key issues like resource efficiency, renewable energies, waste management, and the resources life cycle analysis (ibid.). Sustainable consumption therefore involves various disciplines, like "Environmental Science; Business, Management and Accounting; Social Sciences; Economics, Econometrics and Finance; Energy; and Engineering" (Mont 2019, pp. 4–5). Accordingly, it is a contested term that can be illuminated from different angles (Boulanger and Zaccai 2007, p. 238). This is because the approaches behind sustainable consumption has yet to be tested (Jackson 2007, p. 256), as the terminology is still relatively new (Jackson 2005, p. 9).

The History of Sustainable Consumption

Even though consumerism has its roots in the Industrial Revolution, it really took hold in the period after World War II (Lintott 2007, pp. 43–44). The first critiques were already made, among others, by the writer and philosopher Henry Thoreau (Thoreau 1854 reprinted 1992) and the economist and sociologist Thorstein Veblen (Veblen 1899).

However, the concept of over (unsustainable)-consumption was first raised as an issue in the international policy arena by the newly established United Nations (UN) in 1949, the subjects of conservation and use of resources was taken up again at the United Nations Conference on the Human Environment in Stockholm in 1972 (Jackson 2007, p. 255). The same year, the well-known document concerning the Limits of Growth was published by the Club of Rome. It dealt with the depletion of resources due to increasing prosperity and the relevance of consumption patterns regarding environmental problems (Horst 1975). This development

subsequently culminated in the establishment of the United Nations Brundtland Commission in 1983 (Nkamnebe 2013, pp. 2428–2429). The commission addressed “the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development” (UN 1987).

As a result, the topic of sustainable consumption has been an integral part of international debates since the early 1990s (Mont 2019, p. 4) and culminated in the Earth Summit in Rio de Janeiro in 1992 (Nkamnebe 2013, pp. 2428–2429). At this United Nations Conference on Environment and Development (UNCED), it was officially recognized that current consumption patterns are not sustainable (UNEP 2001, p. 11). The developed Agenda 21 therefore explicitly dealt with changing consumption patterns in Chap. 4. The following action plan focused first on unsustainable production and consumption behaviors before moving on to national policy strategies to bring out a change towards sustainable consumption (UNCED 1992). Therefore the popularization of the term sustainable consumption can be dated back to Agenda 21 (Jackson 2007, p. 255) meaning that this field of research is about 30 years old (Mont 2019, p. 4).

In the years that followed, much changed in the area of sustainable consumption. These included, for example, the roundtable held in Oslo in the year of 1994, which was attended by companies, NGO’s, and government representatives (IISD 2021). In 1995, the UN launched another program, the International Work Programme on Changing Consumption and Production Patterns (IWPCPP), which focuses on changing consumption patterns (UNEP 2001, p. 11).

This program also led to an Earth Summit II in 1997, which is also known as the Rio + 5 conference (Jackson 2007, pp. 255–256). In the process, the issue of sustainable consumption was recognized as a cross-cutting issue of sustainable development (UNEP 2001, p. 11). The 1998 published Human Development Report also focused explicitly on this issue. It showed that, from a global perspective, consumption is very unequally

distributed, leading to major inequalities (UNDP 1998b). The Commission on Sustainable Development (CSD), therefore met in New York in 1999 on this topic and developed guidelines for developed and developing countries (CSD 1999). During the World Summit on Sustainable Development (WSSD) in Johannesburg in the year of 2002, the participants also discussed the implementation of Agenda 21 and the continuation of further goals in the field of sustainable consumption until 2015 (UN 2002; Zaccāi 2007, p. 1).

According to the brief summary of the historical development of sustainable consumption, the roots of the current understanding were established in the late 1990s. Since then many initiatives evolved (Jackson 2007, pp. 255–256). This includes, above all, the work of the CSD, the United Nations Environmental Programme (UNEP) and the Organization for Economic Cooperation and Development (OECD) (Fuchs and Lorek 2005, p. 263). Within the work of UNEP, special mention should be made of the Sustainable Consumption Network, which in 2001 published a document dealing with the integration of sustainable consumption policies into consumer protection guidelines. The focus was particularly on the possibilities and opportunities offered by the new sustainable consumption focus (UNEP 2001). The UK government was one of the first to recognize those necessities and opportunities and published a national strategy on sustainable consumption in 2003. The framework was developed by the Department for Environmental, Food and Rural Affairs (DEFRA) together with The Department of Trade and Industry (DTI), which developed twelve strategy points (defra 2003; DTI 2003; HM Government 2005). Among the strategy points identified were the decoupling of economic growth and environmental degradation (which will be discussed later), consideration of the entire life cycle, and explicit policy design measures to achieve the targets (DTI 2003).

Another major milestone was the WSSD a few years later, in 2002. There the international global commitment to make consumption sustainable in the future was solidified in the 10-Year Framework of programs on sustainable consumption

and production also reflected in Goal 12 of the Sustainable Development Goals (SDG's) (UNEP 2021b). The SDG's are the result of decades of discussion by the UN, including United Nations Department of Economic and Social Affairs (UNDESA), and were signed by all member states in 2015. They are based on the 17 Millennium Development Goals (MDG's) developed in 2000, (UN 2021b).

SDG Goal 12 (Responsible Consumption and Production) of the Agenda 2030 is further subdivided into 11 targets and 13 indicators that deal, among other things, with sustainable production and consumption patterns, resource-conserving behavior patterns and the Circular Economy. A monitoring approach of the targets is ensured by means of developed hotspot analysis tools as well as the OnePlanet Initiative for sustainable consumption and production (UNEP 2021a). The overall aim of these initiatives is to ensure that as few natural and toxic resources as possible are consumed throughout the production and consumption process and that as little waste and pollutants as possible are generated. The aim is to fulfill three holistic goals, which are the decoupling the environmental degradation from the economic growth, keeping the life cycle in mind and shaping fair opportunities for developing countries regarding efficient resource management and the creation of green jobs (UNEP 2021c).

As the historical overview indicates, many sustainable consumption policies and strategies have been developed over the years but many countries are still struggling with their implementation. In summary, it is regrettable that the implementation and translation of these policies and strategies at both the national and international levels has been lacking (Jackson 2007). As a result, no fundamental changes in consumer behavior have been identified at this point. On the contrary, it has been found that the increasing consumption of green products has rather led to a rebound effect (Schultz and Stieß 2008, p. 289). Accordingly, it must be said that there is an assumption that companies only consider sustainable production and consumption if their profit is not affected. Also, national governments act in such a way

that the issue is ignored if the general income level cannot support sustainable consumption (Nkamnebe 2013, p. 2434). This leads to argue that the implementation of sustainable consumption faces many challenges.

Challenges for Sustainable Consumption

Consumption decisions can no longer be explained with the classical economic approach, but only with more dynamic and complex models including sociology, psychology, and situational variables (Rousseau and Bontinckx 2007, p. 73). Additionally, consumption is dependent on a variety of factors: personality and motivation, the social situation of the consumer, the place of living, the age and the society the consumer is surrounded by (Wallenborn 2007, p. 68). Thereby, consumption is understood as a way of expressing communication with others in a social context through social conversations about "status, identity, social cohesion, and the pursuit of personal and cultural meaning" (Jackson 2007, p. 261). Therefore the consumption behavior results from social expectations and thus from social norms as well as from pure habits (Spaargaren and van Vliet 2000). This makes the development of policy in the direction of consumer behavior change very difficult to bring about (Jackson 2005, p. 3). Cialdini et al. (1991, pp. 203–230), for example, state that the individual behavior is the copy of the behavior of others around. In doing so, people usually always follow two norms. The descriptive norm of "is," which characterizes what most people do, and the injunctive norm of "should". This denotes the perception of what most people perceive as right or wrong. Since it is argued that norms strongly influence human behavior, they also have a strong impact on consumer patterns (ibid.). Accordingly, the roots of normal consumer habits do not lie with each individual, but in the behavior of the masses (Jackson 2007, pp. 262–264). Moreover, the phenomenon of social inertia can also be identified. It states that no one will change their consumption habits, as no sustainable consumption behavior is visible in society either (Goldsmith and Bacille 2015,

p. 150). In doing so, humans always strive to adjust their consumption level to the consumption of fellow human beings or even to surpass it.

However, in the long term, the global welfare will not change due to the individual adjustment of consumption (Lintott 2007, p. 48). This means that in particular the Western society is locked into a treadmill that promotes unsustainable consumption patterns (Sanne 2002). And since consumption is facilitated by values, institutions, and by socialization, consumer society expresses who they are through their consumption. It must be clearly emphasized here that companies deliberately direct consumption according to their interests through targeted marketing, and that governments also exert a strong influence on consumption patterns according to the economic paradigm (Lintott 2007, p. 49). It is therefore obvious that incentives and pressure encourage people to consume (Rousseau and Bontinckx 2007, p. 73), which means that institutional barriers are stopping the development to a more sustainable consumption (Goldsmith and Bacille 2015, p. 150).

Additionally, in order to bring about sustainable consumption, it is not merely about the issue of reducing the consumption, but also general structural factors such as changes to “working life conditions, urban structure and everyday life patterns” (Sanne 2002, pp. 273–274).

In addition to consumers, governments as well as industry represent the most important stakeholders in the area of consumption (UNEP 2001, p. 16). However, at the point of decision-making it is the consumer, who holds the power to lead the way toward sustainable consumption (Mont and Power 2013). This argument is supported by the increasing awareness of current consumers regarding which products they consume and how and where these products come from. This leads to stronger pressure on all stakeholders to foster a transition to make consumption more sustainable in the long term (UNEP 2001, p. 10).

In addition to the issues already outlined, the topic of sustainable consumption faces further challenges. These include, for example, overcoming the economic incentive to consume (e.g., low raw material prices, low economic benefits for countries, and low recycling rates) to using

economic incentives to reduce resource use to a very low level (e.g., higher raw material prices linked to fairer wages and higher economic benefits for nations, higher recycling rates). At the moment, it is often cheaper to buy new equipment than to have it repaired (Bauchmüller 2021).

Moreover, governments constant drive for economic growth in developed and developing countries is a critical issue (Kemp 2008, p. 369), despite the fact that it has been proven that the satisfaction of the majority of inhabitants of developed societies are no longer dependent on material goods above a certain level. However, the economic systems of those countries rely on perpetual consumption to retain a growing economy.

This is where sustainable consumption comes into action focusing on the improvement of the quality of life of society and economic wealth, while insuring a lower resource input. This term is referred to as decoupling (UNEP 2001, p. 15). The difficulty behind this approach, however, is the fear of economic growth coming to a standstill, followed by a subsequent recession and high unemployment. Modern governments therefore do not choose or consider this path, even if it is possible to continue to experience economic growth as long as the decoupling of economic spending from material resources is more rapid (Jackson 2007, p. 258).

Decoupling is seen as an important part of achieving sustainable consumption in the long term and a “more socially inclusive global economy” (UNEP 2021a). According to IISD (2021), it is possible to increase revenues while reducing resource consumption without any problems. Nevertheless this will sometimes lead to conflicts between economic growth and sustainable consumption (ibid.), and therefore needs a more sophisticated understanding (Jackson 2007, p. 259).

Future Directions and Solutions for Sustainable Consumption

The challenges described in the previous chapter can quickly lead to a pessimistic assumption on the topic of change toward more sustainable

consumption patterns. Nevertheless, it is important to recognize that the pressure created by the continuous increase of negative environmental change accompanied by growing consumption will lead to a poorer quality of life. Accordingly, it is expected that this development will exert a general pressure on all stakeholders with the consequence to work together (Lintott 2007, p. 53). This is expected not only in Western countries, but worldwide, since humanity ultimately shares one planet with limited resources (Schoot and Anton 2007, p. 39). However, to bring about change, there first has to be a recognition of the issue and secondly, the development of new remedial and redesign measures. These measures should be considered as soon as possible, as unsustainable consumption is responsible for large shares of greenhouse gas emissions and thus has a major effect on climate change (Genus 2016, p. 143). The options that are seen as possible solutions to this problem can be divided into two categories: The reorientation of the production and consumption patterns and the involvement of all stakeholders.

Reorientation of Production and Consumption Patterns

Making production and consumption sustainable in the long term will require major transformations of existing behavior, especially in industrialized societies, but also the abdication of developing societies to achieve a Western lifestyle. This symbolizes another major (unjustified and unfair) ask of developed countries to developing countries.

In general, it requires a promotion of already existing positive trends and a reorientation of the entire production and consumption process (UNCED 1992). At this point in time the focus is on making consumption more efficient and environmentally friendly, but it is more important that the volume of consumption (in particular of nonrenewable resources) decreases in the long term (IISD 2021).

The following approaches are seen as possibilities to reduce waste and pollutants and use as few finite resources and energy as possible in the whole production process (UNCED 1992). This includes the Eco Design Framework as well as the

Life-cycle Approach and the Integrated Product Policy (DTI 2003) to drive a change to produce products and services with a lower environmental impact along the entire supply chain (HM Government 2005, p. 43). It also includes, for example, that non-sustainable products need to be replaced by more sustainable alternatives (IISD 2021).

Another important model is the Circular Economy. It aims to re-use, re-manufacture, recycle and recover materials to preserve them for as long as possible (UNEP 2021a). At the moment, only 12% of the raw materials processed for consumption are returned to the production cycle. Already, improved deposit systems, the application of the Sharing Economy, and product design guidelines are used to address this problem.

Other tools are, for example, the taxation of CO₂ emissions created by production processes and the increase in product prices (Bauchmüller 2021). This can be understood as the internalization of external costs in order to send clear signals to the market to change or optimize their production processes. It goes in conjunction with the elimination of negative tax incentives that motivate unsustainable behavior (Maxwell 2013, pp. 691–692).

However, in the past it was observed that price signals are often not sufficient to induce more sustainable consumption behavior as cost-efficient decisions are not implemented. This is precisely where policymakers need to start and help to make sustainable consumption options available to the customers (Jackson 2007, pp. 262–263). One fundamental option would be to reduce working hours, because “[w]ork and consumption are the two sides of the coin of the economy” (Sanne 2002, pp. 279–285). As the amount of work done also defines the level of consumption, not only individually but also nationally, reduced working hours is proposed to lead to lower consumer spending. However, such changes in lifestyle could undermine overall economic growth (*ibid.*) and therefore threaten the current economic system.

Such a change goes hand in hand with the decoupling approach, which states that economic growth needs **not** be accompanied by

environmental degradation (UNEP 2021c). It is done through the so-called efficiency approach behind decoupling process. It can be understood as an answer to the dilemma of economic growth (Jackson 2009, p. 68). Sustainable production can thus be achieved on the basis of dematerialization, which describes both product efficiency (using less) and process efficiency (doing less). Thus, overall economic growth can still be achieved, but with fewer resources and lower pollutants.

Nevertheless, it must also be added at this point that dematerialization also comes up against natural efficiencies especially when the increasing consumption and the rising population rates are taken into consideration (UNEP 2001, pp. 27–30). This is where the change in consumer behavior comes into play, which can make an important contribution through optimization. Optimization can be divided into three aspects at this point: Different consumption (changing infrastructure and choices), conscious consumption (choosing and using more consciously) and appropriate consumption (questioning levels and drivers of consumption) (UNEP 2001, p. 31). This is also an important component on the way to sustainable consumption and is brought about by growing awareness of social and ecological concerns in society (HM Government 2005, p. 43). In order to achieve such, a multifaceted strategy is needed to cover the topic holistically (UNCED 1992). And this are also necessary, because while there is great potential for improved product and production processes, sustainable consumption can only be brought about if consumers themselves also participate in this process (HM Government 2005, p. 51).

Already, consumers expect to be able to adopt more sustainable consumption patterns in the future, therefore demanding change. This is due to the fact that consumers realize that they are seen as having a great deal of power in terms of sustainable consumption developments (Wallenborn 2007, p. 57). Accordingly, business will have to adopt a consumer perspective including a holistic approach to find solutions to satisfy a demand for more sustainable consumption. It should take into account the “attitudes, routines and the organisation of everyday life” (Schultz and Stieß 2008,

p. 288), regarding society’s consumption patterns (ibid.). By adopting the consumer perspective, the provision of information and communication with consumers can be improved in the long term. This can also lead to an improvement in the “product design, innovation strategies and sustainability policies” (Schultz and Stieß 2008, p. 298). Sustainable consumption possibilities could facilitate better health, a cleaner environment, and greater interactivity in society. Such an improved quality of life at less cost and with positive cultural and personal development options is enhanced through conscious and appropriate consumption (UNEP 2001, pp. 60–61), but it also needs the involvement of all stakeholders.

Involving Stakeholders

It has already become clear from the previous chapters that a number of stakeholders are involved in the area of sustainable consumption. In order to do justice to a holistic approach, it is therefore of great importance to include all stakeholders in the change processes (UNEP 2001, p. 62). Individual actors without sufficient knowledge and power are not enough as the shift toward a more sustainable consumption calls for an enormous paradigm shift in society as well as in the economy (Mont 2019, pp. 2–3). Stakeholders from all sectors from all over the world must therefore pull together (UNEP 2021c), while the first initiatives should be started locally and regionally, since consumption is by nature local in the first place (UNEP 2001, p. 14). However, care should be taken to establish a consensus (at least as much as possible) regarding all parties involved to be independent of the short-term interests of individual participants (Nkamnebe 2013, p. 2434). Companies for example can be supported by the government and international industry best practices to get inspirations, financial help, and appropriate management instruments (UNEP 2001, p. 14). Moreover, consequent cost reductions, an improved competitive position, increased market share, and higher consumer confidence can be seen as additional incentives (UNEP 2001, pp. 60–61).

Nevertheless, the shift toward completely sustainable consumption will take many decades. This

is also due to recent stocks of unsustainable consumer goods in the areas of infrastructure and transportation, as well as households, in the energy and waste management sectors. Accordingly, measures to develop alternative plans that favor sustainable consumption choices must be developed progressively with the participation of all stakeholders (IISD 2021). Respectively, collective decisions and structure-changing decisions are necessary to help individuals to frame their buying decisions on sustainable consumption (Lintott 2007, p. 53).

Yet, this should not explicitly disregard the fact that consumers, governments and companies already have opportunities to help shaping consumption in a more sustainable way (IISD 2021). Overall, there is great responsibility on the consumer and voter. Accordingly, experts argue that the focus of the political instruments in the future should be much more on the actual consumption phase in order to ensure sustainable behavior (Stø et al. 2008, p. 251). In this respect, governments linked to governance play a crucial role in identifying new pathways (Mont 2019, pp. 2–3) and provide important leadership and support to individuals and households (UNCED 1992). By political intervention such as implementing international integrated legal policy frameworks, long-term costs resulting from environmental damage can be reduced or eliminated, but competitiveness and the quality of life being improved (UNEP 2001, pp. 60–61). These basic requisites include regulatory intervention through legislation compelling certain consumption patterns, economic intervention through adjustments to the market, and social intervention through awareness-raising or education (UNEP 2001, p. 44). It also contains the increase of information dissemination (Jackson 2007, p. 262). Policymakers are therefore responsible for providing a market that enables society to make efficient and long-term sustainable consumption choices (Jackson 2007, p. 262) moving away from exclusively economic indicators such as gross domestic product and to include natural and social capital in the calculation (Maxwell 2013, pp. 691–692).

Another important stakeholder at the micro or macro level is the industry. Here, the progress is rather gradual and not radical, because sustainable

business activities are constantly revised depending on consumption patterns (Charter et al. 2008, p. 65). Besides consumers and governments, companies and marketers are key players in the creation of new sustainable business models that apply push and pull strategies to foster sustainable innovations. Additionally, non-governmental and the financial organizations are important stakeholders in developing an appropriate framework (Charter et al. 2008, p. 66). In general, there must be a change in perspective when it comes to sustainable business models and corresponding sustainable growth, because these issues are closely linked to the shift toward sustainable consumption (Charter et al. 2008, p. 66).

In summary, it is obvious that sustainable consumption behavior can only be achieved through legal and regulatory means, incentives, far-reaching strategies, and social influence (Goldsmith and Bacille 2015, p. 127). There is a need to develop strategies for sustainable production on the supply side, as well as to create sustainable consumption patterns on the consumer side. Consequently, the focus of policymakers is increasingly shifting to the interest groups that have a major influence on consumer choice. These include retailers, brand manufacturers, educators, and the media (Maxwell 2013, pp. 691–692). Only in this way can long-term strategies change consumption patterns, bring about resource efficiency, implement economic transformation, and thus maintain the standard of living of the rich while improving the standard of living of the poor. On a broad scale, sustainability can be achieved and environmental degradation prevented (UNEP 1999, p. 16). But even though the consequences for consumers, producers, and politicians are clear, it can be assumed that it will take decades rather than years to bring about a general change. Accordingly, it will take commitment, compassion, and patience from all stakeholders involved (Schoot and Anton 2007, p. 39).

Summary

The research field of sustainable consumption is already about 30 years old and includes multi-

disciplinary fields. Especially in the 1990s, major developments were noted as local, national, as well as international attempts were made to implement sustainable consumption patterns.

Overall, the complexity of the topic is evident and the necessity of acting has been clearly identified. Current consumption patterns in particular in developed countries or society in combination with global population growth, environmental limits of the planet are exceeded. The Western consumption patterns also lead to a growing imbalance between rich and poor. A shift toward sustainable consumption can reduce these negative impacts overall and lead to poverty reduction, lower emissions, and a greener economy.

Though, it must be noted that despite sustainable consumption policies and strategies, the implementation of sustainable consumption proves to be difficult. It is also reflected in the consumption behavior, which has hardly changed so far. This is also due to the nature of consumption as it is strongly influenced by social norms and embeds humans in social structures. Accordingly, the roots of consumption do not only lie in each individual, but also in the social behavior of the masses. Consequently, there is a need for a general adjustment of lifestyles, working methods, and general behavior patterns combined with a change in values, attitudes, knowledge, and symbolic aspects of consumption, habits, and routines. Correspondingly, the change toward sustainable consumption will take some time, because societies are still locked in a market that promotes sustainable consumption patterns and linked changes only to a limited extent. Even so, a development toward more conscious consumption and production on the part of consumers and producers can already be observed. Currently, production efficiencies achieved are quickly cancelled out by the rising consumption trend and population growth. Hence, there is no way around reducing the volume of consumption in the long term, which means that adopting the consumer perspective is one approach to bringing about general changes in behavior. In this respect, the approach of decoupling economic growth is also an important component on the way to sustainable

consumption. This requires the involvement of all stakeholders in order to implement a holistic approach. Only with an enormous paradigm shift in society, politics, and the economy can the goal of sustainable consumption be achieved. This requires collaboration across disciplinary boundaries, remodeling of economic and social processes, and long-term strategies and considerations. Only sophisticated approaches can thus lead to a long-term improvement in the quality of life, use of resources more efficiently, bring about behavioral changes, contribute to a reduction in poverty, and reduce environmental degradation.

Cross-References

- [Emulative Consumption and Bankruptcy](#)
- [Responsible Consumption](#)
- [Sufficiency](#)
- [Sustainability](#)
- [Sustainable Development](#)

References

- Bauchmüller, M. (2021) 'Dem Raubbau ein Ende setzen', Süddeutsche Zeitung, 2021. Available at: <https://www.sueddeutsche.de/wirtschaft/rohstoffe-wie-lange-noch-1.5413355?reduced=true>
- Boulanger, P.-M., & Zaccà, E. (2007). Conclusions: The future of sustainable consumption. In E. Zaccà (Ed.), *Sustainable consumption, ecology and fair trade*. Routledge.
- Carroll, C. D. (2021). *Consumption: Economics*. Available at: <https://www.britannica.com/topic/consumption>
- Charter, M., et al. (2008). Review: The role of business in realising sustainable consumption and production. In A. Tukker et al. (Eds.), *System innovation for sustainability 1: Perspective on radical changes to sustainable Consumption and production*. London: Routledge.
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. In M. Zanna & J. Olson (Eds.), *Advances in experimental social psychology* (Vol. 24, pp. 201–234). Academic Press.
- Credit Suisse. (2016). *Global wealth report 2016*. Credit Suisse Research Institute.

- CSD. (1999). *Commission on sustainable development: Report on the seventh session (1 May and 27 July 1998, and 19–30 April 1999)*. (9).
- defra. (2003). *Changing patterns: UK government framework for sustainable consumption and production*. London: Defra Publications.
- Dobré, M. (2007). Consumption: A field for resistance and moral containment. In E. Zaccāi (Ed.), *Sustainable consumption, ecology and fair trade*. Routledge.
- DTI. (2003). *UK position paper on the thematic strategy on the sustainable use of natural resources*.
- Enquete-Kommission. (1998). *Abschlußbericht der Enquete-Kommission "Schutz des Menschen und der Umwelt – Ziele und Rahmenbedingungen einer nachhaltig zukunftsverträglichen Entwicklung" *: Konzept Nachhaltigkeit Vom Leitbild zur Umsetzung*. Bonn: Bonner Universitäts-Buchdruckerei.
- Fuchs, D. A., & Lorek, S. (2005). Sustainable consumption governance: A history of promises and failures. *Journal of Consumer Policy*, 28(3), 261–288.
- Genus, A. (2016). Conclusion. In A. Genus (Ed.), *Sustainable consumption: Design, innovation and practice* (p. 3). Cham: Springer International Publishing.
- Goldsmith, R. E., & Bacille, T. (2015). Social influence and sustainable behavior. In E. B. Goldsmith (Ed.), *Social influence and sustainable consumption*. Cham: Springer International Publishing.
- HM Government. (2005). *Securing the future: Delivering UK sustainable development strategy*. London: The Stationery Office.
- Horst, S. (1975). Die Grenzen des Wachstums. *Mitteilungen*, 24, 1–8.
- IISD. (2021). *The imperative of sustainable production and consumption*. Available at: <https://enb.iisd.org/consume/oslo004.html>
- ipcc. (2018). *Global warming of 1,5°C*. Switzerland: Intergovernmental Panel on Climate Change.
- Jackson, T. (2005). *Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change: A report to the sustainable development research network*. Surrey: University of Surrey.
- Jackson, T. (2007). Sustainable consumption. In G. Atkinson, S. Dietz, & E. Neumayer (Eds.), *Handbook of sustainable development* (Elgar original reference). Cheltenham: Edward Elgar.
- Jackson, T. (2009). *Prosperity without growth: Economics for a finite planet*. London: Earthscan.
- Kemp, R. (2008). Transition management for sustainable consumption and production. In A. Tukker et al. (Eds.), *System innovation for sustainability 1: Perspective on radical changes to sustainable consumption and production*. London: Routledge.
- Lintott, J. (2007). Sustainable consumption and sustainable welfare. In E. Zaccāi (Ed.), *Sustainable consumption, ecology and fair trade*. Routledge.
- Maxwell, D. (2013). Sustainable consumption. In J. Kauffman & K.-M. Lee (Eds.), *Handbook of sustainable engineering*. Dordrecht: Springer.
- Mont, O. (Ed.). (2019). *A research agenda for sustainable Consumption governance*. Cheltenham: Edward Elgar Publishing (Elgar research agendas).
- Mont, O., & Power, K. (2013). *Understanding factors that shape consumption*. Lund University.
- Nkamnebe, A. D. (2013). Sustainable consumption. In S. O. Idowu et al. (Eds.), *Encyclopedia of corporate social responsibility*. Berlin, Heidelberg: Springer.
- Pufé, I. (2017). *Nachhaltigkeit* (3rd ed.). Konstanz und München: UVK Verlagsgesellschaft mbH.
- Reisch, L. A., & Thøgersen, J. (Eds.). (2015). *Handbook of research on sustainable consumption*. Cheltenham: Edward Elgar Publishing.
- Rockström, J., et al. (2009). A safe operating space for humanity. *Nature* (461).
- Rousseau, C., & Bontinckx, C. (2007). Testing propositions towards sustainable consumption among consumers. In E. Zaccāi (Ed.), *Sustainable consumption, ecology and fair trade*. Routledge.
- Sanne, C. (2002). Willing consumers – or locked-in? Policies for a sustainable consumption. *Ecological Economics*, 42, 273–287.
- Schoot, U., & Anton, J. M. (2007). Sustainable household consumption: Fact, future or fantasy? In E. Zaccāi (Ed.), *Sustainable consumption, ecology and fair trade*. Routledge.
- Schultz, I., & Stieß, I. (2008). Linking sustainable consumption to everyday life: A social-ecological approach to consumption research. In A. Tukker et al. (Eds.), *System innovation for sustainability 1: Perspective on radical changes to sustainable consumption and production*. London: Routledge.
- Spaargaren, G., & van Vliet, B. (2000). Lifestyles, consumption and the environment: The ecological modernization of domestic consumption. *Environmental Politics*, 9(1), 50–76.
- Stern, et al. (1997). *Environmentally significant consumption*. Washington, D.C.: National Academies Press.
- Stø, E., et al. (2008). Review: A multi-dimensional approach to the study of consumption in modern societies and the potential for radical sustainable changes. In A. Tukker et al. (Eds.), *System innovation for sustainability 1: Perspective on radical changes to sustainable consumption and production*. London: Routledge.
- Thoreau, H. D. (1854 reprinted 1992). *Walden and resistance to civil government* (2nd ed).
- UN. (1987). *Report of the world commission on environment and development*. Available at: <http://www.un-documents.net/a42r187.htm>
- UN. (2002). *Report of the world summit on sustainable development: Johannesburg, South Africa, 26 August–4 September 2002*. New York: United Nations.
- UN. (2021a). *Goal 12: Ensure sustainable consumption and production patterns*. Available at: <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>
- UN. (2021b). *The 17 goals*. Available at: <https://sdgs.un.org/goals>

- UNCED. (1992). United Nations conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992: *Agenda 21*.
- UNDP. (1998a). *Human Development Report 1998*. New York.
- UNDP. (1998b). *Human Development Report 1998*. Available at: <http://hdr.undp.org/en/content/human-development-report-1998>
- UNEP. (1999). *Overview GEO-2000: Global environment outlook*.
- UNEP. (2001). *Consumption opportunities: Strategies for change; a report for decision-makers*. Geneva: UNEP.
- UNEP. (2021a). *GOAL 12: Sustainable consumption and production*. Available at: <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-12>
- UNEP. (2021b). *One planet network*. Available at: <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/one-planet-network>
- UNEP. (2021c). *Sustainable consumption and production policies*. Available at: <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-consumption-and-production-policies>
- Veblen, T. (1899). *The theory of the leisure class*. London: Prometheus Books.
- Wallenborn, G. (2007). How to attribute power to consumers? When epistemology and politics converge. In E. Zaccāi (Ed.), *Sustainable consumption, ecology and fair trade*. Routledge.
- Zaccāi, E. (Ed.). (2007). *Sustainable consumption, ecology and fair trade*. Routledge.

Sustainable Corporate Responsibility (SCR)

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Related Terms

Corporate Responsibility (CR), Corporate Social Responsibility (CSR), Socially Responsible Corporation (SRC), Strategic Corporate Social Responsibility (SCSR), Ethical Responsibility, Corporate Citizenship, Triple Bottom Line (TBL), ESG (Environmental, Social, Governance), Corporate Governance, Creating Shared

Value (CSV), Responsible Leadership, Business Ethics.

Definition

Companies and their management meet sustainable responsibility when they reasonably justify the consequences of their actions towards all affected stakeholders and natural environment, be they present or in the future.

To the Term

Sustainable corporate responsibility (SCR) specifies the concept of corporate (social) responsibility (CSR). This is to be perceived as sustainable, that is, long-term, not only with regard to present generations, but also with regard to future generations. The fact that an enterprise company, that is, a “producing economic unit” (Enderle 1993, p. 1094), is ascribed any responsibility at all is the result of a longer evolution of the concept of responsibility.

The word *responsible* has its origin in Roman law and is a translation of the Latin *respondere* in the sense of *answering an accusation*, which has its roots in the Greek word *spendein*. This, in turn, refers to the giving of a libation at the conclusion of a contract in which something is agreed and assured. The conclusion of a contract was a sacred act, sealed before a divine authority. In the *respondere*, the question of the judge was answered as to whether the obligation had been fulfilled or not (Schüz 2017, p. 11).

In general, *responsibility* represents a “concept of action” (Schüz 2021, p. 22). Unlike behavior, which occurs involuntarily, action is based on a conscious decision with the goal of realizing certain consequences and avoiding others. However, the consequences of an action do not only fulfill the intentions of the causer, but often have unintended effects on uninvolved third parties. As affected parties, they sue the causers for justification of their actions. They should answer for the consequences of their actions to those parties. Depending on the answer

given, the polluter is attributed not only factual but also moral guilt.

In this context, responsibility can be attributed less and less to single individuals, but more and more to social systems – in which, due to the division of labor, a large number of decision-makers can be held responsible for the consequences of their activities. Business enterprises are therefore ascribed corporate responsibility.

Brief History of Corporate Responsibility

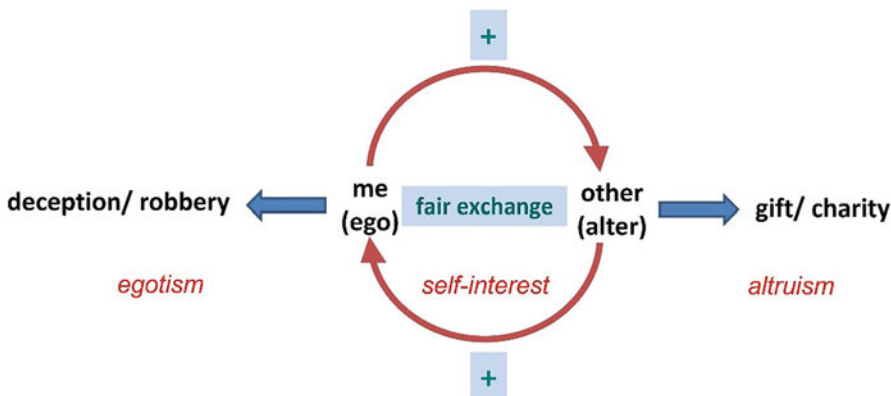
The fact that economic activities should not serve self-enrichment but the good of society was already established in antiquity. According to Aristotle, they should be based on “just exchange,” that is, on a balance of give and take (cf. Soudek, 1952, p. 66 f). According to Georg Simmel, exchange is the middle ground “between robbery and charity” (1989, p. 86; see Fig. 1) – in which all parties to the exchange experience an increase in value. When all exchange partners provide fair exchange, it serves the good survival of any community, a point later echoed by Adam Smith (Aristotle 2009, 1132b10–20; Cordero 1988, p. 682; Smith 2016, p. 83; Schüz 2021, pp. 40–48).

According to Nicholas Eberstadt, “business has traditionally been ... a tightly regulated

instrument of social development” (1973, p. 77). With the Industrial Revolution, the centuries-old practice of reciprocity in business and society came to an end.

As a result, however, the concept of responsibility explicitly gained importance in the nineteenth century, as a reaction to the fundamental change that human action underwent in the transition from traditional to modern society (Bayertz 1993, p. 25). This is because industrialization, with its machine-based production and division of labor, made it increasingly difficult to attribute the consequences of action to single individuals: “There is no longer a direct and linear relationship between the actor and the consequence he produces” (ibid. p. 25, translated by author). The damage caused now has a social dimension, if, for example, it contributed to the impoverishment of whole strata of the population or to their health being threatened.

Exemplary for this in the USA is the “Gilded Age” (after the satirical novel of the same name by Mark Twain) in the nineteenth century after the Civil War. During this period, industrialists such as Cornelius Vanderbilt or John D. Rockefeller gained a dominant position in certain markets using questionable, sometimes extortionate methods. Rockefeller at times had a 90% market share with his Standard Oil Company (Cannon 2012, p. 6). “It was a period where greedy, corrupt industrialists, bankers and politicians enjoyed



Sustainable Corporate Responsibility (SCR), Fig. 1 Fair Exchange in the middle of robbery and charity. (Source: adapted from Schüz 2021, p. 49)

extraordinary wealth and opulence at the expense of the working class“ (History.com 2018).

John Maurice Clark may have been the first to call for a new understanding of responsibility in economics as early as 1916 (cf. Shute 1997). The “laissez-faire” or “liberal economics” of the nineteenth century led to an “economics of irresponsibility” by “separating business sharply off from the rest of life” (Clark 1916, p. 218). In turn, the call for a governmental “economics of control” (ibid. p. 221) grew louder.

The Theodore Roosevelt Administration broke up the monopolies of the “robber barons” with “trust busting” – such as the Standard Oil Company into 38 individual companies in 1911 (Cannon 2012, p. 8; cf. History.com 2018). And the industry’s life-threatening technologies had to be controlled via legal safety regulations for the “welfare of the public as a whole.” Steam Boiler laws (first in the United States: 1852), for example, were intended to curb deaths from steam boiler explosions, which numbered in the thousands (Burke 1975, 331f).

Clark suggested that laws can never cover all problems arising from business activities. He therefore argues for a “business responsibility beyond the law ... enforced by mutual interests” of all involved parties (Clark 1916, p. 227). In this context, it is above all necessary to assume responsibility for such courses of action on whose effects the decision-maker has an influence in business life: “Which are the causes over which we have some control and before which we do not stand entirely helpless?” (ibid., p. 214). In his extensive textbook ► *Social Control of Business*, Clark worked out the possibilities of a socially responsible economy already in 1926. Thereby for him “fair” business is “the system of social cooperation by mutual exchange,” which is neither “charity” nor “warfare” (1939, p. 11).

The debate as to whether laws should curb the harmful greed of companies for profit or whether they themselves should assume greater social responsibility was discussed in detail in 1932 in the so-called “Berle-Dodd debate” (cf. Macintosh 1999). Merick Dodd’s idea of a “Socially Responsible Corporation” (SRC) was the antithesis of Adolf Augustus Berle’s demand for legal control

of companies that were only concerned with profit maximization.

The first systematic approach to the “*social responsibilities of the businessman*” was provided in 1953 by Howard R. Bowen in his book of the same name. The businessman should “recognize the social implications of his decisions and to consider the social interest - as far as is possible and reasonable” (Bowen 2013 [1953], p. 30). As Acquier et al. point out, Bowen’s book provides a “systemic concept” that includes “historical, institutional, political, managerial, psychological, moral, and economic” dimensions. “Each is related to the others. Each contributes to or can defeat the purpose of the whole” (2011, p. 625, 629). Clarence C. Walton first summarized the concepts under the title “*Corporate Social Responsibilities*” (CSR), which had been further developed by then, in (1967). More detailed history and evolution of CSR are described – among others – by Archie Carroll and Jill Brown (2018), particularly by Latapi Agudelo et al. (2019), and also by Freeman et al. (2020).

The Structure of Responsibility

According to Georg Picht, the basic structure of any responsibility results as a three-digit relation of acting subject (e.g., a company), which has to answer for the consequences of its activities to the principals or affected parties, the authorities, or instances (1969, p. 319 f), which can be represented graphically as a triangular relation:

In this context, the acting subject (e.g., a corporation) can be held accountable not only for the intended, but also for the unintended consequences concerning third parties. Theoretically, the acting subject must respond for *all* consequences (side effects, repercussions, and long-distance effects of its actions) towards *all those* affected (e.g., stakeholders), which would paralyze any action. Only aspects of the consequences and a certain number of instances can be considered at a time.

In view of the complexity of responsibility, the idea of reducing it to one dimension prevailed in business for a long time to keep enterprises free

from any other restrictions. Accordingly, companies have only one responsibility, namely, to make profits: “the social responsibility of business is to increase its profits,” as Milton Friedman put it in a nutshell in 1970 (Friedman 2007). The idea of shareholder-value as the only responsibility corporate world should take became a trend.

The Dimensions of Corporate Responsibility

Between the two extremes of one-dimensional shareholder value responsibility and universal responsibility, the idea of a three-dimensional responsibility was set (e.g., by Barbier 1987), but has later gained worldwide acceptance with John Elkington’s Triple Bottom Line (TBL) (1997). Generally, a company must be accountable for the economic, social, and ecological consequences of its activities. Thus, it must fulfill its responsibility in three dimensions of responsibility: the economic, social, and ecological consequences. It bears a triple responsibility, which can be illustrated by replicating the triangle of responsibility (Fig. 2) thrice (see Fig. 3).

All consequences of entrepreneurial activity must be justifiable in terms of benefit or harm to self-preservation, co-preservation, and preservation of the whole (or, as it is quite often expressed,

profit/prosperity, people, and planet), and they must also be justified vis-à-vis the relevant authorities, respectively, stakeholders. (Schüz 2017, p. 34).

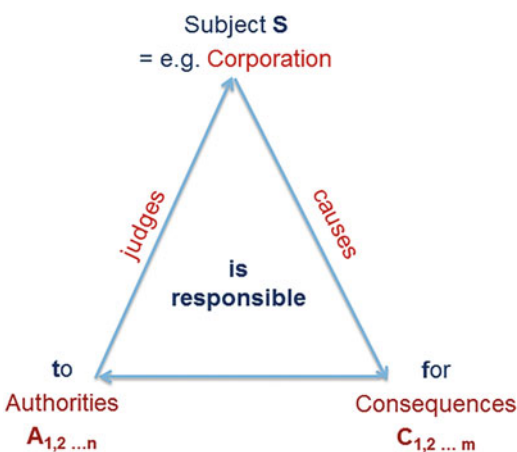
The *triple responsibility* can be reasoned in terms of systems theory as well as philosophy. Sustainable development can only be seen as “interaction among three systems: the biological (and other resource) system (BS), the economic systems (ES), and the social system (SS)” (Barbier 1987, p. 104; see Fig. 6). Philosophically, businesses do not survive solely by pursuing self-preservation (economic dimension to secure prosperity), but – like all other forms of life – also need to co-preserve the social dimension (to protect all the people they are depending on) as well as to preserve the ecological dimension (to preserve our planet which nurtures all life-forms) (cf. Schüz 1999, pp. 40f, 71–81). In other words: “Business is embedded in society and in a physical world” (Freeman et al. 2020, p. 21; see Fig. 4).

Economic Dimension: Technical or Functional Responsibility

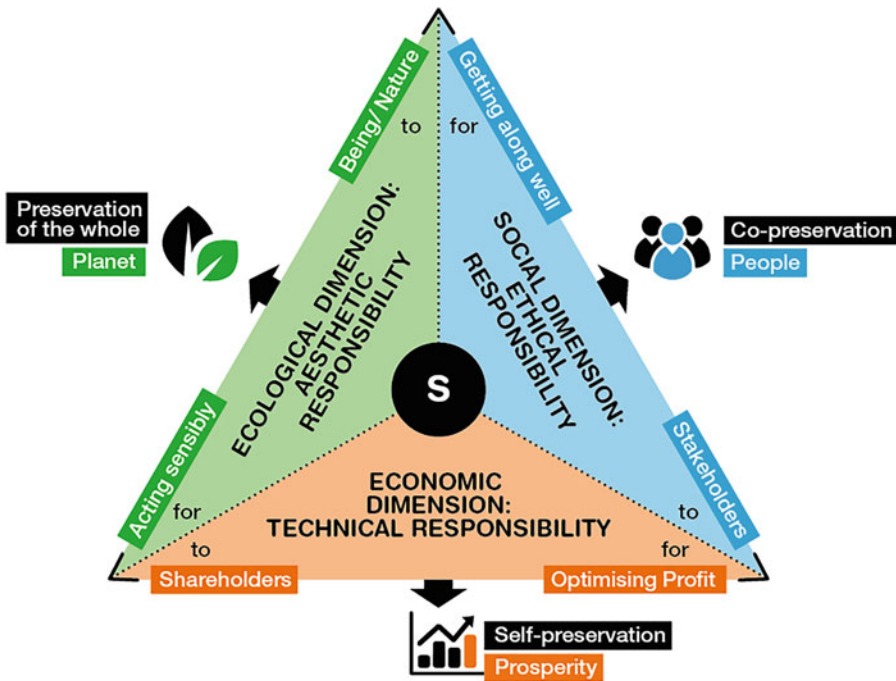
This is where functional responsibility comes into play. It aims to ensure that the company technically functions, that it makes its material resources as efficient and profitable as possible in order to create demand with its products and services so that losses are avoided and profits optimized. The shareholders are the decisive authority here, judging the activities as responsible or irresponsible. All methods and tools of business economics contribute to ensure the income for the purpose of survival (Schüz 2017, p. 34).

Social Dimension: Ethical Responsibility

The social dimension refers to ethical responsibility. Ethics is the art of “getting along well with each other” (Schüz 2019, p. 99). In companies, it aims at good social relations with internal and external stakeholders. A closer look at how this can be achieved by the three main ethical approaches (utilitarian, deontological, and virtue ethics) in business ethics see keyword “Ethical Responsibility” (cf. Schüz 2019, p. 116).

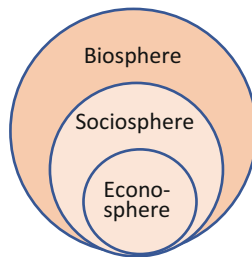


Sustainable Corporate Responsibility (SCR), Fig. 2 The structure of responsibility. (Source: cf. Schüz 2012, p. 9)



Sustainable Corporate Responsibility (SCR), Fig. 3 Triple corporate responsibility. (Source: The author following Schüz 2012, p. 10; 2017, p. 34)

Sustainable Corporate Responsibility (SCR), Fig. 4 Strong sustainability model. (Source: The author following SANZ 2009, p. 8)



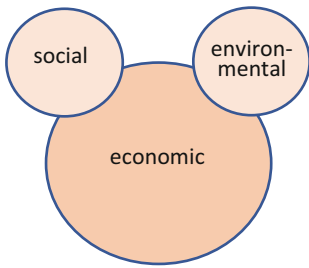
Ecological Dimension: Aesthetic Responsibility

The ecological dimension refers to aesthetic responsibility. Aesthetics examines how we perceive the environment sensually. Through our sense organs, we grasp what is useful or harmful to our survival. Most negative environmental influences can be immediately tasted, smelled, touched, or heard. The senses usually point the way to which actions are ecologically useful and which are not. However, our civilization-induced way of life has increasingly alienated us from

nature and dulled our senses to it. We have become accustomed to noise, unhealthy air, polluted soil, or water. In addition, the technical exploitation of nature has limited its self-healing powers (Schüz 2017, p. 35). Aesthetic responsibility teaches people to use all their senses again (including intuition), but also measuring apparatus. It sensitizes them to perceive again the negative effects of their actions on their natural environment. With growing sensitivity, their creativity also increases, which shows them the way to adapt creatively and meaningfully to changed circumstances, for example, with the help of visions, new ideas and strategies. (Ibid, p. 37).

Triple Bottom Line: A Trade-off?

Elkington himself recently criticized that while the TBL is respected by countless companies worldwide, it has ultimately been instrumentalized only as a better “accounting model” for profit generation. (Elkington 2018)



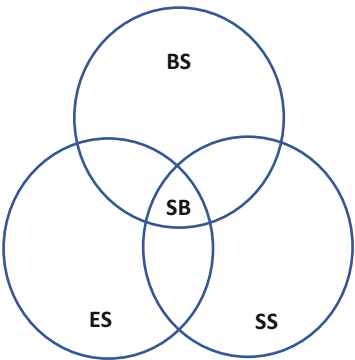
Sustainable Corporate Responsibility (SCR), Fig. 5 Mickey Mouse version of the triple bottom line. (Source: The author following SANZ 2009, p. 8)

Ultimately, most corporate leaders see TBL as a trade-off. With this argument, they justify that social and environmental responsibility does not come too much at the expense of economic responsibility. These forms of green and ethics washing can be illustrated by the so-called Mickey Mouse model (SANZ 2009, p. 8; Fig. 5):

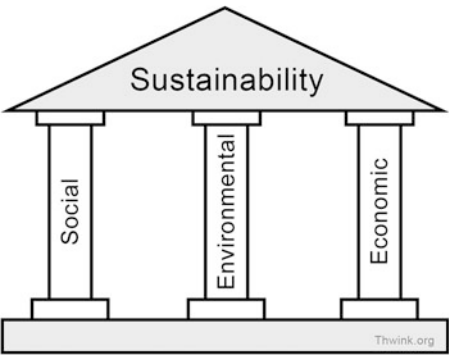
However, as we know, companies are part of society, which in turn is embedded in nature (see Fig. 4). Trade-offs therefore only occur when the resulting profit is not based on fair exchange relationships in society *and* nature (Schüz 2021, p. 86). Thus, Freeman et al. see “avoiding trade-off thinking is the essence of the art of management in the new story of business,” for which they can also provide numerous case studies (2020, p. 81).

Sustainable Corporate Responsibility (SCR)

In addition to the concept of corporate responsibility, the concept of *sustainability*, which originated in forestry already at the beginning of the eighteenth century (Grober 2010, p. 115 ff), has become established with the famous definition of the Brundtland Commission. Among many other definitions, it is the most binding: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission 1987; cf. Barbier 1987). Ultimately, it states that the economic, social, and ecological dimensions of



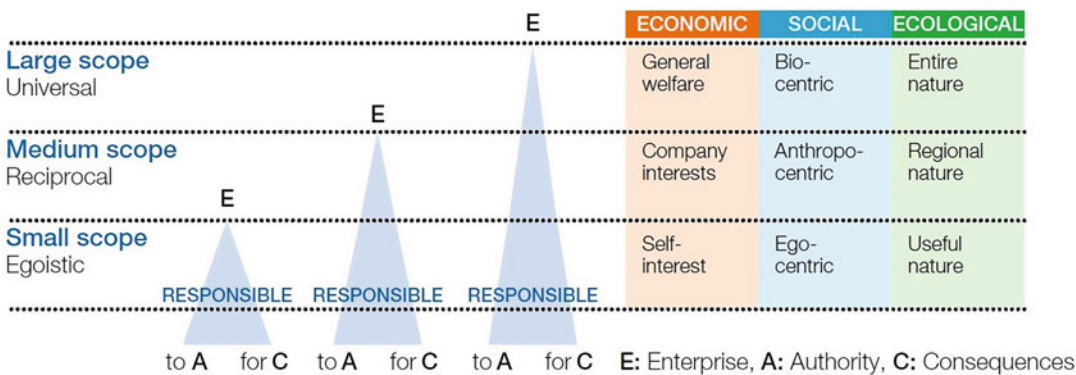
Sustainable Corporate Responsibility (SCR), Fig. 6 Only at the intersection (SB) of the three systems does sustainable development take place. (Source: The author according to Barbier 1987, p. 104)



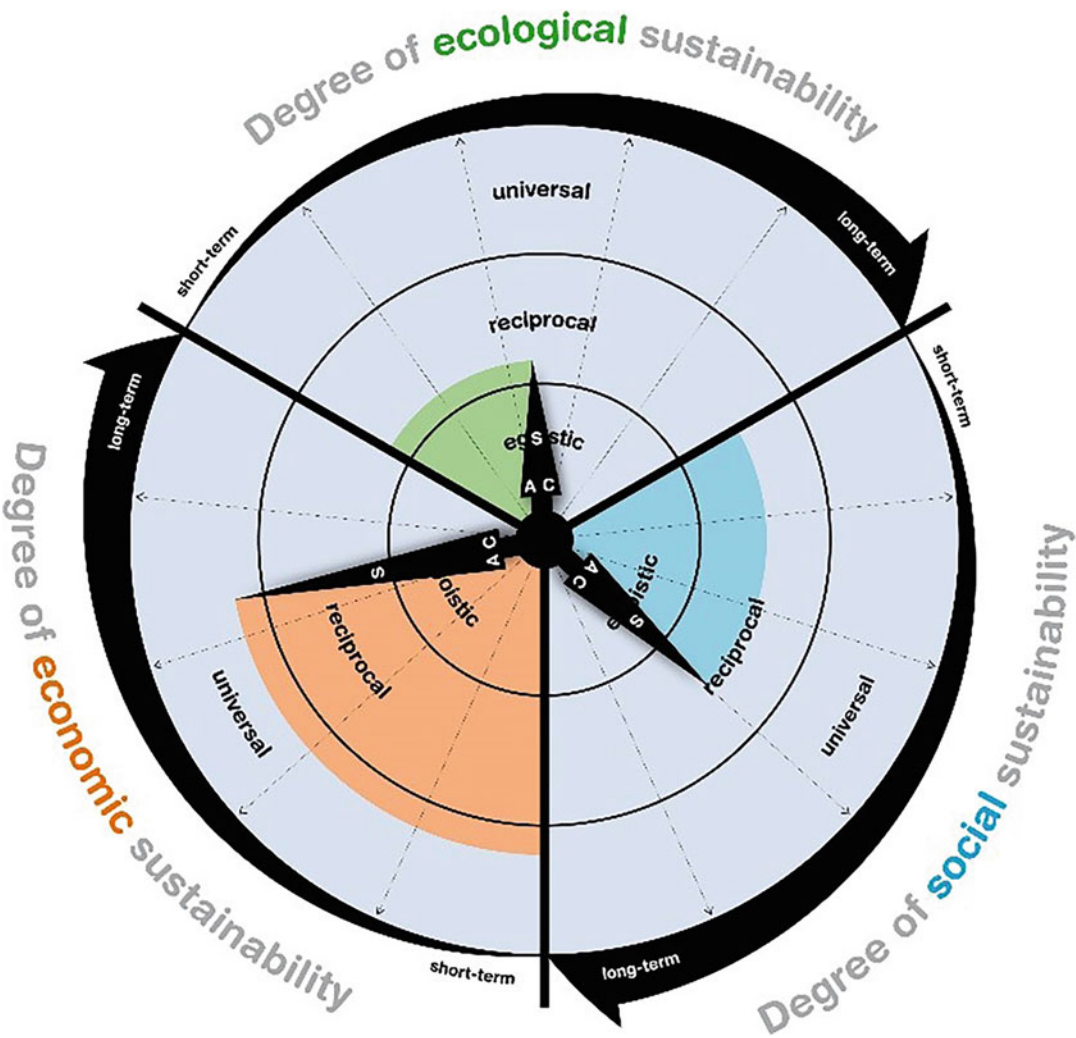
Sustainable Corporate Responsibility (SCR), Fig. 7 Three-pillar model of sustainability. (Source: thwink.org)

responsibility should also be exercised in the *long term for the* benefit of future generations. Thus, in addition to the three spatial dimensions, it introduces the dimension of time. Accordingly, companies should answer four questions before making any decision: “1. Is my behavior useful from an economic point of view? 2. Is my behavior socially acceptable? 3. Is my behavior ecologically sensitive? 4. Will my behavior be tolerable for future generations? “ (Schüz 2019, p. 73).

But how is the time dimension connected with the three space-dimensions? Quite often it is illustrated like a Venn-diagram (Fig. 6) or a roof on the three pillars of responsibility (Fig. 7). If any one of



Sustainable Corporate Responsibility (SCR), Fig. 8 Different scopes of responsibility. (Source: Schüz 2017, p. 37; cf. 2012, p. 11)



Sustainable Corporate Responsibility (SCR), Fig. 9 SCR-Model. (Source: following Schüz 2017, p. 38; 2012, p. 14)

them is weak, then the system as a whole can be seen as unsustainable.

All these models that portray the relationship between the three dimensions of corporate responsibility and sustainability have the disadvantage that they are rigid and do not allow for dynamics. Furthermore, they do not map the individual strengths and weaknesses of organizations or managers in a sustainable responsibility profile. Therefore, Mathias Schüz has developed an own model of sustainable corporate responsibility that compensates such weaknesses (2012) and will be presented in the following section.

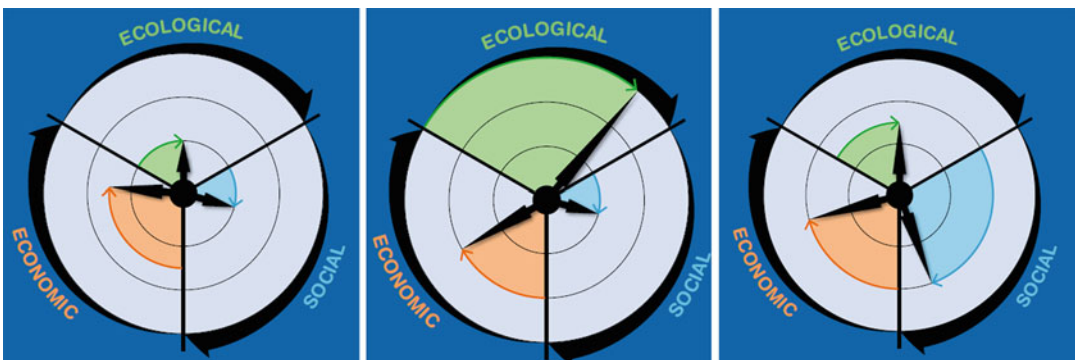
A Holistic Model of Sustainable Corporate Responsibility (Winterthur SCR-Model)

Sustainable corporate responsibility can, therefore, be seen as the overall responsibility of a company for all the actions and omissions of its employees. This, however, would be more than the sum of its individual responsibilities, encompassing the interdependent consequences

for current and future generations, as well as the power of the responsible subject.

Few companies would be prepared to recognize, or even accept, such a universal scope of responsibility. For many, their responsibility only goes as far as the avoidance of immediate risks to their own survival (egoistical point of view). Others are concerned with the effect of their actions on immediate exchange partners or stakeholders (reciprocal view). There are some, however, that consider the world as a total, for example, by taking account of the consequences of their actions for whatever exists.

It has been shown that all entrepreneurial activity should be justified economically, socially, and ecologically. As we have also seen, the scope of responsibility varies depending on the level of moral development. According to Lawrence Kohlberg, we can roughly differentiate the pre-conventional, conventional, and postconventional level (Kohlberg 1971, p. 164): It can be restricted to selfish interests, it can involve reciprocal interests, and it can even be altruistic, or even universal. The latter includes the interests of all concerned life forms (Schüz 2019, p. 69 f). In



Example 1: A purely economic family business that considers social and ecological responsibility as well as future generations only if it serves the family's own interests.

Example 2: A fundamentalist environmental organization that relies on volunteers to fund its actions and attracts sponsors through publicity.

Example 3: A pragmatic and idealistic pharmaceutical manufacturer dedicated primarily to the preservation and improvement of human life while preserving natural resources and making profits along the way.

Sustainable Corporate Responsibility (SCR), Fig. 10 Examples of SCR-Profiles. (Source: following Schüz 2021, p. 31)

our triple responsibility model, the different scopes are represented by the height of the responsibility triangles (see Fig. 8).

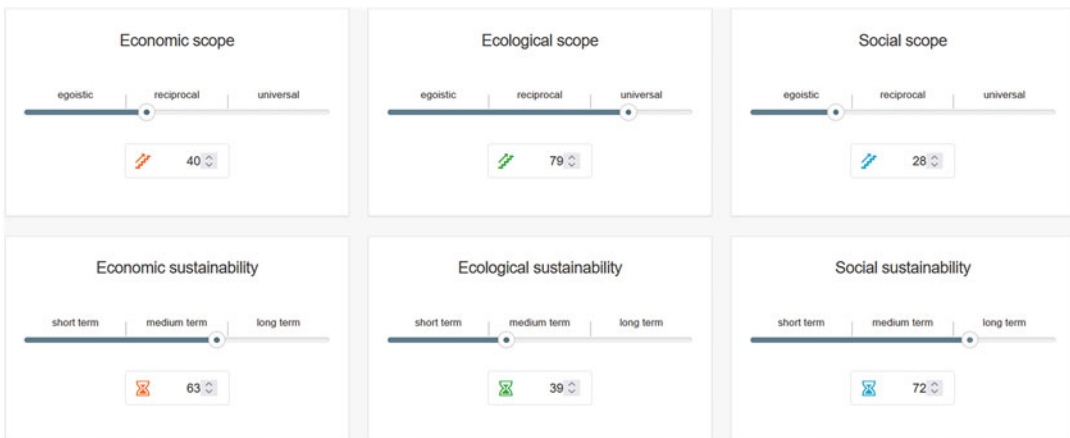
Now that we have sketched out the spatial dimensions of corporate responsibility, our model should also include the sustainability dimension. Here, too, different degrees of sustainability, from short- to long-term, can be defined. It was, therefore, decided to present the model of corporate responsibility as a clock with three hands whose length represents the respective scope of responsibility within the spatial dimension. The clock hands themselves represent the triangles of responsibility, consisting of subject S, consequences C, and authorities A. The degree of sustainability can be shown by moving a hand clockwise. The model of sustainable corporate responsibility can now be represented as follows (Fig. 9):

Within the economic dimension, for example, the selfish entrepreneur may well be sustainably oriented if he thinks exclusively of inheriting a healthy company for his great-grandchildren, without regard for other future generations. Further possible combinations cannot be discussed in detail here, profiles in Schüz (2017, p. 47). It is left to the reader to flesh out the respective dimensions with his or her own considerations.

Use of the Sustainable Corporate Responsibility Model

The Winterthur SCR-model now allows typical corporate responsibility profiles (see Fig. 10) to be displayed and compared. Briefly, one can see whether a company, as in Fig. 9, for example, is more economically and socially than ecologically oriented and to what extent sustainability is practiced. A comparison is particularly useful within an industry to identify the most balanced company (best practice). However, comparability is only given if the yardstick and catalogue of criteria on which the assessment is based are identical. Target-performance comparisons based on self-assessment and external assessment (audits) of a company are also possible.

Marcel Fischer has programmed the model so that individual responsibility profiles can be created at <https://SCR-Schuez.maecefischer.ch/home> (see Fig. 10). There, for example, rating agencies such as RobecoSAM (www.robeco.com) could enter and illustrate their assessment of the sustainable responsibility of companies as a percentage.



Sustainable Corporate Responsibility (SCR), Fig. 11 Input fields of SCR-online-tool. (Source: Marcel Fischer 2017)

Sustainable Corporate Responsibility (SCR), Table 1 SCR-checklist

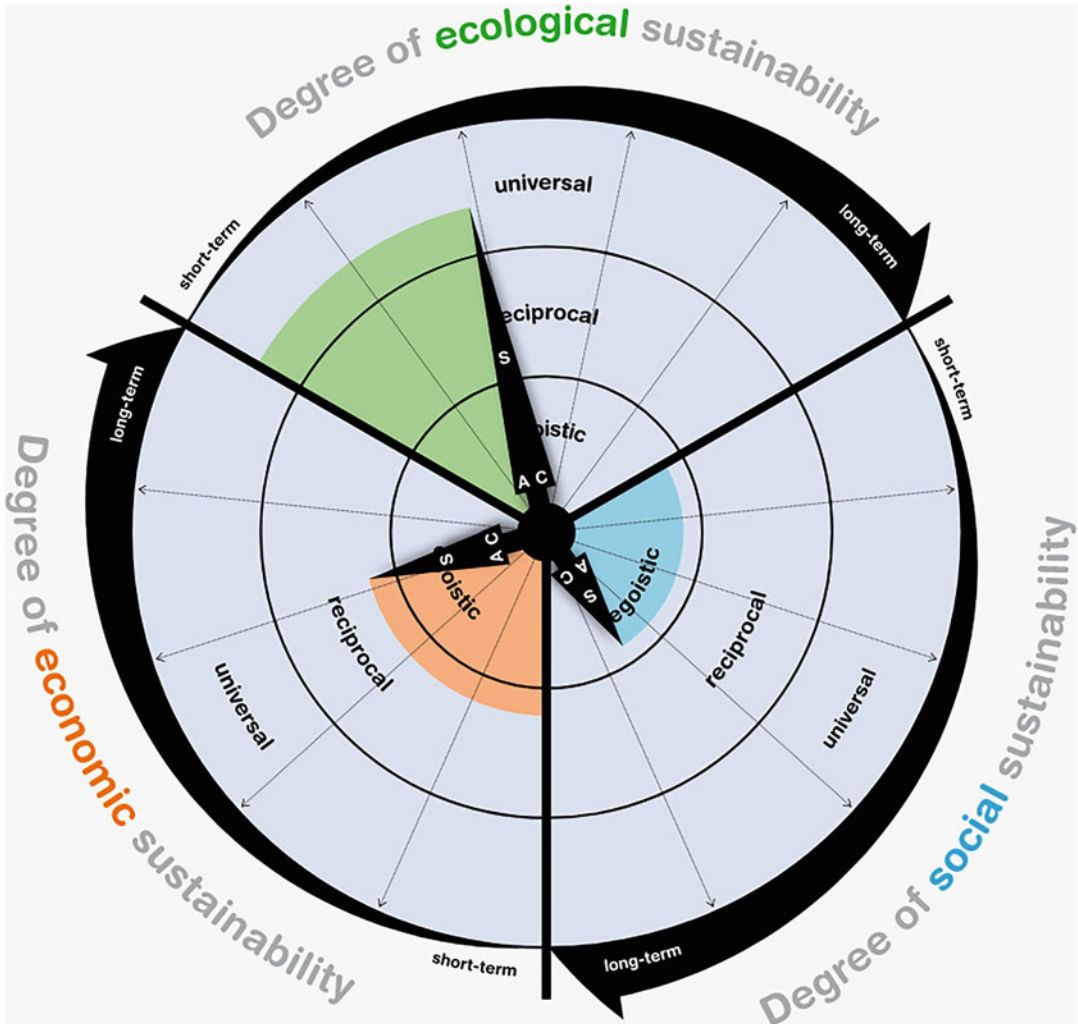
®SCR checklist Criteria for acceptance/rejection of a strategic option			
<i>universal: range/sustainability > 66.6% altruistic charity</i> <i>reciprocal: scope/sustainability: 33.3- 66.6% fair exchange</i> <i>range/sustainability: 0-33.3% egoistic/ robbery</i>		Scope [in %]	Sustainability [in %]
I. Economic Dimension: Technical/ Functional Responsibility			
I.1	Efficiency: What values/resources are available to realize the option efficiently?		
I.2	Reciprocity: To what extent are the exchange relationships along the option's value chain fair, i.e. in a balance of give and take?		
I.3	Effectiveness: How effectively does the option promote the investors' vision?		
II Social Dimension: Ethical Responsibility			
II.1	Utility ethics (average of II.1.a. + II.1.b.)		
a	<i>Reciprocity test</i> : Does the action generate fair exchange relations along the value chain with all stakeholders?		
b	<i>Stakeholder discourse test</i> : Has there been a (fictitious or real) discourse with key stakeholders about the planned measure and was this discourse fair and transparent?		
II.2	Duty ethics (average of II.2.a. + II.2.b.)		
a.	<i>Daylight test</i> : How much is the option in line with the law or the company's defined values and could it be made public?		
b.	<i>Universalizability/autonomy test (Categorical Imperative)</i> : To what extent can the option be elevated to a universal principle or does it violate the dignity/autonomy of those affected?		
II.3	Virtue ethics (average of II.3a. + II.3b.)		
a.	<i>Golden Mean Test</i> : How much is the option virtuous, i.e. does it meet the mean between two vices and can be considered a good example or even best practice?		
b.	<i>Empathy test</i> : How would I feel as an affected person if the option were realized (role reversal)?		
III. Ecological dimension: Aesthetic Responsibility			
III.1	Self-reflection: How much does the option - without trade-off - serve the self-, co- or Overall maintenance?		
III.2	Cradle-to-Cradle: To what extent are the side effects (e.g. waste) of the option meaningfully reintegrated into the natural cycle?		
III.3	Wholeness reflection: How does the option fit into the larger whole of nature?		

Source: cf. Schüz 2019, p. 291 f

SCR-Checklist

One can use the following SCR-Checklist (Table 1) to evaluate, for example, a strategic option or a whole

enterprise how far it can be seen as sustainably responsible in all SCR-dimensions. Especially the test questions for the social dimensions reflect the concept of ethical responsibility (see there) (Table 1).



Sustainable Corporate Responsibility (SCR), Fig. 12 SCR-profile as a result of inputs in Fig. 11. (Source: Fischer 2017)

The resulting percentages for each dimension can be entered in Marcel Fischer's online tool (Input fields see Fig. 11). Then the corresponding SCR-profile is obtained (Fig. 12).

Summary

The concept of sustainable corporate responsibility (SCR) highlights the various dimensions, scopes, and degrees of sustainably responsible corporate activities. Historically, it has its roots in the

economics of fair exchange. This can only take place if all those involved in creating value are in a reciprocal relationship of give and take. The SCR model illustrates the possible relationships between economic, social, and ecological responsibility, as well as their scope and degrees of sustainability.

References

- Acquier, A., Gond, J.-P., & Pasquero, J. (2011). Rediscovering Howard R. Bowen's legacy : The unachieved agenda and continuing relevance of social

- responsibilities of the businessman. *Business & Society*, 50(4), 607–646. Accessed: <https://doi.org/10.1177/00076503114519251>.
- Agudelo, M. A. L., Jóhannsdóttir, L., & Davíðsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*, 4(1). Accessed: <https://doi.org/10.1186/s40991-018-0039-y>.
- Aristotle. (2009). *The Nicomachean ethics*. Oxford: Oxford University Press.
- Barbier, E. B. (1987). The concept of sustainable economic development. *Environmental Conservation*, 14(2), 101–110.
- Bayertz, K. (1993). Eine kurze Geschichte der Herkunft der Verantwortungs. In K. Bayertz (Ed.), *Verantwortung – Prinzip oder Problem?* (pp. 3–71). Darmstadt: Wissenschaftliche Buchgesellschaft.
- Bowen, H. R. (2013). *Social responsibilities of the businessman [1953]*. Iowa City: University of Iowa Press.
- Brundtland Commission. (1987). *Our common future - towards sustainable development*. Accessed: <https://digitallibrary.un.org/record/139811?ln=en>.
- Burke, J. G. (1975). Kesselexplosionen und bundesstaatliche Gewalt in den USA. In K. Hausen & R. Rürup (Eds.), *Moderne Technikgeschichte* (pp. 314–336). Köln: Kiepenheuer & Witsch.
- Cannon, T. (2012). *Corporate responsibility - governance, compliance and ethics in a sustainable environment* (2nd ed.). London/New York: Pearson.
- Carroll, A. B., & Brown, J. A. (2018). Corporate social responsibility: A review of current concepts, research, and issues. In J. Weber & D. M. Wasieleski (Eds.), *Corporate social responsibility* (pp. 39–69). Pittsburgh: Emerald Publishing.
- Clark, J. M. (1916). The changing basis of economic responsibility. *Journal of Political Economy*, 24(3), 209–229.
- Clark, M. (1939). *Social control of business [1926]* (2nd ed.). New York: McGraw-Hill. Accessed: <https://archive.org/details/in.ernet.dli.2015.52171/page/n3/mode/2up>.
- Cordero, R. A. (1988). Aristotle and fair deals. *Journal of Business Ethics*, 7(9), 681–690.
- Eberstadt, N. N. (1973). What history tells us about corporate responsibility. *Business and Society Review/Innovation, Autumn* 73(7), 76–81.
- Elkington, J. (1997). *Cannibals with forks - the triple bottom line of 21st century business* (Vol. 8, p. 37). Oxford, UK: Capstone Publishers.
- Elkington, J. (2018, June 25). 25 years ago I coined the phrase 'triple bottom line.' Here's why it's time to rethink it. *Harvard Business Review*. Accessed: <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it>.
- Enderle, G. (1993). Unternehmen. In Enderle et al. (Eds.), *Lexikon der Wirtschaftsethik* (pp. 1093–1100). Freiburg: Herder.
- Fischer, M. (2017). *Online-tool for Winterthur SCR-model*. Accessed: <https://scr-schuez.macefischer.ch/home>.
- Freeman, R. Edward/ Martin, Kirsten E./ Parmar, Bidhan L. (2020): The power of and - responsible business without trade-offs. New York, NY: Columbia University Press.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. In W. C. Zimmerli, M. Holzinger, & K. Richter (Eds.), *Corporate ethics and corporate governance*. Berlin/Heidelberg: Springer. Accessed: https://doi.org/10.1007/978-3-540-70818-6_14.
- Grober, U. (2010). *Die Entdeckung der Nachhaltigkeit – Kulturgeschichte eines Begriffs*. München: Antje Kunstmann Verlag.
- History.com Editors. (2018). Gilded age. <https://www.history.com/topics/19th-century/gilded-age>. Access date: 3 June 2022.
- Kohlberg, L. (1971). From is to ought. In T. Mischel (Ed.), *Cognitive development and epistemology* (pp. 151–235). New York: Academic.
- Macintosh, J. C. C. (1999). The issues, effects and consequences of the Berle–Dodd debate, 1931–1932. *Accounting, Organizations and Society*, 24(2), 139–153. accessed: [https://doi.org/10.1016/S0361-3682\(97\)00055-X](https://doi.org/10.1016/S0361-3682(97)00055-X).
- Picht, G. (1969). Der Begriff der Verantwortung. In derselbe: *Wahrheit - Vernunft - Verantwortung - Philosophische Studien* (pp. 318–342). Stuttgart: Klett.
- SANZ -Sustainable Aotearoa New Zealand. (2009). *Strong sustainability for New Zealand - principles and scenarios*. New Zealand: Nakedize Ltd. publication. Accessed: <https://docs.niwa.co.nz/library/public/9780958278416.pdf>.
- Schüz, M. (1999). *Werte – Risiko - Verantwortung. Dimensionen des Wertemanagements*. München: Gerling Akademie Verlag.
- Schüz, M. (2012). Sustainable corporate responsibility – The foundation of successful business in the new millennium. *Central European Business Review*, 1(2), 7–15.
- Schüz, M. (2017): *Foundations of ethical responsibility - SML-Essentials No. 1*. Zurich: School of Management and Law, ZHAW 2017.
- Schüz, M. (2019). *Applied business ethics - foundations for study and daily practice*. Singapore/London/New Jersey: World Scientific.
- Schüz, M. (2021). *Angewandte Unternehmensethik - Grundlagen für Studium und Praxis*. München: Pearson Studium. (2nd, updated ed.) 2021.
- Shute, L. (1997). *John Maurice Clark - a social economics for the twenty-first century*. London: Palgrave Macmillan.
- Simmel, G. (1989). *Philosophie des Geldes [1901]*. Frankfurt a. M.: Suhrkamp.
- Smith, A. (2016). *The theory of moral sentiments*. Los Angeles: Enhanced Media.
- Soudek, Josef (1952): Aristotle's Theory of Exchange: An Inquiry into the Origin of Economic Analysis. In:

Proceedings of the American Philosophical Society, Feb. 29, 96(1), 45–75.

Walton, C. C. (1967). *Corporate Social Responsibilities*. Belmont: Wadsworth Publishing.

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Sustainable Design in Innovative Food Production

► Sustainable Food Design and Innovation

Sustainable Development

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Definition/Description

Sustainable development is a widely used concept, and it has been described in many different

ways. In the Brundtland Report, it is defined as follows (WCED 1987, p. 46): “[S]ustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.” More recently, it has been given a broader definition which conveys that there are three principal dimensions: an ecological or an environmental dimension, a social, and an economic one. The social dimension is often split into social and cultural dimensions. The goal of the ecological dimension is the conservation of all living things, resources, and life-supporting systems. The social dimension involves people living together with the goals of peace, equality, and human rights. The economic dimension comprises jobs and income – as a goal their appropriate development. In addition to these three dimensions, some researchers speak also about the fourth one, the political dimension (Fien et al. 2009), but some of them argue that it is not a dimension – instead it is an aspect what has to do with politics, policy, and decision-making as a goal of democracy (Wolff et al. 2017).

Introduction

Everybody is committed to sustainable development, but seeking ways of people for sustainable development is various. The concept of sustainable development emerged out of particular historical context (Robinson 2004). The idea and terminology of “sustainable development” goes back to Robert Prescott-Allen, World Conservation Union (IUCN) staff writer and principal author of the 1980 World Conservation Strategy. In the Section 13.1, it has been stated (IUCN 1980):

Ultimately the behavior of entire societies towards biosphere must be transformed if the achievement of conservation objectives is to be assured. A new ethic, embracing plants and animals as well as people, which will be enable human societies to

live in harmony with the natural world on which they depend for survival and well-being.

The concept was thereafter introduced by Lester Brown (1981), who defined a sustainable society as one that is able to satisfy its needs without diminishing the chances of future generations. Later on, the Brundtland Report used the same definition to present the notion of sustainable development (WCED 1987, p. 229): “Human-kind has the ability to achieve sustainable development – to meet the needs of the present without compromising the ability of future generations to meet their own needs.” The definition does not mention the natural environment explicitly, focusing only upon human needs or wants. However, the report makes it clear that these “needs” include the conservation of the natural environment. The concept of sustainable development (Clark and Munn 1986) is an attempt to bridge the gap between environmental concerns about the increasingly evident ecological consequences of human activities and socio-political concerns about human development issues. In that sense sustainable development is a logical extension of arguments within the environmental literature of the 1960s, 1970s, and early 1980s. The concept of sustainable development carries within it the dynamic tension between poverty and environmental concern that is the most radical message of the Brundtland Commission.

Key Issues

The concept of sustainable development was introduced in the 1970s. It was firstly adopted and popularized as a world conservation strategy through the efforts of three influential conservation bodies – the International Union for Conservation of Nature and Natural Resource (IUCN) which has since been renamed World Conservation Union (WCU), the World Wide Fund for Nature (WWF), and the United Nations Environment Programme (UNEP) (Trzyna 1998). For the first time, the concept was mentioned in the Nature Conservation and Natural Resources Strategy of the International Union for Conservation of

Nature published by IUCN in 1980. Initially, it was associated with ecological sustainability, but it was soon used also to describe social and economic sustainability (Brown 1981). The greater popularity the concept gained through the Brundtland Report (WCED 1987) and Agenda 21 (UN 1993).

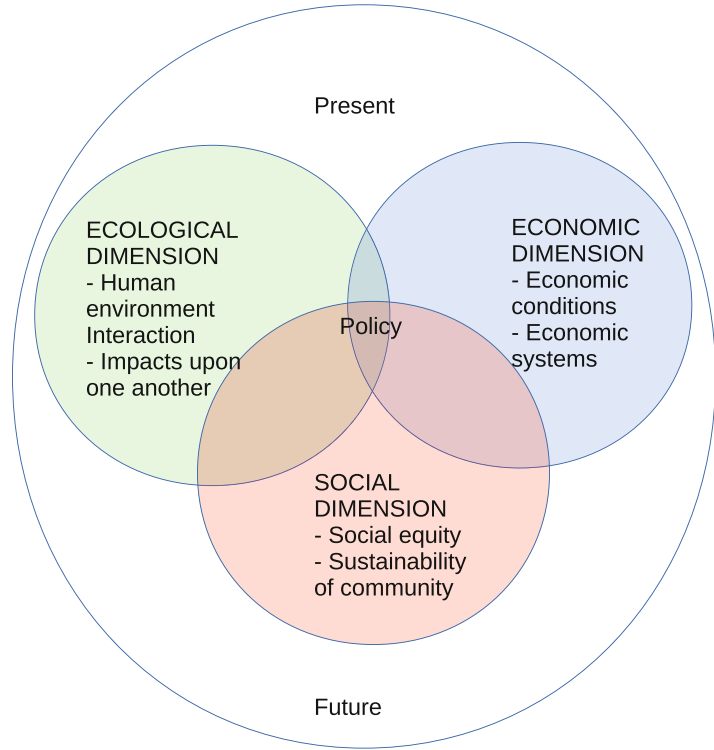
The Brundtland Report proposed “a global agenda for change” in the concept and practices of development. It presented new ideas such as equity and justice within and between generations, a shared understanding of the long-term goals for human life, collective action, and confidence in other people, new leadership, and governance instruments (WCED 1987). Agenda 21 was the document that was the culmination of the United Nations conference on environment and development, also known as the Earth Summit, held in Rio de Janeiro, Brazil, in 1992. This summit focused on ecological sustainability.

A few years after Brundtland report, Dobson (1996) identified more than 300 definitions and interpretations of the concept of sustainable development (p. 402). Later on, Klarin (2018) presented an overview of interpretations of sustainable development including the period 1987–2015. All definitions largely follow the core of the concept set out in the basic definition of the WCED (1987). In these definitions sustainable development is mostly perceived as a socio-economic system that enables human needs but also a long-term progress toward the well-being and improvement of overall quality of life in accordance with environmental constraints. Thus the principle of sustainable development focuses at the same time on humans living today and in the future.

The essence of the concept of sustainable development derives from the triple bottom line framework, which implies the balance between three dimensions of sustainability (Elkington 1994) (Fig. 1). Ecological (environmental) sustainability focuses on maintaining the quality of the environment which is necessary for conducting the economic activities and quality of life of people. So, human-environment interaction and impacts of one another belong to the ecological dimension (Spooner 1984). Social

Sustainable Development,

Fig. 1 Sustainable development and its dimensions (Dempsey et al. 2011; Elkington 1994; GRI 2013; Spooner 1984; Wolff et al. 2017)



sustainability strives to ensure human rights and equality, preservation of cultural identity, and respect for cultural diversity, race, and religion. Consequently, at the core of the social dimension are social equity and the sustainability of community (Dempsey et al. 2011). Economic sustainability is necessary to maintain the natural, social, and human capital required for income and living standards. Thus the **economic dimension** concerns the organization's impacts on the economic conditions of its stakeholders, and on economic systems at local, national, and global levels (GRI 2013, p. 67). The dimensions also integrate in a complex way; e.g., the political aspect is mainly a part of the economic dimension but also of the other two dimensions (Wolff et al. 2017).

The core of sustainable development includes three principles: eco-efficiency, inter- and intra-generational social justice, and participation in decision-making (WCED 1987). Eco-efficiency is striving to create more goods and services while using fewer resources and creating less waste and pollution. Inter- and

intra-generational social justice and possibility to participate in decision-making depend on many different aspects such as inter- and intra-generational equity, the distribution of power and resources, education, freedom, access to influential decision-making fora, general "capacity-building," etc. (cf. Basiago 1998; Bramley and Power 2009; Foladori 2005; Halme et al. 2004; Newell et al. 2004). The major theme included in these issues is the interconnection of degradation, poverty, and inequality. Fulfilling peoples' needs of the present and future generations requires actions that are of the short, medium, and long term. Basing on a long-term perspective, the sustainability approach incorporates an efficiency as well as an equity criterion, and it also emphasizes the need to maintain ecosystem health and integrity (Costanza et al. 1992).

Sachs (2015, p. XIII) has stated that "[S]ustainable development is both a way of looking at the world, with a focus on the interlinkages of economic, social, and environmental change, and a way of describing our shared aspirations for a

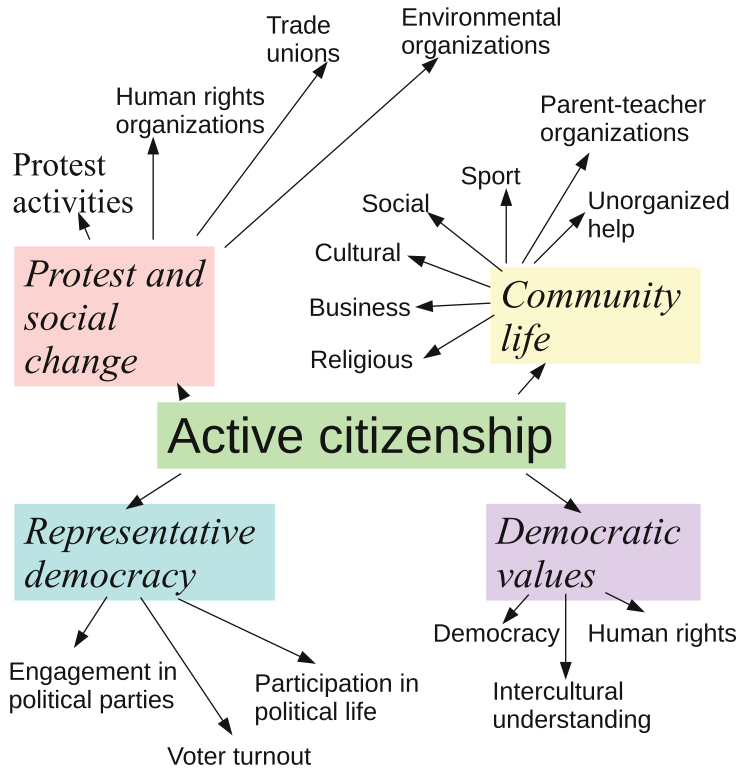
decent life, combining economic development, social inclusion, and environmental sustainability. It is in short both an analytic theory and a ‘normative’ or ethical framework.” The Brundtland Report clearly emphasized the link between the environment and development, as well as the importance of the human dimension in all decisions concerning environmentally sound development (Wolff et al. 2017). The importance of ecological sustainability lies in the fact that the society and economy depend on the integrity of the biosphere and the ecological processes taking place within it. Consequently, people should maintain social, cultural, and economic well-being without depleting natural resources or overloading nature’s delicate balance. According to UNESCO (2018): “Sustainable development cannot be achieved by technological solutions, political regulation or financial instruments alone. We need to change the way we think and act. This requires quality education and learning for sustainable development at all levels and in all social contexts.”

Education – A Crucial Precondition for Sustainable Development

Education for sustainable development is about enabling people to constructively and creatively address present and future global challenges and create more sustainable and resilient societies (UNESCO 2009). Learning in education for sustainable development often includes only knowledge, values, and theories related to sustainable development. However, it also means “[l]earning to ask critical questions; learning to clarify one’s own values; learning to envision more positive and sustainable futures; learning to think systematically; learning to respond through applied learning; and learning to explore the dialectic between tradition and innovation” (UN 2003). Thus it offers learners a context for developing active citizenship and participation (Berkowitz et al. 2005) (Fig. 2), embracing the complexity of the interdependencies of ecological, societal, and economic systems (Pigozzi 2007).

To understand sustainable development requires understanding of the behavior of systems

Sustainable Development,
Fig. 2 Active citizenship,
its dimensions, and
components (Mascherini
et al. 2009)



in general and of human and environmental systems in particular (Clayton and Radcliffe 1996). The overall goal of the UN Decade of Education for Sustainable Development (2005–2014) was to integrate the principles, values, and practices of sustainable development into all aspects of education and learning (UNESCO 2005; 2009). Based on a broad literature review, Wiek et al. (2011) propose five key competencies to be taken into account in education for sustainability. These competencies can be seen to support resolving sustainability problems in the real world through synthesizing the knowledge, skills, and attitudes. They are systems thinking competence, anticipatory competence, normative competence, strategic competence, and interpersonal competence. The competencies build upon one another and can be combined in different ways (Wiek et al. 2011).

According to Wiek et al. (2011), systems thinking competence means that people are able to understand the intermediate and root causes of complex sustainability problems. Systems thinking is a way of thinking that helps people see their role from a holistic point of view (Palmberg et al. 2017). Thus systems thinking is understood as the ability to see the world as a complex system where everything is connected to everything else (Draper 1993). It includes the capacity of identifying various biophysical and social components in a given environmental context and the interrelations in whole systems (Sterling 2003). It should therefore be based at least on critical thinking and reflection, deliberation, and action competence (Hoffman 2015). Draper (1993) associates seven thinking skills with systems thinking, structural, dynamic, generic, operational, scientific, closed-loop, and continuum thinking, whereas Stave and Hopper (2007) identify the same skills and several activities such as recognizing interconnections, identifying feedback, understanding dynamic behavior, differentiating types of flows and variables, using conceptual models, creating simulation models, and testing policies. System dynamics and systems thinking can be taught without involving sustainability, but sustainability cannot be taught without involving systems thinking (Cloud 2009).

Anticipatory competence is the capacity to think systematically about the future and future generations (Wiek et al. 2011) and to modify and shape the future of society and to guide its social, economic, technological, and ecological changes along the lines of sustainable development (de Haan 2006). This competence enables people to integrate concepts such as intergenerational equity and long-term consequences of present action into sustainability problem-solving.

Normative competence is the ability to understand concepts of justice, equity, social-ecological integrity, and ethics (cf. Moore and Nelson 2013). It means understanding how these concepts vary across and within cultures and how integrating these concepts contributes to solving sustainability problems.

The strategic competence is the ability to cope with unexpected problems, when no ready-made solutions are available (Mariani 1994). Interpersonal competence is the capacity to motivate and facilitate sustainability research and problem-solving. It requires communication, negotiation, and collaboration skills and expertise in participatory with stakeholders (Wiek et al. 2011).

Summary

Initially, the concept of sustainable development was associated with ecological sustainability, but it was soon used to describe social and economic sustainability, too. The greater popularity the concept gained through the Brundtland Report and Agenda 21. Sustainable development is mostly perceived as a socioeconomic system that enables human needs but also a long-term progress toward the well-being and improvement of overall quality of life in accordance with environmental constraints. The essence of the concept of sustainable development derives from the triple bottom line framework, which implies the balance between three dimensions of sustainability: ecological (environmental) sustainability, social sustainability, and economic sustainability. In the core of sustainable development are eco-efficiency, inter- and intra-generational social justice, and participation in decision-making. Thus to

understand sustainable development requires understanding of the behavior of systems in general and of human and environmental systems in particular because the ecological, social, and economic dimensions of sustainable development include several different aspects which are inter-related with each other.

Systems thinking is a way of thinking that helps people see their role from a holistic point of view. Systems thinking and systems dynamics can be taught without involving sustainability, but sustainability cannot be taught without involving systems thinking. Beside systems thinking, the capacities to think systematically, to understand ethical issues, to cope with unexpected problems, and also problem-solving and collaboration skills are needed when modifying and shaping the future of society in a sustainable way.

Sustainability is, thus, not only an environmental issue to be controlled by scientists, it is a multifaceted and interdisciplinary issue related to both local and global circumstances and past events as well as future prospects. There is a growing need for effective international cooperation to manage ecological, economic, and social interdependence. Thus the term sustainable development encompasses the concerns of people working in a wide range of disciplines from sociology to engineering, from geology to mathematics, not only today but also in the future.

Cross-References

- Biodiversity
- Bioremediation
- Conservation: Sustainability
- Corporate Social Responsibility
- CSR: Evolution of Concept
- Decade of Education for Sustainable Development
- Economic Sustainability
- Exxon Valdez
- Global Governance
- Holistic Development
- NP 4469: Portuguese Social Responsibility Standard
- Sustainability Management and Market Risk

- Sustainability Science
- Sustainable Development Goals (SDGs)
- Sustainable Development Planning
- Sustainable Energy
- Sustainable Innovation

References

- Basiago, A. (1998). Economic, social and environmental sustainability in development theory and urban planning practice. *Environmentalist*, 19, 145–161. <https://www.amherst.edu/system/files/media/0972/fulltext.pdf>. Accessed 2018.
- Berkowitz, A. R., Ford, M. F., & Brewer, C. A. (2005). A framework for integrating ecological literacy, civics literacy, and environmental citizenship in environmental education. In E. A. Johnson & M. J. Mappin (Eds.), *Environmental education and advocacy: Changing perspectives of ecology and education* (pp. 227–266). New York: Cambridge University Press.
- Bramley, G., & Power, S. (2009). Urban form and social sustainability: The role of density and housing type. *Environment and Planning B*, 36(1), 30–48.
- Brown, L. (1981). *Building a sustainable society*. Washington, DC: Worldwatch Institute.
- Clark, W., & Munn, T. (Eds.). (1986). *Ecologically sustainable development of the biosphere*. Cambridge: Cambridge University Press.
- Clayton, A. M. H., & Radcliffe, N. J. (1996). *Sustainability: A systems approach*. London: Earthscan.
- Cloud, J. P. (2009). Some systems thinking concepts for environmental educators during the decade of education for sustainable development. In B. Chalkley, M. Haigh, & D. Higgitt (Eds.), *Education for sustainable development* (pp. 225–229). New York: Routledge.
- Costanza, R., Norton, B. G., & Haskell, B. D. (Eds.). (1992). *Ecosystem health: New goals for environmental management*. Washington, DC: Island Press.
- de Haan, G. (2006). The BLK ‘21’ programme in Germany: A ‘Gestaltungskompetenz’-based model for education for sustainable development. *Environmental Education Research*, 1, 19–32.
- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 19(5), 289–300. <https://doi.org/10.1002/sd.417>.
- Dobson, A. (1996). Environmental sustainabilities: An analysis and a typology. *Environmental Politics*, 5(3), 401–428. <https://doi.org/10.1080/09644019608414280>. Accessed 16 Nov 2018.
- Draper, F. (1993). A proposed sequence for developing systems thinking in a grades 4–12 curriculum. *System Dynamics Review*, 9, 207–214.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable

- development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>.
- Fien, J., Maclean, R., & Park, M.-G. (Eds.). (2009). *Work, learning and sustainable development*. Dordrecht: Springer.
- Foladori, G. (2005). Advances and limits of social sustainability as an evolving concept. *Canadian Journal of Development Studies – Revue canadienne d'études du développement*, 26(3), 501–510. <https://doi.org/10.1080/02255189.2005.9669070>.
- GRI. (2013). Global reporting initiative. GRI G4 part 2: Implementation manual. <https://www.globalreporting.org/resource/library/GRIG4-Part2-Implementation-Manual.pdf>. Accessed 2 Nov 2018.
- Halme, M., Jasch, C., & Scharp, M. (2004). Sustainable homeservices? Toward household services that enhance ecological, social and economic sustainability? *Ecological Economics*, 51(1–2), 125–138.
- Hoffman, M. (2015). What is an education for sustainable development supposed to achieve – A question about what, how and why. *Journal of Education for Sustainable Development*, 9, 213–228.
- IUCN (International Union for Conservation of Nature and Natural Resources). (1980). World conservation strategy: Living resource conservation for sustainable development. <https://portals.iucn.org/library/efiles/documents/WCS-004.pdf>. Accessed 16 Nov 2018.
- Klarin, T. (2018). The concept of sustainable development: From its beginning to the contemporary issues. *Zagreb International Review of Economics & Business*, 21(1), 67–94. <https://doi.org/10.2478/zireb-2018-0005>. ISSN 1331-5609; UDC: 33+65. https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=295780. Accessed 16 Nov 2018.
- Mariani, L. (1994). Developing strategic competence: Towards autonomy in oral interaction. Perspectives, a Journal of TESOL-Italy, XX(1). <http://www.learningpaths.org/papers/papercommunication.htm>. Accessed 10 Nov 2018.
- Mascherini, M., Manca, A. R., & Hoskins, B. (2009). *The characterization of active citizenship in Europe. JRC-IPSC, European Commission*. Luxembourg: Office for Official Publications of the European Communities. <https://doi.org/10.2788/35605>. http://publications.jrc.ec.europa.eu/repository/bitstream/11111111/4854/1/reqno_jrc54065_the_characterization_of_active_citizenship_in_europe%5B1%5D.pdf. Accessed 20 Dec 2018.
- Moore, K. D., & Nelson, M. P. (2013). Moving toward a global moral consensus on environmental action. In Worldwatch Institute. *State of the World 2013: Is Sustainability still Possible?* (pp. 225–234). Washington, DC: Island Press.
- Newell, S., Tansley, C., & Huang, J. (2004). Social capital and knowledge integration in an ERP project team: The importance of bridging and bonding. *British Journal of Management*, 15, 43–57.
- Palmberg, I., Hofman-Bergholm, M., Jeronen, E., & Yli-Panula, E. (2017). Systems thinking for understanding sustainability? Nordic student teachers' views on the relationship between species identification, biodiversity and sustainable development. *Education Sciences*, 7(72). <https://www.mdpi.com/2227-7102/7/3/72>. <https://doi.org/10.3390/educsci7030072>. Accessed 27 Oct 2018.
- Pigozzi, M. (2007). Quality in education defines ESD. *Journal of Education for Sustainable Development*, 1, 27–35.
- Robinson, J. (2004). Squaring the circle? Some thoughts on the idea of sustainable development. *Ecological Economics*, 48, 369–384.
- Sachs, J. D. (2015). *The age of sustainable development*. New York: Colombia University Press.
- Spoonner, B. (1984). *Ecology in development: A rationale for three-dimensional policy*. Tokyo: United Nations University Press.
- Stave, K. A., & Hopper, M. (2007). What constitutes systems thinking? A proposed taxonomy. In Proceedings of the 25th international conference of the system dynamics society, Boston, MA, USA, 29 July–2 August 2007. <https://www.systemdynamics.org/conferences/2007/proceed/papers/STAVE210.pdf>. Accessed 28 Oct 2018.
- Sterling, S. (2003). Whole systems thinking as a basis for paradigm change in education: Explorations in the context of sustainability. <http://www.bath.ac.uk/cree/sterling/sterlingthesis.pdf>. Accessed 28 Oct 2018.
- Trzyna, T. (1998). Sustainable development: Linking values and policy. In D. G. Dallmeyer & A. F. Ike (Eds.), *Environmental ethics and the global marketplace* (pp. 75–84). London: The University of Georgia Press.
- UN (United Nations). (1993). United Nations Conference on Environment & Development, Agenda 21. Rio de Janeiro, Brazil, 3 to 14 June 1992. <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>. Accessed 18 Nov 2018.
- UN (United Nations). (2003). General assembly. United Nations A 58/210. Activities undertaken in implementation of Agenda 21, the programme for the implementation of Agenda 21 and the outcomes of the World summit on sustainable development. Report of the Secretary-General. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N03/451/88/PDF/N0345188.pdf?OpenElement>. Accessed 16 Dec 2016.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2005). *Guidelines and recommendations for reorienting teacher education to address sustainability. Education for sustainable development in action. Technical paper; 2*. Paris: UNESCO, Section for Education for Sustainable Development.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2009). United Nations decade of education for sustainable development (DESD,

- 2005–2014). Review of contexts and structures for education for sustainable development. http://www.unesco.org/education/justpublished_desd2009.pdf. Accessed 28 Oct 2018.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2018). Education for sustainable development. <http://en.unesco.org/themes/education-sustainable-development>. Accessed 28 Oct 2018.
- WCED (World Commission on Environment and Development). (1987). Report of the world commission on environment and development: Our common future. UN Documents Gathering a body of global agreements. <http://www.un-documents.net/wced-ocf.htm>. Accessed 27 Oct 2018.
- Wiek, A., Withycombe, L., Redman, C., & Mills, S. B. (2011). Moving forward on competence in sustainability research and problem solving. *Environment: Science and Policy for Sustainable Development*, 53(2), 3–13. <https://doi.org/10.1080/00139157.2011.554496>. Accessed 27 Oct 2018.
- Wolff, L.-A., Sjöblom, P., Hofman-Bergholm, M., & Palmberg, I. (2017). High performance education fails in sustainability? – A reflection on finnish primary teacher education. *Education Sciences*, 7(32). <https://www.mdpi.com/2227-7102/7/1/32>. <https://doi.org/10.3390/educsci7010032>. Accessed 27 Oct 2018.

Sustainable Development Goals

- [United Nations Agenda 2030 on Sustainable Development Goals, The](#)
- [United Nations Human Rights Committee](#)

Sustainable Development Goals (SDGs)

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Synonyms

[Development; Sustainable development](#)

Definition

The term sustainable development came into prominence in the Paris Biosphere Conference and Washington Ecological Aspects of International Development Conference held in 1968 (Barbier 1987). According to Beltratti (1987), sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own need.” Two macroeconomic terms development and growth usually thought to have a similar meaning. Growth refers to the percentage change in national income (NI), in more detailed the percentage change in the nation’s total value of final goods and services that are produced in a given time period. On the other hand, development indicates a rise in the quality of life for peoples’ well-being in a country. Life quality is often evaluated using a human development index (HDI), which considers personal factors not considered in economic growth, such as literacy rate, number of people per doctor, internet usage ratio, life expectancy, housing, educational facilities, medical services, the supply of food and poverty levels, etc. (Intelligent Economics 2019).

Theoretical Framework

The founders of modern economics including Adam Smith, Francois Quesnay, and Antoine Lavoisier consider the key issues in economic development. The early writings of economic development are traditionally based on human well-being (Sen 1988). In this framework, economists and policymakers focus on the enhancement of living standards. Bauer (1971) indicates that engineering and logistics tools help to solve this problem which may differ in developed and developing countries.

After the Second World War, economists (see Lewis 1955; Hirschman 1958) emphasize the interaction between economic growth and development. In the year 1950s modernization theories and structuralist development theories indicate

Sustainable Development Goals (SDGs), Table 1 Main economic development theories (1950s onwards)

Decade	Theory/Approach	Main idea
1950s	Modernization theories	European development model and international cooperation
	Structuralist theories	Southern part of the world needed to interact with the global economies.
1960s	Modernization theories	Resource intensity is higher in northern countries relative to southern
	Dependency theories	
1970s	Dependency theories	Basic human needs must be the priority in development
	Neo-Malthusian theories	Control on economic growth, population growth, and resource allocation
1980s	Neoliberalism	Macroeconomic policies should focus on the market
	Grassroots approaches	The role of local context and indigenous knowledge
	Sustainable development	Need to balance needs of current generation by considering future generations
1990s	Neoliberalism	
	Post-development	Eurocentrist and colonialist idea should be changed
	Sustainable development	Emphasize the role of cultural and social dimensions
2000s	Neoliberalism	Increased engagement with concepts of globalization
	Post-development	
	Sustainable development	
	Grassroots approaches	
	Right-based approach	

Source: Willis (2011). Theories and Practices of Development. p.28

that an increase in economic growth should enhance the quality of life and having economic growth without economic development is possible. A major revision on the concept of sustainable development arises in the 1970s which emphasizes meeting the basic needs by considering environmental issues (ILO 1976). In the late 1970s, empirical literature defines economic development as the functional achievement of a better life by the members of the society (Sen 1988). Today’s world, instead of economic activities, political, social, and cultural dimensions, as well as changes in the institutional framework, are the complementary elements of sustainable development. The below mentioned Table 1 provides the main development theories and their ideas in post-war era.

Sustainable Development Goals (SDGs)

Background and History

The sustainable development goals (SDGs) are rooted at the United Nations Sustainable Development Conference held in Rio de Janeiro in 2012. This implies of implementing

the new agenda – including how economic resources are mobilized to accomplish the sustainable growth agenda. Significant investment will be needed in both advanced and developing nations to attain the sustainable development goals (SDGs). This agenda will involve the mobilization in trillions of dollars of important resources. These funds do exist, however. In the globe, savings are far more than sufficient to fund the fresh agenda. It will be essential for us to achieve our goals on how to direct investments to promote sustainable development.

- Implementation and achievement will be based on and guided by countries’ own policies, programs, and plans for sustainable development. SDGs are a compass to align countries’ plans with their worldwide obligations. Their objectives are to be aligned.
- Sustainable development policies nationally and country-led will involve the mobilization of resources and funding.
- The fresh agenda should be made possible by all stakeholders: governments, civil society, the private sector, and others.

- In order to promote domestic initiatives, a revitalized worldwide partnership is necessary at a worldwide level.

In year 2000, SDGs replaced the millenium development goals (MDGs) which focus on the poverty. The MDGs give priority to objectives against extreme poverty, child mortality, hunger, deadly diseases such as HIV/AIDS, malaria, and at least primary education to all children. The UN announced that since 1990, child mortality, the number of out-of-school children, and HIV/AIDS diseases fell by about half.

Objectives

The traditional objective of sustainable development is ecological sustainability (Lele 1991). Sustainable development is aimed at creating and maintaining successful social, economic, and environmental systems. These systems are closely related: for their riches and safety, humanity relies on ecosystem services. In addition, beings can turn ecosystems into circumstances that are more or less desirable. Many ecosystem services are provided to humanity, such as clean water and air, food manufacturing, fuel, and others. Yet human intervention can make ecosystems unable to provide these services, with implications for human livelihoods, vulnerability, and safety. Such adverse changes are a loss of resilience (Folke et al. 2002).

For the well-being of its residents, economic development is the growth of the financial riches of nations, areas, or communities. From a political point of view, financial growth may be described by generating and/or keeping employment, promoting or increasing income and tax base as an effort to enhance the financial well-being and quality of life of a society. Development reduces individuals from low living norms to good jobs with adequate shelters. The decline of natural resources which may lead to pollution, congestion, and diseases are not taken into consideration in economic growth. However, development is about sustainability, which implies meeting current requirements without

jeopardizing future requirements (Intelligent Economics 2019).

The sustainable development objectives are the guiding principle for achieving a better and more sustainable future for everyone. The difficulties we face are worldwide: poverty, inequality, environment, environmental degradation, prosperity, peace, and justice (UN 2019).

Sustainable development encompasses three main areas:

- Governments' policies to fulfill wide financial goals, including price stabilization, elevated jobs, extended tax base, and sustainable growth. These attempts include monetary and fiscal policies, financial institution regulation, trade, and taxation policies.
- Infrastructure policies and programs and facilities, such as roads, parks, affordable housing, crime prevention, education, and initiatives.
- Policies and programs explicitly aimed at work creation and maintenance by particular company finance initiatives, marketing, neighbourhood growth, start-up, and growth of tiny enterprises, company growth.

In this framework, UN announced 17 SDGs:

- End poverty in all its forms.
- Zero hunger.
- Health.
- Education.
- Gender equality and women empowerment.
- Water and sanitation.
- Energy.
- Infrastructure and industrialization.
- Inequality.
- Sustainable production and consumption.
- Climate change.
- Ocean.
- Biodiversity, forests, and desertification.
- Peace, justice, and strong institutions.
- Partnership (UN 2019).

Sustainable development calls for concerted efforts to build a future for individuals and the

planet that is inclusive, sustainable, and resilient. In order to achieve sustainable development, the harmonization of three key aspects is critical: financial growth, social inclusion, and preservation of the environment. These components are interconnected and are all essential to personal and societal well-being. Eradicating poverty in all types and sizes is essential to sustainable development. In this context, sustainable, inclusive, and equitable economic growth must be promoted, higher opportunities for all must be created, inequalities reduced, living standards raised, social development and inclusion promoted equitably, and natural resources and ecosystems managed in an integrated and sustainable way must be encouraged (UN 2019).

Policies and Applications

The economic policies on sustainable development goals focus on the increase in human well-being over a long period of time. Until the Second World War, countries mainly implement regional strategies and development plans. In year 1944, 44 delegates from 44 countries met in Bretton Woods Conference to restructuring the global economies. During the conference, three main pillars International Monetary Fund (IMF), World Bank (WB), and General agreement of tariff and trade barriers (GATT, which becomes World Trade Organization (WTO)) were established. These international organizations also shaped the policies and agenda to achieve economic development. Since then, international cooperation began to play a key role in economic development. The UN system is the crucial organization among them.

The SDG fund is the first international cooperation to achieve SDGs. The fund and its joint programs in collaboration with 27 UN agencies, citizens, NGOs, and government agencies operated in 50 countries. Under the MDGs, steering, supervising, and implementing mechanisms arise in eight areas: children, food security and nutrition, gender equality and women's

empowerment, environment and climate change, youth employment and migration, democratic economic governance development, private sector conflict prevention and peace-building, and culture and development from 2000 to 2015 (UN 2020). On September 2015, the 2030 agenda titled "Transforming Our World: The 2030 Agenda for Sustainable Development" was formally adopted which includes the 17 sustainable development.

Cross-References

- [Ecological Economics](#)
- [Growth](#)
- [Human Development Index \(HDI\)](#)

References

- Barbier, E. B. (1987). The concept of sustainable economic development. *Environmental Conservation*, 14(2), 101–110.
- Bauer, P. T. (1971). *Dissent on development*. London: Weidenfeld and Nicholson.
- Folke, C., Carpenter, S., Elmqist, T., Gunderson, L., Holling, C. S., & Walker, B. (2002). Resilience and sustainable development: Building adaptive capacity in a world of transformations. *Royal Swedish Academy of Science*, 31(5), 437–440.
- Hirschman, A. O. (1958). *The strategy of economic development*. New Haven: Yale University Press.
- ILO. (1976). *Employment, Growth and basic needs, a one world problem*. Geneva.
- Intelligent Economics. (2019). *Growth and development*. Retrieved from <https://www.intelligenteconomist.com/economic-growth-and-development/>. Accessed 2 Aug 2019.
- Lele, S. M. (1991). Sustainable development a critical view. *World Development*, 19(6), 607–621.
- Lewis, W. A. (1955). *The theory of economic growth*. Homewood: Irwin.
- Sen, A. (1988). The concept of economic development. In Chenery, H. & Srinivasan, T.N. (eds.). *Handbook of economic development*. North-Holland.
- United Nations. (2019). *Sustainable development goals*. Retrieved from <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>. Accessed 2 Aug 2019.
- Willis, K. (2011). *Theories and practices of development*. Routledge.

Sustainable Development Goals (UN Global Goals)

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Synonyms

UN Global Goals

Definition

In 2015, the United Nations set the course for the transformation of the world toward global sustainability with its Agenda 2030. With the help of 17 Sustainable Development Goals (SDGs) as a framework and a total of 169 subgoals, states, institutions, companies, and civil society should be encouraged to work together for our future. The sustainability goals are intended to solve ecological, social, and economic topics. Nowadays the SDGs are increasingly finding their way into our everyday lives.

Introduction

On September 25, 2015, 193 member states of the United Nations adopted the so-called “Agenda 2030 for Sustainable Development” at the world summit at the United Nations headquarters in New York (UN, 2015). The Agenda 2030 today is the global framework for politics and is intended to perpetuate the tried and tested in terms of sustainability and at the same time initiate changes for a better future. Specifically, 17 Sustainable Development Goals (SDGs) were adopted with the Agenda, which came into effect on January 1, 2016, with a time frame of 15 years. The core messages are documented in the 30-page resolution of the United Nations.

With a view to the history of the agenda, it should be noted that the United Nations Conference on Sustainable Development in Rio de

Janeiro in 2012 lay the foundation for the sustainability goals. The subsequent consultation and development process resulted in the Agenda 2030. The adoption of the Sustainable Development Goals replaced the so-called Millennium Development Goals, which were valid until 2015. The Millennium Goals were a catalog of measures adopted by the international community in 2000 to combat poverty, secure peace, and protect the environment (UN, 2000). At the same time, the SDGs made a contribution to the adoption of the Paris Climate Protection Agreement in 2015, with which the international community advocated limiting man-made global warming.

The United Nations’ resolution on the Agenda 2030 defined 17 global Sustainable Development Goals (SDGs). The Agenda 2030 focuses on “five Ps” (people – planet – prosperity – peace – partnership) and thus covers a broad spectrum of sustainability aspects. For example, the SDGs focus on people to end poverty or hunger. The nation-states are determined to save and protect the planet, for example, by the efficient management of its resources. Additionally, all the people should live prosperous and fulfilling lives. Peace and freedom are other important goals, as well as the need to work together in order to achieve all the goals.

The sustainability goals are intended to solve ecological, social, and economic challenges. In addition – as the title of the resolution of the United Nations General Assembly claims – the “transformation” toward a more sustainable world should be ensured. The basic idea of focusing on a broad range of topics should help: from climate protection to education, from poverty and hunger to equal treatment, and from economy and employment to cooperative cooperation.

The resolution includes the preamble and a declaration by the heads of state and government as the basis for the Agenda 2030. It also includes the means of implementation and a focus on the role of global partnerships. And it includes information on measures for follow-up and monitoring in regard to the Agenda 2030. Finally, the resolution includes specific goals and targets. They are the heart of the Agenda 2030.

Sustainable Development Goals

SDG number	Title	Brief description	Number of subgoals/ targets
1	No poverty	End poverty in all its forms everywhere	7
2	Zero hunger	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	8
3	Good health and Well-being	Ensure healthy lives and promote Well-being for all at all ages	13
4	Quality education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	10
5	Gender equality	Achieve gender equality and empower all women and girls	9
6	Clean water and sanitation	Ensure availability and sustainable management of water and sanitation for all	8
7	Affordable and clean energy	Ensure access to affordable, reliable, sustainable, and modern energy for all	5
8	Decent work and economic growth	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all	12

(continued)

SDG number	Title	Brief description	Number of subgoals/ targets
9	Industry, innovation, and infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation	8
10	Reduced inequality	Reduce inequality within and among countries	10
11	Sustainable cities and communities	Make cities and human settlements inclusive, safe, resilient, and sustainable	10
12	Responsible consumption and production	Ensure sustainable consumption and production patterns	11
13	Climate action	Take urgent action to combat climate change and its impacts	5
14	Life below water	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	10
15	Life on land	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	12
16	Peace and justice strong institutions	Promote peaceful and inclusive societies for sustainable development, provide access to	12

(continued)

SDG number	Title	Brief description	Number of subgoals/ targets
		justice for all, and build effective, accountable, and inclusive institutions at all levels	
17	Partnerships to achieve the goal	Strengthen the means of implementation and revitalize the global partnership for sustainable development	19

Source: UN (2022)

The catalog of global Sustainable Development Goals (SDGs) comprises a total of 169 subgoals. The latter define specific goals or aim to provide financial resources and ensure the political and legal framework necessary to achieve the 17 sustainability goals. In this respect, the Agenda 2030 is not only about defining common goals, but also about describing the means that are necessary to achieve them.

The SDGs are essentially addressed to the nation-states. They therefore have universal validity. In particular, they apply regardless of the development status of a country. They are hence valid for developing countries and industrialized nations alike. However, regional and local levels are also addressed. Joint responsibility for global intentions can only be created through cooperation and a multistakeholder approach. That means the SDGs also call on businesses, science, and civil society beside legislators and politicians.

Details on the 17 sustainability goals and a total of 169 subgoals can be found on the website of the United Nations (UN, 2022).

In order to prevent the contents of the resolution from being vigorously pursued, a review framework was included in the Agenda 2030, which includes numerous measures and, with the help of (progress) reports, records the status of goal achievement. Statistical analyzes and

the Global SDG Indicators Database strengthen the monitoring. A set of a total of 232 indicators is used to record the implementation steps of the measures and to assess whether the goals have been achieved (Federal Statistical Office, 2022).

The SDGs are increasingly finding their way into our everyday lives. For example, companies rely on compliance with the SDGs and accordingly provide information in their annual reports. The sustainability goals are also gaining more and more attention in the perception of a general public as well as in marketing (Genders, 2021, p.68). Change processes have been demonstrably initiated, for example, through national sustainability strategies based on the sustainability goals. In order to have an overview of the progress toward achieving the SDGs, appropriate instruments have been developed – the so-called SDG Index with the corresponding reports offers a helpful overview (Sustainable Development Solutions Network and Bertelsmann Stiftung, 2022).

Nevertheless, there is also criticism: A study by the Basel Institute of Commons and Economics proves, for example, that the goals are not implemented equally; in particular, the goals of biodiversity, peace, and social inclusion are neglected in a comparison of all 17 goals (Basel Institute of Commons and Economics, 2019). And it has already been stated by heads of state and government that increased efforts are required to achieve the goals. The Global Sustainable Development Report (GSRD) confirms this view (UN, 2020). Not least based on these critics, international and national efforts – such as the Green Deal of the European Union in 2020 – have followed.

Summary

In 2015, the United Nations, set the course to transform the world. With the Agenda 2030, with the help of 17 Sustainable Development Goals (SDGs) and 169 subgoals, states, institutions, companies, and civil society are encouraged to create a more sustainable world. The

Agenda focuses on “five Ps” – people, plant, prosperity, peace, and partnership. By addressing all nation-states and their stakeholders, the SDGs are increasingly finding their way into our everyday lives and becoming the most important framework regarding sustainability.

Cross-References

- Sustainability
- Transformation

References

- Basel Institute of Commons and Economics. (2019). World Social Capital Monitor. http://commons.ch/wp-content/uploads/Synopsis_SDG_Reports_Goals_Allocation_2019.pdf. Accessed April 4, 2022.
- Genders, S. (2021). *Wie Gier uns retten kann. Nachhaltigkeit, Unternehmertum und das Streben nach Gewinn*. Berlin: Springer.
- Statistisches Bundesamt. (2022). Indicators of the UN Sustainable Development Goals. <https://sdg-indikatoren.de/en/>. Accessed 4 April 4, 2022.
- Sustainable Development Solutions Network and Bertelsmann Stiftung. (2022). Sustainable Development Report. <https://www.sdgindex.org/>. Accessed May 16, 2022.
- UN. (2000). United Nations Millennium Declaration. Resolution adopted by the General Assembly. Distr.: General 18 September 2000. United Nations a/RES/55/2. New York: United Nations.
- UN. (2015). Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on September 25, 2015. Distr.: General October 21, 2015. United Nations A/RES/70/1. New York: United Nations.
- UN. (2020). *The sustainable development goals report 2020*. New York: United Nations.
- UN. (2022). Transforming our world: the 2030 Agenda for Sustainable Development. <https://sdgs.un.org/goals>. Accessed May 16, 2022.

Sustainable Development Planning

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Synonyms

Sustainability planning; Sustainable development; Sustainable planning; Three Es

Definition

Sustainable development (SD) is essentially a holistic design approach that takes into account both a community's inherent social characteristics and external interventions, the most important of which are the environment, politics, and economy. While this meta-approach includes a dangerous tendency to give way to an interpretation of “anything goes,” it is also the most common denominator in pursuing novel planning and development methods. Ensuring SD requires good planning first. SD planning can be defined as a process to chart a course toward the desired future of a community by all stakeholders and requires a political commitment of the local authorities to produce an action plan strategically for sustainable development and implement it. Its main objective is to ensure equality and justice between generations. Therefore, SD planning focuses on the problems of overconsumption and poverty and seeking solutions in the totality of social values adopting the search for development which is considered as a whole of economic, social, and ecological interactions – also defined as the three pillars of SD. During this process many obscurities arise as there is no general methodology for preparing SD strategic plans for local communities. As communities vary in their territory, environment, size, number of population, and political-social-cultural conditions, local authorities should find their own individual approach to this future together with their society.

Sustainable Development of Solar Energy

- Sustainability and Solar Energy

The main principles of SD planning require effective use of resources, activating local dynamics, supporting residents, and engaging internal potential should take a priority for the advantages of communities toward a sustainable future.

Background

SD is a broad umbrella term with no agreed-upon definition. Initially it is set out with environmental concerns, and in eliminating these concerns, the economic dimension has rapidly gained importance. At the first United Nations World Conference in Stockholm in 1972, economic development was offered to be handled with an attitude of using natural resources as effectively as possible by making the least possible impact on nature, and the term “ecological development” was firstly offered. In 1980, international environmental protection organizations and institutions declared the World Conservation Strategy which can be considered as a base for sustainable development.

SD entered the world agenda in the late twentieth century and became a global aim with the international agreements signed in the 1990s. The concept of SD was first described in 1987 in the Brundtland Report (Our Common Future) prepared by the World Commission on Environment and Development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” This is still the most widely used definition.

The UN Conference on Environment and Development, held at Rio de Janeiro on June 3–14, 1992, is an important step for the participating nations to adopt principles for environmentally responsive management. The Forest Principles have been accepted by an action plan Agenda 21 and Rio Declaration. The UN Framework Convention on Climate Change and the UN Convention on Biological Diversity have been opened for signature during the summit. The UN Convention to Combat Desertification, which was prepared in line with the decisions taken at the Rio Conference, was opened for signature in 1994.

In 2000, at the UN Millennium Summit, the Millennium Declaration and the Millennium Development Goals, aiming for 2015, have been determined by governments, and in line with a universal approach, the need for developing countries to work in cooperation with the developed countries was emphasized. Within the scope of ensuring environmental sustainability, integration of the principles of sustainable development into country policies and programs and reversing the loss of environmental resources, reducing biodiversity loss, and halving the proportion of the population without sustainable access to safe drinking water and basic sanitation were the main topics. On August 26–September 4, 2002, the “World Summit on Sustainable Development” was held in Johannesburg.

Twenty years after the Rio conference, the UN Sustainable Development Conference (Rio + 20 Summit) was held at Rio de Janeiro between June 20 and 22, 2012, and a roadmap called “The Future We Want” was issued as a result document. In this process, two main pillars of sustainability were defined, but it was soon understood that SD should be based not only on matching economic and environmental interests but also on guarantees of social justice in internal and international affairs. Therefore, society is the third pillar for SD.

On September 27, 2015, “Agenda 2030: UN Sustainable Development Goals (SDGs)” was set in New York as a continuation of the Millennium Development Goals. According to this, 17 targets and 169 sub-targets were adopted by 193 countries. Sustainable cities, climate change, drought fighting, and biodiversity conservation have been included in the agenda of SD. All these issues must be considered during the planning process.

Planning Process/Approach

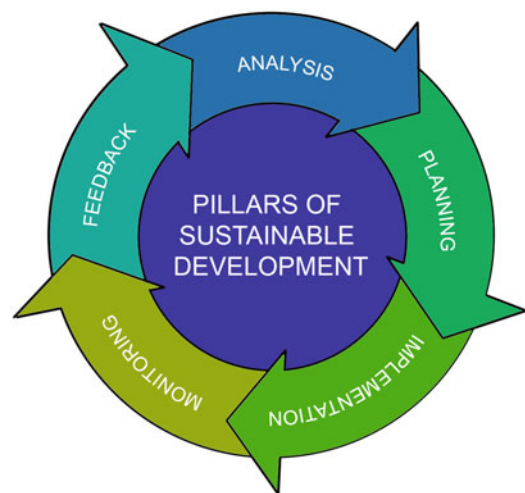
Both new and developing communities require a model for continuing development, and the SD concept is one of the leading models for societal development with a wide consensus. Mebratu (1998) gives a historical review of the popularization of the concept in a small timeframe with help from diverse local and global organizations.

However, there are many different trends of thoughts on SD; Hopwood et al. (2005) create a framework for discussion by classifying and mapping various trends according to their political roots and attitudes toward change. Childers et al. (2014) discuss the challenges and opportunities of urban sustainability theory and its role in changing the urban environment, with particular emphasis on human well-being and environmental and social equity in terms of many perceived benefits of SD.

SD planning focuses on the problems of over-consumption and poverty and seeks solutions in the totality of social values. These values are identified in the “three pillars” of SD; environment, economy, and equality. In order to achieve sustainability, SD planning adopts the search for development which is considered as a whole in economic, social, and ecological interaction. Ensuring SD requires good planning first, and the success of the global implementation plan depends on country policies. Strategic development planning means a political commitment of the local authorities to produce an action plan for sustainable development and implement it. Implementation strategies should be developed, and SD principles should be determined in line with the sustainability policy carried out by a country. As communities vary in their territory, environment, size, number of population, political-social-cultural conditions, and the lifestyles, local authorities together with their society should find their own individual approach to SD. Therefore, local implementation plans should be prepared in line with regional development policies. Ensuring effective use of resources, activating local dynamics and internal potential should take priority for the advantages of communities. But during this process, many obscurities arise as there is no general methodology for preparing SD strategic plans for local communities (Čiegis and Gineitiene 2008). However, common basic principles such as “harmony with nature,” “livable built environments,” “place-based economy,” “equity,” “polluters share,” and “responsible regionalism” can be mentioned to evaluate local comprehensive plans (Berke and Conroy 2000). Besides “The Local Agenda 21 Planning

Guide has been prepared to assist local governments and their local partners to learn and undertake the challenging task of sustainable development planning” which puts forward a planning approach that will enable them to manage their cities, towns, and/or rural settlements in a sustainable way and create their own local action plans (International Council for Local Environmental Initiatives et al. 1996). Thus, SD planning can be summarized as “a proactive process that allows the local government and its partners to support and engage the intellectual, physical, and economic resources of residents to chart a course toward a desired future” (International Council for Local Environmental Initiatives et al. 1996). This multidisciplinary point of view plays an essential role in shaping the future development of a region.

SD planning process involves some phases (look at Fig. 1), and analyzing the conditions is the first step for generating a sustainable vision for a community. With this vision the stakeholders, institutions, governmental organizations, and interest groups that will support the process can be clarified, and strategic goals of the community can be defined realistically. The “planning group” has to be “formed in accordance with the principles of democracy and readiness to spend time for their community” (Čiegis and Gineitiene 2008). After the determination of vision through the



Sustainable Development Planning, Fig. 1 Phases of sustainable development planning

analysis phase, the planning process begins, and the activities/tasks are defined together with their responsibilities, timetable, and budget to create an infrastructure for implementation and monitoring. The success of the implementation phase depends on the analytical framework constituted during the planning phase, and managing access to finance is crucial. Accurate documentation of the implementation activities and their impacts should be provided from the beginning of implementation. Monitoring process and reporting are important when considering new and emerging challenges while ensuring continuity. The feedback phase ensures accountability among stakeholders and informs the public about the progress and the changes so that all the actors can adjust their own actions and behaviors (International Council for Local Environmental Initiatives et al. 1996). Moreover, in case of a failure, the feedback mechanisms ensure that the problems in the action plan are identified, reanalyzed, and corrected. Afterward, the circularity in the process triggers further analysis according to the new situation, and SD planning begins again.

Given the overwhelming amount of available possibilities, the decision-making process is complex; thus, a number of tools were created to help establish what is most essential for a community by simplifying theoretical, social, and practical problems (EASAC 2005). There are two main approaches to SD planning: “bottom-up” and “top-down.” In the top-down approach, strategic plans are prepared by foreign or local experts. The plans developed by foreign experts are often unrealistic and are far from being implemented (Čiegis and Gineitiene 2008). Therefore, it is more accurate for foreign and local experts to work together. However, in all circumstances, the opportunity for the public to participate in preparatory planning and implementation processes can be very small. Therefore, it is difficult to provide a truly participatory process. Local authorities need to address this issue separately and make extra efforts to ensure active participation. But the basic advantage of bottom-up approach is the possibility to concentrate on the main problems and the solutions through the eyes of local people with a better knowledge of the present situation. Therefore, SD

planning is also important in terms of achieving strategic management through community participation. The participation and cooperation between public, private, and nongovernmental actors are planned for in local and regional development policies.

Key Issues

Some issues of SD can be forecasted and modeled, while some are more difficult to predict. SD planning embraces many aspects of sustainability in one way or another. Yet a SD planning problem does not have only one answer; therefore, there are many issues to consider and discuss. What is SD? Who gets to decide what SD is? What does SD look like? What are the key sustainability aspects that shape a plan? What kind of a plan will be implemented? How will it be implemented? When do the various stakeholders involved have any say in the process (Tokuç and Güller 2018)? All these questions have numerous answers depending on the type, size, and location of the project and the involved stakeholders; meanwhile SD planning provides the roadmap. Although SD planning depends on the integration of the pillars of SD within a holistic view, most of the current debates stem from their local interpretations for the decision process. Therefore, the following paragraphs take a separatist view of the pillars to allow a deeper discussion of the relevant issues.

Economic

Economy mainly deals with achievement of local development goals, job creation, and development of infrastructure. Energy and resource issues are also linked to economy with emphasis on building circular cities, economies, and production chains (European Commission 2015). Blue, green, or blue-green circular economies and growth mechanisms including degrowth are strategies that can sustain the natural life, while ensuring humanity is a part of the ecological system. Actions related to construction such as mobilizing vacant lots and buildings, renovating existing buildings and facilities, utilizing prefabricated

and mass-customized designs are all relevant research topics that also have the potential to create green jobs. Sustainable consumption and production of high-value assets in accordance with development goals should be given priority, where the definition of value is important. The assets have to be managed via the use of cost-effective and economically viable technologies and sustainable, resource-efficient and low-carbon business models.

Energy efficiency, utilization of natural or local energy resources, energy demand management, infrastructure, and energy management regulate the communities' relationship with the other communities. Waste management models can be imitated from nature. Management of assets and infrastructure can be integrated with technologies like smart meters and concepts like smart cities. Developments in smartness and their integration into various application areas are being investigated (Höjer and Wangel 2015). Public procurement mechanisms play a role on their implementation. Access to emerging or mature technologies, size of the development, and tourism potential effect a settlement's carbon footprint and related roadmap proposal to SD. Initiatives like slow food or ecotourism and incentives can either help or hamper efforts on availability and public acceptance. For instance, successful eco-destination marketing can make a community grow in an undesired direction and decrease the sustainability of the natural assets, thus creating and maintaining sustainable management protocols are crucial.

Social

The *social* dimension of sustainability is not clearly defined, and a number of physical and nonphysical factors can be identified in relation to social domain. Poverty, hunger, gender, age, disability, health, accessibility, resilience, immigration, emigration, refugees, and effects of natural disasters including climate change are all topics under the heading of the term social sustainability. Murphy (2012) reviewed the social pillar of sustainability and proposed four overarching concepts, which are public awareness,

equity, participation, and social cohesion. The built environment is a significant indicator of a community's sociocultural quality and level of development. The rise in environmental consciousness either individually or collectively can be seen in all of the phases of SD planning, including the making of legislation. The preferred approach in SD planning is participatory planning, where pluralism is at the core. Sociocultural values of a community, the community's relationship with its habitat, and the outlook of its local authorities are some of the most dominant indicators. All of the stakeholders can participate in SD planning, while the main actors include the community and governing bodies. Governments and structure of local governance also play an important role since public involvement in the planning process can be difficult when the dialog between the society and local authorities is weak. Institutions also play a role in sustainable communities as participants. While there are only three publicly accepted pillars of SD, nowadays some researchers are searching for perspectives that make it easier to define specific policies toward SD. In this context, sometimes other aspects of society such as culture (Hawkes 2001) institutions (Čiegis and Gineitiene 2008), governance, or policies can be cited as a fourth pillar (look at Burford et al. 2013). Meanwhile, Seghezze (2009) defines the five dimensions of sustainability as three dimensions of space (place), time (permanence), and human (persons) dimension.

Environmental

At its beginning, SD was concerned with mainly environmental concerns including air, water, and soil pollution, degradation of ecosystems, climate change, resource depletion, and waste. The energy, water, and food nexus are one of the greatest challenges of humankind and a principal aim of SD planning. Poor planning can lead to increasing energy and resource consumption and unsustainable changes in land use especially loss of areas necessary for food production and biodiversity. Poor planning also may cause urban problems such as heat island phenomena, river and coastal flooding, poor indoor air quality, and

environment-related health issues. SD planning can make use of ecosystem services so that the water cycle, water quality, soil quality, stability, erosion, air quality, and noise quality can be regulated and improved. For example, vegetation, soil, and vegetables in green ecosystems and water in blue ecosystems capture and sequester carbon inside while also improving air quality. From another point of view, planetary stability can be among the goals of SD; in this context Griggs et al. (2013) propose some provisional targets for SD in 2030.

SD for climate change adaptation and mitigation requires lowering environmental impacts. There are a number of strategies; therefore decision-making and using tools are also taking energy-water-food nexus which is critical (for further discussion, look at Bieber et al. 2018). One of the most common approaches for resource conservation and planning is life cycle assessment. The carbon emissions resulting from energy consumption in buildings and their role in environmental problems are evident. Yet the embodied emissions of construction, operational emissions, and emissions from changes in land coverage cause global environmental concerns. Therefore, changing ways of building and creating nature-based and circular systems that support urban ecologies are ways for SD planning to enhance sustainable urbanization. Population density, urban community amenities, land coverage, interventions in the public space, transportation, utilizing blue and/or green infrastructure, and zero waste are among the tools of SD planning. In addition, edible city solutions and urban gardens can also help with the issues of territorial coherence and biodiversity.

Summary

“How should a community develop in the future?” is a valid research question within various fields to find alternatives to unsustainable ways of living. However, the vast numbers of opportunities inherent in SD make a number of futures possible; thus, another question becomes

inevitable: “How is a community supposed to choose between so many options?” Concepts such as solar, eco, sustainable, green, etc. are being researched with many small-scale implementations; however, the difficulty of adapting an existing society to a concept that was never thought during its design is inevitable. After many excellent studies, implementations, and legislations, there are still many uncertainties. The main challenge is how to balance the conceptual coexistence of environment, society, and economy in the planning dimension. There is no general agreement on how the concept should be translated into practice. To implement economic instruments aligned with environmental goals and the societal values is not simple. In this process, sometimes some of the principles may be emphasized more and overshadow other principles. However, sustainability can be promoted by a plan only if all the values are represented.

The two main approaches of SD planning are “bottom-up” and “top-down.” The UN is the most significant actor in the global SD debates, therefore the “top-down” approach. It gives direction by forming goals (such as millennium goals or sustainable development goals), creating supporting programs, and providing funds and intergovernmental agreement frameworks. For instance, its effect can be seen on the concept of resilience. Studies on resilience were very few in number before it became part of the description of SD goal 11; afterward they rose in number. Reaching resilience is a key planning aim in urban hazard planning and can be utilized in dealing with many problems of SD. Moreover, international awareness is very high, and many countries have their own development plans, and ensuring their sustainability takes priority. An indicator of the importance of planning is that most investors analyze strategic development plans when choosing a place for the investments.

The local actors play the main part in the “bottom-up” approach. In the last decades, environmental consciousness became embedded in the social norms of many countries, from their legislation to their way of doing business. Conscious individuals, who demand a say in the

decision process, work to put many issues on the table and to implement many practices. The most common planning methods are design by the governing authority, tenders, colloquia, and design competitions. Since continuous improvement in the desired direction is an aim of sustainable communities, public involvement is also a necessity. However, public involvement into the planning process can be difficult if there has been no preceding social participation tradition before or if the society is passive or negative against the local authorities.

Both traditional and innovational design approaches that look at the nature as an inspiration or a teacher became widespread, while new multidisciplinary areas of research such as biodesign and circularity are increasing technical knowledge. A SD strategic planning roadmap can be created by comparatively analyzing good practices in different communities. Rather than separate systems, all of the pillars should be holistically designed both to ensure equality and justice between generations and to provide a livable sustainable development. Thus, there is not a single definition of SD planning, but rather there are a number of approaches that enable the involvement of many issues (i.e., pillars) at the same time while balancing both local values and global priorities.

Cross-References

- [Agenda21 \(UN\)](#)
- [Air Pollution](#)
- [Blue Circular Economy](#)
- [Building Energy Management](#)
- [Carbon Emissions](#)
- [Carbon Footprint](#)
- [Circular Economy](#)
- [Climate Change Adaptation in Coastal Cities](#)
- [Energy-Renewable](#)
- [Environment, Social, and Governance \(ESG\)](#)
- [Good Governance](#)
- [Governance](#)
- [Green Building](#)
- [Green Circular Economy](#)
- [Public Participation](#)
- [Resilience](#)
- [Rio Declaration on Environment and Development](#)
- [Slow Food Movement and Sustainability](#)
- [Smart Cities](#)
- [Sustainable Communities](#)
- [Sustainable Construction Management](#)
- [Sustainable Development](#)
- [Sustainable Development Goals \(UN Global Goals\)](#)
- [Sustainable Growth](#)
- [United Nations Development Programme](#)

References

- Berke, P. R., & Conroy, M. M. (2000). Are we planning for sustainable development? An evaluation of 30 comprehensive plans. *Journal of the American Planning Association*, 66(1), 21–33. <https://doi.org/10.1080/01944360008976081>.
- Bieber, N., Ker, J. H., Wang, X., Triantafyllidis, C., van Dam, K. H., Koppelaar, R. H., & Shah, N. (2018). Sustainable planning of the energy-water-food nexus using decision making tools. *Energy Policy*, 113, 584–607. <https://doi.org/10.1016/j.enpol.2017.11.037>.
- Burford, G., Hoover, E., Velasco, I., Janoušková, S., Jimenez, A., Piggot, G., Podger, D., & Harder, M. K. (2013). Bringing the “missing pillar” into sustainable development goals: Towards intersubjective values-based indicators. *Sustainability*, 5(7), 3035–3059. <https://doi.org/10.3390/su5073035>.
- Childers, D. L., Pickett, S. T. A., Grove, J. M., Ogden, L., & Whitmer, A. (2014). Advancing urban sustainability theory and action: Challenges and opportunities. *Landscape and Urban Planning*, 125, 320–328. <https://doi.org/10.1016/j.landurbplan.2014.01.022>.
- Čiegis, R., & Gineitiene, D. (2008). Participatory aspects of strategic sustainable development planning in local communities: Experience of Lithuania. *Technological and Economic Development of Economy*, 14(2), 107–117. <https://doi.org/10.3846/1392-8619.2008.14.107-117>.
- EASAC (European Academies Science Advisory Council). (2005). *A user's guide to biodiversity indicators*. London: EASAC.
- European Commission. (2015). *Towards an EU research and innovation policy agenda for nature-based solutions & renaturing cities: Final report of the horizon 2020 expert group on “nature-based solutions and renaturing cities”*. Luxembourg: Publications Office

- of the European Union. <http://dx.publications.europa.eu/10.2777/765301>.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., Steffen, W., Glaser, G., Kanie, N., & Noble, I. (2013). Sustainable development goals for people and planet. *Nature*, 495(7441), 305. <https://doi.org/10.1038/495305a>.
- Hawkes, J. (2001). *The fourth pillar of sustainability: Culture's essential role in public planning*. Melbourne: Cultural Development Network of Victoria.
- Höjer, M., & Wangel, J. (2015). Smart sustainable cities: Definition and challenges. In L. M. Hilty & B. Aebischer (Eds.), *ICT innovations for sustainability* (pp. 333–349). Cham: Springer.
- Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: Mapping different approaches. *Sustainable Development*, 13, 38–52. <https://doi.org/10.1002/sd.244>.
- International Council for Local Environmental Initiatives, International Development Research Centre (Canada), & United Nations Environment Programme. (1996). *The local agenda 21 planning guide: An introduction to sustainable development planning*. Toronto: The International Council for Local Environmental Initiatives.
- Mebratu, D. (1998). Sustainability and sustainable development: Historical and conceptual review. *Environmental Impact Assessment Review*, 18(6), 493–520. [https://doi.org/10.1016/S0195-9255\(98\)00019-5](https://doi.org/10.1016/S0195-9255(98)00019-5).
- Murphy, K. (2012). The social pillar of sustainable development: A literature review and framework for policy analysis. *Sustainability: Science, Practice and Policy*, 8(1), 15–29. <https://doi.org/10.1080/15487733.2012.11908081>.
- Seghezze, L. (2009). The five dimensions of sustainability. *Environmental Politics*, 18(4), 539–556. <https://doi.org/10.1080/09644010903063669>.
- Tokuç, A., & Güller, E. (2018). From competition to implementation: Asset-based development in the Çeşme Peninsula, Turkey. *Journal of Architectural and Planning Research*, 35(1), 47–68.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford, UK: Oxford University Press.

Sustainable Development Politics

- [Politics \(Role of Politics in Sustainable Development\)](#)

Sustainable Dialogue

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Synonyms

[Stakeholder engagement](#)

Definition

The concept of dialogue was introduced for the first time by Plato, meaning “an exchange of opinion between two or more people” (Khan 1998). From an etymological point of view, it stems from the Greek διάλογος (*dialogos*, conversation). “Dialogue” has been widely analyzed in business and management studies because of firms’ need to engage in an effective way with their internal and external stakeholders. Furthermore, the increasing growth of new financial and nonfinancial reporting frameworks has extended academics’ interest in this field of study. Nowadays, dialogue represents a central topic in discussion about the achievement of the United Nations’ Sustainable Development Goals (SDGs). Specifically, SDG 12.6 requires the wide diffusion of nonfinancial reports in order to increase dialogue between stakeholders. Furthermore, the World Development Business Council for Sustainable Development (2002) defines stakeholder dialogue as “a powerful catalyst for change. It promotes greater transparency; information sharing and inspires society to work together.”

Corporate Communication: A Brief History

Over the past few years, several changes have occurred in the form and substance of communication from firms (Ihator 2004). These changes have been influenced by the increasing attention

from stakeholders on firms' activities. From a formal point of view, these paradigm changes have been supported by the wide diffusion of new tools like nonfinancial reports, social media, and forums. On the other hand, the increasing attention paid by business stakeholders to sustainable development has impacted the content of communication (Pizzi et al. 2021). This now includes both the disclosure of financial results and non-financial information. Furthermore, some firms have started to integrate their financial and nonfinancial information in a standalone report (Eccles and Krzus 2010). However, the concept of dialogue is different from the disclosure of information through a one-way tool. Instead, an effective dialogue consists of a 2-way exchange of information between firms and stakeholders.

From Corporate Communication to Corporate Dialogue

Effective dialogue with internal and external stakeholders can increase firms' perceived legitimacy (Greenwood 2007). An increasing number of academics have tried to identify the theoretical framework that will be most useful to analyze this phenomenon. However, currently only a small proportion of studies are truly oriented to analyze stakeholder engagement through the lens of effective dialogue.

The relationship between legitimacy and stakeholder engagement is one of the most important subjects debated in CSR-related studies (Schuman 1995; Claasen and Roloff 2011; Bonson and Ratkai 2013). Prior literature suggests how firms' implementation of CSR activities could be analyzed through the perspective of signaling theory (Hetze 2016; Zerbini 2017). In fact, the traditional approach of signaling theory (Spence 1973) regards the market competition between firms, who transmit "signals" that cause consumers to perceive different levels of quality (Bergh et al. 2014). From the perspective of CSR communication studies, this traditional approach is extended

to the reputational effect (Patten 1991). However, the achievement of reputational benefit from CSR communications is not easy for firms due the possibility of sending messages that are irrelevant to the intended audiences (Hetze 2016). For effective communication, it is necessary to analyze the composition of the audience and their expectations of the firm's activities (Du and Vieira 2012).

The New Paradigms of Corporate Dialogue

Nowadays, an increasing number of firms have started to engage with their stakeholders through new tools such as Facebook, Twitter, and LinkedIn. However, only a few studies have analyzed this new form of accountability. Studies about social media communication are generally based on the dialogic principle defined by Kent and Taylor (1998) regarding the use of institutional websites. In this theory, "dialogue" is defined as any negotiated exchange of ideas and opinions characterized by an honest, open and ethically based give and take (Bortree and Seltzer 2009). The use of social media to build a positive attitude allows the company to identify the stakeholders and gives them the chance to satisfy them and the possibility to engage with them over a long period of time (Unerman and Bennet 2004). Also, the possibility for users to give negative feedback to the signal could be an efficient driver to minimize the risk of greenwashing by the firms' management (Lyon and Montgomery 2013). In fact, a too-proactive approach by the firms could be perceived by stakeholders as a greenwashing strategy (Aji and Sutikno 2015). Previous studies suggest how the use of social media tools in the strategic communication of firms, through the analysis of big data, has increased the degree of interaction between them and the stakeholders (Ma 2014; Gunther et al. 2017). However, stakeholder engagement through social media could be characterized by different degrees of information delivered and exchanged. Specifically, it could be characterized by two different approaches. The

first approach consists of a monologue by the firm about a specific topic (Brainard and Edlins 2015; Swani et al. 2014). The second approach is a two-way dialogue between firms and stakeholders, and it is most common in email and website communications (Lattimore et al. 2004).

Summary

In the current scenario, the achievement of effective dialogue with stakeholders represents one of the most important challenges for managers. It has become a necessity because of the increasing attention paid by stakeholders to new themes related to the concept of sustainable development. However, engaging in an effective way with stakeholders can be highly complex. Firms have started to introduce new items in their communication strategies to shift from a “monologue” to a “dialogue.” The use of new tools like social media to engage effectively with stakeholders in dialogue about nonfinancial themes will be the next challenge for worldwide companies.

References

- Aji, H. M., & Sutikno, B. (2015). The extended consequence of greenwashing: Perceived consumer skepticism. *International Journal of Business and Information, 10*, 4.
- Bergh, D. D., Connelly, B. L., Ketchen, D. J., Jr., & Shannon, L. M. (2014). Signalling theory and equilibrium in strategic management research: An assessment and a research agenda. *Journal of Management Studies, 51*(8), 1334–1360.
- Bonsón, E., & Ratkai, M. (2013). A set of metrics to assess stakeholder engagement and social legitimacy on a corporate Facebook page. *Online Information Review, 37*(5), 787–803.
- Bortree, D. S., & Seltzer, T. (2009). Dialogic strategies and outcomes: An analysis of environmental advocacy groups' Facebook profiles. *Public Relations Review, 35*(3), 317–319.
- Brainard, L., & Edlins, M. (2015). Top 10 U.S. municipal police departments and their social media usage. *The American Review of Public Administration, 45*, 728–745.
- Claasen, C., & Roloff, J. (2011). The link between responsibility and legitimacy: The case of De Beers in Namibia. *Journal of Business Ethics, 107*(3), 379–398.
- Du, S., & Vieira, E. T. (2012). Striving for legitimacy through corporate social responsibility: Insights from oil companies. *Journal of Business Ethics, 110*(4), 413–427.
- Eccles, R. G., & Krzus, M. P. (2010). *One report: Integrated reporting for a sustainable strategy*. Hoboken: Wiley.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business ethics, 74*(4), 315–327.
- Günther, W. A., Mehrizi, M. H. R., Huysman, M., & Feldberg, F. (2017). Debating big data: A literature review on realizing value from big data. *The Journal of Strategic Information Systems, 26*(3), 191–209.
- Hetze, K. (2016). Effects on the (CSR) reputation: CSR reporting discussed in the light of signalling and stakeholder perception theories. *Corporate Reputation Review, 19*(3), 281–296.
- Ihator, A. S. (2004). Corporate communication: Reflections on twentieth century change. *Corporate Communications: An International Journal, 9*(3), 243–253.
- Kahn, C. H. (1998). *Plato and the Socratic dialogue: The philosophical use of a literary form*. Cambridge: Cambridge University Press.
- Kent, M. L., & Taylor, M. (1998). Building dialogic relationships through the World Wide Web. *Public Relations Review, 24*(3), 321–334.
- Lattimore, D., Baskin, O., Heiman, S. T., Toth, E. L., & Van Leuven, J. K. (2004). *Public relations: The profession and the practice*. New York: McGraw-Hill.
- Lyon, T. P., & Montgomery, A. W. (2013). Tweetjacked: The impact of social media on corporate greenwash. *Journal of business ethics, 118*(4), 747–757.
- Ma, L. (2014). Diffusion and assimilation of government microblogging: Evidence from Chinese cities. *Public Management Review, 16*, 274–295.
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and public policy, 10*(4), 297–308.
- Pizzi, S., Venturelli, A., & Caputo, F. (2021). The “comply-or-explain” principle in directive 95/2014/EU. A rhetorical analysis of Italian PIEs. *Sustainability Accounting, Management and Policy Journal, 12*(1), 30–50.
- Schuman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 195–208.
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics, 87*(3), 355–374. (1977). Consumer misperceptions, product failure and producer liability. *Review of Economic Studies, 44*(3).
- Swani, K., Brown, B. P., & Milne, G. R. (2014). Should tweets differ for B2B and B2C? An analysis of Fortune 500 companies' Twitter communications. *Industrial marketing management, 43*(5), 873–881.

- Unerman, J., & Bennett, M. (2004). Increased stakeholder dialogue and the internet: Towards greater corporate accountability or reinforcing capitalist hegemony? *Accounting, Organizations and Society*, 29(7), 685–707.
- World Business Council for Sustainable Development. (2002). *Stakeholder dialogue. The WBCSD's approach to engagement*. Conches-Geneva, Switzerland.
- Zerbini, F. (2017). CSR initiatives as market signals: A review and research agenda. *Journal of Business Ethics*, 146(1), 1–23.

Sustainable Economic Growth

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Synonyms

Growth

Definition

The sustainable growth rate (SGR) is the maximum rate of growth that a company can sustain without having to finance growth with additional equity or debt. The SGR involves maximizing sales and revenue growth without increasing financial leverage. In a firm level, a sustainable rate of growth is the maximum growth rate that a firm is able to maintain without raising the fund flow. For a small company owner, the rate is how much more money he can collect each year without investing his own money or borrowing from the bank. Both small and big business owners should calculate their sustainable rate of growth to determine whether their capital is adequate to meet their strategic needs for growth (Higgins 1981).

Sustainable economic growth means a rate of growth that can be maintained, especially for future generations, without causing other important economic problems. There is a compromise between current rapid economic growth and future growth. Today, rapid growth may exhaust resources and cause environmental problems to

future generations, including oil and fish depletion and global warming (Daly and Townsend 2003).

Measuring Growth

Growth can be evaluated in the light of a general trend as an annual rise in real GDP. The lengthy term noninflationary average economic growth rate is the trend rate of growth (Economics Online 2019). If growth increases substantially above or below the trend, excessive growth or low development will occur in the economy. The economic downturn or recessions take place if the rate is negative for two quarters or more in a row. Therefore, standard growth potential estimates that view inflation as the only indicator of macroeconomic disequilibrium, together with inflation stability, have supplied the policymakers with false signals. This article presents an alternative to prospective growth methodology to achieve viable growth rates. Sustainable development is described as a development of production which, through a broad variety of national and external factors, does not produce or expand macroeconomic imbalances (Alberola et al. 2013).

In the majority of countries, even the UK, GDP is the formal basic metric of production utilized. Gross measurements record the total cost of all products and services, including equipment bought as a substitute for current equipment. Capital substitution is referred to as capital use or decrease. Net production is an alternative to aggregate output. This means that depreciation is taken into consideration and deducted from the gross values. Revenues from property relate to revenues generated through different kinds of foreign investments such as earnings and dividends. When added, the measure is transformed into a domestic item known as the GNP.

Business is considered in the modern world as the chance to create wealth, financial prosperity, and employment. Market economies, however, depend on the organization's integrity to operate within societal values and norms (Kanji 2007). When real output increases over time, economic growth occurs. Gross Domestic Product (GDP) measures the real

output at constant prices, thereby eliminating the impact of price increases on national value output. Growth periods are often triggered by an increase of aggregated demand, such as an increase in consumer expenditure. Any extra demand will push the price level up if production does not increase.

Inclusive Sustainable Growth

The assistance of the United Nations Development Programme (UNDP) for sustainable and inclusive development enables individuals to contribute to financial development and profit from it with minimal environmental impacts. We think it helps to bridge the financial, social, and environmental gaps for viable development by generating circumstances for inclusive growth. The United Nations (UNDP) works widely with other United Nations organizations and development actors including IFIs (International Financial Institutions), private foundations, the private sector, and civil society to help nations in pursuing inclusive and sustainable policies for growth. The three broad policy priorities that frame UNDP's support to achieve inclusive and sustainable growth are as follows:

- Inclusive- and sustainable-growth-integrated planning. Activities include developing evidence-based domestic plans assessment, supporting financial diversification and sustainable development, and efficient management of natural resources.
- Promoting job development, decent labor and redistributive poverty, and inequality and exclusion programs. Activities include encouraging decent job, removing obstacles to accessing employment possibilities, enhancing working circumstances, and expanding redistributive programs in particular in support of schemes of social security.
- Mobilizing and expanding the funding to enable an inclusive and sustainable development transition. Activities shall include encouraging fiscal policies that are compliant with viable and inclusive development targets; encouraging the mobilization of national

resources and the implementation of innovative environmental and clean power funding systems (UNDP 2019).

In designing macroeconomic policies, the notion of future development plays the main role. Monetary, fiscal, and recent strategies take into consideration estimates of output gaps – the distinction between perspective and observed output – to adjust their position to decrease possible macroeconomic imbalances, thus damping overall changes. Prospective development in theoretical and empirical literature has received comprehensive analyses, yet two variables influence the significance and utility of these ideas for economic policy. First, there is the capacity to reflect and synthesize economic imbalances. Second, there is the extent to which the estimates of the production gap and their strength toward new data remain uncertain (Alberola et al. 2013).

The notion of perspective development is based on many of the methodologies employed to achieve trend growth rates. In the context of manufacturing, the traditional Phillips curve is used to estimate standard future development connecting unemployment to inflation. Consequently, these estimates of future development only consider one specific imbalance: inflation. A reevaluation of sustainable growth levels is therefore needed to eliminate the imbalances that the economy entails in expansionary stages (Alberola et al. 2013).

Summary

As an economic term, growth refers percentage change in NI-National Income which the total value of all the final goods and services produced in a country for a given time period. Sustainable growth rate may indicate a rate of growth which macroeconomy or economy as a whole expect to experience without creating any volatility or imbalances.

Cross-References

- [Growth](#)
- [Sustainability](#)

References

- Alberola, E., Estrada, A., & Santabarbara, D. (2013). *Growth beyond imbalances, sustainable growth rates and output gap reassessment. Documentos de Trabajo. No. 1313*. Banco de Espana. Eurosistema.
- Daly, H. E., & Townsend, K. N. (2003). *Valuing the earth: Economics, ecology, ethics*. Cambridge, MA: The MIT press.
- Economics Online. (2019). Sustainable growth retrieved from https://www.economicsonline.co.uk/Managing_the_economy/Sustainable_growth.html. Accessed 2 Aug 2019.
- Higgins, R. J. (1981). Sustainable growth under inflation. *Financial Management*, 10(4), 36–40.
- Kanji, G. P. (2007). Sustainable growth and business excellence. *Total Quality Management and Business Excellence*, 16(8–9), 1069–1078.
- UNDP (2019). Inclusive sustainable growth. Retrieved from <https://www.undp.org/content/undp/en/home/2030-agenda-for-sustainable-development/prosperity/development-planning-and-inclusive-sustainable-growth.html>. Accessed 2 Aug 2019.

Sustainable Economy

- Anthropological Sustainability
- Civil Economy

Sustainable Education

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Definition/Description

The concept of sustainable education is based on the terms sustainability and education. The term “sustainability” is derived from the Latin word *sustinere* and the term “education” from the Latin word *educatio*. The former is a model of

thinking in which the quality of life is improved through balancing the environment, society, and the economy (Jeronen 2013). The latter refers to an activity or process for acquiring or sharing knowledge or skills, developing the powers of reasoning and judgment, and intellectually preparing oneself or others for life (Thesaurus 2021). Many of today’s challenges require a veritable shift in thought and behavior to support sustainable living. According to Stephen Sterling (2008), the necessary cultural change can be achieved through sustainable education (SE). He defines the concept as:

a change of educational culture, one which develops and embodies the theory and practice of sustainability in a way which is critically aware. It is therefore a transformative paradigm which values, sustains and realises human potential *in relation to* the need to attain and sustain social, economic and ecological well being, recognising that they must be part of the same dynamic. (Sterling 2001, p. 22)

The concept of SE thus refers to finding sustainable solutions to environmental, social, and economic problems through education (Prabakaran 2020). It is a concept that challenges both formal and non-formal educational sectors to actively participate in the creation of economic, social, and environmental programs that improve quality of life, increase empowerment, and respect interdependence (Abduganiev and Abdurakhmanov 2020).

Introduction

Our machines, our value systems, our educational systems will all have to be informed by (the) switch, from the machine age when we tried to design schools to be like factories, to an ecological age, when we want to design schools, families and social institutions in terms of maintaining the quality of life, not just for our species, but for the whole planet. (Cited in Sterling 2008, para. 5)

Since the 1980, there has been increased international attention on sustainability and sustainable development (SD) issues. According to UNESCO (United Nations Educational, Scientific and Cultural Organization), the difference between the two concepts is that sustainability is a long-term

goal toward a more sustainable world, whereas SD implies the processes to reach this goal (UNESCO 2018a). Sustainability can be considered as a paradigm for thinking about the future in which environmental, societal, and economic considerations are balanced in the pursuit of an improved quality of life (Jeronen 2013). It is heavily context-dependent in social, cultural, and environmental situations (Kopnina 2012). Brundtland's report (1987) defines sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UN 2021a, p. 1). Today, it is described as the organizing principle of human development that fulfils long-term needs of humanity and at the same time sustains the "ability of natural systems to provide natural resources and ecosystem services upon which society and economy depend" (Glavić 2020, p. 2). It is thought to comprise three main dimensions: the ecological, social, and economic dimensions (Fien et al. 2009; Quinn et al. 2016). These dimensions are complexly interrelated. Also research and education of sustainability are based on these dimensions (Maurer and Bogner 2019).

To promote sustainability locally, regionally, and globally, United Nations (UN), including the UN Department of Economic and Social Affairs, with several countries began to develop sustainable development goals or global goals (SDGs). In June 1992, in Rio de Janeiro, Brazil, more than 178 countries ratified Agenda 21, which aimed to work together globally to improve people's lives and protect the environment from an SD perspective. At the September 2000 Millennium Summit in New York, the Member States adopted the Millennium Declaration, which led to eight Millennium Development Goals (MDGs) of reducing extreme poverty by 2015. The Johannesburg Declaration on SD and the Plan of Implementation, adopted in 2002, reaffirmed the global commitments to poverty eradication and environment through multilateral partnerships, based on Agenda 21 and the Millennium Declaration. In June 2012, the UN Conference on Sustainable Development (Rio + 20) in Rio de Janeiro, Brazil, adopted "The Future We Want."

Among other things, it decided to develop a set of SDGs to build upon the MDGs. Negotiations on a Post-2015 Development Agenda began in January 2015 and ended in August 2015. The negotiations resulted in the adoption of the Addis Ababa Action Plan in July 2015. The final document, *Transforming Our World: The 2030 Agenda for Sustainable Development* (called Agenda 2030), with 17 SDGs at its core, was adopted at the UN Sustainable Development Summit in September 2015 in New York (UN 2021b). Today, the Division for Sustainable Development Goals (DSDG) supports capacity building on the SDGs and related thematic issues.

The 2030 Agenda for Sustainable Development and its 17 SDGs are focused both on environment and a multidimensional approach to SD to achieve the well-being of people around the world (Di Fabio 2017). The 17 SDGs are: (1) no poverty, (2) zero hunger, (3) good health and well-being, (4) quality education, (5) gender equality, (6) clean water and sanitation, (7) affordable and clean energy, (8) decent work and economic growth, (9) industry, innovation, and infrastructure, (10) reducing inequality, (11) sustainable cities and communities, (12) responsible consumption and production, (13) climate action, (14) life below water, (15) life on land, (16) peace, justice, and strong institutions, and (17) partnerships for the goals (UN 2016).

Each SDG typically has 8–12 targets, and each target has 1–4 indicators to measure the achievement of the objectives. The targets are either "outcome targets" (conditions to be achieved) or "means of implementation." SDG17 concerns how the SDGs can be achieved (Bartram et al. 2018). The Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) developed a Global Indicator Framework for SDGs. It was adopted by the General Assembly in July 2017. The indicator framework will be refined annually. It was reviewed comprehensively by the Statistical Commission in March 2020 and will be reviewed again in 2025. The global indicator framework will be complemented by indicators at the regional and national levels, which will be developed by Member States (see UN 2016).

Targets and Indicators of SDG4

Education as an SDG is, perhaps more than ever, a priority to ensure that students are able to develop appropriate and rapid responses based on inputs to the SDGs. The SDG4 called “Quality Education” particularly focuses on ensuring inclusive and equitable quality education and promoting life-long learning opportunities for all. It aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UNESCO 2017).

The SDG4 includes seven targets that stress inclusion, quality, and equality in all phases of education. The first three targets aim to ensure that all children and adults have access to quality education from early childhood to primary and secondary education and to vocational and university education. The fourth target is to improve the working capacity of young people and adults. The fifth target addresses access to education for people with disabilities, indigenous peoples, and vulnerable people. The sixth target aims to guarantee literacy and numeracy for all young people and to reduce adult illiteracy. The seventh target concerns the content of education aiming to develop the knowledge and skills needed to promote SD, gender equality, and peace and non-violence culture (Unterhalter 2019).

The 32 indicators related to these targets are classified into Tiers 1, 2, and 3 (UN Statistical Commission 2018). Only two indicators are classified as Tier 1: participation in organized learning 1 year before primary school and the amount of official development assistance spent on higher education scholarships. The Tier 2 indicators relate to the methods used to try to achieve the targets. Many of the Tier 3 indicators are linked with facets of quality and equality (Unterhalter 2019). One indicator (the indicator 4.7.1) addresses the extent to which global citizenship education and education for sustainable development (ESD) should be taken into account in national education policies, curricula, teacher education, and student assessment (UN 2016, p. 5).

Several different concepts have been and continue to be used in education of sustainability and

SD. The concepts do not necessarily mean the same thing, even if they contain similar ideas. In the following sections, these concepts are considered separately from the perspectives of education, teaching, and learning.

Concepts Related to Sustainability Used in Education

The concepts “sustainability education,” “education for sustainable development,” “education for sustainability,” and “sustainable education” are often used as synonyms. However, they do not necessarily mean the same thing although they do contain similar ideas (Table 1).

Sustainability education has evolved in waves in the twentieth century in response to sustainability challenges (Wals and Blewitt 2010). The first wave, called environmental education, paved the way for a new type of educational culture. The first descriptions of it were published at the Intergovernmental Conference on Environmental Education in Tbilisi (UNESCO 1977). In Agenda 21, it has been stated that environmental education is a continual, life-long learning process to raise public awareness and action globally, nationally, and locally in every area in which humans impact the environment (UN 2003). The main theme was thus concerned about the state of the environment. The 1992 UN Conference in Rio Janeiro emphasized the need to integrate environmental education and development (UN 1993). This integration gave birth to four new waves of sustainability education. The first of these waves was about implementing environmental education and the related environmental education for sustainability (EefS) in response to environmental and developmental concerns (Papenfuss et al. 2019). The key components of the EefS are relevance, integrity, values, action, and political literacy (Tilbury 1995). Thus, the EefS evolves by acknowledging that sustainability challenges are socially connected, transdisciplinary, normative, and urgent.

The second of the new waves, called the campus greening movement, addressed the complicity in sustainability dilemmas (Wals and Blewitt 2010).

Sustainable Education, Table 1 Definitions of the concepts “sustainability education,” “education for sustainable development,” “education for sustainability,” and “sustainable education”

	Definition	Source
Sustainability education	An interdisciplinary, collaborative, experiential, and potentially transformative process of creating a space for inquiry, dialogue, reflection, and action about the values and goals of sustainability	Moore (2005, p. 78)
Education for sustainable development (ESD)	Holistic and transformational, lifelong learning process which aims to enhance the cognitive, social, emotional, and behavioral dimensions of learning	UNESCO (2020)
Education for sustainability (EfS)	Regarded as possessing both the <i>process towards</i> and the <i>vision of</i> sustainability	Wade (2008, p. 32)
Sustainable education (SE)	A change of educational culture, one which develops and embodies the theory and practice of sustainability in a way which is critically aware. It is therefore a transformative paradigm which values, sustains and realises human potential <i>in relation to</i> the need to attain and sustain social, economic and ecological well being, recognising that they must be part of the same dynamic	Sterling (2001, p. 22)
	A change of educational culture which both develops and embodies the theory and practice of sustainability in a way which is critically aware. This would be a transformative paradigm which values, sustains and realizes human potential in relation to the need to attain and sustain social, economic and ecological Well-being, recognizing that they are interdependent	Sterling (2003, p. 233)

It focuses less on pedagogy, and more on efforts to reduce ecological impacts. However, despite the development of the first and second new waves of sustainability education, many indicators of global sustainability continued to decline during the 2000s (Rockström et al. 2009).

The aim of sustainability education was to meet these new challenges with the help of the third new wave, which included transformative and emancipatory pedagogies and their interaction (Papenfuss et al. 2019). It aims at “learning that helps people transcend the ‘given,’ the ‘ordinary,’ and often the ‘routine ways of doing,’ to create a new dynamic and alternative ways of seeing and doing” (Wals and Blewitt 2010, p. 66).

The fourth new wave of sustainability education can be considered contemplative education (Papenfuss et al. 2019). It has been defined as a “way of knowing that compliments the rational and the sensory” (Hart 2004 p. 29), and “a set of pedagogical practices designed to cultivate the potentials of mindful awareness and volition in an ethical-relational context in which the values of personal growth, learning, moral living, and caring for others are nurtured” (Roeser and Peck 2009, p. 11). Other goals are the development of

empathetic connection, compassion, creativity, and altruistic behavior (Zajonc 2013).

In summary, it can be stated that, over the years, sustainability education expanded from an original ecological perspective to include social, ethical, and transformative aspects as well.

The use of the concept ESD became more widespread during the United Nations Decade of Sustainable Development (2005–2014, DESD) (UNESCO 2009). The Decade was the culmination of many initiatives that have developed on the international stage since 1980, when the concept “sustainable development” was first introduced by Robert Prescott-Allen (IUCN 1980). Very recently (UNESCO 2018b), ESD is placed at the center of the 2030 Agenda for Sustainable Development and has been widely acknowledged as a key enabler of all 17 SDGs (besides SDG4 Quality Education for all). ESD is one of the teaching approaches with the complexity of a globalized world. The key principles of ESD are (UNESCO 2009, 2017):

- A transformative and reflective process that seeks to integrate values and perceptions of sustainability into, not only education systems,

but one's everyday personal and professional life;

- A means of empowering people with new knowledge and skills to help resolve common issues that challenge global society's collective life now and in the future;
- A holistic approach to achieve economic and social justice and respect for all life;
- A means to improve the quality of basic education, to reorient existing educational programmes and to raise awareness.

According to Wade (2008), the EfS examines sustainability at different levels from the personal and psychological to the organizational, local, national and global levels from a value perspective with the goal of sustainable change. It focuses on sustainable planning, alternative energy, land education, human rights education, conflict resolution, futures education, anti-racism, and intercultural education. The core concept of EfS is the agency of human being, this concept can be very useful in building an ethical framework for action (Dower 2003). The EfS process is based on a systemic approach that emphasizes contexts to create overall images of phenomena. Thus, it provides "a holistic approach by recognizing the complex, interrelated nature of all aspects of the world around us from the individual to the global level" (Sterling 2005, p. 23). The EfS is a lifelong process in which much of our learning takes place outside the formal sector. Wade (2008) believes that the EfS can provide a framework based on the idea of multidisciplinary to bring together related fields.

Some progressive steps have been taken through sustainability education, ESD and EfS. However, attitudes, values, and behaviors have not sufficiently adjusted to the much-needed sustainable lifestyles. Therefore, Sterling (2008, p. 64) argues that we need for anticipative education to help identify new conditions and discontinuities faced by current generations, e.g., the massive challenges of global warming, species extinction, economic vulnerability, social fragmentation and migration, endemic poverty, the end of cheap energy, and more positively, the rise of localism, participative democracy, green

purchasing, ethical business, and efforts to achieve a low carbon economy. Consequently, Sterling provides the concept of SE as a basis for education, emphasizing the nature, policy, and practice of educational thinking as a whole.

Sustainable Education for Sustainable Transformation

According to Sterling (2008), the concept of "sustainable education" refers to a change in culture in the way education and learning are understood. SE has been considered as renewable resources to be geared toward the acquisition of key competences of the twenty-first century including sustainable lifestyles, work, and habitat (Branden 2015). The heart of it lays on an ecological orientation. Other terms describing the nature of the SE are "holistic," "systemic," and "inclusive" showing that SE is relative, committed, ethically oriented, and globally and locally relevant. SE signifies a systemic change in educational thinking and practice that arises around the poles of holism, systemic thinking, sustainability, and complexity. SE enables education that is appropriate, takes into account and responds immediately to changes in circumstances, and supports the development of students' adaptability, creativity, self-reliance, hope, and resilience. SE combines education and learning theories integrating the best aspects of liberal education with new ideas of transformative education, capacity building, creativity, and adaptive management which are considered as a part of the new SD program at all educational level (Sterling 2008).

SE requires education policies and practices that are sustaining, tenable, healthy, and durable (Sterling 2008, p. 65):

- Sustaining: it helps sustain people, communities, and ecosystems;
- Tenable: it is ethically defensible, working with integrity, justice, respect, and inclusiveness;
- Healthy: it is itself a viable system, embodying and nurturing healthy relationships and emergence at different system levels;

- Durable: it works well enough in practice to be able to keep doing it.

Traditional teaching cannot bring about a change in the whole system, but everything continues in a more or less the same way (so-called first-order change). Achieving change requires at least “a second-order change” that involves re-examining assumptions through systemic and in-depth learning toward broader awareness at the personal, organizational, and community levels.

Thus, an ecological orientation means seeking synergies between all aspects of education: ethos, curriculum, pedagogy, leadership, use of resources, architecture, and community connections (Sterling 2008).

The purpose of SE is to promote equity, improve the quality of life and well-being, conserve natural resources, and protect health (Jämsä 2006, p. 28). Jämsä emphasizes that the principles of SE are similar to the general principles of education and that SE is an essential as part of ethical education. He also believes that SE can awaken people to a deep personal awareness of the various consequences of moral choices. According to Alcalá and Gutiérrez (2019), SE should include innovative pedagogy that supports students’ understanding of social reality. In teaching and learning, crucial issues are values (e.g., respect, trust, participation, community, justice, participatory democracy, openness, and critical reflection). The educational process should be planned and implemented from a holistic perspective (Burns 2011), and SE practice extended to be systemic and cross-disciplinary (Stevenson et al. 2017). At SE, the core of education is a critically important “learning about learning” process that directly affects the opportunities for a more sustainable future for all.

Despite the distinctions that can sometimes be drawn between sustainability education, ESD, EfS, and SE, they all share a vision of quality education and a society that lives in balance with earth’s carrying capacity (cf. Sterling 2010). According to Sterling (2004a), a key question concerns “response-ability,” that is, how different sectors are able to respond to the wider context of the unsustainability crisis and the opportunities of

sustainability. This is a difficult challenge that requires learning from all those involved in educational planning, policy, and practice. Sustainability requires the development of systematic and integrative activities as well as systemic thinking in education (Sterling 2004b). Ultimately, the sustainability transition requires a shift of culture from a mechanistic and reductionist toward a more ecological and holistic one. Achieving these changes requires designing education systems from a sustainability perspective.

Teachers’ Competencies of Sustainability and SE

The key skills for SD are systems thinking competency, anticipatory competency, normative competency, strategic competency, collaboration competency, critical thinking competency, self-awareness competency, and integrated problem-solving competency (UNESCO 2017). Systems thinking competency means the abilities to recognize and understand relationships, to analyze complex systems, to think of how systems are embedded within different domains and different scales and to deal with uncertainty. Anticipatory competency comprises the abilities to understand and evaluate possible, probable, and desirable futures, to create one’s own visions for the future, to apply the precautionary principle, to assess the consequences of actions, and to deal with risks and changes. Normative competency includes the abilities to understand and reflect on the norms and values that underlie one’s actions and to negotiate sustainability values, principles, goals, and targets in a context of conflicts of interest and trade-offs, uncertain knowledge, and contradictions (UNESCO 2017).

Strategic competency is the ability to collectively develop and implement innovative actions that further sustainability at the local level and further afield. Collaboration competency includes the abilities to learn from others, to understand and respect the needs, perspectives, and actions of others, to understand, relate to and be sensitive to others, to deal with conflicts in a group, and to facilitate collaborative and participatory problem-

solving. Critical thinking competency comprises the ability to question norms, practices, and opinions; to reflect on one's values, perceptions, and actions, and to take a position in the sustainability discourse. Self-awareness competency is the ability to reflect on one's own role in the local/global community and society, to continually evaluate and further motivate one's actions, and to deal with one's feelings and desires. Integrated problem-solving competency is the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive and equitable solution options that promote SD, integrating the abovementioned competences (UNESCO 2017).

The key competencies for sustainability can be understood as transversal, multifunctional, and context independent (Rychen and Salganik 2003). They represent what citizens who work to achieve sustainability will particularly need to deal with today and the future's complex challenges. They are relevant to all SDGs and enable individuals to relate the different SDGs to each other – to see “the big picture” of the 2030 Agenda for Sustainable Development (United Nations 2015). The key competencies represent cross-cutting competencies that are necessary for all learners of all ages worldwide. Thus, teachers should be able to master the issues concerning the key competences for sustainability and be able to apply their knowledge in teaching situations.

According to Brundiers and Wiek (2017), the knowledge dimensions required for integrative SD include content knowledge, methodological skills, communication skills, collaborative teamwork, participant engagement, project leadership ability, continuous learning ability, and self-care. By fostering competencies of SD (Lozano et al. 2017; Rieckmann 2019), it is important to steer education in a global direction to achieve social justice for present and future generations while respecting cultural diversity. At the local level, teaching should be favored a variety of formal, non-formal, and informal learning to accelerate the implementation of sustainable solutions (Lockhart 2016).

SE is a lifelong learning and an integral part of a quality, comprehensive, and transformative education concerning content, environment, and learning outcomes, as well as pedagogy (Ghemawat 2017). Beside environmental issues, interaction between society and the environment is in the core of teaching, studying, and learning processes. Cooperation between fields of education should be encouraged, especially in matters of environmental protection, human rights, social and economic development. The values, knowledge, and skills needed for sustainable environmental management, the promotion of social justice, and the eradication of poverty are key to education (Coriddi 2008). SE can be seen as an instrument of empowerment that inspires individuals and society to adopt sustainable lifestyles for the benefit of present and future generations.

Summary

The issues of sustainability and SD have received more national and international attention in recent decades. Numerous concepts are used interchangeably in education of sustainability. The following terms are most commonly used: “sustainability Education,” “education for sustainable development (ESD),” “education for sustainability (EfS),” and “sustainable education (SE).” Although they contain similar ideas, their starting points, goals, and approaches differ somewhat.

Over the years, sustainability education has expanded from an original ecological perspective to include social, ethical, and transformative aspects as well. Also ESD and EfS aim to find sustainable solutions to local and global problems through a transformative perspective. The core ideas of ESD are social justice and cultural diversity while EfS emphasizes the agency of human being in order to achieve sustainable change from a value perspective. Like early sustainability education, also SE is based on ecological orientation. Ecological orientation means that the sustainable use of natural resources must also be taken into account when promoting justice and improving the quality of life and well-being. SE should

support students' understanding of social reality. Teaching and learning of SE should be based on values and in the holistic, systemic, and cross-disciplinary planning and implementation processes.

Today, the crucial goal is to learn to live sustainably. This requires education systems, educational institutions, and educators with a willingness to tackle sustainability problems and the ability to respond to them.

Cross-References

- [Brundtland Report](#)
- [Sustainable Development](#)
- [Sustainable Development Goals](#)

References

- Abduganiev, O. I., & Abdurakhmanov, G. Z. (2020). Ecological education for the purposes sustainable development. *American Journal of Social Science and Education Innovations*, 2, 280–284.
- Alcalá del Olmo, M., & Gutiérrez Sánchez, J. (2019). El desarrollo sostenible como reto pedagógico de la universidad del siglo XXI. *Anduli*, 19, 59–58.
- Bartram, J., Brocklehurst, C., Bradley, D., Muller, M., & Evans, B. (2018). Policy review of the means of implementation targets and indicators for the sustainable development goal for water and sanitation. *NPJ Clean Water*, 1(1), 3. <https://doi.org/10.1038/s41545-018-0003-0>. S2CID 169226066.
- Branden, K. V. (2015). Sustainable education: Exploiting students' energy for learning as a renewable resource. *Sustainability*, 7(5), 5471–5487. <https://doi.org/10.3390/su7055471>.
- Brundiers, K., & Wiek, A. (2017). Beyond interpersonal competence: Teaching and learning professional skills in sustainability. *Education Sciences*, 7, 1–18. <https://doi.org/10.3390/educsci7010039>.
- Burns, H. (2011). Teaching for transformation: (re)-designing sustainability courses based on ecological principles. *Journal of Sustainability Education*, 2, 1–16.
- Corididi, J. (Ed.). (2008). *Policy & practice a development education review*. Lisburn: NI Ltd..
- Di Fabio, A. (2017). The psychology of sustainability and sustainable development for Well-being in organizations. *Frontiers in Psychology*, 8, 1534.
- Dower, N. (2003). *Global citizenship: A critical introduction*. New York: Routledge.
- Fien, J., Maclean, R., & Park, M. G. (2009). *Work, learning and sustainable development: Opportunities and challenges*. Berlin: Springer.
- Ghemawat, P. (2017). Strategies for higher education in the digital age. *California Management Review*, 59, 56–78.
- Glavić, P. (2020). Identifying key issues of education for sustainable development. *Sustainability*, 12, 6500. <https://doi.org/10.3390/su12166500>.
- Hart, T. (2004). Opening the contemplative mind in the classroom. *Journal of Transformative Education*, 2(1), 28–46.
- IUCN (International Union for Conservation of Nature and Natural Resources). (1980). *World conservation strategy: Living resource conservation for sustainable development*. <https://portals.iucn.org/library/efiles/documents/WCS-004.pdf>. Accessed 18 July 2021.
- Jämsä, T. (2006). The concept of sustainable education. In A. Pipere (Ed.), *Education & Sustainable Development: First steps toward changes* (pp. 5–30). Daugavpils: Daugavpils University Publishing House 'Saule'.
- Jeronen, E. (2013). Sustainability and sustainable development. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility*. Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-28036-8_662.
- Kopnina, H. (2012). Education for sustainable development (ESD): The turn away from 'environment' in environmental education? *Environmental Education Research*, 18, 699–717.
- Lockhart, A. S. (2016). *Creating sustainable futures for all: Non-formal and informal programs and activities that promote the acquisition of knowledge and skills in areas of global citizenship education (GCED) and education for sustainable development (ESD)*. Background paper prepared for the 2016 Global Education Monitoring Report Education for people and planet. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000245625>. Accessed 19 July 2021.
- Lozano, R., Merrill, M., Sammalisto, K., Ceulemans, K., & Lozano, F. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education. *A Literature Review and Framework Proposal*. *Sustainability*, 9(10), 1889. <https://doi.org/10.3390/su9101889>.
- Maurer, M., & Bogner, F. X. (2019). How freshmen perceive environmental education (EE) and education for sustainable development (ESD). *PLoS One*, 14(1), e0208910. <https://doi.org/10.1371/journal.pone.0208910>.
- Moore, J. (2005). Is Higher Education Ready for Transformative Learning? A Question Explored in the Study of Sustainability. *Journal of Transformative Education*, 3(1), 76–91. <https://doi.org/10.1177/1541344604270862>.
- Papenfuss, J., Merritt, E., Manuel-Navarrete, D., Cloutier, S., & Eckard, B. (2019). Interacting pedagogies: A review and framework for sustainability education. *Journal of Sustainability Education*, 20. <http://susted.com/wordpress/wp-content/uploads/2019/04/>

- Papenfuss-JSE-April-2019-General-Issue-PDF.pdf. Accessed 19 July 2021.
- Prabakaran, M. (2020). Historical appropriation of epistemological values: A goal ahead for higher education. *Higher Education for the Future*, 7(1), 67–81. <https://doi.org/10.1177/2347631119886416>.
- Quinn, F., Castéra, J., & Clément, P. (2016). Teachers' conceptions of the environment: Anthropocentrism, non-anthropocentrism, anthropomorphism and the place of nature. *Environmental Education Research*, 22(6), 893–917. <https://doi.org/10.1080/13504622.2015.1076767>.
- Rieckmann, M. (2019). Education for sustainable development in teacher education. An international perspective. In S. Lahiri (Ed.), *Environmental education* (pp. 33–48). Delhi: Studera Press.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., et al. (2009). A safe operating space for humanity. *Nature*, 461, 472–475. <https://doi.org/10.1038/461472a>.
- Roeser, R. W., & Peck, S. C. (2009). An education in awareness: Self, motivation, and selfregulated learning in contemplative perspective. *Educational Psychology*, 44(2), 119–136.
- Rychen, D. S., & Salganik, L. H. (2003). A holistic model of competence. In D. S. Rychen & L. H. Salganik (Eds.), *Defining and selecting key competencies* (pp. 41–62). Seattle: Hogrefe & Huber.
- Sterling, S. (2001). *Sustainable education: Re-visioning learning and change* (Schumacher Briefing) (Vol. 6). Dartington: Green Books.
- Sterling, S. (2003). Whole Systems Thinking as a Basis for Paradigm Change in Education: explorations in the context of sustainability (PhD thesis). Bath: Centre for Research in Education and the Environment, University of Bath.
- Sterling, S. (2004a). *Environmental audit. Appendix 39. Memorandum*. <https://publications.parliament.uk/pa/cm200405/cmselect/cmenvaud/84/84we40.htm>. Accessed 18 July 2021.
- Sterling, S. (2004b). An analysis of the development of sustainability education internationally: Evolution, interpretation and transformative potential. In J. Blewitt & C. Cullingford (Eds.), *The sustainability curriculum – Facing the challenge in higher education* (pp. 43–62). London: Earthscan.
- Sterling, S. (2005). *Unit 7 study guide: Education for sustainability: Education in change*. London: Distance Learning Centre, South Bank University.
- Sterling, S. (2008). Sustainable education – Towards a deep learning response to unsustainability. *Policy & Practice. A Development Education Review*, 6(Spring), 63–68.
- Sterling, S. (2010). Learning for resilience, or the resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education. *Environmental Education Research*, 16, 511–528.
- Stevenson, R. B., Lasen, M., Ferreira, J. A., & Davis, J. (2017). Approaches to embedding sustainability in teacher education: A synthesis of the literature. *Teaching and Teacher Education*, 63, 405–417. <https://doi.org/10.1016/j.tate.2017.01.013>.
- Thesaurus (2021). *Education*. <https://www.dictionary.com/browse/education>. Accessed 20 July 2021.
- Tilbury, D. (1995). Environmental education for sustainability: Defining the new focus of environmental education in the 1990s. *Environmental Education Research*, 1(2), 195–212.
- UN (United Nations). (1993). *United Nations conference on environment & development, agenda 21*. Rio de Janeiro, Brazil, 3 to 14 June 1992. <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>. Accessed 19 July 2021.
- UN (United Nations). (2003). *Activities undertaken in implementation of Agenda 21, the programme for the implementation of Agenda 21 and the outcomes of the World summit on sustainable development*. Report of the Secretary General. General Assembly. United Nations A 58/210. [https://documents-dds-ny.un.org/doc/UNDOC/GEN/N03/451/88/PDF/N0345188.pdf](https://documents-dds-ny.un.org/doc/UNDOC/GEN/N03/451/88/PDF/N0345188.pdf?OpenElement). Accessed 16 December 2016.
- UN (United Nations). (2015). *Transforming our world: the 2030 agenda for sustainable development*. General Assembly, A/70/L.1.
- UN (United Nations). (2016). *Global indicator framework for the sustainable development goals and targets of the 2030 agenda for sustainable development*. https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202021%20refinement_Eng.pdf. Accessed 4 Aug 2021.
- UN (United Nations). (2021a). *Our common future, Chapter 2: Towards sustainable development. A/42/427*. Our common future: Report of the world commission on environment and development. UN documents gathering a body of global agreements. <http://www.un-documents.net/ocf-02.htm#I>. Accessed 21 July 2021.
- UN (United Nations). (2021b). *The 17 goals. Department of economic and social affairs, sustainable development*. <https://sdgs.un.org/goals>. Accessed 4 Aug 2021.
- UN Statistical Commission. (2018, 11 May). *Tier classification for global SDG indicators*. New York: United Nations. https://unstats.un.org/sdgs/files/Tier%20Classification%20of%20SDG%20Indicators_11%20May%202018_web.pdf. Accessed 4 Aug 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (1977, 14–26 October). *Intergovernmental conference on environmental education*, Tbilisi, USSR, final report. <https://unesdoc.unesco.org/ark:/48223/pf0000032763>. Accessed 19 July 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2009). *United nations decade of education for sustainable development (DESD, 2005–2014)*. Review of contexts and structures for education for sustainable development. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000184944>. Accessed 20 July 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2017). *Education for sustainable development goals*. Learning Objectives. 2017. <https://>

unesdoc.unesco.org/ark:/48223/pf0000247444.

Accessed 4 August 2021.

- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2018a). *Sustainable development*. <https://en.unesco.org/themes/education-sustainable-development/what-is-esd/sd>. Accessed 20 July 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2018b). *Education for sustainable development*. <https://en.unesco.org/themes/education-sustainable-development>. Accessed 19 July 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2020). Education for Sustainable Development. A Roadmap. #ESDfor 2030. Paris, France. <https://www.gcedclearinghouse.org/sites/default/files/resources/200782eng.pdf>. Accessed 20 July 2021.
- Unterhalter, E. (2019). The many meanings of quality education: Politics of targets and indicators in SDG4¹. *Global Policy*, 10(1), 39–51.
- Wade, R. (2008). Education for sustainability: Challenges and opportunities. In J. Coriddi (Ed.), *Policy & Practice: A Development Education Review* (pp. 30–48). Lisbon: NI Ltd..
- Wals, A. E., & Blewitt, J. (2010). Third-wave sustainability in higher education: Some (inter) national trends and developments. In P. Jones, D. Selby, & S. Sterling (Eds.), *Sustainability education: Perspectives and practice across higher education* (pp. 55–74). London: Earthscan Publishing.
- Zajonc, A. (2013). Contemplative pedagogy: A quiet revolution in higher education. *New Directions for Teaching and Learning*, 134, 83–94.

concern for any country seeking to create its economy. Historical information shows that the connection between mankind and natural resources was solely extractive. In the 1980s, the United Nations (UN) established the World Commission on Environment and Development (UNCED), also known as the Brundtland Commission, in view of the issues produced by this exploration. Brundtland Commission report (1987) became a framework for sustainable energy development (Jefferson 2005). The Commission highlighted the danger of overuse of natural resources without taking into account ecosystem ability, highlighting the incompatibility between sustainable development and the current manufacturing and consumption trends (Camio et al. 2018).

Energy requirements have been steadily growing to sustain countries' development. At the same moment, atmospheric levels of greenhouse gases (GHGs) are growing, especially carbon dioxide (CO₂), intensifying the natural greenhouse effect and the heat it produces. The rise in energy consumption has developed severe issues in this context. The present patterns of global energy production and consumption are based on fossil fuels, resulting in local pollutant and GHG emissions and endangering the planet's long-term supply as a nonrenewable source.

Sustainable Energy

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Synonyms

Biofuels; Biomass; Energy efficiency; Energy engineering; Hydrogen; Renewable energy; Sustainable development

Definition

Increasing energy consumption in the modern world is a severe issue. Policies aimed at ensuring energy efficiency have therefore become a

Introduction

There is pressure on the world's main economies to enhance their energy efficiency, and people need to discover methods to decrease energy requirements and prevent energy waste and pollution in order to achieve sustainable development. Also essential is the long-term link between energy consumption and the real GDP of 25 countries of the Organization for Economic Cooperation and Development (OECD) (Camio et al. 2018).

Belke et al. (2011) show a direct link between energy consumption and economic development. Consequently, when planning efficient energy conservation interventions, it is vital for policymakers to consider the direct effect of energy consumption on economic growth. Not only do unsustainable energy production and consumption habits threaten human health and

quality of life, but they also have a profound impact on ecosystems and contribute to climate change. However, sustainable energy not only addresses these problems head-on, but is also an engine for poverty reduction, social progress, equity, increased resilience, economic growth, and environmental sustainability.

Policy Suggestions

The future of sustainable energy relies on a higher share of renewable energy, particularly in developing nations. Considering that there are greater levels of energy use and environmental effects from this use with greater rates of financial activity, energy efficiency can provide extra safety and advantages, such as decreased CO₂ emissions and decreased energy imports. These advantages complement each other, resulting in a decrease in the energy needed per unit of economic product, improving the effectiveness of the economy and ensuring that output can be accomplished with less energy and thus less use of natural resources and less harm to the environment.

UNDP's work on energy is in line with SDG 7's primary energy objectives: ensuring universal access to affordable, reliable, and modern energy services; working with nations to create energy systems and use them more effectively; and working to boost the worldwide share of renewable energy. The work of UNDP also involves a focus on sustainable cities and transport projects, with a focus on more integrated alternatives for electricity, mobility, land use, and waste management. Through these efforts, countries are able to make progress against each and every one of the SDGs, while contributing to global climate action (UNDP 2019).

As part of the 10-year UN Framework Program on Sustainable Consumption and Production, the EU has created sustainable consumption and manufacturing policies. In this context, as the significance of energy input, the research of energy consumption and manufacturing trends could be particularly important (Garccia-Alvarez

and Soarez 2018). The EU requires the below-mentioned policy suggestions:

- Renewable energy targets
- An improvement of coordination of economic units
- The elimination of administrative barriers to renewable energy consumption
- An acceleration of renewable heating technologies
- Financing renewable energy projects
- Identification of priority sectors
- Energy labeling and ecodesign directives
- Developing energy technologies (European Commission 2014)

It is therefore essential to continue investing in regulatory measures that enable more sustainable energy to be produced, distributed, and used. To be able to live within ecological boundaries, they should be implemented at all levels of culture (consumers, manufacturers, and local authorities) (Garccia-Alvarez and Soarez 2018).

UNECE's work on sustainable energy aims at improving access for all to affordable and clean energy and helping to decrease greenhouse gas emissions and the energy sector's carbon footprint in the region. It fosters dialog and collaboration between governments, energy industries, and other stakeholders on global policy (UNECE 2019). The focus is on energy efficiency, cleaner fossil-fuel electricity generation, renewable power, methane coal mine, natural gas, energy and mineral reserves and resources classification, and energy security (UNECE 2019).

From the point of perspective of sustainable energy development, renewables are widely available, ensuring greater security of power supply and reducing dependence on oil imports from politically volatile fields. In terms of both local emissions (such as particulate matter, coal, and lead) and greenhouse gases (coal dioxide and methane), renewables are less polluting and cause global warming. They also require more labor-intensive workers per energy unit than standard fossil fuels. Although technologically mature, some renewable energy sources are more costly than fossil-fuel-generated energy. This is

especially the case with the “fresh renewables.” Traditional biomass is often not the object of business operations, and it is hard to assess its expenses, except for economic ones. Despite its attractiveness from a sustainability view, cost remains the basic obstacle to the widespread implementation of traditional biomass (Goldemberg 2007).

Thus, it is worth evaluating and estimating the potential of countries’ energy-saving and emission cuts as an attempt to progress toward building a world economy that is effective in resource utilization. Such an assessment can provide helpful data for energy and environmental policies as well as contribute to the sustainability of nations with major financial impact in the globe (Camiato et al. 2018).

Summary

The sustainable energy is referred to energy that meets the needs of the present society without affecting the ability of future generations to meet their needs. Sustainable energy is a result of the earth’s natural resources which implies it is replenished constantly via natural resources. Hence, it is inexhaustible. Several forms of energy can be considered sustainable, such as widely known wind, solar, and water and also bioenergy and geothermal energy, biological energy (straw, manure, and other agricultural byproducts), geothermal energy like geysers.

Cross-References

- [Green Economy](#)
- [Renewable Resource](#)
- [Solar as a Sustainable Energy](#)

References

Belke, A., Dobnik, F., & Dreger, C. (2011). Energy consumption and economic growth: New insights into the cointegration relationship. *Energy Economics*, 33, 782–789.

Camiato, F. C., Mariano, E. B., Santana, N. B., Yamashita, B. D., Aparecida, D., & Rebelatto, N. (2018). Renewable and sustainable energy efficiency: An analysis of Latin American countries. *Environmental Progress and Sustainable Energy*, 37(6), 2116–2123.

European Commission. (2014). *Communication from the commission to the European Parliament and the council: European energy security strategy*. European Commission.

Garccia-Alvarez, M. T., & Soarez, I. (2018). Empirical assessment of sustainable energy markets in the EU-28. *Economic Development and Sustainability*, 20(1), 83–108.

Goldemberg, J. (2007). Ethanol for a sustainable energy future. *Sustainability and Energy*, 315, 808–810.

Jefferson, M. (2005). Sustainable energy development: Performance and practice. *Renewable Energy*, 31(5), 571–582.

UNDP United Nations Development Programme. (2019). Sustainable energy. Retrieved from <https://www.undp.org/content/undp/en/home/2030-agenda-for-sustainable-development/planet/sustainable-energy.html>. Accessed 2 Aug 2019.

UNECE United Nation Economic Commission for Europe. (2019). Energy Retrieve from <https://www.unece.org/energy.html>. Accessed 2 Aug 2019.

Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators

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Abbreviations

CHP	Combined Heat and Power
DH	District Heat(ing)
DHC	District Heating and Cooling
DSI	Demand-Side Integration
DSO	Distribution System Operator
IoT	Internet of Things
IPCC	Intergovernmental Panel on Climate Change
TSO	Transmission System Operator
VRE	Variable Renewable Energy

Description

The energy systems, producing electricity and heating/cooling for buildings, should operate carbon neutrally by 2050, in order to limit the global warming to 1.5 °C above preindustrial levels. This requires significant changes in the energy systems and market structures, as the current systems are mainly based on the use of fossil fuels. The Intergovernmental Panel on Climate Change (IPCC 2018) names energy demand reductions, decarbonization of electricity and other fuels, and electrification of energy end use, among others, as pathways to limiting the global warming.

Introducing energy systems running on totally renewable energy sources is a challenge that involves large number of different players with different roles in building the future energy systems and markets. The roles of energy system players are changing: building users, formerly in energy terms consumers or customers, become prosumers. The structures of energy networks are also changing, new production technologies of electricity and heating energy are entering the markets. This is leading to more decentralized and versatile production structures.

The future integrated energy systems are, compared to the current ones, much more dynamic and versatile. Energy production will be more decentralized, and more technologies are utilized in energy production, consumption, and storing. Future energy networks operate on two directions, this makes it possible basically for anyone to be able to also produce and sell excess energy to the market, when it is profitable.

Introduction and Background

The energy systems, producing electricity and heating/cooling for buildings, should operate carbon neutrally by 2050, in order to limit the global warming to 1.5 °C above preindustrial levels. This requires significant changes in the energy systems and market structures, as the current systems are mainly based on the use of fossil fuels. The Intergovernmental Panel on Climate Change

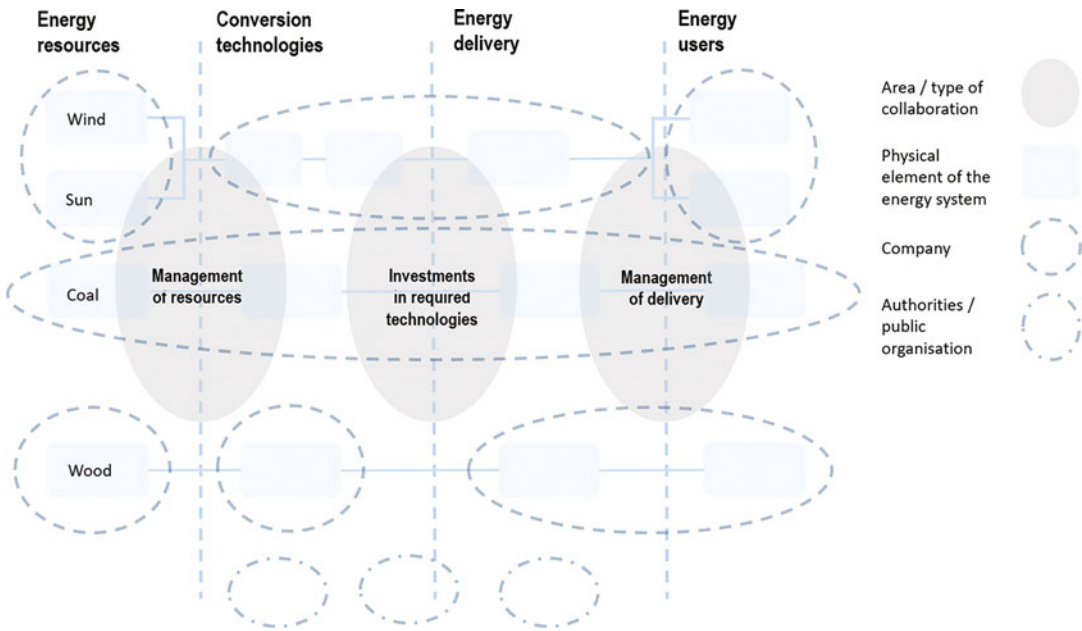
(IPCC 2018) names energy demand reductions, decarbonization of electricity and other fuels, and electrification of energy end use, among others, as pathways to limiting the global warming.

Buildings have an important role in reaching the environmental targets, as the buildings and building construction sectors are responsible for nearly 40% of global final energy consumption and nearly 40% of total direct and indirect CO₂ emissions. In 2017, buildings and appliances were responsible for around 30% of global final energy use. Building energy use increase was 0.8% in 2016 and 20% between 2000 and 2017. This growth was primarily driven by increases in floor area, occupancy, and access to services along with increases in activity, including changes in population, climate, and the use of appliances (IEA 2018a).

Some major increases in energy consumption have taken place since 2000. Energy consumption from space heating has nearly doubled, energy intensity per floor area in the residential sector has increased by over 80%, and energy consumption by appliances has grown by 58%. However, at the same time, Space heating, water heating, lighting, and cooking have also experienced improvements of more than 20% in energy intensity per floor area (IEA 2018a).

The International Energy Agency (2018a) highlights the potential for global building energy demand to remain flat between now and 2040, despite total building floor area growing by 60%. There is a large energy efficiency potential in buildings; according to IEA's estimate, by 2040 buildings could be 40% more energy efficient than today. Greatest energy savings are estimated to come from space heating – over a quarter of the savings potential. Water heating efficiency could improve by 43%, and space cooling efficiency could be improved by doubled air conditioner efficiency.

Along with decarbonization, the share of electricity in total energy consumption is expected to increase. Future renewable energy technologies mainly produce electricity (photovoltaic solar panels, wind power, hydro power, wave power, . . .), which is then used also for heating purposes, by utilizing, for example, heat pump technology.



Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Fig. 1 Regional energy collaboration context. (Adapted from Mikkola et al. (2015))

In colder climates, heating of spaces still remains an important part of the energy consumption palette, and district heating is expected to have a role also in the future integrated energy systems. IEA has stated in 2018: “For space heating, if all countries were to achieve best practice market averages (such as in Japan and Scandinavia), global heating energy consumption could be cut in half” (IEA 2018a).

Managing energy production, under different seasonal weather and climate conditions, raises many challenges for the energy markets under transition to decarbonized operation.

Energy Grid Players

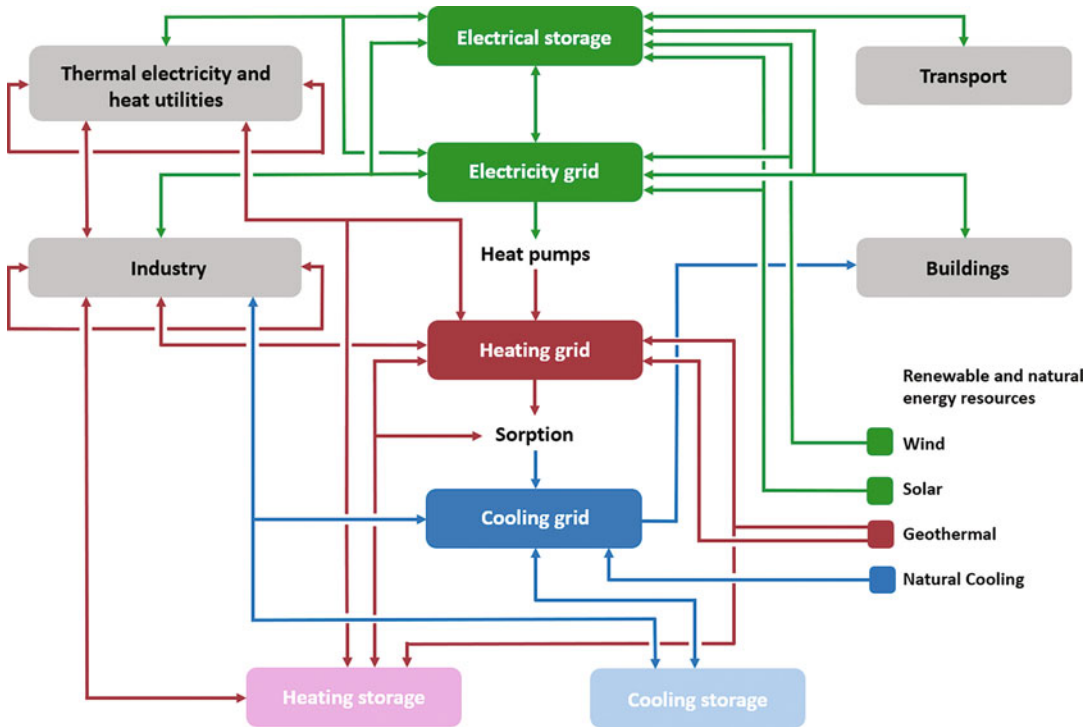
Regionally, planning energy management involves long-term planning of energy sources management, suitable production technologies, and planning of distribution grids, based on forecasted energy demand. In order to reach and maintain a feasible balance in energy production, supply, and demand, with affordable overall costs, different players should be involved in the

planning and development of the regional energy system (Fig. 1).

In energy systems, the efficiency is not the only important criterion, but balancing between the elements of the overall system also has an important role. Close collaboration between all partners producing, consuming, or transmitting energy is required to optimize the system (Jussila et al. 2014).

In the regional context, both heat (and/or cooling) and electricity grids are often available, at least in the areas where space heating is required during cold periods. The interconnections of electricity and thermal energy systems are presented in Fig. 2.

Heating and electricity grids are different by their nature: heating grids are local, due to the heat losses in the distribution grid (in average 8–9% in Finland). Electricity can be transported with lower energy losses (in Finland, approx 3%) than heat. Local electricity grids are usually connected to a national grid, which can then further be connected to a neighbor country’s national grid. Such is the case in Nord Pool market area, which includes Finland, Sweden, Norway, Denmark, Estonia,



Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Fig. 2 Interconnections of electricity and thermal energy in integrated energy systems. (Adapted from IEA (2014))

Latvia, and Lithuania. Thus, for a customer, there is a large selection of electric energy sources, with various prices, and large market area ensures that demand is met by the lowest cost electricity generation. On the contrary, in the local heating grid the customer is bound to the fuel selection available in the local production plants.

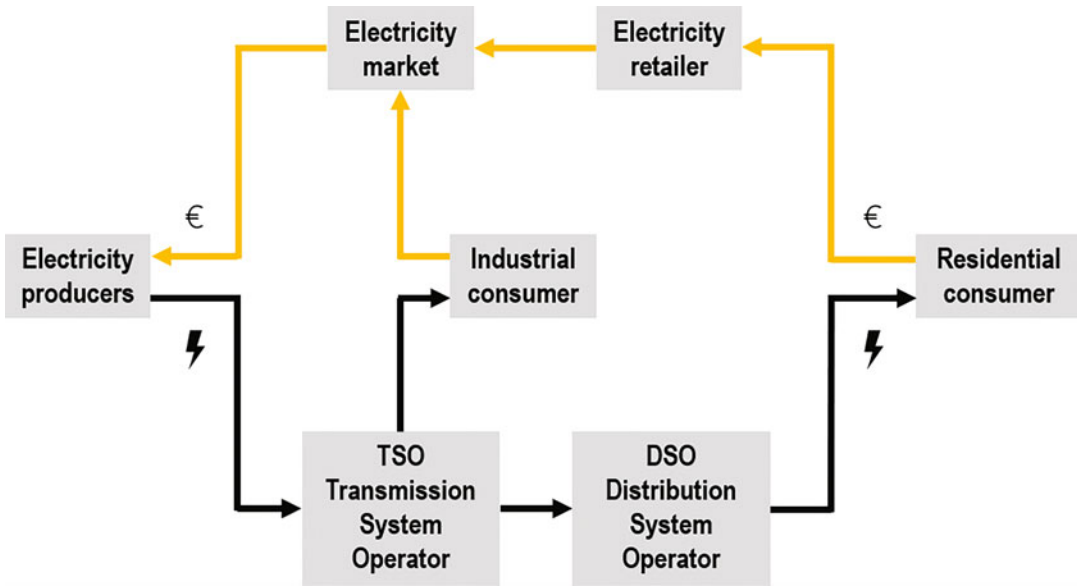
Electricity and heat grids and markets integrate in Combined Heat and Power production (CHP), and when heat storages are added to the system. This enables the optimization of heating energy acquisition costs, as electricity can be transformed into heat energy by utilizing heat pumps, and then stored to be used at appropriate time in the district heating network. During periods of cheap electricity prices (excess renewable production), this option can be very profitable.

Planning the regional energy system involves planning of energy production structure in the area. The decision makers have to take a stand on how self-sufficient the region should be in energy production and sources. If there are

renewable energy sources available inside the region, utilizing them would likely benefit the region by creating business opportunities and jobs. Between countries, changes in policies could result in short- or long-term problems in electricity export or import. To avoid such partial optimized country-specific policies, EU is building Energy Union to ensure secure, sustainable, competitive, and affordable energy for its citizens (European Commission 2015).

Electricity Grid Players

In traditional electricity systems, electricity is produced in generation plants and then distributed to customers via the main grid (e.g., 110–400 kV), high voltage distribution networks (110 kV), and distribution networks (20, 10, 1, or 0.4 kV). Currently, it is possible also for the consumers to produce electricity and sell it to the grid, depending on the market. This has not only



Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Fig. 3 Overview of the electricity system showing both technical and economic subsystems; the black line indicates the route of

physical electricity; the yellow line shows the money flow (excluding network tariffs) (Adapted from Baumgartner 2014)

given rise to new business opportunities, but also challenges, as the electricity customers can now buy and sell energy.

The main actors in a modern electricity market are shown in Fig. 3, the Nordic electricity market is used as an example. Transmission system operator (TSO) operates the main (national) grid and is responsible for maintaining system balance in national level. The final customers, apart from the large industrial ones, buy their electricity from the retailer of their choice, which again, is buying electricity from producers in wholesale electricity markets, in which also large industrial consumers operate. Open competition has been introduced to wholesale and retail electricity markets. DSO (Distribution System Operator) charges for the electricity distribution, which means that the customer gets two bills; one concerning the energy consumption and one concerning the distribution. DSO, similar as TSO, runs a natural monopoly, since there is only one local distribution grid for electricity, and it would not be a cost-efficient solution to build parallel competing networks. Hence, the distribution bill cannot be invited to tender. On

the other hand, DSO is regulated by the authority to avoid the misuse of the monopoly position.

Residential consumer's electricity bill consists typically of distribution fee, energy fee, and taxes. In Finland, electricity tax and value-added tax form approximately one third of the average consumer's electricity bill. One third of the total costs is transport cost related, and one third comes from the energy sales.

Heating Grid Players

District heating (DH) is common in the areas having high space heating demand, due to its ability to provide reliable heating energy with high system efficiency. When utilizing Combined Heat and Power (CHP) technology, also power (electricity) is produced, in addition to heat. This improves the overall efficiency of energy production.

Traditionally, a DH system consisted of three main system components: production, distribution, and consumption. The thermal energy produced at the production plants is transmitted to

customers as hot water in a closed district heating network, consisting of two pipelines (supply and return pipes). Customers get their heat energy from the DH supply stream through heat exchangers, the return pipe conveys cooled water back to the production plant, to be heated again. DH water does not circulate in the building heating network (Finnish Energy 2019). “The four generations” of DH are presented in Table 1.

The player chart of DH system is similar to the electricity system (Fig. 4). The traditional customer–retailer relationship has also been similar to electricity systems: customer consumes, retailer delivers. Currently, also DH networks can be opened for new energy producers and retailers.

The heat energy demand of buildings is determined in the customer end of the chain, consisting mainly of heat losses via building envelope, heating demand for ventilation/air conditioning purposes, and heating demand of hot domestic water. Distribution losses and losses at the production site determine the total primary energy demand, along with the customer energy demand (Fig. 5). The primary energy demand of the chain is the total amount of energy needed to compensate the consumption and losses; hence the emissions related to the energy consumption at the customer end include also the emissions caused by the distribution and production losses. The analogy is the same when the environmental impacts of electricity consumption are under consideration. The main difference between these energy systems are losses: electricity can be transmitted much longer distances with relatively small energy losses.

Prosumer in an Integrated Energy System

The prosumers of an energy system are customers who can both consume and produce energy to the grid. Produced energy (electricity or heat) can be used to satisfy customer’s own demand, or sold to the distribution grid. The most common

application of being a residential prosumer is producing electricity with a photovoltaic production unit. Depending on the design of the solar plant, and the structure of local electricity market, all produced electricity may be consumed by the customer, or excess energy can be sold to the grid. In principal, a customer can be a prosumer also in regional heating energy system (DH, or a smaller local heating grid). However, not so many DH networks are yet open for two-way connections, apart from some industrial cases.

The importance of the prosumer’s role is likely to increase significantly in the next decades, as the pursuit of reaching the carbon neutrality will lead to restricting of peak loads by financial incentives and other policy measures. Different demand response (DR) programs are being introduced to support the development leading to more energy efficient and renewable energy-based energy system.

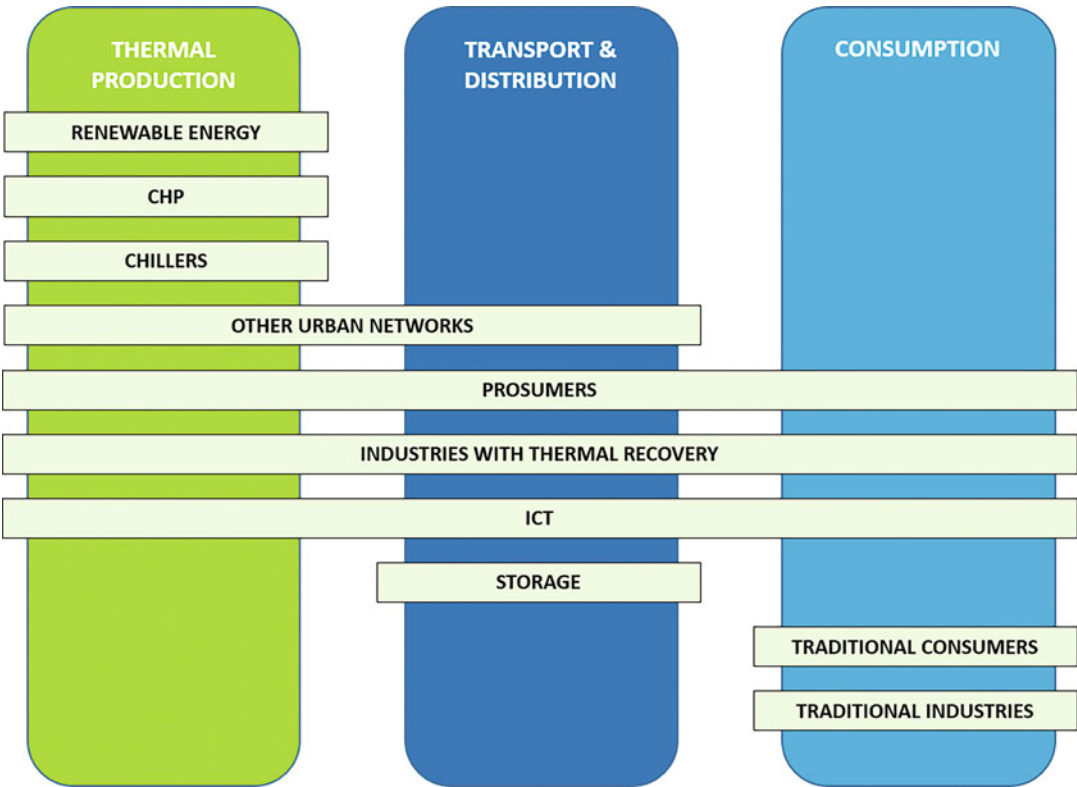
The collective term Demand-side integration (DSI, Fig. 6) includes the programs aimed at integrating the demand (customer) side into energy system operations. Utilizing DSI allows electricity systems to accommodate higher shares of renewables, increase system efficiency, and reduced costs (IEA 2018b).

DSI can be implemented through tariff design and retail programs, where consumers can be exposed to pricing signals that allow them to adjust their consumption (Implicit DSM). Demand response, or explicit DSM, can be carried out through wholesale and load control programs. These are generally mediated by a demand aggregator, which enables consumer participation in operations in wholesale, capacity, or ancillary markets (IEA 2018b).

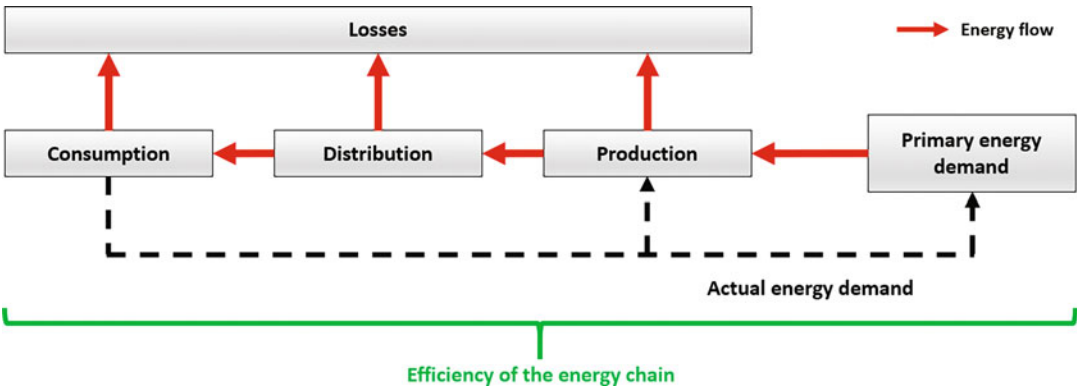
The DSI programs can contribute to the improving of the power markets, providing system services and shaping demand in a way that helps facilitate variable renewable energy integration. Costly investments in power plants or infrastructure can be postponed or even avoided, fuel cost savings can be gained, and critical power outages can be avoided (IEA 2018b).

Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Table 1 The four generations of DH. (Adapted from Lund et al. (2014))

	1st Gen. DH	2nd Gen. DH	3rd Gen. DH	4th Gen. DH
Period of best available technology	1880–1930	1930–1980	1980–2020	2020–2050
Distribution and demand				
Heat carrier	Steam	Pressurized hot water mostly $T_{\text{supply}} > 100\text{ }^{\circ}\text{C}$	Pressurized hot water, mostly $T_{\text{supply}} < 100\text{ }^{\circ}\text{C}$	Low-temperature water, $T_{\text{supply}} = 30\text{--}70\text{ }^{\circ}\text{C}$
Pipes	In situ insulated steel pipes	In situ insulated steel pipes	Pre-insulated steel pipes	Pre-insulated flexible (possibly twin) pipes
Circulation systems	Steam pressure	Central pumps	Central pumps	Central and decentralized pumps
Substations heat exchanger	No	Tube-and-shell heat exchangers	Without or with plate heat exchangers	Probably mostly with plate heat exchangers Introduction of flat-stations (decentralized supply of hot water in new buildings)
Buildings	Apartment and service sector buildings in the city	Apartment and service sector buildings $200\text{--}300\text{ kWh/m}^2$	Apartment and service sector buildings (and some single-family houses) $100\text{--}200\text{ kWh/m}^2$	New buildings: $<25\text{ kWh/m}^2$ Existing buildings: $50\text{--}150\text{ kWh/m}^2$
Metering	Condensate meters in order to measure the amount of steam used	Initially only flow meters in substations, later replaced by heat meters. Annual or monthly readings Sometimes use of allocation meters on radiators for internal distribution of heat costs	Heat meters and sometimes additional metering of flow in order to compensate for high return temperatures Wireless readings introduced for more frequent readings	As earlier but continuous reading used for continuous commissioning of customer heating system
Radiators	High-temperature radiators ($90\text{ }^{\circ}\text{C}$) using steam or water	High-temperature radiator ($90\text{ }^{\circ}\text{C}$) using district heating water directly or indirectly	Medium-temperature radiators ($70\text{ }^{\circ}\text{C}$) using district heating water directly or indirectly Floor heating	Floor heating Low-temperature radiators ($50\text{ }^{\circ}\text{C}$). Indirect system
Hot water	Hot water tanks heated directly with steam or from a secondary water circuit	DHW tank heated to $60\text{ }^{\circ}\text{C}$ Circulation at $55\text{ }^{\circ}\text{C}$ when needed	Heat exchanger heating DHW to $50\text{ }^{\circ}\text{C}$. Domestic hot tank heated to $60\text{ }^{\circ}\text{C}$. Circulation at $55\text{ }^{\circ}\text{C}$ when needed	Very efficient local heat exchanger heating DHW to $50\text{--}40\text{ }^{\circ}\text{C}$ In district heating systems with supply temperature of $30\text{ }^{\circ}\text{C}$, a heat exchanger preheats DHW and a heat pump with buffer tank and heat exchanger increases DHW temperature to $40\text{ }^{\circ}\text{C}$ by cooling down the return temperature



Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Fig. 4 Stakeholders of DHC (District Heating and Cooling) (Adapted from Euroheat & Power 2012)

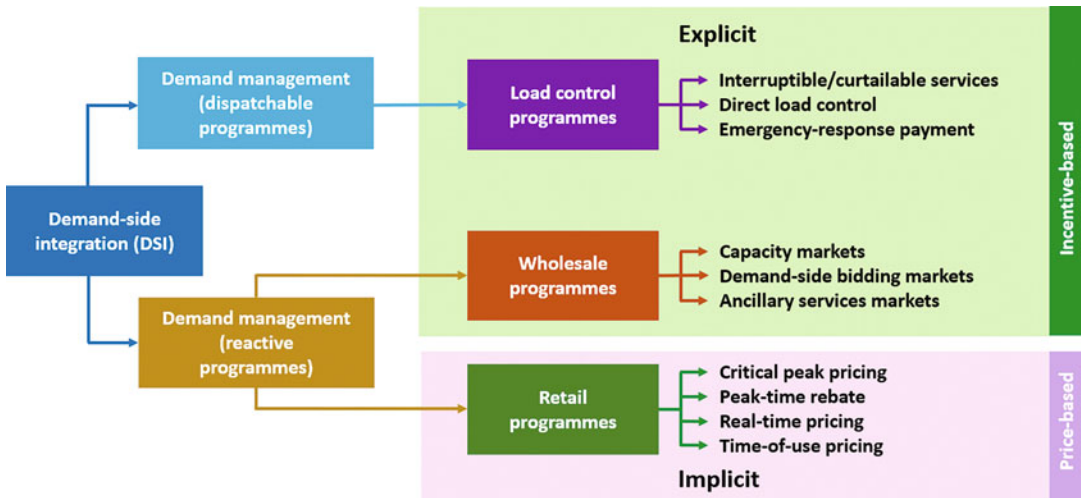


Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Fig. 5 Primary energy consumption in a regional heating system (Adapted from Vinokurov and Luoranen 2015)

**Managing the Overall System:
Cooperation Between Prosumers,
Producers, and Operators**

Managing the future integrated energy system involves many different actors. Heating and

electricity grids are integrated through energy in building energy systems and energy storages, as storages are becoming more and more important part of the energy markets: Heat storages can be charged by utilizing heat pumps, when electricity price is low. The storages can



Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Fig. 6 Demand side management and demand response. (Adapted from IEA (2018b))

then be discharged during the expensive electricity periods.

Electrification is a current global trend; at the moment the increase in electricity consumption caused by increasing access to electricity and electrical appliances exceeds those energy savings gained by more energy efficient building systems. This means the households' total energy, especially electricity, consumption is continuously increasing. The target of reaching the decarbonization in building-related energy consumption seems to be solved only by totally renewable electricity, i.e., mainly solar, wind, or hydropower. In addition to that, controlling the peak loads is becoming a crucial point when energy systems' efficiency and economy are considered.

In the near future, charging of large number of electric cars requires electricity systems to be flexible. On the other hand, the car batteries can also operate as storages, when connected to the grid. Furthermore, utilizing Internet of Things (IoT) technologies in home appliances will contribute to the complexity of the task of optimizing energy systems. The overall system management should keep all the players happy – end-users, prosumers, operators, and producers.

Future energy systems need to be more and more flexible, since the amount of intermittent

generation is increasing drastically, and the customer demand patterns are changing. All energy market players have important roles in this development. In Table 2, elements of power system development are described. The same analogy can be applied on heating networks.

There are several challenges to be solved, in order to accomplish the target of carbon neutral and affordable integrated energy system. IEA (2014) has published a list of barriers preventing the selection of cogeneration and efficient district heating and cooling (DHC) technologies:

- Energy efficiency is not rewarded due to market conditions and energy prices.
- Energy policies fail to reward utilization of industrial waste heat or natural cooling, in comparison to renewable energy sources.
- Nontransparent, inconsistent interconnection procedures and back-up charges.
- Lack of knowledge about co-operation benefits and savings.
- Lack of integrated heating/cooling supply planning.

Furthermore, barriers reducing economic feasibility of cogeneration and DHC include (IEA 2014):

Sustainable Energy Grids: Cooperation Between Prosumers, Producers, and Operators, Table 2 Layers of power system

Who	How	What
Institutions and actors	Policy, market, and regulatory frameworks	Hardware and infrastructure
Typical decision makers	Categories of interventions	Asset types
Energy ministry	Energy strategies Legal frameworks Policies and programs	Power plants Electricity networks Energy storages
Regulatory agency	Regulatory frameworks and decisions Power sector planning exercises Retail electricity planning	Distributed energy resources
System operator, electric utility, standards body	Power market rules and codes System operation protocols Connection codes	

Adapted from IEA (2019)

- Higher upfront investments, compared to conventional generation and distribution systems.
- Difficulties in securing fair values prices for electricity from cogeneration to the grid.
- Uncertain energy policies, lacking long-term visibility.

In addition, barriers reducing flexibility of the business structure of complex energy systems include (IEA 2014):

- Lack of energy efficiency policy coordination on supply, distribution, and end use.
- Lack of business models rewarding energy flexibility and sustainability.

Summary

The energy systems, producing electricity and heating/cooling for buildings, should operate carbon neutrally by 2050, in order to limit the global warming to 1.5 °C above preindustrial levels. This requires significant changes in the energy systems and market structures, as the current systems are mainly based on the use of fossil fuels. The Inter-governmental Panel on Climate Change (IPCC 2018) names energy demand reductions, decarbonization of electricity and other fuels, and electrification of energy end use, among others, as pathways to limiting the global warming. Regionally, planning energy management involves long-term planning of energy

sources management, suitable production technologies, and planning of distribution grids, based on forecasted energy demand. In order to reach and maintain a feasible balance in energy production, supply, and demand, with affordable overall costs, different players should be involved in the planning and development of the regional energy system.

Managing energy production, under different seasonal weather and climate conditions, raises many challenges for the energy markets under transition to decarbonized operation. Increasing cooperation between all energy field players is required, in addition to intensive research and development of technologies, market structures, and business models, to achieve the ambitious targets set for mitigation of global warming. Since the demand for energy, due to seasonal and periodical changes in temperatures and weather conditions, is not constant locally or nationally, storages for heat and electricity are required for shorter (milliseconds to hours to days) and longer (months, seasons) periods. In addition, DSI programs are needed to maximize the energy efficiency of the energy systems, and to minimize the overall costs.

Cross-References

- Controlling the Building Energy Footprint
- Energy Efficiency in Public Building Procurement

- [Energy Pricing for Households for Promoting Energy Efficiency](#)
- [Needs and Barriers for Local Energy Market Solutions](#)

Vinokurov, M., & Luoranen, M. (2015). Framework for regional heating energy efficiency assessment. ISBN 978-952-265-747-3 (PDF). ISSN-L 2243-3376. ISSN 2243-3376.

References

- Baumgartner, P. (2014). *Demand response ecosystems in the Nordic Electricity Markets*. Master of science thesis, Tampere University of Technology.
- Euroheat & Power. (2012). District heating & cooling – Strategic Research Agenda. DHC+ Technology Platform. [On website of Euroheat & Power]. [Cited 6.5.2016]. Available: <http://www.euroheat.org/publications/brochures/districtheating-cooling-strategic-research-agenda/>
- European Commission. (2015). *Energy union package. A framework strategy for a resilient energy union with a forward-looking climate change policy*. Brussels.
- Finnish Energy. (2019). Energy networks – Almost 15,000 km of district heating networks. Available: https://energia.fi/en/energy_sector_in_finland/energy_networks/district_heating_networks
- IEA (International Energy Agency). (2014). Linking heat and electricity systems. CIREN workshop. [On website of IEA]. [Cited 7.6.2016]. Available: <https://www.iea.org/publications/freepublications/publication/linking-heat-andelectricity-systems.html>
- IEA (International Energy Agency). (2018a). Energy efficiency 2018. Analysis and outlooks to 2040.
- IEA (International Energy Agency). (2018b). Energy transitions in G20 countries. Energy transitions towards cleaner, more flexible and transparent systems. Available: <https://www.iea.org/news/iea-releases-two-reports-on-energy-transitions-in-g20-countries>
- IEA (International Energy Agency). (2019). Status of power system Transformation 2019: Power system flexibility. Available: www.iea.org
- IPCC (Intergovernmental Panel on Climate Change). (2018). Global warming of 1.5 °C. Special report. Summary for policymakers. Available: <https://www.ipcc.ch/sr15/>
- Jussila, A., Mikkola, M., & Ryyänänen, T. (2014). *Facilitating innovation in loosely coupled networks: Case regional energy efficiency*. ISPIM Asia-Pacific Innovation Forum 2014, 7–10 December 2014, Singapore: ISPIM. The Proceedings of the ISPIM Asia-Pacific Forum: Singapore. ISBN 978-952-265-589-5.
- Lund, H., Werner, S., Wiltshire, R., Svendsen, S., Thorsen, J. E., Hvelplund, F., & Mathiesen, B. V. (2014). 4th Generation District Heating (4GDH) integrating smart thermal grids into future sustainable energy systems. *Energy*, 68, 1–11.
- Mikkola, M., Jussila, A., & Ryyänänen, T. (2015). Collaboration in regional energy efficiency development. Smart and Sustainable Planning for Cities and Regions 2015. Bolzano, Italy, 19–20 November 2015.

Sustainable Entrepreneurship

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Synonyms

Environmental, eco, green, and social entrepreneurship

Definition

Business practices led the emergence of numerous environmental and social problems, which constitute the major source of sustainability issues. Environmental degradation and social problems have sparked the attention of scholars and practitioners to find solutions for these problems. In contrast to conventional entrepreneurship in which the core goal is economic gains, sustainable entrepreneurship has gained an aspirational appeal in motivation to seek substantial solutions for environmental and social problems. As a new conceptualization of entrepreneurial activities, sustainable entrepreneurship reflects the entrepreneurial efforts for exploring, developing, and exploiting opportunities to promote sustainable development through environmental and social gains. In this domain, entrepreneurs who start a venture to serve for societies' interest by tackling the facets of social and environmental issues are usually referred to as sustainable entrepreneurs. Although there are ambiguities about the conceptualization of sustainable entrepreneurship, the definition that reached to the consensus reflects the consistency of sustainable development goals with entrepreneurial activities. In line with this, Young and Tilley (2006) view sustainable

entrepreneurs as “the individuals who holistically integrate the goals of economic, social and environmental entrepreneurship into an organization that is sustainable in its goal and sustainable in its form of wealth generation” (Tilley and Young 2009, p. 88). Accordingly, sustainable entrepreneurship is defined as exploration, creation, and exploitation of opportunities with economic, social, and environmental gains. In conjunction with this definition, sustainable entrepreneurs pursue profitable solutions for sustainability issues including social and environmental goals through offering more innovative and sustainable alternatives.

Introduction

The severe global climate crisis, increasing depletion of natural resources, and social inequality mirror the reality that the world is not consistent with sustainable development. The accelerating sustainability challenges show that existing solutions are not adequate to keep natural and social capital at a critical level. Therefore, the concept of sustainable entrepreneurship as a nascent research stream has received burgeoning interest from scholars (Binder and Belz 2014; Thompson et al. 2011). Entrepreneurs are considered as the key change engines that ignite the transformation worldwide (Belz 2013; Hall et al. 2010). In contradistinction to the traditional or conventional view of entrepreneurship which solely focuses on economic development (e.g., Kirzner 1973; Schumpeter 1942), sustainable entrepreneurship underlines the balance in the triple bottom line of social, environmental, and economic aspects in the aim of creating a more sustainable environment (Cohen et al. 2008; Cohen and Winn 2007; Thompson et al. 2011). The concept of triple bottom line was pointed out by Elkington (1997) who asserted that firms should go beyond their financial gains and focus on social and environmental aspects of their business interactively (Slaper and Hall 2011). Accordingly, triple bottom line is viewed as a performance measurement that observes the balance between economic, environmental, and social gains in which the

main focal points are “people, planet, and profit” (Bell and Stellingwerf 2012). In this respect, sustainable entrepreneurs are those who conduce the business practices that simultaneously integrate those dimensions without ignoring social and environmental aspects. In this sense, there is a growing attention in the roles of entrepreneurs regarding social, environmental, and economic aspects of sustainable development (Binder and Belz 2014; Schaltegger and Wagner 2011; Schaltegger et al. 2016).

Sustainable entrepreneurship is associated also with sustainable development that refers to “the needs of the present without comprising the ability of future generations to meet their own needs” (Brundtland Commission 1987) as it provides an integrated perspective of sustainable development and entrepreneurship. Sustainable development that has risen as an influential as much as controversial topic for business and policy makers delivers the awareness that a fundamental transformation is urgent to extenuate the hazardous environmental and societal effects of existing unsustainable business practices (Hockerts and Wüstenhagen 2010). In addition, sustainable development is addressing the core notion that all resources are scarce which requires people to live in those limits. This interplay between sustainable development and entrepreneurship led new conceptualizations of entrepreneurship including green, ecopreneur or environmental entrepreneur, social entrepreneur, and sustainable entrepreneur (Muñoz and Cohen 2018; Schaltegger and Wagner 2011; Zahra et al. 2009). While the green, ecopreneurs, or environmental entrepreneurs pursue an environmental perspective, social entrepreneurs associate their business activities to the accomplishment of societal development. Accordingly, sustainable entrepreneurship has its origins from environmental and social entrepreneurship field, and it encompasses creation of sustainable ventures where the social and environmental issues are viewed as the ultimate goal (Muñoz and Dimov 2015; O’Neill et al. 2009). Sustainable entrepreneurs address economic, social, and environmental gains interactively and simultaneously, while social or environmental entrepreneurs focus on one or two

dimensions (Binder and Belz 2014). The common feature that combines those entrepreneurs under the same umbrella is the avoidance of only profit maximization and ignoring the environmental and social gains. Despite the overlap of the conceptualization of sustainable entrepreneurs and social and environmental entrepreneurs, the simultaneous triple focal view differentiates sustainable entrepreneurship from social and environmental entrepreneurs (Belz and Binder 2017; Thompson et al. 2011). Shepherd and Patzelt (2011, p. 137) define this multiple goal implementation as “the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society.” In this vein, sustainable entrepreneurs who are the sources of sustainable ventures that promote environmental protection and solution for social problems are motivated by advancing sustainable development (Hall et al. 2010, Shepherd and Patzelt 2011). Accordingly, sustainable entrepreneurship is an overarching view of entrepreneurial efforts covering social, environmental, and economic developments. Briefly stated, sustainable entrepreneurship highlights the exploration and exploitation of opportunities to produce goods and services that are in line with sustainable development goals (Pacheco et al. 2010; Shepherd and Patzelt 2011). Sustainable entrepreneurs are resonated with efforts for promoting environmental protection, stopping environmental degradation, achieving energy efficiency, increasing social equality and education, reducing poverty and unemployment, and solving social problems through sustainable innovations regarding products, services, and processes. More broadly, these socially and environmentally conscious agents are motivated and dedicated to promoting sustainable development worldwide through their environmentally and socially innovative efforts. Thus, sustainable entrepreneurs are considered as the nexus between sustainable development and innovation. Sustainability innovation and sustainable entrepreneurship are considered as the primary drivers of sustainability that enable the integration

of economic, environmental, and social system (Cohen and Winn 2007; Parrish 2007; Young and Tilley 2006). Especially, innovations are considered as the central point for sustainable entrepreneurs (Lüdeke-Freund 2019). In essence, sustainable entrepreneurship is viewed as the realization and implementation of sustainable innovations in order to meet the unmet demands of stakeholders and provide benefits to society.

Related Issues

Entrepreneurs who pursue sustainability seek to change the existing market structure by creation of value for a nation's society, environment, and economy. Through their innovative approach, sustainable entrepreneurs are exerting substantial impact on their institutional environment including markets and societies. In order to be effective in this transformation process, sustainability-oriented business models are employed in which a triple bottom line approach is incorporated with the interests of stakeholders, environment, and society. Sustainable business models play a vital role in implementation of sustainable innovations in products, processes, and services that are considered as the drivers of competitive advantage (Bochen et al. 2014).

Being socially and environmentally aware individuals, sustainable entrepreneurs are fulfilling a crucial role in societies since they discover and provide solutions for problems that are neglected or underestimated by the governments and other related organizations (Elkington and Hartigan 2008). Despite the contributions of sustainable entrepreneurs, there are hurdles that they can face. Entrepreneurs who start their sustainable venture can experience various challenges or barriers that can hinder their growth and success of their venture. For instance, sustainable entrepreneurs can be exposed to market imperfections and governmental interventions that can favor the existing technologies and interests of the incumbents (Schaltegger and Wagner 2011). In this regard, governmental institutions can enable nurturing sustainable entrepreneurial activities (Muñoz and Cohen 2018). Policies that are

conducive to create an appropriate climate for sustainable entrepreneurs to explore, experiment, and exploit with required technologies that can provide engaging in more sustainable business models should be implemented (Silajdžić et al. 2015). Another challenge which needs to be mentioned is the uncertainty of undertaking sustainable innovations (Schaltegger and Wagner 2011). In this vein, scholars pointed out that sustainable entrepreneurs need to eliminate market imperfections and external factors by commercialization of the solutions of the society and transformation of markets through providing benefits to stakeholders (Cohen and Winn 2007; Freudenreich et al. 2019).

Future Directions

Societies are substantially facing environmental and social challenges. In this regard, sustainable business practices of entrepreneurs are aiming to deploy triple bottom line of environmental, economic, and social gains instead of addressing short-term profits (Elkington 1997). In this process, the main challenge is the integration of the three aspects of the bottom line. Integration requires comprehensively understanding and analyzing the sustainability aspects in order to overcome any possible trade-off between the three aspects and keep simultaneously the effectiveness of each aspect including social, environmental, and economic gains. Those difficulties can be overcome by sustainable business models in which sustainable development is the focal goal. Moreover, governments should engage policies that can conduce the environment where sustainable entrepreneurial actions can resolve the challenges and achieve efficiency in functioning of markets for limited environmental and social resources.

Summary

Entrepreneurs who start their ventures in motivation to create values regarding triple bottom

line factors are called as sustainable entrepreneurs. Akin to the entrepreneurship research stream which ultimately points out the economic gains, sustainable entrepreneurship embodies meeting the economic, social, and environmental needs of the societies simultaneously. Sustainable entrepreneurs are willing to take risks and overcome the challenges to achieve their sustainability-oriented goals. Therefore, sustainable entrepreneurship plays an indisputable role in the transformation of world markets by creating economic, social, and environmental values through the sustainable innovations and business models. In other words, sustainable entrepreneurs are the key agents to deal with the increasing sustainability challenges and to realize sustainable development goals. It is important to bear in mind that an institutional environment which enables the required support for the sustainable entrepreneurs is one of the crucial factors for the success of sustainability-oriented practices.

Cross-References

- [Business Model Innovation](#)
- [Innovation](#)
- [Social Entrepreneurship](#)
- [Sustainable Business Models](#)
- [Sustainable Development](#)
- [Sustainable Development Goals](#)
- [Triple Bottom Line](#)

References

- Bell, J. F. & Stellingwerf, J. J. (2012). Sustainable entrepreneurship: The motivations & challenges of sustainable entrepreneurs in the renewable energy industry. Master's thesis, Jönköping International Business School, Jönköping, Sweden.
- Belz, F. M. (2013). Shaping the future: Sustainable innovation and entrepreneurship. *Social Business*, 3(4), 311–324. <https://doi.org/10.1362/204440813X13875569154028>.
- Belz, F. M., & Binder, J. K. (2017). Sustainable entrepreneurship: A convergent process model. *Business Strategy and the Environment*, 26(1), 1–17. <https://doi.org/10.1002/bse.1887>.

- Binder, J., & Belz, F. M. (2014). Sustainable entrepreneurship: What it is. In P. Kyrö (Ed.), *Handbook of entrepreneurship and sustainable development* (pp. 30–71). Cheltenham: Elgar.
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56. <https://doi.org/10.1016/j.jclepro.2013.11.039>.
- Brundtland Commission. (1987). *Our common future*. World Commission on Environment and Development, Brussels.
- Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1), 29–49. <https://doi.org/10.1016/j.jbusvent.2004.12.001>.
- Cohen, B., Smith, B., & Mitchell, R. (2008). Toward a sustainable conceptualization of dependent variables in entrepreneurship research. *Business Strategy and the Environment*, 17(2), 107–119. <https://doi.org/10.1002/bse.505>.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of twenty-first century business*. Oxford: Capstone.
- Elkington, J., & Hartigan, P. (2008). *The power of unreasonable people: How social entrepreneurs create markets that change the world*. Boston: Harvard Business Press.
- Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2019). A stakeholder theory perspective on business models-Value creation for sustainability. *Journal of Business Ethics*. Online first 08 February 2019. <https://doi.org/10.1007/s10551-019-04112-z>.
- Hall, J. K., Daneke, G. A., & Lenox, M. J. (2010). Sustainable development and entrepreneurship: Past contributions and future directions. *Journal of Business Venturing*, 25(5), 439–448. <https://doi.org/10.1016/j.jbusvent.2010.01.002>.
- Hockerts, K., & Wüstenhagen, R. (2010). Greening Goliaths versus emerging Davids-Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. *Journal of Business Venturing*, 25(5), 481–492. <https://doi.org/10.1016/j.jbusvent.2009.07.005>.
- Kirzner, I. M. (1973). *Entrepreneurship and competition*. Chicago: University of Chicago Press.
- Lüdeke-Freund, F. (2019). Sustainable entrepreneurship, innovation, and business models: Integrative framework and propositions for future research. *Business Strategy and the Environment*, 1–17. <https://doi.org/10.1002/bse.2396>.
- Muñoz, P., & Cohen, B. (2018). Sustainable entrepreneurship research: Taking stock and looking ahead. *Business Strategy and the Environment*, 27(3), 300–322. <https://doi.org/10.1002/bse.2000>.
- Muñoz, P., & Dimov, D. (2015). The call of the whole in understanding the development of sustainable ventures. *Journal of Business Venturing*, 30(4), 632–654. <https://doi.org/10.1016/j.jbusvent.2014.07.012>.
- O'Neill, G. D., Jr., Hershauer, J. C., & Golden, J. S. (2009). The cultural context of sustainability entrepreneurship. *Greener Management International*, 55, 33–46.
- Pacheco, D. F., Dean, T. J., & Payne, D. S. (2010). Escaping the green prison: Entrepreneurship and the creation of opportunities for sustainable development. *Journal of Business Venturing*, 25(5), 464–480. <https://doi.org/10.1016/j.jbusvent.2009.07.006>.
- Parrish, B. (2007). Sustainability entrepreneurship: Innovations in the logics of organizing. Paper presented at the World Symposium on Sustainable Entrepreneurship 2007, Leeds, UK, 15–17 July 2007.
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. *Business Strategy and the Environment*, 20(4), 222–237. <https://doi.org/10.1002/bse.682>.
- Schaltegger, S., Lüdeke-Freund, F., & Hansen, E. G. (2016). Business models for sustainability: A co-evolutionary analysis of sustainable entrepreneurship, innovation, and transformation. *Organization & Environment*, 29(3), 264–289. <https://doi.org/10.1177/1086026616633272>.
- Schumpeter, J. A. (1942). The process of creative destruction. In *Capitalism, socialism and democracy* (pp. 81–86). New York: Harper.
- Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed”. *Entrepreneurship Theory and Practice*, 35(1), 137–163. <https://doi.org/10.1111/j.1540-6520.2010.00426.x>.
- Silajdžić, I., Kurtagić, S. M., & Vučijak, B. (2015). Green entrepreneurship in transition economies: A case study of Bosnia and Herzegovina. *Journal of Cleaner Production*, 88, 376–384. <https://doi.org/10.1016/j.jclepro.2014.07.004>.
- Slaper, T. F., & Hall, T. J. (2011). The triple bottom line: What is it and how does it work. *Indiana Business Review*, 86(1), 4–8.
- Thompson, N., Kiefer, K., & York, J. G. (2011). Distinctions not dichotomies: Exploring social, sustainable, and environmental entrepreneurship. In G. Lumpkin & J. Katz (Eds.), *Social and sustainable entrepreneurship* (pp. 201–229). Bingley: Emerald Group Publishing Limited. [https://doi.org/10.1108/S1074-7540\(2011\)0000013012](https://doi.org/10.1108/S1074-7540(2011)0000013012).
- Tilley, F., & Young, W. (2009). Sustainability entrepreneurs. *Greener Management International*, 55, 1–15.
- Young, W., & Tilley, F. (2006). Can businesses move beyond efficiency? The shift toward effectiveness and equity in the corporate sustainability debate. *Business Strategy and the Environment*, 15, 402–415. <https://doi.org/10.1002/bse.510>.
- Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532. <https://doi.org/10.1016/j.jbusvent.2008.04.007>.

Sustainable Environment

- [Sustainability Education and Environmental Awareness](#)

Sustainable Environments

- [Social License to Operate](#)

Sustainable Event Management

- [Sustainable Events](#)

Sustainable Events

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Synonyms

[Green events](#); [Sustainable event management](#)

Definition

Sustainable events are managed with the aim of contributing to sustainable development through promoting inter- and intra-generational equity.

History

As the concept of sustainability became widespread, many sectors began to focus on tackling

the issues this raises. Protecting their reputation and legitimacy was obviously the main driving force for the commitment of corporations towards sustainability. While in the 1990s the concept of sustainability was already widespread among many sectors with material outputs, it was not until the beginning of the new millennium that large-scale diffusion of this concept and its associated practices occurred in service sectors. After the theme of sustainability established itself as relevant in the tourism industry (see ► [“Sustainable Tourism”](#)), starting from the end of the 1990s, and especially with the new millennium, this issue has also become of great interest for the related special event industry.

Mega-events have been pioneers in the development of sustainable event management. Particularly, the Olympic Games has served as a platform for discussion and experimentation of sustainability best practices, spreading from environmental concerns. A significant step forward was made during the Centennial Olympic Congress held in Paris in 1994, where the importance of promoting sustainable development was formally recognized and included as a value in the Olympic Charter. This led the International Olympic Committee (IOC) to the decision to create an IOC Sport and Environment Commission giving birth to a process of guideline elaboration in the field of sustainable event management. A highly influential role was also played by the 2012 London Olympics Games. Since 2005, when London won the right to host the 2012 Olympics, the Organizing Committee demonstrated high commitment to sustainability. Indeed, this event became a catalyst not only in the debate around the creation of a common framework for event sustainability but also in the development of two of the most important standards in the field: BS 8901 *Sustainability in Event Management* and ISO 20121 *Sustainable events*.

Having just over two decades of history, the theme of sustainability in event studies is still at an early stage, even if the extent of research in this field is rapidly growing, in parallel with the interests of practitioners and policy makers.

The Impact of Events from the Perspective of the Triple Bottom Line

Sustainable events are managed with the aim of contributing to sustainable development through promoting inter- and intra-generational equity (Getz 2009; Hall 2012; Smith-Christensen 2009). The main objective of event sustainability is to maximize benefits whilst minimizing negative impacts, with the specific purpose of leaving a positive legacy for all stakeholders. The prevailing approach in the field of event sustainability is based on the triple bottom line framework (Elkington 1997). Sustainable events aim to balance their economic, social, and environmental impacts to positively contribute to the sustainable development of society. Thus, from the perspective of the triple bottom line, all three aspects should be considered together.

The economic impacts of events tended to be the first to be considered by practitioners and academics. Consequently, early approaches to event impacts were focused on measuring economic impacts. The success of an event itself was typically considered related primarily to its economic contribution to the hosting region (Holmes et al. 2015). The rapid rise of event tourism and the consequent benefits for the hosting community in terms of additional wealth and jobs stimulated the development and testing of increasingly accurate methods to measure this positive economic impact to the local economy (Brown et al. 2015). Further, growing scarcity of public resources served as a boost to increase attention to events' economic impacts, compelling public authorities to undertake an evaluation of cost-opportunity in funding events (Burgan and Mules 2001). More recently, some studies have highlighted that negative economic impacts can descend from the organization of an event (Chirieleison and Montrone 2013), like the indirect costs for the municipality to guarantee that the event runs smoothly (e.g., extra resources made available for policing, rubbish collection, assistance, and aid).

The social impacts of events are manifold. Some of them are definitively positive, as, for example, the effect on the sense of community

and pride for local culture and heritage (Delamere et al. 2001). Even enhanced infrastructure and revitalization of urban and rural areas can be a positive legacy of events. Besides this, numerous negative effects can arise. The "touristification" of historical commemorations, religious and folkloristic events can reduce their authenticity weakening their long-term legitimacy and even their reason to exist. Disadvantages like an increase in vandalism and criminality, traffic congestion, pressure on services, and infrastructure can reduce the quality of life for local inhabitants during the days of the event (Small 2007). Numerous methods have been proposed to evaluate events' social impacts, adopting both quantitative and qualitative analysis (Fredline et al. 2003; Kim et al. 2015).

Events' environmental impacts have been thoroughly studied only just recently, but analysis of such impacts is rapidly becoming the most spotlighted topic in this domain. Indeed, the term "green event" has become synonymous with "sustainable event" (Laing and Frost 2010; Mair and Jago 2010). The prevailing perspective is focused on measuring and reducing the event's negative impacts in terms of atmospheric and water pollution, waste, fossil energy consumption, and noise pollution (Collins and Cooper 2017). Recently, visitors' transportation choices (see ► ["Sustainable Transportation"](#)) are emerging as a key issue in terms of the negative environmental impacts attributable to events (Chirieleison and Scrucca 2017; Triantafyllidis et al. 2018; Chirieleison et al. 2020). Ecological Footprint analysis and Environmental Input–Output modeling are two of the most widely used approaches for quantitative impact assessment of events environmental externalities (Collins et al. 2009).

Managing Event Sustainability

Every event has positive and negative economic, social, and environmental impacts. Organizing special events can lead to significant advantages for the hosting community, with regard to both economic and social impacts. Nevertheless, they can also raise significant disadvantages, not least

in terms of threats to the environment. Besides the issue of a triple bottom line assessment of special events, the challenge in the last few years has become the integration of all three aspects of sustainability in one single framework, paying attention to the strict interconnections existing among them (O'Sullivan and Jackson 2002; Holmes et al. 2015; Raj and Musgrave 2009). For example, the reduction of events environmental impacts – which is highly desirable – could lead to an unsustainable increase in costs and thus to a lack of economic viability and a loss of opportunities for the local community.

Meanwhile, some characteristics of the event industry could make it challenging to deal effectively with sustainability concerns. Unlike other businesses, event organizers do not operate in the same way 365 days a year, as a special event is – by its very nature – unique and temporary. Thus, event sustainability could sound like an oxymoron, as sustainable development implies a long-term perspective, while events are meant to last a few days, or even just a few hours. In parallel, however, even if every event is different – and also the same event changes from year to the next – there are enough similarities to pursue a common management system approach in a path towards leaving a net positive legacy from a holistic perspective.

While sustainability is becoming one of the main challenges for event management, a widely accepted framework to evaluate event sustainability is still lacking. Nevertheless, the various approaches proposed by academics, professionals, standardization bodies, and practitioners share (i) a focus on promotion of the triple bottom line approach to economic, environmental, and social dimensions of events, (ii) the adoption of multiple evaluations and assessments (often based on sets of objectives and/or indicators), and (iii) a focus on a balanced contribution to society. Examples of such frameworks proposing specific performance objectives or measures include Getz (2009), Laing and Frost (2010), and Andersson and Lundberg (2013). Venue selection, visitors' transportation, supply chains, waste reduction, use of non-renewable energy, economic impacts on the

local economy, disruptions to residents, air and water emissions, cost-opportunity of public funding, stakeholder engagement, fair treatment of employees and contributors are just some of the aspects most commonly linked to event sustainability. Attention towards sustainability involves every stage of an event's life cycle: projecting, planning, staging, closing, dismantling, controlling, and feedback. A wide number of stakeholders should be involved, such as organizers, policy makers, visitors, suppliers, volunteers, local inhabitants, sponsors, and funders. While impact evaluation and monitoring are essential components of managing event sustainability, communication policies are also crucial to gain maximum benefits in terms of reputation and legitimacy.

Frameworks devoted to objective definition and evaluation of the impact aim – directly or indirectly – to promote the organization of events managed in a sustainable way (Getz and Andersson 2008). Typically, the focus is on minimizing negative social and environmental impacts while maximizing positive economic benefits. Beyond this, an alternative approach is emerging regarding event sustainability. In this second approach, events are viewed in terms of a wider significance and seen as a fruitful opportunity for promoting sustainability (Mair and Laing 2013). These events have the specific purpose not only to adopt policies and approaches which can provide a positive net impact to society but even – and foremost – to promote behavior change amongst attendees. Indeed, the event itself is used to push its audience towards more sustainable lifestyle choices. The choice of a sustainability-focused theme, the robust adoption of responsible management practices made visible through special sustainability features of the event, the staging of entertainment, and educational programs centered on sustainability: these are some of the tools used to comprehensively link the image of the event to sustainability spreading the culture of sustainability itself. Here, effectiveness is related in a large part to the adoption of communication strategies capable of capturing a broad audience and

not only visitors who are already sustainability-conscious (Tölkes and Butzmann 2018).

Event Sustainability Standards

Event sustainability standards include a wide number of national and subsector specific labels as well as authoritative international standards.

BS 8901 *Sustainability in Event Management*, released by the British Standards Institution (BSI), has been among the most influential national standards. This standard emerged from a partnership established between the 2012 London Olympics Organizing Committee and the BSI with the specific aim to elaborate a standard in the field of event sustainability. The standard, first issued in 2007, received positive reactions from the community of practitioners and began to be adopted by important events even outside the UK, for example, the United Nations Conference on Climate Change (COP15) held in Copenhagen in December 2009. BS 8901 was the precursor and model of the main standard in the field of event sustainability management, ISO 20121. Thus, following the introduction of ISO 20121, the BS 8901 standard was withdrawn.

ISO 20121 *Event sustainability management systems – Requirements with guidance for use* is a voluntary international standard for sustainable event management created by the International Organization for Standardization (ISO) in 2012. The standard has the purpose to promote the adoption of innovative solutions in the event industry for addressing sustainability issues, helping organizers to contribute to sustainable development, and leaving a positive legacy. ISO 20121 is applicable to all events, regardless of size, location, and theme and provides a practical framework to manage and reduce potentially negative social, economic, and environmental impacts of events.

Another important international standard in this field has been developed by the Global Reporting Initiative (GRI) (see ► [“Global Reporting Initiative”](#)). GRI is a nonprofit organization founded in Boston in 1997 spreading from the cooperation between the US nonprofit

organizations Coalition for Environmentally Responsible Economies (CERES) and the Tellus Institute, an interdisciplinary, nonprofit research, and policy organization mainly focused on environmental protection, with the support of the United Nations Environment Programme (UNEP). The purpose of the GRI is to help businesses, governments, and other organizations to understand, manage, and communicate their sustainability. The GRI Sustainability Reporting Standards (GRI Standards) have been continuously developed over 20 years and undoubtedly represent best practice in sustainability disclosure. Today, they are the most widely adopted global standards for sustainability reporting. Besides the Standards, GRI has also developed various Sector Disclosures containing sector-specific guidance for sustainability reporting. One of these is directed to *Events Organizers*. While in the fourth version of the Reporting Standards Guidelines (G4), the adoption of Sector Disclosures was mandatory, in the currently in force GRI Standard (which superseded G4) it is recommended, but not a requirement, for preparing a report in accordance with the Standards. The Sector Disclosure *Event Organizers*, however, still represents a landmark for sustainability disclosure in the event industry. The GRI reporting guidance *Event Organizers* covers the complete project life cycle of an event – from planning to post-event – with reference to economic, social, and environmental aspects, defining additional disclosure requirements and specific indicators to be included in the sustainability report. For every indicator, the correct data processing mode and calculation methods are provided, with specific references to definitions, compilation, and required documentation. Streamlined comparison between different events in terms of sustainability is one of the main benefits arising from this standardization of the disclosure.

Summary

Sustainable events are managed with the aim of contributing to sustainable development through promoting inter- and intergenerational equity. The

main objective of event sustainability is to maximize benefits while minimizing negative impacts, with the specific purpose of leaving a positive legacy for all stakeholders. The prevailing approach is based on the triple bottom line framework and takes into account the economic, socio-cultural, and environmental impacts of events on the hosting community.

Cross-References

- [Global Reporting Initiative](#)
- [Sustainable Tourism](#)
- [Sustainable Transportation](#)

References

- Andersson, T. D., & Lundberg, E. (2013). Commensurability and sustainability: Triple impact assessments of a tourism event. *Tourism Management*, 37, 99–109.
- Brown, S., Getz, D., Pettersson, R., & Wallstam, M. (2015). Event evaluation: Definitions, concepts and a state of the art review. *International Journal of Event and Festival Management*, 6(2), 135–157.
- Burgan, B., & Mules, T. (2001). Reconciling cost – Benefit and economic impact assessment for event tourism. *Tourism Economics*, 7(4), 321–330.
- Chirieleison, C., & Montrone, A. (2013). Evaluating local government costs and revenues: The case of an Italian privately owned for-profit event. *Tourism Management Perspectives*, 8, 90–97.
- Chirieleison, C., & Scrucca, L. (2017). Event sustainability and transportation policy: A model-based cluster analysis for a cross-comparison of hallmark events. *Tourism Management Perspectives*, 24, 72–85.
- Chirieleison, C., Montrone, A., & Scrucca, L. (2020). Event sustainability and sustainable transportation: A positive reciprocal influence. *Journal of Sustainable Tourism*, 28(2), 240–262.
- Collins, A., & Cooper, C. (2017). Measuring and managing the environmental impact of festivals: The contribution of the ecological footprint. *Journal of Sustainable Tourism*, 25(1), 148–162.
- Collins, A., Jones, C., & Munday, M. (2009). Assessing the environmental impacts of mega sporting events: Two options? *Tourism Management*, 30(6), 828–837.
- Delamere, T. A., Wankel, L. M., & Hinch, T. D. (2001). Development of a scale to measure resident attitudes toward the social impacts of community festivals, Part 1: Item generation and purification of the measure. *Event Management*, 7, 11–24.
- Elkington, J. (1997). *Cannibals with forks: the triple bottom line of 21st century business*. Oxford: Capston.
- Fredline, L., Jago, L., & Deery, M. (2003). The development of a generic scale to measure the social impacts of events. *Event Management*, 8(1), 23–37.
- Getz, D. (2009). Policy for sustainable and responsible festivals and events: Institutionalization of a new paradigm. *Journal of Policy Research in Tourism, Leisure and Events*, 1(1), 61–78.
- Getz, D., & Andersson, T. D. (2008). Sustainable festivals: On becoming an institution. *Event Management*, 12(1), 1–17.
- Hall, C. M. (2012). Sustainable mega-events: Beyond the myth of balanced approaches to mega-event sustainability. *Event Management*, 16(2), 119–131.
- Holmes, K., Hughes, M., Mair, J., & Carlsen, J. (2015). *Events and sustainability*. New York: Routledge.
- Kim, W., Jun, H. M., Walker, M., & Drane, D. (2015). Evaluating the perceived social impacts of hosting large-scale sport tourism events: Scale development and validation. *Tourism Management*, 48, 21–32.
- Laing, J., & Frost, W. (2010). How green was my festival: Exploring challenges and opportunities associated with staging green events. *International Journal of Hospitality Management*, 29(2), 261–267.
- Mair, J., & Jago, L. (2010). The development of a conceptual model of greening in the business events tourism sector. *Journal of Sustainable Tourism*, 18(1), 77–94.
- Mair, J., & Laing, J. H. (2013). Encouraging pro-environmental behaviour: The role of sustainability-focused events. *Journal of Sustainable Tourism*, 21(8), 1113–1128.
- O'Sullivan, D., & Jackson, M. J. (2002). Festival tourism: A contributor to sustainable local economic development? *Journal of Sustainable Tourism*, 10(4), 325–342.
- Raj, R., & Musgrave, J. (Eds.). (2009). *Event management and sustainability*. Wallingford: CABI Publishing.
- Small, K. (2007). Social dimensions of community festivals: An application of factor analysis in the development of the social impact perception (SIP) scale. *Event Management*, 11(1–2), 45–55.
- Smith-Christensen, C. (2009). Sustainability as a concept within events. In R. Raj & J. Musgrave (Eds.), *Event management and sustainability* (pp. 22–31). Wallingford: CABI Publishing.
- Tölkes, C., & Butzmann, E. (2018). Motivating pro-sustainable behavior: The potential of green events – A case-study from the Munich Streetlife Festival. *Sustainability*, 10(10), 3731.
- Triantafyllidis, S., Ries, R., & Kaplanidou, K. (2018). Carbon dioxide emissions of spectators' transportation in collegiate sporting events: Comparing on-campus and off-campus stadium locations. *Sustainability*, 10(1), 241.

Website Citations

- <https://www.bsigroup.com>. Accessed 1 Mar 2019.
- <https://www.globalreporting.org>. Accessed 1 Mar 2019.
- <https://www.iso.org/home.html>. Accessed 1 Mar 2019.
- <https://www.iso.org/iso-20121-sustainable-events.html>. Accessed 1 Mar 2019.

Sustainable Facilities

- [Sustainable Sports Stadiums](#)

Sustainable Finance

- [Climate Finance](#)
- [Finance and CSR](#)

Sustainable Food Design and Innovation

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Synonyms

[Food design innovation](#); [Sustainable design in innovative food production](#); [Sustainable innovation in food design](#)

Definition

Innovation is the process of renewal of science and technology for economic and social benefit (Rinkinen and Harmaakorpi 2018). It refers to both a process and a result. It can be handled in four main types such as product, process, marketing, and organization (Ramirez et al. 2018). Food innovation, on the other hand, can be defined as the completion of all the innovation and development work carried out for food production, distribution, sales, consumption, and waste management. Therefore, innovation is one of the main routes through which the food industry can increase productivity and gain a competitive edge in the global marketplace (Kaleka and Morgan 2017). The scope of innovation is very wide and it is possible to interpret it differently for each

group of food products. Moreover, innovation in food can also be discussed through a variety of subcategories, from the use of sustainable techniques to ergonomic food designs and even consumption. It is also not possible to consider the concept of food design separately from sustainability and the sustainability concept separately from innovation. In this sense, the terms food design and innovation are intrinsically associated (Elias and Marsh 2020). Within the scope of this chapter, sustainability will be explained in the context of the food industry innovation. In addition, different fields of innovation will be evaluated together with the sustainable food design approach.

Introduction

Design and innovation for food sustainability began to get attention in the mid-1980s. By the early 1990s, a group of research-motivated designers and academics had emerged in Europe and the USA (Rao et al. 2001; Akça 2018). The leading activity in this field was initially called green design. Green design focuses on improving only one feature of a product, or concentrates on a food product's appearance (Zhihong and Yucheng 2000; Ala-Harja and Helo 2014). Examples of green design include the use of natural food colorants instead of artificial ones, or the use of recycled materials for food packaging. Since a food product may sometimes have at least one sustainable feature, this is enough to call it a sustainable product. However, this does not mean that a food product then meets all the sustainability principles. Changing a single feature of a food product may reduce its negative impact on the environment and society only in small amounts, or not at all (Lindgren et al. 2018). Hence, it is clear that the food industry needs to work hard on sustainable food product design and innovation in order to meet the sustainability criteria (Ciccullo et al. 2020).

From the point of view of the food industry, the term innovation is used to define a reduction in costs, an increase in profitability in a sustainable manner, and/or the achievement of a certain

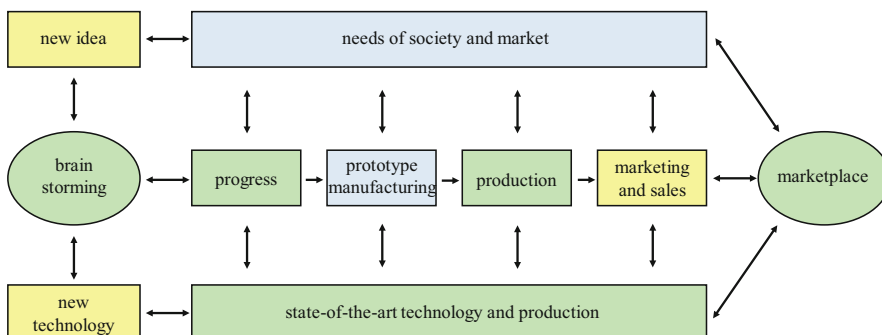
quality in food products. The innovation provides an advantage to the company in managing the production processes. By its nature, therefore, innovation in food production brings economic development coming mainly from power of food market (Olsen 2015; Busse and Siebert 2018).

In the food market, competition issues have attracted increasing interest from policymakers and food professionals in recent years. Therefore, greater attention should be paid to the functioning of food markets in relation to the role of competition in ensuring food design and innovation to follow sustainability requirements. Hence, the competition in the food and beverage industry is increasingly competitive (Voytovych and Polyak 2019). In today's competitive environment, it is becoming more and more difficult for such businesses to survive only by imitating the activities of their rivals. Therefore, competition in the industry is leading to new products being developed. As part of this, food and beverage businesses have focused on processing consumer-oriented high-quality food products rather than expensive and uniform offerings (Lusk and McCluskey 2018). However, the share of resources allocated to R&D in the industry has to increase in order for the industry to compete globally. Although it has increased in recent years, capacity utilization in the food and beverage industry is still not at the desired level (Bayona-Saez et al. 2017). The reason for this may be a lack of suitable raw materials, insufficient technical knowledge, lack of capital, or production and sales problems

(Fetullah 2012). Therefore, in order to achieve economic development, it is necessary to match innovation with demands and needs, ensure effective coordination with the agriculture industry, and to produce goods without sacrificing quality.

Innovation is a way that food businesses can survive, take advantage of opportunities, and increase their competitiveness (Belous 2013). Figure 1 schematizes the process from the idea stage of a food product to its place in the market. As can be seen, design adds value to the process, with innovation considered primarily at the outset, with the whole process proceeding in line with the principle of sustainability.

The use of innovation enables food production to be planned and to be flexible depending on the technology available and on consumer needs. At this point, design enters the circuit. Design includes a number of elements, such as how the food is produced from raw materials, product shape and size, food packaging, and how it is served. In other words, food design has always been a factor underlying the whole process, since it came more to the forefront as the concepts of innovation and sustainability started to have an impact on production processes (Messerli et al. 2019; Tukker et al. 2017). Today, food design has evolved and has increased its impact on physical and sensory characteristics of food such as appearance, smell, taste, and texture (McCrickerd and Forde 2016). The important message is that food design and design innovation approaches come within the scope of sustainability. Therefore, the



Sustainable Food Design and Innovation, Fig. 1 Sustainable innovative design process for a food product (yellow: innovation dominated areas, blue: design

dominated areas, green: innovation and design dominated areas) (Kernbach and Nabergoj 2018)

food industry provides a forum in which the topics of sustainability, innovation, research and development, design, and competitive advantage can be evaluated.

Sustainable Food

People have always needed to meet their existential needs. By doing so, they had more or less food alternatives depending on the conditions of the era and the time they had to process foods. Moreover, since the dawn of existence of society, the food industry has been an agent of cultural development. Food design is a feature of all civilizations and forms the basis of different gastro-cultural structures (Heitmann et al. 2011). For this reason, it is possible to reveal many food designs reflecting different cultural and technological accumulations in a multidisciplinary sense. At this point, food can be considered as an indispensable element in design (Biderman 2017). Today, where food has such an important place, resources must be used efficiently while producing food, to protect the environment and the ecosystem, and to pass on technological knowledge from one generation to another. This is also covered by the concept of sustainability (Ibrahim et al. 2019). Although the concept can be generally applied, it is possible to see how it relates to different areas specifically (Fig. 2).

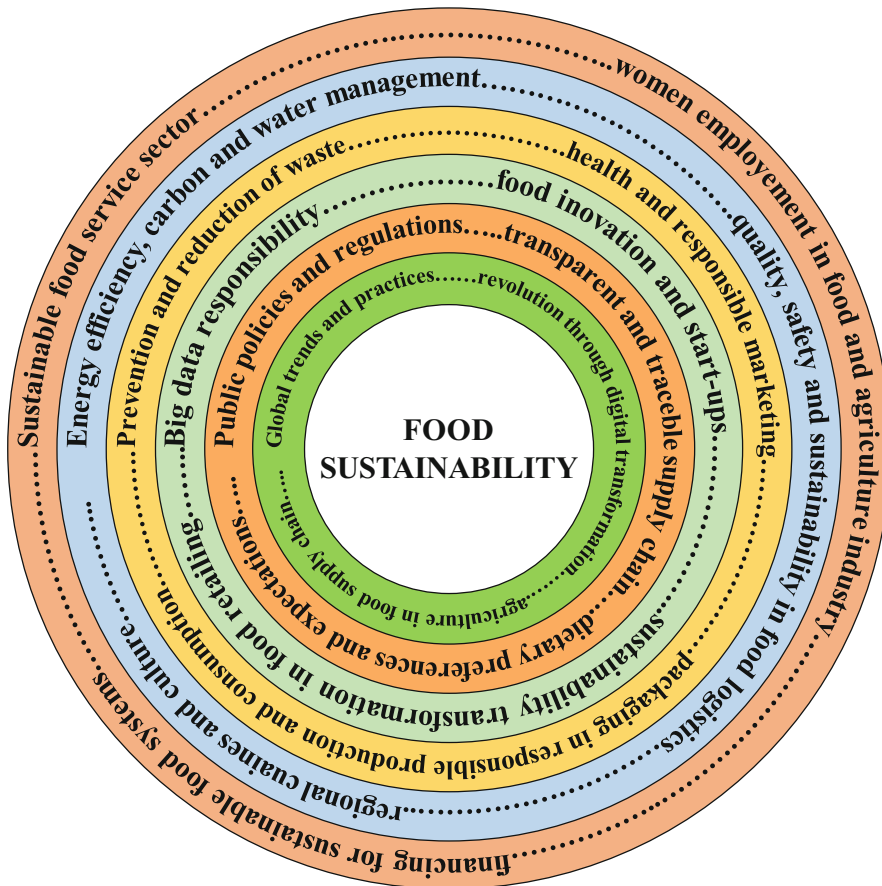
In Fig. 2, application areas on food sustainability are linked. In this context, it is noteworthy that the food industry has a tightly interconnected cosmopolitan structure. For example, it can be seen that the distribution of agricultural resources, labor management, the distribution of the labor force in the parameters of the demographic characteristics of the society, natural resource management, social responsibility studies, the association of food safety principles with culture, the impact of supply chain management on food safety, and consumer preferences to control global trends, innovation, environmental awareness, production efficiency, and many more elements have a role in the formation of the food cycle within the scope of food sustainability (Morone et al. 2019).

Similarly, since the food industry has many sub-branches such as meat and meat products,

dairy products, seafood products, bakery products, fruit and vegetable processing, vegetable oil and vegetable oil products, sugar industry products, pastry products, feed manufacturing, and other food products (Nikmaram and Rosentrater 2019). Therefore, the concept of sustainability can serve the same purpose in many areas of the industry (Lang and Barling 2012; Aiking and De Boer 2004). The concept itself is based on three fundamental dimensions such as economic, environmental, and social and is related to the implementation of innovative methods and principles that include developments in the food industry (Voytovych and Polyak 2019; Giddings et al. 2002). In this respect, food manufacturers are engaged in various activities to increase their production efficiency. As a result of interaction between sub-branches of the food industry, sustainable development has become a key issue in the food industry. Its principles of trying to ensure the welfare and productivity of the community in industrial production have contributed to an increase in consumer awareness about food consumption over time (Peano et al. 2019). Moreover, sustainability in food production is also critical to food safety and economic development. Food safety encompasses the whole process of production, from the raw materials to consumer consumption. Therefore, it has many variables, such as the quality of the raw materials used; hygiene on the production line; the positioning of equipment; prevention of cross-contamination; consistency in the product supply chain; and consumption. The economic dimension of sustainable development in the food industry, starting with a country's existing technical facilities and resource management, evaluates all activities from the perspective of issues such as income levels of labor, transfer of information from stakeholders in the industry, and improvement of the welfare of the country. It can therefore be inferred that the concept of sustainability can be applied to all areas of the food industry (Lubin and Esty 2010).

Innovation

Although there are a number of approaches that do not regard innovation as a concept in itself, it can



Sustainable Food Design and Innovation, Fig. 2 Comprehensiveness of the food sustainability (Eakin et al. 2017)

be stated that innovation is one of the most important factors in a company's success (Baregheh et al. 2009). Generally defined as the process of transforming innovative ideas into value-added outputs, it can be clearly understood by considering it as the implementation of new ideas, services, processes, and business models in order to create new, better-quality food products (Camisón and Villar-López 2014; Shepherd and Ahmed 2000).

Types of Innovation

It is not possible to assign the concept of innovation to a specific food field. The concept of innovation has a wide range of applications as well as a variety of food application areas. In order to be efficient in matching in the field of food and innovation, the concept of innovation can be

evaluated in four categories (Soto-Acosta et al. 2016) (Fig. 3).

These four categories are identified as follows (Ramirez et al. 2018; Oke 2007):

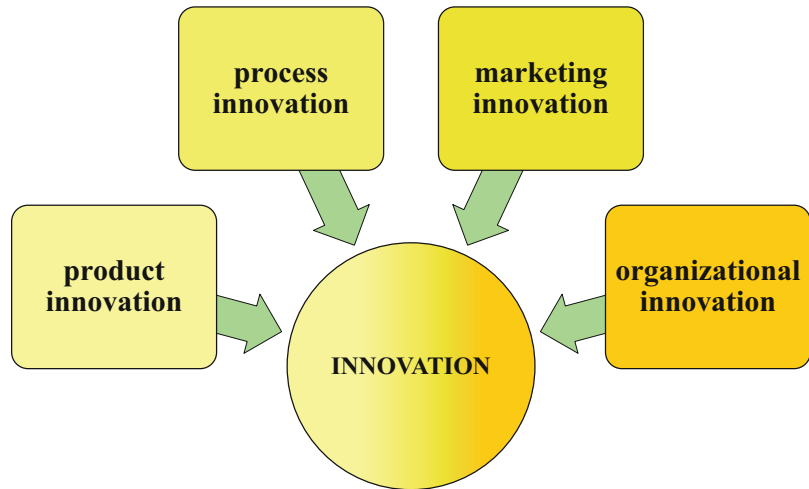
- Product innovation
- Process innovation
- Marketing innovation
- Organizational innovation

By following through with innovations in each of these areas, a food business can make sustainable production improvements.

Product Innovation Product innovation is the improvement of the current specifications of products or services, or the introduction of new products or services. It covers all changes made to the

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Fig. 3 Types of innovation



components or materials and equipment and to the user-oriented characteristics of the food product (Bloch 2007). For example, being a functional food, lactose-reduced milk or lactose-free milk for special nutritional purposes can be considered in this context. This product has been developed to prevent digestive disorders experienced when milk is drunk by consumers with lactose intolerance. It is possible to reduce bloating and gas complaints after consuming the product, as the milk sugar is broken down during the packaging phase with the natural lactase enzyme it contains (Ohlsson et al. 2017).

Process Innovation Process innovation is the name given to comprehensive innovations in the production method, including logistics processes. It also includes technological and software changes related to the technical infrastructure (Ramirez et al. 2018; Bloch 2007). One of the most striking examples of this is the Ford assembly line where production time was reduced from 12 h to 90 min per product. In the food field, freeze drying, one of the storage methods, can be considered within the scope of process innovation. Freeze drying takes place by first freezing the product, then lowering the pressure in the environment, and evaporating the water it contains before it becomes liquid. Meanwhile, most of the chemical and physical properties of the product are preserved. The fact that the process takes place

in completely closed and hygienic conditions is another advantage of the technique in terms of product quality and safety. In this way, it is advantageous for consumers who prefer organic, additive free, and hygienic foods such as fresh fruits and unprocessed foods (Duan et al. 2016).

Marketing Innovation Marketing innovation is a new marketing method that includes significant changes in product design, product positioning, product promotion, or pricing (Bloch 2007). Marketing innovation aims at increasing the sales of a company, responding to customer needs more successfully, and opening new markets or positioning a product in the market in a new way. For example, the name of the IKEA brand has often been associated with innovation. As the founder of the world of ready-to-assemble furniture products, IKEA has a wide product portfolio from food to furniture, from kitchen utensils to office supplies. When it comes to marketing innovation examples, it is one of the first companies that come to mind. Approaching its target audience with augmented reality technology in 2013, the company provided access to all its products. With its catalog application, the brand, which provides an effective service on how IKEA products will look in the living space of its target audience, has achieved a significant increase in product sales and has become one of the successful marketing innovation examples (Tronvoll et al. 2019).

Organizational Innovation Organizational innovation refers to improvements made to the structural, managerial, internal, and external relations of companies and organizations (Anzola-Román et al. 2018). For example, if the flow of information between employees causes delays or misunderstandings, an initiative may be implemented to ensure that employees have easy access to necessary information. The creation of a data network in a company that can be used by employees is an example of an organizational innovation. Another method supporting the concept of organizational innovation is the KAIZEN approach, which means continuous improvement (Suárez-Barraza et al. 2012; Paul Brunet and New 2003). The Kaizen approach emphasizes the necessity of staging interventions to achieve success. Time is the key criterion in this. When time is chosen as the improvement parameter, the process should be monitored accurately and carefully.

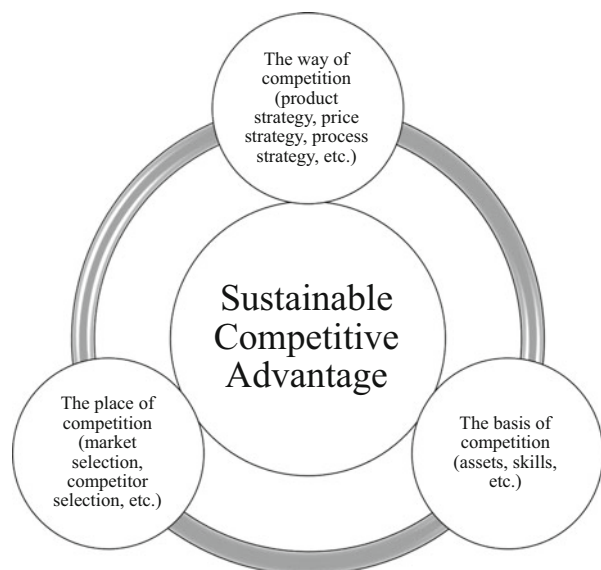
The Importance of Innovation and its Relationship with Sustainable Competitive Advantage
From the perspective of the food industry, customer demand dictates innovation rather than simply trying to reduce production costs (Liao and Tsai 2019). An example of this is the healthy snack industry. The market share of healthy

snacks has been increasing over time in the functional food market, which is developing rapidly alongside society's greater understanding of healthier nutrition (Vecchio and Cavallo 2019). When healthy snacks were first produced, customers judged them only on taste, color, and shape of the packaging (Togawa et al. 2019). Today, it is quite different due to the rapid expansion of the food product range. Since consumers can buy these products within approximately the same cost range, they can demand additional specifications (Crofton and Scannell 2020). Their demands may result in product improvements, such as biodegradable packaging.

The food industry is very competitive (Yang and Nie 2017). Companies need to consider operational efficiency while fulfilling the demands of customers. In this context, they try to provide high-quality products efficiently without creating waste. All of these efforts result in effective innovation outputs at the end of the food production cycle. Therefore, it is clear that companies need innovation in order to get a competitive advantage (Anzola-Román et al. 2018; Soto-Acosta et al. 2016; Ireland and Webb 2007). The importance and advantage of innovation for companies, whether they are food businesses or not, can be summarized as the relationship between the factors set out in Fig. 4.

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Fig. 4 Factors affecting sustainable competitive advantage (Hancıoğlu and Türkoğlu 2017)



In a globalized world, it is possible to gain a competitive advantage by creating the greatest additional value with minimum input. The best way to do this is innovation. Innovation from different perspectives (product, process, marketing, and organizational) will also serve sustainability in production. This can be achieved with sustainability-oriented innovation such as finding an innovative solution to disruption in a food product or production. Polyethylene (PE) material provides impermeability in paper-based food packaging materials and is used for consumption of beverages such as tea and coffee. Just as PE is not recyclable in nature, a PE-coated paper-based packaging material cannot also be recycled in nature. Unfortunately, this situation is contrary to the principles of sustainability in terms of environmental protection. The problem can be solved by coating the mentioned packaging materials instead of using PE with another biodegradable material, such as a bio-based lack, without compromising the quality of the packaging. This is an example of product and process innovation that can be given to the principle of sustainability. Thus, the paper packaging will be recycled many times by contributing to environmental protection and by avoiding depositing the PE-coated paper-based

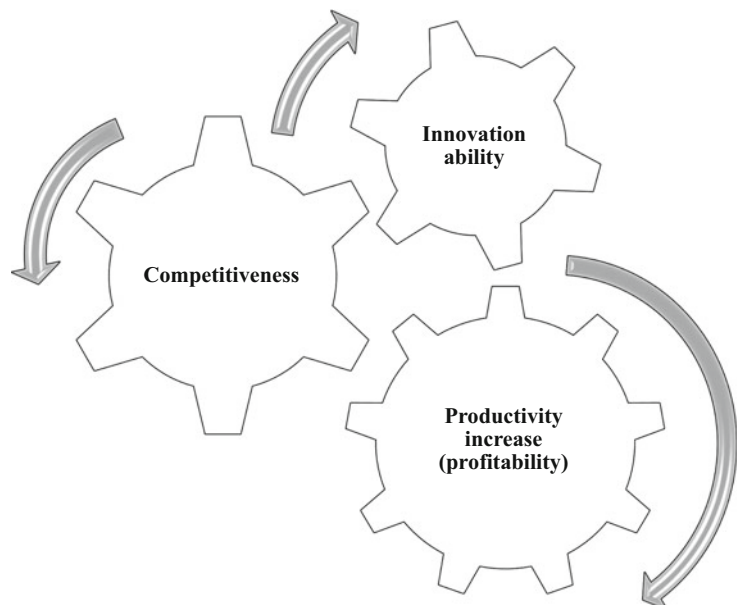
packaging materials in the environment as waste (Al-Tayyar et al. 2020).

Sustainability-oriented innovation brings a sustainable competitive advantage. Some of the advantages are maintained against competitors over a long time, while others can be immediately imitated (Lev 2017). Building the competitive advantage in this sense means building a wall around the company's position in a retail market (Lubit 2001). Establishing a sustainable competitive advantage will provide long-term financial returns to businesses. One of the determining factors in winning a competitive advantage in the food industry is whether a product is original and whether it can be easily imitated. Another decisive factor is how well an innovation can be implemented. Both have a positive and meaningful effect on sustainable competitive advantage. Moreover, competitiveness is not a static but a dynamic phenomenon (Fig. 5).

For retailers, the easiest way to differentiate themselves is to satisfy customers' needs and desires better than their competitors. The term customer satisfaction is different from customer service. Customer satisfaction is determined by whether the total shopping experience meets or exceeds customer expectations. It is the main determinant of customer loyalty and customer

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Fig. 5 The relationship between innovation, competitiveness, and productivity increase (Gupta et al. 2016)



retention and the creation of a valuable business organization (Novelli et al. 2006).

The majority of studies in this area have examined the food processing industry whereas there is little research on the relationship between innovation and sustainable competitive advantage in the service sector. In fact, this whole area has been hitherto neglected in the food and beverage industry (Mention 2011; Novelli et al. 2006).

Research and Development (R&D)

Research and development (R&D) is a systematic and creative work that is carried out to increase knowledge for use in new applications (Maruszewska and Strojek-Filus 2020). R&D helps businesses to focus on innovation. In the case of the food industry, R&D is considered a necessary resource for developing new food products, production techniques, and processes. The information obtained as a result of these activities is used for the creation of new markets, as well as for the development of new food products and production methods and is, therefore, a major factor in encouraging innovation and increasing competitiveness (Ferreira et al. 2017). Nowadays, R&D in the food industry is just as important as it is in any other industry. In fact, R&D awareness in industry generally tends to be more developed currently than in previous eras and is a key component of a country's economic growth (Wang et al. 2018). This awareness creates an opportunity for R&D to play an important role in innovative product design, which is increasingly necessary for success. In addition, the accumulation of technical and organizational knowledge as part of the R&D process helps to develop strategies for managing consumer behavior. Technical know-how increases the quality of food, while providing new products in response to changing consumption behaviors, thus providing competitive power to the food company (Soon and Saguy 2017). As a result of R&D activities, by reducing costs and ensuring product differentiation and quality, competitiveness is gained in price and in other product specifications. In other words, R&D can be regarded as an important tool for food

producers to gain a niche in the market or to increase their market share in the global competitive environment (Schot and Steinmueller 2018).

Food Design

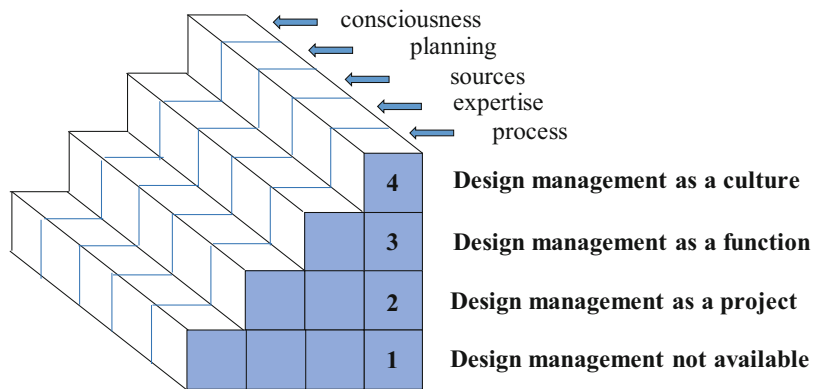
Food design is both a way of symbolizing a technical and aesthetic style and a way of differentiating a product. It also includes the processes used to solve problems and evaluate solutions proposed in the food production system (Namany et al. 2019). The most important point of food design, which brings together many fields of expertise, is to develop a product so that it can be obtained easily and cheaply without decreasing its nutritional value, while at the same time presenting it in a way that gives people happiness and pleasure.

Manufacturers are actually quite flexible and successful in keeping up with changes in the industry and responding to different consumer demands (Chan et al. 2017). It may be possible for a food product to quickly stand out among its competitors if it is practical, easy to transport, easy to store, and complies with regulatory standards (Kaleka and Morgan 2017). Today, businesses are looking for ways to establish an emotional relationship between the product and the consumer. Design can be considered as one of the tools in which this relationship can be established (Biderman 2017). Successful designs incorporate products and services that enhance the consumer's experience. In addition, fragmented markets force manufacturers to continually improve themselves in producing new models. The design is part of this process (Jagtap and Duong 2019).

Designers seek to offer more competitive products to customers by differentiating them on the basis of their aesthetic characteristics. Design is a competitive advantage that can be implemented in any industry. However, a systematic approach should be followed in order to gain a competitive advantage through design activities. Therefore, the competitive strategy of the company should firstly be clearly determined (Spink 2019). Next, design needs must be aligned with the company's strategy for remaining competitive. The design should include a product-specific approach, and

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Fig. 6 Design ladder model (Doherty et al. 2014)



consider data related to the product to be designed and environmental factors. Therefore, the company's design team will need to be in constant contact with other technical, financial, and management departments, depending on the nature of the product. This provides competitive advantage. Hence, design is a process that requires a systematic, planned approach (Fig. 6) (Biderman 2017).

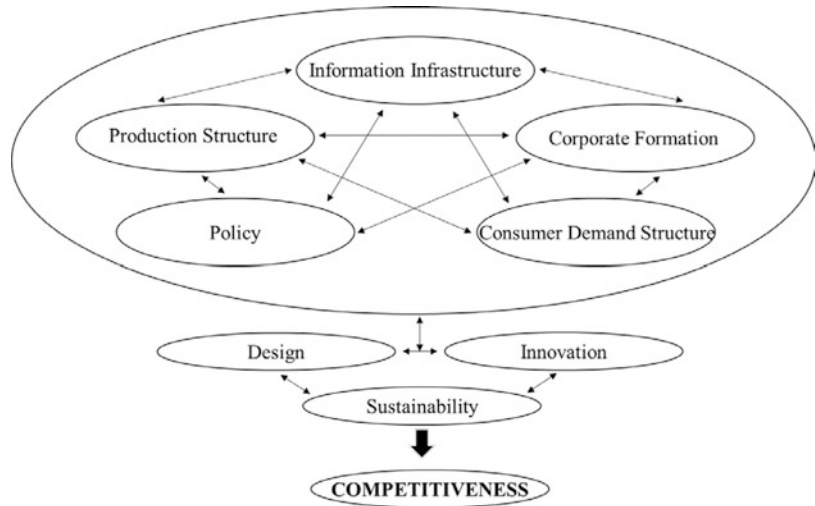
In the model set out in Fig. 6, there are four steps in total. In the first step, there is no awareness or planning or expertise with regard to design management. No resources have been allocated or processes created. In the second step, design management is considered as a product development project. At this stage, although awareness about design management is higher than the previous stage, the limited resources within the institution and the lack of regular communication among the departments signal that the processes have not yet been planned. In the third step, design management begins to be seen as part of the whole operation. Compared to the previous steps, communication between departments within the organization operates in a more planned way, while awareness levels and relationships between those responsible for production are moving towards a professional understanding. In addition, in this step, production is no longer product oriented. A process management approach is more evident than in the previous steps. In the last step, design management has started to become one of the important elements of the institution and at the center of many initiatives. Although the specialists working in the institution work in

different departments, they all have a certain knowledge of design. In this way, many other issues, such as financial management, access to resources, production, and efficiency analysis, are evaluated under the title of design management by specialists and the process is carried out in a planned manner (Bisantz et al. 2003).

In addition to the managerial approaches mentioned in respect of the concept of design, it is also useful to divide the food design concept into sub-disciplines, such as food design and food product design, and to explain the importance of design for food innovation. The concept of food design can be seen as a bridge between food and design. It can also be used to address different approaches to food in the innovation model (Zampollo 2016). Here, the concept of design is apparent to the producer and consumer at every stage, from production to consumption, from conservation to waste disposal. Food product design can be interpreted as handling the concept of food design on a more technical basis (Moskowitz et al. 2012). The aim here is to design new food product types on a scale that can be industrially produced. In other words, food product design relates to foods that are suitable for mass production, such as chocolate, pasta, and snack foods. The relationship between the unit operation process parameters applied to foods are examined in any new design of food properties. Among the parameters taken into consideration are melting, boiling, foaming, and mixing. The aim is to transform the qualities of the product in terms of temperature, color, texture, or stability in a way that will differ from previous versions.

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Fig. 7 Impact of design, innovation, and sustainability on competitiveness (Ferreira et al. 2017)



Unifying Factors Playing a Role in Achieving Competitiveness

The World Economic Forum has defined competitiveness as a business's superiority over their competitors in designing, producing, and pricing products and/or services (Gómez-Vega and Picazo-Tadeo 2019). In order to ensure efficiency in competition, factors related to the concept such as information infrastructure, production structure, policy, consumer demand structure, and corporate formation should be managed in an integrated manner (Fig. 7). As can be seen from the figure, the prominent factors to achieve successful competitiveness in food industry can be specified as sustainability, food design, and innovation (Berti and Mulligan 2016). Successful management of these three factors at both the pilot- and industrial-scale food productions will result in sustainable food innovation and, therefore, competitiveness.

Successful food production design also takes part among these factors at both the pilot and industrial scale, allowing for sustainable process innovation and, therefore, competitiveness. The competitiveness depends on many factors, such as R&D activities, industrial performance, the foreign trade surplus of countries, the availability of high-tech products, and the use of trained

human resources. It can be said that in order to gain competitiveness, all the resources of the enterprise should be brought together and effectively used.

Therefore, competitiveness within the scope of the food industry can be defined within the framework of increasing the living standards of society due to increases in food productivity, and by its contribution to the social welfare and competitiveness by forming a balancing harmony among the factors that are stated in Fig. 2 (Bredahl 2019). When these factors that take part in competitiveness are in harmony with each other, productivity increases and the industry can accelerate if there is efficient use of the country's export capabilities and natural resources (Sonmez Cakir and Adiguzel 2020). In other words, the ultimate goal of the competition strategy should be to comply with the competition rules and to change these rules for the benefit of the food business (Molden 2013). For example, if it is desired to develop an innovative food in a sustainable framework, the competencies of the enterprise in terms of corporate formation should be reviewed. Afterwards, consumer demands for this innovative approach are confirmed by conducting a market research. If there is a need for the product, the structure of production line within the enterprise is

reevaluated with a sustainability approach. In this regard, while the food is being produced, the design factors in the product itself and its production are applied. All steps from the production of the product to the consumer and even the disposal of waste are evaluated within the framework of sustainability. In this way, the concept of competitiveness arises for food production (Lev 2017; Ferreira et al. 2017).

Summary

Today, the concepts of design and innovation for sustainability in the food industry are a combination of small- and large-scale, short- and long-term, and technological and social innovations and improvements. These are important elements that create bridges in many areas, such as transportation, energy, agriculture, strategic planning, and implementation in the production processes planned to increase the welfare level of society. The current chapter emphasizes that food innovation positively and significantly affects sustainable competitive food advantages. In this context, it can be said that food businesses can achieve a sustainable competitive advantage through innovation, which plays a very important role in achieving production sustainability. It can be realized through innovations that increase customer satisfaction with regard to standard recipes of existing food products, innovations that increase food quality in existing products, and innovations that reduce raw material and production costs. In addition, effective design of food and food processes and the effective distribution of food are among the most important factors in achieving sustainability and effective productivity. The area of design and innovation for sustainability touches many food production areas, and the ability to organize and to manage these activities from a strategic perspective within the framework of the transformation of socio-technical systems reflects the knowledge and cultural level of the industry.

Cross-References

► Innovation

References

- Aiking, H., & De Boer, J. (2004). Food sustainability: Diverging interpretations. *British Food Journal*, 106 (5), 359–365.
- Akça, H. S. (2018). Ekonomikbüyümeveinovasyonilişkisi: Seçilmiş OECD ülkeleriüzerine panel verianalizi (Doctoral dissertation).
- Al-Tayyar, N. A., Youssef, A. M., & Al-Hindi, R. (2020). Antimicrobial food packaging based on sustainable Bio-based materials for reducing foodborne Pathogens: A review. *Food chemistry*, 310, 125915.
- Ala-Harja, H., & Helo, P. (2014). Green supply chain decisions—case-based performance analysis from the food industry. *Transportation Research Part E: Logistics and Transportation Review*, 69, 97–107.
- Anzola-Román, P., Bayona-Sáez, C., & García-Marco, T. (2018). Organizational innovation, internal R&D and externally sourced innovation practices: Effects on technological innovation outcomes. *Journal of Business Research*, 91, 233–247.
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), 1323–1339.
- Bayona-Saez, C., Cruz-Cázares, C., García-Marco, T., & García, M. S. (2017). Open innovation in the food and beverage industry. *Management Decision*.
- Belous, M. (2013). Functional foods—a New opportunity for food industry. *Scientific Works. Series C. Veterinary Medicine*, 59(3), 149–152.
- Berti, G., & Mulligan, C. (2016). Competitiveness of small farms and innovative food supply chains: The role of food hubs in creating sustainable regional and local food systems. *Sustainability*, 8(7), 616.
- Biderman, J. L. (2017). Embracing complexity in food, design and food design. *International Journal of Food Design*, 2(1), 27–44.
- Bisantz, A. M., Roth, E., Brickman, B., Gosbee, L. L., Hettinger, L., & McKinney, J. (2003). Integrating cognitive analyses in a large-scale system design process. *International Journal of Human-Computer Studies*, 58 (2), 177–206.
- Bloch, C. (2007). Assessing recent developments in innovation measurement: The third edition of the Oslo manual. *Science and Public Policy*, 34(1), 23–34.
- Bredahl, M. E. (2019). *Competitiveness in international food markets*. CRC Press.
- Busse, M., & Siebert, R. (2018). The role of consumers in food innovation processes. *European Journal of Innovation Management*, 21(1), 20–43.

- Camisón, C., & Villar-López, A. (2014). Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of Business Research*, 67(1), 2891–2902.
- Chan, A. T., Ngai, E. W., & Moon, K. K. (2017). The effects of strategic and manufacturing flexibilities and supply chain agility on firm performance in the fashion industry. *European Journal of Operational Research*, 259(2), 486–499.
- Ciccullo, F., Pero, M., Gosling, J., Caridi, M., & Purvis, L. (2020). When Sustainability Becomes an Order Winner: Linking Supply Uncertainty and Sustainable Supply Chain Strategies. *Sustainability*, 12(15), 6009.
- Crofton, E. C., & Scannell, A. G. (2020). Snack foods from brewing waste: consumer-led approach to developing sustainable snack options. *British Food Journal*, 122(12), 3899–3916.
- Doherty, B., Haugh, H., & Lyon, F. (2014). Social enterprises as hybrid organizations: A review and research agenda. *International journal of management reviews*, 16(4), 417–436.
- Duan, L., Guo, L., Dou, L. L., Zhou, C. L., Xu, F. G., Zheng, G. D., ... & Liu, E. H. (2016). Discrimination of Citrus reticulata Blanco and Citrus reticulata 'Chachi' by gas chromatograph-mass spectrometry based metabolomics approach. *Food chemistry*, 212, 123–127.
- Eakin, H., Connors, J. P., Wharton, C., Bertmann, F., Xiong, A., & Stoltzfus, J. (2017). Identifying attributes of food system sustainability: emerging themes and consensus. *Agriculture and human values*, 34(3), 757–773.
- Elias, M., & Marsh, R. (2020). Innovations in agricultural and food systems sustainability in California. *Case Studies in the Environment*, 4(1), 1–14.
- Ferreira, J. J., Fernandes, C. I., & Ratten, V. (2017). Entrepreneurship, innovation and competitiveness: what is the connection?. *International Journal of Business and Globalisation*, 18(1), 73–95.
- Fetullah, A. K. I. N. (2012). Gıda Ürünleri ve İçecek Sanayinin Ekonomik Özellikleri. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 14(3), 17–70.
- Giddings, B., Hopwood, B., & O'brien, G. (2002). Environment, economy and society: Fitting them together into sustainable development. *Sustainable Development*, 10(4), 187–196.
- Gómez-Vega, M., & Picazo-Tadeo, A. J. (2019). Ranking world tourist destinations with a composite indicator of competitiveness: To weigh or not to weigh? *Tourism Management*, 72, 281–291.
- Gupta, S., Malhotra, N. K., Czinkota, M., & Foroudi, P. (2016). Marketing innovation: A consequence of competitiveness. *Journal of Business Research*, 69(12), 5671–5681.
- Hancıoğlu, Y., & Türkoğlu, S. (2017). Değişen rekabet anlayışı ve sürdürülebilirliğin işletmeler üzerindeki etkileri ve BİST Sürdürülebilirlik Endeksi'ndeki işletmelerin etkinliğinin araştırılması. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, 16, 237–252.
- Heitmann, S., Robinson, P., & Povey, G. (2011). Slow food, slow cities and slow tourism. Research themes for tourism, 114–127.
- Ibrahim, Y. M., Hami, N., & Othman, S. N. (2019, September). Assessing of imbalance among economic, environmental and social sustainability: Evidence from oil and gas industry in Iraq. In *Journal of Physics: Conference Series* (Vol. 1294, No. 7, p. 072006). IOP Publishing.
- Ireland, R. D., & Webb, J. W. (2007). Strategic entrepreneurship: Creating competitive advantage through streams of innovation. *Business Horizons*, 50(1), 49–59.
- Jagtap, S., & Duong, L. N. K. (2019). Improving the new product development using big data: A case study of a food company. *British Food Journal*, 12(11), 2835–2848.
- Kaleka, A., & Morgan, N. A. (2017). Which competitive advantage(s)? Competitive advantage–market performance relationships in international markets. *Journal of International Marketing*, 25(4), 25–49.
- Kernbach, S., & Nabergoj, A. S. (2018). Visual design thinking: Understanding the role of knowledge visualization in the design thinking process. In 2018 22nd International Conference Information Visualisation (IV) (pp. 362–367). IEEE.
- Lang, T., & Barling, D. (2012). Food security and food sustainability: Reformulating the debate. *The Geographical Journal*, 178(4), 313–326.
- Lev, B. (2017). Evaluating sustainable competitive advantage. *Journal of Applied Corporate Finance*, 29(2), 70–75.
- Liao, Y. C., & Tsai, K. H. (2019). Innovation intensity, creativity enhancement, and eco-innovation strategy: The roles of customer demand and environmental regulation. *Business Strategy and the Environment*, 28(2), 316–326.
- Lindgren, E., Harris, F., Dangour, A. D., Gasparatos, A., Hiramatsu, M., Javadi, F., ... & Haines, A. (2018). Sustainable food systems – A health perspective. *Sustainability Science*, 13(6), 1505–1517.
- Lubin, D. A., & Esty, D. C. (2010). The sustainability imperative. *Harvard Business Review*, 88(5), 42–50.
- Lubit, R. (2001). The keys to sustainable competitive advantage. *Organizational Dynamics*, 29(3), 164–178.
- Lusk, J. L., & McCluskey, J. (2018). Understanding the impacts of food consumer choice and food policy outcomes. *Applied Economic Perspectives and Policy*, 40(1), 5–21.
- Maruszewska, E. W., & Strojek-Filus, M. (2020). Research and development in the service sector–vague definition and problematic application. *Management Systems in Production Engineering*, 28(1), 53–59.
- McCrickerd, K., & Forde, C. G. (2016). Sensory influences on food intake control: Moving beyond palatability. *Obesity Reviews*, 17(1), 18–29.

- Mention, A. L. (2011). Co-operation and co-opetition as open innovation practices in the service sector: Which influence on innovation novelty? *Technovation*, 31(1), 44–53.
- Messerli, P., Murniningtyas, E., Eloundou-Enyegue, P., Foli, E. G., Furman, E., Glassman, A., ... & Richardson, K. (2019). Global sustainable development report 2019: The future is now—science for achieving sustainable development.
- Molden, D. (Ed.). (2013). *Water for food water for life: A comprehensive assessment of water management in agriculture*. Routledge.
- Morone, P., Falcone, P. M., & Lopolito, A. (2019). How to promote a new and sustainable food consumption model: A fuzzy cognitive map study. *Journal of Cleaner Production*, 208, 563–574.
- Moskowitz, H. R., Beckley, J. H., & Resurreccion, A. V. (2012). *Sensory and consumer research in food product design and development*. John Wiley & Sons.
- Namany, S., Al-Ansari, T., & Govindan, R. (2019). Sustainable energy, water and food nexus systems: A focused review of decision-making tools for efficient resource management and governance. *Journal of Cleaner Production*, 225, 610–626.
- Nikmaram, N., & Rosentrater, K. A. (2019). Overview of some recent advances in improving water and energy efficiencies in food processing factories. *Frontiers in Nutrition*, 6, 20.
- Novelli, M., Schmitz, B., & Spencer, T. (2006). Networks, clusters and innovation in tourism: A UK experience. *Tourism Management*, 27(6), 1141–1152.
- Ohlsson, J. A., Johansson, M., Hansson, H., Abrahamson, A., Byberg, L., Smedman, A., ... & Lundh, Å. (2017). Lactose, glucose and galactose content in milk, fermented milk and lactose-free milk products. *International Dairy Journal*, 73, 151–154.
- Oke, A. (2007). Innovation types and innovation management practices in service companies. *International Journal of Operations & Production Management*, 27(6), 564–587.
- Olsen, N. V. (2015). Design thinking and food innovation. *Trends in Food Science & Technology*, 41(2), 182–187.
- Paul Brunet, A., & New, S. (2003). Kaizen in Japan: An empirical study. *International Journal of Operations & Production Management*, 23(12), 1426–1446.
- Peano, C., Merlino, V. M., Sottile, F., Borra, D., & Massaglia, S. (2019). Sustainability for food consumers: Which perception? *Sustainability*, 11(21), 5955.
- Ramirez, F. J., Parra-Requena, G., Ruiz-Ortega, M. J., & Garcia-Villaverde, P. M. (2018). From external information to marketing innovation: The mediating role of product and organizational innovation. *Journal of Business & Industrial Marketing*.
- Rao, S., Ahmad, A., Horsman, W., & Kaptein-Russell, P. (2001). The importance of innovation for productivity. *International Productivity Monitor*, 2(Spring), 11–18.
- Rinkinen, S., & Harmaakorpi, V. (2018). The business ecosystem concept in innovation policy context: Building a conceptual framework. *Innovation: the European Journal of Social Science Research*, 31(3), 333–349.
- Schot, J., & Steinmueller, W. E. (2018). Three frames for innovation policy: R&D, systems of innovation and transformative change. *Research Policy*, 47(9), 1554–1567.
- Shepherd, C., & Ahmed, P. K. (2000). From product innovation to solutions innovation: A new paradigm for competitive advantage. *European Journal of Innovation Management*, 3(2), 100–106.
- Sonmez Cakir, F., & Adiguzel, Z. (2020). Analysis of leader effectiveness in organization and knowledge sharing behavior on employees and organization. *SAGE Open*, 10(1), 2158244020914634.
- Soon, J. M., & Saguy, I. S. (2017). Crowdsourcing: A new conceptual view for food safety and quality. *Trends in Food Science & Technology*, 66, 63–72.
- Soto-Acosta, P., Simona P., & Daniel P. (2016). E-business, organizational innovation and firm performance in manufacturing SMEs: an empirical study in Spain. *Technological and Economic Development of Economy*, 22(6), 885–904.
- Spink, J. W. (2019). Marketing, competitive strategy, and competitive intelligence. In *Food fraud prevention* (pp. 479–500). New York: Springer.
- Suárez-Barraza, M. F., Ramis-Pujol, J., & Estrada-Robles, M. (2012). Applying Gemba-Kaizen in a multinational food company: A process innovation framework. *International Journal of Quality and Service Sciences*, 4(1), 27–50.
- Togawa, T., Park, J., Ishii, H., & Deng, X. (2019). A packaging visual-gustatory correspondence effect: Using visual packaging design to influence flavor perception and healthy eating decisions. *Journal of Retailing*, 95(4), 204–218.
- Tronvoll, B., Edvardsson, B., Möllerskov-Jonzon, M., & Innlandet, H. (2019). From customer feedback to innovation: The IKEA innovation journey from screws to click. *Service Innovation For Sustainable Business: Stimulating, Realizing and Capturing the Value from Service Innovation*, 75.
- Tukker, A., Charter, M., Vezzoli, C., Stø, E., & Andersen, M. M. (Eds.). (2017). *System innovation for sustainability 1: Perspectives on radical changes to sustainable consumption and production*. Routledge.
- Vecchio, R., & Cavallo, C. (2019). Increasing healthy food choices through nudges: A systematic review. *Food Quality and Preference*, 78, 103714.
- Voytovych, N., & Polyak, Y. (2019). The marketing innovation and the innovation technology in food industry enterprises. *Науковий вісник Львівського національного університету ветеринарної медицини та біотехнологій імені СЗ Гюсцького*, 21(92), 9–14.
- Wang, N., Phelan, P. E., Harris, C., Langevin, J., Nelson, B., & Sawyer, K. (2018). Past visions, current trends, and future context: A review of building energy,

- carbon, and sustainability. *Renewable and Sustainable Energy Reviews*, 82, 976–993.
- Yang, Y. C., & Nie, P. Y. (2017). Asymmetric competition in food industry with product substitutability. *Agricultural Economics*, 62(7), 324–333.
- Zampollo, F. (2016). What is food design? The complete overview of all food design sub-disciplines and how they merge. Published on Academia. edu on November, 23, 2016.
- Zhihong, F., & Yucheng, P. (2000). Green design for products. *Machine Design and Research*, 2, 45–47.

Sustainable Food Movement

► [Slow Food Movement and Sustainability](#)

Sustainable Food Processing

► [Traditional and New Sustainable Production Methods in Food Industry](#)

Sustainable Growth

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Synonyms

[Economic growth](#)

Definition/Description

Daly and Costanza argue, based on their analyses, that the concept of “sustainable growth” is a bad oxymoron which should be rejected (Costanza and Daly 1992; Daly 1990, 2010). Other

researchers have defined the concept in various ways. Traditionally, sustainable growth reflects the view of very weak sustainability position. It has meant the realistically achievable growth that a company or national economy could maintain without running into problems (MBN 2018). Today the term has two positions: weak and strong sustainability. Based on the neoclassical weak sustainability position, sustainable growth can continue as long as utility is not declined, the reduction of natural resources are replenished by the increase of the natural or produced resources (Turner 1993; Neumayer 2003), and the negative impact on environment is compensated by innovative technologies (Turner 1993). When the concept of sustainable growth is used by environmentalists and advocates a variant of strong sustainability position (Pezzey and Toman 2005; Turner 1993), the concept is seen as a synonym of economic growth (MBN 2018). They stress that sustainable growth can continue over the long term if intolerable pollution is not created or all the nonrenewable resources are not used up. In ecological sustainability (the second variant of strong sustainability position, Pezzey and Toman 2005; Turner 1993), it emphasized environmental protection in a global ecological, socioeconomic, and political context (Sharpley 2000). In this connection, the concept of sustainable growth means growth that is repeatable, ethical, and responsible to, and for, current and future communities (Miller 2018).

Introduction

All economic activity ultimately depends on services provided by nature. Business and the finance industry are starting to question how global environmental risks will affect the macroeconomic performance of countries, sectors, and financial markets, and policy-makers wonder how human beings will meet climate and sustainable development targets with declining nature and biodiversity. One major focal point is the rapid depletion of nonrenewable resources, especially fossil fuels, on which manufacturing is greatly dependent. However, not only nonrenewable

resources are in decline. While climate change is a growing threat, the main drivers of biodiversity decline continue to be the overexploitation of species, agriculture, and land conversion. The Living Planet Index has recorded an overall decline of 60% in species population sizes between 1970 and 2014 (Grooten and Almond 2018, p. 11). Although water scarcity is already a reality for some countries, it might even worsen due to the expected population growth and the resulting increase in production and consumption. This unsustainable lifestyle has led to the “ecological overshoot.” The term is used to describe when, at a global level, the ecological footprint is larger than biocapacity (WWF 2012, p. 8).

As scenarios illustrate, these trends will likely continue in the future if research results are not taken into account. In a business-as-usual scenario, global extraction of natural resources could further grow by more than 50% by 2030 compared to today’s situation (Giljum and Polzin 2009), and by 2050, humanity would require an equivalent of 2.9 planets to support the “business-as-usual” assumptions (WWF 2012, p. 100). With the phrase “business as usual,” it is referred to the normal conduct of business regardless of circumstances which pose a potential negative impact (BusinessDictionary 2018a).

The Brundtland Commission Report (WCED 1987) has made a great contribution by emphasizing the importance of sustainable development and in effect forcing it to the top of the agenda of the United Nations and the multilateral development banks. According to Daly (1990), the report addresses sustainable growth even if it does not use that concept. He argues that the concepts sustainable growth and sustainable development contradict one another, and therefore the concept of sustainable growth should be rejected as a bad oxymoron. He justifies his view stating that since the human economy is a subsystem of a finite global ecosystem which does not grow, even though it does develop, it is clear that the growth of the economy cannot be sustainable over long periods of time (Daly 1990).

Other researchers have put forward different views on the concept. The traditional definition

of the concept of “sustainable growth” expresses the ideas of “business as usual.” Sustainable growth means the realistically achievable growth that a company or national economy could maintain without running into problems (MBN 2018). The more modern definitions of the concept are based on environmental and ethical issues. The same core idea of intergenerational equity that future generations are entitled to at least as good a quality of life as the current generation has can be found from their background (Pezzey 1992). Otherwise, the conceptual definitions differ depending on the financial perspectives and the environmental and social perspectives underlying them.

Key Issues

The concept of “sustainable growth” is a controversial one. Researchers are disagreeing about what the concept of sustainable growth means and whether it can be used at all. Herman E. Daly discussed in his Commentary article “Towards some operational principles of sustainable development” the concepts of “sustainable growth” and “sustainable development” making distinction between the terms growth and development (Daly 1990). According to him, to grow means “to increase naturally in size by the addition of material through assimilation or accretion,” and to develop means “to expand or realize the potentialities of; bring gradually to a fuller, greater, or better state” (p. 1). Growth is thus a quantitative increase in physical scale, while development is the qualitative improvement or unfolding of potentialities.

Daly also argued that an economy can grow without developing, or develop without growing, or do both or neither. Based on his discussions, he concluded that “since the human economy is a subsystem of a finite global ecosystem which does not grow, even though it does develop, it is clear that growth of the economy cannot be sustainable over long periods of time” (Daly 1990, p. 1). Two years later, he and Costanza defined the concepts of growth and development. They stated that the former one means material increase in size

and the latter one improvement in organization without size change. Given these definitions, they concluded that growth cannot be sustainable indefinitely on a finite planet and that development may be sustainable within the given limits (Costanza and Daly 1992).

Later on Daly wrote (2010, p. 11):

Impossibility statements are the very foundation of science. ...By respecting impossibility theorems we avoid wasting resources on projects that are bound to fail. Therefore economists should be very interested in impossibility theorems, especially the one to be demonstrated here, namely that it is impossible for the world economy to grow its way out of poverty and environmental degradation. In other words, sustainable growth is impossible.

The conclusion of Daly’s and Costanza’s dictionary-based discussions is that the concept of “sustainable growth” should be rejected as a bad oxymoron (Costanza and Daly 1992; Daly 1990, 2010).

Other researchers have put forward different views giving various definitions to the concept (Table 1). The traditional definition of the concept “sustainable growth” reflects the technocentric and anthropocentric perspectives and very weak sustainability position. According to it, sustainable growth means the realistically achievable

growth that a company or national economy could maintain without running into problems (MBN 2018). It also means the right of the current generation to use nature and unfettered free market (Davies 2013). Growth is imperative for corporate success (Blanco and Sheffi 2015). There is clearly a trade-off between rapid economic growth today and growth in the future (Sequoia 2018). Rapid growth today may, however, exhaust resources and create environmental problems for current and future generations. People confront, e.g., the simultaneous challenges of growing disruption of the global climate, the depletion of vital resources such as fresh water and oil, and the massive and rapid extinction of animal and plant species around the world (Elgin 2010). Thus, the growth based on the view of very weak sustainability position is not sustainable.

The more modern definitions of the concept of “sustainable growth” include different views about its conceptual content and meaning reflecting the ideas of weak or strong sustainability position. Almost all approaches to sustainable growth or sustainable development contain the same core ethic of intergenerational equity that future generations are entitled to at least as good

Sustainable Growth, Table 1 Definitions of sustainable growth

Definitions	References
“Sustainable growth, traditionally, has meant the realistically achievable growth that a company or national economy could maintain without running into problems.”	MBN (2018)
“Sustainable growth is growth that can be maintained without exhausting future resources. There is a trade-off between rapid growth today and growth in the future; rapid growth today may exhaust the addressable market and make it impossible to sustain your product over a longer period of time.”	Sequoia (2018)
“Today the term sustainable growth is frequently used by environmentalists, meaning economic growth that can continue over the long term without creating intolerable pollution or using up all the non-renewable resources.”	MBN (2018)
“Sustainable growth means the level of growth that can be sustained (environmentally, economically and otherwise). . . . many authors writing on sustainability today presume that growth runs counter to sustainability, especially to the growth of population and to the economic growth (defined by standard economic measures such as GDP).”	Božuć (2015, p. 29)
Sustainable growth comprises next elements: Building up a competitive, low-emission economy; environmental protection; developing new, environmentally friendly technologies and methods of production; installation of efficient and “smart” energy networks; improving the conditions for the development of entrepreneurship; and supporting customers in making informed choices	EC (2018a)
“Sustainable growth means growth that is repeatable, ethical and responsible to, and for, current and future communities. It’s key to the long-term success of any business.”	Miller (2018)

a quality of life as the current generation has (Pezzey 1992). Unlike Davies (2013), Pezzey (1992) argued that one important part of sustainability not covered by the core ethic is that of intragenerational equity.

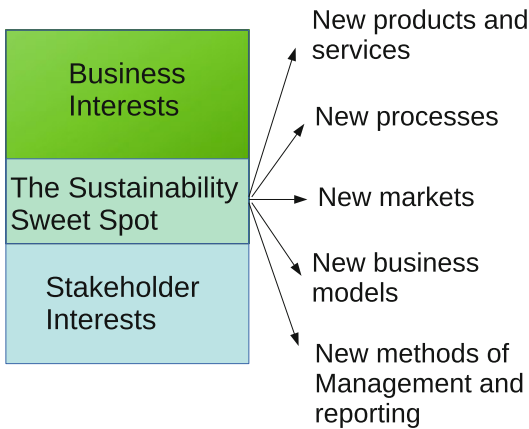
Different perspectives of sustainability have now been considered from the extreme anthropocentric to the extreme bio- or ecocentric positions, which are related to the criteria of very weak, weak, strong, and very strong sustainability. Very weak sustainability and weak sustainability have technocentric and anthropocentric perspectives based on the works of two neoclassical economists: Solow (1986, 1993) and Hartwick (1977, 1978). Based on the neoclassical views, it can be stated that sustainable growth can continue as long as total capital stock (utility) is not declined, the reduction of natural resources are replenished by the increase of the natural or produced resources (Turner 1993; Neumayer 2003), and the negative impact on environment is compensated by innovative technologies (Turner 1993). Sustainable growth can continue with free market focusing on produced capital (Davies 2013). The problem with this kind of views is that the resources that are most threatened are those without markets, for example, the receiving capacities of the oceans, atmosphere, and stratosphere and the greater part of the world's biological diversity (Pearce et al. 1994).

In environmental sustainability (a variant of strong sustainability position, Pezzey and Toman 2005; Turner 1993), the concept of "sustainable growth" is seen as a synonym of economic growth (MBN 2018). It is stressed that sustainable growth can continue over the long term if intolerable pollution is not created or all the nonrenewable resources are not used up. So, it is seen that sustainable growth is depending on environmental sustainability, and it is thus important to take into account such factors and practices which affect the quality of the environment (BusinessDictionary 2018b), the economic activities, and the quality of life of people on a long-term basis (Elkington 1994). The basic ideas behind environmentalism dictate that corporations have responsibilities that go beyond the

production of goods and services. These responsibilities involve helping to solve important social problems, especially those they have helped create (Peattie 1995). In the global economy, businesses ideas such as corporate social responsibility and socially responsible investment are gaining in importance (Janicka 2016). Corporate social responsibility is the responsibility of enterprises for their impact on society (EC 2017). Socially responsible investing is a strategy for investing individual- or institution-owned funds, which equally strive to maximize profits in achieving the social good (Grupa Lotos 2017).

In ecological sustainability (the second variant of strong sustainability position, Pezzey and Toman 2005; Turner 1993), it is stressed that sustainable development requires environmental protection in a global ecological, socioeconomic, and political context (Sharpley 2000). This idea is based on the phrase "triple bottom line" which was first articulated by Freer Spreckley in 1981 in his publication called *Social Audit – A Management Tool for Co-operative Working*. In this work, he argued that enterprises should measure and report on financial performance, social wealth creation, and environmental responsibility. Later on, the phrase "triple bottom line" was articulated more fully by John Elkington in 1994 and 1997. Elkington presented that businesses need to measure their success not only by the traditional bottom line of financial performance (profits, return on investment, or shareholder value) but also by their impact on the broader economy, the environment, and the society in which they operate (Elkington 1997, 1998).

Savitz and Weber added their perspective on the term sustainable growth in 2006 in their book, called *The Triple Bottom Line*, which advocates for a balanced focus on profit, people, and the planet. In its opening pages, they defined a sustainable corporation as one "that creates profit for its stakeholders while protecting the environment and improving the lives of those with whom it interacts." A sustainable corporation thus operates so that its business interests and the interests of environment and society intersect and benefits flow naturally to all stakeholders, including



Sustainable Growth, Fig. 1 The sustainability sweet spot. (Based on Savitz and Weber 2006)

employees, customers, business partners, the communities in which it operates, and its shareholders (Savitz and Weber 2006). This common ground of business is what they call the sustainability sweet spot (Fig. 1): “the place where the pursuit of profit blends seamlessly with the pursuit of the common good” (p. 21).

It is stressed today that sustainable growth is based on ecologically, socially, and ethically justified solutions (Ministry of Economic Affairs and Employment 2018). Sustainable growth means growth that is repeatable, ethical, and responsible to, and for, current and future communities (Miller 2018). According to the EC (European Commission), sustainable growth comprises the following elements (EC 2018a):

- Building up a competitive, low-emission economy that uses resources in rational and economical manner
- Environmental protection, including mainly the reduction of greenhouse gas emissions and preventing the loss of biodiversity
- Developing new, environmentally friendly technologies and methods of production
- Installation of efficient and “smart” energy networks, which will give additional competitive advantage to European business
- Improving the conditions for the development of entrepreneurship
- Supporting customers in making informed choices

EC has identified five main targets which should be accomplished by 2020 (EC 2018b):

- Employment
 - 75% of people aged 20–64 to be in work
- Research and development (R&D)
 - 3% of the EU’s GDP to be invested in R&D
- Climate change and energy
 - Greenhouse gas emissions 20% lower than 1990 levels
 - 20% of energy coming from renewables
 - 20% increase in energy efficiency
- Education
 - Rates of early school leavers below 10%
 - At least 40% of people aged 30–34 having completed higher education
- Poverty and social exclusion
 - At least 20 million fewer people in – or at risk of – poverty/social exclusion

The analysis of the above elements and targets indicates that current EU priorities focus on environmental protection, developing conditions conducive to the improvement of EU citizens’ knowledge and skills (leading to higher employment and reduced poverty), and business competitiveness (cf. Janicka 2016). These focuses are in line with the milestones of ecological sustainability which are eco-efficiency, eco-equity, and eco-effectiveness (Dyllick and Hockerts 2002). Eco-efficiency is focused on economic activity with regard to nature’s goods and services and stresses fundamental changes in the way societies produce and consume resources (UN 2009). Eco-equity stresses the equal rights of all peoples to environmental resources and social responsibility of the current generation for the future generations (Economics Online 2018). Eco-effectiveness in its part seeks solutions for ecological problems (UN 2009). It also has requirements concerning a shift of mindset and transformation of business models (Brooke 2000). One of the key business strategies for sustainable growth has taken the shape of green marketing. Green marketing is a business strategy where companies have concern for environmental protection and practice green

philosophy to run their marketing activities (Saxena and Khandelwal 2010).

Summary

In recent decades, global concern has emerged about the nonrenewability of natural resources as a factor limiting production and the threat to long-term economic growth caused by environmental destabilization and pollution. So, financial markets have started to realize the need to take into account an environmentally friendly approach and aspects of sustainable growth in their investment decisions. The difficult problem to be solved is how sustainable growth can be achieved, especially as the perceptions of researchers concerning the concept differ. Some scientists, e.g., Daly and Costanza, have argued that the whole concept must be rejected as a bad oxymoron. Others have considered it usable, but defined it differently depending on the starting points and perspectives.

Based on the neoclassical views, sustainable growth can continue as long as total capital stock is not declined, the reduction of natural resources is replenished by the increase of the natural or produced resources, and the negative impact on environment is compensated by innovative technologies. In strong sustainability position, environmentalists see the concept as a synonym of economic growth, and advocates of ecological sustainability in their part think that sustainable growth means growth that is repeatable, ethical, and responsible to, and for, current and future communities. The key issues in the contents and objectives defined by the European Commission for sustainable growth are environmental protection, improving the EU citizens' knowledge and skills and maintaining economic competitiveness.

Cross-References

- Degrowth
- Economic Sustainability
- Strong Sustainability
- Sustainable Development
- Weak Sustainability

References

- Blanco, E. E., & Sheffi, Y. (2015). Eco-growth: A framework for sustainable growth. ESD working papers; ESD-WP-2015-03, 1–27. Massachusetts Institute of Technology. Engineering Systems Division. <http://hdl.handle.net/1721.1/97643>. Accessed 30 Dec 2018.
- Bołtuć, P. (2015). Sustainability and growth – A study in environmental epistemology. *Zeszyty Naukowe Politechniki Śląskiej, Organizacja i Zarządzanie*, 84, 27–48.
- Brooke, C. (2000). A framework for evaluating organizational choice and process redesign issues. *Journal of Information Technology*, 15, 17–28.
- BusinessDictionary. (2018a). What is business as usual? Definition and meaning. <http://www.businessdictionary.com/definition/business-as-usual.html>. Accessed 19 Dec 2018.
- BusinessDictionary. (2018b). What is environmental sustainability? Definition and meaning. <http://www.businessdictionary.com/definition/environmental-sustainability.html>. Accessed 3 Dec 2018.
- Costanza, R., & Daly, H. E. (1992). Natural capital and sustainable development. *Conservation Biology*, 6(1), 37–46.
- Daly, H. E. (1990). Towards some operational principles of sustainable development. *Ecological Economics*, 2, 1–6.
- Daly, H. E. (2010). Sustainable growth: An impossibility theorem. In J. Dawson, R. Jackson, & H. Norberg-Hodge (Eds.), *Gaian economics, living well within planetary limits* (pp. 11–16). Hampshire: Permanent Publications.
- Davies, G. R. (2013). Appraising weak and strong sustainability: Searching for a middle ground. *Consilience: The Journal of Sustainable Development*, 10(1), 111–124.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11, 130–141.
- Economics Online. (2018). Sustainable growth. http://www.economicsonline.co.uk/Managing_the_economy/Sustainable_growth.html. Accessed 15 Dec 2018.
- EC (European Commission). (2017). Corporate social responsibility (CSR). http://ec.europa.eu/growth/industry/corporate-social-responsibility_en. Accessed 19 Dec 2018.
- EC (European Commission). (2018a). The European semester. https://ec.europa.eu/info/publications/180308-action-plan-sustainable-growth_en. Accessed 15 Dec 2018.
- EC (European Commission). (2018b). Europe 2020 strategy. https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_en#featuresofthetargets. Accessed 15 Dec 2018.
- Elgin, D. (2010). Simplicity: A cool lifestyle for a hot planet. In J. Dawson, R. Jackson, & H. Norberg-

- Hodge (Eds.), *Gaia economics, living well within planetary limits* (pp. 121–126). Hampshire: Permanent Publications.
- Elkington, J. (1994). Towards the sustainable corporation: Win-Win-Win business strategies for sustainable development. *California Management Review*, 36(2), 90–100. <https://doi.org/10.2307/41165746>.
- Elkington, J. (1997). *Cannibals with forks – Triple bottom line of 21st century business*. Stoney Creek: New Society Publishers.
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st century business. *Environmental Quality Management*, Autumn, 1998, 37–51.
- Giljum, S., & Polzin, C. (2009). Resource efficiency for sustainable growth: Global trends and European policy scenarios. Background paper for the International conference on green industry in Asia – Managing the transition to resource-efficient and low-carbon industries. Manila, Philippines, 9–11 September 2009. http://old.seri.at/documentupload/SERI%20PR/giljum_manila_resource_efficiency_background_paper.pdf. Accessed 19 Dec 2018.
- Grooten, M., & Almond, R. E. A. (Eds.) (2018). *WWF 2018. Living planet report – 2018: Aiming higher*. Gland: WWF. ISBN: 978-2-940529-90-2. <https://wwf.fi/mediabank/11561.pdf>. Accessed 19 Dec 2018.
- Grupa Lotos. (2017). Responsible investments. (In Polish.) http://inwestor.lotos.pl/1062/strefa_inwestora/odpowiedzialne_inwestycje. Accessed 19 Dec 2018.
- Hartwick, J. M. (1977). Intergenerational equity and the investing of rents from exhaustible resources. *The American Economic Review*, 67(5) 972–974. http://lib.cufe.edu.cn/upload_files/other/4_20140527033434_50_hartwick.pdf. Accessed 27 Nov 2018.
- Hartwick, J. M. (1978). Substitution among exhaustible resources and intergenerational equity. *The Review of Economic Studies*, 45(2), 347–354. <https://doi.org/10.2307/2297349>. Accessed 27 Nov 2018.
- Janicka, M. (2016). Financial markets and the challenges of sustainable growth. *Comparative Economic Research*, 19(2), 27–41. <https://doi.org/10.1515/cer-2016-0011>. <https://content.sciendo.com/view/journals/cer/19/2/article-p27.xml>. Accessed 15 Dec 2018.
- MBN (Market Business News). (2018). What is sustainable growth? Definition and meaning. <https://marketbusinessnews.com/financial-glossary/sustainable-growth-definition-meaning/>. Accessed 15 Dec 2018.
- Miller, R. (2018). What does sustainable growth really mean? <https://www.forbes.com/sites/rickmiller/2018/08/16/what-does-sustainable-growth-really-mean/#6fc197537a98>. Accessed 15 Dec 2018.
- Ministry of Economic Affairs and Employment. (2018). MEAE guides and other publications 15. <http://urn.fi/URN:ISBN:978-952-327-372-6>. Accessed 15 Dec 2018.
- Neumayer, E. (2003). *Weak versus strong sustainability: Exploring the limits of two opposing paradigms*. Cheltenham/Northampton: Edward Elgar Publishing. <https://doi.org/10.4337/9781781007082>.
- Pearce, D., Turner, R. K., O'Riordan, T., Adger, N., Atkinson, G., Brisson, I., Brown, K., Dubourg, R., Fankhauser, S., Jordan, A., Maddison, D., Moran, D., & Powell, J. (1994). *Blueprint 3: Measuring sustainable development*. London: Earthscan.
- Peattie, K. (1995). *Environmental marketing management: Meeting the green challenge*. London: Pitman.
- Pezzey, J. (1992). *Sustainable development concepts: An economic analysis* (World Bank environment paper, 2). Washington, DC: The World Bank. https://www.researchgate.net/publication/243768263_Economic_Analysis_of_Sustainable_Growth_and_Sustainable_Development. Accessed 17 Dec 2018.
- Pezzey, J. C. V., & Toman, M. A. (2005). Sustainability and its economic interpretations. In R. D. Simpson, M. A. Toman, & R. U. Ayres (Eds.), *Scarcity and growth: Natural resources and the environment in the New Millennium* (pp. 121–141). Washington, DC: RFF Press. <http://people.anu.edu.au/jack.pezzey/PezzeyToman2005.pdf>. Accessed 3 Dec 2018.
- Savitz, A., & Weber, K. (2006). *The triple bottom line: How today's best-run companies are achieving economic, social and environmental success – And how you can too*. San Francisco: Jossey-Bass.
- Saxena, R., & Khandelwal, P. K. (2010). Can Green marketing be used as a tool for sustainable growth? A study performed on consumers in India – An emerging economy. *The International Journal of Environmental, Cultural, Economic and Social Sustainability*, 6(2), 277–291. ISSN 1832-2077. <https://ro.uow.edu.au/dubaipapers/96/>. Accessed 18 Dec 2018.
- Sequoia. (2018). Sustainable product growth. <https://www.sequoiacap.com/article/sustainable-product-growth>. Accessed 15 Dec 2018.
- Sharpley, R. (2000). Tourism and sustainable development: Exploring the theoretical divide. *Journal of Sustainable Tourism*, 8(1), 1–19.
- Solow, R. (1993). An almost practical step toward sustainability. *Resources Policy*, 162–172. https://haskayne.ualgary.ca/files/haskayne/RobertSolow_AnAlmostPracticalStepTowardSustainability_Sep93.pdf. Accessed 23 Nov 2018.
- Solow, R. M. (1986). On the intergenerational allocation of natural resources. *Scandinavian Journal of Economics*, 88(1), 141–149. <https://doi.org/10.2307/3440280>.
- Spreckley, F. (1981). *Social audit: A management tool for Co-operative working*. Leeds: Beechwood College. <http://www.setoolbelt.org/resources/1929>. Accessed 19 Dec 2018.
- Turner, R. K. (1993). Sustainability: Principles and practice. In R. K. Turner (Ed.), *Sustainable environmental economics and management: Principles and practice* (pp. 3–36). London: Belhaven Press.
- UN (United Nations). (2009). Eco-efficiency indicators: Measuring resource-use efficiency and the impact of economic activities on the environment. United Nations Economic and Social Commission for Asia and Pacific, Environment and Development Policy Section, Environment and Development Division. <https://sustainabledevelopment.un.org/content/documents/785eco.pdf>. Accessed 5 Dec 2018.

WCED (World Commission on Environment and Development). (1987). Report of the World Commission on Environment and Development: Our common future. UN documents gathering a body of global agreements. <http://www.un-documents.net/wced-ocf.htm>. Accessed 27 Oct 2018.

WWF (World Wildlife Fund). (2012). Living planet report 2012. Biodiversity, biocapacity and better choices. http://d2ouvy59p0dg6k.cloudfront.net/downloads/lpr_living_planet_report_2012.pdf. Accessed 19 Dec 2018.

Sustainable Growth Cycle

► Lifecycle of Sustainable Development

Sustainable Happiness

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Definition

Sustainable happiness is a wide concept. It characterizes conditions under which happiness, understood broadly as a mental state, attitude, and functioning, is individually and collectively secured or enhanced in the long run while preserving the natural and social environment. Thus, happiness is sustainable in two ways. First of all, it is sustainable *qua* happiness, namely, it characterizes situations where the individual or community is flourishing in the long term. Put differently, happiness achievement in the short run does not impair its realization in the future. Second, such happiness spares social and natural resources, namely, it minimally guarantees an equivalent access to these resources for the future generations. In other words, happiness is at least compatible, at best conducive, to sustainability understood as the preservation of economic, social, and environmental resources necessary for the satisfaction of future generations. The assumption of sustainable happiness is

that these two dimensions are intimately correlated.

Introduction

For the last two decades, the interest in happiness has been swelling in industrialized countries. The reasons are multiple. On the one hand, it expresses deep concerns for quality of life, especially as reported by the individuals themselves, in a period of limited resources. Since the mid-1970s, growth in advanced economies has been stagnating, well under its level during the 1950s to early 1970s period. The impact of limited resources and economic instability became prominent after the 2008 crisis. At this point of time, individuals, organizations, communities, and governments have started to investigate how to maintain well-being in a languishing economy.

The idea spread that human beings cannot rely on indefinite, high-paced expansion of goods and services for securing their quality of life. Deeper worries also build up about the distinction between needs and wants, between what is necessary and superfluous for leading, if not a good but at least, a contented life. The core argument has been that market and capitalist economies have overall performed very well for satisfying needs, but at the price of inflating waste, nurturing superfluous preferences, and so forth.

This stream of concerns has generated a tremendous number of studies, articles and books, official reports, and so forth. The academic research on happiness has developed throughout various fields such as psychology, economics, sociology, philosophy, or public policy, involving prominent authors such as Ed Diener, Richard E. Easterlin, Robert Frank, Bruno Frey, Daniel Gilbert, John F. Helliwell, Daniel Kahneman, Richard Layard, Martin Seligman, or Ruut Veenhoven. Governments and international organizations have investigated different approaches of well-being measurement, e.g., the Commission on the Measurement of Economic Performance and Social Progress, or Stiglitz-Sen-Fitoussi Commission, in France, OECD with its *Guidelines on Measuring Subjective Well-being* published in 2013. The United Kingdom and

Japan conducted their own work. The annual *World Happiness Report* edited by John F. Helliwell, Richard Layard, and Jeffrey Sachs illustrates the popularity of the topic.

On the other hand, the period that opens with the 1990s has witnessed soaring concerns about a second set of pressing issues: climate change and sustainability. The United Nations Conference on Environment and Development in Rio (1992) and the ensuing Conferences of the Parties (COP) under the United Nations Framework Convention on Climate Change (UNFCCC) constitute prominent examples of the rise. The economic model based on indefinite growth, criticized for its inability to generate lasting, i.e., sustainable, satisfaction, was equally accused of being unsustainable, wasting natural resources, and altering the climate dangerously.

This context characterized by growing concerns about quality of life and environmental sustainability explains the emergence of the, still developing, field of sustainable happiness. More than a unified domain, it refers to a concept that is in use among a porous network of activists, researchers, and policy makers for describing diverse approaches.

As a first approximation, sustainable happiness can be defined as “the pursuit of happiness that does not exploit other people, the environment, or future generations” (O’Brien 2008). This definition contains two facets: first, happiness that perpetuates itself (or its possibility), and second, happiness that preserves the natural and social environment. This links concerns for sustainability expressed by the Brundtland Commission (1983–1987), the United Nations Conference on Environment and Development in Rio (1992), and the Agenda 21 to worries about well-being initiated by Richard A. Easterlin works (1974).

Sustainable Happiness-es

On the one hand, happiness is sustainable *per se*, viz. as happiness. Happiness is a concept that allows different interpretations and covers a large variety of dimensions. The academic

literature identifies four main conceptions: hedonia, mood theory, life satisfaction, and eudaimonia.

Hedonia boils down to maximizing pleasant experiences and minimizing unpleasant ones. It is constituted by the sum of mental states, i.e., a matter of positive and negative effects. A happy life describes a life where individuals *feel good*. Etymologically, it originates from *hēdonē*, which in old Greek means “pleasure.” Articulated by Jeremy Bentham, modern hedonism deeply influenced early utilitarianism and economics (e.g., Stanley Jevons, Francis Edgeworth). Coupled with life satisfaction, this conception is the most popular among psychologists.

The second formulation is the mood theory as advanced by Daniel Haybron (2008) which distinguishes central emotional states from peripheral ones. The former, which constitute the mood, are more enduring than the latter, which characterize hedonia. They last longer than fleeting experiences of pleasures and pains. They are more robust and, moreover, more intimately connected to one’s sense of identity. In sum, they are dispositions capturing the psychological inclination of individuals, i.e., their propensity to undergo rather positive or negative effects, as well as some deep traits, for instance, openness, conscientiousness, extraversion, agreeableness, and neuroticism.

The third conception is life satisfaction. Contrary to the former two, which are based on mental states, life satisfaction is an appraisal of one’s life. Social scientists use self-assessments for evaluating it. They survey people about how happy or satisfied they feel with their life in general (life satisfaction) or with some dimensions such as job, marital, health, and relationship (domain satisfaction). It is therefore a construct. When respondents are asked how satisfied they are with their whole life or parts of it, they are requested to undertake a cognitive reconstruction. The result takes the form of a numerical assessment on a X-point scale (X usually varying from 3 to 10).

Combined with hedonia, life (or domain) satisfaction is the dominant conception among psychologists and social scientists such as Ed Diener. It is also the most commonly used for large-scale

surveys. Although Richard Layard (2005) defines happiness as “feeling good,” therefore as hedonic, his reliance on self-assessment suggests that his conception is closer to life satisfaction. Furthermore, satisfaction is usually aggregated with positive and negative effects (hedonic dimension) for creating subjective well-being, which is a composite indicator.

The last conception is eudaimonia (from the old Greek, *eu* – , “good,” “true,” and – *daimon*, “spirit”). It originates from Aristotle’s *Nicomachean Ethics* (2009), where eudaimonia is identified with the realization of higher faculties and virtues. It has been particularly influential on virtue ethics, which judges actions and states of the world insofar as they are in accordance with underlying moral virtues (e.g., generosity, courage, and honesty). While the other three conceptions are subjective, eudaimonia was initially (and is still often) interpreted as an “objective” approach, namely, that an outside observer could evaluate one’s happiness by using a list of objective achievements.

Throughout time, eudaimonia has lost some of its “objective” character. It gradually started to be identified with self-accomplishment while some of its focus on higher faculties and virtues faded away. It still relates to the realization by an individual of an ideal good life or some individual potentialities. However, the stress is less on the realization of absolute virtues and more on flourishing based on one’s specific skills and values or more generally adequate functioning. Due to its connection with the good life, the eudaimonic conception has been particularly prevalent in philosophy (e.g., Julia Annas, Richard Kraut), while less popular in psychology despite some prominent representatives such as Martin Seligman’s authentic happiness (Seligman 2002), Alan Waterman, or the self-determination theory (Ryan and Deci 2017).

In that context, sustainable happiness, *qua* happiness that perpetuates itself (or its possibility), seems *a priori* incompatible with pure hedonic enjoyment, since pleasures (and pains) constitute fleeting experience, and it is very unlikely that individuals can maintain a condition of unfading hedonia. To the contrary, moods, satisfaction, and

eudaimonia possess more this much persisting characteristic.

Sustainable happiness stands at odds with behaviors that do not bring enduring positive mental states (moods), satisfaction, or functioning. Its qualities should be consistent with a robust experience that extends through time, while allowing variations for obvious reasons (no life can only be loaded with satisfaction, positive psychological dispositions, or constant flourishing).

In that sense, the pursuit of immediate gratification, frequently associated with hedonia, might turn out to be incompatible with sustainable happiness because it might divert individuals from different, but more enduring, positive experience (e.g., in relation to the development of one’s capacities). For instance, sustainable happiness could be understood as objecting to the quest for materialistic values, since such values are correlated with poor mental health in psychological research (Kasser 2002).

Despite these limits, hedonia remains crucial for sustainable happiness since it is dubious that a life packed with constant or recurrent, intense, pain is worth living. Whereas hedonia cannot be *the* core conception of sustainable happiness, it is still key for its accomplishment. In sum, if sustainable happiness cannot be reduced to hedonic experience, the absence of overwhelming negative mental states appears to be a prerequisite.

Sustainable Happiness As Sustainability

On the other hand, it refers to happiness respectful of people and the nature. This dimension articulates a critique of an economic model based on mass production with little regard for the preservation of natural resources and human dignity. Conspicuous consumption, in which large amounts of resources are wasted in the sake of relative standing and status seeking, epitomizes unsustainability from both happiness and social-environmental sides.

The central claim is that any step for improving individuals’ mental state, attitude, and functioning in the present should take seriously the overall impact on the Earth and other human beings. In

short, well-being cannot be conceived as an egoistic quest and should include wider considerations. Even at the individual level, an eye should always be kept on the quality of life of the immediate and more distant communities and generations.

Sustainable happiness can be understood in a broader context characterized not only by global issues (e.g., poverty and climate change), but also by a growing discontent since the Great Recession toward a specific economic model. Since the late 2000s, an increasing number of people have started to challenge the view of development funded on mass production and consumption with severe pollution, resource depletion, and exploitation.

Sustainable happiness tackles the very idea that quality of life directly depends on constant material expansion. The core assumption is that it is possible to combine sustainability in a large sense (including economic, social, and environmental aspects) with the maintenance, or even enhancement, of well-being. This postulate contradicts conceptions of development that strictly tie improved living standards with rising affluence.

In addition, sustainable happiness is grounded on the view that well-being does not result from an individual enterprise led in isolation from a community and global issues. It is a collective endeavor, which requires people to use resources with parsimony, cooperate, and avoid producing externalities (i.e., costs imposed on others in terms of resource depletion, pollution, exploitation, abuses, and so forth). It deepens the contrast with economic growth as it has presumably been undertaken from the onset of industrialization in the nineteenth century, with the drastic acceleration since the afterwar period. To that respect, sustainable happiness claims to figure or participate to a necessary paradigmatic or civilizational shift.

The Easterlin Paradox

Therefore, sustainable happiness merges sustainable development as coined by the Brundtland Commission (“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

[World Commission on Environment and Development 1987]) with the happiness studies that followed the Easterlin paradox.

The Easterlin (or happiness) paradox has been proposed by the economist and historian Richard A. Easterlin (1974). The paradox tackles the correlation between economic growth (captured by the Gross Domestic Product) and happiness (approximated by satisfaction). It posits that, although wealth and satisfaction are strongly correlated within countries and moderately correlated in comparisons between countries, longitudinal, national, studies (e.g., Japan and the USA) do not show any significant improvements of happiness over time despite tremendous economic growth.

The paradox has generated a fair amount of methodological, economic, social, and political controversies (Deaton 2013), some being rather technical. In substance, the main objections are that happiness, even under the form of satisfaction, is not a reliable indicator of people’s quality of life (individual self-assessments would be “tainted” in one way or another), that a correlation exists between happiness (or quality of life) and material affluence, and, finally, that even if such correlation is absent nothing can, or should, be done about it. In sum, the normative implications would be thin or inexistent.

Nonetheless, the paradox had supported skepticism toward capitalist and market economies. It has been interpreted as the proof that “money doesn’t or can’t buy happiness.” The direct consequence would be that citizens and institutions should change the scope of their efforts, pursuing other objectives than becoming wealthier. Beyond the debates on society models, the paradox has nurtured more targeted, concrete approaches, such as Robert Frank’s proposition to implement an incremental tax on consumption (Frank 1999). The assumption is that if economic growth fails to deliver happiness, at least when considering industrialized countries through time, it is due to a sizable part of the wealth being used for conspicuous spending, positional goods, and so forth. Individuals in developed nations would waste money trying to assert their status by unnecessary expenditures that do not bring lasting satisfaction.

Along this paradox, sustainable happiness aims at contributing to societies where well-

being can be secured without jeopardizing such security for other people and future generations. For achieving this goal, a large diversity of instruments and policies can be mobilized. Although the field is still in its infancy, there are already initiatives for rethinking urban planning, educational curricula, methods of governance, quality of life indicators, waste management (e.g., with upcycling), and so forth. Individual autonomy and endorsement of a sustainable approach are especially underlined, which rules out too strict constraints and top-down solutions despite the fact that sustainable happiness clearly articulates individual and collective dimensions.

Various initiatives, not always explicitly associated with sustainable happiness, express the same concerns for sustainable development coupled with well-being (approximated by concepts such as well-being, happiness, and so on). One is the *Happy Planet Index* proposed by the New Economics Foundation. It is a composite indicator combining measurements of life satisfaction, life expectancy, and equality in relation to the ecological footprint of (usually) a country. Another instance is Bhutan's *Gross National Happiness Index*. It is also a composite indicator that monitors nine domains (living standards, health, education, good governance, ecological diversity and resilience, time use, psychological well-being, cultural diversity and resilience, and community vitality) through encompassing surveys of 148 questions (Centre for Bhutan Studies and GNH Research 2016).

Along with other concepts and initiatives, sustainable happiness is still in the making. Thus, its potential implications and impacts on the socioeconomic organization of our societies are not obvious yet. Many of these outcomes may unfold in the year to come depending on the concrete projects that will be led. Nonetheless, it could be objected against the whole demarche that by focusing on voluntary reforms at the individual and community level, it fails to measure up to the global issues of climate change or pollution. Due to the magnitude and seriousness, it might be argued that the only workable solutions are constituted by public intervention under the form of international agreements, state regulation, and coercion. However, sustainable happiness and

more “command and control” approaches are not mutually exclusive. They could even be designed in a self-reinforcing manner.

Summary

Sustainable happiness captures the two-pronged objective of enduring well-being in the respect of the social and natural environment. The first objective is to promote forms of happiness that could be sustained in the long run. While overwhelmingly negative hedonic experience can be an obstacle, the enduring forms of happiness relate to moods, satisfaction, and individual flourishing. The second objective is to promote happiness in a manner that is respectful of the future generations and of the environment. Therefore, sustainable happiness offers a response of global challenges such as climate change, pollution, economic exploitation, and quality of life. It is part of a more ambitious project, which is of reforming the economic model inherited from industrialization. The aim is to revamp institutions and governance, and educate citizens, so they understand more clearly what lasting well-being entails in a world of limited resources. Despite its intention, sustainable happiness remains in the making and could be criticized as not fully measuring up to the seriousness and extent of the global issues it tackles.

Cross-References

- [Brundtland Report](#)
- [Climate Ethics](#)
- [Conspicuous Consumption/Positional Goods](#)
- [Earth Summit](#)
- [Eudaimonic Management](#)
- [Sustainable Development](#)

References

- Aristotle. (2009). *Nicomachean ethics*. Oxford and New York: Oxford University Press.
- Centre for Bhutan Studies & GNH Research. (2016). *A compass towards a just and harmonious society: 2015*

GNH survey report. Thimphu: Centre for Bhutan Studies & GNH Research.

- Deaton, A. (2013). *The great escape: Health, wealth, and the origins of inequality*. Princeton/Oxford: Princeton University Press.
- Easterlin, R. A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P. A. David & M. W. Reder (Eds.), *Nations and households in economic growth: Essays in honor of Moses Abramovitz* (pp. 89–125). New York: Academic Press.
- Frank, R. H. (1999). *Luxury fever: Why money fails to satisfy in an era of excess*. New York: The Free Press.
- Haybron, D. (2008). *The pursuit of unhappiness: The elusive psychology of well-being*. Oxford/New York: Oxford University Press.
- Kasser, T. (2002). *The high price of materialism*. Cambridge, MA/London: The MIT Press.
- Layard, R. (2005). *Happiness: Lessons from a new science*. New York: Penguin Books.
- O'Brien, C. (2008). Sustainable happiness: How happiness studies can contribute to a more sustainable future. *Canadian Psychology*, 49(4), 289–295.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: The Guilford Press.
- Seligman, M. (2002). *Authentic happiness*. New York: Simon & Schuster.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford: Oxford University Press.

Sustainable Innovation

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Synonyms

Eco-innovation; Sustainable development; Sustainable innovations; Sustainable solutions

Definition

The concept of sustainable innovation is related to a new understanding of the innovation process, which pursues to include the three main areas of sustainability (environmental, social and economic) from Research and Development (R&D) to commercialization.

The notion of sustainability is introduced by Brundtland et al. (1987), referring to sustainable development. In this approach “sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland et al. 1987, p. 41). This viewpoint is considered in different approaches in the 1990s. Elkington (1994, 1997) proposed the bottom three approaches and the People, Planet, Profit: 3P approach. The People dimension is to encompass the social issue, the Planet dimension incorporates the environmental component and the Profit dimension integrates the economic system.

For instance, Ehrenfeld (2008, p. 1) defines “...sustainability is the possibility that human and other life will flourish on the planet forever”. Thus, fostering sustainability requires the development of new products or processes that integrate these 3 dimensions: 3P approach. In other words, sustainability involves innovation.

Regarding sustainable innovation, this differs from regular innovation, since it pursues to reduce the negative impact on environmental, social and economic dimensions (Charter and Tischner 2001). It should be noted that it is possible to find different definitions of innovation. At the moment we will limit ourselves to García and Calantone's definition: “innovation is an iterative process triggered by a new market and/or a new service opportunity for a technology-based invention that leads to developmental tasks, production and marketing that seeks the commercial success of the invention” (García and Calantone 2002, p. 112).

Therefore, following Cilo et al. (2019, p. 1014) and Tello and Yoon (2008, p. 165) sustainable innovation is defined as “the development of new products, processes, services and technologies that contribute to the development

and well-being of human needs and institutions while respecting natural resources and regeneration capacities”. Also, for Bos-Brouwers (2010, p. 422) sustainable innovation is defined as “innovations in which the renewal or improvement of products, services, technological or organizational processes not only delivers an improved economic performance, but also an enhanced environmental and social performance, both in the short and long term have the capacity to generate positive social and environmental impacts”.

Introduction

Sustainable innovation is crucial to promote sustainability in the company. Innovations that contribute to sustainability are, for example, called eco-innovations, green innovations, sustainability-oriented innovations or sustainable innovation (Klewitz and Hansen 2014).

Considering the traditional view of Oslo Manuel (OECD/Eurostat 2005, p. 16) “it covers four types of innovations: product, process, organisational and marketing”. In this viewpoint, innovation can take the different types to improving sustainability: the introduction of a new product using different raw materials (product innovation), changes in production and delivery methods (process innovation) (Steiner 2008), changes in business practices, in workplace organisation or in the firm’s external relations (organisational innovation), changes in product design and packaging, in product promotion and placement, and in methods for pricing goods and services (marketing innovation) that reduce the environmental impact.

Sustainability (Elkington 1997), sustainable development (Brundtland et al. 1987) and innovation are controversial and controversial concepts. Consequently, a clear or uniform definition of “sustainable innovation” has not yet been published. The literature is full of publications that take into account only the environmental dimension of innovation. Various terms such as “green innovation” or “eco-innovation” are often used in these documents (e.g. Carrillo-Hermosilla

et al. 2010; De Marchi 2012; Hellström 2007; Horbach 2008; Kesidou and Demirel 2012; Schiederig et al. 2012).

Sustainable innovation reflects a broad range of issues as important drivers for implementing innovation related to sustainability (Bacinello et al. 2020).

From the company’s point of view, it is fundamental to consider the environmental orientation of innovation due to its economic impact, referring to eco-innovation impact in terms of the product’s life cycle or other relevant dimensions (OECD 2009). However, this particular perspective on sustainable innovation ignores the social dimensions of the concepts of innovation and sustainability.

Indeed, the concept of sustainable innovation presupposes that “the result of the innovation process somehow shows sustainability” (Achterkamp and Vos 2006, p. 526) or that the innovation contributes “to sustainable development from an economic, ecological and social point of view” (Steiner 2008, p. 596), which is reflected in “sustainability-oriented innovation” or “sustainable innovation” and that include other aspects besides environmental concerns (Klewitz and Hansen 2014).

Sustainability-oriented innovation has been defined as “the commercial introduction of a new (or improved) product (service), product service system or clean service based on traceable comparative analysis (qualitative or quantitative), leading to environmental and/or social benefits during the physical life cycle of the previous version (‘cradle to grave’)” (Hansen and Große-Dunkirk 2013, pp. 2407–2408).

Thus, according Bacinello et al. (2020, p. 752) “sustainable innovation is related to innovations that incorporate economic, social, and environmental issues as the engine of competitive advantage, adding positive net value to the company (Anser et al. 2017; Gallego-Álvarez et al. 2011)”. It is about introducing new or improved products, processes, organisational and marketing methods or systems which reflect the social, environmental and economic dimensions of sustainability (Halila and Hörte 2006).

Key Issues

The ideas of sustainable development arise from the discussion on “five principles based on fairness: futurity – intergenerational fairness; social justice – fairness within generations; cross-border responsibility – geographical fairness; procedural fairness: persons treated openly and fairly; and interracial fairness – the importance of biodiversity” (Haughton 1999; Hopwood et al. 2005).

Thus, sustainability emerges, firstly, focused on the concept of diversity (Rocha et al. 2007) and considering the three goals: “achieving economic goals (profits), but also to the need to achieve environmental and social goals (or essence) at the same time in business” (Harding 2006, p. 232).

Gibson (2006), Rocha et al. (2007) and Stevens (2005), for example, consider other dimensions for sustainable development as: “social and ecological integrity; option; equity; efficiency and performance reduction; democracy and civilization; caution and adaptation; immediate and long-term integration”. Figure 1 summarises the dimensions of sustainability from Stevens’ (2005) approach.

Sustainable innovation involves fewer environmental impacts and produces a better image in social terms and can thus lead to greater profits. In this sense, business models must face these challenges in production, branding, marketing and sales and develop a business culture that integrates this change. According to the Ottosson (2009) model, innovation is at the core to lead to good service, sustainable profit and a better world (Fig. 2).

In addition to new business models, sustainable incremental innovation such as changing staff behaviour in relation to energy use, the process of encouraging new and more sustainable behaviour can lead to significant internal changes with positive sustainability outcomes.

Thus, sustainable innovation has become a challenge for companies and there are several reasons to bet on this new reality: changes in consumer perceptions and behaviour; rising commodity prices; less polluting technologies that are becoming cheaper; shareholders who identify good sustainability performance with good management.

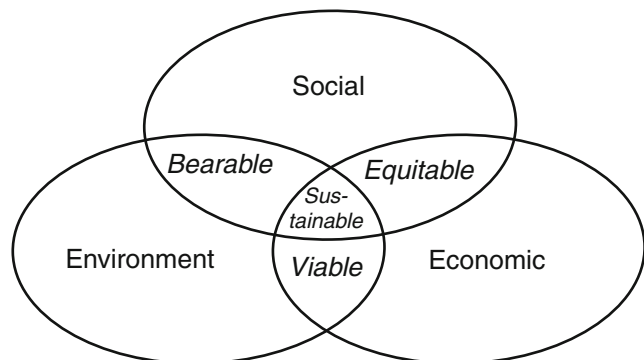
Sustainable innovation also requires cooperation: cooperation between individuals, departments and organisations. Cooperation to access resources, to produce a wider range of initiatives, to share costs and risks, and to access finance.

Future Directions

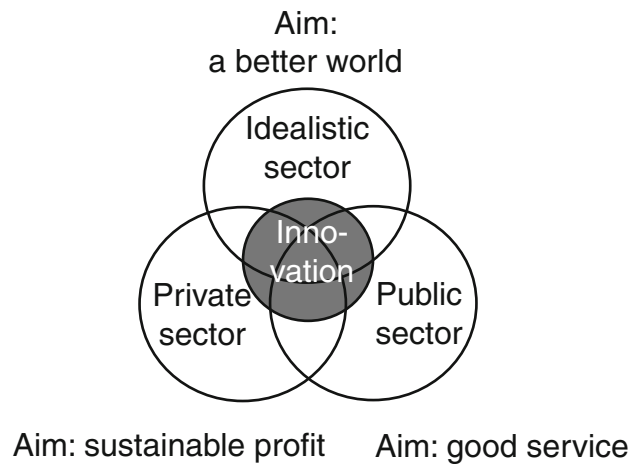
In effect the adoption of sustainable innovation practices produce positive results in business performance, namely: “integration with local communities and other stakeholders to generate social and environmental benefits; mechanisms of interaction with stakeholders; practices to reduce emissions in the supply chain; Product-Service System that seeks to create alternatives for product replacement by services; sustainable practices to ensure stakeholders’ well-being; and production systems and selected suppliers to provide environmental and social benefits” (Kneipp et al. 2019, p. 109).

Sustainable Innovation,

Fig. 1 Dimensions of Sustainable Development (Stevens 2005)



Sustainable Innovation,
Fig. 2 Aims of Innovation
 (Ottosson 2009)



Sustainable development requires innovative behaviour and innovation by all (Boons and Lüdeke-Freund 2013; Matos & Silvestre, 2013). Clean technologies and those that reduce carbon use will be key to mitigating climate change (Wennersten et al., 2015).

The concerns with sustainability and the studies on the theme of sustainable innovation have highlighted the importance of the following aspects in the promotion of sustainable innovation:

1. Systemic cooperation (Chesbrough and Rosenbloom 2002; Soosay and Hyland 2015) warning of the need to strengthen “the collaborative process, including the sharing of knowledge, benefits, challenges and partnerships” (Mbeguéré et al. 2014, p. 59).
2. The negative externalities of innovation and the clear definition of responsible or sustainable innovation (Koops et al. 2015) seeking to investigate how firms and entrepreneurs can jointly develop and build capacity to promote these sustainable innovations.
3. Difficulties in defining the concept of sustainability and the multidisciplinary nature of sustainable innovation leads to different approaches to conceptualising and operationalising sustainable innovation constructs (Cillo et al. 2019).
4. The relationship between knowledge management and sustainable organizational innovation (Abbas et al. 2020), the connection to

open innovation 4.0 as driver of sustainable innovation ecosystems (Costa and Matias 2020).

5. Public policies and government subsidies to promote sustainable innovation in university-industry collaboration as strategic of this ecosystem (Song et al. 2022).

According to Silvestre and Țîrcă (2019), as future research we point to:

1. Studying how SD innovations differ in the vast literature on the three themes: technology, management and policy and how different types of innovation fit into the traditional, green, social and sustainable strand. Such research will help a more detailed understanding of which types of innovations are most relevant and can actually make the greatest contribution to sustainability.
2. Developing studies on the different types of innovations: traditional, green, social, sustainable, from different perspectives: management technological and policy and how they influence the four uncertainties of innovation (i.e. technological, commercial, organisational and social – TCOS). This study will contribute, in practical terms to reduce or eliminate uncertainties, given the type and approach to specific innovation in sustainable development.
3. Research on how managers can maximise sustainability trajectories and the best management

approaches and perspectives that can be applied in all cases.

4. Developing more radical approaches to sustainability and innovation. Intensify research to identify and assess the barriers and factors underlying new sustainability perspectives, such as Sustainable Innovation 4.0 and its “triple bottom line” approach to refining and empirical testing.

In another perspective, for instance, for Griswold et al. (2018) the future of sustainability passes through the involvement of higher education students, with curricula that include these themes in an incisive and articulated manner.

In sum, the new topics on sustainable innovation should cover: (1) new cooperation models for sustainable innovation; (2) how companies are transforming their innovation; (3) how to structure sustainable innovation to combat business resilience; (4) how millennials are shaping their future innovation; and (5) how to build innovation ecosystems.

Cross-References

- Corporate Sustainability Performance
- Corporate Sustainable Innovation
- Economic Sustainability
- Eco-Sustainability Innovations Performance Measurement
- Innovation and CSR
- Reverse Innovation
- Social Innovation
- Sustainability as a Management Approach
- Sustainable and Innovation Process
- Sustainable Business Model Innovation
- Sustainable Business Solutions

References or Further Readings

- Abbas, J., Zhang, Q., Hussain, I., Akram, S., Afaq, A., & Shad, M. A. (2020). Sustainable innovation in small medium enterprises: The impact of knowledge management on organizational innovation through a mediation analysis by using SEM approach. *Sustainability*, 12(6), 2407. <https://doi.org/10.3390/su12062407>.
- Achterkamp, M. C., & Vos, J. F. (2006). A framework for making sense of sustainable innovation through stakeholder involvement. *International Journal of Environmental Technology and Management*, 6(6), 525–538.
- Anser, M. K., Zhang, Z., & Kanwal, L. (2017). Moderating effect of innovation on corporate social responsibility and firm performance in realm of sustainable development. *Corporate Social Responsibility and Environmental Management*, 25(6), 799–806. <https://doi.org/10.1002/csr.1495>.
- Bacinello, E., Tontini, G., & Alberton, A. (2020). Influence of maturity on corporate social responsibility and sustainable innovation in business performance. *Corporate Social Responsibility and Environmental Management*, 27(2), 749–759.
- Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production*, 45, 9–19.
- Bos-Brouwers, H. E. J. (2010). Corporate sustainability and innovation in SMEs: Evidence of themes and activities in practice. *Business Strategy and the Environment*, 19(7), 417–435.
- Brundtland, G., Khalid, M., Agnelli, S., Al-Athel, S., Chidzero, B., Fadika, L., & Singh, M. (1987). Our Common Future. Report of the World Commission on Environment and Development. Oxford: Oxford University Press.
- Carrillo-Hermosilla, J., Del Río, P., & Könnölä, T. (2010). Diversity of eco-innovations: Reflections from selected case studies. *Journal of Cleaner Production*, 18(10–11), 1073–1083.
- Charter, M., & Tischner, U. (2001). *Sustainable product design. Sustainable solutions: Developing products and services for the future*. Sheffield: Greenleaf Publishing.
- Chesbrough, H., & Rosenbloom, R. S. (2002). The role of the business model in capturing value from innovation: Evidence from Xerox Corporation’s technology spin-off companies. *Industrial and Corporate Change*, 11(3), 529–555.
- Cillo, V., Petruzzelli, A. M., Ardito, L., & Del Giudice, M. (2019). Understanding sustainable innovation: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, 26(5), 1012–1025.
- Costa, J., & Matias, J. C. (2020). Open innovation 4.0 as an enhancer of sustainable innovation ecosystems. *Sustainability*, 12(19), 8112.
- De Marchi, V. (2012). Environmental innovation and R&D cooperation: Empirical evidence from Spanish manufacturing firms. *Research Policy*, 41(3), 614–623.
- Delmas M., & Toffel M. W. (2004). Institutional pressure and environmental management practices. In S. Sharma, M. Starik (Eds.), *Stakeholders, environment and society* (New perspectives in research on corporate sustainability, pp. 209–222). Cheltenham: Edward Elgar Publishing.

- Ehrenfeld, J. R. (2008). Sustainability needs to be attained, not managed. *Sustainability: Science, Practice and Policy*, 4(2), 1–3.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Elkington, J. (1997). *Cannibals with forks – Triple bottom line of 21st century business*. Stoney Creek: New Society Publishers.
- Gallego-Álvarez, I., Prado-Lorenzo, J. M., & García-Sánchez, I. M. (2011). Corporate social responsibility and innovation: A resource-based theory. *Management Decision*, 49(10), 1709–1727. <https://doi.org/10.1108/00251741111183843>.
- García, R., & Calantone, R. (2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. *Journal of Product Innovation Management*, 19(2), 110–132.
- Gibson, R. B. (2006). Sustainability assessment: Basic components of a practical approach. *Impact Assessment and Project Appraisal*, 24(3), 170–182.
- Griswold, W., Sauters, O. S., & Sanders, A. G. Y. (2018). The future of sustainability: A participant motivation model for higher education, research, and practice. *Creative Education*, 9, 406–425. <https://doi.org/10.4236/ce.2018.93029>.
- Halila, F., & Hörte, S. Å. (2006). Innovations that combine environmental and business aspects. *International Journal of Innovation and Sustainable Development*, 1(4), 371–388.
- Hansen, E. G., & Große-Dunker, F. (2013). Sustainability-oriented innovation. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (Vol. 1, pp. 2407–2417). Heidelberg, New York: Springer.
- Harding, R. (2006). Ecologically sustainable development: Origins, implementation and challenges. *Desalination*, 187(1–3), 229–239.
- Houghton, G. (1999). Environmental justice and the sustainable city. *Journal of Planning Education and Research*, 18(3), 233–243.
- Hellström, T. (2007). Dimensions of environmentally sustainable innovation: The structure of eco-innovation concepts. *Sustainable Development*, 15(3), 148–159.
- Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: Mapping different approaches. *Sustainable Development*, 13(1), 38–52.
- Horbach, J. (2008). Determinants of environmental innovation—New evidence from German panel data sources. *Research Policy*, 37(1), 163–173.
- Kesidou, E., & Demirel, P. (2012). On the drivers of eco-innovations: Empirical evidence from the UK. *Research Policy*, 41(5), 862–870.
- Klewitz, J., & Hansen, E. G. (2014). Sustainability-oriented innovation of SMEs: A systematic review. *Journal of Cleaner Production*, 65, 57–75.
- Kneipp, J. M., Gomes, C. M., Bichueti, R. S., Frizzo, K., & Perlin, A. P. (2019). Sustainable innovation practices and their relationship with the performance of industrial companies. *Revista de Gestão*, 26(2), 94–111.
- Koops, B.-J., Oosterlaken, I., Romijn, H., Swierstra, T., & Van den Hoven, J. (2015). *Responsible innovation 2: Concepts, approaches, and applications*. Dordrecht: Springer.
- Matos, S., & Silvestre, B. S. (2013). Managing stakeholder relations when developing sustainable business models: The case of the Brazilian energy sector. *Journal of Cleaner Production*, 45, 61–73.
- Mbéguéré, M., Diop, C., Niang, S., & Strande, L. (2014). Effect of hydraulic loading frequency on performance of planted drying beds for the treatment of faecal sludge. *Journal of Water, Sanitation and Hygiene for Development*, 4(4), 633–641.
- OECD. (2009). *Eco-innovation in industry, enabling green growth*. Paris: OECD Publishing.
- OECD/Eurostat. (2005). Oslo manual: Guidelines for collecting and interpreting innovation data. In *The measurement of scientific and technological activities* (3rd ed.). Paris: OECD Publishing. <https://doi.org/10.1787/9789264013100-en>.
- Ottosson, S. (1996). Dynamic product development: Findings from participating action research in a fast new product development process. *Journal of Engineering Design*, 7(2), 151–169.
- Ottosson, S. (2009). *Frontline innovation management*. Göteborg: Tervix. (ISBN 978-91-977947-7-0).
- Rocha, M., Searcy, C., & Karapetrovic, S. (2007). Integrating sustainable development into existing management systems. *Total Quality Management & Business Excellence*, 18(1–2), 83–92.
- Schiederig, T., Tietze, F., & Herstatt, C. (2012). Green innovation in technology and innovation management—an exploratory literature review. *R&D Management*, 42(2), 180–192.
- Silvestre, B. S., & Țircă, D. M. (2019). Innovations for sustainable development: Moving toward a sustainable future. *Journal of Cleaner Production*, 208, 325–332.
- Song, Y., Sahut, J. M., Zhang, Z., Tian, Y., & Hikkerova, L. (2022). The effects of government subsidies on the sustainable innovation of university-industry collaboration. *Technological Forecasting and Social Change*, 174, 121233.
- Soosay, C. A., & Hyland, P. (2015). A decade of supply chain collaboration and directions for future research. *Supply Chain Management: An International Journal*, 20(6), 613–630.
- Steiner, G. (2008). Supporting sustainable innovation through stakeholder management: A system review. *International Journal of Innovation and Learning*, 5(6), 595–616.
- Stevens, C. (2005). Measuring sustainable development. Retrieved from <http://www.oecd.org/std/35407580.pdf>
- Tello, S. F., & Yoon, E. (2008). Examining drivers of sustainable innovation. *International Journal of Business Strategy*, 8(3), 164–169.
- Wennersten, R., Sun, Q., & Li, H. (2015). The future potential for carbon capture and storage in climate change mitigation—an overview from perspectives of technology, economy and risk. *Journal of Cleaner Production*, 103, 724–736.

Sustainable Innovation in Food Design

► Sustainable Food Design and Innovation

Sustainable Innovations

► Sustainable Innovation

Sustainable Investing

► Socially Responsible Investing and Finance

Sustainable Investment

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Synonyms

Conscious Investment; Environmental Investment; Ethical Investment; Green Investment; Impact Investment; Responsible Investment; Social Investment; Socially Responsible Investment (SRI)

Definition

Sustainable Investing (SI) is a responsible way of investing. It is defined as an approach that takes into account environmental, social, and governance (ESG) factors in investment portfolio selection and management (GSIA 2018).

SI acknowledges the importance of making a financial return but does not forsake ethical, social, and environmental responsibilities in pursuit of high returns. In fact, the same diligence that

is accorded to measure financial returns is accorded to social and environmental returns with SI.

Though often used interchangeably, there is some difference between SI and Socially Responsible Investment (SRI). SI is objective and proactive, in that, it looks at social, ethical, or environmental issues as challenges or opportunities that can be remedied while delivering returns (Cunha et al. 2019). Some examples are waste management, telecommunications, renewable energy, etc. SRI, on the other hand, is much more defensive and reactive, in that, it avoids investing in ethical, social, and/or environmental laggards. SRIs are subjective; in other words, what is right and therefore acceptable, and what is wrong and therefore unacceptable, is relative.

History

Sustainable investing is not new (Schueth 2003). It has been around in different forms since religion happened. SI or responsible investment is said to have been practiced when religious institutions avoided certain forms of “sin” businesses such as slave trading, gambling, alcohol, pornography, etc. Religious beliefs drove the investments toward more socially and morally acceptable trades. This form of investing is where funds are “screened,” i.e., funds are invested in morally and socially good business, or funds are withheld from immoral and socially irresponsible businesses (Renneboog et al. 2008). In the modern version of SI, environmental issues and norms are also included while screening.

The first such fund is attributed to the Pax World Balanced Fund, a mutual fund established in 1971. This fund allowed investors to avoid investing in companies profiteering from the Vietnam war (Townsend 2017). There were several catalysts that helped accelerate the growth of responsible funds, such as boycotting of the South African companies in the 1980s during the apartheid regime (Kumar et al. 2002), the Exxon Valdez spill in 1989 (Leahy 2019) which brought to fore the environmental aspect of irresponsible investing, among others. The 1980s also saw the

inception of EIRIS foundation in England which was one of the first to provide research in the area of ethical and responsible investing (EIRIS Foundation 2020).

Since then, the need to direct finance more responsibly has become more mainstream. For instance, the Kyoto Protocol of 1997 saw the world officially agreeing to reduce carbon emissions to prevent global warming (United Nations 1997). This was followed by the Global Compact which is an effort to protect human and labor rights, prevent corruption, and protect the environment (United Nations 2000), and Global Reporting Initiative (GRI) which creates more transparency in terms of a company's ESG behavior. The UN Principles of Responsible Investing (UNPRI) is another step in this direction and aims to also educate investors in the context of SI.

In 2015, the 2030 Agenda for Sustainable Development was adopted by all UN member states with the aim of combating poverty while addressing climate change (United Nations 2015). The 17 Sustainable Development Goals (SDGs) established at the heart of this agenda aim to tackle economic, environmental, and social challenges facing humanity. SI now therefore has become imperative to successfully achieve the SDGs. Today SI forms a core part of most companies' CSR policies.

Methods

SI incorporates different methods to identify requisite investment opportunities. It is more active, in that it looks for ESG challenges which are then "fixed" while generating a financial return (Eccles and Klimenko 2019). Some examples here are clean technology, community development, health services, alternative energy, etc.

SI can also be a strategy which includes share/stakeholder activism wherein share/stakeholders actively engage with the companies to bring about a change, e.g., stakeholders demanding fairer supply chains, or shareholders forcing companies to uphold labor rights or stamping out corruption or seeking more transparency in terms of environmental issues, amongst others (Eccles and

Klimenko 2019). SI also pioneers "green" innovation by providing (seed) capital to relevant ESG projects.

SRI is on the passive side and uses, in large parts, the screening method. There are different types of screens used, often in combination and also very often used by SIs. As detailed by Eccles and Klimenko (2019), these are,

- Positive screening – this is an affirmative screen, in that, here the investment portfolio includes the so called "good" companies. Here selection of investments is made on the basis of which companies suit social, environmental, or ethical criteria best. Very often, a triple-bottom-line approach is applied to make the selection. For example, an investor might invest only in companies with proven track record not only in financial terms but also in protecting the environment.
- Negative screening – here investment portfolio excludes the so-called "bad" companies. Those companies which fall short of the necessary social, environmental, or ethical criteria are left out of the investment portfolio. For instance, an investor refuses to invest in companies manufacturing guns or military equipment.
- Norms-based screening – this combines both positive and negative screening. Here companies are chosen based on specific norms. For example, companies that have signed on to the global compact are included in the investment portfolio and those that have not done so are excluded from the portfolio.
- Best-in-class screening – here, as the name suggests, those companies that are best in terms of a certain set of social, environmental, and/or ethical criteria are included in the investment portfolio.

Current Developments

On the product side, between 2016 and 2018, the SI has grown 34% worldwide reaching US\$30.7 trillion (GSIA 2018). According to the same report, SI makes up nearly half of total

professionally managed funds in Europe and about 26% in the USA.

On the market side, in 2018, 35 stock exchanges from 30 countries offered sustainability indices (Cunha et al. 2019) which represent a growing and liquid market. Such developments stimulate SI considerably. Investors routinely use such indices for benchmarking and investing (European Union High-Level Expert Group on Sustainable Finance 2018).

UN Global Compact is currently making a case to issue SDG bonds which will further facilitate trade in the SI market (Global Compact 2019).

It is apparent that incorporating ESG strategies into investment decisions is now not a random occurrence but more of a standard due diligence. For example, according to Eccles and Klimenko (2019), sustainable and impact investment has more than tripled since December 2016, with \$17 billion in AUM at UBS Asset Management. Moreover, in 2019 alone, ESG funds pulled in US\$ 20 billion which is four times the similar investments in 2018 (Iacurci 2020).

SI and CSR

The idea that being socially responsible actually is good for the long-term sustainability is not a new one. A journalist who is renowned to have started making the “Best Companies” list with Robert Levering in the early 1970s, Milton Moskowitz (1973) wrote “I do harbor the suspicion that a socially insensitive management will eventually make enough mistakes to play havoc with the bottom line.” He believed that a company that had a good CSR policy, which looked after the employees, treated them fairly, was transparent in its dealings, and generally a good corporate citizen made a good investment candidate.

Idiosyncratic risks of companies can, in theory, be diversified by constructing a balanced portfolio. However, companies which do not pay attention to ESG factors and then are eventually penalized in one way or another will find it difficult to sustain themselves in the long run. Such companies risk losing their investments and also face possible ruin. Such companies could get

caught out by legal action like in the case of diesel motor scandal (Volkswagen), or be stuck with stranded assets like in the case of fossil fuel companies, or face customer boycotts as in the case of fur and blood diamonds.

In today’s world, with all the signs of global warming being present and pressing and with social inequality increasing, the growth of the SI shows that there is a growing acknowledgment that incorporating ESG factors in investment decisions could lower risks and improve financial performance over time. In other words, researching and analyzing ESG factors could help create an efficient portfolio.

Cunha et al. (2019) show that though SI performance around the world is still heterogeneous, and investors incorporating SI practices in their investments are likely to generate better risk-adjusted returns.

More and more regulators, governments, and also financial decision makers are seeking wider reaching sustainable investment solutions. This is evidenced in the fact that in 2018, 60% more assets, globally, are managed with SI strategy of ESG integration as compared to 2016 (GSIA 2018).

More and more companies are signing up to the UNPRI and are actively engaging with the UN Sustainable Development Goals (SDGs). Such companies are, in many cases, the right candidates for SI.

Sound CSR policies of a company incorporate ESG factors in their processes and decision-making which in turn assure the company’s long-term (financial) sustainability. More and more companies and their stakeholders recognize this, and this in turn increases the portfolio universe of sustainable investments. SI is no longer a passing thought but is a strong movement, driven by committed stakeholders on all levels with serious sums of funding being directed toward responsible companies.

Cross-References

- [Global Reporting Initiative](#)
- [Kyoto Protocol](#)

- [UN Principles for Responsible Investments \(PRI\)](#)
- [United Nations Global Compact](#)

References

- Cunha, F., Oliveira, E., Oliveira, R., Klotzle, M., Oliveira, F., & Caiado, R. (2019). Can sustainable investments outperform traditional benchmarks? Evidence from global stock markets. *Bus Strateg Environ*, 29(2), 682–697. <https://doi.org/10.1002/bse.2397>.
- Eccles, R., & Klimenko, S. (2019). The investor revolution – shareholders are getting serious about sustainability. *Harvard Business Review*, 106–116. <https://hbr.org/2019/05/the-investor-revolution>
- EIRIS Foundation. (2020). History. <https://eirisfoundation.org/history/>
- European Union High-Level Expert Group on Sustainable Finance. (2018). *Financing a sustainable European economy. Final report 2018*. Brussels: European Commission.
- Global Compact. (2019). *SDG bonds: Leveraging capital markets for the SDGs*. Report (2019). The UN Global Compact action platform on financial innovation for the SDGs. <https://unglobalcompact.org/library/5713>
- GSIA. (2018). 2018 Global Sustainable Investment Review. http://www.gsi-alliance.org/wp-content/uploads/2019/06/GSIR_Review2018F.pdf. Accessed 14 Aug 2020.
- Iacurci, G. (2020, January 14). Money moving into environmental funds shatters previous record. *CNBC*. <https://www.cnbc.com/2020/01/14/esg-funds-see-record-inflows-in-2019.html#:~:text=Sustainable%20funds%2C%20which%20invest%20based,which%20held%20the%20previous%20record>. Accessed 14 Aug 2020.
- Kumar, R., Lamb, W. N., & Wokutch, R. E. (2002). The end of south African sanctions, institutional ownership, and the stock Price performance of boycotted firms: Evidence on the impact of social-ethical investing. *Business and Society*, 41(2), 133–165. <https://doi.org/10.1177/0007650302041002002>.
- Leahy, S. (2019). Exxon Valdez changed the oil industry forever – But new threats emerge. *National Geographic*. <https://www.nationalgeographic.com/environment/article/oil-spills-30-years-after-exxon-valdez>
- Moskowitz, M. (1973, February 11). Why “good guy” funds have flopped. *New York Times*. Archive.
- Renneboog, L., Ter Horst, J., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking and Finance*, 32(9), 1723–1742. <https://www.sciencedirect.com/science/article/abs/pii/S0378426607004220>. Accessed 5 Feb 2021.
- Schueh, S. (2003). Socially responsible investing in the United States. *Journal of Business Ethics*, 43(3), 189–194. <https://doi.org/10.1023/A:1022981828869>.
- Townsend, B. (2017). *From SRI to ESG: Origins of socially responsible and sustainable investing* [white paper]. Bailard Wealth Management, California. <https://www.bailard.com/wp-content/uploads/2017/06/Socially-Responsible-Investing-History-Bailard-White-Paper-FNL.pdf?pdf=SRI-Investing-History-White-Paper>. Accessed 14 Aug 2020.
- United Nations. (1997). What is the Kyoto Protocol? https://unfccc.int/kyoto_protocol
- United Nations. (2000). UN Global Compact strategy 2021–2023. <https://www.unglobalcompact.org/>
- United Nations. (2015). *History*. The 17 goals. <https://sdgs.un.org/goals>

Sustainable Leadership

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Synonyms

[CSR leadership](#); [Global leadership](#); [Good leadership](#); [Leadership](#); [Responsible leadership](#); [Sustainability leadership](#)

Definition/Description

There are numerous definitions of sustainable leadership. These differ concerning the various concepts of “leadership” and “sustainability.” Despite the different perspectives on leadership, a common idea they all share is that leadership involves influencing other people’s behavior, beliefs, and feelings. The critical characteristic of sustainable leadership is its sustainable development orientation. It involves taking on the responsibility to contribute to social, ecological, and environmental progress within the organization and beyond organizational boundaries.

Sustainable leaders incorporate various stakeholders inside and outside the organization to inspire and support action towards a better world. Thus, sustainable leadership can be defined

as influencing the behavior, beliefs, and feelings of other people (inside and outside the organization) to contribute to sustainable development progress. Its three significant characteristics are systemic perspective, relationship building, and sustainable development orientation. In this sense, the construct of sustainable leadership is intertwined with theoretical and practical developments in corporate social responsibility, business ethics, sustainable development, and leadership. These concepts have in common that short-termism, the sole focus on profit maximization, and shareholder-only orientation no longer meet the challenges of an increasingly complex environment and interconnected world.

Introduction

The dynamics and complexities of daily business and different assumptions and beliefs about what is right and wrong make leading in a globalized world increasingly difficult. This pressure is increased by economic, social, and ecological challenges raising the demand for companies to contribute to a sustainable future. Traditional leadership behavior (such as command and control, authority, and domination, asserting influence through hierarchical structures) relies on an outdated assumption of treating people. In addition, new technologies, educational systems, and worldviews have changed how people relate to each other, collaborate to deal with global challenges and create meaning. Therefore, traditional leadership concepts appear outdated in the knowledge society and are not suitable for the sustainability challenges business and societies face. This leads to the need for a changing leadership paradigm.

Senge et al. (2004) propose that leadership can be defined as the ability of human society to create its future. This definition shifts the view of associating leadership with a group or society rather than one single person. Companies today are faced with the task of managing the simultaneous consideration of economic, social, and ecological system views. This complexity leads to a substantial shift towards the principle of

sustainability, which aims to integrate these three areas. Thus, they strive to balance social, environmental, and economic values and progress within their organization but also beyond their organization.

A new kind of leadership is emerging – one that does not depend on extraordinary hero leaders but a form of leadership applied by groups and communities (Senge et al. 2004). This raises the question of what leadership concepts and behavior for sustainable development would look like.

Three Core Characteristics of Sustainable Leadership

The essence of sustainable leadership revolves around the future in which the conditions in society and economy are different from today. To manage the growing complexity and interconnectedness of social, ecological, and economic topics, leaders require a long-term focus on their companies' effects on societies and the environment.

Therefore, sustainable leaders need three core characteristics to manage this complexity.

1. Systemic Perspective

Sustainable leadership can be understood as an answer to the challenges of the increasing complexity of systems. With this, sustainable behavior is a holistic approach that incorporates social, ecological, and economic aspects. Activities and decisions cannot be viewed in isolation but have intended, unintended, recognizable, unrecognizable effects on other areas (Ferdig 2007).

2. Sustainable Development Orientation

The orientation towards sustainable development is a global challenge that leads to a complex situation in which leaders must make well-considered decisions. Therefore, sustainable leaders address economic, social, and ecological issues with a long-term view while being aware that long-term success cannot be achieved without short-term delivery (Hind et al. 2009).

3. Relationship Building/Mutual Meaning-Making

Sustainable leaders understand the value of people across cultures, belief systems, and worldviews by recognizing, interpreting, and reacting appropriately to people, organizations, and other stakeholders. They facilitate relational processes among teams and communities and take on the responsibility for the quality of these relationships. For them, waving a net of inclusion of stakeholders is crucial to achieving long-term success for everybody involved.

- Passionately and humbly strive to leave behind dignified, lasting legacies for present and future generations, thus creating real purpose and meaning.
- Pursue a shared agenda that serves the common good.
- Consistently act ethically and with integrity.
- Demonstrate genuine, authentic care, and compassion.
- Enable and empower people.
- Are unconditionally committed to being the best leader possible.
- Serve as an exemplary role model.

Behavior

These characteristics of sustainable leadership are manifested in the behavior within the leader-follower construct. The following behaviors can be associated but are not limited to a sustainable leader.

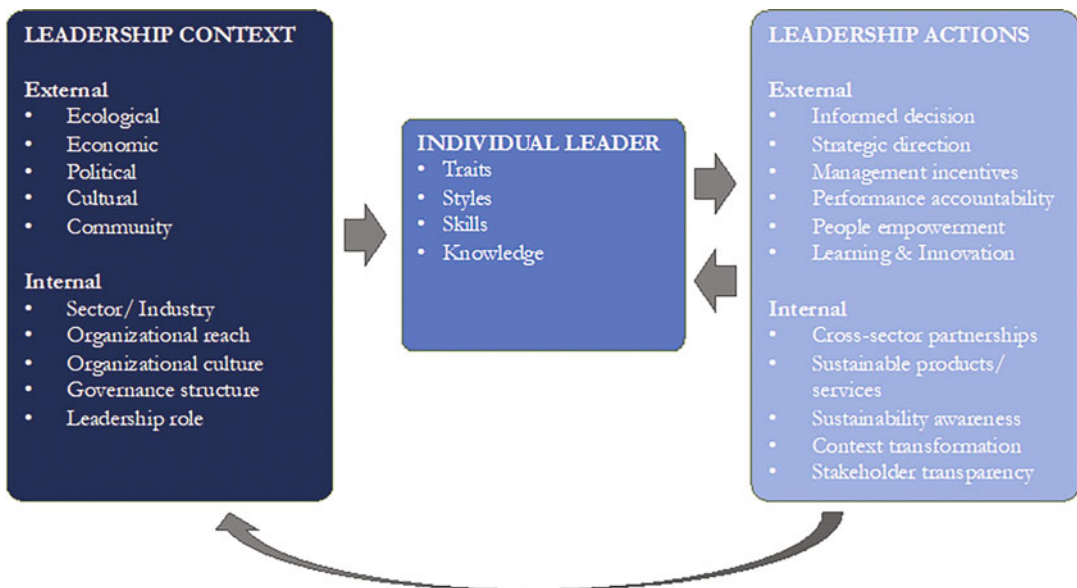
Sustainable leaders (Veldsman 2018)

- Visualize and mobilize people for an inspiring, shared future, a dream, turning stakeholders into committed followers.

Leadership makes a difference in the presence and future of teams, organizations, communities, and society, for better or for worse. Based on the above, leadership capital is a critical investment in the future of organizations, communities, and societies at the top front. In addition, it has a significant impact on the “bottom line.”

The sustainability challenges of the world and aspirations for a more sustainable future calls for certain types of leadership and manifest themselves in the following model (Fig. 1):

In the Cambridge sustainability leadership model, context describes the conditions or



Sustainable Leadership, Fig. 1 Cambridge sustainability leadership model (Visser and Courtice 2011)

environment in which leaders operate that directly or indirectly affect their institutions and decision-making. This context is broadly divided into external factors – e.g., ecological, economic, political, cultural, and community – which leaders may have less influence over and internal factors – e.g., the organizational culture, governance structure, or role of leadership – which they have more influence over.

Ultimately, it highlights how the new characteristics of sustainable leaders can be implemented in the proper context. Based on this, leadership and leadership development is an essential investment in the future and have a significant impact on our society. Therefore, the race for the future will be won by organizations that consciously build sustainable leadership.

Future Directions

In light of the grand social challenges of our time, we currently witness a reconceptualization of the leadership construct. Leadership will become a wider, organizational boundaries overarching concept to deliver on sustainable development progress. Future research will deal with the effects of leadership behavior not only on the organizational performance but moreover on the societal progress.

Summary

We witness the emergence of a new kind of leadership. Sustainable leadership aims to address the demand of an increasingly complex and rapidly changing world, which traditional leadership behavior cannot meet. Sustainable leadership means empowering people in their behavior, beliefs, and feelings inside and outside of an organization through a systematic perspective, relationship building, and a sustainable development orientation. As role models, sustainable leaders treat people with compassion, have a holistic view, and create real purpose and meaning.

Cross-References

- ▶ [Employee Sustainability Behaviors](#)
- ▶ [Sense Making, Organizational](#)
- ▶ [Sustainability Resilience](#)
- ▶ [Sustainable Development](#)
- ▶ [Transformative Learning](#)

References

- Ferdig, M. A. (2007). Sustainability leadership: Co-creating a sustainable future. *Journal of Change Management*, 7, 25–35.
- Hind, P., Wilson, A., & Lenssen, G. (2009). Developing leaders for sustainable business. *Corporate Governance: The international journal of business in society*, 9(1), 7–20.
- Senge, P., Scharmer, O., Jaworski, J., & Flowers, B. S. (2004). *Presence: Human purpose and the field of the future*. New York: Crown Business.
- Veldsman, T. H. (2018). Master of the leadership universe travel guide for leadership excellence in the newly emerging order. Stop-over 34. A glaring gap in the valuation of organizations: Leadership Capital.
- Visser, W., & Courtice, P. (2011). *Sustainability leadership: Linking theory and practice* (SSRN Working Paper Series). 21 October 2011.

Sustainable Lighting Design

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Synonyms

[Environmentally Responsible Lighting Design \(ERLD\)](#); [SLD](#)

Definition

Sustainable Lighting Design (SLD) has been proposed by Panagiotopoulos (2019) as this kind of Lighting Design (LD) that consisting part of a Corporate Social Responsibility (CSR) program examines economic, social, and environmental issues. In comparison with Environmentally

Responsible Lighting Design (ERLD) which focuses on environment analyzing the interaction between LD and environment, SLD further considers societal and economic parameters, and thus, it fully covers all aspects of sustainability. SLD as term supports the theoretical background for the consideration of the element of light as a sustainable parameter for the design of corporate buildings and workplaces as part of a holistic CSR design for energy usage optimization, environmental footprint minimization, health and safety, and productivity enhancement.

Introduction

Big international companies occupy buildings for their production activities and their administration like in the case of their headquarters. Buildings in general emit 50% of CO₂ emissions in developed countries because they have increased needs for heating, cooling, lighting, ventilation, and the operation of any electric, electronic, and mechanical equipment inside them. Especially lighting is an element that affects other parameters like heating and cooling, and it relates to the consumption of electricity and consequently with the total energy needs of a building (Strong and Burrows 2017). The multi-level effects of lighting in energy and gas emissions, human mood, health, etc. indicate that lighting design (LD) is a significant element that affects economy, environment, and people, and thus, is directly connected with sustainability. This fact offers the necessary theoretical background and consists a chance for corporations to incorporate LD inside their Corporate Social Responsibility (CSR) policy (Panagiotopoulos 2018).

Sustainability and CSR

The concept of sustainability has enriched the philosophy of ecology by suggesting the necessity of a dynamic balance among environmental preservation, society and economy (Jordan and Lenschow 2008). The term economy represents

any technological and commercial activity of people.

CSR is the concept that calls corporations to include social and environmental concerns in their decision-making processes and in their relations with their stakeholders (European Commission 2001). Modern corporations make efforts to comprehend the concept of sustainability and its materialized expression with the form of CSR in their business practices. The most intense type of CSR, strategic CSR calls firms to incorporate sustainability principles through CSR programs in their everyday activities (Mc Williams and Siegel 2011). CSR has three main fields of interest (European Commission 2001):

- Economy referring to the market where a firm is active
- Society concerning the local community of a place where a company is located, the people who are the customers of the company and the employees of the company, too.
- Environment that includes aspects like environmental preservation, waste management, energy consumption, etc.

The key element in the modern consideration of CSR is stakeholders. Everyone who is directly or indirectly related or affected by the operation and the decisions of a company belongs to the wide group of stakeholders. CSR underlines that every company should respect the interests of its stakeholders and consider them during decision-making process. The era when a company had as only target the maximization of the wealth for its shareholders has passed in accordance with the theory for CSR and sustainability (Carroll 1991).

Lighting Design

Lighting Design (LD) comprises a process for the incorporation of the element of light in building total architecture. LD must contain provisions for the existence of light where is needed and on parallel to achieve to reduce light where is not necessary or desirable. A successful modern LD

should respect sustainable values (Gordon 2014, p. 204).

Environmentally Responsible Lighting Design (ERLD) is called the sector of lighting architecture that considers environmental protection as part of its targets. ERLD is based on sunlight and daylight besides artificial lighting. The combination of sunlight and artificial lighting consists the “passive approach” of Lighting Design in bi-climatic architecture which consists part of ecological architecture (Al-Sallal 2016).

ERLD has as main element the use of daylight along with the use of artificial light. The artificial light is used complementary when the natural light is not enough to cover the lighting needs of a space. The optimal use of daylight implies the ability to control it because plenty daylight could cause issues like glaring and overheating which can create uncomfortable or even dangerous living and working conditions. For that reason, another important element of ERLD consist shading. ERLD could be restructured to Sustainable Lighting Design (SLD) through the angle of CSR concerning corporations by taking into consideration social, environmental, and economic parameters. Especially, SLD could offer various benefits to an organization and that profit operates as reasoning for the necessity and the advantages of CSR in business world. Furthermore, the incorporation of lighting design programs in CSR policies of firms would upgrade the general interest concerning the value of natural light for human health and underline its importance for a healthy and qualitative working environment.

The Benefits of Daylight in Humans

By the term daylight is described any type of natural light that originated from the sun directly or indirectly. Daylighting concerns the delivery and distribution of light from the sky and the sun to a building interior and the provision ambient and/or task lighting to cover the visual and biological needs of its users (Al-Sallal 2016, p. 63). Natural light consists of three discrete categories of light: (a) the light that comes directly from the sun, (b) the daylight that is the result of the

scattering of sun beams in the atmosphere, and (c) the daylight that is the result of the reflection of sun beams in the land and other surfaces (Al-Obaidi et al. 2016, pp. 129–131). Thus, there are three subcategories of natural light that have different characteristics and possibilities to be exploited with various technical means like windows, atriums, etc. The exploitation of natural light for the coverage of lighting needs in corporate buildings hides a plethora of benefits for environment, people, and economy, covering all the three poles of interest of a CSR strategy.

At first, especially direct sunlight expedites the secretion of serotonin hormone which is vital for the adjustment of circadian cycle, spiritual clarity, and mental health (Boubekri 2014, pp. 31–34). The circadian rhythm is regulated through the secretion of serotonin. Lack of natural light during the day, as it happens inside most of the corporate buildings with the fluorescent lamps, implies low levels of serotonin. This absence of serotonin is replaced by the secretion of melatonin which is related with drowsiness and results in high risk for occupational accidents and deaths, along with low professional performance by employees. Seasonal Affective Disorder (SAD) is another disorder that relates to the absence of daylight in the everyday life inside corporate premises. SAD is considered a type of depression directly caused by the limited access to daylighting. It is more popular in north countries during the winter period, when sun stays less on the sky and the duration of night is bigger. The most usual symptoms of SAD are a strong sense of tiredness, increased need for sleep, craving for the consumption of hydrocarbons, depression, anxiety, low morale, and possibly other health disorders as consequence of the previously mentioned conditions. The exposure to natural light is considered a main therapeutic agent for SAD and consequently windowless corporate premises where employees spent at least one-third of their day do not support positively their health condition (Boubekri 2014, pp. 31–35). Moreover, the unlimited access to direct sunlight and the view of external environment through proper openings provide a mental and optical relaxation to employees and assist them to maintain good mood through the whole work hours.

Situations like depression, anxiety, low morale, and lack of motivation for action are indications of psychological and mental illnesses which consist a serious and intense phenomenon in modern societies especially in developed world. These disorders of people cause genitive financial impact to companies. Employees who suffer from SAD for example take more day-leaves from the office either for medical reasons or nor, present low productivity, lack of motivation, and poor performance in brainstorming activities. It is estimated that depressed people lose approximately 1 h of real productive and creative work in daily basis due to their situation (Boubekri 2014, pp. 34–35). Limited access to daylight has been related with low sleep quality too. All these symptoms make employees with poor quality of sleep to underperform in their work, to have limited mood to cooperate, difficulties to focus on their tasks, lack of calmness, and last but not least higher possibilities to be involved in accidents during their work hours (Boubekri 2014).

Natural light is considered of superior quality than artificial lighting. The combination of sunlight and daylight is considered by specialists the best light sources for human eyes. There are several benefits that source from natural light. Everyday access to daylight through working places provides a sense of connection between employees and natural environment. Natural light offers a balanced color spectrum because its energy peaks are slightly in the blue and green portion of the visible spectrum. The term “quality of light” means a holistic approach that embraces parameters like the distribution of light, color rendering, flickering of light, brilliance, and variability. It is representative of the higher quality of natural light that less quality of the first is need for the implementation of a project in comparison with the quantity of artificial light that is needed for the same project.

A Protocol for Sustainable Lighting Design

LD targets to assure safety in the working environment and optical comfort for employees. The basic

aim of ERLD is the production of the same lighting result with less quantity of energy and, thus, less burden for environment. Sustainable LD involves control of light, glare, and energy usage, to be in compliance with ecological principles (Gordon 2014, pp. 204). Modern light designers should be aware of the impact of natural light and/or its absence in biological functions and performance of people (Gordon 2014, pp. 216). The interactions among the three main fields of CSR, the relevant lighting policies and the potential sustainable targets are presented in Table 1 creating a solid theoretical background for the establishment of Sustainable LD and its adoption in CSR strategies.

Benefits from Sustainable Lighting Design

The embodiment of natural light as central ingredient of lighting design in corporate buildings provides various benefits to the company that designs and apply such sophisticated CSR policy (Panagiotopoulos 2018a):

- Savings of energy because artificial light substitutes less times daylight.
- Savings of energy due to the reduced use of air conditioning for heating and cooling.
- Savings of money due to the use of solar panels in corporate premises.
- Money savings through the improvement of working environment and the aftermath limitation of employees' absenteeism due to medical reasons in correlation with the limited access to daylight.
- Financial profit due to increased productivity of employees. The increased use of daylight in working environment increases employees' health, mood, and creativity and supports them to fulfill their duties.

Sustainable Lighting Design in Twenty-First Century

SLD can use several ways and technological achievements for the proper mix of natural and

Sustainable Lighting Design, Table 1 The Sustainable Lighting Design Protocol comprises the interconnections that arise among CSR fields, CSR goal setting, and the relevant lighting parameters (Panagiotopoulos 2018b, 2019)

CSR FIELDS	STRATEGIC – SUSTAINABLE TARGETS	LIGHTING POLICIES
ENVIRONMENT	Natural Resources Protection	Exploitation of Natural Light
		Exploitation of Green Energy
		Thermal Protection
	Restriction of Environmental Impact	Reduction of Pollutant Emissions
		Reduction of Solid and Dangerous Waste/ Recycling
		Light Pollution
SOCIETY	Health, Safety, Quality of Life in, out, and around the Workplace	Adequacy of Lighting
		Quality of Lighting
		Optical Comfort
		Thermal Comfort
		View of Exterior Environment
		Light Pollution
ECONOMY	Money Saving	Reduction of Electricity Consumption
	Productivity (Health, Safety & Quality of Life in Workplace)	Adequacy of Lighting
		Quality of Lighting
		Optical Comfort
		Thermal Comfort
		View of Exterior Environment

artificial light. Shading is an important parameter in SLD. Means for shading could be placed either in the external or internal environment of a corporate building. An advanced ability for shading equals an advanced control of daylight inside a building. Basic idea of SLD is to achieve the desired lighting conditions in a work space with daylighting without additional thermal load and glare in comparison with the available artificial lighting solutions (Lechner 2015). The proper technical means for an homogeneous diffusion of daylighting are: skylight/roof light, roof monitor/clerestory, sawtooth, courtyard and lightwell, atria, light tubes, and light ducts (Al-Obaidi et al. 2016).

Although theoretically lighting needs of corporate buildings could be covered by a combination of natural and artificial lighting, the most popular solution in use consists of fluorescent lamps, and low ceilings. This solution provides stable and homogenous conditions inside a corporate building close or far of the openings of the building and independently of the climate conditions of the place where the building

is. Furthermore, it saves space which previously was used for internal atriums that were planned for the introduction of daylight into the internal of a building. This popular solution causes an increased consumption of energy and high gas emissions because it avoids taking any advantage of the natural conditions of each place of earth since suggests the same for a place in Norway with limited sunshine and a place in Greece with sunshine the most days of the year. This established concept seems that additionally disconnects employees from the external environment and limits them inside the same artificial microclimate (Boubekri 2014).

Ideally, sun light could be used in higher percentage instead of artificial light in corporate premises. However, this is not so simple, because it is not easy for daylight to enter with homogeneity inside the working spaces and it is accumulated in places closed to windows. Glare consist another challenge for the spaces closed to windows. Moreover, direct sun beams multiply the thermal load in the spaces closed to the windows and the consequent need for cooling will result in higher

consumption of electricity. The proper exploitation of natural light should be based on a detailed lighting design that includes architectural openings, shading systems, and lighting automation systems with photocells and sensors of motion. The exploitation of natural light in corporate premises could result in energy savings of 20–40% due to reduced lighting and heating ventilation and air-conditioning (HVAC) needs (Boubekri 2014, p. 15). The savings could be higher whether there is a total CSR plan for the optimization of energy usage that involves automatic control system for lighting and HVAC, timers, occupancy or motion sensors, photosensors or daylight sensors (photocells are a subsystem of them), dimers, means for shade, etc. (Gordon 2014, pp. 254–257).

The upgrade of lighting design of corporate premises to an important part of a total CSR policy for the optimization of energy usage could offer several benefits in various fields like financial savings through a reduction in electricity bills, better working conditions for employees which support their good health and their productivity, and less gas emissions from the building operation. It is not easy for a corporation to record all these advantages with a quantitative manner. However, many of these benefits could be quantified through energy savings, increase in sales, less medical leaves for employees, lower accident rates, etc.

Epilogue

SLD is a new challenge for CSR specialists as for lighting designers, too. It demands deep perusal of light in order a spherical picture of its interactions to be obtained. A complete study for the lighting design of a corporate building should take into consideration parameters like the total life cycle assessment for the building, purchase cost for artificial lighting, construction cost for openings, energy consumption, gas emissions percentage, lighting performance, life span, possibilities for recycling and waste management, maintenance, replacement cost, etc. (Zheng 2016, pp. 88–96). Furthermore, it should consider the effect of

natural light in better and healthier working conditions, the improved productivity of employees due to better lighting conditions, etc. Finally, SLD consists a call for the consideration of lighting design in multilevels in compliance and proportionally with the sustainability principles, and for the deep comprehension of its interscientific interactions with economy, environment, and human health and performance.

Summary

Lighting Design (LD) has been an underestimated parameter in the design of corporate buildings and workplaces for decades. The development of Environmentally Responsible Lighting Design (ERLD) is deemed an upgrade for the comprehension of the impact of light in corporate environment and natural environment. However, a better perusal of the implications of LD reveals that light has the potential to affect the environmental footprint of a company, the health and safety in workplaces, the productivity of employees, its energy costs, and its relations with local community. This fact entails that light could be transformed into a basic sustainability parameter for a corporation since affects all the three main poles of sustainability: environment, economy, and society. Moreover, this realization indicates a chance for the incorporation of the element of light into the Corporate Social Responsibility (CSR) policy of organizations providing a plethora of advantages for employees, society, and the company itself, and additionally possibilities for assessment of such initiatives. This fully comprehension of the sustainable potential of light leads to Sustainable Lighting Design (SLD) as a necessary step for the better exploitation of light in favor of humans, environment, and companies.

Cross-References

- [CSR](#)
- [Strategic CSR](#)
- [Sustainability](#)

References

- Al-Obaidi, K. M., Malek, A., & Rahman, A. (2016). Toplighting systems for improving indoor environment: A review. In M. Idayu, A.-M. Ismail, & S. Riffat (Eds.), *Renewable energy and sustainable technologies for building and environmental applications. Options for a greener future* (pp. 117–136). Cham: Springer.
- Al-Sallal, K. A. (2016). *Low energy low carbon architecture: Recent advances & future directions*. CRC Press/Balkema.
- Boubekri, M. (2014). *DAYLIGHTING DESIGN: Planning strategies and best practice solutions*. Birkhauser Basel.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- European Commission. (2001). *Green book: Forwarding a European framework for corporate social responsibility*. https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9. Accessed 16 Dec 2021.
- Gordon, G. (2014). *Interior lighting for designers*. Wiley.
- Jordan, A., & Lenschow, A. (2008). Integrating the environment for sustainable development: An introduction. In A. Jordan & A. Lenschow (Eds.), *Innovation in environmental policy? Integrating the environment for sustainability* (pp. 3–23). Edward Elgar Publishing.
- Lechner, N. (2015). *Heating, cooling, lighting: Sustainable design methods for architects* (4th ed.). Wiley.
- Mc Williams, A., & Siegel, D. S. (2011). Creating and capturing value: Strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480–1495.
- Panagiotopoulos, F. I. (2018a). Corporate social responsibility and lighting design. Presentation in *7th International Conference on Energy in Buildings*, November 3 2018. ASHRAE Hellenic Chapter, Athens.
- Panagiotopoulos, F. I. (2018b). *Lighting design in the light of corporate social responsibility. The use of technology and innovation in lighting of corporate buildings*. Master Thesis in Hellenic Open University.
- Panagiotopoulos, F. I. (2019). Environmentally responsible lighting Design in the Frame of corporate social responsibility. Tool guide and assessment of CSR programs focused on natural light use in corporate buildings. In *Presentation in Professional lighting design convention 2019*. Rotterdam: VIA-Verlag.
- Strong, D., & Burrows, V. (2017). *A whole-system approach to high-performance green buildings*. Artech House.
- Zheng, X. (2016). Insights to current lighting technologies and low environmental impact artificial lighting. In M. Idayu, A.-M. Ismail, & S. Riffat (Eds.), *Renewable energy and sustainable technologies for building and environmental applications. Options for a greener future* (pp. 87–105). Cham: Springer.

Sustainable Logistics

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Synonyms

City Logistics; Green Logistics

Definition

Sustainable Logistics is the application of principles from sustainability to logistics, i.e., the functions of transportation, warehousing, and packaging. It is a part of Sustainable Supply Chain Management and includes the concepts of Green Logistics and City Logistics.

Green Logistics is a logistical concept, which mainly deals with the environmental dimension of the Triple Bottom Line and aims at the alignment of the logistical functions with the targets of environmental sustainability, i.e., improvement of resource efficiency and reduction of emissions. In essence, Green Logistics combines the “six R’s” of logistics with the targets of environmental sustainability concerning resource consumption and environmental friendliness. This means that the task of Green Logistics is to make the right quantity of the right product available at the right place and the right time in the right condition for the right cost (“six R’s”) while keeping resource consumption and emissions as low as possible (environmental sustainability).

City Logistics is the improvement of the supply of urban areas with goods. This includes not only deliveries but also return logistics. In contrast to city planning, City Logistics mainly uses existing public infrastructure. Targets of city logistics are the relief of the strain on transport infrastructure (e.g., less traffic congestion, fewer accidents) and the reduction of emissions, particularly direct emissions such as noise, particulate matter, and nitric oxide.

Introduction

Due to the interlacing of economies and the liberalization of world trade, the global flow of materials and goods is steadily increasing. In such a globalized world, there is an increase in logistical activities such as transportation, warehousing, and packaging. This means that the negative impacts of logistics on the environment will, in all likelihood, also increase.

Every human activity has potentially negative impacts on the environment in two areas: resource consumption and emissions of harmful substances. Resources can be energy, raw materials, water, air, and space. Emissions can appear in the form of pollutants, waste, radiation, noise, and disfigurement of the landscape. Typical impacts of logistical activities with regard to resource consumption are fuel consumption for transportation, energy consumption, and use of space for warehousing and material and energy consumption for packaging. Typical emissions of logistical activities are exhaust fumes, greenhouse gases and noise for transportation, greenhouse gases (indirect emissions), and disfigurement of landscape for warehousing as well as waste for packaging (Deckert 2015, 2017).

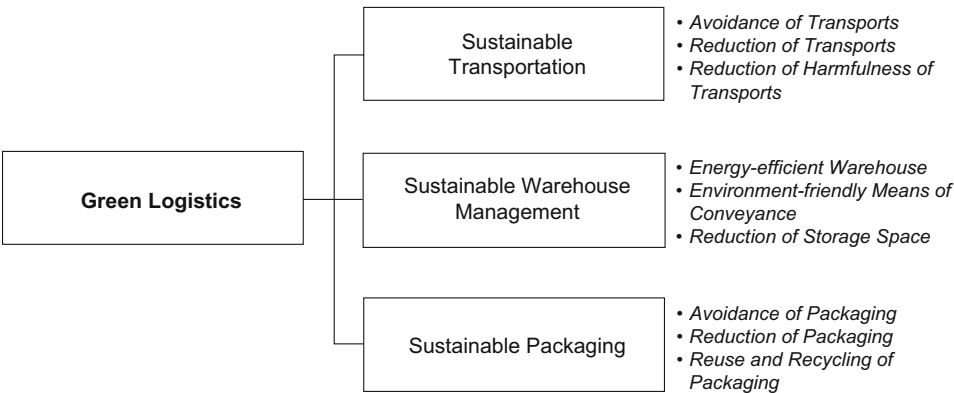
Another issue affecting logistics activities is the megatrend of urbanization. More and more people around the globe live in cities, and cities gain in size leading to what is called mega-cities with more than ten million inhabitants. This

leads to a growing delivery volume into urban areas, which is often comprised of many small, just-in-time deliveries. Typical logistical problems in supplying densely populated urban areas with necessary goods are constrained access to inner cities due to a rivalry between delivery vehicles and passenger vehicles for the same space on the road, an increase in traffic jams, accidents, and emissions as well as longer transportation times due to traffic congestion and increased surface size of the city. All this decreases the logistical service as well as the quality of living in cities (Stodick and Deckert 2019).

Key Issues of Green Logistics

According to the Council of Supply Chain Management Professionals (CSCMP 2013), logistics can be defined as the “process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services.” Functions of logistics are transportation, warehouse management, and packaging. Since Green Logistics is the alignment of logistical functions with the improvement of resource efficiency and the reduction of emissions, it contains measures for Sustainable Transportation, Sustainable Warehouse Management, and Sustainable Packaging (see Fig. 1).

Transportation is the movement of goods between different locations using different



Sustainable Logistics, Fig. 1 Green Logistics Framework (Deckert 2017)

modes of transport. Modes of freight transport can be road transport, rail transport, pipeline transport, inland waterway transport, ocean or sea shipping, air transport, or intermodal transport (i.e., a combination of different modes of transport) (Chopra and Meindl 2013; Grant 2012). According to McKinnon (2015), the main parameters of *sustainable transportation* are modal split, average number of changes of transportation mode, average length of haul, average load on laden trips, average percentage of empty runs, other externalities per vehicle-km and per unit of throughput (e.g., noise, accidents), energy efficiency of transport vehicle, and emissions per unit of energy. Sustainable transportation can, thus, be achieved by avoidance of transports (e.g., digitization of goods), reduction of number of transports (e.g., through increased load utilization), and length of transport route (e.g., through route planning) as well as reduction of harmfulness of transports (e.g., development of environment-friendly propulsion technologies, use of environment-friendly modal split) (Deckert 2015, 2017).

Warehouse management can be defined as “that part of a company’s logistics system that stores products [...] at certain nodes in the firm’s supply chain, and provides information to the firm on the status, condition and disposition of items being stored” (Grant 2012). Sustainable warehouse management primarily aims at low energy consumption of the warehouse (and, thus, low indirect greenhouse gas emissions). Low energy consumption of a warehouse can be achieved mainly by measures on electricity and lighting in the warehouse or on heating and cooling systems of the warehouse. Other issues of sustainable warehousing are environment-friendly means of conveyance and reduction of storage space (Deckert 2015, 2017).

Packaging comprises the functional use of packaging systems such as transport packaging as well as the employment of loading devices such as pallets or containers. Sustainable packaging focuses on material efficiency concerning packaging design and on waste treatment after packaging use. Material efficiency in packaging can be achieved by preventing packaging, by reducing packaging quantity and/or harmfulness,

by reusing packaging through reusable packaging systems, or by recycling packaging materials. The main task of sustainable packaging design is to balance the function of sustainability with the established packaging functions (e.g., protection and preservation of the packaged good) (Deckert 2015, 2017).

Key Issues of City Logistics

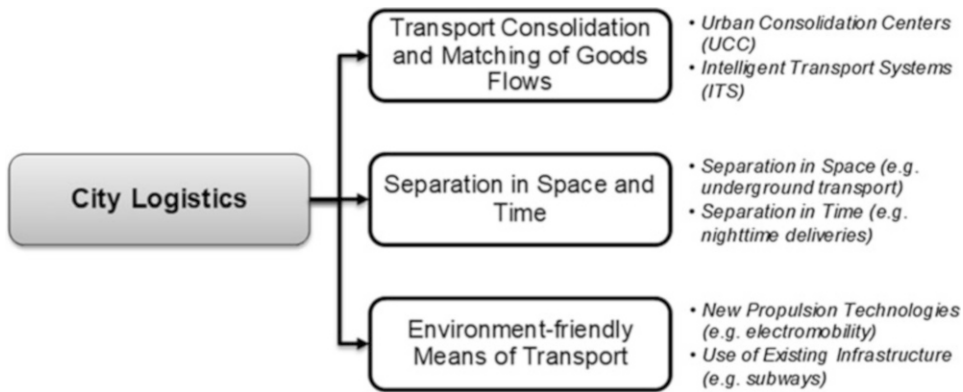
Taniguchi et al. (2001) define City Logistics as “the process for totally optimizing the logistics and transport activities by private companies in urban areas while considering the traffic environment, traffic congestion and energy savings within the framework of a market economy.” In essence, this means to improve the supply of urban areas with necessary goods using the given transport infrastructure. A focus of City Logistics is typically on transport management within urban areas containing such fields as urban consolidation centers (UCCs), intelligent transport systems (ITS), and environment-friendly means of transport (Deckert 2015).

The measures of City Logistics typically make use of the following mechanisms (see Fig. 2; Deckert 2015, 2017; Stodick and Deckert 2019):

Consolidation of transports and matching of the flows of goods: Typical measures are the freight consolidation in urban consolidation centers (UCCs) at the edge of town as well as the use of intelligent transport systems (ITS) to optimize transport routes and to track and trace deliveries.

Separation in Space and Time: Measures for separation in space include separate transport lanes as well as air or underground transport. Typical examples of measures for separation in time are deliveries outside of the rush hour (e.g., nighttime deliveries).

Use of Environment-friendly Means of Transport: Typical measures include the application of environment-friendly delivery vehicles such as electric vehicles or the use of existing passenger infrastructure for freight transport, e.g., subway or tram.



Sustainable Logistics, Fig. 2 Mechanisms of City Logistics (Stodick and Deckert 2019)

A measure in City Logistics can also combine two or more mechanisms. A typical example is the concept of microdepots as used by CEP service providers (courier, express, parcel). A microdepot is an interim storage in the city – usually a container deposited at the center of gravity of the respective distribution area – from which the parcels are delivered to the recipient using environment-friendly means of transport such as cargo bikes. Microdepots divide the last mile of delivery into two steps: firstly full-truckload-delivery from depot of the CEP service provider to the microdepot (second last mile), then delivery of individual parcels from the microdepot to the final recipients (very last mile). This means that the concept of microdepots combines the consolidation of transports on the second last mile with the use of environment-friendly means of transport on the very last mile (Stodick and Deckert 2019).

According to Crainic et al. (2009) the main target of city logistics is the reduction of the “nuisances associated to freight transportation in urban areas while supporting their economic and social development.” The “nuisances” can be divided into strain on the transport infrastructure (e.g., traffic congestion and accidents) as well as noise and emissions such as greenhouse gases and exhaust fumes. The measures of city logistics have different impacts on these “nuisances.” The consolidation of freight leads to

fewer delivery vehicles in the city, which reduces emissions and traffic congestion. Separation in space and time mainly reduces traffic congestion and accidents. Environment-friendly means of transport reduce the emissions per vehicle and – in case of new propulsion technologies such as electric engines – the noise level. If smaller vehicles such as cargo bikes are used, as in the case of microdepots, there is also a reduction of road blockage and traffic congestion (Stodick and Deckert 2019).

Summary and Outlook

As a logistical concept focusing on environmental sustainability Sustainable Logistics includes Green Logistics (the alignment of logistical functions to environmental sustainability) and City Logistics (the improvement of supplying urban areas with goods). In the full meaning of sustainability, social issues should also be included in this approach to achieve a full Triple-Bottom-Line view of logistics. While City Logistics includes some social aspects (e.g., noise and traffic congestion), Green Logistics contains none. Social issues of logistics are, e.g., noise emissions from transportation activities and their impact on human wellbeing (e.g., in the vicinity of warehouses), accidents of delivery vehicles and safety issues impacting other traffic participants as well as work conditions and remuneration of logistics

workers. Future research should integrate these issues into a holistic and integrated model of sustainable logistics.

The three functions of logistics are not independent, and measures in one area usually have trade-offs in other areas. Isolated measures taking into account only one logistical function run the risk of ignoring impacts on the other functions. In the future, trade-offs between the functions of sustainable transportation, warehousing, and packaging should be researched in more depth. One example of the interdependences of the functions is that a reusable packaging system increases the resource efficiency in packaging but usually also leads to higher emissions in transportation for return logistics.

One way to increase our understanding of the impacts and trade-offs of different measures in sustainable logistics is to quantify the effects these measures have on different dimensions of environmental sustainability. An important area of research is to develop meaningful and comparable measurements for resource consumption and emissions. One example is the standardization and harmonization activities surrounding the Transport Carbon Footprint to enable comparison and benchmarking of different transport solutions (Deckert and Görs 2018). Another issue is that in an economic context measurements should also be easy to implement to ensure a wide application, especially in small and medium-sized enterprises.

Cross-References

- Carbon Footprint
- Supply Chain
- Supply Chain Management
- Sustainable Supply Chain
- Sustainable Supply Chain Management

References

Chopra, S., & Meindl, P. (2013). *Supply chain management. Strategy, planning, and operations*. Harlow: Pearson.

- Council of Supply Chain Management Professionals (CSCMP). (2013). Supply chain management terms and glossary. [https://cscmp.org/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms.aspx?hkey=60879588-f65f-4ab5-8c4b-6878815ef921](https://cscmp.org/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms/CSCMP/Educate/SCM_Definitions_and_Glossary_of_Terms.aspx?hkey=60879588-f65f-4ab5-8c4b-6878815ef921). Accessed 4 Jan 2019.
- Crainic, T. G., Ricciardi, N., & Storchi, G. (2009). Models for evaluating and planning city logistics systems. *Transportation Science*, 42(4), 432–454.
- Deckert, C. (2015). Nachhaltige Logistik – Verbesserte Ressourcennutzung und Umweltverträglichkeit durch Green Logistics und City Logistik. In C. Deckert (Ed.), *CSR und Logistik: Spannungsfelder Green Logistics und City-Logistik* (pp. 3–41). Berlin/Heidelberg: Springer Gabler.
- Deckert, C. (2017). Sustainable logistics: A framework for green logistics and city logistics. In H. Lu, R. Schmidpeter, N. Capaldi, & L. Zu (Eds.), *Building new bridges between business and society* (pp. 53–70). Berlin/Heidelberg: Springer Gabler.
- Deckert, C., & Görs, N. (2018). Transport carbon footprint in the German Courier, Express and Parcel Industry (CEP Industry). uwf. <https://doi.org/10.1007/s00550-018-0471-1>.
- Grant, D. B. (2012). *Logistics management*. Harlow: Pearson.
- McKinnon. (2015). Environmental sustainability: A new priority for logistics managers. In A. McKinnon, M. Browne, M. Piecyk, & A. Whiteing (Eds.), *Green logistics: Improving the environmental sustainability of logistics* (2nd ed.). London: Kogan Page.
- Stodick, K., & Deckert, C. (2019). Sustainable parcel delivery in urban areas with micro depots. In E. Sucky, R. Kolke, N. Biethahn, J. Werner, & M. Vogelsang (Eds.), *Mobility in a globalised world 2018* (pp. 233–244). Bamberg: University of Bamberg Press.
- Taniguchi, E., Thompson, R. G., Yamada, T., & van Duin, R. (2001). *City logistics. Network modelling and intelligent transport systems*. Bingley: Emerald.

Sustainable Management

- Phytoremediation
- Sustainability as a Management Approach

Sustainable Market Solutions

- Sustainable Business Solutions

Sustainable Marketing

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Synonyms

Corporate environmentalism; Corporate sustainability; Ecological marketing; Environmental marketing; Environmentally-friendly marketing; Green marketing; Market-oriented sustainability

Definition

Sustainability marketing can be defined as *“the planning, coordination, implementation and controlling of all market transactions in such a way that a sustained satisfaction of the needs of current and potential customers toward the achievement of corporate objectives is granted, while at the same time contributing toward reducing ecological and social impacts and restoring social and ecological health”* (Kirchgeorg and Winn 2006 p.176). Further, Jabbour (2010 p.1223) states that organizations should incorporate sustainability marketing practices throughout the levels of management. As there appear diverse concepts that are interchangeably used by sustainable marketing phenomenon in the pertinent literature such as “eco-friendly marketing,” “environmental marketing,” “corporate environmentalism,” “ecological marketing,” or “green marketing” (Pane-Haden et al. 2009), all of which notions imply to the integrated marketing and management policies/practices, distributing responsibilities for the implementation of environmental and sustainability matters via developing sustainable strategies, and creating different competitive advantages such as declining extra costs (i.e., energy and material), enhancing profits (i.e., differentiation), and improving stakeholder relationships (Ambec and Lanoie 2008).

In that vein, different scholars conceptualize and describe these alternatively used notions in

different ways in the pertinent literature. For example, Banerjee (2002 p.181) defines corporate environmentalism concept as “the organization-wide recognition of the legitimacy and importance of the biophysical environment in the formulation of organization strategy, and the integration of environmental issues into the strategic planning process.” In this sense, while some researchers assert that corporate environmentalism consists of waste reduction, which in turn improves revenue maximization, other scholars rely upon the premise that it captures far more than waste minimization. On the other hand, corporate sustainability expands beyond the contamination retrenchment and requires continuous improvement within an organization (Pane-Haden et al. 2009). To achieve sustainability goals, economies should change their view from a growth orientation to steady-state orientation, in which the rates of consumption and pollution do not extend the capacities of a country (Daly 1996). Overall, sustainability implies to “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission 1987).

Key Issues

As being alive depends upon some regular functions of the biosphere, it is relatively revealed that human behaviors heavily damaged the climate (Agatiello 2009). Besides, the extent of human activities has gradually increased each year with incremental impacts on the global context (Hart 1995). On the other hand, the population over the world has been increased from two billion to approximately seven billion after the World War II, anticipating reaching at around 10 billion by the end of 2050. In a parallel vein, an increased population results in harmful ecological effects. To address these issues, the United Nations Stockholm Conference has determined on an action plan and the Brundtland Commission has published their report in 1987, which covers around four subjects: (a) regulating the impacts of populations on the climate, (b) ensuring food

preservation, (c) allocating sufficient resources in an effective manner, and (d) organizing sustainable systems (Brundtland Commission 1987). In this context, Shrivastava (1995) declared that Brundtland Commission put special emphasis on the concept of “ecologically sustainable development” (ESD), which implies to dealing with both economic and environmental matters simultaneously.

The Historical Evolution of Sustainable Marketing

The concept of sustainable marketing is an evolving process, which dates to 1940s with the approval of Human Rights by United Nations, which is postdated by economic and socio-cultural rights in the 1960s, and lastly ecological matters was popularized as risen topic of 1970s. Owing to the Brundtland Commission Report, a set of environmental protection statements were declared, respectively, such as the “Montreal Agreement” in 1989, the “Basel Treaty” in 1992, and the “Kyoto Protocol” in 1997. In this sense, Kyoto Protocol endeavors to reduce greenhouse gas emissions throughout the world and accepts the estimation of costs associated with global warming within a system. Hence, “Kyoto Protocol” plays a judgmental role in giving priorities to the accountability of the companies regarding the natural environment (Albino et al. 2009). Nevertheless, Shrivastava (1995) has indicated that not only firms generate the wheels of sustainability but also consumers and governments have some responsibilities in terms of consuming wisely and regulating with environmentally sustainable policies.

Further, Industrial Revolution, initiating in the late 1700s in England, has disseminated over North America as there exist controversies about the start and end dates. This era is regarded as the most accelerated period in terms of increasing the level of consumption, contamination, and deterioration (Pane-Haden et al. 2009). Thereafter, this period was followed with a transmission time towards a capitalistic economy where individuals and organizations put emphasis on revenue-

orientation and increased production levels (Hobsbawm 1975). As the population volume rapidly grows, it also results in increased levels of the resource deterioration and ecological degradation (Pane-Haden et al. 2009). Afterwards, nineteenth century has faced with important historians, philosophers, naturalists, and writers who lead to the “Conservation Movement,” which enhances environmental consciousness level of individuals in the late 1850s (Udall 1963). This movement was targeted to decline the irresponsible deployment of the resources owing to industrialization, leading to several government regulations such as “the Forest Reserve Act” in 1891 and “the Rivers and Harbors Act” in 1899 (Pane-Haden et al. 2009).

Given heightened consumer awareness on environmental matters, the governments began to establish stricter regulations regarding the environment (Menon and Menon 1997). Thereafter, organizations started to distribute their budgets for ecological aids with an intent of meeting with environmental legislations. In relation with academic standpoint, the new concepts such as “holistic/strategic social responsibility,” “cause-related marketing,” and “sustainability” were initially emerged in the extant body of the literature (Varadarajan and Menon 1988).

During the 1990s, heightened pressure of ecological activists on governments was received greater attention of the media, which in turn revitalizes the environmental matters again (Peattie 1995). However, Nattress and Altomare (1999) considered this era as proactive responses of corporations against ecological problems. In this sense, it should be noted that organizations started to be aware of environmentally friendly behaviors that may yield financial benefits to the companies. In addition, the terminology of “eco-efficiency” has become very popular among organizations in the marketplace. Further, firms need to understand whether implementing environmental practices provides the opportunities of prestige and profit. Also, environmental activities not only complicate the nature of the product, which makes it harder to imitate by rivals, but also reduce the negative ideas of customers and media (Walley and Whitehead 1994). In terms of scholarly

contributions, some new concepts such as “environmentalism” (e.g., Drumwright 1994), “social marketing” (e.g., Andreasen 1994), “enviropreneurialism” (e.g., Menon and Menon 1997), and “corporate social responsibility” (e.g., Brown and Dacin 1997) were emerged in the extant literature.

In the 2000s, there has been a burgeoning concern on ecological issues owing to the effect of globalization, rapid growth in competition, increased conscious level of consumers, and high global warming threats (Baker and Sinkula 2005). Moreover, organizations understand that sustainable issues should be engaged in all their firm behaviors to survive in these highly competitive and dynamic environments. During that period, scholars put great attention on the subjects such as corporate environmentalism (e.g., Banerjee et al. 2003) and market-oriented sustainability (e.g., Crittenden et al. 2011).

In sum, even though sustainable marketing has been emerged in 1990s in the pertinent literature, a sharp increase has been recognized in 2000s in the last two decades (Chabowski et al. 2011). However, a wide range of academic research subjected to environmental matters dates back to the 1960s with the emergence of the concept of “societal marketing” (Kotler and Levy 1969). Because environmental strategies have incrementally received a great attention of academics, existent body of intellectual knowledge reveals a number of different concepts related to the sustainable marketing named as “cause-related marketing” (e.g., Varadarajan and Menon 1988), “social marketing” (e.g., Andreasen 1994) and “environmental marketing” (e.g., Drumwright 1994), “enviropreneurial marketing” (e.g., Menon and Menon 1997), “corporate social responsibility” (e.g., Brown and Dacin, 1997), “corporate environmentalism” (e.g., Banerjee et al. 2003), and “market-oriented sustainability” (e.g., Crittenden et al. 2011).

Summary

Last two decades have received an increased interest on natural environment by governments, policy makers, companies, and the community over

the world. Several researchers have uncovered the possible ecological effects of increased number of world population, industrialization activities, and the exploitation of nonrenewable resources. Although industrialization that lasts for more than a century has provided some opportunities, it has also resulted in environmental corruptions (Shrivastava 1995). There exist several climate deteriorations such as increased level of oceans, ozone depletion, increased degree of acid rains, reduced biodiversity, global warming, and soil erosion (Hart 1995). The sustainable marketing concept has been received great importance of both marketing scholars and marketing managers, as a wealth of academic research acknowledges the importance of the subject in the extant literature. This chapter is aimed to present the definition of sustainable marketing via presenting similar concepts’ definitions, which is followed by key issues in sustainable marketing and the historical evolution of the subject.

Cross-References

- [Green Marketing](#)
- [Marketing and CSR](#)
- [Sustainable Marketing II](#)
- [Socially Responsible Marketing](#)
- [Societal Marketing](#)

References

- Agatiello, O. R. (2009). The world is one and all things are in it. *Management Decision*, 47(7), 1056–1064.
- Albino, V., Balice, A., & Dangelico, R. M. (2009). Environmental strategies and green product development: An overview on sustainability-driven companies. *Business Strategy and the Environment*, 18(2), 83–96.
- Ambec, S., & Lanoie, P. (2008). Does it pay to be green? A systematic overview. *Academy of Management Perspectives*, 22, 45–62.
- Andreasen, A. R. (1994). Social marketing: Its definition and domain. *Journal of Public Policy & Marketing*, 13(1), 108–114.
- Baker, W. E., & Sinkula, J. M. (2005). Environmental marketing strategy and firm performance: Effects on new product performance and market share. *Journal of the Academy of Marketing Science*, 33(4), 461–475.

- Banerjee, S. B. (2002). Corporate environmentalism: The construct and its measurement. *Journal of Business Research*, 55(3), 177–191.
- Banerjee, S. B., Iyer, E. S., & Kashyap, R. K. (2003). Corporate environmentalism: Antecedents and influence of industry type. *Journal of Marketing*, 67(2), 106–122.
- Brown, T. J., & Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *The Journal of Marketing*, 61(1), 68–84.
- Brundtland, G. (1987). Our common future-call for action. *Environmental Conservation*, 14(4), 291–294.
- Chabowski, B. R., Mena, J. A., & Gonzalez-Padron, T. L. (2011). The structure of sustainability research in marketing, 1958–2008: A basis for future research opportunities. *Journal of the Academy of Marketing Science*, 39(1), 55–70.
- Crittenden, V. L., Crittenden, W. F., Ferrell, L. K., Ferrell, O. C., & Pinney, C. C. (2011). Market-oriented sustainability: A conceptual framework and propositions. *Journal of the Academy of Marketing Science*, 39(1), 71–85.
- Daly, H. E. (1996). *Beyond growth: The economics of sustainable development*. Beacon Press. Boston.
- Drumwright, M. E. (1994). Socially responsible organizational buying: Environmental concern as a noneconomic buying criterion. *The Journal of Marketing*, 58(3), 1–19.
- Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*, 20(4), 986–1014.
- Hobsbawm, E. J. (1975). The standard of living debate. In *The standard of living in Britain in the industrial revolution* (pp. 179–188). London: Methuen.
- Jabbour, C. J. C. (2010). Non-linear pathways of corporate environmental management: A survey of ISO 14001-certified companies in Brazil. *Journal of Cleaner Production*, 18(12), 1222–1225.
- Kirchgeorg, M., & Winn, M. I. (2006). Sustainability marketing for the poorest of the poor. *Business Strategy and the Environment*, 15(3), 171–184.
- Kotler, P., & Levy, S. J. (1969). Broadening the concept of marketing. *The Journal of Marketing*, 33(1), 10–15.
- Menon, A., & Menon, A. (1997). Enviropreneurial marketing strategy: The emergence of corporate environmentalism as market strategy. *The Journal of Marketing*, 61(1), 51–67.
- Natrass, B., & Altomare, M. (1999). *The natural step for business: Wealth, ecology and the evolutionary corporation*. Gabriola Island: New Society Publishers.
- Pane Haden, S. S., Oyler, J. D., & Humphreys, J. H. (2009). Historical, practical, and theoretical perspectives on green management: An exploratory analysis. *Management Decision*, 47(7), 1041–1055.
- Peattie, K. (1995). *Environmental marketing management: Meeting the green challenge*. London: Pitman.
- Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *Academy of Management Review*, 20(4), 936–960.
- Udall, S. L. (1963). *The quiet crisis*. New York: Holt, Rinehart & Winston.
- Varadarajan, P. R., & Menon, A. (1988). Cause-related marketing: A coalignment of marketing strategy and corporate philanthropy. *The Journal of Marketing*, 52(3), 58–74.
- Walley, N., & Whitehead, B. (1994). It's not easy being green. *Reader in Business and The Environment*, 36, 10–14.

Sustainable Marketing II

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Synonyms

Green marketing; Socially responsible marketing; Societal marketing

Definition/Description

“Sustainable marketing” is a holistic approach to marketing theory and practice that takes goals from all three pillars of triple bottom line (TBL), namely, environment, society, and economy. It stands for a balanced and equitable development with integrated marketing effort and through customer satisfaction. Within marketing thought, “green marketing,” which is sometimes used synonymously with ecological marketing or environmental marketing, focuses on the reduction or elimination of negative environmental impact caused by marketing strategy and practice. These negative impacts reside in the way by which products and services are designed, the resources they consume, waste generated by excessive packaging, and distribution structures that depend on nonrenewable and pollutant resources. On the other hand, triggered by the consumerism movement, “societal marketing” focuses on marketing strategy and practice that causes overproduction

and overconsumption, provision of goods and services that threaten human health or safety, and societal consequences of environmental damage caused by marketing activity.

Sustainable marketing is a holistic view of marketing's role in the quest for sustainable development. It requires the convergence of green and societal marketing for a responsible design and development of goods and services that enhance quality of life and an equitable distribution of those goods and services between industrialized and non-industrialized nations of today and tomorrow. At the same time, sustainable marketing calls for a shift from a dominant focus on wants to needs in order to prioritize sustainable utilization of resources. To achieve the transformation of conventional marketing toward sustainable marketing, a critical marketing approach is required that challenges the fundamental objectives of marketing based solely on economic development.

Introduction

Sustainable marketing is marketing within and supportive of sustainable economic development (van Dam and Apeldoorn 1996, p. 46). Based on the widely accepted definition in Brundtland Report (WCED 1987), such a development requires equitable and balanced growth within and across different generations that focuses on not only the physical environment but also societal needs. Therefore, sustainable marketing is a contemporary marketing thought that challenges the fundamentals of conventional approaches to marketing and addresses how "mutually satisfying exchange relationships" (Baker 2010, p. 3) can be achieved while eliminating the damage on environment and considering societal needs at large.

Although it is a relatively newer concept, sustainability was on the agenda of modern marketing thought since the 1960s and 1970s. Green marketing has emerged and was established as a strong domain following the ecological and environmentalist movements of these early eras. Similarly, societal marketing and social marketing

have emerged as a response to raising consumerism thought in parallel. The aim of this entry is to provide an understanding of these separate marketing domains and then to synthesize them for conceptualizing sustainable marketing.

Green Marketing

The negative impact of industrial activity and commerce on the physical environment such as increased pollution, extensive use of non-renewable resources, and accelerating levels of waste has been on the agenda of governments, society, and business for many decades. Green marketing focuses on the relationship between marketing and environment. In particular, it covers the marketing activities that reduce the negative environmental impacts of products, services, or production systems while, at the same time, promote products and services that cause less or no harm to the environment (Peattie 2001). Ecological marketing and environmental marketing are terms that are sometimes used synonymously with green marketing in different sources, but in fact they refer to earlier eras in green marketing's historical development.

At the end of the 1960s and the beginning of the 1970s, the ecological marketing movement challenged conventional marketing thought and demanded environmental considerations to be incorporated into marketing practice. The main causes of this were increased environmental pollution and acknowledgment of the limits to natural resources that were abundantly used for centuries. Ecological marketing was defined as the study of negative and positive impacts of marketing action on pollution, energy depletion, and non-energy resource depletion (Henion and Kinnear 1976). This era had a relatively low impact in marketing practice because it had too much of a local focus on selected industries based on limited environmental indicators and couldn't influence a large segment of companies or consumers (Peattie and Charter 2003). However, it triggered the introduction of laws and regulations that forced businesses to take measures on their activities that created

negative impact on the environment (Menon and Menon 1997).

Then, following the big environmental disasters such as Chernobyl or Exxon Valdez oil spill and the publication of Brundtland Report (WCED 1987), the late 1980s experienced the second wave of environmentalist movement which this time was widely accepted by marketing, consumers, and the society at large. Environmental considerations became a part of marketing strategy for organizations as the number of environmentally conscious consumers increased and ability to offer green products and services began to provide competitive advantage. Strategies such as greening the production processes through input reduction, decreasing packaging, and switching to reused or recycled materials for production introduced cost advantages for companies.

One way to understand how green marketing is applied in practice is by using the marketing mix concept. Organizations introduce green product, green price, green promotion, and green distribution strategies for incorporating environmental considerations into their marketing activities. Green product strategies range from product design for environment, replacing virgin raw materials with environmentally friendly raw materials, decreasing production, or consumption waste to elimination of planned obsolescence, using degradable packaging, or eco-labelling of products.

Green pricing is related with internalizing the external costs of production and consumption. It is not only about adding the “green premium” to prices or introducing inferior products through recycling or refurbishing. Cost reductions in the long run due to decreased resource usage serve as competitive avenues for green pricing. Furthermore, new pricing strategies such as pay per use reduce overproduction and contribute to environmental sustainability.

Green promotion is a strategy that needs careful handling. Marketing communications for environmental products and services are necessary to inform the consumers about green alternatives in the market. However, accuracy about the environmental performance of products and services is essential. Over-promising with green

promotion might result in green washing accusations.

Finally place strategies have significant impact on green marketing practice because of the heavy dependence of transportation on fossil fuels. Distribution network design, capacity utilization in transportation and warehousing, transport mode selection, and customer service levels are various physical distribution decisions that impact environmental performance.

Despite the wide recognition of green marketing, skepticism has been raised to narrow applications of green marketing strategies (Peattie and Crane 2005) and inability of marketing to incorporate environmental considerations as a strategic tool (Polonsky and Rosenberger III 2001). Green marketing is perceived as a hype or a myth as long as more radical change in corporate philosophy and action doesn't take place. Transformative green marketing that alters the financial performance measurements and perceptions of value is called for a real change (Polonsky 2011). Convergence of societal considerations with environmental considerations and a focus on sustainable marketing is another solution (Peattie 2001) that is suggested to have a more holistic understanding of green marketing.

Societal Marketing

The raising ecological considerations triggered skepticism about conventional marketing practice that caused overproduction and overconsumption. The relationship between increasing negative environmental impact and free use of resources that are considered infinite started being noticed widely which pointed out the negative societal impact caused by marketing activities. Critics started to call for a focus on human needs instead of business needs, expansion of marketing to social areas such as population control, or education support and a general business orientation shift from solely profits to societal impact (Takas 1974). Consumerism movement spread widely among the new highly educated consumer profile of the 1970s and called for marketing action

against irresponsible corporate behavior (Abratt and Sacks 1988).

Societal marketing emerged as a response to these critics, and it is defined as the incorporation of societal considerations to marketing strategy and practice regardless of the object of exchange (El-Ansary 1974). This object of exchange can be a product, service, social cause, a person, or an idea. The focus of integrated marketing effort in its conventional form is customer satisfaction as the key to attaining long-run profitability. Societal marketing extends this focus and includes long-run customer welfare to the objectives of marketing while maintaining long-run profitability (Kotler 1972). In addition to achieving customer satisfaction under fair conditions to customers, marketers need to support customers to make intelligent purchase decisions and avoid making firm decisions that have negative impacts on society at large (Schwartz 1971). Therefore, societal marketing extends the exchange actors from sellers and buyers to the larger task environment that includes employees, competitors, suppliers, and even the larger society considering that anything that is done for the benefit of the society will provide benefits to the firm in the long run.

Social marketing, which sometimes might be confused with societal marketing, is a different concept that similarly focuses on society but has a relatively limited focus onto object of exchange. Social marketing is defined as the application of standard marketing tools and practices to influence the acceptability and dissemination of social ideas or causes (Kotler and Zaltman 1971). Some examples to these social ideas can be safe driving, anti-smoking, recycling, or responsible consumption. The marketing of these social ideas can be done by for-profit or non-profit organizations, but the essence is the utilization of conventional marketing knowledge while marketing these ideas. Based on this definition, societal marketing is a larger concept that requires consideration of society at large while conducting marketing activities whether to market commercial goods and services or social ideas. It is the incorporation of corporate social responsibility into marketing thought.

Societal marketing, which is sometimes used synonymously with socially responsible

marketing, has gained attention throughout the many years since it was introduced the first time. Alongside with consumerism movement, it influenced marketing practice in terms of safe and responsible product design, marketing communications that educate consumers for responsible consumption, advertising that avoids overconsumption or deceptive promotion, fair pricing, and fair distribution. Consumerism movement triggered the introduction of new laws and regulations that protect consumer rights, and these laws and regulations affected changes in the marketing mix toward social responsibility.

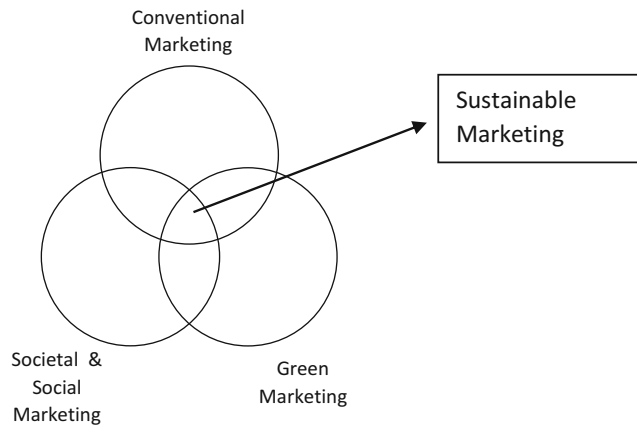
Despite the increase in interest to both green marketing and societal marketing, one can't say that the balance between those concepts and economic considerations is achieved. Takas (1974, p. 3) once stated that "for a businessman a product is not a societal consideration; it is something the factory can make, the warehouse is full of, and the sales department has got to move at as great a profit as possible." It is possible to see that this view still holds true in some cases especially when the societal or environmental interests collide with business interests. A more holistic and balanced approach to green and environmental marketing which also considers the requirements of conventional marketing is represented by sustainable marketing concept.

Sustainable Marketing

Sustainable development is defined as a balanced and equitable path to development that depends on three main pillars which are also known as the TBL. TBL stands for a balance between social, environmental, and economic pillars which are illustrated frequently with a Venn diagram. Departing from TBL concept, sustainable marketing, in this entry, is defined as the integrated marketing effort that aims to achieve customer satisfaction for maintaining balanced and long-run environmental, societal, and economic performance. Sustainable marketing is a larger concept than green marketing or societal marketing that includes the goals of both. Figure 1 below shows sustainable marketing and its main pillars.

Sustainable Marketing II,

Fig. 1 Sustainable marketing (Altuntas Vural 2015)



Conventional marketing in the figure stands for the traditional marketing strategy that prioritizes profitability for organizations both in the short and in the long run. The means to this profitability is seen as customer satisfaction. Marketing mix is designed and revised in accordance with competitive considerations. Customer wants are at the focus of marketing effort regardless of a transactional or a relational approach. Despite the dominant economic perspective, considerations for environment or society are not inexistent; however, they are mostly at compliance level to laws and regulations.

Green marketing and societal marketing represent the marketing strategies and practices that consider environmental impact and societal impact, respectively. However, these are not independent concepts. Majority of negative environmental impact caused by marketing activity has societal consequences such as waste produced by excessive packaging, or dangerous chemicals used in products result in negative impact on human health. On the other hand, natural environment is not dependent on society; it is the society that depends on natural environment. Therefore, any environmental marketing effort that eliminates negative environmental impact of business activity will have positive consequences for the society as well.

Within this pillar, social marketing is also essential to make a change in behavior toward sustainability. Social marketing can be used to promote sustainable consumption and encourage

regulatory frameworks for environmentally sustainable production, consumption, and disposal. Social marketing can function as the strategic use of marketing tools for marketing sustainability.

Peattie (2001) states that although many efforts were made with respect to developing green products, targeting green customer segments, or improving the environmental performance of supply and distribution chains, the overall achievement in relation to sustainable development goals is not close to desired levels. He explains this situation with three main sustainability challenges for marketing. The first one is the futurity component of sustainable development that challenges marketing to justify why meeting today's customers' needs are more important than meeting future generations' needs. It is important to make goods and services available not only to current customers but the customers who belong to future generations as well. The second one is the equity challenge that underlines the high share of industrialized nations in overproduction and overconsumption and the related negative environmental impacts. The burden of industrialization is endured by less-industrialized nations, while the benefits of industrialization provided in terms of goods and services are not distributed equally among nations. Finally, the third one is about shifting the emphasis of marketing from wants to needs to achieve sustainable development.

These challenges and the inability of green marketing or societal marketing making it to mainstream marketing for almost 50 years are a

result of the continuous battle between the conventional economic perspective that welcomes these sustainability initiatives as long as they don't compromise the short- and long-term financial targets and even use them as a leverage to achieve these targets. Whenever there is a compromise requirement for sustainability, it comes rarely from the economic pillar. That is why Gordon et al. (2011) propose an alternative framework for sustainable marketing. According to this framework, sustainable marketing can be achieved by using the power of marketing through green marketing, social marketing, and critical marketing. While green marketing is used to design, develop, promote, and distribute environmentally friendly products and services, social marketing helps to create sustainable behavior change among consumers, producers, sellers, and regulatory authorities. But without a critical marketing approach, the changes to the existing system would remain only marginal. For a systemic change toward sustainability, the fundamental principles of marketing such as globalized economic development, increased consumption, or profitability need to be challenged in favor of quality of life in addition to quality of services and products, re-localized economic growth, and self-sufficiency based on renewable resources.

Summary

Sustainable marketing is a concept that is larger than green marketing or societal marketing. While including the objectives of both, sustainable marketing is an alternative to the well-established commercial marketing thought that prioritizes economic performance. It is not about producing and selling environmentally friendly products and services for earning more profit. It is not about introducing social responsibility campaigns for reputation marketing. As the early discussions on societal marketing pointed well, reduction or elimination of negative environmental and societal impacts of marketing will provide long-term profitability for businesses as they are dependent on the natural environment and the society to survive.

However, the fundamentals of conventional marketing need to be challenged to find alternative means for achieving long-term profitability. Systemic change is required to alter current structure of markets, commercial performance indicators, valuation of natural resources, and ecosystem services and approaches to production and consumption. Critical marketing theory could lead the way toward this systemic change and become a means for achieving a fundamental transformation toward sustainability in marketing.

Cross-References

- ▶ [Green Marketing](#)
- ▶ [Social Marketing](#)
- ▶ [Societal Marketing](#)
- ▶ [Sustainable Marketing](#)

References

- Abratt, R., & Sacks, D. (1988). The marketing challenge: Towards being profitable and socially responsible. *Journal of Business Ethics*, 7(7), 497–507.
- Altuntas Vural, C. (2015). Green marketing: A conceptual framework and suggestions for industrial services marketing. In *Handbook of research on developing sustainable value in economics, finance, and marketing* (pp. 63–85). Hershey: IGI Global.
- Baker, M.J. (2010). Marketing Philosophy or Function? in *Marketing Theory* (pp. 3–23) Michael J. Baker and Michael Saren (Eds.) UK: Sage Publications.
- El-Ansary, A. I. (1974). Towards a definition of social and societal marketing. *Journal of the Academy of Marketing Science*, 2(2), 316–321.
- Gordon, R., Carrigan, M., & Hastings, G. (2011). A framework for sustainable marketing. *Marketing Theory*, 11(2), 143–163.
- Henion, K. E., & Kinneer, T. C. (1976). *Ecological marketing*. Columbus: American Marketing Association.
- Kotler, P. (1972). What consumerism means for marketers. *Harvard Business Review*, 50, 48–57.
- Kotler, P., & Zaltman, G. (1971). Social marketing: An approach to planned social change. *Journal of Marketing*, 35(3), 3–12.
- Menon, A., & Menon, A. (1997). Enviropreneurial marketing strategy: The emergence of corporate environmentalism as market strategy. *Journal of Marketing*, 61(1), 51–67.
- Peattie, K. (2001). Towards sustainability: The third age of green marketing. *The Marketing Review*, 2(2), 129–146.

- Peattie, K., & Charter, M. (2003). Green marketing. In M. J. Baker (Ed.), *The marketing book* (pp. 726–756). London: Butterworth-Heinemann.
- Peattie, K., & Crane, A. (2005). Green marketing: Legend, myth, farce or prophesy? *Qualitative Market Research: An International Journal*, 8(4), 357–370.
- Polonsky, M. J. (2011). Transformative green marketing: Impediments and opportunities. *Journal of Business Research*, 64(12), 1311–1319.
- Polonsky, M. J., & Rosenberger, P. J., III. (2001). Reevaluating green marketing: A strategic approach. *Business Horizons*, 44(5), 21–30.
- Schwartz, G. (1971). Marketing: The societal concept. *University of Washington Business Review*, 31(1), 33–38.
- Takas, A. (1974). Societal marketing: A Businessman's perspective. *Journal of Marketing*, 38(4), 2–7.
- van Dam, Y. K., & Apeldoorn, P. A. C. (1996). Sustainable marketing. *Journal of Macromarketing*, 16(2), 45–56.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. Oxford: Oxford University.

view, keeping at its core the person's well-being. Material poverty shows itself when indispensable goods are lacking. Poverties different from the former can be found in very numerous situations of discomfort and dependence which, especially in the western world, are spreading at dizzying speed.

Moreover, by way of examining the dimensions that development should have, sustainable modernity is considering the trends which are showing in such a period where digitalization and the lack of relational goods represent the main features that tend to make the person, especially within businesses, less and less physically part of the productive process. In order to remedy these matters, the term “sustainable modernity” is suggested to give space to those contradictions that development involves. All this in order to contribute to building a more livable, fair, and beautiful economic system.

Sustainable Mobility

► Sustainable Transportation

Sustainable Modernity

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Synonyms

[Inclusive modernity](#); [Integral development](#); [Relationships development](#); [Social responsible development](#)

Definition

Sustainable modernity indicates the dimensions that development should have in order to be able to create better conditions of existence from a social, economic, and environmental point of

The Dimensions of Sustainable Modernity

Among the dimensions on which sustainable modernity unfolds (Rullani 2010), the first one concerns the integral development of people who are agents of social life and of businesses which instead mainly operate in the economics field. The word “integral” (Sorci 2007) includes the growth of professional expertise with reference to the work that they are actually carrying on, but also the immaterial aspects which characterize subjects, and therefore businesses as well, who require adequate spaces for reflecting, for thinking. We include, among these spaces, those areas concerning relationships (McIntyre 2009) and consequently the contribution to building relational goods (Gui 1996). This in that, in relational goods, relationships, and especially the interpersonal ones, is a good in itself.

Another dimension of sustainable modernity relates to inclusion and that is the capacity of all subjects, and therefore of businesses as well, of involving subjects with a disadvantage or a different ability in the economic-social process which concerns the production of goods and

services of all kinds. This process is really important in order to guarantee justice and fairness of treatment (Nussbaum 2006).

The third dimension concerns the danger of dissipated growth (Rullani 2010) which consists in destroying relational goods. This occurs by way of an erroneous interpretation of time subdivisions: work time, free time, time for family, and time for reflecting and thinking (Donati 2003). This danger takes place when harmony of the different facets of modernity disappears and too much importance is given to one of the outlined aspects. For example, work is solely considered important, or is it only free time?

This is all the more serious if certain limits, which are defined critical points, are crossed, so creating pathologies, like the use of mobile phones and/or computers that can be beneficial for development, or they may produce dependence and therefore contribute to diverting the subject from real life and everyday tasks. This limit-crossing may involve loss of meaning of his/her own activity and make bewilderment and desperation grow. The critical point represents a turning point where those goods (comfort), which we daily use – mobile phones, cars, computers, and so forth – change from positive goods into goods that create “damage” to ourselves and to society. Especially in western societies, we have already stepped amply over this critical line and, therefore, incorrect use generates social “uneasiness” instead of social “well-being” (Bruni and Zamagni 2016).

The fourth dimension is the ability to develop behaviors which tend toward gratuitousness (Bruni et al. 2008) and reciprocity (Bruni et al. 2008). By way of gratuitousness it is not meant that the various activities are carried on for free. Gratuitousness is based on the ability of subjects to carry on his/her own activity in order to make the subject that is beside him/her better, but also keeping the improvement of life quality of near and far people in mind and heart.

Reciprocity refers to the possibility of cooperation in building relationships that generate a bidirectional approach where your work/service does not always have the same quality or is not always of the same quantity of the work/service of

your counterpart. However, in this case as well, there are differences of intensity. That which is considered essential for sustainable modernity is the ability to cooperate in all cases with an objective that goes beyond contingency; rather, it opens up greater horizons of time and space.

The fifth dimension concerns reconsidering prize mechanisms which are excessively oriented toward meritocracy. These mechanisms are based on individual merit and, for the way in which they are outlined in the current state of the art, create inequalities because they are calculated on the final results instead of on behavior and process. Merit has been taken by capitalism as a veneer in order to make everything more efficient from the viewpoint of success, power, and money. However, “histories,” and therefore the starting points of each subject, are different as well as are their ways of acting. This means that certain features like patience, mildness, and ability to cooperate are not considered or rather “forgotten” (Bruni and Zamagni 2016). This triggers vicious circuits which widen inequality undermining sustainability at its very core (Baldarelli et al. 2017).

These dimensions can be considered both for individuals acting in the social environment and for economic operators like organizations and businesses.

Sustainable Modernity and Relational Goods: Some Notes

The characteristics can be summarized in the ability to create trust both in the environment, and inside the company, which is not simply the “legitimacy,” but it comes to seeking a true relationship with the environment, in all expressions, who become engines of both factors of production activities in the company, but also elements and essential guidance to the entire business activity.

The definition of company as a system of relations is, according to our point of view, a definition that needs to be clarified and in reality does not happen spontaneously because even within the company there are conflicting interests. So, on the one hand it is necessary that the undertaking takes account of how such behavior influences

economic variables, and on the other it is necessary to take into account that such behavior must be cultivated and built. This type of approach has a significant effect on the definition of the goals especially of the company (mission), the type of government (governance), and accountability.

Summary

The objective of having included this chapter is that of reflecting on certain aspects which are becoming more and more important in order to be able to solve some important issues, like that of poverty both material and of other kinds. The dimensions of sustainable modernity, which have been analyzed, are useful to base managers' decision processes to consider human and relationship variables as important as economic and financial ones.

Cross-References

- [Environmental Accounting](#)
- [Environmental Disclosure](#)

References

- Baldarelli, M. G., Del Baldo, M., & Nesheva-Kiosseva, N. (2017). *Environmental accounting and reporting. Theory and practice* (Series Title: CSR, sustainability, ethics & governance). Cham: Springer.
- Bruni, L., & Zamagni, S. (2016). *Civil economy*. Newcastle upon Tyne: Agenda Publishing.
- Bruni, L., Gilli, M., & Pelligra, V. (2008). *Reciprocity: Theory and facts*. International Review of Economics. Springer. <https://doi.org/10.1007/s12232-008-0042-9>.
- Bruni, L., Oslington, P., & Zamagni, S. (2016). Economics and theology special issue. *International Review of Economics*, 63(1), 1–5.
- Donati, P. (2003). *Sociologia delle politiche familiari*. Roma: Carocci.
- Gui, B. (1996). On “relational goods”: Strategic implications of investment in relationships. *International Journal of Social Economics*, 23(10/11), 260–278. <https://doi.org/10.1108/03068299610149589>.
- McIntyre, A. (2009). *Dependent rational animals. Why human beings need the virtues*. London: Bloomsbury Academic.
- Nussbaum, M. C. (2006). *Frontiers of justice*. Cambridge: Harvard University Press.
- Rullani, E. (2010). *Modernità sostenibile. Idee, filiere e servizi per uscire dalla crisi*. Verona: VIU Marsilio.
- Sorci, C. (2007). *Lo sviluppo integrale delle aziende*. Milano: Giuffrè.

Sustainable Net Benefit Index (SNBI)

- [Index of Sustainable Economic Welfare](#)

Sustainable Operations Management

- [Sustainable Chain Management](#)

Sustainable Organisations

- [Social Responsibility According to ISO 26000](#)

Sustainable Performance

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Synonyms

[Continual performance](#); [Continuous performance](#); [Viable performance](#)

Description

In 1987, the Brundtland commission's report, Our Common Future, called for a new model of global economic development (Brundtland report, 1987). This report offered what has become a

common definition of sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987; p:41). Sustainable performance is a concept introduced after sustainable development and can be defined as a practice as the combination of its economic, social, and environmental performances (Chardine-Baumann & Botta-Genoulaz, 2014). Triple bottom line framework, introduced by Elkington (2004), suggested companies take a multidimensional perspective that integrates not only economic returns but also social and environmental aspects (Henao et al., 2019). According to this framework, companies can use all three aspects (economic, social, and environmental) as a foundation for building sustainable performance and measure performance against the three.

The literature on sustainable performance is growing; however until this point, there are two main conceptual streams observed in existing literature. The first view suggests that there are trade-offs among the three pillars of sustainability (economic, social, and environmental), where improving on one pillar can be detrimental to the others. The second view suggests that there is a positive relation among the pillars and improvement in one pillar can have a positive influence on the others (Henao et al., 2019).

Tools and Techniques to Achieve Sustainable Performance

Lean manufacturing has emerged as a dynamic learning process, which can guide companies to achieve positive economic outcome while using less resources and adding value to customers (Shah & Ward, 2007). There is growing body of literature on understanding the impact of lean manufacturing on the sustainable performance (Cherrafi et al., 2016; Hartini & Ciptomulyono, 2015; Martinez-Jurado & Moyano-Fuentes, 2014). The building blocks of lean manufacturing include several tools and techniques that have been practiced in Japan for years and include Kaizen, 5S, Total Quality Management (TQM), Value Stream Mapping (VSM), to mention a few

(Posajek, 2003). Companies have adopted these tools to achieve sustainable performance goals in their organizations. For instance, 5S technique that is one of the tools of lean manufacturing has been widely adopted by organizations since it brings stability and improvement in a continuous way (Randhawa & Ahuja, 2017). Osada (1991) introduced 5S concept, which can help companies build high quality products, reduce costs, and improve safety, availability rate, and product diversification. The key elements of 5S as defined by author are:

- Seiri – Organization
- Seiton – Orderliness
- Seiso – Cleanliness
- Seiketssu – Standardized cleanup
- Shitsuke – Discipline

The fifth element, Shitsuke (Discipline), is about making a habit of preserving established procedures and an important element to achieve sustained organizational performance. This means establishing a standard work across the organization so that every employee can utilize standard operating mechanisms to avoid surprises at the end. The existing literature on 5S proves that if adopted correctly, this tool can help companies achieve their sustainable performance goals (Bragança et al., 2013; Aziz et al., 2014; Putro, 2013).

Summary

Sustainability is a process where companies integrate their economic, social, and environmental objectives into their business values and strategies, and hence, it is a process rather than an end in itself (Székely & Knirsch, 2005). In today's competitive business environment, this means going one step further than just following the rules and regulations but also establishing a work environment and principles where all three aspects of sustainability (economic, social, environmental) can flourish. Székely and Knirsch (2005) argue that there are at least three critical success factors to achieve sustainable

performance. These factors are leadership and vision, flexibility to change, and openness through stakeholder engagement.

One of the key challenges regarding sustainable performance is building key performance indicators (KPI's) and eventually measuring the performance of the company against these KPI's. In today's world, companies' stakeholders are becoming more demanding and vocal on understanding sustainability information in addition to financial performance (Brown, 2000). Investors demand evidence of good corporate governance, customers demand information on footprints of the products, employees demand their workplaces to have corporate social responsibility practices, and governments demand companies follow the rules and regulations regarding sustainability (Keeble et al., 2003). This demanding stakeholder environment puts pressure on the companies to use indicators to measure sustainable performance both at a corporate level and at a functional or divisional level.

Cross-References

- [Balanced Scorecard and Sustainability](#)
- [Corporate Responsibility Index](#)
- [Corporate Social Responsibility Disclosure](#)
- [Stakeholder Management](#)
- [Sustainability and Profitability](#)
- [Sustainability Measurement](#)
- [Sustainable Reporting](#)

References

- Aziz, A. R. A., Nishazini, M. B., & Fareza and Azizan, N. A. (2014). Survey to see the impact of 5S implementation among staff of KPJ Seremban Specialist Hospital Malaysia. *IOSR Journal of Business and Management (IOSR-JBM)*, 16(3), 82–96.
- Bragança, S., Alves, A., Costa, E., & Sousa, R. (2013). The use of lean tools to improve the performance of an elevators company. In *4th International Conference on Integrity, Reliability and Failure*, Funchal, June 23–27, pp. 1–8.
- Brown, D. (2000). *The accountable business: Managing corporate responsibility in practice* (Arthur D. Little).
- Brundtland, G. H. (1987). Our common future-call for action. *Environmental Conservation*, 14(4), 291–294.
- Chardine-Baumann, E., & Botta-Genoulaz, V. (2014). A framework for sustainable performance assessment of supply chain management practices. *Computers & Industrial Engineering*, 76, 138–147.
- Cherrafi, A., Elfezazi, S., Chiarini, A., Mokhlis, A., & Benhida, K. (2016). The integration of lean manufacturing, Six Sigma and sustainability: A literature review and future research directions for developing a specific model. *Journal of Cleaner Production*, 139, 828–846.
- Elkington, J. (2004). *The triple bottom line: Does it all add up?* (pp. 1–16). Routledge.
- Hartini, S., & Ciptomulyono, U. (2015). The relationship between lean and sustainable manufacturing on performance: Literature review. *Procedia Manufacturing*, 4, 38–45.
- Henao, R., Sarache, W., & Gómez, I. (2019). Lean manufacturing and sustainable performance: Trends and future challenges. *Journal of Cleaner Production*, 208, 99–116.
- Keeble, J. J., Topiol, S., & Berkeley, S. (2003). Using indicators to measure sustainability performance at a corporate and project level. *Journal of Business Ethics*, 44(2), 149–158.
- Martínez-Jurado, P. J., & Moyano-Fuentes, J. (2014). Lean management, supply chain management and sustainability: A literature review. *Journal of Cleaner Production*, 85, 134–150.
- Osada, T. (1991). *The 5-S: Five keys to a total quality environment*. Tokyo: Asian Productivity Organization.
- Pojasek, R. B. (2003). Lean, six sigma, and the systems approach: Management initiatives for process improvement. *Environmental Quality Management*, 13(2), 85–92.
- Putro, C. R. (2013). *5S implementation in Bengkel ABC*, thesis in Industrial Engineering. Faculty of Industrial Technology, Universitas Atma Jaya Yogyakarta, Yogyakarta.
- Randhawa, J. S., & Ahuja, I. S. (2017). 5S—a quality improvement tool for sustainable performance: Literature review and directions. *International Journal of Quality & Reliability Management*, 34, 334.
- Shah, R., & Ward, P. T. (2007). Defining and developing measures of lean production. *Journal of Operations Management*, 25(4), 785–805.
- Székely, F., & Knirsch, M. (2005). Responsible leadership and corporate social responsibility: Metrics for sustainable performance. *European Management Journal*, 23(6), 628–647.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. New York: Oxford University Press.

Sustainable Place Marketing

- [Sustainable City Branding](#)

Sustainable Planning

- [Sustainable Development Planning](#)

Sustainable Practices

- [Sustainable Business Solutions](#)

Sustainable Production and Sustainable Development in Food Industry

- [Sustainability and Sustainable Development in the Food Industry](#)

Sustainable Property Development

- [Sustainability and Sustainable Development in Real Estate Industry](#)

Sustainable Public Procurement

- [Public Procurement and CSR](#)

Sustainable Remediation

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Definition

There are several definitions of the term Sustainable Remediation. In general remediation

of contaminated soil and groundwater refers to mitigation (reduction or control) or elimination of risks which are considered to be unacceptable to environmental receptors or human health. While remediation activities improve soil and groundwater quality locally, they can also have negative environmental effects. These effects can include impacts on site level as well as impact on a global scale, e.g., through CO₂ emissions during remediation. Introducing sustainability concepts into soil and groundwater remediation implies balancing the three interconnected aspects of sustainability: economy, environment, and society. Important definitions of Sustainable Remediation include the definition in an international standard document on Sustainable Remediation (ISO 2017; Nathanail et al. 2017) and definitions of practitioners' networks (Ellis and Hadley 2009; NICOLE 2010; SuRF-UK 2010).

Sustainable Remediation refers to “elimination and/or control of unacceptable risks in a safe and timely manner whilst optimizing the environmental, social and economic value of the work” (Nathanail et al. 2017).

The network for industrially contaminated land in Europe NICOLE (2010) defines Sustainable Remediation as “one that represents the best solution when considering environmental, social, and economic factors – as agreed by stakeholders.” The NICOLE roadmap underlines the importance of effective risk management as well as communication with stakeholders for successful integration of sustainability into the process of contaminated land management. According to Ellis and Hadley (2009), the term refers to measures where a “net benefit on human health and the environment is maximized through the judicious use of limited resources.”

Soil and Groundwater Remediation

Human activities such as industrial processes, energy production, or handling of waste can cause soil and groundwater contamination. Remediation of soil and groundwater contamination is performed to reduce risks of hazardous substances in soil and groundwater to human

health or environmental receptors. Further reasons to remediate are a change of ownership or site development (Vegter and Kasamas 2011). Targeted remediation removes or controls unacceptable risks to relevant receptors safely and within the given timeframe (Nathanail et al. 2017). Remediating a contaminated site completely to pre-impact status is usually not feasible, neither technically nor financially. Often remediation aims at rendering soil and groundwater quality fit for use. There are numerous techniques to remove contamination, to reduce contaminant concentration, or to prevent contact of receptors with the contamination. Contamination can be removed by simply digging out contaminated soil and landfilling the excavated material. More advanced techniques include reducing contaminant concentrations using microbial degradation or physical or chemical methods. Many of these techniques cause CO₂ emissions and use resources.

Early Concepts Integrating Sustainability into Soil and Groundwater Remediation

In the 1990s ideas of valuation of ecosystem services developed (Costanza et al. 1997). Ecosystem services are benefits provided by ecosystems to humans. Examples for ecosystem services are the provision of clean drinking water or degradation of contaminants by bacteria in the subsurface.

At the same time, there was a growing understanding of the extent of the soil and groundwater remediation task. In response to these developments, concepts to value clean soil and groundwater and to evaluate resource efficiency and environmental impact of soil remediation evolved. An early method is the risk reduction, environmental merit and cost (REC) method described by Beinat et al. (1997). This tool provides decision support to choose the remediation option with optimum balance between environmental merit, risk reduction, and costs based on value functions. Diamond et al. (1999) described a life cycle-based framework for soil remediation to facilitate the choice of

remediation options with optimum results for environmental impact and human health. This is an example of applying Life Cycle Thinking to soil and groundwater remediation. At the time integral approaches of contaminated land management evolved, considering environmental, economic, and social aspects. Risk-based land management (RBLM) was developed to balance requirements of adequate soil and groundwater quality with several other aspects. Examples for such aspects taken into account are environmental protection, financial aspects, and long-term care needed after remediation (Vegter et al. 2002). At the time sustainable remediation solutions were often seen in finding the optimum regarding several criteria such as fitness of the location for use, reduction of environmental risks, and minimized long-term obligations (e.g., control measures). In this context in situ remediation methods developed in the 1990s as resource efficient, more sustainable remediation approaches.

Development of Three Overlapping Concepts Integrating Sustainable and Green Remediation

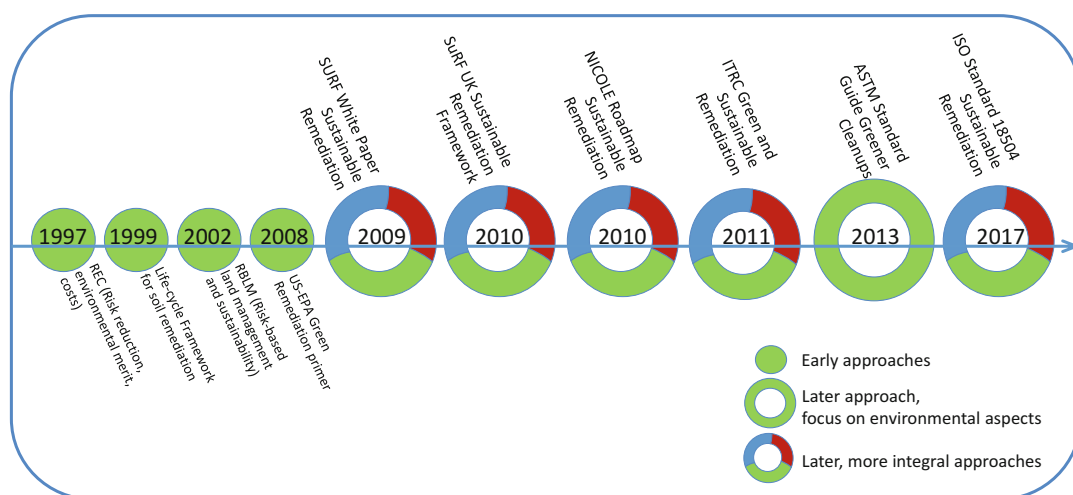
In the early 2000s partly overlapping, yet different concepts of Sustainable Remediation developed: Green Remediation and Sustainable Remediation. The US Environmental Protection Agency (US EPA) defines Green Remediation as “The practice of considering all environmental effects of remedy implementation and incorporating options to maximize net environmental benefit of cleanup actions” (US EPA 2008). Green Remediation favors remediation methods with the highest environmental benefit (e.g., lower energy consumption and lower greenhouse gas (GHG) emissions). Green Remediation has a strong focus on environmental aspects such as materials and waste, land and ecosystems, water, air, and atmosphere. Similar to the concept of Sustainable Remediation, activities in Green Remediation are also embedded in a context of stakeholder involvement and resource efficiency. However the main focus of Green Remediation lies on methods with low climate impact. At the same time, the concept of Sustainable Remediation developed as an integral

approach (Ellis and Hadley 2009). This concept is centered on balancing impacts and benefits across the three pillars of sustainability. According to the authors, the remediation methods chosen should involve minimum energy consumption and minimum releases of contaminants to the environment. Also, methods mimicking natural processes should be preferred over chemical or physical measures. Furthermore Sustainable Remediation measures should facilitate reuse of land and methods eliminating contaminants, for example, by biological degradation to nontoxic substances. There is a strong focus on consensus-based stakeholder involvement and on finding a site-specific optimum solution (NICOLE 2010; SuRF-UK 2010). To integrate the Green Remediation concept into existing efforts to consider social and economic aspects, Interstate Technology and Regulatory Council (ITRC) published guidance for a combined Green and Sustainable Remediation approach (ITRC 2011). This latter concept represents the third of three partly overlapping concepts on eco-friendly or Sustainable Remediation. While

the focus of Green Remediation and Sustainable Remediation is different, there is considerable overlap between the concepts, especially with regard to implementation in practice (Hadley and Harclerode 2015).

Standardization of Sustainable Remediation Concept

Based upon earlier work of different authors and practitioners' groups in several countries (Bardos et al. 2013; NICOLE 2010), standardization efforts resulted in two relevant standards: the ASTM Standard Guide for Greener Cleanups (ASTM 2013) and the ISO standard on Soil Quality: Sustainable Remediation (ISO 2017; Nathanail et al. 2017). The ISO standard specifies terms and methods for the selection and assessment of remediation strategies. A timeline depicting important milestones of the development of sustainability concepts in soil and groundwater remediation is given in Figure 1.



Sustainable Remediation, Fig. 1 Timeline of the development of the concept of Sustainable Remediation (Martino et al. 2016; Smith 2019; Slenders et al. 2017). The representation differentiates between early approaches, approaches with a focus on environmental aspects and integral approaches covering three pillars of sustainability. The milestones shown are REC (Beinat et al. 1997), life-cycle approach applied to soil remediation (Diamond et al. 1999), RBLM (Vegter et al. 2002), Green

Remediation Tech Primer (US EPA 2008), SURF White Paper Sustainable Remediation (Ellis and Hadley 2009), Framework for Assessing the Sustainability of Soil and Groundwater Remediation (SuRF-UK 2010), NICOLE Roadmap to Sustainable Remediation (NICOLE 2010), Green and Sustainable Remediation: A Practical Framework (ITRC 2011), Standard Guide for Greener Cleanups (E2893–13) (ASTM 2013), and ISO 18504:2017 Soil Quality: Sustainable Remediation Standard (ISO 2017)

Bardos et al. (2011) emphasize that it is necessary and challenging to use an appropriate form of sustainability assessment to identify the approach which achieves the best balance. More recently special emphasis is given to the integration of the social aspect of sustainability into the remediation process (Harclerode et al. 2015). While a lot of work has been done to integrate the economic and environmental aspects, more work is needed to come to appropriate site-specific adaptation of indicators and metrics also for this aspect of sustainability.

Qualitative and Quantitative Metrics and Tools to Support Decision-Making and Contaminated Land Management

From the beginning, the emergence of the topic Sustainable Remediation was characterized by a strong awareness that sustainability of a remediation strategy needs to be proven (Bardos et al. 2011). In the concept of Sustainable Remediation, decision support for a sustainable choice plays a central role. Obviously this means that indicators and metrics are needed to be able to compare remediation strategies. In this context an indicator is a parameter which can be used to compare the sustainability of various remediation options. SuRF UK has set up a list of 15 headline categories, 5 headline categories for each aspect of sustainability (environmental, economic, and social). Examples for such headline categories are emissions to air or natural resources and waste (environmental), direct costs and benefits or employment (economic), and human health and safety (social) (Bardos et al. 2018; SuRF-UK 2010). These indicator categories can serve as a point of departure for choosing and agreeing on a relevant site specific set of indicators (NICOLE 2010; SuRF-UK 2010). A metric is a measure for an indicator (e.g., amount of CO₂ emitted as a metric for the headline category emissions to air). Metrics can reflect a single aspect of sustainability as well as a combination of two or three aspects (Butler et al. 2011). The metric is used to determine performance of remediation options.

An overview of different metrics and tools is given in Huysegoms and Cappuyns (2017) or

on the website of SURF (www.sustainablemediation.org). Tools include qualitative, semi-quantitative, and quantitative tools. Both from practitioners' and researchers' point of view, it seems important that the most simple way to compare remediation alternatives should be used (Nathanail et al. 2017). Smith and Kerrison (2013) evaluated several tools to rank sustainability of remedial options with regard to effort needed, practicability and data requirements. They found that for simple projects, simple sustainability assessment provides the same result as more complex assessment procedures. So it is possible to adapt the complexity of the assessment to the requirements of the project. Care should be taken that on the one hand all relevant impacts are covered by the selection of indicators and metrics, while on the other hand indicators and metrics are consistent and do not duplicate information (Bardos et al. 2018; Butler et al. 2011). To come to a good fit between stakeholders' needs and the chosen option, it is important to agree on relevant indicators with all stakeholders and balance impacts and benefits for all aspects of sustainability (NICOLE 2010). This way both assessment and communication with stakeholders can be targeted and at the same time relevant and complete. Some social indicator headlines are relatively straightforward to use, e.g., human health or safety at work. Others are more challenging to adapt to site-specific situations, e.g., when it comes to equity, neighborhoods, and community involvement. The concept of Sustainable Remediation is still evolving. In spite of all achievements of standardization, the actual challenge is to implement Sustainable Remediation site-specifically. It is a demanding task to translate standards and guidance documents into optimum solutions for local communities.

Outlook: Sustainable Remediation and Sustainable Development

Over the coming decades, a reduction of GHG emissions will be necessary. As soil formation is a very slow process, soil basically is a

nonrenewable resource. Therefore there will be an increasing need to use resources of land and soil fair and sustainably. In general, soil plays an important role in attaining the United Nations Sustainable Development Goals (SDGs) because soil plays a crucial role in the provision of ecosystem services (Blum 2016). Many SDGs are linked to soil functioning (Rodríguez and Payá Pérez 2018). This holds for SDG 2 on ending hunger and for SDG 6 on availability of water, because both SDGs rely on ecosystem services provided by soils. Soil sealing and soil contamination are two forms of anthropogenic impact on soils threatening sustainable development (Blum 2016). Both threats can be reduced by Sustainable Remediation as Sustainable Remediation can limit resource use and balance impacts and benefits of soil remediation across the three aspects of sustainability. Therefore it can be stated that a considerable proportion of the SDGs is linked to Sustainable Remediation. So, for example, SDG 13 (“take urgent action to combat climate change...”) and SDG 15 (“Protect, restore and promote sustainable use of terrestrial ecosystems...”) also require the functioning of soil ecosystems (Bardos et al. 2018; Keesstra et al. 2016). Sustainable Remediation can lessen land use conflicts, reduce the use of limited resources, abate human health risks, and improve the economic value of land. Therefore it can be assumed that future remediation projects need to be sustainable.

Summary

Sustainable Remediation means to integrate sustainability assessment into remediation and balancing benefits for environmental, social, and economic aspects. There are several definitions and concepts developed in parallel by standardization bodies and practitioners. The Green Remediation concept refers to efforts making remediation more environmentally friendly, the Sustainable Remediation concept puts emphasis on remediation options achieving the best balanced outcome regarding the three aspects of sustainability (environmental, economic, and

social), and the Green and Sustainable Remediation concept tries to integrate both concepts. A guided process of consensus forming among stakeholders on indicators and metrics can help to find optimum site-specific solutions for remediation of contaminated sites. Sustainable Remediation is linked to SDGs.

Cross-References

- Life Cycle Assessment
- Risk Management
- United Nations Sustainable Development Goals 2030, The

References

- American Society for Testing and Materials (ASTM). (2013). Standard guide for integrating sustainable objectives into cleanup. ASTM. <https://www.astm.org/Standards/E2876.htm>. Accessed 20 Feb 2019.
- Bardos, R. P., Bakker, L. M., Slenders, H. L., & Nathanail, C. P. (2011). Sustainability and remediation. In F. Swartjes (Ed.), *Dealing with contaminated sites* (pp. 889–948). Dordrecht: Springer.
- Bardos, P., Bakker, L., Darmendrail, D., Harries, N., Holland, K., & MacKay, S., et al. (2013). Sustainable and green remediation – Global update. In Aquaconsol Proceedings. Barcelona, April 2013.
- Bardos, P., Thomas, H. F., Smith, J., Harries, N., Evans, F., Boyle, R., et al. (2018). The development and use of sustainability criteria in SuRF-UK’s sustainable remediation framework. *Sustainability*, 10(6), 1781.
- Beinat, E., van Drunen, M. A., Janssen, R., Nijboer, M. H., Koolenbrander, J. G. M., & Okx, J. P., et al. (1997). REC: A methodology for comparing soil remedial alternatives based on the criteria of risk reduction, environmental merit and costs. CUR/Nobis report 95-10-3, Gouda.
- Blum, W. E. H. (2016). Role of soils for satisfying global demands for food, water, and bioenergy. In H. Hettiarachchi & R. Ardakanian (Eds.), *Environmental resource management and the Nexus approach* (pp. 143–177). Springer: Cham.
- Butler, P. B., Larsen-Hallock, L., Lewis, R., Glenn, C., & Armstead, R. (2011). Metrics for integrating sustainability evaluations into remediation projects. *Remediation Journal*, 21(3), 81–87.
- Costanza, R., d’ Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., et al. (1997). The value of the world’s ecosystem services and natural capital. *Nature*, 387(15), 253–260.

- Diamond, M., Page, C. A., Campbell, M., McKenna, S., & Lall, R. (1999). Life-cycle framework for assessment of site remediation options: Method and generic survey. *Environmental Toxicology and Chemistry*, 18(4), 788–800.
- Ellis, D. E., & Hadley, P. W. (2009). Sustainable remediation white paper – Integrating sustainable principles, practices, and metrics into remediation projects. *Remediation Journal*, 19(3), 5–114.
- Hadley, P. W., & Harclerode, M. (2015). Green remediation or sustainable remediation: Moving from dialogue to common practice. *Remediation Journal*, 25(2), 95–115.
- Harclerode, M., Ridsdale, D. R., Darmendrail, D., Bardos, P., Alexandrescu, F., Nathanail, P., et al. (2015). Integrating the social dimension in remediation decision-making: State of the practice and way forward. *Remediation Journal*, 26(1), 11–42.
- Huysegoms, L., & Cappuyns, V. (2017). Critical review of decision support tools for sustainability assessment of site remediation options. *Journal of Environmental Management*, 196(2), 278–296.
- International Organization for Standardization (ISO). (2017). ISO 18504:2017 Soil quality – Sustainable remediation. ISO. <https://www.iso.org/standard/62688.html>. Accessed 20 May 2019.
- Interstate Technology & Regulatory Council (ITRC). (2011). Green and sustainable remediation: A practical framework. Interstate Technology & Regulatory Council: Washington, DC. <https://www.itcreweb.org/GuidanceDocuments/GSR-2.pdf>. Accessed 20 May 2019.
- Keesstra, S., Bouma, J., Wallinga, J., Tittoneil, P., Smith, P., Cerdà, A., et al. (2016). The significance of soils and soil science towards realization of the United Nations Sustainable Development Goals. *The Soil*, 2(2), 111–124.
- Martino, L. E., Dona, C. L., Dicerbo, J., Hawkins, A., Moore, B., & Horner, R. (2016). Green and sustainable remediation practices in Federal Agency cleanup programs. *Environmental Earth Sciences*, 75(21), 1407.
- Nathanail, C. P., Bakker, L. M. M., Bardos, P., Furukawa, Y., Nardella, A., Smith, G., et al. (2017). Towards an international standard: The ISO/DIS 18504 standard on sustainable remediation. *Remediation Journal*, 28(1), 9–15.
- Network of Industrially Contaminated Land in Europe (NICOLE). (2010). NICOLE Road map for sustainable remediation. <http://www.nicole.org/uploadedfiles/2010-wg-sustainable-remediation-roadmap.pdf>. Accessed 20 Feb 2019.
- Rodríguez, N., & Payá Pérez, A. (2018). Status of local soil contamination in Europe: Revision of the indicator progress in the management Contaminated Sites in Europe, EUR 29124 EN, Publications Office of the European Union: Luxembourg.
- Slenders, H. L., Bakker, L., Bardos, P., Verburg, R., Alphenaar, A., Darmendrail, D., et al. (2017). There are more than three reasons to consider sustainable remediation, a Dutch perspective. *Remediation Journal*, 27(2), 77–97.
- Smith, J. W. N. (2019). Debunking myths about sustainable remediation. *Remediation Journal*, 29(2), 7–15.
- Smith, J. W. N., & Kerrison, G. (2013). Benchmarking of decision-support tools used for tiered sustainable remediation appraisal. *Water, Air, and Soil Pollution*, 224(12), 1706.
- SuRF-UK. (2010). A framework for assessing the sustainability of soil and groundwater remediation. Sustainable Remediation Forum UK. Contaminated Land: Applications in Real Environments (CL:AIRE), London, March 2010.
- US Environmental Protection Agency (US EPA). (2008). Green remediation: incorporating sustainable environmental practices into remediation of contaminated sites. Technology Primer. Report EPA 542-R-08-002. <https://www.epa.gov/remedytech/green-remediation-incorporating-sustainable-environmental-practices-remediation>. Accessed 20 Feb 2019.
- Vegter, J. J., & Kasamas, H. (2011). Bringing sustainable management of contaminated sites into practice – The role of policy and regulations. In F. Swartjes (Ed.), *Dealing with contaminated sites* (pp. 1017–1053). Dordrecht: Springer.
- Vegter J. J., Lowe J., & Kasamas H. (2002). Sustainable management of contaminated land: An overview. Austrian Federal Environment Agency on behalf of CLARINET. https://www.commonforum.eu/Documents/DOC/Clarinet/rblm_report.pdf. Accessed 20 May 2019.

Sustainable Reporting

► Corporate Governance Reporting

Sustainable Resources

► Renewable Resource

Sustainable Responsible Business

► CSR Reporting

Sustainable Rewards

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Synonyms

Effective rewards

Definitions

A sustainable rewards system means shaping and evaluating rewards systems within an organization to foster the integration of key stakeholder goals and creating mutual understanding and dialogue, in addition to analyzing the long-term effects of such action. The sustainable rewards approach stresses the role of people within the organization and underlines the importance of the creation of favorable conditions for further sustainable development of the organization and its employees. This harmonious development is considered over the long-term and concerns the so-called triple bottom line; that is, the application of solutions that are socially responsible, ecologically friendly, and economically valuable at the same time.

Introduction

Due to excessive exploitation of both natural and human resources, sustainability has become an important issue over the past decade (Ehnert 2008). Increasing awareness of the importance of sustainability has necessitated that organizations conduct business in such a way that human needs and aspirations achieve a balance with environmental, economic, and social concerns. Creating sustainable development through appropriate human resources practices and tools is one way in which employers can meet present and future needs (Renwick et al. 2012).

Today, practices that create sustainability are used in all functional areas of human resources management: recruitment and selection, training and development, and performance and rewards. Of these practices, employee rewards seems particularly important, in that it helps build employee well-being while supporting desired and ethical employee behaviors. Research and a review of the literature on the subject, however, indicate that rewards may have outcomes opposite of what was intended (Werbel and Balkin 2010; Transparency UK 2016). Inappropriate design of rewards systems or unethical behavior of employees may lead to abuses, and excessive pressure on results can lead to decisions and actions that harm the interests of some stakeholders. For example, a high financial bonus may lead a manager to undertake risky activities that have negative consequences on the natural environment or on the local community. Similarly, too low salaries may lead to negligence that affects the important interests of other stakeholders.

Hence, there is a need to pay special attention to sustainable rewards systems which create the material and social well-being of employees and support appropriate, balanced attitudes and behaviors of employees toward other stakeholders of the organization.

Definition of Sustainable Rewards Systems and Context

Sustainable human resources management (SHRM) is a relatively new area (Moxey 2016; Klimkiewicz and Beck-Krala 2015; Sahakiantz et al. 2015), although issues such as pay inequality or pay transparency connected with SHRM have been reflected in the literature for a long time. SHRM refers to human resources programs, procedures, and practices that lead to harmonious development. SHRM stresses the importance of employee development and improvement of organizational performance via economic, environmental, and societal outputs (Beck-Krala and Klimkiewicz 2018). In practice, SHRM focuses on achieving organizational goals while improving employee well-being through:

- Reducing stress at work and implementing a policy of equal treatment
- Developing a supportive work environment and work–life balance
- Building a culture that promotes high ethical and moral values: transparent communication, trust, cooperation, etc.
- Increasing employability levels through professional development
- Offering competitive total rewards packages (among them, development opportunities on both a professional and personal level) and an attractive level of remuneration (Docherty et al. 2002; Ehnert 2008; Beck-Krala and Klimkiewicz 2018)

A **sustainable rewards** system means shaping and evaluating rewards systems within an organization to foster the integration of key stakeholder goals and creating mutual understanding and dialogue, in addition to analyzing the long-term effects of such action (Beck-Krala and Klimkiewicz 2018, pp. 44–45). The sustainable rewards approach stresses the role of people within the organization and underlines the importance of the creation of favorable conditions for further sustainable development of the organization and its employees (Ehnert et al. 2014). This harmonious development is considered over the long term and concerns the so-called triple bottom line; that is, the application of solutions that are socially responsible, ecologically friendly, and economically valuable at the same time (Elkington 1998). According to this approach, a well-designed rewards system simultaneously meets the goals of the organization and the expectations of the main stakeholders – employees, managers, and shareholders – through motivating employees to adopt desirable behaviors and outstanding performance. Therefore, it focuses on a long-term perspective to develop organizational and main stakeholder well-being. Main stakeholders are owners, employees, managers, customers, suppliers, the natural environment, or local communities and other groups that may be affected by the company.

There is a scarcity of publications in the literature that address the subject of sustainable rewards systems (Linder and Mottis 2013;

Sahakiantis et al. 2015). Sustainable rewards systems can be examined in the context of two perspectives (Beck-Krala et al. 2019):

- How salary levels, incentives, employee benefits, and the work environment support CSR and sustainability and how these programs may influence employee decisions with CSR and sustainability implications
- How rewards encourage employees to take socially responsible and environmentally sustainable actions, which could include making charitable donations and volunteering to support community programs

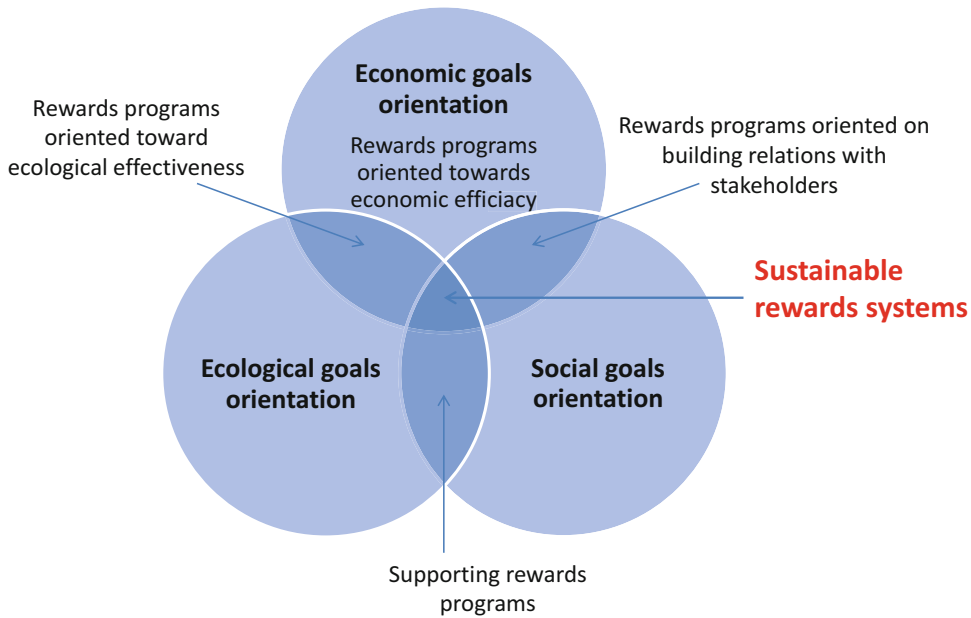
The second perspective is often referred to as Corporate Social Performance (CSP), which means evaluating corporate performance in terms of the triple bottom line.

The Classification of Sustainable Rewards

Sustainable rewards systems include motivational programs which target three main areas in addition to incentives: economic, social, and environmental.

Figure 1 (below) shows the different orientation of rewards programs (Beck-Krala and Klimkiewicz 2018):

- Rewards programs oriented toward economic efficiency focus on the achievement of economic objectives and include bonus programs or rewards based on financial performance (targets). Measurement criteria used in such programs are usually quantitative (e.g., sales value, quantity of production).
- Rewards programs focused on building relationships with employees are strongly oriented toward the relationship with main stakeholders (e.g., needs of employees). These programs not only motivate toward achievement of financial goals but also improve employee well-being and increase employee and community safety. Examples of such programs are rewards programs based on competencies, cafeteria programs, and



Sustainable Rewards, Fig. 1 Different orientation of rewards programs. (Source: Based on Beck-Krala and Klimkiewicz 2018)

bonuses, including qualitative performance criteria, such as quality of service provided to customers and employee development.

- Environmental incentive programs or pro-environmental green incentive programs are primarily aimed at reducing the negative impact of the organization and its people on the environment (organizational footprint). These programs are aimed at strengthening and creating attitudes and behaviors that support pro-ecological activities. Examples include programs aimed at reducing pollution and reducing water and energy consumption in the workplace.
- Support programs are geared toward the achievement of social or environmental goals but do not have a direct link to financial motives. Examples include recognition-type awards for achieving social and environmental goals, such as employee volunteer programs or knowledge sharing.

Sustainable rewards systems cover programs from all three areas. Examples of these are incentive programs created with the use of a balanced scorecard that takes into account ecological,

social, and economic criteria in all areas of the scorecard – financial, customer, internal processes, and development. By selecting appropriate practices and incentive programs from different areas, organizations can diversify and balance the range of motivational solutions.

The Importance of Sustainable Rewards

Designing sustainable rewards has become particularly important because of many negative examples and abuse that have resulted from improper rewards practices (Werbel and Balkin 2010; Moxey 2016; Sahakiantz et al. 2015). Examples of large companies that lost their reputation or became bankrupt because of the unethical behavior of their employees who were motivated by abusive rewards programs – mostly short-term incentive programs – are widely commented upon and described in the media and in the literature [e.g., the case of Enron, BP, Volkswagen, Wells Fargo (UK Transparency 2016)]. Sustainable rewards needs to focus on both prevention of possible negative societal impacts of business

according to the rule “do no harm” (European Commission 2011) and evaluation of the possible negative impact of rewards on stakeholders. The most common cases where rewards may harm stakeholders are concerned with the violation of employee rights. Cases of inequality in pay and the large pay gap between men and women, child labor, too low wages, lack of insurance, etc. are some of the key aspects of rewards that harm employees. Sustainable rewards means avoiding *over-exploitation* of employees (Ehnert 2008) that causes, in the long term, work-related stress, work–family conflicts, and even health problems and employee burnout. Thus, shaping sustainable rewards systems, apart from their effectiveness, focuses on creating a policy of equal opportunities, offering fair salaries, and a healthy and safe work environment which might be extended to work–life programs. Sustainable rewards systems are most often present in socially responsible organizations or those characterized by a strong culture that promotes important values, such as safety, trust, innovation, open communication, etc. This requires, for example, ensuring compliance of the rewards systems with applicable domestic or international law. In some countries, apart from legal requirements, it is recommended that accepted ethical standards and social norms, as well as traditions of the countries in question, be respected or maintained (Scott and Beck-Krala 2019). Furthermore, poorly designed rewards programs, particularly incentives, may result in counterproductive employee work behavior, such as aggressive risk-taking, mis-selling, fraud, destruction, and misuse of organizational property (Werbel and Balkin 2010). Such misbehaviors may have detrimental consequences for other stakeholders and the organization itself (Spector et al. 2006). In order to avoid any harm that the rewards system may create, organizations need to provide regular risk assessment and monitoring to deter unethical employee behavior.

For employees, rewards systems are of great importance when choosing an employer and place of work. Sustainable rewards gives employees the message that the law will be respected and that they will have more attractive rewards and a supportive work environment that will allow them to

balance work with personal and family responsibilities. Furthermore, for younger generations, such as Millennials currently entering the labor market, socially responsible involvement of the employer in activities that are important and beneficial for the community and the natural environment are of key importance when selecting the workplace. Employees are also looking for a sense of purpose and want the opportunity to realize their personal values in the workplace. Therefore, in the face of the scarcity of the pool of talent that plays a significant role for every employer, sustainable rewards can help in promoting socially responsible attitudes of employees by rewarding desirable ethical behaviors (Sahakiantz et al. 2015; Linder and Mottis 2013). Financing volunteer work that supports the local environment or community is particularly popular and has great value for employees.

The Characteristic of Sustainable Rewards

Sustainable rewards programs are characterized by some important principles. These principles arise from current challenges organizations are facing and are consistent with their core values and societal norms. Therefore, sustainable rewards should be as follows (Beck-Krala et al. 2019):

- Legal and Liveable: rewards must comply with labor standards of the country in which the organization is operating, as some global companies have been accused of being irresponsible to their employees by providing poor working conditions, abusing child labor laws, forcing overtime, or abusing human rights (Crane et al. 2014, p. 229)
- Safe: providing safe and healthy working conditions and reducing workplace-related injuries and illnesses
- Equitable: consistent with societal norms and not encouraging employees to participate in unethical or illegal behavior
- Transparent: opens the rewards system to scrutiny by all stakeholders and may demonstrate to employees that their pay is fair, at least

within the context of company policies and government regulations

- Economically Sustainable: takes into account not only the economic rationality and cost effectiveness but also is based on the assumption that economic value depends on noneconomic factors, such as employee engagement and willingness to perform given tasks
- Creates employee well-being in a long-term perspective: rewards strategies rely on both financial and nonfinancial rewards and help build a supportive environment and development opportunities for employees (Total Rewards approach)
- Does not harm other stakeholders: which may happen when rewards programs are poorly designed (most often short-term incentives programs) and may lead to unethical employee behavior or employee misconduct that can be directed against both the organization and other stakeholders (Werbel and Balkin 2010; Spector et al. 2006).

Evaluation as an Integral Part of Sustainable Rewards

Monitoring the effectiveness of rewards programs is essential (Beck-Krala and Klimkiewicz 2018), particularly because organizations face extensive competition for talent while working to optimize costs. The pressure to meet targets and the need to win business may lead to shortcuts that result in various forms of corrupt and unethical behavior. Therefore, employers must be aware of the risks connected with rewards and the need to evaluate the effectiveness of rewards systems. Sustainable rewards requires a comprehensive evaluation methodology that includes both shareholder and stakeholder views in which the evaluation process is based on both hard facts and quantitative measures as well as qualitative measures (Klimkiewicz and Beck-Krala 2015). Therefore, effective sustainable rewards systems will focus on both economic efficiency (profit oriented) and effectiveness (goal oriented) and will also be responsible to their main stakeholders (Beck-Krala 2018).

The first dimension of effective, sustainable rewards – economic efficiency – requires quantifying the total cost of the rewards system; this often also includes return on investment. The second dimension evaluates if the organization has achieved the main goals of the rewards system, such as attracting and retaining talent. Then, the responsibility dimension, a part of sustainable rewards that means the ethical aspects of rewards effectiveness (such as social justice and long-term impact of the system according to the rule “do no harm”) are extremely important and should be considered in the evaluation methodology. In the first dimension, various economic measures may be used; for example, the return on investment in compensation, total cost of the rewards package, etc. In the second dimension, achievement of the rewards system’s goals are assessed and such measures as turnover rate, absenteeism, external attractiveness of the total reward, etc., may be used. Finally, the responsibility dimension may use such measures as employee satisfaction with the rewards, customer satisfaction with the service provided, number of employee accidents at work, total number of employees, and work hours spent on volunteering at sustainable projects.

The literature offers some examples of comprehensive models for analyzing the effectiveness of rewards systems. The following criteria may be present:

- Philosophy of the system and its convergence with the firm’s strategy
- Compliance of the system with formal regulations
- External competitiveness of the total compensation system
- Cost effectiveness of the payroll (and return on investment from the compensation)
- Satisfaction of the main stakeholders (e.g., employee satisfaction) with the system

Within these five criteria, employers can analyze areas of the rewards system that are most important to the organization. For example, the analysis may include the main components of the rewards package: financial compensation, non-financial compensation, growth opportunities,

and a safe and healthy working environment. Apart from the total rewards package, the process of distribution, transparency of the system, and other crucial aspects of the rewards process need to be assessed.

Sustainable Rewards in Practice: Some Examples

Many companies are just beginning to adopt sustainable practices; many other organizations, however, have already established a balanced scorecard approach which identifies and rewards the skills and behaviors needed to execute corporate strategy in terms of sustainability. There have been many recent instances of companies that have integrated sustainability metrics into performance assessment and compensation for executives, senior management, and even other employees (WBSCD report).

According to the research published by the World Business Council for Sustainable Development (www.wbscd.org) in Europe, 29% of the largest companies include environmental, social, and governance (ESG) factors in their executive remuneration policies (WSBCD report). The Dutch Association of Investors for Sustainable Development (VBDO) called on Dutch companies to base at least 60% of their remuneration on long-term goals and at least one third on sustainable targets. There are many companies that have linked executive pay to sustainable performance measures, such as SC Johnson, which linked executive rewards with the company's *Greenlist* program for product stewardship and reduction in use of hazardous chemicals. Others, such as Evonik (German chemical company) have linked performance measures to the bottom line of social, economic, and environmental aspects that are fully integrated with HR objectives (WBSCD report). Some companies, such as Shell, DSM, NovoNordisk, or Natura, have the balanced scorecard that is linked to their strategic plan and includes sustainable Key Performance Indicators (KPIs) (which again concern environmental, social, and economic measures). Other companies, such as Siemens, may link sustainable

metrics with performance evaluation, where senior managers are rewarded for promoting a culture of integrity. Some companies link sustainability to annual bonuses. For example, Akzo Nobel (Dutch chemical company) rewards their senior managers for sustainable performance based on the Dow Jones Sustainability Index (50% of their long-term bonus plan is tied to the company position). Finally, there are also companies that see the power of nonfinancial incentives and recognition in promoting employee sustainable behavior and innovations, e.g., giving employees the opportunity to realize pro-ecological projects during work time, encouraging employees to engage in charity for the local community, employer-sponsored charity programs in which employees participate. For example, in Areva (French energy company) employees are rewarded for best projects on sustainable development by the international experts panel with the biannual Areva Sustainable Development Award.

Key Points

In the area of sustainable development which drives long-term value creation, employers are beginning to understand how social and environmental issues matter to the business. More and more employers are aligning rewards and remuneration systems more closely with long-term value creation by integrating environmental, social, and ethical factors into rewards programs. This approach is called *sustainable rewards*. The basic assumption in sustainable development in business is that, in the long-term, shareholder value and stakeholder value can be aligned. Sustainable rewards focuses on a long-term perspective to provide harmonious development of the organization and its main stakeholders (mainly employees). This harmonious development is considered in the triple bottom line, which means that the rewards system (rewards strategy, programs, and tools) are simultaneously socially responsible, ecologically friendly, and economically valuable. Sustainable rewards uses a mix of incentives that support long-term sustainability and success of the

company (development and profitability of the organization) and its main stakeholders (e.g., employee well-being, customer satisfaction, the well-being of local society, care and preservation of the environment in the region, etc.). Such rewards programs are linked not only to economic (financial) targets, such as quantifiable and measureable outputs, but also to sustainable measures – social, environmental, and ethical – which are more qualitative in nature, such as safety, health, satisfaction, etc.

Summary and Conclusions

Two important elements of sustainable rewards are risk management and a comprehensive process of evaluation of the rewards effectiveness which may include the impact (both positive and negative) the system has on stakeholders of the organization in a long-term perspective. Employee rewards are powerful tools to drive performance on sustainability issues, such as energy efficiency, ethics, or innovation. By providing sustainable rewards, employers communicate that the company is serious about sustainability commitments. Research indicates that organizations in which sustainability and CSR are a central part of the managerial culture are more attractive to potential employees (Jones and Willness 2013). In this context, sustainable rewards can help organizations attract and retain talent by providing a competitive edge and also build a culture that creates employee awareness and responsibility for the business. This helps meet the requirements of the social contract expected between employer and employees – to be seen as responsible in relation to local and national norms, laws, expectations about pay, benefits, working conditions, security employment, health, etc.

When implementing sustainable rewards, the company first needs to create an open and ethical culture which encourages employees to adopt socially responsible behaviors (in accordance with social norms) and challenges targets or managerial decisions that may be dysfunctional. This may be reinforced by strong management values and alignment of business objectives with organizational

values. Incorporating and monitoring sustainable rewards is an educational process for both employees and employers. Employers and employees are at the beginning of this sustainable and long-term journey, and it is important for all of us.

Cross-References

- [Balanced Scorecard](#)
- [Balanced Scorecard and Sustainability](#)
- [Human Capital Management](#)
- [Human Rights](#)
- [Labor Rights](#)
- [Social Justice](#)
- [Strategic CSR](#)
- [Sustainable Development](#)
- [Work-life Balance](#)

References

- Beck-Krala, E. (2018). Evaluation of rewards programs as an element of sustainable employee rewards – Research results. *Entrepreneurship and Management*, 19(6), 133–145.
- Beck-Krala, E., & Klimkiewicz, K. (2018). Reward programs supporting environmental organizational policy. *Human Resources Management, Poland*, 6, 41–56.
- Beck-Krala, E., Scott, D., & Klimkiewicz, K. (2019). Socially responsible and sustainable rewards programmes: The new frontier. In S. J. Perkins (Ed.), *The Routledge companion to reward management* (pp. 97–111). London/New York: Taylor & Francis Group /Routledge.
- Crane, A., Matten, D., & Spence, L. J. (Eds.). (2014). *Corporate social responsibility: Readings and cases in a global context* (2nd ed.). London: Routledge.
- Docherty, P., Forslin, J., & Rami, A. B. (Eds.). (2002). *Creating sustainable work systems: Emerging perspectives and practice*. London: Routledge.
- Ehnert, I. (2008). *Sustainable human resource management – A conceptual and exploratory analysis from a paradox perspective*. Springer. <http://www.springer.com/us/book/9783790821871>. Accessed 7 Dec 2016.
- Ehnert, I., Harry, W., & Zink, K. J. (Eds.). (2014). *CSR, sustainability, ethics & governance. Sustainability and human resource management: Developing sustainable business organizations*. Berlin, Heidelberg: Springer Berlin Heidelberg; Imprint: Springer.
- European Commission. (2011). Communication from the Commission to the European Parliament, the Council,

the European Economic and Social Committee and the Committee of Regions. A renewed EU strategy 2011–14 for Corporate Social Responsibility. COM (2011) 681.

- Jones, D. A., & Willness, C. R. (2013). Corporate Social Performance, Organizational Reputation and Recruitment.
- Klimkiewicz, K. & Beck-Krala, E. (2015). Responsible rewarding systems – The first step to explore the research area. *Research Papers of Wroclaw University of Economics*. Poland: University of Economics in Wroclaw.
- Linder, S., & Mottis, N. (2013). *Incentives for Socially Responsible Behavior (srb): Is “Bribing” managers a promising way to foster SRB? Presented at the ERM conference*. Belgium: EAISM.
- Elkington, J. (1998). *Cannibals with forks: Triple bottom line of 21st century business*. Mankato: Capstone Publishing Ltd..
- Moxey, P. (2016). *Incentivizing ethics. Managing incentives to encourage good and deter bad behavior*. Editors. <http://www.transparency.org.uk/publications/incentivising-ethics-managing-incentives-to-encourage-good-and-deter-bad-behaviour/>. Accessed 2 Feb 2017.
- Renwick, D., Redman, T., & Maguire, S. (2012). Green human resource management, a review and research agenda. *International Journal of Management Reviews*, 15(10), 1–14.
- Sahakiant, I., Festing, M., & Steger, T. (2015). Paying your employee right: Exploring the concept of socially responsible rewards. In *Uncertainty is a great opportunity*. Presented at the EURAM 2015, Warsaw: Kozminski Academy.
- Scott, D., & Beck-Krala, E. (2019). Evaluating reward strategies, programmes and policies: Research and practice. In S. J. Perkins (Ed.), *The Routledge companion to reward management* (pp. 112–124). London \New York: Taylor & Francis Group\Routledge.
- Spector, P. E., Fox, S., & Domagalski, T. (2006). Emotions, violence and counterproductive work behavior. In E. K. Kelloway, J. Barling, & J. J. Hurrell (Eds.), *Handbook of workplace violence* (pp. 29–46). Thousand Oaks: SAGE.
- Transparency International UK Report, 2016, Incentivising Ethics. Managing incentives to encourage good and deter bad behaviour. Retrived from: <https://www.transparency.org.uk>. Access 05 May 2018.
- Werbel, J., & Balkin, D. B. (2010). Are human resource practices linked to employee misconduct?: A rational choice perspective. *Human Resource Management Review*, 20(4), 317–326. <https://doi.org/10.1016/j.hrmr.2009.10.002>.

Sustainable Slow Movement in Food

- [Slow Food Movement and Sustainability](#)

Sustainable Solutions

- [Sustainable Innovation](#)

Sustainable Sports Areas

- [Sustainable Sports Stadiums](#)

Sustainable Sports Facilities

- [Sustainable Sports Stadiums](#)

Sustainable Sports Stadiums

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Synonyms

[Corporate Social Responsibility](#); [Sports CSR](#); [Sports stadium](#); [Sustainability and sports stadiums](#); [Sustainability of sports stadiums](#); [Sustainable arenas](#); [Sustainable facilities](#); [Sustainable sports areas](#); [Sustainable sports facilities](#); [Sustainable stadiums](#)

Definition

Sustainable sports stadiums are sports facilities that are built and maintained for the purpose of housing competitive sporting events, and which operate in a manner that is consistent with socially responsible standards, including the ecological, economic, and social interests of society overall. To determine whether a given sports stadium meets the standard for being sustainable, one would need to consider at least five attributes of

the stadium construction: land sustainability; natural resource sustainability; economic sustainability; labor sustainability; and sustainability of community interest. Land sustainability addresses whether the building of a sports facility makes reasonable use of the available land given reasonably available opportunity costs to building a stadium on a given piece of land. Natural resource sustainability assesses whether a sports stadium does a reasonable job of conserving natural resources such as an energy and protecting the long-term sustainability of the broader environment. Economic sustainability relates to the efficient use of taxpayer funds to build a sports stadium, including whether the stadium remains operable and in-use for a reasonable period of time after its initial construction. Labor sustainability relates to whether there is socially acceptable compensation provided to both the labor force who build a sports stadium and the labor force who provide the entertainment housed within the stadium. Finally, sustainability of community interest relates to the likelihood that consumers of entertainment housed in a particular sports stadium will remain interested in attending events featuring that form of entertainment for a sufficient time period to make the building of that sports stadium viable.

Introduction

The global sports industry is valued at more than half a trillion dollar per year, making it a meaningful source of worldwide entertainment and employment revenue (Sanawane 2022). As an industry, commercial sports thrive on athletes competing against one another to prove themselves bigger, faster, and stronger than the competition. Rivalries emerge between countries, nations, and regional teams. For the most part, these rivalries are societally healthy.

As a by-product of the unique competitive spirit of organized sports, however, public and public parties regularly hire architects, who compete to build the most physically impressive structures to host organized sports. While the competition to build modern sports facilities is often innocuous, there may emerge important

issues of sustainability when the construction of a new sports stadium is commissioned.

Land Sustainability

Land sustainability is one important matter to consider when assessing the virtue of building a new sports stadium. Land is a finite resource (Peters 2010). Thus, when land is expended to build a new sports facility, there is the “opportunity cost” of using the land for other purposes (Wolla 2017). The finite nature of land is especially pronounced in large cities, where the building of sports facilities may mean an opportunity cost in terms of building hospitals, low-income housing structures, or even public works projects (“Shortage of Land” n.d.). Stadium building also might mean the loss of important community green spaces such as parks and nature preserves in certain communities.

While in most cases building new sports facilities does not overly deplete the supply of land, there are instances in which using land to build sports facilities may become controversial. For example, there theoretically could be instances where proposals to build new sports facilities compromise existing parks, wildlife preserves, or other green spaces. This would be a matter of important public concern. In addition, where a federal or state government uses its eminent domain powers to take land for the building of a sports stadium, some legal scholars argue that doing so may infringe on liberty interests (Birch 2012).

Natural Resource Sustainability

Beyond questions of how to allocate finite land, conserving natural resources is another important issue that may affect the decision of whether to build a sports facility (McHale 2019). In terms of environmental friendliness, sports facilities, much like all other forms of construction, vary in terms of their performance (McHale 2019). Stadiums that are built in a more environmentally friendly manner make efforts to conserve finite natural resources by adopting techniques such as

rainwater harvesting and recycling, as well as by using solar and wind power wherever feasible (“Website for Cascadia Sport” [n.d.](#)). They also make use of recyclable and/or recycled materials (“Website for Cascadia Sport” [n.d.](#)).

There are a number of recent sports facilities that have received praise for their attention to environmental sustainability (“The Five Most Sustainable Sports Stadiums in the World” [2018](#)). For example, the ArenA in Amsterdam, Netherlands, uses more than 4,200 solar panels and a wind turbine to produce its energy (“The Five Most Sustainable Sports Stadiums in the World” [2018](#)). Similarly, Levi’s Stadium in San Francisco, California, includes more than 1,000 solar elements including solar-powered pedestrian bridges. (“The Five Most Sustainable Sports Stadiums in the World” [2018](#)). And, Mercedes-Benz Stadium, which is home to the NFL’s Atlanta Falcons, became the first professional sports stadium to earn a platinum Leadership in Energy & Environmental Design (LEED) certificate based on its numerous energy-efficient and renewable energy projects including a storm-water management system and a pedestrian-friendly walking path leading to the stadium itself (“The Five Most Sustainable Sports Stadiums in the World” [2018](#)).

Yet not all new sports facilities meet the ideal standards for environmental friendliness. According to one recent article, the Dallas Cowboys’ new stadium “uses up to 750 megawatts (mW) of electricity during peak times . . . which is enough to power the entire city of Santa Monica” (McHale [2019](#), p. 128). Meanwhile, “[i]n one month . . . the 2014 World Cup in Brazil generated 2.7 million tons of carbon dioxide (CO₂)” (McHale [2019](#), p. 129). While technology exists to build environmentally friendlier sports facilities than the ones built in Dallas as Brazil, among other places, some of the reasons why some private and public entities may continue to build sports facilities that fail to meet the highest level of environmental standards include the lack of legal obligation to meet higher standards, failure to align the costs and benefits of investing in sustainable energy, and the belief by some architects that environmental friendliness may detract from the beauty of their stadium design.

Economic Sustainability

Issues of economic sustainability are also pertinent to the building of sports facilities, especially when the facilities are constructed with public funds. While municipalities compete for the opportunity to host high-profile sporting events such as the Olympic Games or the World Cup, most municipalities lose money from hosting these events, despite gaining intangible benefits such as civic pride (Lisa [2022](#)). Because public funds are finite, economic resources that are spent on building public sports facilities to host large national or international events, again, yield opportunity costs in terms of alternative spending opportunities (Wolla [2017](#)).

There are, of course, a select few sports facilities that have remained operational and popular with fans for a long time period – perhaps providing a sense of “best practices” in terms of economically sustainable sports construction. Perhaps most notably, the Melbourne Cricket Grounds in Melbourne, Australia, was first built in 1854, and it remains operational to this day as the home to professional cricket, Australian football, and a wide range of other high-profile sporting events (Smith [2021](#)). Although the Melbourne Cricket Grounds has undergone some expensive renovations over the years including the building of the North Stand at a cost of \$460 million AUD in 2006, the cost of these periodic repairs is likely far lower than would have been a total rebuild (Smith [2021](#)).

In the United States, there are also a number of iconic facilities that have enjoyed more than 100 year lifespans. Franklin Field in Philadelphia, PA, which was once the home to the NFL’s Eagles and remains the longstanding home to the University of Pennsylvania’s football team, has remained operational since 1895 (Kries [n.d.](#)). Another Ivy League football stadium, Harvard Stadium, has remained operational since 1902 (Kries [n.d.](#)). Meanwhile, Major League Baseball’s Boston Red Sox and Chicago Cubs have played in their iconic home stadiums, Fenway Park and Wrigley Field, since 1912 and 1914, respectively (Kries [n.d.](#)).

On the other end of the spectrum, however, there have been sports facilities built in recent decades with public money that have ceased to serve their intended purpose within one

generation. While the International Olympic Committee purports that “85 per cent of all permanent Olympic venues since 1896 remain in use” (International Olympic Committee 2022), reasonable minds may disagree as to how much use of a stadium is needed for it to be perceived as economically viable. As an example of one stadium that remains technically in use but questionably utilized, Turner Field, which was commissioned by the City of Atlanta in 1990 to serve as the centerpiece to the Summer Olympics in 1996, became home to Major League Baseball’s Atlanta Braves before becoming deemed obsolete by the MLB team just 21 years later in 2017 (“Braves Moving to Cobb County in 2017” 2013). Turner Field has since been reconfigured for use as a football field for Georgia State University (Kahn 2017). But, with its present usage limited to just a six-game home college football season, one could reasonably question whether Turner Field was ever worth nearly the amount of money spent to build it.

Labor Sustainability

Adopting a broad definition of sustainability, “labor sustainability” in terms of reasonable worker protections is yet another area of concern related to building sports stadiums (Pagnattaro 2013). When sports facilities are constructed for massive events such as the Olympic Games or the World Cup, the finding of a sufficient short-term workforce to aid in the construction may be challenging. Ensuring that the workers who provide labor for these projects do so of their own volition is necessary, but not always followed. In building facilities for the 2022 FIFA World Cup, the nation of Qatar purportedly employed migrant laborers of African and South Asian descent to perform dangerous work for low pay; this has come under scrutiny for what some have described as “forced labor or other forms of modern slavery” (“Qatar World Cup’s Labor Abuse Amounts to ‘Modern Slavery,’ New Report Says” 2022). If the accusations are true, they present substantial concerns about stadium construction in conjunction with the World Cup.

Even in countries typically perceived as more progressive in terms of their labor rights, concerns have likewise emerged about the use of labor in preparing to host global sporting events. In Australia, some have criticized the purported use of incarcerated Aborigines from the Bathurst Prison in New South Wales to make artifacts and paintings for the 2000 Summer Olympics in Sydney, Australia, while receiving just \$12 AUD per week in pay (Syron 1999). In the United States, recent labor concerns have emerged where the construction workforce does not enjoy a legal right to universal healthcare, even despite the health dangers that may underlie certain forms of construction (Nuwer 2022). Moreover, college football players and basketball players in the United States, despite generating huge revenues for their schools while competing in many of the most luxurious facilities, are denied a free-market wage and other worker benefits based on the so-called NCAA Principle of Amateurism, which keeps the wealth of college sports in the hands of a select few coaches and administrators (Edelman 2013).

Taylor Branch, who is a Pulitzer Prize-winning author and expert on the US Civil Rights era, describes the NCAA system as one where “corporations and universities enrich themselves on the backs and uncompensated young men” and there is an “unmistakable whiff of the plantation” (Branch 2011). Branch is not altogether wrong.

Sustainability of Community Interest

Finally, the ongoing building of new sports stadiums leads to inevitable questions as to whether fan interest in sport, in itself, is even sustainable. Despite the famous saying from the 1989 hit movie *Field of Dreams* that “if you build it, they will come,” it seems somewhat presumptuous to simply declare that current levels of interest in attending commercial sporting events will sustain indefinitely. When considering the full scope of human life on Earth, the period of highly commercialized sports represents only a modicum of time within human existence. The modern Olympic Games date back only to 1896

(Sternfeld 2012). Professional baseball, cricket, and soccer trace their roots to only slightly earlier.

There are a number of existential threats to the future viability of sports stadiums as a commons for consumers to observe sports. The COVID-19 pandemic that struck in March 2020 called into question for some sports fans the safety of observing sporting events live, in the closed-in quarters of sports facilities, especially those with closed roofs (Edelman et al. 2021). Similarly, advancements in television, Internet, and Virtual Reality technologies present emerging ways for the consuming public to share the common experience of viewing sport without being in the same physical space via the stadium (“How Virtual Reality Can Deliver a Stadium Experience for Sports Fans in a Post-COVID-19 World” 2023). A 2022 *Virgin Media* survey found that nearly half of all football (soccer) fans would prefer to watch a match from their own couch than from within a stadium (Singh 2022).

Summary

The desire to be part of a shared communities continues to draw sports fans, and especially those with economic means, to attending live sporting events. Yet, for all the virtues of the live watching of competitive sports, the persistent building (and rebuilding) of sports facilities produces important societal questions in terms of sustainability. Federal and local laws, as well as international treaties and compacts, play a role in ensuring that future builders of sports facilities adopt environmentally sustainable and socially conscious practices when building new sports facilities. Nonetheless, the often-intense competition to secure the rights to sports teams and events may work against imposing laws to ensure the building of only sustainable sports facilities. As a result, certain practical challenges are likely to persist in promoting the building of sustainable sports stadiums.

References or Further Readings

- Birch, M. (2012). Take some land for the ballgame: Sports stadiums, eminent domain, and the public purpose debate. *Sports Lawyers Journal*, 9, 174–176.
- Branch, T. (2011). The shame of college sports. *Atlantic*.
- Braves moving to Cobb County in '17. (2013). ESPN. https://www.espn.com/mlb/story/_/id/9959440/atlanta-braves-leaving-turner-field-relocating-cobb-county-2017.
- Cascadia Sport Systems. (n.d.). <https://cascadiasport.com/sports-and-environment-green-initiatives-in-stadiums>. Accessed 8 Feb. 2023.
- Edelman, M. (2013). A short treatise on amateurism and antitrust law. *Case Western Reserve Law Review*, 64(1), 61–99.
- Edelman, M., Baker, T. Holden, J. & Shuman, A. (2021). Exploring college sports in the time of COVID-19: A legal, medical, and ethical analysis. *Michigan State Law Review*, 2021, 469.
- How virtual reality can deliver a stadium experience for sports fans in a post-COVID-19 world. (2023). <https://www.lithiosapps.com/blog/how-virtual-reality-could-deliver-a-stadium-experience-for-sports-fans-in-a-post-covid-19-world>. Accessed 8 Feb. 2023.
- International Olympic Committee. (2022). New report shows 85 per cent of all permanent Olympic venues still in use. *International Olympic Committee Website*. <https://olympics.com/ioc/news/new-report-shows-85-per-cent-of-all-permanent-olympic-venues-still-in-use>.
- Kahn, M. (2017). Turner field's transformation into Georgia State stadium is underway. *Curbed Atlanta*. <https://atlanta.curbed.com/2017/3/27/15066254/turner-field-gsu-stadium-construction>.
- Kries, D. (n.d.). 15 oldest stadiums in the United States. *Urban Matters*. <https://urbanmatter.com/15-oldest-stadiums-in-the-united-states>, <https://urbanmatter.com/15-oldest-stadiums-in-the-united-states>. Accessed 8 Feb 2023.
- Lisa, A. (2022). Are Olympics financially worth it for host cities? *Yahoo*. <https://finance.yahoo.com/news/olympics-worth-financially-host-cities-160012285.html>.
- McHale, K. (2019). Give the fans what they really want: How professional sports stadiums around the world can positively impact the environment. *Texas Environmental Law Journal*, 49, 127.
- Nuwer, R. (2022). Universal healthcare could have saved more than 330,000 U.S. lives during COVID. *Scientific American*. <https://www.scientificamerican.com/article/universal-health-care-could-have-saved-more-than-330-000-u-s-lives-during-covid>.
- Pagnattaro, M. A. (2013). Labor rights are human rights: Direct action is critical in supply chains and trade policy. *South Carolina Journal of International Law & Business*, 10(1), 34.
- Peters, K. A. (2010). Creating a sustainable urban agriculture revolution. *Journal of Environmental Law & Litigation*, 25, 226.
- Qatar world cup's labor abuse amounts to 'modern slavery,' new report says. (2022). *Huffington Post*. https://www.huffpost.com/entry/qatar-world-cup-labor-modern-slavery-new-report_n_636d2e72e4b03438614132ba.
- Sanawane, S. (2022). Global sports market poised to cross \$500 billion. *Oman Daily Observer*. <https://www.omanobserver.com/article/1129163/opinion/global-sports-market-poised-to-cross-500-billion>.

- Shortage of Urban Land. (n.d.). *The encyclopedia of world problems and human potential*. <http://encyclopedia.uia.org/en/problem/140003>. Accessed 8 Feb 2023.
- Singh, E. (2022, Jul. 29). Home advantage: Nearly half of football fans prefer watching games at home—Saying they save money and can concentrate easier. *The Sun*. <https://www.thesun.co.uk/sport/19357967/half-foot-ball-fans-watching-games-home-save-money>
- Smith, J. (2021). History of Melbourne cricket grounds. *AU Stadiums*. <https://www.austadiums.com/news/1058/history-of-the-melbourne-cricket-ground>.
- Sternfeld, J. (2012). *The first modern Olympics*. National Endowment for the Humanities. <https://www.neh.gov/divisions/preservation/featured-project/the-first-modern-olympics>.
- Syron, G. (1999). *12 bucks a week*. National Museum of Australia.
- The five most sustainable sports venues in the world. (2018). *Climate Action*. <https://www.climateaction.org/news/the-5-most-sustainable-sports-venues-in-the-world>.
- Wolla, S. A. (2017). *The economics of subsidizing sports stadiums*. Economic Research: Federal Reserve Bank of St. Louis. <https://research.stlouisfed.org/publications/page1-econ/2017-05-01/the-economics-of-subsidizing-sports-stadiums>.

Sustainable Stadiums

► Sustainable Sports Stadiums

Sustainable Stakeholder Dialogue

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Synonyms

Important stakeholders; Influencing stakeholders; Relevant stakeholders

Definition

A primary stakeholder group is one without whose continuing participation the corporation

cannot survive as a going concern. Primary stakeholder groups typically are comprised of shareholders and investors, employees, customers, and suppliers, together with what is defined as the public stakeholder group: the governments and communities that provide infrastructures and markets, whose law and regulations must be obeyed, and to whom taxes and other obligations may be due. There is a high level of interdependence between the corporation and its primary stakeholders. If any primary stakeholder group as customers or suppliers becomes dissatisfied and withdraws from the corporate system, in whole or in part, the corporation will be seriously damaged or unable to continue as a going concern.

This definition comes from the classification made by Clarkson in 1995 between primary stakeholders and secondary stakeholders, according to the formal relationship with the company.

Key Issues

Freeman, generally known as the founder of the Stakeholder theory thanks to his work “Strategic Management: A Stakeholder approach” (1984), considered in his model the company at the center of many interactions between stakeholders.

In the theoretical context of stakeholder theory, different stakeholder groups interact with company.

Stakeholders are defined as persons or groups that have, or claim, ownership, rights, or interests in a corporation and in its activities, past, present, or future. Stakeholders with similar interests, claims, or rights can be classified as belonging to the same group: employees, shareholders, customers, and so on (Clarkson 1995).

In literature, however, there are many definitions of stakeholders (Mitchell et al. 1997), all of which share their roots in the definition from Freeman (1984): “Any group or individual who can affect or is affected by the achievement of the organization’s objectives.”

Literature offers different proposals to classify stakeholders by their respective level of importance, as resumed in the following table by Mainardes et al. (2012) (Table 1).

Sustainable Stakeholder Dialogue, Table 1 Stakeholder classification typologies

Authors	Classification/criteria used
Goodpaster (1991)	The strategic and the moral stakeholder
Savage et al. (1991)	Stakeholder's potential powers to threaten or cooperate with the organization
Clarkson (1995)	The primary (with formal relationships) and the secondary (without formal relationships)
Mitchell et al. (1997)	Power, legitimacy, and urgency
Rowley (1997)	Network density and the centrality of the organization focus
Scholes and Clutterbuck (1998)	Power of influence, impact on the organization, and affinity with organizational objectives
Kamann (2007)	Power and the level of interest
Fassin (2009)	Classical stakeholders, stakewatchers, stakekeepers

Mainardes et al. (2011)

In particular, Clarkson (1995) was the first to divide stakeholders into two groups: primary and secondary stakeholders.

According to Clarkson (1995), the primary stakeholders were those that have formal or official contractual relationships with the company, such as clients, suppliers, employees, shareholders, among others, and the secondary ones are those not holding such contracts, such as governments and the local community, for example. In this way, a company is conceived of as a network of explicit and implicit relationships spanning both the internal and external environments. Furthermore, with the advance of stakeholder theory, greater interest began to be shown in these distinct interest groups and not only company shareholders or owners (Laffont and Martimort 1997; Argandona 1998; Gibson 2000; Delmar and Shane 2006; Wang et al. 2008; Forray and Goodnight 2010; Hirsch and Morris 2010).

From this perspective, the corporation itself can be defined as a system of primary stakeholder groups, a complex set of relationships between

and among interest groups with different rights, objectives, expectations, and responsibilities.

The corporation success depends on the managers ability to create satisfaction for each stakeholder group, so that each group continues as a part of the corporation's stakeholders system.

According to the same classification of Clarkson (1995), secondary stakeholder are defined as those who influence of affect, or are influenced or affected by, the corporation, but they are not engaged in transactions with the corporation and are not essential for its survival. They have the capacity to mobilize public opinion in favor of or in opposition to, a corporation's performance. Even if they are not essential for survival, such groups can cause significant damage to a corporation.

The stakeholders, being among the main protagonists of corporate life, feel the need to be integrated and contribute to improving the company in which they are involved. Therefore, stakeholder engagement (SE) becomes a composite process that includes more methods of interaction consultation, communication, exchange, and dialogue between the company and its stakeholders. Greenwood (2007) identifies SE as the set of procedures that an organization develops to involve stakeholders in organizational activity, in order to create a system of cooperation (Phillips 1997).

Stakeholder theory scholars have tried to classify the relational models between organizations and stakeholders by assuming a gradual growth of stakeholder involvement and participation. First, the organization identifies and maps its stakeholders, if possible distinguishing between primary parties (those who are strategic in the middle to long term) and secondary parties (stakeholders that do not affect its sustainability) (Clarkson 1995). Second, it tries to manage stakeholders' expectations and the claims they support in accordance with their salience (Mitchell et al. 1997), while also balancing these various positions through a process of stakeholder management (O'Dwyer 2005). In the last step, organizations try to engage primary stakeholders in decision-making processes, making them participants in organization management and governance, sharing information, dialoguing, and

creating a model of mutual responsibility. The stakeholder engagement phase, unlike the stakeholder mapping and management phase, “creates a dynamic context of interaction, mutual respect, dialogue and change, not a unilateral management of stakeholders” (Andriof et al. 2002). As a result, the main feature of stakeholder engagement is not to encourage the mere involvement of stakeholders to “mitigate” or manage their expectations, but to create a network of mutual responsibility.

Stakeholder engagement is a milestone corporate social responsibility (CSR) policy because it allows one party (the organization) to interact with another (the stakeholder) in a two-way dialogue in which the engager and engaged mutually learn from such contacts, deeply revising their expectations and preconceptions. In this sense, stakeholder engagement is a powerful tool of dialogic communication and accounting that offers interactive mutual learning processes that are capable of promoting transformative action and social change. According to Unerman and Bennett (2004), three key problems are associated with stakeholder engagement initiatives: identifying and reaching a wide range of stakeholders; determining a consensus set of stakeholder expectations from a range of potentially mutually exclusive views held by different stakeholders; and engaging them in an authentic two-way conversation. This does not exclude the possibility for stakeholders to communicate with each other without the intermediation of corporations that hold “legitimate interests” (Evan and Freeman 1988; Friedman and Miles 2006).

Future Directions

Undoubtedly, nowadays, stakeholder theory could not develop enough understanding of the heterogeneity of stakeholder claims and interests in focal firms. More importantly, the common or generic categories of stakeholders – for example, suppliers, customers, shareholders – are considered inadequate because they do not offer a realistic portrait of the stakeholders that interact with firms. Additionally, stakeholder theory is silent on

what occurs when these generic categories break-down (Freeman et al. 2010). This silence limits the ability of stakeholder theory to prioritize stakeholder claims. Building on stakeholder salience, Perrault (2017) proposed “status” as an attribute that explains how managers assign salience to various stakeholders and attempts to define how stakeholder claims are prioritized based on their status. Perhaps the first step for future research on this connection would be to empirically examine Perrault’s (2017) proposition of the relevance of status with stakeholder salience and other salience attributes, for example, power and legitimacy. Knowing how status translates into power and how stakeholders possessing different levels of status push their claims on focal firms should provide important knowledge for this field. Within the broader premises of the stakeholder theory examining the associations between status and power and between status and legitimacy would be helpful to understanding negative, additive, subsuming, and synergistic results.

Previous research has suggested that, apart from the originally proposed attributes of salience (Mitchell et al. 1997), proximity (Driscoll and Starik 2004), frequency of contact (Luoma-aho 2005), status and organization (as discussed above) also determine stakeholder salience. The attribute of proximity is relevant to modern organizational forms and to not-for-profit organizations because they build more on networks and coalitions (Yaziji and Doh 2009). Khurram et al. (2019) believe that there is a need to empirically examine the proximity and frequency of contact to be attributes of stakeholder salience. Moreover, a detailed effort should also be directed toward untangling these attributes and drawing conceptual boundaries that differentiate between the two.

Nowadays, a stronger general equilibrium analysis that better incorporates dynamic aspects of the stakeholder salience model is necessary. Future research should investigate the salience and importance of stakeholders considering the dynamic relationship between a company and its stakeholders, also in the light of the greater and greater importance given to digitalization.

Cross-References

- [Materiality](#)
- [Stakeholder](#)
- [Shareholder Engagement](#)
- [Stakeholder Engagement](#)
- [Stakeholder Management](#)
- [Stakeholder Mapping](#)

References for Further Readings

- Andriof, J., Waddock, S., Husted, B., & Rahman, S. (2002). *Unfolding stakeholder thinking: Theory, responsibility and engagement*. Sheffield: Greenleaf Publishing.
- Andriof, J., & Waddock, S. (2002). Unfolding stakeholder engagement. In J. Andriof, S. Waddock, B. Husted, & S. Sutherland Rahman (Eds.), *Unfolding stakeholder thinking: Theory, responsibility and engagement* (pp. 19–42). Sheffield: Greenleaf Publishing.
- Argandonã, A. (1998). The stakeholder theory and the common good. *Journal of Business Ethics*, 17(1), 1093–102.
- Ayuso, S., Rodriguez, M. A., Garcia-Castro, R., & Arino, M. A. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business and Society*, 53(3), 414–439.
- Boesso, G., & Kumar, K. (2008). An investigation of stakeholder prioritization and engagement: Who or what really counts. *Journal of Accounting & Organizational Change*, 5(1), 62–80.
- Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92–117.
- Delmar, F., & Shane, S. (2006). Does experience matter? The effect of founding team experience on the survival and sales of newly founded ventures. *Strategic Organization*, 4(3), 215–47.
- Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review*, 20(1), 65–91.
- Fassin, Y. (2009). The stakeholder model refined. *Journal of Business Ethics*, 84(1), 113–35.
- Forray, J., & Goodnight, J. (2010). Think global, act local: A methodology for investigating international business curriculum priorities using stakeholder feedback. *Organization Management Journal*, 7, 56–64.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Friedman, A., & Miles, S. (2006). *Stakeholders: Theory and Practice*. Oxford University Press, Oxford.
- Greenwood, M. (2007). Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, 74, 315–327.
- Gibson, K. (2000). The moral basis of stakeholder theory. *Journal of Business Ethics*, 26(1), 245–57.
- Goodpaster, K. (1991). Business ethics and stakeholder analysis. *Business Ethics Quarterly*, 1(1), 53–73.
- Hirsch, P., & Morris, M. (2010). Immoral but not illegal: monies vs mores amid the mortgage meltdown. *Strategic Organization*, 8(1), 69–74.
- Kamann, D. (2007). Organizational design in public procurement: a stakeholder's approach. *Journal of Purchasing & Supply Management*, 13(1), 127–36.
- Laffont, J., & Martimort, D. (1997). The firm as a multi-contract organization. *Journal of Economics & Management Strategy*, 6(2), 201–34.
- Lopatta, K., Reemda, J., & Chen, C. (2017). Stakeholder engagement and Corporate Social Responsibility (CSR) performance: International evidence. *Social Responsibility Environmental Management*, 24, 199–209.
- Mainardes, E.W., Alves, H. & Raposo, M. (2011). Stakeholder theory: issues to resolve. *Management Decision*, 49(2), 226–52.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Moratis, L., & Brandt, S. (2017). Corporate stakeholder responsiveness? Exploring the state and quality of GRI-based stakeholder engagement disclosures of European firms. *Corporate Social Responsibility Environmental Management*, 24, 312–325. <https://doi.org/10.1002/csr.1408>.
- Phillips, R. (1997). Stakeholder theory and a principle of fairness. *Business Ethics Quarterly*, 7(1), 51–66.
- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 78–92.
- Reed, D. (1999). Stakeholder management theory: A critical theory perspective. *Business Ethics Quarterly*, 9(3), 453–483.
- Rowley, T. (1997). Moving beyond dyadic ties: a network theory of stakeholder influences. *Academy of Management Review*, 22(4), 887–910.
- Savage, G., Nix, T., Whitehead, C. & Blair, J. (1991). Strategies for assessing and managing organizational stakeholders. *Academy of Management Executive*, 5(1), 61–75.
- Scholes, E., & Clutterbuck, D. (1998). Communication with stakeholders: an integrated approach. *Long Range Planning*, 31(2), 227–38.
- Tashman, P., & Raelin, J. (2013). Who and what really matters to the firm: Moving stakeholder salience beyond managerial perceptions. *Business Ethics Quarterly*, 23(4), 591–616.
- Wang, H., Choi, J. & Li, J. (2008). Too little or too much? Untangling the relationship between corporate philanthropy and firm financial performance. *Organization Science*, 19, 143–59.

Sustainable Supply Chain

► Sustainable Supply Chain Management

Sustainable Supply Chain Management

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Synonyms

Greening the supply chain; Sustainable logistics;
Sustainable supply chain

Definition

Sustainable supply chain management involves integrating environmentally, socially, and financially viable practices into the comprehensive supply chain lifecycle, beginning with product design and development to material selection, manufacturing, packaging, transportation, consumption, return, and disposal. Such management and practices can help companies not only reducing their total carbon footprint but also in optimizing their end-to-end operations to achieve more significant cost savings resulting in profitability.

Why a “Sustainable Supply Chain”?

Any organization’s supply chain must operate beyond maintaining efficiency and profitability benchmarks by delivering improved environmental and social performance within a financially viable operation. This has a far superior impact on the environment than any other part of an organization’s operations. Organizations must

address several priorities in this domain including environmental stewardship, conservation of resources, carbon footprint reduction, financial savings and viability, and social responsibility.

Gary Hirshberg, President and CEO of *Stonyfield Farms*, best epitomizes the need for sustainable supply chains, when he said:

Even though we were the first manufacturer in America to offset 100% of the CO₂ emissions from our manufacturing plants, these incredible off-sets amounted to a rounding error in terms of our total carbon footprint. We realized that our supply chain – what is coming in and going out of our plant – represents 80% to 90% of our total carbon footprint. So, despite the great things that we did in our plant, unless we tackled our supply chain’s carbon footprint, we were nowhere.

According to the *Sustainable Supply Chain Foundation* (sustainable-scf.org), even though companies and consumers focus on the sustainable profile of a product and consider the sourcing and recyclability of products, there is a greater need to illuminate and understand the sustainability issues related to the transportation and distribution. Beyond the discernible benefits of reducing overall carbon footprint, and reducing energy and resource consumption, there are several other tangible reasons why companies should care about the sustainability in their supply chains, including:

- (a) Better bottom line – research and practice have demonstrated a clear, positive link between sustainability and financial outcomes.
- (b) Consumers and companies recognize the importance of green and social practices throughout the production process, and this, in turn, drives increased sales and share valuation.
- (c) Governmental initiatives around the world provide tax and investment incentives to firms that employ sustainable practices. In many regions around the globe, it is mandated by law.
- (d) The positive public relations exposure from implementing sustainable supply chain policies can generate numerous intangible benefits for companies. Sustainability is

synonymous with corporate social responsibility and being a good global citizen.

- (e) Suppliers and business customers are increasingly mandating the sustainable practices of their vendors.
- (f) The critical benchmark of sustainability is the eradication of waste in the supply chain.

Making a Supply Chain Sustainable

A sustainable supply chain is managed using four hierarchical strategies – legal, ethical, responsible, and sustainable. For example, a responsible supply chain must be legal and ethical, but not necessarily sustainable. The complexity of supply chains makes it difficult to determine whether it is meeting the social and environmental aspects of sustainability. Very little work has been done to address the performance of social or environmental issues. For example, none of the 2555 supply chain metrics that were reviewed explicitly addressed sustainability (Ahi and Searcy 2013). Another example is that only 5% of reviewed corporate responsibility reports of approximately 40,000 referred to ecological limits. There is a need for monitoring and compliance of sustainability targets for environmental and social measures, since companies are gradually being held responsible for harmful activities to the society or environment carried out by suppliers at all levels throughout their supply chain.

A sustainable supply chain is only as strong as its weakest link. Objective metrics and targets are already established for meeting some of the environmental goals, such as capping greenhouse gas emissions. It is encouraging that nearly 200 businesses committed to achieving this environmental goal. *Unilever*, a multinational company, has also established several science-based targets as a part of its Sustainable Living Plan, many of which will require their supply chain partners to meet the sustainability target. However, for social issues, measurement metrics are not very well defined. Sustainable development goals and *Oxfam*'s social foundations provide some guidance towards meeting the social aspect of sustainability in the supply chain.

Focusing on the Source to Create a "Sustainable Supply Chain"

Focusing on the source can help create a sustainable supply chain (Bove and Schwartz 2016). It was found that the supply chain of a consumer company accounts for greater social and environmental cost than its own operation. For example, 80% of greenhouse gas emissions and more than 90% of the impact on air, land, water, biodiversity, and geological resources are created by supply chain that can be reduced significantly by focusing on their supply chains.

Climate change has an adverse effect on the supply chain. For example, drought in Australia reduced a company, *Grain Crop*'s grain deliveries by 23%, leading to a 64% drop in 2014 profits. *Unilever* reported an estimated 3000 million pounds per year loss due to water scarcity and declining agricultural productivity leading to higher food costs. The deadly collapse of *Rana Plaza Factory* in Bangladesh resulted in two of the world's 100 most prominent apparel company to be dropped out of the list in 2 years after the incident.

The *Sustainability Consortium* (TSC), a non-profit organization dedicated to improving consumer products' sustainability, has reported the responses of 1700 companies on the sustainability of their supply chains. Only one-fifth of the respondents had a comprehensive view of their supply chain's sustainability performance. More than half of the respondents were unable to determine sustainability issues in their supply chain. The consumer companies are capable of making their supply chains more sustainable by identifying critical issues deep into the supply chain, linking the company's supply chain sustainability goals to the global sustainability agenda, and helping suppliers manage their impact. Based on scientific research and consultation with more than 100 stakeholder organizations, TSC has built a set of performance indicators and a reporting system that highlights sustainability hot spots for more than 110 consumer product categories, covering 80–90% of consumer products' impact.

Consumer companies and retailers can influence their suppliers to reduce sustainability impact due to their high purchasing power. Collaboration with suppliers has found to be responsible for carbon emission reduction of more than 3.5 million tons with suppliers saving an average of \$1.3 million per emissions reduction initiative. Companies are currently helping their suppliers design and implement sustainability programs that support their own goals. For example, in collaboration with the *Environmental Defense Fund*, *Campbell Soup* company offers farmers technologies, guidelines, and products to help them to optimize their fertilizer use and improve soil conservation. To monitor sustainability practices of supplier farmers, *Unilever* developed a digital software with the *University of Aberdeen* and share it free with suppliers with the aim of procuring 100% of its agricultural content from sustainable sources by 2020.

Providing incentives to suppliers has been adopted by many companies. For example, *Walmart* has pledged that 70% of its sales would come from suppliers that use the company's sustainability index that employ's TSC's supply-chain performance indicators and reporting system. *Walmart* tagged the companies with the highest sustainability index scores with "made by Sustainable Leaders," thus providing recognition for their good deed.

Four Strategies for Creating a More Sustainable Supply Chain

The social and environmental sustainability in the supply chain can be fostered by maintaining long-term sustainability goals, requiring the first-tier suppliers to set up their own long-term sustainability goals, by including suppliers from all levels in the overall sustainable strategy and most importantly, extending the company's sustainable program to their suppliers. To identify the effective strategies in fostering sustainability in supply chain, three notable multinational companies (MNCs) and their suppliers were investigated. Villena and Gioia (2020) have suggested four successful strategies; they are summarized below:

1. *Direct approach*: A firm can define and monitor social and environmental goals for its first-tier suppliers regarding second-tier suppliers. For example, to encourage diversity, an automotive company mandated that their first-tier supplier to allocate 7% of their procurement spending to minority suppliers, and monitored if it was met over time. These actions helped to spread the sustainability standards throughout the supply chain. Additionally, working together, the firm and their first-tier suppliers can build a map of connectedness and interdependency of suppliers, including lower-tier suppliers.
2. *Indirect approach*: The companies can provide training and incentives for their suppliers to implement sustainable practices. This was found to be very successful in making substantial changes in supplier's manufacturing practices and requiring their suppliers to adopt sustainability practices, thus cascading the practice of sustainability throughout the supply chain. The indirect approach is based on fostering peer learning and providing incentives such as long-term contracts, or preferred status as sustainability awards.
3. *Collective approach*: Industry competitors can collaborate to establish sustainability standards and tools and hold their suppliers responsible for adhering to those standards. Working together, business alliances can achieve a more efficient system for their suppliers. Companies can help suppliers become members of the industry association, thus making them responsible for complying with industry standards. Once becoming members of these industry associations, first-tier suppliers can influence second-tier suppliers to follow sustainability standards to stay competitive.
4. *Global approach*: Collaboration with international organizations such as the United Nations Global Compact, an international effort to promote corporate social responsibilities and NGOs that share the same goals, helps multinational companies.

Besides those strategies, a few more things can be done to develop sustainable supply chains. For

example, an inspection of all three components of 3P (profit, people, and planet) are required for all levels of suppliers before approving them, instead of addressing only one P (profit) related issues such as cost, quality, delivery, and technology which has been the general practice particularly for suppliers beyond the first-tier. Furthermore, proper training and incentives are needed for procurement officers at all levels of the supply chains, particularly at the first-tier suppliers, to mandate the social and environmental aspects of sustainability to the lower-tier suppliers. In addition, engaging the top executives of the first-tier suppliers are effective in developing sustainable supply chains at all levels. It is important to convey a consistent message of achieving all 3Ps – the economic, social, and environmental goals to the procurement officers, and all tiers' suppliers.

Summary and Conclusion

Highly functioning supply chains should focus on environmental and social factors, in addition to creating greater efficiencies (Brandenburg et al. 2014). Companies are increasingly focused on sustainable products and the extent to which the supply chains contribute to global sustainability challenges and how they contribute positively to their growth and long-term profitability.

Companies managing their supply chain impact are best positioned to gain a competitive advantage in the marketplace. More substantial social and environmental aspects of sustainability measures will influence company growth – poor performances will slow down growth. To achieve strong growth, companies can build partnerships with their suppliers to improve the social and environmental outcomes. By partnering closely with their suppliers, companies can lessen their environmental and social impact, and position themselves for greater success.

Cross-References

- [Cradle to Cradle](#)
- [Green Circular Economy](#)

- [Life Cycle Management](#)
- [Selling Cycle for Sustainability](#)
- [Supply Chain Management](#)
- [Sustainable Chain Management](#)
- [Sustainable Logistics](#)
- [Sustainable Supply Chain](#)
- [UN Declaration on Cleaner Production](#)

References/Further Reading

- Ahi, P., & Searcy, C. (2013). A comparative literature analysis of definitions for green and sustainable supply chain management. *Journal of Cleaner Production*, 52, 329–341.
- Bove, A.-T., & Swartz, S. (2016, November). *Starting at the source: Sustainability in supply chains*. McKinsey & Company.
- Brandenburg, M., Govindan, K., Sarkis, J., & Seuring, S. (2014). Quantitative models for sustainable supply chain management: Developments and directions. *European Journal of Operational Research*, 233(2), 299–312.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward new theory. *International Journal of Physical Distribution & Logistics Management*.
- Crum, M., Poist, R., Carter, C. R., & Easton, P. L. (2011). Sustainable supply chain management: Evolution and future directions. *International Journal of Physical Distribution & Logistics Management*.
- Dubey, R., Gunasekaran, A., Papadopoulos, T., Childe, S. J., Shibin, K. T., & Wamba, S. F. (2017). Sustainable supply chain management: Framework and further research directions. *Journal of Cleaner Production*, 142, 1119–1130.
- Golicic, S. L., & Smith, C. D. (2013). A meta-analysis of environmentally sustainable supply chain management practices and firm performance. *Journal of Supply Chain Management*, 49(2), 78–95.
- Hammervoll, T., Jensen, L.-M., & Beske, P. (2012). Dynamic capabilities and sustainable supply chain management. *International Journal of Physical Distribution & Logistics Management*.
- Pagell, M., & Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *Journal of Supply Chain Management*, 45(2), 37–56.
- Saenz, M. J., Koufteros, X., Touboulic, A., & Walker, H. (2015). Theories in sustainable supply chain management: A structured literature review. *International Journal of Physical Distribution & Logistics Management*.
- Searcy, C. (2016, November 16). What makes a supply chain sustainable?. *MIT Sloan Management Review*.
- Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain

- management. *Journal of Cleaner Production*, 16(15), 1699–1710.
- Villena, V. H., & Gioia, D. A., (2020, March–April). A more sustainable supply chain. *Harvard Business Review*.
- Wolf, J. (2014). The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance. *Journal of Business Ethics*, 119(3), 317–328.
- Wu, Z., & Pagell, M. (2011). Balancing priorities: Decision-making in sustainable supply chain management. *Journal of Operations Management*, 29(6), 577–590.

Sustainable Tourism

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Synonyms

Eco-tourism; Ethical tourism; Green tourism

Definition

Sustainable tourism is any activity of persons traveling to and staying in places outside their usual environment that adheres to commonly accepted sustainability criteria.

Introduction

Tourism is one of the fastest growing industries in all continents. In 2005, tourism accounted for 10% of the world's economic activity and was already one of the main generators of employment.

According to the United Nations World Tourism Organization (UNWTO), tourism conventionally comprises the activities of people traveling to and staying in places outside their

usual environment for a limited time for leisure, business, and other purposes. In the tourism business, natural resources are thus intensively used and consumed to guarantee high standards of mobility, accommodation, and local consumption (Pan et al. 2018). As a consequence, tourism can have major impacts on the environment, ecosystems, and economy but, favoring their openness, also on societies and culture. The positive or negative nature of these impacts, and thus the distinction between sustainable and unsustainable tourism, depends on how it is managed. It is thus not surprising that in the last 30 years sustainable tourism has emerged as the dominant paradigm in tourism development (Ruhanen et al. 2015). In the definition of UNWTO, sustainable tourism is the form of tourism that “takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.” This entails meeting the needs of present tourists and host regions while protecting and enhancing opportunities for the future, without altering cultural integrity, essential ecological processes, biological diversity, and life support systems. Notably, this long-term conservation perspective reflects symbiotic relationships between ecotourism and natural resource conservation (Boley and Green 2016) that stem from the needs of both tourists and host regions to increase the carrying capacity of the destination so as to limit the trade-off between its current and future attractiveness.

History

The increasing globalization of the economy and the availability of cheaper and faster transportation systems have boosted the tourism industry in recent decades. The sudden rise of mass tourism in the 1960s, coupled with a lack of regulation and awareness of its direct and indirect impacts, attracted wide criticism for stimulating unfair investments, which consequently paved the way to the introduction of the phenomenon of sustainable tourism.

As noted in the 2015 United Nations Educational, Scientific and Cultural Organization (UNESCO) report entitled “Sustainable Tourism Development in UNESCO,” international action in this area, however, did not really take off until the early 1990s, when tourism was officially recognized as an important issue in international environmental politics, both in relation to the Convention on Biological Diversity and to Agenda 21.

The evolution of the debate on sustainable tourism, and the increasingly complex and multifaceted nature of sustainable tourism in the last 30 years, is effectively represented in publications by the largest think-tank on the topic, the United Nations World Tourism Organization (UNWTO).

The first publication of UNWTO arrived in 1992, “An Integrated Approach to Resort Development”.

The topic of natural protected areas was introduced in 2002 with the publication “Sustainable Tourism in Protected Areas – Guidelines for Planning and Management” (Eagles et al. 2002). In the same year, UNWTO published “Voluntary Initiatives in Tourism Worldwide Inventory and Comparative Analysis of 104 Eco-labels, Awards and Self-Commitments.”

The topic of climate change entered the debate on sustainable tourism in 2003 in the publication “Climate Change and Tourism.”

In 2004, UNWTO published the first study on poverty alleviation entitled “Tourism and Poverty Alleviation Recommendations for Action”.

The relationship between tourism and cultural heritage was introduced in 2008 in the publication “Tourism Congestion Management at Natural and Cultural Sites.”

The impact of tourism on biodiversity was discussed in 2010 in the publication “Tourism and Biodiversity – Achieving Common Goals Towards Sustainability.”

In 2011, UNWTO focused attention on the business case for greener and sustainable tourism, highlighting the role of green investments as a means to create jobs and reduce poverty while also improving environmental outcomes in the “Tourism” chapter of the “Green Economy Report” (see ► [“Green Economy”](#)).

The same evolution, from theoretical and methodological approaches to empirically driven theory testing and building works, emerges also in the last 25 years of scientific production (Ruhanen et al. 2015), which demonstrates the maturation of the field towards a progressively more rigorous and detailed search – from a “looking back in order to progress” approach – of in-field evidence of the links between sustainable tourism management and performance improvement.

As a consequence of this increasing body of knowledge, sustainable tourism management is nowadays considered a key means to achieving sustainable development. It is explicitly mentioned in three of the 169 targets referred to in the 17 Sustainable Development Goals (SDGs) adopted by the UN General Assembly on 25 September 2015 through the Resolution “Transforming our world: the 2030 Agenda for Sustainable Development.” Nonetheless, there are many more targets that do not explicitly mention “tourism” but where tourism is/could be very relevant in their achievement.

General Principles and Metrics

Sustainable tourism encompasses all the activities that, in short, determine the contribution of tourism to the sustainable development of a destination. Its key principles can be delineated as follows:

- Ensuring an optimal use of environmental resources so as to maintain essential ecological processes and conserve natural heritage and biodiversity
- Respect and conserve the socio-cultural authenticity of host communities while contributing to inter-cultural understanding and tolerance
- Promote viable, long-term economic operations that are capable of providing socio-economic benefits to all stakeholders, including poverty alleviation, stable employment, social mobility, and social services to host communities

As reflected in the 2007 European Commission Communication “Agenda for a sustainable and competitive European tourism,” supporting universal access to tourism, preserving natural and cultural resources, diversifying tourism offerings at the transnational level, reducing the seasonality of demand, promoting the wellbeing of the local community, increasing the accountability of destinations, and reporting and promoting quality standards aimed at reducing information asymmetries among stakeholders are cross-cutting priorities of modern tourism policies.

A precondition for sustainable tourism is the informed participation of all relevant stakeholders, which is key to understanding the interests at stake and ensuring effective and constant monitoring of impacts, introducing appropriate preventive and/or corrective measures whenever necessary. Local communities are both crucial targets and drivers of sustainable tourism, as their community attachment and community involvement, mediated by perceived benefits, are critical factors that affect the level of support for sustainable tourism development (Lee 2013).

Of course, among the different stakeholders, sustainable tourism should also maintain a high level of tourist satisfaction and ensure motivating emotions (Malone et al. 2014) and meaningful experiences for tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them, so as to reduce both intended and unintended (i.e., linked to the attitude–behavior gap) impacts (Juvan and Dolnicar 2014).

In doing that, it should be considered that the concept of responsible tourism from the consumer perspective is heterogeneous and evolving, which calls for adaptation of top-down planning and communication approaches towards more bottom-up alternatives (Caruana et al. 2014).

Sustainable tourism management requires assessing and monitoring the impacts of current and future tourism development. Thus, there is need for clear indicators, analysis of carrying capacity, limits of acceptable change, and related benchmarks.

Unfortunately, aside from the difficulties in ensuring wide generation and collection of quality

data (Law et al. 2017), in the tourism industry it is traditionally difficult to select indicators that can be monitored on an ongoing basis to establish trends over time, to establish baselines, benchmarks, and targets against which different regions can be compared, and to distinguish between indicators that summarize the broader economic, social, or environmental context and those indicators that relate directly to specific policies. These difficulties have led to a proliferation of purpose-specific metrics and relatively few orchestration initiatives, like the launch of the European Tourism Indicators System (ETIS).

Despite some attempts to achieve commensurability and reductionism (Andersson and Lundberg 2013), most of the indicators in use fit the needs of nonreductionist multicriteria evaluations that are not aimed at finding optimal solutions, but at outcomes that build greater consensus across the various stakeholders.

In this framework, to establish shared metrics of sustainability in tourism, UNWTO launched, with the support of the United Nations Statistics Division (UNSD), the initiative “Towards a Statistical Framework for Measuring the Sustainability of Tourism (MST).” The guiding principle that lay behind this initiative is that credibility, comparability, and coherence of various measurement and monitoring programs pertaining to sustainable tourism (e.g., the derivation of Sustainable Development Goals (SDG) indicators and those of UNWTO’s International Network of Sustainable Tourism Observatories (INSTO)) are necessary to adequately identify good practices to be supported and diffused.

Managing Sustainable Tourism

Achieving sustainable tourism requires determination, a long-term oriented motivation, and a holistic and integrated (i.e., systemic) approach to managing the overall lifecycle of the tourist experience, which consists in its preparation, the journey, the stay, the journey back home, and the activities after returning home. Sustainable tourism performance thus depends on the concerns and behaviors of a variety of actors throughout

the lifecycle of the tourist experience, from salespeople in travel agencies (Aliperti et al. 2018; Chen and Peng 2014) to waste management companies at the destination (Law et al. 2017) and to tourists and their bottom-up conceptualizations of the phenomenon (Caruana et al. 2014).

From this perspective, according to UNESCO, the main drivers of tourism management are context-specific visions, common rules, control, and active development strategies. Context-specificity can be achieved through zoning that consists of dividing the given area into clearly designated zones listing the tourism activities and types of infrastructure that would be acceptable and should be developed in accordance with legitimate stakeholder needs. Anthropoc presence, the local environment, and their interactions are key to identifying homogeneous zones to orchestrate policies and resources from a risk-management perspective, which is particularly effective in case of disaster management (Becken and Hughey 2013).

Besides approval, licensing and control of tourism activities, guidelines and voluntary standards are typical policy tools aimed at ensuring a voluntary, effective, and inconsistencies-free regulation of tourism activities and infrastructures according to the vision and the zoning established (see ► [“Sustainable Tourism Products and Policies”](#)).

Since stakeholders and authorities are fundamental to boosting tourism development by catalyzing initiatives in tourism innovation, including product development, marketing and improvement of services, incentives, assistance programs, and facilitation of networking are typical instruments aimed at supporting virtuous dynamism and proactiveness in the tourism sector. Notably, the development and diffusion of best practice examples is a preferred way not just to pursue tourism development, but also to discourage unfavorable activities without solely enforcing strict command and control regulations or overcharging on exogenous, yet necessary to internalize tourism impacts, financial tools like tiered user fees, bonds, taxes, or levies.

Driving the development of sustainable tourism at an appropriate pace is thus a matter of

leveraging local accessibility to resources, both at the destination and company level (Leonidou et al. 2013), which calls for the definition of tourism management plans where possible threats and opportunities of tourism development are turned into widely agreed strategies after the careful assessment of environmental, social, cultural, political, and legal aspects. Modern planning approaches recognize that implementation success is a function of participation by neighbors and residents, local companies, tourism providers, restaurant owners, tourist guides, tours operators and tourism agencies, local authorities, local Non-Governmental Organizations (NGOs), educational institutions, research centers, visitors, and media. In fact, these stakeholders are expected to ensure an adequate understanding of what makes the specific context special and which are the key issues that should guide action. There is thus a virtuous – egoist to socio-altruist transforming – cycle between stakeholders’ pro-environmental perceptions and ecological understanding, education and knowledge sharing, availability of resources and opportunities, adaptive legislation and regulations, and collaborative planning and management (Imran et al. 2014).

Untapping the coordination potential of these stakeholders is important not only for providing the knowledge base for sustainable tourism planning, but also for exploiting potential synergies, e.g., related to the orchestration that destination management organizations (DMOs), travel agencies, and tour-operators might offer to individual service providers (e.g., hotels, restaurants, and tour guides) that usually tend to sell their own service overlooking the benefits from reducing redundancies and leveraging complementarities.

The importance of environmental knowledge management at the stakeholder level highlights the role of time as a necessary component of the nonstatic sustainable tourism planning process. As an example, this is particularly evident with reference to corporate sustainability in the hospitality sector, where socialization, externalization, combination, and internalization continue to be key processes for the creation of knowledge which enables organizations to successfully

address environmental challenges (Martínez-Martínez et al. 2015).

When turning sustainable tourism planning into practice, the region's tourism management vision, its main goals, and objectives have to be translated into a work plan to activate adequate resources and coordination of public and private efforts towards local governance (Battaglia et al. 2012). The workplan should also indicate how to monitor results against criteria for both sustainable tourism in principle, which are applicable to every region and every kind of tourism all over the world, and for local priorities adjusted according to the special conditions of the investigated area. As a result, global issues like greenhouse gas (GHG) emissions and climate change, apart from their capability to represent the vulnerability of a specific destination to fuel price shocks (Gössling et al. 2015) and the response of tourists to sectoral policies (Gössling et al. 2012), should be fairly balanced with those referring to local specificities in terms of energy use, wastewater and waste management, disruption of ecosystems, conservation of biodiversity, local food consumption, or safeguarding of employment and local culture.

In this framework, the more stakeholders that are involved appropriately in the design of feedback and review processes, the higher the probability of avoiding misuse of local resources and, thus, achieving a sustainable dependency of tourism activity on the local environment.

Sustainable Tourism Labels

If the process of sustainable tourism planning is by nature complex and multifaceted, communication with tourists should be developed on trustable and easily accessible information. To this end, compliance with standards is a common tool for providing stakeholders with explicit assurance that a business, product, process, service, or management system voluntarily meets or exceeds a set of baseline criteria or is committed to achieving progressively stronger sustainability.

Voluntary standards refer to product (e.g., EU Ecolabel) or process-oriented (e.g., ISO 14001),

certifiable (e.g., Blue Angel) or noncertifiable (e.g., ISO 26000) (see ► [“ISO 26000 Standard”](#)), private (e.g., Carbon Neutral) or public schemes (e.g., the European Eco Management and Audit Scheme – EMAS) that conform to third-party criteria (e.g., type I labels), to be distinguished from voluntary self-declarations that are (e.g., type III labels) or are not (e.g., type III labels) subject to third party audits on conformity to life cycle assessment criteria.

While the number of existing types of certification and ecolabels is continuously increasing, only the more credible ones have a widely known logo that enables consumers to recognize those businesses or products and services that meet certain sustainability criteria from those that do not, have sound and independent verification procedures that guarantee the transparency of criteria and evaluation, require certified companies to publish a statement of commitment to sustainable development, and have a set of defined standards/criteria or an environmental management system (or both) which must be met or exceeded, foster continual improvement and interpret the compliance with local regulations as a required and minimum standard, require a periodic follow up audits to renew the certification, entail to some extent a participatory approach involving stakeholders to define the standards and the design of the scheme.

Besides the emergence of these characteristics among trustworthy sustainable tourism certifications, it is worth noting the increasing number of profit-oriented institutions that are promoting sustainable tourism trademarks to market licensed products and build synergies among sustainable tourism providers under one umbrella brand. This might allow overcoming unfair concurrence of traditional competitors by developing economies of scale through cooperative marketing or a joint booking system and by providing a cooperate identity. Also, the legitimization of sustainable tourism trademarks depends on the extent to which these institutions guarantee the quality and compliance of the products and services of its members and communicate this guarantee to large numbers of consumers.

Summary

Besides relevant economic, social, and cultural impacts, tourism can generate relevant environmental impacts. In the last 30 years, in line with the increased awareness of stakeholders on sustainability issues, significant theoretical and practical improvements have been made in the field of tourism planning and management. Grounding on the increased sharing and understanding of lessons learnt at global level, the evolution of guiding principles and metrics is progressing hand in hand with the development and cross-sectoral integration of tourism policies. In parallel, the proliferation of product and management standards, tools, and labels reflects the interest that companies have in sustainable tourism as a means to achieve a competitive advantage.

Cross-References

- [CSR in Tourism](#)
- [Green Economy](#)
- [Sustainability in Tourism Marketing \(Sustainable Tourism Marketing\)](#)
- [Sustainable Tourism Products and Policies](#)

References

- Aliperti, G., Rizzi, F., & Frey, M. (2018). Cause-related marketing for disaster risk reduction in the tourism industry: A comparative analysis of prevention- and recovery-related campaigns. *Journal of Hospitality and Tourism Management*, 37, 1–10. <https://doi.org/10.1016/j.jhtm.2018.08.003>.
- Andersson, T. D., & Lundberg, E. (2013). Commensurability and sustainability: Triple impact assessments of a tourism event. *Tourism Management*, 37, 99–109. <https://doi.org/10.1016/j.tourman.2012.12.015>.
- Battaglia, M., Daddi, T., & Rizzi, F. (2012). Sustainable tourism planning and consultation: Evidence from the project INTER.ECO.TUR. *European Planning Studies*, 20(2), 193–211. <https://doi.org/10.1080/09654313.2012.650908>.
- Becken, S., & Hughey, K. F. D. (2013). Linking tourism into emergency management structures to enhance disaster risk reduction. *Tourism Management*, 36, 77–85. <https://doi.org/10.1016/j.tourman.2012.11.006>.
- Boley, B. B., & Green, G. T. (2016). Ecotourism and natural resource conservation: The ‘potential’ for a sustainable symbiotic relationship. *Journal of Ecotourism*, 15(1), 36–50. <https://doi.org/10.1080/14724049.2015.1094080>.
- Caruana, R., Glozer, S., Crane, A., & McCabe, S. (2014). Tourists’ accounts of responsible tourism. *Annals of Tourism Research*, 46, 115–129. <https://doi.org/10.1016/j.annals.2014.03.006>.
- Chen, A., & Peng, N. (2014). Recommending green hotels to travel agencies’ customers. *Annals of Tourism Research*, 48, 284–289. <https://doi.org/10.1016/j.annals.2014.07.003>.
- Eagles, P. F., McCool, S. F., Haynes, C. D., & Phillips, A. (2002). *Sustainable tourism in protected areas: Guidelines for planning and management* (Vol. 8). Gland: IUCN.
- Gössling, S., Scott, D., Hall, C. M., Ceron, J.-P., & Dubois, G. (2012). Consumer behaviour and demand response of tourists to climate change. *Annals of Tourism Research*, 39(1), 36–58. <https://doi.org/10.1016/j.annals.2011.11.002>.
- Gössling, S., Scott, D., & Hall, C. M. (2015). Inter-market variability in CO₂ emission-intensities in tourism: Implications for destination marketing and carbon management. *Tourism Management*, 46, 203–212. <https://doi.org/10.1016/j.tourman.2014.06.021>.
- Imran, S., Alam, K., & Beaumont, N. (2014). Environmental orientations and environmental behaviour: Perceptions of protected area tourism stakeholders. *Tourism Management*, 40, 290–299. <https://doi.org/10.1016/j.tourman.2013.07.003>.
- Juvan, E., & Dolnicar, S. (2014). The attitude–behaviour gap in sustainable tourism. *Annals of Tourism Research*, 48, 76–95. <https://doi.org/10.1016/j.annals.2014.05.012>.
- Law, A., DeLacy, T., & McGrath, G. M. (2017). A green economy indicator framework for tourism destinations. *Journal of Sustainable Tourism*, 25(10), 1434–1455. <https://doi.org/10.1080/09669582.2017.1284857>.
- Lee, T. H. (2013). Influence analysis of community resident support for sustainable tourism development. *Tourism Management*, 34, 37–46. <https://doi.org/10.1016/j.tourman.2012.03.007>.
- Leonidou, L. C., Leonidou, C. N., Fotiadis, T. a., & Zeriti, A. (2013). Resources and capabilities as drivers of hotel environmental marketing strategy: Implications for competitive advantage and performance. *Tourism Management*, 35, 94–110. <https://doi.org/10.1016/j.tourman.2012.06.003>.
- Malone, S., McCabe, S., & Smith, A. P. (2014). The role of hedonism in ethical tourism. *Annals of Tourism Research*, 44, 241–254. <https://doi.org/10.1016/j.annals.2013.10.005>.
- Martínez-Martínez, A., Cegarra-Navarro, J.-G., & García-Pérez, A. (2015). Environmental knowledge management: A long-term enabler of tourism development. *Tourism Management*, 50, 281–291. <https://doi.org/10.1016/j.tourman.2015.03.006>.
- Pan, S.-Y., Gao, M., Kim, H., Shah, K. J., Pei, S.-L., & Chiang, P.-C. (2018). Advances and challenges in sustainable tourism toward a green economy. *Science of*

the Total Environment, 635, 452–469. <https://doi.org/10.1016/j.scitotenv.2018.04.134>.

Ruhanen, L., Weiler, B., Moyle, B. D., & McLennan, C. J. (2015). Trends and patterns in sustainable tourism research: A 25-year bibliometric analysis. *Journal of Sustainable Tourism*, 23(4), 517–535. <https://doi.org/10.1080/09669582.2014.978790>.

Website Citations

http://portal.unesco.org/es/files/45338/12417872579Introduction_Sustainable_Tourism.pdf/Introduction_Sustainable_Tourism.pdf. Accessed 1 Mar 2019.

<http://www.environment.gov.au/resource/steps-sustainable-tourism>. Accessed 1 Mar 2019.

<http://www2.unwto.org/mst>. Accessed 1 Mar 2019.

https://ec.europa.eu/growth/sectors/tourism/offer/sustainable_en. Accessed 1 Mar 2019.

Sustainable Tourism (Sustainable Development of Tourism, Sustainable Tourism Management)

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Definitions and Conceptualizations of Sustainable Tourism

A well designed and well-managed tourism can make a significant contribution to the three dimensions of sustainable development and has close linkages to other sectors and can create decent jobs and generate trade opportunities.

UN Resolution (2012, pp. 130/283)

In line with the above description of the United Nations, the “sustainable tourism” definition of the United Nations World Tourism Organization (UNWTO) is as follows:

Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.

UNEP and UNWTO (2005, p. 12)

Since the first appearance of the environmental concerns by Brundtland Commission with “Our Common Future Report,” the need for

the protection of the scarce resources of the world while developing the industry to meet the needs of current and future generations, conceptually the sustainability, is emphasized. Similarly, the debates about the conceptual definitions and practical implications of sustainable tourism emphasizing the aspect of sustainability applied to tourism enrich and still continue to develop.

Sustainable tourism evolved from the sustainable development concept. The original definition of sustainable development was provided by the Brundtland Commission in “Our Common Future” as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987, p. 43). 1992 Rio Earth Summit indicated the important helping role of tourism for transition to sustainable development (Murphy and Price 2005, p. 174). As a result of the Rio Summit, Agenda 21 appeared as an action plan that might be adopted on local, national, and international levels.

The rapid development of tourism beginning after the second half of the twentieth century until the end of the same century resulted in benefits as well as losses in terms of the resources of the world. Positive impacts of development of the tourism industry can be mentioned as the contribution to socio-economic development and protection of socio-cultural and environmental values. Contrarily, massive exploitation of the natural and socio-cultural resources for tourism development have undesired consequences over the resources of the world such as:

- The extinction of fauna and flora species and wildlife in favor of urbanization and surpassed carrying capacity
- Loss of fertile lands in favor of over-construction and
- Forgotten original traditions in favor of commodification

The latter undesired results are aimed to be eliminated and the former desired benefits are encouraged by sustainable tourism theories and practices.

Attempts to conceptualize the theoretical framework of sustainable tourism and emphasize its opportunities of implicability have been made by different writers. In this context, especially Garrod and Fyall (1998) carries an unnegligible place and worth referring to by theoreticians and practitioners in order to comprehend the logic of sustainable tourism.

While developing tourism sustainably, it is essential to consider three basic pillars: economic, social, and environmental. The definitions of sustainable tourism emphasize the importance of balancing among the needs and expectations of the visitor, host, and destination. Parallely, in a following definition, sustainable tourism is defined as “a form of tourism that safeguards and enhances the natural and cultural assets of the destination, the resident population’s quality of life and life opportunities; satisfies the needs and expectations of the tourist market; is economically viable and achieves a return on investment for tourism operators; and achieves equity in the distribution of costs and benefits of tourism between the current and future generations” (Faulkner 2003, pp. 344–345). Additionally, Pearce (1992, p. 3) states: “Sustainability means that the average wellbeing of the global population rises over time.”

From the philosophical point of view of sustainable development mentioned by d’Allonnes, (2008), “the responsibility” is at the focus of attention. The traditional idea of responsibility is for the justification and paying the price for the damage of the past actions. The new concept of responsibility is closer to an obligation, for the future, and to others.

As for its nature, the tourism industry uses many socio-cultural and environmental resources in order to plan, produce, and offer the products and services to its clientele. Then, sustainable tourism can be defined as the style or aspect of management, policy, and planning of the tourism industry to create a sustainable tourism business with viable economic revenue for all concerned parties while respecting and protecting the resources for the needs of the current and future generations (Sonuç 2014).

All in all, sustainable tourism is a positive approach which attempts to reduce the tensions

among tourists, the host population, and the environment. It is an approach to realize the long term viability and quality of the natural resources and human resources. It is not against growth; however, it accepts that there are limitations to it. These limits may change according to the different places and to the varying management practices in those localities. With the sustainable tourism perceptive, the long term sustainability of tourism is guaranteed as well as its practicing field. With the commitment to increasing satisfaction, the sustainability of the tourist is also maintained. Fair resource allocation, increasing the quality of life of people, and contributing to World peace are among the current objectives of sustainable tourism (Sonuç 2014).

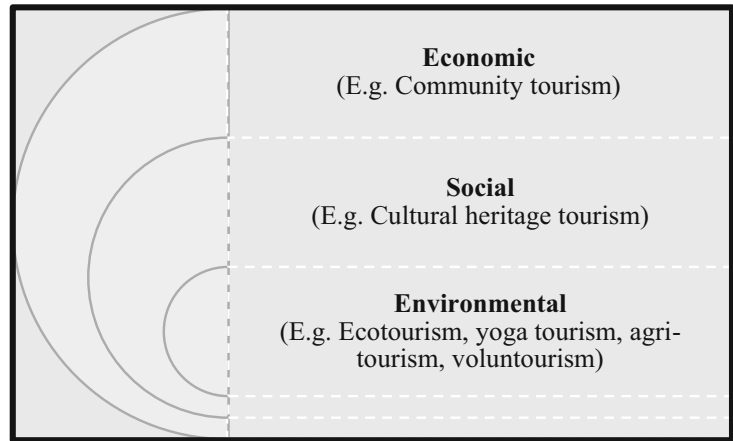
Important Dimensions and Aims of Sustainable Tourism

Centered around the three main pillars which are “economic,” “environmental,” and “social,” the 12 objectives of sustainable tourism are shown as “biological diversity, resource efficiency, environmental purity, economic viability, local prosperity, employment quality, social equity, visitor fulfillment, local control, community wellbeing, cultural richness and physical integrity” by United Nations Environment Programme (UNEP) and UNWTO (UNEP and UNWTO 2005, p. 12). As may be concluded from this document of UNEP and UNWTO, the environmental and social dimensions cannot be neglected to solely reach the economic aims. Because the main dimension which encapsules the other two is the environmental dimension. It may well be concluded that, so as to reach more sustainable economic goals, long term social and environmental aims should be taken into consideration.

Figure 1 demonstrates the main pillars or dimensions of sustainable tourism as environmental, social, and economic. The former dimension (environment) is at the heart of all the dimensions. Meaning that, if you primarily consider in your sustainable tourism plans and projects the environmental aims, then it means that you already will automatically include the socially and economically beneficial outputs in the long term and

**Sustainable Tourism
(Sustainable
Development of
Tourism, Sustainable
Tourism Management),**

Fig. 1 Main pillars of sustainable tourism: environmental, social, economic. (Figure designed by Sonuc, N.; the author of this article)



the tourism format is then accepted as sustainable. Explained further, the primary goal of sustainable tourism should be to protect environmental and social resources while putting plans into practice if sustainable social, environmental, and economical returns are desired.

Otherwise, if solely economic concerns are put forward and others are denied, then those forms of tourism practices will not be included inside the sustainable tourism perspective. Furthermore, they not only lose the economical benefits in the long term, but also deplete and destroy the environmental and social dimensions. The examples of sustainable forms of tourism according to their outcomes under the most representative three pillars are also shown in Fig. 1. The given three pillars inside the figure are not with solid borders; the borders are shown with dotted lines that let the flow in-between; as sustainable tourism forms are executed mostly multi- and intradimensionally.

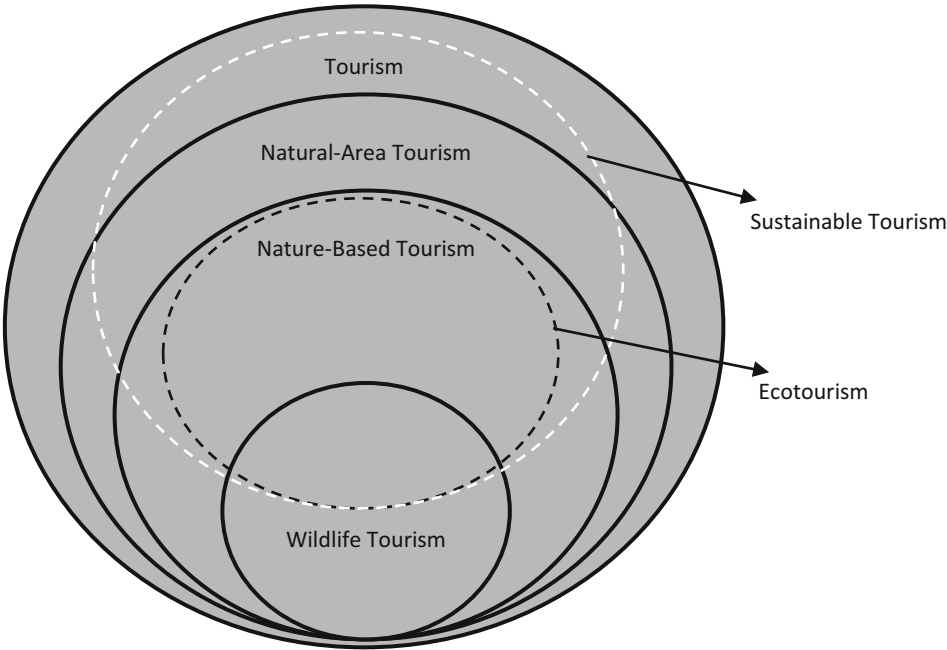
According to the definitions of sustainable tourism management, the objectives defined can be a reason for confusion. Politically, the definitions and objectives may be realized and interpreted as too ideal. Thus, the real concrete implications in the industry may not match. As an example, the measurement of the impacts of tourism mentioned by the surpassed carrying capacities brings some of the threatening results and the destructive nature of the industry. Thus, it may be concluded that it is beyond the tourism industry's ability to comply with the highly demanding objectives of sustainability fully. That is why

some forms of the tourism sector are sustainable while others are not.

This means that all tourism types may not be sustainable even if they are committed to be managed sustainably. As may be understood from Fig. 2, sustainable management of tourism may be applied to all tourism types. It also shows the case of the tourism industry possessing both the sustainable and not sustainable parts of the supply.

It is understood from the figure that tourism practices inside the white dotted lines are sustainable, the parts outside are not sustainable tourism practices. Thus, it can be inferred that, wildlife tourism, nature-based tourism, natural-area tourism, and other tourism practices may exist in sustainable or unsustainable forms. Additionally, the only totally sustainable tourism type is seen as ecotourism which is shown with dark dotted lines. When the inside of this ecotourism circle is observed, it is discovered also that ecotourism is composed of the sustainable practices of nature-based and wildlife tourism.

Whilst, Fig. 2 may be a representative of the tourism sector, there may exist different boundaries to what is considered sustainable and what is not both in theory and in practice. Conceptualizations may vary according to the perspectives and localities. In the Encyclopedia of Ecotourism, for example, ecotourism has been categorized into softer or harder versions so as to conform more or less to the requirements of sustainability (Weaver 2001). So it is better not to expect global conceptualizations and clearly defined boundaries of the sustainable tourism practices but evaluate



Sustainable Tourism (Sustainable Development of Tourism, Sustainable Tourism Management), Fig. 2 The place of sustainable tourism in the tourism industry. (Adapted from Cater et al. 2015, p. xxii)

and try to understand specific cases with their own genuine local characteristics. Still, the need for creating the researches and studies for more scientific and acceptable conceptualizations are emphasized by many scientifics.

The Global Code of Ethics for Tourism is another important document to mention for sustainable tourism (Table 1). Adopted in 1999 by the General Assembly of the World Tourism Organization, its acknowledgment by the United Nations 2 years later expressly encouraged UNWTO to promote the effective follow-up of its provisions.

When all these ten articles of the Global Code of Ethics for Tourism are considered each in its own perspective, they include the principles of sustainability at social, economic, and/or environmental aspects.

Conceptual Clarification of the Sustainability and Tourism Relationship

Changing views have existed about sustainable tourism’s diverse pillars, its framework, and its practicability. During the concept’s evolution, its

Sustainable Tourism (Sustainable Development of Tourism, Sustainable Tourism Management), Table 1 Global Code of Ethics for Tourism (UNWTO)

Article 1: Tourism’s contribution to mutual understanding and respect between peoples and societies
Article 2: Tourism as a vehicle for individual and collective fulfillment
Article 3: Tourism, a factor of sustainable development
Article 4: Tourism, a user of the cultural heritage of mankind and contributor to its enhancement
Article 5: Tourism, a beneficial activity for host countries and communities
Article 6: Obligations of stakeholders in tourism development
Article 7: Right to tourism
Article 8: Liberty of tourist movements
Article 9: Rights of the workers and entrepreneurs in the tourism industry
Article 10: Implementation of the principles of the Global Code of Ethics for Tourism

Adapted from <http://ethics.unwto.org/en/content/global-code-ethics-tourism>

understanding and perception have continued to develop. The environmental dimension was at the forefront. Then, the economic and social

dimensions followed. None of the dimensions are to be neglected. In fact, as tourism itself is already multidimensional, multifaceted, and complex in nature, so is sustainable tourism and the evolution of its understanding.

Hardy et al. (2002, pp. 489–490) have shown the paces of this evolutionary period of sustainable tourism. In their study, “conservation,” “community,” and “economic” visions corresponded to the three dimensions of sustainable tourism being environment, social, and economic dimensions. Evolution of conceptualization of the sustainable tourism over time, at least until the time period this study was created, including academic and industry response correspondingly, becomes more clearly understood. The significance of some of the important terms and steps concerning sustainable tourism can be summarized as follows: Doxey’s (1975) Irridex Model suggested that as the stages of the tourism evolve, the resident’s perceptions change from “euphoria” to “apathy” then to “irritation” and finally to “antagonism.” Butler’s (1980) Life Cycle Model tried to describe the stages of a touristic area as “exploration,” “involvement,” “development,” “consolidation,” “stagnation,” and finally “rejuvenation” or “decline.” Both models have been subject to many other researches and implications as well as criticisms in the framework of the sustainability of the tourism industry. Additionally, the attempts of some international nongovernmental organizations such as IUCN and WWF are mentioned in the evolution of the sustainable tourism concerns.

IUCN (The International Union for Conservation of Nature) has evolved into the “world’s largest and most diverse environmental network” since it was created in 1948. IUCN included among its members public, private, and nongovernmental organizations and working with six commissions dedicated to species survival, environmental law, protected areas, social and economic policy, ecosystem management, and education and communication (IUCN).

WWF was founded as the World Wildlife Fund in 1961, later in 1986 named “World Wide Fund for Nature” as more suitable to its actions and since then using the acronym WWF is used in

order to avoid confusion. WWF works for realizing its mission to “stop the degradation of our planet’s natural environment, and build a future in which humans live in harmony with nature.” In order to realize these objectives WWF focus on two key issues: first, keeping the biodiversity of the World (critical places and species) and the second, reducing the ecological footprint which is the negative impact of human activity; by working to ensure that the natural resources required for life – land, water, air – are managed sustainably and equitably (WWF). Many other local, national, and international nongovernmental organizations alike exist with the aim of protecting the environment.

Another urge for conceptual clarification about sustainable tourism was made by Saarinen (2014). Saarinen brings a critical commentary on sustainable tourism by explaining and discussing the multiple efforts of defining the conceptual framework of sustainable tourism both on the theoretical and practical fields. Additionally in this study, the need for setting frameworks for setting the limits to growth and responsibility in tourism is precised. The writer also lists on the table below the traditions of sustainable tourism and setting the limits to growth accordingly (Table 2). This table helps understand the content of the sustainable tourism traditions.

As shown in the table, three traditions of sustainable tourism are mentioned as “resource-based,” “activity-based,” and “community-based” corresponding to basic three “environmental, economic, and social” dimensions of sustainable tourism. Each appears listed with their own character of origin/manifestation, orientation, limits to growth, resource and system view, and timescale.

Current Issues About Sustainability of Tourism

During the following years, the evolution of sustainable tourism continued to grow. The dimensions’ and the stakeholders’ separation stage was inevitably followed by the unification stage. It is concluded that trying to understand and solve the

Sustainable Tourism (Sustainable Development of Tourism, Sustainable Tourism Management), Table 2 Traditions of sustainable tourism and setting the limits to growth

	Resource-based	Activity-based	Community-based
Origin/manifestation	Carrying capacity model	Product cycle (TALC)	Participatory planning
Orientation	Environment (physical)	Industry	Community
Limits to growth	Objective/measurable	Relative/changing	Constructed/negotiated
Resource and system view	Static	Dynamic	Dynamic/static
Time scale	Long	Now	Short

Adapted from Saarinen (2014, p. 4)

problems concerned with each different party separately would not work. The complexity of the industry of tourism also included the complexity of the stakeholders. However, the resolving of the problems lay under a simplicity of a holistic view. That is, bringing all the parties involved into question for the resolution of the problems. The sustainable management of tourism thus requires a management style involving all the concerned parties into all processes of sustainable tourism, especially taking part in the decision-making. Regarding this issue, many reasonings and suggestions are made by researchers.

The sustainability is considered on the theoretical part while the responsibility is considered on the practical side in one suggestion on the basis of the sustainable management of tourism on the more macrolevel of destination rather than the microbusiness level (Mihalic 2016). Higgins-Desbiolles (2018) criticizes the tourism industry's unsustainable practices which are against the sustainability of tourism and which support the growth of tourism despite its devastating results not only to the environment but also the culture of the population. It is further emphasized in this study that the distinction between economic growth and sustainable development of tourism is to be made; plus as indicated since the Brundlandt Report, the clear understanding and implication of the sustainability requirements are to be realized.

In fact, the problem of not being able to implement sustainable tourism on the practical level raises the question: Is sustainable tourism the only solution to the current problems such as overtourism, commodification, overbuilding, air pollution, water pollution, climate change and so on, or is there a need for different management

styles? As seen in the evolutionary phases of sustainable tourism, there has always been avoidance about its application either because of its too unrealizable and unreachable structures or its costly investment and frighteningly long term planning considerations. It has always been perceived by the practitioners to be not responding to their short-term, profit-based, macro- and micro-economic objectives. But humankind has always found itself constantly re-defining the same long-term objectives for saving this one World which is their only place of inhabitation. That is why, the most recent updates for sustainable development as well as sustainable tourism re-tell in other words the same objectives. The "17 SDGs (Sustainable Development Goals) with 169 associated targets" which are "integrated and indivisible" joining together "the world leaders with common action" and "across such a broad and universal policy agenda" (UN Resolution 2015, p. 18/6) was adopted by the UN Member States in 2015 as the 2030 Agenda for Sustainable Development. The 17 SDGs are shortly named as: "no poverty," "zero hunger," "good health and well-being," "quality education," "gender equality," "clean water and sanitation," "affordable and clean energy," "decent work and economic growth," "industry, innovation and infrastructure," "reduced inequalities," "sustainable cities and communities," "responsible consumption and production," "climate action," "life below water," "life on land," "peace, justice, and strong institutions," "partnerships for the goals" (UN Sustainable Development Goals Knowledge Platform).

The UNWTO also launched "Tourism4SDGs.org" as an online platform in order to realize the linkage between the 17 SDGs and tourism. It is

emphasized by the UNWTO that the 17 Sustainable Development Goals (SDGs) constitute an ambitious global agenda for people, planet, prosperity, and peace through partnerships. The SDGs aim to end poverty, fight inequality, and injustice and to solve the problems engendering the climate change by 2030. The economic relevance of tourism, representing up to 10% of the world's GDP and employment, makes harnessing its full potential essential for the advancement of the SDGs (UNWTO Tourism for SDGs Platform).

Recent publications exist about the theoretical and practical aspects of the adaptation of tourism businesses to the SDGs (Hall 2019; Higham and Miller 2018; Bramwell et al. 2017; Kristjánsdóttir et al. 2018; Gössling and Hall 2019; Hughes and Scheyvens 2016; Boluk et al. 2017; Cotterell et al. 2019; Harilal et al. 2018; Scheyvens and Biddulph 2018). Most of the researches point out that it is not possible for the tourism industry to fully engage in and realize all the 17 SDGs. The businesses choose among the SDGs the aims that are more in line with their own business objectives and try to apply them by using the CSR (Corporate Social Responsibility) mechanisms (Jones et al. 2017; Hall 2019; Hughes and Scheyvens 2016). As indicated by Hughes and Scheyvens (2016, p. 478): "While it is pleasing to see many hotels and others applying ethical principles to their business practices, typically under the banner of CSR, the reality is that for many in the industry CSR is limited to either PR exercises, cost-saving (e.g., energy efficiency) or tokenistic sideline activities, often with direct and positive spin-offs for the company." Time will show how tourism industry will adopt and adapt to the 17 SDGs. Recent case studies exist about local and regional examples of adaptation to SDGs (Su et al. 2017; Kimbu and Tichaawa 2018; Islama and Shamsuddohab 2018; Tracey et al. 2017).

References

- Boluk, K., Cavaliere, C. T., & Higgins-Desbiolles, F. (2017). Critical thinking to realize sustainability in tourism systems: Reflecting on the 2030 sustainable development goals. *Journal of Sustainable Tourism*, 25(9), 1201–1204. <https://doi.org/10.1080/09669582.2017.1333263>.
- Bramwell, B., Higham, J., Lane, B., & Miller, G. (2017). Twenty-five years of sustainable tourism and the Journal of Sustainable Tourism: Looking back and moving forward. *Journal of Sustainable Tourism*, 25(1), 1–9. <https://doi.org/10.1080/09669582.2017.1251689>.
- Butler, R. W. (1980). The concept of a tourist area cycle of evolution: Implication for management of resources. *Canadian Geographer*, 24(1), 5–12.
- Cater, C., Garrod, B., & Low, T. (2015). *The encyclopedia of sustainable tourism*. London: CABI.
- Cotterell, D., Hales, R., Arcodia, C., & Ferreira, J.-A. (2019). Overcommitted to tourism and under committed to sustainability: The urgency of teaching "strong sustainability" in tourism courses. *Journal of Sustainable Tourism*, 27(7), 882–902. <https://doi.org/10.1080/09669582.2018.1545777>.
- D'Allonnes, M. R. (2008). The philosophical implications of sustainable development. In P. Jacquet, L. Tubiana, H. Kieken, J.-M. Bellot, D. Loyer, M. Lönnroth, M. D'Allonnes, & J. Jouzel (Eds.), *L'europe et Le Développement Durable/Europe and Sustainable Développement* (pp. 58–68). Paris: Collection Penser L'Europe. CulturesFrance.
- Doxey, G. (1975, September). A causation theory of visitor-resident irritants: Methodology and research inferences in the impact of tourism. In *Sixth annual conference proceedings of the travel research association* (pp. 195–198). San Diego.
- Faulkner, B. (2003). Destination Australia: A research agenda for 2002 and beyond. In H. W. Faulkner, L. Fredline, L. Jago, & C. Cooper (Eds.), *Progressing tourism research* (pp. 341–384). Channel View Publications/Cromwell Press, GB. UK USA Canada Australia. ISBN, 1-853150-48-2(hbk), ISBN, 1-853150-47-4 (pbk).
- Garrod, B., & Fyall, A. (1998). Beyond the rhetoric of sustainable tourism? *Tourism Management*, 19(3), 199–212.
- Gössling, S., & Hall, C. M. (2019). Sharing versus collaborative economy: How to align ICT developments and the SDGs in tourism? *Journal of Sustainable Tourism*, 27(1), 74–96. <https://doi.org/10.1080/09669582.2018.1560455>.
- Hall, C. M. (2019). Constructing sustainable tourism development: The 2030 agenda and the managerial ecology of sustainable tourism. *Journal of Sustainable Tourism*, 27(7), 1044–1060. <https://doi.org/10.1080/09669582.2018.1560456>.
- Hardy, A., Beeton, R. J. S., & Pearson, L. (2002). Sustainable tourism: An overview of the concept and its position in relation to conceptualisations of tourism. *Journal of Sustainable Tourism*, 10(6), 475–496.
- Harilal, V., Tichaawa, T. M., & Saarinen, J. (2018). "Development without policy": Tourism planning and research needs in Cameroon, Central Africa. *Tourism Planning & Development*. <https://doi.org/10.1080/21568316.2018.1501732>.

- Higgins-Desbiolles, F. (2018). Sustainable tourism: Sustaining tourism or something more? *Tourism Management Perspectives*, 25, 157–160.
- Higham, J., & Miller, G. (2018). Transforming societies and transforming tourism: Sustainable tourism in times of change. *Journal of Sustainable Tourism*, 26(1), 1–8. <https://doi.org/10.1080/09669582.2018.1407519>.
- Hughes, E., & Scheyvens, R. (2016). Corporate social responsibility in tourism post-2015: A development first approach. *Tourism Geographies*, 18(5), 469–482. <https://doi.org/10.1080/14616688.2016.1208678>.
- Islama, M. M., & Shamsuddohab, M. (2018). Coastal and marine conservation strategy for Bangladesh in the context of achieving blue growth and sustainable development goals (SDGs). *Environmental Science and Policy*, 87, 45–54.
- IUCN (The International Union for Conservation of Nature). <https://www.iucn.org/about>. Accessed 1 July 2019.
- Jones, P., Hillier, D., & Comfort, D. (2017). The sustainable development goals and the tourism and hospitality industry. *Athens Journal of Tourism*, 4(1), 7–18. <https://doi.org/10.30958/ajt.4.1.1>.
- Kimbu, A. N., & Tichaawa, T. M. (2018). Sustainable development goals and socio-economic development through tourism in Central Africa: Myth or reality? *GeoJournal of Tourism and Geosites*, Year XI, 23(3), 780–796. <https://doi.org/10.30892/gtg.23314-328>.
- Kristjánsdóttir, K. R., Ólafsdóttir, R., & Ragnarsdóttir, K. V. (2018). Reviewing integrated sustainability indicators for tourism. *Journal of Sustainable Tourism*, 26(4), 583–599. <https://doi.org/10.1080/09669582.2017.1364741>.
- Mihalic, T. (2016). Sustainable-responsible tourism discourse – Towards ‘responsustainable’ tourism. *Journal of Cleaner Production*, 111(B), 461–470.
- Murphy, P. E., & Price, G. G. (2005). Tourism in sustainable development. In W. F. Theobald (Ed.), *Global tourism* (3rd ed., ISBN, 0-7506-7789-9, pp. 167–193). Elsevier.
- Pearce, D.W. (1992). Towards sustainable development through environmental assessment. CSERGE Working Paper PA 92-11.
- Saarinén, J. (2014). Critical sustainability: Setting the limits to growth and responsibility in tourism. *Sustainability*, 6, 1–17. <https://doi.org/10.3390/su6010001>.
- Scheyvens, R., & Biddulph, R. (2018). Inclusive tourism development. *Tourism Geographies*, 20(4), 589–609. <https://doi.org/10.1080/14616688.2017.1381985>.
- Sonuç, N. (2014). Sürdürülebilir Turizm: Tanımı ve İçeriği. In M. Kozak (Ed.), *Sürdürülebilir Turizm*. Ankara: Detay Yayıncılık.
- Su, W.-S., Chang, L.-F., & Yeh, M.-T. (2017). Developing a sustainable tourism attitude in Taiwanese residents. *International Journal of Organizational Innovation*, 10(1), 275–289.
- Tracey, L., Cumming, T. L., Shackleton, R. T., Förster, J., Dinie, J., Khana, A., Gumulac, M., & Kubiszewski, I. (2017). Achieving the national development agenda and the Sustainable Development Goals (SDGs) through investment in ecological infrastructure: A case study of South Africa. *Ecosystem Services*, 27, 253–260.
- UN Resolution. (2012). The future we want. 130/283. <https://sustainabledevelopment.un.org/futurewewant.html>. Accessed 1 July 2019.
- UN Resolution. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015.
- UN Sustainable Development Goals Knowledge Platform. <https://sustainabledevelopment.un.org/sdgs>. Accessed 1 July 2019.
- UNEP & UNWTO. (2005). Making tourism more sustainable – A guide for policy makers, p. 12. www.unep.fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf. Accessed 2 July 2019.
- UNWTO Tourism for SDGs Platform. <http://tourism4sdgs.org/tourism-for-sdgs/>. Accessed 1 July 2019.
- UNWTO. Global Code of Ethics for Tourism. <http://ethics.unwto.org/en/content/global-code-ethics-tourism>. Accessed 2 July 2019.
- WCED (World Commission on Environment and Development). (1987). *Our Common Future*. New York: Oxford University Press.
- Weaver, D. B. (2001). *Encyclopedia of ecotourism*. Cabi International Publishing. Wallingford.
- WWF (World Wildlife Fund). <http://www.wwf.org>. Accessed 2 July 2019.

Sustainable Tourism Products and Policies

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Definition and Conceptual Framework

Under the title, “Sustainable tourism products and policies,” one of the important pillars of sustainable tourism, the economic pillar of sustainable tourism shall be dealt with. As it may be predicted, the “policy” is representing the “macro” and the “product” the “micro” level on the planning and operational management of sustainable tourism. On the pathway to realize more sustainability in tourism policy and planning, theoreticians and practitioners affirm involvement of all parties toward more participatory patterns and/or structures. The

economic aim of this flexible, ever-evolving, and multidimensionally participative pattern which encourages cooperation and collaboration is to distribute fairly the benefits of sustainable tourism to the stakeholders.

UNWTO (United Nations World Tourism Organization) is the leading authority continuously working to develop this philosophy and the practicability of this pattern. UN (United Nations) members accepted Agenda 2030 for Sustainable Development “Transforming Our World” in 2015. This agenda is a developed version of the historic “Millennium Development Goals” with newly updated 17 SDGs (Sustainable Development Goals) with their 169 associated targets. The agenda sets out a global framework “to end extreme poverty, fight inequality and injustice, and fix climate change” until 2030 with a “people-centered, transformative, universal and integrated” perspective (UNWTO Web Site). UNWTO organizes many conferences, meetings, and other activities to increase the theoretical and practical implicability of these SDGs by the tourism sector. Tourism for SDGs (tourism4sdgs.org) is a platform created to help tourism professionals adopt this development process.

You can refer to the “sustainable tourism” article in this encyclopedia for the general understanding of this term. Sustainable tourism in its own nature is a newly studied and developing field in theory, philosophy, and implications. And its sub-components can be understood more clearly with specific case studies. Thus, the basic components of the sustainable tourism policy and product are going to be described by the specific case studies and examples from the literature.

Saarinen (2006) critically discussed the resource-, activity-, and community-based traditions of sustainability in relation with the contexts of implicability of sustainable tourism at local or global levels as well as limits to growth and the carrying capacities. Additionally, in the critical analysis of the theory about the sustainable development and its derivative, sustainable tourism is made in this study which proves that it is necessary to understand the essence of these issues thoroughly for policy making in tourism.

Stakeholder Involvement for Sustainable Tourism Products and Policies

Simpson (2001, p. 33) argued that “sustainable tourism development, stakeholder participation, and strategic orientation offer considerable synergistic benefits which could be profitably incorporated into any policy and process related to long-term tourism development ambitions.” Even at the destination level, more destinations are claimed to adopt strategic, sustainable perspectives toward tourism development (Ritchie and Crouch 2000), and the importance of strategic planning and community involvement is emphasized (Simpson 2001; Ruhanen 2004). However, the result of the studies examining local destinations on these issues proved that local implications lack these aspects. Local tourism destinations in Australia, for example, were found to be reactive rather than proactive with superfluous plans and day-to-day decisions (Ruhanen 2004).

It is not easy to define a stakeholder involvement framework that will be valid for all destinations in sustainable tourism policy implication and product creation. However, case studies developed to handle the matter exist. Byrd (2007) discussed the different aspects of the stakeholder participation basically on two pillars: who to include and the extent of inclusion in decision-making and benefit sharing. In this context, the roles and the interests of the stakeholders, the incorporation of multiple stakeholders, the involvement and inclusion of the participants in decision-making, and so on were discussed exemplifying the different scenarios from the literature of sustainable tourism. Among the involved stakeholders, business owners, residents, local officials, and potential business owners, DMOs, present and future host communities, and current and future visitors were mentioned according to the case studied.

As indicated by Donaldson and Preston (1995), it is important to understand and identify all the interests, while equal involvement of all stakeholders in the decision-making process is not

required. Another study in İzmir, Turkey, shows a stakeholder framework proposal for social tourism including all stakeholders as government bodies in collaboration with the private sector, NGOs, consultants, and people at both ends of user and beneficiary at different layers of decision-making, supply and demand, and product (Sonuç and Oral 2017, pp. 48, 49).

A MSIM (multi-stakeholder involvement management) framework was developed with three strategic levels “attraction, integration and management of stakeholder involvement” embedded within six stages “scene-setting, recognition of stakeholder involvement capacity, stakeholder relationship management, pursuit of achievable objectives, influencing implementation capacity and monitoring stakeholder involvement” at a case study based in the UK (Waligo et al. 2013).

Hardy and Pearson (2018) probed the perceptions of different stakeholder groups that included “locals, operators, community members and the regulatory positions,” and they noted that the contextual views belonging to different groups were clearly defined. In addition, it is confirmed that variations in attitudes toward sustainable tourism development may arise according to the regional differences and the sociopolitical context of the region under examination. Thus, it is suggested that stakeholder research be an “ongoing” and “contextual process,” to guarantee that “decision-making related to tourism” is as “responsive” and “reflexive” as possible.

Integrated Approach Prioritizing Local Livelihoods for Sustainable Tourism Products and Policies

In a study substantiating the sustainability’s positive impact on destination’s competitiveness, as a result of the PCA (Principal Component Analysis) of “Small Destinations of Excellence” in Italy, the basic indicators of the “sustainable tourism policy and destination management” component were found as “the integrated approach to tourism planning,” “the collaboration and the community participatory process,” “the stewardship of the natural environment,” “the monitoring and

minimizing of the negative tourism impacts,” and “the public commitment to tourism and to tourism education.” And the importance of the tourism education for all the participants was underlined in order to create a more sustainable tourism policy with the knowledgeable collaborative participants (Cucculelli and Goffi 2016).

Understanding the livelihood structure of a region is important before making tourism a part of the life of the people living there as this may bring benefits as well as risks. Tao and Wall (2009) show and defend their findings from their study that livelihood perspective enables understanding of the social and economic structure in a specific geographical and political area with its own dynamics more tangibly. Moreover, this makes the sustainability of tourism policies and implications more realistic, avoiding the risks and making it economically more viable for the locals.

Moving from the need for tourism planning based on multidimensional sustainability objectives, Blancas et al. (2011) proposed a sustainable development indicator system which enables the most objective results possible by including the economic, social, and environmental dimensions as well as destination benchmarking and the maximization of the strengths and opportunities and minimization of the weaknesses and threats. If the economic indicators of sustainable tourism in this study are to be exemplified, the first is “economic benefits of tourism for host community and destination.” Its subindicators are shown as unemployment rate, number of tourist arrivals, registered service sector investment volume, and net income per habitant. Other related economic issues of sustainability are indicated as:

- “Sustaining tourist satisfaction” (indicators: tourist satisfaction level, price-quality relationship, percentage of return visitors, satisfaction level of visits to protected areas)
- “Development control” (indicator: land use planning)
- “Tourist offer” or “variety of experiences” (indicators: vacancies offered in accommodation and restaurant establishments, tourist information offices per tourist, existence of a destination website, ecotourism services)

“Tourism activity seasonality,” “tourism employment,” “transport related to tourism,” “destination competitiveness,” “creation of tourist itinerary and routes,” and “infrastructure” are also mentioned among other important economic indicators of sustainable tourism.

Sustainable tourism’s local economic contribution is subjected to studies that emphasize the importance to understand the local and regional political and economic structures. In Africa, Simpson (2009) studied the local economic contribution to sustainable livelihoods and found out that only those few people employed directly in tourism were positively affected but the reason for other conflicting impacts engendering from which sector is not clearly understood because of the limitations of the methodology. Reid and Schwab (2006) examined the ecotourism and heritage tourism implications in Jordan from the sustainability aspect, and they also reached to the conclusion that local dynamics are important to be understood while the policy and product structures are formulated for sustainable tourism.

Recent studies become more case specific and have local findings that may be leading for the local sustainable tourism policy and product development. In China (Gao and Wu 2017) and Iran (Ghaderi and Henderson 2012), case studies of rural tourism were conducted to explore the impact of sustainable tourism. In Iran, the results show that rural tourism is only a supplementary source of income for some of the inhabitants and criticized by the people who did not benefit from it. In China, a more participative model was suggested which showed a more succeeded rural sustainable tourism practice. It elaborated priority at social and spiritual levels for stakeholders rather than economic at an engagement level of more protectionist and possessive philosophy. When compared with the Iranian example which seems to give priority to the economic aims of increasing income, China’s example proves to be a sustainable model.

In Mexico (Avila-Foucat and Rodríguez-Robayo 2018) and India (Apine et al. 2019), the nature-based environmental sustainable tourism policy and product diversification for increasing and improving livelihood opportunities are dealt

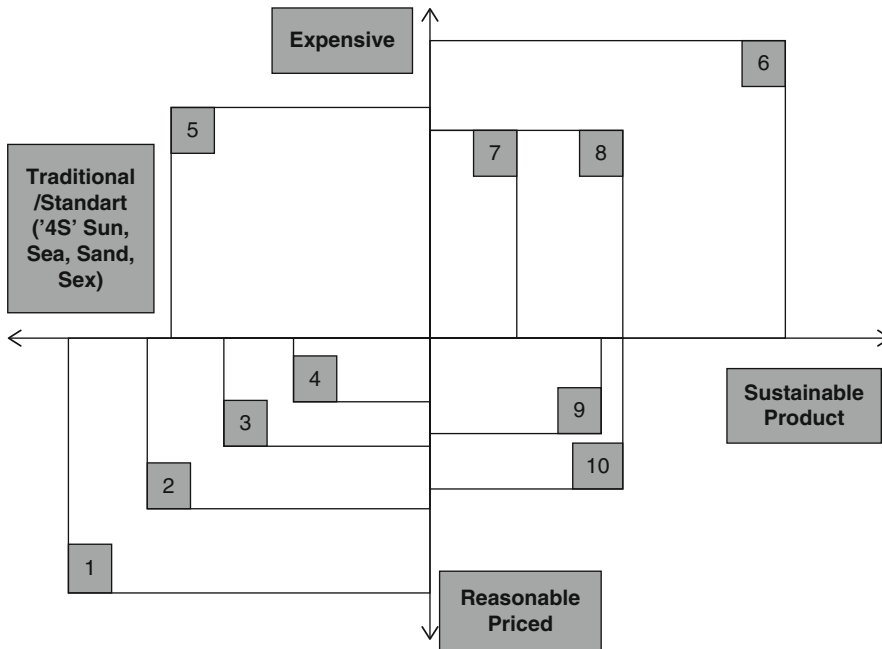
with. In both cases, in a framework of diversification for the livelihoods, the involvement and coordination of the communities at the governmental and nongovernmental level, the necessary knowledge and information formation, and thus the need for education of all parties for the sustainability and understanding of the local and regional dynamics are viewed as important issues.

A study in the Caribbean focused on the issues hindering the sustainability of tourism such as stakeholder participation, and the academics and practitioners are called for collaboration toward forming the sustainable tourism policies (Harrison et al. 2003).

A study of the sustainable development of tourism in Guadeloupe (Sonuç 2003, 2009) made some product and policy suggestions so as to increase the compliance with sustainable tourism such as diversification of the tourism product, inclusion of all related stakeholders, preservation of nature, and protection of the cultural resources and using them sustainably for creating more sustainable tourism products. A schema of the products was suggested for the categorization of products which is a useful tool to indicate where each product stands before taking action to make them more sustainable (Fig. 1).

As a result of the need for more reliable sustainability indicators and measurement, studies of benchmarking of sustainability among the regions also emerge. A study conducted by Cernat and Gourdon (2012) shows the case of benchmarking sustainable tourism across countries. The three developing countries of Asia (Indonesia, Malaysia, and Thailand) which provided more available data are benchmarked with the help of STBT (sustainable tourism benchmarking tool), a quantitative tool of seven sustainability dimensions (tourism assets, tourism activity, tourism-related linkages, tourism-related leakages, environmental and social sustainability, overall infrastructure, attractiveness), and their subindicators.

As a result, it can be concluded that the economic implications of sustainable tourism cannot be considered separate from the local livelihoods. Thus the environmental social and economic pillars are measured and implied inseparably in the planning, policy, and product implications of



Sustainable Tourism Products and Policies, Fig. 1 Schema of tourism products positioning in Guadeloupe. 1. Package tour (mass tourism) (St. Domingue, Cuba), 2. VFR, 3. Timeshare, 4. Holiday village, 5. Four-star luxury hotels, casinos, and shopping, 6.

Luxurious products and technologically modern hotels for business tourism (Grande Terre, St. Martin, St. Barth, Martinique), 7. Cruise tourism, 8. Ecotouristic products, 9. Renting from the owner (Gite, meuble), 10. Social tourism. (Adapted from Sonuç 2003, p. XXV)

sustainable tourism. Mainly the stakeholders, the local livelihoods, the tourist satisfaction, and the sustainable development requirements such as the global climate change, welfare and well-being of the locals, and natural and cultural heritage conservation are the subjects that are dealt with by the academic works. More researches are called for by academics to be in collaboration with practitioners in order to have more implicable results pragmatically and tangibly appreciated and letting a more local, regional, and global reciprocity as well as comparability.

References

- Apine, E., Turnera, L. M., Rodwellb, L. D., & Bhatta, R. (2019). The application of the sustainable livelihood approach to small scale-fisheries: The case of mud crab *Scylla serrata* in south west India. *Ocean and Coastal Management*, 170, 17–28.
- Avila-Foucat, V. S., & Rodríguez-Robayo, K. J. (2018). Determinants of livelihood diversification: The case wildlife tourism in four coastal communities in Oaxaca, Mexico. *Tourism Management*, 69, 223–231.
- Blancas, F. J., Lozano-Oyola, M., González, M., Guerrero, F. M., & Caballero, R. (2011). How to use sustainability indicators for tourism planning: The case of rural tourism in Andalusia (Spain). *Science of the Total Environment*, 412–413, 28–45.
- Byrd, E. T. (2007). Stakeholders in sustainable tourism development and their roles: Applying stakeholder theory to sustainable tourism development. *Tourism Review*, 62(2), 6–13. <https://doi.org/10.1108/16605370780000309>.
- Cernat, L., & Gourdon, J. (2012). Paths to success: Benchmarking cross-country sustainable tourism. *Tourism Management*, 33, 1044–1056.
- Cuccellelli, M., & Goffi, G. (2016). Does sustainability enhance tourism destination competitiveness? Evidence from Italian destinations of excellence. *Journal of Cleaner Production*, 111, 370–382.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65–91.
- Gao, J., & Wu, B. (2017). Revitalizing traditional villages through rural tourism: A case study of Yuanjia Village, Shaanxi Province, China. *Tourism Management*, 63, 223–233.

- Ghaderi, Z., & Henderson, J. C. (2012). Case study, sustainable rural tourism in Iran: A perspective from Hawraman Village. *Tourism Management Perspectives*, 2–3, 47–54.
- Hardy, A., & Pearson, J. (2018). Examining stakeholder group specificity: An innovative sustainable tourism approach. *Journal of Destination Marketing & Management*, 8, 247–258.
- Harrison, L. C., Jayawardena, C., & Clayton, A. (2003). Sustainable tourism development in the Caribbean: Practical challenges. *International Journal of Contemporary Hospitality Management*, 15(5), 294–298. <https://doi.org/10.1108/09596110310482227>.
- Reid, M., & Schwab, W. (2006). Barriers to sustainable development: Jordan's sustainable tourism strategy. *Journal of Asian and African Studies*, 41(5/6), 439–457. <https://doi.org/10.1177/0021909606067408>.
- Ritchie, J. R. B., & Crouch, G. I. (2000). The competitive destination: A sustainability perspective. *Tourism Management*, 21(1), 1–7.
- Ruhanen, L. (2004). Strategic planning for local tourism destinations: An analysis of tourism plans. *Tourism and Hospitality Planning & Development*, 1(3), 239–253. <https://doi.org/10.1080/1479053042000314502>.
- Saarinén, J. (2006). Traditions of sustainability in tourism studies. *Annals of Tourism Research*, 33(4), 1121–1140.
- Simpson, K. (2001). Strategic planning and community involvement as contributors to sustainable tourism development. *Current Issues in Tourism*, 4(1), 3–41. <https://doi.org/10.1080/13683500108667880>.
- Simpson, M. C. (2009). An integrated approach to assess the impacts of tourism on community development and sustainable livelihoods. *Community Development Journal*, 44(2), 186–208. <https://doi.org/10.1093/cdj/bsm048>.
- Sonuç, N. (2003). *Développement durable du tourisme en Guadeloupe*. Unpublished master thesis, Université de Savoie, Chambéry.
- Sonuç, N. (2009). Sustainable development of tourism in Guadeloupe. In: *13th International scientific meeting "Contemporary trends in tourism, hotel management and gastronomy"*, Novi Sad, ISBN 978-86-7031-213-5.
- Sonuç, N., & Oral, S. (2017). A sustainable approach to social tourism development: The case of İzmir city. *Journal of Tourism Theory and Research*, 3(1), 35–57.
- Tao, T. C. H., & Wall, G. (2009). Tourism as a sustainable livelihood strategy. *Tourism Management*, 30, 90–98.
- UNWTO (United Nations World Tourism Organization) Web Site. Tourism in the 2030 Agenda. <https://www.unwto.org/tourism-in-2030-agenda>, Accessed 7 Mar 2020.
- Waligo, V. M., Clarke, J., & Hawkins, R. (2013). Implementing sustainable tourism: A multi-stakeholder involvement management framework. *Tourism Management*, 36, 342–353.

Sustainable Transition

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Synonyms

Sustainability transition

The Concept of Sustainable Transition

In this entry, the conceptualization of sustainability transitions is adopted from Markard et al. (2012) who define sustainable transition as follows:

Sustainability transitions are long-term, multi-dimensional, and fundamental transformation processes through which established socio-technical systems evolve into more sustainable versions of production and consumption.

In this respect, this entry treats the terms “sustainable transition” and “sustainability transitions” interchangeably to describe these fundamental transformation processes toward a greater degree of sustainability. In general, research on sustainability transitions scrutinizes changes in societal subsystems, such as energy or transport, by emphasizing the social, technological, and institutional interactions (Loorbach et al. 2017). Transitions are seen to involve a broad range of actors and typically take place over considerable time-spans, such as 50 years and more (Markard et al. 2012).

Introduction

Scholarly literature has witnessed the increasing outbreak of various and serious threats to

sustainability (e.g., Geels 2011; Köhler et al. 2019). For example, Rockström et al. (2009) stressed that exceeding the planetary boundaries of the global Earth system is due to human activities. To this end, achieving sustainable development requires rapid and profound transformations throughout all societies and its sectors, including realms of energy, water, food, and transport (Brown et al. 2013; Geels 2012; Kahiluoto et al. 2014; Shaw et al. 2014; Levänen et al. 2020).

In the turn of the millennium, streams of research that revolved around sustainability-oriented innovations and technologies gained increasing attention (Markard et al. 2012). Eventually, this led to the emergence of the research field referred today as “sustainability transitions” (Markard et al. 2012). According to Köhler et al. (2019), the aim of addressing the persistent unsustainability the global system is confronted with is the very essence of research focusing on sustainable transition.

The concepts of socio-technical regimes and niches, elaborated by Nelson and Winter (1982), are central for sustainable transition. The study on technological regimes set the development trajectory for the notion of socio-technical regime applied in the extant transition research. To this end, in the late 1990s Rip and Kemp (1998) scrutinized regime shifts and the elements preluding the destabilization of established regimes leading in the evolution of new regimes. Zooming closer, the contemporary transition literature assumes transitions constituting from regime shifts.

The transition literature assumes regimes being endogenously fixed on incremental socio-technical change as well as rigid trajectories of development (Geels and Schot 2007; Rip and Kemp 1998). Sustainability transitions draws from the vested notion the existing regime manifesting power that provokes incumbents to develop strong positions against pioneers, who typically are the initiators of sustainable alternatives (Geels 2011). Kemp et al. (1998) conceptualize socio-technical niches as protected spaces, for example, specific markets in which radical innovations are able to flourish without being introduced to the selection pressure of the prevailing regime during an early phase of a

transition. Niche innovations can acquire momentum, and thus, become capable of challenging and competing with the prevailing regime via social learning through various experiments, articulating promising expectations and heterogeneous networking (Geels and Raven 2006).

The extant literature on sustainability transitions depicts in four prominent frameworks: (1) Transition Management, (2) Strategic Niche Management, (3) Technological Innovation System, and (4) the Multilevel Perspective.

The next section discusses the dominating frameworks of sustainability transitions. After addressing the conceptual background of the entry, the entry presents how research on sustainable transition is currently applied and what are the emerging developments in the field.

Dominating Frameworks

Transition Management

Transition management (TM) is proposed as a novel means to govern sustainable development. The framework draws from complex systems theory and new forms of governance that are incorporated to a novel governance approach (Loorbach 2010; Kauffman 1995; Rotmans et al. 2001). According to Rotmans et al. (2001), the approach is targeted to reconstruct socio-technical systems toward a greater degree of sustainability. In transition management is assumed that the boundary conditions of both the sociotechnical system and sectoral policy regimes require structural change in order to shift toward sustainability (Kern and Howlett 2009). In this respect, policy developments are required to bring forth these changes (Kern and Howlett 2009).

Voß et al. (2009) stressed transition management merging an orientation toward a long-term vision of sustainable development accompanied with short-term experimental learning to seek alternatives and trajectories for accomplishing the vision. To this end, scholars stress that the leading notion of transition management is to promote transitions by gathering various actors together to build new visions and trajectories for change (Hyysalo et al. 2019; Köhler et al. 2019).

Strategic Niche Management

In the late 1990s, Kemp et al. (1998) elaborated the framework of strategic niche management (SNM). The notion of the strategic niche management is to manage innovations – which are seen as socially desirable and serve long-term goals, such as sustainability – and path-breaking novelties that are not compatible with the existing infrastructures, user practices, or regulations. Strategic niche management builds on the assumption that niches are spaces that orchestrate temporary protection for the configuration and evolution of path-breaking innovations (Kemp et al. 1998; Schot et al. 1994). In this respect, strategic niche management can be perceived as the purposeful creation and support of niches that eventually establish regime shifts (Hoogma et al. 2002; Kemp et al. 1998).

The need of protection and nurturing in the early stages of a transition is explained by the premise that the regime shaping innovations are not able to survive in the selection environment and pressures of the prevailing socio-technical regime. The protection may cover, for example, subsidies or tax incentives. According to Smith and Raven (2012), with such protection, the path-breaking innovations are anticipated to evolve and enter broader and more diverse markets. To this end, the dependence on protection progressively lessens as the niches grow competitive and begin to enable regime shifts. The strategic niche management is targeted at bringing the knowledge and expertise of various actors into the course of technological development, and nurture bilateral learning and institutional adaptation (Kemp et al. 1998). This reciprocity between actors and institutions in a certain technological field is a fundamental notion in the strategic niche management studies (Kemp et al. 1998; Konrad et al. 2012).

Technological Innovation System

Sustainability transitions typically provide a setting for the framework of technological innovation system (TIS) (Markard et al. 2016). The notion of the technological innovation system is to embark on the emergence of new technologies and the institutional and organizational changes happening concurrently with technological

development (Markard et al. 2012). According to Markard et al. (2016) studies on technological innovation system aim at understanding the dynamics of an innovation system that is centered around a certain technology. The technological innovation system approach was initially discussed by Carlsson and Stankiewicz (1991). They build on the notion that the generation, diffusion, and application of a technological innovation is initiated by the systemic interplay of organizations and other actors in a certain institutional setting.

It is distinctive for the technological innovation system to emphasize interdependencies in the system. Taking a closer look, a focus on interdependencies builds various means of cooperation, for example, collective resources on which different actors can draw but would be unable to produce if they acted without such a collaboration (Bergek et al. 2015). The framework is considered as means to evaluate the performance of a technological innovation system. The technological innovation system is targeted to recognize drawbacks, and gather recommendations for governance in favor of a certain technology and, thus, a sustainability transition (Alkemade et al. 2011; Weber and Rohracher 2012; Wieczorek and Hekkert 2012; Jacobsson and Karltorp 2013).

Multilevel Perspective

Multilevel perspective (MLP) on socio-technical transitions may be the most prominent framework in the sustainability transition literature (Köhler et al. 2019). One explaining factor for this prominence is the fact that the MLP perceives transitions as a bid to bridge technological and social aspects in explaining sustainability changes. Verbong and Geels (2010) note that the objective of the MLP is to conceptualize the dynamics of a transition by concentrating on socio-technical systems via noticing the co-evolution and the influence of actors.

The MLP divides transitions to sustainability to three levels: niche, socio-technical regime, and exogenous socio-technical landscape (Geels 2002; Rip and Kemp 1998). The MLP draws from the assumption transitions stemming from the alignment of trajectories and continuous

processes in and between these three levels (Geels 2002; Geels and Schot 2007). The dynamics between the three levels are often condensed along these lines: First, niche innovations progressively amplify their leverage within the niche level (Geels 2002, 2010). Second, developments at the landscape level create growing pressure on the regime (Geels 2002; Geels and Schot 2007). Third, the destabilization of the regime opens windows of opportunity for the niche innovations to diffuse, which simultaneously with continuous regime processes establish major transformation and disruption (Rip and Kemp 1998; Geels 2002). Scholars stress the objective of burgeoning sustainability transitions being the confrontation, shaping, and reestablishing the existing, unsustainable, system (Geels 2011; Geels and Schot 2007).

Current State of the Art in the Sustainability Transition Research

The sustainability transition research has diversified significantly from the early years of the field. Based on the recent developments in the field, transition studies are beginning to broaden their scope. Taking a closer look, contemporary sustainability transition research has witnessed scientific openings that explore interactions between multiple existing – and possibly either competing or cooperating – niches and the implications these various interactions provide for the larger system (Markard and Hoffmann 2016; Raven 2007; Verbong et al. 2008; Papachristos et al. 2013; Sandén and Hillman 2011; Köhler et al. 2019).

The destabilization, decline, and phase-out of current systems and regimes are suggested as important topics in the extant research on sustainable transition (Karlton and Sandén 2012; Kuokkanen et al. 2018; Kungl and Geels 2018; Roberts 2017). These are seen to constitute the other side of transition (Köhler et al. 2019). Transition literature acknowledges that established systems can be shaped or replaced due to niche level pressure. In addition to this notion, recent studies have started to pay attention to system's intentional phasing-out, since purposeful phasing-out may provide more room and power

for niche innovations (Rogge and Johnstone 2017; Stegmaier et al. 2014; Köhler et al. 2019).

Another growing research topic in the transition studies is the breakthrough, diffusion, and tipping points of a transition. This emerging topic is explained due to various advances in the real world. Köhler et al. (2019) have noted some technological fields, such as electric vehicle domain, reacting rapidly on the sustainability threats, and thus, enabling sustainability transitions.

Moreover, recent academic insights are often targeted to provide a broader perception on sustainability transitions (Köhler et al. 2019). Succeeding in this attempt calls for interactions between multiple systems such as electricity-transport, agriculture-transport, and heat-electricity (Konrad et al. 2008; Papachristos et al. 2013). Schot (2016) has noted that research on “deep transitions” is gaining increasing attention in the field. The objective of deep transitions is to focus on macro level and investigate how multiple regime shifts can shape landscape developments, and thus, societies as a whole (Schot 2016).

The question if sustainability transitions need to take decades to succeed is another important topic in the transition literature (Köhler et al. 2019). In other words, speed of transitions and how transitions can be accelerated are rising topics in the present transition research (Sovacool 2016; Bento and Wilson 2016).

In general, the field of sustainability transitions has experienced a rapid growth during the past two decades. Markard et al. (2012) have argued despite this growth, research on sustainability transition can still be considered as a rather narrow field: it has gained ground in selected innovation and policy journals, but the prominence in the established journals on management studies, economics, economic geography, and political science remains rather scant.

Emerging Themes in the Sustainability Transition Research

Köhler et al. (2019) have proposed that in the near future the transition research will pay increasing

attention to five different themes. First theme considers the preciseness of the sustainability transition under examination; are the cases exploring in-depth single cases or developing a generic insight from a transition (Köhler et al. 2019)? Second growing theme in the transition research is proposed to consider the time span of transition. The transition research is expected to adopt narrative approaches to explain both historical and contemporary transitions (Köhler et al. 2019). The third emerging theme pays attention to the levels of analysis. The sustainability transition research is anticipated to unite the study of micro level processes to the macro level system configuration study. At the moment, scholars are calling for contributions vis-à-vis the interdependences of micro and macro levels (Köhler et al. 2019). The fourth suggested increasing theme in transition research focuses on balancing between reduction and articulation in the complex nature of a transition. The future studies thus call for the embrace of irreducible complexity, such as modeling approaches and indicator development (Köhler et al. 2019). The final proposed theme considers the perceived distanced research from real-world experimentation and action research. In order to gain societal relevance, sustainability transition research is expected to adopt more methodological pluralism and action research (Köhler et al. 2019).

Moreover, several authors have argued that one of the largest debates in the sustainability transition research concerns the question if agency is sufficiently embedded in the literature or not (Avelino and Wittmayer 2016; Bakker 2014; de Haan and Rotmans 2018; Fischer and Newig 2016; Gazheli et al. 2015; Pesch 2015; Sarrica et al. 2016; Upham et al. 2015, 2018; van der Vleuten 2018). Some scholars argue that actors are always embedded in the core frameworks of sustainability transitions (e.g., Kemp et al. 1998; Geels 2011; Bergek et al. 2015). However, many scholars have also noted that the diversity of actors is not sufficiently addressed in sustainability transitions literature (e.g., de Haan and Rotmans 2018; Avelino and Wittmayer 2016; Fischer and Newig 2016). For example, knowledge on actors appears to be often scattered and many psychosocial processes of actors remain

under-researched (Bögel and Upham 2018; Gazheli et al. 2015; Pesch 2015; Upham et al. 2018). Since this debate appears quite heated in the transition community (van der Vleuten 2018), it is anticipated that the research on actors in sustainability transitions continues to increase within the field of sustainability transitions.

Sustainability transition studies have experienced a significant growth and diversification compared to the early publications in the turn of the millennium. In general, it is expected that the sustainability transition literature continues to incorporate established disciplines such as development studies, political sciences, business studies, and science and technology studies in order to achieve thriving sustainability transitions. While the earth system suffers from various sustainability challenges, the need for sustainability transitions is still evident. Hence, the core frameworks of sustainability transitions are still relevant in achieving sustainability.

Summary

Sustainable transitions are described as fundamental transformation processes toward a greater degree of sustainability. The discipline field of sustainability transitions began to emerge in the turn of the millennium. The aim of sustainability transitions is to address the persistent unsustainability the global system is confronted with. Transitions emerge through regime-shifts. Regime-shifts constitute from fundamental changes throughout the entire societal level. Sustainability transition literature focuses often on societal subsystems, such as energy or transport, by emphasizing the social, technological, and institutional interactions. Transitions involve various actors and take place over considerable time-spans, such as, 50 years. The sustainability transition research has diversified from the early years of the field, and this development trajectory is anticipated to continue in the future as well.

Cross-References

► [Emerging Markets](#)

References

- Alkemade, F., Hekkert, M. P., & Negro, S. O. (2011). Transition policy and innovation policy: Friends or foes? *Environmental Innovation and Societal Transitions*, 1, 125–129.
- Avelino, F., & Wittmayer, J. M. (2016). Shifting power relations in sustainability transitions: A multi-actor perspective. *Journal of Environmental Policy and Planning*, 18, 628–649. <https://doi.org/10.1080/1523908X.2015.1112259>.
- Bakker, S. (2014). Actor rationales in sustainability transitions – Interests and expectations regarding electric vehicle recharging. *Environmental Innovation and Societal Transitions*, 13, 60–74. <https://doi.org/10.1016/j.eist.2014.08.002>.
- Bento, N., & Wilson, C. (2016). Measuring the duration of formative phases for energy technologies. *Environmental Innovation and Societal Transitions*, 21, 95–112. <https://doi.org/10.1016/j.eist.2016.04.004>.
- Bergek, A., Hekkert, M., Jacobsson, S., Markard, J., Sandén, B., & Truffer, B. (2015). Technological innovation systems in contexts: Conceptualizing contextual structures and interaction dynamics. *Environmental Innovation and Societal Transitions*, 16, 51–64. <https://doi.org/10.1016/j.eist.2015.07.003>.
- Bögel, P. M., & Upham, P. (2018). The role of psychology in sociotechnical transitions literature: A review and discussion in relation to consumption and technology acceptance. *Environmental Innovation and Societal Transitions*, 28, 122–136. <https://doi.org/10.1016/j.eist.2018.01.002>.
- Brown, R. R., Farrelly, M. A., & Loorbach, D. A. (2013). Actors working the institutions in sustainability transitions: The case of Melbourne's stormwater management. *Global Environmental Change*, 23, 701–718. <https://doi.org/10.1016/j.gloenvcha.2013.02.013>.
- Carlsson, B., & Stankiewicz, R. (1991). On the nature, function and composition of technological systems. *Journal of Evolutionary Economics*, 1, 93–118.
- de Haan, F. J., & Rotmans, J. (2018). A proposed theoretical framework for actors in transformative change. *Technological Forecasting and Social Change*, 128, 275–286. <https://doi.org/10.1016/j.techfore.2017.12.017>.
- Fischer, L. B., & Newig, J. (2016). Importance of actors and agency in sustainability transitions: A systematic exploration of the literature. *Sustainability*, 8. <https://doi.org/10.3390/su8050476>.
- Gazheli, A., Antal, M., & van den Bergh, J. (2015). The behavioral basis of policies fostering long-run transitions: Stakeholders, limited rationality and social context. *Futures*, 69, 14–30. <https://doi.org/10.1016/j.futures.2015.03.008>.
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, 31, 1257–1274. [https://doi.org/10.1016/S0048-7333\(02\)00062-8](https://doi.org/10.1016/S0048-7333(02)00062-8).
- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39, 495–510. <https://doi.org/10.1016/j.respol.2010.01.022>.
- Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1, 24–40. <https://doi.org/10.1016/j.eist.2011.02.002>.
- Geels, F. W. (2012). *Automobility in transition?: A socio-technical analysis of sustainable transport*. New York: Routledge.
- Geels, F., & Raven, R. (2006). Non-linearity and expectations in niche-development trajectories: Ups and downs in Dutch biogas development (1973–2003). *Technology Analysis and Strategic Management*, 18, 375–392. <https://doi.org/10.1080/09537320600777143>.
- Geels, F. W., & Schot, J. (2007). Comment on “Technotherapy or nurtured niches?” by Hommels et al. [Res. Policy 36 (7) (2007)]. *Research Policy*, 36, 1100–1101. <https://doi.org/10.1016/j.respol.2007.07.004>.
- Hoogma, R., Kemp, R., Schot, J., & Truffer, B. (2002). *Experimenting for sustainable transport. The approach of strategic niche management* (p. 224). London: Routledge. <https://doi.org/10.4324/9780203994061>.
- Hyysalo, S., Lukkarinen, J., Kivimaa, P., Lovio, R., Temmes, A., Hildén, M., Marttila, T., Auvinen, K., Perikangas, S., Pyhälä, A., Peljo, J., Savolainen, K., Hakkarainen, L., Rask, M., Matschoss, K., Huomo, T., Berg, A., & Panssar, M. (2019). Developing policy pathways: Redesigning transition arenas for mid-range planning. *Sustainability*, 11, 1–22. <https://doi.org/10.3390/su11030603>.
- Jacobsson, S., & Karltorp, K. (2013). Mechanisms blocking the dynamics of the European offshore wind energy innovation system – Challenges for policy intervention. *Energy Policy*, 63, 1182–1195.
- Kahiluoto, H., Kuisma, M., Kuokkanen, A., Mikkilä, M., & Linnanen, L. (2014). Taking planetary nutrient boundaries seriously: Can we feed the people? *Global Food Security*, 3, 16–21. <https://doi.org/10.1016/j.gfs.2013.11.002>.
- Karltorp, K., & Sandén, B. A. (2012). Explaining regime destabilisation in the pulp and paper industry. *Environmental Innovation and Societal Transitions*, 2, 66–81. <https://doi.org/10.1016/j.eist.2011.12.001>.
- Kauffman, S. (1995). *At home in the universe: The search for laws of complexity*. Oxford: Oxford University Press.
- Kemp, R., Schot, J., & Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: The approach of strategic niche management. *Technology Analysis and Strategic Management*, 10, 175–198. <https://doi.org/10.1080/09537329808524310>.
- Kern, F., & Howlett, M. (2009). Implementing transition management as policy reforms: A case study of the Dutch energy sector. *Policy Sciences*, 42, 391–408. <https://doi.org/10.1007/s11077-009-9099-x>.

- Köhler, J., Geels, F. W., Kern, F., Markard, J., Wiecek, A., Alkemade, F., Avelino, F., Bergek, A., Boons, F., Fünfschilling, L., Hess, D., Holtz, G., Hyysalo, S., Jenkins, K., Kivimaa, P., Martiskainen, M., McMeekin, A., Mühlemeier, M. S., Nykvist, B., Onsongo, E., Pel, B., Raven, R., Rohrer, H., Sandén, B., Schot, J., Sovacool, B. K., Turnheim, B., Welch, D., & Wells, P. (2019). An agenda for sustainability transitions research: State of the art and future directions. *Environmental Innovation and Societal Transitions*, 31, 1–32. <https://doi.org/10.1016/j.eist.2019.01.004>.
- Konrad, K., Truffer, B., & Voß, J.-P. (2008). Multi-regime dynamics in the analysis of sectoral transformation potentials. Evidence from German utility sectors. *Journal of Cleaner Production*, 16(11), 1190–1202. <https://doi.org/10.1016/j.jclepro.2007.08.014>.
- Konrad, K., Markard, J., Ruef, A., & Truffer, B. (2012). Strategic responses to fuel cell hype and disappointment. *Technological Forecasting and Social Change*, 79, 1084–1098. <https://doi.org/10.1016/j.techfore.2011.09.008>.
- Kungl, G., & Geels, F. W. (2018). Sequence and alignment of external pressures in industry destabilisation. Understanding the downfall of incumbent utilities in the German energy transition (1998–2015). *Environmental Innovation and Societal Transitions*, 26, 78–100. <https://doi.org/10.1016/j.eist.2017.05.003>.
- Kuokkanen, A., Nurmi, A., Mikkilä, M., Kuisma, M., Kahiluoto, H., & Linnanen, L. (2018). Agency in regime destabilization through the selection environment. The Finnish food system's sustainability transition. *Research Policy*, 47(8), 1513–1522. <https://doi.org/10.1016/j.respol.2018.05.006>.
- Levänen, J., Mikkilä, M., Koistinen, K., Kuokkanen, A., Linnanen, L. (2020). Emerging markets. In: S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-030-02006-4_436-1.
- Loorbach, D. A. (2010). Transition management for sustainable development: A prescriptive, complexity-based governance framework. *Governance*, 23, 161–183. <https://doi.org/10.1111/j.1468-0491.2009.01471.x>.
- Loorbach, D., Frantzeskaki, N., & Avelino, F. (2017). Sustainability transitions research: Transforming science and practice for societal change. *Annual Review of Environment and Resources*, 42, 599–626. <https://doi.org/10.1146/annurev-environ-102014-021340>.
- Markard, J., & Hoffmann, V. H. (2016). Analysis of complementarities. Framework and examples from the energy transition. *Technological Forecasting and Social Change*, 111, 63–75. <https://doi.org/10.1016/j.techfore.2016.06.008>.
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, 41, 955–967. <https://doi.org/10.1016/j.respol.2012.02.013>.
- Markard, J., Suter, M., & Ingold, K. (2016). Socio-technical transitions and policy change – Advocacy coalitions in Swiss energy policy. *Environmental Innovation and Societal Transitions*, 18, 215–237. <https://doi.org/10.1016/J.EIST.2015.05.003>.
- Nelson, R. R., & Winter, S. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.
- Papachristos, G., Sofianos, A., & Adamides, E. (2013). System interactions in socio-technical transitions. Extending the multi-level perspective. *Environmental Innovation and Societal Transitions*, 7, 53–69. <https://doi.org/10.1016/j.eist.2013.03.002>.
- Pesch, U. (2015). Tracing discursive space: Agency and change in sustainability transitions. *Technological Forecasting and Social Change*, 90, 379–388. <https://doi.org/10.1016/j.techfore.2014.05.009>.
- Raven, R. (2007). Niche accumulation and hybridisation strategies in transition processes towards a sustainable energy system. An assessment of differences and pitfalls. *Energy Policy*, 35(4), 2390–2400. <https://doi.org/10.1016/j.enpol.2006.09.003>.
- Rip, A., & Kemp, R. (1998). Technological change. In S. Rayner & E. L. Malone (Eds.), *Human choice and climate change. Vol. II, Resources and technology* (pp. 327–399). Columbus: Battelle Press.
- Roberts, J. C. D. (2017). Discursive destabilisation of socio-technical regimes. Negative storylines and the discursive vulnerability of historical American railroads. *Energy Research and Social Science*, 31, 86–99. <https://doi.org/10.1016/j.erss.2017.05.031>.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., de Wit, C. A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R. W., Fabry, V. J., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., & Foley, J. (2009). Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society*, 14. <https://doi.org/10.5751/ES-03180-140232>.
- Rogge, K. S., & Johnstone, P. (2017). Exploring the role of phase-out policies for low-carbon energy transitions. The case of the German Energiewende. *Energy Research and Social Science*, 33, 128–137. <https://doi.org/10.1016/j.erss.2017.10.004>.
- Rotmans, J., Kemp, R., & van Asselt, M. (2001). More evolution than revolution: Transition management in public policy. *Foresight*, 3, 15–31. <https://doi.org/10.1108/03684920610675157>.
- Sandén, B. A., & Hillman, K. M. (2011). A framework for analysis of multi-mode interaction among technologies with examples from the history of alternative transport fuels in Sweden. *Research Policy*, 40(3), 403–414. <https://doi.org/10.1016/j.respol.2010.12.005>.
- Sarrica, M., Brondi, S., Cottone, P., & Mazzara, B. M. (2016). One, no one, one hundred thousand energy transitions in Europe: The quest for a cultural approach.

- Energy Research and Social Science*, 13, 1–14. <https://doi.org/10.1016/j.erss.2015.12.019>.
- Schot, J. (2016). Confronting the second deep transition through the historical imagination. *Technology and Culture*, 57(2), 445–456. <https://doi.org/10.1353/tech.2016.0044>.
- Schot, J., Hoogma, R., & Elzen, B. (1994). Strategies for shifting technological systems: The case of the automobile system. *Futures*, 26, 1060–1076. [https://doi.org/10.1016/0016-3287\(94\)90073-6](https://doi.org/10.1016/0016-3287(94)90073-6).
- Shaw, A., Burch, S., Kristensen, F., Robinson, J., & Dale, A. (2014). Accelerating the sustainability transition: Exploring synergies between adaptation and mitigation in British Columbian communities. *Global Environmental Change*, 25, 41–51. <https://doi.org/10.1016/j.GLOENVCHA.2014.01.002>.
- Smith, A., & Raven, R. (2012). What is protective space? Reconsidering niches in transitions to sustainability. *Research Policy*, 41, 1025–1036. <https://doi.org/10.1016/j.respol.2011.12.012>.
- Sovacool, B. K. (2016). How long will it take? Conceptualizing the temporal dynamics of energy transitions. *Energy Research and Social Science*, 13, 202–215. <https://doi.org/10.1016/j.erss.2015.12.020>.
- Stegmaier, P., Kuhlmann, S., & Visser, V. R. (2014). The discontinuation of socio-technical systems as a governance problem. In S. Borrás & J. Edler (Eds.), *The governance of socio-technical systems*. Cheltenham: Edward Elgar Publishing.
- Upham, P., Lis, A., Riesch, H., & Stankiewicz, P. (2015). Addressing social representations in socio-technical transitions with the case of shale gas. *Environmental Innovation and Societal Transitions*, 16, 120–141. <https://doi.org/10.1016/j.eist.2015.01.004>.
- Upham, P., Dütschke, E., Schneider, U., Oltra, C., Sala, R., Lores, M., Klapper, R., & Bögel, P. (2018). Agency and structure in a sociotechnical transition: Hydrogen fuel cells, conjunctural knowledge and structuration in Europe. *Energy Research and Social Science*, 37, 163–174. <https://doi.org/10.1016/j.erss.2017.09.040>.
- van der Vleuten, E. (2018). Radical change and deep transitions: Lessons from Europe's infrastructure transition 1815–2015. *Environmental Innovation and Societal Transitions*, 1–11. <https://doi.org/10.1016/j.eist.2017.12.004>.
- Verbong, G. P. J., & Geels, F. W. (2010). Exploring sustainability transitions in the electricity sector with socio-technical pathways. *Technological Forecasting and Social Change*, 77, 1214–1221. <https://doi.org/10.1016/j.techfore.2010.04.008>.
- Verbong, G. P. J., Geels, F. W., & Raven, R. (2008). Multi-niche analysis of dynamics and policies in Dutch renewable energy innovation journeys (1970–2006). Hypecycles, closed networks and technology-focused learning. *Technology Analysis and Strategic Management*, 20(5), 555–573. <https://doi.org/10.1080/09537320802292719>.
- Voß, J. P., Smith, A., & Grin, J. (2009). Designing long-term policy: Rethinking transition management. *Policy Sciences*, 42, 275–302. <https://doi.org/10.1007/s11077-009-9103-5>.
- Weber, K. M., & Rohrer, H. (2012). Legitimizing research, technology and innovation policies for transformative change: Combining insights from innovation systems and multi-level perspective in a comprehensive 'failures' framework. *Research Policy*, 41, 1037–1047.
- Wieczorek, A. J., & Hekkert, M. P. (2012). Systemic instruments for systemic innovation problems: A framework for policy makers and innovation scholars. *Science and Public Policy*, 39, 74–87.

Sustainable Transportation

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Synonyms

Green vehicles; Sustainable mobility

Definition

Sustainable transportation is any action of transporting someone or something that adheres to commonly accepted sustainability criteria.

History

Being the major driving force behind growing world demand for energy, the role of transport in sustainable development was first recognized at the 1992 United Nation's Earth Summit and reinforced in its outcome document – Agenda 21.

The 2002 World Summit on Sustainable Development offered a first cornerstone for the operationalization of sustainable transportation through the Johannesburg Plan of Implementation (JPOI), which covered infrastructure, public transport

systems, goods delivery networks, affordability, efficiency and convenience of transportation, as well as improving urban air quality and health, and reducing greenhouse gas emissions.

In 2012, the United Nations Conference on Sustainable Development (Rio+20) highlighted that sustainable transportation should pursue the enhancement of economic growth and the improvement of accessibility, allowing for a more inclusive and integrated economy within social and environmental constraints. This clarified that sustainable transportation has a central role in improving social equity, citizens' health, urban resilience, and the productivity of rural areas.

In 2014, the High-Level Advisory Group on Sustainable Transport (HLAG-ST) compared all modes of transport, including road, rail, aviation, marine, ferry, and urban public transport providers. The resulting policy recommendations gained worldwide consideration due to the publication of a global sustainable transport outlook report entitled "Mobilizing Sustainable Transport for Development," released at the first Global Sustainable Transport Conference in November 2016. Only 1 year before, in 2015, investments in greening the transport sector emerged as a fundamental cornerstone for the achievement of the Paris Agreement goals within the United Nations Framework Convention on Climate Change (UNFCCC).

Finally, in the 2030 Agenda for Sustainable Development, sustainable transport has been identified as a key cross-cutting issue that arises from several Sustainable Development Goals (SDGs) (see ► ["Sustainable Development Goals"](#)) and targets related to food security, health, energy, economic growth, infrastructure, cities, and other human settlements.

General Principles and Metrics

Since pursuing sustainable transportation is a matter of resource efficiency in the creation of social-economic welfare, the general principles that may lead to a reduction of natural, social, and economic impacts are as follows:

- Don't transport the unnecessary
- Don't use inefficient transport modes when renewable and efficient transport modes are available
- Don't create new transport when sharing options are available

In detail, from an ecological perspective, sustainable transportation is a form of transportation that does not endanger public health or ecosystems and that meets needs for access consistent with, on the one hand, the use of renewable resources that are below their rates of regeneration and, on the other hand, the use of nonrenewable resources below the rates of development of renewable substitutes (OECD 2001).

Unfortunately, the heterogeneity of stakeholders' concerns makes it harder to formulate a deterministic definition of sustainable transportation from economic and social perspectives. The integration into the ecological perspective of a multiperspective and nonreductionist assessment of economic and social impacts on targeted stakeholders is thus a typical, but not the sole, way to account for the broader contribution of transportation to sustainable development.

In the context of lacking universally agreed thresholds of performance to be considered as sustainable (Neumayer 2003; Haghshenas and Vaziri 2012), transport systems are usually subject to policies that set targets referred to as benchmarks. These benchmarks tend to comply with such validity criteria as being easily understandable, reasonable, measurable, possible to quantify, accessible, comprehensive, reflecting various aspect of study, sensitive to changes over time, independent, standardized for comparison, clearly defined, and capable of capturing long-term processes (Nourry 2008). As an example, the European Commission Expert Group on Transport and Environment in 2000 set targets of environmental performance for 2020 as percentages of reduction of absolute emissions of carbon dioxide, volatile organic compounds, nitrous oxides, particulates, noise, and land use from a conventional baseline given by the same parameters measured in 1990.

Simplified operationalizations of the concept of sustainability in transport systems are justified

by the practical need to navigate the differential levels of importance that stakeholders attribute to incommensurable dimensions of sustainability and, thus, to refer to a small number of proxies of general interest. In doing that, absolute measures (e.g., total sectoral emissions), when compared to relative measures (e.g., emissions per kilometer per vehicle), are generally considered better able to investigate strong sustainability because they can better account for the worldwide increasing access to transportation, which is likely to negate the increasing efficiency of specific technologies (Janic 2006).

In this framework, sustainability assessment of transport systems can privilege by design different perspectives that refer either to the local or global intended audience. The local audience is expected to value most context-specific information about economic, social, and environmental performance that determine positive or negative subjective reactions to externalities on local communities. The global audience, instead, is expected to value most objective, noncontext dependent, variations of universally relevant proxies, which typically refer to physical (i.e., environmental) dimensions of global impact categories. Hybrid approaches, consisting of both absolute and relative yet widely applicable indicators such as multimodal accessibility, land consumption for transport infrastructure, population exposed to noise >55 dB (A), total time spent in traffic, traffic fatalities, and injuries per capita are considered acceptable for comparing the sustainability of transport systems in different urban areas (Corsini et al. 2016; Haghshenas and Vaziri 2012).

The choice of metrics might influence the outputs of sustainability assessments of transport systems to an extent that determines a tension between convenience, relevance, and comprehensiveness. As an example, a narrow definition of sustainable transport tends to favor individual technological solutions, while a broader definition, with higher stakeholder involvement, tends to favor more integrated solutions, including improved travel behaviors, economic incentives, institutional reforms, land use changes, as well as

technological innovation (Litman and Burwell 2006). Thus, when reporting assessment results, particular attention should be paid to the fairness of the delivery of the assumptions made about the concept of sustainability.

Technological Trends

Early discussions on the comparative assessment of advantages between different transport modes from a regional or global perspective, e.g., through an attributional prospective LCA, focused attention on the superior performance of particular systems, e.g., trains, over others, collective, over private vehicles (Spielmann et al. 2005).

More recently, in the context of substantial multisectoral efforts in technology innovation, this comparison has been exerted to alternative fuels and storage systems aimed at reducing or displacing emissions from highly inhabited areas and at decreasing the use of fossil fuels. Most of the time, these solutions stem from synergies with bio-based industries (Nanaki and Koroneos 2012) or the energy storage and smart grid sectors (Cherubini et al. 2015; Rizzi et al. 2014).

This has led to the consolidation of three streams of research: the incremental improvement of internal combustion engines (ICE), the coupling of ICE with alternative and renewable fuels, and alternative engines. Improvements in ICEs originate from regulatory-driven advancements in combustion research, electronics, materials science, and electrical engineering and are justified by the lock-ins in the industrial structure of incumbents (Berggren and Magnusson 2012). The pace of development of alternative engines is moderated by the orientation of incumbents to lobby for a reduction of future regulatory stringencies so as to be allowed to continue to invest in incremental innovations on ICEs, which have lower risks, lower costs, and less complexity (Berggren and Magnusson 2012; Vaz et al. 2017).

Nevertheless, ICEs can yield benefits in terms of reduced of greenhouse gas (GHG) emissions associated with the use of biodiesel, although this

often comes with higher emissions of PM₁₀, nitrous oxide, nitrogen oxides (NO_x), as well as nutrients such as nitrogen and phosphorous (Nanaki and Koroneos 2012).

Among alternative engines, electric vehicles coupled with low-carbon electricity sources are a promising solution that can solve both salient environmental problems in the use phase and stability issues of power grids caused by the increasing share of nonprogrammable renewable energy generation. The substitution of ICEs with large numbers of private-owned electric engines capable of equalizing peaks and valleys of exchanges in power grids could potentially reshape the truck, car, and scooter industries. Despite that, still much has to be done to reduce electric vehicle manufacturing impacts from a life-cycle perspective, which can be up to twice that of conventional vehicles in terms of global warming potential (GWP). Since even greater gaps might emerge for human toxicity potential (HTP) and mineral depletion potential (MDP), beside the development of cleaner production processes, stronger sustainability might be achieved also by means of a more circular end-of-life management of energy storage (Hawkins et al. 2013).

Another frequently advocated type of alternative engine refers to fuel cells, which might represent an interesting alternative to electric vehicles when associated to a large supply of cleaner renewable energies (e.g., wind) for hydrogen production (Bartolozzi et al. 2013).

Apart from the adoption of a specific technological platform, it is important to note that the overall design of vehicles plays an important role vis-à-vis making the most of the incremental improvements of ICE-technologies in modern vehicles or of the introduction of alternative fuels and engines. In fact, recent technological improvements have often been overshadowed by the tendency towards technological overshooting, which means that improvements in efficiency are used for increases in convenience, comfort and weight, faster acceleration, and higher top speed (Cuenot 2009).

Besides car use, environmental pressure is also stimulating innovation in rail, maritime, and

aviation systems, where the mainstream of incremental innovations aimed at increasing energy efficiency and the use of renewable energy sources is integrated by sector-specific interventions, e.g., the use of electric systems to switch off fuel-based power generation of ships during docking (Bailey and Solomon 2004).

In spite of the increasing stringency of policy interventions (e.g., the aviation industry, which had in the past faster rates of diffusion than technological improvement, was brought into the EU's emission trading scheme in 2012), technological innovation is necessary but unlikely to be the sole answer to the challenges and barriers for the transition towards sustainable transport systems. Indeed, behavioral change is a relevant aspect to be tackled to achieve both short-term and long-term goals (Chapman 2007).

Nontechnological Trends

Public transport is generally advocated as an efficient option for ensuring universal access to ecologically efficient mobility. Despite that, it often suffers for poor economic performance and low levels of customer satisfaction, especially in small and medium urban areas with a large diffusion of individual motorized transport (Grotenhuis et al. 2007).

In recent years, the need to deal with economic, ecological, population, and institutional constraints has given multimodal mobility a prominent role in avoiding regime stalemates and path dependency by capitalizing on the benefits of various systems. The shift towards sustainable urban multimodal mobility systems implies a significant change in social habits and behaviors, as well as trade offs between actors directly and indirectly involved in transport networks (Golinska and Hajdul 2012). Thus, it requires long-term orientation and clear orchestration to successfully adapt and innovate business models and invest in appropriate resources, such as customized smart services and ICTs (Spickermann et al. 2014).

Urban planning is a traditional key aspect in rationalizing the distribution of functional areas of the built environment and, thus, in minimizing the demand for transportation and in maximizing accessibility to public and shared transport systems (Chapman 2007). When coupled with sustainability assessment at the transportation planning level, it helps visualizing and assessing tradeoffs and dominance for competing alternatives at regional scales (Jeon et al. 2013). A robust planning phase lays the foundation of adequate operations.

Therefore, professional competencies usually complement design-based solutions by providing analytical skills and orchestration in the further phases, as in the case of mobility managers who assist members of large organizations to reduce individual and collective impacts of transport (Rotaris and Danielis 2015) and logistic managers who assist manufacturers to reduce freight kilometers and empty running (Chapman 2007).

More recently, modal shifts have also been favored also by the implementation of information and communication technologies, artificial intelligence, and related smart systems. These are capable of making information easily accessible, shared services more affordable and viral, and customers more informed and aware of the existence of new value propositions enabled by the sharing economy (see ► “Sharing Economy”). What is more, the diffusion of smart technologies has allowed an increasing number of innovative start-ups to foster dynamism in the competitive arena of transport service providers (Firnkor and Müller 2012).

It is worth noting that, despite evidence of environmental performance improvements both in terms of environmental emissions and land use associated with a shift from individual to collective or shared transport systems (Firnkor and Müller 2012), the impact of innovative transport systems on sustainability performance depends not just on the increased efficiency of the solution, but also on the possible rebound effects that might be generated by the easier and more universal access to transport systems (Binswanger 2001), especially in the case of high-speed transport technologies (Spielmann et al. 2008).

Summary

Economic development is associated with the increase of the demand, in terms of both volume and performance, of local and global transportation. Sustainable transportation originates from the attempt to decouple the increase of the demand for transportation from its negative environmental, social, and economic impacts. Progresses in this field highlight an intertwined evolution of, on the one hand, technical and nontechnical solutions and, on the other hand, sustainability metrics and principles. Coherently, sectoral policies have proven effective in fostering the correction of market imperfections and the internalization of environmental and social costs.

Cross-References

- Carpooling
- Dieselgate
- Sharing Economy
- Sustainable Development Goals

References

- Bailey, D., & Solomon, G. (2004). Pollution prevention at ports: Clearing the air. *Environmental Impact Assessment Review*, 24(7–8), 749–774. <https://doi.org/10.1016/j.eiar.2004.06.005>.
- Bartolozzi, I., Rizzi, F., & Frey, M. (2013). Comparison between hydrogen and electric vehicles by life cycle assessment: A case study in Tuscany, Italy. *Applied Energy*, 101, 103–111. <https://doi.org/10.1016/j.apenergy.2012.03.021>.
- Berggren, C., & Magnusson, T. (2012). Reducing automotive emissions – The potentials of combustion engine technologies and the power of policy. *Energy Policy*, 41, 636–643. <https://doi.org/10.1016/j.enpol.2011.11.025>.
- Binswanger, M. (2001). Technological progress and sustainable development: What about the rebound effect? *Ecological Economics*, 36(1), 119–132. [https://doi.org/10.1016/S0921-8009\(00\)00214-7](https://doi.org/10.1016/S0921-8009(00)00214-7).
- Chapman, L. (2007). Transport and climate change: A review. *Journal of Transport Geography*, 15(5), 354–367. <https://doi.org/10.1016/j.jtrangeo.2006.11.008>.
- Cherubini, S., Iasevoli, G., & Michelini, L. (2015). Product-service systems in the electric car industry: Critical success factors in marketing. *Journal of Cleaner Production*, 97, 40–49. <https://doi.org/10.1016/j.jclepro.2014.02.042>.

- Corsini, F., Rizzi, F., & Frey, M. (2016). Analysing smartness in European cities: A factor analysis based on resource efficiency, transportation and ICT. *International Journal of Global Environmental Issues*, 15(3), 235. <https://doi.org/10.1504/IJGENVI.2016.076957>.
- Cuenot, F. (2009). CO₂ emissions from new cars and vehicle weight in Europe: How the EU regulation could have been avoided and how to reach it? *Energy Policy*, 37(10), 3832–3842. <https://doi.org/10.1016/j.enpol.2009.07.036>.
- Firkorn, J., & Müller, M. (2012). Selling mobility instead of cars: New business strategies of automakers and the impact on private vehicle holding. *Business Strategy and the Environment*, 21(4), 264–280. <https://doi.org/10.1002/bse.738>.
- Golinska, P., & Hajdul, M. (Eds.). (2012). *Sustainable transport: New trends and business practices*. New York: Springer.
- Grotenhuis, J.-W., Wiegman, B. W., & Rietveld, P. (2007). The desired quality of integrated multimodal travel information in public transport: Customer needs for time and effort savings. *Transport Policy*, 14(1), 27–38. <https://doi.org/10.1016/j.tranpol.2006.07.001>.
- Haghshenas, H., & Vaziri, M. (2012). Urban sustainable transportation indicators for global comparison. *Ecological Indicators*, 15(1), 115–121. <https://doi.org/10.1016/j.ecolind.2011.09.010>.
- Hawkins, T. R., Singh, B., Majeau-Bettez, G., & Strømman, A. H. (2013). Comparative environmental life cycle assessment of conventional and electric vehicles. *Journal of Industrial Ecology*, 17(1), 53–64. <https://doi.org/10.1111/j.1530-9290.2012.00532.x>.
- Janic, M. (2006). Sustainable transport in the European Union: A review of the past research and future ideas. *Transport Reviews*, 26(1), 81–104. <https://doi.org/10.1080/01441640500178908>.
- Jeon, C. M., Amekudzi, A. A., & Guensler, R. L. (2013). Sustainability assessment at the transportation planning level: Performance measures and indexes. *Transport Policy*, 25, 10–21. <https://doi.org/10.1016/j.tranpol.2012.10.004>.
- Litman, T., & Burwell, D. (2006). Issues in sustainable transportation. *International Journal of Global Environmental Issues*, 6(4), 331–347. <https://doi.org/10.1504/IJGENVI.2006.010889>.
- Nanaki, E. A., & Koroneos, C. J. (2012). Comparative LCA of the use of biodiesel, diesel and gasoline for transportation. *Journal of Cleaner Production*, 20(1), 14–19. <https://doi.org/10.1016/j.jclepro.2011.07.026>.
- Neumayer, E. (2003). *Weak versus strong sustainability: exploring the limits of two opposing paradigms*. Cheltenham: Edward Elgar Publishing.
- Noury, M. (2008). Measuring sustainable development: Some empirical evidence for France from eight alternative indicators. *Ecological Economics*, 67(3), 441–456. <https://doi.org/10.1016/j.ecolecon.2007.12.019>.
- OECD. (2001). *Policy instruments for achieving project environmentally sustainable transport*. Paris: Organisation for Economic Co-operation and Development.
- Rizzi, F., Annunziata, E., Liberati, G., & Frey, M. (2014). Technological trajectories in the automotive industry: Are hydrogen technologies still a possibility? *Journal of Cleaner Production*, 66, 328–336. <https://doi.org/10.1016/j.jclepro.2013.11.069>.
- Rotaris, L., & Danielis, R. (2015). Commuting to college: The effectiveness and social efficiency of transportation demand management policies. *Transport Policy*, 44, 158–168. <https://doi.org/10.1016/j.tranpol.2015.08.001>.
- Spickermann, A., Grienitz, V., & Von Der Gracht, H. A. (2014). Heading towards a multimodal city of the future: Multi-stakeholder scenarios for urban mobility. *Technological Forecasting and Social Change*, 89, 201–221. <https://doi.org/10.1016/j.techfore.2013.08.036>.
- Spielmann, M., Scholz, R., Tietje, O., & Haan, P. d. (2005). Scenario modelling in prospective LCA of transport systems. Application of formative scenario analysis (11 pp). *The International Journal of Life Cycle Assessment*, 10(5), 325–335. <https://doi.org/10.1065/lca2004.10.188>.
- Spielmann, M., de Haan, P., & Scholz, R. W. (2008). Environmental rebound effects of high-speed transport technologies: A case study of climate change rebound effects of a future underground maglev train system. *Journal of Cleaner Production*, 16(13), 1388–1398. <https://doi.org/10.1016/j.jclepro.2007.08.001>.
- Vaz, C. R., Shoeninger Rau, T. R., Lezana, R., & Álvaro, G. (2017). Sustainability and innovation in the automotive sector: A structured content analysis. *Sustainability*, 9(6), 880. <https://doi.org/10.3390/su9060880>.

Website Citations

- https://ec.europa.eu/transport/themes/sustainable_en. Accessed 1 Mar 2019.
- <https://sustainabledevelopment.un.org/topics/sustainabletransport>. Accessed 1 Mar 2019.
- <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>. Accessed 1 Mar 2019.

Sustainable Value Creation

► Sustainable Business Solutions

Sustainable Value Measurement

► Eco-sustainability Innovations Performance Measurement

Sustaining Innovation

► Disruptive Innovation

Sustainment

► Sustainability (World Commission on Environment and Development Definition)

SWOR Analysis

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Synonyms

Assessment; Performance; SOFT Analysis; Strategic Plan; SWOT Analysis; TOWS Matrix

Definition

Strength (S), Weakness (W), Opportunity (O), and Risk (R) analysis with the acronym of SWOR is a strategic tool supported on a squared matrix based on past-experience, present-practice, and future-expectations associated with the internal situation strengths and weaknesses and with the external environment opportunities and risks to assess a company, a product or service, an idea, a partnership, an investment opportunity, or a new decision-making process.

History

The history of SWOR analysis starts with the research team of the Stanford Research Institute, from 1960 to 1970, where Marion Doshier, Otis Benepe, Robert Stewart, Birger Lie, and Albert

Humphrey have studied the reasons why corporate planning failed using data from Fortune 500 companies (Learned et al. 1965). Lyndall Urwick and John Leslie Orr, in 1964, as consultancy partners, used four categories for the SOFT analysis, knowing that in the present, good is classified as satisfactory and bad as a faulty; and in the future, good is classified as an opportunity and bad as a threat (Agarwal et al. 2012; Hill and Westbrook 1997; Urwick 1964). Hewlett (1999) defends that strategic planning “*helps a company decide what it wants to be when it grows up*” (Hewlett 1999, p. 26) and “*is very intensive, must be prepared to allocate the time and resources necessary to see it through*” (Hewlett 1999, p. 29).

In 1964, in Zurich, Switzerland, Humphrey presented in Long-Range Planning Seminar the SOFT analysis which details inefficiencies and efficiencies practices based on the analysis of being satisfactory, opportunistic, faulty, and threatening (Humphrey 2005; George 2017, p. 298). There are other researchers such as Porter (1980) and Jain (2015, p. 17) who argue that the modern SWOT analysis “was explained first (not originated) by Alfred Humphrey” and the origin of SWOT “*is in Thirukkural as the pancham veda (Fifth sacred book) of Tamilians is being looked at as a management handbook.*” Later with a new tendency, Weilrich (1982, p. 54) presented the TOWS matrix with threats and opportunities in the external environment and weaknesses and strengths inside the organization as a tool for situational analysis.

It is relevant to understand that the matrix proposed by the author is presented in Table 1, and Weilrich (1982, p. 54) starts on variables outside the organization to those variables inside to propose an “*effective and efficient attainment of its organizational objective and its mission.*”

SWOR Analysis, Table 1 The TOWS matrix

		Internal	
		Strengths	Weaknesses
External	Opportunities	SO	WO
	Threats	TS	WT

The matrix remained the same from the 1960s till today, but researchers published several frameworks (Helms and Nixon 2010). For example, Pandya (2017, p. 17) presents the LISA framework as “Leveraging” the strengths; “Improving” upon the weaknesses; “Seizing” the opportunities; and “Awareness” of the threats.” In another example, Valentin (2001, p. 54) presents in Table 2 a different SWOT framework based on the resource-based view with strategic associations that establish their significance.

Lengnick-Hall and Wolfe (1999) present a combination of pairs of components that must adhere to the logic of column combinations (i.e., component pairs combined within the matrix columns (strengths-opportunities (SO) and weaknesses-threats (WT)), row combinations (i.e., component pairs combined within the matrix rows (threats-opportunities (TO) and weaknesses-strengths (WS)), and diagonal combinations (i.e., component pairs combined within the matrix diagonals (weaknesses-opportunities (WO) and strengths-threats (ST)) as Table 3 represents.

Novicevic et al. (2004, p. 87) present the traditional SWOT analysis with a new “dual-perspective” framework with a controllable internal analysis subdivided by strengths (positive attributes) and weaknesses (negative attributes); and evaluative views of the uncontrollable external analysis subdivided by opportunities (desirable changes) and threats (undesirable changes) as Table 4 represents.

Geroge (2017, p. 303) presents the SWOT matrix “to improve organizational planning and

management,” based on internal factors (strengths as positive and weaknesses as negative) as attributes of the organization and external factors (opportunities as positive and threats as negative) as attributes of the environment as Table 5 represents.

It will be explaining the process of develop a SWOR analysis.

Proposal of SWOR Analysis

The proposal of the SWOR analysis is based on the strategic planning and as Roth et al. (2018, p. 1391) defines “business models that explicitly draw on the creative potential of functional differentiation as the distinctive feature of the modern society.” Furthermore, the SWOR matrix is proposal of development of the “strategic planning is merely a tool” (Bartling 1997, p. 20). Indeed, the greatest success of this tool is the “intellectual journey that the participants take in exploring the future” (Blatstein 2012, p. 32), but it “is not about predicting the future, what then is the objective? Strategic planning stresses the importance of making decision that will ensure the organization’s ability to successfully respond to changes in that environment” (Blatstein 2012, p. 32). Indeed, the organization must answer to the needs of stakeholders, but more relevant is to justify its mission with higher level of performance facing all the adversities and fighting with best strategies weapons. Without no doubt, the author agrees with Seelhofer (2016, p. 24) that

SWOR Analysis, Table 2 The SWOT framework

Factors	Internal	External
Favorable	Strengths	Opportunities
Unfavorable	Weaknesses	Threats

SWOR Analysis, Table 3 The SWOT components

Components	Weaknesses	Strengths
Threats	WT	ST
Opportunities	WO	SO

SWOR Analysis, Table 4 The traditional SWOT analysis with a new “dual-perspective” framework

Factors	Desirable	Undesirable
Uncontrollable	Opportunities	Threats
Controllable	Strengths	Weaknesses

SWOR Analysis, Table 5 The SWOT matrix

	Positive	Negative
Internal	Strengths	Weaknesses
External	Opportunities	Threats

describes “once developed and in the process of being implemented, the strategy’s fit with the organization’s environment should be reviewed periodically and revised as necessary.”

The fast and complex evolution on the economy and their consequences to management of the organization demands to change the focus from “threats” to “risks” based on the concept of risk of the ISO 31000 (IPQ 2013, p. 6). This standard defines risk as the “effect of uncertainty on objectives” but knowing that as the note 1 argues “the effect is a deviation from the expected positive and/or negative” (IPQ 2013, p. 6). Thus, the note 3 defines that risk “is often characterized by reference to potential events (3.5.1.3) and consequences (3.6.1.3), or a combination of these” (IPQ 2013, p. 6). Even though the note 5 describes that uncertainty “is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood” (IPQ 2013, p. 6).

The SWOR analysis is dependent on the perception of the consultant. In this sense, the ISO Standard 31,000 specifies that the “risk perception reflects the stakeholder’s needs, issues, knowledge, belief and values” (IPQ 2013, p. 9). Lalonde

and Boiral (2012) present an extensive checklist of guideline principles from the literature (IPQ 2011, 2016, 2017) and ISO Standard 31,000 (IPQ 2013) to improve risk management practices. Then, this analysis demonstrates vulnerabilities and expectations of strengths (S), weaknesses (W), opportunities (O), and risks (R).

Table 6 shows a diagonal increasing strategy from “good” to “bad” assessment. It is mandatory that the matrix must be squared (the same number of lines and columns). These assessments have been adopted from types of strategies developed by Aslan et al. (2012, p. 234). Indeed, first square starts on strategies that maximize strengths by taking advantage or wasted the opportunity (with the acronym SO); after the second square deals with strategies that minimize weakness by taking advantage or wasted the opportunity (with the acronym WO); later on, third square presents strategies that maximize strengths by avoiding and mitigating risks (with the acronym SR); and then on the fourth square displays strategies that minimize weakness by avoiding and mitigating risks (with the acronym WR).

Table 7 shows a diagonal increasing strategy from “bad” to “good” assessment. These

SWOR Analysis, Table 6 First proposal of the SWOR matrix

		Strengths			Weaknesses		
		S1	(...)	Sn	W1	(...)	Wn
Opportunities	O1						
	(...)						
	On						
Risks	R1						
	(...)						
	Rn						

SWOR Analysis, Table 7 Second proposal of the SWOR matrix

		Weaknesses			Strengths		
		W1	(...)	Wn	S1	(...)	Sn
Risk	R1						
	(...)						
	Rn						
Opportunities	O1						
	(...)						
	On						

assessments have been adopted from types of strategies developed by Aslan et al. (2012, p. 234). Indeed, first square starts on strategies that minimize weakness by avoiding and mitigating risks (with the acronym WR); later, the second square deals with strategies that maximize strengths by avoiding and mitigating risks (with the acronym SR); after on the third square presents strategies that minimize weakness by taking advantage or wasted the opportunity (with the acronym WO); and then on the last square displays strategies that maximize strengths by taking advantage or wasted the opportunity (with the acronym SO).

This allows to balance the positive, negative, and null impacts with the same level of influence and to know that the dynamic of the analysis demands that in each interrelation between weaknesses and strengths versus risk and opportunities with variables: (+) Positive interaction: fighting the risk or taking advantage of the opportunity; (—) Negative interaction: avoid the risk or wasted opportunity and (0) Null interaction: nonexistent interrelation. Table 8 presents an example of the final composition of interaction.

This dynamic has been proposed by Weilrich (1982, p. 62) to “*identify combinations of relationships which, in turn, may become the basis for strategic choices.*” In addition to that process, the expert on strategic planning or the chief strategy officer could have several alternatives, but the result must give an analysis tool to improve the decision-making process.

The literature suggests using Analytical Hierarchy Process (AHP), proposed by Saaty (1980), to weight variables based on statistical behavior

(if they are quantitative) or content analysis (if they are qualitative) to prioritize cross analysis variables between them. The SWOR analysis improves performance to accomplish results (Watkins and Leigh 2010).

There is a huge diversity of developments, but the methodology recommended in Table 1 to the organization allows to propose $n \times n$ strategies based on each relation of SWOR. The expert on strategic planning or the chief strategy officer could start on lowest expectations to higher expectations as:

- The first square, WR, defines the strategy that minimize each weakness by minimizing each risk; therefore, it demands necessary assessment of the relative importance/influence of the relation to take the decision about weakness by avoiding and mitigating risks with, respectively, positive, or negative interaction.
- The second square, WO, related the strategy that minimize each weakness by maximizing each opportunity; therefore, it demands necessary to assess the relative importance/influence of the relation about strength to take the decision by taking advantage or wasted the opportunity, respectively, with a positive, or negative interaction.
- The third square, SR, defines the strategy that maximize each strength by minimizing each risk; therefore, it demands necessary to assess the relative importance/influence of the relation to take the decision about strength by avoiding and mitigating risks with, respectively, with positive, or negative interaction.
- The fourth square, SO, related the strategy that maximize the strength by maximize the opportunity; therefore, it demands necessary to assess the relative importance/influence of the relation about strength to take the decision by taking advantage or wasted the opportunity, respectively, with a positive, or negative interaction.

The author agrees with Barney (1996, p. 22), who says the SWOT analysis lies at the intersection between research and practice and, also,

SWOR Analysis, Table 8 Interactions of the SWOR matrix

	Weaknesses			Strengths		
Risk	+	—	0	—	+	0
	—	0	+	+	0	—
	0	+	—	0	—	+
Opportunities	0	+	—	—	0	+
	—	0	+	+	—	0
	+	—	0	0	+	—

details “*matching process in choosing strategies.*” So, the expert on strategic planning or the chief strategy officer that plans, develops, and assesses the analysis must know very well the organization to reduce redundant variables and to increase robust variables to justify the mission statement of the organization.

Due to the large experience of Weilrich (1982, p. 54), on the one hand, it is important to emphasize that “*many of goals of these claimants are incongruent with each other and it is the manager’s task to integrate these divergent needs and goals.*” On the other hand, Webb (2019, p. 1) argues “*linear timelines offer a certain amount of assurance: that events can be preordained, chaos can be contained, and success can be plotted and guaranteed.*”

The propose SWOR analysis starts with current situation to assess an organization, a product or service, an idea, a partnership, an investment opportunity, or a new decision-making process. The main objective is identified, for example, three strengths, weaknesses, opportunities, and risks. All this process demands a specific analysis for each assessment and as Porter et al. (2002, p. 44) teaches at the Harvard Business School the SWOT framework knowing that “*the prevailing SWOT model of strengths, weaknesses, opportunities, threats was based on the idea that every case is different and that the relevant considerations are company-specific.*” All this process ends when the strategic planning through the SWOR analysis produces the desire results.

Summary

For more than 100 years, the SWOR analysis has been consolidated as a robust strategic plan that allows to assess an organization, a product or service, an idea, a partnership, an investment opportunity, or a new decision-making process. In the first phase, it is very hard to “break stone” from anything on the organization, because it demands to start to identify SWOR analysis on the organization that it will change the present and it will build a new future and as Vladoš (2019, p. 348) details “*explore the problems.*” In the

second phase, it is interesting this process of selecting strategies and analyzing alternatives that best answer to the needs of the strategic position of the organization and as Vladoš (2019, p. 348) emphasizes “*the evolutionary approach to business dynamics.*” In the third phase, it is important to understand the SWOR analysis that this process involves subjectivity of the expert on strategic planning or the chief strategy officer on the three phases, but the assessment of alternatives for each strategy increases the quality of the analysis itself as Vladoš (2019, p. 348) argues “*discuss the limits and future prospects.*” At last, the SWOR analysis incorporates the strategic plan made with assessment of the mission, the vision, and values of the organization to create value to the future.

Cross-References

- [Accountability](#)
- [Accountability in Nonprofit Sector](#)
- [Corporate Sustainability Performance](#)
- [Cost-Benefit Analysis](#)
- [Crisis Management](#)
- [Global Performance](#)

References

- Agarwal, R., Grassl, W., & Pahl, J. (2012). Meta-SWOT: Introducing a new strategic planning tool. *Journal of Business Strategy*, 33(2), 12–21.
- Aslan, I., Çınar, O., & Kumpikaite, V. (2012). Creating strategies from TOWS matrix for strategic sustainable development of Kipaş group. *Journal of Business Economics and Management*, 13(1), 95–110.
- Barney, J. B. (1996). *Gaining and sustaining competitive advantage* (p. 22). Reading: Addison-Wesley.
- Bartling, A. C. (1997). 25 pitfalls of strategic planning. *Healthcare Executive*, 12(5), 20–23.
- Blatstein, I. M. (2012). Strategic planning: Predicting or shaping the future? *Organization Development Journal*, 30(2), 31–38.
- George, P. (2017). Reimagining the student evaluation: Using democratic frameworks in college teaching and learning. In D. D. Liston & R. Rahimi (Eds.), *Promoting social justice through the scholarship of teaching and learning*. Bloomington: Indiana University Press.
- Helms, M. M., & Nixon, J. (2010). Exploring SWOT analysis – Where are we now? A review of academic

- research from the last decade. *Journal of Strategy and Management*, 3(3), 215–251.
- Hewlett, C. A. (1999). Strategic planning for real estate companies. *Journal of Property Management*, 64(1), 26–29.
- Hill, T., & Westbrook, R. (1997). SWOT analysis: It's time for a product recall. *Long Range Planning*, 30(1), 46–52.
- Humphrey, A. (2005). SWOT analysis for management consulting. SRI Alumni Newsletter. Standard Research Institute (SRI) International, United States.
- Instituto Português da Qualidade (IPQ). (2011). *Documento Normativo Português (DNP) ISO Guia 73- Gestão do risco – Vocabulário*. Caparica: IPQ.
- Instituto Português da Qualidade (IPQ). (2013). *Norma NP ISO 31.000: 2013. Gestão de riscos: princípios e linhas de orientação*. Caparica: IPQ.
- Instituto Português da Qualidade (IPQ). (2016). *NP EN 31.010: 2016. Gestão do risco. Técnicas de apreciação do risco. Linhas de Orientação para implementação da ISO 31.000*. Caparica: IPQ.
- Instituto Português da Qualidade (IPQ). (2017). *Documento Normativo Português DNP ISO/TR 31.004: 2017 Gestão do risco. Linhas de Orientação para implementação da ISO 31.000*. Caparica: IPQ.
- Jain, A. (2015). SWOT analysis Thirukkural: Comparative analysis with Humphrey SWOT matrix. *IOSR Journal of Business and Management (IOSR-JBM)*, 17(9), 17–20.
- Lalonde, C., & Boiral, O. (2012). Managing risks through ISO 31000: A critical analysis. *Risk Management*, 14(4), 272–300.
- Learned, E. P., Christensen, C. R., Andrews, K. R., & Guth, W. D. (1965). *Business policy: Text and cases*. Homewood: Richard D. Irwin.
- Lengnick-Hall, C. A., & Wolfe, J. A. (1999). Similarities and contradictions in the core logic of three research streams. *Strategic Management Journal*, 20(12), 1109–1132.
- Novicevic, M. N., Harcey, M., Autry, C. W., & Bond, E. U., III. (2004). Dual-perspective SWOT: A synthesis of marketing intelligence and planning. *Marketing Intelligence & Planning*, 22(1), 84–94.
- Pandya, S. (2017). Improving the learning and developmental potential of SWOT analysis: Introducing the LISA framework. *Strategic Direction*, 33(3), 12–14.
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and companies*. New York: Free Press.
- Porter, M., Argyres, N., & McGahan, A. M. (2002). An interview with Michael Porter. *Academy of Management Executive*, 16(2), 43–52.
- Roth, S., Valentinov, V., Kaivo-oja, J., & Dana, L. P. (2018). Multifunctional organisation models. A systems-theoretical framework for new venture discovery and creation. *Journal of Organizational Change Management*, 31(7), 1383–1400.
- Saaty, T. L. (1980). *The analytic hierarchy process*. New York: McGraw-Hill.
- Seelhofer, D. (2016). Developing business school strategies: A practitioner-oriented conceptualization. *Central European Business Review*, 5(1), 5–28.
- Urwick, L. F. (1964). Education and training for management. In T. N. Robertson (Ed.), *Monopolies and management* (pp. 22–54). Melbourne: F.W. Cheshire.
- Valentin, E. K. (2001). SWOT analysis from a resource-based view. *Journal of Marketing Theory and Practice*, 9(2), 54–69.
- Vlados, C. (2019). On a correlative and evolutionary SWOT analysis. *Journal of Strategy and Management*, 12(3), 347–363.
- Watkins, R., & Leigh, D. (2010). *Handbook of improving performance in the workplace. volume 2 – Selecting and implementing performance interventions*. San Francisco: International Society for Performance Improvement & Pfeiffer Publisher.
- Webb, A. (2019). How to do strategic planning like a futurist. *Harvard Business Review*, 2019/07, July 30.
- Wehrich, H. (1982). The TOWS matrix: Tool for situational analysis. *Long Range Planning*, 15(2), 54–66.

Further Reading

- Buyukozkan, G., & Ilick, O. (2019). Integrated SWOT analysis with multiple preference relations selection of strategic factors for social media. *Kybernetes*, 48(3), 451–470.
- Pandya, S. (2017). Improving the learning and developmental potential of SWOT analysis: Introducing the LISA framework. *Strategic Direction*, 33(3), 12–14.
- Wehrich, H. (1999). Analysing the competitive advantages and disadvantages of Germany with the TOWS matrix – An alternative to Porter's model. *European Business Review*, 99(1), 9–22.

SWOT Analysis

► SWOR Analysis

Symbolic Corporate Environmentalism

► Greenwashing

System Innovation

► Transition Sustainability

System of Profound Knowledge (SoPK)

► Deming 14 Points Model

Systemic

► Systemic Transition

Systemic CSR

► CSR 1.0/2.0/3.0

Systemic Thinking

► Systems Thinking

Systemic Transition

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Synonyms

Change; Transformation macro; Transition; Societal system; Systemic

The Concept of System Transition

The term transition is widely applied in many scientific disciplines spanning from social

sciences (e.g., psychology) to natural sciences (e.g., physics) (Loorbach et al. 2017). In a literal sense, transition means going across and refers to the process of change from one state to another (Hölscher et al. 2018; Loorbach et al. 2017). In system studies, the concept “transition” typically refers to radical, nonlinear, and structural change in complex adaptive systems, such as socio-technical or social-ecological systems (Feola 2015; Patterson et al. 2016; Ostrom 2007). Bearing this in mind, in the chapter, the term “change” is perceived as an overarching concept for all terms that describe something that becomes different, such as transition or transformation. Adding to that, the term “transition” refers to socio-technical systems, whereas the term “transformation” emphasizes socio-ecological systems. Moreover, this chapter takes up the idea of “system” level as interchangeable word to describe the “societal” or “macro” level of society. In addition, the terms “system” and “systemic” are used interchangeably in the chapter.

Fuenfschilling and Binz (2018) note that in system transition literature, transition is understood as a shift from one socio-technical regime to another. In turn, according to Walker et al. (2004), in social-ecological research, change occurs when system transgresses the so-called tipping points and moves to a new stable state. Planetary boundaries can be perceived as such tipping points at Earth system scale, although definition and exact measure of the boundary is more complex and subject to scientific debate (Steffen et al. 2015). Whereas socio-technical transition research focuses on enabling a desired transition, social-ecological system research aims to improve understanding of the critical thresholds and ways to improve resilience of environmental systems (Smith and Stirling 2008). Here, the focus is rather on the former type of transition, yet it is important to understand the commonalities in the change dynamics. To this end, this chapter embraces the concept of systemic transition defined by Grin et al. (2010) who explain societal system transitions as follows:

Transitions are co-evolution processes that require multiple changes in sociotechnical systems and configurations. [...] [They are] multi-actor processes, [...] radical shifts from one system or

configuration to another. The term “radical” refers to the scope of change. [...] Transitions are “long-term processes” and “macroscopic.”

Loorbach et al. (2017) stress systemic transitions being changes that reconstruct entire societal systems. The essence of system in social-ecological approach is distinguished as a co-evolution between social and environmental systems at either particular geographical area or global scale. In turn, the emphasis of socio-technical approach is on the co-evolution of technology, institutions, and practices at societal level, not necessarily bound to spatial scale, but rather to the hierarchy of rule structure. System transition research applies this perspective and explores how to embark greater degrees of sustainability facilitated through a structural change from tenacious unsustainability (Geels and Schot 2007; Markard et al. 2012; Loorbach et al. 2017). In other words, transitions, in the discipline of system transition, aim at achieving a greater degree of sustainability.

The emergence of the concept of systemic transition took place in 1990s across different disciplines as a contemporary means to address societal changes to sustainability (O’Riordan 1996; Raskin 2002; Costanza 1992; Kemp 1994). According to Loorbach et al. (2017), the current field of system transition research evolved in the 1990s by building on at least two different ontologies. The stream of innovation research forms the prior one (Rip and Kemp 1998; Arthur 1994; van den Bergh and Gowdy 2000). The latter is a compound of the partly overlapping disciplines of environmental studies and sustainability sciences (Kemp 1994; O’Riordan 2001; Van Asselt and Rotmans 1996; Rotmans 1998).

Loorbach et al. (2017) propose that the emergence of systemic transition research is explained by the need for novel research approaches as attempts to explore the dynamics of societal problems, and consequently, to seek systemic solutions to them. Thus, systemic transitions typically explore changes in societal subsystems, for example, food system, by emphasizing various interactions at social, technological, and institutional levels (Geels and Schot 2010; Loorbach et al. 2017; Fuenfschilling and Binz 2018).

System transition research entails a prevailing notion that disruptive systemic change can be located in so-called regimes: the dominant order in a societal system or subsystem (Loorbach et al. 2017). Geels (2010) explains the concept of the regime referring to the “deep-structure” or “grammar” of a socio-technical system, defining appropriate, legitimate, and conceivable means-end rationalities in a given sector, in other words the “mainstream” logic of system functioning.

Since the objective of the transition literature is to pay further attention to the plethora of unsustainabilities in the global system, and how to overcome them, the next section describes the sustainability science as a background literature for transition research. Moreover, the socio-ecological system is addressed in more detail to provide an example of a different system where sustainability science is applied. The next section also discusses the concepts of socio-technical system and its landscape, regime, and niche as important elements of systemic transition. After addressing the literature, the chapter presents how system transition research is currently applied and what are the emerging developments in the field.

Literature

Sustainability Science

In 1987, United Nations World Commission on Environment and Development (WCED) report “Our Common Future” included a definition for sustainable development. Currently, this definition is broadly applied, and thus, this chapter follows the definition set by United Nations. The report defines sustainable development as follows:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (Brundtland 1987)

Sparked by the Brundtland’s report and mounting sustainability challenges, academia witnessed an emergence of novel a discipline, sustainability science, in the late 1990s (Clark and Dickson 2003; Kates et al. 2001; Swart et al. 2004; Wiek

et al. 2012). In the early millennia, Kates et al. (2001) defined three main objectives of sustainability science: (1) understanding the fundamental interactions between nature and society; (2) guiding these interactions along sustainable trajectories; and (3) promoting the social learning necessary to navigate the transition to sustainability.

In addition to academic work, the sustainability challenges have sparked about a wide array of societal responses from industries and civil society companies as well (Lang et al. 2012).

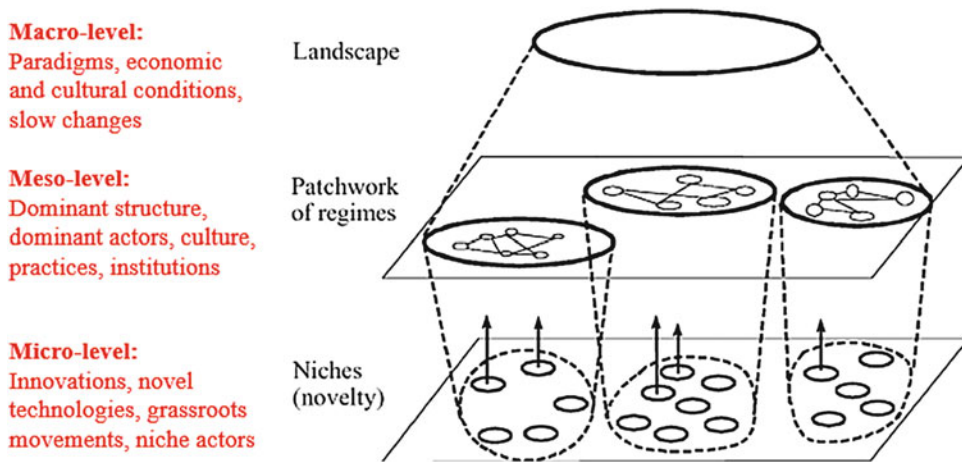
Despite the emergence of sustainability science, Brandt et al. (2013) stress that the pursuit of sustainable development, in line with the WCED's definition, has not succeeded. To this end, Geels (2011) argue the global system being burdened by various threats of sustainability. Similarly, Rockström et al. (2009a) note human activities being accountable for major sustainability problems that have led to surpassing the planetary boundaries of the Earth system. Therefore, the need for systemic transitions remains evident. Thus, the discipline of system transition emerged to implement sustainable development on a system level (Markard et al. 2012; Köhler et al. 2019), by expanding the analytic scope of problem framing and the scale of action and solution needed (Smith et al. 2010).

Social-Ecological System

Mounting sustainability challenges, such as climate change and biophysical nutrient cycling, initiated the need for socio-ecological research. According to Folke et al. (2005) the emergence of social-ecological research from the natural sciences occurred due to declining the view of ecosystem changes being linear, predictable, and controllable. Thus, socio-ecological research entails a vested notion that social and environmental systems are tightly coupled. Socio-ecological studies include resilience and transformation in human-environmental interactions and feedbacks in to break the existing unsustainable developments as its fundamental notions (Westley et al. 2011; Folke et al. 2011; Olsson and Galaz 2012; Steffen et al. 2011).

As reported by Berkes et al. (2002), system's resilience refers to the capability to defend external forces and maintain the basic nature and functioning while facing a disruption. Taking a closer look, the greater society's resilience is in confronting change externally brought about, the greater its ability to absorb external shocks and perturbations is, and vice versa (Adger et al. 2005). However, as the external influence increases beyond certain tipping points – thresholds – even a minor change can lead to major system alterations without any prior notice or warning signals (Waltner-Toews et al. 2008). Since such change is expected to be uncertain and the consequences are unpredictable, in socio-ecological research, sustainability is seen to be dependent on the maintenance of the adaptive capability to hold up social and economic systems (Berkes et al. 2002). To this end, resilience studies have recently embraced an adaptation to shocks by change (Carpenter et al. 2001). Zooming closer, an active and deliberate transformation on lower scales is considered to sustain resilience on a higher scale (Folke et al. 2010).

The key notion of resilience is the realization that system stability and equilibrium are not considered as normal state for a system. To this end, resilience studies pay emphasis on uncertainty and understanding change as continuous part of the system, and thus, resilience research stresses the proactive role of individuals, communities, and institutions in managing change (Folke 2006). In addition, recognizing the concept of critical thresholds or tipping points, beyond which the system, as broad as the Earth system, can degenerate to unexpected and irreversible state has been another prominent contribution in the socio-ecological studies (Biermann et al. 2012). Therefore, socio-ecological research attempts to take a precautionary approach vis-à-vis global environmental change. Taking a closer look, assessing the resilience at Earth scale appears crucial. Thus, defining and quantifying planetary boundaries, that is, the safe operating space for human kind, has played an important role in socio-ecological research (Rockström et al. 2009b; Steffen et al. 2015).



Systemic Transition, Fig. 1 Different levels of the socio-technical system. (Adapted from Geels 2002)

Socio-technical System

Rip and Kemp (1998) state that system transition literature focuses on understanding sustainability problems as inherent in existing, unsustainable, socio-technical systems. To this end, the rigid configurations of institutions, techniques, and artifacts, as well as the rules, practices, and networks set the trajectory for a typical development within socio-technical systems (Rip and Kemp 1998).

Socio-technical approach prevails the notion of society consisting from sectors, such as food and transportation, which provide certain societal needs, and consequently, they together form socio-technical systems (Markard et al. 2012). Going forward, actors (e.g., individuals, firms) – and networks of actors – and institutions (e.g., technical norms) as well as material artifacts and knowledge are also seen to constitute a socio-technical system (Geels 2004; Markard 2011; Weber 2003). As such, technology is embedded in the social institutions, and the co-evolution of the two, the social and the technical, give rise to incumbent socio-technical structure.

Research in socio-technical system transition is heavily influenced by the multilevel perspective (MLP) and research into the history of technology (Rip and Kemp 1998; Geels 2002; Loorbach et al.

2017). The research on systemic transition entail a vested notion on multilevel interplay between incumbent regime structures, external landscape pressures, and emerging niches leading to processes of technological changes (Geels 2002). The empirical studies are often consisted to explore these change dynamics (Loorbach et al. 2017). Figure 1, adapted from Geels (2002), illustrates the different levels of the socio-technical system.

Loorbach et al. (2017) argue that the subject of system transition is typically the socio-technical regimes that evolve path-dependently building on dominant technologies. System transition research entails an important assumption that socio-technical systems are rigid and inert, which results in change and innovation being incremental and path-dependent (Geels 2002; Markard and Truffer 2008). According to Fuenfschilling and Binz (2018), stability in socio-technical systems is due to the presence of highly institutionalized formal and informal rules that have co-evolved with certain technologies and solidified into practices and routines. Path-dependency can even lead to system lock-in, in which vested interests and sunk costs make regime shift an impasse (Unruh 2000). Typical examples in the research of transitions are systems, such as energy or food, in which

infrastructures and technologies are crucial (Loorbach et al. 2017).

Socio-technical Landscape

Geels and Schot (2010) note that the concept of landscape builds on various views from wide-ranging theories of technological change in societal setting. Researchers in several fields, such as history, archeology, anthropology, and philosophy, consider technology as part of the material culture of societies (Geels and Schot 2010). Moreover, Stones (2005) has argued that structuration research in sociology would benefit from being placed within a broader social, historical, and geographical framework. Hence, landscape can be perceived as the macro level of a society.

The extant system transition literature conceptualizes the socio-technical landscape as an exogenous environment beyond the direct influence of niche and regime actors and it represents macro-economics, deep cultural patterns, macro-political developments (Geels and Schot 2007). The socio-technical landscape contains a set of heterogeneous factors, such as oil prices, economic growth, wars, emigration, broad political coalitions, cultural and normative values, and environmental problems (Geels 2002). The landscape is an external structure or context for interactions of actors and it does not include actors itself (Fischer and Newig 2016; Geels 2002). The context of landscape is even harder to change than that of regimes, which means that landscapes do change, but more slowly than regimes – it may take decades to change landscapes (Geels 2002; Geels and Schot 2007).

Socio-technical Regimes

Loorbach et al. (2017) have argued the notion of regime being the most essential concept for entire systemic transition studies. Regime can be perceived as dominant and stable order of a system (Dosi 1982; Kemp 1994; Rip and Kemp 1998; Geels 2002). To this end, regime level represents the meso-level of a society. Rip and Kemp (1998) have defined socio-technical regimes as follows:

The rule-set or grammar embedded in a complex of engineering practices, production process technologies, product characteristics, skills and procedures,

ways of handling relevant artefacts and persons, ways of defining problems; all of them embedded in institutions and infrastructures.

The conceptualization of regime in system transition literature is built on Nelson's and Winter's (1982) concept of technological regimes in evolutionary economics. In their definition, technological regimes refer to the cognitive routines shared in a community of engineers (Nelson and Winter 1982). Later in the system transition literature regimes were conceptualized as semi-coherent rule sets carried by different social groups, which stabilize a technological trajectory and function as a selection and retention mechanism (Geels 2002; Smith et al. 2005). Building on neo-institutional theory Geels (2004) proposed that the rules of regimes consist of three types: cognitive, regulative, and normative.

Hence, regime in a socio-technical system is often described as the dominant institutional logic of the system (Fuenfschilling and Truffer 2014; Thornton et al. 2012). This view entails the idea that the concept of regime is not constant nor stable rather than continuously socially constructed, as regimes are persistently contested and under various power battles by different actors (Fuenfschilling and Truffer 2016; Geels 2014; Geels et al. 2016; Smink et al. 2015). Consequently, the socio-technical regime can be perceived as the result of an interplay between actors, technologies, and institutions in a system (Fuenfschilling and Binz 2018). These dynamics unveil the difficulty to initiate radical innovations, while the existing system favors incremental innovations in regime changes (Geels and Schot 2007). This path-dependency and lock-in are noted as the defining factor of socio-technical regimes (Fuenfschilling and Binz 2018).

Socio-technical Niches

Socio-technical niches portray the micro-level of a society. In system transition literature, technological niches form the micro-level where radical novelties emerge (Geels and Schot 2007). These novelties are initially unstable socio-technical configurations with low performance (Geels and Schot 2007). According to evolutionary theories,

radical innovations often emerge outside or on the fringe of existing regimes, where niches act as “incubation rooms” protecting novelties against mainstream market selection (Schot 1998; Kemp et al. 1998; Geels and Schot 2010). Geels and Schot (2007) state that in system transition literature, niche-innovations are carried and developed by small networks of dedicated actors, often outsiders or fringe actors.

The scholars in system transition literature explicitly incorporate science and technology studies insights and agency into evolutionary theory (Geels and Schot 2010). Elaborated by Kemp et al. (1998), technological niches are carried by experimental projects, where new technologies are exposed to actors from the selection environment under relatively protected circumstances. Networks of dedicated actors who are willing to invest resources in the new technology typically protect niches (Geels and Schot 2010). This protection enables the shielded development of niches to eventually challenge and even replace the existing regime (Kemp et al. 1998).

Current Developments in the Field

The research field of system transition has increased considerably over the past decades and it has become an important area of research into the nonlinear dynamics of societal change, highly relevant to policy and society in the context of grand challenges (Loorbach et al. 2017). According to Köhler et al. (2019) early publications of system transition often focused on electricity and transport systems, and current articles regularly explore other societal domains, such as food, water, heat and buildings, cities, and waste management. Contemporary transition literature has notably broadened its scope compared to the early system transition discipline. Recently systemic transition studies have revolved, for example, around urban transitions, acceleration, system decline, system re-configuration and interaction between multiple innovations, ethics and justice, the role of users, power relations in governance structures, and transitions involving multiple sectors (Köhler et al. 2019). The economic stagnation

and degrowth, destabilization and collapse, transitions and democracy, and attempts to bridge the gap between descriptive analytical transition dynamics and prescriptive transition policies are noted as emerging themes in the contemporary system transition research as well (Loorbach et al. 2017).

Moreover, system transition research has recently brought forward a theoretical debate concerning the core concepts of the research field. At the moment, the concepts of regime and niche are contested (Fuenfschilling and Binz 2018; Fuenfschilling and Truffer 2016). To better address the question of how institutional change unfolds, there has emerged research openings adopting institutional theories to amend system transition literature (Fuenfschilling and Binz 2018). In addition, many recent contributions call for a more nuanced analysis of the spatial dimensions of transition dynamics (e.g., Binz and Truffer 2017; Coenen et al. 2012; Raven et al. 2012).

The aim of system transitions research remains being the incorporation of established disciplines such as political sciences, business studies, development studies, and science and technology studies (Köhler et al. 2019). However, Loorbach et al. (2017) have argued that realizing the full academic and societal potential of system transition literature would require both critical observation of the entire research branch and further appreciation on more diverse views from other disciplines. These various emerging research openings and themes point to the continuing expansion of the systemic transition field and demonstrate the usefulness of system transition in the efforts of achieving sustainable societies.

Summary

Systemic transitions are changes that reconstruct entire societal systems. Systemic transitions have gained increasing interest since 1990s across the academia as a contemporary means to address societal changes to sustainability. Systemic transition literature emphasizes the coevolution of technology, institutions, and practices at societal

level. Currently, the discipline studying systemic transitions is undergoing continuous expansion.

Cross-References

► Institutional Theory

References

- Adger, W., Brown, K., & Tompkins, E. (2005). The political economy of cross-scale networks in resource co-management. *Ecology and Society*, 10(2), 9.
- Arthur, W. B. (1994). *Increasing returns and path dependence in the economy*. Ann Arbor: University of Michigan Press.
- Berkes, F., Colding, J., & Folke, C. (2002). *Navigating social-ecological systems: Building resilience for complexity and change*. West Nyack: Cambridge University Press.
- Biermann, F., Abbott, K., Andersen, S., Bäckstrand, K., Bernstein, S., Betsill, M., . . . Zondervan, R. (2012). Navigating the anthropocene: Improving earth system governance. *Science*, 335(6074), 1306–1307.
- Binz, C., & Truffer, B. (2017). Global innovation systems—A conceptual framework for innovation dynamics in transnational contexts. *Research Policy*, 64(7), 1284–1298.
- Brandt, P., Ernst, A., Gralla, F., Luederitz, C., Lang, D. J., Newig, J., Reinert, F., Abson, D. J., & Von Wehrden, H. (2013). A review of transdisciplinary research in sustainability science. *Ecological Economics*, 92, 1–15. <https://doi.org/10.1016/j.ecolecon.2013.04.008>.
- Brundtland, G. H. (1987). Our common future: Report of the World Commission on environment and development. *United Nations Commission*, 4, 300. <https://doi.org/10.1080/07488008808408783>.
- Carpenter, S., Walker, B., Anderies, J., & Abel, N. (2001). From metaphor to measurement: Resilience of what to what? *Ecosystems*, 4, 765–781.
- Clark, W. C., & Dickson, N. M. (2003). Sustainability science: The emerging research program. *Proceedings of the National Academy of Sciences of the United States of America*, 100, 8086–8091. <https://doi.org/10.1073/pnas.1231333100>.
- Coenen, L., Benneworth, P., & Truffer, B. (2012). Toward a spatial perspective on sustainability transitions. *Research Policy*, 41(6), 968–979.
- Costanza, R. (1992). *Ecological economics: The science and management of sustainability*. New York: Columbia University Press.
- Dosi, G. (1982). Technological paradigms and technological trajectories. *Research Policy*, 11(3), 147–162.
- Feola, G. (2015). Societal transformation in response to global environmental change: A review of emerging concepts. *Ambio*, 44, 376–390. <https://doi.org/10.1007/s13280-014-0582-z>.
- Fischer, L. B., & Newig, J. (2016). Importance of actors and agency in sustainability transitions: A systematic exploration of the literature. *Sustainability*, 8. <https://doi.org/10.3390/su8050476>.
- Folke, C. (2006). Resilience: The emergence of a perspective for social-ecological systems analyses. *Global Environmental Change*, 16(3), 253–267.
- Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). Adaptive governance of social-ecological systems. *Annual Review of Environment and Resources*, 30, 441–473.
- Folke, C., Carpenter, S., Walker, B., Scheffer, M., Chapin, T., & Rockström, J. (2010). Resilience thinking: Integrating resilience, adaptability and transformability. *Ecology and Society*, 15(4), 20.
- Folke, C., Jansson, Å., Rockström, J., Olsson, P., Carpenter, S., Chapin, F., III, . . . et al. (2011). Reconnecting to the biosphere. *Ambio*, 31(5), 437–440.
- Fuenfschilling, L., & Binz, C. (2018). Global socio-technical regimes. *Research Policy*, 47, 735–749. <https://doi.org/10.1016/j.respol.2018.02.003>.
- Fuenfschilling, L., & Truffer, B. (2014). The structuration of socio-technical regimes—Conceptual foundations from institutional theory. *Research Policy*, 43(4), 772–791.
- Fuenfschilling, L., & Truffer, B. (2016). The interplay of institutions, actors and technologies in socio-technical systems – An analysis of transformations in the Australian urban water sector. *Technological Forecasting and Social Change*, 103, 298–312. <https://doi.org/10.1016/j.techfore.2015.11.023>.
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study. *Research Policy*, 31, 1257–1274. [https://doi.org/10.1016/S0048-7333\(02\)00062-8](https://doi.org/10.1016/S0048-7333(02)00062-8).
- Geels, F. W. (2004). From sectoral systems of innovation to socio-technical systems: Insights about dynamics and change from sociology and institutional theory. *Research Policy*, 33, 897–920. <https://doi.org/10.1016/j.respol.2004.01.015>.
- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39, 495–510. <https://doi.org/10.1016/j.respol.2010.01.022>.
- Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1, 24–40. <https://doi.org/10.1016/j.eist.2011.02.002>.
- Geels, F. W. (2014). Regime resistance against low-carbon transitions: Introducing politics and power into the multi-level perspective. *Theory, Culture and Society*, 31, 21–40. <https://doi.org/10.1177/0263276414531627>.
- Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. *Research Policy*, 36, 399–417. <https://doi.org/10.1016/j.respol.2007.01.003>.

- Geels, F. W., & Schot, J. (2010). *The dynamics of transitions: A socio-technical perspective, transitions to sustainable development: New directions in the study of long term transformative change*. London: Routledge.
- Geels, F. W., Kern, F., Fuchs, G., Hinderer, N., Kungl, G., Mylan, J., Neukirch, M., & Wassermann, S. (2016). The enactment of socio-technical transition pathways: A reformulated typology and a comparative multi-level analysis of the German and UK low-carbon electricity transitions (1990-2014). *Research Policy*, 45, 896–913. <https://doi.org/10.1016/j.respol.2016.01.015>.
- Grin, J., Rotmans, J., & Schot, J. (2010). *Transitions to sustainable development*. London: Routledge. 398 p. ISBN: 9780415876759.
- Hölscher, K., Wittmayer, J. M., & Loorbach, D. (2018). Transition versus transformation: what's the difference? *Environmental Innovation and Societal Transitions*, 27, 1–3. <https://doi.org/10.1016/j.eist.2017.10.007>.
- Kates, R. W., Clark, W. C., Corell, R., Hall, J. M., Jaeger, C. C., Lowe, I., McCarthy, J. J., Schellnhuber, H. J., Bolin, B., Dickson, N. M., Faucheux, S., Gallopin, G. C., Grübler, A., Huntley, B., Jäger, J., Jodha, N. S., Kasperson, R. E., Mabogunje, A., Matson, P., Mooney, H., Moore, B., O'Riordan, T., & Svedlin, U. (2001). Environment and development. *Sustainability science. Science*, 292, 641–642. <https://doi.org/10.1126/SCIENCE.1059386>.
- Kemp, R. (1994). Technology and the transition to environmental sustainability. The problem of technological regime shifts. *Futures*, 26, 1023–1046.
- Kemp, R., Schot, J., & Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: The approach of strategic niche management. *Technol. Anal. Strateg. Manag* 10, 175–198. <https://doi.org/10.1080/09537329808524310>.
- Köhler, J., Geels, F.W., Kern, F., Markard, J., Wiecek, A., Alkemade, F., Avelino, F., Bergek, A., Boons, F., Fünfschilling, L., Hessk, D., Georg Holtz, G., Hyysalo, S., Jenkins, K., Kivimaa, P., Martiskainen, M., McMeekin, A., Mühlemeier, M.S., Nykvist, B., Onsongo, E., Pel, B., Raven, R., Rohrachner, H., Sandén, B., Schot, J., Sovacool, B., Turnheim, B., Welch, D. and Wells, P. (2019) 'An agenda for sustainability transitions research: State of the art and future directions', *Environmental Innovation and Societal Transitions* 31: 1-32. <https://doi.org/10.1016/j.eist.2019.01.004>.
- Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7, 25–43. <https://doi.org/10.1007/s11625-011-0149-x>.
- Loorbach, D., Frantzeskaki, N., & Avelino, F. (2017). Sustainability transitions research: Transforming science and practice for societal change. *Annual Review of Environment and Resources*, 42, 599–626. <https://doi.org/10.1146/annurev-environ-102014-021340>.
- Markard, J. (2011). Transformation of infrastructures: Sector characteristics and implications for fundamental change. *Journal of Information Systems (ASCE)*, 17, 107–117.
- Markard, J., & Truffer, B. (2008). Technological innovation systems and the multi-level perspective: Towards an integrated framework. *Research Policy*, 37, 596–615. <https://doi.org/10.1016/j.respol.2008.01.004>.
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, 41, 955–967. <https://doi.org/10.1016/j.respol.2012.02.013>.
- Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press.
- O'Riordan, T. (1996). *Politics of climate change: A European perspective*. London: Psychology Press.
- O'Riordan, T. (2001). *Globalism, localism, and identity: Fresh perspectives on the transition to sustainability*. London: Earthscan.
- Olsson, P., & Galaz, V. (2012). Social-ecological innovation and transformation. In *Social innovation* (pp. 223–247). Palgrave Macmillan, London.
- Ostrom, E. (2007). A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences of the United States of America*, 104 (39), 15181–15187.
- Patterson, J., Schulz, K., Vervoort, J., van der Hel, S., Widerberg, O., Adler, C., Hurlbert, M., Anderton, K., Sethi, M., & Barau, A. (2016). Exploring the governance and politics of transformations towards sustainability. *Environmental Innovation and Societal Transitions*. <https://doi.org/10.1016/j.eist.2016.09.001>.
- Raskin, P. (2002). *Great transition: The promise and lure of the time ahead*. Boston: Stockholm Environment Institute.
- Raven, R., Schot, J., & Berkhout, F. (2012). Space and scale in socio-technical transitions. *Environmental Innovation and Societal Transitions*, 4(0), 63–78.
- Rip, A., & Kemp, R. (1998). Technological change. In S. Rayner & E. L. Malone (Eds.), *Human choice and climate change. Vol. II, Resources and technology* (pp. 327–399). Columbus: Battelle Press.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H. J., Nykvist, B., de Wit, C. A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P. K., Costanza, R., Svedin, U., Falkenmark, M., Karlberg, L., Corell, R. W., Fabry, V. J., Hansen, J., Walker, B., Liverman, D., Richardson, K., Crutzen, P., & Foley, J. (2009a). Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society*, 14. <https://doi.org/10.5751/ES-03180-140232>.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Stuart Chapin, I. F., Lambin, E., ... et al. (2009b). A safe operating space for humanity. *Nature*, 461, 472–475.

- Rotmans, J. (1998). Methods for IA: The challenges and opportunities ahead. *Environmental Modeling and Assessment*, 3, 155–179.
- Schot, J. W. (1998). The usefulness of evolutionary models for explaining innovation: The case of the Netherlands in the nineteenth century. *History of Technology*, 14, 173–200.
- Smink, M. M., Hekkert, M. P., & Negro, S. O. (2015). Keeping sustainable innovation on a leash? Exploring incumbents' institutional strategies. *Business Strategy and the Environment*, 24, 86–101. <https://doi.org/10.1002/bse.1808>.
- Smith, A., & Stirling, A. (2008). *Social-ecological resilience and socio-technical transitions: Critical issues for sustainability governance*. STEPS. Brighton: STEPS Centre.
- Smith, A., Stirling, A., & Berkhout, F. (2005). The governance of sustainable socio-technical transitions. *Research Policy*, 34, 1491–1510. <https://doi.org/10.1016/j.respol.2005.07.005>.
- Smith, A., Voss, J.-P., & Grin, J. (2010). Innovation studies and sustainability transitions: The allure of the multi-level perspective and its challenges. *Research Policy*, 39(4), 435–448.
- Steffen, W., Persson, Å., Deutsch, L., Zalasiewicz, J., Williams, M., Richardson, K., ... et al. (2011). The anthropocene: From global change to planetary stewardship. *Ambio*, 40(7), 739–761.
- Steffen, W., Richardson, K., Rockström, J., Cornell, S., Fetzer, I., Bennett, E., et al. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223), 1259855.
- Stones, R. (2005). *Structuration theory*. Basingstoke: Palgrave Macmillan. 224 p. ISBN: 978–0333793787.
- Swart, R. J., Raskin, P., & Robinson, J. (2004). The problem of the future: Sustainability science and scenario analysis. *Global Environmental Change*, 14, 137–146. <https://doi.org/10.1016/j.gloenvcha.2003.10.002>.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The institutional logics perspective. A new approach to culture, structure, and process*. Oxford, UK: Oxford University Press.
- Unruh, G. (2000). Understanding carbon lock-in. *Energy Policy*, 28(12), 817–830.
- Van Asselt, M. B. A., & Rotmans, J. (1996). Uncertainty in perspective. *Global Environmental Change*, 6, 121–157.
- van den Bergh, J. C. J. M., & Gowdy, J. M. (2000). Evolutionary theories in environmental and resource economics: Approaches and applications. *Environmental and Resource Economics*, 17, 37–57.
- Walker, B., Holling, C., Carpenter, S., & Kinzig, A. (2004). Resilience, adaptability and transformability in social-ecological systems. *Ecology and Society*, 9(2), 5.
- Waltner-Toews, D., Kay, J.J. & Lister, N.-M.E. (2008). *Ecosystem Approach: Complexity, Uncertainty, and Managing for Sustainability*. New York, NY: Columbia University Press.
- Weber, K. M. (2003). Transforming large socio-technical systems towards sustainability. On the role of users and future visions for the uptake of city logistics and combined heat and power generation. *Innovations*, 16, 155–176.
- Westley, F., Olsson, P., Folke, C., Homer-Dixon, T., Vredenburg, H., Loorbach, D., ... van der Leeuw, S. (2011). Tipping toward sustainability: Emerging pathways of transformation. *Ambio*, 40, 762–780.
- Wiek, A., Ness, B., Schweizer-Ries, P., Brand, F. S., & Farioli, F. (2012). From complex systems analysis to transformational change: A comparative appraisal of sustainability science projects. *Sustainability Science*, 7, 5–24. <https://doi.org/10.1007/s11625-011-0148-y>.

Systems Approach

► Systems Thinking

Systems Thinking

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Synonyms

Systemic thinking; Systems approach

Summary

Systems thinking is a method of analysis using frameworks that are based upon a theory of systems. The goal of systems thinking is to facilitate a better understanding of problems and complex situations by enabling the conceptualization and analysis of the structures, dynamics, and perspectives within and by which they are contexted. A wide range of systems thinking frameworks have been developed over time and they have been shaped by changes in the understanding of the nature of systems, their dynamics, and the objectives for their analysis. Although numerous and varied, these frameworks commonly share several

key structural concepts including systems, holism, boundaries, hierarchy, and emergence. Systems thinking frameworks can be classified upon the basis of these influences over time into categories of soft, hard, and critical approaches.

The Systems Thinking Approach

Systems thinking is a response to the perceived need to understand phenomena in terms of the whole rather than simply the parts, as a dynamic of interactions between elements over time, and as being based upon a purposeful and subjective world view. Systems thinking is a framework whereby some form of systems theory is applied to the analysis of a problem in order to identify its problem situation and develop a plan for action. The systems thinking approach is particularly concerned with the resolution of problems within complex situations defined by nonlinear system behavior.

This review will present a brief overview of the systems thinking approach from its: (1) starting point in the analysis of complex problem situations, (2) key defining concepts, (3) the development over time of major frameworks within the approach, and (4) typologies of systems thinking approach frameworks.

Complexity and Problems

The conceptualization of problems within complex situations is fundamental to an understanding of the systems thinking approach. In the years during and after the Second World War, developments in the scientific, technological, business, and economic fields were defined by the increasing speed of innovation, diversity among, and interaction between systems.

More recently, the dynamics of military conflict in the post-Cold War period have been characterized as volatile, uncertain, complex, and ambiguous under an acronym of VUCA and used as a tool to make sense of the dynamic nature of interrelationships that define business environments (Bennett and Lemoine 2014). The

proliferation and growing importance of strategies based on open systems, combined with innovations in information technology that give voice to interests from different perspectives, give particular importance to the “A” – *ambiguity* – in VUCA.

Systems theorists take the position that the complex problems which arise from the dynamics of open systems are not amenable to solutions based solely upon a reductionistic examination of their constituent parts. The goal of systems thinking is not to reduce complexity but to understand it. As explained by Hitchins, in contrast to a reductionist approach, “system theory affords the opportunity to manage complexity; that is, to effectively conceal perceived complexity so that our limited intellects can comprehend without being swamped by detail and variety. A system may be represented, not by its structure, function, form, etc., but by its emergent properties, capabilities and behaviors” (Hitchins 2008, p. 51).

Systems thinking approaches have developed against this background of growing awareness of the prevalence and criticality of problems characterized by increasing levels of complexity and ambiguity, along with the realization that prevailing reductionistic methods of problem analysis may in fact act to exacerbate the perception of complexity.

Systems thinking as defined by Gharajedaghi is the “art of simplifying complexity. It is about seeing through chaos, managing interdependency, and understanding choice. We see the world as increasingly more complex and chaotic because we use inadequate concepts to explain it. When we understand something, we no longer see it as chaotic or complex” (Gharajedaghi 2011, p. 335). For Gharajedaghi, the perception of complexity is also a product of the process of perception. The systems thinking approach thereby reflects a changing understanding of the nature and meaning of complexity as a concept for understanding problems and not as a problem in itself.

One of the defining characteristics of systems thinking approach frameworks is therefore the process they apply in defining problems. Complex problems have been conceptualized in a variety of ways by systems thinking theorists as *messes*

(Ackoff 1981a), *wicked problems* (Rittel and Webber 1973), and *resource dilemmas* (Blackmore 2007, p. 512). Rittel and Webber draw a comparison between the “tame” problems that concern the natural sciences – for which the objectives and achievement of solutions can be clarified in advance – with what they call the wicked problems of complex situations in social contexts (Rittel and Webber 1973). Rittel’s definition of wicked problems has been summarized by Churchman as “that class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing” (Churchman 1967, pp. B-141). The scope of Rittel’s definition of wicked problems included most social problems confronted by planners (Rittel and Webber 1973, p. 160).

Rittel and Webber elaborated their conceptualization of a wicked problem in their “ten properties” which distinguished wicked from tame problems by attributing to them – among other characteristics – the qualities of being impossible to define objectively, embedded in their social contexts and therefore related to other factors in such a way that their effects and solution impacts are never fully measurable, always unique yet related to higher-order problems and only solvable using solutions which are good or bad and not true or false because of the relativity of the planner with regards to the perspectives of those involved (Rittel and Webber 1973, pp. 161–167).

Rittel and Webber’s definition of wicked problems was developed to explain the situation faced by actors engaged in social planning. Ackoff, taking a position which is essentially compatible with that of Rittel and Webber, has focused on the problems faced by business managers and defined problems as essentially abstractions derived from messes as artifacts of the management process. For Ackoff:

managers are not confronted with problems that are independent of each other, but with dynamic situations that consist of complex systems of changing problems that interact with each other. . . Problems are abstractions extracted from messes by analysis;

they are to messes as atoms are to tables and chairs. We experience messes, tables, and chairs; not problems and atoms. Because messes are systems of problems, the sum of the optimal solutions to each component problem taken separately is not an optimal solution to the mess. The behavior of a mess depends more on how the solutions to its parts interact than on how they act independently of each other. But the unit in OR [Operational Research] is a problem, not a mess. Managers do not solve problems; they manage messes. (Ackoff 1979, pp. 99–100)

Systems thinking approaches therefore assume a contextualized view of problems wherein the interrelatedness of factors within and between systems is acknowledged and the relativity derived from the different perspectives and interests of actors is considered in the definition of problem situations. A result of this is the emphasis given to defining problem situations and their resolution by systemic innovation rather than the identification of immediate problems and their solutions.

Systems thinking is a process for understanding the organized nature of reality. According to Capra and Luisi, systems thinking “means a shift of perception from material objects and structures to the nonmaterial processes and patterns of organization that represent the very essence of life” (Capra and Luisi 2014, p. 79). This defining characteristic of a focus on the analysis of processes over materials is reflected in the concepts used by theorists of the systems thinking approach.

The Language of Systems Thinking

Systems thinking frameworks share a common terminology of key concepts. Jackson refers to these concepts as the language of systems thinking (Jackson 2003, p. 3). The key concepts of the systems thinking approach include systems, elements, structures, holism, boundaries, hierarchy, and emergence.

Systems: Elements, Relationships, and Purpose

For systems thinking theorists a system consists of a “set of elements in interaction” (von Bertalanffy

1968) wherein all elements are connected either directly or indirectly with each other (Ackoff 1971, p. 662) to form a complex whole which is functionally dependent upon all these elements and their interactions (Jackson 2003, p. 3). Although a collection of elements without significant patterns of interaction or with clearly linear patterns of interaction is amenable to reductionistic scientific analysis (von Bertalanffy 1968, p. 18), systems thinking theorists contend that a reductionistic approach is ineffective for the analysis of systems shaped by organized complexity (von Bertalanffy 1968, p. 34). In contrast to a reductionist approach wherein the disaggregation of a system's elements into isolated parts is central, the organized system itself is the primary focus of the systems thinking approach.

An organized system is one that is purposeful. Ackoff defines a purposeful system as one that: "contains at least two purposeful elements which have a common purpose relative to which the system has a functional division of labor; its functionally distinct subsets can respond to each other's behavior through observation or communication; and at least one subset has a system-control function" (Ackoff 1971, p. 670). For systems thinking theorists therefore social situations and problems are amenable to analysis by virtue of their being contexted in complex and purposeful systems (Bruni et al. 2018, p. 242).

Systems are structured. The structure of a system is derived from the sets of its constituent elements and the interactions between them. The properties of the system's elements are defined as attributes and the set of a system's attributes define its state. A system's state can be (1) static, stable in the absence of events; (2) dynamic, moving between several different possible states; or (3) homeostatic, wherein the dynamic interaction of its elements adjust to maintain an overall static state. Systems display both change and behavior. Change is the effect of environmental events on the system and behavior is the effect of the system on its external environment (Ackoff 1971).

Holism

The systems thinking approach is based upon the position that the behavior of complex systems can

only be understood as wholes. For systems thinking approach theorists identifying a system as a whole in order to understand its behavior are central issues. According to Boardman and Sauser, a

systems thinker understands that complexity is made up of lots of things that interact with one another in curious, counterintuitive ways. This makes decomposition, the disaggregation of these various things into their separate existences, less useful. If we separate them we no longer have them, because they exist together. (Boardman and Sauser 2008, p. 15)

The systems thinking approach shifts the focus of understanding the world from its parts to the whole. According to Capra:

The first, and most general, criterion is the shift from the parts to the whole. Living systems are integrated wholes whose properties cannot be reduced to those of smaller parts. Their essential, or 'systemic,' properties are proper ties of the whole, which none of the parts have. They arise from the 'organizing relations' of the parts – that is, from a configuration of ordered relationships that is characteristic of that particular class of organisms, or systems. Systemic properties are destroyed when a system is dissected into isolated elements. (Capra 1996, p. 36)

The whole therefore is the nature of a complex system that is irreducible to the individual properties of its constituent elements. Formulations of the concept of "holism" can be located as early as the writings of Aristotle. Aristotle described the unique whole of an organism in terms of being its "potential." Aristotle maintained that:

It is evident that even of the things that are thought to be substances, most are [only] potentialities: the parts of animals (for none of them, having been separated, is [the part of an animal], and when they are separated, then all of them exist [merely] as matter), and earth and fire and air; for none of them is one, but they are like a heap, until they are concocted and some one thing comes to be out of them. All [the parts] will exist [only] potentially when they are one and continuous by nature. (as quoted in: Mayhew 1997, p. 327)

Here Aristotle is concerned with life as an emergent property of bodies. In 1933 von Bertalanffy – a biologist whose theories strongly influenced early systems thinking – addressed the same issue in modern terms when he stated that:

since the fundamental character of the living thing is its organization, the customary investigation of the single parts and processes, even the most thorough physico-chemical analysis, cannot provide a complete explanation of the vital phenomena. This investigation gives us no information about the co-ordination of the parts and processes in the complicated system of the living whole which constitutes the essential 'nature' of the organism, and by which the reactions in the organism are distinguished from those in the test-tube. (von Bertalanffy 1933, pp. 64–65).

Aristotle's "potential" and von Bertalanffy's "nature" have also been conceptualized as the "meaning" (Jackson 2003, pp. 3–4) and "properties" (Simon 1962, p. 468) the system gives to its parts when seen as a whole. For the systems thinking approach the meaning of the parts of a system are derived from the whole. The contention of systems thinking is that a reductionistic analysis of the whole by examining the independent characteristics of its constituent elements will (1) not fully explain the behavior displayed by a system, nor (2) enable the future possible behaviors of that system to be predicted.

Boundaries and Hierarchies

In order to be approached holistically a system must be properly defined. Systems are defined by boundaries. A boundary is the difference made by an observer in distinguishing a system from its environment (Checkland 1999, p. 312). The observation and analysis of a system require the identification of the elements constituting the system, as well as the extent of their interactions within it and beyond it with its environment through a process known as "systemic resolution" whereby a systems boundary is defined. Identifying a system against the background of its wider context in accordance with a specific issue or concern is called defining the "system of interest."

Relationships outside of the boundary of a system may cause it to be linked to other systems in the form of hierarchies. Systems can be hierarchic in structure where systems may be interrelated to each other vertically as super- and subsystems (Simon 1962, p. 468). This leads to complexity. For Simon: "complexity frequently takes the form of hierarchy, and that hierarchic

systems have some common properties that are independent of their specific content" (Simon 1962, p. 468).

Emergence

For systems thinking theorists, understanding the complexity of systems means understanding non-linear behavior or "emergence" as a property of systems. Emergence is a consequence of the fundamental system concepts of holism and interaction (Hitchins 2008, p. 27). Checkland has defined emergence as "the principle that entities exhibit properties which are meaningful only when attributed to the whole, not to its parts" (Checkland 1999, p. 314). Emergence is the behavior of the system as a whole – its *potential* according to Aristotle.

The capability of flight is an emergent behavior for a bird as a holistically defined system. The emergent behaviors of a system are their "system properties" which Lenk and Stephan define as being possessed by a system but not by its individual constituent parts (Lenk and Stephan 2002, p. 21). Emergent properties can be defined as emergent if: "although it arises out of the properties and relations characterizing its simpler constituents, it is neither predictable from, nor reducible to, these lower-level characteristics" (Honderich 2005, p. 239). Systems are therefore not simply the structures which result from the relationships between a systems constituent elements but instead to the coupled processes that exist between the interaction of system elements. As a result, emergence is the behavior of system which is either novel and therefore unable to be predicted or instantiated but systemic and therefore difficult to be explained reductively.

A key concern regarding emergence for systems thinking is predictability. Systems thinking scholars have devoted given considerable attention to the analysis of emergence in terms of its predictability. Emergence is generally classified depending on its level of predictability; the more difficult a system behavior is to predict the stronger its emergence is considered to be. "Simple" emergence is the behavior evidenced by a designed system (controlled movement in the case of an automobile), "weak" emergence is

derived from the system structure but cannot be explained from its parts, and “unexpected” emergence is impossible to predict (consciousness as a behavior of the human brain, or the sudden failure of a complex system). Systems thinking theorists tend to focus on strong emergence, some such as Chroust refer to weaker forms of emergence as “system-level behavior” (Chroust 2002).

Unexpected emergence is usually associated with systemic failure and shock which has led some systems thinking theorists to construe the identification and prediction of negative impact and undesirable shocks to be one of the primary goals of systems thinking (Hitchins 2008). François has classified unpredictable emergence into two forms: (1) properties which could be predicted but are not due to lack of information and (2) properties which are “in and of themselves, not derivable a priori from the behavior of the parts of the system” (François 2004, p. 737). This unknowable character of complex systems is characteristic of the subject matter of the social sciences.

Systems Thinking Frameworks

Although there exists a basic language common to most systems thinking theorists, a large number of divergent models (frameworks) of system thinking have developed over time under the influence of both the issues and theories of their respective periods (Midgley and Lindhult 2017, p. 7). As the frameworks of each period gained ground and were applied in practice, both their achievements and shortcomings became the subject of study and critique and the material upon which new frameworks were developed. Several major studies have been undertaken to categorize the different frameworks of systems thinking approaches and trace their development. These studies include two exhaustive collections of original papers of key theorists compiled by Midgley (2003), François (2004) and several comprehensive analytical expositions by Jackson (2002, 2003).

The history of the development of the systems thinking approach is a move towards greater concern with holism and pluralism. Midgley has

classified the development of systems thinking over time in terms of three waves (Midgley 2006). Midgley traces the first wave to the 1930s with the development of general systems theory, cybernetics, and complexity theory (Midgley 2006, p. 13). The second wave is identified in the 1950s and 1960s with the development of soft systems models, while the third wave commences in the 1980s and is characterized by frameworks of critical systems thinking. Rather than representing three distinct chronological phases, these waves are better understood as a series of developments within the field as new frameworks were introduced. These waves also represent a series of paradigmatic shifts in the Kuhnian sense (Kuhn 2012) as new frameworks are developed to redress the perceived shortcomings of previous approaches.

First Wave: Hard Systems

The first wave is characterized by what is known as hard systems theory. The “hard” in hard systems refers to the assumption that systems have clearly identifiable goals and structured boundaries, thus making them hard in the sense that they are objective and grounded in reality. According to Reynolds and Holwell, systems thinking approaches can be divided into one of two categories: (1) those designed to facilitate *thinking about systems* as real-world ontological entities in contrast to (2) those designed to enable *systems thinking* as an epistemological construct (Reynolds and Holwell 2010, p. 17). The early hard forms of systems thinking fall into the former category due to their assumption that systems exist in the real world and need to be discovered and explained accurately and correctly.

Within the first wave the systems thinking approach was seen as a means to optimize system performance in pursuit of a set goal using engineering methods to optimize a solution. According to Jackson, hard systems theory:

offered managers and management scientists a means of seeking to optimize the performance of a system in pursuit of clearly identified goals. Emphasis is placed on the application of a systematic methodology that, having established objectives, is able to identify problems that stand in the way

of optimization and rectify them by employing scientific modelling, rational testing, implementation and evaluation processes. (Jackson 2003, p. 16)

Hard system approaches assume that irrespective of their complexity problems these can be understood as they exist in the real world and are amenable to solution by a process of system optimization. Representative models of this hard approach include general systems, cybernetics, systems dynamics, and viable systems modeling.

General systems theory as represented by the work of von Bertalanffy was of great importance in the development of the earliest systems thinking approach frameworks (von Bertalanffy 1968, 1972). Von Bertalanffy's contention was that examining the connectedness, context, and feedback between parts yields an understanding of the whole that could not be gained from only examining the constituent parts of a system (von Bertalanffy 1968). General systems theory therefore represents a rejection of reductionist forms of scientific inquiry and instead maintains that an understanding of the general rules by which phenomena in open systems are organized will yield a better explanation of their emergent behaviors and survivability within their environmental context. General systems theory emphasizes the understanding of the simple rules that underlie all systems and by which all systems can be understood. This approach contends that knowledge gained regarding one system should be applicable in order to promote understanding of other systems. Many of the concepts common to systems thinking approaches are derived from GST and include system boundaries, hierarchies and embeddedness, emergence, and system survivability.

The lesson of cybernetics is that causality is systemic in nature. According to Midgley the "basic idea in cybernetics is feedback" (Midgley 2006, p. 15). **Cybernetics** emphasizes the effect of feedback within systems. Feedback loops of negative and/or positive reinforcement are identified as shaping the performance of systems as they interact. The insight here is that the optimal effect of actions on subsystem levels may combine to create suboptimal effects on the larger system

level resulting in the situation known as system failure. According to Midgley, this insight "offers a methodology and model for evaluating organizational failures without simply attributing blame to a single individual" (Midgley 2006, p. 17).

Developed by Forrester in the 1960s, **systems dynamics** was developed to model dynamic systems behavior such as supply chains and demographics (Forrester 1961). Systems dynamics applies concepts from cybernetics to understand system behavior as environmentally contexted wholes. The systems dynamics model focuses on explaining the nonlinearity of complex situations over time in terms of feedback loops, stocks, and flows (Reynolds and Holwell 2010, p. 17). The systems dynamics approach later figured prominently in Senge's *Fifth Discipline* where its characteristic concepts of feedback and control were applied as the framework for systems thinking (Senge 1990).

One of the earliest specific applications of the hard systems approach to organizations was that of Beer's **viable system modeling** framework (Beer 1972), which compared actual with ideal models of organizations based upon cybernetic and systems theories in order to identify problems (Midgley and Lindhult 2017, p. 8). Viability for Beer was the ability of an organization to adapt in order to survive within a changing environment as an independent entity over time.

The hard system approaches of the 1950s and 1960s aimed to apply the methodology of operational research in order to bring objectivity to the analysis of human systems. This assumed that reality could be described objectively and represented in a manner which was both accurate and true. As a result, these approaches have been criticized for being unsuited for the analysis of human systems which are inherently subjective and the intersubjectivity that defines society. Specifically, critics of the first wave have argued that these shortcomings meant that hard systems approaches were: (1) unsuited to deal with complexity derived from differences among the beliefs and values of actors and the relationships of power between them (Jackson 2003, p. 16), (2) failed to recognize that the search for objectivity resulted in prioritizing the perspective of the

analyst over all other system actors in system modeling (Midgley and Lindhult 2017, p. 9), and (3) ill-equipped to understand the ongoing negotiation of meaning that defines reality for individuals in social systems due to the limitations of the feedback process models of systems engineering (Jackson 2003, p. 80).

Second Wave: Soft Systems

The second wave was marked by the development of soft systems models which were designed as frameworks for systems intervention and emerged in the 1970s and 1980s. The term “soft systems” was coined by Checkland who sought to differentiate between the first wave of approaches which assumed systems to be objectifiable, real-world entities from the newly developed approaches that took systems to be epistemological constructs (Checkland 1978).

Soft systems thinking approaches assumed that systems are social constructs and are therefore open and subjective rather than closed and objective as assumed during the first wave. The concern of soft systems thinking models was to make subjectivity central, replace the concern with defining immutable systems goals, and instead accommodate different and even conflicting world views. According to Midgley, the objective of soft systems models “shifted from being that of constructing systems to utilizing systems to promote understanding” (Midgley 2006, pp. 20–21).

For soft systems thinking theorists a system is comprised of multiple intersubjective relationships, the mapping of which is a means of promoting dialogue among actors with differing perspectives and enable the reframing of problematic situations from the perspective of multiple stakeholders, thus enhancing the potential for innovation (Ulrich 1983). The soft systems thinking theorists maintain that the complexity of social systems defies prediction and that the goal of system mapping should therefore be to emphasize systemic learning among stakeholders about possible courses of action (Sterman 1994). Correspondingly, rather than system boundaries as an indication of reality, Churchman – a leading figure in the second wave – saw boundaries as indicative of the limits of knowledge (Midgley 2006, p. 21).

The definition of system boundaries assumed particular importance in this period as the delimitation of systems came to be seen as an indicator of the limits of knowledge and participation as shown in the work of Ackoff (1981b). Incorporating a dimension of intersubjectivity gave new meaning to the importance of defining boundaries. According to Mele, Pels, and Polese, the “concept of a system is not connected with the notion of objectivity, but instead refers to a specific point of view and can vary from actor to actor; it strictly depends on the contextualized system’s perception in time and space” (Mele et al. 2010, pp. 129–130). Soft problems are problems which are defined differently in accordance with the perspective of the actor and are therefore difficult to define in a uniform manner.

Perspectives differ, they can shift over time, and a system thinker can in fact benefit from assessing situations from multiple and contrasting perspectives. For Churchman systems thinking was cyclical in nature – described as a never-ending process of perception and deception as the right questions by which to comprehend situations and their problems were sought only to find an answer, be deceived by it, and go on to seek a better question (Churchman 1968).

Holism under the second wave models was seen as the product of knowledge boundary expansion rather than just of a comprehensive depiction of a system’s characteristics. As explained by Midgley it meant “expanding the boundaries of our knowledge about whatever we are studying, together with the boundaries defining the set of people involved in generating that knowledge” (Midgley 2006, p. 22).

Soft systems thinking models are primarily concerned with framing problematic situations within their intersubjective and relative contexts. Soft system approaches tended, therefore, to eschew the definition of single problems for solution, and instead conceptualize problem situations from a variety of perspectives which should be managed by systemic interventions. Problem situations are analyzed with the objective of enabling the actors involved in the situation to assess it in an interactive and reflective manner in

order to plan for a systemic intervention to resolve (manage) it rather than simply solving it.

Known collectively as problem structuring methods (Mingers and Rosenhead 2004), these soft models share the characteristics of using systems thinking in order to guide the analysis of situations by including consideration of the values and interests of those involved and maintaining that contradictions in their respective mental models of reality must be included in problem situation analysis, considered when devising preferable futures, and accommodated in planned interventions. These problem structuring methods thereby aim at facilitating the process for framing the issues constituting a problem situation and actively accommodate plurality by focusing analysis to promote an understanding of a situation and develop an ideal future situation.

A large number of soft systems frameworks have been proposed. Representative methodologies include: soft systems methodology, strategic assumption surfacing and testing, and strategic options development and analysis.

Developed by Checkland (1981; Checkland and Scholes 1990), **soft systems methodology** is a method for system redesign wherein participants build ideal-type conceptual models in accordance with the worldview of each stakeholder group which are then used to compare perceptions of current situations in order to promote dialogue regarding what changes could be both acceptable in terms of interests and feasible in terms of their overall utility. The objective here was to enable stakeholders to actively consider the relative meaning of potential systemic interventions as part of the planning process.

Pioneered by Mason and Mitroff (1981), **strategic assumption surfacing and testing** is, as its name suggests, a method for identifying the assumptions that underlie a stakeholder's perception of problems and their possible solutions and discussing them in comparison with the assumptions and goals of other stakeholders. Using this method groups of stakeholders independently define unstructured problems and develop strategies for their resolution which they then compare and discuss with other groups in a process designed to reveal the key assumptions which

underlie both the perceptions of problems and proposed systemic interactions. Intersubjectivity is thereby made an explicit part of the process whereby problems are structured and analyzed rather than solved.

The **strategic options development and analysis** method created by Eden (1988, 1992; Eden et al. 1983) uses systems thinking to develop diagrams called "cognitive maps" which visualize the values, beliefs, and worldviews of stakeholders involved in a problematic situation. The cognitive maps produced by each stakeholder are then merged and used as the basis for discussing the goals, strategic directions, and potential options in planning for systemic interventions to resolve the situation.

The hard and soft approaches can be distinguished by their respective emphasis on defining as opposed to understanding systems, identifying problems as opposed to understanding problematic contexts, and posing solutions as opposed to reducing the discomfort of the situation (Flood and Carson 1993). Unlike the hard systems approach which assumes a knowable goal and structure, the soft approach presumes an unknown environment which requires the development and application of learning processes to promote understanding and generate knowledge to guide positive action.

Wave Three: Critical Systems

The third wave is characterized by the development of frameworks of critical systems thinking. The "critical" in CST has two meanings: critical regarding the assumptions of hard and soft approaches, and critical in its recognition of a dimension of power in systems.

Although they share the same epistemological orientation of the soft approaches, the critical systems thinking approach has been developed as a response to the problems perceived in both the hard and earlier soft approaches – that of inability to recognize imbalances in power among the constituents of a system and the limits that this places upon system definition and analysis in terms of knowledge and assumptions. Arguing that the conceptualization of participation emphasized in the second wave models lacked a consideration of

the effect of power and authority in shaping relationships and action, critical systems frameworks were designed to accommodate situations defined by asymmetrical power relationships and disenfranchisement.

Critical systems thinking is a humanized approach to system analysis that recognizes the existence and legitimacy of multiple perspectives and imbalances of power and their effect in producing and prolonging problems that otherwise resist solution. Systems under third wave frameworks are populated by stakeholders who, as the constituents of a situation, are defined by their own distinct identities, values, and interests – the expression and fulfillment of which becomes a key issue in conceptualizing phenomena and planning action.

Among the key models developed in this period are the critical systems heuristics framework of Ulrich (1983), and the systemic intervention framework of Midgley (1992).

Critical heuristics of social systems design as defined by Ulrich (1987) is concerned with a critique of “boundary judgments” that demark the system to be analyzed from its environment and the legitimation of the facts and values upon which this is based. Ulrich maintains that these boundary judgments are made in two ways: whole system judgments and justification break-offs. Whole system judgments are the “assumptions about what belongs to the section of the real world to be studied and improved and what falls outside the reach of this effort,” while justification break-offs are the “demarcation of the context of application that is to be relevant when it comes to justifying the normative implications of a design for those affected by its effects” (Ulrich 1987, p. 278). In this way Ulrich effectively calls for the conscious and critical recognition of, and reflection upon, the values which serve to legitimate the definition of situations and the proposals for action to address the problems perceived within them. Boundaries are therefore issues of motivation, power, knowledge, and legitimation within the critical heuristics approach to systems thinking (Ulrich 2000) – each of which require conscious and reflective assessment in order for situations to be analyzed and action planned

within contexts populated by stakeholders of different perspectives, interests, and power. The critical approach to systems thinking attempts to avoid dogmatism by recognizing the existence of multiple perspectives and interests which can be in conflict with and even irreconcilable with each other and thereby adopting a pluralist perspective beyond that of the second wave approaches.

Midgley proposed the **systemic intervention** model in order to make the examination of relationships of power a central feature of the analysis of problem situations. This emphasis on power relationships can be seen in the assumptions underlying the model. Midgley’s systemic intervention model is hinged upon the three key assumptions that: (1) everything is connected, (2) complex systems extend beyond the boundaries and values understandable from of any single perspective, and (3) that intervention in systems (by either action or inaction) is unavoidable. According to Midgley, boundaries are the most fundamental concept of systems (the most useful concept for attempts for reframing by planned action) under the systemic intervention model because: (1) human perception itself is based on framing (making distinctions between phenomena in process of cognition), and (2) awareness of phenomena (“perspectives, parts, wholes, interactions, and emergent properties”) is based upon and strongly influenced by pre-existing boundary judgments (Midgley and Lindhult 2017, p. 12).

Classifications of Systems Thinking Approaches

Several systems have been proposed for classifying models within the various approaches to ST. These classifications include Midgley’s three wave classification of hard, soft, and critical approaches as employed in this review of systems thinking models given above.

Building upon Midgley’s classification, Reynolds and Holwell have classified systems thinking models into three categories in accordance with their objectives as purposeful activity: (1) understanding complex situations by simplifying them

Systems Thinking, Table 1 Classifications of key models of systems thinking approaches

Dimensions		Representative models (theorists)
Midgley (2003)	Jackson (2001, 2003)	
Hard	Functionalist	von Bertalanffy (1968) General Systems Theory, Churchman (1968) Operations Research
Soft	Interpretivist	Checkland (1972) Soft Systems Methodology, Ackoff (1981b) Interactive Management
Critical	Emancipatory	Ulrich (1983) Critical Heuristics of Social Systems Design, Midgley (2000) Systemic intervention

Source: Adapted from Jackson (2001) and Jackson (2003)

in a meaningful way, (2) revealing differences in perspectives and interests within a situation, and (3) promote reflection on the relationships of power and definitions of boundaries within a system (Reynolds and Holwell 2010, p. 17).

Jackson and Keys have proposed a system of systems methodologies typology for classifying holistic approaches to systems thinking (Jackson and Keys 1984). The SOSM is a matrix comprised of two dimensions – systems and participants. Systems are divided into two groups – simple and complex. Simple systems are (1) relatively stable over time, (2) comprised of a limited number of subsystems which interact through structured interactions, and (3) little influenced by internal or environmental factors. Complex systems are on the opposite end of the spectrum and are characterized by: (1) a tendency to change and evolve as a result of (2) fluid interactions between their many constituent subsystems and (3) a tendency to be influenced by their parts and environments. The participants dimension is divided into three groups – unitary, pluralist, and coercive – each representing “relationships that can exist between those concerned with the problem context” (Jackson 2003, p. 19). Participants in a unitary relationship are defined by (1) shared values, interests, and purposes, and (2) are involved in decision-making processes for planning action. Participants in a pluralist relationship (1) share basic interests but not values, therefore (2) their goal setting and decision-making processes require “space” to facilitate discussion and debate in order to agree on objectives. Participants in a coercive relationship (1) subscribe to potentially conflicting beliefs and share neither values nor

interests and (2) in the absence of the possibility for compromise in setting objectives decisions are made upon the basis of power (Jackson 2003, p. 19).

As illustrated in Table 1, Jackson and Keys’ unitary, pluralist, and coercive definitions of participants could also be explained as functionalist, interpretivist, and emancipatory approaches to systems analysis and correlated with Midgley’s hard, soft, and critical classifications.

Models developed based upon systems thinking approaches for the analysis of complexity, nonlinearity, and unpredictability in the world have and continue to exert considerable influence on the way that social actors create and change their worldviews, examine their own and others’ understandings of the world, and define and realize their expectations for the future.

Cross-References

► [Business Ecosystems](#)

References

- Ackoff, R. L. (1971). Towards a system of systems concepts. *Management Science*, 17(11), 661–671.
- Ackoff, R. L. (1979). The future of operational research is past. *The Journal of the Operational Research Society*, 30(2), 93–104.
- Ackoff, R. L. (1981a). The art and science of mess management. *Interfaces*, 11(1), 20–26.
- Ackoff, R. L. (1981b). *Creating the corporate future*. New York: Wiley.
- Beer, S. (1972). *Brain of the firm*. New York: Wiley.

- Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, 57(3), 311–317.
- Blackmore, C. (2007). What kinds of knowledge, knowing and learning are required for addressing resource dilemmas? A theoretical overview. *Environmental Science & Policy*, 10(6), 512–525. <https://doi.org/10.1016/j.envsci.2007.02.007>.
- Boardman, J., & Sauser, B. (2008). *Systems thinking: Coping with 21st century problems*. Boca Raton: CRC Press.
- Bruni, R., Carrubbo, L., Cavacece, Y., & Sarno, D. (2018). An overview of the contribution of systems thinking within management and marketing. In S. Barile, M. Pellicano, & F. Polese (Eds.), *Social dynamics in a systems perspective* (pp. 241–259). Cham: Springer.
- Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. New York: Anchor Books Doubleday.
- Capra, F., & Luisi, P. L. (2014). *The systems view of life: A unifying vision*. Cambridge: Cambridge University Press.
- Checkland, P. B. (1972). Towards a systems-based methodology for real-world problem solving. *Journal of Systems Engineering*, 3(2), 87–116.
- Checkland, P. B. (1978). The origins and nature of 'hard' systems thinking. *Journal of Applied Systems Analysis*, 5(2), 99–110.
- Checkland, P. B. (1981). *Systems thinking, systems practice*. Chichester: Wiley.
- Checkland, P. B. (1999). *Systems thinking, systems practice*. New York: Wiley.
- Checkland, P. B., & Scholes, R. J. (1990). *Soft systems methodology in action*. Chichester: Wiley.
- Chroust, G. (2002). Emergent properties in software systems. In C. Hofer & G. Chroust (Eds.), *IDIMT-2002, 10th interdisciplinary information management talks* (pp. 277–289). Zadorf: Verlag Trauner.
- Churchman, C. W. (1967). Guest editorial: Wicked problems. *Management Science*, 14(4), B141–B142.
- Churchman, C. W. (1968). *The systems approach*. New York: Dell Publishing Company.
- Eden, C. (1988). Cognitive mapping. *European Journal of Operational Research*, 36(1), 1–13.
- Eden, C. (1992). On the nature of cognitive maps. *Journal of Management Studies*, 29(3), 261–265.
- Eden, C., Jones, S., & Sims, D. (1983). *Messing about in problems: An informal structured approach to their identification and management*. Oxford: Pergamon Press.
- Flood, R. L., & Carson, E. R. (1993). *Dealing with complexity: An introduction to the theory and application of systems science*. New York: Springer Science+Business Media, LLC.
- Forrester, J. W. (1961). *Industrial dynamics*. Cambridge, MA: Wright-Allen Press.
- François, C. (2004). *International encyclopedia of systems and cybernetics*. Berlin: De Gruyter Saur.
- Gharajedaghi, J. (2011). *Systems thinking: Managing Chaos and complexity: A platform for designing business architecture*. Boston: Elsevier.
- Hitchins, D. K. (2008). *Systems engineering: A 21st century systems methodology*. Chichester: Wiley.
- Honderich, T. (Ed.). (2005). *The Oxford companion to philosophy* (2nd ed.). Oxford: Oxford University Press.
- Jackson, M. C. (2001). Critical systems thinking and practice. *European Journal of Operational Research*, 128, 233–244.
- Jackson, M. C. (2002). *Systems approaches to management*. New York: Kluwer Academic Publishers.
- Jackson, M. C. (2003). *Systems thinking: Creative holism for managers*. Chichester: Wiley.
- Jackson, M. C., & Keys, P. (1984). Towards a system of systems methodology. *The Journal of the Operational Research Society*, 35(6), 473–486.
- Kuhn, T. S. (2012). *The structure of scientific revolutions: 50th anniversary edition*. Chicago: University of Chicago Press.
- Lenk, H., & Stephan, A. (2002). Levels and types of complexity and emergence. In E. Agazzi & L. Montecucco (Eds.), *Complexity and emergence: Proceedings of the annual meeting of the international academy of the philosophy of science* (pp. 13–28). Singapore: World Scientific.
- Mason, R. O., & Mitroff, I. I. (1981). *Challenging strategic planning assumptions*. New York: Wiley.
- Mayhew, R. (1997). Part and whole in Aristotle's political philosophy. *The Journal of Ethics*, 1, 325–340.
- Mele, C., Pels, J., & Polese, F. (2010). A brief review of systems theories and their managerial applications. *Service Science*, 2(1/2), 126–135.
- Midgley, G. (1992). The sacred and profane in critical systems thinking. *Systems Practice*, 5(1), 5–16.
- Midgley, G. (2000). *Systemic intervention: Philosophy, methodology and practice*. New York: Kluwer/Plenum.
- Midgley, G. (Ed.). (2003). *Systems thinking*. London: SAGE.
- Midgley, G. (2006). Systems thinking for evaluation. In B. Williams & I. Imam (Eds.), *Systems concepts in evaluation: An expert anthology* (pp. 11–34). Point Reyes: Edge Press.
- Midgley, G., & Lindhult, E. (2017). *What is systemic innovation?* Hull: Centre for Systems Studies, Business School, University of Hull.
- Mingers, J., & Rosenhead, J. (2004). Problem structuring methods in action. *European Journal of Operational Research*, 152(3), 530–554. [https://doi.org/10.1016/s0377-2217\(03\)00056-0](https://doi.org/10.1016/s0377-2217(03)00056-0).
- Reynolds, M., & Holwell, S. (2010). Introducing systems approaches. In M. Reynolds & S. Holwell (Eds.), *Systems approaches to managing change: A practical guide* (pp. 1–23). London: Springer.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155–169.
- Senge, P. M. (1990). *The fifth discipline: The art & Practice of the learning organization*. New York: Currency Doubleday.

- Simon, H. A. (1962). The architecture of complexity. *Proceedings of the American Philosophical Society*, 106(6), 457–476.
- Sterman, J. D. (1994). Learning in and about complex systems. *System Dynamics Review*, 10(2–3), 291–330.
- Ulrich, W. (1983). *Critical heuristics of social planning: A new approach to practical philosophy*. Chichester: Wiley.
- Ulrich, W. (1987). Critical heuristics of social systems design. *European Journal of Operational Research*, 31(3), 276–283.
- Ulrich, W. (2000). Reflective practice in the civil society: The contribution of critically systemic thinking. *Reflective Practice*, 1(2), 247–268.
- von Bertalanffy, L. (1933). *Modern theories of development: An introduction to theoretical biology*. London: Oxford University Press.
- von Bertalanffy, L. (1968). *General system theory: Foundations, development, applications*. New York: George Braziller.
- von Bertalanffy, L. (1972). The history and status of general systems theory. *The Academy of Management Journal*, 15(4), 407–426.

Take of Decisions

► [Management](#)

Takeover

► [Hostile Takeover](#)

Tall Building Sustainability

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Synonyms

[High-rise](#); [Skyscraper](#); [Tower building](#)

Description

The term tall building is relative and has different meanings in different contexts and at different times. A 30-story building may not be considered tall in Hong Kong or New York City today. But in a relatively small city such as Champaign, Illinois, it will be considered tall. On the other hand, while a 30-story building may not stand out as tall in

New York City now, in the early 1900s it would have received considerable attention as a tall building.

There is no universal definition for what is considered a tall building. However, the Council on Tall Buildings and Urban Habitat (CTBUH, [2023a](#)) defines supertall buildings as those with heights of 300 m (984 feet) or taller and megatall as those having heights of 600 m (1968 feet) or more.

Sustainable design of tall buildings (Oldfield, [2019](#)), particularly supertall and megatall buildings, is key in today's urban density (Güller & Tokuç, [2020](#)) and sustainable development (Jeronen, [2020](#); Krannich & Reiser, [2021](#)). Due to their large scale, construction and operation of tall buildings play a significant role in sustainable development.

Urbanization and the Need for Tall Buildings

The World Bank ([2023a](#)) estimates that about 56% of the world's population lived in urban areas in 2021. That is up by 9% compared to 20 years earlier. The percentage of urban population varies from continent to continent (World Bank, [2023b](#)). The Americas, Greenland, and Australia have high urban populations with over 80% of their residents living in urban areas. The United States is at about 83%; Canada at about 82%; Mexico at about 81%; and Argentina at

about 92%. Much of Africa has the lowest percentages with urban populations of about 20%, 30%, and 40% with some exception such as Libya at about 80%. Asia and Asia Pacific have a mix of urban population rates ranging from about 26% (Afghanistan) to Islamic Republic of Iran at 76% and Singapore at 100%. Europe also has a mix of urban population rates ranging from about 50% (e.g., Romania) to 100% (e.g., Monaco).

The trend worldwide is, however, that the rate of urbanization is higher than the rate of population growth. In 2021, the rate of global population growth was 0.9% (World Bank, 2023c) while the rate of urbanization over the same year was 1.6% (World Bank, 2023d). With the world population having been 7.89 billion in 2021 (World Bank, 2023e), this represents a global migration rate of 10.5 million per month from suburban to urban areas. For context, according to the United States Census Bureau (United States Census Bureau, n.d.), the population of New York City in July of 2021 was about 8.47 million. This global migrating to urban areas is equivalent to the birth of 1.24 New York cities per month!

People move to urban areas for a variety of reasons with the most obvious ones being career opportunities (Fig. 1) and lifestyle changes (Fig. 2). In doing so, they need places to live and to work (Johnson, 2017; Kahraman, 2020; Zhongjie & Gamez, 1998).

A particular trend observed among the urban migrants is young people seeking a lifestyle that allows them to live near their work (Fig. 3). A group referred to as Double Income No Children (DINC) comprises a considerable portion of the urban dwellers.

Another obvious group of urban migrants are empty nesters – middle-aged or older people who have no children living with them anymore and seek the advantages of living in apartments or condominiums in dense city centers. For them, the benefits are worry-free residences, and the advantage of shopping, restaurants, and places of entertainment that are either within walking distance or a short taxi ride away.

To accommodate the increase of their urban population, some cities such as Melbourne, Australia, have room to expand their geographic



Tall Building Sustainability, Fig. 1 Urban areas provide improved career opportunities for many. (Photo: A. Aminmansour)

Tall Building Sustainability,

Fig. 2 London street with public transportation. (Photo: Adobe Stock)



Tall Building Sustainability,

Fig. 3 Young shopper in an urban shop. (Photo: Adobe Stock)



extent (Fig. 4). However, big cities that do not have room to grow such as Hong Kong (Fig. 5) have no option but to build vertical. According to the SkyscraperCenter web site maintained by the Council on Tall Buildings and Urban Habitat (CTBUH), Hong Kong has 553 buildings at 150 m or taller; 98 buildings at 200 m or taller; and 6 buildings at 300 m or taller, making it the number one global city with the greatest number of buildings at 150 m or taller (CTBUH, 2023b).

New York has had to develop unusually slender tall buildings such as those in what is called

the Billionaires-row (Fig. 6) due to lack of land. There have even been cases when developers obtained what is known as the excess development rights from other buildings to build taller on their own site.

Developers in some cities with very little to no land to develop have had to resort to building on sites with significant constraints. An example is 150 North Riverside in Chicago which was built on top of Amtrak railroad tracks and adjacent to the river (Fig. 7). The land was partially owned by Amtrak National Railroad Passenger Corporation,



Tall Building Sustainability, Fig. 4 Vast suburb of Melbourne. (Photo: Adobe Stock)



Tall Building Sustainability, Fig. 5 Hong Kong bounded by mountains and water. (Photo: Adobe Stock)

partially by the City of Chicago, and partially by a private owner. Further, construction had to take place without disrupting railroad traffic and there were very few specific locations where foundations could be placed in between rail tracks. The design and construction of the tower presented some serious challenges for the design team.

There have been even entire large metropolitan areas born at a miraculous speed to accommodate the need for new urban areas. According to encyclopedia Britannica (Britannica, The Editors of Encyclopedia, 2023), Shenzhen, China, was a rural port city of about 30,000 inhabitants in 1979. Beginning with 1980, the city began a very rapid growth known in China as the

“Shenzhen speed” with large domestic and foreign investments. Today, Shenzhen is one of the world’s most significant centers of technology and commerce (Fig. 8) with a population of about 17.6 million.

Astonishingly, with just over 40 years of age in its modern form, Shenzhen has one of the highest population densities in the world with about 8600 people per kilometer square (CTBUH, 2023b) with 366 buildings at 150 m or taller; 130 buildings at 200 m or taller; and 16 buildings at 300 m or taller, making it the city with the second largest number of buildings at 150 m or taller. Shenzhen is part of Pearl River Delta, the largest megacity in the world which among others includes Hong



Tall Building Sustainability, Fig. 6 Very slender tall buildings, New York. (Photo: Adobe Stock)



Tall Building Sustainability, Fig. 7 150 North Riverside built on top of railroads, Chicago. (Photo: N. Olivieri)



Tall Building Sustainability, Fig. 8 Skyline of Shenzhen, China, about 40 years after its initial modern development. (Photo: Adobe Stock)

Kong, Macau, Guangzhou, and Dongguan with a population of about 65 million and about 250 buildings at 200 m or taller.

The bottom line is, with the high rate of migration to major cities around the world, tall buildings have become an essential building form and part of today's contemporary landscape. Development of tall buildings has seen considerable growth of 8% each year since 1950 (MIT Technology Review, 2018). This growth has been higher in certain parts of the world such as parts of Asia including Western Asia (also known as Middle East) (CTBUH, 2023b). Interestingly, the high rate of development of tall buildings cannot be solely attributed to the increasing urbanization. There appears to be a rush to build tall, not just based on need, but based on other factors as well. They include the personality characteristics of some developers who want to build taller than the competition, and occupants who want to have a condominium

or office address in a supertall building and are willing to pay to achieve their goal.

Are Tall Buildings Sustainable?

Being tall (Fig. 9) comes at a premium. The taller you go, the higher the premium (Aminmansour, 2009).

Tall buildings are susceptible to lateral loads, force in the horizontal direction such as wind and earthquake forces. Lateral loads cause tall buildings to bend and sway. While excessive movement does not necessarily pose a structural safety concern, it may make the building's occupants feel sick or uncomfortable and may damage building components such as walls, partitions, doors, windows, pipes, elevator shafts, and so on. Therefore, tall buildings need to be made stiff enough to control their movement to an acceptable level. The structural system that

Tall Building Sustainability,

Fig. 9 Shanghai World Financial Center, Jin Mao tower, and Shanghai tower. (Photo: Adobe Stock)



provides this stiffness for tall buildings is called the lateral load resisting system.

Lateral load resisting systems of tall buildings require additional material, well beyond what is required to support the weight of the building and its contents, also known as the gravity load resisting system. In other words, tall buildings require a higher rate of structural material per unit floor area than shorter buildings with the same total floor area. This increase in material use is referred to as the premium for height.

Information developed by the late legendary structural engineer Fazlur Rahman Khan (Khan, 2004) illustrates the premium for height. Per Khan, a 30-story building with a steel frame requires about 10 pounds per square foot of steel (48.8 kilograms per square meter) for its gravity load resisting system and an additional three pounds per square foot (14.6 kilograms per square meter) for its lateral load resisting system. The premium for height for this 30-story building is 30% additional steel over what is needed for its gravity load resisting system. Now consider a 100-story steel framed building. This building would require about 25 pounds per square foot (122 kilograms per square meter) of structural steel for its gravity load resisting system and an additional 65 pounds per square foot (317 kilograms per square meter) of structural steel for its lateral load resisting system. The premium for

height of a 100-story building is 260% as opposed to 30% for a 30-story building. In other words, the 100-story building, which is 3.33 times taller than a 30-story building, pays a premium for height of almost nine times as much!

There are ways to minimize the premium for height such as selecting the most appropriate structural system for a particular tall building depending on its height and material (e.g., steel or concrete). Ali and Moon (2007) offer a comprehensive coverage of proper selection of the most appropriate structural system for tall buildings. Many of today's tall buildings utilize concrete as their structural material partly because concrete provides a better stiffness for the building. However, concrete includes cement which is widely believed to generate as high as about 7% of total global CO₂ emissions (EPA, 2021). Though there have been advances in at least partially using other materials to replace cement (e.g., fly ash), there is still a significant carbon footprint associated with construction of tall concrete buildings.

Delivering material to high height during construction of tall buildings requires special equipment and consumes more energy than construction of buildings that are not as tall. Further, during the life of the building, water and conditioned air need to be delivered to high heights, consuming more energy and increasing the carbon footprint of the building.

From energy consumption point of view, typically modern tall buildings have large amounts of glass in their exterior walls (Fig. 10). While glass technology has improved over the years, it is still not the most efficient insulation material in terms of heat gain and heat loss, adding to higher demand for conditioned air for the extraordinarily large volume of the building over its life. In addition, at times tall buildings have higher floor-to-ceiling heights to make spaces feel larger and for penetrating more natural light deeper in the interior spaces of the building. This feature not only increases the amount of glass used, but it also increases the volume of the building that needs to be conditioned during the life of the building.

The core of a tall building which houses the elevator shafts, safe egress, and building services such as the mechanical, electrical, and plumbing components takes up floor space, on every floor, reducing the efficiency of the floors and adversely

affecting the sustainability of tall buildings. It is not uncommon for floors of a tall building to lose somewhere around 15%, 20%, even 30% of their floor area to the building core (Firehouse, 2004). Additionally, elevators consume a considerable amount of energy, in the range of up to about 10% of the building's total energy consumption during its life (GTM, 2020) and again adversely affecting their sustainability. New technologies are on the horizon that would help with more efficient design of elevators including magnetic elevator cabs that can not only move vertically but can move horizontally on certain floors as well allowing sharing of the same shaft with more than one elevator cab.

Tall buildings are built as if they are permanent fixtures on the face of the earth with no regard for their end of life. The fact is that they have a useful and economical life span. A tall building may be renovated and repurposed up to a point. But at some point, it needs to be deconstructed. This phase will have a considerable environmental effect, but regrettably, it appears that not many consider this factor in the development of tall buildings. Life Cycle Assessment (LCA) and sustainability of tall buildings must consider deconstruction at the end of the building's life including disposal of building material. This is another area where tall buildings do not fare well.

Tall buildings are typically designed by the best in their profession and are as efficient and economical as they can be (Aminmansour, 2009; Aminmansour & Moon, 2010). However, they are not as "sustainable" as buildings that are not tall but have the same total floor area. But, as will be discussed in the next section, tall buildings have a significant sustainability impact in their home communities.

Sustainability Impact of Tall Buildings

Tall buildings have several characteristics that lead to significant positive environmental impacts. They provide space for people to live and to work in dense urban areas. Well-designed urban density offers considerable positive



Tall Building Sustainability, Fig. 10 Toronto Dominion Centre, Toronto. (Photo: A. Aminmansour)



Tall Building Sustainability, Fig. 11 Aqua Tower, Chicago. (Photo: A. Aminmansour)

environmental benefits as follows. Consider, for example, the Aqua Tower in Chicago (Fig. 11). According to Emporis which recognized the building as the Skyscraper of the Year in 2009, the 86-story, 262-meter-tall building offers 736 residential units including 262 condominium units in the upper levels and 474 rental units in the midlevels in addition to 55,000 square feet of commercial office space at the first and second floors (Emporis, 2023). If the 736 residential units alone were disbursed on the outskirts of the city, they would take up a significant amount of land – very likely agricultural land – which would amount to hundreds of times the area of land the tower sits on (Fig. 12). In addition to the land they occupy, these residences would require water, electricity, gas, sewage, and other services that would have a significant negative environmental

impact to build and to maintain due to their distance and distributed spread (Du & Wood, 2017).

Inhabitants of suburban residential units would require a substantial road and bridge system that needs to be constructed and maintained regularly to provide access to their places of work. Each resident will likely spend hundreds of hours commuting to and from work each year and cause vehicular wear and tear, fuel consumption, and fume generation (Fig. 13).

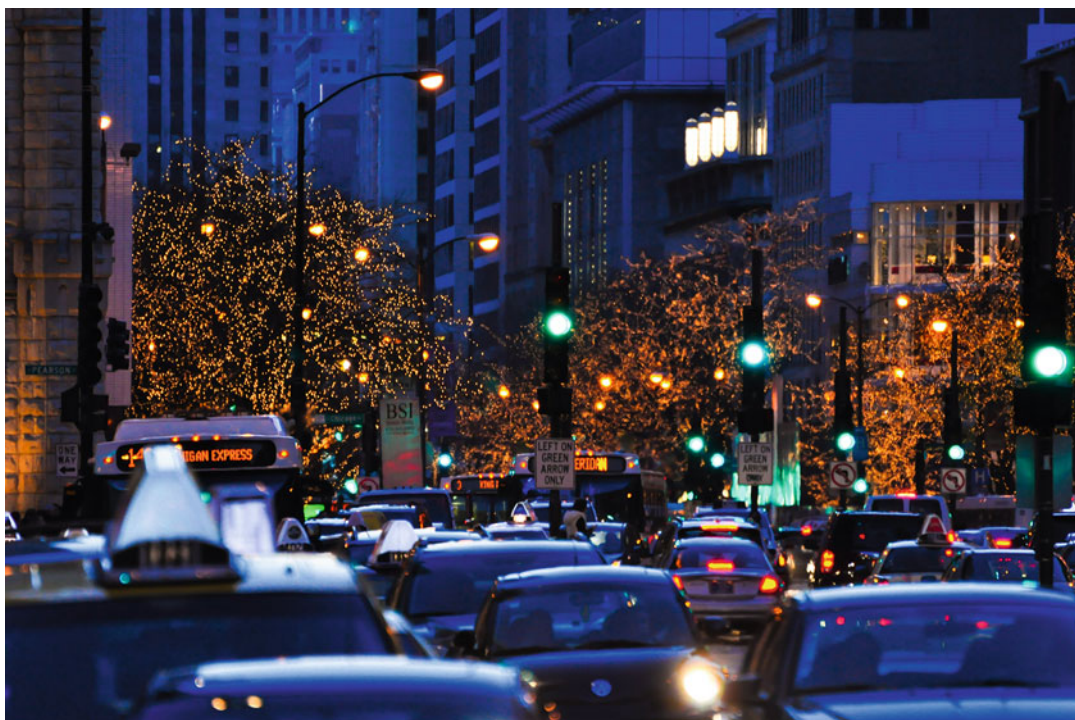
In addition, because of their significantly large scale, tall buildings offer substantial opportunities for environmental impact. For example, imagine a tall building which renovates its lighting system, one of the major sources of energy consumption during the operational life of the building, by switching to low energy-consuming or occupant-sensing lighting system. Even a 10% decrease in energy consumption of the building would amount to a very large amount. Or consider mail and package delivery to a tall building for all its occupants versus delivering them to hundreds of locations in the suburbs.

Cities with skylines including tall buildings are perceived as forward-looking, visionary, and financially prosperous. Indeed, many such cities are centers of regional and global commerce and have very strong tourism industries (Fig. 14). Tall buildings have proven to be magnets for new developments, bringing in more businesses and helping the local economy. For example, at the time when Willis Tower (formerly Sears Tower) was constructed in Chicago, the area was underdeveloped. Now, the area is significantly developed and highly sought after by businesses and residents, making it one of the most expensive areas in the city. Furthermore, after completion, some tall buildings end up in the portfolios of investment and insurance companies, providing economic benefits for more than the developer.

Assessing tall buildings' sustainability using the same metrics as those used for low rise buildings is misguided. We need a much more holistic evaluation of tall buildings' sustainability which includes other factors outlined above, among others.



Tall Building Sustainability, Fig. 12 Land usage for residences in city suburbs. (Photo: Adobe Stock)



Tall Building Sustainability, Fig. 13 Chicago street during evening rush hour. (Photo: Adobe Stock)



Tall Building Sustainability, Fig. 14 Skyline of Singapore, a major center of global finance and tourism. (Photo: Adobe Stock)

Summary

Tall buildings are clearly an essential form of building topology as vertical urbanism through density is viewed as a more and more viable solution that offers places for people to live and to work. They provide a lifestyle desired by considerable sectors of society and usually come with spectacular views, attract more businesses, and help the tourism industry among other benefits.

Tall buildings are intrinsically not “sustainable” if assessed based on the criteria used for low-rise buildings. On a per unit floor area (e.g., per square meter), tall buildings consume a larger amount of construction material, have a higher rate of energy consumption, and are less economical to design and build than their shorter counterparts with the same total floor area. However, a holistic study of the characteristics of tall buildings shows that they do indeed have a significant

sustainability impact in their home community. Unlike low rise buildings, the sustainability impact of tall buildings reaches far beyond their physical boundaries.

Cross-References

- ▶ [Carbon Emissions](#)
- ▶ [Carbon Footprint](#)
- ▶ [Life Cycle Assessment](#)
- ▶ [Lifestyle](#)
- ▶ [Sustainability](#)
- ▶ [Sustainable Development](#)

References

- Ali, M. M., & Moon, K. S. (2007). Structural developments in tall buildings: Current trends and future prospects. *Architectural Science Review*, 50(3), 205–223.

- Aminmansour, A. (2009). Considerations for Design and Construction of Tall Buildings, North American Steel Construction Conference, NASCC: The Steel Conference, Phoenix, Arizona, USA, April 1–4, 2009. The American Institute of Steel Construction. https://cloud.aisc.org/nascc/2009/videos/NASCC2009_P1.mp4.
- Aminmansour, A., & Moon, K. S. (2010). Integrated design and construction of tall buildings. *Journal of Architectural Engineering*, 16(2), 47–53. [https://doi.org/10.1061/\(ASCE\)1076-0431\(2010\)16:2\(47\)](https://doi.org/10.1061/(ASCE)1076-0431(2010)16:2(47)).
- Britannica, The Editors of Encyclopedia Britannica. (2023, January 16). Shenzhen, China. Encyclopedia Britannica, <https://www.britannica.com/place/Shenzhen>. Accessed 25 Feb 2023.
- CTBUH (Council on Tall Buildings and Urban Habitat). (2023a). *Tall Building Criteria*. <https://www.ctbuh.org/resource/height>. Accessed 21 Mar 2023.
- CTBUH (Council on Tall Buildings and Urban Habitat). (2023b). Cities. <https://www.skyscrapercenter.com/cities>. Accessed 21 Mar 2023.
- Du, P., & Wood, A. (2017). *Downtown high-rise vs. suburban low-rise living*. Council on Tall Buildings and Urban Habitat (CTBUH).
- Emporis. (2023). Buildings, Aqua. <https://web.archive.org/web/20150322001849/http://www.emporis.com/buildings/190323/aqua-chicago-il-usa>. Accessed 25 Feb 2023.
- EPA (United States Environmental Protection Agency). (2021). U.S. Cement Industry Carbon Intensities (2019). <https://www.epa.gov/system/files/documents/2021-10/cement-carbon-intensities-fact-sheet.pdf>. Accessed 25 Feb 2023.
- Firehouse. (2004). *Operations + training: Understanding the core*. <https://www.firehouse.com/operations-training/article/10513539/understanding-the-core>. Accessed 12 Mar 2023.
- GTM (Green Tech Media). (2020). *Getting building height right for the climate*. <https://www.greentechmedia.com/articles/read/getting-building-height-right-for-the-climate#:~:text=Lifting%20people%2C%20air%20and%20water%2C%20and%20windows%20that,percent%20of%20energy%20use%2C%20AS%202B%20GG%20found>. Accessed 12 Mar 2023.
- Güller, E., & Tokuç, A. (2020). Sustainable development planning. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-030-02006-4_190-1. Accessed 12 Mar 2023.
- Jeronen, E. (2020). Sustainable Development. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-030-02006-4_193-1. Accessed 12 Mar 2023.
- Johnson, S. (2017). *Essays on the tall building and the City*. South Korea: Navigator Cross-Media Publishing.
- Kahraman, S. (2020). Sustainable development goals (SDGs). In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-030-02006-4_1043-1. Accessed 12 Mar 2023.
- Khan, Y. S. (2004). *Engineering architecture: The vision of Fazlur R. Khan*. New York: W. W. Norton.
- Krannich, A., & Reiser, D. (2021). The United Nations sustainable development goals 2030. In S. Idowu, R. Schmidpeter, N. Capaldi, L. Zu, M. Del Baldo, & R. Abreu (Eds.), *Encyclopedia of sustainable management*. Cham: Springer. https://doi.org/10.1007/978-3-030-02006-4_178-1. Accessed 12 Mar 2023.
- MIT Technology Review. (2018). *Get ready for more and taller skyscrapers*. <https://www.technologyreview.com/2018/08/20/2343/get-ready-for-more-and-taller-skyscrapers/>. Accessed 12 Mar 2023.
- Oldfield, P. (2019). *The sustainable tall building: A design primer*. New York: Routledge.
- United States Census Bureau. (n.d.). *Quick facts*. <https://www.census.gov/quickfacts/fact/table/newyorkcitynewyork/PST045221>. Accessed 25 Feb 2023.
- World Bank. (2023a). *Urban population (% of total population)*. <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?end=2021&start=1960&view=chart>. Accessed 25 Feb 2023.
- World Bank. (2023b). *Urban population (% of total population)*. <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?end=2021&start=1960&view=map>. Accessed 25 Feb 2023.
- World Bank. (2023c). *Population growth (annual %)*. <https://data.worldbank.org/indicator/SP.POP.GROW?end=2021&start=1961&view=chart>. Accessed 25 Feb 2023.
- World Bank. (2023d). *Urban population growth (annual %)*. <https://data.worldbank.org/indicator/SP.URB.GROW?end=2021&start=1961&view=chart>. Accessed 25 Feb 2023.
- World Bank. (2023e). *Population, total*. <https://data.worldbank.org/indicator/SP.POP.TOTL?end=2021&start=2021>. Accessed 25 Feb 2023.
- Zhongjie, L., & Gamez, L. (1998). *Vertical urbanism: Designing compact cities in China*. London and New York: Routledge Taylor & Francis Group.

Tangible Leisure Attainment

► Consumerism

Tap Water

► Water

Tax

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Definition

A tax (from the Latin *taxo*) is a compulsory financial charge or some other type of levy imposed upon a taxpayer (an individual or other legal entity) by a governmental organization in order to fund various public expenditures (McLure 1970). A failure to pay, along with evasion of or resistance to taxation, is punishable by law. Taxes consist of direct or indirect taxes and may be paid in money or as its labor equivalent.

Legal Definition

The legal definition and the economic definition of taxes differ in some ways such as economists do not regard many transfers to governments as taxes. For example, some transfers to the public sector are comparable to prices. Examples include tuition at public universities and fees for utilities provided by local governments. Governments also obtain resources by “creating” money and coins (e.g., by printing bills and by minting coins), through voluntary gifts (e.g., contributions to public universities and museums), by imposing penalties (such as traffic fines), by borrowing, and also by confiscating wealth. From the view of economists, a tax is a nonpenal, yet compulsory transfer of resources from the private to the public sector, levied on a basis of predetermined criteria and without reference to specific benefit received.

Economic Definition

In economic terms, taxation transfers wealth from households or businesses to the government of a

nation. Adam Smith writes in *The Wealth of Nations* that:

...the economic incomes of private people are of three main types: rent, profit and wages. Ordinary taxpayers will ultimately pay their taxes from at least one of these revenue sources. The government may intend that a particular tax should fall exclusively on rent, profit, or wages – and that another tax should fall on all three private income sources jointly. However, many taxes will inevitably fall on resources and persons very different from those intended ... Good taxes meet four major criteria. They are (1) proportionate to incomes or abilities to pay (2) certain rather than arbitrary (3) payable at times and in ways convenient to the taxpayers and (4) cheap to administer and collect. (Smith 2015, p. 429)

In modern taxation systems, governments levy taxes in money; but in-kind and *corvée* taxation are characteristic of traditional or pre-capitalist states and their functional equivalents. The method of taxation and the government expenditure of taxes raised are often highly debated in politics and economics. Tax collection is performed by a government agency such as the Ghana Revenue Authority, Canada Revenue Agency, Internal Revenue Service (IRS) in the United States, Her Majesty’s Revenue and Customs (HMRC) in the United Kingdom, or Federal Tax Service in Russia. When taxes are not fully paid, the state may impose civil penalties (such as fines or forfeiture) or criminal penalties (such as incarceration) on the non-paying entity or individual.

Most countries have a tax system in place to pay for public, common, or agreed national needs and government functions. Some levy a flat percentage rate of taxation on personal annual income, but most scale taxes are based on annual income amounts. Most countries charge a tax both on corporate income and dividends. Countries or subunits often also impose wealth taxes, property taxes, sales taxes, value-added taxes, payroll taxes, or tariffs. In the OECD classification, the term “taxes” is confined to compulsory, unrequited payments to general government. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments.

For different taxes by country, see tax rates around the world.

Taxes generally fall into the following non-exhaustive list:

1. Income tax (Aaron 1976). *Income tax usually may include:*
 - Capital gains tax (tax on the sale of an investment, usually stocks, bonds, precious metals and property).
 - Corporate tax (levied on the earnings or profits of a corporation).
 - Dividend tax (tax on dividends paid to shareholders of a company).
 - Excess profits tax (tax on unusually high profits levied on a corporation). This was largely levied in the United States in times of war to prevent war profiteering but has been proposed at other times.
 - Flat tax (income tax where everyone pays the same tax rate).
 - Gift tax (tax on gifts given (generally paid by the person making the gift, not by the recipient).
 - Gross receipts tax (tax on revenues received by a corporation, even if they don't profit).
 - Hall–Rabushka flat tax (a particular flat tax on income that excludes investments).
 - Inheritance tax (tax paid on money gained through inheritance).
 - Negative income tax (income tax where the poor receive payment from the government, instead of owing taxes).
 - Windfall profits tax (tax on profits gained by a company that has some kind of large unexpected profit).
2. Payroll tax
3. Property tax
4. Consumption tax
5. Tariff (taxes on international trade)
6. Capitation (a fixed tax charged per person)
7. Fees and tolls
8. Effective taxes (government policies that aren't explicitly taxes, but result in income to the government through losses to the public).

A comparison of tax rates by countries is very difficult and somewhat subjective, as tax

laws in most countries are extremely complex and the tax burden falls differently on different groups in each country and sub-national unit. The list focuses on the main indicative types of taxes: corporate tax, individual income tax, and sales tax, including VAT and GST (see *Economic Data and Statistics on World Economy and Economic Freedom*. www.heritage.org)

Low Tax Countries

The following are not tax-free countries, but they tax their residents on a territorial basis and, to the best of our research, don't have CFC laws. This essentially means that these countries tax only the income earned from activity within their borders, not overseas income. However, one would need to take precautions when remitting money, as it may be treated differently if it is held within a controlled foreign corporation that if it is brought in personally for use in the country.

The bottom line is that these jurisdictions have very favorable tax treatments, but if you are a legal resident there, you should make sure that any income you remit into the country isn't taxable as local-sourced income. Also, you should always consult a tax adviser.

- Anguilla
- Belize
- Costa Rica
- Georgia
- Gibraltar
- Guatemala
- Hong Kong
- Macau
- Malaysia
- Malta
- Nicaragua
- Panama
- Paraguay
- Qatar
- Singapore
- Thailand
- Uruguay

Tax-Free Countries

- The Bahamas. The Bahamas imposes no income tax on its residents and receives most of its revenue from tourism and its robust off-shore industry.
- The British Virgin Islands.
- Brunei.
- The Cayman Islands.
- Monaco.
- Oman.
- Turks and Caicos.
- The United Arab Emirates. The United Arab Emirates does not levy personal income and corporate taxes (except some economic activities such as oil, gas, and financial services). You can easily get a residency visa by setting up a 100% foreign-owned company in one of its more than 40 free trade areas. In addition, it is possible to set up an offshore company in the emirates of Dubai, Ajman, and Ras Al Khaimah. With a Dubai's offshore company, you can even own real estate in certain Dubai's development projects.
- Vanuatu.

References

- Aaron, H. (1976). Inflation and the income tax. *The American Economic Review*, 66(2), 193–199. Papers and proceedings of the eighty-eighth annual meeting of the American Economic Association (May, 1976).
- Economic Data and Statistics on World Economy and Economic Freedom. www.heritage.org.
- McLure, C. E., Jr. (1970). Taxation, substitution, and industrial location. *Journal of Political Economy*, 78(1), 121–132. <http://www.journals.uchicago.edu>.
- Smith, A. (2015). *The wealth of nations: A translation into modern English* (pp. 423–429). Manchester: Industrial Systems Research. ISBN 978-0-906321-70-6.

Tax Awareness

- [Tax Citizenship](#)

Tax Benefits in Brazil

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Synonyms

[Investment allowances](#); [Tax breaks](#); [Tax credits](#); [Tax holidays](#); [Tax incentives](#); [Tax relief](#); [Tax savings](#)

Definition/Description

The authors agree with Sanchez-Ugarte (1995) that tax benefits are forms of tax incentives or subsidies and may be defined as a reduction in either the tax rate, the tax base, or the tax liability, which is granted if a specified action is taken by the selected beneficiary/taxpayer selected on the basis of qualifications. They can be grouped into several categories, such as tax holidays, investment allowances, tax credits, timing differences, and free economic zones.

Introduction

Tax benefits in the form of incentives in Brazil are typically granted for investments – e.g., tax-free zones, tax holidays, timing differences, deferment and reduced tax rates or basis under special tax and customs regimes, and free economic zones. As a general rule, they are granted through tax laws and regulations. This is an attempt to increase transparency and avoid disputes.

Resident and nonresident investors through local subsidiaries may request and benefit from tax incentives in Brazil. Tax benefits may be granted by (i) the Federal Union, (ii) the 26 states, (iii) the Federal District of Brasília, and (iv) cities (approximately 5,600 cities).

The beneficiary of tax benefits must be a registered company established in Brazil. This is

because tax authorities grant the benefit to the federal, state, or city taxpayer number of the corporate taxpayer, according to the grantor authority. Cumulative benefits at federal, state, and city levels are possible.

Brazil is an important recipient of foreign investments with a large manufacturing and technological industry. For this reason, the federal, state, and city authorities adopt tax benefits as part of an overall economic development policy for regional or industry-specific incentives. Such benefits are based on exemption, reduction, or deferment of federal, state, and city taxes, sometimes combined with free land, construction leases, and financial support with favorable interest rates and/or grace periods.

Brazilian state and city governments, in particular, offer important tax benefits seeking to dispute and attract investments. State and city authorities may enter into bilateral agreements with companies to formalize such benefits, unless there is a general legislation indicating the procedures for investors to qualify for the benefits.

At the state level, the National Council of Fiscal Policy (CONFAZ in Portuguese its abbreviation), a body composed by the State Treasury Secretaries, publishes national protocols on ICMS tax incentives that each state of the Federation may grant. ICMS is one of the most important taxes in Brazil in terms of collection, and this national guidance seeks to avoid investment disputes among states. Investors must confirm whether a given State ICMS tax incentive has been approved by CONFAZ.

Fostering Exports

Exports of goods and services are encouraged and subject to certain tax benefits. For goods, tax benefits are available for export production and take the form of customs rules (see specifics in the topic about Beneficial Customs Regimes), export tax exemption for the most part, and credit, deferment, or suspension of indirect taxes levied on taxable items that will compose finished goods (destined to exports). The support for export

sales can also take the form of specific credit lines at beneficial rates.

For services, tax benefits are not subject to (i) federal turnover taxation provided that there is inflow of cash for payment and (ii) city service taxation if the economic benefits derived from the service are seen out of Brazil.

Special Zones

Investments may benefit from tax incentives if channeled to Brazil through free-trade zones within the North and Northern and part of the Mid-West regions of Brazil, pursuant to approved projects. Companies gain from exemptions or reductions of federal taxes on (i) income, (ii) turnover, and (iii) sales of tangibles: the corporate income tax, turnover taxes (PIS/COFINS), import duties, tax on imported goods and on manufactured ones (IPI), and the state VAT tax (ICMS).

The Manaus Free Trade Zone 75% of reduction of IRPJ for 10 years (currently limited to FY2073), up to 88% reduction of the federal Import tax (II), exemption of the federal IPI tax if goods are locally consumed and/or produced, reduced State ICMS tax rate, exemption of the federal PIS and COFINS taxes when importing into the Manaus Free Trade Zone, no federal PIS/COFINS taxes on imported raw, intermediate, and packing materials when buyer and supplier are located within the Manays Free Trade Zone, and on inputs for local manufacturing processes; limited PIS/COFINS (3.65%) on sales of locally produced goods.

Superintendence for the Development of Amazônia (SUDAM) and Northeast (SUDENE) SUDAM and SUDENE are independent agencies of the federal government. They provide reduction or exemption of corporate income taxes for projects within the North/Northern states, including the Manau Free Trade Zone. They allow a 75% reduction of the corporate income tax on investments for a period of 10 years (until 2073).

Federal Special Customs Regimes

These regimes provide for exemption, suspension, and deferment of federal import taxation. State legislation on imports may be harmonized with the federal equivalent, and the particular rules must be assessed.

RECAP This special regime for acquisition of capital assets for export companies is provided by federal law 11.196/2005. It suspends the turn-over taxation on the acquisition and/or imports of equipment according to the tariff codes indicated in the regulations. The suspension may last 3 years as of the moment the regime has been approved.

Drawback This regime was originally introduced by law-decree 37/1966. It has been subject to a number of regulatory modifications, and the regime has evolved and improved since then. The regime involves various benefits. The payment of relevant import taxes – Import tax (II), tax on imported goods and on manufactured ones (IPI), state VAT tax (ICMS), and the Merchant Marine Renewal Tax on freight (AFRRM) – can be partially or totally suspended on goods that will be re-exported after being transformed, repaired, or manufactured locally. The amount of exemption depends on the level of local manufacturing (alternatively, instead of being suspended, taxes may be paid upon the import and further reimbursed after re-exportation). Imported items must be limited to 40% of exported goods. ICMS conditions may vary depending on the legislation of the different states.

Temporary Admission This customs regime under Federal Revenue Regulation #1600/2015 (“IN RFB 2015/2015”) allows certain imported goods to enter and remain in Brazil under a temporary import procedure without payment of import taxes. Goods remain in the country for a determined temporary period of time according to their specific purposes and conditions indicated in the regulations (e.g., lease transactions, exhibitions, commercial, cultural, and sports events,

etc.). Under this regime, import taxes are suspended and not due at the return of the goods if all conditions upon-agreed are observed.

RECOF This regime is based on law-decree 37/1996, federal law 10.833/2003, federal law 10.865/2004, Federal Revenue regulation #1291/2012, and further amendments. Under this regime, imported raw materials and inputs, mainly parts for aircrafts, vehicles, and electronics, may be exempt from federal taxes (II, IPI, and PIS/COFINS) and state tax (ICMS). Exemption is conditioned to exports of the finished goods or their sale in the domestic market.

RECOM According to Sec. 381 of the Customs regs, this regime is for imports of inputs (materials and components) to be used in manufacturing of products ranked from tariff codes 8701 to 8705 (e.g., spare parts and subassemblies as motors, components, and accessories). It allows for the deferment of PIS, COFINS, and IPI on imports until the moment the finished vehicle is sold by the wholeseller.

REPETRO This is a custom regime under the terms of decree 6.759/2009. It has been designed for imports and exports of goods used in the exploration of oil and natural gas deposits. The regime allows the importation of raw materials and the parts and pieces that are to be used in the production of goods which are to be re-exported (drawback) without IPI, PIS, and COFINS. Another benefit is the exemption from IPI, PIS, and COFINS on importation of foreign equipment for a temporary stay. Companies holding authorization for exploring oil and natural gas deposits may benefit from REPETRO.

REPEX Under the terms of law-decree 37/1966 and further amendments, including the enactment of federal law 10.865/2004, this regime allows for the suspension of tax payments and imports of crude oil and its derivatives when they are exported or re-exported. This program is dedicated to firms that are allowed to import and export oil products by the National Petroleum Agency (ANP).

REINTEGRA Under the terms of decrees #8.543/2015 and #8.415/2015 and federal laws #12.546/2011 and #13.043/2014, this is a federal tax regime created to provide incentives to exports of manufactured goods. It provides export companies with the refund in the form of a tax credit of 1% of the total amount of revenues derived from the export of goods. This amount shall be offset with federal taxes or reimbursed. This incentive is not applicable to trading companies and to goods which were previously imported. It will be enforced through December 2013 and could be extended by the government.

REIDI This special regime of incentives for the development of infrastructure was introduced by federal law #11.488/2007. It provides suspension of PIS and COFINS on goods and services in the case of projects of infrastructure: transports, ports, power, irrigation, etc. The benefit is granted for 5 years, after which a new application project must be presented.

Federal Import Tax Exemption for Lack of Similar Product in Domestic Market Federal decree #6759/2009 provides that imports of goods not available in the domestic market may be subject to a zero-rated import tax. This procedure is subject to an approval process. Importers of records must follow the customs regulations to produce evidence with respect to the applicable tariff code.

Federal Corporate Income Tax Benefit for Workers Nourishment Program (PAT in Its Portuguese Abbreviation) Under federal law 6321/1976 (and further modifications), companies may reduce their corporate income tax due if they qualify for the Workers Nourishment Program aimed at improving the quality of nutrition of employees. The combined maximum amount that may be deducted from the corporate income tax is 4% of the tax due.

Federal Incentive for Cinematographic and Audiovisual Productions and Co-productions The Audiovisual federal law #8.685/1993 provides rules on investments in

audiovisual and cinematographic productions and co-productions. Individuals may invest part of its income tax in such projects up to the limit of 3% of the tax due, while companies are subject to a 1% cap. These are deductible expenses, and projects must be approved by federal authorities from the Ministries of Culture and Economy. For sponsorship of and donations to projects approved by federal authorities from the Cinema National Agency (ANCINE), the deduction limits are 6% for individuals and 4% for companies of the income tax due.

Federal Incentive for Sports The sports federal law # 11.438/2006 (and further modifications) provides tax incentives for the development of sports at different levels, including Olympic and Paralympic sports. Individuals may deduct up to 6% of the income tax due. Companies may deduct up to 1% of the income tax due. Sponsorship and donations by individuals and companies in favor of sports projects are subject to approval by federal authorities.

Federal Corporate Income Tax Benefit for Cultural and Artistic Projects Companies may reduce their corporate income tax based on approved cultural and artistic projects under the terms of federal 8313/1991. The amount that may be deducted from the corporate income tax applicable to these incentives is 4% of the income tax due. Individuals may also benefit from this legislation, and the cap is 6% in their case.

Federal Incentive for Semi-conductors and Digital TV (PADIS and PADTV) This tax incentive under federal law #11.484/2007 (and further modifications) has focused on the tech development of the semi-conductor industry ("PADIS") and of equipment for Digital TV (PADTV). The regime provides income tax exemption and zero-rated levies of turnover taxes (PIS/COFINS), tax on imported and manufactured goods (IPI) and on contribution tax on payments for services and technology (CIDE), and import tax on fixed assets (machinery and equipment).

Federal Incentive for Information and Technology

The Information and Technology (federal laws #8.248/91 and 8.387/91 and further modifications) grant tax incentives to increase competition and technical know-how of resident companies that produce information and tech goods, automation tech and telecom goods. Companies must invest between 4% and 4.35% of the annual revenues generated by eligible products in R&D. They may benefit from an IPI (tax on imported and manufactured goods) 80–95% reduction. The benefits are extended to the State VAT (ICMS) reduction (applicable to some states) and reduction on the imports of inputs (applicable to some states) and credit lines.

There are specific federal incentive programs that provide low-cost financing through the Brazilian Social and Economic Development Bank (BNDES), one of the largest of its kind in the world. This form of incentive may be associated with industrial projects that may also benefit from tax benefits.

Federal Incentive for Innovation Federal law 10.973/2004 provides incentives for scientific and tech research for the corporate industry. This is achieved through the distribution of financial incentives. The Federal Union grants financial, material, and infra resources to universities and research foundations. Companies have to enter into a partnership agreement for the development of tech with those institutions to benefit.

Federal Incentive for R&D Federal law 11.196/2005 provides companies with investments in Research & Development activities may qualify for the following incentives: corporate income tax deduction from 20.4% up to 34% for expenditures on R&D, IPI (tax on imported and manufactured goods) 50% reduction on the acquisition of machinery and equipment to be employed in R&D, accelerated depreciation and amortization (of capitalized R&D expenses and certain intangibles) – R&D expenses are entirely deductible for Brazilian income tax purposes.

State of São Paulo

In view of the fact that 26 states and a substantial number of cities within Brazil's 5,600 municipal jurisdictions may offer tax benefits, we will briefly comment on some relevant State VAT tax benefits of a Brazilian southern state with a relevant manufacturing and information and technology activity.

Acquisition of Machinery and Equipment for Fixed Assets

Under section 29 of the ICMS Tax Regulations of the State of São Paulo, this benefit provides (i) the ICMS suspension in the case of imports of assets without similar ones in the domestic market and (ii) full refund in one installment of the ICMS tax due if these fixed assets are acquired from a state resident manufacturer.

Accumulated ICMS Credit in Investment Projects

This benefit allows the use of such credits for the acquisition of goods to be used in projects of investment, say modernization and expansion of industrial plants, construction of new plants, development of new products, and expansion of businesses within the State.

7% ICMS Credit on Interstate Sales for Information and Technology Assets

This benefit is provided by state decree 51.624/07. If sales are within the state, taxpayers may choose the credit equivalent to the tax burden imposed on this transaction. Information and Technology products listed in Treasury Resolution 14/2013 of the State of São Paulo are subject to tax base reduction in such a way that the corresponding tax burden be 12% (art 27, attachment II, of the State Regs). There is also suspension or deferment of the ICMS on imports of parts, inputs, and raw materials if the acquisition is undertaken by a manufacturer of information and technology products listed in federal law #8.248/1991.

Summary

The overall corporate direct, indirect, and payroll tax burden in Brazil is heavy, and the rules are rather complex. Tax benefits have become crucial

as a form of tax policy for the Brazilian governments at different levels, say federal, state, and city, to correct gaps in the legislation and foster investments.

Tax incentives provide opportunities for resident and nonresident investors to create and accumulate capital stock in the country. So to speak, through tax breaks, investors have legal access to planning that will lead to cost reductions associated with doing business in different sectors of the Brazilian economy (technology and infrastructure above all) and a quicker recovery of expenditures.

The outcome is job creation, training, industrial investments in plants, transfer of know-how and technology, development of exports infra, and gains for specific industries such as culture, sports, and audiovisual.

To implement this kind of tax and legal framework, companies (and individuals) have the option to merely channel part of their taxes to specific projects of interest that are available in the country.

Reference

Federal law 11.196/2005, law-decree 37/1966, federal revenue regulation #1600/2015 ("IN RFB 2015/2015"), law-decree 37/1996, federal law 10.833/2003, federal law 10.865/2004, federal revenue regulation #1291/2012, Brazilian customs regulations, section 381, decree 6.759/2009, federal law 10.865/2004, decrees #8.543/2015 and #8.415/2015, federal law #12.546/2011, federal law #13.043/2014, federal law #11.488/2007, federal decree #6759/2009, federal law 6321/1976, federal law #8.685/199, federal law # 11.438/2006, federal 8313/1991, federal law #11.484/2007, federal laws #8.248/91 and 8.387/91, federal law 10.973/2004, federal law 11.196/2005, the ICMS Tax Regulations of the State of São Paulo, São Paulo state decree 51.624/07.

Further Reading

Sanchez-Ugarte, F. (1995). *Rationality of income tax incentives in developing countries: A supply-side look*. Supply-side tax policy its relevance to developing countries, International Monetary Fund, chapter 10.

Tax Citizenship

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Synonyms

[Tax awareness](#); [Tax consciousness](#); [Tax culture](#); [Tax education](#)

Definition

Tax citizenship is the commitment of individuals and organizations within the community where they are located, in particular, and the society, in general, to exercise the correct and the ethical use of their rights and taxation obligations based on the public trust of fair and transparent public spending as well as the reciprocity of the participating public agencies. Carrasco (2010) has proposed a definition of tax citizenship, and the authors have adapted it.

Transformation of Tax Citizenship

The transformation of tax involves new concepts and definitions of citizenship (Lister 2003) that requires the adaptive focus. Tax citizenship is a learning process that never ends. For the state to develop its institutional activities in the areas of infrastructure, education, health, social security, and others, provided for in the federal constitution, it is necessary to have sufficient financial resources, which are obtained mainly through the collection of taxes. However, many taxpayers are looking for ways to avoid or reduce the payment of taxes due, whether through legal or illegal means. In this case, the problem lies in the situation of nonpayment or reduction of the tax due illegally, where tax evasion occurs.

Tax Breaks

- [Tax Benefits in Brazil](#)
- [Tax Incentives from a Brazilian Perspective](#)

The OECD (2015, p. 3) argues in favor of the culture of tax compliance that is based on “rights and responsibilities, and in which citizens see paying taxes as an integral part of their relationship with the government. Across the globe, governments and tax administrations are the developing innovative taxpayer education programs to inform and engage both current and future taxpayers.” Thus, the concept of tax compliance is built on a legal decision made under context of uncertainty. Indeed, taxpayers face the option of either accepting the law and paying taxes honestly or cheating and taking the risk of being caught and fined. It is assumed that the level of compliance is related to the personal income levels and its tax rate, penalty rates, and audit process, respectively, that determine the citizen’s decisions to comply or not to comply in relation to taxes (Allingham and Sandmo 1972).

In the context of human behaviour, there is the need to understand the tax awareness or tax the consciousness, because the citizen must understand the surroundings of the reality which is immerse and how to react to this reality as Nurlis (2015) argues. Furthermore, in the tax awareness, the citizen must balance her or his self-awareness, self-fellow, and their past, present, and future possibilities of the decisions that must be made. Also, the tax awareness means that the taxpayer wants to pay taxes, despite the disadvantaged to do it, due to the tax process collection. For all these reasons, the taxpayer felt the compulsion to fulfil this as an obligation that must be done. Nevertheless, tax awareness is often an obstacle in the problem of collecting taxes from the society.

Many taxpayers do not know the concrete form of compensation for the tax they have paid. This happens due to the agency theory and, in particular, with moral hazard problem as a result of the fact that the taxpayer wants to enjoy the benefits arising from public policies; however, he or she is not willing to contribute to his or her fair share to the costs of their adoption and implementation (Varvarigos 2017).

The taxpayer knows that are social costs. They are the amount of transfer of resources from households and businesses to the government

by imposition of taxes, which generates three different types of costs, such as: efficiency, administrative, and compliance. Tran-Nam et al. (2000) define efficiency costs as deadweight losses or excess burdens arising from tax-induced changes in relative prices, distort consumer and producer choices, and cause losses in overall output. Also, the administrative costs are the government costs of collecting taxes. And the compliance costs are the resource value expended by the taxpayer in meeting his or her tax obligations. The sum of administrative and compliance costs is often referred to as the operating costs of a tax system.

Additionally, Dowling (2014) defines tax minimization as looking for ways to minimize the tax bill in relation to transactions usually undertaken. Thus, the citizen is focus on efficiency costs as deadweight losses or excess burdens, arising from tax-induced changes in relative prices, distort consumer and producer choices, and cause losses in overall output (Tran-Nam et al. 2000). These cost concepts demand to assess the psychic costs because they are the nonpecuniary costs incurred by those whose fraudulent behavior is exposed, such as costs that could comprise social stigma, reputation damage, shame, and others (Varvarigos 2017).

Thus, the importance of the concept of tax citizenship becomes relevant. Through one of its attributes, transparency in the state’s financial activity, it can provide greater security to the taxpayer and result in a citizen who participates in a more spontaneous and collectivist way in public affairs (Nasar 2015). As Taxes for Expats (2021) defines, the citizenship-based taxation is related to all citizens of one country that are taxed under the same personal income tax system, regardless of whether they live in the country or abroad. Also, tax citizenship is related to tax arbitrage because it encompasses planning devices that exploit differences in tax jurisdictions.

One example where there are differences in the State tax-planning opportunities for individuals as taxpayers is the federal-state tax-base, which is the conformity that may reduce loss from tax arbitrage by minimizing differences (Mason 2013). Another example that the Greenback Expat Tax Services (2020) defines is the

residency-based taxation, which it is related with the country where the citizen life. So, the citizen pays taxes, because he or she lives in this country and it is subject to specific taxes and to his or her income. Also, the Greenback Expat Tax Services explains that nonresidents are only subject to taxation of income derived from the country. It is relevant to define that each country specifies a tax resident characteristic because it changes widely, and sometimes the tax rates differ for residents and nonresidents.

Indeed, the tax resident is defined under the specific domestic tax laws of each country jurisdiction. There might be situations where a person qualifies as a tax resident under the tax residence rules of more than one jurisdiction and therefore is a tax resident in more than one jurisdiction. For the purposes of the paying taxes, financial institutions must ensure that account holders or controlling persons disclose all tax residences in the required self-certification. For the purposes of the paying personal taxes, the account holder or controlling person must disclose all its tax residences in the required self-certification. Kindly note that the mere right to reside in each jurisdiction (on permanent or temporary basis) or the fact of holding citizenship of a given jurisdiction does not automatically mean that a person shall be considered a tax resident in such a jurisdiction or that, upon obtaining residency or citizenship, the tax residency is extinguished in the former jurisdiction(s) of tax residence. Tax residency rules are applicable in jurisdictions that are committed to automatically exchanging information under the CRS, as provided to the OECD Secretariat by those jurisdictions (OECD 2021).

It is relevant to understand that taxation is an economic policy instrument that generates tax revenues, which are an important source of financial resources with which governments finance the adoption of policies, such as the provision of public services and infrastructure, that increase productivity and, thus, redistribution of wealth (Varvarigos 2017). The imposition of taxes

represents a transfer of resources from households and businesses to the government (Tran-Nam et al. 2000).

Undeniably, the tax citizenship is related with tax morale or tax mentality, since it is supported on psychological costs of tax evasion (Molero and Pujol 2012). Nerré (2008, p. 155) “includes all attitudes and also all patterns of behavior which the tax-paying citizens hold against (or with?) the tax and the state”. Therefore, Torgler and Werner (2005, p. 460) take a wider perspective, where they define tax morale as the “intrinsic motivation to pay taxes.”

In addition, tax citizenship is based on the tax payment, from the CSR perspective, which can be considered a clear measure of the direct financial contribution a firm makes to an elected government (Dowling 2014). This scenario has been possible to see at the Transparency Portal of the Minas Gerais State (2021) that argues the tax citizenship is the exercise, by the citizen, of the right to be adequately informed about the origin and application of public resources, overseeing the transformation of taxes paid into quality works and services. In this sense, tax citizenship requires awareness of the social function of the tax, the role of the state in collecting taxes, the duty to pay them when due, and the need to control their correct payment (Folloni and Bubniak 2017).

However, the tax culture is inherent to a country, and, by one side, it emerges coined by the tradition of taxation (e.g. an accentuation of [in]direct taxes) and, by another side, by the interaction of cultural values like ‘honesty’, ‘justice’ or a ‘sense of duty’. A country-specific tax culture is the entirety of all relevant formal and informal institutions connected with the national tax system and its practical execution, which are historically embedded within the country’s culture, including the dependencies and ties caused by their ongoing interaction (Nerré 2008).

In this context, the tax education concept is an innovative process that creates awareness among citizens of the social function of taxes, that it has been argued by Lindholm (1967). Little by little,

one has found out and learned why it is more important to convince rather than apply coercive actions. Citizen involvement is concerned with the payment of taxes and in taking care of public properties (Brenes 2011).

Brenes (2011) argues, too, that civic tax is a broad concept that involves not only the passive attitude of complying with the right to vote, with the payment of taxes, but rather goes beyond in the sense that each citizen must be responsible for the public property that has been assigned to him, of which he makes use in his social environment. They should be watchful to ensure that public revenues be invested in the items for which they were established.

Tax avoidance is defined as transactions entered solely for the purpose of generating a tax benefit. As a legal activity, it exposes the ambiguity of what is meant by the simple statement that companies should “abide by the law.” Some common practices for tax avoidance are offshore tax sheltering, accounting manipulation, and legal obfuscation (Dowling 2014).

Tax agencies are aware of the tax evasion that it is very difficult to shift, and it is against the tax citizenship (Varvarigos 2017). Thus, citizens must understand that illegal practices will increase tax obligations in order to found information about income and wealth. These efforts demand strong tax education and the tax awareness that will lead to fiscal civics which is a broad concept that involves not only the passive attitude of fulfilling the right to vote, with the payment of taxes, but goes further in the sense that each citizen must be responsible for the property which he has been assigned or which he makes use of in his social environment; The citizens must be vigilant to ensure that public revenues are invested in items for which they are established in Annual Budget State. So, if someone manages to reach a fiscally committed citizen, the government will have to invest less and less in those expenses that currently arise because of serious problems in citizen behavior and can do more through infrastructure, education, and health (Brenes 2011).

Summary

Tax citizenship has been promoted, in several countries, with different tax culture and systems by politics, researchers, organizations, experts, national authorities, and citizens. However, even though efficient and effective immediate results have not been achieved, each government has invested in tax citizenship and, especially, has improved its communication with citizens, in general, and with taxpayers, in particular.

A constant publication of rules and codes of law related to the tax system allows the tax agencies to disseminate an open and free source of information for all citizens, which is important to prevent tax evasion. These citizenship strategies demand that each government must act to increase taxpayers’ fiscal awareness, which improved the financial balance of the taxation budget, and, at the same time, increase the consciousness about the citizenship.

For one side, the state needs resources for the development of its constitutional activities, which are practically obtained through taxes collected from taxpayers. And the Government knows to be more efficient on collection of taxes must dialogue with taxpayers about tax issues, instead of imposing penalties for not paying taxes.

For the other side, the citizens, in general, and the taxpayers, in particular, want to pay the minimum taxes possible due to the income of its economic activities. All over the world, tax authorities promoted new reforms instead of negative sanctions, fines, and penalties to non-compliance of taxes.

Lastly, the citizens must make a commitment with the society, based on the accurate and legal tax system, an ethical right, and customs in relation to tax culture, mandatory obligations that must diminish the resistance to pay taxes, and increasing the merits of citizenship arguments. Certainly, the citizens must be confident with impartial and transparent public expenditure, as well as the trade-off of the tax authorities to collect taxes. However, the consensus must be achieved with progression of the scientific knowledge.

Cross-References

- [Fiscal Fairness](#)
- [Green Taxation](#)
- [Pigouvian Taxation](#)
- [Sustainable Management](#)
- [Tax Benefits in Brazil](#)

References

- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, 1(3–4), 323–338.
- Brenes, B. (2011). *The development and strengthening of the tax citizenship concept: The tax education programs. In Tax Morale as determining factor in improving the effectiveness of the Tax Administration. 45th CIAT General Assembly* (pp. 335–352). Panama: Inter-American Center of Tax Administrations – CIAT. https://www.ciat.org/Biblioteca/AsambleasGenerales/2011/Ingles/2011_topic_3.1_costarica_brenes.pdf. Accessed 2 July 2021.
- Carrasco, C. M. (2010). Instruments and techniques for the measurement of evasion. In *44th CIAT General Assembly. The Role of the Tax Administrations in the Global Crisis*. Montevideo, Uruguay.
- Dowling, G. R. (2014). The curious case of corporate tax avoidance: Is it socially irresponsible? *Journal of Business Ethics*, 124(1), 173–184.
- Folloni, A., & Bubniak, P. L. T. (2017). Programas de Estímulo à Cidadania Fiscal e a Participação Social no Combate à Sonegação. *Economic Analysis of Law Review*, 8(2), 71–87.
- Greenback Expat Tax Services. (2020). *The difference between residency-based taxation and citizenship-based taxation*. <https://www.greenbacktaxservices.com/blog/difference-residency-based-taxation-citizenship-based-taxation/>. Accessed 29 June 2021.
- Lindholm, R. W. (1967). Tax education for the citizen. *Proceedings of the Annual Conference on Taxation under the Auspices of the National Tax Association*, 60, 247–254.
- Lister, R. (2003). What is citizenship? In J. Campling (Ed.), *Citizenship: Feminist perspectives* (pp. 13–42). London: Palgrave.
- Mason, R. (2013). Delegating up: State conformity with the federal tax base. *Duke Law Journal*, 62(7), 1267–1348.
- Molero, J. C., & Pujol, F. (2012). Walking inside the potential tax evader's mind: Tax morale does matter. *Journal of Business Ethics*, 105(2), 151–162.
- Nasar, S. (2015). The contractual freedoms citizen taxpayer faced a contemporary interpretation of civil and tax anti-evasion rules. *Diké Revista do Mestrado em Direito da UFS*, 4(2), 16–27.
- Nerré, B. (2008). Tax culture: A basic concept for tax politics. *Economic Analysis and Policy*, 38(1), 153–167.
- Nurlis, I. K. (2015). The effect of taxpayer awareness, knowledge, tax penalties and tax authorities services on the tax compliance: (survey on the individual taxpayer Jabodetabek & Bandung). *Research Journal of Finance and Accounting*, 6(2), 104–111.
- OECD (Organisation for Economic Co-operation and Development). (2015). *OECD building tax culture, compliance and citizenship: A global source book on taxpayer education*. Paris: OECD Publishing & International and Ibero-American Foundation for Administration and Public Policies.
- OECD (Organisation for Economic Co-operation and Development). (2021). *Rules governing tax residence*. <https://www.oecd.org/tax/automatic-exchange/crs-implementation-and-assistance/tax-residency/>. Accessed 20 June 2021.
- Taxes for Expats. (2021). *Citizenship based taxation – International comparison*. <https://www.taxesforexpats.com/expat-tax-advice/Citizenship-Based-Taxation-International-Comparison.html>. Accessed 20 June 2021.
- Torgler, B., & Werner, J. (2005). Tax morale and fiscal autonomy: Evidence from Germany. *Public Finance and Management*, 5(4), 460–485.
- Tran-Nam, B., Evans, C., Walpole, M., & Ritchie, K. (2000). Tax compliance costs: Research methodology and empirical evidence from Australia. *National Tax Journal*, 53(2), 229–252.
- Varvarigos, D. (2017). Cultural norms, the persistence of tax evasion, and economic growth. *Economic Theory*, 63(4), 961–995.

Further Readings

- Dwyer, P. (2010). *Understanding social citizenship. Themes and perspectives for policy and practice*. Bristol: Bristol University Press.
- Powell, M. (2002). The hidden history of social citizenship. *Citizenship Studies*, 6(3), 229–244.
- Shell, S. M. (2016). Kant on citizenship, society, and redistributive justice. In A. Faggion, A. Pinzani, & N. Sanchez-Madrid (Eds.), *Kant and social policies*. London: Palgrave Macmillan.

Tax Consciousness

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Tax Credits

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Tax Culture

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Tax Incentives

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Tax Incentives from a Brazilian Perspective

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Synonyms

[Investment allowances](#); [Tax breaks](#); [Tax credits](#); [Tax grants](#); [Tax holidays](#); [Tax incentives](#); [Tax relief](#); [Tax savings](#); [Tax subsidies](#)

Definition/Description

Article 1 of the GATT/WTO Agreement on Subsidies and Countervailing Measures: defines subsidy as a financial contribution that confers a benefit. The contribution involves direct transfers of funds, grants, loans, equity, or potential revenue otherwise due but forgone in the form of tax incentives. Sanchez-Ugarte (1995) uses tax incentive interchangeably with subsidy and argues that both may be defined as a reduction in the tax rate, tax base, or tax liability granted if a specified action is taken by the selected beneficiary. In Brazil, the lack of a legal standard terminology definition has led a good part of the doctrine to refer to this backlog of economic drivers as tax benefits interchangeably with tax incentives (Elali, 2010). Broadly speaking, the so-called tax benefits or incentives may be grouped into different categories, such as tax subsidies, tax holidays, investment allowances, grants, tax credits, timing differences, and free economic zones.

Introduction

Brazil is one of the world’s most important recipients of foreign investments, with a large manufacturing and technological industry within its vast economy. At the same time, the overall corporate direct, indirect, and payroll tax burden

in Brazil has been steadily heavy grounded on rather complex rules.

To minimize the burden and foster domestic and inbound investments and exports, federal, state, and city authorities often grant tax incentives. This framework has become part of the overall economic development policy for regional or industry-specific incentives. This broad perspective raised the need of coordinated tax policy among the different units of the federation to prevent or mitigate disputes.

From the standpoint of authorities, tax incentives provide opportunities for resident and non-resident investors to create and accumulate capital stock. The experience of Brazil based on long-term grants associated with planning has led to cost reduction, quicker recovery of expenditures, job creation, training, industrial investments, transfer of know-how and technology, development of export infrastructure, and gains for specific industries.

The key drivers backing the complex network of tax incentives range from exemptions, rate and basis reductions, timing differences, tax holidays and subsidies to grants and special tax and customs regimes. Sometimes they may be combined with free land, construction leases, and financial support with favorable interest rates and/or grace periods. On granting the incentives, the authorities do so through federal, state, and city legislation and administrative regulations enacted by federal, state, and city revenue services. The use of formal legislation increases transparency.

Both resident and nonresident investors (through local subsidiaries) may request tax benefits in the form of incentives. They are granted to the federal, state, and/or city taxpayer numbers of the resident beneficiaries. Cumulative benefits at federal, state, and city levels are common, eventually connected depending on the objectives of the incentive.

At the state level, the National Council of Fiscal Policy (CONFAZ in its Portuguese abbreviation), a body composed by the State Treasury Secretaries, publishes national protocols on the State VAT tax incentives (known as ICMS) that each state may grant. As States have their own set of ICMS tax rules, the CONFAZ protocols

constitute a binding national guidance to avoid investment disputes among states. At the city level, to ensure national harmonization and minimization of city conflicts, the federal legislation provides guidance for cities to comply with.

Analysis

• Fostering Exports

Exports of goods and services are encouraged. For goods, tax benefits are available for export production and take the form of customs rules, export tax exemption for the most part, and credit, deferment, or suspension of indirect taxes levied on taxable items that will compose finished goods (destined to exports). The support for export sales can also take the form of credit lines at beneficial rates. For services, tax benefits are not subject to (i) federal turnover taxation provided according to certain conditions.

Special Zones

Investments may benefit from tax incentives if channeled to Brazil through free-trade zones within the North and Northern and (part of) the Mid-West regions of Brazil, pursuant to approved projects. Companies gain from exemptions or reduction of federal taxes on (i) income, (ii) turnover, and (iii) sales of tangibles: the corporate income tax, turnover taxes (PIS/COFINS), import duties, tax on imported goods and on manufactured ones (IPI), and the state VAT tax (ICMS).

The Manaus Free Trade Zone 75% of reduction of IRPJ for 10 years (currently limited to FY2073), up to 88% reduction of the federal Import tax (II), exemption of the federal IPI tax if goods are locally consumed and/or produced, reduced State ICMS tax rate, exemption of the federal PIS and COFINS taxes when importing into the Manaus Free Trade Zone, no federal PIS/COFINS taxes on imported raw, intermediate, and packing materials when buyer and supplier are located within the Manaus Free Trade Zone, and on inputs for local manufacturing processes.

Superintendence for the Development of Amazônia (SUDAM) and Northeast (SUDENE) SUDAM and SUDENE are independent agencies of the federal government. They provide reduction or exemption of corporate income taxes for projects within the North/Northern states, including the Manaus Free Trade Zone. They allow a 75% reduction of the corporate income tax on investments for a given period.

- **Federal Special Customs Regimes**

These regimes provide exemption, suspension, and deferment of federal import taxation. State legislation on imports may be harmonized with the federal equivalent.

RECAP This special regime for acquisition of capital assets for export companies is provided by federal law 11.196/2005. It suspends the turnover taxation on the acquisition and/or imports of equipment according to the tariff codes indicated in the regulations. The suspension may last 3 years as of the moment the regime has been approved.

Drawback This regime was originally introduced by law-decree 37/1966. It has been subject to a number of regulatory modifications and the regimes has evolved and improved since then. The regime involves various benefits. The payment of relevant import taxes – Import tax (II), tax on imported goods and on manufactured ones (IPI), state VAT tax (ICMS), and the Merchant Marine Renewal Tax on freight (AFRRM) – can be partially or totally suspended on goods that will be re-exported after being transformed, repaired, or manufactured locally. The amount of exemption depends on the level of local manufacturing (alternatively, instead of being suspended, taxes may be paid upon the import and further reimbursed after re-exportation). Imported items must be limited to 40% of exported goods. ICMS conditions may vary depending on the legislation of the different states.

Temporary Admission This customs regime under Federal Revenue Regulation #1600/2015

(“IN RFB 2015/2015”) allows certain imported goods to enter and remain in Brazil under a temporary import procedure without payment of import taxes. Goods remain in the country for a determined temporary period of time according to their specific purposes and conditions indicated in the regulations (e.g., lease transactions, exhibitions, commercial, cultural, and sports events, etc.). Under this regime, import taxes are suspended and not due at the return of the goods if all conditions upon-agreed are observed.

RECOF This regime is based on law-decree 37/1996, federal law 10.833/2003, federal law 10.865/2004, Federal Revenue regulation 1291/2012, and further amendments. Under this regime, imported raw materials and inputs, mainly parts for aircrafts, vehicles, and electronics, may be exempt from federal taxes (II, IPI, and PIS/COFINS) and state tax (ICMS). Exemption is conditioned to exports of the finished goods or their sale in the domestic market.

RECOM According to Sec. 381 of the Customs regs, this regime is for imports of inputs (materials and components) to be used in manufacturing of products ranked from tariff codes 8701 to 8705 (e.g., spare parts and subassemblies as motors, components, and accessories). It allows for the deferment of PIS, COFINS, and IPI on imports until the moment the finished vehicle is sold by the wholeseller.

REPETRO This is a custom regime under the terms of decree 6.759/2009. It has been designed for imports and exports of goods used in the exploration of oil and natural gas deposits. The regime allows the importation of raw materials and the parts and pieces that are to be used in the production of goods which are to be re-exported (drawback) without IPI, PIS, and COFINS. Another benefit is the exemption from IPI, PIS, and COFINS on importation of foreign equipment for a temporary stay. Companies holding authorization for exploring oil and natural gas deposits may benefit from REPETRO.

REPEX Under the terms of law-decree 37/1966 and further amendments, including the enactment of federal law 10.865/2004, this regime allows for the suspension of tax payments and imports of crude oil and its derivatives when they are exported or re-exported. This program is dedicated to firms that are allowed to import and export oil products by the National Petroleum Agency (ANP).

REINTEGRA Under the terms of decrees 8.543/2015 and 8.415/2015 and federal laws 12.546/2011 and 13.043/2014, this is a federal tax regime created to provide incentives to exports of manufactured goods. It provides export companies with the refund in the form of a tax credit of 1% of the total amount of revenues derived from the export of goods. This amount shall be offset with federal taxes or reimbursed. This incentive is not applicable to trading companies and to goods which were previously imported. It will be enforced through December 2013 and could be extended by the government.

REIDI This special regime of incentives for the development of infrastructure was introduced by federal law 11.488/2007. It provides suspension of PIS and COFINS on goods and services in the case of projects of infrastructure: transports, ports, power, irrigation, etc. The benefit is granted for 5 years, after which a new application project must be presented.

- Federal Import Tax Exemption for Lack of Similar Product in Domestic Market

Federal decree 6759/2009 provides that imports of goods not available in the domestic market may be subject to a zero-rated import tax. This procedure is subject to an approval process. Importers of records must follow the customs regulations to produce evidence with respect to the applicable tariff code.

- Federal Corporate Income Tax Benefit for Workers Nourishment Program (PAT in Its Portuguese Abbreviation)

Under federal law 6321/1976 (and further modifications) companies may reduce their corporate income tax due if they qualify for the Workers Nourishment Program aimed at improving the quality of nutrition of employees. The combined maximum amount that may be deducted from the corporate income tax is 4% of the tax due.

- Federal Incentive for Cinematographic and Audiovisual Productions and Co-productions

The Audiovisual federal law 8.685/1993 provides rules on investments in audiovisual and cinematographic productions and co-productions. Individuals may invest part of its income tax in such projects up to the limit of 3% of the tax due, while companies are subject to a 1% cap. These are deductible expenses, and projects must be approved by federal authorities from the Ministries of Culture and Economy. For sponsorship of and donations to projects approved by federal authorities from the Cinema National Agency (ANCINE), the deductions limits are 6% for individuals and 4% for companies of the income tax due.

- Federal Incentive for Sports

The sports federal law 11.438/2006 (and further modifications) provides tax incentives for the development of sports at different levels, including Olympic and Paralympic sports. Individuals may deduct up to 6% of the income tax due. Companies may deduct up to 1% of the income tax due. Sponsorship and donations by individuals and companies in favor of sports projects are subject to approval by federal authorities.

- Federal Corporate Income Tax Benefit for Cultural and Artistic Projects

Companies may reduce their corporate income tax based on approved cultural and artistic projects under the terms of federal 8313/1991. The amount that may be deducted from the corporate income tax applicable to these incentives is 4% of the income tax due. Individuals may also benefit from this legislation, and the cap is 6% in their case.

- Federal Incentive for Semi-conductors and Digital TV (PADIS and PADTV)

This tax incentive under federal law 11.484/2007 (and further modifications) has focused on the tech development of the semi-conductor industry (“PADIS”) and of equipment for Digital TV (PADTV). The regime provides income tax exemption and zero-rated levies of turnover taxes (PIS/COFINS), tax on imported and manufactured goods (IPI) and on contribution tax on payments for services and technology (CIDE), and import tax on fixed assets (machinery and equipment).

- Federal Incentive for Information and Technology

The Information and Technology (federal laws 8.248/91 and 8.387/91 and further modifications) grant tax incentives to increase competition and technical know-how of resident companies that produce information and tech goods, automation tech and telecom goods. Companies must invest between 4% and 4.35% of the annual revenues generated by eligible products in R&D. They may benefit from an IPI (tax on imported and manufactured goods) 80–95% reduction. The benefits are extended to the State VAT (ICMS) reduction (applicable to some states) and reduction on the imports of inputs (applicable to some states) and credit lines.

There are specific federal incentive programs that provide low-cost financing through the Brazilian Social and Economic Development Bank (BNDES), one of the largest of its kind in the world. This form of incentive may be associated with industrial projects that may also benefit from tax benefits.

- Federal Incentive for Innovation

Federal law 10.973/2004 provides incentives for scientific and tech research for the corporate industry. This is achieved through the distribution of financial incentives. The Federal Union grants financial, material, and infra resources to universities and research foundations. Companies have

to enter into a partnership agreement for the development of tech with those institutions to benefit.

- Federal Incentive for R&D

Federal law 11.196/2005 provides companies with investments in Research & Development activities may qualify for the following incentives: corporate income tax deduction from 20.4% up to 34% for expenditures on R&D, IPI (tax on imported and manufactured goods) 50% reduction on the acquisition of machinery and equipment to be employed in R&D, accelerated depreciation and amortization (of capitalized R&D expenses and certain intangibles) – R&D expenses are entirely deductible for Brazilian income tax purposes.

State of São Paulo

In view of the fact that 26 states and a substantial number of cities within Brazil’s 5,600 municipal jurisdictions may offer tax benefits, we will briefly comment on some relevant State VAT tax benefits of a Brazilian southern state with a relevant manufacturing and information and technology activity.

- Acquisition of Machinery and Equipment for Fixed Assets

Under section 29 of the ICMS Tax Regulations of the State of São Paulo, this benefit provides (i) the ICMS suspension in the case of imports of assets without similar ones in the domestic market and (ii) full refund in one installment of the ICMS tax due if these fixed assets are acquired from a state resident manufacturer.

- Accumulated ICMS Credit in Investment Projects

This benefit allows the use of such credits for the acquisition of goods to be used in projects of investment, say modernization and expansion of industrial plants, construction of new plants, development of new products, and expansion of businesses within the State.

- 7% ICMS Credit on Interstate Sales for Information and Technology Assets

This benefit is provided by state decree 51.624/07. If sales are within the state, taxpayers may choose the credit equivalent to the tax burden imposed on this transaction. Information and Technology products listed in Treasury Resolution 14/2013 of the State of São Paulo are subject to tax base reduction in such a way that the corresponding tax burden be 12% (art 27, attachment II, of the State Regs). There is also suspension or deferment of the ICMS on imports of parts, inputs, and raw material if the acquisition is undertaken by a manufacturer of information and technology products listed in federal law #8.248/1991.

Summary

Brazil's authorities adopt tax incentives to bolster regional development and encourage industry-specific development. In Brazil, the use of tax incentives based on long-term policies aims at increasing investments and capital stock in the country. Historically, this policy has secured job creation, training of labor work, solid industrial investments from local and foreign sources, development and transfer of substantial know-how and technology, supply of the domestic market based on local production, creation of exports infra to attend Latin American markets, and gains for top-notch industries.

The set of Brazilian legislation and amendments on tax incentives is fairly extensive. The following is a summary of some key federal rules that govern the sample of tax benefits discussed above: (i) Federal Laws – e.g., 13.043 (2014), 12.546 (2011), 11.488 (2007), 11.484 (2007), 11.438 (2006), 11.196 (2005), 10.973/2004, 10.865 (2004), 10.833 (2003), 8.685 (1999), 8.387 (1991), 8.313 (1991), 8.248 (1991), 6.321 (1976); (ii) Federal Decrees – e.g., 8.543 (2015), 8.415 (2015), 6.759/2009; (iii) Federal Law-Decree 37 (1966); (iv) Federal Revenue Acts 1600 (2015), 1291 (2012), and (v) Federal Customs Regulations, section 381. In view of the

wide range of state and city legislation on the matter, our analysis made reference to some of the state of São Paulo incentives (as the state is an important recipient of investments), derived from its ICMS tax regulations and State decree 51.624/07.

References

- Elali, A. (2010). *Incentivos Fiscais Internacionais*. Quartier Latin, Chapter IV.
- Further Reading**
- Auerbach, A. J., & Hines, J. R., Jr. (1988). Investment tax incentives and frequent tax reforms. *American Economic Review Papers and Proceedings*, 78(2), 211–216.
- Bojikian, N. M. (2009). *Acordos Comerciais Internacionais: o Brasil nas negociações do setor de serviços financeiros*. São Paulo: Unesp.
- Carota, J. C. (2018). *Planejamento Tributário & Incentivos Fiscais Empresariais*. Curitiba: Juruá.
- De Brito, H. M. (2015). *Regime Jurídico dos Incentivos Fiscais*. São Paulo: Malheiros.
- Goolsbee, A. (1988). Investment tax incentives, prices, and the supply of capital goods. *Quarterly Journal of Economics*, 113(1), 121–148.
- House, C., & Shapiro, M. (2006). *Temporary investment tax incentives: Theory with evidence from bonus depreciation*, NBER working paper W12514. Cambridge, MA: National Bureau of Economic Research.
- Ozai, I. O. (2019). *Benefícios Fiscais do ICMS*. Rio de Janeiro: Lumen Juris.
- Perantoni, M. (2014). *Os Subsídios no Sistema OMC e a Defesa Comercial no Brasil*. Rio de Janeiro: Lumen Juris.
- Piva, S. H. (2018). *Incentivos Fiscais, uma Visão Normativa*. São Paulo: Juspodivm.
- Rocha, P., & Alves, C. (2013). *Logística & Aduana*. São Paulo: Aduaneira.
- Mills, L., & Newberry, K. (2004). Do foreign multinationals' tax incentives influence their U.S. Income Reporting and Debt Policy? *National Tax Journal*, 57(1), 89–107.
- Sanchez-Ugarte, F. (1995). Rationality of income tax incentives in developing countries: A supply-side look, supply-side tax policy its relevance to developing countries, International Monetary Fund, Chapter 10.
- Slemrod, J., Estelle, D., & Martinez, C. (2005). *Corporate tax avoidance and the effectiveness of tax incentives for investments*. Mimeo. Ann Arbor: University of Michigan.
- Zodrow, G. R. (2003). Reflections on the economic theory of local tax incentives. *State Tax Notes*, 28(10), 891–900.

Tax Relief

- ▶ [Tax Benefits in Brazil](#)
 - ▶ [Tax Incentives from a Brazilian Perspective](#)
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Tax Savings

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Tax Subsidies

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Tax Uncertainty

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Synonyms

[Cost of taxes](#); [Tax discretionary](#); [Tax disclosure](#)

Background

Governments of all countries consciously seek to finance their policies and operations to fulfill their obligations and responsibilities to their citizens. A viable tool for seeking funding is taxation (Eragbhe and Aronmwan 2015).

To maximize their value, companies use various tax optimization strategies that generate tax savings, translating into better financial results (Zimmerman 1983). Considering this direct impact on tax collections, tax managers in

companies adopt various tax planning instruments, among which sometimes they can result in significant tax contingencies for the company (Tarazona et al. 2019).

This tax contingency risk started to demand greater transparency in financial statements, which became the motto of financial and tax accounting in recent years, with the Sarbanes-Oxley Act starting this movement in 2002 on the financial accounting side and a combination of new requirements of tax reporting and disclosures. Following corporate scandals over the past few decades (e.g., Enron, WorldCom, Tyco, Qwest), the financial accounting information provided to investors has come under greater scrutiny, with a particular focus on accounting for contingent liabilities (also known as reserves) due to concerns about the lack of transparency and perceived abuses in this area (Gupta et al. 2017).

Definition

The discussion on tax avoidance or evasion has gained increasing attention from business stakeholders and researchers in the recent years. The international literature calls the effects of tax avoidance or evasion as Unrecognized Tax Benefit (UTB), and there is a vast publication of academic papers on the subject (Wilde and Wilson 2018). The pioneering papers on tax avoidance are by Scholes et al. (1990) and Scholes and Wolfson (1992), who brought theory and empirical techniques from economics, finance, and accounting to better understand corporate tax evasion. However, researchers and shareholders must still understand about tax evasion from financial statements because companies typically do not disclose the details of their tax strategies (Simone et al. 2019).

Simone et al. (2019) state that there are three types of tax avoidance strategies: a permanent tax saving strategy (tax credit), a temporary tax saving strategy (accelerated tax depreciation), and a hybrid strategy (transfer of income between jurisdictions).

In the sphere of tax uncertainties, an initial study by Gleason and Mills (2011) uses tax

declaration data to show that before FIN 48, most companies did not voluntarily disclose these uncertainties (UTBs), which until then were classified as contingent tax reserves. Other studies examined whether companies changed the UTB before the effective date of FIN 48 (Blouin et al. 2010), whether companies managed profits using the tax reserve before or after FIN 48 (Simone et al. 2019).

Jacob et al. (2020) in their research identified that managers try to alleviate tax uncertainty with cheap sources of financing or available cash balance. In recent decades, companies have increasingly increased cash balances, and a key reason for this increase has been to provide preventive protection for uncertain future cash outflows (Opler et al. 1999; Bates et al. 2009). Also, Hanlon et al. (2017) in more recently study report that a significant part of a company's cash buffer is associated with uncertainty regarding its fiscal positions.

The implicit concern is that considerable cash balances are not invested or invested in low-return assets, effectively losing their use, such as in large capital investments (Jacob et al. 2020).

In this sense of cash accumulation, Law and Mills (2015) found that companies with financial constraints take a more aggressive stance in fiscal strategies, recording higher UTBs. Guenther et al. (2016) examine in the USA the relationship between tax evasion and tax uncertainty for firms with financial constraints and for firms without financial constraints and found that most tax evasion strategies are not uncertain, suggesting that only about 6 percent of the tax avoided is uncertain.

Dyrenge et al. (2019) also investigated the relationship between tax evasion and tax uncertainty, treating this uncertainty as the amount of tax benefits not recognized or recorded during the same period as tax evasion. The authors Dyrenge et al. (2019) found that tax evaders, that is, companies with a low effective tax rate, have significantly greater tax uncertainty than companies that have higher effective cash taxes. They also identified that the relationship between tax evasion and tax uncertainty is stronger for companies with frequent patent registrations and subsidiaries of tax

havens, with strategies in transfer pricing calculations and related to intangible assets (goodwill on acquisitions) (Markle and Shackelford 2012).

Regarding some differences in reporting, Dyrenge et al. (2019) report that the US multinational companies with subsidiaries located in tax havens have effective tax rates that are between 1.5 and 2.2 percentage points below the effective tax rates of US multinational companies without subsidiaries in places of refuge.

Watrin et al. (2019) identified that auditors are aware that companies may not make provisions for uncertain taxes, and these professionals (auditors) can still advise with more conservative tax strategies and can take more conservative positions when they have also provided advice to the audited company, since aggressive tax positions could lead to a review of its audit responsibility (Watrin et al. 2019). The auditor can use the knowledge gained during the audit to provide advice on tax planning, which can result in aggressive tax strategies (Hogan and Noga 2015).

Due to this exchange of knowledge from the audit department to the tax department, the auditor is in an excellent position to provide advice on tax savings (Gleason and Mills 2011). However, aggressive tax planning increases the risk of tax litigation and more tax risk, which can result in financial problems, restatements, and auditor liability, so auditors who provide tax services may also prefer less aggressive tax planning if there are uncertainties (Watrin et al. 2019).

International Accounting Perspective

A recent phenomenon to be studied is the scrutiny of the level of taxes on profits paid by companies (Whiting 2006). Firms often attract adverse attention due to the perceived discrepancy between the level of reported accounting earnings and the associated levels of taxable earnings and hence the level of taxes payable (Uncut 2010) and (Public Accounts Committee 2012). The review reflects concerns about the use of tax avoidance techniques and the perceived consequences on government revenue levels or increased levels of

taxation on other groups of taxpayers (Hasseldine et al. 2012).

Emphasizing the importance of accounting and tax differences, large American companies were asked to present to the Internal Revenue Service (IRS) a reconciliation of taxable income and financial accounting result since 2004 (Boynton and Mills 2004).

Differences can also arise from earnings management. This is more likely to represent aggressiveness in financial accounting reporting (Hanlon and Slemrod 2009); however, companies may be willing to pay taxes on management earnings as a sign of credibility (Erickson et al. 2004).

The rivalry between the tax authority and corporate taxpayers is increasing, as these (corporate taxpayers) are more aggressive with the approach of reducing taxable profits, while the tax authority is looking for ways to increase its collection (Salihu et al. 2013).

Tax savings are usually obtained from loopholes in tax regimes that are not intended to provide taxpayers with tax advantages (Bai et al. 2017). Thus, the concern of regulators with greater transparency is driven by the possible impact of tax contingency, considering the greater risk in companies immersed in complex tax planning structures, as in these cases, a tax performance can have a strong economic and financial impact on companies (Tarazona et al. 2019). The same authors also point out that imprecise and incorrect disclosures can affect the decision-making process of stakeholders, including the tax inspector; because of these impacts, companies must be very careful in the process of estimating and disclosing their actual contingent liabilities with regarding taxes on profit. If the company concludes that the tax authority is unlikely to accept the uncertain tax treatment, the effect of tax uncertainty must be reflected in determining the tax base (ICPC 22 2018).

American Accounting Perspective

The interpretation FIN 48, published in June 2006 by the FASB, began in 2007. Also, the purpose of this US accounting standard was to increase the

transparency of interpretations, relevance, and comparability with the uncertain tax positions of companies, all related to income taxes (Gleason et al. 2018). Indeed, FIN 48 was introduced to improve the relevance and comparability of financial statements in their income tax reporting and to provide more information in the financial statements about uncertainty in income tax assets and liabilities (FASB 2006). The entry of FIN 48 was considered one of the most impactful accounting changes after the 2000s (Mills et al. 2010).

A highlight of the interpretation is related to the disclosure of strategic information related to taxes; the main disclosures are techniques adopted to reduce taxes due, criteria for the deferral of taxes, justification for changes in the expectations of realization of deferred taxes, as well as the benefits related to tax planning, focusing mainly on business combinations.

Uncertain tax benefits must be recognized as an accounting reserve; this reserve is necessary when a company is unsure whether the tax position and its treatment of recognition in tax returns will be accepted by the tax authority; therefore, it will lead to new tax payments when submitted to a tax audit (Lisowsky et al. 2013).

Tax laws and regulations are subject to interpretations by taxpayers, which in an inspection procedure may not be the same interpretations of the inspection agent (Frischmann et al. 2008). A common example in these cases is the goodwill or goodwill in business combinations that generate uncertainties for companies and inspectors in the measurement and fiscal accounting recognition (Lopes 2012).

Summary

Tax uncertainties are common in the financial statements because there are always a risk between the interpretation of the facts by the tax authorities and the management of the company. Sometimes management uses the judgment in the financial statements to promote a better understanding by the stakeholders. However, it is not the same view of tax authorities, causing a risk when it comes a book-tax difference.

References

- Bai, Y., Lobo, G. J., & Zhao, Y. (2017). *Reputation and corporate tax planning: A moral licensing*. Lone Star Accounting Research Conference.
- Bates, T. W., Kahlen, K. M., & Stulz, R. M. (2009). Why do U.S. firms hold so much more cash than they used to? *Journal of Finance*, 64(5), 1985–2021.
- Blouin, J. L., Gleason, C. A., Mills, L. F., & Sikes, S. A. (2010). Pre-empting disclosure? Firms decisions prior to FIN 48. *The Accounting Review*, 85, 791–815.
- Boynton, C., & Mills, L. (2004). The evolving Schedule M-3: a new era of corporate show and tell? *National Tax Journal*, 57(3), 757–772.
- Dyregne, S., Hanlon, M., & Maydew, E. L. (2019). When does tax avoidance result in tax uncertainty? *The Accounting Review*, 94(2), 179–203.
- Eragbhe, E., & Aronmwan, E. J. (2015). Taxpayers income, taxpayers attributes and personal income tax compliance. *African Journal of Management Sciences*, 1(1), 95–111.
- Erickson, M., Hanlon, M., & Maydew, E. (2004). How much will firms pay for earnings that do not exist? Evidence of taxes paid on allegedly fraudulent earnings. *The Accounting Review*, 79(2), 387–408.
- FASB. (2006). FIN 48 – Accounting for uncertainty in income taxes. Recuperado de: www.fasb.org: FASB Interpretation.
- Frischmann, P., Shevlin, T., & Wilson, R. (2008). Economic consequences of increasing the conformity in accounting for uncertain tax benefits. *Journal of Accounting and Economics*, 46(2/3), 261–278.
- Gleason, C., & Mills, L. (2011). Do auditor-provided tax services improve the estimate of tax reserves? *Contemporary Accounting Research*, 28, 1484–1509.
- Gleason, C. A., Markle, K. S., & Song, J. Z. (2018). *Did FIN 48 improve the predictive ability of tax expense?* Iowa: University of Iowa presents.
- Guenther, D. A., Wilson, R. J., & Wu, K. (2016). *Tax uncertainty and marginal tax avoidance*. Lundquist College of Business. University of Oregon: Eugene.
- Gupta, S., Laux, R. C., & Lynch, D. P. (2017). Do firms use tax reserves to meet analysts' forecasts? Evidence from the Pre- and Post-FIN 48 Periods. *Contemporary Accounting Research*, 33(3), 1044–1074.
- Hanlon, M., & Slemrod, J. B. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics*, 93(1–2), 126–141.
- Hanlon, M., Maydew, E. L., & Saavedra, D. (2017). The taxman cometh: Does tax uncertainty affect corporate cash holdings? *Review of Accounting Studies*, 22, 1198–1228.
- Hasseldine, J., Holland, K. M., & Van der Rijt, P. G. (2012). Companies and taxes in the UK: Actors, actions, consequences and responses. *eJournal of Tax Research*, 10(3), 532–551.
- Hogan, B., & Noga, T. (2015). Auditor-provided tax services and long-term tax avoidance. *Review of Accounting Studies*, 285–305.
- ICPC 22. (2018). *Incerteza sobre Tratamento de Tributos sobre o Lucro. Interoretação Técnica ICPC 22*. Brazil: Comitê de Pronunciamentos Contábeis - CPC.
- Jacob, M., Wentland, K., & Wentland, S. (2020). *Real effects of tax uncertainty: Evidence from firm capital investments*. Available at SSRN 2518243.
- Law, K. K., & Mills, L. F. (2015). Taxes and financial constraints: Evidence from linguistic cues. *Journal of Accounting Research*, 53, 777–819.
- Lisowsky, P., Robinson, L., & Schmidt, A. (2013). Do publicly disclosed tax reserves tell us about privately disclosed tax shelter activity? *Journal of Accounting Research*, 51(3), 583–629.
- Lopes, T. (2012). *Custos políticos tributários: o impacto do tamanho na alíquota tributária efetiva*. Tese de Doutorado, Faculdade de Economia, Administração e Contabilidade. São Paulo: Universidade de São Paulo.
- Markle, K. S., & Shackelford, D. A. (2012). Cross-country comparisons of corporate income tax rates. *National Tax Journal*, 65, 493–528.
- Mills, L. F., Robinson, L. A., & Sansing, R. C. (2010). FIN 48 and tax compliance. *The Accounting Review*, 85(5), 1.721–1.742.
- Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics*, 52(1), 3–46.
- Public Accounts Committee. (2012). Public Accounts Committee. Nineteenth Report. London. www.publications.parliament.uk/pa/cm201213/cmselect/cmpubacc/716/71602.htm.
- Salihu, I. B., Obid, S. N., & Annuar, H. A. (2013). Measures of corporate tax avoidance: Empirical evidence from an emerging economy. *International Journal of Business and Society*, 14(3), 412–427.
- Scholes, M. S., & Wolfson, M. A. (1992). *Taxes and business strategy: A planning approach*. Englewood Cliffs: Prentice Hall.
- Scholes, M. S., Wilson, G. P., & Wolfson, M. A. (1990). Tax planning, regulatory capital planning, and financial reporting strategy for commercial banks. *Review of Financial Studies*, 3, 625–650.
- Simone, L. D., Nickerson, J., Seidman, J., & Stomberg, B. (2019). How reliably do empirical tests identify tax avoidance? *Contemporary Accounting Research*, 37, 1536–1561.
- Tarazona, C. E., Sánchez, F. R., & Toyofuku, V. R. (2019). *Experiencia Peruana Sobre Las Revelaciones De Posiciones Fiscales Inciertas Del Impuesto A Las Ganancias*. Área de investigación: Contabilidad, costos, auditoría, contribuciones y tributación. Cuidade de México, México: Congreso Internacional de Contaduría, Administración e Informática.
- Uncut, U. K. (2010). Big Society Revenue & Customs. <http://www.ukuncut.org.uk/targets>.
- Watrin, C., Burggraef, S., & Weiss, F. (2019). Auditor-provided tax services and accounting for tax uncertainty. *The International Journal of Accounting*, 54(3), 1950011.
- Whiting, J. (2006). Tax and accounting. *British Tax Review*, 3, 267–281.

- Wilde, J., & Wilson, R. (2018). Perspectives on corporate tax avoidance: Observations from the past decade. *Journal of the American Taxation Association*, 40, 63–81.
- Zimmerman, J. L. (1983). Taxes and firm size. *Journal of Accounting and Economics*, 5, 119–149.

Further Readings

- Gupta, S., Mills, L. A., & Towery, E. (2013). Did FIN 48 arrest the trend in multistate tax aggressiveness? from <http://ssrn.com/abstract=1477068>.
- Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, 50, 127–178.
- Holthausen, R. W., & Leftwich, R. W. (1983). The economic consequences of accounting choice. Implications of costly contracting and monitoring. *Journal of Accounting and Economics*, 5(1), 77–117.
- Lee, B. B., Dobiyanski, A., & Minton, S. (2015). Theories and empirical proxies for corporate tax avoidance. *Journal of Applied Business and Economics*, 17(3), 21–34.
- Lev, A. M. (2008). FIN 48 creates unexpected risks in business sales. *The M&A Lawyer*, 12, 2–7.
- Mynatt, P., Schroeder, R., & Wiggins, C. (2014). The of FIN 48 on financial reporting: Lessons from the first five years. *The CPA*, 44–49.
- Nichols, N. B. (2008). One year later: An analysis of FIN 48 disclosures in 2007 forms 10-k. *Tax Notes*, 121, 5.
- Robinson, L. A., Stomberg, B., & Towery, E. M. (2015). One size does not fit all: How the uniform rules of FIN 48 affect the relevance of income tax accounting. *The Accounting Review*, 91(4), 1195–1217.
- Wahab, N. S., & Holland, K. (2015). The persistence of book-tax differences. *The British Accounting Review*, 47, 339–350.

Technical Externalities

- Externalities (Economics)

Technology

- Disruptive Innovation

Technology/People/Outputs Integration

- Supply Chain Management

Technopoles

- Smart Cities

Territorial Governance

- Shared Community-Based Governance

Territorial Resilience Community

- Resilient Sustainability

Territory Lifecycle

- Lifecycle of Sustainable Development

Text

- EU Communication CSR

The All-Subjected Principle

- Social Justice

The Atmosphere of Personal Relationships/Interactions Within Organization

- Communication Climate and Culture

The Board and CSR

- Directors and CSR

The Board and Environment

- ▶ [Directors and CSR](#)

The Resilient Sustainability

- ▶ [Resilient Sustainability](#)

The Club of Rome

- ▶ [Club of Rome](#)

The Selling Cycle

- ▶ [Selling Cycle for Sustainability](#)

The Contingency Theory of Organizations

- ▶ [Contingency Theory](#)

The Sustainability Concept in Islam

- ▶ [Islamic Sustainability](#)

The Ecocultural Tourism

- ▶ [Ecocultural Tourism](#)

The Third Sector

- ▶ [Nongovernmental Organization](#)

The Emotional Tone of a Relationship Between Two or More Individuals

- ▶ [Communication Climate and Culture](#)

The United Nations Framework Convention on Climate Change

- ▶ [United Nations Convention on Climate Change \(UNCCC\)](#)

The International Standard on Social Responsibility

- ▶ [Guidance on Social Responsibility](#)

Theoretical Paradigms of the Board of Directors

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The ISO Standard on Social Responsibility

- ▶ [Guidance on Social Responsibility](#)

Synonyms

[Theories on the board of directors](#)

Introduction

There are several theories that can contribute to knowledge about the most important governance body of the firm – the board of directors. However, the emergence of alternative theories, opposed in some points, has contributed even more to the broad debate on corporate governance (Garner et al. 2017). The three dominant theoretical paradigms in research on corporate governance are (Nicholson and Kiel 2007): the Agency Theory (Jensen and Meckling 1976; Fama and Jensen 1983), the Stewardship Theory (Donaldson 1990; Donaldson and Davis 1991, 1994), and the Resources and Capabilities Theory (Zald 1969; Pfeffer 1972; Pfeffer and Salancik 1978). These three theories recognize the different main roles of the board of directors, in such a way that the optimal configuration of the board differs depending on the theoretical approach adopted. However, a common aspect of all of them is their emphasis on clarifying the relationship between the different characteristics of boards of directors and company performance. In this sense, the academic literature developed in recent years concludes that the relationship between the board of directors and company performance is too complex to be explained unilaterally by a single theory (Garner et al. 2017; Li et al. 2018). These theories have helped clarify the functions carried out by the board to contribute to the better performance of organizations (Åberg et al. 2019).

The Agency Theory

The Agency Theory has been the dominant theoretical approach in research on boards of directors (Åberg et al. 2019; Li et al. 2018), especially in the field of corporate finance. This theory refers to the alignment of interests between owners and managers (Jensen and Meckling 1976; Fama 1980; Fama and Jensen 1983). The starting point is the conflict of interest between those who finance the company – its owners and those who manage funds –and the managers (Fama and Jensen 1983). Adam Smith (1776) first documented the

recognition of this conflict, although it was not until the beginning of the last century, with the seminal work of Berle and Means (1932), when it was heard for the first time about the effective separation between company ownership and company control. This separation implies that managers have more knowledge and experience of the company than owners; the former can therefore act at the expense of the latter. The combination of these information asymmetries, the different “risk profiles, and the inability of managers to diversify their risk” (Boyd et al. 2011, p. 1.893) can lead to their opportunistic behavior. Company owners need to incur agency costs to supervise the behavior of managers in order to reduce the divergence of interests between both parties. “Jensen and Meckling (1976), who argue that agency costs are an inevitable part of the ownership-management relationship, formalize this hypothesis in a mathematical model” (Nicholson and Kiel 2007, p. 587). The agency problem has been later discussed in studies of great importance (see, e.g., Eisenhardt 1989; Fama 1980; Fama and Jensen 1983,). These studies conclude that the self-interest of managers can be detected through remuneration or other types of gratifications, and in other types of motivations more difficult to identify, such as the pursuit of growth at the expense of economic benefit (Stano 1976).

From this perspective, corporate governance must establish control and supervision mechanisms that allow an effective protection of shareholders from possible opportunistic behavior by the management team (Li et al. 2018; Pearce and Zahra 1992). The Agency Theory, widely accepted in the political-business sphere, has resulted in corporate governance recommendations that focus on the supervisory role of boards, advocating, in general for boards of an intermediate size, with a majority of independent directors and with an effective separation of the figures of CEO and board chairperson (Andrés and Santamaría 2018; Cuomo et al. 2016). These characteristics will allow the board to effectively supervise managerial action. As a result of this supervisory role, there will be fewer opportunities for managers to act in their own interest at the

expense of the interests of the owners, there will be less agency costs, and, therefore, shareholders will receive higher returns or profit increases. In summary, a more efficient supervisory function is associated with lower agency costs and, consequently, with better business performance (Garner et al. 2017).

The impact of the Agency Theory in research on corporate governance can be seen in the large number of studies that have examined the impact of board structure on company performance; the results of these studies are contradictory and inconclusive (Aguilera et al. 2016; Garner et al. 2017).

This theory has been widely developed “in the Anglo-American context and, consequently, highly criticized for its limited applicability” Boyd et al. 2011, p. to other institutional contexts (Aguilera et al. 2008; Aguilera et al. 2016). In response to this criticism, new branches of this theory have been developed, such as the Social Agency Theory (Wiseman et al. 2012) and the Theory of Behavioral Agency (Wiseman and Gomez-Mejia 1998).

The Stewardship Theory

The Stewardship Theory (Donaldson and Davis 1991) emerged from the fields of sociology and psychology. Contrary to the Agency Theory, which proposes an economic view of managers, the Stewardship Theory offers a psychosocial view of corporate governance and establishes that relationships within the company are governed by behavioral guidelines and are not led by the agent-principal conflict of interest (Keay 2017). It considers company managers to be people of trust, committed to the organization and, therefore, good administrators of the resources that the company entrusts to them (Martin and Butler 2017). According to this theory, the gain derived from this pro-organizational behavior is greater than that derived from an individualistic behavior that only pursues self-interest. From this approach, the interests of managers would be aligned with those of the organization (Li et al. 2018), and, therefore, although it is true

that managers can try to maximize their personal utility, this theory proposes that the interest of the manager-steward will not be different from the collective interests. Given that the main objective of the company is to maximize the wealth of its owners, the management team, under this steward behavior, will pursue the same objective (Krause et al. 2014). In the event the interests of different participants in the company are not the same, the management team will take decisions aimed at serving the best general interest of the organization (Miller et al. 2008) as, in doing so, it maximizes its own utility function (Davis et al. 1997). The behavior of the steward is highly oriented toward cooperation, and its motivation responds more to intrinsic than extrinsic questions. Therefore, the server adds value not only through its pro-organizational behavior but also by internalizing the objectives of the organization in its individual cognitive structures (Boyd et al. 2011).

Davis et al. (1997) present a broad description of this theoretical approach (Martin and Butler 2017). These authors conceive corporate governance as the simultaneous result of two perspectives, psychological or behavioral in terms of human behavior and the situation regarding the business organization model. Consequently, the resulting governance structure has its origin not only in the behavioral factors and motivations of the agents but also in the organizational and cultural conditions existing within the organization. These two perspectives are closely related, since the organizational and cultural context existing within the company derives from the behavioral factors and the motivations of the agents that it comprises.

From this theoretical perspective, excessive oversight of the management team by the board of directors is unnecessary, and even counterproductive, to achieve a better corporate performance (Martin and Butler 2017). Those governance structures that emphasize executive control over board control can be more beneficial (Donaldson and Davis 1994). “Large boards, with more independent directors and non-dual leadership structures, could reduce the steward behavior of managers (Jaskiewicz and Klein 2007)” (García-Ramos and García-Olalla 2014, p. 316).

Therefore, this theory recommends smaller boards, which incorporate a high proportion of executive directors, who devote themselves more to the advisory board role than to the supervisory board role (Corbetta and Salvato 2004; Hillman and Dalziel 2003). In this same vein, dual leadership structures, that is, when the figures of the CEO and the board chairperson fall on the same person, are interpreted as a positive force leading to a better corporate performance, since it allows for a clear, well-defined business leadership (Donaldson and Davis 1991; Muth and Donaldson 1998). From this approach, a greater proportion of executive directors will result in higher business performance, since they work to maximize the wealth of shareholders; because they know the company they govern better than external directors, their decision-making process is more effective. The idea behind this approach is that thanks to the relationship of trust that they have with the company, there will be no large agency costs (Le Breton-Miller and Miller 2009; Le Breton-Miller et al. 2011). In addition, the Stewardship Theory establishes that senior executives will not harm shareholders so as not to damage their reputation (Donaldson and Davis 1994; Keay 2017). Empirical evidence about the superior capacity of executive directors to achieve a better corporate performance is inconclusive (Garner et al. 2017).

The Stewardship Theory has not explicitly indicated the processes through which the board of directors and the firm's performance are related, although the ability to carry out a more effective decision-making, which in the end positively affects corporate performance, has been considered a key aspect. Access to information, commitment, relationships of trust, and the ability to adopt a long-term vision are considered crucial for the decision-making process (Donaldson and Davis 1994; Keay 2017). In this regard, several studies have examined the greater quantity and better quality of the information held by the executive directors and their apparent relationship with long-term investment or with more balanced remuneration systems (Barontini and Bozzi 2018; Baysinger and Hoskisson 1990; Baysinger et al. 1991; Boyd 1994; Keay 2017).

The Resources and Capabilities Theory

The third of the theoretical approaches that has received the most attention in the literature on corporate governance is the Resources and Capabilities Theory (Åberg et al. 2019; Pfeffer 1972). Different studies recognize the ability of the board to access vital resources that the company needs to maximize its performance (Li et al. 2018). The definition of these resources is varied. In general, they consist of all tangible and intangible assets, human and nonhuman, that are owned or controlled by the organization and that allow it to make more efficient corporate decisions. Capabilities refer to the company's ability to deploy resources and achieve the desired end. These are tangible or intangible processes based on information that is specific to the organization and developed through time and over complex interactions between corporate resources.

This theoretical perspective postulates "that the board of directors is an essential link between the company and the resources it needs to maximize its performance" (Nicholson and Kiel 2007, p. 589) and that its members possess adequate capacities to manage those resources (Li et al. 2018; Withers et al. 2012). Although this perspective became popular in the 1970s, it was not until the 1990s that it began to receive increasing attention thanks to the emphasis of many academics on the competitive advantage that could derive from an adequate supply of resources (Barney 1991). According to this theory, directors reduce the uncertainty of the environment by providing information, which results in improvements in corporate performance (Pfeffer 1972). Authors such as Hillman et al. (2009) define the board of directors as an important potential resource for the company (Åberg et al. 2019). In reviews of the literature on governance and corporate performance, the ability of boards to provide significant resources to the company is considered one of the fundamental functions of the board of directors (Åberg et al. 2019; Korac-Kakabadse et al. 2001; Zahra and Pearce 1989).

Some of the most important resources identified in the literature are the following (Nicholson and Kiel 2007): information, capital, contacts

with suppliers, clients and other stakeholders, links with other companies, and legitimation. But undoubtedly, the attention received by knowledge (Li et al. 2018), defined by Wernerfelt (1984), stands out as an intangible resource capable of sustaining a competitive advantage in the long term and fundamental for the provision of efficient advice. Pfeffer and Salancik (1978) consider that the board of directors provides the company with four types of essential benefits: (1) advice; (2) legitimation; (3) information communication channels between the company and the environment; and (4) preferential access to resources.

Within this stream of literature, the terminology used by Hillman and Dalziel (2003) deserves special mention (Åberg et al. 2019). These authors define the capital of the board as the sum of human capital (knowledge, experience, and reputation) and social capital (network of links with other organizations and external contingencies). In this vein, it is possible to differentiate between an internal perspective, on the one hand, and an external perspective on the other. The former is geared toward the internal analysis of the company and focuses on the way in which it tries to develop its human resources with the objective of transforming them into a competitive advantage, whereas the latter is geared to the external analysis of the company and focuses on the way the firm obtains resources from the environment in which it operates.

Studies that have analyzed the board of directors under this theoretical perspective can be classified into different groups (see Barontini and Bozzi 2018; Boyd et al. 2011; Hillman et al. 2009; Li et al. 2018; Nielsen and Nielsen 2013; Terjesen et al. 2016; Withers et al. 2012). For example, there are studies that have shown that certain characteristics of a board, such as its size, independence, or gender diversity, represent a response to the external environment. There are also studies that have analyzed how changes in environmental conditions lead to changes in the structure of the board. In addition, there are the studies that have analyzed which type of companies are most likely to benefit from the provision of resources by the board. Moreover, there are

studies that have classified directors according to the type of benefits they can provide in terms of resource provision and have analyzed under what circumstances a firm could benefit more from one type of director.

Future Directions

As recently pointed out by Adams (2017), the question “what makes a board effective?” is open and continues to be an important matter in academic research and policy-making. Despite decades of research on corporate governance, there is not a theory that alone helps to configure the ideal board of directors (Aguilera et al. 2016; Andrés and Santamaría 2018; Keay 2017). More research is needed using multi-theoretical approaches in order to improve the performance of boards of directors. Nowadays, Behavioral Theory (Cyert and March 1963) is gaining importance in the field of boards of directors (Desai 2016; Kaczmarek 2017). To understand boards, “it is necessary to understand the people who sit on them” (Adams 2017). Whether characteristics of directors, such as their personality, beliefs, or values, affect the decision-making of the individuals and group members that sit on the board is the current challenge embarked upon in the most recent academic literature on boards of directors (Andrés and Santamaría 2018).

Cross-References

- [Agency Theory](#)
- [Chief Executive Officer \(CEO Duality\)](#)
- [Corporate Governance](#)
- [Non-Executive Director \(NED\)](#)
- [Stakeholder Theory](#)

References

- Åberg, C., Bankewitz, M., & Knockaert, M. (2019). Service tasks of board of directors: A literature review and research agenda in an era of new governance practices. *European Management Journal*, 37, 648–663.

- Adams, R. B. (2017). Boards, and the directors who sit on them. European Corporate Governance Institute, Working Paper 515/2017.
- Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. (2008). An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization Science*, 19(3), 475–492.
- Aguilera, R. V., Florackis, C., & Kim, H. (2016). Advancing the corporate governance research agenda. *Corporate Governance: An International Review*, 24(3), 172–180.
- Andrés, P., & Santamaría, M. (2018). Del consejo de administración a los códigos de buen gobierno: un paseo por la literatura académica. *The Economist*, 158, 106–125.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barontini, R., & Bozzi, S. (2018). Family firm heterogeneity and CEO compensation in continental Europe. *Journal of Economics and Business*, 97, 1–18.
- Baysinger, B. D., & Hoskisson, R. E. (1990). The composition of boards of directors and strategic control: Effects on corporate strategy. *Academy of Management Review*, 15, 72–87.
- Baysinger, B. D., Kosnik, R. D., & Turk, T. A. (1991). Effects of board and ownership structure on corporate R&D strategy. *Academy of Management Journal*, 34(1), 205–214.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: Macmillan Publishing.
- Boyd, B. K. (1994). Board control and CEO compensation. *Strategic Management Journal*, 15(5), 335–344.
- Boyd, B. K., Haynes, K. T., & Zona, F. (2011). Dimensions of CEO–board relations. *Journal of Management Studies*, 48(8), 1892–1923.
- Corbetta, G., & Salvato, C. A. (2004). Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: A commentary on “Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence”. *Entrepreneurship Theory & Practice*, 28(4), 355–362.
- Cuomo, F., Mallin, C., & Zattoni, A. (2016). Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 24(3), 222–241.
- Cyert, R. M., & March, J. G. (1963). *A behavioral theory of the firm*. Englewoods Cliffs: Prentice-Hall.
- Davis, J., Schoorman, D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22, 20–47.
- Desai, V. M. (2016). The behavioral theory of the (governed) firm: Corporate board influences on organizations’ responses to performance shortfalls. *Academy of Management Journal*, 59(3), 860–879.
- Donaldson, L. (1990). The ethereal hand: Organizational economics and management theory. *Academy of Management Review*, 15(3), 369–381.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64.
- Donaldson, L., & Davis, J. H. (1994). Boards and company performance—research challenges the conventional wisdom. *Corporate Governance: An International Review*, 2, 151–160.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14, 57–74.
- Fama, E. F. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy*, 88, 288–307.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics*, 26(2), 327.
- García-Ramos, R., & García-Olalla, M. (2014). Board independence and firm performance in Southern Europe: A contextual and contingency approach. *Journal of Management & Organization*, 20(3), 313–332.
- Garner, J., Kim, T. Y., & Kim, W. Y. (2017). Boards of directors: A literature review. *Managerial Finance*, 43(10), 1189–1998.
- Hillman, A. J., & Dalziel, T. D. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *The Academy of Management Review*, 28, 383–396.
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404–1427.
- Jaskiewicz, P., & Klein, S. B. (2007). The impact of goal alignment on board composition and board size in family businesses. *Journal of Business Research*, 60(10), 1080–1108.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kaczmarek, S. (2017). Rethinking board diversity with the behavioural theory of corporate governance: Opportunities and challenges for advances in theorising. *Journal of Management & Governance*, 21(4), 879–906.
- Keay, A. (2017). Stewardship theory: Is board accountability necessary? *International Journal of Law and Management*, 59(6), 1292–1314.
- Korac-Kakabadse, N., Kakabadse, A. K., & Kouzmin, A. (2001). Board governance and company performance: Any correlations? *Corporate Governance*, 1(1), 24–30.
- Krause, R., Semadeni, M., & Cannella, A. A. (2014). CEO duality: A review and research agenda. *Journal of Management*, 40, 256–286.
- Le Breton-Miller, I., & Miller, D. (2009). Agency vs. stewardship in public family firms: A social embeddedness reconciliation. *Entrepreneurship Theory & Practice*, 33(6), 1169–1191.
- Le Breton-Miller, I., Miller, D., & Lester, R. H. (2011). Stewardship or agency? A social embeddedness reconciliation of conduct and performance in public family businesses. *Organization Science*, 22(3), 704–721.

- Li, H., Terjesen, S., & Umans, T. (2018). Corporate governance in entrepreneurial firms: A systematic review and research agenda. *Small Business Economics*, 1–32.
- Martin, J. A., & Butler, F. C. (2017). Agent and stewardship behavior: How do they differ?. *Journal of Management & Organization*, 23(5), 633–646.
- Miller, D., Le Breton-Miller, I., & Scholnick, B. (2008). Stewardship Vs. Stagnation: An empirical comparison of small family and non-family businesses. *Journal of Management Studies*, 45(1), 51–78.
- Muth, M. M., & Donaldson, L. (1998). Stewardship theory and board structure: A contingency approach. *Corporate Governance: An International Review*, 6(1), 5–28.
- Nicholson, G. J., & Kiel, G. C. (2007). Can directors impact performance? A case-based test of three theories of corporate governance. *Corporate Governance: An International Review*, 15(4), 585–608.
- Nielsen, B. B., & Nielsen, S. (2013). Top management team nationality diversity and firm performance: A multilevel study. *Strategic Management Journal*, 34(3), 373–382.
- Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies*, 29, 411–438.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17, 218–229.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organisations*. New York: Harper & Row.
- Smith, A. (1776). *The wealth of nations*. Edited by Edwin Cannan, 1904. Reprint edition 1937. New York: Modern Library.
- Stano, M. (1976). Monopoly power, ownership control, and corporate performance. *The Bell Journal of Economics*, 7, 672–679.
- Terjesen, S., Couto, E. B., & Francisco, P. M. (2016). Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity. *Journal of Management & Governance*, 20(3), 447–483.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Wiseman, R. M., & Gomez-Mejia, L. R. (1998). A behavioral agency model of managerial risk taking. *Academy of Management Review*, 23(1), 133–153.
- Wiseman, R. M., Cuevas-Rodríguez, G., & Gomez-Mejia, L. R. (2012). Towards a social theory of agency. *Journal of Management Studies*, 49(1), 202–222.
- Withers, M. C., Hillman, A. J., & Cannella, A. A. (2012). A multidisciplinary review of the director selection literature. *Journal of Management*, 38(1), 243–277.
- Zahra, S., & Pearce, J. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15, 291–334.
- Zald, M. N. (1969). The power and functions of boards of directors: A theoretical synthesis. *American Journal of Sociology*, 75, 97–111.

Theories on the Board of Directors

► Theoretical Paradigms of the Board of Directors

Theorizing Governance from a Banking Perspective

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Synonyms

[Agency theory](#); [Banking sector](#); [Stakeholder identification](#); [Stakeholder theory](#)

Definition

The bone of contention in academic literature is whether to theorize governance from a shareholder-centric perspective based on the agency theoretical viewpoint or to adopt a stakeholder perspective. This is of particular importance depending on the sector or industry involved. The agency theory involves one party, the principal (shareholders) delegating work to another, the agent (directors). Many academics and researchers have theorized corporate governance in this agency perspective. For example, Shleifer and Vishny (1997) view governance as the way in which suppliers of finance to corporations assure themselves of getting a return on their investments. Fundamentally, this view proffers that the main objective of the firm is thus wealth maximization. Engaging in an operational and financial perspective of governance emphasizes the use of control or incentives and monitoring as mechanisms to align the divergent interests of shareholders and managers (Jensen and Meckling 1976). This view finds support in the earlier definition of governance offered by the Cadbury

Report (1992) where they state that governance is a system by which firms are directed and controlled. The agency theory views man as self-seeking, who cannot be always trusted to pursue altruistic goals. Thus, the theory seeks to avoid corporate executives exploiting their firms to the detriment of investors. This theory of governance is fraught with criticism. The pre-occupation of proponents of the theoretical perspective with 'shareholder primacy' and over-reliance on capital markets for performance measurement and the ultimate disciplining mechanism, ultimately encourages managerial-myopia or short-termism (Letza et al. 2004).

The stakeholder perspective on the other hand posits that governance encompasses the implementation of internal mechanisms to protect shareholder interests, as well as external mechanisms to support the relationship of firms with its shareholders and other stakeholder groups (Mallin 2019). The theory which gathered momentum in the 1970s reflected a conscious societal fear that large multinational companies had become too imperialistic and powerful to be held accountable solely through the classic stewardship hypothesis. It advocated that a good corporate governance system should establish an accountability relationship between the firm and stakeholders that could potentially be affected by the firm's activities. In light of this development, many writers and international organizations have championed the need to align governance with the stakeholder theoretical perspective. For example, the OECD (2004) recognizes that *corporate governance involves a set of relationships between a company's management, its board, its shareholders, and other stakeholders. The BCBS (2015) views corporate governance as a set of relationships between a company's management, its board, its shareholders, and other stakeholders which provide the structure through which the objectives of the company are set and the means of attaining those objectives and monitoring performance. Solomon (2010) asserts that corporate governance is the system of checks and balances, both internal and external to the company, which ensure that they are able to discharge their accountability to all stakeholders and act in a*

socially responsible way in all areas of their activities. This wider stakeholder perspective was subsequently advocated for by Cadbury in 2000. He emphasized that corporate governance frameworks should ensure that the interests of individuals, firms, and society are aligned by ensuring that the firms' resources are efficiently utilized and that accountability for the stewardship of such resources is fully discharged (Cadbury 2000).

Stakeholder identification has also become one of the central debates in stakeholder theory (Freeman 2014). It is imperative to ensure an encased category of stakeholders in order to readily identify them and balance any conflicting interests. The OECD (2004) and Freeman (2014) posit that stakeholders are individuals or groups who influence and are influenced by the firm, including shareholders, creditors, customers, employees, suppliers, owners, management and the local community, media, non-governmental organizations, and others. Stakeholders in the banking sector include customers, depositors, employees, suppliers, shareholders, regulators, auditor, the investigative media, the government, local communities, and society (BCBS 2015). A bank or banking organization is defined as an entity considered by banking supervisors to be the parent of a banking group under applicable national law as determined to be appropriate by the entity's national supervisor (BCBS 2015).

Introduction

The banking sector is pivotal to the socioeconomic development of any economy. The application of stakeholder theory in the banking sector is driven by the role of banks in the economic and financial stability of countries. The banking sector generates employment and contributes significantly to economic growth and development, thus making it more integral to a variety of stakeholders. Thus, it is imperative that banks are socially responsible. At the very least, banks should be able to build their reputational capital which enables them to attract first-class employees, charge higher fees, negotiate superior

business deals, expand customer and depositor base, attract more long-term investors, and build public trust (Lincoln et al. 2017, 2019). Stakeholder management leads to improved shareholder value (OECD 2004; BCBS 2015). There is evidence in extant literature which supports the view that banks' performance is positively associated with their orientations toward satisfying corporate stakeholder interests.

While it is accepted that the primary objective of firms is shareholder value maximization, adopting this perspective in relation to the banking sector creates a host of challenges. Firstly, in most situations, owners and managers enter into a nexus of agency contracts that specifies the powers of the manager (Jensen and Meckling 1976). Irrespective of the nexus of contracts between owners and managers, corporate defects often arise, due to the fact that it is not technologically feasible to design an all-encompassing contract or conclusively predict all circumstances that can arise from the activities pursued by management. Secondly, the cost implications associated with the design of a perfect agency contract would make it practically impossible to implement as owners often have to allocate residual control rights to management so that these agents have the authority to make decisions not foreseen by the agency contract. The implication of the transfer of such residual control rights is that management usually possesses a vast amount of discretionary powers. This, coupled with the existence of incomplete contracts, creates agency problems associated with the separation of ownership and control (Jensen and Meckling 1976). Thirdly, manager and owners are considered utility maximizers, and thus the agent cannot be trusted to always act in the best interests of the principal (Jensen and Meckling 1976) and due to time and monetary restrictions, the agent cannot be effectively monitored by the principal. This immediately creates an information asymmetry between the parties because managers, by virtue of their position, are privy to more information than the owners. This can invariably lead to moral hazard because management can have a riskier perspective of potential risk than the owners (Tricker 2012). Moreover, the agent can pursue

opportunistic behavior such as empire building at the expense of profits; engaging in fraudulent behavior, short-termism, and over-indulging in perks; but externalizing the costs to the principal (Jensen 1986). There is also the added complexity that the principal could appoint an agent who does not possess the specialized expertise necessary to fulfill the role and responsibilities of the management position. Consequently, agency theorists suggest that incentives and monitoring mechanisms are implemented so that moral hazard is prevented and the self-seeking opportunism that managers innately possess is controlled (Jensen and Meckling 1976). These incentives are financial rewards provided to management by owners for maximizing shareholder wealth. Such schemes include strategies which allow management acquire shares, perhaps at a reduced rate, so as to align the financial interests of agents with principals (Jensen and Meckling 1976).

Thus, agency theory revolves around a discourse based on the self-interested manager and shareholder wealth maximization whereas a stakeholder perspective leads to a discussion on duty and social responsibility. The 2007–2008 global financial crisis evolved from the traditional shareholder-centric notions of corporate governance to a more enlightened agency approach (Aguilera and Jackson 2010; Claessens and Yurtoglu 2012). For instance, investors are encouraged to exercise their ownership rights to prevent expropriation by management and boards; independent directors are encouraged to protect stakeholder interests; and high remuneration packages are constantly scrutinized (Claessens and Yurtoglu 2012). The most realistic compromise between these two disparate theories would be adopting the business case for stakeholder inclusion (OECD 2004; BCBS 2015). From a banking perspective, banks have to consider stakeholder interests for two reasons. First, banks have legally binding contracts with stakeholders such as creditors, customers, depositors, employees, and shareholders (BCBS 2015). Second, it is in the long-term interest of banks to recognize that fostering relationships with stakeholders is a strategic tool for enhancing shareholder wealth and ensuring bank success (BCBS 2015).

Key Issues

Historically, the perspective was that shareholders, as providers of risk capital, should be able to protect their investment by ensuring a competent board is appointed to manage the firm and also ensure that effective strategies are implemented for the firm's overall corporate performance and long-term sustainability (Mallin and Melis 2010). Undoubtedly, shareholder wealth maximization in the banking sector has introduced business models which invariably damaged stakeholder interests. This was evidenced in various banking crisis exemplified by the near-collapse or closure of several top world banks including Barings Bank, Enron, Parmalat, Northern Rock, HBOS, Royal Bank of Scotland, Citibank, Washington Mutual, Bear Stearns, Lehman Brothers, and others (Erturk et al. 2009; Mallin 2019). Consequently, there is increasing recognition at a national, regional, and international level that stakeholders who affect and are affected by the activities of the bank should have their interests protected (BCBS 2015). Consequently, the present reality is that a variegated agency and stakeholder theoretical perspective has shaped governance structures in many industrial sectors and in various countries. Agency theory fails to explain the complexity of management actions and is ill-suited to the demands of society; it is excessively rational and ignores the dynamics of modern corporate governance practices. The reality is that, a narrow focus on aligning the interests of owners and management invariably leads to an overemphasis on the control role rather than the strategy role of boards. In agency theory, good governance of non-financial firms is often defined on how effective boards are, in protecting shareholder interests. Such assumptions, however, are unsuitable for theorizing governance from a banking perspective. This is partly due to the fact that the dangers of systemic risk, coupled with the specific attributes of complexity, opacity, and heavy regulation in the banking sector, ensure that the governance problems, mechanisms, and practices have to be highly specific to the business of banking (Laeven 2012).

Within the banking sector, there is an added layer of complexity vis-à-vis regulation. Regulation is an additional external governance mechanism which alters the parameters of the principal/agent relationship in banks by introducing a third party, the regulator (Levine 2003). The aim of the regulator which is paradoxically to reduce systemic risk in banks is in direct conflict with the main objective of shareholders, which is wealth maximization. Furthermore, regulation restricts the ability of the market to discipline banks because hostile takeovers are explicitly discouraged in many countries (Laeven 2012), as they threaten the financial stability of the banking sector and other parts of the financial sector. Furthermore, the deposit insurance scheme offered by regulators, acting in its role as lender of last resort, intensifies agency problems as it increases the potential likelihood that management and shareholders will pursue excessive risk-taking ventures. Finally, Levine (2003) notes that apart from the information asymmetries between owners and managers, there are at least three additional strands of information asymmetric in the banking sector between banks, depositors, and regulators on the one hand; owners, managers, and regulators on another; and finally, borrowers, managers, and regulators. These information asymmetries are exacerbated by the opacity found in banks which ultimately creates additional problems for shareholders, regulators, and other stakeholders to monitor managerial behavior and design contracts to ensure manager objectives are aligned with stakeholder interests (Lincoln et al. 2017, 2019).

The 2007–2008 global financial crises highlighted the deficiencies in agency theory and led to a period where a more enlightened shareholder approach is pursued (Mallin 2019). This wider perspective is actively encouraged and has been adopted in the banking sector. Effective governance is critical to the proper functioning of the banking sector and the economy as a whole. Banks perform a crucial role in the economy by intermediating funds from savers and depositors to activities that support enterprise and help drive economic growth. Banks' safety and soundness are key to financial stability, and the manner in

which they conduct their business, therefore, is central to economic health (BCBS 2015). In light of the important role that the banking sector plays, the primary objective of governance here ought to be safeguarding stakeholders' interest in conformity with public interest on a sustainable basis (BCBS 2015).

Summary

There are differing theoretical perspectives seeking to provide governance frameworks to ensure that the firm is run efficiently. The agency and stakeholder theories have vied for prominence within academic debates. The agency theory which is concerned with shareholder wealth maximization fails to explain the diversity in corporate governance worldwide, and it is equally limiting and over-assuming in its suppositions. It assumes that every country has an efficient and competitive market economy, where there is dispersed ownership across a range of shareholders, and minimal information asymmetries between boards, management, and shareholders. The agency theory underestimates the implicit and explicit relationships between the firm and its various constituents including employees, creditors, suppliers, customers, local communities, and the government. Governance transcends the relationship between a firm and its investors and stretches to the various constituencies that define and are defined by the business of a firm.

The approach adopted by each firm or industry on stakeholder management, engagement, and governance should depend on the nature of its business and challenges, national corporate governance codes or principles, and stakeholder participation. Consequently, from an international and banking perspective, agency theory has a limited role to play in shaping international business environments and the banking sector specifically. The stakeholder perspective is better suited to banking. This is because the stakeholder perspective takes into consideration wider interest. The theory recognizes the need for firms to involve stakeholders who can be affected by its decisions or can influence the implementation of

its decisions and ensure that it fosters stakeholder participation in the discussion, decision-making, and implementation of solutions to common stakeholder problems and goals while also seeking to create positive relationships with stakeholders by managing their expectations and objectives. Thus, governance here focuses on the manner in which the business and affairs of a bank are governed and on how depositors are protected, shareholder obligations are met, while also taking into consideration the interest of other stakeholder groups whose interests are affected by the activities of the bank. An all-encompassing perspective in the banking sector is of utmost importance, as any governance weaknesses in banks that play a significant role in the financial system could result in the transmission of problems across the banking sector and the economy as a whole as witnessed by previous banking and financial crisis.

References

- Aguilera, R. V., & Jackson, G. (2010). Comparative and international corporate governance. *The Academy of Management Annals*, 4(1), 485–556.
- BCBS. (2015). Guideline corporate governance principles for banks. Available <https://www.bis.org/bcbs/publ/d328.pdf>
- Cadbury, A. (1992). *Report of the committee on the financial aspects of corporate governance*. London: Gee and Co. Ltd.
- Cadbury, A. (2000). The corporate governance agenda. *Corporate Governance: An International Review*, 8(1).
- Claessens, S., & Yurtoglu, B. (2012). *Corporate governance and development- An update, a global governance forum publication*. Washington, DC: International Finance Corporation.
- Erturk, I., Froud, J., Johal, S., Leaver, A., & Williams, K. (2009). *Rediscovering banking as a utility*, Submission to the UK House of Commons Treasury Committee.
- Freeman, R. E. (2014). *Strategies for managing stakeholder relationships*. Available at: <http://redwardfreeman.com/stakeholder-management/>
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of firms: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- Laeven, L. (2012). *Corporate governance: What's special about banks?* Amsterdam: Keynote Lecture at the DNB-CGIC Conference on Corporate Governance of Financial Institutions.

- Letza, S., Sun, X., & Kirkbridge, J. (2004). Shareholding versus stakeholding: A critical review of corporate governance. *Corporate Governance: An International Review*, 12(3), 242–262.
- Levine, R. (2003). *The corporate governance of banks: A concise discussion of concepts and evidence*. Discussion Paper presented at the Global Corporate Governance Forum, 1–19.
- Lincoln, A., Adedoyin, O., & Laugharne, J. (2017). Board composition and corporate governance mechanisms in the Nigerian Banking Sector. In N. Capaldi, S. O. Idowu, & R. Schmidpeter (Eds.), *Dimensional corporate governance: An inclusive approach*. Springer.
- Lincoln, A., Adedoyin, O., & Croad, J. (2019). Goal 16 of the UN sustainable development agenda and its implications for effective governance and sustainability in the Nigerian banking sector. In S. O. Idowu & R. Schmidpeter (Eds.), *Business perspectives of sustainable development goals 2030, CSR, sustainability, ethics & governance*. Springer.
- Mallin, C. A. (2019). *Corporate governance* (6th ed.). Oxford: Oxford University Press.
- Mallin, C., & Melis, A. (2010). Shareholder rights, shareholder voting, and corporate performance. *Journal of Management and Governance*, 16, 171–176.
- OECD. (2004). *Principles of corporate governance*. Available at <http://www.oecd.org/corporate/ca/corporategovernanceprinciples/31557724.pdf>
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737–783.
- Solomon, J. (2010). *Corporate governance and accountability* (3rd ed.). West Sussex: Wiley Publications.
- Tricker, B. (2012). *Corporate governance: Principles, policies and practices* (2nd ed.). Oxford: Oxford University Press.

Theory of Simultaneous Maximums

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Synonyms

Simultaneous maxima; Simultaneous maximization

Definition

Onida (1965) formulated the theory of simultaneous maximums, aimed at identifying the factors

allowing organizations to survive durable over time and to operate in optimal management conditions. This theory has strong links with the concept of ► “*economicità*” and ► “*durable survival of the organization*”. Unlike the concept of “*economicità*,” which identifies the minimum conditions allowing companies to survive over time, the theory of simultaneous maximums seeks optimal management conditions under which the company can not only survive, but also thrive.

According to this theory, profit-oriented firms can achieve their lasting survival over time, not in function of the profit maximization, but pursuing together four maximums, which must be dynamically combined, namely: maximizing shares of profits, self-financing, salaries/wages, and setting appropriate sales prices able to stimulate the consumer demand.

Introduction

During the last decades, sustainability and social responsibility (CSR) have become increasingly relevant aspects for corporations. Even if these topics have become popular in management and business administration practice and academic literature in relatively recent times, both practitioners and academics started to pay attention to these aspects some decades ago. A growing attention toward CSR issues started from the early 1950s (Carroll 2008), while the attention toward sustainability issues mainly increased from the publication of the Brundtland Report (WCED 1987), focusing on the concept of “sustainable development.”

The theory of simultaneous maximums is an example of a pioneering approach to these issues within a national academic setting. It was formulated in the 1960s by Pietro Onida (1965), an Italian Business Administration scholar who devoted deep attention to the dual role of profit-oriented companies, considered at the same time as instruments of production and distribution of wealth.

This theory was innovative at the time of its formulation since it started from the assumption

that profit maximization, hitherto considered the main objective of for-profit organizations, is not the main objective that such organizations have to pursue to ensure their durable survival and to satisfy the needs of corporate stakeholders. According to Onida, for-profit organizations must not tend to maximize profit but must aim to maximize other conditions taking into account the interests of the main corporate stakeholders that he identified in the shareholders, employees, and customers.

In recent decades, the concept of “stakeholder” is evolving, with an increase in the type and number of subjects deemed to be relevant stakeholders to whom report the results of the company’s activity. This change is conditioned by the growing attention to the sustainable development goals (SDGs), i.e., the United Nation’s principles aimed at ending poverty, protecting planet earth, and ensuring that by 2030 people can enjoy peace and prosperity. This broadened viewpoint is coherent with Freeman (1984), who argues that organizations are responsible to the whole society, and therefore everyone can be considered as a stakeholder.

Consistently with these changes in the way corporate stakeholders are interpreted, the theory of simultaneous maximums should be reexamined and broadened.

Historical Roots of the Theory of Simultaneous Maximums

Within the Italian business administration and management academic literature, the attention toward social and sustainability issues initially focused on profit-oriented companies (both on big corporations and smaller firms), which were meant as entities that had to operate for the pursuit not only of profit but also of social goals. In this approach, the social distribution of wealth occurs through the following policies: dividends (i.e., shares of profits), self-financing, wages and prices. In Onida’s opinion, the firm’s lasting survival does not require profit maximization, especially in the short term; it requires the achievement of four simultaneous maximums related to the abovementioned policies.

Capital investments in a certain firm are attracted not so much by high profits, but rather by prospects for lasting profits over time and lasting development of the firm. The conditions for achieving sustainable development of the firm are much more complex than the simple maximization of profit: they require to maximize jointly the expectations not only of the shareholders but also of other subjects contributing to the firm’s survival, i.e., workers and customers. In other words, the lasting survival and prosperity of the company presupposes the achievement of simultaneous maximums of wages, dividends and self-financing, dynamically combined, and accompanied by prices suitable to sustain and expand the demand for the firm’s products and services. In the author’s opinion, in the long term, this is the most valid economic policy for the firm, as it reconciles opposite interests, which thus converge towards the common good.

According to Onida, the firm’s economic results should be analyzed from two main points of view: (a) profitability; (b) productivity.

Profitability (a) relates to equity and is expressed by the net profits.

Productivity (b) can be understood in two ways:

- (i) With reference to specific production factors or processes, showing the more or less high returns that the firm can obtain from these factors or processes.
- (ii) In reference to the entire firm, looking at its ability to adequately remunerate the capital and the human labor employed in the company and to sell products and services at prices that stimulate consumption, competitiveness, and the firm’s development.

While profitability (a) could theoretically be maintained in the short term at the expense of the firm’s workers and consumers, favoring exclusively the achievement of high profits, productivity (b) cannot be limited to giving a fair return on equity. In fact, according to Onida, the prosperity of firms lasts for a long time and develops by spreading it among others, rather than defending

it from others. The prosperity of individuals, firms, and nations cannot last long if it is built on the misery of others. In this sense, the conditions necessary to achieve the survival and development of the individual firms converge with the demands of superior social ethics.

The above considerations lead to the conclusion that the spirit of sociality that should guide the firms' behavior in their relations with shareholders, workers, and consumers does not conflict with the firms' ability to survive durably; on the contrary, it allows to achieve the firm's survival in the medium to long term. The managerial choices based on socially responsible criteria are therefore consistent not only with morality but also with economic and managerial principles. In this sense, a sustainable management policy requires to conjointly maximize profits, wages, and self-financing, and to fix prices able to expand the demand of the firm's products and services. Only a dynamic equilibrium among these four maximums allows firms to operate in the medium and long term according to sustainable management policies.

The formulation of the theory of simultaneous maximums can be traced back to the spread of the institutionalist approach in the Italian business administration and management disciplines (Rappa 2005, p. 449). This approach recognized to profit-oriented companies an institutional subjectivity, beyond the subjects belonging to the ownership and the corporate governance structure. It also assumed an institutional responsibility of companies to be accountable to an increasingly wider public for the activities carried out.

In this context, a series of reflections on the environmental relationships of companies have developed within the Italian business administration and management literature, including reflections on the redefinition of the role of financial statements and the income.

Even before Onida, another Italian scholar (Palumbo 1934) was oriented in this direction. According to him, the maximum profit for the entrepreneur should be replaced by the maximum usefulness for all the members of the company.

Similar reflections can be found in Panciera (1939), who proposed the creation of two separate statements:

- (a) An income statement;
- (b) A social functionality report.

The first statement would have been aimed at expressing the profit or loss of the year to satisfy the cognitive needs of all the subjects involved in its production (i.e., state, shareholders, entrepreneur, and workers). The second statement was supposed to express in statistical terms a series of information relating to the role of the company in the corporate economy.

Key Issues

According to Onida, the firm should be considered as a community. Within this community, human work and capital are essential and equally important productive factors that must interact since the long-lasting existence and prosperity of the firm requires the conjoint achievement of maximums for wages, dividends, and self-financing, as well as an appropriate price policy, for the purpose of their mutual reinforcement.

Firms are therefore considered as economic and social institutions aimed at lasting overtime in which apparently opposing interests (coming from owners, workers, and consumers) find a balance, thus converging towards the common good.

From the One Bottom Line to the Triple Bottom Line and to Sustainability

Onida's theory of simultaneous maximums can be considered as an early example of a corporate social responsible interpretation of the firm's role within Italian accounting, business administration, and management literature. At the time of its formulation, Italian accounting scholars considered financial statements essentially as: (a) an internal information tool for company managers; (b) an external information tool for a small group

of stakeholders, essentially limited to the current and potential financiers, the customers and the subjects appointed to control the financial statements.

At Onida's time, a current of thought advocating information tools other than the traditional financial statements had not yet been consolidated. Therefore, Onida can be considered as a forerunner to the currents of thought leading to the introduction of the social balance in Italy in the 1980s.

Onida's simultaneous maximums focus on the following elements: (a) dividends, (b) self-financing, (c) wages, and (d) prices. Among them, dividends (a) and self-financing (b) can be considered as elements relevant especially for the firm's owners, wages (c) are most relevant for workers, while prices (d) are most relevant for customers. Onida's theory seems therefore to broaden the ancient and classical "one bottom line" approach (i.e., the focus of accounting only on financial aspects) to a "two bottom line" approach (i.e., a focus on both social and financial aspects). Only in the following years (almost starting in the 1980s), the Italian accounting and business administration scholars started focusing deep attention on the triple bottom line approach (i.e., an accounting framework focusing on financial, social and environmental/ecological aspects).

Onida's theory can, therefore, be considered not only as a forerunner of the triple bottom line accounting approach but also of sustainability accounting and accountability. The latter is connected with the Sustainable Development Goals (SDGs), i.e., a blueprint to achieve a better and more sustainable future for all.

Knowing the historical roots of social responsibility, sustainability, and sustainable development literature can be useful to better understand the conditions leading to the current state of social and sustainability accounting and accountability tools. In this sense, Onida's simultaneous maximums theory is a relevant piece of history explaining the current status of social and sustainability accounting, reporting and management practices in a local context.

Future Directions

Onida's theory of simultaneous maximums has oriented the firm's vision in the direction of the "two bottom lines" approach. Current developments in business theory imply going beyond the more advanced triple bottom line approach, moving to the logic of sustainability and sustainable development. Taking a cue from Aras and Crowther's (2009) model of sustainable development, the dimensions necessary to achieve sustainable development are four, namely:

- Finance: According to the authors, it implies maintaining economic equilibrium. More precisely, this dimension includes also financial, monetary, and owners' equity equilibria (► "Economicità").
- Societal influence: It implies ensuring social justice and is achieved through actions aimed at reducing poverty, protect human rights, guarantee universal access to education, promote peace, etc.
- Environmental impact: It entails environment protection aimed at maintaining the availability of production factors for future generations.
- Organizational culture: It requires the development of spiritual and cultural values to align societal and corporate values in the individual.

The theory of simultaneous maximums touched the first two dimensions of this model. References to the last two dimensions, i.e., environmental impact and organizational culture, are missing. A contemporary reinterpretation of this theory implies pursuing the following simultaneous objectives:

- 1) Maintaining economic, financial, monetary, and owners' equity equilibria.
- 2) Achieve good organizational performances in terms of effectiveness and efficiency.
- 3) Maximizing shares of profits, self-financing, and salaries/wages.
- 4) Setting appropriate sales prices able to stimulate the consumer demand.

- 5) Minimizing the environmental impact of the organization's activity.
- 6) Maximizing the alignment of societal and corporate spiritual and cultural values.

These objectives are the conditions that can allow organizations to lasting survival over time.

Summary

After a definition of the theory of simultaneous maximums, the entry provides an introduction aimed at describing the social and historical context in which this theory was formulated. Thereafter, the entry focuses on the historical roots of this theory within the Italian business administration and management academic literature. It focuses on the need to conjointly achieve the maximum of wages, dividends, and self-financing, as well as an appropriate price policy, for their mutual reinforcement.

Thereafter, the entry focuses on the evolution from the one bottom line to the triple bottom line and sustainability. Considerations about the future directions of this theory in an international business theory context close the entry.

Cross-References

- [Durable Survival of the Organization](#)
- [Economicità](#)
- [Sustainability](#)
- [Sustainable Development](#)
- [Triple Bottom Line](#)

References

- Aras, G., & Crowther, D. (2009). *The Durable Corporation. Strategies for sustainable development*. Cornwall: MPG Books Ltd/Gower.
- Carroll, A. B. (2008). A history of corporate social responsibility: Concepts and practiced. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. Oxford, UK: Oxford Handbooks Online.

- Freeman, R.E. (1984). *Strategic management: A stakeholder approach*. Marshfield, MA: Pittman Publishing.
- Onida, P. (1965). *Economia d'azienda*. Torino: Utet.
- Palumbo, P. (1934). *Ragioneria commerciale*. Palermo: Ciuni.
- Panciera, E. (1939). *Riflessi corporativi nell'economia aziendale*. Palermo: Palumbo.
- Rappa, G. (2005). *Fasi storiche di formazione della teoria italiana sul bilancio sociale*. In Riferimenti storici e processi evolutivi dell'informativa di bilancio tra dottrina e prassi. Atti dell'VIII Convegno Nazionale della Società Italiana di Storia della Ragioneria, Atri-Silvi, 22nd-23rd September 2005 (Vol. 2, pp. 441–488). Rome: RIREA.
- World Commission on Environment and Development (WCED). (1987). *"Our common future" (the Brundtland report)*. Oxford, UK: Oxford University Press.

Thick Value

- [Creating Shared Value](#)
- [Shared Value](#)

"Think Global, Act Local"

- [Glocality](#)

Thinking Together

- [Community of Practices](#)

Three Es

- [Sustainable Development Planning](#)

Three Pillars

- [Triple Bottom Line](#)

Three Vs

► Big Data and Data Mining

Threshold

► Tipping Point

Tipping Point

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Synonyms

Boiling point; Critical point; Shift point; Threshold; Turning point; Trigger event

Definition

The term that has gained great popularity in many disciplines such as climatology, sociology, physics over the last decade, has held various conceptualizations and also has been put to many different uses across such a wide range of disciplines (Milkoreit et al., 2018). Especially after the 2000s, the term was mostly recognized to describe sudden changes by climate scientists (Kopp et al., 2016). However the usage of the phrase, the concept was popularized by Malcolm Gladwell. The term of tipping point attributed to him - in his book entitled “Tipping Point” (2000) – is considered as “the moment of critical mass, the threshold, the boiling point”. In today’s modern business world, diverse tipping points in terms of sustainability are also identified and heavily discussed since a dramatic increase in the human imprint seems to push the planet toward a tipping point that could bring about an abrupt change (Grainger, 2017; Morello, 2012).

A Brief Explanation

The tipping point occurs when a threshold is crossed (Gladwell, 2000) and it explains how a level (Walsh, 2007), trend, process, moment, message, or idea “spread like wildfire” (Gladwell, 2000). It is defined as the time or the point at which the momentum for a change or an effect becomes unstoppable (Cambridge English Dictionary, 2021; Ivkovich, 2017). The idea of tipping points is related to the transition of an unstable situation to a new state where it is repositioned (O’Riordan, 2013). According to Gladwell (2000), “the tipping point is the moment of critical mass, the threshold, the boiling point” and also “the world of the tipping point is a place where the unexpected becomes expected, where radical change is more than possibility”. Therefore, it also reflects an era of unimaginably dangerous and politically turbulent events normalized, and of intense concerns about the fear of losing control (O’Riordan, 2013). This characterization, in a sense, also seems to refer to the extraordinary Covid-19 global epidemic period we are still in (see Daniel, 2020 and Karine, 2020).

Its Relationship with Covid-19

As a matter of fact, recent studies have been intensely discussing the Covid-19 crisis period as a tipping point especially for sustainability (e.g., Ford, 2020; The World Bank, 2020; Trinquetel, 2020). Undoubtedly, Covid-19 has had a huge impact on social (people), environmental (planet), and economic (profit) activities, creating a simultaneous and sudden change in the way systems operate as usual, all over the world. According to the results of the survey conducted by McKinsey and Company (2020a, b), companies responded 20 to 25 times faster than expected to several Covid-19 related changes, especially in remote working. Such rapid shifts are seen as a result of passing a tipping point (Heinze et al., 2021). In this respect, crossing a threshold requires a radical transformation since existing systems are no longer valid since they have not enough capacity to respond to this huge

transformation, totally a new perspective is needed. Similarly, Werners et al.'s (2013) study, which examines sustainability in terms of thresholds, tipping, and turning points within the scope of climate change, emphasizes that once the critical threshold is exceeded, current management strategies will no longer meet the objectives. Moreover, this will require long-term planning accompanied by uncertainty and also a deep understanding of the system, including discussion of thresholds that society should not violate (Werners et al., 2013).

Discussions about Reaching a Tipping Point

On the other hand, there have been some discussions about reaching a tipping point despite inconsistencies. It is noteworthy that there is a lively discussion area regarding tipping points specific to various issues such as energy (Khokhar & Banerjee, 2017), water (Ahmada, 2015), education and technology (Trucano, 2014), or climate change (Pereira & Viola, 2020; Werners et al., 2013) within the scope of sustainability. However, due to the populist focus of today's modern business world on short-term economic profit, unfortunately, sustainable globalization seems far from reaching a tipping point (Fernando, 2012). Moreover, unless this short-term obsession with "Doing good to look good" is abandoned, it will be impossible to embed sustainability into corporate and national strategies, and a tipping point for sustainability will remain just a concept (Fernando, 2012). Therefore, a global holistic approach toward sustainability is needed (Fernando, 2012). Contrary to this, according to the results of the survey conducted by the MIT Sloan Management Review and Boston Consulting Group, in which approximately 3000 executives and managers of commercial companies around the world participated, it seems that sustainability is approaching the tipping point, 70% of companies are putting sustainability on their management agenda (Kiron et al., 2012). Moreover, they are not only implementing sustainable practices in various subjects such as carbon

emission, energy, consumption, etc. but also changing their operational structures and strategies. (Kiron et al., 2012). In a similar vein, Pearce and Stahl's (2015) study, also emphasizes that we are on the edge of such a tipping point for sustainability and corporate social responsibility. In terms of such studies, the world seems to stand near a shift point.

Tipping Points for Sustainability

Furthermore, some studies also provide a kind of roadmap that enlightens some priorities for a sustainable future. For instance, McKinsey and Company (2021), especially for climate change, specifies five action areas that will ensure sustainability to flow in the right direction while at the tipping point: (1) Energy Transitions (2) Mobility (3) Circular Economy (4) Sustainable Investing and (5) Sustainable Agriculture. Firstly, taking action on *energy transitions* states the necessity of returning to renewable and efficient energy production or sources such as solar and wind. According to the report, although emissions related to energy are expected to decrease by 20% by 2050 due to a possible decrease in coal use in the electricity sector after peaking in 2024, in this case, however, it will still be far from the 2-degree path of (McKinsey & Company, 2021; Pinner, 2019), the Paris Climate Agreement which "aims to limit global temperature rises to 2°C and preferably keeping the increase to 1.5°C" (McKinsey & Company, 2020b). On the other hand, the second action area points to "the lack of *mobility* options beyond carbon-intensive road transport and limited community planning capacity (OECD iLibrary, 2021)". Despite energy-efficient and environmentally friendly innovations in transportations, there is a huge global challenge for achieving sustainable mobility (McKinsey & Company, 2021; OECD iLibrary, 2021). Since how we experience mobility directly depends on where we live (McKinsey & Company, 2021), in a sense, this also reveals a vivid touch on human rights that will enable all humanity to experience this mobility in safe, fast, fair, and equal conditions. Because the presence of

such a context-dependency also calls for the right to life “globally in an equal manner, on the same footing and with the same emphasis (United Nations, 1993)”. As for *circular economy*, it necessitates disrupting the fast/over-production and consumption trends of today’s society (Aras-Beger et al., 2020). As stated by the report, the value of the waste material that is thrown around the world corresponds to \$2.6 billion each year (McKinsey & Company, 2021). It is quite clear that the planet no longer approves today’s production and consumption patterns, and existing systems are no longer adequate to handle such a load. As stated in the McKinsey and Company (2021) report, without urgent action, the waste amount would rise to 460 billion by 2030 while also in the World Bank report, by 2050 global waste is expected to have increased by 70% (Kaza et al., 2018). Finally, the fourth action area, *sustainable investment*, points to creating a space that enable investors to make decisions and valuable investments that take into account corporate social responsibility and sustainability issues, while *sustainable agriculture* as the fifth emphasizes the vital need for breaking the unsustainable loop of food systems that cause 20–30% of greenhouse gases and 70% freshwater withdrawals (McKinsey & Company, 2021; Pinner, 2019). However, initiating a transition under such an action plan focusing on five themes would require a solid infrastructure for each step of that plan (Pinner, 2019).

Towards a More Sustainable Future

Gladwell (2000) also suggests three rules of the tipping point to make a sustainable change happen: (1) *the Law of the Few* (the messenger), which states a small group of people (e.g., Connectors, Mavens, Salesmen) who have capability to spread messages to wide audience quickly, (2) *the Stickiness Factor* (the message itself), which means that these messages, in a sense, stick in memory and make an impact (e.g., Sesame Street) (3) *the Power of Context* (the context of the message), which reflects the constant interaction of human beings with their immediate

environment within the scope of their perception, attitudes, and behaviors (e.g., Zimbardo’s Stanford Prison Experiment or Gladwell’s example: reducing the crime rate in New York City’s subways in the mid-nineties simply by removing graffiti and signs of vandalism from stations) (Doscher, 2013; Gladwell, 2000).

Summary

The aforementioned discussion highlights that the term tipping point is quite popular and commonly used. Although its usage has some nuances semantically, it seems to have achieved semantic consistency in general. However, it is still unclear whether we are in a place that is about to reach a tipping point that has accumulated a critical mass or are we in an early stage of a radical change that has already passed the point.

Cross-References

- Consumerism
- Corporate Sustainability
- Corporate Social Responsibility
- Corporate Social Responsibility Strategy
- Planned Obsolescence
- Strategic Corporate Social Responsibility
- Sustainable Consumption
- Sustainability Management

References

- Ahmada, K. J. (2015). Tipping point for water. The World Bank. <https://blogs.worldbank.org/water/tipping-point-water>. Accessed March 29, 2021
- Aras-Beger, G., Sağlam, B. B., & Bekki, N. (2020). Case studies on sustainability for various fashion brands. In R. Nayak (Ed.), *Supply chain management and logistics in the global fashion sector: The sustainability challenge* (pp. 242–260).
- Doscher, S. P. (2013). *Sustainable development: The search for the tipping point*. https://scholar.google.com/scholar?hl=tr&as_sdt=0%2C5&q=Doscher%2C+S.+P.+%282013%29.+Sustainable+Development%3A+The+Search+for+the+Tipping+Point.&btnG. Accessed April 08, 2021.

- Fernando, R. (2012). Sustainable globalization and implications for strategic corporate and national sustainability. *Corporate Governance*, 12(4), 579–589.
- Ford, D. (2020). Why COVID-19 is the tipping point for sustainability. Shelton Group. <https://sheltongrp.com/why-covid-19-is-the-tipping-point-for-sustainability/>. Accessed March 29, 2021.
- Gladwell, M. (2000). *The tipping point: How little things can make a big difference*. New York: Little, Brown & Company.
- Grainger, A. (2017). The prospect of global environmental relativities after an Anthropocene tipping point. *Forest Policy and Economics*, 79, 36–49.
- Heinze, C., Blenckner, T., Martins, H., Rusiecka, D., Döschner, R., Gehlen, M., Gruber, N., Holland, E., Hov, J., Matthews, F., Rodven, J. B. R., & R. & Wilson, S. (2021). The quiet crossing of ocean tipping points. *Proceedings of the National Academy of Sciences*, 118(9).
- Ivkovich, L. (2017). Tipping point: Which way will we tip?. The University of Utah. <https://sustainability.utah.edu/which-way-will-we-tip/>. Accessed March 31, 2021.
- Kaza, S., Yao, L., Bhada-Tata, P., & Van Woerden, F. (2018). *What a waste 2.0: A global snapshot of solid waste management to 2050*. World Bank Publications.
- Khokhar, Tariq & Banerjee, Raka (2017). *Between 2 geeks: Episode 5 - a renewable energy tipping point?*. The World Bank. <https://blogs.worldbank.org/opendata/between-2-geeks-episode-5-renewable-energy-tipping-point>. Accessed March 29, 2021.
- Kiron, D., Kruschwitz, N., Haanaes, K., & Velken, I. V. S. (2012). Sustainability nears a tipping point. *MIT Sloan Management Review*, 53(2), 69.
- Kopp, R. E., Shwom, R. L., Wagner, G., & Yuan, J. (2016). Tipping elements and climate-economic shocks: Pathways toward integrated assessment. *Earth's Future*, 4(8), 346–372.
- McKinsey & Company. (2020a). *How COVID-19 has pushed companies over the technology tipping point—and transformed business forever*. <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>. Accessed April 02, 2021.
- McKinsey & Company. (2020b). Global perspectives on climate change and policy response. In leading the battle against climate change: Actions for China (pp. 10–15). <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/Sustainability/Our%20Insights/Leading%20the%20battle%20against%20climate%20change%20Actions%20for%20China%20new/Leading-the-battle-against-climate-change-Actions-for-China-vF-EN.pdf>. Accessed April 02, 2021.
- McKinsey & Company. (2021). *Sustainability at a tipping point*. <https://www.mckinsey.com/business-functions/sustainability/our-insights/sustainability-at-a-tipping-point#>. Accessed March 29, 2021.
- Milkoreit, M., Hodbod, J., Baggio, J., Benessaiah, K., Calderón-Contreras, R., Donges, J. F., Mathias, J. D., Rocha, J. C., Schoon, M., & Werners, S. E. (2018). Defining tipping points for social-ecological systems scholarship—An interdisciplinary literature review. *Environmental Research Letters*, 13(3), 033005.
- Morello, L. (2012). *Is earth nearing an environmental “Tipping Point”?*. <https://www.scientificamerican.com/article/is-earth-nearing-environmental-tipping-point/>. Accessed April 06, 2021.
- O’Riordan, T. (2013). Sustainability for wellbeing. *Environmental Innovation and Societal Transitions*, 6, 24–34.
- OECD iLibrary. (2021). *Managing environmental and energy transitions in rural areas*. <https://www.oecd-ilibrary.org/sites/5dcad35e-en/index.html?itemId=/content/component/5dcad35e-en>. Accessed April 02, 2021.
- Pearce, C. L., & Stahl, G. K. (2015). Introduction to the special issue: The leadership imperative for sustainability and corporate social responsibility. *Organizational Dynamics*, 44(2), 83–86.
- Pereira, J. C., & Viola, E. (2020). Close to a tipping point? The Amazon and the challenge of sustainable development under growing climate pressures. *Journal of Latin American Studies*, 52(3), 467–494.
- Pinner, D. (2019). Summit recap sustainability at a tipping point. *McKinsey & Company*. <https://www.mckinsey.com/business-functions/sustainability/our-insights/sustainability-blog/summit-recap-sustainability-at-a-tipping-point>. Accessed April 02, 2021.
- The World Bank. (2020). *Earth day 2020: Could COVID-19 be the tipping point for transport emissions?*. <https://www.worldbank.org/en/news/feature/2020/04/22/earth-day-2020-could-covid-19-be-the-tipping-point-for-transport-emissions>. Accessed March 29, 2021.
- Trinquetel, K. (2020). Could COVID-19 be the tipping point for sustainability?. KANTAR. <https://www.kantar.com/uki/inspiration/coronavirus/could-covid-19-be-the-tipping-point-for-sustainability>. Accessed March 29, 2021.
- Trucano, M. (2014). *Education & technology in an age of pandemics (revisited)*. <https://blogs.worldbank.org/edutech/education-technology-age-pandemics-revisited>. Accessed March 29, 2021.
- United Nations. (1993). Vienna declaration and Programme of action at the world conference on human rights. <https://www.ohchr.org/en/professionalinterest/pages/vienna.aspx>. April 05, 2021.
- Werners, S. E., Pfenninger, S., van Slobbe, E., Haasnoot, M., Kwakkel, J. H., & Swart, R. J. (2013). Thresholds, tipping and turning points for sustainability under climate change. *Current Opinion in Environmental Sustainability*, 5(3–4), 334–340.

Tobin Tax

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Synonyms

Financial transactions tax; FTT; Robin Hood tax

Definition

The Tobin tax is a form on taxation that proposes taxing currency exchange. Nobel Laureate James Tobin proposed the tax in 1974 and it was considered a measure against currency speculation (Raffer 1998).

Tobin suggested taxing currency transactions in order to prevent short-term currency speculation. He proposed this measure in light of the Bretton Woods’ system termination (Tobin 1978). As the USA had abandoned convertibility to gold of the dollar, states became exposed to exchange rate volatility risks. In order to ensure overall economic stability nations needed to introduce measures that would overcome threats of economic turmoil due to overspeculation with currency exchange.

The idea of Tobin was to slow down exchange rate volatility (Tobin 1996). For that reason the size of the Tobin tax was considered crucial. It had to be set on a rate that would make it unattractive for short-term purely speculative currency exchange but not so high as to impact negatively investment and trade.

As former Breton Woods members moved to a regime of floating exchange rates, the proposal for a Tobin tax on international currency exchange never caught on. Voices that consider the introduction of a Tobin tax necessary were raised periodically (Raffer 1998). In the early 2000s antiglobalization movements advocated for the introduction of a Tobin tax (Buckman 2004, p. 126).

After the 2008 financial crisis some governments have come back to the idea for financial

transactions tax (Yates 2009) but widespread implementation of the Tobin tax did not develop.

History of the Tobin Tax

In the context of a globalizing financial market, rising global interconnectedness, and no world exchange rate in the post-Breton-Woods financial system, the room for speculation and potential overheating was announced as a major field of potential negative effects on economies. In this line of thought James Tobin recognized flexible or adjustable currency exchange rates plus free movement of funds across currencies as a hazardous compound to economic health of nations (Tobin 1996). In the context of that notion, he proposed a measure to “throw some sand in the wheels of super-efficient financial vehicles” (Tobin 1996, p. 65) by introducing a financial transactions tax (FTT). The FTT later became known also as the Tobin tax.

Tobin proposed his currency transactions tax during a lecture in honor of Joseph Schumpeter at Princeton in 1972 as a measure to enhance the efficacy of macroeconomic policy (Raffer 1998). A few years later, he drew attention to the revenue potential of the proposed tax, which he saw as a by-product. Thus, both reasons for a Tobin tax quoted by its advocates at present were on the table in the 1970s (Raffer 1998).

Box 1

James Tobin (1918–2002), after whom the Tobin tax was named, was an American economist who became a recipient of the Nobel Memorial Prize in Economics in 1981. He is known for his contributions “for his analysis of financial markets and their relations to expenditure decisions, employment, production and prices” (The Royal Swedish Academy of Sciences 2019).

Despite it initially gained interest among researchers and some representatives of national governments (World Parliamentarians Call for

Tobin Tax 2020), the Tobin tax never became a widely used instrument for regulation of financial transactions.

The 2008 financial crisis was a period when the idea of FTT had a rise once again (Yates 2009). As countries strived to manage the consequences of the crisis, sentiments towards reformation and systemic improvement of the financial system rose debate. The discussions about the Tobin and Spahn taxes reappeared in both academia and politics, viewing them as possible tools for achieving system control and lower financial volatility (Yates 2009).

Some propositions for redistribution of Tobin tax income towards sustainable development goals have been taken into account (Yates 2009).

Pros and Cons of the Tobin Tax

Despite that governments have not had a huge interest in the Tobin tax as a policy tool, the international economic research community did elaborate on the proposition of FTT in a number of recurring in time.

Researchers have outlined the two major potential uses of a Tobin tax. On one hand, the Tobin tax is viewed as an instrument for facilitation of macroeconomic stability (Felix and Sau 1996; Tobin 1996). On the other hand, the revenues from the Tobin tax have been proposed to be redistributed across various fields of economic and social life. Felix and Sau suggest that the revenues from a low Tobin tax could be invested in funding international institutions and sustainable development (Felix and Sau 1996).

Eichengreen and Wyplosz argue that taxes on international financial transactions could enhance the operation of the international monetary system and the successful application of restrictions on capital imports is inconsistent with more extreme arguments about the potential ineffectiveness of such measures (Eichengreen and Wyplosz 1996).

Opposers of the Tobin tax often could stem from the idea of a free market exchange as efficient. Dooley argues that the Tobin tax is designed to discourage short holding periods and for that reason it would have no predictable effect on the

composition of capital flows (Dooley 1996). In his argument Dooley defines the weakest link of the Tobin tax idea as the assumption that a tax on transactions “will fall differentially on speculators who base their positions on price dynamics as compared to speculators who base their positions on fundamentals” (Dooley 1996, p. 84).

One of the most prominent critiques of the Tobin tax was that of economist Paul Spahn, who introduced an alternative to the Tobin tax, which came to be known as the Spahn tax. Paul Spahn argues that the Tobin tax is not viable and that it is not only an unlikely instrument to deter speculation but it would also impair financial operations and create international liquidity problems (Spahn 1995). It is also unlikely to deter speculation. He proposed an alternative tax, inspired by the European Monetary System, which would consist of a two-tier rate structure with a low-rate transaction tax plus an exchange surcharge (Spahn 1995).

Cross-References

- ▶ [Green Growth](#)
- ▶ [Green Jobs](#)
- ▶ [Positional Goods](#)

References and Further Reading

- Buckman, G. (2004). *Globalization: Tame it or scrap it?: Mapping the alternatives of the anti-globalization movement*. London: Zed Books.
- Dooley, M. (1996). The Tobin tax: Good theory, weak evidence, questionable policy. In M. ul Haq, I. Kaul, & I. Grunberg (Eds.), *The Tobin tax: Coping with financial volatility* (pp. 83–108). New York: Oxford University Press.
- Eichengreen, B., & Wyplosz, C. (1996). Taxing international financial transactions to enhance the operation of the international monetary system. In M. ul Haq, I. Kaul, & I. Grunberg (Eds.), *The Tobin tax: Coping with financial volatility* (pp. 15–40). New York: Oxford University Press.
- Felix, D., & Sau, R. (1996). On the revenue potential and phasing in of the Tobin tax. In M. ul Haq, I. Kaul, & I. Grunberg (Eds.), *The Tobin tax: Coping with financial volatility* (pp. 223–253). New York: Oxford University Press.

- Raffer, K. (1998). The tobin tax: Reviving a discussion. *World Development*, 26(3), 529–538. [https://doi.org/10.1016/s0305-750x\(97\)10057-2](https://doi.org/10.1016/s0305-750x(97)10057-2).
- Spahn, P. B. (1995). *International financial flows and transactions taxes: Survey and options*. International Monetary Fund, IMF Working Paper WP/95/60.
- The Royal Swedish Academy of Sciences. (2019). *James Tobin biographical*. <https://www.nobelprize.org/prizes/economic-sciences/1981/tobin/biographical/>. Accessed 4 Oct 2019.
- Tobin, J. (1978). A proposal for international monetary reform. *Eastern Economic Journal*, 4(3/4), 153–159. Eastern Economic Association.
- Tobin, J. (1996). A currency transactions tax, why and how. *Open Economies Review*, 7(S1), 493–499. <https://doi.org/10.1007/bf01886209>.
- World Parliamentarians Call for Tobin Tax. (2020). *The Tobin tax in parliaments*. <http://tobintaxcall.free.fr/>. Accessed 4 May 2020.
- Yates, N. A. (2009). Revisiting the Tobin tax, in the context of development and the financial crisis. *The Law and Development Review*, 2(1), 256–282. <https://doi.org/10.2202/1943-3867.1039>.

Further Readings

- Jetin, B. (2012). The Tobin tax. In M. Juergensmeyer & H. K. Anheier (Eds.), *Encyclopedia of global studies* (pp. 1650–1652). Thousand Oaks: SAGE.

Top Management

► Management

Total Quality Management and European Foundation of Quality Management

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Synonyms

Comprehensive quality management; Quality management

Introduction

Total Quality Management (TQM) is a systematic management approach that contributes to the optimization of the quality of a company's products, services, and processes in all functional areas and at all hierarchy levels through the participation of all employees. In this respect, it differs from quality management, which is narrower and refers only to the planning, control, and monitoring of the quality of a process or process result. According to ISO 8402:1994, TQM is "a management approach of an organization centred on quality, based on the participation of all its members and aiming at long term success through customer satisfaction and benefits to all members of the organisation and society" (ISO 8402:1994).

History and Definition of Total Quality Management

According to Powell (1995), the origins of TQM can be traced back to 1949, when a committee of Japanese scholars, engineers, and government officials aimed to improve Japanese productivity with the overall goal of enhancing quality of life. Companies of the USA first took note of TQM around 1980 (Powell 1995). Although it is unclear, when the term TQM exactly came up, the philosophy and the concept as a whole were introduced in the mid-1980s (Martínez-Lorente et al. 1998, p. 4). The term might be a substitute of "Total Quality Control (TQC)" (Feigenbaum 1961), which was previously in use. With the idea that quality cannot be controlled but has to be managed, it might have turned into TQM (Martínez-Lorente et al. 1998, p. 4). Dale states that the term derived from the "Department of Trade and Industry" in the UK during its "National Quality Campaign" in 1983 (Dale et al. 1994). In contrast, Bemowski (1992) believes that the term first came up in 1985 in the US Naval Air Systems Command, in order to describe the Japanese approach toward quality improvement (for TQM in Navy organizations see also Housten and Dockstader 1988, 1997).

However, the confrontation with the philosophy of TQM coincides on the one hand with the penetration of the US market with Japanese products and on the other hand with the publications of Crosby (1979, 1987, 1992), Deming (1982, 1986), Feigenbaum (1956, 1961, 1991), Juran (1988, 1995), and Juran et al. (1974; Juran and Gryna 1988) as well as Ishikawa (1985, 1989, 1990) (Martínez-Lorente et al. 1998, p. 4).

There is no broad agreement on what TQM is and what action it requires from organizations. Several definitions exist. The abovementioned TQM gurus had a partially different understanding of TQM and took a different approach toward it. Nevertheless, according to Neyestani 2017, some shared aspects can be identified:

1. Management commitment;
2. The strategy, policy, and firm-wide control;
3. Employee education and training;
4. Employee's award;
5. Improvement of process, quality system, and product design;
6. Designing system based on prevention;
7. Focusing on quality improvement instead of the inspection;
8. Customer orientation and;
9. Quality is first and schedules are secondary. (Neyestani 2017, p. 15)

The inherent concept of TQM is continuous improvement of business quality performance. It is based on establishing proper systems in order to be able to lead an organization effectively and to meet customer requirements (Neyestani 2017, p. 15).

According to Martínez-Lorente, Dewhurst, and Dale (1998), the application of TQM differs from country to country, because of different cultural characteristics leading to a culture-specific understanding of quality in general and of TQM in particular. Only recently, as a result of globalization and the interdependences of markets, differences are diminishing (Martínez-Lorente et al. 1998, p. 13).

Against this background, also different TQM-based quality awards have been created in Japan, the USA, and finally in Europe in order to promote and recognize efforts to achieve quality in

the encompassing understanding that underlies the TQM approach. The three most famous awards are the Malcolm Baldrige National Quality Award in the USA (2019), the Deming Application Prize (2019) in Japan, and the EFQM Excellence Award (2019) in Europe. Even though the awards are consistent in essential points, there are differences resulting mainly from the use of different criteria for the operationalization of the respective quality concept. The most widespread TQM approach in Europe is the European Excellence model of the European Foundation of Quality (EFQM), which, thus, will be briefly presented below.

As an European specific theoretical foundation the holistic management approach of the St. Gallen School of Management was used (Rüegg-Sturm 2003). Unlike the Japanese and US-American versions of TQM, the EFQM model from the very beginning was values-based, took into account one of the most important informal governance mechanisms in the form of corporate culture, and integrated the need of a multi-stakeholder perspective into the description of its quality criteria (Kleinfeld and Rottluff 2016).

European Foundation of Quality Management

The European Foundation for Quality Management (EFQM) is a nonprofit membership organization, which was founded in 1988 by 14 boards of leading European companies, namely, AB Electrolux, British Telecommunications plc, Bull, Ciba-Geigy AG, C. Olivetti & C. SpA, Dassault Aviation, Fiat Auto SpA, KLM, Nestlé, Philips, Renault, Robert Bosch, Sulzer AG, and Volkswagen. The aim of the initiative was to ensure Europe's long-term competitiveness (EFQM 2019). In comparison with the developments of management theory in the USA and Japan in the 1980s, European management was perceived as backward and uncompetitive. As a result, the potential of European companies was pooled, and the EFQM model for business excellence was developed.

EFQM as an organization concentrates on four areas:

1. Due to membership and its community, EFQM offers an environment in which individuals and organizations can share, learn, and collaborate.
2. Via offering training, self-assessments, and assess base/learning and sharing, EFQM offers its members a holistic view on the entire enterprise in order to progress toward sustainable results and an adaptive culture.
3. With the help of the EFQM recognition, organizations can demonstrate how well their organization is performing against the success criteria of the EFQM excellence model. Role model organizations, which have a track record of success in turning strategy into action and improving their performance continuously, are recognized by the EFQM Global Excellence Award (preliminary stages for these awards are the “Swiss Award for Excellence” in Switzerland and the “Ludwig-Erhard-Preis” in Germany; ILEP 2019).
4. By offering a library, a list of frequently asked questions, and an image gallery, EFQM keeps their members informed so that they can improve continuously.

Because of being a not-for-profit membership foundation, EFQM is run by its members. Its headquarter is located in Brussels. A board of directors, which meets twice a year, oversees EFQM’s operations. It ensures that the mission is always present, that interests of stakeholders are taken into account, that the added value of its members is maximized, and that EFQM remains financially independent. The board of directors is supported by a strategy committee, a finance and audit committee, and a nomination and HR committee. EFQM currently has 13 permanent employees under the leadership of CEO Russell Longmuir.

EFQM Model for Business Excellence

A group of experts from different sectors and academic institutions created the first version of

the EFQM excellence model in 1992 – at this stage primarily as a framework for assessing applications for the first European Quality Award, the European version of the US Baldrige Award, and the Japanese Deming Application Prize (see above).

Representing a Total Quality Management (TQM) approach, the model aims to improve both the process and the relevant value-added quality of an organization. Unlike ISO 9001, the EFQM model from its very beginning claimed to be a value-oriented concept designed for the application to any organization, regardless of industry, culture, or size. The “European Convention on Human Rights” of 1953 and the “European Social Charter” in their 1996 edition constitute the foundation of values of the model (see EFQM 2012, p. 2). In addition, the EFQM model is guided by the principles of the United Nations Global Compact (UNGC) and calls on all organizations striving for excellence to join United Nations Global Compact (EFQM 2012) and to respect and act upon the essence of the Sustainable Development Goals (EFQM 2019).

The model that is regularly revised consists of three major components:

- (I) The eight fundamental concepts of excellence:
 1. Adding value for customers
 2. Creating a sustainable future
 3. Developing organizational capability
 4. Harnessing creativity and innovation
 5. Leading with vision, inspiration, and integrity
 6. Managing with agility
 7. Succeeding through the talent of people
 8. Sustaining outstanding results

- (II) The nine evaluation criteria:

The first five criteria are the prerequisite for successful management, being called “enablers”:

- (a) Leadership
- (b) People
- (c) Strategy
- (d) Partnerships
- (e) Resources
- (f) Processes, products, and services

The last four criteria represent the multi-dimensional output of an organization and are called “results”:

- (a) People results
 - (b) Customer results
 - (c) Society results
 - (d) Business results (EFQM 2013, p. 10)
- (III) The RADAR logic. It is the basis of the “striving for excellence approach” of the EFQM model in the form of a dynamic assessment tool, which ensures continuous improvement by questioning an organization’s performance. The RADAR logic is not only verifying the existence of certain requirements but is evaluating the quality of their implementation/realization at the same time. Therefore, it demonstrates that an organization:
- (a) Determines the results it is aiming to achieve as part of its strategy
 - (b) Plans and develops an integrated set of different approaches in order to deliver the required results (nowadays and in future)
 - (c) Deploys the approaches in a systematic way in order to ensure implementation
 - (d) Assesses and refines the deployed approaches (via monitoring and analysis of the results achieved and ongoing learning activities)

The last version of the EFQM model (described above and called “EFQM 2013”) is free for download at the EFQM website.

On the annual forum in Helsinki on 23rd and 24th of October 2019, the new EFQM model (named EFQM 2019) was released. According to ILEP 2019, the new version focuses much more on the further development of the organization. It has an even stronger character of a management approach than of a valuation model. Corporate culture has become a separate perspective in the new version, thus underlining its importance for corporate success in the twenty-first century. Besides, leadership is now considered as an integral part at all levels within the model. This shall help to understand the conceptual work as well as the day-to-day business of the executives across

all levels. A particular strength of the new model lies in the consideration of the need to transform organizations in contrast to the classic improvement and performance orientation in the sense of a performance management model. The pro-competitive features are the flexibility and adaptability of companies. Looking into the future and anticipating new trends are seen as one of the most important critical success factors for the development of organizations (ILEP 2019).

Against this background, the new model focuses on three essential questions, which comprise seven criteria:

- (I) “Why” does the organization exist? What purpose does it fulfill? Why this particular strategy? (direction)
 - 1. Purpose, vision, and strategy
 - 2. Organizational culture and leadership
- (II) “How” does it intend to deliver on its purpose and its strategy? (execution)
 - 3. Engaging stakeholders
 - 4. Creating sustainable value
 - 5. Driving performance and transformation
- (III) “What” has it actually achieved to date? “What” does it intend to achieve tomorrow? (results)
 - 6. Stakeholder perceptions
 - 7. Strategic and operational performance.
 (Moll and Zeller 2019)

The basic principle (“red thread”) of the EFQM model is the combination of an organization’s purpose, vision, and strategy and how it creates sustainable benefits and delivers outstanding results for important stakeholders (EFQM 2019). With these objectives, the EFQM model is an effective instrument for running an organization in a sustainable manner.

Major Accomplishments

According to EFQM, the model helps to define an organization’s purpose. It supports the conscious development process of organizational culture, forms strong managers, eases transformation, fosters agile practices, addresses unique

organizational challenges and finally, helps to forecast future, and is therefore essential to companies that aim to strive for sustainable excellence (EFQM 2019).

Hendricks and Singha, 1996, who investigated the correlation between the adoption of holistic models such as the EFQM excellence model and improved results of the organization, summarize:

We note that the abnormal returns generated by the quality award winning announcements provide a lower bound for the impact of implementing an effective quality award improvement program. Our results show that the stock market reacts positively to quality award announcements. (Hendricks and Singha 1996, p. 415)

Over the course of its development, the EFQM model has evolved into a holistic management model aiming for sustainable development, both of the organization itself and of the global society.

It combines the requirements of the “Triple Bottom Line” and takes into account the interests of different stakeholders. This becomes particularly evident in the requirements of the EFQM model 2013: “Excellent Organizations achieve and sustain outstanding levels of performance that meet or exceed the expectations of all their stakeholders” (EFQM 2012, p. 2).

This orientation is also reflected in EFQM’s vision: “A world striving for sustainable excellence” (EFQM 2013, p. 4). According to EFQM Corporate Social Responsibility is an essential ingredient for the survival of any organization (Schaltegger and Müller 2008, p. 17 according to EFQM 2004, p. 6). That “creating a sustainable future” is one of the eight fundamental principles of business excellence of EFQM, which underlines this statement.

The EFQM model shows a strong stakeholder orientation, which gives this instrument weight in the context of the CSR debate. In contrast to other instruments, the EFQM model takes into account negative externalities of an organization and tries to counteract them on the basis of the catalogue of criteria (see Lorentsichs and Walker 2012, p. 304). It provides a framework for reducing and managing complexity and provides users with assistance in controlling, evaluating, and developing their own organizational performance.

It, thus, may be considered as one of the most appropriate management frameworks for integrating social responsibility and sustainability management into the corporate governance of organizations (Kleinfeld and Rottluff 2016).

According to EFQM, more than 30,000 organizations worldwide have been using the EFQM model so far (see EFQM 2013, p. 2).

Criticism

Although, according to Zink, the fathers of the EFQM model were more motivated by “cost reduction by process optimization” (Zink 1998, p. 219) than by a contribution to the sustainable development of society, a continuous development toward a holistic management approach including sustainability and responsibility can be observed.

Zink already noted in the late 1990s:

“Although it is necessary and makes sense to reduce internal planning and overheads, these are not the right concepts to secure the future of businesses” [...]. “Optimal processes alone will not, however, secure long-term survival, even with customer orientation” (Zink 1998, p. 219). Despite the abovementioned positive development of the EFQM model, it must be pointed out that in practice it is often not implemented for sustainability reasons but rather for the purpose of efficient process optimization with the aim of utilitarian profit maximization.

In addition, the EFQM model has been criticized for having included a large amount of soft factors in its pool of criteria, thus being inappropriate for measuring business success. This is considered especially critical since the instrument would therefore not meet its own functional requirements (Gucanin 2003). The positive effect of the model on business success would remain questionable because it cannot be measured sufficiently precisely. According to Gućanin, this is mainly due to the fact that the sub-criteria of the EFQM model do not provide a sound basis in terms of content (see *ibid.*). It should also be noted that a solid corporate culture does not develop through mere setting and codification, i.e., by the formulation of mission, vision, and

values, but must actually be lived and communicated in a credible way. It seems that the latest version of the model, shortly described above, has modified at least the latter aspect of critique.

Summary

TQM refers to a company's effort to continuously improve all areas of its organization. It serves to introduce quality as a system goal and to guarantee it permanently in all functional areas. TQM, which was developed in the Japanese automotive industry and finally turned into a successful model, needs full support of all employees in order to lead to success. The most common TQM concept in Europe is the EFQM model for excellence of the European Foundation for Quality Management, a model which offers a holistic, results-oriented approach.

Cross-References

- Corporate Social Responsibility (CSR)
- Quality Management
- Sustainable Development Goals
- United Nations Global Compact

References

- Bemowski, K. (1992). The quality glossary. *Quality Progress*, 25(2), 18–29.
- Crosby, P. B. (1979). *Quality is free*. New York: McGraw-Hill.
- Crosby, P. B. (1987). *Quality without tears*. Singapore: McGraw-Hill.
- Crosby, P. B. (1992). *Completeness. Quality for the 21st century*. New York: Dutton.
- Dale, B. G., Boaden, R. J., & Lascelles, D. M. (1994). *Total quality management. An overview* (pp. 3–40). Herts: Prentice Hall.
- Deming, W. E. (1982). *Quality, productivity and competitive position*. Cambridge: Massachusetts Institute of Technology.
- Deming, W. E. (1986). *Out of the crisis: Quality, productivity, and competitive position*. Cambridge, MA: Cambridge University Press.
- Deming Prize. (2019). www.juse.or.jp/deming_en/. Accessed 17 Oct 2019.
- EFQM. (2004). *The EFQM framework for corporate social responsibility*. Brüssel: EFQM.
- EFQM. (2012). *EFQM excellence model. EFQM model 2013*. Brüssel: EFQM.
- EFQM. (2013). EFQM annual report 2012–2013, https://issuu.com/vingolf/docs/efqm_annual_report_2013_v1.0/19. Accessed 20 Oct 2019.
- EFQM. (2019). Das EFQM Modell. https://ilep.de/cmxf/download.php?file=../f/2019/Dec/04/23/FS5de8398396f85.pdf&filename=EFQM_MODELBROCHURE_AWfinal%20-%20German%20-%20Free%20-%20Sponsors.pdf. Accessed 15 April 2020.
- Feigenbaum, A. (1956). Total quality control. *Harvard Business Review*, 34(6), 93–101.
- Feigenbaum, A. (1961). *Total quality control*. New York: McGraw-Hill.
- Feigenbaum, A. (1991). *Total quality control* (3rd ed.). New York: McGraw-Hill.
- Gucanin, A. (2003). EFQM-Modell auf dem Prüfstand. Forschungsergebnisse über Schwächen des EFQM-Modells für Excellence. *Qualität und Zuverlässigkeit (QZ)*, 48(2), 109–110.
- Hendricks, K., & Singhal, V. (1996). Quality awards and the market value of the firm: An empirical investigation. *Management Science*, 42(3), 415–436.
- Housten, A., & Dockstader, S. L. (1988). *A total quality management process improvement model*. San Diego: Navy Personnel Research and Development Center.
- Housten, A., & Dockstader, S. L. (1997). *Total quality leadership: A primer. TQLO publication number 97-02*. Washington, DC: Department of the Navy TQLO.
- ILEP. (2019). <https://ilep.de/Homepage>. Accessed 20 Oct 2019.
- Ishikawa, K. (1985). *What is total quality control? The Japanese way*. New York: Prentice-Hall.
- Ishikawa, K. (1989). How to apply companywide quality control in foreign countries. *Quality Progress*, 22(9), 70–74.
- Ishikawa, K. (1990). *Introduction to quality control*. Tokyo: 3A Corporation.
- ISO 8402:1994. (1994). Quality management and quality assurance – Vocabulary.
- Juran, J. M. (1988). *Juran on planning for quality*. New York: Free Press.
- Juran, J. M. (1995). *A history of managing for quality: The evolution, trends, and future directions of managing for quality*. Milwaukee: ASQC Quality Press.
- Juran, J. M., & Gryna, F. M. (Eds.). (1988). *Quality control handbook* (4th ed.). New York: McGraw-Hill.
- Juran, J. M., Gryna, F. M., & Bingham, R. S. (Eds.). (1974). *Quality control handbook* (3rd ed.). New York: McGraw-Hill.
- Kleinfeld, A., & Rottluff, J. (2016). ISO 26000 und das EFQM-Modell: Ein holistischer Ansatz zur Entwicklung einer verantwortlich handelnden Organisation. In B. Schram & R. Schmidpeter (Eds.), *CSR und Organisationsentwicklung* (pp. 161–179). Berlin/Heidelberg: Management-Reihe Corporate Social Responsibility.
- Lorentsich, B., & Walker, T. (2012). Vom integrierten zum integrativen CSR-Managementansatz. In A. Schneider & R. Schmidpeter (Eds.), *Corporate*

- social responsibility* (pp. 299–316). Berlin/Heidelberg: Springer.
- Malcolm Baldrige National Quality Award. (2019). www.nist.gov/baldrige/baldrige-award. Accessed 17 Oct 2019.
- Martínez-Lorente, A. R., Dewhurst, F., & Dale, B. G. (1998). Total quality management: Origins and evolution of the term. *The TQM Magazine*, 10(5), 378–386. Bingley: MCB University Publishers Ltd.
- Moll, A., & Zeller, E. (2019). Präsentation zur Vorstellung des EFQM Modells 2020. <https://ilep.de/cmxdownload.php?file=../f/2019/Nov/11/07/FS5dc90952c061e.pdf&filename=Pr%C3%A4sentation%20zur%20Vorstellung%20des%20EFQM%20Modells%202020%20-%20pubic.pdf>. Accessed 15 Apr 2020.
- Neyestani, B. (2017). Principles and contributions of total quality management (TQM) gurus on business quality improvement. MPRA Paper No. 77282, posted 04 Mar 2017. Accessed 17 Oct 2019.
- Powell, T. C. (1995). Total quality management as a competitive advantage: a review and empirical study. *Strategic Management Journal*, 16(1), 15–37.
- Rüegg-Stürm, J. (2003). *Das neue St. Galler Management-Modell: Grundkategorien einer integrierten Managementlehre: der HSG-Ansatz* (2., durchges. Aufl.) Bern: Haupt.
- Schaltegger, S., & Müller, M. (2008). CSR zwischen unternehmerischer Vergangenheitsbewältigung und Zukunftsgestaltung. In: Dies. (Hrsg.), *Corporate social responsibility. Trend oder Modeerscheinung?* (pp. 17–35) München: oekom.
- Zink, K. J. (1998). *Total quality management as a holistic management concept. The European model for business excellence*. Berlin/Heidelberg: Springer.

Total Returns

► Total Rewards

Total Rewards

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Synonyms

Reward strategy; Total returns

Definition

Total reward is an approach to reward management that emphasizes the need to consider all aspects of the work of value to employees, not just a few, such as pay and employee benefits. It aims to blend the financial and nonfinancial elements of reward into a cohesive whole. Total rewards complement the organizational goals as well as values and culture, ensuring a highly effective realization of the business strategy. Total reward is of interest because it encompasses all types of rewards – nonfinancial as well as financial, indirect as well as direct, and intrinsic as well as extrinsic.

Introduction

Today it is more important than ever for organizations to have a strategic and integrated approach to rewards. Traditional rewards programs are typically financial in nature and must be at least at a baseline competitive level for companies to attract and retain talent (Bremen and Sejen 2012). The effectiveness of these traditional rewards programs, however, has not been established (see, e.g., Lawler 2000; Gerhart and Rynes 2003), as they produce higher labor costs, without insuring employee commitment and loyalty, two of today's most important goals. Apart from attracting and retaining talent, rewards must also increase organizational commitment, encourage employees to improve their skills, and motivate behaviors that raise performance levels in organizations (Lawler 2000). Employers now realize that this traditional approach to rewards, offering just competitive compensation and benefits programs, are insufficient when competing for talent, especially among younger employees (Towers Perrin 2005). Moreover, a growing number of employees, particularly from generations X and Y, are looking for development opportunities, a supportive work environment, reduced work-related stress, and better work-life balance (Bremen and Sejen 2012).

There is, therefore, a need for a more comprehensive approach to rewarding employees, such

as the total rewards concept (TR, also called total returns) that will help achieve organizational goals while meeting employee needs. TR that combines organizational goals and needs with employee expectations and preferences, therefore, creates high value for employees. **The aim of TR** is to maximize the impact of a wide range of rewards programs and instruments on employee motivation, commitment, and job engagement (Armstrong and Cummins 2011; Bremen and Sejen 2012; Anku-Tsede and Kutin 2013). Employers that create successful total rewards strategies meet employee needs and preferences while optimizing their investments around the most effective and attractive motivating instruments. This strategy also brings maximum return and builds effective employer branding (Anku-Tsede and Kutin 2013).

The total rewards concept is a comprehensive, holistic approach that is compatible with human capital and stakeholder theory and simultaneously aligns organizational and human capital strategy (Armstrong and Brown 2005; Beck-Krala and Klimkiewicz 2016). Human capital theory presents a holistic view of employees. This concept considers the expectations and needs of the main stakeholders of the organization – its employees. Particularly, it integrates organizational goals and values with employee expectations, needs, and values, instead of considering employees as merely valuable resources. Based on this assumption, total rewards view employees as important and essential assets who contribute to the present and future development and growth of the organization.

A traditional reward consists mostly of financial payment and emphasizes the function of extrinsic motivation, treating employees as resources necessary to achieve organizational goals. The TR approach, however, has an intrinsic focus on incentives and motivation and emphasizes employee initiatives and human capital development for a sustainable, competitive advantage. Therefore, TR is of interest because it encompasses all types of rewards – nonfinancial as well as financial, indirect as well as direct, and intrinsic as well as extrinsic. Moreover, selected rewards programs within the TR concept

complement the organizational goals as well as values and culture, ensuring a highly effective realization of the business strategy. Managers understand that most talented employees prefer to work for organizations that offer competitive pay as well as growth opportunities, a promising future, and a positive work experience. In this context, TR creates the employee value proposition (EVP), which describes the value employees derive from the organization. Thus, TR encompasses everything that employees value in their employment relationship. This includes both transactional and relational rewards, such as compensation, benefits, development opportunities, and a supportive work environment. These four components of total rewards comprise a tool kit for HR leaders to draw upon in constructing a comprehensive rewards program that will provide them with a competitive edge. Total rewards are the most visible elements to employees who make their employment decisions based on the overall attractiveness of the offer. Many employers on Fortune magazine's annual list of the best companies to work for in America embrace a total rewards strategy rich in relational rewards, such as flexible working arrangements, development opportunities, and engaging office perks to provide heightened visibility as a preferred employer in a tight labor market (Bremen and Sejen 2012).

Definition and the Idea of TR

Total rewards have emerged as a modern approach and gained attention in the 1990s (e.g., O'Neil 1998). However, this topic has been more developed in the practitioner literature than in academic works (Torre and Sarti 2013). Thus, many associations and consulting groups (e.g., WorldatWork, SHRE, Towers Perrin, etc.) have developed this approach which may have had an impact on the few scientific publications that explored a common definition of TR.

Armstrong and Cummins explain that "A Total Reward is an approach to reward management that emphasizes the need to consider all aspects of the work of value to employees, not just a few,

such as pay and employee benefits. It aims to blend the financial and non-financial elements of reward into a cohesive whole” (Armstrong and Cummins 2011, p. 45). In this context, total rewards build a strong employment value proposition, offering a wide and attractive range of motivational instruments. As such, WorldatWork defines total rewards as all of the tools available to the employer that are used to attract, motivate, and retain employees and includes everything the employee values from the employment relationship (www.worldatwork.org). In fact, most of the TR strategies offer attractive incentive programs that fulfill employee expectations and needs. Other TR definitions, apart from the comprehensive use of financial and nonfinancial motivational instruments, underline the strong integration with business and human capital strategy or simply organizational goals and boost to employee motivation (Lawler 2000). In this regard, total rewards are treated as a portfolio of integrated investments with various but complementary sets of purposes and desired outcomes (Bremen and Sejen 2012, p. 57). This definition shows the strong linkage of business, human capital, and TR strategies (Fig. 1). Many researchers agree that this makes employees feel valued and enhances the attraction and retention of talent committed to helping the company execute its business strategy (Kaplan 2007; Lawler 2000; Brown 2014). Some authors add that TR

strategy is vertically integrated with the business strategy and horizontally with other human capital strategies that help achieve internal consistency (Anku-Tsede and Kutin 2013).

Effective total rewards are designed to be an extension of the business strategy, explicitly supporting key priorities and goals and clearly communicating the level and nature of the contribution the organization expects from its people. Therefore, some researchers view TR as a strategy that represents more *responsible* rewarding (Klimkiewicz and Beck-Krala 2015), which is consistent with the approach of corporate social responsibility. Furthermore, it suggests basing rewards on the value that people bring to organizations and rewards people according to how effectively they use their knowledge, skills, and competencies to help organizations improve their business performance (Lawler 2000). While TR should develop from the business strategy, employers must ensure that the objectives of all elements within the total rewards package are aligned and support the main goals of TR (Fig. 2). Thus, total rewards are designed to effectively align the interests of key organizational stakeholder groups: customers, owners, and employees (Chen and Hsieh 2006).

This linkage model illustrates the results of rewards investment from inception to outcomes. It also helps identify rewards programs that influence desired employee behavior which drives desired customer behaviors, resulting in desired financial outcomes.



Total Rewards, Fig. 1 Integration of TR, business, and HC strategy. (Source: Based on Lyons and Ben-Ora 2002)

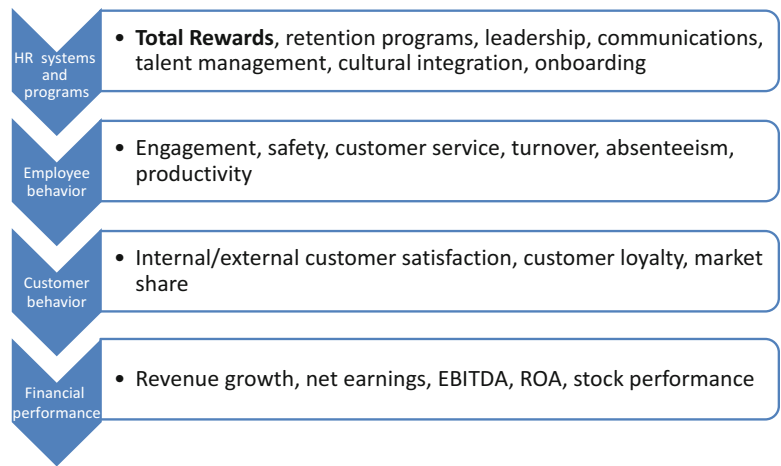
Main Components of Total Rewards

The model of total rewards appears to rely on the psychological contract and Rousseau’s (1995) distinction between reward elements, which are either relational or transactional. All models available in the literature include those two elements: relational or transactional. Relational rewards are identified as nonfinancial rewards, while transactional rewards are identified as tangible, financial, rewards (Armstrong and Cummins 2011). Tangible rewards focus on extrinsic motivation and arise from transactions

between employer and employee. Tangible rewards include base pay, variable pay (bonuses, incentives), and employee benefits. They are essential to recruit and retain employees but can, however, be easily copied by competitors (Armstrong and Brown 2005). Intangible rewards, also called relational rewards, focus on intrinsic motivation and show how employees are treated by the employer. They are nonfinancial in nature; however, they enhance the value and effectiveness of transactional rewards. Intangible rewards include opportunities for growth (learning and development, work experience) and a positive workplace and are important in developing and building engagement and commitment of employees (Armstrong and Cummins 2011; Chen and Hsieh 2006). This is shown in Fig. 3.

Although there are a few TR models in the literature that differ in specific components, all have the same general outline, as shown in Fig. 3. Most models presented contain four main elements: financial compensation, nonfinancial compensation, growth opportunities, and working environment (Armstrong and Cummins 2011; Chen and Hsieh 2006; Milkovich and Newman 2001). Some of the TR models are simplified and comprised of three main elements (e.g., the Towers Watson model, which consists of foundation rewards, performance-based rewards, and career/environmental rewards (Bremen and Sejen 2012, p. 59), or the Mercer Human Resources Consulting model, which includes pay, benefits, and careers (Gross and Friedman 2004). Other models consist of four components (e.g., the Zingheim and Schuster model or

Total Rewards,
Fig. 2 Linkage model.
(Source: Based on Bremen and Sejen 2012)



Total Rewards,
Fig. 3 General total rewards model. (Source: Own elaboration)



Total Rewards, Table 1 Specific total rewards instruments

Main components of total rewards			
Financial rewards	Nonfinancial rewards – benefits	Growth opportunities	Work environment/workplace
Base pay, contingent pay, cash bonuses, long-term incentives, shares, profit sharing	Pensions, holidays, health care, other perks, flexibility	Training, on-the-job training mentoring, coaching programs, performance management, career development, succession planning, sabbaticals	Safe climate, work-life balance (flexible work week), community volunteer opportunities, leadership, organizational culture, communication
Transactional/tangible rewards		Relational/intrinsic rewards	

Source: Based on Armstrong and Cummins (2011)

the Towers Perrin model): total pay, positive workplace, individual growth, and a promising future (Armstrong and Cummins 2011, p. 47; Chen and Hsieh 2006, p. 66).

The TR elements, as presented in Table 1, are interdependent and may have different values and importance to every employee. The aim of a total rewards approach is to provide employees with a combination of monetary and nonmonetary rewards to motivate them to maintain a level of desired business performance. This rewards strategy enables employees to manage their lives more easily while maintaining focus on their jobs. The components are integrated and chosen deliberately to complement each other and strengthen employee motivation. Thus, financial rewards provide financial security, ensure compliance with regulations, and attract and retain employees. Nonfinancial rewards motivate employees and create desired staff attitudes, such as commitment, and help achieve high performance and appreciation of that performance. Next, growth opportunities support professional development and self-realization, as well as influence loyalty and a desire to remain with the organization. Finally, work environment creates long-term employee well-being, engenders loyalty, gives a sense of safety, and helps in better balancing work and family responsibilities (Beck-Krala and Klimkiewicz 2016).

Popular TR models can be found in the literature, such as those proposed by Zingheim and Schuster or Armstrong and Brown, whereas, in practice, most popular are those presented by professional organizations, such as Towers

Perrin, Hay Group, WorldatWork, Aon Hewitt, or Mercer Human Resources Consulting. An interesting model that may be also dedicated to organizations representing the public sector was the one presented by the Hay Group in cooperation with the Cabinet Office in the UK. This model proposed six components: quality of work, work-life balance, tangible rewards, inspiration/values, future growth opportunity, and an enabling environment (UK Cabinet Office 2007). Another interesting model is presented by the American WorldatWork, which focuses on six main components, subdivided into smaller subgroups, as specified in Table 2.

Designing and Implementation of Total Rewards

Every organization needs to adopt a model that best fits and is tailored to its specific characteristic and the needs of its main stakeholders – employees. When designing TR strategy, it is important to remember the external and internal organizational environment that influence TR. External influences are characteristics of particular countries or regions and include the global economic landscape (e.g., labor market trends), cultural norms, and legislative aspects. For example, in developing countries, more impact will be given to transactional (financial) rewards, as financial rewards are more valued by employees in such countries, whereas employers in developed countries will focus more on relational rewards (Anku-Tsede and

Total Rewards, Table 2 WorldatWork model of total rewards

Total rewards	
Compensation	Base wages (e.g., salary pay, hourly pay, piece rate pay), premium pay (e.g., skill-based pay, weekend holiday pay), variable pay (e.g., commissions, bonus programs, short- and long-term incentive programs), severance pay, and outplacement services
Benefits	Legally required benefits (e.g., social security), health and welfare (e.g., medical plan, life insurance), retirement (e.g., defined benefit plan), pay for time not worked (e.g., vacation, holiday), voluntary benefits (e.g., parking), perks (e.g., company car)
Work-life effectiveness	Workplace flexibility (e.g., teleworking, flex time), paid and unpaid time off (e.g., sabbaticals, maternity/ paternity leave), health and wellness (e.g., employee assistance program), community involvement (e.g., CSR/green initiatives), caring for dependents (e.g., special needs care), financial support (e.g., financial wellness program, culture change initiatives (e.g., diversity initiatives, work environment initiatives)
Recognition	Recognition (e.g., service award, yearly awards)
Performance management	Performance (e.g., performance reviews, pay alignment and connection with rewards)
Talent development	Learning opportunities (e.g., on-the-job learning), coaching/ mentoring (e.g., leadership training), advancement opportunities (e.g., internships, succession planning)

Source: Based on the WorldatWork Total Rewards Inventory (www.worldatwork.org)

Kutin 2013). Then, among the most important internal factors that influence TR strategy are business strategy, human capital strategy, organizational culture, employees of the organization, etc. To enhance employee value, some TR components – such as benefits – are offered **cafeteria style**. This allows employees to create a TR package best suited to their own requirements. Individually created TR packages are tailored to specific employee needs and preferences and, therefore, have strong impact on employee behavior and engagement. The overall value of TR offered to specific employee groups is set by the employer, but the individual packages employees choose for themselves contain what is most important and valuable for them. These flexible benefit plans allow employees to decide, within certain limits, what best suits their needs.

Creating an adequate and effective total rewards program is not easy; however, there are some recommendations provided in the literature to guide professionals. Professionals note three important issues crucial to the design of effective TR strategies:

- Understanding real employee expectations and preferences.

- Understanding the relationship between total rewards and the employee value proposition.
- Understanding how to develop programs and balance costs and employee value.

The first issue seems simple enough to most employers; however, practitioners underline that understanding employee expectations is not always easy. Often, employees are not sure about their preferences, managers do not know what employees really want, and sometimes employers ask wrong or misleading questions. Thus, when conducting employee surveys, it is important to ask about specific choices rather than asking open-ended questions (Bremen and Sejen 2011). Despite conducting frequent surveys of employee preferences, many employers find a mismatch between what employers believe employees want and what employees really prefer. Moreover, employers are supposed to understand employee preferences, taking into account key demographics to ensure alignment of TR. Professionals also add that TR strategy needs to be based on hard facts and quantitative analysis, which will help create an adequate package that not only meets employee expectations but also optimizes cost (Bremen and Sejen 2012).

Furthermore, developing and implementing a total rewards strategy requires strong **engagement of top management**. Managers must ensure that the organization will provide employees with the most suitable combination of a reward mix. That means that the right employees will be supported with the right rewards programs and instruments, in the right time and for the right reason (Anku-Tsede and Kutin 2013). These rewards programs offered within TR must be linked to organizational goals that will be achieved by specific employee behaviors that will be rewarded. Moreover, these rewards must be valued by employees (according to the Vroom theory) and also perceived as fair and equitable (according to the Equity theory). Managers must understand employee preferences and values in this area (often preceded by an employee survey). Besides involving employees in the process of developing TR, the survey may increase their acceptance of TR and commitment in the implementation process. Another crucial aspect in implementing and administering TR is open communication on the TR strategy. Complete information about the available rewards programs and their values to employees must be provided to all employees, as this will promote equity and trust, as well as commitment (Rickard et al. 2016; Thompson 2002; UK Cabinet Office 2007).

When designing the TR strategy, some may use the **seven-step process** proposed by Gross and Friedman (2004, p. 10). These steps are as follows:

- Defining the context and issues which focus on clear understanding of the key factors both outside and inside the organizations that affect business and human capital decisions.
- Setting the total rewards strategy which provides a strategic agenda and principles for creating the programs and package.
- Developing an agenda for a holistic assessment of the existing rewards strategy and creating alternative programs if changes in TR are required.
- Creating an implementation plan for TR concerning time, budget, major communications, etc.

- Designing an individual plan that gives a wider perspective as to how TR supports individual employees and their expectations.
- Implementing the process by publicizing it to employees and educating management personnel as to how they can use the program to achieve results for personal success and company goals.
- Measuring and managing TR strategy to ensure that the organization does indeed reward what it plans to reward and achieves desired goals, evaluating the program's effectiveness, and making necessary changes to further achieve goals.

It is crucial to clarify the concept and objectives of TR strategy at the beginning of implementing TR within the organization, and most practitioners indicate the crucial role of effective communication in this process. Involving stakeholders in developing TR is another important aspect. Not only lower-level employees but line managers as well can contribute significantly to the effectiveness of the TR package. Above all, it must be monitored and evaluated to realize its value. To decide which outcomes of a total rewards system should be measured, it is useful to revisit the system's objectives and then consider which data sources will provide the information needed to evaluate those outcomes (Heneman and Coyne 2007).

Benefits of Total Rewards

Benefits of a TR strategy accrue to the organization and its shareholders – clients as well as employees. It is important to remember that effective TR programs are holistic and integrated to be aligned with the organization's unique strategy. Therefore, total rewards programs support key organizational priorities and goals and communicate the main requirements and contributions the organization expects from its employees (Bremen and Sejen 2012). Total rewards can help the organization achieve important goals, such as meeting varied and changing employee needs by

introducing more value, choice, and flexibility and enhancing employee engagement by promoting a culture that values and rewards outstanding performance (Morris 2006). Moreover, TR builds positive employer branding for both internal (e.g., managers and employees) and external stakeholders (clients, potential employees). In terms of clients, because satisfied and engaged employees provide high-performance and high-quality customer service, TR ensures responsible employee behavior toward clients. Then, for employees, TR creates employee safety and satisfaction. Financial and nonfinancial rewards, including training and development opportunities, flexible schedules and recognition, and even providing vehicles for employee transportation, create employee well-being and add convenience to their daily lives as well as sending a more caring message to employees and engendering their loyalty (Chen and Hsieh 2006). TR seems particularly important for younger employees, for whom flexibility and both nonmonetary and monetary rewards are important in strengthening employee initiative. Furthermore, total rewards may enhance employee work happiness (Gulyani and Sharma 2018).

When considering possible benefits connected with total rewards, researchers noticed that effective and strategic total rewards programs can:

- Create affordable and sustainable costs of the total rewards package through accurate decisions concerning where to invest rewards money, which is possible by examining employee expectations and priorities (Gross and Friedman 2004).
- Have a deep and long-lasting impact on motivation and commitment of employees (Armstrong and Brown 2005).
- Create a positive psychological contract (Anku-Tsede and Kutin 2013).
- Develop flexible plans to encourage employees to stay longer in the organization and help in recruiting new employees (Griffin 1999).
- Connect with the business strategy to create a high-performance culture (Gross and Friedman 2004, p. 9).
- Generate maximum returns on the rewards program investment which is systematically measured and assessed (Gross and Friedman 2004, p. 9).
- Support the *employment brand* through effective communications and enhancing desired employee attitudes and behaviors (Gross and Friedman 2004, p. 9).

To sum up, effective TR strategy supports a sustainable competitive advantage through guiding long-term, sustainable programs that build employee well-being and positively influence employee behavior which drives customer satisfaction. Finally, customer satisfaction results in revenue growth and profitability for the organization.

Summary

Many organizations operating in a highly competitive environment design and implement TR strategies. The popularity of this approach is a result of its highly efficient maximization of employee benefits and optimization of employer costs while implementing the business strategy. For most employers, it is a way of becoming an employer of choice and achieving a sustainable advantage. Despite the fact that this concept has existed in the literature for a decade, little research has been done and few case studies exist. Most available case studies are connected with industry examples. It would be highly important to present and provide a guide to developing and implementing TR strategy for both private and public sector organizations.

Cross-References

► [Sustainable Rewards](#)

References

- Anku-Tsede, O., & Kutin, E. (2013). Total reward concept: A key motivational tool for corporate Ghana. *Business*

- and *Economic Research*, 3(2), 173–182. Macrothink Institute.
- Armstrong, M., & Brown, D. (2005). Reward strategies and trends in the United Kingdom: The land of diverse and pragmatic dreams. *Compensation and Benefits Review*, 37, 41–53.
- Armstrong, M., & Cummins, A. (2011). *The reward management toolkit. A step-by-step guide to designing and delivering pay and benefits* (p. 47). London: Kogan Page.
- Beck-Krala, E., & Klimkiewicz, K. (2016). Occupational safety and health as an element of a complex compensation system evaluation within an organization. *International Journal of Occupational Safety and Ergonomics*, 22(4), 523–531.
- Bremen, J., & Sejen, M. (2012). Advancing total rewards & the employee value proposition. *Worldatwork Magazine*, 1, 55–61.
- Brown, D. (2014). The future of reward management: From total reward strategies to smart rewards. *Compensation and Benefits Review*, 46(3), 147–151.
- Chen, H., & Hsieh, Y. (2006). Key trends of the total reward system in the 21st century. *Compensation and Benefits Review*, 38(6), 64–70. <https://doi.org/10.1177/0886368706292542>.
- Gerhart, B., & Rynes, S. L. (2003). *Compensation: Theory, evidence, and strategic implications*. London: Sage.
- Griffin, R. W. (1999). *Management*. New York: Houghton Mifflin Company.
- Gross, S. E., & Friedman, H. M. (2004). Creating an effective total reward strategy: Holistic approach better supports business. *Benefits Quarterly*, 20(3), 7.
- Gulyani G., & Sharma, T. (2018). Total rewards components and work happiness in new ventures: The mediating role of work engagement. Available from: <https://www.researchgate.net/publication/325745333>. Accessed 11 Aug 2019.
- Heneman, L. R., & Coyne, E. E. (2007). *Implementing total rewards strategies*. Alexandria: SHRM Foundation.
- Kaplan, S. L. (2007). Business strategy and Total rewards. *Benefit and Compensation Digest*, 44(9), 12–19.
- Klimkiewicz, K., & Beck-Krala, E. (2015). Responsible rewarding systems – the first step to explore the research area. Research Papers of Wrocław University of Economics.
- Lawler, E. (2000). *Rewarding excellence: Pay strategies for the new economy*. San Francisco: Josse-Bass Publishers/Wiley.
- Lyons, F. H., & Ben-Ora, D. (2002). Total rewards strategy: The best foundation of pay for performance. *Compensation and Benefits Review*, 34(2), 34.
- Milkovich, G., & Newman, J. (2001). *Compensation*. San Francisco: Jossey Bay.
- Morris, I. (2006). *The future of work: Total reward strategies and Canadian's aging workforce*. Toronto: Rogers Media.
- O'Neil, S. (1998). The phenomenon of Total rewards. *ACA Journal*, 7(3), 8–12.
- Rickard, C., Reilly, P., & Brown, D. (2016). Applying a reward strategy in local government, IES, Institute for Employment Studies, Local Government Association UK, 1–32. Retrieved from: <https://www.local.gov.uk/sites/default/files/documents/applying-reward-strategy%2D%2Da2d.pdf>. November 2018.
- Rousseau, D. M. (1995). *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*. Newbury Park, CA: Sage.
- Thompson, P. (2002). *Total reward*. London: Chartered Institute of Personnel Development (CIPD).
- Torre, T., & Sarti, D. (2013). Total reward system: Towards an operational model. In: *EAISM 4th European reward management conference (Rmc 2013) managing rewards: What can we learn from a comparative approach?* Brussels, December 2–3, 2013.
- Towers Perrin. (2005). *Reconnecting with employees: Quantifying the value of engaging your workforce*. London: Towers Perrin Report.
- UK Cabinet Office. (2007). Total reward strategy. Available at: www.cabinetoffice.gov.uk/workforcematters

Tower Building

- Tall Building Sustainability

TOWS Matrix

- SWOR Analysis

Toxic Waste

- Waste Dumping

Toyota Production System

- Lean Thinking

Toyota Way

- Lean Thinking

Tracing Corporate Governance to Its Roots

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Definition

Corporate governance can be defined as a corporation's operating system (Gilson 2018). The modern notion of "ecosystems" (Moore 1993, 1996) provides an appropriate metaphor to describe the range of value creating interactions and relationships among the key actors of governance, or the individuals and organisms who are assigned key roles in the governance of corporate affairs. The term corporate governance dates back to the 1970s and was coined in the wake of corporate scandals (Ocasio and Joseph 2005). Ralph Nader proposed one of the earliest available definitions, borrowing elements from democracy as a form of governance and applying them the "governance" of corporations. *The Taming of the Giant Corporation* (Nader et al. 1976) defines corporate governance as being about limiting the abuse of power of large corporations. Other scholars, business leaders, and institutions followed suit and elaborated their own definitions of governance, contributing to establish a vocabulary of corporate governance.

Language and vocabulary are generally the products of human activity and follow the evolution of human affairs. Corporate governance is no exception and its definitions appeared in the wake of societal and environmental changes taking place between the 1930s and the 1970s in the cultural and political economic make-up of companies and markets. Since 1976, definitions of corporate governance have evolved depending on viewpoints (Aguilera et al. 2015; Tihanyi et al. 2014) and reflect the specific focus and interest of society in corporate activities. Fundamentally, governance is concerned with the structure of rights and responsibilities among those holding a stake in a company (Aguilera et al.

2016a; Aoki 2001) and the essence of corporate governance is rooted in control over corporate activities and shareholder protection. More recent views have started to regard governance beyond control, or as a mechanism to ensure that corporate power is properly channeled to the benefit of society (Judge and Talaulicar 2017). These perspectives take the core of governance beyond control to embrace the overall corporate contribution to society. Between these two opposite poles other definitions of governance exist. These include "the determination of the broad uses to which organizational resources will be deployed and the resolution of conflicts among the myriad participants in organizations" (Daily et al. 2003, p. 371), "the structures, processes, and institutions within and around organizations that allocate power and resource control among participants" (Davis 2005, p. 143), and, more broadly, "the collection of rules, policies and institutions affecting how a firm is controlled" (Donaldson 2012, p. 257). *Corporate Governance: An International Review* (CGIR), one of the leading academic journals in the field, offers one of the broadest definitions and views governance as being about "the exercise of power over corporate entities so as to increase the value provided to the organization's various stakeholders as well as making those stakeholders accountable for acting responsibly with regard to the protection, generation and distribution of wealth invested in the firm" (CGIR 2019).

Introduction

The twenty-first century is characterized by disruption at social, political, environmental, and financial level. Despite economic, technological, and social progress, humanity faces "overwhelmingly important challenges" (McGahan 2019, p. 10) that entail a high degree of change only destined to grow (United Nations 2016). Between the twilight years of the twentieth century and the dawn of the new millennium corporate governance became an institutionalized field of activity for corporations, governments, investors, and scholars in the United States and throughout the

world. Although what has become known as *corporate governance* is a field of study and a business practice that focuses on issues of operation and control of corporations as commercial entities, the term *corporate governance* and its ecosystem of formal and informal definitions, charters, codes, laws, rights, and responsibilities of the actors (individuals and organisms) legally tasked to govern a corporation only emerged in the 1970s. Since then, following major corporate scandals, the dot.com boom of the late 1990s and the financial crisis of 2008, the concept of corporate governance has evolved considerably. These changes in meaning have had major implications for organizations and institutions both politically and economically. To trace corporate governance to its roots it is important to review the evolution of governance to its contemporary forms.

Tracing the Roots of Corporate Governance

To trace corporate governance to its roots, a good starting point is the consideration of fundamental, historical changes that have taken place in corporate law. Historically, only by the 1900 every major jurisdiction in the world had converged to offer as a minimum one standard form of legal incorporation with five key peculiarities: legal personality, limited liability (of managers and owners), investor ownership, transferability of shares, and delegation of management activities under a board of directors (Kraakman et al. 2004). Through legal personhood the corporation had acquired and developed a separate life, no longer identifiable with that of its owners. Owners and managers started to become more and more separate and distant (Mark 1987) and the board of directors emerged to represent the bridge between the two. In most jurisdictions, since the dawn of the twentieth century, this basic structure has remained unchanged (Hansmann and Kraakman 2000). Ever since the creation of corporate personhood, corporate law academics have debated the obligations of those who direct and make decisions on its activity (Letza et al. 2004; Wallman 1999). In the 1930s, in the United States,

the famous “Berle-Dodd dialogue” discussed to whose interests the powers granted to a corporation should be exercised. This debate has great historical relevance (Weiner 1964) and to this day possesses an active voice. The dispute started with the argument that the powers granted to a corporation are to be exercised in the interests of its shareholders (Berle 1932). In the traditional legal view, a corporation is an alliance of shareholders “formed for their private gains” (Dodd 1932, p. 1147). However, Dodd also posited that “it is undesirable (...) to give increased emphasis (...) to the view that business corporations exist for the sole purpose of making profits for their stockholders” (Dodd 1932, p. 1148), a recognition that corporations also possess a social function. Consequently, a view of corporate governance began to emerge as the mechanism to maximize shareholder value while recognizing the expectation of a corporate contributing to society.

Ever since the famous Berle-Dodd dialogue, the main actors of corporate governance include the board of directors, managers, and shareholders (Aguilera et al. 2016b). Nowadays, in most legal entities with a governance requirement, a group of people typically known as the board of directors have responsibility for monitoring the activities and strategic direction of the company in the interests of shareholders and of other stakeholders. Boards represent the highest legal authority of the corporation (McNulty et al. 2013; Starbuck 2014) and sit at the apex of corporate power. Although boards have a key governance role (Almandoz and Tilcsik 2016; Baysinger and Butler 1985), in practice they usually delegate most activities to management (Berle and Means 1932; Hillman and Dalziel 2003; Judge and Talauecar 2017). Nonetheless, governance systems do exist (such as the Netherlands or Switzerland), where the responsibility for managing and governing a company is codified in law and cannot be delegated to management.

The Evolution of Corporate Governance

Directors have legal responsibilities, and over time their roles have evolved, resting either on

the foundation of governance (monitoring) or on the evolution of its definitions (resource provision, service, and strategy) (Boivie et al. 2016; Judge and Talaucar 2017; Klarner et al. 2018). At the heart of governance is agency theory, and the key concepts of agency problem and shareholder interests (Aguilera et al. 2016b; Daily et al. 2003; Filatotchev and Boyd 2009; Van Ees et al. 2009). Since 1932, boards of directors have been the focus of attention. At the time, a number of problems were raised with the public corporate structure and the separation of ownership and control (Berle and Means 1932). About three decades later, Jensen and Meckling studied the ownership structure of the corporation, the separation of ownership and control, and the problem of aligning the interests of managers and shareholders who own the corporation (Jensen and Meckling 1976). The agency relationship remains among the most common and oldest modes of interaction of human beings (Ross 1973). Almost any contractual relationship featuring a party (agent) promising performance to another (principal) is subjected to what is known as the “agency problem.” In essence, the problem boils down to information asymmetry between the two, the agent having better information than the principal. Under the assumption of self-interested behavior on the part of agents (Bosse and Phillips 2016), the potential for wrongdoing increases when interests diverge (Dalton et al. 2007). This assigns the principal a position of weakness, as he/she cannot, without cost, ensure that the agent’s performance is what was promised. Consequently, costs arise out of the necessity of monitoring and controlling agent’s activities (Kraakman et al. 2004). Agency theory views shareholders as principals (Jensen and Meckling 1976) and boards (and their directors) as first-order agents (Eisenhardt 1989) with managers acting as second-order agents. The key concern of agency is how, through the monitoring role of boards shareholders can control their agents’ behavior to ensure the principals’ interests are protected. Boards are fiduciaries of the principals and through the board collective management of the conflicts between shareholders and managers, companies can perform better (Dalton et al. 2007).

Traditionally, boards perform two broad roles: monitoring and resource provision (Hillman and Dalziel 2003; Hillman et al. 2008), however this role set up has evolved (Machold and Farquhar 2013). Traditional board monitoring and resource tasks may be complemented with service and strategy roles (Stiles and Taylor 2001; Zahra and Pearce 1989), or substituted with monitoring and service roles (Judge and Talaucar 2017). In agency tradition, shareholder value maximization, incentives, and board independence are among the “mantras of corporate governance” (McNulty et al. 2013, p. 183). Gradually, alternative and complementary approaches have been developed to study governance and its actors, for instance, institutional, stakeholder, or resource provision theories. Topics such as management and board compensation, two tier board systems (where the chair of the board and CEO roles are separate and held by different individuals) and the relationship between governance structures and financial performance have drawn the lion share of interest among governance scholars, legislators, and the media (Cuomo et al. 2015). The board monitoring is inward looking. To curb or limit self-interest, board controls, incentives and contractual relations are available as mechanisms to restrict and control agents’ power to act in ways that diverge or damage principals’ interests (Mitchell et al. 1997). Contracts, in particular, are the “unit of analysis” (Eisenhardt 1989, p. 58) of corporate governance and efforts are geared toward identifying the most efficient contractual arrangements to govern the principal-agent relationship. Studies have shown that boards give priority to maximizing shareholder’s wealth, optimizing agency costs, nominating and compensating executives, and financial auditing as core activities to protect and enhance shareholder value (Baysinger and Butler 1985; Daily et al. 2003; Fama and Jensen 1983; Kosnik 1987; McNulty et al. 2012) but are also increasingly occupied with corporate purpose and value creation (Bezemer et al. 2018; Federo and Saz-Carranza 2018; Roberts et al. 2005).

The rationale for the evolution of corporate governance from a mechanism of control over business activities in the interests of shareholders to a broader mechanism for also channeling

corporate power to the benefit of society follows an evolution in the expectations of corporate accountability toward society and toward those holding an interest or stake in a company. Motivated by a variety of concerns, such as product quality and safety, disclosure of sustainability practices, transparent and audited financial reports, and value creation for society as well as for investors, scholars, governments, legislators and investors have gradually defined and set out in soft (codes) and hard law (regulation) additional responsibilities for board of directors and shareholders.

In this regard, a remarkable evolution in the governance role of shareholders is worth noting. This evolution is linked to the evolution of finance from the nineteenth-century Rockefeller and Carnegie heroes of money promotion, investment, and management, to professional managers of corporations, owned by shareholder investors, in the first half of the twentieth century (Clark 1981). Ever since, the world is in the age of “intermediated finance” (Rock 2018, p. 364), with separate savings and investment decisions, paving the way for professional investors, the money managers, also known as “institutional investors.” In investor capitalism and liberal economies, institutional investors play a powerful role (Goyer and Jung 2011; Hertig 2018; Rock 2018; Useem 1996), and the share of corporate equity investments held by these investors has increased significantly both in the size and concentration of their stakes (Coates 2018; OECD 2015). Historically, shareholders have delegated the governance of corporations to their elected boards of directors. Following societal demands for investors to get closer to their investee companies and positively influence corporate conduct, investors increasingly engage in the governance of corporations (Gillan and Starks 2007), exercise voice (Hirschman 1970) on corporate matters, and actively seek to influence financial, environmental, and social performance, in the form of activism (Cai and Walkling 2011; Cundill et al. 2018; Ertimur et al. 2010; Goranova and Ryan 2014).

Tracing the roots and evolution of corporate governance indicates that the corporation is much more than a few pieces of paper filled

with legal jargon. Consequently, corporate governance has become much more than the structure of rights and responsibilities around the corporate personhood. Governance has evolved into the ecosystem of structures, processes, and ways of doing things that enable a business to operate in the interests of its investors, employees, customers, suppliers, governments, and society at large. In other words, governance has evolved toward being about channeling corporate power to the benefit of society. Some of these structures and processes are rooted in corporate law, while the majority “is not legal at all” (Gilson 2018, p. 7), rather it relates to the web of relationships, power sources, information processes, decision making and control, support and advice that make up the ecosystem of corporate governance. The corporate legal skeleton and its governance represent the bare minimum of how a corporation operates, while all other elements of the governance ecosystem represent the most important part or the dark matter of corporate governance. In this ecosystem one can find the labyrinth of relationships, formal and informal controls, organizational charts, sources of influence and support that never appear on corporate websites, corporate governance codes, or charters. It is this governance ecosystem that constitutes the real operating system of a corporation, a working system on which sustainable value creation for investors as well as for society depend on.

Cross-References

- [Corporate Purpose](#)
- [Institutional Investors](#)
- [Shareholder and Stakeholder Activism](#)
- [Stakeholders](#)

References

- Aguilera, R. V., Desender, K., Bednar, M., & Lee, J. (2015). Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *The Academy of Management Annals*, 9(1), 483–573.

- Aguilera, R. V., Canapé, J., & Esade, J. S. (2016a). Sovereign wealth funds: A strategic governance view. *Academy of Management Perspectives*, 30(1), 5–23.
- Aguilera, R., Florackis, C., & Kim, H. (2016b). Advancing the corporate governance research agenda. *Corporate Governance: An International Review*, 24(3), 172–180.
- Almandoz, J., & Tilcsik, A. (2016). When experts become liabilities: Domain experts on boards and organizational failure. *Academy of Management Journal*, 59(4), 1124–1149.
- Aoki, M. (2001). *Toward a comparative institutional analysis*. Cambridge, MA: MIT Press.
- Baysinger, B. D., & Butler, H. (1985). Corporate governance and boards of directors: Performance effects of changes in board composition. *The Journal of Law, Economics, and Organisation*, 1(1), 101–124.
- Berle, A. A. (1932). For whom corporate managers are trustees: A note. *Harvard Law Review*, 45(8), 1365–1372.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property* (10th ed.). New Brunswick: Transaction Publishers.
- Bezemer, P. J., Nicholson, G., & Pugliese, A. (2018). The influence of board chairs on director engagement: A case-based exploration of boardroom decision-making. *Corporate Governance: An International Review*, 26(3), 219–234.
- Boivie, S., Bednar, M., Aguilera, R. V., & Andrus, J. (2016). Are boards designed to fail? The implausibility of effective board monitoring. *Academy of Management Annals*, 10(1), 319–407.
- Bosse, D., & Phillips, R. (2016). Agency theory and bounded self-interest. *Academy of Management Review*, 41(2), 276–297.
- Cai, J., & Walkling, R. A. (2011). Shareholders' say on pay: Does it create value? *Journal of Financial and Quantitative Analysis*, 46(2), 299–339.
- Clark, R. C. (1981). The four stages of capitalism: Reflections on investment management treaties. *Harvard Law Review*, 94(3), 561–582.
- Coates, J. C. (2018). Mergers, acquisitions and restructuring: types, regulation and pattern of practice. In J. N. Gordon & W. Ringe (Eds.), *The Oxford handbook of corporate law and governance* (pp. 570–602). New York: Oxford University Press.
- Corporate Governance: An International Review (CGIR). (2019). <https://onlinelibrary.wiley.com/page/journal/14678683>
- Cundill, G. J., Smart, P., & Wilson, H. N. (2018). Non-financial shareholder activism: A process model for influencing corporate environmental and social performance. *International Journal of Management Reviews*, 20(2), 606–626.
- Cuomo, F., Mallin, C., & Zattoni, A. (2015). Corporate governance codes: A review and research agenda. *Corporate Governance: An International Review*, 24(3), 222–241.
- Daily, C. M., Dalton, D. R., & Cannella, A. (2003). Corporate governance: Decades of dialogue and data. *The Academy of Management Review*, 28(3), 371–382.
- Dalton, D., Hitt, M., Certo, S., & Dalton, C. (2007). The fundamental agency problem and its mitigation. *Academy of Management Annals*, 1(1), 1–64.
- Davis, G. (2005). New directions in corporate governance. *Annual Review of Sociology*, 31(1), 143–162.
- Dodd, E. M. (1932). For whom are corporate managers trustees? *Harvard Law Review*, 45(7), 1145–1163.
- Donaldson, T. (2012). The epistemic fault line in corporate governance. *Academy of Management Review*, 37(2), 256–271.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Ertimur, Y., Ferri, F., & Stubben, S. R. (2010). Board of directors' responsiveness to shareholders: Evidence from shareholder proposals. *Journal of Corporate Finance*, 16(1), 53–72.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, 26, 327–349.
- Federo, R., & Saz-Carranza, A. (2018). A configurational analysis of board involvement in intergovernmental organizations. *Corporate Governance: An International Review*, 26(6), 414–428.
- Filatotchev, I., & Boyd, B. (2009). Taking stock of corporate governance research while looking to the future. *Corporate Governance: An International Review*, 17(3), 257–265.
- Gillan, S. L., & Starks, L. T. (2007). The evolution of shareholder activism in the United States. *Journal of Applied Corporate Finance*, 19(1), 55–73.
- Gilson, R. J. (2018). From corporate law to corporate governance. In J. N. Gordon & W. Ringe (Eds.), *The Oxford handbook of corporate law and governance* (pp. 334–362). New York: Oxford University Press.
- Goranova, M. L., & Ryan, L. (2014). Shareholder activism: A multidisciplinary review. *Journal of Management*, 40(5), 1230–1268.
- Goyer, M., & Jung, D. K. (2011). Diversity of institutional investors and foreign blockholdings in France: The evolution of an institutionally hybrid economy. *Corporate Governance: An International Review*, 19(6), 562–584.
- Hansmann, H., & Kraakman, R. (2000). The end of history for corporate law. *Harvard Law School*. John M. Olin Center for Law, Economics and Business discussion paper series, paper 280. http://lsr.nellco.org/harvard_olin/280
- Hertig, G. (2018). Governance by institutional investors in a stakeholder world. In J. N. Gordon & W. Ringe (Eds.), *The Oxford handbook of corporate law and governance* (pp. 821–838). New York: Oxford University Press.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource

- dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Hillman, A. J., Nicholson, G., & Shropshire, C. (2008). Directors' multiple identities, identification, and board monitoring and resource provision. *Organization Science*, 19(3), 441–456.
- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Cambridge, MA: Harvard University Press.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Judge, W. Q., & Talaulicar, T. (2017). Board involvement in the strategic decision making process: A comprehensive review. *Annals of Corporate Governance*, 2(2), 51–169.
- Klarner, P., Yoshikawa, T., & Hitt, M. A. (2018). A capability-based view of boards: A new conceptual framework for board governance. *Academy of Management Perspectives*. <https://doi.org/10.5465/amp.2017.0030>.
- Kosnik, R. D. (1987). Greenmail: A study of board performance in corporate governance. *Administrative Science Quarterly*, 32(2), 163–185.
- Kraakman, R. H., Devis, P., Hansmann, H., Hertig, G., Hopt, K., Kanda, H., & Rock, E. B. (2004). *The anatomy of corporate law: A comparative and functional approach*. New York: Oxford University Press.
- Lee, M.-D. P., & Lounsbury, M. (2011). Domesticating radical rant and rage: An exploration of the consequences of environmental shareholder resolutions on corporate environmental performance. *Business and Society*, 50(1), 155–188.
- Letza, S., Sun, X., & Kirkbride, J. (2004). Shareholding versus stakeholding: A critical review of corporate governance. *Corporate Governance*, 12(3), 242–262.
- Machold, S., & Farquhar, S. (2013). Board task evolution: A longitudinal field study in the UK. *Corporate Governance: An International Review*, 21(2), 147–164.
- Mark, G. (1987). The personification of the business corporation in American law. *The University of Chicago Law Review*, 54, 1441–1483.
- McGahan, A. (2019). Guidepost trilogy – Claims on the corporation: Directions for stakeholder research in the field of management. Where does an organization's responsibility end? Identifying the boundaries on stakeholder claims. *Academy of Management Discoveries*, 6(1), 8–11.
- McNulty, T., Florackis, C., & Ormrod, P. (2012). Boards of directors and financial risk during the credit crisis. *Corporate Governance: An International Review*, 21(1), 58–78.
- McNulty, T., Zattoni, A., & Douglas, T. (2013). Developing corporate governance research through qualitative methods: A review of previous studies. *Corporate Governance: An International Review*, 21(2), 183–198.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853–886.
- Moore, J. F. (1993). Predators and prey: A new ecology of competition. *Harvard Business Review*, 71, 75–86.
- Moore, J. F. (1996). *The death of competition: Leadership and strategy in the age of business ecosystems*. New York: Harper Business.
- Nader, R., Green, M., & Seligman, J. (1976). *Taming the giant corporation*. New York: W. W. Norton & Company.
- Ocasio, W., & Joseph, J. (2005). Cultural adaptation and institutional change: The evolution of vocabularies of corporate governance, 1972–2003. *Poetics*, 33(3–4), 163–178.
- Organisation for Economic Cooperation and Development (OECD). (2015). *G20/OECD principles of corporate governance*. Paris: OECD Publishing.
- Rehbein, K., Waddock, S., & Graves, S. B. (2004). Understanding shareholder activism: Which corporations are targeted? *Business and Society*, 43(3), 239–267.
- Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *British Journal of Management*, 16(Suppl 1), S5–S26.
- Rock, E. B. (2018). Institutional investors in corporate governance. In J. N. Gordon & W. Ringe (Eds.), *The Oxford handbook of corporate law and governance* (pp. 361–386). New York: Oxford University Press.
- Ross, S. (1973). The economy theory of the agency: The principal's problem. *American Economic Review*, 63(2), 134–139.
- Starbuck, W. H. (2014). Why corporate governance deserves serious and creative thought. *Academy of Management Perspectives*, 28(1), 15–21.
- Stiles, P., & Taylor, B. (2001). *Boards at work. How directors view their roles and responsibilities*. Oxford, UK: Oxford University Press.
- Tihanyi, L., Graffin, S., & George, G. (2014). Rethinking governance in management research. *Academy of Management Journal*, 57(6), 1535–1543.
- United Nations. (2016). World economic situation and prospects. http://www.un.org/en/development/desa/policy/wesp/wesp_current/2016wesp_ch1_en.pdf
- Useem, M. (1996). *Investor capitalism: How money managers are changing the face of corporate America*. New York: Basic Books.
- Van Ees, H., Gabrielsson, J., & Huse, M. (2009). Toward a behavioral theory of boards and corporate governance. *Corporate Governance: An International Review*, 17(3), 307–319.
- Wallman, S. M. H. (1999). Understanding the purpose of a corporation: An introduction. *Journal of Corporation Law*, 24(4), 807–818.
- Weiner, J. L. (1964). The Berle-Dodd dialogue on the concept of the corporation. *Columbia Law Review*, 64(8), 1458–1467.
- Zahra, S. A., & Pearce, J. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15(2), 291–334.

Traditional and New Sustainable Production Methods in Food Industry

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Synonyms

Food industry; New food production methods; Sustainability; Sustainable; Sustainable food processing; Traditional food production methods

Definition

Traditional foods are necessary for people to meet their vital needs (Hossain et al. 2018). They are the symbols of culture, and they have been consumed for many years from one generation to another. They also may contain a historical texture or a national dish, or at least the materials used in the dishes may be culturally specific. So, they may express the level of cultural development of a society (Inglehart 2018; Bagelman 2018). Most of them are produced using traditional production methods. The traditional production methods can be used at the household level for small amount of food or for specific traditional foods to keep or enhance specific properties of food (Song et al. 2016; Ekpa et al. 2019). However, modern foods are the foods that are produced by using modern food production methods in which the food products reflect the style and approach of the food professional and are possible to be served in different forms according to the desires of consumers (Ettlie 1983; Mozaffarian et al. 2018). Hence, it can be stated that there is a cycle, starting from the raw materials to be used in the production of traditional foods, through to the end products, which are then developed according to the feedback from consumers regardless of whether the food is traditional or modern. Therefore, production methods need to be carefully designed, implemented by well-qualified teams, and must

obviously be appropriate for the materials being used depending on the food characteristics (Meghwal et al. 2017; Shegelman et al. 2019). For some food products, such as handmade foods, grains, fermented foods, etc., the use of traditional production methods may be the only choice. On the other hand, some food products can be produced with the use of new techniques depending on the possibilities available. Burgers, milkshakes, genetically modified foods, and frozen foods are some examples of modern foods (Sharmaa et al. 2020). In fact, the aim is to produce sustainable food of reasonable quality, depending on whether the food is traditional or modern and the method used in food production, because sustainability also aims to produce sustainable goods without compromising the quality (Movilla-Pateiro et al. 2020). For this reason, both the material used and the sustainability of the applied method will make the produced food sustainable. Hence, the concept of sustainability can be considered an emerging technique for the production of food materials (Lang and Barling 2012; Miranda et al. 2019).

Introduction

In the world economy, the food industry is of great importance to economic development and industrialization (Hediger 2000; Sexton 2000). At the same time, labor is obviously necessary for the production of food products. Hence, the establishment of food processing cycle should be in harmony with the variety and amount of materials to be used in the production, needs in public nutrition, technical facilities, and labor demand. For example, in order to produce a nutritional supplement beverage, the material to be used in production should be continuously available, the product to be produced should contain essential nutrients, the production area should have sufficient equipment, and labor delegation within the company should be well organized (Griggs et al. 2013; Tanumihardjo et al. 2019). Therefore, the food industry has great organizational, strategic, and economic importance for all countries (Pinstrup 1994; Spink et al. 2019).

Today, a number of environmental problems beset the world such as climate change, reduction of ecological and biological diversity, and air-water-soil pollution. These problems can lead to complexity in the plans of companies and institutions to produce food and to develop new production methods, because the climatic conditions and nutritional sources required for the growth of agricultural materials used in food production will show inconsistency (Hosseini-Fashami et al. 2019). In this context, the concept of sustainability has gained importance in the food sector. Sustainability can be defined differently depending on the subsectors such as food, chemistry, agriculture, textile, construction, environment, etc. In general terms, most of the definitions about sustainability include the concepts of continuity in diversity and increase in efficiency (Salvioni and Gennari 2016). To serve the aforementioned concept of sustainability, sustainable production in the food industry aims to produce goods by using traditional and new production methods depending on the nutritional profile of the foods, characteristics and the needs of costumers (Nenni and Micillo 2017). In order to achieve this without harming the balance of nature and using resources effectively, it is necessary to manage the synergy between sustainability factors such as the economic dimension, environmental dimension, and social dimension (Fig. 1) (Despotovic et al. 2016; Lutz et al. 2002). As seen from Fig. 1, the intersections of these three factors result in new concepts that are important for sustainability, such as a sustainable economy, social equality, and the local environment. Sustainable change is the common point of all of these. In the figure, the economic dimension of sustainability is related to the use of limited resources to produce goods (Geiger et al. 2018). An economically sustainable system can produce goods and services within the frame of sustainability and can avoid sectoral imbalances that harm industrial production (Aydin 2015). The social dimension of sustainability is human-oriented and has importance with regard to social and cultural continuity (Hanif et al. 2017). The environmental dimension predicts a balance between biological and physical systems. The main objective is to ensure that these systems

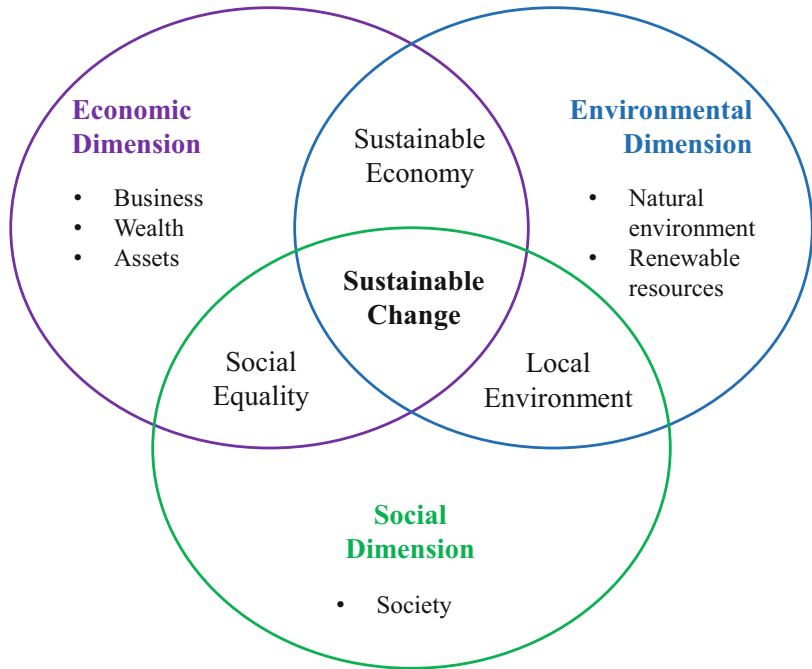
can be adapted to changing conditions. Biodiversity and conservation of this becomes important in this regard (Murgado-Armenteros et al. 2020). Environmental pollution, which causes irreversible damage, results in a loss of biodiversity which has a negative impact on the food sector. These include food-related problems such as food-related illnesses, decrease in production yield, loss of food quality, destruction of natural resources, dependence on imported food products, migration from rural areas to cities as a result of changing nutritional status, and the destruction of rural communities (Nabi et al. 2019). These factors all impact sustainable food production in various ways. For example, there may be a reduction in variety of plant-based raw materials to produce plant-based food products due to inappropriate climate conditions or due to the pesticide-borne illnesses in these plant-based raw materials, so it may also cause a decrease in food product variety (Egal and Forster 2020). In addition, it should be noted that almost all traditional and new food production methods that have gained current popularity are based on sustainability principles (Kopczyńska 2020). Therefore, it is essential to follow sustainability principles in food production and to evaluate basic principles of food production methods in order to make sustainable change successful (Galanakis 2018).

The food industry is a large field where these sustainable change elements can be applied (Aguilar et al. 2019). Green production practices cover both traditional and new sustainable food production methods, and in this sense, they have a large share in food production (Rueda et al. 2017). These practices can improve food product quality and accuracy in measurement and analysis, and prevent or minimize environmental damage to an acceptable level. They are obviously preferred because of the threat of depletion of natural resources for food production (Shouket et al. 2019).

In this context, when considering sustainability in food production, cuisine should not be ignored due to their common point to reflect the interaction between culture and technology, such as development of traditional and modern food production methods, investigation of new types of

Traditional and New Sustainable Production Methods in Food Industry,

Fig. 1 Sustainability factors in food industry (Leat et al. 2011)



food and service styles by experts, etc. Therefore, it is possible to evaluate the cuisine into two groups such as traditional foods and new (modern) foods (Sozer et al. 2017). Traditional or new foods can also create various subsegments, depending on whether the methods they are produced are traditional or new. Sometimes, it can even be seen that these methods are blended with alternative techniques (Okumus 2020). For example, the extraction method is a sustainable method used to obtain food extracts. As well as traditional applications such as extracting foods by holding the food material in hot water for a certain period of time, the method has new uses in systems developed with the support of temperature and pressure depending on food characteristics. Hence, traditional foods and modern foods may intersect in terms of product and production techniques (Johnson et al. 2018).

Traditional food products can reflect the historical, cultural, geographical, agricultural, and climatic heritage of society according to the characteristics of the material used in their production (Fatorić and Seekamp 2017). If traditional food is produced, traditional reflections can be seen in the presentation, consumption, and storage

conditions of the food. For example, if the produced food needs to be stored in a wooden container, the presentation and consumption styles can be planned in accordance with that material (Turck et al. 2016). In recent years, new sustainable methods have been used in addition to the use of sustainable traditional methods for the production of traditional foods. The possible reasons for that can be macroeconomic developments, changes in consumer behavior, innovations in food technology, the supply and demand balance, etc. (Voinea et al. 2020). Hence, the concept of sustainability is becoming an important part of life, from the consumed food to the materials used and even consumption habits (Petrovič and Murgaš 2020). In this context, regardless of whether the food or food production method is traditional or new, the main thing is to apply the sustainability principles efficiently. Accordingly, this entry will discuss traditional and new sustainable techniques used in food production.

Importance of Sustainability in Food Production

Sustainable food production is of great importance for the future of the world and for raising

healthy generations (Movilla-Pateiro et al. 2020). Likewise, the use of renewable energy sources in the food industry to avoid energy dependence and damage to ecosystems is a priority issue (Petersen 2016; Murphy et al. 2004). This is important both to reduce the environmental burden as well as production costs. At the same time, traditional and new production principles have started to follow the principles of green engineering applications in order to achieve sustainability in food production (Abualfaraa et al. 2020).

There are 12 basic principles in the green engineering approach (Ivanković et al. 2017). Many technical factors, from the design of new products to the provision of new materials, and from environment to human health within the scope of sustainable food production, can be evaluated according to these principles (Table 1) (Anastas

and Zimmerman 2003). The principles contain factors such as efficient energy consumption, importance of balance between inputs and outputs in the production area, waste treatment, design for sustainability, etc. They express key points to achieve sustainability by protecting the environment and by increasing production efficiency. Unfortunately, the food system struggles with climate change, deforestation, pollution, and exploitation of some animal and plant species (Myers et al. 2017). Sustainability is a solution to deal with these problems (Abualfaraa et al. 2020). Therefore, many subsidiary sectors starting from the raw material supply to the food production, including logistics, textile, chemistry, and information technology, contribute to food sustainability on a global scale, regardless of whether their production methods are traditional or modern, and

Traditional and New Sustainable Production Methods in Food Industry, Table 1 Twelve basic principles of green engineering (Kolb 2017; Sheldon 2016)

Number	Concept	Basic information
1	Inherent rather than circumstantial	Officials involved in production should make efforts to ensure that the materials used, the factors that make up the energy inputs and outputs, are not dangerous
2	Prevention instead of treatment	It is more advantageous to prevent the formation of waste rather than to clean it once it has been formed
3	Design for separation	Separation and treatment processes should be planned to ensure effective energy consumption by material use
4	Maximize efficiency	The entire production system, including products, should be planned to improve production quantity, use energy and time effectively, and increase efficiency accordingly
5	Output-pulled versus input-pushed	The product, the mode of manufacture, and the system should be based on the principle that the inputs must be known and the inputs designed accordingly, not the inputs and the results measured
6	Conserve complexity	The confusion and entropy embedded in the system should be considered as an investment to make the system more usable and waste-recyclable
7	Durability rather than immortality	Targeted durability should become the goal in the design of production, not immortality
8	Meet need, minimize excess	Design for excess or unnecessary capacity should be considered a design inefficiency
9	Minimize material diversity	The diversity of materials in multicomponent products should be minimized to enable efficient use of resources
10	Integrate local material and energy flows	The production steps of the products and the system design and material flow must be arranged in a harmonious manner
11	Design for commercial “afterlife”	Products, processes and systems as a whole should also be designed to enable commercial sustainability.
12	Renewable rather than depleting	Inputs in production (materials, raw materials, energy, etc.) should be designed by selecting them in the reusability philosophy rather than just consumption option

show their efforts to ensure that nature remains in sustainable balance. Hence, the food industry should also be one of the stakeholders (Franceschelli et al. 2018).

Innovation in Sustainable Food Production

Innovation in the food industry focuses not only on the food product but also on process, company structure, capacity, and speed (Rajapathirana and Hui 2018). This concept emerges as a result of the organizational development process where R&D and entrepreneurship have been combined with quality, effective leadership, appropriate employee management, and strategic marketing management factors. This will lead to an increase in production efficiency in the food chain. Moreover, the food industry will therefore be seen as an innovative sector producing high-quality food products by using appropriate production methods (Nazzaro et al. 2019). Food innovations include the developments in both traditional and new production methods such as innovations in frozen-storage, ionization, radiation, chemical-storage, vacuum or modified atmosphere packaging, food preservation, etc. These innovations can be applied to the food production lines depending on the characteristics of food, facilities in equipment, the level of technical knowledge, type of food production method (whether it is traditional or new), and the level of development in sustainability, so the adaptation of these innovations to the food production in order to achieve sustainability may differ from one country to the other (Romeiro 2012; Cappellesso and Thomé 2019). Some of these innovations are done for the development of traditional food production methods for specific types of food, while the others are for the exploration of new food products and new production methods. For example, a type of a snack food may retain its traditional appearance even after years because there is a certain customer segment that wants to purchase that food because of its traditional appearance, which can be considered as nostalgic. However, it may be possible to produce this traditional snack food product with a new method, which is faster, suitable for mass production, while maintaining the same appearance. Therefore, innovation in food production

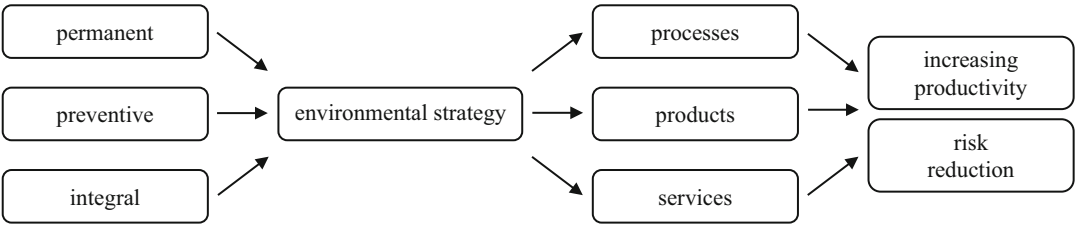
can be done for various reasons such as the need to develop the technical characteristics of food, to preserve the food quality, to maintain sustainability in food production, to provide an advantage from cost variability by creating added value to the food product, and to protect the environment (Franceschelli et al. 2018). However, the innovation performance of a food company depends on its past experience, capacity, production and trade performance, etc. (Fig. 2) (Muller 2012; Laforet 2013).

As can be seen from Fig. 2, factors affecting innovation can be grouped depending on the sectoral status, the company profile, and technical knowledge. In this age of rapid development, R&D expenditures in the food industry need to be increased in proportion to the changing needs of consumers. In fact, when factors such as human resources, technical capability, and investment are evaluated, it can be said that the food company has enough capacity for innovation (Dzillas and Blind 2019). Therefore, awareness of the efficacy of innovation in the sector needs to be increased to profit from this capacity, using factors such as age groups, nutritional habits, working patterns, and performance. In addition, it should be noted that regardless of whether the technique used in food production is traditional or new, old technology should be replaced with innovative ones in order to progress in the line of sustainable food production and to meet the food need quickly (Millar et al. 2018).

Green Production in Food Industry

Green production can be defined as a production process that eliminates risks to human health and the environment and increases productivity by applying sustainable approaches in a holistic manner (Baines et al. 2012). The green production can also be described as the development of production technologies which do not produce greenhouse gas emissions, which do not produce toxic substances, and which do not produce waste (Conway 2019). The production process consumes fewer resources with less energy, reduces unnecessary packaging usage, and minimizes waste (Biner 2014). The green production results in green products that do not endanger human or animal health and are produced with

Traditional and New Sustainable Production Methods in Food Industry, Fig. 2 Factors affecting innovation (Jegade et al. 2012)



Traditional and New Sustainable Production Methods in Food Industry, Fig. 3 Clean production elements (Misra 2012)

environmentally friendly sustainable techniques. While maintaining quality, these products should also be recyclable (Krystallis and Chryssohoidis 2005). Hence, green products do not endanger human or animal health and are produced with environmentally friendly sustainable techniques. Sustainable food production methods and the green production methods are intertwined with clean production methods, so both the approaches may be grouped under clean production principles (Hens et al. 2018; Bera and Sadowska 2020). The basic building blocks in the clean production are shown in Fig. 3.

As stated in Fig. 3, environmental strategy is addressed under two sections such as system inputs and outputs. These are all selected aspects of integrated environmental management. The elements that make up the environmental strategy should be permanent, preventive, and integrative. The strategic approach strengthened in this way will provide robust products, processes, and services as output. In other words, the approach laid on the basis of clean production principles will bring efficiency in food production. At this point, as in every production process, increase in efficiency will become the target after a while. Applying clean production

principles to comply with sustainability principles in the food production line also signals that risks can be reduced to a certain level. However, if measures are not taken, factors that may adversely affect food production will appear. Greenhouse gases, ozone layer damage, poor air quality, drought, biodiversity, toxic chemicals, non-renewable materials, hazardous wastes, and polluted water are examples of these factors. Therefore, it is necessary to take counter measures to make the production sustainable. Waste reduction, pollution prevention, recycling, reuse of resources, and environmentally friendly design are emerging as measures that include clean production and green production principles for sustainable food production (Keijer et al. 2019; Chen 2008). They all need to be addressed in the context of sustainability, with the impacts outlined above being used as indicators for evaluation.

Green production is applied not only to production processes but also to products and services, as stated below:

- Green production-based processes (effective use of resources such as raw materials, water and energy, no polluting raw materials, reducing the amount and pollution rates of all waste during the production process)
- Product-based green production (reducing the negative impact of the product on the environment during its lifetime from raw material to its end use)

- Service-based green production (reducing the negative environmental impact of services provided throughout the product life cycle)

Green production aims to ensure that waste and greenhouse gases are reduced to the lowest level and the output (product) reaches the highest level by analyzing the material and energy flow within a certain system. In other words, it is based on the principle of using fewer natural resources and energy, and producing less waste for the same amount of production (Wang and Liu 2019).

However, more research needs to be done with regard to green production. The orientation of society toward environmentally-friendly products will enable an overall change in production and consumption philosophy. In today’s rapidly developing technological context, important pioneering studies are being done by companies to produce environmentally friendly green products in order to protect the environment. These will be the firms that survive into the new age, as the food business is forced into green production by forces from all sides.

Traditional Sustainable Methods in Food Production

Food has been processed since ancient times (Pilcher 2017). Traditional food production methods include sun drying, salting, smoking, freezing, canning, pickling, fermentation, etc. (Table 2). Almost all of these methods have been

Traditional and New Sustainable Production Methods in Food Industry, Table 2 Development of food production methods (Acharya et al. 2017)

Development of food production methods		
Traditional methods	New production methods	
	(circa 1900s)	(After 1960)
Canning	Extrusion	Freeze drying
Fermentation	Freezing and cooling	Infrared processing
Freezing	Pasteurization	Irradiation
Oven drying	Sterilization	Magnetic fields
Pickling	Ultra high temperature (UHT)	Microwave processing
Salting		Modified atmosphere packaging
Smoking (fumigation)		Ohmic heating
Sun drying		Pulsed power field
		Spray drying
		Ultrasonication

used to keep food safe for longer periods of time, with minimal nutritional losses (Sampels 2015). Sometimes, inappropriate food production methods may pose a risk of food loss, spoilage, and contamination of food products (Ishangulyyev et al. 2019). Therefore, the method to be used in food production should be suitable and sustainable to the characteristics of the food materials. At this point, traditional sustainable methods are also preferred for the production of some foods, because these methods contribute to the production of environmentally friendly products (Sozer et al. 2017). In addition, the traditional methods can be applied to processed and unprocessed foods depending on the usage area, frequency, and bioavailability of food products (Turck et al. 2016). Although almost all of the methods used in food processing (cutting, chopping, cooking, mixing, cooling, freezing, etc.) can be applied in the kitchen, sometimes, the production of these foods needs to be done in industrial scale instead of producing them in the kitchen. Therefore, the concept of food production does not have to be evaluated on an industrial scale (Horton 2017). Table 2 describes the chronological development of food production methods.

As indicated in the table, a traditional sustainable production method that can be applied to the same type of food can be replaced over time with the new production methods with a sustainable approach. The reasons for this situation may be the increase in the demand for food, the increase in the production speed with the new method, and the higher awareness of the new method on environmental protection. For example, the canning method can be preferred as one of the traditional methods for storing seasonal foods. In the following periods, ultrahigh temperature application can be used as a new method for storing this food. In this method, short-processing time is an important advantage compared to the first method used. In addition, since the energy required in this method is environmentally friendly, the method can be considered more environmentally friendly than it was originally. Freeze drying, which is used in later periods, can be preferred as a sustainable approach in order to be more sensitive for environmental protection and to reduce nutritional value losses of the food product.

New Sustainable Methods in Food Production

As a result of the acceleration of industrialization in food production, traditional food production methods started to be developed or to be replaced by new food production methods (Table 2). The new methods used in production should not be perceived as an advantage over the traditional production method, because in some cases, traditional production methods are the only option for some special foods. The methods used can be sustainable regardless of whether the method is traditional or new. For example, a type of food, whose raw material is specific to a particular geographical area, can be produced on a small scale, using a sustainable method that does not harm the environment. The important point here is that the technique used should be applied consciously. Otherwise, a number of potential risks for consumer health and for food safety may occur in contrary to the sustainable production principles (McElhatton and El Idrissi 2016). In relation to this, in an academic study involving six European countries, Tournier et al. (2007) found that new food production methods that improve the safety and nutritional quality of food and make the food product usable without compromising its characteristics are mostly accepted by consumers (Tournier et al. 2007). Similarly, studies examining the use of new food production methods instead of traditional food production methods highlight that the most successful transitions occur when sustainability principles can be followed for the development of new products and for the improvement of shelf life (Wallerstein 2016; Springer et al. 2018). Hence, if a transition from a traditional food production method to a new food production method is planned, the issues to be reviewed before and during production are indicated below (Di Giovine and Brulotte 2016; El Baz et al. 2016):

- Monitoring methods of traditional production
- Determination of production methods and differences in production
- Carrying out characterization studies of the products monitored at the production site

- Conducting controlled laboratory production while maintaining traditional production characteristics
- Standardization of the production method
- Ensuring the transition to industrial production based on the standardized laboratory production
- Production of the food material on an industrial scale and conducting shelf life studies of the produced foods by organizing appropriate storage conditions for food safety

Therefore, new food production methods can be considered as the sustainable approaches that use technological facilities to increase food production efficiency while maintaining the characteristics of food. Hence, harvesting higher amounts of food products per acre while conserving natural sources or producing the maximum amount of agricultural products to be raw materials for food production can be regarded as some of the goals of new food production methods.

Summary

The food industry is one of the basic building blocks of the worlds' economy, regardless of the geographical position of the country. Increasing awareness of sustainability in the world has led to new research among food businesses. One of these lines of enquiry is sustainable production. In this context, evaluation, analysis, and determination of future strategies are of great importance for sustainable production in the sector. The main purpose of these efforts is the transformation of traditional economic activities into modern ones, to facilitate efficient use of resources and an increase in production efficiency. The activities extend to the purchase of raw materials, their processing and conversion into high-quality food and beverage products, and finally delivery to the consumer. This can be done by using traditional food production methods or the new food production methods within the scope of sustainability. Hence, the focus of food production process should be on energy use, greenhouse gas emissions, resource and waste management, water and waste water management, and packaging.

Traditional food production methods may be preferable to ensure the stability of sensory characteristics of some specific local foods. It may not be easy to switch to modern production techniques for that type of food product because of the risk of deterioration in the consistency of those characteristic properties. On the other hand, new food production methods may provide advantages such as availability in mass production, short process time, ease of automation, etc. Both traditional and conventional methods guarantee the efficient use of raw materials and to convert these materials into high-quality and safe products using sustainable industrial processes. Hence, this entry highlights the importance of sustainability in food production, innovation, and green production within the scope of food production methods, being traditional methods and new methods. These are all important indicators when discussing sustainable development in the context of food production.

Cross-References

- [Green Rewards](#)
- [Sustainability and Sustainable Development in the Food Industry](#)
- [Sustainable Development](#)

References

- Abualfaraa, W., Saloniitis, K., Al-Ashaab, A., & Ala'raj, M. (2020). Lean-green manufacturing practices and their link with sustainability: A critical review. *Sustainability*, 12(3), 981.
- Acharya, V. I. B. H. A., Shukla, S. W. A. T. I., & Jain, S. H. A. S. H. I. (2017). Agri-produce processing and value addition for nutrition security. *International Journal of Applied Home Science*, 4(7–8), 611–616.
- Aguilar, A., Twardowski, T., & Wohlgemuth, R. (2019). Bioeconomy for sustainable development. *Biotechnology Journal*, 14(8), 1800638.
- Anastas, P. T., & Zimmerman, J. B. (2003). Design through the twelve principles of green engineering. *Environmental Science and Technology*, 37(5), 94–101.
- Aydin, N. (2015). Benefits of global sustainability. *International Journal of Enhanced Research in Management & Computer Applications*, 4(4), 9–12.
- Bagelman, C. (2018). Unsettling food security: The role of young people in indigenous food system revitalisation. *Children & Society*, 32(3), 219–232.

- Baines, T., Brown, S., Benedettini, O., & Ball, P. (2012). Examining green production and its role within the competitive strategy of manufacturers. *Journal of Industrial Engineering and Management (JIEM)*, 5(1), 53–87.
- Bera, A., & Sadowska, B. (2020). Clean production as an element of sustainable development. In *Sustainable production: Novel trends in energy, environment and material systems* (pp. 1–9). Cham: Springer.
- Biner, N. (2014). Tüketicilerin yeşil ürün satın alma davranışlarının incelenmesi (Master's thesis, Trakya Üniversitesi).
- Cappellesso, G., & Thomé, K. M. (2019). Technological innovation in food supply chains: Systematic literature review. *British Food Journal*.
- Chen, Y. S. (2008). The positive effect of green intellectual capital on competitive advantages of firms. *Journal of Business Ethics*, 77(3), 271–286.
- Conway, G. (2019). *The doubly green revolution: Food for all the twenty-first century*. Cornell University Press.
- Despotovic, D., Cvetanovic, S., Nedic, V., & Despotovic, M. (2016). Economic, social and environmental dimension of sustainable competitiveness of European countries. *Journal of Environmental Planning and Management*, 59(9), 1656–1678.
- Di Giovine, M.A. & Brulotte, R.L. (2016). Introduction food and Foodways as cultural heritage. In edible identities: Food as cultural heritage (pp. 1-27). Routledge.
- Dziallas, M., & Blind, K. (2019). Innovation indicators throughout the innovation process: An extensive literature analysis. *Technovation*, 80, 3–29.
- Egal, F., & Forster, T. (2020). *Biodiversity, food systems and urban-rural linkages*. Biodiversity, Food and Nutrition: A New Agenda for Sustainable Food Systems.
- Ekpa, O., Palacios-Rojas, N., Kruseman, G., Fogliano, V., & Linnemann, A. R. (2019). Sub-Saharan African maize-based foods-processing practices, challenges and opportunities. *Food Reviews International*, 35(7), 609–639.
- El Baz, J., Laguir, I., Marais, M., & Staglianò, R. (2016). Influence of national institutions on the corporate social responsibility practices of small-and medium-sized enterprises in the food-processing industry: Differences between France and Morocco. *Journal of Business Ethics*, 134(1), 117–133.
- Ettlie, J. E. (1983). Organizational policy and innovation among suppliers to the food processing sector. *Academy of Management Journal*, 26(1), 27–44.
- Fatorić, S., & Seekamp, E. (2017). Are cultural heritage and resources threatened by climate change? A systematic literature review. *Climatic Change*, 142(1–2), 227–254.
- Franceschelli, M. V., Santoro, G., & Candelo, E. (2018). Business model innovation for sustainability: A food start-up case study. *British Food Journal*.
- Galanakis, C. M. (Ed.). (2018). *Sustainable food systems from agriculture to industry: Improving production and processing*. Academic Press.
- Geiger, S. M., Fischer, D., & Schrader, U. (2018). Measuring what matters in sustainable consumption: An integrative framework for the selection of relevant behaviors. *Sustainable Development*, 26(1), 18–33.
- Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., ... & Noble, I. (2013). Policy: Sustainable development goals for people and planet. *Nature*, 495(7441), 305.
- Hanif, E., Hashemnejad, H., & Ghafourian, M. (2017). Factors affecting the augmentation of spatial dynamics in social sustainability with an emphasis on human-orientation of space. *Journal of History Culture and Art Research*, 6(1), 419–435.
- Hediger, W. (2000). Sustainable development and social welfare. *Ecological Economics*, 32(3), 481–492.
- Hens, L., Block, C., Cabello-Eras, J. J., Sagastume-Gutierrez, A., Garcia-Lorenzo, D., Chamorro, C., ... & Vandecasteele, C. (2018). On the evolution of “cleaner production” as a concept and a practice. *Journal of Cleaner Production*, 172, 3323–3333.
- Horton, P. (2017). We need radical change in how we produce and consume food. *Food Security*, 9(6), 1323–1327.
- Hossain, K., Raheem, D., & Cormier, S. (2018). *Food security governance in the Arctic-Barents region*. Springer.
- Inglehart, R. (2018). *Cultural evolution: people's motivations are changing, and reshaping the world*. Cambridge University Press.
- Ishangulyyev, R., Kim, S., & Lee, S. H. (2019). Understanding food loss and waste—Why are we losing and wasting food? *Food*, 8(8), 297.
- Ivanković, A., Dronjić, A., Bevanda, A. M., & Talić, S. (2017). Review of 12 principles of green chemistry in practice. *Int J Sustain Green Energy*, 6(3), 39–48.
- Jegade, O. O., Ilori, M. O., Sonibare, J. A., Oluwale, B. A., & Siyanbola, W. O. (2012). Factors influencing innovation and competitiveness in the service sector in Nigeria: A sub-Sectoral approach. *Management*, 2(3), 69–79.
- Johnson, S. L., Moding, K. J., Maloney, K., & Bellows, L. L. (2018). Development of the trying new foods scale: A preschooler self-assessment of willingness to try new foods. *Appetite*, 128, 21–31.
- Keijer, T., Bakker, V., & Slootweg, J. C. (2019). Circular chemistry to enable a circular economy. *Nature Chemistry*, 11(3), 190–195.
- Kolb, V. M. (2017). *Green organic chemistry and its interdisciplinary applications*. CRC Press.
- Kopczyńska, E. (2020). Are there local versions of sustainability? Food networks in the semi-periphery. *Sustainability*, 12(7), 2845.
- Krystallis, A., & Chrysosoidis, G. (2005). Consumers' willingness to pay for organic food: Factors that affect it and variation per organic product type. *British Food Journal*, 107(5), 320–343.
- Laforet, S. (2013). Organizational innovation outcomes in SMEs: Effects of age, size, and sector. *Journal of World Business*, 48(4), 490–502.

- Lang, T., & Barling, D. (2012). Food security and food sustainability: Reformulating the debate. *The Geographical Journal*, 178(4), 313–326.
- Leat, P., Revoredo-Giha, C., & Lamprinopoulou, C. (2011). Scotland's food and drink policy discussion: Sustainability issues in the food supply chain. *Sustainability*, 3(4), 605–631.
- Lutz, W., Shah, M. M., Bilsborrow, R. E., Bongaarts, J., Dasgupta, P., Entwisle, B., & Nilsson, S. (2002). The global science panel on population in sustainable development. *Population and Development Review*, 28(2), 367–369.
- McElhatton, A., & El Idrissi, M. M. (Eds.). (2016). Modernization of traditional food processes and products (Vol. 11). Springer.
- Meghwal, M., Goyal, M. R., & Kaneria, M. J. (Eds.). (2017). *Food technology: Applied research and production techniques*. CRC Press.
- Millar, C., Lockett, M., & Ladd, T. (2018). Disruption: Technology, innovation and society. *Technological Forecasting and Social Change*, 129, 254–260.
- Miranda, J., Ponce, P., Molina, A., & Wright, P. (2019). Sensing, smart and sustainable technologies for Agri-food 4.0. *Computers in Industry*, 108, 21–36.
- Misra, K. B. (Ed.). (2012). *Clean production: Environmental and economic perspectives*. Springer Science & Business Media.
- Movilla-Pateiro, L., Mahou-Lago, X. M., Doval, M. I., & Simal-Gandara, J. (2020). Toward a sustainable metric and indicators for the goal of sustainability in agricultural and food production. *Critical Reviews in Food Science and Nutrition*, 1–22.
- Mozaffarian, D., Rosenberg, I., & Uauy, R. (2018). History of modern nutrition science—Implications for current research, dietary guidelines, and food policy. *BMJ*, 361.
- Muller, E. (2012). *Innovation interactions between knowledge-intensive business services and small and medium-sized enterprises: An analysis in terms of evolution* (198 pages). Technology, Innovation and Policy (ISI), Springer Science & Business Media: Knowledge and Territories.
- Murgado-Armenteros, E. M., Gutierrez-Salcedo, M., & Torres-Ruiz, F. J. (2020). The concern about biodiversity as a criterion for the classification of the sustainable consumer: A cross-cultural approach. *Sustainability*, 12(8), 3472.
- Murphy, J. D., McKeogh, E., & Kiely, G. (2004). Technical/economic/environmental analysis of biogas utilisation. *Applied Energy*, 77, 407–427.
- Myers, S. S., Smith, M. R., Guth, S., Golden, C. D., Vaitla, B., Mueller, N. D., ... & Huybers, P. (2017). Climate change and global food systems: Potential impacts on food security and undernutrition. *Annual Review of Public Health*, 38.
- Nabi, G., Ali, M., Khan, S., & Kumar, S. (2019). The crisis of water shortage and pollution in Pakistan: Risk to public health, biodiversity, and ecosystem. *Environmental Science and Pollution Research*, 26(11), 10443–10445.
- Nazzaro, C., Lerro, M., Stanco, M., & Marotta, G. (2019). *Do consumers like food product innovation?* British Food Journal: An analysis of willingness to pay for innovative food attributes.
- Nenni, M. E., & Micillo, R. (2017). Sustainable manufacturing: An application in the food industry. In *International conference on optimization and decision science* (pp. 345–353). Cham: Springer.
- Okumus, B. (2020). Food tourism research: A perspective article. *Tourism Review*.
- Petersen, J. P. (2016). Energy concepts for self-supplying communities based on local and renewable energy sources: A case study from northern Germany. *Sustainable Cities and Society*, 26, 1–8.
- Petrovič, F., & Murgaš, F. (2020). Linking sustainability and happiness. What kind of happiness? *GeoScape*, 14(1), 70–79.
- Pilcher, J. M. (2017). *Food in world history* (2nd ed., 164 pages). New York: Taylor & Francis Group.
- Pinstrip, A.P. (1994). World food trends and future food security. International food policy research institute (p. 25). Washington, D.C.: Food policy report.
- Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44–55.
- Romeiro, A. R. (2012). Sustainable development: An ecological economics perspective. *Estudos Avancados*, 26(74), 65–92.
- Rueda, X., Garrett, R. D., & Lambin, E. F. (2017). Corporate investments in supply chain sustainability: Selecting instruments in the Agri-food industry. *Journal of Cleaner Production*, 142, 2480–2492.
- Salvioni, D. M., & Gennari, F. (2016). Corporate governance, ownership and sustainability. *Corporate Ownership and Control*, 13(2), 606–614.
- Sampels, S. (2015). The effects of processing technologies and preparation on the final quality of fish products. *Trends in Food Science & Technology*, 44(2), 131–146.
- Sexton, R.J. 2000. Industrialization and consolidation in the U.S. food sector: Implications for competition and welfare. *American journal of agricultural economics*, 82(5), 1087–1104).
- Sharmaa, R., Itharath, A., Moffattc, R., & Trivedid, A. (2020). 21 food and nutrition in cancer. *Functional Foods in Cancer Prevention and Therapy*, 435.
- Shegelman, I. R., Vasilev, A. S., Shtykov, A. S., Sukhanov, Y. V., Galaktionov, O. N., & Kuznetsov, A. V. (2019). Food fortification-problems and solutions. *Eurasian Journal of Biosciences*, 13(2).
- Sheldon, R. A. (2016). Green chemistry and resource efficiency: Towards a green economy. *Green Chemistry*, 18(11), 3180–3183.
- Shouket, B., Zaman, K., Nassani, A. A., Aldakhil, A. M., & Abro, M. M. Q. (2019). Management of green transportation: An evidence-based approach. *Environmental Science and Pollution Research*, 26(12), 12574–12589.
- Song, Y., Sun, Z., Guo, C., Wu, Y., Liu, W., Yu, J., et al. (2016). Genetic diversity and population structure of

- Lactobacillus delbrueckii* subspecies *bulgaricus* isolated from naturally fermented dairy foods. *Scientific Reports*, 6(1), 1–8.
- Sozer, N., Holopainen-Mantila, U., & Poutanen, K. (2017). Traditional and new food uses of pulses. *Cereal Chemistry*, 94(1), 66–73.
- Spink, J., Chen, W., Zhang, G., & Speier-Pero, C. (2019). Introducing the food fraud prevention cycle (FFPC): A dynamic information management and strategic roadmap. *Food Control*, 105, 233–241.
- Springer, V. S., Göransson, M., Nilsson, F., & Jevinger, Å. (2018). Temperature performance and food shelf-life accuracy in cold food supply chains—insights from multiple field studies. *Food Control*, 86, 332–341.
- Tanumihardjo, S. A., McCulley, L., Roh, R., Lopez-Ridaura, S., Palacios-Rojas, N., & Gunaratna, N. S. (2019). Maize agro-food systems to ensure food and nutrition security in reference to the sustainable development goals. *Global Food Security*, 100327.
- Tournier, C., Sulmont-Rosse, C., & Guichard, E. (2007). Flavour perception: Aroma, taste and texture interactions. *Food*, 1(2), 246–257.
- Turck, D., Bresson, J. L., Burlingame, B., Dean, T., Fairweather-Tait, S., et al. (2016). Guidance on the preparation and presentation of the notification and application for authorisation of traditional foods from third countries in the context of regulation (EU) 2015/2283. *EFSA Journal*, 14(11), e04590.
- Voinea, L., Popescu, D. V., Bucur, M., Negrea, T. M., Dina, R., & Enache, C. (2020). Reshaping the traditional pattern of food consumption in Romania through the integration of sustainable diet principles. A qualitative study. *Sustainability*, 12(14), 5826.
- Wallerstein, I. (2016). Evolution of the modern world-system. In *Strukturelle Evolution und das Weltsystem*, 271–279.
- Wang, H. & Liu, Z. (2019). The indirect effect of top management commitment in improving green performance. Available at SSRN 3341074.

Traditional Food Production Methods

► [Traditional and New Sustainable Production Methods in Food Industry](#)

Transdisciplinary Approaches to Learning

► [Transdisciplinary Learning](#)

Transdisciplinary Learning

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Synonyms

[Transdisciplinary approaches to learning](#); [Transdisciplinary learning approach](#); [Transdisciplinary learning theory](#)

Definition

Transdisciplinary (TD) entails a mutual research and learning process involving researchers as well as nonacademic staff. TD research connects researchers, policy makers, and various other stakeholders (see ► [“Stakeholder”](#), ► [“Stakeholders”](#)) in a change process. In this process, the participants investigate and learn to understand issues and solve problems that extend many disciplines both theoretically and methodically (Roux et al. 2017). Consequently, the various perspectives merge in a co-creating learning process toward a wide-ranging aim. Various expertise and forms of knowledge unite to tackle challenging real-world problems in all their complexity (Arnold 2013; Gibbs and Beavis 2020). TD research is based on both theory and practice and is an alternative to more conventional disciplinary-based research. It is like an ideology and a way of dealing with, or taking care of, the world (Gibbs and Beavis 2020). The TD enterprise is a learning process “in which people recognize their own complexity, incoherence and potential to become” (Gibbs and Beavis 2020, p. 5). TD and sustainability are strongly related (see ► [“Sustainable Development,”](#) ► [“Sustainability Science”](#)), and TD research and education are increasingly advocated as routes toward sustainability (Hirsch Hadorn et al. 2006; Klein 2020). Knowledge regarding future development requires learning processes considering diversity,

complexity, and dynamic issues related to individuals as well as the society and nature on the entire planet. Therefore, TD is seen as a promising approach.

Introduction

Humanity faces terrific problems, because of threats to the basic life-supporting systems. These problems are complex and affect social and economic matters as well as ecosystems (see ► [“Sustainable Development”](#)). Climate change (see ► [“Climate Change”](#)) is one of the more obvious and disastrous of these dilemmas. Other tremendous problems are war, poverty, and inequality. These and similar enigmas interact and have a global expanse; the consequences are intergenerational, and unpredictable. Disciplinary knowledge alone cannot solve these challenges. The unsustainability quandaries call for creativity, transformation, and transcendence (see ► [“Sustainability Science”](#)). In turn, this calls for people able to view the world critically and deepen their own perspectives, but also to learn to see the world from other points of view, and to collaborate (see ► [“Collaborative Teamworking”](#)) in various contexts.

The disciplines produce amazing new knowledge (Kochher-Lindgren in Gibbs and Beavis 2020), and both truths and mistakes (Foucault 1981). Disciplinary-based knowledge is hegemonic, fragmented, insufficient, and ignores other forms of knowledge and truth, according to Gibbs and Beavis (2020; see also Foucault 1981). However, various rituals, certification systems, exclusion, and inclusion (see ► [“Inclusion”](#)) mechanisms robustly support the disciplinary division (Foucault 1981; Gibbs and Beavis 2020; Turner 2017).

On a personal level, the disciplinary lenses do not only influence how humans perceive the world but also what they neglect (Henriksen 2018). A disciplinary background may be a merit, and simultaneously act like blinds restricting the view, and reducing the creativity. “Creativity requires deep disciplinary knowledge—but at the same time it requires one to think broadly, across disciplines” (Henriksen 2018).

When experts from various fields collaborate, they recognize the limitations of their own perspectives (Cornell et al. 2013; Ivakhiv 2014) and realize that their actions influence other people and vice versa (Maguire in Gibbs and Beavis 2020). Consequently, the TD process starts inside the researchers themselves and their visioning of the world, when they access the interior respectively the exterior world (Nicolescu in Gibbs and Beavis 2020). Thus, the researchers become part of the knowledge creation in a larger sense, through reflections and discussions.

However, dialogues (see ► [“Dialogue”](#)) and sharing of thoughts are not problem-free undertakings. Knowledge production relates to norms that reproduce knowledge and both limit and facilitate communication (Turner 2017). Therefore, conflicts, power-struggles, and value-clashes are challenging (Gibbs and Beavis 2020; McGregor in Gibbs and Beavis 2020) (see ► [“Culture, Tourism, and Sustainability \(Cultural Heritage and Sustainable Tourism, Social Sustainability of Tourism, Socio-cultural Sustainability of Tourism\)”](#), and ► [“Value Creation”](#)).

The Emergence of TD

The disciplinary structure is well established with roots in the Middle Ages and even earlier (e.g., Gibbs and Beavis 2020; Foucault 1981), and have had a strong hold on education. However, facing reality and learning through disciplines is only one way of producing and structuring knowledge and science. There has also been a tendency to unite knowledge and research for hundreds of years (Hadorn et al. 2008; Hernández-Aguilar et al. 2020) and this has taken place in both Eastern and Western cultures. A holistic worldview is usual among indigenous people in the Global South, as well as in the Global North, and noticeable in religion, philosophy, and research, as well as in all levels of education (Wolff 2011). In the eighteenth century, the French encyclopedists searched for analogy, continuity, and interconnections distinguishing a broad network of social, political, and ethical concerns (see ► [“Ethics”](#), ► [“Ethical Dilemmas”](#), ► [“Ethics and Ethical Theories”](#))

influencing both artistic expressions and economic behavior (Wolff 2011). Since the late nineteenth century, opposite traditions of both general and divided knowledge have been present. Yet, efficient structures of both education and research are still necessary, which makes the disciplines powerful and their abandonment challenging.

There are many concepts similar to TD. Such concepts are the distinct words cross-disciplinary, multidisciplinary, and interdisciplinary, which often appear as synonyms (Hadorn et al. 2008; Niemi 2012). Cross-disciplinary is an umbrella word including multidisciplinary, interdisciplinary, and TD. The various methods by which cross-disciplinarity is implemented are also indistinct and difficult to grasp (O'Rourke 2017). Multidisciplinary research implies an approach in which various disciplines have little cross-fertilization, whereas interdisciplinary research is a coordinated collaboration involving researchers from several disciplines (Pohl and Hadorn 2008). The cross-disciplinary concepts have developed over time, and TD is regarded more advanced than interdisciplinary, which tendencies have been obvious since the nineteenth century (Klein and Frodeman 2017).

Besides other earlier ideas about uniting disciplines, interdisciplinary and TD thinking is based on systems science and systems thinking (see ► “Systems Thinking”). The systems thinking ideas date back in the 1940s, and as far back as in the Antique (Flood and Carson 2013). The so-called general systems theory aims at finding a science that stretches across disciplines, whereas systems thinking is a way to deal with complexity holistically.

The TD concept was coined at the *Organisation for Economic Cooperation and Development* (OECD) *International Conference on Interdisciplinary Research and Education* in Paris in 1970 (Gibbs and Beavis 2020; Mokiý 2019). The conference gathered leading researchers from many parts of the world. There were more than 200 presentations and the topics were innovative interdisciplinary approaches to epochal challenges. Three researchers in particular wanted to advance beyond the interdisciplinary view, and emphasized transcendence. They were the psychologist Jean Piaget,

the astrophysicist Erich Jantsch, and the mathematician Andre Lichnerowicz. Piaget and Jantsch wanted to anchor TD in central systems, structures, and patterns of thoughts, while Lichnerowicz saw mathematics as a universal science language (Gibbs and Beavis 2020).

The interest in TD research has grown and spread. Forums for TD are the *Network for Transdisciplinary Research* (td-net), the *International Center for Transdisciplinary Research* (CIRET), and the *Swiss Academic Society for Environmental Research and Ecology* (SAGUF). Conferences termed international, global (or something else) on TD have been held in a range of countries, and three so-called *World Congresses on Transdisciplinarity*.

The TD concept appears in numerous and distinct contexts related to science, health care, feminism, post-structuralism, cultural critique, and sustainability (Klein 2015, 2020). TD is a way of emphasizing equality between scientists, ideas, ideologies, and cultures (Mokiý 2019). “[T]ransdisciplinarity is a way of expanding the horizon of human and scientific worldview, allowing you to see and describe the world in all its diversity” (Mokiý 2019, p. 74, italic orig.).

Klein (2020) lists TD research issues including how human interact with natural systems, technical development, and topics related to values, politics, and culture. In addition, research highlighting unequal Global South/North dilemmas is increasing (e.g., Barth et al. 2019). However, even if TD has been a way to unite disciplines, it is increasingly divided in many differing branches with distinct aims, methods, and theoretical bases. Mokiý (2019) lists four such branches, of which what he calls *Transdisciplinarity-4* is recognized as its own scientific discipline or meta-discipline. TD is also gradually dividing into a research-focused and an education-focused direction, according to Mokiý.

The Interpretation of TD

There are many interpretations of TD, but two differing versions are most obvious (Gibbs and Beavis 2020). The first version has a theoretical and epistemological foundation, while the second

version is more pragmatic (McGregor in Gibbs and Beavis 2020).

According to the first version, the *Nicolescuian approach*, transdisciplinarity is a process that transcends the disciplinary limits. This approach was developed by the quantum physicist Basarab Nicolescu in the late 1970s (McGregor in Gibbs and Beavis 2020; Nicolescu in Gibbs and Beavis 2020), and further developed by Sue McGregor in the field of sustainability. This view states that “TD knowledge is complex, emergent, cross-fertilised, embodied and alive” (McGregor in Gibbs and Beavis 2020, p. 21).

The Nicolescuian TD approach employs phenomenology and searches for methodological and ontological answers on what knowledge or reality is (McGregor in Gibbs and Beavis 2020; Nicolescu 2014a, b). Nicolescu talks about multiple realities and calls the reality “plastic,” something that is simultaneously inside and outside a person. The *Hidden Third* or the *included middle* entails that there is a space or a level of reality between the subject and the object, the *logical axiom*. Since the subject, the object, and the Hidden Third interrelate, the human subject also appears between the Hidden Third and the world (Nicolescu 2014a). The Hidden Third escapes from analytical thinking and creates a bridge between two realities (Nicolescu in Gibbs and Beavis 2020). This space is alive and dynamic, and when people reach this “middle,” they can co-create new knowledge in a fusion of ideas in the in-between space (McGregor in Gibbs and Beavis 2020). Without the Middle Third as a part in knowledge creation, human is reduced to “cells, neurons, quarks and elementary particles,” according to Nicolescu (2014a).

The second TD version, the *Zürich approach*, is participative and applied. This approach was developed during a congress in Zürich in 2000, and denotes that knowledge is created through a synthesis of disciplinary as well as socially relevant knowledge. The TD research performs “the science differently,” the knowledge is thus “robust, reflective and accountable” (McGregor in Gibbs and Beavis 2020, p. 31). Among the researchers following this approach are Helga Nowotny, Michael Gibbons, and Julie Thompson

Klein. Gibbons started to call TD “socially robust knowledge” at the end of the 1990s, and many others use this epithet. According to Hadorn et al. (2008, p. 35), the aim and tasks of TD research are:

to grasp the complexity of the problems, to take into account the diversity of scientific and societal views of the problems, to link abstract and case specific knowledge, and to constitute knowledge with a focus on problem-solving for what is perceived to be the common good.

Brown and Lambert (2013) regard TD as a collective understanding of an issue including all valid knowledge, worldviews, and methods. In addition, it implies a potential to change. The TD research process consists of three stages: “problem identification,” “problem analysis,” and bringing results to fruition,” according to Pohl and Hadorn (2008). Thus, TD research denotes that knowledge is converted to action (cf. Hirsch Hadorn et al. 2006).

TD-Related Concepts

Many special concepts relate to TD. Among them are, first, the “trans-” words transdisciplinary and transdisciplinarity, which are wedded to several other trans-words, like the earlier described transcendence, but also transgression, transfer, transformation, translation, etc. Other common concepts in the TD discourse are the already mentioned “wicked problems,” “systems research,” “systems thinking” (Klein 2015), but also “life-world.” “Action research” (see ► “[Action Research](#)”), in which the researchers are themselves involved in what they study, is common in TD (e.g., Hadorn et al. 2008). In addition, TD has a complementary pair in “post-normal science.”

The word “trans” is an abbreviation of the Latin preposition “transitive” meaning across, over, or beyond (Harper 2021). According to Kochhar-Lindgren (in Gibbs and Beavis 2020, p. 32), “the ‘trans’ serves as an operator, a kind of shifter, between social systems and intellectual domains.” A concept used in art context is “indisciplinary,” meaning a “transgression” of

disciplinary boundaries, whereas interdisciplinary implies knowledge “transfer” from one discipline to another (Nicolescu 2014b). Many scholars relate TD to “transformation” and change (Hernández-Aguilar et al. 2020; Klein in Gibbs and Beavis 2020; see ► “Transformative Learning”).

“Translation” implies that academic expertise and research must be interpreted to be understood in other contexts (Klein 2020). TD requires skills of translation, and understanding of “how concepts, methods, and tools travel across domains” (Ivakhiv 2014, p. 12).

Today, TD has become a means to tackle so-called “wicked problems” claiming sound solutions (Gibbs and Beavis 2020). Rittel and Webber (1973) use the concept “wicked problems” as opposite to “tame problems” with a solution that can be tested. Oppositely, wicked problems have unintended consequences in an infinite time, and the consequences are impossible to trace. In addition, wicked problems cannot be resolved without changing the society that created them.

The German philosopher of science Jürgen Mittelstraß introduced the concept “lifeworld” (*Lebenswelt*) to TD research in 1992 (Hirsch Hadorn et al. 2006) with a distinctive meaning than in Edmund Husserl’s phenomenology and Alfred Schütz sociology (see, e.g., Leinsle 1992). Contemporary TD researchers mainly use the concept to denote the nonacademic everyday world (Klein 2015; Pohl and Hadorn 2008).

“Post-normal science” opposes science approaches searching for results through linear analysis, and thus it deals with value-related issues and uncertainty (Funtowicz and Ravetz 2008; Klein 2015). There are many additional concepts common in the TD discourse, and many book chapters and articles describe the TD vocabulary.

Transdisciplinarity as a Knowledge and Learning Approach

The TD approach builds on the idea that the world is diverse and changing. New forms of knowledge

emerge, cross boundaries and search for problem solving in collaboration with stakeholders. This process requires imagination, creativity, insight, vision, and originality (Brown and Lambert 2013).

Cornell et al. (2013) emphasize that future knowledge and learning have to accept that change takes place over temporal and spatial scales and involve a complexity of social-ecological interaction. Kochher-Lindgren (in Gibbs and Beavis 2020) describes TD as situated knowledge dependent on time, place, aim, and various other circumstances. Therefore, the methods also shift dependent on the situation. The TD researcher needs to develop skills and networks, and what Cornell et al. (2013) call “T-shaped skills.” These skills imply deep disciplinary knowledge combined with skills to interact with a wide range of experts both from inside and outside the academia. Yet, if TD aims at a transcendent, it is about more than accessible skills, and the learning process goes beyond the measuring ideology.

Nicolescu (1999) means that contemporary education is based on worn-out values, and not at all in line with what the world needs. He uses UNESCO’s four pillars of learning from the 1970s: “learning to know,” “learning to do,” “learning to live together (with),” and “learning to be” as a basis in TD learning. When it comes to “learning to know,” he stresses both quality of the content and flexibility, and requests education that encourages the students to question facts, representations, and rationales. In addition, he sees the role of learning to encourage bridge building between disciplines, and between disciplines and personal meaning making. “Learning to do,” he sees as fostering a person, who has a flexible, interior core, and easily can change occupation. This surprisingly corresponds with the flexible lifelong learner that European policy emphasizes (Biesta 2006; Jeronen et al. 2009; Wolff 2008). Yet, learning to do also implies creativity and discovering novelty, according to Nicolescu. On the other hand, with “learning to live together [with],” Nicolescu denotes developing a transcultural, transreligious, transpolitical, and transnational attitude. Finally, with “learning to be” he denotes discovering one’s own conditioning, and relation to others.

According to Nicolescu (1999), who asks for education that recognizes the sensitivity of the body, and not only the intellect, “[a] viable education can only be an integral education of the human being” (p. 1). Therefore, he sees TD as an educational approach that reveals the role of intuition, imagination, sensitivity, and embodiment (cf. ► “Phenomenon-based Learning”). He asks for a new tolerance based on the TD attitude, and a new form of university education, a TD “evolution,” which starts from the teaching of teachers. The word “university” in fact originates in the word “universitas” meaning “whole” (Pohl and Hadorn 2008). Nicolescu defines the new TD knowledge production and learning as an opening toward society and all places outside the university, where learning takes place; toward cyber-space-time; toward universality; and most important, “towards a redefinition of values governing the existence of learning itself” (Nicolescu 1999, p. 10).

Nicolescu’s learning ideas might seem old, and there are an increasing number of articles reporting outcomes from more recent TD learning projects, but profound theory development has hitherto been mostly absent. Even if TD approaches also appear outside academia, like in school contexts, the theoretical ground is still vague. However, TD learning has common features with transformative learning, and the development of these two approaches could potentially be combined.

TD Learning and Sustainability

Many scholars see TD as central in the context of learning related to sustainability (e.g., Barth et al. 2019; Chilisa 2017; Klein 2015), and highlight TD when discussing how to implement sustainability. This is visible in several international policy documents published by UNESCO, the OECD, and the EU, not least in the Sustainable Development Goals (SDGs) (Zinchenko et al. 2021; see ► “Sustainable Development Goals (SDGs)”, and ► “Sustainability Education and Environmental Awareness”). Education for global

environmental change requires that people from an early age receive experiences of how to engage in complex and socially significant topics (Cornell et al. 2013). Such education includes theory and methods at the academic level, negotiation and communication skills, as well experience of knowledge unification. A report from a regional UNESCO symposium on sustainability science in Malaysia, reads:

The explanations on the mono-, multi-, inter- and trans- research should combine the non-academic circles. An approach to knowledge production has to be beyond discipline, problem solving, process-oriented co-creation and participatory approach and focused on six sets of questions: complexity, consequences, interpretation, change, decision-making and responsibility. (UNESCO 2016, p. 3)

Likewise, sustainability is emphasized in various TD contexts, such as in the advertisement of *III World Congress of Transdisciplinary* in Mexico in 2020 (UNESCO 2020). At that congress, the main topics were planetary education, transhumanism, artificial intelligence, destructive technologies, health, poverty, destruction of biologic diversity, climate change, and war.

The concept of learning includes both individual and social dimensions. According to Cornell et al. (2013), sustainability “as an open-ended process of social learning in which a new balance is continually being sought between multiple social, economic and environmental challenges and goals” (p. 62). Barth et al. (2019) distinguish social learning between “learning in a group,” “learning as a group,” and “learning as social change.” The last process is the one that transcends the group boundaries. These authors also make a division in three other forms of social learning that may happen in all these three earlier mentioned areas. They are the forms introduced by Argyris and Schön in 1996; “single-loop,” “double-loop” and “triple-loop learning,” of which triple-loop learning is a reflection that goes beyond “reflection on how to do things differently towards how to do different things” (p. 383). Barth et al. (2019) consider that triple-loop learning comes close to TD as a research practice. Medema et al. (2014) see “multi-loop social learning” as crucial for learning related

to sustainable decision-making and to effectively engage the participators in collaborative learning.

Summary

To introduce TD is not to abandon the disciplines; both disciplines and TD are needed. Ivakhiv (2014) sees disciplinarity and TD as two faces, one looking inwards and the other outwards. TD is “not a luxury, it’s not just intellectual play, and it is a necessity if we want to face the complexity of our world” (Nicolescu in Gibbs and Beavis 2020, p. 63). In line with Nicolescu (1999), Klein (2009) sees TD as a knowledge and learning approach. She (p. 36) argues that “a new ‘transdisciplinary attitude’ is needed, capable of sensitizing all social actors to more comprehensive, inclusive methods of knowing and acting in the world.” Chilisa (2017) questions how African philosophies and worldviews could inform methodologies and promote decolonization and indigenization of sustainability science and TD research.

The unequal power relations between indigenous and western academic knowledge are the greatest threat to any form of collaborative research that seek[s] to address Africa’s sustainability challenges. In fact, the collaboration whether coming from mono-disciplinary, interdisciplinary or transdisciplinary research, sometimes borders on a form of colonisation of ILK [indigenous and local knowledge]. There is need to decolonise mainstream methodologies that inform sustainability science inquiry, reclaim indigenous epistemologies, and envision indigenous methodologies that promote the co-existence of knowledge systems. (Chilisa 2017, p. 813)

Kessi et al. (2021) state that it is high time to decolonize academia and orient education toward the future. This outlook applies to transformative learning, but also TD learning.

Sustainability is an aim, and as such, is utopian (Wolff 2008; Wolff and Ehrström 2020), but utopias are better guiding principles for research and learning than dystopias. Dystopias easily lead to an avoidance of risks, but strong utopias can lead education toward transformation, especially open-ended utopias (Harris 2014). Transformation

demands a total renewal of educational theory, policy, practice, management, in addition to an entire reorganization of educational institutions. This change could start from a thorough TD learning process that includes collaboration on many institutional levels, among researchers and other staff members, students, and numerous stakeholders (Wolff 2007; Wolff and Ehrström 2020). It is a continuous change and learning process toward a better future “accepting the dynamic between the parts and the whole, stable and chaotic systems, individuals and groups, and creative and rational thinking” (Harris 2014, p. 215). This process also includes reflection on humans as a part of the non-human world, and as more or less powerful performers, for better or worse, transforming the entire planet.

Nicolescu (2014b) challenges the sustainable development idea when he rejects what he calls a “reductionist and binary thinking” reducing everything to society, economy, and environment. He means that this thinking ignores both the individual and the cosmic level of reality. Therefore, he asks for “a united theory of levels of reality,” since merely scientific knowledge will lead to self-destruction of the human species. He calls it a “New Renaissance,” and a new spirituality free of dogmas (Nicolescu 2014a). Yet, aiming at a transcultural, tranreligious, and transpolitical TD (Nicolescu 1999) might not be enough anymore. The planetary situation begs for a transformed awareness and understanding of a reality including not only other humans but also other species (biotic factors), and abiotic factors (such as water, soil, and air).

Cross-References

- [Action Research](#)
- [Climate Change](#)
- [Collaborative Teamworking](#)
- [Dialogue](#)
- [Diversity](#)
- [Ethical Dilemmas](#)
- [Ethics](#)
- [Ethics and Ethical Theories](#)

- Inclusion
- Phenomenon-Based Learning
- Power Equalizing
- Stakeholder
- Stakeholders
- Sustainability Education and Environmental Awareness
- Sustainability Science
- Sustainable Development
- Sustainable Development Goals (SDGs)
- Systems Thinking
- Transformative Learning
- Value
- Value Creation

References

- Argyris, C., & Schön, D. A. (1996). *Organizational learning II: Theory, method and practice*. Reading: Addison-Wesley.
- Arnold, M. (2013). Transdisciplinary research (transdisciplinarity). In E. G. Carayannis (Ed.), *Encyclopedia of creativity, invention, innovation and entrepreneurship* (pp. 1819–1828). New York: Springer.
- Barth, M., Lang, D. J., & Michelsen, G. (2019). Transdisciplinary learning to foster sustainable development: Institutionalizing co-engaged South-North collaboration. *GALA-Ecological Perspectives for Science and Society*, 28(4), 382–385. <https://doi.org/10.14512/gaia.28.4.11>.
- Biesta, G. (2006). What's the point of lifelong learning if lifelong learning has no point? On the democratic deficit of policies for lifelong learning. *European Educational Research Journal*, 5(3–4), 169–180. <https://doi.org/10.1080/03057640500490981>.
- Brown, V. A., & Lambert, J. A. (2013). *Collective learning for transformational change: A guide to collaborative action*. London: Routledge.
- Chilisa, B. (2017). Decolonising transdisciplinary research approaches: An African perspective for enhancing knowledge integration in sustainability science. *Sustainability Science*, 12(5), 813–827. <https://doi.org/10.1007/s11625-017-0461-1>.
- Cornell, S., Berkhout, F., Tuinstra, W., Tàbara, J. D., Jäger, J., Chabay, I., de Wit, B., Langlais, R., Mills, D., Moll, P., Otto, I. M., Petersen, A., Pohl, C., & van Kerkhoff, L. (2013). Opening up knowledge systems for better responses to global environmental change. *Environmental Science & Policy*, 28, 60–70. <https://doi.org/10.1016/j.envsci.2012.11.008>.
- Flood, R. L., & Carson, E. R. (2013). *Dealing with complexity: An introduction to the theory and application of systems science* (2nd ed.). New York: Springer Science & Business Media.
- Foucault, M. (1981). The order of discourse. In R. Young (Ed.), *Untying the text: A post-structuralist reader* (pp. 48–78). Boston: Routledge.
- Funtowicz, S., & Ravetz, J. (2008). Values and uncertainties. In G. H. Hadorn, H. Hoffmann-Riem, S. Biber-Klemm, V. Grossenbacher-Mansuy, D. Joye, C. Pohl, U. Wiesmann, & E. Zemp (Eds.), *Handbook of transdisciplinary research* (Vol. 10, pp. 361–368). Dordrecht: Springer.
- Gibbs, P., & Beavis, A. (2020). *Contemporary thinking on transdisciplinary knowledge: What those who know, know*. Cham: Springer Nature.
- Hadorn, G. H., Biber-Klemm, S., Grossenbacher-Mansuy, W., Hoffmann-Riem, H., Joye, D., Pohl, C., Wiesmann, U., & Zemp, E. (2008). The emergency of transdisciplinarity as a form of research. In G. H. Hadorn, H. Hoffmann-Riem, S. Biber-Klemm, V. Grossenbacher-Mansuy, D. Joye, C. Pohl, U. Wiesmann, & E. Zemp (Eds.), *Handbook of transdisciplinary research* (Vol. 10, pp. 19–39). Dordrecht: Springer.
- Harper, D. (2021). *Online etymology dictionary*. <https://www.etymonline.com/>. Accessed 2 Nov 2021.
- Harris, J. A. (2014). Utopian thinking in a connected world. In V. A. Brown & J. A. Harris (Eds.), *The human capacity for transformational change: Harnessing the collective mind* (pp. 215–229). London: Routledge.
- Henriksen, D. (2018). *The 7 transdisciplinary cognitive skills for creative education*. Cham: Springer.
- Hernández-Aguilar, C., Dominguez-Pacheco, A., Martínez-Ortiz, E., Ivanov, R., Bonilla, J. L., Cruz-Orea, A., & Ordonez-Miranda, J. (2020). Evolution and characteristics of the transdisciplinary perspective in research: A literature review. *Transdisciplinary Journal of Engineering & Science*, 11, 158–188. <https://doi.org/10.22545/2020/00140>.
- Hirsch Hadorn, G. H., Bradley, D., Pohl, C., Rist, S., & Wiesmann, U. (2006). Implications of transdisciplinarity for sustainability research. *Ecological Economics*, 60(1), 119–128. <https://doi.org/10.1016/j.ecolecon.2005.12.002>.
- Ivakhiv, A. (2014). The discipline of interdiscipline. In R. Emmett, & F. Zelko (Eds.), *Minding the gap: Working across disciplines in environmental studies. RCC Perspectives*, (2), 11–14. <https://doi.org/10.5282/rcc/6313>.
- Jeronen, E., Jeronen, J., & Raustia, H. (2009). Environmental education in Finland: A case study of environmental education in nature schools. *International Journal of Environmental & Science Education*, 4(1), 1–23.
- Kessi, S., Marks, Z., & Ramugondo, E. (2021). Decolonizing knowledge within and beyond the classroom. *Critical African Studies*, 13(1), 1–9. <https://doi.org/10.1080/21681392.2021.1920749>.
- Klein, J. T. (2009). Unity of knowledge and transdisciplinarity: Contexts of definition, theory and the new discourse of problem solving. In G. H. Hadorn (Ed.), *Unity of knowledge (in transdisciplinary*

- research for sustainability). *Encyclopedia of life-support systems* (Vol. I, pp. 35–69). Oxford, UK: EOLSS/UNESCO.
- Klein, J. T. (2015). Discourses of transdisciplinarity: Looking back to the future. *Futures*, 63, 68–74. <https://doi.org/10.1016/j.futures.2014.08.008>.
- Klein, J. T. (2020). Sustainability and collaboration: Crossdisciplinary and cross-sector horizons. *Sustainability*, 12(4), 1515. <https://doi.org/10.3390/su12041515>.
- Klein, J. T., & Frodeman, R. (2017). Interdisciplining humanities: A historical overview. In R. Frodeman (Ed.), *The Oxford handbook of interdisciplinarity* (pp. 276–290). Oxford, UK: Oxford University Press.
- Leinsle, U. G. (1992). Von der Lebenswelt zur Welt: Konstruktive Aspekte menschlicher Weltorientierung. *Zeitschrift für katholische Theologie*, 114(2), 127–139. <http://www.jstor.org/stable/24166636>. Accessed 5 Nov 2021.
- Medema, W., Wals, A., & Adamowski, J. (2014). Multi-loop social learning for sustainable land and water governance: Towards a research agenda on the potential of virtual learning platforms. *NJAS-Wageningen Journal of Life Sciences*, 69, 23–38. <https://doi.org/10.1016/j.njas.2014.03.003>.
- Moki, V. (2019). International standard of transdisciplinary education and transdisciplinary competence. *Informing Science: The International Journal of an Emerging Transdiscipline*, 22, 73–91. <https://doi.org/10.28945/4480>.
- Nicolescu, B. (1999, April). The transdisciplinary evolution of learning. In Symposium on overcoming the underdevelopment of learning at the annual meeting of the American Educational Research Association, Montreal, Canada. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.296.5742&rep=rep1&type=pdf>. Accessed 30 Oct 2021.
- Nicolescu, B. (2014a). Methodology of transdisciplinarity. *World Futures*, 70, 186–199. <https://doi.org/10.1080/02604027.2014.934631>.
- Nicolescu, B. (2014b). Multidisciplinarity, interdisciplinarity, indisciplinarity, and transdisciplinarity: Similarities and differences. In R. Emmett, & F. Zelko (Eds.), *Minding the gap: Working across disciplines in environmental studies* (pp. 19–26). *RCC Perspectives*, 2. <https://doi.org/10.5282/rcc/6313>.
- Niemi, H. (2012). Multidisciplinary research on learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 2363–2366). Boston: Springer.
- O'Rourke, M. (2017). Comparing methods for cross-disciplinary research. In R. Fordeman (Ed.), *The Oxford handbook of interdisciplinarity* (pp. 276–290). Oxford, UK: Oxford University Press.
- Pohl, C., & Hadorn, G. H. (2008). Core terms in transdisciplinary research. In G. H. Hadorn, H. Hoffmann-Riem, S. Biber-Klemm, V. Grossenbacher-Mansuy, D. Joye, C. Pohl, U. Wiesmann, & E. Zemp (Eds.), *Handbook of transdisciplinary research* (pp. 427–432). Dordrecht: Springer.
- Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155–169. <https://doi.org/10.1007/BF01405730>.
- Roux, D. J., Nel, J. L., Cundill, G., O'Farrell, P., & Fabricius, C. (2017). Transdisciplinary research for systemic change: Who to learn with, what to learn about and how to learn. *Sustainability Science*, 12(5), 711–726. <https://doi.org/10.1007/s11625-017-0446-0>.
- Turner, S. (2017). Knowledge formation: An analytic framework. In R. Frodeman (Ed.), *The Oxford handbook of interdisciplinarity* (2nd ed., pp. 9–20). Oxford: Oxford University Press.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2016). Regional/thematic symposium on broadening the application of the sustainability science approach in support of the 2030 agenda for sustainable development: A focus on regional experiences and inputs for the development of sustainability science policy guidelines Kuala Lumpur – Malaysia 19–21 December 2016. Report. https://en.unesco.org/sites/default/files/sus_2_report_f.pdf. Accessed 8 Nov 2021.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2020). III World Congress of transdisciplinary virtual mode. <http://unescoblog.blob.core.windows.net/pdf/UploadCKEditor/Programme%20Symposium%20November%2027th%202020.pdf>. Accessed 2 Nov 2021.
- Wolff, L.-A. (2007). The quest for a route to sustainable development in higher education. In T. Kaivola & L. Rohweder (Eds.), *Towards sustainable development in higher education: Reflections* (pp. 58–62). Helsinki: Finnish Ministry of Education. <http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2007/liitteet/opm06.pdf>. Accessed 5 Nov 2021.
- Wolff, L.-A. (2008). Drömmar i pedagogikens kraftfält [Dreams on the educational arena]. In M. Uljens (Ed.), *Det händer i pedagogiken: Röster om bildning i det senmoderna* (pp. 35–64). Vaasa: Faculty of Education, Åbo Akademi University.
- Wolff, L.-A. (2011). *Nature and sustainability: An educational study with Rousseau and Foucault*. Saarbrücken: Lambert. <https://www.doria.fi/handle/10024/130752>. Accessed 30 Sept 2021.
- Wolff, L.-A., & Ehrström, P. (2020). Social sustainability and transformation in higher educational settings. *Sustainability*, 12(10), 4176. <https://doi.org/10.3390/su12104176>.
- Zinchenko, V., Levkulych, V., Palamarchuk, O., & Debych, M. (2021). Global cooperation of research and educational activities in the implementation of the Sustainable Development Goals. In *E3S web of conferences* (Vol. 277). EDP Sciences. <https://doi.org/10.1051/e3sconf/202127702005>.

Transdisciplinary Learning Approach

- ▶ [Transdisciplinary Learning](#)

Transdisciplinary Learning Theory

- ▶ [Transdisciplinary Learning](#)

Transformation

- ▶ [Communication and Innovation](#)
- ▶ [Degrowth](#)
- ▶ [Postgrowth](#)

Transformation Macro

- ▶ [Systemic Transition](#)

Transformational Leadership

- ▶ [Charismatic Leaders](#)

Transformative Learning

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Synonyms

[Mezirow's transformative learning theory](#); [TLT](#);
[Transformative learning theory](#)

Definition

Transformative learning (TL) is a concept that has been popular in adult learning contexts for many decades and lately also in sustainable development and sustainability education contexts (see ▶ [“Sustainable Development”](#); ▶ [“Education for Sustainable Development”](#)). By the end of the 1970s, the American sociologist Jack Mezirow (1923–2014) started to develop what he called the “transformative learning theory” especially with adults as the target. According to Mezirow (2009) learning is a process in which the learners transform problematic frames of reference, such as democracy, justice (see ▶ [“Social Justice”](#)), and even love (see ▶ [“Ethic of Love”](#)). The aim of TL is to make these frames reflective, and open for change. As a communicative learning theory, TL sees the adult learners as active participants in discourses (Mezirow 1991). Mezirow continued to alter and develop his theory throughout his life. He has collaborated with many other educational researchers with different views on TL, and his ideas have been widely modified and developed to suit various new contexts (see, e.g., Mezirow et al. 2009). As a reconstructive theory, TL strives to shape an idealized model of the adult learning process (Mezirow 2009). Especially when implemented in sustainability education, TL is similar to reconstructive social theory, which is aimed at encouraging practical social change (cf. Vandenberghe 2018).

Introduction

Transformative learning (TL) is a major adult learning approach (Mezirow 2009a; Taylor 2007). The TL theory has unquestionably changed the view of adult learning during the last few decades. Jack Mezirow developed TL particularly for adult learners and did not recommend it for younger targets. The theory is strongly based on understanding of how adults learn and develop. TL can take place in formal adult learning settings, but also in other adult learning

situations (Mezirow 1990). It is usual in higher education, organizational development, professional training, and many more contexts. The limits between education, learning, and research are diffuse in TL, likewise the limits between educators and learners. Since action research (see ► “Action Research”) is common in relation to TL (Taylor 2007), both the educators and the learners also easily become researchers (Mezirow 1990).

Initially Mezirow was inspired by the American women’s liberation movement and his own wife’s adult learning experiences (see Mezirow 1991, 2008). In addition, several scholars who were influential in education stirred his ideas. Among them were the Austrian-British philosopher Karl Popper, the Brazilian educator Paulo Freire, the American psychiatrist Roger Gould, the German philosopher Jürgen Habermas, the American philosophers John Dewey and Thomas Kuhn, and many others (see Kitchenham 2008; Mezirow 1990, 1991, 2009b).

Mezirow (1991) saw Popper as a forerunner of the TL theory. Popper regarded learning more as a way to change the structures of one’s expectations than to cover knowledge gaps. Freire’s ideas, especially as he expresses them in *Pedagogy of the Oppressed* (1970) and *Education for Critical Consciousness* (1974) is another foundation of TL. According to Freire (1970, 1974), adults need to problematize their actual historical situation. The pedagogy has to awake critical awareness among the students and empower them to become active transformers of their own reality. Gould’s research includes adult development and TL in relation to trauma (Gould 1990; Mezirow 1991, 2009b). Mezirow drew from Gould when claiming that TL could be the result of someone gaining insight into unresolved traumatic experiences (Mezirow 2009b). Habermas’ theory of communicative action, discourse ethics (see ► “Discourse Ethics”), and knowledge interests are also apparent in Mezirow’s TL theory. In the book *Knowledge and Human Interest* (1968), Habermas introduces three cognitive interests: technical, practical, and emancipatory. Meaning is established through consensus based on the actors’ self-understanding; the emancipatory

cognitive interest is formed by self-reflection. Mezirow was also influenced by the critical theory, of which Habermas was a part. Likewise, there are similar elements in Bildung theories and in TL, which also relate to Habermas (see Buttigieg and Calleja 2021; Sørensen 2015 and ► “Phenomenon-Based Learning”).

Inspired by Dewey, Mezirow (1991) saw meaning perspectives as selective codes directing perception and understanding. Simultaneously, Mezirow claimed that he used “perspective transformation” similarly to how Kuhn used “paradigm shift” indicating changed scientific views in his book *The Structure of Scientific Revolutions* (1962). However, even if the many influencers’ views are visible in Mezirow’s TL theory, his thoughts have changed and advanced over time. To read more, Baumgartner (2012) gives a comprehensive review of how Mezirow’s theories have developed.

The TL theory has met a lot of criticism; it has been tested, evaluated, revised, and adapted to suit various contexts. Nevertheless, it is still vital (Kitchenham 2008). Conferences on TL attract large audiences, and scholars continue writing dissertations, articles, and books on the TL topic.

The *Journal of Transformative Education*, founded 2003, is one of the main publication channels. TL is especially popular in the field of sustainability education practice and research. Edmund O’Sullivan’s book, *Transformative Learning: Educational Vision for the 21st century*, published in 1999, inspired many sustainability education scholars to try to implement and develop TL in their field of interest. In addition, *transformation* has become a central aim in both sustainability and educational policies in the twenty-first century.

In the UNESCO document *Education for Sustainable Development Goals: Learning Objectives* (2017), transformation and transformative pedagogy are fundamental (see also Leicht et al. 2018; ► “United Nations Agenda 2030 on Sustainable Development Goals, The”; ► “United Nations Sustainable Development Goals 2030, The”; ► “Sustainable Development Goals (SDGs)”). The UNESCO document calls for “an action-oriented, transformative pedagogy, which

supports self-directed learning, participation and collaboration, problem-orientation, inter- and transdisciplinarity [see ► [“Transdisciplinary Learning”](#)] and the linking of formal and informal learning” (UNESCO 2017, p.2). In this pedagogy, the educator’s role is to empower the learners to change their worldviews. UNESCO (2014) also calls for whole-institution approaches, in which entire schools or other educational institutions, and also private and public organizations, are transformed at all their collective levels. However, what transformative pedagogy really is remains undisclosed in this document.

The Theory’s Basic Elements

In the TL process, individuals learn to reflect on experiences and preconceptions, hidden values (see ► [Value](#)), and assumptions, to think critically, and to participate freely in rational discourses (Mezirow 1990, 1991). One aim of TL is to encourage learners to deliberate on earlier assumptions, and to come to a position in which they may change viewpoints and start acting in alternative ways. Valued-laden issues and activities may especially generate critical reflection, and even change, when old presuppositions are detected (Mezirow 1991; Taylor 2009).

TL is a process of meaning making and alteration of viewpoints according to new insights. Meaning making is to interpret and make sense of experiences and thus meaning making becomes learning, and even altered actions (Mezirow 1990, 1991). Simultaneously, learning and thinking are overlapping. In TL, actions not only entail behavior, but rather “praxis” or “creative implementation of a purpose” (Mezirow 1991, p. 12). In addition, the meaning making process can be both paralinguistic and linguistic.

Meaning making has two dimensions, “meaning perspectives” and “meaning schemes,” both controlling what we learn, according to Mezirow (1990, 1991). Thus, meaning *perspectives* (or frames of reference) are established during the socialization process in childhood. The meaning perspectives describe the fundamental ideas that an individual rely on when interpreting new

experiences. They are higher-order schemata, theories, beliefs, basic assumptions, rules, language, and networks of arguments that make earlier experiences assimilate and transform new experiences (Mezirow 1991, 2009b). One could call them the glasses through which an individual views the world.

At a more practical level, meaning *schemes* organize the way individuals react on new experiences; they are rules for interpretation (if this happens, you shall do this). Meaning schemes come from earlier, often unreflective interpretations (Mezirow 1991). They guide the way an individual feels, understands, judges, and acts upon something. Accordingly, they tell an individual how to do something, and how to understand oneself and others, but also the opposite, what not to react to. If meaning perspectives metaphorically are glasses that gives a specific picture of the world, meaning schemes are shoes that regulate what roads it is comfortable to walk on in relation to the picture the glasses show.

TL offers new meaning perspectives and encourages new meaning schemes that challenge the old ones. Since TL has three related core elements, individual experience, dialogue (see ► [Dialogue](#)), and critical reflection (Taylor 2009), the basic when implementing TL is to facilitate learning through powerful individual experiences that promote critical reflection and dialogue. Following Habermas, TL makes the distinction between instrumental and communicative learning (Mezirow 2003). Instrumental learning refers to learning to control and manipulate the environment, improving predictions and performance, whereas communicative learning entails that an individual understand what another participant in a dialogue means. It includes awareness of the others’ assumptions and intentions.

Reflection, and especially critical self-reflection, is a basic element in TL. Reflection is a higher-order mental process guiding actions, giving coherence to the unfamiliar, and reconsidering the justification of what is already known (Mezirow 1990). When reflecting, the learners think about themselves, others, and society (Dirkx and Smith 2009). Thus, reflection includes “making inferences, generalizations,

analogies, discriminations, and evaluations, as well as feeling, remembering, and solving problems” (Mezirow 1990, p. 5). Both meaning perspectives and meaning schemes may be transformed through reflection. Using the earlier metaphors, reflection is a way to stop or slow down, take off the glasses and even the shoes, or change into more appropriate ones, and ponder anew about which route to take.

When Mezirow uses the concept “critical reflection,” he means reflection on presuppositions in prior learning, which, in turn, means challenging the validity of established meaning perspectives and habitual expectations (Mezirow 1991). “Critical self-reflection” is a major learning experience, which leads to a reassessment of one’s own knowing, believing, feeling, and acting (Mezirow 1990).

Reflections may take place at three levels and involve consideration about the learning content and process, as well as its premises (Taylor 2009). Reflection on premises is the basis for the other levels. In its furthest extension, the reflection may even lead to a change of worldviews. Yet, such a significant change may awaken strong emotions (Taylor 2009; Sterling 2011).

In a social learning situation, the experiences and collective activities of all the participating learners may inspire critical reflection and discussions. Value-laden learning content as well as intense and emotional experimental activities can encourage critical reflection and dialogue (Taylor 2009). Dialogues in a trustful atmosphere promote both critical reflection and transformation. According to Edward W. Taylor (2009), critical reflection develops the learners’ awareness of power relations and agency to transform both their own reality and society.

The Role of the Educator

Every adult educator or teacher has a responsibility to foster TL and encourage the students to critical self-reflection and action taking, according to Mezirow (1990). Since adults have a variety of meaning perspectives, the educator’s task is to recognize the learners’ points of departure and to

acknowledge the diversity of viewpoints. Mezirow (1990) sees the educator as an “emphatic provocateur” and a role model for critical reflection, but also a critical co-learner and re-learner in the emancipatory TL process. Heaton (2020) calls the educator “a cultural activist,” who fosters social, economic, and political conditions and thus enables participation, and critical reflection. Even if the relationship between the educator and the students is based on policy and organizational structures, flexibility allows the educator to become the learner and the learner educator (Mandell and Herman 2009). When learners transform, so do the educators (see also King and Heuer 2009). Therefore, the educators are those who foster leadership in others instead of acting as strong leaders themselves. The educator’s role is to help the students bring forward their ideas in learning situations (Taylor and Jarecke 2009). Subsequently, the student voices influence the larger educational structures and initiate a change toward a TL culture (see Mandell and Herman 2009).

An authentic practice is a foundation for a trustful relationship between educators and learners (Taylor 2009). Trust is important if the educator wants to promote critical reflection. Since TL can awaken strong emotions and feelings of vulnerability, the educator needs to be responsive and aware of the students’ comfort levels (King and Heuer 2009; Tisdell and Tolliver 2009). Mezirow (1991) claims that remembering relates to emotions, and the strength of the emotion and its frequency affect how well one remembers something. Since an emotional stress may lead to a transformation of a meaning perspective, stress cannot be totally avoided (see also Sterling 2011).

Theory Development and Research on Transformative Learning

Numerous scholars have developed TL, either with Mezirow, or without him. Therefore, the ideas originating in Mezirow’s TL theory has expanded in many directions by focusing on various aspects of the basic theory or emphasizing

new elements. The theory has even been fragmented (Cranton and Roy 2003). From Mezirow's more cognitive approach, TL now focuses on holistic, extra rational and integrative perspectives (Merriam and Bierema 2013), as well as embodied and intuitive knowledge, and individuals in social relations (Lange 2009). The perspective has turned toward depth psychology, humanism, post-structuralism, as well as to post-humanism (Cranton and Roy 2003). Researchers have discussed if TL is rational or extra-rational; imaginative, cognitive, or emotional; or if it is individual or social (Cranton and Roy 2003).

Many studies have affirmed the TL theory and have described how it has been implemented in various contexts and with various aims. Edward W. Taylor (2007) describes how the focus has shifted from *identifying* transformative experiences to finding *elements* that shape the transformative experiences, and how to foster TL. Based on a TL review, he asks for more critical views on the presence of critical reflection in the learning processes. He also requests distinguishing between various forms of reflection. In addition, he wants a better awareness of the students' attitudes, personalities, and roles (cf. Aboytes and Barth 2020).

Kovan and Dirkx (2003) regard Mezirow's TL approach as too cognitive and rational; they emphasize the role of emotions, spirituality, and imagination in a broader sociocultural learning context (see also Taylor 2009). Referring to Carl Jung's psychology and his *individuation* concept, they compare the TL process with a journey in which the individuals recognize the self in relation to the rest of the world and becomes who they truly are. Kovan and Dirkx are also inspired by Boyd's TL (see e.g., Boyd 2008). Dirkx seeks a more holistic understanding of subjectivity combining intellectual, emotional, moral, and spiritual dimensions of an individual's being in the world in a linking of experiences from an individual's outer world with the inner world (see Dirkx et al. 2006). Napan et al. (2020) give an example of how TL is implemented in a Māori context acknowledging cultural typical learning elements, for example, collaboration, partnership, and non-cognitive learning approaches like dance, poems, and music. The following section presents a few

examples on the many TL directions that touches sustainability.

Sustainable Directions of Transformative Learning

There are various views, implementation methods, and interpretations of TL in relation to sustainability. Unfortunately, TL has been used in sustainability education research more or less rigorously. In a large review of research articles on TL in sustainability education, Aboytes and Barth (2020) found that even if TL is a popular theory in this research field, it is often implemented without any critical theoretical examination, but increasingly used as a buzzword (Aboytes and Barth 2020). In both UNESCO's educational policy and in sustainability education research, the request for TL is often combined with the idea that education has to promote sustainable *core* (or *key*) *competencies* (e.g., Leicht et al. 2018). Lange (2019), on the other hand, does not believe in a focus on competencies, since she thinks sustainability demands a TL approach that is a shift from modernist assumptions of outcomes, measurements, managerialism, and colonization. She asks for decolonization and a deep transformation into new ways of thinking and acting within the mutual circles of humans and nonhumans (Lange 2018, 2019). In addition, she calls for interdisciplinary and transdisciplinary research (see also Gunnlaugson 2005), and a development of higher education to play a significant role in social change fostering awareness, learning, and action (see also Wolff 2007).

Lotz-Sisitka et al. (2015) picture the practical TL as transdisciplinary. They argue that it is high time to abandon unsustainable systems and "to strengthen transgressive learning and disruptive capacity-building" involving multiple and multi-voiced actors decolonizing thinking and coproducing knowledge (p. 73). Similarly, Gautam (2021) wants the students he teaches to become revolutionary agents and magicians criticizing and transforming the human condition. Lange (2009, p. 195) describes TL as progressive and gradually advancing, meaning "that people will transcend self-interest to embrace larger

social interests.” Consequently, she believes that it is possible to create a transformative space in which participants can individually and jointly transform the world. This happens when they understand the purpose of work, the mechanism behind global economy, and start to respect the natural world. Thus, they are encouraged to develop principles and action plans to guide their own work and living as a part of a larger “web of life.” Likewise, O’Sullivan (2008) asks for a TL vision viewing the human species embedded in the “web of life” and suggests a transformation to an “Ecozoic” mode of being.

Lange (2009) emphasizes that TL is about reconstructing worldviews, and O’Sullivan (2012) calls for a planetary worldview. Lange positions the dialectic pedagogy she calls for between critique and hope. To encourage the learners’ hope and a deeper connection with nature, she employs nature experiences. Also, Kovan and Dirkx (2003) believe in nature contemplations as a method to trigger TL. Inspired by Karen Barad and post-humanistic ideas, Lange (2018, 2019) claims that transformative sustainability education asks for a transformation that is both ontological and epistemological. She argues that educators and learners are intertwined in many levels of life and engagement (from their own bodies to the entire cosmos). What she calls an “ethico-onto-epistemological transformation process” could lead toward socially just and ecological regenerative societies, according to her (Lange 2018, p. 298).

To make sure that TL happens, there are researchers who have started to use a practice-based design process called *WeValue InSitu* to measure the success of TL in sustainability education contexts (Harder et al. 2021; Odii et al. 2021). This process was originally developed to produce indicators for shared values in civil society groups. To use a structural design to test TL sounds remarkable, but the future may tell how good an idea this is.

Diverse Critical Comments

The TL theory is hard to implement, the process difficult to understand and predict, and the

outcome difficult to evaluate. It is a contradictive learning approach, and much of it remains unclear (Taylor 2009). Based on diverse theories, the TL theory is utopic. It is even called illusive (Taylor 2009) and a beautiful metaphor (Howie and Bagnall 2013). A central foundation of TL is Habermas’ thoughts about communicative action and consensus building through rational public discussions, which is more an ideal than a practical means. As an ambiguous and unsettled learning approach, it is not yet properly understood (Taylor 2009). Likewise, TL is difficult to implement in various educational settings. The TL theory has also been criticized because of its theoretical unboundedness, for being an inadequate theory of learning, its lack of critical assessment, and lack of predictiveness, as well as its nonquantifiability, the failure to validate it, and its problematic example cases (Howie and Bagnall 2013).

In addition, authors have blamed TL for representing a Western view neglecting other perspectives (Gilpin-Jackson 2014; Cranton and Taylor 2012; O’Sullivan 2012) and encouraged including indigenous knowledge and worldviews in TL (Burns 2015). In the book *Research as Transformative Learning for Sustainable Futures: Global Voices and Visions*, edited by Taylor and Luitel (2019), the chapters written by authors from Asian, South Pacific, Middle Eastern, and African countries are more broadly critical of the hegemony of a neocolonial Western worldview and positivist epistemologies.

Sterling (2011) rightly emphasizes that Mezirow did not create TL for a total rebuilding of the world. To adapt a theory for transforming the entire world demands thoughtful consideration, even if it initially was designed to help people overcome traumatic experiences or change life tracks. Another problem is that TL often serves as a normative tool in sustainability education. To create models aiming at changing the individuals might be tempting, but also dubious (Wolff 2011). If transformation of individuals is the appropriate aspiration, educators must accept the risks of going forth into the unknown. A critical and reflective practice may generate a change of values among the educators and students involved, but the will to

change has to advance from within the individuals. Therefore, the outcome of changed meaning perspectives is not foreseeable (Wolff 2011).

Summary

TL is a powerful learning approach with potential “to evoke a kind of deep learning that engages learners in a process of self-work, self-change, and transformation” (Dirkx and Smith 2009, p. 64). Even if TL is steadily developing, it is a complex approach with many unidentified features (Dirkx and Smith 2009; Taylor and Jarecke 2009). TL can employ a variety of methods and take place in many contexts, but to evaluate the results is not easy (e.g., Taylor 2009). The increasing use of online learning contexts is also a growing challenge (Dirkx and Smith 2009).

TL has been regarded as an answer on how to transform society in a more sustainable direction. Yet, TL can either be forced (Cranton 2009) or rushed (Taylor 2009). The educators can plan and arrange learning situations to empower the students’ learning in a transformative way, but never be sure that the projects will succeed. As Cranton argues, success depends on the students, the context, the resources available, and many other circumstances. The TL theory is often handled superficially without direction, not least in sustainability education (Aboytes and Barth 2020), even if the theoretical basis is most important in TL (Taylor 2009). The move from knowing and understanding to social action is not easy (Cranton 2009; Wolff 2011; see also ► “Agency Theory”). Therefore, it is not self-evident that an educational approach will transform neither individuals nor society toward sustainability (see ► “Sustainability Education and Environmental Awareness”). Nonetheless, TL is still seen as a promising approach in adult learning (Taylor 2007), and in sustainability education (Lange 2019). In an obviously unsustainable time, with huge dilemmas like climate change (see ► “Climate Change”) and a long-lasting pandemic, there is an urgent need for appropriate learning theories. In that situation, TL is better than many other theories developed to meet various challenges.

Conversely, in contemporary times, TL without any focus on sustainability might be worthless. Policy documents on the twenty-first-century skills highlight TL. Yet, Bell (2016) argues that if the policy does not focus on sustainability and a transformation of the global economy, the learners will not have the skills and responsibility (see ► Responsibility) they need to live a sustainable life on this planet (see also Sterling 2011; Zilliacus and Wolff 2021; Wolff et al. 2020). According to Heaton (2020), the problem is not *what* humans today know, but *how* they know it. Yet, Sterling was already skeptical in 2011 (p. 27), as he stated that TL is difficult and that “the mainstream emphasis on cognitive learning, with a little ‘values education’ thrown in, is simply insufficient to meet this challenge” [the unsustainability challenge]. TL is definitely a complicated theory, and to fulfill the demands of sustainability education it has to be developed, tried out, and evaluated meticulously. Yet, like Bildung it might even be impossible to assess (see Buttigieg and Calleja 2021), and it is definitely not a quick fix.

Cross-References

- Action Research
- Agency Theory
- Climate Change
- Decade of Education for Sustainable Development
- Dialogue
- Discourse Ethics
- Education for Sustainable Development
- Ethic of Love
- Responsibility
- Sustainability Education and Environmental Awareness
- Sustainable Development
- Sustainable Development Goals (SDGs)
- Transdisciplinary Learning
- United Nations Agenda 2030 on Sustainable Development Goals, The
- United Nations Sustainable Development Goals 2030, The
- Value

References

- Aboytes, J. G. R., & Barth, M. (2020). Transformative learning in the field of sustainability: A systematic literature review (1999–2019). *International Journal of Sustainability in Higher Education*, 21(5), 993–1013. <https://doi.org/10.1108/IJSHE-05-2019-0168>.
- Baumgartner, L. M. (2012). Mezirow's theory of transformative learning from 1975 to present. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 99–115). San Francisco: Wiley.
- Bell, D. V. (2016). Twenty first century education: Transformative education for sustainability and responsible citizenship. *Journal of Teacher Education for Sustainability*, 18(1), 48–56. <https://eric.ed.gov/?id=EJ1112451>.
- Boyd, D. (2008). Autoethnography as a tool for transformative learning about white privilege. *Journal of Transformative Education*, 6(3), 212–225. <https://doi.org/10.1177/1541344608326899>.
- Burns, H. L. (2015). Transformative sustainability pedagogy: Learning from ecological systems and indigenous wisdom. *Journal of Transformative Education*, 13, 259–276. <https://doi.org/10.1177/1541344615584683>.
- Buttigieg, K., & Calleja, C. (2021). Bildung and transformative learning theory: Two peas in a pod? *Journal of Transformative Education*, 19(2), 166–185. <https://doi.org/10.1177/1541344620971673>.
- Cranton, P. (2009). From tradesperson to teacher: A transformative transition. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 182–190). San Francisco: Jossey-Bass.
- Cranton, P., & Roy, M. (2003). When the bottom falls out of the bucket: Toward a holistic perspective on transformative learning. *Journal of Transformative Education*, 1(2), 86–98. <https://doi.org/10.1177/1541344603001002002>.
- Cranton, P., & Taylor, E. W. (2012). Transformative learning theory. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 3–20). San Francisco: John Wiley & Sons.
- Dirkx, J. M., & Smith, R. O. (2009). Facilitating transformative learning: Engaging emotions in an online context. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 57–66). San Francisco: Jossey-Bass.
- Dirkx, J. M., Mezirow, J., & Cranton, P. (2006). Musings and reflections on the meaning, context, and process of transformative learning: A dialogue between John M. Dirkx and Jack Mezirow. *Journal of Transformative Education*, 4(2), 123–139. <https://doi.org/10.1177/1541344606287503>.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York: Herder and Herder.
- Freire, P. (1974). *Education for critical consciousness*. London: Bloomsbury Academic.
- Gautam, S. (2021). Letter to professor Auguste Comte. In P. C. Taylor & B. C. Luitel (Eds.), *Research as transformative learning for sustainable futures: Global voices and visions* (pp. 61–73). Leiden: Brill Sense.
- Gilpin-Jackson, Y. (2014). Resonance as transformative learning moment: The key to transformation in socio-cultural and posttrauma contexts. *Journal of Transformative Education*, 12(1), 95–119. <https://doi.org/10.1177/1541344614541547>.
- Gould, R. (1990). The therapeutic learning program. In J. Mezirow & Associates (Eds.), *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning* (pp. 134–156). San Francisco: Jossey-Bass.
- Gunnlaugson, O. (2005). Toward integrally informed theories of transformative learning. *Journal of Transformative Education*, 3(4), 331–353. <https://doi.org/10.1177/1541344605278671>.
- Habermas, J. (1968). *Knowledge and human interests* (J. J. Shapiro, Trans.). Boston: Beacon Press.
- Harder, M. K., Dike, F. O., Firoozmand, F., Des Bouvrie, N., & Masika, R. J. (2021). Are those really transformative learning outcomes? Validating the relevance of a reliable process. *Journal of Cleaner Production*, 285, 125343. <https://doi.org/10.1016/j.jclepro.2020.125343>.
- Heaton, M. G. (2020). *A pedagogy of hope: Levers of change in transformative place-based learning systems*. (Doctoral dissertation, Antioch University). <https://aura.antioch.edu/cgi/viewcontent.cgi?article=1575&context=etds>. Accessed 1 Oct 2021.
- Howie, P., & Bagnall, R. (2013). A beautiful metaphor: Transformative learning theory. *International Journal of Lifelong Education*, 32(6), 816–836. <https://doi.org/10.1080/02601370.2013.817486>.
- King, K. P., & Heuer, B. P. (2009). Transformative learning in adult basic education. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 172–181). San Francisco: Jossey-Bass.
- Kitchenham, A. (2008). The evolution of John Mezirow's transformative learning theory. *Journal of Transformative Education*, 6(2), 104–123. <https://doi.org/10.1177/1541344608322678>.
- Kovan, J. T., & Dirkx, J. M. (2003). "Being called awake": The role of transformative learning in the lives of environmental activists. *Adult Education Quarterly*, 53(2), 99–118. <https://doi.org/10.1177/0741713602238906>.
- Lange, E. A. (2009). Fostering a learning sanctuary for transformation in sustainability education. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 193–204). San Francisco: Jossey-Bass.
- Lange, E. A. (2018). Transforming transformative education through ontologies of relationality. *Journal of Transformative Education*, 16(4), 280–301. <https://doi.org/10.1177/1541344618786452>.

- Lange, E. A. (2019). Transformative learning for sustainability. In W. Leal Filho (Ed.), *Encyclopedia of sustainability in higher education* (pp. 1954–1966). Cham: Springer. https://doi.org/10.1007/978-3-030-11352-0_104.
- Leicht, A., Heiss, J., & Byun, W. J. (2018). *Issues and trends in education for sustainable development*, 5. Paris: UNESCO. https://en.unesco.org/sites/default/files/issues_0.pdf. Accessed 5 Oct 2021.
- Lotz-Sisitka, H., Wals, A. E., Kronlid, D., & McGarry, D. (2015). Transformative, transgressive social learning: Rethinking higher education pedagogy in times of systemic global dysfunction. *Current Opinion in Environmental Sustainability*, 16, 73–80. <https://doi.org/10.1016/j.cosust.2015.07.018>.
- Mandell, A., & Herman, L. (2009). Mentoring: When learners make the learning. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 78–88). San Francisco: Jossey-Bass.
- Merriam, S. B., & Bierema, L. L. (2013). *Adult learning: Linking theory and practice*. San Francisco: Wiley.
- Mezirow, J. (1990). How critical reflection triggers transformative learning. In J. Mezirow & Associates (Eds.), *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning* (pp. 1–20). San Francisco: Jossey-Bass.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.
- Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education*, 1(1), 58–63. <https://doi.org/10.1177/1541344603252172>.
- Mezirow, J. (2009a). Preface. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. xi–xiv). San Francisco: Jossey-Bass.
- Mezirow, J. (2009b). Transformative learning theory. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 18–31). San Francisco: Jossey-Bass.
- Napan, K., Connor, H., & Toki, L. (2020). Cultural pedagogy and transformative learning: Reflections on teaching in a Māori environment in Aotearoa/New Zealand. *Journal of Transformative Education*, 18(1), 59–77. <https://doi.org/10.1177/1541344619858978>.
- O'Sullivan, E. (1999). *Transformative learning: Educational vision for the 21st century*. London: Zed Books.
- O'Sullivan, E. (2012). Deep transformation: Forging a planetary worldview. In E. W. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 162–177). San Francisco: Wiley.
- Odi, B. C., Huang, Y., Des Bouvrie, N., & Harder, M. K. (2021). Cycles of meaning-making crystallization in the WeValue InSitu process as clear contributions towards transformative learning. *Journal of Cleaner Production*, 304, 127024. <https://doi.org/10.1016/j.jclepro.2021.127024>.
- Sørensen, A. (2015). From critique of ideology to politics: Habermas on Bildung. *Ethics and Education*, 10(2), 252–270. <https://doi.org/10.1080/17449642.2015.1055148>.
- Sterling, S. (2011). Transformative learning and sustainability: Sketching the conceptual ground. *Learning and Teaching in Higher Education*, 5(11), 17–33.
- Taylor, E. W. (2007). An update of transformative learning theory: A critical review of the empirical research (1999–2005). *International Journal of Lifelong Education*, 26(2), 173–191. <https://doi.org/10.1080/02601370701219475>.
- Taylor, E. W. (2009). Fostering transformative learning. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 3–17). San Francisco: Jossey-Bass.
- Taylor, E. W., & Jarecke, J. (2009). Looking forward by looking back: Reflections on the practice of transformative learning. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 275–290). San Francisco: Jossey-Bass.
- Taylor, P. C., & Luitel, B. C. (Eds.). (2019). *Research as transformative learning for sustainable futures: Glocal voices and visions*. Leiden: Brill Sense.
- Tisdell, E. J., & Tolliver, D. E. (2009). Transformative approaches to culturally responsive teaching: Engaging cultural imagination. In J. Mezirow, E. W. Taylor, & Associates (Eds.), *Transformative learning in practice: Insights from community, workplace, and higher education* (pp. 89–99). San Francisco: Jossey-Bass.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2014). UNESCO roadmap for implementing the global action programme on education for sustainable development. <https://www.voced.edu.au/content/ngv:70467>. Accessed 5 Oct 2021.
- United Nations Educational, Scientific and Cultural Organization (UNESCO). (2017). Education for sustainable development goals: Learning objectives. https://www.unesco.de/sites/default/files/2018-08/unesco_education_for_sustainable_development_goals.pdf. Accessed 7 Oct 2021.
- Vandenberghe, F. (2018). Principles of reconstructive social theory. In T. Rutzou & G. Steinmetz (Eds.), *Critical realism, history, and philosophy in the social sciences*, 34 (pp. 73–88). Bingley: Emerald Publishing Limited.
- Wolff, L.-A. (2007). The quest for a route to sustainable development in higher education. In T. Kaivola & L. Rohweder (Eds.), *Towards sustainable development in higher education: Reflections* (pp. 58–62). Helsinki: Finnish Ministry of Education. <https://julkaisut.valtioneuvosto.fi/handle/10024/79511>. Accessed 1 October 2021.
- Wolff, L.-A. (2011). *Nature and sustainability: An educational study with Rousseau and Foucault*. Saarbrücken: Lambert. <https://www.doria.fi/handle/10024/130752>. Accessed 30 Sept 2021.
- Wolff, L.-A., Skarstein, T., & Skarstein, F. (2020). The mission of early childhood education in the Anthropocene. *Education Sciences*, 10, 27. <https://doi.org/10.3390/educsci10020027>. Accessed 14 Sept 2021.

Zilliacus, H., & Wolff, L. A. (2021). Climate change and worldview transformation in Finnish education policy. In P. William (Ed.), *Oxford research encyclopedia of education*. New York: Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1676>. Accessed 5 Oct 2021. E-pub ahead of print.

Transformative Learning Theory

► Transformative Learning

Transgenic Organisms

► Genetically Modified Organisms (GMOs)

Transition

► Systemic Transition

Transition Sustainability

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Synonyms

[Environmental transition](#); [Great transformation](#);
[Societal transition](#); [Socio-technical transition](#);
[Sustainability transition](#); [System innovation](#)

Definition

Sustainability transitions are long-term, multi-dimensional, and fundamental transformation processes through which established societal systems shift to more sustainable modes of production and consumption. Examples of ongoing

sustainability transitions can be found in the food, energy, mobility, and construction sectors, among others. As large-scale societal change processes, sustainability transitions are characterized not only by technological advances and industrial transformation but also by wider social, behavioral, and regulatory change. This is also why sustainability transitions are often referred to as a type of ‘socio-technical transition’ or ‘system innovation’. Sustainability transitions depend on the co-evolution of economic, technical, and social system elements and unfold over time horizons that can easily span decades. Research on different aspects of sustainability transitions has been conducted from a variety of domains, ranging from environmental sciences over business studies to political sciences. The relatively young and rapidly growing research community focused on *transition research* explicitly focuses on the dynamics by which a socio-technical system can transit toward greater sustainability.

Introduction

Sustainability has widely been recognized as one of the grand challenges of the twenty-first century. Both scholars and policy makers stress the need for the *Great Transition* (Raskin et al. 2002) or the *Great Transformation* (WBGU 2011). With these terms they refer to achieving greater sustainability and “fundamental changes in the way societies produce and consume” (United Nations 2002, p. 7). Because current patterns of consumption and production are deeply embedded in societal structures and lifestyles, their transformation requires wide-ranging changes to consumption practices, technologies, infrastructures, and institutions at regional, national, and global levels. The long-term, multidimensional, and fundamental transformation processes through which established societal systems shift to more sustainable modes of production and consumption are referred to as *sustainability transitions* (Markard et al. 2012, p. 956).

The term sustainability transition is not used in a uniform manner. In the broadest sense, a transition (lat. “transitio” = crossing over) refers to

“going from one state or phase to another.” Commonly, the term sustainability transition can thus be used to refer to any change process that indicates the transformation of a system or entity to a more sustainable state. More narrowly, however, researchers have used the term sustainability transition to refer to the transformation of systems that fulfill a societal function such as transport, energy provision, or housing (Elzen et al. 2004; Elzen and Wieczorek 2005).

Research on sustainability transitions has most prominently been conducted by the research field known as *transition research*, which combines insights from science and technology studies, evolutionary economics, and sociology as well as innovation studies (Geels 2010). Whereas transition research generally deals with long-term changes in socio-technical systems and has also investigated historical transitions such as those from horse carriages to trains or sailing to steamships, the explanations and models the research field offers have received most attention in connection to sustainable development (Geels 2010; Markard et al. 2012; Smith et al. 2010). Prominent examples of empirical areas that transition researchers study are sectors such as energy, transport, food, water, and waste.

The roots of transition research lie in the Netherlands, where the topic was given a central place in the National Environmental Policy Plan (Elzen et al. 2004) and has been driven forward by a very active scholarly community since the early 2000s. As of 2020, the Sustainability Transitions Research Network (STRN) counts more than 2000 members. The community publishes a journal dedicated to the field (Environmental Innovation and Societal Transitions) and organizes the annual International Sustainability Transitions Conference (IST).

Defining Characteristics of Transitions

What unites different streams and models within transition research (for an overview see Markard et al. 2012) is the understanding that technology alone is insufficient to accomplish societal change. Transition research is anchored in the understanding that technology can only provide

a function to society when embedded in a *socio-technical system*. A socio-technical system includes actors such as users, producers, suppliers, public authorities, or financiers as well as the respective infrastructures, patterns of behavior, cultural values, and policies that guide their interaction (Elzen et al. 2004; Geels 2002; Kemp et al. 1998). A classic example for a socio-technical system is car-based transportation, where the actual technology (the car) only provides the function of mobility to society in interaction with the road-based infrastructure, gas stations, traffic rules, parking systems, repair shops, or driving behavior, among others (Geels 2005). A *socio-technical transition* then describes the shift from one socio-technical system to another. Such a shift requires the co-evolution of multiple changes in the spheres of production, distribution, consumption, and ways of life (Elzen et al. 2004). For example, novel technologies such as hydrogen cars require a different fueling infrastructure, changes in driving behavior and safety rules, and the refurbishment of car production facilities, among others (Tukker 2008). Sustainability transitions must therefore be understood as multi-change processes (technical, economic, behavioral) that unfold simultaneously and interact at different levels (regional, national, global).

Defining Characteristics of Sustainability Transitions

In comparison with other processes of long-term societal change, sustainability transitions are said to have three special characteristics (Geels 2011, p. 25), namely:

1. Sustainability transitions are goal-oriented or purposive toward a collective good (sustainability), yet this normative direction is often highly contested.
2. Sustainability transitions require policy support because more sustainable solutions initially score lower on price/performance dimensions than established technologies.
3. Sustainability transitions require the strategic reorientation of incumbents because domains

such as energy or transport, where sustainability transitions are needed the most, are dominated by large firms in control of complementary assets and infrastructures.

For business scholars, it is also important to keep in mind that the models and frameworks commonly used in transition research depart in different assumptions than those used in management and innovation research (Geels 2018): First, transition research takes a holistic and systemic perspective. It is less interested in single innovations or products but rather focuses on the interaction between such different system elements. Second, transition research cares less about price/performance competition in markets but pays explicit attention to social, political, cultural, and infrastructural dimensions (taxes, subsidies, performance standards, regulations) as drivers of change. Third, transition research is not compatible with a “point source” understanding of change, in which disruption can be caused by single actors, but tries to understand the shifts that may occur when new technologies align with broader ongoing processes of change such as political struggles or societal debates. Business and management scholars should therefore remember that the single firm is only considered as one of the many actors who need to cooperate if we are to accomplish sustainability transitions.

Summary

Sustainability transitions are defined as long-term, multidimensional, and fundamental transformation processes through which established societal systems become more sustainable. Understanding such transformation processes is highly relevant in the light of achieving our society’s sustainable development goals and solving grand challenges such as poverty alleviation and securing water or food supply. The explanations and models of the relatively young field of transition research offer to business sustainability a multilevel understanding of the dynamics that drive or hamper change in societal systems. Establishing links to such explanations and models can be helpful to better

understand the role of business in society and its impact on sustainable development.

Cross-References

- [Ecology and Ecosystem: Sustainability](#)
- [Green Economy](#)
- [Managing Change for Sustainability](#)
- [Sustainable Development](#)
- [Sustainable Transition](#)
- [Systemic Transition](#)
- [Systems Thinking](#)

References

- Elzen, B., & Wieczorek, A. (2005). Introduction: Transitions towards sustainability through system innovation. *Technological Forecasting and Social Change*, 72, 651–661.
- Elzen, B., Geels, F. W., & Green, K. (2004). *System innovation and the transition to sustainability: Theory, evidence and policy*. Cheltenham/Northampton: Edward Elgar Publishing Ltd.
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case study. *Research Policy*, 31, 1257–1274.
- Geels, F. W. (2005). Processes and patterns in transitions and system innovations: Refining the co-evolutionary multi-level perspective. *Technological Forecasting and Social Change*, 72, 681–696.
- Geels, F. W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy*, 39, 495–510.
- Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1, 24–40.
- Geels, F. W. (2018). Disruption and low-carbon system transformation: Progress and new challenges in socio-technical transitions research and the multi-level perspective. *Energy Research & Social Science*, 37, 224–231.
- Kemp, R., Schot, J. W., & Hoogma, R. (1998). Regime shifts to sustainability through processes of niche formation: The approach of strategic niche management. *Technology Analysis & Strategic Management*, 10, 175–196.
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. *Research Policy*, 41, 955–967.
- Raskin, P., Banuri, T., Gallopini, G., Gutman, P., Hammond, A., Kates, R., & Swart, R. (2002). *The great*

transition. The promise and lure of the times ahead.
Boston: Stockholm Environment Institute.

Smith, A., Voß, J.-P., & Grin, J. (2010). Innovation studies and sustainability transitions: The allure of the multi-level perspective and its challenges. *Research Policy*, 39, 435–448.

Tukker, A. (2008). Conclusions: Change management for sustainable consumption and production. In A. Tukker, M. Charter, C. Vezzoli, E. Stø, & M. Munch Andersen (Eds.), *System innovation for sustainability I: Perspectives on radical changes to sustainable consumption and production* (pp. 406–443). Sheffield: Greenleaf.

United Nations (UN). (2002). Plan of implementation of the World Summit on sustainable development. <http://www.un-documents.net/jburgpln.htm>

Wissenschaftlicher Beirat Globale Umweltveränderungen (WBGU). (2011). *Welt im Wandel – Gesellschaftsvertrag für eine Große Transformation*. Berlin: WBGU.

Trans-species Injustice

- [Speciesism](#)

Trans-species Justice

- [Social Justice](#)

Trickle-Up Innovation

- [Reverse Innovation](#)

Transnational Justice

- [Social Justice](#)

Trigger Event

- [Tipping Point](#)

Transparency

- [Corruption Perception Index](#)
- [Chernobyl Disaster, The](#)

Triple Bottom Line

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Transparency in Nonprofit Sector

- [Accountability in Nonprofit Sector](#)

Synonyms

[Economic, social, and environmental integration](#);
[People, planet, profit](#); [Three pillars](#)

Transparency International

- [Corruption Perception Index](#)

Definition

The expression “Triple Bottom Line” (also referred as to 3BL) has been coined by John Elkington in the 1990s in his book *Cannibals with Forks: The Three Bottom Line of 21st Century Business* published in 1997.

The main idea behind the Triple Bottom Line model is that company’s long-term success should be measured on the basis not only of the

Transparent Reporting

- [Media Ethics](#)

traditional financial bottom line but also of social and environmental performance.

The Elkington's model involves three main lines: the economic one (profit or loss) and the social and environmental ones.

The Framework

The term "Triple Bottom Line" has been introduced by Elkington in 1997, building on the foundations of Meadows et al. (1972) and Bruntland (1987), aiming at measuring not only the company's economic performance but also the social and environmental ones. This approach is based on a wide notion of stakeholder that is identified as any entity upon which company's activity may produce, directly or indirectly, an impact. According to the Triple Bottom Line, the attention is not based only on shareholders and on economic results, but it implies the attempt to satisfy all stakeholders' expectations including those related to the environment. Thus, two more bottom lines (social and environmental concerns) are introduced in addition to the traditional one (profit or loss).

The three lines – that should be analyzed according to an integrated approach – stand for society, economy, and environment. In this regard, Carter and Rogers (2008) define the Triple Bottom Line as the "strategic, transparent integration and achievement of an organization's social, environmental and economic goals."

The Triple Bottom Line model – as explained in the book *Cannibals with Forks: The Three Bottom Line of 21st Century Business* – is a way of assessing and reporting business performance based on three main areas: social (people), environmental (planet), and economic (profit) (Elkington 1997).

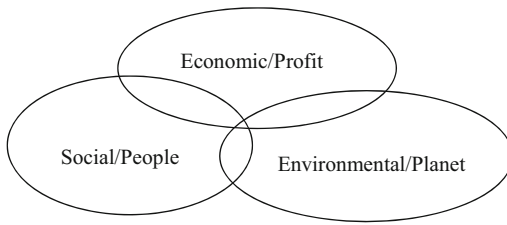
The "cannibals" are the companies, while the "fork" refers to sustainable business as a tool to progress into the "civilization process" (Fig. 1).

The above-stated areas – or three Ps as coined by Elkington's consulting firm "Sustainability" – are the components of the bottom line assuming the following meanings:

- People include the employees involved in a company's activity and the wider community where a corporation operates; the general aim is to ensure social justice. With reference to "people," a Triple Bottom Line approach implies the development of business producing mutual benefits for shareholders, employees, and the community as well; for example, a company committed to Triple Bottom Line model would not use youthful workforce, would pay fair salaries, and would secure working conditions.
- Planet refers to the environment upon which companies should reduce their ecological footprint as much as possible; the general goal is to guarantee environmental quality. The adoption of a Triple Bottom Line model requires companies to safeguard the natural setting by benefiting it or, at least, by reducing the potential damage due to company's activity.
- Profit that identifies the traditional Bottom Line should be implemented aiming at economic prosperity, avoiding damages for the other two dimensions (people and environment).

The adoption of the Triple Bottom Line approach requires companies a revolution of thinking and acting in no less than seven dimensions:

1. Markets: the first revolution is based on the use of market as Elkington identifies sustainability as a source of commercial opportunity for competitive companies.
2. Values: the second revolution focuses on the change in human and social values, driving toward a greater emphasis on social and ethical values rather than a merely economic view.
3. Transparency: the third revolution is powered by the increasing global transparency implying that companies' sustainability performance will increasingly be benchmarked and ranked by external stakeholders.
4. Life cycle technology: the fourth revolution involves a shift from companies focusing on the acceptability of their products at the point of sale to their performance from cradle to the grave.



Triple Bottom Line, Fig. 1 Triple Bottom Line's three "Ps"

5. Partnerships: the fifth revolution is characterized by the creation of new types of cooperation between companies and activist groups.
6. Time perspective: the sixth revolution implies the shift from the short-term approach to a long-term perspective.
7. Corporate governance: the last revolution refers to a new definition of ownership rights in company assets and of ways companies are managed and controlled.

The Triple Bottom Line model has been adopted by many international organizations such as the United Nations in order to clarify sustainability concept; in 2005, United Nations stated that "We reaffirm that development is a central goal in itself and that sustainable development in its economic, social and environmental aspects constitutes a key element of the overarching framework of United Nations activities" (United Nations 2005).

The Triple Bottom Line has established itself as an umbrella concept, linking its meaning to other similar expressions causing some overlaps: indeed, it is additionally recognized as "corporate social responsibility" or as "sustainability" (Sheehy and Farneti 2020).

The most popular definition of sustainability is "[...] a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are consistent with future as well as present needs and further that sustainability must meet the needs and aspirations of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission 1987).

With reference to corporate social responsibility, in 1953, Howard Bowen's *Social Responsibilities of the Businessman* provided the following definition: "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of actions which are desirable in terms of objectives and values of our society" (Bowen 1953). In 1960, Davis argued that corporate social responsibility refers to "businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest" (Davis 1960), while Frederick stated that "social responsibility in the final analysis implies a public posture toward society's economic and human resources, as a willingness to see that those resources are used for broad social ends and not simply for the narrowly circumscribed interests of private persons and firms" (Frederick 1960). It is clear how the Triple Bottom Line model is linked to sustainability and corporate social responsibility concepts as it emphasizes the need of an integrated approach among the three dimensions: economic, social, and environmental.

Limited research has shown that there are three main advantages from adopting this model: increased revenue and market share, increased employee retention, and increased community support (Quinn and Baltes 2007; Markely and Davies 2007).

Interest in the Triple Bottom Line has been growing rapidly across publicly traded companies, as well as private and nonprofit organizations. The first known public company to adopt the Three Bottom Line model was Shell in 1998, followed by other companies such as Nike, Texaco, AT&T, IBM, Hewlett-Packard, and Dow Chemical (Bishop and Beckett 2000; Raar 2002).

Summary

In its broadest meaning, the "triple bottom line" approach identifies a global responsibility perspective based on a multidimensional assessment of performance, including not only the economic dimension, but also the social, environmental, and economic ones. According to Elkington (1997),

these are the three lines that should be considered in order to assess a firm's long-term performance.

Cross-References

- [Accountability](#)
- [Corporate Social Responsibility](#)
- [Corporate Sustainable Innovation](#)
- [CSR: Evolution of Concept](#)

References

- Bishop, L., & Beckett, R. (2000). Corporate citizenship and the communicator: communication's role in developing the 'triple bottom line' in the new economy. *Strategic Communications Management*, 4(4), 32–37.
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. New York: Harper & Row.
- Brundtland Report. (1987). *Our common future: Report of the World Commission for Environment and Development*. New York: WCED.
- Carter, C. R., & Rogers, D. S. (2008). A framework of sustainable supply chain management: Moving toward a new theory. *International Journal of Physical Distribution & Logistics Management*, 38(5), 360–387.
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2(3), 70–76.
- Elkington, J. (1997). *Cannibals with Forks: The triple bottom line of the 21st century business*. Oxford: Capstone.
- Frederick, W. C. (1960). The growing concern over business responsibility. *California Management Review*, 2, 54–61.
- Markely, M. J., & Davies, L. (2007). Exploring future competitive advantage through sustainable supply chains. *International Journal of Physical Distribution & Logistics Management*, 37(9), 763–774.
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. (1972). *The limits to growth*. New York: Club of Rome.
- Quinn, L., & Baltes, J. (2007). *Leadership and the triple bottom line: Bringing sustainability and corporate social responsibility to life*. White Paper from the Center for Creative Leadership.
- Raar, J. (2002). Environmental initiatives: Towards triple bottom line reporting. *Corporate Communications: An International Journal*, 7(3), 169–183.
- Sheehy, B., & Farneti, F. (2020). Corporate social responsibility. *Sustainability and corporate sustainability: What is the difference? And, does it matter?* Available at SSRN: <https://ssrn.com/abstract=3549577>
- United Nations. (2005). *World summit outcome: Resolution adopted by the general assembly*. 24 October. New York.

Triple Bottom Line (TBL)

- [Corporate Sustainability Performance](#)

Triple Bottom Line Reporting

- [Sustainability Management and Reporting](#)

Triple Bottom-Line Accounting

- [Sustainability Accounting](#)

Triple Helix and Innovation

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Synonyms

[Innovation](#); [Interaction](#); [Knowledge](#); [Relationships](#); [University-Industry-Government Relationships](#)

Definition

The Triple Helix concept associated to the linkages of university-industry-government to promote innovation was introduced in the 1990s by Etzkowitz and Leydesdorff (1995). They created a model that consider the interactions between university-industry-government in the knowledge society and seeks to integrate science, technology, and economic development.

These interactions between university-industry-government are crucial for improving the innovation process (Etzkowitz, 2002) and it

is “increasingly recognized as the source of new models of regional innovation that drive the translation of scientific and technical advance into economic activity” (Etzkowitz & Zhou, 2007:8).

Introduction

The Triple Helix Model is a new approach of innovation that rejects the linear innovation process and highlights the networks, linkages, cooperation between the three spheres, and circulation concept (Etzkowitz & Zhou, 2007). In the static perspective the three helices are independent, they have common characteristics, and each one has an inner center and an outer space. However, in a dynamic point of view, the interaction among university-industry-government configures a collaborative system supported by vertical and horizontal linkages to create hybrid organizations like enterprise incubators, spin-offs, and technological science parks (Etzkowitz, 2008; Zhou, 2001).

Key Issues

The Triple Helix Model considers that the three helices are interrelated and in continuous transformation in an evolutionary perspective (Fig. 1). This model can also be seen as a DNA chain, where the helices entwine and restructure themselves in the development of innovation (Dzisah & Etzkowitz, 2008; Leydesdorff & Etzkowitz, 2000).

In the Triple Helix Model, the relationships among the Higher Education Institutions, the Companies, and the Government are crucial to promote dynamics of innovation. In the innovation process, to develop and generated innovations and competitiveness there should be important linkages, cooperation, and collaboration between the three spheres.

Knowledge develops dynamically: it germinates within organizations and across institutional boundaries, and that wealth generation can take place through knowledge produced by institutional combinations (Leydesdorff & Etzkowitz, 2001). The permanent interaction between three spheres,

Industry and Higher Education Institutions (and other knowledge institutions) and Government (local, regional, national, and international), influenced the knowledge base and generated continuous innovation.

The trilateral collaboration facilitates innovation and creative development by generating new knowledge, social advantages, profits, and stimulus. It, also, reinforces new partnerships at local and national level through the funding of research programs (Etzkowitz & Zhou, 2007).

The university in its entrepreneurial perspective adopts a proactive attitude when applying the knowledge, which in turn generates more academic knowledge following an interactive, non-linear model of innovation. And companies, as they increase their technological level, they are approaching the academic level, triggering higher levels of training and knowledge sharing. The government is one helix that complements the others: companies and universities. Through its regulatory role as a public actor, it facilitates investment and cooperation, contributing to more transparent justice, promoting the innovation system (regional and national) and economic development.

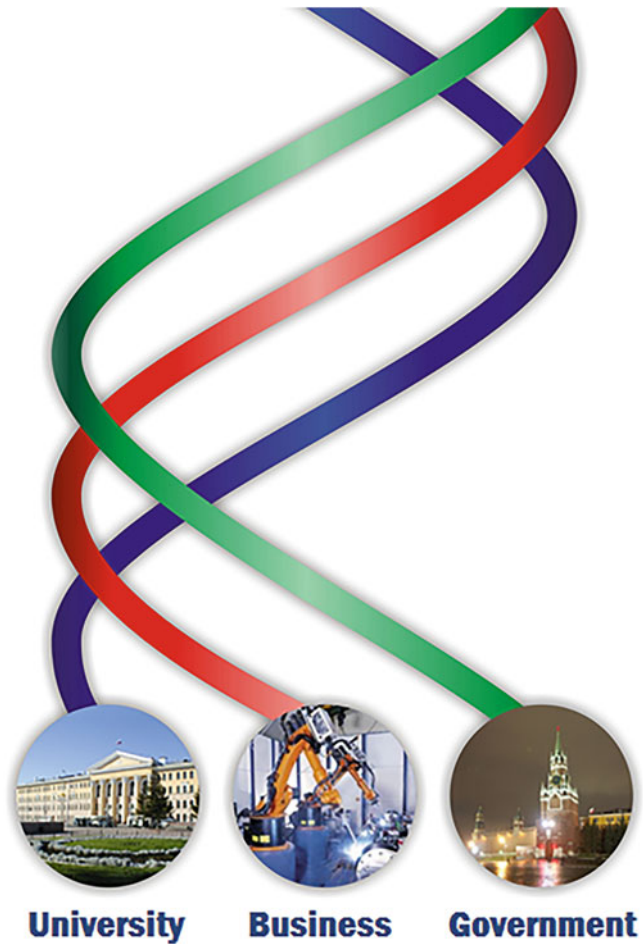
A fourth helix about civil society was introduced in the study of Leydesdorff and Knowl (2012) to contemplate the local versus global. This last study points out an *N*-tuple of helices in order to captures other dimensions that influenced innovation process and knowledge-based economy process including market and governance.

Afonso, Monteiro, and Thompson (2012) developed a specific Growth Model for the Quadruple Helix. The National Innovation System Triple and the Quadruple Helix Innovation Theory also considers that a country's economic structure is based on these four helices and the economic growth is a result of the concentration of talented and productive people (Van Horne & Dutot, 2016).

Empirical studies have been developed in recent years by Natário, Couto, and Almeida (2012) and Natário, Braga, Daniel, Rosa, and Salgado (2014, 2017), to understand the role of the triple helix model in less favored regions. Following this approach, they sought to identify

Triple Helix and Innovation,

Fig. 1 The Triple Helix Model. (Source: Etzkowitz, Magnus, & Levitt, 2000)



the contribution of a higher education institution in a less favored region of Portugal, to territorial innovation dynamics. The study aimed to show how the helices foster sustainable innovation and development in less-favored regions, generating new patterns of collaboration and interaction among the helices.

Paula, Ferreira, Ferreira, and Pereira (2017) analyzed how the triple helix model stimulated the competitive advantage of companies by being used as a guideline of the company strategy and to stimulate innovations and new knowledge essential to competition, as well as by company-university and company-government interconnections. The company's initiatives in establishing relationships with universities are important to intensify and improve the quality and innovation in its product portfolio, thus gaining competitive

advantage (Carvalho, Viana, & Mantovani, 2016). According to Chen, Wu, and Yang (2016:181), "we found that the high-tech firms can improve economic situation via the cooperation with universities on the platform. . . . this study also finds that high-tech firms selecting distinct cooperation models on the platform will bring different effects on the economic performance of firms."

Future Directions

Following Leydesdorff, Ivanova, and Meyer (2019) and Etzkowitz and Zhou (2017) new perspectives toward Triple Helix Model are required, from the selection of relevant disciplines and inter-disciplines, across different levels of analysis, covering the range of policy orientations. New

conceptual frameworks can be developed in the future, integrating other theoretical domains related to innovation and knowledge management and reflecting on those with new empirical data. The investigation can be through individual and regional innovation institutions, as well as innovation modalities powered by other entrepreneur actors. New insights of Triple Helix can be considering other contextual settings, analyzing various helices, and incorporating new or alternative methodologies in analyzing the Triple Helix relationships.

Summary

This chapter aims to discuss the triple helix model as a promoter of territorial innovation dynamics. Framed within the territorial approaches to innovation, this model articulates the three helices to develop innovation. In this sense, the role of each of the helices is discussed.

References

- Afonso, O., Monteiro, S. & Thompson, M. (2012). A Growth Model for the Quadruple Helix, *Journal of Business Economics and Management*, 13(5), 849–865. <https://doi.org/10.3846/16111699.2011.626438>
- Carvalho, L., Viana, A., & Mantovani, D. (2016). O papel da FAPESP no ecossistema empreendedor do Estado de São Paulo. *Revista de Administração, Contabilidade e Economia da FUNDACE*, 7(1), 84–101. <https://www.fundace.org.br/revistaracef/index.php/racef/article/view/168>
- Chen, F., Wu, C., & Yang, W. (2016). A new approach for the cooperation between academia and industry: An empirical analysis of the triple helix in East China. *Science Technology and Society*, 21(2), 181–204. <https://journals.sagepub.com/doi/full/10.1177/0971721816640617>
- Dzisah, J., & Etzkowitz, H. (2008). Triple helix circulation: the heart of innovation and development. *International Journal of Technology Management & Sustainable Development*, 7(2), 101–115. https://doi.org/10.1386/ijtm.7.2.101_1
- Etzkowitz, H. (2002). *The triple helix of university – Industry – Government, implications for policy and evaluation* (Working paper). Stockholm: Sister. http://www.sister.nu/pdf/wp_11.pdf
- Etzkowitz, H. (2008). *The triple helix: Industry, university, and government innovation in action*. New York: Routledge. <https://doi.org/10.4324/9780203929605>
- Etzkowitz, H., & Leydesdorff, L. (1995). The triple helix–university–industry–government relations: A Laboratory for Knowledge-Based Economic Development. *EASST Review*, 14(1), 14–19. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2480085
- Etzkowitz, H., & Zhou, C. (2007). *Regional innovation initiator: The entrepreneurial University in Various Triple Helix Models*. Paper presented in triple helix conference VI in Singapore. Available at <https://triplehelixconference.org/th/6/SingaporeConferenceThemePaper050107.pdf>
- Etzkowitz, H., & Zhou, C. (2017). *The triple helix: University–industry–government innovation and entrepreneurship*. London: Routledge. <https://doi.org/10.4324/9781315620183>
- Etzkowitz, H., Magnus, G., & Levitt, J. (2000). The future of the university and the University of Future: Evolution of ivory tower to entrepreneurial paradigm. *Research Policy*, 29(2), 313–330. <https://www.sciencedirect.com/journal/research-policy/vol/29/issue/2>
- Leydesdorff, L., & Etzkowitz, H. (2000). The dynamics of innovation: From National Systems and ‘mode 2’ to a triple helix of university–industry–government relations. *Research Policy*, 29(2), 109–123. <https://www.sciencedirect.com/journal/research-policy/vol/29/issue/2>
- Leydesdorff, L. & Etzkowitz, H. (2001). The transformation of university – Industry– government relations into a triple helix of innovation. *Electronic Journal of Sociology*, 5(4). https://www.researchgate.net/publication/248040198_The_transformation_of_university-industry-government_relations
- Leydesdorff, L. J., & Nowell, E. (2012). The triple helix, quadruple helix, . . . , and an N-tuple of helices: Explanatory models for Analyzing the. *Knowledge-Based Economy?*, 3(1), 25–35. <https://doi.org/10.1007/s13132-011-0049-4>
- Leydesdorff, L., Ivanova, I. A., & Meyer, M. (2019). Synergy in innovation systems measured as redundancy in triple helix relations. In W. Glänzel, H. F. Moed, U. Schmoch, & M. Thelwall (Eds.), *Springer handbook of science and technology indicators*. Cham: Springer. <https://link.springer.com/content/pdf/bfm:978-3-030-02511-3/1.pdf>
- Natário, M. M., Couto, J. P. A., & Almeida, C. F. R. (2012). The triple helix model and dynamics of innovation: A case study. *Journal of Knowledge-based Innovation in China*, 4(1), 36–54. <https://doi.org/10.1108/17561411211208758>
- Natário, M., Braga, A., Daniel, A., Rosa, C., & Salgado, M. (2014). The role of higher education institutions in the promotion of innovation in the triple helix approach. *Journal of Business Management and Applied Economics*, 3(5).
- Natário, M., Braga, A., Daniel, A., Rosa, C., & Salgado, M. (2017). Using a triple helix approach to examine interactions and dynamics of innovation in less-favoured regions: The case of the Portuguese

Polytechnic of Guarda. *Industry and Higher Education Journal*, 31(6), 351–359. <https://doi.org/10.1177/0950422217736564>

- Paula, R., Ferreira, M., Ferreira, M., & Pereira, S. (2017). O Modelo Hélice Triplíce como incentivo no Processo de Vantagem Competitiva. *Latin American Journal of Business Management, LAJBM*, 8(2), 93–116. SP, Brazil. <https://www.lajbm.com.br/index.php/journal/article/view/427/204>
- Van Hone, C., & Dutot, V. (2016). Challenges in technology transfer: An actor perspective in a quadruple helix environment. *The Journal of Technology Transfer*, 42(2), 1–17. <https://link.springer.com/article/10.1007/s10961-016-9503-6>
- Zhou, C. (2001). On science and technology field. *Science of Science and Management of S&T*, 22(4), 13–15. https://scholar.google.com/citations?view_op=view_citation&hl=pt-PT&user=qX6OYPMAAAAJ&cstart=20&pagesize=80&sortby=pubdate&citation_for_view=qX6OYPMAAAAJ:HevVnK7dagcC

Trust and Information

► Media Ethics

Trust Economy

► Access Economy (Ethics)

Turning Point

► Tipping Point

Two-Tier Board

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Synonyms

Dual board; Supervisory directors

Definition

Two-tier board, also known as the dual-system board, is the most important body in a corporation. It comprises the supervisory board (non-executive directors) and management board (executive directors) (Tricker 2012). The supervisory board provides oversight and monitoring over management board, yet without giving orders. It is also expected to offer counsel and advice to the executives if needed. The mandates of these two boards are kept separately. The supervisory board works collectively (Ruigrok et al. 2006; Larcker and Tayan 2011) balancing interests of all shareholders. Similarly to one-tier board also members of the supervisory board (directors) are required to have adequate knowledge, experience, and ethical stance in order to monitor the functioning of the company (Mallin 2004).

Two-tier board is usually compared to the alternative model known as the board of directors or one-tier board which is also discussed in the Encyclopedia. Two-tier board functions mostly in Germany, Austria, and Poland but is legally introduced also in other European countries such as Spain, Italy, and France, yet the majority of companies in these countries adopt one-tier model.

General Overview

Two tier board model, known also as dual board or dual system board, consists of the supervisory board and the management board. The supervisory board plays the central role in the corporate governance structure. The supervisory board is a team of high profile directors who work collectively to monitor the performance of executives and oversee the strategic development of the company. Beside the control function, the supervisory board role is also to provide advice to executives (Ruigrok et al., 2006; Tricker, 2012). Although the board does not have the legal right to give orders to executives, it bears the responsibility for the company performance. The incompetent and passive boards can act at the expense of the company and be detrimental to its survival.

Two tier board is usually compared with the alternative board model known as board of directors is also discussed in the Encyclopedia. Two tier board model system functions in Germany, Austria, the Netherlands, and Poland (Mallin, 2004). In several countries such as Italy, Spain, or France the law allows the company to choose the board model. Two tier model is then one of the existing options of the governance structure.

Functions and Duties

Similarly to the characteristics of one tier board, the work of the supervisory board is centered around its advisory capacity and oversight capacity (Larcker & Tayan, 2011). The board represents shareholders and provides oversight over the strategic development of the company. The board monitors risk management and induces the optimal contracts between the company and executives. It also assures for the company activity in accordance to the existing laws, shareholder interests and stakeholder expectations. In the language of the agency theory the supervisory board controls the rights to the residual claims of shareholders, mitigates the conflict of interests between shareholders and executives and lowers the agency costs (Fama & Jensen, 1983a, 1983b).

The principles of corporate governance (OECD/G20, 2015: 51) define the board tasks as follows: “Together with guiding corporate strategy, the board is chiefly responsible for monitoring managerial performance and achieving an adequate return for shareholders, while preventing conflicts of interest and balancing competing demands on the corporation. In order for boards to effectively fulfill their responsibilities they must be able to exercise objective and independent judgment. Another important board responsibility is to oversee the risk management system and systems designed to ensure that the corporation obeys applicable laws, including tax, competition, labor, environmental, equal opportunity, health, and safety laws. In some countries, companies have found it useful to explicitly articulate the responsibilities that the board assumes and those for which management is accountable”.

The director activity is embedded in three duties which include the duty of care, duty of loyalty, and duty of candor (Larcker & Tayan, 2011). The duty of care is defined as the director responsibility to make decision with due deliberation, be engaged in the board work, read necessary information and data, and undertake considerable discussions before decisions are made. The duty of loyalty is understood as mitigating the conflict of interests. The emergence of conflict of interest may be of the dynamic character – for instance, when the director does not have any conflict of interests but in a certain case or matter such problems may appear. Thus, the duty of loyalty requires immediate disclosure of such a potential conflict as well as refraining from taking advantage of this situation. This may mean that the director will exclude himself or herself from a particular voting or discussion. The duty of candor is defined as the obligation of the management and the board to inform shareholders about all matters which are important in the process of the evaluation of corporate and executives’ performance. Thus, the board is expected to take the necessary actions and to oversee the process of corporate reporting, the disclosure of data, and the information policy (Larcker & Tayan, 2011).

Composition and Structure

Directors Types

Corporate boards are powerful groups of strategic importance packed with high profile directors tied with a network of relations and behavioral processes (Hambrick et al., 2008) whose work determines the company performance and shareholder value (OECD/G20, 2015; Tonello, 2010). Directors bring value to the company in a number of ways – providing oversight and advise, delivering experience and know how, understanding the industry dynamics, challenging executives as well as increasing corporate reputation and legitimacy, improving communication and securing professional contacts (e.g., with business partners, investors, creditors, government, other authorities, powerful stakeholders).

The structural distinction of two tier board relies on the fundamental legal requirements that the mandates of members of the supervisory and the management board are kept separate.

Two tier board reveals a different structure as compared with the unitary board of directors. It is composed of two bodies – the supervisory board and management (executive) board. Specifically:

- The supervisory board encompasses only non-executive directors meaning directors who do not have the executive position in the company. This is a broad group of board members which may include.
 - Affiliated directors who have some material relationships with shareholders or executives, with major company suppliers or customers, company creditors or lawyers.
 - Independent directors who do not have any relations with the company of the nature listed above and were not an executive or an employee in the company for at least the last 5 years.
 - Outside directors who are recruited from the outside of the company.
 - Inside directors who usually include employees.
 - Constituency directors appointed by stakeholders.
- Management (executive) board which includes managers appointed to the executive positions of the company. Management board is a more elite body as compared with top management team or the group of directors.

Board Committees

The board tasks are executed during board meetings. Naturally, the board directors need to get prepared for such meetings, read corporate materials, collect necessary data, or ask for additional legal opinions. The work of the supervisory board, similarly, to the work on board of directors, tends to be divided into thematic sections to be discussed by specialized committees (Rezaee, 2010; Stiles, 2014). These committees most often include: audit committee, remuneration and nomination committee, risk management committee, succession committee, strategy committee, or related

party transaction committee. In addition, the formation of corporate governance, CSR, human relations committees is also noted.

Audit committee is responsible for overseeing the company's external audit and the communication between the company and the auditor. It acts with the prime goal to eliminate the risk of accounting manipulation and conflict of interest while assessing financial statement (Stiles, 2014; Tricker, 2012). Audit committee plays the central role in the control function of the board. In countries of high corporate governance standards, 100% of listed companies form audit committee within their boards. In majority of countries, the formation of the audit committee is the legal obligation of the company. Due to its essential role in corporate governance, it is recommended for the audit committee to be composed solely or in majority of independent directors. The main obligations of the audit committee include (Larcker & Tayan, 2011):

- Overseeing the practice of financial reporting and the standards of disclosure.
- Monitoring the application of accounting policies and practice.
- Monitoring the selection of the external auditor.
- Assuring for regulatory compliance.
- Assuring for internal control process.
- Monitoring the risk management policies.

Remuneration (compensation) committee is responsible for structuring the compensation schemes for the CEO as well as for other executive officers (Stiles, 2014). Its tasks encompass setting corporate goals expressed in financial, market, or organizational measures which illustrate their achievement or failure to achieve them. It also links these measures to selected components of the executive pay including fixed, variable, bonus, stock options, long term incentive program, deferred compensation and severance pay. Similarly to audit committee, compensation committee operates in 100% of listed companies in the USA and the UK. It is recommended that remuneration committee is fully or in majority composed of independent directors. The main

obligations of the audit committee include (Larcker & Tayan, 2011; Stiles, 2014)

- Setting the compensation for CEO and other executives.
- Formulating the performance-related goals with the corresponding performance measures and pay components.
- Deciding about the appropriate compensation structure.
- Overseeing CEO performance and the achievement of formulated goals.
- Advising on the pay of the non-executive directors.

In addition, the nominating, strategy and risk management committees are frequently formed within the boards. The nomination committee is responsible for recommending to the board individuals to be nominated as directors. The committee evaluates new candidates and current directors, while also hires consultants to assist in the process of succession. Directors in the strategy committee review corporate strategy and provide counsel to executives on the directions of the company development. The risk management committee reviews and recommends to the board the risk management and internal audit policy. In companies characterized with significant ownership concentration, the related party transaction is formed to monitor all transactions within the group with affiliated units.

Structural Shortcomings

As it is signaled above, two tier board is characterized by the separation of the executive and control functions. Such distinction between supervision and management may improve the objectivity and independence of non-executive directors. At the same time, however, it may be detrimental to the information flow and communication between these two bodies and may affect the quality of sessions between supervisory and management boards. In line with this argument the evidence from countries such as Italy, Spain, or France is used. While in these countries law

allows the company to choose the board model between one tier and two tier model, the vast majority (95%) prefer to organize its board according to the one tier model.

The influence of large shareholders on the appointment of board members is another essential topic of the functioning of the dual board. While in many countries shareholders may vote in groups (so that each shareholder group will have its representatives proportionally to the percentage of shares controlled), still block holders tend to dominate the board. This translates into the control over the board work and its agenda by large shareholders which may be at the cost of minority investors (Shleifer & Vishny, 1997).

Often the board may become a place for fights and conflicts between shareholders (McNulty, 2014; Tricker, 2012). This is observed for both one tier and two tier boards. The coalitions amongst shareholders are formed to proceed with certain resolutions referring to executive appointments, dividend payouts, or investment plans. The conflicts between minority and dominant shareholders are most often observed in countries and companies characterized with significant ownership concentration (continental Europe) and weaker investor protection (Asia, Latin America). Such conflicts when disclosed to the general public usually have a negative impact on firm valuation.

Finally, similarly to one tier model also the practice of the dual board reveals the existence of the interlocking directorates' phenomenon (Hillman & Dalziel, 2003; Pfeffer & Salancik, 1978). The links which secure access to scarce resources are formed between executive and supervisory boards or between supervisory boards of different companies. It may also happen that the executive director will serve as the non-executive director on the board of affiliated companies. Yet, the law usually forbids the situation that the executive director in the parent company (company A) would be the supervisory board member in the affiliated company (company B) to monitor the executives (in company B) who are at the same time the members of the supervisory board in the parent company (company A).

Behavioral Aspects

Boards are teams of high profile directors and as such they undergo the mechanisms of the group work (Pye, 2014) both in the case of two and one tier boards. The board dynamics, communication style, leadership patterns, and culture emerge in the process of the interactions between directors. Such interactions include formal meetings as well as informal situations. Existing literature provides interesting analyses on the conflict avoidance, cooperation of directors in board together, decision-making process and the emergence of values and norms. The behavioral processes are difficult to study and even more difficult to manage and control. Yet, they are viewed as one of the key factor to determine the quality of the board work. Naturally, the board structure and composition as well as the presence of procedures in place shape the behavioral patterns.

Studies identify behaviors of directors who intend to achieve certain goals while serving on the board. Tricker (2012) lists a number of games which directors play. These games include forming alliances and coalitions, conspiracy of silence cronyism, deal making, dereliction of duty, empire building, hidden and personal agendas, lobbying and sponsoring, log rolling, competing, snowing, manipulation, and window dressing.

Finally, the dynamics of the board work leads to the emergence of certain board culture which is defined as a collection of behaviors, norms, and values which drive director's work and engagement. Depending on the typology the board styles include:

- Active and passive boards.
- Financially and industry oriented boards.
- Board following the style of rubber stamp, representative board, country club board or professional boards.

National Versions

Two tier board is adopted in many companies. Its structure and the general construct is similar to the

models of the unitary board, yet some differences are observed. The comparative analysis reveals national differences with respect to the board composition, structure and practice. Below a brief characteristics of board in selected countries is presented (Aluchna, 2014; Mallin, 2004; Monks & Minow, 2004; Tricker, 2012):

- The German board is composed of on average 18–20 directors. According to the German law and the concepts of codetermination (Mitbestimmung) half of the board mandates are guaranteed for the representatives of employees. The remaining half of the board seats are taken by the representatives of shareholders and independent directors. Traditionally, large German banks appointed their representatives on the boards. Currently, the banks engagement is lower (estimated that ca. 30% of directors are bank representatives). In the case of large German companies, the presence of independent directors is estimated at 20–25%, with ca. 25–30% presence of female directors. It may look however different for smaller companies with concentrated ownership. Audit and remuneration committees are formed in 100% and nearly 100% of German boards, respectively.
- The Polish board is significantly smaller than its German peer and encompasses 6–7 directors. Majority of the board members are affiliated directors with the participation of independent directors at the level of ca. 20%. Women make for 13% of board members. Following the law 100% of companies form audit committee, while the remuneration committee is found on ca. 30% of boards.

Trends and Best Practice

The growing interest in the studies on the board composition, structure, and performance as well as the exchange of experience on the functioning of unitary and dual boards lead to better understanding of the work and processes. Studies report a significant dynamics of procedures of the board work and add to the formulation of a number of

guidelines and best practice. With the globalization of the stock market, the differences between unitary and dual board are diminishing since the key changes of the growing role of independent and female directors, response to stakeholder expectations, improvement of the board work, its evaluation and performance, as well as the identification of board working styles are similar. The key trends which also refer to the unitary board are discussed below.

Independent Directors

Independent directors are believed to deliver effective and objective monitoring free from the influence and pressure of various investor groups and from the management (Bhagat & Black, 1998, 2002; Gay, 2001; Gordon, 2007; Langevoort, 2004). Independent directors' goal is to add to accountability of the board, to deliver the highest ethical standards and to create shareholder value. Despite some criticism many studies indicate their positive impact on the financial performance (Duchin et al., 2010; Knyazeva et al., 2013; Nguyen & Nielsen, 2010) and social and relational capital (Johnson et al., 2013).

The analysis of independent director's presence on board reveals several shortcomings related mostly to the lack of motivation, insufficient industry expertise and weaker position within the boardroom.

Diversity and Female Directors

Numerous studies indicate that boards which reveal greater diversity perform better. The positive role of diversified board is related to the presence of directors with various backgrounds who add to the board discussion, may be more sensitive to non-routine changes in the environment and risk management as well as may be more responsive to stakeholder expectations. Diversity enriches leadership and creativity (Ferreira, 2010).

Within this line of research the participation of female directors is viewed as a corporate response to the growing women's presence in business and remains a measure to improve the quality of board work. Studies indicate a significant increase of female directors and even greater increase of

number of boards with at least one female director. The shortcoming of the process relates to the tokenism which describes situations when women are appointed to the board for the purpose of instrumental legitimacy. This limits the number of women participating on board while leading to multiple mandates by few successful female directors who are offered numerous board seats.

Stakeholders

With the consequences of globalization and growing stakeholder pressure companies need to adjust their strategies and operation (Donaldson & Preston, 2008; Verdeyen et al., 2004). These reforms are also expected at the board level – directors should acquire new skills and show understanding as social and environmental challenges and respond to new stakeholders' expectations (Khan et al., 2013; Rao & Tilt, 2016; Webb, 2004). As research document there is a link between a specific board characteristics and its engagement in improving the company reputation and performance. Particularly with respect to social and environmental results (Mallin and Michelson, 2011; Post et al., 2011, 2013; Mallin et al., 2013; Shaikat et al., 2016).

Best Practice and Recommendation

Corporate governance best practice offers recommendations to structure supervision and control. A substantial part of these recommendations addresses the board specifically emphasizing the following aspects (OECD/G20, 2015; PWC, 2017; Tricker, 2012):

- Appointing responsible, experienced and competent individuals of strong ethical stance. To be effective the board should be composed of committed and engaged directors, open to cooperation and contributing to the company. In addition, board directors should participate in trainings and continuously develop their knowledge and skills in order to be able to adjust to the changing requirements of companies and their environments.

- Assuring for strong independence on the board.
- Providing inclusion of stakeholder expectations to creating shareholder value, review of strategy and assessment of corporate performance.
- Assuring for effective board work with the formation of committees, collecting data, fulfilling all board responsibilities and tasks.
- Assuring high transparency standards strengthen with the regular self-assessment and procedures after the evaluation of the board.
- Assuring for board documentation and reporting (minutes).

Two Tier and Sustainability

In line with the identified relationships between corporate governance and sustainability research reveals the essential role of the supervisory board for ESG performance and disclosure. While the growing stakeholder and regulatory pressure stimulates companies to change their business mode and to minimize their negative impact on the natural environment and society, the board is expected to adjust accordingly. In consequence, the board tasks and responsibilities change towards greater attention devoted to issues such as climate change, GHGs emissions, waste management, inclusion and social inequality. The board directors need to take trainings and acquire new skills. Overall, the corporate culture and stakeholder orientation of the company, greater presence of female and independent directors on board, functioning of the specialized CSR/ sustainability committee on board as well as the chair orientation are found to be positively correlated with sustainability performance and disclosure.

Summary

Two tier board model (dual board, dual system board) consists of two separate corporate bodies – the supervisory board and the management board. Similar to the one tier model the supervisory board plays the central role in the corporate governance structure. It included only non-executive

directors, both affiliated and independent. The board directors work collectively to monitor the performance of executives, oversee the strategic development of the company and to provide advice to executives. Its main task is to represent the interest to shareholders and assure for the company development.

Cross-References

- ▶ [Board Committees and Corporate Governance](#)
- ▶ [Board Diversity and Gender Quotas](#)
- ▶ [Board Diversity and Inclusivity](#)
- ▶ [Board of Directors and Corporate Governance](#)
- ▶ [Diversity of Boards](#)

References

- Aluchna, M. (2014). *The dynamics of polish corporate governance*. LAP Lambert Academic Publishing.
- Bhagat S., & Black B. (1998). Independent directors in: Newman P (red.) *the new Palgrave dictionary of economics and the law*, Palgrave.
- Bhagat, S., & Black, B. (2002). The non-correlation between board independence and long term firm performance. *Journal of Corporation Law*, 27, 231–274.
- Donaldson, T., & Preston, L. (2008). The stakeholder theory of the corporation: Concept, evidence and implications. In A. Crane, D. Matten, & L. Spence (Eds.), *Corporate social responsibility* (pp. 139–165). London: Routledge.
- Duchin, R., Matsusaka, J., & Ozbas, O. (2010). When are outside directors effective? *Journal of Financial Economics*, 96, 195–214.
- Fama, E., & Jensen, M. (1983a). Separation of ownership and control. *Journal of Law and Economics*, 26, 301–325.
- Fama, E., & Jensen, M. (1983b). Agency problems and residual claims. *Journal of Law and Economics*, 26, 327–349.
- Ferreira, D. (2010). Board diversity. In H. Baker & R. Anderson (Eds.), *Corporate governance* (pp. 225–242). A Synthesis of Theory, Research and Practice: John Wiley & Sons.
- Gay, K. (2001). A boardroom revolution? The impact of the Cadbury nexus on the work of non-executive directors of FTSE 350 companies. *Corporate Governance: An International Review*, 9(3), 152–164.
- Gordon, J. (2007). Rise of independent directors in the United States, 1950–2005: Of shareholder value and stock market prices. *Stanford Law Review*, 59, 1465–1568.

- Hambrick, D., Werder, A., & Zajac, E. (2008). New directions in corporate governance research. *Organization Science*, 19(3), 381–385.
- Hillman, A., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396.
- Johnson, S., Schnatterley, K., & Hill, A. (2013). Board composition beyond independence: Social capital, human capital, and demographics. *Journal of Management*, 39(1), 232–261.
- Khan, A., Muttakin, M., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility: Evidence from an emerging economy. *Journal of Business Ethics*, 114(2), 207–223.
- Knyazeva, A., Knyazeva, D., & Masulis, R. (2013). The supply of corporate directors and board independence. *The Review of Financial Studies*, 26(6), 1561–1605.
- Langevoort, D. (2004). The human nature of corporate boards: Laws, norms and the unintended consequences of independence and accountability. In T. Joo (Ed.), *Corporate governance. Law, theory and policy* (pp. 337–347). Carolina Academic Press.
- Larcker, D., & Tayan, B. (2011). *Corporate governance matters*. Pearson Education, New Jersey: A closer look at organizational choices and their consequences.
- Mallin, C. A. (2004). *Corporate governance*. Oxford University Press.
- Mallin, C., Michelon, G., & Raggi, D. (2013). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure. *Journal of Business Ethics*, 114(1), 29–43.
- McNulty, T. (2014). Process matters. Understanding board behavior and effectiveness. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance*, Oxford university press (pp. 163–176). Oxford.
- Monks, R. A., & Minow, N. (2004). *Corporate governance*. Blackwell Publishing.
- Nguyen, B.-D., & Nielsen, K. (2010). The value of independent directors: Evidence from sudden deaths. *Journal of Financial Economics*, 98, 550–567.
- OECD/G20. (2015). Principles of corporate governance, OECD, <https://www.oecd.org/daf/ca/Corporate-Governance-Principles-ENG.pdf>
- Pfeffer, J., & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper and Row Publishers.
- Post, C., Rahman, N., & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. *Business and Society*, 50(1), 189–223.
- PWC. (2017). The governance divide boards and investors in a shifting world, <https://www.pwc.es/es/publicaciones/consejos-y-buen-gobierno/pwc-2017-annual-corporate-directors-survey.pdf>
- Pye, A. (2014). Boards and governance. 25 years of qualitative research with directors of FTSE companies. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance*, Oxford university press (pp. 135–162). Oxford.
- Rao, K., & Tilt, C. (2016). Board composition and corporate social responsibility: The role of diversity, gender, strategy and decision making. *Journal of Business Ethics*, 138, 327–347.
- Rezaee, Z. (2010). Board subcommittees for corporate governance in: Baker H., Anderson, R. (eds.) corporate governance. A synthesis of theory, research and practice, John Wiley & Sons, Hoboken, 243–262.
- Ruigrok, W., Peck, S., & Keller, P. (2006). Board characteristics and involvement in the strategic decision-making: Evidence from Swiss companies. *Journal of Management Studies*, 43, 1201–1226.
- Shaukat, A., Qiu, Y., & Trojanowski, G. (2016). Board attributes, corporate social responsibility strategy, and corporate environmental and social performance. *Journal of Business Ethics*, 135, 569–585.
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783.
- Stiles, P. (2014). Board committees. In M. Wright, D. Siegel, K. Keasey, & I. Filatotchev (Eds.), *The Oxford handbook of corporate governance* (pp. 177–199). Oxford: Oxford University Press.
- Tonello, M. (2010). Board composition and organization issues in: Baker H., Anderson, R. (eds.) corporate governance. A synthesis of theory, research and practice, John Wiley & Sons, Hoboken, 195–223.
- Tricker, B. (2012). *Corporate governance. Principles, policies and practices*. Oxford: Oxford University Press.
- Verdeyen, V., Put, J., & van Buggenhout, B. (2004). A social stakeholder model. *International Journal of Social Welfare*, 13(4), 325–331.
- Webb, E. (2004). An examination of socially responsible firms' board structure. *Journal of Management and Governance*, 8, 255–277.

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Ubuntu

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Introduction

Ubuntu cannot be defined with precision, yet it forms part of uniquely South African jurisprudence. It is associated with how human beings ought to treat each other. Bennet (2018) argued that establishing a precise and definite meaning of *ubuntu* is impossible. In that light *ubuntu* can only be understood in its connotation, shades of meaning that are associative, expressive, attitudinal, and evaluative (Bennet 2018; Mokgoro 2012). It is something that can only be observed from the living experiences of indigenous black persons (Mokgoro 2012). In that light the connotation of *ubuntu* is expressed as group solidarity, conformity, compassion, respect, human dignity, humanistic orientation, and collective unity (Mokgoro 2012). It is understood as a concept that is deeply rooted in African indigenous societies (Gade 2011).

According to Bennet (2018), the underlying meaning of *ubuntu* is the right way of being a human being and being a human being through the community. Archbishop Tutu during the Truth and Reconciliation Commission emphasized African morality and self-worth and highlighted

ubuntu as a way to deal with the pain of the past and work toward forgiveness and a common feature of interdependent people (Bähre 2002). Bähre (2002) conducted empirical research on financial mutuals in Cape Town found that *ubuntu* can mean many things to different people. During his fieldwork, he found that his research subjects did not refer to *ubuntu* to explain their behavior, they emphasized helping each other, and when asked if helping each other is *ubuntu*, they agreed (Bähre 2002). Gade (2012) also conducted a qualitative investigation; the different interpretations of *ubuntu* found that there is no consistency in the way in which indigenous persons describe *ubuntu*; it is either described as a moral quality of a person or a phenomenon according to which persons are interconnected.

Ubuntu and the South African Law

Although *ubuntu* was part of the indigenous South African living experience, it was not included in the law. The Constitutional Court in *Azanian People's Organisation (AZAPO) and Others v President of the Republic of South Africa* explained that the word was included in the Interim Constitution (Constitutional Court of South Africa 1996). The word was omitted in the final constitution, except paragraph 22 of schedule 6, which preserves the epilogue of the interim constitution (Muvangua and Cornell 2012).

In private law, the focus is on the actual relationship between the persons involved and the appropriate order as a remedy which considers the need to do justice between individuals. The use of *ubuntu* in contracts is quite contentious and has resulted in numerous debates by the courts and academics. This is because there is a lack of contextualization of *ubuntu* in the context of contracts. *Ubuntu* is equated to other common law principles such as good faith and public policy. In that light, the courts are unclear, and the law is unclear regarding contracts and *ubuntu*. *Ubuntu* is a constitutional value; the question is always how the courts can interpret *ubuntu* in contracts between the parties. For example, in the constitutional case of *Barkhuizen v Napier*, the appellant was an insured in a short-term insurance contract with the respondent. In this case, the insured instituted a claim against the insurer who raised a special plea that it was released from liability because the appellant had failed to institute an action within 90 days as stipulated in the contract. The appellant argued that the period specified in the contract contravened the constitutional right to access to courts. Justice Ngcobo who penned the majority judgment noted that public policy considers the need to do simple justice between individuals which is informed by *ubuntu*. Justice Ngcobo equated *ubuntu* to public policy; he did not elaborate further; it is unclear whether *ubuntu* and public policy are interchangeable or are words that denote the same meaning. The court found that time limitation clauses are permissible; the right to access to courts can be limited if justifiable, fair, and reasonable (Constitutional Court of South Africa 2007).

In an unreported High Court matter of *Mall Space Management v Liberty Group Limited*, the applicant argued that the common law principles of contract law should relax the principle that a mandate may be terminated at any moment by the principal in light of *ubuntu* and fairness. The court found that given the circumstances, in which the parties had a contractual relationship of over 20 years, 5 days' notice to terminate the contract was unreasonable and offending constitutional values of *ubuntu*, fairness and dignity. The court granted a court order that interdicted the respondents from terminating the agreement or mandate

between the applicant and the respondents for 6 months (Gauteng Local Division High Court of South Africa 2018). The judgment appears to be an example of judgments that Judge Wallis (2016) warned against in an article where he explained the importance of commercial certainty. Judge Wallis argued that the problem with the judgments is the suggestion that enforcement of contractual obligations is dependent on a judicial sense of fairness, reasonableness, and good faith as opposed to the terms of the contract. He also noted that the other problem is that there is no guidance on how the descriptors of *ubuntu* are to be made applicable in the context of contractual relationships (Wallis 2016). According to Hutchison (2017), commercial certainty is a policy choice; therefore the "underlying" value of good faith could instead be foregrounded if this was found to be in line with a new African policy direction that the Constitutional Court wished to follow.

Ubuntu is also used in property cases, for example, in the constitutional case of *Shoprite Checkers (Pty) Ltd v MEC for Economic Development, Eastern Cape*, the appellant held a grocer's wine liquor license enabling it to sell wine and grocery on the same premises. The Eastern Cape Act changed and provided that wine licenses continue for 10 years and that after 5 years they could be converted to registrations permitting the sale of liquor from dedicated premises. The issue was whether the license constituted property and whether the promulgation of the Act led to the deprivation of property rights. The court found that a license constituted property. The court further discussed the nature of property rights in line with the Constitutions. It found that property is not an absolute right and that the Constitution envisages a society based on the fundamental values of dignity, freedom, and equality. The court emphasized that:

The notion that we are not islands unto ourselves is central to the understanding of the individual in African thought. It is often expressed in the phrase *umuntu ngumuntu ngabantu* which emphasises communality and the interdependence of the members of a community and that every individual is an extension of others.

In that light, the court explained that property should also serve a public good. The court

confirmed the declaration that Shoprite had been deprived of its property (Constitutional Court of South Africa 2015).

The Companies Act does not mention *ubuntu*. Nonetheless, King IV (2016) mentions *ubuntu*. Given that corporate governance deals with processes and functions of companies, therefore, *ubuntu* can be used to inform the process of decision-making. King IV defines corporate governance as the exercise of ethical and practical leadership by the governing body. King IV further defines ethics as considering what is good and right for the other and can be expressed in terms of the golden rule to treat others as you would like to be treated. Also, ethics are the ethical values applied to decision-making and the relationship between the organization, stakeholder, and the broader society. King IV also acknowledges the organization as an integral part of the society which is supported by *ubuntu*. The practical implication of the concept is not well articulated; King IV merely states that it means that there should be a common purpose to all human endeavors which is based on service to humanity (Institute for Directors 2016). Taylor (2004) contextualized *ubuntu* and argued for a framework for ethical business decision-making. Taylor argued that *ubuntu* must be a model for decision-making in business – which means that an action is right insofar as it promotes cohesion, reciprocal values among people. Further, an action is wrong insofar as it damages relationships. Taylor outlined the steps of decision-making in businesses as follows: analyze the situation, take action, and test it against the components of *ubuntu* (Taylor 2004).

In the sphere of criminal law, *ubuntu* is a vehicle for restorative justice. One of the first cases to use the concept of restorative justice was *S v Makwanyane*; the Constitutional Court found that the death penalty is unconstitutional (Constitutional Court of South Africa 1995). The court affirmed that *ubuntu* demands a system of justice that seeks to heal the rift in the society caused by the wrongdoer (Muvangua and Cornell 2012). Restorative justice is also used in the law of defamation, for example, in *Dikoko v Mokhatla*, the Constitutional Court ordered an apology instead of a quantum of damages to address the

need for reconciliation and social harmony (Constitutional Court of South Africa 2006; Bennet 2018).

Most legal concepts require precision for the purposes of legal certainty; *ubuntu* does not meet the requirement. Nonetheless, the courts have attempted to show how *ubuntu* can be used in different cases to reflect the living practices of South Africans.

Summary

For decades, one of the most popular ideologies in South Africa is *ubuntu*, pronounced oo-boon-too. It is basically an umbrella term that is used to describe how human beings ought to treat each other. This chapter gives a general understanding of *ubuntu* from different perspectives of law, namely, contracts, property, criminal law, company law, and delict.

References

- Bähre, E. (2002). *Money and violence: Financial mutuels among the Xhosa in Cape Town, South Africa*. Amsterdam: Universiteit van Amsterdam.
- Bennet, T.W. (2018). *Ubuntu: An African jurisprudence*. Cape Town: Juta.
- Constitutional Court of South Africa. (1995). Case CCT 3/94. 'State versus T Makwanyane and M Mchunu'. <http://www.saflii.org/za/cases/ZACC/1995/3.html>. Accessed 30 May 2019.
- Constitutional Court of South Africa. (1996). Case CCT 17/96. 'Azanian People's Organisation, Azanian People's Organisation, Nontsikelelo Margaret Biko, Churchill Mhleli Mxenge, Chris Ribeiro versus President of the Republic of South Africa, Government of the Republic of South Africa, Minister of Justice, Minister of Safety and Security, Chairperson of the Truth and Reconciliation Commission'. <http://www.saflii.org/za/cases/ZACC/1996/16.html>. Accessed 30 May 2019.
- Constitutional Court of South Africa. (2006). Case CCT 62/05. 'David Dikoko versus Thupi Zakharia Mokhatla'. <http://www.saflii.org/za/cases/ZACC/2006/10.html>. Accessed 30 May 2019.
- Constitutional Court of South Africa. (2007). Case CCT 72/05. 'Barend Petrus Barkhuizen versus Ronald Stuart Napier'. <http://www.saflii.org/za/cases/ZACC/2007/5.html>. Accessed 30 May 2019.
- Constitutional Court of South Africa. (2015). Case CCT 216/14. 'Shoprite Checkers (Pty) Ltd v Member of

- the Executive Council for Economic Development, Environmental Affairs and Tourism, Esstern Cape and Others'. <http://www.saflii.org/za/cases/ZACC/2015/23.html>. Accessed 30 May 2019.
- Gade, C. B. (2011). The historical development of the written discourses on Ubuntu. *South African Journal of Philosophy*, 30(3), 303–329.
- Gade, C. B. (2012). What is Ubuntu? Different interpretations among south Africans of African descent. *South African Journal of Philosophy*, 31(3), 484–503.
- Gauteng Local Division High Court of South Africa. (2018). Case 34177/17. 'Mall Space Management CC t/a Mall Space Management versus Liberty Group Limited, Liberty Two Degrees, Pareto Limited, JHI Retail (Pty) Ltd and Excellerate Brand Management (Pty) Ltd'. <https://jutastat-juta-coza.ezproxy.uct.ac.za/nxt/gateway.dll?f=templates&fn=default.htm&vid=Publish:10.1048/Enu>. Accessed 30 May 2019.
- Hutchison, A. (2017). Decolonising South African contract law: An argument for synthesis. In L. Siliquini Cinelli & A. Hutchison (Eds.), *The constitutional dimension of contract law: A comparative perspective* (pp. 151–181). Cham: Springer.
- Institute for Directors (South Africa). (2016). King IV report on corporate governance for South Africa. <https://www.iodsa.co.za/general/custom.asp?page=KingIVReport&DGPCrPg=1&DGPCrSrt=6A>. Accessed 10 May 2019.
- Mokgoro, Y. (2012). Ubuntu and the law in South Africa. In C. Drucilla & M. Nyoko (Eds.), *Ubuntu and the law: African ideals and post-apartheid jurisprudence* (pp. 317–323). New York: Fordham University Press.
- Muvangua, N., & Cornell, D. (2012). *Ubuntu and the law: African ideals and post-apartheid jurisprudence*. New York: Fordham Univ Press.
- Taylor, D.F.P. (2004). Defining *ubuntu* for business ethics – a deontological approach. *South Africa Journal of Philosophy*, 33(3), 331–345.
- Wallis, M. (2016). Commercial certainty and constitutionalism: Are they compatible? *South African Law Journal*, 133(3), 545–568.

UK Corporate Governance Code (2010)

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Synonyms

Board Behaviour; Combined Code

Description

The *UK Corporate Governance Code (2010)*, hereafter called the *UKGC Code*, provides the framework of guidelines on best practice in corporate governance for corporations listed on the main markets of the London and Irish Stock Exchanges. The *UKGC Code* has statutory backing for listed corporations as compliance with the *UKGC Code* is a requirement of the Financial Conduct Authority's *Listing Rules*. Corporations listed on the London Stock Exchange must comply with the *Listing Rules* under the Financial Services and Markets Act (2000). Moreover, listed corporations must disclose that they have complied with the *UKGC Code* or provide explanations where they have not. The *UKGC Code* originates from the *Cadbury Report (1992)*, the recommendations of which were developed in the *Combined Codes* of 1998, 2003, 2006, and 2008. The creation of the *UKGC Code* was a primary outcome of the *Walker Review of the Effectiveness of Corporate Governance in the UK Banks and Other Financial Institutions (2009)* (the *Walker Review*). Relative to prior codes of best practice, considerably more encouragement is given to boards of directors to follow the spirit of the *UKGC Code* as well as its letter. Sustainable performance as a means of long-term wealth generation is a dominant theme. This entry presents the background to the *UKGC Code* and discusses its principles and provisions with a focus on those that are distinct from previous guidelines in place in the UK. The entry concludes by evaluating the extent to which the *UKGC Code* serves to promote accountability and corporate value creation.

Background

Following the financial crisis and the publication of the *Walker Review* in 2009, the Financial Reporting Council (FRC) reviewed the *Combined Code (2008)* and, in June 2010, replaced it with the *UKGC Code*. The 2010 edition of the *UKGC Code* consists of 18 main principles and 52 provisions which fall under 5 categories: board leadership, effectiveness, accountability,

remuneration, and relations with shareholders. Pursuant to the recommendations of the *Walker Review*, many of the provisions of Section E of the *Combined Code* (2008) which dealt with institutional investors were removed and replaced by the separate *UK Stewardship Code* (2010), which aims to promote the generation of long-term returns to shareholders. Relative to the *Combined Code* (2008), the *UKCG Code* places more emphasis on risk management and external board evaluation.

The *UKCG Code* (2010) is reflective of the *Combined Code* (2008) framework in that many of its guidelines are set out in quite general terms so as to allow for variation in corporate size and circumstances. Like its predecessor, it is adopted on a “comply-or-explain” basis. “Comply-or-explain” means that a corporate must either comply with the *UKCG Code*’s principles or explain why it has not done so. The main idea behind this mechanism is to create a dialogue between investors and corporates (O’Dwyer 2014). If the corporate fails to adequately explain non-compliance with *UKCG Code* principles, or investors are dissatisfied with the explanation given, the investors can then use their rights to question the board (O’Dwyer 2014); alternatively they can sell their shares in the corporate. The *UKCG Code* discourages the use of “boilerplate” or meaningless explanations for non-compliance (preface, para. 7). Ultimate responsibility remains with the investor to judge disclosures and, if dissatisfied, voice their concerns with management or sell their shares in the corporate. One of the more novel aspects of the *UKCG Code* is its encouragement of board chairmen to report personally to shareholders as to how the principles relating to the role and effectiveness of the board have been applied (preface, para. 7).

Board Leadership

Many of the recommendations in respect of board leadership originate in the *Walker Review* (2009). The *UKCG Code* advises every corporate should be headed by an effective board which is collectively responsible for the long-term success of

the corporate (principle A.1). Heretofore, best practice principles in the UK did not specify the “long-term” nature of this responsibility. Indeed, the *UKCG Code*’s introduction begins by clarifying that “the purpose of corporate governance is to facilitate effective, entrepreneurial and prudent management that can deliver the long-term success of the company” (“Governance and the Code,” para 1). Thus, from the outset, the *UKCG Code* encourages board level decision-making toward sustainable improvements in corporate performance and stable growth in wealth. The role of board chairman is defined in extensive terms. While this role was addressed to a considerable extent in previous guidance, the *UKCG Code* is the first to devote a principle to the chairman. The chairman’s responsibility for board leadership and ensuring the board’s effectiveness in all aspects of its role (principle A.3) extends to promoting a culture of openness and debate by facilitating the effective contribution of non-executive directors in particular and ensuring their constructive relations with executive directors (supporting principle A.3). Consistently, nonexecutive directors are expected to constructively challenge and help develop proposals on strategy (principle A.4). This principle also represents a deviation from the approach taken in previous guidance where the leadership role of nonexecutive directors was not exclusively addressed. Boards are advised to appoint one of the independent nonexecutive directors to be the senior independent director to provide a “sounding board” for the chairman and to serve as an intermediary for other directors when necessary (provision A.4.1).

Board Effectiveness

The *UKCG Code* sets out as a main principle that the board, and its committees, achieves a balance of skills, experience, independence, and knowledge of the corporate to enable them to discharge their respective duties and responsibilities effectively (principle B.1). While the importance of balance in these respects was acknowledged in the *Combined Code* (2008, principle A.3), the

UKCG Code promotes their significance as a basis for effectiveness at both board and committee level. Alongside balance, the importance of diversity on the board is emphasized to a much greater extent than was previously the case. The *Combined Code's* (2008) guidance toward a formal, rigorous, and transparent procedure for the appointment of new directors to the board is retained (principle B.2). However, a supporting principle advising that appointments be made on merit, against objective criteria is expanded upon, to advise that due regard should be given to the benefits of diversity on the board, including gender. Consistent with prior recommendations, the board is advised to undertake a formal and rigorous annual evaluation of its own performance and that of its committees and individual directors (principle B.6). The *UKCG Code* goes somewhat further in this respect by introducing a new supporting principle that the chairman should act on the results of the evaluation by recognizing the strengths and addressing the weaknesses of the board and, where appropriate, proposing new members be appointed to the board or seeking the resignation of directors. The inclusion of such advice illustrates quite effectively the *UKCG Code's* encouragement for boards to comply with the spirit as well as with the letter of the *Code*, explicitly, to avoid taking a “box-ticking” approach. The guidance for FTSE 350 corporations is more demanding than in previous guidance. These corporations are expected to have their performance evaluation facilitated by an independent external facilitator at least every 3 years. Moreover, the *UKCG Code* introduces a new provision that all directors of FTSE 350 corporations should be subject to annual election by shareholders (provision B.7.1). Such frequent reelection had not been specified in the *Combined Code* (2008). The time requirements associated with a board position and the risk of directors becoming overburdened were already addressed in a considerable level of detail in the *Combined Code* (2008, supporting principle A.4; provisions A.4.3 and A.4.4), yet the issue was not addressed as a main principle. As a result of concerns raised in the *Walker Review* (2009), the *UKCG Code* gives

this issue greater prominence by guiding that all directors should allocate sufficient time to the corporate, to discharge their responsibilities effectively (principle B.3).

Accountability

Reflective of its postcrisis construction, the *UKCG Code's* guidance on financial and business reporting is more rigorous, particularly with regard to communicating its strategy for delivering long-term value to shareholders. The board is instructed to include in the annual report an explanation of the basis on which the corporate generates or preserves value over the longer term and the strategy for delivering the objectives of the corporation (provision C.1.2). Greater emphasis is placed on the board's responsibility for risk management with regard to determining the nature and extent of the significant risks it is willing to take in achieving its strategic objectives and for the maintenance of sound risk management and internal control systems (principle C.2). Heretofore, the board's role in this respect was addressed in supporting principles, in terms of working within a framework of prudent and effective controls that enable risk to be assessed and managed and satisfying themselves that systems of risk management are robust and defensible. While the *UKCG Code's* guidance on the role and responsibilities of the audit committee remains relatively similar to that offered within the *Combined Code* (2008, principle C.3), the FRC's work on the *UKCG Code* was followed by a revision and updating of its specific “Guidance on Audit Committees.” This individual guidance was issued in 2012 (FRC 2012).

Remuneration

The *UKCG Code* strongly guides boards to structure remuneration such that incentives are created to maximize corporate value in the long term. The *Combined Code's* (2008) recommendation that a significant proportion of executive directors' remuneration should be structured so as to

link rewards to corporate and individual performance is retained (principle D.1). However, the *UKCG Code* supports this principle by adding that the performance-related elements of executive directors' remuneration should be stretching and designed to promote the long-term success of the corporate. The *UKCG Code* recommends that payments and share option grants made under incentive schemes should be subject to performance criteria reflecting the corporate's objectives, including nonfinancial performance metrics where appropriate. Furthermore, remuneration incentives should be compatible with risk policies and systems (schedule A, para 5). The recommendations of the *Walker Review* are echoed in the advice that boards should consider the use of measures that permit the corporate to reclaim variable components of directors' salaries in exceptional circumstances of misstatement or misconduct (schedule A, para 7).

Relations with Shareholders

Since the *UKCG Code* is accompanied by the separate *Stewardship Code*, its recommendations in relation to shareholders pertain only to the board's position and are thus more limited than those of the *Combined Code* (2008, section D). While responsibility for ensuring that a satisfactory dialogue with shareholders continues to be considered to reside with the board as a whole (principle E.1), the supporting principles add that the chairman should take responsibility for ensuring that all directors are made aware of shareholders' concerns. Principle E.2 of the *UKCG Code* retains the *Combined Code's* (2008) recognition of the annual general meeting as the primary occasion for the board's constructive communication with shareholders (principle D.2).

Summary

The introduction of the *UKCG Code* in 2010 marked a concerted effort to encourage boards of directors to preserve the long-term value of

UK corporates. Many of the principles and provisions set a distinct tone of prudence and sustainable performance improvements, strongly resonating with lessons learned over the course of the financial crisis. Nevertheless, the *UKCG Code* maintains the flexible approach taken in previous best practice guidelines. Indeed, it might be considered something of a lost opportunity to promote more rigorous monitoring of executive behavior. For instance, given the significance of board meetings in facilitating a flow of information between executive and non-executive directors, more guidance on an appropriate frequency of board meetings may have been welcomed, particularly given the potential scheduling challenge faced by internationally diverse boards (Hahn and Lasfer 2016). Similarly, guidelines on independence remain very much open to interpretation, and it is largely left at the discretion of the board to determine if a director is independent in character and judgment (Mallin et al. 2015). That said, the *UKCG Code's* promotion of deeper consideration and more meaningful disclosures by directors, in particular by the chairman, sets a high standard of accountability which ought to foster maintainable wealth creation.

Cross-References

- [Accountability](#)
- [Greenbury Report \(UK\)](#)
- [Hampel Report \(UK\)](#)
- [Higgs Report \(UK\)](#)

References

- Cadbury, A. (1992). *Committee on the financial aspects of corporate governance*. London: Gee.
- Financial Reporting Council. (2008). *The combined code on corporate governance, June 2008*. London: The Financial Reporting Council Ltd..
- Financial Reporting Council. (2010). *The UK Corporate Governance Code, June 2010*. London: The Financial Reporting Council Ltd..
- Financial Reporting Council. (2012). *Guidance on audit committees, September 2012*. London: The Financial Reporting Council Ltd..

- Hahn, P. D., & Lasfer, M. (2016). Impact of foreign directors on board meeting frequency. *International Review of Financial Analysis*, 46, 295–308.
- Mallin, C., Melis, A., & Gaia, S. (2015). The remuneration of independent directors in the UK and Italy: An empirical analysis based on agency theory. *International Business Review*, 24(2), 175–186.
- O'Dwyer, A. (2014). Corporate governance after the financial crisis: The role of shareholders in monitoring the activities of the board. *Aberdeen Student Law Review*, 5, 112–133.
- Walker, D. (2009). *A review of corporate governance in UK banks and other financial industry entities: Final recommendations*. http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/d/walker_review_261109.pdf. Accessed 22 Mar 2020.

UN Declaration on Cleaner Production

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Synonyms

IDCP; UNEP IDCP

Definition/Description

The United Nations Environment Program International Declaration on Cleaner Production (UNEP IDCP) is a voluntary and public statement by which signatories demonstrate their commitment to the implementation and promotion of cleaner production (CP) practices.

The Declaration is a statement of commitment to cleaner production practices that can be applied in all aspects of economic activity. It proves the dedication of organizations to avoid the negative impact of “end-of-pipe” solutions and devote their efforts towards creating a more sustainable pattern of production from beginning to end of production process (UNEP 2001).

It provides an opportunity to obtain a commitment from both political or public organizations (UNEP 2001) and private business leaders

worldwide. Such a declaration has been signed by a number of government agencies of different countries, and some of the biggest companies in the world, such as the BMW Group (2001). Alongside ensuring general recognition of the benefits of cleaner production, the declaration aims to promote the concept of cleaner production among different stakeholders, aiming at broader adoption of cleaner production worldwide. It is a tool for spreading of cleaner production strategies and attracting new advocates from both business and governments (UNIDO 2002).

The formulation of the declaration text was performed by The United Nations Environment Programme (UNEP) in consultation with diverse interest groups. The implementation of the declaration is coordinated and monitored by UNEP. Through signing the declaration, organizations commit to the following core principles: leadership; awareness, training, and education; integration; research and development; communication; and implementation of cleaner production practices (UNEP 2001).

Cleaner Production

The concept of cleaner production was first introduced in the 1980s. It is related to establishing more environmentally sustainable practices in production processes, and producing more environmentally friendly products and services. The most common definition of cleaner production is provided by the United Nations Environment Programme. Cleaner production is defined as “the continuous application of an integrated preventive environmental strategy applied to processes, products and services to increase eco-efficiency and reduce risks to humans and the environment” (Schaltegger et al. 2008, p. 4).

Cleaner production is regarded as beneficial to both companies that implement cleaner production practices into their processes (for example, in lowering pollution license fees), and the environment.

Establishing cleaner production practices could be done in all steps of the production process. Such practices could be associated with change in technology, changes in input materials,

change in operating practices, changes in product design, changes in waste use, changes in packaging, etc. A proactive approach towards both environmentally sound and cost-minimization approaches is conceived as the sustainable approach towards production (UNEP 2001). While the initial CP concept was oriented towards industrial production practices, in the years that followed it reshaped towards nonindustrial sectors as well (Hens et al. 2018).

Since the Rio de Janeiro Conference of 1992, cleaner production has become part of the overall sustainable development framework. Cleaner production is closely related to other sustainability concepts such as eco-efficiency, environmental sound technologies, life cycle assessment, green procurement, and zero emissions. Cleaner production and eco-efficiency have been regarded as “two sides of the same coin,” with cleaner production stressing on means and eco-efficiency – on objectives (van Berkel 2006). Both concepts are gaining momentum but there is yet room for enhancement of the strategic recognition (van Berkel 2006) and emancipation from the image of instruments for promotion of mostly environmental-protection measures as opposed to business efficiency instruments.

Nowadays, CP is also closely associated with the green economy and blue economy frameworks, as well as developing fields of business practices such as corporate social responsibility (CSR) (Hens et al. 2018).

History of UNEP Cleaner Production Activities

The World Cleaner Production Program was initiated by UNEP in 1989 (Nowak and Cichy 2008). The primary objectives of UNEP’s cleaner production activities after the initiation of the program were to raise awareness about the cleaner production concept and to promote its adoption by industry (UNEP 2001).

In 1994, as part of the results from the 1992 Rio Conference UNEP and the United Nations Industrial Development Organization (UNIDO) launched the worldwide national CP center program (UNIDO 2002).

Since the start of the program in 1994 up to 2002, the organizations established 22 cleaner

production centers where provision of industrial technical expertise, strategic environmental expertise, training, information, and policy analyses were provided (UNIDO 2002).

Since that time, cleaner production has been widely promoted as a win-win strategy to improve industrial performance and simultaneously protect the environment. Nevertheless, the commitment to adopt and practice the cleaner production concept has not been as widespread as one would like to have.

It is within the framework of the cleaner production program of UNEP that the International Declaration on Cleaner Production (IDCP) was developed. In 1998, as part of the overall strategic actions for promotion of cleaner production, UNEP prepared the International Declaration on Cleaner Production, which constitutes a voluntary public statement of commitment to the strategy and practice of cleaner production. It was presented to the public during the high-level CP Meeting CP5 in October 1998 with 67 initial signatories (UNIDO 2002). Since then, other national and international organizations continue to sign the Declaration as declaration partners. As of November 2001, the number of signatories of the IDCP totals over 1000 organizations, among which 45 national governments (UNIDO 2002). In addition to the formal commitment through the IDCP, the UNEP has also developed implementation guidelines that aim to aid organizations (UNEP 2001).

Following the development of the organizational actions for promotion of CP, the joint UNIDO-UNEP global Resource Efficient and Cleaner Production Program (RECP) was formulated and approved in 2009 (Hens et al. 2018). The first global UNIDO-UNEP RECP program meeting was held in Switzerland in October 2009 and was hosted by the Government of Switzerland (UNIDO 2020). Following the endorsement of the RECP network (RECPnet), the global RECPnet in developing and transition countries was officially established in November 2010 by 41 signatories of the RECPnet charter (UNIDO 2020) with the primary objective of the RECPnet being to contribute to the effective promotion and implementation of RECP, to foster North–South

and South–South collaboration, as well as technology transfer and policy collaboration (UNIDO 2020).

Principles and Goals of the International Declaration of Cleaner Production

The main goal of the IDCP is to encourage support for the adoption of CP practices by organizations, and promote commitment and cooperation between actors. A second goal of the IDCP is considered to be spreading awareness of the concept of CP (UNIDO 2002). The International Declaration defines cleaner production as “the continuous application of an integrated, preventive strategy applied to processes, products and services in pursuit of economic, social, health, safety and environmental benefits” (Hens et al. 2018, p. 4).

The Declaration is based on six principles that comprise the commitment of organizations. They are perceived as an action framework that provides a general overview of activities related to the adoption and implementation of signatory CP strategy (UNIDO 2002). Through the International Declaration on Cleaner Production, UNEP has been working to gain the necessary commitment from governments, from companies, from industry associations, and from academia – from all the stakeholders who have a role to play in the big picture of sustainable production and consumption (UNEP 2001).

When organizations take the decision to commit to cleaner production practices via signing a declaration on cleaner production, they are to commit to the following principles:

- Leadership
- Awareness, education, and training
- Integration
- Research and development
- Communication
- Implementation (UNEP 2001)

Upon committing to the above-mentioned principles, organizations that choose to sign a declaration are obliged to fulfill certain actions in

promotion of cleaner production practices. In accordance with the organizations’ affairs and conduct, not all recommended implementation actions may be applicable, so it is advised that they develop an individual strategy for implementing the cleaner production principles (UNEP 2001).

Obstacles for Cleaner Production Practices Implementation and Criticism

Cleaner production practices are generally rapidly infiltrating all levels of economic activity – from agriculture, manufacturing to the service sector. However, there are still certain barriers to implementing cleaner production practices to the fullest extent.

While conceptually cleaner production has been a constantly developing concept (Hens et al. 2018), it is the application of CP practices that is the most important obstacle. It has taken some time for both investors and business to acknowledge the importance of CP and reach to the understanding of economic profitability of CP businesses as well as its environmental benefits (Hens et al. 2018). However, constant efforts in promotion and education of CP advocates has had a significant effect with recent findings suggesting that environmental passion among entrepreneurs affects both entrepreneurial behavior and identity, therefore proving that entrepreneurial orientation towards environmentally sound production is passion and identity relevant (De Bernardi and Pedrini 2020).

The second obstacle towards implementing CP is related to the different levels of application and general development of policies and action between developed and developing countries. Earlier research shows that difficulties for implementing CP in developing countries is due to a number of reasons – lack of investment in such projects due to considered riskiness (Ciccozzi et al. 2003), cost and availability of feasible technologies being the case as well. In more recent times, applying CP-related practices in developing countries is still lagging behind developed countries due to various reasons – both political and governance oriented, and

incentive oriented. Research on applying CP in small and medium enterprises (SMEs) in developing countries has shown that SMEs are less likely to adopt more ecologically efficient business practices if there are no external motivators such as government regulation or community pressure (Agwa-Ejon and Fore 2011).

Summary

The International Declaration of Cleaner Production is a statement of commitment to cleaner production. Through signing this document organizations – both public and private – not only commit to implementing cleaner production practices into their processes, but communicate the idea as well.

Cleaner production has become one of the key concepts of both UNEP and UNIDO, and the UNED IDCP is a key statement of commitment that has promoted the development and spread of the notion.

Cross-References

- [Eco-Efficiency](#)
- [Life Cycle Assessment](#)
- [Net Zero Emission](#)

References

- Agwa-Ejon, J., & Fore, S. (2011). Challenges faced by SMEs in developing countries in implementing cleaner production (CP). *Advanced Materials Research*, 367, 257–263.
- BMW Group (Press Release). (2001). BMW Group signs international declaration of “Cleaner Production” of the United Nations environmental program. https://www.press.bmwgroup.com/usa/article/detail/T0022121EN_US/bmw-group-signs-international-declaration-of-cleaner-production-of-the-united-nations-environmental-program?language=en_US. Accessed 10 Oct 2019.
- Ciccozzi, E., Chekenya, R., & Rodriguez, A. (2003). Recent experiences and challenges in promoting cleaner production investments in developing countries. *Journal of Cleaner Production*, 11(6), 629–638. [https://doi.org/10.1016/S0959-6526\(02\)00106-3](https://doi.org/10.1016/S0959-6526(02)00106-3).
- De Bernardi, C., & Pedrini, M. (2020). Entrepreneurial behaviour: Getting eco-drunk by feeling environmental passion. *Journal of Cleaner Production*, 256. <https://doi.org/10.1016/j.jclepro.2020.120367>.
- Hens, L., Block, C., Cabello-Eras, J. J., Sagastume-Gutierrez, A., Garcia-Lorenzo, D., Chamorro, C., Herrera Mendoza, K., Haeseldonckx, D., & Vandecasteele, C. (2018). On the evolution of “Cleaner Production” as a concept and a practice. *Journal of Cleaner Production*, 172, 3323–3333.
- Nowak, Z. A., & Cichy, M. J. (2008). Phenomenological model of cleaner production. In S. Schaltegger, M. Bennett, R. L. Burritt, & C. Jasch (Eds.), *Environmental management accounting for cleaner production* (pp. 123–142). Dordrecht: Springer.
- Schaltegger, S., Bennett, M., Burritt, R. L., & Jasch, C. (2008). Environmental management accounting (EMA) as a support for cleaner production. In S. Schaltegger, M. Bennett, R. L. Burritt, & C. Jasch (Eds.), *Environmental management accounting for cleaner production* (pp. 3–28). Dordrecht: Springer.
- UNEP. (1998). International declaration on cleaner production. Retrieved at <http://www.unep.fr/scp/cp/network/pdf/english.pdf>. Accessed 10 Oct 2019.
- UNEP. (2001). *Implementation principles for facilitating organizations*. United Nations Environment Programme, Division of Technology, Industry and Economics Production and Consumption Branch.
- UNIDO (The United Nations Industrial Development Organization). (2002). *Manual on the development of cleaner production policies – Approaches and instruments guidelines for National Cleaner Production Centres and Programmes. Unido CP Programme*. Vienna: Cleaner Production and Environmental Management Branch, Programme Development and Technical Cooperation Division, UNIDO. https://www.unido.org/sites/default/files/2007-11/9750_0256406e_0.pdf. Accessed 25 Mar 2020.
- UNIDO (The United Nations Industrial Development Organization). (2020). *Global RECPnet & regional networks*. United Nations Industrial Development Organization. <https://www.unido.org/our-focus/cross-cutting-services/partnerships-prosperity/networks-centres-forums-and-platforms/national-cleaner-production-centres-ncpcs-networks/global-recpnet-regional-networks>. Accessed 4 May 2020.
- van Berkel, R. (2006). Cleaner production and eco-efficiency. In D. Marinova, D. Annandale, & J. Phillimore (Eds.), *The international handbook on environmental technology management* (pp. 67–92). Cheltenham: Edward Elgar Publishing.

UN Development Goals

- [Shareholder and Stakeholder Activism](#)

UN Environment Finance Initiative

- [United Nations Environment Programme Finance Initiative](#)

UN Environment Programme

- [United Nations Environment Program \(UNEP\)](#)

UN Global Compact

- [United Nations Global Compact](#)

UN Global Goals

- [Sustainable Development Goals \(UN Global Goals\)](#)

UN Guiding Principles of Business and Management

- [John Gerard Ruggie and the UN Guiding Principles on Business and Human Rights](#)

UN Guiding Principles on Business and Human Rights

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Synonyms

[Guiding principles](#); [Guiding principles for business and human rights](#); [UN human rights guiding principles](#)

Definition/Description

The endorsement by the Human Rights Council of the General Assembly of the United Nations of the United Nations' Guiding Principles on Business and Human Rights (UNGP) signaled a shift in how human rights are viewed under international law. This entry briefly discusses the international legal system and how the UNGP fits into that legal system. Furthermore, the entry also examines the theory behind the UNGP, the Protect, Respect, and Remedy (PRR) Regime. Particularly, the entry takes a look at the obligation of a state to protect human rights and provide adequate remedies for victims of human rights abuses, particularly those committed by private business enterprises. The entry also tackles the duty of private business enterprises to respect human rights standards. In examining the UNGP and its foundational framework, the entry looks at the strengths and weaknesses of the UNGP framework, particularly the fact that the UNGP uses a system of obligations derived from international law that are imposed on states and a duty to respect human rights that is imposed on private business enterprises. Lastly, it identifies possible areas for future research.

Introduction

The recently concluded World Cup held in Qatar was a source of headlines not only for the sport of soccer but also for other issues, particularly those involving human rights. The New York Times reported that "Garment workers in Myanmar earn less than \$3 a day to produce soccer apparel for Adidas. Some say they were fired after asking factory owners for a raise" (Paton 2022). The entry further states that:

The Myanmar factory underscores the continuing struggle for many of South Asia's 40 million garment workers, who have long grappled with poor working conditions and wages, and whose troubles have been exacerbated by the pandemic. Now, with the biggest sporting event in the world underway, efforts by some laborers to improve their working conditions have been met with harsh resistance and punishment. (Paton 2022)

This highlights the growing tension between legitimate corporate or business interests and the need to uphold human rights in the international community. This is especially true in this age of transnational businesses. “The question has always remained one of how to strike the fair and workable balance between profit and human welfare” (Addo 2014).

The Legal Framework

International Law

To better understand the relationship between human rights and business, a dichotomy and distinction have to be made. Businesses and the entities that operate in this area such as corporations and transnational corporations are usually actors in a domestic legal system. They are governed by domestic or state law. As such, corporations, e.g., transnational or multinational corporations, such as Apple, Amazon, or Google, are beholden to the laws of the state where they are domiciled or incorporated. They are subjects of domestic or state law and rarely are directly subject to international law.

Human rights law, on the other hand, properly belongs to the sphere of international law. Traditionally, international law deals with the conduct of states and international organizations with each other. It does not usually govern the actions or relations of individuals or corporate entities. “Clearly, international law deals with the relations of states, international organizations, and in certain cases, individual persons, whether juridical or natural” (Goquingco 2020). “While international law, in its most basic and essential form, is a system of rules and principles governing the conduct of states, the way that international law operates is very different from how most people view law” (Goquingco 2020). Domestic law is very different in the way it operates. In domestic law systems, “[t]he law is not created by the members of the system but is rather imposed on them by a higher authority” (Goquingco 2020). This is not the case for international law. International law is made, obeyed, or disobeyed by the states who made it (Goquingco 2020).

Taking this dichotomy into account, the fact remains that human rights law is clearly an international law topic and subject. Deveraturda notes that “[t]he recognition of and mechanisms for protecting human rights are most often found in conventions or treaties, as well as declarations” (2021). As such, the treaties and conventions relating to human rights law such as the 1948 Universal Declaration of Human Rights, the International Convention on the Elimination of All Forms of Racial Discrimination, the International Covenant on Civil and Political Rights, and the International Convention on Economic, Social and Cultural Rights are designed to regulate the actions of states. These treaties impose standards and, more importantly, obligations on states and not on individual persons. As has been noted, “[t]he state-based system of global governance has struggled for more than a generation to adjust to the expanding reach and growing influence of transnational corporations” (Ruggie 2007).

The United Nations’ Guiding Principles on Business and Human Rights

On 16 June 2011, the Human Rights Council of the General Assembly of the United Nations endorsed the Guiding Principles on Business and Human Rights. The UNGP presents a framework designed to enhance the respect and observance of human rights standards by businesses, particularly corporations and transnational corporations. The UNGP is founded on three principles or pillars, namely, protect, respect, and remedy, also referred to as the PRR regime. It should also be noted that the UNGP also formally recognizes “[t]he role of business enterprises as specialized organs of society performing specialized functions, required to comply with applicable laws and to respect human rights” (General Principles, 2011).

The first foundational pillar is that of protecting human rights. “States must protect human rights abuse within their territory and/or jurisdiction by third parties, including business enterprises. This requires taking appropriate steps to prevent, investigate, punish and redress such abuse through effective policies, legislation, regulations and adjudications” (UNGP, Principle 1, 2011). Clearly, the primary responsibility to protect

human rights lies with a state. It is the state's primary obligation not only as provided for in the UNGP but also as provided for in the various human rights instruments.

A state must enact measures that will allow the effective grant and implementation of human rights and human right standards within its countries. Furthermore, The UNGP further provides that this protection should extend to human right abuses perpetrated by third parties, including business or corporate entities. (UNGP, Principle 1, 2011). This is a departure from traditional thinking that human rights abuses are only committed by states or governmental actors. By providing that human rights protection is the primary responsibility of the state, the UNGP remains consistent with international law as human rights treaties and conventions are binding on states and not on nonstate actors.

Furthermore, "States should set out clearly the expectation that all business enterprises domiciled in their territory and/or jurisdiction respect human rights throughout their operations" (UNGP, Principle 2, 2011). Clearly, this sets the tone that a state is required to oversee and regulate business enterprises and their compliance with human rights standards within their jurisdiction. Moreover, this obligation of the state is not limited to the activities of businesses within their territory but to business activities that may extend beyond the territorial jurisdiction of the state.

The second foundational pillar provides that "[b]usiness enterprises should respect human rights. This means that they should avoid infringing on the human rights to others and should address adverse human rights impacts with which they are involved" (UNGP, Principle 11, 2011). As opposed to a state's fundamental duty and obligation to protect human rights, a business enterprise is obligated to respect human rights. It creates a very different obligation that takes into account that business enterprises are not the proper subjects of international law.

The UNGP does not impose any obligation on private entities, particularly corporations and transnational corporations, beyond that respecting the fundamental human rights of people. This reflects the basic principle that "human rights

apply to everyone simply by virtue of their being human. Simply put, it is that human rights are to be claimed and enjoyed by all, arising out of their inherent entitlements by virtue of being human beings" (Deveraturda 2021). As such, private entities are enjoined to respect human rights.

Moreover, the UNGP provides that "[t]he responsibility of business enterprises to respect human rights applies to all enterprises regardless of their size, sector, or operational context, ownership and structure" (Principle 14, 2011). This "responsibility of business enterprises to respect human rights refers to internationally recognized human rights – understood, at a minimum, as those expressed in the International Bill of Human Rights and the principles concerning fundamental rights set out in the International Labour Organization's Declaration on Fundamental Principles and Rights at Work" (UNGP, Principle 12, 2011). It should be noted, however, that the UNGP does allow for some flexibility in this responsibility to respect human rights. The UNGP provides that "the scale and complexity of the means through which enterprises meet that responsibility may vary according to these factors and with the severity of the enterprise's adverse human rights impacts" (Principle 14, 2011).

The third foundational pillar provides that:

As part of their duty to protect against business-related human rights abuse, States must take appropriate steps to ensure, through judicial, administrative, legislative or other appropriate means, that when such abuses occur within their territory and/or jurisdiction those affected have access to effective remedy. (UNGP, Principle 25, 2011)

The UNGP imposes on a state the obligation to provide adequate remedies and measures to allow for redress for human rights violations, particularly those committed by corporations and multinational corporations. These remedies can either be through judicial (court action), administrative, legislative, or other means. The obligation of the state to provide for adequate remedies goes hand in hand with its obligation to protect human rights. For, if there are no suitable remedies available to victims of human rights abuses, the duty of the state to protect is rendered meaningless.

It is worth noting that the UNGP also provides that there is a need “to ensure the effectiveness of domestic judicial mechanisms” (Principle 26, 2011). This includes “ways to reduce legal, practical and other relevant barriers that could lead to denial of access to remedy” (Principle 26, 2011). It is not enough for a state to provide remedies for redress of human rights violations. More importantly, the state should make sure that victims of human rights abuses are able to access the remedies.

Judicial mechanisms and the ability to access them are the core of guaranteeing effective redress of human rights abuses. More importantly, these remedies should not only be seen to be but should actually be impartial and have integrity.

Aside from providing judicial mechanism to allow for redress, the state is likewise obligated to provide alternative means for redress or remedy. Particularly, the state “should provide effective and appropriate non-judicial grievance mechanisms, alongside judicial mechanisms, as part of a comprehensive State-based system for the remedy of business-related human rights abuse” (UNGP, Principle 27). This would allow for a complimentary system to that of redress by court litigation. Furthermore, private or nonstate grievance mechanisms should also be facilitated (UNGP, Principle 28, 2011). These nonstate mechanisms would allow for early redress and may actually lead to prevention of human rights abuses as would be victims would be given a forum where their concerns may be addressed at early stages.

Strengths and Weaknesses

The issue of human rights and business is not a new one. As one author highlighted:

Fueled by the escalating reports of corporate human rights abuses, especially in the extractive and the footwear and apparel industries, the UN Sub-Commission on the Promotion and Protection (Sub-Commission), a subsidiary body of the then Commission on Human Rights composed of twenty-six more or less independent experts established a working group on business and human rights in 1998. (Ruggie 2007)

The situation has not changed. In fact, Reif provides that:

It is generally accepted that business conduct can directly result in human rights violations or render the business complicit in human rights violations committed by state or non-state actors. While domestic businesses impact negatively on human rights, the conduct of multinational corporations (MNCs) is also problematic given their operations in many nations, the Global South, and conflict-affected areas. (2017)

Moreover, another author notes that:

Some of the most severe and widespread forms of corporate human rights abuse include the dislocation of indigenous communities without compensation or consultation, the impairment of people’s health and safety due to unfit working conditions and destruction of the environment, the leaving of individuals’ data to government agents, the denial of freedom of expression and of association, discrimination and sexual harassment at the workplace, and sweatshops, bonded labor, and child labor in the transnational supply chains of global brands. (Wolfsteller and Li 2022)

While the UNGP provides a framework for interplay between human rights protection and business interests, “a broad responsibility for the protection of human rights within the corporation’s sphere of influence is still far from being universally accepted” (Wolfsteller and Li 2022). This shows that the current regime provided for by the UNGP does offer a mixed bag. There are both strengths and weaknesses.

What immediately stands out is that the UNGP are merely guiding principles. In the field of international law, the UNGP can be considered a declaration. Deveraturda provides that “a declaration is a document that in itself is not legally binding. It is often a means of stating general principles of international law, in this case the general standards of recognizing, promoting, and protecting human rights” (2021). Thus, the UNGP is not a binding instrument in the same sense that a treaty or convention is. “While not on the same plane of enforceability, a declaration express the ‘will, intention, or opinion when acting in the field of international relations,’ often leading to treaties or customary international law” (Deveraturda 2021).

This lack of binding force on the part of the UNGP is its major weakness, particularly with

reference to the second foundational pillar of business entities to respect human rights. Absent a formal legal system that forces business entities to comply with human rights obligations, there will always be a wide latitude for human rights violations. In fact, it is clear that “there is a persistent unwillingness among governments to introduce more stringent regulations for the corporate sector” (Wolfsteller and Li 2022).

Furthermore, some authors note that:

“[I]n the absence of a centralized and effective international regulatory body or system, corporate human rights accountability is regulated by a patchwork of national and international rules, laws, and standards with differing degrees of bindingness and enforceability, often dealing only with specific rights norms and/or types of companies with a particular state or region.” (Wolfsteller and Li 2022)

The very nature of the international legal system in its current form is the other major weakness of the UNGP. As has been discussed earlier, international law, including international human rights law, has for its subjects states and international organizations. International law very rarely covers the actions of nonstate actors. “[T]he international human rights regime is primarily designed to protect human rights from interference by state actors. The UN treaty regime imposes direct legal obligations only on states and applies to private businesses rather indirectly and in a very limited way” (Wolfsteller and Li 2022).

On the other hand, the fact that the UNGP is not an international treaty or convention, it neither creates new international law obligations, nor does it limit or undermine any legal obligation a state may already have under international human rights law. This allows some sort of flexibility and leeway for states to enact measures using domestic law to be able to bring business enterprises into the legal framework of which they are not naturally part of. By not creating new normative standards but rather elaborating the implications of existing standards and practices, the UNGP is able to bring into its fold and impose, in a way, certain commitments on business enterprises (Addo 2014).

The UNGP, as one author notes:

[A]re not just another layer of corporate governance but a sophisticated and refined synthesis of existing

standards and mechanisms that integrate both voluntary standards and legally compelling standards. This so-called ‘smart mix’ of governance mechanisms is original and unique to the PRR regime and underlies the importance of complementary responsibilities for all stakeholders as an indication of shared commitment to ensure the effective application of the [UN]GPs. (Addo 2014)

Summary

International human rights law has always been the domain of states and international organizations. However, the intersection of private business interests, particularly corporate profit-seeking, has resulted in clear instances wherein human rights have been violated. With states being the traditional subjects of international law, a gap on how to govern private business was a legitimate concern of the international legal system.

In June 2011, the Human Rights Council of the United Nations endorsed the UNGP. This was a radical and bold step to change how human rights are viewed, particularly with regard to private actors. Instead of making corporations, including transnational corporations subject to international law, something that has faced resistance and criticism, the UNGP introduced a framework that combined both international obligations of states with certain responsibilities on private entities.

The introduction of a framework which allows for a better realization of imposing human rights standards on private enterprises was unheard of. The UNGP, it must be remembered, “is not a governance or regulatory regime in and of itself but rather of platform of guidelines by which stakeholders may define mechanisms using either compelling regulatory mechanisms or indeed voluntary initiatives” (Addo 2014). In using the PRR (protect, respect, and remedy) regime, the UNGP has found a way of creating a system wherein states and private business entities are able to work together to be able to ensure the protection of human rights. The key characteristics of “flexibility, the smart mix of processes and substantive standards as well as the endorsement and uptake by stakeholders from different sectors”

(Addo 2014) are what make the UNGP special and potentially the answer to human rights abuses by private enterprises.

As has been discussed, the UNGP is not the perfect answer. While it does have its strengths, there are shortcomings to be considered as well. Moreover, it must be remembered that in drafting the UNGP, certain considerations had to be made particularly that it had to have the broadest possible consensus among stakeholders, particularly business enterprises, and, at the same time, it had to steer clear of imposing new, direct, and legally binding obligations on corporations (Wolfsteller and Li 2022). In some cases, the UNGP raises more questions than answers. However, it is a start to answer a compelling problem faced by today's world. It is better than nothing.

However, '[i]t remains an open question whether the responsibilities to respect and protect human rights can (and should) be translated into business principles so as to find broader acceptance' (Wolfsteller and Li 2022). Furthermore, it should also be asked "whether the aim of realizing human rights can in fact, be integrated into business practice in ways that are compatible with corporate profit-seeking in global market capitalism at all" (Wolfsteller and Li 2022). There are still no concrete answers to these questions. In fact, these are areas that future research may undertake. Ultimately, it should also be determined whether human rights standards provided for by international law can be legally enforced on private entities.

Cross-References

- [Corporate Governance](#)
- [Discrimination](#)
- [Human Rights](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References

- Addo, M. K. (2014). The reality of the United Nations guiding principles on business and human rights. *Human Rights Law Review*, 14(1), 133–147.

- Deveraturda, J. P. A. (2021). *An introduction to international human rights law*. Manila: Rex Book Store.
- Goqingco, A. R. A. (2020). *Beyond borders: Examining special issues in international law (Commentary and materials)*. Manila: Rex Book Store.
- Paton, E. (2022). Who made your World Cup Jersey. *The New York Times*. <https://www.nytimes.com/2022/12/01/business/world-cup-myanmar-adidas-wages.html>
- Reif, L. C. (2017). The UN guiding principles on business and human rights and networked governance: Improving the role of human rights ombudsman institutions as national remedies. *Human Rights Law Review*, 17(4), 603–632.
- Ruggie, J. G. (2007). Business and human rights: The evolving international agenda. *American Journal of International Law*, 101(4), 819–840.
- Wolfsteller, R., & Li, Y. (2022). Business and human rights regulation after the UN guiding principles: Accountability, governance, effectiveness. *Human Rights Review*, 23, 1–17.

UN Human Rights Guiding Principles

- [UN Guiding Principles on Business and Human Rights](#)

UN IPCC

- [Climate Change and Role of IPCC](#)

UN Principles for Responsible Investments (PRI)

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Synonyms

[Principles for Responsible Investments; Responsible investments](#)

Definition/Description

The Principles for Responsible Investments (PRI) is "the world's leading proponent of responsible

investment” (PRI 2021a). With the development of six Principles for Responsible Investment, the PRI supports its international network of investor signatories in incorporating the environmental, social, and governance (ESG) factors into their investment and ownership decisions. The goal of PRI is to develop a more sustainable global financial system by encouraging “investors to use responsible investment to enhance returns and better manage risks” (PRI 2021a). This independent financial initiative is supported by the United Nations and linked to the United Nations Environmental Program Finance Initiative (UNEP FI 2021) and the United Nations Global Compact (UN Global Compact 2021).

Six Principles for Responsible Investment (PRI)

The six Principles for Responsible Investment (cp. Table 1) give investors guidance incorporating ESG issues into investment practice. Examples of ESG factors are numerous. Environmental factors are among others climate change, resource depletion, waste, and pollution (PRI 2020a, p. 4). Social factors include human rights, working conditions, and employee relations (PRI 2020a, p. 4). Governance factors contain for instance board diversity and structure,

executive pay, tax strategy as well as bribery and corruption (PRI 2020a, p. 4).

The topic responsible investment is growing steadily in importance. Players for instance in the financial community start to recognize that ESG factors affects risk and return. Furthermore, more and more investors ask for transparency where and how is their money being invested. On a global level, the ESG factors are increasingly incorporated into regulations, as it is seen as duty of the investors to report on (PRI 2020a, p. 4).

PRI’s Mission

The PRI aims at contributing to develop a more sustainable global financial system by steadily attracting signatories representing the professionally managed investments, which implement the PRI Principles.

This is captured in their mission:

“We believe that an economically efficient, sustainable global financial system is a necessity for long-term value creation. Such a system will reward long-term, responsible investment and benefit the environment and society as a whole.

The PRI will work to achieve this sustainable global financial system by encouraging adoption of the Principles and collaboration on their implementation; by fostering good governance, integrity and accountability; and by addressing obstacles to a sustainable financial system that lie within market practices, structures and regulation.” (PRI 2020a, p. 1)

UN Principles for Responsible Investments (PRI), Table 1 Six Principles for Responsible Investment

Principles for Responsible Investment	
Principle 1:	We will incorporate ESG issues into investment analysis and decision-making processes
Principle 2:	We will be active owners and incorporate ESG issues into our ownership policies and practices
Principle 3:	We will seek appropriate disclosure on ESG issues by the entities in which we invest
Principle 4:	We will promote acceptance and implementation of the Principles within the investment industry
Principle 5:	We will work together to enhance our effectiveness in implementing the Principles
Principle 6:	We will each report on our activities and progress toward implementing the Principles

Source: PRI (2020a), p. 6

Development of the Principles for Responsible Investment

Supported by the United Nations, the PRI is an “investor initiative in partnership with UNEP Finance Initiative FI and the UN Global Compact” (PRI 2020a, p. 36).

In 2005, Kofi Annan, United Nations secretary-general, encouraged international, influential financial institutional investors to join the development process of Principles for Responsible Investment (PRI 2021a). The group consisted of 20 persons drawn from institutions in 12 countries. They received support from an expert group consisting

of 70 persons from various sectors and organizations such as the financial sector as well as inter-governmental organizations and civil society (PRI 2021a). In April 2006, the Principles were launched at the New York Stock Exchange (PRI 2021a).

Signatories and Their Commitment

The PRI distinguishes three groups of signatories: asset owners, investment managers, and service providers (PRI 2021b). Asset owners represent the holders of long-term retirement savings, insurance, or other assets (e.g., pension funds, insurance and reinsurance companies, and foundations). Investment managers manage or control investment funds, either on its own or on behalf of others (owning not more than half of such funds). Service providers or so-called professional

service partners offer products or services to asset owners and/or investment managers, providing, developing, and promoting services that support clients’ implementation of the Principles (e.g., sustainability rating agencies).

Up to now more than 3900 investment managers, asset owners, and service providers have committed themselves by recognizing the PRI to integrate ESG factors into their investment (PRI 2021c). Together they manage more than US\$100 trillion (PRI 2021d). Since 2006, the number of signatories has steadily grown (compare current figures on the website PRI 2021d).

Organizations who want to sign the Principles have to submit the relevant declaration signed by the CEO or equivalent (cp. Table 2.), send an organization chart including the structure of the organization with all its legal entities as well as further company details, and reasons for signing the application (PRI 2021b).

UN Principles for Responsible Investments (PRI), Table 2 Signatory declarations of asset owners, investment managers, and professional service partners

Asset owner/Investment manager signatory declaration “As institutional investors, we have a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). We also recognise that applying these Principles may better align investors with broader objectives of society. Therefore, where consistent with our fiduciary responsibilities, COMPANY NAME commit to the following: • To incorporate Environmental, Social and Corporate Governance (ESG) issues into investment analysis and decision-making processes; • To be an active owner and to incorporate ESG issues into our ownership policies and practices; • To seek appropriate disclosure on ESG issues by the entities in which we invest; • To promote acceptance and implementation of the Principles within the investment industry; • To work with the PRI Secretariat and other signatories to enhance their effectiveness in implementing the Principles; • To report on our activities and progress towards implementing the Principles. By signing this letter, COMPANY NAME agrees to pay the annual fee and commits to completing the PRI Reporting Framework on an annual basis. COMPANY NAME confirms their current AUM is _____ bn USD. This figure was last calculated on _____. COMPANY NAME is classified as an [Asset Owner/Investment Manager]. Signed: Name: Title (CEO / equivalent): Date:” Professional service partner signatory declaration “As professional service partners, we recognise that we have considerable influence over how our clients address ESG issues. COMPANY NAME acknowledges the relevance of ESG issues to investment management, and commits to providing, promoting and improving services that support the implementation of the following Principles: • [see six Principles of Responsible Investment above] By signing this letter, COMPANY NAME agrees to pay the annual fee. COMPANY NAME confirms their number of staff is _____. COMPANY NAME is classified as a Professional Service Partner. (...)”
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Source: cp. PRI (2021b)

The PRI is mainly funded by an annual membership fee of all signatories, scaled to each signatory's category, type, and assets under management. Furthermore, the initiative receives grants from other international organizations, governments, and foundations (PRI 2021a).

Signatories can be deleted from the directory. A reason for voluntary resignation can be that another signatory of the PRI acquired the company. In case signatories do not pay their annual fee or have not been reporting on progress, they will be delisted (PRI 2020b).

Possible Actions

There are various possibilities for investors, asset owners, and service providers to incorporate ESG issues. The following list provides an overview on possible actions (cp. Table 3).

Investors can use these principles for focusing and formalizing their responsible investment efforts. Furthermore, these principles set expectations for their internal and external stakeholders and provide a common language for all involved.

Reporting for Signatories

For all PRI signatories reporting is compulsory. Besides ensuring a standardized transparency tool for signatories' reporting, PRI gives signatories feedback to establish a continuous learning process (PRI 2021e).

Signatories have to report in a reporting tool on their responsible investment activities annually (PRI 2021e). After sign up, only the first reporting cycle is seen as a learning experience and is therefore voluntary.

Two reporting frameworks exist: one for investors and one for service providers.

The PRI has developed a new reporting framework for investors (PRI 2020c), building on the previous reporting framework with mandatory and voluntary indicators (PRI 2019a). Now a "core" and "plus" model has been introduced with various indicators. The "core" or rather process-focused components with closed-ended

questions are mandatory and require disclosure. The "plus" process- and outcome-focused components with mainly open-ended questions are voluntary (PRI 2020c, p. 6).

After publishing a senior leadership statement and providing an overview on the organization, the signatories explain their specific responsible investment practices, e.g., how they incorporate ESG factors in their investment decision-making processes, stewardship processes, and in each of their specific asset class (PRI 2020c, p. 6ff; cp. Fig. 1). It is important to notice that since 2020, PRI signatories are required to report on climate indicators too. These indicators on the performance of managing risks and opportunities regarding climate change issues are based on the disclosure framework of the Financial Stability Board's Task Force on climate-related disclosures (TCFD) PRI (2021g).

The reporting framework for service providers is split into seven modules (PRI 2019b). All service provider signatories complete the (1.) organizational overview, (2.) strategy and governance, and (3.) closing module. The remaining modules are business specific (cp. Fig. 2).

Depending on their organizational setup, circumstance, and market, signatories can adopt verification and assurance practices. If not existing yet, signatories have to establish an internal control system in order to collect and produce accurate and credible information for the ESG reports. Then, on a medium level of assurance, an internal audit will identify risks and opportunities for management and thus independently examine the internal controls. Finally, on a high level of assurance, external third-party assurance can give confidence that reported ESG information is credible or accurate (PRI 2018, p. 8).

Summary and Outlook

The Principles for Responsible Investment recognize the importance of the ESG factors and consist of a set of principles developed by a group of institutional investors (PRI 2020a). Therefore, PRI provides proposals for understanding and

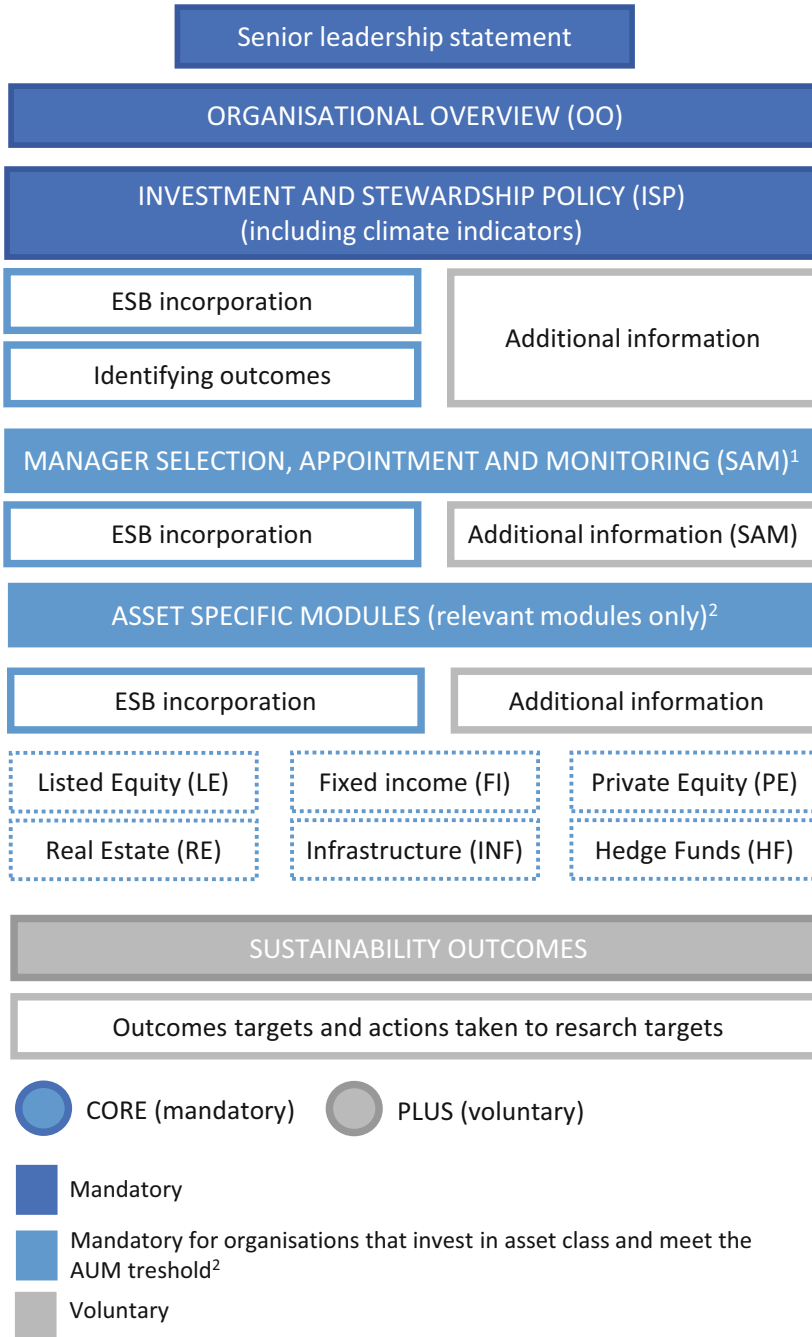
UN Principles for Responsible Investments (PRI), Table 3 Possible actions per principle

Possible actions for investors, asset owners, and service providers to incorporate ESG issues	
Principle 1:	We will incorporate ESG issues into investment analysis and decision-making processes
Possible actions	Address ESG issues in investment policy statements Support development of ESG-related tools, metrics, and analyses Assess the capabilities of internal investment managers to incorporate ESG issues Assess the capabilities of external investment managers to incorporate ESG issues Ask investment service providers (such as financial analysts, consultants, brokers, research firms, or rating companies) to integrate ESG factors into evolving research and analysis Encourage academic and other research on this theme Advocate ESG training for investment professionals
Principle 2:	We will be active owners and incorporate ESG issues into our ownership policies and practices
Possible actions	Develop and disclose an active ownership policy consistent with the Principles Exercise voting rights or monitor compliance with voting policy (if outsourced) Develop an engagement capability (either directly or through outsourcing) Participate in the development of policy, regulation, and standard setting (such as promoting and protecting shareholder rights) File shareholder resolutions consistent with long-term ESG considerations Engage with companies on ESG issues Participate in collaborative engagement initiatives Ask investment managers to undertake and report on ESG-related engagement
Principle 3:	We will seek appropriate disclosure on ESG issues by the entities in which we invest
Possible actions	Ask for standardized reporting on ESG issues (using tools such as the Global Reporting Initiative) Ask for ESG issues to be integrated within annual financial reports Ask for information from companies regarding adoption of/adherence to relevant norms, standards, codes of conduct, or international initiatives (such as the UN Global Compact) Support shareholder initiatives and resolutions promoting ESG disclosure
Principle 4:	We will promote acceptance and implementation of the Principles within the investment industry
Possible actions	Include Principles-related requirements in requests for proposals (RFPs) Align investment mandates, monitoring procedures, performance indicators, and incentive structures accordingly (for example, ensure investment management processes reflect long-term time horizons when appropriate) Communicate ESG expectations to investment service providers Revisit relationships with service providers that fail to meet ESG expectations Support the development of tools for benchmarking ESG integration Support regulatory or policy developments that enable implementation of the Principles
Principle 5:	We will work together to enhance our effectiveness in implementing the Principles
Possible actions	Support/participate in networks and information platforms to share tools, pool resources, and make use of investor reporting as a source of learning Collectively address relevant emerging issues Develop or support appropriate collaborative initiatives
Principle 6:	We will each report on our activities and progress toward implementing the Principles
Possible actions	Disclose how ESG issues are integrated within investment practices Disclose active ownership activities (voting, engagement, and/or policy dialogue) Disclose what is required from service providers in relation to the Principles Communicate with beneficiaries about ESG issues and the Principles Report on progress and/or achievements relating to the Principles using a comply-or-explain approach Seek to determine the impact of the Principles Make use of reporting to raise awareness among a broader group of stakeholders

Source: PRI (2020a), p. 7

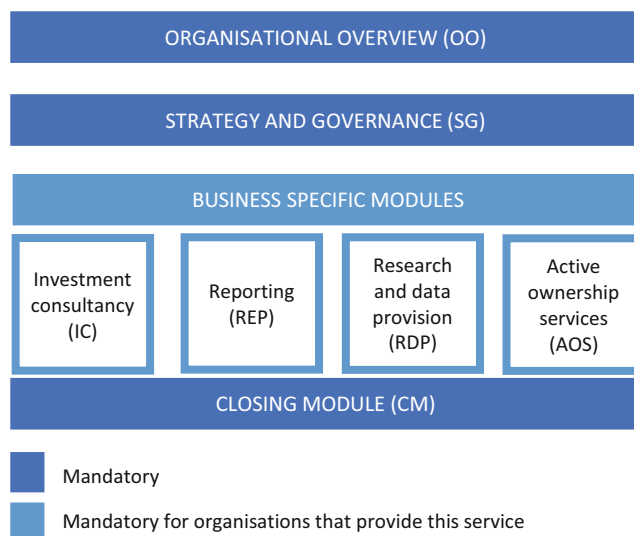
integrating of ESG issues into investment decision-making and support their signatories receiving feedback and providing them with tools for improvement.

These activities will be continued and expanded. In 2017, under the headline *A blueprint for responsible investment* (PRI 2017), the PRI published three areas of impact of the next ten years:



1. The SAM module applies to investors who outsource some or all of their investment activities to external investment managers.
2. The asset class modules only apply when a signatory has 10% or more of their AUM invested directly in that asset class; or directly invests less than 10% but US\$10bn or more of their AUM in any particular asset class.

UN Principles for Responsible Investments (PRI), Fig. 2 PRI reporting framework for service providers. (Sources: PRI 2021h)



1. Responsible investors: “We will strengthen, deepen and expand our core work: to lead responsible investors in their pursuit of long-term value and to enhance alignment throughout the investment chain.”
 - Empower asset owners
 - Support investors incorporating ESG issues
 - Foster a community of active owners
 - Showcase leadership and increase accountability
 - Convene and educate responsible investors” (PRI 2017, p. 5)
2. Sustainable markets: “We will address unsustainable aspects of the markets that investors operate in, to achieve the economically efficient, sustainable global financial system that responsible investors and beneficiaries need.”
 - Challenge barriers to a sustainable financial system
 - Drive meaningful data throughout markets” (PRI 2017, p. 5)
3. A prosperous world for all: “We will enable signatories to improve the real world – now and in the future – by encouraging investments that contribute to prosperous and inclusive societies for current and future generations.”
 - Champion climate action
 - Enable real world impact aligned with the SDGs” (PRI 2017, p. 5)

Creating a sustainable financial system is necessary as the investment community has a huge impact on shaping the economy. Therefore, the question is still up to date how PRI’s signatories as important investment community can contribute with their investment activities to sustainability outcomes in the real world (PRI 2021i, p. 5). PRI-led net-zero initiatives are one necessary step to tackle climate change (PRI 2021i, p. 27).

Cross-References

- [Environment, Social, and Governance \(ESG\)](#)
- [Equator Principles](#)
- [Rio Declaration on Environment and Development](#)
- [United Nations Environment Programme Finance Initiative](#)
- [United Nations Human Rights Committee](#)

References

- PRI. (2017). A blueprint for responsible investment. <https://www.unpri.org/download?ac=5330>. Accessed 1 Feb 2021.
- PRI. (2018). Introducing confidence-building measures to PRI signatories. <https://www.unpri.org/download?ac=4467>. Accessed 1 Feb 2021.
- PRI. (2019a). PRI Reporting Framework 2019. Organizational overview. <https://www.unpri.org/Uploads/z/i/i/>

- [july2019investorrf_full_607795.pdf](#). Accessed 1 Feb 2021.
- PRI. (2019b). PRI reporting framework 2020 – Service providers. Organisational overview (OO). https://d8g8t13e9vf2o.cloudfront.net/Uploads/r/j/k/pri_rf_sp_2020_452342.pdf for update check <https://www.unpri.org/reporting-and-assessment/service-provider-reporting-guidance/5374.article>. Accessed 1 Feb 2021.
- PRI. (2020a). Principles for responsible investment. Brochure. <https://www.unpri.org/download?ac=10948>. Accessed 1 Feb 2021. See current report in various languages in download area: <https://www.unpri.org/pri/about-the-pri>
- PRI. (2020b). Signatories delisted for not meeting the minimum requirements. <https://www.unpri.org/reporting-and-assessment/signatories-delisted-for-not-meeting-the-minimum-requirements/6480.article>. Accessed 1 Feb 2021.
- PRI. (2020c). PRI Reporting Framework. Overview and structure. Updated 2020. https://dwtyzx6upklss.cloudfront.net/Uploads/w/h/f/overview_and_guidance_reporting_framework_structure3_584160.pdf. Accessed 1 Feb 2021.
- PRI. (2021a). About the PRI. <https://www.unpri.org/pri/about-the-pri>. Accessed 1 Feb 2021.
- PRI. (2021b). Become a signatory. Documents required. Declaration forms for asset owners, investment managers and service providers. Download forms see <https://www.unpri.org/signatory-resources/become-a-signatory/5946.article>. Accessed 1 Feb 2021.
- PRI. (2021c). Signatory directory. <https://www.unpri.org/signatories/signatory-resources/signatory-directory>. Accessed 1 Feb 2021.
- PRI. (2021d). Quarterly signatory update (ppt). Check up to date presentation slide “PRI signatory growth”. <https://www.unpri.org/signatory-resources/quarterly-signatory-update/4609.article> and data and methodology, updated annually (Excel), “PRI growth 2006-202x” downloadable <https://www.unpri.org/pri/about-the-pri>. Accessed 1 Feb 2021.
- PRI. (2021e). The reporting process. <https://www.unpri.org/reporting-and-assessment/the-reporting-process/3057.article>. Accessed 1 Feb 2021.
- PRI. (2021f). Investor reporting guidance. <https://www.unpri.org/reporting-and-assessment/investor-reporting-guidance/5373.article>. Accessed 1 Feb 2021.
- PRI. (2021g). Climate reporting to the PRI. <https://www.unpri.org/climate-change/climate-reporting-to-the-pri/7131.article>. Accessed 1 Feb 2021.
- PRI. (2021h). Service provider reporting guidance. <https://www.unpri.org/reporting-and-assessment/service-provider-reporting-guidance/5374.article>. Accessed 1 Feb 2021.
- PRI. (2021i). PRI Strategic plan 2021–24. Building a bridge between financial risk, opportunities and real-world outcomes. April 2021. <https://www.unpri.org/download?ac=13269>. Accessed 1 May 2021.
- UNEP FI. (2021). About UNEP FI (United Nations Environmental Programme Finance Initiative) and PRI.

<https://www.unepfi.org/investment/pri/>. Accessed 1 Feb 2021.

UN Global Compact. (2021). United Nations Global Compact. Our partners. <https://www.unglobalcompact.org/about/partners>. Accessed 1 Feb 2021.

UN Principles on Responsible Management Education

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Synonyms

Ethical education; UNPRME, Responsible education

Definition/Description

The Principles for Responsible Management Education (PRME), a 2007 project funded by the United Nations, aims to increase awareness of sustainability in educational settings worldwide and give today’s business students the knowledge and skills they need to effect change in the future.

Principle 1. Purpose: “We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.”

Principle 2. Values: “We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.”

Principle 3. Method: “We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.”

Principle 4. Research: “We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.”

Principle 5. Partnership: “We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.”

Principle 6. Dialog: “We will facilitate and support dialog and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.”

Context

As a result of an increasing number of corporate scandals, malpractice, and economic mismanagement that contributed to a worldwide financial crisis, attention has been focused not just on the business community but also on the business schools’ responsibility for training many of the senior executives (see, e.g., Brooks 2009; Global Foundation for Management Education 2010). Business schools are criticized by Pfeffer and Fong (2004) for organizing management education around a value proposition that emphasizes components that will boost careers and pay. The aim for business and management schools to be seen as “scientific,” according to Ghoshal (2005), has led to an overreliance on a limited core theoretical agenda that has ignored ethics and morals.

An increased focus on morality, social responsibility, business ethics, and sustainability is at the forefront of this evaluation of management education, reflecting societal concern with excessive materialism, a lack of corporate accountability, and the contribution of business to environmental deterioration and human rights violations (Blowfield and Murray 2011; Burchell 2008). Following a suggestion made by academic

stakeholders of the UNGC, a platform for global involvement based on principles has been created for academic institutions. The concept was first launched by the UNGC at the Case Western Reserve University Global Forum “Business as an Agent of World Benefit” in October 2006.

History

The Principles for Responsible Management Education (PRME), a 2007 project funded by the UN, aims to increase awareness of sustainability in educational settings worldwide and give today’s business students the knowledge and skills they need to effect change in the future. An international work committee comprising 60 deans, university presidents, and authorized representatives of top business schools and academic institutions created PRME. Co-conveners in the drafting process who later endorsed the final document were:

- AACSB International
- European Foundation for Management Development (EFMD)
- Aspen Institute Business and Society Program
- European Academy of Business in Society (EABIS – now ABIS)
- Globally Responsible Leadership Initiative (GRLI)
- Net Impact

PRME was launched in 2007 by UN Secretary-General Ban Ki-moon at the UN Global Compact Leaders’ Summit in Geneva and has grown to be the largest formal organization between the UN and business schools.

In addition to raising awareness of the Sustainable Development Goals (SDGs) and fostering the development of tomorrow’s ethical corporate leaders, PRME’s objective is to revolutionize business and management education, research, and thought leadership globally. Over 850 higher education institutions with a focus on business and management are part of the effort, which spans 96 nations. A Board made up of professionals from industry and academics oversees PRME and the UN Global Compact (UNGC).

The PRME task group created a set of six guiding principles [purpose, values, method, research, partnership, and dialogue] that serve as the cornerstone of the global platform for responsible management education, coordinated by the UNGC and top academic institutions.

Principle 1. Purpose: “We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.”

Principle 2. Values: “We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.”

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PRME has developed as a network serving as a platform for idea exchange and facilitating learning among the signatories through a variety of channels, in addition to providing a framework for implementing responsible management education. This network is divided into 14 Regional

Chapters with their own governance. There are eight working groups composed of faculty, industry experts, business leaders, and student collaborators who produce research on specific issues and their implications for responsible management education. There are also PRME champions composed of a select group of high-performing institutions that serve as case studies on how the signatories can transform their business education curricula and research around the Six Principles.

The PRME program sets guidelines for business and management schools to follow and offers a space for information sharing and learning, much to the UNGC, which anticipates signatory businesses to adhere to ten principles of responsible business. The effort places a strong emphasis on transparency via recurring Sharing Information on Progress (SIP) reports as well as ongoing progress along six (plus one) criteria.

Signatories

The PRME program was introduced before the global financial crisis. To become a PRME signatory, the institution is required to state its commitment to the six principles and to report on progress in applying them every 18 months. Otherwise, the institution will be delisted as a signatory.

Although enrollment in schools was modest at first, it has significantly increased over the past 5 years (particularly in the United Kingdom). Only nine UK institutions signed in May 2008. In contrast, by March 2012, 40 universities have expressed support, including nine of the top 20 UK business schools according to the Financial Times. By March 2014, 540 groups from around the world were taking part in the campaign. The participation of the Association of MBAs (AMBA), the Association to Advance Collegiate Schools of Business (AACSB), the European Foundation for Management Development (EFMD), and the Association of Business Schools (ABS) on the PRME Steering Committee has been equally significant in PRME's growing credibility.

Despite the initiative's worldwide nature and the PRME signatories' global reach, most of the initiative's first signatories, which include some of the world's greatest economies, were from Western Europe (33%) and North American (22%). However, the geographical distribution of signatories is now a little wider. The majority of PRME signatories outside of these prominent regions are found in Latin America (13%), Asia, Australia, and New Zealand (16%). Around 10% of PRME signatories are from Eastern Europe and the CIS combined. Africa's percentage of signatories has climbed from 3% to 7%.

There are currently 510 signatories from 81 different nations to the PRME effort. From 2008, when PRME received 195 members, this constituted a consistent growth rate, with an average of roughly 80 new signatories joining every succeeding year, with 2012 being the most astounding year of growth. However, the total number of PRME signatories leveled out to a little above 500 in 2013, when signatories who failed to submit a SIP were delisted according to the policy.

From among the 2022 QS World University Ranking on Business and Management Top Schools and Programs, only HEC Paris School of Management (10th) joined in 2020 and Copenhagen Business School (14th) joined in 2008.

For Bloomberg Top 10 Business Schools in 2022–2023, none from the USA is a signatory while in Europe, those who signed are IESE Business School (3rd) and ESADE (10th) both in 2008, University of St. Gallen (6th) in 2010, and University of Mannheim (7th) in 2014. In Canada, HEC Montreal (2nd) joined in 2023, Smith, Queen's University (4th) joined in 2008, and Desautels, McGill University (5th) joined in 2017. Finally, in the Asia-Pacific Region, China Europe International Business School (3rd) joined in 2008, while Shanghai University MBA Center (7th) joined in 2009.

Of the top 20 Business schools in 2023 ranked by CEOWORLD Magazine, only Haas School of Business, UC Berkeley (9th) joined in 2012, Alliance Manchester Business School (14th) joined in 2019, and UCLA Anderson School of Management (17th) joined in 2021.

Sharing Information on Progress (SIP) Report

Even as a “soft voluntary regulation,” signing up for PRME comes with some obligations. The PRME 2010 initiative mandates institutions to routinely share information about their work in progress; otherwise, they will be removed as signatories. Active participation in the UN PRME program by signatory institutions includes reporting on success to other business schools and others. The SIP reports serve two purposes (UN PRME 2012): first, they offer the PRME network a significant learning opportunity by facilitating the exchange of experiences and best practices; second, they give all stakeholders a regular update on the accomplishments made by the signatories (at least every 24 months, although yearly communication is encouraged).

The Inspirational Guide (PRME 2012) specifically strives to give instances of good practice, while the SIP reporting studies provide overviews of these developing areas. To assist PRME signatories in integrating responsible management education and research and to enable individual contextualization, the 6 + 1 principles and the specifications for SIP reports are both formulated widely (Waddock et al. 2011). Principles and SIP reports are related in that many signatories use them to organize their SIP reports and convey the successes and difficulties of putting the principles into practice as well as plans.

To encourage reporting, reports are recognized by SIP Excellence Awards on two criteria:

- Quality of reporting (not the quality of what is reported).
- How the signatory shares information on progress in relation to PRME.

Even if the focus of the report is the signatory's progress in relation to PRME, the signatory may include other initiatives not related to PRME.

The signatories reported some initiatives made to enhance corporate social responsibility and business ethics education (Matten and Moon 2005; Moon and Orlitzky 2011; Orlitzky and

Moon 2010) such as the conduct of curriculum review by Euclid University and the stakeholder dialogue series of the Lorange Institute of Business Zurich. The self-presentations demonstrate commitment to greening the campus and other initiatives that help preserve the environment, reduce emissions (with a particular emphasis on carbon emissions), and improve resource management. A specific initiative is University of Bologna's enhancement of the territory through the preservation and renovation of natural resources and the more strategic Edith Cowan University Climate Initiative Task Force in Western Australia. Increased attention has been focused to organizational transformation and how individual institutions facilitate organizational learning and change toward more excellent adaption of PRME (Godemann et al. 2011; PRME 2012). Specific initiatives involved institutionalization of PRME in the school's vision and mission (George Mason School of Business, USA) or in the quality management system in the form of a PRME Booklet which every staff signed at the end as a form of a pledge (Richfield Graduate Institute of Technology (Pty) Ltd., South Africa). There are also emerging links between schools and stakeholder engagement standards, such as the AccountAbility 1000 series (Godemann et al. 2011), and reporting standards, such as the Global Reporting Initiative guidance document (PRME 2012). Overall, participating in the PRME initiative is believed to enhance the formalization and development of strategic integration of social responsibility and sustainability (Godemann et al. 2011; PRME 2012). For instance, the Hanken School of Economics in Finland conducted the Sustainable Development Goals week and the 2-month Sustainability-In-Action Challenge.

Critique

Rethinking management and leadership education is still a struggle (GRLI 2012). The stakeholders have regularly singled out management education

as having a special duty in the larger agenda for social, economic, and ecological sustainability due to the crucial role it plays (e.g., as one of the key sources of recruiting for the financial industry) (e.g., Khurana 2010; Khurana and Nohria 2008). In this regard, PRME has been referred to as the crucial catalyst for management education's transformation and for the adjustments needed to satisfy the growing public demands for a responsible economy (Waddock et al. 2011; Rasche and Kell 2010; Haertle 2012).

Contrary to its claim of catalyzing transformative management education, some scholars argue that PRME does not encourage critical thinking (Louw 2015). PRME's underlying assumption is that management is an agent of the shareholders (Khurana 2010). This utilitarian view of business education precludes critical thinking about modern capitalism and the attendant results (Zald 2002). This is problematic because PRME positions business schools as servants that tailor management education according to the fit of the corporate sector (Louw 2015). The interest of business holds the universities hostage (Giroux 2011, p. 150) such that business schools have lost their moral and professional ideals as in the case in the USA (Khurana 2010). Instead of higher education contributing to culture and society, higher education focused on the economic and entrepreneurial (Collini 2012). Principle 1 of PRME which purports to develop the capabilities of students to generate value toward an inclusive and sustainable global economy reveals the utilitarian view of business education. If PRME is truly a catalyst for transformative management education, its orientation should be to educate about management and not for management (Watson 2001). In fact, in 2022–2023, most of the top business schools in the USA, UK, and Asia-Pacific that are thought leaders in their right are not signatories to PRME.

This "stakeholder-orientated" view is further reinforced in Principle 3. Instead of a call to discovery and insight on business education, PRME method is to create "educational frameworks, materials, processes and environments that enable

effective learning experiences for responsible leadership.” There is no appreciable difference in the business curriculum development between signatory and nonsignatory business schools in the UK where responsible management issues had not been mainstreamed or thoroughly covered like other core management subjects (Burchell et al. 2015).

In the 2012 Rio + 20 declaration of PRME, endorsed by the participants of the Third Global Forum for Responsible Management Education “The Future We Want: A Roadmap for Management Education to 2020,” interest was expressed in giving “purpose to research so that it supports organizations to serve the common good” (PRME 2012). However, a reading of Principle 4 makes clear that research will be for the purpose of understanding the role, dynamics, and impact of corporations. Knowledge sought is about the challenges of business corporations in meeting social and environmental challenges, and exploration is limited to jointly effective approaches to meeting the corporation’s challenges. This is discriminatory as it appears to have minimized other stakeholders’ role, dynamics, and impact in the business education ecosystem toward creating sustainable social, environmental, and economic value. This is more emphatically seen in Principle 5 which limits the partnership and interaction in extending knowledge only with managers of business corporations. The interaction with the other stakeholders identified to be the educators, government, consumers, media, civil society organizations, and other interested groups is limited in Principle 6 to the facilitation and support of dialog and debate on critical issues about global social responsibility and sustainability (Louw 2015).

Notably, despite Principle 5’s declaration of partnership and interaction only with managers of business corporations, signatories still report initiatives that are not only limited to managers of business corporations but also include nonbusiness entities such as the Centre of Art and Exhibitions Zurich and Climate-KIC Switzerland initiated by The Lorange Institute of Business Zurich.

Moreover, nonsignatory schools are already capable of curriculum development and engaged with the responsible management agenda without signing up for PRME (Burchell et al. 2015). Such is true in the case of the top business schools who are acknowledged thought leaders. In 2022–2023, most of the top business schools in the US, the UK, and the Asia Pacific are not signatories to PRME.

PRME affiliation may not be the catalyst for transformative management education. Rather, PRME membership may be utilized by signatories to communicate and justify activities that were already evolving (Burchell et al. 2015).

References

- Blowfield, M., & Murray, A. (2011). *Corporate responsibility*. Oxford: Oxford University Press.
- Brooks, A. (2009). *Business schools mull over blame in financial crisis*. Available at: <http://www.npr.org/templates/story/story.php?storyId=103719186>
- Burchell, J. (2008). *Corporate social responsibility reader*. London: Routledge.
- Burchell, J., Kennedy, S., & Murray, A. (2015). Responsible management education in UK business schools: Critically examining the role of the United Nations Principles for Responsible Management Education as a driver for change. *Management Learning*, 46(4). <https://doi.org/10.1177/1350507614549117>. Accessed 9 May 2023.
- Collini, S. (2012). *What are universities for?* London: Penguin.
- Ghoshal, S. (2005). Bad management theories are destroying good management practices. *Academy of Management Learning & Education*, 4, 75–91.
- Giroux, H. A. (2011). Beyond the swindle of the corporate university. In M. Bailey & D. Freedman (Eds.), *The assault on universities* (pp. 145–156). London: Pluto Press.
- Global Foundation for Management Education. (2010). *From challenge to change: Business schools in the wake of the financial crisis*. Available at: <http://www.aacsb.edu/about/gfme/>
- Global Responsibility Leadership Initiative (GRLI). (2012). *World Business School Council for Sustainable Business (WBSCSB) and Principles for Responsible Management Education (PRME): The 50þ20 Agenda*. Management Education for the World. GRLI, WBCSB and PRME.

- Godemann, J., Herzig, C., Moon, J., Powell, A. (2011). *Integrating Sustainability into Business Schools. Analysis of 100 UN PRME Sharing Information on Progress (SIP) reports*, Nottingham.
- Haertle, J. (2012). Principles for responsible management education PRME. *Journal of Management Education*, 36, 310e311.
- Khurana, R. (2010). *From higher aims to hired hands*. In *From Higher Aims to Hired Hands*. Princeton University Press. Accessed on 9 May 2007 in Google Scholar.
- Khurana, R., & Nohria, N. (2008). It's time to make management a true profession. *Harvard Business Review*, 86, 70e77.
- Louw, J. (2015). "Paradigm change" or no real change at all? A critical reading of the UN principles for responsible management education. *Journal of Management Education*, 39(2), 184–208.
- Matten, D., & Moon, J. (2005). Corporate social responsibility education in Europe. *Journal of Business Ethics*, 54(4), 323e337.
- Moon, J., & Orlitzky, M. (2011). Corporate social responsibility and sustainability education: A trans-Atlantic comparison. *Journal of Management & Organization*, 17(5), 583–603. <https://doi.org/10.5172/jmo.2011.17.5.583>. Accessed 9 May 2023.
- Orlitzky, M., & Moon, J. (2010). Corporate social responsibility education in Europe: Trends and comparisons. In D. L. Swanson & D. G. Fisher (Eds.), *Toward assessing business ethics education* (p. 143e176). Charlotte: Information Age Pub.
- Pfeffer, J. & Fong, C.T. (2004). The business school 'Business': Some lessons from the US Experience. *Journal of Management Studies*, 41(8). <https://doi.org/10.1111/j.1467-6486.2004.00484.x>. Accessed 9 May 2023.
- PRME. (2012). *Inspirational Guide for the Implementation of PRME. Placing sustainability at the heart of management education*.
- Rasche, A., & Kell, G. (Eds.). (2010). *The United Nations global compact. Achievements, trends and challenges*. Cambridge, New York: Cambridge University Press.
- United Nation Principles for Responsible Management Education PRME. (2012). The Rio declaration on the contribution of higher education institutions and management schools to 'The Future We Want'. A roadmap for management education to 2020. In *Endorsed by the Participants of the 3rd Global Forum for Responsible Management Education in Conjunction with Rio+20, 14e15 June 2012*. <http://www.unprme.org/resource-docs/3rdPRMEGFRioDeclaration.pdf>
- Waddock, S., Rasche, A., Wehane, P. H., & Unruh, G. (2011). The principles for responsible management education. Implications for implementation and assessment. In D. L. Swanson & D. G. Fisher (Eds.), *Toward assessing business ethics education* (p. 13e28). Charlotte: Information Age Pub.
- Watson, T. (2001). Beyond managism: Negotiated narratives and critical management education in practice. *British Journal of Management*, 12, 385–396.
- Zald, M. N. (2002). Spinning disciplines: Critical management studies in the context of the transformation of management education. *Organization*, 9, 365–385.

UN SDGs (Sustainable Development Goals, Agenda 2030)

► [Degrowth](#)

UN SDGs (UN Sustainable Development Goals)

► [Postgrowth](#)

Unalienable Rights

► [Human Rights](#)

UNCED

► [Earth Summit \(1992\)](#)

Uncertainty Management

► [ISO 31000: Risk Management Guidelines](#)

Uncontested Market Space

► [Blue Ocean Strategy](#)

Underground Economy

► [Shadow Trades](#)

UNDP

► [United Nations Development Programme](#)

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Synonyms

Abidjan Convention Secretariats; Coastal and marine management; Regional cooperation; Regional seas; South East Atlantic

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Introduction

Being part of the seven Regional Seas Conventions administered by the United Nations Environmental Programme (UNEP), the UNEP Abidjan Convention (ABC) or “Abidjan Convention” (short form for the Convention for the Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region) is the only competent instrument for marine and coastal management/governance in the Southeast Atlantic region. ABC’s jurisdiction covers 22 countries, and adopted by 19 contracting State Parties as the overarching legal framework under which all marine and coastal related initiatives, programmes and activities in the region are anchored (IW: LEARN 2019). The 19 contracting State Parties

that have ratified the Abidjan Convention are Benin, Cameroon, the Republic of the Congo, Côte d'Ivoire, Gabon, Gambia, Ghana, Guinea, Liberia, Nigeria, Senegal, Sierra Leone, South Africa, and Togo. The ABC is being coordinated by UNEP’s Marine Ecosystems Branch within the Division of Environmental Policy Implementation, based at the Nairobi Headquarters (UNEP 2016). To support the functions of the Abidjan Convention Secretariat (ABS) on its mandate to guide national policy makers and resources managers on what should be done to fulfil the mission of “Protecting, conserving and developing the Abidjan Convention area and its resources for the benefit and well-being of its people”, a Regional Coordinating Unit (RCU) hosted in Abidjan, Côte d'Ivoire was established. With the instruments of office and legal mandate, the ABS through the RCU is saddled with the responsibility to implement the Convention’s action plan and additional protocols, while partnering with local, regional, and international and non-governmental organizations to deliver a coastal and marine space where good environmental status is maintained, social integrity enhanced, and economic prosperity realized.

The History

Propelled by concerns at regional and global levels about the abysmal state of the marine and coastal environment, UNEP in 1974 under its Regional Seas Programme began the process of birthing different regional legally binding frameworks to protect and conserve the marine and coastal areas by first, developing Regional Action Plans. In 1981, the West and Central Africa (WACAF) Action Plan was developed, which would eventually emerge as the ABC signed on 23 March 1981 in Abidjan, Côte d'Ivoire, and came into force on 5 August 1984. Just like the “Action Plan” and “Convention,” an associated protocol referred to as the “Protocol Concerning Co-operation in Combating Pollution in Cases of Emergency in the Western and Central African Region” was also signed in 1981 and came into effect in 1984 (IAGC 2019).

However, the time between 1992 and 2002 marked a period when activities of the ABC was ebbing away, due to myriad of difficulties such as competing priorities and lack of resources (UNEP 2017). But afterwards, particularly with the advent of the Gulf of Guinea (GoG) Large Marine Ecosystem Programme, the ABC was reitalized. Also, the fifth meeting of the Contracting Parties in 2000 marked another red-letter day for the ABC as two landmark decisions were made. First, its geographical extent was expanded to accommodate South Africa. Secondly, an agreement was reached by the Contracting Parties to amend ABC's first article to expand its jurisdiction landward covering related inland waters that are within the control of its Contracting States (IWG 2019).

To change and to improve Contrary to the saying that "*to change and improve are two different things*", not only did the ABC **changed** its name in 2008 to the "Convention for Cooperation in the Protection, Management and Development of the Main and Coastal Environment of the Atlantic Coast of the West Africa, Central and Southern Africa Region", it also **improved** by adding the "Protocol concerning Cooperation in Combating Pollution in Cass of Emergency" to its repertoire.

Mission/Objectives/Focus Areas

Protecting, conserving, and developing the Abidjan Convention area and its resources for the benefit and well-being of its people.

Structure of Governance

The apex of the ABC's organizational structure is the UNEP. UNEP directs the ABC's activities, communicate reports, and liaise with the Contracting Parties. Article 17 of the ABC obligates the ABS to convene a Conference of Parties (CoP) once every two years and when necessary, call for an extraordinary meeting at the request of at least four Contracting Parties. A very important

component of the ABC structure is the National Focal Points. These Focal Points are mandatorily senior government personnels who serve as a link between their respective countries and the UNEP and are saddled with the responsibility of reporting the state of coastal and marine environment. To support the activities of the Focal Points and to achieve coherence, an umbrella Forum for the Focal Points is also in place to foster the preparation of the detailed programme of work ahead of the CoP. There is a Regional Coordinating Unit (RCU) based in Côte d'Ivoire which function as the Secretariat and headed by the Executive Secretary appointed by UNEP. The Executive Secretary coordinates the implementation of the ABC's Action Plan and plays a leadership position at the CoP. The three Large Marine Ecosystems in the African Atlantic (Guinea, Canary, and Benguela Current) have also institutionalized their activities within the ABC's organizational structure as the Contracting Parties agreed to grant them special status as advisors to the ABC.

Activities/Major Accomplishments

Thirty four years after its adoption, the ABC has been at the forefront of ensuring sustainability in the coastal and marine environment under its jurisdiction. In 2010, under the auspice of the UNEP Programme of the Regional Seas and Action Plan, the ABC and the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention) expressed interest to cooperate on two areas: (1) sharing of knowledge and experience between the two regions, and (2) implementing a transboundary ecosystem approach. An agreement to cooperate was officially reached in 2011 as a result of recommendations that emanated from a 2011 joint workshop between the ABC and OSPAR held in Libreville, Gabon, and a 2015 follow-up workshop held in Malabo, Equatorial Guinea, (OSPAR 2019). Courtesy of the revolutionary and proactive work of the ABC in the West, Central, and Southern Africa Region, there has also been intact cooperation between Regional

Fisheries Bodies (UNEP 2016), demonstrated by a 2012 decision of the ABC contracting Parties (World Bank 2017).

With the assistance of relevant international and regional organizations, the ABC has partnered with various regional and international organisations to develop and implement several integrated coastal, marine, environmental and climate change projects aimed at reducing and forestalling pressing challenges peculiar to the region. Among these projects is the Guinea Current Large Marine Ecosystem Project, Mami Wata project, West Africa Biodiversity and Climate Change project (WABICC), World Bank's West Africa Coastal Areas Management Programme (WACA), etc.

Recently, during the ABC's 13th COP, history was made as four additional Protocols were adopted by the Contracting Parties. These include the Calabar Protocol on Sustainable Mangrove Management; Grand-Bassam Protocol on Pollution from Land-based Sources and Activities; Malabo Protocol on Environmental Standards and Guidelines for Offshore Oil and Gas Activities; and the Pointe Noire Protocol on Integrated Coastal Zone Management (Abidjan Convention 2019). These four Protocols have been identified by experts as a game-changer towards achieving targets put forward by the Sustainable Development Goal 14, and the entire UN Agenda 2030.

Summarily, the convention provides an important instrument through which national policy makers and resource managers implement national control measures in the protection and development of the marine and coastal environment of the WACAF Region (West and Central African Region). Owing to its effective coordination and support, the Abidjan Convention Secretariat has ensured sustainable management of coastal and marine domain within the ABC jurisdiction. The ABS has matched-up ABC's evolution since 1981 by providing continuous mechanisms and programmatic initiatives which promotes transboundary cooperation, integrated management of marine resources, and innovation pathway for improving the socioeconomic status of people who depend on marine resources for their livelihood.

References

- Abidjan Convention. (2019). Why new Abidjan Convention Protocol was named after Calabar. Retrieved July 04, 2019, from <https://abidjanconvention.org/why-new-abidjan-convention-protocol-was-named-after-calabar>
- IAGC. (2019). Abidjan Convention – International Association of Geophysical Contractor. Retrieved July 03, 2019, from <https://www.iagc.org/abidjan-convention.html>
- IW: LEARN. (2019). Abidjan Convention – International Waters Learning Exchange & Resource Network. Retrieved August 23, 2019, <https://iwlearn.net/documents/legal-frameworks/abidjan-convention>
- IWG. (2019). Abidjan Convention – International Waters Governance. Retrieved August 23, 2019, from <http://www.internationalwatersgovernance.com/abidjan-convention.html>
- OSPAR. (2019). Abidjan Convention – International Cooperation. The OSPAR Commission. Retrieved August 23, 2019, from <https://www.ospar.org/about/international-cooperation/abidjan-convention>
- UNEP. (2016). *Regional ocean governance: Making regional seas programmes, regional fishery bodies and large marine ecosystem mechanisms work better together*. Nairobi: UNEP.
- UNEP. (2017). *Realizing integrated regional ocean governance: Summary of case studies on regional cross-sectoral institutional cooperation and policy coherence*. Nairobi: UNEP.
- World Bank. (2017). Abidjan Convention COP12. Retrieved August 23, 2019, from <https://www.worldbank.org/en/events/2017/03/27/abidjan-convention-cop12>

UNEP FI

- [United Nations Environment Programme Finance Initiative](#)

UNEP IDCP

- [UN Declaration on Cleaner Production](#)

Unethical Behaviors

- [Counterproductive Work Behaviors](#)

Unethical Sales

- [Mis-selling](#)

Unexplored Market

- [Blue Ocean Strategy](#)

Unfriendly Takeover

- [Hostile Takeover](#)

UNIDO

- [UNIDO: United Nations Development Organization](#)

UNIDO: United Nations Development Organization

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Synonyms

[UNIDO](#)

Definition/Description

The United Nations Industrial Development Organization (UNIDO) is the specialized agency of the United Nations (UN) that promotes industrial development for poverty reduction, inclusive globalization, and environmental sustainability. Created in 1966, it gained status of a UN specialized agency in 1985. Currently UNIDO has 170 member states (UN Brussels [2020](#)).

The purpose of the organization is to provide assistance to countries and communities to enhance economic development through the improvement of industrial capacity.

The mission of UNIDO, as described in the Lima Declaration adopted at the fifteenth session of the UNIDO General Conference in 2013, is to promote and accelerate inclusive and sustainable industrial development (ISID) in member states (UNIDO [2013](#)). The organization’s main focus areas are structured in four strategic priorities – creation of shared prosperity, advancing economic competitiveness, safeguarding the environment, and strengthening knowledge and institutions (UNIDO [2013](#)).

Like all organizations from the UN system, UNIDO agenda is driven by the programmatic focus of the sustainable development goals (SDGs). More specifically, UNIDO focuses its activities in the pursuit of Goal 9 which is focused on industry, innovation, and infrastructure (UNIDO [2016b](#)).

UNIDO facilitates its projects by implementing a holistic approach through combining four areas of cooperation – technical cooperation; analytical and research cooperation, and policy adoption and implementation cooperation; normative and quality-related activities; and creation of partnerships for knowledge transfer, networking, and industrial cooperation (Gall and Hobby [2007](#)).

UNIDO also functions as a facilitator of the mobilization of financial resources for the execution of relevant industrial development projects, with funding provided from governments, vertical funds, international financial institutions, etc. (UNIDO [2016a](#)).

History

Before the establishment of UNIDO, it was developing countries that have been pressing for the creation of a central UN organization for promotion of industrialization, particularly in the manufacturing sector (Campbell [1967](#)). Up to that point, UN specialized agencies had carried out activities on industrial development only as matters peripheral to their central concerns (Campbell [1967](#)).

In 1960 ECOSOC established a committee on industrial development, consisting of 18 members, that provided surveys and studies on the topic (Campbell 1967). However, in 1965 in light of the still very unsatisfactory levels of industrial development in developing countries, the UN General Assembly approved the establishment of an autonomous organization that would handle industrial development issues (Campbell 1967).

Thus, in 1966 UNIDO was formed by changing the UN Centre for Industrial Development, which was part of the UN Secretariat, into an autonomous organization of the United Nations (Kulesa 2010). In the first years of the existence of the organization, supporters of its stronger position in the UN system, which were mostly developing countries, could not achieve to be provided with UN specialized agency status. It was only after lengthy negotiations when in the Statute for UNIDO as a specialized agency was adopted on 8 April 1979 (Kulesa 2010).

For the first years of its existence UNIDO profiled itself as the United Nations entity supporting structural transformation of economies. In order to achieve its goals UNIDO initially relied on the top-down approach in industrialization, and focused on dialogue with local governments. From 1967 to 1997 UNIDO deployed senior industrial development field advisors (SIDFAs) and, later, UNIDO country directors (UCDs) (UNIDO 2016b). SIDFAs/UCDs were responsible for the industrial sector of UNDP country programs and acted as advisers to local governments on industrial matters.

After the adoption of the Lima Declaration in 1975, the organization moved on from supporting industrialization based on central planning, state-owned enterprises, and import substitution to private industries and export-led growth (UNIDO 2016b). A greater focus on South–South cooperation was established. A long process of ratifying UNIDO's establishment as a specialized agency of the United Nations is finally concluded in 1985 (Kulesa 2010).

A system of industrial consultations was established. In the context of the oil crises in the 1980s UNIDO started to assist developing countries in the realm of industrial energy efficiency and renewable energy (UNIDO 2016b).

The end of the Cold War marked a historic shift in international economic cooperation. The era of globalization and trade liberalization brought up new aspects on economic cooperation. It was in this period when development was reoriented towards aid in social sectors. The shift in development aid away from industrial cooperation towards social projects continued through the 1990s and 2000s (UNIDO 2016b). With the millennium development goals reaffirming this approach, UNIDO fell into an identity crisis, and some of the key contributor member states withdrew from the organization.

In the year 2013 UNIDO's General Conference, in its second Lima declaration, adopts the concept of inclusive and sustainable industrial development (ISID) (UNIDO 2013). Campaigns such as sustainable energy for all are launched. To facilitate the efforts of governments in implementing ISID, UNIDO launches pilot versions for its program for country partnerships (PCPs). In recent years UNIDO develops a strong South–South cooperation initiative which is mostly led by China.

Policy Review and Governance

The organization's medium-term program framework 2018–2021 has stated the four strategic priorities of UNIDO – **creating shared prosperity, advancing economic competitiveness, safeguarding the environment, and strengthening knowledge and institutions** (UNIDO 2017).

UNIDO's five basic development objectives, approved by UNIDO's fifth General Conference in December 1993, are as follows:

- Promotion of industrial and technological growth and competitiveness
- Promotion of the development of human resources for industry
- Promotion of equitable development through industrial development
- Promotion of environmentally sustainable industrial development
- Promotion of international cooperation in industrial investment and technology (Muegge and Assaf 1995)

UNIDO acts as the central coordinating agency for matters related to industrial development; a focal point for industrial technology; an honest broker for industrial cooperation; a center of excellence on industrial development issues; and a global source of industrial information (Gall and Hobby 2007).

The structure of UNIDO comprises of three main organs – the General Conference (GC), the Industrial Development Board (IDB), and the Program and Budget Committee (PBC). The GC is the structure that determines the guiding principles and policies of the organization and approves the budget and work program (UNIDO 2020a, b, c). It meets every two years. The Conference also appoints the director general and the members of the Industrial Development Board and of the Program and Budget Committee. The IDB has a four-year term, with its 53 members being chosen on a rotational basis. It meets on an annual basis and is in charge of reviewing the implementation of the working program, the regular and operational budgets, and policy recommendations to the GC (UNIDO 2020a, b, c).

The PBC is a subsidiary organ of the Board, which comprises of 27 members, and has the main purpose to provide assistance in the preparation of the work program, the budget, and other financial matters (Gall and Hobby 2007).

The UNIDO Secretariat is situated in Vienna, Austria. It maintains liaison offices in New York, Geneva, and Brussels. UNIDO maintains 30 field offices and 19 regional hubs worldwide. It also

has 9 ITPOs situated in Asia, Europe, Africa, the Middle East, and Latin America. Since 2013 the director general of UNIDO is Li Yong, a former vice-minister of the People's Republic of China Ministry of Finance (MOF) (UNIDO 2020d).

As of December 2019, UNIDO has a total of 170 member states (UNIDO 2020a, b, c). It is however one of the few UN specialized agencies from which key contributors to the UN system have withdrawn their participation. A list of membership withdrawals from UNIDO are presented in Table 1.

UNIDO Activities

In accordance with its main objectives, UNIDO develops and acquires funding for different programs related to industrial development. Its activities are mainly regional, with programs and funding directed mainly towards developing countries. UNIDO is dedicated to the achievement of the global SDGs, and the approach to handling that is its activities are often with local or regional focus. Though the typical strategic actions of UNIDO are concentrated on local initiatives, a few global initiatives in which the organization participates and facilitates also have impact on the organization's identity.

Historically, UNIDO's activities have been concentrated on developing countries in Africa, Latin America, and Asia. UNIDO has executed projects in economies in transition too – it played a role for

UNIDO: United Nations Development Organization,
Table 1 Former members of UNIDO (2020c)

Member state	Date of membership	Date of withdrawal
Australia	1985	1997
Belgium	1985	2015
Canada	1985	1993
Denmark	1985	2016
France	1985	2014
Greece	1985	2016
Lithuania	1991	2012
New Zealand	1985	2013
Portugal	1985	2014
United Kingdom of Great Britain and Northern Ireland	1985	2012
United States of America	1985	1996

the restructuring of economies in Soviet states and Eastern European countries in transition after the Cold War (Muegge and Assaf 1995). It still has regional offices in Armenia, Kyrgyzstan, etc.

UNIDO activity is concentrated within two main fields of assistance it provides:

- **Technical cooperation**

The purpose of UNIDO's technical cooperation function is to build the capacity of member states to initiate and carry out their own programs in the field of industrial development. The organization's technical cooperation activities are made to meet the needs and requirements of developing countries across UNIDO's three thematic priorities of creating shared prosperity, advancing economic competitiveness, and safeguarding the environment (UNIDO 2020b). Assistance is provided to developing countries, with special attention to least developed countries (LDCs).

Technical cooperation projects in the sphere of shared prosperity currently have both global and local projects. One global project, which UNIDO coexecutes with other UN agencies, is the UNIDO initiated joint program (3ADI) in the areas of agribusiness value chains, food security, policies, financing, and related trade (Matambalya 2015). Current local projects include assistance in industrial development, youth empowerment, sustainable business, etc. in developing countries (UNIDO 2020b).

Technical cooperation projects in the sphere of advancing economic competitiveness currently include a number of local projects in Latin America, Africa, etc. A global project in action is the trade facilitation project which offers support to UNIDO member countries in achieving effective and efficient implementation of WTO's new trade facilitation agreement (TFA) (UNIDO 2020b).

- **Investment support**

UNIDO has a key role in facilitating dialog between developing countries and investors. UNIDO has created a network of programs and cooperation frameworks for promoting investment in developing countries. Key structures such as the Investment Promotion

Services (IPSS) have played a vital role in the investment support activities of UNIDO (UNIDO 2016a). In the late 1990s the IPS network was renamed to the Network of Investment and Technology Promotion Offices (ITPOs), which would prioritize investment promotion and technology transfer in Africa, and in LDCs, in particular (UNIDO 2016a).

UNIDO's investment services may be categorized in the following main areas:

- Matchmaking between buyers and suppliers
- Mobilizing investments through targeted institutional cooperation
- Promoting technology transfer, with a focus on green technologies
- Strengthening institutional capacity of public and private partners
- Encouraging public-private partnerships
- Fostering entrepreneurship to attract more domestic and foreign investment (UNIDO 2016a)

Some of UNIDO's flagship programs and tools include the global network of Investment and Technology Promotions Offices (ITPOs), with nine such ITPOs currently working across the globe; the network of Subcontracting and Partnership Exchanges (SPXs); the UNIDO Investment Learning Centre (ILC); the Enterprise Development and Investment Promotion (EDIP) (UNIDO 2016a).

After the adoption of the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action UNIDO created the Investment and Technology Promotion Branch to support the growth of industrial productivity in developing countries (UNIDO 2016a). A prominent agency in UNIDO's investment promotion actions became the Africa Investment Promotion Agency Network (AfrIPANet) (UNIDO 2016a).

UNIDO Budget and Funding

UNIDO's budget and funding is allocated to financing UNIDO projects, to executing

campaigns and industrial development programs, and to maintenance of organizational structures. The budget consists of three categories – the regular budget, the operational budget, and voluntary contributions (Gall and Hobby 2007). The regular budget is formed from regular contributions of member states. The operational budget is formed through the implementation of projects (Gall and Hobby 2007). Like other UN specialized agencies, UNIDO's funding is divided into core contributions by member states, and ear-marked contributions, ascribed to particular goals and projects of the organization.

After the United Nations Conference on Environment and Development (Rio conference) in 1992, the new Global Environment Facility (GEF) becomes a major funding mechanism for environment-related activities. UNIDO became an implementing agency for both the multilateral fund and the GEF, which become substantial donors for activities covering industry, the environment, and sustainable energy. Bilateral donors start to play an increasingly important role in the funding of technical cooperation projects. In December 2019 UNIDO secured funding by GEF for over US\$38m of GEF funding for its submitted proposals. UNIDO's GEF funding highlights the organization's commitment to support its member states in their efforts to tackle some of the most pressing environmental challenges (UNIDO 2020a). UNIDO is also closely related with the UNDP when it comes to facilitating and executing projects in different spheres (Gall and Hobby 2007).

UNIDO and the Sustainable Development Goals (SDGs)

Like all organizations from the United Nations system, UNIDO agenda is driven by the programmatic focus of the sustainable development goals (SDGs). More specifically, UNIDO focuses its activities in the pursuit of Goal 9 which calls to "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation" (UN 2015) and is oriented towards the

development of quality regional and transborder infrastructure, the promotion of inclusive and sustainable industrialization and raising industry's share of employment and gross domestic product, the increase in access of small-scale industrial and other enterprises to financial services, including affordable credit, and their integration into value chains and markets, and enhancing scientific research and upgrading of technological capabilities of industrial sectors in all countries with a focus on developing countries.

The relevance of UNIDO's ISID concept, however, applies in greater or lesser extent to all SDGs. All UNIDO projects and programs are to a large extent related to the eighth SDG goal which focuses on promoting decent work and an economic growth. Some UNIDO programs are directly related to other SDG goals. One example is the empowering youth for change program in Cote d'Ivoire which is also related to the fourth SDG which focuses on quality education. Other UNIDO programs have adhered to SDGs regarding gender equality, with training and inclusion in economic life of women and at-risk youth in LDCs and developing countries (UNIDO 2016b).

Criticism of UNIDO

UNIDO has faced criticism since the beginning of its existence. It was in the first place the overall unwillingness of key actors in the UN system to create such an organization that is fairly noticeable. In retrospective, UNIDO is the only UN specialized agency that has been given the status of a specialized agency somewhat at odds with some members of the UN. While largely favored by developing countries, and a mostly a product of their political efforts at the UN (Campbell 1967), it would seem that members from developed countries did not seem to think that a structure specializing in industrial development is needed. Rather, it is still a widely adopted critique that UNIDO's activities are duplicating the activities of other UN agencies such as the UNDP.

UNIDO has received criticism about lacking transparency as well (Beigbeder 1997), which has been an issue that all UN agencies have been working on overcoming.

Summary

United Nations Industrial Development Organization (UNIDO) gains its specialized agency status in 1985, 19 years after its creation. Its role of an organization for industrial development sets the path for cooperation between states in the field of industry and technology, where traditionally competition is king. For this reason, UNIDO's road has sometimes been rocky, but in the year's organizational evolution, the agency has established an organizational path for cooperation between countries.

The role of UNIDO, although contested by some members of the United Nations, remains a key organization for facilitating development projects. The industrial development promotion has changed its means of achievement through time and has come to its present form through a number of reorganizations. The current project and investment-oriented approach the organization uses is proving to be a market-oriented approach to connecting investors with developing economies, and it has a significant impact on the promotion of dialog and coordination between business and emerging markets.

Cross-References

► Sustainable Development Goals (SDGs)

References

- Beigbeder, Y. (1997). *The internal management of United Nations Organizations*. London: Macmillan Press. ISBN 978-1-349-13960-6.
- Campbell, P. (1967). The birth of UNIDO. *Ekistics*, 24 (141), 227–230.
- Gall, T. L., & Hobby, J. M. (2007). United Nations Industrial Development Organization (UNIDO). In *Worldmark encyclopedia of the nations* (12th ed., pp. 332–335). Detroit: Thomson Gale.
- Kulesa, M. (2010). United Nations Industrial Development Organization. In H. Volger (Ed.), *Concise encyclopedia of the United Nations* (2nd ed., pp. 732–733). Leiden/Boston: Martinus Nijhoff Publishers.
- Matambalya, F. (2015). Pan-African and multilateral schemes and Africa's industrialisation: Synthesis of substance and legacy. In F. Matambalya (Ed.), *African industrial development and European Union co-operation: Prospects for a reengineered partnership*. London: Routledge.
- Muegge, H., & Assaf, G. (1995). Unido and the economies in transition: The challenge of economic recovery and technical assistance. *MOCT-MOST: Economic Policy in Transitional Economies*, 5(2), 223–252.
- United Nations (UN). (2015). General Assembly resolution 67/97, Transforming Our World: The 2030 Agenda for Sustainable Development, A/RES/70/1 (25 September). <https://undocs.org/A/RES/70/1>. Accessed 29 Mar 2020.
- United Nations Brussels (UN Brussels). (2020). United Nations Industrial Development Organization: What is UNIDO?. <https://www.unbrussels.org/united-nations-industrial-development-organisation-unido/>. Accessed 23 Mar 2020.
- United Nations Industrial Development Organization (UNIDO). (2013). Lima declaration: Towards inclusive and sustainable industrial development. Resolution GC.15/Res.1. https://www.unido.org/sites/default/files/2013-12/UNIDO_GC15_Lima_Declaration_0.pdf. Accessed 18 June 2020.
- United Nations Industrial Development Organization (UNIDO). (2016a). *UNIDO investment promotion: A retrospective*. UNIDO. United Nations Industrial Development Organization (UNIDO). <https://www.unido.org/resources/publications/advancing-economic-competitiveness/investment-technology-and-sme-development/investment-promotion>. Accessed 1 Apr 2020.
- United Nations Industrial Development Organization (UNIDO). (2016b). *50 years UNIDO*. United Nations Industrial Development Organization (UNIDO). <https://50.unido.org/index.html>. Accessed 22 Aug 2019.
- United Nations Industrial Development Organization (UNIDO). (2017). *Medium-term programme framework 2018–2021*. United Nations Industrial Development Organization (UNIDO). Accessed 1 Apr 2020.
- United Nations Industrial Development Organization (UNIDO). (2020a). News: UNIDO secures US\$38m in GEF funding. UNIDO Official Website (www.unido.org). <https://www.unido.org/news/unido-secures-us38m-gef-funding-1>. Accessed 2 Apr 2020.
- United Nations Industrial Development Organization (UNIDO). (2020b). Technical cooperation. UNIDO Official Website (www.unido.org). <https://www.unido.org/our-focus/cross-cutting-services/technical-cooperation>. Accessed 2 Apr 2020.

United Nations Industrial Development Organization (UNIDO). (2020c). Former Member States. 2020 United Nations Industrial Development Organization. <https://www.unido.org/who-we-are/structure/member-states/former-member-states>. Accessed 1 Apr 2020.

United Nations Industrial Development Organization (UNIDO). (2020d). UNIDO Director General. 2020 United Nations Industrial Development Organization. <https://www.unido.org/who-we-are-structure-director-general/biography>. Accessed 9 Sept 2021.

Further Readings

Browse through a selection of UNIDO projects. <https://www.unido.org/our-focus/cross-cutting-services/technical-cooperation>. Accessed 22 Aug 2019.

Unitary Board

► One-Tier Board

Unitary Model Versus Dual Model

► Anglo-American Board Model (One-Tier) Versus European Model (Two-Tier)

United Nations Agenda 2030 on Sustainable Development Goals, The

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Synonyms

[Sustainable development goals](#)

Definition

The increasing attention paid by stakeholders to socioenvironmental themes has imposed

policymakers to identify new economic paradigms. Starting from the Brundtland Report, national and over-national organizations have started to introduce new forms of regulation in order to favor the achievement of higher degree of worldwide well-being (Schubert and Láng 2005).

Nowadays, one of the main initiatives about sustainable development is represented by the introduction of the Agenda 2030 by the United Nations. The Agenda 2030 has been introduced on 25 October 2015 after a deep consultation about the opportunity to introduce a new agreement about the main topic of sustainable development.

The central role covered by Agenda 2030 is confirmed from Member States reaction to its introduction. In fact, it has been signed from all the 169 states involved in the United Nations. In this sense, the Agenda 2030 represents the first attempt to achieve highest level of sustainability through a set of common targets for all the Member States. Furthermore, the United Nations explicitly required in Sustainable Development Goals (SDGs) active participation from private and public sectors.

The contents of the Agenda 2030 are characterized by a high degree of heterogeneity related to the high number of topics connected to the concept of “sustainable development.” On this point, for the United Nations, the Agenda 2030 represents “*a plan of action for people, planet and prosperity*” to eradicate the worldwide poverty (United Nations 2015). According to this evidence, Agenda 2030 provided a set of 17 SDGs divided into 169 targets that represent standalone topics.

The Agenda 2030

The Agenda 2030’s introduction has been favored from the increasing consciousness about the negative externalities related to an “unsustainable world.” Furthermore, the data provided by World Economic Forum (2019) revealed how the introduction of Agenda 2030

following a period characterized from an increased probability of adverse events related to climate change, economic inequality, and societal well-being.

The Agenda is composed of 17 goals that represent different items related to the macro-concept of sustainable development that ideally followed the previous Millennium Development Goals (MDGs) (Pineda-Escobar 2019). However, despite the common origin, SDGs and MDGs are characterized by several differences. Specifically, the main differences are represented by number of goals, stakeholders interested, and role of civil society (Kumar et al. 2016). Furthermore, SDGs has been defined through several consultations with stakeholders while MGS was defined only from the United Nations. According to this evidence, the contents of Agenda 2030 are characterized by increasing attention paid from policymakers both from a qualitative perspective and from a quantitative one to sustainable development themes.

The preliminary evidence collected about the SDGs achievement reveals how they are interrelated despite their independency (Nerini et al. 2019). However, as evidenced before the achievement of SDGs needs an effective contribution both from Member States and from private sector. The private sector contribution represents a criticism for SDGs' achievement. In fact, Member States contribution to SDGs is connected to their social role covered in the society, while the contribution of private firms is related to their orientation toward socially responsible themes.

The achievement of the targets identified within Agenda 2030 needs effective support from private firms in order to increase worldwide equality. In fact, the documents required an active contribution to SDGs both from public and both from private sector. The implementation of these practices from them has been characterized by different responses. Specifically, only a small part of MNE has introduced in their business models explicitly references to them. However, this criticism was just considered in Agenda 2030 through an explicit provision for Member

States to “*Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle*” in SDG 12.6.

The preliminary evidence about private sectors orientation toward SDGs reveals how they are influenced by internal and external factors. This evidence followed as evidenced from overnational institution that highlights how “walking” and “talking” about SDGs are two different standalone concepts (Mhlanga et al. 2018). The internal factors related to SDG's orientation is connected to firms' characteristics, while the external factors are related to the context where they operate (Rosati and Faria 2019a, b). Furthermore, their approach is typically characterized by the prioritization of SDGs (Ike et al. 2019).

Summary

Agenda 2030 represents a tool to achieve a more high degree of worldwide sustainable development. The role covered by Agenda 2030 will be determinants for the future generation due to its innovative contents. Furthermore, the call in action of new categories of stakeholders not related to institutional entities represents the first attempt to increase the attention to these new topics. In fact, one of the major element of novelty of SDGs is represented by the involvement of the private sector.

Nowadays, the worldwide scenario has been characterized by progress in terms of SDGs' achievement. However, the full achievement of these ambitious goals needs the highest degree of contribution from the private entities. In this sense, a central role will be covered by academics in order to increase the overall knowledge about these themes.

Cross-References

► [Value Creation](#)

References

- Ike, M., Donovan, J. D., Topple, C., & Masli, E. K. (2019). The process of selecting and prioritising corporate sustainability issues: Insights for achieving the sustainable development goals. *Journal of Cleaner Production*, 236, 117661.
- Kumar, S., Kumar, N., & Vivekadish, S. (2016). Millennium development goals (MDGS) to sustainable development goals (SDGS): Addressing unfinished agenda and strengthening sustainable development and partnership. *Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine*, 41(1), 1.
- Mhlanga, R., Gneiting, U., & Agarwal, N. (2018). *Walking the talk: Assessing companies' progress from SDG rhetoric to action*. Oxfam.
- Nerini, F. F., Sovacool, B., Hughes, N., Cozzi, L., Cosgrave, E., Howells, M., ... Milligan, B. (2019, August 1). Connecting climate action with other Sustainable Development Goals. *Nature Sustainability*, 2, 674–680.
- Pineda-Escobar, M. A. (2019). Moving the 2030 agenda forward: SDG implementation in Colombia. *Corporate Governance: The International Journal of Business in Society*, 19(1), 176–188.
- Rosati, F., & Faria, L. G. (2019a). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production*, 215, 1312–1326.
- Rosati, F., & Faria, L. G. D. (2019b). Business contribution to the sustainable development agenda: Organizational factors related to early adoption of SDG reporting. *Corporate Social Responsibility and Environmental Management*, 26(3), 588–597.
- Schubert, A., & Láng, I. (2005). The literature aftermath of the Brundtland report 'our common future'. A scientometric study based on citations in science and social science journals. *Environment, Development and Sustainability*, 7(1), 1–8.
- UN. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations A/RES/70/1. In United Nations (Vol. 16301). Retrieved from https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf
- WEF. (2019). The Global Risks Report 2019 14th Edition Insight Report. <https://doi.org/978-1-944835-15-6>

United Nations Climate Change

► [United Nations Convention on Climate Change \(UNCCC\)](#)

United Nations Convention on Climate Change (UNCCC)

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Synonyms

[The United Nations Framework Convention on Climate Change](#); [United Nations Climate Change](#)

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Introduction

Climate change has become one of the defining environmental challenges of this generation and indeed the world is now at a crossroad. While there has been increasing shifts in the pattern of climate; threatening global food security, rising sea levels have increased the flooding risks and the scale and significance of the global impacts of the changing climate is unprecedented. Without drastic and timely collective action to reverse the present trend, adaptation to future impacts of climate change may prove arduous and expensive (Ott et al. 2004). However, even though greenhouse gases (GHGs) are naturally occurring and are critical to the survival of humans and other species, scientific evidences have linked the

increasing variation in the pattern of climate to the steady rise in concentration of GHGs in the Earth's atmosphere with carbon dioxide (CO₂) accounting for about two-third of the GHG emission. This global situation is occasioned by over a century and a half of industrial production and massive deforestation activities (Matemilola et al. 2019). The depth and breadth of knowledge and understanding of climate change causes and implications have grown tremendously over the last few decades and it is the clarity of understanding that has motivated the call for collective action at international, regional, national, and local levels. Thus, the conception of the most fundamental international climate agreement, the United Nations Framework Convention on Climate Change (UNFCCC) at the Earth Summit in Rio de Janeiro 1992 with the goal of stabilizing the concentration of GHGs in the Earth's atmosphere at a level where human interference will not cause significant threat to the climate system (Montes 2013; UNFCCC 2006).

History

Scientific proof of the anthropogenic interference with the climate system was first presented at the World Climate Conference in 1979. The conference called for national governments to anticipate and prevent worse climate effects. This event triggered wide range public awareness of global environmental challenges in the 1980s and governments became more concerned about global climate issues. This led to the establishment of the World Climate Program led by the World Meteorological Organization (WMO) in collaboration with the United Nations Environment Program (UNEP) and the International Council of Scientific Unions (ICSU) (UNFCCC 2007). In 1988, 340 delegates from 46 nations participated in the Toronto Conference on the Changing Atmosphere which further heightened the public discussion and recommended the development of a global framework convention on the protection of the climate (UNFCCC 2019a).

Later in 1988, following a proposal by the Government of Malta, the United Nations General Assembly adopted resolution 43/53 which affirms that “climate change is a common concern of mankind, since climate is an essential condition which sustains life on Earth” and pushes for the protection of the global climate for the benefit of present and future generations (Montes 2013; UNFCCC 2019b). Thus, also in 1988, the WMO and UNEP established a new body, the Intergovernmental Panel on Climate Change (IPCC), to regularly conduct studies to assess the pattern of changes, project potential impacts and significance, and response strategies. The IPCC published its First Assessment Report on the state of the global climate in 1990. The IPCC Annual Assessment Report have since formed the basis for negotiations at the UN General Assemblies on climate issues (UNFCCC 2019a).

Later in November 1990, the Second World Climate Conference was again held in Geneva, but unlike the First Climate Conference, delegates included scientists and ministers. This time the Conference called for the establishment of a treaty to deal with climate challenges and the General Assembly acted swiftly in passing Resolution 45/212 to set up the Intergovernmental Negotiating Committee (INC) for a Framework Convention on Climate Change to formally oversee negotiations on a convention on climate change at the General Assembly. The INC convened five times between February 1991 and May 1992 for negotiations and came up with a final text for the United Nations Framework Convention on Climate Change (UNFCCC) in time for adoption in May 1992 in New York (UNFCCC 2019a).

The document for UNFCCC became open for signature later in June 1992 at the Earth Summit in Rio de Janeiro, where 154 states signed it, and the convention was entered into force on March 21, 1994, after the fiftieth member State deposited its ratification instrument (UNFCCC 2007). As of 2015, the Convention already enjoys almost a complete universal membership with 197 parties, making it one of the most globally accepted International Environmental Agreements. Since it entered into force, the INC's assignment of

negotiating implementation of the UNFCCC was completed and the Conference of the Parties (COP) to the Convention became the decision body with the first session (COP 1) held in Berlin in 1995. States that are parties to the convention have since then held annual meetings of the Conference of Parties (with the most recent, COP 25 held in Madrid in December 2019) to discuss and monitor implementation of previous conventions and facilitate further negotiations on the best ways to address climate change, going forward (UNFCCC 2019b; Hermwille et al. 2015).

UNFCCC is the parent treaty for the Kyoto Protocol which was adopted on 11 December 1997 in Kyoto, Japan, and entered into force on 16 February 2005, as well as the Paris Climate Change Agreement, adopted on 12 December 2015 and entered into force on 4 November 2016. The UNFCCC in itself is not a legally binding treaty because it has no enforcement mechanism and sets no GHG emission limits. Rather, it provides platform for negotiating other international agreements (such as the Kyoto Protocol and Paris Agreement) that may be binding on parties (Ministry of the Environment and Statistics Finland 2009).

Objectives and Principles

The ultimate objective of the UNFCCC as contained in Article 2 of the Convention is “to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic [originating in human activity] interference with the climate system.” This objective reflects the Convention’s concern of the threat to the Earth’s climate system from the surging anthropogenic GHG emissions. Thus, in this context, parties to the Convention further assent in the Article 2 not only to avert dangerous interference of human activities in the climate system but also to stabilize the concentration of GHG in the atmosphere in order to allow the “ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic

development to proceed in a sustainable manner” (Ministry of the Environment and Statistics Finland 2009; UNFCCC 2007).

The principles are designed to guide the actions of parties to the convention and are outlined in Article 3 of the Convention. The Article however also stresses that the list principles provided do not represent an exhaustive one. For example, the first principles, which is a replica of the Principle 7 of the Rio Declaration on Environment, stresses the principles of equity and of common but differentiated responsibilities and respective capabilities (CBDR-RC). This principle implies that although every state must take part in the climate action, the level of contribution will be based on their respective volume of emission and capabilities (Ministry of the Environment and Statistics Finland 2009).

Institutional Structure and Governance

Several bodies and groups are involved in the organizational and governance process of the Convention. These include bodies and offices set-up by the Convention such as the Conference of the Parties (COP), the subsidiary bodies (SBs), COP Presidency, and the Bureau. Also included are other working groups, committees, and bodies of expert set up by COP in line with Article 7.2(i) of the Convention (UNFCCC 2007).

Also known as the climate summit, climate change conference, or UN climate conference, the Conference of the Parties (COP) is the chief decision-making body of the Convention and this is expressly affirmed in Article 7.2. The global climate action process generally corresponds to the outcomes of the annual COP sessions where state parties to the Convention come together to deliberate on implementation of the convention and facilitate important decisions relating to climate action. Thus, at the end of a COP session, parties may adopt amendments to the convention or come up with independent agreements like the Paris Agreement. Overall, COP is responsible to review parties’ commitments, facilitate information exchange, evaluate implementation of the

Convention, review, adopt and publish reports, and make recommendations (UNFCCC 2007).

In addition, to serve as advisory institutions to the COP, the Convention established two permanent multidisciplinary subsidiary bodies (SBs), the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI), by Article 9 and 10, respectively. The SBSTA and SBI are the key working groups of the Convention and hold biannual meetings in mid-year and in conjunction with COP towards the end of the year. The SBs normally is comprised of experts from different fields because of the more technical nature of their responsibilities. The SBs play an important role in helping COP to reach key decisions with the submission of their recommendation for draft decision which COP then reviews for adoption (UNFCCC 2007).

Of key importance is the office of the COP President, which is usually rotated amongst the five UN regional groups of Africa (54 members), Asia (53), Latin America and the Caribbean (33), Western Europe and Others (WEO, 29), and Eastern Europe (23). The COP Presidency is an elective position which is open to the environment minister of party states to the Convention and normally filled upon the commencement of a COP session. The COP President must remain impartial in facilitating agreements among parties. There is also the COP Bureau which usually comprise of 11 members: the COP President, seven Vice-Presidents, the Chairs of the two SBs and a Rapporteur. While the President presides over negotiations on open issues under discussion with parties usually at ministerial level, the Vice-Presidents typically oversee high-level discussion segments. The Rapporteur however prepares report for the session (UNFCCC 2007).

Summary

Climate change is one of the most important environmental issues in recent years which has been linked to the increasing concentration of GHG in the atmosphere. United Nations Framework Convention on Climate Change was therefore

conceived as an international treaty in 1992 to provide a platform for the states to collaborate and negotiate solutions to stabilize atmospheric GHG concentration. UNFCCC has no enforcement mechanism and is not a legally binding treaty; instead, it provides the platform for other binding agreements on climate change to be negotiated. Thus, it is upon the foundation of the UNFCCC that the Kyoto protocol in 1997 and the Paris Agreement in 2015 were adopted amongst other international climate agreements.

Cross-References

- Sustainable Development Goals (UN Global Goals)

References

- Hermwille, L., Obergassel, W., Ott, H. E., & Beuermann, C. (2015). UNFCCC before and after Paris: What's necessary for an effective climate regime? *Climate Policy*, 17(2):1–28. From <http://www.tandfonline.com/10.1080/14693062.2015.1115231>
- Matemilola, S., Adedeji, O. H., Elegbede, I., & Kies, F. (2019). Mainstreaming climate change into the EIA process in Nigeria: Perspectives from projects in the Niger Delta Region. *Climate*, 7(29), 1–16. <https://doi.org/10.3390/cli7020029>.
- Ministry of the Environment and Statistics Finland. (2009). *Finland's fifth national communication under the United Nations framework convention on climate change*. Helsinki: Ministry of the Environment and Statistics Finland.
- Montes, M. F. (2013). *Climate change financing requirements of developing countries. Climate policy brief*.
- Ott, K., Klepper, G., Lingner, S., Schäfer, A., Scheffran, J., & Sprinz, D. (2004). *Reasoning goals of climate protection. Specification of article 2 UNFCCC*. Berlin: Federal Environmental Agency (Umweltbundesamt): Geneva.
- UNFCCC. (2006). *United Nations framework convention on climate change: Handbook*. Halesworth: United Nations Framework Convention on Climate Change.
- UNFCCC. (2007). *Uniting on climate: A guide to the climate change convention and the Kyoto Protocol*. UNFCCC. From https://unfccc.int/resource/docs/publications/unitingonclimate_eng.pdf
- UNFCCC. (2019a). *History of the convention*. Retrieved February 10, 2020 from United Nations Framework Convention on Climate Change: <https://unfccc.int/process/the-convention/history-of-the-convention>

UNFCCC. (2019b). *The Katowice climate package: Making The Paris agreement work for all*. Retrieved October 5, 2019 from United Nations Framework Convention on Climate Change: <https://unfccc.int/process-and-meetings/the-paris-agreement/katowice-climate-package#eq-10>

United Nations Development Program

► [United Nations Development Programme](#)

United Nations Development Programme

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Synonyms

[UNDP](#); [United Nations Development Program](#)

Definition/Description

The United Nations Development Programme (UNDP) is the main United Nations (UN) agency for development. It is a part of the United Nations system of organizations, agencies, funds, and programs. Its main objective is to foster the building of “inclusive, sustainable and resilient societies” (UNDP 2019a).

Created in 1965, the UNDP currently has 176 members – both countries and territories. UNDP provides expert advice, training, and financial support (Gall and Hobby 2007, p. 141). The agency puts a special focus on sustainable development in the Least Developed Countries (LDCs) and countries emerging from conflict (UNDP 2019a).

The UNDP is a key international organization for meeting the needs of developing societies, and raising funds for the execution of development

projects all around the world (Gall and Hobby 2007, p. 144).

Its focus is on working with developing countries to find solutions to the challenges of a number of key areas of development, such as democratic governance, poverty reduction, crisis prevention and recovery, environment and energy, HIV/AIDS.

UNDP coordinates global and national campaigns that are dedicated to achieve the UN Sustainable Development Goals (SDGs). The program has over 4000 projects that operate in more than 170 countries and territories (UNDP 2019a).

The main job of the organization is to gather funding for the projects. Through its channels for fundraising, UNDP is one of the most prominent organizations in international fundraising for development (Klingebiel and Hildebrand 2010a).

History

Established with Resolution of the UN General Assembly 2029 (XX) (1965) from 22 November 1965 (UN Doc. A/RES/2029 (XX) 1965), UNDP is an organization that came to existence in 1966 from the merger of two other United Nations agencies – the Expanded Programme of Technical Assistance (EPTA), on one hand, and the UN Special Fund (SF), on other hand (Klingebiel and Hildebrand 2010a).

The organization was created in order to reduce duplication and channel financial resources toward a single legal entity. Further reforms in the UN structure have had a similar aim, with more recent reforms in the UN system having brought a clearer allocation of rights and duties to the UNDP (Klingebiel and Hildebrand 2010a).

In the context of decolonization and the rapid emergence of new countries, a lot of which came into existence after conflicts, UNDP was a much needed structure whose role for advancing the UN vision was crucial. Old problems as famine and natural disaster, and new problems as weak governments, corruption, and institutional inefficiencies were impeding development, and UNDP was the structure that was designated to facilitate the

United Nations' assistance in local and international development promotion efforts.

The first couple of projects that the UNDP developed were regional. In 1967, the UNDP partnered with the UN Food and Agriculture Organization and 42 countries to conquer desert locusts, which ravaged crops and was exposing local people to famine. In the 1960s the UNDP started a partnership with the Republic of Singapore (UNDP 2016), which had just acquired its independence as a city-state offering funding and technical expertise in such areas as education, industrialization, job creation, and urban planning. The partnership between UNDP and Singapore grew and, in 2012, the country became home for the jointly-directed Global Centre for Public Service Excellence (GCPSE), which was one of six UNDP Global Policy Centres and it operated until 2018 (UNDP 2019c).

The first global project of the UNDP was launched in 1970, and it was named "Global One" (UNDP 2016). The aim of the project was to develop a high-protein maize at an agricultural research centre in Mexico. Over time, the project has developed dozens of successful new varieties. Hundreds of people from dozens of countries have received training in maize improvement. The International Maize and Wheat Improvement Centre continues to function today and provides maize and wheat research, genetic research, as well as socioeconomic research related to sustainable development (CIMMYT 2020).

Over time, the UNDP has administered different projects with developing countries. In the 1980s the UNDP put a significant focus on gender issues by launching the Women in Development Division, and by starting a partnership with United Nations Development Fund for Women (UNIFEM). More funding was moved to women's rights projects around the world. An early grantee was Dr. Wangari Maathai, founder of the Green Belt Movement and the 2004 Nobel Peace Prize laureate. Women's rights and development has been one of the core spheres of action of the UNDP ever since (UNDP 2016).

After the end of the Cold War, the UNDP also took part in helping former Soviet countries in restoring their economies from the economic

crises and transfers from centrally planned to market economies that hit the post-Soviet countries. Such a project was the Beautiful Bulgaria project which went on from 1998 to 2011 (UNDP 2020b). The project was later extended to other former communist countries such as Armenia, Romania, and Serbia.

Currently, under the UNDP cap more than 4000 projects are being executed, with the funding in 2017 peaking to five billion dollars (UNDP 2019a).

The UNDP's Role in the UN System

UNDP is the main specialised organization of the UN for pursuing development. Following the main principles of the UN, it executes various projects and programs that aim to aid countries improve development within their societies.

The organization has outlined three main areas on which it focuses its actions:

- Sustainable development
- Democratic governance and peacebuilding
- Climate and disaster resilience (UNDP 2019c)

UNDP's main principles are in line with its three core goals – eradicating poverty, structural transformations, and building resilience (UNDP 2017). In the fulfilment of these goals, it has pointed out six signature solutions, namely:

- Keeping people out of poverty
- Promotion of governance for peaceful, just, and inclusive societies
- Crisis prevention and increased resilience
- Advancement of nature-based solutions for development
- Investment in clean, affordable energy
- Promoting women's empowerment and gender equality (UNDP 2017).

Each solution comprises of a mix of policy advice, technical assistance and financial aid (UNDP 2017).

UNDP is related to the UN General assembly (GA) and the Economic and Social Council

(ECOSOC). The monitoring of UNDP programs and projects is performed in accordance with the rules of the organization, and include both financial monitoring and performance and success monitoring (UNDP 2021).

UNDP Funding

UNDP funding is executed through a number of channels. The regular contributions, or core contributions, are one such channel. The core funding is mainly obtained by government payments to the UNDP. Each government decides for itself what would the size of its yearly contribution to the UNDP be. Core contributions account for roughly one third of the funding the organization gathers (UNDP 2019a). The official public web platform of the program states that more than \$5 billion were raised in 2018 alone (UNDP 2019a).

Top government contributors to the UNDP in 2018 were Germany, Japan, United States, Sweden, United Kingdom, Ukraine, Norway, Argentina, Netherlands, and Switzerland (UNDP 2019b).

Another channel for fundraising, which is more preferred by donors nowadays, is the so-called earmarked non-core funding. While core funding is given by donors to the organization with no specific area in which the funding should be spent, “earmarked” funding are contributions that donors provide to the organization with a specific purpose – for example, the contribution is to be utilized for climate change action projects, or women’s rights projects, etc.

Non-core funding is raised both by governments – more and more do governments turn to “earmarked” type of contribution – and by other donors, such as financial institutions, vertical funds, non-governmental organizations, foundations, pooling funding, etc.

In accordance with its transparency principles, the UNDP publishes online information about all contributions that it receives on a yearly basis, and project funding as well, on its public online platform, the SDG Impact initiative, the UNDP Accelerators labs, the UNDP Innovation facility, etc. (UNDP 2019a).

UNDP Reports and Development Research

Since 1990, the UNDP has been publishing the annual Human Development Report (HDR) each year. The report does not focus constantly on a specific sector (e.g., trade, labor, agriculture), but instead considers a different theme each year, with the constant focus on the problems of human development (Klingebiel and Hildebrand 2010b).

UNDP publishes annually the global Human Development Report (HDR) which is a report that tracks global and national progress relative to a set of development indicators (Murphy 2013). Indicators include different spheres of development such as eliminating poverty, providing access to clean water, optimizing government action, promotion of education and social inclusion, etc. The UNDP has also sponsored the production of local, national, and regional *Human Development Reports* (Murphy 2013). The HDR is considered to be one of the key regular reports that shine a light on the status of development across countries.

UNDP reports are categorized into global, regional, and national Human Development Reports. The UNDP also issues additional research reports on development, and occasional research papers by associated authors. The agency hosts a database of development-related statistical information which is included in the Human Development Reports. There are several composite indices of human development indices – the Human Development Index (HDI), the Inequality-adjusted Human Development Index (IHDI), the Gender Development Index (GDI), the Gender Inequality Index (GII), and the Multidimensional Poverty Index (MPI) (UNDP 2020a).

UNDP and the Sustainable Development Goals

UNDP is the main UN agency related to development issues. It mostly focuses on social aspects of development, rather than economic development.

UNDP has been considered as a key agency for the achievement of the United Nations

Sustainable Development Goals (SDGs) (Fraser 2019). The SDGs, also known as the Global Goals, are a universal call to action set by the United Nations. Building on the Millennium Development Goals (UN goals until 2015), the SDGs are 17 goals oriented toward poverty alleviation, climate protection, ensuring global peace, prosperity, and equality to all people. Key feature of the goals is interconnectedness, which corresponds with the idea of interdependence in sustainable development (Fraser 2019).

The SDGs were introduced in January 2016, and they are set to guide UNDP policy and funding until 2030. As the lead UN development agency, UNDP is uniquely placed to help implement the Goals through practical development projects in all UNDP partner countries and territories.

UNDP is conducting various initiatives that aim to promote the achieving of the SDGs. Such initiatives are the UNDP Climate promise initiative, the Small Island Developing States (SIDS) Offer, the UN Transitions Project, the Finance Sector Hub, etc. (UNDP 2021).

Summary

The United Nations Development Programme is one of the core specialized agencies of the United Nations. Its role in fostering development in developing countries and least developed countries (LDCs) takes the UNDP to the forefront of global sustainable development. The program is considered a reliable partner for development projects and has been administering numerous development initiatives throughout the globe.

The UNDP has a crucial role in the pursuit of the United Nations SDGs. It conducts various initiatives with its partners that aim to promote the development and adoption of sustainability.

The UNDP is the UN's major agency for fostering funding for different development projects, and it has a large number of contributors. The most of the UNDP's funding comes from nation states in the form of general purpose contributions or ear-marked contributions.

Cross-References

- Sustainable Development Goals (SDGs)
- United Nations Environment Program (UNEP)

References

- CIMMYT (International Wheat and Maize improvement Center). (2020). Our history. <https://www.cimmyt.org/about/>. Accessed 10 June 2020.
- Fraser, A. (2019). *Achieving the sustainable development goals* (Sustainable development goals series). Berlin: Springer.
- Gall, T. L., & Hobby, J. M. (2007). *Worldmark encyclopedia of the nations*. Detroit: 12th edn, Thomson Gale.
- Klingebiel, S., & Hildebrand, M. (2010a). United Nations Development Programme. In H. Volger (Ed.), *A concise encyclopedia of the United Nations* (2nd ed., pp. 706–712). Boston: Martinus Nijhoff Publishers.
- Klingebiel, S., & Hildebrand, M. (2010b). Human development reports. In H. Volger (Ed.), *A concise encyclopedia of the United Nations* (2nd ed., pp. 248–253). Boston: Martinus Nijhoff Publishers.
- Murphy, C. (2013). *The United Nations Development Program: A better way?* New York: Cambridge University Press.
- UNDP (United Nations Development Program). (2016). UNDP 50 years: On its anniversary, UNDP is looking towards the future. <http://50.undp.org/en/>. Accessed 8 Oct 2019.
- UNDP (United Nations Development Program). (2017). UNDP strategic plan 2018–2021. <https://digitallibrary.un.org/record/1318769>. Accessed 10 Apr 2020.
- UNDP (United Nations Development Program). (2019a). UNDP transparency portal. <https://open.undp.org/>. Accessed 22 Aug 2019.
- UNDP (United Nations Development Program). (2019b). UNDP funding, top contributors. <https://www.undp.org/content/undp/en/home/funding/top-contributors.html>. Accessed 22 Aug 2020.
- UNDP (United Nations Development Program). (2019c). Our work. <https://www.undp.org/content/undp/en/home/ourwork/>. Accessed 22 Aug 2019.
- UNDP (United Nations Development Program). (2019d). The Human Development Report. <http://www.hdr.undp.org/>. Accessed 22 Aug 2019.
- UNDP (United Nations Development Program). (2020a). Human Development Report 2019: Reader's guide. <http://hdr.undp.org/en/content/human-development-report-2019-readers-guide>. Accessed 10 July 2020.
- UNDP (United Nations Development Program). (2020b). Beautiful Bulgaria. Retrieved at https://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/supporting_transformationalchange/beautiful_bulgaria.html. Accessed 10 June 2020.
- UNDP (United Nations Development Program). (2021). Global initiatives. <https://sdgintegration.undp.org/global-initiatives>. Accessed 22 Aug 2021.

United Nations Environment Program (UNEP)

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Synonyms

[UN Environment Programme](#)

Definition

The United Nations Environmental Program (UNEP) is the leading environmental authority of the United Nations. Its headquarters was established Nairobi, Kenya, on 5 June 1972. The Programme was established after the United Nations Conference on the Human Environment held in Stockholm, 1972 (Siboni and Sangiorgi, 2013). The United Nations chose Nairobi as the Programme's headquarters to reflect its mandate to focus on developing countries. However, it operates internationally through a range of divisions, as well as regional offices.

At the time of its establishment UNEP had a staff of 300, including 100 experts from a range of fields. Funding of more than US\$100 million for the first 5 years was provided by 50 nations, with a US\$40 million contribution from the United States. Currently, about 95% of UNEP's income is from voluntary funding provided by its partners (UNEP, 2020).

UNEP finances its activities from two funds. The first, the Environment Fund, is the principal source of funds, supporting its core activities worldwide, and, in particular, the implementation of the UNEP work program. The second are earmarked funds, which are funds given for the purposes of a specific project, theme, country, etc. These funds are mostly via by the Global Environment Facility, the Green Climate Fund, and the European Commission.

Introduction

The United Nations Environmental Programme was established to lead nations worldwide in environmental initiatives and to promote and support the implementation of sustainable development. Its focus is on policymaking, setting the global environmental agenda. It also initiates specific projects that are aimed at enhancing sustainability, using the established systems of the United Nations to advocate and enact global environmental change. Its work is underpinned by the principles of the UN Agendas, specifically, Agenda 21 and Agenda 2030 that are targeted at identifying and addressing critical contemporary environmental issues.

UNEP's mission is to guide and lead nations around the world in a partnership approach. It does so via inspiring, informing, and enabling nations and their citizens to improve their quality of life while also considering the importance of protecting the world for future generations.

UNEP's Approach

UNEP approach relies on scientific research, which is the foundation of its program. On this basis it builds strategies aimed at key environmental issues. With these two carefully developed themes it is then able to work with nations to gain political support. Key to this approach is UNEP's development of "soft law" guidelines or principles, which are an effective way of engaging nation states as a precursor to the development of binding international law (UNEP, 2020).

To further its environmental aims, UNEP assesses global, regional, and national environmental conditions and trends. Based on these it works towards key endeavors that will support nations in enacting environmental change. These include international and national environmental instruments and strengthening institutions for the purposes of good environmental governance. To do so, UNEP works closely with its member states and develops relationships with a range of stakeholders including policymakers, industry, and community groups.

The effectiveness of UNEP's operations relies on these core activities.

- Monitoring of the environment via a range of instruments and indices, to gather and disseminate environmental information.
- Promoting international cooperation to develop and implement policies that support sustainable development.
- Catalyzing environmental awareness and action by government, industry, and society to address major environmental threats.
- Helping to develop international environmental law by providing expertise on all issues relating to the environmental governance, concepts, and instruments.
- Coordinating UN activities related to environmental action, based on principles of cooperation, liaison, and participation.
- Developing regional programs for sustainability.
- Capacity building and technology support at the country level.
- Making available support and advice on environmental policy, when needed and requested by its members, in particular with the goal of supporting developing countries and emerging economies.

UNEP's Governance System

UNEP's governance system comprises the UN Environment Assembly (formerly Governing Council) and the Committee of Permanent Representatives (Petsonk, 1990). Originally, the Governing Council of UNEP was composed of 58 states. These states were not necessarily members of the UN. During the Rio+20 UN Conference in 2012, the UN General Assembly resolved to reaffirm and strengthen the governance and role of UNEP as part of the UN more broadly, by creating the UN Environment Assembly to replace the Governing Council. Membership of the Assembly was automatically provided to all 193 UN member states. The Assembly meets biennially in Nairobi. During these meetings it

debates and decides on policies and issues, and sets UNEP's agenda, including its environmental law program.

The Committee of Permanent Representatives provides policy advice to the UN Environment Assembly. It comprises 122 members who work together to provide the agenda for the Assembly's meetings, which take place four times each year, and oversee implementation of policies adopted by the Assembly. The Committee is led by a five-member executive, elected for a period of 2 years. Each member of the executive is a representative of one of the five UN regional groups of member states. The outcomes of the Committee's meetings are available in the documents section of the UNEP website (UNEP, 2020).

Organizational Structure

UNEP's organizational structure is led by its Executive Office, consisting of its Executive Director, Deputy Executive Deputy, and Chief of Staff. The Executive have oversight of the following: New York Office Secretariat/Secretariat of the Environment Management Group; Chief Scientist; Evaluation Office; Governance Affairs Office/Secretariat of Governing Bodies; Crisis Management Branch. Its global reach is evidenced in its regional and subregional office locations (<https://www.unenvironment.org/>):

- Africa Office, including West Africa Sub-regional Office, South Africa Country Office, Addis Ababa Liaison Office
- Asia and the Pacific Office, including Pacific Sub-regional Office, China Country Office, India Country Office
- Europe Office, including Central Asia Sub-regional Office, Russian Federation Country Office, Brussels Liaison Office, Vienna Programme Office
- Latin America and the Caribbean Office, including Caribbean Sub-regional Office, Southern Cone Sub-regional Office, Brazil Country Office, Mexico Country Office
- North America Office

- West Asia Office

UNEP also comprises several divisions reflecting the range of work in which it engages: Communication, Economy, Ecosystem, Law, Science, Policy and Programme, and Corporate Services. Moreover, UNEP has created a network of centers of excellence that collaborate to develop and implement environmental programs and projects.

In addition, UNEP oversees international conventions, including the following:

- The Convention on Biological Diversity
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora
- The Minamata Convention on Mercury
- The Basel, Rotterdam and Stockholm Conventions
- The Vienna Convention for the Protection of Ozone Layer and the Montreal Protocol
- The Convention on Migratory Species
- The Carpathian Convention
- The Bamako Convention
- The Tehran Convention

UNEP coordinates interagency bodies working cooperatively on environmental issues and initiatives and has oversight of a number of secretariats working on multilateral environmental agreements, as well as several important collaborative research organizations and institutes.

UNEP Working Program: Strategic Areas of Intervention

UNEP has established seven thematic programs on which it bases the work of its members, across regions and sub-regions. These seven themes are outlined below.

1. **Climate Change.** UNEP is committed to supporting research on climate change. Its aim is to facilitate a transition to low-carbon societies, using research to support the development of renewable energy and to raise awareness of the importance of taking action

to avoid the consequences of climate change. It supports countries in developing and implementing climate change actions and provides leadership as well as advice and action in terms of technology, resources, finance.

2. **Disasters and Conflicts.** UNEP has a particular focus on action in crisis-affected countries and provides guidance for implementing legislative and institutional frameworks aimed at environmental improvement and disaster mitigation. It has taken action in areas that have been subject to conflict, such as Afghanistan, Côte d'Ivoire, Lebanon, Nigeria, and Sudan.
3. **Ecosystem Management.** UNEP supports the management and restoration of ecosystems for members and nation states around the world. Its support for ecosystems falls under its initiative, the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities.
4. **Environmental Governance.** As recognition of the importance of governance in underpinning environmental initiatives, UNEP assists governments to formulate, implement, and strengthen policies, processes, and programs that support the implementation of sustainable development. Key to this assistance is supporting the institutional and legal context within individual countries and in an overarching sense at regional and global levels. UNEP's aim in environmental governance is to bring sustainable development to the foreground of all development activity.
5. **Harmful Substance (Chemicals and Waste).** UNEP is focused on eliminating or minimizing harmful substances and hazardous waste and their impact on the environment and society. It negotiates international agreements and projects, such as the Strategic Approach to International Chemicals Management.
6. **Resource Efficiency (Sustainable Consumption and Production).** Given recent demands on the earth's resources due to consumption in developed and developing economies, UNEP is focusing on effective management of natural resources in terms of production, process, and consumption (Garrette, 2007). For example,

the Marrakesh Process is a global strategy supporting the creation and implementation of a 10-Year Framework of Programmes aimed at action toward sustainable consumption and production.

7. **Environment under Review.** UNEP has taken a global leadership role in raising awareness of environmental issues. It aims to provide information to policymakers and stakeholders about important environmental issues, such as air pollution. It achieves this by information provision via instruments that monitor resource use, access maps, publications, and other resources that are made available on UNEP's Environment Live platform. UNEP regularly publishes its Global Environment Outlook, which through its assessments and monitoring creates a comprehensive picture of the nexus between the environment and societal wellbeing. The sixth Global Environment Outlook (GEO-6) sets the stage for implementation of the 2030 Sustainable Development Agenda and will assist national, regional, and global efforts to achieve the UN Sustainable Development Goals. Through its Shared Environmental Information System (SEIS) project, UNEP assists countries in developing their own environmental reports and sharing their environmental data. This project is active in 20 countries in Africa, Asia, and Central Asia.

Cross-References

- [Agenda 2030](#)
- [Biodiversity](#)
- [Carbon Emissions](#)
- [Climate Change](#)
- [Eco-efficiency](#)
- [Ecology and Ecosystem: Sustainability](#)
- [Environmental Governance](#)
- [Environmental Law](#)
- [Local Agenda 21](#)
- [Pollution Prevention](#)
- [Sustainability of Waste Management System: Waste Generation and Collection](#)
- [Sustainable Consumption](#)

- [Sustainable Development](#)
- [United Nations Sustainable Development Goals 2030, The](#)

References

- Garrette, C. (2007). Evolution of the global sustainable consumption and production policy and the United Nations environment Programme's (UNEP) supporting activities. *Journal of Cleaner Production*, 15(5), 492–498.
- Petsonk, C. A. (1990). Role of the United Nations Environment Programme (UNEP) in the development of international environmental law. *American University International Law Review*, 5(2), 351–391.
- Siboni, B., & Sangiorgi, D. (2013). Genesis and development of the European Communication on Sustainability in Local Governments. *International Journal of Advances in Management Science*, 2(2), 43–49.
- UNEP (2020). United Nations Environment Programme. Available at: <https://www.unenvironment.org/>. Accessed 28 Oct 2020.

United Nations Environment Programme Finance Initiative

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Synonyms

[UN Environment Finance Initiative](#); [UNEP FI](#)

Definition

United Nations Environment Programme Finance Initiative (UNEP FI) is a partnership between the United Nations Environment Programme and the global financial sector (UNEP FI 2020b). It was created in 1992 in relation to the Rio Earth Summit, and it is headquartered in Geneva, Switzerland (UNEP FI 2020b).

The goal of the UNEP FI is to promote sustainable finance (Ziolo et al. 2019). The Positive Impact finance concept was developed by the

UNEP FI, and it is oriented toward financing business that has a positive impact on at least one of the pillars of sustainable development (UNEP FI 2017).

Members of UNEP FI are more than 400 institutions from the banking, insurance, and investment industries (UNEP FI 2020b). More than 100 supporting organizations related to these industries are also associated to the UNEP FI (UNEP FI 2020b). It is one of the international initiatives that supports the financial sector gain a better understanding on the significance of finance on the different aspects of environmental challenges, and how investment could be directed toward sustainable development (G20 2016).

UNEP FI also has a policy-oriented perspective. By providing different forums of cooperation and dialogue, such as country-level forums, it facilitates the dialogue between finance practitioners and policy-makers.

The Goal of Sustainable Finance

Sustainable finance refers to the variety of financial services that facilitate the combination of long-term ecological, social, and economic aspects of decision-making in different economic sectors and business spheres (Ziolo et al. 2019, p. 66).

Green finance is regarded to play a role in environmental damage mitigation related to the impact of climate change on the economic system. Climate change poses new risks for the natural and economic systems, and finance toward the mitigation of these risks is stepping up (Ghoul 2019, p. 301). Green finance has begun to play a more significant role as a facilitator of the rising trend of green growth.

Among the UN agencies that facilitate issues of sustainable and green finance, the United Nations Environment Programme (UNEP) and its Finance Initiative (UNEP FI) are considered to be of key importance. The categories of UNEP's activity are as follows:

- Assessment of the state of the natural environment and publishing thematic reports

- Formulation of international environmental agreements
- Support to organizations working for the sustainable management of environmental resources
- Support to activities aimed at integrating economic development with environmental protection
- Dissemination of knowledge and technology relevant to sustainable development
- Support of partnerships between the public and private sectors
- Patron of international initiatives related to the natural environment (Ziolo et al. 2019, p. 66)

International collaboration among different stakeholders such as market participants, central banks, finance ministries, and regulators is growing. The cooperation is mainly focused on knowledge sharing and capacity building in the sphere of green finance. Agencies such as the UNEP FI aim to promote sustainable lending, investment, and insurance (G20 2016).

History

In 1991, a group of commercial bankers got together and proposed the idea of a group to help spread awareness about the environmental calendar (UNEP FI 2021). In 1992, the UNEP Statement by Banks on Environment and Sustainable Development was launched in New York after the Earth Summit in Rio de Janeiro, to insure that sustainable development, among other issues, could be improved. This new initiative brought a broad range of financial institutions on board such as commercial and investment banks (UNEP 2021).

In 1997, this statement was redrafted in order to be more broad in its appeal and was renamed the UNEP Statement by Financial Institutions on the Environment and Sustainable Development (UNEP FI 2021). The Banking Initiative was renamed The Financial Institutions Initiative (FII). In 2003, the two groups were merged with this group, then called the UNEP Finance Initiative (UNEP FI 2021).

In the period 2010–2011, UNEP FI finalized the UNEP Statement of Commitment by Financial

Institutions on Sustainable Development by merging the Statement by Financial Institutions on the Environment and Sustainable Development and the UNEP Statement of Environmental Commitment.

Since 1994, UNEP FI hosts a Global Roundtable every other year. The Global Roundtable is an agenda-setting discussion forum that aims to bring together members of the sustainable finance community. In 2017, the UNEP FI initiated a regional roundtable initiative.

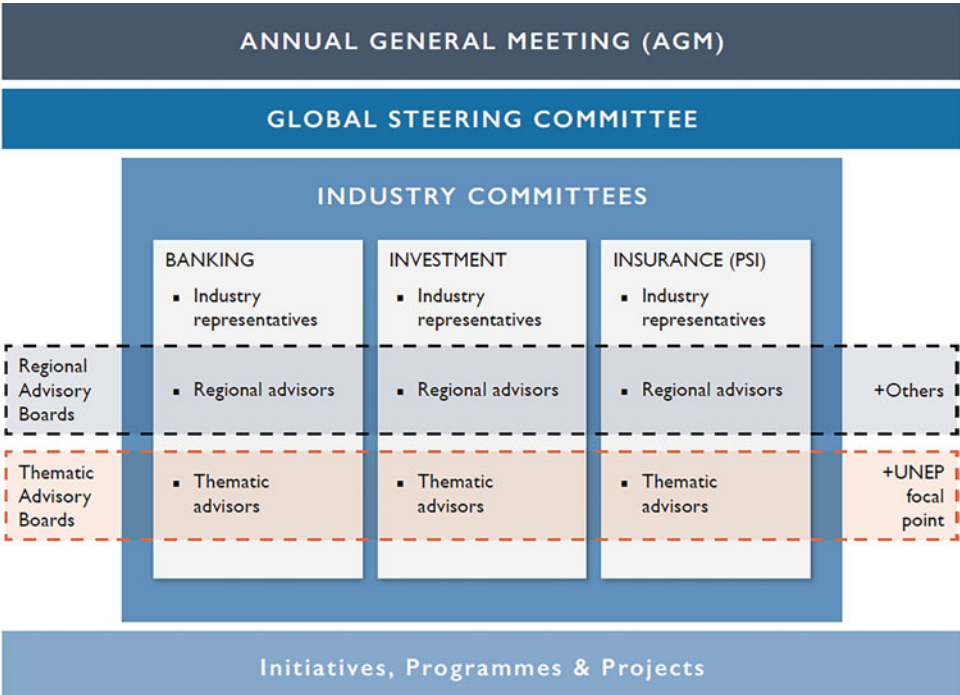
In recent years, UNEP FI has worked with actors from the banking industry to put systems to manage so-called “environmental, social and governance” (ESG) issues (G20 2016).

Organization and Governance

The UNEP FI’s working agenda is determined by a Global Steering Committee that consists of representatives of the member institutions and UN

Environment’s representatives (Fig. 1). Broader strategic decisions are made and confirmed at the UNEP FI Annual General Meeting (AGM), which takes place once a year. The key event of the UNEP FI is the Annual General Meeting (AGM) (UNEP FI 2020b).

The Global Steering Committee is composed of representatives of the core members of UNEP FI and is in charge of establishing the strategic orientation of the UNEP FI. The Industry Committees (the three UNEP FI industries are banking, investment, and insurance) are operative bodies of the initiative. The different thematic boards of the initiative reflect the main strategic goals and ensure their pursuance. Such boards are created on different topics such as climate change, sound environmental management, positive impact investment, etc. Regional advisory boards are in charge of coordinating UNEP FI actions in different global regions – Africa and Middle East, Asia Pacific, Europe, Latin America, and North America.



United Nations Environment Programme Finance Initiative, Fig. 1 UNEP FI governance structure. (Source: UNEP FI (2019a). UNEP Finance

Initiative Structure. <https://www.unepfi.org/about/structure/>. Accessed 11th October 2019)

Statement of Commitment and Principles of Responsible Banking

In its effort to put in place systems to manage the “environmental, social and governance” (ESG) issues (G20 2016), the UNEP FI developed key documents that members of UNEP FI must sign in order to become members of the Initiative, namely the Statement of Commitment by Financial Institutions on Sustainable Development, and the Statement of Environmental Commitment for the Insurance Industry (UNEP FI 2019b). The Statement by Financial Institutions on the Environment and Sustainable Development was designed in 1992 and revised in 1997 in order to include other institutions than banks (UNEP FI 2019c). The Statement of Environmental Commitment for the Insurance Industry is the relevant statement of commitment for insurance companies that become members of the UNEP FI (UNEP FI 2019c). The Statement acknowledges the role of the financial services sector in achieving sustainable development and states a commitment of organizations to strive to provide as much assistance as needed in order to improve the economy, business practices, and organizational structures toward integration of environmental and social aspects into their practices and operations (UNEP FI 2020a). Both Statements focus on the commitment of financial enterprises to environmental sustainability. Focus on internal operations, environmental risk assessment, and development of products and services is provided (UNEP FI 2020a, b). The Statements promote active environmental protection.

A similar direction with regard to impact is taken by the Principles for Responsible Banking. They are a part of UNEP FI and focus on climate change and align banking with the SDGs and Paris Climate Goals. As of March 2019, 49 banks and a number of stakeholders have endorsed the Principles of Responsible Banking (Weber and ElAlfy 2019).

The principles aim to provide a foundation for signatories to proactively consult and engage stakeholders with sustainable practices, as well as to establish governance practices to achieve the sustainability targets. Transparency and accountability are key components in the sustainability

achievement practices. The principles are considered as the first conventional financial industry code of conduct that explicitly addresses the role of banks on sustainable development and climate change (Weber and ElAlfy 2019).

Box 1: Principles for Positive Impact Finance

Principle 1:

Positive Impact Finance is that which serves to finance Positive Impact Business, serving to deliver a positive contribution to one or more of the three pillars of sustainable development (economic, environmental, and social) (UNEP FI 2017)

Principle 2:

To promote the delivery of Positive Impact Finance, entities (financial or non-financial) need adequate processes, methodologies, and tools, to identify and monitor the positive impact of their activities (UNEP FI 2017)

Principle 3:

Entities (financial or nonfinancial) providing Positive Impact Finance should provide transparency and disclosure on their activities (UNEP FI 2017)

Principle 4:

The assessment of Positive Impact Finance, delivered by entities (financial or nonfinancial), should be based on the actual impacts achieved (UNEP FI 2017)

Source: UNEP FI (2017). The Principles of Positive Impact Finance: A Common Framework to Finance the Sustainable Development Goals. <https://www.unepfi.org/wordpress/wp-content/uploads/2017/01/POSITIVE-IMPACTPRINCIPLES-AW-WEB.pdf>. Accessed 12 August 2021.

Criticism of the UNEP FI

Criticism of the UNEP FI is associated with the application and execution of projects and initiatives. One line of criticism is toward application, which is sometimes considered limited due to lack

of consistency between risk management and green lending guidelines. Another line of criticism concerns the difficulties in measuring the provision and performance of clean energy lending which have been attributed to the UNEP FI (Purkayastha 2019).

Summary

UNEP FI is a key UN Environment unit that brings together representatives of the global financial sector with the purpose to establish a framework for sound sustainable development in both business and society. It is considered an influential organizational structure in the realm of sustainable business and investment. The UNEP FI Statements of Commitment and Principles of Responsible Banking are considered as an important part of the formalization of environmental protection-oriented banking. As the idea of green banking continues its development, recommendations of better application procedures of the initiatives have been raised.

Cross-References

- [Rio Declaration on Environment and Development](#)
- [Sustainable Finance](#)
- [United Nations Environment Program \(UNEP\)](#)

References

- G20 (G 20 Green Finance Study Group). (2016). G20 green finance synthesis report. https://unepinquiry.org/wp-content/uploads/2016/09/Synthesis_Report_Full_EN.pdf. Accessed 23 Mar 2020.
- Ghoul, M. B. (2019). Green finance concept: Framework and consumerism. In M. Ziolo & B. S. Sergi (Eds.), *Financing sustainable development: Key challenges and prospects* (pp. 299–312). Palgrave Macmillan.
- Purkayastha, D. (2019). Managing credit risk and improving access to finance in green energy projects. In *Handbook of green finance* (pp. 1–19). Springer Singapore. https://doi.org/10.1007/978-981-10-8710-3_18-1.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2017). The principles of positive impact finance: A common framework to finance the Sustainable Development Goals. <https://www.unepfi.org/wordpress/wp-content/uploads/2017/01/POSITIVE-IMPACTPRINCIPLES-AW-WEB.pdf>. Accessed 12 Aug 2021.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2019a). UNEP Finance Initiative Structure. <https://www.unepfi.org/about/structure/>. Accessed 11 Oct 2019.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2019b). UNEP FI statement. <https://www.unepfi.org/about/unep-fi-statement/>. Accessed 11 Oct 2019.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2019c). History of the statement. <https://www.unepfi.org/about/unep-fi-statement/history-of-the-statement/>. Accessed 11 Oct 2019.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2020a). UNEP FI Statement of Commitment. http://www.unepfi.org/fileadmin/states/UNEPFI_Statement.pdf. Accessed 23 Mar 2020.
- UNEP FI (United Nations Environment Programme Finance Initiative). (2020b). About UNEP FI. <https://www.unepfi.org/about/>. Accessed 23 Mar 2020.
- UNEP FI (2020c). Structure. <https://www.unepfi.org/about/structure/>. Accessed 11th October 2019
- UNEP FI (United Nations Environment Programme Finance Initiative). (2021). Background. <https://www.unepfi.org/about/background/>. Accessed 10 Aug 2021.
- Weber, O., & ElAlfy, A. (2019). The development of green finance by sector. In M. Migliorelli & P. Dessertine (Eds.), *The rise of green finance in Europe: Opportunities and challenges for issuers, investors and marketplaces* (pp. 53–78). Palgrave Macmillan.
- Ziolo, M., Pawlaczyk, M., & Sawicki, P. (2019). Sustainable development versus green banking: Where is the link? In M. Ziolo & B. S. Sergi (Eds.), *Financing sustainable development: Key challenges and prospects* (pp. 53–81). Palgrave Macmillan.

Further Reading

- Peris-Ortiz, M., & Sahut, J. (Eds.). (2015). *New challenges in entrepreneurship and finance examining the prospects for sustainable business development, performance, innovation, and economic growth*. Springer International Publishing Switzerland.

United Nations Global Compact

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Synonyms

[Global compact](#); [UN global compact](#)

Definition/Description

The United Nations (UN) Global Compact is a call to companies to align their strategies and operations with ten universal principles in the areas of human rights, labor, environment, and anti-corruption, and to take actions that advance societal goals (UN Global Compact 2017, p. 3). The UN Global Compacts’ vision is “to mobilize a global movement of sustainable companies and stakeholder to create the world we want” (UN Global Compact 2021a). It is a global network with local presence all around the world.

At global level, the UN Global Compact established “a leadership platform for the development, implementation and disclosure of responsible corporate practices” (UN Global Compact 2014, p. 47). Furthermore, at local level, the Global Compact established Local Networks (i) to support businesses establishing and maintaining responsible practices considering their specific cultural, national, regional, and language contexts, (ii) to offer various formats for dialogues, learning, and partnerships (e.g., policy dialogues, issue-specific training, and workshops), as well as (iii) to connect companies with other stakeholder such as governments, NGOs, and academia to jointly foster sustainability activities (e.g., networking events, collectives action projects) (UN Global Compact 2021b).

Launched in 2000, the UN Global Compact is seen as world’s largest voluntary corporate sustainability initiative, with currently over 13,000 companies representing nearly every sector and size and 4000 organizations based in 160 countries (for up-to-date numbers check the website, UN Global Compact 2021c) and around 70 Local Networks (UN Global Compact 2021d).

Ten Principles of the UN Global Compact

The foundation of responsible businesses lies in a values system based on fundamental principles. UN Global Compact believes that responsible businesses enact the same values and principles

wherever they are active. Therefore, they developed Ten Principles in the field of human rights, labor, environment, and anti-corruption (see Table 1) which companies should incorporate into strategies, policies, and procedures.

These principles are derived from the following international documents (UN Global Compact 2021e): the UN Universal Declaration of Human Rights (United Nations 1948), the International Labour Organization’s Declaration on Fundamental Principles and Rights at Work (ILO 1998), the Rio Declaration on Environment and Development (United Nations 1992), and the UN Convention Against Corruption (UNCAC 2004). The principles one to nine were published in 2000. The tenth principle against corruption was adopted in 2004.

United Nations Global Compact, Table 1 Ten Principles of the UN Global Compact

HUMAN RIGHTS	
Principle 1:	Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2:	Make sure that they are not complicit in human rights abuses.
LABOUR	
Principle 3:	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4:	The elimination of all forms of forced and compulsory labour;
Principle 5:	The effective abolition of child labour; and
Principle 6:	The elimination of discrimination in respect of employment and occupation.
ENVIRONMENT	
Principle 7:	Businesses should support a precautionary approach to environmental challenges;
Principle 8:	Undertake initiatives to promote greater environmental responsibility; and
Principle 9:	Encourage the development and diffusion of environmentally friendly technologies.
ANTI-CORRUPTION	
Principle 10:	Businesses should work against corruption in all its forms, including extortion and bribery.

Source: UN Global Compact 2021e

Vision and Mission

The UN Global Compact aims at creating a global movement of sustainable organizations. They published the following vision: “To mobilize a global movement of sustainable companies and stakeholder to create the world we want” (UN Global Compact 2021a).

In accordance to this, the UN Global Compact has the mission to support companies to:

1. “Do business responsibly by aligning their strategies and operations with Ten Principles on human rights, labour, environment and anti-corruption; and
2. Take strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals, with an emphasis on collaboration and innovation.” (UN Global Compact 2021a)

Global Strategy 2030

How can the UN Global Compact support responsible business action? How can they support businesses delivering on the UN Sustainable Development Goals (SDGs), the world’s common agenda for achieving peace and prosperity for people and the planet (United Nations 2015)? These questions were part of UN Global Compact’s global strategy development process (UN Global Compact 2021f).

As a normative, principle-based and inclusive UN entity, the UN Global Compact decided to create a global movement of sustainable businesses and other stakeholders and to become the “translator” of the SDGs for business everywhere. The new global strategy lays emphasis on how the UN Global Compact participants as powerful private sector network can deliver on the SDGs with a huge impact and scale.

Currently, in the UN Global Compact Strategy 2021–2023 the following five focus areas have been defined (UN Global Compact 2021f; for details see also UN Global Compact 2021g):

1. *Holding companies accountable*: The UN Global Compact will support their participants to demonstrate their contribution to the UN principles and the SDGs and will hold participants accountable.
2. *A balanced growth of local and regional networks*: The UN Global Compact plans to continue to establish new local and regional networks.
3. *Measuring impact in priority areas*: The UN Global Compact prioritizes the following five SDGs based on their Ten Principles: Gender Equality (SDG 5), Decent Work and Economic Growth (SDG 8), Climate Action (SDG 13), Peace, Justice and Strong Institutions (SDG 16), and Partnerships (SDG 17).
4. *Harnessing the collective action of small and medium-sized businesses (SMEs)*: The UN Global Compact will focus on creating specific SME programs, as SMEs are worldwide important players in promoting the SDGs, and especially in emerging and developing countries.
5. *Engage more actively with the United Nations and its partners*: The UN Global Compact will deepen their collaboration with UN agencies and country teams on all levels.

The UN Global Compact aims at continuously strengthen their global network with local presence all around the world and established UN Global Compact Local Networks to support businesses establishing and advancing responsible business practices by providing, e.g., trainings, knowledge exchange, and networking opportunities among local business partners (UN Global Compact 2021b).

Signatories & Participants

The number of participants who have signed the UN Global Compact is steadily growing. Currently, this initiative is counting more than 13,000 companies and 4,000 organizations representing multitudes of sector and sizes of

organizations (for up-to-date numbers check the website, UN Global Compact [2021c](#)).

Since 2018, the UN Global Compact introduced two distinct engagement tiers to tailor their support for business: participant or signatory. Participants actively engage with the UN Global Compact at the global level, and at their national or regional level with full access to all resources. Signatories actively engage with the UN Global Compact at their national or regional level.

The value proposition of engagement consist of three categories (UN Global Compact [2017](#), p. 9): (1) *communicate your commitments*, e.g., by providing a digital profile on UN Global Compact website, (2) *easily access tools and resources*, e.g., by providing access to sustainability content and learning in the UN Global Compact digital library and academy as well as self-assessment and benchmarking with the UN Global compact navigator, and (3) *global reach and connections*, e.g., by providing access to UN Global Compact global events and advisory and support services strengthening partnerships.

UN Global Compact Management Model and Communication on Progress (COP)

The UN Global Compact developed a management model to help companies of all sizes align their sustainability strategy (UN Global Compact [2010](#)). How can companies implement the Ten Principles in strategy and operations? Which organizational culture is supportive? Is organizational change required? The UN Global Compact Management Model describes six steps for implementing the Ten Principles (UN Global Compact [2010](#), p. 8):

1. *Commit*: Leadership commitment to mainstream the Global Compact principles into strategies and operations and to act in support of broader UN goals, in a transparent way.
2. *Assess*: Assess risks, opportunities, and impacts across Global Compact issue areas.
3. *Define*: Define goals, strategies, and policies.

4. *Implement*: Implement strategies and policies through the company and across the company's value chain.
5. *Measure*: Measure and monitor impacts and progress toward goals.
6. *Communicate*: Communicate progress and strategies and engage with stakeholders for continuous improvement.

Each step contains suggestions for activities and focus areas. The process is iterative and ongoing.

The last step “communicate” is also important for remaining member in this global initiative: The UN Global Compact requires participants to publish annually their Communication on Progress (COP) (UN Global Compact [2021h](#)). In this annual disclosure to stakeholders, companies announce their process made in embedding the Ten Principles into their strategic and operational levels and how they support the SDGs (UN Global Compact [2021i](#)). The status of participants that fail to report on the COP minimum requirements or to upload their COP report on time will change to “non-communicating” and – eventually – these participants will be expelled from the initiative (UN Global Compact [2015a, b](#)).

Summary

The UN Global Compact aims at integrating Ten Principles in the field of human rights, labor, environment, and anti-corruption into business strategies and operations and at thus mobilizing action for a sustainable development. As important pillar of the UN private sector engagement, the UN Global Compact supports the SDGs by enabling (new) partnerships and collaboration among their participants on local, regional, and global level. Furthermore, the UN Global Compact has contributed creating and supporting several global action networks, such as the Principles for Responsible Investment (PRI [2021](#)) and

Principles for Responsible Management Education (PRME 2021) (Kell 2012). In all these global action networks the discourse on responsible business practices will be continued.

Cross-References

- [Earth Summit](#)
- [Rio Declaration on Environment and Development](#)
- [United Nations Human Rights Committee](#)
- [United Nations Principles for Responsible Management Education](#)

References

- ILO. (1998). International Labour Organization's declaration on fundamental principles and rights at work. https://www.ilo.org/wcmsp5/groups/public/%2D%2D-ed_norm/%2D%2D-declaration/documents/normativeinstrument/wcms_716594.pdf. Accessed 1 Feb 2021.
- Kell, G. (2012). 12 Years later: Reflections on the growth of the UN Global Compact. *Business & Society*, 52(1), 31–52. <https://doi.org/10.1177/0007650312460466>. Accessed 1 Feb 2021.
- PRI, Principles for Responsible Investment. <https://www.unpri.org/>. Accessed 1 Feb 2021.
- PRME, Principles for Responsible Management Education. <https://www.unprme.org/>. Accessed 1 Feb 2021.
- UN Global Compact. (2010). UN Global Compact management model. Framework for implementation. (Report, UN Global Compact library 231). https://www.unglobalcompact.org/docs/news_events/9.1_news_archives/2010_06_17/UN_Global_Compact_Management_Model.pdf. Accessed 1 Feb 2021.
- UN Global Compact. (2014). Guide to corporate sustainability. Shaping a sustainable future. (Report, UN Global Compact library 1151). https://d306pr3pise04h.cloudfront.net/docs/publications%2FUNG_Global_Compact_Guide_to_Corporate_Sustainability.pdf. Accessed 1 Feb 2021.
- UN Global Compact. (2015a). Communication on progress. An introduction. (Infographic, UN Global Compact library 1551). https://d306pr3pise04h.cloudfront.net/docs/communication_on_progress%2FIntro_to_COP.pdf. Accessed 1 Feb 2021.
- UN Global Compact. (2015b). UN Global Compact communication on progress policy (Policy document, UN Global Compact library 1851). https://d306pr3pise04h.cloudfront.net/docs/communication_on_progress%2FCOP_Policy.pdf. Accessed 1 Feb 2021.
- UN Global Compact. (2017). United Nations global compact. A call to action for sustainable business (Report, UN Global Compact library 5481). <https://d306pr3pise04h.cloudfront.net/docs/publications%2FUNG-Value-Proposition.pdf>. Accessed 1 Feb 2021.
- UN Global Compact. (2021a). Our mission. <https://www.unglobalcompact.org/what-is-gc/mission>. Accessed 1 Feb 2021.
- UN Global Compact. (2021b). Engage locally. <https://www.unglobalcompact.org/engage-locally>. Accessed 1 Feb 2021.
- UN Global Compact. (2021c). Our participants. <https://www.unglobalcompact.org/what-is-gc/participants>. Accessed 1 Feb 2021.
- UN Global Compact. (2021d). Where we operate. <https://www.unglobalcompact.org/engage-locally/about-local-networks>. Accessed 1 Feb 2021.
- UN Global Compact. (2021e). The ten principles of the UN Global Compact. <https://www.unglobalcompact.org/what-is-gc/mission/principles>. Accessed 1 Feb 2021.
- UN Global Compact. (2021f). What does this mean for our work. <https://www.unglobalcompact.org/what-is-gc/strategy>. Accessed 1 Feb 2021.
- UN Global Compact. (2021g). UN Global Compact strategy 2021–2023 (Policy document, UN Global Compact library 5869). https://ungc-communications-assets.s3.amazonaws.com/docs/about_the_gc/UN-GLOBAL-COMPACT-STRATEGY-2021-2023.pdf. Accessed 1 Feb 2022.
- UN Global Compact. (2021h). The Communication on Progress (CoP) in brief. <https://www.unglobalcompact.org/participation/report/cop>. Accessed 1 Feb.
- UN Global Compact. (2021i). Create and submit your CoP. <https://www.unglobalcompact.org/participation/report/cop/create-and-submit>. Accessed 1 Feb.
- UNCAC. (2004). United Nations convention against corruption. https://www.unodc.org/documents/treaties/UNCAC/Publications/Convention/08-50026_E.pdf. Accessed 1 Feb 2021.
- United Nations. (1948). The Universal Declaration on human rights. General Assembly resolution 217A, pp 71–77. 10 December 1948. [https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/217\(III\)](https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/217(III)). Accessed 1 Feb 2021.
- United Nations. (1992). Report of the United Nations conference on environment and development. A/CONF.151/26 (Vol. I), 12. August 1992. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf. Accessed 1 Feb 2021.
- United Nations. (2015). Transforming our World: The 2030 agenda for Sustainable Development. A/RES/70/1. <https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981>. Accessed 1 Feb 2021.

United Nations Human Rights Committee

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Synonyms

Accountability; Corporate social responsibility disclosure; John Ruggie; Social license to operate; Sustainable development goals

Definition

The United Nations Human Rights Committee is the monitoring committee for the International Covenant on Civil and Political Rights. It serves those member states of the United Nations who have signed up and ratified or acceded to the Covenant and, optionally, either of its Protocols.

Background to the United Nations

Early Years

The Great Depression of the 1930s started in the United States in 1929 and continued until the mid-1930s. It is generally attributed to a substantial reduction in aggregate demand within the US economy that led to significant declines in local manufacturing. This caused unprecedented unemployment that migrated to other economies, due mainly to fiscal regulation being reliant on the gold standard, and this resulted in a worldwide recession. This demonstrated the financial interrelatedness and reliance of economies and the lack and fragility of the systems in place. The World Economic Conference of 1931 was convened to establish economic protocols and multilateral agreements that protected against recurrences. Although unsuccessful, it prompted the British economist John Maynard Keynes to develop and

publish proposals that challenged international free trade arrangements and that were designed to encourage full employment (e.g., *The General Theory of Employment, Interest and Money* (1936)). He particularly advocated the introduction of trade tariffs and protectionist policies regulated by governments to address extreme trade imbalances. This view was taken up in the Bretton Woods conference in 1942 and acted as the instigator for the creation of the World Bank and International Monetary Fund (Williamson 1985; Helleiner 2014), two of the four pillar system of international support that Keynes envisaged (Singer 1995).

World War I and the League of Nations

Meanwhile, in the immediate aftermath of World War I, the League of Nations/Société des Nations was introduced as an international diplomacy grouping of prominent nations to ensure that disputes among nations were resolved through peaceful means (Walters 1952). Of particular note was the acceptance and inclusion of social well-being provisions for the citizens of nations. The covenant was signed in June 1919 and the League formally came into effect in January 1920. Due to a lack of commitment by member countries and, especially, with the outbreak of World War II, the League was, however, formally dissolved in April 1946.

World War II: The Aftermath and Setting Up of the United Nations

World War II and its immediate aftermath prompted a period of intense reflection by the international community to further establish measures to both encourage universal economic stability and social well-being for citizens, the fourth pillar identified by the Bretton Woods Institutions (Singer 1995), and to avoid another destructive war while avoiding the pitfalls of the failing (and failed) League. This led to the introduction of the United Nations.

In 1941, following the Declaration of St James's Palace, as a result of the conference of inter-allied member state representatives, Churchill, the British prime minister, and Roosevelt, the US president, drafted the Atlantic Charter that defined, among specific war-related issues, the social goals and objectives that were to follow

the conclusion of World War II. These overall principles were formally adopted by the governments of states then under occupation by the Axis aggressor countries, who were resident in the United Kingdom, the Soviet Union, and representatives of the free French state. On New Year's Day, 1942, Churchill, Roosevelt, and Litvinov and Soong, representing the USSR and China, respectively, signed an abridged document that formed the basis for the subsequent formal Declaration of the United Nations (Simma 1995). This included precepts based on the fundamental principles of universal human rights, as articulated in the Atlantic Charter.

The structure and location for this new United Nations international inter-government organization were agreed by Britain, the United States, the USSR, and China at Dumbarton Oaks in Washington, D.C., in 1944. Fifty governments met at the United Nations Conference on International Organization in San Francisco where the formal draft for the UN Charter was finally developed and subsequently ratified by the constituent member states in June 1945, with the UN finally coming into being on October 24, 1945 (Luard 1982).

For the structure, it was agreed that the organization would initially consist of four main bodies: a General Assembly of representatives from all member states; a Secretariat; a Security Council comprised of five permanent member states, supplemented by additional six members with fixed-term appointments, and who are selected by the General Assembly; and an International Court of Justice. In addition, the Economic and Social Council (ECOSOC) was formed under the aegis of the General Council, with specific responsibility for promoting human rights among member states. The UN Charter formally designated the two Bretton Woods Institutions as specialized agencies of the UN with these, together with other specialized agencies, being coordinated by the ECOSOC.

It was agreed that the United Nations headquarters would be located on designated international territory in New York City with other main offices in Geneva (Switzerland), Nairobi (Kenya), and Vienna (Austria) and the International Court of Justice at The Hague (Netherlands).

Notwithstanding its obvious and well-documented failings, the principles and overarching social objectives were established by the League of Nations and so it can rightly be viewed as a precursor to the United Nations. The influence that the Bretton Woods Institutions had was also instrumental.

In addition to mediating international conflicts to help maintain peace, the objectives of the UN Charter were geared at establishing and protecting human rights for citizens, providing humanitarian aid, upholding international law, and promoting sustainable development. At present, the United Nations now has six main bodies: the original four and the ECOSOC, supplemented by the Trustees Council. It also has a further collection of agencies, programs, and support funds such as the World Bank; World Health Organization (WHO); United Nations Educational, Scientific and Cultural Organization (UNESCO); United Nations International Children's Emergency Fund (UNICEF); and the World Food Program. It currently has 193 member states.

With acceptance by such a high proportion of the sovereign states, the United Nations Charter is considered by many as having the status of an International Treaty and instrument of International Law, with its member states, effectively, bound by its instruments. These champion the notion of equality of sovereign states and direct the following of appropriate international relations in all dealings, including prohibiting the use of military force to resolve conflicts.

Having set the context of the United Nations as an organization and its conglomerates, their remit, and the vested powers of the UN Charter, we now look to the human rights aspects of the UN.

Universal Declaration of Human Rights

The United Nations Charter (1945) identified the need to promote human rights and fundamental freedoms for all, not least, due to the atrocities committed in World War II and revelations from the Nuremberg Trials of 1945 and 1946.

In June 1946, the United Nations Economic and Social Council created the Commission on Human

Rights standing committee to introduce an International Bill of Rights. A drafting committee, under the auspices of chair, Eleanor Roosevelt, the wife of the US president, was convened for this purpose. Their approved Declaration and associated Covenant were submitted by the Commission to the Economic and Social Council and, after their adoption on August 26, 1948, were subsequently adopted by the United Nations General Assembly on December 10, 1948 (Morsink 1999).

In 1966, the General Assembly adopted the two international human rights covenants: the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights (Joseph and Castan 2013), and an additional five fundamental core human rights treaties to support the civil and political rights that are covered in the Declaration: the International Convention on the Elimination of All Forms of Racial Discrimination (1965); the Convention on the Elimination of All Forms of Racial Discrimination Against Women (1979); the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984); the Convention on the Rights of the Child (1989); and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (1990). These all have legally binding powers.

Each also has an associated independent monitoring committee, established by their treaty, that oversees the operation and implementation of their specialized area of human rights. Corporate human rights responsibilities for transnational corporations and business enterprises were later introduced in the Guiding Principles for Business and Human Rights framework. This was developed by John Ruggie (Cornelius and Wallace 2023) and endorsed by the United Nations Human Rights Council in 2011.

The United Nations Human Rights Committee

Responsibilities of the UN Human Rights Committee

The United Nations Human Rights Committee is the monitoring committee for the implementation

and maintenance of civil and political rights, as specified in the International Covenant on Civil and Political Rights, for those member states of the United Nations who have signed up to the Covenant (Buergenthal 2001). This includes its two Optional Protocols.

The General Assembly adopted the Covenant in 1966 but only came into force on March 23, 1976, at the point where the necessary minimum number of 35 member states formally agreed to be bound by the treaty (and its Optional Protocols). Since then, the majority of United Nations member states have committed to the Covenant – for a list of the relevant states, see the database for the Office of the United Nations High Commissioner for Human Rights (<http://www.unhchr.ch/tbs/doc.nsf>).

A state becomes bound to the Covenant through one of two distinct routes. It can either sign the treaty, followed by ratifying this to formally state its intention to be bound by the terms of the treaty, or accede to the treaty. By accession, the state does not sign the treaty but agrees to be bound by its terms and this is considered equivalent to ratification. After ratification, the state has three months before it is bound by the terms of the Covenant.

In addition to the Covenant, member states have the option of being party to the Optional Protocols. The first came into force at the inception of the Covenant and details the process whereby the Committee deals with claims of violations of their human rights by individual citizens (Shikhelmman 2018). The second Optional Protocol requires abolition of the death penalty for the member state and came into force on July 11, 1991. The Covenant has no provision for withdrawal by any state that has become a member and, similarly, from the second Optional Protocol by those who sign up to this. There is, however, a procedure within the Covenant for withdrawal from the first Optional Protocol. Several of the rights present in the Covenant are also subject to permitted restriction or limitation by the member state without being considered a violation. Such an action does, however, require the state to provide a suitable justification on the grounds of legality, legitimate purpose, necessity, or reasonableness.

The United Nations Human Rights Committee was established by actioning Article 28 of the Covenant. The instigation, remit, functioning, and procedures of the Human Rights Committee, as a monitoring body for the Covenant and its Optional Protocols, are formally stated in Articles 28–45 of the Covenant.

Membership of the UN Human Rights Committee

The UN Human Rights Committee comprises 18 “expert” members possessing recognized high moral standing and with knowledge and competence of human rights (Article 28). Each must be a national of a constituent state party who nominates them for membership, with Article 31 limiting such representation to, at most, a single representative from any particular state. Article 31 also advocates consideration be given to accepting Committee members from nominating states that suitably represent the diversity of political and legal systems in place while providing an “equitable” representative geographic distribution, overall. The latter is also suggested to potentially capture linguistic diversity of the Committee members. As an expedient, most elected members should also have a suitable legal background and experience.

Elections to the UN Human Rights Committee

Election to the Committee for a four-year term is by secret ballot of all member states at a United Nations General Assembly annual meeting. To aid continuity, elections are staggered, with half of the positions being available at two-year intervals and with provision for possible re-election if a member is re-nominated by their parent state. The elected members, themselves, elect Committee officers for a period of two years. These are the Committee Chairperson, three Vice-Chairpersons, and a Rapporteur. There is also the contingency to elect further Special Rapporteurs for specific named duties. The Committee is additionally provided with a Secretariat from the Secretary-General of the United Nations.

Although selected and nominated by a member’s state government, elected Committee members are deemed independent and serve their term in a personal capacity. To ensure political

impartiality in the Committee’s proceedings, Committee members cannot have any dealings with a periodic report sent from their parent state. They cannot also take part in any complaint made under an Optional Protocol that is directed against their state. They are also able to recuse themselves from participation in any issues they consider might lead to a charge of impartiality.

Monitoring Role of the UN Human Rights Committee

To meet their obligations from the Covenant, the Human Rights Committee has four basic monitoring functions to discharge (Neuman 2018):

1. To examine reports of the actions and processes taken by the member states (obligation Article 40) to give effect to the rights contained in the Covenant
2. To give high-level guidance regarding substantive and procedural obligations to assist member states to give effect to provisions in the Covenant
3. The evaluation of communications (complaints from individuals) made under the Optional Protocol against member states
4. Consideration of complaints regarding a lack of compliance to the provisions in the Covenant by a member state against another member state (Article 41)

Procedures Followed

Point 1 is a substantial overhead for the Human Rights Committee as each state that has either ratified or acceded to the Covenant has an obligation to provide an initial report within the first year of treaty membership (the core document) and, thereafter, a periodic report, typically every fourth or fifth year – or when required to do so by the Committee. Each report must explain how the state is addressing all Articles of the Covenant, in detail. The examination of the submitted report is achieved over two consecutive meetings of the Committee. In the first, the documentation is assignment to a Country Report Task Force comprising four to six Committee members. One member will be from the same geographic region as the submitting state, but no member can be from this state. In conjunction with the

Committee's Secretariat, and after due deliberation, a List of Issues is raised and sent to representatives of the submitting state. The submission is then examined in a public meeting with delegates of the state; this typically comprises the state's Ambassador to the United Nations Office at Geneva, senior representatives from their government, and other informed diplomats from the state. At the conclusion of this dialogue, the Country Report Task Force then drafts a report of the concluding observations that are initially circulated to all members of the Committee for their comments. It is then sent to the Committee for final discussion and adoption in a plenary session. This monitoring process provides visibility to the state's human rights compliance and can result in standardization and the adoption of "best practice" across member states (Shikhelman 2019).

Progression of a complaint made by an individual, group, or organization, under the first Optional Protocol (Point 3) requires the Committee to initially evaluate several admissibility criteria. These are specified in the Protocol and are a part of the jurisprudence underpinning the Committee. If the complaint is deemed admissible, the Committee will study the written submission by the appellant and any rejoinder the affected member state may provide and take a "View" regarding the substance and merits of the alleged violation. Should the Committee uphold the complaint, they provide a detailed remedy or appropriate recompense in their Views documentation. At present, the Committee's designated Special Rapporteur on Follow-up to Views would then liaises with all parties in an attempt to broker an agreeable outcome, given the Committee's findings, and to ensure instruments and/or suitable procedures are introduced to avoid reoccurrences by the offending State.

For point 4, should a member state raise a complaint against another party state claiming a lack of compliance due to negligence, disregard, or misinterpretation of the Covenant, in part or wholly, the states would be allowed a period of time, currently six months, to resolve the claim to the satisfaction of both parties. Should this remain unresolved, and the affected states have

both formally recognized the competence of the Committee to judge such disputes between party states, the Committee may formally consider the issues. This would require a referral by either or both states and for a reasonable period to have elapsed for a resolution, given the nature of the alleged transgression or transgressions. The Committee would then proceed to consider the dispute and seek a "friendly" resolution in the first instance. If this is not possible, an agreed reconciliation committee of five Committee members, independent of the states under dispute, would be instituted to consider the claims and to provide a formal report to the Committee Chair who would then forward this to the state parties within 12 months from the start of the investigation. Despite this provision, it is noteworthy that no such inter-state dispute has been formally progressed, to date.

Impact of the United Nations Human Rights Committee

The United Nations has a Human Rights Council (Hug and Lukacs 2014) whose role is to ensure that citizens are aware of their rights and know how to pursue these when denied them.

The United Nations Human Rights Committee, however, is charged with ensuring that the human rights Articles of the International Covenant on Civil and Political Rights are monitored. The outcome of this continuous process is to encourage states who have signed up or acceded to be members, to introduce and maintain domestic laws, policies, and practices that provide human rights for their citizens. The requirement of periodic reporting of compliance to the Covenant and the ready availability of the relevant documentation has the twofold effect of encouraging continued adherence by the state and an evolving process of harmonization of perceived best practices. The Committee actively engages in addressing those practices that limit or challenge human rights, both for the individual state and for the greater community. This has prompted changes in practices and policies and led to the introduction of appropriate human rights-focused legislation, by numerous party states (Heyns and Viljoen 2001).

Summary

The evolution of human rights and the Universal Declaration of Human Rights have been chronicled from their origins, in the Great Depression and the two World Wars, through to the offices of the United Nations. The Human Rights Committee is then shown to be the monitoring committee for compliance to the provisions of the United Nations International Covenant on Civil and Political Rights. The structure, composition, and remit of the Committee are further described, and indicative processes are detailed. Finally, their impact on the maintenance and furtherance of human rights is discussed.

References

- Buergenthal, T. (2001). The UN Human Rights Committee. *Max Planck Yearbook of United Nations Law*, 5, 341–398.
- Cornelius, N., & Wallace, J. (2023). John Gerard Ruggie and the UN Guiding Principles on Business and Human Rights. In Idowu, S. O. & Schmidpeter, R. (Eds): *Encyclopedia of Sustainable Management*, London, Springer.
- Helleiner, E. (2014). *Forgotten foundations of Bretton Woods: International development and the making of the post-war order*. Ithaca: Cornell University Press.
- Heyns, C., & Viljoen, F. (2001). The impact of the United Nations Human Rights treaties on the domestic level. *Human Rights Quarterly*, 23(3), 483–535.
- Hug, S., & Lukacs, R. (2014). Preferences or blocs? Voting in the United Nations Human Rights Council. *Review of International Organizations*, 9, 83–106.
- Human Rights: Civil and Political Rights. (2005). The Human Rights Committee. Fact sheet no. 15 (Rev1): <https://www.ohchr.org/en/publications/fact-sheets/fact-sheet-no-15-rev-1-civil-and-political-rights-human-rights-committee>
- Joseph, S., & Castan, M. (2013). *The international covenant on civil and political rights: Cases, materials, and commentary*. Oxford, UK: Oxford University Press.
- Luard, E. (1982). *A history of the United Nations: volume 1: The years of Western domination, 1945–1955*. London: Palgrave Macmillan.
- Morsink, J. (1999). *The Universal Declaration of Human Rights: Origins, drafting, and intent*. Philadelphia: University of Pennsylvania Press.
- Neuman, G. (2018). Giving meaning and effect to human rights: The contributions of Human Rights Committee members, in the Human Rights Covenants at 50: Their past, present, and future. In D. Moeckli, H. Keller, & C. Heri (pp. 31–47). Oxford, UK: Oxford University Press.
- Shikhelman, V. (2018). Access to justice in the United Nations Human Rights Committee. *Michigan Journal of International Law*, 39(3), 453–531.
- Shikhelman, V. (2019). Implementing decisions of International Human Rights Institutions – Evidence from the United Nations Human Rights Committee. *The European Journal of International Law*, 30(3), 753–777.
- Simma, B. (1995). *The charter of the United Nations*. Oxford, UK: Oxford University Press.
- Singer, H. W. (1995). *An historic perspective, in The UN and the Bretton Woods Institutions: New challenges for the twenty-first century*, Editors ul Haq, Jolly, Streeten & Haq. London: Macmillan Press.
- Walters, F. P. (1952). *A history of the league of nations*. Oxford, UK: Oxford University Press.
- Williamson, J. (1985). On the system in Bretton Woods. *The American Economic Review*, 75(2), 74–79, Papers and Proceedings of the Ninety-Seventh Annual Meeting of the American Economic Association.

United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting

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Synonyms

ISAR

Definition

The United Nations Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) is the United Nations focal point on accounting and corporate governance matters. Founded in 1982 by the United Nations Economic and Social Council, the ISAR aims to contribute to the economic and social development through the identification

good practices in corporate transparency and accountability. Nowadays, the activities made by the ISAR have been widely explored by academics and practitioners because of the increasing awareness about the need to favor the transition from traditional financial systems to modern economies based on the integration of social and economic goals. In this regard, the ISAR is considered by academics and practitioners as one of the leading institutions in the emerging field of the SDG reporting.

The Evolutionary Path of the ISAR

Since the 1982, the ISAR has been involved in many projects about accounting and accountability topics. The choice made by the United Nations to activate a research group to support the transition toward more transparent financial markets was driven by the need to enhance the comparability of the information disclosed by worldwide companies on mandatory or voluntary basis. In this regard, the United Nations organized a stable research group under the supervision of the United Nations Conference on Trade and Development (UNCTAD), which is the organizational body that coordinates ISAR activities.

Evaluating the main research focus of the ISAR is a complex task for academics. Over the year, the ISAR constantly revised their research activities in order to consider the contemporary challenges faced by worldwide companies. Accounting and SMEs, corporate governance and narrative disclosure are some of the main themes considered by the ISAR since its foundation. In particular, the main projects launched by the ISAR can be summarized by the following reports:

- 2003: *Accounting and Financial Reporting Guidelines for Small and Medium-Sized Enterprises (SMEGA) Level 3 Guidance*
- 2006: *Guidance on Good Practices in Corporate Governance Disclosure*
- 2008: *Guidance on Corporate Responsibility Indicators in Annual Reports*
- 2019: *Guidance on Core Indicators for Entity Reporting on Contribution Towards*

Implementation of the Sustainable Development Goals

In the last few years, the ISAR activities regarded nonfinancial dimension of accounting practices, as evidenced by the intense activities about social and environmental accounting. This paradigm shift is consistent with the original goal identified by the United Nations, which is the identification of initiatives to support the implementation of international standards, codes, and best practices to promote harmonization and improvement of quality of enterprise reporting to facilitate financial stability, international and domestic investment. Thus, the increasing awareness about the need to integrate sustainability topics in financial statements underlined the need for the ISAR to actively contribute to this debate through their project.

As evidenced in the previous section, in 2019, the ISAR launched its guidance on SDG reporting, which was a relevant contribution for companies and policy makers because of the lack of widely adopted guidelines about the disclosure of information about business contribution to the 2030 Agenda. In fact, the first evidences collected by academics revealed that the SDG reporting field was characterized by the coexistence of alternative practices based on different theoretical and practical foundations (García Meca & Martínez Ferrero, 2021; Pizzi et al., 2022). Thus, the attempt made by the United Nations to evaluate business contribution through the overall number of nonfinancial reports yearly disclosed by companies was not achieved because of these limitations (Venturelli et al., 2019). This evidence is also confirmed by the first insights collected about the Directive 2014/95/EU, which represents one of the main international initiatives developed to encourage companies to adopt more transparent and reliable information on mandatory basis.

The SDG Reporting According to the UNCTAD

Building on the SDG 12.6, which explicitly requires to the Member States to introduce

mandatory provisions about sustainability reporting, in 2019, the ISAR contributed to the launch of the official guidelines about SDG reporting. The main aim of the guidelines can be summarized by the need to identify a set of standardized metrics to enhance the comparability of the information reported by companies to communicate their contribution to the sustainable development goals. At the same time, the guidelines aim to support governments in their evaluation activities. In this regard, they represent a managerial tool with direct implications on policy making and decision processes.

The Guidance was prepared in accordance with the agreed conclusions of the 34 sessions of the ISAR, which in 2017 had requested UNCTAD to develop guidelines to support the disclosure of information about SDGs through the use of a limited number of sustainability indicators. This process was supported by preliminary reflections made by the ISAR during their periodical meetings. In particular, the projects about “eco-efficiency indicators for preparers” and “accounting for environmental costs and liabilities” are considered by the ISAR as two of the main pillars that have supported the development of the final version of the guidelines.

The main conceptual foundation of the standard consists of the provision of explicit reminder to the adoption of a reporting process inspired by typical approaches identified by accounting standards, such as the simplicity, baseline approach, emphasis on quantitative indicators, and alignment between the micro- and macro-level indicators. In particular, a central role is covered by the emphasis on quantitative indicators, which represented a limit for an effective representation of the main externalities related to business activities. Furthermore, the choice to consider internal and external perspectives has been driven by the need to consider the political dimension of the 2030 Agenda, which is a worldwide agreement between governments. In this regard, the disclosure of this information should represent relevant indicators also for policy makers interested to collect data from the private sector (Zhan & Santos-Paulino, 2021).

As regards the methodological approach, the guidelines suggested the adherence to the

following principles: materiality vs. universality, clarity of reporting boundaries, incremental approach, consistency in measurement methodology and data comparability, and reporting period. Some of these principles have been also considered by policy makers in their regulation activities (e.g., the materiality approach proposed by the European Commission) and by practitioners (e.g., the recent initiatives launched by the IFRS Foundation about comparability). However, the identification of this methodological approach represents an innovation within the sustainability reporting landscape, as evidenced by the absence of specific strict requirements about SDG reporting (Unerman et al., 2018).

Concluding Remarks

Accounting harmonization represents a critical issue for policy makers. In the last few years, the concept of accounting harmonization evolved from traditional financial reports to the emerging accounting tools adopted by worldwide companies to disclose their contributions to the sustainable development. Within this scenario, the ISAR can cover an enabling role in foster accountability processes. As evidenced by the long-term vision adopted by the United Nations in the 1982, the ISAR represents an effective tool to anticipate the future trends of accounting and accountability. The recent contribution to the development of the official UNCTAD guidelines about SDG reporting confirms this evidence. In this regard, management scholars interested to evaluate the main interlinkages between corporate communication and business strategy should try to embed the practical contribution provided by the ISAR within their research to fill the knowledge gap between theory and practice, which represents a critical issue for academics.

Cross-References

- [Politics \(Role of Politics in Sustainable Development\)](#)

References

- García Meca, E., & Martínez Ferrero, J. (2021). Is SDG reporting substantial or symbolic? An examination of controversial and environmentally sensitive industries. *Journal of Cleaner Production*, 298, 126781. <https://doi.org/10.1016/j.jclepro.2021.126781>.
- Pizzi, S., Principale, S., & de Nuccio, E. (2022). *Material sustainability information and reporting standards*. Exploring the differences between GRI and SASB: Meditari Accountancy Research. <https://doi.org/10.1108/MEDAR-11-2021-1486>.
- Unerman, J., Bebbington, J., & O'dwyer, B. (2018). Corporate reporting and accounting for externalities. *Accounting and Business Research*, 48(5), 497–522. <https://doi.org/10.1080/00014788.2018.1470155>.
- Venturelli, A., Caputo, F., & Adamo, S. (2019). *SDG accounting e informativa non finanziaria: prime evidenze empiriche sul contesto italiano*. Nuove Frontiere Del Reporting Aziendale. La Comunicazione Agli Stakeholders Tra Vincoli Normativi e Attese Informative.
- Zhan, J. X., & Santos-Paulino, A. U. (2021). Investing in the sustainable development goals: Mobilization, channeling, and impact. *Journal of International Business Policy*, 4(1), 166–183. <https://doi.org/10.1057/s42214-020-00093-3>.
- 2019a). As a voluntary initiative with over 650 signatories worldwide, PRME is the largest organized association between the United Nations (UN) and management-related higher education institutions. PRME encourages business schools and management-related higher education institutions to become advocates for an inclusive and sustainable global economy by incorporating values of corporate social responsibility and sustainability into their activities, teaching, and research using the six principles framework. In summary, the PRME initiative:
- Provides a platform for dialogue and learning on responsible management education
 - Develops and publishes tools and resources to help increase responsible management education
 - Identifies and develops thought and action leadership on responsible management education

PRME engages business and management schools to ensure they provide future leaders with the skills needed to balance economic and sustainability goals, while drawing attention to the Sustainable Development Goals (SDGs) and aligning academic institutions with the work of the UN Global Compact (UNPRME 2019a; CEEMAN 2019). Academic institutions that are publicly recognized and are degree-granting, as well as corporate universities whose parent organizations are participants of the UN Global Compact, are eligible to become signatories to PRME (UNPRME 2019c).

United Nations Principles for Responsible Management Education

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Synonyms

PRME

Description

The Principles for Responsible Management Education (PRME) is a United Nations-supported initiative. It was founded in 2007 with the goal “to raise the profile of sustainability in schools around the world, and to equip today’s business students with the understanding and ability to deliver change tomorrow” (UNPRME

Introduction

The social and environmental challenges we are facing today (e.g., poverty, substantial levels of inequalities, aging societies, climate change, finite resources, etc.) as well as numerous corporate scandals (e.g., the Volkswagen emissions scandal, the collapse of Enron due to cooked books, the spying on its board members and on the personal life of some of its investors of Deutsche Bank, etc.) and the global financial crisis have recently

led to an increased interest in corporate social responsibility (CSR). At the same time, some growing discontent with the way many business schools around the world teach their students and encourage a self-interested, profit-orientated focus that ignores the wider responsibilities of business to society can be observed (Baden 2013; Gorenak 2011; Kochan 2002; Mitroff 2004). Some scholars have started to look at the role business schools play in educating future business (and other) leaders and ask for changes in the business school curricula. Cant and Kulik (2009), for example, claim that “business schools would be remiss, if not unethical themselves, if their ethics education efforts were not increased in light of recent events.” Implicit in this debate is the desire that business education will equip students with the tools, skills, and motivation to recognize and repel unethical behavior in the workplace and to implement responsible and sustainable business practices (Baden 2013).

These developments were also observed by the United Nations (UN), and PRME is the UN Global Compact’s initiative which aims to transform management education, research, and thought leadership globally. The initiative is widely regarded as “an important catalyst for the transformation of management education (...) in order to meet the increasing societal demands for responsible business” (Godemann et al. 2014). To achieve this, PRME provides the six principles framework, supports the development of learning communities, and promotes awareness about the United Nations Sustainable Development Goals (SDGs) (UNPRME 2019a).

The Six Principles of PRME

Signatories to the PRME are required to commit to six principles when developing research, curricula, and teaching methodologies (Godemann et al. 2014). These principles of PRME are based on internationally accepted values endorsed by UN member states and provide an engagement framework for higher education institutions to embed responsibility and sustainability in education, research, and campus practices through a process

of continuous improvement (UNPRME 2019b). The six principles can be summarized as follows:

- **Principle 1: Purpose** – To develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.
- **Principle 2: Values** – Participating institutions incorporate the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact into their academic activities, curricula, and organizational practices.
- **Principle 3: Method** – Participating institutions create educational frameworks, materials, processes, and environments that enable effective learning experiences for responsible leadership.
- **Principle 4: Research** – Participating institutions engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental, and economic value.
- **Principle 5: Partnership** – Participating institutions interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.
- **Principle 6: Dialogue** – Participating institutions facilitate and support dialogue and debate among educators, students, business, government, consumers, media, civil society organizations, and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability (Source: UNPRME 2019b).

Progress and Achievements of PRME

The use of the PRME as a guide for delivering sustainability-focused management education has provided an opportunity to structure the change process of business schools and management-related higher education institutions

(Godemann et al. 2014). By some estimates, there are over 16,000 business and management programs worldwide, and a growing number of them are PRME signatories (UNPRME 2019c). Studies conducted on PRME found that management education institutions that signed up to the six principles initially concentrated on the development of new modules and programs which focus specifically on CSR, but by now, they are trying to embed responsibility topics into all undergraduate and postgraduate programs (Godemann et al. 2013).

Cross-References

- [Business Case](#)
- [Business Case of CSR](#)

References

- Baden, D. (2013). Applying social psychology to the challenge of embedding ethics into the business school curriculum. In *Education and corporate social responsibility international perspectives* (pp. 77–110). Limited: Emerald Group Publishing.
- Cant, G., & Kulik, B. W. (2009). More than lip service: The development and implementation plan of an ethics decision-making framework for an integrated undergraduate business curriculum. *Journal of Academic Ethics*, 7(4), 231–254.
- CEEMAN. (2019). About PRME – Principles for responsible management education. <http://www.ceeman.org/about-us/ceeman-prme/about-prme>. Accessed 15 May 2019.
- Godemann, J., Herzig, C., & Moon, J. (2013). Integrating sustainability into business schools: Evidence from United Nations Principles for Responsible Management Education (UNPRME) sharing of information in progress (SIP) reports.
- Godemann, J., Haertle, J., Herzig, C., & Moon, J. (2014). United Nations supported principles for responsible management education: Purpose, progress and prospects. *Journal of Cleaner Production*, 62, 16–23.
- Gorenak, Š. (2011). Responsible education and innovative CSR. In *Knowledge as business opportunity: Proceedings of the management, knowledge and learning international conference 2011* (pp. 513–521). Celje: International School for Social and Business Studies.
- Kochan, T. A. (2002). Addressing the crisis in confidence in corporations: Root causes, victims, and strategies for reform. *Academy of Management Perspectives*, 16(3), 139–141.
- Mitroff, I. (2004). An open letter to the deans and the faculties of American business schools. *Journal of Business Ethics*, 54(2), 185–189.
- UNPRME. (2019a). What is PRME? <http://www.unprme.org/about-prme/index.php>. Accessed 15 May 2019.
- UNPRME. (2019b). Six principles. <http://www.unprme.org/about-prme/the-six-principles.php>. Accessed 15 May 2019.
- UNPRME. (2019c). Become a signatory. <http://www.unprme.org/participation/index.php>. Accessed 15 May 2019.

United Nations Sustainable Development Goals 2030, The

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Synonyms

[Global Goals](#)

Definition/Description

The Sustainable Development Goals (SDGs), also called the Global Goals, are the central part of the 2030 Agenda for Sustainable Development (UN 2020a). They comprise of a global agenda of 17 sustainability goals and 169 targets (Martinuzzi and Schönherr 2019) that were developed through a bottom-up and consultative approach. The goals were agreed to at a UN General Assembly in 2015 and signed by nearly 200 countries. They cover complex overlapping concepts (ending poverty and hunger, reducing the impacts of climate change, helping to develop sustainable cities and community, and cutting gender inequality, and wider general inequality) where the action in one area will impact on the outcomes of others (Walker et al. 2019a). It is a nonbinding legal treaty, but a global partnership with voluntary guidelines intended to work in the spirit of global solidarity (Pekmezovic 2019).

A critical success factor is the involvement of the private sector with other key stakeholders being governments and regulators (e.g., setting national targets taking national circumstances into consideration) and civil society philanthropic organizations. However, the SDGs ask for key changes in the global financial and economic system to bring about fundamental sustainability transformation (Walker et al. 2019a).

The History

After the end of the Second World War in 1945, the world was striving for world peace. Representatives of over 80% of the world population gathered. The world was ready for an organization to follow the League of Nations to pursue common global goals. In June 1945, 50 countries signed the Charter in San Francisco (Poland signed later as the 51st original member state), United States, to form a new organization, the United Nations. The UN came into existence on 24th October of the same year, when the majority of signatories had ratified the Charter (UN 2020b).

It has three main goals: securing world peace, enforcing human rights, and ensuring social justice in the world. By signing the Charter of the United Nations, the members of the organization are obliged to act in common interest and by the principles laid down in the Charter of the United Nations (Woyke 1998). In the current 111 articles, all principles, values, rules of action as well as the organizational structures, and the handling of all members of the United Nations are formed into 19 chapters. Today, the United Nations are a multilateral forum for international exchange. It is intended to promote relations between states. This cooperation shall support advancement in political fields, human rights, development, economics, and culture (United Nations 2015a), including fostering sustainable development and poverty reduction.

A pioneering idea toward sustainable development, including issues of security, human needs, freedom, and environment, was already addressed at the UN Conference in 1972 in Stockholm, Sweden. Following this, the Brundtland Report

was published in 1987 highlighting the importance of an integrated approach to peace, development, and the environment. The Earth Summit in Rio de Janeiro, Brazil in 1992, renewed that approach by adopting the Rio declaration comprising of 27 principles to guide global sustainable development (UN 2015a).

Consequently, a new global partnership, the Millennium Declaration was concluded in September 2000 at the Headquarters of the United Nations in New York, where eight mutual goals were formulated. Signed by 191 countries, the so-called Millennium Development Goals (MDG) aim to reduce poverty, to eliminate hunger, to achieve universal primary education, to promote gender equality and to empower women, to reduce mortality rate, to improve maternal health, to battle against HIV/AIDS, malaria, and other diseases, to ensure global environmental sustainability, and to facilitate global partnerships for development by 2015 (UN 2020c).

At a follow-up conference, the United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil (Rio+20), in 2012, the importance of future global sustainability, including the importance of human rights, was highlighted. Additionally, there were talks on the post-MDGs world, leading to the first formal discussion of the Sustainable Development Goals (SDGs). It was followed by the process of establishing an inter-governmental process to implement the UN's sustainable development agenda and to develop global goals that are easy to communicate, concise, and action-oriented. Those goals, prepared as a proposal with a list of targets and measurable indicators, arose from a 30-member Open Working Group of the UN General Assembly. It provided the basis for developing the Agenda 2030 (Pekmezovic 2019).

In the final declaration of the Rio+20 conference with the title "The future we want," the main future global targets included sustainable development and a green economy. At that time, neither concrete goals were expressed, nor possible measurements determined (UN, 66/288. The future we want, 2012). Some years later, a more detailed report, "The Millennium Development Goals

Report 2015,” was published to highlight the achievements of the MDGs, in particular the reduction in global poverty levels. However, “Despite many successes, the poorest and most vulnerable people are being left behind” (UN 2015a) as many goals were not achieved. The results were included in the discussions for the Agenda 2030 (Gungadeen and Paul 2020). This new development Agenda 2030 is constructed on three key milestones: (1) adoption of SDGs to replace MDGs (concluded at a UN General Assembly in New York – Sustainable Development Goals); (2) a new framework for financing the development goals (the third international conference on financing for development in Addis Ababa – Addis Ababa Action Agenda); and (3) reaching a legally binding and universal agreement on climate (COP-21 in Paris – Paris Agreement) (Walker et al. 2019b).

Sustainable Development Goals (SDGs)

As part of the Agenda 2030, the SDGs are the latest in a line of global sustainable development initiatives going back to the UN Conference on the Human Environment held in Stockholm in 1972 (Wynn and Jones 2019). It was adopted by the UN at the United Nations Headquarters in New York, United States, in September 2015. All 193 member states representing industrialized countries, developing countries, and least developed countries agreed on the new Agenda “Transforming our World: The 2030 Agenda.” It is based on the three pillars of sustainable development (economic, social, and environmental).

In total, 17 goals and further 169 targets (broad goals with specific targets) to be achieved by 2030 were defined, designed to bring a variety of life-changing “zeros” such as zero poverty and hunger and zero discrimination against women. The focus is on global and long-term change, whereby global cooperation is a basic requisite. These new SDGs include the principles and commitments of the United Nations, including the full respect for international law (UN 2015a).

The cooperation of all nations is thereby essential to achieve the SDGs until 2030. It is evident

that this is a global challenge and that multilateral action by all parties is indispensable. Holistic solutions are needed to promote international cooperation and partnerships in important sectors like poverty reduction, climate change, migration, technology, and trade (UN 2019). Economically, for example, it is estimated that countries will need to deploy up to US\$4.5 trillion per year between 2015 and 2030 to meet the SDGs and the Addis Ababa Action Agenda (AAAA). However, in 2020, “the world is not on track to achieve the Global Goals” (UN 2020a, p. 3) and the mission of “Leave No One Behind” will be difficult to be achieved by 2030 (Kharas et al. 2018). Additionally, huge data gaps still exist in terms of geographic coverage, timeliness, and the level of disaggregation required. This situation is worsened by the COVID-19 crisis that began in January 2020 and impacted on all areas of the SDGs.

The 19 SDGs are the following:

GOAL 1 – NO POVERTY

End poverty in all its forms everywhere.

GOAL 2 – ZERO HUNGER

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

GOAL 3 – GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for humans at all ages.

GOAL 4 – QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities.

GOAL 5 – GENDER EQUALITY

Achieve gender equality and empower all women and girls.

GOAL 6 – CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation.

GOAL 7 – AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable, and modern energy.

GOAL 8 – DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work.

GOAL 9 – INDUSTRY, INNOVATION, AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.

GOAL 10 – REDUCE INEQUALITIES

Reduce inequality within and among countries.

GOAL 11 – SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient, and sustainable.

GOAL 12 – RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns.

GOAL 13 – CLIMATE ACTION

Take urgent action to combat climate change and its impacts.

GOAL 14 – LIFE BELOW WATER

Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.

GOAL 15 – LIFE ON LAND

Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

GOAL 16 – PEACE, JUSTICE, AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.

GOAL 17 – PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

(UN 2015c)

Measurement

The progress in achieving the SDGs is measured by data collected at the global level from official sources (World Bank, WHO, ILO, and others) and

nonofficial data sources (research centers and nongovernmental organizations). They are used to analyze developments in the implementation of appropriate policies and the achievement of objectives. Indicators are used to critically record and evaluate the achievement of the SDGs. Accordingly, the development of countries can be compared to each other as well as the level of achievement of other global measures. Nevertheless, national and global data quality, especially adequacy and accuracy, remains difficult (Sach et al. 2019). Moreover, there are additional issues in integrated monitoring, review, and reporting mechanisms that are essential for the effective improvement to transmit information on the SDGs advancement. The results of the measurements can be found in the SDG-Index (<https://dashboards.sdgindex.org/rankings>).

Fazit and future

Various scenarios are imaginable as to whether the measures will achieve the global goals by 2030. The implementation of the goals is expected to be uneven in different countries, and it will be particularly challenging in regions that are affected by conflicts. Regardless of which scenario occurs by 2030, the reality is that an enormous increase in population is forecasted so that by 2050 almost ten billion people will live on the planet. As a result, individual goals must be pursued well beyond 2030 to provide people, especially those in the southern hemisphere, with fair and universal access to clean drinking water (Froehlich 2018).

Additionally, to the review of the 169 targets, recommendations were also developed based on the work of the independent Future Earth, the UNU-IAS Post-2015 project, and the Independent Research Forum. From a scientific perspective, there are visible improvements to be seen concerning the Millennium Development Goals. However, the extent to which the 17 goals have been developed and implemented is not consistent enough in itself. There is an overlap between the goals, and this could cause conflicts and therefore be unsustainable. To better specify the SDG,

suggestions for an integrated perspective are proposed. An SDG forum for scenario modelers could relieve the burden and promote the transfer of experience. This would provide national planners, policymakers, and stakeholders with simplified access to the data. It could also be used to stimulate research and to facilitate the creation of quantitative maps of the entire system based on the SDG. The Department of Economic and Social Affairs of the United Nation could be of assistance to create those. Furthermore, it is recommended to develop an open access online database to provide more specific information. In this way, sustainable development assessments could be compiled, and a common data standard could serve as a basis. Furthermore, policymakers could benefit much from a systematic data synthesis from different perspectives, based on assessments for specific SDGs and fully integrated SDG knowledge (UN 2015a).

The SDGs are part of a long-term process with the vision of “the future we want.” This statement, expressed at the Rio Conference in 2012 (Rio+20), derives from the 1987 Brundtland Report “Our common future.” To be able to achieve this vision including the 17 goals and 169 targets, global governance and stakeholder participation are indispensable. In addition to the ongoing process of implementation of and transformation through the SDGs, new trends such as climate change, digitization, urbanization, aging, and migration are emerging in parallel. As a consequence, society may have difficulties in adapting. Likewise, if individuals, nations, and cultures feel disadvantaged by conditions following the fulfillment of the legally not binding SDGs and their potential overburdening challenges, societies could show counterreactions. Accordingly, the SDGs are one of the most important challenges for the future of humanity to create a more equal sustainable human world by taking global actions (Kurz 2020).

Cross-References

- Sustainable Development
- United Nations Global Compact

References

- Froehlich, A. (2018). *Post 2030-agenda and the role of space (the UN 2030 goals and their further evolution beyond 2030 for sustainable development)*. Vienna: Springer.
- Gungadeen, S., & Paul, M. (2020). Sustainability reporting and its impact on the implementation of sustainable development goals in island economies in Africa: A comparative study of private sector organisations in Mauritius, Madagascar and Seychelles. In S. Idowu, R. Schmidpeter, & L. Zu (Eds.), *The future of the UN sustainable development goals. Business perspectives for global development in 2030* (pp. 123–152). Heidelberg: Springer.
- Kharas, H., McArthur, J. W., & Rasmussen, K. (2018). *How many people will the world leave behind? Assessing current trajectories on the Sustainable Development Goals*. Global Economy and Development at Brookings.
- Kurz, R. (2020). UN SDGs: Disruptive for companies and for universities? In S. O. Idowu, R. Schmidpeter, L. Zu, & S. N. AG (Eds.), *The future of the UN sustainable development goals*. Cham: Springer.
- Martinuzzi, A., & Schönherr, N. (2019). Introduction: The sustainable development goals and the future of corporate sustainability. In N. Schönherr & A. Martinuzzi (Eds.), *Business and the sustainable development goals. Measuring and managing corporate impacts* (pp. 1–14). Cham: Springer.
- Pekmezovic, A. (2019). The UN and goal setting. In J. Walker, A. Pekmezovic, & G. Walker (Eds.), *Sustainable development goals: Harnessing business to achieve the SDGs through finance* (pp. 19–35). Chichester: Wiley.
- Sach, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., & Fuller, G. (2019). *Sustainable development report*. New York: Berthelsman Stiftung and Sustainable Development Solutions Network (SDSN).
- United Nations. (2012). *Resolution adopted by the general assembly on 27 July 2012*. New York City: United Nations.
- United Nations. (2015a). *Global Sustainable Development Report, 2015 Edition, Advanced unedited version*. Report, United Nations, New York City.
- United Nations. (2015b). *The Millennium Development Goals Report 2015*. Report, United Nations.
- United Nations. (2015c). *Transforming our world: The 2030 Agenda for Sustainable Development*. Resolution adopted by the General Assembly on 25 September 2015, United Nations, New York.
- United Nations. (2019). *The sustainable development goals report 2019*. New York City: United Nations publication issued by the Department of Economic and Social Affairs.
- United Nations (UN). (2020a). *The Sustainable Development Goals Report 2020*. UN Publications, New York. <https://unstats.un.org/sdgs/report/2020/>. Accessed 31 July 2020.

- United Nations (UN). (2020b). History of the United Nations. <https://www.un.org/en/sections/history/history-united-nations/index.html>. Accessed 22 Oct 2020.
- United Nations (UN). (2020c). *United Nations Development Programme*. Retrieved April 2020, from United Nations Development Programme: https://www.undp.org/content/undp/en/home/sdgoverview/mdg_goals.html
- Walker, J., Pekmezovic, A., & Walker, G. (Eds.). (2019a). *Sustainable development goals: Harnessing business to achieve the SDGs through finance*. Chichester: Wiley.
- Walker, J., Pekmezovic, A., & Walker, G. (2019b). Introduction. In J. Walker, A. Pekmezovic, & G. Walker (Eds.), *Sustainable development goals: Harnessing business to achieve the SDGs through finance* (pp. 1–9). Chichester: Wiley.
- Woyke, W. (1998). *Handwörterbuch Internationale Politik*. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Wynn, M., & Jones, P. (2019). *The sustainable development goals. Industry sector approaches*. London: Routledge.

University Gardens for Sustainable Development

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Synonyms

Competences, Higher education, Organic learning gardens, Sustainability

Description

Gardens have become popular in educational institutions of all stages, as appropriate resources within the framework of a competence-based teaching-learning model. They provide students with

outdoor learning experiences, while promoting affective and cognitive development, and personal well-being. Gardens also provide experiences *in* and *of* nature, particularly when they are sustainably managed, that is, based on practices that mimic how nature works, so that the garden is, in fact, a healthy and resilient agro-ecosystem (*organic learning gardens*). In higher education, gardens are emerging as valuable spaces to address key issues of food and sustainability, and from which to promote critical thinking. In the context of the significant efforts devoted to conceptualizing competences in sustainability since the beginning of the twenty-first century, the GreenComp (The European Sustainability Competence Framework) has recently been defined. This framework is used here to propose the 17 specific sustainability competencies that can be promoted using university gardens. These correspond to the four areas established in the GreenComp: five relate to *embodying sustainability values*, three to *embracing complexity in sustainability*, four to *envisioning sustainable futures*, and five to *acting for sustainability*.

Introduction

Contemporary educational institutions, including universities, are planned built environments from which “nature” has been frequently excluded. When present, green spaces are professionally managed to be tidy and sanitized, thus not providing real experiences about what nature is like and how it works: the variety of insects that may inhabit a wild green patch, the variety of birds that feed on them, or on the worms that come to the surface after rain, for instance. Such spatial planning reflects the Enlightenment-informed distinction between what is “human” and what is “natural” that has brought us to where we are today (Milstein et al., 2019; Molina-Motos, 2019). However, a shift is occurring toward a generalized understanding that nature is essential in order to educate, and, consequently, its presence is necessary in educational institutions (Louv, 2005). First, direct experience *in* and *of* nature plays a vital role, arguably an irreplaceable

one, in affective and cognitive development (Khan & Kellert, 2002). Second, regular or frequent contact with nature has restorative psycho-emotional effects (Berman et al., 2008; Hartig et al., 2001; Kaplan & Kaplan, 1989). Moreover, it is important to provide threshold experiences that lead to a life of conservation (IUCN, 2016), since empirical evidence shows that direct experiences *in* and *of* nature are related to the development of affective relationships with it (the so-called *connectedness with nature*, a term coined in the field of environmental psychology), and subsequently, proenvironmental or pro-conservationist attitudes and behaviors (Chawla, 2009; Collado et al., 2013; Evans et al., 2018; Zelenski et al., 2015).

This recognition of the need to provide outdoor learning experiences in formal education marks an enormous step in legitimizing the presence of food gardens at educational institutions (Eugenio-Gozalbo et al., 2020). At such institutions, an important shift has occurred in recent years. While, some years ago, the initiation of a university garden was an obstacle-laden venture, gardens are now recognized as significant sustainability projects and, in many cases, are promoted from university sustainability offices (Murakami, 2016; Ostertag et al., 2019). University gardens are sometimes initiated and managed by students themselves and bring together diverse stakeholders from the campus and the wider community (Duram & Williams, 2015; Jagger et al., 2016). In other cases, they are carefully designed and purposely managed by the institution for sustainability education (Cheang et al., 2017). Between these two situations, there are various other possibilities, such as gardens devoted to outdoor science education in Education Faculties (Eugenio-Gozalbo & Ortega-Cubero, *in press*; Eugenio-Gozalbo et al., *in press*). Overall, university gardens are helping provide students with learning experiences on food and sustainability, and to promote critical thinking (Barlett, 2011; LaCharite, 2016; Eugenio-Gozalbo et al., 2021).

In Spain, university garden-based learning (GBL) practitioners coined the term *organic learning gardens* (OLGs), to underline that education – and not production – is the main

function of university gardens, and that sustainable farming practices are implemented in them (Eugenio-Gozalbo et al., 2020). The sustainable management of these spaces involves important practices, such as composting and vermicomposting organic waste, mulching, associating plants, and avoiding biocides and fertilizers, among others. These are important, first, to promote respect and care toward life and nature in students, and, second, because such techniques are often *nature-based*, in that they imitate the way nature works, thus resulting in more diverse, complex, functional, and resilient agro-ecosystems (Laureto et al., 2015; Carmona et al., 2016), which in turn are more valuable as resources to teach topics in the fields of ecology or environmental sciences. For example, at small spatial scales, the diversity of insects can be predicted from that of plants (Southwood et al., 1979), and the spatial complexity in the distribution of plants is also important for bees (Jha & Vandermeer, 2010); these kinds of aspects are considered and promoted by sustainable agriculture, but not by conventional agriculture.

The use of OLGs as educational contexts (*garden-based learning*, Desmond et al., 2004) can mobilize the cognitive, procedural, attitudinal, and relational dimensions of learning and is thus considered a suitable strategy in the frame of the current educational model for European Higher Education, which is based on *teaching and learning by competences* (Lisbon European Council, 2000). The concept of competence was introduced in the field of linguistics by Chomsky (1965), from which it extended to other disciplines. However, there are many definitions and interpretations of the term, which generates some confusion. Internationally, competences are equated to *learning outcomes* (Cedefop., 2017), following the tendency to understand competencies as a transformation of objectives, which in fact moves away from the intended holistic approach. Competences have also been interpreted as an evolution of the four pillars posed by the Delors Report: learning to know, learning to do, learning to be, and learning to be together (Delors, 1996), which constitute an integrated approach to learning throughout life. This

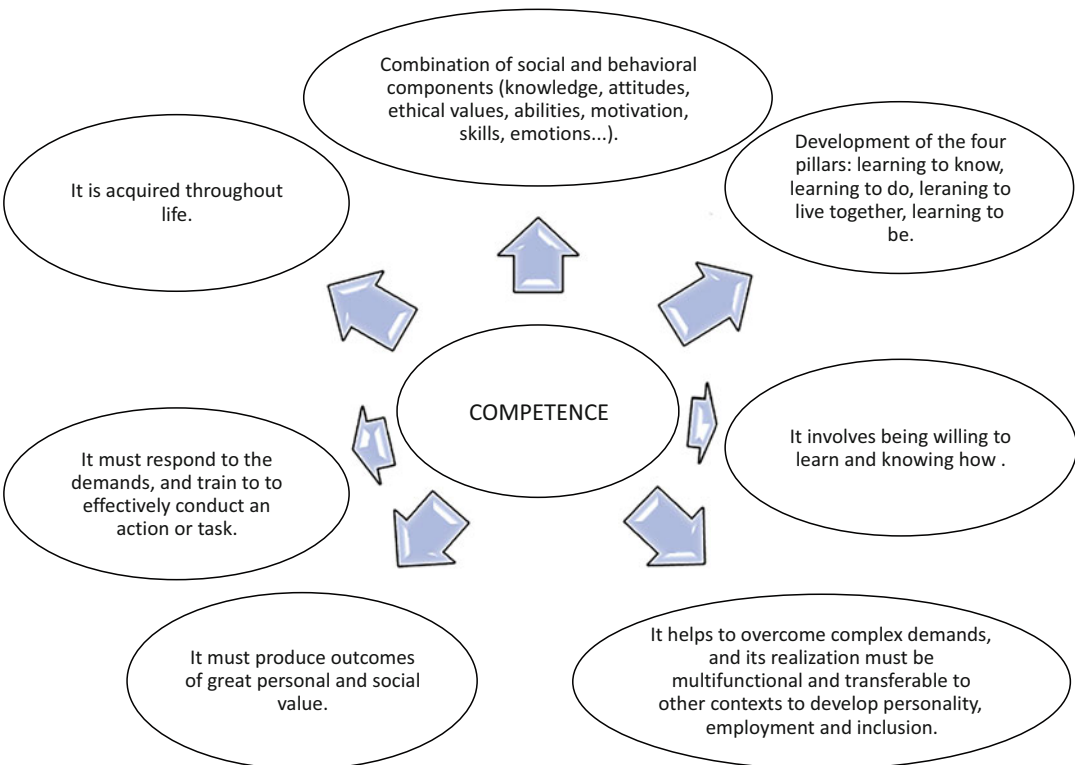
approach had a significant impact on policy debates, teacher training, and curriculum development in a range of countries worldwide.

Two international organizations have contributed most to the concept of competencies, serving as the foundation for the current European Reference Framework: the Organization for Economic Cooperation and Development (OECD), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). Thus, an outstanding definition of competences is that originally provided in the document Definition and Selection of Competencies (DeSeCo) in 1997 (Rychen & Salganik, 2003), and later reformulated as “the ability to successfully meet individual and social demands, or to carry out an activity or task” (OECD, 2003, p.8). The relevance of this perspective lies in the functional approach to performance based on the simultaneous development of knowledge, skills,

strategies, and metacognitions. From the European Union, competence development is being promoted from early ages and throughout life (EC, n.d.). In accordance with the guidelines proposed by the OECD and UNESCO, competences present seven characteristics (Fig. 1).

The structure of a competence consists of three essential parts that allow it to be defined as follows (Cedefop., 2017):

- *Action*: observable in an activity that can be evidenced in the form of performance. The verb will be in the infinitive or present indicative.
- *Object*: on what or whom the action falls. Questions such as what, why, and where? can be asked.
- *Context*: performance condition where it is applied, with which the quality of performance achievement is expressed.



University Gardens for Sustainable Development, Fig. 1 Characteristics of a competence, according to the proposals of the EU, the OECD, and UNESCO

For example, “to apply (*action*) the procedures that govern nature (*object*) to guarantee a correct behavior for sustainability in daily life (*context*).”

Currently, there are four documents that serve as a reference in the European competence framework: (1) The Digital Competence Framework for Citizens (DigComp) (Carretero Gómez et al., 2017), updated to DigComp 2.2. (Vuorikari et al., 2022); (2) The European Entrepreneurship Competence Framework (EntreComp) (Bacigalupo et al., 2016); (3) The European Framework for Personal, Social and Learning to Learn Key Competence (LifeComp) (Sala et al., 2020); and (4) The European Sustainability Competence Framework (GreenComp) (Bianchi et al., 2022). This last one, the GreenComp, is the document that will serve as the basis to define the sustainability competences that can be specifically addressed using OLGs, which constitutes the main objective of this entry.

Review of the Literature on Competences in Sustainability

Since the beginning of the twenty-first century, significant efforts have been devoted to conceptualizing *competences in sustainability*, understood as the holistic capacities that citizens need to develop to deal with sustainability challenges (De Haan, 2010; Barth, 2015; Willard et al., 2010). The first ambitious effort to systematically and comprehensively organise these competences in a conceptually embedded set of interlinked competences was conducted by Wiek et al. (2011a, b), in a work that synthesized the previous literature on sustainability competencies into an overarching framework. Their compilation showed a rich picture of key competences in sustainability, differing, however, in terminology and corresponding to a variety of frameworks unrelated to a common core concept. The competences compiled were *systems-thinking competence*, *anticipatory competence*, *normative competence*, *strategic competence*, and *interpersonal competence*, and each of these was related to a series of concepts, for example, *systems-thinking competence* was related to: (1) variables/indicators, subsystems, structures,

and functions; (2) feedback loops, complex cause-effect chains, cascading effects, inertia, tipping points, legacy, resilience, adaptation, and structuration; (3) across/multiple scales: local to global; (4) across/multiple/coupled domains: society, environment, economy, and technology; and (5) people and social systems: values, preferences, needs, perceptions, (collective) actions, decisions, power, tactics, politics, and institutions. Wiek et al. (2016) subsequently updated their framework by adding a sixth competence, named *integrated problem-solving competence*.

Efforts were also made by the United Nations Economic Commission to provide a framework of *core competences in Education for Sustainable Development* (ESD) for educators, clustered around three essential characteristics of ESD: *holistic approach*, *envisioning change*, and *achieving transformation*. This document established what educators “should know, what they should be able to do, how they should live and work with others, and what they should be like” if they are to contribute to ESD (UNECE, 2012). For instance, “The educator is someone who is inclusive of different disciplines, cultures and perspectives, including indigenous knowledge and worldviews” (pp. 14–15). This competence is related to what an educator is like, understanding that it is necessary to develop a holistic vision, integrating thought and practice.

In 2014, UNESCO defined four core competencies in sustainability: *critical thinking*, *systemic thinking*, *collaborative decision-making*, and *taking responsibility for present and future generations* (UNESCO, 2014, p. 12). Importantly, this document highlighted ESD pedagogies, moving from transmissive teaching and memorization toward new approaches to teaching and learning that go beyond the classroom and into the community, thus being in line with the use of OLGs, or garden-based learning. When respondents to UNESCO’s Global Monitoring and Evaluation Questionnaire were asked to choose from a list of the types of teaching and learning strategies favored in the implementation of ESD, the top five types of learning were *participatory and collaborative learning* (87%), *problem-based learning* (84%), *critical thinking* (81%), *discovery*

learning (76%), and *interdisciplinary learning* (73%). Also important were *multiple stakeholder social learning* (66%), *systems- thinking-based learning* (61%), *transmissive learning* (56%), and *disciplinary learning* (50%).

Rieckmann (2018) subsequently conducted a review of the previous literature considering, among others:

- The three categories of key competences of OECD: *using tools interactively*, *interacting in heterogeneous groups*, and *acting autonomously* (Rychen, 2003).
- The eleven competences of *gestaltungs-kompetenz* (shaping competencies), for example, *thinking and acting in a forward-looking manner*, or *showing empathy for, and solidarity with, the disadvantaged* (De Haan, 2010).
- The four competence-based dimensions of sustainability: *the dynamics and content of sustainability*, *the critical dimension of sustainability*, *the change and innovation dimension of sustainability*, and *the existential and normative dimension of sustainability* (Wals, 2015).
- The five additional key competences of Glasser and Hirsh (2016): *affinity for life*, *knowledge about the state of the planet*, *wise decision-making*, *modeling sustainable behavior*, and *transformative social change*.

He finally highlighted the mutually interdependent competencies on which there was general agreement within the international ESD discourse, which are the following:

1. Systems-thinking competence.
2. Anticipatory competence.
3. Normative competence.
4. Strategic competence.
5. Collaboration competence.
6. Critical thinking competence.
7. Self-awareness competence.
8. Integrated problem-solving competence.

The most recent effort to define and compile sustainability competences is that of the GreenComp (The European sustainability

competence framework) (Bianchi et al., 2022), which will be used in this work to define sustainability competences that are promoted in the context of educational gardens and, in particular, of university gardens. It is composed of four areas, each one comprising three competences that are explained by means of descriptors (Bianchi et al., 2022, pp. 14-15):

1. Embodying Sustainability Values
 - 1.1. **Valuing sustainability:** to reflect on personal values, to identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values.
 - 1.2. **Supporting fairness:** to support equity and justice for current and future generations and learn from previous generations for sustainability.
 - 1.3. **Promoting nature:** to acknowledge that humans are part of nature, and to respect the needs and rights of other species and of nature itself in order to restore and regenerate healthy and resilient ecosystems.
2. Embracing Complexity in Sustainability
 - 2.1. **Systems thinking:** to approach a sustainability problem from all sides, to consider time, space, and context in order to understand how elements interact within and between systems.
 - 2.2. **Critical thinking:** to assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social, and cultural backgrounds influence thinking and conclusions.
 - 2.3. **Problem framing:** to formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems.
3. Envisioning Sustainable Futures
 - 3.1. **Futures literacy:** to envision alternative sustainable futures by imagining and

developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future.

- 3.2. **Adaptability:** to manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity, and risk.
- 3.3. **Exploratory thinking:** to adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas or methods.
4. Acting for Sustainability
 - 4.1. **Political agency:** to navigate the political system, identify political responsibility and accountability for unsustainable behavior, and demand effective policies for sustainability.
 - 4.2. **Collective action:** to act for change in collaboration with others.
 - 4.3. **Individual initiative:** to identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.

Competences in Sustainability to Be Promoted Using University Gardens

Based on the GreenComp (Bianchi et al., 2022), four competences that can be promoted using instructional gardens are presented, classified into the same four areas:

1. *Embodying sustainability values.*

- To reflect on one's own values and practices in relation to garden management, and critically evaluate those of past and present generations, to finally identify the values and practices that are aligned with sustainability (*valuing sustainability*).
- To value the knowledge, time, and effort involved in sustainable food production, to support purchasing decisions that are responsible toward farmers and the planet (*supporting fairness*).

- To develop connection to nature in the garden, to generate behaviors of respect toward the needs and rights of other species and of nature itself (*promoting nature*).
- To value the natural resources that human societies need to feed themselves, with the aim of preserving healthy and resilient ecosystems for current and future generations (*promoting nature and supporting fairness*).
- To become aware of the impact that agricultural management decisions have on the physical-chemical environment and living beings, in order to restore and regenerate healthy and resilient ecosystems and sustain current and future human societies (*valuing sustainability, promoting nature, and supporting fairness*).

2. *Embracing complexity in sustainability.*

- To understand the garden as a system made up of components among which complex relationships are established, so that environmental factors or agricultural practices that affect one of such factors have repercussions on others and on the system (*systems thinking*) [to make management decisions on the agricultural practices capable of restoring and regenerating healthy and resilient ecosystems (*promoting nature*)].
- To evaluate evidence of the socio-environmental impacts of the agri-food system in order to challenge the *status quo* based on the experience of organically cultivating food for self-consumption (*critical thinking*).
- To formulate current or potential challenges related to sustainable resource management in the garden, in order to identify suitable approaches to mitigating and adapting or anticipating and preventing (*problem framing*).

3. *Envisioning sustainable futures.*

- To envision alternative future scenarios where sustainable farming practices are prevailing, and local communities have achieved suitable levels of alimentary self-sufficiency (*futures literacy*).

- To be capable of making sustainable garden management decisions, anticipating, and taking into account the uncertainties and risks derived from climate change or related to resource availability, with the aim of promoting food security (*adaptability*).
 - To be able to make responsible food consumption decisions, based on a critical attitude toward the current agri-food system in a context of uncertainties and risks across the planet (*adaptability*).
 - To be capable of developing innovative solutions to problems or challenges that occur in the garden in a context of climatic uncertainty and risks, through interaction and contributions from various disciplines (*exploratory thinking*).
4. *Acting for sustainability.*
- To demand campaigns and regulations to promote both sustainable food production and consumption (*political agency*).
 - To participate in social movements that favor both individual and corporate social responsibility for sustainability, with the aim of provoking shifts in society (*collective action*).
 - To identify one's own potential to sustainably produce food for self-sufficiency, thus contributing to one's health and to a sustainable planet (*individual initiative*).
 - To develop purchasing habits and food consumption habits that contribute to improving prospects for the community and the planet (*individual initiative*).
 - To interact and collaborate with others to manage the garden more efficiently, thus obtaining quality, seasonal, and local food (*individual initiative* and *collective action*).

Whereas some of these competences are developed merely by having the experience of gardening with colleagues or classmates in an organically managed space, the literature has pointed to the desirability of adopting a values-based pedagogical approach, meaning that explicit attention is paid to the values that (1) underpin different agricultural and food systems and their governance, (2) inform and shape

educational strategies and experiences, and (3) are held by different individuals in various encounters in the learning environment (Galt et al., 2012). All the competences proposed herein have the intention to “enable and empower students to become effective in positively contributing to sustainability problem-solving in their lives, professions, and communities” (Brundiers et al., 2021). As Sterling (1996 as cited in Sterling, 2017) suggested:

Whether the future holds breakdown or breakthrough scenarios . . . people will require flexibility, resilience, creativity, participative skills, competence, material restraint and a sense of responsibility and transpersonal ethics to handle transition and provide mutual support. Indeed, an education oriented towards nurturing these qualities would help determine a positive and hopeful breakthrough future. (p. 26)

University gardens are valuable resources for educators to deal with this challenge, since, by engaging people in the collective formation of scenarios for sustainable lifestyles that are accessible and relevant, education in responsible living is promoted, and democratic participation in social change empowered (Lenglet, 2015).

Cross-References

- Brundtland Report
- Climate Change
- Community Sustainability
- Consumer Social Responsibility (CnSR)
- Ecology and Ecosystem: Sustainability
- Education for Sustainable Environment

References

- Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The entrepreneurship competence framework*. Luxembourg: Publication Office of the European Union. <https://data.europa.eu/doi/10.2791/593884>.
- Barlett, P. F. (2011). Campus sustainable food projects: Critique and engagement. *American Anthropologist*, 113(1), 101–115. <https://doi.org/10.1111/j.1548-1433.2010.01309.x>.
- Barth, M. (2015). *Implementing sustainability in higher education: Learning in an age of transformation*. London: Routledge.

- Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science*, 19(12), 1207. <https://doi.org/10.1111/j.1467-9280.2008.02225.x>.
- Bianchi, G., Pisiotis, U., & Cabrera, M. (2022). *GreenComp: The European sustainability competence framework*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2760/13286>.
- Brundiers, K., Barth, M., Cebrián, G., Cohen, M., Diaz, L., Doucette-Remington, S., Dripps, W., Habron, G., Harre, N., Jarchows, M., Losche, K., Michel, J., Mochizuki, Y., Rieckmann, M., Parnell, R., Walker, P., & Zint, M. (2021). Key competencies in sustainability in higher education-toward an agreed-upon reference framework. *Sustainability Science*, 16(1), 13–29. <https://doi.org/10.1007/s11625-020-00838-2>.
- Carmona, C. P., de Bello, F., Norman, W. H. M., & Lepš, J. (2016). Traits without Borders: Integrating functional diversity across scales. *Trends in Ecology & Evolution*, 31(5), 382–394. <https://doi.org/10.1016/j.tree.2016.02.003>.
- Carretero Gómez, S., Vuorikari, R., & Punie, Y. (2017). *DigComp 2.1: The digital competence framework for citizens with eight proficiency levels and examples of use*. Luxembourg: Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/38842>.
- Cedefop. (2017). *Defining, writing and applying learning outcomes: A European handbook*. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2801/566770>.
- Chawla, L. (2009). Growing up green: Becoming an agent of Care for the Natural World. *Journal of Developmental Processes*, 4(1), 6–23.
- Cheang, C. C., So, W.-M. W., Zhan, Y., & Tsoi, K. H. (2017). Education for sustainability using a campus eco-garden as a learning environment. *International Journal of Sustainability in Higher Education*, 18(2), 242–262. <https://doi.org/10.1108/IJSHE-10-2015-0174>.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge: The MIT Press.
- Collado, S., Staats, H., & Corraliza, J. A. (2013). Experiencing nature in children's summer camps: Affective, cognitive and behavioural consequences. *Journal of Environmental Psychology*, 33, 37–44. <https://doi.org/10.1016/j.jenvp.2012.08.002>.
- De Haan, G. (2010). The development of ESD-related competencies in supportive institutional frameworks. *International Review of Education*, 56, 315–328. <https://doi.org/10.1007/s11159-010-9157-9>.
- Delors, J. (1996). The four pillars of education. In Commission Delors (Ed.), *Learning: The treasure within. Report to UNESCO of the international commission on education for the twenty-first century* (pp. 85–98). Paris, UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000109590>.
- Desmond, D., Grieshop, J., & Subramaniam, A. (2004). Revisiting garden-based learning in basic education: Philosophical roots, historical foundations, best practices and products, impacts, outcomes and future directions. *Food and Agriculture Organization of the United Nations (FAO) and International Institute for Educational Planning*. <https://unesdoc.unesco.org/ark:/48223/pf0000136271/PDF/136271eng.pdf.multi>
- Duram, L. A., & Williams, L. L. (2015). Growing a student organic garden within the context of university sustainability initiatives. *International Journal of Sustainability in Higher Education*, 16(1), 3–15. <https://doi.org/10.1108/IJSHE-03-2013-0026>.
- Eugenio-Gozalbo, M., & Ortega-Cubero, I. (in press). Drawing our garden's insects: A didactic sequence to improve pre-service teachers' knowledge and appreciation of insect diversity. *International Journal of Biological Education*. Accepted on 21-April-2022. <https://doi.org/10.1080/00219266.2022.2081243>.
- Eugenio-Gozalbo, M., Pérez-López, R., & Tójar-Hurtado, J. C. (2020). Identifying key issues for university practitioners of garden-based learning in Spain. *Journal of Environmental Education*, 51(3), 246–255. <https://doi.org/10.1080/00958964.2019.1687407>.
- Eugenio-Gozalbo, M., Ramos-Truchero, G., & Suárez-López, R. (2021). University gardens for sustainable citizenship: Assessing the impacts of garden-based learning on environmental and food education at Spanish higher education. *International Journal of Sustainability in Higher Education*, 22(3), 516–534. <https://doi.org/10.1108/IJSHE-06-2020-0208>.
- Eugenio-Gozalbo, M., Zuazagoitia, D., Ruiz-González, A., Corrochano, D., Hurtado-Soler, A., & Talavera, M. (in press). Implementing citizen science programmes in the context of university gardens to promote PST' scientific literacy: A study case on soil. *International Journal of Science Education*. Accepted on 9-June-2022. <https://doi.org/10.1080/09500693.2022.2088877>.
- European Commission [EC]. (2020). *Farm to fork strategy*. For a fair, healthy and environmentally-friendly food system. https://ec.europa.eu/food/sites/food/files/safety/docs/f2f_action-plan_2020_strategy-info_en.pdf
- European Commission [EC]. (n.d.). *Education and training*. https://ec.europa.eu/education/policies/school/key-competences-and-basic-skills_es.
- Evans, G. W., Otto, S., & Kaiser, F. G. (2018). Childhood origins of young adult environmental behavior. *Psychological Science*, 29, 679–687. <https://doi.org/10.1177/0956797617741894>.
- Galt, R. E., Clark, S. F., & Parr, D. (2012). Engaging values in sustainable agriculture and food systems education: Toward an explicitly values-based pedagogical approach. *Journal of Agriculture, Food Systems, and Community Development*, 2(3), 43–54. <https://doi.org/10.5304/jafscd.2012.023.006>.
- Glasser, H., & Hirsh, J. (2016). Toward the development of robust learning for sustainability core competencies. *Sustainability: The Journal of Record*, 9(3), 121–134. <https://doi.org/10.1089/SUS.2016.29054.hg>.
- Hartig, T., Kaiser, F. G., & Bowler, P. A. (2001). Psychological restoration in nature as a positive motivation for

- ecological behavior. *Environment and Behavior*, 33, 590–607. <https://doi.org/10.1177/00139160121973142>.
- International Union for Conservation of Nature (IUCN) (2016). *Navigating Island earth: The Hawai'i commitments*. https://www.iucn.org/sites/dev/files/en_navigating_island_earth_-_hawaii_commitments_final.pdf
- Jagger, S., Sperling, E., & Inwood, H. (2016). What's growing on there? Garden-based pedagogy in a concrete jungle? *Environmental Education Research*, 22(2), 271–287. <https://doi.org/10.1080/13504622.2014.997195>.
- Jha, S., & Vandermeer, J. H. (2010). Impacts of coffee agroforestry management on tropical bee communities. *Biological Conservation*, 143(6), 1423–1431. <https://doi.org/10.1016/j.biocon.2010.03.017>.
- Kaplan, R., & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. Cambridge University Press.
- Khan, P. H., & Kellert, S. R. (Eds.). (2002). *Children and nature. Psychological, sociocultural, and evolutionary investigations*. Cambridge: The MIT Press.
- LaCharite, K. (2016). Re-visioning agriculture in higher education: The role of campus agriculture initiatives in sustainability education. *Agriculture and Human Values*, 33(3), 521–535. <https://doi.org/10.1007/s10460-015-9619-6>.
- Laureto, L. M. O., Cianciaruso, M. V., & Samia, D. S. M. (2015). Functional diversity: An overview of its history and applicability. *Natureza & Conservação*, 13(2), 112–116. <https://doi.org/10.1016/j.ncon.2015.11.001>.
- Lenglet, F. (2015). ESD and assessing the quality of education and learning. In V. Thoresen, D. Doyle, J. Klein, & R. Didham (Eds.), *Responsible Living* (pp. 57–72). Cham: Springer International Publishing AG. https://doi.org/10.1007/978-3-319-15305-6_5.
- Lisbon European Council (2000). Presidency Conclusions of the Lisbon European Council, 23 and 24 March 2000. https://www.europarl.europa.eu/summits/lis1_en.htm
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. New York: Algonquin Press.
- Milstein, T., Thomas, M., & Hoffmann, J. (2019). Dams and flows: Immersing in Western meaning systems in search of ecocultural reflexivity. *Environmental Communication*, 13(1), 104–117. <https://doi.org/10.1080/17524032.2018.1423626>.
- Molina-Motos, D. (2019). Ecophilosophical principles for an Ecocentric environmental education. *Education Sciences*, 9(1), 37. <https://doi.org/10.3390/educsci9010037>.
- Murakami, C. D. (2016). Developing a learning garden on a mid-western land grant university. In J. Summer (Ed.), *Learning food and sustainability: Sites for resistance and change*. Palgrave / Mc Millan.
- OECD (Organization for Economic Cooperation and Development). (2003). *Definition and selection of competencies (DeSeCo)*. Executive Summary. <https://www.oecd.org/pisa/35070367.pdf>.
- Ostertag, J. K., Gerofsky, S. G., & Scott, S. A. (2019). Learning to teach environmental education by gardening the margins of the academy. In I. D. D. Karrow & M. Di Giuseppe (Eds.), *Environmental and sustainability education in teacher education* (pp. 111–130). Cham: Springer. <https://doi.org/10.1007/978-3-030-25016-4>.
- Rieckmann, M. (2018). Learning to transform the world: Key competencies in education for sustainable development. In A. Leicht, J. Heiss, & W. J. Byun (Eds.), *Issues and trends in education for sustainable development* (pp. 39–59). Paris: UNESCO Publishing. <https://unesdoc.unesco.org/ark:/48223/pf0000261445>.
- Rychen, D. S. (2003). Key competencies: Meeting important challenges in life. In D. S. Rychen & L. H. Salganik (Eds.), *Key competencies for a successful life and well-functioning society* (pp. 63–107). Cambridge MA: Hogrefe & Huber Publishers.
- Rychen, D. S., & Salganik, L. H. (2003). Introduction. In D. S. Rychen & L. H. Salganik (Eds.), *Key competencies for a successful life and a well-functioning society* (pp. 1–12). Hogrefe & Huber Publishers.
- Sala, A., Punie, Y., Garkov, V., & Cabrera, M. (2020). *LifeComp: The European framework for personal, social and learning to learn key competence*. Luxembourg: Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/302967>.
- Southwood, T. R. E., Brown, V. K., & Reader, P. M. (1979). The relationships of plant and insect diversities in succession. *Biological Journal of the Linnean Society*, 12(4), 327–348. <https://doi.org/10.1111/j.1095-8312.1979.tb00063.x>.
- Sterling, S. (2017). Assuming the future: Repurposing education in a volatile age. In B. Jickling & S. Sterling (Eds.), *Post-sustainability and environmental education: Remaking education for the future* (pp. 31–45). Cham: Springer. <https://doi.org/10.1007/978-3-319-51322-5>.
- United Nations Economic Commission for Europe [UNECE]. (2012). *Learning for the future: Competences in education for sustainable development*. UNECE. https://unece.org/fileadmin/DAM/env/esd/ESD_Publications/Competences_Publication.pdf.
- United Nations Educational, Scientific and Cultural Organization [UNESCO]. (2014). *Shaping the future we want: UN decade of education for sustainable development final report*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000230171>.
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The digital competence framework for citizens*. Luxembourg: Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/115376>.
- Wals, A. E. J. (2015). *Beyond unreasonable doubt*. Education and Learning for Socio-ecological Sustainability in the Anthropocene. Wageningen University. <https://library.wur.nl/WebQuery/wurpubs/494121>.
- Wiek, A., Withycombe, L., & Redman, C. L. (2011a). Key competencies in sustainability: A reference framework for academic program development. *Sustainability*

- Science*, 6, 203–218. <https://doi.org/10.1007/s11625-011-0132-6>.
- Wiek, A., Withycombe, L., Redman, C., & Banas Mills, S. (2011b). Moving forward on competence in sustainability research and problem solving, environment. *Science and Policy for Sustainable Development*, 53(2), 3–13. <https://doi.org/10.1080/00139157.2011.554496>.
- Wiek, A., Bernstein, M. J., Foley, R. W., Cohen, M., Forrest, N., Kuzdas, C., Kay, B., & Withycombe Keeler, L. (2016). Operationalising competencies in higher education for sustainable development. In M. Barth, G. Michelsen, I. Thomas, & M. Rieckmann (Eds.), *Routledge handbook of higher education for sustainable development* (pp. 241–260). London: Routledge.
- Willard, M., Wiedmeyer, C., Flint, R. W., Weedon, J. S., Woodward, R., Feldman, I., & Edwards, M. (2010). The sustainability professional: 2010 competency survey report. *Environmental Quality Management*, 27(4), 49–83. <https://doi.org/10.1002/tqem.20271>.
- Zelenski, J. M., Dopko, R. L., & Capaldi, C. A. (2015). Cooperation is in our nature: Nature exposure may promote cooperative and environmentally sustainable behavior. *Journal of Environmental Psychology*, 42, 24–31. <https://doi.org/10.1016/j.jenvp.2015.01.005>.

University Social Responsibility

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Synonyms

Higher education social responsibility; Social responsibility education

Definition

In general, education has a significant impact on individuals to develop themselves and thus to contribute to social relations, economic efficiency, and being a responsible citizen (Varış, 1991). Education system has a significant role, and organizations within this system lead to create and disseminate knowledge from corporate to societal level, and contribute to raising the rate of well-

being of the community (Wigmore-Álvarez & Ruiz-Lozano, 2012). Considering the importance of education, in particular higher education, the questions on the purpose and primary missions of the universities, then based on this, the scope of the university education, and the course offerings are under debate (Toker et al., 2016). Accordingly, from one point of view the most important task of universities is to focus on education, science, and applied research (Reed, 2004), while another view emphasizes the social consciousness of university students and graduating responsible citizens instead of technicians (Wilhite & Silver, 2005). Based on the argument that universities can perform these two tasks at the same time (Toker et al., 2016), two divergent views have reached a reconciliation with the concept of university social responsibility (USR) as a new paradigm in higher education. Then, USR refers to a four-dimensional set of principles including management, teaching, research, and extension. More specifically, it contains the efforts for the creation and transmission of knowledge based upon ethical principles, good governance, respect for the environment, and social engagement (Giuffré & Ratto, 2014, p. 233).

Corporate Social Responsibility

Corporate social responsibility has been in research and managerial agenda since the 1950s after the publication of Bowen's (1953) well-known work titled as "Social Responsibilities of Businessmen" and now seems to be a significant aspect of contemporary business activities (Kotler & Keller, 2008). Although the concept has taken a great deal of interest in different disciplines of social sciences, there is no common and agreed definition of the concept. However, Carroll's conceptualization and pyramid including the economic, legal, ethical, and discretionary (or philanthropic) expectations of society at a particular time has been widely recognized (Carroll, 1979, 1991). Turker (2019) states that as CSR is a dynamic concept, it is stated that the notion and the understanding of CSR has been developed

and evolved since the term was initially coined. Accordingly, in the 1950s, the main emphasis was related to doing good for society as an organizational responsibility. The 1960s is the period when the ethical obligations were on the agenda. In parallel to the awareness of the importance of organizational stakeholders, the notion of CSR has shifted to generate mutual benefits for both the organization and its stakeholders from the beginning of the 1970s. After this, CSR has become a strategic concept that creates and enhances value (Turker, 2019). Due to the strategic nature of CSR, it has been managed, discussed, and taught with an increasing interest both in academic and business fields.

University Social Responsibility

As a response to global economic, political, and social changes in recent years, to meet the societal challenges, universities, like many other sectors, also recognized the necessity to engage in the social responsibility practices in their course offerings and their strategic plans, and management processes (Larrán Jorge & Andrades Peña, 2017). Based on this, in 2007, the United Nations Global Compact has launched a framework for business and management schools revealing the Principles for Responsible Management Education that promote change within higher education institutions with the purpose of preparing responsible management professions for business (Burchell et al., 2015). Moreover, the European higher education area has been introduced by the Bologna Process. The Bologna Process that promotes reforms in innovation, quality of learning, and within 48 participating countries also focuses on developing social values in European universities and integrating social issues into the curriculum (European Commission, 2022).

In literature, how social responsibility has been incorporated as part of the curriculum is a research topic, and it is stated that social responsibility is lectured under several topics such as business ethics, corporate responsibility, corporate governance, social accountability, business,

and sustainability (Murphy et al., 2012, p. 314). The ultimate purpose of these courses is to nurture socially responsible citizens through promoting social and ethical values with the awareness of sustainability objectives. Moreover, it is recognized that the universities have a general task of training the professionals and leaders of the future, and additionally, they have a social role to prepare students for external social reality and to make knowledge accessible to all (Giuffré & Ratto, 2014). Thus, the university has a challenging mission to be useful to society, and this mission comprises a particular emphasis on content, attitudes, and values, to fulfill the requirements of excellence, ethical principles together with social values, and humanistic aspects of the generations. In order to assess the needs of the society, suggest alternative solutions to the existing issues, and promote development, universities have fundamental duties regarding socially responsible administration, corporate governance, effective and efficient management in addition to focus on teaching, engaging in research, generation and transmission of knowledge, and integrating with both local and global community. Consequently, universities need to design research and course offerings, by incorporating it into their mission, vision, corporate values, and strategy to fulfill their fundamental role regarding social responsibility (Wigmore-Álvarez & Ruiz-Lozano, 2012).

Being aware of social responsibilities also means corporate social responsibility for institutions and is related to developing strategies with this awareness. Among the external stakeholders of universities, students, alumni, and society, it is an important strategy to be able to meet the expectations of its internal stakeholders, such as administrators, faculty members, and staff, and to carry out responsible activities toward them. Therefore, university social responsibility covers social, environmental, and economic issues that should always be a part of their strategic planning and operation, while guiding how universities interact with both internal and external stakeholders and society (Chen et al., 2015).

Under these circumstances, enhancing individuals' awareness in society starts from not only

ideally but also physically at the university. As a part of organizational learning, efforts to reduce waste, preserve ecology, and efficiently consume resources on campus strengthen collaboration between the students and university members including both academic and administrative staff and enable spreading USR through the campus-wide sustainability initiatives. Consequently, the campus-wide sustainability efforts encourage student appreciation on the responsibilities and proactiveness for global issues and, thus, generate extension of USR (Wigmore-Álvarez & Ruiz-Lozano, 2012).

Conclusion

Based on the literature, USR is a new paradigm as a response to challenges of the recent decades and knowledge society. Being a part of the society, universities and other higher education institutions are also social actors that are required to act and work to promote knowledge transmission to the society, which desires a global sustainable development, within ethical principles. The concept of USR is an open field and is generally applied within the framework of quality management and accreditation so that their practices need to accomplish the accreditation and quality management at standards (Giuffré & Ratto, 2014, p.236).

Cross-References

- [Social Responsibility](#)
- [Sustainability](#)

References

- Bowen, H. (1953). *Social responsibilities of the businessman*. New York: Harper.
- Burchell, J., Murray, A., & Kennedy, S. (2015). Responsible management education in UK business schools: Critically examining the role of the UN principles for responsible management education (PRME) as a driver for change. *Management Learning*, 46(4), 479–497.
- Carroll, A. B. (1979). A three dimensional conceptual model of corporate social performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Chen, S. H., Nasongkhla, J., & Donaldson, J. A. (2015). University social responsibility (USR): Identifying an ethical foundation within higher education institutions. *Turkish Online Journal of Educational Technology-TOJET*, 14(4), 165–172.
- European Commission. (2022). The Bologna Process and the European Higher Education Area. Retrieved from <https://education.ec.europa.eu/education-levels/higher-education/higher-education-initiatives/inclusive-and-connected-higher-education/bologna-process>. Accessed on 7 June 2022.
- Giuffré, L., & Ratto, S. E. (2014). A new paradigm in higher education: University social responsibility (USR). *Journal of Education & Human Development*, 3(1), 231–238.
- Kotler, P., & Keller, K. L. (2008). *Marketing management, 13th international edition*. London: Prentice Hall.
- Larrán Jorge, M., & Andrades Peña, F. J. (2017). Analysing the literature on university social responsibility: A review of selected higher education journals. *Higher Education Quarterly*, 71(4), 302–319.
- Murphy, R., Sharma, N., & Moon, J. (2012). Empowering students to engage with responsible business thinking and practices. *Business and Professional Ethics Journal*, 31(2), 313–330.
- Reed, D. (2004). Universities and the promotion of corporate responsibility: Reinterpreting the liberal arts tradition. *Journal of Academic Ethics*, 2, 3–41.
- Toker, H., Turker, D., & Altuntaş Vural, C. (2016). Social responsibility education in Turkey. In *Social responsibility education across Europe* (pp. 1–28). Cham: Springer.
- Turker, D. (2019). *Managing social responsibility: Functional strategies, decisions and practices*. Springer.
- Varış, F. (1991). *Eğitim Bilimine Giriş*. Ankara: Ankara Üniversitesi Basımevi.
- Wigmore-Álvarez, A., & Ruiz-Lozano, M. (2012). University social responsibility (USR) in the global context: An overview of literature. *Business and Professional Ethics Journal*, 31(3/4), 475–498.
- Willhite, S. C., & Silver, P. T. (2005). A false dichotomy for higher education: Educating citizens vs. educating technicians. *National Civic Review*, 94(2), 46–54.

University-Industry-Government Relationships

- [Triple Helix and Innovation](#)

Unknown Stakeholders

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Synonyms

Invisible stakeholders

Definition

Unknown stakeholders have interests in the organization's activity, are influenced by its impacts, but do not have voice to participate in it, and sometimes they do not even have the maturity or the cultural context to realize and understand this influence.

They could be, for instance: entire peoples unaware of choices made by governments or businesses which will impact their well-being; consumers within the context of not being able to access sensitive, impactful information of the products and business; babies “who will breathe what will be left of the air seventy years from now” (D’Anselmi 2011, p. 52); Alzheimer’s patients living in a center whose management changes are being decided by the public administration (Bartlett and O’Connor 2010); all non-human creatures (Starik 1995). At the same time, other cases can be observed in workers who are in contexts that do not allow them to speak and hence do not guarantee them freedom of expression, and in individuals who, even if deeply understanding of the phenomena and their risks, do not deal with them because they do not believe in life and future.

Factors of Stakeholder Invisibility

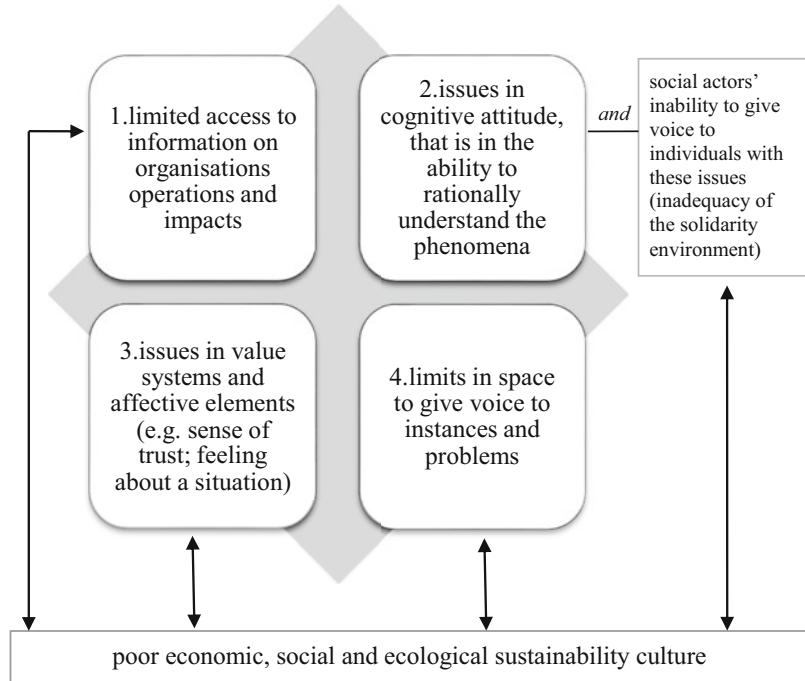
From the previous brief examples, how the invisibility of the stakeholders derives from limits may be deduced:

1. In the *accessibility* of relevant information on the operations and impacts of the organization: the less elevated the sustainability culture of a community, the more restricted are its information resources (provided directly by the organization itself and indirectly by other actors) and channels to access them.
2. In the *cognitive attitude*, hence in the ability to rationally evaluate and understand the phenomena: this limit is linked to intellectual immaturity or degeneration (due to young age, illnesses, traumas, and so on); only when the availability of information meets this understanding are knowledge and learning generated.
3. In the *motivation*, that is in the willingness of individuals to apply the acquired knowledge to hinder harmful phenomena and promote positive behaviors; for this to happen, it is essential that evaluation and learning also involve emotional and affective elements, based on the individual’s value system: this depends strongly on the whole psychology of the person and, as mentioned above, on the shared sustainability culture.
4. In the *availability of space* to express points of view and issues: this limit could be objective (when there is no opportunity to speak and be listened to) or subjectively linked to psychological constraints, for example, the fear of losing something as a consequence to social commitment.

An unknown interlocutor category presents one or more of the above-indicated limits. All but those concerning the cognitive attitude – as here defined – are *directly* influenced by the economic, social, and ecological sustainability culture. It should be noted, however, that the issues in cognitive attitude, as factors of stakeholder invisibility, are influenced by the cultural context *indirectly*. In fact, the latter influences the adequacy/inadequacy of the solidarity environment and therefore the ability/inability of the social actors to give a voice to individuals with such issues (Fig. 1). In understanding the observed phenomenon, the important impact of emotional elements

Unknown Stakeholders,

Fig. 1 Factors of stakeholder's invisibility. (Source: Own elaboration)



on individual attitudes and behaviors must not be neglected; in particular in addressing persuasion strategies aimed at promoting stakeholder visibility, it is fundamental to keep in mind that external rational input cannot adequately relate to the person's affective component, just as external emotional input cannot adequately relate to the person's cognitive component (Millar and Tesser 1986; Crites et al. 1994; Nisbet and Zelenski 2011).

Toward the Inclusion of Unknown Stakeholders

The evolution of sensitivity to sustainability issues has often occurred, thanks to the impact on public opinion of important global players. For example, nonprofit organizations have globally played an extremely important role in the evolution of awareness regarding the problem of child labor and other issues of labor exploitation. They have also provided a significant contribution to the evolution of awareness regarding the risky use of toxic elements in food, clothing, and other goods. All of these are very important actions in

favor of the visibility of the stakeholders, because they bring to light information on sustainability issues, influencing common value systems, developing a sense of belonging to the global community, and supporting efforts to gain space of expression and claim.

Despite important developments such as those outlined above, the landscape of the invisible stakeholders is immense, and the spread of sustainability culture is still only initial and embryonic. This culture, in fact, requires the demanding transition of all the involved actors to an inclusive dimension of responsibility, which must take into account the needs of each stakeholder category in order to mediate them in an ethical perspective of global regeneration and well-being that must overcome conflict of interests (Thabrew et al. 2009; Fischer 1991; Glicken 2000). A dialogic approach to stakeholder management necessarily requires the development of an ethic of care and citizenship (Sama et al. 2004; Castello and Lozano 2009; Manville and Ober 2003). In an increasingly interconnected world, this ethical perspective is the key tool for a holistic approach to all – known and unknown – stakeholders, who include in a wide sense, as defined by Freeman

and Reed: “Any identifiable group or individual who can affect the achievement of an organization’s objectives or who is affected by the achievement of an organization’s objectives” (1983, p. 91; see also Evan and Freeman 1988).

It is true that for companies and other organizations, it is not easy to understand the needs of unknown stakeholders (Yang et al. 2009, p. 337; Reed et al. 2009). However, the general reference to sustainability and regeneration policies certainly supports the holistic vision indicated above and allows even less known stakeholders to be, although indirectly and not fully, considered in the decision-making process (Campbell et al. 2011, p. 326). Each organization therefore has the responsibility to not exploit or encourage this invisibility but act to reduce it and help to develop the cultural context outlined above. It should also be noted that, in a world that increasingly acts through the Internet, an important challenge is undoubtedly also that of discovering stakeholders on virtual environments and social media (Sedereviciute and Valentini 2011).

It is essential to highlight that the company should go beyond just discovering the hidden interlocutors and their unknown values. It should also ensure that such interlocutors are given adequate space and that they are represented by suitable individuals or institutions when they cannot directly interact (see, for instance, all the living creatures of the animal kingdom). The normative power of stakeholder theory – amply highlighted by Donaldson and Preston (1995) – is not enabled when the consideration of the needs of silent stakeholders is lacking (Kurland and Calton 1996, p. 23; Van Buren and Greenwood 2009).

Making efforts to bring unknown stakeholders and values to light means developing enormous awareness potential (D’Anselmi et al. 2017). The latter must be strategically inserted within an integrated development process, from the economic, social, and ecological perspectives. However, such development requires not only observing but also proactively listening to the parties and integrating the development of competitiveness, interlocutors’ trust, and social culture in a virtuous circle.

Cross-References

- [Ethics Management](#)
- [Inclusion](#)
- [Integrity](#)
- [Stakeholder Engagement](#)
- [Stakeholder Governance and Citizen Science](#)
- [Stakeholder Management](#)
- [Stakeholder Mapping](#)
- [Stakeholder Theory](#)
- [Stakeholder Value Creation](#)
- [Stakeholders](#)

References

- Bartlett, R., & O’Connor, D. (2010). *Broadening the dementia debate: Towards social citizenship*. Bristol: Policy Press.
- Campbell, D., Edgar, D., & Stonehouse, G. (2011). *Business strategy: An introduction*. London: Macmillan International Higher Education.
- Castello, I., & Lozano, J. (2009). From risk management to citizenship corporate social responsibility: Analysis of strategic drivers of change. *Corporate Governance*, 9 (4), 373–385.
- Crites, S. L., Jr., Fabrigar, L. R., & Petty, R. E. (1994). Measuring the affective and cognitive properties of attitudes: Conceptual and methodological issues. *Personality and Social Psychology Bulletin*, 20(6), 619–634.
- D’Anselmi, P. (2011). The unknown stakeholder. In *Values and stakeholders in an era of social responsibility. Cut-throat competition?* (pp. 52–63). London: Palgrave Macmillan.
- D’Anselmi, P., Chymis, A., & Di Bitetto, M. (2017). *Unknown values and stakeholders: The pro-business outcome and the role of competition*. Cham: Springer.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence and implications. *Academy of Management Review*, 20(1), 65–91.
- Evan, W. M., & Freeman, R. E. (1988). A stakeholder theory of the modern corporation: Kantian capitalism. In T. Beauchamp & N. Bowie (Eds.), *Ethical theory and business* (pp. 75–93). Englewood Cliffs: Prentice Hall.
- Fischer, F. (1991). Risk assessment and environmental crisis: Toward an integration of science and participation. *Industrial Crisis Quarterly*, 5(2), 113–132.
- Freeman, R. E., & Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review*, 25(3), 88–106.
- Glicken, J. (2000). Getting stakeholder participation ‘right’: A discussion of participatory processes and possible pitfalls. *Environmental Science & Policy*, 3, 305–310.

- Kurland, N., & Calton, J. (1996). A theory of stakeholder enabling: Giving voice to an emerging postmodern praxis of organizational discourse. In D. Boje, R. Gephart Jr., & T. Joseph (Eds.), *Postmodern management and organization theory* (pp. 154–177). Thousand Oaks: Sage.
- Manville, B., & Ober, J. (2003). Beyond empowerment: Building a company of citizens. *Harvard Business Review*, 81(1), 48–53.
- Millar, M. G., & Tesser, A. (1986). Effects of affective and cognitive focus on the attitude–behavior relation. *Journal of Personality and Social Psychology*, 51(2), 270–276.
- Nisbet, E. K., & Zelenski, J. M. (2011). Underestimating nearby nature: Affective forecasting errors obscure the happy path to sustainability. *Psychological Science*, 22(9), 1101–1106.
- Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Stringer, L. C., & Quinn, C. H. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*, 90(5), 1933–1949.
- Sama, L. M., Welcomer, S. A., & Gerde, V. W. (2004). Who speaks for the trees? Invoking an ethic of care to give voice to the silent stakeholder. In S. Sharma & M. Starik (Eds.), *Stakeholders, the environment and society* (pp. 140–165). Cheltenham: Edward Elgar.
- Sedereviciute, K., & Valentini, C. (2011). Towards a more holistic stakeholder analysis approach. Mapping known and undiscovered stakeholders from social media. *International Journal of Strategic Communication*, 5(4), 221–239.
- Starik, M. (1995). Should trees have managerial standing? Toward stakeholder status for non-human nature. *Journal of Business Ethics*, 14(3), 207–217.
- Thabrew, L., Wiek, A., & Ries, R. (2009). Environmental decision making in multi-stakeholder contexts: Applicability of life cycle thinking in development planning and implementation. *Journal of Cleaner Production*, 17(1), 67–76.
- Van Buren, H. J., & Greenwood, M. (2009). Stakeholder voice: A problem, a solution and a challenge for managers and academics. *Philosophy of Management*, 8(3), 15–23.
- Yang, J., Shen, G. Q., Ho, M., Drew, D. S., & Chan, A. P. (2009). Exploring critical success factors for stakeholder management in construction projects. *Journal of Civil Engineering and Management*, 15(4), 337–348.

Unlawful Killing

- [Corporate Manslaughter](#)

UNPRME, Responsible Education

- [UN Principles on Responsible Management Education](#)

Untapped Emerging Markets

- [Blue Ocean Strategy](#)

Unwanted Sexual Advances

- [Sexual Harassment](#)

Uprightness

- [Integrity](#)

Urgent CSR

- [Critical Corporate Social Responsibility](#)

Useful Life

- [Product Life Cycle](#)

Usefulness

- [Effectiveness](#)

Use-Goal Utility

- [Consumerism](#)

User Activism

► Consumerism

Utilitarianism

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Synonyms

Benefit focus; Opportunity ethics; Outcomes-focused practice; Rule of common good

Definition

Utilitarianism is a practical philosophy which continues to be influencing the principles of law, governance, politics, (political) economy, and societal structuring. A number of authors consider it inextricably linked to the very functioning of modern capitalism. The subject matter of *utilitarian* thought is convoluted: many thinkers have been labeled “utilitarian” though very few truly are. Utilitarianism survives well into the twenty-first century, and it remains relevant in both practical and philosophical terms; it underwent many mutations, and there are a number of contemporary schools of thought that seem attuned to it for the foreseeable future. Indeed, some radical forms of utilitarian thinking may continue to influence human civilization for the foreseeable future.

Utilitarianism may be defined as the modern *consequentialist* doctrine of *achieving the greatest possible happiness for the greatest numbers possible* – and in latter forms of utilitarianism, aiming for *the highest quality of such happiness attainable*. In its very initial original form, *utilitarian* thought was characterized by a more radical form and had combined liberty with elements of coercive control best epitomized in the *Panopticon*, a concept of some relevance to

contemporary societies (This is not only in terms of the self-evident application in “surveillance-driven societal norms,” as was contentiously proposed in Foucauldian thought. Panopticon and its assertion on the governance by public opinion, transparency, and related concepts are more logically contemporaneous to the manifest practices of the twenty-first than those of the late eighteenth century, as shall be seen further in this text). The immediate modification of its initial earliest form of act utilitarianism and rule utilitarianism simplifies and systematizes the matter; it also sets a number of individualistic principles curbing the power of governance mechanisms. Such pragmatic approach to the matter made utilitarianism more logically robust and defensible against very early critics who identified internal contradictions within it. As such, it has led to increased tolerant attitudes and law reform that enables greater degrees of legal equality and more humane punitive systems than those of its time. On the other hand, some argued that certain analytical flaws within its propositions have led to kinds of relativization with adverse impact on practical applications of everyday life. Those include commercial inequalities reflected in corporate behavior toward multiple stakeholder groups; economic stratification of healthcare provision and the infamous postcode lotteries in health and education; and others.

At the start of the twenty-first century, utilitarian thought and practice has various forms. This includes neo-utilitarian approaches that utilize cognitive psychology and work to enhance for practice relatively recent critical concepts such as normative stakeholder theory; contemporary forms of preference utilitarianism; and some more radical negative utilitarian ideas as well. Also, as seen across news media and permeating developed economies with strong civil societies, novel and powerful ethics of social advocacy in veganism and environmentalism (“extinction rebellion”) are taking root much thanks to utilitarian premises many of them are founded on. There are exceptions, as will be seen; some vegan and environmentalist thought is deontological or virtue-ethics based. At a time when religious ethics are on the wane in developed economies,

mindfulness takes over as a utilitarian concept (Brazier 2016).

Introduction: Origins

Two pivotal names in utilitarianism are Jeremy Bentham and John Stuart Mill. The latter had claimed that utilitarianism may find its roots in the works of Aristotle and can be traced to the religious ethics of Christianity (Contemporary critics tend to agree this is not the case. As for religious apologetics in Mill's work, it may be argued this is the condition of the broad consensus of the nineteenth century, an unlikely requirement of modern secular societies largely influenced by his, implicitly if not explicitly, secularist thought). This, while Eudaimonia ("goodness of spirit," synonymous with happiness) was indeed an aspect of Aristotle's work, with quite a few differences. In Aristotle's view, Eudaimonia is subject to matters of chance, including the respective birth rights (or lack thereof) of Greek citizens, women, and slaves; utilitarian concept of happiness may not be so – and Mill was decidedly egalitarian in those respects and in ways which would be alien to an ancient citizen of Athens (Ryan et al. 1987). Relatedly, the "natural rights" Mill so strongly rejected in the work of deontological ethicists like Kant does appear to underpin the work of Aristotle. Also, the virtue of Eudaimonia is not identical to the higher pleasures of Mill's thought, albeit related to some extent (In calling upon such towering authorities of ancient times highly revered in his day, Mill may have sought justification of his thought, perhaps a reference to the truth of his own work). One clearer connection with Aristotle was the teleological nature of his thinking, namely, the implications and validity of the method by which a result is arrived at. More directly inspiring to his predecessor and mentor Bentham was the work of Hedonists, namely, Epicurus. Proto-utilitarian thought may also be found in the oeuvres of Hume (in terms of logic) and Austin (save for his clearly non-secular approach to ontological matters). An important methodological influence on Mill was Bacon and the concept of *axiomata media* ("middle

principles"). This too was an aspect of Bentham's the original work on hedonic utility that Mill readily acknowledged in his otherwise considerable critique.

Though the overall impact of Bentham's and Mill's work can be seen to include a pragmatic tolerance of fringe behaviors and systematic review of the rigid values of their time both of which have been inherited in a number of legal and political systems present today, it would be naïve to approach them as proponents of what would today be described "democratic." Bentham's lack of empathy for prisoners or others subdued is manifest in his well-known quote "*Call them soldiers, call them monks, call them machines: so they were but happy ones, I should not care*" (Bentham 1995: 31). Similarly, the reference in Mill's work to *higher pleasures* and the notorious retort to a critic with comparison of "lower pleasures" to those of a "swine" (This is not without excessive criticism of his mentor and founder of utilitarianism) may lead the reader to wonder as to whether there was a correlation drawn between poor education and lower human capacity (schooling was far from universal; a very costly activity). (NB: Some contemporary reflections on utilitarianism covered below will be shedding some light on controversial matters and challenges to the concept.) While Bentham's *hedonic calculus* may find little application today, ordinal preference approach to decisions in management and healthcare alike do remain influential. Similarly, Mill's concepts of rule utilitarianism, the harm principle, and limiting the powers – not only of state but also of public opinion – were the principles of liberty that appear to influence contemporary values. Below is a more detailed elaboration of the impact of utilitarianism on contemporary management, health, and other fields of human endeavor.

Continued Impact, Legacy, and Novel Solutions for Corporate Goals: Controversies and Critique

Bentham's Panopticon is frequently addressed by critics and equality- and rights-oriented scholars.

It had become synonymous with surveillance, monitoring, and curbs on human liberties in society. Researchers analyzing his work tend to explore him as inconsistent, starting with Mill. There are interesting contrasts between his liberal and illiberal views. He is in favor of individual interest as the case is with private prisons while at the same time managers of such institutions would be subject to penalties, fines, and even prosecution should they fail to disclose the details of their functioning to a governance body answerable to the public. The accuracy of any of Bentham's proposed calculations of the best sum of pleasure and pain may not be practicable – as pointed out by Mill through the metaphor of astronomy which sailors do not need to use to navigate and rather resort to the *National Almanac* (Ryan et al. 1987: 296–7). However, his interest in codifying the notion of transparency both literal and metaphorical; then *the tribunal of the world*, designed to oversee the Panopticon; and the tribunal of public opinion – all of these concepts come to the foreground in the early twenty-first century above and beyond the contentious notion of surveillance which Foucault and Sheridan (1977) had addressed in his works. As Itai (2019: 3–4) suggests, there is a managerial notion of *the union of interests and duties* in Bentham's Panopticon, surpassing Foucault's views in *Discipline and Punish* (and other related or derivative work).

The surveillance in Bentham's concept surpasses the physical notion of control – Panopticon inspector being the metaphorical *spider in his web*, placing individuals under both physical and psychological control. Foucault's analysis cannot thus be entirely dismissed though the generalization he proposed may not be fully plausible: Foucault suggested that Bentham's view also reveals a capitalist pragmatism of penal practice, i.e., the profit-making utilization of the inmates or others under the controlling mechanism of Panopticon (schools, hospitals, etc.). Panopticon – Bentham's failed investment project in material terms – financially embarrassing, as observed by Russell (2009) does leave a legacy both abstract and concrete, as he had envisaged actual governing bodies that would scrutinize each other by means of

continued evaluation; these do seem to work in the public interest, within indeed a specified remit.

One of the major differences between this and what Mill had practiced in that respect was the one championing *individuality and independence of mind*, understanding the power of public opinion and social pressures to the extent that these forces may need to be kept in check. His notion of moral progress remains linked to the middle-level rules whereby one tests the existing ordinary moral principles as to their utility and does not always need to pursue the ultimate end of all action. The oversimplification of interests of all sentient creatures by the binary opposites of pleasure and pain remains the problem of principle. This is critiqued by current practitioners and theorists. Therefore: one aspect, concerning the sweeping nature of such a logical proposition and statement. And, two, the commentary that points at such binary opposites missing out on the nuances of *happiness*, which in some *neo-utilitarian* views is not an ordinal discrete category but a continual one. This is in the context of the calls to reform contemporary corporate goals (Jones and Felps 2013).

Novel Solutions Proposed: Some Examples

Jones and Felps (2013) explore the problems and offer solutions regarding the managerial running of contemporary corporations, at the very core of their professed goals and widely accepted objectives. Rooted in utilitarian logic and further redefined, set out by neoliberal values, shareholder wealth maximization (SWM) stands in contrast with a critical approach of normative stakeholder theory. Admitting to the fact that these proposed solutions may take very long time to be arrived at, Jones and Felps propose stakeholder happiness enhancement as a novel approach to the matter. Observing Hayek's criticism of utilitarian principles in that welfare enhancement is not an attainable goal, as it is not knowable (the "ideal observer" problem) what is the correlations of (corporate) actions and "the welfare of everyone else in the world," Jones and Felps (2013: 356–7) utilize cognitive psychology to scrutinize such logic. Observing that high levels of cortisone and high blood pressure are inversely proportionate to a notion of happiness, they adopt a neo-utilitarian approach to happiness

and pleasure, thus rebutting the claim of subjective limitations of experience in happiness and fulfillment. Thus opening the possibility of generalization, they further curtail the importance of interest as a means to happiness and therefore utility; the result is that a sequential logic of SWT is not without alternative, therefore problematizing the claim that firms *must* increase firm profits (2013: 358). Utility thus is stated as the means of seeking, not increasing profits at all cost. The significance of the physiological and cognitive components of such an approach – unknown at the time of early utilitarian theory – is that intersubjective propositions do have ground in science and objectively observable parameters that affect both shareholders and other varieties of stakeholder in business. The above is but one example of innovative approaches to a modified understanding of utility fit for the enhanced debates in highly developed corporate capitalist economy. It is essential indeed to add the notion of utility as described by Carroll (2016) in the context of corporate social responsibility, as the means of enhancement of positive goals may lay in further social engagement and impact.

Beyond the Panopticisms: Some Radical Approaches at the Turn of Millennia

Utilitarianism may be perceived as brutal by some; debates on the deontological and utilitarian nature of medicine are covered by a number of authors (e.g., Garbut and Davies 2012; Roscamp and D'Cruz 2017; Mazer 2017; Middleton 2007). Moreover, the logic of preference utilitarian opinion may be seen merciless as taking root in the “eugenic” argument presented by the influential contemporary utilitarian philosopher Peter Singer (e.g., Baroff 2000). A virtues-based question (not deontological in its entirety) – While the majority, middle-ground of *axiomata media* are continuously content, does utilitarianism attain its goals? Indeed, Baroff’s strong critique was faced with further refutations from those looking at cases of extreme disability. Those authors (e.g., Weikle 2000) had called for a balanced approach to specific cases; it may be extrapolated that this can be seen as a call for “postmodern” felicitous calculus. Nonetheless, a number of voices

expressed deep disquiet with implications of views that stand in stark contrast with deontological notion of rights.

In prose fiction, the boundaries of utilitarian thought were explored in Aldous Huxley’s critical Sci-Fi satire *Brave New World* (Diken 2011). The subject matter and critique were covered enthusiastically and in detail by BLTC, an organization practicing “negative utilitarianism” (e.g., Huxley.net 1998/2020; Conley 2017). Negative utilitarianism, the philosopher of science, Karl Popper, was one of its most famous proponents – professes as its key aim to minimize or end aggregate pain and suffering of humans and other sentient beings, whereas more traditional forms of utilitarianism aim to enhance the aggregate happiness of humans. BLTC (Better Living Through Chemistry) is closely connected to transhumanists, with one of its professed aims being the infinite extension of human experience, prolonging life, and editing the human body by any means required, including genetic surgery. It is therefore evidence that utility has no bounds but human imagination and goals of interest, hedonic notions of pleasure, or alleviation of pain. The subject of utilitarianism is complex and evocative of invention, self-enhancement, and worthy of intellectual consideration in the full variety of its guises. It is very likely to evolve into the future, branching out into novel ways of thinking, transforming, and mutating with technology, science, and forms of experience, redefining its form and purpose to suit.

Summary

Traceable to two very prominent authors of the eighteenth and nineteenth centuries, utilitarianism as a school of thought and model of practice is inherently connected to capitalism and continues to be so with its more advanced forms. Indeed, it can be argued that in the predominant school of thought impacting the world in the post-Second World War period, especially since the early 1980s, neoliberalism is one of its ultimate exponents. This is regardless of the fact that the most prominent thinkers of neoliberalism did not shy away from the critique of utilitarianism as a

relatively obsolete model. Similarly, as the new ethics espoused by postmodernist writers took hold and reshaped philosophy and social practice of the late twentieth century, we now see a novel transformation of utilitarian thought in new guises, with the same logic accelerated to new levels, in the form of transhumanism, which in turn borrows from Huxleyan dystopia and is decidedly non-deontological though equally disinterested in the original notions of utility as defined centuries ago. The very fact that utilitarian ideas survive such enormous transformations as presented by the two among many contemporary examples proves that their legacy remains enduring across the economy, business, and the sciences.

Antonym

Deontology

References

- Baroff, G. S. (2000). Eugenics, "Baby Doe," and Peter Singer: Toward a more "perfect" society. *Mental Retardation*, 38(1), 73–77.
- Bentham, J. (1995). [1787] *The Panopticon writings*. London/New York: Verso.
- Brazier, D. (2016). Mindfulness: Traditional and utilitarian. In *Handbook of mindfulness* (pp. 63–74). Cham: Springer.
- Carroll, A. B. (2016). Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*, 1(1), 3.
- Conley, J. J. (2017). Who's afraid of transhumanism? (We all should be). *America Magazine: The Jesuit Review*. [online] 5 September 2017. [online] Available at: <https://www.americamagazine.org/politics-society/2017/09/05/whos-afraid-transhumanism-we-all-should-be>. Accessed 3 May 2020.
- Diken, B. (2011). Huxley's brave New World—And ours. *Journal for Cultural Research*, 15(2), 153–172.
- Foucault, M., & Sheridan, A. (1977). *Discipline and punish*. New York: Pantheon.
- Garbut, G., & Davies, P. (2012). Should the practice of medicine be a deontological or utilitarian enterprise? *Journal of Medical Ethics*, 37(5), 267–270.
- Itai, H. (2019). Surveillance and metaphor of "tribunal" in Bentham's utilitarianism. *Revue d'études benthamiennes*, 16.
- Jones, T. M., & Felps, W. (2013). Stakeholder happiness enhancement: A neo-utilitarian objective for the modern corporation. *Business Ethics Quarterly*, 23(3), 349–379.
- Mazer, B. (2017, December). Brutalist medicine: A reflection on the architecture of healthcare. *BMJ*, 359, j5676.
- Middleton, H. (2007). A utilitarian perspective of social and medical contributions to three illustrative conditions, and recent UK NHS policy initiatives. *Journal of Mental Health*, 16(3), 291–305.
- Roscamp, J. A., & D'Cruz, D. P. (2017). The funding lottery for potentially life-threatening rare diseases: It's not fair, my disease is rare. *Rheumatology*, 57(1, January 2018), 1–2.
- Russell, B. (2009). *Freedom and organization, 1814–1914*. London: Routledge.
- Ryan, A., Mill, J. S., & Bentham, J. (Eds.). (1987). *John Stuart Mill and Jeremy Bentham: Utilitarianism and other essays*. London: Penguin Classics.
- Weikle, D. W. (2000). Eugenics, "Baby Doe," and Peter Singer: Toward a more "perfect" society: A response. *Mental Retardation*, 38(5), 460.

V

Value

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Synonyms

Value drivers; Value management; Value proposition

Definition

Value, and more specifically customer value, is the overall benefit derived, as the customer perceives it, at the price the customer is willing to pay. More precisely, value is the overall benefit derived from a product or service at the price the customer is willing to pay. Information about perceived customer value allows companies to adapt their offering to meet customer value expectations. And companies must understand how their customers perceive value. Perceived value is defined in terms of an existing trade-off between perceived benefits to be received and the perceived price for acquiring the product or service that delivers those benefits. Companies should understand what these trade-offs are and how to influence product and service configurations that can maximize customer value and business outcomes. The power of choice mandates that those

configurations that deliver superior value will win in the market place. The value proposition refers to the creation of value. Value delivering is the process that enables the delivery of the created value. Value capturing is how the firm exchanges the created value and generates revenue and profit from it.

Introduction

Generally, customer value is constituted by four segments: perceived quality, customer wishes (consciously and unconsciously), as well as perceived extrinsic (e.g., price) and intrinsic attributes (e.g., haptic). Additionally, the dimension of time plays also a role in customers' value perception (Zeithaml 1988).

In every profound value analysis, it is important to understand customers' "pains" that they endure in private or business-related contexts. Any solution, benefit, feature, or product/service element that will help in easing this "pain" will be thus regarded as something of value. From a marketing perspective, the goal of pricing strategy is to assign a price that is the monetary equivalent of the value the customer perceives in the product while meeting profit and return on investment goals. The price a customer is willing to pay, and therefore the price a company can achieve is always a reflection of the perceived value of the product or service in the customer's eyes. Understanding and quantifying value to customer is the

foundation of effective product and service development. Conversely, pricing approaches based on the customers' assessment of value are strategic and long term in nature since they are focused on monetizing the service value perceptions from each customer through the pricing mechanism.

The background of value analysis in a business context is closely linked to the development in the nature of competition between companies. Companies during the 1950s and 1960s have based their competition mainly on tangible product qualities. However, since tangible characteristics can be imitated, competition based on product qualities has reached a plateau from the 1970s. The new focus of differentiation was based on the additional services a company provides. To illustrate this evolution, one can think of the car industry with its various services such as financing, warranties, and insurance. Furthermore, also services became quickly generic, and the development of long-term relationships was considered as the new source for competition. The question of what happens if also relationships become generic was the starting point for a reconsideration of the traditional consumer behavior theory (Palmer 2010, p. 197).

A new experiential approach reconsiders previously neglected value variables and takes into account the roles of emotions in behavior, the significance of symbolism in consumption, and the consumer's need for pleasure and fun (Addis and Holbrook 2001, p. 50; Gentile et al. 2007, p. 396).

History of the Concept of Value and Price Determination

Scholars have been investigating economic value-related matters since ancient times. According to Monti (2011), these early debates were strongly influenced by basic ethical-political and ethical-religious motives. If prices and the corresponding value were perceived as too low or too high, this caused offence, and the consequences were strict and harsh regulations, sometimes even prohibitions. Consequently, a particular ethical attitude towards the use of pricing instruments emerged,

which could not yet pave the way for a well-thought-out pricing policy geared to increasing sales. A sales and customer orientation contradicted the nature of the management at that time, as it included unforeseeable risks. Elements such as ethics, morals, and proportionality as characteristics and guidelines of business management created dislikes against an overly individualistic or selfish management of the business. The reference to an "honorable" price was constant. Even in cases of monopoly positions, one's own profit should be "Christian" and not set excessively high (Monti 2011).

The intellectual age of scholasticism stretched from about 800 to 1500. The ultimate goal of the scholastics was the formation of an independent body of scientific thought that could be applied to all aspects of life (Chafuen 2003, p. 13). Scholasticism was not an economic science, as it rather dealt with ethical aspects of economic and investigated the relations and dynamics of humans towards goods and worldly. Scholastic ethics interpreted the divine world order and gave rules of conduct for daily life that were in harmony with Christian morals and the world view (Monti 2011, p. 35). The scholastics asked about the compatibility of real facts with the teachings of the Bible, the Church Fathers, and ancient (Aristotelian) philosophy. Thus, over the centuries, they came closer to an understanding and moral appreciation of trade with Christian prudence and morality. The trading activity was inseparably linked to the issue of fair value and pricing. The "fair price" was therefore the price that corresponded in its principles to a just exchange. This was given if in the business relationship, an exchange equality prevailed and hence equal countervalues were exchanged. The benchmark for operationalizing the value was the paid price that was valid on the market. Since ancient times, the moral-theological and social-philosophical question of pricing justice has prompted scholars to make comprehensive considerations about the factors that determine the price and the principles of pricing (Monti 2011, p. 40).

The solutions that the scholastics gave to the questions facing value and price cannot, of course, be applied to today's problems. Monti (2011)

states that the focus on value analysis for the scholastics was not trade and exchange per se but rather the field of price ranges and margins, which practically made up the profit of a merchant, in other words, the difference between purchase price and sales price, the so-called *lucrum*. The path between the allowed and possible behavior and the prohibited and thus sinful practice remained very blurred during this time. With his actions, the merchant was subject to the postulate of the fair price and value (Monti 2011, p. 40).

The mental and spiritual universe still exerted a strong influence on the daily work of a business owner, so that the idea of a fair price and fair value continued to dominate economic life at least into the seventeenth century. Pricing could not be based on microeconomic considerations but in many cases was dictated by the professional order. Price calculation was not the instrument of the merchant and his striving for success in trade and commerce, but it served to maintain a corporate economic life based on risk. The aim of maintaining the honor of the guild and its members was to produce impeccable goods (Monti 2011, p. 42).

Cost accounting in the Middle Ages essentially included labor costs and material costs. In the constitution of the economic value as the basis of the fair price, the estimates on the personal and material expenditure played a decisive role. Skill, the use of personal strengths and abilities (*labor*), and material expenses (*expensae*) had the greatest impact as factors of price and value determination (Monti 2011, p. 46). With the advent of the eighteenth century, the economic views of the scholastics lost their validity as the standards for value determination. This period of the Enlightenment established a methodological foundation which still forms the basic framework of economic science today and has pushed for the dismantling of ethically based economic doctrines: Individual laws and rules shaped the handling of the discipline, which put the focus on people who were concerned about their own advantage. In the Age of Enlightenment, the rules of the “old economy,” the compilation of topics of ethics, sociology, pedagogy, and agriculture centered around the unity of the household, had decisively lost

their influence on people’s thinking (Monti 2011, p. 46).

Starting in the Renaissance and especially in the mercantile system, business operations and profit prospects intensified. The (re)discovery of the business as a single economic unit and a rationalization of the methods for profit seeking commenced, with a consequent expansion of the sales volumes and the size of the businesses. The principle of economic efficiency, already present in the first stages since the late Middle Ages, gradually made its way through the economy of the mercantilist era (Monti 2011). This principle was closely accompanied by the need for profitability, which in turn acted as a catalyst for a fundamental change in internal business processes through a division of labor and by replacing relatively expensive cost factors with relatively cheap ones. The concrete economic expression of this change was represented by the market, which for the first time formed a real focus of economic activity and value creation. The market offered merchants the opportunity to almost fully exploit this phenomenon in their business endeavors and to use all the levers inherent in the market for successful commercial activity (Monti 2011, p. 46).

Nature and Categories of Value Drivers

Customer value drivers are the decision-related attributes that are perceived by the customer to be the most important to the choice process. Therefore, value drivers are based on customers’ beliefs about the product and the company that provides it, in addition to the intrinsic buying motivation and the buying situation (Mowen 1987).

The value for the customer originates from tangibles and intangibles that provide benefits for the customer, i.e., satisfy his needs. Sheth et al. (1991) were able to identify the following value drivers: functional value, social value, emotional value, epistemic value, and conditional value driver. Functional value is the perceived utility that derives from a product’s physical, utilitarian, or functional attributes. Social value is

derived from an association with an identified demographic, socioeconomic, cultural, or ethnic group. Emotional value derives from the ability to arouse an emotional or affective state. Epistemic value is acquired as the result of its ability to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge. Finally, conditional value derives from the specific situation or context of the purchase or usage decision. A more modern approach seeks to merge these categories of value drivers into a total of three important spheres of value creation.

The value drivers can be classified into economic (Nagle and Holden 1995), emotional (Sheth et al. 1991), and community value drivers (Chiang 2020). Economic value drivers deliver usually tangible and measurable benefits to consumers and companies, such as the ability to improve revenue and reduce cost, a better impact on balance sheets, the reduction of risk management, and hedging costs. Economic value drivers are furthermore based on perceptions about the cost of acquiring, owning, installing, using, and disposing of a product or service. Economic value drivers can be quantified in monetary value.

The second category are emotional value drivers that mainly appeal to consumers rather than companies. In fact, these benefits will help individuals achieve self-actualization or self-esteem and will bond the individual with a community of like-minded peers. Emotional value drivers will drive customers towards feelings of social acceptance and prestige. Emotional value drivers also cover basic emotional functions, like physiological needs. By definition, emotional value drivers are intangible (Sheth et al. 1991).

The last category has received greater attention in the last years, especially with the rise of the importance of a sustainable and socially responsible business behavior within larger communities. Being able to deliver security and safety is a key community value driver, as many consumers want to be protected from physical or mental harm. Other community value drivers are the ability to execute social impact and engaging society, the facilitation of rights and freedom of choice and expression, and finally the possibility to protect

the environment and have a positive impact on sustainable development goals (Chiang 2020).

Two of the most powerful value drivers are intangible benefits, namely, convenience and peace of mind. Even if a product or service is not fully utilized, consumers show a willingness to pay for these specific intangible benefits.

Examples:

- Free cancellation policy (“... what if something happens?”)
- Flat rates/unlimited consumption (“... I don’t usually eat much, but...”)
- Priority access (“... it is good that I can buy this earlier than others...”)
- Loyalty/membership cards (“... I can always have savings if I want to...”)

The price or willingness to pay of the customer and the price achievable by the provider are always a reflection of the value of a product perceived by the customer.

Value Delivery Process

When delivering value to customers, both in consumer- and in business-oriented settings, three important steps have to be taken.

The first step constitutes value creation. The ability to deliver innovative solutions, together with unique material conditions and overall product quality and design, is a fundamental element in order to be able to generate and create meaningful value to customers. The selection of customer segments also creates value, because customers have different requirements and perceptions.

The second step is value communication. It is paramount to be able to send out the right and appropriate messages on products and services that convey to the targeted customers the value created before. The specific positioning of the product or service is also an important tool to communicate value. In this respect, premium brands and low-cost brands serve the function to transmit the underlying value. Furthermore,

elements of packaging products, the presentation, and even the placement of a product in a store can help contribute to the value communication in a significant way.

The third step in the value creation process is the step of maintaining value. In the case of durable consumer goods is the willingness to pay influenced by the preservation of value at the time of the initial purchase. For luxury articles or other goods like automobiles, the preservation of value over a longer period of time makes a decisive contribution to the initial willingness to pay.

Once a company has gained clarity about the value, it should approach the concrete price setting. Moreover, when determining the value, for which in practice there is a wide range from highest to lowest quality, the company must keep the achievable price in mind from the very beginning. The decision to use a product or service, and the subsequent steps to buy, and the price that customers are willing to pay – all these decisions are dependent on the possibility to assess the value that customers will receive from the product in question, relative to other possible alternatives. The emergence of the digital information economy has contributed to the convergence of knowledge, goods, and services into total product solutions that attempt to maximize customer perceived value and, hence, customer satisfaction. Thus, digital value propositions may include the ability to access and use (rather than own) products and services, as well as the increased capacity to reduce effort and to save time for customers. Digital value propositions may also be based on elements of superior customer experience and customer usage.

Summary

The concept of value, and more specifically customer value, can be defined as the overall benefit derived at the price the customer is willing to pay. In this context it is not only important for companies to understand how customers perceive value but also to assess the various value drivers that are important to customers. It is therefore paramount to understand customers' "pains" that they

endure, and any solution, benefit, feature, or product/service element that will help in easing this "pain" will be regarded as something of value. Understanding and quantifying value to customer is the foundation of effective product and service development. Historically, the concept of value has been strongly influenced by basic ethical-political and ethical-religious motives. The reference to "honorable," "fair," or "just" prices can be constantly seen throughout the Middle Ages and up to the modern era. While the costs of production and materials were at the core of value perception, the nature and categories of value drivers have changed in a modern business setting: from functional to social, emotional, epistemic, and conditional value drivers. Furthermore, modern value delivery includes the steps of value creation, value communication, and maintaining value.

Cross-References

- [Customer Value Creation](#)
- [Value Creation](#)

References

- Addis, M., & Holbrook, M. B. (2001). On the conceptual link between mass customisation and experiential consumption: An explosion of subjectivity. *Journal of Consumer Behaviour*, 1(1), 50–66.
- Chafuen, A. A. (2003). *Faith and liberty: The economic thought of the late scholastics*. Lanham: Lexington Books.
- Chiang, K. (2020). Weaving social consciousness into corporate identity – community value drivers. <https://www.ibbaka.com/ibbaka-market-blog/weaving-social-consciousness-to-corporate-outcomes-community-value-drivers>. Accessed 15 Sept 2020.
- Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that co-create value with the customer. *European Management Journal*, 25(5), 395–410.
- Monti, A. (2011). *Der Preis des "weißen Goldes": Preispolitik und -strategie im Merkantilssystem am Beispiel der Porzellanmanufaktur Meissen 1710–1830, [The price of the "white gold": Price policy and strategy during the mercantile era at the porcelain manufacture of Meissen 1710–1830]*. München: Oldenbourg.
- Mowen, J. C. (1987). *Consumer behavior*. New York: MacMillan.

- Nagle, T. T., & Holden, R. (1995). *The strategy and tactics of pricing: A guide to profitable decision making*. Englewood Cliffs: Prentice-Hall.
- Palmer, A. (2010). Customer experience management: A critical review of an emerging idea. *Journal of Services Marketing*, 24(3), 196–208.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). *Consumption values and market choices: Theory and applications*. Cincinnati: South-Western Publishing.
- Zeithaml, V. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *The Journal of Marketing*, 52(3), 2–22.

for the generality of the cases. There are multiple value chain analysis (VCA) methods, designed and applied mainly according to the approach from which it is studied (firm, industry, country, or global) and the information and time available. VCA in practice should use or combine different methods or types of VCA, which provide different types of information about the value chain under analysis, have different advantages and limitations, and finally complement each other to help gain a better understanding of what it is like and what happens in the value chain.

Value Chain

- ▶ [Supply Chain](#)
 - ▶ [Value Chain Management II](#)
-

Value Chain Analysis

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Synonyms

[Analysis of value chain](#); [Supply chain analysis](#); [VCA](#)

Definition/Description

Value chains are an essential element for sustainable development, not only in economic terms but also in the environmental, social, and cultural dimensions. Despite its interest, the analysis of value chains encounters various barriers, among which the difficulty in obtaining the necessary information stands out. Value chains can become complex and dynamic systems, with different dimensions (company, sector, industry, country, global), and diverse forms, that interact with each other. That is why, in the same way, there is no single methodology or a better methodology

Introduction

Value chains are an essential element for sustainable development, not only in economic terms but also in the environmental, social, and cultural dimensions. In recent years, factors such as globalization, advances in logistics and communication technologies, and changes in consumer preferences and consumption habits have increased the complexity of value chains. Firms' competitiveness increasingly depends on what happens along the value chains, and the different stakeholders are increasingly aware of the importance of understanding their functioning. That is why the scientific community has increased studies with a value chain approach, which in many cases try to find out value creation along the value chain, from producer to consumers. Despite this interest, the analysis of value chains encounters various barriers, among which the difficulty in obtaining the necessary information stands out. This data gap in many cases limits the methodologies that can be applied to understand the functioning and relations at value chains and, therefore, the usefulness of the results.

Although the value chain is defined by multiple authors, and there is a basic theoretical conceptualization of it, in reality, value chains can become complex and dynamic systems, with different dimensions (company, sector, industry, country, global), and diverse forms, that interact with each other. That is why, in the same way, there is no single methodology or a better methodology for the generality of the cases. There are multiple

VCA methods, designed and applied mainly according to the approach from which it is studied (firm, industry, country, or global) and the information and time available. However, and despite a certain degree of standardization in these methodologies, the final design is always adapted to each case, depending on the combination of certain factors such as scope, information, time, resources, and knowledge.

The objective of this work is not to review all the possible methodologies of VCA but instead, and in a simple way, present the main approaches applied to the analysis of the value chains and the main factors conditioning the design and development of the VCA. First, we briefly clarify the concept of value chain and its most recent evolutions. Second, we identify the main VCA approaches. Next, we discuss about the most value chain dimensions, a key aspect for VCA design, implementation, and interpretation. Then, we present some of the most relevant and recent applications of VCA. Finally, we close the work with some conclusions and future directions about VCA.

The Concept of Value Chain

Michael Porter introduced the concept of value chain as all those activities that a company develops to offer a product or service with value added in the market (Porter 1985). The final value added in a product or service is the result of the aggregation of the value added in each of different activities during the production process. A firm has to analyze its level of efficiency doing each of the activities within the production process. This allows to identify sources of competitive advantages (Brown 1997), but also it helps to find those activities that should be outsourced or relocated to a more efficient actor. Efficiency of each of the task in the production process determines cost and margins, so indeed, it influences firm's competitiveness and profitability. Porter's model identifies different generic activities within a value chain, both primary and secondary activities. Primary activities are inbound logistics, operations, outbound logistics, marketing and sales, and

services. Secondary activities are classified into procurement, human resource management, infrastructure, and technological development (Porter 1985). This model has been, and still is, a key strategic management tool to understand the value creation in organizations and improve their competitiveness.

Porter's definition of value chain has a clear internal orientation in the organization, related to strategic management. This way of understanding the value chain is closer to a simple value chain, which defines all those tasks and production steps needed to obtain a good or service and is often identified with the activity of a single company. Nevertheless, the extended value chains consider also more activities and agents involved in the development of the product or service, what helps to describe a more complex reality. Moreover, the configuration of a value chain can be interconnected and interrelated with other value chains (Kaplinsky and Morris 2000).

Extended value chains began to take on more relevance in the 1990s, with the takeoff of the processes that led to globalization. The manufacture of goods and the provision of services started to involve many companies, in different countries, or even the same company, in different countries. Thus, global value chains (GVCs) emerged as the international extension of the Porter's value chain (Jones et al. 2019), simply due to the fact that the activities that occur in these chains have been developed in different countries. In a GVC, production takes place along a value-adding chain of activities developed not only within a factory or a single firm but also in chains that link multiple firms, facilities, infrastructures, and companies located in different countries (Sturgeon and Memedović 2011). In GVCs the value created by cross-national task transfers is a relevant factor with implications for firms, industries, and countries (Inomata 2017).

With globalization and the appearance of GVC, VCA began to be relevant and useful, not only for firm's strategic management but also for the competitiveness and sustainability of industries, the evolution of international trade, and countries' economic development. More recently, value chains are undergoing significant structural

changes, due to the rise of green economy policies and the development of a new industrial revolution which is not just based on technology but is also information and digital driven.

Value Chain Analysis Approaches

Traditionally, VCA is applied as a strategic instrument to analyze firm's activity and improve organizations' efficiency and competitiveness. Under this internal approach, VCA aims to identify which resources and activities provide a competitive advantage to the organization. Based on Porter's conception of the value chain, VCA is a useful approach in developing firm's strategic planning, that is, the organization process that makes decisions affecting its competitiveness and profitability (Ensign 2001). VCA helps managers and practitioners to understand the sources of competitive advantages, identify interrelations between activities that create value, and formulate competitive strategies (Ensign 2001). Since Porter defined the concept of value chain, VCA has been broadly used in business administration and strategic management to define, implement, and evaluate firms' strategies. Nowadays VCA is still a widely used tool in firms' internal management, although it has evolved in parallel with the evolution experimented by the concept and structure of value chains.

With the internationalization of business and economic activities, and the appearance of GVC, value chain analysis has been applied to different approaches beyond the boundaries of the firm (Zamora 2016). According to Frederick (2014), VCA analyzes interfirm relationships in order to understand firms' current situations and their potential evolution. Frederick even goes deeper into the external dimension of the company, stating that "the objective of value chain analysis is to determine how and where power is exerted along the chain and by whom (firms or institutions)." Under this conceptualization, VCA has been applied to analyze industries as a whole, as well as industry clusters. This more recent and extended approach of VCA considers the value chain as complex network within which value

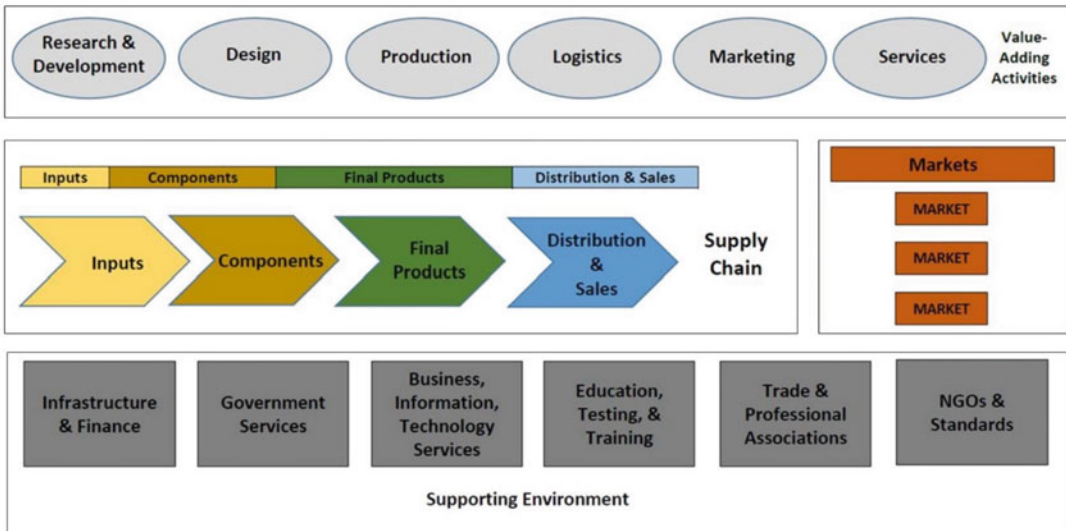
creation is the consequence of the interactions not only between producing companies but also between the rest of agents necessary to make the good or service reach the final recipient (Zott et al. 2011). Some of the actors are directly involved in the different stages of product design, production, and placement and others as auxiliary actors in the process, providing technology, services, infrastructures, research, financing, and insurance, among others. However, the latter are, in most cases, direct and indirect actors in other value chains. As a result, this simplistic classification generates confusion when analyzing the structure of a complex value chain, from an industrial or global perspective.

In recent years, several authors have tried to clarify and put order in who is who in this new approach to the study of value chains, and among them, the value chain reference model (VCRM) proposed by Frederick (2010, 2014) stands out for its clarity and usefulness. Figure 1 shows the four parts or dimensions that the VCRM model identifies within a value chain, and below we provide a briefly explanation of each one.

Value-adding activities: this dimension defines the six main steps normally needed to develop a product from its conception to the final recipient. Frederick breaks down the production process into these activities: research and development, design, logistics, production, marketing, and services. These activities are business functions a firm may engage, from one to all six of them, and which stakeholders can engage in. Some of these functions may not require physically transforming the product, but they provide value added to the product (Frederick 2014).

Supply chain: analyzes production and logistics activities beyond the conception of a simple value chain. It covers the input-output process with four elemental stages: inputs, components, final products, and distribution and sales. Supply chain focuses in the physical distribution of the inputs, components, and products across the different stages of the chain (Frederick 2014).

End-use markets: this dimension defines three different distribution channels and buyers according to the purpose for purchasing the product: consumer retail markets (personal use),



Value Chain Analysis, Fig. 1 Value chain reference model (VCRM). (Source: Frederick (2010, 2014))

industrial markets (industrial use), and institutional/public use markets (products used by public institutions) (Frederick 2014).

Supporting business environments: includes the local and global entities that support and influence related stakeholders. Participants in this environment can be separated into six general categories as can be seen in Fig. 1. These organizations create rules and provide resources into the value chain and are responsible for establishing and enforcing institutions in different forms that may improve or limit the performance of the value chain. The influence of these institutions can be local, regional, national, or global, and these actors can represent public or private interests (Frederick 2014).

One of the main advantages of this model is that it allows to differentiate and associate the activities that involve a physical transformation of the product through the supply chain, from those value-adding activities (Frederick 2014).

Value Chain Dimensions

The design and implementation of VCA need an approach that considers the different value chain dimensions. Below, we present some of the main classifications of these dimensions.

Fearne et al. (2012) identify three critical dimensions to adopt a holistic VCA approach that incorporates sustainability in the achievement of a competitive advantage, thanks to the consideration of social and environmental aspects.

Boundary of analysis. Traditionally, VCA has been applied to evaluate firms' internal dimension, in line with the Porter's original value chain conceptualization (Fearne et al. 2012; Zamora 2016). Nevertheless, nowadays, value chain length has increased, and production processes have become international, with multiple firms involved in several countries. Value chain studies no longer only analyze interactions between tasks in the same company, but the relationships between tasks involve interactions between organizations, often located in different countries, with different cultures and regulations. This new context implies that the study of value chains may require a boundary of analyses beyond the intra-firm, since the competitiveness of a company or an industry is determined by the relationship and behavior of different agents throughout a value chain.

Scope of value considered. Within the same value chain, consumers can value different product

attributes and characteristics. Within the same market, there can be heterogeneity between consumers, and the final value of the product may vary according to factors such as customers' income, gender, education, or culture. These aspects influence willingness to pay, and therefore, VCAs should in these cases consider the different market segments instead of treating the consumer as a single and homogeneous group (Zamora 2016).

Governance. Gereffi (1994) defined governance as "authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain." In the value chain context, this implies that the performance and sustainability, both of a firm as an individual actor in the chain and the industry as a whole, can come to depend to a great extent on the relationships that exist between the agents of the same, on the distribution of bargaining power among them, on the role played by third parties such as administrations or business associations, and, to a certain extent, on the degree of coordination and collaboration between all of them.

Another proposal to describe VCA dimensions is that of Frederick (2014), in which this author divides the value chain framework into four blocks that helps to understand the structure, functioning, and interactions among agents in the chain and, therefore, can be used to implement a VCA approach and analysis. These four blocks are:

Input-output structure: includes the supply chain segments and value-adding activities included in the VCRM model.

Geographic scope: the industry activities included in the input-output structure can take place in locations in more than one country, and countries participate in industries by leveraging their competitive advantages in assets.

Governance: it refers to the ability of a firm or organization to exert control and power along the value chain.

Institutional context: how local, national, and international environment and policies configure the different stages of the value chain.

Later, Gereffi and Fernandez-Stark (2016) added two more dimensions, upgrading and stakeholders analysis, to the four defined by Frederick (2014):

Upgrading: economic upgrading is the process in which firms, countries, or regions advance to higher-value activities in the value chain in order to increase the benefits (e.g., security, profits, value-added, capabilities), specially from participating in global value chain (Gereffi and Fernandez-Stark 2016).

Stakeholders analysis: industry actors are not only mapped, but also their main role in the chain has to be explained. Examples of the most common stakeholders in the value chain are companies, industry associations, employees, educational and research institutions, government agencies, and ministries. How relations between these actors are governed and which institutions may drive change are key information not only to understand the value chain but also to propose policies and recommendations (Gereffi and Fernandez-Stark 2016).

Value Chain Analysis in Practice

The methodologies for developing a VCA are very diverse, and there is no generic methodology, nor strict rules on how it should be developed. In reality, in what there is some agreement is in that a VCA in practice should use or combine different methods or types of VCA, which provide different types of information about the value chain under analysis, have different advantages and limitations, and finally complement each other to help gain a better understanding of what it is like and what happens in the value chain.

VCA comprises qualitative and quantitative methodologies. Hellin and Meijer (2006) recommend using qualitative methodologies first and then apply quantitative methods. This qualitative

approach mainly aims to map the value chain, while the quantitative methods are used to understand the relations between the different actors and stakeholders involved in the value chain.

Frederick (2014) proposed an approach to developing a VCA based on its four value chain dimensions. The four blocks or dimensions that this author identifies in the global value chain framework are converted into two steps described below:

Value chain mapping: it contains the two first dimensions (input-output and geography), and it uses mainly qualitative methods. Value chain mapping aims to describe the structure of the chain through the identification of the geography and activities of stakeholders involved in production process, from raw materials to final customers. It includes methods used to identify and map the structural elements and actors in the value chain, including qualitative (market reports, firm reports) and quantitative (labor, trade, market, firm statistics, and data), secondary (companies, industry, regional, national, international, public and private organizations, and associations), and primary data (interviews, questionnaires) sources (Frederick 2014).

Value chain analysis: it seeks to determine the role that dynamic factors (governance, institutions, and interfirm relationships) play in conditioning the location, development, and competitiveness of a product or service. Value chain analysis considers governance and the institutional context in order to determine how and where power are exerted along the chain and by whom and how firms and institutions influence innovation, marketing, and risk (Frederick 2014).

Another essential aspect when implementing a VCA is access to information and the necessary resources (human, financial, and time horizon) to obtain it. The availability of information determines in most cases the methods that can be used to make a VCA. The more ambitious a VCA is in terms of boundary and scope analysis, the more difficult and costlier it is to obtain the

information and the most likely the appearance of limitations in the data that do not allow the application of quantitative methodologies based on econometric models. This is the case, for example, of price transmission or market competition, which demands long enough price time series.

VCA Main Applications

The VCA has traditionally been applied as a tool to determine the competitiveness and strategy of companies. With the increasing complexity of value chains, globalization, and interest in sustainable economic and business activity, the use of VCA has spread to other areas and objectives, from a firm internal dimension to industry, country, and global approaches with different goals.

Frederick (2014) describes several principal applications of the VCA that include different actors and stakeholders as recipients of the results of the analysis. Governments, NGOS, industry associations, researches, and other stakeholders use VCA as a benchmarking tool that maps the value chain to identify the structure of the chain, its actors, and length. Then, the understanding of the value chain functioning helps to provide policy and upgrading recommendations. Finally, VCA facilitates the creation of visual and analytical tools that help to disseminate information about the value chain and improve transparency.

Gereffi and Fernandez-Stark (2016) highlight that in the context of global value chains, in addition to helping governments in the design of policies, nowadays the VCA is also applied to support emergent industries such as offshore services; help to include SMEs in GVC, particularly in agrifood industries; and promote the economic and social upgrading, especially in developing countries.

Future Directions

Nowadays, VCA is becoming a key driver not only for firm strategic management but also for governance and policy making. Schmitz (2005) highlights three key structural changes to explain

the relevance of the study of value chains for policy makers: first, the internationalization of production processes and the globalization of manufacture and service chains across multiple countries; second, the fact that some activities add more value and are more profitable than others within a value chain, so that policy makers aim to guide local firms to move into these more value-added activities. Third, there is heterogeneity in the power that the different agents exercise over the chain, and there is an increasing concern about the sustainability of those chains in which powerful actors set the government rules.

New VCA approaches need to overcome the limitations of traditional analysis, that in many occasions present static results, that do not allow to reflect the dynamism of the reality of the companies (Kaplinsky and Morris 2000). One of the main conclusions in this work is that there is no ideal methodology for the analysis of value creation and competition relationships in value chains. The availability of information and resources to obtain said information determines the type of analysis that can be carried out.

Most analyses use prices as the source of data because they are easier and less costly to obtain than costs. The simplest and most intuitive analysis is the study of the evolution of the price series. But this type of analysis, while useful, does not provide scientific evidence. More sophisticated methodologies such as price integration provide information on competitive relationships in the value chain. However, these methodologies that provide information based on prices require complete price series over time, at different levels of the value chain, which requires standardized information data collection systems.

Those works that determine not only price structures but also cost structures along the food value chain, and hence margins, are far fewer in number. Furthermore, in most cases, these works are developed by national or supranational public institutions or large research projects. One of the main characteristics of these works is that they are static, they are a photograph in time, and there is no continuity, due to the difficulty and the enormous effort and consumption of resources that their realization requires. This means that the

available studies improve the knowledge about certain chains, but they are not a tool to support decision-making and monitoring the impact of measures and policies.

In general, VCA works adapt the methodology to the information available for the case or the value chain they address. However, a project or research that addresses multiple products in multiple countries requires a flexible design that allows the largest amount of information to be provided depending on the resources and information available in each case.

In this context, more and more authors recommend encouraging and supporting the development of VCA systems that combines different methodologies to make efficient use of available resources, considering the advantages and disadvantages of each type of analysis. These systems would be constituted by a basic analysis methodology, based on the dynamic analysis of flows (quantities, prices, etc.), and other complementary methodologies, both qualitative ones, such as value chain mapping, and quantitative ones, for example, the analysis of the cost and price structures, price transmission, or marketing integration. The basic methodology would allow generating an analysis tool that provides continuous information over time on the largest number of chains and products. Complementary methodologies would make it possible to complete and improve knowledge about value chains, performing analysis of case studies on different chains. The selection of the chains and the methodologies would respond both to the interest in certain products and to an efficiency criterion conditioned by the availability of information. The use of artificial intelligence techniques, data-driven decision-making, and system dynamics methodologies will be key methodologies to provide dynamic information on value chains, in an increasingly digital economy.

Summary

VCA is a widely used tool in firms' internal management, although it has evolved in parallel with the evolution experimented by the concept and

structure of value chains. It has traditionally been applied as a tool to determine the competitiveness and strategy of companies and is becoming a key driver not only for firm strategic management but also for governance and policy making. New VCA approaches need to overcome the limitations of traditional analysis, which in many occasions present static results, that do not allow to reflect the dynamism of the reality of the companies.

Cross-References

- [Blue Circular Economy](#)
- [Global Value Chains](#)
- [Life Cycle Management](#)
- [Social Life Cycle Assessment](#)
- [Supply Chain](#)
- [United Nations Sustainable Development Goals 2030, The](#)
- [Value Chain Management](#)
- [Value Chain Management II](#)

References

- Brown, L. (1997). *Competitive marketing strategy: Dynamic manoeuvring for competitive position*. Melbourne: Nelson.
- Ensign, P. C. (2001). Value chain analysis and competitive advantage. *Journal of General Management*, 27(1), 18–42.
- Fearne, A., Martinez, M. G., & Dent, B. (2012). Dimensions of sustainable value chains: Implications for value chain analysis. *Supply Chain Management*, 17(6), 575–581.
- Frederick, S. (2010). *Development and application of a value chain research approach to understand and evaluate internal and external factors and relationships affecting economic competitiveness in the textile value chain* (PhD dissertation). North Carolina State University, Raleigh, NC.
- Frederick, S. (2014). *Combining the global value chain and global I-O approaches*. Discussion paper presented at the international conference on the measurement of international trade and economic globalization, Aguascalientes, Mexico.
- Gereffi, G. (1994). The organisation of buyer-driven global commodity chains: How US retailers shape overseas production networks. In G. Gereffi & M. Korseniewicz (Eds.), *Commodity chains and global capitalism* (pp. 95–122). Westport: Praeger.
- Gereffi, G., & Fernandez-Stark, K. (2016). *Global value chain analysis: A primer* (2nd ed.). Cambridge/New York: Cambridge University Press.
- Hellin, J., & Meijer, M. (2006). *Guidelines for value chain analysis*. Rome: Food and Agriculture Organization (FAO), UN Agricultural Development Economics Division.
- Inomata, S. (2017). Analytical frameworks for global value chains: An overview. *Global value chain development report*.
- Jones, L., Demirkaya, M., & Bethmann, E. (2019). Global value chain analysis: Concepts and approaches. *Journal of International Commerce and Economics*, 1.
- Kaplinsky, R., & Morris, M. (2000). *A handbook for value chain research* (Vol. 113). Brighton: University of Sussex, Institute of Development Studies.
- Porter, M. E. (1985). *The competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- Schmitz, H. (2005). *Value chain analysis for policy-makers and practitioners*. International Labour Organization. ISBN 92-2-117738-6.
- Sturgeon, T. J., & Memedović, O. (2011). *Mapping global value chains: Intermediate goods trade and structural change in the world economy*. United Nations Industrial Development Organization (UNIDO). Development Policy and Strategic Research Branch Working Paper 05/2010.
- Zamora, E. A. (2016). Value chain analysis: A brief review. *Asian Journal of Innovation and Policy*, 5(2), 116–128.
- Zott, C., Amit, R., & Massa, L. (2011). The business model: Recent developments and future research. *Journal of Management*, 37(4), 1019–1042.

Value Chain Management

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Synonyms

[Value chain analysis](#); [Value stream analysis](#)

Definition

Value chain management (VCM) refers to the decisions and action taken by a firm in order to optimize its value chain. The value chain is a

representation, introduced by Porter (1985), of the firm as a chain of linked activities that work together to create value for the customer. The linkages can arise from the need for optimization or from the need for coordination. “Managing” the value chain means properly managing these activities and linkages in order to create value and achieve competitive advantage. It is important to underline that VCM differs from supply chain management (SCM), although the supply chain is central to VCM.

VCM has evolved consistently in response to rapid and complex changes in the context in which firms operate and therefore in firms’ activity. Since an enterprise has relations with other firms, often spread across the world, its strategies drive the reconfiguration of the value chain, taking into account the value chains of other entities. The environment forces the firm to extend its value chain beyond its boundaries, in many cases to create a global chain. For this reason, VCM requires it to expand its analysis, enhance its partnerships, and build more pervasive information systems.

Another relevant change, which has deep impacts on the value chain, is the growing attention to social responsibility and to the effects of a firm’s action on the environment, society, and the community. Nowadays the concept of a

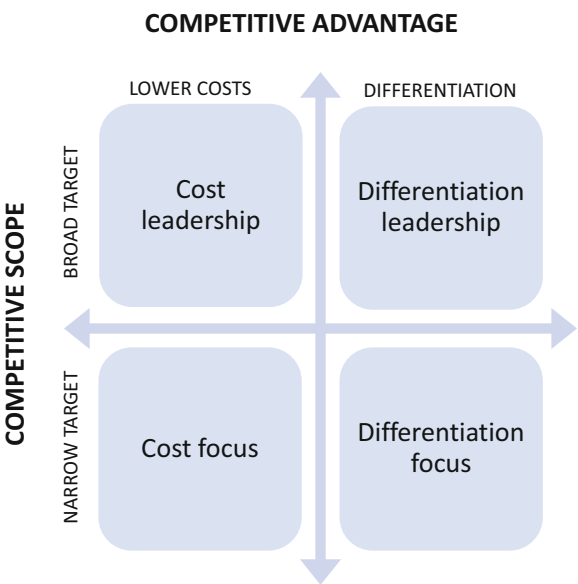
sustainable value chain is central in the debate, partly stimulated by the article by Porter and Kramer (2011) about creating shared value. Social issues have a relevant impact on the firm’s value proposition and on VCM.

The Value Chain

The value chain was introduced by Michael Porter in 1985 as a representation of the levers used by a firm to create competitive advantage. Competitive advantage can be obtained through two opposite strategies: cost leadership and differentiation leadership. In the first strategy, the firm pursues lower costs in relation to its competitors who produce the same product. In a differentiation strategy, a firm seeks to bring a unique product to the market that its competitors are not able to produce. In addition, a third strategy is possible, as an organization can focus on only one or a few segments of its market and pursue, in this specific area, a cost leadership or differentiation strategy. The strategies to obtain competitive advantage are summarized in Fig. 1.

Porter argues that every organization must create value for its customers and that, in doing so, it can achieve a competitive advantage and become successful in its market. Value is a complex

Value Chain Management,
Fig. 1 Strategies of a firm
(Porter 1985)



concept that can be summarized as the price that a customer is willing to pay for the product or service produced by the firm.

The value chain considers the organization as a group of activities and processes that are linked to each other and oriented to create value for the customer. In other words, an activity (or process) creates value if the customers detect the activity, appreciate it, and assign a value to it (in terms of the price they pay, e.g.). According to Porter, there are two groups of activities (Fig. 2): primary activities and supporting activities. Primary activities are those involved in the production of goods or services and in their delivery to customers, including post-sale services. Primary activities are:

- Inbound logistics
- Operations
- Outbound logistics
- Marketing and sales
- Services

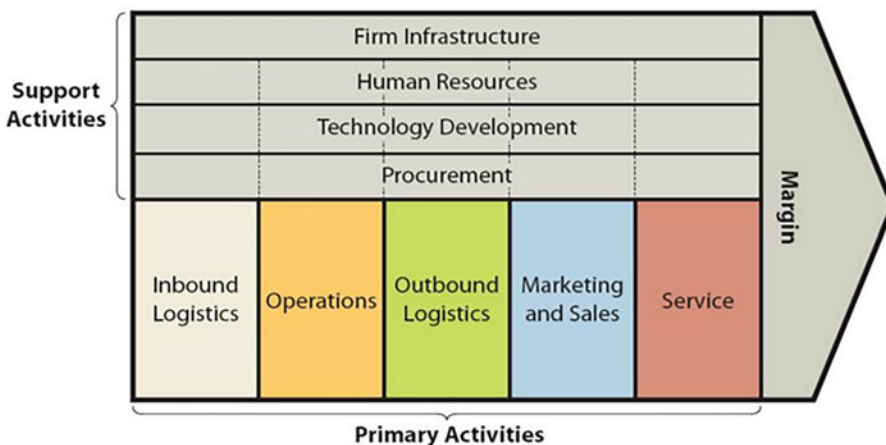
Supporting activities are those that make available, to the entire firm, the resources (physical, human, capital, etc.) it needs. Supporting activities guarantee the flow and correct use of resources for the performance of the primary activities. Supporting activities are:

- Procurement
- Technology development

- Human resource management
- Infrastructure functions such as finance, accounting, control, legal, quality management, etc.

The “macro” activities listed above could be divided into sub-activities, which are groups of single operations that are homogeneous and are able to generate a measurable output that contributes to the value generation. More specifically, Porter (1985) underlines that, in both primary and supporting activities, activities coexist that contribute in different ways to value creation. Some activities, such as those of sales forces, the assembly line, etc., contribute directly to the creation of value for the customer. Other activities, such as planning, the management of sales forces, the management of R&D, etc., contribute indirectly by making it possible for the direct activities to be performed in a continuous manner. Lastly, there are activities like monitoring, testing, and possibly reworking that contribute to creating value for the customer by ensuring the quality of the other activities.

Moreover, even if the activities can be distinctly observed and described, they are strongly interdependent and are linked to each other in creating value. A linkage is the relationship between the way one activity is performed and the cost or performance of another activity (Presutti and Mawhinney 2013; D’heur 2015). Such linkages can arise from the need for optimization



Value Chain Management, Fig. 2 The value chain

or from the need for coordination and, if properly managed, they lead to the creation of value and the achievement of competitive advantage. For example, decisions regarding the activity of investing in quality assurance have a significant impact on post-sale (assistance) costs, reducing them and contributing to value creation.

As a firm works in an open environment, where it comes into contact with many other firms, the value chains of different firms are connected. Porter speaks, in this case, of vertical linkages. The most evident example is the relationship between a firm and its suppliers (the upstream direction) or that between a firm and its clients (the downstream direction). The value chain of the supplier has an impact on the value chain of the firm, as decisions about the former firm can contribute to the creation or destruction of value for the latter firm. In a similar way, the value chain of a client or a distributor can enhance or weaken the process of creating value and the competitive advantage of the firm.

As mentioned above, the linkages can arise from optimization or coordination but, in this case, they are more complex because they concern two entities that may have conflicting goals.

These considerations open the way to value chain management as well as to supply chain management (SCM) and, more recently, to value chain management from a sustainable perspective.

Value Chain Management

The value chain represents the activities of the firm, the linkages between them and the potential interdependence with the value chains of firms that have connections with the firm. "Managing" the value chain means detecting these linkages and exploiting them in order to pursue a competitive advantage through the strategies described in more detail above. A firm can also enhance and shape its relationships with its suppliers and clients, creating new linkages that support value generation for all the actors in the whole chain.

Often, in the literature, value chain management (VCM) seems to overlap with supply chain

management (SCM). The latter has become more and more central in enabling the firm to bring products and services to its customers in a reliable and efficient way (Presutti and Mawhinney 2013; D'heur 2015). SCM progressively expands from operational to organizational and strategic aspects. This evolution has an impact on the whole firm and on other entities belonging to the firm's network. It leads to an interchangeable use of the terms "value chain" and "supply chain," despite there being some differences between them.

In the literature, three perspectives are prevalent.

In the first, VCM and SCM flow in opposite directions. Value chain management starts by considering customers' needs and requests, and shapes the products and production processes in order to generate value for the customer (Feller et al. 2006). On the other hand, supply chain management aims to define a flow from the product to the customer in the most efficient manner. Authors writing from this perspective emphasize the complementarity of VCM and SCM and the need to integrate them.

In the second perspective, SCM is so wide and interwoven with a firm's strategy, operations, and organization that it almost assumes the same meaning as VCM. This approach, closer to a practitioner's point of view, brings integration between VCM and SCM to the extreme of a complete overlap (Presutti and Mawhinney 2013).

In the third perspective, SCM is a part (with a growing relevance) of VCM. In this sense, "the value chain is the combination of products and supply chains of a company" (D'heur 2015, p. 25). Authors with this view emphasize the importance of listening to and interpreting the customer's needs in relation to the product design and all activities not strictly related to the supply chain (Sweeney 2009; D'heur 2015). In this view, the value chain also involves relationship management and information management, suggesting the need for "coordination" as a priority in successful value chains (Walters and Lancaster 2000; Al-Mudimigh et al. 2004).

In general, "VCM is concerned with managing integrated information about product flow, all the way from suppliers to end-users. . . VCM is

concerned primarily, with the customer from start to finish” (Al-Mudimigh et al. 2004, pp. 311–312).

As already underlined, VCM is fundamental in building a firm’s competitive advantage. Presutti and Mawhinney (2013) indicate some dimensions that must be addressed in order to be competitive and consequently have good performance: cost, quality, response time, and flexibility. In pursuing these goals, an efficient and effective value chain plays a key role (see Fig. 3).

First of all, VCM forces an organization to make its value proposition clear, taking into account customers’ needs and the business environment. Porter (1985), for example, argues that the value chain is affected by the following aspects of the competitive environment: the segment, the intensity of integration, the geographical context, and the industrial sector. Each factor should be considered in building the value proposition and the consequent value chain. VCM helps a firm to define its position in the market, its values and beliefs, its core competencies, and its strategy for approaching the market and the customer. Moreover, it supports the firm in relating its mission and vision to the customer relationship.

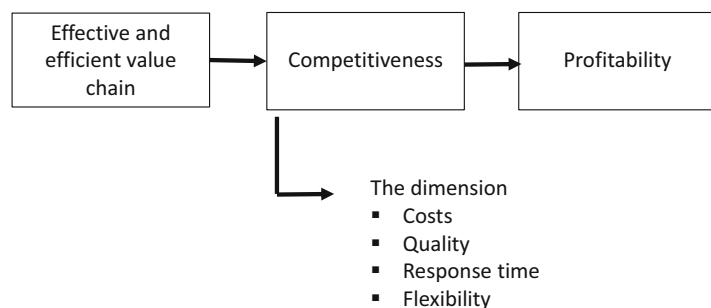
Second, the design of the value chain aims to consider the value stream. The value stream comprises two flows: one (physical) from the raw materials to the finished product, and the other (information) that moves backward from the customer’s order to the production. The organization must synchronize the flows correctly. In this sense, a value chain analysis establishes the activities and the linkages between them, overcoming the silo approach, implementing a process

approach, and shaping the chain by considering the value drivers. The intent of the firm is to improve efficiency, on the one hand, and to reduce uncertainty (e.g., in the relation between demand and supply) on the other. This analysis is the core challenge in VCM, and can involve different tools, such as process analysis, lean thinking, leadership management, change management, target costing, etc. A firm must bear in mind that the design and development of the product are fundamental in meeting the customer’s need for a reliable and successful product or service. This activity requires close integration between the different departments of the firm, and a cultural attitude of cooperation and dialogue. Some authors (e.g., Presutti and Mawhinney 2013) speak of boundary-less organization, in the sense that there is organization-wide integration. The design of the value chain is a result of organizational, technical, and informational drivers that, using many different tools, aim to pursue the goals of cost, quality, response time, and flexibility described above.

In particular, flexibility provides evidence of a third relevant point: a value chain has to be continuously monitored and revised in response to environmental changes and new or different customer needs. In this monitoring, the firm has to be able to “listen” outside and within itself, through a strong relationship with its market and a high flexibility in the organization. This leads to a continuous improvement of the value chain, so that it becomes more effective and efficient. Various factors, again, could drive the firm to do this: dialogue and cohesion between people, a shared culture of “value chain management” as a driver of the firm’s performance, and an efficient and

Value Chain Management,

Fig. 3 Competitiveness, profitability, and the value chain (Presutti and Mawhinney 2013, p. 28)



integrated information system that supports the measuring and monitoring of the value creation and value chain performance.

Extended Value Chain Management

After the introduction of the value chain, the concept soon overcomes the boundaries of the firm and underlines the importance of integration with other firms in managing the value chains of the different firms as a unique chain. As markets are wider and more complex than in the past, the global value chain framework (Gereffi and Lee 2012) aims to describe how different firms in different countries relate to each other in a value chain.

The concept of SCM itself has evolved, thanks to the work of the Supply Chain Council in providing and updating the SCOR (Supply Chain Operations Reference). The SCOR is a model that describes different supply chain configurations and helps in building and monitoring the mode of operation and performance of the supply chain (D'heur 2015). Al-Mudimigh et al. (2004) point out that SCM has changed and expanded as a consequence of several facts: i) the globalization of production and distribution; ii) the shift, in many markets, from mass production to customized production; and iii) the huge development of integrated information systems.

Porter (1985) introduced the seminal idea of the extended value chain, pointing out that every firm has relationships with suppliers and clients who have their own value chains. As these relationships affect the firm, they offer the opportunity to enhance or, vice versa, to weaken the value chain of the firm. This means that an appropriate VCM has to manage the linkages between value chains along the whole extended value chain. Initially, SCM and, in particular, the areas of inbound and outbound logistics, were involved in managing the upstream and downstream flows. This phenomenon, however, has grown rapidly in a global world, and it has become clear that an extended value chain could include many firms that are related in a network and are often geographically distributed across the world.

By competing in a worldwide context, firms have realized that having an efficient and effective value chain is more difficult.

A study by Chartered Global Management Accountant (CGMA) (2014) highlights some relevant points. First, there are more sources of value-creating activities than in the past, because of the interrelations between the value chains of different firms and different countries. Second, the exploitation of these sources demands that the “contractual” view is replaced by a “partnership” view. Third, the extended value chain is affected by many challenges. CGMA identifies three main challenges:

- Globalization
- Demographic change
- Digitalization

As emphasized above, globalization offers many opportunities to expand the value chain and to make it more efficient, by finding the firms that perform certain activities in the best way. Moreover, globalization could facilitate flows of goods and services, enabling a more effective supply chain. However, some risks arise in managing a global value chain: geopolitical instability, differences in legislation, compliance requirements, and the potentially complex governance of such different contexts.

Demographic changes and development of new large urban areas around the world change the value chain strategy to a “next-shoring” approach instead of an off-shoring one. This means that, in the value chain, proximity to demand and to innovation will be success factors. This “proximity” leads to a closer link between the product and the local market situation, and to a more intense co-innovation in the value chain.

Digitalization is a relatively new phenomenon that will be pervasive in managing a firm. The large quantity and the better quality of information have relevant impacts on the value chain, as they make the flow of information between the partner and the organizations in the extended value chain more efficient. Moreover, digitalization provides the opportunity for a direct link to the final consumer, enhancing and transforming the post-sales

service and leading to a better customization of the product.

An extended or global value chain involves actors operating in different countries, with problems of languages, times, culture and approach to business. This implies that a global value chain probably needs more stable and long-term, but at the same time more flexible, relationships, and a high level of trust and cooperation. In order to seize these opportunities and to limit the risks in the extended value chain, some of the enabling factors described in the previous section are even more important.

For example, dialogue and cohesion between people is more complicated because of the physical and cultural distance between actors, but it constitutes a cornerstone in building a fluid and efficient value chain. In this vein, trust between actors is a crucial lever in enhancing relationships and communication in the value chain. Undoubtedly, technology plays a fundamental role in this process, by facilitating, sharing, and speeding up the flow of information. Al-Mudimigh et al. (2004, p. 318) describe the “partnership approach” as one of the pillars of value chain management, and point out how collaboration implies “free sharing of information and the mutual leveraging of various capabilities” and the constant adaptation of the network supply to generate value for the customer.

Value Chain Management and Sustainability

Companies face strong competition that has driven research into the new configuration of the internal and extended value chain. In recent times, a new issue has challenged firms and their value chains: sustainability.

On the one hand, the value chain considers the idea of creating value for the customer to be central.

On the other hand, as the UN Brundtland Report (1987, p. 15) argues, “. . . sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own

needs.” This shifts the focus from a narrow view of the firm (even if the view extends to its economic environment) to a long-term view and to a specific role for the firm in preserving resources and giving opportunities to future generations in creating value.

Recently, the European Union Commission (2011, p. 6) has defined corporate social responsibility (CSR) as “the responsibility of enterprises for their impact on society To fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders.” In this way, the terms “sustainability” and “CSR” assume similar meanings.

Moreover, the theory of stakeholders and the development of this theory point out that the firm lies at the intersection of many different and sometimes divergent interests. This is related to the many stakeholders involved or affected, directly or indirectly, by the firm’s decisions and actions.

The main challenge is to balance stakeholders’ interests and to be sustainable in the sense described above. The consequences of this new vision of a firm’s role are evident in the value chain configuration and in the way a firm pursues its competitive advantage. Presutti and Mawhinney (2013), for example, describe a situation in which a firm builds its competitive advantage by adopting a lean thinking approach. This results in a reduction of the inventory and in the need for prompter and more frequent procurement and deliveries. However, frequent shipments from suppliers and to the customer impact negatively on the environment, by causing traffic congestion and emissions. In this case, more efficiency in the firm conflicts with sustainability. If the enterprise takes into account the needs of the environment, it will explore opportunities to pursue efficiency but at the same time reduce its impact on the environment (e.g., by using hybrid vehicles).

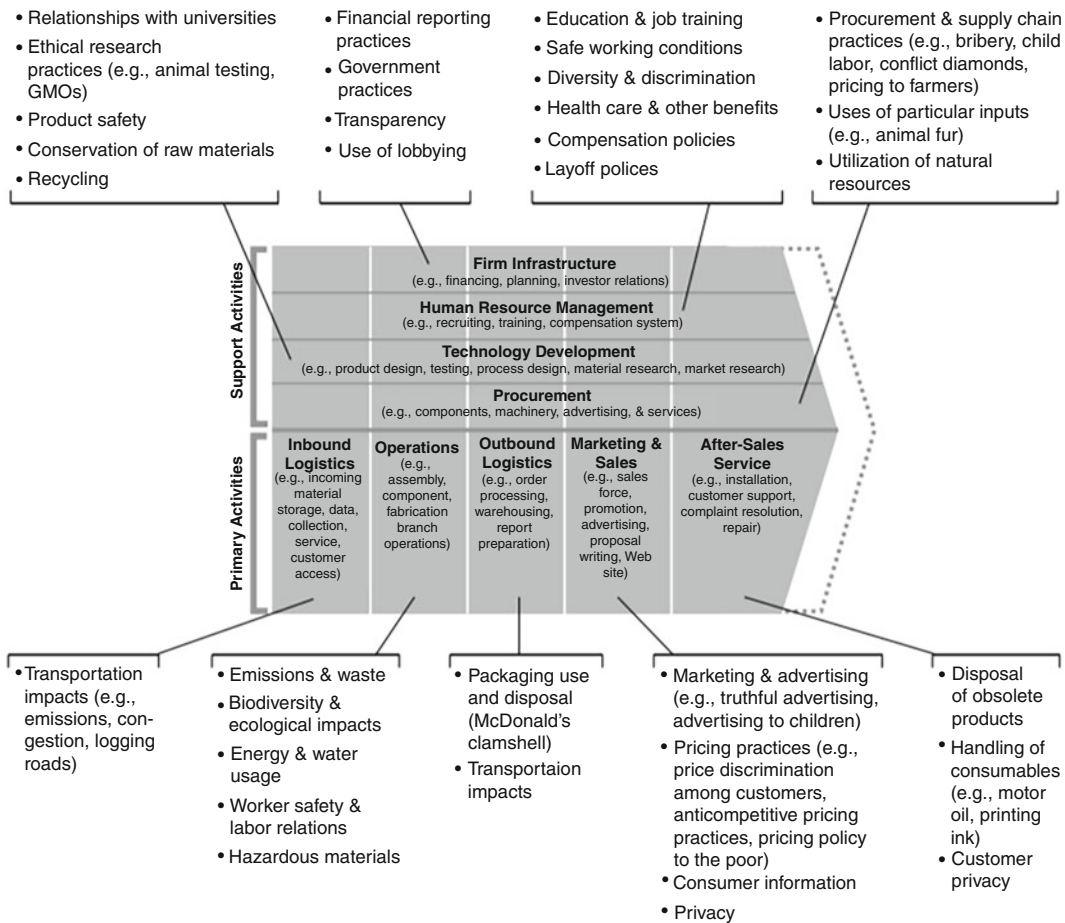
Porter and Kramer (2006, p. 5) investigate the relationship between competitive advantage and corporate social responsibility, starting from the assumption that “a successful company needs a healthy society and a healthy society needs

successful companies.” These authors advise that a firm (and society as well) must focus more on the intersections than on the tensions between its goals and social interests. In their article, they study the implications of this for the value chain and at the strategic level. Regarding the value chain, which is the topic of this chapter, the authors consider the traditional value chain and indicate, for each primary or supporting activity, factors and examples of how environmental and social concern could affect the value chain.

As Fig. 4 shows, the abundance of areas in which a firm can consider CSR in its work suggests, in Porter and Kramer’s view, that a firm must build a strategy while facing up to its social responsibility by: (i) identifying the points of intersection with social needs, (ii) choosing

which social issues to address, and (iii) creating a social agenda. In this light, CSR is an “opportunity” to gain competitive advantage.

In their 2011 work, Porter and Kramer reinforce and enlarge this concept, by proposing their “Big Idea: creating shared value,” in an attempt to solve the trade-off between economic efficiency and social progress. In their definition, shared value refers to “policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates” (Porter and Kramer 2011, p. 66). In describing the environment in which the firm acts, Porter and Kramer argue that societal needs define the market, and that weaknesses in society lead to internal costs for the firm. In fact,



Value Chain Management, Fig. 4 Value chain and CSR (Porter and Kramer 2006, p. 8)

in their view, social issues could impact on the company's productivity. They mention the environmental impact, supplier access and viability, employee skills, worker safety, employee health, water use, and energy use. Addressing societal concerns would improve productivity and generate a competitive advantage for the firm. In other words, an excessive focus on the optimization of the value chain without consideration of societal factors will lead to an underperforming value chain.

The authors view also this new approach as an opportunity to create competitive advantage. In fact, they underline the fact that creating shared value (CSV) is different from CSR. Shared value concerns profitability, competitiveness, and an internally generated agenda, while CSR is separate from profit maximization and originates from external pressures.

The authors suggest that a firm could create shared value in three interconnected ways: (i) reconceiving products and markets, (ii) redefining productivity in the value chain, and (iii) enabling local cluster development.

The topic of this chapter is the value chain. The authors give details about this idea, already described in Fig. 4, giving some examples regarding energy use and logistics, resource use, procurement, distribution, and employee productivity, and showing how firms like Marks & Spencer, Coca Cola, Nestlé, Johnson & Johnson, and Walmart achieved a competitive advantage by reshaping their value chain to incorporate social issues.

The environment, the needs of the community, and the social impact have to be embedded in the value proposition and consequently in the value chain, pursuing a win-win relationship.

The works of Porter and Kramer, especially the last one to be discussed above, have given rise to an intense debate among scholars and also among practitioners. On the one hand, many firms have taken inspiration from the "shared value" concept and try to apply the model in their own context, even if (Corazza et al. 2017) the meaning they attribute to "shared value" does not seem to be homogeneous among the cases. Moreover, as the approach originally refers to multinational firms

and developed countries, it does not fit well in "non-western" countries, such as developing and emerging countries (Voltan et al. 2017). On the other hand, many researchers have criticized the Porter and Kramer's model. Crane et al. (2014) recognize that the model has some strengths, but emphasize other weaknesses. Porter and Kramer's article successfully appeals to practitioners and scholars, partly because of the reputation of these authors in firms (Corazza et al. 2017). It contributes toward elevating social goals to a strategic level, and articulates a clear role for governments in responsible behavior. Moreover, CSV provides an umbrella construct, adding rigor to the ideas of "conscious capitalism." However, the shared value concept has some weaknesses. In the opinion of Crane et al. (2014), the concept is unoriginal and has already been considered (although not under this label) in the previous literature. In addition, in describing a win-win solution, the tensions between the economic and the social goal are hidden. For this reason, De los Reyes et al. (2017) emphasize that the approach poorly supports managers in win-lose situations. Another criticism regards the challenge of business compliance, because Porter and Kramer implicitly consider that the firm's behavior will be compliant with the regulations and moral standards, and this is not always the case. Finally, Porter and Kramer do not study the role of the firm in depth, resulting in a shallow conception. Similarly, Voltan et al. (2017), in their literature review, indicate four main areas of weakness in CSV: a lack of originality, its seductive nature, a tendency to oversimplify, and the naivety of some of its assumptions. Furthermore, some authors, especially those in the business ethics and CSR areas (Hartman and Werhane 2013; De los Reyes et al. 2017), point out that the model is incomplete and lacks an ethical framework.

This huge debate, which is summarized and somewhat simplified here, makes several relevant points clear. First, firms nowadays cannot ignore the issue of sustainability and the role that they can play in the global context. Second, even if all authors agree that sustainability is intertwined with the strategy and management of a firm, the relationship is more complex than an appealing

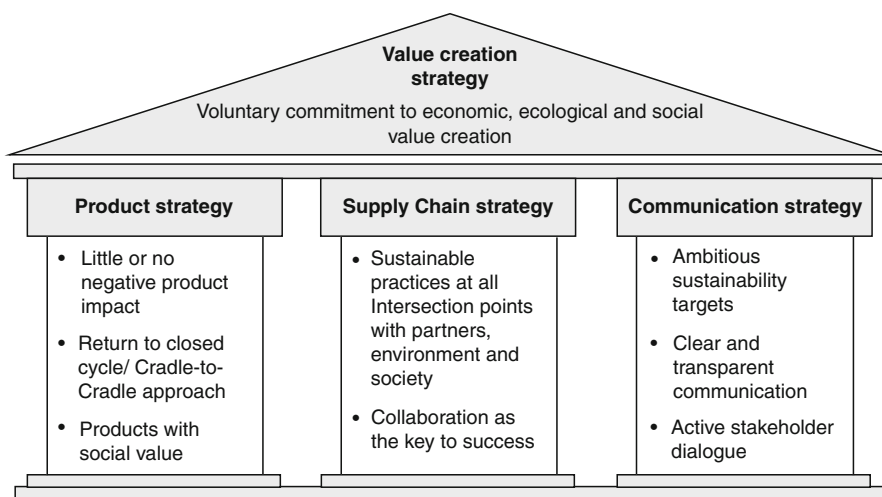
idea of a situation that is always win-win. Third, in this holistic view of the firm, the value chain remains the backbone of the whole organization and needs to be reshaped to take into account the impact of sustainability on the firm. As Presutti and Mawhinney (2013, p. 104) argue, “using a value chain model as a tool to identify the social and environmental impact of a firm’s activities can serve as a useful starting point to identify the interconnections between business and society.” In this vein, Fig. 4 gives evidence of the factors that affect the activities in the value chain. As described above, in an extended value chain the intersections and linkages between the value chains of different firms can enhance (or harm) value creation and often leads to a global value chain, which is a network of firms with different businesses located across the world. In a similar way, assuming that sustainability is part of the value proposition and of the firm’s strategy changes the boundaries of the firm. First, the enterprise must take into account relationships with more and different entities, such as government (national or local), authorities, and communities. In a broad sense, these organizations have their own value chains, focused on the creation of social value, or services for the community, etc. As in an extended value chain, the dialogue between the entities is also a dialogue between the value chains (Pesonen 2001). Second,

sustainability implies moving away from considering products from the “cradle to the grave” and toward considering, in a circular economy, products from “cradle to cradle” (McDonough and Braungart 2002). A value chain could create (or destroy) value during the entire life cycle of a product, from its concept and design to its disposal (or recycling). The so-called Green SCOR (Version 9 of the Supply Chain Operations Reference) introduced sustainability in the analysis of the supply chain and value chain, giving some guidelines for building and monitoring a sustainable supply chain (Closs et al. 2011; D’heur 2015).

The main issue is that sustainability should permeate the firm, starting with the strategy, and continue with the ideation of the products and then their realization, distribution, etc. D’heur (2015, p. 38) gives an effective representation of the approach (Fig. 5), which makes this concluding point clear.

Summary

The value chain is the backbone of a firm and, if properly managed, supports it in achieving competitive advantage. A good integration and coordination of the firm’s primary and supporting activities is a prerequisite for reinforcing the



Value Chain Management, Fig. 5 Value creation strategy (D’heur 2015, p. 38)

firm's position in the market. Supply chain management (SCM) is central in value chain management (VCM), but VCM has a wider impact. Nowadays VCM has evolved into extended (or global) value chain management and, more recently, to sustainable value chain management.

This implies that a firm has to consider its relationship within a global context and with firms and customers worldwide. Moreover, interconnections between the firm and social and environmental issues force the firm to rethink its strategy and therefore the value chain. A reconfiguration of the value chain and its efficient management strongly challenge the firm and depend on specific factors. The entire value proposition has to be reformulated, the dialogue within and outside the firm must be more intense, and the firm needs to abandon the silo approach. In addition, the exploitation of information systems, as well of the potential of digitalization, is necessary in supporting an efficient flow in the value chain.

Cross-References

- [Brundtland Report](#)
- [Competitive Advantage](#)
- [Corporate Social Responsibility Strategy](#)
- [Cradle to Cradle](#)
- [Creating Shared Value](#)
- [Embedded Sustainability](#)
- [Life Cycle Management](#)
- [Shared Value](#)
- [Stakeholder Theory](#)
- [Sustainable Chain Management](#)
- [Value Chain](#)
- [Value Creation](#)

References

- Al-Mudimigh, A. S., Zairi, M., & Ahmed, A. M. M. (2004). Extending the concept of supply chain: The effective management of value chains. *International Journal of Production Economics*, 87, 309–320.
- Chartered Global Management Accountant – CGMA. (2014). *Rethinking the value chain. The extended value chain*.
- Closs, D. J., Speier, C., & Meacham, N. (2011). Sustainability to support end-to-end value chains: The role of supply chain management. *Journal of the Academy of Marketing Science*, 39, 101–116. <https://doi.org/10.1007/s11747-010-0207-4>.
- Corazza, L., Scagnelli, S. D., & Mio, C. (2017). Simulacra and sustainability disclosure: Analysis of the interpretative models of creating shared value. *Corporate Social Responsibility and Environmental Management*, 24, 414–434. <https://doi.org/10.1002/csr.1417>.
- Crane, A., Palazzo, G., Spence, L. J., & Matten, D. (2014). Contesting the value of “creating shared value”. *California Management Review*, 56(2), 30–53. <https://doi.org/10.1525/cmr.2014.56.2.130>.
- D’heur, M. (2015). *Sustainable value chain management: Delivering sustainability through the Core business*. Springer ed.
- De los Reyes, G., Jr., Scholz, M., & Smith, N. C. (2017). Beyond the “win-win”: Creating shared value requires ethical frameworks. *California Management Review*, 59(2), 142–167. <https://doi.org/10.1177/0008125617695286>.
- European Union Commission. (2011). A renewed EU strategy 2011–14 for Corporate Social Responsibility. COM (2011) 681 final, 25.10.2011.
- Feller, A., Shunk, D., & Callarman, T. (2006, March). Value chains versus supply chains, BPT Trends.
- Gereffi, G., & Lee, J. (2012). Why the world suddenly cares about global supply chains. *Journal of Supply Chain Management*, 48(3), 24–32.
- Hartman, L. P., & Werhane, P. H. (2013). Proposition: Shared value as an incomplete mental model. *Business Ethics Journal Review*, 1(6), 36–43.
- McDonough, W., & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things*. North Point Press, New York.
- Pesonen, H.-L. (2001). Environmental Management of value chains. Promoting life-cycle thinking in industrial networks. *Greener Management International*, 33, 45–58.
- Porter, M. E. (1985). *Competitive advantage. Creating and sustaining superior performance*. New York: Free Press Simon and Schuster.
- Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Porter, M. E., & Kramer, M. R. (2011). The big idea: Creating shared value. *Harvard Business Review*, 89(1–2), 62–67.
- Presutti, W. D., & Mawhinney, J. (2013). *Understanding the dynamics of the value chain*. New York: Business Expert Press.
- Sweeney, E. (2009). Supply chain management and the value chain. *Supply Chain Perspectives, the Journal of the National Institute for Transport and Logistics*, 10(2), 13–15.
- United Nations. (1987). *Report of the World Commission on Environment and Development: Our common future* (Brundtland Report).
- Voltan, A., Hervieux, C., & Mills, A. (2017). Examining the win-win proposition of shared value across

contexts: Implications for future application. *Business Ethics. A European Review*, 26, 347–368. <https://doi.org/10.1111/beer.12159>.

Walters, D., & Lancaster, G. (2000). Implementing value strategy through the value chain. *Management Decision*, 38(3), 160–178, <https://doi.org/10.1108/EUM000000005344>.

Value Chain Management II

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Synonyms

Value chain; Value chain analysis

Definition/Description

The Value Chain (VC) model was introduced by Michael E. Porter in his 1985 book *Competitive Advantage: Creating and Sustaining Competitive Advantage* (Porter 1985). The model is representing a firm as “a collection of activities that are performed to design, produce, market, deliver, and support its products” (Porter 1998, p. 36). A VC is industry specific, typically constructed on a business unit level. Nevertheless, even though there are similarities with an industry, the differences are key source of competitive advantage. The model is centered around a concept of value creation, as each value activity is analyzed to identify where exactly the value is created within the company. Companies continuously examine the value they create for their

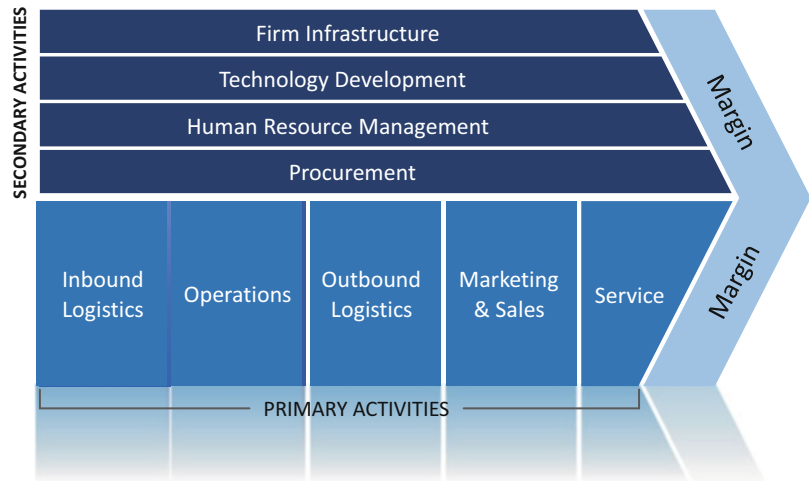
customers to increase, or at least retain, their competitive advantage. Competitive advantage of a company cannot be understood by looking at the company as a whole, rather it has to be analyzed at the activity level. Consequently, the purpose of a Value Chain Management (VCM) is to increase efficiencies so that a company delivers maximum value at a minimum cost.

The Value Chain

The Value Chain (VC) is basic tool for systematic analysis of the company’s activities, which aims to identifying sources of competitive advantage. Activities in the VC are divided into two main categories: primary and secondary activities (please see Fig. 1).

Primary activities relate directly to creation of a physical product, sale, maintenance, and after-sale support. As the product is passing throughout all activities of the chain, it gains some value at each activity. The total added value is greater than the sum of independent activities’ values, and that is why customer is willing to pay for value activities and margin. Margin is being the difference between total value and the cost of performing value activities. Primary activities are divided into five generic categories, as follows:

- Inbound logistics: These are activities related to receiving, storing, and distributing raw materials and supplies within the company. The supplier relationship management (SRM) is an imperative in value creation in this category. The SRM typically helps companies to lower costs, improve quality, innovate faster, and through all this increase profitability (Liker and Choi 2004).
- Operations: These are transformational activities that convert inputs into outputs. Operations focus on running a business effectively and efficiently and include maintenance, material planning, and the analysis of production systems.
- Outbound logistics: It refers to transportation, storage, and delivery of product to customers. There are different ways to create value

Value Chain**Management II,****Fig. 1** The generic value chain (based on Porter 1998)

through the outbound logistics activities, but most prominent are responsiveness and visibility.

- **Marketing and sales:** These are activities associated with introducing a product to the customer and making it available to them. Sources of value are not just utility provided to customer, but also how value proposition is communicated to them. Some of the activities are sales, promotion, managing channels of distribution, managing relationships, setting prices, etc.
- **Services:** Activities aimed at preserving the value of products or services after they have been sold to the consumer. These activities include installation, training, supplying parts, modifications, and similar.

Secondary activities (please see Fig. 1), also called supporting activities, are necessary for smooth business operations. Procurement, technology development, and human resource management can support one or several primary activities; however, firm infrastructure supports the entire chain.

- **Procurement:** These are activities organization performs to get resources needed to operate. Included are vendor selection, negotiating favorable prices, and maintaining relationships with suppliers. Along with the logistics activities, they add values to the SRM. Although

purchased inputs are usually associated with primary activities, they are associated with every secondary activity as well. Creating value through procurement is well established (Presutti 2003), especially if deeper strategic relationships with suppliers are developed (Liker and Choi 2004).

- **Human resource management:** Activities include recruiting, hiring, training, motivating, rewarding, and retaining employees. People always create a lot of value, and business can have a clear competitive advantage with good human resource management (Han et al. 2019).
- **Technology development:** These activities relate to managing and processing data and information, as well as knowledge management. Companies are creating additional value through technologies like big data, mobile, cloud, social media, platforms, and similar. Benefits achieved through mentioned technologies include increased innovation (Yun and Yigitcanlar 2017), transparency and traceability (Francisco and Swanson 2018), improvements in production processes and supply chains (Nagy et al. 2018), increased efficiencies (Sabbagh et al. 2012), smarter products and services (Kiel et al. 2017; Raff et al. 2020), etc. The full potential companies are reaching by adopting digital platforms (Sandberg et al. 2020).
- **Firm infrastructure:** These activities are company's support systems and all functions

backing daily operations. Examples include accounting and legal department, general management, and similar. Company can use the infrastructure to their advantage in many ways.

The Value Chain Management

The value chain analysis is an integral part of the Value Chain Management (VCM). The Value Chain (VC) is quite generic and needs to be applied to a particular industry and specific company in order to define competitive advantage. When analyzing the VC generic categories are subdivided into more discrete activities, which reflect the specific approach a firm has developed. Number of value activities providing competitive advantage can be quite large, depending on the firm complexity. Yet activities that are little or no impact on competitive advantage are usually combined. Order of activities usually follows the process flow, but they can also be quite arbitrary. There are three activity types that differently influence competitive advantage, and each activity should be classified accordingly. Direct activities are directly involved in value creation for the customers. Indirect activities provide support to direct activities, and they are essential for performance of direct activities. Quality assurance exists to ensure quality of other activities. Hence, after the exhaustive list of activities is made, all activities are categorized by type. Next step is finding connections between all identified activities, as many are undoubtedly interrelated. Finally, all activities and linkages are reviewed to identify opportunities for improvement. These linkages are key to maximizing the value and increasing the competitive advantage through the VCM. The VCM also help us locate companies' core competences. Core competencies as such are foundations of company's competitiveness and sustainability, and they are used to seize the new opportunities (Oftedal 2013).

Summary

In this entry, the Value Chain Management (VCM) was presented. The importance of the

VCM was emphasized, given it is essential to understand how companies create value and understand sustainability. The VCM is highly practical and highly utilized by companies.

Cross-References

- [Competitive Advantage](#)
- [Value Chain Analysis](#)

References

- Francisco, K., & Swanson, D. (2018). The supply chain has no clothes: Technology adoption of blockchain for supply chain transparency. *Logistics*, 2(1), 2.
- Han, J. H., Kang, S., Oh, I. S., Kehoe, R. R., & Lepak, D. P. (2019). The goldilocks effect of strategic human resource management? Optimizing the benefits of a high-performance work system through the dual alignment of vertical and horizontal fit. *Academy of Management Journal*, 62(5), 1388–1412.
- Kiel, D., Arnold, C., & Voigt, K. I. (2017). The influence of the Industrial Internet of Things on business models of established manufacturing companies – A business level perspective. *Technovation*, 68, 4–19. <https://doi.org/10.1016/j.technovation.2017.09.003>.
- Liker, J. K., & Choi, T. Y. (2004). Building deep supplier relationships. *Harvard Business Review*, 82(12), 104–113.
- Nagy, J., Oláh, J., Erdei, E., Máté, D., & Popp, J. (2018). The role and impact of industry 4.0 and the internet of things on the business strategy of the value chain—The case of Hungary. *Sustainability*, 10(10), 3491.
- Oftedal, E. M. (2013). Business model innovation. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of corporate social responsibility* (pp. 2149–2156). Berlin, Heidelberg: Springer.
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press/Collier Macmillan.
- Porter, M. E. (1998). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press/Collier Macmillan.
- Presutti, W. D., Jr. (2003). Supply management and e-procurement: Creating value added in the supply chain. *Industrial Marketing Management*, 32(3), 219–226.
- Raff, S., Wentzel, D., & Obwegeser, N. (2020). Smart products: Conceptual review, synthesis, and research directions. *J. Product Innovation Management*, 37, 379–404. <https://doi.org/10.1111/jpim.12544>.
- Sabbagh, K., Friedrich, R., El-Darwiche, B., Singh, M., Genediwalla, S., & Katz, R. (2012). *Maximizing the impact of digitization*. The global information technology report, pp. 121–133.
- Sandberg, J., Holmstrom, J., & Lyytinen, K. (2020). Digitization and phase transitions in platform organizing

logics: Evidence from the process automation industry. *MIS Quarterly*, 44, 129–153. <https://doi.org/10.25300/MISQ/2020/14520>.

Yun, J. J., & Yigitcanlar, T. (2017). Open innovation in value chain for sustainability of firms. *Sustainability*, 9(5), 811.

Value Creation

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Synonyms

Nonfinancial performance

Definition

Value creation represents the main functions of an enterprise. Furthermore, recent studies have highlighted how stakeholders' well-being is influenced by business activities (Coronella et al. 2019). However, during the last years, the concept of value creation has been characterized by different reinterpretations. Specifically, the increasing attention paid by stakeholders to sustainable development and community well-being impacts value creation paradigms. Nowadays, value creation is not merely related to the concept of financial profit, but it is extended to additional items not related to financial performance like environmental, societal, and governance impacts. According to this evidence, defining value creation in XXI is more complex than in the past due to the exigence to create value for stakeholders and shareholders.

Value Creation and Sustainable Development: Origin and the Current Debate

Worldwide academics have historically analyzed the concept of value due to its central role in business and management's debate (Teti and Dallochio 2011; Coronella et al. 2019).

However, over time, the concept of value has been interested in several changes caused by historical, geographical, and political determinants.

The prior definition of value creation was proposed in the United States to identify the primary goal of enterprises (Teti and Dallochio 2011). Specifically, the first definition was provided by Drucker in 1954. The approach of Drucker was innovative because it redefined the concept of value. Specifically, prior studies assigned to profit the role of an enterprise's primary goal, while Drucker proposed an alternative perspective. From Drucker's perception, the profit represented only an effect of an adequate orientation to the market in terms of consumers' satisfaction. However, Drucker's contribution has not been followed in 1960 due to the development of a new orientation toward the markets. Drucker's proposal was influenced by the rise of the investments and the orientation toward a short-time profit from the managers. Contrarily, the orientation toward the market's exigence represented an activity characterized by a long-time orientation (Van der Stede 2000). The concept of value creation in that period was limited to only one category of stakeholders: the shareholders (Hansen 2012). The first conceptualization of "shareholder value" has been provided by US consultants in 1980 to define their services during a period characterized by financial markets' exigence to hire services to maximize their profits. However, firms oriented to create value only for shareholders were interested in several financial scandals. Furthermore, this period was characterized by unethical behaviors from managers.

The shareholder orientation was replaced by a new approach inspired by the exigence to create value for all stakeholders. The first definition of stakeholder value has been probably provided by Freeman (1984). However, recently some authors have highlighted how accounting scholars just considered the concept during the first half of the twentieth century (Coronella et al. 2019). The authors denoted how the enterprises cover a central role within the community. Furthermore, an enterprise's impacts are not limited to financial dynamics but even on nonfinancial items like pollution, citizen well-being, and human rights (Carroll 1984; Coronella et al. 2019).

According to this evidence, Teti and Dallochio (2011) have tried to formalize some of the main pillars that characterized firms oriented to the concept of stakeholder value:

- Adequate remuneration for employees
- Adequate work conditions
- Innovation in the supply chain
- Good relations with suppliers and buyers
- Nonfinancial reporting's transparency

Recently, Porter and Kramer (2011) have tried to identify a new concept of value. The authors' new concept is called "Created Shared Value" and consists of achieving the highest degree of connection between firms and stakeholders' interests. Specifically, the authors underlined firms' opportunity to adopt new business models to sustain both firms' value and both communities' well-being.

Summary

The Value creation definition is a complex concept due to the existence of different theories. During the last years, the increasing attention paid by stakeholders to sustainable development impacts all these theories. The role of academics in this process consists of identifying a new paradigm able to describe a possible definition of "value creation." On this point, the increasing number of nonfinancial reports prepared according to SDGs impose to update the latest definition of value to this new field.

Cross-References

- [Corporate Social Performance](#)

References

- Carroll, A. B. (1984). When business closes down: Social responsibilities and management actions. *California Management Review*, 26(2), 125–140.
- Coronella, S., Caputo, F., Leopizzi, R., & Venturelli, A. (2019). Corporate social responsibility in Economia

- Aziendale scholars' theories: A taxonomic perspective. *Meditari Accountancy Research*, 26(4), 640–656.
- Drucker, P. F. (1954). *The practice of management: A study of the most important function in America society*. New York: Harper & Brothers.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Hansen, P. H. (2012). Business history: A cultural and narrative approach. *Business History Review*, 86(4), 693–717.
- Porter, M., & Kramer, M. (2011). Creating shared value: Redefining capitalism and the role of the corporation in society. *Harvard Business Review*, 89(1/2), 62–77.
- Teti, E., & Dallochio, M. (2011). *Valore, Impresa e Sistema Paese. Strategie d'azienda per la Generazione di Valore Sostenibile*. Milano: Egea.
- Van der Stede, W. A. (2000). The relationship between two consequences of budgetary controls: Budgetary slack creation and managerial short-term orientation. *Accounting, Organizations and Society*, 25(6), 609–622.

Value Drivers

- [Value](#)

Value in Healthcare

- [Healthcare Value](#)

Value Management

- [Value](#)

Value Proposition

- [Value](#)

Value Stream Analysis

- [Value Chain Management](#)

Values Dividend

► Integrated Value

Values Management

► Values Management System

Values Management System

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Synonyms

Compliance management system; CSR management system; Values management; ValuesManagementSystem^{ZfW}

Introduction to a Values Management System

The ValuesManagementSystem^{ZfW} (VWS^{ZfW}) is a management standard to “provide a sustainable safeguard of a firm and its development, in all dimensions (legal, economic, ecological, social)” (VWS^{ZfW}, p. 4). It includes a framework for values-driven governance through self-commitment and self-binding mechanisms. Values promote a sense of identity and give organizations guidance in decision-making. This is especially important in decision-making processes where topics are not clearly ruled by laws and regulations.

VMS^{ZfW} must be embedded in the specific business strategy, structure, and culture of an organization. The following four steps describe the implementation of the ValuesManagement-System^{ZfW}: (i) Codify core values of an organization, for instance, with a “mission, vision and values statement” or Code of Ethics, (ii) implement guidelines such as Code of

Conduct and specific policies and procedures, (iii) systematize these by establishing management systems such as Compliance and CSR management systems, and (iv) finally organize and establish structures to ensure the strategic direction and operational implementation and review of these processes. The top management shows that values management is taken seriously by their self-commitment to the core values of the company.

The ValuesManagementSystem^{ZfW} is a management standard applied by small, medium-sized, and large companies in Europe. It has been developed by the Centre for Business Ethics (Zentrum für Wirtschaftsethik – ZfW), a central research institute of the German Business Ethics Network (Deutsches Netzwerk Wirtschaftsethik – DNWE) (DNWE 2019) jointly with companies such as Allianz AG, BASF AG, and Siemens AG as well as organizations such as Novartis Foundation for Sustainable Development (for a full list of members, cp. VMS^{ZfW} p. 23). These business corporations and organizations are part of the Users’ Board for Values Management (Anwendererrat für Wertemanagement – AfW^{ZfW}), a voluntary association aiming at ensuring the quality of the management system.

Integrating Compliance and CSR in Management Systems

Compliance is characterized by legality and conformity. Compliance-related topics for companies are, for instance, the responsibility to comply with legal rules and regulations, fight against corruption, and ensure fairness in competition. Companies have to follow laws and legal regulations (hard law) and should follow – depending on their sphere of action – legal nonbinding recommendations and statements of international organizations and public authorities (soft law). Numerous soft law initiatives exist, among others the United Nations Sustainable Development Goals (SDGs) (United Nations 2015), principle-based initiatives such as the United Nations Global Compact (UN Global Compact), or certification standards such as Social Accountability International SA8000 (SA8000 2014) as well as

principles of good governance and international policies and procedures.

A closely related topic is Corporate Social Responsibility (CSR), the responsibility of enterprises for their impacts on society. Besides following hard and soft law, companies should have a process in place to integrate ethical, social, environmental, human rights, and consumer concern into their strategy and business operations. The aim of CSR is to identify, prevent, and mitigate their possible adverse impacts and to maximize the creation of shared value for their owners, other stakeholders, and society at large (European Commission 2011). CSR measurements can include responsible actions along the supply chain, such as the implementation of environmental and social standards and respect of human rights.

To ensure compliance and CSR in companies, increasingly companies establish Compliance management systems and CSR management systems. Both management systems have strategical and operational components (Table 1). On strategic management level, companies should integrate compliance and CSR in their strategy and business model or adapt their strategy and business model accordingly to ensure that that compliance and CSR will be considered in all management decisions. On operational management level, the focus lies in the systematical and continuous implementation of compliance and CSR by integrating compliance and CSR in all processes, structures, and control systems of the company.

Values Management System, Table 1 Strategic and operational components of Compliance and CSR management systems

Dimension	Components
Strategic	Integration in company values (e.g., “Mission, vision, values statement,” code of ethics)
	Integration in company strategy and business model
Operational	Integration in all company processes, structures, and control systems (e.g., code of conduct, operative processes, and incentive systems)

Source: Own illustration

Implementing the Values Management System^{ZfW}

Values-driven companies use management systems to integrate systematically compliance and CSR. In the following, the ValuesManagementSystem^{ZfW}, a standard for sustainable management, will be introduced (VMS^{ZfW}, pp. 1ff.). The ValuesManagementSystem^{ZfW} is based on the moral self-binding and self-control of corporations (Wieland 2003). Therefore, the VMS^{ZfW} must be embedded in the specific business strategy, structure, and culture of an organization.

The following four steps – step 1: codify, step 2: implement, step 3: systemize, and step 4: organize (see Fig. 1) – describe the implementation of the ValuesManagementSystem^{ZfW} (VMS^{ZfW}, p. 14).

Step 1: Codify

In the first step, it is important to codify the core values of the organization in a “Mission, Vision and Values Statement,” “Code of Ethic,” or another similar document. These fundamental values build the foundation of the organization’s strategy, structure, and culture. Values can be categorized into four groups: performance values (e.g., competence, performance, quality, flexibility, creativity, and innovation orientation), communication values (e.g., transparency, respect, agreement, and openness), cooperation values (e.g., loyalty, team spirit, tolerance for criticism, and open-mindedness), and moral values (e.g., integrity, responsibility, fairness, and honesty) (VMS^{ZfW}, p. 6). Companies declare their individual set of core values.

Step 2: Implement

The second step requires companies to create guidelines based on the core values and implement them through developing a Code of Conduct and policies and procedures, for instance, in employment contracts, job instructions, and assessment systems for management and employees (questions such as “What role does the Code of Conduct take in selecting personnel? Is it a criterion for assessment and promotion of



Values Management System, Fig. 1 Implementation of the Values Management System^{ZfW}. (Source: Cp. VMS^{ZfW}, p. 14)

junior staff members?") as well as supplier screenings and assessments (questions such as "Are suppliers selected according to a procedure that embraces criteria with regard to the principles and values of the codes?") (VMS^{ZfW}, p. 16 f.).

Step 3: Systematize

In the third step, the company can systematize their activities by implementing management systems, such as Compliance and CSR management systems with specific instruments (VMS^{ZfW}, p. 6; for details, see next chapter).

Step 4: Organize

The fourth step emphasizes, that the top management has to act as role models ("tone at the top") and demonstrate their personal commitment to VMS^{ZfW}. They are responsible to ensure the strategic direction and operational implementation of these processes, for instance, by establishing structures such as a compliance and/or CSR office (VMS^{ZfW}, p. 12).

VMS^{ZfW} evaluation procedures aims at documenting and verifying the process. Typically, organizations decide to self-evaluate their progress. In some cases, they ask for support of external institutions (VMS^{ZfW}, p. 21).

Instruments of Compliance and CSR Management Systems

To develop, implement, and review a values management system, various instruments are helpful. The following Table 2 provides an overview on elements for three stages: development, implementation, and review of Compliance and CSR management systems. Then examples of CSR and compliance instruments per stage are given.

1. STAGE: DEVELOPMENT (CPM^{ZfW}, pp. 18–21, amended and differentiated according to CSR and compliance-specific instruments)

I. Conduct Principles (Code of Ethics):

CSR and compliance instruments: Definition of company goals and company values; definition of the principles of business ethics; naming of key stakeholders; and identification of the applicable reference standards (CPM^{ZfW}, p. 18)

II. Conduct Guidelines (Code of Conduct):

CSR and compliance instruments: Legal compliance, law abidance; ensuring compliance with laws in collaborating with clients, suppliers, sales intermediaries, and subcontractors (CPM^{ZfW}, p. 18)

Values Management System, Table 2 Elements to develop, implement, and review Compliance and CSR management systems

Development	Implementation	Review
I. Conduct principles (code of ethics)	V. Leadership and corporate culture	IX. Audit
II. Conduct guidelines (code of conduct)	VI. Communication and training	X. Monitoring
III. Policies and procedures	VII. CSR and compliance in human resources (HR)	
IV. Transparency	VIII. CSR and compliance organization	

Source: Own illustration in accordance to CPM^{ZfW}, pp. 18–24

Compliance-specific instruments: Prohibition of corruption and antitrust law violations; acceptance and giving of benefits such as gifts and meal invitations; dealing with sponsoring, donations, and nonprofit activities; dealing with conflicts of interests; and protection of the assets of the company and business partners (CPM^{ZfW}, pp. 18 f.)

III. Policies and Procedures:

Compliance-specific instruments: Acceptance and giving of gifts; compliance declaration for managers and employees; compliance agreement for supplier and for third parties, e.g., review of suppliers, compliance declaration, and evaluation of suppliers; and sanctions in case of noncompliance (CPM^{ZfW}, p. 20)

IV. Transparency:

Compliance-specific instruments: Risk screening for sensitive business areas; control of risk management in sensitive business areas; documentation of sensitive payment transactions, e.g., donations and commissions; protection of IT systems against data manipulation; two-person rule in sensitive functions; and control of compliance with generally accepted accounting principles (CPM^{ZfW}, pp. 20 f.)

2. **STAGE: IMPLEMENTATION** (CPM, pp. 21–23, amended and differentiated according to CSR and compliance-specific instruments)

V. Leadership and Corporate Culture:

CSR and compliance instruments: CSR and Compliance as a strategy of sustainability; orientation toward ethical

values; managers take responsibility for compliance (“tone from the top”); leadership style: determination, clarity, reliability, accountability, and integrity; self-commitment, legality; and proactive communication of the management systems by company board and management (CPM^{ZfW}, p. 21)

VI. Communication and Training:

CSR and compliance instruments: Internal communication, e.g., meetings, brochures, newspapers, and intranet; external communication, e.g., annual reports, reporting, and brochures; written and oral information for agents, suppliers, and consultants; membership and engagement in CSR and compliance initiatives and exchange of experiences; and web- or intranet-based training for employees (CPM^{ZfW}, p. 22)

Compliance-specific instruments: Training for top-level management and specific training for functions with high-compliance risks, e.g., sales and procurement; trainings include legal information plus a focus on “real cases” (CPM^{ZfW}, p. 22).

VII. CSR and Compliance in HR:

CSR and compliance instruments: Integration into employee selection and hiring processes; career planning for board members and managers (CPM^{ZfW}, p. 23)

Compliance-specific instruments: Compliance declaration for employees in areas with increased compliance risks; target agreements in sensitive business areas; compliance risks in salary systems

and bonuses; and communication of disciplinary measures, e.g., sanctions in line with the law (CPM^{ZfW}, pp. 22 f.)

VIII. Organization:

CSR and compliance instruments: Responsibility of top management (board, management); CSR and compliance-steering committee, e.g., legal, audit, sales, HR, CSR, and compliance; and CSR and compliance office with appropriate resources (CPM^{ZfW}, p. 23)

Compliance-specific instruments: External compliance monitor; whistleblower systems (CPM^{ZfW}, p. 23)

3. **STAGE: REVIEW** (CPM, p. 24, amended and differentiated according to CSR and compliance-specific instruments)

IX. Audit:

CSR and compliance instruments: Control of compliance with and implementation of CSR and Compliance management system into everyday business practices (CPM^{ZfW}, p. 24)

Compliance-specific instruments: Internal audit of CSR and compliance management systems in sensitive business areas; control of sensitive payment transactions, e.g., donations and commissions (CPM^{ZfW}, p. 24)

X. Monitoring:

CSR and compliance instruments: regular reports to and discussion in the top management; self-evaluation of business areas and companies; and external monitoring of the implementation and continuous development of CSR and Compliance management systems by experts and auditing companies (CPM^{ZfW}, p. 24)

Effectiveness and Efficiency of Values Management Systems

Top management is obliged to check the VMS^{ZfW} effectiveness and efficiency. On the one hand, the

Values Management System, Table 3 Control of effectiveness and efficiency of values management systems

Phase	Possible Questions
1. Design check Development of Compliance and CSR management systems	Have all relevant compliance and CSR reference standards been considered? Is the design of compliance and CSR measures suitable for the company?
2. Functionality check Implementation or establishment of Compliance and CSR management systems	Are all required elements of the Compliance and CSR management system implemented?
3. Effectiveness check Application of the Compliance and CSR management system	In daily business, are the elements of the Compliance and CSR management system applied in all strategic and operational practices?

Source: Own illustration according to CPM^{ZfW}, p. 17

control ensures the quality of the management system and, on the other hand, continuous improvements due to dynamics in the business environment (VMS^{ZfW}, p. 22).

Typically, the top management checks their management systems such as Compliance and CSR management systems along the three phases of development, implementation, and application (CPM^{ZfW}, p. 17) (Table 3).

The effectiveness and efficiency of values management systems depend upon the continuous integration and implementation of compliance and CSR in the company's culture and into their structures and processes.

Cross-References

- ▶ [Audit](#)
- ▶ [Compliance Management System](#)
- ▶ [Core Values](#)
- ▶ [Corporate Codes of Conduct](#)
- ▶ [Corporate Mission, Vision, and Values](#)
- ▶ [Efficiency](#)
- ▶ [ISO 26000 Standard](#)
- ▶ [OECD Guidelines for Multinational Enterprises](#)

- **Organizational Culture**
- **Risk Management and CSR**
- **SA8000 Standard**
- **Strategic Management and CSR**
- **United Nations Global Compact**

References

- CPM^{ZfW}. ComplianceProgramMonitor^{ZfW}. The Centre for Business Ethics. https://www.dnwe.de/files/ZfW-CPM-DE_EN_2011.pdf. Accessed 1 July 2019.
- DNWE (2019). Deutsches Netzwerk Wirtschaftsethik. European Business Ethics Network Deutschland e.V. <https://www.dnwe.de>. Accessed 1 July 2019.
- European Commission (2011). A renewed EU strategy 2011–14 for Corporate Social Responsibility. Communication from the commission to the European Parliament, the council and European economic and social committee and the committee of the regions. COM (2011) 681 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0681&from=EN>. Accessed 1 July 2019.
- SA8000 (2014). Social Accountability International SA8000 Standard (SA8000:2014). <https://sa-intl.org/programs/sa8000/>. Accessed 1 July 2019.
- UN Global Compact. The Ten Principles of the UN Global Compact. <https://www.unglobalcompact.org/what-is-gc/mission/principles>. Accessed 1 July 2019.
- United Nations (2015). Transforming our World: The 2030 Agenda for Sustainable Development. A/RES/70/1. <https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981>. Accessed 1 July 2019.
- VMS^{ZfW}. ValuesManagementSystem. Standard & Guidance Document. The Centre for Business Ethics. <https://www.dnwe.de/wp-content/uploads/2019/03/wms-english.pdf>. Accessed 1 July 2019.
- Wieland, J. (2003). ValuesManagementSystem^{ZfW}: A new standard for values driven management. In J. Wieland (Ed.), *Standards and audits for ethics management systems: The European perspective* (pp. 3–24). Heidelberg: Springer.

Values-Based Leadership

- **Inclusive Leadership**

ValuesManagementSystem^{ZfW}

- **Values Management System**

Variable Compensation

- **Bonuses (Employee for Performance)**

Variable Income

- **Bonuses (Employee for Performance)**

Variable Payment

- **Bonuses (Employee for Performance)**

Variation

- **Communication and Innovation**

Variety

- **Diversity**

Variety of Living Things

- **Biodiversity**

Variousness

- **Diversity**

VCA

- **Value Chain Analysis**

Veblen Goods

- [Conspicuous Consumption/Positional Goods](#)

Vendor Questionnaire

- [Supplier Self-Assessment Questionnaire](#)

Vendor Survey

- [Supplier Self-Assessment Questionnaire](#)

Venture Capital

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Synonyms

[Business angels](#)

Definition

Venture capital is the provision of venture or risk capital to a mostly young, fast-growing company whose business is characterized by high risk and a high degree of innovation. The aim of the investor is to maximize their own returns in a limited period of time. In addition to company shares, this usually requires far-reaching information, control, and codetermination rights.

Venture Capital – Introduction

Corporates need money and funding. Corporate financing includes a variety of types of financing: In addition to loans from banks, public subsidies,

and own funds, this includes the provision of capital by “private” (private investors, companies, etc.). In such “private equity” deals, equity is made available to companies that are not listed on stock markets, by private or institutional players.

If the capital is made available to young companies for a limited period of time, this is referred to as venture capital. Venture capital is therefore part of the “private equity” business.

Since the recipients of capital are usually not only young, but also mostly highly innovative and fast-growing companies with an increased risk of default and therefore investment, this is a special type of corporate financing.

Life Cycle Model of a Company

From the point of view of a company, different phases of corporate growth can be distinguished: Three phases of a life cycle model have been established (Müller et al. 2019, p 223 ff.):

- The first phase (“Early Stages”) includes the implementation of a business idea and the founding of the company. From the point of view of the young company, this is about finding the right idea and developing the first products and prototypes. At the same time, the focus is on building up the founding team. It must also be able to contact the first potential customers. The goal is to develop the company’s product or service to market maturity. It is important to prepare for market entry.
- The second phase (“Expansion Stages”) includes the growth of the company, including national and international markets. After successfully entering the market, the implementation of entrepreneurial steps begins with a view to providing products or services. In this phase, the focus is on market penetration to secure market shares and to consolidate one’s own competitive position. At the same time, the company’s network is strengthened by building relationships with customers, suppliers, or other companies. Depending on the business model, internationalization may follow.

- The third phase (“Later Stages”) includes a possible realignment of an established business model, possibly a restructuring or even a company succession. If crises occur because new competitors are entering the market, because the company cannot keep up with innovations or because of other obstacles, it may become necessary to realign the business model. If reorientation does not succeed, restructuring or consolidation is required. Under certain circumstances, the life cycle of the company ends with a successor and the handover from the founder to the next generation of entrepreneurs.

Financing Stages of a Corporate

Depending on the life cycle phase – early stages, expansion stages, and later stages – different types of financing can be distinguished (Müller et al. 2019, p. 224):

- Early Stages: Seed financing/start-up financing
- Expansion Stages: Growth financing/bridge financing
- Later Stages: Turnaround financing/restructuring financing/management buy-out (MBO), management buy-in (MBI)

There are different sources of financing for each of these types of financing. Depending on the phase of a business cycle, different sources of financing are suitable. Examples are the following: bank loans, guarantees, development loans, leasing and factoring, internal financing from own profits, or equity financing through the company’s own funds or through third parties. People who provide external equity financing can be, for example, business angels or venture capitalists who provide private funds.

Venture Capital

Venture capital providers are companies, funds, or private individuals (known as business angels) who provide so-called venture or risk capital for

a limited period of time. For this, they usually receive shares in a company. Companies that use such venture capital are fast-growing (usually very new) companies, usually start-ups, which often also have a highly scalable business model.

Investors demand a very high return for the provision of capital – especially in comparison to bank loans. This is due to the very insecure, risky business model and thus the risky investment, especially in these often very early phases of the company life cycle.

For the investor, there is an extremely high investment risk (including total losses) that, on the one hand, the investor is paid “well” (e.g., by the number of shares in a company that he receives for his participation).

As an incentive for their funds and to alleviate the risk of total loss if the business idea fails, venture capitalists seek control or influence on the company they invest in.

On the other hand, the investor tries to maintain influence through the design of contracts and control rights and to ensure that the company does not reduce its services after receiving the capital (and thus the probability of success of the company and thus – from the investor’s point of view – the investment): The provision of capital in stages based on milestones ensures the ongoing commitment of the company’s management. By helping to shape the business policy, strategic decisions can be made together with the management, and their performance can in turn be monitored.

The advantage for the company is the availability of free funds for business growth. Especially since classic debt financing is not suitable in such phases, or if an initial public offering (IPO) did not take place.

In addition to providing capital, venture capital providers are characterized by the fact that they also provide know-how in matters of entrepreneurship (management, product development, market penetration, etc.). The latter applies in particular when it comes to private individuals (business angels) who see a kind of mentoring model and a partnership with the young company as an important task.

The aim of the venture capital provider is (usually) to achieve maximum growth in the value of

their own investment after a few years. The increase in value is usually realized by selling the investment. These proceeds are usually the central earnings component of the investors. Possible ways of selling a stake are an initial public offering (IPO), the sale of one's own stake to strategic partners or companies, sale to another private equity player, or even a buyback by the company's founders.

Importance of Venture Capital and Criticism

Venture capital is an important component of corporate financing. Especially in early phases of the company's history or when other instruments are not possible or simply do not exist as a result of the business model. On the one hand, bank loans cannot be expected to a sufficient extent, for example, for young, fast-growing companies that have high growth rates but do not generate any profits. The debt service (interest and repayment) of a loan would also continue to burden the company's liquidity. On the other hand, own funds are rarely available to the required extent. Especially in capital-intensive areas with rapidly growing business models (technology, pharmaceutical industry, online business, etc.), venture capital is needed to provide these companies with capital for their highly innovative and at the same time risky projects.

When it comes to venture capital, it is criticized that it is simply about increasing market share and sales growth. In addition, the long-term, strategic orientation of the company in which an investor invests is not important. Building a "real" company is being sacrificed at the expense of "quick money."

Venture Capital and Sustainability

The aspect of corporate social responsibility (CSR) and sustainability is gaining in importance in the discussion about venture capital. The question here is whether, in addition to exclusively strengthening the financial resources of a company for entrepreneurial growth and thus the

highest possible return for the investor, other goals should also be pursued by the investor. The question of the effectiveness and purpose of the investment is asked. This connection is known as "impact investing." Impact investing is about investments that not only aim for a financial return, but also have a social or environmental impact on the company and its actions. With the help of the capital, a positive social and entrepreneurial contribution is to be made.

Summary

Venture capital is the provision of capital to young, fast-growing companies. Their business model is characterized by high risk. Investors want to maximize their own returns in regard to the high investment risk. Very often investors therefore try to maintain influence through the design of contracts or control right. Venture capital is very important as a component of corporate financing. Nevertheless, it is criticized, that it is simply about increasing market share or value of the investment instead of strategic and long-term orientation.

References

- Müller, C., et al. (2019). Gründungsfinanzierung. In U. Fueglistaller et al. (Eds.), *Entrepreneurship. Modelle – Umsetzung – Perspektiven. Mit Fallbeispielen aus Deutschland, Österreich und der Schweiz* (pp. 221–260). Wiesbaden: Springer.

Venture Philanthropy

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Synonyms

Angel philanthropy; Catalytic philanthropy; Enterprise philanthropy; Philanthrocapitalism; VP

Definition

Venture philanthropy (VP) comes as an indirect way of dealing with corporate social responsibility issues, since it calls for providing financial and nonfinancial support to organizations with societal purpose (SPOs), in order to increase their societal impact. VP applies venture capital principles (such as long-term investment and hands-on support) to charitable giving (Grossman et al. 2013; John 2006), and it recommends high engagement, organizational capacity-building, tailored financing, nonfinancial support, involvement of networks, multiyear support, and performance measurement (EVPA 2013, 2016, 2018; John 2006; OECD 2014).

Rise of VP as an Unprecedented Grant-Making Model

Grant-making model known as “venture philanthropy” (VP) is one of the most prominent and most controversial innovations breaking away from the old-fashioned ways of giving (Defourny et al. 2007; Moody 2008).

“Venture philanthropy” term was probably first coined in 1969 by the American philanthropist, John D. Rockefeller III, hinting at an adventurous approach to funding unpopular social causes, rather than an association with entrepreneurial business (Council on Foundations 2001; John 2006).

Only in the in the 1990s, VP approach definitely became established as a new form of highly engaged grant-making by foundations. Conceptually, the idea of VP found popular expression in 1997 with the publication of a Harvard Business Review article “Virtuous Capital: What Foundations Can Learn from Venture Capitalists” (Grossman et al. 2013; Letts et al. 1997; OECD 2014). This article urged philanthropists to resort to some of the methods of venture capital including due diligence, risk management, performance measurement, relationship management, investment duration and size, and exit strategy, in order to have a greater impact in addressing societal problems (Grossman et al. 2013; OECD

2014). At the same time, newly wealthy dot-com entrepreneurs-turned-philanthropists begun to take a growing interest in VP, whose intrusion into the social sector world was not always widely endorsed (John 2006; Koh 2010; OECD 2014; Reddy 2015).

In the UK, interest in VP was aroused through articles by Drucker – founder of Oxford Philanthropic – jointly acting with the support that the UK government has been giving to social entrepreneurship and social enterprise since 1997 (John 2006). Outside the UK, in continental Europe, there has been a slow but steady growth in interest in social investment and high-engagement models of philanthropy (EVPA 2018; John 2006). In particular, the upsurge of this interest has been due to the work of two European networks: The European Venture Philanthropy Association (EVPA) and the European Foundation Centre’s Social Investment Group (John 2006).

To date, at the European stage, VP/Social Investment (SI) sector has been continuing to grow. In particular, in fiscal year (FY) 2017, VP/SI organizations (VPO/SIs) have invested €767 million to support a total of 11,951 SPOs (EVPA 2018). VP/SI organizations have supported their investees not just financially, but also with a variety of nonfinancial support, ranging from strategic support and support to develop a Theory of Change to revenue strategy and human capital support (EVPA 2018). On the whole, economic and social development and financial inclusion have been reckoned as the two top sectors, attracting together more than half of the total investment reported for FY 2017 (56%), followed by education (12%). Concerning the beneficiaries, people suffering from poverty and children and youth have been detected as the most targeted categories, followed by people with disabilities and migrants and refugees (EVPA 2018).

Basically, there is a growing recognition from official aid agencies that private funders and investors, including foundations, are an important part of the global development architecture (OECD 2014).

Although venture philanthropists initially adapted high-level principles from investment industry players such as venture capital funds,

they have since developed specific investment tools, processes, and methodologies that have been adapted to work effectively in the social sector (EVPA 2013).

Generally speaking, new philanthropists take advantage of their experience from commercial enterprise and pursue scalable outcomes through the mobilization and leveraging of financial and nonfinancial resources (OECD 2014). These philanthropists are open-minded about the organizations and institutions they work with, whether for- or not-for-profits, and are willing to use a wider array of strategies, commercial, and noncommercial, to address development issues (OECD 2014). They build partnerships, work across multiple sectors, and take greater interest in outcomes and impact than in inputs and grant size (OECD 2014). Their new approaches have attracted a variety of names – angel philanthropy, enterprise philanthropy, catalytic philanthropy, and venture philanthropy – with the differences between them being more semantic than operational (OECD 2014). What the approaches share are operating principles of high engagement with beneficiaries (also known as partners, investees, or social purpose organizations, SPOs) and a willingness to combine a variety of financial and nonfinancial disciplines (OECD 2014).

Basically, VP industry seeks to complement existing forms of social finance and to contribute to the development of a more efficient capital market to support the social sector, especially working hand in glove with social entrepreneurs (Defourny et al. 2007; EVPA 2016; John 2006; Reddy 2015). As a matter of fact, the rise of VP has taken place in a context where the concepts of social enterprise, social entrepreneur, and social entrepreneurship (the “SE” concepts) have gained a foothold steadily (Defourny et al. 2007).

Currently, there are three major ways for individuals to engage in VP:

- Pooled funds: contribute to an organization already engaged and experienced in venture philanthropy.
- Staff a new entity: start an organization and rely on staff with the capacity to plan and implement the key practices of VP.

- Hands-on: invest in nonprofit organizations as an individual venture philanthropist (Grossman et al. 2013).

Venture philanthropists can provide financial and nonfinancial support directly, in case they may meet the needs of the supported organization by offering specialized services and financial means on their own. When venture philanthropists do not have the capacity to provide direct assistance or when they prefer not to play a direct role, they choose to provide funding and skills through a foundation or nonprofit entity, a fund, or a structure that incorporates both (Grossman et al. 2013). In this way, the foundation becomes the major partner of the SE (Grossman et al. 2013). VPs can also exist as companies or corporations that develop VP behavior to support social causes, as well as Government departments or public agencies may initiate a VP organization, but then they usually do it in partnership with other initiators (Grenier 2006; Grossman et al. 2013). SEs, on their part, must demonstrate to venture philanthropists that they understand and can articulate how they will achieve their outcomes – their theory of change – and how they measure their results (Defourny and Nyssens 2010, 2013; Reddy 2015).

Main Features of VP

Typically the VP approach helps smaller, growth-oriented charities and social enterprises to scale up their work and impact over a number of years (Koh 2010). Going in depth, first of all venture philanthropists develop long-term and close relationships with SEs, by making available financial and intellectual capital. Subsequently, they help the SEs become self-reliable and thus, eventually, do without their support (Frumkin 2017; Reddy 2015). In this sense, VPs also provide social capital by linking SEs to other SEs, so that they can support and can learn each other (John 2006).

Conventionally, VP key characteristics might be summed up as follows:

- Tailored financing by leveraging a variety of financial instruments (including grant-making and social investment).
- Provision of nonfinancial support during the lifetime of the investment to help SPOs build institutional capacity. In this sense, VP aims to provide advice in a range of areas such as human management and accountability, as well as it aims to promote organizational development before specific programs. Indeed, unlike grant-makers that trickle out support in small installments, the venture philanthropist seeks to get into projects with a large initial investment that signals real commitment (Frumkin 2017; Reddy 2015).
- An emphasis on performance and impact management.
- Multiyear support that means supporting a limited number of organizations for 3–5 years and then exiting when organization is financially or operationally sustainable (EVPA 2013).
- Leveraging additional financial or advisory support from the VP’s networks and peers.
- A strong emphasis on measuring and impacts and holding organizations accountable for achieving agreed upon outcomes (EVPA 2013, 2016, 2018; Grossman et al. 2013; John 2006; OECD 2014; Reddy 2015).

As shown by Fig. 1, VP comes as a methodology that is practiced at different stages of an organization’s development (Grossman et al. 2013).

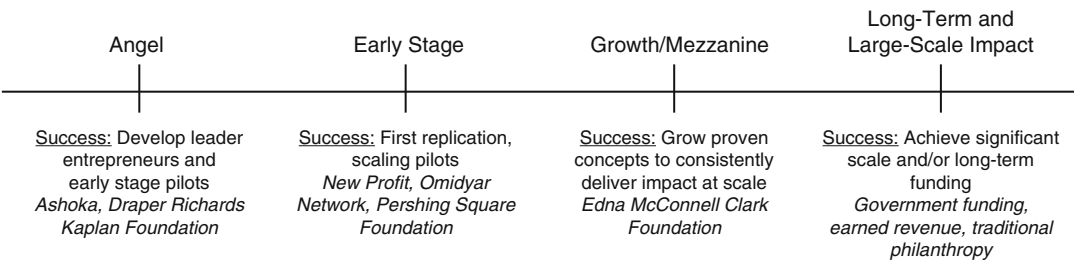
While venture capital emerged as the early stage funder of innovation in a functioning capital market, evidence indicates that VP is not only an approach for funding early stage organizations but

is a way to enable scaling of more mature non-profits (Grossman et al. 2013). Indeed, although there is an emphasis on planning for sustainability and achieving large-scale impact even since the “angel” or “early stage” organizational development stages, venture philanthropists generally aim at fuelling long-term organizational development (Grossman et al. 2013).

Evidences suggest that the engagement period for any venture philanthropist ranges from 3 years to 5–7 years (EVPA 2013). Along the engagement period, VP is prepared to provide financial, intellectual (one might refer to this as human capital), and social capital to SEs. As opposite, SEs are required to show commitment to scaling their impact. Starting from the assumption that venture philanthropists cope with investment cycles, they are not likely to provide sustaining funding endlessly, aiming instead to bring SEs’ organizations to a scale that will allow them to access long-term funding streams from other more risk averse sources, once the investment cycle ends (Grossman et al. 2013; Reddy 2015). Hence, at the “long-term and large-scale impact” stage, SEs are expected to be able to succeed in the marketplace on their own (Grossman et al. 2013; Reddy 2015).

Summary and Future Directions

Venture philanthropy has been devised to provide supported organizations with a leverage effect, which may contribute weakening the typical philanthropic shortfall and leading them toward a sustainable operating model. Such an open



Venture Philanthropy, Fig. 1 Venture philanthropy across stages of organizational development (Grossman et al. 2013)

approach, more focused on outcomes than on types of incomes, tends to see sponsored organizations as hybrid ones, which have to secure the best mix of resources to support their social mission (Defourny et al. 2007).

The construction and diffusion of such a grant-making model have depended on influential opinion leaders who strategically have defined and advocated a new cultural repertoire geared toward claiming for its legitimacy and combining successfully new donors' practices with existing culture (Moody 2008). The institutionalization of such a grant-making model and its diffusion has depended also on communication and isomorphic modelling across networks (Moody 2008). On the whole, VP approach has spawned a language and some metaphors to convey the deep-seated desires of these new donors to have an impact and measure the effects of their philanthropy (Frumkin 2017; Gianoncelli and Boiardi 2017) (Table 1).

However, the language shown above has revealed itself as obtuse at times (Frumkin 2017). In fact, many of the investments made by venture philanthropist may look like just grants made by other donors (Frumkin 2017). Only a few of the most-high profile venture philanthropy investments represent substantial portions of the operating budgets of the nonprofit organizations on the receiving end (Frumkin 2017). Similarly, the idea of *consultative engagement* that many describe as a trademark of venture philanthropy is hard to distinguish from the diverse forms of mere *technical assistance* that donors have provided to nonprofits for decades (Frumkin 2017).

Venture Philanthropy, Table 1 Venture philanthropy terminology (Frumkin 2017)

Venture philanthropy term	Translation
Investment	Grant
Investor	Donor
Social return	Impact
Performance measurement	Evaluation
Benchmarking	Standard setting
Due diligence	Grant review process
Consultative engagement assistance	Technical
Investment portfolio	Grant list

To date, hybrid finance might constitute the upcoming best way to finance societal impact through collaboration of multiple actors in the ecosystem (Gianoncelli and Boiardi 2017). Indeed, the creation of more hybrid finance mechanisms and structures may contribute to a more efficient allocation of the capital available for the social entrepreneurship field (Gianoncelli and Boiardi 2017). As hybrid finance becomes mainstream, the added value that hybrid finance brings into the VP/SI space will need to be assessed, looking in detail at how social enterprises and the society in broader sense benefit from these innovations (Gianoncelli and Boiardi 2017).

As more and more venture philanthropy funds spread out and as increasing numbers of donors pop up as social investors, it becomes crucial to pause and to ask about the underlying coherence of this model (Gianoncelli and Boiardi 2017). Surely, as already mentioned, a chief force behind this popular trend is the sincere desire of donors to see social change happen as a result of their giving (Frumkin 2017; Gianoncelli and Boiardi 2017).

Nowadays, formulating an exact definition for venture philanthropy might curb further evolution and, thereby, might be counterproductive, given that the willingness to try out new VP approaches and to learn from them are defying any strict codification (OECD 2014).

Nevertheless, it is necessary to reach out a widespread consensus upon those unique key aspects constituting the VP backbone in all respects. Indeed, only by rationalizing these widely accepted key aspects (first and foremost, the tailored multiyear financial and nonfinancial support devised to help the SEs build their institutional capacity and, eventually, to make them financially and operationally self-reliant) it becomes feasible to realize which levers can be toggled to fuel the VP approach upsurge and how to distinguish, also in practice, the VP approach from some other ones being developed, first of all the social impact investment stream.

Cross-References

- [Corporate Social Responsibility \(CSR\)](#)
- [Social Enterprise](#)

References

- Council on Foundations. (2001). Venture philanthropy: A model of innovation vs a model of intrusion. Board Briefing, February, Washington, DC.
- Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. *Journal of Social Entrepreneurship*, 1(1), 32–53. <https://doi.org/10.1080/19420670903442053>.
- Defourny, J., & Nyssens, M. (2013). Social innovation, social economy and social enterprise: What can the European debate tell us? In F. Moulaert, D. MacCallum, A. Mehmood, & A. Hamdouch (Eds.), *The international handbook on social innovation, Collective Action, Social Learning and Transdisciplinary Research* (pp. 40–53). <https://doi.org/10.4337/9781849809993.00013>
- Defourny, J., Nyssens, M., Thys, S., & Xhauffair, V. (2007). Beyond philanthropy: When philanthropy becomes social entrepreneurship. Paper presented at the 6th conference of the European Research Network on Philanthropy, pp. 1–33, Riga, Latvia. http://labos.ulg.ac.be/philanthropie/wp-content/uploads/sites/3/2014/04/Beyond-Philanthropy-JD.MN_ST_VX_.pdf. Accessed 15 Feb 2019.
- EVPA (European Venture Philanthropy Association). (2013). European Venture Philanthropy and Social Investment 2012/2013. The EVPA Survey. <https://evpa.eu.com/knowledge-centre/publications/evpa-yearly-survey-2012-2013-european-venture-philanthropy-and-social-investment>. Accessed 15 Feb 2019.
- EVPA (European Venture Philanthropy Association). (2016). A practical guide to venture philanthropy and social impact investment. <https://evpa.eu.com/news/2016/new-evpa-report-a-practical-guide-to-venture-philanthropy-and-social-impact-investment>. Accessed 15 Feb 2019.
- EVPA (European Venture Philanthropy Association). (2018). Investing for Impact. The EVPA Survey 2017/2018. <https://evpa.eu.com/knowledge-centre/publications/investing-for-impact-the-evpa-survey-2017-2018>. Accessed 15 Feb 2019.
- Frumkin, P. (2017). Inside venture philanthropy. In P. Frumkin & J. B. Imber (Eds.), *In search of the nonprofit sector* (pp. 113–128). New York: Routledge. <https://doi.org/10.1007/s12115-003-1013-0>.
- Gianoncelli, A., & Boiardi, P. (2017). “Funding hybrid organisations” The next step of venture philanthropy. http://ernop.eu/wp-content/uploads/2017/06/Gianoncelli_Boiardi-Funding-Hybrid-Organisations-7.pdf. Accessed 15 Feb 2019.
- Grenier, P. (2006). *Venture philanthropy in Europe: Obstacles and opportunities*. Brussels: European Venture Philanthropy Association.
- Grossman, A., Appleby, S., & Reimers, C. (2013). Venture philanthropy: Its evolution and its future. *Harvard Business School*, 9, 1–25. <https://evpa.eu.com/>. Accessed 15 Feb 2019.
- <http://www.oecd.org/development/development-philanthropy/>. Accessed 15 Feb 2019.
- John, R. (2006). Venture philanthropy: The evolution of high engagement philanthropy in Europe. <http://eureka.sbs.ox.ac.uk/745/1/VenturePhilanthropyinEuropeRobJohnspaper.pdf>. Accessed 15 Feb 2019.
- Koh, H. (2010). Building powerful agents of change: A perspective from venture philanthropy. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78910/Harvey-Koh_2.pdf. Accessed 15 February 2019.
- Letts, C. W., Ryan, W., & Grossman, A. (1997). Virtuous capital: What foundations can learn from venture capitalists. *Harvard Business Review*, 75, 36–50.
- Moody, M. (2008). “Building a culture”: The construction and evolution of venture philanthropy as a new organizational field. *Nonprofit and Voluntary Sector Quarterly*, 37(2), 324–352. <https://doi.org/10.1177/0899764007310419>.
- OECD (Organisation for Economic Co-operation and Development). (2014). Venture philanthropy in development dynamics, challenges and lessons in the search for greater impact. <https://www.oecd.org/dev/Venture%20Philanthropy%20in%20Development-BAT-24022014-indd5%2011%20mars.pdf>. Accessed 15 Feb 2019.
- Reddy, C. D. (2015). Social entrepreneurship and venture philanthropy: A conceptual framework. In S. Goodman, G. Human, C. Mulenga, D. Prilaid, & J. Robertson (Eds.), *Management in Southern Africa: Change, challenge and opportunity. Proceedings the 27th SAIMS annual conference, 30 August–1 September, 2015* (pp. 288–299). Cape Town: The Southern Africa Institute for Management Scientists.

Verification

► Audit

Viable Brands

► Sustainable Brands

Viable Performance

► Sustainable Performance

Vision Setting

► Corporate Strategy

Visioneering

- [Corporate Strategy](#)

Volatility

- [Sustainability Management and Market Risk](#)

Voluntary Organization

- [Nongovernmental Organization](#)

Volunteer Participation

- [Cause Promotions](#)

Volunteering

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Synonyms

[Employee participation/ownership](#); [Employee sustainability behaviors](#); [Employee volunteer programs](#)

Definition

Mozes et al. (2011) call corporate volunteering one of the most widely used types of CSR, which should be a strategic activity. Based on Kotler and Lee (2005), corporate volunteering means a volunteer-based program that can be implemented with the involvement of any corporate stakeholder, be it a current or former

employee, partner, or just a family member. According to Allen (2003), corporate responsibility is a solution to a problem for the community by attracting new talent and energy resources. In Wilson's (2000) definition, the essence of volunteering is that one person offers their time to another, person, group, organization without compensation (Shin and Kleiner 2003), which interpreted to companies, means that the company encourages its employees to sacrifice their time to participate in the local community (Lukka and Locke 2003).

The essence of volunteering is that the company supports and encourages its own employees, its partners, to volunteer, to donate their time and talent (Kotler and Lee 2005). However, Bussell and Forbes (2008) point out that the company only supports volunteering itself, but does not provide additional compensation or direct personal remuneration to employees in exchange for their volunteer work. Most volunteering activities are related to education, the environment, health and well-being, young or old groups, but typically companies also carry out such activities in local community organizations or on behalf of the local community (Kotler and Lee 2005). The voluntary effort of employees in a corporate social initiative that is linked to business goals is an important aspect. The strategic approach is expedient, so volunteering has to be connected with the areas already supported by the company and to be linked to the company's values and goals (Kotler and Lee 2005).

Introduction

Nowadays, most companies are increasingly seeking to involve their employees in CSR activities. One of the most common and popular forms of CSR is volunteering, which is gradually becoming part of business. However, the effectiveness of volunteering is greatly influenced by the commitment and active participation of employees.

Corporate volunteering is one of the most authentic forms of CSR. According to Bill Shore, the unique ability and contribution of

creative abilities of volunteering may be the most effective, meaning every company should help what they do best, arguing that core business volunteering is the most effective form of volunteering (Kotler and Lee 2005). Volunteering is the cleanest and most beneficial way for corporate involvement in society (Iamandi and Filip 2014). It facilitates cooperation between different sectors, making it easier for a company to integrate into social and environmental issues (VSA and RCS 2014).

Volunteering should be part of the business plan as it is done with the involvement of employees. It benefits all stakeholders, the company, the employee, and the community. It is also suitable for showing commitment to how committed companies are to their communities and their consumers in communities (VOLUM 2016). Through corporate volunteering, a company can become a positive organization in society (Muthuri et al. 2009; Gligor-Cimpoieru and Munteanu 2014).

Types of Corporate Volunteering

There are several categorizations of volunteering, as the possibilities for its realization are very diverse. The form of volunteering also depends on the abilities and talents of the volunteers. It can be in a formal or informal way. It can be initiated by the company, which is called company-driven program, or it can be initiated by the employee, which Pajo and Lee (2011) call employee-led program.

The type of activity itself can be: special technical support, lecture, workshop, organizational support, organizing and promoting fundraising events, providing spiritual support to people in need, entertaining older people, or organizing campaigns. Support can be expertise, talent, an idea, or physical work (Kotler and Lee 2005).

According to the form of organization, they can be: (Federația VOLUM 2014)

- Fully organized by the company
- Joint organization of the company and its related nonprofit organization

- Nonprofit organization without involving the company

In the first two cases, the voluntary program is implemented during working hours, in the third case it happens in free time; the employee decides on the basis of his/her choice in terms of time and activity.

Possible forms of volunteering are as follows (Kotler and Lee 2005):

- Encouraging employees to volunteer in the community and providing information about opportunities
- Helping in specific goals and organizations that are important for employees.
- Organizing volunteer teams for a cause or event
- Providing more alternatives for employees to find the right activity, such as site coordinator, site list, software
- Paid leave per year for volunteering is 2–5 days from working time, participation in major programs such as 1 year volunteering in developing countries
- A financial donation according to the number of voluntary hours spent by employees
- Highlighting the volunteer work in newsletters, awarding with plaques, mentioning at workshops and lectures

Motivations of Corporate Volunteering

An important factor in volunteering is that the company can maintain employee participation, so it is essential to see what internal and external motivational factors can help sustain corporate volunteering in the long run (Nave and do Paco 2013).

The underlying motivation may be altruistic on the part of the employee, so it is a selfless help, but there are also those who are motivated by egotism, to achieve individual reward and recognition (Dolnicar and Randle 2004).

However, there may be a number of other motivational factors behind volunteering, such as the nature of volunteering, the management of

volunteer programs, the achievement of a perceptible impact on others, the fact that one is doing something meaningful (Grant 2007). At the same time, autonomous problem-solving options appear to be one of the most important motivating factors for returning to volunteering.

Thus, there can be several reasons for volunteering (Clary et al. 1998):

- Values – responsibility to others from an altruistic, humanitarian perspective
- Understanding – learning new things, development of skills and competencies
- Social – development relationship and interaction with others
- Career – having new experience in other type of work
- Protective – having more positive feelings
- Enhancement – development in self-esteem

Advantages of Corporate Volunteering

Corporate volunteering has a number of benefits for the company, employees, and supported organizations.

From a company perspective, the following benefits are worth highlighting (Walsh 2005; Sanchez-Hernandez and Gallardo-Vázquez 2013; Păceșilă 2015, 2016; Kim et al. 2010; Peterson 2004; Gatignon-Turnau and Mignonac 2014; do Paço and Nave 2013; Zappala and McLaren 2004)

- Improving the image – consumers will have a more positive image of the company if they know they are acting responsibly
- Helping in meeting employee needs
- Professional performance can improve and develop
- Increasing overall job satisfaction
- Making a difference in the life of the company
- Strengthening the contribution to society
- Development of a healthy work environment
- Increasing in loyalty and commitment to the company, decreasing in turnover
- Increasing efficiency
- More interaction between employees, narrowing of gaps arising from hierarchy

- Increasing transparency toward the community
- Increasing trust, reducing mistrust
- Investing in the community
- Helping in achieve strategic goals (Allen 2003) – lower operating costs, shared value creation, higher profitability, increased consumer loyalty, impact on sales (LBG Associates 2005)
- Developing a more positive relationship with the community and the government

Many benefits can also be identified for employees:

- Increasing employee morale, volunteering simply makes the employee feel good
- Meeting people
- Acquiring new skills and abilities such as teamwork, communication (Allen 2003; Bartsch 2012; Paço and Nave 2013), which makes employees more skilled
- Special skills can also be developed for a company (Sgarciu 2011), such as time management, data collection, analysis
- Improving employee self-esteem (Allen 2003) as they create something useful and valuable to others
- Improving writing and communication skills, time management, planning, people management, leadership skills – amounts spent on employee training can be reduced (Caudron 1994)

For the community, the following benefits can be listed:

- Its contribution to poverty reduction
- Increasing well-being
- Establishment of social cohesion, increasing trust
- Recognizing and answering to community problems
- Strengthening civic thinking and communication in the community
- Generating similar initiatives among other organizations, etc.
- Connecting communities
- Raising awareness of the issue, needs, organization (Zhang 2011)

Summary

Challenges for companies related to corporate volunteering can be identified at several points:

- Recruiting and retaining volunteers, but not making it a must (Clary and Snyder 2002)
- Limited time for employee engagement – they prefer to take part in such activities, but the availability of corporate volunteering may not be the same as other volunteering
- Finding the right program – they can volunteer there, as defined by the company in its responsibility strategy – so that it doesn't have too little or a negative impact on the community (VSA and RCS 2014). If it doesn't meet the needs of the community, it will have fewer resources. Relationship can be broken between the two parties (Volunteering Victoria 2014). If an employee can choose the program, it cannot be racist, discriminatory, religious, or political, or in violation of public order
- Identification of NGOs capable of hosting volunteers – it is also a cost for an NGO, although not material as giving them work status and coordinate them. A detailed budget should be provided for the costs incurred for the whole program (Pro Vobis 2003)

At the same time, volunteering is challenging for employees, which also needs to be addressed by the company to unleash the comfort zone, to facilitate working in other new conditions through training, and to encourage networking with new people, communities, and organizations.

What companies need to pay the most attention to designing volunteer programs are the following ones:

- Maximum how many people can volunteer at one time to keep the company running smoothly
- Maximum how many hours of volunteering can be accounted for
- Who is entitled to volunteer (fixed-term, indefinite-term employment contract)
- Training of volunteers
- Proof of volunteering

- Recruitment of employees
- Organizing – to whom, when, and what is the task
- Leisure time, working time – spending their working time on volunteering or their free time. If it is paid time, then is it really voluntary? In the case of paid leave, the company contributes to the development of the community, the employee participates on his/her own initiative, therefore employee involvement in the community or employer-sponsored volunteering may be a better term
- The employee decides whether he or she wants to take part. If it is compulsory, it is no longer voluntary, it is more team-building or leisure, recreational activity
- All employees can participate in volunteering, but prior information is required – occupational safety training is mandatory
- The volunteering activity should be done with or without expertise?
- In return, they may receive financial or logistical assistance (CVE 2011), costs are borne by the company
- Recognition of employees before the company – more and more people are involved
- Evaluation, monitoring, and impact measurement of results is essential

Cross-References

- ▶ [Employee Participation/Ownership](#)
- ▶ [Employee Sustainability Behaviors](#)
- ▶ [Employee Volunteer Programs](#)

References

- Allen, K. (2003). The social case for corporate volunteering. *Australian Journal on Volunteering*, 8(1), 57–62.
- Bartsch, G. (2012). Emotional learning: Managerial development by corporate volunteering. *Journal of Management Development*, 31(3), 253–262.
- Bussell, H., & Forbes, D. (2008). How UK universities engage with their local communities: A study of employer supported volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 13(4), 363–378.

- Caudron, S. (1994). Volunteer efforts offer low-cost training options. *The Personnel Journal*, 73(6), 38–44.
- Clary, E. G., & Snyder, M. (2002). Community involvement: Opportunities and challenges in socializing adults to participate in society. *Journal of Social Issues*, 58(3), 581–591.
- Clary, E. G., Snyder, M., Ridge, R., & Copeland, J. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74, 1516–1530.
- CVE. (2011). Bunele practici de voluntariat corporatist pentru bazele de date din școli. Retrieved September 2016 from http://cesie.org/media/cve_database_ro.pdf
- Dolnicar, S., & Randle, M. (2004). What moves which volunteers to donate their time? An investigation of psychographic heterogeneity among volunteers in Australia. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 18, 135–155.
- Federația VOLUM. (2014). Voluntariatul sprijinit de angajator și responsabilitatea socială corporativă. Retrieved June 2015 from http://federatiavolum.ro/wp-content/uploads/2014/11/Ghid_CSR_VSA_tipar.pdf
- Gatignon-Turnau, A. L., & Mignonac, K. (2014). (Mis) using employee volunteering for public relations: Implications for corporate volunteers' organizational commitment. *Journal of Business Research*, 68(1), 7–18.
- Gligor-Cimpoieru, D. C., & Munteanu, V. P. (2014). External CSR communication in a strategic approach. *Economia. Seria Management*, 17(2), 276–289.
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393–417.
- Iamandi, I. A., & Filip, R. (2014). Etică și responsabilitate socială corporativă în afacerile internaționale. Retrieved September 2016 from http://www.ai.rei.ase.ro/ETICA%202014/Supurt%20curs%20master%20-%20Etica%20si%20CSR_2014.pdf
- Kim, H. R., Lee, M., Lee, H. T., & Kim, N. M. (2010). Corporate social responsibility and employee–Company identification. *Journal of Business Ethics*, 95(4), 557–569.
- Kotler, P., & Lee, N. (2005). *Corporate social responsibility: Doing the most good for your company and your cause*. Hoboken: Wiley.
- LBG Associates. (2005). Can corporate volunteering support the bottom line? The challenge. The opportunity. The case for investment. Commissioned by: The Case Foundation and Hands on Network.
- Lukka, P., & Locke, M. (2003). *Faith and voluntary action: Community, values and resources*. London: Institute for Volunteering Research.
- Mozes, M., Josman, Z., & Yaniv, E. (2011). Corporate social responsibility organizational identification and motivation. *Social Responsibility Journal*, 7(2), 310–325.
- Muthuri, J. N., Matten, D., & Moon, J. (2009). Employee volunteering and social capital: Contributions to corporate social responsibility. *British Journal of Management*, 20, 75–89.
- Nave, A. C., & do Paco, A. (2013). Corporate volunteering – An analysis of volunteers' motivations and demographics. *Journal of Global Responsibility*, 4(1), 31–43.
- Păceșilă, M. (2015). *Managementul organizațiilor meguvernamentale*. Cluj-Napoca: Editura Accent.
- Păceșilă, M. (2016). *Organizații neguvernamentale-nonprofit. De la teorie la practică*. București: Editura ASE.
- Paço, A., & Nave, A. C. (2013). Corporate volunteering: A case study centred on the. Motivations, satisfaction and happiness of company employees. *Employee Relations*, 35(5), 547–559.
- Pajo, K., & Lee, L. (2011). Corporate-sponsored volunteering: A work design perspective. *Journal of Business Ethics*, 99, 467–482.
- Peterson, D. K. (2004). Benefits of participation in corporate volunteer programs: Employees' perceptions. *Personnel Review*, 33(6), 615–627.
- Pro Vobis. (2003). Pregătirea organizației pentru implicarea voluntarilor. Retrieved August 2015 from <http://www.provobis.ro/assets/uploads/2013/01/1Pregatirea-organizatiei-pentru-implicarea-voluntarilor.pdf>
- Sanchez-Hernandez, M. I., & Gallardo-Vázquez, D. (2013). Approaching corporate volunteering in Spain. *Corporate Governance: The international journal of business in society*, 13(4), 397–411.
- Sgarciu L. (2011). De ce ar trebui să susțină companiile voluntariatul. Retrieved September 2016 from <http://www.csr-romania.ro/articole-si-analize/concepte-de-baza/978-de-ce-ar-trebuie-sa-sustina-companiile-voluntariatul.html>
- Shin, S., & Kleiner, B. H. (2003). How to manage unpaid volunteers in organizations. *Management Research Review*, 26, 63–71.
- VOLUM. (2016). Ghid de lucru. Voluntariatul sprijinit de angajator și responsabilitatea socială corporativă. Retrieved September 2016 from http://federatiavolum.ro/wp-content/uploads/2016/07/ghid_AEV_voluntariatul_corporatist_s%CC%A6i_CSR_A4_210x297_mm_VOLUM.pdf
- Volunteering Victoria. (2014). The business case for corporate volunteering. Retrieved September 2016 from <http://www.volunteering.com.au/wp-content/uploads/2016/01/The-Business-Case-forCorporate-Volunteering.pdf>
- VSA and RCS. (2014). Voluntariatul sprijinit de angajator și responsabilitatea socială corporativă. Retrieved August 2015 from http://federatiavolum.ro/wp-content/uploads/2014/11/Ghid_CSR_VSA_tipar.pdf
- Walsh, J. P. (2005). Book review essay: Taking stock of stakeholder culture. *Academy of Management Review*, 30(2), 426–438.
- Wilson, J. (2000). Volunteering. *Annual Reviews of Sociology*, 26, 215–240.

Zappala, G., & McLaren, J. (2004). A functional approach to employee volunteering: An exploratory study. *Australian Journal on Volunteering*, 9(1), 41–54.

Zhang, Y. (2011). *Corporate volunteering research in a case company*. Satakunta University of Applied Sciences.

“Vorsorgeprinzip”

► [Precautionary Principle](#)

Volunteerism Management

► [Employee Volunteer Programs](#)

VP

► [Venture Philanthropy](#)

Wage and Salary Negotiation

► Collective Bargaining

Walker Review (2009) on Banks' Corporate Governance

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Description

In response to the global financial crisis of 2008, Sir David Walker was commissioned by the UK government to conduct an independent review of the effectiveness of corporate governance in UK banks and other financial institutions with a view to making recommendations as to potential means of strengthening governance in the industry. Specifically, under the terms of reference of the review, recommendations were sought in the following respects:

- The effectiveness of risk management at board level including the incentives in remuneration policy to manage risk effectively
- The balance of skills, experience, and independence required on boards

- The effectiveness of board practices
- The performance of audit, risk, remuneration, and nomination committees
- The role of institutional shareholders in engaging effectively with financial institutions and monitoring of boards
- Whether the UK approach is consistent with international practice
- How national and international best practice can be promulgated

Among the recommendations of the resultant *Review of Corporate Governance in UK Banks and Other Financial Industry Entities* or *The Walker Review* was the creation of a *Stewardship Code* aimed at making management more accountable to institutional investors. This proposal was adopted by the Financial Reporting Council (FRC) for corporations in general. Consequently, in June 2010, the FRC replaced the *Combined Code* with the *UK Corporate Governance Code (2010)*. This chapter sets the background to the *Walker Review*. It proceeds with a précis of its findings and 39 recommendations. The chapter concludes by assessing the consequence of the *Walker Review* for the governance of financial institutions.

Background

As was the case in many countries, the financial services industry in the UK was severely impacted by the global financial crisis. State injections

of equity, takeovers of institutions, and significant liquidity support were key features of its aftermath. Corporate governance failures were widely recognized as having contributed to the financial crisis both in financial institutions in the UK and internationally. In particular, the ability of nonexecutive directors to protect the interests of shareholders in financial services institutions through prudent risk management and internal control was brought into question. Similarly, much criticism surrounded the appropriateness of directors' remuneration in the sector. In response, in February 2009, the UK prime minister appointed Sir David Walker to review corporate governance in the nation's banks in light of the considerable losses incurred in the banking sector during the crisis. Sir Walker's review was informed by over 180 written submissions from interested organizations and individuals. The review also held discussions with interested parties including board members of banks and other corporates, the accounting and legal professions, representatives of smaller shareholders, and representative of consumer interests. While focusing primarily on financial services industry, the recommendations in relation to engagement by institutional investors have wider relevance for shareholdings in all UK corporates. The review pays particular attention to questioning why different banks operating in the same country and in the same financial market and regulatory environment were impacted differently by the crisis. This difference is primarily attributed to the different approaches taken in the governance of, and by extension, the running of individual institutions. The recommendations of the *Walker Review* are intended to inform a governance framework that works in harmony with the regulatory system to ensure capital and liquidity adequacy.

Board Size, Composition, and Qualification

Despite guidance on induction, training, and development for executive and nonexecutive directors in the *Combined Code for Corporate Governance* (hereafter called the *Combined*

Code), the *Walker Review* is critical of the approach taken to induction, training, and development of nonexecutive directors in the UK banking and financial services industry. It notes that support is necessary to ensure nonexecutive directors have the requisite knowledge and understanding of the business to make an effective contribution. This is especially pertinent in aspects such as risk management where external training may be necessary (para 3.16). Thus, it is recommended that thematic business awareness sessions and substantive, personalized induction, training, and development be provided and reviewed annually with the chairman. Similarly, it is noted that executive directors should also be assured necessary training in the areas in which they have direct responsibility (recommendation 1).

Consistent with the earlier findings of the *Higgs Review*, the *Walker Review* reported concerns about the time commitment of nonexecutive directors. The review affirms that fundamental and intensive work must be performed in the areas of audit and risk management; hence the time commitment required from nonexecutive directors in the financial services industry is stressed (para 3.19). Thus, the *Walker Review* proposes that a minimum expected time commitment from nonexecutive directors of 30–36 days per year in a major bank board should be clearly indicated in letters of appointment so the appointees are made aware of the likely impediment this may present to their serving on boards elsewhere (recommendation 3).

The *Walker Review* also recommends a more hands-on approach by the Financial Services Authority (FSA). It notes that directors in financial institutions authorized by the FSA serve in a controlled function and must be pre-approved by the FSA. The *Walker Review* reports that in its approval, the FSA places substantial reliance on the judgment of the chairman and board of the financial institution. While it is acknowledged that the board's insight is likely to be well-considered, it is deemed appropriate that FSA encourages financial institutions to take their input still more seriously (para 3.24). Accordingly, it is recommended that the FSA's ongoing supervisory

process should give closer attention to the overall balance of the board in relation to the risk strategy of the financial institution, taking into account the experience, behavioral, and other qualities of individual directors and their access to adequate induction and development programs (recommendation 4). Furthermore, it recommends that the FSA's interview process for nonexecutive directors, proposed for FTSE 100 financial institution boards, should involve questioning and assessment by one or more senior advisers with relevant industry experience. It is envisaged that such advisers should be independent and may be engaged by the FSA for this purpose on a part-time panel basis (recommendation 5).

Functioning of the Board and Evaluation of Performance

The *Walker Review* considers that along with experience and knowledge, nonexecutive directors should have the personal qualities necessary to obtain clear and full answers from management (para 4.11). The review recommends that non-executive directors should be ready, able, and encouraged to challenge and test proposals on strategy put forward by executive directors. They should satisfy themselves that board discussion and decision-taking on risk matters are based on accurate and appropriately comprehensive information and draw on external analysis and input (recommendation 6). This reaffirms earlier proposals forwarded by the *Higgs Review*.

The responsibilities of the chairman in terms of determination of risk strategy and regular appropriate engagement with major shareholders are noted. The almost full-time requirement of this role is debated against the potential for the chairman's strong presence to increase his dominance (para 4.17). Thus, it is recommended that the chairman of a major bank be expected to commit a substantial proportion of his or her time (approximately two-thirds), to the business of the entity, with clear understanding from the outset that, in the event of need, the bank chairmanship role would have priority over any other business time commitment that the individual

may have (recommendation 7). Such commitment is not expected from a chairman of a smaller entity.

Past inadequacies in the experience of individuals holding the chairman position are noted (para 4.22), and it is recommended that the chairman should have both relevant financial industry experience and a track record of successful leadership capability in a significant board position. While both qualifications are preferable, the recommendation that the chairman has relevant industry experience can be relaxed, provided there is an adequate balance of relevant financial industry experience among other board members. However, convincing leadership experience should be prioritized (recommendation 8). Consistently, the chairman's responsibility is stated to encompass leading the board; ensuring its effectiveness; setting its agenda so that adequate time is available for substantive discussion on strategic issues; and ensuring that the directors receive all information that is relevant to discharge their obligations in accurate, timely, and clear form. In addition, the chairman's role is extended to facilitating, encouraging, and expecting the informed and critical contribution of the directors in discussion and decision-taking on matters of risk and strategy and promoting effective communication between executive and non-executive directors (recommendation 9).

A depth of consideration is given to the terms of board service. The need to hold directors continually accountable to shareholders via annual reelection is weighed up against the potential for such a practice to promote short-term-oriented attitudes (paras 4.23–4.24). In addition, the FTSE-100 norm of triennial reelections is considered, as is the extent of change taking place in the industry at the time (para 4.25). Against this backdrop, the *Walker Review* considers that it is potentially unsettling to recommend that all nonexecutive directors be reelected annually. However, given the importance of the capability and performance of the chairman, it is recommended that this position be subject to annual reelection (recommendation 10). Finally, a formal and rigorous performance evaluation of the board and its committees, with external facilitation

of the process every 2nd or 3rd year, with disclosure of relevant detail to shareholders is also recommended (recommendation 12).

The Role of Institutional Shareholders

The *Walker Review* evaluates communication between shareholders and the corporate. In particular, the review discusses the practice of selling shares when the bank or financial institution's investors have concerns with performance. The *Walker Review* concludes the sale of shares as "an uncertain influence on decision-taking by the board and a relatively blunt means of communication between owner and board" (para 5.21). The review considers the corporate should pay attention to shareholder behavior. Hence, it is recommended that boards ensure that they are made aware of any material cumulative changes in the share register as soon as possible (para 5.22). They should seek to understand as far as possible the reasons for such changes and satisfy themselves that they have taken steps, if any are required, to respond. Where material cumulative changes take place over a short period, the FSA should be promptly informed (recommendation 14).

By means of encouraging engagement with investors, it is recommended that a *Stewardship Code* be separated from the content of the *FRC's Combined Code on Corporate Governance* (recommendation 16). The *Stewardship Code* is recommended to be based upon the *Institutional Shareholders' Committee Code on the Responsibilities of Institutional Investors* (Institutional Shareholders' Committee 2002) but be akin to the *Combined Code* to the extent that it should be adopted on a "comply or explain basis" (recommendation 17) and overseen by the FRC (recommendation 18). To support commitment to the *Stewardship Code*, it is further recommended that the FSA require institutions that are authorized to manage assets for others to disclose clearly on their websites or in other accessible form the nature of their commitment to the *Stewardship Code* or their alternative business model.

The *Stewardship Code* promotes collective engagement by institutions where appropriate (principle 5). The "concert party" rules of the *Takeover Code*, however, pose a potential barrier to such commitment. In effect, institutional investors in the UK may be reluctant to take collective action due to the possibility of being considered be acting in concert by the UK Takeover Panel and thus being subject to the requirements of the mandatory bid rule of the *Takeover Code* (rule 9). To ease investors' concerns that collective engagement may lead them to be considered as parties acting in concert, thereby potentially contravening the rules of the *Takeover Code* and the FSA, both parties are encouraged to keep under review the adequacy of "safe harbor" interpretation and guidance (recommendation 20). The review takes the stance that voting and disclosure of voting policies and outcomes by institutions are an element of good governance (para 5.51) and recommends that voting powers be exercised and that fund managers and other institutional investors make relevant voting disclosures in statements on their websites or in another publicly accessible form (recommendation 22).

Governance of Risk

The *Walker Review* notes that enhanced statutory, accounting, and other standards concerning the preparation of financial statements combined with the need to review and report on the effectiveness of internal controls place a heavy regulatory burden upon audit committees (para 6.11). It stresses the potential or actual overload of the audit committee and the need for a closely related but separate capability for risk management (para 6.12). The "fundamental" prudential risks of the institution, leverage, liquidity risk, interest rate and currency risk, credit/counterparty risk, and other market risks are distinguished from other "major" prudential risks, operational, information technology, compliance, and reputational risk, the former requiring dedicated focus (para 6.12). Consequently, it is recommended that the board of a FTSE 100-listed financial services company should establish a stand-alone board risk

committee with responsibility for oversight and advice to the board on the current risk exposures of the entity and future risk strategy, including strategy for capital and liquidity management, and the embedding and maintenance throughout the entity of a supportive culture in relation to the management of risk alongside established prescriptive rules and procedures. In preparing advice to the board on its overall risk appetite, tolerance, and strategy, the board risk committee should ensure that account has been taken of the current and prospective macroeconomic and financial environment drawing on relevant financial stability assessments of authorities including the Bank of England and the FSA (recommendation 23). The committee's remit should extend to due diligence assessment of proposed acquisitions, disposals, and other such transactions (recommendation 26). A report of the committee, to be included in the annual report and financial statements, should describe the corporate's strategy in a risk management context, including information on the key inherent risk exposures, the associated risk appetite, and tolerance for risk. It should explain how the actual risk appetite is assessed and provide information on the scope and outcome of the stress-testing program. Finally, the report should disclose membership of the risk committee, frequency of its meetings, and sources of external advice sought (recommendation 27).

The *Walker Review* advises that a chief risk officer (CRO) be appointed. The CRO should participate in the risk management and oversight process at the highest level on an enterprise-wide basis and have a status of total independence from individual business units. Alongside an internal reporting line to the chief executive officer or chief financial officer, the CRO should report to the board risk committee, with direct access to the chairman of the committee as is necessary. The CRO should have the resources necessary to assess, independently of executives and with due regard to materiality, whether proposed products or transactions are consistent with the risk tolerance determined by the risk committee and board and should be able to exercise a power of veto where necessary. On a continuing basis, the CRO

should seek to ensure that risk originators in individual business units within the entity are fully aware of and aligned with the board's appetite for risk. The evaluation of current practices undertaken by Walker's research team uncovered that CROs experienced resistance to their role. In light of this finding, the *Walker Review* emphasizes that members of financial institutions engaging in seemingly risky business should not challenge the CRO's authority if such business is deemed to extend beyond the institution's risk appetite. The tenure and independence of the CRO should be underpinned by a provision that removal from office would require the prior agreement of the board. Finally, the remuneration of the CRO should be subject to approval by the chairman of the board or the chairman of the board remuneration committee (recommendation 24).

Remuneration

It is widely acknowledged that, prior to the crisis, remuneration and incentive schemes in the banking sector contributed to the creation of a culture of risk-taking. The *Walker Review* notes that while guidelines on best practice in corporate governance advise the remuneration committee to determine remuneration policy and packages for board-level executives, remuneration committees' role in this regard ought to have a wider scope in the financial services sector given the systemic and economic significance of the risks which may be influenced through performance-related pay (para 7.7). In particular, it advises that the remuneration committee should have sufficient understanding of the financial institution's policy on pay and employment conditions to ensure that it is adopting a coherent approach to remuneration in respect of all employees (recommendation 28). Moreover, the terms of reference of the remuneration committee should include oversight of remuneration policy and outcomes in respect of all high-end employees (recommendation 29), and it should explain the principles underlying the performance objectives, risk adjustments, and the related compensation structure for high-end employees, if these differ

from those put in place and disclosed in respect of executive board members. "High-end employees" refers to individuals who perform a significant influence function for the financial institution or whose activities have, or could have, a material impact on the risk profile of the financial institution (para 7.10). Potential issues regarding the impact of such disclosures on international comparisons are considered (para 7.20), and it is recommended that for FTSE 100-listed banks and comparable unlisted financial institutions, the remuneration committee report should disclose in bands the number of high-end employees whose total expected remuneration in respect of the reported year is in a range of bands and, within each band, the main elements of salary (recommendation 31). The threshold level for these bands starts at £1 million (Slaughter and May 2009).

The *Walker Review* suggests that deferral of an element of high-end remuneration may serve as a primary means of risk adjustment of pay and serve as a long-term incentive mechanism (recommendation 33). The *Walker Review* rationalizes that the remuneration of such employees ought to be adjusted to account for risks which may be encountered in the pursuit of performance benchmarks such as revenues and market share (para 7.36). Specifically, consideration is given to an arrangement whereby a component of variable high-end remuneration would have a vesting period of a number of years. Full endowment would follow at the end of the vesting period, when the impact of risk-taking is realized. The review, however, acknowledges that financial institutions may engineer remuneration packages to avoid the deferral of contingent bonuses. In particular, it predicts that financial institutions may respond by remunerating high-end employees through fixed pay. This would have negative consequences for the financial institution as it would increase fixed costs and reduce profits. The overall implication is that UK financial institutions would be less able to compete internationally (para 7.26). Hence, it is advised that deferred remuneration structures be adopted on a "comply or explain" basis. This means that shareholders can evaluate reasons for deviation (para 7.31). It

is further recommended that short-term bonus awards be paid over a 3-year period with not more than one-third in the 1st year. The *Walker Review* also recommends that financial institutions be able to reclaim bonuses paid in circumstances of misstatement and misconduct (recommendation 33). The conventional measure of aligning managers' long-term interests with those of the shareholder by means of share ownership is deemed to remain a fundamental element of compensation; the *Walker Review* stated that executive board members and high-end employees should be expected to have "skin in the game" (para 7.35). Therefore, the review recommends that executive board members and high-end employees should be expected to maintain a shareholding or retain a portion of vested awards consistent with their total compensation. This vested interest is to be built up over a period at the discretion of the remuneration committee. Further, the review recommends that vesting of stock should not be accelerated on cessation of employment, other than on compassionate grounds (recommendation 34).

The *Walker Review* highlights that the existing practice of presenting the remuneration committee report at the annual general meeting should continue, even though the report is subject only to an advisory, non-binding resolution (para 7.38). The justification provided is that manager remuneration is addressed in managers' contracts of employment that are implicitly or explicitly approved by shareholders. Therefore, at the appointment stage, shareholders have an opportunity to ensure that the manager's remuneration structure is consistent with the interests of shareholders. Nonetheless, it is deemed important that shareholders are provided an opportunity to exert their influence on occasions, where they have concerns regarding the remuneration granted to management. The *Walker Review* suggests that the best feasible means of enabling shareholder influence is when the non-binding resolution on a remuneration committee report attracts less than 75% of the total votes cast at the annual general meeting, the chairman of the remuneration committee should stand for reelection in the following year irrespective of his or her normal appointment

term (recommendation 36). It is pointed out that over the course of the year prior to the remuneration committee chairman's reelection, there should be good opportunity for shareholder engagement with the board regarding remuneration matters (para 7.41).

The *Walker Review's* treatment of remuneration concludes by emphasizing the need for remuneration committees to have access to high-quality external advice (para 7.53). In respect of this external advice, the review welcomes the Remuneration Consultants Group's work on a draft code of practice for external remuneration consultants (para 7.54). The review suggests that this code should provide the basis for the determination of the remuneration committee's terms of engagement with its external adviser (para 7.57). To facilitate engagement between remuneration committees and remuneration consultants, the *Walker Review* recommends that remuneration consultants, as a profession, put in place a formal constitution with provision for independent oversight and review of the remuneration consultancy code; that this code and an indication of those committed to it should be lodged on the FRC website; that all remuneration committees should use the code as the basis for determining the contractual terms of engagement of their advisers; and that the remuneration report should indicate the source of consultancy advice and whether the consultant has any other advisory engagement with the financial institution (recommendations 38 and 39).

Conclusion

The *Walker Review* was a prompt response to the deficiencies in banks' and other financial institutions' corporate governance systems highlighted by the financial crisis. The approach taken in the *Walker Review* to governance is distinctly shareholder-oriented. While the interests of various other stakeholders in banks and related institutions are accounted for, the factors more closely associated with systemic and economic risk are largely left to the national and international financial regulatory systems. Indeed, the capacity of

such a shareholder-centric set of recommendations to constrain undue risk-taking by banking executives has been questioned, given that equity holders commonly have similarly high-risk appetites (Deakin 2010; Bruner 2011). The link between remuneration and risk-taking is thoroughly addressed. However, there is a view that the *Walker Review* did not go far enough and that the review should have suggested a cap on bonuses; however, the clawback provision proposed may be considered more conducive in incentivizing and rewarding prudent management performance. It is also consistent with measures proposed in the USA under Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) (Public Law 111-203). In a general sense, the *Walker Review* marked a turning point in the UK's approach to governance such that the introduction of the *Stewardship Code* by the FRC was the first bona fide initiative to assist institutional engagement with investee corporations since the publication of the *Review of Institutional Investment in the United Kingdom* (Myners 2001).

The published report received a mixed reaction (Slaughter and May 2009). The media, in particular, considered that the recommendations did not go far enough that Walker had the potential to suggest a major shake-up of banking governance but instead opted for "tweaks" to already existing corporate governance recommendations (Finch 2009). Therefore, the recommendations made are not considered to be unduly reactionary or cautionary, given the environment of uncertainty in which they were constructed. The *Walker Review* came under criticism for not going far enough in promoting transparency. For example, the review recommends that financial institutions disclose the number of "high-end" employees earning more than one million per year, with bands for higher earners. In addition, the report provides no justification for the one million figure. In his defense, Walker argues that the provision of such detail may result in increased salaries and enable rivals to head hunt (Finch 2009).

The *Walker Review* is considered one of the most commanding sets of recommendations on corporate governance practice in the UK (Gibson

Dunn 2009). It contrasts previous reviews in terms of the level of flexibility offered to boards. Yet, in light of the risks entailed in banking and the necessity to create a culture of prudence in the interests of the shareholder and indeed of society more generally, a more rigid framework serves to avoid future losses of the scale experienced during the crisis.

Cross-References

► [Hampel Report \(UK\)](#)

References

- Bruner, C. (2011). Corporate governance reform in a time of crisis. *Journal of Corporation Law*, 36, 309–341.
- Cadbury, A. (1992). *Committee on the financial aspects of corporate governance*. London: Gee.
- Deakin, S. (2010). What directors do (and fail to do): Some comparative notes on board structure and corporate governance. *New York Law School Law Review*, 55, 525–541.
- Dodd-Frank Wall Street Reform and Consumer Protection Act. (2010). *Public law*, 111-203. US Government Publishing Office. <https://www.govinfo.gov/app/details/PLAW-111publ203>. Accessed 15 Apr.
- Finch, J. (2009). Walker report a ‘crashing disappointment’. *The Guardian Online*, 26 November 2009. <https://www.theguardian.com/business/2009/nov/26/walker-report-banking-comment>. Accessed 3 Mar 2019.
- Gibson Dunn. (2009). *UK Walker review – Tougher than the rest*, July 2009. <https://www.gibsondunn.com/uk-walker-review-tougher-than-the-rest/>. Accessed 15 Apr 2019.
- Higgs, D. (2003). *Review of the role and effectiveness of non-executive directors*. London: Department of Trade and Industry.
- Institutional Shareholders’ Committee. (2002). *The responsibilities of institutional shareholders and agents – Statement of principles*. http://www.ecgi.org/codes/documents/isc_statement_of_principles.pdf. Accessed 14 Apr 2019.
- Myers, P. (2001). *Institutional investment in the United Kingdom: A review*. <https://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/media/1/6/31.pdf>. Accessed 15 Apr 2019.
- Panel on Takeovers and Mergers. (2016). *The Takeover Code* (12th ed.). London: The Panel on Takeovers and Mergers.
- Slaughter and May. (2009). *The Walker review final recommendations – As you were, but manage it better*, December 2009. https://www.slaughterandmay.com/media/882451/walker_review_final_recommendations_as_you_were.pdf. Accessed 3 Mar 2019.
- Walker, D. (2009). *A review of corporate governance in UK banks and other financial industry entities*. https://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/d/walker_review_261109.pdf. Accessed 15 Apr 2019.

waqf

► [Foundations](#)

Waste Avoidance

► [Pollution Prevention](#)

Waste Dumping

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Synonyms

[Construction debris](#); [Electronic waste recycling](#); [Mining slags](#); [Municipal waste disposal](#); [Toxic waste](#); [Waste export](#)

Definition/Description

The international trade of waste encompasses everything from household trash to industrial chemicals. Its growth has been fostered by the increase of waste production worldwide with economic growth, more stringent environmental laws particularly in the developed world and the developing world’s need for investment capital. Trading in wastes has been quietly included within free trade pacts between developed and developing countries, in contravention of

international banning treaties like the Basel Convention. Given the directionality of the trade from the developed to the developing world, it is important to tackle the issue of export, transit, storage, and disposal of such wastes produced, whether currently or in the past. Though the ultimate question to be addressed is how more sustainable production, less toxic by-products, and efficient upcycling can be achieved in the future.

Definition and Research

The waste trade typically involves shipping wastes from developed countries to developing countries with adverse consequences for the environment of the latter and the health of their peoples. The trade encompasses everything from household trash to industrial chemicals. Its growth is fostered by the increase of waste production, the more stringent environmental laws in the developed world and the developing world's need for capital. No less lethal than dumping of solid toxic wastes on land is the pollution of the air and water that then travels across the globe. Most research on this trade appears to be published by the biological, health, and chemical sciences and in the environmental engineering, rather than in the management and the social sciences. The former's focus is on the consequences and remedies, rather than penalization or incentivization of culpable organizations, business, or government, which profit from this trade.

History and Trends

Dumping wastes has a long history dating from colonial countries dumping industrial wastes along shipping routes to and in their colonies to the post-World War II period of the military dumping surplus chemical and biological weapons in oceans. Only when multinational oil companies, prohibited by law from dumping wastes around the Gulf of Mexico, commenced incinerating wastes and exporting the ash to developing countries was there impetus for the comprehensive Basel Convention. Deeming

transborder movement and disposal of hazardous waste as a crime, the Convention requires signatory countries to monitor, enforce, and prosecute. But the lack of resources to regulate the trade particularly in developing-emergent economies is exploited by traders dealing with wastes from industrialized countries through bribery, false documents, and outright smuggling. Furthermore for some developing countries, economic benefits of the waste trade seem to outweigh the environmental costs.

While laws on waste collection and disposal in the developed world are based on notions of sustainable production consumption, few equivalents exist in the developing countries to which such wastes are transported ostensibly for recycling. As the destination of much hazardous waste exports the nations of the Organisation for African Unity (subsequently the African Union) had drafted the Bamako Convention. However, its focus on the reduction of waste production may be irrelevant because most waste is generated in other continents. Advocates for this trade see cooperation between industrialized and developing economies as a means of environmentally sustainable waste management globally. So provisions for trading in wastes have been included within bilateral trade agreements in contravention of international treaties.

Forms and Alleviation

Electronic wastes: Generation of e-waste is expected to rise by 2 million tonnes (Mt) per year, thus reaching 50 Mt by the late 2010s. Although Asia generated the most e-waste at 16 Mt, on a per capita basis, Europe generates the highest e-waste at 15.6 kg per person though that may reflect greater monitoring of collection and measurement. About a quarter comes from devices like smartphones and computers, while appliances like refrigerators and air-conditioners making up the rest. For communities involved in their recycling in developing countries, exposure to chemicals such as lead and mercury, air pollution from fumes and dust, and contamination of water and food have negative health

consequences. Yet recycling could contribute to sustainability via reconditioned products, replacement parts, and remanufacturing as new products.

Industrial wastes: All industrial processes generate waste and those that affect air and water are often removed within the factories themselves. Still, that can result in solid wastes like the slags, sludge, and dust such as generated by the steel industry. Coal mines, in developing countries particularly, dump solid waste as side-hill fill which together with the blasting and transportation cause dust emissions into the air, contaminated water from surface flows and seepage causing stability risks. Environmental legislation worldwide has discouraged dumping in landfills and encouraged treatment of industrial waste for reuse. Research on materials recovery could reduce costs, enabling industrial production to be both competitive and sustainable.

Construction waste: Whether contributed by natural disasters, infrastructure development, demolitions of illegal construction, household modifications, deterioration from poor labor or materials, construction materials are the major source of waste worldwide. Regulations on reuse of construction and demolition wastes may exist but as these are seldom implemented without there being a market for used building materials. Stakeholders in construction waste management include profit-oriented developers, contractors, site managers, engineers, and suppliers, as well as the sustainability-conscious government departments. Educating householders against unnecessary renovations, training contractors on quality construction, encouraging use of recycled materials, and provision of sufficient landfills for unrecoverable waste are all needful for sustainable management of construction waste.

Municipal waste: Greater urbanization, better living standards, and increased consumption invariably results in greater trash. Though inadequate collection and uncontrolled dumping has led to environmental and health issues such as dioxin and similar chemicals being found in the breast milk of women living near municipal dumping grounds in developing countries. Often lack of sanitation facilities especially in the rural

areas results in uncontrolled household waste polluting the water and land, affecting adversely communities in close proximity. Food waste pretreatment has global warming potential, but processes have tended to be based on considerations like economy and practicality. To ensure sustainability, governments have to deal with this waste through a combination of measures like source reduction, collection, recycling, composting, incineration, and landfills.

Summary

Although a global treaty regulating the waste trade exists, this is perceived by industry and civil society as weak in enforcement, as demonstrated by periodic news reports of toxic dumping post-hoc. It is imperative to tackle the issue of export, transit, storage, recycling, and disposal of such wastes produced currently or in the past. Considered mundane, waste management mobilizes the public and politicians only when events like landfill leakage, siting of dumps and dust from incinerators make the news. Yet resource scarcity and efficiency has generated interest in reuse, remanufacturing, and recycling such as of alloyed steel in component manufacture. Losses of materials and functionality can be considerable in recycling processes, but there are also opportunities for reduced material use through remanufacturing which has benefits for environmental sustainability. Given the negative impact of wastes on both the industrialized-developed and the developing-emerging world, what is crucial is ensuring that less toxic products and by-products are produced in the future.

Cross-References

- ▶ [Basel Convention](#)
- ▶ [Circular Economy](#)
- ▶ [Environmental Disaster](#)
- ▶ [E-waste](#)
- ▶ [Health and Safety](#)
- ▶ [UN Declaration on Cleaner Production](#)

Further Reading

- Alexander, C., & Reno, J. (Eds.). (2012). *Economies of recycling: The global transformation of materials, values and social relations*. London: Zed Books.
- Amankwah-Amoah, J. (2016). Global business and emerging economies: Towards a new perspective on the effects of e-waste. *Technological Forecasting and Social Change*, 105, 20–26.
- Diener, D. L., & Tillman, A. M. (2015). Component end-of-life management: Exploring opportunities and related benefits of remanufacturing and functional recycling. *Resources, Conservation and Recycling*, 102, 80–93.
- European Commission. http://ec.europa.eu/trade/import-and-export-rules/export-from-eu/waste-shipment/index_en.htm
- Hird, M. J. (2017). Waste, environmental politics and dis/engaged publics. *Theory, Culture and Society*, 34(2–3), 187–209.
- Institute of Scrap Recycling. <https://www.isri.org/recycling-commodities/international-scrap-trade-database>
- Kojima, M., & Michida, E. (Eds.). (2013). *International trade in recyclable and hazardous waste in Asia*. Cheltenham: Edward Elgar Publishing.
- Minter, A. (2013). *Junkyard planet: Travels in the billion-dollar trash trade*. New York: Bloomsbury Publishing.
- Recycling International. <https://recyclinginternational.com/category/research/>
- Waste Atlas. <http://www.atlas.d-waste.com/>
- World Bank. <http://www.worldbank.org/en/topic/urban-development/brief/solid-waste-management>
- Yuan, H. (2013). A SWOT analysis of successful construction waste management. *Journal of Cleaner Production*, 39, 1–8.

Waste Export

- [Waste Dumping](#)

Waste Management Accounting

- [Environmental Accounting](#)

Waste Minimization

- [Pollution Prevention](#)

Waste-to-Energy

- [Sustainability of Waste Management Systems: Energy Recovery](#)

Water

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Synonyms

[Aqua](#); [Component](#); [Ice](#); [Liquid](#); [Substance](#); [Mineral water](#); [Public good](#); [Spring water](#); [Tap water](#)

Definition

A colorless, transparent, and odorless liquid and one of the most valuable assets on the planet, vital for humans and to ecosystems, and is an important resource in all areas of human life.

The Importance of Water Research

“Clean Water and Sanitation” is the sustainable development objective 6 that must “*ensure availability and sustainable management of water and sanitation for all*” (UN 2021). Thus, the importance of water is justified on its origin of life. It is the most abundant element on the planet, contains many nutrients and minerals, and is of primary importance in human life (Schmidt, 2017; Versari et al., 2002).

Water is considered a vital part of the human diet. According to the World Health Organization (WHO), hydration is indispensable to human life. To maintain the body’s cell function, it is essential to regulate the amount of water in the body (Perrier et al., 2020).

According to the public information of the World Health Organization (WHO), each person needs between 50 and 100 liters of water, per day, to ensure the most basic needs, then health problems are minimized (WHO, 2015).

The total body water balance is the result of the balance between losses and the water intake. To maintain this balance, which is an essential condition to life, we must daily ingest an adequate amount of water, preventing the loss of moisture in the skin (PIANSMW, 2017). And if there are several ways to lose body water, there are only two ways to obtain: produce water via the metabolism and drink water. Metabolic production generally results from most of the oxidation reactions caused by nutrient metabolism (WHO, 2015).

The human body needs a series of mineral elements to play correctly their functions. The consumption of two liters of water a day represents contributing with more than 20 minerals and trace elements to the functioning of our body, which is equivalent to responding to between 5 and 8 percent of daily needs (Perrier et al., 2020).

Water is the most important molecule worldwide and covers most surfaces below atmospheric conditions. It is present in several states, such as vapor, liquid, and several amorphous and crystalline phases (Malenkov, 2009; Petrenko & Whitworth, 2002).

Planet Earth has two-thirds of its surface occupied by water – they are approximately 360 million km² out of a total of 510 million. However, 98% of the water available on the planet is salty. Only 3 percent of the water on the earth is fresh, and of this, more than 2 percent is locked away in the polar ice caps, glaciers, or deep groundwater aquifers and is therefore unavailable to satisfy the needs of man. Furthermore, *“less than 100,000km², just 0.3% of total fresh water reserves on earth”* is found in rivers, lakes, and swamps and is sufficiently accessible to be considered a renewable freshwater resource (Gleick, 1993, p. 3).

There are multiples uses of water, such as drinking; domestic supplies; supply industrial; agriculture; recreation and leisure; power

generation; navigation; slop dilution; landscape harmony; preservation of fauna; preservation of flora; and irrigation, among others (Marengo, 2008).

This valuable resource must be used for the benefit of Human without compromising the needs of ecosystems and the continuity of water-courses. Its economic value increases geometrically, but its availability decreases. Water fulfills multiple functions, and it is instilled with numerous meanings: It is concurrently an economic input, an esthetic reference, a religious symbol, a public good, a fundamental resource for public health, and a biophysical need for humans and ecosystems (Barnes & Alatout, 2012).

The growth and evolution of human culture and civilization have had a strong relationship with water resources. Ancient civilizations, such as the Egyptians, Romans, Venetian Empire, and the Omayyad dynasty, were all based upon sustainable water resources, which helped them to survive and thrive. The sustainability and development of past, and present, human societies have been conditioned by advances in water science, and by their use through engineering and technology (Seyedeh et al., 2021).

In fact, all living beings are fundamentally composed of water. Today, as in the past, citizens depend on water, either to evolve or to survive daily. Water is indispensable to life; without water, there is no life, at least in the form with which we know it. The so-called water cycle occurs then to preserve life. The Sun, as a great biological engine, evaporates the water from the seas and oceans, which in vapor form will constitute the clouds in the atmosphere. Upon returning to Earth in the form of rain or snow, water is distributed over the continents (PIANSMW, 2017). As Mishra and Dubey (2015, p. 325) argue *“humans depend on it. While demand –increases, supply clean water are diminishing due to mounting pollution of inland water ways and aquifers.”*

The earth's hydrological cycle links interactions between the atmosphere, lithosphere, biosphere, and anthroposphere, and it is also profoundly affected by human activities and socioeconomic development. With recent rapid

changes in climate and land use, the global water cycle is experiencing high levels of spatial and temporal variability, which has resulted in numerous water-related issues that pose challenges to human water security (Braga et al., 2014; Wang et al., 2010; Xia et al., 2017).

Summary

Water is the fundamental natural resource that supports life, ecosystems, and human society (Yang et al., 2021). Life on earth descends from water, and water is the lifeblood of our planet. Existence, and prosperity of the mankind, depends on access to safe water, and access to water has been the key to any sustainable civilization (Seyedeh et al., 2021).

Water is at the heart of sustainable development because it helps to reduce poverty, enables economic growth (imagine agriculture without water), and safeguards the environment (see nature reserves and the forest-run economy). From food to human and environmental health, water contributes to the improvement of social well-being and the growth of citizens and all living beings (Marengo, 2008).

However, water supply is finite and increasingly uncertain given the likely impacts of climate change and an increased demand for water as population increases, and agricultural and industrial activity expands (Bjornlund et al., 2013). Concerns are also escalating about water quality and the health of riparian ecosystems (UN, 1997).

The truth is water is used everywhere in people's daily lives and has a key role in the modern economy. Therefore, it is possible to guess that sustainable water management is one of the greatest challenges that man will face during the twenty-first century (Akamani & Wilson, 2011).

Cross-References

- Biodiversity: Sustainability
- Ecology and Ecosystem: Sustainability
- Water Problems

References

- Akamani, K., & Wilson, P. (2011). Toward the adaptive governance of transboundary water resources. *Conservation Letters*, 4(6), 409–416.
- Barnes, J., & Alatout, S. (2012). Water worlds: Introduction to the special issue of *social studies of science*. *Social Studies of Science*, 42(4), 483–488.
- Bjornlund, H., Zuo, A., Wheeler, S., Xu, W., & Edwards, J. (2013). Policy preferences for water sharing in Alberta, Canada. *Water Research and Economics*, 1(10), 93–100.
- Braga, B., Chartres, C., Cosgrove, W. J., da Cunha, L. V., Gleick, P. H., Kabat, P., Kadi, M. A., Loucks, D. P., Lundqvist, J., Narain, S., & Xia, J. (2014). *Water and the future of humanity: Revisiting water security*. Springer International: Calouste Gulbenkian Foundation.
- Gleick, P. H. (1993). An introduction to global fresh water issues. In P. H. Gleick (Ed.), *Water in crisis: A guide to the world's fresh water resources* (pp. 3–13). New York: Oxford Univ. Press.
- Malenkov, G. (2009). Liquid water and ices: Understanding the structure and physical properties. *Journal Physics: Condensed Matter*, 21(28), 283101.
- Marengo, J. A. (2008). Water and climate change. *Advanced Studies*, 22(63), 83–96.
- Mishra, R. K., & Dubey, S. C. (2015). Fresh water availability and it's global challenge. *International Journal of Engineering Science Invention Research & Development*, 2(6), 351–407.
- Perrier, E.T., Armstrong, L.E., Bottin, J.H., Clark, W.F., Dolci, A., Guelinckx, I., Iroz, A., Kavouras, S.A., Lang, F., Lieberman, H.R., Melander, O., Morin, C., Seksek, I., Stookey, J.D., Tack, I., Vanhaecke, T., Vecchio, M., & Péroneet, F. (2020). Hydration for health hypothesis: A narrative review of supporting evidence. *European Journal Nutrition*, 60(3), 1167–1180.
- Petrenko, V. F., & Whitworth, R. W. (2002). *Physics of ice*. Oxford: Oxford University Press.
- Portuguese Industrial Association of Natural and Spring Mineral Waters (PIANSMW). (2017). *White paper*. Lisbon: PIANSMW Editions.
- Schmidt, J. (2017). *Water: Abundance, scarcity, and security in the age of humanity*. New York: NYU Press.
- Seyedeh, H. H., Bozorg-Haddad, O., & Bocchiola, D. (2021). Water, culture, civilization, and history. In O. Bozorg-Haddad (Ed.), *Economical, political, and social issues in water resources* (pp. 189–216). Elsevier.
- UN (United Nations). (1997). *Governance for sustainable human development: An integrated paper on the highlights of four regional consultation workshops on governance for sustainable human development*. United Nations DP Policy Document. New York: UNDP.
- UN (United Nations). (2021). *Water: Sustainable development goal 6*. New York: UN.
- Versari, A., Parpinello, G. P., & Galassi, S. (2002). Chemometric survey of Italian bottled mineral waters by means of their labelled physico-chemical and

chemical composition. *Journal of Food Composition and Analysis*, 15(3), 251–264.

Wang, H., Yan, D. H., Jia, Y. W., Hu, D. L., & Wang, L. H. (2010). Subject system of modern hydrology and water resources and research frontiers and hot issues. *Advances in Water Science*, 21(4), 479–489.

WHO (World Health Organization). (2015). *Health through safe drinking water and basic sanitation*. http://www.who.int/water_sanitation_health/mdg1/en/. Accessed 30.01.2021.

Xia, J., Zhang, Y., Xiong, L., He, S., Wang, L., & Yu, Z. (2017). Opportunities and challenges of the Sponge City construction related to urban water issues in China. *Science China Earth*, 60(4), 652–658.

Yang, D., Yang, Y., & Xia, J. (2021). Hydrological cycle and water resources in a changing world: A review. *Geography and Sustainability*, 2(2), 115–122.

Further Readings

Outwater, A. (2008). *Water: A natural history*. New York: Basic Books.

Strang, V. (2015). *Water: Nature and culture*. Waterside: Reaktion Books.

UN (United Nations). (2006). *Water a shared responsibility: The United Nations world water development report 2*. Paris: (UNESCO) United Nations Educational, Scientific and Cultural Organization and Berghahn Books.

Valentine, H. R. (1967). *Water in the service of man* (852). London: Penguin Books.

Wagner, J. R. (2013). *The social life of water*. New York: Berghahn Books.

Water and Sanitation

► Hunger and Poverty

Water Problems

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Synonyms

Aridity; Drouth; Dryness; Dry spell; Dry weather; Lack of rain; Parchedness; Water shortage

Definition

Water problems address the lack of access to safe water supplies that requires a multi-dimensional approach, including water infrastructure investments, water management improvements and conservation, education, and awareness-raising programs to promote good hygiene practices and safe water use. It also expects political influence which will promote a cross-sectorial collaboration to ensure that water resources are managed sustainably and that the needs of all stakeholders are considered. In places or countries where water resources are scarce or unreliable, stakeholders may struggle to meet their basic needs for drinking, cooking, and sanitation. All these aspects could face a range of water-related diseases, such as cholera, typhoid, and dysentery, which can be life-threatening, particularly for vulnerable populations such as children, the elderly, and those with weakened immune systems and, especially, faces several negative impacts on human health, economic development, and social well-being.

What Are the Water Problems?

Currently, humanity faces problems with a complex dimension, caused by climate change. The impacts of climate change associated with water problems are very diverse from country to country and between regions due to the characteristics of each territory, variations in seasons, and the economic activities of each region and population (WHO 2002). The changes and impacts already noticed have brought high economic impacts and loss of human life in many areas of planet Earth. Projections related to climate change are increasingly worrying and alarming, especially with regard to the scarcity of water resources, which can lead to enormous losses for humanity (Safonov 2020). The availability of water resources will be the major challenge to future societies and to the environment under climate change (FAO 2015; Huang and Tao 2020).

In the context of global warming, variations in the atmospheric system have accelerated temporal and spatial changes in the water cycle (Taylor et al. 2013), as well as intensifying the global and regional water shortages (Schewe et al. 2014). Climate change is characterized by rising temperatures and more common extreme events such as heatwaves, heavy rains, floods, sudden droughts, and persistent droughts who have become critical concerns for the scientific community, governments, and the public (IPCC 2014; Hao et al. 2018).

Furthermore, the vulnerability of water resources to the threats of climate change underscores the urgent need for action to mitigate and adapt to these impacts (Huang and Tao 2020). Under climate warming, the global terrestrial cryosphere has undergone changes involving glacier retreat, snow reduction, and permafrost degradation, all of which affect the water cycle (Ding et al. 2020). These impacts are in addition to those created by human activities (Vörösmarty and Dork 2000; Wang et al. 2010). Humans affect the water cycle through greenhouse gas emissions (Piao et al. 2007; IPCC 2014), as well as through water conservation projects and water consumption activities (Haddeland et al. 2014; Tang et al. 2015; Wada et al. 2017). Rapid population growth and increased consumption levels have put unprecedented pressure on the world's water resources (Dosdogru et al. 2020).

On the other hand, the lack of safe drinking water in quantity and quality is another problem to humanity. The growth of population density and industrialization have led to an increase in the type of contaminants in water bodies, a situation that puts public health at risk through inadequate sanitation and hygiene, which in turn causes diseases in human beings. The wastewater created in developing countries is discharged without any treatment, polluting surface waters and causing the transmission of waterborne diseases (UNESCO 2018). The physicochemical and microbiological contaminants in water bodies are contributing agents of diseases such as malnutrition, compromised immune system, physical growth and cognitive development, chronic

disability, and even death. Besides, health problems could be intensified in the future by the growth in the frequency and strength of tropical storms, floods, and droughts caused by climate change (Pichel et al. 2019).

The Organization for Economic Co-operation and Development (OECD) and the United Nations Environment Programme (UNEP) have highlighted the critical role water governance plays in sustainability issues (OECD 2015; United Nations 2020). The OECD (2015; Venzce et al. 1997) has introduced good governance practices to address water crises, as governance gaps hinder the design and implementation of technical and non-technical solutions identified in water policies. In the same line, water sustainability issues have been included in the UN 2030 Agenda and its 17 Sustainable Development Goals (SDGs), which provide a common framework for measuring sustainable development from a social, economic, and environmental perspective (Glass and Newig 2019; Woodhouse and Muller 2017).

In contemporary society, uncertainties and risks are dominant concerns in the business environment, as well as in the management of public assets. Increasing problems of water scarcity and drought clearly require a more sustainable approach to water resource management across the world. This need is, already, reflected in water-related policy and legislation. Economic activities in human-oriented systems inevitably result in freshwater consumption and wastewater discharge; they would exacerbate water scarcity problems through reducing the available amount of freshwater and deteriorating the quality of usable water (Chengyu et al. 2020).

Summary

Water is the driver of nature and its accessibility and quality often constitute a limit on economic development and human welfare. For this primacy, the mission of providing water in sufficient quantity and suitable quality to the world's human population while assuring its availability for

future needs constitutes one of the distinguished challenges of the twenty-first century (Tarhule 2017).

The most significant resource on the planet is water, no human or any other life could live without water. However, water resources are becoming progressively scarce. This scarcity, joined with the numerous competing uses for water, creates complex choices over how water resources must be allocated (Grafton et al. 2013; Zurita et al. 2015). Many regions in the world have been facing severe water scarcity problem due to economic development and urbanization (Feng et al. 2014; Liu et al. 2020). By 2050, urban surface-water deficit was projected to be 6.75 million tons, because of the imbalance between water supply and demand (Flörke et al. 2018).

All these problems are increasingly aggravated by climate change, which directly affects the hydrological cycle and consequently the quantity and quality of water resources. The water is a general interest feature, so implementing technologies and practices that either conserve water or use it more efficiently plays a key role in the demand-side approach to water management. It is critical to integrate the protection and sustainable management of water resources into other community policies to ensure their long-term health and viability. Water is a finite resource, and its availability and quality are essential for a wide range of human activities, from agriculture and industry to household use and recreation (Pichel et al. 2019).

Cross-References

- Biodiversity: Sustainability
- Blue Economy
- Conservation: Sustainability
- Environment and Ethics in Sustainability
- Sustainability and Vulnerability
- Sustainability Resilience
- Water

References

- Chengyu, H., Guohe, H., Lirong, L., Yongping, L., Xiaoyue, Z., & Xinli, X. (2020). Multi-dimensional diagnosis model for the sustainable development of regions facing water scarcity problem: A case study for Guangdong, China. *Science of the Total Environment*, 734, 2–12.
- Ding, Y., Zhang, S., & Cheng, R. (2020). Cryospheric hydrology: Decode the largest freshwater reservoir on earth. *Bulletin of the Chinese Academy of Sciences*, 35(4), 414–424.
- Dosdogru, F., Kalin, L., Wang, R., & Yen, H. (2020). Potential impacts of land use/cover and climate changes on ecologically relevant flows. *Journal of Hydrology*, 584(1), 124654.
- FAO (Food and Agriculture Organization). (2015). 2050: Water scarcity in many parts of the world threatens food security and livelihoods. <http://www.fao.org/news/story/pt/item/283456/icode/>. Accessed 12 May 2021.
- Feng, K., Hubacek, K., Pfister, S., Yu, Y., & Sun, L. (2014). Virtual scarce water in China. *Environmental Science Technology*, 48(14), 7704–7713.
- Flörke, M., Schneider, C., & McDonald, R. (2018). Water competition between cities and agriculture driven by climate change and urban growth. *Nature Sustainability*, 1(1), 51–58.
- Glass, L. M., & Newig, J. (2019). Governance for achieving the Sustainable Development Goals: How important are participation, policy coherence, reflexivity, adaptation and democratic institutions? *Earth System Governance Journal*, 2, 100031.
- Grafton, R. Q., Pittock, J., Tait, M., & White, C. (2013). *Water security, economics, and governance*. Melbourne: Tilde University Press.
- Haddeland, I., Heinke, J., Biemans, H., Eisner, S., Flörke, M., Hanasaki, N., Konzmann, M., Ludwig, F., Masaki, Y., Schewe, J., & Stacke, T. (2014). Global water resources affected by human interventions and climate change. *Proceedings of the National Academy of Sciences of the United States of America*, 111(9), 3251–3256.
- Hao, Z., Singh, V. P., & Hao, F. (2018). Compound extremes in hydroclimatology: A review. *Water*, 10(6), 718, 1–24.
- Huang, C., & Tao, J. (2020). Chapter 4 – Water-related problems with special reference to global climate change in China. In P. Singh, Y. Milshina, K. Tian, D. Gusain, & J. P. Bassin (Eds.), *Water conservation and wastewater treatment in BRICS Nations* (pp. 61–82). Amsterdam: Elsevier.
- IPCC (Intergovernmental Panel on Climate Change). (2014). *Climate change 2013: The physical science basis: Working group I contribution to the fifth assessment report of the intergovernmental panel on climate change*. Cambridge: Cambridge University Press.

- Liu, Y., Chen, B., Wei, W., Shao, L., Li, Z., Jiang, W., & Chen, G. (2020). Global water use associated with energy supply, demand and international trade of China. *Applied Energy*, 257(C), 113992.
- OECD (Organization for Economic Co-operation and Development). (2015). *The OECD principles on water governance*. Paris: OECD Publishing.
- Piao, S., Friedlingstein, P., Ciais, P., de Noblet-Ducoudré, N., Labat, D., & Zaehle, S. (2007). Changes in climate and land use have a larger direct impact than rising CO₂ on global river runoff trends. *Proceedings of the National Academy of Sciences of the United States of America*, 104(39), 15242–15247.
- Pichel, N., Vivar, M., & Fuentes, M. (2019). The problem of drinking water access: A review of disinfection technologies with an emphasis on solar treatment methods. *Chemosphere*, 218, 1014–1030.
- Safonov, G. (2020). Chapter 2 – Water-related problems with special reference to global climate change in Russia. In P. Singh, Y. Milshina, K. Tian, D. Gusain, & J. P. Bassin (Eds.), *Water conservation and wastewater treatment in BRICS Nations* (pp. 23–35). Amsterdam: Elsevier.
- Schewe, J., Heinke, J., Gerten, D., Haddeland, I., Arnell, N. W., Clark, D. B., Dankers, R., Eisner, S., Fekete, B. M., Colón-González, F. J., & Gosling, S. N. (2014). Multimodel assessment of water scarcity under climate change. *Proceedings of the National Academy of Sciences of the United States of America*, 111(9), 3249–3250.
- Tang, Q., Huang, Z., Liu, X., Han, S., Leng, G., Zhang, X., & Mu, M. (2015). Impacts of human water use on the large-scale terrestrial water cycle. *Advances in Earth Science*, 30(10), 1091–1099. (in Chinese).
- Tarhule, A. (2017). The future of water: Prospects and challenges for water management in the 21st century. In *Competition for water resources, experiences and management approaches in the US and Europe, part 4* (pp. 442–454). Amsterdam: Elsevier.
- Taylor, R. G., Todd, M. C., Kongola, L., Maurice, L., Nahozya, E., Sanga, H., & MacDonald, A. M. (2013). Evidence of the dependence of groundwater resources on extreme rainfall in East Africa. *Nature Climate Change*, 3(4), 374–378.
- UN (United Nations). (2020). *SDG good practices. A compilation of success stories and lessons learned in SDG implementation*. New York: UN.
- UNESCO. (2018). *The United Nations world water development report 2018. Nature based, Solutions for Water*.
- Venzel, L. V., Arrowood, M., Hurd, M., Sobsey, M. D. (1997). Inactivation of *Cryptosporidium parvum* Oocysts and *Clostridium perfringens* Spores by a Mixed-Oxidant Disinfectant and by Free Chlorine. *Applied and Environmental Microbiology*, 63(4), 1598–1601.
- Vörösmarty, C. J., & Dork, S. (2000). Anthropogenic disturbance of the terrestrial water cycle. *Bioscience*, 50(9), 753–765.
- Wada, Y., Bierkens, M. F., Roo, A. D., Dirmeyer, P. A., Famiglietti, J. S., Hanasaki, N., Konar, M., Liu, J., Müller Schmied, H., Oki, T., & Pokhrel, Y. (2017). Human–water interface in hydrological modelling: Current status and future directions. *Hydrological Earth System Science*, 21, 4169–4193.
- Wang, J., Hong, Y., Gourley, J., Adhikari, P., Li, L., & Su, F. (2010). Quantitative assessment of climate change and human impacts on long-term hydrologic response: A case study in a sub-basin of the Yellow River. *China International Journal Climatology*, 30, 2130–2137.
- WHO (World Health Organization). (2002). Water and health in Europe. *A joint report from the European Environment Agency and the WHO Regional Office for Europe*, 93. New York: WHO Regional Publications European Series.
- Woodhouse, P., & Muller, M. (2017). Water governance-an historical perspective on current debates. *World Development*, 92, 225–241.
- Zurita, M. L. M., Thomsen, D. C., Smith, T. F., Lyth, A., Preston, B. L., & Scott, B. (2015). Reframing water: Contesting H₂O within the European Union. *Geoforum*, 75, 170–178.

Further Reading

- Barlow, M. (2009). *Blue covenant: The global water crisis and the coming battle for the right to water*. New York: McClelland & Stewart.
- Chartres, C., & Varma, S. (2010). *Out of water: From abundance to scarcity and how to solve the world's water problems*. New York: FT Press.
- Grafton, Q. R., Wyrwoll, P., White, C., & Allendes, D. (2014). *Global water issues and insights*. New York: ANU Press.
- Martin-Ortega, J., Ferrier, R. C., Gordon, I. J., & Khan, S. (2015). *Water ecosystem services: A global perspective*. Paris: UNESCO Publishing.
- Pearce, F. (2018). *When the rivers run dry, fully revised and updated edition: Water-the defining crisis of the twenty-first century*. London: Beacon Press.
- Solomon, S. (2010). *Water: The epic struggle for wealth, power, and civilization* (p. 624). New York: Harper.

Water Shortage

► Water Problems

Weak Sustainability

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Synonyms

[Shallow environmentalism](#)

Definition/Description

The issue of sustainability has received various treatments over the past two decades. A spectrum of perspectives has been identified ranging from a technocentric “very weak sustainability” position to an ecocentric “very strong sustainability” position (Gibbs et al. 1998). Weak sustainability (shallow environmentalism) emphasizes the idea of the quantitative side of growth (Balaceanu and Apostol 2014). Based on Robert M. Solow’s (1986, 1993) ideas, weak sustainability implies a constant amount of total capital assets (resources) over the time, while natural and produced (manmade, manufactured) capital is interchangeable (Turner 1993). Some resources may be reduced because of the increase of other ones (Neumayer 2003).

Following the definition proposed by Pearce and Atkinson (1993), an economy is considered sustainable if its savings rate is greater than the combined depreciation rate on natural and produced capital (Cabeza Gutiérrez 1996). Under this notion, sustainability is equivalent to non-decreasing total capital stock. This is referred to as “weak” sustainability since no restrictions on the degree of substitutability between natural and produced capital are introduced, and thus natural capital receives no special treatment. Consistent with this interpretation, Pearce and Atkinson (1993) presented a weak sustainability index as

an economic indicator of sustainable development. The weak sustainability index is defined as the difference between the savings rate and the sum of the depreciation rate of natural and produced capital. That is, an economy is considered to be “weakly” sustainable if and only if the weak sustainability index is greater than zero (Cabeza Gutiérrez 1996).

Introduction

Sustainability includes many dimensions related to ecology, society, economics, technology, and other system aspects (Cabeza Gutiérrez 1996; McMichael et al. 2003). The main idea is trying to satisfy the needs of the present without prejudicing the following generations’ capacity of equally satisfying their own needs (WCED 1987). Barr (2016) argues that the Brundtland definition has a technocentric perspective, and thus, it is an anthropocentric ideal (Manning 1990). A definition of sustainable development that many economists may accept is “development [that] does not decrease the capacity to provide non-declining per capita utility for infinity” (Neumayer 2003, p. 7). Based on the neoclassical logic, the concept of sustainable growth receives a quantitative understanding (Balaceanu and Apostol 2014). According to this approach, the concept of sustainability seeks the optimal extraction of nonrenewable natural resources. It also refers to the use of innovative technologies which have certainly increased the capacity of the environment and which should compensate the negative impact on the environment. Such sustainability also supports the free market, exploitation of resources, and growth focused on produced (manmade, manufactured) capital (Davies 2013).

The need to develop sustainability indicators is central when assessing whether an economy is sustainable or not. Within the field of economics, this search for an operational definition of sustainable development has led, among many other contributions, to the concepts of strong and weak sustainability (Cabeza Gutiérrez 1996). Strong sustainability regards natural capital as providing

Weak Sustainability, Table 1 Features of very weak and weak sustainability (Davies 2013; Gibbs et al. 1998; Pearce et al. 1994; O’Riordan 1996; Turner 1993, 2001; Williams and Millington 2004)

Perspectives	Technocentric (techno-optimistic); anthropocentric (human centered)	
Sustainability labels	Very weak (weaker): problems that arise will be solved by modifying existing structures through technological development	Weak: by changing some processes there will be less tangible problems dealt with
Green labels	Resource exploitative, growth-orientated position	Resource conservationist and “managerial” position
Ethics	Traditional ethical justification for the right of the present generation to use nature. Nature has instrumental value, and it is seen as a resource to which human beings have a right of dominion	Expanded ethical principles: taking care of others and the idea of intra- and intergenerational equity Instrumental value in nature
Type of Economy	Economic growth is a valid measure of “progress,” unfettered free market	Green economy and green markets guided by economic incentives

some functions that are not substitutable by produced capital. These functions, labeled “critical natural capital,” are stressed by defining sustainability as leaving the future generations a stock of natural capital not smaller than the one enjoyed by the present generation. That is, sustainability is viewed in terms of non-decreasing natural capital. Weak sustainability implies a constant amount of total capital assets (resources) over the time, while natural and produced (manmade, manufactured) capitals are interchangeable (Solow 1986, 1993). The strong and weak concepts outlined above can be considered to represent two opposing ends of sustainability. This article focuses on the second of these views (Table 1).

Key Issues

Weak sustainability is based on the work of two neoclassical economists: Solow (1986, 1993) and Hartwick (1977, 1978). It can be interpreted as the extension of economic welfare (Neumayer 2003) where tradeoffs are still possible (Gibbs et al. 1998; Turner 1993). Advocates of weak sustainability (Solow 1993) argue that a development path is sustainable if it provides constant or increasing level of utility or welfare to successive generations. Weak sustainability requires the maintenance of the total capital stock through time (Turner 1993). The total capital stock is composed of produced or reproducible capital, human capital, or the stock of knowledge and

skills, natural capital or exhaustible, and renewable resources, together with environmental structures, functions and services (Turner 2000). Weak sustainability is related to the precautionary principle or safe minimum standards. According to this principle, some natural capital is critical, that is, nonsubstitutable (Turner 1993). It limits, therefore, set on natural capital usage and see that it should be possible to substitute natural capital for produced capital (Gibbs et al. 1998). Weak sustainability favors green economy and green markets guided by economic incentives (Davies 2013). Green economy is an economy that results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcities (UNECE 2018).

In weak sustainability, ethical principles include taking care of others and the idea of intergenerational equity (Davies 2013). Unlike Pezzey (1992), Davies (2013) argues that weak sustainability includes also the idea of intragenerational equity. The Hartwick’s rule (Hartwick 1978) is used to buttress the weak sustainability position by regulating intergenerational capital bequests. The rule lays down that the rent obtained from the exploitation of the natural capital stock by the current generation should be reinvested in the form of reproducible capital which forms the future generations’ inheritance. This inheritance transfer should be at a sufficient level to guarantee non-declining real consumption (well-being) through time. In weak sustainability it is seen that by

changing some processes, there will be less tangible problems dealt with (Davies 2013). It also argues that one needs to expand the stock of resources. This can be done by developing renewable resources, creating substitutes for nonrenewable resources, making more effective use of existing resources, and/or by searching for technological solutions to problems such as resource depletion and pollution (Williams and Millington 2004).

Beside the term “weak sustainability,” it has been used the terms “very weak sustainability” (Turner 1993, 2001) or “weaker sustainability” (Williams and Millington 2004). Advocates of very weak sustainability see that nature has predominantly instrumental value (O’Riordan 1996) and support traditional ethical justification for the right of the present generation to use nature (Davies 2013). They also believe that economic growth is a valid measure of “progress” (Williams and Millington 2004) and that development should be based on unfettered free market (Davies 2013). Based on the idea of very weak sustainability, overall stock of capital assets remains stable over time, and complete substitution between human and natural capital is possible. There is a link between willingness to pay and sustainable development.

As weak sustainability, also very weak sustainability has a technocentric or techno-optimistic perspective (cf. Turner 1993). Technocentrists are optimistic about the extent of current and future substitution possibilities between different forms of capital (including environmental resources) (Pearce et al. 1994). At the heart is an optimistic belief that any problems that arise will be solved by modifying existing structures through technological development (Davies 2013). It is, therefore, thought that economic growth will probably not be overly constrained either by absolute or relative resource scarcities and that individual utility functions are smooth, signifying extensive substitution between human wants (Williams and Millington 2004).

Based on O’Riordan’s ideas (1996), it can be stated that both weak and very weak sustainability adopt anthropocentric (human-centered) ideal on the relationship between people and nature. The

main anthropocentric ideas are (1) people are separated from nature, (2) nature is a “resource” to be used for the benefit of society or individuals, and (3) people have the right to dominate, to control, and to manage nature for the benefit of people (Williams and Millington 2004). These kind of thoughts also support the free market (Davies 2013) which is based on the idea that as nonrenewable resources get scarce, their prices will rise and substitutes will be encouraged. The problem with this solution is that the resources that are most threatened are those without markets, for example, such as the receiving capacities of the oceans, atmosphere and stratosphere, and the greater part of the world’s biological diversity (Pearce et al. 1994).

Summary

The studies reveal the existence of two interpretations of the environment, namely, from an environmental perspective and from a perspective of an economic development, reflecting different positions. A spectrum of perspectives can be identified ranging from a technocentric “very weak sustainability” position to an ecocentric “very strong sustainability” position. Weak sustainability positions assume that there is a very high degree of substitutability between human capital and natural one. Strong versions of sustainability emphasize the assumption of almost infinite substitutability of resources. Under weak versions of sustainability, the market and the preservation of the status quo play a much greater role than in strong versions.

Weak sustainability stresses the adjustment of existing activities within existing operational boundaries. It represents resource conservationism and “managerial” position. It requires the maintenance of the total capital stock through time by regulating intergenerational capital bequests and expanding the stock of resources, e.g., by developing renewable resources, creating substitutes for nonrenewable resources, making more effective use of existing resources, and/or by searching for technological solutions to problems such as resource

depletion and pollution. So, by changing some processes there will be less tangible problems dealt with. What concerns on ethical principles, weak sustainability stresses the idea of instrumental value in nature and intergenerational equity. According to some researchers, also intragenerational equity is covered by the core ethic of weak sustainability. Green economy and green markets guided by economic incentives are supported by advocates of weak sustainability.

Very week (weaker) sustainability sees that problems that arise will be solved by modifying existing structures through technological development. It stresses that resources are exploitative, and thus, it has growth-orientated position. Traditional ethical justification for the right of the present generation to use nature is supported. So, nature has instrumental value, and it is seen as a resource to which human beings have a right of dominion. The advocates of very weak sustainability think that economic growth is a valid measure of “progress” and they emphasize unfettered free market.

Very week and weak sustainability are seen to employ a technocentric and an anthropocentric perspective. The core idea of the technocentric perspective is that any problems that arise will be solved through technological development. In the anthropocentric perspective, it is seen that nature is predominantly a resource to which people have a right to dominate. The difference between the concepts of very weak and week sustainability lies in how nature is used and how much use of nature is allowed to satisfy human needs.

Cross-References

- [Strong Sustainability](#)
- [Sustainable Development](#)

References

- Balaceanu, C., & Apostol, D. (2014). The perspective of concept sustainability. 5th world conference on educational sciences – WCES 2013. *Procedia - Social and Behavioral Sciences*, 116, 2257–2261. <https://doi.org/10.1016/j.sbspro.2014.01.555>.
- Barr, S. (2016). *Environment and society: sustainability, policy and the citizen*. New York: Routledge. ISBN: 978-0-7546-4343-2 (hbk), ISBN: 978-1-3155-7998-6 (ebk).
- Cabeza Gútes, M. (1996). The concept of weak sustainability. *Ecological Economics*, 17, 147–156.
- Davies, G. R. (2013). Appraising weak and strong sustainability: Searching for a middle ground. *Consilience: The Journal of Sustainable Development*, 10(1), 111–124.
- Gibbs, D. C., Longhurst, J., & Braithwaite, C. (1998). ‘Struggling with sustainability’: Weak and strong interpretations of sustainable development within local authority policy. *Environment and Planning A*, 30, 135–1365.
- Hartwick, J. M. (1977). Intergenerational equity and the investing of rents from exhaustible resources. *The American Economic Review*, 67(5), 972–974. http://lib.cufe.edu.cn/upload_files/other/4_20140527033434_50_hartwick.pdf. Accessed 27 Nov 2018.
- Hartwick, J. M. (1978). Substitution among exhaustible resources and intergenerational equity. *The Review of Economic Studies*, 45(2), 347–354. <https://doi.org/10.2307/2297349>. Accessed 27 Nov 2018.
- Manning, E. W. (1990). Presidential address: Sustainable development, the challenge. *The Canadian Geographer*, 34(4), 290–302.
- McMichael, A. J., Butler, C. D., & Folke, C. (2003). New visions for addressing sustainability. *Science*, 302, 1919–1920.
- Neumayer, E. (2003). *Weak versus strong sustainability: Exploring the limits of two opposing paradigms*. Cheltenham/Northampton: Edward Elgar Publishing. <https://doi.org/10.4337/9781781007082>.
- O’Riordan, T. (1996). Environmentalism on the move. In I. Douglas, R. Huggett, & M. Robinson (Eds.), *Companion encyclopaedia of geography* (pp. 449–476). London: Routledge. <http://www.univpgri-palembang.ac.id/perpus-fkip/Perpustakaan/East%20Phylosopy/Economic%20Geography/COMPANION%20ENCYCLOPEDIA%20OF%20GEOGRAPHY.pdf>. Accessed 28 Nov 2018.
- Pearce, D. W., & Atkinson, G. (1993). Capital theory and the measurement of sustainable development: an indicator of weak sustainability. *Ecological Economics*, 8, 103–108.
- Pearce, D., Turner, R. K., O’Riordan, T., Adger, N., Atkinson, G., Brisson, I., Brown, K., Dubourg, R., Fankhauser, S., Jordan, A., Maddison, D., Moran, D., & Powell, J. (1994). *Blueprint 3: Measuring sustainable development*. London: Earthscan.
- Pezzey, J. (1992). *Sustainable development concepts: An economic analysis* (World Bank Environment Paper, 2). Washington, DC: The World Bank. https://www.researchgate.net/publication/243768263_'Economic_Analysis_of_Sustainable_Growth_and_Sustainable_Development. Accessed 17 Dec 2018.
- Solow, R. M. (1986). On the intergenerational allocation of natural resources. *Scandinavian Journal of Economics*, 88(1), 141–149. <https://doi.org/10.2307/3440280>.

- Solow, R. (1993). An almost practical step toward sustainability. *Resources Policy*, 19, 162–172. https://haskayne.ucalgary.ca/files/haskayne/RobertSolow_AnAlmostPracticalStepTowardSustainability_Sep93.pdf. Accessed 23 November 2018.
- Turner, R. K. (1993). Sustainability: Principles and practice. In R. K. Turner (Ed.), *Sustainable environmental economics and management: Principles and practice* (pp. 3–36). London: Belhaven Press.
- Turner, R. K. (2000). *Sustainable development and climate change* (CSERGE working paper PA 95-01). Centre for Social and Economic Research on the Global Environment University of East Anglia and University College London. ISSN 0967-8875. <https://pdfs.semanticscholar.org/4664/fa9b297744d909adb5983faafe6d5c3a17d2.pdf>. Accessed 23 Nov 2018.
- Turner, R. K. (2001). The place of economic values in environmental valuation. In J. Bateman & K. G. Willis (Eds.), *Valuing environmental preferences, theory and practice of the contingent valuation method in the US, EU, and developing countries* (pp. 17–41). Oxford: Oxford University Press. ISBN 0-19-924891-5.
- UNECE (The United Nations Economic Commission for Europe). (2018). What does green economy mean? <https://www.unece.org/sustainable-development/green-economy/what-does-green-economy-mean.html>. Accessed 6 Dec 2018.
- WCED (World Commission on Environment and Development). (1987). *Our common future*. http://mom.gov.af/Content/files/Brundtland_Report.pdf. Accessed 27 Nov 2018.
- Williams, C. C., & Millington, A. C. (2004). The diverse and contested meanings of sustainable development. *The Geographical Journal*, 170(2), 99–104.

Weapons Export

- [Arms Export](#)

We-conomy

- [Collaborative Consumption](#)

WEF

- [World Economic Forum \(Davos\)](#)
- [World Economic Forum \(Davos\) II](#)

Wellness Policies

- [Corporate Family Responsibility](#)

Whistleblower

- [Whistleblowing and CSR](#)

Whistleblowing

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Synonyms

[Corruption warning](#); [Disclosure](#); [Integrity warning](#); [Raising awareness](#); [Reporting wrongdoing](#)

Definition

According to Collins Dictionary (n.d.), “whistleblowing is the act of telling the authorities or the public that the organization you are working for is doing something immoral or illegal.” The act is called whistleblowing, and the person doing this is called a whistleblower. The definition is simple and does not present the context in which someone decides to go public. Scaturro (2018, p. 2) highlights that there is no “unanimous legal definition” of the term, this being sometimes presented differently by “academics, international and regional organizations.” According to Transparency International (n.d.), whistleblowing means disclosing “neglect or abuses within an organization . . . that threaten public interest.” In these conditions, there appeared the need to have protection laws for whistleblowers that suffer the consequences for revealing acts of corruption or other immoral or illegal acts in the companies or

institutions where they work. Jubb (1999, p. 77) mentions the long history of the term (more than 50 years before he wrote the article) and considers that there are numerous and unfortunate situations in which whistleblowers are misjudged as corrupt informers. Still, whistleblowers are at the opposite pole; they are driven by integrity when disclosing the wrongdoing in an organization.

Introduction

In order to have a better picture of the whistleblowing phenomenon, we have to understand the term from different perspectives: Who are the whistleblowers? What are their motives? Which are the conditions required by an action to be considered as whistleblowing? In a simplistic way, the motives behind the whistleblowing can be related to morality or to the personal interests of whistleblowers. Ideally, whistleblowing should be driven by the honesty and morality of an individual, but in many cases, it is also related with other interests.

Baltaci and Balci (2017, p. 39) consider that there are individual (protection or individual gains that can be material or spiritual), organizational (to achieve a better position in the organization, to “punish” the organization for its behavior), and social reasons (having in mind the public interest and the well-being of the society) for becoming a whistleblower.

Considering these reasons, a company should understand the importance of protecting whistleblowers and offering them a proper background in which the employees feel safe to disclose the wrongdoing. According to Stuben and Welch (2020), the whistleblowing is beneficial for the company on the long term, the authors showing that the internal whistleblowing “is associated with fewer and lower amounts of government fines and material lawsuits.” Even if the company’s image will suffer after the disclosure, this is the right path to follow. A strong management with clear strategies of communication will succeed to recover from this. A reference to the benefits of whistleblowing for a company is made by Yeh (2011) who mentions a whistleblowing

policy that requires the employees to first disclose the wrongdoing internally and only afterward externally. This policy not only reduces the damage on the reputation of the organization, but also maintains a good relationship among employees and employers.

Latan, Jabbour, and de Sousa Jabbour (2019) present the triangle of whistleblowing, analyzing the relationship between the intentions of whistleblowers to disclose the wrongdoing and factors such as opportunity (having the appropriate channels for reporting anonymously), rationalization, and financial incentives (being rewarded for disclosing the wrongdoing). The authors mention that their empirical research is conducted in the Indonesian context in which whistleblowers are not encouraged to report wrongdoing and do not feel protected and that their study is focused on auditors. Sørensen, Gaup, and Magnussen (2020) also refer to the motivation factors that can increase the willingness of employees in revealing corruption in their organization. The study focused on the Norwegian municipalities revealed that the most important factors are recognition from their supervisors and having more accessible and safe channels for reporting wrongdoing.

Oran and Ünsar (2020) highlight that whistleblowing is strongly influenced by the leadership style. Thus, a manager that is more open and adopts an ethical behavior encourages employees to speak up and report illegal activities or behaviors in the organization. Seeler, Fuchs, Stöckl, and Sixl-Daniell (2019, p. 219) appreciate that “strict governance processes are strong facilitators for effective whistleblowing.” The authors consider that whistleblowing is part of the organizational culture and is also influenced by it.

Ethics management is a part of the management in which ethics is incorporated in the organizational climate using different tools. One of these is having precise whistleblowing procedures and training the employees to know how to react when they are faced with ethical dilemmas. Besides these procedures, a company should have other tools: a code of conduct or an ethical code that should be disseminated to all employees, an ethical committee for preventing

the wrongdoing, ethical trainings for preparing the employees to deal with ethical problems and dilemmas, a dedicated ethical hotline for whistleblowers to make them feel safe from retaliation, and an ethical audit for evaluating the ethical climate in an organization. All these should prevent the wrongdoing, but if there are ethical problems in a company and an employee finds out or is a witness of those problems, whistleblowing should be encouraged in order to put an end to illegal or immoral activities in a company for the well-being of everyone involved (employees, community, public authorities, and the company itself).

Whistleblowing Classification

Miceli and Near (1992, p. 31) mention three elements that are useful in establishing whether a behavior is considered whistleblowing and of which type. These are: “employee concerns,” “political behavior,” and “prosocial behavior and organizational citizenship.” According to the authors, disclosing a behavior that is immoral or illegal is considered whistleblowing when the whistleblower stays in the organization and decides to speak up against it and can be internal (when disclosing the wrongdoing to someone inside the company who can take the appropriate measures) or external (when disclosing the wrongdoing to someone outside the company).

The two types of whistleblowing (internal and external) could occur separately but also in the same case. For example, when a whistleblower discloses the wrongdoing internally but there is no solution provided and the wrongdoing continues, he or she can address the problem publicly becoming an external whistleblower. Johnson (2003, p. 4) considers whistleblowing only as external appreciating that the whistleblower should go “to parties outside the organization,” this being one of the conditions for an act to be considered as whistleblowing. On the contrary, De George (1986) appreciates that the whistleblowing is moral only when the whistleblowers first disclose the bad behavior in

the organization to a supervisor or to someone inside the entity.

There are differences regarding the phenomenon of whistleblowing, its definition, or classification. Some countries use different terms, some having a bad connotation as the meaning attached to this behavior. According to Transparency International (2013), there are “positive, negative, neutral or none” connotations to the term *whistleblower* in the EU countries.

Sometimes, whistleblowing is seen as a political behavior (Miceli and Near 1992) because of the motives and personal interests that stay behind whistleblowers’ actions. Not always, even if ideally it would be desirable to be driven only by altruistic reasons, whistleblowers aim the public interest of the community. In some cases, they have their own agenda. So, even if the consequences are good and they contribute to saving the situation from the illegal or immoral activities in an organization, the motives are not always pure. This reminds of the Kantian and utilitarianism theories that classify an act as being bad or wrong considering the motives (in Kantianism, bad intentions mean that the act is wrong) and the results of an act (in utilitarianism, if the result is good for the public, it does not matter which were the intentions).

According to Nan (2017), there are four types of whistleblowing: internal and external according to the recipient of the disclosure, and open and anonymous if the identity of the whistleblower is revealed or not during the process. The author also addresses the problems of the internal conflicts faced by the whistleblowers in terms of loyalty (to the company, the public, and the profession). We could also add the loyalty to someone’s moral compass.

Whistleblowers’ Protection

Transparency International (2013) published a report about whistleblowing in Europe, and the laws meant to protect whistleblowers from retaliation after disclosing the wrongdoing. These laws are not only for protection but also for encouraging whistleblowers to speak up about the illegal or

immoral problems they are aware of in the companies or institutions where they work. Transparency International appreciates that there are three classes of protection laws in EU countries: advanced legislation for “providing comprehensive” procedures that protect whistleblowers (in Luxembourg, Romania, Slovenia, and UK), “partial provisions” (in Austria, Belgium, Cyprus, Denmark, Estonia, Czech Republic, France, Germany, Hungary, Ireland, Italy, Latvia, Malta, Netherlands, Poland, and Sweden), and “none or very limited” procedures (in Bulgaria, Finland, Greece, Lithuania, Portugal, Slovakia, and Spain).

Loyens and Vandekerckhove (2018) analyze the legal framework for whistleblowing from an international perspective and conclude that some countries have separate legislation for public and private sectors (Australia, South Korea, USA, and Israel), others only for public sector such as in Belgium (we can find this country under the “partial provisions” class in Transparency International’s report from 2013), and others that address both sectors in the same legislation (Ireland, France, Norway, UK, Serbia, and the Netherlands). We notice that most of the latter are in the “partial provisions” class (if we refer strictly to the EU countries) with one exception – UK that has a comprehensive legislation according to Transparency International.

Having a comprehensive law does not always translate into an exceptional application of it. The laws create the premises, but these should be communicated to the employees, helping them to understand that they are protected if they become whistleblowers. Puiu and Barbu (2015) present the situation of Romania, a country with a comprehensive legislation but with few people knowing about the law that exists since 2004 (Law no. 571/2004). Gamberini (2013) presents some cases of whistleblowing from Germany and Italy where the whistleblowers found justice after more than 6 years. All these cases show that having a good law is not enough for protecting whistleblowers. The most important factor in protecting them is disseminate the laws among the citizens and create the background for them to act and use the law in their favor.

Importance of Whistleblowing

The benefits brought by whistleblowing consist in having a more trustworthy climate in organizations. If the whistleblowers are not afraid to speak up, this is finally translated into a cleaner community. On the short term, organizations may suffer a damage to their image, but on the long term, they will benefit from having a more ethical climate. The advantages brought by whistleblowing are highlighted by Makhija and Kulshrestha (2018): shareholders’ trust in the company, greater transparency, protection for all actors involved, and diminished potential risks in the future. The authors also present the downsides of whistleblowing, but all of them refer to downsides for whistleblowers not for the company.

It is difficult to eradicate corruption or all immoral/illegal activities, but a company’s management can apply some measures to reduce them and diminish the bad consequences on its image: implementing various tools from ethics management at the organizational level (ethical codes, committees, audits, trainings, ethical hotlines, and whistleblowing procedures), communicating them to the employees and the management, creating a safe environment for the whistleblowers where they will not be afraid of retaliation and will be encouraged to speak up (anonymous hotlines, mail boxes), making the process easy and simple, applying the whistleblowers’ protection law of the country if there is one, and training the employees on aspects related to corruption and other ethical dilemmas.

Summary

Despite the fact that there are different terms used for the meaning of whistleblowing and various connotations in different countries, this phenomenon refers to a disclosure of illegal, harmful activities that affect the public interest in an organization. This revealing can be internal or external, companies preferring the former one because it gives them a higher control in order to reduce the negative image encountered if the problem

would be made public. Taking into account that employees are afraid of retaliation and they are not encouraged to speak up, there were implemented laws for their protection in Europe. These ensure that whistleblowers are protected if they disclose wrongdoing, thus contributing to a cleaner environment in companies. Procedures and policies on whistleblowers' protection were implemented in organizations as a part of their ethics management and together with other tools such as ethics codes, committees, audits, ethical trainings, and ethical hotlines provide a more ethical culture in companies. Whistleblowing is important bringing benefits on the long term. Companies that encourage whistleblowers to disclose the harmful activities have a better image and reputation in the long run than those who try to cover these problems and protect their reputation on a short term.

Cross-References

- [Ethical Dilemmas](#)
- [Whistleblowing and CSR](#)

References

- Baltacı, A., & Balci, A. (2017). Reasons for whistleblowing: A qualitative study. *Journal of Educational Sciences Research*, 7(1), 37–51. Retrieved from <https://dergipark.org.tr/download/article-file/698117>.
- Çağla Oran, F., & Ünsar, A. S. (2020). The effects of leadership styles on organizational trust and disclosure of unethical behaviors (whistleblowing): A practical research. In K. Çalıyurt (Ed.), *New approaches to CSR, sustainability and accountability, volume I. accounting, finance, sustainability, Governance & Fraud: Theory and application*. Singapore: Springer.
- Collins Dictionary (n.d.). *Whistle-blowing*. Retrieved from <http://www.collinsdictionary.com/dictionary/english/whistle-blowing>
- De George, R. T. (1986). *Business ethics*. New York: Macmillan Publishing Company.
- Gamberini, G. (2013). Whistleblowing in countries without whistleblowing laws: The Italian case. @Adapt_bulletin, 29th May 2013. Retrieved from http://www.adapt.it/englishbulletin/docs/gamberini_29_may_2013.pdf
- Johnson, R. A. (2003). *Whistleblowing: When it works and why*. Boulder: Lynne Rienner Publisher.
- Jubb, P. B. (1999). Whistleblowing: A restrictive definition and interpretation. *Journal of Business Ethics*, 21(1), 77–94.
- Latan, H., Chiappetta Jabbour, C. J., & Lopes de Sousa Jabbour, A. B. (2019). 'Whistleblowing triangle': Framework and empirical evidence. *Journal of Business Ethics*, 160, 189–204. <https://doi.org/10.1007/s10551-018-3862-x>.
- Loyens, K., & Vandekerckhove, W. (2018). Whistleblowing from an international perspective: A comparative analysis of institutional arrangements. *Administrative Sciences*, 8, 30. <https://doi.org/10.3390/admsci8030030>.
- Makhija, M., & Kulshrestha, S. S. (2018). A qualitative study on impact of whistle-blowers on performance of the organisation. *International Journal of Engineering Sciences & Research Technology*, 7(2), 596–602.
- Miceli, M. P., & Near, J. P. (1992). *Blowing the whistle: The organizational and legal implications for companies and employees*. New York: Lexington Books.
- Nan, W. (2017). On whistleblowing: From the view of engineering ethics. In W. W. Gasparki & M. Arszulowics (Eds.), *Whistleblowing: In defense of proper action*. New York: Routledge.
- Puiu, S., & Barbu, M. (2015). *Whistleblowing in Romania – The gap between theory and practice*. Albenia: SGEM Conference Proceedings.
- Scaturro, R. (2018). *Defining whistleblowing*. International Anti-Corruption Academy. Research paper series no. 5. Retrieved from http://www.iaca.int/images/Research/Research_paper_05_Ruggero_Scaturro_final.pdf
- Seeler, J. M., Fuchs, A., Stöckl, T., & Sixl-Daniell, K. (2019). Whistleblowing and culture: A case for CSR in developing markets. In R. Schmidpeter, N. Capaldi, S. Idowu, & A. Stürenberg Herrera (Eds.), *International dimensions of sustainable management. CSR, sustainability, Ethics & Governance*. Cham: Springer.
- Sørensen, J. L., Gaup, A. M. N., & Magnussen, L. I. (2020). Whistleblowing in Norwegian municipalities – Can offers of reward influence employees' willingness and motivation to report wrongdoings? *Sustainability*, 12, 3479.
- Stubben, S., Welch, K. (2020). *Evidence on the use and efficacy of internal whistleblowing systems*. Retrieved from <https://ssrn.com/abstract=3273589> or <https://doi.org/10.2139/ssrn.3273589>
- Transparency International (2013). *Whistleblowing in Europe: Legal protections for whistleblowers in the EU*. Retrieved from http://issuu.com/transparencyinternational/docs/2013_whistleblowingineurope_en
- Transparency International (n.d.). *Whistleblowing*. Retrieved from <http://www.transparency.org/en/corruptionary/whistleblowing>
- Yeh, Y.-H. (2011). The effectiveness of the whistleblower protection under Sarbanes-Oxley section 806 in corporate governance. Retrieved from https://kuscholarworks.ku.edu/bitstream/handle/1808/9840/Yeh_ku_0099D_11587_DATA_1.pdf

Whistleblowing and CSR

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Synonyms

Deep Throat; Informant/Informer; Insider; Making a disclosure; Snitch; Source; Whistleblower; Whistleblowing

Definition

According to the UNCAC (2004), a whistleblower is “any person who reports in good faith and on reasonable grounds to the competent authorities, any facts concerning offences established in accordance with this Convention.” The convention itself establishes various corruption-related offences.

In other words, a whistleblower is someone who reports misconduct in any of the 5 economic sectors, namely, primary, secondary, tertiary, quaternary, and quinary sectors, so as to facilitate corrective action from the requisite authorities. Such a whistleblower is usually a stakeholder of a given organization, that is, he/she could be a (former) employee, or a supplier or any such person who may have or have had access to or inside knowledge on alleged misconduct. The said misconduct is usually in the realm of violating rules and regulations, fraud, abuse of rights, corruption, health and safety violations, sexual harassment, among many others.

According to Collins Dictionary (n.d.), whistleblowing is defined as “the act of telling the authorities or the public that the organization you are working for is doing something immoral or illegal.” The International Labour Organization (ILO) defines whistleblowing as “the reporting by employees or former employees of illegal, irregular, dangerous or unethical practices by employers” (ILO Thesaurus n.d.).

In other words, therefore, the process or act of reporting to authorities or bringing into public

domain incriminating information on any given entity on perceived ills is called whistleblowing. The person or persons who blow the whistle on a company’s misdeeds are called whistleblowers.

Famous Whistleblowers

Li Wenliang – Wuhan Central Hospital (Green 2020)

Thomas le Bonniec – Apple (Hern 2020)

Christopher Wylie; Cambridge Analytica (Gross 2019)

Edward Snowden – NSA (“Edward Snowden: Leaks that exposed” 2014)

Chelsea Manning – US Army (“Chelsea Manning” 2017)

Sherron Watkins – Enron (Lacayo and Ripley 2002)

Coleen Rowley – FBI (Lacayo and Ripley 2002)

Cynthia Cooper – Worldcom (Lacayo and Ripley 2002)

Karen Silkwood – Kerr-McGee (Rashke 2000)

Jefferey Wigand – Brown & Williamson (Brenner 1996)

Background

Whistleblowing has a very philosophical side based on morality and ethics, in that it evokes issues of trust and loyalty. An employee working for an organization is privy to inside information. The employee is in most cases expected to treat this information with confidentiality. However, when the said employee feels that the acts of the organization are questionable, damaging, destructive, or harmful, then the loyalty the employee feels towards the organization and likewise the trust the organization placed in the employee both come into question. The employee now must choose between reporting such misconduct or carry on with business as usual. This places severe burden on the employee’s shoulder and very often creates serious conflicts not only the professional but also on the personal level. The issue of responsibility to report and loyalty to the organization therefore often

creates grounds for animosity on both the sides. This has in the past turned rather aggressive with serious consequences for both the whistleblower and at times the organization as well.

The employee(s), in general, should be able to voice their concerns to appropriate authorities within the organization, safely. When the internal mechanisms, to safely address the issue(s) fail, employees turn towards other outlets, like, for instance, presenting evidence to the media, or to relevant authorities.

It is well accepted, in principle, that it should not be possible to sweep embarrassing or potentially damaging truths of organizations or governments under the rug. These truths should have the right to be in the open, more so, if these negatively affect the unsuspecting public at large. Having said that, organizations and the governments of countries are relatively powerful entities. They can – under the guise of confidentiality, competitive strategy, or national security – continue persecuting the whistleblower while conducting their businesses in a debatable fashion. For example, it is no secret now, thanks to whistleblowing, that organizations and governments alike around the world have been collecting personal information on unsuspecting public, without their explicit permission.

Many such high profile whistleblowing cases often have polarizing effects, for instance, Mr. Edward Snowden who blew the whistle on the global mass surveillance system of the US Government is a traitor to some and a hero to others (“Was Snowden hero” 2017).

The consequences of whistleblowing can be dire for the whistleblower, and it can also cause severe and at times debilitating economic issues on the company front.

Regulations to Protect Whistleblowers

Whistleblowing has the potential of severely disrupting the (internal/external) functioning of the accused entity. Quite often it results in the businesses being dismantled with responsible personnel facing judiciary action. Since the consequences can be quite dramatic, whistleblowers

need to be very sure about their claims and accusations and need to have solid proof to substantiate such claims and accusations.

Most companies have a so-called “confidentiality agreement” colloquially referred to as a gag order in place to prevent sensitive information from being leaked out. Confidentiality agreements are a common place in the working world, with most employees having to sign contracts that include clauses on some form of confidentiality. When such contracts are breached, it leads to different forms of repercussions. The most common is being losing the job for the said employee. On the other hand, slighted or disgruntled employees or commensurate stakeholders may seek to act out vindictively against an organization. In such cases, it becomes apparent that the parties involved need to have some form of legal redressal.

The very first official whistleblowing act is often credited to the ten marines and soldiers on board the American Warship Warren in 1977. They were (rightfully) concerned about the questionable behavior of the commander of the Continental Navy, namely, Commodore Esek Hopkins. America’s very first whistle-blower protection law resulted from this event (Kohn 2011).

Today whistleblowing and whistleblower protection is usually a part of CSR of an organization and companies most often have a policy on facilitating safe whistleblowing. While this may vary across countries, many consider such facilitation of paramount importance. This is because, in many ways, it promises ethical conduct of organizations.

Many statutory rules have been put in place to promote safe whistle blowing around the world. These allow for anonymous whistle blowing, setting up of clear reporting channels and processes, establishing criminal penalties for those who persecute legitimate whistleblowers, and training personnel to handle the different aspects of whistleblowing, among others.

The European Council of the European Union (2019), in its press release, stated that new EU wide rules that increase the protection for stakeholders would come into force in year 2021. They promised “high level protection to whistleblowers” in various sectors. This is highly

pertinent since the EU legislation, in this context, is currently limited mostly to financial services.

Context of CSR

Despite there being various legislative protections in place, with more to come, whistleblowing still remains a dangerous decision to make for anyone. Consistently, history has shown that despite there being safety measures in place, whistleblowers face discriminatory retaliation. As quoted in the *Time Magazine*, Coleen Rowley (2002) of FBI said “The credibility of the investigation I helped launch into pre-9/11 lapses at the FBI was undercut by suspicions that I was motivated by the fame that came along with being on the cover of *TIME*. Still, the publicity is what kept me from being fired from the FBI.”

Since the company has much to lose lest its misconduct is made public, very often companies and governments retaliate harshly. In Jeffery Wigand’s case, he not only lost his job but was also labeled a shop lifter, liar, abusive partner among a few other choice labels. Chelsea Manning suffered in prison and Edward Snowden is still in asylum in Russia at the time of writing this definition.

There are many reasons the organizations retaliate in such fashion, among which simple economics is always an important contender closely followed by reputation. In case of governments, this is taken to another level. Quite often with the governments, whistleblowing has bordered on possible espionage or spying given the (usually) sensitive nature of the information.

Despite there being measures in place to protect whistleblowers from retaliation, there is increasing evidence that these measures are just ineffective. Dworkin (2007) states that in the USA, despite the Sarbanes Oxley (SOX) Act having 2 clear provisions to address the issue of whistleblowing, it is simply illusory. This is because the persecuted whistleblowers have been consistently unsuccessful in getting redressal.

To summarize, among others, focusing on consistent growth and increasing shareholder

value often leads companies to take borderline (un) ethical decisions. Being caught in such situations could trigger justified whistleblowing on the company, its personnel, and/or its activities. Whistle blowing can be expensive. To ensure long-term sustainable performance of the company, it is very important to have measures in place that inhibit unethical behavior at the very core. Thereafter, providing proper channels for safe whistleblowing where the whistle blowers are protected from criminal or other form of retaliation should become standard. Persecution in any shape or form of the whistleblowers should have serious consequences for all concerned. The revamp of the whistleblower protection laws in the EU is therefore a right step in that direction.

Cross-References

- ▶ [Accountability](#)
- ▶ [Big Data and Data Mining](#)
- ▶ [Corruption](#)
- ▶ [CSR and Data Protection](#)
- ▶ [Data protection](#)
- ▶ [ISO 37001 Anti-bribery Management Systems](#)
- ▶ [Whistleblowing](#)

References

- Brenner, M. (1996, May). The man who knew too much Marie Brenner. *VANITY FAIR*. <https://web.archive.org/web/20081010102623/http://www.mariebrenner.com/PDF/TheManWhoKnewTooMuch.pdf>. Accessed 2 Aug 2020.
- Chelsea Manning: Wikileaks source and her turbulent life. (2017, May 16). *BBC News*. <https://www.bbc.com/news/world-us-canada-11874276>. Accessed 3 Aug 2020.
- Collins Dictionary. (n.d.). Whistle-blowing. *In Collinsdictionary.com.Dictionary*. <https://www.collinsdictionary.com/dictionary/english/whistle-blowing>. Accessed 5 Aug 2020.
- Dworkin, T. M. (2007). SOX and whistleblowing. *Michigan Law Review*, 105(8). <https://repository.law.umich.edu/mlr/vol105/iss8/5>. Accessed 4 Aug 2020.
- Edward Snowden: Leaks that exposed US spy programme. (2014, January 17). *BBC News*. <https://www.bbc.com/news/world-us-canada-23123964>. Accessed 2 Aug 2020.

- European Council of the European Union. (2019, October 7). *Better protection of whistle-blowers: new EU-wide rules to kick in in 2021* [Press release]. <https://www.consilium.europa.eu/en/press/press-releases/2019/10/07/better-protection-of-whistle-blowers-new-eu-wide-rules-to-kick-in-in-2021/>, Accessed 4 Aug.
- Fick, N. (2017, January 19). Was Snowden hero or traitor? Perhaps a little of both. *Washington Post*. https://www.washingtonpost.com/opinions/was-snowden-hero-or-traitor-perhaps-a-little-of-both/2017/01/19/a2b8592e-c6f0-11e6-bf4b-2c064d32a4bf_story.html. Accessed 3 Aug 2020.
- Green, A. (2020). Li Wenliang, Obituary. *The Lancet*, 395(10255), 682. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30382-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30382-2/fulltext). Accessed 2 Aug 2020.
- Gross, T. (2019, October 8). *Whistleblower explains how Cambridge analytica helped fuel U.S. 'Insurgency'*. NPR. <https://www.npr.org/2019/10/08/768216311/whistleblower-explains-how-cambridge-analytica-helped-fuel-u-s-insurgency>. Accessed 2 Aug 2020.
- Hern, A. (2020, May 20). Apple whistleblower goes public over 'lack of action'. *The Guardian*. <https://www.theguardian.com/technology/2020/may/20/apple-whistleblower-goes-public-over-lack-of-action>. Accessed 2 Aug 2020.
- International Labour Organization (ILO). (n.d.). Whistleblowing in *ILO Thesaurus*. <https://metadata.ilo.org/thesaurus/648756062>. Accessed 3 Aug 2020.
- Kohn, S. M. (2011, June 12). The Whistle-Blowers of 1777. *The New York Times*. <https://www.nytimes.com/2011/06/13/opinion/13kohn.html>. Accessed 3 Aug 2020.
- Lacayo, R., & Ripley, A. (2002, December 30). Persons of The Year 2002: The Whistleblowers, SHERRON WATKINS of Enron COLEEN ROWLEY of the FBI CYNTHIA COOPER of WorldCom. *TIME*. <http://content.time.com/time/magazine/article/0,9171,1003998,00.html>. Accessed 2 Aug 2020.
- Rashke, R. (2000). *The killing of Karen Silkwood: The story behind the Kerr-McGee plutonium case*. Sphere Books.
- Rowley, C. (2002). Persons of the Year 2002. *TIME*. http://content.time.com/time/specials/packages/article/0,28804,1946375_1947772_1947759,00.html. Accessed 4 Aug 2020.
- United Nations Convention Against Corruption (UNCAC). (2004). *United Nations Convention on Corruption*. Article 33, General Assembly resolution 58/4 of 31 October 2003. https://www.unodc.org/documents/brussels/UN_Convention_Against_Corruption.pdf. Accessed 3 Aug 2020.

Whitewashing

- **Greenwashing**

Wildlife

- **Exxon Valdez**

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Basic Biographical Information

William C. (Bill) Frederick (4 May 1925 in Mena, Arkansas – 16 March 2018 in Pittsburgh, Pennsylvania), Professor Emeritus, Katz Graduate School of Business, University of Pittsburgh, was among the founders of the study of Corporate Social Responsibility (CSR) and inspired several generations of business ethics, CSR, management and sustainability scholars, and professionals globally. The World War II was Frederick's self-proclaimed "escape" from his native Arkansas and opened up the world to him. To this author's happy Veteran's Day wishes Frederick replied back in 2014 that:

I never really feel like a "war veteran" in spite of serving during WWII, but I do fondly remember my father who served in Europe during WWI. Let's see, that was to be "the war to end all wars," wasn't it? It's what you do after the war that counts the most, I believe. (Personal communication, November 11, 2014)

Frederick enjoyed the intellectual debate about his field but unlike many scholars was always able to consider a much larger context, considering everything relating to culture, society, social and economic issues, politics, and nature.

After serving in Belgium during World War II, Frederick earned his B.A. and Ph.D. in economics and anthropology at the University of Texas-Austin. He taught at Tampa University, the University of Florida, and Kansas State University, where he was also dean of the business school, before coming to the University of Pittsburgh's

Katz Graduate School of Business as Associate Dean, Dean, and finally as Professor of Business Administration, focusing on corporate social responsibility, business ethics and values, and evolutionary interpretations of business behavior. During our monthly lunches at Panera Bread across from Maybe Magee-Womens Hospital in Pittsburgh Frederick often and proudly mentioned his Virginia lineage: his mother's family, the Crittendens, traced their ancestry to the Washington and Jefferson families – and his upbringing in a very pro-political environment and fond memories of Franklin D. Roosevelt (personal communication, 05.2005–06.2015).

Major Contributions

Substance of the Frederick Contributions

As early as in the 1960s Frederick put his focus on studying and writing about corporate social responsibility (CSR) and must be considered one of the founding fathers of the developing academic field:

During the 1970s, Frederick continued advancing the newly founded CSR field. He described the stages and conceptualizations of CSR ranging from CSR1, a pre-conventional moral reasoning stage focused on corporate social responsibility as it relates to the self-interest of the company, to CSR4, representing a more post-conventional moral reasoning akin to consciousness. CSR2 eased into corporate social responsiveness, which meant CSR2 is a more pragmatic approach influenced through the realization that a company's relationship with society is an essential asset. The moral reasoning behind CSR2 can be found between pre-conventional and conventional. Corporate social rectitude can be found within the paradigm of CSR3. CSR3 takes a view between conventional and post-conventional reasoning building on the assertion that “embedded within humankind are moral meanings and conceptions of what is felt to be ethical” (Frederick 1986, p. 134). In Frederick's publication *Moving to CSR4: What to Pack for the Trip* from 1998 in *Business and Society*, he shifted his focus to developing the concept of CSR4,

which he thought needed a broader and deeper interest in space, science, and religion, an almost metaphysical approach. Frederick was aware that his ideas might not be recognized from the contemporary CSR community, which often lacks the intellectual ability to go beyond the boundaries of our own research. *Business & Society*, which Frederick published and updated between 1980 until 1996, influenced generations of business students (Carroll 2018).

Arguably, his most impactful later works consist of *Corporation, Be Good! The Story of Corporate Social Responsibility* (Frederick 2006), in which he presents the history and definition and an outlook on where the developments will lead in the area of corporate social responsibility.

Told in an eyewitness, I-was-there style by a pioneer of the study of CSR in the nation's business Schools, it takes the reader through a half century of corporate scandals and fierce struggles over corporate ethics—from Ralph Nader's 1960s Campaign GM to today's white collar crimes at Enron, WorldCom, Tyco, and other Wall Street giants. It lays bare the values that drive corporate culture, explores the motivational depths of corporate strategy and policy, demonstrates how biological impulses can lead business decision makers astray, questions the relevance and ethical commitment of business school education, reveals the spiritual side of management life, and holds out hope that the New Millennium will see improvement in the ethical performance of business. (Frederick 2006)

In *Values, Nature, and Culture in the American Corporation* (Frederick 1995), Frederick's undertaking was to explain the values that drive business. A particular focus falls on those values that are defined as individualistic and self-focused and unlike many business ethicists Frederick recognizes that these psychological traits are extremely opposed to the fabric of a fair and just society.

In his book *Values, Nature, and Culture in the American Corporation* (1995), Frederick investigates issues of essential importance to all those who wish to conduct business more ethically. In this work, Frederick introduced a new theory of the origin and role of business values, combining and synthesizing input from the natural sciences, social sciences, and the field of philosophy. At times one gets the impression that Frederick is an anthropologist, dissecting business through

the scientific study of humanity concerned with human behavior, human biology, and present and past cultures and societies, connecting the bigger picture in this works. Contemporary value systems that drive modern business enterprises and corporate managers can be traced back to the ancient natural evolutionary process as depicted by Frederick. He first examines the three value systems, which he finds to be incompatible, and therefore in a constant state of tension. The three value systems are divided into manager needs to efficiently allocate resources and achieve economic objectives, manager pursuits of the accumulation of power and influence, and the third value cluster focused outside of the corporation on community and stakeholder networks.

Frederick's central theory in *Values, Nature, and Culture in the American Corporation* (1995) offers two proposals to the business ethics crisis. One of the solutions is the reconciliation of businesses economizing practices with the community's needs for ecological congruence and balance. Frederick's critique of traditional business ethics theory offered in the book, and his proposal for a new normative synthesis of insights from natural science, social science, and philosophy, is among the most holistic approaches in the entire field.

Frederick's academic service, his dedication toward students as well as his service in the community of Pittsburgh were duly noticed and followed by several excellence awards.

Frederick led the Society for Business Ethics as well as the Society for Advancement of Socio-Economics as president and chaired the Social Issues in Management division in the Academy of Management. Internationally, Frederick conducted research in the field of management education in Spain, Italy, Egypt, former Yugoslavia, Ecuador, Nigeria, and Australia. Undoubtedly, Frederick the scholar and the person never stopped working after retirement. He maintained monthly meetings with young Ph.D. students, worked on his own scholarship, authored books and articles, chapters, entries to dictionaries and encyclopedias as well as enjoyed the time allotted

with his wonderful partner of 43 years, Dr. Mildred (Millie) S. Myers, well into official retirement. During the mature decades of his career, Frederick did not suffer from intellectual foreclosure. Rather he continued studying, contributing, and broadening his interests in the field of business and society, far beyond the usual academic boundaries.

Last but not least to mention are Frederick's Ph.D. students that he often referred to as his children: Albert Borelli; Rogene Buchholz; Denis Collins; Robert Hogner; Nancy Kurland; Harry Leonardi; Cliff Montgomery; Lyman Reed; Diane Swanson; William Tiga Tita; Robert Toy; David Wasieleski; James Weber; Richard Wokutch, and Donald Wygal.

Some of His Essential Publications in the Field of Business & Society

- Blake, D. H., Frederick, W. C., & Myers, M. S. (1976). *Social auditing: Evaluating the impact of corporate programs*. Praeger.
- Davis, K., Frederick, W. C., & Blomstrom, R. L. (1980). *Business and society: Concepts and policy issues*. McGraw Hill.
- Davis, K., Frederick, W. C. (1984). *Business and society: Management, public policy, ethics*. McGraw Hill.
- Davis, K., Frederick, W. C., & Post, J. (1988). *Business and society: Corporate strategy, public policy, ethics*. McGraw Hill.
- Davis, K., Frederick, W. C., & Post, J. (1992). *Business and society: Corporate strategy, public policy, ethics*. McGraw Hill.
- Frederick, W. C., Lawrence, A., Post, J., & Weber, J. (1996). *Business and society: Corporate strategy, public policy, ethics*. McGraw Hill. (This textbook was first published in 1968 and is the longest-running textbook in the field, now in its 17th edition and currently authored by Weber and Lawrence.)
- Frederick, W. C., & Preston, L. (1987). *Research in corporate social performance and policy*. JAI Press.
- Frederick, W. C., & Preston, L. (1990). *Business ethics: Research issues & empirical studies*. JAI Press.

Frederick, W. C. (2006). *Corporation, be good! The story of corporate social responsibility*. Dog Ear Publishing.

Some of His Essential Articles in the Field of Business & Society

Frederick, W. C. (1960). The growing concern over business responsibility. *California Management Review*, 2(4), 54–61. <https://doi.org/10.2307/41165405>

Frederick, W. C., & Myers, M. S. (1974). The hidden politics of social auditing. *Business and Society Review*, 11, 49–53.

Frederick, W. C. (1975). Corporate social policy: Selections. *Business and Society Review*, 253–258.

JAI Press. (1978). Auditing corporate social performance: The anatomy of a social research project. In L. E. Preston (Ed.), *Research in corporate social performance and policy* (Vol. 1, pp. 123–137).

Frederick, W. C. (1981). Free market vs. social responsibility decision time at the CED. *California Management Review*, 23(3), 20–28. <https://doi.org/10.2307/41172598>

Frederick, W. C., & Myers, M. S. (1983). Public policy advertising and the 1980 presidential election. In L. E. Preston (Ed.), *Research in corporate social performance and policy* (Vol. 5, pp. 56–89). Stamford: JAI Press.

Frederick, W. C. (1983). Point of view: Corporate social responsibility in the Reagan era and beyond. *California Management Review*, 25(3), 145–157. <https://doi.org/10.2307/41165022>

Lexington Books. (1987). Theories of corporate social performance. In S. P. Sethi & C. Falbe (Eds.), *Business and society: Dimensions of conflict and cooperation* (pp. 142–161).

Frederick, W. C. (1994). From CSR1 to CSR2: The maturing of business-and-society thought. *Business & Society*, 33(2), 150–164. <https://doi.org/10.1177/000765039403300202>

Blackwell Publishing. (1998). Business and society. In C. L. Cooper & C. Argyris (Eds.), *The concise Blackwell encyclopedia of management* (pp. 54–56).

Frederick, W. C. (1998). Moving to CSR4: What to pack for the trip. *Business and Society*, 37(1), 40+. <https://link.gale.com/apps/doc/A20541122/AONE?u=anon~789b7216&sid=googleScholar&xid=250b1240>

Frederick, W. C. (1998). Conceptual foundations of business: A book that made a difference. In R. F. Duska (Eds.), *Education, leadership and business ethics. Issues in business ethics* (Vol. 11). Dordrecht: Springer. https://doi.org/10.1007/978-0-585-27624-3_8

Frederick, W. C. (2008). Corporate social responsibility: Deep roots, flourishing growth, promising future. In A. Crane, A. Williams, D. Matten, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*, Chapter 23 (pp. 522–531). New York: Oxford University Press.

Some of His Essential Articles in the Field of Business Ethics

Frederick, W. C. (1985). Embedded values: Prelude to ethical analysis. In P. H. Werhane & K. D'Andrade (Eds.), *Profit and responsibility* (pp. 47–64). New York: The Edwin Mellen Press.

Frederick, W. C. (1986). Toward CSR3: Why ethical analysis is indispensable and unavoidable in corporate affairs. *California Management Review*, 28(2), 126–141. <https://doi.org/10.2307/41165190>

Frederick, W. C., & Weber, J. (1987). The values of corporate managers and their critics: An empirical description and normative implications. In W. C. Frederick & J. E. Post (Eds.), *Research in corporate social performance and policy* (Vol. 9, pp. 131–152). Greenwich: JAI Press.

Frederick, W. C. (1988). An ethics roundtable: The culprit is culture. *Management Review*, 48–50.

Frederick, W. C. (1991). The moral authority of transnational corporate codes. *Journal of Business Ethics*, 10(3), 165–177. Retrieved June 29, 2021, from <http://www.jstor.org/stable/25072145>

Oxford University Press. (1991). Business ethics: The state of the art. In R. E. Freeman (Ed.),

Business ethics: The state of the art (pp. 57–59).

Frederick, W. C. (1992). The empirical quest for normative meaning: Introduction and overview. *Business Ethics Quarterly*, 2(2), 91–98. <https://doi.org/10.5840/beq19922216>

Frederick, W. C. (2000). Genes, nanobots, and the human future. *Professional Ethics, A Multidisciplinary Journal*, 8(3), 101–122. <https://doi.org/10.5840/profethics200083/418>

Frederick, W. C. (2000). Notes for a third millennial manifesto: Renewal and redefinition in business ethics. *Business Ethics Quarterly*, 10(1), 159–167. <https://doi.org/10.2307/3857702>

Sage Publications. (2008). Natural business ethics. In R. W. Kolb (Ed.), *Encyclopedia of business ethics and society* (pp. 1479–1480).

Sage Publications. (2008). Pragmatism. In R. W. Kolb (Ed.), *Encyclopedia of business ethics and society* (pp. 1651–1652).

His professional web page remains active and can be found at www.williamcfrederick.com

Cross-References

- [Business Ethics](#)
- [Corporate Social Responsibility \(CSR\)](#)
- [Sustainability](#)

References

- Business & Nature. (n.d.). William C. Frederick. <https://www.williamcfrederick.com/business-nature.html>
- Carroll, A. (2018). William C. Frederick. *Business Ethics Quarterly*, 28(3), 369–371. <https://doi.org/10.1017/beq.2018.17>
- Frederick, W. C. (1986). Toward CSR3: Why ethical analysis is indispensable and unavoidable in corporate affairs. *California Management Review*, 28(2), 134. <https://doi.org/10.2307/41165190>
- Frederick, W. C. (1995). *Values, nature, and culture in the American corporation*. Oxford University Press.
- Frederick, W. C. (2006). *Corporation, be good!: The story of corporate social responsibility*. Indianapolis: Dog Ear Publishing.
- Frederick, W. C. (2012). *Natural corporate management: From the big bang to wall street*. Sheffield: Greenleaf Pub.

Win-Win Game

- [Win-Win Situation](#)

Win-Win Negotiation

- [Win-Win Situation](#)

Win-Win Situation

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Synonyms

[Win-win game](#); [Win-win negotiation](#); [Win-win transaction](#)

Definition

In a win-win situation, all participants obtain a benefit. Based on the collaborative interactions among two or more players, this context includes no losers but only winners who gain an advantage. Competition, antagonism, and conflicting positions between participants are avoided, and mutual trust among actors is pursued in order to maximize the overall advantage.

The reference approach is that of game theory which allows the study of interrelationships between multiple wary subjects and the understanding of the individual and collective advantage and risk of choosing collaborative opportunity when possible (Von Neumann 1928; Von Neumann and Morgenstern 1944).

To adopt this alternative and pursue the win-win strategy, each player has to not give in to the temptation to compete with others and win a game that would collectively be zero sum (win-lose perspective), however with the risk of an overall

negative outcome (lose-lose situation) because the other actors could yield to the same temptation and follow the same individualistic path too.

Moreover, also collaborative choice causes risks for the player because, if betrayed by the others, it generates a lose-win outcome and thus the worst individual scenario.

Win-win Approach in Sustainability

The prisoner's dilemma, within game theory, is a well-known example that allows us to effectively highlight how, in the interactions between players, mutual suspicion and individualistic interest lead to not maximizing collective and individual outcomes.

In reality, the extent of opportunistic behavior may encounter some mitigating factors: in reiterated relationships, for example, each player's strategy also depends on the experience of previous interactions with the other party and will influence the other player's future behavior. According to Axelrod (1980, p. 3), "there are subtle reasons why an individualistic pragmatist can cooperate until the other party, somehow forgives, and be optimistic about the other party's responsiveness."

Moreover, there may be interventions by the institutions to encourage collaborative approaches.

The win-win perspective can also be applied to the different spheres – economic, ecological, and social – of sustainability, as parts to be considered in connection and between which ensure collaboration, in order to create synergies and increase the overall results of a certain organization. In this dimension, the terminology 'win-win-win' is widespread and precisely referred to the three indicated spheres.

The basic idea is that an organization can build foundations for prosperity only by effectively relating with all sustainability fields.

In particular, it can maintain a long-term overall balance only by considering all three kinds of issues in its strategies and decision-making, in order to enhance – in an integrated way and within a virtuous circle of interconnected effects – its overall contribution to the economy, society, and

environment, as well as to the quality of its connections with stakeholders.

This approach is opposed to the trade-off one, which is instead focused on the observation of conflicts between the different sustainability areas. These conflicts lead, in any specific situation, to identify priorities and to proceed with compromises within win-lose schemes.

In the win-win framework, the attention is addressed toward coordinating and aligning the economic, environmental, and social dimensions of the objectives. The hypothesis is that advances in one sphere positively impact on the other spheres and vice versa in a reciprocal relationship (Van der Byl and Slawinski 2015, p. 58).

Elkington has focused extensively on the need for companies to face the important challenge of collaborating in the field of sustainability – with customers, suppliers, competitors and all their other stakeholders – aiming to take advantage not only in the sense of "corporate citizenship" but also within a competitive dimension (1994, p. 99). This requires composing the different perspectives as a whole and optimizing choices and efforts within several directions.

In 1995, Porter and van der Linde have effectively underlined how innovation is a fundamental lever to identifying solutions which enable the enhancement of both environmental profiles and industrial competitiveness and how the two dimensions are inextricably linked (Porter and van der Linde 1995a, b).

Furthermore, Porter and Kramer (2006) have strongly underlined the importance of reference to shared value (significant for society and also positively impacting on the business) in powerful interconnection between competitive advantage and social responsibility.

According to these authors, the concept of shared value widens the extent of benefit creation and allows for the overcoming of the perspective based on trade-off needs in choosing between business and society (Porter and Kramer 2011).

Many studies have indeed identified a positive relationship between corporate social responsibility and financial results.

For instance, based on relevant meta-analysis, Orlitzky, Schmidt, and Rynes have highlighted

the positive correlation of the corporate social performance with corporate financial performance and that this “relationship tends to be bidirectional and simultaneous” (2003, p. 427); Albertini, focusing on environmental issues, has particularly underlined a link between corporate environmental management and financial performance, “supporting the win-win hypothesis” (2013, p. 443).

A Holistic Perspective

However, considering all the interactions – between the economic, social, and ecological areas of sustainability and between different elements within each of these specific areas – is not easy, and, even despite a win-win intention, actual trade-off situations could be created between spheres or within a specific sphere. Each of these pillars is immensely large and complex, and, in practice, supporting win-win strategies is hugely demanding. This aspect is emphasized by many, for instance, by Pope, Annandale, and Morrison-Saunders who have claimed: “the practical difficulty of integrating environmental, social and economic considerations in a way that fully recognises interactions and interlinkages, and that maximises ‘win – win – wins’ and minimises trade-offs was acknowledged” (2004, p. 613).

Moreover, many have argued that in reality – considering the profound complexity of sustainability issues and challenges – the conflicts, win-lose situations, and compromises are much more usual than the opportunities to compose profiles toward win-win solutions. In particular, according to Hahn et al. (2010, p. 217), they “are the rule rather than the exception.”

Indeed, tensions both between sustainability areas and between different profiles of the same sphere can be observed. It is thus necessary to approach sustainability based on an inclusive perspective that enables us to extensively consider these tensions, overcoming risks of partiality. In the win-win approach, there is a risk of exclusive focus on issues for which the alignment between areas or within the same sphere is more immediate, easy, and accessible (Van der Byl and

Slawinski 2015). An integrated and holistic approach allows us to avoid neglecting relevant tensions and to face sustainability issues in all their complexity.

Cross-References

- [Competitive Advantage](#)
- [Corporate Development](#)
- [Corporate Social Responsibility Strategy](#)
- [Corporate Sustainability](#)
- [Corporate Sustainable Innovation](#)
- [Integrated Value](#)
- [Shared Value](#)

References

- Albertini, E. (2013). Does environmental management improve financial performance? A meta-analytical review. *Organization & Environment*, 26(4), 431–457.
- Axelrod, R. (1980). Effective choice in the prisoner's dilemma. *Journal of Conflict Resolution*, 24(1), 3–25.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2010). Trade-offs in corporate sustainability: You can't have your cake and eat it. *Business Strategy and the Environment*, 19(4), 217–229.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441.
- Pope, J., Annandale, D., & Morrison-Saunders, A. (2004). Conceptualising sustainability assessment. *Environmental Impact Assessment Review*, 24(6), 595–616.
- Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78–92.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62–77.
- Porter, M. E., & van der Linde, C. (1995a). Green and competitive: Ending the stalemate. *Harvard Business Review*, 73(5), 120–134.
- Porter, M. E., & van der Linde, C. (1995b). Toward a new conception of the environment-competitiveness relationship. *Journal of Economic Perspectives*, 9(4), 97–118.
- Van der Byl, C. A., & Slawinski, N. (2015). Embracing tensions in corporate sustainability: A review of research from win-wins and trade-offs to paradoxes and beyond. *Organization & Environment*, 28(1), 54–79.

Von Neumann, J. (1928). Sur la théorie des jeux. Comptes rendus de l'académie des. *Sciences*, 186(25), 1689–1691.

Von Neumann, J., & Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton: Princeton University.

Win-Win Transaction

- ▶ [Win-Win Situation](#)

Wired Cities

- ▶ [Smart Cities](#)

Wisdom in Action

- ▶ [Phronesis](#)

Wisdom in Practice

- ▶ [Phronesis](#)

Women

- ▶ [CSR and Women](#)

Women Empowerment

- ▶ [CSR and Women](#)

Work Engagement

- ▶ [Employee Engagement](#)

Work Ethics

- ▶ [Professional Ethics](#)

Work Life Management

- ▶ [Work-Life Balance](#)

Work-Family Conflict

- ▶ [Work-Life Balance](#)

Work-Life Balance

- ▶ [Corporate Family Responsibility](#)

Work-Life Balance

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Synonyms

[Compatibility of work and family](#); [Compatibility of work and private life](#); [Life domain balance](#); [Life satisfaction](#); [Quality of life](#); [Work life management](#); [Work-family conflict](#); [Work-life budget](#)

Description and Definition

It has become obvious that “work time practices are now more unpredictable, irregular and unsocial for employees in lower level jobs,” while pressure to work longer hours and more intensively has become more prevalent in managerial, technical, and professional jobs (Walsh [2019](#),

p. 398). Yet, in today's working environment, it is important to keep employees motivated, less stressed, and productive. This can be achieved by making employees feel valued, giving them a greater responsibility and a sense of ownership or by giving them greater control of their working lives (Byrne 2005). However, in order to achieve a more satisfied workforce that is more productive, less absent from work and happy to work for a particular company, issues regarding the work conditions in modern society have to be considered.

A particular problem of modern society in this regard is the lack of differentiation between work and private life, asking for work–life integration to create a “healthy” work–life balance. This development is driven by globalization (e.g., outsourcing, short-term contracts), demographic change (e.g., less young people in developed world, less potential employees in employable age), value change (e.g., pluralization and individualization, higher flexibility regarding job planning, importance of work–life balance), structural change (e.g., fourth industrial revolution with a transition from a service society to a knowledge society), and digital integration (e.g., blurring of home and work environments) linked with permanent availability (Kaiser and Ringlstetter 2010). Additionally, the COVID-19 pandemic has dramatically blurred the relationship of both spheres further. Consequently, the term work–life balance enjoys a high popularity for companies, the public, and science as it relates to the relationship of work and leisure and the compatibility of job and family. It is a term used in human resource management, organizational behavior, and quality of life studies.

The dynamic concepts developed out of the need to balance between all the individual commitments of private and working life linked to time management (Hoffmann 2019). However, there is no accepted definition of the term. Different viewpoints include, for example, a subjective or objective approach, a focal point on individual or organizational well-being, and a long-term or a short-term view (Papmeyer 2018).

Even so, it seems to be agreed that a modern work–life equilibrium needs to balance individual

time with individual energy (Kumanu 2020). Human beings who have an imbalanced life in regard to time, commitment to work, friends, family, and sport have to accept the possibility of illnesses (Hesse/Schrader 2017), higher stress levels, decreased job satisfaction, and productivity (Kumanu 2020). Accordingly, achieving a work–life balance is an individual and dynamic process that cannot be standardized, but is facilitated by tools to evaluate priorities regarding time commitments to assess work–life balance. Raja and Stein (2014) therefore add the term work–life budget to the discussion on work–life balance to evaluate how the individual optimizes her/his time by identifying how time is actually spent, to set goals as long-term objectives and to track the results against the set objectives with the ultimate goal being to enhance the quality of life. Sirgy and Lee (2018) provide a summary of the key characteristics and conceptualization of work–life definitions, focusing firstly on engagement in work life and non-work life and secondly on minimal conflict between social roles in work and non-work life (Table 1).

History

One of the earliest statements regarding the importance of a work–life balance is by John Ruskin, a social reformer. He wrote in 1851 that people would need three things to be happy at work: “they must be fit for it, they must not do too much of it, and they must have a sense of success in it” (Ruskin 1851, p. 7). First attempts to limit the time spent at work to find a balance between work and leisure go back to manufacturing laws in the late 1800s (Raja and Stein 2014). In these later stages of the Industrial Revolution labor reformers drew attention to employees (including children) and their issues. In the UK, for example, employees suffered negative social and health consequences as they commonly worked 14–16 h for 6 days a week. This was also not uncommon in other European countries and the USA. Consequently, later reforms, such as the 40 h work a week, were introduced in the USA (1940) and Germany (1918) (Kumanu 2020).

Work–Life Balance, Table 1 Various conceptualizations of work–life balance

Theoretical approaches to work life balance	Key characteristics in work–life balance	Conceptualization of work–life balance	Representative authors
Role engagement in work life and non-work life	Attentive engagement in multiple roles	The tendency to become fully engaged in the performance of every role in one’s total role system to approach each role and role partner with an attitude of attentiveness and care	Marks (1977), Marks and MacDermid (1996), Sieber (1974)
	Equal time and involvement across multiple roles	Engagement in multiple roles with an approximate equal level of attention, time, involvement or commitment	Kirchmeyer (2000)
	Balanced satisfaction across life domains	Engagement in work and non-work roles to produce an outcome of equal amounts of satisfaction in work and non-work life domains	Clark (2000), Kirchmeyer (2000)
	Balance in time, involvement, and satisfaction across life domains	Allocation of time and psychological energy in a balanced way in work and non-work life while deriving much satisfaction from both work and non-work life	Greenhaus et al. (2003)
Minimal conflict between work and non-work roles	Minimizing role conflict between work and family roles	Satisfaction and good functioning in work and family roles with minimum role conflict	Allen et al. (2000), Clark (2000), Kahn et al. (1964), Galinsky and Johnson (1998)
	Role enrichment with no role conflict	A high degree of role enrichment with a low degree of role conflict in work and non-work life domains	Frone (2003), Greenhaus and Powell (2006)
	Management of resources to minimize role conflicts	Work–life balance is achieved through effective management of role conflict–conflict or interference results when resources to meet role demand are threatened or lost	Fisher et al. (2009), Hobfoll (1989)

Source: Sirgy and Lee (2018, p. 231)

Even so individual companies had initiated work–life programs in the USA at least since the 1930s. The W.K. Kellogg company, for example, started with flexible work hour shifts for their employees around that time resulting in increased employee efficiency and morale (Mbaknol 2020).

The actual term “work–life balance” was first used by a plank in the Women’s Liberation Movement in the UK in the 1980s to advocate maternity leave for women and more flexible work schedules (Kamanu 2020), but gained in importance in the late 1990s (Kuhn 2010). Especially the transition from an industrial to a service society in this so-called New Economy put new and higher demands on employees and squeezed their time (e.g., double income households changing

domestic obligations, more equal separation of home tasks between women and men) (Papmeyer 2018). Consequently, more and more employees suffered from burnout or tinnitus (Hesse/Schrader 2017), depression or, in extreme cases, died from overwork (Walsh 2019). Therefore, the achievement of a work–life balance became a “key concept in the late 20th century” and a multimillion dollar industry (Raja and Stein 2014, p. 71), especially in the Western World. Today, talented individuals in the developed world are becoming more discerning about who they want to work for under which conditions and with whom (Boudreau et al. 2015). Additionally, employers and governments increasingly formulate and implement policies to support the

comanagement of life and work demands (Walsh 2019). Such policies could include the provision for flexible benefits, flexi-time, staggered hours, compressed working hours, time off in lieu, shift swapping, self-rostering, breaks from work, annualized hours, term-time working, job-sharing, working from home, and teleworking (Byrne 2005). Nevertheless, important issues, such as the interference of work and family, are only beginning to gain attention in developing and emerging countries (Cooper 2015).

Disadvantages of the term “work-life-balance”	Alternative and related terms
Suggests a separation of work and life, in which work is not described as part of life	Compatibility of work and family
Suggests cuddling culture and spa oasis	Compatibility of work and private life
Anglicism and <i>en vogue</i> , can lead to misunderstandings	Work life management
“Balance” as ideal condition is factually not achievable	Work–family conflict
	Work atmosphere
	Life satisfaction
	Life domain balance
	Work–life budget
	Quality of life

References: own table after (Papmeyer 2018; Raja and Stein 2014; Beile and Jahnz 2006; Ulich 2005; Sirgy and Lee 2018)

Current Issues and Future Directions

Today, “the entire ‘employee work experience’ is changing” (McLaughlin, Vicere and Ziskin 2019, p. 181). A healthy work–life balance (and work–life balance policies) has become a vital element of the employer–employee relationship (Azmi 2019), in particular through the application of strategies for effective time management to prevent burnout and manage stress (Kumanu 2020).

However, there are a number of issues. The concept of a work–life balance first assumes a strict separation of work and life, where work is not described as part of one’s life. In many cases such separation does not exist. Secondly, it remains unclear if the term is about the temporal compatibility of work and private life or about all dimensions of life and the quality of life (Kratzer et al. 2015).

There are also concerns of more practical nature, e.g., how to manage the performance of people who are not in the office at the same time as the manager or how and to whom work–life balance strategies are applied to or not, leading to perceived favoritism of particular employees over others. Moreover, work–life balance strategies can result in a (perceived or real) loss of team spirit and/or some employees being branded as uncommitted and unmotivated (Byrne 2005).

The table below summarizes the disadvantages of the term work–life balance and alternative and related terms.

Disadvantages of the term work–life balance and alternative terms.

In conclusion, work–life balance or rather the achievement of a positive work–life balance will remain an important topic to achieve higher job satisfaction, retain employees, and increase productivity. The concept has come a long way since John Ruskin outlined the importance of being happy at work for employees and employers in 1851. Moreover, it has to be constantly adjusted to permanently changing working environments and conditions. The current Covid-19 pandemic and its impact on the working environment provides a good example for such changes.

Summary

In today’s society, there is an increasing lack of differentiation between work and private life. This process is driven by globalization, demographic change, digital integration, value change, and structural change. The COVID-19 pandemic has blurred the borderline between the two spheres of life even further. Accordingly, the term work-life balance enjoys high popularity for companies, the public, and sciences. In particular, the achievement of a positive work-life balance under permanently changing working environments and conditions to achieve higher job satisfaction, retain employees and increase productivity has become very important.

Cross-References

► Quality of Life

References

- Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: a review and agenda for future research. *Journal of Occupational Health Psychology, 5*(2), 278–308.
- Azmi, F. T. (2019). Employee relations, engagement, and termination. In F. T. Azmi (Ed.), *Strategic human resource management* (pp. 268–288). Cambridge: Cambridge University Press.
- Belle, J., & Jahnz, S. (2006). Work-Life balance and Unternehmenskultur. Die Praxis in Unternehmen. Arbeitspapier Nr. 6 aus dem Projekt TIM, Universität Rostock, Lehrstuhl für ABWL: Wirtschafts- und Organisationspsychologie der Universität Rostock (Hrsg.).
- Boudreau, J. W., Creelman, D., & Jesuthasan, R. (2015). *Lead the way: Navigating a world beyond employment*. Chichester: Wiley.
- Byrne, U. (2005). Work-life balance. Why are we talking about it at all? *Business Information Review, 22*(1), 53–59.
- Clark, S. C. (2000). Work/family border theory: a new theory of work/family balance. *Human Relations, 53*, 747–770.
- Cooper, C. L. (2015). Introduction. In L. Lu & C. L. Cooper (Eds.), *Handbook of research on work-life balance in Asia* (pp. 1–6). Cheltenham: Elgar Publishing.
- Fisher, G. G., Bulger, C. A., & Smith, C. S. (2009). Beyond work and family: a measure of work/nonwork interference and enhancement. *Journal of Occupational Health Psychology, 14*, 441–456.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Terick (Eds.), *Handbook of occupational health psychology* (pp. 143–162). Washington: American Psychological Association.
- Galinsky, E., & Johnson, A. A. (1998). *Reframing the business case for work-life initiatives*. New York: Families and Work Institute.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior, 63*, 510–531.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and families are allies: a theory of work family enrichment. *The Academy of Management Review: Wechselnde Verlagsorte, 31*(1), 111–128.
- Hesse/Schrader. (2017). Work life balance, Zwei Leben im Einklang. <https://www.berufsstrategie.de/bewerbung-karriere-soft-skills/work-life-balance.php>. Accessed 26 Feb 2021.
- Hobfoll, S. E. (1989). Conservation of resources: a new attempt at conceptualizing stress. *The American Psychologist, 44*, 513–524.
- Hoffmann, M. (2019). Work-life-balance. <https://www.businessinsider.de/gruenderszene/lexikon/begriffe/work-life-balance/>. Accessed 26 Feb 2021.
- Kahn, R. L., Wolfe, D. M., Quinn, R., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress*. New York: Wiley.
- Kaiser, S., & Ringlstetter, M. J. (2010). *Work-life-balance, Erfolgsversprechende Konzepte und Instrumente für Extremjobber*. Heidelberg: Springer.
- Kirchmeyer, C. (2000). Work-life initiatives: greed or benevolence regarding workers' time? *Trends in Organizational Behavior, 7*, 79–94.
- Kratzer, N., Menz, W., & Pangert, B. (2015). Balanceorientierte Leistungspolitik: Eine Einführung. In N. Kratzer et al. (Eds.), *Work-life balance- eine Frage der Leistungspolitik* (p. 13). Wiesbaden: Springer Fachmedien.
- Kuhn, L. (2010). Was ist...work life balance? <https://www.manager-magazin.de/harvard/was-ist-work-life-balance-a-d93773b6-0002-0001-0000-000091605038>. Accessed 26 Feb 2021.
- Kumanu. (2020). Defining work-life balance: its history and future. <https://www.kumanu.com/defining-work-life-balance-its-history-and-future/>. Accessed 20 Dec 2020.
- Marks, S. R. (1977). Multiple roles and strain: some notes on human energy, time and commitment. *American Sociological Review, 42*, 921–936.
- Marks, S. R., & MacDermid, S. M. (1996). Multiple roles and the self: a theory of role balance. *Journal of Marriage and the Family, 58*, 417–432.
- Mbaknol. (2020). Work-life balance-definition, significance and importance. <https://www.mbaknol.com/human-resource-management/work-life-balance/>. Accessed 20 Dec 2020.
- Papmeyer, K. (2018). *Work-life-balance im Kontext von mitarbeiterunterstützenden Dienstleistungen*. Wiesbaden: Springer Fachmedien.
- Raja, S., & Stein, S. L. (2014). Work-life balance: History, costs, and budgeting for balance. *Clinical Colon Rectal Surgery, 27*, 71–74.
- Ruskin, J. (1851). *Pre-Raphaelitism* (Pamphlet). New York: Wiley.
- Siebert, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review, 39*, 567–578.
- Sirgy, M. J., & Lee, D.-J. (2018). Work-life balance: An integrative review. *Applied Research Quality Life, 13*, 229–254.
- Ulich, E. (2005). *Arbeitspsychologie* (6th ed.). Stuttgart: Schäffer-Poeschel.
- Walsh, J. (2019). Working time and work-life balance. In A. Wilkinson et al. (Eds.), *The Sage handbook of human resource management* (2nd ed., pp. 387–401). London: Sage Publications.

Work–Life Budget

► Work–Life Balance

Workplace Health Promotion

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Synonyms

Health; Public Health; SDG 3

Definition

Health inequality is a complex mix of in-work poverty, unemployment, malnutrition, toxic working conditions, lack of social support, unhealthy lifestyles, and status, which undermines the integrity of health policies in each country. No sector in society or active citizenship can ignore responsibility for the promotion of health and social development. The workplace has been established as a fundamental location for health promotion since it directly influences the economic and social well-being of its workers, their physical and psychological health, and the health of their immediate families and communities. Safe workplaces contribute to sustainable development by promoting health through a correct lifestyle at work encouraging personal skills and professional development. It also provides the infrastructure and environment to support the promotion of health to a broad audience.

Introduction

The Universal Declaration of Human Rights states that “the States Parties to the covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” (UN 1948). A key factor is the

social and cultural structure of society as customs and traditions, and support from relatives and communities, help to attain better health conditions (WHO 1948a). Group solidarity involves an idea of shared life or destiny, a sense of belonging and justice toward peers, and integration or rootedness of each member within the group. If it is harnessed toward sustainable goals, it can be a powerful motivating force, and an effective strategy since the areas of social development are at the same time the social determinants of health. Cultural developments that should be promoted refer to material conditions, access to water and environmental protection, formal and cultural structures, elimination of marginalization and exclusion, and education and reduction in illiteracy. Four principles have been identified as essential to the process of priority setting in health: treating people equally and equitably, favoring the excluded, maximizing common benefits, and promoting or rewarding social altruism (UNESCO 2010).

According to the World Health Organization (WHO), determinants that affect health include income and social status, including gender differences, culture and education, support networks and coping skills, genetics and personal behavior, health services and employment conditions, when present. If a genetic disease is present, for example, check-ups need to be more frequent, and access to medical services that prevent and treat the disease are fundamental as well as direct and indirect work permits. Another example is working mothers. Today, working mothers that find time to spend with their children dedicate seven fewer hours per week on housework, six fewer hours sleeping, five fewer hours on personal care, and twelve fewer hours on leisure activities than non-employed mothers. Women, therefore, tend to end up with less pay, less economic security, higher vulnerability to poverty, less leisure time, and less access to top jobs that do not support a healthy or balanced lifestyle, both personal and family-related (Nedelsky 1993).

Loss of sleep, leisure time, and time to oneself is not just a loss of comfort or pleasure, but a threat to autonomy, to the capacity to figure out what is essential in life and how to pursue it. The absence

of care and stability makes people afraid, and in many instances, leads to behavior that causes harm to others as well as to the planet. Having time to cook and enjoy meals, for example, could radically change the need for fast food, rushed meals, meals in front of the television, and the urge to use ecologically unsound shortcuts from paper towels to disposable plastic and aluminum, augmenting both quality of life and environmental sustainability. Also, stress and insecurity make people self-protective and self-focused in ways that make it difficult for them to enter the cooperative relationships necessary both for their well-being and that of others (Nedelsky 2011; Ratti 2017). One of the terrible harms of time poverty is that it makes people ungenerous making them think they do not have time to help, despite their motivation, as per the Samaritan's Dilemma (Stone 2008).

Therefore, in the 21st century, the workplace has been established as one of the priority settings for health promotion, since it influences the physical, mental, economic, and social well-being of workers and in turn the health of their families, communities, and society (WHO 1948a). Workplace Health Promotion (WHP) – defined as the combined efforts of employers, employees, and society to improve the health and well-being of people at work (ENWHP 1996) – is a program of the World Health Organization for the promotion of health through a correct lifestyle at work.

WHP places emphasis on improving the work in organizations, increasing employee participation in shaping the working environment, and encouraging professional development (WHO 1948b). It also offers an ideal setting and infrastructure to support the promotion of health to a broad audience (WHP 2007).

World Health Organization

The World Health Organization (WHO) was established in 1948 and is a specialized agency of the United Nations, a member of the United Nations Development Group, that deals with public health – its objective “is the attainment by all people of the highest possible level of health”

Workplace Health Promotion, Table 1 Roles and functions of WHO

Role	Functions
<i>Guiding on health matters and engaging in partnerships where joint action is needed</i>	Establish and maintain effective collaboration among agencies, governments, and the third sector to strengthen health services and provide facilities
<i>Dissemination of valuable knowledge and monitoring of the implementation of norms and standards</i>	Setting an agenda regarding international health matters to eradicate and mitigate diseases
<i>Articulating ethical and evidence-based policy options</i>	Promote cooperation to attain the advancement of health policies and regulations
<i>Monitoring the health situation and assessing health trends by providing technical support, catalyzing change, and building sustainable institutional capacity</i>	Give appropriate technical and direct assistance
<i>CRVS (Civil Registration and Vital Statistics)</i>	Provide monitoring of vital events (birth, death, wedding, divorce)

Source: Elaboration from <https://www.euro.who.int/en/home>

(Encyclopedia of Public Health 2008). The World Health Organization constitution has been signed by 61 countries and focuses on communicable diseases and non-communicable conditions ranging from development and aging to food security and occupational health (World Health Organization 1948). Its primary roles and functions are highlighted in Table 1.

In addition, the WHO publishes health-specific reports such as the World Health Report and the World Health Survey and organizes networking activities such as World Health Day (WHO 1948a, b; Hoffman and Rottingen 2012).

Workplace Health Promotion

Social and financial conditions that increase the probability to get sick and raise the need for

medical assistance serve as a foundation for the health of the entire population (Kemp 2012). Higher income, social status, and education are linked to better health while illiteracy and poverty bring low health awareness, cause more stress, and bring lower self-confidence, which creates a mental barrier to success and life betterment. Lifestyle is also fundamental, a healthy environment and workplace together with balanced eating, keeping active, and having control over daily setbacks all affect health (Kemp 2012).

The WHO has prioritized the workplace as a setting for health promotion due to the influence it has on all spheres of a person's life. The health of workers, since they are first and foremost people and members of a community, is affected equally by occupational and non-occupational factors such as family welfare, home, and commuting conditions, and community impact. Healthy workers are not only more productive and improve the organizational environment but also raise healthy families, which in turn can bring poverty reduction (WHO 1948a).

An unhealthy lifestyle, on the contrary, may contribute to general lowering of the level of health, can cause absence from work due to sickness, generate productivity loss at work, and reduce the overall ability to work. Workplace Health Promotion Programs (WHPPs) aim to improve lifestyle and consequently improve health, workability, and work productivity (Rongen et al. 2013). Employers who adopt a health promotion program should use best practices to maximize the likelihood of achieving positive results (Goetzel et al. 2014) since well-designed and well-executed programs, together with an organizational culture that can facilitate success, can produce positive outcomes (DeJoy and Wilson 2003; Goetzel et al. 2014).

Workplace health promotion combines the reduction of health risk factors with the enhancement of health-strengthening factors that further promotion strategies (Chu 2000). The processes of protecting workers, their communities, and the surrounding environment are fundamental for sustainable development (WHO 1948a) and have a more significant exponential effect on

Workplace Health Promotion, Table 2 Benefits of workforce health promotion

Organization	Employee
Health and safety program	Safe and healthy work environment
Improved employability and enthusiasm	Enhanced self-esteem and teamwork
Reduced turnover and absenteeism	Reduced stress, fear, and anxiety
Reduced insurance costs	Improved health
Reduced litigation	Increased job satisfaction and internal turnover
Increased productivity	Increased skills for health protection
Better overall environment	Improved well-being
Active participation	Personal development

Source: Elaboration from <https://www.who.int/>

low-paid workers in high-risk occupations since the lack of an adequate quality health care system hinders social development and augments inequities.

Proper attention to workers' health and safety, on the other hand, has extensive benefits for both the organization and its employees (WHO 1948a) as portrayed in Table 2:

Companies can utilize diverse strategies, such as health education, implementation of supportive environments, integration of programs into the benefit structure, and co-created initiatives, at different functional levels – awareness, lifestyle modification, and work environment (Gebhardt 1990). WHP thus functions as the combined stakeholder effort to improve the mental and physical health and well-being of people at work (ENWHP 1996). It supports a participatory process for the implementation of a comprehensive organizational analysis and design aimed at improving health resources in an enterprise (Abraham et al. 2011).

While some health promotion activities in the workplace tend to focus on the prevention of specific risk factors, such as maintaining a correct posture, or on changing personal behaviors, such as healthy nutrition (Rongen et al. 2013), workforce health promotion initiatives

have moved toward a more comprehensive approach.

Summary

The concept of the health-promoting workplace is becoming increasingly relevant as more private and public organizations recognize its importance. A correct balance of physical, emotional, social, spiritual, and intellectual well-being is fundamental to maintain a healthy, qualified, and motivated workforce, which in turn can bring sustainable social and economic development.

Policy implementation, incentive-based benefits, on-site facilities, counseling, and reinforcement strategies can be obtained through a high level of organizational commitment and support from senior management (O'Donnell 2002). Advocacy, including political, economic, social, cultural, environmental, behavioral, and biological factors that can favor good health (Cambridge Dictionary 2019), is also key in overcoming significant barriers to public and occupational health such as poor living and working conditions and in building and maintaining professional health programs through lobbying and commercial campaigning (WHO 1986).

Successful workplace health promotion should be viewed as an ongoing process (WHO 1948a) and include participation by all stakeholders; orientation toward sustainability goals and integration into company practices; comprehensive programs including individual- and environment-directed health strategies (Chu 2000). The effects of these programs include disease prevention, risk reduction, and health awareness – personal, environmental, organizational, and societal factors that have a major impact on employee well-being (WHO 1948a).

Cross-References

- [Health and Safety](#)
- [Occupational Safety and Health Administration](#)
- [Sustainable Development](#)

References

- Abraham, J. M., Feldman, R., Nyman, J. A., & Barleen, N. (2011). What factors influence participation in an exercise-focused, employer-based wellness program? *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 48, 221–241. <https://doi.org/10.5034/inquiryjml.48.03.01>.
- Cambridge Dictionary. (2019). Advocacy. <https://dictionary.cambridge.org/dictionary/english/advocacy>.
- Chu, C. (2000). Health-promoting workplaces – International settings development. *Health Promotion International*, 15, 155–167. <https://doi.org/10.1093/heapro/15.2.155>.
- DeJoy, D. M., & Wilson, M. G. (2003). Organizational health promotion: Broadening the horizon of workplace health promotion. *American Journal of Health Promotion*, 17, 337–341. <https://doi.org/10.4278/0890-1171-17.5.337>.
- Encyclopedia of Public Health. (2008). World Health Organization. In: W. Kirch (Eds.), *Encyclopedia of Public Health*. Springer, Dordrecht. https://doi.org/10.1007/978-1-4020-5614-7_3809.
- ENWHP. (1996). European Network for Workplace Health Promotion: ENWHP. https://www.enwhp.org/resources/toolip/doc/2018/10/26/1_phwork-analysis_mogps.pdf.
- Gebhardt, D. L. (1990). Employee fitness and wellness programs in the workplace. *American Psychologist*, 45, 262–272.
- Goetzel, R. Z., Henke, R. M., Tabrizi, M., Pelletier, K. R., Loeppke, R., Ballard, D. W., Grossmeier, J., et al. (2014). Do workplace health promotion (wellness) programs work? *Journal of Occupational and Environmental Medicine*, 56, 927–934. <https://doi.org/10.1097/JOM.0000000000000276>.
- Hoffman, S., & Rottingen, J.-A. (2012). Assessing implementation mechanisms for an international agreement on research and development for health products. *Bulletin of the World Health Organization*, 90, 854–863. <https://doi.org/10.2471/BLT.12.109827>.
- Kemp, C. B. (2012). Public health in the age of health care reform. *Preventing Chronic Disease*, 9. <https://doi.org/10.5888/pcd9.120151>.
- Nedelsky, J. (1993). *Reconceiving rights as relationship* (Vol. 1, 1 vols.). Review of Constitutional Studies/Revue d'études constitutionnelles.
- Nedelsky, J. (2011). *Law's relations: A relational theory of self, autonomy, and law*. Oxford/New York: Oxford University Press.
- O'Donnell, M. P. (2002). *Health promotion in the workplace* (3rd ed.). Albany: Delmar Thompson Learning.
- Ratti, A. (2017). Part-time per tutti: la proposta di Jennifer Nedelsky. *Aggiornamenti Sociali*.
- Rongen, A., Robroek, S. J. W., van Lenthe, F. J., & Burdorf, A. (2013). Workplace health promotion. *American Journal of Preventive Medicine*, 44, 406–415. <https://doi.org/10.1016/j.amepre.2012.12.007>.

- Stone, D. A. (2008). *The Samaritan's dilemma: Should government help your neighbor?* New York: Nation Books.
- UN. (1948). *Universal declaration of human rights*. Paris. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>.
- UNESCO. (2010). *Report of the International Bioethics Committee of UNESCO (IBC) on social responsibility and health*. International Bioethics Committee. ISBN: 978-92-3-104170-9, p. 69. <https://unesdoc.unesco.org/ark:/48223/pf0000187899>.
- WHO. (1948a). *Workplace Health Organization*. Workplace Health Organization.
- WHO. (1948b). *Constitution of the World Health Organization*. World Health Organization.
- WHO. (1986). *The Ottawa Charter for Health Promotion*. World Health Organization.
- WHP. (2007). *Workplace Health Promotion*. Workplace Health Organization.
- World Health Organization. (1948). *British Medical Journal*, 2, 302–303. <https://doi.org/10.1136/bmj.2.4570.302>.

Workplace Health Surveillance

► Health and Safety

Workplace Incivility

► Counterproductive Work Behaviors

World Business Council for Sustainable Development

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Synonyms

CEO-led organization for sustainable development; Environmental business coalition;

International organization towards sustainable development; International organization to promote sustainable business companies

Definition/Description

The World Business Council for Sustainable Development (WBCSD) is a coalition of international companies united by a shared commitment to the environment and sustainable development. It comprises over 200 leading companies from all business sectors and all major economies and almost 70 national business councils. The WBCSD provides a platform for companies to explore sustainable development business models; to share knowledge, experiences, and best practices on energy and climate; and to influence a variety of forums to keep progress toward sustainability (Lovins 2008; Wilkinson and Mangalagiu 2012).

The WBCSD History and Milestones

The WBCSD was initially formed as the “Business Council for Sustainable Development” (BCSD), in 1991, by the Swiss businessman Stephan Schmidheiny and 48 top business leaders interested in the environment, in response to the challenge made by the Secretary-General of the United Nations Conference on Environment and Development (UNCED), Maurice Strong, to promote the concept of sustainable development among the world’s business leaders and companies at the upcoming Rio Earth Summit, in 1992.

At that conference, the council presented an in-depth analysis of how companies can adapt and combine environmental protection with economic growth, in a book named *Changing Course: A Global Business Perspective on Development and the Environment*, which advocated the concept of *eco-efficiency* – doing more with less. This perspective was a major breakthrough at the time, because business leaders at the highest level overcame the prevailing business model “business versus environment” (Najam 1999). Instead, they argued that sustainable development

was not only good for business, but it was a “good business” (Lovins 2008).

Later, in January 1995, the Council merged with the World Industry Council for the Environment (WICE), and formed the WBCSD, secretariat in Geneva, Switzerland, with 120 members.

In 1996, the WBCSD launched a program with the United Nations Environment Programme (UNEP), and the Ceres Initiative on *financial indicators* of sustainable development, and its “International Business Action Plan on Climate Change” (Najam 1999).

In 1997, as part of the Rio+5 celebrations, the WBCSD co-hosts a high-level round table with governments, NGO, and business leaders and releases its report “Signals of Change: Business Progress Towards Sustainable Development” summarizing the progress since the Rio Earth Summit. During that year, WBCSD signed a memorandum of understanding with UNDP to improve environmental performance of companies in developing countries (Najam 1999). It also launched the *What-if?* project with a cross-sectoral approach to solve sustainability challenges. This project used scenarios to explore the possibilities of different future worlds (Wilkinson and Mangalagiu 2012).

Since its beginning, the WBCSD has grown and became a major player, shaping the international discourse on sustainable development. In 2003, it was identified by a World Bank-/IFC-commissioned study as one of the “most influential forums” for companies on corporate social responsibility issues (Wilkinson and Mangalagiu 2012).

Concerns with social matters were highlighted in 2006, when the WBCSD urged its members to pursue *inclusive businesses* to help low-income communities, either by providing employment for people, directly, or as suppliers, distributors, retailers, and service providers or by providing affordable products to meet basic needs (WBCSD 2019k).

In February 2010, the WBCSD publicly released the “Vision 2050: The new agenda for business.” This report presents a vision of a sustainable world by 2050. It also provides the pathway that can lead to that future, by changing governance structures, economic frameworks,

business, and human behavior. This pathway identifies nine key areas of action that must proceed in parallel to keep progress toward sustainability by 2050 (WBCSD 2010). Later that year, on 29 October 2010, the International Chamber of Commerce (ICC), the WBCSD, and the UN Global Compact announced the creation of a temporary coalition of business groups named Business Action for Sustainable Development 2012 (BASD 2012). The purpose of BASD 2012 was to influence the preparatory process of Rio+20 by providing an inclusive platform for exchange of policy recommendations, business solutions, and partnerships aiming to achieve concrete actions and deliverable results toward sustainable development.

In 2011, the WBCSD released a guide for implementing the Vision 2050, with a prescriptive plan of the organizational changes that companies need to engage to integrate sustainability into their strategy and operations (WBCSD 2011).

In 2015, the WBCSD presented at the Conference of the Parties (COP) 21, in Paris, with the Sustainable Development Solutions Network and the International Energy Agency, the “Low Carbon Technology Partnerships Initiative” (LCTPi), an action-oriented program to accelerate the development of low-carbon technologies and scale up deployment with the overall aim to reach a 50% reduction in energy-related CO₂ emissions by 2050 (WBCSD 2015). This was the year all United Nations Member States compromised with “The 2030 Agenda for Sustainable Development” that sets 17 Sustainable Development Goals (SDGs) for achieving peace and prosperity for the people and the planet, now and into the future (UN 2019). Subsequently, the SDGs Compass Guide, developed by GRI, the UN Global Compact, and the WBCSD, was also released. This guide assists companies in adapting their core activities to maximize their contribution to the SDGs by (1) understanding the SDGs, (2) defining priorities, (3) setting goals aligned with SDSs, (4) integrating sustainability into the core business and governance, and (5) reporting and communicating using common indicators and a shared set of priorities (SDGCompass 2015).

In 2017, the WBCSD presents the “Reporting Exchange.” This is a free online

platform with information on sustainability reporting requirements, resources, and indicators, covering 70 sectors and 60 countries, that was developed to assist companies, investors, academics, regulators, and standard setters (WBCSD 2019). This should be useful for academic research because it contains extensive data on regulation and indicators of a wide range of countries.

A year after, in 2018, the WBCSD launched the “Factor 10,” an initiative that offers scalable business solutions toward circular economy. It seeks to encourage leading businesses to use resources wisely, to create processes with the greatest possible value and minimum waste, and to benefit from business circular opportunities (WBCSD 2019).

Governance and Leadership

According to the Articles of Association (WBCSD 2017a), the WBCSD is a nonprofit organization that is financed by annual membership fees and by other incomes, such as fees charged for services, donations, gifts, and contributions to program expenses (Article 3). The membership fees cannot change within a 3-year period.

The governance of the Association comprises the following bodies: the Council, the Executive Committee, and the Auditor (Article 5 of the Association).

The Council is the main body of the WBCSD, and it is composed of all the representatives of the members. These representatives should be the CEO of the companies or an executive board member.

The Council members meet in ordinary session once a year, in the Annual General Meeting, that should take place within 12 months after the financial year end. They can meet in extraordinary session whenever necessary.

The competences of the Council include to discuss strategic issues related to sustainable development and to decide the future direction of the Association. The Council also has the power of supervising the activities of other bodies

and can dismiss them and dissolve the Association.

The Executive Committee is responsible for the operational (day-to-day) management, but this responsibility can be delegated in the CEO of the Association.

This body carries out all acts to pursue the purposes of the Association and to manage the Association’s business. In order to achieve this, the Executive Committee approves the work program, prepares the annual budget to be approved by the Council, approves the annual report and accounts, approves reports and executive briefs released under the name of the WBCSD, handles membership issues, and proposes internal regulations.

Each mandate of the members is 2 years’ duration, and they can serve up to a maximum of three consecutive or nonconsecutive terms (WBCSD 2017a). The members have a non-remunerated role (WBCSD 2017b).

The Executive Committee is composed of up to eighteen (18) members of the Council including the Chair and four Vice Chairs, and it should have diversity in terms of industry, geography, sectors, gender, and sustainability areas and should also be considered the representation from each of the Sector Projects on a case-by-case basis (WBCSD 2017b).

The members’ profile should meet the criteria set out in the Annex B of the “WBCSD Executive Committee Charter.” Firstly, they should have some qualifications, namely, experience in international business and demonstrated innovative leadership to advance the sustainability agenda of an international company, detailed knowledge of and in-depth experience in key sustainability areas, and engagement with key sustainability stakeholders. Additionally, members are selected and recommended according to the following criteria: to be CEO or board executive member in large companies; experience relevant in the main areas of the WBCSD; personal and professional commitment to advance the mission of the WBCSD; engagement and visionary leadership in sustainability; to be able to promote the principles of sustainability reporting, at the level of their company’s activities, in general, and in terms of

social equity, inclusive business, and gender equality; and ability to add value to the WBCSD and to leverage their network (WBCSD 2017b). The profile of the members should be assessed annually and published on the WBCSD’s website.

Since the beginning of the WBCSD, the Chairs of the Executive Committee were the following:

Chairman	Company	Period
Rodney F. Chase	BP	1995
Livio D. DeSimone	3 M	1996/1997
Egil Myklebust	Norsk Hydro	1998/1999
Charles O. Holliday, Jr.	DuPont	2000/2001
Sir Philip Watts KCMG	Royal Dutch Shell	2002/2003
Bertrand Collomb	Lafarge	2004/2005
Travis Engen	Alcan	2006/2007
Samuel DiPiazza	PwC	2008/2009
Paul Polman	Unilever	2010/2011
Charles O. Holliday, Jr.	Bank of America	2012/2013
Paul Polman	Unilever	2014/2017
Sunny Verghese	Olam International Ltd.	2018/2020

The CEO is responsible for the day-to-day management, according to the delegated powers of the Executive Committee, and he may be supported by the Senior Management Team (Article 8). The salary amount of the CEO is determined by the Executive Committee.

The current President and CEO of the WBCSD is Peter Bakker, who has been leading the Association since 2012.

Finally, the Council should appoint a company of auditors, established in Switzerland, for periods of 3 years. The auditor has the responsibility to audit the accounts of the Association and to prepare a report to be submitted to the Annual General Meeting.

According to the website of WBCSD, currently, the governance structure includes also an advisor. Peter White has been involved in the work of WBCSD since 1997 and now, as advisor, has the role of the Ambassador for Biodiversity. In this context, he is working with WBCSD members and partners to bring business solution to the 15th COP of the Convention on Biological

Diversity (CBD), that it will take place in China in 2020, and to other nature-related projects. During the tenth meeting of the COP, held in Japan in 2010, the parties adopted a revised and updated Strategic Plan for Biodiversity for the 2011–2020 period. The 15th COP in 2020 is expected to update the CBD’s strategic plan and adopt a post-2020 global biodiversity framework for the next decade.

Membership Philosophy and Global Network

The eligible members of the WBCSD are companies from around the world seeking to provide business leadership in sustainable development and environmental performance (WBCSD 2017a). These companies can be a member of the WBCSD only by invitation of the CEO, following approval of the Executive Committee of the Association (WBCSD 2018).

The philosophy of the Association is to be open to join new members, and these can come from all sectors and industries. However, there are some membership conditions. The companies must be committed to the mission (“to accelerate the transition to a sustainable world by making more sustainable business more successful”), respect the vision (“to build a world where nine billion people are living well and within the boundaries of the planet, by 2050”), and work in the objectives of the WBCSD (WBCSD 2019a). Members of the WBCSD agree to contribute to the UN Sustainable Development Goals and the WBCSD’s Vision 2050 (WBCSD 2018).

The WBCSD identifies six objectives of the organization that the members should work for, which are the following: (1) be a business thought leader and advocate for sustainable development; (2) participate in policy development to create the right framework conditions for business to make an effective contribution toward sustainable development; (3) develop and promote the business case for sustainable development; (4) develop scalable business solutions, and promote their implementation, for sustainable development; (5) demonstrate and measure the business

contribution to sustainable development and share leading-edge practices among members; and (6) contribute to a sustainable future for all nations (WBCSD 2018).

According to the membership conditions, a member company should accept the following conditions: (1) be independent; (2) be represented on the Council by the CEO or executive-level or board of directors' representative; (3) nominate a liaison delegate, to manage the relationship with the WBCSD; (4) actively support the objectives and work plan of WBCSD; (5) strive for consistency in their advocacy by being transparent about the position and actions the company is taking on sustainable development; (6) operate at the highest levels of transparency, adopting appropriate frameworks to report their Environmental, Social, and Governance (ESG) performance and actively contribute to implementing governance processes that integrate the ESG performance into the review of their business; (7) pay the annual fees; and (8) in case of withdrawal of membership, notice must be provided to the CEO of WBCSD, in written form signed by the Council Member, from 1 January to 30 September, in order to take effect as of the first day of the following year (WBCSD 2018).

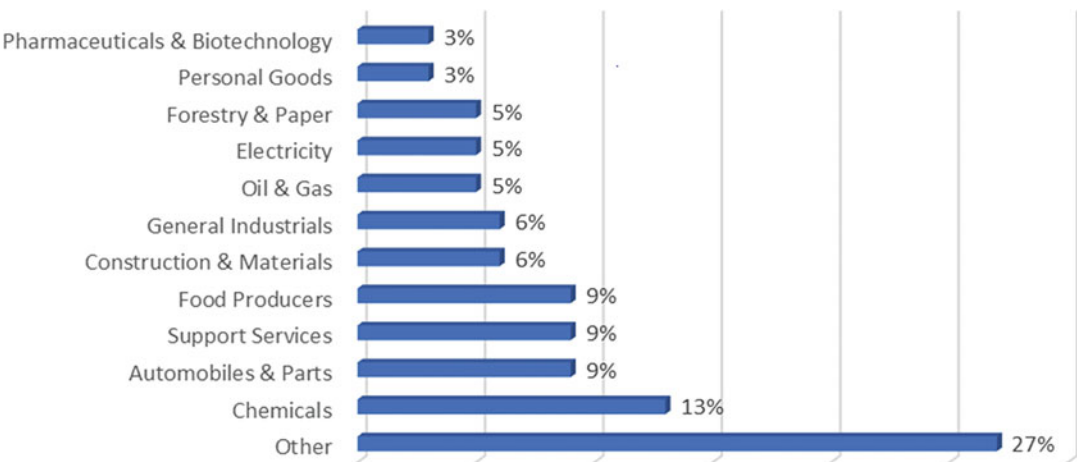
Currently, the WBCSD integrate over 200 forward-thinking global companies, and the

distribution of the membership by sector and by region is shown in Figs. 1 and 2. Mostly, members come from Europe and the chemical sector.

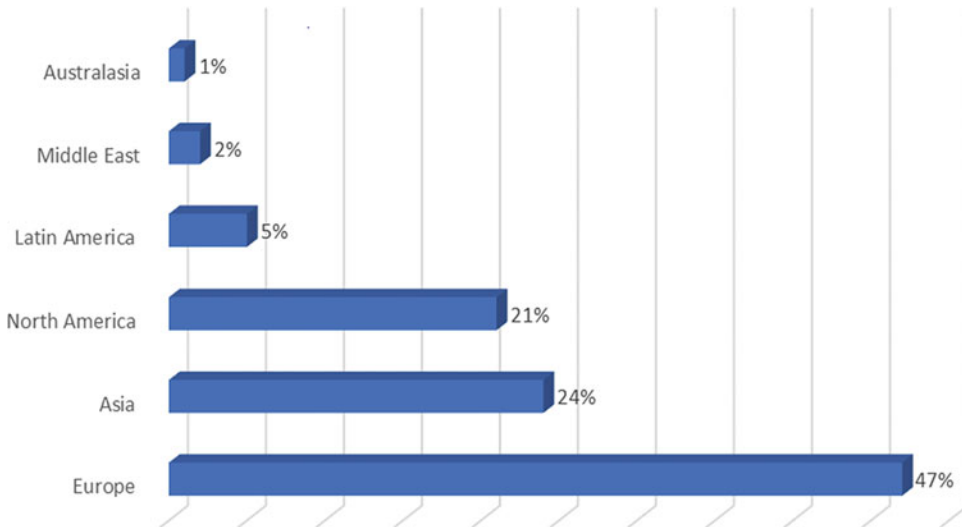
One important criticism about the membership philosophy of the WBCSD is that this organization is a “fairly exclusive club” due to the requirement of having an invitation to be a member and a high amount of annual membership fee (Najam 1999). According to this author, the WBCSD remains a coalition of big businesses, predominantly from the advanced industrialized countries; in theory, the smaller companies could be members, but in practice, the priorities and focus concern issues of large corporations.

The projects of WBCSD are led and resourced by members, but, in some cases, they can also have support from partner organizations that provide specific competencies and/or financial resources (WBCSD 2019c). Partners are from a broad range of nonbusiness stakeholders, and they are invited to engage in working groups of the WBCSD, where particular need for external collaboration is identified and can be a factor of success of the program.

There are five categories of partners: implementation, knowledge, outreach, collaboration, and policy partners. In the first and main category, the partners play an instrumental role in the implementation of specific projects due to their



World Business Council for Sustainable Development, Fig. 1 Membership by sector. (Source: Adapted from WBCSD 2019b)



World Business Council for Sustainable Development, Fig. 2 Membership by region. (Source: Adapted from WBCSD 2019b)

expertise, perspective, or credibility. The knowledge partners provide academic or technical expertise. In the third category, the partners provide outreach and advocacy support. Collaboration partners can be major platforms, philanthropy, development agencies, etc. that provide significant systems transformation. And the last category includes governmental or international organizations and governments themselves (e.g., city- or country-level governments, United Nations organizations, European Union).

The collaboration with WBCSD as partner gives access to its Global Network. The Network is an alliance of more than 60 CEO-led business organizations worldwide and encompassing around 5000 companies with the shared commitment to provide business leadership for sustainable development in their respective countries and regions (WBCSD 2019c).

The members of the Global Network help to promote sustainable development at the local and regional levels. The purpose is to work together with WBCSD in order to create the global-local linkages necessary to promote business solutions for a sustainable world.

The Global Network brings value on three main levels: (1) promoting in a global way the programs and activities of the WBCSD,

disseminating information to a wide range of players, and implementing pilot projects; (2) fostering synergies with WBCSD member companies and securing the business license to operate, innovate, and grow in their respective countries and regions; and (3) strengthening Global Network partners' local and regional activities, because they benefit from cooperating with each other due to their similar socio-economic and cultural characteristics and similar sustainability challenges (WBCSD 2019d).

The National Business Council for Sustainable Development or other equivalent national representatives of the WBCSD are an important group of this Global Network, and it is placed in different countries from five continents: Africa (4 countries), Asia (18), Europe (21), Latin America (15), North America, and (4) and Oceania (2).

Programs and Projects to Achieve Systems Transformation

To contribute to the achievement of the SDGs, the WBCSD is currently engaged in six work programs, *Circular Economy*, *Cities and Mobility*, *Climate and Energy*, *Food and Nature*, *Redefining Value*, and *People*, and three Sector Projects,

Forest Solutions Group, Global Agrobusiness Alliance, and Tire Industry Project. Additionally, it is involved in several projects related with these work programs.

The *Circular Economy* program seeks to drive business leadership and practice toward circular economy. It is aligned with the Vision 2050 report. It has the mission of achieving a society with a circular approach to resources, in which the concept of waste is obsolete (WBCSD 2010). This program is operationalized by the *Factor10* Project, which aims to improve eco-efficiency of materials by a factor of 10 in order to eliminate waste (WBCSD 2019e).

The *Cities and Mobility* program incentivizes companies to provide sustainable solutions for the future development of cities in areas such as housing, energy efficiency in buildings, mobility, water, and sanitation. It has two main areas of action – *Sustainable Cities* and *Transforming Mobilities*. The *Sustainable Cities* program area includes two projects: the *SBT4buildings*, which aims to help building and construction companies to reduce carbon emissions and address decarbonization across the life cycle of buildings, and the *Low Emissions Economy Partnership* (LEEP), which seeks to promote local offices which should provide neutral spaces for discussion between public and private stakeholders to create projects, expand local economies, and reduce GHG emissions. The *Transforming Mobilities* area includes two projects: the *SiM-Plify*, designed for providing evaluation tools for the sustainability of cities mobility systems and proposing solutions, and the *Transforming Urban Mobility*, which should guide the conversion of cities mobility to a more sustainable approach (WBCSD 2019f).

The *Climate and Energy* program facilitates the interaction between WBCSD members to address critical industry issues and the sharing of best practices regarding climate and energy issues. This program comprises two areas of action: (1) Energy, which includes several projects such as guidance for energy companies to achieve decarbonization targets (SBT4utilities), guidance to use the available low-carbon energy sources (New Energy Solutions), and promotion

of renewable energy (REscale); and (2) Climate, which includes projects such as developing natural climate for agriculture and forestry sectors (Natural Climate Solutions), establishing a cross-sectorial framework to help companies transform their operations and align with 1.5 °C limit (SOS1.5), and influencing climate policy across industries and countries (Climate Action and Policy) (WBCSD 2019g).

The *Food, Land, and Water* program seeks to promote comprehensive approaches and new technologies to meet the feeding needs of an estimated population of nine billion people by 2050. It addresses several key challenges such as food and nutrition security, smallholder livelihoods, and natural resource efficiency. This program has two areas of action: *Food and Land Use* and *Water*. The *Food and Land Use* area includes three programs: the *Soft Commodities Forum*, the *FReSH*, and the *Climate Smart Agriculture* that aim to develop sustainable agriculture supply chains, to refocus the food system toward healthy products within environmental limits, and to promote agriculture efficiency and resilience while improving the livings of farmers. The second program area, *Water*, includes four projects: the *Water Stewardship*, which involves water risk assessment and sustainable water management; the *Circular water management*, which offers company case studies of circular water management in practice; *Water-Smart Agriculture*, which aims to identify innovative and scalable business solutions to increase efficiency in agriculture, and the *WASH – access to water, sanitation, and hygiene*, which promotes access to water, sanitation, and hygiene at the workplace and through businesses supply chains and communities (WBCSD 2019h).

The *People* program prioritizes the business role in respecting people's rights, needs, and goals in a sustainable way. This program has three main areas of action. The first area, *Social Impact*, includes the *Future of Work* project that aims to promote balance between new technologies and their application in the workplace and what is socially viable and sustainable in the long term; the *Human Rights* project, which seeks to enhance corporate commitment to

human rights; and the *Finance for Social Impact* project that promotes alignment between institutional investors and corporations with social impact. The second area, *Sustainable Lifestyles*, explores the technical, practical, and emotional features of a sustainable world to achieve more sustainable lifestyles. The third area of action regards the *SDGs* and includes the *SDG Sector Roadmaps* project that seeks to help companies to develop sector roadmaps towards the achievement of the *SDGs* and the *SDG Action and Policy* project that supports companies in the internalization of the *SDG* agenda (WBCSD 2019i).

The *Redefining Value* program has three areas of action: *External Disclosure*, *Business Decision-Making*, and *Investor Decision-Making*. The *External Disclosure* area includes the *Task Force on Climate-related Financial Disclosure (TCFD) Preparer Forums* program that helps companies in the oil and gas, electric utilities, chemicals, construction, automobiles and food, agriculture, and forest sectors to disclose quality information on climate-related financial risks and opportunities. This area of action also includes three other projects: the *Reporting Matters* project that analyzes sustainability reports of member companies to provide individual feedback on where to improve; the *Reporting Exchange* program, mentioned earlier; and the *Purpose-Driven Disclosure* project that seeks to align corporate disclosure practices with the needs of financial market participants in order to encourage the flow of capital to more sustainable companies. The *Business Decision-Making* is the second area of action which includes four projects: *Governance and Internal Oversight*, which encourages companies' governance structures to integrate sustainability considerations into their strategies; the *Integrated Performance Management* project, which explores performance management indicators in line with sustainability concerns; the *Measurement and Valuation* project, which encourages convergence and alignment around generally accepted methodologies and datasets that enable consistent and comparable results; and the *Enterprise Risk Management (ERM)* project, in collaboration with the

Committee of Sponsoring Organizations of the Treadway Commission, that provides guidance to integrate social, environmental and governance risks into the ERM framework. The third area of action, the *Investor Decision-Making*, currently comprises a single project, the *Aligning Retirement Assets*, which helps member companies to incorporate sustainable strategies in their retirement plans (WBCSD 2019j).

Summary

Transition of the economy toward sustainable development poses new and complex challenges to businesses. The purpose of the WBCSD is to provide companies a wide range of tools that help them to become more sustainable and successful by incorporating environmental and social concerns into their business models.

From its beginning, in 1991, the WBCSD has launched several programs, participated in high-level round tables with governments, international organizations, NGO, and business leaders, and released significant reports with pathways to a sustainable future, among other initiatives.

The governance of this organization is the responsibility of its members. The Council is the main body of the WBCSD, and it is composed of all the representatives (CEO of the companies or an executive board member) of the members. The Executive Committee is composed of up to eighteen (18) members of the Council including the Chair and four Vice Chairs, and it should have diversity in terms of industry, geography, sectors, gender, and sustainability areas and should also be considered the representation from each of the Sector Projects on a case-by-case basis.

The eligible members of the WBCSD are companies from around the world, and from all sectors and industries, seeking to provide business leadership in sustainable development and environmental performance. These companies can be a member of the WBCSD only by invitation of the CEO, following approval of the Executive Committee of the Association.

The WBCSD is financed by annual membership fees and by other incomes, such as fees charged for services, donations, gifts, and contributions to program expenses. These financial resources support the development of a wide range of projects.

In some cases, the projects could also have support from partner organizations providing specific competencies and/or financial resources. Partners are from a broad range of nonbusiness stakeholders, and they are invited to engage in working groups of the WBCSD, where particular need for external collaboration is identified and could be a factor of success of the program. This collaboration gives access to the Global Network of the WBCSD.

The Global Network is an alliance of more than 60 CEO-led business organizations worldwide and encompassing around 5000 companies with the shared commitment to provide business leadership for sustainable development in their respective countries and regions. The National Business Council for Sustainable Development or other equivalent national representatives of the WBCSD are part of this Global Network.

The WBCSD is presently engaged into six work programs aligned with the SDGs. These programs pursue several goals such as circular economy; mobility transformation and sustainable cities; climate and energy solutions; water, food, and land use; redefinition of companies' value; and integration of people's concerns.

Currently, the WBCSD is a major player in the international arena and a leading voice of large businesses for sustainable development.

Cross-References

- ▶ [Circular Economy](#)
- ▶ [Corporate Sustainability](#)
- ▶ [Eco-efficiency](#)
- ▶ [Rio Declaration on Environment and Development](#)
- ▶ [Sustainable Development](#)
- ▶ [United Nations Development Program](#)
- ▶ [United Nations Sustainable Development Goals 2030, The](#)

References

- Lovins, L. H. (2008). Rethinking production. In L. Starke (Ed.), *State of the world 2008: Innovations for a sustainable economy* (pp. 32–44). New York: The Worldwatch Institute.
- Najam, A. (1999). World business council for sustainable development: The greening of business or a greenwash? In G. P. Helge Ole Bergesen & Ø. B. Thommessen (Eds.), *Yearbook of international co-operation on environment and development 1999/2000* (pp. 65–75). London: Earthscan.
- SDGCompass, Sustainable Development Goals Compass. (2015). The guide for business action on the SDGs. Available at: https://sdgcompass.org/wp-content/uploads/2015/12/019104_SDG_Compass_Guide_2015.pdf
- UN, United Nations (2019). Sustainable Development Goals knowledge platform. Available at: <https://sustainabledevelopment.un.org/>
- WBCSD, World Business Council for Sustainable Development. (2010). Vision 2050: The new agenda for business. Available at: <https://www.wbcds.org/Overview/About-us/Vision2050/Resources/Vision-2050-The-new-agenda-for-business>
- WBCSD, World Business Council for Sustainable Development. (2011). A Road map for Vision 2050: An implementation guide for executing the Vision 2050 report. Available at: <https://www.wbcds.org/contentwbc/download/1766/22050>
- WBCSD, World Business Council for Sustainable Development. (2015). The CEO guide to climate action. Available at: <http://www.bcsdportugal.org/wp-content/uploads/2013/10/CEO-Guide-to-Climate-Action-2015.pdf>
- WBCSD, World Business Council for Sustainable Development. (2017a). Articles of Association. Available at: https://docs.wbcds.org/Governance/WBCSD_Articles_of_Association-October_2017.pdf. Accessed 07 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2017b). WBCSD Executive Committee Charter. Available at: https://docs.wbcds.org/Governance/WBCSD_Executive_Committee_Charter-approved_Mexico_AGM-Oct%202017.pdf. Accessed 07 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2018). WBCSD membership conditions. Available at: https://docs.wbcds.org/Governance/WBCSD_Membership_Conditions_2018.pdf. Accessed 07 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019a). Our philosophy of open membership. Available at: <https://www.wbcds.org/Overview/About-us>. Accessed 12 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019b). Our members. Available at: <https://www.wbcds.org/Overview/Our-members>. Accessed 12 Aug 2019.

- WBCSD, World Business Council for Sustainable Development. (2019c). Our partners. Available at: <https://www.wbcsd.org/Overview/Our-partners>. Accessed 12 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019d). Global network. Available at: <https://www.wbcsd.org/Overview/Global-Network>. Accessed 12 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019e). Circular economy. Available at: <https://www.wbcsd.org/Programs/Circular-Economy>. Accessed 14 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019f). Cities & mobility. Available at: <https://www.wbcsd.org/Programs/Cities-and-Mobility>. Accessed 14 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019g). Climate & energy. Available at: <https://www.wbcsd.org/Programs/Climate-and-Energy>. Accessed 14 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019h). Food & nature. Available at: <https://www.wbcsd.org/Programs/Food-Land-Water>. Accessed 14 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019i). People. Available at: <https://www.wbcsd.org/Programs/People>. Accessed 14 Aug 2019.
- WBCSD, World Business Council for Sustainable Development. (2019j). Redefining value. Available at: <https://www.wbcsd.org/Programs/Redefining-Value>. Accessed 14 Aug 2019.
- WBCSD, World Business Council for Sustainable Development (2019k). Our history. Available at: <https://www.wbcsd.org/Overview/Our-history>. Accessed 12/08/2019.
- Wilkinson, A., & Mangalagiu, D. (2012). Learning with futures to realise progress towards sustainability: The WBCSD vision 2050 initiative. *Futures*, 44(4), 372–384. <https://doi.org/10.1016/j.futures.2011.12.001>.

World Economic Forum (Davos)

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Synonyms

Davos Summit; WEF

Definition

The World Economic Forum is a nonprofit organization headquartered in Geneva, Switzerland, that is most well-known for its annual meetings in Davos, Switzerland, on which top political and business leaders, as well as renowned intellectuals, scientists, and public figures, gather to discuss emerging and global economic and social issues in a public-private dialogue fashion (WEF 2020c). Each year, the Annual Meeting is held in January and is appointed a specific theme which usually revolves around crucial global economic and social tendencies (Pigman 2007, p. 17).

Since 2007, the WEF organizes the so-called “Summer Davos” Annual Meeting of the New Champions, which is held in China in September, and focuses on companies, markets, and growth (Lim 2012).

The WEF was founded as an independent international nonprofit organization in 1971 by Dr. Klaus Schwab, a German business professor at the University of Geneva, and it initially was named the European Management Symposium (Pigman 2007, p. 7). Initially a forum for regional management topic discussion, after the fall of the Bretton Woods system, it started to include major social and economic topics into the discussion agenda, and it gradually grew to a global issue discussion forum. The name World Economic Forum was adopted in 1987 (Pigman 2007, p. 14).

Founded on the stakeholder theory, the WEF has stated accountability to all parts of society a priority (WEF 2020a). For this reason it strives to engage many kinds of organizations and individuals in the debate – from both public and private sectors, international and domestic organizations, academics, and media (WEF 2020c).

Emphasizing on the importance of international cooperation towards free trade and exchange, the WEF is usually seen as a focal point for promotion of the free-market globalization agenda. It is often criticized by anti-globalist and alter-globalist international activists and organizations (Pigman 2007, p. 123). Despite such criticism, The WEF is generally considered a crucial meeting for the international community as a

whole as it provides an opportunity for coordination and exchange of information and opinions on important global topics between top officials and company executives. The WEF also provides information to a larger audience through issuing different materials such as its research reports and video recording of discussion panels.

The World Economic Forum in Brief

The main aim of the WEF, as its official organizational statements claim, is to promote “entrepreneurship in the global public interest.” (WEF 2020a).

The main vision of the WEF is that a free global market system and economic globalization is good for all and that the proper development and spirit of such a system should be created and promoted by all stakeholders in society – firms, governments, international organizations, and civil society (WEF 2020a).

The WEF is headquartered at Geneva, Switzerland (WEF 2019c).

The flagship event of the WEF is the annual Davos Forum, which takes place in the Swiss resort at the end of January of each year (Pigman 2007, p. 4). Each year it gathers thousands of delegates and holds hundreds of sessions.

Except the Annual Davos Forum, the WEF also holds regional meetings all year-round. It holds such regional events all over the globe both in developed and developing countries. Regional WEF forums have been held in Europe, the Middle East, India, Latin America, Africa, Central and East Asia, etc. (WEF 2020b).

Since 2007 the WEF also holds the Annual Meeting of New Champions, also called “Summer Davos,” which takes place each year in China, and focuses on innovative and emerging markets and companies (Lim 2012).

Besides the organization of the WEF conferences, the World Economic Forum publishes a range of reports and white papers on different global issues. Some of the more significant WEF reports include the Annual World Economic Forum Report, the Global Competitiveness Report, the Global Information Technology Report, etc (WEF 2019a).

Criticism of World Economic Forum

The WEF is a proponent of discussion about globalization. It is known to promote a globalization agenda, focusing on convergence and market liberalization objectives (Sparke et al. 2009). It engages the topic discussion among scholars, the media, governments, and civil society.

Through its support of globalization, the WEF has been seen by anti-globalist and alter-globalist movements as a structure that is responsible for the increase of global inequality (Pigman 2007, p. 18). Alternative meetings, such as the World Social Forum, have been created as a counter to the WEF agenda (Sparke et al. 2009).

Some international NGOs, such as Greenpeace (Pigman 2007, p. 126), have been criticizing the WEF for lacking a proper address on climate issues (Greenpeace 2019).

Another criticism that the WEF is subject to is related to exclusivity, with some authors claiming it a “transnational elite club.” (Graz 2003). With the WEF having a membership network of mostly large enterprises, as well as institutional affiliates such as governments and international organizations, it has faced critique that in discussing global issues it should open to more representation of smaller business and civil society (Pigman 2007, p. 125).

In the organizational change from a management club towards a global issue discussion forum, the WEF has been making attempts at widening the representation of different social groups in the annual meetings (Pigman 2007, p. 5). Access to the annual meetings has been much harder for companies from developing countries. In an effort to formally overcome this imbalance, the WEF has adopted some measures, such as lowering its annual turnover limit and by inviting CEOs of companies from emerging markets.

The formal strive for a more open Davos dialogue is the Open Forum Initiative which is free of charge and welcomes government officials and company CEOs as well as artists, civil society leaders, and innovative entrepreneurs who share their opinions on the topics of discussion (WEF 2019b). The WEF has addressed the transparency and access issues also by mobilizing social network technologies – for example, by streaming the Davos sessions online on platforms such as

YouTube and upholding an active Twitter communication channel.

Summary

Considered by some a transnational elite club, the World Economic Forum has been facing biases in global society. However, the organization is of importance for international coordination, as it is a platform for communication for many of the most powerful representatives of states and businesses. With the strive for inclusion of media and academia, the WEF has been trying to evolve as an organization from being “an elite club” towards a platform organization that fosters “entrepreneurship in the global public interest.”

Cross-References

- [Stakeholder Governance and Citizen Science](#)
- [World Social Forum](#)

References

- Graz, J.-C. (2003). How powerful are transnational elite clubs? The social myth of the World Economic Forum. *New Political Economy*, 8(3), 321–340.
- Greenpeace (2019). Climate emergency must dominate World Economic Forum in Davos [16 January 2019 Press release]. <https://www.greenpeace.org/international/press-release/20295/global-risks-report-climate-emergency-world-economic-forum-davos/>. Accessed 26 September 2019.
- Lim, H. C. (2012). World Economic Forum. The Wiley-Blackwell Encyclopedia of Globalization. <https://doi.org/10.1002/9780470670590.wbeog827>
- Pigman, J. (2007). *Global institutions: The World Economic Forum – A multi-stakeholder approach to global governance*. London: Routledge.
- Sparke, M., Brown, E., Corva, D., Day, H., Faria, C., Sparks, T., & Varg, K. (2009). The world social forum and the lessons for economic geography. *Economic Geography*, 81(4), 359–380.
- World Economic Forum (WEF) (2019a). Reports. <https://www.weforum.org/reports/>. Accessed 26 September 2019.
- World Economic Forum (WEF) (2019b). Open Forum. <https://www.weforum.org/open-forum/>. Accessed 26 September 2019.
- World Economic Forum (WEF) (2019c). Office locations. <https://www.weforum.org/contact-us/office-locations>. Accessed 26 September 2019.
- World Economic Forum (WEF) (2020a). Our Mission. <https://www.weforum.org/about/world-economic-forum>. Accessed 23 December 2020.
- World Economic Forum (WEF) (2020b). How do we do our work? <https://www.weforum.org/about/how-does-the-forum-do-its-work/>. Accessed 23 December 2020.
- World Economic Forum (WEF) (2020c). Forum Members. <https://www.weforum.org/communities/forum-members>. Accessed 23 December 2020.

World Economic Forum (Davos) II

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Synonyms

Davos; Davos group; European Management Forum; Forum; WEF

Description

The World Economic Forum (WEF) is the international nongovernmental lobbying organization for public-private cooperation. It aspires to achieve the greatest degree of sustainability for its offices, as well as improve the sustainability performance of its events and incorporate sustainability principles into its business and worldwide operations. Established in 1971, WEF was founded by German engineer and economist, Professor Klaus Schwab, initially under the name of European Management Forum. According to the Forum, a self-selected alliance of multinational firms, governments, and civil society

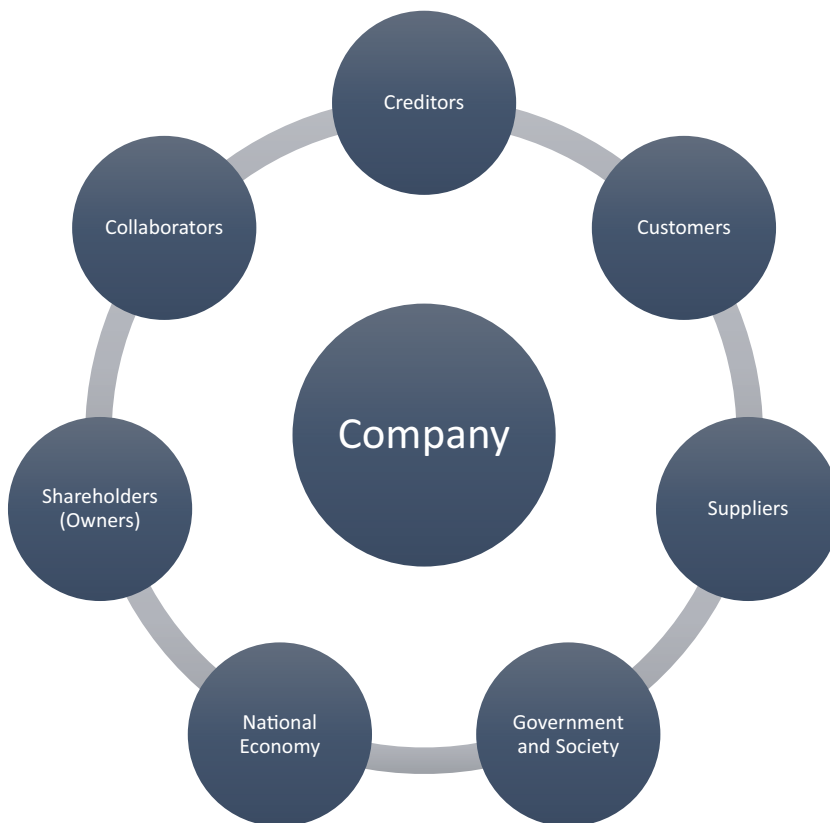
organizations is best suited to manage a globalized world. The WEF gathers the most influential public and private organizations and their leaders around the common goal of shaping the future of the globalized world. Mostly recognized by its annual meetings deep in the Swiss Alps at Davos, WEF established an elite reputation in political and business milieus, along with the accompanying criticism from various anti-establishment circles directed towards its undemocratic decision-making, elitism, and agendas such as *The Great Reset* with its controversial setup in terms of information privacy, technological progressivism, etc.

The Origins and the Mission of WEF

The initial vision of the founder of WEF, Professor Schwab, was predicated upon the

so-called *stakeholder theory* which states that companies have other responsibilities besides the ones towards their shareholders (Schwab and Kroos 1971). According to Schwab, stakeholders such as customers, society, collaborators, and others illustrated in Fig. 1 also have rights to claim the benefits arising from the business activity of the company, since they are all under the influence of the latter. Out of this doctrine, the Davos Manifesto was derived as well, as a code of ethics for future Davos meetings and its endeavors.

Since its inception, WEF has been working with global partners to make a positive change in the world, resulting in historic initiatives, industrial breakthroughs, economic solutions, and tens of thousands of projects and collaborations. In this sense, WEF positioned itself as the frontline advocate of corporate social responsibility (CSR) with the emphasis on sustainability in recent decades.



World Economic Forum (Davos) II, Fig. 1 The company surrounded by its stakeholders. (Created by the template from WEF 2022e, 15)

Accordingly, the broad scope of areas influenced by WEF is ideated around the fundamental axis of sustainable development. The organization's influence now stretches over the whole world and its involvement in determining economic, management, and social policies have been spectacular during its 52 years. The mission of the WEF has therefore always been to transform and regulate the raw shareholders' capitalism into the stakeholders' capitalism.

Activities and Centers

In addition to the activities related to CSR, through its history, WEF has been influential in mediating various types of conflicts since 1971 until today. Averting war between Greece and Turkey in 1988 is a good example for this. Furthermore, 2 years later, Davos had its role in German reunification as well, where a session on the "New Europe" also took place, bringing together the heads of Western and Eastern European countries for the first time. The famous handshake between Mandela and de Klerk, which symbolized the end of apartheid, happened through the mediation of WEF as well.

Some of the most important WEF events and achievements are enumerated in Table 1.

The Forum, with its chairman Klaus Schwab, is also widely known as a key ambassador of technological innovation throughout the fourth industrial revolution (*Industry 4.0*). The Forum is continuously expanding its impact through various specialized centers. In 2016, WEF established *The Centre for the Fourth Industrial Revolution* (C4IR) in order to "help leaders anticipate, understand and shape the trajectory of technological change for human-centered, society-serving outcomes" (WEF 2022a). Furthermore, *The Centre for Nature and Climate* is working to speed up action on climate change and environmental sustainability, food systems, the circular economy and value chains, and the future of international development. There is also *The Centre for Cybersecurity*, intended to meliorate coordination of the global response to systemic cybersecurity issues. *The Centre for the New Economy and Society* should be mentioned

World Economic Forum (Davos) II, Table 1 World Economic Forum: a timeline of highlights. (Created according to WEF 2022d)

Year	Theme
1971	The first Davos
1973	A prescient warning on the environment – The Davos manifesto
1976	Bridging the Arab world and the west
1979	Opening the door to China
1987	The beginning of the end of the cold war
1988	Averting war between Greece and Turkey
1990	German reunification and a new Europe
1992	Mandela and the end of apartheid
1998	The birth of the G20
1999	Kofi Annan and the global compact
2000	Bill Clinton and the launch of GAVI
2002	"Davos" moves to New York after 9/11
2005	The launch of the gender gap report
2007	A looming crisis
2012	Bringing in young leaders
2016	Mastering the fourth industrial revolution
2018	"A real panel, not a manel"
2019	Nature's emergency
2020	Stakeholders for a cohesive and sustainable world
2021	The great reset (canceled)
2022	The Davos agenda

as well, especially in terms of its most important output – annual Global Risk Reports.

Besides Global Risk Reports, WEF is issuing other various kinds of whitepapers and annual reports such as Global Competitiveness Reports, Global Gender Gap Reports, Future of Work Reports, etc. All these serve as outlooks for further lobbying and influencing decision-makers choices.

Offices and Locations

The Forum is headquartered in Cologny, Switzerland, with a stunning view of Lake Geneva. This location employs around 600 people. The WEF's New York office is home to Industry and System Initiatives, as well as regional and business teams serving North and Latin America. The Forum's Centre for the Fourth Industrial Revolution is based in San Francisco and is situated in the

Presidio national park. The WEF's Beijing Representative Office was founded in 2006 with the goal of integrating Chinese leaders from government, business, and academia into the Forum's communities and activities. In 2009, the WEF also established the Japan Representative Office. The Tokyo office supports the Forum's work in all sectors, notably in Japanese interactions with government, business, and the general public. The Centre for the Fourth Industrial Revolution India, which was established in October 2018, collaborates with the Indian government on a national level to codesign new policy frameworks and protocols for emerging technology with leaders from business, academia, start-ups, and international organizations.

Organization Governance

Professor Klaus Schwab is the executive chairman of the Forum. The Board of Trustees, with its members from business, politics, academia, and civil society, is guiding and overseeing the Forum's work. The Managing Board, an executive body of the WEF, is chaired by Forum's president, a former Norwegian minister, Børge Brende.

Partners and Delegates

The delegates list for Davos meetings don't get officially published, although they are often brought to the public by media leaks (Quartz 2020). Davos meetings regularly gather world's most renowned political and business leaders, presidents, prime ministers, CEO's, and other influential individuals and organizations. Unlike the delegates list, the list of all WEF's partners, counting more than 1000 companies and groups, is transparently announced and accessible via their official site (WEF 2022b). Among them, the Forum officially enumerated 105 strategic partners, including the largest companies and associations from all industries such as: Amazon,

Google, IBM, GE, Pfizer, Goldman Sachs, and many more.

Funding

The WEF is officially run as a nonprofit, politically neutral organization. The Forum receives a big portion of its income from the world's most powerful corporations, which join as members and partners in order to participate in its operations. Depending on the amount of commitment, membership, and partnership fees range from CHF60,000 to CHF600,000. The Forum also collaborates with government agencies to achieve project or initiative goals, and these agencies may support such efforts through the Forum in some cases. Nonbusiness attendees at the annual meeting, such as leaders from civil society, the arts, young global leaders, media leaders, heads of state, and ministers from more than 70 countries, do not pay a fee to attend.

The Great Reset Agenda

The idea of *The Great Reset* was launched along with the emergence of Covid-19 crisis and its social, political, and economic implications. The WEF proposes *The Great Reset* as an opportunity to shape and plan the world's future, and reestablish the goals and directions for the whole global economy and society. As Schwab noted, "The pandemic represents a rare but narrow window of opportunity to reflect, reimagine, and reset our world" (WEF 2022c). *The Great Reset*, a book, was published in July 2020, where Schwab and Malleret described a strategy for resetting five macro categories of the world: economic, societal, geopolitical, environmental, and technological. Their main argument is that "we should take advantage of this unprecedented opportunity to reimagine our world, in a bid to make it a better and more resilient one as it emerges on the other side of this crisis" (Schwab and Malleret 2020).

Criticism

The Davos conference has had its opponents since its inception. In his book *The World Economic Forum: A Multi-Stakeholder Approach to Global Governance*, Pigman wrote:

The critics of the World Economic Forum can be divided broadly into two levels: those who question the Forum at an existential level – its mission, its membership, its methods of operation – and those who criticize it at an instrumental level, arguing that the Forum is not doing what it intends to do as well as it might or ought to do (Pigman 2006, 123)

And this distinction is still valid. Existential level critics often consider Forum as a body for imposing neoliberal globalization. Instrumental level criticism, on the other hand, is commonly directed towards some particular practices or perceived governance inefficiencies. While critics of the first kind openly stand against the Forum's mission, instrumental critics often sympathize with the desires of the Forum but criticize it in terms of nonadherence to their own principles, etc. One of the most notable detractors of the first kind is undoubtedly an American political scientist, Samuel P. Huntington who coined the term “Davos Man” referring to the members of global elite who “have little need for national loyalty, view national boundaries as obstacles that thankfully are vanishing, and see national governments as residues from the past whose only useful function is to facilitate the elite's global operations” (Huntington 2004). The notion of *Davos Man* helped stir up further criticism such as the one coming from Peter Goodman in his newly published book *Davos Man: How the Billionaires Devoured the World* (2022) which Joseph Stiglitz described as a “deadly serious account of the profound damage the billionaire class is inflicting on the world.”

Summary

The World Economic Forum (WEF) is an international public-private partnership organization

focused on lobbying and leading societal and technological changes in the world by engaging leaders in collaborative efforts. It produces research reports, organizes events, and fosters public-private partnerships to address global challenges. Critics have raised concerns about its elitism and business influence, but it remains a prominent platform for dialogue and action on global issues.

Cross-References

- [Corporate Social Responsibility](#)
- [Sustainable Consumption](#)

References

- Huntington, S. P. (2004). Dead souls: The denationalization of the American Elite. <https://nationalinterest.org/article/dead-souls-the-denationalization-of-the-american-elite-620>. Accessed 29 Mar 2022.
- Pigman, G. A. (2006). *The World Economic Forum: A multi-stakeholder approach to global governance*. New York: Routledge.
- Quartz. (2020). *The confidential list of everyone attending the 2020 World Economic Forum in Davos*. <https://qz.com/1787763/the-list-of-delegates-to-the-2020-world-economic-forum-in-davos/>. Accessed 3 Apr 2022.
- Schwab, K. & Kroos, H. (1971). *Moderne Unternehmensführung im Maschinenbau*. https://www3.weforum.org/docs/WEF_KSC_CompanyStrategy_Presentation_2014_DE.pdf. Accessed 27 Mar 2022.
- Schwab, K., & Malleret, T. (2020). *COVID-19: The great reset* (1st ed.). Cologny/Geneva Schweiz: Forum Publishing.
- WEF. (2022a). Centre for the fourth industrial revolution. <https://www.weforum.org/centre-for-the-fourth-industrial-revolution>. Accessed 2 Apr 2022.
- WEF. (2022b). *Partners*. <https://www.weforum.org/partners/#search>. Accessed 30 Mar 2022.
- WEF. (2022c). *The great reset*. <https://www.weforum.org/great-reset/>. Accessed 30 Mar 2022.
- WEF. (2022d). *The World Economic Forum at 50: A timeline of highlights from Davos and beyond*. <https://www.weforum.org/agenda/2019/12/world-economic-forum-davos-at-50-history-a-timeline-of-highlights/>. Accessed 2 Apr 2022.
- WEF. (2022e). *The World Economic Forum – A partner in shaping history*. https://www3.weforum.org/docs/WEF_A_Partner_in_Shaping_History.pdf. Accessed 30 Mar 2022.

World Social Forum

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Synonyms

WSF

Definition

The World Social Forum (WSF) is an annual meeting of civil organizations, activists, and influencers, that strives to provide an alternative scenario for economic and social growth and development opposing the World Economic Forum in Davos (WSF 2001).

The first WSF meeting was held in Porto Alegre, Brazil, in 2001. It was organized as an event opposing the World Economic Forum in Davos. It was institutionally supported by the Brazilian government. The WSF is a meeting that provides a platform for discussion of issues and coordination of actions between organizations and movements of civil society and nongovernmental organizations. One of its main principles is to work in a plural, diversified, and nonparty context (WSF 2001).

After the first meeting in Porto Alegre, the WSF issued its charter of principles (WSF 2001). It established the basic principles of the Forum which state that the WSF is an open meeting place for reflective thinking, formulation of proposals, and free exchange of experiences by groups and movements of civil society that are opposed to neoliberalism. The charter defines the WSF as a world process, in which all meetings have an international dimension (WSF 2001). The forum aims to provide alternative approaches to global economic and social issues focusing on the understanding that globalization should be approached from the context of global solidarity.

The slogan of the forum that has gained popularity is “Another World is Possible.”

History of the WSF

The WSF is conceived to be an international society, much in the way Hedley Bull considers the term, namely “make a conscious social contract by instituting rules and machinery to make their relations more orderly and predictable to further certain shared principles and values” (Watson 1987, p. 147). The participating actors are all formal organizations, most of which come from the nongovernment sector, or civil rights organizations, political activists, and leaders, and they gather in the WSF via sharing common views for socioeconomic development. The WSF strives to provide an alternative solution for economic growth and development not only on national level, but on an international level as well (WSF 2001).

Created as an alternative to the Davos World Economic Forum, the WSF aims to provide a platform for the promotion of ideas for economic globalization that are different from the Davos perspectives. The WSF supports the idea of more equity instead of more efficiency in terms of economic development, thus positioning itself on the side of equity-driven public policy in the more general economic policy debate. It is often associated with the nongovernmental organizations of the global left (Santos 2008).

The WSF has had a number of events since its initial meeting in Brazil in 2001 (Table 1). The first few events had taken place in Brazil, but in recent years annual meetings have been hosted by a number of countries. A list of all WSF Annual Meetings is provided below.

Founders and Organizers

The WSF was proposed by Brazilian civil society organizations, and were politically supported by the Workers’ Party of Brazil. The idea received international support from organizations from various background of social and economic spheres. It received financial support from organizations like Novib, the Netherlands Organization for International Development Cooperation (Bello 2002). With the permission of the Brazilian

World Social Forum, Table 1 List of the World Social Forum (WSF) summits

Year of summit	Summit location
2001	Porto Alegre, Brazil
2002	Porto Alegre, Brazil
2003	Porto Alegre, Brazil
2004	Mumbai, India
2005	Porto Alegre, Brazil
2006	Bamako, Mali Caracas, Venezuela Karachi, Pakistan
2007	Nairobi, Kenya
2008	No specific location
2009	Belem, Brazil
2010	No specific location
2011	Dakar, Senegal
2012	Porto Alegre, Brazil
2013	Tunis, Tunisia
2015	Tunis, Tunisia
2016	Montreal, Canada
2018	Salvador, Brazil

Sources: 2016 WSF Official Website, retrieved at <https://fsm2016.org/en/sinformer/a-propos-du-forum-social-mondial/> (accessed on 22.03.2020); 2018 WSF Official Website, retrieved at <https://wsf2018.org/en/> (accessed on 22.03.2020)

local authorities of Porto Alegre and the state government of Rio Grande do Sul, the first WSF took place in Porto Alegre, Brazil, in 2001 (Sparke et al. 2005).

The original 2001 version of the WSF charter of principles was signed and adopted by the following organizations (WSF 2001):

- Brazilian Association of Nongovernmental Organizations (ABONG)
- Association for the Taxation of Financial Transactions for the Aid of Citizens (ATTAC)
- Brazilian Justice and Peace Commission (CBJP)
- National Council of Bishops (CNBB)
- Brazilian Business Association for Citizenship (CIVES)
- Central Trade Union Confederation (CUT)
- Brazilian Institute for Social and Economic Studies (IBASE)
- Center for Global Justice (CJG)

- Movement of Landless Rural Workers (MST) (WSF 2001)

After the first WSF, the summit developed into a large-scale meeting of participants from various backgrounds. The organization of WSFs differs from the traditional top to bottom fashion of other global summits (such as United Nations conferences, the World Economic Forum in Davos, etc.). Activities in WSF are decided by the participants, and often are self-organized by them (Smith et al. 2012).

Organization of the WSF is not hosted by a permanent structure that facilitates it. Rather, an organizational structure is created ad hoc for the needs of the event. Organizers of the forums do not exercise control over them and they only facilitate the events. For this reason there is generally no traditional adoption of official documents like the typical legal or political documents adopted in conferences hosted by international organizations.

Thus, the WSF is considered to be neither a movement nor an entity, but a meeting place of organizations of different social spheres and civil society which aims to provide a forum for communication between those organization, and opportunity to build alliances and launch initiatives (Whitaker 2005).

Since the first WSF in 2001, the venues of the global and local events have changed, with later summits taking place in multiple venues simultaneously (Hammond 2006). Local versions of the forum that have sprung out have acquired as much attention as the original forum – the Indian Social Forum (ISF) (Rucht 2012) and the European Social Forum (ESF) (Fiedlschuster 2018) being the most prominent of them, and the so-called World Social Forum process evolving (Rucht 2012).

Participants

Keeping up with the bottom-up approach to organization of events, the WSF has attracted multiple organizations from sectors such as agriculture, women's organizations, environmental protection organizations, political rights activists, etc. (WSF 2016).

Participation in the forum is available for registration, and organizations that want to attend could sign up. Later WSFs provided the opportunity for organizations to register for participation through the WSF summit websites (WSF 2016, 2018). Some social forum events have been free of participation fees as well which makes them more attractive for organizations (Fiedlschuster 2018).

The WSF is considered to be a platform for and a manifestation of contemporary global justice movements (GJMs) and transnational activism (Rucht 2012). The WSF is for that reason characteristic with participant heterogeneity, with a variety of civil society activists and organizations gathering around the alternative opinions on economic globalization.

The WSF is not entirely an informal summit, as it was established through the collaboration between formal political and economic institutions – from the Brazilian Workers Party, the municipal government of Porto Alegre, the state government of Rio Grande do Sul, with the participation of French journal *Le Monde Diplomatique*, and formal nongovernmental organizations (Sparke et al. 2005).

However, the forum is typically attended by a large proportion of informal groups and actors. Sparke et al. list only a few such participants – from the Brazilian Landless Rural Workers movement, The World Women's March, The Women's International Coalition for Economic Justice (WICEJ), The Land Action Research Network, The Halifax Initiative Coalition, etc. (Sparke et al. 2005).

No WSF ever ends with concluding documents, and each organization or alliance of organizations can propose measures which are binding on them (Whitaker 2005). Article 6 of the WSF's charter of principles states that the event itself is not to represent all participants through formal statements (WSF 2001). Participants in the WSF are free to issue statements and proposals on their behalf, and the established practice is for them to do so. As a result, WSF meetings result in a significant number of documents adopted by separate groups of participants. Whitaker notes that for the 2005 WSF

alone 352 proposals were presented at the closing ceremony (Whitaker 2005).

Institutional partners of the WSF include the United Nations Educational, Scientific and Cultural Organization (UNESCO), which is the main United Nations agency that facilitates UN-WSF communication and dialog through its programs (Solinis 2004).

Role of Companies and Impact on Social Sustainability

The WSF is not typically attended by business and companies. The forum lacks efficient structure of business-society dialog.

However, the role of the forum in terms of business-civil society dialog is not insignificant. It is stated in the charter of principles of the WSF, and statements issued by WSF participants are often oriented towards opposing multinational companies and raising a voice in defense of socially fair economic activity. In this relation, it is the WSF's value that such statements are issued, as they are dedicated to promoting social fairness, and social sustainability. The forum has proven to be a useful foci of economic globalization opposers, with discussions, statements, and action taken on different economic issues. One classic example is the WSF discussions and action taken in relation to the proposed Free Trade Area of the Americas (FTAA) agreement, as opposers of the agreement gathered at the WSF (Sparke et al. 2005).

Political Significance of the WSF Summits

Since the first WSF in 2001, the summit has become one of the important spaces for meeting and mobilizing diverse social movements that oppose the dominant strain of economic and financial globalization (Grzybowski 2006).

The forum has become an influential platform for discussion of issues such as women's rights, LGBTQ rights, climate justice as a part of social

justice, ban of nuclear weapons, and humanitarian assistance (WSF 2016).

Thus, the WSF became one of the most important global arenas for social movements and networks that seek democratic transformations of the capitalist world system. As Teivainen observes, the WSF is an attempt to facilitate and debate transformations in local, national, and global contexts (Teivainen 2012). It has been recognized that the WSF events are a key mean of communication and manifestation of the still amorphous concept of global civil society. However, the global impact of the forum events remains somehow questionable, as opposed to the very tangent and unquestionable effects of its main rival – the World Economic Forum.

However, the political essence of the WSF is still struggling with problems of internal organization and political identity, as reaching a status of a truly global event is sometimes contested. The spread of the social forum participation has remained relatively local (Reese et al. 2012), despite the desire for global representation. As surveys show, social forum events around the world remain quite local, in some cases with 80% of participants being representatives of local social entities (Smith and Smythe 2012). Authors have commented that too often are travel costs the factor that impedes participation of more international representatives (Smith and Smythe 2012). It is still not clear on whether digitalization of social interaction will benefit the forum effects enough in order to make the WSF more significant an event in global aspect.

Summary

The WSF is a structure of annual meetings aiming to provide an alternative to the Worlds Economic Forum (Davos) paradigm. It claims that it is more important for globalization to be fair and be directed towards equity instead of efficiency. The political significance of the social forums is focused on providing an alternative standpoint to economic globalization. However, social forums lack a focus on business–society relationship and

has not so far been a place for joint company–society discussion and adoption of sustainable management and corporate social responsibility practices.

Cross-References

► [World Economic Forum \(Davos\)](#)

References

- Bello, W. (2002). Porto Alegre social summit sets stage. The Global Policy Forum. <https://www.globalpolicy.org/component/content/article/174/30851.html>. Accessed 20 Mar 2020.
- Fiedlschuster, M. (2018). Introduction: Democracy and globalization. In M. Fiedlschuster (Ed.), *Globalization, EU democracy assistance and the world social forum concepts and practices of democracy* (pp. 1–38). Switzerland: Palgrave Macmillan.
- Grzybowski, C. (2006). The world social forum: Reinventing global politics. *Global Governance*, 12 (1), 7–13.
- Hammond, J. L. (2006). The possible world and the actual state. *Latin American Perspectives*, 33(3), 122–131. <https://doi.org/10.1177/0094582x06287868>.
- Reese, E., Chase-Dunn, C., Anantram, K., Coyne, G., Kaneshiro, M., Koda, A., Kwon, R., & Saxena, P. (2012). Surveys of world social forum participants show influence of place and base in the global public sphere. In J. Smith, E. Reese, S. Byrd, & E. Smythe (Eds.), *Handbook of world social forum activism* (pp. 64–81). Routledge.
- Rucht, D. (2012). Social forums as public stage and infrastructure of global justice movements. In J. Smith, E. Reese, S. Byrd, & E. Smythe (Eds.), *Handbook of world social forum activism* (pp. 11–28). Routledge.
- Santos, B. D. S. (2008). The world social forum and the global left. *Politics & Society*, 36(2), 247–270.
- Smith, P. J., & Smythe, E. (2012). (In)Fertile ground? Social forum activism in its regional and local dimensions. In J. Smith, E. Reese, S. Byrd, & E. Smythe (Eds.), *Handbook of world social forum activism* (pp. 29–49). Routledge.
- Smith, J., Byrd, S., Reese, E. & Smythe, E. (2012). Introduction: Learning from the world social forums. In J. Smith, E. Reese, S. Byrd, & E. Smythe (Eds.), *Handbook of world social forum activism* (pp. 1–7). Routledge.
- Solinis, G. (2004). UNESCO and the world social forum: The first three years. *International Social Science Journal*, 56(182), 639–640. <https://doi.org/10.1111/j.0020-8701.2004.00523.x>.
- Sparke, M., Brown, E., Corva, D., Day, H., Faria, C., Sparks, T., & Varg, K. (2005). The world social forum

and the lessons for economic geography. *Economic Geography*, 81(4), 359–380.

Teivainen, T. (2012). The political and its absence in the world social forum: Implications for democracy in the forum and in the world. In J. Smith, E. Reese, S. Byrd, & E. Smythe (Eds.), *Handbook of world social forum activism* (pp. 50–63). Routledge.

Watson, A. (1987). Hedley Bull, states systems and international societies. *Review of International Studies*, 13 (2), 147–153.

Whitaker, C. (2005). The world social forum: What is it really about? *OECD Observer*, 248. https://oecdobserver.org/news/archivestory.php/aid/1565/The_World_Social_Forum.html. Accessed 19 Mar 2020.

WSF (World Social Forum). (2001). World social forum charter of principles, April 9, 2001. São Paulo, Brazil.

WSF (World Social Forum). (2016). About the world social forum. <https://fsm2016.org/en/sinformer/a-propos-du-forum-social-mondial/>. Accessed 20 Mar 2020.

WSF (World Social Forum). (2018). About the WSF 2018. <https://wsf2018.org/en/o-fsm-2018/>. Accessed 20 Mar 2020.

Written and Digital Document

► Reporting

WSF

► World Social Forum

WSSD

► Johannesburg Summit of 2002 on Sustainable Development

Z

Zero-Carbon Brands

► [Sustainable Brands](#)

Zero-Waste Brands

► [Sustainable Brands](#)